Full wwPDB EM Validation Report ⓘ

Dec 11, 2022 – 04:41 am GMT

PDB ID	:	4V3P
EMDB ID	:	EMD-2790
Title	:	The molecular structure of the left-handed supra-molecular helix of eukaryotic polyribosomes
Authors	:	Myasnikov, A.G.; Afonina, Z.A.; Menetret, J.F.; Shirokov, V.A.; Spirin, A.S.; Klaholz, B.P.
Deposited on	:	2014-10-20
Resolution	:	34.00 Å(reported)
Based on initial model	:	3IZ6

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

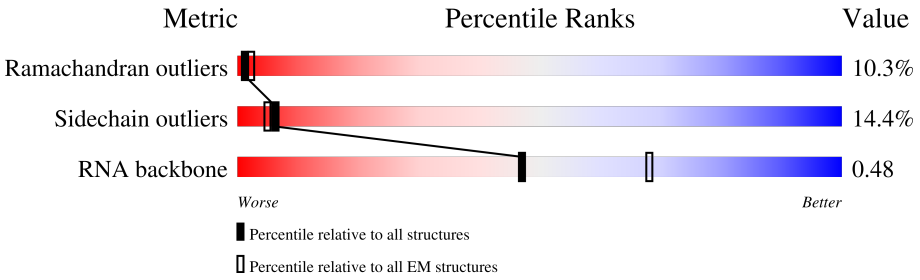
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 34.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	Sa	380	34% 65% 26% 7% ·
2	SA	260	30% 62% 23% 13% ·
3	SB	208	34% 41% 33% 22% ·
4	SD	200	· 65% 21% 8% 6%
5	SE	263	5% 62% 28% 8% ·
6	SF	191	63% 76% 19% 5%
7	SI	126	10% 61% 30% 6% ·
8	SJ	128	30% 68% 23% 8% ·

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Mol	Chain	Length	Quality of chain
9	SK	119	18% 54% 28% 17%
10	SL	142	90% 68% 18% 11%
11	SM	152	39% 43% 33% 19% 5%
12	SO	121	79% 71% 19% 7%
13	SQ	141	34% 45% 30% 14% 11%
14	SP	85	99% 55% 32% 11%
15	SS	146	55% 27% 12% 5%
16	SR	91	34% 63% 29% 7%
17	SV	100	55% 63% 23% 12%
18	SW	92	89% 11%
19	SY	58	34% 55% 28% 16%
20	SZ	62	39% 56% 32% 6% 5%
21	Sc	25	24% 96%
22	Sb	36	100%
23	SU	98	61% 29% 34% 21% 16%
24	SX	50	86% 66% 26% 6%
25	SC	195	12% 51% 26% 15% 8%
26	SG	143	37% 81% 19%
27	SH	130	59% 28% 12%
28	SN	48	44% 38% 15%
29	ST	82	44% 60% 29% 6% 5%
30	S3	11	9% 73% 18%
31	S2	75	80% 65% 31%
32	S1	1743	31% 7% 64% 29%
33	L1	3352	25% 10% 59% 31%

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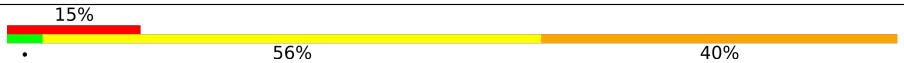
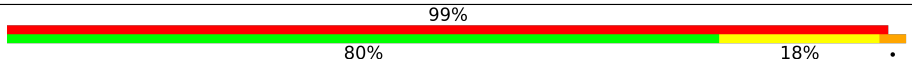
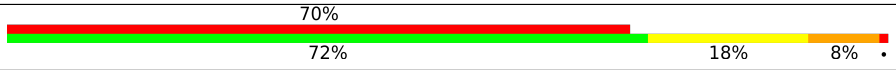
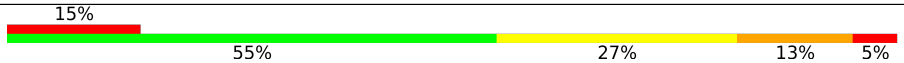
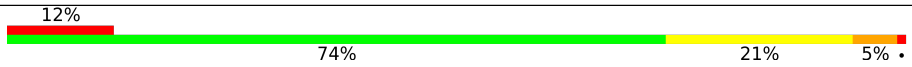
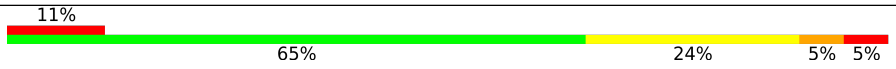
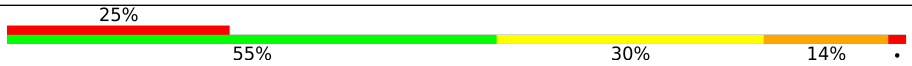
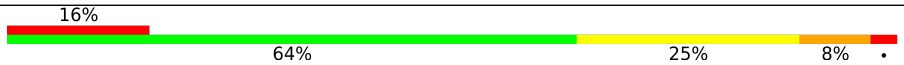
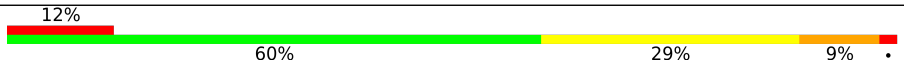
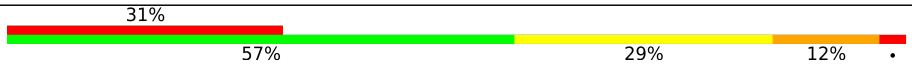
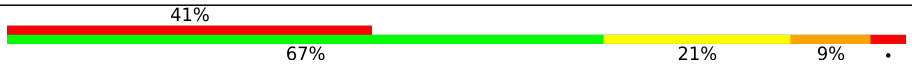
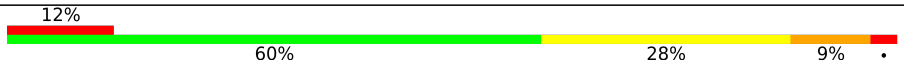
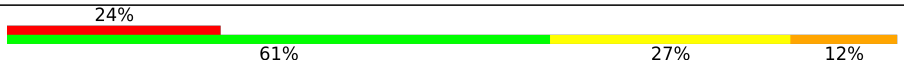
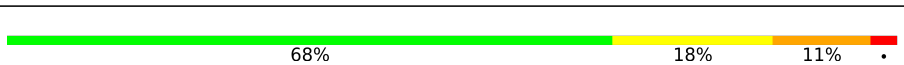
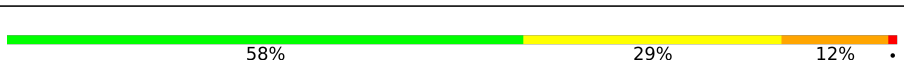
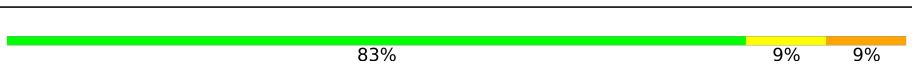
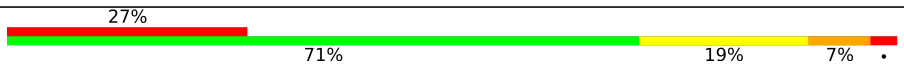
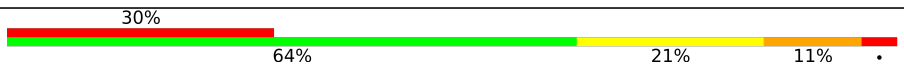
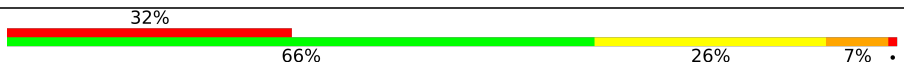
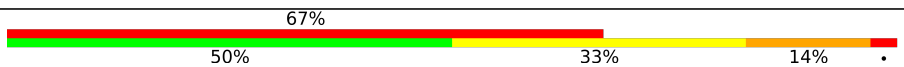
Mol	Chain	Length	Quality of chain
34	L3	120	
35	L2	159	
36	LA	216	
37	LB	255	
38	LE	170	
39	LF	190	
40	LH	201	
41	LM	140	
42	LP	194	
43	LO	144	
44	LR	163	
45	LQ	304	
46	LT	189	
47	LU	164	
48	LV	171	
49	LX	122	
50	LZ	75	
51	LY	130	
52	Lb	73	
53	Ld	23	
54	Lf	112	
55	Lg	120	
56	Lh	133	
57	Ll	94	
58	Ln	69	

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Mol	Chain	Length	Quality of chain
59	Lo	51	53% 31% 35% 24% 10%
60	Lr	105	35% 50% 35% 11%
61	Lq	25	32% 56% 32% 12%
62	Lx	20	10% 80% 20%
62	Ly	20	95% 5%
63	Lz	14	86% 14%
64	LG	219	45% 30% 17% 8%
65	LL	182	34% 81% 19%
66	LN	134	49% 27% 16% 9%
67	LS	167	34% 38% 22% 5%
68	LW	108	49% 28% 16% 7%
69	La	99	45% 29% 19% 6%
70	Li	119	34% 28% 23% 15%
71	Lj	104	22% 47% 31% 14% 8%
72	Lk	77	8% 48% 30% 17% 5%
73	Lp	41	39% 32% 12% 17%
74	LJ	128	63% 24% 9%
75	Lt	58	91% 5%
75	Lu	58	5% 93%
76	Lv	59	88% 10%
76	Lw	59	86% 8% 5%
77	Lc	124	67% 24% 8%
78	Le	244	17% 64% 25% 9%
79	Ls	262	15% 77% 18% 5%
80	LC	389	57% 28% 11%

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Mol	Chain	Length	Quality of chain
81	LD	372	
82	LK	206	
83	Lm	92	
84	LI	184	

2 Entry composition (i)

There are 84 unique types of molecules in this entry. The entry contains 195694 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called G protein beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	Sa	380	2842	1758	512	553	19	0	0

- Molecule 2 is a protein called 40S ribosomal protein SA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	SA	260	1946	1220	349	367	10	0	0

- Molecule 3 is a protein called Putative 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	SB	208	1539	964	288	279	8	0	0

- Molecule 4 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	SD	200	1607	1030	290	283	4	0	0

- Molecule 5 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	SE	263	2028	1283	385	352	8	0	0

- Molecule 6 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	SF	191	1485	925	281	272	7	0	0

- Molecule 7 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	SI	126	Total	C	N	O	S	0	0
			1017	648	195	170	4		

- Molecule 8 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	SJ	128	Total	C	N	O	S	0	0
			887	541	171	171	4		

- Molecule 9 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	SK	119	Total	C	N	O	S	0	0
			830	508	159	159	4		

- Molecule 10 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	SL	142	Total	C	N	O	S	0	0
			952	576	197	175	4		

- Molecule 11 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	SM	152	Total	C	N	O	S	0	0
			1167	722	233	206	6		

- Molecule 12 is a protein called 40S ribosomal protein S13-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	SO	121	Total	C	N	O	S	0	0
			977	627	180	167	3		

- Molecule 13 is a protein called 40S ribosomal protein S17-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	SQ	141	Total	C	N	O	S	0	0
			1129	699	214	210	6		

- Molecule 14 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	SP	85	Total	C	N	O	S	0	0
			639	399	130	107	3		

- Molecule 15 is a protein called 40S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	SS	146	Total	C	N	O	S	0	0
			1155	726	218	207	4		

- Molecule 16 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	SR	91	Total	C	N	O	S	0	0
			711	457	130	120	4		

- Molecule 17 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				AltConf	Trace
17	SV	100	Total	C	N	O	0	0
			740	458	142	140		

- Molecule 18 is a protein called 40S WHEAT GERM RIBOSOME1.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	SW	92	Total	C	N	O	0	0
			460	276	92	92		

- Molecule 19 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	SY	58	Total	C	N	O	S	0	0
			442	274	83	82	3		

- Molecule 20 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	SZ	62	Total	C	N	O	S	0	0
			469	289	105	73	2		

- Molecule 21 is a protein called Unknown 40S wheat germ ribosome protein 2.

Mol	Chain	Residues	Atoms				AltConf	Trace
21	Sc	25	Total 126	C 75	N 25	O 26	0	0

- Molecule 22 is a protein called Unknown 40S wheat germ ribosome protein 3.

Mol	Chain	Residues	Atoms				AltConf	Trace
22	Sb	36	Total 181	C 108	N 36	O 37	0	0

- Molecule 23 is a protein called Unknown 40S wheat germ ribosome protein 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	SU	98	Total 732	C 466	N 142	O 123	S 1	0	0

- Molecule 24 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	SX	50	Total 375	C 235	N 65	O 68	S 7	0	0

- Molecule 25 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	SC	195	Total 1535	C 958	N 307	O 265	S 5	0	0

- Molecule 26 is a protein called Unknown 40S wheat germ ribosome protein 4.

Mol	Chain	Residues	Atoms				AltConf	Trace
26	SG	143	Total 716	C 429	N 143	O 144	0	0

- Molecule 27 is a protein called Ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	SH	130	Total 1042	C 667	N 189	O 181	S 5	0	0

- Molecule 28 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	SN	48	Total	C	N	O	S	0	0
			313	184	67	56	6		

- Molecule 29 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	ST	82	Total	C	N	O	S	0	0
			650	400	121	126	3		

- Molecule 30 is a RNA chain called 40S WHEAT GERM RIBOSOME protein 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	S3	11	Total	C	N	O	P	0	0
			236	106	45	74	11		

- Molecule 31 is a RNA chain called 40S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	S2	75	Total	C	N	O	P	0	0
			1599	712	280	532	75		

- Molecule 32 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	S1	1743	Total	C	N	O	P	0	11
			33897	14994	5742	11418	1743		

- Molecule 33 is a RNA chain called 26S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	L1	3352	Total	C	N	O	P	0	39
			69592	30953	12564	22725	3350		

- Molecule 34 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	L3	120	Total	C	N	O	P	0	0
			2565	1144	461	840	120		

- Molecule 35 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	L2	159	Total	C	N	O	P	0	0
			3192	1415	555	1063	159		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
L2	136	G	C	conflict	GB 17016972

- Molecule 36 is a protein called Ribosomal protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	LA	216	Total	C	N	O	S	0	0
			1718	1092	309	304	13		

- Molecule 37 is a protein called 60S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	LB	255	Total	C	N	O	S	0	0
			1933	1200	398	326	9		

- Molecule 38 is a protein called Ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	LE	170	Total	C	N	O	S	0	0
			1376	867	256	244	9		

- Molecule 39 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	LF	190	Total	C	N	O	S	0	0
			1500	947	270	277	6		

- Molecule 40 is a protein called 60S ribosomal protein L7a.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	LH	201	Total	C	N	O	S	0	0
			1564	996	289	273	6		

- Molecule 41 is a protein called Ribosomal Pr 117.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	LM	140	Total	C	N	O	S	0	0
			1020	640	192	179	9		

- Molecule 42 is a protein called Ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	LP	194	Total	C	N	O	S	0	0
			1630	1027	342	257	4		

- Molecule 43 is a protein called 60S ribosomal protein L27a-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	LO	144	Total	C	N	O	S	0	0
			1086	691	217	173	5		

- Molecule 44 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	LR	163	Total	C	N	O	S	0	0
			1284	810	248	219	7		

- Molecule 45 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	LQ	304	Total	C	N	O	S	0	0
			2395	1497	430	461	7		

- Molecule 46 is a protein called Ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	LT	189	Total	C	N	O	S	0	0
			1569	972	330	257	10		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
LT	184	GLY	UNK	variant	UNP Q7XY20

- Molecule 47 is a protein called 60S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	LU	164	Total	C	N	O	S	0	0
			1266	789	250	225	2		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
LU	65	TRP	CYS	conflict	UNP W5EIT2

- Molecule 48 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	LV	171	Total	C	N	O	S	0	0
			1335	826	266	238	5		

- Molecule 49 is a protein called 60S ribosomal protein L23a.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	LX	122	Total	C	N	O	S	0	0
			987	634	178	173	2		

- Molecule 50 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	LZ	75	Total	C	N	O	S	0	0
			578	366	115	94	3		

- Molecule 51 is a protein called 60S ribosomal protein L26.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	LY	130	Total	C	N	O	S	0	0
			1048	647	220	178	3		

- Molecule 52 is a protein called 60S ribosomal protein l28.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	Lb	73	Total	C	N	O	S	0	0
			576	364	107	103	2		

- Molecule 53 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				AltConf	Trace
53	Ld	23	Total	C	N	O	0	0
			199	119	41	39		

- Molecule 54 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	Lf	112	Total	C	N	O	S	0	0
			825	516	146	157	6		

- Molecule 55 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	Lg	120	Total	C	N	O	S	0	0
			944	585	185	171	3		

- Molecule 56 is a protein called Ribosomal L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	Lh	133	Total	C	N	O	S	0	0
			1089	688	216	179	6		

- Molecule 57 is a protein called Ribosomal protein L37.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	Ll	94	Total	C	N	O	S	0	0
			725	438	158	122	7		

- Molecule 58 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	Ln	69	Total	C	N	O	S	0	0
			547	347	102	96	2		

- Molecule 59 is a protein called Ribosomal protein L39.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	Lo	51	Total	C	N	O	S	0	0
			460	291	100	67	2		

- Molecule 60 is a protein called 60S ribosomal protein L44.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	Lr	105	Total	C	N	O	S	0	0
			838	523	166	143	6		

- Molecule 61 is a protein called Unknown 60S wheat germ ribosome protein 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	Lq	25	Total	C	N	O	S	0	0
			238	145	62	28	3		

- Molecule 62 is a protein called Unknown 60S wheat germ ribosome protein 2.

Mol	Chain	Residues	Atoms				AltConf	Trace
62	Ly	20	Total	C	N	O	0	0
			101	60	20	21		
62	Lx	20	Total	C	N	O	0	0
			101	60	20	21		

- Molecule 63 is a protein called Unknown 60S wheat germ ribosome protein 3.

Mol	Chain	Residues	Atoms				AltConf	Trace
63	Lz	14	Total	C	N	O	0	0
			71	42	14	15		

- Molecule 64 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	LG	219	Total	C	N	O	S	0	0
			1730	1106	314	306	4		

- Molecule 65 is a protein called Unknown 60S wheat germ ribosome protein 5.

Mol	Chain	Residues	Atoms				AltConf	Trace
65	LL	182	Total	C	N	O	0	0
			910	545	182	183		

- Molecule 66 is a protein called Unknown 60S wheat germ ribosome protein 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	LN	134	Total	C	N	O	S	0	0
			1081	690	201	185	5		

- Molecule 67 is a protein called 60S ribosomal protein L18a.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	LS	167	Total	C	N	O	S	0	0
			1419	916	263	233	7		

- Molecule 68 is a protein called 60S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	LW	108	Total	C	N	O	S	0	0
			839	530	152	155	2		

- Molecule 69 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	La	99	Total	C	N	O	S	0	0
			732	463	140	126	3		

- Molecule 70 is a protein called Ribosomal protein l34.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	Li	119	Total	C	N	O	S	0	0
			964	606	195	161	2		

- Molecule 71 is a protein called ribosomal protein L35A.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	Lj	104	Total	C	N	O	S	0	0
			797	498	158	138	3		

- Molecule 72 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	Lk	77	Total	C	N	O	S	0	0
			613	383	128	100	2		

- Molecule 73 is a protein called Ubiquitin-60S ribosomal protein L40-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	Lp	41	Total	C	N	O	S	0	0
			344	211	75	53	5		

- Molecule 74 is a protein called 60S ribosomal protein L12.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	LJ	128	Total	C	N	O	S	0	0
			959	601	177	177	4		

- Molecule 75 is a protein called Ribosomal protein P1.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	Lt	58	Total	C	N	O	S	0	0
			432	283	69	79	1		
75	Lu	58	Total	C	N	O	S	0	0
			432	283	69	79	1		

- Molecule 76 is a protein called 60S acidic ribosomal protein P2A.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	Lv	59	Total	C	N	O	S	0	0
			441	278	69	90	4		
76	Lw	59	Total	C	N	O	S	0	0
			441	278	69	90	4		

- Molecule 77 is a protein called 60S ribosomal protein L35.

Mol	Chain	Residues	Atoms				AltConf	Trace
77	Lc	124	Total	C	N	O	0	0
			1006	632	202	172		

- Molecule 78 is a protein called Ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	Le	244	Total	C	N	O	S	0	0
			1984	1271	368	339	6		

- Molecule 79 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	Ls	262	Total	C	N	O	S	0	0
			1993	1278	330	377	8		

- Molecule 80 is a protein called Ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	LC	389	Total	C	N	O	S	0	0
			3102	1968	578	538	18		

- Molecule 81 is a protein called 60S ribosomal protein L4/L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	LD	372	Total	C	N	O	S	0	0
			2866	1802	555	502	7		

- Molecule 82 is a protein called Ribosomal protein L13a.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	LK	206	Total	C	N	O	S	0	0
			1650	1045	320	274	11		

- Molecule 83 is a protein called 60S ribosomal protein L37a, expressed.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	Lm	92	Total	C	N	O	S	0	0
			715	447	137	124	7		

- Molecule 84 is a protein called 60S ribosomal protein L10-1.

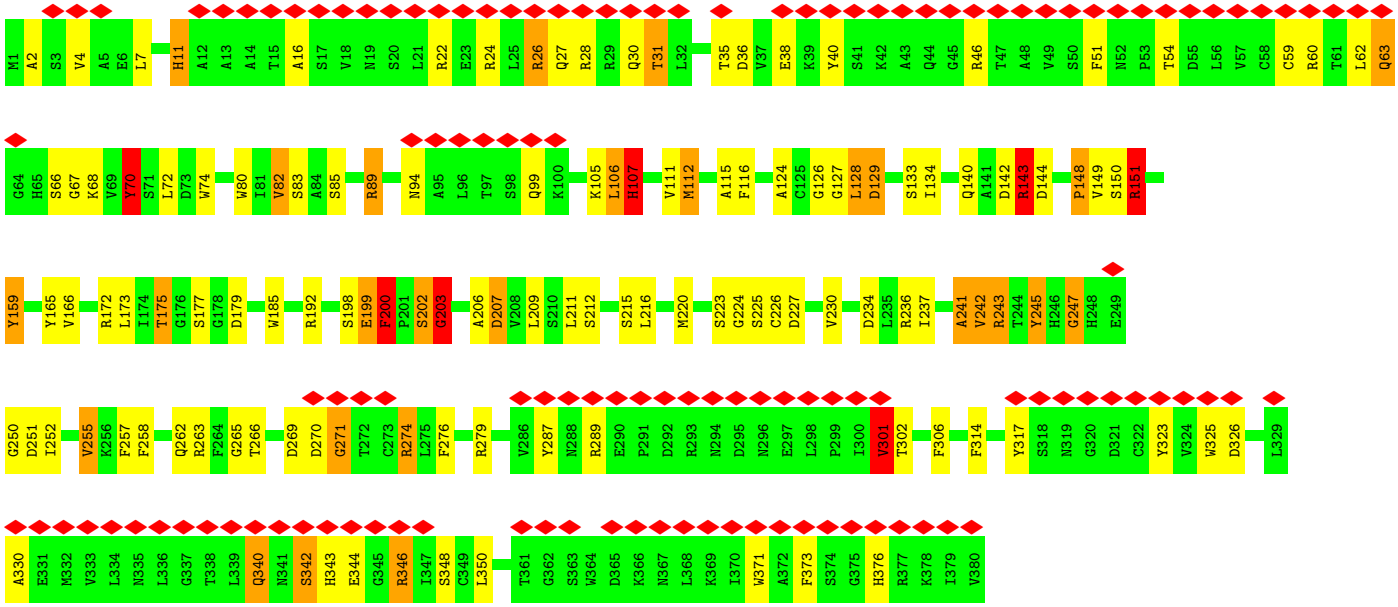
Mol	Chain	Residues	Atoms					AltConf	Trace
84	LI	184	Total	C	N	O	S	0	0
			1468	923	288	245	12		

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

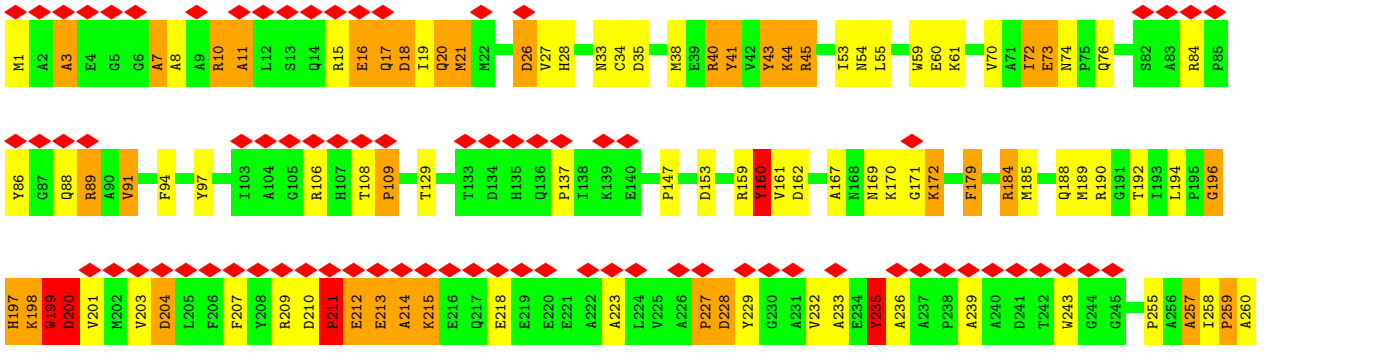
• Molecule 1: G protein beta subunit

Chain Sa:



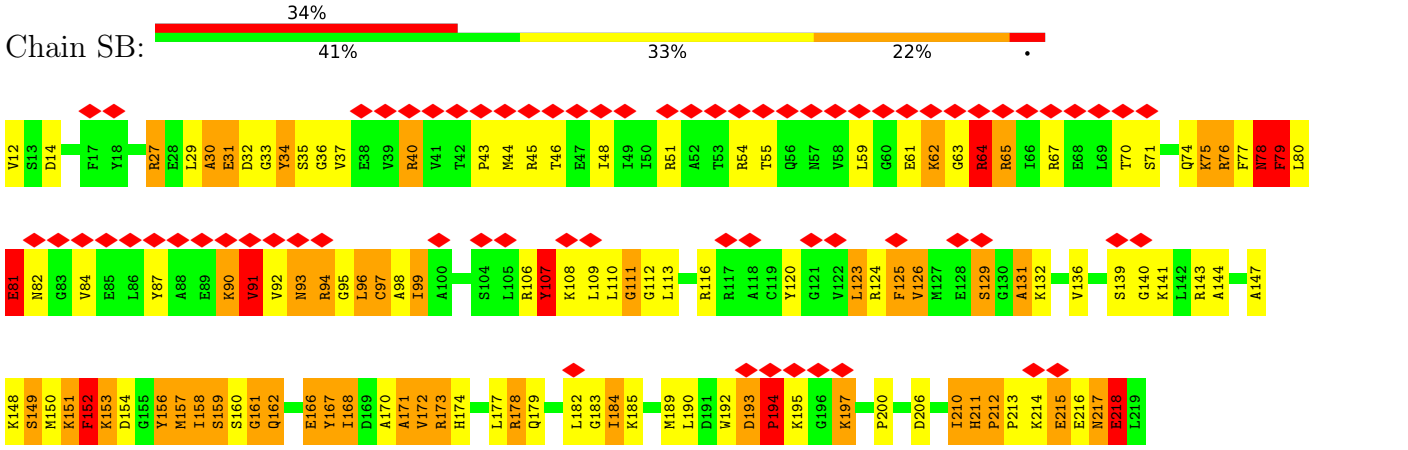
• Molecule 2: 40S ribosomal protein SA

Chain SA:



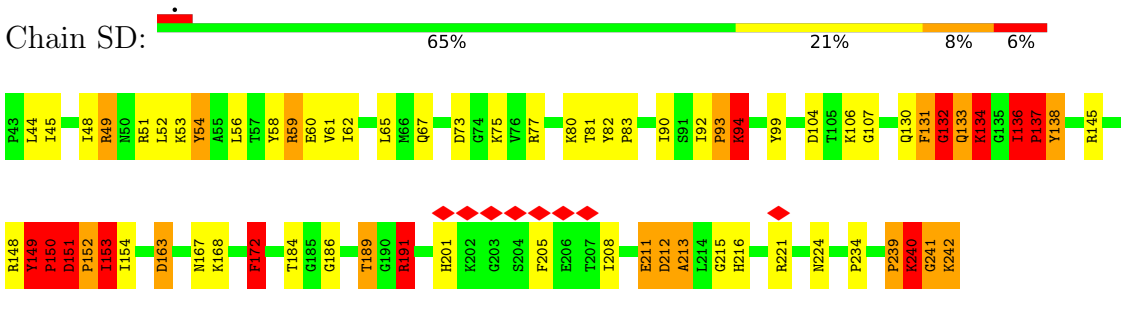
• Molecule 3: Putative 40S ribosomal protein S3

Chain SB:



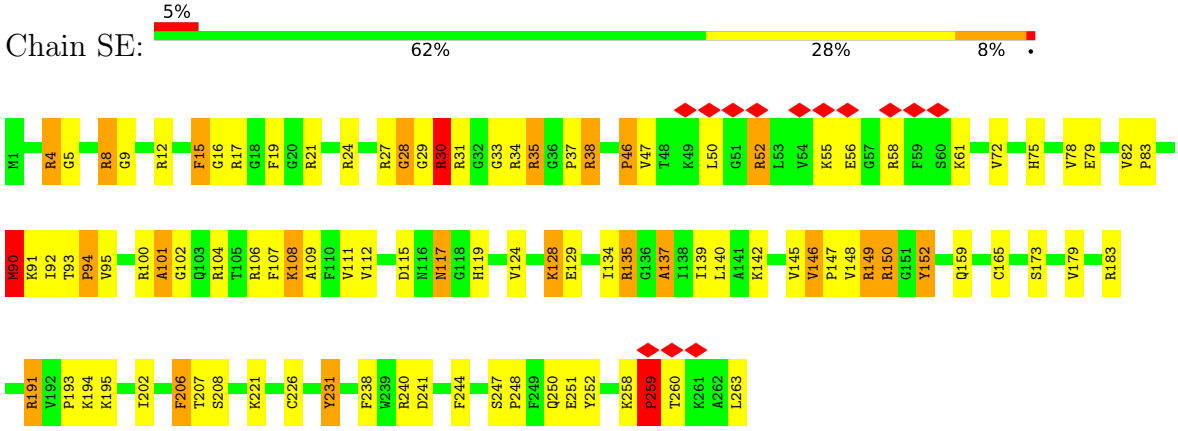
• Molecule 4: 40S ribosomal protein S4

Chain SD:



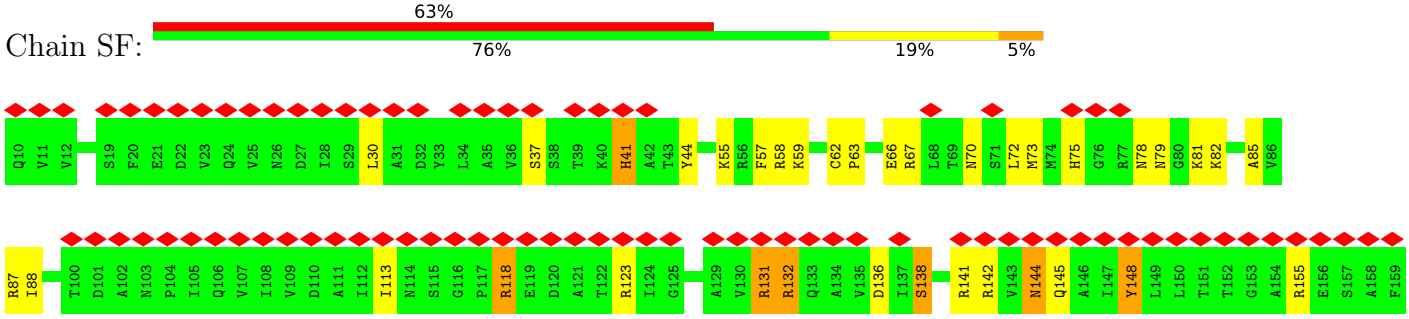
• Molecule 5: 40S ribosomal protein S2

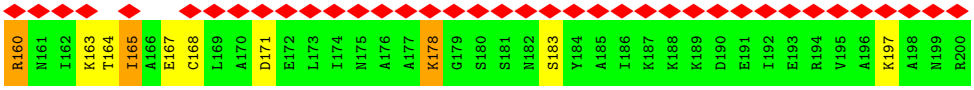
Chain SE:



• Molecule 6: 40S ribosomal protein S5

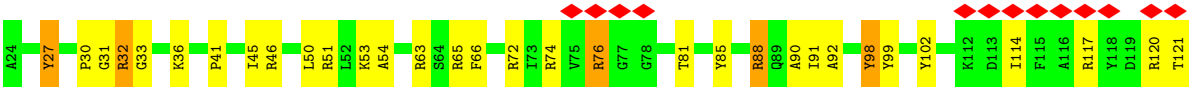
Chain SF:





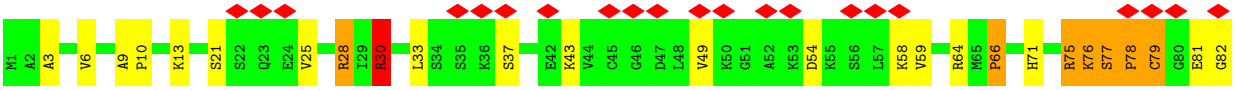
• Molecule 7: 40S ribosomal protein S16

Chain SI:



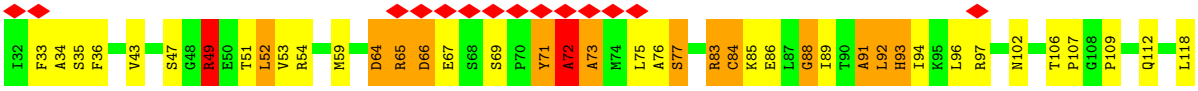
• Molecule 8: 40S ribosomal protein S20

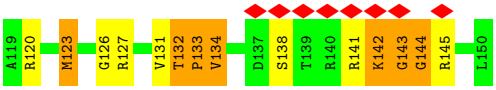
Chain SJ:



• Molecule 9: 40S ribosomal protein S14

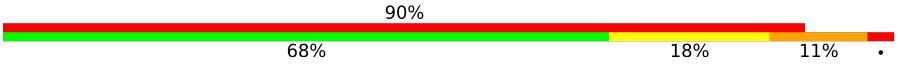
Chain SK:

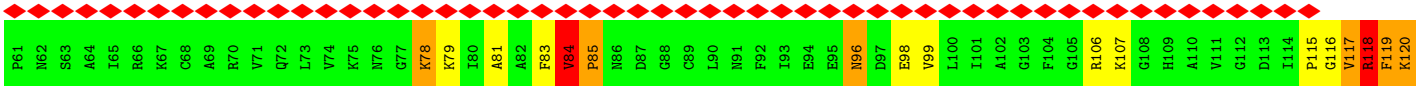


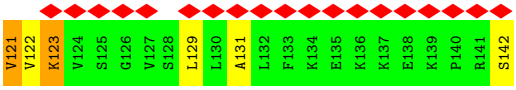


• Molecule 10: 40S ribosomal protein S23

Chain SL:

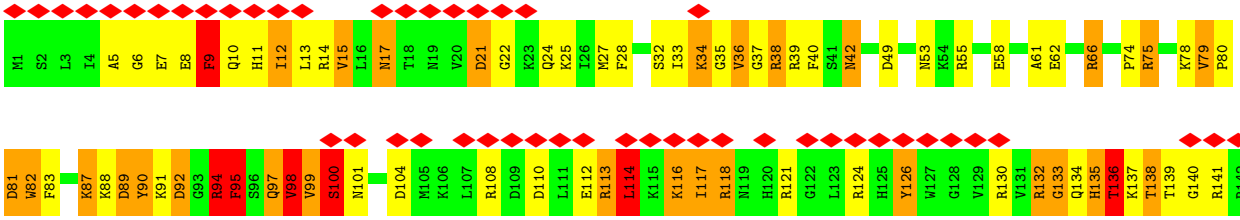






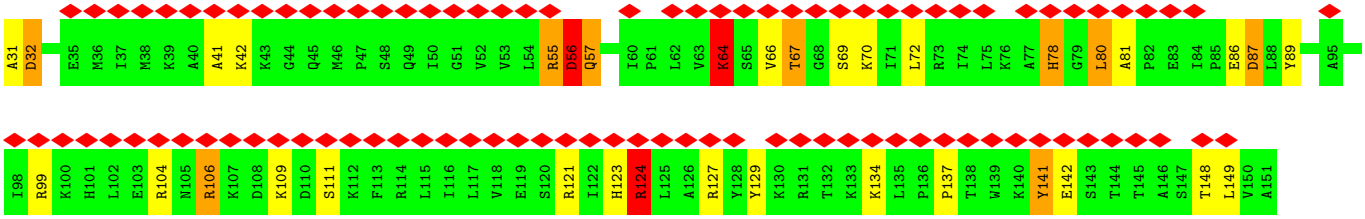
• Molecule 11: 40S ribosomal protein S18

Chain SM:



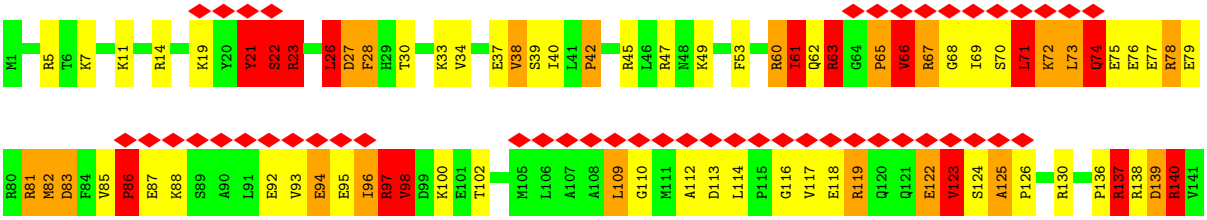
• Molecule 12: 40S ribosomal protein S13-1

Chain SO:



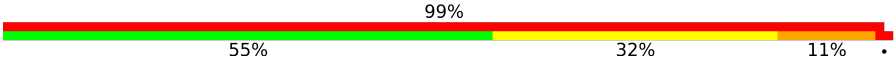
• Molecule 13: 40S ribosomal protein S17-4

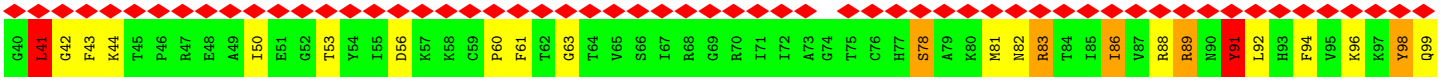
Chain SQ:

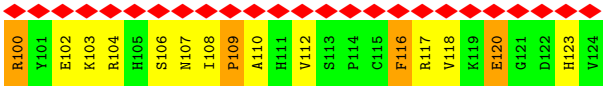


• Molecule 14: 40S ribosomal protein S11

Chain SP:

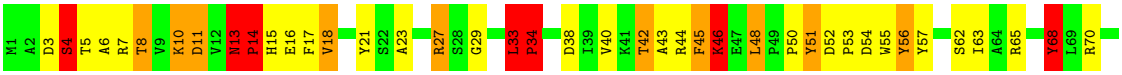


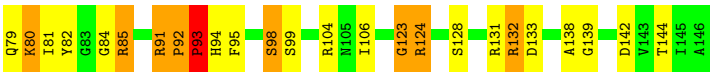




• Molecule 15: 40S ribosomal protein S19

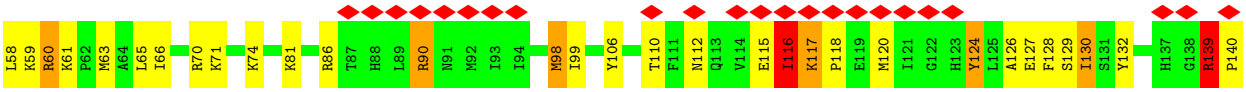
Chain SS:

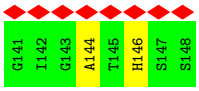




• Molecule 16: 40S ribosomal protein S15

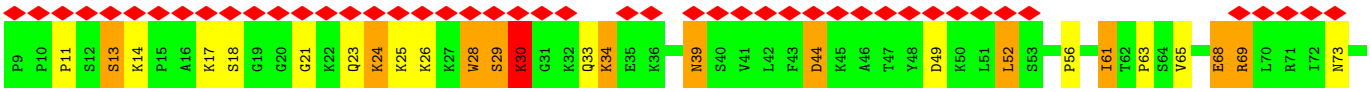
Chain SR:

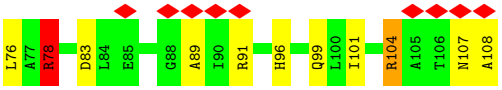




• Molecule 17: 40S ribosomal protein S25

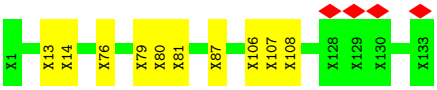
Chain SV:





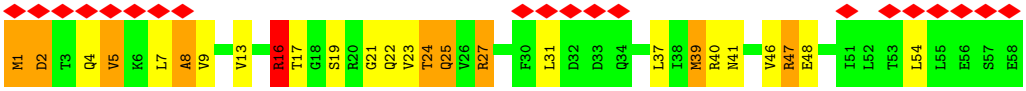
• Molecule 18: 40S WHEAT GERM RIBOSOME1

Chain SW:



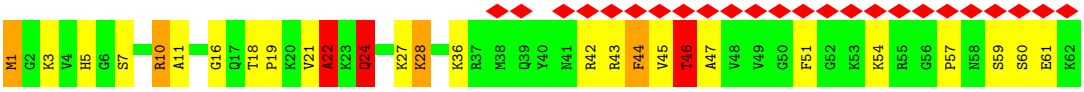
• Molecule 19: 40S ribosomal protein S28

Chain SY:



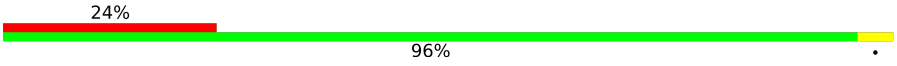
• Molecule 20: 40S ribosomal protein S30

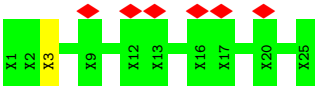
Chain SZ:



• Molecule 21: Unknown 40S wheat germ ribosome protein 2

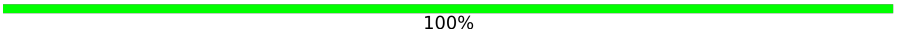
Chain Sc:





• Molecule 22: Unknown 40S wheat germ ribosome protein 3

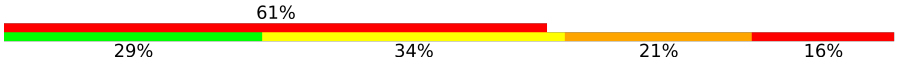
Chain Sb:

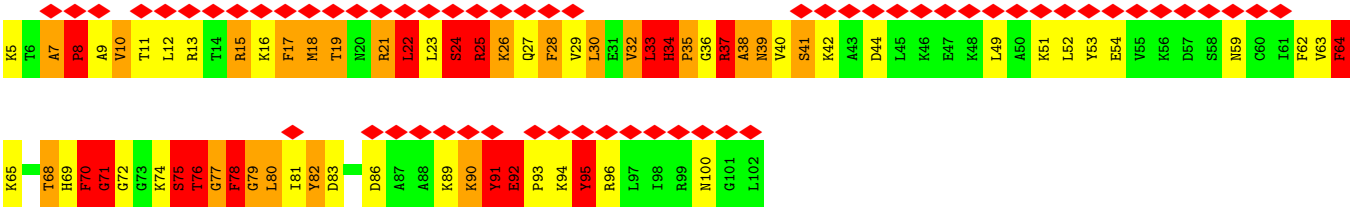


There are no outlier residues recorded for this chain.

• Molecule 23: Unknown 40S wheat germ ribosome protein 3

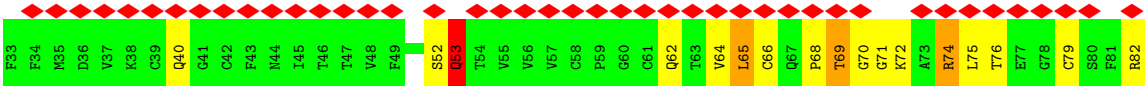
Chain SU:





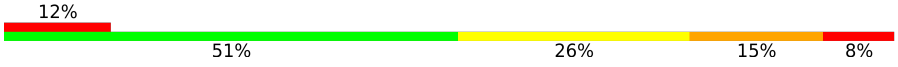
• Molecule 24: 40S ribosomal protein S27

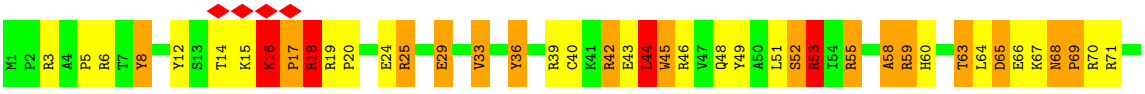
Chain SX:

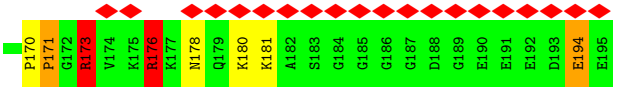


• Molecule 25: 40S ribosomal protein S9

Chain SC:

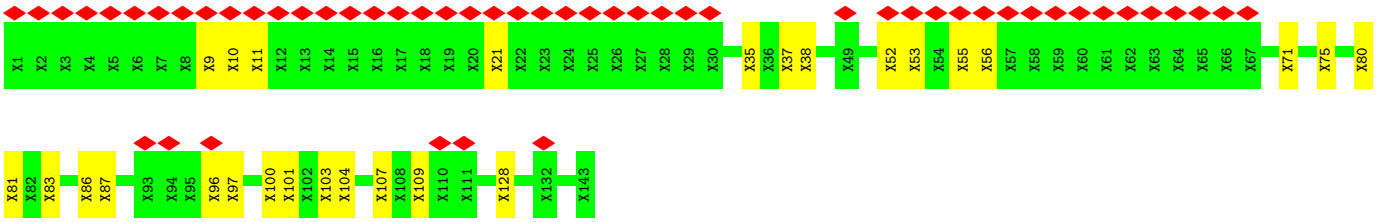






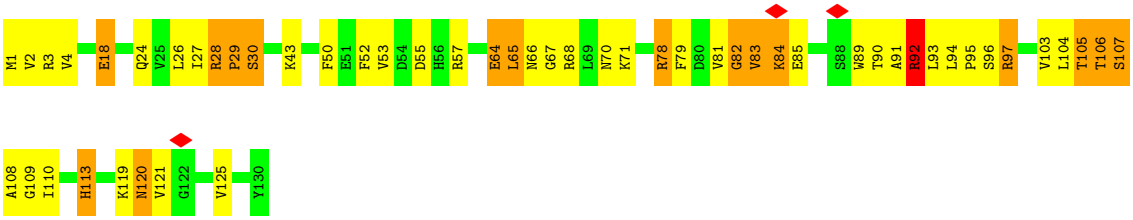
• Molecule 26: Unknown 40S wheat germ ribosome protein 4

Chain SG:



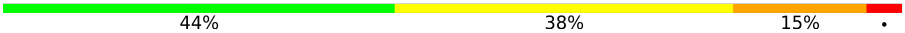
• Molecule 27: Ribosomal protein S15

Chain SH:



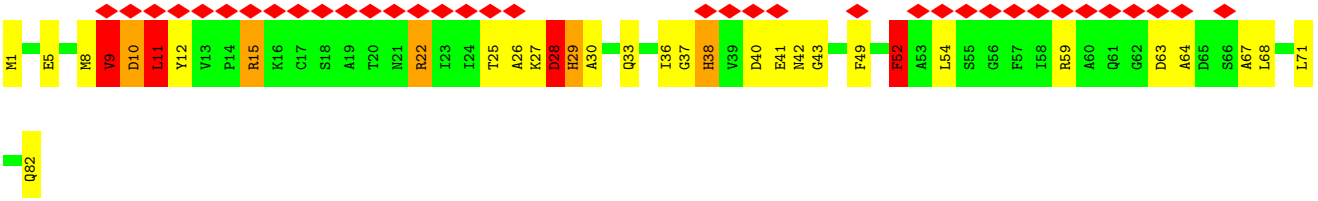
• Molecule 28: 40S ribosomal protein S29

Chain SN:



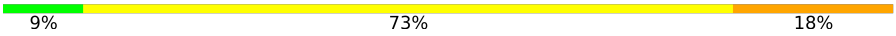
• Molecule 29: 40S ribosomal protein S21

Chain ST:



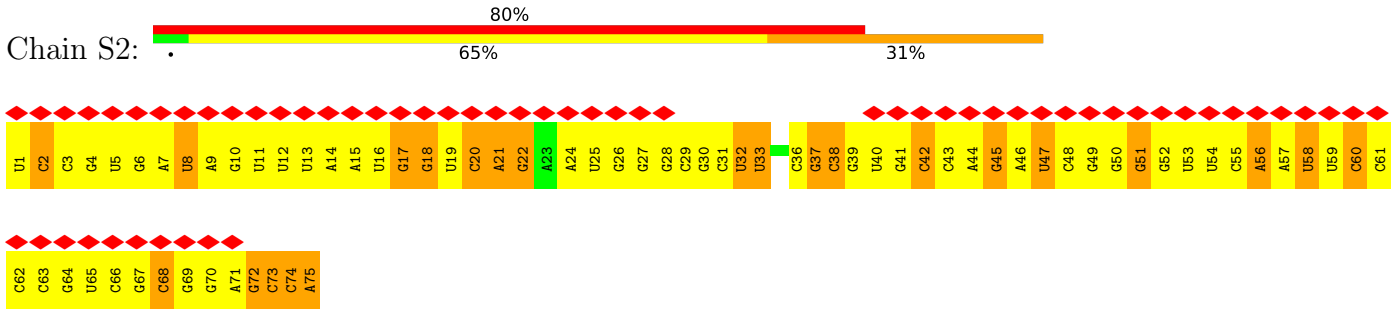
• Molecule 30: 40S WHEAT GERM RIBOSOME protein 4

Chain S3:



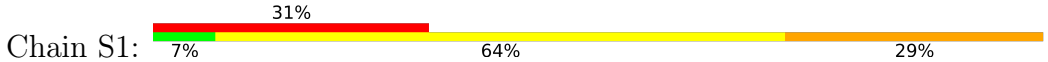
• Molecule 31: 40S ribosomal RNA

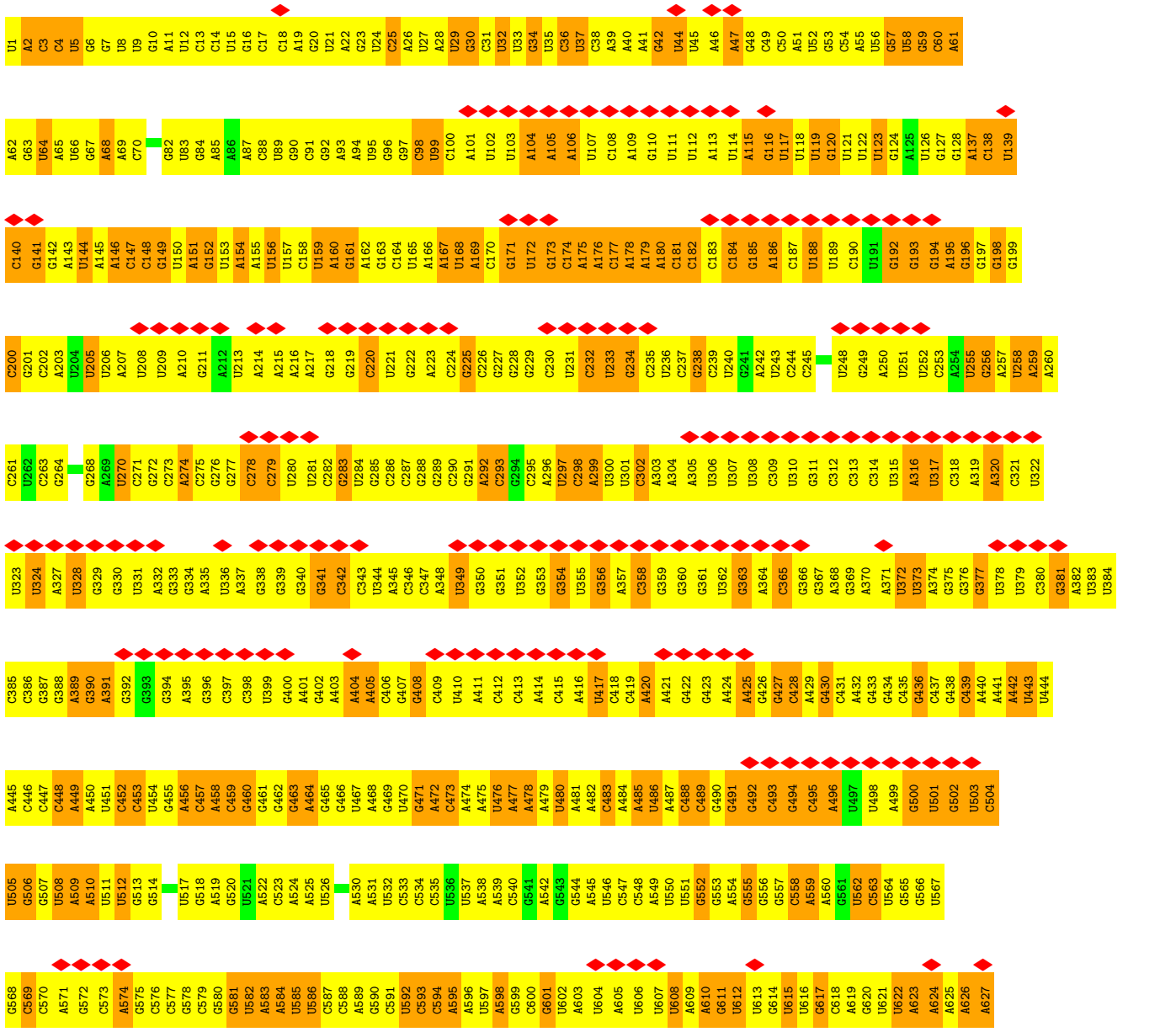
Chain S2:

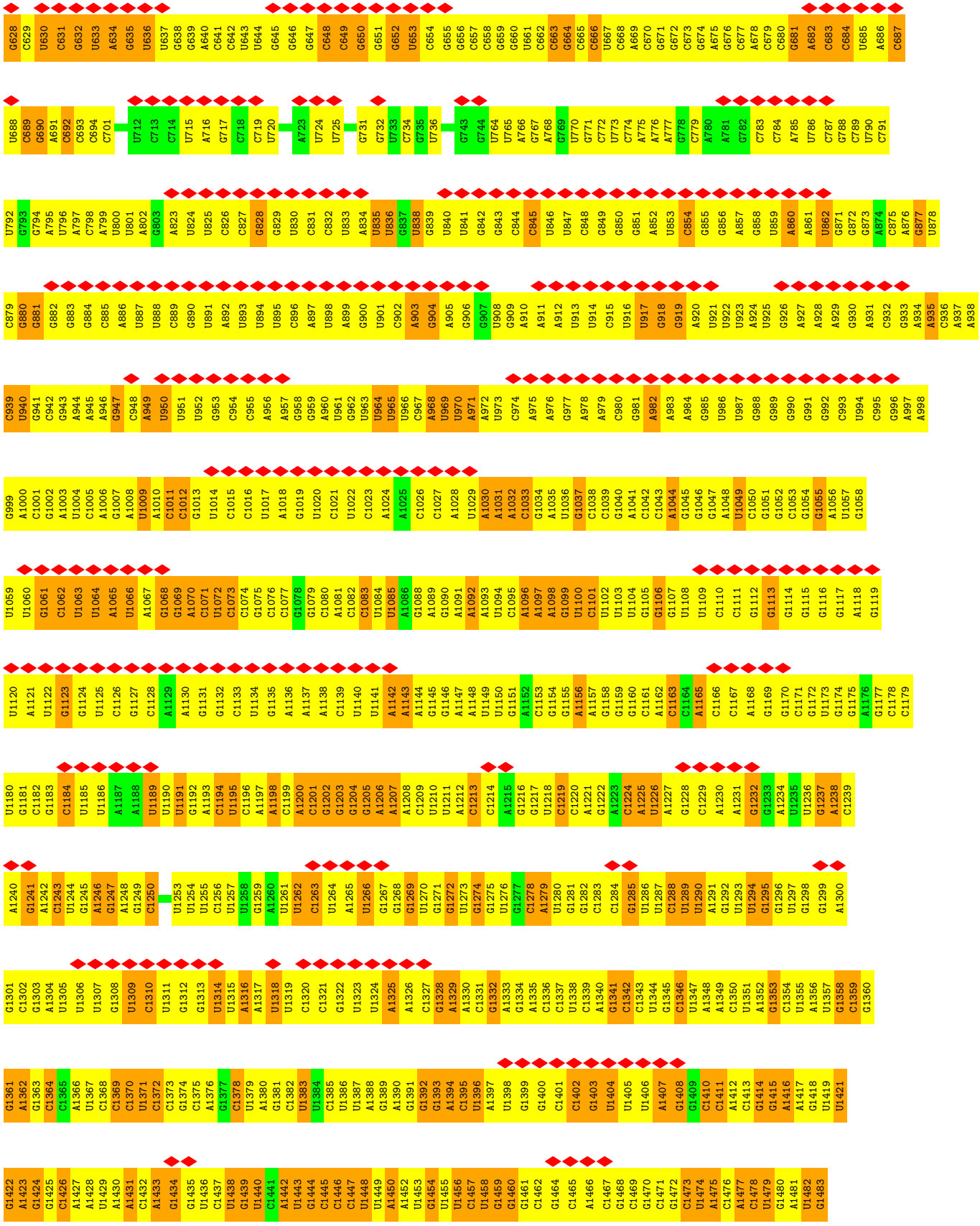


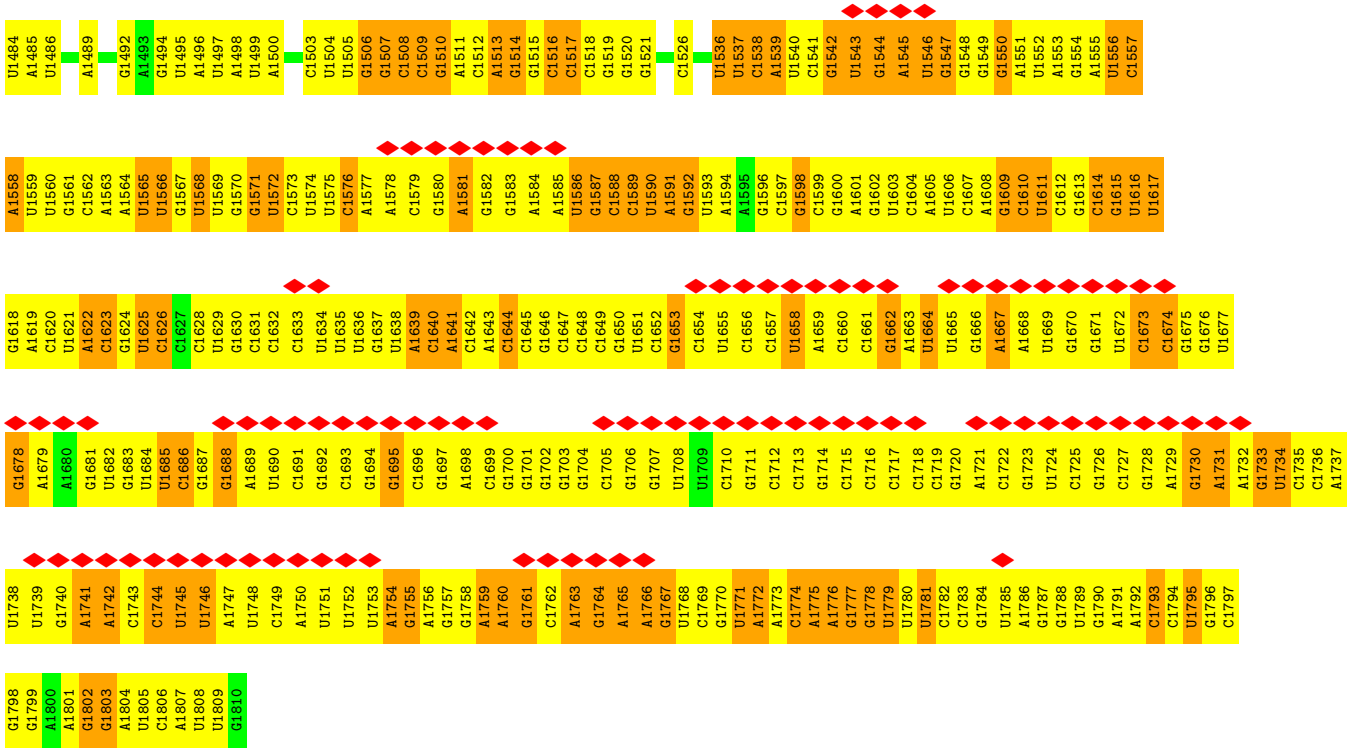
• Molecule 32: 18S ribosomal RNA

Chain S1:



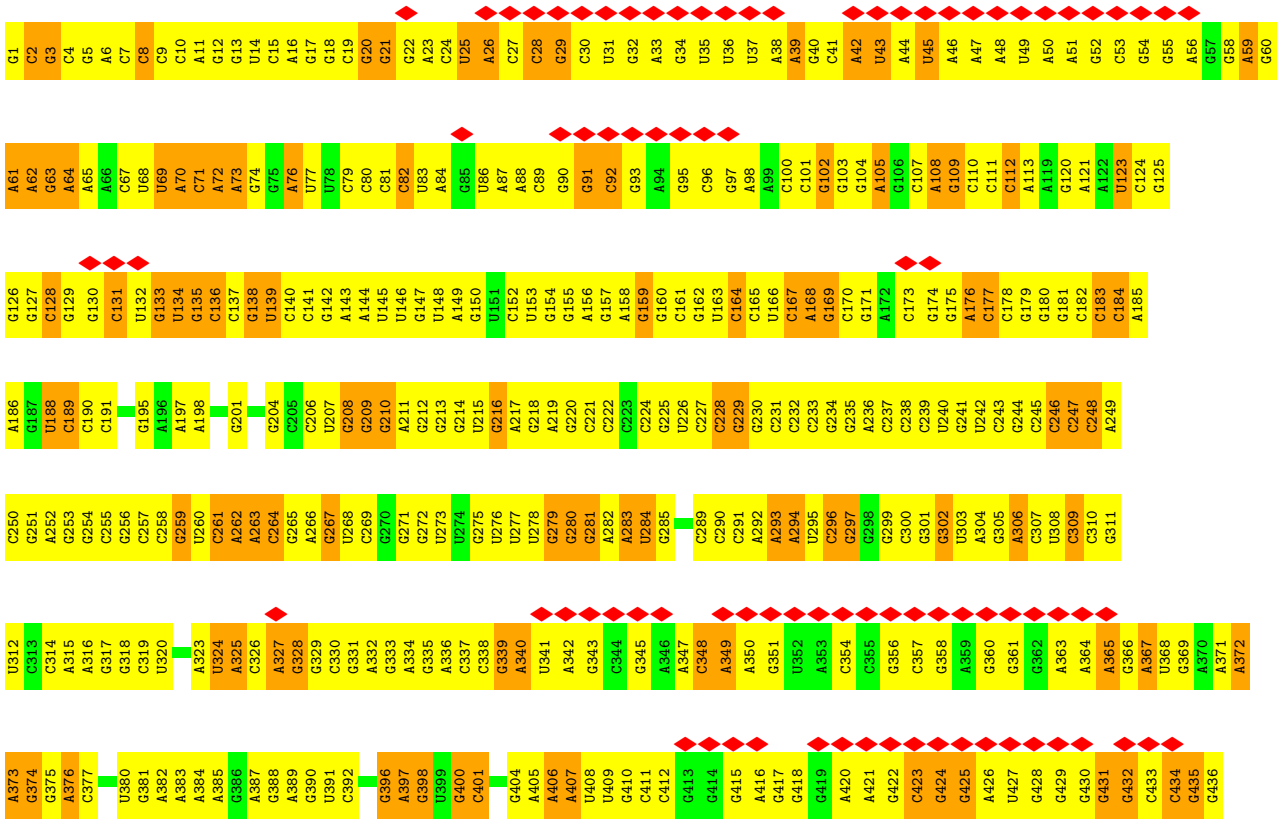


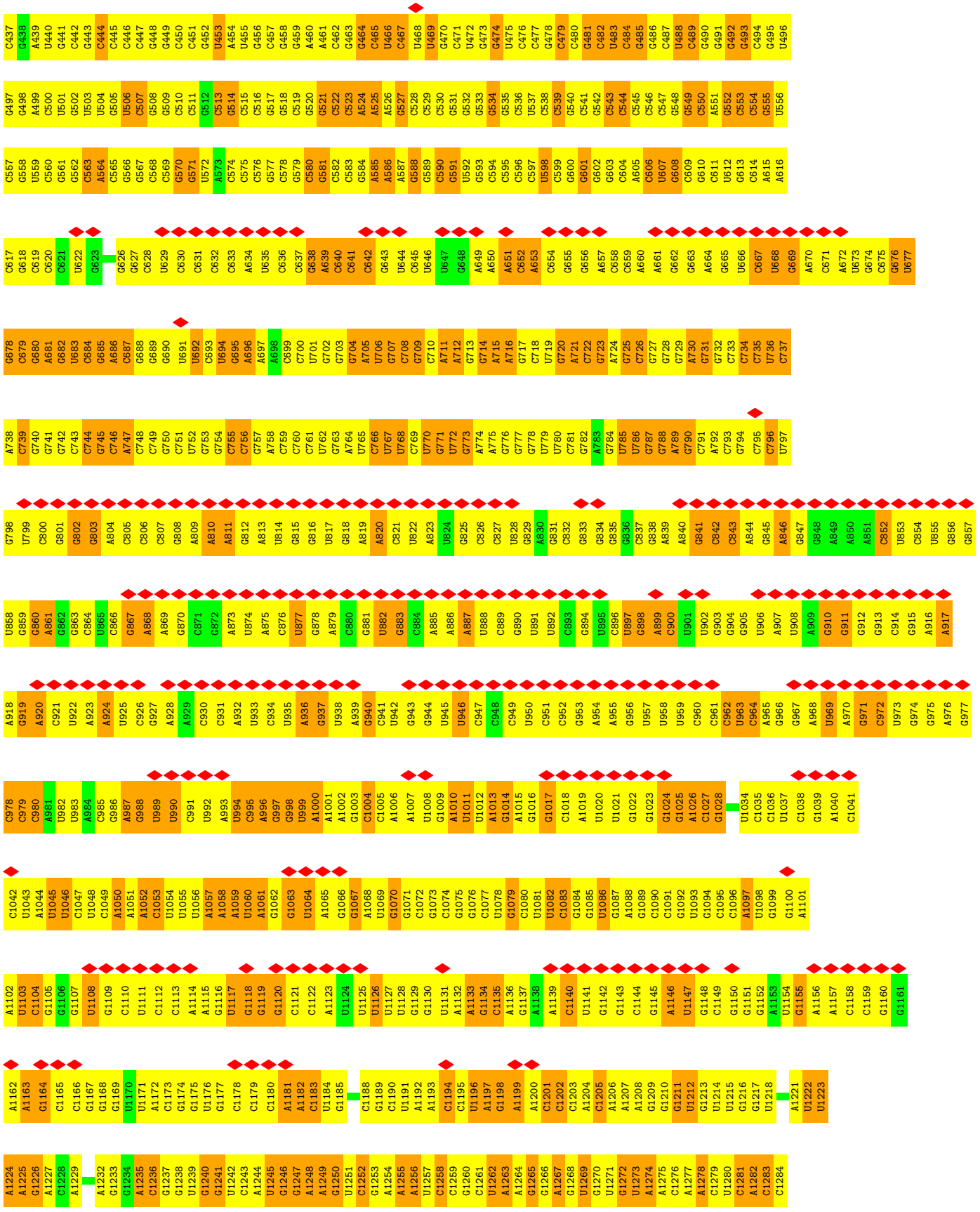


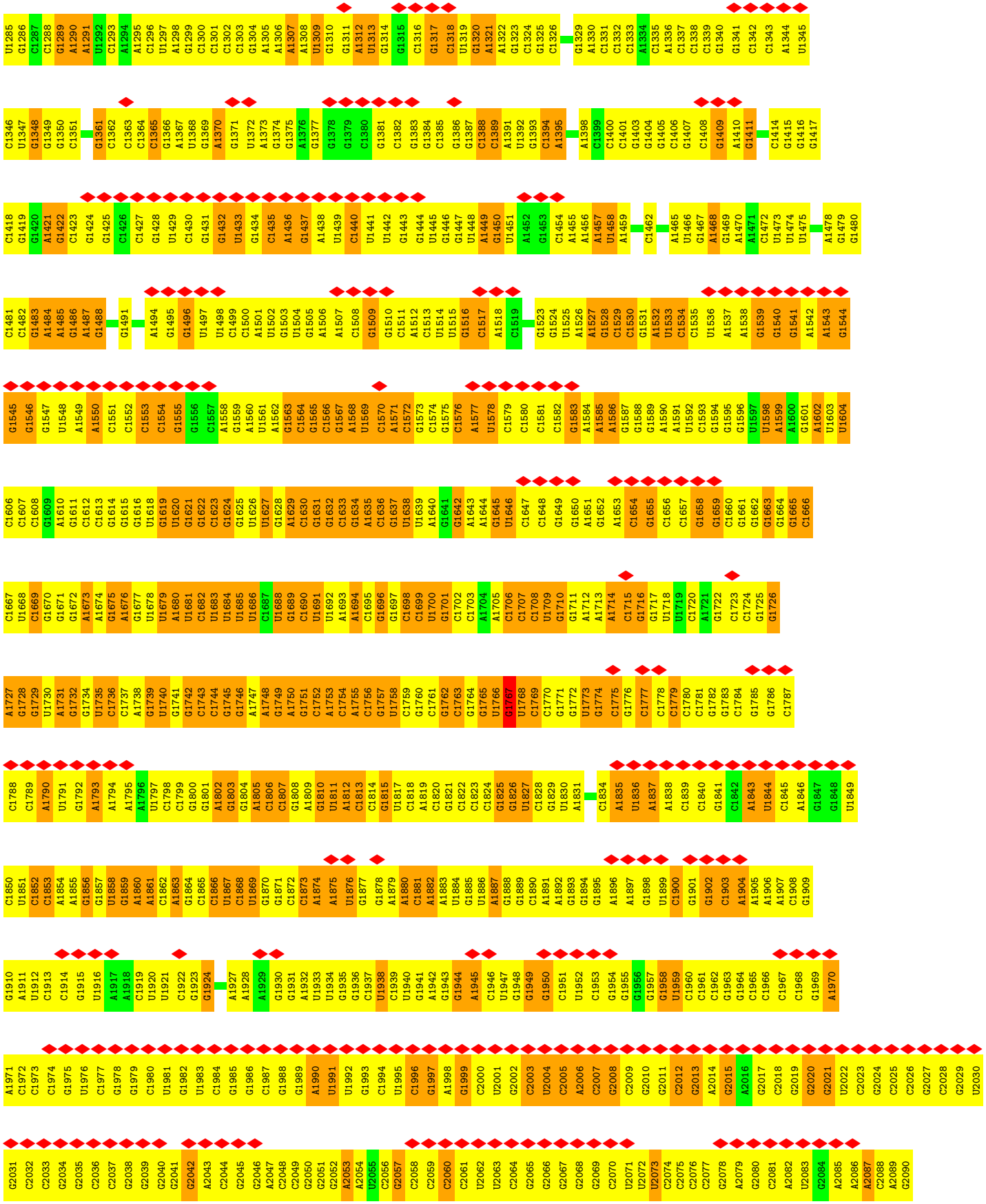


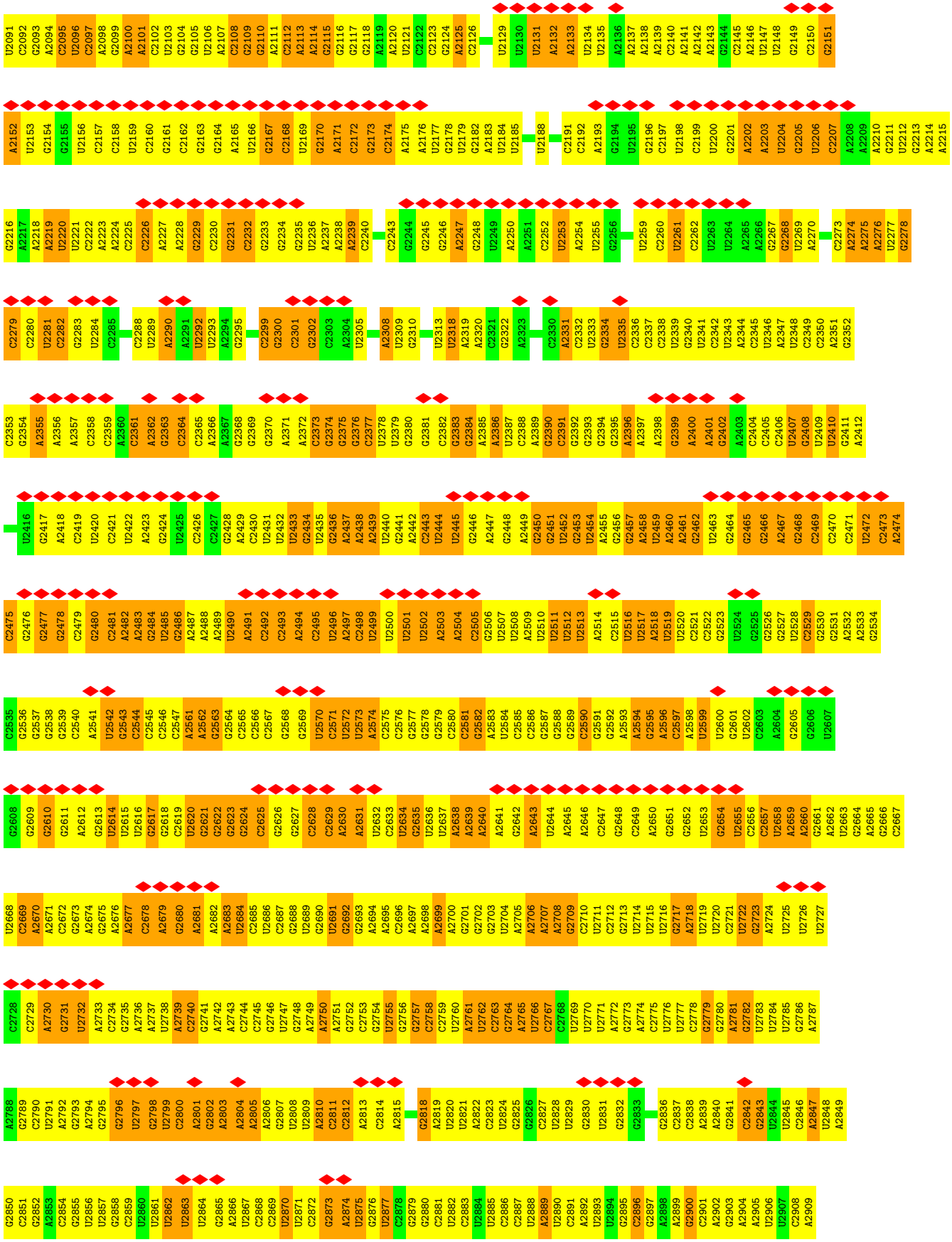
• Molecule 33: 26S ribosomal RNA

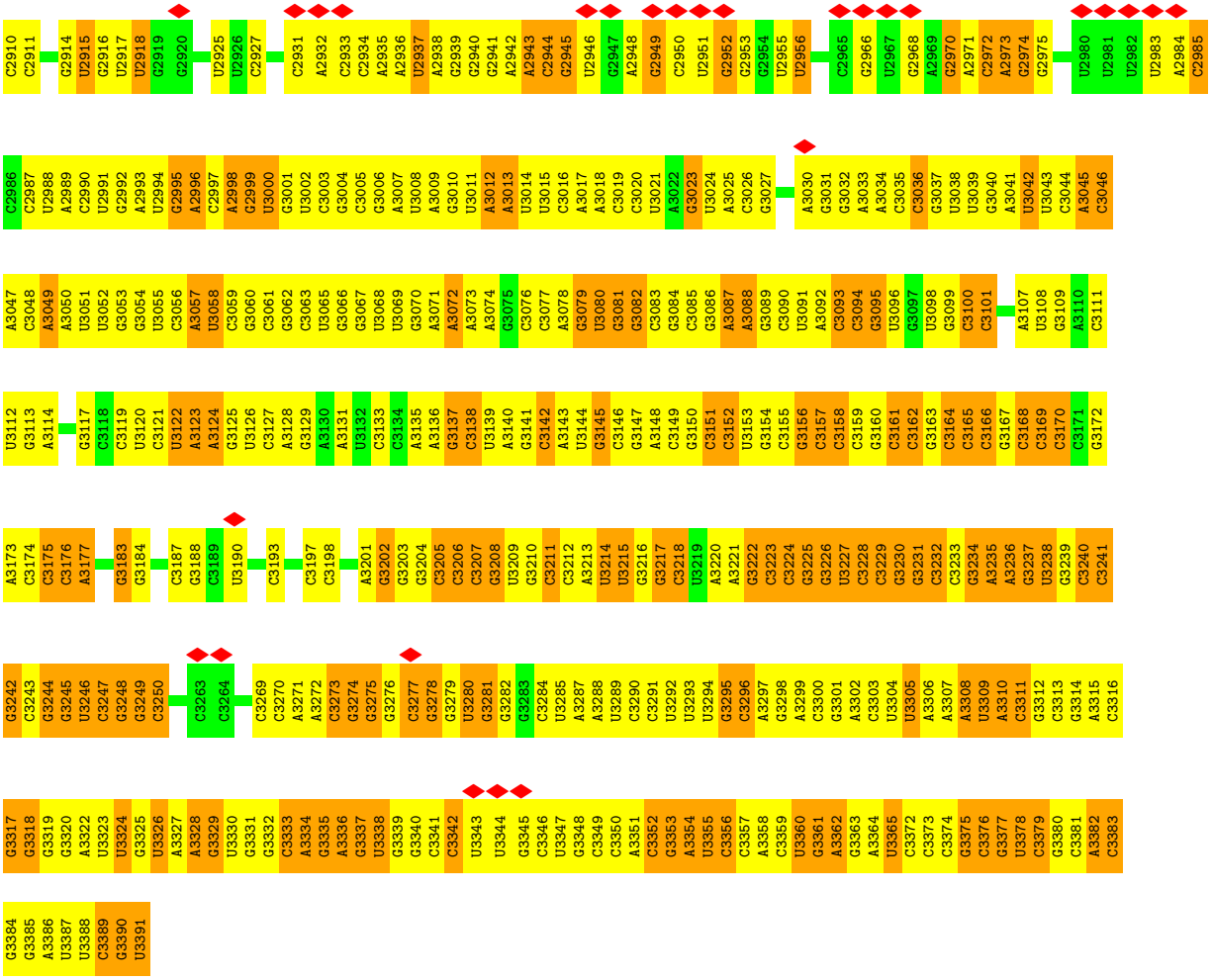
Chain L1:





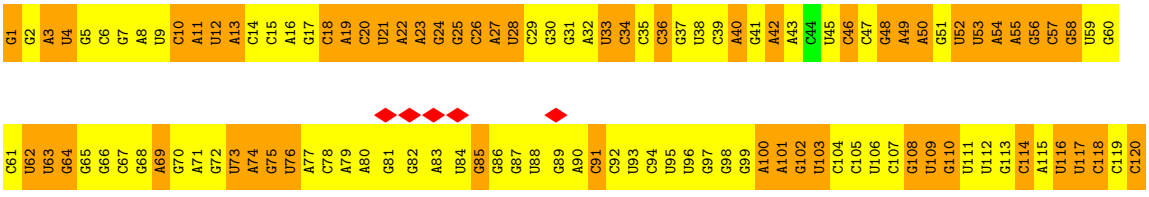






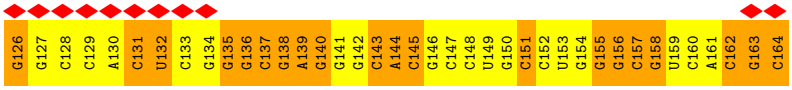
• Molecule 34: 5S ribosomal RNA

Chain L3:



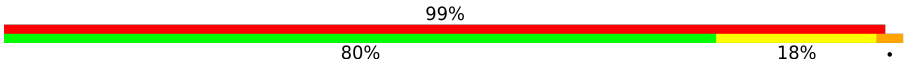
• Molecule 35: 5.8S ribosomal RNA

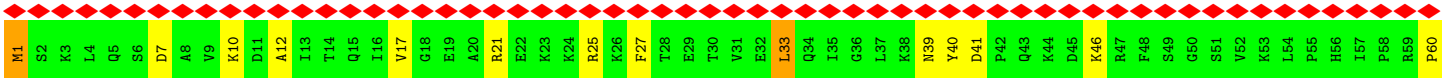
Chain L2:

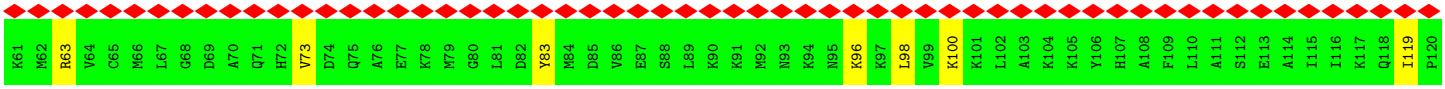


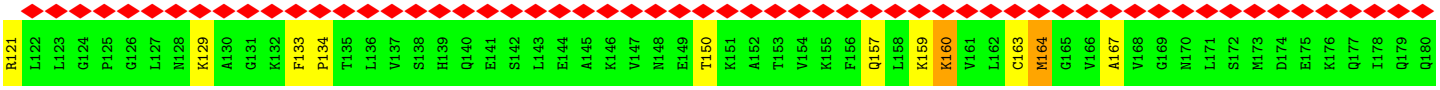
• Molecule 36: Ribosomal protein

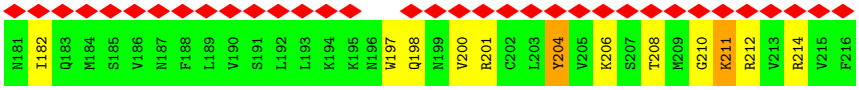
Chain LA:





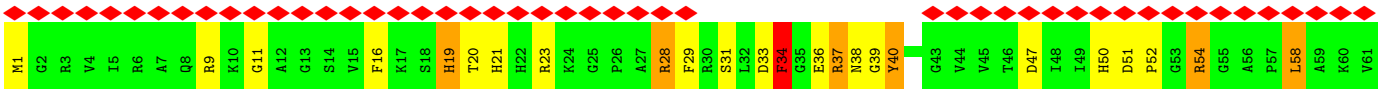


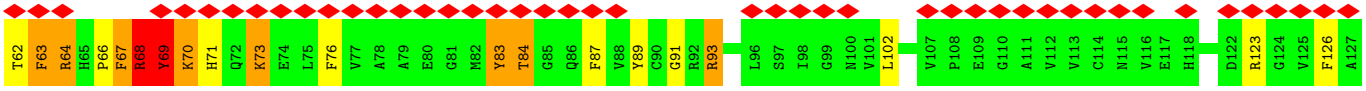


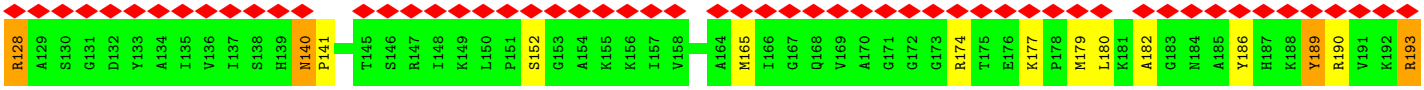


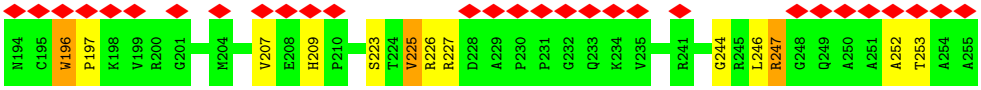
• Molecule 37: 60S ribosomal protein L2

Chain LB:



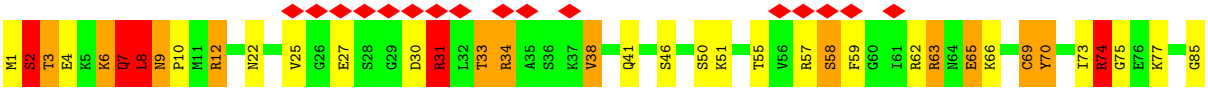


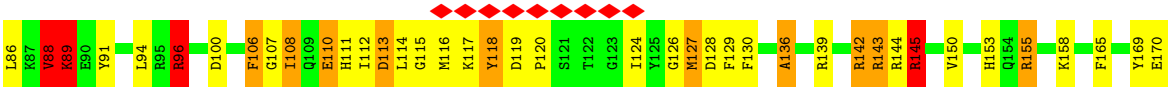




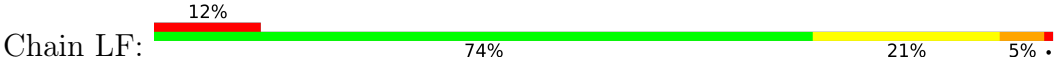
• Molecule 38: Ribosomal protein L11

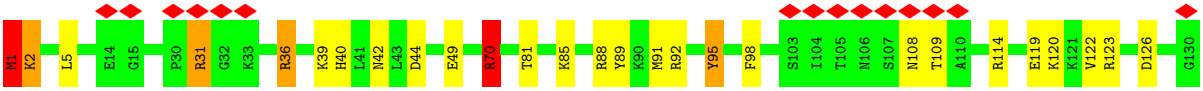
Chain LE:



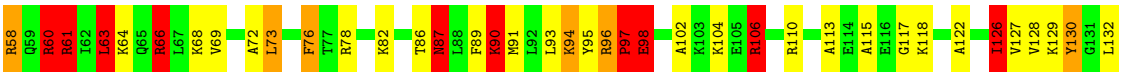


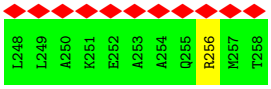
• Molecule 39: 60S ribosomal protein L9



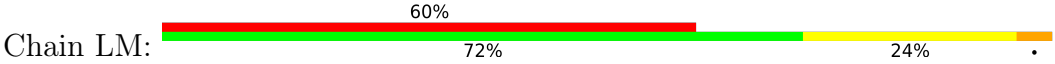


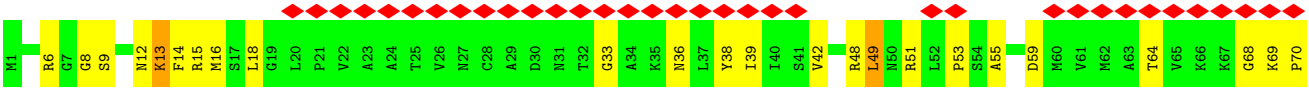
• Molecule 40: 60S ribosomal protein L7a

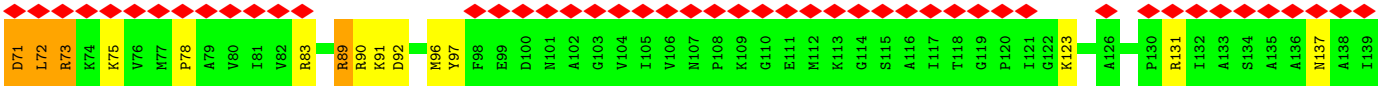




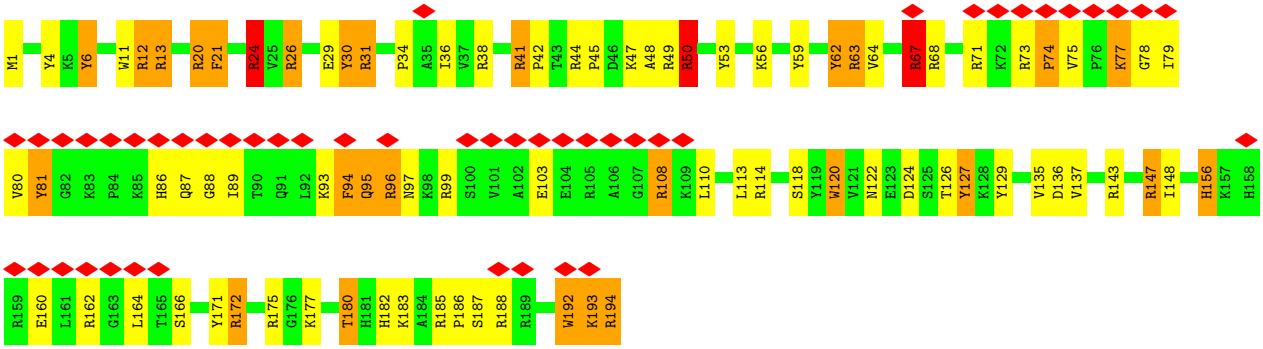
• Molecule 41: Ribosomal Pr 117





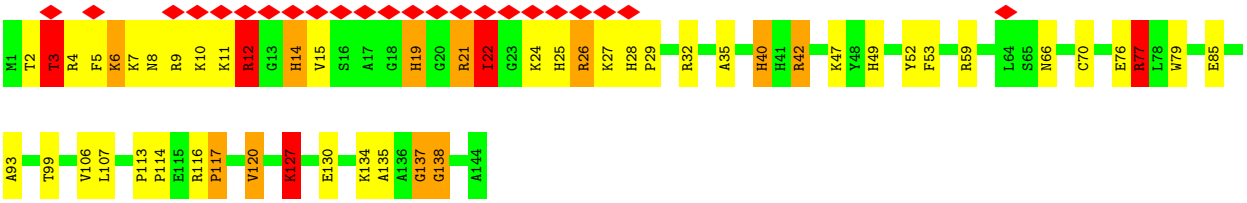


• Molecule 42: Ribosomal protein L15



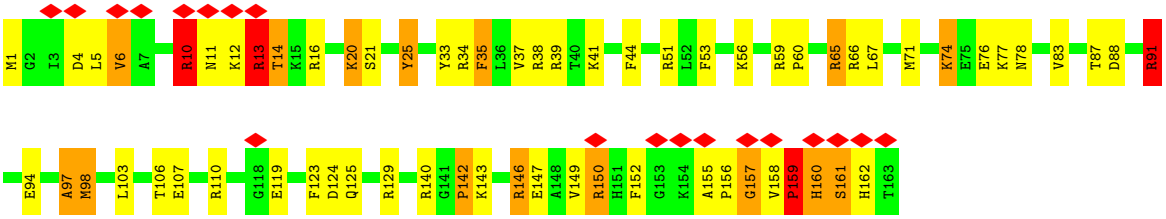
• Molecule 43: 60S ribosomal protein L27a-3

Chain LO:



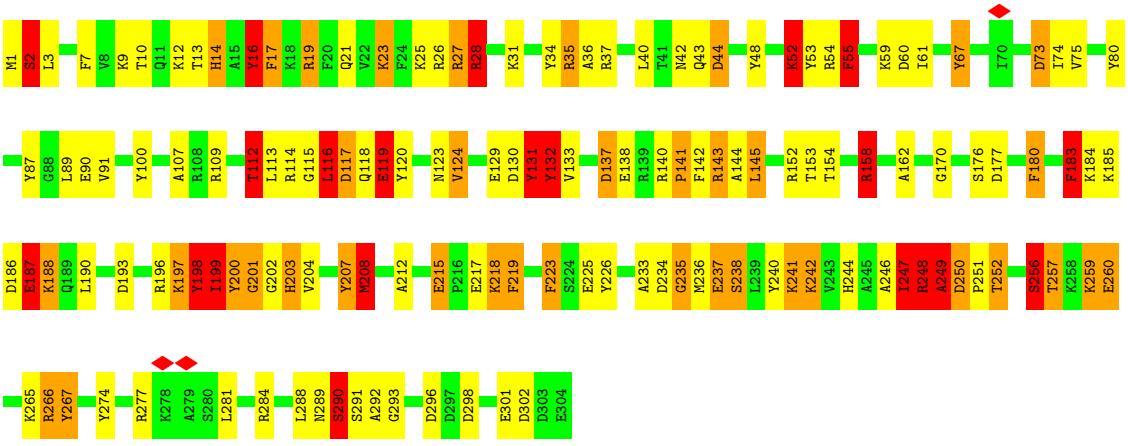
• Molecule 44: 60S ribosomal protein L18

Chain LR:



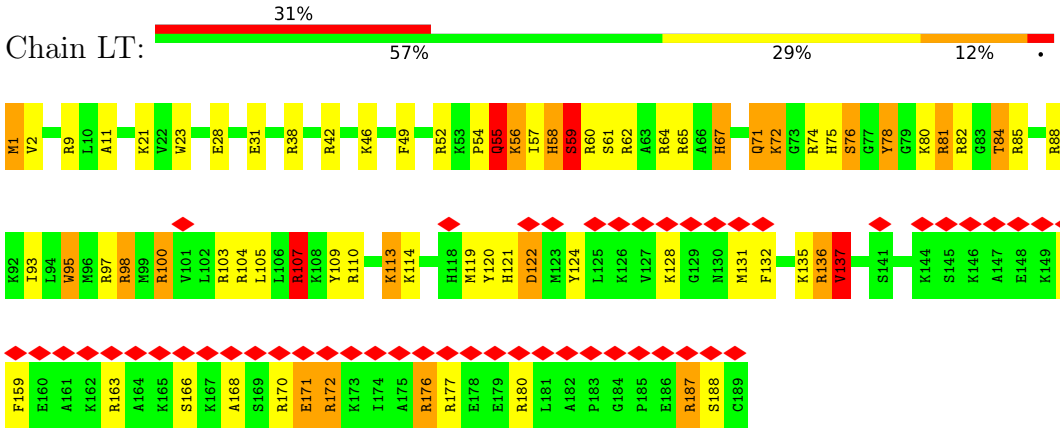
• Molecule 45: 60S ribosomal protein L5

Chain LQ:



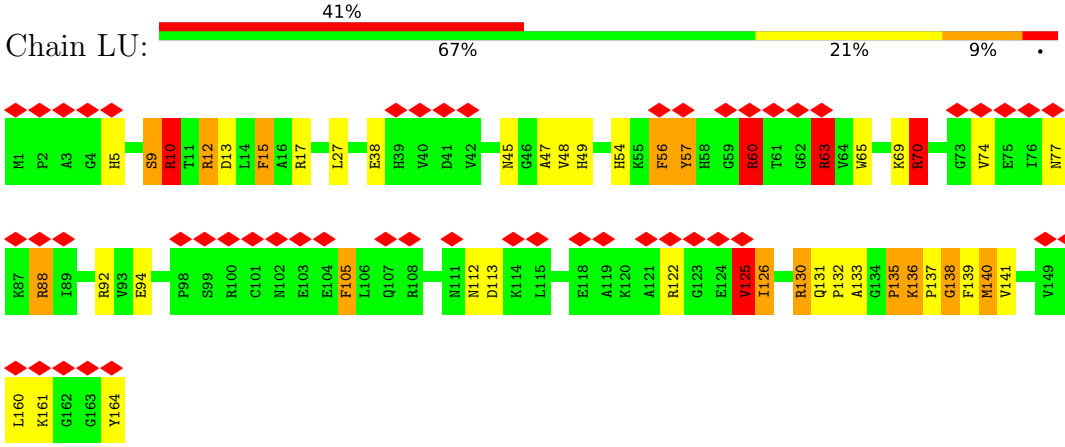
• Molecule 46: Ribosomal protein L19

Chain LT:



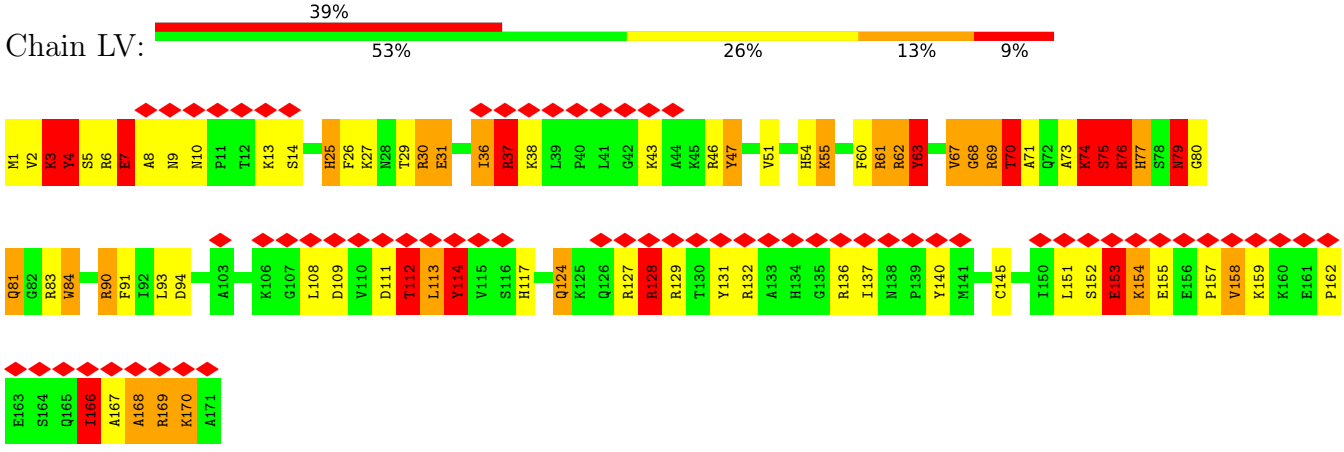
• Molecule 47: 60S ribosomal protein L21

Chain LU:



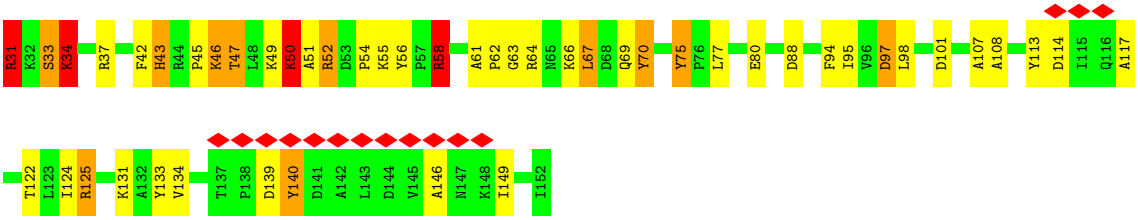
• Molecule 48: 60S ribosomal protein L17

Chain LV:



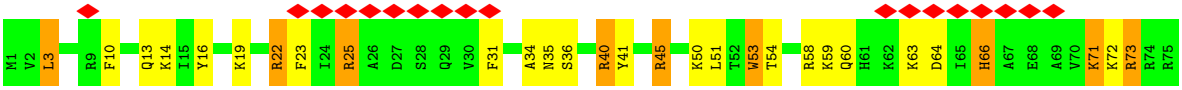
• Molecule 49: 60S ribosomal protein L23a

Chain LX:



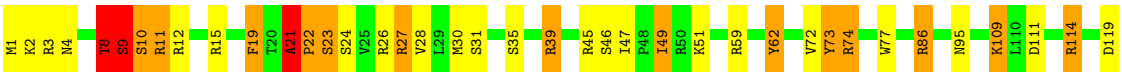
• Molecule 50: 60S ribosomal protein L24

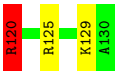
Chain LZ:



• Molecule 51: 60S ribosomal protein L26

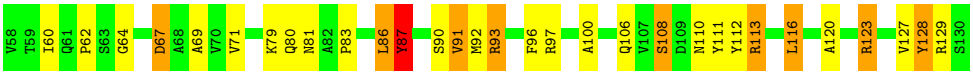
Chain LY:





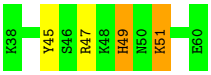
• Molecule 52: 60S ribosomal protein l28

Chain Lb:



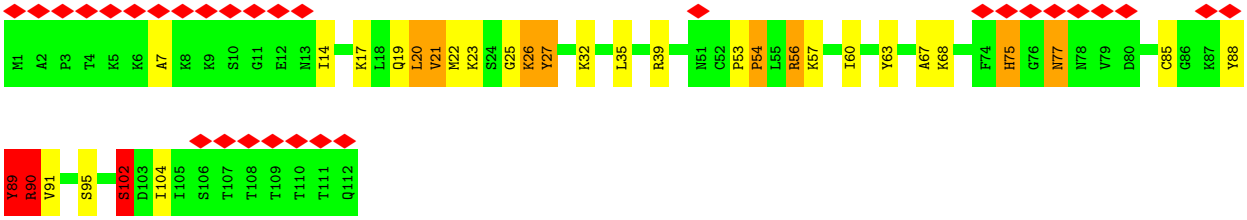
• Molecule 53: 60S ribosomal protein L29

Chain Ld:



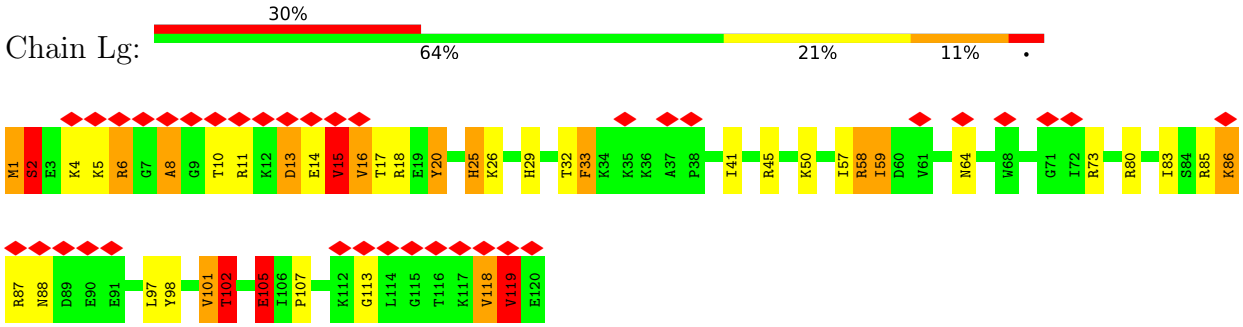
• Molecule 54: 60S ribosomal protein L30

Chain Lf:



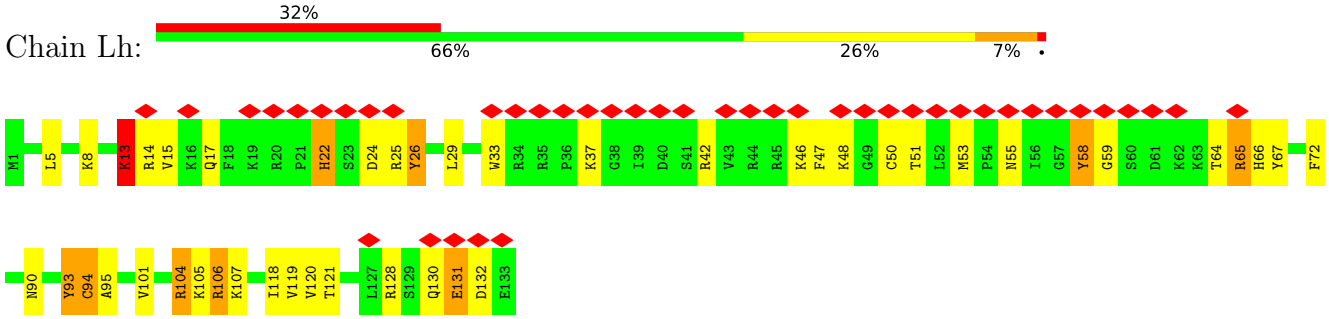
• Molecule 55: 60S ribosomal protein L31

Chain Lg:



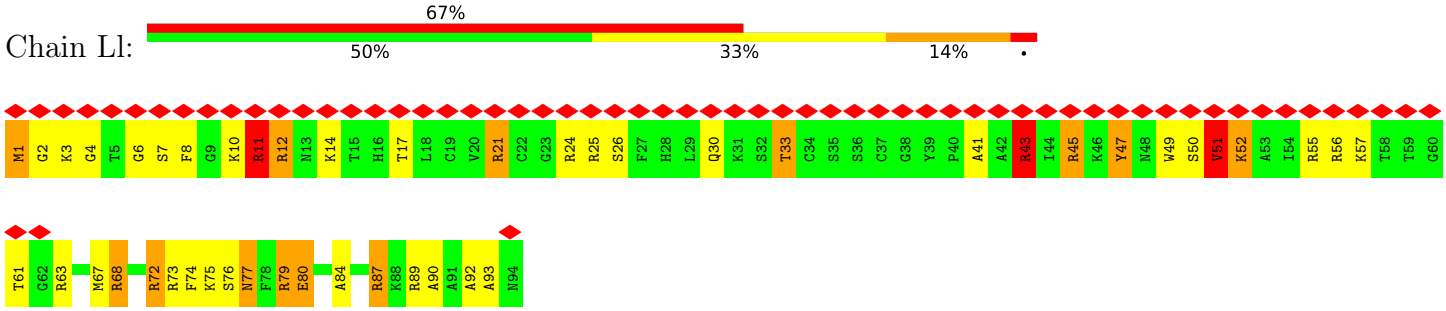
• Molecule 56: Ribosomal L32

Chain Lh:



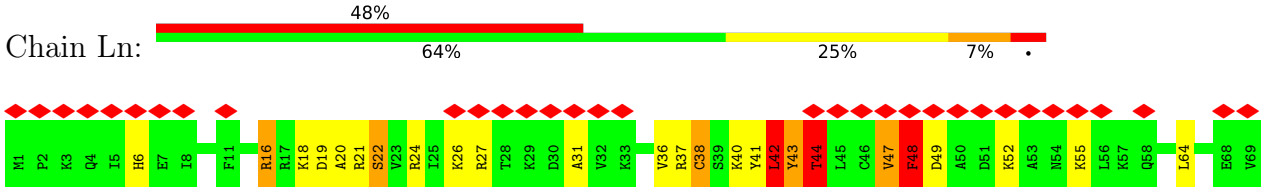
• Molecule 57: Ribosomal protein L37

Chain Ll:



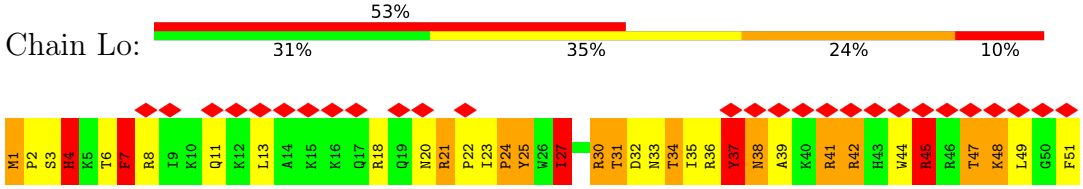
• Molecule 58: 60S ribosomal protein L38

Chain Ln:



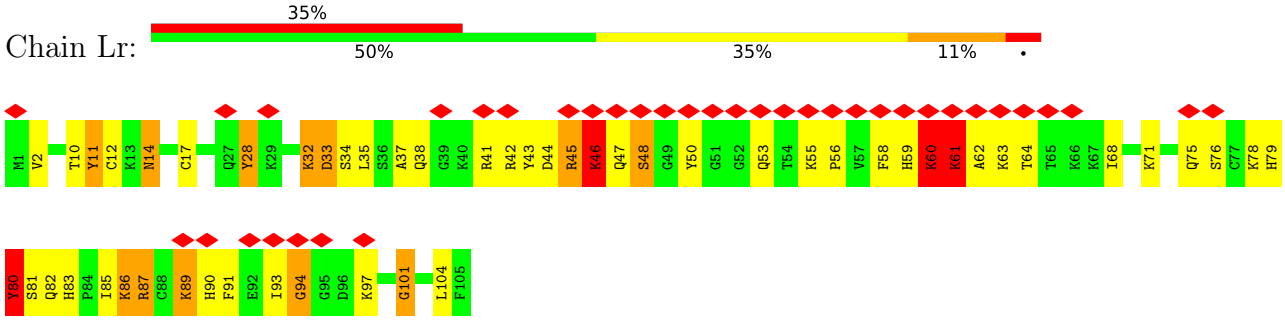
• Molecule 59: Ribosomal protein L39

Chain Lo:



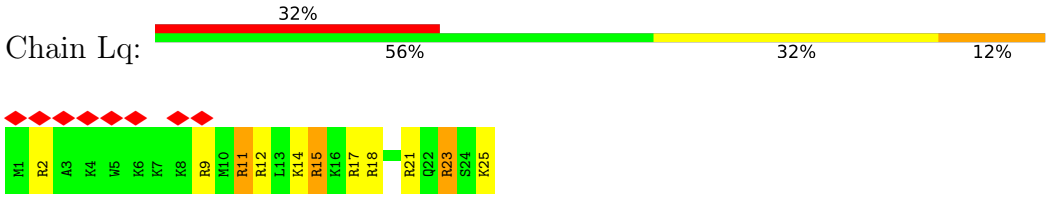
• Molecule 60: 60S ribosomal protein L44

Chain Lr:



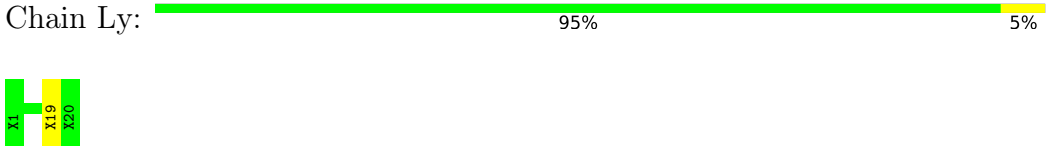
• Molecule 61: Unknown 60S wheat germ ribosome protein 1

Chain Lq:



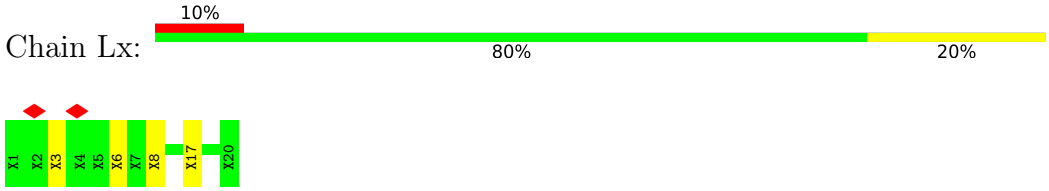
• Molecule 62: Unknown 60S wheat germ ribosome protein 2

Chain Ly:



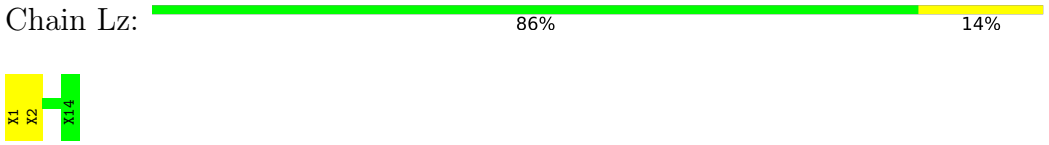
• Molecule 62: Unknown 60S wheat germ ribosome protein 2

Chain Lx:



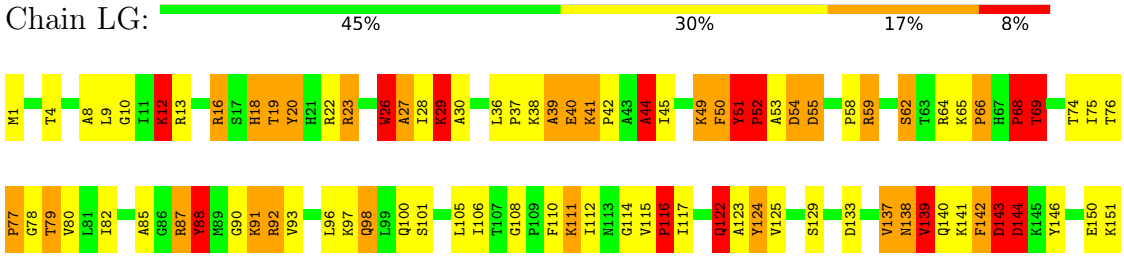
• Molecule 63: Unknown 60S wheat germ ribosome protein 3

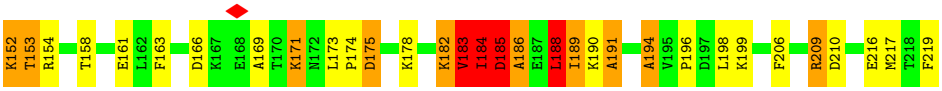
Chain Lz:



• Molecule 64: 60S ribosomal protein L6

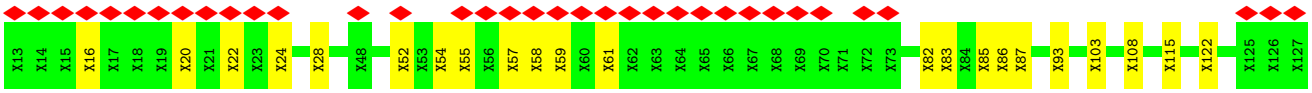
Chain LG:

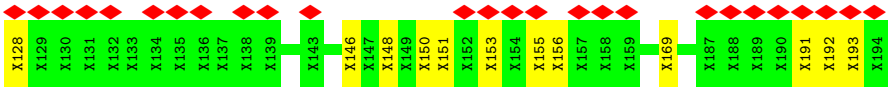




• Molecule 65: Unknown 60S wheat germ ribosome protein 5

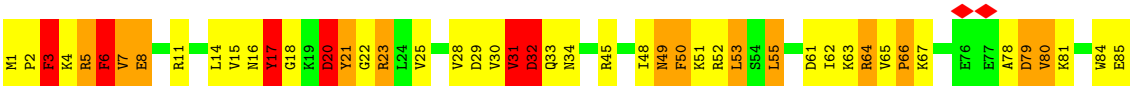
Chain LL:





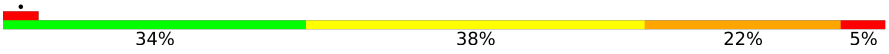
• Molecule 66: Unknown 60S wheat germ ribosome protein 6

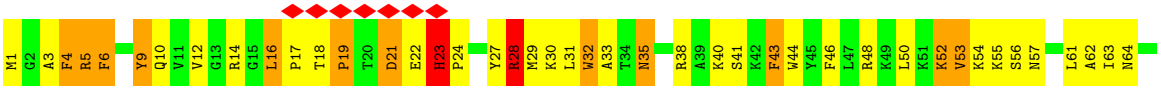
Chain LN:

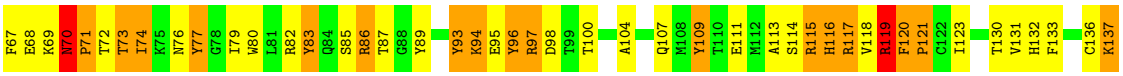


• Molecule 67: 60S ribosomal protein L18a

Chain LS:

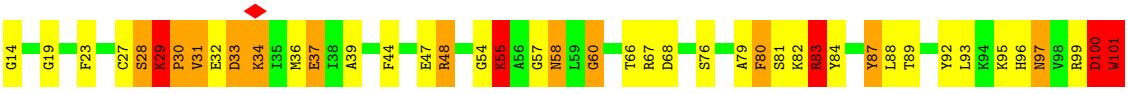


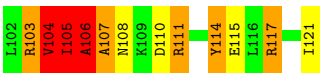




• Molecule 68: 60S ribosomal protein L22

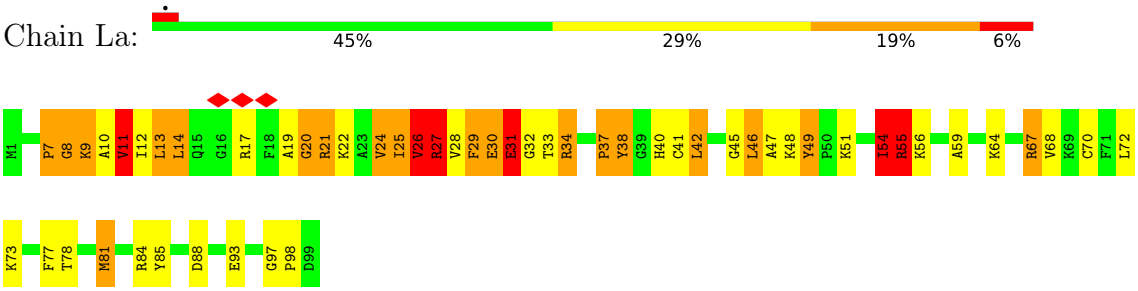
Chain LW:





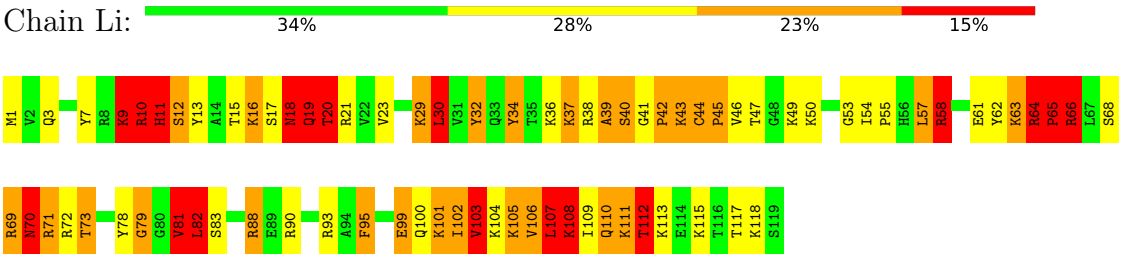
• Molecule 69: 60S ribosomal protein L27

Chain La:



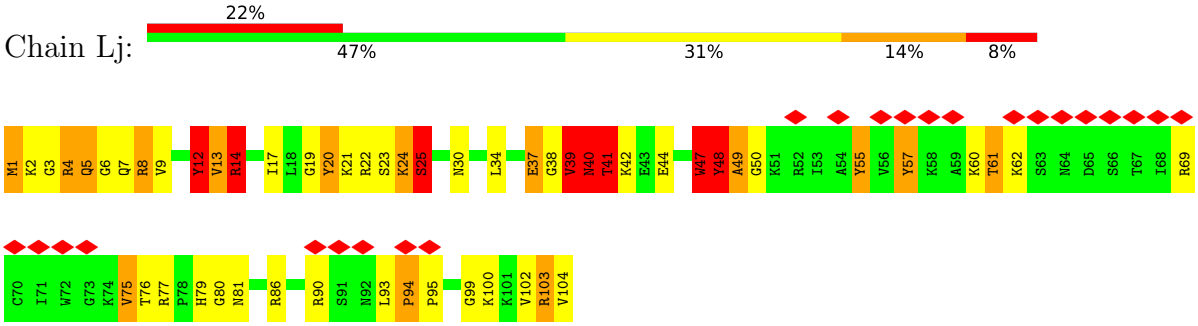
• Molecule 70: Ribosomal protein l34

Chain Li:



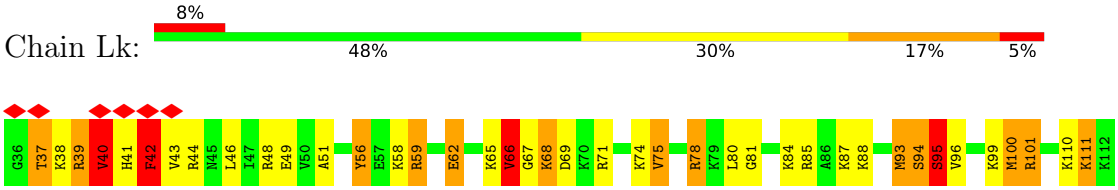
• Molecule 71: ribosomal protein L35A

Chain Lj:



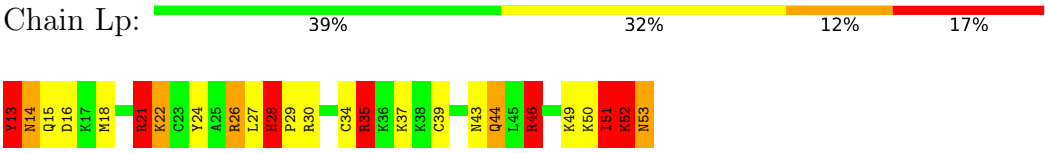
• Molecule 72: 60S ribosomal protein L36

Chain Lk:



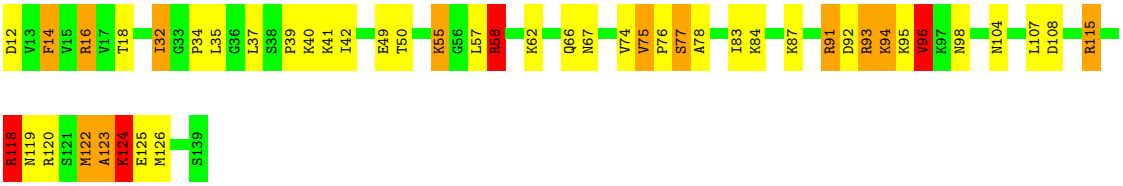
• Molecule 73: Ubiquitin-60S ribosomal protein L40-1

Chain Lp:

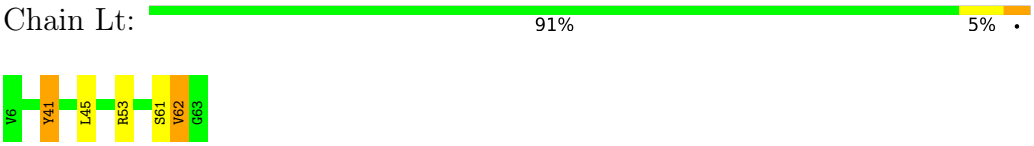


• Molecule 74: 60S ribosomal protein L12

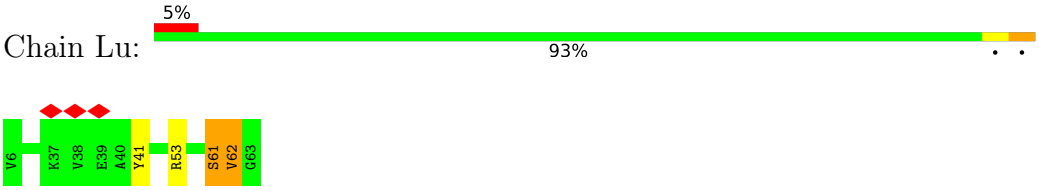
Chain LJ:



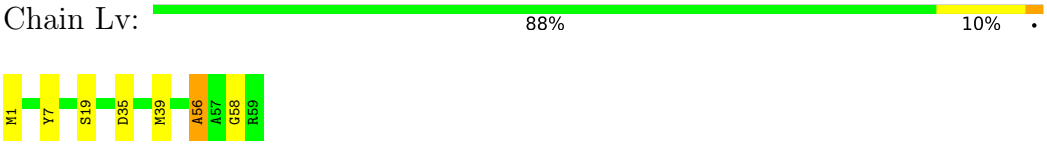
• Molecule 75: Ribosomal protein P1



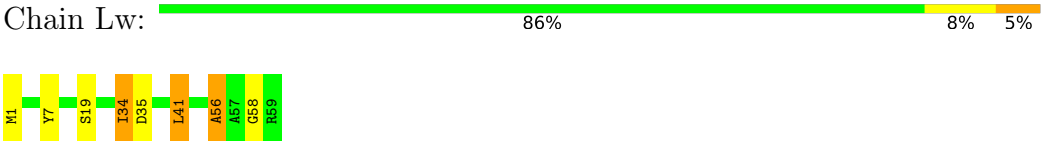
• Molecule 75: Ribosomal protein P1



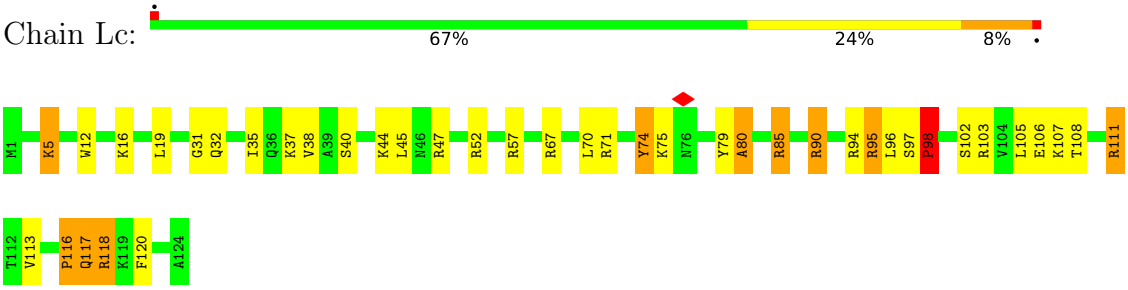
• Molecule 76: 60S acidic ribosomal protein P2A



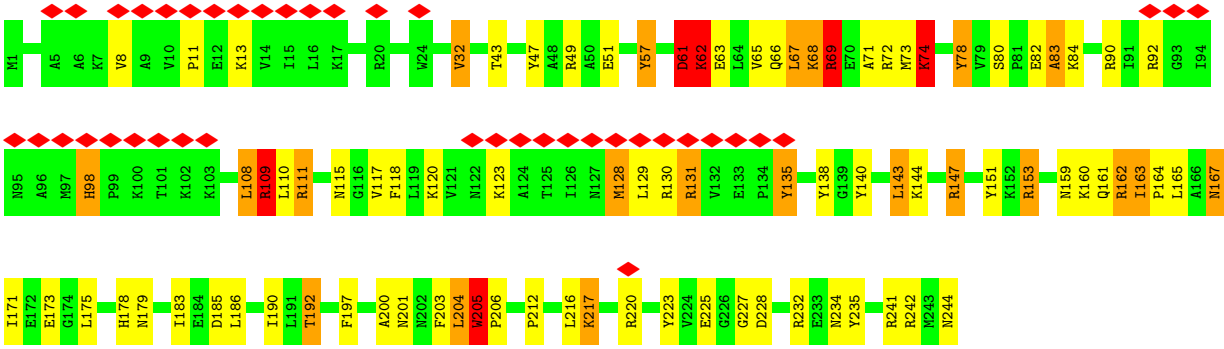
• Molecule 76: 60S acidic ribosomal protein P2A



• Molecule 77: 60S ribosomal protein L35

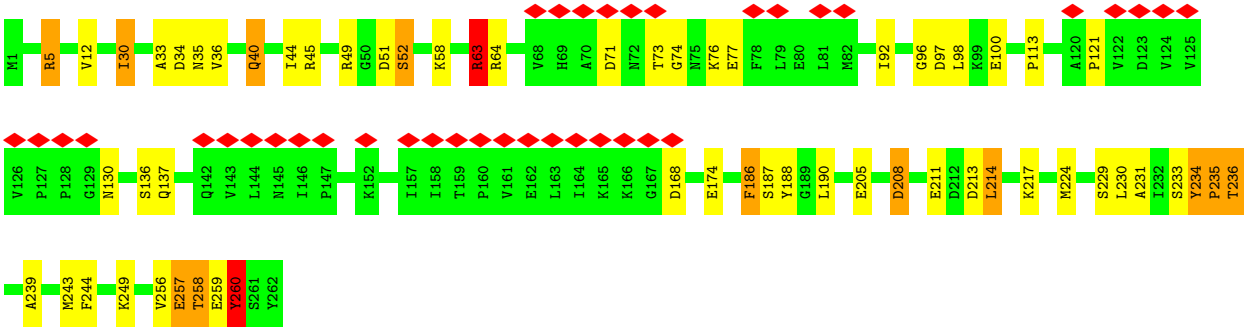


• Molecule 78: Ribosomal protein L7



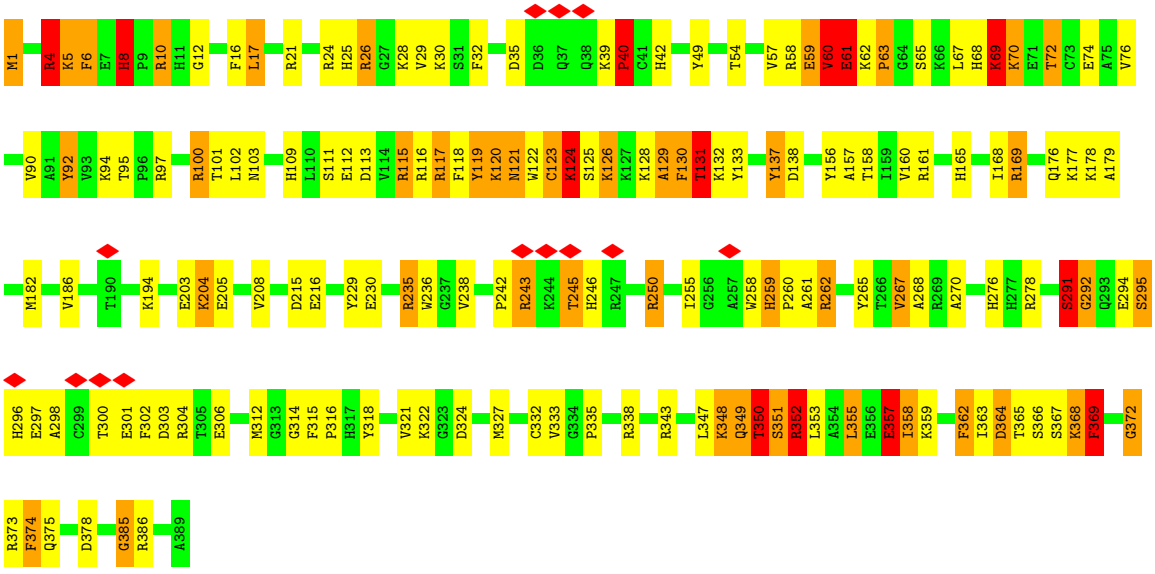
• Molecule 79: 60S acidic ribosomal protein P0

Chain Ls:



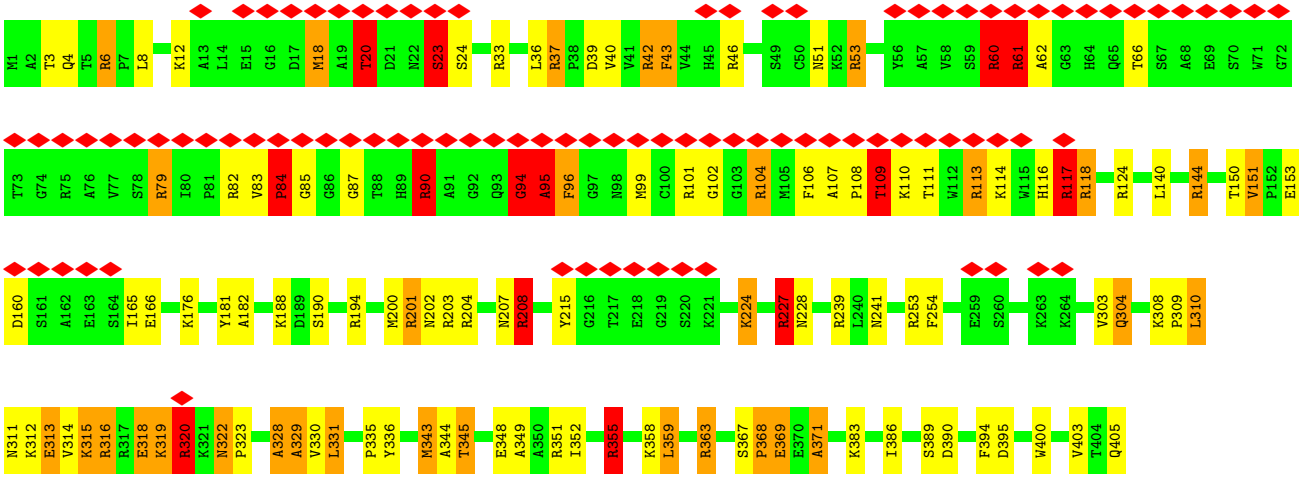
• Molecule 80: Ribosomal protein L3

Chain LC:



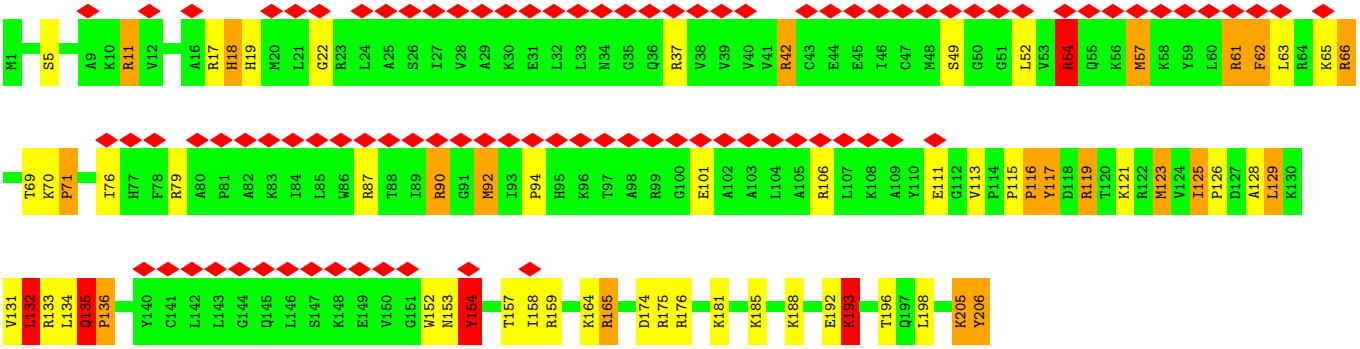
• Molecule 81: 60S ribosomal protein L4/L1

Chain LD:



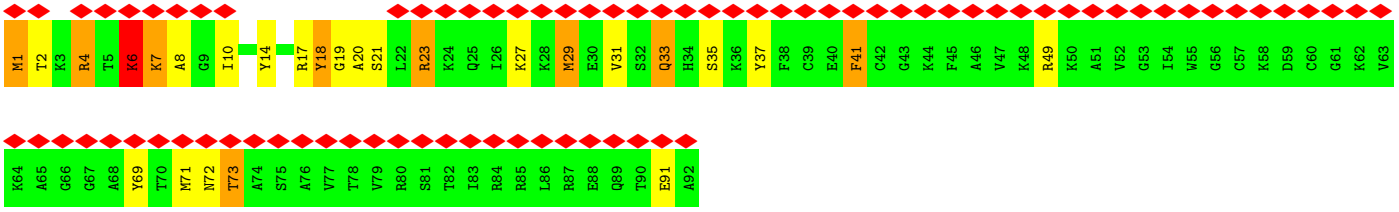
• Molecule 82: Ribosomal protein L13a

Chain LK:



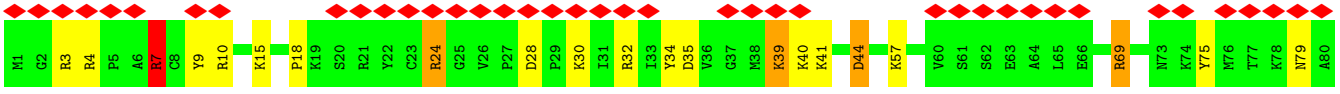
• Molecule 83: 60S ribosomal protein L37a, expressed

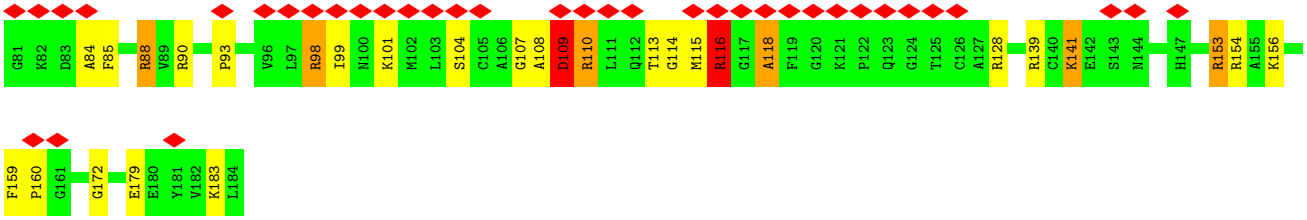
Chain Lm:



• Molecule 84: 60S ribosomal protein L10-1

Chain LI:




G81
K82
D83
A84
F85
R88
V89
R90
P93
V96
L97
R98
I99
N100
K101
M102
L103
S104
C105
A106
G107
A108
D109
R110
L111
Q112
T113
G114
M115
R116
G117
A118
F119
G120
K121
P122
Q123
G124
T125
C126
A127
R128
R139
C140
K141
E142
S143
N144
H147
R153
R154
A155
K156
F159
P160
G161
G172
E179
E180
Y181
V182
K183
L184

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	HELICAL, twist=Not provided°, rise=Not provided Å, axial sym=Not provided	Depositor
Number of subtomograms used	106	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	150	Depositor
Electron dose ($e^-/Å^2$)	30	Depositor
Minimum defocus (nm)	2000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	41176	Depositor
Image detector	FEI FALCON I (4k x 4k)	Depositor
Maximum map value	16.279	Depositor
Minimum map value	-14.012	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	1.0	Depositor
Map size (Å)	1740.8, 1740.8, 1360.0	wwPDB
Map dimensions	256, 256, 200	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	6.8, 6.8, 6.8	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	Sa	1.90	33/2897 (1.1%)	2.28	124/3917 (3.2%)
2	SA	1.63	11/1988 (0.6%)	2.25	83/2697 (3.1%)
3	SB	2.02	27/1555 (1.7%)	2.91	115/2077 (5.5%)
4	SD	1.94	35/1637 (2.1%)	3.00	96/2202 (4.4%)
5	SE	2.09	32/2068 (1.5%)	2.98	73/2776 (2.6%)
6	SF	0.99	2/1505 (0.1%)	1.58	29/2027 (1.4%)
7	SI	1.85	14/1034 (1.4%)	2.36	42/1379 (3.0%)
8	SJ	1.78	13/896 (1.5%)	2.78	34/1193 (2.8%)
9	SK	2.29	11/839 (1.3%)	2.92	43/1120 (3.8%)
10	SL	1.68	18/965 (1.9%)	2.24	35/1271 (2.8%)
11	SM	3.93	25/1185 (2.1%)	3.78	113/1574 (7.2%)
12	SO	0.90	2/994 (0.2%)	2.31	29/1332 (2.2%)
13	SQ	1.81	23/1145 (2.0%)	3.16	96/1531 (6.3%)
14	SP	1.91	10/653 (1.5%)	2.85	41/871 (4.7%)
15	SS	1.88	24/1179 (2.0%)	3.02	80/1586 (5.0%)
16	SR	1.50	6/727 (0.8%)	1.91	29/975 (3.0%)
17	SV	1.18	3/748 (0.4%)	1.77	31/994 (3.1%)
19	SY	1.98	8/443 (1.8%)	2.41	20/592 (3.4%)
20	SZ	1.54	4/476 (0.8%)	2.82	22/623 (3.5%)
23	SU	2.45	34/745 (4.6%)	3.90	126/988 (12.8%)
24	SX	1.65	9/382 (2.4%)	1.96	15/515 (2.9%)
25	SC	3.58	34/1563 (2.2%)	3.62	136/2086 (6.5%)
27	SH	1.53	10/1060 (0.9%)	2.45	52/1419 (3.7%)
28	SN	2.18	7/317 (2.2%)	2.71	27/414 (6.5%)
29	ST	1.52	4/659 (0.6%)	2.09	29/884 (3.3%)
30	S3	2.62	16/264 (6.1%)	2.41	16/407 (3.9%)
31	S2	3.33	165/1785 (9.2%)	2.83	192/2779 (6.9%)
32	S1	2.97	2435/37672 (6.5%)	2.60	3313/58357 (5.7%)
33	L1	3.27	5613/77720 (7.2%)	2.85	8211/121026 (6.8%)
34	L3	3.13	166/2868 (5.8%)	2.95	328/4468 (7.3%)
35	L2	3.74	298/3553 (8.4%)	3.05	429/5515 (7.8%)
36	LA	1.27	7/1741 (0.4%)	1.66	27/2323 (1.2%)
37	LB	1.57	15/1979 (0.8%)	2.30	63/2659 (2.4%)
38	LE	2.68	30/1397 (2.1%)	2.43	86/1864 (4.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
39	LF	1.25	10/1519 (0.7%)	1.98	45/2042 (2.2%)
40	LH	1.24	9/1586 (0.6%)	2.43	41/2120 (1.9%)
41	LM	1.36	7/1036 (0.7%)	1.97	40/1388 (2.9%)
42	LP	1.72	23/1669 (1.4%)	2.57	80/2235 (3.6%)
43	LO	1.49	11/1113 (1.0%)	2.62	32/1485 (2.2%)
44	LR	1.36	7/1303 (0.5%)	2.09	41/1748 (2.3%)
45	LQ	1.69	24/2438 (1.0%)	3.26	131/3271 (4.0%)
46	LT	1.73	12/1590 (0.8%)	2.57	88/2100 (4.2%)
47	LU	1.75	9/1290 (0.7%)	2.66	55/1728 (3.2%)
48	LV	2.47	27/1359 (2.0%)	3.07	111/1816 (6.1%)
49	LX	1.71	9/1002 (0.9%)	2.28	42/1340 (3.1%)
50	LZ	1.42	5/591 (0.8%)	2.45	20/782 (2.6%)
51	LY	1.65	15/1061 (1.4%)	2.37	37/1418 (2.6%)
52	Lb	1.79	9/585 (1.5%)	2.16	31/786 (3.9%)
53	Ld	1.12	0/201	1.55	3/261 (1.1%)
54	Lf	1.22	1/836 (0.1%)	1.85	23/1121 (2.1%)
55	Lg	1.52	7/954 (0.7%)	2.14	42/1272 (3.3%)
56	Lh	1.50	4/1108 (0.4%)	2.35	37/1477 (2.5%)
57	Ll	1.67	8/738 (1.1%)	2.57	49/974 (5.0%)
58	Ln	1.11	1/554 (0.2%)	2.46	15/738 (2.0%)
59	Lo	1.87	7/472 (1.5%)	3.05	44/627 (7.0%)
60	Lr	1.99	14/853 (1.6%)	3.17	41/1124 (3.6%)
61	Lq	1.77	5/239 (2.1%)	3.70	15/302 (5.0%)
64	LG	1.72	25/1765 (1.4%)	3.20	140/2372 (5.9%)
66	LN	1.57	13/1094 (1.2%)	3.36	81/1461 (5.5%)
67	LS	1.93	21/1457 (1.4%)	2.83	120/1957 (6.1%)
68	LW	1.76	14/850 (1.6%)	2.74	55/1135 (4.8%)
69	La	1.69	12/743 (1.6%)	2.67	65/992 (6.6%)
70	Li	1.87	15/979 (1.5%)	2.91	91/1305 (7.0%)
71	Lj	1.89	20/811 (2.5%)	3.14	58/1083 (5.4%)
72	Lk	1.74	7/618 (1.1%)	3.73	52/809 (6.4%)
73	Lp	2.33	11/349 (3.2%)	3.33	37/458 (8.1%)
74	LJ	1.36	1/967 (0.1%)	2.08	29/1298 (2.2%)
75	Lt	0.83	0/438	1.67	4/596 (0.7%)
75	Lu	0.69	0/438	1.28	2/596 (0.3%)
76	Lv	0.83	0/444	1.42	6/596 (1.0%)
76	Lw	0.97	1/444 (0.2%)	1.61	8/596 (1.3%)
77	Lc	1.69	10/1017 (1.0%)	2.53	27/1351 (2.0%)
78	Le	1.52	13/2018 (0.6%)	2.44	77/2702 (2.8%)
79	Ls	0.90	0/2023	1.71	40/2739 (1.5%)
80	LC	1.56	35/3168 (1.1%)	3.16	134/4234 (3.2%)
81	LD	1.47	27/2919 (0.9%)	3.04	129/3924 (3.3%)
82	LK	1.33	12/1678 (0.7%)	2.08	44/2246 (2.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
83	Lm	1.32	4/724 (0.6%)	2.06	28/958 (2.9%)
84	LI	0.93	6/1499 (0.4%)	1.88	31/2001 (1.5%)
All	All	2.71	9615/207179 (4.6%)	2.73	16506/304005 (5.4%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	Sa	1	25
2	SA	1	24
3	SB	0	32
4	SD	1	31
5	SE	0	23
6	SF	0	14
7	SI	0	5
8	SJ	0	16
9	SK	0	14
10	SL	0	11
11	SM	1	24
12	SO	0	14
13	SQ	1	37
14	SP	0	6
15	SS	1	25
16	SR	0	4
17	SV	0	5
18	SW	0	12
19	SY	0	6
20	SZ	1	9
21	Sc	0	1
23	SU	3	38
24	SX	0	3
25	SC	6	43
26	SG	0	43
27	SH	0	11
28	SN	1	6
29	ST	2	6
32	S1	9	0
33	L1	45	0
34	L3	2	0
35	L2	4	0

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Mol	Chain	#Chirality outliers	#Planarity outliers
36	LA	0	4
37	LB	0	25
38	LE	1	18
39	LF	0	15
40	LH	0	28
41	LM	0	5
42	LP	0	29
43	LO	0	20
44	LR	0	27
45	LQ	4	59
46	LT	1	26
47	LU	1	21
48	LV	0	29
49	LX	1	11
50	LZ	0	12
51	LY	0	12
52	Lb	0	2
53	Ld	0	2
54	Lf	0	6
55	Lg	0	11
56	Lh	1	13
57	Ll	0	11
58	Ln	0	11
59	Lo	0	12
60	Lr	1	28
61	Lq	0	5
62	Lx	0	5
62	Ly	0	1
63	Lz	0	2
64	LG	2	59
65	LL	0	39
66	LN	2	21
67	LS	2	41
68	LW	0	24
69	La	0	28
70	Li	2	43
71	Lj	0	26
72	Lk	1	10
73	Lp	2	10
74	LJ	1	12
75	Lt	0	2
75	Lu	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
76	Lv	0	1
76	Lw	0	2
77	Lc	0	16
78	Le	0	23
79	Ls	1	13
80	LC	5	58
81	LD	2	58
82	LK	2	26
83	Lm	0	12
84	LI	0	17
All	All	111	1482

All (9615) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	SM	126	TYR	CD2-CE2	112.90	3.08	1.39
25	SC	171	PRO	N-CD	81.71	2.62	1.47
32	S1	1315	U	O3'-P	-72.15	0.74	1.61
32	S1	860	A	O3'-P	-63.70	0.84	1.61
33	L1	2398	A	O3'-P	-57.14	0.92	1.61
25	SC	29	GLU	CD-OE1	56.95	1.88	1.25
32	S1	633	U	C2'-C1'	50.83	2.09	1.53
33	L1	2203	A	C2'-C1'	46.32	2.04	1.53
33	L1	1265	G	C2'-C1'	45.99	2.04	1.53
25	SC	29	GLU	CD-OE2	45.93	1.76	1.25
33	L1	2668	U	C2'-C1'	45.72	2.03	1.53
5	SE	30	ARG	CZ-NH2	-44.61	0.75	1.33
34	L3	1	G	C2'-C1'	-44.06	1.04	1.53
33	L1	3227	U	O4'-C1'	43.52	1.98	1.41
1	Sa	140	GLN	CD-NE2	43.13	2.40	1.32
33	L1	2247	A	C2'-C1'	42.91	2.00	1.53
35	L2	97	U	C2'-C1'	42.32	1.99	1.53
33	L1	716	A	C2'-C1'	42.30	1.99	1.53
32	S1	1083	C	O3'-P	-42.25	1.10	1.61
35	L2	155	G	C2'-C1'	-41.50	1.07	1.53
32	S1	376	G	O4'-C1'	41.43	1.95	1.41
33	L1	1691	U	C2'-C1'	41.28	1.98	1.53
33	L1	803	G	C2'-C1'	40.95	1.98	1.53
35	L2	98	C	O4'-C1'	40.61	1.94	1.41
33	L1	1549	A	O4'-C1'	40.02	1.93	1.41
9	SK	84	CYS	CB-SG	-38.86	1.16	1.82
32	S1	1642	C	C2'-C1'	-38.74	1.10	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	250	C	O4'-C1'	38.32	1.91	1.41
11	SM	126	TYR	CE1-CZ	37.13	1.86	1.38
33	L1	2640	A	C2'-C1'	36.70	1.93	1.53
33	L1	986	G	C2'-C1'	36.38	1.93	1.53
33	L1	3327	A	C2'-C1'	-36.28	1.13	1.53
33	L1	2231	G	C2'-C1'	35.95	1.93	1.53
33	L1	2628	C	O4'-C1'	35.74	1.88	1.41
33	L1	640	C	O4'-C1'	35.67	1.88	1.41
32	S1	1156	A	O3'-P	-35.47	1.18	1.61
33	L1	280	G	C2'-C1'	35.45	1.92	1.53
33	L1	1804	G	O4'-C1'	35.43	1.87	1.41
33	L1	2779	G	C2'-C1'	34.89	1.91	1.53
33	L1	1035	C	C2'-C1'	-34.35	1.15	1.53
33	L1	237	C	O4'-C1'	34.33	1.86	1.41
33	L1	1826	G	C2'-C1'	33.91	1.90	1.53
33	L1	3357	C	C2'-C1'	-33.75	1.16	1.53
35	L2	89	G	C2'-C1'	-33.37	1.16	1.53
34	L3	48	G	C2'-C1'	33.10	1.89	1.53
33	L1	2984	A	C2'-C1'	-33.07	1.17	1.53
32	S1	1004	U	O3'-P	-33.02	1.21	1.61
32	S1	1783	C	O4'-C1'	33.00	1.84	1.41
33	L1	3334	A	C2'-C1'	-32.66	1.17	1.53
31	S2	72	G	C2'-C1'	32.51	1.89	1.53
38	LE	91	TYR	CE2-CZ	32.47	1.80	1.38
33	L1	532	G	C2'-C1'	-32.32	1.17	1.53
38	LE	91	TYR	CG-CD2	32.25	1.81	1.39
33	L1	70	A	C2'-C1'	-32.18	1.18	1.53
25	SC	106	PHE	CD1-CE1	32.13	2.03	1.39
48	LV	114	TYR	CE1-CZ	32.07	1.80	1.38
2	SA	109	PRO	C-N	-31.99	0.75	1.33
33	L1	1818	C	O4'-C1'	31.77	1.82	1.41
33	L1	2318	U	C2'-C1'	31.29	1.87	1.53
33	L1	522	C	O3'-P	-31.18	1.23	1.61
33	L1	2700	A	O3'-P	31.06	1.98	1.61
33	L1	665	G	C2'-C1'	-30.79	1.19	1.53
33	L1	707	G	C2'-C1'	-30.67	1.19	1.53
33	L1	2486	G	C2'-C1'	30.63	1.87	1.53
33	L1	3354	A	C2'-C1'	30.61	1.87	1.53
33	L1	425	G	C2'-C1'	-30.58	1.19	1.53
38	LE	91	TYR	CE1-CZ	30.54	1.78	1.38
38	LE	91	TYR	CG-CD1	30.51	1.78	1.39
33	L1	3048	C	C2'-C1'	-30.41	1.19	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3334	A	O4'-C1'	30.41	1.81	1.41
33	L1	2881	C	C2'-C1'	-30.34	1.20	1.53
33	L1	2290	A	C2'-C1'	-30.24	1.20	1.53
33	L1	3227	U	C2'-C1'	30.20	1.86	1.53
32	S1	1225	A	C2'-C1'	30.11	1.86	1.53
33	L1	3234	G	C2'-C1'	29.91	1.86	1.53
33	L1	2518	A	C2'-C1'	-29.85	1.20	1.53
33	L1	3005	C	C2'-C1'	-29.84	1.20	1.53
33	L1	62	A	O4'-C1'	-29.65	1.03	1.41
33	L1	2059	C	O4'-C1'	29.58	1.80	1.41
32	S1	1346	C	C2'-C1'	-29.43	1.21	1.53
33	L1	1576	C	O4'-C1'	29.38	1.79	1.41
35	L2	63	A	C2'-C1'	-29.22	1.21	1.53
33	L1	1679	U	C2'-C1'	29.18	1.85	1.53
33	L1	2125	A	C2'-C1'	29.10	1.85	1.53
33	L1	997	G	C2'-C1'	28.94	1.85	1.53
33	L1	566	G	C2'-C1'	-28.88	1.21	1.53
32	S1	1678	G	O4'-C1'	-28.84	1.04	1.41
35	L2	53	G	C2'-C1'	-28.84	1.21	1.53
33	L1	1593	C	O4'-C1'	28.84	1.79	1.41
33	L1	1395	A	C2'-C1'	28.59	1.84	1.53
32	S1	823	A	P-OP1	-28.58	1.00	1.49
32	S1	764	U	P-OP1	-28.57	1.00	1.49
32	S1	701	C	P-OP2	-28.56	1.00	1.49
32	S1	701	C	P-OP1	-28.54	1.00	1.49
32	S1	1740	G	C2'-C1'	28.54	1.84	1.53
32	S1	764	U	P-OP2	-28.51	1.00	1.49
32	S1	823	A	P-OP2	-28.46	1.00	1.49
33	L1	3320	G	O4'-C1'	28.41	1.78	1.41
33	L1	1575	G	C2'-C1'	-28.40	1.22	1.53
33	L1	996	A	C2'-C1'	-28.34	1.22	1.53
33	L1	1651	A	C2'-C1'	-28.20	1.22	1.53
33	L1	177	C	C2'-C1'	-28.13	1.22	1.53
32	S1	1572	U	O4'-C1'	27.98	1.78	1.41
33	L1	3156	G	C2'-C1'	27.95	1.84	1.53
33	L1	1081	U	C2'-C1'	27.93	1.84	1.53
33	L1	267	G	O4'-C1'	27.92	1.77	1.41
33	L1	1646	U	C2'-C1'	27.87	1.84	1.53
33	L1	175	G	C2'-C1'	-27.85	1.22	1.53
32	S1	535	C	O3'-P	-27.84	1.27	1.61
33	L1	1564	C	O4'-C1'	27.83	1.77	1.41
33	L1	2216	G	C2'-C1'	27.82	1.83	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1759	A	O4'-C1'	27.76	1.77	1.41
33	L1	3035	C	C2'-C1'	-27.72	1.22	1.53
33	L1	1344	A	O4'-C1'	27.72	1.77	1.41
33	L1	700	C	O4'-C1'	27.69	1.77	1.41
32	S1	1091	A	C2'-C1'	-27.66	1.23	1.53
33	L1	1513	C	C2'-C1'	-27.58	1.23	1.53
33	L1	507	C	O4'-C1'	27.47	1.77	1.41
48	LV	114	TYR	CD1-CE1	27.40	1.80	1.39
33	L1	1309	U	O4'-C1'	27.40	1.77	1.41
34	L3	68	G	C2'-C1'	-27.35	1.23	1.53
48	LV	114	TYR	CE2-CZ	27.33	1.74	1.38
33	L1	1551	C	O4'-C1'	27.24	1.77	1.41
31	S2	41	G	C2'-C1'	-27.23	1.23	1.53
33	L1	2356	A	C2'-C1'	-27.21	1.23	1.53
33	L1	1849	U	C2'-C1'	27.08	1.83	1.53
33	L1	2170	G	C2'-C1'	-27.03	1.23	1.53
33	L1	1804	G	C2'-C1'	-26.93	1.23	1.53
33	L1	2708	A	O4'-C1'	26.90	1.76	1.41
32	S1	632	G	C2'-C1'	26.74	1.82	1.53
33	L1	1513	C	O4'-C1'	26.70	1.76	1.41
32	S1	1759	A	C2'-C1'	26.64	1.82	1.53
33	L1	2450	G	O4'-C1'	-26.62	1.07	1.41
32	S1	1007	G	C2'-C1'	-26.47	1.24	1.53
33	L1	618	G	O3'-P	26.45	1.92	1.61
33	L1	3143	A	O4'-C1'	26.42	1.75	1.41
32	S1	635	G	C2'-C1'	26.38	1.82	1.53
32	S1	303	A	O3'-P	26.36	1.92	1.61
33	L1	1035	C	O4'-C1'	26.36	1.75	1.41
32	S1	1462	C	C2'-C1'	-26.35	1.24	1.53
32	S1	187	C	O3'-P	-26.32	1.29	1.61
35	L2	57	A	O4'-C1'	26.12	1.75	1.41
32	S1	1792	A	C2'-C1'	26.10	1.82	1.53
33	L1	2599	U	C2'-C1'	26.08	1.82	1.53
32	S1	1472	G	C2'-C1'	-26.07	1.24	1.53
33	L1	953	G	C2'-C1'	-26.04	1.24	1.53
33	L1	2437	A	O4'-C1'	26.04	1.75	1.41
35	L2	66	C	C2'-C1'	-26.00	1.24	1.53
3	SB	154	ASP	C-N	25.99	1.79	1.33
33	L1	3092	A	C2'-C1'	-25.98	1.24	1.53
33	L1	1614	G	C2'-C1'	-25.91	1.24	1.53
38	LE	91	TYR	CD1-CE1	25.85	1.78	1.39
32	S1	1642	C	O4'-C1'	25.84	1.75	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2059	C	C2'-C1'	-25.84	1.25	1.53
32	S1	1403	G	C2'-C1'	-25.78	1.25	1.53
33	L1	656	G	C2'-C1'	-25.76	1.25	1.53
35	L2	109	A	C2'-C1'	-25.73	1.25	1.53
32	S1	669	A	P-OP2	25.60	1.92	1.49
33	L1	1034	U	O3'-P	-25.58	1.30	1.61
32	S1	3	C	O4'-C1'	25.56	1.74	1.41
33	L1	2802	G	O4'-C1'	25.43	1.74	1.41
33	L1	2450	G	C2'-C1'	25.41	1.81	1.53
33	L1	811	A	C2'-C1'	-25.35	1.25	1.53
33	L1	102	G	C2'-C1'	25.31	1.81	1.53
33	L1	62	A	C2'-C1'	25.30	1.81	1.53
33	L1	2355	A	C2'-C1'	25.22	1.81	1.53
33	L1	262	A	C2'-C1'	25.21	1.81	1.53
33	L1	2582	G	C2'-C1'	-25.16	1.25	1.53
34	L3	46	C	C2'-C1'	-25.16	1.25	1.53
32	S1	1678	G	C2'-C1'	25.13	1.80	1.53
33	L1	1318	C	O4'-C1'	25.05	1.74	1.41
33	L1	68	U	C2'-C1'	-25.04	1.25	1.53
33	L1	2808	U	C2'-C1'	-24.98	1.25	1.53
33	L1	1050	A	C2'-C1'	24.96	1.80	1.53
33	L1	557	C	C2'-C1'	-24.94	1.25	1.53
33	L1	291	C	C2'-C1'	-24.83	1.26	1.53
33	L1	2290	A	O4'-C1'	24.81	1.74	1.41
48	LV	114	TYR	CG-CD2	24.80	1.71	1.39
33	L1	1628	G	O4'-C1'	24.79	1.73	1.41
60	Lr	101	GLY	C-O	-24.58	0.84	1.23
31	S2	75	A	C2'-C1'	24.54	1.80	1.53
33	L1	177	C	O4'-C1'	24.49	1.73	1.41
33	L1	1551	C	C2'-C1'	-24.49	1.26	1.53
32	S1	200	C	O4'-C1'	24.45	1.73	1.41
33	L1	963	U	O4'-C1'	24.43	1.73	1.41
35	L2	30	C	O4'-C1'	24.43	1.73	1.41
33	L1	563	C	O4'-C1'	24.41	1.73	1.41
33	L1	1672	G	O4'-C1'	-24.36	1.09	1.41
33	L1	3203	G	C2'-C1'	24.36	1.80	1.53
38	LE	91	TYR	CD2-CE2	24.34	1.75	1.39
33	L1	1236	C	C2'-C1'	-24.31	1.26	1.53
33	L1	1754	C	O4'-C1'	24.31	1.73	1.41
32	S1	1748	U	C2'-C1'	-24.27	1.26	1.53
33	L1	1577	A	C2'-C1'	24.26	1.80	1.53
33	L1	2759	C	C2'-C1'	-24.18	1.26	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2622	G	C2'-C1'	-24.17	1.26	1.53
33	L1	2686	U	C2'-C1'	-24.13	1.26	1.53
33	L1	858	U	C2'-C1'	-24.11	1.26	1.53
33	L1	69	U	C2'-C1'	-24.02	1.26	1.53
32	S1	311	G	C2'-C1'	-24.02	1.26	1.53
33	L1	2783	U	C2'-C1'	24.02	1.79	1.53
33	L1	2231	G	O4'-C1'	-24.01	1.10	1.41
33	L1	227	C	C2'-C1'	-24.00	1.26	1.53
33	L1	3218	C	C2'-C1'	-23.96	1.26	1.53
32	S1	1310	C	O4'-C1'	23.93	1.72	1.41
33	L1	164	C	C2'-C1'	-23.93	1.27	1.53
33	L1	1371	G	C2'-C1'	-23.93	1.27	1.53
35	L2	64	U	O4'-C1'	23.92	1.72	1.41
34	L3	56	G	C2'-C1'	-23.85	1.27	1.53
32	S1	582	U	O4'-C1'	23.84	1.72	1.41
33	L1	1151	G	C2'-C1'	-23.81	1.27	1.53
33	L1	1525	U	C2'-C1'	-23.81	1.27	1.53
33	L1	348	C	O4'-C1'	23.74	1.72	1.41
33	L1	3143	A	C2'-C1'	-23.71	1.27	1.53
33	L1	640	C	C2'-C1'	-23.71	1.27	1.53
33	L1	995	C	O4'-C1'	23.69	1.72	1.41
33	L1	1348	G	C2'-C1'	-23.68	1.27	1.53
33	L1	3304	U	C2'-C1'	23.66	1.79	1.53
33	L1	2786	G	O4'-C1'	23.62	1.72	1.41
33	L1	665	G	O4'-C1'	23.61	1.72	1.41
35	L2	44	A	C2'-C1'	-23.60	1.27	1.53
32	S1	1739	U	O4'-C1'	23.58	1.72	1.41
33	L1	2952	G	C2'-C1'	23.56	1.79	1.53
33	L1	1612	C	C2'-C1'	-23.55	1.27	1.53
33	L1	1207	A	C2'-C1'	-23.55	1.27	1.53
33	L1	3350	C	C2'-C1'	-23.55	1.27	1.53
33	L1	804	A	O4'-C1'	23.54	1.72	1.41
32	S1	94	A	C2'-C1'	-23.52	1.27	1.53
33	L1	400	G	O4'-C1'	-23.52	1.11	1.41
33	L1	1077	C	C2'-C1'	-23.51	1.27	1.53
33	L1	1247	G	C2'-C1'	-23.50	1.27	1.53
33	L1	1295	A	C2'-C1'	23.48	1.79	1.53
33	L1	2709	G	C2'-C1'	-23.47	1.27	1.53
33	L1	543	C	O4'-C1'	23.46	1.72	1.41
31	S2	75	A	O4'-C1'	-23.45	1.11	1.41
32	S1	1279	A	C2'-C1'	-23.43	1.27	1.53
33	L1	1949	G	O4'-C1'	-23.39	1.11	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1767	G	C2'-C1'	23.38	1.79	1.53
33	L1	227	C	O4'-C1'	23.35	1.72	1.41
33	L1	1368	U	O4'-C1'	23.33	1.72	1.41
33	L1	1549	A	C2'-C1'	-23.33	1.27	1.53
33	L1	1320	G	O4'-C1'	-23.31	1.11	1.41
33	L1	1070	G	C2'-C1'	-23.30	1.27	1.53
30	S3	16	G	C2'-C1'	23.29	1.78	1.53
33	L1	3093	C	O4'-C1'	23.29	1.72	1.41
35	L2	124	G	C2'-C1'	23.28	1.78	1.53
33	L1	3149	C	O4'-C1'	23.18	1.71	1.41
32	S1	373	U	C2'-C1'	23.15	1.78	1.53
33	L1	2361	C	C2'-C1'	23.14	1.78	1.53
33	L1	299	G	C2'-C1'	23.09	1.78	1.53
33	L1	2493	C	O4'-C1'	23.08	1.71	1.41
33	L1	1241	G	O4'-C1'	23.08	1.71	1.41
33	L1	2362	A	C2'-C1'	23.07	1.78	1.53
35	L2	138	G	O4'-C1'	23.06	1.71	1.41
33	L1	1634	G	C2'-C1'	-23.05	1.27	1.53
33	L1	1087	G	C2'-C1'	-23.04	1.28	1.53
33	L1	1395	A	O4'-C1'	-23.03	1.11	1.41
33	L1	1662	G	C2'-C1'	-23.02	1.28	1.53
33	L1	1430	C	C2'-C1'	-23.02	1.28	1.53
33	L1	9	C	O4'-C1'	22.96	1.71	1.41
33	L1	458	G	C2'-C1'	-22.95	1.28	1.53
35	L2	96	A	O4'-C1'	22.95	1.71	1.41
33	L1	3335	G	O4'-C1'	22.88	1.71	1.41
32	S1	1061	G	C2'-C1'	-22.88	1.28	1.53
33	L1	18	G	O3'-P	-22.84	1.33	1.61
67	LS	151	PHE	CB-CG	22.83	1.90	1.51
32	S1	1346	C	O4'-C1'	22.82	1.71	1.41
35	L2	125	A	C2'-C1'	-22.79	1.28	1.53
35	L2	148	C	C2'-C1'	-22.76	1.28	1.53
33	L1	2585	C	O4'-C1'	22.76	1.71	1.41
34	L3	15	C	O4'-C1'	22.74	1.71	1.41
33	L1	2753	C	O4'-C1'	22.74	1.71	1.41
25	SC	43	GLU	C-N	22.73	1.86	1.34
33	L1	234	G	C2'-C1'	-22.69	1.28	1.53
31	S2	8	U	C2'-C1'	22.62	1.78	1.53
33	L1	707	G	O4'-C1'	22.59	1.71	1.41
33	L1	2585	C	C2'-C1'	-22.57	1.28	1.53
33	L1	2199	C	C2'-C1'	-22.55	1.28	1.53
32	S1	1055	G	C2'-C1'	-22.50	1.28	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	582	C	C2'-C1'	-22.47	1.28	1.53
33	L1	1862	C	C2'-C1'	-22.47	1.28	1.53
32	S1	147	C	O4'-C1'	22.42	1.70	1.41
33	L1	3037	G	C2'-C1'	-22.40	1.28	1.53
4	SD	167	ASN	C-N	22.40	1.85	1.34
33	L1	2597	C	C2'-C1'	-22.39	1.28	1.53
33	L1	2418	A	O4'-C1'	22.39	1.70	1.41
33	L1	2664	G	C2'-C1'	-22.34	1.28	1.53
32	S1	1740	G	O4'-C1'	-22.34	1.12	1.41
9	SK	93	HIS	C-N	22.31	1.85	1.34
33	L1	3299	A	C2'-C1'	22.20	1.77	1.53
33	L1	19	C	O4'-C1'	22.16	1.70	1.41
38	LE	153	HIS	CG-CD2	22.16	1.73	1.35
32	S1	1354	C	C2'-C1'	-22.16	1.28	1.53
33	L1	3001	G	C2'-C1'	-22.11	1.29	1.53
32	S1	1647	C	O3'-P	-22.08	1.34	1.61
32	S1	593	C	O4'-C1'	22.05	1.70	1.41
33	L1	1246	G	C2'-C1'	22.04	1.77	1.53
33	L1	12	G	C2'-C1'	-22.02	1.29	1.53
48	LV	114	TYR	CD2-CE2	22.02	1.72	1.39
32	S1	1308	G	C2'-C1'	21.97	1.77	1.53
33	L1	3036	C	C2'-C1'	-21.95	1.29	1.53
48	LV	114	TYR	CG-CD1	21.94	1.67	1.39
33	L1	584	G	O4'-C1'	21.93	1.70	1.41
33	L1	2252	C	C2'-C1'	21.91	1.77	1.53
33	L1	1564	C	C2'-C1'	-21.88	1.29	1.53
33	L1	596	C	O4'-C1'	21.87	1.70	1.41
33	L1	242	U	O4'-C1'	21.87	1.70	1.41
33	L1	384	A	O4'-C1'	21.86	1.70	1.41
33	L1	3124	A	C2'-C1'	21.84	1.77	1.53
33	L1	2766	U	C2'-C1'	21.81	1.77	1.53
32	S1	152	G	O4'-C1'	21.79	1.70	1.41
33	L1	72	A	C2'-C1'	21.78	1.77	1.53
33	L1	2800	C	C2'-C1'	-21.74	1.29	1.53
33	L1	628	C	O4'-C1'	21.74	1.70	1.41
33	L1	631	C	O4'-C1'	21.73	1.70	1.41
33	L1	3175	C	O4'-C1'	21.73	1.69	1.41
33	L1	2688	G	C2'-C1'	-21.72	1.29	1.53
33	L1	30	C	O4'-C1'	21.70	1.69	1.41
32	S1	823	A	O4'-C1'	21.70	1.69	1.41
32	S1	1198	A	C2'-C1'	-21.70	1.29	1.53
33	L1	1083	C	C2'-C1'	21.68	1.77	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	124	C	C2'-C1'	-21.63	1.29	1.53
33	L1	3149	C	C2'-C1'	-21.62	1.29	1.53
33	L1	2579	G	C2'-C1'	-21.61	1.29	1.53
33	L1	167	C	C2'-C1'	-21.60	1.29	1.53
32	S1	1727	C	C2'-C1'	-21.57	1.29	1.53
33	L1	1823	C	O4'-C1'	21.57	1.69	1.41
33	L1	1752	C	C2'-C1'	-21.51	1.29	1.53
33	L1	490	G	C2'-C1'	-21.51	1.29	1.53
33	L1	534	G	C2'-C1'	-21.48	1.29	1.53
33	L1	542	G	C2'-C1'	-21.48	1.29	1.53
47	LU	138	GLY	C-O	-21.40	0.89	1.23
33	L1	632	C	O4'-C1'	21.36	1.69	1.41
33	L1	2211	G	C2'-C1'	-21.35	1.29	1.53
33	L1	2206	U	C2'-C1'	-21.33	1.29	1.53
33	L1	1057	A	C2'-C1'	21.32	1.76	1.53
33	L1	3317	G	O4'-C1'	-21.27	1.14	1.41
33	L1	568	C	C2'-C1'	-21.21	1.30	1.53
33	L1	1394	C	C2'-C1'	-21.20	1.30	1.53
33	L1	956	G	C2'-C1'	-21.18	1.30	1.53
33	L1	2424	G	C2'-C1'	-21.17	1.30	1.53
33	L1	2793	G	C2'-C1'	-21.12	1.30	1.53
33	L1	1666	C	O4'-C1'	21.07	1.69	1.41
33	L1	1753	A	C2'-C1'	21.07	1.76	1.53
32	S1	1745	U	O4'-C1'	21.04	1.69	1.41
33	L1	917	A	O4'-C1'	21.00	1.69	1.41
32	S1	636	U	O4'-C1'	20.99	1.69	1.41
35	L2	41	A	O4'-C1'	20.99	1.69	1.41
32	S1	1757	G	O4'-C1'	20.96	1.68	1.41
33	L1	242	U	C2'-C1'	-20.93	1.30	1.53
33	L1	555	G	C2'-C1'	-20.90	1.30	1.53
33	L1	521	G	O3'-P	20.87	1.86	1.61
33	L1	2836	G	C2'-C1'	-20.86	1.30	1.53
33	L1	127	G	C2'-C1'	-20.86	1.30	1.53
35	L2	97	U	O4'-C1'	-20.86	1.14	1.41
33	L1	1370	A	O4'-C1'	20.85	1.68	1.41
3	SB	153	LYS	CD-CE	20.84	2.03	1.51
33	L1	3341	C	C2'-C1'	-20.83	1.30	1.53
33	L1	3357	C	O4'-C1'	20.80	1.68	1.41
34	L3	10	C	O4'-C1'	20.79	1.68	1.41
35	L2	90	U	C2'-C1'	20.76	1.76	1.53
33	L1	2887	C	C2'-C1'	-20.72	1.30	1.53
32	S1	1095	C	C2'-C1'	-20.70	1.30	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2669	C	C2'-C1'	-20.67	1.30	1.53
32	S1	1249	G	C2'-C1'	-20.67	1.30	1.53
31	S2	37	G	C2'-C1'	-20.64	1.30	1.53
33	L1	2984	A	O4'-C1'	20.64	1.68	1.41
33	L1	1563	G	O4'-C1'	20.64	1.68	1.41
33	L1	3101	C	O4'-C1'	20.63	1.68	1.41
33	L1	1193	A	O4'-C1'	20.61	1.68	1.41
32	S1	1729	A	C2'-C1'	-20.61	1.30	1.53
33	L1	637	C	O4'-C1'	20.59	1.68	1.41
32	S1	1108	U	C2'-C1'	20.58	1.75	1.53
32	S1	1683	G	C2'-C1'	-20.57	1.30	1.53
32	S1	61	A	C2'-C1'	20.56	1.75	1.53
33	L1	1613	C	P-OP1	-20.54	1.14	1.49
33	L1	2780	G	C2'-C1'	20.54	1.75	1.53
33	L1	487	C	O4'-C1'	20.52	1.68	1.41
33	L1	937	G	C2'-C1'	-20.52	1.30	1.53
33	L1	755	C	C2'-C1'	-20.51	1.30	1.53
33	L1	842	C	C2'-C1'	-20.50	1.30	1.53
33	L1	1018	C	O4'-C1'	20.48	1.68	1.41
33	L1	590	C	O4'-C1'	20.47	1.68	1.41
33	L1	1708	C	C2'-C1'	-20.45	1.30	1.53
33	L1	167	C	O4'-C1'	20.44	1.68	1.41
33	L1	3326	U	C2'-C1'	20.42	1.75	1.53
33	L1	711	A	O4'-C1'	-20.41	1.15	1.41
32	S1	1674	C	O4'-C1'	20.41	1.68	1.41
33	L1	264	C	O4'-C1'	20.39	1.68	1.41
33	L1	3147	G	C2'-C1'	-20.39	1.30	1.53
33	L1	571	G	C2'-C1'	-20.38	1.30	1.53
33	L1	2667	C	C2'-C1'	-20.38	1.30	1.53
33	L1	1634	G	O4'-C1'	20.34	1.68	1.41
32	S1	1184	C	O4'-C1'	20.33	1.68	1.41
33	L1	2332	C	C2'-C1'	-20.32	1.30	1.53
33	L1	238	C	O4'-C1'	20.32	1.68	1.41
33	L1	803	G	O4'-C1'	-20.30	1.15	1.41
35	L2	101	G	C2'-C1'	-20.30	1.31	1.53
33	L1	257	C	C2'-C1'	-20.30	1.31	1.53
33	L1	2725	U	C2'-C1'	-20.29	1.31	1.53
33	L1	3347	U	O4'-C1'	20.28	1.68	1.41
33	L1	2237	A	O4'-C1'	20.27	1.68	1.41
33	L1	533	G	C2'-C1'	-20.26	1.31	1.53
33	L1	307	C	O4'-C1'	20.26	1.68	1.41
33	L1	430	G	C2'-C1'	-20.25	1.31	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	L3	8	A	C2'-C1'	-20.23	1.31	1.53
33	L1	137	C	C2'-C1'	-20.23	1.31	1.53
35	L2	93	A	C2'-C1'	-20.22	1.31	1.53
33	L1	1243	C	C2'-C1'	-20.21	1.31	1.53
35	L2	43	G	O4'-C1'	20.19	1.67	1.41
16	SR	86	ARG	C-N	20.14	1.80	1.34
32	S1	1112	G	C2'-C1'	-20.13	1.31	1.53
32	S1	1713	C	C2'-C1'	-20.11	1.31	1.53
33	L1	1862	C	O4'-C1'	20.11	1.67	1.41
33	L1	2114	A	O4'-C1'	20.11	1.67	1.41
33	L1	2973	A	C2'-C1'	20.10	1.75	1.53
32	S1	1332	G	C2'-C1'	20.09	1.75	1.53
33	L1	2629	C	C2'-C1'	-20.09	1.31	1.53
35	L2	138	G	C2'-C1'	-20.08	1.31	1.53
33	L1	570	G	C2'-C1'	-20.08	1.31	1.53
33	L1	1723	C	O4'-C1'	20.07	1.67	1.41
33	L1	3327	A	O4'-C1'	20.07	1.67	1.41
32	S1	563	C	O4'-C1'	20.07	1.67	1.41
33	L1	283	A	C2'-C1'	20.04	1.75	1.53
32	S1	119	U	C2'-C1'	-19.97	1.31	1.53
33	L1	381	G	C2'-C1'	19.96	1.75	1.53
33	L1	1647	C	O4'-C1'	19.95	1.67	1.41
5	SE	30	ARG	CZ-NH1	19.95	1.58	1.33
33	L1	69	U	O4'-C1'	19.91	1.67	1.41
32	S1	299	A	C2'-C1'	19.89	1.75	1.53
32	S1	152	G	C2'-C1'	-19.88	1.31	1.53
33	L1	1568	A	C2'-C1'	19.87	1.75	1.53
32	S1	138	C	O4'-C1'	19.82	1.67	1.41
33	L1	846	A	O4'-C1'	-19.82	1.15	1.41
33	L1	256	G	C2'-C1'	-19.82	1.31	1.53
33	L1	3385	G	O4'-C1'	-19.81	1.16	1.41
32	S1	1006	A	C2'-C1'	-19.80	1.31	1.53
33	L1	2900	G	C2'-C1'	-19.79	1.31	1.53
33	L1	1211	G	O4'-C1'	-19.79	1.16	1.41
33	L1	1612	C	O4'-C1'	19.76	1.67	1.41
33	L1	1255	A	C2'-C1'	-19.75	1.31	1.53
33	L1	446	C	O4'-C1'	19.74	1.67	1.41
33	L1	1574	C	C2'-C1'	-19.73	1.31	1.53
33	L1	827	C	C2'-C1'	-19.73	1.31	1.53
33	L1	1318	C	C2'-C1'	-19.73	1.31	1.53
33	L1	636	C	C2'-C1'	-19.72	1.31	1.53
33	L1	1817	U	O4'-C1'	19.68	1.67	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	599	C	C2'-C1'	-19.66	1.31	1.53
33	L1	3081	G	O4'-C1'	19.66	1.67	1.41
33	L1	1900	C	C2'-C1'	-19.65	1.31	1.53
33	L1	250	C	C2'-C1'	-19.64	1.31	1.53
33	L1	272	G	C2'-C1'	-19.64	1.31	1.53
33	L1	692	U	O4'-C1'	19.64	1.67	1.41
33	L1	3344	U	C2'-C1'	-19.63	1.31	1.53
33	L1	3218	C	O4'-C1'	19.63	1.67	1.41
33	L1	1450	G	O4'-C1'	19.60	1.67	1.41
33	L1	2903	G	C2'-C1'	-19.59	1.31	1.53
33	L1	1823	C	C2'-C1'	-19.59	1.31	1.53
33	L1	271	G	C2'-C1'	-19.58	1.31	1.53
33	L1	307	C	C2'-C1'	-19.58	1.31	1.53
33	L1	1350	G	C2'-C1'	19.57	1.74	1.53
33	L1	2512	U	C2'-C1'	-19.57	1.31	1.53
33	L1	1061	A	O4'-C1'	19.57	1.67	1.41
33	L1	963	U	C2'-C1'	-19.57	1.31	1.53
33	L1	2726	U	C2'-C1'	-19.56	1.31	1.53
34	L3	73	U	C2'-C1'	19.56	1.74	1.53
32	S1	1214	C	O4'-C1'	19.55	1.67	1.41
32	S1	1536	U	C2'-C1'	-19.55	1.31	1.53
35	L2	158	G	C2'-C1'	19.54	1.74	1.53
35	L2	48	A	C2'-C1'	-19.53	1.31	1.53
33	L1	1530	C	O4'-C1'	19.50	1.67	1.41
32	S1	1715	C	C2'-C1'	-19.47	1.31	1.53
33	L1	1222	U	C2'-C1'	19.45	1.74	1.53
33	L1	1732	G	C2'-C1'	-19.45	1.31	1.53
33	L1	1744	C	C2'-C1'	-19.43	1.31	1.53
33	L1	2437	A	C2'-C1'	-19.40	1.32	1.53
33	L1	2900	G	O4'-C1'	19.39	1.66	1.41
33	L1	557	C	O4'-C1'	19.38	1.66	1.41
32	S1	938	A	C2'-C1'	-19.38	1.32	1.53
33	L1	1885	G	C2'-C1'	-19.38	1.32	1.53
33	L1	423	C	C2'-C1'	-19.36	1.32	1.53
33	L1	1458	U	O4'-C1'	-19.36	1.16	1.41
33	L1	1819	A	C2'-C1'	-19.30	1.32	1.53
33	L1	2750	A	C2'-C1'	-19.27	1.32	1.53
35	L2	155	G	O4'-C1'	19.24	1.66	1.41
31	S2	43	C	C2'-C1'	-19.24	1.32	1.53
33	L1	2474	A	C2'-C1'	19.23	1.74	1.53
33	L1	2759	C	O4'-C1'	19.23	1.66	1.41
32	S1	1797	C	C2'-C1'	-19.22	1.32	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	25	C	O4'-C1'	19.21	1.66	1.41
33	L1	1755	A	O4'-C1'	19.21	1.66	1.41
32	S1	1202	G	C2'-C1'	-19.20	1.32	1.53
33	L1	1258	C	C2'-C1'	19.20	1.74	1.53
33	L1	1078	U	O4'-C1'	19.20	1.66	1.41
32	S1	67	G	C2'-C1'	-19.20	1.32	1.53
33	L1	2166	U	C2'-C1'	-19.16	1.32	1.53
33	L1	510	C	C2'-C1'	-19.16	1.32	1.53
32	S1	1076	C	O4'-C1'	19.14	1.66	1.41
32	S1	988	G	C2'-C1'	-19.12	1.32	1.53
32	S1	1462	C	O4'-C1'	19.11	1.66	1.41
33	L1	3376	C	C2'-C1'	-19.07	1.32	1.53
33	L1	2460	A	O4'-C1'	-19.06	1.16	1.41
32	S1	357	A	C2'-C1'	19.03	1.74	1.53
33	L1	2630	A	O4'-C1'	-19.01	1.17	1.41
33	L1	3310	A	C2'-C1'	-19.00	1.32	1.53
33	L1	1192	A	C2'-C1'	19.00	1.74	1.53
33	L1	472	U	C2'-C1'	-18.99	1.32	1.53
33	L1	1017	G	C2'-C1'	-18.98	1.32	1.53
33	L1	2700	A	C2'-C1'	-18.97	1.32	1.53
33	L1	1135	C	O4'-C1'	18.97	1.66	1.41
33	L1	3328	A	O4'-C1'	18.95	1.66	1.41
33	L1	1800	G	O4'-C1'	-18.93	1.17	1.41
33	L1	1911	A	O4'-C1'	-18.90	1.17	1.41
33	L1	1245	U	C2'-C1'	18.89	1.74	1.53
33	L1	1731	A	C2'-C1'	-18.87	1.32	1.53
33	L1	2235	G	C2'-C1'	-18.87	1.32	1.53
33	L1	2590	C	O4'-C1'	18.86	1.66	1.41
33	L1	1295	A	O4'-C1'	-18.86	1.17	1.41
33	L1	2493	C	C2'-C1'	-18.85	1.32	1.53
33	L1	2748	G	C2'-C1'	18.85	1.74	1.53
32	S1	138	C	C2'-C1'	-18.81	1.32	1.53
33	L1	1822	C	C2'-C1'	-18.81	1.32	1.53
32	S1	1443	U	C2'-C1'	18.81	1.74	1.53
32	S1	1589	C	C2'-C1'	-18.80	1.32	1.53
33	L1	2135	U	O4'-C1'	18.80	1.66	1.41
33	L1	1787	C	C2'-C1'	-18.78	1.32	1.53
33	L1	2684	U	C2'-C1'	-18.77	1.32	1.53
32	S1	483	C	O4'-C1'	18.77	1.66	1.41
33	L1	232	C	O4'-C1'	18.77	1.66	1.41
32	S1	437	C	O4'-C1'	18.76	1.66	1.41
32	S1	950	U	C2'-C1'	-18.74	1.32	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2478	G	C2'-C1'	-18.73	1.32	1.53
32	S1	1279	A	O4'-C1'	18.72	1.66	1.41
33	L1	487	C	C2'-C1'	-18.68	1.32	1.53
33	L1	2061	C	C2'-C1'	-18.66	1.32	1.53
33	L1	1900	C	O4'-C1'	18.65	1.66	1.41
33	L1	1664	G	O4'-C1'	18.64	1.65	1.41
33	L1	3094	C	O4'-C1'	18.63	1.65	1.41
5	SE	30	ARG	CD-NE	18.62	1.78	1.46
33	L1	1254	A	C2'-C1'	18.62	1.73	1.53
33	L1	2696	C	C2'-C1'	-18.61	1.32	1.53
33	L1	1131	U	O4'-C1'	18.61	1.65	1.41
32	S1	850	G	C2'-C1'	-18.61	1.32	1.53
33	L1	2229	G	C2'-C1'	18.60	1.73	1.53
32	S1	1116	G	C2'-C1'	-18.60	1.32	1.53
32	S1	1126	C	C2'-C1'	-18.59	1.32	1.53
32	S1	1290	U	O4'-C1'	18.58	1.65	1.41
33	L1	543	C	C2'-C1'	-18.57	1.32	1.53
33	L1	1211	G	C2'-C1'	18.57	1.73	1.53
33	L1	3207	C	C2'-C1'	-18.56	1.32	1.53
33	L1	2875	U	O4'-C1'	18.55	1.65	1.41
32	S1	317	U	C2'-C1'	-18.53	1.32	1.53
33	L1	2597	C	O4'-C1'	18.53	1.65	1.41
33	L1	922	U	C2'-C1'	-18.52	1.32	1.53
35	L2	107	G	C2'-C1'	-18.52	1.32	1.53
33	L1	310	C	C2'-C1'	-18.50	1.33	1.53
33	L1	1131	U	C2'-C1'	-18.49	1.33	1.53
33	L1	1599	A	C2'-C1'	-18.48	1.33	1.53
33	L1	308	U	C2'-C1'	-18.48	1.33	1.53
32	S1	123	U	C2'-C1'	18.48	1.73	1.53
33	L1	1735	U	C2'-C1'	18.46	1.73	1.53
33	L1	1822	C	O4'-C1'	18.44	1.65	1.41
32	S1	600	C	O4'-C1'	18.43	1.65	1.41
34	L3	26	C	C2'-C1'	-18.43	1.33	1.53
32	S1	1068	G	C2'-C1'	18.43	1.73	1.53
33	L1	763	G	O4'-C1'	18.43	1.65	1.41
33	L1	58	G	C2'-C1'	18.42	1.73	1.53
33	L1	1593	C	C2'-C1'	-18.42	1.33	1.53
33	L1	1086	U	C2'-C1'	18.41	1.73	1.53
34	L3	79	A	C2'-C1'	18.41	1.73	1.53
33	L1	348	C	C2'-C1'	-18.40	1.33	1.53
33	L1	2213	G	C2'-C1'	-18.40	1.33	1.53
33	L1	3363	G	C2'-C1'	-18.39	1.33	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1538	A	O4'-C1'	18.39	1.65	1.41
33	L1	334	A	C2'-C1'	-18.37	1.33	1.53
33	L1	2614	U	C2'-C1'	18.36	1.73	1.53
35	L2	25	C	C2'-C1'	-18.36	1.33	1.53
33	L1	518	G	C2'-C1'	-18.34	1.33	1.53
33	L1	2199	C	O4'-C1'	18.32	1.65	1.41
33	L1	1394	C	O4'-C1'	18.31	1.65	1.41
67	LS	151	PHE	CG-CD2	18.28	1.66	1.38
33	L1	1607	C	O4'-C1'	18.27	1.65	1.41
33	L1	630	C	C2'-C1'	-18.27	1.33	1.53
33	L1	683	U	C2'-C1'	-18.26	1.33	1.53
33	L1	1615	G	C2'-C1'	-18.26	1.33	1.53
33	L1	811	A	O4'-C1'	18.25	1.65	1.41
33	L1	1630	C	O4'-C1'	18.25	1.65	1.41
33	L1	3203	G	O4'-C1'	-18.25	1.18	1.41
33	L1	2386	A	C2'-C1'	-18.24	1.33	1.53
34	L3	111	U	C2'-C1'	-18.23	1.33	1.53
33	L1	628	C	C2'-C1'	-18.22	1.33	1.53
33	L1	124	C	O4'-C1'	18.22	1.65	1.41
32	S1	466	G	C2'-C1'	-18.21	1.33	1.53
33	L1	71	C	C2'-C1'	18.21	1.73	1.53
34	L3	40	A	C2'-C1'	18.21	1.73	1.53
25	SC	63	THR	CB-OG1	18.21	1.79	1.43
33	L1	2354	G	C2'-C1'	18.21	1.73	1.53
32	S1	32	U	C2'-C1'	18.19	1.73	1.53
32	S1	1616	U	C2'-C1'	-18.18	1.33	1.53
34	L3	13	A	C2'-C1'	-18.18	1.33	1.53
32	S1	513	G	C2'-C1'	-18.17	1.33	1.53
33	L1	1913	C	C2'-C1'	-18.16	1.33	1.53
25	SC	106	PHE	CG-CD1	18.15	1.66	1.38
33	L1	1912	U	C2'-C1'	-18.15	1.33	1.53
33	L1	2746	G	C2'-C1'	-18.14	1.33	1.53
32	S1	943	G	C2'-C1'	-18.13	1.33	1.53
32	S1	603	A	C2'-C1'	-18.11	1.33	1.53
33	L1	1949	G	C2'-C1'	18.11	1.73	1.53
32	S1	290	C	C2'-C1'	-18.11	1.33	1.53
33	L1	35	U	C2'-C1'	-18.11	1.33	1.53
33	L1	3137	G	O4'-C1'	-18.10	1.18	1.41
33	L1	643	G	O4'-C1'	-18.10	1.18	1.41
33	L1	2744	C	O4'-C1'	18.10	1.65	1.41
33	L1	2418	A	C2'-C1'	-18.09	1.33	1.53
34	L3	15	C	C2'-C1'	-18.08	1.33	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	576	C	O4'-C1'	18.08	1.65	1.41
33	L1	311	G	C2'-C1'	-18.07	1.33	1.53
32	S1	1088	G	O4'-C1'	18.07	1.65	1.41
33	L1	682	G	C2'-C1'	-18.07	1.33	1.53
32	S1	124	G	C2'-C1'	-18.06	1.33	1.53
32	S1	645	G	C2'-C1'	-18.06	1.33	1.53
33	L1	10	C	C2'-C1'	-18.06	1.33	1.53
32	S1	902	C	O4'-C1'	18.06	1.65	1.41
33	L1	1547	G	O4'-C1'	18.04	1.65	1.41
33	L1	843	C	O4'-C1'	18.03	1.65	1.41
32	S1	1600	G	C2'-C1'	-18.02	1.33	1.53
31	S2	68	C	C2'-C1'	-18.00	1.33	1.53
33	L1	3333	C	C2'-C1'	-18.00	1.33	1.53
33	L1	2863	U	C2'-C1'	-17.99	1.33	1.53
32	S1	1266	U	O4'-C1'	17.99	1.65	1.41
32	S1	504	C	O4'-C1'	17.99	1.65	1.41
33	L1	1744	C	O4'-C1'	17.98	1.65	1.41
34	L3	1	G	O4'-C1'	17.96	1.65	1.41
33	L1	1755	A	C2'-C1'	-17.96	1.33	1.53
33	L1	2848	U	C2'-C1'	17.96	1.73	1.53
33	L1	1010	A	C2'-C1'	17.96	1.73	1.53
33	L1	2105	G	C2'-C1'	17.95	1.73	1.53
35	L2	128	C	O4'-C1'	17.95	1.65	1.41
33	L1	1533	U	O4'-C1'	17.94	1.65	1.41
33	L1	1537	A	C2'-C1'	17.93	1.73	1.53
33	L1	2706	A	O4'-C1'	-17.92	1.18	1.41
33	L1	2388	C	C2'-C1'	-17.91	1.33	1.53
33	L1	2480	G	C2'-C1'	17.89	1.73	1.53
35	L2	119	C	O4'-C1'	17.85	1.64	1.41
33	L1	656	G	O4'-C1'	17.84	1.64	1.41
33	L1	1715	C	C2'-C1'	17.83	1.73	1.53
35	L2	50	G	C2'-C1'	-17.82	1.33	1.53
33	L1	136	C	O4'-C1'	17.82	1.64	1.41
33	L1	3035	C	O4'-C1'	17.81	1.64	1.41
33	L1	2431	U	C2'-C1'	-17.79	1.33	1.53
32	S1	1736	C	O4'-C1'	17.79	1.64	1.41
33	L1	1533	U	C2'-C1'	17.79	1.73	1.53
32	S1	893	U	O4'-C1'	17.79	1.64	1.41
33	L1	1587	G	O4'-C1'	17.77	1.64	1.41
33	L1	1536	U	C2'-C1'	17.76	1.72	1.53
33	L1	1710	G	C2'-C1'	-17.75	1.33	1.53
33	L1	295	U	C2'-C1'	17.74	1.72	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	677	U	C2'-C1'	-17.74	1.33	1.53
33	L1	2459	U	C2'-C1'	17.73	1.72	1.53
33	L1	1312	A	O4'-C1'	17.73	1.64	1.41
33	L1	2949	G	C2'-C1'	-17.71	1.33	1.53
33	L1	527	G	O4'-C1'	17.71	1.64	1.41
33	L1	423	C	O4'-C1'	17.71	1.64	1.41
33	L1	2722	U	C2'-C1'	17.71	1.72	1.53
33	L1	3331	G	O4'-C1'	-17.69	1.18	1.41
33	L1	1366	G	C2'-C1'	-17.68	1.33	1.53
32	S1	128	G	C2'-C1'	17.68	1.72	1.53
32	S1	611	G	C2'-C1'	-17.66	1.33	1.53
33	L1	265	G	O4'-C1'	17.66	1.64	1.41
31	S2	39	G	C2'-C1'	-17.66	1.33	1.53
32	S1	1797	C	O4'-C1'	17.65	1.64	1.41
33	L1	2993	A	C2'-C1'	-17.64	1.33	1.53
32	S1	1593	U	C2'-C1'	17.63	1.72	1.53
32	S1	1719	C	O4'-C1'	17.63	1.64	1.41
33	L1	2723	G	C2'-C1'	-17.63	1.33	1.53
33	L1	814	U	C2'-C1'	-17.62	1.33	1.53
33	L1	763	G	C2'-C1'	-17.62	1.33	1.53
32	S1	1549	G	C2'-C1'	-17.61	1.33	1.53
33	L1	2179	U	O4'-C1'	17.60	1.64	1.41
33	L1	1574	C	O4'-C1'	17.59	1.64	1.41
32	S1	398	C	C2'-C1'	-17.59	1.34	1.53
33	L1	3234	G	O4'-C1'	-17.59	1.18	1.41
33	L1	2899	A	C2'-C1'	17.58	1.72	1.53
33	L1	1904	A	C2'-C1'	-17.58	1.34	1.53
33	L1	2543	G	O4'-C1'	17.58	1.64	1.41
32	S1	1659	A	O4'-C1'	17.58	1.64	1.41
33	L1	3344	U	O4'-C1'	17.56	1.64	1.41
32	S1	618	C	O4'-C1'	17.56	1.64	1.41
33	L1	2762	U	C2'-C1'	17.55	1.72	1.53
33	L1	3316	C	O4'-C1'	17.55	1.64	1.41
33	L1	636	C	O4'-C1'	17.51	1.64	1.41
33	L1	1311	G	O4'-C1'	-17.51	1.18	1.41
33	L1	2393	G	C2'-C1'	-17.51	1.34	1.53
33	L1	2345	C	C2'-C1'	-17.51	1.34	1.53
32	S1	1351	U	O4'-C1'	17.50	1.64	1.41
33	L1	833	G	C2'-C1'	-17.49	1.34	1.53
33	L1	1266	G	C2'-C1'	-17.49	1.34	1.53
34	L3	41	G	C2'-C1'	-17.49	1.34	1.53
32	S1	1063	U	C2'-C1'	17.49	1.72	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	816	G	C2'-C1'	-17.47	1.34	1.53
33	L1	231	C	O4'-C1'	17.45	1.64	1.41
33	L1	507	C	C2'-C1'	-17.44	1.34	1.53
33	L1	1320	G	C2'-C1'	17.44	1.72	1.53
33	L1	2581	C	C2'-C1'	-17.43	1.34	1.53
33	L1	2850	G	C2'-C1'	-17.42	1.34	1.53
33	L1	446	C	C2'-C1'	-17.41	1.34	1.53
33	L1	1545	G	C2'-C1'	-17.39	1.34	1.53
33	L1	1508	C	C2'-C1'	-17.39	1.34	1.53
33	L1	2197	C	C2'-C1'	-17.39	1.34	1.53
32	S1	1632	C	O4'-C1'	17.38	1.64	1.41
33	L1	2391	C	O4'-C1'	17.36	1.64	1.41
33	L1	3036	C	O4'-C1'	17.36	1.64	1.41
45	LQ	202	GLY	N-CA	17.36	1.72	1.46
33	L1	2876	G	C2'-C1'	-17.36	1.34	1.53
32	S1	1761	G	O4'-C1'	17.33	1.64	1.41
33	L1	1863	A	C2'-C1'	17.33	1.72	1.53
32	S1	1589	C	O4'-C1'	17.33	1.64	1.41
35	L2	121	C	O4'-C1'	17.33	1.64	1.41
4	SD	132	GLY	C-O	-17.32	0.95	1.23
32	S1	301	U	O4'-C1'	17.31	1.64	1.41
32	S1	623	A	O3'-P	-17.30	1.40	1.61
33	L1	425	G	O4'-C1'	17.30	1.64	1.41
33	L1	2952	G	O4'-C1'	-17.30	1.19	1.41
33	L1	1450	G	C2'-C1'	-17.29	1.34	1.53
33	L1	49	U	O4'-C1'	17.29	1.64	1.41
32	S1	290	C	O4'-C1'	17.28	1.64	1.41
33	L1	2376	G	O4'-C1'	-17.28	1.19	1.41
32	S1	509	A	O4'-C1'	17.25	1.64	1.41
33	L1	74	G	C2'-C1'	-17.25	1.34	1.53
33	L1	2779	G	O4'-C1'	-17.25	1.19	1.41
32	S1	1614	C	O4'-C1'	17.23	1.64	1.41
33	L1	2734	C	O4'-C1'	17.23	1.64	1.41
33	L1	3090	C	O4'-C1'	17.22	1.64	1.41
33	L1	295	U	O4'-C1'	-17.22	1.19	1.41
33	L1	1778	C	O4'-C1'	17.20	1.64	1.41
33	L1	549	G	C2'-C1'	-17.19	1.34	1.53
33	L1	2748	G	O4'-C1'	-17.18	1.19	1.41
33	L1	140	C	C2'-C1'	-17.17	1.34	1.53
32	S1	1536	U	O4'-C1'	17.17	1.64	1.41
32	S1	1682	U	O4'-C1'	17.16	1.64	1.41
33	L1	840	A	C2'-C1'	-17.15	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1633	C	C2'-C1'	-17.15	1.34	1.53
33	L1	1892	A	C2'-C1'	-17.15	1.34	1.53
33	L1	2218	A	C2'-C1'	-17.14	1.34	1.53
33	L1	2097	C	O4'-C1'	17.13	1.64	1.41
33	L1	475	U	O4'-C1'	17.13	1.64	1.41
33	L1	2644	U	C2'-C1'	-17.12	1.34	1.53
32	S1	1566	U	O4'-C1'	17.12	1.64	1.41
33	L1	805	C	C2'-C1'	-17.12	1.34	1.53
33	L1	514	G	C2'-C1'	-17.12	1.34	1.53
32	S1	1012	C	O4'-C1'	17.12	1.64	1.41
34	L3	26	C	O4'-C1'	17.11	1.63	1.41
33	L1	433	C	O4'-C1'	17.10	1.63	1.41
32	S1	1688	G	O4'-C1'	-17.09	1.19	1.41
33	L1	424	G	O4'-C1'	17.08	1.63	1.41
33	L1	2396	A	O4'-C1'	17.08	1.63	1.41
33	L1	2649	C	C2'-C1'	-17.08	1.34	1.53
33	L1	41	C	C2'-C1'	-17.06	1.34	1.53
33	L1	1598	U	C2'-C1'	17.06	1.72	1.53
33	L1	3240	C	C2'-C1'	-17.06	1.34	1.53
33	L1	687	C	C2'-C1'	-17.05	1.34	1.53
33	L1	716	A	O4'-C1'	17.04	1.63	1.41
67	LS	151	PHE	CA-CB	-17.03	1.16	1.53
32	S1	882	G	C2'-C1'	-17.03	1.34	1.53
32	S1	1547	G	O4'-C1'	17.03	1.63	1.41
33	L1	641	C	O4'-C1'	17.02	1.63	1.41
33	L1	1254	A	O4'-C1'	-16.98	1.19	1.41
33	L1	959	U	C2'-C1'	-16.97	1.34	1.53
33	L1	3212	C	C2'-C1'	-16.97	1.34	1.53
33	L1	1240	G	C2'-C1'	-16.96	1.34	1.53
33	L1	3335	G	C2'-C1'	-16.96	1.34	1.53
33	L1	1806	C	O4'-C1'	16.96	1.63	1.41
33	L1	1660	C	O4'-C1'	16.95	1.63	1.41
33	L1	3128	A	C2'-C1'	-16.95	1.34	1.53
33	L1	2540	C	C2'-C1'	-16.94	1.34	1.53
33	L1	3005	C	O4'-C1'	16.94	1.63	1.41
33	L1	1807	C	C2'-C1'	16.94	1.72	1.53
32	S1	1512	C	O4'-C1'	16.92	1.63	1.41
33	L1	2104	G	C2'-C1'	-16.92	1.34	1.53
33	L1	233	C	C2'-C1'	-16.92	1.34	1.53
33	L1	1608	C	O4'-C1'	16.90	1.63	1.41
33	L1	3232	C	C2'-C1'	-16.90	1.34	1.53
33	L1	1007	A	C2'-C1'	-16.90	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1720	G	C2'-C1'	-16.89	1.34	1.53
33	L1	521	G	C2'-C1'	-16.89	1.34	1.53
33	L1	1103	U	C2'-C1'	16.88	1.72	1.53
33	L1	2724	A	O4'-C1'	16.88	1.63	1.41
35	L2	43	G	C2'-C1'	-16.87	1.34	1.53
32	S1	1343	C	O4'-C1'	16.85	1.63	1.41
33	L1	841	G	C2'-C1'	-16.84	1.34	1.53
33	L1	1252	C	O4'-C1'	16.84	1.63	1.41
33	L1	2846	C	C2'-C1'	-16.83	1.34	1.53
33	L1	796	C	O4'-C1'	16.83	1.63	1.41
34	L3	3	A	O4'-C1'	16.82	1.63	1.41
32	S1	317	U	O4'-C1'	16.81	1.63	1.41
33	L1	210	G	C2'-C1'	-16.80	1.34	1.53
28	SN	51	GLY	C-N	16.78	1.72	1.34
33	L1	1767	G	O4'-C1'	-16.77	1.19	1.41
33	L1	691	U	C2'-C1'	16.76	1.71	1.53
33	L1	224	C	C2'-C1'	-16.74	1.34	1.53
33	L1	1883	A	C2'-C1'	16.71	1.71	1.53
33	L1	410	G	C2'-C1'	-16.71	1.34	1.53
33	L1	695	G	C2'-C1'	16.71	1.71	1.53
34	L3	120	C	C2'-C1'	-16.70	1.34	1.53
32	S1	437	C	C2'-C1'	-16.69	1.34	1.53
32	S1	575	G	C2'-C1'	-16.69	1.34	1.53
33	L1	1727	A	O4'-C1'	16.69	1.63	1.41
33	L1	1430	C	O4'-C1'	16.68	1.63	1.41
35	L2	154	G	C2'-C1'	-16.68	1.35	1.53
32	S1	999	G	C2'-C1'	-16.68	1.35	1.53
32	S1	1099	G	C2'-C1'	-16.67	1.35	1.53
33	L1	1120	G	O4'-C1'	16.67	1.63	1.41
33	L1	2216	G	O4'-C1'	-16.66	1.20	1.41
33	L1	2490	U	C2'-C1'	-16.66	1.35	1.53
80	LC	372	GLY	C-O	-16.65	0.97	1.23
32	S1	1746	U	C2'-C1'	-16.65	1.35	1.53
33	L1	19	C	C2'-C1'	-16.64	1.35	1.53
33	L1	339	G	C2'-C1'	-16.64	1.35	1.53
33	L1	1707	C	C2'-C1'	16.64	1.71	1.53
33	L1	2744	C	C2'-C1'	-16.63	1.35	1.53
33	L1	1829	G	C2'-C1'	-16.63	1.35	1.53
33	L1	2105	G	O4'-C1'	-16.62	1.20	1.41
33	L1	1750	A	O4'-C1'	16.61	1.63	1.41
5	SE	30	ARG	CG-CD	-16.61	1.10	1.51
33	L1	1026	A	C2'-C1'	-16.61	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1015	A	O4'-C1'	16.60	1.63	1.41
32	S1	1453	U	O4'-C1'	16.59	1.63	1.41
33	L1	1004	C	O4'-C1'	16.58	1.63	1.41
33	L1	1877	G	O4'-C1'	-16.58	1.20	1.41
33	L1	1741	G	C2'-C1'	-16.57	1.35	1.53
33	L1	2477	G	C2'-C1'	16.57	1.71	1.53
32	S1	936	C	O4'-C1'	16.56	1.63	1.41
31	S2	68	C	O4'-C1'	16.55	1.63	1.41
33	L1	1508	C	O4'-C1'	16.54	1.63	1.41
33	L1	2350	C	C2'-C1'	-16.53	1.35	1.53
33	L1	2941	G	C2'-C1'	-16.52	1.35	1.53
33	L1	734	C	O4'-C1'	16.51	1.63	1.41
33	L1	140	C	O4'-C1'	16.51	1.63	1.41
33	L1	2530	G	C2'-C1'	-16.50	1.35	1.53
32	S1	580	G	O4'-C1'	16.50	1.63	1.41
32	S1	1691	C	C2'-C1'	-16.49	1.35	1.53
33	L1	2847	A	C2'-C1'	16.47	1.71	1.53
34	L3	28	U	C2'-C1'	-16.46	1.35	1.53
33	L1	2341	U	C2'-C1'	-16.46	1.35	1.53
33	L1	3372	C	O4'-C1'	16.43	1.63	1.41
73	Lp	52	LYS	C-O	-16.43	0.92	1.23
33	L1	2723	G	O4'-C1'	16.42	1.62	1.41
32	S1	501	U	O4'-C1'	16.41	1.62	1.41
32	S1	318	C	C2'-C1'	-16.41	1.35	1.53
33	L1	3270	C	C2'-C1'	-16.41	1.35	1.53
33	L1	627	G	C2'-C1'	-16.40	1.35	1.53
33	L1	1607	C	C2'-C1'	-16.39	1.35	1.53
32	S1	1226	U	P-O5'	-16.39	1.43	1.59
33	L1	1025	G	C2'-C1'	-16.38	1.35	1.53
33	L1	2881	C	O4'-C1'	16.37	1.62	1.41
32	S1	1226	U	C2'-C1'	16.36	1.71	1.53
33	L1	1660	C	C2'-C1'	-16.33	1.35	1.53
33	L1	1136	A	C2'-C1'	-16.32	1.35	1.53
32	S1	1138	A	C2'-C1'	16.32	1.71	1.53
33	L1	842	C	O4'-C1'	16.30	1.62	1.41
68	LW	29	LYS	N-CA	16.29	1.78	1.46
33	L1	1283	C	O4'-C1'	16.29	1.62	1.41
33	L1	702	G	C2'-C1'	-16.28	1.35	1.53
33	L1	2840	A	C2'-C1'	-16.28	1.35	1.53
32	S1	893	U	C2'-C1'	-16.27	1.35	1.53
33	L1	252	A	O4'-C1'	16.27	1.62	1.41
33	L1	175	G	O4'-C1'	16.26	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	63	G	C2'-C1'	-16.25	1.35	1.53
33	L1	568	C	O4'-C1'	16.25	1.62	1.41
33	L1	2875	U	C2'-C1'	16.25	1.71	1.53
32	S1	1214	C	C2'-C1'	-16.25	1.35	1.53
33	L1	1554	C	C2'-C1'	-16.24	1.35	1.53
33	L1	3236	A	O4'-C1'	16.24	1.62	1.41
33	L1	2485	U	C2'-C1'	16.23	1.71	1.53
33	L1	1272	G	O4'-C1'	16.23	1.62	1.41
33	L1	480	C	C2'-C1'	-16.23	1.35	1.53
13	SQ	82	MET	C-O	-16.23	0.92	1.23
32	S1	473	C	O4'-C1'	16.22	1.62	1.41
32	S1	1389	G	C2'-C1'	-16.22	1.35	1.53
32	S1	1067	A	C2'-C1'	-16.22	1.35	1.53
33	L1	418	G	O4'-C1'	16.21	1.62	1.41
32	S1	631	C	O4'-C1'	16.20	1.62	1.41
32	S1	1606	U	O4'-C1'	16.19	1.62	1.41
33	L1	1573	G	C2'-C1'	-16.19	1.35	1.53
33	L1	1555	G	C2'-C1'	-16.18	1.35	1.53
33	L1	2487	A	O4'-C1'	-16.17	1.20	1.41
33	L1	444	C	O4'-C1'	16.17	1.62	1.41
32	S1	1686	C	C2'-C1'	-16.16	1.35	1.53
33	L1	335	G	O4'-C1'	16.16	1.62	1.41
33	L1	1887	A	O4'-C1'	16.15	1.62	1.41
32	S1	885	C	O4'-C1'	16.14	1.62	1.41
33	L1	2784	U	C2'-C1'	-16.13	1.35	1.53
10	SL	54	ILE	C-N	-16.13	1.04	1.33
33	L1	2411	G	C2'-C1'	-16.12	1.35	1.53
34	L3	10	C	C2'-C1'	-16.11	1.35	1.53
33	L1	1711	G	C2'-C1'	-16.11	1.35	1.53
33	L1	165	C	C2'-C1'	-16.11	1.35	1.53
33	L1	224	C	O4'-C1'	16.11	1.62	1.41
33	L1	2345	C	O4'-C1'	16.11	1.62	1.41
33	L1	1880	A	C3'-C2'	16.10	1.70	1.52
33	L1	2178	G	C2'-C1'	-16.09	1.35	1.53
33	L1	2592	G	C2'-C1'	-16.09	1.35	1.53
32	S1	1397	A	O4'-C1'	16.08	1.62	1.41
33	L1	1873	C	C2'-C1'	-16.08	1.35	1.53
32	S1	589	A	C2'-C1'	-16.08	1.35	1.53
32	S1	648	C	C2'-C1'	16.07	1.71	1.53
33	L1	2789	G	O4'-C1'	-16.07	1.20	1.41
33	L1	571	G	O4'-C1'	16.06	1.62	1.41
33	L1	2475	C	O4'-C1'	16.06	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	LD	309	PRO	N-CD	-16.06	1.25	1.47
33	L1	1286	G	C2'-C1'	-16.05	1.35	1.53
32	S1	1369	C	O4'-C1'	16.05	1.62	1.41
33	L1	2580	C	C2'-C1'	-16.05	1.35	1.53
33	L1	759	C	C2'-C1'	-16.04	1.35	1.53
32	S1	400	G	C2'-C1'	16.03	1.71	1.53
33	L1	496	U	C2'-C1'	-16.03	1.35	1.53
32	S1	493	C	C2'-C1'	-16.01	1.35	1.53
32	S1	1062	C	O4'-C1'	15.99	1.62	1.41
33	L1	1718	U	C2'-C1'	-15.99	1.35	1.53
33	L1	178	C	C2'-C1'	-15.98	1.35	1.53
33	L1	1756	C	O4'-C1'	15.97	1.62	1.41
35	L2	63	A	O4'-C1'	15.97	1.62	1.41
33	L1	2405	C	C2'-C1'	-15.97	1.35	1.53
32	S1	1748	U	O4'-C1'	15.96	1.62	1.41
33	L1	1132	A	C2'-C1'	-15.95	1.35	1.53
33	L1	1901	G	C2'-C1'	15.94	1.70	1.53
33	L1	1217	G	C2'-C1'	-15.94	1.35	1.53
3	SB	159	SER	CB-OG	-15.93	1.21	1.42
33	L1	3042	U	C2'-C1'	15.91	1.70	1.53
33	L1	1530	C	C2'-C1'	-15.90	1.35	1.53
33	L1	1526	A	C2'-C1'	15.90	1.70	1.53
34	L3	103	U	O4'-C1'	15.89	1.62	1.41
32	S1	1311	U	O4'-C1'	15.88	1.62	1.41
33	L1	220	G	C2'-C1'	-15.87	1.35	1.53
32	S1	449	A	O4'-C1'	15.85	1.62	1.41
32	S1	1774	C	O4'-C1'	15.85	1.62	1.41
33	L1	2081	C	O4'-C1'	15.85	1.62	1.41
33	L1	400	G	C2'-C1'	15.85	1.70	1.53
33	L1	3088	A	C2'-C1'	-15.85	1.35	1.53
34	L3	46	C	O4'-C1'	15.83	1.62	1.41
32	S1	1793	C	O4'-C1'	15.82	1.62	1.41
33	L1	490	G	O4'-C1'	15.82	1.62	1.41
33	L1	25	U	C2'-C1'	15.82	1.70	1.53
33	L1	2407	U	C2'-C1'	-15.82	1.35	1.53
33	L1	729	G	O4'-C1'	-15.82	1.21	1.41
33	L1	1888	G	O4'-C1'	-15.81	1.21	1.41
33	L1	2841	G	C2'-C1'	-15.81	1.35	1.53
32	S1	4	C	O4'-C1'	15.81	1.62	1.41
33	L1	509	G	C2'-C1'	-15.79	1.35	1.53
33	L1	1635	A	C2'-C1'	-15.79	1.35	1.53
33	L1	254	G	C2'-C1'	-15.79	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1078	U	C2'-C1'	-15.79	1.35	1.53
32	S1	580	G	C2'-C1'	-15.78	1.35	1.53
33	L1	80	C	C2'-C1'	-15.78	1.35	1.53
33	L1	12	G	O4'-C1'	15.78	1.62	1.41
33	L1	615	A	C2'-C1'	-15.77	1.35	1.53
33	L1	2395	G	C2'-C1'	-15.77	1.36	1.53
35	L2	62	G	C2'-C1'	-15.77	1.36	1.53
32	S1	1513	A	C2'-C1'	15.76	1.70	1.53
33	L1	1798	C	O4'-C1'	15.76	1.62	1.41
34	L3	68	G	O4'-C1'	15.76	1.62	1.41
32	S1	358	C	O4'-C1'	15.75	1.62	1.41
33	L1	1056	U	O4'-C1'	15.75	1.62	1.41
33	L1	2544	C	C2'-C1'	-15.75	1.36	1.53
32	S1	1469	C	O4'-C1'	15.73	1.62	1.41
33	L1	2715	U	C2'-C1'	-15.73	1.36	1.53
32	S1	1371	U	C2'-C1'	-15.73	1.36	1.53
33	L1	1814	C	O4'-C1'	15.72	1.62	1.41
33	L1	2887	C	O4'-C1'	15.72	1.62	1.41
34	L3	11	A	C2'-C1'	-15.72	1.36	1.53
33	L1	2518	A	O4'-C1'	15.71	1.62	1.41
33	L1	2375	G	O4'-C1'	15.67	1.62	1.41
33	L1	1368	U	C2'-C1'	-15.66	1.36	1.53
35	L2	160	C	O4'-C1'	15.66	1.62	1.41
33	L1	583	C	O4'-C1'	15.65	1.61	1.41
33	L1	3175	C	C2'-C1'	-15.64	1.36	1.53
32	S1	1060	U	C2'-C1'	-15.64	1.36	1.53
32	S1	1156	A	C2'-C1'	15.64	1.70	1.53
33	L1	2684	U	O4'-C1'	15.63	1.61	1.41
32	S1	1196	C	O4'-C1'	15.62	1.61	1.41
33	L1	1540	G	C2'-C1'	-15.62	1.36	1.53
33	L1	718	C	C2'-C1'	-15.59	1.36	1.53
33	L1	297	G	C2'-C1'	-15.59	1.36	1.53
33	L1	1213	G	C2'-C1'	-15.58	1.36	1.53
32	S1	1229	C	O4'-C1'	15.57	1.61	1.41
33	L1	2758	C	C2'-C1'	-15.57	1.36	1.53
32	S1	1648	C	O4'-C1'	15.57	1.61	1.41
35	L2	152	C	O4'-C1'	15.56	1.61	1.41
33	L1	1619	G	C2'-C1'	-15.55	1.36	1.53
33	L1	2955	U	C2'-C1'	15.55	1.70	1.53
33	L1	165	C	O4'-C1'	15.55	1.61	1.41
33	L1	3003	C	C2'-C1'	-15.55	1.36	1.53
35	L2	32	C	C2'-C1'	-15.54	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1437	G	C2'-C1'	-15.53	1.36	1.53
35	L2	86	C	O4'-C1'	15.53	1.61	1.41
33	L1	448	G	C2'-C1'	-15.53	1.36	1.53
33	L1	1786	G	C2'-C1'	-15.52	1.36	1.53
32	S1	1794	C	O4'-C1'	15.49	1.61	1.41
32	S1	577	C	O4'-C1'	15.48	1.61	1.41
32	S1	1446	C	O4'-C1'	15.48	1.61	1.41
33	L1	2154	G	C2'-C1'	-15.47	1.36	1.53
33	L1	2165	A	C2'-C1'	-15.47	1.36	1.53
33	L1	2858	G	C2'-C1'	-15.47	1.36	1.53
33	L1	1642	G	C2'-C1'	-15.47	1.36	1.53
33	L1	1606	C	C2'-C1'	-15.47	1.36	1.53
35	L2	115	G	C2'-C1'	15.46	1.70	1.53
33	L1	589	G	C2'-C1'	-15.45	1.36	1.53
33	L1	447	C	O4'-C1'	15.45	1.61	1.41
33	L1	1698	C	C2'-C1'	-15.44	1.36	1.53
32	S1	1373	C	O4'-C1'	15.43	1.61	1.41
33	L1	582	C	O4'-C1'	15.43	1.61	1.41
33	L1	2567	C	C2'-C1'	-15.41	1.36	1.53
32	S1	36	C	O4'-C1'	15.40	1.61	1.41
33	L1	1712	A	O4'-C1'	15.40	1.61	1.41
33	L1	333	G	C2'-C1'	-15.38	1.36	1.53
33	L1	493	G	C2'-C1'	-15.38	1.36	1.53
33	L1	105	A	O4'-C1'	15.38	1.61	1.41
33	L1	1742	G	P-O5'	-15.38	1.44	1.59
4	SD	240	LYS	C-O	-15.37	0.94	1.23
33	L1	3063	C	C2'-C1'	-15.37	1.36	1.53
33	L1	1552	C	C2'-C1'	-15.36	1.36	1.53
32	S1	832	C	C2'-C1'	-15.36	1.36	1.53
32	S1	1036	U	O4'-C1'	15.34	1.61	1.41
32	S1	1649	C	O4'-C1'	15.34	1.61	1.41
33	L1	428	G	C2'-C1'	-15.34	1.36	1.53
35	L2	64	U	C2'-C1'	-15.33	1.36	1.53
33	L1	1708	C	O4'-C1'	15.32	1.61	1.41
32	S1	318	C	O4'-C1'	15.32	1.61	1.41
33	L1	2636	U	C2'-C1'	15.31	1.70	1.53
33	L1	2490	U	O4'-C1'	15.31	1.61	1.41
33	L1	105	A	C2'-C1'	15.31	1.70	1.53
33	L1	1789	C	O4'-C1'	15.31	1.61	1.41
33	L1	347	A	C2'-C1'	-15.31	1.36	1.53
33	L1	112	C	C2'-C1'	-15.30	1.36	1.53
33	L1	2274	A	C2'-C1'	-15.30	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	578	C	O4'-C1'	15.28	1.61	1.41
33	L1	854	C	O4'-C1'	15.28	1.61	1.41
33	L1	3247	C	C2'-C1'	-15.27	1.36	1.53
33	L1	973	U	C2'-C1'	-15.27	1.36	1.53
33	L1	1948	G	C2'-C1'	15.26	1.70	1.53
33	L1	607	U	O4'-C1'	-15.26	1.21	1.41
33	L1	2708	A	C2'-C1'	-15.26	1.36	1.53
35	L2	48	A	O4'-C1'	15.25	1.61	1.41
33	L1	282	A	C2'-C1'	15.24	1.70	1.53
32	S1	1406	U	O4'-C1'	15.23	1.61	1.41
32	S1	1303	G	O4'-C1'	15.23	1.61	1.41
32	S1	591	C	C2'-C1'	-15.23	1.36	1.53
33	L1	1499	C	C2'-C1'	-15.22	1.36	1.53
32	S1	181	C	O4'-C1'	15.22	1.61	1.41
33	L1	2439	A	C2'-C1'	-15.22	1.36	1.53
32	S1	1385	C	O4'-C1'	15.20	1.61	1.41
32	S1	1658	U	O4'-C1'	15.20	1.61	1.41
33	L1	2901	C	O4'-C1'	15.20	1.61	1.41
35	L2	41	A	C2'-C1'	-15.19	1.36	1.53
32	S1	558	C	O4'-C1'	15.18	1.61	1.41
33	L1	3216	G	O4'-C1'	-15.18	1.22	1.41
33	L1	1501	A	C2'-C1'	-15.18	1.36	1.53
33	L1	1663	G	C2'-C1'	-15.18	1.36	1.53
32	S1	1727	C	O4'-C1'	15.18	1.61	1.41
32	S1	1300	A	C2'-C1'	-15.17	1.36	1.53
33	L1	1602	A	O4'-C1'	-15.17	1.22	1.41
33	L1	1034	U	C2'-C1'	-15.17	1.36	1.53
33	L1	1579	C	O4'-C1'	15.16	1.61	1.41
33	L1	2572	U	C2'-C1'	15.16	1.70	1.53
33	L1	2829	U	C2'-C1'	15.16	1.70	1.53
5	SE	250	GLN	C-N	15.16	1.69	1.34
33	L1	1408	C	O4'-C1'	15.16	1.61	1.41
33	L1	2478	G	O4'-C1'	15.15	1.61	1.41
33	L1	2942	A	C2'-C1'	-15.15	1.36	1.53
32	S1	604	U	O4'-C1'	15.14	1.61	1.41
33	L1	671	C	C2'-C1'	-15.14	1.36	1.53
33	L1	450	C	C2'-C1'	-15.14	1.36	1.53
33	L1	2469	C	O4'-C1'	15.14	1.61	1.41
32	S1	1139	C	O4'-C1'	15.13	1.61	1.41
32	S1	1227	A	C2'-C1'	15.13	1.70	1.53
33	L1	1253	G	O4'-C1'	-15.12	1.22	1.41
33	L1	973	U	O4'-C1'	15.12	1.61	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1815	G	C2'-C1'	-15.12	1.36	1.53
32	S1	1592	G	O3'-P	15.11	1.79	1.61
33	L1	3144	U	O4'-C1'	15.11	1.61	1.41
32	S1	1298	G	O3'-P	15.10	1.79	1.61
32	S1	1562	C	O4'-C1'	15.10	1.61	1.41
33	L1	2112	C	O4'-C1'	15.09	1.61	1.41
35	L2	109	A	O4'-C1'	15.08	1.61	1.41
32	S1	1042	C	O4'-C1'	15.07	1.61	1.41
32	S1	586	U	C2'-C1'	-15.06	1.36	1.53
32	S1	1731	A	C2'-C1'	-15.06	1.36	1.53
33	L1	164	C	O4'-C1'	15.06	1.61	1.41
33	L1	846	A	C2'-C1'	15.03	1.69	1.53
32	S1	484	A	C2'-C1'	-15.03	1.36	1.53
33	L1	1545	G	O4'-C1'	15.02	1.61	1.41
33	L1	93	G	C2'-C1'	-15.02	1.36	1.53
33	L1	2763	C	C2'-C1'	15.02	1.69	1.53
33	L1	606	C	C2'-C1'	15.01	1.69	1.53
33	L1	1004	C	C2'-C1'	-15.01	1.36	1.53
33	L1	2280	C	O4'-C1'	15.01	1.61	1.41
32	S1	1354	C	O4'-C1'	15.00	1.61	1.41
33	L1	599	C	O4'-C1'	15.00	1.61	1.41
32	S1	1072	U	C2'-C1'	-14.99	1.36	1.53
32	S1	377	G	C2'-C1'	-14.99	1.36	1.53
32	S1	1295	G	C2'-C1'	-14.99	1.36	1.53
33	L1	1391	A	C2'-C1'	-14.98	1.36	1.53
33	L1	1112	C	C2'-C1'	-14.97	1.36	1.53
33	L1	3307	A	C2'-C1'	14.97	1.69	1.53
33	L1	1197	A	C2'-C1'	-14.97	1.36	1.53
33	L1	3222	G	C2'-C1'	-14.97	1.36	1.53
33	L1	1389	C	C2'-C1'	14.96	1.69	1.53
33	L1	2839	A	O4'-C1'	-14.95	1.22	1.41
32	S1	292	A	C2'-C1'	14.95	1.69	1.53
32	S1	1134	U	C2'-C1'	14.94	1.69	1.53
33	L1	1575	G	O4'-C1'	14.94	1.61	1.41
33	L1	173	C	O4'-C1'	14.93	1.61	1.41
33	L1	1442	U	O4'-C1'	14.93	1.61	1.41
32	S1	1588	C	O4'-C1'	14.92	1.61	1.41
33	L1	1873	C	O4'-C1'	14.92	1.61	1.41
33	L1	2229	G	O4'-C1'	-14.92	1.22	1.41
32	S1	1715	C	O4'-C1'	14.91	1.61	1.41
33	L1	3169	C	O4'-C1'	14.91	1.61	1.41
33	L1	679	C	O4'-C1'	14.91	1.61	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	746	C	C2'-C1'	-14.91	1.36	1.53
33	L1	3375	G	C2'-C1'	-14.91	1.36	1.53
32	S1	1098	A	C2'-C1'	-14.89	1.36	1.53
33	L1	2996	A	O4'-C1'	-14.89	1.22	1.41
33	L1	3121	C	C2'-C1'	-14.89	1.36	1.53
33	L1	2667	C	O4'-C1'	14.88	1.60	1.41
34	L3	78	C	O4'-C1'	14.88	1.60	1.41
33	L1	72	A	O4'-C1'	-14.88	1.22	1.41
33	L1	174	G	C2'-C1'	-14.86	1.37	1.53
32	S1	1743	C	O4'-C1'	14.85	1.60	1.41
33	L1	436	G	O4'-C1'	14.85	1.60	1.41
33	L1	887	A	O4'-C1'	-14.85	1.22	1.41
33	L1	30	C	C2'-C1'	-14.84	1.37	1.53
33	L1	1142	G	C2'-C1'	-14.84	1.37	1.53
33	L1	3020	C	O4'-C1'	14.84	1.60	1.41
33	L1	1814	C	C2'-C1'	-14.83	1.37	1.53
33	L1	2456	G	C2'-C1'	-14.81	1.37	1.53
32	S1	1657	C	O4'-C1'	14.81	1.60	1.41
32	S1	397	C	C2'-C1'	-14.80	1.37	1.53
33	L1	952	C	C2'-C1'	-14.79	1.37	1.53
33	L1	607	U	C2'-C1'	14.79	1.69	1.53
33	L1	637	C	C2'-C1'	-14.78	1.37	1.53
33	L1	1806	C	C2'-C1'	-14.77	1.37	1.53
32	S1	1169	G	O4'-C1'	-14.76	1.22	1.41
33	L1	510	C	O4'-C1'	14.76	1.60	1.41
33	L1	1338	C	C2'-C1'	-14.75	1.37	1.53
32	S1	1358	G	C2'-C1'	-14.75	1.37	1.53
33	L1	301	G	C2'-C1'	-14.75	1.37	1.53
33	L1	1367	A	O4'-C1'	14.74	1.60	1.41
33	L1	1824	C	C2'-C1'	-14.74	1.37	1.53
33	L1	2143	A	C2'-C1'	-14.74	1.37	1.53
32	S1	826	C	O4'-C1'	14.74	1.60	1.41
33	L1	530	C	O4'-C1'	14.74	1.60	1.41
33	L1	1344	A	C2'-C1'	-14.74	1.37	1.53
32	S1	483	C	C2'-C1'	-14.73	1.37	1.53
33	L1	922	U	O4'-C1'	14.73	1.60	1.41
32	S1	1184	C	C2'-C1'	-14.73	1.37	1.53
19	SY	47	ARG	C-N	14.72	1.68	1.34
32	S1	1213	C	O4'-C1'	14.72	1.60	1.41
33	L1	2691	U	O4'-C1'	14.71	1.60	1.41
33	L1	1096	C	O4'-C1'	14.71	1.60	1.41
33	L1	1779	C	C2'-C1'	-14.69	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1878	G	C2'-C1'	-14.69	1.37	1.53
34	L3	75	G	P-O5'	-14.68	1.45	1.59
33	L1	3333	C	O4'-C1'	14.68	1.60	1.41
33	L1	2973	A	O4'-C1'	-14.67	1.22	1.41
33	L1	2730	A	C2'-C1'	14.67	1.69	1.53
34	L3	110	G	C2'-C1'	-14.67	1.37	1.53
33	L1	1252	C	C2'-C1'	-14.67	1.37	1.53
33	L1	1526	A	O4'-C1'	-14.66	1.22	1.41
9	SK	123	MET	CG-SD	-14.66	1.43	1.81
35	L2	136	G	O4'-C1'	14.65	1.60	1.41
33	L1	2438	A	C2'-C1'	-14.65	1.37	1.53
33	L1	80	C	O4'-C1'	14.65	1.60	1.41
33	L1	255	C	O4'-C1'	14.64	1.60	1.41
33	L1	384	A	C2'-C1'	-14.64	1.37	1.53
33	L1	826	C	C2'-C1'	-14.64	1.37	1.53
64	LG	50	PHE	N-CA	14.64	1.75	1.46
33	L1	3026	C	C2'-C1'	-14.64	1.37	1.53
33	L1	218	G	C2'-C1'	-14.62	1.37	1.53
33	L1	215	U	C2'-C1'	-14.61	1.37	1.53
33	L1	691	U	O4'-C1'	-14.61	1.22	1.41
33	L1	2687	C	C2'-C1'	-14.61	1.37	1.53
32	S1	431	C	O4'-C1'	14.60	1.60	1.41
33	L1	519	C	C2'-C1'	-14.60	1.37	1.53
33	L1	688	G	C2'-C1'	-14.60	1.37	1.53
33	L1	739	C	O4'-C1'	14.60	1.60	1.41
33	L1	113	A	C2'-C1'	14.59	1.69	1.53
33	L1	639	A	C2'-C1'	-14.59	1.37	1.53
32	S1	1485	A	C2'-C1'	14.58	1.69	1.53
32	S1	373	U	O4'-C1'	-14.58	1.22	1.41
33	L1	592	U	C2'-C1'	-14.58	1.37	1.53
32	S1	1303	G	C2'-C1'	-14.58	1.37	1.53
33	L1	663	G	C2'-C1'	-14.57	1.37	1.53
33	L1	1007	A	O4'-C1'	14.57	1.60	1.41
32	S1	1718	C	C2'-C1'	-14.57	1.37	1.53
33	L1	81	C	C2'-C1'	-14.57	1.37	1.53
33	L1	3277	C	O4'-C1'	14.56	1.60	1.41
33	L1	267	G	C2'-C1'	-14.56	1.37	1.53
33	L1	594	C	O4'-C1'	14.55	1.60	1.41
34	L3	101	A	O4'-C1'	14.54	1.60	1.41
32	S1	1746	U	O4'-C1'	14.54	1.60	1.41
33	L1	1841	G	O4'-C1'	-14.53	1.22	1.41
33	L1	2097	C	C2'-C1'	-14.51	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	L3	103	U	C2'-C1'	-14.51	1.37	1.53
33	L1	631	C	C2'-C1'	-14.51	1.37	1.53
32	S1	354	G	O4'-C1'	14.51	1.60	1.41
33	L1	618	G	O4'-C1'	-14.51	1.22	1.41
33	L1	3349	C	C2'-C1'	-14.51	1.37	1.53
33	L1	1748	A	O4'-C1'	14.50	1.60	1.41
33	L1	2770	U	C2'-C1'	14.50	1.69	1.53
33	L1	183	C	O4'-C1'	14.50	1.60	1.41
33	L1	10	C	O4'-C1'	14.49	1.60	1.41
32	S1	1068	G	O4'-C1'	-14.49	1.22	1.41
14	SP	106	SER	CB-OG	14.49	1.61	1.42
33	L1	1171	U	O4'-C1'	-14.48	1.22	1.41
33	L1	3034	A	O4'-C1'	-14.48	1.22	1.41
32	S1	148	C	C2'-C1'	-14.48	1.37	1.53
33	L1	1553	C	O4'-C1'	14.48	1.60	1.41
33	L1	82	C	C2'-C1'	-14.48	1.37	1.53
33	L1	2150	C	O4'-C1'	14.47	1.60	1.41
33	L1	3324	U	C2'-C1'	14.46	1.69	1.53
33	L1	1056	U	C2'-C1'	-14.46	1.37	1.53
33	L1	1628	G	C2'-C1'	-14.46	1.37	1.53
32	S1	1538	C	C2'-C1'	14.46	1.69	1.53
33	L1	1439	U	C2'-C1'	-14.45	1.37	1.53
32	S1	1395	C	C2'-C1'	-14.45	1.37	1.53
33	L1	77	U	C2'-C1'	14.44	1.69	1.53
32	S1	385	C	O4'-C1'	14.43	1.60	1.41
23	SU	72	GLY	N-CA	14.43	1.67	1.46
33	L1	1115	A	C2'-C1'	14.43	1.69	1.53
33	L1	1283	C	C2'-C1'	-14.42	1.37	1.53
32	S1	234	G	C2'-C1'	-14.41	1.37	1.53
33	L1	719	U	C2'-C1'	-14.40	1.37	1.53
34	L3	19	A	C2'-C1'	14.40	1.69	1.53
33	L1	2487	A	C2'-C1'	14.40	1.69	1.53
33	L1	2672	C	C2'-C1'	-14.40	1.37	1.53
32	S1	880	G	C2'-C1'	14.39	1.69	1.53
33	L1	294	A	C2'-C1'	14.39	1.69	1.53
31	S2	14	A	C2'-C1'	-14.39	1.37	1.53
33	L1	411	C	C2'-C1'	-14.38	1.37	1.53
33	L1	1911	A	C2'-C1'	14.38	1.69	1.53
32	S1	295	C	O4'-C1'	14.38	1.60	1.41
32	S1	1375	C	O4'-C1'	14.37	1.60	1.41
32	S1	447	C	O4'-C1'	14.36	1.60	1.41
35	L2	112	C	O4'-C1'	14.36	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	240	U	O4'-C1'	14.35	1.60	1.41
33	L1	1361	G	C2'-C1'	14.35	1.69	1.53
33	L1	579	G	O4'-C1'	14.34	1.60	1.41
33	L1	338	C	O4'-C1'	14.33	1.60	1.41
33	L1	1054	U	C2'-C1'	-14.33	1.37	1.53
33	L1	337	C	O4'-C1'	14.33	1.60	1.41
33	L1	743	C	O4'-C1'	14.33	1.60	1.41
33	L1	1555	G	O4'-C1'	14.32	1.60	1.41
33	L1	690	G	O4'-C1'	-14.32	1.23	1.41
9	SK	126	GLY	C-N	14.30	1.67	1.34
33	L1	3051	U	C2'-C1'	-14.28	1.37	1.53
33	L1	1693	A	O4'-C1'	14.28	1.60	1.41
33	L1	1715	C	P-O5'	-14.28	1.45	1.59
32	S1	1126	C	O4'-C1'	14.27	1.60	1.41
33	L1	1731	A	O4'-C1'	14.27	1.60	1.41
32	S1	652	G	O4'-C1'	14.26	1.60	1.41
32	S1	1566	U	C2'-C1'	14.26	1.69	1.53
34	L3	104	C	O4'-C1'	14.26	1.60	1.41
33	L1	2397	A	O4'-C1'	14.26	1.60	1.41
33	L1	1772	G	C2'-C1'	14.26	1.69	1.53
33	L1	869	A	C2'-C1'	-14.24	1.37	1.53
33	L1	2712	C	O4'-C1'	14.24	1.60	1.41
32	S1	1151	G	C2'-C1'	-14.23	1.37	1.53
32	S1	33	U	C2'-C1'	14.23	1.69	1.53
33	L1	2624	G	C2'-C1'	-14.22	1.37	1.53
32	S1	1693	C	O4'-C1'	14.22	1.60	1.41
33	L1	1085	G	C2'-C1'	-14.22	1.37	1.53
33	L1	596	C	C2'-C1'	-14.21	1.37	1.53
33	L1	1907	A	O4'-C1'	-14.21	1.23	1.41
34	L3	50	A	O4'-C1'	14.20	1.60	1.41
32	S1	1614	C	C2'-C1'	-14.19	1.37	1.53
31	S2	7	A	O4'-C1'	14.19	1.60	1.41
32	S1	979	A	C2'-C1'	-14.19	1.37	1.53
33	L1	1364	C	O4'-C1'	14.18	1.60	1.41
33	L1	3032	G	C2'-C1'	-14.18	1.37	1.53
34	L3	107	C	C2'-C1'	-14.18	1.37	1.53
33	L1	1128	U	C2'-C1'	-14.18	1.37	1.53
33	L1	3039	U	C2'-C1'	-14.17	1.37	1.53
32	S1	1317	A	C2'-C1'	14.17	1.69	1.53
33	L1	1583	G	C2'-C1'	14.16	1.69	1.53
33	L1	333	G	O4'-C1'	14.16	1.60	1.41
32	S1	1517	C	O4'-C1'	14.16	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2300	G	O4'-C1'	14.16	1.60	1.41
35	L2	27	C	O4'-C1'	14.15	1.60	1.41
35	L2	61	C	C2'-C1'	-14.15	1.37	1.53
33	L1	1527	A	O4'-C1'	14.14	1.60	1.41
33	L1	2386	A	O4'-C1'	14.14	1.60	1.41
32	S1	170	C	O4'-C1'	14.13	1.60	1.41
33	L1	1764	G	C2'-C1'	-14.12	1.37	1.53
33	L1	1304	G	C2'-C1'	-14.11	1.37	1.53
4	SD	240	LYS	CA-C	14.10	1.89	1.52
33	L1	3158	C	C2'-C1'	-14.10	1.37	1.53
4	SD	240	LYS	C-N	14.10	1.58	1.33
33	L1	459	G	C2'-C1'	-14.10	1.37	1.53
33	L1	3325	G	C2'-C1'	-14.10	1.37	1.53
35	L2	129	C	O4'-C1'	14.09	1.59	1.41
35	L2	89	G	O4'-C1'	14.09	1.59	1.41
33	L1	2971	A	C2'-C1'	-14.09	1.37	1.53
33	L1	1523	G	O3'-P	14.08	1.78	1.61
33	L1	68	U	O4'-C1'	14.07	1.59	1.41
33	L1	2396	A	C2'-C1'	-14.06	1.37	1.53
32	S1	1094	U	O4'-C1'	14.06	1.59	1.41
33	L1	729	G	C2'-C1'	14.05	1.68	1.53
33	L1	1107	G	C2'-C1'	-14.05	1.37	1.53
33	L1	2632	U	C2'-C1'	14.05	1.68	1.53
33	L1	722	C	C2'-C1'	14.04	1.68	1.53
32	S1	1718	C	O4'-C1'	14.04	1.59	1.41
34	L3	12	U	C2'-C1'	-14.04	1.38	1.53
33	L1	241	G	C2'-C1'	-14.03	1.38	1.53
33	L1	674	G	C2'-C1'	-14.03	1.38	1.53
33	L1	2761	A	C2'-C1'	-14.03	1.38	1.53
32	S1	420	A	O4'-C1'	14.02	1.59	1.41
32	S1	1781	U	C2'-C1'	-14.01	1.38	1.53
33	L1	328	G	O4'-C1'	14.01	1.59	1.41
33	L1	1666	C	C2'-C1'	-14.01	1.38	1.53
32	S1	1643	A	C2'-C1'	14.00	1.68	1.53
33	L1	1516	G	C2'-C1'	-14.00	1.38	1.53
33	L1	2099	G	C2'-C1'	-13.99	1.38	1.53
33	L1	2696	C	O4'-C1'	13.99	1.59	1.41
33	L1	238	C	C2'-C1'	-13.99	1.38	1.53
33	L1	310	C	O4'-C1'	13.98	1.59	1.41
33	L1	1947	U	C2'-C1'	13.98	1.68	1.53
33	L1	131	C	O4'-C1'	13.95	1.59	1.41
32	S1	1794	C	C2'-C1'	-13.93	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	137	A	C2'-C1'	-13.93	1.38	1.53
32	S1	1425	G	O4'-C1'	13.93	1.59	1.41
70	Li	107	LEU	C-O	-13.92	0.96	1.23
33	L1	1698	C	O4'-C1'	13.92	1.59	1.41
32	S1	1775	A	C2'-C1'	-13.91	1.38	1.53
33	L1	1401	C	O4'-C1'	13.91	1.59	1.41
32	S1	562	U	C2'-C1'	13.91	1.68	1.53
33	L1	2302	G	C2'-C1'	-13.90	1.38	1.53
33	L1	650	A	O4'-C1'	-13.90	1.23	1.41
33	L1	237	C	C2'-C1'	-13.89	1.38	1.53
33	L1	1566	C	O4'-C1'	13.89	1.59	1.41
33	L1	3341	C	O4'-C1'	13.89	1.59	1.41
32	S1	67	G	O4'-C1'	13.89	1.59	1.41
33	L1	409	U	C2'-C1'	-13.89	1.38	1.53
33	L1	112	C	O4'-C1'	13.88	1.59	1.41
32	S1	563	C	C2'-C1'	-13.88	1.38	1.53
32	S1	1464	G	C2'-C1'	-13.88	1.38	1.53
32	S1	1722	C	C2'-C1'	-13.88	1.38	1.53
33	L1	60	G	C2'-C1'	-13.88	1.38	1.53
33	L1	887	A	C2'-C1'	13.88	1.68	1.53
32	S1	1250	C	C2'-C1'	-13.88	1.38	1.53
32	S1	877	G	O4'-C1'	13.87	1.59	1.41
33	L1	1912	U	O4'-C1'	13.86	1.59	1.41
32	S1	495	C	C2'-C1'	-13.86	1.38	1.53
32	S1	31	C	O4'-C1'	13.86	1.59	1.41
35	L2	18	C	C2'-C1'	-13.86	1.38	1.53
33	L1	63	G	O4'-C1'	13.85	1.59	1.41
33	L1	3352	C	C2'-C1'	13.84	1.68	1.53
32	S1	1327	C	O4'-C1'	13.84	1.59	1.41
32	S1	1783	C	C2'-C1'	-13.84	1.38	1.53
33	L1	791	C	O4'-C1'	13.84	1.59	1.41
33	L1	1880	A	C3'-O3'	13.84	1.61	1.42
33	L1	2927	C	O4'-C1'	13.83	1.59	1.41
33	L1	2846	C	O4'-C1'	13.83	1.59	1.41
33	L1	562	G	C2'-C1'	-13.83	1.38	1.53
32	S1	1061	G	O4'-C1'	13.82	1.59	1.41
32	S1	1249	G	O4'-C1'	13.82	1.59	1.41
33	L1	1080	C	O4'-C1'	13.82	1.59	1.41
32	S1	1620	C	O4'-C1'	13.82	1.59	1.41
33	L1	1432	G	C2'-C1'	-13.82	1.38	1.53
33	L1	2247	A	O4'-C1'	13.81	1.59	1.41
33	L1	1748	A	C2'-C1'	-13.81	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	27	C	C2'-C1'	-13.81	1.38	1.53
33	L1	2649	C	O4'-C1'	13.81	1.59	1.41
33	L1	2676	A	P-O5'	-13.80	1.46	1.59
32	S1	602	U	C2'-C1'	-13.79	1.38	1.53
33	L1	2825	G	C2'-C1'	13.79	1.68	1.53
47	LU	138	GLY	CA-C	13.78	1.74	1.51
34	L3	3	A	C2'-C1'	13.78	1.68	1.53
33	L1	1458	U	C2'-C1'	13.78	1.68	1.53
32	S1	939	C	O4'-C1'	13.77	1.59	1.41
33	L1	1363	C	C2'-C1'	-13.77	1.38	1.53
31	S2	11	U	C2'-C1'	-13.77	1.38	1.53
32	S1	1326	A	O4'-C1'	13.77	1.59	1.41
32	S1	1799	G	C2'-C1'	-13.76	1.38	1.53
33	L1	686	A	O4'-C1'	13.76	1.59	1.41
33	L1	305	G	O4'-C1'	-13.76	1.23	1.41
33	L1	827	C	O4'-C1'	13.74	1.59	1.41
33	L1	938	U	C2'-C1'	13.74	1.68	1.53
14	SP	50	ILE	C-N	-13.72	1.02	1.34
33	L1	2629	C	O4'-C1'	13.71	1.59	1.41
33	L1	3129	G	C2'-C1'	-13.70	1.38	1.53
35	L2	145	C	C2'-C1'	13.71	1.68	1.53
42	LP	74	PRO	C-O	-13.71	0.95	1.23
35	L2	122	C	C2'-C1'	-13.70	1.38	1.53
1	Sa	83	SER	CB-OG	13.69	1.60	1.42
32	S1	1471	C	O4'-C1'	13.68	1.59	1.41
32	S1	1632	C	C2'-C1'	-13.68	1.38	1.53
33	L1	2160	C	O4'-C1'	13.68	1.59	1.41
27	SH	109	GLY	CA-C	-13.67	1.29	1.51
32	S1	1801	A	O4'-C1'	-13.67	1.23	1.41
33	L1	563	C	C2'-C1'	-13.67	1.38	1.53
33	L1	2758	C	O4'-C1'	13.67	1.59	1.41
33	L1	1070	G	O4'-C1'	13.67	1.59	1.41
35	L2	153	U	O4'-C1'	13.67	1.59	1.41
33	L1	3082	G	O4'-C1'	13.66	1.59	1.41
33	L1	655	G	C2'-C1'	-13.66	1.38	1.53
33	L1	1089	G	O4'-C1'	13.66	1.59	1.41
31	S2	11	U	O4'-C1'	13.66	1.59	1.41
32	S1	1784	G	C2'-C1'	-13.66	1.38	1.53
33	L1	2232	C	O4'-C1'	13.65	1.59	1.41
32	S1	459	C	O4'-C1'	13.65	1.59	1.41
33	L1	350	A	C2'-C1'	13.65	1.68	1.53
33	L1	1273	U	O4'-C1'	13.64	1.59	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3225	G	O4'-C1'	-13.64	1.24	1.41
32	S1	995	C	O4'-C1'	13.64	1.59	1.41
33	L1	513	C	O4'-C1'	13.64	1.59	1.41
35	L2	135	G	C2'-C1'	-13.64	1.38	1.53
33	L1	2419	C	O4'-C1'	13.63	1.59	1.41
33	L1	1542	A	O4'-C1'	13.63	1.59	1.41
32	S1	1770	G	C2'-C1'	-13.63	1.38	1.53
34	L3	49	A	C2'-C1'	-13.63	1.38	1.53
38	LE	153	HIS	CD2-NE2	13.61	1.70	1.42
33	L1	1440	C	C2'-C1'	-13.61	1.38	1.53
33	L1	541	C	O4'-C1'	13.61	1.59	1.41
35	L2	19	G	C2'-C1'	-13.60	1.38	1.53
33	L1	2732	U	O4'-C1'	13.60	1.59	1.41
33	L1	979	C	O4'-C1'	13.59	1.59	1.41
33	L1	1053	C	O4'-C1'	13.59	1.59	1.41
33	L1	2808	U	O4'-C1'	13.59	1.59	1.41
33	L1	627	G	O4'-C1'	13.59	1.59	1.41
31	S2	46	A	C2'-C1'	13.58	1.68	1.53
33	L1	810	A	O4'-C1'	13.58	1.59	1.41
33	L1	2133	A	O4'-C1'	13.58	1.59	1.41
32	S1	1050	C	O4'-C1'	13.58	1.59	1.41
33	L1	1456	A	C2'-C1'	13.57	1.68	1.53
33	L1	1707	C	O4'-C1'	-13.56	1.24	1.41
32	S1	879	C	C2'-C1'	-13.56	1.38	1.53
68	LW	104	VAL	C-O	-13.55	0.97	1.23
33	L1	819	A	O4'-C1'	13.55	1.59	1.41
33	L1	1886	U	C2'-C1'	-13.55	1.38	1.53
33	L1	2739	A	O4'-C1'	-13.54	1.24	1.41
32	S1	1602	G	C2'-C1'	-13.54	1.38	1.53
33	L1	2358	C	O4'-C1'	13.54	1.59	1.41
33	L1	3314	G	C2'-C1'	-13.53	1.38	1.53
33	L1	1811	U	O4'-C1'	13.53	1.59	1.41
33	L1	3011	U	C2'-C1'	13.53	1.68	1.53
33	L1	232	C	C2'-C1'	-13.51	1.38	1.53
33	L1	3296	C	C2'-C1'	13.51	1.68	1.53
32	S1	386	C	O4'-C1'	13.50	1.59	1.41
33	L1	3026	C	O4'-C1'	13.50	1.59	1.41
33	L1	3323	U	C2'-C1'	13.50	1.68	1.53
33	L1	686	A	C2'-C1'	-13.50	1.38	1.53
33	L1	3290	C	C2'-C1'	-13.49	1.38	1.53
45	LQ	124	VAL	C-O	-13.49	0.97	1.23
32	S1	1514	G	C2'-C1'	-13.49	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	125	G	C2'-C1'	-13.48	1.38	1.53
33	L1	3301	G	C2'-C1'	13.48	1.68	1.53
33	L1	2302	G	O4'-C1'	13.46	1.59	1.41
33	L1	2622	G	O4'-C1'	13.46	1.59	1.41
33	L1	2868	C	O4'-C1'	-13.45	1.24	1.41
33	L1	2336	C	C2'-C1'	-13.45	1.38	1.53
33	L1	1483	G	O4'-C1'	-13.44	1.24	1.41
33	L1	1350	G	O4'-C1'	-13.44	1.24	1.41
33	L1	2036	C	O4'-C1'	13.44	1.59	1.41
30	S3	17	A	O4'-C1'	13.43	1.59	1.41
33	L1	960	C	O4'-C1'	13.43	1.59	1.41
33	L1	2491	A	C2'-C1'	-13.42	1.38	1.53
33	L1	1937	C	O4'-C1'	13.42	1.59	1.41
33	L1	231	C	C2'-C1'	-13.41	1.38	1.53
33	L1	489	C	O4'-C1'	13.41	1.59	1.41
33	L1	2753	C	C2'-C1'	-13.40	1.38	1.53
25	SC	143	VAL	C-N	13.39	1.64	1.34
33	L1	3319	G	C2'-C1'	-13.39	1.38	1.53
33	L1	2226	C	O4'-C1'	-13.39	1.24	1.41
33	L1	2738	U	C2'-C1'	-13.39	1.38	1.53
33	L1	3092	A	O4'-C1'	13.39	1.59	1.41
31	S2	61	C	O4'-C1'	13.38	1.59	1.41
33	L1	2801	A	O4'-C1'	13.38	1.59	1.41
33	L1	7	C	O4'-C1'	13.38	1.59	1.41
33	L1	910	G	C2'-C1'	-13.38	1.38	1.53
33	L1	491	G	C2'-C1'	-13.37	1.38	1.53
33	L1	3040	G	O4'-C1'	-13.37	1.24	1.41
32	S1	994	U	C2'-C1'	13.36	1.68	1.53
31	S2	26	G	O4'-C1'	-13.36	1.24	1.41
32	S1	1707	G	C2'-C1'	13.36	1.68	1.53
33	L1	548	G	C2'-C1'	-13.35	1.38	1.53
32	S1	298	C	O4'-C1'	13.35	1.59	1.41
64	LG	44	ALA	C-O	-13.35	0.97	1.23
33	L1	375	G	C2'-C1'	-13.34	1.38	1.53
33	L1	2521	C	C2'-C1'	-13.34	1.38	1.53
33	L1	451	C	O4'-C1'	13.34	1.58	1.41
32	S1	1434	G	C2'-C1'	-13.33	1.38	1.53
33	L1	2998	A	C2'-C1'	13.32	1.68	1.53
33	L1	1414	C	C2'-C1'	-13.32	1.38	1.53
33	L1	2234	G	C2'-C1'	-13.32	1.38	1.53
33	L1	1939	C	O4'-C1'	13.32	1.58	1.41
32	S1	1506	G	C2'-C1'	-13.31	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3231	G	C2'-C1'	-13.30	1.38	1.53
33	L1	2567	C	O4'-C1'	13.30	1.58	1.41
33	L1	3161	C	O4'-C1'	13.30	1.58	1.41
33	L1	2486	G	O4'-C1'	-13.30	1.24	1.41
32	S1	1743	C	C2'-C1'	-13.29	1.38	1.53
33	L1	2462	G	C2'-C1'	13.29	1.68	1.53
32	S1	14	C	O4'-C1'	13.28	1.58	1.41
33	L1	1913	C	O4'-C1'	13.29	1.58	1.41
33	L1	2070	C	O4'-C1'	13.29	1.58	1.41
33	L1	2373	C	C2'-C1'	13.28	1.68	1.53
33	L1	2505	C	O4'-C1'	13.28	1.58	1.41
33	L1	843	C	C2'-C1'	-13.28	1.38	1.53
33	L1	2856	U	C2'-C1'	13.28	1.68	1.53
33	L1	2058	C	O4'-C1'	13.27	1.58	1.41
32	S1	933	G	C2'-C1'	13.27	1.68	1.53
33	L1	178	C	O4'-C1'	13.27	1.58	1.41
33	L1	1000	A	O4'-C1'	13.27	1.58	1.41
32	S1	1358	G	O4'-C1'	13.26	1.58	1.41
32	S1	1667	A	O4'-C1'	13.26	1.58	1.41
33	L1	3183	G	O4'-C1'	13.26	1.58	1.41
33	L1	1703	C	O4'-C1'	13.26	1.58	1.41
33	L1	3229	C	C2'-C1'	-13.26	1.38	1.53
32	S1	336	U	C2'-C1'	13.25	1.68	1.53
33	L1	994	U	C2'-C1'	-13.25	1.38	1.53
33	L1	853	U	C2'-C1'	13.25	1.68	1.53
33	L1	126	G	C2'-C1'	-13.24	1.38	1.53
32	S1	1597	C	O4'-C1'	13.23	1.58	1.41
33	L1	1310	G	O4'-C1'	-13.23	1.24	1.41
33	L1	315	A	C2'-C1'	-13.22	1.38	1.53
33	L1	2726	U	O4'-C1'	13.22	1.58	1.41
32	S1	1645	C	C2'-C1'	-13.22	1.38	1.53
31	S2	47	U	C2'-C1'	13.21	1.67	1.53
33	L1	3349	C	O4'-C1'	13.21	1.58	1.41
33	L1	744	C	C2'-C1'	-13.20	1.38	1.53
32	S1	574	A	C2'-C1'	13.19	1.67	1.53
33	L1	296	C	O4'-C1'	13.19	1.58	1.41
33	L1	1486	G	C2'-C1'	13.19	1.67	1.53
32	S1	1433	A	O4'-C1'	-13.19	1.24	1.41
33	L1	3388	U	C2'-C1'	13.18	1.67	1.53
31	S2	49	G	C2'-C1'	-13.18	1.38	1.53
32	S1	439	C	O4'-C1'	13.18	1.58	1.41
33	L1	2158	C	O4'-C1'	13.18	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1074	C	O4'-C1'	13.17	1.58	1.41
33	L1	442	C	O4'-C1'	13.16	1.58	1.41
32	S1	1167	C	O4'-C1'	13.16	1.58	1.41
33	L1	1736	C	C2'-C1'	-13.16	1.38	1.53
33	L1	1673	A	C2'-C1'	-13.14	1.38	1.53
32	S1	1243	C	O4'-C1'	13.14	1.58	1.41
33	L1	1496	G	C2'-C1'	13.14	1.67	1.53
33	L1	2657	C	O4'-C1'	13.14	1.58	1.41
33	L1	2871	U	O4'-C1'	13.14	1.58	1.41
33	L1	3232	C	O4'-C1'	13.14	1.58	1.41
32	S1	1509	C	O4'-C1'	13.14	1.58	1.41
33	L1	264	C	C2'-C1'	-13.14	1.38	1.53
32	S1	1447	C	O4'-C1'	13.13	1.58	1.41
33	L1	2681	A	O4'-C1'	13.13	1.58	1.41
33	L1	3235	A	P-O5'	-13.13	1.46	1.59
33	L1	1582	C	C2'-C1'	-13.12	1.39	1.53
33	L1	1895	G	C2'-C1'	-13.12	1.39	1.53
32	S1	1761	G	C2'-C1'	-13.12	1.39	1.53
33	L1	2512	U	O4'-C1'	13.12	1.58	1.41
33	L1	2666	G	O4'-C1'	-13.12	1.24	1.41
32	S1	1576	C	O4'-C1'	13.11	1.58	1.41
33	L1	859	G	C2'-C1'	-13.11	1.39	1.53
33	L1	2546	C	C2'-C1'	-13.10	1.39	1.53
32	S1	1549	G	O4'-C1'	13.10	1.58	1.41
33	L1	3291	C	O4'-C1'	13.10	1.58	1.41
32	S1	690	G	O4'-C1'	13.09	1.58	1.41
33	L1	1589	G	O4'-C1'	-13.09	1.24	1.41
32	S1	1174	G	O4'-C1'	13.09	1.58	1.41
33	L1	1363	C	O4'-C1'	13.09	1.58	1.41
32	S1	1353	G	C2'-C1'	-13.09	1.39	1.53
33	L1	664	A	O4'-C1'	-13.08	1.24	1.41
33	L1	492	G	O4'-C1'	-13.08	1.24	1.41
4	SD	241	GLY	CA-C	-13.06	1.30	1.51
33	L1	642	C	O3'-P	-13.06	1.45	1.61
33	L1	974	G	P-O5'	-13.05	1.46	1.59
33	L1	1499	C	O4'-C1'	13.05	1.58	1.41
33	L1	2406	C	O4'-C1'	13.05	1.58	1.41
33	L1	1682	C	C2'-C1'	-13.05	1.39	1.53
33	L1	1935	G	C2'-C1'	-13.05	1.39	1.53
33	L1	2336	C	O4'-C1'	13.05	1.58	1.41
32	S1	377	G	O4'-C1'	13.04	1.58	1.41
33	L1	2331	A	C2'-C1'	13.04	1.67	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	501	U	C2'-C1'	-13.03	1.39	1.53
33	L1	431	G	C2'-C1'	-13.03	1.39	1.53
32	S1	1228	G	O4'-C1'	13.03	1.58	1.41
33	L1	3095	G	C2'-C1'	-13.02	1.39	1.53
33	L1	18	G	C2'-C1'	-13.02	1.39	1.53
33	L1	1286	G	O4'-C1'	13.02	1.58	1.41
33	L1	2454	U	C2'-C1'	-13.02	1.39	1.53
80	LC	357	GLU	C-O	-13.01	0.98	1.23
33	L1	2909	A	C2'-C1'	13.01	1.67	1.53
32	S1	983	A	C2'-C1'	-13.00	1.39	1.53
32	S1	1383	U	C2'-C1'	-13.00	1.39	1.53
32	S1	1245	G	C2'-C1'	13.00	1.67	1.53
33	L1	602	G	C2'-C1'	-13.00	1.39	1.53
33	L1	3063	C	O4'-C1'	13.00	1.58	1.41
33	L1	2697	A	O4'-C1'	13.00	1.58	1.41
33	L1	518	G	O4'-C1'	12.99	1.58	1.41
33	L1	426	A	C2'-C1'	-12.99	1.39	1.53
33	L1	751	C	O4'-C1'	12.99	1.58	1.41
33	L1	720	G	C2'-C1'	12.99	1.67	1.53
33	L1	1749	G	C2'-C1'	-12.99	1.39	1.53
33	L1	2731	G	C2'-C1'	-12.98	1.39	1.53
32	S1	1699	C	C2'-C1'	-12.97	1.39	1.53
33	L1	553	C	O4'-C1'	12.97	1.58	1.41
32	S1	689	C	O4'-C1'	12.97	1.58	1.41
33	L1	975	G	C2'-C1'	-12.97	1.39	1.53
33	L1	302	G	O4'-C1'	-12.96	1.24	1.41
32	S1	1458	U	C2'-C1'	-12.96	1.39	1.53
33	L1	461	A	O4'-C1'	12.96	1.58	1.41
32	S1	683	C	O4'-C1'	12.95	1.58	1.41
33	L1	1180	C	O4'-C1'	12.95	1.58	1.41
33	L1	1696	G	C2'-C1'	12.94	1.67	1.53
33	L1	2228	A	C2'-C1'	12.94	1.67	1.53
4	SD	153	ILE	CA-C	12.93	1.86	1.52
34	L3	12	U	O4'-C1'	12.93	1.58	1.41
33	L1	3241	C	C2'-C1'	-12.92	1.39	1.53
31	S2	31	C	C2'-C1'	-12.91	1.39	1.53
32	S1	1231	A	O4'-C1'	12.91	1.58	1.41
33	L1	2225	C	O4'-C1'	12.91	1.58	1.41
32	S1	1073	C	C2'-C1'	-12.91	1.39	1.53
33	L1	876	C	C2'-C1'	-12.91	1.39	1.53
32	S1	1065	A	O4'-C1'	12.91	1.58	1.41
33	L1	2727	U	C2'-C1'	-12.90	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	697	A	C2'-C1'	-12.89	1.39	1.53
33	L1	681	A	C2'-C1'	12.88	1.67	1.53
33	L1	1135	C	C2'-C1'	-12.89	1.39	1.53
35	L2	99	G	C2'-C1'	12.88	1.67	1.53
32	S1	1021	C	O4'-C1'	12.88	1.58	1.41
33	L1	17	G	C2'-C1'	-12.88	1.39	1.53
33	L1	88	A	C2'-C1'	-12.88	1.39	1.53
33	L1	1736	C	O4'-C1'	12.88	1.58	1.41
33	L1	661	A	C2'-C1'	12.87	1.67	1.53
33	L1	2839	A	C2'-C1'	12.87	1.67	1.53
34	L3	72	G	C2'-C1'	-12.86	1.39	1.53
33	L1	605	A	C2'-C1'	12.86	1.67	1.53
33	L1	703	G	C2'-C1'	-12.86	1.39	1.53
33	L1	784	G	C2'-C1'	-12.86	1.39	1.53
32	S1	663	C	O4'-C1'	12.86	1.58	1.41
33	L1	2430	C	P-O5'	-12.86	1.46	1.59
32	S1	576	C	C2'-C1'	-12.84	1.39	1.53
33	L1	2992	G	O4'-C1'	-12.84	1.25	1.41
32	S1	550	U	O4'-C1'	12.83	1.58	1.41
32	S1	1019	G	C2'-C1'	-12.83	1.39	1.53
33	L1	1675	G	C2'-C1'	12.83	1.67	1.53
35	L2	36	C	O4'-C1'	12.82	1.58	1.41
32	S1	652	G	C2'-C1'	-12.82	1.39	1.53
33	L1	3210	G	C2'-C1'	12.82	1.67	1.53
45	LQ	235	GLY	C-O	-12.82	1.03	1.23
32	S1	398	C	O4'-C1'	12.81	1.58	1.41
32	S1	14	C	C2'-C1'	-12.81	1.39	1.53
11	SM	97	GLN	C-O	-12.80	0.99	1.23
33	L1	1371	G	O4'-C1'	12.79	1.58	1.41
33	L1	2200	U	O4'-C1'	12.79	1.58	1.41
33	L1	2673	G	C2'-C1'	-12.79	1.39	1.53
33	L1	1253	G	C2'-C1'	12.79	1.67	1.53
33	L1	2166	U	O4'-C1'	12.79	1.58	1.41
35	L2	61	C	O4'-C1'	12.79	1.58	1.41
32	S1	397	C	O4'-C1'	12.78	1.58	1.41
33	L1	430	G	O4'-C1'	12.78	1.58	1.41
33	L1	611	C	C2'-C1'	12.78	1.67	1.53
33	L1	2896	C	O4'-C1'	12.78	1.58	1.41
33	L1	2388	C	O4'-C1'	12.78	1.58	1.41
32	S1	1109	U	O4'-C1'	12.77	1.58	1.41
32	S1	350	G	C2'-C1'	-12.77	1.39	1.53
32	S1	1174	G	C2'-C1'	-12.77	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1201	C	O4'-C1'	12.77	1.58	1.41
33	L1	536	C	O4'-C1'	12.76	1.58	1.41
33	L1	2749	A	C2'-C1'	-12.76	1.39	1.53
33	L1	1088	A	O4'-C1'	12.76	1.58	1.41
33	L1	3101	C	C4'-C3'	12.76	1.67	1.53
32	S1	18	C	O4'-C1'	12.76	1.58	1.41
33	L1	931	C	C2'-C1'	-12.76	1.39	1.53
33	L1	2481	C	O4'-C1'	12.76	1.58	1.41
33	L1	1977	C	O4'-C1'	12.75	1.58	1.41
35	L2	44	A	O4'-C1'	12.75	1.58	1.41
32	S1	412	C	O4'-C1'	12.75	1.58	1.41
32	S1	1336	C	O4'-C1'	12.74	1.58	1.41
33	L1	81	C	O4'-C1'	12.74	1.58	1.41
32	S1	1353	G	O4'-C1'	12.73	1.58	1.41
32	S1	1792	A	O4'-C1'	-12.73	1.25	1.41
23	SU	82	TYR	N-CA	12.71	1.71	1.46
32	S1	1695	G	C2'-C1'	-12.71	1.39	1.53
33	L1	558	G	C2'-C1'	-12.71	1.39	1.53
32	S1	1757	G	C2'-C1'	-12.70	1.39	1.53
33	L1	2949	G	O4'-C1'	12.69	1.58	1.41
32	S1	614	G	O4'-C1'	-12.69	1.25	1.41
33	L1	1790	A	C2'-C1'	-12.69	1.39	1.53
32	S1	1299	G	O3'-P	-12.69	1.46	1.61
33	L1	281	G	C2'-C1'	-12.69	1.39	1.53
33	L1	1763	C	O4'-C1'	12.69	1.58	1.41
33	L1	2282	C	O4'-C1'	12.69	1.58	1.41
33	L1	1270	G	C2'-C1'	-12.68	1.39	1.53
33	L1	928	A	O4'-C1'	12.68	1.58	1.41
35	L2	157	C	O4'-C1'	12.68	1.58	1.41
33	L1	679	C	C2'-C1'	-12.68	1.39	1.53
31	S2	3	C	O4'-C1'	12.67	1.58	1.41
32	S1	164	C	C2'-C1'	-12.66	1.39	1.53
32	S1	1050	C	C2'-C1'	-12.66	1.39	1.53
31	S2	27	G	C2'-C1'	-12.65	1.39	1.53
33	L1	632	C	C2'-C1'	-12.65	1.39	1.53
33	L1	2713	G	C2'-C1'	-12.65	1.39	1.53
33	L1	513	C	C2'-C1'	-12.64	1.39	1.53
33	L1	1366	G	O4'-C1'	-12.64	1.25	1.41
33	L1	3322	A	C2'-C1'	-12.63	1.39	1.53
33	L1	2088	C	C2'-C1'	-12.63	1.39	1.53
38	LE	153	HIS	CE1-NE2	12.63	1.61	1.32
71	Lj	24	LYS	C-O	-12.63	0.99	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1315	U	C2'-C1'	12.62	1.67	1.53
33	L1	449	G	O4'-C1'	12.62	1.58	1.41
33	L1	2365	C	C2'-C1'	-12.62	1.39	1.53
33	L1	614	C	O4'-C1'	12.61	1.58	1.41
33	L1	3317	G	C2'-C1'	12.61	1.67	1.53
32	S1	1225	A	O3'-P	-12.60	1.46	1.61
33	L1	2584	U	C2'-C1'	-12.60	1.39	1.53
32	S1	679	C	O4'-C1'	12.60	1.58	1.41
32	S1	1385	C	C2'-C1'	-12.59	1.39	1.53
32	S1	475	A	O4'-C1'	12.59	1.58	1.41
33	L1	3272	A	C2'-C1'	-12.59	1.39	1.53
23	SU	33	LEU	C-O	-12.57	0.99	1.23
32	S1	1686	C	O4'-C1'	12.57	1.57	1.41
33	L1	460	A	C2'-C1'	12.57	1.67	1.53
32	S1	513	G	O4'-C1'	12.56	1.57	1.41
33	L1	1689	G	O4'-C1'	12.56	1.57	1.41
33	L1	2648	G	C2'-C1'	-12.56	1.39	1.53
33	L1	1914	C	O4'-C1'	12.56	1.57	1.41
33	L1	3365	U	O4'-C1'	12.56	1.57	1.41
33	L1	585	A	C2'-C1'	-12.56	1.39	1.53
33	L1	907	A	C2'-C1'	-12.55	1.39	1.53
33	L1	1906	A	C2'-C1'	12.55	1.67	1.53
33	L1	1623	C	C2'-C1'	-12.55	1.39	1.53
33	L1	940	G	O3'-P	-12.55	1.46	1.61
33	L1	2280	C	C2'-C1'	-12.54	1.39	1.53
67	LS	151	PHE	CD2-CE2	-12.54	1.14	1.39
32	S1	23	G	C2'-C1'	-12.54	1.39	1.53
33	L1	778	G	C2'-C1'	-12.54	1.39	1.53
33	L1	27	C	O4'-C1'	12.54	1.57	1.41
32	S1	627	A	C2'-C1'	12.53	1.67	1.53
32	S1	1030	A	O4'-C1'	12.53	1.57	1.41
32	S1	1790	G	C2'-C1'	-12.53	1.39	1.53
33	L1	2227	A	O4'-C1'	12.52	1.57	1.41
32	S1	1128	C	O4'-C1'	12.51	1.57	1.41
33	L1	974	G	C2'-C1'	-12.51	1.39	1.53
33	L1	2532	A	C2'-C1'	-12.51	1.39	1.53
32	S1	1656	C	O4'-C1'	12.51	1.57	1.41
32	S1	1705	C	O4'-C1'	12.51	1.57	1.41
35	L2	36	C	C2'-C1'	-12.51	1.39	1.53
32	S1	1372	C	O4'-C1'	12.51	1.57	1.41
33	L1	2510	U	O4'-C1'	12.50	1.57	1.41
32	S1	854	C	C2'-C1'	-12.50	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1232	G	C2'-C1'	-12.49	1.39	1.53
23	SU	79	GLY	C-O	-12.49	1.03	1.23
33	L1	2173	G	C2'-C1'	-12.49	1.39	1.53
33	L1	2767	C	O4'-C1'	12.49	1.57	1.41
33	L1	581	G	C2'-C1'	-12.49	1.39	1.53
33	L1	888	U	C2'-C1'	12.48	1.67	1.53
33	L1	1027	C	C2'-C1'	12.48	1.67	1.53
33	L1	990	U	C2'-C1'	-12.47	1.39	1.53
31	S2	50	G	C2'-C1'	-12.47	1.39	1.53
31	S2	73	C	O4'-C1'	12.47	1.57	1.41
32	S1	1199	C	O4'-C1'	12.47	1.57	1.41
32	S1	226	C	O4'-C1'	12.47	1.57	1.41
32	S1	906	G	C2'-C1'	-12.47	1.39	1.53
32	S1	1625	U	O4'-C1'	12.47	1.57	1.41
33	L1	1859	G	O4'-C1'	12.47	1.57	1.41
33	L1	2633	C	O4'-C1'	12.47	1.57	1.41
33	L1	2301	C	C2'-C1'	-12.46	1.39	1.53
32	S1	595	A	C2'-C1'	-12.46	1.39	1.53
33	L1	2944	C	O4'-C1'	12.46	1.57	1.41
33	L1	3088	A	O4'-C1'	12.45	1.57	1.41
33	L1	3275	G	C2'-C1'	-12.45	1.39	1.53
33	L1	2369	G	C2'-C1'	-12.45	1.39	1.53
33	L1	1151	G	O4'-C1'	12.44	1.57	1.41
33	L1	890	G	C2'-C1'	-12.43	1.39	1.53
33	L1	2578	G	C2'-C1'	-12.43	1.39	1.53
33	L1	960	C	C2'-C1'	-12.43	1.39	1.53
33	L1	465	C	O4'-C1'	12.43	1.57	1.41
33	L1	433	C	C2'-C1'	-12.42	1.39	1.53
33	L1	2029	G	C2'-C1'	-12.42	1.39	1.53
32	S1	10	G	C2'-C1'	-12.41	1.39	1.53
32	S1	980	C	O4'-C1'	12.41	1.57	1.41
32	S1	889	C	O4'-C1'	12.41	1.57	1.41
32	S1	1005	C	O4'-C1'	12.41	1.57	1.41
33	L1	540	G	C2'-C1'	-12.41	1.39	1.53
33	L1	2795	G	C2'-C1'	-12.41	1.39	1.53
64	LG	184	ILE	C-O	-12.41	0.99	1.23
32	S1	1446	C	C2'-C1'	-12.40	1.39	1.53
33	L1	1112	C	O4'-C1'	12.40	1.57	1.41
31	S2	72	G	O4'-C1'	-12.40	1.25	1.41
33	L1	2151	G	O4'-C1'	12.40	1.57	1.41
32	S1	1607	C	O4'-C1'	12.39	1.57	1.41
32	S1	302	C	O4'-C1'	12.38	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	246	C	C2'-C1'	12.38	1.67	1.53
33	L1	2836	G	O4'-C1'	12.37	1.57	1.41
32	S1	1037	G	O4'-C1'	12.37	1.57	1.41
33	L1	2031	G	C2'-C1'	-12.37	1.39	1.53
33	L1	1633	C	O4'-C1'	12.36	1.57	1.41
33	L1	2362	A	O4'-C1'	-12.36	1.25	1.41
33	L1	2576	C	O4'-C1'	12.36	1.57	1.41
33	L1	1075	G	C2'-C1'	-12.36	1.39	1.53
33	L1	25	U	O4'-C1'	12.36	1.57	1.41
33	L1	2037	C	C2'-C1'	-12.36	1.39	1.53
33	L1	257	C	O4'-C1'	12.35	1.57	1.41
32	S1	351	G	C2'-C1'	-12.35	1.39	1.53
81	LD	351	ARG	CZ-NH2	-12.35	1.17	1.33
32	S1	879	C	O4'-C1'	12.35	1.57	1.41
33	L1	2492	C	O4'-C1'	12.33	1.57	1.41
32	S1	832	C	O4'-C1'	12.32	1.57	1.41
34	L3	98	G	C2'-C1'	-12.32	1.39	1.53
32	S1	275	C	C2'-C1'	-12.31	1.39	1.53
33	L1	519	C	O4'-C1'	12.31	1.57	1.41
32	S1	1514	G	O4'-C1'	12.31	1.57	1.41
32	S1	933	G	O4'-C1'	-12.30	1.25	1.41
33	L1	2586	C	O4'-C1'	12.30	1.57	1.41
32	S1	1209	C	O4'-C1'	12.30	1.57	1.41
33	L1	2745	C	C2'-C1'	-12.30	1.39	1.53
32	S1	633	U	O4'-C1'	12.30	1.57	1.41
32	S1	1731	A	O4'-C1'	12.30	1.57	1.41
33	L1	3215	U	O4'-C1'	-12.30	1.25	1.41
32	S1	947	G	C2'-C1'	-12.30	1.39	1.53
33	L1	2544	C	O4'-C1'	12.29	1.57	1.41
35	L2	156	G	O4'-C1'	12.29	1.57	1.41
33	L1	2482	A	C2'-C1'	-12.29	1.39	1.53
32	S1	1777	G	O4'-C1'	12.29	1.57	1.41
33	L1	3127	C	C2'-C1'	-12.29	1.39	1.53
33	L1	2150	C	C2'-C1'	-12.29	1.39	1.53
38	LE	153	HIS	CG-ND1	12.28	1.65	1.38
33	L1	3147	G	O4'-C1'	12.28	1.57	1.41
32	S1	1423	A	O4'-C1'	12.27	1.57	1.41
33	L1	486	G	C2'-C1'	-12.27	1.39	1.53
33	L1	2037	C	O4'-C1'	12.27	1.57	1.41
11	SM	97	GLN	CD-NE2	-12.27	1.02	1.32
33	L1	1966	C	O4'-C1'	12.26	1.57	1.41
33	L1	892	U	O4'-C1'	12.26	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3216	G	C2'-C1'	12.26	1.66	1.53
33	L1	2619	C	C2'-C1'	-12.25	1.39	1.53
34	L3	39	C	C2'-C1'	-12.23	1.39	1.53
33	L1	1648	C	O4'-C1'	12.23	1.57	1.41
33	L1	2868	C	C2'-C1'	12.23	1.66	1.53
33	L1	111	C	C2'-C1'	-12.23	1.39	1.53
32	S1	1798	G	C2'-C1'	-12.22	1.40	1.53
33	L1	496	U	O4'-C1'	12.21	1.57	1.41
33	L1	1064	U	C2'-C1'	12.21	1.66	1.53
32	S1	1673	C	O4'-C1'	12.21	1.57	1.41
33	L1	1877	G	C2'-C1'	12.21	1.66	1.53
31	S2	29	C	C2'-C1'	-12.19	1.40	1.53
33	L1	3163	G	O4'-C1'	12.19	1.57	1.41
32	S1	934	A	O4'-C1'	-12.19	1.25	1.41
33	L1	1664	G	C2'-C1'	-12.19	1.40	1.53
19	SY	46	VAL	C-N	12.19	1.62	1.34
33	L1	478	G	C2'-C1'	-12.18	1.40	1.53
32	S1	1635	U	C2'-C1'	-12.18	1.40	1.53
33	L1	515	C	C2'-C1'	-12.18	1.40	1.53
33	L1	759	C	O4'-C1'	12.18	1.57	1.41
32	S1	495	C	O4'-C1'	12.17	1.57	1.41
33	L1	800	C	O4'-C1'	12.17	1.57	1.41
33	L1	2543	G	C2'-C1'	-12.17	1.40	1.53
32	S1	943	G	O4'-C1'	12.17	1.57	1.41
33	L1	1437	G	O4'-C1'	12.17	1.57	1.41
33	L1	704	G	O4'-C1'	12.17	1.57	1.41
33	L1	1715	C	C5'-C4'	-12.16	1.36	1.51
33	L1	3099	G	C4'-C3'	12.16	1.66	1.53
34	L3	13	A	O4'-C1'	12.16	1.57	1.41
32	S1	1127	G	O4'-C1'	12.15	1.57	1.41
33	L1	3024	U	C2'-C1'	12.15	1.66	1.53
32	S1	1782	C	C2'-C1'	-12.15	1.40	1.53
32	S1	453	C	C2'-C1'	12.14	1.66	1.53
33	L1	781	C	O4'-C1'	12.14	1.57	1.41
32	S1	692	C	O4'-C1'	12.14	1.57	1.41
33	L1	1258	C	O4'-C1'	12.14	1.57	1.41
33	L1	911	G	O4'-C1'	12.14	1.57	1.41
71	Lj	95	PRO	CA-C	-12.14	1.28	1.52
33	L1	2261	U	C2'-C1'	-12.13	1.40	1.53
33	L1	3250	C	C2'-C1'	-12.13	1.40	1.53
32	S1	1616	U	O4'-C1'	12.12	1.57	1.41
33	L1	642	C	O4'-C1'	12.12	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1644	A	O4'-C1'	12.12	1.57	1.41
33	L1	2446	G	C2'-C1'	-12.12	1.40	1.53
33	L1	1316	C	O4'-C1'	12.11	1.57	1.41
33	L1	230	G	C2'-C1'	-12.11	1.40	1.53
33	L1	687	C	O4'-C1'	12.11	1.57	1.41
33	L1	1002	A	O4'-C1'	12.11	1.57	1.41
33	L1	1165	C	O4'-C1'	12.11	1.57	1.41
33	L1	3059	C	O4'-C1'	12.11	1.57	1.41
24	SX	82	ARG	C-O	-12.10	1.00	1.23
33	L1	2441	G	O4'-C1'	-12.10	1.25	1.41
33	L1	1424	G	O4'-C1'	-12.10	1.25	1.41
33	L1	2009	C	O4'-C1'	12.09	1.57	1.41
33	L1	522	C	O4'-C1'	12.09	1.57	1.41
33	L1	1094	G	C2'-C1'	-12.09	1.40	1.53
32	S1	891	U	O4'-C1'	12.08	1.57	1.41
33	L1	1682	C	O4'-C1'	12.08	1.57	1.41
60	Lr	32	LYS	C-O	-12.08	1.00	1.23
33	L1	2859	C	C2'-C1'	-12.07	1.40	1.53
81	LD	405	GLN	C-O	-12.07	1.00	1.23
33	L1	2299	C	O4'-C1'	12.07	1.57	1.41
33	L1	3207	C	O4'-C1'	12.07	1.57	1.41
33	L1	239	C	C2'-C1'	12.07	1.66	1.53
5	SE	263	LEU	C-O	-12.06	1.00	1.23
33	L1	968	A	O4'-C1'	-12.06	1.25	1.41
33	L1	1279	C	C2'-C1'	12.05	1.66	1.53
33	L1	3088	A	C4'-C3'	12.05	1.66	1.53
10	SL	142	SER	C-O	-12.05	1.00	1.23
32	S1	104	A	O3'-P	-12.05	1.46	1.61
33	L1	1481	C	C2'-C1'	-12.05	1.40	1.53
33	L1	3272	A	O4'-C1'	12.04	1.57	1.41
81	LD	405	GLN	C-OXT	-12.04	1.00	1.23
2	SA	260	ALA	C-O	-12.04	1.00	1.23
33	L1	2631	A	C5'-C4'	12.04	1.65	1.51
10	SL	142	SER	C-OXT	-12.04	1.00	1.23
33	L1	444	C	C2'-C1'	-12.04	1.40	1.53
33	L1	3058	U	O4'-C1'	12.04	1.57	1.41
33	L1	2473	C	C2'-C1'	12.04	1.66	1.53
31	S2	58	U	C2'-C1'	12.03	1.66	1.53
32	S1	1717	C	O4'-C1'	12.03	1.57	1.41
33	L1	1300	C	O4'-C1'	12.03	1.57	1.41
32	S1	993	C	C2'-C1'	-12.02	1.40	1.53
32	S1	1162	A	C2'-C1'	12.02	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	141	C	O4'-C1'	12.02	1.57	1.41
32	S1	493	C	O4'-C1'	12.02	1.57	1.41
33	L1	188	U	C2'-C1'	12.02	1.66	1.53
35	L2	143	C	O4'-C1'	12.02	1.57	1.41
33	L1	2365	C	O4'-C1'	12.01	1.57	1.41
33	L1	2198	U	C2'-C1'	-12.00	1.40	1.53
33	L1	699	C	C2'-C1'	-12.00	1.40	1.53
33	L1	1875	A	O4'-C1'	12.00	1.57	1.41
33	L1	426	A	O4'-C1'	12.00	1.57	1.41
33	L1	3224	C	C2'-C1'	-11.99	1.40	1.53
33	L1	495	G	O4'-C1'	-11.99	1.26	1.41
32	S1	670	C	O4'-C1'	11.98	1.57	1.41
32	S1	1444	G	O4'-C1'	11.98	1.57	1.41
33	L1	1954	G	C4'-C3'	11.98	1.66	1.53
32	S1	891	U	C2'-C1'	-11.97	1.40	1.53
4	SD	240	LYS	N-CA	11.97	1.70	1.46
32	S1	1359	C	O4'-C1'	11.97	1.57	1.41
32	S1	192	G	C2'-C1'	-11.96	1.40	1.53
33	L1	41	C	O4'-C1'	11.96	1.57	1.41
33	L1	473	G	C2'-C1'	11.96	1.66	1.53
33	L1	725	G	O4'-C1'	11.96	1.57	1.41
32	S1	694	C	C2'-C1'	-11.96	1.40	1.53
33	L1	545	C	O4'-C1'	11.96	1.57	1.41
33	L1	769	C	O4'-C1'	11.96	1.57	1.41
31	S2	33	U	O4'-C1'	11.96	1.57	1.41
33	L1	1120	G	C2'-C1'	-11.95	1.40	1.53
32	S1	570	C	O4'-C1'	11.95	1.57	1.41
32	S1	1478	C	O4'-C1'	11.95	1.57	1.41
33	L1	3354	A	O4'-C1'	-11.95	1.26	1.41
33	L1	1431	G	C2'-C1'	-11.94	1.40	1.53
33	L1	2620	U	O4'-C1'	-11.94	1.26	1.41
33	L1	985	C	O4'-C1'	11.93	1.57	1.41
31	S2	13	U	C2'-C1'	11.92	1.66	1.53
32	S1	51	A	O4'-C1'	11.92	1.57	1.41
32	S1	1146	G	C2'-C1'	-11.92	1.40	1.53
33	L1	1737	C	C2'-C1'	-11.91	1.40	1.53
33	L1	3148	A	C2'-C1'	-11.91	1.40	1.53
32	S1	1213	C	C2'-C1'	-11.90	1.40	1.53
32	S1	1749	C	C2'-C1'	-11.90	1.40	1.53
33	L1	515	C	O4'-C1'	11.89	1.57	1.41
33	L1	833	G	O4'-C1'	11.89	1.57	1.41
33	L1	3250	C	O4'-C1'	11.89	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2028	C	O4'-C1'	11.89	1.57	1.41
33	L1	2882	U	C2'-C1'	-11.89	1.40	1.53
32	S1	690	G	C2'-C1'	-11.89	1.40	1.53
35	L2	39	C	O3'-P	11.89	1.75	1.61
33	L1	1005	C	C2'-C1'	11.89	1.66	1.53
32	S1	38	C	O4'-C1'	11.88	1.57	1.41
33	L1	719	U	O4'-C1'	11.88	1.57	1.41
32	S1	342	C	O4'-C1'	11.88	1.57	1.41
32	S1	1376	A	O4'-C1'	11.88	1.57	1.41
32	S1	859	U	C2'-C1'	11.87	1.66	1.53
32	S1	339	G	C2'-C1'	-11.87	1.40	1.53
33	L1	2626	G	O4'-C1'	11.86	1.57	1.41
33	L1	2790	C	O4'-C1'	11.86	1.57	1.41
32	S1	1790	G	O4'-C1'	11.85	1.57	1.41
33	L1	1511	C	O4'-C1'	11.85	1.57	1.41
33	L1	2377	C	O4'-C1'	11.84	1.57	1.41
33	L1	2864	U	C2'-C1'	-11.83	1.40	1.53
33	L1	1080	C	C2'-C1'	-11.83	1.40	1.53
34	L3	97	G	C2'-C1'	-11.83	1.40	1.53
33	L1	1951	C	O4'-C1'	11.82	1.57	1.41
25	SC	164	SER	CA-CB	11.82	1.70	1.52
33	L1	2593	A	C2'-C1'	-11.82	1.40	1.53
33	L1	3350	C	O4'-C1'	11.82	1.57	1.41
32	S1	417	U	C2'-C1'	-11.81	1.40	1.53
35	L2	104	U	O4'-C1'	11.81	1.57	1.41
32	S1	1388	A	C2'-C1'	-11.81	1.40	1.53
33	L1	480	C	O4'-C1'	11.81	1.57	1.41
33	L1	3277	C	C2'-C1'	-11.81	1.40	1.53
33	L1	1948	G	O4'-C1'	-11.80	1.26	1.41
32	S1	919	G	C2'-C1'	-11.80	1.40	1.53
33	L1	385	A	O4'-C1'	-11.80	1.26	1.41
32	S1	21	U	O4'-C1'	11.80	1.56	1.41
33	L1	2201	G	C2'-C1'	11.80	1.66	1.53
32	S1	1083	C	C2'-C1'	-11.79	1.40	1.53
32	S1	595	A	O4'-C1'	11.79	1.56	1.41
33	L1	389	A	C2'-C1'	-11.79	1.40	1.53
33	L1	137	C	O4'-C1'	11.79	1.56	1.41
32	S1	1791	A	O4'-C1'	11.78	1.56	1.41
33	L1	34	G	C2'-C1'	-11.78	1.40	1.53
32	S1	694	C	O4'-C1'	11.78	1.56	1.41
33	L1	1202	C	O4'-C1'	11.78	1.56	1.41
33	L1	3158	C	O4'-C1'	11.78	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	L3	1	G	OP3-P	-11.77	1.47	1.61
33	L1	110	C	C2'-C1'	-11.77	1.40	1.53
32	S1	1413	C	O4'-C1'	11.77	1.56	1.41
32	S1	1371	U	O4'-C1'	11.77	1.56	1.41
33	L1	2172	C	O4'-C1'	11.77	1.56	1.41
32	S1	453	C	O4'-C1'	11.76	1.56	1.41
32	S1	333	G	C2'-C1'	-11.76	1.40	1.53
33	L1	970	A	C2'-C1'	-11.76	1.40	1.53
33	L1	912	G	C2'-C1'	-11.75	1.40	1.53
34	L3	22	A	O4'-C1'	-11.75	1.26	1.41
32	S1	291	G	C2'-C1'	-11.75	1.40	1.53
33	L1	1415	G	C2'-C1'	-11.74	1.40	1.53
33	L1	1063	G	O4'-C1'	11.74	1.56	1.41
33	L1	517	G	C2'-C1'	-11.73	1.40	1.53
33	L1	2226	C	C2'-C1'	11.73	1.66	1.53
33	L1	3086	G	C2'-C1'	-11.73	1.40	1.53
32	S1	1038	C	O4'-C1'	11.73	1.56	1.41
33	L1	3382	A	C2'-C1'	11.73	1.66	1.53
35	L2	40	G	C2'-C1'	-11.73	1.40	1.53
32	S1	343	C	O4'-C1'	11.72	1.56	1.41
33	L1	2687	C	O4'-C1'	11.72	1.56	1.41
33	L1	1542	A	C2'-C1'	-11.72	1.40	1.53
33	L1	2112	C	C2'-C1'	-11.72	1.40	1.53
33	L1	1303	C	C2'-C1'	-11.71	1.40	1.53
33	L1	745	G	O4'-C1'	11.71	1.56	1.41
33	L1	457	C	C2'-C1'	-11.71	1.40	1.53
33	L1	1592	U	O4'-C1'	11.70	1.56	1.41
33	L1	2503	A	C2'-C1'	-11.70	1.40	1.53
32	S1	1370	C	C2'-C1'	-11.69	1.40	1.53
33	L1	3240	C	O4'-C1'	11.69	1.56	1.41
33	L1	3080	U	O4'-C1'	-11.69	1.26	1.41
33	L1	822	U	C2'-C1'	11.69	1.66	1.53
33	L1	1554	C	O4'-C1'	11.69	1.56	1.41
33	L1	23	A	C2'-C1'	11.68	1.66	1.53
33	L1	2474	A	O4'-C1'	-11.68	1.26	1.41
32	S1	164	C	O4'-C1'	11.67	1.56	1.41
33	L1	1515	U	C2'-C1'	-11.67	1.40	1.53
33	L1	2945	G	C2'-C1'	-11.67	1.40	1.53
33	L1	13	G	C2'-C1'	-11.67	1.40	1.53
33	L1	710	C	O4'-C1'	11.67	1.56	1.41
33	L1	3061	C	O4'-C1'	11.67	1.56	1.41
33	L1	3270	C	O4'-C1'	11.67	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	SU	7	ALA	C-O	-11.66	1.01	1.23
34	L3	69	A	C2'-C1'	-11.66	1.40	1.53
33	L1	1225	A	C2'-C1'	-11.66	1.40	1.53
35	L2	125	A	O4'-C1'	11.66	1.56	1.41
32	S1	108	C	C2'-C1'	-11.66	1.40	1.53
33	L1	2012	C	O4'-C1'	11.66	1.56	1.41
33	L1	2704	U	O4'-C1'	11.66	1.56	1.41
32	S1	1608	A	C2'-C1'	11.65	1.66	1.53
33	L1	2870	U	O4'-C1'	11.65	1.56	1.41
32	S1	1203	G	O4'-C1'	-11.65	1.26	1.41
32	S1	636	U	C2'-C1'	11.64	1.66	1.53
33	L1	1236	C	O4'-C1'	11.64	1.56	1.41
33	L1	3144	U	C2'-C1'	-11.64	1.40	1.53
32	S1	1242	A	C5'-C4'	11.64	1.65	1.51
33	L1	2333	U	O4'-C1'	-11.64	1.26	1.41
33	L1	3066	G	C2'-C1'	-11.64	1.40	1.53
33	L1	128	C	O4'-C1'	11.63	1.56	1.41
33	L1	1096	C	C2'-C1'	-11.63	1.40	1.53
33	L1	630	C	O4'-C1'	11.63	1.56	1.41
33	L1	2385	A	C2'-C1'	-11.63	1.40	1.53
33	L1	2406	C	C2'-C1'	-11.62	1.40	1.53
33	L1	1215	U	C2'-C1'	-11.62	1.40	1.53
33	L1	26	A	O4'-C1'	11.62	1.56	1.41
13	SQ	110	GLY	N-CA	11.62	1.63	1.46
33	L1	2874	A	C2'-C1'	-11.61	1.40	1.53
32	S1	569	C	O4'-C1'	11.61	1.56	1.41
33	L1	2629	C	P-O5'	-11.61	1.48	1.59
32	S1	404	A	O4'-C1'	-11.60	1.26	1.41
33	L1	442	C	C2'-C1'	-11.60	1.40	1.53
38	LE	115	GLY	CA-C	-11.60	1.33	1.51
33	L1	1570	C	C2'-C1'	11.59	1.66	1.53
35	L2	93	A	O4'-C1'	11.59	1.56	1.41
33	L1	397	A	O4'-C1'	-11.59	1.26	1.41
33	L1	2033	C	O4'-C1'	11.59	1.56	1.41
33	L1	2640	A	O4'-C1'	-11.59	1.26	1.41
32	S1	1762	C	O4'-C1'	11.59	1.56	1.41
32	S1	683	C	C2'-C1'	-11.58	1.40	1.53
32	S1	950	U	O4'-C1'	11.58	1.56	1.41
33	L1	1083	C	O4'-C1'	-11.58	1.26	1.41
32	S1	346	C	O4'-C1'	11.57	1.56	1.41
32	S1	693	C	O4'-C1'	11.57	1.56	1.41
32	S1	1043	C	O4'-C1'	11.57	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2676	A	O4'-C1'	11.57	1.56	1.41
32	S1	1537	U	C2'-C1'	-11.57	1.40	1.53
33	L1	1345	U	O4'-C1'	11.56	1.56	1.41
33	L1	2161	G	C2'-C1'	-11.56	1.40	1.53
35	L2	121	C	C2'-C1'	-11.55	1.40	1.53
33	L1	233	C	O4'-C1'	11.55	1.56	1.41
33	L1	2049	C	O4'-C1'	11.55	1.56	1.41
23	SU	82	TYR	CA-C	11.55	1.82	1.52
32	S1	973	U	C2'-C1'	-11.54	1.40	1.53
33	L1	2935	A	O4'-C1'	11.54	1.56	1.41
32	S1	144	U	O4'-C1'	11.54	1.56	1.41
32	S1	1357	U	C2'-C1'	-11.54	1.40	1.53
32	S1	1633	C	O4'-C1'	11.54	1.56	1.41
33	L1	2763	C	C4'-C3'	11.53	1.65	1.53
32	S1	148	C	O4'-C1'	11.53	1.56	1.41
33	L1	726	C	O4'-C1'	11.53	1.56	1.41
32	S1	17	C	O4'-C1'	11.52	1.56	1.41
32	S1	1807	A	O3'-P	-11.52	1.47	1.61
33	L1	4	C	O4'-C1'	11.51	1.56	1.41
33	L1	22	G	C2'-C1'	-11.51	1.40	1.53
32	S1	1337	C	O4'-C1'	11.51	1.56	1.41
31	S2	16	U	O4'-C1'	11.50	1.56	1.41
33	L1	49	U	C2'-C1'	-11.50	1.40	1.53
34	L3	25	G	C2'-C1'	11.50	1.66	1.53
32	S1	962	G	C2'-C1'	-11.50	1.40	1.53
35	L2	13	G	C2'-C1'	-11.49	1.40	1.53
32	S1	416	A	C2'-C1'	11.49	1.66	1.53
33	L1	55	G	O4'-C1'	-11.49	1.26	1.41
33	L1	755	C	O4'-C1'	11.49	1.56	1.41
32	S1	890	G	C2'-C1'	-11.48	1.40	1.53
33	L1	136	C	C2'-C1'	-11.48	1.40	1.53
33	L1	1892	A	O4'-C1'	11.48	1.56	1.41
33	L1	2794	A	C2'-C1'	-11.48	1.40	1.53
33	L1	471	C	O4'-C1'	11.47	1.56	1.41
35	L2	106	U	C2'-C1'	-11.47	1.40	1.53
32	S1	981	G	C2'-C1'	-11.47	1.40	1.53
33	L1	1407	G	C2'-C1'	11.47	1.66	1.53
33	L1	2345	C	P-O5'	-11.47	1.48	1.59
32	S1	1093	A	C2'-C1'	11.46	1.66	1.53
33	L1	3003	C	O4'-C1'	11.46	1.56	1.41
33	L1	586	A	C2'-C1'	-11.45	1.40	1.53
33	L1	183	C	O3'-P	-11.45	1.47	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1572	U	C2'-C1'	-11.45	1.40	1.53
33	L1	2699	A	O4'-C1'	11.44	1.56	1.41
32	S1	1015	C	C2'-C1'	-11.44	1.40	1.53
32	S1	1066	U	O4'-C1'	11.44	1.56	1.41
33	L1	1525	U	O4'-C1'	11.44	1.56	1.41
32	S1	1613	G	C2'-C1'	-11.43	1.40	1.53
32	S1	1172	G	C2'-C1'	-11.43	1.40	1.53
33	L1	3058	U	C2'-C1'	-11.43	1.40	1.53
32	S1	1637	G	C2'-C1'	-11.43	1.40	1.53
33	L1	1467	G	C2'-C1'	11.43	1.66	1.53
33	L1	886	A	O4'-C1'	11.43	1.56	1.41
33	L1	796	C	C2'-C1'	-11.42	1.40	1.53
33	L1	2621	G	C2'-C1'	11.42	1.66	1.53
33	L1	3121	C	O4'-C1'	11.41	1.56	1.41
32	S1	1539	A	O4'-C1'	11.41	1.56	1.41
33	L1	343	G	C2'-C1'	-11.41	1.40	1.53
33	L1	230	G	O4'-C1'	11.41	1.56	1.41
33	L1	3215	U	C2'-C1'	11.41	1.65	1.53
32	S1	1370	C	O4'-C1'	11.40	1.56	1.41
32	S1	108	C	O4'-C1'	11.40	1.56	1.41
33	L1	529	C	C2'-C1'	-11.40	1.40	1.53
32	S1	174	C	O4'-C1'	11.40	1.56	1.41
33	L1	1910	G	C2'-C1'	-11.40	1.40	1.53
33	L1	2025	C	O4'-C1'	11.40	1.56	1.41
33	L1	1997	G	O4'-C1'	11.39	1.56	1.41
25	SC	33	VAL	C-N	11.39	1.53	1.33
32	S1	1288	C	C2'-C1'	11.39	1.65	1.53
69	La	27	ARG	CA-C	11.38	1.82	1.52
32	S1	391	A	C2'-C1'	11.38	1.65	1.53
33	L1	964	C	C2'-C1'	11.38	1.65	1.53
33	L1	3033	A	C2'-C1'	11.38	1.65	1.53
32	S1	1211	U	C2'-C1'	-11.37	1.40	1.53
33	L1	1735	U	O4'-C1'	11.38	1.56	1.41
33	L1	2018	C	O4'-C1'	11.38	1.56	1.41
33	L1	350	A	O4'-C1'	-11.37	1.26	1.41
33	L1	2630	A	C2'-C1'	11.37	1.65	1.53
13	SQ	22	SER	CA-CB	11.37	1.70	1.52
33	L1	1076	G	O4'-C1'	11.36	1.56	1.41
33	L1	1369	G	C2'-C1'	-11.36	1.40	1.53
33	L1	1889	G	C2'-C1'	-11.36	1.40	1.53
33	L1	2685	C	C2'-C1'	-11.36	1.40	1.53
33	L1	2032	C	O4'-C1'	11.36	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	87	C	C2'-C1'	-11.35	1.40	1.53
33	L1	771	G	C2'-C1'	-11.35	1.40	1.53
33	L1	385	A	C2'-C1'	-11.34	1.40	1.53
32	S1	1402	C	O4'-C1'	11.34	1.56	1.41
37	LB	196	TRP	C-O	-11.34	1.01	1.23
32	S1	1765	A	O4'-C1'	-11.34	1.26	1.41
32	S1	586	U	O4'-C1'	11.33	1.56	1.41
33	L1	1299	G	C2'-C1'	-11.32	1.40	1.53
32	S1	88	C	O4'-C1'	11.32	1.56	1.41
33	L1	3021	U	C2'-C1'	11.32	1.65	1.53
32	S1	1391	G	C2'-C1'	-11.32	1.40	1.53
33	L1	1675	G	O4'-C1'	-11.32	1.26	1.41
32	S1	1691	C	O4'-C1'	11.32	1.56	1.41
33	L1	1580	C	C2'-C1'	-11.32	1.40	1.53
32	S1	373	U	P-O5'	-11.31	1.48	1.59
33	L1	2284	U	O4'-C1'	11.31	1.56	1.41
33	L1	2	C	O4'-C1'	11.31	1.56	1.41
33	L1	3342	C	O4'-C1'	11.31	1.56	1.41
32	S1	666	C	O4'-C1'	11.30	1.56	1.41
33	L1	1382	C	O4'-C1'	11.30	1.56	1.41
33	L1	2105	G	P-O5'	-11.30	1.48	1.59
34	L3	40	A	O4'-C1'	-11.30	1.26	1.41
33	L1	3372	C	C2'-C1'	-11.29	1.41	1.53
33	L1	1894	G	C2'-C1'	11.29	1.65	1.53
32	S1	1736	C	C2'-C1'	-11.29	1.41	1.53
33	L1	2299	C	C2'-C1'	-11.28	1.41	1.53
32	S1	591	C	O4'-C1'	11.28	1.56	1.41
33	L1	1095	C	C2'-C1'	-11.28	1.41	1.53
33	L1	2872	C	C2'-C1'	11.27	1.65	1.53
34	L3	104	C	C2'-C1'	-11.27	1.41	1.53
33	L1	21	G	O4'-C1'	-11.26	1.27	1.41
32	S1	1574	U	C2'-C1'	-11.26	1.41	1.53
33	L1	70	A	O4'-C1'	11.26	1.56	1.41
33	L1	1457	A	O4'-C1'	11.26	1.56	1.41
33	L1	722	C	O4'-C1'	-11.26	1.27	1.41
33	L1	372	A	C2'-C1'	11.26	1.65	1.53
33	L1	2503	A	O4'-C1'	11.26	1.56	1.41
33	L1	2507	U	C2'-C1'	-11.26	1.41	1.53
33	L1	2814	C	O4'-C1'	11.25	1.56	1.41
33	L1	916	A	O4'-C1'	-11.25	1.27	1.41
32	S1	1705	C	C2'-C1'	-11.25	1.41	1.53
33	L1	1267	A	C2'-C1'	-11.24	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1547	G	C2'-C1'	-11.24	1.41	1.53
33	L1	1475	U	C2'-C1'	-11.24	1.41	1.53
73	Lp	53	ASN	N-CA	11.24	1.68	1.46
33	L1	2485	U	O4'-C1'	-11.24	1.27	1.41
32	S1	794	G	C3'-O3'	11.23	1.57	1.42
33	L1	1579	C	C2'-C1'	-11.23	1.41	1.53
33	L1	280	G	O4'-C1'	-11.23	1.27	1.41
32	S1	1777	G	P-O5'	-11.22	1.48	1.59
32	S1	154	A	C2'-C1'	11.22	1.65	1.53
32	S1	1654	C	O4'-C1'	11.22	1.56	1.41
33	L1	2580	C	O4'-C1'	11.22	1.56	1.41
33	L1	683	U	O4'-C1'	11.22	1.56	1.41
33	L1	2113	A	C2'-C1'	-11.22	1.41	1.53
33	L1	2638	A	O4'-C1'	11.22	1.56	1.41
34	L3	92	C	C2'-C1'	-11.22	1.41	1.53
32	S1	1735	C	O4'-C1'	11.21	1.56	1.41
33	L1	3375	G	O4'-C1'	11.21	1.56	1.41
32	S1	378	U	O4'-C1'	11.21	1.56	1.41
32	S1	634	A	C5'-C4'	11.21	1.64	1.51
33	L1	2531	G	C2'-C1'	-11.21	1.41	1.53
33	L1	2783	U	O4'-C1'	-11.20	1.27	1.41
45	LQ	116	LEU	C-O	-11.21	1.02	1.23
80	LC	385	GLY	C-O	-11.20	1.05	1.23
14	SP	41	LEU	C-O	-11.20	1.02	1.23
32	S1	1194	C	O4'-C1'	11.20	1.56	1.41
35	L2	32	C	O4'-C1'	11.20	1.56	1.41
33	L1	700	C	C2'-C1'	-11.19	1.41	1.53
35	L2	57	A	C2'-C1'	-11.19	1.41	1.53
43	LO	138	GLY	N-CA	11.19	1.62	1.46
32	S1	896	C	O4'-C1'	11.19	1.56	1.41
32	S1	1389	G	O4'-C1'	11.19	1.56	1.41
33	L1	3306	A	C2'-C1'	-11.19	1.41	1.53
32	S1	1688	G	C2'-C1'	11.19	1.65	1.53
33	L1	1994	C	O4'-C1'	11.19	1.56	1.41
33	L1	92	C	O4'-C1'	11.18	1.56	1.41
35	L2	151	C	O4'-C1'	11.17	1.56	1.41
64	LG	20	TYR	CG-CD1	11.17	1.53	1.39
32	S1	99	U	C2'-C1'	-11.17	1.41	1.53
33	L1	931	C	O4'-C1'	11.17	1.56	1.41
32	S1	324	U	O4'-C1'	11.17	1.56	1.41
33	L1	1305	A	O4'-C1'	11.17	1.56	1.41
33	L1	3211	C	C2'-C1'	11.17	1.65	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	436	G	C2'-C1'	-11.17	1.41	1.53
33	L1	1784	C	O4'-C1'	11.17	1.56	1.41
32	S1	1062	C	C2'-C1'	-11.16	1.41	1.53
44	LR	97	ALA	C-O	-11.16	1.02	1.23
32	S1	670	C	C2'-C1'	-11.16	1.41	1.53
33	L1	2751	A	C2'-C1'	11.16	1.65	1.53
33	L1	2443	C	O4'-C1'	11.16	1.56	1.41
32	S1	1738	U	O4'-C1'	11.16	1.56	1.41
33	L1	2755	U	O4'-C1'	11.16	1.56	1.41
32	S1	16	G	C2'-C1'	-11.15	1.41	1.53
33	L1	11	A	C2'-C1'	-11.15	1.41	1.53
32	S1	654	C	O4'-C1'	11.15	1.56	1.41
33	L1	649	A	C2'-C1'	-11.15	1.41	1.53
33	L1	1921	U	C2'-C1'	11.14	1.65	1.53
32	S1	1072	U	O4'-C1'	11.13	1.56	1.41
33	L1	3365	U	C2'-C1'	11.13	1.65	1.53
32	S1	330	G	C2'-C1'	-11.13	1.41	1.53
33	L1	1143	G	C2'-C1'	-11.13	1.41	1.53
33	L1	3292	U	C2'-C1'	11.13	1.65	1.53
33	L1	7	C	C2'-C1'	-11.13	1.41	1.53
33	L1	708	C	O4'-C1'	11.13	1.56	1.41
33	L1	541	C	C2'-C1'	-11.13	1.41	1.53
33	L1	2026	C	O4'-C1'	11.13	1.56	1.41
32	S1	25	C	O4'-C1'	11.12	1.56	1.41
32	S1	1543	U	O4'-C1'	-11.12	1.27	1.41
60	Lr	61	LYS	C-O	-11.12	1.02	1.23
32	S1	402	G	C2'-C1'	-11.11	1.41	1.53
33	L1	1604	U	C2'-C1'	-11.11	1.41	1.53
33	L1	1391	A	O4'-C1'	11.11	1.56	1.41
32	S1	286	C	O4'-C1'	11.11	1.56	1.41
33	L1	218	G	O4'-C1'	11.11	1.56	1.41
33	L1	1133	A	O4'-C1'	11.11	1.56	1.41
33	L1	392	C	C2'-C1'	-11.10	1.41	1.53
33	L1	1297	U	C2'-C1'	-11.10	1.41	1.53
33	L1	459	G	O4'-C1'	11.09	1.56	1.41
35	L2	104	U	C2'-C1'	-11.09	1.41	1.53
33	L1	2079	A	P-O5'	-11.09	1.48	1.59
33	L1	111	C	O4'-C1'	11.08	1.56	1.41
33	L1	859	G	O4'-C1'	11.08	1.56	1.41
33	L1	1055	U	C2'-C1'	-11.08	1.41	1.53
33	L1	1622	G	O4'-C1'	11.08	1.56	1.41
20	SZ	44	PHE	C-N	11.07	1.59	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2343	U	O4'-C1'	11.07	1.56	1.41
35	L2	18	C	O4'-C1'	11.07	1.56	1.41
33	L1	2515	C	O4'-C1'	11.07	1.56	1.41
32	S1	1681	G	C2'-C1'	-11.07	1.41	1.53
33	L1	2048	C	O4'-C1'	11.06	1.56	1.41
32	S1	1310	C	C4'-C3'	11.06	1.65	1.53
33	L1	1047	C	O4'-C1'	11.05	1.56	1.41
33	L1	1107	G	O4'-C1'	11.05	1.56	1.41
33	L1	2389	A	C2'-C1'	-11.05	1.41	1.53
33	L1	3004	G	C2'-C1'	-11.05	1.41	1.53
34	L3	56	G	O4'-C1'	11.05	1.56	1.41
32	S1	228	G	C2'-C1'	-11.05	1.41	1.53
33	L1	2692	G	C2'-C1'	-11.04	1.41	1.53
32	S1	1698	A	C2'-C1'	11.03	1.65	1.53
33	L1	449	G	C2'-C1'	-11.03	1.41	1.53
33	L1	1952	U	C2'-C1'	11.03	1.65	1.53
33	L1	2883	C	C2'-C1'	11.03	1.65	1.53
33	L1	696	A	O4'-C1'	11.03	1.55	1.41
33	L1	734	C	C2'-C1'	-11.02	1.41	1.53
32	S1	1339	C	O4'-C1'	11.02	1.55	1.41
33	L1	684	C	C2'-C1'	11.01	1.65	1.53
33	L1	508	G	C2'-C1'	-11.01	1.41	1.53
35	L2	55	G	C4'-C3'	11.01	1.65	1.53
33	L1	1991	U	C2'-C1'	-11.00	1.41	1.53
32	S1	449	A	C2'-C1'	-11.00	1.41	1.53
32	S1	1548	G	C2'-C1'	-11.00	1.41	1.53
33	L1	148	U	P-O5'	-11.00	1.48	1.59
33	L1	924	A	C2'-C1'	11.00	1.65	1.53
33	L1	292	A	C2'-C1'	-11.00	1.41	1.53
33	L1	1457	A	C2'-C1'	-10.99	1.41	1.53
32	S1	1773	A	C2'-C1'	-10.99	1.41	1.53
32	S1	38	C	C2'-C1'	-10.99	1.41	1.53
33	L1	1650	G	C2'-C1'	-10.99	1.41	1.53
33	L1	1730	U	C2'-C1'	10.99	1.65	1.53
33	L1	3318	G	C2'-C1'	-10.98	1.41	1.53
34	L3	115	A	C2'-C1'	-10.98	1.41	1.53
33	L1	376	A	C2'-C1'	-10.98	1.41	1.53
33	L1	1260	G	O4'-C1'	10.98	1.55	1.41
33	L1	2223	A	C5'-C4'	10.98	1.64	1.51
33	L1	693	C	O4'-C1'	10.98	1.55	1.41
33	L1	736	U	C2'-C1'	10.98	1.65	1.53
32	S1	657	C	O4'-C1'	10.97	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2498	C	O4'-C1'	10.97	1.55	1.41
33	L1	3183	G	C4'-C3'	10.97	1.65	1.53
8	SJ	78	PRO	C-N	10.96	1.59	1.34
33	L1	1709	U	C2'-C1'	-10.96	1.41	1.53
33	L1	744	C	O4'-C1'	10.96	1.55	1.41
32	S1	337	A	C2'-C1'	-10.96	1.41	1.53
33	L1	445	C	O4'-C1'	10.95	1.55	1.41
33	L1	552	G	O4'-C1'	10.95	1.55	1.41
33	L1	35	U	O4'-C1'	10.94	1.55	1.41
33	L1	390	G	C2'-C1'	10.94	1.65	1.53
33	L1	1818	C	C2'-C1'	-10.94	1.41	1.53
33	L1	1984	C	C2'-C1'	-10.94	1.41	1.53
33	L1	1581	C	C2'-C1'	-10.93	1.41	1.53
35	L2	158	G	O4'-C1'	-10.93	1.27	1.41
32	S1	1015	C	O4'-C1'	10.92	1.55	1.41
32	S1	1316	A	C2'-C1'	10.92	1.65	1.53
32	S1	1516	C	C4'-C3'	10.92	1.65	1.53
33	L1	713	G	C2'-C1'	-10.92	1.41	1.53
33	L1	1203	C	O4'-C1'	10.92	1.55	1.41
32	S1	320	A	O4'-C1'	10.92	1.55	1.41
33	L1	583	C	C2'-C1'	-10.92	1.41	1.53
33	L1	133	G	O4'-C1'	-10.91	1.27	1.41
33	L1	3077	C	O4'-C1'	10.91	1.55	1.41
33	L1	2536	G	C2'-C1'	-10.91	1.41	1.53
32	S1	1506	G	O4'-C1'	10.91	1.55	1.41
33	L1	1034	U	C4'-C3'	-10.91	1.41	1.53
33	L1	1987	C	O4'-C1'	10.91	1.55	1.41
33	L1	1962	C	O4'-C1'	10.90	1.55	1.41
32	S1	305	A	O4'-C1'	-10.89	1.27	1.41
33	L1	578	C	C5'-C4'	10.88	1.64	1.51
33	L1	2763	C	O4'-C1'	10.88	1.55	1.41
73	Lp	51	ILE	CA-C	10.88	1.81	1.52
33	L1	282	A	C5'-C4'	10.87	1.64	1.51
32	S1	1109	U	C2'-C1'	-10.87	1.41	1.53
33	L1	37	U	C2'-C1'	-10.87	1.41	1.53
33	L1	3123	A	C3'-C2'	-10.86	1.40	1.52
33	L1	1208	A	O4'-C1'	10.86	1.55	1.41
33	L1	1223	U	C2'-C1'	10.86	1.65	1.53
33	L1	2279	C	O4'-C1'	10.86	1.55	1.41
32	S1	100	C	O4'-C1'	10.85	1.55	1.41
32	S1	60	C	O4'-C1'	10.85	1.55	1.41
33	L1	602	G	O4'-C1'	10.85	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2613	G	C2'-C1'	10.85	1.65	1.53
82	LK	135	GLN	C-O	-10.84	1.02	1.23
33	L1	141	C	C2'-C1'	-10.84	1.41	1.53
33	L1	903	G	C2'-C1'	10.84	1.65	1.53
33	L1	1088	A	C2'-C1'	-10.84	1.41	1.53
33	L1	3212	C	O4'-C1'	10.84	1.55	1.41
33	L1	589	G	O4'-C1'	10.83	1.55	1.41
33	L1	2497	A	P-O5'	-10.83	1.49	1.59
33	L1	559	U	C2'-C1'	10.83	1.65	1.53
32	S1	29	U	C2'-C1'	-10.83	1.41	1.53
32	S1	439	C	C2'-C1'	-10.83	1.41	1.53
32	S1	61	A	O4'-C1'	10.82	1.55	1.41
33	L1	1713	A	C2'-C1'	-10.82	1.41	1.53
33	L1	1014	G	O4'-C1'	10.82	1.55	1.41
33	L1	1599	A	O4'-C1'	10.82	1.55	1.41
33	L1	1780	C	O4'-C1'	10.82	1.55	1.41
35	L2	133	C	O4'-C1'	10.82	1.55	1.41
33	L1	1072	C	C2'-C1'	-10.81	1.41	1.53
32	S1	1161	C	C2'-C1'	-10.81	1.41	1.53
33	L1	2337	C	C2'-C1'	-10.81	1.41	1.53
33	L1	2910	C	O4'-C1'	10.81	1.55	1.41
33	L1	3099	G	O4'-C1'	10.81	1.55	1.41
33	L1	785	U	O3'-P	-10.81	1.48	1.61
32	S1	1034	G	C2'-C1'	-10.80	1.41	1.53
33	L1	1961	C	O4'-C1'	10.80	1.55	1.41
33	L1	2720	U	C2'-C1'	-10.80	1.41	1.53
33	L1	3271	A	O4'-C1'	10.80	1.55	1.41
33	L1	554	C	O4'-C1'	10.79	1.55	1.41
33	L1	132	U	O4'-C1'	10.79	1.55	1.41
35	L2	23	A	O4'-C1'	-10.78	1.27	1.41
33	L1	1195	C	C5'-C4'	10.78	1.64	1.51
33	L1	1277	A	C2'-C1'	-10.78	1.41	1.53
33	L1	2377	C	C2'-C1'	-10.78	1.41	1.53
67	LS	151	PHE	CG-CD1	-10.78	1.22	1.38
32	S1	352	U	C2'-C1'	-10.77	1.41	1.53
32	S1	677	C	O4'-C1'	10.77	1.55	1.41
33	L1	1375	G	O4'-C1'	10.77	1.55	1.41
81	LD	328	ALA	C-O	-10.77	1.02	1.23
33	L1	1496	G	O4'-C1'	-10.77	1.27	1.41
32	S1	413	C	C2'-C1'	-10.77	1.41	1.53
33	L1	121	A	O3'-P	-10.76	1.48	1.61
32	S1	1802	G	P-O5'	-10.76	1.49	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	235	C	O4'-C1'	10.76	1.55	1.41
32	S1	1666	G	C2'-C1'	-10.76	1.41	1.53
33	L1	2676	A	C2'-C1'	10.76	1.65	1.53
33	L1	2380	G	C2'-C1'	-10.75	1.41	1.53
33	L1	715	A	C2'-C1'	10.75	1.65	1.53
4	SD	153	ILE	C-N	10.74	1.58	1.34
33	L1	2179	U	C2'-C1'	-10.74	1.41	1.53
33	L1	2201	G	C3'-C2'	10.74	1.64	1.52
33	L1	2383	G	C2'-C1'	-10.74	1.41	1.53
33	L1	505	G	O4'-C1'	10.74	1.55	1.41
33	L1	1205	C	C2'-C1'	-10.74	1.41	1.53
33	L1	2789	G	O3'-P	-10.73	1.48	1.61
4	SD	153	ILE	N-CA	10.72	1.67	1.46
32	S1	642	C	O4'-C1'	10.72	1.55	1.41
31	S2	6	G	C2'-C1'	-10.72	1.41	1.53
32	S1	1411	C	O4'-C1'	10.72	1.55	1.41
32	S1	1609	G	C2'-C1'	-10.72	1.41	1.53
3	SB	212	PRO	C-O	-10.71	1.01	1.23
33	L1	3377	G	O4'-C1'	10.71	1.55	1.41
33	L1	1059	A	C2'-C1'	-10.71	1.41	1.53
33	L1	2441	G	C2'-C1'	10.71	1.65	1.53
32	S1	938	A	O4'-C1'	10.71	1.55	1.41
60	Lr	32	LYS	CA-CB	10.70	1.77	1.53
33	L1	1775	C	C2'-C1'	10.70	1.65	1.53
33	L1	95	G	C2'-C1'	-10.70	1.41	1.53
33	L1	1830	U	C2'-C1'	-10.70	1.41	1.53
32	S1	1163	C	O4'-C1'	10.69	1.55	1.41
32	S1	1	U	OP3-P	-10.69	1.48	1.61
33	L1	857	G	O4'-C1'	-10.69	1.27	1.41
32	S1	1434	G	O4'-C1'	10.68	1.55	1.41
33	L1	1369	G	C5'-C4'	10.68	1.64	1.51
33	L1	2792	A	O4'-C1'	-10.68	1.27	1.41
35	L2	34	C	O4'-C1'	10.68	1.55	1.41
32	S1	1132	G	O3'-P	-10.68	1.48	1.61
33	L1	244	G	C2'-C1'	-10.68	1.41	1.53
33	L1	2335	U	C2'-C1'	-10.68	1.41	1.53
32	S1	1557	C	O4'-C1'	10.68	1.55	1.41
33	L1	2035	G	C2'-C1'	-10.68	1.41	1.53
33	L1	2382	C	O4'-C1'	10.68	1.55	1.41
33	L1	479	C	O4'-C1'	10.67	1.55	1.41
33	L1	2904	A	C2'-C1'	10.67	1.65	1.53
32	S1	309	C	O4'-C1'	10.67	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	296	A	C2'-C1'	-10.66	1.41	1.53
33	L1	787	G	C2'-C1'	10.66	1.65	1.53
33	L1	32	G	C2'-C1'	-10.66	1.41	1.53
33	L1	2134	U	O3'-P	-10.66	1.48	1.61
33	L1	1408	C	C2'-C1'	-10.66	1.41	1.53
33	L1	1759	C	O4'-C1'	10.66	1.55	1.41
33	L1	2017	G	C2'-C1'	-10.66	1.41	1.53
33	L1	1251	U	O4'-C1'	-10.65	1.27	1.41
32	S1	259	A	O4'-C1'	10.65	1.55	1.41
33	L1	1343	C	O4'-C1'	10.65	1.55	1.41
33	L1	1737	C	O4'-C1'	10.64	1.55	1.41
68	LW	29	LYS	CA-CB	10.64	1.77	1.53
32	S1	3	C	C2'-C1'	-10.63	1.41	1.53
33	L1	809	A	C2'-C1'	10.63	1.65	1.53
33	L1	1373	A	C2'-C1'	-10.63	1.41	1.53
33	L1	2761	A	C4'-C3'	10.63	1.64	1.53
33	L1	3037	G	O4'-C1'	10.63	1.55	1.41
32	S1	648	C	O4'-C1'	10.62	1.55	1.41
32	S1	1603	U	C2'-C1'	10.62	1.65	1.53
33	L1	2682	A	C2'-C1'	10.62	1.65	1.53
32	S1	1683	G	O4'-C1'	10.62	1.55	1.41
32	S1	788	G	C4'-C3'	10.62	1.64	1.53
32	S1	1112	G	O4'-C1'	10.62	1.55	1.41
32	S1	689	C	C2'-C1'	-10.61	1.41	1.53
33	L1	1543	A	C2'-C1'	10.61	1.65	1.53
33	L1	1550	A	O4'-C1'	10.61	1.55	1.41
33	L1	3269	C	O4'-C1'	10.61	1.55	1.41
32	S1	20	G	C2'-C1'	-10.60	1.41	1.53
32	S1	1696	C	O4'-C1'	10.60	1.55	1.41
33	L1	3048	C	O4'-C1'	10.60	1.55	1.41
32	S1	435	C	C2'-C1'	-10.59	1.41	1.53
32	S1	957	A	C2'-C1'	10.59	1.65	1.53
38	LE	153	HIS	ND1-CE1	10.59	1.61	1.34
32	S1	1261	U	C2'-C1'	10.59	1.65	1.53
23	SU	72	GLY	CA-C	10.58	1.68	1.51
31	S2	42	C	P-O5'	10.58	1.70	1.59
33	L1	2423	A	O4'-C1'	-10.58	1.27	1.41
33	L1	8	C	C2'-C1'	-10.57	1.41	1.53
32	S1	70	C	O4'-C1'	10.57	1.55	1.41
38	LE	34	ARG	CA-CB	10.57	1.77	1.53
33	L1	2540	C	O4'-C1'	10.56	1.55	1.41
33	L1	3360	U	C2'-C1'	-10.56	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	928	A	C2'-C1'	-10.56	1.41	1.53
33	L1	15	C	O4'-C1'	10.56	1.55	1.41
33	L1	1192	A	O4'-C1'	-10.56	1.27	1.41
33	L1	2479	C	O4'-C1'	10.56	1.55	1.41
32	S1	1541	C	C2'-C1'	-10.55	1.41	1.53
33	L1	1022	G	O4'-C1'	-10.56	1.27	1.41
33	L1	603	G	C2'-C1'	-10.55	1.41	1.53
33	L1	609	C	C2'-C1'	-10.55	1.41	1.53
33	L1	1472	C	O4'-C1'	10.55	1.55	1.41
33	L1	2471	C	O4'-C1'	10.55	1.55	1.41
33	L1	272	G	O4'-C1'	10.55	1.55	1.41
33	L1	482	C	O4'-C1'	10.55	1.55	1.41
32	S1	150	U	C2'-C1'	10.55	1.65	1.53
32	S1	1781	U	O4'-C1'	10.54	1.55	1.41
33	L1	2566	C	C2'-C1'	-10.54	1.41	1.53
33	L1	786	U	C2'-C1'	-10.54	1.41	1.53
33	L1	1	G	OP3-P	-10.54	1.48	1.61
32	S1	1503	C	O4'-C1'	10.53	1.55	1.41
33	L1	2481	C	C2'-C1'	-10.53	1.41	1.53
32	S1	654	C	C2'-C1'	-10.53	1.41	1.53
34	L3	76	U	O4'-C1'	10.53	1.55	1.41
33	L1	1237	G	C2'-C1'	-10.53	1.41	1.53
30	S3	12	A	OP3-P	-10.53	1.48	1.61
35	L2	122	C	O4'-C1'	10.53	1.55	1.41
33	L1	2909	A	O4'-C1'	-10.52	1.27	1.41
5	SE	101	ALA	C-O	-10.52	1.03	1.23
33	L1	1081	U	O4'-C1'	-10.52	1.27	1.41
33	L1	3084	G	O4'-C1'	-10.52	1.27	1.41
32	S1	334	G	C2'-C1'	-10.51	1.41	1.53
32	S1	680	C	O4'-C1'	10.51	1.55	1.41
33	L1	669	G	C2'-C1'	-10.51	1.41	1.53
33	L1	1568	A	O4'-C1'	-10.51	1.27	1.41
35	L2	68	U	C4'-C3'	-10.51	1.41	1.53
33	L1	1789	C	C5'-C4'	10.50	1.64	1.51
33	L1	3070	G	C2'-C1'	-10.50	1.41	1.53
33	L1	3072	A	O4'-C1'	10.50	1.55	1.41
33	L1	2994	U	O4'-C1'	10.50	1.55	1.41
32	S1	875	C	O4'-C1'	10.50	1.55	1.41
35	L2	22	U	C2'-C1'	-10.50	1.41	1.53
32	S1	1663	A	O4'-C1'	10.49	1.55	1.41
33	L1	2870	U	C2'-C1'	-10.49	1.41	1.53
33	L1	3101	C	C2'-C1'	-10.49	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1248	A	C2'-C1'	-10.49	1.41	1.53
32	S1	1442	A	O4'-C1'	10.49	1.55	1.41
33	L1	225	G	C2'-C1'	-10.48	1.41	1.53
33	L1	675	C	O4'-C1'	10.48	1.55	1.41
32	S1	1012	C	C2'-C1'	-10.48	1.41	1.53
32	S1	1766	A	C2'-C1'	10.48	1.64	1.53
33	L1	2029	G	O4'-C1'	10.48	1.55	1.41
33	L1	453	U	C2'-C1'	-10.48	1.41	1.53
32	S1	387	G	C2'-C1'	-10.47	1.41	1.53
33	L1	2975	G	C2'-C1'	-10.47	1.41	1.53
32	S1	1219	C	O4'-C1'	10.46	1.55	1.41
34	L3	71	A	C2'-C1'	10.46	1.64	1.53
33	L1	1080	C	P-O5'	-10.46	1.49	1.59
35	L2	44	A	C5'-C4'	10.46	1.64	1.51
32	S1	1082	C	C2'-C1'	-10.46	1.41	1.53
33	L1	775	A	O4'-C1'	10.46	1.55	1.41
33	L1	2566	C	O4'-C1'	10.45	1.55	1.41
33	L1	2132	A	O4'-C1'	-10.45	1.28	1.41
33	L1	2787	A	O3'-P	-10.45	1.48	1.61
33	L1	3094	C	C2'-C1'	10.45	1.64	1.53
34	L3	106	U	O3'-P	-10.45	1.48	1.61
33	L1	1251	U	C2'-C1'	10.45	1.64	1.53
31	S2	1	U	OP3-P	-10.44	1.48	1.61
33	L1	545	C	C2'-C1'	-10.44	1.41	1.53
32	S1	1393	G	C2'-C1'	-10.44	1.41	1.53
33	L1	1973	C	O4'-C1'	10.44	1.55	1.41
33	L1	2042	G	C2'-C1'	-10.43	1.41	1.53
32	S1	1283	C	O4'-C1'	10.43	1.55	1.41
33	L1	1906	A	O4'-C1'	-10.43	1.28	1.41
33	L1	2382	C	C2'-C1'	-10.43	1.41	1.53
32	S1	624	A	O4'-C1'	10.42	1.55	1.41
33	L1	1997	G	C2'-C1'	-10.42	1.41	1.53
33	L1	1384	G	O4'-C1'	-10.42	1.28	1.41
33	L1	454	A	O4'-C1'	10.42	1.55	1.41
33	L1	3224	C	O4'-C1'	10.42	1.55	1.41
33	L1	1321	A	C2'-C1'	-10.42	1.41	1.53
33	L1	1965	C	O4'-C1'	10.42	1.55	1.41
33	L1	2215	A	O4'-C1'	10.42	1.55	1.41
33	L1	3111	C	C2'-C1'	-10.42	1.41	1.53
33	L1	434	C	O4'-C1'	10.41	1.55	1.41
32	S1	623	A	C2'-C1'	10.41	1.64	1.53
33	L1	590	C	C2'-C1'	-10.41	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	578	C	C2'-C1'	-10.41	1.42	1.53
33	L1	3164	C	O4'-C1'	10.40	1.55	1.41
33	L1	2276	A	C2'-C1'	10.40	1.64	1.53
33	L1	2650	A	C2'-C1'	10.40	1.64	1.53
39	LF	187	THR	C-O	-10.40	1.03	1.23
33	L1	1385	C	C2'-C1'	-10.40	1.42	1.53
33	L1	3086	G	O4'-C1'	-10.39	1.28	1.41
33	L1	3170	C	O4'-C1'	10.39	1.55	1.41
33	L1	735	C	O4'-C1'	10.39	1.55	1.41
33	L1	1226	G	O3'-P	-10.39	1.48	1.61
33	L1	1739	G	C2'-C1'	-10.39	1.42	1.53
33	L1	2204	U	C2'-C1'	-10.39	1.42	1.53
31	S2	22	G	C2'-C1'	-10.39	1.42	1.53
32	S1	584	A	O4'-C1'	10.39	1.55	1.41
33	L1	1637	G	O4'-C1'	-10.39	1.28	1.41
33	L1	2837	C	C2'-C1'	-10.39	1.42	1.53
32	S1	1295	G	O4'-C1'	10.38	1.55	1.41
33	L1	210	G	O4'-C1'	10.38	1.55	1.41
33	L1	818	G	O4'-C1'	-10.38	1.28	1.41
32	S1	1091	A	O4'-C1'	10.38	1.55	1.41
32	S1	362	U	O4'-C1'	10.38	1.55	1.41
32	S1	668	C	O4'-C1'	10.38	1.55	1.41
33	L1	3021	U	O4'-C1'	-10.38	1.28	1.41
33	L1	357	C	C2'-C1'	-10.37	1.42	1.53
32	S1	467	U	C2'-C1'	-10.37	1.42	1.53
33	L1	132	U	C2'-C1'	-10.37	1.42	1.53
32	S1	1080	C	O4'-C1'	10.37	1.55	1.41
32	S1	1776	A	C4'-C3'	10.37	1.64	1.53
33	L1	660	A	C2'-C1'	-10.37	1.42	1.53
33	L1	391	U	C2'-C1'	-10.36	1.42	1.53
82	LK	135	GLN	CA-CB	10.36	1.76	1.53
33	L1	2874	A	O4'-C1'	10.36	1.55	1.41
32	S1	1670	G	C2'-C1'	10.35	1.64	1.53
33	L1	1025	G	O4'-C1'	10.35	1.55	1.41
33	L1	1596	G	C2'-C1'	-10.35	1.42	1.53
33	L1	1317	G	C2'-C1'	10.34	1.64	1.53
33	L1	2145	C	O4'-C1'	10.34	1.55	1.41
33	L1	641	C	O3'-P	-10.34	1.48	1.61
23	SU	72	GLY	C-N	10.34	1.51	1.33
33	L1	1235	A	O4'-C1'	10.34	1.55	1.41
33	L1	2883	C	O4'-C1'	10.33	1.55	1.41
35	L2	131	C	O4'-C1'	10.33	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2659	A	C2'-C1'	-10.33	1.42	1.53
32	S1	1278	C	O4'-C1'	-10.33	1.28	1.41
33	L1	3039	U	O4'-C1'	10.33	1.55	1.41
32	S1	915	C	C2'-C1'	10.32	1.64	1.53
32	S1	550	U	C2'-C1'	-10.32	1.42	1.53
32	S1	910	A	C2'-C1'	-10.32	1.42	1.53
33	L1	1614	G	O4'-C1'	10.32	1.55	1.41
33	L1	3223	C	P-O5'	-10.32	1.49	1.59
33	L1	1824	C	O4'-C1'	10.32	1.55	1.41
33	L1	1819	A	O4'-C1'	10.31	1.55	1.41
33	L1	2129	U	C2'-C1'	-10.31	1.42	1.53
32	S1	1788	G	C2'-C1'	10.31	1.64	1.53
32	S1	1708	U	O3'-P	-10.30	1.48	1.61
33	L1	662	G	C2'-C1'	-10.31	1.42	1.53
80	LC	17	LEU	C-O	-10.31	1.03	1.23
33	L1	1996	C	O4'-C1'	10.30	1.55	1.41
33	L1	608	G	C2'-C1'	-10.30	1.42	1.53
33	L1	1993	G	C2'-C1'	-10.29	1.42	1.53
32	S1	1611	U	O4'-C1'	10.29	1.55	1.41
33	L1	1346	C	C2'-C1'	-10.29	1.42	1.53
33	L1	2394	G	C2'-C1'	-10.29	1.42	1.53
32	S1	1069	G	C2'-C1'	10.29	1.64	1.53
32	S1	905	A	C2'-C1'	-10.28	1.42	1.53
33	L1	670	A	C2'-C1'	-10.28	1.42	1.53
33	L1	2436	G	O4'-C1'	-10.27	1.28	1.41
33	L1	921	C	C2'-C1'	10.27	1.64	1.53
33	L1	1912	U	C4'-C3'	10.27	1.64	1.53
33	L1	2699	A	C2'-C1'	-10.27	1.42	1.53
33	L1	1799	C	O4'-C1'	10.27	1.54	1.41
33	L1	291	C	O4'-C1'	10.26	1.54	1.41
32	S1	658	C	O4'-C1'	10.26	1.54	1.41
33	L1	138	G	C2'-C1'	-10.25	1.42	1.53
33	L1	1729	G	C2'-C1'	-10.24	1.42	1.53
32	S1	1347	U	O4'-C1'	10.24	1.54	1.41
83	Lm	7	LYS	C-O	-10.24	1.03	1.23
32	S1	1314	U	C5'-C4'	-10.24	1.39	1.51
33	L1	1953	C	O4'-C1'	10.24	1.54	1.41
32	S1	715	U	P-O5'	-10.23	1.49	1.59
35	L2	56	A	C2'-C1'	10.23	1.64	1.53
32	S1	525	A	C4'-C3'	-10.23	1.41	1.53
32	S1	1396	U	C2'-C1'	10.23	1.64	1.53
33	L1	588	G	C2'-C1'	-10.23	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	617	G	C2'-C1'	-10.22	1.42	1.53
33	L1	3070	G	O4'-C1'	10.22	1.54	1.41
33	L1	1808	G	O4'-C1'	-10.22	1.28	1.41
35	L2	137	C	C2'-C1'	-10.22	1.42	1.53
43	LO	6	LYS	C-O	-10.22	1.03	1.23
32	S1	983	A	O4'-C1'	10.22	1.54	1.41
32	S1	68	A	C2'-C1'	-10.22	1.42	1.53
32	S1	163	G	C2'-C1'	-10.21	1.42	1.53
33	L1	955	A	C2'-C1'	-10.21	1.42	1.53
33	L1	2672	C	O4'-C1'	10.21	1.54	1.41
34	L3	35	C	O4'-C1'	10.21	1.54	1.41
32	S1	271	C	O4'-C1'	10.21	1.54	1.41
35	L2	94	C	O4'-C1'	-10.21	1.28	1.41
35	L2	117	U	O4'-C1'	10.21	1.54	1.41
32	S1	470	U	C2'-C1'	-10.21	1.42	1.53
33	L1	501	U	O4'-C1'	10.21	1.54	1.41
32	S1	147	C	C2'-C1'	-10.20	1.42	1.53
33	L1	245	C	O4'-C1'	10.20	1.54	1.41
33	L1	262	A	O4'-C1'	10.20	1.54	1.41
64	LG	185	ASP	C-O	-10.20	1.03	1.23
33	L1	1256	A	C2'-C1'	-10.20	1.42	1.53
33	L1	1133	A	C2'-C1'	10.20	1.64	1.53
33	L1	3100	C	O4'-C1'	10.19	1.54	1.41
33	L1	2766	U	O4'-C1'	10.19	1.54	1.41
33	L1	953	G	O4'-C1'	10.19	1.54	1.41
33	L1	2065	G	C2'-C1'	10.19	1.64	1.53
33	L1	2219	A	C3'-C2'	10.19	1.64	1.52
32	S1	155	A	C2'-C1'	-10.18	1.42	1.53
33	L1	2496	U	O4'-C1'	-10.18	1.28	1.41
33	L1	11	A	O4'-C1'	10.18	1.54	1.41
33	L1	1689	G	C2'-C1'	-10.18	1.42	1.53
32	S1	456	A	C2'-C1'	10.17	1.64	1.53
33	L1	2095	C	O4'-C1'	10.17	1.54	1.41
32	S1	909	G	C2'-C1'	-10.17	1.42	1.53
33	L1	841	G	O4'-C1'	-10.17	1.28	1.41
33	L1	1260	G	C2'-C1'	-10.17	1.42	1.53
33	L1	2462	G	O4'-C1'	-10.17	1.28	1.41
33	L1	1163	A	O4'-C1'	-10.16	1.28	1.41
33	L1	1506	A	C2'-C1'	-10.16	1.42	1.53
32	S1	973	U	O4'-C1'	10.16	1.54	1.41
33	L1	991	C	O4'-C1'	10.16	1.54	1.41
32	S1	127	G	O4'-C1'	10.16	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	949	A	C2'-C1'	10.16	1.64	1.53
33	L1	1375	G	C3'-O3'	10.16	1.56	1.42
33	L1	584	G	C2'-C1'	10.15	1.64	1.53
33	L1	1087	G	O4'-C1'	10.15	1.54	1.41
33	L1	2366	A	C2'-C1'	-10.15	1.42	1.53
33	L1	2230	C	C2'-C1'	-10.15	1.42	1.53
33	L1	3328	A	C5'-C4'	10.15	1.63	1.51
31	S2	21	A	O4'-C1'	10.15	1.54	1.41
33	L1	2736	A	C2'-C1'	10.14	1.64	1.53
33	L1	690	G	C2'-C1'	10.14	1.64	1.53
33	L1	1163	A	C2'-C1'	-10.14	1.42	1.53
33	L1	1932	A	C2'-C1'	-10.14	1.42	1.53
23	SU	8	PRO	N-CD	-10.14	1.33	1.47
33	L1	2706	A	C2'-C1'	10.14	1.64	1.53
32	S1	539	A	P-O5'	-10.14	1.49	1.59
4	SD	93	PRO	C-O	-10.13	1.02	1.23
32	S1	1578	A	C2'-C1'	-10.13	1.42	1.53
33	L1	528	C	O4'-C1'	10.12	1.54	1.41
33	L1	1271	U	C4'-C3'	10.12	1.64	1.53
32	S1	158	C	O4'-C1'	10.12	1.54	1.41
33	L1	255	C	C2'-C1'	-10.12	1.42	1.53
33	L1	2358	C	C2'-C1'	-10.12	1.42	1.53
32	S1	29	U	O4'-C1'	10.11	1.54	1.41
33	L1	966	G	O4'-C1'	10.11	1.54	1.41
33	L1	1265	G	O4'-C1'	-10.11	1.28	1.41
33	L1	1724	C	O4'-C1'	10.11	1.54	1.41
33	L1	2164	G	C2'-C1'	-10.11	1.42	1.53
33	L1	2842	C	C2'-C1'	10.11	1.64	1.53
33	L1	2066	G	C3'-C2'	10.11	1.64	1.52
45	LQ	9	LYS	C-N	10.11	1.57	1.34
33	L1	1481	C	O4'-C1'	10.10	1.54	1.41
32	S1	293	C	O4'-C1'	10.10	1.54	1.41
32	S1	609	A	O4'-C1'	10.10	1.54	1.41
33	L1	2908	C	C2'-C1'	-10.10	1.42	1.53
31	S2	12	U	C5'-C4'	10.10	1.63	1.51
32	S1	1095	C	O4'-C1'	10.10	1.54	1.41
33	L1	912	G	O4'-C1'	10.10	1.54	1.41
33	L1	2101	A	O4'-C1'	10.10	1.54	1.41
33	L1	2997	C	O4'-C1'	10.10	1.54	1.41
32	S1	1388	A	O4'-C1'	10.09	1.54	1.41
33	L1	1960	C	O4'-C1'	10.09	1.54	1.41
32	S1	1271	G	O4'-C1'	10.09	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	50	G	O4'-C1'	10.09	1.54	1.41
34	L3	26	C	C5'-C4'	10.09	1.63	1.51
32	S1	956	A	C2'-C1'	10.08	1.64	1.53
33	L1	1702	C	O4'-C1'	10.08	1.54	1.41
33	L1	2537	G	C2'-C1'	-10.08	1.42	1.53
32	S1	1363	G	C2'-C1'	-10.08	1.42	1.53
33	L1	808	G	O4'-C1'	-10.08	1.28	1.41
33	L1	2000	C	O4'-C1'	10.08	1.54	1.41
4	SD	239	PRO	C-N	10.08	1.57	1.34
32	S1	256	G	C2'-C1'	-10.07	1.42	1.53
33	L1	1720	C	O4'-C1'	10.07	1.54	1.41
32	S1	103	U	O4'-C1'	10.07	1.54	1.41
33	L1	3229	C	O4'-C1'	10.07	1.54	1.41
32	S1	1037	G	C2'-C1'	-10.07	1.42	1.53
33	L1	498	G	C4'-C3'	10.07	1.64	1.53
32	S1	1099	G	O4'-C1'	10.06	1.54	1.41
32	S1	1543	U	C2'-C1'	10.06	1.64	1.53
32	S1	673	C	O4'-C1'	10.06	1.54	1.41
32	S1	881	G	O4'-C1'	10.06	1.54	1.41
33	L1	676	G	C2'-C1'	-10.06	1.42	1.53
33	L1	1321	A	O4'-C1'	10.06	1.54	1.41
33	L1	3310	A	O4'-C1'	10.06	1.54	1.41
34	L3	94	C	C2'-C1'	-10.05	1.42	1.53
32	S1	1241	G	C2'-C1'	-10.05	1.42	1.53
64	LG	185	ASP	CA-CB	10.05	1.76	1.53
33	L1	1215	U	O4'-C1'	10.05	1.54	1.41
33	L1	1262	U	O4'-C1'	-10.04	1.28	1.41
33	L1	2677	A	C2'-C1'	10.05	1.64	1.53
32	S1	1166	C	O4'-C1'	10.04	1.54	1.41
33	L1	1761	C	O4'-C1'	10.04	1.54	1.41
33	L1	3245	G	C2'-C1'	-10.04	1.42	1.53
32	S1	788	G	C5'-C4'	10.04	1.63	1.51
32	S1	504	C	C2'-C1'	-10.03	1.42	1.53
32	S1	568	G	P-O5'	-10.03	1.49	1.59
33	L1	567	G	C2'-C1'	-10.03	1.42	1.53
33	L1	1866	C	C2'-C1'	-10.03	1.42	1.53
32	S1	1352	A	C3'-C2'	-10.02	1.41	1.52
33	L1	1325	G	C2'-C1'	-10.02	1.42	1.53
73	Lp	52	LYS	C-N	10.02	1.57	1.34
33	L1	1305	A	C2'-C1'	-10.02	1.42	1.53
33	L1	2402	G	C2'-C1'	10.02	1.64	1.53
32	S1	574	A	O4'-C1'	10.01	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	975	G	O4'-C1'	-10.01	1.28	1.41
33	L1	1382	C	C2'-C1'	-10.01	1.42	1.53
33	L1	2501	U	C5'-C4'	10.01	1.63	1.51
33	L1	1958	G	C2'-C1'	-10.00	1.42	1.53
32	S1	991	G	C2'-C1'	-10.00	1.42	1.53
32	S1	1314	U	O5'-C5'	-10.00	1.26	1.42
33	L1	1041	C	O4'-C1'	10.00	1.54	1.41
32	S1	1004	U	C2'-C1'	-10.00	1.42	1.53
33	L1	2230	C	C3'-O3'	10.00	1.56	1.42
33	L1	2661	G	C4'-C3'	10.00	1.64	1.53
32	S1	381	G	O4'-C1'	-9.99	1.28	1.41
32	S1	1294	U	C2'-C1'	-9.99	1.42	1.53
33	L1	185	A	C2'-C1'	-9.99	1.42	1.53
33	L1	598	U	C2'-C1'	-9.99	1.42	1.53
32	S1	1133	C	O4'-C1'	9.99	1.54	1.41
33	L1	338	C	C2'-C1'	-9.99	1.42	1.53
33	L1	1986	G	C2'-C1'	-9.99	1.42	1.53
33	L1	597	C	C4'-C3'	9.99	1.64	1.53
33	L1	1659	G	C2'-C1'	-9.99	1.42	1.53
33	L1	2453	G	C2'-C1'	9.99	1.64	1.53
32	S1	1275	G	C2'-C1'	-9.98	1.42	1.53
33	L1	1127	U	C2'-C1'	-9.98	1.42	1.53
34	L3	108	G	O4'-C1'	-9.98	1.28	1.41
32	S1	40	A	O4'-C1'	9.98	1.54	1.41
32	S1	1405	U	O4'-C1'	9.97	1.54	1.41
33	L1	2908	C	O4'-C1'	9.97	1.54	1.41
33	L1	2132	A	C2'-C1'	9.97	1.64	1.53
33	L1	2796	G	C2'-C1'	9.97	1.64	1.53
32	S1	1060	U	O4'-C1'	9.97	1.54	1.41
33	L1	1933	U	C2'-C1'	-9.96	1.42	1.53
32	S1	468	A	C2'-C1'	9.96	1.64	1.53
33	L1	2896	C	C2'-C1'	9.96	1.64	1.53
32	S1	285	G	O4'-C1'	9.96	1.54	1.41
33	L1	587	A	O4'-C1'	9.95	1.54	1.41
33	L1	608	G	O4'-C1'	9.95	1.54	1.41
33	L1	2319	A	C2'-C1'	9.95	1.64	1.53
33	L1	766	C	O4'-C1'	9.95	1.54	1.41
33	L1	1345	U	C2'-C1'	-9.95	1.42	1.53
33	L1	3164	C	C2'-C1'	-9.95	1.42	1.53
34	L3	35	C	C2'-C1'	-9.95	1.42	1.53
32	S1	825	U	C2'-C1'	-9.94	1.42	1.53
33	L1	935	U	O4'-C1'	9.94	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1228	G	C2'-C1'	-9.94	1.42	1.53
32	S1	1306	U	C2'-C1'	-9.94	1.42	1.53
32	S1	1392	G	O4'-C1'	9.94	1.54	1.41
33	L1	2157	C	O4'-C1'	9.93	1.54	1.41
33	L1	1751	G	O4'-C1'	9.93	1.54	1.41
32	S1	182	C	C2'-C1'	-9.93	1.42	1.53
31	S2	56	A	C2'-C1'	9.93	1.64	1.53
32	S1	144	U	C2'-C1'	-9.93	1.42	1.53
33	L1	1828	C	C2'-C1'	-9.93	1.42	1.53
33	L1	2100	A	O4'-C1'	9.93	1.54	1.41
32	S1	1433	A	C2'-C1'	9.93	1.64	1.53
33	L1	128	C	C2'-C1'	-9.93	1.42	1.53
33	L1	3096	U	P-O5'	-9.93	1.49	1.59
32	S1	365	C	O4'-C1'	9.92	1.54	1.41
32	S1	1146	G	O3'-P	-9.92	1.49	1.61
33	L1	2776	U	O4'-C1'	9.92	1.54	1.41
33	L1	443	G	C2'-C1'	-9.92	1.42	1.53
32	S1	9	U	O4'-C1'	9.92	1.54	1.41
33	L1	314	C	O4'-C1'	9.92	1.54	1.41
32	S1	494	G	C2'-C1'	-9.92	1.42	1.53
33	L1	658	C	O4'-C1'	9.92	1.54	1.41
33	L1	2313	U	C2'-C1'	9.92	1.64	1.53
33	L1	801	G	O4'-C1'	-9.91	1.28	1.41
35	L2	88	C	O4'-C1'	9.91	1.54	1.41
32	S1	1027	C	O4'-C1'	9.91	1.54	1.41
33	L1	660	A	O4'-C1'	9.91	1.54	1.41
33	L1	2038	G	C2'-C1'	-9.91	1.42	1.53
33	L1	2102	C	O4'-C1'	9.90	1.54	1.41
34	L3	30	G	C2'-C1'	-9.90	1.42	1.53
33	L1	825	G	O3'-P	-9.90	1.49	1.61
33	L1	2109	G	C2'-C1'	-9.90	1.42	1.53
32	S1	828	G	O4'-C1'	-9.89	1.28	1.41
32	S1	1161	C	O4'-C1'	9.89	1.54	1.41
33	L1	1526	A	P-O5'	-9.89	1.49	1.59
32	S1	839	G	C2'-C1'	-9.89	1.42	1.53
32	S1	1476	C	O4'-C1'	9.89	1.54	1.41
33	L1	1785	G	O4'-C1'	-9.89	1.28	1.41
33	L1	2087	A	C2'-C1'	9.89	1.64	1.53
33	L1	1015	A	C2'-C1'	9.89	1.64	1.53
33	L1	248	C	O4'-C1'	9.89	1.54	1.41
33	L1	1810	G	C2'-C1'	9.89	1.64	1.53
33	L1	2497	A	O4'-C1'	9.89	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1671	G	O4'-C1'	9.88	1.54	1.41
33	L1	1097	A	O4'-C1'	9.88	1.54	1.41
33	L1	3247	C	O4'-C1'	9.88	1.54	1.41
32	S1	1080	C	C2'-C1'	-9.88	1.42	1.53
32	S1	1122	U	C2'-C1'	-9.88	1.42	1.53
33	L1	676	G	O3'-P	-9.88	1.49	1.61
33	L1	2483	A	O4'-C1'	-9.88	1.28	1.41
33	L1	1511	C	C2'-C1'	-9.87	1.42	1.53
33	L1	2916	G	C2'-C1'	-9.88	1.42	1.53
33	L1	2522	C	O4'-C1'	9.87	1.54	1.41
33	L1	228	C	O4'-C1'	9.87	1.54	1.41
33	L1	1176	U	C3'-C2'	-9.87	1.41	1.52
32	S1	1410	C	O4'-C1'	9.87	1.54	1.41
32	S1	1336	C	C2'-C1'	-9.86	1.42	1.53
33	L1	341	U	C5'-C4'	9.86	1.63	1.51
33	L1	814	U	O4'-C1'	9.86	1.54	1.41
31	S2	2	C	O4'-C1'	9.86	1.54	1.41
31	S2	48	C	O4'-C1'	9.86	1.54	1.41
32	S1	300	U	C2'-C1'	9.86	1.64	1.53
32	S1	1559	U	C2'-C1'	9.86	1.64	1.53
33	L1	2430	C	C2'-C1'	9.86	1.64	1.53
35	L2	147	C	C2'-C1'	-9.86	1.42	1.53
33	L1	795	C	O4'-C1'	9.85	1.54	1.41
33	L1	1146	A	O3'-P	-9.85	1.49	1.61
32	S1	1100	U	O4'-C1'	9.85	1.54	1.41
33	L1	741	G	C2'-C1'	-9.85	1.42	1.53
33	L1	2129	U	O4'-C1'	9.85	1.54	1.41
33	L1	2620	U	C2'-C1'	9.85	1.64	1.53
32	S1	145	A	C2'-C1'	-9.84	1.42	1.53
33	L1	1950	G	C2'-C1'	9.84	1.64	1.53
34	L3	51	G	C2'-C1'	-9.84	1.42	1.53
33	L1	2147	U	O4'-C1'	9.84	1.54	1.41
33	L1	2489	A	O4'-C1'	9.84	1.54	1.41
33	L1	3183	G	C2'-C1'	-9.84	1.42	1.53
34	L3	27	A	C2'-C1'	-9.84	1.42	1.53
33	L1	2673	G	O4'-C1'	9.83	1.54	1.41
32	S1	290	C	C4'-C3'	9.83	1.64	1.53
32	S1	845	C	O4'-C1'	9.83	1.54	1.41
33	L1	2711	U	C2'-C1'	-9.83	1.42	1.53
27	SH	82	GLY	C-O	-9.83	1.07	1.23
32	S1	1282	G	O4'-C1'	9.82	1.54	1.41
32	S1	1390	A	C2'-C1'	-9.82	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	461	A	C2'-C1'	-9.82	1.42	1.53
33	L1	1389	C	O4'-C1'	-9.82	1.28	1.41
33	L1	1876	U	C2'-C1'	-9.82	1.42	1.53
33	L1	2032	C	C2'-C1'	-9.82	1.42	1.53
33	L1	2444	U	C2'-C1'	-9.82	1.42	1.53
33	L1	2594	A	C3'-C2'	9.82	1.63	1.52
33	L1	2934	C	C2'-C1'	9.82	1.64	1.53
32	S1	82	G	C2'-C1'	-9.82	1.42	1.53
32	S1	1764	G	C2'-C1'	-9.82	1.42	1.53
32	S1	687	C	O4'-C1'	9.81	1.54	1.41
33	L1	2354	G	O4'-C1'	-9.81	1.28	1.41
33	L1	2703	G	C2'-C1'	-9.81	1.42	1.53
33	L1	1338	C	O4'-C1'	9.81	1.54	1.41
35	L2	148	C	O4'-C1'	9.81	1.54	1.41
4	SD	153	ILE	C-O	-9.81	1.04	1.23
33	L1	723	G	C5'-C4'	9.81	1.63	1.51
32	S1	1122	U	O4'-C1'	9.81	1.54	1.41
67	LS	120	PHE	C-O	-9.81	1.04	1.23
32	S1	1198	A	O4'-C1'	9.81	1.54	1.41
32	S1	585	U	O4'-C1'	9.80	1.54	1.41
33	L1	649	A	O4'-C1'	9.80	1.54	1.41
33	L1	1486	G	O4'-C1'	-9.80	1.28	1.41
33	L1	2709	G	O4'-C1'	9.80	1.54	1.41
33	L1	3211	C	C4'-O4'	9.80	1.58	1.45
33	L1	999	U	O4'-C1'	9.80	1.54	1.41
73	Lp	52	LYS	CA-CB	9.80	1.75	1.53
33	L1	891	U	C2'-C1'	9.79	1.64	1.53
33	L1	2408	G	O4'-C1'	9.79	1.54	1.41
33	L1	337	C	C2'-C1'	-9.79	1.42	1.53
33	L1	2813	A	C2'-C1'	-9.79	1.42	1.53
32	S1	681	G	C2'-C1'	-9.78	1.42	1.53
33	L1	2412	A	O4'-C1'	-9.78	1.28	1.41
33	L1	3313	C	O4'-C1'	9.78	1.54	1.41
41	LM	68	GLY	CA-C	9.78	1.67	1.51
33	L1	1957	G	O4'-C1'	-9.78	1.28	1.41
33	L1	2855	G	C2'-C1'	9.78	1.64	1.53
32	S1	649	C	O4'-C1'	9.77	1.54	1.41
35	L2	93	A	C3'-C2'	9.77	1.63	1.52
33	L1	2933	C	C5'-C4'	9.77	1.63	1.51
32	S1	940	U	O4'-C1'	9.77	1.54	1.41
33	L1	61	A	C2'-C1'	-9.77	1.42	1.53
33	L1	594	C	C2'-C1'	-9.77	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1474	U	C2'-C1'	-9.77	1.42	1.53
31	S2	45	G	O4'-C1'	9.76	1.54	1.41
33	L1	2341	U	O4'-C1'	9.76	1.54	1.41
32	S1	142	G	C2'-C1'	-9.76	1.42	1.53
33	L1	1273	U	C2'-C1'	-9.76	1.42	1.53
39	LF	188	GLU	N-CA	9.76	1.65	1.46
33	L1	506	U	O4'-C1'	9.76	1.54	1.41
33	L1	1369	G	C4'-C3'	9.76	1.63	1.53
33	L1	3057	A	C2'-C1'	-9.75	1.42	1.53
33	L1	3379	C	O4'-C1'	9.75	1.54	1.41
32	S1	1211	U	O4'-C1'	9.75	1.54	1.41
33	L1	1311	G	P-O5'	-9.75	1.50	1.59
33	L1	2135	U	C2'-C1'	-9.75	1.42	1.53
35	L2	53	G	O4'-C1'	9.75	1.54	1.41
32	S1	619	A	O4'-C1'	9.75	1.54	1.41
66	LN	64	ARG	NE-CZ	-9.75	1.20	1.33
35	L2	27	C	C2'-C1'	-9.74	1.42	1.53
32	S1	619	A	C2'-C1'	-9.74	1.42	1.53
32	S1	914	U	C2'-C1'	9.74	1.64	1.53
33	L1	1026	A	O4'-C1'	9.74	1.54	1.41
34	L3	64	G	C2'-C1'	-9.74	1.42	1.53
32	S1	1082	C	O4'-C1'	9.74	1.54	1.41
35	L2	87	C	O4'-C1'	9.74	1.54	1.41
32	S1	1142	A	O3'-P	-9.73	1.49	1.61
33	L1	633	C	O4'-C1'	9.73	1.54	1.41
33	L1	1132	A	P-O5'	-9.73	1.50	1.59
33	L1	1785	G	C2'-C1'	-9.73	1.42	1.53
33	L1	160	G	C2'-C1'	-9.73	1.42	1.53
33	L1	3122	U	C2'-C1'	-9.73	1.42	1.53
32	S1	333	G	O4'-C1'	9.72	1.54	1.41
32	S1	1656	C	C2'-C1'	-9.72	1.42	1.53
33	L1	1837	A	C2'-C1'	-9.72	1.42	1.53
32	S1	1011	C	O4'-C1'	9.72	1.54	1.41
32	S1	1617	U	P-O5'	-9.72	1.50	1.59
33	L1	1263	A	C2'-C1'	-9.72	1.42	1.53
32	S1	1036	U	C2'-C1'	-9.72	1.42	1.53
33	L1	2232	C	C2'-C1'	-9.72	1.42	1.53
32	S1	1026	C	O4'-C1'	9.71	1.54	1.41
33	L1	2451	G	O4'-C1'	9.71	1.54	1.41
33	L1	1119	G	C4'-C3'	9.71	1.63	1.53
33	L1	2511	U	C2'-C1'	9.71	1.64	1.53
32	S1	219	G	C2'-C1'	-9.71	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1033	C	O3'-P	-9.71	1.49	1.61
33	L1	1191	U	C2'-C1'	9.70	1.64	1.53
4	SD	150	PRO	C-O	-9.69	1.03	1.23
33	L1	251	G	O4'-C1'	-9.69	1.29	1.41
4	SD	93	PRO	CA-CB	9.69	1.73	1.53
33	L1	845	G	P-O5'	-9.69	1.50	1.59
33	L1	1043	U	C2'-C1'	-9.69	1.42	1.53
33	L1	1630	C	P-O5'	-9.69	1.50	1.59
31	S2	18	G	O4'-C1'	-9.68	1.29	1.41
32	S1	1610	C	C2'-C1'	9.68	1.64	1.53
32	S1	1592	G	C2'-C1'	9.67	1.64	1.53
32	S1	1616	U	O3'-P	-9.67	1.49	1.61
33	L1	1754	C	C2'-C1'	-9.67	1.42	1.53
33	L1	1763	C	C2'-C1'	-9.67	1.42	1.53
32	S1	1125	U	C2'-C1'	-9.67	1.42	1.53
33	L1	1977	C	C2'-C1'	-9.67	1.42	1.53
34	L3	67	C	P-O5'	-9.67	1.50	1.59
32	S1	1285	G	C2'-C1'	-9.66	1.42	1.53
59	Lo	30	ARG	CA-CB	9.66	1.75	1.53
32	S1	1083	C	O4'-C1'	9.66	1.54	1.41
32	S1	1611	U	C2'-C1'	9.66	1.64	1.53
33	L1	450	C	O4'-C1'	9.66	1.54	1.41
33	L1	3236	A	C2'-C1'	-9.66	1.42	1.53
43	LO	137	GLY	C-O	-9.65	1.08	1.23
33	L1	468	U	C4'-C3'	9.65	1.63	1.53
33	L1	2076	C	O4'-C1'	-9.65	1.29	1.41
32	S1	914	U	O4'-C1'	9.65	1.54	1.41
33	L1	720	G	O4'-C1'	9.65	1.54	1.41
33	L1	2206	U	C5'-C4'	9.65	1.62	1.51
23	SU	95	TYR	CB-CG	-9.64	1.37	1.51
32	S1	199	G	C2'-C1'	-9.64	1.42	1.53
32	S1	834	A	C2'-C1'	-9.64	1.42	1.53
32	S1	350	G	O4'-C1'	9.64	1.54	1.41
32	S1	1452	A	O4'-C1'	9.64	1.54	1.41
33	L1	424	G	C2'-C1'	-9.64	1.42	1.53
33	L1	2755	U	C2'-C1'	-9.63	1.42	1.53
33	L1	2053	A	O4'-C1'	9.63	1.54	1.41
33	L1	2444	U	O4'-C1'	9.63	1.54	1.41
33	L1	1274	A	C2'-C1'	9.62	1.64	1.53
33	L1	3289	U	O4'-C1'	9.62	1.54	1.41
35	L2	91	G	C2'-C1'	-9.62	1.42	1.53
33	L1	2999	G	O4'-C1'	-9.62	1.29	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1441	U	C2'-C1'	-9.61	1.42	1.53
32	S1	631	C	O3'-P	-9.61	1.49	1.61
32	S1	1707	G	O4'-C1'	-9.61	1.29	1.41
32	S1	771	G	O3'-P	-9.61	1.49	1.61
33	L1	3170	C	C2'-C1'	-9.61	1.42	1.53
33	L1	3343	U	C2'-C1'	-9.60	1.42	1.53
35	L2	24	U	C2'-C1'	-9.60	1.42	1.53
33	L1	598	U	P-O5'	-9.60	1.50	1.59
33	L1	1319	U	O4'-C1'	-9.60	1.29	1.41
33	L1	566	G	O4'-C1'	9.59	1.54	1.41
33	L1	854	C	C2'-C1'	-9.59	1.42	1.53
33	L1	166	U	O4'-C1'	9.59	1.54	1.41
33	L1	1309	U	C2'-C1'	-9.59	1.42	1.53
33	L1	1690	C	C2'-C1'	9.59	1.63	1.53
33	L1	2674	A	O4'-C1'	-9.59	1.29	1.41
33	L1	2108	C	O4'-C1'	9.59	1.54	1.41
33	L1	2178	G	O4'-C1'	9.59	1.54	1.41
70	Li	43	LYS	C-O	9.59	1.41	1.23
33	L1	726	C	C2'-C1'	-9.58	1.42	1.53
33	L1	2757	G	C2'-C1'	9.58	1.63	1.53
33	L1	629	U	O4'-C1'	9.58	1.54	1.41
33	L1	254	G	O4'-C1'	9.58	1.54	1.41
32	S1	1518	C	O4'-C1'	9.58	1.54	1.41
32	S1	1698	A	C5'-C4'	9.57	1.62	1.51
33	L1	752	U	O4'-C1'	9.57	1.54	1.41
33	L1	2283	G	C2'-C1'	-9.57	1.42	1.53
33	L1	677	U	O4'-C1'	9.57	1.54	1.41
33	L1	3007	A	C2'-C1'	-9.57	1.42	1.53
32	S1	1123	G	C2'-C1'	-9.57	1.42	1.53
33	L1	2480	G	O4'-C1'	-9.56	1.29	1.41
48	LV	36	ILE	C-O	-9.56	1.05	1.23
32	S1	1299	G	C2'-C1'	-9.56	1.42	1.53
33	L1	3331	G	C2'-C1'	9.56	1.63	1.53
4	SD	132	GLY	C-N	9.56	1.56	1.34
33	L1	839	A	C3'-C2'	-9.56	1.42	1.52
33	L1	1509	G	C2'-C1'	9.56	1.63	1.53
33	L1	2539	G	O4'-C1'	9.56	1.54	1.41
33	L1	868	A	C4'-C3'	9.55	1.63	1.53
33	L1	2012	C	C2'-C1'	-9.55	1.42	1.53
33	L1	934	C	C2'-C1'	-9.54	1.42	1.53
11	SM	36	VAL	C-N	9.54	1.50	1.33
33	L1	258	C	C2'-C1'	-9.54	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	180	A	C2'-C1'	-9.54	1.42	1.53
33	L1	1190	C	C2'-C1'	-9.54	1.42	1.53
33	L1	2951	U	C2'-C1'	9.54	1.63	1.53
34	L3	119	C	O4'-C1'	9.54	1.54	1.41
13	SQ	22	SER	N-CA	9.54	1.65	1.46
33	L1	2501	U	C2'-C1'	-9.53	1.42	1.53
32	S1	1350	C	O4'-C1'	9.53	1.54	1.41
32	S1	1629	U	C2'-C1'	-9.53	1.42	1.53
35	L2	95	C	C2'-C1'	9.53	1.63	1.53
32	S1	289	G	C2'-C1'	-9.53	1.42	1.53
32	S1	1612	C	C2'-C1'	-9.53	1.42	1.53
33	L1	1787	C	O4'-C1'	9.53	1.54	1.41
33	L1	309	C	C5'-C4'	9.53	1.62	1.51
33	L1	2060	C	O4'-C1'	-9.53	1.29	1.41
34	L3	58	G	O4'-C1'	-9.53	1.29	1.41
33	L1	1042	C	C5'-C4'	9.52	1.62	1.51
33	L1	2793	G	O4'-C1'	-9.52	1.29	1.41
33	L1	3226	G	C2'-C1'	9.52	1.63	1.53
33	L1	659	C	O4'-C1'	9.52	1.54	1.41
32	S1	988	G	C5'-C4'	9.51	1.62	1.51
32	S1	1000	A	O4'-C1'	-9.51	1.29	1.41
32	S1	1024	A	O4'-C1'	9.51	1.54	1.41
32	S1	1333	A	O4'-C1'	9.51	1.54	1.41
33	L1	819	A	C2'-C1'	-9.51	1.42	1.53
33	L1	2862	U	C2'-C1'	9.51	1.63	1.53
33	L1	1351	C	C5'-C4'	9.51	1.62	1.51
32	S1	999	G	O4'-C1'	9.51	1.54	1.41
33	L1	844	A	C2'-C1'	-9.51	1.42	1.53
33	L1	2062	U	C2'-C1'	9.50	1.63	1.53
32	S1	22	A	O4'-C1'	9.50	1.53	1.41
32	S1	408	G	O4'-C1'	9.50	1.53	1.41
33	L1	2042	G	O4'-C1'	9.50	1.53	1.41
32	S1	951	U	C2'-C1'	9.49	1.63	1.53
33	L1	2594	A	O4'-C1'	-9.49	1.29	1.41
33	L1	2612	A	C2'-C1'	9.49	1.63	1.53
32	S1	1654	C	C2'-C1'	-9.48	1.43	1.53
33	L1	793	C	C2'-C1'	-9.48	1.43	1.53
33	L1	1344	A	C5'-C4'	9.48	1.62	1.51
64	LG	51	TYR	C-O	-9.48	1.05	1.23
33	L1	2003	C	O4'-C1'	9.48	1.53	1.41
32	S1	181	C	C2'-C1'	-9.47	1.43	1.53
32	S1	440	A	O4'-C1'	9.47	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	SC	171	PRO	CG-CD	9.47	1.81	1.50
32	S1	272	G	C2'-C1'	-9.47	1.43	1.53
33	L1	2033	C	C2'-C1'	-9.47	1.43	1.53
32	S1	641	C	O4'-C1'	9.46	1.53	1.41
32	S1	1565	U	O4'-C1'	9.46	1.53	1.41
33	L1	2668	U	C4'-O4'	9.46	1.57	1.45
31	S2	74	C	O3'-P	-9.46	1.49	1.61
33	L1	3054	G	C5'-C4'	9.46	1.62	1.51
33	L1	1224	A	P-O5'	-9.45	1.50	1.59
33	L1	2424	G	O4'-C1'	9.45	1.53	1.41
32	S1	97	G	C2'-C1'	-9.45	1.43	1.53
32	S1	948	C	O4'-C1'	9.45	1.53	1.41
32	S1	1145	G	O4'-C1'	9.45	1.53	1.41
66	LN	64	ARG	CZ-NH1	9.45	1.45	1.33
32	S1	1381	G	C2'-C1'	-9.44	1.43	1.53
33	L1	183	C	C2'-C1'	-9.44	1.43	1.53
32	S1	1633	C	C2'-C1'	-9.44	1.43	1.53
33	L1	1701	G	O4'-C1'	-9.44	1.29	1.41
33	L1	3168	C	C2'-C1'	9.44	1.63	1.53
33	L1	3174	C	C5'-C4'	9.44	1.62	1.51
64	LG	52	PRO	N-CA	9.43	1.63	1.47
32	S1	1088	G	C2'-C1'	-9.42	1.43	1.53
33	L1	1661	G	C2'-C1'	-9.42	1.43	1.53
35	L2	70	G	C2'-C1'	-9.42	1.43	1.53
33	L1	2574	A	O4'-C1'	9.42	1.53	1.41
32	S1	1271	G	C2'-C1'	-9.42	1.43	1.53
33	L1	1984	C	O4'-C1'	9.42	1.53	1.41
32	S1	273	C	C2'-C1'	-9.42	1.43	1.53
33	L1	1808	G	P-O5'	-9.42	1.50	1.59
33	L1	3100	C	C5'-C4'	9.41	1.62	1.51
80	LC	295	SER	CA-CB	9.41	1.67	1.52
33	L1	96	C	O4'-C1'	9.41	1.53	1.41
33	L1	312	U	C2'-C1'	-9.41	1.43	1.53
33	L1	2359	C	O4'-C1'	9.41	1.53	1.41
32	S1	404	A	C2'-C1'	9.41	1.63	1.53
32	S1	320	A	C5'-C4'	9.41	1.62	1.51
33	L1	2061	C	O4'-C1'	9.41	1.53	1.41
33	L1	2718	A	C2'-C1'	9.41	1.63	1.53
33	L1	88	A	O3'-P	-9.40	1.49	1.61
33	L1	561	G	C2'-C1'	-9.40	1.43	1.53
33	L1	1618	U	O4'-C1'	9.40	1.53	1.41
33	L1	3282	G	C2'-C1'	-9.40	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1699	C	O4'-C1'	9.40	1.53	1.41
33	L1	108	A	C4'-C3'	9.40	1.63	1.53
33	L1	1119	G	C2'-C1'	-9.40	1.43	1.53
33	L1	1703	C	C2'-C1'	-9.40	1.43	1.53
33	L1	3290	C	O4'-C1'	9.40	1.53	1.41
33	L1	2773	G	C4'-C3'	-9.40	1.42	1.53
32	S1	1348	A	C2'-C1'	9.39	1.63	1.53
33	L1	2743	A	O4'-C1'	-9.39	1.29	1.41
32	S1	371	A	C2'-C1'	9.39	1.63	1.53
32	S1	368	A	C2'-C1'	-9.38	1.43	1.53
33	L1	600	G	C5'-C4'	9.38	1.62	1.51
33	L1	1488	G	O4'-C1'	9.38	1.53	1.41
34	L3	5	G	C2'-C1'	-9.38	1.43	1.53
32	S1	442	A	O4'-C1'	9.37	1.53	1.41
33	L1	1632	G	O3'-P	-9.37	1.50	1.61
33	L1	1696	G	O4'-C1'	9.37	1.53	1.41
33	L1	2374	G	O4'-C1'	-9.37	1.29	1.41
33	L1	3241	C	O4'-C1'	9.36	1.53	1.41
33	L1	685	G	C2'-C1'	-9.36	1.43	1.53
82	LK	134	LEU	N-CA	9.36	1.65	1.46
32	S1	452	C	C2'-C1'	-9.36	1.43	1.53
33	L1	1062	G	C2'-C1'	-9.36	1.43	1.53
32	S1	1425	G	C2'-C1'	-9.35	1.43	1.53
72	Lk	95	SER	CA-CB	9.35	1.67	1.52
33	L1	725	G	C2'-C1'	-9.35	1.43	1.53
33	L1	1387	G	O3'-P	9.35	1.72	1.61
33	L1	1812	A	C5'-C4'	9.35	1.62	1.51
35	L2	140	G	C2'-C1'	-9.35	1.43	1.53
33	L1	2202	A	O4'-C1'	9.34	1.53	1.41
32	S1	1319	U	C4'-C3'	9.34	1.63	1.53
33	L1	2477	G	O4'-C1'	-9.34	1.29	1.41
33	L1	1539	G	O4'-C1'	-9.34	1.29	1.41
33	L1	2705	A	C2'-C1'	-9.34	1.43	1.53
33	L1	900	C	C2'-C1'	-9.33	1.43	1.53
32	S1	313	C	P-O5'	-9.33	1.50	1.59
32	S1	1667	A	C2'-C1'	-9.33	1.43	1.53
33	L1	3311	C	O4'-C1'	9.33	1.53	1.41
33	L1	1968	C	O4'-C1'	9.33	1.53	1.41
32	S1	315	U	C5'-C4'	9.32	1.62	1.51
32	S1	1239	C	O4'-C1'	-9.32	1.29	1.41
32	S1	1705	C	P-O5'	-9.32	1.50	1.59
30	S3	18	C	O4'-C1'	9.32	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1060	U	O3'-P	-9.32	1.50	1.61
33	L1	2800	C	O4'-C1'	9.32	1.53	1.41
32	S1	946	A	C2'-C1'	-9.31	1.43	1.53
33	L1	1561	U	C5'-C4'	9.31	1.62	1.51
33	L1	2359	C	C2'-C1'	-9.31	1.43	1.53
47	LU	140	MET	C-O	-9.31	1.05	1.23
33	L1	1964	G	C2'-C1'	-9.31	1.43	1.53
23	SU	80	LEU	N-CA	9.30	1.65	1.46
32	S1	1124	G	C2'-C1'	-9.30	1.43	1.53
23	SU	35	PRO	N-CA	9.30	1.63	1.47
13	SQ	26	LEU	C-O	-9.30	1.05	1.23
35	L2	129	C	C2'-C1'	-9.30	1.43	1.53
33	L1	2632	U	O4'-C1'	-9.29	1.29	1.41
32	S1	279	C	O4'-C1'	9.29	1.53	1.41
33	L1	1121	C	O4'-C1'	9.29	1.53	1.41
32	S1	35	U	O4'-C1'	9.29	1.53	1.41
35	L2	92	A	C2'-C1'	-9.29	1.43	1.53
32	S1	767	G	O3'-P	-9.28	1.50	1.61
32	S1	662	C	O4'-C1'	9.28	1.53	1.41
32	S1	1022	U	C5'-C4'	9.28	1.62	1.51
35	L2	86	C	C2'-C1'	-9.28	1.43	1.53
32	S1	1607	C	O3'-P	-9.28	1.50	1.61
33	L1	2849	A	O4'-C1'	9.28	1.53	1.41
33	L1	2518	A	C4'-O4'	9.27	1.57	1.45
33	L1	1059	A	O4'-C1'	9.27	1.53	1.41
33	L1	737	C	O4'-C1'	9.27	1.53	1.41
33	L1	2005	C	O4'-C1'	9.27	1.53	1.41
33	L1	2891	C	O4'-C1'	9.27	1.53	1.41
35	L2	15	C	O4'-C1'	9.27	1.53	1.41
33	L1	1160	G	C2'-C1'	-9.26	1.43	1.53
33	L1	2749	A	O3'-P	-9.26	1.50	1.61
33	L1	706	U	C2'-C1'	-9.26	1.43	1.53
33	L1	477	C	O4'-C1'	9.25	1.53	1.41
33	L1	741	G	O4'-C1'	9.25	1.53	1.41
31	S2	66	C	O4'-C1'	9.25	1.53	1.41
32	S1	422	G	P-O5'	-9.25	1.50	1.59
32	S1	1179	C	O4'-C1'	9.25	1.53	1.41
32	S1	801	U	C4'-C3'	-9.25	1.43	1.53
33	L1	1274	A	C5'-C4'	9.25	1.62	1.51
33	L1	1912	U	C4'-O4'	9.25	1.57	1.45
33	L1	3353	G	O4'-C1'	9.24	1.53	1.41
34	L3	77	A	O4'-C1'	9.24	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	766	A	C4'-C3'	-9.24	1.43	1.53
33	L1	1066	G	C2'-C1'	-9.24	1.43	1.53
33	L1	904	G	O3'-P	-9.23	1.50	1.61
33	L1	2023	C	O4'-C1'	9.23	1.53	1.41
32	S1	1004	U	O4'-C1'	9.23	1.53	1.41
31	S2	12	U	C3'-O3'	9.23	1.55	1.42
33	L1	1797	U	P-O5'	-9.23	1.50	1.59
32	S1	610	A	C2'-C1'	-9.23	1.43	1.53
25	SC	162	LEU	CA-CB	-9.22	1.32	1.53
33	L1	2028	C	C2'-C1'	-9.22	1.43	1.53
33	L1	651	A	C2'-C1'	-9.22	1.43	1.53
33	L1	652	C	O4'-C1'	9.22	1.53	1.41
32	S1	789	C	P-O5'	9.22	1.69	1.59
33	L1	1061	A	C2'-C1'	-9.22	1.43	1.53
33	L1	1081	U	C4'-O4'	9.22	1.57	1.45
32	S1	1178	C	O4'-C1'	9.22	1.53	1.41
33	L1	2651	G	O4'-C1'	-9.22	1.29	1.41
71	Lj	25	SER	N-CA	9.22	1.64	1.46
32	S1	1281	G	C5'-C4'	9.22	1.62	1.51
33	L1	1553	C	C2'-C1'	-9.21	1.43	1.53
32	S1	53	G	O4'-C1'	9.21	1.53	1.41
32	S1	1687	G	O4'-C1'	9.21	1.53	1.41
33	L1	410	G	O4'-C1'	9.21	1.53	1.41
33	L1	439	A	P-O5'	-9.21	1.50	1.59
33	L1	2347	A	C2'-C1'	-9.21	1.43	1.53
33	L1	692	U	C2'-C1'	-9.21	1.43	1.53
32	S1	1232	G	O4'-C1'	9.21	1.53	1.41
33	L1	957	U	O4'-C1'	9.21	1.53	1.41
32	S1	1191	U	C2'-C1'	9.20	1.63	1.53
33	L1	25	U	P-O5'	-9.21	1.50	1.59
33	L1	2665	A	O4'-C1'	9.20	1.53	1.41
33	L1	1272	G	P-O5'	9.20	1.69	1.59
33	L1	856	G	C2'-C1'	-9.20	1.43	1.53
33	L1	3364	A	C2'-C1'	-9.20	1.43	1.53
32	S1	789	C	C4'-C3'	9.20	1.63	1.53
32	S1	1504	U	C2'-C1'	9.20	1.63	1.53
33	L1	365	A	C2'-C1'	9.20	1.63	1.53
33	L1	1271	U	C4'-O4'	9.20	1.57	1.45
33	L1	367	A	C5'-C4'	9.20	1.62	1.51
33	L1	36	U	C2'-C1'	-9.19	1.43	1.53
33	L1	2639	A	C2'-C1'	-9.19	1.43	1.53
32	S1	1074	C	O4'-C1'	9.19	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1648	C	C3'-C2'	9.19	1.63	1.52
33	L1	580	C	C4'-C3'	-9.19	1.43	1.53
32	S1	1162	A	O4'-C1'	-9.18	1.29	1.41
33	L1	1247	G	O4'-C1'	9.18	1.53	1.41
33	L1	2453	G	O4'-C1'	9.18	1.53	1.41
33	L1	1868	C	C2'-C1'	-9.18	1.43	1.53
32	S1	1157	A	P-O5'	-9.17	1.50	1.59
25	SC	163	THR	CA-CB	9.17	1.77	1.53
33	L1	409	U	P-O5'	-9.17	1.50	1.59
64	LG	186	ALA	CA-CB	9.17	1.71	1.52
32	S1	776	A	C4'-C3'	-9.17	1.43	1.53
33	L1	666	U	O4'-C1'	9.17	1.53	1.41
33	L1	2734	C	C2'-C1'	-9.17	1.43	1.53
33	L1	516	C	O4'-C1'	9.17	1.53	1.41
33	L1	429	G	O4'-C1'	-9.17	1.29	1.41
32	S1	54	C	C2'-C1'	9.16	1.63	1.53
33	L1	1113	C	C2'-C1'	-9.16	1.43	1.53
32	S1	665	C	O4'-C1'	9.16	1.53	1.41
33	L1	2990	C	O4'-C1'	9.16	1.53	1.41
31	S2	18	G	C5'-C4'	9.16	1.62	1.51
33	L1	733	C	O4'-C1'	9.16	1.53	1.41
33	L1	2617	G	O4'-C1'	9.16	1.53	1.41
33	L1	923	A	C2'-C1'	9.16	1.63	1.53
33	L1	1942	A	O4'-C1'	-9.16	1.29	1.41
33	L1	2795	G	C4'-C3'	9.16	1.63	1.53
32	S1	673	C	C2'-C1'	-9.15	1.43	1.53
33	L1	2162	C	O4'-C1'	9.15	1.53	1.41
32	S1	1349	A	O4'-C1'	9.15	1.53	1.41
33	L1	879	A	O3'-P	-9.15	1.50	1.61
73	Lp	52	LYS	N-CA	9.15	1.64	1.46
33	L1	1706	C	O4'-C1'	9.14	1.53	1.41
32	S1	10	G	P-O5'	-9.14	1.50	1.59
33	L1	2334	G	O4'-C1'	-9.14	1.29	1.41
33	L1	630	C	C5'-C4'	9.14	1.62	1.51
33	L1	1855	A	C2'-C1'	9.14	1.63	1.53
32	S1	1311	U	C2'-C1'	-9.13	1.43	1.53
33	L1	1962	C	C2'-C1'	-9.13	1.43	1.53
33	L1	483	U	C2'-C1'	-9.13	1.43	1.53
33	L1	972	C	P-O5'	-9.13	1.50	1.59
33	L1	2225	C	C2'-C1'	-9.13	1.43	1.53
33	L1	3362	A	C2'-C1'	9.12	1.63	1.53
34	L3	54	A	O3'-P	-9.12	1.50	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	876	C	O4'-C1'	9.12	1.53	1.41
33	L1	2805	A	O4'-C1'	-9.12	1.29	1.41
48	LV	166	ILE	C-O	-9.12	1.06	1.23
32	S1	93	A	O4'-C1'	-9.12	1.29	1.41
33	L1	2091	U	C2'-C1'	9.12	1.63	1.53
32	S1	1262	U	O4'-C1'	9.11	1.53	1.41
33	L1	3019	C	O4'-C1'	9.11	1.53	1.41
31	S2	52	G	C2'-C1'	-9.11	1.43	1.53
32	S1	500	G	C2'-C1'	-9.11	1.43	1.53
32	S1	1225	A	C4'-C3'	-9.11	1.43	1.53
32	S1	1764	G	O4'-C1'	9.11	1.53	1.41
32	S1	1755	G	C2'-C1'	-9.11	1.43	1.53
33	L1	799	U	O4'-C1'	9.10	1.53	1.41
33	L1	1116	G	O4'-C1'	-9.10	1.29	1.41
35	L2	42	U	C2'-C1'	-9.10	1.43	1.53
32	S1	998	A	C2'-C1'	-9.10	1.43	1.53
32	S1	474	A	O4'-C1'	9.10	1.53	1.41
32	S1	1594	A	O4'-C1'	9.10	1.53	1.41
33	L1	551	A	O4'-C1'	9.10	1.53	1.41
32	S1	1437	C	C2'-C1'	9.10	1.63	1.53
33	L1	615	A	O4'-C1'	9.10	1.53	1.41
33	L1	2719	U	O3'-P	-9.10	1.50	1.61
35	L2	123	C	C2'-C1'	-9.10	1.43	1.53
32	S1	352	U	O4'-C1'	9.10	1.53	1.41
32	S1	1605	A	O4'-C1'	9.10	1.53	1.41
32	S1	955	C	O4'-C1'	9.09	1.53	1.41
33	L1	2176	A	C2'-C1'	9.09	1.63	1.53
33	L1	3233	C	O4'-C1'	9.09	1.53	1.41
34	L3	25	G	O4'-C1'	-9.09	1.29	1.41
32	S1	295	C	C2'-C1'	-9.09	1.43	1.53
33	L1	2049	C	C2'-C1'	-9.09	1.43	1.53
33	L1	730	A	O4'-C1'	9.09	1.53	1.41
32	S1	1115	G	C2'-C1'	-9.09	1.43	1.53
33	L1	2036	C	C2'-C1'	-9.09	1.43	1.53
33	L1	338	C	O3'-P	-9.08	1.50	1.61
32	S1	1057	U	C2'-C1'	9.08	1.63	1.53
33	L1	2228	A	O4'-C1'	-9.08	1.29	1.41
35	L2	128	C	C2'-C1'	-9.08	1.43	1.53
33	L1	1083	C	C4'-C3'	9.08	1.63	1.53
33	L1	1996	C	C2'-C1'	-9.08	1.43	1.53
33	L1	2435	U	O4'-C1'	9.08	1.53	1.41
33	L1	1871	G	C2'-C1'	-9.07	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1427	A	C2'-C1'	-9.07	1.43	1.53
15	SS	5	THR	C-N	-9.07	1.13	1.34
32	S1	1587	G	O4'-C1'	9.07	1.53	1.41
33	L1	476	C	O4'-C1'	9.07	1.53	1.41
33	L1	1627	U	C2'-C1'	9.07	1.63	1.53
33	L1	1746	G	O4'-C1'	-9.07	1.29	1.41
32	S1	161	G	O4'-C1'	9.07	1.53	1.41
32	S1	624	A	C2'-C1'	9.07	1.63	1.53
34	L3	100	A	O4'-C1'	9.07	1.53	1.41
35	L2	55	G	C2'-C1'	9.07	1.63	1.53
33	L1	311	G	P-O5'	-9.06	1.50	1.59
33	L1	748	C	C2'-C1'	-9.06	1.43	1.53
33	L1	2572	U	O4'-C1'	-9.06	1.29	1.41
33	L1	3246	U	C2'-C1'	-9.06	1.43	1.53
32	S1	273	C	O4'-C1'	9.06	1.53	1.41
35	L2	65	A	C5'-C4'	9.06	1.62	1.51
33	L1	398	G	C4'-C3'	9.06	1.63	1.53
33	L1	1256	A	O3'-P	-9.06	1.50	1.61
32	S1	1701	G	C5'-C4'	9.06	1.62	1.51
33	L1	1709	U	O4'-C1'	9.05	1.53	1.41
32	S1	1652	C	O4'-C1'	9.05	1.53	1.41
32	S1	1314	U	C2'-C1'	9.05	1.63	1.53
33	L1	1670	G	O4'-C1'	-9.05	1.29	1.41
33	L1	1800	G	C4'-C3'	9.05	1.63	1.53
33	L1	2343	U	C2'-C1'	-9.05	1.43	1.53
33	L1	2703	G	P-O5'	-9.05	1.50	1.59
33	L1	3380	G	C2'-C1'	-9.05	1.43	1.53
32	S1	1476	C	C2'-C1'	-9.05	1.43	1.53
32	S1	1560	U	C2'-C1'	-9.05	1.43	1.53
33	L1	417	G	O4'-C1'	-9.05	1.29	1.41
33	L1	916	A	C2'-C1'	9.05	1.63	1.53
33	L1	1113	C	O4'-C1'	9.05	1.53	1.41
33	L1	841	G	C3'-C2'	9.05	1.62	1.52
33	L1	1507	A	O4'-C1'	-9.05	1.29	1.41
33	L1	245	C	C2'-C1'	-9.05	1.43	1.53
33	L1	1243	C	O4'-C1'	9.05	1.53	1.41
32	S1	1662	G	O4'-C1'	9.04	1.53	1.41
33	L1	2649	C	C3'-O3'	9.04	1.54	1.42
32	S1	935	A	C3'-C2'	9.04	1.62	1.52
33	L1	163	U	C2'-C1'	9.04	1.63	1.53
33	L1	925	U	C2'-C1'	9.04	1.63	1.53
33	L1	930	C	C2'-C1'	-9.04	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2492	C	C5'-C4'	9.04	1.62	1.51
33	L1	2727	U	O4'-C1'	9.04	1.53	1.41
32	S1	1056	A	C2'-C1'	-9.04	1.43	1.53
33	L1	1565	G	C2'-C1'	-9.04	1.43	1.53
33	L1	2025	C	C2'-C1'	-9.04	1.43	1.53
33	L1	2798	G	C4'-C3'	9.04	1.63	1.53
33	L1	3027	G	C2'-C1'	9.04	1.63	1.53
33	L1	1941	G	C2'-C1'	-9.03	1.43	1.53
33	L1	2009	C	C2'-C1'	-9.03	1.43	1.53
33	L1	2024	G	C2'-C1'	-9.03	1.43	1.53
33	L1	3109	G	O4'-C1'	-9.03	1.29	1.41
33	L1	2502	U	O4'-C1'	9.03	1.53	1.41
32	S1	355	U	C4'-O4'	9.02	1.57	1.45
33	L1	86	U	P-O5'	-9.02	1.50	1.59
35	L2	130	A	C2'-C1'	9.02	1.63	1.53
32	S1	16	G	O4'-C1'	9.02	1.53	1.41
33	L1	296	C	C2'-C1'	-9.02	1.43	1.53
33	L1	2438	A	O4'-C1'	9.02	1.53	1.41
32	S1	327	A	C2'-C1'	9.01	1.63	1.53
33	L1	1849	U	O4'-C1'	-9.01	1.29	1.41
33	L1	581	G	O4'-C1'	9.01	1.53	1.41
33	L1	3159	C	O4'-C1'	9.01	1.53	1.41
45	LQ	137	ASP	C-O	-9.01	1.06	1.23
33	L1	957	U	C2'-C1'	-9.01	1.43	1.53
33	L1	1003	G	O4'-C1'	9.01	1.53	1.41
32	S1	1274	G	O4'-C1'	9.00	1.53	1.41
35	L2	137	C	O4'-C1'	9.00	1.53	1.41
33	L1	209	G	P-O5'	-9.00	1.50	1.59
33	L1	874	U	C4'-O4'	9.00	1.57	1.45
4	SD	67	GLN	C-N	8.99	1.54	1.34
32	S1	494	G	O4'-C1'	8.99	1.53	1.41
32	S1	572	G	O4'-C1'	-8.99	1.29	1.41
33	L1	1982	G	C2'-C1'	-8.99	1.43	1.53
32	S1	800	U	O3'-P	8.99	1.72	1.61
33	L1	2800	C	O3'-P	-8.99	1.50	1.61
33	L1	1851	U	O4'-C1'	-8.99	1.29	1.41
33	L1	1923	G	C3'-C2'	8.99	1.62	1.52
33	L1	977	G	C2'-C1'	-8.98	1.43	1.53
33	L1	1581	C	O4'-C1'	8.98	1.53	1.41
33	L1	2508	U	O4'-C1'	-8.98	1.29	1.41
33	L1	240	U	C2'-C1'	-8.98	1.43	1.53
33	L1	2999	G	C2'-C1'	-8.98	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3361	G	C2'-C1'	-8.98	1.43	1.53
34	L3	72	G	P-O5'	-8.98	1.50	1.59
35	L2	103	C	O4'-C1'	8.98	1.53	1.41
77	Lc	98	PRO	C-O	-8.98	1.05	1.23
32	S1	1401	C	O4'-C1'	8.98	1.53	1.41
35	L2	26	U	O3'-P	-8.98	1.50	1.61
32	S1	1119	G	O4'-C1'	-8.97	1.29	1.41
33	L1	2670	A	C2'-C1'	-8.97	1.43	1.53
33	L1	1983	U	O4'-C1'	8.97	1.53	1.41
33	L1	3050	A	C2'-C1'	8.97	1.63	1.53
32	S1	960	A	C2'-C1'	8.97	1.63	1.53
33	L1	723	G	C2'-C1'	8.97	1.63	1.53
35	L2	73	U	O3'-P	-8.97	1.50	1.61
32	S1	884	G	O4'-C1'	-8.96	1.29	1.41
33	L1	2693	G	C2'-C1'	-8.96	1.43	1.53
31	S2	30	G	C2'-C1'	-8.96	1.43	1.53
33	L1	2115	G	O4'-C1'	-8.96	1.29	1.41
33	L1	2262	C	C2'-C1'	-8.96	1.43	1.53
33	L1	3163	G	C2'-C1'	-8.96	1.43	1.53
32	S1	1397	A	C2'-C1'	8.96	1.63	1.53
33	L1	1653	A	C2'-C1'	-8.95	1.43	1.53
33	L1	38	A	C2'-C1'	8.95	1.63	1.53
33	L1	2749	A	P-O5'	-8.95	1.50	1.59
13	SQ	73	LEU	C-O	-8.95	1.06	1.23
32	S1	645	G	O4'-C1'	8.95	1.53	1.41
33	L1	435	G	C2'-C1'	-8.95	1.43	1.53
33	L1	2718	A	O3'-P	-8.95	1.50	1.61
64	LG	52	PRO	CA-C	8.95	1.70	1.52
35	L2	152	C	C2'-C1'	-8.95	1.43	1.53
32	S1	1040	G	O3'-P	-8.94	1.50	1.61
33	L1	2337	C	C4'-C3'	8.94	1.62	1.53
33	L1	1115	A	O4'-C1'	8.94	1.53	1.41
33	L1	1740	U	O4'-C1'	8.94	1.53	1.41
33	L1	2262	C	C4'-O4'	8.94	1.57	1.45
33	L1	2832	G	C2'-C1'	-8.94	1.43	1.53
33	L1	560	C	C2'-C1'	8.93	1.63	1.53
33	L1	2933	C	C2'-C1'	8.93	1.63	1.53
34	L3	72	G	O4'-C1'	8.93	1.53	1.41
33	L1	666	U	C2'-C1'	-8.92	1.43	1.53
33	L1	2660	A	C2'-C1'	8.92	1.63	1.53
33	L1	879	A	C4'-C3'	8.92	1.62	1.53
33	L1	1235	A	C4'-C3'	8.92	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	94	A	O4'-C1'	8.92	1.53	1.41
33	L1	1123	A	O4'-C1'	-8.92	1.30	1.41
33	L1	1789	C	C2'-C1'	-8.92	1.43	1.53
33	L1	2740	C	O4'-C1'	8.92	1.53	1.41
33	L1	3347	U	P-O5'	-8.92	1.50	1.59
32	S1	979	A	O4'-C1'	8.91	1.53	1.41
32	S1	1079	G	O4'-C1'	8.91	1.53	1.41
33	L1	1595	G	O4'-C1'	8.91	1.53	1.41
33	L1	724	A	O4'-C1'	8.91	1.53	1.41
32	S1	579	C	O4'-C1'	8.91	1.53	1.41
32	S1	355	U	O3'-P	-8.90	1.50	1.61
33	L1	882	U	C2'-C1'	-8.90	1.43	1.53
33	L1	1165	C	C2'-C1'	-8.90	1.43	1.53
33	L1	1674	A	O4'-C1'	8.90	1.53	1.41
33	L1	2821	U	C2'-C1'	-8.90	1.43	1.53
33	L1	2099	G	P-O5'	-8.89	1.50	1.59
33	L1	1915	G	C2'-C1'	-8.89	1.43	1.53
33	L1	764	A	O4'-C1'	8.89	1.53	1.41
33	L1	251	G	P-O5'	8.89	1.68	1.59
33	L1	638	G	O3'-P	-8.88	1.50	1.61
33	L1	858	U	O3'-P	-8.88	1.50	1.61
33	L1	2095	C	C2'-C1'	-8.88	1.43	1.53
33	L1	2131	U	C3'-C2'	-8.89	1.43	1.52
32	S1	410	U	C2'-C1'	-8.88	1.43	1.53
33	L1	2007	C	O4'-C1'	8.88	1.53	1.41
33	L1	2169	U	C2'-C1'	-8.88	1.43	1.53
33	L1	2082	A	C5'-C4'	8.88	1.61	1.51
33	L1	2230	C	O4'-C1'	8.88	1.53	1.41
33	L1	2832	G	O4'-C1'	8.87	1.53	1.41
32	S1	487	A	C2'-C1'	-8.87	1.43	1.53
32	S1	1473	C	P-O5'	-8.87	1.50	1.59
33	L1	1608	C	C2'-C1'	-8.87	1.43	1.53
33	L1	1685	U	C2'-C1'	-8.87	1.43	1.53
33	L1	2435	U	C2'-C1'	-8.87	1.43	1.53
35	L2	75	A	O3'-P	-8.87	1.50	1.61
32	S1	848	C	O4'-C1'	8.87	1.53	1.41
33	L1	2493	C	C5'-C4'	8.87	1.61	1.51
33	L1	1249	A	O4'-C1'	8.86	1.53	1.41
32	S1	990	G	C2'-C1'	-8.86	1.43	1.53
33	L1	857	G	C2'-C1'	-8.86	1.43	1.53
33	L1	2499	U	O3'-P	-8.86	1.50	1.61
35	L2	111	G	C2'-C1'	-8.86	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	S2	22	G	O4'-C1'	8.86	1.53	1.41
33	L1	454	A	C2'-C1'	-8.86	1.43	1.53
33	L1	2483	A	C2'-C1'	8.86	1.63	1.53
33	L1	2754	G	P-O5'	-8.86	1.50	1.59
33	L1	337	C	P-O5'	-8.86	1.50	1.59
32	S1	794	G	C4'-C3'	8.85	1.62	1.53
33	L1	918	A	O3'-P	-8.85	1.50	1.61
32	S1	378	U	C2'-C1'	-8.84	1.43	1.53
32	S1	1725	C	C2'-C1'	-8.84	1.43	1.53
32	S1	1327	C	C2'-C1'	-8.84	1.43	1.53
33	L1	1514	U	O4'-C1'	8.84	1.53	1.41
33	L1	1036	C	O4'-C1'	8.84	1.53	1.41
33	L1	1042	C	O4'-C1'	8.84	1.53	1.41
33	L1	1248	A	O4'-C1'	-8.84	1.30	1.41
33	L1	2505	C	C2'-C1'	-8.84	1.43	1.53
32	S1	161	G	C2'-C1'	8.84	1.63	1.53
32	S1	1015	C	P-O5'	8.84	1.68	1.59
33	L1	1281	C	P-O5'	-8.84	1.50	1.59
33	L1	2158	C	C2'-C1'	-8.83	1.43	1.53
33	L1	2224	A	C2'-C1'	8.83	1.63	1.53
32	S1	1468	G	C2'-C1'	8.83	1.63	1.53
33	L1	1850	C	C2'-C1'	8.83	1.63	1.53
32	S1	1154	G	C2'-C1'	-8.83	1.43	1.53
32	S1	1664	U	P-O5'	-8.83	1.50	1.59
33	L1	103	G	C2'-C1'	-8.83	1.43	1.53
33	L1	145	U	P-O5'	-8.83	1.50	1.59
33	L1	1027	C	P-O5'	8.83	1.68	1.59
33	L1	1779	C	O4'-C1'	8.83	1.53	1.41
33	L1	2356	A	O4'-C1'	8.83	1.53	1.41
32	S1	1210	U	O4'-C1'	8.82	1.53	1.41
33	L1	532	G	O4'-C1'	8.82	1.53	1.41
33	L1	2716	U	C3'-C2'	8.82	1.62	1.52
45	LQ	249	ALA	N-CA	8.82	1.64	1.46
33	L1	318	G	O3'-P	-8.82	1.50	1.61
32	S1	674	G	C2'-C1'	-8.81	1.43	1.53
32	S1	1055	G	O4'-C1'	8.81	1.53	1.41
32	S1	1288	C	O4'-C1'	8.81	1.53	1.41
33	L1	892	U	C2'-C1'	-8.81	1.43	1.53
32	S1	471	G	C2'-C1'	8.81	1.63	1.53
32	S1	1053	C	C2'-C1'	-8.81	1.43	1.53
33	L1	304	A	O4'-C1'	-8.81	1.30	1.41
10	SL	84	VAL	C-O	-8.81	1.06	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1163	C	C2'-C1'	8.81	1.63	1.53
33	L1	2481	C	O3'-P	-8.80	1.50	1.61
33	L1	1782	G	C2'-C1'	-8.80	1.43	1.53
32	S1	1373	C	C2'-C1'	-8.80	1.43	1.53
33	L1	3026	C	C4'-C3'	8.80	1.62	1.53
32	S1	784	C	P-O5'	-8.79	1.50	1.59
33	L1	2692	G	C5'-C4'	8.79	1.61	1.51
33	L1	2108	C	C2'-C1'	8.79	1.63	1.53
33	L1	3389	C	O4'-C1'	8.79	1.53	1.41
32	S1	435	C	O4'-C1'	8.79	1.53	1.41
33	L1	493	G	O4'-C1'	8.79	1.53	1.41
33	L1	329	G	O4'-C1'	-8.79	1.30	1.41
33	L1	2803	A	C2'-C1'	-8.79	1.43	1.53
32	S1	1588	C	C2'-C1'	-8.79	1.43	1.53
32	S1	384	U	O4'-C1'	8.78	1.53	1.41
33	L1	1128	U	O4'-C1'	8.79	1.53	1.41
33	L1	1276	C	O4'-C1'	8.79	1.53	1.41
33	L1	3086	G	C5'-C4'	8.79	1.61	1.51
32	S1	1250	C	O4'-C1'	8.78	1.53	1.41
33	L1	2235	G	C5'-C4'	8.78	1.61	1.51
33	L1	1243	C	C5'-C4'	8.78	1.61	1.51
32	S1	315	U	C2'-C1'	-8.78	1.43	1.53
32	S1	477	A	C2'-C1'	-8.78	1.43	1.53
33	L1	2824	U	C2'-C1'	8.78	1.63	1.53
64	LG	49	LYS	C-N	8.78	1.54	1.34
33	L1	1407	G	O4'-C1'	-8.77	1.30	1.41
33	L1	2502	U	C2'-C1'	8.77	1.63	1.53
33	L1	2564	G	C2'-C1'	-8.77	1.43	1.53
11	SM	89	ASP	C-O	-8.77	1.06	1.23
33	L1	2838	C	O4'-C1'	8.77	1.53	1.41
32	S1	903	A	C5'-C4'	8.77	1.61	1.51
33	L1	1009	G	O4'-C1'	-8.77	1.30	1.41
33	L1	1510	G	O4'-C1'	-8.77	1.30	1.41
33	L1	2875	U	O3'-P	8.77	1.71	1.61
32	S1	287	C	O4'-C1'	8.76	1.53	1.41
32	S1	1007	G	O4'-C1'	8.76	1.53	1.41
33	L1	2716	U	C2'-C1'	-8.76	1.43	1.53
33	L1	3168	C	O4'-C1'	8.76	1.53	1.41
33	L1	123	U	C5'-C4'	8.76	1.61	1.51
4	SD	239	PRO	C-O	-8.75	1.05	1.23
42	LP	185	ARG	CZ-NH2	8.75	1.44	1.33
33	L1	3057	A	C3'-C2'	8.75	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	100	C	O4'-C1'	8.75	1.53	1.41
33	L1	2688	G	C3'-O3'	8.75	1.54	1.42
33	L1	3314	G	O4'-C1'	8.75	1.53	1.41
32	S1	1300	A	C5'-C4'	8.74	1.61	1.51
33	L1	1994	C	C2'-C1'	-8.74	1.43	1.53
32	S1	446	C	O4'-C1'	8.73	1.53	1.41
32	S1	140	C	O4'-C1'	8.73	1.53	1.41
33	L1	1168	G	C2'-C1'	8.73	1.62	1.53
35	L2	110	C	O4'-C1'	8.73	1.53	1.41
33	L1	3333	C	C3'-C2'	8.73	1.62	1.52
32	S1	1209	C	C2'-C1'	-8.73	1.43	1.53
33	L1	1512	A	C2'-C1'	8.73	1.62	1.53
35	L2	101	G	O4'-C1'	8.73	1.52	1.41
33	L1	2168	C	O3'-P	-8.72	1.50	1.61
33	L1	2442	A	O4'-C1'	8.72	1.52	1.41
35	L2	19	G	O4'-C1'	8.72	1.52	1.41
32	S1	428	C	C2'-C1'	-8.72	1.43	1.53
33	L1	969	U	C2'-C1'	8.72	1.62	1.53
33	L1	3087	A	O4'-C1'	8.72	1.52	1.41
33	L1	705	A	O4'-C1'	8.72	1.52	1.41
33	L1	3288	A	C5'-C4'	8.72	1.61	1.51
33	L1	229	G	O4'-C1'	8.71	1.52	1.41
33	L1	805	C	C4'-C3'	-8.71	1.43	1.53
33	L1	3214	U	C2'-C1'	8.71	1.62	1.53
33	L1	276	U	O4'-C1'	8.71	1.52	1.41
33	L1	2175	A	C2'-C1'	-8.71	1.43	1.53
33	L1	2461	A	C5'-C4'	8.71	1.61	1.51
33	L1	1253	G	P-O5'	8.71	1.68	1.59
33	L1	1473	U	C2'-C1'	-8.70	1.43	1.53
33	L1	2681	A	C2'-C1'	-8.70	1.43	1.53
32	S1	910	A	O4'-C1'	8.70	1.52	1.41
33	L1	1580	C	O4'-C1'	8.70	1.52	1.41
33	L1	467	C	C2'-C1'	-8.70	1.43	1.53
33	L1	743	C	C2'-C1'	-8.70	1.43	1.53
32	S1	1208	A	C2'-C1'	-8.70	1.43	1.53
33	L1	520	G	C4'-C3'	8.70	1.62	1.53
33	L1	2843	G	P-O5'	-8.69	1.51	1.59
33	L1	1867	U	C2'-C1'	-8.69	1.43	1.53
33	L1	2149	G	C2'-C1'	-8.69	1.43	1.53
33	L1	3055	U	C2'-C1'	8.69	1.62	1.53
33	L1	2576	C	C2'-C1'	-8.69	1.43	1.53
33	L1	3184	G	C5'-C4'	8.69	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
40	LH	87	ASN	N-CA	-8.69	1.28	1.46
33	L1	1789	C	O3'-P	-8.69	1.50	1.61
33	L1	2685	C	O4'-C1'	8.68	1.52	1.41
33	L1	21	G	C2'-C1'	8.68	1.62	1.53
33	L1	1770	C	O4'-C1'	8.68	1.52	1.41
45	LQ	256	SER	CA-C	8.67	1.75	1.52
33	L1	1043	U	O4'-C1'	8.67	1.52	1.41
32	S1	17	C	C2'-C1'	-8.67	1.43	1.53
33	L1	2471	C	C2'-C1'	-8.67	1.43	1.53
33	L1	2495	C	C2'-C1'	-8.67	1.43	1.53
33	L1	2644	U	O4'-C1'	8.67	1.52	1.41
33	L1	2772	A	C2'-C1'	-8.67	1.43	1.53
33	L1	3082	G	O3'-P	-8.67	1.50	1.61
32	S1	556	G	C3'-C2'	-8.67	1.43	1.52
32	S1	1018	A	O4'-C1'	8.67	1.52	1.41
33	L1	3035	C	O3'-P	-8.66	1.50	1.61
32	S1	937	A	O4'-C1'	8.66	1.52	1.41
33	L1	398	G	C2'-C1'	-8.66	1.43	1.53
33	L1	1827	U	O4'-C1'	8.66	1.52	1.41
35	L2	105	U	C2'-C1'	-8.66	1.43	1.53
49	LX	34	LYS	N-CA	8.66	1.63	1.46
33	L1	2445	U	C2'-C1'	-8.66	1.43	1.53
33	L1	2231	G	P-O5'	8.66	1.68	1.59
33	L1	302	G	O3'-P	-8.65	1.50	1.61
32	S1	1677	U	P-O5'	-8.65	1.51	1.59
33	L1	138	G	O3'-P	-8.65	1.50	1.61
33	L1	277	U	C2'-C1'	-8.65	1.43	1.53
5	SE	194	LYS	N-CA	8.65	1.63	1.46
32	S1	736	U	C4'-C3'	8.65	1.62	1.53
33	L1	2589	G	O3'-P	-8.65	1.50	1.61
33	L1	384	A	C3'-O3'	8.65	1.54	1.42
33	L1	1869	U	C2'-C1'	-8.65	1.43	1.53
33	L1	2658	U	P-O5'	-8.65	1.51	1.59
33	L1	1312	A	C4'-C3'	8.65	1.62	1.53
33	L1	2617	G	C2'-C1'	-8.65	1.43	1.53
33	L1	2795	G	O3'-P	-8.65	1.50	1.61
33	L1	3006	G	O4'-C1'	-8.65	1.30	1.41
71	Lj	8	ARG	C-O	-8.65	1.06	1.23
31	S2	53	U	C4'-C3'	8.64	1.62	1.53
32	S1	509	A	C2'-C1'	-8.64	1.43	1.53
33	L1	1130	G	P-O5'	-8.64	1.51	1.59
33	L1	1746	G	C2'-C1'	-8.64	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1178	C	C2'-C1'	-8.64	1.43	1.53
33	L1	1277	A	O3'-P	-8.64	1.50	1.61
33	L1	2461	A	C4'-C3'	8.64	1.62	1.53
33	L1	2567	C	O3'-P	-8.64	1.50	1.61
32	S1	650	G	C2'-C1'	-8.64	1.43	1.53
33	L1	208	G	C4'-C3'	8.64	1.62	1.53
33	L1	1959	U	O4'-C1'	8.64	1.52	1.41
32	S1	585	U	C2'-C1'	8.63	1.62	1.53
32	S1	1518	C	C2'-C1'	-8.63	1.43	1.53
9	SK	123	MET	SD-CE	-8.63	1.29	1.77
32	S1	604	U	C2'-C1'	-8.63	1.43	1.53
33	L1	2973	A	C3'-C2'	8.63	1.62	1.52
33	L1	2724	A	C2'-C1'	-8.63	1.43	1.53
30	S3	15	A	C2'-C1'	8.63	1.62	1.53
33	L1	483	U	O4'-C1'	8.63	1.52	1.41
33	L1	818	G	C2'-C1'	-8.63	1.43	1.53
35	L2	67	C	C2'-C1'	-8.63	1.43	1.53
67	LS	28	ARG	CA-CB	8.63	1.73	1.53
32	S1	448	C	O4'-C1'	8.62	1.52	1.41
32	S1	1175	G	C2'-C1'	-8.62	1.43	1.53
33	L1	3358	A	P-O5'	-8.62	1.51	1.59
32	S1	1307	U	O3'-P	-8.62	1.50	1.61
33	L1	73	A	O4'-C1'	-8.62	1.30	1.41
33	L1	701	U	C2'-C1'	8.62	1.62	1.53
33	L1	1618	U	C2'-C1'	-8.62	1.43	1.53
33	L1	3092	A	C4'-O4'	8.62	1.56	1.45
33	L1	971	G	C4'-C3'	8.62	1.62	1.53
32	S1	1702	G	C5'-C4'	8.62	1.61	1.51
31	S2	57	A	O4'-C1'	8.62	1.52	1.41
33	L1	2504	A	O4'-C1'	8.62	1.52	1.41
32	S1	434	G	C2'-C1'	-8.61	1.43	1.53
32	S1	933	G	C4'-C3'	-8.61	1.43	1.53
32	S1	51	A	C2'-C1'	-8.61	1.43	1.53
32	S1	1167	C	C2'-C1'	-8.61	1.43	1.53
33	L1	2936	A	O4'-C1'	8.61	1.52	1.41
35	L2	160	C	C2'-C1'	-8.61	1.43	1.53
33	L1	1775	C	O4'-C1'	8.61	1.52	1.41
33	L1	2774	A	O4'-C1'	8.61	1.52	1.41
33	L1	211	A	P-O5'	-8.60	1.51	1.59
33	L1	249	A	C5'-C4'	8.60	1.61	1.51
32	S1	406	C	O4'-C1'	8.60	1.52	1.41
33	L1	549	G	O4'-C1'	8.60	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	695	G	O4'-C1'	-8.60	1.30	1.41
32	S1	978	A	C2'-C1'	8.59	1.62	1.53
32	S1	931	A	O4'-C1'	-8.59	1.30	1.41
33	L1	2995	G	C2'-C1'	8.59	1.62	1.53
33	L1	1393	G	C2'-C1'	-8.59	1.44	1.53
32	S1	419	C	C2'-C1'	8.58	1.62	1.53
32	S1	1292	G	C2'-C1'	-8.58	1.44	1.53
33	L1	1954	G	O4'-C1'	-8.58	1.30	1.41
33	L1	2628	C	C2'-C1'	-8.58	1.44	1.53
67	LS	70	ASN	C-O	-8.58	1.07	1.23
33	L1	2797	U	C2'-C1'	-8.58	1.44	1.53
32	S1	428	C	O4'-C1'	8.58	1.52	1.41
32	S1	500	G	O4'-C1'	8.58	1.52	1.41
33	L1	3387	U	C3'-C2'	8.58	1.62	1.52
35	L2	135	G	O4'-C1'	8.58	1.52	1.41
33	L1	891	U	O4'-C1'	-8.57	1.30	1.41
32	S1	949	A	O4'-C1'	-8.57	1.30	1.41
33	L1	123	U	O4'-C1'	8.57	1.52	1.41
70	Li	108	LYS	CA-CB	8.57	1.72	1.53
33	L1	739	C	C2'-C1'	-8.57	1.44	1.53
33	L1	1349	G	O4'-C1'	-8.57	1.30	1.41
32	S1	1356	A	O4'-C1'	8.56	1.52	1.41
33	L1	1606	C	O4'-C1'	8.56	1.52	1.41
33	L1	1937	C	C2'-C1'	-8.56	1.44	1.53
32	S1	1660	C	C2'-C1'	-8.56	1.44	1.53
33	L1	2743	A	C2'-C1'	8.56	1.62	1.53
32	S1	858	G	C5'-C4'	8.56	1.61	1.51
33	L1	2075	C	O4'-C1'	8.56	1.52	1.41
33	L1	104	G	C2'-C1'	-8.55	1.44	1.53
33	L1	1146	A	O4'-C1'	-8.55	1.30	1.41
33	L1	447	C	C2'-C1'	-8.55	1.44	1.53
33	L1	1879	A	C4'-C3'	8.55	1.62	1.53
33	L1	319	C	P-O5'	-8.54	1.51	1.59
33	L1	609	C	O4'-C1'	8.54	1.52	1.41
33	L1	1018	C	C4'-C3'	8.54	1.62	1.53
33	L1	2018	C	C2'-C1'	-8.54	1.44	1.53
33	L1	3138	C	O4'-C1'	8.54	1.52	1.41
35	L2	53	G	C5'-C4'	8.55	1.61	1.51
15	SS	92	PRO	CA-CB	8.54	1.70	1.53
32	S1	647	G	C4'-C3'	8.54	1.62	1.53
33	L1	2381	G	O4'-C1'	-8.54	1.30	1.41
34	L3	38	U	O3'-P	8.54	1.71	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	794	G	C2'-C1'	-8.53	1.44	1.53
33	L1	1979	G	C2'-C1'	-8.53	1.44	1.53
33	L1	3120	U	O3'-P	-8.54	1.50	1.61
37	LB	73	LYS	C-O	-8.53	1.07	1.23
32	S1	173	G	C2'-C1'	-8.53	1.44	1.53
32	S1	1694	G	C2'-C1'	-8.53	1.44	1.53
33	L1	2705	A	O4'-C1'	8.53	1.52	1.41
23	SU	24	SER	C-N	8.52	1.53	1.34
33	L1	2422	U	O3'-P	-8.52	1.50	1.61
33	L1	179	G	C5'-C4'	8.52	1.61	1.51
33	L1	2177	U	C2'-C1'	-8.52	1.44	1.53
33	L1	3363	G	C5'-C4'	8.52	1.61	1.51
32	S1	610	A	O4'-C1'	-8.52	1.30	1.41
33	L1	569	C	C2'-C1'	-8.52	1.44	1.53
33	L1	978	C	O4'-C1'	8.51	1.52	1.41
33	L1	1713	A	O4'-C1'	8.51	1.52	1.41
32	S1	1725	C	O4'-C1'	8.51	1.52	1.41
33	L1	601	G	C5'-C4'	8.51	1.61	1.51
33	L1	1567	G	O4'-C1'	-8.51	1.30	1.41
33	L1	3079	G	O4'-C1'	8.51	1.52	1.41
32	S1	1423	A	C2'-C1'	-8.51	1.44	1.53
32	S1	1639	A	O3'-P	-8.51	1.50	1.61
33	L1	1914	C	C2'-C1'	-8.51	1.44	1.53
45	LQ	198	TYR	CE2-CZ	8.51	1.49	1.38
33	L1	411	C	O4'-C1'	8.50	1.52	1.41
4	SD	136	ILE	CA-CB	8.50	1.74	1.54
32	S1	314	C	C2'-C1'	-8.50	1.44	1.53
33	L1	258	C	O4'-C1'	8.50	1.52	1.41
33	L1	560	C	P-O5'	-8.50	1.51	1.59
33	L1	780	U	O4'-C1'	8.50	1.52	1.41
35	L2	56	A	O4'-C1'	8.50	1.52	1.41
33	L1	1003	G	C2'-C1'	-8.49	1.44	1.53
32	S1	967	C	O4'-C1'	8.49	1.52	1.41
11	SM	112	GLU	CA-C	-8.49	1.30	1.52
33	L1	2483	A	P-O5'	8.49	1.68	1.59
32	S1	1713	C	O4'-C1'	8.48	1.52	1.41
33	L1	1199	A	C5'-C4'	8.48	1.61	1.51
33	L1	1734	G	C2'-C1'	-8.48	1.44	1.53
33	L1	1538	A	O3'-P	-8.48	1.50	1.61
33	L1	1669	C	P-O5'	-8.48	1.51	1.59
33	L1	2751	A	C5'-C4'	8.48	1.61	1.51
33	L1	2863	U	O4'-C1'	8.48	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2989	A	O4'-C1'	8.48	1.52	1.41
33	L1	3351	A	C2'-C1'	8.48	1.62	1.53
33	L1	2895	G	O3'-P	-8.48	1.50	1.61
33	L1	1501	A	O4'-C1'	8.48	1.52	1.41
32	S1	940	U	C2'-C1'	-8.48	1.44	1.53
32	S1	126	U	C4'-C3'	8.47	1.62	1.53
32	S1	954	C	O4'-C1'	8.47	1.52	1.41
33	L1	591	G	C2'-C1'	-8.47	1.44	1.53
32	S1	906	G	P-O5'	-8.47	1.51	1.59
33	L1	2350	C	O4'-C1'	8.47	1.52	1.41
32	S1	1545	A	C2'-C1'	-8.47	1.44	1.53
33	L1	469	U	O4'-C1'	8.47	1.52	1.41
33	L1	1241	G	C3'-C2'	8.47	1.62	1.52
33	L1	2484	G	C5'-C4'	8.47	1.61	1.51
33	L1	2738	U	C3'-C2'	8.47	1.62	1.52
32	S1	1700	G	C2'-C1'	-8.47	1.44	1.53
32	S1	159	U	O4'-C1'	8.46	1.52	1.41
33	L1	2508	U	C2'-C1'	8.46	1.62	1.53
32	S1	900	G	C2'-C1'	-8.46	1.44	1.53
33	L1	2862	U	C4'-C3'	-8.46	1.43	1.53
34	L3	94	C	O4'-C1'	8.46	1.52	1.41
33	L1	1038	C	O4'-C1'	8.46	1.52	1.41
32	S1	331	U	O4'-C1'	8.46	1.52	1.41
33	L1	3083	C	O4'-C1'	8.46	1.52	1.41
33	L1	2757	G	C3'-C2'	8.45	1.62	1.52
33	L1	1762	G	C2'-C1'	-8.45	1.44	1.53
33	L1	110	C	O4'-C1'	8.45	1.52	1.41
33	L1	2380	G	P-O5'	8.44	1.68	1.59
33	L1	2910	C	C4'-C3'	8.44	1.62	1.53
32	S1	507	G	C2'-C1'	-8.44	1.44	1.53
32	S1	1758	G	O3'-P	-8.44	1.51	1.61
33	L1	2450	G	P-O5'	-8.44	1.51	1.59
33	L1	3077	C	C2'-C1'	-8.44	1.44	1.53
32	S1	476	U	C2'-C1'	8.44	1.62	1.53
33	L1	3126	U	C2'-C1'	-8.44	1.44	1.53
32	S1	918	G	P-O5'	-8.44	1.51	1.59
33	L1	2704	U	O3'-P	-8.44	1.51	1.61
33	L1	332	A	O4'-C1'	8.44	1.52	1.41
33	L1	2340	G	O4'-C1'	-8.44	1.30	1.41
33	L1	2942	A	O3'-P	-8.43	1.51	1.61
32	S1	1788	G	O4'-C1'	-8.43	1.30	1.41
32	S1	478	A	O4'-C1'	8.43	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1125	U	O4'-C1'	8.42	1.52	1.41
33	L1	186	A	C3'-C2'	-8.42	1.43	1.52
32	S1	1537	U	O4'-C1'	8.42	1.52	1.41
32	S1	955	C	C2'-C1'	-8.42	1.44	1.53
32	S1	1598	G	C2'-C1'	-8.42	1.44	1.53
33	L1	2941	G	C3'-O3'	8.42	1.53	1.42
33	L1	3155	C	O3'-P	-8.42	1.51	1.61
31	S2	20	C	C2'-C1'	8.41	1.62	1.53
32	S1	919	G	O4'-C1'	8.41	1.52	1.41
33	L1	198	A	P-O5'	-8.41	1.51	1.59
33	L1	2202	A	C5'-C4'	8.41	1.61	1.51
33	L1	239	C	O3'-P	-8.41	1.51	1.61
31	S2	7	A	C4'-C3'	8.41	1.62	1.53
32	S1	533	C	O3'-P	-8.41	1.51	1.61
32	S1	844	C	O4'-C1'	8.41	1.52	1.41
32	S1	1309	U	C2'-C1'	-8.41	1.44	1.53
40	LH	233	VAL	C-O	-8.41	1.07	1.23
33	L1	529	C	O4'-C1'	8.40	1.52	1.41
34	L3	105	C	C2'-C1'	-8.40	1.44	1.53
84	LI	109	ASP	CA-C	-8.40	1.31	1.52
31	S2	39	G	C5'-C4'	8.40	1.61	1.51
32	S1	35	U	C2'-C1'	-8.40	1.44	1.53
32	S1	1159	G	C2'-C1'	-8.40	1.44	1.53
33	L1	936	A	C2'-C1'	8.40	1.62	1.53
23	SU	25	ARG	N-CA	8.40	1.63	1.46
33	L1	1019	A	C2'-C1'	8.40	1.62	1.53
68	LW	105	ILE	N-CA	8.40	1.63	1.46
33	L1	1954	G	C2'-C1'	-8.39	1.44	1.53
33	L1	2622	G	P-O5'	-8.39	1.51	1.59
33	L1	2660	A	C4'-C3'	8.39	1.62	1.53
32	S1	1661	C	O4'-C1'	8.39	1.52	1.41
33	L1	1465	A	O4'-C1'	8.39	1.52	1.41
33	L1	595	C	C4'-O4'	8.39	1.56	1.45
33	L1	1107	G	C4'-C3'	8.39	1.62	1.53
33	L1	3090	C	C2'-C1'	-8.39	1.44	1.53
32	S1	1287	U	O4'-C1'	8.39	1.52	1.41
33	L1	2863	U	P-O5'	8.38	1.68	1.59
33	L1	3054	G	C2'-C1'	-8.39	1.44	1.53
60	Lr	61	LYS	CA-CB	8.39	1.72	1.53
70	Li	43	LYS	CA-CB	8.38	1.72	1.53
32	S1	339	G	O4'-C1'	8.38	1.52	1.41
33	L1	585	A	O4'-C1'	8.38	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1548	G	O4'-C1'	8.38	1.52	1.41
33	L1	3326	U	P-O5'	-8.38	1.51	1.59
32	S1	162	A	C2'-C1'	8.38	1.62	1.53
32	S1	846	U	C2'-C1'	-8.38	1.44	1.53
33	L1	2615	U	C2'-C1'	-8.37	1.44	1.53
31	S2	71	A	O4'-C1'	8.37	1.52	1.41
33	L1	131	C	C2'-C1'	8.37	1.62	1.53
33	L1	2274	A	O4'-C1'	8.37	1.52	1.41
33	L1	2348	U	C3'-O3'	8.37	1.53	1.42
35	L2	51	U	O4'-C1'	8.37	1.52	1.41
33	L1	2656	C	C2'-C1'	8.37	1.62	1.53
33	L1	924	A	O4'-C1'	-8.36	1.30	1.41
33	L1	1332	C	C2'-C1'	-8.36	1.44	1.53
31	S2	4	G	C2'-C1'	-8.36	1.44	1.53
32	S1	1032	A	O4'-C1'	8.36	1.52	1.41
33	L1	614	C	O3'-P	-8.35	1.51	1.61
32	S1	1016	C	P-O5'	-8.35	1.51	1.59
32	S1	901	U	C3'-C2'	8.35	1.62	1.52
33	L1	2992	G	C2'-C1'	8.35	1.62	1.53
32	S1	1628	C	O4'-C1'	8.35	1.52	1.41
35	L2	30	C	P-O5'	-8.35	1.51	1.59
32	S1	357	A	O4'-C1'	8.35	1.52	1.41
33	L1	611	C	O4'-C1'	8.35	1.52	1.41
33	L1	1143	G	O4'-C1'	-8.35	1.30	1.41
33	L1	462	C	O4'-C1'	8.34	1.52	1.41
32	S1	1077	C	O4'-C1'	8.34	1.52	1.41
33	L1	2595	G	O4'-C1'	8.34	1.52	1.41
33	L1	2695	A	C2'-C1'	-8.34	1.44	1.53
32	S1	1612	C	O4'-C1'	8.34	1.52	1.41
33	L1	1347	U	C2'-C1'	8.34	1.62	1.53
33	L1	1369	G	O4'-C1'	-8.34	1.30	1.41
33	L1	2643	A	C2'-C1'	8.34	1.62	1.53
33	L1	3002	U	C3'-C2'	8.34	1.62	1.52
33	L1	463	G	O4'-C1'	-8.33	1.30	1.41
33	L1	1759	C	C2'-C1'	-8.33	1.44	1.53
32	S1	454	U	O4'-C1'	8.33	1.52	1.41
32	S1	1225	A	O4'-C1'	8.33	1.52	1.41
32	S1	1288	C	C5'-C4'	8.33	1.61	1.51
32	S1	1390	A	O4'-C1'	8.33	1.52	1.41
33	L1	1881	C	C2'-O2'	-8.33	1.30	1.41
35	L2	58	A	C3'-C2'	8.33	1.62	1.52
32	S1	505	U	C5'-C4'	8.33	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	565	G	C2'-C1'	-8.33	1.44	1.53
32	S1	1647	C	C2'-C1'	-8.32	1.44	1.53
33	L1	584	G	C3'-C2'	8.32	1.62	1.52
33	L1	1079	G	C5'-C4'	8.32	1.61	1.51
33	L1	2074	C	O4'-C1'	8.32	1.52	1.41
13	SQ	83	ASP	N-CA	8.32	1.62	1.46
33	L1	3270	C	P-O5'	-8.32	1.51	1.59
32	S1	1097	A	C2'-C1'	-8.32	1.44	1.53
32	S1	98	C	O4'-C1'	8.32	1.52	1.41
32	S1	1738	U	C2'-C1'	-8.31	1.44	1.53
33	L1	1126	U	C2'-C1'	8.31	1.62	1.53
33	L1	2595	G	C4'-C3'	8.31	1.62	1.53
33	L1	2665	A	C5'-C4'	8.31	1.61	1.51
32	S1	663	C	C2'-C1'	-8.31	1.44	1.53
33	L1	42	A	O4'-C1'	-8.31	1.30	1.41
33	L1	1377	G	C2'-C1'	-8.31	1.44	1.53
33	L1	810	A	C2'-C1'	8.31	1.62	1.53
33	L1	1541	G	O4'-C1'	-8.31	1.30	1.41
33	L1	1885	G	C4'-O4'	-8.31	1.34	1.45
33	L1	2219	A	C5'-C4'	8.31	1.61	1.51
33	L1	1865	C	O4'-C1'	8.31	1.52	1.41
32	S1	1201	C	O3'-P	-8.30	1.51	1.61
32	S1	1310	C	C2'-C1'	-8.30	1.44	1.53
33	L1	1982	G	O4'-C1'	8.30	1.52	1.41
33	L1	2599	U	O4'-C1'	-8.30	1.30	1.41
32	S1	633	U	C4'-C3'	8.30	1.62	1.53
33	L1	2292	U	C2'-C1'	-8.30	1.44	1.53
33	L1	2736	A	O4'-C1'	-8.30	1.30	1.41
33	L1	835	G	O4'-C1'	-8.30	1.30	1.41
33	L1	932	A	O4'-C1'	-8.30	1.30	1.41
33	L1	1047	C	C2'-C1'	-8.30	1.44	1.53
33	L1	2854	C	O4'-C1'	8.30	1.52	1.41
33	L1	98	A	C2'-C1'	-8.29	1.44	1.53
33	L1	1045	U	C2'-C1'	-8.29	1.44	1.53
33	L1	1439	U	O4'-C1'	8.30	1.52	1.41
33	L1	1909	G	O3'-P	-8.29	1.51	1.61
33	L1	2050	G	C2'-C1'	-8.30	1.44	1.53
81	LD	329	ALA	C-O	-8.29	1.07	1.23
33	L1	2456	G	P-O5'	-8.29	1.51	1.59
32	S1	304	A	O4'-C1'	8.29	1.52	1.41
32	S1	384	U	C2'-C1'	-8.29	1.44	1.53
33	L1	159	G	C2'-C1'	-8.28	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2488	A	C4'-C3'	-8.28	1.44	1.53
33	L1	604	C	O4'-C1'	8.28	1.52	1.41
33	L1	2746	G	O4'-C1'	8.28	1.52	1.41
33	L1	2486	G	O3'-P	-8.28	1.51	1.61
32	S1	1577	A	C2'-C1'	-8.28	1.44	1.53
32	S1	1608	A	O4'-C1'	-8.28	1.30	1.41
33	L1	593	G	C2'-C1'	-8.28	1.44	1.53
35	L2	8	C	O4'-C1'	8.28	1.52	1.41
33	L1	1901	G	O4'-C1'	-8.27	1.30	1.41
35	L2	112	C	C2'-C1'	-8.27	1.44	1.53
33	L1	1515	U	O3'-P	-8.27	1.51	1.61
32	S1	583	A	C2'-C1'	8.27	1.62	1.53
33	L1	934	C	O4'-C1'	8.26	1.52	1.41
33	L1	134	U	O4'-C1'	-8.26	1.30	1.41
33	L1	2347	A	O4'-C1'	8.26	1.52	1.41
35	L2	120	G	C2'-C1'	-8.26	1.44	1.53
4	SD	133	GLN	N-CA	8.26	1.62	1.46
32	S1	1542	G	O4'-C1'	-8.26	1.30	1.41
33	L1	1095	C	O4'-C1'	8.26	1.52	1.41
34	L3	101	A	P-O5'	-8.26	1.51	1.59
35	L2	62	G	O4'-C1'	8.26	1.52	1.41
32	S1	774	C	C4'-C3'	-8.25	1.44	1.53
33	L1	2349	C	P-O5'	-8.25	1.51	1.59
33	L1	2048	C	C2'-C1'	-8.25	1.44	1.53
23	SU	69	HIS	N-CA	8.25	1.62	1.46
33	L1	338	C	P-O5'	-8.25	1.51	1.59
33	L1	1364	C	C2'-C1'	-8.25	1.44	1.53
33	L1	1874	A	C2'-C1'	8.25	1.62	1.53
32	S1	577	C	C5'-C4'	8.25	1.61	1.51
32	S1	1599	C	C2'-C1'	-8.25	1.44	1.53
32	S1	1750	A	C2'-C1'	8.25	1.62	1.53
32	S1	994	U	C4'-O4'	8.24	1.56	1.45
33	L1	2700	A	C5'-C4'	8.24	1.61	1.51
33	L1	3069	U	O4'-C1'	8.24	1.52	1.41
32	S1	1137	A	O4'-C1'	8.23	1.52	1.41
33	L1	1772	G	O4'-C1'	-8.23	1.30	1.41
49	LX	31	ARG	NE-CZ	8.23	1.43	1.33
32	S1	48	G	C2'-C1'	-8.23	1.44	1.53
33	L1	2510	U	C2'-C1'	-8.23	1.44	1.53
33	L1	3384	G	O4'-C1'	8.22	1.52	1.41
33	L1	2210	A	O4'-C1'	8.22	1.52	1.41
33	L1	2673	G	C5'-C4'	8.22	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1114	A	O4'-C1'	-8.22	1.30	1.41
33	L1	1741	G	O3'-P	8.22	1.71	1.61
33	L1	1955	G	C3'-O3'	8.22	1.53	1.42
33	L1	2702	G	P-O5'	-8.22	1.51	1.59
33	L1	2366	A	O4'-C1'	8.21	1.52	1.41
33	L1	2875	U	C4'-C3'	8.21	1.62	1.53
33	L1	467	C	O4'-C1'	8.21	1.52	1.41
33	L1	2771	U	O4'-C1'	-8.21	1.30	1.41
33	L1	3041	A	C2'-C1'	-8.21	1.44	1.53
32	S1	425	A	O4'-C1'	8.21	1.52	1.41
33	L1	24	C	P-O5'	-8.21	1.51	1.59
33	L1	1197	A	P-O5'	-8.21	1.51	1.59
33	L1	3308	A	O4'-C1'	8.21	1.52	1.41
33	L1	2991	U	O4'-C1'	8.21	1.52	1.41
32	S1	1447	C	C2'-C1'	-8.20	1.44	1.53
33	L1	1194	C	P-O5'	-8.21	1.51	1.59
33	L1	1218	U	P-O5'	-8.20	1.51	1.59
33	L1	1572	C	O4'-C1'	8.21	1.52	1.41
33	L1	2661	G	C5'-C4'	8.20	1.61	1.51
33	L1	318	G	C2'-C1'	-8.20	1.44	1.53
35	L2	118	G	C2'-C1'	-8.20	1.44	1.53
33	L1	469	U	C2'-C1'	-8.20	1.44	1.53
33	L1	897	U	C4'-C3'	8.20	1.62	1.53
32	S1	220	C	O4'-C1'	8.20	1.52	1.41
33	L1	2276	A	O4'-C1'	-8.20	1.30	1.41
33	L1	1753	A	C4'-C3'	-8.20	1.44	1.53
31	S2	18	G	C2'-C1'	-8.19	1.44	1.53
33	L1	1599	A	C3'-O3'	8.20	1.53	1.42
33	L1	2814	C	C2'-C1'	-8.19	1.44	1.53
32	S1	3	C	C3'-C2'	-8.19	1.43	1.52
33	L1	1235	A	C3'-O3'	8.19	1.53	1.42
33	L1	2230	C	C5'-C4'	8.19	1.61	1.51
33	L1	2665	A	C2'-C1'	-8.19	1.44	1.53
33	L1	3294	U	C2'-C1'	8.19	1.62	1.53
33	L1	470	G	O4'-C1'	-8.19	1.31	1.41
13	SQ	74	GLN	N-CA	8.19	1.62	1.46
32	S1	1646	G	O3'-P	-8.19	1.51	1.61
32	S1	1726	G	C2'-C1'	-8.19	1.44	1.53
33	L1	71	C	P-O5'	-8.19	1.51	1.59
33	L1	1181	A	C2'-C1'	8.19	1.62	1.53
33	L1	1596	G	O3'-P	-8.19	1.51	1.61
33	L1	2109	G	O4'-C1'	8.19	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
64	LG	185	ASP	N-CA	8.19	1.62	1.46
33	L1	657	A	C2'-C1'	-8.19	1.44	1.53
32	S1	380	C	O4'-C1'	8.18	1.52	1.41
81	LD	23	SER	CA-CB	8.18	1.65	1.52
33	L1	464	G	O4'-C1'	8.18	1.52	1.41
33	L1	2673	G	C3'-O3'	8.18	1.53	1.42
33	L1	3243	C	O4'-C1'	8.18	1.52	1.41
35	L2	83	A	O3'-P	-8.18	1.51	1.61
32	S1	105	A	O4'-C1'	8.17	1.52	1.41
33	L1	1868	C	O4'-C1'	8.17	1.52	1.41
33	L1	3322	A	O4'-C1'	-8.17	1.31	1.41
33	L1	2373	C	O4'-C1'	8.17	1.52	1.41
33	L1	1714	A	C2'-C1'	-8.17	1.44	1.53
32	S1	773	U	C4'-C3'	-8.16	1.44	1.53
32	S1	1430	A	O4'-C1'	8.16	1.52	1.41
32	S1	360	G	C2'-C1'	-8.16	1.44	1.53
32	S1	1464	G	O4'-C1'	8.16	1.52	1.41
32	S1	1720	G	C3'-C2'	8.16	1.61	1.52
33	L1	1987	C	C2'-C1'	-8.16	1.44	1.53
33	L1	2626	G	C5'-C4'	8.16	1.61	1.51
33	L1	2984	A	C3'-C2'	8.16	1.61	1.52
32	S1	1737	A	O4'-C1'	8.16	1.52	1.41
33	L1	3287	A	C2'-C1'	-8.16	1.44	1.53
35	L2	133	C	C2'-C1'	-8.16	1.44	1.53
33	L1	583	C	C4'-C3'	8.16	1.62	1.53
33	L1	2619	C	O4'-C1'	8.16	1.52	1.41
32	S1	1007	G	P-O5'	-8.15	1.51	1.59
32	S1	1767	G	C2'-C1'	-8.15	1.44	1.53
34	L3	32	A	C2'-C1'	-8.15	1.44	1.53
33	L1	83	U	C2'-C1'	-8.15	1.44	1.53
33	L1	1008	U	O4'-C1'	8.15	1.52	1.41
32	S1	1564	A	O4'-C1'	8.15	1.52	1.41
33	L1	685	G	O4'-C1'	8.15	1.52	1.41
33	L1	1266	G	O4'-C1'	8.15	1.52	1.41
33	L1	1296	C	C5'-C4'	8.15	1.61	1.51
8	SJ	126	SER	C-O	-8.15	1.07	1.23
32	S1	390	G	C2'-C1'	-8.15	1.44	1.53
32	S1	557	G	O4'-C1'	8.14	1.52	1.41
32	S1	1422	G	C2'-C1'	-8.14	1.44	1.53
33	L1	3309	U	P-O5'	-8.14	1.51	1.59
32	S1	489	C	O4'-C1'	8.14	1.52	1.41
33	L1	964	C	O4'-C1'	8.14	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	115	A	C2'-C1'	8.14	1.62	1.53
33	L1	1337	C	O4'-C1'	8.14	1.52	1.41
33	L1	1590	A	C2'-C1'	-8.14	1.44	1.53
33	L1	2521	C	O4'-C1'	8.14	1.52	1.41
33	L1	2562	A	C2'-C1'	8.14	1.62	1.53
32	S1	1254	U	C4'-C3'	-8.13	1.44	1.53
32	S1	1342	C	O4'-C1'	8.13	1.52	1.41
31	S2	71	A	C3'-C2'	-8.13	1.43	1.52
32	S1	1593	U	O4'-C1'	8.13	1.52	1.41
32	S1	15	U	C2'-C1'	-8.12	1.44	1.53
32	S1	1242	A	C3'-C2'	8.12	1.61	1.52
32	S1	1483	G	O4'-C1'	-8.12	1.31	1.41
33	L1	1372	U	C4'-C3'	-8.12	1.44	1.53
32	S1	635	G	O4'-C1'	8.12	1.52	1.41
32	S1	381	G	C2'-C1'	8.12	1.62	1.53
32	S1	511	U	C2'-C1'	-8.12	1.44	1.53
33	L1	2140	C	P-O5'	-8.12	1.51	1.59
33	L1	2708	A	O3'-P	-8.12	1.51	1.61
34	L3	61	C	C2'-C1'	-8.12	1.44	1.53
32	S1	587	C	C2'-C1'	-8.11	1.44	1.53
32	S1	1364	C	O3'-P	-8.11	1.51	1.61
33	L1	2792	A	C3'-O3'	8.11	1.53	1.42
33	L1	3129	G	O4'-C1'	8.11	1.52	1.41
35	L2	114	A	O4'-C1'	8.11	1.52	1.41
32	S1	1555	A	O4'-C1'	8.11	1.52	1.41
33	L1	544	C	P-O5'	-8.11	1.51	1.59
32	S1	1321	C	C4'-O4'	-8.11	1.35	1.45
32	S1	1106	G	C4'-C3'	8.10	1.62	1.53
33	L1	1261	C	C4'-C3'	-8.10	1.44	1.53
38	LE	89	LYS	N-CA	8.10	1.62	1.46
32	S1	1580	G	O4'-C1'	-8.10	1.31	1.41
33	L1	2706	A	C4'-C3'	8.10	1.62	1.53
33	L1	3076	C	O4'-C1'	8.10	1.52	1.41
33	L1	1678	U	O4'-C1'	-8.10	1.31	1.41
32	S1	60	C	C2'-C1'	-8.09	1.44	1.53
33	L1	2131	U	C2'-C1'	-8.09	1.44	1.53
33	L1	1604	U	O4'-C1'	8.09	1.52	1.41
33	L1	2461	A	O4'-C1'	8.09	1.52	1.41
32	S1	1413	C	C2'-C1'	-8.09	1.44	1.53
33	L1	492	G	C2'-C1'	8.09	1.62	1.53
33	L1	1345	U	O3'-P	-8.08	1.51	1.61
32	S1	13	C	C3'-C2'	-8.08	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1387	U	C2'-C1'	8.08	1.62	1.53
32	S1	1265	A	C2'-C1'	-8.08	1.44	1.53
32	S1	1577	A	O4'-C1'	8.08	1.52	1.41
33	L1	2569	G	O4'-C1'	-8.08	1.31	1.41
33	L1	308	U	C3'-O3'	8.07	1.53	1.42
34	L3	28	U	O4'-C1'	8.07	1.52	1.41
80	LC	69	LYS	C-O	-8.07	1.08	1.23
32	S1	765	U	P-O5'	-8.07	1.51	1.59
32	S1	207	A	C2'-C1'	-8.07	1.44	1.53
31	S2	55	C	O4'-C1'	8.07	1.52	1.41
33	L1	733	C	C2'-C1'	-8.07	1.44	1.53
33	L1	207	U	C2'-C1'	8.07	1.62	1.53
32	S1	1218	U	C2'-C1'	-8.06	1.44	1.53
33	L1	689	G	O4'-C1'	-8.06	1.31	1.41
33	L1	1076	G	C5'-C4'	8.06	1.61	1.51
32	S1	90	G	C2'-C1'	-8.06	1.44	1.53
33	L1	327	A	O4'-C1'	-8.06	1.31	1.41
32	S1	1621	U	C2'-C1'	8.06	1.62	1.53
33	L1	315	A	O4'-C1'	8.06	1.52	1.41
33	L1	1024	G	O4'-C1'	8.05	1.52	1.41
33	L1	1041	C	C2'-C1'	8.05	1.62	1.53
33	L1	2203	A	C5'-C4'	8.05	1.61	1.51
33	L1	2245	G	C2'-C1'	-8.05	1.44	1.53
33	L1	2815	A	C2'-C1'	-8.05	1.44	1.53
32	S1	1519	G	O4'-C1'	-8.05	1.31	1.41
34	L3	11	A	P-O5'	8.05	1.67	1.59
31	S2	7	A	O3'-P	-8.05	1.51	1.61
33	L1	366	G	O4'-C1'	8.05	1.52	1.41
33	L1	780	U	C2'-C1'	-8.05	1.44	1.53
43	LO	40	HIS	C-O	-8.05	1.08	1.23
33	L1	1714	A	O3'-P	-8.04	1.51	1.61
33	L1	2044	C	O4'-C1'	8.04	1.52	1.41
33	L1	2133	A	C2'-C1'	-8.04	1.44	1.53
33	L1	2495	C	C3'-C2'	8.04	1.61	1.52
33	L1	2523	G	O4'-C1'	-8.04	1.31	1.41
32	S1	666	C	C2'-C1'	-8.04	1.44	1.53
33	L1	2798	G	O4'-C1'	-8.04	1.31	1.41
44	LR	25	TYR	CG-CD2	8.04	1.49	1.39
32	S1	1139	C	C2'-C1'	-8.03	1.44	1.53
32	S1	1459	G	C4'-C3'	8.03	1.61	1.53
33	L1	2344	A	O3'-P	-8.03	1.51	1.61
33	L1	437	C	C2'-C1'	8.03	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	51	A	O4'-C1'	8.03	1.52	1.41
33	L1	2927	C	C3'-O3'	8.03	1.53	1.42
35	L2	6	G	O4'-C1'	8.03	1.52	1.41
35	L2	69	G	O3'-P	-8.03	1.51	1.61
33	L1	2111	A	O4'-C1'	8.03	1.52	1.41
33	L1	3154	G	C5'-C4'	8.03	1.60	1.51
32	S1	1029	U	C4'-C3'	-8.02	1.44	1.53
33	L1	2419	C	C2'-C1'	-8.02	1.44	1.53
32	S1	1653	G	C2'-C1'	-8.02	1.44	1.53
33	L1	6	A	C2'-C1'	8.02	1.62	1.53
33	L1	877	U	C3'-O3'	8.02	1.53	1.42
33	L1	2732	U	C2'-C1'	-8.02	1.44	1.53
32	S1	1591	A	O3'-P	-8.02	1.51	1.61
33	L1	499	A	P-O5'	-8.02	1.51	1.59
33	L1	1587	G	C2'-C1'	-8.02	1.44	1.53
33	L1	2125	A	O4'-C1'	-8.02	1.31	1.41
60	Lr	62	ALA	N-CA	8.02	1.62	1.46
32	S1	1098	A	O4'-C1'	8.01	1.52	1.41
33	L1	878	G	O4'-C1'	8.01	1.52	1.41
33	L1	1144	C	C2'-C1'	-8.01	1.44	1.53
33	L1	2235	G	O4'-C1'	8.01	1.52	1.41
33	L1	2269	U	C2'-C1'	-8.01	1.44	1.53
32	S1	451	U	C2'-C1'	-8.01	1.44	1.53
35	L2	52	A	O4'-C1'	-8.01	1.31	1.41
32	S1	1374	G	O3'-P	-8.00	1.51	1.61
33	L1	721	A	C2'-C1'	-8.00	1.44	1.53
33	L1	1548	U	O4'-C1'	8.00	1.52	1.41
33	L1	1872	C	C5'-C4'	8.00	1.60	1.51
33	L1	2026	C	C2'-C1'	-8.00	1.44	1.53
35	L2	45	A	C5'-C4'	8.00	1.60	1.51
33	L1	1035	C	P-O5'	-8.00	1.51	1.59
33	L1	2801	A	C5'-C4'	8.00	1.60	1.51
35	L2	102	U	C4'-C3'	-8.00	1.44	1.53
33	L1	1117	U	C4'-C3'	-8.00	1.44	1.53
33	L1	2060	C	C2'-C1'	8.00	1.62	1.53
33	L1	2840	A	C4'-C3'	8.00	1.61	1.53
33	L1	3049	A	C2'-C1'	8.00	1.62	1.53
25	SC	144	ASN	N-CA	8.00	1.62	1.46
32	S1	955	C	C4'-C3'	8.00	1.61	1.53
35	L2	105	U	O4'-C1'	8.00	1.52	1.41
32	S1	1551	A	C2'-C1'	-7.99	1.44	1.53
33	L1	789	A	O4'-C1'	7.99	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2470	C	C5'-C4'	7.99	1.60	1.51
33	L1	2618	G	C4'-C3'	-7.99	1.44	1.53
32	S1	1100	U	C2'-C1'	-7.99	1.44	1.53
32	S1	1808	U	O3'-P	-7.99	1.51	1.61
33	L1	2354	G	O3'-P	-7.99	1.51	1.61
24	SX	70	GLY	C-N	7.99	1.47	1.33
33	L1	1441	U	O4'-C1'	7.99	1.52	1.41
33	L1	1770	C	C2'-C1'	-7.99	1.44	1.53
33	L1	2886	C	C2'-C1'	-7.99	1.44	1.53
33	L1	3381	C	C2'-C1'	-7.99	1.44	1.53
35	L2	23	A	C2'-C1'	7.99	1.62	1.53
35	L2	144	A	O4'-C1'	7.99	1.52	1.41
60	Lr	33	ASP	N-CA	7.99	1.62	1.46
33	L1	2115	G	C2'-C1'	7.98	1.62	1.53
10	SL	36	TRP	NE1-CE2	-7.98	1.27	1.37
33	L1	1765	G	C2'-C1'	7.98	1.62	1.53
69	La	27	ARG	C-N	7.98	1.52	1.34
32	S1	417	U	O4'-C1'	7.98	1.52	1.41
32	S1	1772	A	C4'-C3'	-7.98	1.44	1.53
32	S1	1386	U	C2'-C1'	-7.97	1.44	1.53
33	L1	291	C	C4'-C3'	7.97	1.61	1.53
33	L1	2333	U	C3'-C2'	-7.97	1.44	1.52
33	L1	2669	C	O4'-C1'	7.97	1.52	1.41
32	S1	913	U	P-O5'	-7.97	1.51	1.59
33	L1	2509	A	C2'-C1'	-7.97	1.44	1.53
35	L2	42	U	O4'-C1'	7.97	1.52	1.41
33	L1	1518	A	O4'-C1'	7.97	1.52	1.41
32	S1	1722	C	C4'-C3'	7.97	1.61	1.53
33	L1	1516	G	O4'-C1'	7.97	1.52	1.41
31	S2	52	G	O4'-C1'	-7.97	1.31	1.41
33	L1	279	G	O4'-C1'	-7.97	1.31	1.41
33	L1	1830	U	O4'-C1'	7.97	1.52	1.41
33	L1	2348	U	O4'-C1'	7.97	1.52	1.41
33	L1	2376	G	C2'-C1'	7.97	1.62	1.53
33	L1	2931	C	C2'-C1'	-7.96	1.44	1.53
80	LC	119	TYR	CE2-CZ	7.96	1.49	1.38
33	L1	299	G	O4'-C1'	-7.96	1.31	1.41
33	L1	923	A	O3'-P	-7.96	1.51	1.61
33	L1	2125	A	P-O5'	-7.96	1.51	1.59
33	L1	3287	A	O4'-C1'	7.96	1.52	1.41
32	S1	1744	C	O4'-C1'	7.96	1.51	1.41
81	LD	94	GLY	C-O	-7.96	1.10	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2101	A	C2'-C1'	-7.96	1.44	1.53
64	LG	13	ARG	N-CA	7.96	1.62	1.46
25	SC	163	THR	CB-OG1	-7.96	1.27	1.43
33	L1	1226	G	O4'-C1'	-7.95	1.31	1.41
33	L1	1386	G	C2'-C1'	-7.95	1.44	1.53
32	S1	773	U	P-O5'	-7.95	1.51	1.59
33	L1	45	U	C2'-C1'	-7.95	1.44	1.53
33	L1	501	U	C2'-C1'	-7.95	1.44	1.53
33	L1	2772	A	O4'-C1'	7.95	1.51	1.41
33	L1	544	C	O4'-C1'	7.94	1.51	1.41
33	L1	696	A	C2'-C1'	-7.94	1.44	1.53
34	L3	31	G	C2'-C1'	-7.94	1.44	1.53
34	L3	71	A	C3'-C2'	-7.94	1.44	1.52
32	S1	1750	A	C5'-C4'	7.94	1.60	1.51
33	L1	2825	G	O4'-C1'	-7.94	1.31	1.41
33	L1	919	G	C2'-C1'	-7.93	1.44	1.53
32	S1	1257	U	C4'-C3'	7.93	1.61	1.53
32	S1	1544	G	C2'-C1'	-7.93	1.44	1.53
31	S2	55	C	C2'-C1'	-7.93	1.44	1.53
32	S1	403	A	P-O5'	-7.93	1.51	1.59
33	L1	3237	G	O4'-C1'	-7.93	1.31	1.41
48	LV	128	ARG	CD-NE	7.93	1.59	1.46
80	LC	352	ARG	C-O	-7.93	1.08	1.23
32	S1	12	U	P-O5'	-7.92	1.51	1.59
31	S2	64	G	O3'-P	-7.92	1.51	1.61
32	S1	104	A	C4'-C3'	7.92	1.61	1.53
32	S1	1196	C	P-O5'	7.92	1.67	1.59
33	L1	3246	U	O4'-C1'	7.92	1.51	1.41
33	L1	1942	A	C2'-C1'	-7.92	1.44	1.53
69	La	45	GLY	CA-C	-7.92	1.39	1.51
4	SD	131	PHE	N-CA	-7.92	1.30	1.46
57	Ll	12	ARG	N-CA	7.92	1.62	1.46
33	L1	1271	U	O3'-P	7.91	1.70	1.61
33	L1	1619	G	C5'-C4'	7.91	1.60	1.51
33	L1	2157	C	C2'-C1'	-7.91	1.44	1.53
33	L1	2565	C	O4'-C1'	7.91	1.51	1.41
33	L1	3018	A	C3'-O3'	7.91	1.53	1.42
33	L1	3020	C	C2'-C1'	-7.91	1.44	1.53
33	L1	3206	C	O4'-C1'	7.91	1.51	1.41
33	L1	382	A	O4'-C1'	-7.91	1.31	1.41
33	L1	1044	A	O4'-C1'	7.91	1.51	1.41
33	L1	1577	A	C5'-C4'	7.91	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2730	A	C3'-O3'	7.91	1.53	1.42
33	L1	3033	A	O4'-C1'	7.91	1.51	1.41
33	L1	2299	C	C5'-C4'	7.91	1.60	1.51
33	L1	2731	G	C5'-C4'	7.91	1.60	1.51
32	S1	276	G	O4'-C1'	7.91	1.51	1.41
33	L1	1902	G	C2'-C1'	7.91	1.62	1.53
33	L1	2694	A	C2'-C1'	7.91	1.62	1.53
33	L1	2946	U	P-O5'	-7.91	1.51	1.59
33	L1	1080	C	O3'-P	-7.90	1.51	1.61
32	S1	120	G	C2'-C1'	7.90	1.62	1.53
32	S1	1340	A	C2'-C1'	-7.90	1.44	1.53
15	SS	14	PRO	N-CD	-7.90	1.36	1.47
32	S1	1803	G	O4'-C1'	-7.90	1.31	1.41
33	L1	608	G	P-O5'	-7.90	1.51	1.59
33	L1	941	C	C2'-C1'	-7.89	1.44	1.53
33	L1	2740	C	C3'-O3'	7.89	1.53	1.42
34	L3	54	A	O4'-C1'	7.89	1.51	1.41
33	L1	2289	U	O3'-P	-7.89	1.51	1.61
32	S1	1394	A	C2'-C1'	-7.89	1.44	1.53
33	L1	1213	G	O4'-C1'	7.89	1.51	1.41
32	S1	1710	C	P-O5'	7.89	1.67	1.59
33	L1	1945	A	C2'-C1'	-7.89	1.44	1.53
33	L1	2299	C	C4'-C3'	7.89	1.61	1.53
32	S1	312	C	O4'-C1'	7.88	1.51	1.41
33	L1	1945	A	O4'-C1'	7.88	1.51	1.41
33	L1	2936	A	C2'-C1'	7.88	1.62	1.53
33	L1	307	C	C4'-C3'	7.88	1.61	1.53
33	L1	1028	G	C3'-C2'	-7.88	1.44	1.52
33	L1	2650	A	P-O5'	-7.88	1.51	1.59
80	LC	120	LYS	C-O	-7.88	1.08	1.23
33	L1	569	C	O4'-C1'	7.88	1.51	1.41
33	L1	2379	U	O3'-P	-7.88	1.51	1.61
33	L1	2479	C	C2'-C1'	7.88	1.62	1.53
23	SU	71	GLY	C-N	7.87	1.47	1.33
32	S1	977	G	C2'-C1'	-7.87	1.44	1.53
32	S1	1166	C	C2'-C1'	-7.87	1.44	1.53
2	SA	160	TYR	CG-CD2	7.87	1.49	1.39
33	L1	1368	U	C3'-O3'	7.87	1.53	1.42
31	S2	42	C	C5'-C4'	7.87	1.60	1.51
33	L1	1578	U	O4'-C1'	7.87	1.51	1.41
33	L1	2199	C	C3'-C2'	-7.87	1.44	1.52
32	S1	569	C	C5'-C4'	7.87	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	875	A	C2'-C1'	-7.87	1.44	1.53
33	L1	2261	U	O4'-C1'	7.87	1.51	1.41
32	S1	577	C	C2'-C1'	-7.86	1.44	1.53
32	S1	1630	G	C2'-C1'	-7.86	1.44	1.53
32	S1	1711	G	C4'-C3'	7.86	1.61	1.53
33	L1	1218	U	C4'-C3'	-7.86	1.44	1.53
33	L1	3293	U	P-O5'	-7.86	1.51	1.59
50	LZ	3	LEU	C-N	7.86	1.52	1.34
5	SE	58	ARG	NE-CZ	7.86	1.43	1.33
33	L1	2254	A	O4'-C1'	7.86	1.51	1.41
33	L1	3054	G	O4'-C1'	7.86	1.51	1.41
33	L1	3100	C	C2'-C1'	7.86	1.61	1.53
33	L1	230	G	O3'-P	-7.86	1.51	1.61
33	L1	2071	U	C3'-O3'	7.86	1.53	1.42
33	L1	2106	U	O3'-P	-7.86	1.51	1.61
33	L1	328	G	C5'-C4'	7.85	1.60	1.51
33	L1	2577	G	C2'-C1'	-7.85	1.44	1.53
32	S1	347	C	O4'-C1'	7.85	1.51	1.41
32	S1	367	G	C2'-C1'	-7.85	1.44	1.53
33	L1	2755	U	C4'-O4'	7.85	1.55	1.45
30	S3	16	G	P-O5'	-7.85	1.51	1.59
32	S1	1153	C	O4'-C1'	7.85	1.51	1.41
33	L1	545	C	O3'-P	-7.85	1.51	1.61
33	L1	1374	G	O4'-C1'	-7.85	1.31	1.41
33	L1	601	G	C4'-C3'	7.85	1.61	1.53
33	L1	3292	U	C4'-C3'	-7.85	1.44	1.53
33	L1	3316	C	C2'-C1'	-7.85	1.44	1.53
32	S1	656	G	O4'-C1'	7.84	1.51	1.41
33	L1	60	G	O4'-C1'	7.84	1.51	1.41
33	L1	642	C	C2'-C1'	-7.84	1.44	1.53
33	L1	1014	G	C2'-C1'	7.84	1.61	1.53
35	L2	113	A	C2'-C1'	-7.84	1.44	1.53
33	L1	2226	C	O3'-P	-7.84	1.51	1.61
80	LC	367	SER	CA-CB	7.84	1.64	1.52
32	S1	946	A	C5'-C4'	7.84	1.60	1.51
32	S1	1562	C	C4'-C3'	-7.84	1.44	1.53
33	L1	1321	A	O3'-P	-7.84	1.51	1.61
33	L1	2039	G	C2'-C1'	-7.84	1.44	1.53
33	L1	1016	G	C4'-O4'	7.84	1.55	1.45
32	S1	642	C	C2'-C1'	-7.84	1.44	1.53
33	L1	845	G	C2'-C1'	-7.84	1.44	1.53
32	S1	1106	G	O4'-C1'	7.83	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	458	G	P-O5'	-7.83	1.51	1.59
33	L1	3332	G	C2'-C1'	-7.83	1.44	1.53
33	L1	1012	U	O4'-C1'	7.83	1.51	1.41
33	L1	90	G	C2'-C1'	-7.83	1.44	1.53
33	L1	1985	G	C2'-C1'	-7.83	1.44	1.53
33	L1	2034	G	C2'-C1'	-7.83	1.44	1.53
33	L1	247	C	O4'-C1'	7.82	1.51	1.41
33	L1	249	A	C3'-O3'	7.82	1.53	1.42
33	L1	749	C	O4'-C1'	7.82	1.51	1.41
33	L1	1340	G	C2'-C1'	-7.82	1.44	1.53
35	L2	32	C	P-O5'	-7.82	1.51	1.59
33	L1	3213	A	O4'-C1'	7.82	1.51	1.41
32	S1	358	C	C5'-C4'	7.82	1.60	1.51
33	L1	1608	C	C5'-C4'	7.82	1.60	1.51
3	SB	124	ARG	CD-NE	7.82	1.59	1.46
32	S1	684	C	O4'-C1'	7.82	1.51	1.41
33	L1	803	G	O3'-P	-7.82	1.51	1.61
33	L1	3033	A	O3'-P	-7.82	1.51	1.61
38	LE	116	MET	N-CA	-7.82	1.30	1.46
33	L1	198	A	O4'-C1'	-7.82	1.31	1.41
33	L1	632	C	P-O5'	-7.82	1.51	1.59
32	S1	1151	G	O4'-C1'	7.81	1.51	1.41
33	L1	2630	A	P-O5'	-7.81	1.51	1.59
32	S1	789	C	C5'-C4'	7.81	1.60	1.51
33	L1	2877	U	O4'-C1'	-7.81	1.31	1.41
32	S1	877	G	C2'-C1'	7.81	1.61	1.53
33	L1	20	G	C2'-C1'	-7.81	1.44	1.53
33	L1	868	A	C4'-O4'	7.81	1.55	1.45
32	S1	573	C	O4'-C1'	7.80	1.51	1.41
32	S1	826	C	C2'-C1'	-7.80	1.44	1.53
32	S1	1307	U	C2'-C1'	-7.80	1.44	1.53
34	L3	115	A	C4'-C3'	-7.80	1.44	1.53
32	S1	1713	C	O3'-P	-7.80	1.51	1.61
32	S1	1705	C	C3'-C2'	7.79	1.61	1.52
33	L1	1470	A	C2'-C1'	-7.79	1.44	1.53
32	S1	25	C	C2'-C1'	-7.79	1.44	1.53
32	S1	1239	C	C4'-O4'	7.79	1.55	1.45
70	Li	43	LYS	CD-CE	7.79	1.70	1.51
33	L1	2985	C	O4'-C1'	7.79	1.51	1.41
33	L1	2338	C	O3'-P	-7.79	1.51	1.61
33	L1	1742	G	O3'-P	-7.79	1.51	1.61
33	L1	2643	A	O3'-P	-7.79	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	LS	166	LYS	N-CA	7.79	1.61	1.46
33	L1	484	C	C3'-O3'	7.79	1.53	1.42
32	S1	392	G	C2'-C1'	-7.78	1.44	1.53
33	L1	1293	C	C2'-C1'	-7.78	1.44	1.53
33	L1	2110	G	C2'-C1'	-7.78	1.44	1.53
33	L1	2436	G	C2'-C1'	7.78	1.61	1.53
33	L1	1386	G	C5'-C4'	7.78	1.60	1.51
33	L1	1500	C	C2'-C1'	-7.78	1.44	1.53
33	L1	1908	C	C2'-C1'	-7.78	1.44	1.53
33	L1	2591	G	O4'-C1'	-7.78	1.31	1.41
33	L1	3141	G	O4'-C1'	-7.78	1.31	1.41
33	L1	715	A	O4'-C1'	7.78	1.51	1.41
33	L1	3312	G	C4'-C3'	7.78	1.61	1.53
33	L1	186	A	P-O5'	-7.78	1.51	1.59
33	L1	571	G	O3'-P	-7.78	1.51	1.61
33	L1	924	A	C3'-C2'	7.78	1.61	1.52
33	L1	1828	C	O4'-C1'	7.78	1.51	1.41
33	L1	779	U	C2'-C1'	7.77	1.61	1.53
33	L1	1257	U	C4'-C3'	7.77	1.61	1.53
33	L1	1672	G	C3'-C2'	7.77	1.61	1.52
33	L1	3388	U	O3'-P	-7.77	1.51	1.61
35	L2	92	A	P-O5'	7.77	1.67	1.59
33	L1	249	A	C2'-C1'	-7.77	1.44	1.53
33	L1	1844	U	O4'-C1'	7.77	1.51	1.41
33	L1	1613	C	O4'-C1'	7.77	1.51	1.41
33	L1	1618	U	P-OP2	7.77	1.62	1.49
45	LQ	237	GLU	C-O	-7.77	1.08	1.23
33	L1	3041	A	C3'-C2'	-7.76	1.44	1.52
61	Lq	23	ARG	C-O	-7.76	1.08	1.23
33	L1	2223	A	C2'-C1'	-7.76	1.44	1.53
33	L1	2645	A	O4'-C1'	-7.76	1.31	1.41
33	L1	2798	G	C2'-C1'	-7.76	1.44	1.53
32	S1	775	A	O3'-P	7.76	1.70	1.61
32	S1	1195	U	C2'-C1'	-7.76	1.44	1.53
32	S1	546	U	C5'-C4'	7.76	1.60	1.51
33	L1	1861	A	C2'-C1'	7.75	1.61	1.53
33	L1	1827	U	C4'-C3'	7.75	1.61	1.53
33	L1	2640	A	C4'-O4'	7.75	1.55	1.45
15	SS	8	THR	C-N	7.75	1.51	1.34
1	Sa	224	GLY	CA-C	-7.75	1.39	1.51
32	S1	1807	A	C5'-C4'	7.75	1.60	1.51
33	L1	1255	A	O4'-C1'	7.75	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2823	C	O4'-C1'	7.75	1.51	1.41
33	L1	3145	G	O4'-C1'	7.75	1.51	1.41
32	S1	786	U	C4'-C3'	-7.75	1.44	1.53
33	L1	1509	G	O4'-C1'	-7.75	1.31	1.41
33	L1	1692	U	C2'-C1'	7.75	1.61	1.53
33	L1	1694	A	C2'-C1'	7.75	1.61	1.53
32	S1	224	C	O4'-C1'	7.75	1.51	1.41
33	L1	3067	G	O4'-C1'	-7.75	1.31	1.41
33	L1	2613	G	O3'-P	-7.74	1.51	1.61
33	L1	2615	U	P-O5'	-7.74	1.52	1.59
71	Lj	25	SER	CA-C	7.74	1.73	1.52
32	S1	271	C	C2'-C1'	-7.74	1.44	1.53
33	L1	1307	A	C2'-C1'	7.74	1.61	1.53
33	L1	1302	C	C2'-C1'	-7.74	1.44	1.53
33	L1	2331	A	C5'-C4'	7.74	1.60	1.51
33	L1	398	G	O4'-C1'	-7.73	1.31	1.41
33	L1	141	C	C3'-C2'	-7.73	1.44	1.52
33	L1	826	C	O4'-C1'	7.73	1.51	1.41
33	L1	1177	G	O4'-C1'	-7.73	1.31	1.41
33	L1	349	A	P-O5'	-7.72	1.52	1.59
32	S1	1285	G	O4'-C1'	7.72	1.51	1.41
33	L1	2628	C	P-O5'	-7.72	1.52	1.59
32	S1	598	A	C2'-C1'	7.72	1.61	1.53
32	S1	843	G	C2'-C1'	-7.72	1.44	1.53
33	L1	1857	G	O4'-C1'	-7.72	1.31	1.41
32	S1	785	A	C5'-C4'	7.72	1.60	1.51
33	L1	2627	G	O4'-C1'	-7.72	1.31	1.41
32	S1	961	U	O4'-C1'	7.72	1.51	1.41
32	S1	1368	C	C5'-C4'	7.71	1.60	1.51
32	S1	928	A	C3'-C2'	-7.71	1.44	1.52
32	S1	49	C	O4'-C1'	7.71	1.51	1.41
34	L3	12	U	C5'-C4'	7.71	1.60	1.51
33	L1	2003	C	C2'-C1'	-7.71	1.44	1.53
33	L1	2675	G	O3'-P	-7.71	1.51	1.61
29	ST	41	GLU	CA-CB	7.71	1.71	1.53
32	S1	170	C	C2'-C1'	-7.71	1.44	1.53
31	S2	52	G	C3'-O3'	7.71	1.52	1.42
33	L1	2424	G	C3'-C2'	7.71	1.61	1.52
33	L1	998	G	O4'-C1'	-7.70	1.31	1.41
32	S1	1738	U	C5'-C4'	7.70	1.60	1.51
32	S1	192	G	O4'-C1'	-7.70	1.31	1.41
32	S1	1272	G	C2'-C1'	-7.70	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	276	U	P-O5'	-7.70	1.52	1.59
34	L3	62	U	O3'-P	-7.70	1.51	1.61
33	L1	2738	U	C4'-O4'	7.69	1.55	1.45
32	S1	854	C	O4'-C1'	7.69	1.51	1.41
33	L1	3351	A	O4'-C1'	-7.69	1.31	1.41
32	S1	413	C	O4'-C1'	7.69	1.51	1.41
32	S1	1270	U	O4'-C1'	7.69	1.51	1.41
33	L1	1209	G	O4'-C1'	-7.69	1.31	1.41
33	L1	1729	G	C4'-O4'	7.69	1.55	1.45
33	L1	3358	A	O4'-C1'	-7.69	1.31	1.41
33	L1	1196	U	C2'-C1'	7.69	1.61	1.53
33	L1	3319	G	P-O5'	-7.69	1.52	1.59
33	L1	3382	A	C5'-C4'	7.69	1.60	1.51
32	S1	934	A	C2'-C1'	-7.69	1.44	1.53
33	L1	377	C	C2'-C1'	-7.69	1.44	1.53
33	L1	1120	G	C5'-C4'	7.69	1.60	1.51
33	L1	1388	C	C2'-C1'	-7.69	1.44	1.53
33	L1	1711	G	O4'-C1'	7.69	1.51	1.41
32	S1	1134	U	O3'-P	-7.68	1.51	1.61
33	L1	2308	A	O4'-C1'	7.68	1.51	1.41
33	L1	1341	G	C2'-C1'	-7.68	1.45	1.53
33	L1	939	A	P-O5'	-7.68	1.52	1.59
33	L1	1662	G	O4'-C1'	7.68	1.51	1.41
33	L1	3090	C	C3'-O3'	7.68	1.52	1.42
35	L2	161	A	O4'-C1'	7.68	1.51	1.41
33	L1	2787	A	O4'-C1'	-7.68	1.31	1.41
32	S1	916	U	C5'-C4'	7.67	1.60	1.51
32	S1	1029	U	P-O5'	-7.67	1.52	1.59
32	S1	1066	U	C2'-C1'	-7.67	1.45	1.53
32	S1	1669	U	O4'-C1'	7.67	1.51	1.41
32	S1	1181	G	C3'-C2'	-7.67	1.44	1.52
32	S1	1773	A	O4'-C1'	7.67	1.51	1.41
33	L1	3384	G	C2'-C1'	-7.67	1.45	1.53
32	S1	801	U	P-O5'	7.67	1.67	1.59
32	S1	1620	C	C2'-C1'	-7.67	1.45	1.53
33	L1	221	C	C2'-C1'	-7.67	1.45	1.53
33	L1	1155	G	C2'-C1'	-7.67	1.45	1.53
32	S1	11	A	O4'-C1'	7.66	1.51	1.41
32	S1	107	U	C2'-C1'	-7.66	1.45	1.53
32	S1	1677	U	C2'-C1'	7.66	1.61	1.53
32	S1	1071	C	O3'-P	-7.66	1.51	1.61
33	L1	3348	G	O4'-C1'	-7.66	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	380	C	C2'-C1'	-7.66	1.45	1.53
33	L1	16	A	O3'-P	-7.66	1.51	1.61
33	L1	2706	A	C5'-C4'	7.66	1.60	1.51
28	SN	11	PRO	N-CA	7.65	1.60	1.47
33	L1	2774	A	P-O5'	-7.65	1.52	1.59
33	L1	2911	C	C2'-C1'	-7.65	1.45	1.53
33	L1	198	A	C2'-C1'	7.65	1.61	1.53
32	S1	1469	C	C2'-C1'	-7.65	1.45	1.53
33	L1	958	U	O4'-C1'	7.65	1.51	1.41
33	L1	2229	G	C5'-C4'	7.65	1.60	1.51
32	S1	570	C	C2'-C1'	-7.65	1.45	1.53
33	L1	869	A	P-O5'	-7.65	1.52	1.59
35	L2	88	C	O3'-P	-7.65	1.51	1.61
32	S1	924	A	O4'-C1'	7.65	1.51	1.41
33	L1	1278	A	C2'-C1'	-7.64	1.45	1.53
33	L1	1978	G	C2'-C1'	-7.64	1.45	1.53
33	L1	2562	A	P-O5'	-7.64	1.52	1.59
33	L1	3057	A	O4'-C1'	7.64	1.51	1.41
32	S1	1286	U	O4'-C1'	7.64	1.51	1.41
33	L1	641	C	C4'-O4'	7.64	1.55	1.45
33	L1	2154	G	O4'-C1'	7.64	1.51	1.41
33	L1	3175	C	C3'-O3'	7.64	1.52	1.42
32	S1	1465	C	C2'-C1'	7.64	1.61	1.53
33	L1	170	C	O4'-C1'	7.64	1.51	1.41
32	S1	256	G	O4'-C1'	7.63	1.51	1.41
32	S1	1352	A	C2'-C1'	-7.63	1.45	1.53
33	L1	2765	A	O4'-C1'	-7.63	1.31	1.41
71	Lj	7	GLN	N-CA	7.63	1.61	1.46
33	L1	2492	C	O3'-P	-7.63	1.51	1.61
33	L1	1261	C	C2'-C1'	-7.63	1.45	1.53
32	S1	155	A	O4'-C1'	7.63	1.51	1.41
33	L1	2417	G	O3'-P	7.63	1.70	1.61
31	S2	12	U	C2'-C1'	-7.63	1.45	1.53
33	L1	2021	G	O4'-C1'	7.63	1.51	1.41
34	L3	101	A	O3'-P	-7.63	1.51	1.61
70	Li	111	LYS	N-CA	7.63	1.61	1.46
32	S1	1752	U	O4'-C1'	7.62	1.51	1.41
33	L1	1891	A	P-O5'	-7.62	1.52	1.59
33	L1	2899	A	O4'-C1'	-7.62	1.31	1.41
33	L1	1659	G	O4'-C1'	7.62	1.51	1.41
33	L1	2420	U	O4'-C1'	7.62	1.51	1.41
32	S1	1573	C	O4'-C1'	7.62	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1769	C	C2'-C1'	-7.62	1.45	1.53
33	L1	1743	C	O4'-C1'	7.62	1.51	1.41
33	L1	2902	A	O4'-C1'	-7.62	1.31	1.41
33	L1	1743	C	C2'-C1'	-7.62	1.45	1.53
32	S1	372	U	O4'-C1'	7.62	1.51	1.41
33	L1	1150	G	C2'-C1'	-7.62	1.45	1.53
33	L1	586	A	O4'-C1'	7.61	1.51	1.41
33	L1	1140	C	O4'-C1'	7.61	1.51	1.41
33	L1	1652	G	C2'-C1'	-7.61	1.45	1.53
46	LT	100	ARG	CD-NE	7.61	1.59	1.46
33	L1	950	U	C2'-C1'	-7.61	1.45	1.53
33	L1	1963	G	C2'-C1'	-7.61	1.45	1.53
33	L1	2255	U	C2'-C1'	-7.61	1.45	1.53
33	L1	2542	U	C2'-C1'	7.61	1.61	1.53
33	L1	735	C	C2'-C1'	-7.61	1.45	1.53
33	L1	1337	C	C2'-C1'	-7.61	1.45	1.53
33	L1	1342	C	P-O5'	-7.61	1.52	1.59
32	S1	1461	G	C5'-C4'	7.61	1.60	1.51
34	L3	1	G	P-OP2	7.61	1.61	1.49
34	L3	116	U	O4'-C1'	7.61	1.51	1.41
33	L1	2581	C	O3'-P	-7.60	1.52	1.61
35	L2	16	A	C2'-C1'	7.60	1.61	1.53
33	L1	1674	A	C5'-C4'	7.60	1.60	1.51
8	SJ	82	GLY	N-CA	7.60	1.57	1.46
33	L1	1400	C	C2'-C1'	-7.60	1.45	1.53
33	L1	2068	G	C2'-C1'	-7.60	1.45	1.53
33	L1	1448	U	O4'-C1'	7.60	1.51	1.41
32	S1	556	G	C2'-C1'	-7.59	1.45	1.53
32	S1	1641	A	O4'-C1'	7.59	1.51	1.41
33	L1	2904	A	O4'-C1'	7.59	1.51	1.41
25	SC	165	PRO	N-CA	7.59	1.60	1.47
35	L2	36	C	C4'-C3'	7.59	1.61	1.53
32	S1	1663	A	C2'-C1'	7.59	1.61	1.53
33	L1	3047	A	O4'-C1'	-7.59	1.31	1.41
32	S1	1238	A	C3'-C2'	-7.59	1.44	1.52
33	L1	915	G	P-O5'	-7.59	1.52	1.59
35	L2	126	G	O4'-C1'	7.59	1.51	1.41
32	S1	440	A	C4'-C3'	7.59	1.61	1.53
32	S1	56	U	O4'-C1'	7.58	1.51	1.41
33	L1	2876	G	O3'-P	7.58	1.70	1.61
59	Lo	30	ARG	C-O	-7.58	1.08	1.23
32	S1	388	G	C2'-C1'	-7.58	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1333	C	C3'-C2'	7.58	1.61	1.52
10	SL	117	VAL	N-CA	-7.58	1.31	1.46
33	L1	1991	U	O4'-C1'	7.58	1.51	1.41
32	S1	792	U	P-O5'	7.58	1.67	1.59
33	L1	1801	G	O4'-C1'	7.58	1.51	1.41
33	L1	641	C	P-O5'	7.57	1.67	1.59
32	S1	122	U	O4'-C1'	7.57	1.51	1.41
32	S1	1197	A	O4'-C1'	-7.57	1.31	1.41
32	S1	1664	U	O4'-C1'	7.57	1.51	1.41
33	L1	1119	G	C5'-C4'	7.57	1.60	1.51
35	L2	45	A	C4'-C3'	7.57	1.61	1.53
31	S2	13	U	O4'-C1'	-7.57	1.31	1.41
32	S1	1614	C	O3'-P	-7.57	1.52	1.61
33	L1	2051	G	C2'-C1'	-7.57	1.45	1.53
32	S1	970	U	C2'-C1'	-7.56	1.45	1.53
7	SI	72	ARG	CD-NE	7.56	1.59	1.46
32	S1	149	G	O4'-C1'	7.56	1.51	1.41
32	S1	1093	A	C4'-O4'	7.56	1.55	1.45
32	S1	1515	G	O4'-C1'	7.56	1.51	1.41
33	L1	3145	G	C2'-C1'	7.56	1.61	1.53
33	L1	1766	U	O4'-C1'	7.56	1.51	1.41
33	L1	2464	G	C2'-C1'	-7.56	1.45	1.53
32	S1	311	G	O4'-C1'	7.56	1.51	1.41
33	L1	243	C	O4'-C1'	7.56	1.51	1.41
33	L1	373	A	O4'-C1'	7.56	1.51	1.41
2	SA	211	PRO	C-O	-7.55	1.08	1.23
32	S1	442	A	C2'-C1'	7.55	1.61	1.53
32	S1	1299	G	O4'-C1'	7.55	1.51	1.41
32	S1	1321	C	C2'-C1'	-7.55	1.45	1.53
33	L1	329	G	C2'-C1'	7.55	1.61	1.53
33	L1	1132	A	O4'-C1'	7.55	1.51	1.41
33	L1	2698	A	P-O5'	-7.55	1.52	1.59
32	S1	882	G	C3'-C2'	-7.55	1.44	1.52
32	S1	1307	U	O4'-C1'	7.55	1.51	1.41
33	L1	634	A	O4'-C1'	7.55	1.51	1.41
33	L1	442	C	P-O5'	-7.55	1.52	1.59
33	L1	1467	G	P-O5'	-7.55	1.52	1.59
71	Lj	9	VAL	N-CA	7.55	1.61	1.46
33	L1	1061	A	P-O5'	-7.54	1.52	1.59
32	S1	1664	U	C2'-C1'	-7.54	1.45	1.53
33	L1	1052	A	C2'-C1'	7.54	1.61	1.53
33	L1	2441	G	C5'-C4'	7.54	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	586	U	P-O5'	-7.54	1.52	1.59
32	S1	1248	A	O4'-C1'	7.54	1.51	1.41
32	S1	1647	C	C5'-C4'	7.54	1.60	1.51
32	S1	1184	C	C5'-C4'	7.54	1.60	1.51
32	S1	289	G	O4'-C1'	7.54	1.51	1.41
32	S1	653	U	P-O5'	-7.53	1.52	1.59
32	S1	1351	U	C2'-C1'	-7.53	1.45	1.53
33	L1	858	U	O4'-C1'	7.53	1.51	1.41
33	L1	972	C	O4'-C1'	7.53	1.51	1.41
33	L1	1190	C	O4'-C1'	7.53	1.51	1.41
32	S1	667	U	C2'-C1'	-7.53	1.45	1.53
32	S1	1516	C	C5'-C4'	7.53	1.60	1.51
33	L1	3086	G	C4'-C3'	7.53	1.61	1.53
33	L1	3326	U	O4'-C1'	-7.53	1.31	1.41
33	L1	1306	A	O3'-P	7.53	1.70	1.61
32	S1	358	C	C2'-C1'	-7.53	1.45	1.53
33	L1	1080	C	C3'-C2'	-7.53	1.44	1.52
33	L1	1677	G	C2'-C1'	-7.53	1.45	1.53
33	L1	2824	U	O3'-P	-7.53	1.52	1.61
32	S1	1207	A	O3'-P	-7.52	1.52	1.61
33	L1	2215	A	C2'-C1'	-7.52	1.45	1.53
33	L1	2815	A	O4'-C1'	7.52	1.51	1.41
33	L1	3175	C	C4'-C3'	7.52	1.61	1.53
33	L1	64	A	C4'-C3'	7.51	1.61	1.53
33	L1	1924	G	P-O5'	7.51	1.67	1.59
33	L1	2103	U	C2'-C1'	7.51	1.61	1.53
32	S1	206	U	O4'-C1'	7.51	1.51	1.41
33	L1	1317	G	O4'-C1'	7.51	1.51	1.41
31	S2	67	G	C2'-C1'	-7.51	1.45	1.53
32	S1	345	A	O4'-C1'	7.51	1.51	1.41
34	L3	120	C	O4'-C1'	7.51	1.51	1.41
33	L1	1062	G	O4'-C1'	7.51	1.51	1.41
33	L1	3301	G	O4'-C1'	-7.51	1.31	1.41
33	L1	513	C	C4'-O4'	7.51	1.55	1.45
33	L1	2655	U	C2'-C1'	7.51	1.61	1.53
33	L1	477	C	C2'-C1'	-7.50	1.45	1.53
32	S1	1221	A	C4'-C3'	7.50	1.61	1.53
33	L1	226	U	O4'-C1'	-7.50	1.31	1.41
33	L1	2380	G	C4'-C3'	7.50	1.61	1.53
33	L1	3161	C	C2'-C1'	-7.50	1.45	1.53
33	L1	3295	G	O3'-P	-7.50	1.52	1.61
33	L1	3383	C	C4'-C3'	7.50	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	108	THR	C-N	-7.50	1.20	1.34
31	S2	57	A	C4'-O4'	7.50	1.55	1.45
33	L1	1343	C	C2'-C1'	-7.49	1.45	1.53
33	L1	1647	C	C2'-C1'	-7.49	1.45	1.53
66	LN	64	ARG	CG-CD	7.49	1.70	1.51
32	S1	405	A	O4'-C1'	7.49	1.51	1.41
33	L1	1451	U	C4'-C3'	7.49	1.61	1.53
33	L1	2579	G	O4'-C1'	7.49	1.51	1.41
32	S1	1071	C	C5'-C4'	7.49	1.60	1.51
33	L1	1700	U	O4'-C1'	7.49	1.51	1.41
33	L1	2222	C	C5'-C4'	7.49	1.60	1.51
33	L1	2469	C	C5'-C4'	7.49	1.60	1.51
35	L2	124	G	O4'-C1'	7.49	1.51	1.41
42	LP	192	TRP	CB-CG	7.49	1.63	1.50
32	S1	1417	A	C2'-C1'	7.48	1.61	1.53
33	L1	970	A	O4'-C1'	7.48	1.51	1.41
32	S1	482	A	C3'-O3'	7.48	1.52	1.42
33	L1	1301	C	O4'-C1'	7.48	1.51	1.41
33	L1	1421	A	C2'-C1'	-7.48	1.45	1.53
32	S1	447	C	C4'-C3'	7.48	1.61	1.53
32	S1	1599	C	O4'-C1'	7.48	1.51	1.41
33	L1	2488	A	C2'-C1'	7.48	1.61	1.53
32	S1	1212	A	C2'-C1'	-7.47	1.45	1.53
33	L1	127	G	O3'-P	-7.47	1.52	1.61
33	L1	488	U	O3'-P	-7.47	1.52	1.61
33	L1	1789	C	C3'-C2'	-7.47	1.44	1.52
35	L2	153	U	C2'-C1'	-7.47	1.45	1.53
32	S1	1189	U	C2'-C1'	-7.47	1.45	1.53
5	SE	194	LYS	CA-CB	7.47	1.70	1.53
32	S1	1133	C	C2'-C1'	-7.47	1.45	1.53
33	L1	56	A	C2'-C1'	7.47	1.61	1.53
33	L1	912	G	P-O5'	-7.47	1.52	1.59
32	S1	928	A	C2'-C1'	-7.47	1.45	1.53
33	L1	340	A	C5'-C4'	7.47	1.60	1.51
32	S1	962	G	P-O5'	-7.47	1.52	1.59
33	L1	1510	G	C4'-C3'	7.47	1.61	1.53
33	L1	1966	C	C2'-C1'	-7.47	1.45	1.53
32	S1	1651	U	C2'-C1'	-7.46	1.45	1.53
33	L1	2707	A	O4'-C1'	-7.46	1.31	1.41
33	L1	1191	U	C4'-C3'	7.46	1.61	1.53
32	S1	679	C	C2'-C1'	-7.46	1.45	1.53
33	L1	1034	U	P-O5'	7.46	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2453	G	C5'-C4'	7.46	1.60	1.51
32	S1	1247	G	C2'-C1'	-7.46	1.45	1.53
33	L1	1965	C	C2'-C1'	-7.46	1.45	1.53
33	L1	149	A	C5'-C4'	7.46	1.60	1.51
33	L1	521	G	P-O5'	-7.46	1.52	1.59
33	L1	1574	C	C5'-C4'	7.46	1.60	1.51
33	L1	2422	U	C2'-C1'	-7.46	1.45	1.53
33	L1	2695	A	C5'-C4'	7.46	1.60	1.51
33	L1	3175	C	C5'-C4'	7.46	1.60	1.51
33	L1	2278	G	C2'-C1'	7.46	1.61	1.53
33	L1	547	C	P-O5'	-7.45	1.52	1.59
33	L1	2668	U	O4'-C1'	-7.45	1.31	1.41
33	L1	3365	U	C4'-C3'	7.45	1.61	1.53
33	L1	44	A	O4'-C1'	7.45	1.51	1.41
39	LF	88	ARG	CD-NE	7.45	1.59	1.46
31	S2	57	A	C2'-O2'	-7.45	1.31	1.41
33	L1	570	G	C4'-C3'	7.45	1.61	1.53
33	L1	1101	A	O3'-P	-7.45	1.52	1.61
33	L1	1012	U	C2'-C1'	-7.45	1.45	1.53
32	S1	1456	U	P-O5'	-7.45	1.52	1.59
33	L1	2090	G	C2'-C1'	7.45	1.61	1.53
33	L1	2717	G	C2'-C1'	-7.45	1.45	1.53
64	LG	27	ALA	N-CA	7.45	1.61	1.46
34	L3	115	A	P-O5'	-7.44	1.52	1.59
33	L1	251	G	C5'-C4'	7.44	1.60	1.51
33	L1	1683	U	O4'-C1'	7.44	1.51	1.41
33	L1	3113	G	O4'-C1'	7.44	1.51	1.41
32	S1	1154	G	O3'-P	7.44	1.70	1.61
32	S1	1471	C	C2'-C1'	-7.44	1.45	1.53
33	L1	2696	C	P-O5'	-7.44	1.52	1.59
11	SM	36	VAL	CA-C	7.44	1.72	1.52
11	SM	113	ARG	N-CA	-7.44	1.31	1.46
32	S1	5	U	O4'-C1'	7.44	1.51	1.41
33	L1	525	A	O4'-C1'	7.44	1.51	1.41
33	L1	2526	G	C5'-C4'	7.44	1.60	1.51
49	LX	125	ARG	CD-NE	7.44	1.59	1.46
31	S2	38	C	O4'-C1'	7.43	1.51	1.41
32	S1	1632	C	C4'-C3'	7.43	1.61	1.53
33	L1	2107	A	O4'-C1'	7.43	1.51	1.41
33	L1	2546	C	O4'-C1'	7.43	1.51	1.41
33	L1	508	G	O4'-C1'	7.43	1.51	1.41
33	L1	2955	U	C4'-O4'	7.43	1.55	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	601	G	O4'-C1'	-7.43	1.31	1.41
34	L3	10	C	P-O5'	7.43	1.67	1.59
32	S1	1076	C	C2'-C1'	-7.42	1.45	1.53
32	S1	587	C	O4'-C1'	7.42	1.51	1.41
33	L1	2520	U	O4'-C1'	7.42	1.51	1.41
32	S1	1364	C	P-O5'	-7.42	1.52	1.59
34	L3	73	U	C4'-O4'	7.42	1.55	1.45
32	S1	1345	G	C2'-C1'	7.42	1.61	1.53
35	L2	7	A	O4'-C1'	7.42	1.51	1.41
33	L1	367	A	O4'-C1'	-7.42	1.32	1.41
33	L1	1163	A	C5'-C4'	7.42	1.60	1.51
32	S1	1325	A	P-O5'	-7.42	1.52	1.59
32	S1	1735	C	C2'-C1'	-7.42	1.45	1.53
33	L1	1330	A	C2'-C1'	-7.41	1.45	1.53
32	S1	953	G	O4'-C1'	-7.41	1.32	1.41
32	S1	1126	C	O3'-P	-7.41	1.52	1.61
33	L1	570	G	O3'-P	-7.41	1.52	1.61
33	L1	839	A	C4'-C3'	7.41	1.61	1.53
33	L1	1276	C	C5'-C4'	7.41	1.60	1.51
33	L1	2886	C	O4'-C1'	7.41	1.51	1.41
34	L3	50	A	C2'-C1'	-7.41	1.45	1.53
33	L1	628	C	C4'-C3'	7.41	1.61	1.53
33	L1	1576	C	C3'-C2'	7.41	1.61	1.52
35	L2	96	A	C5'-C4'	7.40	1.60	1.51
33	L1	2934	C	O4'-C1'	-7.40	1.32	1.41
33	L1	3038	U	P-O5'	7.40	1.67	1.59
46	LT	172	ARG	CD-NE	7.40	1.59	1.46
4	SD	131	PHE	C-O	-7.40	1.09	1.23
32	S1	647	G	O4'-C1'	-7.40	1.32	1.41
33	L1	470	G	C5'-C4'	7.40	1.60	1.51
33	L1	2397	A	C5'-C4'	-7.40	1.42	1.51
32	S1	940	U	C4'-C3'	-7.40	1.45	1.53
33	L1	533	G	O4'-C1'	7.40	1.51	1.41
32	S1	1371	U	C4'-O4'	7.39	1.55	1.45
32	S1	1496	A	C5'-C4'	7.39	1.60	1.51
34	L3	24	G	C4'-C3'	-7.39	1.45	1.53
32	S1	1203	G	C2'-C1'	7.39	1.61	1.53
34	L3	39	C	P-O5'	-7.39	1.52	1.59
32	S1	376	G	C4'-O4'	7.39	1.55	1.45
32	S1	1426	C	O4'-C1'	7.39	1.51	1.41
33	L1	3068	U	C2'-C1'	7.39	1.61	1.53
32	S1	716	A	P-O5'	-7.39	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	906	G	C5'-C4'	7.39	1.60	1.51
32	S1	1266	U	C2'-C1'	-7.39	1.45	1.53
33	L1	2460	A	C3'-O3'	7.39	1.52	1.42
77	Lc	5	LYS	C-O	-7.39	1.09	1.23
33	L1	571	G	P-O5'	-7.39	1.52	1.59
32	S1	1183	G	C4'-C3'	7.38	1.61	1.53
32	S1	1506	G	O3'-P	-7.38	1.52	1.61
33	L1	3062	G	C4'-C3'	7.38	1.61	1.53
32	S1	91	C	O4'-C1'	7.38	1.51	1.41
23	SU	81	ILE	C-N	7.38	1.51	1.34
31	S2	15	A	O4'-C1'	-7.38	1.32	1.41
32	S1	985	G	O4'-C1'	7.38	1.51	1.41
33	L1	1058	A	O4'-C1'	7.38	1.51	1.41
33	L1	1513	C	C4'-O4'	-7.38	1.35	1.45
33	L1	2655	U	P-O5'	7.38	1.67	1.59
33	L1	2713	G	O4'-C1'	7.38	1.51	1.41
32	S1	1102	U	C5'-C4'	7.38	1.60	1.51
42	LP	42	PRO	N-CD	-7.38	1.37	1.47
33	L1	1948	G	C4'-C3'	7.38	1.61	1.53
33	L1	3383	C	O4'-C1'	7.37	1.51	1.41
35	L2	102	U	C2'-C1'	-7.37	1.45	1.53
33	L1	1182	A	C5'-C4'	7.37	1.60	1.51
32	S1	875	C	C2'-C1'	-7.37	1.45	1.53
33	L1	2080	G	C3'-O3'	7.37	1.52	1.42
30	S3	22	A	C2'-C1'	7.37	1.61	1.53
32	S1	23	G	O4'-C1'	7.36	1.51	1.41
33	L1	674	G	O4'-C1'	7.36	1.51	1.41
32	S1	1416	A	O4'-C1'	7.36	1.51	1.41
32	S1	1500	A	C5'-C4'	7.36	1.60	1.51
33	L1	1462	C	C2'-C1'	-7.36	1.45	1.53
23	SU	34	HIS	C-O	-7.36	1.09	1.23
32	S1	601	G	C2'-C1'	-7.36	1.45	1.53
32	S1	1197	A	O3'-P	-7.36	1.52	1.61
33	L1	2409	U	O4'-C1'	7.36	1.51	1.41
33	L1	2519	U	C2'-C1'	7.36	1.61	1.53
33	L1	2875	U	P-O5'	-7.36	1.52	1.59
67	LS	138	ARG	CZ-NH2	7.36	1.42	1.33
32	S1	206	U	C2'-C1'	-7.35	1.45	1.53
80	LC	70	LYS	N-CA	7.35	1.61	1.46
32	S1	11	A	C4'-O4'	-7.35	1.35	1.45
32	S1	1169	G	C2'-C1'	7.35	1.61	1.53
32	S1	1768	U	C2'-C1'	-7.35	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3330	U	O4'-C1'	-7.35	1.32	1.41
45	LQ	10	THR	C-N	7.35	1.50	1.34
33	L1	161	C	O4'-C1'	7.35	1.51	1.41
33	L1	2494	A	C5'-C4'	7.34	1.60	1.51
33	L1	2574	A	C2'-C1'	-7.34	1.45	1.53
32	S1	323	U	C2'-C1'	-7.34	1.45	1.53
33	L1	3008	U	C2'-C1'	7.34	1.61	1.53
2	SA	212	GLU	N-CA	7.34	1.61	1.46
32	S1	1140	U	C3'-O3'	7.34	1.52	1.42
33	L1	1276	C	C2'-C1'	-7.34	1.45	1.53
33	L1	2761	A	O4'-C1'	7.34	1.51	1.41
33	L1	1257	U	O4'-C1'	-7.34	1.32	1.41
34	L3	105	C	O4'-C1'	7.34	1.51	1.41
32	S1	1	U	O3'-P	-7.34	1.52	1.61
32	S1	1263	C	C2'-C1'	-7.34	1.45	1.53
32	S1	1623	C	O4'-C1'	7.34	1.51	1.41
33	L1	67	C	O4'-C1'	7.34	1.51	1.41
33	L1	944	G	C2'-C1'	-7.34	1.45	1.53
33	L1	1442	U	O3'-P	7.34	1.70	1.61
33	L1	3046	C	C2'-C1'	-7.33	1.45	1.53
31	S2	64	G	C5'-C4'	7.33	1.60	1.51
33	L1	1199	A	P-O5'	-7.33	1.52	1.59
33	L1	3079	G	P-O5'	-7.33	1.52	1.59
35	L2	46	G	C2'-C1'	7.33	1.61	1.53
32	S1	466	G	O4'-C1'	7.33	1.51	1.41
32	S1	354	G	C3'-C2'	7.33	1.61	1.52
33	L1	316	A	O4'-C1'	7.33	1.51	1.41
32	S1	427	G	O4'-C1'	7.33	1.51	1.41
32	S1	1084	U	C2'-C1'	7.33	1.61	1.53
33	L1	2806	A	C5'-C4'	7.33	1.60	1.51
33	L1	2628	C	C5'-C4'	7.33	1.60	1.51
1	Sa	16	ALA	C-N	7.32	1.50	1.34
78	Le	78	TYR	CG-CD2	7.32	1.48	1.39
34	L3	74	A	C4'-C3'	-7.32	1.45	1.53
33	L1	427	U	O4'-C1'	7.32	1.51	1.41
32	S1	1728	G	C2'-C1'	-7.32	1.45	1.53
32	S1	1330	A	O4'-C1'	7.32	1.51	1.41
32	S1	1541	C	O3'-P	-7.32	1.52	1.61
33	L1	1336	A	O4'-C1'	7.32	1.51	1.41
33	L1	1535	C	O4'-C1'	7.32	1.51	1.41
32	S1	1723	G	C2'-C1'	-7.31	1.45	1.53
33	L1	2014	A	O4'-C1'	7.31	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1042	C	C2'-C1'	-7.31	1.45	1.53
32	S1	1739	U	C2'-C1'	-7.31	1.45	1.53
33	L1	1035	C	O3'-P	-7.31	1.52	1.61
33	L1	2064	C	C5'-C4'	7.31	1.60	1.51
33	L1	2944	C	O3'-P	-7.31	1.52	1.61
33	L1	3012	A	C2'-C1'	7.31	1.61	1.53
32	S1	1173	U	O4'-C1'	7.30	1.51	1.41
33	L1	1465	A	C2'-C1'	-7.30	1.45	1.53
40	LH	87	ASN	C-O	-7.30	1.09	1.23
33	L1	242	U	C5'-C4'	7.30	1.60	1.51
33	L1	721	A	O4'-C1'	7.30	1.51	1.41
33	L1	1639	U	C5'-C4'	7.30	1.60	1.51
32	S1	1660	C	C3'-C2'	-7.30	1.44	1.52
33	L1	293	A	O3'-P	-7.30	1.52	1.61
33	L1	650	A	P-O5'	-7.30	1.52	1.59
33	L1	801	G	C2'-C1'	7.30	1.61	1.53
23	SU	25	ARG	CA-C	7.30	1.72	1.52
32	S1	8	U	C3'-C2'	-7.30	1.44	1.52
32	S1	1244	U	O4'-C1'	7.30	1.51	1.41
33	L1	1449	A	O3'-P	-7.30	1.52	1.61
33	L1	2899	A	P-O5'	7.30	1.67	1.59
32	S1	373	U	C3'-C2'	7.30	1.60	1.52
33	L1	1685	U	O4'-C1'	7.29	1.51	1.41
15	SS	5	THR	CA-CB	7.29	1.72	1.53
33	L1	293	A	O4'-C1'	-7.29	1.32	1.41
31	S2	4	G	C3'-O3'	7.29	1.52	1.42
32	S1	1240	A	C4'-C3'	-7.29	1.45	1.53
33	L1	579	G	C4'-C3'	7.29	1.61	1.53
33	L1	1961	C	C2'-C1'	-7.29	1.45	1.53
33	L1	2665	A	C3'-O3'	7.29	1.52	1.42
33	L1	3005	C	P-O5'	-7.29	1.52	1.59
32	S1	1205	G	O4'-C1'	7.29	1.51	1.41
33	L1	637	C	O3'-P	7.29	1.69	1.61
33	L1	1623	C	O4'-C1'	7.29	1.51	1.41
33	L1	1425	G	O4'-C1'	-7.29	1.32	1.41
33	L1	578	C	C4'-O4'	-7.29	1.36	1.45
33	L1	1037	U	C2'-C1'	-7.29	1.45	1.53
33	L1	2968	G	C2'-C1'	-7.29	1.45	1.53
33	L1	3142	C	P-O5'	-7.29	1.52	1.59
34	L3	120	C	P-O5'	-7.29	1.52	1.59
33	L1	461	A	C4'-C3'	7.28	1.61	1.53
33	L1	1886	U	C5'-C4'	7.28	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3093	C	C5'-C4'	7.28	1.60	1.51
80	LC	49	TYR	CG-CD2	7.28	1.48	1.39
10	SL	119	PHE	C-N	7.28	1.50	1.34
32	S1	675	A	C2'-C1'	-7.28	1.45	1.53
33	L1	210	G	C4'-C3'	7.28	1.61	1.53
34	L3	103	U	C5'-C4'	7.28	1.60	1.51
82	LK	136	PRO	N-CA	7.28	1.59	1.47
33	L1	882	U	O3'-P	-7.28	1.52	1.61
33	L1	955	A	P-O5'	-7.28	1.52	1.59
33	L1	1881	C	O3'-P	-7.28	1.52	1.61
33	L1	2740	C	C2'-C1'	-7.27	1.45	1.53
32	S1	1440	U	C2'-C1'	7.27	1.61	1.53
33	L1	1616	G	C2'-C1'	-7.27	1.45	1.53
33	L1	2040	G	C2'-C1'	-7.27	1.45	1.53
33	L1	2059	C	C3'-C2'	7.27	1.60	1.52
32	S1	1762	C	C2'-C1'	-7.27	1.45	1.53
33	L1	305	G	C4'-C3'	7.27	1.61	1.53
33	L1	2689	U	C3'-O3'	7.27	1.52	1.42
32	S1	68	A	O4'-C1'	7.27	1.51	1.41
33	L1	2653	U	C2'-C1'	-7.27	1.45	1.53
35	L2	92	A	C5'-C4'	7.27	1.60	1.51
33	L1	2582	G	O4'-C1'	7.27	1.51	1.41
9	SK	83	ARG	CD-NE	7.26	1.58	1.46
32	S1	1805	U	O3'-P	-7.26	1.52	1.61
33	L1	790	G	O4'-C1'	7.26	1.51	1.41
32	S1	1382	C	C2'-C1'	-7.26	1.45	1.53
32	S1	402	G	O4'-C1'	7.26	1.51	1.41
33	L1	2725	U	C5'-C4'	7.26	1.60	1.51
32	S1	431	C	C2'-C1'	-7.26	1.45	1.53
33	L1	1190	C	C4'-O4'	-7.26	1.36	1.45
44	LR	98	MET	CA-CB	7.26	1.70	1.53
23	SU	34	HIS	N-CA	7.26	1.60	1.46
33	L1	1632	G	O4'-C1'	-7.26	1.32	1.41
32	S1	1460	G	C2'-C1'	-7.25	1.45	1.53
7	SI	129	ARG	CZ-NH2	7.25	1.42	1.33
33	L1	812	G	C2'-C1'	-7.25	1.45	1.53
33	L1	1195	C	O4'-C1'	7.25	1.51	1.41
33	L1	1583	G	O4'-C1'	7.25	1.51	1.41
33	L1	1752	C	O4'-C1'	7.25	1.51	1.41
33	L1	1934	U	P-O5'	-7.25	1.52	1.59
35	L2	154	G	O4'-C1'	7.25	1.51	1.41
33	L1	1092	G	O4'-C1'	-7.25	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1729	G	C3'-C2'	-7.25	1.44	1.52
33	L1	2751	A	C4'-C3'	7.25	1.61	1.53
32	S1	423	G	O4'-C1'	7.24	1.51	1.41
32	S1	873	G	O4'-C1'	-7.24	1.32	1.41
32	S1	998	A	O4'-C1'	7.24	1.51	1.41
33	L1	3303	C	C2'-C1'	-7.24	1.45	1.53
34	L3	47	C	C2'-C1'	-7.24	1.45	1.53
33	L1	1569	U	O4'-C1'	-7.24	1.32	1.41
33	L1	1981	U	O4'-C1'	7.24	1.51	1.41
81	LD	60	ARG	CD-NE	7.24	1.58	1.46
7	SI	88	ARG	NE-CZ	7.24	1.42	1.33
33	L1	214	G	O3'-P	-7.24	1.52	1.61
35	L2	86	C	C4'-C3'	7.24	1.61	1.53
33	L1	2991	U	C2'-C1'	-7.24	1.45	1.53
32	S1	647	G	C2'-C1'	7.24	1.61	1.53
33	L1	657	A	O4'-C1'	7.24	1.51	1.41
33	L1	1049	C	C2'-C1'	-7.24	1.45	1.53
37	LB	68	ARG	NE-CZ	7.24	1.42	1.33
32	S1	49	C	C2'-C1'	-7.23	1.45	1.53
33	L1	83	U	P-O5'	-7.23	1.52	1.59
35	L2	25	C	C4'-C3'	7.23	1.61	1.53
33	L1	1525	U	C5'-C4'	7.23	1.60	1.51
35	L2	55	G	C5'-C4'	7.23	1.60	1.51
32	S1	479	A	C2'-C1'	-7.23	1.45	1.53
32	S1	667	U	O4'-C1'	7.23	1.51	1.41
33	L1	1967	C	O4'-C1'	7.23	1.51	1.41
32	S1	34	G	C2'-C1'	7.23	1.61	1.53
33	L1	2093	G	C2'-C1'	-7.23	1.45	1.53
32	S1	1038	C	P-O5'	-7.23	1.52	1.59
33	L1	886	A	O3'-P	-7.22	1.52	1.61
33	L1	1954	G	P-O5'	-7.22	1.52	1.59
33	L1	2587	G	O4'-C1'	-7.22	1.32	1.41
32	S1	1091	A	O3'-P	-7.22	1.52	1.61
32	S1	1703	G	C5'-C4'	7.22	1.60	1.51
33	L1	3183	G	O3'-P	-7.22	1.52	1.61
33	L1	2647	C	O3'-P	-7.22	1.52	1.61
60	Lr	59	HIS	N-CA	7.22	1.60	1.46
32	S1	824	U	O4'-C1'	7.22	1.51	1.41
32	S1	886	A	O4'-C1'	7.22	1.51	1.41
33	L1	1602	A	C4'-C3'	7.22	1.61	1.53
33	L1	1805	A	O4'-C1'	7.22	1.51	1.41
33	L1	2989	A	C2'-C1'	-7.22	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1006	A	O4'-C1'	7.21	1.51	1.41
33	L1	2394	G	O3'-P	-7.21	1.52	1.61
32	S1	1192	G	C2'-C1'	-7.21	1.45	1.53
33	L1	451	C	C2'-C1'	-7.21	1.45	1.53
34	L3	75	G	C2'-C1'	-7.21	1.45	1.53
32	S1	1269	G	C2'-C1'	7.21	1.61	1.53
25	SC	163	THR	N-CA	7.21	1.60	1.46
33	L1	2990	C	C2'-C1'	-7.21	1.45	1.53
33	L1	990	U	O4'-C1'	7.20	1.51	1.41
33	L1	1601	G	C2'-C1'	-7.20	1.45	1.53
33	L1	388	G	P-O5'	-7.20	1.52	1.59
33	L1	3125	G	O3'-P	-7.20	1.52	1.61
32	S1	773	U	O3'-P	-7.20	1.52	1.61
33	L1	1674	A	C3'-O3'	7.20	1.52	1.42
33	L1	1886	U	C4'-C3'	7.20	1.61	1.53
1	Sa	63	GLN	CD-OE1	7.20	1.39	1.24
32	S1	1318	U	O4'-C1'	7.20	1.51	1.41
33	L1	831	G	C3'-O3'	7.20	1.52	1.42
33	L1	1513	C	C5'-C4'	7.20	1.59	1.51
34	L3	118	C	O4'-C1'	7.20	1.51	1.41
32	S1	939	C	C2'-C1'	-7.20	1.45	1.53
32	S1	327	A	O4'-C1'	-7.19	1.32	1.41
32	S1	785	A	P-O5'	-7.19	1.52	1.59
32	S1	1001	C	O4'-C1'	7.19	1.51	1.41
33	L1	3313	C	C2'-C1'	-7.19	1.45	1.53
37	LB	247	ARG	CZ-NH2	7.19	1.42	1.33
32	S1	356	G	O3'-P	-7.19	1.52	1.61
33	L1	2648	G	O3'-P	-7.19	1.52	1.61
33	L1	2392	G	O4'-C1'	-7.19	1.32	1.41
32	S1	985	G	C2'-C1'	-7.18	1.45	1.53
49	LX	140	TYR	CE1-CZ	7.18	1.47	1.38
33	L1	2401	A	C5'-C4'	7.18	1.59	1.51
32	S1	954	C	C5'-C4'	7.18	1.59	1.51
33	L1	2358	C	C5'-C4'	7.18	1.59	1.51
33	L1	2654	G	C3'-C2'	7.18	1.60	1.52
35	L2	67	C	O3'-P	-7.18	1.52	1.61
33	L1	39	A	C2'-C1'	-7.18	1.45	1.53
33	L1	208	G	C2'-C1'	-7.18	1.45	1.53
33	L1	2224	A	O4'-C1'	-7.18	1.32	1.41
33	L1	1765	G	P-O5'	-7.17	1.52	1.59
33	L1	422	G	C2'-C1'	7.17	1.61	1.53
33	L1	3101	C	C5'-C4'	7.17	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1310	G	O3'-P	-7.17	1.52	1.61
34	L3	36	C	O4'-C1'	7.17	1.50	1.41
35	L2	88	C	C4'-O4'	7.17	1.54	1.45
32	S1	314	C	O4'-C1'	7.17	1.50	1.41
32	S1	605	A	C2'-C1'	7.17	1.61	1.53
33	L1	2107	A	C4'-C3'	-7.17	1.45	1.53
32	S1	562	U	C5'-C4'	7.17	1.59	1.51
35	L2	88	C	C5'-C4'	7.17	1.59	1.51
33	L1	1189	G	C5'-C4'	7.16	1.59	1.51
32	S1	1422	G	O4'-C1'	7.16	1.50	1.41
33	L1	84	A	C4'-C3'	7.16	1.61	1.53
33	L1	2390	G	C2'-C1'	-7.16	1.45	1.53
33	L1	746	C	P-O5'	-7.16	1.52	1.59
33	L1	2447	A	P-O5'	7.16	1.67	1.59
34	L3	89	G	C2'-C1'	-7.16	1.45	1.53
33	L1	126	G	C4'-C3'	7.16	1.61	1.53
10	SL	120	LYS	N-CA	7.16	1.60	1.46
32	S1	1171	C	O4'-C1'	7.16	1.50	1.41
33	L1	2770	U	C3'-O3'	7.16	1.52	1.42
32	S1	370	A	O4'-C1'	7.15	1.50	1.41
33	L1	2518	A	C4'-C3'	7.15	1.61	1.53
32	S1	892	A	C4'-C3'	7.15	1.61	1.53
33	L1	174	G	P-O5'	7.15	1.67	1.59
33	L1	3081	G	C3'-C2'	7.15	1.60	1.52
56	Lh	33	TRP	C-N	7.15	1.50	1.34
32	S1	677	C	C2'-C1'	-7.15	1.45	1.53
32	S1	19	A	C2'-C1'	7.15	1.61	1.53
32	S1	1317	A	O4'-C1'	-7.15	1.32	1.41
33	L1	1076	G	C2'-C1'	-7.15	1.45	1.53
33	L1	1299	G	O4'-C1'	7.15	1.50	1.41
33	L1	1428	G	O4'-C1'	-7.15	1.32	1.41
33	L1	1517	C	O4'-C1'	7.15	1.50	1.41
14	SP	78	SER	CA-CB	7.14	1.63	1.52
32	S1	382	A	C2'-C1'	7.14	1.61	1.53
33	L1	2500	U	C5'-C4'	7.14	1.59	1.51
33	L1	3080	U	C2'-C1'	7.14	1.61	1.53
33	L1	503	U	C2'-C1'	-7.14	1.45	1.53
33	L1	1263	A	C4'-C3'	7.14	1.61	1.53
33	L1	1954	G	O3'-P	-7.14	1.52	1.61
33	L1	2064	C	P-O5'	7.14	1.66	1.59
33	L1	3139	U	C2'-C1'	-7.14	1.45	1.53
32	S1	938	A	C4'-C3'	-7.14	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1495	G	C3'-O3'	7.14	1.52	1.42
33	L1	807	C	P-O5'	-7.14	1.52	1.59
32	S1	1386	U	P-O5'	7.14	1.66	1.59
33	L1	714	G	C2'-C1'	-7.14	1.45	1.53
33	L1	1213	G	P-O5'	-7.14	1.52	1.59
15	SS	44	ARG	CZ-NH2	7.13	1.42	1.33
33	L1	47	A	C2'-C1'	-7.13	1.45	1.53
33	L1	1680	A	O4'-C1'	7.13	1.50	1.41
32	S1	982	A	C2'-C1'	-7.13	1.45	1.53
32	S1	1479	U	C5'-C4'	7.13	1.59	1.51
35	L2	39	C	C2'-C1'	-7.13	1.45	1.53
32	S1	1716	C	O4'-C1'	7.13	1.50	1.41
33	L1	1947	U	O3'-P	-7.13	1.52	1.61
33	L1	484	C	C3'-C2'	7.12	1.60	1.52
32	S1	1203	G	P-O5'	-7.12	1.52	1.59
33	L1	612	U	C5'-C4'	7.12	1.59	1.51
33	L1	2418	A	C3'-O3'	7.12	1.52	1.42
33	L1	2674	A	C5'-C4'	7.12	1.59	1.51
32	S1	1124	G	C3'-C2'	7.12	1.60	1.52
32	S1	288	G	C2'-C1'	-7.12	1.45	1.53
32	S1	1249	G	P-O5'	-7.12	1.52	1.59
33	L1	793	C	C4'-O4'	-7.12	1.36	1.45
33	L1	1097	A	C3'-C2'	7.12	1.60	1.52
33	L1	434	C	C2'-C1'	-7.12	1.45	1.53
33	L1	3007	A	O4'-C1'	7.12	1.50	1.41
32	S1	221	U	C2'-C1'	-7.11	1.45	1.53
32	S1	1022	U	O4'-C1'	7.11	1.50	1.41
32	S1	1727	C	C4'-O4'	7.11	1.54	1.45
33	L1	1766	U	O3'-P	-7.11	1.52	1.61
33	L1	549	G	C4'-C3'	-7.11	1.45	1.53
33	L1	1960	C	C5'-C4'	7.11	1.59	1.51
38	LE	34	ARG	CG-CD	7.11	1.69	1.51
80	LC	70	LYS	CA-CB	7.11	1.69	1.53
33	L1	1057	A	C4'-C3'	-7.11	1.45	1.53
33	L1	2227	A	C5'-C4'	7.11	1.59	1.51
33	L1	2822	A	O4'-C1'	7.11	1.50	1.41
33	L1	3140	A	C4'-C3'	7.11	1.60	1.53
33	L1	860	G	O4'-C1'	-7.11	1.32	1.41
33	L1	2643	A	C5'-C4'	7.11	1.59	1.51
32	S1	1063	U	C4'-O4'	7.10	1.54	1.45
33	L1	1764	G	O3'-P	-7.10	1.52	1.61
32	S1	603	A	O4'-C1'	7.10	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1	U	O4'-C1'	-7.10	1.32	1.41
33	L1	509	G	P-O5'	-7.10	1.52	1.59
33	L1	654	C	O4'-C1'	7.10	1.50	1.41
33	L1	2108	C	O3'-P	-7.10	1.52	1.61
48	LV	131	TYR	CE2-CZ	7.10	1.47	1.38
32	S1	510	A	O4'-C1'	7.09	1.50	1.41
32	S1	39	A	C2'-C1'	-7.09	1.45	1.53
33	L1	182	C	O4'-C1'	7.09	1.50	1.41
33	L1	1207	A	P-O5'	-7.09	1.52	1.59
33	L1	1874	A	P-O5'	-7.09	1.52	1.59
33	L1	2334	G	O3'-P	-7.09	1.52	1.61
32	S1	1343	C	C2'-C1'	-7.09	1.45	1.53
33	L1	861	A	O4'-C1'	-7.09	1.32	1.41
66	LN	89	TRP	N-CA	7.08	1.60	1.46
33	L1	999	U	C2'-C1'	-7.08	1.45	1.53
33	L1	2248	G	O4'-C1'	-7.08	1.32	1.41
33	L1	2804	A	C2'-C1'	7.08	1.61	1.53
33	L1	1973	C	C2'-C1'	-7.08	1.45	1.53
32	S1	398	C	O3'-P	-7.08	1.52	1.61
32	S1	913	U	O4'-C1'	7.08	1.50	1.41
33	L1	2811	C	O3'-P	-7.08	1.52	1.61
33	L1	3094	C	P-O5'	-7.08	1.52	1.59
35	L2	141	G	C2'-C1'	-7.08	1.45	1.53
32	S1	1372	C	P-O5'	-7.08	1.52	1.59
32	S1	1724	U	O4'-C1'	7.08	1.50	1.41
42	LP	74	PRO	CA-CB	-7.08	1.39	1.53
33	L1	398	G	O3'-P	-7.08	1.52	1.61
33	L1	831	G	C5'-C4'	7.08	1.59	1.51
33	L1	9	C	P-O5'	-7.07	1.52	1.59
33	L1	541	C	C5'-C4'	7.07	1.59	1.51
33	L1	1407	G	P-O5'	-7.07	1.52	1.59
33	L1	1613	C	C2'-C1'	-7.07	1.45	1.53
33	L1	757	G	C2'-C1'	-7.07	1.45	1.53
33	L1	1370	A	C3'-O3'	7.07	1.52	1.42
32	S1	457	C	O4'-C1'	7.07	1.50	1.41
33	L1	70	A	C3'-C2'	7.07	1.60	1.52
34	L3	86	G	C2'-C1'	-7.07	1.45	1.53
60	Lr	89	LYS	CA-CB	7.07	1.69	1.53
32	S1	37	U	O4'-C1'	7.07	1.50	1.41
33	L1	959	U	C5'-C4'	7.07	1.59	1.51
32	S1	1763	A	C2'-C1'	-7.07	1.45	1.53
33	L1	3074	A	O4'-C1'	7.07	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	L3	107	C	O4'-C1'	7.07	1.50	1.41
33	L1	67	C	C2'-C1'	-7.07	1.45	1.53
33	L1	2063	U	O4'-C1'	7.07	1.50	1.41
33	L1	814	U	C3'-C2'	7.06	1.60	1.52
33	L1	2741	G	C2'-C1'	-7.06	1.45	1.53
33	L1	918	A	C4'-C3'	-7.06	1.45	1.53
33	L1	1119	G	O4'-C1'	-7.06	1.32	1.41
33	L1	2151	G	C5'-C4'	7.06	1.59	1.51
33	L1	1323	G	O4'-C1'	-7.06	1.32	1.41
33	L1	1742	G	O5'-C5'	-7.06	1.31	1.42
33	L1	2140	C	C2'-C1'	-7.06	1.45	1.53
10	SL	119	PHE	CA-C	7.06	1.71	1.52
33	L1	709	G	O4'-C1'	-7.06	1.32	1.41
68	LW	28	SER	CA-CB	7.06	1.63	1.52
33	L1	1422	G	C2'-C1'	7.06	1.61	1.53
33	L1	2207	C	C4'-C3'	7.06	1.60	1.53
33	L1	2474	A	C3'-O3'	7.06	1.52	1.42
33	L1	1896	A	O4'-C1'	-7.05	1.32	1.41
23	SU	81	ILE	CA-C	7.05	1.71	1.52
33	L1	15	C	C5'-C4'	7.05	1.59	1.51
33	L1	890	G	O4'-C1'	7.05	1.50	1.41
33	L1	3138	C	C2'-C1'	-7.05	1.45	1.53
32	S1	270	U	O4'-C1'	7.05	1.50	1.41
33	L1	671	C	C5'-C4'	7.05	1.59	1.51
33	L1	1620	U	O3'-P	-7.05	1.52	1.61
33	L1	3234	G	C5'-C4'	7.05	1.59	1.51
33	L1	804	A	C2'-C1'	-7.05	1.45	1.53
33	L1	3358	A	C2'-C1'	-7.05	1.45	1.53
29	ST	1	MET	N-CA	7.05	1.60	1.46
32	S1	1326	A	C4'-O4'	-7.05	1.36	1.45
33	L1	1112	C	C5'-C4'	7.05	1.59	1.51
33	L1	1201	C	C2'-C1'	7.05	1.61	1.53
33	L1	2069	G	O4'-C1'	7.05	1.50	1.41
33	L1	2996	A	C4'-C3'	7.05	1.60	1.53
33	L1	537	U	O4'-C1'	7.04	1.50	1.41
33	L1	1598	U	O3'-P	-7.04	1.52	1.61
32	S1	1778	G	C2'-C1'	-7.04	1.45	1.53
33	L1	1154	U	O4'-C1'	7.04	1.50	1.41
33	L1	857	G	O3'-P	-7.04	1.52	1.61
33	L1	2132	A	P-O5'	-7.04	1.52	1.59
32	S1	889	C	C2'-C1'	-7.04	1.45	1.53
32	S1	308	U	C2'-C1'	-7.04	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1114	A	C4'-C3'	7.04	1.60	1.53
33	L1	3044	C	O4'-C1'	7.04	1.50	1.41
32	S1	1429	U	O4'-C1'	7.03	1.50	1.41
33	L1	448	G	O4'-C1'	7.03	1.50	1.41
33	L1	1603	U	O3'-P	-7.03	1.52	1.61
33	L1	1562	A	O3'-P	-7.03	1.52	1.61
67	LS	28	ARG	CD-NE	7.03	1.58	1.46
31	S2	21	A	C3'-O3'	7.03	1.51	1.42
33	L1	582	C	P-O5'	-7.03	1.52	1.59
33	L1	1670	G	C5'-C4'	7.03	1.59	1.51
31	S2	50	G	P-O5'	-7.03	1.52	1.59
32	S1	633	U	P-O5'	-7.03	1.52	1.59
33	L1	538	C	C2'-C1'	7.03	1.61	1.53
33	L1	575	C	P-O5'	-7.03	1.52	1.59
33	L1	875	A	O3'-P	-7.03	1.52	1.61
33	L1	2260	C	C2'-C1'	-7.03	1.45	1.53
35	L2	23	A	C4'-C3'	7.03	1.60	1.53
32	S1	772	C	P-O5'	-7.03	1.52	1.59
33	L1	2102	C	C2'-C1'	-7.03	1.45	1.53
39	LF	95	TYR	CZ-OH	7.03	1.49	1.37
32	S1	986	U	O4'-C1'	7.02	1.50	1.41
33	L1	1595	G	C2'-C1'	-7.02	1.45	1.53
32	S1	974	C	C2'-C1'	7.02	1.61	1.53
33	L1	2716	U	O3'-P	-7.02	1.52	1.61
33	L1	5	G	O4'-C1'	7.02	1.50	1.41
33	L1	268	U	O4'-C1'	7.02	1.50	1.41
4	SD	151	ASP	CA-CB	7.02	1.69	1.53
32	S1	1495	U	C4'-C3'	-7.02	1.45	1.53
80	LC	10	ARG	CD-NE	7.02	1.58	1.46
32	S1	370	A	C2'-C1'	-7.02	1.45	1.53
32	S1	1204	G	C2'-C1'	7.02	1.61	1.53
33	L1	3109	G	C2'-C1'	-7.02	1.45	1.53
32	S1	64	U	C2'-C1'	-7.01	1.45	1.53
32	S1	1780	U	C2'-C1'	-7.01	1.45	1.53
33	L1	1808	G	C2'-C1'	7.01	1.61	1.53
33	L1	2103	U	P-O5'	-7.01	1.52	1.59
33	L1	2222	C	C4'-C3'	7.01	1.60	1.53
33	L1	2838	C	C3'-C2'	7.01	1.60	1.52
32	S1	775	A	C3'-O3'	7.01	1.51	1.42
32	S1	1236	U	C5'-C4'	7.01	1.59	1.51
33	L1	2594	A	P-O5'	-7.01	1.52	1.59
32	S1	1435	G	C4'-C3'	-7.01	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1577	A	O4'-C1'	-7.01	1.32	1.41
34	L3	2	G	O4'-C1'	-7.01	1.32	1.41
32	S1	1776	A	O4'-C1'	7.00	1.50	1.41
33	L1	3372	C	P-OP2	7.00	1.60	1.49
33	L1	2502	U	C4'-O4'	7.00	1.54	1.45
33	L1	3337	G	C4'-O4'	7.00	1.54	1.45
35	L2	29	G	C5'-C4'	7.00	1.59	1.51
35	L2	60	G	C4'-O4'	7.00	1.54	1.45
33	L1	843	C	C5'-C4'	7.00	1.59	1.51
33	L1	1571	A	C2'-C1'	7.00	1.61	1.53
33	L1	2877	U	C2'-C1'	-7.00	1.45	1.53
33	L1	3081	G	C5'-C4'	7.00	1.59	1.51
33	L1	1895	G	C4'-C3'	7.00	1.60	1.53
33	L1	1914	C	P-O5'	-7.00	1.52	1.59
27	SH	121	VAL	C-N	6.99	1.45	1.33
32	S1	1561	G	C2'-C1'	6.99	1.61	1.53
33	L1	642	C	C4'-C3'	-6.99	1.45	1.53
33	L1	2247	A	C4'-O4'	6.99	1.54	1.45
33	L1	3167	G	C2'-C1'	6.99	1.61	1.53
45	LQ	238	SER	C-O	-6.99	1.10	1.23
4	SD	132	GLY	CA-C	6.99	1.63	1.51
32	S1	887	U	O3'-P	-6.99	1.52	1.61
33	L1	559	U	P-O5'	-6.99	1.52	1.59
33	L1	902	U	C4'-C3'	6.99	1.60	1.53
33	L1	680	G	C2'-C1'	-6.99	1.45	1.53
33	L1	1323	G	C5'-C4'	6.99	1.59	1.51
33	L1	2353	C	C2'-C1'	-6.99	1.45	1.53
33	L1	3144	U	C3'-C2'	6.99	1.60	1.52
32	S1	1587	G	C2'-C1'	-6.99	1.45	1.53
33	L1	791	C	C2'-C1'	-6.99	1.45	1.53
33	L1	1198	G	O4'-C1'	-6.99	1.32	1.41
66	LN	64	ARG	CD-NE	-6.99	1.34	1.46
33	L1	207	U	C5'-C4'	6.99	1.59	1.51
32	S1	522	A	C5'-C4'	6.99	1.59	1.51
32	S1	856	G	C2'-C1'	-6.99	1.45	1.53
32	S1	1290	U	C4'-C3'	-6.99	1.45	1.53
34	L3	26	C	C4'-C3'	6.99	1.60	1.53
70	Li	108	LYS	N-CA	6.98	1.60	1.46
33	L1	2887	C	C4'-C3'	-6.98	1.45	1.53
32	S1	1157	A	C2'-C1'	6.98	1.61	1.53
33	L1	2756	G	O4'-C1'	-6.98	1.32	1.41
33	L1	1726	G	O3'-P	-6.98	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2226	C	P-O5'	-6.98	1.52	1.59
33	L1	3293	U	C5'-C4'	6.98	1.59	1.51
32	S1	944	A	C2'-C1'	-6.98	1.45	1.53
32	S1	1459	G	O4'-C1'	-6.98	1.32	1.41
33	L1	227	C	C3'-C2'	6.98	1.60	1.52
33	L1	207	U	C4'-C3'	6.98	1.60	1.53
32	S1	1135	G	C4'-O4'	-6.97	1.36	1.45
33	L1	754	G	O4'-C1'	-6.97	1.32	1.41
33	L1	1892	A	C5'-C4'	6.97	1.59	1.51
33	L1	2547	C	C2'-C1'	-6.97	1.45	1.53
32	S1	625	A	C3'-O3'	6.97	1.51	1.42
33	L1	2361	C	O4'-C1'	-6.97	1.32	1.41
33	L1	2993	A	O3'-P	-6.97	1.52	1.61
32	S1	88	C	C2'-C1'	-6.97	1.45	1.53
32	S1	1450	A	O4'-C1'	-6.97	1.32	1.41
33	L1	1345	U	C5'-C4'	6.97	1.59	1.51
33	L1	1905	A	O4'-C1'	6.97	1.50	1.41
33	L1	228	C	C2'-C1'	6.96	1.61	1.53
33	L1	925	U	C5'-C4'	6.96	1.59	1.51
33	L1	1343	C	C4'-C3'	6.96	1.60	1.53
33	L1	3027	G	O4'-C1'	6.96	1.50	1.41
35	L2	22	U	O3'-P	-6.96	1.52	1.61
5	SE	173	SER	CA-CB	6.96	1.63	1.52
33	L1	1110	C	O4'-C1'	6.96	1.50	1.41
32	S1	1662	G	C2'-C1'	-6.96	1.45	1.53
33	L1	1403	G	O4'-C1'	6.96	1.50	1.41
33	L1	1099	G	O3'-P	-6.96	1.52	1.61
33	L1	601	G	C2'-C1'	-6.96	1.45	1.53
33	L1	3308	A	P-O5'	-6.96	1.52	1.59
33	L1	3049	A	O4'-C1'	6.96	1.50	1.41
35	L2	68	U	P-O5'	-6.96	1.52	1.59
27	SH	120	ASN	N-CA	-6.95	1.32	1.46
32	S1	509	A	C5'-C4'	6.95	1.59	1.51
33	L1	181	G	C2'-C1'	-6.95	1.45	1.53
33	L1	1714	A	O4'-C1'	6.95	1.50	1.41
33	L1	2641	A	O4'-C1'	6.95	1.50	1.41
33	L1	218	G	O3'-P	-6.95	1.52	1.61
33	L1	2191	C	C2'-C1'	-6.95	1.45	1.53
33	L1	2337	C	O4'-C1'	6.95	1.50	1.41
33	L1	3217	G	C2'-C1'	6.95	1.60	1.53
35	L2	164	C	O4'-C1'	6.95	1.50	1.41
33	L1	2873	G	C2'-C1'	-6.95	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3	G	C2'-C1'	-6.95	1.45	1.53
33	L1	2807	G	C4'-C3'	6.94	1.60	1.53
33	L1	2801	A	C2'-C1'	-6.94	1.45	1.53
33	L1	2875	U	C3'-C2'	6.94	1.60	1.52
80	LC	352	ARG	CA-CB	6.94	1.69	1.53
32	S1	620	G	C2'-C1'	-6.94	1.45	1.53
33	L1	1245	U	O4'-C1'	-6.94	1.32	1.41
33	L1	1478	A	C2'-C1'	6.94	1.60	1.53
33	L1	1912	U	P-O5'	-6.94	1.52	1.59
52	Lb	87	TYR	CG-CD1	6.94	1.48	1.39
32	S1	1184	C	C4'-C3'	6.94	1.60	1.53
32	S1	1541	C	P-O5'	-6.94	1.52	1.59
32	S1	1755	G	P-O5'	6.94	1.66	1.59
33	L1	1714	A	C4'-C3'	6.94	1.60	1.53
11	SM	33	ILE	CA-C	-6.94	1.34	1.52
33	L1	1755	A	O3'-P	-6.93	1.52	1.61
33	L1	3270	C	C5'-C4'	6.93	1.59	1.51
32	S1	255	U	C2'-C1'	-6.93	1.45	1.53
32	S1	399	U	C4'-C3'	6.93	1.60	1.53
35	L2	13	G	O4'-C1'	-6.93	1.32	1.41
35	L2	150	G	O3'-P	-6.93	1.52	1.61
32	S1	233	U	O4'-C1'	6.93	1.50	1.41
33	L1	1590	A	O4'-C1'	6.93	1.50	1.41
33	L1	2987	C	C2'-C1'	-6.93	1.45	1.53
10	SL	85	PRO	N-CD	-6.92	1.38	1.47
31	S2	3	C	C2'-C1'	-6.92	1.45	1.53
32	S1	316	A	P-O5'	6.92	1.66	1.59
32	S1	557	G	C2'-C1'	-6.92	1.45	1.53
32	S1	916	U	O4'-C1'	-6.92	1.32	1.41
33	L1	2201	G	O3'-P	-6.92	1.52	1.61
33	L1	3041	A	O4'-C1'	-6.92	1.32	1.41
32	S1	904	G	O4'-C1'	6.92	1.50	1.41
33	L1	688	G	O4'-C1'	6.92	1.50	1.41
32	S1	1640	C	C2'-C1'	-6.92	1.45	1.53
32	S1	1689	A	C2'-C1'	-6.92	1.45	1.53
32	S1	581	G	O3'-P	-6.92	1.52	1.61
33	L1	1389	C	P-O5'	-6.92	1.52	1.59
32	S1	775	A	C4'-C3'	-6.92	1.45	1.53
33	L1	2635	G	C2'-C1'	-6.92	1.45	1.53
33	L1	2872	C	P-O5'	-6.92	1.52	1.59
33	L1	3308	A	C2'-C1'	-6.92	1.45	1.53
34	L3	14	C	C3'-C2'	-6.92	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2877	U	P-O5'	-6.92	1.52	1.59
51	LY	15	ARG	CD-NE	6.92	1.58	1.46
8	SJ	30	ARG	NE-CZ	6.92	1.42	1.33
33	L1	2756	G	C3'-O3'	6.92	1.51	1.42
33	L1	3326	U	C4'-C3'	6.92	1.60	1.53
33	L1	341	U	O4'-C1'	-6.91	1.32	1.41
33	L1	821	C	O4'-C1'	6.91	1.50	1.41
33	L1	2674	A	C2'-C1'	6.91	1.60	1.53
33	L1	1254	A	C3'-C2'	-6.91	1.45	1.52
33	L1	2799	U	O3'-P	-6.91	1.52	1.61
32	S1	602	U	O3'-P	-6.91	1.52	1.61
33	L1	2737	A	O4'-C1'	6.91	1.50	1.41
33	L1	3346	C	C2'-C1'	-6.91	1.45	1.53
32	S1	1318	U	C2'-C1'	-6.91	1.45	1.53
31	S2	57	A	P-O5'	-6.91	1.52	1.59
32	S1	364	A	C5'-C4'	6.91	1.59	1.51
33	L1	2646	A	C4'-O4'	-6.91	1.36	1.45
33	L1	249	A	C4'-C3'	-6.90	1.45	1.53
32	S1	1304	A	O4'-C1'	-6.90	1.32	1.41
33	L1	108	A	P-O5'	-6.90	1.52	1.59
33	L1	1118	G	O4'-C1'	6.90	1.50	1.41
33	L1	1773	U	C2'-C1'	-6.90	1.45	1.53
33	L1	2767	C	C2'-C1'	-6.90	1.45	1.53
33	L1	2865	G	O3'-P	-6.90	1.52	1.61
35	L2	155	G	C3'-C2'	6.90	1.60	1.52
13	SQ	95	GLU	N-CA	6.90	1.60	1.46
33	L1	82	C	O4'-C1'	6.90	1.50	1.41
33	L1	1602	A	C2'-C1'	6.90	1.60	1.53
33	L1	2602	U	C3'-O3'	6.90	1.51	1.42
33	L1	1953	C	C3'-C2'	6.90	1.60	1.52
33	L1	2808	U	C3'-O3'	6.90	1.51	1.42
32	S1	1679	A	O4'-C1'	6.89	1.50	1.41
33	L1	123	U	C2'-C1'	-6.89	1.45	1.53
33	L1	915	G	O4'-C1'	-6.89	1.32	1.41
33	L1	1990	A	O4'-C1'	6.89	1.50	1.41
33	L1	2702	G	C2'-C1'	-6.89	1.45	1.53
33	L1	209	G	C3'-O3'	6.89	1.51	1.42
32	S1	28	A	O4'-C1'	6.89	1.50	1.41
33	L1	343	G	C4'-C3'	6.89	1.60	1.53
33	L1	358	G	C2'-C1'	-6.89	1.45	1.53
33	L1	1388	C	C4'-C3'	6.89	1.60	1.53
33	L1	1752	C	P-O5'	-6.89	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2275	A	C5'-C4'	6.89	1.59	1.51
33	L1	3343	U	O4'-C1'	6.89	1.50	1.41
45	LQ	116	LEU	N-CA	6.89	1.60	1.46
31	S2	15	A	C3'-O3'	6.89	1.51	1.42
33	L1	1530	C	C4'-C3'	6.89	1.60	1.53
32	S1	101	A	O4'-C1'	6.89	1.50	1.41
33	L1	839	A	C2'-C1'	6.89	1.60	1.53
33	L1	1656	C	C2'-C1'	-6.89	1.45	1.53
33	L1	2501	U	P-O5'	-6.89	1.52	1.59
32	S1	1044	A	C2'-C1'	-6.88	1.45	1.53
33	L1	392	C	O4'-C1'	6.88	1.50	1.41
77	Lc	98	PRO	CA-CB	-6.88	1.39	1.53
31	S2	48	C	C4'-C3'	6.88	1.60	1.53
33	L1	1365	C	O4'-C1'	6.88	1.50	1.41
32	S1	452	C	O4'-C1'	6.88	1.50	1.41
33	L1	633	C	C2'-C1'	-6.88	1.45	1.53
33	L1	1288	C	O4'-C1'	6.88	1.50	1.41
33	L1	1342	C	C3'-O3'	6.88	1.51	1.42
33	L1	1680	A	C2'-C1'	6.88	1.60	1.53
33	L1	2877	U	C4'-C3'	6.88	1.60	1.53
13	SQ	21	TYR	CA-CB	6.88	1.69	1.53
32	S1	1749	C	O4'-C1'	6.87	1.50	1.41
33	L1	2841	G	C5'-C4'	6.87	1.59	1.51
33	L1	62	A	O3'-P	-6.87	1.52	1.61
33	L1	1933	U	O4'-C1'	6.87	1.50	1.41
35	L2	110	C	C5'-C4'	6.87	1.59	1.51
33	L1	400	G	C3'-C2'	6.87	1.60	1.52
33	L1	908	U	O3'-P	-6.87	1.52	1.61
33	L1	2456	G	O4'-C1'	6.87	1.50	1.41
32	S1	313	C	C3'-O3'	6.86	1.51	1.42
32	S1	1650	G	O4'-C1'	6.86	1.50	1.41
33	L1	382	A	C2'-C1'	6.86	1.60	1.53
33	L1	3152	C	C5'-C4'	6.86	1.59	1.51
32	S1	286	C	C2'-C1'	-6.86	1.45	1.53
32	S1	379	U	C3'-O3'	6.86	1.51	1.42
33	L1	527	G	C2'-C1'	-6.86	1.45	1.53
77	Lc	57	ARG	CZ-NH1	6.86	1.42	1.33
33	L1	1905	A	C3'-O3'	6.86	1.51	1.42
33	L1	2123	C	O4'-C1'	6.86	1.50	1.41
33	L1	2696	C	C3'-O3'	6.86	1.51	1.42
32	S1	179	A	C2'-C1'	-6.86	1.45	1.53
32	S1	368	A	O4'-C1'	6.86	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1858	U	O4'-C1'	6.86	1.50	1.41
33	L1	2222	C	O4'-C1'	6.86	1.50	1.41
33	L1	350	A	C4'-O4'	6.85	1.54	1.45
32	S1	1421	U	O4'-C1'	6.85	1.50	1.41
33	L1	1049	C	O4'-C1'	6.85	1.50	1.41
33	L1	1504	U	C3'-C2'	6.85	1.60	1.52
33	L1	2711	U	O3'-P	-6.85	1.52	1.61
33	L1	3376	C	O4'-C1'	6.85	1.50	1.41
72	Lk	68	LYS	CB-CG	-6.85	1.34	1.52
31	S2	15	A	C4'-C3'	-6.85	1.45	1.53
32	S1	1142	A	P-O5'	-6.85	1.52	1.59
33	L1	2626	G	P-O5'	6.85	1.66	1.59
34	L3	92	C	O4'-C1'	6.85	1.50	1.41
15	SS	14	PRO	CA-CB	-6.85	1.39	1.53
32	S1	329	G	C2'-C1'	6.84	1.60	1.53
33	L1	1731	A	C4'-C3'	6.84	1.60	1.53
33	L1	1890	C	O4'-C1'	6.84	1.50	1.41
33	L1	714	G	O4'-C1'	-6.84	1.32	1.41
32	S1	1479	U	O4'-C1'	-6.84	1.32	1.41
33	L1	2140	C	O3'-P	-6.84	1.52	1.61
33	L1	2368	G	C2'-C1'	-6.84	1.45	1.53
32	S1	1149	U	O4'-C1'	6.84	1.50	1.41
33	L1	911	G	C2'-C1'	6.84	1.60	1.53
35	L2	31	U	P-O5'	-6.84	1.52	1.59
33	L1	790	G	C2'-C1'	-6.84	1.45	1.53
68	LW	88	LEU	CA-CB	-6.84	1.38	1.53
33	L1	518	G	C3'-C2'	-6.83	1.45	1.52
33	L1	2167	G	O4'-C1'	-6.83	1.32	1.41
33	L1	1086	U	O4'-C1'	6.83	1.50	1.41
33	L1	1811	U	C3'-C2'	6.83	1.60	1.52
33	L1	3215	U	C5'-C4'	6.83	1.59	1.51
33	L1	1792	G	O4'-C1'	6.83	1.50	1.41
32	S1	1344	U	O4'-C1'	6.83	1.50	1.41
33	L1	1496	G	O3'-P	-6.83	1.52	1.61
33	L1	2470	C	O4'-C1'	6.83	1.50	1.41
32	S1	1265	A	C5'-C4'	6.82	1.59	1.51
35	L2	157	C	C2'-C1'	-6.82	1.45	1.53
48	LV	170	LYS	C-O	-6.82	1.10	1.23
32	S1	1353	G	C5'-C4'	6.82	1.59	1.51
33	L1	584	G	C2'-O2'	-6.82	1.32	1.41
32	S1	1331	C	C2'-C1'	6.82	1.60	1.53
33	L1	1472	C	C2'-C1'	-6.82	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2104	G	O4'-C1'	6.82	1.50	1.41
33	L1	2658	U	C4'-C3'	6.82	1.60	1.53
33	L1	2601	G	C2'-C1'	-6.82	1.45	1.53
69	La	28	VAL	C-N	6.82	1.49	1.34
33	L1	328	G	C2'-C1'	-6.81	1.45	1.53
35	L2	21	A	O4'-C1'	-6.81	1.32	1.41
33	L1	595	C	O4'-C1'	6.81	1.50	1.41
33	L1	3299	A	C3'-O3'	6.81	1.51	1.42
33	L1	3339	G	O3'-P	-6.81	1.52	1.61
7	SI	126	ASP	CA-CB	6.81	1.69	1.53
32	S1	372	U	C2'-C1'	-6.81	1.45	1.53
32	S1	1132	G	C2'-C1'	-6.81	1.45	1.53
33	L1	961	C	O4'-C1'	6.81	1.50	1.41
33	L1	3176	C	C3'-O3'	6.81	1.51	1.42
32	S1	361	G	C2'-C1'	6.81	1.60	1.53
33	L1	839	A	O3'-P	-6.81	1.52	1.61
33	L1	1571	A	O4'-C1'	-6.81	1.32	1.41
33	L1	1786	G	O4'-C1'	6.81	1.50	1.41
33	L1	2376	G	P-O5'	-6.81	1.52	1.59
33	L1	905	G	P-O5'	-6.81	1.52	1.59
32	S1	397	C	P-O5'	-6.80	1.52	1.59
32	S1	390	G	O4'-C1'	6.80	1.50	1.41
33	L1	1637	G	P-O5'	6.80	1.66	1.59
25	SC	25	ARG	CD-NE	6.80	1.58	1.46
32	S1	1432	C	C2'-C1'	6.80	1.60	1.53
33	L1	896	C	C4'-C3'	6.80	1.60	1.53
33	L1	1953	C	P-O5'	-6.80	1.52	1.59
33	L1	2243	C	C2'-C1'	-6.80	1.45	1.53
33	L1	2622	G	O3'-P	-6.80	1.52	1.61
33	L1	1176	U	C5'-C4'	6.80	1.59	1.51
33	L1	1214	U	O4'-C1'	6.80	1.50	1.41
31	S2	9	A	O3'-P	-6.80	1.52	1.61
33	L1	1835	A	O4'-C1'	6.79	1.50	1.41
33	L1	3296	C	O4'-C1'	-6.79	1.32	1.41
34	L3	29	C	O4'-C1'	6.79	1.50	1.41
68	LW	14	GLY	N-CA	6.79	1.56	1.46
69	La	8	GLY	N-CA	6.79	1.56	1.46
33	L1	2661	G	O4'-C1'	-6.79	1.32	1.41
32	S1	385	C	C2'-C1'	-6.79	1.45	1.53
32	S1	776	A	O3'-P	-6.79	1.52	1.61
34	L3	49	A	C5'-C4'	6.79	1.59	1.51
33	L1	2344	A	O4'-C1'	-6.79	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1079	G	C2'-C1'	-6.79	1.45	1.53
33	L1	959	U	P-O5'	-6.79	1.52	1.59
32	S1	491	G	O3'-P	-6.79	1.53	1.61
32	S1	717	G	P-O5'	-6.79	1.52	1.59
33	L1	1043	U	P-O5'	-6.79	1.52	1.59
33	L1	2727	U	C5'-C4'	6.79	1.59	1.51
34	L3	26	C	P-O5'	6.79	1.66	1.59
32	S1	777	A	P-O5'	-6.78	1.52	1.59
33	L1	3127	C	O4'-C1'	6.78	1.50	1.41
11	SM	92	ASP	CA-C	-6.78	1.35	1.52
33	L1	309	C	C3'-O3'	6.78	1.51	1.42
4	SD	213	ALA	N-CA	-6.78	1.32	1.46
33	L1	149	A	O3'-P	-6.78	1.53	1.61
33	L1	639	A	O4'-C1'	6.78	1.50	1.41
32	S1	409	C	C3'-C2'	-6.78	1.45	1.52
32	S1	1583	G	O4'-C1'	-6.78	1.32	1.41
33	L1	1504	U	C2'-C1'	-6.77	1.45	1.53
32	S1	1664	U	C5'-C4'	6.77	1.59	1.51
33	L1	1882	A	C5'-C4'	6.77	1.59	1.51
33	L1	2750	A	O4'-C1'	6.77	1.50	1.41
32	S1	1319	U	C4'-O4'	6.77	1.54	1.45
33	L1	2999	G	C4'-O4'	6.77	1.54	1.45
45	LQ	117	ASP	N-CA	6.77	1.59	1.46
32	S1	1158	G	C2'-C1'	-6.77	1.46	1.53
33	L1	820	A	C4'-C3'	6.77	1.60	1.53
33	L1	1119	G	O3'-P	-6.77	1.53	1.61
37	LB	209	HIS	C-N	6.77	1.47	1.34
31	S2	70	G	C2'-C1'	-6.77	1.46	1.53
32	S1	301	U	C2'-C1'	-6.77	1.46	1.53
33	L1	1529	C	P-O5'	-6.77	1.52	1.59
33	L1	2202	A	C3'-C2'	-6.77	1.45	1.52
71	Lj	12	TYR	C-O	-6.77	1.10	1.23
32	S1	1586	U	P-O5'	-6.76	1.52	1.59
33	L1	1830	U	C3'-C2'	-6.76	1.45	1.52
33	L1	2616	U	P-O5'	-6.76	1.52	1.59
33	L1	2562	A	C5'-C4'	6.76	1.59	1.51
33	L1	3208	G	C4'-C3'	6.76	1.60	1.53
81	LD	367	SER	CB-OG	-6.76	1.33	1.42
3	SB	35	SER	CA-CB	6.76	1.63	1.52
33	L1	915	G	C5'-C4'	-6.76	1.43	1.51
33	L1	2237	A	C3'-C2'	6.76	1.60	1.52
33	L1	2320	A	C2'-C1'	-6.76	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3002	U	O4'-C1'	-6.76	1.32	1.41
32	S1	1072	U	O3'-P	-6.76	1.53	1.61
33	L1	2859	C	O4'-C1'	6.76	1.50	1.41
35	L2	151	C	C2'-C1'	-6.76	1.46	1.53
33	L1	3144	U	C4'-C3'	6.76	1.60	1.53
25	SC	80	ARG	NE-CZ	6.75	1.41	1.33
32	S1	1313	G	C2'-C1'	6.75	1.60	1.53
66	LN	21	TYR	CE2-CZ	6.75	1.47	1.38
33	L1	1801	G	O3'-P	-6.75	1.53	1.61
33	L1	343	G	C3'-C2'	-6.75	1.45	1.52
33	L1	667	C	P-O5'	-6.75	1.52	1.59
33	L1	1601	G	O4'-C1'	6.75	1.50	1.41
33	L1	453	U	O4'-C1'	6.75	1.50	1.41
33	L1	252	A	C4'-C3'	6.75	1.60	1.53
33	L1	418	G	C2'-C1'	-6.75	1.46	1.53
33	L1	667	C	C2'-C1'	6.75	1.60	1.53
57	Ll	11	ARG	CA-CB	6.75	1.68	1.53
32	S1	616	U	C2'-C1'	6.75	1.60	1.53
33	L1	2856	U	O4'-C1'	-6.75	1.32	1.41
32	S1	1325	A	C5'-C4'	6.74	1.59	1.51
32	S1	1378	C	C2'-C1'	6.74	1.60	1.53
33	L1	2721	C	C3'-O3'	6.74	1.51	1.42
25	SC	44	LEU	C-O	-6.74	1.10	1.23
33	L1	1462	C	O4'-C1'	6.74	1.50	1.41
33	L1	2010	G	C2'-C1'	-6.74	1.46	1.53
32	S1	1278	C	C2'-C1'	6.74	1.60	1.53
33	L1	467	C	C5'-C4'	6.74	1.59	1.51
32	S1	1594	A	C2'-C1'	-6.74	1.46	1.53
33	L1	861	A	C4'-C3'	6.74	1.60	1.53
33	L1	949	C	P-O5'	-6.74	1.53	1.59
32	S1	658	C	C2'-C1'	-6.74	1.46	1.53
33	L1	275	G	O3'-P	-6.74	1.53	1.61
33	L1	1913	C	C3'-C2'	6.74	1.60	1.52
10	SL	120	LYS	CA-C	6.73	1.70	1.52
33	L1	3223	C	C2'-C1'	-6.73	1.46	1.53
33	L1	1899	U	C3'-C2'	6.73	1.60	1.52
32	S1	590	G	O4'-C1'	-6.73	1.32	1.41
32	S1	1495	U	C3'-O3'	6.73	1.51	1.42
31	S2	68	C	P-O5'	6.73	1.66	1.59
33	L1	1193	A	C3'-O3'	6.73	1.51	1.42
33	L1	1880	A	C2'-O2'	6.72	1.50	1.41
32	S1	1716	C	C5'-C4'	6.72	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	87	A	C5'-C4'	6.72	1.59	1.51
33	L1	1955	G	C5'-C4'	6.72	1.59	1.51
33	L1	2676	A	O3'-P	-6.72	1.53	1.61
43	LO	19	HIS	C-N	6.72	1.45	1.33
32	S1	1199	C	C2'-C1'	-6.72	1.46	1.53
33	L1	1063	G	C2'-C1'	-6.72	1.46	1.53
33	L1	3218	C	O3'-P	-6.72	1.53	1.61
33	L1	915	G	C4'-C3'	6.72	1.60	1.53
31	S2	46	A	O3'-P	-6.72	1.53	1.61
32	S1	1696	C	C2'-C1'	-6.72	1.46	1.53
33	L1	959	U	O4'-C1'	6.72	1.50	1.41
33	L1	3348	G	C2'-C1'	6.72	1.60	1.53
31	S2	47	U	O3'-P	-6.71	1.53	1.61
33	L1	3236	A	O3'-P	6.71	1.69	1.61
33	L1	2253	U	O4'-C1'	6.71	1.50	1.41
33	L1	2933	C	C4'-O4'	6.71	1.54	1.45
33	L1	3006	G	C4'-O4'	6.71	1.54	1.45
33	L1	518	G	C4'-C3'	6.71	1.60	1.53
33	L1	1275	A	C2'-C1'	6.71	1.60	1.53
33	L1	1946	C	O4'-C1'	6.71	1.50	1.41
33	L1	2668	U	C4'-C3'	6.71	1.60	1.53
34	L3	27	A	O4'-C1'	6.71	1.50	1.41
33	L1	1275	A	P-O5'	-6.71	1.53	1.59
33	L1	3004	G	O3'-P	-6.71	1.53	1.61
33	L1	73	A	C4'-C3'	6.71	1.60	1.53
33	L1	364	A	C2'-C1'	-6.71	1.46	1.53
33	L1	1886	U	P-O5'	-6.71	1.53	1.59
33	L1	3342	C	C2'-C1'	-6.71	1.46	1.53
32	S1	159	U	C2'-C1'	-6.71	1.46	1.53
33	L1	26	A	C2'-C1'	-6.71	1.46	1.53
32	S1	2	A	C4'-O4'	6.70	1.54	1.45
32	S1	1412	A	O4'-C1'	6.70	1.50	1.41
32	S1	1716	C	C3'-O3'	6.70	1.51	1.42
33	L1	2739	A	O3'-P	-6.70	1.53	1.61
77	Lc	40	SER	CA-CB	6.70	1.63	1.52
33	L1	1679	U	C3'-O3'	6.70	1.51	1.42
1	Sa	177	SER	CB-OG	-6.70	1.33	1.42
32	S1	915	C	C3'-C2'	-6.70	1.45	1.52
32	S1	1225	A	C3'-O3'	-6.70	1.32	1.42
33	L1	2452	U	C2'-C1'	6.70	1.60	1.53
33	L1	3295	G	O4'-C1'	-6.70	1.32	1.41
32	S1	1143	A	C2'-C1'	6.70	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1340	A	O4'-C1'	6.70	1.50	1.41
32	S1	1553	A	C5'-C4'	6.70	1.59	1.51
33	L1	2530	G	O4'-C1'	-6.70	1.32	1.41
31	S2	44	A	O4'-C1'	-6.69	1.32	1.41
32	S1	1160	G	C5'-C4'	6.69	1.59	1.51
33	L1	405	A	O4'-C1'	6.69	1.50	1.41
33	L1	2568	G	C2'-C1'	6.69	1.60	1.53
33	L1	2786	G	C5'-C4'	6.69	1.59	1.51
32	S1	976	A	C3'-C2'	-6.69	1.45	1.52
32	S1	1058	G	P-O5'	-6.69	1.53	1.59
32	S1	1655	U	O4'-C1'	6.69	1.50	1.41
33	L1	3382	A	O4'-C1'	-6.69	1.32	1.41
32	S1	412	C	C2'-C1'	-6.69	1.46	1.53
33	L1	294	A	C5'-C4'	6.69	1.59	1.51
33	L1	593	G	P-O5'	6.69	1.66	1.59
32	S1	188	U	O3'-P	-6.69	1.53	1.61
32	S1	856	G	O3'-P	-6.69	1.53	1.61
33	L1	364	A	C4'-C3'	-6.69	1.45	1.53
32	S1	493	C	P-O5'	-6.68	1.53	1.59
33	L1	328	G	C4'-C3'	6.68	1.60	1.53
33	L1	410	G	C3'-C2'	6.68	1.60	1.52
33	L1	1906	A	C5'-C4'	6.68	1.59	1.51
33	L1	3124	A	C5'-C4'	6.68	1.59	1.51
33	L1	3156	G	C3'-C2'	-6.68	1.45	1.52
31	S2	18	G	O3'-P	-6.68	1.53	1.61
33	L1	2065	G	C5'-C4'	6.68	1.59	1.51
33	L1	2646	A	C2'-C1'	6.68	1.60	1.53
33	L1	1157	A	C2'-C1'	6.68	1.60	1.53
78	Le	242	ARG	CZ-NH2	6.68	1.41	1.33
32	S1	1677	U	C3'-C2'	6.68	1.60	1.52
33	L1	1941	G	C5'-C4'	6.68	1.59	1.51
33	L1	3387	U	O4'-C1'	6.68	1.50	1.41
32	S1	1787	G	C2'-C1'	-6.68	1.46	1.53
33	L1	96	C	C2'-C1'	-6.68	1.46	1.53
34	L3	99	G	C3'-C2'	6.68	1.60	1.52
33	L1	713	G	O4'-C1'	6.68	1.50	1.41
33	L1	3065	U	P-OP2	6.68	1.60	1.49
32	S1	229	G	C2'-C1'	-6.67	1.46	1.53
33	L1	1565	G	C3'-C2'	-6.67	1.45	1.52
33	L1	1920	U	C5'-C4'	6.67	1.59	1.51
33	L1	2737	A	C2'-C1'	-6.67	1.46	1.53
4	SD	151	ASP	N-CA	6.67	1.59	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	979	A	O3'-P	-6.67	1.53	1.61
33	L1	1237	G	C4'-C3'	-6.67	1.45	1.53
33	L1	29	G	C5'-C4'	6.67	1.59	1.51
33	L1	1330	A	C3'-O3'	6.67	1.51	1.42
33	L1	2857	U	C2'-C1'	-6.67	1.46	1.53
32	S1	558	C	O3'-P	-6.67	1.53	1.61
32	S1	981	G	P-O5'	-6.67	1.53	1.59
33	L1	2684	U	O3'-P	-6.67	1.53	1.61
32	S1	928	A	O3'-P	-6.67	1.53	1.61
32	S1	1173	U	C2'-C1'	-6.67	1.46	1.53
33	L1	968	A	C2'-C1'	6.67	1.60	1.53
33	L1	1872	C	P-O5'	-6.67	1.53	1.59
33	L1	3147	G	C4'-O4'	6.67	1.54	1.45
32	S1	626	A	O3'-P	-6.66	1.53	1.61
32	S1	1575	U	C4'-C3'	-6.66	1.45	1.53
33	L1	1887	A	C2'-C1'	6.66	1.60	1.53
33	L1	3133	C	C2'-C1'	-6.66	1.46	1.53
48	LV	90	ARG	CD-NE	6.66	1.57	1.46
32	S1	410	U	O4'-C1'	6.66	1.50	1.41
32	S1	1558	A	O4'-C1'	6.66	1.50	1.41
33	L1	129	G	C4'-C3'	6.66	1.60	1.53
33	L1	1850	C	P-O5'	-6.66	1.53	1.59
7	SI	46	ARG	NE-CZ	6.66	1.41	1.33
81	LD	304	GLN	C-O	-6.66	1.10	1.23
33	L1	2761	A	C2'-O2'	6.66	1.50	1.41
33	L1	1971	A	O4'-C1'	6.66	1.50	1.41
33	L1	3357	C	P-O5'	-6.66	1.53	1.59
33	L1	2867	U	C3'-C2'	-6.65	1.45	1.52
33	L1	3389	C	C5'-C4'	6.65	1.59	1.51
31	S2	60	C	O4'-C1'	6.65	1.50	1.41
32	S1	1278	C	C2'-O2'	6.65	1.50	1.41
32	S1	1279	A	P-O5'	-6.65	1.53	1.59
33	L1	141	C	P-O5'	-6.65	1.53	1.59
33	L1	256	G	O4'-C1'	6.65	1.50	1.41
32	S1	1229	C	C4'-C3'	-6.65	1.45	1.53
39	LF	2	LYS	C-O	-6.65	1.10	1.23
32	S1	1367	U	C5'-C4'	6.65	1.59	1.51
32	S1	1609	G	C3'-C2'	6.65	1.60	1.52
32	S1	1703	G	C2'-C1'	-6.65	1.46	1.53
33	L1	1342	C	O3'-P	-6.65	1.53	1.61
33	L1	2226	C	C4'-O4'	6.65	1.54	1.45
32	S1	1702	G	C2'-C1'	-6.65	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1297	U	C5'-C4'	6.65	1.59	1.51
32	S1	1346	C	C5'-C4'	6.64	1.59	1.51
33	L1	536	C	P-O5'	-6.64	1.53	1.59
33	L1	1014	G	C5'-C4'	6.64	1.59	1.51
31	S2	17	G	C4'-C3'	-6.64	1.45	1.53
33	L1	544	C	C2'-C1'	-6.64	1.46	1.53
31	S2	52	G	C3'-C2'	-6.64	1.45	1.52
32	S1	848	C	C2'-C1'	-6.64	1.46	1.53
32	S1	1581	A	C2'-C1'	6.64	1.60	1.53
30	S3	19	U	O4'-C1'	6.64	1.50	1.41
33	L1	858	U	C4'-C3'	6.64	1.60	1.53
33	L1	2247	A	C3'-O3'	6.64	1.51	1.42
35	L2	44	A	O3'-P	6.64	1.69	1.61
42	LP	143	ARG	NE-CZ	6.64	1.41	1.33
33	L1	1182	A	O4'-C1'	-6.64	1.33	1.41
33	L1	2596	A	O4'-C1'	6.64	1.50	1.41
33	L1	1074	C	C2'-C1'	-6.63	1.46	1.53
33	L1	1152	G	O4'-C1'	6.63	1.50	1.41
9	SK	49	ARG	CD-NE	6.63	1.57	1.46
32	S1	519	A	P-O5'	-6.63	1.53	1.59
32	S1	801	U	O3'-P	-6.63	1.53	1.61
32	S1	1569	U	O4'-C1'	6.63	1.50	1.41
32	S1	1663	A	C3'-C2'	6.63	1.60	1.52
33	L1	1596	G	P-O5'	6.63	1.66	1.59
33	L1	1022	G	C4'-C3'	-6.63	1.45	1.53
32	S1	660	G	C2'-C1'	-6.63	1.46	1.53
32	S1	1690	U	O4'-C1'	6.63	1.50	1.41
33	L1	207	U	O4'-C1'	-6.63	1.33	1.41
33	L1	222	C	O4'-C1'	6.63	1.50	1.41
33	L1	652	C	C2'-C1'	6.63	1.60	1.53
41	LM	69	LYS	N-CA	6.63	1.59	1.46
80	LC	366	SER	CA-CB	6.63	1.62	1.52
2	SA	243	TRP	CD2-CE2	-6.63	1.33	1.41
32	S1	955	C	C5'-C4'	6.63	1.59	1.51
33	L1	135	G	C5'-C4'	6.63	1.59	1.51
33	L1	580	C	O3'-P	-6.63	1.53	1.61
33	L1	962	C	C3'-C2'	-6.63	1.45	1.52
33	L1	2219	A	C2'-C1'	6.63	1.60	1.53
33	L1	5	G	C2'-C1'	-6.62	1.46	1.53
33	L1	213	G	O4'-C1'	-6.62	1.33	1.41
32	S1	386	C	C2'-C1'	-6.62	1.46	1.53
33	L1	2737	A	C4'-O4'	6.62	1.54	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	238	C	C2'-O2'	-6.62	1.33	1.41
33	L1	465	C	C2'-C1'	-6.62	1.46	1.53
33	L1	1291	A	C2'-C1'	6.62	1.60	1.53
33	L1	2070	C	C3'-C2'	6.62	1.60	1.52
14	SP	108	ILE	C-N	6.62	1.46	1.34
33	L1	404	G	O4'-C1'	-6.62	1.33	1.41
33	L1	710	C	C2'-C1'	-6.62	1.46	1.53
33	L1	756	C	O4'-C1'	6.62	1.50	1.41
33	L1	1001	A	C5'-C4'	6.62	1.59	1.51
33	L1	1409	G	C2'-C1'	-6.62	1.46	1.53
33	L1	2653	U	C4'-C3'	6.62	1.60	1.53
70	Li	64	ARG	CZ-NH1	6.62	1.41	1.33
33	L1	1606	C	P-O5'	-6.62	1.53	1.59
32	S1	1073	C	C4'-C3'	-6.62	1.45	1.53
33	L1	422	G	O4'-C1'	-6.62	1.33	1.41
33	L1	1322	A	C3'-O3'	6.62	1.51	1.42
33	L1	3087	A	C5'-C4'	6.62	1.59	1.51
32	S1	82	G	O4'-C1'	6.61	1.50	1.41
32	S1	1564	A	P-O5'	6.61	1.66	1.59
33	L1	6	A	C5'-C4'	6.61	1.59	1.51
33	L1	2966	G	C2'-C1'	6.61	1.60	1.53
33	L1	91	G	C2'-C1'	6.61	1.60	1.53
33	L1	272	G	C5'-C4'	6.61	1.59	1.51
33	L1	1046	U	O4'-C1'	6.61	1.50	1.41
33	L1	2931	C	O3'-P	-6.61	1.53	1.61
33	L1	3158	C	C3'-C2'	-6.61	1.45	1.52
32	S1	833	U	C2'-C1'	6.61	1.60	1.53
32	S1	886	A	O3'-P	-6.61	1.53	1.61
32	S1	1017	U	O4'-C1'	6.61	1.50	1.41
32	S1	1275	G	O4'-C1'	6.61	1.50	1.41
33	L1	2281	U	O4'-C1'	6.61	1.50	1.41
33	L1	2411	G	O4'-C1'	6.61	1.50	1.41
33	L1	2720	U	C4'-C3'	6.61	1.60	1.53
33	L1	3100	C	C4'-C3'	6.61	1.60	1.53
6	SF	165	ILE	CA-C	-6.61	1.35	1.52
48	LV	167	ALA	N-CA	6.61	1.59	1.46
32	S1	22	A	C2'-C1'	-6.60	1.46	1.53
32	S1	719	C	C5'-C4'	-6.60	1.43	1.51
33	L1	595	C	C2'-C1'	-6.60	1.46	1.53
33	L1	1896	A	P-O5'	-6.60	1.53	1.59
33	L1	1765	G	O4'-C1'	-6.60	1.33	1.41
28	SN	10	HIS	C-O	-6.60	1.10	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1899	U	C2'-C1'	-6.60	1.46	1.53
33	L1	2098	A	P-O5'	-6.60	1.53	1.59
32	S1	930	G	C2'-C1'	-6.60	1.46	1.53
33	L1	16	A	C3'-O3'	6.60	1.51	1.42
33	L1	712	A	O4'-C1'	6.60	1.50	1.41
33	L1	1016	G	C2'-C1'	-6.60	1.46	1.53
33	L1	2164	G	O3'-P	-6.60	1.53	1.61
34	L3	2	G	P-O5'	-6.60	1.53	1.59
33	L1	1831	A	O4'-C1'	-6.60	1.33	1.41
33	L1	212	G	C4'-C3'	-6.59	1.45	1.53
33	L1	1729	G	C4'-C3'	6.59	1.60	1.53
33	L1	1502	U	O4'-C1'	6.59	1.50	1.41
32	S1	1198	A	C3'-C2'	-6.59	1.45	1.52
33	L1	1566	C	C2'-C1'	-6.59	1.46	1.53
33	L1	1651	A	O4'-C1'	6.59	1.50	1.41
32	S1	871	G	P-OP2	6.59	1.60	1.49
33	L1	1901	G	C4'-C3'	6.59	1.60	1.53
35	L2	56	A	P-O5'	-6.59	1.53	1.59
32	S1	366	G	C4'-C3'	6.59	1.60	1.53
33	L1	1616	G	C4'-O4'	6.59	1.54	1.45
36	LA	83	TYR	CB-CG	-6.59	1.41	1.51
45	LQ	290	SER	C-O	-6.59	1.10	1.23
32	S1	222	G	C2'-C1'	-6.58	1.46	1.53
33	L1	1734	G	P-OP2	6.58	1.60	1.49
33	L1	3160	G	C5'-C4'	6.58	1.59	1.51
33	L1	1223	U	O3'-P	-6.58	1.53	1.61
33	L1	1235	A	C4'-O4'	6.58	1.54	1.45
33	L1	3183	G	C3'-C2'	6.58	1.60	1.52
32	S1	116	G	C5'-C4'	6.58	1.59	1.51
33	L1	1798	C	O3'-P	-6.58	1.53	1.61
33	L1	1930	G	C2'-C1'	-6.58	1.46	1.53
33	L1	2663	U	C2'-C1'	-6.58	1.46	1.53
32	S1	787	C	O3'-P	-6.58	1.53	1.61
32	S1	1472	G	O4'-C1'	6.58	1.50	1.41
70	Li	69	ARG	NE-CZ	6.58	1.41	1.33
33	L1	430	G	C5'-C4'	6.58	1.59	1.51
33	L1	1089	G	C2'-C1'	-6.58	1.46	1.53
33	L1	1172	A	C3'-O3'	6.58	1.51	1.42
33	L1	3292	U	C3'-C2'	6.58	1.60	1.52
33	L1	728	G	C2'-C1'	6.58	1.60	1.53
33	L1	3093	C	C3'-C2'	6.58	1.60	1.52
35	L2	88	C	C2'-C1'	6.58	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1023	G	C4'-O4'	6.57	1.54	1.45
33	L1	1947	U	C4'-C3'	6.57	1.60	1.53
33	L1	1403	G	P-OP2	6.57	1.60	1.49
33	L1	2500	U	P-O5'	6.57	1.66	1.59
33	L1	2706	A	O3'-P	-6.57	1.53	1.61
34	L3	55	A	O4'-C1'	-6.57	1.33	1.41
35	L2	139	A	O4'-C1'	6.57	1.50	1.41
32	S1	445	A	O4'-C1'	6.57	1.50	1.41
32	S1	499	A	O4'-C1'	6.57	1.50	1.41
33	L1	1	G	P-OP2	6.57	1.60	1.49
33	L1	1564	C	C5'-C4'	6.57	1.59	1.51
33	L1	1657	C	C2'-C1'	-6.57	1.46	1.53
33	L1	2602	U	C5'-C4'	6.57	1.59	1.51
33	L1	2865	G	C3'-C2'	6.56	1.60	1.52
78	Le	204	LEU	N-CA	-6.56	1.33	1.46
32	S1	567	U	C2'-C1'	6.56	1.60	1.53
33	L1	295	U	C5'-C4'	6.56	1.59	1.51
33	L1	597	C	C3'-C2'	-6.56	1.45	1.52
33	L1	985	C	C2'-C1'	-6.56	1.46	1.53
33	L1	2598	A	C2'-C1'	-6.56	1.46	1.53
33	L1	2638	A	C4'-C3'	6.56	1.60	1.53
35	L2	41	A	P-O5'	-6.56	1.53	1.59
32	S1	1032	A	C5'-C4'	6.56	1.59	1.51
32	S1	862	U	O4'-C1'	6.56	1.50	1.41
32	S1	1310	C	O3'-P	6.56	1.69	1.61
32	S1	1411	C	C2'-C1'	-6.56	1.46	1.53
33	L1	1675	G	P-O5'	-6.56	1.53	1.59
33	L1	1940	U	C3'-C2'	6.56	1.60	1.52
33	L1	705	A	C2'-C1'	6.55	1.60	1.53
80	LC	1	MET	C-O	-6.55	1.10	1.23
33	L1	1761	C	C3'-O3'	6.55	1.51	1.42
33	L1	2052	G	O3'-P	-6.55	1.53	1.61
32	S1	258	U	O4'-C1'	6.55	1.50	1.41
33	L1	73	A	C4'-O4'	-6.55	1.37	1.45
33	L1	1191	U	C3'-O3'	6.55	1.51	1.42
33	L1	1264	A	O4'-C1'	-6.55	1.33	1.41
33	L1	2694	A	O4'-C1'	-6.55	1.33	1.41
7	SI	102	TYR	CZ-OH	6.55	1.49	1.37
33	L1	1000	A	C2'-C1'	-6.55	1.46	1.53
32	S1	1137	A	C2'-C1'	-6.55	1.46	1.53
33	L1	1433	U	O3'-P	-6.55	1.53	1.61
45	LQ	196	ARG	CZ-NH2	6.55	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	LD	95	ALA	CA-CB	6.55	1.66	1.52
32	S1	1056	A	C3'-O3'	6.55	1.51	1.42
32	S1	1238	A	O4'-C1'	-6.55	1.33	1.41
32	S1	1461	G	C2'-O2'	-6.55	1.33	1.41
33	L1	565	C	C3'-C2'	-6.55	1.45	1.52
33	L1	1602	A	C5'-C4'	6.54	1.59	1.51
33	L1	3349	C	P-O5'	-6.54	1.53	1.59
32	S1	1069	G	O4'-C1'	6.54	1.50	1.41
33	L1	572	U	O3'-P	-6.54	1.53	1.61
33	L1	823	A	O4'-C1'	6.54	1.50	1.41
33	L1	2635	G	O3'-P	-6.54	1.53	1.61
32	S1	1571	G	C2'-C1'	-6.54	1.46	1.53
33	L1	412	C	C2'-C1'	-6.54	1.46	1.53
33	L1	983	U	O3'-P	6.54	1.69	1.61
33	L1	1676	A	C2'-C1'	-6.54	1.46	1.53
33	L1	2431	U	O4'-C1'	6.54	1.50	1.41
2	SA	11	ALA	N-CA	6.54	1.59	1.46
32	S1	137	A	P-OP2	6.54	1.60	1.49
33	L1	1727	A	C2'-C1'	-6.54	1.46	1.53
32	S1	1101	C	O4'-C1'	6.54	1.50	1.41
33	L1	2622	G	C4'-O4'	-6.54	1.37	1.45
33	L1	374	G	C4'-C3'	6.54	1.60	1.53
33	L1	962	C	P-O5'	-6.54	1.53	1.59
33	L1	1335	C	O4'-C1'	6.54	1.50	1.41
5	SE	28	GLY	C-O	-6.53	1.13	1.23
32	S1	1720	G	C5'-C4'	6.53	1.59	1.51
33	L1	1025	G	O3'-P	-6.53	1.53	1.61
33	L1	2718	A	C3'-O3'	6.53	1.51	1.42
33	L1	3155	C	C4'-C3'	6.53	1.60	1.53
33	L1	3381	C	P-O5'	-6.53	1.53	1.59
80	LC	358	ILE	N-CA	6.53	1.59	1.46
32	S1	317	U	C4'-C3'	6.53	1.60	1.53
32	S1	1063	U	C5'-C4'	6.53	1.59	1.51
33	L1	1020	U	O4'-C1'	6.53	1.50	1.41
33	L1	1612	C	P-O5'	-6.53	1.53	1.59
33	L1	2733	A	C3'-C2'	-6.53	1.45	1.52
33	L1	3198	C	C5'-C4'	6.53	1.59	1.51
35	L2	82	G	C5'-C4'	6.53	1.59	1.51
3	SB	149	SER	N-CA	6.53	1.59	1.46
32	S1	1640	C	O3'-P	-6.53	1.53	1.61
33	L1	429	G	C5'-C4'	6.53	1.59	1.51
33	L1	2210	A	C2'-C1'	-6.53	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	SM	39	ARG	NE-CZ	6.52	1.41	1.33
33	L1	1942	A	P-O5'	-6.52	1.53	1.59
33	L1	2069	G	C2'-C1'	6.52	1.60	1.53
33	L1	2451	G	C2'-C1'	6.52	1.60	1.53
37	LB	152	SER	CA-CB	6.52	1.62	1.52
32	S1	1204	G	C5'-C4'	6.52	1.59	1.51
33	L1	514	G	P-O5'	-6.52	1.53	1.59
33	L1	1205	C	O4'-C1'	6.52	1.50	1.41
33	L1	2000	C	C2'-C1'	-6.52	1.46	1.53
33	L1	2240	C	O4'-C1'	6.52	1.50	1.41
33	L1	2433	U	C2'-C1'	6.52	1.60	1.53
32	S1	942	C	C5'-C4'	6.52	1.59	1.51
33	L1	2599	U	C5'-C4'	6.52	1.59	1.51
33	L1	2795	G	C5'-C4'	6.52	1.59	1.51
33	L1	1578	U	C2'-C1'	-6.52	1.46	1.53
45	LQ	198	TYR	CG-CD1	6.52	1.47	1.39
78	Le	83	ALA	C-O	-6.52	1.10	1.23
32	S1	314	C	C3'-C2'	-6.52	1.45	1.52
32	S1	1299	G	C5'-C4'	6.52	1.59	1.51
33	L1	36	U	O4'-C1'	6.52	1.50	1.41
33	L1	209	G	C2'-C1'	6.52	1.60	1.53
33	L1	340	A	C2'-C1'	-6.52	1.46	1.53
33	L1	1819	A	C5'-C4'	6.52	1.59	1.51
35	L2	14	G	O4'-C1'	-6.51	1.33	1.41
35	L2	49	C	C5'-C4'	6.51	1.59	1.51
31	S2	44	A	P-O5'	-6.51	1.53	1.59
32	S1	327	A	P-OP2	6.51	1.60	1.49
35	L2	39	C	P-O5'	-6.51	1.53	1.59
32	S1	21	U	C2'-C1'	-6.51	1.46	1.53
35	L2	66	C	O4'-C1'	6.51	1.50	1.41
32	S1	568	G	C3'-O3'	6.51	1.51	1.42
33	L1	3042	U	C3'-C2'	-6.51	1.45	1.52
44	LR	98	MET	N-CA	6.51	1.59	1.46
32	S1	1202	G	O3'-P	6.51	1.69	1.61
33	L1	2159	U	O4'-C1'	6.51	1.50	1.41
33	L1	2465	G	O4'-C1'	-6.51	1.33	1.41
37	LB	196	TRP	C-N	6.51	1.46	1.34
55	Lg	41	ILE	CA-CB	-6.51	1.39	1.54
32	S1	1716	C	C2'-C1'	-6.50	1.46	1.53
33	L1	487	C	C5'-C4'	6.50	1.59	1.51
3	SB	144	ALA	CA-CB	6.50	1.66	1.52
32	S1	977	G	C5'-C4'	6.50	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1617	U	C2'-C1'	-6.50	1.46	1.53
33	L1	189	C	C2'-C1'	-6.50	1.46	1.53
34	L3	49	A	C4'-C3'	6.50	1.60	1.53
32	S1	331	U	C2'-C1'	6.50	1.60	1.53
33	L1	282	A	O3'-P	-6.50	1.53	1.61
33	L1	1812	A	O5'-C5'	6.50	1.54	1.44
51	LY	9	SER	N-CA	6.50	1.59	1.46
81	LD	18	MET	C-O	-6.50	1.10	1.23
33	L1	2057	G	C2'-C1'	-6.50	1.46	1.53
32	S1	18	C	C5'-C4'	6.50	1.59	1.51
32	S1	232	C	O4'-C1'	6.50	1.50	1.41
13	SQ	109	LEU	C-O	-6.50	1.11	1.23
32	S1	854	C	O3'-P	-6.50	1.53	1.61
32	S1	1777	G	C5'-C4'	6.50	1.59	1.51
33	L1	268	U	C4'-C3'	6.50	1.60	1.53
60	Lr	38	GLN	C-N	6.50	1.44	1.33
32	S1	127	G	C2'-C1'	6.49	1.60	1.53
32	S1	1135	G	O4'-C1'	6.49	1.50	1.41
33	L1	995	C	C3'-O3'	6.49	1.51	1.42
33	L1	1819	A	O3'-P	-6.49	1.53	1.61
33	L1	2709	G	C5'-C4'	6.49	1.59	1.51
31	S2	62	C	O4'-C1'	6.49	1.50	1.41
30	S3	12	A	P-OP2	6.49	1.59	1.49
33	L1	2837	C	C4'-O4'	6.49	1.53	1.45
34	L3	10	C	C5'-C4'	6.49	1.59	1.51
32	S1	617	G	O4'-C1'	6.49	1.50	1.41
33	L1	3038	U	C2'-C1'	-6.49	1.46	1.53
41	LM	53	PRO	N-CA	-6.49	1.36	1.47
15	SS	13	ASN	C-N	-6.49	1.22	1.34
33	L1	3123	A	O4'-C1'	6.49	1.50	1.41
33	L1	20	G	O3'-P	-6.49	1.53	1.61
32	S1	184	C	C2'-C1'	-6.48	1.46	1.53
32	S1	1143	A	O3'-P	-6.48	1.53	1.61
32	S1	1380	A	O4'-C1'	-6.48	1.33	1.41
33	L1	605	A	O4'-C1'	6.48	1.50	1.41
32	S1	981	G	O4'-C1'	6.48	1.50	1.41
32	S1	1452	A	P-OP2	6.48	1.59	1.49
33	L1	1279	C	P-O5'	6.48	1.66	1.59
33	L1	2581	C	O4'-C1'	6.48	1.50	1.41
48	LV	69	ARG	CA-CB	6.48	1.68	1.53
32	S1	258	U	C2'-C1'	-6.48	1.46	1.53
33	L1	126	G	P-O5'	-6.48	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	882	U	O4'-C1'	6.48	1.50	1.41
33	L1	1347	U	O3'-P	-6.48	1.53	1.61
36	LA	200	VAL	N-CA	6.48	1.59	1.46
32	S1	1756	A	C4'-O4'	6.48	1.53	1.45
33	L1	109	G	C5'-C4'	6.47	1.59	1.51
33	L1	738	A	C2'-C1'	6.47	1.60	1.53
33	L1	3033	A	C4'-C3'	6.47	1.60	1.53
32	S1	1552	U	O4'-C1'	6.47	1.50	1.41
33	L1	1488	G	C3'-C2'	6.47	1.60	1.52
32	S1	622	U	P-O5'	-6.47	1.53	1.59
33	L1	1527	A	C4'-C3'	6.47	1.60	1.53
7	SI	128	ARG	NE-CZ	6.47	1.41	1.33
33	L1	1248	A	C2'-C1'	6.47	1.60	1.53
33	L1	1432	G	O3'-P	-6.47	1.53	1.61
33	L1	2739	A	C4'-C3'	-6.47	1.46	1.53
33	L1	3289	U	C4'-O4'	6.47	1.53	1.45
32	S1	1304	A	C2'-C1'	6.46	1.60	1.53
33	L1	933	U	C2'-C1'	-6.46	1.46	1.53
33	L1	2545	C	C2'-C1'	-6.46	1.46	1.53
32	S1	1629	U	O4'-C1'	6.46	1.50	1.41
35	L2	61	C	C5'-C4'	6.46	1.59	1.51
50	LZ	41	TYR	CG-CD2	6.46	1.47	1.39
32	S1	44	U	P-OP2	6.46	1.59	1.49
33	L1	1456	A	O3'-P	-6.46	1.53	1.61
33	L1	3170	C	C4'-C3'	6.46	1.60	1.53
33	L1	973	U	O3'-P	-6.46	1.53	1.61
33	L1	1852	C	C2'-C1'	-6.46	1.46	1.53
33	L1	2506	G	C2'-C1'	-6.46	1.46	1.53
82	LK	135	GLN	CB-CG	6.46	1.70	1.52
32	S1	1319	U	P-O5'	-6.45	1.53	1.59
33	L1	1893	G	O3'-P	6.45	1.68	1.61
34	L3	52	U	C2'-C1'	-6.45	1.46	1.53
37	LB	186	TYR	CE1-CZ	6.45	1.47	1.38
37	LB	223	SER	CA-CB	6.45	1.62	1.52
33	L1	308	U	O4'-C1'	6.45	1.50	1.41
33	L1	3124	A	O4'-C1'	6.45	1.50	1.41
34	L3	25	G	P-O5'	-6.45	1.53	1.59
33	L1	1625	G	C2'-C1'	6.45	1.60	1.53
33	L1	3176	C	O4'-C1'	6.45	1.50	1.41
33	L1	3000	U	C2'-C1'	6.44	1.60	1.53
33	L1	224	C	C3'-O3'	6.44	1.51	1.42
33	L1	451	C	C4'-C3'	6.44	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	94	C	C2'-C1'	6.44	1.60	1.53
33	L1	1317	G	C5'-C4'	6.44	1.59	1.51
32	S1	381	G	C4'-C3'	6.44	1.60	1.53
32	S1	1474	U	C2'-C1'	6.44	1.60	1.53
72	Lk	93	MET	N-CA	-6.44	1.33	1.46
24	SX	71	GLY	C-N	-6.44	1.19	1.34
33	L1	1079	G	O4'-C1'	6.44	1.50	1.41
33	L1	3208	G	C2'-C1'	6.44	1.60	1.53
64	LG	12	LYS	CA-CB	6.44	1.68	1.53
32	S1	491	G	C5'-C4'	6.43	1.59	1.51
33	L1	1537	A	O4'-C1'	6.43	1.50	1.41
33	L1	2871	U	C2'-C1'	-6.43	1.46	1.53
28	SN	35	GLY	CA-C	6.43	1.62	1.51
32	S1	422	G	C2'-C1'	-6.43	1.46	1.53
35	L2	121	C	C5'-C4'	6.43	1.59	1.51
32	S1	1052	G	C2'-C1'	-6.43	1.46	1.53
32	S1	1540	U	C5'-C4'	6.43	1.59	1.51
33	L1	1131	U	P-O5'	-6.43	1.53	1.59
33	L1	2735	G	C3'-C2'	6.43	1.60	1.52
33	L1	3071	A	O4'-C1'	-6.43	1.33	1.41
35	L2	64	U	O3'-P	-6.43	1.53	1.61
80	LC	17	LEU	CA-CB	6.43	1.68	1.53
33	L1	210	G	C5'-C4'	6.43	1.59	1.51
32	S1	376	G	C2'-C1'	6.43	1.60	1.53
32	S1	480	U	O4'-C1'	6.43	1.50	1.41
33	L1	505	G	C4'-O4'	6.43	1.53	1.45
33	L1	980	C	O4'-C1'	6.43	1.50	1.41
33	L1	2421	C	C2'-C1'	-6.43	1.46	1.53
33	L1	3053	G	C2'-C1'	-6.43	1.46	1.53
32	S1	1734	U	O4'-C1'	6.42	1.50	1.41
33	L1	347	A	O4'-C1'	6.42	1.50	1.41
33	L1	3053	G	O3'-P	-6.42	1.53	1.61
35	L2	102	U	C3'-O3'	6.42	1.51	1.42
32	S1	1266	U	C4'-C3'	-6.42	1.46	1.53
33	L1	222	C	C2'-C1'	-6.42	1.46	1.53
33	L1	1281	C	C3'-C2'	6.42	1.60	1.52
33	L1	2805	A	C2'-C1'	6.42	1.60	1.53
33	L1	3225	G	C2'-C1'	6.42	1.60	1.53
34	L3	67	C	O3'-P	-6.42	1.53	1.61
33	L1	731	G	C2'-C1'	-6.42	1.46	1.53
33	L1	2240	C	C2'-C1'	-6.42	1.46	1.53
33	L1	3279	G	C2'-C1'	-6.42	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	472	A	C2'-C1'	-6.41	1.46	1.53
33	L1	48	A	C2'-C1'	-6.41	1.46	1.53
33	L1	1640	A	C4'-C3'	-6.41	1.46	1.53
33	L1	466	U	C2'-C1'	6.41	1.60	1.53
33	L1	2651	G	C2'-C1'	-6.41	1.46	1.53
32	S1	628	G	C5'-C4'	6.41	1.59	1.51
33	L1	486	G	P-O5'	6.41	1.66	1.59
33	L1	2829	U	O4'-C1'	-6.41	1.33	1.41
33	L1	2943	A	O4'-C1'	6.41	1.50	1.41
49	LX	70	TYR	CZ-OH	6.41	1.48	1.37
32	S1	571	A	P-O5'	-6.41	1.53	1.59
32	S1	607	U	C2'-C1'	-6.41	1.46	1.53
33	L1	1206	A	C4'-C3'	6.41	1.60	1.53
33	L1	3162	C	O4'-C1'	6.41	1.50	1.41
33	L1	175	G	C4'-C3'	6.41	1.60	1.53
33	L1	2236	U	C3'-O3'	6.41	1.51	1.42
31	S2	8	U	O4'-C1'	-6.41	1.33	1.41
33	L1	16	A	C4'-O4'	-6.41	1.37	1.45
33	L1	3335	G	P-O5'	-6.41	1.53	1.59
33	L1	610	G	O4'-C1'	6.40	1.50	1.41
33	L1	712	A	C2'-C1'	6.40	1.60	1.53
32	S1	1366	A	C5'-C4'	6.40	1.59	1.51
32	S1	1445	C	O4'-C1'	6.40	1.50	1.41
33	L1	218	G	C5'-C4'	6.40	1.59	1.51
33	L1	345	G	C2'-C1'	-6.40	1.46	1.53
33	L1	2451	G	O3'-P	-6.40	1.53	1.61
32	S1	1607	C	C4'-C3'	6.40	1.60	1.53
33	L1	1176	U	C4'-O4'	6.40	1.53	1.45
33	L1	1840	C	O4'-C1'	6.40	1.50	1.41
33	L1	2679	A	O4'-C1'	6.40	1.50	1.41
8	SJ	64	ARG	CZ-NH2	6.40	1.41	1.33
31	S2	59	U	P-O5'	-6.40	1.53	1.59
32	S1	765	U	C5'-C4'	6.40	1.59	1.51
33	L1	300	C	C2'-C1'	-6.40	1.46	1.53
33	L1	2906	U	C2'-C1'	-6.40	1.46	1.53
32	S1	46	A	O4'-C1'	-6.39	1.33	1.41
33	L1	1090	C	O4'-C1'	6.39	1.50	1.41
33	L1	1544	G	O4'-C1'	6.39	1.50	1.41
33	L1	1881	C	O4'-C1'	-6.39	1.33	1.41
33	L1	1866	C	O4'-C1'	6.39	1.50	1.41
33	L1	1920	U	O3'-P	-6.39	1.53	1.61
33	L1	2545	C	O4'-C1'	6.39	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	664	A	C2'-C1'	-6.39	1.46	1.53
32	S1	1714	G	C2'-C1'	-6.39	1.46	1.53
33	L1	3139	U	O4'-C1'	6.39	1.50	1.41
7	SI	51	ARG	CZ-NH2	6.39	1.41	1.33
31	S2	72	G	O3'-P	-6.39	1.53	1.61
32	S1	966	U	P-O5'	-6.39	1.53	1.59
32	S1	1362	A	O4'-C1'	6.39	1.50	1.41
33	L1	1113	C	C5'-C4'	6.39	1.59	1.51
33	L1	1873	C	C3'-C2'	6.39	1.59	1.52
33	L1	2129	U	O3'-P	-6.39	1.53	1.61
33	L1	2950	C	O4'-C1'	6.38	1.50	1.41
33	L1	2248	G	P-O5'	-6.38	1.53	1.59
33	L1	2661	G	O3'-P	-6.38	1.53	1.61
4	SD	136	ILE	CA-C	-6.38	1.36	1.52
32	S1	1397	A	O3'-P	-6.38	1.53	1.61
33	L1	1469	G	O3'-P	-6.38	1.53	1.61
67	LS	150	LYS	C-O	-6.38	1.11	1.23
69	La	7	PRO	C-N	6.38	1.44	1.33
32	S1	968	A	C2'-C1'	6.38	1.60	1.53
33	L1	15	C	O3'-P	-6.38	1.53	1.61
33	L1	1880	A	P-O5'	-6.38	1.53	1.59
33	L1	3208	G	P-O5'	-6.38	1.53	1.59
31	S2	20	C	O4'-C1'	6.38	1.50	1.41
32	S1	585	U	P-O5'	-6.38	1.53	1.59
32	S1	860	A	O4'-C1'	6.38	1.50	1.41
33	L1	76	A	O3'-P	6.38	1.68	1.61
33	L1	1589	G	C2'-C1'	6.38	1.60	1.53
84	LI	116	ARG	C-O	-6.38	1.11	1.23
33	L1	3223	C	O4'-C1'	6.38	1.50	1.41
33	L1	3123	A	C2'-C1'	-6.37	1.46	1.53
73	Lp	34	CYS	CB-SG	6.37	1.93	1.82
33	L1	2842	C	O4'-C1'	-6.37	1.33	1.41
32	S1	491	G	C4'-O4'	6.37	1.53	1.45
33	L1	2177	U	O4'-C1'	6.37	1.50	1.41
33	L1	1307	A	O4'-C1'	-6.37	1.33	1.41
33	L1	1344	A	C4'-C3'	6.37	1.60	1.53
33	L1	1728	G	P-O5'	-6.37	1.53	1.59
33	L1	1938	U	O4'-C1'	6.37	1.50	1.41
33	L1	2442	A	C2'-C1'	-6.37	1.46	1.53
81	LD	313	GLU	CG-CD	6.37	1.61	1.51
32	S1	461	G	C2'-C1'	-6.36	1.46	1.53
32	S1	1256	C	C5'-C4'	6.36	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1685	U	C2'-C1'	6.36	1.60	1.53
33	L1	1710	G	O4'-C1'	6.36	1.50	1.41
29	ST	41	GLU	CA-C	6.36	1.69	1.52
32	S1	62	A	O4'-C1'	6.36	1.50	1.41
32	S1	523	C	C5'-C4'	6.36	1.58	1.51
33	L1	29	G	C4'-C3'	6.36	1.60	1.53
32	S1	232	C	C2'-C1'	6.36	1.60	1.53
32	S1	827	C	O4'-C1'	6.36	1.50	1.41
32	S1	488	C	C2'-C1'	-6.35	1.46	1.53
32	S1	36	C	C2'-C1'	-6.35	1.46	1.53
32	S1	169	A	O4'-C1'	6.35	1.50	1.41
32	S1	1460	G	C3'-C2'	-6.35	1.45	1.52
33	L1	3329	G	O4'-C1'	-6.35	1.33	1.41
33	L1	1839	C	C2'-C1'	-6.35	1.46	1.53
32	S1	552	G	O4'-C1'	6.35	1.50	1.41
32	S1	612	U	C2'-C1'	6.35	1.60	1.53
32	S1	1606	U	C3'-C2'	-6.35	1.45	1.52
33	L1	2620	U	P-O5'	-6.35	1.53	1.59
32	S1	1648	C	C2'-C1'	-6.35	1.46	1.53
33	L1	2295	G	C2'-C1'	-6.35	1.46	1.53
33	L1	2562	A	O4'-C1'	-6.35	1.33	1.41
33	L1	547	C	O4'-C1'	6.34	1.49	1.41
33	L1	642	C	C3'-O3'	-6.34	1.33	1.42
33	L1	939	A	O3'-P	-6.34	1.53	1.61
33	L1	3361	G	O4'-C1'	6.34	1.49	1.41
81	LD	90	ARG	C-O	-6.34	1.11	1.23
33	L1	1386	G	P-O5'	-6.34	1.53	1.59
33	L1	3290	C	C5'-C4'	6.34	1.58	1.51
32	S1	1382	C	C4'-C3'	6.34	1.60	1.53
33	L1	498	G	C5'-C4'	6.34	1.58	1.51
33	L1	1090	C	P-O5'	-6.34	1.53	1.59
33	L1	2429	A	C4'-O4'	6.34	1.53	1.45
33	L1	2971	A	C3'-C2'	6.34	1.59	1.52
31	S2	1	U	P-O5'	-6.34	1.53	1.59
32	S1	469	G	C4'-C3'	6.34	1.60	1.53
32	S1	1034	G	O4'-C1'	6.34	1.49	1.41
71	Lj	8	ARG	CA-CB	6.34	1.67	1.53
32	S1	974	C	O4'-C1'	6.34	1.49	1.41
33	L1	1345	U	C3'-O3'	6.34	1.51	1.42
32	S1	1461	G	O4'-C1'	-6.33	1.33	1.41
33	L1	803	G	P-O5'	-6.33	1.53	1.59
32	S1	470	U	O4'-C1'	6.33	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	796	U	C5'-C4'	6.33	1.58	1.51
33	L1	143	A	C2'-C1'	6.33	1.60	1.53
46	LT	65	ARG	CD-NE	6.33	1.57	1.46
33	L1	1172	A	C4'-C3'	6.33	1.60	1.53
33	L1	1222	U	C4'-C3'	6.33	1.60	1.53
32	S1	158	C	C2'-C1'	-6.33	1.46	1.53
13	SQ	61	ILE	CA-C	6.33	1.69	1.52
33	L1	462	C	P-O5'	6.33	1.66	1.59
33	L1	659	C	C2'-C1'	-6.33	1.46	1.53
33	L1	1923	G	O4'-C1'	-6.33	1.33	1.41
32	S1	996	G	P-O5'	-6.33	1.53	1.59
32	S1	1431	A	C4'-C3'	-6.33	1.46	1.53
33	L1	185	A	C4'-C3'	6.33	1.60	1.53
32	S1	237	C	O4'-C1'	6.33	1.49	1.41
32	S1	920	A	O4'-C1'	6.33	1.49	1.41
33	L1	457	C	O4'-C1'	6.33	1.49	1.41
33	L1	521	G	O4'-C1'	6.33	1.49	1.41
33	L1	2267	G	O4'-C1'	-6.33	1.33	1.41
33	L1	2910	C	C4'-O4'	6.33	1.53	1.45
35	L2	6	G	P-OP2	6.33	1.59	1.49
35	L2	75	A	C3'-O3'	6.33	1.51	1.42
32	S1	731	G	C4'-C3'	6.32	1.60	1.53
33	L1	1129	G	O3'-P	-6.32	1.53	1.61
33	L1	1512	A	C3'-O3'	6.32	1.51	1.42
33	L1	2751	A	O4'-C1'	-6.32	1.33	1.41
38	LE	34	ARG	CB-CG	6.32	1.69	1.52
52	Lb	97	ARG	CZ-NH2	6.32	1.41	1.33
3	SB	27	ARG	CZ-NH2	6.32	1.41	1.33
33	L1	3056	C	O3'-P	-6.32	1.53	1.61
33	L1	357	C	C3'-O3'	6.32	1.50	1.42
33	L1	807	C	C3'-C2'	-6.32	1.45	1.52
33	L1	958	U	C4'-O4'	6.32	1.53	1.45
33	L1	1194	C	C2'-C1'	6.32	1.60	1.53
33	L1	1818	C	O3'-P	-6.32	1.53	1.61
33	L1	2613	G	C5'-C4'	6.32	1.58	1.51
32	S1	305	A	C5'-C4'	6.32	1.58	1.51
32	S1	1196	C	C2'-C1'	-6.32	1.46	1.53
33	L1	2038	G	O4'-C1'	6.32	1.49	1.41
30	S3	12	A	C2'-C1'	-6.32	1.46	1.53
32	S1	1666	G	O3'-P	-6.32	1.53	1.61
33	L1	860	G	C2'-C1'	-6.32	1.46	1.53
33	L1	1787	C	P-O5'	-6.32	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	967	G	C2'-C1'	-6.32	1.46	1.53
33	L1	2393	G	O4'-C1'	6.32	1.49	1.41
33	L1	2507	U	O4'-C1'	6.32	1.49	1.41
32	S1	1734	U	C2'-C1'	-6.31	1.46	1.53
32	S1	1155	G	O4'-C1'	-6.31	1.33	1.41
32	S1	1785	U	C2'-C1'	6.31	1.60	1.53
33	L1	365	A	C4'-C3'	6.31	1.60	1.53
11	SM	132	ARG	CD-NE	6.31	1.57	1.46
20	SZ	7	SER	CA-CB	6.31	1.62	1.52
30	S3	17	A	O3'-P	-6.31	1.53	1.61
33	L1	1346	C	O4'-C1'	6.31	1.49	1.41
33	L1	1516	G	C3'-O3'	6.31	1.50	1.42
1	Sa	185	TRP	CD2-CE2	6.31	1.49	1.41
33	L1	513	C	O3'-P	-6.31	1.53	1.61
33	L1	1391	A	P-OP2	6.31	1.59	1.49
33	L1	1599	A	O3'-P	-6.31	1.53	1.61
32	S1	1160	G	C4'-O4'	-6.31	1.37	1.45
32	S1	596	A	O4'-C1'	6.30	1.49	1.41
33	L1	135	G	O4'-C1'	6.30	1.49	1.41
33	L1	1423	C	C2'-C1'	6.30	1.60	1.53
33	L1	2569	G	C2'-C1'	-6.30	1.46	1.53
32	S1	1	U	P-OP2	6.30	1.59	1.49
32	S1	178	A	C2'-C1'	6.30	1.60	1.53
24	SX	53	GLN	N-CA	-6.30	1.33	1.46
32	S1	916	U	C2'-C1'	6.30	1.60	1.53
32	S1	1124	G	P-O5'	6.30	1.66	1.59
33	L1	654	C	C2'-C1'	-6.30	1.46	1.53
33	L1	1120	G	C3'-C2'	6.30	1.59	1.52
33	L1	1867	U	O4'-C1'	6.30	1.49	1.41
33	L1	2220	U	O4'-C1'	6.30	1.49	1.41
34	L3	110	G	O4'-C1'	6.30	1.49	1.41
32	S1	382	A	O4'-C1'	-6.30	1.33	1.41
32	S1	621	U	P-O5'	-6.30	1.53	1.59
32	S1	1070	A	C4'-C3'	-6.30	1.46	1.53
33	L1	309	C	O3'-P	6.30	1.68	1.61
33	L1	363	A	O3'-P	-6.30	1.53	1.61
32	S1	1018	A	C2'-C1'	-6.29	1.46	1.53
33	L1	1174	G	O4'-C1'	-6.29	1.33	1.41
32	S1	231	U	O4'-C1'	-6.29	1.33	1.41
33	L1	71	C	O4'-C1'	6.29	1.49	1.41
33	L1	206	C	O4'-C1'	6.29	1.49	1.41
33	L1	2918	U	C3'-O3'	6.29	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	657	C	C2'-C1'	-6.29	1.46	1.53
33	L1	922	U	P-O5'	-6.29	1.53	1.59
33	L1	1216	G	C2'-C1'	-6.29	1.46	1.53
33	L1	1577	A	C4'-C3'	-6.29	1.46	1.53
31	S2	22	G	C5'-C4'	6.29	1.58	1.51
32	S1	1302	C	C4'-O4'	6.29	1.53	1.45
33	L1	68	U	C3'-O3'	6.29	1.50	1.42
33	L1	1500	C	O4'-C1'	6.29	1.49	1.41
33	L1	2226	C	C5'-C4'	6.29	1.58	1.51
32	S1	288	G	C5'-C4'	6.29	1.58	1.51
33	L1	459	G	C4'-C3'	6.29	1.60	1.53
33	L1	2910	C	C2'-C1'	-6.29	1.46	1.53
81	LD	351	ARG	CD-NE	6.29	1.57	1.46
32	S1	848	C	C5'-C4'	6.29	1.58	1.51
33	L1	1776	G	C2'-C1'	-6.29	1.46	1.53
33	L1	3053	G	O4'-C1'	6.29	1.49	1.41
33	L1	3201	A	C5'-C4'	6.29	1.58	1.51
33	L1	526	A	O4'-C1'	6.28	1.49	1.41
44	LR	160	HIS	CB-CG	6.28	1.61	1.50
31	S2	38	C	C5'-C4'	6.28	1.58	1.51
33	L1	1864	G	O4'-C1'	6.28	1.49	1.41
33	L1	2192	C	O4'-C1'	6.28	1.49	1.41
32	S1	1049	U	P-O5'	-6.28	1.53	1.59
33	L1	855	U	C3'-O3'	6.28	1.50	1.42
33	L1	2738	U	P-O5'	-6.28	1.53	1.59
32	S1	1096	A	C2'-C1'	6.28	1.60	1.53
33	L1	1139	A	C2'-C1'	-6.28	1.46	1.53
32	S1	1432	C	C5'-C4'	-6.28	1.43	1.51
33	L1	1935	G	O4'-C1'	6.28	1.49	1.41
32	S1	1123	G	C3'-O3'	6.28	1.50	1.42
32	S1	1574	U	O4'-C1'	6.28	1.49	1.41
33	L1	519	C	C4'-O4'	6.28	1.53	1.45
33	L1	2902	A	P-O5'	-6.28	1.53	1.59
33	L1	3091	U	C5'-C4'	6.28	1.58	1.51
35	L2	98	C	O3'-P	-6.28	1.53	1.61
66	LN	99	ARG	CA-C	-6.28	1.36	1.52
32	S1	1665	U	C2'-C1'	-6.27	1.46	1.53
33	L1	799	U	C2'-C1'	-6.27	1.46	1.53
33	L1	2301	C	O4'-C1'	6.27	1.49	1.41
32	S1	436	G	O4'-C1'	6.27	1.49	1.41
32	S1	895	U	O4'-C1'	6.27	1.49	1.41
32	S1	1297	U	C4'-C3'	6.27	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1319	U	C2'-C1'	6.27	1.60	1.53
33	L1	748	C	O4'-C1'	6.27	1.49	1.41
33	L1	1361	G	P-O5'	-6.27	1.53	1.59
32	S1	1089	A	O3'-P	-6.27	1.53	1.61
33	L1	162	G	C5'-C4'	6.27	1.58	1.51
33	L1	276	U	C2'-C1'	-6.27	1.46	1.53
33	L1	469	U	P-O5'	6.27	1.66	1.59
33	L1	1655	G	C2'-C1'	-6.27	1.46	1.53
33	L1	2076	C	C2'-C1'	6.27	1.60	1.53
33	L1	2151	G	C2'-C1'	6.27	1.60	1.53
33	L1	206	C	C2'-C1'	-6.27	1.46	1.53
32	S1	1483	G	C2'-C1'	-6.27	1.46	1.53
32	S1	1766	A	O4'-C1'	-6.27	1.33	1.41
33	L1	1505	G	O4'-C1'	-6.27	1.33	1.41
33	L1	460	A	P-O5'	6.26	1.66	1.59
33	L1	1159	C	O4'-C1'	6.26	1.49	1.41
33	L1	2857	U	O4'-C1'	6.26	1.49	1.41
34	L3	38	U	C4'-C3'	-6.26	1.46	1.53
43	LO	137	GLY	C-N	6.26	1.44	1.33
31	S2	52	G	C4'-C3'	6.26	1.60	1.53
81	LD	309	PRO	N-CA	-6.26	1.36	1.47
32	S1	1067	A	C4'-C3'	-6.26	1.46	1.53
33	L1	1243	C	C3'-O3'	6.26	1.50	1.42
33	L1	1385	C	P-O5'	-6.26	1.53	1.59
33	L1	1712	A	C3'-C2'	6.26	1.59	1.52
33	L1	2236	U	O3'-P	-6.26	1.53	1.61
33	L1	2760	U	C5'-C4'	6.26	1.58	1.51
10	SL	121	VAL	N-CA	6.26	1.58	1.46
33	L1	619	C	C4'-C3'	-6.26	1.46	1.53
33	L1	1974	C	O4'-C1'	6.26	1.49	1.41
35	L2	72	G	P-O5'	-6.26	1.53	1.59
36	LA	164	MET	C-N	6.26	1.44	1.33
32	S1	632	G	C5'-C4'	6.26	1.58	1.51
33	L1	2807	G	C2'-C1'	-6.26	1.46	1.53
33	L1	1730	U	O3'-P	-6.25	1.53	1.61
35	L2	37	A	O3'-P	-6.25	1.53	1.61
32	S1	1360	G	C5'-C4'	6.25	1.58	1.51
33	L1	524	A	O4'-C1'	6.25	1.49	1.41
32	S1	471	G	O4'-C1'	-6.25	1.33	1.41
32	S1	1127	G	C2'-C1'	-6.25	1.46	1.53
33	L1	1548	U	C2'-C1'	-6.25	1.46	1.53
32	S1	573	C	P-O5'	-6.25	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3006	G	C5'-C4'	6.25	1.58	1.51
34	L3	70	G	O4'-C1'	-6.25	1.33	1.41
77	Lc	85	ARG	CD-NE	6.25	1.57	1.46
33	L1	204	G	C2'-C1'	6.25	1.60	1.53
33	L1	905	G	C2'-C1'	-6.25	1.46	1.53
66	LN	109	LYS	N-CA	6.25	1.58	1.46
33	L1	2677	A	C5'-C4'	6.25	1.58	1.51
32	S1	501	U	C5'-C4'	6.24	1.58	1.51
32	S1	1736	C	C5'-C4'	6.24	1.58	1.51
33	L1	474	G	C2'-C1'	-6.24	1.46	1.53
33	L1	3361	G	C3'-O3'	6.24	1.50	1.42
32	S1	1049	U	C3'-C2'	6.24	1.59	1.52
33	L1	1122	C	O4'-C1'	6.24	1.49	1.41
32	S1	1730	G	C2'-C1'	6.24	1.60	1.53
33	L1	79	C	C2'-C1'	-6.24	1.46	1.53
33	L1	996	A	O4'-C1'	6.24	1.49	1.41
33	L1	3162	C	C2'-C1'	-6.24	1.46	1.53
70	Li	66	ARG	CD-NE	6.24	1.57	1.46
31	S2	61	C	C5'-C4'	6.24	1.58	1.51
32	S1	418	C	C2'-C1'	-6.24	1.46	1.53
33	L1	369	G	O4'-C1'	-6.24	1.33	1.41
33	L1	539	C	O4'-C1'	6.24	1.49	1.41
33	L1	3157	C	O4'-C1'	6.24	1.49	1.41
32	S1	1559	U	P-O5'	-6.24	1.53	1.59
33	L1	3148	A	O3'-P	-6.24	1.53	1.61
32	S1	1486	U	C2'-C1'	6.24	1.60	1.53
33	L1	1466	U	C2'-C1'	-6.24	1.46	1.53
33	L1	2500	U	C2'-C1'	-6.24	1.46	1.53
32	S1	1131	G	C3'-O3'	6.23	1.50	1.42
33	L1	2273	C	O4'-C1'	6.23	1.49	1.41
33	L1	3308	A	C5'-C4'	6.23	1.58	1.51
7	SI	141	ARG	NE-CZ	6.23	1.41	1.33
32	S1	628	G	O3'-P	-6.23	1.53	1.61
33	L1	2164	G	C4'-C3'	-6.23	1.46	1.53
33	L1	3007	A	O5'-C5'	6.23	1.54	1.44
33	L1	3057	A	O3'-P	-6.23	1.53	1.61
2	SA	11	ALA	CA-C	6.23	1.69	1.52
32	S1	462	G	C2'-C1'	-6.23	1.46	1.53
32	S1	1089	A	O4'-C1'	6.23	1.49	1.41
32	S1	1701	G	C3'-C2'	6.23	1.59	1.52
33	L1	1247	G	O3'-P	-6.23	1.53	1.61
35	L2	50	G	C3'-O3'	6.23	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1747	A	P-O5'	-6.23	1.53	1.59
32	S1	282	C	C2'-C1'	6.23	1.60	1.53
33	L1	580	C	C5'-C4'	6.23	1.58	1.51
33	L1	2337	C	C5'-C4'	6.23	1.58	1.51
32	S1	1557	C	C2'-C1'	-6.23	1.46	1.53
32	S1	1558	A	C2'-C1'	-6.23	1.46	1.53
32	S1	1772	A	C3'-C2'	-6.23	1.46	1.52
32	S1	936	C	C2'-C1'	-6.22	1.46	1.53
32	S1	1261	U	C4'-O4'	-6.22	1.37	1.45
33	L1	1578	U	C5'-C4'	6.22	1.58	1.51
33	L1	2622	G	C4'-C3'	-6.22	1.46	1.53
33	L1	2748	G	P-O5'	-6.22	1.53	1.59
4	SD	212	ASP	N-CA	-6.22	1.33	1.46
32	S1	883	G	C2'-C1'	-6.22	1.46	1.53
33	L1	502	G	C2'-C1'	6.22	1.60	1.53
33	L1	1538	A	C5'-C4'	6.22	1.58	1.51
33	L1	2449	A	O4'-C1'	6.22	1.49	1.41
32	S1	1142	A	O4'-C1'	6.22	1.49	1.41
71	Lj	94	PRO	N-CA	6.22	1.57	1.47
32	S1	400	G	C4'-C3'	6.22	1.59	1.53
32	S1	795	A	O3'-P	-6.22	1.53	1.61
32	S1	1545	A	C5'-C4'	-6.22	1.43	1.51
35	L2	79	G	C4'-C3'	6.22	1.59	1.53
33	L1	1786	G	C3'-C2'	-6.22	1.46	1.52
33	L1	2571	C	O4'-C1'	6.22	1.49	1.41
33	L1	428	G	O4'-C1'	6.21	1.49	1.41
33	L1	767	U	C2'-C1'	-6.21	1.46	1.53
33	L1	131	C	C3'-O3'	6.21	1.50	1.42
32	S1	489	C	C5'-C4'	6.21	1.58	1.51
32	S1	567	U	C5'-C4'	6.21	1.58	1.51
33	L1	1366	G	P-O5'	-6.21	1.53	1.59
33	L1	1702	C	C2'-C1'	-6.21	1.46	1.53
69	La	9	LYS	CA-C	6.21	1.69	1.52
33	L1	432	G	C2'-C1'	-6.21	1.46	1.53
25	SC	136	ILE	C-O	-6.21	1.11	1.23
32	S1	443	U	O4'-C1'	6.21	1.49	1.41
33	L1	246	C	O4'-C1'	6.21	1.49	1.41
33	L1	306	A	C2'-C1'	-6.21	1.46	1.53
33	L1	1550	A	C5'-C4'	6.21	1.58	1.51
32	S1	1297	U	C2'-C1'	6.21	1.60	1.53
33	L1	1981	U	C2'-C1'	-6.21	1.46	1.53
33	L1	356	G	O3'-P	-6.20	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	11	A	C2'-C1'	6.20	1.60	1.53
32	S1	649	C	C2'-C1'	-6.20	1.46	1.53
33	L1	2337	C	C3'-O3'	6.20	1.50	1.42
33	L1	1336	A	P-O5'	-6.20	1.53	1.59
35	L2	100	A	C4'-O4'	6.20	1.53	1.45
83	Lm	8	ALA	N-CA	6.20	1.58	1.46
33	L1	1006	A	O4'-C1'	6.20	1.49	1.41
33	L1	1386	G	O4'-C1'	6.20	1.49	1.41
33	L1	1679	U	C5'-C4'	6.20	1.58	1.51
33	L1	1910	G	O3'-P	-6.20	1.53	1.61
33	L1	2214	A	C2'-C1'	-6.20	1.46	1.53
33	L1	2458	A	O4'-C1'	-6.20	1.33	1.41
33	L1	2538	G	O4'-C1'	-6.20	1.33	1.41
33	L1	2624	G	C3'-O3'	6.20	1.50	1.42
23	SU	68	THR	C-O	-6.20	1.11	1.23
33	L1	488	U	C3'-C2'	6.20	1.59	1.52
73	Lp	51	ILE	C-N	6.20	1.48	1.34
32	S1	55	A	O4'-C1'	6.20	1.49	1.41
32	S1	1760	A	O4'-C1'	6.20	1.49	1.41
33	L1	1473	U	C3'-C2'	-6.20	1.46	1.52
33	L1	1990	A	C2'-C1'	-6.20	1.46	1.53
33	L1	2213	G	C5'-C4'	6.20	1.58	1.51
33	L1	3157	C	O3'-P	-6.20	1.53	1.61
32	S1	996	G	C2'-C1'	6.19	1.60	1.53
33	L1	704	G	C2'-C1'	-6.19	1.46	1.53
48	LV	136	ARG	NE-CZ	6.19	1.41	1.33
32	S1	632	G	C3'-C2'	6.19	1.59	1.52
46	LT	31	GLU	CD-OE2	-6.19	1.18	1.25
32	S1	173	G	O4'-C1'	6.19	1.49	1.41
32	S1	600	C	C2'-C1'	-6.19	1.46	1.53
32	S1	1230	A	O4'-C1'	6.19	1.49	1.41
32	S1	720	U	P-O5'	6.19	1.66	1.59
32	S1	800	U	C4'-C3'	-6.19	1.46	1.53
32	S1	1003	A	C2'-C1'	-6.19	1.46	1.53
33	L1	1395	A	P-O5'	-6.19	1.53	1.59
32	S1	97	G	O4'-C1'	6.19	1.49	1.41
33	L1	2515	C	C2'-C1'	-6.18	1.46	1.53
45	LQ	256	SER	CA-CB	6.18	1.62	1.52
32	S1	1712	C	C3'-C2'	6.18	1.59	1.52
33	L1	626	G	C2'-C1'	-6.18	1.46	1.53
33	L1	1118	G	C2'-C1'	6.18	1.60	1.53
35	L2	53	G	O3'-P	-6.18	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	606	C	O4'-C1'	6.18	1.49	1.41
33	L1	1421	A	C5'-C4'	6.18	1.58	1.51
33	L1	2465	G	C2'-C1'	-6.18	1.46	1.53
33	L1	2479	C	C3'-O3'	6.18	1.50	1.42
33	L1	2677	A	P-O5'	-6.18	1.53	1.59
51	LY	73	TYR	CG-CD1	6.18	1.47	1.39
2	SA	41	TYR	CB-CG	-6.18	1.42	1.51
24	SX	75	LEU	N-CA	-6.18	1.33	1.46
32	S1	1383	U	O4'-C1'	6.18	1.49	1.41
33	L1	2336	C	C5'-C4'	6.18	1.58	1.51
33	L1	1813	C	O4'-C1'	6.18	1.49	1.41
32	S1	466	G	C4'-O4'	-6.18	1.37	1.45
32	S1	599	G	O4'-C1'	6.18	1.49	1.41
33	L1	83	U	O4'-C1'	6.18	1.49	1.41
33	L1	604	C	C2'-C1'	-6.18	1.46	1.53
33	L1	1272	G	C2'-C1'	-6.18	1.46	1.53
33	L1	2123	C	C2'-C1'	-6.18	1.46	1.53
33	L1	2228	A	C4'-O4'	6.18	1.53	1.45
31	S2	4	G	O4'-C1'	-6.17	1.33	1.41
32	S1	408	G	C4'-C3'	-6.17	1.46	1.53
32	S1	496	A	O4'-C1'	6.17	1.49	1.41
33	L1	248	C	C2'-C1'	-6.17	1.46	1.53
33	L1	610	G	C3'-O3'	6.17	1.50	1.42
33	L1	1668	U	C3'-O3'	6.17	1.50	1.42
33	L1	2935	A	C2'-C1'	-6.17	1.46	1.53
33	L1	3146	C	O4'-C1'	6.17	1.49	1.41
32	S1	1107	G	C2'-C1'	-6.17	1.46	1.53
32	S1	207	A	O4'-C1'	6.17	1.49	1.41
32	S1	1448	U	O4'-C1'	6.17	1.49	1.41
33	L1	579	G	C2'-C1'	-6.17	1.46	1.53
33	L1	1168	G	C3'-C2'	6.17	1.59	1.52
33	L1	1198	G	C2'-C1'	6.17	1.60	1.53
33	L1	2740	C	O3'-P	-6.17	1.53	1.61
33	L1	603	G	C4'-O4'	6.17	1.53	1.45
30	S3	20	U	O4'-C1'	6.17	1.49	1.41
32	S1	1157	A	C3'-C2'	6.17	1.59	1.52
32	S1	1330	A	C2'-C1'	-6.17	1.46	1.53
33	L1	1948	G	O3'-P	-6.17	1.53	1.61
33	L1	1988	G	C2'-C1'	-6.17	1.46	1.53
33	L1	770	U	C2'-C1'	6.17	1.60	1.53
33	L1	2473	C	O4'-C1'	6.17	1.49	1.41
71	Lj	57	TYR	CB-CG	-6.17	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	958	U	C3'-O3'	6.16	1.50	1.42
33	L1	1680	A	O3'-P	-6.16	1.53	1.61
33	L1	2647	C	C2'-C1'	6.16	1.60	1.53
5	SE	38	ARG	CZ-NH1	6.16	1.41	1.33
32	S1	323	U	O4'-C1'	6.16	1.49	1.41
32	S1	1706	G	C2'-C1'	6.16	1.60	1.53
42	LP	187	SER	CA-CB	6.16	1.62	1.52
32	S1	451	U	C5'-C4'	6.16	1.58	1.51
32	S1	1760	A	C5'-C4'	6.16	1.58	1.51
34	L3	97	G	C5'-C4'	6.16	1.58	1.51
32	S1	1093	A	O4'-C1'	6.16	1.49	1.41
33	L1	940	G	O4'-C1'	6.16	1.49	1.41
33	L1	1610	A	C2'-C1'	6.16	1.60	1.53
33	L1	1870	G	C2'-C1'	-6.16	1.46	1.53
69	La	29	PHE	N-CA	6.15	1.58	1.46
10	SL	18	ARG	CZ-NH2	6.15	1.41	1.33
25	SC	143	VAL	C-O	-6.15	1.11	1.23
31	S2	22	G	P-O5'	6.15	1.66	1.59
32	S1	672	G	C2'-C1'	-6.15	1.46	1.53
32	S1	1130	A	O4'-C1'	6.15	1.49	1.41
33	L1	2357	A	C2'-C1'	-6.15	1.46	1.53
33	L1	1370	A	O3'-P	-6.15	1.53	1.61
33	L1	3239	G	O4'-C1'	-6.15	1.33	1.41
32	S1	1098	A	C4'-C3'	6.15	1.59	1.53
33	L1	1534	C	O4'-C1'	6.15	1.49	1.41
67	LS	138	ARG	NE-CZ	6.15	1.41	1.33
33	L1	2972	C	O3'-P	-6.15	1.53	1.61
33	L1	1177	G	C2'-C1'	-6.15	1.46	1.53
33	L1	3341	C	C3'-O3'	6.15	1.50	1.42
11	SM	17	ASN	CB-CG	6.14	1.65	1.51
32	S1	387	G	O4'-C1'	6.14	1.49	1.41
32	S1	1253	U	O3'-P	-6.14	1.53	1.61
33	L1	1440	C	O4'-C1'	6.14	1.49	1.41
33	L1	3355	U	C4'-O4'	6.14	1.53	1.45
34	L3	20	C	O4'-C1'	6.14	1.49	1.41
33	L1	43	U	C2'-C1'	6.14	1.60	1.53
33	L1	1331	C	O4'-C1'	6.14	1.49	1.41
33	L1	1527	A	C2'-C1'	6.14	1.60	1.53
78	Le	227	GLY	CA-C	-6.14	1.42	1.51
80	LC	385	GLY	N-CA	6.14	1.55	1.46
31	S2	40	U	C5'-C4'	6.14	1.58	1.51
32	S1	555	G	C2'-C1'	-6.14	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	581	G	O4'-C1'	-6.14	1.33	1.41
32	S1	1240	A	C5'-C4'	6.14	1.58	1.51
33	L1	32	G	C5'-C4'	6.14	1.58	1.51
31	S2	13	U	O3'-P	-6.14	1.53	1.61
32	S1	1467	C	C2'-C1'	6.14	1.60	1.53
32	S1	1607	C	C5'-C4'	6.14	1.58	1.51
33	L1	277	U	O4'-C1'	6.14	1.49	1.41
33	L1	441	G	O4'-C1'	-6.14	1.33	1.41
33	L1	478	G	P-O5'	-6.14	1.53	1.59
35	L2	102	U	C3'-C2'	6.14	1.59	1.52
32	S1	1257	U	O3'-P	-6.14	1.53	1.61
33	L1	1881	C	C3'-C2'	6.14	1.59	1.52
33	L1	2448	G	C3'-C2'	-6.14	1.46	1.52
33	L1	3305	U	C2'-C1'	6.14	1.60	1.53
35	L2	63	A	O3'-P	-6.14	1.53	1.61
5	SE	147	PRO	N-CA	-6.13	1.36	1.47
32	S1	650	G	O4'-C1'	6.13	1.49	1.41
33	L1	3142	C	C3'-O3'	6.13	1.50	1.42
32	S1	988	G	O4'-C1'	6.13	1.49	1.41
33	L1	522	C	C3'-O3'	6.13	1.50	1.42
33	L1	662	G	O3'-P	-6.13	1.53	1.61
33	L1	1608	C	C3'-O3'	6.13	1.50	1.42
32	S1	1238	A	C2'-C1'	6.13	1.60	1.53
33	L1	974	G	O4'-C1'	-6.13	1.33	1.41
33	L1	1631	G	C3'-C2'	6.13	1.59	1.52
33	L1	2178	G	P-O5'	-6.13	1.53	1.59
33	L1	2339	U	P-O5'	-6.13	1.53	1.59
41	LM	72	LEU	C-N	6.13	1.48	1.34
13	SQ	42	PRO	N-CD	-6.13	1.39	1.47
32	S1	341	G	O4'-C1'	6.13	1.49	1.41
32	S1	966	U	C2'-C1'	-6.13	1.46	1.53
33	L1	3133	C	O4'-C1'	6.13	1.49	1.41
15	SS	68	TYR	CE2-CZ	6.13	1.46	1.38
32	S1	1224	C	O3'-P	-6.13	1.53	1.61
33	L1	955	A	C5'-C4'	6.13	1.58	1.51
33	L1	1188	C	O4'-C1'	6.13	1.49	1.41
33	L1	2675	G	P-O5'	6.13	1.65	1.59
33	L1	2890	U	O4'-C1'	6.13	1.49	1.41
33	L1	986	G	P-O5'	-6.13	1.53	1.59
33	L1	2214	A	C4'-C3'	6.13	1.59	1.53
34	L3	34	C	C2'-C1'	-6.13	1.46	1.53
32	S1	1776	A	C2'-C1'	-6.12	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1856	G	C2'-C1'	6.12	1.60	1.53
57	Ll	11	ARG	C-O	-6.12	1.11	1.23
32	S1	608	U	O4'-C1'	-6.12	1.33	1.41
32	S1	1670	G	C5'-C4'	6.12	1.58	1.51
33	L1	644	U	C2'-C1'	-6.12	1.46	1.53
33	L1	565	C	C2'-C1'	-6.12	1.46	1.53
33	L1	1190	C	O3'-P	-6.12	1.53	1.61
33	L1	1455	A	O3'-P	-6.12	1.53	1.61
33	L1	1792	G	C5'-C4'	6.12	1.58	1.51
33	L1	2169	U	P-O5'	-6.12	1.53	1.59
33	L1	2729	C	O3'-P	-6.12	1.53	1.61
32	S1	1475	A	O4'-C1'	6.12	1.49	1.41
32	S1	1606	U	C2'-C1'	-6.12	1.46	1.53
7	SI	63	ARG	NE-CZ	6.12	1.41	1.33
33	L1	1159	C	C4'-C3'	6.12	1.59	1.53
33	L1	1525	U	C3'-C2'	-6.12	1.46	1.52
33	L1	2742	A	P-O5'	-6.12	1.53	1.59
32	S1	1131	G	O4'-C1'	-6.12	1.33	1.41
32	S1	1358	G	C4'-O4'	6.12	1.53	1.45
33	L1	2710	C	O4'-C1'	6.12	1.49	1.41
32	S1	894	U	O4'-C1'	6.12	1.49	1.41
33	L1	516	C	C2'-C1'	-6.12	1.46	1.53
33	L1	2338	C	P-O5'	-6.12	1.53	1.59
33	L1	243	C	C2'-C1'	-6.11	1.46	1.53
33	L1	1720	C	C2'-C1'	-6.11	1.46	1.53
10	SL	84	VAL	N-CA	-6.11	1.34	1.46
32	S1	635	G	C5'-C4'	6.11	1.58	1.51
33	L1	1509	G	P-O5'	-6.11	1.53	1.59
33	L1	1656	C	O4'-C1'	6.11	1.49	1.41
33	L1	2719	U	C5'-C4'	6.11	1.58	1.51
33	L1	2975	G	C5'-C4'	6.11	1.58	1.51
33	L1	1048	U	O4'-C1'	6.11	1.49	1.41
33	L1	2470	C	C3'-O3'	6.11	1.50	1.42
33	L1	805	C	O4'-C1'	6.11	1.49	1.41
33	L1	2671	A	O4'-C1'	-6.11	1.33	1.41
8	SJ	78	PRO	C-O	-6.11	1.11	1.23
32	S1	1031	A	C4'-C3'	6.11	1.59	1.53
33	L1	261	C	O4'-C1'	6.11	1.49	1.41
33	L1	318	G	C4'-C3'	-6.11	1.46	1.53
33	L1	552	G	C2'-C1'	-6.11	1.46	1.53
33	L1	702	G	O4'-C1'	6.11	1.49	1.41
33	L1	873	A	P-O5'	-6.11	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1132	A	O3'-P	-6.11	1.53	1.61
32	S1	1316	A	C4'-C3'	-6.10	1.46	1.53
33	L1	3152	C	O4'-C1'	6.10	1.49	1.41
35	L2	127	G	C2'-C1'	6.10	1.60	1.53
1	Sa	279	ARG	CZ-NH1	6.10	1.41	1.33
32	S1	1793	C	O5'-C5'	6.10	1.54	1.44
7	SI	72	ARG	NE-CZ	6.10	1.41	1.33
19	SY	48	GLU	CB-CG	6.10	1.63	1.52
34	L3	75	G	O4'-C1'	-6.10	1.33	1.41
34	L3	98	G	C4'-O4'	-6.10	1.37	1.45
40	LH	226	ARG	CZ-NH2	6.10	1.41	1.33
33	L1	182	C	C2'-C1'	-6.10	1.46	1.53
33	L1	2760	U	O3'-P	-6.10	1.53	1.61
33	L1	503	U	O4'-C1'	6.10	1.49	1.41
33	L1	1167	G	C3'-O3'	6.10	1.50	1.42
33	L1	1281	C	O3'-P	-6.10	1.53	1.61
33	L1	2679	A	C5'-C4'	6.09	1.58	1.51
33	L1	2713	G	C5'-C4'	6.09	1.58	1.51
33	L1	2904	A	C2'-O2'	6.09	1.49	1.41
13	SQ	63	ARG	CZ-NH1	6.09	1.41	1.33
32	S1	652	G	O3'-P	-6.09	1.53	1.61
33	L1	640	C	C3'-C2'	6.09	1.59	1.52
51	LY	77	TRP	CZ2-CH2	6.09	1.49	1.37
23	SU	29	VAL	CA-CB	-6.09	1.42	1.54
33	L1	233	C	C5'-C4'	6.09	1.58	1.51
33	L1	564	A	C4'-O4'	6.09	1.53	1.45
33	L1	960	C	C5'-C4'	6.09	1.58	1.51
33	L1	1257	U	C2'-C1'	6.09	1.60	1.53
33	L1	1983	U	C2'-C1'	-6.09	1.46	1.53
33	L1	2613	G	O4'-C1'	-6.09	1.33	1.41
32	S1	1180	U	O4'-C1'	6.09	1.49	1.41
33	L1	775	A	C2'-C1'	-6.09	1.46	1.53
33	L1	2754	G	C4'-C3'	-6.09	1.46	1.53
32	S1	1195	U	C5'-C4'	6.09	1.58	1.51
32	S1	1290	U	C5'-C4'	6.09	1.58	1.51
32	S1	1464	G	P-OP2	6.09	1.59	1.49
35	L2	64	U	P-O5'	-6.09	1.53	1.59
32	S1	1421	U	P-OP2	6.08	1.59	1.49
33	L1	174	G	O4'-C1'	6.08	1.49	1.41
33	L1	827	C	P-O5'	-6.08	1.53	1.59
33	L1	1482	C	C2'-C1'	-6.08	1.46	1.53
33	L1	2477	G	O3'-P	-6.08	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2617	G	P-O5'	6.08	1.65	1.59
32	S1	1033	C	O4'-C1'	6.08	1.49	1.41
33	L1	2668	U	C3'-O3'	6.08	1.50	1.42
35	L2	56	A	C4'-C3'	6.08	1.59	1.53
38	LE	143	ARG	CD-NE	6.08	1.56	1.46
33	L1	495	G	C2'-C1'	6.08	1.60	1.53
33	L1	2872	C	C3'-O3'	6.08	1.50	1.42
28	SN	11	PRO	N-CD	-6.08	1.39	1.47
32	S1	823	A	O3'-P	-6.08	1.53	1.61
32	S1	1381	G	O3'-P	-6.08	1.53	1.61
32	S1	1579	C	O4'-C1'	6.08	1.49	1.41
33	L1	221	C	O4'-C1'	6.08	1.49	1.41
33	L1	2992	G	C4'-C3'	-6.08	1.46	1.53
34	L3	1	G	O3'-P	6.08	1.68	1.61
31	S2	9	A	C3'-O3'	6.08	1.50	1.42
33	L1	1441	U	C5'-C4'	6.08	1.58	1.51
33	L1	2561	A	P-OP2	6.08	1.59	1.49
32	S1	783	C	C3'-O3'	6.08	1.50	1.42
32	S1	998	A	P-O5'	-6.08	1.53	1.59
33	L1	208	G	O4'-C1'	6.08	1.49	1.41
33	L1	490	G	O3'-P	-6.08	1.53	1.61
33	L1	971	G	C2'-C1'	-6.08	1.46	1.53
33	L1	1082	U	C5'-C4'	6.08	1.58	1.51
33	L1	2951	U	P-O5'	-6.08	1.53	1.59
33	L1	3279	G	O4'-C1'	6.08	1.49	1.41
70	Li	42	PRO	CA-C	6.07	1.65	1.52
33	L1	564	A	O4'-C1'	6.07	1.49	1.41
33	L1	1382	C	C4'-O4'	6.07	1.53	1.45
33	L1	269	C	C2'-C1'	-6.07	1.46	1.53
33	L1	972	C	C4'-O4'	6.07	1.53	1.45
1	Sa	67	GLY	CA-C	-6.07	1.42	1.51
1	Sa	257	PHE	CG-CD2	6.07	1.47	1.38
32	S1	836	U	C2'-C1'	6.07	1.60	1.53
33	L1	401	C	O4'-C1'	6.07	1.49	1.41
33	L1	1950	G	C5'-C4'	6.07	1.58	1.51
33	L1	2773	G	P-O5'	-6.07	1.53	1.59
35	L2	94	C	O3'-P	-6.07	1.53	1.61
32	S1	827	C	C3'-C2'	6.07	1.59	1.52
33	L1	540	G	C5'-C4'	6.07	1.58	1.51
33	L1	1259	C	O3'-P	-6.07	1.53	1.61
33	L1	1494	A	C2'-C1'	6.07	1.60	1.53
33	L1	2803	A	O4'-C1'	-6.07	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	SS	15	HIS	N-CA	-6.06	1.34	1.46
33	L1	2526	G	O3'-P	-6.06	1.53	1.61
32	S1	582	U	C2'-C1'	-6.06	1.46	1.53
32	S1	1495	U	C5'-C4'	6.06	1.58	1.51
32	S1	1678	G	C4'-C3'	6.06	1.59	1.53
33	L1	918	A	C4'-O4'	6.06	1.53	1.45
33	L1	1608	C	C4'-O4'	6.06	1.53	1.45
33	L1	2420	U	C2'-C1'	-6.06	1.46	1.53
32	S1	261	C	O3'-P	-6.06	1.53	1.61
33	L1	1429	U	O3'-P	-6.06	1.53	1.61
42	LP	94	PHE	CG-CD1	6.06	1.47	1.38
32	S1	1615	G	P-O5'	-6.06	1.53	1.59
32	S1	1756	A	O4'-C1'	6.06	1.49	1.41
59	Lo	22	PRO	CA-C	-6.06	1.40	1.52
31	S2	65	U	C5'-C4'	6.06	1.58	1.51
32	S1	263	C	C3'-O3'	6.06	1.50	1.42
32	S1	356	G	C5'-C4'	6.06	1.58	1.51
33	L1	2418	A	C4'-O4'	-6.06	1.37	1.45
13	SQ	61	ILE	N-CA	6.05	1.58	1.46
31	S2	29	C	O4'-C1'	6.05	1.49	1.41
32	S1	912	A	C4'-O4'	6.05	1.53	1.45
33	L1	273	U	P-O5'	-6.05	1.53	1.59
32	S1	1564	A	C2'-C1'	-6.05	1.46	1.53
33	L1	2142	A	O3'-P	-6.05	1.53	1.61
32	S1	953	G	C2'-C1'	6.05	1.60	1.53
33	L1	301	G	O3'-P	-6.05	1.53	1.61
33	L1	2621	G	C5'-C4'	6.05	1.58	1.51
64	LG	152	LYS	N-CA	-6.05	1.34	1.46
33	L1	2850	G	C3'-O3'	6.05	1.50	1.42
35	L2	86	C	P-O5'	-6.05	1.53	1.59
3	SB	143	ARG	CZ-NH2	6.05	1.41	1.33
5	SE	102	GLY	N-CA	-6.05	1.36	1.46
32	S1	41	A	O4'-C1'	6.05	1.49	1.41
32	S1	530	A	C5'-C4'	6.05	1.58	1.51
32	S1	1475	A	C2'-C1'	-6.05	1.46	1.53
33	L1	693	C	C2'-C1'	-6.05	1.46	1.53
33	L1	2259	U	C3'-O3'	6.05	1.50	1.42
33	L1	3326	U	O3'-P	-6.05	1.53	1.61
51	LY	77	TRP	CE3-CZ3	6.05	1.48	1.38
32	S1	376	G	C3'-O3'	6.04	1.50	1.42
32	S1	967	C	C2'-C1'	-6.04	1.46	1.53
32	S1	1027	C	C2'-C1'	-6.04	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1312	G	C3'-C2'	-6.04	1.46	1.52
33	L1	808	G	C2'-C1'	6.04	1.59	1.53
33	L1	1167	G	O3'-P	-6.04	1.53	1.61
33	L1	1780	C	P-O5'	-6.04	1.53	1.59
32	S1	6	G	C2'-C1'	-6.04	1.46	1.53
33	L1	2717	G	O3'-P	6.04	1.68	1.61
32	S1	1655	U	C2'-C1'	-6.04	1.46	1.53
33	L1	472	U	P-O5'	-6.04	1.53	1.59
32	S1	108	C	P-O5'	-6.04	1.53	1.59
33	L1	925	U	P-O5'	-6.04	1.53	1.59
33	L1	2522	C	C2'-C1'	-6.04	1.46	1.53
32	S1	1582	G	C2'-C1'	-6.04	1.46	1.53
33	L1	897	U	C5'-C4'	-6.04	1.44	1.51
40	LH	61	ARG	CD-NE	6.04	1.56	1.46
32	S1	682	A	O4'-C1'	6.03	1.49	1.41
32	S1	1206	A	C2'-C1'	6.03	1.59	1.53
32	S1	1270	U	C2'-C1'	-6.03	1.46	1.53
32	S1	1222	G	C3'-O3'	6.03	1.50	1.42
33	L1	107	C	C2'-C1'	-6.03	1.46	1.53
33	L1	320	U	O3'-P	-6.03	1.53	1.61
33	L1	617	C	O4'-C1'	6.03	1.49	1.41
33	L1	1343	C	C3'-O3'	6.03	1.50	1.42
11	SM	21	ASP	C-N	6.03	1.44	1.33
32	S1	13	C	P-O5'	-6.03	1.53	1.59
32	S1	375	G	O4'-C1'	-6.03	1.33	1.41
32	S1	1592	G	O4'-C1'	-6.03	1.33	1.41
32	S1	1760	A	C2'-C1'	6.03	1.59	1.53
33	L1	2142	A	O4'-C1'	6.03	1.49	1.41
32	S1	901	U	O4'-C1'	6.03	1.49	1.41
33	L1	1905	A	C2'-C1'	6.03	1.59	1.53
33	L1	2114	A	C2'-C1'	-6.03	1.46	1.53
23	SU	24	SER	N-CA	-6.03	1.34	1.46
32	S1	644	U	O4'-C1'	6.03	1.49	1.41
33	L1	1441	U	P-O5'	-6.03	1.53	1.59
33	L1	1790	A	C3'-O3'	6.03	1.50	1.42
47	LU	164	TYR	CB-CG	-6.03	1.42	1.51
33	L1	25	U	C3'-C2'	6.03	1.59	1.52
33	L1	2516	U	O4'-C1'	6.03	1.49	1.41
32	S1	139	U	C2'-C1'	6.02	1.59	1.53
33	L1	588	G	C3'-C2'	-6.02	1.46	1.52
33	L1	2762	U	C3'-O3'	6.02	1.50	1.42
35	L2	61	C	C4'-C3'	-6.02	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	791	C	C3'-O3'	6.02	1.50	1.42
33	L1	1631	G	O4'-C1'	6.02	1.49	1.41
33	L1	2946	U	C5'-C4'	6.02	1.58	1.51
48	LV	152	SER	CA-CB	6.02	1.61	1.52
60	Lr	46	LYS	C-O	-6.02	1.11	1.23
33	L1	1398	A	C2'-C1'	6.02	1.59	1.53
32	S1	1048	A	C2'-C1'	6.02	1.59	1.53
32	S1	1790	G	C5'-C4'	6.02	1.58	1.51
32	S1	517	U	P-O5'	-6.02	1.53	1.59
33	L1	933	U	O4'-C1'	-6.02	1.33	1.41
33	L1	1672	G	C3'-O3'	6.02	1.50	1.42
33	L1	1705	A	O4'-C1'	6.02	1.49	1.41
33	L1	2349	C	C5'-C4'	6.02	1.58	1.51
33	L1	1242	U	C2'-C1'	-6.02	1.46	1.53
35	L2	157	C	O3'-P	-6.02	1.53	1.61
31	S2	10	G	C2'-C1'	-6.01	1.46	1.53
32	S1	397	C	C5'-C4'	6.01	1.58	1.51
33	L1	1899	U	C5'-C4'	6.01	1.58	1.51
32	S1	905	A	C3'-O3'	6.01	1.50	1.42
33	L1	461	A	P-O5'	-6.01	1.53	1.59
33	L1	1688	U	C2'-C1'	-6.01	1.46	1.53
15	SS	4	SER	CB-OG	6.01	1.50	1.42
32	S1	1565	U	C5'-C4'	6.01	1.58	1.51
32	S1	1739	U	C5'-C4'	6.01	1.58	1.51
33	L1	3376	C	C5'-C4'	6.01	1.58	1.51
32	S1	1263	C	O4'-C1'	6.01	1.49	1.41
33	L1	1582	C	O4'-C1'	6.01	1.49	1.41
33	L1	1084	G	C2'-C1'	-6.01	1.46	1.53
33	L1	3228	C	O4'-C1'	6.01	1.49	1.41
47	LU	65	TRP	CZ3-CH2	6.01	1.49	1.40
31	S2	39	G	C4'-O4'	-6.00	1.37	1.45
33	L1	105	A	O3'-P	-6.00	1.53	1.61
33	L1	613	G	C4'-C3'	-6.00	1.46	1.52
31	S2	69	G	C2'-C1'	-6.00	1.46	1.53
32	S1	921	U	C2'-C1'	-6.00	1.46	1.53
32	S1	961	U	O3'-P	-6.00	1.53	1.61
32	S1	1229	C	C2'-C1'	-6.00	1.46	1.53
33	L1	311	G	C2'-O2'	6.00	1.49	1.41
33	L1	1700	U	C2'-C1'	6.00	1.59	1.53
33	L1	1716	G	C3'-O3'	6.00	1.50	1.42
33	L1	2871	U	P-O5'	6.00	1.65	1.59
33	L1	3225	G	O3'-P	-6.00	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
44	LR	146	ARG	CD-NE	6.00	1.56	1.46
64	LG	69	THR	N-CA	6.00	1.58	1.46
33	L1	1949	G	C3'-O3'	6.00	1.50	1.42
33	L1	3273	C	O4'-C1'	6.00	1.49	1.41
5	SE	251	GLU	CD-OE1	-6.00	1.19	1.25
11	SM	22	GLY	N-CA	6.00	1.55	1.46
60	Lr	61	LYS	CB-CG	6.00	1.68	1.52
66	LN	79	ASP	CA-C	-6.00	1.37	1.52
80	LC	65	SER	CA-CB	6.00	1.61	1.52
31	S2	57	A	C5'-C4'	5.99	1.58	1.51
32	S1	1748	U	C4'-C3'	5.99	1.59	1.53
33	L1	211	A	O4'-C1'	5.99	1.49	1.41
33	L1	1443	G	C3'-O3'	5.99	1.50	1.42
33	L1	2462	G	O3'-P	-5.99	1.53	1.61
33	L1	2577	G	C5'-C4'	5.99	1.58	1.51
33	L1	3203	G	P-O5'	-5.99	1.53	1.59
32	S1	613	U	O4'-C1'	5.99	1.49	1.41
32	S1	1578	A	O4'-C1'	5.99	1.49	1.41
33	L1	138	G	O4'-C1'	5.99	1.49	1.41
33	L1	1183	C	C2'-C1'	5.99	1.59	1.53
33	L1	1890	C	C3'-O3'	5.99	1.50	1.42
33	L1	2621	G	P-O5'	-5.99	1.53	1.59
32	S1	680	C	C2'-C1'	-5.99	1.46	1.53
33	L1	923	A	P-O5'	-5.99	1.53	1.59
33	L1	1728	G	C2'-C1'	5.99	1.59	1.53
33	L1	2940	G	C2'-C1'	5.99	1.59	1.53
32	S1	1143	A	P-O5'	-5.99	1.53	1.59
32	S1	1805	U	C5'-C4'	5.99	1.58	1.51
33	L1	2200	U	C2'-C1'	-5.99	1.46	1.53
33	L1	2247	A	P-O5'	-5.99	1.53	1.59
33	L1	3170	C	C3'-C2'	5.99	1.59	1.52
32	S1	1763	A	O4'-C1'	5.98	1.49	1.41
33	L1	2794	A	C4'-C3'	5.98	1.59	1.53
33	L1	3391	U	C2'-C1'	5.98	1.59	1.53
19	SY	27	ARG	CD-NE	5.98	1.56	1.46
33	L1	1059	A	P-O5'	-5.98	1.53	1.59
33	L1	3008	U	C5'-C4'	5.98	1.58	1.51
33	L1	309	C	P-O5'	5.98	1.65	1.59
33	L1	1283	C	O3'-P	-5.98	1.53	1.61
33	L1	326	C	C3'-C2'	-5.98	1.46	1.52
33	L1	2011	G	C2'-C1'	-5.98	1.46	1.53
42	LP	49	ARG	CD-NE	5.98	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	512	U	O3'-P	-5.98	1.53	1.61
33	L1	722	C	O3'-P	-5.98	1.53	1.61
33	L1	1715	C	C3'-C2'	5.98	1.59	1.52
33	L1	2946	U	C2'-C1'	5.98	1.59	1.53
32	S1	1301	G	O3'-P	-5.97	1.53	1.61
32	S1	1305	U	C5'-C4'	5.97	1.58	1.51
33	L1	466	U	O4'-C1'	5.97	1.49	1.41
33	L1	1060	U	O4'-C1'	-5.97	1.33	1.41
33	L1	3310	A	C4'-O4'	5.97	1.53	1.45
32	S1	418	C	C3'-C2'	5.97	1.59	1.52
32	S1	1183	G	C5'-C4'	5.97	1.58	1.51
33	L1	1226	G	O5'-C5'	5.97	1.54	1.44
33	L1	1906	A	O3'-P	-5.97	1.53	1.61
33	L1	2516	U	C2'-C1'	-5.97	1.46	1.53
32	S1	978	A	P-O5'	5.97	1.65	1.59
33	L1	856	G	C4'-O4'	5.97	1.53	1.45
33	L1	887	A	P-O5'	-5.97	1.53	1.59
33	L1	1194	C	C4'-O4'	5.97	1.53	1.45
32	S1	913	U	C3'-O3'	5.97	1.50	1.42
32	S1	1369	C	O3'-P	-5.97	1.53	1.61
33	L1	2205	G	C2'-C1'	5.97	1.59	1.53
33	L1	2750	A	C3'-O3'	5.97	1.50	1.42
33	L1	365	A	C3'-O3'	5.97	1.50	1.42
33	L1	3101	C	C3'-O3'	5.97	1.50	1.42
32	S1	617	G	C5'-C4'	5.97	1.58	1.51
33	L1	522	C	C2'-C1'	5.97	1.59	1.53
33	L1	1268	G	O3'-P	-5.97	1.53	1.61
1	Sa	263	ARG	CZ-NH1	5.96	1.40	1.33
33	L1	1610	A	C3'-C2'	5.96	1.59	1.52
33	L1	1841	G	C5'-C4'	5.96	1.58	1.51
33	L1	2342	C	C5'-C4'	5.96	1.58	1.51
33	L1	3096	U	O4'-C1'	-5.96	1.33	1.41
47	LU	57	TYR	CE1-CZ	5.96	1.46	1.38
33	L1	1278	A	O3'-P	-5.96	1.53	1.61
16	SR	86	ARG	NE-CZ	5.96	1.40	1.33
32	S1	31	C	C2'-C1'	-5.96	1.46	1.53
32	S1	684	C	C2'-C1'	-5.96	1.46	1.53
33	L1	93	G	O4'-C1'	5.96	1.49	1.41
33	L1	910	G	C3'-C2'	-5.96	1.46	1.52
33	L1	1105	G	C2'-C1'	5.96	1.59	1.53
35	L2	113	A	O4'-C1'	5.96	1.49	1.41
32	S1	1218	U	O4'-C1'	-5.96	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1245	G	C5'-C4'	5.96	1.58	1.51
36	LA	1	MET	N-CA	5.96	1.58	1.46
32	S1	302	C	C5'-C4'	5.96	1.58	1.51
33	L1	158	A	O4'-C1'	5.96	1.49	1.41
33	L1	504	U	C2'-C1'	5.96	1.59	1.53
33	L1	2067	G	C2'-C1'	-5.96	1.46	1.53
33	L1	2430	C	C4'-C3'	5.96	1.59	1.53
32	S1	1097	A	C5'-C4'	5.96	1.58	1.51
32	S1	1604	C	O3'-P	-5.95	1.54	1.61
33	L1	226	U	C4'-C3'	-5.95	1.46	1.52
33	L1	1517	C	C2'-C1'	-5.95	1.46	1.53
33	L1	2716	U	P-O5'	-5.95	1.53	1.59
31	S2	61	C	C2'-C1'	-5.95	1.46	1.53
32	S1	770	U	O3'-P	-5.95	1.54	1.61
33	L1	427	U	C2'-C1'	-5.95	1.46	1.53
35	L2	48	A	O3'-P	-5.95	1.54	1.61
32	S1	951	U	O4'-C1'	5.95	1.49	1.41
32	S1	1601	A	C2'-C1'	-5.95	1.46	1.53
33	L1	255	C	O3'-P	-5.95	1.54	1.61
33	L1	1361	G	C5'-C4'	5.95	1.58	1.51
33	L1	3090	C	O3'-P	-5.95	1.54	1.61
33	L1	2519	U	O4'-C1'	5.95	1.49	1.41
31	S2	43	C	P-O5'	-5.95	1.53	1.59
33	L1	2661	G	C4'-O4'	5.95	1.53	1.45
32	S1	575	G	C5'-C4'	5.94	1.58	1.51
32	S1	879	C	C5'-C4'	5.94	1.58	1.51
33	L1	3055	U	O3'-P	-5.94	1.54	1.61
42	LP	24	ARG	NE-CZ	5.94	1.40	1.33
33	L1	1800	G	C2'-C1'	5.94	1.59	1.53
32	S1	1319	U	C5'-C4'	5.94	1.58	1.51
33	L1	1649	G	C4'-O4'	5.94	1.53	1.45
33	L1	1903	C	O3'-P	-5.94	1.54	1.61
33	L1	2577	G	C3'-O3'	5.94	1.50	1.42
33	L1	3150	G	C2'-C1'	5.94	1.59	1.53
33	L1	3391	U	O4'-C1'	5.94	1.49	1.41
34	L3	80	A	O4'-C1'	5.94	1.49	1.41
35	L2	41	A	C2'-O2'	-5.94	1.33	1.41
32	S1	1175	G	O4'-C1'	5.94	1.49	1.41
32	S1	1379	U	O4'-C1'	5.94	1.49	1.41
33	L1	1628	G	O3'-P	-5.94	1.54	1.61
34	L3	120	C	C5'-C4'	5.94	1.58	1.51
31	S2	53	U	C2'-C1'	5.94	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	618	C	C2'-C1'	-5.94	1.46	1.53
32	S1	1092	A	O4'-C1'	-5.94	1.33	1.41
33	L1	897	U	C2'-C1'	-5.94	1.46	1.53
33	L1	2785	U	O4'-C1'	5.94	1.49	1.41
33	L1	3025	A	O3'-P	-5.94	1.54	1.61
33	L1	3096	U	O3'-P	-5.94	1.54	1.61
32	S1	1373	C	C3'-O3'	5.93	1.50	1.42
32	S1	563	C	P-O5'	5.93	1.65	1.59
33	L1	2563	G	C3'-C2'	5.93	1.59	1.52
33	L1	2934	C	P-O5'	-5.93	1.53	1.59
33	L1	1532	A	O4'-C1'	5.93	1.49	1.41
33	L1	3032	G	P-O5'	-5.93	1.53	1.59
32	S1	237	C	C2'-C1'	-5.93	1.46	1.53
32	S1	1322	G	C4'-O4'	5.93	1.53	1.45
32	S1	1644	C	O4'-C1'	5.93	1.49	1.41
33	L1	400	G	O3'-P	-5.93	1.54	1.61
33	L1	767	U	O4'-C1'	5.93	1.49	1.41
33	L1	995	C	C2'-C1'	-5.93	1.46	1.53
33	L1	3339	G	C2'-C1'	-5.93	1.46	1.53
35	L2	71	U	C5'-C4'	5.93	1.58	1.51
33	L1	1818	C	C3'-O3'	-5.93	1.33	1.42
33	L1	2765	A	C2'-C1'	-5.93	1.46	1.53
33	L1	2774	A	C4'-O4'	5.93	1.53	1.45
33	L1	2797	U	O4'-C1'	5.93	1.49	1.41
70	Li	95	PHE	CE2-CZ	5.93	1.48	1.37
33	L1	142	G	P-O5'	5.92	1.65	1.59
33	L1	2134	U	C2'-C1'	-5.92	1.46	1.53
31	S2	62	C	C3'-C2'	-5.92	1.46	1.52
33	L1	727	G	C2'-C1'	-5.92	1.46	1.53
33	L1	2594	A	O3'-P	-5.92	1.54	1.61
42	LP	48	ALA	CA-CB	5.92	1.64	1.52
31	S2	24	A	C5'-C4'	5.92	1.58	1.51
32	S1	590	G	C3'-C2'	-5.92	1.46	1.52
32	S1	637	U	O4'-C1'	5.92	1.49	1.41
33	L1	123	U	P-O5'	-5.92	1.53	1.59
33	L1	1227	A	C5'-C4'	5.92	1.58	1.51
35	L2	150	G	O4'-C1'	-5.92	1.33	1.41
33	L1	614	C	C3'-C2'	5.92	1.59	1.52
33	L1	1473	U	C5'-C4'	5.92	1.58	1.51
1	Sa	202	SER	CA-CB	5.92	1.61	1.52
32	S1	975	A	C3'-O3'	5.92	1.50	1.42
32	S1	422	G	O4'-C1'	5.92	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	510	A	C2'-C1'	-5.92	1.46	1.53
33	L1	889	C	C2'-C1'	-5.92	1.46	1.53
33	L1	1850	C	C4'-O4'	5.92	1.53	1.45
33	L1	2400	A	C2'-C1'	-5.92	1.46	1.53
33	L1	3052	U	C3'-C2'	5.92	1.59	1.52
33	L1	3274	G	O4'-C1'	5.92	1.49	1.41
33	L1	1389	C	C5'-C4'	5.92	1.58	1.51
17	SV	68	GLU	CB-CG	5.91	1.63	1.52
32	S1	306	U	O4'-C1'	5.91	1.49	1.41
33	L1	152	C	C3'-O3'	5.91	1.50	1.42
33	L1	306	A	C4'-C3'	5.91	1.59	1.53
33	L1	1773	U	O3'-P	-5.91	1.54	1.61
33	L1	2475	C	C5'-C4'	5.91	1.58	1.51
60	Lr	42	ARG	CD-NE	5.91	1.56	1.46
32	S1	678	A	C2'-C1'	-5.91	1.46	1.53
32	S1	1740	G	C5'-C4'	5.91	1.58	1.51
35	L2	35	G	O3'-P	-5.91	1.54	1.61
32	S1	1454	G	O4'-C1'	5.91	1.49	1.41
33	L1	54	G	C2'-C1'	-5.91	1.46	1.53
33	L1	89	C	C2'-C1'	-5.91	1.46	1.53
33	L1	1559	G	C5'-C4'	5.91	1.58	1.51
33	L1	2933	C	O4'-C1'	5.91	1.49	1.41
33	L1	3140	A	C3'-C2'	5.91	1.59	1.52
35	L2	22	U	O4'-C1'	5.91	1.49	1.41
32	S1	565	G	O3'-P	-5.91	1.54	1.61
32	S1	1268	G	O4'-C1'	5.91	1.49	1.41
33	L1	2806	A	O3'-P	-5.91	1.54	1.61
33	L1	3228	C	P-O5'	-5.91	1.53	1.59
34	L3	48	G	C4'-O4'	5.91	1.53	1.45
31	S2	75	A	C4'-C3'	5.91	1.59	1.53
32	S1	1604	C	C2'-C1'	-5.91	1.46	1.53
32	S1	23	G	C3'-C2'	5.91	1.59	1.52
33	L1	530	C	C2'-C1'	-5.91	1.46	1.53
33	L1	1446	G	C2'-C1'	-5.91	1.46	1.53
46	LT	136	ARG	C-O	-5.91	1.12	1.23
23	SU	80	LEU	CA-CB	5.90	1.67	1.53
33	L1	832	C	C4'-C3'	5.90	1.59	1.53
33	L1	1323	G	C2'-C1'	-5.90	1.46	1.53
33	L1	645	C	O4'-C1'	5.90	1.49	1.41
33	L1	2475	C	C2'-C1'	-5.90	1.46	1.53
35	L2	85	U	P-O5'	-5.90	1.53	1.59
33	L1	1891	A	C3'-O3'	5.90	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2023	C	C2'-C1'	-5.90	1.46	1.53
32	S1	70	C	C2'-C1'	-5.90	1.46	1.53
33	L1	2519	U	C3'-C2'	-5.90	1.46	1.52
32	S1	1016	C	O4'-C1'	5.90	1.49	1.41
33	L1	176	A	O4'-C1'	5.90	1.49	1.41
33	L1	598	U	O3'-P	-5.90	1.54	1.61
33	L1	1140	C	C2'-C1'	5.90	1.59	1.53
33	L1	1487	A	O4'-C1'	5.90	1.49	1.41
40	LH	87	ASN	CA-CB	5.90	1.68	1.53
15	SS	124	ARG	C-N	5.90	1.47	1.34
33	L1	1892	A	C4'-C3'	5.90	1.59	1.53
10	SL	120	LYS	C-N	5.89	1.47	1.34
33	L1	1824	C	O3'-P	-5.89	1.54	1.61
33	L1	2402	G	O4'-C1'	5.89	1.49	1.41
33	L1	3030	A	O3'-P	-5.89	1.54	1.61
54	Lf	90	ARG	CD-NE	5.89	1.56	1.46
32	S1	276	G	C2'-C1'	-5.89	1.46	1.53
33	L1	61	A	O4'-C1'	5.89	1.49	1.41
33	L1	357	C	O4'-C1'	5.89	1.49	1.41
33	L1	2529	C	O4'-C1'	5.89	1.49	1.41
16	SR	81	LYS	CD-CE	5.89	1.66	1.51
32	S1	912	A	C4'-C3'	5.89	1.59	1.53
33	L1	135	G	C4'-O4'	5.89	1.53	1.45
33	L1	936	A	P-O5'	-5.89	1.53	1.59
33	L1	3119	C	O4'-C1'	5.89	1.49	1.41
78	Le	223	TYR	CG-CD2	5.89	1.46	1.39
31	S2	66	C	O3'-P	-5.89	1.54	1.61
27	SH	79	PHE	N-CA	5.89	1.58	1.46
32	S1	531	A	C5'-C4'	5.89	1.58	1.51
32	S1	1293	U	O4'-C1'	5.89	1.49	1.41
33	L1	310	C	C3'-C2'	5.89	1.59	1.52
33	L1	367	A	C4'-O4'	5.89	1.53	1.45
33	L1	1875	A	C5'-C4'	5.89	1.58	1.51
32	S1	293	C	C2'-C1'	-5.88	1.46	1.53
33	L1	1404	G	C2'-C1'	-5.88	1.46	1.53
33	L1	1594	G	P-O5'	-5.88	1.53	1.59
33	L1	2449	A	C3'-O3'	5.88	1.50	1.42
33	L1	144	A	P-O5'	-5.88	1.53	1.59
11	SM	82	TRP	N-CA	-5.88	1.34	1.46
32	S1	235	C	C2'-C1'	-5.88	1.46	1.53
32	S1	1610	C	O4'-C1'	5.88	1.49	1.41
33	L1	1436	A	C2'-C1'	5.88	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3051	U	O3'-P	-5.88	1.54	1.61
35	L2	16	A	C4'-C3'	5.88	1.59	1.53
81	LD	95	ALA	C-O	-5.88	1.12	1.23
32	S1	1362	A	O3'-P	-5.88	1.54	1.61
32	S1	1691	C	C5'-C4'	-5.88	1.44	1.51
33	L1	2519	U	P-O5'	-5.88	1.53	1.59
67	LS	163	ARG	CA-C	5.88	1.68	1.52
3	SB	148	LYS	CA-C	5.87	1.68	1.52
3	SB	166	GLU	CB-CG	5.87	1.63	1.52
32	S1	887	U	O4'-C1'	5.87	1.49	1.41
32	S1	1285	G	O3'-P	-5.87	1.54	1.61
33	L1	489	C	P-O5'	5.87	1.65	1.59
33	L1	814	U	C2'-O2'	-5.87	1.34	1.41
33	L1	3007	A	C4'-C3'	-5.87	1.46	1.52
33	L1	3141	G	P-O5'	-5.87	1.53	1.59
35	L2	15	C	C2'-C1'	-5.87	1.46	1.53
32	S1	678	A	O4'-C1'	5.87	1.49	1.41
33	L1	1882	A	P-O5'	-5.87	1.53	1.59
33	L1	2199	C	P-O5'	-5.87	1.53	1.59
48	LV	80	GLY	C-N	5.87	1.47	1.34
33	L1	263	A	O4'-C1'	5.87	1.49	1.41
33	L1	284	U	O4'-C1'	5.87	1.49	1.41
33	L1	2354	G	C5'-C4'	5.87	1.58	1.51
33	L1	2716	U	C5'-C4'	5.87	1.58	1.51
33	L1	2876	G	O5'-C5'	5.87	1.53	1.44
35	L2	53	G	C3'-O3'	5.87	1.50	1.42
31	S2	51	G	C4'-C3'	5.87	1.59	1.53
32	S1	573	C	C2'-O2'	-5.87	1.34	1.41
33	L1	1371	G	C5'-C4'	5.87	1.58	1.51
33	L1	2334	G	C4'-C3'	5.87	1.59	1.53
67	LS	150	LYS	CA-CB	5.87	1.66	1.53
77	Lc	102	SER	CA-CB	5.87	1.61	1.52
33	L1	548	G	P-O5'	-5.87	1.53	1.59
33	L1	1425	G	C5'-C4'	5.87	1.58	1.51
33	L1	1735	U	O3'-P	-5.87	1.54	1.61
32	S1	366	G	O4'-C1'	5.86	1.49	1.41
33	L1	1482	C	O4'-C1'	5.86	1.49	1.41
33	L1	2455	A	C5'-C4'	5.86	1.58	1.51
45	LQ	215	GLU	CB-CG	5.86	1.63	1.52
33	L1	2220	U	C4'-O4'	5.86	1.53	1.45
33	L1	2226	C	C3'-O3'	5.86	1.50	1.42
46	LT	166	SER	CA-CB	5.86	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1706	G	C4'-C3'	5.86	1.59	1.53
32	S1	1707	G	C3'-O3'	5.86	1.50	1.42
33	L1	1129	G	C5'-C4'	5.86	1.58	1.51
33	L1	2637	U	C2'-C1'	5.86	1.59	1.53
33	L1	2692	G	P-O5'	5.86	1.65	1.59
33	L1	1089	G	C5'-C4'	5.86	1.58	1.51
3	SB	143	ARG	CD-NE	5.86	1.56	1.46
3	SB	158	ILE	CA-C	5.86	1.68	1.52
32	S1	929	A	C5'-C4'	5.86	1.58	1.51
33	L1	2870	U	C2'-O2'	-5.86	1.34	1.41
33	L1	3129	G	O3'-P	-5.86	1.54	1.61
33	L1	3156	G	C4'-C3'	5.86	1.59	1.53
32	S1	32	U	C4'-C3'	5.86	1.59	1.53
32	S1	830	U	C3'-O3'	5.86	1.50	1.42
32	S1	1568	U	O4'-C1'	5.86	1.49	1.41
33	L1	1225	A	C4'-C3'	5.86	1.59	1.53
33	L1	2663	U	O4'-C1'	5.86	1.49	1.41
33	L1	3211	C	O4'-C1'	5.86	1.49	1.41
33	L1	3288	A	C2'-C1'	-5.86	1.47	1.53
32	S1	622	U	O4'-C1'	5.85	1.49	1.41
32	S1	1757	G	P-O5'	-5.85	1.53	1.59
33	L1	549	G	C5'-C4'	5.85	1.58	1.51
33	L1	585	A	P-O5'	-5.85	1.53	1.59
33	L1	840	A	C3'-C2'	5.85	1.59	1.52
33	L1	1495	G	C5'-C4'	5.85	1.58	1.51
32	S1	1357	U	O4'-C1'	5.85	1.49	1.41
32	S1	1362	A	P-O5'	5.85	1.65	1.59
32	S1	1578	A	O3'-P	-5.85	1.54	1.61
32	S1	1545	A	O4'-C1'	5.85	1.49	1.41
32	S1	1792	A	C3'-O3'	5.85	1.50	1.42
33	L1	1338	C	C4'-C3'	5.85	1.59	1.53
33	L1	1475	U	O4'-C1'	5.85	1.49	1.41
33	L1	1778	C	C2'-C1'	-5.85	1.47	1.53
33	L1	3214	U	C3'-C2'	-5.85	1.46	1.52
33	L1	3338	U	C4'-O4'	5.85	1.53	1.45
59	Lo	31	THR	N-CA	5.85	1.58	1.46
33	L1	923	A	C3'-O3'	5.85	1.50	1.42
33	L1	2205	G	C4'-C3'	5.85	1.59	1.53
33	L1	2827	C	O4'-C1'	5.85	1.49	1.41
33	L1	3002	U	C3'-O3'	5.85	1.50	1.42
33	L1	22	G	C3'-O3'	5.85	1.50	1.42
33	L1	2727	U	P-O5'	-5.85	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	LO	138	GLY	CA-C	5.85	1.61	1.51
33	L1	866	C	C2'-C1'	-5.84	1.47	1.53
33	L1	2022	U	O4'-C1'	5.84	1.49	1.41
33	L1	822	U	C5'-C4'	-5.84	1.44	1.51
33	L1	1276	C	O3'-P	-5.84	1.54	1.61
33	L1	2641	A	C3'-C2'	5.84	1.59	1.52
33	L1	195	G	C2'-C1'	-5.84	1.47	1.53
33	L1	1123	A	C2'-C1'	5.84	1.59	1.53
33	L1	1810	G	P-O5'	-5.84	1.53	1.59
33	L1	1875	A	C2'-C1'	-5.84	1.47	1.53
33	L1	2879	G	C2'-C1'	5.84	1.59	1.53
33	L1	2939	G	C2'-C1'	-5.84	1.47	1.53
35	L2	26	U	C4'-C3'	5.84	1.59	1.53
66	LN	64	ARG	CZ-NH2	-5.84	1.25	1.33
32	S1	882	G	P-O5'	-5.84	1.53	1.59
33	L1	706	U	O4'-C1'	5.84	1.49	1.41
33	L1	1511	C	O3'-P	-5.84	1.54	1.61
33	L1	1616	G	O4'-C1'	-5.84	1.34	1.41
33	L1	1936	G	O4'-C1'	5.84	1.49	1.41
33	L1	180	G	C2'-C1'	-5.84	1.47	1.53
33	L1	348	C	O3'-P	-5.84	1.54	1.61
33	L1	997	G	O4'-C1'	-5.84	1.34	1.41
33	L1	2575	C	C5'-C4'	5.84	1.58	1.51
33	L1	3016	C	P-O5'	-5.84	1.53	1.59
33	L1	3137	G	C4'-C3'	5.84	1.59	1.53
69	La	28	VAL	CA-C	5.84	1.68	1.52
33	L1	1433	U	O4'-C1'	-5.83	1.34	1.41
33	L1	2948	A	O3'-P	-5.83	1.54	1.61
32	S1	1065	A	C2'-C1'	5.83	1.59	1.53
32	S1	1674	C	C4'-O4'	5.83	1.53	1.45
33	L1	1262	U	P-O5'	-5.83	1.53	1.59
15	SS	91	ARG	CD-NE	5.83	1.56	1.46
32	S1	888	U	O4'-C1'	5.83	1.49	1.41
33	L1	2705	A	O3'-P	-5.83	1.54	1.61
31	S2	1	U	C5'-C4'	5.83	1.58	1.51
33	L1	2698	A	C4'-C3'	5.83	1.59	1.53
35	L2	99	G	O3'-P	-5.83	1.54	1.61
32	S1	973	U	C3'-O3'	5.83	1.50	1.42
32	S1	993	C	O4'-C1'	5.83	1.49	1.41
32	S1	835	U	C2'-C1'	5.83	1.59	1.53
33	L1	1897	A	C2'-C1'	-5.83	1.47	1.53
33	L1	3069	U	C2'-C1'	-5.83	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	942	C	P-O5'	5.82	1.65	1.59
33	L1	816	G	O3'-P	-5.82	1.54	1.61
33	L1	1712	A	C2'-C1'	-5.82	1.47	1.53
33	L1	1274	A	C3'-C2'	-5.82	1.46	1.52
33	L1	1901	G	C3'-O3'	5.82	1.50	1.42
31	S2	74	C	C2'-C1'	5.82	1.59	1.53
32	S1	1119	G	C2'-C1'	5.82	1.59	1.53
33	L1	112	C	P-O5'	-5.82	1.53	1.59
33	L1	2459	U	O4'-C1'	5.82	1.49	1.41
33	L1	2571	C	C2'-C1'	5.82	1.59	1.53
32	S1	338	G	C5'-C4'	5.82	1.58	1.51
32	S1	1744	C	C3'-C2'	-5.82	1.46	1.52
33	L1	863	G	C4'-C3'	5.82	1.59	1.53
33	L1	2451	G	C5'-C4'	5.82	1.58	1.51
32	S1	3	C	O3'-P	-5.82	1.54	1.61
32	S1	1094	U	O3'-P	-5.82	1.54	1.61
33	L1	1837	A	C5'-C4'	5.82	1.58	1.51
60	Lr	80	TYR	CD1-CE1	5.82	1.48	1.39
33	L1	1015	A	C5'-C4'	5.81	1.58	1.51
80	LC	161	ARG	CD-NE	5.81	1.56	1.46
32	S1	674	G	O4'-C1'	5.81	1.49	1.41
33	L1	1434	G	C2'-C1'	-5.81	1.47	1.53
32	S1	1565	U	P-O5'	-5.81	1.53	1.59
33	L1	940	G	C2'-C1'	5.81	1.59	1.53
33	L1	2488	A	C3'-O3'	5.81	1.50	1.42
33	L1	3052	U	P-O5'	-5.81	1.53	1.59
31	S2	14	A	O4'-C1'	5.81	1.49	1.41
32	S1	94	A	C3'-O3'	5.81	1.50	1.42
32	S1	564	U	C4'-O4'	5.81	1.53	1.45
33	L1	603	G	P-O5'	-5.81	1.53	1.59
33	L1	1322	A	C4'-C3'	5.81	1.59	1.53
33	L1	1718	U	O4'-C1'	5.81	1.49	1.41
32	S1	451	U	O4'-C1'	5.81	1.49	1.41
32	S1	849	G	O4'-C1'	5.81	1.49	1.41
32	S1	1266	U	C3'-O3'	5.81	1.50	1.42
33	L1	410	G	O3'-P	-5.81	1.54	1.61
33	L1	2602	U	O3'-P	-5.81	1.54	1.61
32	S1	551	U	C2'-C1'	5.81	1.59	1.53
33	L1	538	C	O4'-C1'	5.81	1.49	1.41
33	L1	1505	G	C3'-C2'	5.81	1.59	1.52
33	L1	2680	G	C5'-C4'	5.81	1.58	1.51
33	L1	3309	U	C2'-C1'	-5.80	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3381	C	C5'-C4'	5.80	1.58	1.51
32	S1	823	A	C2'-C1'	5.80	1.59	1.53
33	L1	2660	A	C3'-O3'	5.80	1.50	1.42
32	S1	1793	C	C5'-C4'	5.80	1.58	1.51
33	L1	494	C	C2'-C1'	-5.80	1.47	1.53
33	L1	829	G	C2'-C1'	-5.80	1.47	1.53
33	L1	2446	G	O4'-C1'	5.80	1.49	1.41
33	L1	3358	A	C5'-C4'	-5.80	1.44	1.51
80	LC	133	TYR	CE1-CZ	5.80	1.46	1.38
3	SB	81	GLU	C-O	-5.80	1.12	1.23
33	L1	931	C	C4'-C3'	5.80	1.59	1.53
33	L1	1975	G	O4'-C1'	5.80	1.49	1.41
33	L1	2636	U	C4'-O4'	5.80	1.53	1.45
32	S1	278	C	O4'-C1'	5.80	1.49	1.41
42	LP	31	ARG	CD-NE	5.80	1.56	1.46
32	S1	1372	C	C4'-O4'	5.80	1.53	1.45
32	S1	1385	C	C4'-C3'	5.80	1.59	1.53
33	L1	978	C	C2'-C1'	-5.80	1.47	1.53
33	L1	2787	A	C2'-C1'	-5.80	1.47	1.53
33	L1	832	C	O4'-C1'	5.79	1.49	1.41
33	L1	2288	C	O4'-C1'	5.79	1.49	1.41
33	L1	2332	C	P-O5'	-5.79	1.53	1.59
1	Sa	70	TYR	CE2-CZ	5.79	1.46	1.38
33	L1	846	A	P-O5'	-5.79	1.53	1.59
33	L1	2313	U	C4'-C3'	5.79	1.59	1.53
33	L1	2738	U	O3'-P	5.79	1.68	1.61
45	LQ	290	SER	N-CA	5.79	1.57	1.46
33	L1	892	U	C3'-O3'	5.79	1.50	1.42
33	L1	2147	U	C2'-C1'	-5.79	1.47	1.53
33	L1	2245	G	O4'-C1'	5.79	1.49	1.41
33	L1	45	U	O4'-C1'	5.79	1.49	1.41
33	L1	2739	A	C3'-C2'	5.79	1.59	1.52
35	L2	110	C	O3'-P	-5.79	1.54	1.61
32	S1	768	A	O3'-P	-5.79	1.54	1.61
33	L1	1123	A	C3'-O3'	5.79	1.50	1.42
33	L1	2439	A	C4'-C3'	5.79	1.59	1.53
34	L3	22	A	P-O5'	-5.79	1.53	1.59
33	L1	2610	G	C2'-C1'	-5.79	1.47	1.53
33	L1	2779	G	C3'-C2'	5.79	1.59	1.52
32	S1	460	G	C2'-C1'	-5.79	1.47	1.53
32	S1	485	A	P-O5'	-5.79	1.53	1.59
33	L1	606	C	C4'-C3'	5.79	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1271	U	C5'-C4'	5.79	1.58	1.51
33	L1	2185	U	C2'-C1'	-5.79	1.47	1.53
33	L1	3217	G	O3'-P	-5.79	1.54	1.61
34	L3	17	G	O4'-C1'	-5.79	1.34	1.41
35	L2	149	U	O4'-C1'	5.79	1.49	1.41
51	LY	39	ARG	CD-NE	5.79	1.56	1.46
12	SO	67	THR	C-O	-5.78	1.12	1.23
33	L1	547	C	C2'-C1'	5.78	1.59	1.53
33	L1	1598	U	P-O5'	-5.78	1.53	1.59
32	S1	469	G	P-O5'	-5.78	1.53	1.59
32	S1	1786	A	O4'-C1'	5.78	1.49	1.41
25	SC	85	TYR	CG-CD2	5.78	1.46	1.39
32	S1	1246	A	O4'-C1'	5.78	1.49	1.41
33	L1	1282	A	C5'-C4'	5.78	1.58	1.51
33	L1	2302	G	C5'-C4'	5.78	1.58	1.51
33	L1	2870	U	O3'-P	-5.78	1.54	1.61
32	S1	891	U	C3'-C2'	-5.78	1.46	1.52
32	S1	1282	G	O3'-P	-5.78	1.54	1.61
32	S1	1540	U	O3'-P	-5.78	1.54	1.61
32	S1	1757	G	C4'-C3'	-5.78	1.46	1.52
33	L1	74	G	O3'-P	-5.78	1.54	1.61
33	L1	1128	U	C3'-O3'	5.78	1.50	1.42
33	L1	1367	A	C2'-C1'	-5.78	1.47	1.53
33	L1	3006	G	C2'-C1'	5.78	1.59	1.53
32	S1	446	C	O3'-P	-5.78	1.54	1.61
32	S1	1241	G	O4'-C1'	5.78	1.49	1.41
23	SU	13	ARG	NE-CZ	5.77	1.40	1.33
33	L1	839	A	O4'-C1'	5.77	1.49	1.41
33	L1	1907	A	C2'-C1'	5.77	1.59	1.53
32	S1	638	G	C2'-C1'	5.77	1.59	1.53
33	L1	1891	A	C4'-O4'	5.77	1.53	1.45
33	L1	2678	C	C5'-C4'	5.77	1.58	1.51
33	L1	669	G	P-O5'	-5.77	1.53	1.59
33	L1	857	G	C3'-C2'	5.77	1.59	1.52
32	S1	880	G	O4'-C1'	5.77	1.49	1.41
33	L1	330	C	C4'-C3'	-5.77	1.46	1.52
33	L1	650	A	C4'-O4'	-5.77	1.38	1.45
33	L1	1699	C	O3'-P	-5.77	1.54	1.61
33	L1	1769	C	O4'-C1'	5.77	1.49	1.41
33	L1	1771	G	O4'-C1'	-5.77	1.34	1.41
84	LI	109	ASP	C-N	5.77	1.47	1.34
32	S1	1520	G	C5'-C4'	5.77	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2612	A	O4'-C1'	-5.77	1.34	1.41
33	L1	2632	U	C5'-C4'	5.77	1.58	1.51
33	L1	2658	U	C3'-O3'	5.77	1.50	1.42
33	L1	2786	G	C2'-C1'	-5.77	1.47	1.53
33	L1	3202	G	C4'-C3'	5.77	1.59	1.53
31	S2	64	G	P-O5'	-5.77	1.53	1.59
33	L1	3122	U	C3'-O3'	5.77	1.50	1.42
32	S1	626	A	O4'-C1'	5.76	1.49	1.41
32	S1	1512	C	C5'-C4'	5.76	1.58	1.51
33	L1	1812	A	P-O5'	-5.76	1.53	1.59
41	LM	73	ARG	CA-C	-5.76	1.38	1.52
33	L1	1178	C	O4'-C1'	5.76	1.49	1.41
25	SC	39	ARG	CD-NE	5.76	1.56	1.46
32	S1	1603	U	C4'-O4'	-5.76	1.38	1.45
33	L1	3050	A	O3'-P	-5.76	1.54	1.61
15	SS	56	TYR	CD2-CE2	5.76	1.48	1.39
33	L1	874	U	O4'-C1'	-5.76	1.34	1.41
33	L1	1388	C	C4'-O4'	5.76	1.53	1.45
33	L1	2274	A	C3'-C2'	5.76	1.59	1.52
31	S2	13	U	C4'-C3'	5.76	1.59	1.53
32	S1	1310	C	P-O5'	-5.76	1.53	1.59
48	LV	68	GLY	CA-C	-5.76	1.42	1.51
5	SE	149	ARG	CD-NE	5.76	1.56	1.46
32	S1	1120	U	C3'-O3'	5.76	1.50	1.42
32	S1	1225	A	C3'-C2'	-5.76	1.46	1.52
33	L1	436	G	C2'-C1'	-5.76	1.47	1.53
33	L1	1173	C	C2'-C1'	-5.76	1.47	1.53
33	L1	2380	G	O5'-C5'	5.76	1.53	1.44
33	L1	2778	C	O4'-C1'	5.76	1.49	1.41
34	L3	25	G	C4'-C3'	5.76	1.59	1.53
34	L3	78	C	P-O5'	-5.76	1.53	1.59
35	L2	96	A	C4'-C3'	5.76	1.59	1.53
33	L1	2842	C	C3'-O3'	5.75	1.50	1.42
33	L1	998	G	P-O5'	-5.75	1.53	1.59
32	S1	360	G	O4'-C1'	5.75	1.49	1.41
32	S1	852	A	C4'-O4'	5.75	1.53	1.45
32	S1	989	G	P-O5'	-5.75	1.53	1.59
33	L1	2942	A	O4'-C1'	5.75	1.49	1.41
14	SP	63	GLY	N-CA	-5.75	1.37	1.46
32	S1	922	U	C2'-C1'	5.75	1.59	1.53
33	L1	1128	U	O3'-P	-5.75	1.54	1.61
33	L1	1168	G	O3'-P	-5.75	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1249	A	O3'-P	-5.75	1.54	1.61
33	L1	2650	A	O3'-P	-5.75	1.54	1.61
33	L1	3152	C	C2'-C1'	5.75	1.59	1.53
5	SE	24	ARG	CZ-NH2	5.75	1.40	1.33
33	L1	2605	G	C2'-C1'	-5.75	1.47	1.53
33	L1	3346	C	O4'-C1'	5.75	1.49	1.41
32	S1	1323	U	O4'-C1'	5.75	1.49	1.41
33	L1	869	A	C5'-C4'	5.75	1.58	1.51
33	L1	1172	A	O5'-C5'	5.75	1.53	1.44
33	L1	1331	C	C2'-C1'	-5.75	1.47	1.53
33	L1	2777	U	O4'-C1'	-5.75	1.34	1.41
32	S1	1198	A	P-O5'	-5.75	1.54	1.59
67	LS	28	ARG	CG-CD	5.75	1.66	1.51
33	L1	1869	U	O4'-C1'	5.74	1.49	1.41
34	L3	65	G	C2'-C1'	-5.74	1.47	1.53
32	S1	415	C	O4'-C1'	5.74	1.49	1.41
32	S1	1457	C	O4'-C1'	5.74	1.49	1.41
33	L1	2290	A	O3'-P	-5.74	1.54	1.61
1	Sa	38	GLU	CA-CB	5.74	1.66	1.53
31	S2	65	U	P-O5'	5.74	1.65	1.59
32	S1	604	U	C3'-C2'	5.74	1.59	1.52
32	S1	840	U	P-O5'	-5.74	1.54	1.59
33	L1	342	A	C2'-C1'	-5.74	1.47	1.53
33	L1	906	U	O4'-C1'	-5.74	1.34	1.41
33	L1	3211	C	C4'-C3'	-5.74	1.46	1.52
33	L1	3305	U	O3'-P	-5.74	1.54	1.61
35	L2	119	C	C2'-C1'	-5.74	1.47	1.53
33	L1	2336	C	C4'-C3'	-5.74	1.46	1.52
11	SM	53	ASN	CG-ND2	5.74	1.47	1.32
32	S1	449	A	C3'-O3'	5.74	1.50	1.42
33	L1	306	A	C3'-C2'	-5.74	1.46	1.52
33	L1	593	G	O4'-C1'	5.74	1.49	1.41
33	L1	1041	C	P-O5'	-5.74	1.54	1.59
33	L1	2498	C	C2'-C1'	-5.74	1.47	1.53
33	L1	2643	A	O4'-C1'	-5.74	1.34	1.41
5	SE	100	ARG	CZ-NH1	5.74	1.40	1.33
28	SN	52	PHE	CA-C	-5.74	1.38	1.52
33	L1	2730	A	C5'-C4'	5.74	1.58	1.51
32	S1	1029	U	C2'-C1'	5.73	1.59	1.53
32	S1	1631	C	O4'-C1'	5.73	1.49	1.41
33	L1	1254	A	P-O5'	5.73	1.65	1.59
33	L1	1791	U	C2'-C1'	-5.73	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	LS	24	PRO	N-CD	-5.73	1.39	1.47
32	S1	288	G	C4'-C3'	5.73	1.59	1.53
32	S1	1248	A	C5'-C4'	5.73	1.58	1.51
33	L1	785	U	O4'-C1'	-5.73	1.34	1.41
33	L1	2238	A	O4'-C1'	5.73	1.49	1.41
33	L1	2618	G	C5'-C4'	-5.73	1.44	1.51
11	SM	141	ARG	C-N	-5.73	1.20	1.34
32	S1	1404	U	O4'-C1'	-5.73	1.34	1.41
33	L1	160	G	C5'-C4'	5.73	1.58	1.51
5	SE	193	PRO	C-N	5.73	1.47	1.34
32	S1	589	A	C2'-O2'	-5.73	1.34	1.41
32	S1	1108	U	O4'-C1'	5.73	1.49	1.41
66	LN	66	PRO	N-CD	-5.73	1.39	1.47
32	S1	588	C	C2'-C1'	5.73	1.59	1.53
33	L1	1204	A	O4'-C1'	5.73	1.49	1.41
32	S1	454	U	C2'-C1'	-5.72	1.47	1.53
33	L1	331	G	C3'-O3'	5.72	1.50	1.42
33	L1	953	G	C5'-C4'	5.72	1.58	1.51
33	L1	3201	A	O4'-C1'	-5.72	1.34	1.41
51	LY	9	SER	C-O	-5.72	1.12	1.23
33	L1	128	C	C3'-C2'	-5.72	1.46	1.52
33	L1	443	G	C5'-C4'	5.72	1.58	1.51
3	SB	170	ALA	N-CA	-5.72	1.34	1.46
32	S1	1206	A	P-O5'	-5.72	1.54	1.59
33	L1	938	U	O3'-P	-5.72	1.54	1.61
33	L1	961	C	O3'-P	-5.72	1.54	1.61
33	L1	3287	A	C3'-C2'	-5.72	1.46	1.52
32	S1	625	A	C5'-C4'	5.72	1.58	1.51
33	L1	499	A	C3'-O3'	5.72	1.50	1.42
33	L1	1151	G	C5'-C4'	5.72	1.58	1.51
33	L1	1172	A	P-O5'	-5.72	1.54	1.59
33	L1	1177	G	C3'-O3'	5.72	1.50	1.42
33	L1	1518	A	P-O5'	-5.72	1.54	1.59
33	L1	2404	C	C5'-C4'	5.72	1.58	1.51
33	L1	3352	C	C4'-C3'	5.72	1.59	1.53
35	L2	54	C	O3'-P	-5.72	1.54	1.61
82	LK	11	ARG	C-O	-5.72	1.12	1.23
32	S1	361	G	O4'-C1'	5.72	1.49	1.41
32	S1	503	U	C2'-C1'	5.72	1.59	1.53
32	S1	832	C	O3'-P	-5.72	1.54	1.61
78	Le	242	ARG	CD-NE	5.72	1.56	1.46
32	S1	1297	U	P-O5'	-5.72	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1809	U	C5'-C4'	5.72	1.58	1.51
33	L1	1077	C	O4'-C1'	5.72	1.49	1.41
77	Lc	32	GLN	CG-CD	5.72	1.64	1.51
32	S1	893	U	C4'-C3'	5.71	1.59	1.53
32	S1	1362	A	C4'-O4'	5.71	1.52	1.45
33	L1	3345	G	O4'-C1'	-5.71	1.34	1.41
33	L1	259	G	C2'-C1'	5.71	1.59	1.53
33	L1	2401	A	O3'-P	-5.71	1.54	1.61
32	S1	627	A	O4'-C1'	-5.71	1.34	1.41
32	S1	1628	C	C5'-C4'	5.71	1.58	1.51
33	L1	1072	C	C4'-O4'	5.71	1.52	1.45
33	L1	1695	C	P-O5'	-5.71	1.54	1.59
35	L2	10	C	C2'-C1'	-5.71	1.47	1.53
33	L1	1975	G	C2'-C1'	5.71	1.59	1.53
33	L1	339	G	C3'-C2'	5.71	1.59	1.52
33	L1	488	U	O4'-C1'	5.71	1.49	1.41
33	L1	663	G	O4'-C1'	5.71	1.49	1.41
33	L1	2758	C	C3'-C2'	5.71	1.59	1.52
35	L2	58	A	C2'-C1'	-5.71	1.47	1.53
23	SU	9	ALA	N-CA	5.71	1.57	1.46
32	S1	54	C	O4'-C1'	-5.71	1.34	1.41
32	S1	691	A	C2'-C1'	-5.71	1.47	1.53
33	L1	1939	C	C5'-C4'	5.71	1.58	1.51
56	Lh	93	TYR	CB-CG	-5.71	1.43	1.51
33	L1	531	G	O4'-C1'	-5.71	1.34	1.41
55	Lg	113	GLY	CA-C	-5.71	1.42	1.51
33	L1	2142	A	P-O5'	-5.70	1.54	1.59
33	L1	3016	C	O4'-C1'	5.70	1.49	1.41
33	L1	506	U	O3'-P	-5.70	1.54	1.61
33	L1	3053	G	C5'-C4'	5.70	1.58	1.51
32	S1	1737	A	C3'-O3'	5.70	1.50	1.42
33	L1	812	G	O4'-C1'	-5.70	1.34	1.41
33	L1	1024	G	C2'-C1'	-5.70	1.47	1.53
82	LK	11	ARG	N-CA	-5.70	1.34	1.46
32	S1	1201	C	C4'-O4'	-5.70	1.38	1.45
33	L1	1320	G	C4'-O4'	5.70	1.52	1.45
31	S2	63	C	C3'-C2'	5.70	1.59	1.52
32	S1	1422	G	O3'-P	-5.70	1.54	1.61
3	SB	129	SER	CA-CB	5.70	1.61	1.52
32	S1	1117	G	C5'-C4'	5.70	1.58	1.51
32	S1	1316	A	O4'-C1'	5.70	1.49	1.41
33	L1	479	C	C2'-C1'	-5.70	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	795	C	C2'-C1'	-5.70	1.47	1.53
33	L1	1023	G	C4'-C3'	5.70	1.59	1.53
33	L1	1738	A	O4'-C1'	-5.70	1.34	1.41
33	L1	1850	C	O3'-P	-5.70	1.54	1.61
35	L2	42	U	C4'-C3'	5.70	1.59	1.53
45	LQ	112	THR	C-O	-5.70	1.12	1.23
84	LI	116	ARG	C-N	5.69	1.43	1.33
31	S2	69	G	C4'-C3'	-5.69	1.46	1.52
32	S1	239	C	O4'-C1'	5.69	1.49	1.41
33	L1	2496	U	C4'-C3'	-5.69	1.46	1.52
34	L3	7	G	O4'-C1'	-5.69	1.34	1.41
35	L2	148	C	C4'-C3'	5.69	1.59	1.53
32	S1	1004	U	C4'-C3'	5.69	1.59	1.53
33	L1	966	G	C3'-C2'	5.69	1.59	1.52
32	S1	1197	A	C5'-C4'	5.69	1.58	1.51
32	S1	1195	U	C4'-C3'	5.69	1.59	1.53
32	S1	1375	C	C3'-O3'	-5.69	1.34	1.42
33	L1	678	G	O4'-C1'	5.69	1.49	1.41
33	L1	1669	C	C3'-O3'	5.69	1.50	1.42
71	Lj	12	TYR	CA-CB	5.69	1.66	1.53
32	S1	1063	U	O3'-P	-5.69	1.54	1.61
25	SC	147	SER	CA-CB	5.68	1.61	1.52
32	S1	1712	C	O4'-C1'	5.68	1.49	1.41
33	L1	2502	U	O3'-P	-5.68	1.54	1.61
33	L1	2576	C	C3'-C2'	-5.68	1.46	1.52
33	L1	2595	G	P-O5'	-5.68	1.54	1.59
33	L1	2851	C	C3'-C2'	-5.68	1.46	1.52
67	LS	162	THR	CA-C	5.68	1.67	1.52
31	S2	2	C	O3'-P	-5.68	1.54	1.61
31	S2	43	C	O4'-C1'	5.68	1.49	1.41
33	L1	2892	A	C2'-C1'	-5.68	1.47	1.53
33	L1	2951	U	C4'-O4'	-5.68	1.38	1.45
34	L3	73	U	C4'-C3'	5.68	1.59	1.53
34	L3	114	C	O4'-C1'	5.68	1.49	1.41
32	S1	589	A	O4'-C1'	5.68	1.49	1.41
33	L1	2694	A	O3'-P	-5.68	1.54	1.61
36	LA	41	ASP	C-N	5.68	1.45	1.34
80	LC	295	SER	C-O	-5.68	1.12	1.23
33	L1	13	G	C5'-C4'	5.68	1.58	1.51
33	L1	1288	C	C2'-C1'	-5.68	1.47	1.53
33	L1	2734	C	C5'-C4'	5.68	1.58	1.51
32	S1	312	C	O3'-P	-5.68	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	334	A	O3'-P	-5.68	1.54	1.61
33	L1	2639	A	O4'-C1'	5.68	1.49	1.41
19	SY	47	ARG	NE-CZ	5.68	1.40	1.33
32	S1	503	U	C4'-O4'	5.68	1.52	1.45
42	LP	156	HIS	CB-CG	5.68	1.60	1.50
33	L1	229	G	O3'-P	-5.67	1.54	1.61
33	L1	464	G	C4'-C3'	5.67	1.59	1.53
33	L1	597	C	O4'-C1'	5.67	1.49	1.41
33	L1	1707	C	P-O5'	-5.67	1.54	1.59
33	L1	2643	A	P-O5'	-5.67	1.54	1.59
1	Sa	263	ARG	NE-CZ	5.67	1.40	1.33
32	S1	1751	U	O4'-C1'	5.67	1.49	1.41
33	L1	2601	G	P-O5'	-5.67	1.54	1.59
33	L1	123	U	C4'-C3'	-5.67	1.46	1.52
33	L1	1920	U	C3'-C2'	-5.67	1.46	1.52
33	L1	2927	C	C2'-C1'	-5.67	1.47	1.53
68	LW	105	ILE	CA-C	5.67	1.67	1.52
5	SE	29	GLY	CA-C	-5.67	1.42	1.51
25	SC	164	SER	CB-OG	5.67	1.49	1.42
32	S1	1307	U	C4'-C3'	5.67	1.59	1.53
33	L1	182	C	C4'-O4'	5.67	1.52	1.45
33	L1	1593	C	C3'-C2'	5.67	1.59	1.52
33	L1	1881	C	O5'-C5'	5.67	1.53	1.44
33	L1	2206	U	O4'-C1'	5.67	1.49	1.41
32	S1	505	U	O4'-C1'	5.67	1.49	1.41
33	L1	142	G	O4'-C1'	5.67	1.49	1.41
33	L1	761	C	C2'-C1'	-5.67	1.47	1.53
33	L1	1093	U	C2'-C1'	5.67	1.59	1.53
66	LN	18	GLY	CA-C	-5.67	1.42	1.51
32	S1	411	A	C2'-C1'	5.66	1.59	1.53
33	L1	1065	A	C2'-C1'	5.66	1.59	1.53
33	L1	1105	G	P-O5'	-5.66	1.54	1.59
33	L1	1517	C	C3'-O3'	5.66	1.50	1.42
32	S1	1537	U	P-O5'	-5.66	1.54	1.59
32	S1	1795	U	C2'-C1'	5.66	1.59	1.53
33	L1	17	G	C3'-C2'	-5.66	1.46	1.52
33	L1	514	G	O4'-C1'	5.66	1.49	1.41
33	L1	883	G	C2'-C1'	-5.66	1.47	1.53
32	S1	69	A	O4'-C1'	5.66	1.49	1.41
32	S1	305	A	C3'-O3'	5.66	1.50	1.42
33	L1	2299	C	C4'-O4'	5.66	1.52	1.45
33	L1	3357	C	O3'-P	-5.66	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	51	U	P-O5'	-5.66	1.54	1.59
48	LV	81	GLN	C-N	5.66	1.43	1.33
33	L1	907	A	C5'-C4'	5.66	1.58	1.51
33	L1	1333	C	O4'-C1'	5.66	1.49	1.41
33	L1	3353	G	C3'-O3'	5.66	1.50	1.42
11	SM	75	ARG	CZ-NH1	5.66	1.40	1.33
33	L1	2520	U	C2'-C1'	-5.66	1.47	1.53
52	Lb	123	ARG	CZ-NH2	5.66	1.40	1.33
24	SX	72	LYS	N-CA	-5.66	1.35	1.46
25	SC	163	THR	CB-CG2	5.66	1.71	1.52
32	S1	661	U	O4'-C1'	5.66	1.49	1.41
33	L1	1421	A	C3'-C2'	5.66	1.59	1.52
33	L1	1456	A	C3'-O3'	5.66	1.50	1.42
33	L1	1457	A	P-O5'	-5.66	1.54	1.59
33	L1	1576	C	O3'-P	-5.66	1.54	1.61
33	L1	2743	A	C3'-O3'	5.66	1.50	1.42
33	L1	2502	U	C5'-C4'	5.65	1.58	1.51
33	L1	2866	A	C2'-C1'	-5.65	1.47	1.53
32	S1	628	G	O4'-C1'	5.65	1.49	1.41
32	S1	1247	G	O3'-P	-5.65	1.54	1.61
33	L1	2255	U	O4'-C1'	5.65	1.49	1.41
33	L1	2383	G	O4'-C1'	5.65	1.49	1.41
33	L1	2991	U	O3'-P	-5.65	1.54	1.61
35	L2	56	A	C5'-C4'	5.65	1.58	1.51
33	L1	19	C	C3'-O3'	5.65	1.50	1.42
33	L1	377	C	O4'-C1'	5.65	1.49	1.41
33	L1	858	U	C4'-O4'	5.65	1.52	1.45
33	L1	1594	G	C4'-C3'	5.65	1.59	1.53
33	L1	1653	A	O4'-C1'	5.65	1.49	1.41
33	L1	2621	G	C4'-C3'	-5.65	1.46	1.52
33	L1	2872	C	O4'-C1'	-5.65	1.34	1.41
33	L1	2909	A	C5'-C4'	5.65	1.58	1.51
42	LP	172	ARG	CD-NE	5.65	1.56	1.46
72	Lk	39	ARG	NE-CZ	5.65	1.40	1.33
33	L1	1107	G	C5'-C4'	5.65	1.58	1.51
33	L1	1307	A	C4'-O4'	5.65	1.52	1.45
33	L1	2331	A	O4'-C1'	5.65	1.49	1.41
33	L1	3353	G	O3'-P	-5.65	1.54	1.61
33	L1	58	G	O4'-C1'	-5.65	1.34	1.41
33	L1	1943	G	C2'-C1'	-5.65	1.47	1.53
33	L1	2171	A	C2'-C1'	5.65	1.59	1.53
33	L1	3018	A	O4'-C1'	-5.65	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3235	A	O3'-P	-5.65	1.54	1.61
73	Lp	35	ARG	CD-NE	5.65	1.56	1.46
15	SS	68	TYR	CG-CD1	5.65	1.46	1.39
32	S1	1197	A	O5'-C5'	5.65	1.53	1.44
56	Lh	107	LYS	C-N	5.65	1.47	1.34
3	SB	75	LYS	N-CA	-5.64	1.35	1.46
33	L1	914	C	O3'-P	5.64	1.68	1.61
33	L1	1268	G	C2'-C1'	5.64	1.59	1.53
37	LB	123	ARG	C-N	5.64	1.43	1.33
83	Lm	19	GLY	CA-C	5.64	1.60	1.51
25	SC	60	HIS	CA-CB	5.64	1.66	1.53
32	S1	362	U	C2'-C1'	-5.64	1.47	1.53
32	S1	1308	G	O4'-C1'	-5.64	1.34	1.41
33	L1	306	A	O4'-C1'	-5.64	1.34	1.41
33	L1	2991	U	P-O5'	-5.64	1.54	1.59
33	L1	997	G	P-O5'	-5.64	1.54	1.59
33	L1	2911	C	O4'-C1'	5.64	1.49	1.41
32	S1	1697	G	C4'-O4'	5.64	1.52	1.45
35	L2	83	A	C5'-C4'	5.64	1.58	1.51
84	LI	109	ASP	CB-CG	-5.64	1.40	1.51
33	L1	3019	C	C4'-C3'	5.64	1.59	1.53
33	L1	232	C	O3'-P	-5.64	1.54	1.61
33	L1	2563	G	C5'-C4'	5.64	1.58	1.51
33	L1	3019	C	P-O5'	-5.64	1.54	1.59
33	L1	1528	G	C2'-C1'	-5.63	1.47	1.53
33	L1	2148	U	O4'-C1'	5.63	1.49	1.41
33	L1	2215	A	C5'-C4'	5.63	1.58	1.51
33	L1	2704	U	C2'-C1'	-5.63	1.47	1.53
32	S1	1645	C	O4'-C1'	5.63	1.49	1.41
32	S1	1729	A	O4'-C1'	5.63	1.49	1.41
31	S2	58	U	C3'-C2'	5.63	1.59	1.52
33	L1	1244	A	C2'-C1'	5.63	1.59	1.53
33	L1	1312	A	C4'-O4'	5.63	1.52	1.45
33	L1	3100	C	P-O5'	5.63	1.65	1.59
32	S1	734	C	C5'-C4'	5.63	1.58	1.51
33	L1	2496	U	C2'-C1'	5.63	1.59	1.53
64	LG	141	LYS	C-N	5.63	1.47	1.34
31	S2	60	C	C4'-C3'	5.63	1.59	1.53
31	S2	75	A	C4'-O4'	5.63	1.52	1.45
33	L1	2952	G	C3'-O3'	5.63	1.50	1.42
32	S1	1806	C	C5'-C4'	5.63	1.58	1.51
33	L1	3088	A	C5'-C4'	5.63	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	SE	90	MET	N-CA	-5.62	1.35	1.46
32	S1	399	U	C5'-C4'	5.62	1.58	1.51
33	L1	924	A	O3'-P	-5.62	1.54	1.61
4	SD	205	PHE	CG-CD1	5.62	1.47	1.38
32	S1	1202	G	O4'-C1'	-5.62	1.34	1.41
34	L3	117	U	O4'-C1'	-5.62	1.34	1.41
51	LY	27	ARG	CD-NE	5.62	1.56	1.46
31	S2	63	C	C5'-C4'	5.62	1.58	1.51
32	S1	1041	A	O4'-C1'	5.62	1.49	1.41
33	L1	2111	A	C2'-C1'	-5.62	1.47	1.53
32	S1	1344	U	C3'-C2'	-5.62	1.46	1.52
32	S1	1609	G	C4'-C3'	5.62	1.59	1.53
33	L1	2077	C	C3'-O3'	5.62	1.50	1.42
33	L1	2288	C	C2'-C1'	-5.62	1.47	1.53
33	L1	2637	U	C4'-C3'	-5.62	1.47	1.52
33	L1	2974	G	C2'-C1'	5.62	1.59	1.53
13	SQ	82	MET	CA-CB	5.62	1.66	1.53
32	S1	1170	G	C2'-C1'	-5.62	1.47	1.53
32	S1	1660	C	O4'-C1'	5.62	1.49	1.41
33	L1	431	G	P-O5'	-5.62	1.54	1.59
33	L1	2169	U	O4'-C1'	5.62	1.49	1.41
32	S1	1	U	C3'-O3'	5.62	1.50	1.42
14	SP	41	LEU	C-N	5.61	1.43	1.33
32	S1	662	C	C2'-C1'	-5.61	1.47	1.53
32	S1	1647	C	O4'-C1'	5.61	1.49	1.41
33	L1	2152	A	C2'-C1'	5.61	1.59	1.53
33	L1	2351	A	P-O5'	-5.61	1.54	1.59
33	L1	2448	G	O3'-P	-5.61	1.54	1.61
33	L1	2503	A	P-O5'	-5.61	1.54	1.59
32	S1	504	C	C4'-C3'	-5.61	1.47	1.52
33	L1	257	C	C5'-C4'	5.61	1.58	1.51
33	L1	1348	G	C5'-C4'	5.61	1.58	1.51
32	S1	1049	U	O4'-C1'	5.61	1.49	1.41
33	L1	1512	A	C5'-C4'	5.61	1.58	1.51
33	L1	1878	G	C3'-O3'	5.61	1.50	1.42
33	L1	2671	A	C2'-C1'	5.61	1.59	1.53
39	LF	88	ARG	CZ-NH2	5.61	1.40	1.33
82	LK	111	GLU	CB-CG	5.61	1.62	1.52
32	S1	1064	U	C5'-C4'	5.61	1.58	1.51
33	L1	1623	C	C5'-C4'	5.61	1.58	1.51
33	L1	1919	C	O3'-P	-5.61	1.54	1.61
34	L3	108	G	C2'-C1'	5.61	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	98	C	C5'-C4'	5.61	1.58	1.51
40	LH	233	VAL	CA-CB	-5.61	1.43	1.54
32	S1	618	C	O3'-P	-5.61	1.54	1.61
32	S1	964	U	O4'-C1'	5.61	1.49	1.41
33	L1	25	U	O3'-P	-5.61	1.54	1.61
33	L1	2456	G	O5'-C5'	5.61	1.53	1.44
78	Le	241	ARG	CZ-NH2	5.61	1.40	1.33
1	Sa	203	GLY	N-CA	5.61	1.54	1.46
27	SH	78	ARG	C-O	-5.61	1.12	1.23
32	S1	1195	U	P-O5'	-5.61	1.54	1.59
32	S1	1756	A	C5'-C4'	5.61	1.58	1.51
42	LP	26	ARG	NE-CZ	5.61	1.40	1.33
32	S1	1023	C	C4'-C3'	-5.60	1.47	1.52
32	S1	1703	G	C3'-O3'	5.60	1.50	1.42
33	L1	2089	A	C5'-C4'	5.60	1.58	1.51
35	L2	54	C	C5'-C4'	5.60	1.58	1.51
32	S1	929	A	C4'-O4'	-5.60	1.38	1.45
33	L1	218	G	P-O5'	-5.60	1.54	1.59
33	L1	2064	C	C3'-O3'	5.60	1.50	1.42
33	L1	2093	G	O4'-C1'	-5.60	1.34	1.41
33	L1	2204	U	O4'-C1'	5.60	1.49	1.41
33	L1	3387	U	O3'-P	-5.60	1.54	1.61
33	L1	190	C	C2'-C1'	-5.60	1.47	1.53
33	L1	723	G	O4'-C1'	-5.60	1.34	1.41
33	L1	1144	C	O4'-C1'	5.60	1.49	1.41
33	L1	1282	A	C3'-C2'	5.60	1.59	1.52
33	L1	331	G	P-O5'	5.60	1.65	1.59
33	L1	1139	A	O4'-C1'	5.60	1.49	1.41
33	L1	2769	U	C2'-C1'	-5.60	1.47	1.53
32	S1	143	A	O4'-C1'	-5.60	1.34	1.41
32	S1	884	G	C5'-C4'	5.60	1.58	1.51
32	S1	1323	U	C4'-C3'	-5.60	1.47	1.52
33	L1	1311	G	C4'-C3'	-5.60	1.47	1.52
33	L1	1513	C	C3'-C2'	-5.60	1.46	1.52
61	Lq	2	ARG	CD-NE	5.60	1.55	1.46
33	L1	32	G	C4'-O4'	5.60	1.52	1.45
33	L1	1087	G	O3'-P	-5.60	1.54	1.61
33	L1	2625	C	C2'-C1'	5.60	1.59	1.53
32	S1	447	C	C3'-C2'	5.59	1.59	1.52
32	S1	630	U	O4'-C1'	5.59	1.49	1.41
33	L1	1134	G	O4'-C1'	5.59	1.49	1.41
33	L1	1895	G	O4'-C1'	5.59	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	L3	58	G	C2'-C1'	5.59	1.59	1.53
34	L3	69	A	O3'-P	-5.59	1.54	1.61
32	S1	17	C	C5'-C4'	5.59	1.58	1.51
46	LT	188	SER	CA-CB	5.59	1.61	1.52
31	S2	63	C	O4'-C1'	5.59	1.49	1.41
32	S1	1074	C	C3'-C2'	5.59	1.59	1.52
33	L1	33	A	C2'-C1'	-5.59	1.47	1.53
33	L1	1282	A	C2'-C1'	5.59	1.59	1.53
33	L1	1393	G	C3'-O3'	-5.59	1.34	1.42
33	L1	1995	U	O4'-C1'	5.59	1.49	1.41
33	L1	2067	G	C4'-C3'	5.59	1.59	1.53
33	L1	2497	A	O3'-P	-5.59	1.54	1.61
33	L1	2577	G	O4'-C1'	5.59	1.49	1.41
3	SB	65	ARG	CD-NE	5.59	1.55	1.46
32	S1	1430	A	C3'-O3'	5.59	1.50	1.42
33	L1	600	G	C3'-C2'	-5.59	1.46	1.52
33	L1	2683	A	C2'-C1'	5.59	1.59	1.53
33	L1	2870	U	C5'-C4'	5.59	1.58	1.51
12	SO	80	LEU	CA-CB	5.59	1.66	1.53
33	L1	166	U	O3'-P	5.59	1.67	1.61
33	L1	279	G	C2'-C1'	5.59	1.59	1.53
33	L1	1289	G	O4'-C1'	5.59	1.49	1.41
33	L1	1599	A	C5'-C4'	5.59	1.58	1.51
33	L1	1680	A	C5'-C4'	5.59	1.58	1.51
78	Le	162	ARG	C-O	-5.59	1.12	1.23
32	S1	463	G	O4'-C1'	5.59	1.49	1.41
33	L1	2216	G	C5'-C4'	5.59	1.58	1.51
33	L1	2837	C	O4'-C1'	5.59	1.49	1.41
43	LO	127	LYS	C-O	-5.59	1.12	1.23
5	SE	33	GLY	N-CA	-5.58	1.37	1.46
33	L1	2134	U	C4'-O4'	5.58	1.52	1.45
33	L1	2568	G	C3'-O3'	5.58	1.50	1.42
32	S1	1136	A	C3'-O3'	5.58	1.50	1.42
33	L1	6	A	P-O5'	5.58	1.65	1.59
33	L1	809	A	O3'-P	-5.58	1.54	1.61
33	L1	1728	G	O4'-C1'	5.58	1.49	1.41
35	L2	38	U	O4'-C1'	5.58	1.49	1.41
42	LP	118	SER	CB-OG	5.58	1.49	1.42
70	Li	50	LYS	N-CA	-5.58	1.35	1.46
32	S1	308	U	O4'-C1'	5.58	1.49	1.41
32	S1	849	G	C2'-C1'	5.58	1.59	1.53
32	S1	1701	G	C2'-C1'	-5.58	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	827	C	C4'-C3'	-5.58	1.47	1.52
32	S1	1155	G	C5'-C4'	5.58	1.58	1.51
33	L1	600	G	O4'-C1'	5.58	1.49	1.41
33	L1	383	A	C3'-O3'	5.58	1.50	1.42
33	L1	676	G	C3'-C2'	5.58	1.59	1.52
33	L1	1785	G	C5'-C4'	5.58	1.58	1.51
33	L1	1889	G	O4'-C1'	5.58	1.49	1.41
51	LY	74	ARG	CD-NE	5.58	1.55	1.46
33	L1	2107	A	C3'-C2'	5.58	1.59	1.52
23	SU	80	LEU	CB-CG	5.58	1.68	1.52
32	S1	445	A	C2'-C1'	-5.58	1.47	1.53
32	S1	845	C	C2'-C1'	-5.58	1.47	1.53
32	S1	1550	G	C2'-C1'	5.58	1.59	1.53
32	S1	1672	U	O4'-C1'	5.58	1.48	1.41
33	L1	310	C	C3'-O3'	5.58	1.50	1.42
33	L1	1277	A	C3'-C2'	-5.58	1.46	1.52
33	L1	443	G	C4'-C3'	5.57	1.59	1.53
33	L1	608	G	O3'-P	-5.57	1.54	1.61
33	L1	1116	G	P-O5'	-5.57	1.54	1.59
33	L1	2246	G	P-O5'	-5.57	1.54	1.59
33	L1	2841	G	P-O5'	-5.57	1.54	1.59
35	L2	13	G	C4'-C3'	5.57	1.59	1.53
35	L2	47	A	C2'-C1'	-5.57	1.47	1.53
32	S1	887	U	C2'-C1'	-5.57	1.47	1.53
33	L1	1669	C	C2'-C1'	-5.57	1.47	1.53
3	SB	149	SER	CA-CB	5.57	1.61	1.52
33	L1	1082	U	C2'-C1'	-5.57	1.47	1.53
33	L1	2191	C	O4'-C1'	5.57	1.48	1.41
33	L1	2539	G	C2'-C1'	-5.57	1.47	1.53
32	S1	47	A	O4'-C1'	5.57	1.48	1.41
64	LG	171	LYS	C-O	-5.57	1.12	1.23
3	SB	107	TYR	CE2-CZ	5.57	1.45	1.38
32	S1	443	U	C2'-C1'	-5.57	1.47	1.53
33	L1	507	C	C5'-C4'	5.57	1.58	1.51
33	L1	1725	G	C2'-O2'	5.57	1.48	1.41
33	L1	1880	A	O4'-C1'	-5.57	1.34	1.41
33	L1	1894	G	C4'-C3'	-5.57	1.47	1.52
33	L1	2729	C	P-O5'	-5.57	1.54	1.59
35	L2	51	U	C2'-C1'	5.57	1.59	1.53
33	L1	1505	G	C2'-C1'	5.57	1.59	1.53
33	L1	2022	U	P-O5'	-5.57	1.54	1.59
33	L1	2697	A	P-O5'	-5.57	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2698	A	O3'-P	-5.57	1.54	1.61
33	L1	3235	A	C5'-C4'	5.57	1.58	1.51
32	S1	887	U	P-O5'	-5.56	1.54	1.59
33	L1	1085	G	C4'-C3'	-5.56	1.47	1.52
71	Lj	47	TRP	CB-CG	5.56	1.60	1.50
32	S1	166	A	O4'-C1'	5.56	1.48	1.41
32	S1	1590	U	P-O5'	-5.56	1.54	1.59
33	L1	703	G	O4'-C1'	5.56	1.48	1.41
33	L1	802	G	O3'-P	-5.56	1.54	1.61
33	L1	1136	A	P-O5'	-5.56	1.54	1.59
34	L3	6	C	O4'-C1'	5.56	1.48	1.41
68	LW	82	LYS	N-CA	-5.56	1.35	1.46
25	SC	137	ARG	CZ-NH2	5.56	1.40	1.33
32	S1	861	A	O4'-C1'	-5.56	1.34	1.41
33	L1	671	C	O4'-C1'	5.56	1.48	1.41
33	L1	2206	U	C4'-C3'	5.56	1.59	1.53
35	L2	117	U	C2'-C1'	-5.56	1.47	1.53
32	S1	788	G	P-O5'	5.56	1.65	1.59
33	L1	699	C	O4'-C1'	5.56	1.48	1.41
33	L1	3320	G	C3'-O3'	5.56	1.50	1.42
33	L1	3352	C	O4'-C1'	5.56	1.48	1.41
80	LC	255	ILE	C-N	5.56	1.43	1.33
84	LI	116	ARG	N-CA	5.56	1.57	1.46
32	S1	378	U	C4'-O4'	-5.56	1.38	1.45
33	L1	1407	G	C4'-C3'	-5.56	1.47	1.52
33	L1	2223	A	P-O5'	-5.56	1.54	1.59
14	SP	104	ARG	CZ-NH2	-5.55	1.25	1.33
32	S1	1023	C	C5'-C4'	5.55	1.58	1.51
32	S1	1043	C	C2'-C1'	-5.55	1.47	1.53
32	S1	1615	G	O3'-P	-5.55	1.54	1.61
33	L1	1514	U	P-O5'	-5.55	1.54	1.59
35	L2	34	C	C3'-C2'	5.55	1.59	1.52
81	LD	90	ARG	CA-CB	5.55	1.66	1.53
32	S1	494	G	P-O5'	-5.55	1.54	1.59
33	L1	3004	G	O4'-C1'	5.55	1.48	1.41
31	S2	66	C	C3'-O3'	5.55	1.50	1.42
32	S1	1229	C	C5'-C4'	5.55	1.58	1.51
33	L1	876	C	C4'-O4'	-5.55	1.38	1.45
33	L1	1629	A	O3'-P	-5.55	1.54	1.61
33	L1	2587	G	C4'-C3'	-5.55	1.47	1.52
39	LF	153	VAL	CB-CG1	5.55	1.64	1.52
33	L1	1252	C	C5'-C4'	5.55	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1044	A	O4'-C1'	5.55	1.48	1.41
33	L1	1159	C	P-O5'	-5.55	1.54	1.59
33	L1	1813	C	P-O5'	-5.55	1.54	1.59
43	LO	127	LYS	CA-CB	-5.55	1.41	1.53
33	L1	227	C	C5'-C4'	5.55	1.58	1.51
33	L1	1507	A	C2'-C1'	-5.55	1.47	1.53
33	L1	2718	A	P-O5'	-5.55	1.54	1.59
33	L1	3140	A	P-O5'	-5.55	1.54	1.59
34	L3	65	G	C5'-C4'	5.55	1.58	1.51
42	LP	6	TYR	CG-CD1	5.55	1.46	1.39
69	La	77	PHE	CA-CB	-5.55	1.41	1.53
33	L1	1550	A	C2'-C1'	-5.54	1.47	1.53
31	S2	70	G	O3'-P	-5.54	1.54	1.61
32	S1	1519	G	O3'-P	-5.54	1.54	1.61
32	S1	1592	G	C5'-C4'	5.54	1.58	1.51
32	S1	1721	A	C2'-C1'	5.54	1.59	1.53
33	L1	237	C	C3'-O3'	5.54	1.50	1.42
33	L1	1271	U	C3'-O3'	5.54	1.50	1.42
33	L1	1870	G	O4'-C1'	5.54	1.48	1.41
33	L1	3338	U	P-O5'	-5.54	1.54	1.59
32	S1	1736	C	C4'-C3'	5.54	1.59	1.53
33	L1	1679	U	C4'-O4'	5.54	1.52	1.45
33	L1	2787	A	C5'-C4'	5.54	1.57	1.51
33	L1	3018	A	C4'-C3'	-5.54	1.47	1.52
51	LY	114	ARG	CD-NE	5.54	1.55	1.46
32	S1	306	U	C4'-C3'	-5.54	1.47	1.52
33	L1	167	C	C5'-C4'	5.54	1.57	1.51
33	L1	1715	C	O4'-C1'	5.54	1.48	1.41
33	L1	1813	C	C5'-C4'	5.54	1.57	1.51
33	L1	2375	G	P-O5'	-5.54	1.54	1.59
33	L1	3095	G	C4'-C3'	5.54	1.59	1.53
68	LW	28	SER	C-N	5.54	1.46	1.34
32	S1	1046	G	C2'-C1'	-5.54	1.47	1.53
33	L1	1449	A	C4'-O4'	5.54	1.52	1.45
33	L1	1451	U	C5'-C4'	5.54	1.57	1.51
33	L1	1618	U	C4'-C3'	-5.54	1.47	1.52
33	L1	2185	U	O4'-C1'	5.54	1.48	1.41
33	L1	2973	A	C4'-C3'	5.54	1.59	1.53
33	L1	3031	G	O4'-C1'	-5.54	1.34	1.41
73	Lp	22	LYS	CD-CE	5.54	1.65	1.51
32	S1	1714	G	O4'-C1'	-5.53	1.34	1.41
33	L1	1689	G	O3'-P	-5.53	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	L2	96	A	C2'-C1'	-5.53	1.47	1.53
1	Sa	325	TRP	N-CA	-5.53	1.35	1.46
27	SH	109	GLY	C-O	-5.53	1.14	1.23
32	S1	450	A	O3'-P	-5.53	1.54	1.61
33	L1	1242	U	C3'-C2'	5.53	1.59	1.52
33	L1	1291	A	C4'-C3'	5.53	1.59	1.53
33	L1	1907	A	C5'-C4'	5.53	1.57	1.51
32	S1	313	C	C2'-C1'	-5.53	1.47	1.53
32	S1	1302	C	C4'-C3'	5.53	1.59	1.53
33	L1	1552	C	O4'-C1'	5.53	1.48	1.41
33	L1	1754	C	C5'-C4'	5.53	1.57	1.51
32	S1	1228	G	C2'-O2'	5.53	1.48	1.41
33	L1	1562	A	C4'-C3'	5.53	1.59	1.53
33	L1	1657	C	O4'-C1'	5.53	1.48	1.41
33	L1	2102	C	C3'-O3'	5.53	1.49	1.42
33	L1	2243	C	O4'-C1'	5.53	1.48	1.41
33	L1	3319	G	C4'-C3'	5.53	1.59	1.53
32	S1	1652	C	C2'-C1'	-5.53	1.47	1.53
33	L1	1449	A	C3'-C2'	5.53	1.59	1.52
32	S1	396	G	C5'-C4'	5.52	1.57	1.51
32	S1	1002	G	C2'-C1'	-5.52	1.47	1.53
33	L1	1395	A	C3'-O3'	5.52	1.49	1.42
7	SI	98	TYR	CD2-CE2	5.52	1.47	1.39
31	S2	32	U	O3'-P	-5.52	1.54	1.61
32	S1	831	C	C3'-O3'	5.52	1.49	1.42
32	S1	957	A	C4'-C3'	5.52	1.59	1.53
33	L1	2649	C	O3'-P	-5.52	1.54	1.61
33	L1	1343	C	C5'-C4'	5.52	1.57	1.51
33	L1	1348	G	C3'-C2'	5.52	1.59	1.52
1	Sa	30	GLN	CA-CB	5.52	1.66	1.53
23	SU	8	PRO	N-CA	5.52	1.56	1.47
33	L1	1173	C	O4'-C1'	5.52	1.48	1.41
35	L2	145	C	C4'-C3'	5.52	1.59	1.53
64	LG	62	SER	N-CA	-5.52	1.35	1.46
32	S1	1628	C	C2'-C1'	-5.52	1.47	1.53
33	L1	868	A	O4'-C1'	5.52	1.48	1.41
35	L2	63	A	C4'-O4'	5.52	1.52	1.45
32	S1	33	U	C4'-C3'	5.52	1.59	1.53
33	L1	316	A	C2'-O2'	5.52	1.48	1.41
33	L1	2221	U	O4'-C1'	5.52	1.48	1.41
33	L1	3291	C	C3'-O3'	5.52	1.49	1.42
32	S1	1049	U	O3'-P	-5.51	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	500	C	C4'-C3'	-5.51	1.47	1.52
33	L1	892	U	C4'-C3'	5.51	1.59	1.53
33	L1	1620	U	P-O5'	-5.51	1.54	1.59
34	L3	80	A	C2'-C1'	-5.51	1.47	1.53
33	L1	2476	G	O4'-C1'	-5.51	1.34	1.41
33	L1	3311	C	C2'-C1'	5.51	1.59	1.53
39	LF	119	GLU	CB-CG	5.51	1.62	1.52
16	SR	58	LEU	N-CA	5.51	1.57	1.46
33	L1	2747	U	C3'-O3'	5.51	1.49	1.42
32	S1	1007	G	C3'-C2'	5.51	1.59	1.52
32	S1	1184	C	C3'-O3'	5.51	1.49	1.42
33	L1	47	A	C5'-C4'	5.51	1.57	1.51
33	L1	349	A	O3'-P	-5.51	1.54	1.61
33	L1	498	G	O3'-P	5.51	1.67	1.61
33	L1	689	G	C2'-C1'	-5.51	1.47	1.53
33	L1	921	C	P-O5'	-5.51	1.54	1.59
33	L1	3387	U	P-O5'	-5.51	1.54	1.59
34	L3	54	A	C3'-O3'	-5.51	1.34	1.42
32	S1	1075	G	C4'-O4'	5.51	1.52	1.45
33	L1	160	G	C4'-C3'	5.51	1.59	1.53
33	L1	1262	U	C2'-C1'	5.51	1.59	1.53
33	L1	2233	G	C2'-C1'	-5.51	1.47	1.53
52	Lb	123	ARG	NE-CZ	5.51	1.40	1.33
33	L1	3385	G	O5'-C5'	5.50	1.53	1.44
35	L2	103	C	C3'-O3'	5.50	1.49	1.42
32	S1	1349	A	C4'-C3'	5.50	1.59	1.53
32	S1	1434	G	C4'-O4'	-5.50	1.38	1.45
33	L1	2424	G	C5'-C4'	5.50	1.57	1.51
33	L1	281	G	C3'-C2'	5.50	1.58	1.52
33	L1	1339	C	C5'-C4'	5.50	1.57	1.51
33	L1	1922	C	P-O5'	5.50	1.65	1.59
1	Sa	212	SER	CA-CB	5.50	1.61	1.52
33	L1	376	A	C3'-O3'	5.50	1.49	1.42
33	L1	892	U	C5'-C4'	5.50	1.57	1.51
8	SJ	107	VAL	CA-CB	-5.50	1.43	1.54
23	SU	7	ALA	CA-CB	5.50	1.64	1.52
32	S1	106	A	O4'-C1'	5.50	1.48	1.41
33	L1	53	C	O4'-C1'	5.50	1.48	1.41
33	L1	840	A	C5'-C4'	5.50	1.57	1.51
33	L1	1341	G	C3'-O3'	5.50	1.49	1.42
33	L1	2454	U	O4'-C1'	5.50	1.48	1.41
33	L1	2648	G	C3'-O3'	5.50	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2705	A	P-O5'	-5.50	1.54	1.59
33	L1	3222	G	C5'-C4'	5.50	1.57	1.51
25	SC	164	SER	C-O	-5.50	1.12	1.23
33	L1	303	U	C2'-C1'	-5.50	1.47	1.53
33	L1	2131	U	C5'-C4'	5.50	1.57	1.51
33	L1	2248	G	C4'-C3'	5.50	1.59	1.53
33	L1	2897	G	C2'-C1'	5.50	1.59	1.53
81	LD	313	GLU	CB-CG	5.50	1.62	1.52
30	S3	18	C	C2'-C1'	-5.49	1.47	1.53
32	S1	990	G	C4'-O4'	-5.49	1.38	1.45
32	S1	1477	A	C2'-C1'	5.49	1.59	1.53
33	L1	3333	C	O3'-P	-5.49	1.54	1.61
71	Lj	2	LYS	N-CA	-5.49	1.35	1.46
78	Le	49	ARG	CD-NE	5.49	1.55	1.46
33	L1	903	G	O3'-P	-5.49	1.54	1.61
33	L1	917	A	C5'-C4'	5.49	1.57	1.51
55	Lg	1	MET	CA-C	-5.49	1.38	1.52
32	S1	913	U	C4'-C3'	-5.49	1.47	1.52
33	L1	1036	C	O3'-P	-5.49	1.54	1.61
33	L1	1286	G	P-O5'	-5.49	1.54	1.59
69	La	34	ARG	N-CA	-5.49	1.35	1.46
32	S1	1715	C	P-O5'	-5.49	1.54	1.59
32	S1	1728	G	C3'-O3'	5.49	1.49	1.42
33	L1	292	A	C3'-O3'	5.49	1.49	1.42
33	L1	1472	C	C4'-C3'	5.49	1.59	1.53
33	L1	2858	G	O3'-P	-5.49	1.54	1.61
35	L2	51	U	C3'-O3'	5.49	1.49	1.42
32	S1	372	U	C4'-O4'	5.49	1.52	1.45
31	S2	4	G	C5'-C4'	5.48	1.57	1.51
33	L1	1765	G	C3'-O3'	5.48	1.49	1.42
33	L1	2806	A	C2'-C1'	-5.48	1.47	1.53
32	S1	1288	C	C4'-C3'	-5.48	1.47	1.52
32	S1	1312	G	C4'-O4'	-5.48	1.38	1.45
33	L1	989	U	O4'-C1'	5.48	1.48	1.41
33	L1	2214	A	O4'-C1'	5.48	1.48	1.41
3	SB	67	ARG	CD-NE	5.48	1.55	1.46
13	SQ	97	ARG	CD-NE	5.48	1.55	1.46
82	LK	54	ARG	CZ-NH2	-5.48	1.25	1.33
15	SS	15	HIS	CA-CB	-5.48	1.42	1.53
32	S1	3	C	C4'-O4'	5.48	1.52	1.45
32	S1	901	U	C2'-C1'	-5.48	1.47	1.53
32	S1	1331	C	O4'-C1'	5.48	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1302	C	O4'-C1'	5.48	1.48	1.41
33	L1	2081	C	C2'-C1'	-5.48	1.47	1.53
37	LB	197	PRO	CA-CB	-5.48	1.42	1.53
38	LE	34	ARG	N-CA	5.48	1.57	1.46
32	S1	502	G	C4'-O4'	5.48	1.52	1.45
32	S1	1565	U	C3'-C2'	-5.48	1.46	1.52
33	L1	1678	U	O3'-P	-5.48	1.54	1.61
33	L1	2794	A	C5'-C4'	5.48	1.57	1.51
35	L2	30	C	C3'-C2'	5.48	1.58	1.52
5	SE	101	ALA	CA-CB	5.47	1.64	1.52
32	S1	178	A	O4'-C1'	5.47	1.48	1.41
33	L1	750	G	C2'-C1'	-5.47	1.47	1.53
33	L1	1195	C	C4'-O4'	5.47	1.52	1.45
33	L1	2672	C	O3'-P	-5.47	1.54	1.61
31	S2	15	A	C2'-C1'	5.47	1.59	1.53
48	LV	131	TYR	CE1-CZ	5.47	1.45	1.38
31	S2	60	C	P-O5'	-5.47	1.54	1.59
32	S1	1	U	C4'-C3'	5.47	1.59	1.53
32	S1	1122	U	C3'-O3'	5.47	1.49	1.42
33	L1	113	A	P-O5'	-5.47	1.54	1.59
33	L1	564	A	C3'-O3'	5.47	1.49	1.42
33	L1	1444	G	C2'-C1'	-5.47	1.47	1.53
33	L1	2185	U	P-O5'	-5.47	1.54	1.59
33	L1	3362	A	C3'-O3'	5.47	1.49	1.42
34	L3	47	C	O4'-C1'	5.47	1.48	1.41
31	S2	48	C	P-O5'	-5.47	1.54	1.59
33	L1	1825	G	C2'-C1'	-5.47	1.47	1.53
33	L1	2632	U	C3'-C2'	-5.47	1.46	1.52
33	L1	2313	U	C3'-C2'	5.47	1.58	1.52
59	Lo	51	PHE	CE1-CZ	5.47	1.47	1.37
81	LD	102	GLY	CA-C	5.47	1.60	1.51
32	S1	626	A	C2'-C1'	-5.46	1.47	1.53
33	L1	2426	C	C2'-C1'	-5.46	1.47	1.53
15	SS	11	ASP	CA-C	5.46	1.67	1.52
55	Lg	6	ARG	CD-NE	5.46	1.55	1.46
4	SD	54	TYR	C-O	-5.46	1.12	1.23
32	S1	899	A	O4'-C1'	5.46	1.48	1.41
33	L1	2495	C	C4'-C3'	-5.46	1.47	1.52
33	L1	926	C	P-O5'	-5.46	1.54	1.59
33	L1	959	U	C4'-C3'	5.46	1.59	1.53
32	S1	182	C	O4'-C1'	5.46	1.48	1.41
32	S1	1391	G	O4'-C1'	5.46	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1395	C	O4'-C1'	5.46	1.48	1.41
33	L1	176	A	C2'-C1'	-5.46	1.47	1.53
33	L1	1910	G	C4'-O4'	5.46	1.52	1.45
15	SS	8	THR	CA-C	-5.46	1.38	1.52
32	S1	6	G	C4'-C3'	5.46	1.59	1.53
32	S1	1070	A	O3'-P	-5.46	1.54	1.61
32	S1	1538	C	O3'-P	-5.46	1.54	1.61
32	S1	1774	C	C5'-C4'	5.46	1.57	1.51
33	L1	2454	U	C5'-C4'	5.46	1.57	1.51
32	S1	873	G	C2'-C1'	5.46	1.59	1.53
33	L1	2482	A	C3'-O3'	-5.46	1.34	1.42
33	L1	2720	U	C3'-C2'	5.46	1.58	1.52
33	L1	2777	U	O3'-P	-5.46	1.54	1.61
47	LU	141	VAL	N-CA	5.46	1.57	1.46
31	S2	17	G	O3'-P	5.45	1.67	1.61
32	S1	686	A	O4'-C1'	5.45	1.48	1.41
32	S1	941	G	C4'-O4'	-5.45	1.38	1.45
32	S1	1063	U	O4'-C1'	-5.45	1.34	1.41
32	S1	1183	G	C2'-C1'	5.45	1.59	1.53
32	S1	1300	A	O3'-P	-5.45	1.54	1.61
32	S1	1319	U	O5'-C5'	-5.45	1.34	1.42
33	L1	102	G	P-O5'	-5.45	1.54	1.59
34	L3	116	U	C3'-O3'	5.45	1.49	1.42
33	L1	367	A	O3'-P	-5.45	1.54	1.61
33	L1	797	U	O4'-C1'	5.45	1.48	1.41
33	L1	2433	U	C5'-C4'	5.45	1.57	1.51
33	L1	2663	U	O3'-P	-5.45	1.54	1.61
32	S1	1789	U	C5'-C4'	5.45	1.57	1.51
33	L1	1394	C	C3'-O3'	5.45	1.49	1.42
33	L1	3040	G	P-O5'	-5.45	1.54	1.59
33	L1	3183	G	C3'-O3'	5.45	1.49	1.42
33	L1	3280	U	O4'-C1'	5.45	1.48	1.41
33	L1	3291	C	P-O5'	-5.45	1.54	1.59
32	S1	1248	A	C4'-O4'	5.45	1.52	1.45
33	L1	31	U	C4'-C3'	5.45	1.59	1.53
33	L1	970	A	C3'-O3'	5.45	1.49	1.42
33	L1	2053	A	C3'-C2'	5.45	1.58	1.52
33	L1	2626	G	C3'-O3'	5.45	1.49	1.42
33	L1	2745	C	P-O5'	-5.45	1.54	1.59
32	S1	20	G	P-O5'	5.44	1.65	1.59
32	S1	1699	C	C4'-C3'	-5.44	1.47	1.52
33	L1	529	C	P-O5'	5.44	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	562	G	C4'-O4'	-5.44	1.38	1.45
33	L1	1155	G	O3'-P	-5.44	1.54	1.61
33	L1	2501	U	C4'-O4'	-5.44	1.38	1.45
8	SJ	89	PHE	N-CA	-5.44	1.35	1.46
32	S1	18	C	C2'-C1'	-5.44	1.47	1.53
32	S1	994	U	C5'-C4'	5.44	1.57	1.51
32	S1	1325	A	C2'-C1'	-5.44	1.47	1.53
33	L1	142	G	C3'-C2'	-5.44	1.46	1.52
33	L1	327	A	C3'-O3'	5.44	1.49	1.42
33	L1	1383	G	C3'-C2'	5.44	1.58	1.52
29	ST	37	GLY	N-CA	-5.44	1.37	1.46
32	S1	1327	C	P-O5'	-5.44	1.54	1.59
33	L1	3205	C	O4'-C1'	5.44	1.48	1.41
32	S1	889	C	C5'-C4'	5.44	1.57	1.51
31	S2	68	C	C3'-C2'	5.44	1.58	1.52
32	S1	896	C	C2'-C1'	-5.44	1.47	1.53
32	S1	994	U	C4'-C3'	-5.44	1.47	1.52
32	S1	1720	G	C4'-C3'	-5.44	1.47	1.52
33	L1	496	U	P-O5'	-5.44	1.54	1.59
33	L1	2488	A	O3'-P	-5.44	1.54	1.61
33	L1	2993	A	P-O5'	-5.44	1.54	1.59
33	L1	3047	A	P-O5'	-5.44	1.54	1.59
80	LC	1	MET	N-CA	-5.44	1.35	1.46
11	SM	113	ARG	CA-CB	5.43	1.66	1.53
33	L1	2518	A	O3'-P	-5.43	1.54	1.61
33	L1	1409	G	P-O5'	5.43	1.65	1.59
33	L1	2807	G	O4'-C1'	-5.43	1.34	1.41
33	L1	3096	U	C2'-C1'	5.43	1.59	1.53
32	S1	609	A	C3'-O3'	5.43	1.49	1.42
33	L1	184	C	C2'-C1'	5.43	1.59	1.53
33	L1	1878	G	O4'-C1'	-5.43	1.34	1.41
35	L2	108	A	O4'-C1'	5.43	1.48	1.41
33	L1	603	G	O4'-C1'	5.43	1.48	1.41
33	L1	1364	C	O3'-P	-5.43	1.54	1.61
33	L1	3156	G	C5'-C4'	5.43	1.57	1.51
33	L1	3377	G	C2'-C1'	5.43	1.59	1.53
35	L2	101	G	P-O5'	-5.43	1.54	1.59
33	L1	3038	U	C5'-C4'	5.43	1.57	1.51
32	S1	1368	C	C4'-C3'	-5.43	1.47	1.52
33	L1	347	A	P-O5'	-5.43	1.54	1.59
33	L1	846	A	C4'-C3'	5.43	1.59	1.53
33	L1	1889	G	C3'-O3'	5.43	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2791	U	C2'-C1'	-5.43	1.47	1.53
38	LE	65	GLU	CD-OE2	-5.43	1.19	1.25
32	S1	494	G	C5'-C4'	5.42	1.57	1.51
32	S1	1479	U	C3'-C2'	5.42	1.58	1.52
32	S1	1681	G	C4'-C3'	5.42	1.59	1.53
33	L1	486	G	O4'-C1'	5.42	1.48	1.41
52	Lb	111	TYR	CZ-OH	5.42	1.47	1.37
59	Lo	51	PHE	CG-CD1	5.42	1.46	1.38
43	LO	40	HIS	CA-CB	5.42	1.65	1.53
76	Lw	35	ASP	CA-CB	5.42	1.65	1.53
32	S1	1559	U	C4'-C3'	5.42	1.59	1.53
33	L1	2433	U	C3'-C2'	5.42	1.58	1.52
32	S1	1589	C	O3'-P	-5.42	1.54	1.61
33	L1	1162	A	O3'-P	-5.42	1.54	1.61
34	L3	48	G	P-O5'	-5.42	1.54	1.59
32	S1	563	C	C4'-C3'	5.42	1.59	1.53
33	L1	2729	C	O4'-C1'	5.42	1.48	1.41
33	L1	3016	C	O3'-P	-5.42	1.54	1.61
33	L1	3159	C	C5'-C4'	5.42	1.57	1.51
32	S1	302	C	C2'-C1'	-5.42	1.47	1.53
32	S1	546	U	C4'-C3'	5.42	1.59	1.53
32	S1	587	C	C4'-O4'	-5.42	1.38	1.45
33	L1	1821	G	O5'-C5'	5.42	1.53	1.44
57	Ll	6	GLY	CA-C	5.42	1.60	1.51
57	Ll	43	ARG	NE-CZ	5.42	1.40	1.33
33	L1	2346	U	C2'-C1'	5.42	1.59	1.53
33	L1	3108	U	C5'-C4'	5.42	1.57	1.51
24	SX	69	THR	C-N	5.41	1.42	1.33
32	S1	1376	A	P-O5'	5.41	1.65	1.59
33	L1	219	A	P-O5'	5.41	1.65	1.59
33	L1	523	C	C5'-C4'	5.41	1.57	1.51
33	L1	567	G	O4'-C1'	5.41	1.48	1.41
33	L1	2201	G	C4'-C3'	5.41	1.59	1.53
33	L1	2870	U	C3'-C2'	-5.41	1.46	1.52
33	L1	1874	A	C3'-O3'	5.41	1.49	1.42
32	S1	1050	C	C4'-C3'	5.41	1.59	1.53
33	L1	2120	A	C2'-C1'	5.41	1.59	1.53
33	L1	2680	G	C2'-C1'	5.41	1.59	1.53
46	LT	170	ARG	CZ-NH1	5.41	1.40	1.33
32	S1	969	U	C2'-C1'	5.41	1.59	1.53
33	L1	878	G	O3'-P	-5.41	1.54	1.61
33	L1	1165	C	P-O5'	-5.41	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1196	U	P-O5'	-5.41	1.54	1.59
33	L1	1726	G	C2'-C1'	-5.41	1.47	1.53
33	L1	3336	A	O3'-P	-5.41	1.54	1.61
50	LZ	53	TRP	C-O	-5.41	1.13	1.23
33	L1	1629	A	C2'-C1'	5.41	1.59	1.53
32	S1	1259	G	C3'-O3'	5.41	1.49	1.42
32	S1	1469	C	C4'-C3'	5.41	1.59	1.53
33	L1	307	C	P-O5'	5.41	1.65	1.59
33	L1	728	G	O4'-C1'	-5.41	1.34	1.41
33	L1	1588	G	O4'-C1'	-5.41	1.34	1.41
33	L1	1802	A	C3'-C2'	5.41	1.58	1.52
33	L1	2331	A	C4'-C3'	5.41	1.59	1.53
33	L1	2616	U	C5'-C4'	5.41	1.57	1.51
33	L1	2883	C	P-O5'	-5.41	1.54	1.59
33	L1	2945	G	P-O5'	-5.41	1.54	1.59
33	L1	365	A	O3'-P	-5.40	1.54	1.61
33	L1	773	G	O4'-C1'	5.40	1.48	1.41
1	Sa	247	GLY	CA-C	-5.40	1.43	1.51
20	SZ	61	GLU	C-N	5.40	1.46	1.34
33	L1	1019	A	C2'-O2'	-5.40	1.34	1.41
33	L1	2806	A	C3'-O3'	5.40	1.49	1.42
33	L1	2871	U	O3'-P	-5.40	1.54	1.61
33	L1	2880	G	O3'-P	-5.40	1.54	1.61
73	Lp	26	ARG	CD-NE	5.40	1.55	1.46
33	L1	153	U	P-O5'	-5.40	1.54	1.59
33	L1	897	U	P-O5'	-5.40	1.54	1.59
33	L1	1670	G	O3'-P	-5.40	1.54	1.61
33	L1	2758	C	C3'-O3'	5.40	1.49	1.42
52	Lb	87	TYR	CD2-CE2	5.40	1.47	1.39
33	L1	339	G	O4'-C1'	-5.40	1.34	1.41
33	L1	1351	C	O4'-C1'	-5.40	1.34	1.41
33	L1	1936	G	C2'-C1'	-5.40	1.47	1.53
51	LY	72	VAL	CA-CB	-5.40	1.43	1.54
33	L1	1718	U	C5'-C4'	5.40	1.57	1.51
33	L1	2762	U	O4'-C1'	-5.40	1.34	1.41
10	SL	5	ARG	CD-NE	5.39	1.55	1.46
31	S2	36	C	C2'-C1'	-5.39	1.47	1.53
33	L1	487	C	C4'-C3'	5.39	1.59	1.53
33	L1	1780	C	C4'-C3'	5.39	1.59	1.53
32	S1	1774	C	O3'-P	-5.39	1.54	1.61
33	L1	1091	C	C2'-C1'	-5.39	1.47	1.53
32	S1	492	G	O3'-P	-5.39	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	191	C	O4'-C1'	5.39	1.48	1.41
33	L1	2821	U	O4'-C1'	5.39	1.48	1.41
33	L1	2916	G	O4'-C1'	5.39	1.48	1.41
33	L1	3202	G	C3'-O3'	5.39	1.49	1.42
32	S1	794	G	O3'-P	5.39	1.67	1.61
32	S1	1113	G	O4'-C1'	-5.39	1.34	1.41
33	L1	838	G	C4'-C3'	5.39	1.59	1.53
33	L1	3062	G	C5'-C4'	5.39	1.57	1.51
32	S1	438	G	C4'-C3'	5.39	1.59	1.53
32	S1	1596	G	C2'-C1'	-5.39	1.47	1.53
33	L1	1284	C	P-O5'	-5.39	1.54	1.59
33	L1	1882	A	C4'-O4'	5.39	1.52	1.45
33	L1	3354	A	P-O5'	-5.39	1.54	1.59
2	SA	212	GLU	CA-C	5.39	1.67	1.52
32	S1	1375	C	P-O5'	5.39	1.65	1.59
32	S1	1579	C	C2'-C1'	-5.39	1.47	1.53
33	L1	496	U	C3'-O3'	5.39	1.49	1.42
33	L1	694	U	O4'-C1'	-5.39	1.34	1.41
33	L1	1175	G	O4'-C1'	-5.39	1.34	1.41
33	L1	1472	C	O3'-P	-5.39	1.54	1.61
33	L1	2163	G	C2'-C1'	-5.39	1.47	1.53
33	L1	2829	U	O3'-P	-5.39	1.54	1.61
61	Lq	23	ARG	CA-CB	-5.39	1.42	1.53
33	L1	97	G	C2'-C1'	-5.38	1.47	1.53
33	L1	215	U	P-O5'	5.38	1.65	1.59
33	L1	3005	C	C3'-C2'	5.38	1.58	1.52
32	S1	1056	A	C3'-C2'	-5.38	1.46	1.52
32	S1	1339	C	C2'-C1'	-5.38	1.47	1.53
1	Sa	66	SER	N-CA	-5.38	1.35	1.46
5	SE	90	MET	CA-CB	5.38	1.65	1.53
33	L1	371	A	P-O5'	-5.38	1.54	1.59
33	L1	1559	G	O3'-P	-5.38	1.54	1.61
33	L1	2575	C	C3'-O3'	5.38	1.49	1.42
33	L1	3382	A	C3'-O3'	5.38	1.49	1.42
32	S1	501	U	C3'-C2'	-5.38	1.46	1.52
32	S1	1584	A	C2'-C1'	5.38	1.59	1.53
33	L1	1212	U	O3'-P	-5.38	1.54	1.61
35	L2	70	G	O3'-P	-5.38	1.54	1.61
32	S1	1458	U	O4'-C1'	5.38	1.48	1.41
32	S1	1497	U	C5'-C4'	5.38	1.57	1.51
33	L1	2082	A	C4'-C3'	5.38	1.59	1.53
33	L1	2496	U	O3'-P	-5.38	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3385	G	C3'-O3'	5.38	1.49	1.42
35	L2	43	G	C3'-C2'	5.38	1.58	1.52
1	Sa	265	GLY	N-CA	-5.38	1.38	1.46
31	S2	71	A	C2'-O2'	-5.38	1.34	1.41
33	L1	1428	G	C3'-O3'	5.38	1.49	1.42
46	LT	120	TYR	CG-CD2	5.38	1.46	1.39
68	LW	114	TYR	CB-CG	5.38	1.59	1.51
33	L1	1799	C	P-O5'	-5.38	1.54	1.59
32	S1	567	U	O4'-C1'	5.37	1.48	1.41
32	S1	945	A	C3'-O3'	5.37	1.49	1.42
33	L1	771	G	O3'-P	-5.37	1.54	1.61
33	L1	1488	G	C5'-C4'	5.37	1.57	1.51
33	L1	3074	A	C2'-C1'	-5.37	1.47	1.53
34	L3	96	U	O3'-P	-5.37	1.54	1.61
10	SL	23	ALA	N-CA	-5.37	1.35	1.46
33	L1	337	C	O3'-P	-5.37	1.54	1.61
33	L1	3328	A	C4'-C3'	5.37	1.59	1.53
33	L1	3383	C	O3'-P	-5.37	1.54	1.61
35	L2	24	U	P-O5'	-5.37	1.54	1.59
35	L2	90	U	C4'-C3'	5.37	1.59	1.53
32	S1	1140	U	C5'-C4'	5.37	1.57	1.51
33	L1	613	G	O3'-P	-5.37	1.54	1.61
33	L1	1363	C	C4'-O4'	5.37	1.52	1.45
13	SQ	138	ARG	CA-C	5.37	1.67	1.52
32	S1	1615	G	C4'-O4'	5.37	1.52	1.45
33	L1	746	C	O4'-C1'	5.37	1.48	1.41
33	L1	907	A	C3'-O3'	5.37	1.49	1.42
33	L1	1207	A	O4'-C1'	5.37	1.48	1.41
33	L1	1283	C	C5'-C4'	5.37	1.57	1.51
32	S1	409	C	O4'-C1'	5.37	1.48	1.41
33	L1	2780	G	C5'-C4'	5.37	1.57	1.51
31	S2	16	U	C3'-C2'	-5.37	1.46	1.52
32	S1	570	C	C3'-O3'	5.37	1.49	1.42
33	L1	1053	C	C2'-C1'	-5.37	1.47	1.53
33	L1	1529	C	O4'-C1'	-5.37	1.34	1.41
33	L1	2757	G	C5'-C4'	5.37	1.57	1.51
33	L1	3155	C	C5'-C4'	5.37	1.57	1.51
33	L1	3328	A	O3'-P	-5.37	1.54	1.61
33	L1	3355	U	C5'-C4'	5.37	1.57	1.51
32	S1	764	U	C4'-C3'	-5.36	1.47	1.52
32	S1	1382	C	P-O5'	5.36	1.65	1.59
32	S1	1676	G	C2'-C1'	-5.36	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	212	G	C3'-O3'	5.36	1.49	1.42
33	L1	570	G	O4'-C1'	5.36	1.48	1.41
33	L1	604	C	O3'-P	5.36	1.67	1.61
32	S1	480	U	O3'-P	-5.36	1.54	1.61
32	S1	1403	G	C5'-C4'	5.36	1.57	1.51
33	L1	448	G	C5'-C4'	5.36	1.57	1.51
33	L1	1383	G	P-O5'	-5.36	1.54	1.59
32	S1	949	A	P-O5'	-5.36	1.54	1.59
32	S1	1243	C	C2'-C1'	-5.36	1.47	1.53
32	S1	1715	C	C5'-C4'	5.36	1.57	1.51
33	L1	351	G	C2'-C1'	-5.36	1.47	1.53
33	L1	2391	C	C2'-C1'	5.36	1.59	1.53
33	L1	2432	U	O4'-C1'	-5.36	1.34	1.41
33	L1	2627	G	O3'-P	-5.36	1.54	1.61
33	L1	3096	U	C3'-C2'	-5.36	1.46	1.52
33	L1	3109	G	P-O5'	-5.36	1.54	1.59
72	Lk	56	TYR	CB-CG	5.36	1.59	1.51
32	S1	444	U	C4'-O4'	-5.36	1.38	1.45
33	L1	281	G	C5'-C4'	5.36	1.57	1.51
48	LV	10	ASN	C-N	5.36	1.44	1.34
4	SD	51	ARG	NE-CZ	5.36	1.40	1.33
32	S1	142	G	O4'-C1'	5.36	1.48	1.41
32	S1	446	C	C3'-C2'	-5.36	1.46	1.52
33	L1	328	G	P-O5'	5.36	1.65	1.59
33	L1	1362	C	C2'-C1'	-5.36	1.47	1.53
33	L1	2135	U	C4'-C3'	5.36	1.59	1.53
33	L1	2219	A	O3'-P	-5.36	1.54	1.61
33	L1	2688	G	C3'-C2'	5.36	1.58	1.52
35	L2	42	U	C3'-O3'	5.36	1.49	1.42
33	L1	975	G	C3'-C2'	-5.35	1.46	1.52
7	SI	76	ARG	NE-CZ	5.35	1.40	1.33
33	L1	1565	G	P-O5'	-5.35	1.54	1.59
33	L1	1742	G	C4'-O4'	5.35	1.52	1.45
35	L2	76	A	C4'-C3'	-5.35	1.47	1.52
32	S1	1250	C	C3'-O3'	5.35	1.49	1.42
32	S1	1583	G	C3'-C2'	-5.35	1.46	1.52
33	L1	307	C	C5'-C4'	5.35	1.57	1.51
33	L1	364	A	C3'-O3'	5.35	1.49	1.42
33	L1	305	G	C5'-C4'	5.35	1.57	1.51
33	L1	1024	G	C4'-O4'	5.35	1.52	1.45
33	L1	1768	U	O4'-C1'	5.35	1.48	1.41
33	L1	2281	U	C2'-C1'	-5.35	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2458	A	C4'-C3'	5.35	1.59	1.53
33	L1	3034	A	O3'-P	-5.35	1.54	1.61
11	SM	95	PHE	CB-CG	5.35	1.60	1.51
32	S1	285	G	C2'-C1'	-5.35	1.47	1.53
33	L1	226	U	C2'-C1'	5.35	1.59	1.53
33	L1	462	C	C2'-C1'	-5.35	1.47	1.53
49	LX	67	LEU	N-CA	-5.35	1.35	1.46
6	SF	165	ILE	CA-CB	-5.35	1.42	1.54
16	SR	86	ARG	CZ-NH1	5.35	1.40	1.33
32	S1	1147	A	C5'-C4'	5.35	1.57	1.51
33	L1	879	A	C4'-O4'	5.35	1.52	1.45
33	L1	967	G	O4'-C1'	5.35	1.48	1.41
33	L1	1388	C	O4'-C1'	5.35	1.48	1.41
33	L1	1427	C	O3'-P	-5.35	1.54	1.61
32	S1	590	G	C4'-O4'	5.34	1.52	1.45
33	L1	1526	A	C4'-C3'	5.34	1.59	1.53
33	L1	1652	G	O4'-C1'	5.34	1.48	1.41
33	L1	1747	A	C4'-C3'	-5.34	1.47	1.52
17	SV	34	LYS	N-CA	-5.34	1.35	1.46
33	L1	1754	C	P-O5'	5.34	1.65	1.59
23	SU	7	ALA	C-N	5.34	1.44	1.34
32	S1	381	G	P-O5'	-5.34	1.54	1.59
33	L1	1016	G	C4'-C3'	5.34	1.59	1.53
33	L1	1382	C	O3'-P	-5.34	1.54	1.61
33	L1	1786	G	O3'-P	-5.34	1.54	1.61
33	L1	2348	U	C4'-O4'	5.34	1.52	1.45
33	L1	2918	U	C4'-O4'	5.34	1.52	1.45
32	S1	340	G	C2'-C1'	-5.34	1.47	1.53
32	S1	1144	A	P-O5'	5.34	1.65	1.59
33	L1	459	G	P-O5'	-5.34	1.54	1.59
32	S1	610	A	C5'-C4'	5.34	1.57	1.51
32	S1	764	U	O3'-P	-5.34	1.54	1.61
33	L1	1309	U	O3'-P	-5.34	1.54	1.61
32	S1	786	U	C5'-C4'	5.34	1.57	1.51
32	S1	797	A	C5'-C4'	-5.34	1.45	1.51
32	S1	912	A	O3'-P	-5.34	1.54	1.61
33	L1	670	A	O4'-C1'	5.34	1.48	1.41
33	L1	1275	A	C3'-C2'	-5.34	1.46	1.52
33	L1	1772	G	C4'-O4'	5.34	1.52	1.45
33	L1	2167	G	C2'-C1'	5.34	1.59	1.53
59	Lo	41	ARG	CD-NE	5.34	1.55	1.46
33	L1	268	U	C5'-C4'	5.33	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	421	A	O4'-C1'	5.33	1.48	1.41
33	L1	606	C	P-O5'	-5.33	1.54	1.59
32	S1	1045	G	C3'-C2'	-5.33	1.46	1.52
33	L1	840	A	O3'-P	-5.33	1.54	1.61
33	L1	1435	C	O4'-C1'	-5.33	1.34	1.41
33	L1	2216	G	P-O5'	-5.33	1.54	1.59
33	L1	3034	A	P-O5'	-5.33	1.54	1.59
33	L1	3355	U	C2'-C1'	5.33	1.59	1.53
42	LP	45	PRO	CA-C	-5.33	1.42	1.52
25	SC	42	ARG	CZ-NH1	5.33	1.40	1.33
32	S1	33	U	P-O5'	5.33	1.65	1.59
33	L1	1852	C	C5'-C4'	5.33	1.57	1.51
33	L1	2220	U	C5'-C4'	5.33	1.57	1.51
33	L1	2908	C	C4'-O4'	-5.33	1.38	1.45
32	S1	991	G	C5'-C4'	5.33	1.57	1.51
33	L1	887	A	C4'-C3'	5.33	1.59	1.53
33	L1	1192	A	C5'-C4'	5.33	1.57	1.51
33	L1	2339	U	C3'-O3'	5.33	1.49	1.42
33	L1	2909	A	C3'-O3'	5.33	1.49	1.42
32	S1	337	A	O4'-C1'	5.33	1.48	1.41
33	L1	211	A	C2'-C1'	-5.33	1.47	1.53
33	L1	1409	G	C5'-C4'	5.33	1.57	1.51
32	S1	220	C	C2'-C1'	-5.33	1.47	1.53
32	S1	486	U	C2'-C1'	-5.33	1.47	1.53
32	S1	1201	C	C5'-C4'	5.33	1.57	1.51
32	S1	1574	U	C3'-C2'	-5.33	1.46	1.52
33	L1	554	C	O3'-P	-5.33	1.54	1.61
33	L1	2821	U	C5'-C4'	5.33	1.57	1.51
46	LT	137	VAL	N-CA	5.33	1.57	1.46
33	L1	184	C	O3'-P	-5.32	1.54	1.61
33	L1	1290	A	C3'-C2'	5.32	1.58	1.52
33	L1	1900	C	C3'-O3'	5.32	1.49	1.42
33	L1	2570	U	O4'-C1'	5.32	1.48	1.41
33	L1	3224	C	O3'-P	-5.32	1.54	1.61
33	L1	2401	A	O4'-C1'	5.32	1.48	1.41
66	LN	85	GLU	CA-CB	5.32	1.65	1.53
25	SC	126	HIS	CA-CB	5.32	1.65	1.53
31	S2	72	G	C5'-C4'	5.32	1.57	1.51
32	S1	352	U	P-O5'	-5.32	1.54	1.59
32	S1	725	U	O5'-C5'	-5.32	1.34	1.42
33	L1	1621	G	C5'-C4'	5.32	1.57	1.51
33	L1	2680	G	O4'-C1'	5.32	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3209	U	O4'-C1'	5.32	1.48	1.41
35	L2	94	C	C5'-C4'	5.32	1.57	1.51
33	L1	1533	U	O3'-P	-5.32	1.54	1.61
33	L1	3000	U	O4'-C1'	5.32	1.48	1.41
1	Sa	46	ARG	CZ-NH1	5.32	1.40	1.33
33	L1	1264	A	C5'-C4'	5.32	1.57	1.51
33	L1	2064	C	C2'-C1'	-5.32	1.47	1.53
33	L1	2275	A	C2'-C1'	5.32	1.59	1.53
33	L1	3249	G	C2'-C1'	-5.32	1.47	1.53
33	L1	260	U	O4'-C1'	5.32	1.48	1.41
33	L1	1285	U	C5'-C4'	5.32	1.57	1.51
33	L1	1362	C	C3'-O3'	5.32	1.49	1.42
32	S1	1309	U	O4'-C1'	5.31	1.48	1.41
32	S1	1710	C	C5'-C4'	5.31	1.57	1.51
33	L1	273	U	O4'-C1'	5.31	1.48	1.41
33	L1	1388	C	C5'-C4'	5.31	1.57	1.51
33	L1	2428	G	O3'-P	-5.31	1.54	1.61
34	L3	1	G	C5'-C4'	5.31	1.57	1.51
32	S1	1005	C	C3'-C2'	5.31	1.58	1.52
32	S1	1017	U	C2'-C1'	-5.31	1.47	1.53
32	S1	1427	A	P-O5'	5.31	1.65	1.59
33	L1	1429	U	C2'-C1'	5.31	1.59	1.53
33	L1	2470	C	O3'-P	-5.31	1.54	1.61
33	L1	2496	U	P-O5'	-5.31	1.54	1.59
34	L3	1	G	C4'-O4'	5.31	1.52	1.45
1	Sa	192	ARG	CZ-NH2	5.31	1.40	1.33
5	SE	56	GLU	CA-CB	5.31	1.65	1.53
33	L1	2618	G	C3'-O3'	5.31	1.49	1.42
33	L1	1824	C	P-O5'	-5.31	1.54	1.59
33	L1	2519	U	C5'-C4'	5.31	1.57	1.51
33	L1	3307	A	C5'-C4'	5.31	1.57	1.51
11	SM	132	ARG	CG-CD	5.31	1.65	1.51
32	S1	1358	G	O3'-P	-5.31	1.54	1.61
33	L1	1190	C	C2'-O2'	-5.31	1.34	1.41
33	L1	3211	C	C2'-O2'	-5.31	1.34	1.41
32	S1	1014	U	O4'-C1'	5.31	1.48	1.41
32	S1	1428	A	O4'-C1'	5.31	1.48	1.41
33	L1	3320	G	C2'-O2'	5.31	1.48	1.41
39	LF	184	GLY	N-CA	5.31	1.54	1.46
31	S2	24	A	P-O5'	-5.30	1.54	1.59
32	S1	628	G	C3'-C2'	5.30	1.58	1.52
33	L1	1254	A	C3'-O3'	5.30	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2215	A	C3'-O3'	5.30	1.49	1.42
33	L1	2474	A	C4'-C3'	5.30	1.58	1.53
33	L1	2739	A	C3'-O3'	5.30	1.49	1.42
33	L1	2832	G	C5'-C4'	5.30	1.57	1.51
32	S1	724	U	O3'-P	-5.30	1.54	1.61
32	S1	1504	U	P-O5'	-5.30	1.54	1.59
33	L1	2516	U	C3'-C2'	5.30	1.58	1.52
32	S1	1515	G	C2'-C1'	-5.30	1.47	1.53
32	S1	1737	A	O3'-P	-5.30	1.54	1.61
33	L1	135	G	C3'-C2'	-5.30	1.47	1.52
33	L1	1418	C	C2'-C1'	-5.30	1.47	1.53
9	SK	43	VAL	CB-CG2	5.30	1.64	1.52
32	S1	917	U	O3'-P	-5.30	1.54	1.61
33	L1	61	A	O3'-P	-5.30	1.54	1.61
45	LQ	240	TYR	CZ-OH	5.30	1.46	1.37
48	LV	47	TYR	CZ-OH	5.30	1.46	1.37
32	S1	1014	U	C2'-C1'	-5.30	1.47	1.53
33	L1	176	A	O3'-P	-5.30	1.54	1.61
33	L1	468	U	O4'-C1'	-5.30	1.34	1.41
33	L1	1022	G	C4'-O4'	5.30	1.52	1.45
33	L1	1645	G	C4'-O4'	5.30	1.52	1.45
33	L1	2093	G	C4'-O4'	-5.30	1.38	1.45
52	Lb	96	PHE	CB-CG	5.30	1.60	1.51
32	S1	1440	U	P-O5'	-5.29	1.54	1.59
32	S1	1771	U	C2'-C1'	5.29	1.59	1.53
33	L1	2748	G	C3'-C2'	5.29	1.58	1.52
33	L1	2779	G	C3'-O3'	5.29	1.49	1.42
71	Lj	99	GLY	CA-C	-5.29	1.43	1.51
5	SE	259	PRO	N-CD	-5.29	1.40	1.47
31	S2	46	A	C4'-O4'	5.29	1.52	1.45
32	S1	64	U	O4'-C1'	5.29	1.48	1.41
32	S1	736	U	P-O5'	5.29	1.65	1.59
33	L1	1273	U	C5'-C4'	5.29	1.57	1.51
33	L1	1778	C	O3'-P	-5.29	1.54	1.61
33	L1	1970	A	O4'-C1'	5.29	1.48	1.41
33	L1	2698	A	O4'-C1'	5.29	1.48	1.41
33	L1	2822	A	C3'-O3'	5.29	1.49	1.42
32	S1	353	G	P-O5'	-5.29	1.54	1.59
32	S1	404	A	P-O5'	-5.29	1.54	1.59
32	S1	892	A	O4'-C1'	-5.29	1.34	1.41
32	S1	1719	C	C2'-C1'	-5.29	1.47	1.53
33	L1	301	G	C3'-O3'	5.29	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3042	U	C5'-C4'	5.29	1.57	1.51
33	L1	3214	U	P-O5'	5.29	1.65	1.59
33	L1	407	A	C2'-C1'	5.29	1.59	1.53
33	L1	466	U	C4'-O4'	-5.29	1.38	1.45
33	L1	1960	C	C2'-C1'	-5.29	1.47	1.53
33	L1	3300	C	O3'-P	-5.29	1.54	1.61
32	S1	581	G	C2'-C1'	5.29	1.59	1.53
32	S1	587	C	C5'-C4'	5.29	1.57	1.51
32	S1	766	A	P-O5'	-5.29	1.54	1.59
33	L1	3058	U	C5'-C4'	5.29	1.57	1.51
35	L2	148	C	C5'-C4'	5.29	1.57	1.51
67	LS	70	ASN	N-CA	-5.29	1.35	1.46
3	SB	131	ALA	C-N	-5.29	1.21	1.34
33	L1	1255	A	C4'-C3'	-5.29	1.47	1.52
33	L1	2575	C	C2'-C1'	5.29	1.59	1.53
32	S1	1379	U	C5'-C4'	5.28	1.57	1.51
33	L1	1069	U	P-O5'	-5.28	1.54	1.59
33	L1	1911	A	O3'-P	-5.28	1.54	1.61
33	L1	3087	A	C4'-C3'	5.28	1.58	1.53
1	Sa	348	SER	CA-CB	5.28	1.60	1.52
32	S1	1636	U	O4'-C1'	5.28	1.48	1.41
38	LE	107	GLY	N-CA	5.28	1.53	1.46
32	S1	676	G	C2'-C1'	-5.28	1.47	1.53
32	S1	1230	A	C4'-C3'	-5.28	1.47	1.52
32	S1	1234	A	C5'-C4'	5.28	1.57	1.51
33	L1	3146	C	O5'-C5'	5.28	1.52	1.44
39	LF	88	ARG	CZ-NH1	5.28	1.40	1.33
32	S1	380	C	O3'-P	5.28	1.67	1.61
32	S1	1499	U	C5'-C4'	5.28	1.57	1.51
33	L1	3091	U	C4'-C3'	5.28	1.58	1.53
64	LG	59	ARG	CD-NE	5.28	1.55	1.46
80	LC	16	PHE	CG-CD1	5.28	1.46	1.38
15	SS	93	PRO	CA-CB	5.28	1.64	1.53
32	S1	499	A	C2'-C1'	-5.28	1.47	1.53
32	S1	1474	U	O3'-P	-5.28	1.54	1.61
33	L1	1368	U	C5'-C4'	5.28	1.57	1.51
33	L1	1944	G	C2'-C1'	-5.28	1.47	1.53
35	L2	149	U	O3'-P	-5.28	1.54	1.61
4	SD	212	ASP	C-N	-5.27	1.22	1.34
33	L1	1045	U	O3'-P	-5.27	1.54	1.61
33	L1	1665	G	P-O5'	-5.27	1.54	1.59
33	L1	1806	C	C2'-O2'	-5.27	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	2337	C	O3'-P	-5.27	1.54	1.61
41	LM	33	GLY	N-CA	-5.27	1.38	1.46
74	LJ	91	ARG	CD-NE	5.27	1.55	1.46
80	LC	8	HIS	CG-CD2	5.27	1.44	1.35
32	S1	995	C	C4'-O4'	-5.27	1.38	1.45
33	L1	968	A	C4'-C3'	-5.27	1.47	1.52
33	L1	1278	A	C5'-C4'	5.27	1.57	1.51
33	L1	1340	G	C3'-O3'	5.27	1.49	1.42
33	L1	2204	U	C4'-O4'	5.27	1.52	1.45
33	L1	2584	U	O4'-C1'	5.27	1.48	1.41
48	LV	30	ARG	CD-NE	5.27	1.55	1.46
32	S1	1526	C	P-O5'	-5.27	1.54	1.59
33	L1	533	G	C3'-C2'	5.27	1.58	1.52
33	L1	968	A	O3'-P	-5.27	1.54	1.61
33	L1	1312	A	O3'-P	-5.27	1.54	1.61
33	L1	1382	C	C2'-O2'	-5.27	1.34	1.41
33	L1	1791	U	P-O5'	-5.27	1.54	1.59
37	LB	9	ARG	CD-NE	5.27	1.55	1.46
38	LE	63	ARG	CD-NE	5.27	1.55	1.46
42	LP	160	GLU	CG-CD	5.27	1.59	1.51
78	Le	65	VAL	CB-CG1	5.27	1.64	1.52
80	LC	59	GLU	CD-OE2	5.27	1.31	1.25
8	SJ	71	HIS	CB-CG	5.27	1.59	1.50
13	SQ	63	ARG	C-N	5.27	1.42	1.33
33	L1	9	C	C3'-O3'	5.27	1.49	1.42
33	L1	1028	G	O4'-C1'	-5.27	1.34	1.41
55	Lg	6	ARG	NE-CZ	5.27	1.39	1.33
32	S1	1720	G	O4'-C1'	5.27	1.48	1.41
32	S1	1675	G	C4'-C3'	5.26	1.58	1.53
33	L1	255	C	C5'-C4'	-5.26	1.45	1.51
33	L1	2699	A	P-O5'	5.26	1.65	1.59
37	LB	64	ARG	CD-NE	5.26	1.55	1.46
32	S1	358	C	P-O5'	-5.26	1.54	1.59
33	L1	982	U	C4'-C3'	5.26	1.58	1.53
33	L1	1651	A	C5'-C4'	5.26	1.57	1.51
33	L1	1714	A	C3'-C2'	-5.26	1.47	1.52
1	Sa	323	TYR	CG-CD1	5.26	1.46	1.39
32	S1	770	U	P-O5'	-5.26	1.54	1.59
32	S1	952	U	C3'-O3'	5.26	1.49	1.42
4	SD	240	LYS	CA-CB	-5.26	1.42	1.53
33	L1	1820	C	O4'-C1'	-5.26	1.34	1.41
33	L1	2490	U	C5'-C4'	5.26	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3177	A	C3'-C2'	5.26	1.58	1.52
13	SQ	63	ARG	NE-CZ	5.26	1.39	1.33
32	S1	1344	U	C2'-C1'	5.26	1.59	1.53
32	S1	99	U	O4'-C1'	5.26	1.48	1.41
32	S1	1611	U	C5'-C4'	-5.26	1.45	1.51
32	S1	1661	C	C3'-C2'	-5.26	1.47	1.52
35	L2	89	G	C3'-O3'	5.26	1.49	1.42
50	LZ	10	PHE	CG-CD2	5.26	1.46	1.38
51	LY	73	TYR	CE2-CZ	5.26	1.45	1.38
72	Lk	62	GLU	CA-CB	5.26	1.65	1.53
52	Lb	112	TYR	CD1-CE1	-5.25	1.31	1.39
32	S1	87	A	O4'-C1'	5.25	1.48	1.41
33	L1	1637	G	C5'-C4'	5.25	1.57	1.51
33	L1	3089	G	C2'-C1'	-5.25	1.47	1.53
33	L1	3145	G	C5'-C4'	5.25	1.57	1.51
33	L1	1313	U	P-O5'	5.25	1.65	1.59
33	L1	1468	A	P-O5'	-5.25	1.54	1.59
32	S1	482	A	P-O5'	-5.25	1.54	1.59
32	S1	1118	A	O3'-P	-5.25	1.54	1.61
32	S1	1380	A	C4'-C3'	-5.25	1.47	1.52
32	S1	1507	G	C2'-C1'	-5.25	1.47	1.53
33	L1	411	C	C4'-C3'	-5.25	1.47	1.52
33	L1	774	A	O4'-C1'	5.25	1.48	1.41
33	L1	1158	C	O4'-C1'	5.25	1.48	1.41
33	L1	1350	G	C3'-O3'	5.25	1.49	1.42
35	L2	33	U	C3'-C2'	5.25	1.58	1.52
35	L2	104	U	C4'-O4'	5.25	1.52	1.45
37	LB	247	ARG	NE-CZ	5.25	1.39	1.33
31	S2	54	U	C3'-O3'	5.25	1.49	1.42
32	S1	225	G	C2'-C1'	-5.25	1.47	1.53
33	L1	1195	C	C3'-O3'	5.25	1.49	1.42
33	L1	1374	G	P-O5'	-5.25	1.54	1.59
33	L1	2678	C	O5'-C5'	5.25	1.52	1.44
33	L1	2737	A	P-O5'	5.25	1.65	1.59
33	L1	2830	G	C3'-C2'	5.25	1.58	1.52
33	L1	2905	A	C4'-C3'	-5.25	1.47	1.52
78	Le	62	LYS	CA-CB	5.25	1.65	1.53
81	LD	204	ARG	CD-NE	5.25	1.55	1.46
32	S1	347	C	C2'-C1'	-5.24	1.47	1.53
32	S1	1146	G	C3'-O3'	5.24	1.49	1.42
33	L1	1506	A	C3'-O3'	5.24	1.49	1.42
33	L1	2479	C	O3'-P	-5.24	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1137	G	C2'-C1'	5.24	1.59	1.53
33	L1	1295	A	C3'-O3'	5.24	1.49	1.42
33	L1	2643	A	C4'-C3'	-5.24	1.47	1.52
64	LG	186	ALA	N-CA	5.24	1.56	1.46
32	S1	824	U	O3'-P	-5.24	1.54	1.61
34	L3	97	G	O4'-C1'	5.24	1.48	1.41
35	L2	26	U	C2'-O2'	5.24	1.48	1.41
7	SI	74	ARG	NE-CZ	5.24	1.39	1.33
33	L1	844	A	C2'-O2'	-5.24	1.34	1.41
33	L1	1474	U	O3'-P	-5.24	1.54	1.61
33	L1	3002	U	O3'-P	-5.24	1.54	1.61
33	L1	3201	A	C2'-C1'	5.24	1.59	1.53
32	S1	948	C	C4'-C3'	5.23	1.58	1.53
32	S1	1591	A	C2'-C1'	5.23	1.59	1.53
33	L1	562	G	O3'-P	5.23	1.67	1.61
33	L1	1671	G	P-O5'	5.23	1.65	1.59
33	L1	3184	G	C3'-O3'	5.23	1.49	1.42
82	LK	49	SER	CA-CB	5.23	1.60	1.52
33	L1	994	U	O4'-C1'	5.23	1.48	1.41
33	L1	1244	A	C5'-C4'	5.23	1.57	1.51
33	L1	2996	A	C2'-C1'	-5.23	1.47	1.53
31	S2	28	G	C2'-C1'	-5.23	1.47	1.53
32	S1	31	C	C4'-C3'	5.23	1.58	1.53
32	S1	1216	G	O4'-C1'	5.23	1.48	1.41
33	L1	852	C	C3'-O3'	5.23	1.49	1.42
33	L1	1890	C	C3'-C2'	-5.23	1.47	1.52
35	L2	103	C	O3'-P	5.23	1.67	1.61
57	Ll	79	ARG	NE-CZ	5.23	1.39	1.33
80	LC	229	TYR	CZ-OH	5.23	1.46	1.37
19	SY	47	ARG	CZ-NH1	5.23	1.39	1.33
32	S1	664	G	C2'-C1'	-5.23	1.47	1.53
32	S1	1083	C	P-O5'	-5.23	1.54	1.59
33	L1	953	G	O3'-P	-5.23	1.54	1.61
33	L1	1280	U	P-O5'	5.23	1.65	1.59
8	SJ	28	ARG	CZ-NH2	5.22	1.39	1.33
32	S1	409	C	C4'-C3'	5.22	1.58	1.53
33	L1	130	G	C4'-C3'	5.22	1.58	1.53
33	L1	1819	A	C3'-O3'	5.22	1.49	1.42
52	Lb	97	ARG	CD-NE	5.22	1.55	1.46
31	S2	37	G	O4'-C1'	5.22	1.48	1.41
32	S1	170	C	O3'-P	-5.22	1.54	1.61
32	S1	1253	U	P-O5'	5.22	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1540	G	O3'-P	-5.22	1.54	1.61
33	L1	2239	A	C2'-C1'	-5.22	1.47	1.53
13	SQ	97	ARG	NE-CZ	5.22	1.39	1.33
32	S1	1182	C	O4'-C1'	5.22	1.48	1.41
33	L1	867	G	C5'-C4'	5.22	1.57	1.51
33	L1	2182	G	O3'-P	-5.22	1.54	1.61
32	S1	502	G	O4'-C1'	-5.22	1.34	1.41
33	L1	375	G	O4'-C1'	-5.22	1.34	1.41
33	L1	1275	A	O5'-C5'	5.22	1.52	1.44
33	L1	1701	G	C2'-C1'	5.22	1.59	1.53
33	L1	2319	A	C5'-C4'	5.22	1.57	1.51
33	L1	2616	U	C2'-C1'	-5.22	1.47	1.53
33	L1	2950	C	C2'-C1'	-5.22	1.47	1.53
15	SS	15	HIS	CB-CG	5.22	1.59	1.50
32	S1	369	G	O4'-C1'	5.22	1.48	1.41
32	S1	1362	A	C2'-C1'	-5.22	1.47	1.53
32	S1	1435	G	C2'-C1'	-5.22	1.47	1.53
33	L1	967	G	C5'-C4'	5.22	1.57	1.51
33	L1	1119	G	C4'-O4'	5.22	1.52	1.45
33	L1	2193	A	C2'-C1'	5.22	1.59	1.53
48	LV	69	ARG	C-O	-5.22	1.13	1.23
32	S1	1555	A	C2'-C1'	-5.21	1.47	1.53
32	S1	1606	U	O3'-P	-5.21	1.54	1.61
33	L1	107	C	O4'-C1'	5.21	1.48	1.41
33	L1	523	C	C2'-C1'	5.21	1.59	1.53
33	L1	1339	C	O3'-P	-5.21	1.54	1.61
33	L1	1734	G	O4'-C1'	5.21	1.48	1.41
33	L1	2843	G	C5'-C4'	5.21	1.57	1.51
77	Lc	12	TRP	CZ2-CH2	5.21	1.47	1.37
32	S1	1069	G	O3'-P	-5.21	1.54	1.61
33	L1	756	C	C2'-C1'	-5.21	1.47	1.53
32	S1	964	U	O3'-P	-5.21	1.54	1.61
32	S1	1282	G	C5'-C4'	5.21	1.57	1.51
33	L1	333	G	C4'-O4'	5.21	1.52	1.45
33	L1	918	A	C5'-C4'	5.21	1.57	1.51
33	L1	1323	G	C4'-C3'	-5.21	1.47	1.52
33	L1	2212	U	C4'-C3'	5.21	1.58	1.53
33	L1	366	G	C5'-C4'	5.21	1.57	1.51
35	L2	68	U	C3'-O3'	5.21	1.49	1.42
42	LP	41	ARG	NE-CZ	5.21	1.39	1.33
31	S2	45	G	P-O5'	5.21	1.65	1.59
32	S1	965	U	O4'-C1'	5.21	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1570	G	C2'-C1'	-5.21	1.47	1.53
33	L1	950	U	O4'-C1'	5.21	1.48	1.41
33	L1	1245	U	C3'-C2'	-5.21	1.47	1.52
33	L1	1447	G	O3'-P	-5.21	1.54	1.61
33	L1	1599	A	P-OP1	-5.21	1.40	1.49
33	L1	2098	A	C2'-C1'	-5.21	1.47	1.53
33	L1	2697	A	C2'-C1'	-5.21	1.47	1.53
33	L1	2968	G	O4'-C1'	5.21	1.48	1.41
32	S1	378	U	C5'-C4'	5.21	1.57	1.51
32	S1	539	A	C3'-O3'	5.21	1.49	1.42
32	S1	852	A	C2'-C1'	-5.21	1.47	1.53
33	L1	2086	A	O3'-P	-5.21	1.54	1.61
33	L1	2778	C	C2'-C1'	-5.21	1.47	1.53
34	L3	102	G	C2'-C1'	5.21	1.59	1.53
35	L2	150	G	C2'-C1'	5.21	1.59	1.53
45	LQ	131	TYR	CZ-OH	5.21	1.46	1.37
48	LV	63	TYR	CZ-OH	5.21	1.46	1.37
33	L1	312	U	C5'-C4'	5.21	1.57	1.51
3	SB	33	GLY	CA-C	-5.20	1.43	1.51
32	S1	502	G	O3'-P	-5.20	1.54	1.61
33	L1	98	A	C3'-C2'	5.20	1.58	1.52
33	L1	1688	U	O4'-C1'	5.20	1.48	1.41
35	L2	64	U	C2'-O2'	5.20	1.48	1.41
5	SE	35	ARG	CZ-NH2	5.20	1.39	1.33
24	SX	74	ARG	CA-CB	5.20	1.65	1.53
27	SH	18	GLU	CA-CB	5.20	1.65	1.53
32	S1	1604	C	O4'-C1'	5.20	1.48	1.41
24	SX	64	VAL	N-CA	-5.20	1.35	1.46
30	S3	15	A	O3'-P	5.20	1.67	1.61
31	S2	25	U	C2'-C1'	-5.20	1.47	1.53
32	S1	1026	C	C2'-C1'	-5.20	1.47	1.53
32	S1	1035	A	C2'-C1'	5.20	1.59	1.53
32	S1	1634	U	O4'-C1'	5.20	1.48	1.41
33	L1	35	U	P-O5'	-5.20	1.54	1.59
33	L1	137	C	O3'-P	-5.20	1.54	1.61
33	L1	2671	A	C3'-O3'	5.20	1.49	1.42
51	LY	12	ARG	NE-CZ	5.20	1.39	1.33
32	S1	1580	G	C2'-C1'	5.20	1.59	1.53
32	S1	1809	U	O3'-P	-5.20	1.54	1.61
33	L1	737	C	C2'-C1'	-5.20	1.47	1.53
33	L1	784	G	O4'-C1'	-5.20	1.34	1.41
33	L1	1045	U	C4'-O4'	-5.20	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1385	C	O4'-C1'	5.20	1.48	1.41
33	L1	1434	G	O4'-C1'	5.20	1.48	1.41
33	L1	2827	C	C2'-C1'	-5.20	1.47	1.53
33	L1	3327	A	O3'-P	-5.20	1.54	1.61
33	L1	3372	C	O3'-P	-5.20	1.54	1.61
28	SN	40	ARG	CZ-NH1	5.20	1.39	1.33
31	S2	31	C	O4'-C1'	5.20	1.48	1.41
32	S1	1335	A	O4'-C1'	5.20	1.48	1.41
33	L1	356	G	C2'-C1'	5.20	1.59	1.53
33	L1	1176	U	O3'-P	-5.20	1.54	1.61
33	L1	1511	C	C4'-O4'	5.20	1.52	1.45
33	L1	1896	A	C2'-C1'	-5.20	1.47	1.53
38	LE	59	PHE	CG-CD1	5.20	1.46	1.38
38	LE	118	TYR	CZ-OH	5.20	1.46	1.37
32	S1	656	G	C2'-C1'	-5.19	1.47	1.53
32	S1	1134	U	O4'-C1'	-5.19	1.34	1.41
33	L1	837	C	C2'-C1'	-5.19	1.47	1.53
33	L1	2300	G	P-O5'	-5.19	1.54	1.59
35	L2	24	U	C3'-O3'	5.19	1.49	1.42
38	LE	130	PHE	CE1-CZ	5.19	1.47	1.37
32	S1	151	A	O4'-C1'	5.19	1.48	1.41
32	S1	1745	U	C2'-C1'	5.19	1.59	1.53
33	L1	90	G	O4'-C1'	5.19	1.48	1.41
33	L1	838	G	C3'-O3'	5.19	1.49	1.42
33	L1	1296	C	C2'-O2'	5.19	1.48	1.41
33	L1	1384	G	C2'-C1'	-5.19	1.47	1.53
33	L1	2467	A	C2'-C1'	5.19	1.59	1.53
33	L1	3125	G	C3'-C2'	-5.19	1.47	1.52
33	L1	3306	A	C3'-C2'	5.19	1.58	1.52
33	L1	1394	C	C3'-C2'	5.19	1.58	1.52
33	L1	1622	G	C4'-O4'	5.19	1.52	1.45
32	S1	492	G	C2'-C1'	-5.19	1.47	1.53
33	L1	505	G	C2'-C1'	-5.19	1.47	1.53
33	L1	608	G	C4'-C3'	-5.19	1.47	1.52
33	L1	881	G	O3'-P	-5.19	1.54	1.61
33	L1	918	A	C2'-C1'	-5.19	1.47	1.53
33	L1	1550	A	C3'-C2'	5.19	1.58	1.52
33	L1	2773	G	C5'-C4'	-5.19	1.45	1.51
33	L1	2569	G	P-O5'	-5.18	1.54	1.59
1	Sa	346	ARG	CZ-NH1	5.18	1.39	1.33
33	L1	167	C	C4'-O4'	-5.18	1.38	1.45
33	L1	289	C	O4'-C1'	5.18	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1261	C	O4'-C1'	5.18	1.48	1.41
33	L1	2482	A	C4'-O4'	5.18	1.52	1.45
33	L1	2875	U	C3'-O3'	5.18	1.49	1.42
33	L1	3172	G	O3'-P	-5.18	1.54	1.61
33	L1	2668	U	O3'-P	-5.18	1.54	1.61
80	LC	49	TYR	CE2-CZ	5.18	1.45	1.38
32	S1	272	G	O4'-C1'	5.18	1.48	1.41
32	S1	880	G	C3'-C2'	5.18	1.58	1.52
33	L1	265	G	C2'-C1'	5.18	1.59	1.53
33	L1	304	A	C4'-C3'	5.18	1.58	1.53
33	L1	1365	C	C5'-C4'	5.18	1.57	1.51
48	LV	25	HIS	N-CA	-5.18	1.35	1.46
81	LD	23	SER	C-O	-5.18	1.13	1.23
33	L1	926	C	C2'-O2'	5.18	1.48	1.41
33	L1	1563	G	C4'-O4'	5.18	1.52	1.45
33	L1	2475	C	P-O5'	-5.18	1.54	1.59
16	SR	127	GLU	CG-CD	5.18	1.59	1.51
32	S1	377	G	P-O5'	-5.18	1.54	1.59
32	S1	1065	A	C3'-C2'	5.18	1.58	1.52
33	L1	219	A	C2'-C1'	-5.18	1.47	1.53
33	L1	253	G	C3'-O3'	5.18	1.49	1.42
33	L1	284	U	C3'-O3'	5.18	1.49	1.42
33	L1	2736	A	C5'-C4'	5.18	1.57	1.51
33	L1	2745	C	P-OP1	-5.18	1.40	1.49
23	SU	81	ILE	N-CA	5.17	1.56	1.46
25	SC	110	ARG	NE-CZ	5.17	1.39	1.33
32	S1	377	G	C5'-C4'	5.17	1.57	1.51
32	S1	800	U	C3'-O3'	5.17	1.49	1.42
32	S1	1201	C	C3'-O3'	5.17	1.49	1.42
32	S1	1431	A	C2'-C1'	-5.17	1.47	1.53
33	L1	220	G	O3'-P	-5.17	1.54	1.61
33	L1	809	A	C4'-O4'	5.17	1.52	1.45
56	Lh	46	LYS	CA-CB	5.17	1.65	1.53
8	SJ	92	ARG	CZ-NH2	5.17	1.39	1.33
32	S1	1479	U	P-O5'	-5.17	1.54	1.59
35	L2	110	C	C3'-C2'	5.17	1.58	1.52
5	SE	179	VAL	C-N	5.17	1.44	1.34
33	L1	863	G	C2'-O2'	-5.17	1.34	1.41
33	L1	2937	U	C2'-C1'	-5.17	1.47	1.53
33	L1	3304	U	C5'-C4'	5.17	1.57	1.51
80	LC	292	GLY	C-O	-5.17	1.15	1.23
32	S1	883	G	O4'-C1'	5.17	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1650	G	C5'-C4'	5.17	1.57	1.51
33	L1	1285	U	C2'-C1'	-5.17	1.47	1.53
33	L1	1788	C	C3'-C2'	5.17	1.58	1.52
33	L1	2275	A	O4'-C1'	-5.17	1.34	1.41
33	L1	2357	A	C4'-C3'	5.17	1.58	1.53
33	L1	3233	C	C4'-C3'	-5.17	1.47	1.52
32	S1	802	A	O3'-P	-5.17	1.54	1.61
33	L1	1421	A	C4'-O4'	5.17	1.52	1.45
33	L1	1575	G	C3'-O3'	5.17	1.49	1.42
33	L1	1599	A	P-O5'	-5.17	1.54	1.59
36	LA	159	LYS	CE-NZ	5.17	1.61	1.49
44	LR	34	ARG	CD-NE	5.17	1.55	1.46
32	S1	947	G	C4'-C3'	5.17	1.58	1.53
33	L1	610	G	C3'-C2'	5.17	1.58	1.52
33	L1	1497	U	C4'-O4'	5.17	1.52	1.45
32	S1	1760	A	C4'-O4'	5.16	1.52	1.45
33	L1	30	C	C5'-C4'	5.16	1.57	1.51
33	L1	1115	A	C5'-C4'	5.16	1.57	1.51
33	L1	2089	A	O3'-P	-5.16	1.54	1.61
33	L1	2388	C	C4'-O4'	5.16	1.52	1.45
33	L1	2970	G	O3'-P	-5.16	1.54	1.61
71	Lj	94	PRO	N-CD	5.16	1.55	1.47
10	SL	6	GLY	N-CA	5.16	1.53	1.46
33	L1	784	G	O3'-P	-5.16	1.54	1.61
33	L1	2625	C	O4'-C1'	5.16	1.48	1.41
15	SS	104	ARG	CZ-NH1	5.16	1.39	1.33
32	S1	457	C	C2'-C1'	5.16	1.59	1.53
33	L1	3202	G	O4'-C1'	-5.16	1.34	1.41
15	SS	131	ARG	CD-NE	5.16	1.55	1.46
31	S2	61	C	C3'-O3'	5.16	1.49	1.42
32	S1	557	G	C3'-O3'	5.16	1.49	1.42
32	S1	855	G	C4'-O4'	5.16	1.52	1.45
32	S1	1482	U	O3'-P	-5.16	1.54	1.61
33	L1	84	A	C3'-O3'	-5.16	1.34	1.42
33	L1	1227	A	C4'-C3'	-5.16	1.47	1.52
33	L1	1320	G	P-O5'	-5.16	1.54	1.59
35	L2	145	C	O4'-C1'	5.16	1.48	1.41
42	LP	68	ARG	CD-NE	5.16	1.55	1.46
33	L1	2615	U	C3'-O3'	5.16	1.49	1.42
33	L1	2720	U	C4'-O4'	5.16	1.52	1.45
34	L3	29	C	C2'-C1'	-5.16	1.47	1.53
32	S1	52	U	O4'-C1'	5.16	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	108	C	C5'-C4'	5.16	1.57	1.51
32	S1	1386	U	O3'-P	-5.16	1.54	1.61
33	L1	642	C	C5'-C4'	5.16	1.57	1.51
33	L1	1246	G	C5'-C4'	5.16	1.57	1.51
33	L1	2467	A	C4'-C3'	-5.16	1.47	1.52
70	Li	107	LEU	C-N	5.16	1.46	1.34
71	Lj	5	GLN	N-CA	-5.16	1.36	1.46
33	L1	70	A	C4'-C3'	5.15	1.58	1.53
33	L1	497	G	C4'-C3'	-5.15	1.47	1.52
27	SH	110	ILE	C-N	-5.15	1.22	1.34
32	S1	470	U	O3'-P	-5.15	1.54	1.61
32	S1	573	C	C4'-O4'	5.15	1.52	1.45
33	L1	1227	A	P-O5'	-5.15	1.54	1.59
33	L1	1316	C	O3'-P	-5.15	1.54	1.61
33	L1	2392	G	P-O5'	-5.15	1.54	1.59
61	Lq	18	ARG	CZ-NH1	5.15	1.39	1.33
1	Sa	262	GLN	CA-CB	5.15	1.65	1.53
33	L1	153	U	O3'-P	-5.15	1.54	1.61
33	L1	1772	G	C3'-O3'	5.15	1.49	1.42
33	L1	3051	U	P-O5'	-5.15	1.54	1.59
38	LE	3	THR	C-N	5.15	1.45	1.34
81	LD	304	GLN	CA-CB	5.15	1.65	1.53
32	S1	93	A	C2'-C1'	5.15	1.59	1.53
32	S1	1381	G	C3'-O3'	5.15	1.49	1.42
33	L1	1207	A	C3'-O3'	5.15	1.49	1.42
1	Sa	60	ARG	CZ-NH1	5.15	1.39	1.33
33	L1	2682	A	P-O5'	-5.15	1.54	1.59
32	S1	1104	U	P-O5'	5.14	1.64	1.59
32	S1	1600	G	O4'-C1'	5.14	1.48	1.41
33	L1	951	C	C3'-O3'	5.14	1.49	1.42
33	L1	1166	C	C3'-O3'	5.14	1.49	1.42
33	L1	1958	G	C5'-C4'	5.14	1.57	1.51
33	L1	2650	A	O4'-C1'	5.14	1.48	1.41
33	L1	3124	A	C3'-O3'	5.14	1.49	1.42
46	LT	38	ARG	NE-CZ	5.14	1.39	1.33
81	LD	6	ARG	CZ-NH2	5.14	1.39	1.33
32	S1	1564	A	C4'-C3'	-5.14	1.47	1.52
33	L1	2686	U	O5'-C5'	5.14	1.52	1.44
35	L2	102	U	O5'-C5'	5.14	1.52	1.44
64	LG	108	GLY	C-N	-5.14	1.24	1.34
33	L1	2654	G	C2'-C1'	-5.14	1.47	1.53
83	Lm	8	ALA	CA-C	-5.14	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1780	U	C4'-C3'	5.14	1.58	1.53
33	L1	376	A	C5'-C4'	5.14	1.57	1.51
33	L1	2357	A	C5'-C4'	5.14	1.57	1.51
32	S1	1658	U	C2'-C1'	-5.14	1.47	1.53
33	L1	2338	C	C4'-C3'	5.14	1.58	1.53
32	S1	277	G	O4'-C1'	5.14	1.48	1.41
32	S1	1739	U	C4'-O4'	5.14	1.52	1.45
33	L1	134	U	C2'-C1'	5.14	1.58	1.53
33	L1	1466	U	O4'-C1'	-5.14	1.34	1.41
33	L1	1959	U	C5'-C4'	5.14	1.57	1.51
1	Sa	224	GLY	N-CA	-5.13	1.38	1.46
32	S1	165	U	O4'-C1'	5.13	1.48	1.41
32	S1	846	U	O4'-C1'	5.13	1.48	1.41
38	LE	111	HIS	CB-CG	-5.13	1.40	1.50
5	SE	24	ARG	CZ-NH1	5.13	1.39	1.33
33	L1	1896	A	C5'-C4'	5.13	1.57	1.51
33	L1	2742	A	C4'-O4'	5.13	1.52	1.45
40	LH	233	VAL	CB-CG2	5.13	1.63	1.52
68	LW	19	GLY	N-CA	-5.13	1.38	1.46
30	S3	12	A	O4'-C1'	-5.13	1.34	1.41
32	S1	1510	G	O4'-C1'	5.13	1.48	1.41
32	S1	1681	G	C5'-C4'	5.13	1.57	1.51
33	L1	63	G	O3'-P	-5.13	1.54	1.61
33	L1	294	A	C4'-O4'	5.13	1.52	1.45
33	L1	2421	C	C5'-C4'	5.13	1.57	1.51
33	L1	2762	U	C4'-C3'	5.13	1.58	1.53
32	S1	584	A	P-O5'	-5.13	1.54	1.59
32	S1	1128	C	C2'-C1'	-5.13	1.47	1.53
4	SD	152	PRO	C-N	5.13	1.45	1.34
32	S1	363	G	O4'-C1'	5.13	1.48	1.41
32	S1	668	C	C2'-C1'	-5.13	1.47	1.53
32	S1	990	G	O4'-C1'	5.13	1.48	1.41
32	S1	1344	U	P-O5'	-5.13	1.54	1.59
33	L1	1163	A	P-O5'	5.13	1.64	1.59
33	L1	1475	U	O3'-P	-5.13	1.54	1.61
33	L1	2619	C	C4'-C3'	5.13	1.58	1.53
35	L2	24	U	O4'-C1'	5.13	1.48	1.41
38	LE	34	ARG	CD-NE	5.13	1.55	1.46
33	L1	21	G	C5'-C4'	5.13	1.57	1.51
33	L1	143	A	C5'-C4'	5.13	1.57	1.51
33	L1	640	C	C3'-O3'	5.13	1.49	1.42
33	L1	1046	U	C2'-C1'	-5.13	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1879	A	C5'-C4'	5.13	1.57	1.51
33	L1	2769	U	C4'-C3'	-5.13	1.47	1.52
33	L1	3376	C	C4'-C3'	5.13	1.58	1.53
34	L3	52	U	O4'-C1'	5.13	1.48	1.41
15	SS	56	TYR	CZ-OH	5.12	1.46	1.37
32	S1	1132	G	O4'-C1'	-5.12	1.34	1.41
32	S1	1442	A	C3'-O3'	5.12	1.49	1.42
33	L1	1197	A	O3'-P	-5.12	1.54	1.61
33	L1	1385	C	C3'-O3'	5.12	1.49	1.42
31	S2	73	C	C4'-C3'	5.12	1.58	1.53
33	L1	1277	A	C4'-C3'	5.12	1.58	1.53
33	L1	1835	A	C2'-C1'	-5.12	1.47	1.53
33	L1	2837	C	C3'-O3'	5.12	1.49	1.42
33	L1	2852	G	C3'-O3'	5.12	1.49	1.42
35	L2	108	A	O3'-P	-5.12	1.55	1.61
38	LE	96	ARG	C-N	5.12	1.45	1.34
69	La	26	VAL	N-CA	-5.12	1.36	1.46
71	Lj	20	TYR	CE1-CZ	5.12	1.45	1.38
31	S2	37	G	O3'-P	-5.12	1.55	1.61
32	S1	872	G	C2'-C1'	-5.12	1.47	1.53
33	L1	302	G	C5'-C4'	5.12	1.57	1.51
33	L1	1078	U	C4'-O4'	5.12	1.52	1.45
33	L1	1089	G	C4'-C3'	-5.12	1.47	1.52
33	L1	1242	U	O4'-C1'	5.12	1.48	1.41
33	L1	1483	G	C2'-C1'	-5.12	1.47	1.53
33	L1	2090	G	C4'-O4'	-5.12	1.38	1.45
33	L1	2755	U	C5'-C4'	5.12	1.57	1.51
33	L1	2831	U	P-O5'	-5.12	1.54	1.59
33	L1	3308	A	O3'-P	-5.12	1.55	1.61
33	L1	3350	C	C4'-C3'	5.12	1.58	1.53
55	Lg	18	ARG	CD-NE	5.12	1.55	1.46
32	S1	984	A	O4'-C1'	5.12	1.48	1.41
33	L1	1367	A	C2'-O2'	-5.12	1.34	1.41
33	L1	2259	U	C4'-O4'	5.12	1.52	1.45
33	L1	2810	A	O4'-C1'	-5.12	1.34	1.41
9	SK	47	SER	CA-CB	5.12	1.60	1.52
32	S1	148	C	P-O5'	-5.12	1.54	1.59
33	L1	1470	A	O4'-C1'	5.12	1.48	1.41
34	L3	25	G	O3'-P	5.12	1.67	1.61
82	LK	22	GLY	N-CA	5.12	1.53	1.46
33	L1	1825	G	O3'-P	-5.12	1.55	1.61
33	L1	2591	G	C2'-C1'	-5.12	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	3235	A	C3'-O3'	5.12	1.49	1.42
33	L1	3285	U	C4'-C3'	5.12	1.58	1.53
9	SK	127	ARG	CD-NE	5.12	1.55	1.46
23	SU	77	GLY	CA-C	-5.12	1.43	1.51
32	S1	259	A	P-O5'	-5.12	1.54	1.59
32	S1	309	C	C2'-C1'	-5.12	1.47	1.53
32	S1	940	U	C3'-C2'	-5.12	1.47	1.52
33	L1	1083	C	C3'-C2'	-5.12	1.47	1.52
33	L1	2202	A	C3'-O3'	5.12	1.49	1.42
33	L1	2780	G	O4'-C1'	-5.12	1.34	1.41
35	L2	40	G	O4'-C1'	-5.12	1.34	1.41
47	LU	15	PHE	CB-CG	5.12	1.60	1.51
71	Lj	3	GLY	CA-C	-5.12	1.43	1.51
32	S1	947	G	O4'-C1'	-5.11	1.35	1.41
33	L1	369	G	C5'-C4'	5.11	1.57	1.51
57	Ll	80	GLU	CG-CD	5.11	1.59	1.51
8	SJ	6	VAL	C-N	5.11	1.45	1.34
33	L1	1614	G	O3'-P	-5.11	1.55	1.61
33	L1	2698	A	C2'-C1'	5.11	1.58	1.53
33	L1	3149	C	P-O5'	-5.11	1.54	1.59
31	S2	41	G	P-O5'	-5.11	1.54	1.59
32	S1	321	C	O3'-P	-5.11	1.55	1.61
33	L1	3227	U	C3'-C2'	5.11	1.58	1.52
81	LD	101	ARG	CD-NE	5.11	1.55	1.46
32	S1	911	A	C2'-C1'	-5.11	1.47	1.53
33	L1	1654	C	O4'-C1'	5.11	1.48	1.41
33	L1	1951	C	C5'-C4'	5.11	1.57	1.51
33	L1	2218	A	C4'-C3'	5.11	1.58	1.53
33	L1	2695	A	P-O5'	-5.11	1.54	1.59
33	L1	143	A	C4'-C3'	-5.11	1.47	1.52
33	L1	213	G	C2'-C1'	5.11	1.58	1.53
33	L1	1099	G	P-O5'	-5.11	1.54	1.59
33	L1	1473	U	P-O5'	-5.11	1.54	1.59
33	L1	2946	U	C4'-C3'	5.11	1.58	1.53
32	S1	978	A	O3'-P	-5.10	1.55	1.61
33	L1	2491	A	C3'-C2'	5.10	1.58	1.52
9	SK	143	GLY	N-CA	-5.10	1.38	1.46
32	S1	1064	U	C2'-C1'	5.10	1.58	1.53
33	L1	388	G	C5'-C4'	5.10	1.57	1.51
33	L1	1019	A	C4'-C3'	5.10	1.58	1.53
33	L1	1324	C	C2'-C1'	-5.10	1.47	1.53
33	L1	1913	C	P-O5'	-5.10	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1989	G	O4'-C1'	-5.10	1.35	1.41
33	L1	2468	G	O4'-C1'	-5.10	1.35	1.41
33	L1	2711	U	P-O5'	5.10	1.64	1.59
33	L1	2908	C	C5'-C4'	5.10	1.57	1.51
46	LT	28	GLU	CB-CG	5.10	1.61	1.52
11	SM	35	GLY	C-N	5.10	1.45	1.34
33	L1	1197	A	C4'-C3'	-5.10	1.47	1.52
33	L1	1803	G	C5'-C4'	5.10	1.57	1.51
5	SE	19	PHE	CE1-CZ	5.10	1.47	1.37
32	S1	1020	U	O4'-C1'	5.10	1.48	1.41
33	L1	283	A	C4'-O4'	5.10	1.52	1.45
33	L1	1222	U	P-O5'	-5.10	1.54	1.59
33	L1	1874	A	O4'-C1'	5.10	1.48	1.41
51	LY	46	SER	CA-CB	5.10	1.60	1.52
57	Ll	24	ARG	CZ-NH2	5.10	1.39	1.33
3	SB	166	GLU	CG-CD	5.10	1.59	1.51
32	S1	647	G	O3'-P	-5.10	1.55	1.61
33	L1	2090	G	O4'-C1'	5.10	1.48	1.41
32	S1	1378	C	C3'-C2'	5.10	1.58	1.52
33	L1	1098	U	P-O5'	5.10	1.64	1.59
33	L1	1513	C	P-O5'	-5.10	1.54	1.59
33	L1	2090	G	P-O5'	-5.10	1.54	1.59
33	L1	894	G	O4'-C1'	-5.09	1.35	1.41
33	L1	1151	G	C2'-O2'	5.09	1.48	1.41
33	L1	1999	G	C2'-C1'	-5.09	1.47	1.53
33	L1	2356	A	C4'-C3'	-5.09	1.47	1.52
33	L1	2738	U	C3'-O3'	5.09	1.49	1.42
33	L1	3065	U	C2'-C1'	-5.09	1.47	1.53
61	Lq	18	ARG	CG-CD	5.09	1.64	1.51
32	S1	494	G	C3'-C2'	5.09	1.58	1.52
32	S1	1632	C	P-O5'	-5.09	1.54	1.59
33	L1	397	A	O3'-P	-5.09	1.55	1.61
47	LU	138	GLY	C-N	5.09	1.45	1.34
33	L1	1300	C	C2'-C1'	-5.09	1.47	1.53
36	LA	7	ASP	CA-CB	5.09	1.65	1.53
14	SP	81	MET	C-N	5.09	1.45	1.34
30	S3	18	C	C2'-O2'	5.09	1.48	1.41
33	L1	680	G	O4'-C1'	5.09	1.48	1.41
33	L1	2470	C	P-O5'	5.09	1.64	1.59
33	L1	2649	C	P-O5'	-5.09	1.54	1.59
51	LY	12	ARG	CD-NE	5.09	1.55	1.46
33	L1	813	A	C3'-O3'	5.09	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1850	C	O4'-C1'	5.09	1.48	1.41
33	L1	1955	G	O3'-P	5.09	1.67	1.61
33	L1	2077	C	C4'-O4'	5.09	1.52	1.45
33	L1	2145	C	C2'-C1'	5.09	1.58	1.53
33	L1	3285	U	C3'-O3'	5.09	1.49	1.42
31	S2	72	G	C3'-C2'	5.09	1.58	1.52
32	S1	187	C	C2'-C1'	-5.09	1.47	1.53
32	S1	935	A	O4'-C1'	5.09	1.48	1.41
33	L1	2196	G	O3'-P	-5.09	1.55	1.61
33	L1	2527	G	C5'-C4'	5.09	1.57	1.51
80	LC	265	TYR	CB-CG	5.09	1.59	1.51
32	S1	918	G	C5'-C4'	5.08	1.57	1.51
32	S1	1101	C	C2'-C1'	5.08	1.58	1.53
33	L1	2500	U	O3'-P	-5.08	1.55	1.61
33	L1	2661	G	P-OP2	-5.08	1.40	1.49
35	L2	103	C	C4'-C3'	5.08	1.58	1.53
31	S2	21	A	C5'-C4'	5.08	1.57	1.51
32	S1	1016	C	C4'-O4'	-5.08	1.39	1.45
32	S1	1507	G	P-O5'	-5.08	1.54	1.59
33	L1	805	C	O5'-C5'	5.08	1.52	1.44
33	L1	926	C	C4'-C3'	5.08	1.58	1.53
33	L1	1561	U	C4'-C3'	5.08	1.58	1.53
33	L1	2901	C	C4'-C3'	5.08	1.58	1.53
33	L1	3137	G	C2'-C1'	5.08	1.58	1.53
70	Li	64	ARG	NE-CZ	5.08	1.39	1.33
81	LD	113	ARG	CZ-NH1	5.08	1.39	1.33
82	LK	66	ARG	NE-CZ	5.08	1.39	1.33
3	SB	212	PRO	C-N	5.08	1.44	1.34
33	L1	485	G	P-O5'	5.08	1.64	1.59
27	SH	68	ARG	CA-C	-5.08	1.39	1.52
32	S1	1066	U	C3'-C2'	5.08	1.58	1.52
32	S1	1729	A	C4'-O4'	-5.08	1.39	1.45
33	L1	987	A	C2'-C1'	5.08	1.58	1.53
33	L1	3091	U	C3'-O3'	5.08	1.49	1.42
42	LP	26	ARG	CZ-NH2	5.08	1.39	1.33
33	L1	182	C	O3'-P	-5.08	1.55	1.61
33	L1	2402	G	C4'-C3'	5.08	1.58	1.53
35	L2	73	U	P-O5'	-5.08	1.54	1.59
43	LO	106	VAL	CB-CG1	5.08	1.63	1.52
31	S2	41	G	C4'-O4'	-5.08	1.39	1.45
32	S1	301	U	C5'-C4'	5.08	1.57	1.51
32	S1	953	G	O3'-P	-5.08	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1319	U	O4'-C1'	5.08	1.48	1.41
33	L1	72	A	O3'-P	-5.08	1.55	1.61
33	L1	271	G	O4'-C1'	5.08	1.48	1.41
33	L1	677	U	P-O5'	-5.08	1.54	1.59
33	L1	1149	C	O4'-C1'	5.08	1.48	1.41
33	L1	1852	C	P-O5'	5.08	1.64	1.59
33	L1	2081	C	C4'-O4'	5.08	1.52	1.45
33	L1	2617	G	C3'-O3'	5.08	1.49	1.42
49	LX	70	TYR	CE2-CZ	5.08	1.45	1.38
67	LS	89	TYR	CZ-OH	5.08	1.46	1.37
32	S1	114	U	C2'-C1'	5.07	1.58	1.53
32	S1	1507	G	O4'-C1'	-5.07	1.35	1.41
33	L1	1338	C	C5'-C4'	5.07	1.57	1.51
33	L1	2495	C	O3'-P	-5.07	1.55	1.61
33	L1	3136	A	O4'-C1'	5.07	1.48	1.41
58	Ln	47	VAL	C-O	-5.07	1.13	1.23
72	Lk	66	VAL	N-CA	-5.07	1.36	1.46
19	SY	25	GLN	CG-CD	5.07	1.62	1.51
32	S1	768	A	C5'-C4'	5.07	1.57	1.51
32	S1	1383	U	P-O5'	-5.07	1.54	1.59
33	L1	2153	U	C4'-O4'	5.07	1.52	1.45
33	L1	2865	G	C2'-O2'	-5.07	1.35	1.41
77	Lc	67	ARG	CZ-NH1	5.07	1.39	1.33
32	S1	1436	U	C2'-C1'	5.07	1.58	1.53
32	S1	1576	C	P-O5'	-5.07	1.54	1.59
35	L2	155	G	C3'-O3'	5.07	1.49	1.42
31	S2	9	A	C2'-C1'	5.07	1.58	1.53
32	S1	842	G	C2'-C1'	-5.07	1.47	1.53
32	S1	1456	U	C2'-C1'	-5.07	1.47	1.53
32	S1	1482	U	O4'-C1'	5.07	1.48	1.41
41	LM	14	PHE	CB-CG	5.07	1.59	1.51
64	LG	29	LYS	C-O	-5.07	1.13	1.23
33	L1	1416	G	O4'-C1'	-5.07	1.35	1.41
33	L1	1801	G	C4'-O4'	-5.07	1.39	1.45
33	L1	1831	A	C2'-C1'	5.07	1.58	1.53
33	L1	3052	U	C2'-C1'	-5.07	1.47	1.53
32	S1	1231	A	C2'-O2'	5.06	1.48	1.41
33	L1	2175	A	O3'-P	-5.06	1.55	1.61
33	L1	2529	C	P-O5'	-5.06	1.54	1.59
38	LE	69	CYS	N-CA	-5.06	1.36	1.46
20	SZ	61	GLU	N-CA	5.06	1.56	1.46
33	L1	354	C	O4'-C1'	5.06	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	1300	C	P-O5'	-5.06	1.54	1.59
33	L1	2076	C	C3'-O3'	5.06	1.49	1.42
33	L1	2458	A	P-O5'	5.06	1.64	1.59
33	L1	2612	A	P-O5'	-5.06	1.54	1.59
33	L1	2712	C	P-O5'	-5.06	1.54	1.59
33	L1	3063	C	P-O5'	-5.06	1.54	1.59
35	L2	99	G	O4'-C1'	5.06	1.48	1.41
32	S1	1294	U	O4'-C1'	5.06	1.48	1.41
33	L1	71	C	O3'-P	-5.06	1.55	1.61
33	L1	1466	U	C4'-C3'	-5.06	1.47	1.52
33	L1	1638	U	O5'-C5'	5.06	1.52	1.44
35	L2	10	C	O4'-C1'	5.06	1.48	1.41
32	S1	995	C	O3'-P	-5.06	1.55	1.61
32	S1	1298	G	C2'-C1'	-5.06	1.47	1.53
32	S1	1364	C	C4'-C3'	5.06	1.58	1.53
32	S1	1465	C	O4'-C1'	5.06	1.48	1.41
33	L1	593	G	C5'-C4'	5.06	1.57	1.51
33	L1	813	A	P-O5'	-5.06	1.54	1.59
33	L1	2137	A	C2'-C1'	5.06	1.58	1.53
50	LZ	45	ARG	CD-NE	5.06	1.55	1.46
1	Sa	159	TYR	CG-CD2	5.06	1.45	1.39
32	S1	1761	G	C3'-O3'	5.06	1.49	1.42
33	L1	798	G	C2'-C1'	-5.06	1.47	1.53
33	L1	1802	A	C2'-C1'	-5.06	1.47	1.53
33	L1	2402	G	C5'-C4'	5.06	1.57	1.51
33	L1	2949	G	C3'-O3'	5.06	1.49	1.42
33	L1	2950	C	P-O5'	5.06	1.64	1.59
40	LH	181	ARG	CD-NE	5.06	1.55	1.46
32	S1	1319	U	C2'-C1'	-5.06	1.47	1.53
33	L1	785	U	P-O5'	-5.06	1.54	1.59
33	L1	1673	A	C3'-O3'	5.06	1.49	1.42
13	SQ	37	GLU	CB-CG	5.05	1.61	1.52
19	SY	48	GLU	CD-OE2	5.05	1.31	1.25
33	L1	1456	A	O4'-C1'	-5.05	1.35	1.41
49	LX	51	ALA	N-CA	-5.05	1.36	1.46
32	S1	661	U	C2'-C1'	-5.05	1.47	1.53
32	S1	798	C	C3'-O3'	5.05	1.49	1.42
78	Le	153	ARG	CD-NE	5.05	1.55	1.46
32	S1	409	C	C2'-C1'	-5.05	1.47	1.53
32	S1	629	C	C2'-C1'	-5.05	1.47	1.53
32	S1	1406	U	C2'-C1'	-5.05	1.47	1.53
32	S1	1419	U	C2'-C1'	5.05	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1790	G	C4'-O4'	5.05	1.52	1.45
33	L1	373	A	C3'-O3'	5.05	1.49	1.42
33	L1	796	C	P-O5'	-5.05	1.54	1.59
33	L1	868	A	C2'-C1'	-5.05	1.47	1.53
33	L1	1794	A	C2'-C1'	-5.05	1.47	1.53
49	LX	77	LEU	C-N	5.05	1.45	1.34
68	LW	83	ARG	CD-NE	5.05	1.55	1.46
33	L1	59	A	O3'-P	-5.05	1.55	1.61
33	L1	787	G	O4'-C1'	-5.05	1.35	1.41
33	L1	1588	G	C2'-C1'	-5.05	1.47	1.53
33	L1	494	C	O4'-C1'	5.05	1.48	1.41
33	L1	513	C	C4'-C3'	-5.05	1.47	1.52
33	L1	1214	U	C4'-O4'	5.05	1.52	1.45
33	L1	1690	C	P-O5'	-5.05	1.54	1.59
33	L1	1888	G	C2'-C1'	5.05	1.58	1.53
35	L2	38	U	C2'-C1'	5.05	1.58	1.53
33	L1	863	G	C5'-C4'	5.04	1.57	1.51
80	LC	350	THR	CA-CB	5.04	1.66	1.53
15	SS	98	SER	C-O	-5.04	1.13	1.23
32	S1	1380	A	C2'-C1'	5.04	1.58	1.53
33	L1	173	C	C4'-C3'	-5.04	1.47	1.52
33	L1	2078	G	C2'-C1'	-5.04	1.47	1.53
33	L1	2782	G	C5'-C4'	5.04	1.57	1.51
32	S1	1410	C	C2'-C1'	-5.04	1.47	1.53
32	S1	1556	U	O3'-P	-5.04	1.55	1.61
33	L1	1458	U	C4'-O4'	-5.04	1.39	1.45
33	L1	1469	G	C2'-C1'	-5.04	1.47	1.53
33	L1	2529	C	C5'-C4'	5.04	1.57	1.51
64	LG	26	TRP	C-O	-5.04	1.13	1.23
33	L1	1524	G	C2'-C1'	-5.04	1.47	1.53
33	L1	2129	U	P-O5'	-5.04	1.54	1.59
55	Lg	98	TYR	CB-CG	5.04	1.59	1.51
14	SP	98	TYR	CE1-CZ	5.04	1.45	1.38
32	S1	1158	G	C3'-O3'	5.04	1.49	1.42
32	S1	1222	G	O3'-P	-5.04	1.55	1.61
33	L1	1179	C	O3'-P	5.04	1.67	1.61
33	L1	1374	G	O3'-P	-5.04	1.55	1.61
33	L1	3364	A	C3'-O3'	5.04	1.49	1.42
32	S1	779	C	C3'-O3'	5.04	1.49	1.42
32	S1	942	C	O5'-C5'	-5.04	1.34	1.42
32	S1	1327	C	C3'-C2'	5.04	1.58	1.52
32	S1	1355	U	O4'-C1'	-5.04	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	1363	G	O4'-C1'	-5.04	1.35	1.41
33	L1	1263	A	O4'-C1'	-5.04	1.35	1.41
33	L1	2726	U	C3'-O3'	5.04	1.49	1.42
33	L1	1431	G	O4'-C1'	5.03	1.48	1.41
33	L1	2355	A	C5'-C4'	5.03	1.57	1.51
33	L1	2502	U	P-O5'	5.03	1.64	1.59
33	L1	2666	G	O3'-P	-5.03	1.55	1.61
33	L1	2862	U	C5'-C4'	5.03	1.57	1.51
1	Sa	314	PHE	CB-CG	-5.03	1.42	1.51
13	SQ	94	GLU	CA-CB	5.03	1.65	1.53
33	L1	1634	G	O3'-P	-5.03	1.55	1.61
33	L1	2470	C	C4'-O4'	-5.03	1.39	1.45
33	L1	3271	A	C2'-C1'	-5.03	1.47	1.53
32	S1	314	C	P-O5'	-5.03	1.54	1.59
33	L1	1113	C	C2'-O2'	5.03	1.48	1.41
33	L1	3360	U	C5'-C4'	5.03	1.57	1.51
33	L1	13	G	O4'-C1'	5.03	1.48	1.41
33	L1	2319	A	C4'-O4'	5.03	1.52	1.45
8	SJ	112	SER	CA-CB	5.03	1.60	1.52
32	S1	1444	G	C2'-C1'	-5.03	1.47	1.53
33	L1	1886	U	O4'-C1'	5.03	1.48	1.41
33	L1	2932	A	C2'-C1'	-5.03	1.47	1.53
42	LP	38	ARG	NE-CZ	5.03	1.39	1.33
48	LV	154	LYS	C-O	-5.03	1.13	1.23
32	S1	1136	A	O4'-C1'	5.03	1.48	1.41
33	L1	253	G	C2'-C1'	-5.03	1.47	1.53
33	L1	428	G	C4'-C3'	5.03	1.58	1.53
33	L1	2659	A	P-O5'	-5.03	1.54	1.59
33	L1	792	A	O4'-C1'	5.02	1.48	1.41
33	L1	3222	G	C4'-C3'	5.02	1.58	1.53
25	SC	71	ARG	CD-NE	5.02	1.54	1.46
33	L1	67	C	P-O5'	-5.02	1.54	1.59
33	L1	765	U	O4'-C1'	5.02	1.48	1.41
33	L1	1221	A	C2'-C1'	5.02	1.58	1.53
67	LS	137	LYS	CA-CB	5.02	1.65	1.53
33	L1	1812	A	C3'-C2'	5.02	1.58	1.52
1	Sa	371	TRP	CG-CD1	5.02	1.43	1.36
32	S1	854	C	C3'-O3'	5.02	1.49	1.42
32	S1	974	C	C2'-O2'	-5.02	1.35	1.41
32	S1	1257	U	C5'-C4'	5.02	1.57	1.51
68	LW	115	GLU	CB-CG	5.02	1.61	1.52
3	SB	210	ILE	C-O	-5.02	1.13	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	S1	545	A	C5'-C4'	-5.02	1.45	1.51
33	L1	329	G	C5'-C4'	5.02	1.57	1.51
33	L1	2850	G	O3'-P	-5.02	1.55	1.61
32	S1	372	U	C3'-C2'	-5.02	1.47	1.52
33	L1	3020	C	C3'-O3'	5.02	1.49	1.42
31	S2	65	U	C4'-C3'	5.01	1.58	1.53
33	L1	1249	A	C4'-C3'	5.01	1.58	1.53
33	L1	1791	U	C4'-O4'	-5.01	1.39	1.45
33	L1	2593	A	O4'-C1'	5.01	1.48	1.41
33	L1	3340	G	O3'-P	-5.01	1.55	1.61
71	Lj	48	TYR	CE1-CZ	5.01	1.45	1.38
80	LC	17	LEU	N-CA	-5.01	1.36	1.46
33	L1	216	G	C2'-C1'	-5.01	1.47	1.53
33	L1	1681	U	C2'-C1'	5.01	1.58	1.53
33	L1	2184	U	C2'-C1'	-5.01	1.47	1.53
33	L1	2732	U	C3'-O3'	5.01	1.49	1.42
4	SD	136	ILE	CB-CG1	5.01	1.68	1.54
32	S1	901	U	O3'-P	-5.01	1.55	1.61
33	L1	169	G	O4'-C1'	5.01	1.48	1.41
33	L1	1834	C	O4'-C1'	5.01	1.48	1.41
33	L1	2457	G	C3'-O3'	5.01	1.49	1.42
33	L1	2749	A	C5'-C4'	5.01	1.57	1.51
32	S1	1193	A	O4'-C1'	5.01	1.48	1.41
33	L1	2645	A	O3'-P	-5.01	1.55	1.61
34	L3	39	C	O4'-C1'	5.01	1.48	1.41
35	L2	121	C	C4'-C3'	5.01	1.58	1.53
23	SU	95	TYR	CE1-CZ	5.01	1.45	1.38
32	S1	988	G	O3'-P	-5.01	1.55	1.61
11	SM	62	GLU	CG-CD	-5.01	1.44	1.51
32	S1	1255	U	P-O5'	-5.01	1.54	1.59
33	L1	1495	G	O3'-P	-5.01	1.55	1.61
33	L1	3021	U	P-O5'	5.01	1.64	1.59
33	L1	3292	U	C2'-O2'	5.01	1.48	1.41
45	LQ	249	ALA	C-O	-5.01	1.13	1.23
33	L1	179	G	O3'-P	-5.00	1.55	1.61
33	L1	1094	G	P-O5'	-5.00	1.54	1.59
33	L1	1752	C	C4'-C3'	5.00	1.58	1.53
33	L1	1774	G	O4'-C1'	5.00	1.48	1.41
37	LB	34	PHE	CG-CD2	5.00	1.46	1.38
17	SV	69	ARG	CD-NE	5.00	1.54	1.46
32	S1	1403	G	O3'-P	-5.00	1.55	1.61
32	S1	1445	C	C2'-C1'	-5.00	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	711	A	C2'-C1'	5.00	1.58	1.53
33	L1	1088	A	C4'-O4'	-5.00	1.39	1.45
33	L1	2098	A	C2'-O2'	5.00	1.48	1.41
33	L1	2352	G	O4'-C1'	-5.00	1.35	1.41
33	L1	2504	A	C2'-C1'	-5.00	1.47	1.53
5	SE	52	ARG	CZ-NH2	5.00	1.39	1.33
32	S1	179	A	O4'-C1'	5.00	1.48	1.41
32	S1	1312	G	C5'-C4'	5.00	1.57	1.51
33	L1	221	C	P-O5'	-5.00	1.54	1.59
33	L1	231	C	C4'-O4'	5.00	1.52	1.45
33	L1	510	C	O3'-P	-5.00	1.55	1.61
33	L1	1949	G	C3'-C2'	5.00	1.58	1.52

All (16506) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	SE	30	ARG	NE-CZ-NH2	-75.84	82.38	120.30
66	LN	64	ARG	NE-CZ-NH2	-64.81	87.90	120.30
11	SM	126	TYR	CZ-CE2-CD2	-63.49	62.66	119.80
33	L1	1395	A	O4'-C1'-N9	60.43	156.54	108.20
33	L1	62	A	O4'-C1'-N9	55.67	152.73	108.20
32	S1	1678	G	O4'-C1'-N9	47.59	146.27	108.20
11	SM	126	TYR	CG-CD2-CE2	-47.51	83.29	121.30
32	S1	1506	G	P-O3'-C3'	43.93	172.42	119.70
33	L1	641	C	P-O3'-C3'	43.42	171.80	119.70
20	SZ	44	PHE	O-C-N	-42.07	55.39	122.70
4	SD	239	PRO	O-C-N	-40.77	57.46	122.70
25	SC	143	VAL	O-C-N	-39.82	58.98	122.70
25	SC	29	GLU	OE1-CD-OE2	-39.08	76.40	123.30
8	SJ	78	PRO	O-C-N	-38.90	60.46	122.70
4	SD	132	GLY	O-C-N	-38.89	60.48	122.70
9	SK	123	MET	CG-SD-CE	38.78	162.26	100.20
47	LU	138	GLY	CA-C-O	-38.46	51.37	120.60
33	L1	3333	C	P-O3'-C3'	37.79	165.05	119.70
45	LQ	137	ASP	O-C-N	-37.69	62.40	122.70
33	L1	1081	U	O4'-C1'-N1	37.60	138.28	108.20
40	LH	233	VAL	O-C-N	-37.55	62.63	122.70
71	Lj	12	TYR	O-C-N	-37.48	62.74	122.70
33	L1	72	A	O4'-C1'-N9	37.40	138.12	108.20
81	LD	304	GLN	O-C-N	-37.30	63.02	122.70
25	SC	136	ILE	O-C-N	-37.21	63.16	122.70
45	LQ	290	SER	O-C-N	-36.62	64.11	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	LU	126	ILE	O-C-N	-36.61	64.12	122.70
31	S2	75	A	O4'-C1'-N9	36.53	137.43	108.20
81	LD	94	GLY	O-C-N	-36.53	64.25	122.70
45	LQ	124	VAL	O-C-N	-36.43	64.41	122.70
33	L1	2483	A	O4'-C1'-N9	36.41	137.33	108.20
48	LV	36	ILE	O-C-N	-36.32	64.59	122.70
5	SE	90	MET	O-C-N	-36.29	64.64	122.70
8	SJ	126	SER	O-C-N	-36.28	64.64	122.70
33	L1	3156	G	O4'-C1'-N9	36.17	137.14	108.20
80	LC	292	GLY	O-C-N	-36.12	64.90	122.70
64	LG	79	THR	O-C-N	-36.10	64.93	122.70
45	LQ	237	GLU	O-C-N	-35.98	65.12	122.70
43	LO	40	HIS	O-C-N	-35.96	65.16	122.70
42	LP	74	PRO	O-C-N	-35.88	65.30	122.70
81	LD	329	ALA	O-C-N	-35.84	65.36	122.70
80	LC	352	ARG	O-C-N	-35.82	65.39	122.70
25	SC	171	PRO	CA-N-CD	-35.76	61.44	111.50
39	LF	2	LYS	O-C-N	-35.72	65.55	122.70
58	Ln	47	VAL	O-C-N	-35.70	65.57	122.70
78	Le	204	LEU	O-C-N	-35.64	65.68	122.70
60	Lr	101	GLY	CA-C-O	-35.56	56.59	120.60
61	Lq	23	ARG	O-C-N	-35.55	65.82	122.70
80	LC	295	SER	O-C-N	-35.52	65.87	122.70
51	LY	9	SER	O-C-N	-35.49	65.92	122.70
15	SS	93	PRO	O-C-N	-35.47	65.95	122.70
80	LC	130	PHE	O-C-N	-35.44	66.00	122.70
81	LD	95	ALA	O-C-N	-35.42	66.02	122.70
11	SM	97	GLN	O-C-N	-35.38	66.09	122.70
45	LQ	238	SER	O-C-N	-35.36	66.13	122.70
72	Lk	93	MET	O-C-N	-35.35	66.14	122.70
33	L1	3227	U	O4'-C1'-C2'	-35.32	70.48	105.80
13	SQ	26	LEU	O-C-N	-35.26	66.29	122.70
4	SD	153	ILE	O-C-N	-35.26	66.29	122.70
80	LC	385	GLY	O-C-N	-35.25	66.30	122.70
37	LB	73	LYS	O-C-N	-35.21	66.37	122.70
34	L3	54	A	P-O3'-C3'	35.16	161.89	119.70
80	LC	120	LYS	O-C-N	-35.12	66.52	122.70
80	LC	349	GLN	O-C-N	-35.08	66.58	122.70
81	LD	20	THR	O-C-N	-35.08	66.57	122.70
80	LC	1	MET	O-C-N	-35.08	66.58	122.70
45	LQ	235	GLY	O-C-N	-35.06	66.60	122.70
4	SD	131	PHE	O-C-N	-34.81	64.03	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	SH	82	GLY	O-C-N	-34.77	67.07	122.70
48	LV	170	LYS	O-C-N	-34.75	67.10	122.70
72	Lk	95	SER	O-C-N	-34.74	67.12	122.70
82	LK	11	ARG	O-C-N	-34.73	67.13	122.70
81	LD	90	ARG	O-C-N	-34.70	67.18	122.70
40	LH	87	ASN	O-C-N	-34.58	67.38	122.70
12	SO	80	LEU	O-C-N	-34.53	67.45	122.70
77	Lc	5	LYS	O-C-N	-34.53	67.45	122.70
5	SE	28	GLY	O-C-N	-34.52	64.51	123.20
45	LQ	249	ALA	O-C-N	-34.50	67.50	122.70
80	LC	372	GLY	CA-C-O	-34.45	58.58	120.60
80	LC	292	GLY	CA-C-O	-34.44	58.60	120.60
3	SB	210	ILE	O-C-N	-34.38	67.69	122.70
81	LD	23	SER	O-C-N	-34.29	67.84	122.70
32	S1	647	G	P-O3'-C3'	34.24	160.79	119.70
81	LD	18	MET	O-C-N	-34.22	67.95	122.70
2	SA	204	ASP	O-C-N	-34.18	68.01	122.70
81	LD	328	ALA	O-C-N	-34.17	68.02	122.70
33	L1	2487	A	O4'-C1'-N9	34.06	135.45	108.20
32	S1	1239	C	O4'-C1'-N1	34.04	135.44	108.20
13	SQ	82	MET	O-C-N	-34.00	68.29	122.70
67	LS	150	LYS	O-C-N	-33.92	68.43	122.70
5	SE	101	ALA	O-C-N	-33.89	65.59	123.20
23	SU	82	TYR	CA-C-O	-33.88	48.95	120.10
60	Lr	101	GLY	O-C-N	-33.86	68.52	122.70
84	LI	116	ARG	O-C-N	-33.84	65.67	123.20
33	L1	607	U	O4'-C1'-N1	33.82	135.25	108.20
50	LZ	53	TRP	O-C-N	-33.80	68.61	122.70
73	Lp	52	LYS	O-C-N	-33.70	68.79	122.70
33	L1	1672	G	O4'-C1'-N9	33.62	135.09	108.20
80	LC	350	THR	O-C-N	-33.50	69.09	122.70
45	LQ	235	GLY	CA-C-O	-33.50	60.30	120.60
5	SE	28	GLY	CA-C-O	-33.46	60.38	120.60
43	LO	127	LYS	O-C-N	-33.32	69.38	122.70
33	L1	499	A	P-O5'-C5'	33.18	173.99	120.90
64	LG	49	LYS	O-C-N	-33.14	69.67	122.70
81	LD	84	PRO	O-C-N	-33.08	66.96	123.20
33	L1	1766	U	P-O3'-C3'	33.07	159.39	119.70
33	L1	3234	G	O4'-C1'-N9	33.02	134.62	108.20
33	L1	3322	A	O4'-C1'-N9	32.96	134.57	108.20
80	LC	372	GLY	O-C-N	-32.93	70.01	122.70
78	Le	83	ALA	O-C-N	-32.78	70.25	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	LD	94	GLY	CA-C-O	-32.76	61.64	120.60
33	L1	3375	G	P-O3'-C3'	32.75	159.00	119.70
66	LN	89	TRP	O-C-N	-32.70	67.61	123.20
80	LC	291	SER	O-C-N	-32.63	67.72	123.20
12	SO	67	THR	O-C-N	-32.62	67.75	123.20
33	L1	1083	C	O4'-C1'-N1	32.56	134.25	108.20
32	S1	1541	C	P-O3'-C3'	32.56	158.77	119.70
80	LC	385	GLY	CA-C-O	-32.49	62.12	120.60
15	SS	98	SER	O-C-N	-32.32	70.98	122.70
64	LG	171	LYS	O-C-N	-32.25	71.10	122.70
32	S1	1443	U	P-O3'-C3'	32.08	158.19	119.70
77	Lc	98	PRO	O-C-N	-32.03	71.45	122.70
45	LQ	16	TYR	O-C-N	-31.82	71.78	122.70
60	Lr	89	LYS	O-C-N	-31.62	72.10	122.70
33	L1	3317	G	O4'-C1'-N9	31.57	133.46	108.20
32	S1	174	C	P-O3'-C3'	31.48	157.48	119.70
33	L1	2973	A	O4'-C1'-N9	31.47	133.37	108.20
64	LG	185	ASP	CA-C-O	-31.46	54.04	120.10
32	S1	1616	U	P-O3'-C3'	31.32	157.28	119.70
46	LT	71	GLN	O-C-N	-31.30	72.63	122.70
33	L1	570	G	P-O3'-C3'	31.16	157.09	119.70
33	L1	1577	A	O4'-C1'-N9	31.06	133.05	108.20
33	L1	2362	A	O4'-C1'-N9	31.00	133.00	108.20
56	Lh	13	LYS	O-C-N	-30.97	73.15	122.70
14	SP	41	LEU	O-C-N	-30.96	70.57	123.20
27	SH	82	GLY	CA-C-O	-30.78	65.19	120.60
32	S1	2	A	O4'-C1'-N9	30.77	132.81	108.20
11	SM	89	ASP	O-C-N	-30.71	73.57	122.70
32	S1	1404	U	O4'-C1'-N1	30.66	132.73	108.20
32	S1	376	G	N9-C1'-C2'	30.62	153.81	114.00
33	L1	1458	U	O4'-C1'-N1	30.53	132.62	108.20
33	L1	2508	U	O4'-C1'-N1	30.49	132.59	108.20
33	L1	1383	G	O4'-C1'-N9	30.49	132.59	108.20
48	LV	69	ARG	O-C-N	-30.38	74.09	122.70
4	SD	240	LYS	CA-C-O	-30.29	56.50	120.10
32	S1	404	A	O4'-C1'-N9	30.20	132.36	108.20
11	SM	97	GLN	CA-C-O	-30.16	56.77	120.10
32	S1	1766	A	O4'-C1'-N9	30.12	132.29	108.20
78	Le	83	ALA	CA-C-O	-30.12	56.86	120.10
45	LQ	112	THR	O-C-N	-30.07	74.58	122.70
33	L1	722	C	P-O3'-C3'	29.99	155.69	119.70
33	L1	1742	G	P-O5'-C5'	29.92	168.77	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	LQ	290	SER	CA-C-O	-29.91	57.29	120.10
5	SE	101	ALA	CA-C-O	-29.91	57.29	120.10
9	SK	93	HIS	O-C-N	-29.88	74.89	122.70
37	LB	196	TRP	O-C-N	-29.88	64.33	121.10
35	L2	98	C	O4'-C1'-N1	-29.87	84.31	108.20
80	LC	17	LEU	O-C-N	-29.84	64.41	121.10
33	L1	2226	C	O4'-C1'-N1	29.79	132.03	108.20
46	LT	71	GLN	CA-C-O	-29.51	58.13	120.10
72	Lk	66	VAL	O-C-N	-29.45	73.14	123.20
33	L1	3336	A	P-O3'-C3'	29.39	154.97	119.70
32	S1	633	U	O4'-C1'-C2'	-29.38	76.42	105.80
72	Lk	93	MET	CA-C-O	-29.31	58.55	120.10
43	LO	127	LYS	CA-C-O	-29.29	58.60	120.10
33	L1	3227	U	C3'-C2'-C1'	29.19	124.85	101.50
45	LQ	249	ALA	CA-C-O	-29.11	58.96	120.10
33	L1	2502	U	O4'-C1'-N1	29.11	131.49	108.20
33	L1	1616	G	O4'-C1'-N9	29.07	131.46	108.20
66	LN	64	ARG	NH1-CZ-NH2	29.03	151.34	119.40
10	SL	84	VAL	CA-C-O	-29.02	59.17	120.10
81	LD	328	ALA	CA-C-O	-28.99	59.23	120.10
35	L2	158	G	O4'-C1'-N9	28.97	131.38	108.20
33	L1	1496	G	O4'-C1'-N9	28.96	131.37	108.20
56	Lh	13	LYS	CA-C-O	-28.93	59.34	120.10
67	LS	150	LYS	CA-C-O	-28.93	59.36	120.10
33	L1	789	A	P-O3'-C3'	28.92	154.40	119.70
32	S1	1740	G	O4'-C1'-N9	28.87	131.29	108.20
15	SS	98	SER	CA-C-O	-28.86	59.50	120.10
33	L1	2450	G	O4'-C1'-N9	28.78	131.23	108.20
80	LC	357	GLU	O-C-N	-28.78	76.65	122.70
14	SP	41	LEU	CA-C-O	-28.76	59.70	120.10
33	L1	2640	A	O4'-C1'-N9	28.76	131.21	108.20
72	Lk	66	VAL	CA-C-O	-28.74	59.75	120.10
32	S1	1225	A	P-O3'-C3'	28.73	154.17	119.70
81	LD	18	MET	CA-C-O	-28.66	59.91	120.10
45	LQ	112	THR	CA-C-O	-28.64	59.96	120.10
81	LD	329	ALA	CA-C-O	-28.53	60.19	120.10
4	SD	131	PHE	CA-C-O	-28.49	60.26	120.10
33	L1	384	A	N9-C1'-C2'	28.48	151.02	114.00
33	L1	1211	G	O4'-C1'-N9	28.47	130.97	108.20
32	S1	652	G	P-O3'-C3'	28.43	153.82	119.70
71	Lj	12	TYR	CA-C-O	-28.43	60.40	120.10
48	LV	170	LYS	CA-C-O	-28.41	60.44	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	LD	95	ALA	CA-C-O	-28.33	60.61	120.10
2	SA	204	ASP	CA-C-O	-28.29	60.68	120.10
77	Lc	5	LYS	CA-C-O	-28.27	60.72	120.10
81	LD	90	ARG	CA-C-O	-28.24	60.80	120.10
25	SC	143	VAL	CA-C-O	-28.22	60.84	120.10
32	S1	1278	C	O4'-C1'-N1	28.22	130.77	108.20
33	L1	62	A	P-O3'-C3'	28.22	153.56	119.70
33	L1	2135	U	O4'-C1'-N1	-28.21	85.63	108.20
43	LO	40	HIS	CA-C-O	-28.14	61.01	120.10
45	LQ	137	ASP	CA-C-O	-28.11	61.06	120.10
33	L1	887	A	O4'-C1'-N9	28.11	130.69	108.20
66	LN	89	TRP	CA-C-O	-28.09	61.12	120.10
80	LC	352	ARG	CA-C-O	-28.09	61.12	120.10
51	LY	9	SER	CA-C-O	-28.07	61.14	120.10
60	Lr	89	LYS	CA-C-O	-28.04	61.21	120.10
32	S1	1203	G	O4'-C1'-N9	28.02	130.61	108.20
45	LQ	124	VAL	CA-C-O	-27.93	61.46	120.10
80	LC	130	PHE	CA-C-O	-27.93	61.45	120.10
12	SO	80	LEU	CA-C-O	-27.87	61.57	120.10
33	L1	996	A	C1'-O4'-C4'	-27.83	87.64	109.90
15	SS	92	PRO	O-C-N	-27.82	68.24	121.10
37	LB	196	TRP	CA-C-O	-27.81	61.70	120.10
32	S1	303	A	O3'-P-O5'	27.80	156.81	104.00
45	LQ	238	SER	CA-C-O	-27.80	61.73	120.10
37	LB	73	LYS	CA-C-O	-27.78	61.75	120.10
64	LG	184	ILE	CA-C-O	-27.69	61.95	120.10
59	Lo	30	ARG	CA-C-O	-27.69	61.96	120.10
32	S1	663	C	P-O3'-C3'	27.60	152.82	119.70
33	L1	1265	G	O4'-C1'-N9	27.58	130.26	108.20
10	SL	84	VAL	O-C-N	-27.52	68.80	121.10
25	SC	44	LEU	CA-C-O	-27.51	62.33	120.10
80	LC	295	SER	CA-C-O	-27.50	62.36	120.10
81	LD	304	GLN	CA-C-O	-27.48	62.39	120.10
23	SU	7	ALA	O-C-N	-27.39	69.06	121.10
33	L1	2730	A	O4'-C1'-N9	27.37	130.10	108.20
33	L1	2361	C	O4'-C1'-N1	27.31	130.05	108.20
81	LD	23	SER	CA-C-O	-27.30	62.76	120.10
80	LC	120	LYS	CA-C-O	-27.27	62.84	120.10
32	S1	1571	G	P-O3'-C3'	27.24	152.39	119.70
58	Ln	47	VAL	CA-C-O	-27.24	62.90	120.10
81	LD	20	THR	CA-C-O	-27.12	63.15	120.10
35	L2	98	C	C3'-C2'-C1'	27.11	123.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	LK	11	ARG	CA-C-O	-27.07	63.24	120.10
31	S2	74	C	P-O3'-C3'	27.07	152.18	119.70
70	Li	107	LEU	O-C-N	-27.06	79.40	122.70
32	S1	1614	C	P-O3'-C3'	27.05	152.16	119.70
48	LV	69	ARG	CA-C-O	-27.03	63.34	120.10
32	S1	533	C	P-O3'-C3'	26.96	152.06	119.70
61	Lq	23	ARG	CA-C-O	-26.93	63.54	120.10
80	LC	350	THR	CA-C-O	-26.86	63.70	120.10
5	SE	90	MET	CA-C-O	-26.84	63.74	120.10
72	Lk	95	SER	CA-C-O	-26.78	63.86	120.10
33	L1	722	C	O4'-C1'-N1	26.77	129.62	108.20
32	S1	261	C	P-O3'-C3'	26.75	151.80	119.70
33	L1	2622	G	P-O3'-C3'	26.72	151.76	119.70
68	LW	28	SER	O-C-N	-26.70	79.98	122.70
80	LC	1	MET	CA-C-O	-26.70	64.04	120.10
33	L1	1549	A	O4'-C1'-N9	-26.69	86.84	108.20
32	S1	151	A	P-O3'-C3'	26.69	151.72	119.70
64	LG	171	LYS	CA-C-O	-26.64	64.16	120.10
78	Le	204	LEU	CA-C-O	-26.63	64.18	120.10
33	L1	998	G	O4'-C1'-N9	26.57	129.45	108.20
33	L1	1394	C	N1-C1'-C2'	26.56	148.52	114.00
8	SJ	126	SER	CA-C-O	-26.49	64.48	120.10
12	SO	67	THR	CA-C-O	-26.46	64.53	120.10
33	L1	1265	G	N9-C1'-C2'	-26.46	79.60	114.00
33	L1	1254	A	O4'-C1'-N9	26.43	129.35	108.20
32	S1	861	A	O4'-C1'-N9	26.42	129.34	108.20
40	LH	233	VAL	CA-C-O	-26.42	64.61	120.10
33	L1	729	G	O4'-C1'-N9	26.39	129.31	108.20
64	LG	49	LYS	CA-C-O	-26.37	64.72	120.10
40	LH	87	ASN	CA-C-O	-26.36	64.74	120.10
84	LI	116	ARG	CA-C-O	-26.35	64.77	120.10
35	L2	79	G	P-O3'-C3'	26.31	151.28	119.70
33	L1	1949	G	O4'-C1'-N9	26.31	129.25	108.20
33	L1	2462	G	O4'-C1'-N9	26.29	129.24	108.20
33	L1	1620	U	P-O3'-C3'	26.26	151.21	119.70
33	L1	2203	A	P-O3'-C3'	26.18	151.11	119.70
68	LW	28	SER	CA-C-O	-26.15	65.18	120.10
25	SC	171	PRO	N-CD-CG	-26.12	64.02	103.20
80	LC	291	SER	CA-C-O	-26.09	65.32	120.10
70	Li	107	LEU	CA-C-O	-26.08	65.32	120.10
45	LQ	16	TYR	CA-C-O	-26.08	65.34	120.10
39	LF	2	LYS	CA-C-O	-26.07	65.35	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	SC	33	VAL	O-C-N	-26.04	78.93	123.20
80	LC	349	GLN	CA-C-O	-25.97	65.56	120.10
31	S2	72	G	O4'-C1'-N9	25.96	128.97	108.20
33	L1	1691	U	N1-C1'-C2'	-25.95	80.27	114.00
48	LV	36	ILE	CA-C-O	-25.88	65.74	120.10
32	S1	1538	C	P-O3'-C3'	25.88	150.76	119.70
13	SQ	26	LEU	CA-C-O	-25.87	65.77	120.10
5	SE	30	ARG	NE-CZ-NH1	25.82	133.21	120.30
33	L1	716	A	O4'-C1'-C2'	-25.80	80.00	105.80
49	LX	33	SER	O-C-N	-25.78	81.45	122.70
80	LC	17	LEU	CA-C-O	-25.78	65.96	120.10
25	SC	136	ILE	CA-C-O	-25.76	66.01	120.10
42	LP	74	PRO	CA-C-O	-25.70	58.51	120.20
33	L1	3227	U	O4'-C1'-N1	-25.68	87.65	108.20
33	L1	2247	A	C1'-O4'-C4'	25.67	130.44	109.90
32	S1	376	G	O4'-C1'-C2'	-25.67	80.13	105.80
47	LU	138	GLY	O-C-N	-25.66	81.64	122.70
50	LZ	53	TRP	CA-C-O	-25.64	66.25	120.10
64	LG	79	THR	CA-C-O	-25.63	66.28	120.10
32	S1	1183	G	P-O3'-C3'	25.61	150.43	119.70
45	LQ	237	GLU	CA-C-O	-25.59	66.36	120.10
32	S1	1443	U	O5'-P-OP2	-25.56	80.03	110.70
33	L1	711	A	O4'-C1'-N9	25.54	128.63	108.20
33	L1	2572	U	O4'-C1'-N1	25.46	128.56	108.20
32	S1	373	U	O4'-C1'-N1	25.40	128.52	108.20
32	S1	1759	A	O4'-C1'-C2'	-25.40	80.40	105.80
40	LH	97	PRO	O-C-N	-25.34	82.15	122.70
78	Le	162	ARG	O-C-N	-25.29	82.23	122.70
33	L1	968	A	O4'-C1'-N9	25.26	128.41	108.20
35	L2	97	U	O4'-C1'-N1	25.24	128.40	108.20
33	L1	3216	G	O4'-C1'-N9	25.23	128.38	108.20
32	S1	964	U	P-O3'-C3'	25.17	149.90	119.70
3	SB	210	ILE	CA-C-O	-25.16	67.27	120.10
47	LU	126	ILE	CA-C-O	-25.12	67.35	120.10
68	LW	104	VAL	O-C-N	-25.05	82.62	122.70
33	L1	785	U	P-O3'-C3'	25.03	149.74	119.70
20	SZ	44	PHE	CA-C-O	-24.98	67.64	120.10
33	L1	695	G	O4'-C1'-N9	24.96	128.17	108.20
77	Lc	98	PRO	CA-C-O	-24.91	60.41	120.20
9	SK	84	CYS	CA-CB-SG	24.88	158.78	114.00
33	L1	2621	G	O4'-C1'-N9	24.88	128.10	108.20
11	SM	89	ASP	CA-C-O	-24.82	67.98	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	SS	93	PRO	CA-C-O	-24.78	60.72	120.20
33	L1	2247	A	O4'-C1'-C2'	-24.76	81.04	105.80
25	SC	106	PHE	CB-CG-CD1	24.76	138.13	120.80
60	Lr	32	LYS	CA-C-O	-24.68	68.28	120.10
33	L1	2643	A	O4'-C1'-N9	24.65	127.92	108.20
42	LP	12	ARG	NE-CZ-NH1	24.62	132.61	120.30
81	LD	84	PRO	CA-C-O	-24.61	61.15	120.20
35	L2	48	A	P-O3'-C3'	24.52	149.12	119.70
64	LG	44	ALA	CA-C-O	-24.47	68.71	120.10
33	L1	2723	G	P-O3'-C3'	24.47	149.06	119.70
33	L1	1549	A	C3'-C2'-C1'	24.46	121.07	101.50
25	SC	106	PHE	CB-CG-CD2	-24.46	103.68	120.80
32	S1	1479	U	O4'-C1'-N1	24.43	127.75	108.20
32	S1	934	A	O4'-C1'-N9	24.42	127.73	108.20
32	S1	1587	G	P-O3'-C3'	24.39	148.97	119.70
43	LO	137	GLY	CA-C-O	-24.39	76.70	120.60
33	L1	3354	A	O4'-C1'-N9	24.39	127.71	108.20
32	S1	630	U	O4'-C1'-N1	24.34	127.67	108.20
33	L1	2669	C	P-O3'-C3'	24.34	148.91	119.70
33	L1	227	C	N1-C1'-C2'	24.32	145.62	114.00
33	L1	1888	G	O4'-C1'-N9	24.32	127.66	108.20
33	L1	1272	G	P-O3'-C3'	24.32	148.88	119.70
33	L1	1192	A	O4'-C1'-N9	24.31	127.65	108.20
13	SQ	73	LEU	O-C-N	-24.31	83.81	122.70
66	LN	113	ALA	N-CA-CB	-24.30	76.07	110.10
3	SB	212	PRO	O-C-N	-24.20	75.11	121.10
33	L1	1746	G	C3'-C2'-C1'	-24.16	82.17	101.50
33	L1	21	G	O4'-C1'-N9	24.10	127.48	108.20
32	S1	653	U	O4'-C1'-N1	24.09	127.47	108.20
25	SC	162	LEU	CB-CG-CD1	-24.06	70.10	111.00
33	L1	3296	C	O4'-C1'-N1	24.05	127.44	108.20
33	L1	2630	A	O4'-C1'-N9	24.05	127.44	108.20
32	S1	231	U	O4'-C1'-N1	23.98	127.39	108.20
33	L1	1526	A	O4'-C1'-N9	23.98	127.39	108.20
33	L1	1621	G	O4'-C1'-N9	23.95	127.36	108.20
33	L1	1675	G	O4'-C1'-N9	23.91	127.33	108.20
33	L1	239	C	O4'-C1'-N1	23.87	127.30	108.20
33	L1	2399	G	P-O3'-C3'	23.87	148.35	119.70
33	L1	1616	G	C3'-C2'-C1'	-23.82	82.45	101.50
23	SU	33	LEU	O-C-N	-23.81	84.60	122.70
33	L1	2793	G	O4'-C1'-C2'	23.81	129.61	105.80
32	S1	1543	U	O4'-C1'-N1	23.79	127.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	716	A	C1'-O4'-C4'	23.76	128.91	109.90
33	L1	1320	G	O4'-C1'-N9	23.76	127.21	108.20
33	L1	2748	G	O4'-C1'-N9	23.75	127.20	108.20
33	L1	2829	U	O4'-C1'-N1	23.74	127.19	108.20
33	L1	1911	A	O4'-C1'-N9	23.68	127.15	108.20
32	S1	303	A	P-O3'-C3'	-23.62	91.36	119.70
32	S1	1169	G	O4'-C1'-N9	23.60	127.08	108.20
32	S1	1443	U	O5'-P-OP1	23.59	139.01	110.70
33	L1	641	C	O4'-C1'-N1	23.56	127.05	108.20
33	L1	723	G	O4'-C1'-N9	23.53	127.02	108.20
32	S1	1765	A	O4'-C1'-N9	23.52	127.01	108.20
32	S1	3	C	C3'-C2'-C1'	23.45	120.26	101.50
33	L1	1486	G	O4'-C1'-N9	23.44	126.95	108.20
33	L1	996	A	C3'-C2'-C1'	-23.42	82.76	101.50
33	L1	2810	A	O4'-C1'-N9	23.35	126.88	108.20
35	L2	97	U	C1'-O4'-C4'	23.35	128.58	109.90
43	LO	137	GLY	O-C-N	-23.32	83.56	123.20
33	L1	3143	A	N9-C1'-C2'	23.31	144.30	114.00
33	L1	3137	G	O4'-C1'-N9	23.31	126.85	108.20
35	L2	94	C	O4'-C1'-N1	23.28	126.82	108.20
83	Lm	7	LYS	O-C-N	-23.27	85.47	122.70
33	L1	641	C	O4'-C1'-C2'	-23.25	82.55	105.80
4	SD	240	LYS	O-C-N	-23.21	83.75	123.20
33	L1	1628	G	O4'-C1'-N9	-23.18	89.65	108.20
33	L1	470	G	O4'-C1'-N9	23.18	126.75	108.20
33	L1	3137	G	P-O3'-C3'	23.14	147.47	119.70
8	SJ	78	PRO	CA-C-O	-23.06	64.86	120.20
45	LQ	116	LEU	O-C-N	-23.04	85.83	122.70
33	L1	2793	G	C1'-O4'-C4'	-23.04	91.47	109.90
33	L1	2668	U	O4'-C1'-N1	23.00	126.60	108.20
33	L1	1742	G	O4'-C1'-N9	22.97	126.58	108.20
4	SD	132	GLY	CA-C-O	-22.94	79.31	120.60
25	SC	44	LEU	O-C-N	-22.91	86.05	122.70
32	S1	1589	C	O5'-P-OP2	22.90	138.18	110.70
33	L1	1748	A	P-O3'-C3'	22.87	147.15	119.70
32	S1	1473	C	P-O5'-C5'	22.84	157.44	120.90
33	L1	3320	G	O4'-C1'-C2'	-22.84	82.97	105.80
35	L2	57	A	C3'-C2'-C1'	22.81	119.75	101.50
33	L1	69	U	N1-C1'-C2'	22.77	143.60	114.00
32	S1	93	A	O4'-C1'-N9	22.75	126.40	108.20
4	SD	150	PRO	O-C-N	-22.69	86.40	122.70
33	L1	1265	G	C1'-O4'-C4'	22.66	128.03	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	280	G	O4'-C1'-N9	22.64	126.31	108.20
33	L1	2203	A	O4'-C1'-C2'	-22.56	83.24	105.80
33	L1	2076	C	O4'-C1'-N1	22.52	126.21	108.20
33	L1	2290	A	N9-C1'-C2'	22.48	143.23	114.00
34	L3	48	G	O4'-C1'-N9	22.47	126.18	108.20
33	L1	1691	U	O4'-C1'-N1	22.45	126.16	108.20
33	L1	2594	A	P-O3'-C3'	22.36	146.53	119.70
33	L1	3234	G	N9-C1'-C2'	-22.36	84.94	114.00
33	L1	488	U	P-O3'-C3'	22.34	146.50	119.70
2	SA	40	ARG	NE-CZ-NH1	22.32	131.46	120.30
32	S1	1608	A	O4'-C1'-N9	22.28	126.02	108.20
33	L1	936	A	O4'-C1'-N9	22.25	126.00	108.20
4	SD	153	ILE	CA-C-O	-22.23	73.42	120.10
38	LE	34	ARG	NE-CZ-NH1	22.21	131.40	120.30
33	L1	1602	A	O4'-C1'-N9	22.17	125.94	108.20
33	L1	2376	G	O4'-C1'-N9	22.16	125.93	108.20
5	SE	30	ARG	NH1-CZ-NH2	22.10	143.71	119.40
33	L1	2436	G	O4'-C1'-N9	22.09	125.87	108.20
71	Lj	86	ARG	NE-CZ-NH1	22.07	131.33	120.30
33	L1	640	C	N1-C1'-C2'	22.06	142.68	114.00
80	LC	357	GLU	CA-C-O	-22.05	73.79	120.10
33	L1	997	G	O4'-C1'-N9	22.02	125.81	108.20
33	L1	1649	G	O4'-C1'-N9	21.95	125.76	108.20
35	L2	99	G	O4'-C1'-N9	21.88	125.70	108.20
33	L1	1455	A	P-O3'-C3'	21.87	145.95	119.70
34	L3	48	G	P-O3'-C3'	21.87	145.94	119.70
71	Lj	24	LYS	CA-C-O	-21.87	74.18	120.10
33	L1	1867	U	O4'-C1'-N1	21.82	125.66	108.20
33	L1	2203	A	N9-C1'-C2'	-21.75	85.72	114.00
57	Ll	11	ARG	O-C-N	-21.69	87.99	122.70
33	L1	3334	A	C3'-C2'-C1'	21.65	118.82	101.50
33	L1	309	C	O5'-C5'-C4'	21.64	152.82	111.70
11	SM	126	TYR	CD1-CE1-CZ	-21.62	100.34	119.80
33	L1	70	A	N9-C1'-C2'	21.62	142.10	114.00
32	S1	544	G	P-O3'-C3'	21.57	145.58	119.70
33	L1	434	C	P-O3'-C3'	21.55	145.56	119.70
33	L1	1948	G	O4'-C1'-N9	21.55	125.44	108.20
32	S1	1803	G	O4'-C1'-N9	21.54	125.43	108.20
33	L1	3087	A	P-O3'-C3'	21.50	145.50	119.70
33	L1	691	U	O4'-C1'-N1	21.47	125.37	108.20
33	L1	716	A	N9-C1'-C2'	-21.46	86.10	114.00
33	L1	2108	C	P-O3'-C3'	21.45	145.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2808	U	C1'-O4'-C4'	-21.45	92.74	109.90
33	L1	1576	C	P-O3'-C3'	21.44	145.42	119.70
32	S1	1422	G	P-O3'-C3'	21.43	145.42	119.70
33	L1	640	C	C3'-C2'-C1'	21.43	118.64	101.50
33	L1	2627	G	P-O3'-C3'	21.40	145.38	119.70
3	SB	212	PRO	CA-C-O	-21.38	68.88	120.20
33	L1	2274	A	N9-C1'-C2'	21.38	141.80	114.00
32	S1	633	U	N1-C1'-C2'	-21.38	86.21	114.00
35	L2	93	A	P-O3'-C3'	21.38	145.35	119.70
32	S1	669	A	O5'-P-OP2	21.34	136.31	110.70
15	SS	92	PRO	CA-C-O	-21.31	69.06	120.20
33	L1	1198	G	O4'-C1'-N9	21.28	125.22	108.20
32	S1	1070	A	O4'-C1'-N9	21.26	125.21	108.20
33	L1	803	G	O4'-C1'-N9	21.21	125.17	108.20
32	S1	170	C	P-O3'-C3'	21.20	145.15	119.70
33	L1	690	G	O4'-C1'-N9	21.18	125.15	108.20
34	L3	40	A	O4'-C1'-N9	21.18	125.14	108.20
33	L1	2480	G	O4'-C1'-N9	21.17	125.13	108.20
32	S1	1279	A	P-O5'-C5'	21.15	154.74	120.90
33	L1	1699	C	P-O3'-C3'	21.15	145.08	119.70
32	S1	1459	G	O4'-C1'-N9	21.13	125.10	108.20
33	L1	484	C	O4'-C1'-N1	21.13	125.10	108.20
32	S1	1225	A	N9-C1'-C2'	-21.12	86.55	114.00
33	L1	1347	U	P-O3'-C3'	21.12	145.04	119.70
44	LR	97	ALA	CA-C-O	-21.12	75.75	120.10
33	L1	1701	G	P-O3'-C3'	21.11	145.03	119.70
66	LN	64	ARG	CD-NE-CZ	-21.09	94.08	123.60
34	L3	2	G	P-O3'-C3'	21.09	145.00	119.70
33	L1	2802	G	C3'-C2'-C1'	21.07	118.36	101.50
33	L1	2503	A	P-O3'-C3'	21.02	144.93	119.70
33	L1	1101	A	P-O3'-C3'	20.98	144.87	119.70
33	L1	1394	C	O4'-C1'-N1	-20.97	91.43	108.20
33	L1	2629	C	N1-C1'-C2'	20.96	141.25	114.00
33	L1	1679	U	C1'-O4'-C4'	20.96	126.67	109.90
33	L1	2252	C	O4'-C1'-N1	20.93	124.95	108.20
33	L1	2973	A	P-O3'-C3'	20.93	144.81	119.70
33	L1	3337	G	O4'-C1'-N9	20.92	124.93	108.20
33	L1	1263	A	O4'-C1'-N9	20.90	124.92	108.20
33	L1	2474	A	O4'-C1'-N9	20.89	124.92	108.20
32	S1	1688	G	O4'-C1'-N9	20.87	124.90	108.20
32	S1	477	A	P-O3'-C3'	20.87	144.74	119.70
35	L2	43	G	O4'-C1'-N9	-20.84	91.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	54	C	O4'-C1'-N1	20.83	124.86	108.20
33	L1	73	A	O4'-C1'-N9	20.82	124.86	108.20
32	S1	372	U	P-O3'-C3'	20.82	144.68	119.70
31	S2	73	C	P-O3'-C3'	20.80	144.66	119.70
40	LH	78	ARG	NE-CZ-NH1	20.77	130.69	120.30
33	L1	691	U	P-O3'-C3'	20.74	144.59	119.70
32	S1	1580	G	O4'-C1'-N9	20.74	124.79	108.20
33	L1	1067	G	P-O3'-C3'	20.74	144.59	119.70
33	L1	2204	U	P-O3'-C3'	20.74	144.59	119.70
33	L1	1350	G	O4'-C1'-N9	20.73	124.78	108.20
71	Lj	24	LYS	O-C-N	-20.73	89.53	122.70
32	S1	1606	U	P-O3'-C3'	20.71	144.56	119.70
34	L3	58	G	O4'-C1'-N9	20.71	124.77	108.20
33	L1	2881	C	N1-C1'-C2'	20.70	140.91	114.00
33	L1	3021	U	O4'-C1'-N1	20.68	124.74	108.20
33	L1	3326	U	O4'-C1'-N1	20.66	124.73	108.20
35	L2	44	A	N9-C1'-C2'	20.66	140.85	114.00
32	S1	1132	G	P-O3'-C3'	20.64	144.47	119.70
33	L1	1576	C	C3'-C2'-C1'	20.63	118.01	101.50
33	L1	167	C	N1-C1'-C2'	20.61	140.80	114.00
35	L2	43	G	C3'-C2'-C1'	20.58	117.96	101.50
33	L1	2100	A	P-O3'-C3'	20.56	144.37	119.70
33	L1	3317	G	P-O3'-C3'	20.56	144.37	119.70
33	L1	1374	G	O4'-C1'-N9	20.53	124.62	108.20
32	S1	1289	U	P-O3'-C3'	20.53	144.33	119.70
35	L2	97	U	N1-C1'-C2'	-20.53	87.32	114.00
32	S1	1615	G	O4'-C1'-N9	20.51	124.61	108.20
33	L1	513	C	P-O3'-C3'	20.47	144.27	119.70
33	L1	2513	U	O4'-C1'-N1	20.47	124.57	108.20
33	L1	2465	G	O4'-C1'-N9	20.46	124.57	108.20
33	L1	55	G	O4'-C1'-N9	20.45	124.56	108.20
33	L1	803	G	N9-C1'-C2'	-20.45	87.42	114.00
33	L1	707	G	N9-C1'-C2'	20.42	140.55	114.00
48	LV	166	ILE	CA-C-O	-20.40	77.25	120.10
33	L1	2105	G	O4'-C1'-N9	20.38	124.50	108.20
33	L1	2640	A	N9-C1'-C2'	-20.35	87.55	114.00
33	L1	2668	U	N1-C1'-C2'	-20.31	87.60	114.00
3	SB	81	GLU	O-C-N	-20.30	90.21	122.70
32	S1	576	C	N1-C1'-C2'	20.29	140.38	114.00
33	L1	3092	A	O4'-C1'-N9	-20.27	91.98	108.20
32	S1	1355	U	O4'-C1'-N1	20.25	124.40	108.20
33	L1	440	U	P-O3'-C3'	20.24	143.99	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1880	A	C5'-C4'-O4'	-20.19	84.87	109.10
33	L1	2059	C	N1-C1'-C2'	20.19	140.25	114.00
9	SK	102	ASN	CB-CG-ND2	20.18	165.14	116.70
32	S1	683	C	P-O3'-C3'	20.18	143.92	119.70
33	L1	2477	G	P-O3'-C3'	20.17	143.91	119.70
47	LU	140	MET	O-C-N	-20.17	90.42	122.70
33	L1	3143	A	O4'-C1'-N9	-20.17	92.06	108.20
33	L1	296	C	P-O3'-C3'	20.16	143.89	119.70
33	L1	250	C	N1-C1'-C2'	20.15	140.20	114.00
32	S1	259	A	P-O5'-C5'	20.14	153.13	120.90
33	L1	1371	G	N9-C1'-C2'	20.14	140.19	114.00
33	L1	618	G	P-O3'-C3'	-20.13	95.55	119.70
33	L1	1691	U	C1'-O4'-C4'	20.11	125.99	109.90
4	SD	239	PRO	CA-C-O	-20.11	71.94	120.20
33	L1	1628	G	C3'-C2'-C1'	20.07	117.56	101.50
33	L1	858	U	P-O3'-C3'	19.97	143.66	119.70
33	L1	3295	G	C3'-C2'-C1'	-19.96	85.53	101.50
33	L1	1533	U	O4'-C1'-C2'	-19.96	85.84	105.80
33	L1	463	G	O4'-C1'-N9	19.95	124.16	108.20
33	L1	73	A	C5'-C4'-C3'	19.95	147.92	116.00
33	L1	1599	A	N9-C1'-C2'	19.94	139.92	114.00
33	L1	3150	G	O4'-C1'-N9	19.93	124.15	108.20
33	L1	2496	U	O4'-C1'-N1	19.91	124.12	108.20
33	L1	2984	A	O4'-C1'-N9	-19.90	92.28	108.20
33	L1	2438	A	P-O3'-C3'	19.87	143.54	119.70
33	L1	689	G	O4'-C1'-N9	19.86	124.08	108.20
33	L1	620	C	P-O3'-C3'	19.85	143.53	119.70
32	S1	916	U	O4'-C1'-N1	19.84	124.07	108.20
33	L1	308	U	N1-C1'-C2'	19.83	139.78	114.00
32	S1	859	U	O4'-C1'-N1	19.82	124.06	108.20
32	S1	1433	A	O4'-C1'-N9	19.81	124.05	108.20
33	L1	811	A	N9-C1'-C2'	19.80	139.74	114.00
33	L1	3334	A	O4'-C1'-N9	-19.78	92.37	108.20
33	L1	1318	C	N1-C1'-C2'	19.77	139.70	114.00
33	L1	2594	A	O4'-C1'-N9	19.70	123.96	108.20
33	L1	2992	G	O4'-C1'-N9	19.69	123.95	108.20
33	L1	2628	C	C3'-C2'-C1'	19.67	117.24	101.50
32	S1	1070	A	P-O3'-C3'	19.66	143.29	119.70
33	L1	1742	G	P-O3'-C3'	19.62	143.25	119.70
33	L1	3080	U	O4'-C1'-N1	19.62	123.89	108.20
35	L2	41	A	O4'-C1'-N9	-19.62	92.50	108.20
33	L1	3304	U	O4'-C1'-N1	19.61	123.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1103	U	O4'-C1'-N1	19.59	123.88	108.20
33	L1	1767	G	P-O3'-C3'	19.59	143.21	119.70
35	L2	53	G	N9-C1'-C2'	19.59	139.47	114.00
33	L1	1024	G	P-O3'-C3'	19.58	143.19	119.70
33	L1	998	G	P-O3'-C3'	19.57	143.19	119.70
23	SU	79	GLY	O-C-N	-19.57	91.39	122.70
33	L1	1826	G	C1'-O4'-C4'	19.53	125.52	109.90
34	L3	75	G	P-O3'-C3'	19.52	143.13	119.70
30	S3	16	G	N9-C1'-C2'	-19.49	88.66	114.00
33	L1	1746	G	O4'-C1'-C2'	19.48	125.28	105.80
33	L1	1045	U	P-O3'-C3'	19.48	143.08	119.70
61	Lq	15	ARG	NE-CZ-NH2	-19.48	110.56	120.30
32	S1	632	G	O4'-C1'-N9	19.45	123.76	108.20
33	L1	3327	A	N9-C1'-C2'	19.44	139.27	114.00
32	S1	1556	U	P-O3'-C3'	19.43	143.02	119.70
33	L1	2318	U	C1'-O4'-C4'	19.43	125.44	109.90
40	LH	66	ARG	NE-CZ-NH2	19.42	130.01	120.30
72	Lk	59	ARG	NE-CZ-NH1	-19.42	110.59	120.30
33	L1	62	A	C3'-C2'-C1'	-19.40	85.98	101.50
33	L1	1619	G	P-O3'-C3'	19.39	142.97	119.70
33	L1	2460	A	O4'-C1'-C2'	19.38	125.18	105.80
32	S1	123	U	O4'-C1'-N1	19.38	123.70	108.20
13	SQ	82	MET	CA-C-O	-19.38	79.41	120.10
32	S1	98	C	P-O3'-C3'	19.37	142.94	119.70
32	S1	114	U	O4'-C1'-N1	19.36	123.69	108.20
33	L1	1281	C	O4'-C1'-N1	19.36	123.69	108.20
33	L1	234	G	C1'-O4'-C4'	-19.35	94.42	109.90
35	L2	93	A	N9-C1'-C2'	19.34	139.14	114.00
33	L1	1531	G	O4'-C1'-N9	19.33	123.66	108.20
35	L2	98	C	O4'-C1'-C2'	-19.33	86.47	105.80
32	S1	1589	C	P-O3'-C3'	19.31	142.87	119.70
33	L1	1589	G	O4'-C1'-N9	19.24	123.59	108.20
32	S1	1364	C	P-O3'-C3'	19.23	142.78	119.70
56	Lh	67	TYR	CB-CG-CD1	19.20	132.52	121.00
33	L1	1508	C	N1-C1'-C2'	19.20	138.96	114.00
33	L1	1123	A	O4'-C1'-N9	19.20	123.56	108.20
35	L2	102	U	P-O5'-C5'	-19.20	90.19	120.90
32	S1	1744	C	P-O3'-C3'	19.19	142.73	119.70
32	S1	1795	U	P-O3'-C3'	19.18	142.72	119.70
33	L1	986	G	C1'-O4'-C4'	19.16	125.23	109.90
32	S1	949	A	O4'-C1'-N9	19.15	123.52	108.20
33	L1	3354	A	C1'-O4'-C4'	19.12	125.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2229	G	O4'-C1'-N9	19.11	123.49	108.20
33	L1	1907	A	O4'-C1'-N9	19.10	123.48	108.20
33	L1	1059	A	P-O5'-C5'	19.08	151.43	120.90
32	S1	1783	C	C3'-C2'-C1'	19.08	116.76	101.50
33	L1	2789	G	O4'-C1'-N9	19.06	123.45	108.20
35	L2	63	A	N9-C1'-C2'	19.06	138.78	114.00
32	S1	1474	U	P-O3'-C3'	19.06	142.57	119.70
33	L1	3109	G	O4'-C1'-N9	19.06	123.45	108.20
33	L1	3372	C	N1-C1'-C2'	19.05	138.76	114.00
33	L1	1880	A	C4'-C3'-C2'	-19.03	83.57	102.60
33	L1	2216	G	C1'-O4'-C4'	19.02	125.12	109.90
32	S1	1435	G	O4'-C1'-N9	19.02	123.42	108.20
33	L1	3071	A	O4'-C1'-N9	19.02	123.42	108.20
33	L1	1698	C	N1-C1'-C2'	19.02	138.72	114.00
33	L1	1691	U	O4'-C1'-C2'	-19.01	86.79	105.80
33	L1	2582	G	O4'-C1'-C2'	19.00	124.80	105.80
7	SI	27	TYR	CB-CG-CD2	-19.00	109.60	121.00
33	L1	803	G	C1'-O4'-C4'	19.00	125.10	109.90
33	L1	1779	C	P-O5'-C5'	18.97	151.26	120.90
33	L1	2375	G	P-O3'-C3'	18.95	142.44	119.70
33	L1	3357	C	N1-C1'-C2'	18.94	138.62	114.00
33	L1	2782	G	O4'-C1'-N9	18.91	123.33	108.20
83	Lm	4	ARG	NE-CZ-NH2	-18.87	110.86	120.30
33	L1	1270	G	C3'-C2'-C1'	-18.82	86.45	101.50
33	L1	2802	G	O4'-C1'-N9	-18.81	93.15	108.20
33	L1	1549	A	N9-C1'-C2'	18.81	138.46	114.00
34	L3	75	G	P-O5'-C5'	18.81	151.00	120.90
33	L1	487	C	P-O3'-C3'	18.80	142.26	119.70
33	L1	1257	U	O4'-C1'-N1	18.77	123.22	108.20
33	L1	1450	G	O4'-C1'-N9	-18.77	93.18	108.20
33	L1	1366	G	O4'-C1'-C2'	18.76	124.56	105.80
1	Sa	128	LEU	CB-CA-C	18.75	145.81	110.20
33	L1	3281	G	O4'-C1'-N9	18.73	123.19	108.20
32	S1	1057	U	O4'-C1'-N1	18.73	123.19	108.20
33	L1	1251	U	O4'-C1'-N1	18.73	123.19	108.20
33	L1	2771	U	O4'-C1'-N1	18.72	123.18	108.20
33	L1	20	G	O4'-C1'-N9	18.71	123.17	108.20
33	L1	986	G	N9-C1'-C2'	-18.71	89.67	114.00
33	L1	857	G	O4'-C1'-N9	18.70	123.16	108.20
19	SY	46	VAL	C-N-CA	-18.69	74.98	121.70
33	L1	2231	G	O4'-C1'-N9	18.68	123.14	108.20
33	L1	2237	A	O4'-C1'-N9	-18.67	93.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1566	U	O4'-C1'-C2'	-18.66	87.14	105.80
32	S1	1311	U	N1-C1'-C2'	18.66	138.26	114.00
33	L1	112	C	N1-C1'-C2'	18.66	138.26	114.00
33	L1	1395	A	P-O5'-C5'	18.65	150.73	120.90
33	L1	3319	G	O5'-P-OP1	-18.63	88.34	110.70
32	S1	933	G	O4'-C1'-N9	18.63	123.10	108.20
35	L2	39	C	P-O3'-C3'	-18.62	97.35	119.70
32	S1	140	C	P-O3'-C3'	18.61	142.04	119.70
33	L1	1620	U	O4'-C1'-N1	18.60	123.08	108.20
33	L1	1009	G	O4'-C1'-N9	18.59	123.08	108.20
74	LJ	58	ARG	NE-CZ-NH1	18.59	129.59	120.30
33	L1	1944	G	P-O3'-C3'	18.58	142.00	119.70
66	LN	99	ARG	NE-CZ-NH2	18.58	129.59	120.30
33	L1	1060	U	O4'-C1'-N1	18.57	123.06	108.20
32	S1	483	C	C3'-C2'-C1'	18.54	116.33	101.50
33	L1	1407	G	O4'-C1'-N9	18.54	123.03	108.20
33	L1	251	G	O4'-C1'-N9	18.54	123.03	108.20
67	LS	70	ASN	CA-C-O	-18.53	81.18	120.10
33	L1	1383	G	P-O3'-C3'	18.53	141.94	119.70
33	L1	262	A	O4'-C1'-C2'	-18.53	87.27	105.80
25	SC	63	THR	OG1-CB-CG2	-18.52	67.40	110.00
33	L1	2502	U	P-O3'-C3'	18.51	141.91	119.70
33	L1	3225	G	O4'-C1'-N9	18.47	122.98	108.20
13	SQ	109	LEU	O-C-N	-18.41	91.90	123.20
33	L1	1879	A	O4'-C1'-N9	18.40	122.92	108.20
33	L1	2629	C	P-O3'-C3'	-18.40	97.62	119.70
34	L3	48	G	C1'-O4'-C4'	18.40	124.62	109.90
32	S1	1740	G	C1'-O4'-C4'	18.38	124.61	109.90
32	S1	583	A	O4'-C1'-N9	18.36	122.89	108.20
35	L2	155	G	N9-C1'-C2'	18.33	137.82	114.00
32	S1	1674	C	C3'-C2'-C1'	18.32	116.16	101.50
25	SC	29	GLU	CG-CD-OE2	18.31	154.93	118.30
32	S1	1759	A	C3'-C2'-C1'	18.31	116.15	101.50
75	Lt	41	TYR	CB-CG-CD2	-18.31	110.01	121.00
32	S1	623	A	P-O3'-C3'	18.30	141.66	119.70
33	L1	2622	G	N9-C1'-C2'	18.29	137.77	114.00
33	L1	571	G	P-O3'-C3'	18.27	141.63	119.70
32	S1	435	C	P-O3'-C3'	18.22	141.56	119.70
33	L1	2518	A	C1'-O4'-C4'	-18.20	95.34	109.90
33	L1	858	U	N1-C1'-C2'	18.16	137.60	114.00
33	L1	1576	C	O4'-C1'-C2'	-18.16	87.64	105.80
33	L1	164	C	N1-C1'-C2'	18.15	137.60	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2984	A	N9-C1'-C2'	18.14	137.59	114.00
33	L1	2779	G	C1'-O4'-C4'	18.14	124.41	109.90
33	L1	3092	A	C1'-O4'-C4'	-18.13	95.40	109.90
33	L1	1921	U	O4'-C1'-N1	18.09	122.67	108.20
67	LS	28	ARG	NE-CZ-NH1	18.09	129.34	120.30
33	L1	2628	C	O4'-C1'-N1	-18.08	93.74	108.20
33	L1	1781	C	P-O3'-C3'	18.05	141.37	119.70
33	L1	3143	A	C3'-C2'-C1'	18.03	115.92	101.50
32	S1	614	G	O4'-C1'-N9	18.03	122.62	108.20
33	L1	1536	U	O4'-C1'-N1	18.03	122.62	108.20
34	L3	79	A	C1'-O4'-C4'	18.02	124.31	109.90
33	L1	1028	G	O4'-C1'-N9	18.01	122.61	108.20
40	LH	66	ARG	NE-CZ-NH1	-17.98	111.31	120.30
33	L1	874	U	O4'-C1'-N1	17.97	122.58	108.20
33	L1	1045	U	O4'-C1'-N1	17.96	122.57	108.20
33	L1	2518	A	C3'-C2'-C1'	-17.94	87.15	101.50
25	SC	33	VAL	CA-C-N	17.94	152.07	116.20
33	L1	1066	G	P-O3'-C3'	17.94	141.22	119.70
34	L3	3	A	O4'-C1'-C2'	-17.92	87.88	105.80
33	L1	1241	G	C3'-C2'-C1'	17.91	115.83	101.50
33	L1	1118	G	P-O3'-C3'	17.89	141.17	119.70
33	L1	68	U	N1-C1'-C2'	17.89	137.26	114.00
33	L1	291	C	C1'-O4'-C4'	-17.89	95.59	109.90
33	L1	2477	G	O4'-C1'-N9	17.88	122.50	108.20
33	L1	2501	U	O3'-P-O5'	-17.88	70.03	104.00
33	L1	2701	G	P-O3'-C3'	17.87	141.14	119.70
71	Lj	8	ARG	O-C-N	-17.85	94.14	122.70
45	LQ	116	LEU	CA-C-O	-17.84	82.63	120.10
32	S1	1059	U	O4'-C1'-N1	17.84	122.47	108.20
32	S1	1782	C	P-O5'-C5'	17.83	149.43	120.90
32	S1	1516	C	P-O3'-C3'	17.83	141.10	119.70
32	S1	1519	G	O4'-C1'-N9	17.82	122.46	108.20
33	L1	1772	G	O4'-C1'-N9	17.80	122.44	108.20
33	L1	2766	U	O4'-C1'-C2'	-17.80	88.00	105.80
33	L1	1826	G	N9-C1'-C2'	-17.79	90.87	114.00
32	S1	321	C	P-O3'-C3'	17.78	141.04	119.70
33	L1	996	A	N9-C1'-C2'	17.77	137.10	114.00
64	LG	184	ILE	O-C-N	-17.74	94.31	122.70
32	S1	1626	C	O4'-C1'-N1	17.74	122.39	108.20
33	L1	1746	G	C1'-O4'-C4'	-17.74	95.71	109.90
33	L1	1450	G	N9-C1'-C2'	17.74	137.06	114.00
33	L1	1486	G	P-O3'-C3'	17.72	140.96	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	636	U	O4'-C1'-C2'	-17.71	88.09	105.80
33	L1	1623	C	O5'-C5'-C4'	17.70	145.33	111.70
33	L1	1538	A	C3'-C2'-C1'	17.70	115.66	101.50
32	S1	381	G	O4'-C1'-N9	17.68	122.34	108.20
33	L1	1078	U	N1-C1'-C2'	17.64	136.93	114.00
33	L1	1568	A	O4'-C1'-N9	17.64	122.31	108.20
32	S1	476	U	P-O3'-C3'	17.63	140.85	119.70
33	L1	2518	A	N9-C1'-C2'	17.62	136.91	114.00
33	L1	1163	A	O4'-C1'-C2'	17.58	123.42	107.60
33	L1	2434	G	O4'-C1'-N9	17.56	122.25	108.20
33	L1	1057	A	O4'-C1'-N9	17.56	122.25	108.20
33	L1	3292	U	O4'-C1'-N1	17.55	122.24	108.20
33	L1	1665	G	P-O3'-C3'	17.52	140.72	119.70
33	L1	2482	A	C1'-O4'-C4'	-17.52	95.89	109.90
33	L1	2774	A	O4'-C1'-N9	17.52	122.22	108.20
33	L1	2738	U	O4'-C1'-N1	17.51	122.21	108.20
33	L1	3094	C	O4'-C1'-N1	-17.50	94.20	108.20
33	L1	3357	C	C1'-O4'-C4'	-17.50	95.90	109.90
33	L1	2596	A	P-O3'-C3'	17.50	140.69	119.70
32	S1	187	C	OP2-P-O3'	-17.49	66.72	105.20
32	S1	1227	A	O4'-C1'-N9	17.49	122.19	108.20
32	S1	1759	A	C1'-O4'-C4'	17.48	123.89	109.90
33	L1	1050	A	O4'-C1'-N9	17.48	122.18	108.20
33	L1	1384	G	C3'-C2'-C1'	-17.47	87.52	101.50
33	L1	3203	G	O4'-C1'-N9	17.46	122.17	108.20
33	L1	2066	G	O4'-C1'-N9	17.46	122.17	108.20
33	L1	23	A	O4'-C1'-N9	17.45	122.16	108.20
33	L1	1667	C	O4'-C1'-N1	17.44	122.15	108.20
34	L3	117	U	P-O3'-C3'	17.44	140.62	119.70
3	SB	106	ARG	NE-CZ-NH1	17.43	129.01	120.30
32	S1	1034	G	P-O3'-C3'	17.40	140.58	119.70
33	L1	424	G	C3'-C2'-C1'	17.38	115.41	101.50
66	LN	98	ARG	NE-CZ-NH1	17.38	128.99	120.30
33	L1	1223	U	O4'-C1'-N1	17.37	122.10	108.20
33	L1	1707	C	O4'-C1'-N1	17.36	122.09	108.20
33	L1	1309	U	O4'-C1'-N1	-17.35	94.32	108.20
47	LU	140	MET	CA-C-O	-17.35	83.66	120.10
33	L1	531	G	O4'-C1'-N9	17.35	122.08	108.20
33	L1	1366	G	C1'-O4'-C4'	-17.34	96.03	109.90
33	L1	2902	A	O4'-C1'-N9	17.34	122.08	108.20
33	L1	3108	U	O4'-C1'-N1	17.34	122.07	108.20
33	L1	224	C	N1-C1'-C2'	17.34	136.54	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2900	G	O4'-C1'-N9	-17.34	94.33	108.20
33	L1	2562	A	P-O3'-C3'	17.32	140.49	119.70
33	L1	2363	G	P-O3'-C3'	17.32	140.48	119.70
67	LS	120	PHE	CA-C-N	17.30	165.54	117.10
33	L1	1035	C	P-O3'-C3'	17.30	140.46	119.70
34	L3	106	U	P-O3'-C3'	17.30	140.45	119.70
33	L1	2881	C	C1'-O4'-C4'	-17.29	96.07	109.90
32	S1	1758	G	O4'-C1'-N9	17.29	122.03	108.20
33	L1	997	G	P-O3'-C3'	17.27	140.43	119.70
33	L1	134	U	O4'-C1'-N1	17.26	122.01	108.20
23	SU	71	GLY	O-C-N	-17.25	93.87	123.20
32	S1	1472	G	P-O3'-C3'	-17.25	99.00	119.70
33	L1	500	C	P-O5'-C5'	17.25	148.50	120.90
32	S1	1748	U	N1-C1'-C2'	17.23	136.41	114.00
33	L1	2486	G	C1'-O4'-C4'	17.23	123.69	109.90
32	S1	1225	A	O4'-C1'-C2'	-17.21	88.59	105.80
33	L1	1369	G	O4'-C1'-C2'	17.21	123.09	107.60
33	L1	1757	G	O4'-C1'-N9	17.21	121.97	108.20
33	L1	1818	C	O4'-C1'-C2'	-17.21	88.59	105.80
33	L1	1073	G	O4'-C1'-N9	17.20	121.96	108.20
32	S1	1104	U	P-O3'-C3'	17.19	140.33	119.70
32	S1	559	A	P-O3'-C3'	17.19	140.33	119.70
3	SB	76	ARG	NE-CZ-NH1	17.18	128.89	120.30
33	L1	755	C	N1-C1'-C2'	17.17	136.32	114.00
33	L1	1274	A	O4'-C1'-N9	17.16	121.93	108.20
33	L1	1533	U	P-O3'-C3'	17.14	140.27	119.70
32	S1	508	U	O4'-C1'-N1	17.14	121.91	108.20
32	S1	1064	U	O4'-C1'-N1	17.14	121.91	108.20
33	L1	2736	A	O4'-C1'-N9	17.13	121.91	108.20
33	L1	1741	G	P-O3'-C3'	-17.12	99.15	119.70
33	L1	1715	C	O4'-C1'-C2'	-17.12	88.68	105.80
25	SC	33	VAL	C-N-CA	17.10	158.20	122.30
3	SB	51	ARG	NE-CZ-NH1	17.09	128.85	120.30
8	SJ	75	ARG	NE-CZ-NH1	17.09	128.84	120.30
34	L3	22	A	O4'-C1'-N9	17.09	121.87	108.20
33	L1	3377	G	P-O3'-C3'	17.09	140.20	119.70
33	L1	772	U	P-O3'-C3'	17.08	140.19	119.70
33	L1	1247	G	C1'-O4'-C4'	-17.07	96.24	109.90
33	L1	2232	C	C3'-C2'-C1'	17.07	115.15	101.50
33	L1	1428	G	O4'-C1'-N9	17.06	121.85	108.20
33	L1	1767	G	O4'-C1'-N9	17.05	121.84	108.20
33	L1	69	U	O4'-C1'-N1	-17.04	94.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	155	G	P-O3'-C3'	17.01	140.11	119.70
33	L1	2152	A	O4'-C1'-N9	17.01	121.81	108.20
32	S1	1358	G	N9-C1'-C2'	16.99	136.08	114.00
33	L1	237	C	C3'-C2'-C1'	16.98	115.08	101.50
32	S1	1645	C	N1-C1'-C2'	16.96	136.05	114.00
33	L1	640	C	O4'-C1'-C2'	-16.96	88.84	105.80
45	LQ	256	SER	N-CA-CB	-16.96	85.06	110.50
33	L1	631	C	N1-C1'-C2'	16.94	136.03	114.00
32	S1	1237	G	P-O3'-C3'	16.94	140.03	119.70
33	L1	700	C	C3'-C2'-C1'	16.93	115.04	101.50
82	LK	135	GLN	CA-C-O	-16.93	84.56	120.10
33	L1	3320	G	C3'-C2'-C1'	16.92	115.04	101.50
32	S1	1588	C	O3'-P-O5'	-16.92	71.86	104.00
32	S1	1511	A	O4'-C1'-N9	16.91	121.73	108.20
33	L1	2151	G	P-O3'-C3'	16.91	139.99	119.70
33	L1	506	U	P-O3'-C3'	16.91	139.99	119.70
33	L1	2355	A	C1'-O4'-C4'	16.90	123.42	109.90
33	L1	3360	U	P-O3'-C3'	16.89	139.97	119.70
32	S1	1642	C	N1-C1'-C2'	16.89	135.95	114.00
33	L1	2587	G	O4'-C1'-N9	16.89	121.71	108.20
33	L1	1958	G	P-O3'-C3'	16.89	139.96	119.70
35	L2	50	G	N9-C1'-C2'	16.89	135.95	114.00
33	L1	2096	U	O4'-C1'-N1	16.88	121.71	108.20
33	L1	1690	C	O4'-C1'-N1	16.88	121.70	108.20
33	L1	1369	G	C3'-C2'-C1'	-16.87	88.00	101.50
3	SB	150	MET	CG-SD-CE	16.86	127.18	100.20
64	LG	29	LYS	O-C-N	-16.86	95.72	122.70
33	L1	1270	G	C1'-O4'-C4'	-16.85	96.42	109.90
13	SQ	81	ARG	CA-C-N	16.84	154.24	117.20
33	L1	250	C	O4'-C1'-C2'	-16.83	88.97	105.80
33	L1	1893	G	O4'-C1'-N9	16.83	121.67	108.20
33	L1	2176	A	O4'-C1'-N9	16.83	121.66	108.20
33	L1	999	U	P-O3'-C3'	16.83	139.89	119.70
33	L1	3175	C	N1-C1'-C2'	16.83	135.88	114.00
33	L1	2630	A	P-O3'-C3'	16.82	139.88	119.70
33	L1	2511	U	O4'-C1'-N1	16.80	121.64	108.20
33	L1	3081	G	C3'-C2'-C1'	16.80	114.94	101.50
33	L1	492	G	O4'-C1'-N9	16.78	121.63	108.20
33	L1	3331	G	O4'-C1'-N9	16.78	121.62	108.20
32	S1	1589	C	O5'-P-OP1	-16.77	90.57	110.70
67	LS	120	PHE	CA-C-O	-16.77	84.89	120.10
33	L1	2502	U	O4'-C1'-C2'	-16.76	89.04	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2482	A	P-O3'-C3'	16.74	139.79	119.70
33	L1	2504	A	P-O3'-C3'	16.74	139.79	119.70
33	L1	2490	U	N1-C1'-C2'	16.74	135.76	114.00
32	S1	1421	U	P-O3'-C3'	16.73	139.78	119.70
33	L1	2153	U	O4'-C1'-N1	16.73	121.58	108.20
33	L1	28	C	P-O3'-C3'	16.71	139.76	119.70
33	L1	3208	G	O4'-C1'-N9	16.70	121.56	108.20
33	L1	845	G	O4'-C1'-N9	16.67	121.54	108.20
33	L1	2	C	P-O3'-C3'	16.67	139.70	119.70
33	L1	2059	C	P-O3'-C3'	-16.66	99.71	119.70
33	L1	1271	U	P-O3'-C3'	-16.64	99.73	119.70
33	L1	2460	A	O4'-C1'-N9	16.64	121.51	108.20
32	S1	32	U	N1-C1'-C2'	-16.63	92.38	114.00
32	S1	535	C	OP2-P-O3'	-16.62	68.64	105.20
33	L1	1258	C	O4'-C1'-C2'	-16.62	89.18	105.80
33	L1	2125	A	N9-C1'-C2'	-16.60	92.42	114.00
84	LI	109	ASP	N-CA-CB	16.59	140.46	110.60
33	L1	3322	A	C3'-C2'-C1'	-16.58	88.24	101.50
33	L1	534	G	C1'-O4'-C4'	-16.57	96.65	109.90
42	LP	12	ARG	NE-CZ-NH2	-16.56	112.02	120.30
32	S1	33	U	C1'-O4'-C4'	16.56	123.15	109.90
33	L1	2876	G	C1'-O4'-C4'	-16.56	96.65	109.90
33	L1	2743	A	O4'-C1'-N9	16.55	121.44	108.20
33	L1	1449	A	P-O3'-C3'	16.55	139.56	119.70
60	Lr	42	ARG	NE-CZ-NH1	16.55	128.57	120.30
28	SN	10	HIS	O-C-N	-16.52	89.71	121.10
56	Lh	67	TYR	CB-CG-CD2	-16.52	111.09	121.00
32	S1	46	A	O4'-C1'-N9	16.51	121.41	108.20
33	L1	138	G	P-O3'-C3'	16.50	139.50	119.70
33	L1	754	G	O4'-C1'-N9	16.50	121.40	108.20
32	S1	1338	U	O4'-C1'-N1	16.49	121.39	108.20
32	S1	1715	C	N1-C1'-C2'	16.49	135.44	114.00
44	LR	10	ARG	NE-CZ-NH1	16.49	128.54	120.30
32	S1	187	C	OP1-P-O3'	16.48	141.47	105.20
33	L1	400	G	O4'-C1'-N9	16.48	121.39	108.20
32	S1	1664	U	O4'-C1'-N1	16.48	121.38	108.20
32	S1	476	U	O4'-C1'-N1	16.47	121.38	108.20
33	L1	234	G	O4'-C1'-C2'	16.47	122.43	107.60
33	L1	1898	G	O4'-C1'-N9	16.46	121.37	108.20
34	L3	26	C	P-O3'-C3'	16.46	139.45	119.70
34	L3	24	G	P-O3'-C3'	-16.45	99.95	119.70
32	S1	119	U	C1'-O4'-C4'	-16.45	96.74	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1752	C	C5'-C4'-C3'	16.44	142.31	116.00
33	L1	98	A	P-O3'-C3'	16.43	139.42	119.70
33	L1	2876	G	O4'-C1'-C2'	16.43	122.39	107.60
42	LP	24	ARG	NE-CZ-NH1	16.43	128.51	120.30
11	SM	95	PHE	CB-CG-CD2	-16.43	109.30	120.80
4	SD	150	PRO	CA-C-O	-16.41	80.80	120.20
33	L1	250	C	C3'-C2'-C1'	16.41	114.63	101.50
32	S1	1387	U	O4'-C1'-N1	16.41	121.33	108.20
33	L1	963	U	O4'-C1'-N1	-16.39	95.09	108.20
33	L1	2354	G	N9-C1'-C2'	-16.38	92.71	114.00
33	L1	175	G	N9-C1'-C2'	16.38	135.29	114.00
79	Ls	235	PRO	CA-N-CD	-16.38	88.57	111.50
32	S1	1395	C	P-O3'-C3'	16.37	139.35	119.70
33	L1	3227	U	C1'-O4'-C4'	16.37	123.00	109.90
33	L1	618	G	O4'-C1'-N9	16.36	121.29	108.20
33	L1	669	G	P-O5'-C5'	16.35	147.06	120.90
32	S1	1443	U	OP1-P-OP2	-16.34	95.09	119.60
32	S1	1589	C	OP1-P-OP2	-16.34	95.09	119.60
32	S1	376	G	C3'-C2'-C1'	16.34	114.57	101.50
33	L1	2499	U	O4'-C1'-N1	16.33	121.26	108.20
33	L1	1625	G	O4'-C1'-N9	16.31	121.25	108.20
33	L1	121	A	P-O3'-C3'	16.31	139.27	119.70
25	SC	106	PHE	CG-CD1-CE1	-16.31	102.86	120.80
33	L1	1616	G	C1'-O4'-C4'	-16.31	96.86	109.90
9	SK	123	MET	CB-CG-SD	16.30	161.31	112.40
33	L1	2486	G	N9-C1'-C2'	-16.30	92.81	114.00
33	L1	2595	G	P-O3'-C3'	16.30	139.25	119.70
5	SE	30	ARG	CB-CG-CD	-16.29	69.25	111.60
32	S1	1745	U	O4'-C1'-C2'	-16.28	89.52	105.80
4	SD	136	ILE	CA-CB-CG1	16.28	141.93	111.00
33	L1	668	U	O4'-C1'-N1	16.27	121.21	108.20
33	L1	776	G	O4'-C1'-N9	16.26	121.21	108.20
33	L1	3101	C	C5'-C4'-C3'	16.26	142.02	116.00
32	S1	1771	U	O4'-C1'-N1	16.24	121.19	108.20
33	L1	3322	A	O5'-P-OP2	-16.24	91.09	105.70
33	L1	532	G	C1'-O4'-C4'	-16.23	96.92	109.90
33	L1	997	G	C1'-O4'-C4'	16.23	122.88	109.90
33	L1	1804	G	N9-C1'-C2'	16.23	135.09	114.00
34	L3	97	G	O4'-C1'-N9	16.23	121.18	108.20
33	L1	348	C	C3'-C2'-C1'	16.21	114.47	101.50
33	L1	2056	C	P-O3'-C3'	16.21	139.15	119.70
33	L1	2783	U	O4'-C1'-N1	16.20	121.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1295	A	O4'-C1'-N9	16.20	121.16	108.20
32	S1	205	U	O4'-C1'-N1	16.19	121.15	108.20
32	S1	192	G	O4'-C1'-N9	16.18	121.14	108.20
32	S1	1621	U	O4'-C1'-N1	16.18	121.14	108.20
33	L1	176	A	P-O3'-C3'	16.18	139.11	119.70
2	SA	108	THR	O-C-N	-16.17	90.38	121.10
3	SB	153	LYS	CD-CE-NZ	-16.15	74.56	111.70
35	L2	157	C	P-O3'-C3'	16.14	139.07	119.70
33	L1	1658	G	P-O3'-C3'	16.14	139.07	119.70
47	LU	10	ARG	NE-CZ-NH1	16.14	128.37	120.30
33	L1	1727	A	C3'-C2'-C1'	16.12	114.40	101.50
32	S1	1099	G	P-O3'-C3'	16.11	139.03	119.70
51	LY	26	ARG	NE-CZ-NH1	16.11	128.35	120.30
33	L1	1735	U	O4'-C1'-C2'	-16.11	89.69	105.80
32	S1	626	A	P-O3'-C3'	16.11	139.03	119.70
32	S1	1591	A	O4'-C1'-N9	16.10	121.08	108.20
33	L1	1035	C	N1-C1'-C2'	16.10	134.93	114.00
33	L1	2381	G	O4'-C1'-N9	16.10	121.08	108.20
33	L1	1658	G	O4'-C1'-N9	16.09	121.08	108.20
33	L1	1683	U	P-O3'-C3'	16.09	139.01	119.70
33	L1	2523	G	O4'-C1'-N9	16.09	121.08	108.20
33	L1	2246	G	O4'-C1'-N9	16.09	121.07	108.20
32	S1	512	U	P-O3'-C3'	16.09	139.00	119.70
32	S1	1759	A	O4'-C1'-N9	-16.08	95.34	108.20
34	L3	3	A	P-O3'-C3'	16.07	138.99	119.70
33	L1	846	A	O4'-C1'-N9	16.07	121.05	108.20
32	S1	138	C	P-O5'-C5'	16.06	146.59	120.90
33	L1	3235	A	O4'-C1'-N9	16.05	121.04	108.20
32	S1	471	G	O4'-C1'-N9	16.04	121.03	108.20
33	L1	2800	C	P-O3'-C3'	16.04	138.94	119.70
32	S1	1035	A	O4'-C1'-N9	16.02	121.02	108.20
13	SQ	21	TYR	O-C-N	-16.02	97.06	122.70
32	S1	532	U	P-O3'-C3'	16.02	138.92	119.70
32	S1	391	A	O4'-C1'-N9	16.02	121.01	108.20
33	L1	686	A	P-O3'-C3'	16.02	138.92	119.70
33	L1	1735	U	P-O3'-C3'	16.01	138.92	119.70
33	L1	7	C	N1-C1'-C2'	16.01	134.81	114.00
33	L1	213	G	O4'-C1'-N9	16.01	121.01	108.20
33	L1	3005	C	N1-C1'-C2'	16.01	134.81	114.00
33	L1	543	C	N1-C1'-C2'	15.99	134.79	114.00
32	S1	1678	G	N9-C1'-C2'	-15.99	93.21	114.00
35	L2	104	U	N1-C1'-C2'	15.99	134.78	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3086	G	O4'-C1'-C2'	15.98	121.99	107.60
33	L1	280	G	C1'-O4'-C4'	15.98	122.68	109.90
33	L1	1852	C	O4'-C1'-N1	15.98	120.98	108.20
33	L1	612	U	P-O3'-C3'	15.98	138.88	119.70
33	L1	1684	U	O4'-C1'-N1	15.98	120.98	108.20
27	SH	92	ARG	NE-CZ-NH1	15.97	128.29	120.30
33	L1	1745	G	P-O3'-C3'	15.97	138.87	119.70
32	S1	404	A	P-O3'-C3'	15.96	138.86	119.70
70	Li	110	GLN	CA-C-O	-15.96	86.58	120.10
11	SM	92	ASP	CB-CA-C	-15.95	78.50	110.40
55	Lg	58	ARG	NE-CZ-NH1	15.94	128.27	120.30
32	S1	1346	C	N1-C1'-C2'	15.94	134.72	114.00
33	L1	1670	G	O4'-C1'-N9	15.94	120.95	108.20
35	L2	96	A	C3'-C2'-C1'	15.93	114.24	101.50
33	L1	2702	G	O4'-C1'-N9	15.92	120.94	108.20
32	S1	1450	A	O4'-C1'-N9	15.90	120.92	108.20
33	L1	1466	U	O4'-C1'-N1	15.90	120.92	108.20
33	L1	3048	C	C1'-O4'-C4'	-15.89	97.18	109.90
33	L1	2231	G	N9-C1'-C2'	-15.89	93.34	114.00
33	L1	2680	G	O4'-C1'-N9	15.88	120.91	108.20
33	L1	2903	G	O4'-C1'-C2'	15.88	121.89	107.60
33	L1	2205	G	O4'-C1'-N9	15.88	120.90	108.20
32	S1	1029	U	O4'-C1'-N1	15.88	120.90	108.20
46	LT	176	ARG	CB-CA-C	15.87	142.14	110.40
33	L1	2995	G	P-O3'-C3'	15.87	138.74	119.70
32	S1	1225	A	C1'-O4'-C4'	15.86	122.58	109.90
32	S1	1296	G	O4'-C1'-N9	15.82	120.86	108.20
32	S1	1314	U	C5'-C4'-C3'	-15.82	90.69	116.00
33	L1	175	G	C1'-O4'-C4'	-15.80	97.26	109.90
33	L1	337	C	C1'-O4'-C4'	-15.79	97.27	109.90
32	S1	260	A	O4'-C1'-N9	15.78	120.83	108.20
33	L1	692	U	P-O3'-C3'	15.78	138.64	119.70
33	L1	637	C	N1-C1'-C2'	15.77	134.50	114.00
33	L1	2796	G	P-O3'-C3'	15.76	138.61	119.70
32	S1	1063	U	O4'-C1'-N1	15.75	120.80	108.20
32	S1	1142	A	P-O3'-C3'	15.74	138.59	119.70
33	L1	2290	A	O4'-C1'-N9	-15.74	95.61	108.20
33	L1	1701	G	O4'-C1'-N9	15.73	120.78	108.20
33	L1	3337	G	P-O3'-C3'	15.73	138.58	119.70
38	LE	139	ARG	NE-CZ-NH1	15.73	128.17	120.30
60	Lr	61	LYS	CA-C-O	-15.72	87.09	120.10
33	L1	745	G	P-O3'-C3'	15.72	138.56	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1576	C	O4'-C1'-N1	-15.71	95.64	108.20
33	L1	1366	G	C3'-C2'-C1'	-15.69	88.95	101.50
33	L1	102	G	O4'-C1'-C2'	-15.69	90.11	105.80
32	S1	1674	C	O4'-C1'-C2'	-15.68	90.12	105.80
33	L1	2125	A	C1'-O4'-C4'	15.66	122.43	109.90
33	L1	1467	G	O4'-C1'-N9	15.66	120.73	108.20
35	L2	40	G	O4'-C1'-C2'	15.65	121.69	107.60
33	L1	1319	U	O4'-C1'-N1	15.64	120.71	108.20
33	L1	2113	A	O4'-C1'-N9	15.64	120.72	108.20
33	L1	1370	A	C3'-C2'-C1'	15.63	114.01	101.50
33	L1	1345	U	N1-C1'-C2'	15.63	134.32	114.00
33	L1	1391	A	OP1-P-OP2	-15.63	96.15	119.60
32	S1	373	U	N1-C1'-C2'	-15.63	93.68	114.00
33	L1	2380	G	O4'-C1'-C2'	15.62	121.66	107.60
33	L1	2875	U	C3'-C2'-C1'	15.61	113.99	101.50
33	L1	2759	C	N1-C1'-C2'	15.61	134.29	114.00
33	L1	566	G	N9-C1'-C2'	15.60	134.28	114.00
1	Sa	140	GLN	CG-CD-NE2	-15.58	79.30	116.70
34	L3	1	G	N9-C1'-C2'	15.58	134.26	114.00
32	S1	1504	U	O4'-C1'-N1	15.57	120.65	108.20
33	L1	2440	U	O4'-C1'-N1	15.57	120.65	108.20
32	S1	1661	C	P-O3'-C3'	15.56	138.37	119.70
33	L1	283	A	O4'-C1'-C2'	-15.55	90.25	105.80
33	L1	2793	G	C3'-C2'-C1'	-15.55	89.06	101.50
33	L1	3204	G	P-O3'-C3'	15.55	138.36	119.70
33	L1	1820	C	O4'-C1'-N1	15.54	120.64	108.20
44	LR	97	ALA	O-C-N	-15.54	97.83	122.70
32	S1	150	U	O4'-C1'-N1	15.53	120.62	108.20
33	L1	841	G	C5'-C4'-O4'	-15.53	90.46	109.10
33	L1	3144	U	P-O3'-C3'	15.53	138.33	119.70
33	L1	178	C	N1-C1'-C2'	15.52	134.17	114.00
33	L1	2164	G	O4'-C1'-N9	15.52	120.61	108.20
33	L1	259	G	O4'-C1'-N9	15.51	120.61	108.20
33	L1	787	G	O4'-C1'-N9	15.51	120.61	108.20
33	L1	2875	U	O4'-C1'-C2'	-15.51	90.29	105.80
33	L1	1867	U	C3'-C2'-C1'	-15.51	89.09	101.50
33	L1	2085	A	P-O3'-C3'	15.51	138.31	119.70
32	S1	1097	A	OP1-P-O3'	-15.50	71.11	105.20
33	L1	2669	C	N1-C1'-C2'	15.50	134.15	114.00
32	S1	610	A	O4'-C1'-N9	15.49	120.59	108.20
33	L1	130	G	O4'-C1'-N9	15.49	120.59	108.20
33	L1	2212	U	O4'-C1'-N1	15.48	120.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2361	C	N1-C1'-C2'	-15.48	93.88	114.00
32	S1	1206	A	O4'-C1'-N9	15.47	120.58	108.20
33	L1	772	U	O4'-C1'-N1	15.47	120.58	108.20
32	S1	1746	U	N1-C1'-C2'	15.47	134.11	114.00
67	LS	28	ARG	N-CA-CB	15.46	138.43	110.60
33	L1	475	U	O4'-C1'-C2'	-15.45	90.35	105.80
32	S1	306	U	O4'-C1'-N1	15.44	120.56	108.20
33	L1	536	C	N1-C1'-C2'	15.44	134.07	114.00
1	Sa	243	ARG	NE-CZ-NH1	15.43	128.01	120.30
33	L1	2511	U	N1-C1'-C2'	-15.41	93.96	114.00
33	L1	1432	G	O4'-C1'-C2'	15.41	121.47	107.60
33	L1	2799	U	P-O3'-C3'	15.41	138.19	119.70
33	L1	1516	G	N9-C1'-C2'	15.40	134.02	114.00
33	L1	3201	A	O4'-C1'-N9	15.40	120.52	108.20
33	L1	1193	A	O4'-C1'-C2'	-15.39	90.41	105.80
70	Li	46	VAL	N-CA-CB	-15.39	77.63	111.50
33	L1	804	A	O4'-C1'-N9	-15.39	95.89	108.20
33	L1	2903	G	C1'-O4'-C4'	-15.39	97.59	109.90
35	L2	53	G	C1'-O4'-C4'	-15.39	97.59	109.90
33	L1	2166	U	N1-C1'-C2'	15.38	134.00	114.00
32	S1	32	U	C1'-O4'-C4'	15.38	122.20	109.90
33	L1	2738	U	P-O3'-C3'	-15.38	101.24	119.70
33	L1	580	C	P-O3'-C3'	15.37	138.14	119.70
33	L1	1253	G	O4'-C1'-N9	15.37	120.49	108.20
33	L1	2290	A	C1'-O4'-C4'	-15.37	97.61	109.90
32	S1	422	G	O4'-C1'-N9	15.36	120.48	108.20
14	SP	88	ARG	NE-CZ-NH1	15.35	127.97	120.30
46	LT	64	ARG	NE-CZ-NH1	15.35	127.97	120.30
32	S1	1	U	O4'-C1'-N1	15.35	120.48	108.20
32	S1	1379	U	O4'-C1'-N1	15.35	120.48	108.20
33	L1	2708	A	O4'-C1'-N9	-15.33	95.93	108.20
32	S1	1134	U	O4'-C1'-N1	15.33	120.47	108.20
32	S1	1609	G	O4'-C1'-N9	15.33	120.47	108.20
33	L1	665	G	C1'-O4'-C4'	-15.32	97.64	109.90
33	L1	2233	G	O4'-C1'-N9	15.32	120.46	108.20
33	L1	262	A	N9-C1'-C2'	-15.32	94.08	114.00
33	L1	105	A	O4'-C1'-N9	-15.32	95.95	108.20
33	L1	809	A	O4'-C1'-C2'	-15.31	90.48	105.80
33	L1	307	C	C5'-C4'-C3'	15.30	140.48	116.00
33	L1	542	G	O4'-C1'-C2'	15.30	121.37	107.60
32	S1	452	C	P-O3'-C3'	15.30	138.06	119.70
33	L1	1814	C	N1-C1'-C2'	15.29	133.88	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	LG	51	TYR	O-C-N	-15.29	92.04	121.10
32	S1	1666	G	P-O3'-C3'	15.29	138.05	119.70
33	L1	1368	U	C3'-C2'-C1'	15.29	113.73	101.50
33	L1	1539	G	P-O3'-C3'	15.29	138.05	119.70
32	S1	156	U	O4'-C1'-N1	15.29	120.43	108.20
32	S1	956	A	O4'-C1'-N9	15.28	120.43	108.20
33	L1	423	C	P-O3'-C3'	15.28	138.04	119.70
33	L1	2103	U	O4'-C1'-N1	15.28	120.42	108.20
33	L1	891	U	O4'-C1'-N1	15.27	120.42	108.20
33	L1	963	U	N1-C1'-C2'	15.27	133.84	114.00
32	S1	31	C	N1-C1'-C2'	15.26	133.83	114.00
32	S1	1483	G	O4'-C1'-N9	15.25	120.40	108.20
33	L1	1708	C	N1-C1'-C2'	15.25	133.83	114.00
33	L1	2770	U	O4'-C1'-N1	15.24	120.39	108.20
33	L1	1728	G	O4'-C1'-C2'	-15.23	90.56	105.80
33	L1	2484	G	O4'-C1'-N9	15.22	120.38	108.20
3	SB	125	PHE	CB-CG-CD1	-15.22	110.15	120.80
33	L1	572	U	P-O3'-C3'	15.22	137.96	119.70
9	SK	120	ARG	NE-CZ-NH1	15.21	127.91	120.30
32	S1	492	G	O4'-C1'-N9	15.21	120.37	108.20
33	L1	1826	G	O4'-C1'-C2'	-15.21	90.59	105.80
33	L1	1624	G	O4'-C1'-N9	15.21	120.36	108.20
33	L1	2791	U	O4'-C1'-N1	15.20	120.36	108.20
33	L1	786	U	P-O3'-C3'	15.19	137.93	119.70
32	S1	1238	A	O4'-C1'-N9	15.18	120.34	108.20
33	L1	3376	C	O4'-C1'-N1	15.18	120.34	108.20
33	L1	335	G	O4'-C1'-C2'	-15.17	90.63	105.80
33	L1	1238	G	O4'-C1'-N9	15.17	120.33	108.20
70	Li	43	LYS	CD-CE-NZ	15.17	146.58	111.70
74	LJ	118	ARG	NE-CZ-NH1	15.16	127.88	120.30
33	L1	2914	G	P-O3'-C3'	15.16	137.89	119.70
34	L3	102	G	O4'-C1'-N9	15.16	120.33	108.20
37	LB	37	ARG	NE-CZ-NH1	15.15	127.88	120.30
33	L1	309	C	P-O3'-C3'	-15.15	101.52	119.70
32	S1	1097	A	P-O5'-C5'	15.14	145.12	120.90
33	L1	1679	U	O4'-C1'-N1	15.13	120.31	108.20
33	L1	3327	A	C1'-O4'-C4'	-15.13	97.79	109.90
7	SI	27	TYR	CB-CG-CD1	15.13	130.08	121.00
33	L1	1318	C	O4'-C1'-N1	-15.12	96.10	108.20
33	L1	1483	G	O4'-C1'-C2'	15.12	121.20	107.60
33	L1	2540	C	N1-C1'-C2'	15.12	133.65	114.00
82	LK	117	TYR	CB-CG-CD2	-15.12	111.93	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	632	G	C1'-O4'-C4'	15.11	121.99	109.90
33	L1	3155	C	P-O3'-C3'	15.09	137.81	119.70
33	L1	1265	G	O4'-C1'-C2'	-15.08	90.72	105.80
32	S1	1740	G	N9-C1'-C2'	-15.08	94.40	114.00
33	L1	2824	U	O4'-C1'-N1	15.07	120.26	108.20
31	S2	15	A	O4'-C1'-N9	15.07	120.26	108.20
33	L1	317	G	O4'-C1'-N9	15.06	120.25	108.20
33	L1	937	G	C1'-O4'-C4'	-15.05	97.86	109.90
19	SY	46	VAL	O-C-N	15.05	146.78	122.70
64	LG	26	TRP	O-C-N	-15.04	98.63	122.70
33	L1	2355	A	N9-C1'-C2'	-15.03	94.46	114.00
33	L1	2356	A	C1'-O4'-C4'	-15.03	97.87	109.90
33	L1	846	A	N9-C1'-C2'	-15.03	94.46	114.00
27	SH	83	VAL	CG1-CB-CG2	15.03	134.94	110.90
33	L1	2389	A	O4'-C1'-N9	15.02	120.21	108.20
33	L1	2841	G	O4'-C1'-N9	15.01	120.21	108.20
33	L1	3344	U	N1-C1'-C2'	15.01	133.51	114.00
33	L1	458	G	C1'-O4'-C4'	-15.00	97.90	109.90
33	L1	3041	A	O4'-C1'-N9	14.99	120.19	108.20
33	L1	2731	G	O4'-C1'-C2'	14.98	121.09	107.60
33	L1	504	U	O4'-C1'-N1	14.97	120.18	108.20
32	S1	632	G	P-O3'-C3'	14.97	137.66	119.70
33	L1	1679	U	O4'-C1'-C2'	-14.96	90.83	105.80
39	LF	187	THR	O-C-N	-14.97	98.75	122.70
33	L1	1513	C	O4'-C1'-N1	-14.95	96.24	108.20
33	L1	549	G	C1'-O4'-C4'	-14.93	97.95	109.90
32	S1	635	G	O4'-C1'-C2'	-14.92	90.88	105.80
33	L1	2955	U	O4'-C1'-N1	14.92	120.14	108.20
11	SM	95	PHE	CB-CG-CD1	14.90	131.23	120.80
30	S3	12	A	O4'-C1'-N9	14.90	120.12	108.20
33	L1	2362	A	N9-C1'-C2'	-14.89	94.64	114.00
33	L1	2390	G	O4'-C1'-N9	14.89	120.11	108.20
33	L1	1900	C	N1-C1'-C2'	14.89	133.35	114.00
33	L1	640	C	O4'-C1'-N1	-14.89	96.29	108.20
33	L1	1880	A	O4'-C1'-C2'	-14.88	90.92	105.80
33	L1	2597	C	N1-C1'-C2'	14.88	133.35	114.00
33	L1	549	G	N9-C1'-C2'	14.88	133.34	114.00
33	L1	2766	U	C1'-O4'-C4'	14.87	121.80	109.90
32	S1	1068	G	O4'-C1'-N9	14.87	120.10	108.20
33	L1	2109	G	N9-C1'-C2'	14.87	133.33	114.00
33	L1	1277	A	P-O3'-C3'	14.86	137.53	119.70
34	L3	10	C	C3'-C2'-C1'	14.86	113.39	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	124	G	O4'-C1'-C2'	-14.86	90.94	105.80
32	S1	682	A	P-O3'-C3'	14.85	137.52	119.70
81	LD	351	ARG	NE-CZ-NH2	14.85	127.73	120.30
33	L1	3304	U	N1-C1'-C2'	-14.85	94.69	114.00
33	L1	2216	G	N9-C1'-C2'	-14.85	94.70	114.00
33	L1	1384	G	O4'-C1'-N9	14.84	120.08	108.20
33	L1	1892	A	N9-C1'-C2'	14.84	133.29	114.00
15	SS	123	GLY	O-C-N	-14.83	98.97	122.70
33	L1	1361	G	P-O3'-C3'	14.83	137.50	119.70
33	L1	2211	G	C1'-O4'-C4'	-14.83	98.04	109.90
33	L1	3040	G	O4'-C1'-N9	14.83	120.06	108.20
32	S1	1592	G	O4'-C1'-N9	14.82	120.06	108.20
33	L1	2502	U	C1'-O4'-C4'	14.82	121.76	109.90
33	L1	584	G	O4'-C1'-C2'	-14.82	90.98	105.80
33	L1	639	A	O4'-C1'-N9	14.82	120.06	108.20
33	L1	2513	U	P-O5'-C5'	14.82	144.61	120.90
33	L1	2735	G	O4'-C1'-N9	14.81	120.05	108.20
33	L1	2590	C	O4'-C1'-C2'	-14.81	90.99	105.80
33	L1	2909	A	O4'-C1'-N9	14.80	120.04	108.20
35	L2	93	A	C3'-C2'-C1'	14.80	113.34	101.50
33	L1	2380	G	O5'-P-OP2	14.80	128.46	110.70
33	L1	2374	G	O4'-C1'-N9	14.79	120.03	108.20
32	S1	1119	G	O4'-C1'-N9	14.79	120.03	108.20
33	L1	1932	A	O4'-C1'-N9	14.79	120.03	108.20
44	LR	152	PHE	CB-CG-CD1	-14.78	110.45	120.80
33	L1	1761	C	P-O3'-C3'	-14.77	101.98	119.70
33	L1	3011	U	O4'-C1'-N1	14.75	120.00	108.20
38	LE	88	VAL	CA-C-N	14.74	149.64	117.20
33	L1	2132	A	O4'-C1'-N9	14.74	119.99	108.20
11	SM	113	ARG	NE-CZ-NH1	-14.74	112.93	120.30
32	S1	1763	A	P-O3'-C3'	14.73	137.38	119.70
33	L1	20	G	C3'-C2'-C1'	-14.73	89.71	101.50
64	LG	12	LYS	CA-C-O	-14.73	89.16	120.10
33	L1	299	G	O4'-C1'-N9	14.73	119.98	108.20
33	L1	1092	G	O4'-C1'-N9	14.73	119.98	108.20
33	L1	2431	U	N1-C1'-C2'	14.72	133.14	114.00
33	L1	2497	A	P-O3'-C3'	14.72	137.37	119.70
33	L1	1714	A	O4'-C1'-N9	-14.72	96.43	108.20
33	L1	1430	C	C1'-O4'-C4'	-14.71	98.13	109.90
32	S1	594	C	P-O3'-C3'	14.71	137.35	119.70
33	L1	570	G	C1'-O4'-C4'	-14.71	98.13	109.90
33	L1	1395	A	N9-C1'-C2'	-14.71	94.88	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	79	A	O4'-C1'-N9	14.71	119.97	108.20
32	S1	1269	G	O4'-C1'-N9	14.70	119.96	108.20
33	L1	483	U	P-O3'-C3'	14.69	137.33	119.70
33	L1	72	A	C1'-O4'-C4'	14.69	121.65	109.90
33	L1	1050	A	O4'-C1'-C2'	-14.69	91.11	105.80
33	L1	1855	A	N9-C1'-C2'	-14.69	94.91	114.00
33	L1	701	U	O4'-C1'-N1	14.67	119.94	108.20
38	LE	96	ARG	NE-CZ-NH2	14.67	127.64	120.30
33	L1	1136	A	C1'-O4'-C4'	-14.67	98.17	109.90
33	L1	1384	G	C1'-O4'-C4'	-14.66	98.17	109.90
33	L1	1395	A	C1'-O4'-C4'	14.65	121.62	109.90
33	L1	566	G	C1'-O4'-C4'	-14.64	98.19	109.90
33	L1	2502	U	O4'-C4'-C3'	-14.64	89.36	104.00
80	LC	278	ARG	NE-CZ-NH2	-14.64	112.98	120.30
49	LX	33	SER	C-N-CA	-14.64	85.11	121.70
33	L1	495	G	O4'-C1'-N9	14.63	119.91	108.20
33	L1	1571	A	O4'-C1'-N9	14.63	119.90	108.20
33	L1	728	G	O4'-C1'-N9	14.62	119.90	108.20
33	L1	339	G	O4'-C1'-C2'	14.62	120.76	107.60
33	L1	2862	U	P-O3'-C3'	14.62	137.25	119.70
31	S2	26	G	C3'-C2'-C1'	-14.62	89.81	101.50
32	S1	1588	C	OP2-P-O3'	-14.62	73.04	105.20
33	L1	311	G	C1'-O4'-C4'	-14.62	98.21	109.90
33	L1	1806	C	N1-C1'-C2'	14.62	133.00	114.00
33	L1	993	A	P-O3'-C3'	14.61	137.24	119.70
34	L3	25	G	O4'-C1'-N9	14.61	119.89	108.20
33	L1	987	A	O4'-C1'-N9	14.60	119.88	108.20
33	L1	2486	G	O4'-C1'-N9	14.59	119.88	108.20
33	L1	3005	C	C1'-O4'-C4'	-14.59	98.22	109.90
33	L1	305	G	O4'-C1'-C2'	14.59	120.73	107.60
32	S1	1240	A	O4'-C1'-N9	14.58	119.87	108.20
33	L1	861	A	O4'-C1'-N9	14.58	119.86	108.20
35	L2	62	G	P-O3'-C3'	14.58	137.19	119.70
23	SU	80	LEU	CB-CG-CD1	14.57	135.77	111.00
33	L1	1484	A	P-O3'-C3'	14.57	137.18	119.70
32	S1	855	G	O4'-C1'-N9	14.57	119.85	108.20
33	L1	1614	G	N9-C1'-C2'	14.56	132.94	114.00
32	S1	1195	U	O4'-C1'-N1	14.56	119.85	108.20
33	L1	2952	G	O4'-C1'-N9	14.56	119.85	108.20
33	L1	665	G	O4'-C1'-N9	-14.55	96.56	108.20
33	L1	1505	G	O4'-C1'-N9	14.55	119.84	108.20
33	L1	3048	C	N1-C1'-C2'	14.55	132.91	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	90	U	C1'-O4'-C4'	14.55	121.54	109.90
33	L1	691	U	N1-C1'-C2'	-14.55	95.09	114.00
33	L1	1863	A	O4'-C1'-N9	14.55	119.84	108.20
33	L1	1034	U	N1-C1'-C2'	14.54	132.91	114.00
33	L1	2787	A	C5'-C4'-C3'	-14.54	92.73	116.00
33	L1	1197	A	C1'-O4'-C4'	-14.54	98.27	109.90
33	L1	1764	G	C3'-C2'-C1'	-14.54	89.87	101.50
32	S1	61	A	O4'-C1'-C2'	-14.53	91.27	105.80
33	L1	70	A	O4'-C1'-N9	-14.54	96.57	108.20
32	S1	288	G	O4'-C1'-N9	14.53	119.82	108.20
33	L1	207	U	O4'-C1'-N1	14.52	119.82	108.20
33	L1	3294	U	O4'-C1'-N1	14.52	119.82	108.20
33	L1	2620	U	P-O3'-C3'	14.52	137.12	119.70
33	L1	1057	A	O4'-C1'-C2'	-14.51	91.29	105.80
33	L1	1344	A	C3'-C2'-C1'	14.51	113.11	101.50
33	L1	656	G	N9-C1'-C2'	14.51	132.86	114.00
42	LP	24	ARG	NE-CZ-NH2	-14.51	113.05	120.30
33	L1	1830	U	C1'-O4'-C4'	-14.51	98.29	109.90
32	S1	564	U	O4'-C1'-N1	14.51	119.80	108.20
33	L1	156	A	P-O3'-C3'	14.50	137.10	119.70
33	L1	684	C	O4'-C1'-N1	14.50	119.80	108.20
33	L1	1646	U	O4'-C1'-C2'	-14.50	91.30	105.80
33	L1	62	A	N9-C1'-C2'	-14.50	95.16	114.00
33	L1	2468	G	P-O3'-C3'	14.50	137.09	119.70
13	SQ	61	ILE	N-CA-C	14.49	150.13	111.00
33	L1	1348	G	O4'-C1'-C2'	14.49	120.64	107.60
70	Li	43	LYS	CG-CD-CE	14.49	155.36	111.90
33	L1	2334	G	O4'-C1'-N9	14.49	119.79	108.20
32	S1	1482	U	P-O3'-C3'	14.48	137.07	119.70
33	L1	2334	G	O4'-C1'-C2'	14.46	120.62	107.60
77	Lc	47	ARG	NE-CZ-NH1	14.46	127.53	120.30
33	L1	986	G	O4'-C1'-C2'	-14.46	91.34	105.80
33	L1	3361	G	P-O5'-C5'	14.46	144.04	120.90
33	L1	2083	U	P-O3'-C3'	14.45	137.04	119.70
33	L1	707	G	O4'-C1'-N9	-14.44	96.64	108.20
78	Le	241	ARG	NE-CZ-NH1	14.44	127.52	120.30
33	L1	642	C	C5'-C4'-O4'	14.43	126.42	109.10
33	L1	3334	A	C1'-O4'-C4'	-14.43	98.36	109.90
32	S1	664	G	P-O5'-C5'	14.43	143.99	120.90
33	L1	1880	A	C5'-C4'-C3'	14.42	139.08	116.00
81	LD	318	GLU	CB-CA-C	-14.42	81.55	110.40
33	L1	2476	G	O4'-C1'-N9	14.41	119.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	341	G	P-O3'-C3'	14.41	136.99	119.70
33	L1	56	A	O4'-C1'-N9	14.41	119.73	108.20
33	L1	2089	A	O4'-C1'-N9	14.40	119.72	108.20
64	LG	51	TYR	CA-C-O	-14.40	89.86	120.10
33	L1	3345	G	O4'-C1'-N9	14.40	119.72	108.20
35	L2	66	C	N1-C1'-C2'	14.40	132.72	114.00
34	L3	58	G	N9-C1'-C2'	-14.39	95.29	114.00
33	L1	3035	C	C1'-O4'-C4'	-14.38	98.40	109.90
33	L1	167	C	P-O3'-C3'	14.38	136.95	119.70
37	LB	128	ARG	NE-CZ-NH2	-14.38	113.11	120.30
33	L1	1752	C	C3'-C2'-C1'	14.37	113.00	101.50
33	L1	2584	U	N1-C1'-C2'	14.37	132.68	114.00
25	SC	46	ARG	NE-CZ-NH1	14.37	127.48	120.30
34	L3	109	U	P-O5'-C5'	14.36	143.88	120.90
35	L2	53	G	O4'-C1'-N9	-14.36	96.71	108.20
33	L1	3096	U	O4'-C1'-N1	14.35	119.68	108.20
69	La	27	ARG	N-CA-CB	-14.35	84.77	110.60
33	L1	1022	G	O4'-C1'-N9	14.35	119.68	108.20
2	SA	215	LYS	C-N-CA	14.33	157.52	121.70
33	L1	2204	U	O4'-C1'-N1	14.33	119.66	108.20
27	SH	3	ARG	NE-CZ-NH2	14.32	127.46	120.30
33	L1	1155	G	P-O3'-C3'	14.32	136.89	119.70
33	L1	2355	A	O4'-C1'-C2'	-14.32	91.48	105.80
33	L1	2634	U	P-O3'-C3'	14.32	136.88	119.70
11	SM	34	LYS	C-N-CA	14.31	152.34	122.30
32	S1	1460	G	O4'-C1'-N9	14.30	119.64	108.20
33	L1	1015	A	O4'-C1'-C2'	-14.30	91.50	105.80
33	L1	262	A	C1'-O4'-C4'	14.30	121.34	109.90
33	L1	2640	A	C1'-O4'-C4'	14.29	121.34	109.90
33	L1	127	G	O4'-C1'-C2'	14.29	120.46	107.60
32	S1	389	A	P-O3'-C3'	14.29	136.84	119.70
33	L1	1577	A	N9-C1'-C2'	-14.28	95.44	114.00
33	L1	1880	A	P-O3'-C3'	-14.28	102.57	119.70
48	LV	136	ARG	NE-CZ-NH2	-14.28	113.16	120.30
32	S1	297	U	P-O3'-C3'	14.27	136.83	119.70
73	Lp	52	LYS	CA-CB-CG	14.27	144.80	113.40
33	L1	431	G	C3'-C2'-C1'	-14.27	90.08	101.50
64	LG	20	TYR	CB-CG-CD2	-14.27	112.44	121.00
44	LR	152	PHE	CB-CG-CD2	14.27	130.79	120.80
32	S1	470	U	P-O3'-C3'	14.26	136.82	119.70
33	L1	2763	C	C1'-O4'-C4'	14.26	121.31	109.90
32	S1	1317	A	O4'-C1'-N9	14.26	119.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1855	A	O4'-C1'-C2'	-14.26	91.54	105.80
33	L1	1433	U	O4'-C1'-N1	14.25	119.60	108.20
33	L1	2651	G	O4'-C1'-N9	14.25	119.60	108.20
33	L1	1408	C	N1-C1'-C2'	14.25	132.52	114.00
33	L1	146	U	P-O3'-C3'	14.25	136.80	119.70
33	L1	975	G	O4'-C1'-C2'	14.25	120.42	107.60
33	L1	3372	C	C3'-C2'-C1'	14.25	112.90	101.50
33	L1	19	C	C3'-C2'-C1'	14.24	112.89	101.50
32	S1	1801	A	O4'-C1'-C2'	14.23	120.41	107.60
33	L1	3295	G	C1'-O4'-C4'	-14.23	98.51	109.90
31	S2	72	G	C1'-O4'-C4'	14.23	121.28	109.90
32	S1	1538	C	O4'-C1'-N1	14.23	119.58	108.20
33	L1	603	G	C1'-O4'-C4'	-14.23	98.52	109.90
64	LG	209	ARG	NE-CZ-NH2	-14.22	113.19	120.30
33	L1	237	C	N1-C1'-C2'	14.22	132.49	114.00
34	L3	48	G	O4'-C1'-C2'	-14.22	91.58	105.80
33	L1	2436	G	P-O3'-C3'	14.20	136.75	119.70
33	L1	2627	G	O4'-C1'-N9	14.20	119.56	108.20
33	L1	3142	C	O4'-C1'-N1	-14.20	96.84	108.20
33	L1	643	G	O4'-C1'-N9	14.20	119.56	108.20
33	L1	1270	G	O4'-C1'-N9	14.19	119.56	108.20
1	Sa	16	ALA	O-C-N	14.19	145.40	122.70
33	L1	1311	G	O4'-C1'-C2'	14.18	120.37	107.60
33	L1	1651	A	C1'-O4'-C4'	-14.18	98.56	109.90
33	L1	2079	A	O4'-C1'-N9	14.18	119.54	108.20
33	L1	640	C	P-O5'-C5'	14.17	143.58	120.90
33	L1	2461	A	P-O3'-C3'	14.17	136.71	119.70
33	L1	267	G	O4'-C1'-N9	-14.16	96.87	108.20
33	L1	915	G	O4'-C1'-N9	14.16	119.53	108.20
33	L1	1348	G	C1'-O4'-C4'	-14.16	98.57	109.90
33	L1	1753	A	P-O3'-C3'	14.16	136.69	119.70
33	L1	2380	G	P-O5'-C5'	14.16	143.55	120.90
69	La	27	ARG	N-CA-C	14.16	149.22	111.00
32	S1	517	U	P-O3'-C3'	14.15	136.68	119.70
33	L1	2628	C	O4'-C1'-C2'	-14.15	91.65	105.80
33	L1	105	A	N9-C1'-C2'	-14.15	95.61	114.00
33	L1	563	C	N1-C1'-C2'	14.15	132.40	114.00
35	L2	30	C	O4'-C1'-C2'	-14.15	91.65	105.80
33	L1	2719	U	O4'-C1'-N1	14.15	119.52	108.20
33	L1	1369	G	C5'-C4'-C3'	14.14	138.63	116.00
33	L1	1849	U	N1-C1'-C2'	-14.13	95.62	114.00
32	S1	1060	U	N1-C1'-C2'	14.13	132.37	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1421	A	O4'-C1'-N9	14.12	119.50	108.20
33	L1	1527	A	O4'-C1'-N9	-14.12	96.90	108.20
32	S1	1586	U	P-O3'-C3'	14.12	136.64	119.70
15	SS	91	ARG	NE-CZ-NH2	-14.12	113.24	120.30
33	L1	1663	G	P-O3'-C3'	14.12	136.64	119.70
32	S1	1160	G	O4'-C1'-N9	14.11	119.49	108.20
32	S1	879	C	C3'-C2'-C1'	14.11	112.79	101.50
42	LP	49	ARG	NE-CZ-NH1	14.11	127.35	120.30
32	S1	877	G	O4'-C1'-C2'	-14.11	91.69	105.80
33	L1	964	C	O4'-C1'-C2'	-14.11	91.69	105.80
33	L1	1881	C	O4'-C1'-N1	14.10	119.48	108.20
71	Lj	7	GLN	N-CA-CB	14.10	135.98	110.60
32	S1	952	U	O4'-C1'-N1	14.10	119.48	108.20
32	S1	1320	C	O4'-C1'-N1	14.09	119.47	108.20
9	SK	93	HIS	C-N-CA	14.09	156.92	121.70
33	L1	2247	A	C3'-C2'-C1'	14.09	112.77	101.50
33	L1	3301	G	O4'-C1'-N9	14.09	119.47	108.20
33	L1	643	G	O4'-C1'-C2'	14.08	120.28	107.60
64	LG	59	ARG	NE-CZ-NH1	-14.08	113.26	120.30
32	S1	1068	G	C1'-O4'-C4'	14.08	121.16	109.90
32	S1	32	U	O4'-C1'-C2'	-14.08	91.72	105.80
33	L1	784	G	O4'-C1'-N9	14.07	119.46	108.20
35	L2	42	U	N1-C1'-C2'	14.07	132.29	114.00
33	L1	665	G	N9-C1'-C2'	14.07	132.29	114.00
57	Ll	55	ARG	NE-CZ-NH1	14.06	127.33	120.30
64	LG	209	ARG	NE-CZ-NH1	14.06	127.33	120.30
32	S1	514	G	P-O3'-C3'	14.06	136.57	119.70
33	L1	3270	C	N1-C1'-C2'	14.06	132.28	114.00
33	L1	834	G	O4'-C1'-N9	14.06	119.45	108.20
33	L1	1841	G	C3'-C2'-C1'	-14.06	90.25	101.50
35	L2	155	G	C5'-C4'-C3'	14.05	138.49	116.00
25	SC	49	TYR	CB-CG-CD1	14.05	129.43	121.00
33	L1	2751	A	C1'-O4'-C4'	14.05	121.14	109.90
33	L1	3095	G	C1'-O4'-C4'	-14.05	98.66	109.90
33	L1	1773	U	P-O3'-C3'	14.05	136.56	119.70
33	L1	1827	U	N1-C1'-C2'	14.04	132.25	114.00
33	L1	3304	U	C1'-O4'-C4'	14.04	121.13	109.90
68	LW	104	VAL	CA-C-O	-14.04	90.62	120.10
40	LH	78	ARG	NE-CZ-NH2	-14.04	113.28	120.30
33	L1	2672	C	C3'-C2'-C1'	14.03	112.73	101.50
32	S1	648	C	O4'-C1'-C2'	-14.03	91.77	105.80
33	L1	3237	G	O4'-C1'-N9	14.03	119.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1058	A	P-O3'-C3'	14.03	136.53	119.70
33	L1	755	C	C1'-O4'-C4'	-14.02	98.68	109.90
9	SK	43	VAL	CG1-CB-CG2	14.02	133.33	110.90
32	S1	828	G	O4'-C1'-N9	14.02	119.41	108.20
33	L1	3293	U	O4'-C1'-N1	14.02	119.42	108.20
64	LG	20	TYR	CD1-CE1-CZ	-14.02	107.19	119.80
31	S2	22	G	N9-C1'-C2'	14.01	132.22	114.00
33	L1	1081	U	N1-C1'-C2'	-14.01	95.78	114.00
33	L1	1989	G	O4'-C1'-N9	14.01	119.41	108.20
33	L1	1180	C	C3'-C2'-C1'	14.01	112.71	101.50
32	S1	801	U	P-O5'-C5'	-14.01	98.48	120.90
32	S1	1648	C	N1-C1'-C2'	14.01	132.21	114.00
33	L1	2453	G	O4'-C1'-N9	14.01	119.41	108.20
35	L2	124	G	C1'-O4'-C4'	14.00	121.10	109.90
32	S1	126	U	O4'-C1'-N1	14.00	119.40	108.20
32	S1	1442	A	OP1-P-O3'	-14.00	74.41	105.20
33	L1	2235	G	C1'-O4'-C4'	-14.00	98.70	109.90
33	L1	1881	C	C5'-C4'-C3'	13.99	138.39	116.00
33	L1	1822	C	N1-C1'-C2'	13.99	132.18	114.00
32	S1	1642	C	C1'-O4'-C4'	-13.98	98.71	109.90
33	L1	1063	G	N9-C1'-C2'	13.98	132.18	114.00
33	L1	1646	U	N1-C1'-C2'	-13.98	95.82	114.00
32	S1	1788	G	O4'-C1'-N9	13.98	119.38	108.20
33	L1	1941	G	O4'-C1'-C2'	13.98	120.18	107.60
33	L1	2161	G	O4'-C1'-N9	13.98	119.38	108.20
34	L3	3	A	C3'-C2'-C1'	13.97	112.68	101.50
33	L1	1344	A	N9-C1'-C2'	13.97	132.16	114.00
33	L1	2722	U	C1'-O4'-C4'	13.96	121.07	109.90
33	L1	2701	G	O4'-C1'-N9	13.96	119.37	108.20
33	L1	2972	C	P-O3'-C3'	13.96	136.45	119.70
32	S1	519	A	P-O3'-C3'	13.96	136.45	119.70
33	L1	771	G	P-O3'-C3'	13.94	136.43	119.70
1	Sa	243	ARG	NE-CZ-NH2	-13.94	113.33	120.30
33	L1	126	G	O4'-C1'-C2'	13.94	120.15	107.60
32	S1	300	U	O4'-C1'-N1	13.94	119.35	108.20
32	S1	503	U	O4'-C1'-N1	13.94	119.35	108.20
32	S1	1685	U	P-O3'-C3'	13.94	136.42	119.70
32	S1	1754	A	O4'-C1'-N9	13.94	119.35	108.20
33	L1	1034	U	O3'-P-O5'	-13.94	77.52	104.00
33	L1	2485	U	O4'-C1'-N1	13.93	119.35	108.20
32	S1	1745	U	P-O3'-C3'	13.93	136.42	119.70
33	L1	2780	G	O4'-C1'-N9	13.93	119.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	188	U	P-O3'-C3'	13.92	136.41	119.70
32	S1	1703	G	O4'-C1'-N9	13.92	119.33	108.20
33	L1	343	G	O4'-C1'-C2'	13.92	120.13	107.60
33	L1	3239	G	O4'-C1'-N9	13.92	119.33	108.20
33	L1	237	C	O4'-C1'-C2'	-13.91	91.89	105.80
33	L1	1298	A	O4'-C1'-N9	13.91	119.33	108.20
33	L1	1638	U	O4'-C1'-N1	13.91	119.33	108.20
33	L1	49	U	N1-C1'-C2'	13.91	132.09	114.00
32	S1	1407	A	P-O3'-C3'	13.91	136.39	119.70
33	L1	1689	G	P-O3'-C3'	13.91	136.39	119.70
33	L1	123	U	N1-C1'-C2'	13.90	132.07	114.00
2	SA	108	THR	C-N-CD	-13.90	90.02	120.60
33	L1	1880	A	C3'-C2'-C1'	13.89	112.62	101.50
34	L3	48	G	N9-C1'-C2'	-13.89	95.94	114.00
33	L1	964	C	C1'-O4'-C4'	13.88	121.00	109.90
33	L1	2722	U	P-O3'-C3'	13.88	136.36	119.70
33	L1	1533	U	N1-C1'-C2'	-13.88	95.96	114.00
33	L1	2376	G	P-O5'-C5'	13.87	143.10	120.90
32	S1	479	A	O4'-C1'-N9	13.87	119.30	108.20
32	S1	389	A	O4'-C1'-N9	13.86	119.29	108.20
32	S1	1094	U	O4'-C1'-N1	13.86	119.29	108.20
42	LP	20	ARG	NE-CZ-NH1	13.86	127.23	120.30
33	L1	1937	C	P-O3'-C3'	13.86	136.33	119.70
33	L1	1646	U	C1'-O4'-C4'	13.85	120.98	109.90
33	L1	667	C	P-O5'-C5'	13.84	143.05	120.90
35	L2	97	U	P-O3'-C3'	13.84	136.31	119.70
33	L1	583	C	N1-C1'-C2'	13.84	131.99	114.00
33	L1	309	C	N1-C1'-C2'	13.84	131.99	114.00
1	Sa	60	ARG	NE-CZ-NH2	-13.84	113.38	120.30
33	L1	209	G	O4'-C1'-N9	-13.84	97.13	108.20
33	L1	2115	G	O4'-C1'-N9	13.84	119.27	108.20
33	L1	2909	A	C1'-O4'-C4'	13.84	120.97	109.90
3	SB	34	TYR	CB-CG-CD2	13.83	129.30	121.00
33	L1	2676	A	P-O5'-C5'	13.83	143.03	120.90
33	L1	2468	G	O4'-C1'-N9	13.83	119.26	108.20
32	S1	1789	U	O4'-C1'-N1	13.82	119.25	108.20
33	L1	2900	G	C3'-C2'-C1'	13.82	112.55	101.50
33	L1	858	U	C5'-C4'-C3'	13.81	138.10	116.00
33	L1	1593	C	C3'-C2'-C1'	13.81	112.55	101.50
33	L1	3041	A	C3'-C2'-C1'	-13.81	90.45	101.50
60	Lr	32	LYS	O-C-N	-13.81	100.61	122.70
33	L1	1025	G	P-O3'-C3'	13.80	136.26	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	SC	3	ARG	NE-CZ-NH2	-13.80	113.40	120.30
32	S1	200	C	O4'-C1'-C2'	-13.79	92.01	105.80
32	S1	1715	C	C1'-O4'-C4'	-13.79	98.87	109.90
33	L1	714	G	O4'-C1'-N9	13.79	119.23	108.20
32	S1	647	G	O4'-C1'-N9	13.79	119.23	108.20
33	L1	1766	U	O4'-C1'-N1	13.79	119.23	108.20
80	LC	315	PHE	CB-CG-CD2	-13.79	111.15	120.80
81	LD	117	ARG	NE-CZ-NH2	13.78	127.19	120.30
33	L1	2518	A	P-O3'-C3'	13.78	136.24	119.70
33	L1	2599	U	O4'-C1'-N1	13.78	119.22	108.20
1	Sa	83	SER	CA-CB-OG	13.78	148.40	111.20
5	SE	194	LYS	N-CA-CB	13.77	135.39	110.60
33	L1	28	C	O4'-C1'-N1	13.77	119.22	108.20
33	L1	3223	C	O4'-C1'-N1	13.77	119.22	108.20
61	Lq	11	ARG	NE-CZ-NH2	-13.77	113.42	120.30
33	L1	2855	G	O4'-C1'-N9	13.77	119.21	108.20
33	L1	2903	G	C3'-C2'-C1'	-13.76	90.49	101.50
33	L1	777	G	O4'-C1'-N9	13.76	119.21	108.20
32	S1	1508	C	P-O3'-C3'	13.75	136.20	119.70
33	L1	1027	C	P-O3'-C3'	13.75	136.20	119.70
33	L1	801	G	O4'-C1'-N9	13.75	119.20	108.20
34	L3	68	G	N9-C1'-C2'	13.75	131.87	114.00
33	L1	441	G	O4'-C1'-N9	13.74	119.19	108.20
33	L1	1164	G	O4'-C1'-N9	13.73	119.18	108.20
33	L1	2615	U	O4'-C1'-N1	13.72	119.18	108.20
34	L3	13	A	N9-C1'-C2'	13.72	131.84	114.00
32	S1	1279	A	N9-C1'-C2'	13.72	131.84	114.00
32	S1	187	C	P-O3'-C3'	13.72	136.16	119.70
46	LT	180	ARG	NE-CZ-NH1	13.71	127.16	120.30
11	SM	53	ASN	OD1-CG-ND2	-13.71	90.37	121.90
33	L1	177	C	N1-C1'-C2'	13.71	131.82	114.00
33	L1	310	C	P-O3'-C3'	-13.71	103.25	119.70
33	L1	677	U	C1'-O4'-C4'	-13.71	98.93	109.90
33	L1	3156	G	N9-C1'-C2'	-13.71	96.17	114.00
35	L2	89	G	N9-C1'-C2'	13.71	131.82	114.00
32	S1	30	G	O4'-C1'-N9	13.71	119.17	108.20
7	SI	53	LYS	CB-CA-C	13.70	137.80	110.40
33	L1	1254	A	N9-C1'-C2'	-13.70	96.19	114.00
33	L1	3320	G	N9-C1'-C2'	13.69	131.80	114.00
32	S1	139	U	O4'-C1'-N1	13.69	119.15	108.20
33	L1	1818	C	N1-C1'-C2'	13.68	131.78	114.00
69	La	31	GLU	O-C-N	-13.68	99.95	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	507	C	C3'-C2'-C1'	13.67	112.44	101.50
35	L2	41	A	C3'-C2'-C1'	13.67	112.44	101.50
33	L1	2944	C	N1-C1'-C2'	13.67	131.77	114.00
35	L2	138	G	C3'-C2'-C1'	13.66	112.43	101.50
33	L1	2096	U	P-O3'-C3'	13.66	136.09	119.70
72	Lk	42	PHE	CB-CG-CD1	13.66	130.36	120.80
23	SU	8	PRO	O-C-N	-13.65	100.86	122.70
33	L1	1312	A	C3'-C2'-C1'	13.65	112.42	101.50
32	S1	147	C	C3'-C2'-C1'	13.65	112.42	101.50
33	L1	1740	U	O4'-C1'-N1	13.64	119.11	108.20
14	SP	94	PHE	CB-CG-CD1	-13.64	111.25	120.80
33	L1	1662	G	C1'-O4'-C4'	-13.63	98.99	109.90
32	S1	631	C	P-O3'-C3'	13.63	136.06	119.70
33	L1	68	U	C1'-O4'-C4'	-13.63	99.00	109.90
33	L1	163	U	O4'-C1'-N1	13.63	119.10	108.20
9	SK	93	HIS	CA-C-N	13.63	147.18	117.20
32	S1	857	A	O4'-C1'-N9	13.62	119.10	108.20
32	S1	504	C	C3'-C2'-C1'	13.62	112.40	101.50
33	L1	102	G	C1'-O4'-C4'	13.62	120.80	109.90
34	L3	25	G	P-O3'-C3'	13.62	136.05	119.70
46	LT	100	ARG	NE-CZ-NH2	-13.62	113.49	120.30
33	L1	105	A	O4'-C1'-C2'	-13.61	92.19	105.80
33	L1	2313	U	O4'-C1'-N1	13.61	119.09	108.20
33	L1	177	C	C1'-O4'-C4'	-13.61	99.02	109.90
32	S1	562	U	O4'-C1'-N1	13.60	119.08	108.20
38	LE	34	ARG	CB-CG-CD	13.60	146.97	111.60
32	S1	1371	U	C1'-O4'-C4'	-13.60	99.02	109.90
32	S1	1670	G	O4'-C1'-N9	13.60	119.08	108.20
33	L1	940	G	P-O3'-C3'	13.60	136.02	119.70
33	L1	2613	G	O4'-C1'-N9	13.60	119.08	108.20
33	L1	183	C	P-O3'-C3'	13.60	136.02	119.70
33	L1	2441	G	O4'-C1'-N9	13.58	119.06	108.20
33	L1	1873	C	P-O3'-C3'	13.58	135.99	119.70
33	L1	664	A	O4'-C1'-C2'	13.58	119.82	107.60
33	L1	2786	G	C3'-C2'-C1'	13.57	112.36	101.50
34	L3	40	A	C1'-O4'-C4'	13.57	120.76	109.90
33	L1	1206	A	O4'-C1'-N9	13.57	119.06	108.20
41	LM	68	GLY	N-CA-C	13.57	147.02	113.10
33	L1	557	C	N1-C1'-C2'	13.57	131.64	114.00
33	L1	2519	U	O4'-C1'-N1	13.57	119.05	108.20
70	Li	46	VAL	CB-CA-C	-13.57	85.62	111.40
33	L1	25	U	P-O5'-C5'	13.56	142.60	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	554	C	P-O3'-C3'	13.56	135.98	119.70
33	L1	2783	U	C1'-O4'-C4'	13.56	120.75	109.90
33	L1	785	U	O4'-C1'-N1	13.56	119.05	108.20
32	S1	1685	U	O4'-C1'-N1	13.56	119.05	108.20
33	L1	473	G	O4'-C1'-N9	13.56	119.05	108.20
34	L3	115	A	P-O3'-C3'	13.56	135.97	119.70
32	S1	578	G	O4'-C1'-N9	13.55	119.04	108.20
33	L1	2714	U	O4'-C1'-N1	13.55	119.04	108.20
33	L1	3236	A	C3'-C2'-C1'	13.55	112.34	101.50
25	SC	162	LEU	CA-C-O	-13.55	91.65	120.10
32	S1	1063	U	C1'-O4'-C4'	13.55	120.74	109.90
32	S1	128	G	C1'-O4'-C4'	13.54	120.73	109.90
33	L1	2174	C	O4'-C1'-N1	13.54	119.03	108.20
34	L3	70	G	O4'-C1'-N9	13.54	119.03	108.20
33	L1	2433	U	P-O3'-C3'	13.53	135.94	119.70
33	L1	384	A	O4'-C1'-C2'	-13.53	92.27	105.80
33	L1	2318	U	N1-C1'-C2'	-13.53	96.41	114.00
33	L1	582	C	N1-C1'-C2'	13.53	131.59	114.00
33	L1	1395	A	C5'-C4'-C3'	13.53	137.64	116.00
33	L1	2318	U	O4'-C1'-C2'	-13.53	92.28	105.80
33	L1	105	A	C3'-C2'-C1'	13.52	112.32	101.50
34	L3	38	U	P-O3'-C3'	-13.52	103.47	119.70
33	L1	1168	G	O4'-C1'-N9	13.52	119.02	108.20
33	L1	350	A	O4'-C1'-N9	13.51	119.01	108.20
34	L3	73	U	P-O3'-C3'	13.51	135.91	119.70
29	ST	22	ARG	NE-CZ-NH1	13.51	127.05	120.30
33	L1	556	U	O4'-C1'-N1	13.50	119.00	108.20
32	S1	7	G	O4'-C1'-N9	13.50	119.00	108.20
33	L1	531	G	C3'-C2'-C1'	-13.49	90.70	101.50
33	L1	2509	A	O4'-C1'-N9	13.48	118.98	108.20
33	L1	694	U	O4'-C1'-N1	13.48	118.98	108.20
33	L1	2478	G	N9-C1'-C2'	13.48	131.52	114.00
35	L2	137	C	P-O3'-C3'	13.48	135.87	119.70
4	SD	239	PRO	C-N-CA	13.47	155.38	121.70
33	L1	2530	G	O4'-C1'-C2'	13.47	119.72	107.60
33	L1	2668	U	O4'-C1'-C2'	-13.46	92.34	105.80
33	L1	2278	G	P-O3'-C3'	13.45	135.84	119.70
33	L1	1196	U	O4'-C1'-N1	13.45	118.96	108.20
33	L1	1829	G	O4'-C1'-C2'	13.45	119.71	107.60
33	L1	250	C	O4'-C1'-N1	-13.45	97.44	108.20
33	L1	1756	C	N1-C1'-C2'	13.44	131.48	114.00
25	SC	164	SER	C-N-CD	13.44	156.63	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1513	C	N1-C1'-C2'	13.44	131.48	114.00
32	S1	953	G	O4'-C1'-N9	13.43	118.95	108.20
32	S1	1288	C	O4'-C1'-C2'	-13.43	92.37	105.80
32	S1	1414	G	P-O3'-C3'	13.43	135.81	119.70
25	SC	49	TYR	CB-CG-CD2	-13.42	112.95	121.00
33	L1	2216	G	O4'-C1'-N9	13.42	118.94	108.20
33	L1	2231	G	C1'-O4'-C4'	13.42	120.64	109.90
33	L1	1634	G	P-O3'-C3'	13.41	135.80	119.70
32	S1	444	U	O4'-C1'-N1	13.41	118.93	108.20
33	L1	1262	U	O4'-C1'-N1	13.41	118.93	108.20
33	L1	3240	C	N1-C1'-C2'	13.41	131.43	114.00
32	S1	446	C	C3'-C2'-C1'	13.40	112.22	101.50
33	L1	2731	G	C1'-O4'-C4'	-13.40	99.18	109.90
32	S1	1446	C	P-O3'-C3'	13.40	135.78	119.70
33	L1	804	A	O4'-C1'-C2'	-13.39	92.41	105.80
33	L1	3363	G	C3'-C2'-C1'	-13.39	90.79	101.50
32	S1	969	U	O4'-C1'-N1	13.39	118.91	108.20
32	S1	1108	U	C1'-O4'-C4'	13.39	120.61	109.90
33	L1	2795	G	C5'-C4'-C3'	13.39	137.42	116.00
33	L1	2774	A	P-O3'-C3'	13.38	135.76	119.70
33	L1	1730	U	C1'-O4'-C4'	13.38	120.60	109.90
71	Lj	14	ARG	CB-CA-C	13.38	137.16	110.40
1	Sa	82	VAL	CA-C-N	-13.37	87.79	117.20
32	S1	838	U	O4'-C1'-N1	13.36	118.89	108.20
32	S1	1303	G	C3'-C2'-C1'	13.35	112.18	101.50
32	S1	1410	C	P-O3'-C3'	13.35	135.72	119.70
23	SU	78	PHE	CB-CG-CD2	-13.35	111.46	120.80
33	L1	1539	G	O4'-C1'-N9	13.35	118.88	108.20
33	L1	2333	U	O4'-C1'-N1	13.35	118.88	108.20
33	L1	2352	G	O4'-C1'-N9	13.35	118.88	108.20
75	Lt	41	TYR	CB-CG-CD1	13.35	129.01	121.00
33	L1	641	C	O5'-C5'-C4'	13.34	137.05	111.70
33	L1	2875	U	C1'-O4'-C4'	13.34	120.57	109.90
35	L2	143	C	P-O3'-C3'	13.34	135.70	119.70
33	L1	241	G	C3'-C2'-C1'	-13.34	90.83	101.50
33	L1	2496	U	P-O3'-C3'	13.34	135.70	119.70
32	S1	1369	C	P-O3'-C3'	13.33	135.70	119.70
32	S1	1547	G	O4'-C1'-C2'	-13.33	92.47	105.80
32	S1	1694	G	P-O3'-C3'	13.33	135.69	119.70
33	L1	1394	C	C3'-C2'-C1'	13.32	112.16	101.50
33	L1	1211	G	N9-C1'-C2'	-13.32	96.68	114.00
31	S2	8	U	O4'-C1'-N1	13.32	118.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	417	G	O4'-C1'-N9	13.31	118.85	108.20
33	L1	3037	G	C1'-O4'-C4'	-13.31	99.25	109.90
33	L1	1389	C	O4'-C1'-N1	13.31	118.85	108.20
33	L1	2999	G	O4'-C1'-N9	13.31	118.84	108.20
33	L1	218	G	C3'-C2'-C1'	13.31	112.14	101.50
32	S1	1541	C	C1'-O4'-C4'	-13.30	99.26	109.90
33	L1	1050	A	C1'-O4'-C4'	13.30	120.54	109.90
33	L1	2508	U	N1-C1'-C2'	-13.30	96.70	114.00
33	L1	2579	G	C1'-O4'-C4'	-13.30	99.26	109.90
35	L2	42	U	C3'-C2'-C1'	13.30	112.14	101.50
57	Ll	79	ARG	NE-CZ-NH2	-13.30	113.65	120.30
33	L1	1901	G	C1'-O4'-C4'	13.29	120.53	109.90
31	S2	75	A	N9-C1'-C2'	-13.29	96.73	114.00
32	S1	373	U	C1'-O4'-C4'	13.29	120.53	109.90
33	L1	305	G	C3'-C2'-C1'	-13.29	90.87	101.50
33	L1	1370	A	O4'-C1'-C2'	-13.28	92.52	105.80
33	L1	2502	U	C5'-C4'-O4'	-13.28	93.16	109.10
35	L2	57	A	O4'-C1'-C2'	-13.28	92.52	105.80
32	S1	1615	G	P-O3'-C3'	13.28	135.63	119.70
33	L1	1058	A	O4'-C1'-N9	13.28	118.82	108.20
82	LK	117	TYR	CB-CG-CD1	13.28	128.97	121.00
33	L1	1642	G	O4'-C1'-C2'	13.27	119.54	107.60
33	L1	2444	U	N1-C1'-C2'	13.27	131.25	114.00
32	S1	1683	G	C1'-O4'-C4'	-13.27	99.28	109.90
60	Lr	61	LYS	O-C-N	-13.27	101.47	122.70
38	LE	88	VAL	O-C-N	-13.26	101.48	122.70
33	L1	261	C	P-O3'-C3'	13.26	135.61	119.70
33	L1	1087	G	C1'-O4'-C4'	-13.26	99.30	109.90
9	SK	120	ARG	NE-CZ-NH2	-13.25	113.67	120.30
19	SY	47	ARG	O-C-N	-13.25	101.50	122.70
32	S1	1346	C	C3'-C2'-C1'	13.25	112.10	101.50
33	L1	745	G	O3'-P-O5'	-13.25	78.82	104.00
35	L2	63	A	O4'-C1'-N9	-13.25	97.60	108.20
23	SU	78	PHE	CB-CA-C	13.25	136.90	110.40
33	L1	280	G	N9-C1'-C2'	-13.24	96.79	114.00
33	L1	1804	G	O4'-C1'-N9	-13.24	97.61	108.20
33	L1	3378	U	O4'-C1'-N1	13.24	118.79	108.20
33	L1	3338	U	O4'-C1'-N1	13.23	118.79	108.20
13	SQ	81	ARG	CA-C-O	-13.23	92.31	120.10
33	L1	3352	C	O4'-C1'-N1	13.23	118.78	108.20
32	S1	860	A	O3'-P-O5'	-13.23	78.86	104.00
32	S1	180	A	P-O3'-C3'	13.22	135.57	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1132	A	N9-C1'-C2'	13.22	131.19	114.00
33	L1	1753	A	O4'-C1'-C2'	-13.22	92.58	105.80
33	L1	1241	G	O4'-C1'-C2'	-13.21	92.58	105.80
32	S1	1069	G	O4'-C1'-C2'	-13.21	92.59	105.80
33	L1	3326	U	C1'-O4'-C4'	13.21	120.47	109.90
38	LE	34	ARG	NE-CZ-NH2	-13.21	113.70	120.30
32	S1	1617	U	O4'-C1'-N1	13.21	118.76	108.20
32	S1	1566	U	C1'-O4'-C4'	13.20	120.46	109.90
32	S1	627	A	O4'-C1'-N9	13.20	118.76	108.20
33	L1	568	C	N1-C1'-C2'	13.19	131.15	114.00
32	S1	1395	C	O4'-C1'-N1	13.19	118.75	108.20
33	L1	844	A	C1'-O4'-C4'	-13.19	99.35	109.90
33	L1	3099	G	C3'-C2'-C1'	13.19	112.05	101.50
33	L1	676	G	P-O3'-C3'	13.19	135.52	119.70
33	L1	1662	G	N9-C1'-C2'	13.19	131.14	114.00
33	L1	325	A	O4'-C1'-N9	13.18	118.75	108.20
33	L1	1242	U	O4'-C1'-N1	13.18	118.75	108.20
33	L1	1364	C	P-O3'-C3'	13.18	135.52	119.70
33	L1	2802	G	O4'-C1'-C2'	-13.18	92.62	105.80
33	L1	1320	G	C3'-C2'-C1'	-13.17	90.96	101.50
33	L1	2220	U	O4'-C1'-N1	13.16	118.73	108.20
33	L1	3341	C	P-O5'-C5'	13.16	141.96	120.90
1	Sa	266	THR	N-CA-C	-13.16	75.46	111.00
46	LT	109	TYR	CB-CG-CD2	-13.16	113.10	121.00
33	L1	2779	G	O4'-C1'-N9	13.16	118.73	108.20
33	L1	3215	U	O4'-C1'-N1	13.16	118.73	108.20
33	L1	2752	G	O4'-C1'-N9	13.15	118.72	108.20
39	LF	172	ARG	NE-CZ-NH1	13.15	126.88	120.30
33	L1	2199	C	N1-C1'-C2'	13.15	131.10	114.00
33	L1	2213	G	C1'-O4'-C4'	-13.15	99.38	109.90
35	L2	36	C	N1-C1'-C2'	13.15	131.10	114.00
32	S1	16	G	N9-C1'-C2'	13.15	131.09	114.00
64	LG	20	TYR	CB-CG-CD1	13.15	128.89	121.00
32	S1	4	C	P-O3'-C3'	13.15	135.48	119.70
34	L3	23	A	O4'-C1'-N9	13.15	118.72	108.20
72	Lk	71	ARG	NE-CZ-NH1	13.15	126.87	120.30
34	L3	114	C	P-O3'-C3'	13.14	135.47	119.70
46	LT	62	ARG	NE-CZ-NH2	13.14	126.87	120.30
33	L1	1050	A	N9-C1'-C2'	-13.14	96.92	114.00
33	L1	797	U	O4'-C1'-N1	13.13	118.71	108.20
1	Sa	94	ASN	C-N-CA	13.13	154.52	121.70
33	L1	2984	A	C1'-O4'-C4'	-13.13	99.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	15	C	C3'-C2'-C1'	13.13	112.00	101.50
33	L1	272	G	C1'-O4'-C4'	-13.12	99.40	109.90
33	L1	2794	A	C1'-O4'-C4'	-13.12	99.40	109.90
32	S1	1768	U	O4'-C1'-N1	13.12	118.69	108.20
59	Lo	7	PHE	CB-CG-CD2	13.12	129.98	120.80
54	Lf	90	ARG	NE-CZ-NH1	13.11	126.86	120.30
32	S1	1261	U	O4'-C1'-N1	13.11	118.69	108.20
33	L1	3360	U	N1-C1'-C2'	13.11	131.04	114.00
13	SQ	139	ASP	N-CA-C	13.11	146.39	111.00
66	LN	89	TRP	CA-CB-CG	13.11	138.60	113.70
32	S1	853	U	O4'-C1'-N1	13.10	118.68	108.20
33	L1	2592	G	C3'-C2'-C1'	-13.10	91.02	101.50
32	S1	632	G	O4'-C1'-C2'	-13.10	92.70	105.80
33	L1	265	G	O4'-C1'-C2'	-13.10	92.70	105.80
33	L1	327	A	O4'-C1'-N9	13.10	118.68	108.20
25	SC	164	SER	CA-C-O	-13.10	92.60	120.10
33	L1	1878	G	C1'-O4'-C4'	-13.09	99.43	109.90
33	L1	1472	C	N1-C1'-C2'	13.09	131.01	114.00
46	LT	42	ARG	NE-CZ-NH1	13.09	126.84	120.30
32	S1	1307	U	N1-C1'-C2'	13.08	131.00	114.00
32	S1	1108	U	O4'-C1'-C2'	-13.07	92.73	105.80
35	L2	94	C	P-O5'-C5'	13.07	141.81	120.90
33	L1	1533	U	C1'-O4'-C4'	13.06	120.35	109.90
67	LS	85	SER	N-CA-CB	-13.06	90.90	110.50
32	S1	994	U	O4'-C1'-N1	13.06	118.65	108.20
31	S2	8	U	C1'-O4'-C4'	13.06	120.35	109.90
35	L2	104	U	C1'-O4'-C4'	-13.06	99.45	109.90
32	S1	1682	U	N1-C1'-C2'	13.05	130.97	114.00
32	S1	1714	G	O4'-C1'-N9	13.05	118.64	108.20
33	L1	324	U	P-O3'-C3'	13.05	135.36	119.70
33	L1	1130	G	O4'-C1'-N9	13.05	118.64	108.20
32	S1	1456	U	P-O5'-C5'	13.05	141.78	120.90
47	LU	10	ARG	NE-CZ-NH2	-13.05	113.78	120.30
32	S1	1237	G	O4'-C1'-N9	13.05	118.64	108.20
33	L1	2516	U	P-O3'-C3'	13.05	135.35	119.70
33	L1	458	G	O4'-C1'-C2'	13.04	119.34	107.60
32	S1	1072	U	P-O3'-C3'	13.04	135.35	119.70
32	S1	824	U	O4'-C1'-N1	13.04	118.63	108.20
33	L1	1836	U	P-O3'-C3'	13.04	135.34	119.70
33	L1	150	G	P-O3'-C3'	13.03	135.33	119.70
35	L2	86	C	C3'-C2'-C1'	13.03	111.92	101.50
4	SD	93	PRO	O-C-N	-13.02	101.86	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	635	G	N9-C1'-C2'	-13.02	97.07	114.00
32	S1	1224	C	O4'-C1'-N1	13.00	118.60	108.20
32	S1	1265	A	O4'-C1'-N9	13.00	118.60	108.20
33	L1	1258	C	C3'-C2'-C1'	13.00	111.90	101.50
45	LQ	183	PHE	CB-CG-CD1	-13.00	111.70	120.80
33	L1	1177	G	O4'-C1'-N9	12.99	118.59	108.20
31	S2	7	A	O4'-C1'-N9	-12.98	97.81	108.20
33	L1	1543	A	O4'-C1'-N9	12.98	118.58	108.20
33	L1	812	G	O4'-C1'-N9	12.98	118.58	108.20
33	L1	555	G	C1'-O4'-C4'	-12.97	99.52	109.90
33	L1	1081	U	C3'-C2'-C1'	-12.97	91.12	101.50
33	L1	2711	U	C1'-O4'-C4'	-12.97	99.52	109.90
32	S1	882	G	C1'-O4'-C4'	-12.97	99.52	109.90
33	L1	1027	C	O4'-C1'-N1	12.97	118.58	108.20
33	L1	1622	G	O4'-C1'-N9	12.97	118.58	108.20
34	L3	13	A	O4'-C1'-N9	-12.97	97.82	108.20
83	Lm	4	ARG	CD-NE-CZ	12.97	141.76	123.60
69	La	27	ARG	CB-CG-CD	12.97	145.32	111.60
33	L1	1564	C	P-O5'-C5'	12.96	141.64	120.90
51	LY	11	ARG	NE-CZ-NH2	12.96	126.78	120.30
32	S1	1113	G	O4'-C1'-N9	12.95	118.56	108.20
33	L1	2766	U	N1-C1'-C2'	-12.95	97.16	114.00
33	L1	1878	G	O4'-C1'-C2'	12.95	119.26	107.60
33	L1	835	G	O4'-C1'-N9	12.95	118.56	108.20
33	L1	2065	G	O4'-C1'-N9	12.95	118.56	108.20
33	L1	3099	G	P-O3'-C3'	12.94	135.22	119.70
33	L1	875	A	O4'-C1'-C2'	12.94	119.24	107.60
33	L1	1054	U	N1-C1'-C2'	12.93	130.81	114.00
33	L1	1696	G	O4'-C1'-C2'	-12.93	92.87	105.80
33	L1	2780	G	C1'-O4'-C4'	12.93	120.25	109.90
32	S1	1443	U	O4'-C1'-N1	12.93	118.54	108.20
33	L1	3238	U	O4'-C1'-N1	12.93	118.55	108.20
32	S1	928	A	O4'-C1'-N9	12.92	118.53	108.20
43	LO	77	ARG	NE-CZ-NH1	-12.92	113.84	120.30
33	L1	2679	A	P-O3'-C3'	12.91	135.19	119.70
33	L1	1883	A	N9-C1'-C2'	-12.91	97.22	114.00
42	LP	81	TYR	CB-CG-CD1	-12.91	113.25	121.00
33	L1	2407	U	P-O3'-C3'	12.90	135.18	119.70
59	Lo	42	ARG	NE-CZ-NH1	12.89	126.75	120.30
14	SP	98	TYR	CB-CG-CD2	-12.89	113.27	121.00
33	L1	1623	C	O4'-C1'-N1	12.89	118.51	108.20
32	S1	1485	A	N9-C1'-C2'	-12.89	97.25	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	418	G	C3'-C2'-C1'	12.89	111.81	101.50
33	L1	534	G	O4'-C1'-C2'	12.88	119.20	107.60
33	L1	254	G	N9-C1'-C2'	12.88	130.75	114.00
31	S2	26	G	O4'-C1'-N9	12.88	118.50	108.20
32	S1	1442	A	O3'-P-O5'	-12.88	79.53	104.00
33	L1	1764	G	N9-C1'-C2'	12.87	130.74	114.00
33	L1	2746	G	N9-C1'-C2'	12.87	130.73	114.00
33	L1	1947	U	N1-C1'-C2'	-12.87	97.27	114.00
33	L1	917	A	O4'-C1'-C2'	-12.87	92.93	105.80
51	LY	73	TYR	CB-CG-CD1	12.86	128.72	121.00
33	L1	2219	A	P-O3'-C3'	12.86	135.13	119.70
33	L1	291	C	O4'-C1'-C2'	12.86	119.17	107.60
32	S1	359	G	O4'-C1'-N9	12.86	118.48	108.20
31	S2	37	G	P-O3'-C3'	12.85	135.12	119.70
32	S1	989	G	O4'-C1'-N9	12.85	118.48	108.20
33	L1	1340	G	O4'-C1'-N9	12.85	118.48	108.20
33	L1	1901	G	O4'-C1'-N9	12.84	118.47	108.20
33	L1	3324	U	O4'-C1'-N1	12.84	118.47	108.20
33	L1	857	G	O4'-C1'-C2'	12.84	119.15	107.60
33	L1	822	U	C1'-O4'-C4'	12.83	120.17	109.90
67	LS	166	LYS	N-CA-C	12.83	145.64	111.00
33	L1	1243	C	N1-C1'-C2'	12.83	130.67	114.00
14	SP	88	ARG	NE-CZ-NH2	-12.82	113.89	120.30
1	Sa	60	ARG	NE-CZ-NH1	12.82	126.71	120.30
32	S1	327	A	O4'-C1'-N9	12.82	118.46	108.20
33	L1	2424	G	C1'-O4'-C4'	-12.82	99.64	109.90
33	L1	997	G	O4'-C1'-C2'	-12.82	92.98	105.80
34	L3	17	G	O4'-C1'-N9	12.82	118.45	108.20
60	Lr	42	ARG	NE-CZ-NH2	-12.81	113.90	120.30
33	L1	2135	U	N1-C1'-C2'	12.80	130.64	114.00
33	L1	3354	A	N9-C1'-C2'	-12.80	97.36	114.00
33	L1	131	C	O4'-C1'-C2'	-12.80	93.00	105.80
33	L1	2502	U	N1-C1'-C2'	-12.80	97.36	114.00
33	L1	3156	G	O4'-C4'-C3'	-12.80	91.20	104.00
7	SI	65	ARG	NE-CZ-NH1	12.79	126.70	120.30
33	L1	3323	U	N1-C1'-C2'	-12.79	97.37	114.00
33	L1	2373	C	O4'-C1'-C2'	-12.79	93.01	105.80
33	L1	2387	U	O4'-C1'-N1	12.79	118.43	108.20
33	L1	2388	C	C1'-O4'-C4'	-12.79	99.67	109.90
33	L1	811	A	C1'-O4'-C4'	-12.79	99.67	109.90
56	Lh	26	TYR	CB-CG-CD2	-12.79	113.33	121.00
33	L1	1384	G	O4'-C1'-C2'	12.78	119.11	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	841	G	O4'-C1'-C2'	12.78	119.10	107.60
33	L1	1043	U	O4'-C1'-N1	12.78	118.42	108.20
35	L2	61	C	N1-C1'-C2'	12.78	130.62	114.00
69	La	26	VAL	CB-CA-C	12.78	135.68	111.40
33	L1	1258	C	C1'-O4'-C4'	12.78	120.12	109.90
33	L1	2482	A	O4'-C1'-N9	12.78	118.42	108.20
79	Ls	186	PHE	CB-CG-CD1	-12.78	111.86	120.80
33	L1	1827	U	P-O5'-C5'	12.77	141.34	120.90
33	L1	3051	U	O4'-C1'-N1	12.77	118.42	108.20
61	Lq	15	ARG	NE-CZ-NH1	12.77	126.69	120.30
32	S1	1686	C	N1-C1'-C2'	12.77	130.60	114.00
33	L1	599	C	C3'-C2'-C1'	12.77	111.71	101.50
33	L1	2640	A	O4'-C1'-C2'	-12.77	93.03	105.80
13	SQ	22	SER	N-CA-CB	12.76	129.64	110.50
32	S1	67	G	N9-C1'-C2'	12.76	130.59	114.00
14	SP	89	ARG	NE-CZ-NH2	-12.75	113.92	120.30
33	L1	676	G	C3'-C2'-C1'	-12.75	91.30	101.50
32	S1	1643	A	O4'-C1'-N9	12.75	118.40	108.20
23	SU	24	SER	C-N-CA	12.75	153.57	121.70
33	L1	24	C	C5'-C4'-C3'	-12.75	95.60	116.00
33	L1	2496	U	N1-C1'-C2'	-12.75	97.43	114.00
33	L1	1668	U	O4'-C1'-N1	12.75	118.40	108.20
32	S1	1590	U	O4'-C1'-N1	12.74	118.40	108.20
33	L1	2108	C	O4'-C1'-C2'	-12.74	93.06	105.80
46	LT	107	ARG	NE-CZ-NH2	-12.74	113.93	120.30
32	S1	1063	U	N1-C1'-C2'	-12.74	97.44	114.00
33	L1	968	A	C3'-C2'-C1'	-12.74	91.31	101.50
33	L1	481	G	P-O3'-C3'	12.74	134.98	119.70
32	S1	1314	U	O5'-C5'-C4'	12.73	135.90	111.70
15	SS	15	HIS	N-CA-CB	-12.73	87.68	110.60
33	L1	1538	A	P-O3'-C3'	12.73	134.98	119.70
33	L1	1672	G	N9-C1'-C2'	-12.73	97.45	114.00
67	LS	113	ALA	N-CA-CB	-12.73	92.28	110.10
32	S1	801	U	O5'-C5'-C4'	12.73	135.88	111.70
31	S2	37	G	C1'-O4'-C4'	-12.72	99.72	109.90
32	S1	562	U	P-O3'-C3'	12.72	134.96	119.70
33	L1	2944	C	C3'-C2'-C1'	12.72	111.67	101.50
23	SU	25	ARG	CD-NE-CZ	12.71	141.40	123.60
33	L1	70	A	P-O3'-C3'	12.71	134.96	119.70
33	L1	2318	U	O4'-C1'-N1	12.71	118.37	108.20
33	L1	2896	C	O4'-C1'-C2'	-12.71	93.09	105.80
32	S1	841	U	O4'-C1'-N1	12.71	118.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2934	C	O4'-C1'-N1	12.71	118.37	108.20
34	L3	2	G	O4'-C1'-N9	12.70	118.36	108.20
33	L1	1303	C	O4'-C1'-N1	12.70	118.36	108.20
32	S1	1513	A	N9-C1'-C2'	-12.70	97.49	114.00
24	SX	74	ARG	NE-CZ-NH1	12.69	126.65	120.30
33	L1	175	G	C3'-C2'-C1'	-12.69	91.35	101.50
38	LE	34	ARG	N-CA-CB	12.69	133.44	110.60
72	Lk	59	ARG	NE-CZ-NH2	12.69	126.64	120.30
78	Le	90	ARG	NE-CZ-NH2	-12.69	113.96	120.30
32	S1	1217	G	O4'-C1'-N9	12.68	118.34	108.20
32	S1	635	G	C1'-O4'-C4'	12.67	120.04	109.90
33	L1	1050	A	P-O3'-C3'	12.67	134.91	119.70
33	L1	2099	G	C1'-O4'-C4'	-12.67	99.76	109.90
13	SQ	94	GLU	CA-C-O	-12.67	93.50	120.10
33	L1	460	A	O4'-C1'-N9	12.67	118.33	108.20
33	L1	384	A	P-O3'-C3'	-12.66	104.50	119.70
33	L1	3316	C	C3'-C2'-C1'	12.66	111.63	101.50
35	L2	45	A	C5'-C4'-C3'	12.65	136.25	116.00
33	L1	1197	A	P-O3'-C3'	12.65	134.88	119.70
32	S1	115	A	O4'-C1'-N9	12.65	118.32	108.20
33	L1	1316	C	C3'-C2'-C1'	12.65	111.62	101.50
35	L2	70	G	C1'-O4'-C4'	-12.65	99.78	109.90
81	LD	61	ARG	NE-CZ-NH2	12.65	126.62	120.30
32	S1	1677	U	C1'-O4'-C4'	12.64	120.01	109.90
33	L1	1697	G	P-O3'-C3'	12.64	134.87	119.70
33	L1	1873	C	N1-C1'-C2'	12.64	130.43	114.00
33	L1	2087	A	O4'-C1'-N9	12.64	118.31	108.20
33	L1	1549	A	O4'-C1'-C2'	-12.63	93.17	105.80
33	L1	1744	C	N1-C1'-C2'	12.63	130.42	114.00
33	L1	2224	A	O4'-C1'-N9	12.63	118.31	108.20
33	L1	2792	A	O4'-C1'-N9	12.63	118.31	108.20
33	L1	989	U	O4'-C1'-N1	12.63	118.30	108.20
33	L1	1863	A	C1'-O4'-C4'	12.63	120.00	109.90
25	SC	144	ASN	CA-C-O	-12.62	93.59	120.10
33	L1	3124	A	N9-C1'-C2'	-12.63	97.59	114.00
32	S1	420	A	C3'-C2'-C1'	12.62	111.60	101.50
32	S1	458	A	O4'-C1'-N9	12.62	118.29	108.20
32	S1	1397	A	O4'-C1'-C2'	-12.62	93.18	105.80
30	S3	16	G	O4'-C1'-C2'	-12.61	93.19	105.80
33	L1	2507	U	O4'-C1'-N1	12.61	118.29	108.20
33	L1	1958	G	O4'-C1'-N9	12.61	118.29	108.20
80	LC	69	LYS	O-C-N	-12.61	102.52	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	Lm	7	LYS	CA-C-O	-12.61	93.61	120.10
42	LP	172	ARG	NE-CZ-NH1	12.61	126.60	120.30
33	L1	3328	A	O4'-C1'-C2'	-12.60	93.20	105.80
32	S1	840	U	O4'-C1'-N1	12.60	118.28	108.20
33	L1	1589	G	P-O3'-C3'	12.60	134.82	119.70
32	S1	456	A	O4'-C1'-N9	12.60	118.28	108.20
33	L1	2875	U	P-O3'-C3'	-12.60	104.58	119.70
33	L1	2160	C	C3'-C2'-C1'	12.59	111.57	101.50
31	S2	51	G	O4'-C1'-N9	12.58	118.27	108.20
71	Lj	14	ARG	N-CA-CB	-12.58	87.95	110.60
33	L1	3320	G	O4'-C1'-N9	-12.58	98.14	108.20
33	L1	3376	C	C5'-C4'-C3'	12.58	136.12	116.00
33	L1	1442	U	P-O3'-C3'	-12.57	104.61	119.70
33	L1	1941	G	C3'-C2'-C1'	-12.57	91.44	101.50
34	L3	73	U	O4'-C1'-C2'	-12.57	93.23	105.80
59	Lo	7	PHE	CB-CG-CD1	-12.57	112.00	120.80
32	S1	903	A	P-O3'-C3'	12.57	134.78	119.70
82	LK	129	LEU	CB-CA-C	-12.57	86.32	110.20
32	S1	960	A	O4'-C1'-N9	12.56	118.25	108.20
32	S1	1028	A	P-O3'-C3'	12.56	134.78	119.70
32	S1	1442	A	OP2-P-O3'	12.56	132.84	105.20
33	L1	860	G	O4'-C1'-N9	12.56	118.25	108.20
33	L1	1895	G	C1'-O4'-C4'	-12.56	99.85	109.90
70	Li	93	ARG	NE-CZ-NH1	-12.56	114.02	120.30
32	S1	468	A	O4'-C1'-N9	12.56	118.25	108.20
32	S1	501	U	N1-C1'-C2'	12.56	130.32	114.00
32	S1	1736	C	N1-C1'-C2'	12.56	130.32	114.00
33	L1	1769	C	O4'-C1'-N1	12.55	118.24	108.20
33	L1	2738	U	C5'-C4'-C3'	-12.55	95.92	116.00
48	LV	70	THR	N-CA-CB	12.55	134.15	110.30
33	L1	1777	C	O4'-C1'-N1	12.54	118.24	108.20
33	L1	357	C	N1-C1'-C2'	12.54	130.31	114.00
33	L1	1612	C	N1-C1'-C2'	12.54	130.31	114.00
33	L1	2544	C	N1-C1'-C2'	12.54	130.30	114.00
32	S1	1540	U	O4'-C1'-N1	12.53	118.22	108.20
33	L1	1312	A	O4'-C1'-C2'	-12.53	93.27	105.80
33	L1	1513	C	C3'-C2'-C1'	12.53	111.52	101.50
34	L3	25	G	O3'-P-O5'	12.53	127.80	104.00
81	LD	308	LYS	O-C-N	-12.53	97.30	121.10
32	S1	268	G	P-O3'-C3'	12.52	134.73	119.70
32	S1	1748	U	C1'-O4'-C4'	-12.52	99.89	109.90
33	L1	1330	A	O4'-C1'-N9	12.51	118.21	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	123	U	N1-C1'-C2'	-12.51	97.74	114.00
33	L1	1821	G	O4'-C1'-N9	12.51	118.20	108.20
32	S1	303	A	OP2-P-O3'	-12.50	77.69	105.20
34	L3	53	U	P-O3'-C3'	12.50	134.70	119.70
15	SS	104	ARG	NE-CZ-NH2	-12.50	114.05	120.30
33	L1	906	U	O4'-C1'-N1	12.50	118.20	108.20
33	L1	833	G	C1'-O4'-C4'	-12.49	99.91	109.90
33	L1	1900	C	C1'-O4'-C4'	-12.49	99.91	109.90
33	L1	3310	A	N9-C1'-C2'	12.49	130.23	114.00
32	S1	1315	U	OP2-P-O3'	-12.47	77.76	105.20
33	L1	635	U	O4'-C1'-N1	12.47	118.18	108.20
33	L1	1765	G	O4'-C1'-N9	12.47	118.18	108.20
32	S1	1071	C	O4'-C1'-N1	12.47	118.17	108.20
33	L1	1817	U	O4'-C1'-C2'	-12.47	93.33	105.80
33	L1	3291	C	P-O5'-C5'	12.46	140.84	120.90
33	L1	3325	G	N9-C1'-C2'	12.46	130.20	114.00
32	S1	1225	A	P-O5'-C5'	-12.46	100.97	120.90
33	L1	2538	G	O4'-C1'-N9	12.46	118.17	108.20
32	S1	1575	U	O4'-C1'-N1	12.45	118.16	108.20
33	L1	2591	G	C1'-O4'-C4'	-12.45	99.94	109.90
33	L1	2941	G	C1'-O4'-C4'	-12.45	99.94	109.90
15	SS	104	ARG	NE-CZ-NH1	12.45	126.53	120.30
33	L1	1369	G	P-O5'-C5'	12.45	140.82	120.90
33	L1	2632	U	O4'-C1'-N1	12.45	118.16	108.20
23	SU	34	HIS	O-C-N	-12.44	97.46	121.10
33	L1	1432	G	C1'-O4'-C4'	-12.44	99.94	109.90
32	S1	119	U	C3'-C2'-C1'	-12.44	91.55	101.50
32	S1	316	A	P-O3'-C3'	12.44	134.63	119.70
32	S1	584	A	P-O3'-C3'	12.44	134.63	119.70
33	L1	305	G	O4'-C1'-N9	12.44	118.16	108.20
35	L2	93	A	O4'-C1'-N9	-12.44	98.25	108.20
33	L1	25	U	O4'-C1'-N1	12.43	118.15	108.20
33	L1	1755	A	C3'-C2'-C1'	12.43	111.44	101.50
32	S1	572	G	O4'-C1'-N9	12.43	118.14	108.20
32	S1	608	U	O4'-C1'-N1	12.43	118.14	108.20
33	L1	538	C	O4'-C1'-C2'	-12.42	93.38	105.80
46	LT	136	ARG	O-C-N	-12.42	102.82	122.70
31	S2	72	G	P-O3'-C3'	12.42	134.60	119.70
33	L1	1692	U	O4'-C1'-N1	12.42	118.13	108.20
33	L1	3084	G	O4'-C1'-C2'	12.42	118.78	107.60
32	S1	192	G	P-O3'-C3'	12.41	134.60	119.70
32	S1	319	A	O4'-C1'-N9	12.41	118.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1546	G	O4'-C1'-N9	12.41	118.13	108.20
32	S1	1290	U	O4'-C1'-N1	-12.41	98.28	108.20
32	S1	1777	G	P-O3'-C3'	12.41	134.59	119.70
33	L1	1075	G	C1'-O4'-C4'	-12.41	99.97	109.90
25	SC	109	ARG	NE-CZ-NH2	-12.40	114.10	120.30
33	L1	2292	U	N1-C1'-C2'	12.40	130.12	114.00
48	LV	69	ARG	C-N-CA	12.40	152.71	121.70
32	S1	1014	U	P-O3'-C3'	12.40	134.58	119.70
32	S1	1635	U	O4'-C1'-N1	12.40	118.12	108.20
33	L1	1627	U	O4'-C1'-N1	12.40	118.12	108.20
33	L1	3188	G	P-O3'-C3'	12.40	134.58	119.70
31	S2	75	A	P-O5'-C5'	12.40	140.73	120.90
33	L1	1713	A	N9-C1'-C2'	12.40	130.12	114.00
33	L1	1245	U	P-O3'-C3'	12.39	134.57	119.70
33	L1	1439	U	N1-C1'-C2'	12.39	130.11	114.00
33	L1	2252	C	C1'-O4'-C4'	12.39	119.81	109.90
32	S1	624	A	P-O3'-C3'	12.39	134.57	119.70
31	S2	50	G	O4'-C1'-C2'	12.39	118.75	107.60
33	L1	3275	G	O4'-C1'-C2'	12.39	118.75	107.60
3	SB	125	PHE	CB-CG-CD2	12.38	129.47	120.80
14	SP	83	ARG	NE-CZ-NH1	12.38	126.49	120.30
32	S1	44	U	P-O3'-C3'	12.38	134.56	119.70
33	L1	2361	C	O4'-C1'-C2'	-12.38	93.42	105.80
33	L1	628	C	N1-C1'-C2'	12.38	130.09	114.00
33	L1	964	C	C3'-C2'-C1'	12.38	111.40	101.50
33	L1	1568	A	N9-C1'-C2'	-12.38	97.91	114.00
33	L1	2796	G	C3'-C2'-C1'	12.38	111.40	101.50
32	S1	1508	C	O4'-C1'-N1	12.37	118.10	108.20
33	L1	709	G	O4'-C1'-N9	12.37	118.10	108.20
32	S1	1760	A	O4'-C1'-N9	12.37	118.09	108.20
33	L1	1266	G	C1'-O4'-C4'	-12.37	100.01	109.90
33	L1	2592	G	O4'-C1'-C2'	12.37	118.73	107.60
33	L1	3353	G	P-O3'-C3'	12.37	134.54	119.70
33	L1	1942	A	O4'-C1'-C2'	12.37	118.73	107.60
33	L1	2352	G	C3'-C2'-C1'	-12.36	91.61	101.50
33	L1	903	G	O4'-C1'-N9	12.36	118.09	108.20
33	L1	3136	A	P-O3'-C3'	12.36	134.53	119.70
33	L1	3001	G	C1'-O4'-C4'	-12.36	100.01	109.90
33	L1	475	U	C3'-C2'-C1'	12.36	111.39	101.50
35	L2	32	C	C1'-O4'-C4'	-12.36	100.02	109.90
33	L1	1888	G	C3'-C2'-C1'	-12.35	91.62	101.50
32	S1	150	U	P-O3'-C3'	12.35	134.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
70	Li	68	SER	N-CA-CB	12.35	129.03	110.50
34	L3	55	A	O4'-C1'-N9	12.35	118.08	108.20
33	L1	484	C	O3'-P-O5'	12.35	127.46	104.00
32	S1	594	C	O4'-C1'-N1	12.35	118.08	108.20
33	L1	707	G	C1'-O4'-C4'	-12.35	100.02	109.90
32	S1	1678	G	C3'-C2'-C1'	-12.34	91.63	101.50
33	L1	133	G	O4'-C1'-C2'	12.34	118.71	107.60
33	L1	137	C	P-O3'-C3'	12.34	134.51	119.70
33	L1	1709	U	P-O3'-C3'	12.34	134.51	119.70
33	L1	1862	C	N1-C1'-C2'	12.34	130.04	114.00
33	L1	3348	G	O4'-C1'-N9	12.34	118.07	108.20
32	S1	1566	U	O4'-C1'-N1	-12.34	98.33	108.20
45	LQ	48	TYR	CB-CG-CD1	-12.34	113.60	121.00
32	S1	1123	G	O4'-C1'-N9	12.33	118.07	108.20
33	L1	3024	U	O4'-C1'-N1	12.33	118.06	108.20
32	S1	382	A	O4'-C1'-N9	12.33	118.06	108.20
33	L1	563	C	P-O3'-C3'	12.33	134.49	119.70
33	L1	962	C	P-O3'-C3'	12.33	134.49	119.70
33	L1	3175	C	C3'-C2'-C1'	12.33	111.36	101.50
33	L1	2801	A	P-O3'-C3'	12.32	134.49	119.70
33	L1	614	C	O4'-C1'-N1	12.32	118.06	108.20
33	L1	1255	A	C1'-O4'-C4'	-12.32	100.04	109.90
68	LW	29	LYS	N-CA-CB	12.32	132.77	110.60
33	L1	159	G	O4'-C1'-C2'	12.32	118.69	107.60
33	L1	2362	A	P-O3'-C3'	12.32	134.48	119.70
33	L1	2612	A	O4'-C1'-N9	12.32	118.05	108.20
32	S1	1643	A	N9-C1'-C2'	-12.31	98.00	114.00
33	L1	812	G	C3'-C2'-C1'	-12.31	91.65	101.50
33	L1	2418	A	N9-C1'-C2'	12.31	130.00	114.00
32	S1	1138	A	C1'-O4'-C4'	12.31	119.75	109.90
33	L1	1163	A	P-O3'-C3'	12.31	134.47	119.70
42	LP	96	ARG	NE-CZ-NH1	12.31	126.45	120.30
32	S1	217	A	O4'-C1'-N9	12.30	118.04	108.20
32	S1	1045	G	O4'-C1'-N9	12.31	118.05	108.20
33	L1	3240	C	P-O3'-C3'	12.30	134.46	119.70
32	S1	480	U	O4'-C1'-C2'	-12.30	93.50	105.80
31	S2	58	U	C1'-O4'-C4'	12.30	119.74	109.90
32	S1	633	U	C5'-C4'-O4'	12.29	123.85	109.10
35	L2	90	U	O4'-C1'-C2'	-12.29	93.51	105.80
33	L1	790	G	P-O5'-C5'	12.28	140.55	120.90
32	S1	823	A	O4'-C1'-C2'	-12.28	93.52	105.80
33	L1	639	A	N9-C1'-C2'	12.28	129.96	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1563	G	O4'-C1'-C2'	-12.28	93.52	105.80
33	L1	2099	G	O4'-C1'-C2'	12.28	118.65	107.60
4	SD	136	ILE	CA-C-N	12.28	151.47	117.10
33	L1	2763	C	C3'-C2'-C1'	12.28	111.32	101.50
33	L1	1586	A	O4'-C1'-N9	12.27	118.02	108.20
33	L1	2882	U	O4'-C1'-C2'	12.27	118.64	107.60
38	LE	170	GLU	CB-CA-C	12.27	134.94	110.40
59	Lo	8	ARG	NE-CZ-NH1	12.27	126.44	120.30
32	S1	715	U	P-O3'-C3'	-12.27	104.98	119.70
33	L1	533	G	N9-C1'-C2'	12.26	129.94	114.00
33	L1	1344	A	O4'-C1'-N9	-12.26	98.39	108.20
33	L1	1911	A	C3'-C2'-C1'	-12.26	91.69	101.50
34	L3	1	G	P-O3'-C3'	-12.26	104.98	119.70
81	LD	309	PRO	CB-CA-C	12.26	142.65	112.00
33	L1	684	C	P-O3'-C3'	12.26	134.41	119.70
33	L1	1005	C	O4'-C1'-N1	12.26	118.01	108.20
33	L1	2795	G	O4'-C1'-C2'	12.26	118.63	107.60
33	L1	662	G	O4'-C1'-C2'	12.25	118.63	107.60
33	L1	306	A	P-O5'-C5'	12.25	140.50	120.90
33	L1	309	C	C3'-C2'-C1'	12.25	111.30	101.50
33	L1	326	C	P-O3'-C3'	12.25	134.40	119.70
33	L1	2411	G	C1'-O4'-C4'	-12.25	100.10	109.90
33	L1	804	A	C3'-C2'-C1'	12.25	111.30	101.50
33	L1	2375	G	P-O5'-C5'	12.25	140.50	120.90
42	LP	63	ARG	NE-CZ-NH1	12.25	126.42	120.30
33	L1	423	C	O4'-C1'-N1	-12.24	98.41	108.20
33	L1	2769	U	O4'-C1'-N1	12.24	118.00	108.20
35	L2	99	G	O4'-C1'-C2'	-12.24	93.56	105.80
7	SI	141	ARG	NE-CZ-NH2	-12.24	114.18	120.30
28	SN	22	ARG	NE-CZ-NH2	12.24	126.42	120.30
32	S1	592	U	O4'-C1'-N1	12.23	117.99	108.20
32	S1	898	U	O4'-C1'-N1	12.23	117.98	108.20
33	L1	972	C	O4'-C1'-N1	12.23	117.98	108.20
33	L1	3363	G	O4'-C1'-C2'	12.23	118.60	107.60
33	L1	3094	C	C3'-C2'-C1'	12.22	111.28	101.50
33	L1	513	C	O4'-C1'-N1	12.21	117.97	108.20
33	L1	404	G	O4'-C1'-N9	12.21	117.97	108.20
33	L1	2061	C	C1'-O4'-C4'	-12.21	100.13	109.90
33	L1	1579	C	N1-C1'-C2'	12.21	129.87	114.00
32	S1	7	G	C3'-C2'-C1'	-12.20	91.74	101.50
35	L2	124	G	N9-C1'-C2'	-12.20	98.14	114.00
38	LE	34	ARG	CA-CB-CG	12.20	140.24	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1792	A	N9-C1'-C2'	-12.20	98.14	114.00
33	L1	1086	U	O4'-C1'-C2'	-12.19	93.61	105.80
15	SS	44	ARG	NE-CZ-NH1	12.19	126.39	120.30
34	L3	9	U	P-O3'-C3'	12.19	134.33	119.70
14	SP	41	LEU	CB-CA-C	12.18	133.34	110.20
32	S1	505	U	O4'-C1'-N1	12.18	117.94	108.20
33	L1	2431	U	C1'-O4'-C4'	-12.18	100.16	109.90
36	LA	201	ARG	NE-CZ-NH1	-12.18	114.21	120.30
33	L1	1010	A	N9-C1'-C2'	-12.17	98.17	114.00
33	L1	1297	U	C1'-O4'-C4'	-12.17	100.16	109.90
43	LO	6	LYS	CA-C-N	12.17	143.98	117.20
33	L1	1034	U	O5'-C5'-C4'	12.16	134.81	111.70
33	L1	1551	C	N1-C1'-C2'	12.16	129.81	114.00
81	LD	79	ARG	NE-CZ-NH2	-12.16	114.22	120.30
33	L1	1103	U	N1-C1'-C2'	-12.16	98.19	114.00
68	LW	114	TYR	CB-CG-CD2	-12.16	113.70	121.00
32	S1	1276	U	O4'-C1'-N1	12.15	117.92	108.20
32	S1	1363	G	O4'-C1'-N9	12.15	117.92	108.20
33	L1	1019	A	O4'-C1'-N9	12.15	117.92	108.20
33	L1	2887	C	N1-C1'-C2'	12.15	129.80	114.00
35	L2	97	U	O4'-C1'-C2'	-12.15	93.65	105.80
23	SU	95	TYR	CB-CG-CD1	-12.15	113.71	121.00
33	L1	1035	C	O3'-P-O5'	-12.15	80.92	104.00
33	L1	2302	G	O4'-C1'-N9	-12.15	98.48	108.20
11	SM	108	ARG	NE-CZ-NH2	-12.14	114.23	120.30
31	S2	70	G	O4'-C1'-N9	12.14	117.91	108.20
33	L1	1690	C	P-O5'-C5'	12.14	140.32	120.90
32	S1	1314	U	P-O5'-C5'	12.14	140.32	120.90
67	LS	5	ARG	NE-CZ-NH2	-12.13	114.23	120.30
32	S1	882	G	N9-C1'-C2'	12.13	129.77	114.00
32	S1	933	G	N9-C1'-C2'	-12.13	98.23	114.00
32	S1	128	G	O4'-C1'-C2'	-12.13	93.67	105.80
64	LG	185	ASP	O-C-N	-12.13	103.30	122.70
33	L1	574	C	P-O3'-C3'	12.12	134.25	119.70
33	L1	1370	A	C1'-O4'-C4'	12.12	119.60	109.90
33	L1	3202	G	O4'-C1'-C2'	12.12	118.51	107.60
32	S1	299	A	N9-C1'-C2'	-12.12	98.24	114.00
33	L1	1369	G	C1'-O4'-C4'	-12.12	100.20	109.90
33	L1	2783	U	P-O5'-C5'	12.12	140.29	120.90
25	SC	163	THR	OG1-CB-CG2	12.11	137.86	110.00
35	L2	162	C	P-O3'-C3'	12.11	134.24	119.70
33	L1	720	G	C3'-C2'-C1'	12.11	111.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	431	G	P-O3'-C3'	12.11	134.23	119.70
30	S3	18	C	P-O3'-C3'	12.11	134.23	119.70
33	L1	975	G	C5'-C4'-C3'	12.11	135.38	116.00
33	L1	295	U	O4'-C1'-N1	12.11	117.89	108.20
33	L1	720	G	O4'-C1'-C2'	-12.11	93.69	105.80
33	L1	2199	C	C1'-O4'-C4'	-12.11	100.22	109.90
33	L1	2379	U	P-O3'-C3'	12.11	134.22	119.70
33	L1	1305	A	O4'-C1'-N9	-12.10	98.52	108.20
33	L1	1771	G	O4'-C1'-N9	12.10	117.88	108.20
32	S1	1541	C	O4'-C1'-N1	12.10	117.88	108.20
33	L1	1351	C	C5'-C4'-C3'	12.10	135.36	116.00
33	L1	1209	G	O4'-C1'-N9	12.10	117.88	108.20
33	L1	1615	G	C1'-O4'-C4'	-12.10	100.22	109.90
33	L1	2437	A	C3'-C2'-C1'	12.10	111.18	101.50
33	L1	2165	A	C1'-O4'-C4'	-12.10	100.22	109.90
32	S1	1765	A	P-O3'-C3'	12.10	134.22	119.70
23	SU	52	LEU	CB-CA-C	12.10	133.18	110.20
33	L1	2482	A	O4'-C1'-C2'	12.10	118.49	107.60
78	Le	109	ARG	NE-CZ-NH1	12.10	126.35	120.30
35	L2	94	C	O4'-C1'-C2'	12.09	118.48	107.60
25	SC	164	SER	CA-C-N	12.09	150.95	117.10
7	SI	53	LYS	N-CA-CB	-12.09	88.84	110.60
33	L1	457	C	N1-C1'-C2'	12.09	129.72	114.00
32	S1	800	U	P-O3'-C3'	12.08	134.19	119.70
11	SM	35	GLY	N-CA-C	12.07	143.28	113.10
32	S1	1783	C	O4'-C1'-N1	-12.07	98.54	108.20
33	L1	2380	G	O5'-C5'-C4'	12.07	134.64	111.70
31	S2	68	C	N1-C1'-C2'	12.07	129.69	114.00
32	S1	1733	G	O4'-C1'-N9	12.07	117.86	108.20
33	L1	2169	U	N1-C1'-C2'	12.07	129.69	114.00
34	L3	74	A	O4'-C1'-N9	12.07	117.86	108.20
33	L1	2418	A	O4'-C1'-N9	-12.07	98.55	108.20
11	SM	126	TYR	CE1-CZ-CE2	12.07	139.11	119.80
32	S1	717	G	P-O5'-C5'	12.07	140.21	120.90
33	L1	1858	U	P-O3'-C3'	12.06	134.18	119.70
32	S1	1739	U	N1-C1'-C2'	12.06	129.68	114.00
33	L1	2739	A	O4'-C1'-N9	12.06	117.85	108.20
33	L1	861	A	P-O3'-C3'	12.06	134.17	119.70
33	L1	3121	C	N1-C1'-C2'	12.06	129.68	114.00
32	S1	860	A	OP2-P-O3'	12.06	131.72	105.20
33	L1	1311	G	O4'-C1'-N9	12.05	117.84	108.20
33	L1	2876	G	C3'-C2'-C1'	-12.05	91.86	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	292	A	C1'-O4'-C4'	12.05	119.54	109.90
33	L1	1395	A	P-O3'-C3'	12.05	134.16	119.70
33	L1	555	G	O4'-C1'-C2'	12.05	118.44	107.60
33	L1	714	G	P-O3'-C3'	12.05	134.16	119.70
33	L1	1871	G	O4'-C1'-N9	12.05	117.84	108.20
33	L1	2350	C	C1'-O4'-C4'	-12.05	100.26	109.90
33	L1	3035	C	N1-C1'-C2'	12.05	129.66	114.00
33	L1	1894	G	C1'-O4'-C4'	12.04	119.53	109.90
31	S2	21	A	O4'-C1'-N9	12.04	117.83	108.20
33	L1	3295	G	O4'-C1'-N9	12.04	117.83	108.20
33	L1	2060	C	O4'-C1'-N1	12.04	117.83	108.20
33	L1	2909	A	N9-C1'-C2'	-12.04	98.35	114.00
32	S1	1773	A	P-O3'-C3'	12.03	134.14	119.70
33	L1	299	G	N9-C1'-C2'	-12.03	98.36	114.00
33	L1	502	G	O4'-C1'-N9	12.03	117.83	108.20
33	L1	860	G	P-O3'-C3'	12.03	134.13	119.70
33	L1	1510	G	O4'-C1'-N9	12.03	117.82	108.20
33	L1	2385	A	P-O3'-C3'	12.03	134.13	119.70
23	SU	34	HIS	CA-C-O	-12.02	94.85	120.10
33	L1	2597	C	C1'-O4'-C4'	-12.02	100.28	109.90
33	L1	1245	U	O4'-C1'-N1	12.02	117.82	108.20
33	L1	2617	G	O3'-P-O5'	-12.02	81.16	104.00
33	L1	3363	G	C1'-O4'-C4'	-12.02	100.28	109.90
34	L3	112	U	O4'-C1'-N1	12.02	117.82	108.20
32	S1	1315	U	O3'-P-O5'	12.02	126.83	104.00
32	S1	110	G	O4'-C1'-N9	12.02	117.81	108.20
33	L1	3326	U	P-O3'-C3'	12.01	134.11	119.70
35	L2	158	G	C3'-C2'-C1'	-12.01	91.89	101.50
33	L1	641	C	P-O5'-C5'	-12.01	101.69	120.90
34	L3	45	U	O4'-C1'-N1	12.01	117.81	108.20
32	S1	893	U	N1-C1'-C2'	12.00	129.60	114.00
32	S1	1156	A	N9-C1'-C2'	-12.00	98.40	114.00
33	L1	430	G	C1'-O4'-C4'	-12.00	100.30	109.90
34	L3	79	A	O4'-C1'-C2'	-12.00	93.80	105.80
23	SU	68	THR	O-C-N	-12.00	103.50	122.70
33	L1	397	A	O4'-C1'-C2'	11.99	118.39	107.60
33	L1	549	G	C3'-C2'-C1'	-11.99	91.90	101.50
33	L1	2739	A	C5'-C4'-C3'	11.99	135.19	116.00
35	L2	125	A	P-O3'-C3'	11.99	134.09	119.70
33	L1	341	U	O4'-C1'-N1	11.99	117.79	108.20
33	L1	1932	A	C1'-O4'-C4'	-11.99	100.31	109.90
32	S1	962	G	O4'-C1'-C2'	11.99	118.39	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	108	G	O4'-C1'-N9	11.99	117.79	108.20
13	SQ	28	PHE	CB-CG-CD2	-11.98	112.41	120.80
33	L1	579	G	C3'-C2'-C1'	11.98	111.09	101.50
19	SY	47	ARG	NE-CZ-NH1	-11.98	114.31	120.30
70	Li	46	VAL	N-CA-C	11.98	143.34	111.00
33	L1	2669	C	C1'-O4'-C4'	-11.98	100.32	109.90
66	LN	122	ARG	NE-CZ-NH1	11.98	126.29	120.30
32	S1	551	U	O4'-C1'-N1	11.98	117.78	108.20
33	L1	1401	C	O4'-C1'-C2'	-11.97	93.83	105.80
16	SR	117	LYS	N-CA-CB	11.97	132.14	110.60
25	SC	162	LEU	C-N-CA	-11.97	91.78	121.70
33	L1	1511	C	N1-C1'-C2'	11.97	129.56	114.00
31	S2	47	U	N1-C1'-C2'	-11.96	98.44	114.00
32	S1	1048	A	O4'-C1'-N9	11.96	117.77	108.20
33	L1	2394	G	O4'-C1'-C2'	11.96	118.36	107.60
29	ST	22	ARG	NE-CZ-NH2	-11.96	114.32	120.30
32	S1	1713	C	N1-C1'-C2'	11.96	129.55	114.00
33	L1	3214	U	O4'-C1'-N1	11.96	117.77	108.20
32	S1	37	U	O4'-C1'-N1	11.96	117.77	108.20
33	L1	3025	A	O4'-C1'-N9	11.95	117.76	108.20
35	L2	63	A	C3'-C2'-C1'	11.95	111.06	101.50
31	S2	8	U	N1-C1'-C2'	-11.95	98.47	114.00
32	S1	1802	G	O4'-C1'-N9	11.95	117.76	108.20
33	L1	784	G	C3'-C2'-C1'	-11.95	91.94	101.50
33	L1	605	A	C3'-C2'-C1'	11.94	111.06	101.50
33	L1	2002	G	O4'-C1'-N9	11.94	117.75	108.20
33	L1	2818	G	P-O3'-C3'	11.94	134.03	119.70
33	L1	3330	U	O4'-C1'-N1	11.94	117.75	108.20
33	L1	3312	G	O4'-C1'-N9	11.93	117.75	108.20
32	S1	1474	U	O4'-C1'-N1	11.93	117.74	108.20
33	L1	2167	G	P-O3'-C3'	11.93	134.02	119.70
33	L1	2721	C	O4'-C1'-N1	11.93	117.74	108.20
33	L1	3202	G	O4'-C1'-N9	11.93	117.74	108.20
71	Lj	86	ARG	NE-CZ-NH2	-11.93	114.33	120.30
33	L1	1012	U	O4'-C1'-N1	11.92	117.74	108.20
45	LQ	256	SER	O-C-N	-11.92	103.63	122.70
33	L1	3006	G	O4'-C1'-N9	11.92	117.73	108.20
48	LV	76	ARG	NE-CZ-NH1	11.92	126.26	120.30
40	LH	226	ARG	NE-CZ-NH1	11.92	126.26	120.30
32	S1	1630	G	O4'-C1'-N9	11.91	117.73	108.20
33	L1	1623	C	P-O3'-C3'	11.91	134.00	119.70
33	L1	1789	C	C1'-O4'-C4'	-11.91	100.37	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	Ls	234	TYR	C-N-CD	-11.91	94.39	120.60
33	L1	2629	C	C1'-O4'-C4'	-11.91	100.37	109.90
33	L1	83	U	P-O5'-C5'	11.91	139.95	120.90
33	L1	309	C	C4'-C3'-C2'	-11.91	90.69	102.60
33	L1	1614	G	C1'-O4'-C4'	-11.91	100.38	109.90
32	S1	1069	G	C1'-O4'-C4'	11.90	119.42	109.90
32	S1	372	U	O4'-C1'-N1	11.90	117.72	108.20
46	LT	159	PHE	CB-CG-CD2	11.90	129.13	120.80
32	S1	1427	A	O4'-C1'-C2'	11.90	118.31	107.60
33	L1	2779	G	N9-C1'-C2'	-11.89	98.54	114.00
32	S1	850	G	N9-C1'-C2'	11.89	129.46	114.00
32	S1	1507	G	O4'-C1'-N9	11.89	117.71	108.20
7	SI	63	ARG	NE-CZ-NH2	-11.89	114.36	120.30
33	L1	468	U	O4'-C1'-N1	11.89	117.71	108.20
33	L1	532	G	O4'-C1'-C2'	11.89	118.30	107.60
33	L1	1551	C	O4'-C1'-N1	-11.89	98.69	108.20
33	L1	460	A	N9-C1'-C2'	-11.88	98.55	114.00
33	L1	605	A	O4'-C1'-C2'	-11.88	93.92	105.80
33	L1	1849	U	O4'-C1'-N1	11.89	117.71	108.20
33	L1	2742	A	O4'-C1'-N9	11.88	117.71	108.20
31	S2	72	G	N9-C1'-C2'	-11.88	98.55	114.00
32	S1	891	U	C1'-O4'-C4'	-11.88	100.39	109.90
33	L1	2629	C	P-O5'-C5'	11.88	139.91	120.90
33	L1	987	A	P-O3'-C3'	11.88	133.96	119.70
33	L1	2125	A	O4'-C1'-C2'	-11.88	93.92	105.80
33	L1	1632	G	P-O3'-C3'	11.87	133.94	119.70
33	L1	1551	C	C3'-C2'-C1'	11.87	111.00	101.50
35	L2	115	G	O4'-C1'-C2'	-11.87	93.93	105.80
34	L3	78	C	O4'-C1'-C2'	-11.87	93.93	105.80
32	S1	1184	C	C3'-C2'-C1'	11.87	110.99	101.50
32	S1	1097	A	O3'-P-O5'	11.86	126.54	104.00
32	S1	1106	G	O4'-C1'-N9	11.86	117.69	108.20
33	L1	1133	A	C3'-C2'-C1'	11.86	110.99	101.50
33	L1	2992	G	N9-C1'-C2'	-11.86	98.58	114.00
32	S1	1513	A	C1'-O4'-C4'	11.86	119.39	109.90
33	L1	47	A	C3'-C2'-C1'	-11.86	92.01	101.50
33	L1	113	A	N9-C1'-C2'	-11.86	98.59	114.00
33	L1	1743	C	P-O3'-C3'	11.86	133.93	119.70
33	L1	1060	U	P-O3'-C3'	11.85	133.93	119.70
33	L1	1058	A	P-O5'-C5'	11.85	139.86	120.90
33	L1	2477	G	N9-C1'-C2'	-11.85	98.60	114.00
34	L3	120	C	N1-C1'-C2'	11.85	129.40	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1226	G	O4'-C1'-N9	11.85	117.68	108.20
33	L1	3206	C	P-O3'-C3'	11.85	133.92	119.70
33	L1	1863	A	N9-C1'-C2'	-11.84	98.61	114.00
35	L2	70	G	O4'-C1'-C2'	11.84	118.26	107.60
33	L1	1086	U	C1'-O4'-C4'	11.84	119.37	109.90
67	LS	28	ARG	CA-CB-CG	11.84	139.45	113.40
33	L1	1739	G	P-O3'-C3'	11.84	133.90	119.70
31	S2	67	G	P-O3'-C3'	11.83	133.89	119.70
33	L1	385	A	C5'-C4'-C3'	11.83	134.93	116.00
33	L1	3339	G	O4'-C1'-N9	11.83	117.66	108.20
58	Ln	21	ARG	NE-CZ-NH1	11.83	126.22	120.30
81	LD	201	ARG	NE-CZ-NH2	-11.83	114.39	120.30
80	LC	26	ARG	NE-CZ-NH1	11.83	126.21	120.30
32	S1	1646	G	O4'-C1'-N9	11.82	117.66	108.20
33	L1	521	G	P-O3'-C3'	11.82	133.89	119.70
33	L1	2693	G	O4'-C1'-N9	11.82	117.66	108.20
33	L1	2725	U	C1'-O4'-C4'	-11.82	100.45	109.90
32	S1	788	G	P-O3'-C3'	11.81	133.88	119.70
33	L1	267	G	C3'-C2'-C1'	11.81	110.95	101.50
33	L1	1101	A	O3'-P-O5'	-11.81	81.55	104.00
33	L1	2081	C	C3'-C2'-C1'	11.81	110.95	101.50
33	L1	3327	A	O4'-C1'-N9	-11.81	98.75	108.20
32	S1	1095	C	C1'-O4'-C4'	-11.81	100.45	109.90
33	L1	1377	G	O4'-C1'-C2'	11.81	118.23	107.60
33	L1	1021	U	O4'-C1'-N1	11.80	117.64	108.20
33	L1	2974	G	O4'-C1'-N9	11.80	117.64	108.20
33	L1	3347	U	O4'-C1'-C2'	-11.80	94.00	105.80
37	LB	123	ARG	NE-CZ-NH2	-11.80	114.40	120.30
33	L1	1778	C	P-O3'-C3'	11.80	133.86	119.70
33	L1	1061	A	O4'-C1'-C2'	-11.80	94.00	105.80
11	SM	124	ARG	NE-CZ-NH2	-11.79	114.41	120.30
33	L1	2528	U	P-O3'-C3'	11.79	133.84	119.70
33	L1	2696	C	N1-C1'-C2'	11.78	129.32	114.00
54	Lf	88	TYR	CB-CG-CD1	-11.78	113.93	121.00
32	S1	1315	U	O4'-C1'-N1	11.78	117.62	108.20
33	L1	446	C	N1-C1'-C2'	11.77	129.30	114.00
33	L1	2167	G	N9-C1'-C2'	-11.77	98.69	114.00
33	L1	126	G	C1'-O4'-C4'	-11.77	100.48	109.90
33	L1	3012	A	O4'-C1'-N9	11.77	117.61	108.20
34	L3	106	U	OP1-P-O3'	11.76	131.08	105.20
4	SD	65	LEU	CB-CA-C	11.76	132.55	110.20
33	L1	1036	C	O4'-C1'-N1	11.76	117.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1070	G	C1'-O4'-C4'	-11.76	100.49	109.90
32	S1	1301	G	O4'-C1'-N9	11.76	117.61	108.20
32	S1	1781	U	O5'-P-OP2	-11.76	95.12	105.70
33	L1	400	G	P-O3'-C3'	11.76	133.81	119.70
33	L1	1196	U	P-O3'-C3'	-11.76	105.59	119.70
33	L1	1568	A	C1'-O4'-C4'	11.76	119.31	109.90
33	L1	1607	C	N1-C1'-C2'	11.76	129.28	114.00
33	L1	2591	G	O4'-C1'-C2'	11.76	118.18	107.60
34	L3	101	A	P-O3'-C3'	11.76	133.81	119.70
35	L2	63	A	P-O3'-C3'	11.76	133.81	119.70
32	S1	1473	C	P-O3'-C3'	11.75	133.80	119.70
32	S1	1226	U	O4'-C1'-C2'	-11.74	94.06	105.80
33	L1	609	C	C3'-C2'-C1'	11.74	110.89	101.50
31	S2	13	U	O4'-C1'-N1	11.74	117.59	108.20
81	LD	309	PRO	CA-N-CD	-11.73	95.07	111.50
11	SM	113	ARG	CB-CA-C	-11.73	86.93	110.40
33	L1	3158	C	N1-C1'-C2'	11.73	129.25	114.00
1	Sa	192	ARG	NE-CZ-NH1	11.73	126.16	120.30
33	L1	1222	U	C1'-O4'-C4'	11.73	119.28	109.90
33	L1	531	G	O4'-C1'-C2'	11.72	118.15	107.60
33	L1	207	U	N1-C1'-C2'	-11.72	98.76	114.00
33	L1	282	A	O4'-C1'-C2'	-11.72	94.08	105.80
33	L1	329	G	O4'-C1'-N9	11.72	117.58	108.20
33	L1	1746	G	O4'-C1'-N9	11.72	117.58	108.20
27	SH	78	ARG	CA-C-O	-11.72	95.49	120.10
33	L1	1623	C	P-O5'-C5'	-11.72	102.15	120.90
33	L1	2729	C	P-O3'-C3'	11.72	133.76	119.70
11	SM	14	ARG	NE-CZ-NH1	11.71	126.16	120.30
34	L3	14	C	C5'-C4'-C3'	11.71	134.75	116.00
32	S1	1516	C	C5'-C4'-C3'	11.71	134.73	116.00
51	LY	125	ARG	NE-CZ-NH1	11.71	126.15	120.30
33	L1	331	G	O4'-C1'-N9	11.71	117.56	108.20
33	L1	2691	U	O4'-C1'-C2'	-11.70	94.10	105.80
33	L1	3344	U	C3'-C2'-C1'	11.70	110.86	101.50
32	S1	1659	A	O4'-C1'-C2'	-11.70	94.10	105.80
33	L1	420	A	O4'-C1'-N9	11.70	117.56	108.20
33	L1	1430	C	N1-C1'-C2'	11.70	129.21	114.00
34	L3	82	G	O4'-C1'-N9	11.70	117.56	108.20
33	L1	1753	A	C1'-O4'-C4'	11.70	119.26	109.90
41	LM	15	ARG	NE-CZ-NH2	11.69	126.15	120.30
32	S1	1037	G	C1'-O4'-C4'	-11.69	100.55	109.90
32	S1	1226	U	O3'-P-O5'	-11.69	81.80	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1818	C	C4'-C3'-C2'	11.68	114.28	102.60
34	L3	19	A	O4'-C1'-C2'	-11.68	94.12	105.80
32	S1	1141	U	O4'-C1'-N1	11.67	117.54	108.20
33	L1	579	G	N9-C1'-C2'	11.67	129.17	114.00
33	L1	1880	A	O4'-C1'-N9	11.67	117.54	108.20
34	L3	49	A	O4'-C1'-N9	11.67	117.54	108.20
35	L2	40	G	OP1-P-OP2	-11.67	102.09	119.60
32	S1	1783	C	O4'-C1'-C2'	-11.67	94.13	105.80
35	L2	87	C	C1'-O4'-C4'	-11.67	100.56	109.90
32	S1	25	C	P-O3'-C3'	11.66	133.70	119.70
33	L1	2732	U	C3'-C2'-C1'	11.66	110.83	101.50
33	L1	3031	G	O4'-C1'-N9	11.66	117.53	108.20
32	S1	1697	G	O4'-C1'-N9	11.66	117.53	108.20
1	Sa	346	ARG	NE-CZ-NH1	11.66	126.13	120.30
33	L1	2674	A	N9-C1'-C2'	-11.66	98.84	114.00
33	L1	3059	C	C3'-C2'-C1'	11.66	110.83	101.50
33	L1	542	G	C1'-O4'-C4'	-11.65	100.58	109.90
33	L1	2882	U	C1'-O4'-C4'	-11.65	100.58	109.90
32	S1	467	U	O4'-C1'-N1	11.65	117.52	108.20
33	L1	18	G	P-O3'-C3'	11.65	133.68	119.70
33	L1	2666	G	O4'-C1'-N9	11.65	117.52	108.20
33	L1	3329	G	O4'-C1'-N9	11.65	117.52	108.20
32	S1	1072	U	N1-C1'-C2'	11.64	129.14	114.00
32	S1	1677	U	O4'-C1'-C2'	-11.64	94.16	105.80
19	SY	46	VAL	CA-C-N	-11.64	91.58	117.20
33	L1	484	C	C4'-C3'-C2'	-11.64	90.96	102.60
33	L1	951	C	O4'-C1'-N1	11.64	117.51	108.20
33	L1	1841	G	O4'-C1'-N9	11.64	117.51	108.20
33	L1	2362	A	C1'-O4'-C4'	11.64	119.21	109.90
33	L1	42	A	O4'-C1'-N9	11.64	117.51	108.20
33	L1	924	A	O4'-C1'-N9	11.64	117.51	108.20
33	L1	1751	G	P-O3'-C3'	11.63	133.66	119.70
32	S1	1346	C	C1'-O4'-C4'	-11.63	100.60	109.90
31	S2	6	G	N9-C1'-C2'	11.63	129.12	114.00
33	L1	2384	G	O4'-C1'-N9	11.63	117.50	108.20
32	S1	1545	A	P-O3'-C3'	11.62	133.65	119.70
33	L1	938	U	N1-C1'-C2'	-11.62	98.89	114.00
33	L1	58	G	C3'-C2'-C1'	-11.62	92.21	101.50
33	L1	2207	C	O4'-C1'-N1	11.62	117.49	108.20
33	L1	2734	C	C3'-C2'-C1'	11.62	110.79	101.50
34	L3	40	A	N9-C1'-C2'	-11.61	98.90	114.00
46	LT	9	ARG	NE-CZ-NH1	11.61	126.11	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2273	C	P-O3'-C3'	11.61	133.63	119.70
33	L1	1849	U	C1'-O4'-C4'	11.61	119.19	109.90
33	L1	2984	A	C3'-C2'-C1'	11.61	110.78	101.50
80	LC	250	ARG	NE-CZ-NH1	11.61	126.10	120.30
34	L3	3	A	C1'-O4'-C4'	11.60	119.18	109.90
82	LK	165	ARG	NE-CZ-NH1	11.60	126.10	120.30
32	S1	1640	C	P-O3'-C3'	11.60	133.62	119.70
33	L1	339	G	P-O3'-C3'	11.60	133.62	119.70
33	L1	596	C	N1-C1'-C2'	11.60	129.07	114.00
1	Sa	82	VAL	C-N-CA	-11.59	92.72	121.70
33	L1	1775	C	O4'-C1'-C2'	-11.59	94.21	105.80
67	LS	16	LEU	N-CA-CB	-11.59	87.21	110.40
33	L1	1511	C	C3'-C2'-C1'	11.59	110.77	101.50
31	S2	41	G	C1'-O4'-C4'	-11.58	100.63	109.90
48	LV	166	ILE	O-C-N	-11.58	104.17	122.70
33	L1	1070	G	N9-C1'-C2'	11.58	129.06	114.00
14	SP	107	ASN	O-C-N	-11.58	104.17	122.70
33	L1	484	C	OP1-P-O3'	-11.58	79.73	105.20
33	L1	1754	C	N1-C1'-C2'	11.57	129.05	114.00
33	L1	996	A	O4'-C1'-C2'	11.57	118.02	107.60
33	L1	1115	A	O4'-C1'-C2'	-11.57	94.23	105.80
33	L1	2479	C	O4'-C1'-C2'	-11.57	94.23	105.80
32	S1	616	U	O4'-C1'-N1	11.57	117.45	108.20
23	SU	95	TYR	CB-CG-CD2	-11.56	114.06	121.00
33	L1	2237	A	C3'-C2'-C1'	11.56	110.75	101.50
2	SA	198	LYS	CB-CA-C	11.56	133.52	110.40
32	S1	1177	G	O4'-C1'-N9	11.56	117.45	108.20
33	L1	226	U	C1'-O4'-C4'	11.56	119.15	109.90
33	L1	2721	C	P-O3'-C3'	-11.56	105.83	119.70
45	LQ	201	GLY	C-N-CA	-11.56	98.03	122.30
33	L1	9	C	O4'-C1'-C2'	-11.55	94.25	105.80
33	L1	154	G	P-O3'-C3'	11.55	133.56	119.70
33	L1	1132	A	O4'-C1'-N9	-11.55	98.96	108.20
33	L1	25	U	O4'-C1'-C2'	-11.55	94.25	105.80
33	L1	796	C	C3'-C2'-C1'	11.54	110.74	101.50
33	L1	1835	A	N9-C1'-C2'	11.54	129.01	114.00
34	L3	75	G	O4'-C1'-N9	11.54	117.44	108.20
34	L3	106	U	O4'-C1'-N1	11.54	117.43	108.20
32	S1	159	U	P-O3'-C3'	11.54	133.55	119.70
33	L1	1254	A	C5'-C4'-C3'	11.54	134.46	116.00
33	L1	1958	G	O4'-C1'-C2'	11.54	117.98	107.60
33	L1	2582	G	C1'-O4'-C4'	-11.54	100.67	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2661	G	O4'-C1'-N9	11.54	117.43	108.20
33	L1	3390	G	P-O3'-C3'	11.53	133.54	119.70
34	L3	19	A	C1'-O4'-C4'	11.53	119.13	109.90
32	S1	1549	G	N9-C1'-C2'	11.53	128.99	114.00
33	L1	2584	U	P-O3'-C3'	11.53	133.54	119.70
32	S1	1247	G	O4'-C1'-N9	11.53	117.42	108.20
33	L1	1056	U	P-O3'-C3'	11.53	133.53	119.70
33	L1	2011	G	P-O3'-C3'	11.53	133.53	119.70
34	L3	115	A	P-O5'-C5'	11.53	139.34	120.90
32	S1	493	C	P-O3'-C3'	11.52	133.53	119.70
33	L1	3093	C	O4'-C1'-C2'	-11.52	94.28	105.80
32	S1	1544	G	O4'-C1'-N9	11.52	117.42	108.20
33	L1	138	G	C5'-C4'-C3'	11.52	134.43	116.00
33	L1	695	G	N9-C1'-C2'	-11.52	99.02	114.00
33	L1	1317	G	N9-C1'-C2'	-11.52	99.02	114.00
33	L1	147	G	P-O3'-C3'	11.52	133.52	119.70
32	S1	89	U	O4'-C1'-N1	11.52	117.41	108.20
33	L1	1941	G	C1'-O4'-C4'	-11.52	100.69	109.90
69	La	8	GLY	CA-C-O	-11.52	99.87	120.60
12	SO	64	LYS	CB-CA-C	11.51	133.43	110.40
32	S1	29	U	P-O3'-C3'	11.51	133.51	119.70
33	L1	2439	A	C3'-C2'-C1'	-11.51	92.29	101.50
33	L1	2503	A	P-O5'-C5'	11.51	139.31	120.90
33	L1	3150	G	O3'-P-O5'	-11.51	82.13	104.00
60	Lr	41	ARG	NE-CZ-NH1	11.51	126.05	120.30
32	S1	592	U	P-O3'-C3'	11.51	133.51	119.70
33	L1	1457	A	P-O3'-C3'	11.50	133.50	119.70
33	L1	3057	A	O4'-C1'-N9	-11.50	99.00	108.20
33	L1	3326	U	N1-C1'-C2'	-11.50	99.05	114.00
33	L1	755	C	P-O3'-C3'	11.49	133.49	119.70
34	L3	26	C	N1-C1'-C2'	11.49	128.94	114.00
33	L1	719	U	P-O3'-C3'	11.49	133.49	119.70
32	S1	1464	G	N9-C1'-C2'	11.49	128.94	114.00
32	S1	1760	A	P-O3'-C3'	11.49	133.49	119.70
34	L3	7	G	O4'-C1'-N9	11.49	117.39	108.20
32	S1	1191	U	O4'-C1'-N1	11.48	117.39	108.20
32	S1	1554	G	O4'-C1'-N9	11.48	117.39	108.20
33	L1	385	A	O4'-C1'-C2'	11.48	117.93	107.60
23	SU	68	THR	CA-C-O	-11.48	95.99	120.10
32	S1	1613	G	P-O3'-C3'	11.48	133.48	119.70
33	L1	3057	A	P-O3'-C3'	11.48	133.48	119.70
33	L1	853	U	C1'-O4'-C4'	11.48	119.08	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	891	U	N1-C1'-C2'	11.48	128.92	114.00
32	S1	901	U	O4'-C1'-N1	11.48	117.38	108.20
33	L1	853	U	O4'-C1'-C2'	-11.48	94.32	105.80
32	S1	1345	G	O4'-C1'-N9	11.47	117.38	108.20
32	S1	934	A	C3'-C2'-C1'	-11.47	92.32	101.50
33	L1	400	G	C3'-C2'-C1'	-11.47	92.33	101.50
33	L1	2479	C	C3'-C2'-C1'	11.47	110.67	101.50
48	LV	158	VAL	CA-CB-CG2	11.47	128.10	110.90
32	S1	1143	A	O4'-C1'-N9	11.46	117.36	108.20
33	L1	1539	G	O4'-C1'-C2'	11.46	117.91	107.60
33	L1	2763	C	N1-C1'-C2'	-11.46	99.11	114.00
17	SV	29	SER	N-CA-CB	11.45	127.68	110.50
32	S1	638	G	O4'-C1'-N9	11.45	117.36	108.20
33	L1	2391	C	O4'-C1'-C2'	-11.45	94.35	105.80
33	L1	2996	A	O4'-C1'-C2'	11.45	117.91	107.60
10	SL	17	ARG	NE-CZ-NH2	-11.45	114.58	120.30
11	SM	90	TYR	CB-CG-CD1	-11.45	114.13	121.00
31	S2	9	A	O4'-C1'-N9	11.45	117.36	108.20
33	L1	803	G	O4'-C1'-C2'	-11.45	94.35	105.80
33	L1	3234	G	C4'-C3'-C2'	-11.44	91.16	102.60
33	L1	1536	U	C1'-O4'-C4'	11.43	119.05	109.90
33	L1	1064	U	O4'-C1'-C2'	-11.43	94.37	105.80
78	Le	74	LYS	CB-CA-C	11.43	133.26	110.40
34	L3	68	G	C1'-O4'-C4'	-11.42	100.76	109.90
32	S1	1547	G	O4'-C1'-N9	-11.42	99.06	108.20
33	L1	1010	A	O4'-C1'-N9	11.42	117.34	108.20
33	L1	3035	C	O4'-C1'-C2'	11.42	117.87	107.60
32	S1	655	G	O4'-C1'-N9	11.41	117.33	108.20
33	L1	937	G	N9-C1'-C2'	11.41	128.83	114.00
40	LH	226	ARG	NE-CZ-NH2	-11.41	114.60	120.30
32	S1	184	C	P-O3'-C3'	11.41	133.39	119.70
33	L1	102	G	O4'-C1'-N9	11.40	117.32	108.20
33	L1	2594	A	C4'-C3'-C2'	-11.40	91.20	102.60
33	L1	311	G	O4'-C1'-C2'	11.40	117.86	107.60
33	L1	842	C	P-O3'-C3'	11.40	133.38	119.70
33	L1	3365	U	P-O5'-C5'	11.40	139.13	120.90
33	L1	1363	C	N1-C1'-C2'	11.39	128.81	114.00
23	SU	25	ARG	CB-CA-C	-11.39	87.61	110.40
33	L1	3382	A	O4'-C1'-N9	11.39	117.31	108.20
33	L1	2562	A	O4'-C1'-N9	11.39	117.31	108.20
33	L1	2706	A	O4'-C1'-N9	11.39	117.31	108.20
33	L1	1647	C	N1-C1'-C2'	11.39	128.80	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1658	U	P-O5'-C5'	11.38	139.12	120.90
60	Lr	41	ARG	NE-CZ-NH2	-11.38	114.61	120.30
32	S1	1631	C	O4'-C1'-N1	11.38	117.30	108.20
78	Le	74	LYS	CA-CB-CG	11.38	138.43	113.40
33	L1	1630	C	O4'-C1'-C2'	-11.37	94.43	105.80
33	L1	407	A	O4'-C1'-N9	11.37	117.30	108.20
32	S1	1163	C	O3'-P-O5'	-11.37	82.40	104.00
32	S1	1588	C	OP1-P-O3'	11.37	130.21	105.20
33	L1	2299	C	P-O3'-C3'	11.37	133.34	119.70
32	S1	1381	G	O4'-C1'-N9	11.36	117.29	108.20
33	L1	839	A	C5'-C4'-C3'	11.36	134.18	116.00
33	L1	2856	U	O4'-C1'-N1	11.36	117.29	108.20
32	S1	1315	U	C1'-O4'-C4'	11.35	118.98	109.90
33	L1	58	G	O4'-C1'-N9	11.35	117.28	108.20
33	L1	1151	G	C1'-O4'-C4'	-11.35	100.82	109.90
72	Lk	68	LYS	CA-CB-CG	-11.35	88.43	113.40
33	L1	1407	G	N9-C1'-C2'	-11.35	99.25	114.00
33	L1	2230	C	N1-C1'-C2'	11.35	128.75	114.00
32	S1	1568	U	P-O3'-C3'	11.35	133.31	119.70
33	L1	2453	G	O4'-C1'-C2'	-11.35	94.45	105.80
33	L1	1163	A	C1'-O4'-C4'	-11.34	100.83	109.90
32	S1	1614	C	O3'-P-O5'	-11.34	82.45	104.00
33	L1	347	A	O4'-C1'-N9	-11.34	99.13	108.20
32	S1	1202	G	O4'-C1'-C2'	11.34	117.80	107.60
33	L1	492	G	C3'-C2'-C1'	-11.33	92.43	101.50
33	L1	343	G	C1'-O4'-C4'	-11.33	100.84	109.90
33	L1	3303	C	C1'-O4'-C4'	-11.33	100.84	109.90
34	L3	39	C	N1-C1'-C2'	11.33	128.73	114.00
48	LV	129	ARG	NE-CZ-NH2	11.33	125.97	120.30
32	S1	1354	C	C1'-O4'-C4'	-11.32	100.84	109.90
33	L1	795	C	O4'-C1'-N1	11.32	117.26	108.20
35	L2	154	G	N9-C1'-C2'	11.32	128.72	114.00
33	L1	1621	G	P-O5'-C5'	11.32	139.02	120.90
32	S1	634	A	N9-C1'-C2'	-11.32	99.28	114.00
33	L1	1575	G	C1'-O4'-C4'	-11.32	100.84	109.90
81	LD	101	ARG	NE-CZ-NH1	11.32	125.96	120.30
32	S1	1423	A	C3'-C2'-C1'	11.32	110.55	101.50
33	L1	1748	A	O4'-C1'-N9	-11.32	99.15	108.20
33	L1	2105	G	C1'-O4'-C4'	11.32	118.95	109.90
33	L1	2299	C	N1-C1'-C2'	11.32	128.71	114.00
32	S1	1343	C	C3'-C2'-C1'	11.31	110.55	101.50
34	L3	12	U	N1-C1'-C2'	11.31	128.71	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	78	C	C3'-C2'-C1'	11.31	110.55	101.50
35	L2	119	C	N1-C1'-C2'	11.31	128.71	114.00
32	S1	137	A	N9-C1'-C2'	11.31	128.71	114.00
32	S1	1572	U	O4'-C1'-C2'	-11.31	94.49	105.80
33	L1	159	G	C1'-O4'-C4'	-11.31	100.85	109.90
33	L1	518	G	C1'-O4'-C4'	-11.31	100.85	109.90
13	SQ	109	LEU	C-N-CA	-11.31	98.56	122.30
33	L1	553	C	P-O3'-C3'	11.30	133.26	119.70
77	Lc	120	PHE	CB-CG-CD2	-11.30	112.89	120.80
33	L1	1786	G	C1'-O4'-C4'	-11.30	100.86	109.90
33	L1	2418	A	P-O3'-C3'	-11.30	106.14	119.70
32	S1	292	A	O4'-C1'-N9	11.29	117.23	108.20
33	L1	841	G	P-O3'-C3'	11.29	133.25	119.70
33	L1	3079	G	P-O3'-C3'	11.29	133.25	119.70
33	L1	2725	U	O4'-C1'-C2'	11.29	117.76	107.60
46	LT	98	ARG	NE-CZ-NH1	11.29	125.94	120.30
33	L1	2053	A	C1'-O4'-C4'	11.29	118.93	109.90
33	L1	2762	U	C5'-C4'-C3'	11.29	134.06	116.00
32	S1	545	A	P-O3'-C3'	11.29	133.24	119.70
32	S1	192	G	C3'-C2'-C1'	-11.28	92.48	101.50
32	S1	689	C	P-O3'-C3'	11.28	133.24	119.70
33	L1	3324	U	N1-C1'-C2'	-11.28	99.34	114.00
32	S1	63	G	O4'-C1'-N9	11.28	117.22	108.20
33	L1	841	G	C5'-C4'-C3'	11.28	134.04	116.00
33	L1	492	G	P-O3'-C3'	11.27	133.23	119.70
34	L3	71	A	N9-C1'-C2'	-11.27	99.35	114.00
31	S2	41	G	N9-C1'-C2'	11.27	128.65	114.00
33	L1	1813	C	O4'-C1'-N1	11.27	117.21	108.20
32	S1	1361	G	P-O3'-C3'	11.26	133.22	119.70
33	L1	2739	A	O5'-P-OP2	-11.26	95.56	105.70
32	S1	1659	A	C3'-C2'-C1'	11.26	110.51	101.50
33	L1	1157	A	O4'-C1'-N9	11.26	117.21	108.20
33	L1	796	C	N1-C1'-C2'	11.26	128.63	114.00
33	L1	1931	G	N9-C1'-C2'	-11.26	99.37	114.00
2	SA	214	ALA	C-N-CA	11.25	149.84	121.70
33	L1	2946	U	C1'-O4'-C4'	11.25	118.90	109.90
32	S1	988	G	C1'-O4'-C4'	-11.25	100.90	109.90
33	L1	1663	G	O4'-C1'-N9	11.25	117.20	108.20
32	S1	1068	G	N9-C1'-C2'	-11.25	99.38	114.00
32	S1	1793	C	C3'-C2'-C1'	11.25	110.50	101.50
13	SQ	78	ARG	NE-CZ-NH2	11.24	125.92	120.30
43	LO	6	LYS	CA-C-O	-11.24	96.49	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2711	U	O4'-C1'-C2'	11.24	117.72	107.60
44	LR	91	ARG	NE-CZ-NH1	-11.24	114.68	120.30
33	L1	2267	G	O4'-C1'-N9	11.24	117.19	108.20
32	S1	388	G	P-O3'-C3'	11.24	133.18	119.70
32	S1	398	C	C3'-C2'-C1'	11.24	110.49	101.50
34	L3	101	A	O4'-C1'-N9	11.24	117.19	108.20
34	L3	33	U	O4'-C1'-N1	11.23	117.19	108.20
32	S1	1461	G	O4'-C1'-N9	11.23	117.18	108.20
33	L1	2396	A	C3'-C2'-C1'	11.23	110.48	101.50
33	L1	2448	G	O4'-C1'-N9	11.22	117.18	108.20
35	L2	64	U	C3'-C2'-C1'	11.22	110.48	101.50
33	L1	2112	C	C3'-C2'-C1'	11.22	110.48	101.50
33	L1	1132	A	P-O3'-C3'	11.22	133.16	119.70
33	L1	1789	C	P-O3'-C3'	11.22	133.16	119.70
7	SI	53	LYS	CA-CB-CG	11.21	138.07	113.40
32	S1	154	A	O4'-C1'-N9	11.21	117.17	108.20
33	L1	1564	C	O4'-C1'-N1	-11.21	99.23	108.20
33	L1	2344	A	O4'-C1'-N9	11.21	117.17	108.20
33	L1	2825	G	O4'-C1'-N9	11.21	117.17	108.20
35	L2	99	G	C1'-O4'-C4'	11.21	118.87	109.90
32	S1	1650	G	O4'-C1'-N9	11.21	117.17	108.20
32	S1	193	G	P-O3'-C3'	11.20	133.14	119.70
32	S1	1054	G	O4'-C1'-N9	11.20	117.16	108.20
32	S1	1771	U	P-O3'-C3'	11.20	133.14	119.70
33	L1	1954	G	O4'-C1'-C2'	11.20	117.68	107.60
32	S1	299	A	C1'-O4'-C4'	11.20	118.86	109.90
32	S1	922	U	O4'-C1'-N1	11.20	117.16	108.20
33	L1	1815	G	O4'-C1'-N9	11.20	117.16	108.20
32	S1	1126	C	C1'-O4'-C4'	-11.19	100.94	109.90
33	L1	2984	A	C5'-C4'-O4'	11.20	122.53	109.10
32	S1	473	C	O4'-C1'-C2'	-11.19	94.61	105.80
33	L1	3084	G	C1'-O4'-C4'	-11.19	100.95	109.90
32	S1	612	U	O4'-C1'-N1	11.19	117.15	108.20
33	L1	425	G	N9-C1'-C2'	11.19	128.54	114.00
34	L3	49	A	C5'-C4'-C3'	11.19	133.90	116.00
71	Lj	103	ARG	NE-CZ-NH2	-11.19	114.71	120.30
33	L1	2793	G	P-O3'-C3'	11.18	133.12	119.70
33	L1	2794	A	O4'-C1'-C2'	11.18	117.67	107.60
32	S1	1058	G	P-O3'-C3'	11.18	133.11	119.70
33	L1	1887	A	O4'-C1'-C2'	-11.18	94.62	105.80
32	S1	1682	U	O4'-C1'-C2'	-11.18	94.62	105.80
33	L1	330	C	P-O5'-C5'	11.18	138.78	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1000	A	O4'-C1'-N9	11.17	117.14	108.20
33	L1	840	A	C5'-C4'-C3'	11.17	133.87	116.00
33	L1	307	C	N1-C1'-C2'	11.17	128.52	114.00
33	L1	1801	G	P-O3'-C3'	11.17	133.10	119.70
33	L1	3244	G	P-O3'-C3'	11.17	133.10	119.70
34	L3	64	G	O4'-C1'-N9	11.16	117.13	108.20
32	S1	390	G	P-O3'-C3'	11.16	133.10	119.70
33	L1	77	U	O4'-C1'-N1	11.16	117.13	108.20
33	L1	350	A	C3'-C2'-C1'	-11.16	92.57	101.50
33	L1	808	G	O4'-C1'-N9	11.16	117.13	108.20
80	LC	169	ARG	NE-CZ-NH1	11.16	125.88	120.30
33	L1	2466	G	O4'-C1'-N9	11.16	117.12	108.20
33	L1	3291	C	C3'-C2'-C1'	11.15	110.42	101.50
23	SU	7	ALA	CB-CA-C	-11.15	93.38	110.10
33	L1	2592	G	C1'-O4'-C4'	-11.15	100.98	109.90
46	LT	151	ARG	NE-CZ-NH1	11.15	125.87	120.30
20	SZ	28	LYS	CB-CA-C	11.14	132.69	110.40
23	SU	80	LEU	CA-CB-CG	11.14	140.93	115.30
33	L1	2632	U	N1-C1'-C2'	-11.14	99.51	114.00
33	L1	2709	G	C1'-O4'-C4'	-11.14	100.98	109.90
33	L1	1781	C	O4'-C1'-N1	11.14	117.11	108.20
30	S3	16	G	C1'-O4'-C4'	11.14	118.81	109.90
32	S1	1559	U	O4'-C1'-N1	11.14	117.11	108.20
33	L1	521	G	C1'-O4'-C4'	-11.13	101.00	109.90
33	L1	3203	G	C1'-O4'-C4'	11.13	118.81	109.90
33	L1	3230	G	O4'-C1'-N9	11.13	117.11	108.20
33	L1	722	C	N1-C1'-C2'	-11.13	99.53	114.00
33	L1	2091	U	C1'-O4'-C4'	11.13	118.80	109.90
33	L1	2760	U	P-O3'-C3'	11.13	133.05	119.70
33	L1	1136	A	O4'-C1'-C2'	11.12	117.61	107.60
33	L1	1189	G	O4'-C1'-N9	11.12	117.10	108.20
32	S1	1406	U	C3'-C2'-C1'	11.12	110.40	101.50
33	L1	493	G	C3'-C2'-C1'	11.12	110.40	101.50
33	L1	1907	A	C3'-C2'-C1'	-11.12	92.60	101.50
33	L1	859	G	P-O3'-C3'	11.12	133.04	119.70
33	L1	227	C	O4'-C1'-N1	-11.12	99.31	108.20
33	L1	1804	G	C3'-C2'-C1'	11.12	110.39	101.50
33	L1	2805	A	O4'-C1'-N9	11.12	117.09	108.20
33	L1	1093	U	O4'-C1'-N1	11.12	117.09	108.20
33	L1	2630	A	N9-C1'-C2'	-11.12	99.55	114.00
28	SN	38	CYS	CB-CA-C	11.11	132.62	110.40
32	S1	1393	G	P-O5'-C5'	11.11	138.68	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2213	G	O4'-C1'-C2'	11.11	117.60	107.60
33	L1	1081	U	O4'-C1'-C2'	-11.11	94.69	105.80
33	L1	1696	G	P-O3'-C3'	11.11	133.03	119.70
33	L1	2436	G	N9-C1'-C2'	-11.10	99.56	114.00
35	L2	123	C	P-O3'-C3'	11.10	133.02	119.70
25	SC	63	THR	CA-CB-OG1	-11.10	85.69	109.00
33	L1	1666	C	N1-C1'-C2'	11.10	128.43	114.00
33	L1	1715	C	C1'-O4'-C4'	11.10	118.78	109.90
34	L3	25	G	N9-C1'-C2'	-11.10	99.57	114.00
38	LE	106	PHE	CB-CG-CD2	-11.10	113.03	120.80
32	S1	1290	U	C3'-C2'-C1'	11.09	110.37	101.50
33	L1	47	A	C1'-O4'-C4'	-11.09	101.03	109.90
33	L1	603	G	O4'-C1'-N9	11.09	117.08	108.20
33	L1	1628	G	O4'-C1'-C2'	-11.09	94.71	105.80
33	L1	2846	C	N1-C1'-C2'	11.09	128.42	114.00
32	S1	1111	C	O4'-C1'-N1	11.09	117.07	108.20
33	L1	1024	G	O4'-C1'-N9	11.08	117.06	108.20
33	L1	2030	U	O4'-C1'-N1	11.08	117.06	108.20
33	L1	473	G	C1'-O4'-C4'	11.08	118.76	109.90
78	Le	242	ARG	NE-CZ-NH2	-11.08	114.76	120.30
33	L1	1237	G	N9-C1'-C2'	11.07	128.40	114.00
33	L1	2490	U	C3'-C2'-C1'	11.07	110.36	101.50
25	SC	8	TYR	CB-CG-CD2	-11.07	114.36	121.00
33	L1	2129	U	N1-C1'-C2'	11.07	128.39	114.00
33	L1	237	C	O4'-C1'-N1	-11.07	99.34	108.20
33	L1	2229	G	N9-C1'-C2'	-11.07	99.61	114.00
33	L1	642	C	O4'-C1'-N1	11.07	117.05	108.20
71	Lj	95	PRO	CA-C-O	-11.07	93.64	120.20
4	SD	136	ILE	O-C-N	-11.06	100.08	121.10
35	L2	9	U	O4'-C1'-N1	11.06	117.05	108.20
3	SB	44	MET	CA-CB-CG	11.06	132.10	113.30
33	L1	1696	G	C1'-O4'-C4'	11.06	118.75	109.90
33	L1	2213	G	C3'-C2'-C1'	-11.06	92.65	101.50
33	L1	2994	U	C3'-C2'-C1'	11.06	110.34	101.50
73	Lp	52	LYS	CA-C-O	-11.06	96.88	120.10
32	S1	1746	U	O3'-P-O5'	-11.06	82.99	104.00
33	L1	700	C	O4'-C1'-C2'	-11.06	94.74	105.80
33	L1	3388	U	O4'-C1'-N1	11.05	117.04	108.20
32	S1	1061	G	N9-C1'-C2'	11.05	128.37	114.00
27	SH	78	ARG	O-C-N	-11.05	105.02	122.70
33	L1	2602	U	O4'-C1'-N1	11.05	117.04	108.20
33	L1	1931	G	O4'-C1'-N9	11.05	117.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2506	G	O4'-C1'-N9	11.05	117.04	108.20
68	LW	83	ARG	C-N-CA	11.04	149.31	121.70
32	S1	873	G	O4'-C1'-N9	11.04	117.03	108.20
2	SA	211	PRO	CA-C-O	-11.04	93.70	120.20
25	SC	173	ARG	NE-CZ-NH2	-11.04	114.78	120.30
31	S2	4	G	C3'-C2'-C1'	-11.04	92.67	101.50
33	L1	1061	A	P-O5'-C5'	11.04	138.56	120.90
33	L1	330	C	O4'-C1'-N1	11.04	117.03	108.20
33	L1	2753	C	N1-C1'-C2'	11.04	128.35	114.00
33	L1	2684	U	N1-C1'-C2'	11.03	128.34	114.00
33	L1	2786	G	O4'-C1'-C2'	-11.04	94.77	105.80
32	S1	631	C	O4'-C1'-N1	11.03	117.03	108.20
32	S1	202	C	P-O3'-C3'	11.03	132.93	119.70
33	L1	1682	C	P-O3'-C3'	11.03	132.93	119.70
35	L2	96	A	O4'-C1'-C2'	-11.02	94.78	105.80
35	L2	155	G	C1'-O4'-C4'	-11.02	101.08	109.90
45	LQ	277	ARG	NE-CZ-NH1	11.02	125.81	120.30
32	S1	1566	U	C3'-C2'-C1'	11.02	110.31	101.50
33	L1	1803	G	O4'-C1'-N9	11.02	117.02	108.20
33	L1	2439	A	C1'-O4'-C4'	-11.02	101.09	109.90
33	L1	2726	U	C1'-O4'-C4'	-11.02	101.08	109.90
33	L1	408	U	O4'-C1'-N1	11.02	117.01	108.20
33	L1	570	G	O4'-C1'-C2'	11.02	117.52	107.60
33	L1	3304	U	O4'-C1'-C2'	-11.02	94.78	105.80
33	L1	3379	C	O4'-C1'-N1	11.02	117.01	108.20
33	L1	972	C	O4'-C1'-C2'	-11.01	94.79	105.80
32	S1	348	A	O4'-C1'-N9	11.01	117.00	108.20
33	L1	1372	U	O4'-C1'-N1	11.00	117.00	108.20
25	SC	106	PHE	CG-CD2-CE2	11.00	132.90	120.80
33	L1	937	G	O4'-C1'-C2'	11.00	117.50	107.60
3	SB	154	ASP	O-C-N	11.00	141.89	123.20
31	S2	16	U	C3'-C2'-C1'	11.00	110.30	101.50
33	L1	938	U	O4'-C1'-N1	11.00	117.00	108.20
33	L1	2361	C	C1'-O4'-C4'	11.00	118.70	109.90
34	L3	93	U	O4'-C1'-N1	10.99	116.99	108.20
33	L1	2356	A	O4'-C1'-C2'	10.99	117.49	107.60
34	L3	101	A	P-O5'-C5'	10.99	138.49	120.90
32	S1	1132	G	O4'-C1'-N9	10.99	116.99	108.20
33	L1	1485	A	P-O3'-C3'	10.99	132.88	119.70
35	L2	62	G	N9-C1'-C2'	10.99	128.28	114.00
33	L1	604	C	O4'-C1'-N1	10.98	116.99	108.20
34	L3	88	U	O4'-C1'-N1	10.98	116.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2022	U	O4'-C1'-N1	10.98	116.98	108.20
32	S1	1700	G	O4'-C1'-N9	10.98	116.98	108.20
32	S1	1513	A	O4'-C1'-N9	10.97	116.98	108.20
32	S1	1585	A	P-O3'-C3'	-10.97	106.54	119.70
32	S1	1572	U	C3'-C2'-C1'	10.97	110.27	101.50
33	L1	3041	A	O4'-C1'-C2'	10.97	117.47	107.60
32	S1	512	U	O4'-C1'-N1	10.96	116.97	108.20
33	L1	3093	C	O4'-C1'-N1	-10.96	99.43	108.20
81	LD	358	LYS	CB-CA-C	-10.96	88.47	110.40
32	S1	1185	U	O4'-C1'-N1	10.96	116.97	108.20
33	L1	1593	C	N1-C1'-C2'	10.96	128.25	114.00
33	L1	1940	U	C5'-C4'-C3'	-10.96	98.46	116.00
33	L1	2585	C	N1-C1'-C2'	10.96	128.25	114.00
33	L1	1180	C	O4'-C1'-N1	-10.96	99.44	108.20
35	L2	24	U	N1-C1'-C2'	10.96	128.24	114.00
32	S1	1665	U	C5'-C4'-C3'	10.95	133.52	116.00
33	L1	1041	C	O4'-C1'-C2'	-10.95	94.85	105.80
33	L1	3067	G	O4'-C1'-N9	10.95	116.96	108.20
32	S1	3	C	O4'-C1'-C2'	-10.95	94.85	105.80
11	SM	92	ASP	CB-CG-OD1	-10.94	108.45	118.30
32	S1	322	U	O4'-C1'-N1	10.94	116.95	108.20
33	L1	1064	U	O4'-C1'-N1	10.94	116.95	108.20
33	L1	3156	G	C1'-O4'-C4'	10.94	118.65	109.90
32	S1	1710	C	P-O3'-C3'	10.94	132.83	119.70
33	L1	2216	G	O4'-C1'-C2'	-10.94	94.86	105.80
33	L1	2439	A	O4'-C1'-C2'	10.94	117.44	107.60
32	S1	1615	G	P-O5'-C5'	10.93	138.39	120.90
33	L1	3128	A	O4'-C1'-C2'	10.93	117.44	107.60
33	L1	423	C	C3'-C2'-C1'	10.93	110.24	101.50
33	L1	424	G	N9-C1'-C2'	10.93	128.21	114.00
33	L1	2628	C	N1-C1'-C2'	10.93	128.21	114.00
13	SQ	23	ARG	NE-CZ-NH2	10.93	125.76	120.30
33	L1	860	G	C3'-C2'-C1'	-10.93	92.76	101.50
33	L1	1207	A	N9-C1'-C2'	10.93	128.20	114.00
33	L1	2132	A	P-O3'-C3'	10.92	132.80	119.70
10	SL	119	PHE	C-N-CA	10.92	148.99	121.70
33	L1	69	U	C3'-C2'-C1'	10.92	110.23	101.50
33	L1	294	A	C1'-O4'-C4'	10.92	118.63	109.90
33	L1	3168	C	P-O3'-C3'	10.92	132.80	119.70
33	L1	1311	G	C3'-C2'-C1'	-10.91	92.77	101.50
33	L1	2402	G	O4'-C1'-C2'	-10.91	94.89	105.80
33	L1	1507	A	P-O3'-C3'	-10.91	106.61	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	LP	21	PHE	CB-CG-CD1	10.91	128.44	120.80
33	L1	3385	G	O4'-C1'-N9	10.91	116.93	108.20
33	L1	1371	G	O4'-C1'-N9	-10.90	99.48	108.20
33	L1	1735	U	N1-C1'-C2'	-10.90	99.83	114.00
34	L3	8	A	C1'-O4'-C4'	-10.90	101.18	109.90
33	L1	818	G	O4'-C1'-N9	10.90	116.92	108.20
32	S1	1757	G	C3'-C2'-C1'	10.90	110.22	101.50
33	L1	1225	A	P-O3'-C3'	10.90	132.78	119.70
32	S1	310	U	O4'-C1'-N1	10.89	116.92	108.20
33	L1	135	G	P-O3'-C3'	10.89	132.77	119.70
33	L1	233	C	C1'-O4'-C4'	-10.89	101.19	109.90
33	L1	2489	A	O4'-C1'-N9	10.89	116.91	108.20
46	LT	180	ARG	NE-CZ-NH2	-10.89	114.85	120.30
32	S1	1435	G	C1'-O4'-C4'	-10.89	101.19	109.90
33	L1	327	A	C4'-C3'-C2'	10.89	113.49	102.60
7	SI	46	ARG	NE-CZ-NH2	-10.88	114.86	120.30
33	L1	1456	A	N9-C1'-C2'	-10.88	99.85	114.00
33	L1	2494	A	O4'-C1'-N9	10.88	116.91	108.20
35	L2	16	A	N9-C1'-C2'	-10.88	99.85	114.00
32	S1	379	U	N1-C1'-C2'	10.88	128.15	114.00
33	L1	306	A	O4'-C1'-N9	10.88	116.91	108.20
33	L1	1741	G	N9-C1'-C2'	10.88	128.15	114.00
33	L1	1201	C	P-O3'-C3'	10.88	132.75	119.70
33	L1	372	A	P-O3'-C3'	10.88	132.75	119.70
32	S1	1075	G	O4'-C1'-N9	10.87	116.90	108.20
32	S1	1785	U	O4'-C1'-N1	10.88	116.90	108.20
33	L1	485	G	O4'-C1'-N9	10.87	116.90	108.20
33	L1	1825	G	C1'-O4'-C4'	-10.87	101.20	109.90
33	L1	3375	G	N9-C1'-C2'	10.87	128.13	114.00
33	L1	459	G	O4'-C1'-N9	10.87	116.89	108.20
32	S1	936	C	P-O5'-C5'	10.86	138.28	120.90
32	S1	1468	G	O4'-C1'-N9	10.86	116.89	108.20
33	L1	543	C	C5'-C4'-O4'	10.86	122.14	109.10
81	LD	227	ARG	NE-CZ-NH1	10.86	125.73	120.30
33	L1	718	C	N1-C1'-C2'	10.86	128.12	114.00
33	L1	1010	A	O4'-C1'-C2'	-10.86	94.94	105.80
33	L1	1764	G	O4'-C1'-N9	10.85	116.88	108.20
33	L1	280	G	P-O3'-C3'	10.85	132.72	119.70
33	L1	2622	G	C1'-O4'-C4'	-10.85	101.22	109.90
72	Lk	71	ARG	NE-CZ-NH2	-10.85	114.87	120.30
33	L1	2643	A	C3'-C2'-C1'	-10.85	92.82	101.50
34	L3	75	G	C1'-O4'-C4'	-10.85	101.22	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	453	C	C3'-C2'-C1'	10.85	110.18	101.50
32	S1	483	C	O4'-C1'-N1	-10.85	99.52	108.20
35	L2	77	U	C5'-C4'-C3'	-10.85	98.64	116.00
33	L1	1800	G	C5'-C4'-C3'	10.85	133.36	116.00
33	L1	571	G	N9-C1'-C2'	10.85	128.10	114.00
32	S1	1462	C	C3'-C2'-C1'	10.84	110.17	101.50
33	L1	3278	G	O4'-C1'-N9	10.84	116.88	108.20
33	L1	1501	A	C1'-O4'-C4'	-10.84	101.23	109.90
32	S1	1302	C	C3'-C2'-C1'	10.84	110.17	101.50
33	L1	74	G	C1'-O4'-C4'	-10.84	101.23	109.90
56	Lh	58	TYR	CB-CG-CD2	-10.84	114.50	121.00
33	L1	3350	C	C1'-O4'-C4'	-10.83	101.23	109.90
3	SB	51	ARG	NE-CZ-NH2	-10.83	114.89	120.30
32	S1	653	U	P-O5'-C5'	10.83	138.23	120.90
33	L1	69	U	C1'-O4'-C4'	-10.83	101.23	109.90
33	L1	2479	C	C5'-C4'-C3'	10.83	133.33	116.00
33	L1	3326	U	O4'-C1'-C2'	-10.83	94.97	105.80
12	SO	64	LYS	CG-CD-CE	10.83	144.38	111.90
33	L1	462	C	C1'-O4'-C4'	-10.83	101.24	109.90
33	L1	135	G	C5'-C4'-C3'	10.82	133.32	116.00
33	L1	2337	C	N1-C1'-C2'	10.82	128.07	114.00
33	L1	2842	C	N1-C1'-C2'	-10.82	99.93	114.00
64	LG	13	ARG	NE-CZ-NH2	-10.82	114.89	120.30
33	L1	138	G	N9-C1'-C2'	10.82	128.07	114.00
2	SA	108	THR	CA-C-N	10.82	147.39	117.10
33	L1	301	G	N9-C1'-C2'	10.82	128.07	114.00
33	L1	2686	U	C1'-O4'-C4'	-10.82	101.25	109.90
33	L1	2748	G	P-O5'-C5'	10.82	138.21	120.90
33	L1	1351	C	P-O3'-C3'	10.82	132.68	119.70
33	L1	1818	C	O4'-C4'-C3'	-10.82	93.18	104.00
33	L1	2459	U	C1'-O4'-C4'	10.82	118.55	109.90
33	L1	3015	U	O4'-C1'-N1	10.82	116.85	108.20
32	S1	549	A	P-O5'-C5'	10.81	138.20	120.90
33	L1	381	G	C1'-O4'-C4'	10.81	118.55	109.90
33	L1	507	C	N1-C1'-C2'	10.81	128.05	114.00
33	L1	3068	U	O4'-C1'-N1	10.81	116.84	108.20
32	S1	1169	G	C3'-C2'-C1'	-10.80	92.86	101.50
32	S1	1517	C	C3'-C2'-C1'	10.80	110.14	101.50
33	L1	819	A	O4'-C1'-N9	-10.80	99.56	108.20
33	L1	3218	C	C1'-O4'-C4'	-10.80	101.26	109.90
60	Lr	61	LYS	C-N-CA	-10.80	94.69	121.70
32	S1	1649	C	O4'-C1'-C2'	-10.80	95.00	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2407	U	N1-C1'-C2'	10.80	128.04	114.00
23	SU	78	PHE	N-CA-CB	-10.80	91.16	110.60
33	L1	639	A	C1'-O4'-C4'	-10.80	101.26	109.90
33	L1	891	U	C1'-O4'-C4'	10.80	118.54	109.90
32	S1	1097	A	N9-C1'-C2'	10.79	128.03	114.00
33	L1	62	A	P-O5'-C5'	-10.79	103.63	120.90
33	L1	2899	A	N9-C1'-C2'	-10.79	99.97	114.00
55	Lg	6	ARG	NE-CZ-NH2	-10.79	114.90	120.30
32	S1	652	G	O3'-P-O5'	-10.79	83.50	104.00
33	L1	266	A	P-O3'-C3'	10.79	132.65	119.70
72	Lk	94	SER	N-CA-CB	10.79	126.68	110.50
67	LS	28	ARG	CB-CG-CD	10.79	139.64	111.60
32	S1	315	U	O4'-C1'-N1	10.78	116.83	108.20
32	S1	992	G	O4'-C1'-N9	10.78	116.82	108.20
33	L1	1046	U	O4'-C1'-N1	10.78	116.82	108.20
33	L1	2771	U	C5'-C4'-C3'	10.78	133.25	116.00
33	L1	1817	U	P-O3'-C3'	-10.78	106.77	119.70
33	L1	2829	U	N1-C1'-C2'	-10.78	99.99	114.00
34	L3	24	G	O4'-C1'-N9	10.78	116.82	108.20
32	S1	1163	C	OP1-P-O3'	10.77	128.89	105.20
33	L1	2274	A	C3'-C2'-C1'	10.77	110.12	101.50
33	L1	234	G	C3'-C2'-C1'	-10.77	92.89	101.50
33	L1	1948	G	C1'-O4'-C4'	10.77	118.52	109.90
33	L1	3304	U	P-O5'-C5'	10.77	138.13	120.90
3	SB	29	LEU	CB-CG-CD2	10.77	129.30	111.00
32	S1	591	C	N1-C1'-C2'	10.77	128.00	114.00
33	L1	1019	A	C1'-O4'-C4'	10.76	118.51	109.90
33	L1	2105	G	C3'-C2'-C1'	-10.76	92.89	101.50
33	L1	997	G	N9-C1'-C2'	-10.76	100.02	114.00
33	L1	1262	U	N1-C1'-C2'	-10.76	100.02	114.00
33	L1	2700	A	N9-C1'-C2'	10.76	127.98	114.00
3	SB	149	SER	N-CA-CB	10.75	126.63	110.50
35	L2	76	A	P-O3'-C3'	-10.75	106.80	119.70
33	L1	1682	C	N1-C1'-C2'	10.75	127.98	114.00
33	L1	1196	U	P-O5'-C5'	10.75	138.10	120.90
33	L1	2501	U	P-O3'-C3'	10.75	132.60	119.70
33	L1	467	C	C3'-C2'-C1'	10.75	110.10	101.50
33	L1	1454	C	O4'-C1'-N1	10.75	116.80	108.20
27	SH	27	ILE	CA-CB-CG1	10.74	131.41	111.00
32	S1	391	A	P-O3'-C3'	10.74	132.59	119.70
33	L1	425	G	C1'-O4'-C4'	-10.74	101.30	109.90
33	L1	1133	A	O4'-C1'-C2'	-10.74	95.06	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3149	C	C1'-O4'-C4'	-10.74	101.31	109.90
32	S1	966	U	O4'-C1'-N1	10.74	116.79	108.20
32	S1	1108	U	O4'-C1'-N1	10.74	116.79	108.20
33	L1	2836	G	C1'-O4'-C4'	-10.74	101.31	109.90
33	L1	2837	C	C3'-C2'-C1'	10.74	110.09	101.50
33	L1	3063	C	N1-C1'-C2'	10.74	127.96	114.00
33	L1	3365	U	C3'-C2'-C1'	10.74	110.09	101.50
33	L1	3156	G	O4'-C1'-C2'	-10.73	95.06	105.80
33	L1	2675	G	C5'-C4'-C3'	10.73	133.17	116.00
33	L1	2868	C	O4'-C1'-N1	10.73	116.79	108.20
38	LE	142	ARG	NE-CZ-NH1	-10.73	114.93	120.30
34	L3	102	G	P-O3'-C3'	10.73	132.57	119.70
32	S1	292	A	N9-C1'-C2'	-10.73	100.06	114.00
33	L1	2614	U	C1'-O4'-C4'	10.73	118.48	109.90
33	L1	211	A	C3'-C2'-C1'	10.72	110.08	101.50
33	L1	2236	U	O4'-C1'-N1	10.72	116.78	108.20
33	L1	2682	A	P-O3'-C3'	10.72	132.56	119.70
32	S1	1472	G	C1'-O4'-C4'	-10.72	101.33	109.90
33	L1	758	A	O4'-C1'-N9	10.72	116.77	108.20
33	L1	3383	C	C3'-C2'-C1'	10.72	110.07	101.50
33	L1	1588	G	O4'-C1'-N9	10.71	116.77	108.20
41	LM	68	GLY	CA-C-N	10.71	140.77	117.20
33	L1	2569	G	O4'-C1'-N9	10.71	116.77	108.20
35	L2	106	U	O4'-C1'-N1	10.71	116.77	108.20
44	LR	25	TYR	CB-CG-CD2	10.71	127.43	121.00
32	S1	1195	U	P-O3'-C3'	10.71	132.55	119.70
32	S1	1753	U	O3'-P-O5'	-10.71	83.65	104.00
33	L1	1857	G	P-O3'-C3'	10.71	132.55	119.70
72	Lk	100	MET	CG-SD-CE	-10.71	83.06	100.20
33	L1	1895	G	O4'-C1'-C2'	10.71	117.24	107.60
33	L1	1670	G	O4'-C1'-C2'	10.71	117.23	107.60
33	L1	1888	G	O4'-C1'-C2'	10.71	117.23	107.60
57	Ll	68	ARG	NE-CZ-NH2	-10.71	114.95	120.30
33	L1	1598	U	O4'-C1'-C2'	-10.70	95.10	105.80
35	L2	67	C	C1'-O4'-C4'	-10.70	101.34	109.90
32	S1	1704	G	O4'-C1'-N9	10.70	116.76	108.20
33	L1	1666	C	C3'-C2'-C1'	10.70	110.06	101.50
33	L1	1948	G	N9-C1'-C2'	-10.70	100.09	114.00
76	Lw	35	ASP	CB-CA-C	-10.70	89.00	110.40
34	L3	1	G	C4'-C3'-C2'	10.70	113.30	102.60
32	S1	199	G	P-O3'-C3'	10.69	132.53	119.70
33	L1	3292	U	C1'-O4'-C4'	10.69	118.45	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1634	G	N9-C1'-C2'	10.69	127.90	114.00
60	Lr	32	LYS	C-N-CA	-10.69	94.97	121.70
32	S1	1804	A	O4'-C1'-N9	10.68	116.75	108.20
33	L1	136	C	C1'-O4'-C4'	-10.68	101.35	109.90
35	L2	87	C	N1-C1'-C2'	10.68	127.89	114.00
23	SU	38	ALA	N-CA-CB	-10.68	95.15	110.10
33	L1	2591	G	C3'-C2'-C1'	-10.68	92.96	101.50
32	S1	1513	A	O4'-C1'-C2'	-10.68	95.12	105.80
33	L1	2245	G	O3'-P-O5'	-10.67	83.73	104.00
33	L1	3241	C	N1-C1'-C2'	10.67	127.87	114.00
32	S1	1231	A	C3'-C2'-C1'	10.66	110.03	101.50
33	L1	3168	C	C3'-C2'-C1'	10.66	110.03	101.50
33	L1	1163	A	C3'-C2'-C1'	-10.66	92.97	101.50
33	L1	1367	A	C3'-C2'-C1'	10.66	110.03	101.50
31	S2	49	G	C1'-O4'-C4'	-10.66	101.37	109.90
33	L1	1286	G	N9-C1'-C2'	10.66	127.86	114.00
33	L1	235	G	O4'-C1'-N9	10.66	116.73	108.20
33	L1	2275	A	P-O3'-C3'	10.66	132.49	119.70
33	L1	2247	A	N9-C1'-C2'	-10.66	100.15	114.00
32	S1	1759	A	N9-C1'-C2'	-10.65	100.16	114.00
33	L1	2495	C	P-O3'-C3'	10.65	132.48	119.70
32	S1	1757	G	O4'-C1'-C2'	-10.64	95.16	105.80
33	L1	2887	C	C1'-O4'-C4'	-10.64	101.39	109.90
33	L1	3124	A	O4'-C1'-C2'	-10.64	95.16	105.80
32	S1	829	G	O4'-C1'-N9	10.64	116.71	108.20
33	L1	1383	G	C3'-C2'-C1'	-10.64	92.99	101.50
33	L1	1785	G	O4'-C1'-C2'	10.64	117.18	107.60
32	S1	1658	U	C3'-C2'-C1'	10.63	110.01	101.50
33	L1	1879	A	O3'-P-O5'	10.64	124.21	104.00
33	L1	801	G	N9-C1'-C2'	-10.63	100.18	114.00
48	LV	63	TYR	CB-CG-CD1	10.63	127.38	121.00
32	S1	16	G	C1'-O4'-C4'	-10.63	101.40	109.90
33	L1	1246	G	O4'-C1'-N9	10.63	116.70	108.20
35	L2	45	A	N9-C1'-C2'	-10.63	100.18	114.00
33	L1	2746	G	C1'-O4'-C4'	-10.63	101.40	109.90
35	L2	109	A	N9-C1'-C2'	10.63	127.81	114.00
35	L2	110	C	C3'-C2'-C1'	10.62	110.00	101.50
32	S1	15	U	O4'-C1'-N1	10.62	116.70	108.20
32	S1	453	C	O4'-C1'-C2'	-10.62	95.18	105.80
32	S1	1473	C	O4'-C1'-N1	10.62	116.70	108.20
32	S1	1749	C	C1'-O4'-C4'	-10.62	101.40	109.90
33	L1	1525	U	C3'-C2'-C1'	10.62	110.00	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	LR	38	ARG	NE-CZ-NH2	10.62	125.61	120.30
33	L1	1880	A	O4'-C4'-C3'	-10.62	93.38	104.00
33	L1	1569	U	O4'-C1'-N1	10.62	116.69	108.20
33	L1	1881	C	C4'-C3'-C2'	-10.62	91.98	102.60
25	SC	85	TYR	CB-CG-CD1	-10.61	114.63	121.00
32	S1	1010	A	O4'-C1'-N9	10.61	116.69	108.20
33	L1	3311	C	O4'-C1'-C2'	-10.62	95.19	105.80
73	Lp	51	ILE	O-C-N	-10.61	105.72	122.70
33	L1	2643	A	N9-C1'-C2'	-10.61	100.21	114.00
33	L1	3177	A	N9-C1'-C2'	-10.61	100.21	114.00
32	S1	1121	A	O4'-C1'-N9	10.61	116.69	108.20
33	L1	2765	A	O4'-C1'-N9	10.61	116.69	108.20
73	Lp	53	ASN	N-CA-CB	10.60	129.69	110.60
33	L1	230	G	C1'-O4'-C4'	-10.60	101.42	109.90
32	S1	1758	G	P-O3'-C3'	10.60	132.42	119.70
33	L1	2368	G	O4'-C1'-N9	10.60	116.68	108.20
33	L1	148	U	P-O3'-C3'	10.60	132.41	119.70
7	SI	51	ARG	NE-CZ-NH1	10.59	125.60	120.30
33	L1	1217	G	C1'-O4'-C4'	-10.59	101.42	109.90
33	L1	271	G	N9-C1'-C2'	10.59	127.77	114.00
56	Lh	104	ARG	NE-CZ-NH1	10.59	125.60	120.30
32	S1	1245	G	O4'-C1'-N9	10.59	116.67	108.20
13	SQ	39	SER	CA-C-O	-10.59	97.87	120.10
44	LR	25	TYR	CB-CG-CD1	-10.59	114.65	121.00
3	SB	154	ASP	C-N-CA	-10.58	100.08	122.30
25	SC	176	ARG	NE-CZ-NH2	-10.58	115.01	120.30
32	S1	489	C	P-O3'-C3'	10.58	132.39	119.70
33	L1	435	G	P-O3'-C3'	10.57	132.39	119.70
32	S1	1567	G	C5'-C4'-O4'	10.57	121.79	109.10
33	L1	972	C	P-O3'-C3'	10.57	132.39	119.70
33	L1	1540	G	C1'-O4'-C4'	-10.57	101.44	109.90
33	L1	1567	G	O4'-C1'-N9	10.57	116.66	108.20
80	LC	70	LYS	N-CA-CB	10.57	129.64	110.60
33	L1	2041	G	O4'-C1'-N9	10.57	116.66	108.20
32	S1	593	C	O4'-C1'-C2'	-10.57	95.23	105.80
33	L1	334	A	O4'-C1'-C2'	10.57	117.11	107.60
32	S1	620	G	P-O3'-C3'	10.57	132.38	119.70
33	L1	1307	A	O4'-C1'-N9	10.57	116.66	108.20
33	L1	1749	G	O4'-C1'-C2'	10.57	117.11	107.60
33	L1	2796	G	O4'-C1'-C2'	-10.57	95.23	105.80
33	L1	280	G	O4'-C1'-C2'	-10.57	95.23	105.80
33	L1	1363	C	C1'-O4'-C4'	-10.57	101.45	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	48	A	C4'-C3'-C2'	-10.56	92.03	102.60
33	L1	2703	G	P-O3'-C3'	10.56	132.38	119.70
34	L3	25	G	C4'-C3'-C2'	-10.56	92.03	102.60
33	L1	63	G	N9-C1'-C2'	10.56	127.73	114.00
33	L1	64	A	P-O3'-C3'	10.56	132.37	119.70
33	L1	1685	U	P-O3'-C3'	10.56	132.37	119.70
73	Lp	51	ILE	CB-CA-C	10.56	132.72	111.60
33	L1	1913	C	P-O3'-C3'	-10.56	107.03	119.70
13	SQ	73	LEU	CA-C-O	-10.55	97.94	120.10
1	Sa	199	GLU	C-N-CA	10.55	148.08	121.70
32	S1	380	C	O4'-C1'-N1	10.55	116.64	108.20
32	S1	606	U	O4'-C1'-N1	10.55	116.64	108.20
14	SP	100	ARG	NE-CZ-NH2	-10.55	115.03	120.30
32	S1	1474	U	N1-C1'-C2'	-10.55	100.29	114.00
33	L1	1524	G	O4'-C1'-N9	10.55	116.64	108.20
33	L1	2480	G	C1'-O4'-C4'	10.55	118.34	109.90
33	L1	2512	U	P-O3'-C3'	10.55	132.36	119.70
33	L1	2722	U	O4'-C1'-N1	10.55	116.64	108.20
33	L1	1388	C	O4'-C1'-N1	10.55	116.64	108.20
33	L1	2480	G	N9-C1'-C2'	-10.55	100.29	114.00
33	L1	3387	U	O4'-C1'-N1	10.54	116.64	108.20
33	L1	735	C	N1-C1'-C2'	10.54	127.70	114.00
33	L1	3310	A	C1'-O4'-C4'	-10.54	101.47	109.90
35	L2	65	A	O4'-C1'-C2'	10.54	117.09	107.60
33	L1	2126	C	O4'-C1'-N1	10.54	116.63	108.20
32	S1	1107	G	O4'-C1'-N9	10.54	116.63	108.20
33	L1	2129	U	O4'-C1'-N1	10.53	116.63	108.20
32	S1	962	G	C3'-C2'-C1'	-10.53	93.07	101.50
33	L1	3137	G	C3'-C2'-C1'	-10.53	93.07	101.50
32	S1	449	A	C3'-C2'-C1'	10.53	109.92	101.50
33	L1	1368	U	P-O3'-C3'	-10.52	107.07	119.70
35	L2	53	G	O4'-C1'-C2'	10.52	117.07	107.60
15	SS	124	ARG	C-N-CA	10.52	148.00	121.70
32	S1	974	C	C3'-C2'-C1'	10.52	109.92	101.50
33	L1	1096	C	O4'-C1'-N1	10.52	116.61	108.20
33	L1	2391	C	C3'-C2'-C1'	10.52	109.92	101.50
32	S1	148	C	P-O3'-C3'	10.52	132.32	119.70
32	S1	1211	U	N1-C1'-C2'	10.52	127.67	114.00
33	L1	2945	G	P-O5'-C5'	10.52	137.73	120.90
33	L1	2133	A	N9-C1'-C2'	10.52	127.67	114.00
32	S1	1326	A	C5'-C4'-C3'	-10.51	99.18	116.00
33	L1	1342	C	C5'-C4'-C3'	10.51	132.82	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3365	U	O4'-C1'-N1	10.51	116.61	108.20
32	S1	61	A	C1'-O4'-C4'	10.51	118.31	109.90
32	S1	645	G	N9-C1'-C2'	10.51	127.66	114.00
33	L1	1762	G	P-O3'-C3'	10.51	132.31	119.70
4	SD	133	GLN	N-CA-C	10.50	139.36	111.00
33	L1	1897	A	N9-C1'-C2'	10.50	127.65	114.00
67	LS	28	ARG	CD-NE-CZ	10.50	138.30	123.60
32	S1	923	U	O4'-C1'-N1	10.50	116.60	108.20
11	SM	89	ASP	N-CA-CB	-10.49	91.71	110.60
33	L1	521	G	OP2-P-O3'	10.49	128.29	105.20
32	S1	1593	U	N1-C1'-C2'	-10.49	100.36	114.00
32	S1	1779	U	O4'-C1'-N1	10.49	116.59	108.20
33	L1	1141	U	O4'-C1'-N1	10.49	116.59	108.20
36	LA	21	ARG	NE-CZ-NH2	-10.49	115.05	120.30
33	L1	2488	A	O4'-C1'-N9	10.49	116.59	108.20
32	S1	1349	A	O4'-C1'-N9	10.49	116.59	108.20
49	LX	58	ARG	N-CA-CB	-10.49	91.72	110.60
55	Lg	45	ARG	NE-CZ-NH1	10.49	125.54	120.30
32	S1	600	C	O4'-C1'-C2'	-10.48	95.32	105.80
33	L1	770	U	O4'-C1'-N1	10.48	116.59	108.20
32	S1	1430	A	O4'-C1'-C2'	-10.48	95.32	105.80
32	S1	1313	G	O4'-C1'-N9	10.48	116.58	108.20
33	L1	886	A	P-O3'-C3'	10.48	132.28	119.70
33	L1	619	C	O5'-P-OP2	-10.48	96.27	105.70
33	L1	2579	G	N9-C1'-C2'	10.48	127.62	114.00
33	L1	1599	A	C1'-O4'-C4'	-10.47	101.52	109.90
32	S1	328	U	O4'-C1'-N1	10.47	116.58	108.20
32	S1	691	A	O4'-C1'-N9	10.47	116.58	108.20
33	L1	1362	C	O4'-C1'-N1	10.47	116.58	108.20
33	L1	2412	A	O4'-C1'-N9	10.47	116.58	108.20
41	LM	72	LEU	N-CA-C	10.47	139.27	111.00
33	L1	2614	U	O4'-C1'-C2'	-10.46	95.33	105.80
33	L1	2739	A	C4'-C3'-C2'	-10.47	92.13	102.60
61	Lq	18	ARG	NE-CZ-NH1	-10.47	115.07	120.30
32	S1	636	U	C3'-C2'-C1'	10.46	109.87	101.50
35	L2	51	U	O4'-C1'-N1	10.46	116.57	108.20
33	L1	3277	C	P-O3'-C3'	10.46	132.25	119.70
32	S1	414	A	O4'-C1'-N9	10.46	116.56	108.20
33	L1	3027	G	O4'-C1'-C2'	-10.46	95.34	105.80
33	L1	2831	U	O4'-C1'-N1	10.45	116.56	108.20
32	S1	84	G	O4'-C1'-N9	10.45	116.56	108.20
33	L1	1686	U	O4'-C1'-N1	10.45	116.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1642	C	O4'-C1'-N1	-10.45	99.84	108.20
33	L1	2664	G	C1'-O4'-C4'	-10.45	101.54	109.90
33	L1	1758	U	O4'-C1'-N1	10.45	116.56	108.20
32	S1	32	U	O4'-C1'-N1	10.44	116.55	108.20
32	S1	484	A	O4'-C1'-C2'	10.44	117.00	107.60
32	S1	648	C	C1'-O4'-C4'	10.44	118.25	109.90
33	L1	418	G	N9-C1'-C2'	10.44	127.57	114.00
33	L1	1197	A	O4'-C1'-N9	10.44	116.55	108.20
33	L1	795	C	P-O3'-C3'	-10.44	107.17	119.70
33	L1	3152	C	O4'-C1'-C2'	-10.44	95.36	105.80
1	Sa	317	TYR	CB-CG-CD1	-10.44	114.74	121.00
33	L1	1131	U	C3'-C2'-C1'	10.44	109.85	101.50
33	L1	3232	C	N1-C1'-C2'	10.44	127.57	114.00
34	L3	120	C	C1'-O4'-C4'	-10.44	101.55	109.90
33	L1	124	C	N1-C1'-C2'	10.43	127.56	114.00
33	L1	614	C	O4'-C1'-C2'	-10.43	95.37	105.80
33	L1	601	G	O4'-C1'-C2'	10.43	116.99	107.60
33	L1	875	A	O4'-C1'-N9	10.43	116.55	108.20
35	L2	87	C	O4'-C1'-N1	10.43	116.55	108.20
32	S1	575	G	N9-C1'-C2'	10.43	127.56	114.00
33	L1	1247	G	N9-C1'-C2'	10.43	127.56	114.00
33	L1	2008	G	O4'-C1'-N9	10.43	116.54	108.20
32	S1	492	G	P-O3'-C3'	10.43	132.21	119.70
32	S1	11	A	C3'-C2'-C1'	10.43	109.84	101.50
33	L1	2146	A	C5'-C4'-C3'	10.42	132.68	116.00
23	SU	8	PRO	CA-C-N	10.42	140.13	117.20
33	L1	1537	A	O4'-C1'-C2'	-10.42	95.38	105.80
33	L1	2348	U	P-O3'-C3'	-10.42	107.20	119.70
31	S2	13	U	C1'-O4'-C4'	10.42	118.23	109.90
31	S2	24	A	O4'-C1'-N9	10.42	116.53	108.20
32	S1	209	U	O4'-C1'-N1	10.42	116.53	108.20
32	S1	1112	G	N9-C1'-C2'	10.42	127.54	114.00
33	L1	843	C	C3'-C2'-C1'	10.42	109.83	101.50
33	L1	1485	A	O4'-C1'-N9	10.42	116.53	108.20
56	Lh	48	LYS	CB-CA-C	10.42	131.24	110.40
8	SJ	89	PHE	CB-CG-CD2	10.41	128.09	120.80
32	S1	1004	U	O3'-P-O5'	-10.41	84.21	104.00
1	Sa	202	SER	CB-CA-C	10.41	129.88	110.10
33	L1	2936	A	P-O3'-C3'	10.41	132.19	119.70
33	L1	1866	C	O4'-C1'-N1	10.41	116.53	108.20
33	L1	2172	C	P-O3'-C3'	10.41	132.19	119.70
49	LX	52	ARG	NE-CZ-NH2	10.41	125.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2218	A	N9-C1'-C2'	10.41	127.53	114.00
33	L1	1674	A	C3'-C2'-C1'	10.41	109.83	101.50
45	LQ	158	ARG	CD-NE-CZ	-10.41	109.03	123.60
33	L1	2846	C	O4'-C1'-N1	-10.40	99.88	108.20
33	L1	2840	A	C1'-O4'-C4'	-10.40	101.58	109.90
23	SU	70	PHE	CB-CA-C	-10.40	89.61	110.40
32	S1	1332	G	N9-C1'-C2'	-10.40	100.48	114.00
33	L1	484	C	P-O3'-C3'	-10.40	107.22	119.70
33	L1	946	U	C2'-C3'-O3'	10.40	132.38	109.50
33	L1	1822	C	C1'-O4'-C4'	-10.40	101.58	109.90
33	L1	2114	A	C3'-C2'-C1'	10.40	109.82	101.50
84	LI	34	TYR	CB-CG-CD1	10.40	127.24	121.00
27	SH	67	GLY	O-C-N	10.39	139.33	122.70
33	L1	310	C	N1-C1'-C2'	10.39	127.51	114.00
35	L2	25	C	N1-C1'-C2'	10.39	127.51	114.00
59	Lo	30	ARG	C-N-CA	-10.39	95.72	121.70
33	L1	553	C	C3'-C2'-C1'	10.39	109.81	101.50
33	L1	1642	G	C1'-O4'-C4'	-10.39	101.59	109.90
33	L1	2722	U	O4'-C1'-C2'	-10.39	95.41	105.80
33	L1	3245	G	O4'-C1'-N9	10.39	116.51	108.20
33	L1	2620	U	O4'-C1'-N1	10.38	116.51	108.20
33	L1	1193	A	C3'-C2'-C1'	10.38	109.80	101.50
33	L1	1368	U	O4'-C1'-N1	-10.38	99.90	108.20
33	L1	1651	A	O4'-C1'-C2'	10.38	116.94	107.60
34	L3	1	G	O4'-C1'-C2'	10.38	116.94	107.60
13	SQ	139	ASP	C-N-CA	10.38	147.64	121.70
31	S2	47	U	P-O3'-C3'	10.38	132.15	119.70
33	L1	566	G	O4'-C1'-N9	-10.38	99.90	108.20
32	S1	1443	U	N1-C1'-C2'	-10.37	100.51	114.00
33	L1	1277	A	C1'-O4'-C4'	-10.38	101.60	109.90
33	L1	3042	U	O4'-C1'-N1	10.37	116.50	108.20
33	L1	606	C	O4'-C1'-N1	10.37	116.50	108.20
33	L1	3094	C	O4'-C1'-C2'	-10.37	95.43	105.80
33	L1	1530	C	C1'-O4'-C4'	-10.37	101.60	109.90
35	L2	96	A	P-O5'-C5'	10.37	137.50	120.90
33	L1	1540	G	O4'-C1'-C2'	10.37	116.93	107.60
33	L1	2762	U	C1'-O4'-C4'	10.37	118.19	109.90
32	S1	626	A	C3'-C2'-C1'	10.37	109.79	101.50
33	L1	494	C	O4'-C1'-N1	10.37	116.49	108.20
33	L1	2656	C	O4'-C1'-N1	10.37	116.49	108.20
32	S1	1344	U	O4'-C1'-N1	10.36	116.49	108.20
68	LW	82	LYS	N-CA-CB	-10.37	91.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	601	G	O4'-C1'-N9	10.36	116.49	108.20
33	L1	1613	C	O5'-P-OP1	-10.36	96.37	105.70
32	S1	987	U	O4'-C1'-N1	10.36	116.49	108.20
33	L1	2274	A	O4'-C1'-N9	-10.36	99.91	108.20
33	L1	2657	C	C5'-C4'-C3'	10.36	132.58	116.00
16	SR	117	LYS	CB-CA-C	-10.36	89.68	110.40
33	L1	2789	G	P-O3'-C3'	10.36	132.13	119.70
33	L1	844	A	C3'-C2'-C1'	-10.36	93.21	101.50
32	S1	580	G	C3'-C2'-C1'	10.36	109.78	101.50
32	S1	1016	C	O4'-C1'-N1	10.36	116.49	108.20
33	L1	1884	U	O4'-C1'-N1	10.36	116.49	108.20
32	S1	1645	C	O4'-C1'-N1	10.35	116.48	108.20
33	L1	2463	U	O4'-C1'-N1	10.35	116.48	108.20
33	L1	73	A	C5'-C4'-O4'	-10.35	96.68	109.10
35	L2	54	C	P-O3'-C3'	10.35	132.12	119.70
15	SS	51	TYR	CB-CG-CD2	10.35	127.21	121.00
33	L1	1366	G	O4'-C1'-N9	10.35	116.48	108.20
70	Li	42	PRO	C-N-CA	10.35	147.56	121.70
32	S1	275	C	O4'-C1'-N1	10.34	116.47	108.20
33	L1	643	G	C3'-C2'-C1'	-10.34	93.23	101.50
34	L3	54	A	O4'-C1'-N9	10.34	116.47	108.20
32	S1	29	U	N1-C1'-C2'	10.34	127.44	114.00
32	S1	400	G	O4'-C1'-N9	10.34	116.47	108.20
33	L1	1690	C	N1-C1'-C2'	-10.34	100.56	114.00
32	S1	1719	C	C3'-C2'-C1'	10.34	109.77	101.50
33	L1	1692	U	N1-C1'-C2'	-10.34	100.56	114.00
33	L1	1750	A	O4'-C1'-C2'	-10.34	95.47	105.80
32	S1	956	A	N9-C1'-C2'	-10.33	100.57	114.00
33	L1	2870	U	N1-C1'-C2'	10.33	127.43	114.00
33	L1	1599	A	O4'-C1'-N9	-10.33	99.94	108.20
5	SE	193	PRO	C-N-CA	10.33	147.53	121.70
32	S1	1266	U	N1-C1'-C2'	10.33	127.43	114.00
33	L1	424	G	P-O3'-C3'	10.33	132.10	119.70
33	L1	615	A	C1'-O4'-C4'	-10.33	101.64	109.90
35	L2	63	A	C1'-O4'-C4'	-10.33	101.64	109.90
33	L1	2999	G	O4'-C1'-C2'	10.33	116.89	107.60
32	S1	1739	U	P-O3'-C3'	-10.33	107.31	119.70
32	S1	457	C	O4'-C1'-C2'	-10.32	95.47	105.80
32	S1	578	G	C1'-O4'-C4'	10.32	118.16	109.90
33	L1	3020	C	C3'-C2'-C1'	10.32	109.76	101.50
35	L2	62	G	C3'-C2'-C1'	10.32	109.76	101.50
32	S1	546	U	P-O3'-C3'	10.32	132.09	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	618	G	O4'-C1'-C2'	10.32	116.89	107.60
68	LW	80	PHE	CB-CG-CD2	-10.32	113.58	120.80
32	S1	200	C	C3'-C2'-C1'	10.32	109.75	101.50
32	S1	1781	U	C3'-C2'-C1'	10.32	109.75	101.50
33	L1	533	G	C1'-O4'-C4'	-10.32	101.65	109.90
32	S1	433	G	O4'-C1'-N9	10.31	116.45	108.20
34	L3	63	U	P-O3'-C3'	10.31	132.07	119.70
33	L1	1583	G	O4'-C1'-C2'	-10.30	95.50	105.80
32	S1	1443	U	C1'-O4'-C4'	10.30	118.14	109.90
33	L1	334	A	P-O3'-C3'	10.30	132.06	119.70
33	L1	3152	C	O4'-C1'-N1	10.30	116.44	108.20
33	L1	2204	U	C5'-C4'-C3'	10.30	132.48	116.00
32	S1	424	A	O4'-C1'-N9	10.29	116.44	108.20
56	Lh	37	LYS	C-N-CA	10.30	143.92	122.30
33	L1	1375	G	N9-C1'-C2'	10.29	127.38	114.00
33	L1	2676	A	C3'-C2'-C1'	10.29	109.73	101.50
33	L1	729	G	N9-C1'-C2'	-10.29	100.62	114.00
33	L1	1735	U	C1'-O4'-C4'	10.29	118.13	109.90
33	L1	2653	U	C1'-O4'-C4'	-10.29	101.67	109.90
33	L1	2474	A	N9-C1'-C2'	-10.29	100.62	114.00
42	LP	81	TYR	CB-CG-CD2	10.29	127.17	121.00
44	LR	110	ARG	NE-CZ-NH1	10.29	125.44	120.30
33	L1	1240	G	C1'-O4'-C4'	-10.29	101.67	109.90
33	L1	2204	U	N1-C1'-C2'	-10.29	100.63	114.00
32	S1	1085	U	O4'-C1'-N1	10.28	116.43	108.20
32	S1	1611	U	O4'-C1'-C2'	-10.29	95.52	105.80
33	L1	1310	G	P-O3'-C3'	10.28	132.04	119.70
1	Sa	159	TYR	CB-CG-CD1	-10.28	114.83	121.00
39	LF	155	ARG	NE-CZ-NH2	10.28	125.44	120.30
32	S1	1676	G	O4'-C1'-N9	10.28	116.42	108.20
32	S1	828	G	C3'-C2'-C1'	-10.28	93.28	101.50
33	L1	1236	C	N1-C1'-C2'	10.28	127.36	114.00
33	L1	2013	G	O4'-C1'-N9	10.28	116.42	108.20
32	S1	1387	U	C1'-O4'-C4'	10.28	118.12	109.90
33	L1	2161	G	O3'-P-O5'	-10.28	84.47	104.00
79	Ls	258	THR	CA-CB-CG2	10.27	126.78	112.40
32	S1	593	C	C3'-C2'-C1'	10.27	109.72	101.50
33	L1	2688	G	C1'-O4'-C4'	-10.27	101.68	109.90
71	Lj	103	ARG	NE-CZ-NH1	10.27	125.43	120.30
32	S1	1489	A	P-O3'-C3'	10.27	132.02	119.70
33	L1	220	G	N9-C1'-C2'	10.27	127.34	114.00
33	L1	905	G	P-O5'-C5'	10.27	137.33	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1722	C	O4'-C1'-C2'	10.26	116.84	107.60
33	L1	1800	G	O4'-C1'-N9	10.26	116.41	108.20
33	L1	3081	G	O4'-C1'-C2'	-10.26	95.54	105.80
33	L1	555	G	C3'-C2'-C1'	-10.26	93.29	101.50
33	L1	610	G	O4'-C1'-N9	10.26	116.41	108.20
33	L1	560	C	O4'-C1'-N1	10.26	116.41	108.20
35	L2	25	C	C1'-O4'-C4'	-10.26	101.69	109.90
33	L1	464	G	O4'-C1'-N9	10.26	116.40	108.20
42	LP	21	PHE	CB-CG-CD2	-10.26	113.62	120.80
33	L1	2114	A	O4'-C1'-C2'	-10.26	95.55	105.80
33	L1	3218	C	N1-C1'-C2'	10.26	127.33	114.00
39	LF	187	THR	CA-C-O	-10.26	98.56	120.10
33	L1	2020	G	O4'-C1'-N9	10.25	116.40	108.20
33	L1	2590	C	C1'-O4'-C4'	10.25	118.10	109.90
33	L1	2724	A	O4'-C1'-N9	-10.25	100.00	108.20
41	LM	72	LEU	CA-C-N	10.25	139.75	117.20
32	S1	1707	G	N9-C1'-C2'	-10.25	100.67	114.00
33	L1	2261	U	O4'-C1'-N1	10.25	116.40	108.20
33	L1	3101	C	C3'-C2'-C1'	10.25	109.70	101.50
2	SA	215	LYS	N-CA-C	10.25	138.67	111.00
25	SC	17	PRO	N-CA-C	10.25	138.74	112.10
51	LY	15	ARG	NE-CZ-NH2	-10.24	115.18	120.30
32	S1	1588	C	P-O3'-C3'	10.24	131.99	119.70
33	L1	2210	A	O4'-C1'-N9	10.24	116.39	108.20
73	Lp	51	ILE	CA-C-N	10.24	139.72	117.20
33	L1	691	U	C1'-O4'-C4'	10.24	118.09	109.90
33	L1	2903	G	N9-C1'-C2'	10.24	127.31	114.00
13	SQ	94	GLU	O-C-N	-10.23	106.33	122.70
32	S1	1505	U	O4'-C1'-N1	10.23	116.39	108.20
33	L1	2644	U	C1'-O4'-C4'	-10.23	101.71	109.90
33	L1	2739	A	P-O3'-C3'	10.23	131.98	119.70
33	L1	1868	C	O4'-C1'-N1	10.23	116.39	108.20
33	L1	763	G	N9-C1'-C2'	10.23	127.29	114.00
33	L1	1790	A	N9-C1'-C2'	10.23	127.29	114.00
66	LN	99	ARG	CD-NE-CZ	10.23	137.92	123.60
33	L1	1072	C	C1'-O4'-C4'	-10.22	101.72	109.90
69	La	27	ARG	C-N-CA	10.22	147.25	121.70
33	L1	639	A	P-O3'-C3'	-10.21	107.44	119.70
33	L1	1801	G	C3'-C2'-C1'	10.21	109.67	101.50
32	S1	400	G	C1'-O4'-C4'	10.21	118.07	109.90
33	L1	230	G	C5'-C4'-C3'	-10.21	99.67	116.00
3	SB	79	PHE	N-CA-CB	-10.21	92.23	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3203	G	N9-C1'-C2'	-10.21	100.73	114.00
33	L1	3358	A	O4'-C1'-C2'	10.21	116.78	107.60
33	L1	29	G	C5'-C4'-C3'	10.20	132.32	116.00
33	L1	1723	C	C3'-C2'-C1'	10.20	109.66	101.50
33	L1	1821	G	C4'-C3'-C2'	-10.20	92.40	102.60
33	L1	2657	C	O4'-C1'-C2'	-10.20	95.60	105.80
33	L1	2769	U	P-O5'-C5'	10.20	137.22	120.90
33	L1	575	C	P-O3'-C3'	10.19	131.93	119.70
33	L1	2995	G	C3'-C2'-C1'	10.20	109.66	101.50
34	L3	67	C	O4'-C1'-N1	10.20	116.36	108.20
23	SU	25	ARG	CG-CD-NE	10.19	133.20	111.80
33	L1	374	G	C3'-C2'-C1'	-10.19	93.35	101.50
33	L1	2991	U	N1-C1'-C2'	10.19	127.25	114.00
33	L1	3101	C	C5'-C4'-O4'	-10.19	96.87	109.10
32	S1	1462	C	C1'-O4'-C4'	-10.19	101.75	109.90
13	SQ	21	TYR	CA-C-N	10.18	139.60	117.20
33	L1	779	U	O4'-C1'-N1	10.18	116.35	108.20
33	L1	1587	G	C3'-C2'-C1'	10.18	109.65	101.50
33	L1	1851	U	O4'-C1'-N1	10.18	116.35	108.20
33	L1	2419	C	N1-C1'-C2'	10.18	127.24	114.00
71	Lj	95	PRO	C-N-CA	-10.18	96.24	121.70
32	S1	415	C	O4'-C1'-N1	10.18	116.34	108.20
33	L1	1647	C	P-O5'-C5'	10.18	137.19	120.90
33	L1	2715	U	O4'-C1'-N1	10.18	116.34	108.20
33	L1	3100	C	O4'-C1'-C2'	-10.18	95.62	105.80
32	S1	636	U	C1'-O4'-C4'	10.18	118.04	109.90
32	S1	1332	G	C1'-O4'-C4'	10.18	118.04	109.90
32	S1	1435	G	C3'-C2'-C1'	-10.18	93.36	101.50
32	S1	1592	G	P-O3'-C3'	10.18	131.91	119.70
33	L1	1087	G	N9-C1'-C2'	10.18	127.23	114.00
33	L1	1175	G	O4'-C1'-N9	10.18	116.34	108.20
34	L3	87	G	O4'-C1'-N9	10.18	116.34	108.20
44	LR	35	PHE	CB-CG-CD2	-10.18	113.68	120.80
33	L1	949	C	O4'-C1'-N1	10.17	116.34	108.20
33	L1	2694	A	O4'-C1'-N9	10.17	116.34	108.20
32	S1	1740	G	O4'-C1'-C2'	-10.17	95.63	105.80
33	L1	50	A	O4'-C1'-N9	10.17	116.34	108.20
33	L1	2848	U	C1'-O4'-C4'	10.17	118.03	109.90
33	L1	3088	A	O4'-C1'-N9	-10.17	100.07	108.20
32	S1	197	G	O4'-C1'-N9	10.16	116.33	108.20
33	L1	2686	U	O4'-C1'-C2'	10.16	116.75	107.60
66	LN	50	PHE	CB-CG-CD1	10.16	127.92	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	17	G	C1'-O4'-C4'	-10.16	101.77	109.90
7	SI	32	ARG	NE-CZ-NH2	10.16	125.38	120.30
33	L1	1126	U	O4'-C1'-N1	10.16	116.33	108.20
33	L1	2708	A	C3'-C2'-C1'	10.16	109.63	101.50
33	L1	2474	A	C1'-O4'-C4'	10.16	118.03	109.90
33	L1	786	U	O4'-C1'-N1	10.16	116.33	108.20
33	L1	3388	U	N1-C1'-C2'	-10.16	100.80	114.00
32	S1	995	C	N1-C1'-C2'	10.15	127.20	114.00
34	L3	116	U	O4'-C1'-N1	10.15	116.32	108.20
32	S1	1639	A	P-O3'-C3'	10.15	131.88	119.70
32	S1	161	G	O4'-C1'-N9	10.15	116.32	108.20
32	S1	716	A	C5'-C4'-C3'	-10.15	99.77	116.00
33	L1	560	C	C1'-O4'-C4'	10.15	118.02	109.90
33	L1	3041	A	C1'-O4'-C4'	-10.15	101.78	109.90
32	S1	284	U	O4'-C1'-N1	10.14	116.31	108.20
33	L1	1057	A	N9-C1'-C2'	-10.14	100.81	114.00
33	L1	91	G	O4'-C1'-C2'	-10.14	95.66	105.80
32	S1	1541	C	O3'-P-O5'	10.14	123.26	104.00
5	SE	193	PRO	O-C-N	-10.14	106.48	122.70
32	S1	1761	G	C1'-O4'-C4'	-10.14	101.79	109.90
33	L1	442	C	N1-C1'-C2'	10.14	127.18	114.00
33	L1	810	A	O4'-C1'-C2'	-10.14	95.66	105.80
32	S1	329	G	O4'-C1'-N9	10.14	116.31	108.20
33	L1	1348	G	P-O5'-C5'	10.14	137.12	120.90
34	L3	76	U	O4'-C1'-N1	10.13	116.31	108.20
35	L2	158	G	N9-C1'-C2'	-10.13	100.82	114.00
48	LV	158	VAL	CB-CA-C	-10.13	92.14	111.40
5	SE	38	ARG	NE-CZ-NH2	-10.13	115.23	120.30
33	L1	251	G	C3'-C2'-C1'	-10.13	93.39	101.50
78	Le	242	ARG	NE-CZ-NH1	10.13	125.36	120.30
32	S1	621	U	O4'-C1'-N1	10.13	116.30	108.20
3	SB	106	ARG	NE-CZ-NH2	-10.13	115.24	120.30
33	L1	2420	U	C3'-C2'-C1'	10.12	109.60	101.50
33	L1	2581	C	C1'-O4'-C4'	-10.12	101.80	109.90
40	LH	58	ARG	NE-CZ-NH1	10.12	125.36	120.30
33	L1	2154	G	N9-C1'-C2'	10.12	127.16	114.00
11	SM	53	ASN	CB-CG-OD1	10.12	141.84	121.60
32	S1	1319	U	O4'-C1'-N1	10.12	116.30	108.20
32	S1	1507	G	C3'-C2'-C1'	-10.12	93.41	101.50
33	L1	2164	G	C3'-C2'-C1'	-10.12	93.41	101.50
33	L1	2231	G	C5'-C4'-C3'	10.12	132.19	116.00
67	LS	6	PHE	N-CA-CB	10.12	128.81	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1326	A	P-O3'-C3'	10.12	131.84	119.70
33	L1	1263	A	O4'-C1'-C2'	10.12	116.70	107.60
33	L1	1583	G	C3'-C2'-C1'	10.12	109.59	101.50
33	L1	713	G	N9-C1'-C2'	10.11	127.15	114.00
37	LB	123	ARG	NE-CZ-NH1	10.11	125.36	120.30
13	SQ	95	GLU	CB-CA-C	-10.11	90.18	110.40
32	S1	1651	U	C3'-C2'-C1'	-10.11	93.41	101.50
33	L1	1576	C	C1'-O4'-C4'	10.11	117.99	109.90
33	L1	3082	G	C3'-C2'-C1'	10.11	109.59	101.50
33	L1	3056	C	O4'-C1'-N1	10.11	116.28	108.20
33	L1	2877	U	O4'-C1'-N1	10.11	116.28	108.20
35	L2	155	G	P-O3'-C3'	10.11	131.83	119.70
32	S1	1088	G	C3'-C2'-C1'	10.10	109.58	101.50
33	L1	242	U	N1-C1'-C2'	10.10	127.13	114.00
34	L3	30	G	O4'-C1'-N9	10.10	116.28	108.20
33	L1	1237	G	O4'-C1'-N9	10.10	116.28	108.20
32	S1	1109	U	C3'-C2'-C1'	10.10	109.58	101.50
33	L1	492	G	C4'-C3'-C2'	10.10	112.70	102.60
32	S1	301	U	C3'-C2'-C1'	10.10	109.58	101.50
33	L1	3095	G	O4'-C1'-C2'	10.10	116.69	107.60
32	S1	486	U	O4'-C1'-N1	10.09	116.28	108.20
33	L1	10	C	N1-C1'-C2'	10.09	127.12	114.00
33	L1	3275	G	C1'-O4'-C4'	-10.09	101.83	109.90
33	L1	1084	G	N9-C1'-C2'	10.09	127.12	114.00
33	L1	429	G	O4'-C1'-N9	10.09	116.27	108.20
33	L1	1905	A	O4'-C1'-N9	10.09	116.27	108.20
33	L1	1912	U	C1'-O4'-C4'	-10.09	101.83	109.90
45	LQ	248	ARG	NE-CZ-NH1	10.09	125.34	120.30
33	L1	1499	C	N1-C1'-C2'	10.09	127.11	114.00
33	L1	2617	G	P-O3'-C3'	10.09	131.81	119.70
32	S1	1516	C	O4'-C1'-N1	10.09	116.27	108.20
33	L1	390	G	O4'-C1'-N9	10.09	116.27	108.20
33	L1	3237	G	C3'-C2'-C1'	-10.09	93.43	101.50
32	S1	119	U	O4'-C1'-C2'	10.08	116.67	107.60
32	S1	238	G	O4'-C1'-N9	10.08	116.27	108.20
33	L1	594	C	N1-C1'-C2'	10.08	127.10	114.00
33	L1	1753	A	O5'-C5'-C4'	10.08	130.85	111.70
33	L1	294	A	O4'-C1'-C2'	-10.08	95.72	105.80
32	S1	1299	G	C3'-C2'-C1'	-10.08	93.44	101.50
33	L1	2077	C	O4'-C1'-N1	10.07	116.26	108.20
25	SC	84	ARG	NE-CZ-NH2	-10.07	115.27	120.30
32	S1	153	U	O4'-C1'-N1	10.07	116.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2540	C	C1'-O4'-C4'	-10.07	101.84	109.90
34	L3	19	A	N9-C1'-C2'	-10.07	100.91	114.00
23	SU	23	LEU	CB-CG-CD2	10.07	128.11	111.00
32	S1	535	C	O3'-P-O5'	10.07	123.13	104.00
32	S1	850	G	C1'-O4'-C4'	-10.07	101.85	109.90
64	LG	185	ASP	C-N-CA	-10.07	96.53	121.70
32	S1	1775	A	N9-C1'-C2'	10.06	127.08	114.00
33	L1	265	G	C3'-C2'-C1'	10.06	109.55	101.50
33	L1	1942	A	O4'-C1'-N9	10.06	116.25	108.20
33	L1	2847	A	C1'-O4'-C4'	10.06	117.95	109.90
33	L1	3109	G	O4'-C1'-C2'	10.06	116.66	107.60
3	SB	139	SER	N-CA-CB	-10.06	95.41	110.50
33	L1	1824	C	N1-C1'-C2'	10.06	127.08	114.00
81	LD	43	PHE	CB-CG-CD2	-10.06	113.76	120.80
32	S1	1000	A	C3'-C2'-C1'	-10.06	93.45	101.50
33	L1	1778	C	C3'-C2'-C1'	10.06	109.55	101.50
32	S1	958	G	O4'-C1'-N9	10.06	116.25	108.20
32	S1	1727	C	N1-C1'-C2'	10.06	127.07	114.00
80	LC	10	ARG	NE-CZ-NH2	-10.06	115.27	120.30
10	SL	17	ARG	NE-CZ-NH1	10.05	125.33	120.30
32	S1	847	U	O4'-C1'-N1	10.06	116.25	108.20
32	S1	856	G	C3'-C2'-C1'	-10.05	93.46	101.50
33	L1	1878	G	C3'-C2'-C1'	-10.05	93.46	101.50
33	L1	2493	C	C1'-O4'-C4'	-10.05	101.86	109.90
34	L3	23	A	P-O3'-C3'	10.05	131.76	119.70
33	L1	607	U	C1'-O4'-C4'	10.05	117.94	109.90
33	L1	692	U	C3'-C2'-C1'	10.05	109.54	101.50
33	L1	2419	C	C3'-C2'-C1'	10.05	109.54	101.50
33	L1	3176	C	C3'-C2'-C1'	10.05	109.54	101.50
32	S1	694	C	N1-C1'-C2'	10.05	127.06	114.00
33	L1	1236	C	O5'-P-OP1	-10.05	96.66	105.70
37	LB	186	TYR	CB-CG-CD2	-10.05	114.97	121.00
32	S1	112	U	O4'-C1'-N1	10.04	116.23	108.20
32	S1	1034	G	C5'-C4'-O4'	10.04	121.15	109.10
32	S1	1504	U	N1-C1'-C2'	-10.04	100.95	114.00
32	S1	1538	C	C1'-O4'-C4'	10.04	117.93	109.90
33	L1	684	C	N1-C1'-C2'	-10.04	100.95	114.00
33	L1	74	G	O4'-C1'-C2'	10.04	116.64	107.60
33	L1	2848	U	N1-C1'-C2'	-10.04	100.95	114.00
33	L1	2915	U	O4'-C1'-N1	10.04	116.23	108.20
33	L1	3084	G	O4'-C1'-N9	10.04	116.23	108.20
31	S2	5	U	O4'-C1'-N1	10.04	116.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1545	G	N9-C1'-C2'	10.04	127.05	114.00
33	L1	2949	G	C1'-O4'-C4'	-10.04	101.87	109.90
32	S1	1264	U	O4'-C1'-N1	10.03	116.22	108.20
33	L1	555	G	O3'-P-O5'	10.03	123.06	104.00
33	L1	1783	G	O4'-C1'-N9	10.03	116.23	108.20
33	L1	753	G	O4'-C1'-N9	10.03	116.22	108.20
34	L3	73	U	C1'-O4'-C4'	10.03	117.92	109.90
42	LP	50	ARG	NE-CZ-NH2	10.03	125.31	120.30
33	L1	183	C	N1-C1'-C2'	10.03	127.04	114.00
33	L1	3001	G	O4'-C1'-C2'	10.03	116.63	107.60
13	SQ	33	LYS	N-CA-CB	10.03	128.65	110.60
31	S2	73	C	N1-C1'-C2'	10.03	127.03	114.00
33	L1	632	C	C1'-O4'-C4'	-10.03	101.88	109.90
33	L1	816	G	N9-C1'-C2'	10.03	127.03	114.00
32	S1	788	G	O3'-P-O5'	10.02	123.05	104.00
33	L1	1222	U	N1-C1'-C2'	-10.02	100.97	114.00
32	S1	495	C	N1-C1'-C2'	10.02	127.03	114.00
32	S1	633	U	C1'-O4'-C4'	10.02	117.92	109.90
33	L1	1525	U	N1-C1'-C2'	10.02	127.03	114.00
33	L1	578	C	P-O3'-C3'	10.02	131.72	119.70
33	L1	3007	A	C1'-O4'-C4'	-10.02	101.88	109.90
33	L1	474	G	O4'-C1'-N9	10.02	116.22	108.20
33	L1	1119	G	P-O3'-C3'	10.02	131.72	119.70
30	S3	18	C	C3'-C2'-C1'	10.02	109.51	101.50
33	L1	507	C	O4'-C1'-C2'	-10.02	95.78	105.80
64	LG	68	PRO	CA-C-O	-10.02	96.16	120.20
14	SP	98	TYR	CB-CG-CD1	10.01	127.01	121.00
33	L1	729	G	C3'-C2'-C1'	-10.01	93.49	101.50
33	L1	2245	G	O4'-C1'-N9	10.01	116.21	108.20
32	S1	609	A	C3'-C2'-C1'	10.01	109.51	101.50
84	LI	34	TYR	CB-CG-CD2	-10.01	114.99	121.00
32	S1	1712	C	P-O5'-C5'	10.01	136.91	120.90
23	SU	22	LEU	CB-CG-CD2	10.01	128.01	111.00
33	L1	1861	A	O4'-C1'-N9	10.01	116.20	108.20
32	S1	951	U	O4'-C1'-N1	10.00	116.20	108.20
33	L1	716	A	C3'-C2'-C1'	10.00	109.50	101.50
33	L1	723	G	O5'-C5'-C4'	10.00	130.71	111.70
33	L1	1071	G	O4'-C1'-N9	10.00	116.20	108.20
33	L1	1675	G	N9-C1'-C2'	-10.00	101.00	112.00
32	S1	888	U	O4'-C1'-N1	10.00	116.20	108.20
32	S1	19	A	O4'-C1'-N9	10.00	116.20	108.20
9	SK	96	LEU	CB-CA-C	-9.99	91.21	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	208	U	O4'-C1'-N1	9.99	116.19	108.20
32	S1	1271	G	P-O3'-C3'	9.99	131.69	119.70
33	L1	3043	U	O4'-C1'-N1	9.99	116.19	108.20
33	L1	3292	U	O4'-C1'-C2'	-9.99	95.81	105.80
33	L1	858	U	O3'-P-O5'	-9.99	85.02	104.00
33	L1	2789	G	O4'-C1'-C2'	9.99	116.59	107.60
35	L2	100	A	O4'-C1'-N9	9.99	116.19	108.20
33	L1	2874	A	P-O3'-C3'	-9.98	107.72	119.70
33	L1	278	U	P-O3'-C3'	9.98	131.68	119.70
33	L1	1081	U	C1'-O4'-C4'	9.98	117.89	109.90
48	LV	37	ARG	NE-CZ-NH2	-9.98	115.31	120.30
81	LD	344	ALA	N-CA-CB	9.98	124.08	110.10
33	L1	416	A	O4'-C1'-N9	9.98	116.18	108.20
33	L1	3057	A	N9-C1'-C2'	9.98	126.97	114.00
33	L1	2808	U	N1-C1'-C2'	9.97	126.97	114.00
32	S1	611	G	P-O3'-C3'	9.97	131.67	119.70
33	L1	229	G	P-O3'-C3'	9.97	131.67	119.70
33	L1	3051	U	O4'-C1'-C2'	9.97	116.58	107.60
25	SC	161	SER	N-CA-CB	9.97	125.45	110.50
32	S1	1439	G	O4'-C1'-N9	9.97	116.18	108.20
33	L1	6	A	C1'-O4'-C4'	9.97	117.88	109.90
33	L1	535	G	O4'-C1'-N9	9.97	116.18	108.20
33	L1	1255	A	N9-C1'-C2'	9.97	126.96	114.00
35	L2	14	G	O4'-C1'-N9	9.97	116.18	108.20
33	L1	973	U	C1'-O4'-C4'	-9.97	101.92	109.90
23	SU	52	LEU	CA-CB-CG	9.96	138.22	115.30
32	S1	1055	G	N9-C1'-C2'	9.96	126.95	114.00
32	S1	1718	C	N1-C1'-C2'	9.97	126.96	114.00
33	L1	1969	G	P-O3'-C3'	9.96	131.66	119.70
32	S1	957	A	O4'-C1'-N9	9.96	116.17	108.20
33	L1	1115	A	C3'-C2'-C1'	9.96	109.47	101.50
33	L1	1906	A	O4'-C1'-N9	9.96	116.17	108.20
15	SS	5	THR	CA-CB-OG1	9.96	129.91	109.00
32	S1	906	G	C1'-O4'-C4'	-9.96	101.93	109.90
33	L1	325	A	P-O5'-C5'	9.96	136.84	120.90
32	S1	1607	C	C3'-C2'-C1'	9.96	109.47	101.50
33	L1	1272	G	N9-C1'-C2'	9.96	126.94	114.00
33	L1	1730	U	O4'-C1'-C2'	-9.96	95.84	105.80
35	L2	13	G	O4'-C1'-C2'	9.96	116.56	107.60
33	L1	3356	C	P-O5'-C5'	9.95	136.83	120.90
32	S1	1134	U	C1'-O4'-C4'	9.95	117.86	109.90
33	L1	1400	C	C1'-O4'-C4'	-9.95	101.94	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1331	C	O4'-C1'-N1	9.95	116.16	108.20
32	S1	1456	U	O4'-C1'-N1	9.95	116.16	108.20
33	L1	608	G	N9-C1'-C2'	9.94	126.93	114.00
33	L1	1620	U	N1-C1'-C2'	-9.94	101.06	112.00
33	L1	1624	G	N9-C1'-C2'	-9.95	101.06	112.00
25	SC	17	PRO	CA-N-CD	-9.94	97.58	111.50
33	L1	715	A	O4'-C1'-C2'	-9.94	95.86	105.80
34	L3	62	U	O4'-C1'-N1	9.94	116.15	108.20
64	LG	184	ILE	CA-CB-CG2	-9.94	91.02	110.90
33	L1	1076	G	N9-C1'-C2'	9.94	126.92	114.00
33	L1	1223	U	C5'-C4'-O4'	-9.94	97.17	109.10
35	L2	162	C	O4'-C1'-N1	9.94	116.15	108.20
23	SU	18	MET	CG-SD-CE	9.94	116.10	100.20
17	SV	69	ARG	NE-CZ-NH2	9.94	125.27	120.30
23	SU	35	PRO	CA-N-CD	-9.94	97.59	111.50
33	L1	584	G	C3'-C2'-C1'	9.94	109.45	101.50
32	S1	1063	U	O4'-C1'-C2'	-9.93	95.87	105.80
33	L1	3042	U	N1-C1'-C2'	-9.93	101.07	112.00
33	L1	2345	C	N1-C1'-C2'	9.93	126.91	114.00
32	S1	1294	U	N1-C1'-C2'	9.93	126.91	114.00
37	LB	186	TYR	CB-CG-CD1	9.93	126.96	121.00
31	S2	4	G	P-O5'-C5'	-9.93	105.02	120.90
32	S1	3	C	P-O5'-C5'	9.93	136.78	120.90
32	S1	399	U	O4'-C1'-N1	9.93	116.14	108.20
33	L1	1222	U	O4'-C1'-C2'	-9.93	95.87	105.80
33	L1	3308	A	P-O3'-C3'	9.93	131.61	119.70
49	LX	34	LYS	CB-CA-C	-9.92	90.55	110.40
1	Sa	346	ARG	NE-CZ-NH2	-9.92	115.34	120.30
33	L1	1696	G	N9-C1'-C2'	-9.92	101.09	112.00
33	L1	88	A	C3'-C2'-C1'	-9.92	93.57	101.50
33	L1	267	G	C1'-O4'-C4'	-9.92	101.97	109.90
23	SU	34	HIS	N-CA-CB	9.91	128.45	110.60
32	S1	1743	C	C3'-C2'-C1'	9.91	109.43	101.50
33	L1	590	C	N1-C1'-C2'	9.91	126.89	114.00
33	L1	2863	U	C1'-O4'-C4'	-9.91	101.97	109.90
35	L2	104	U	O4'-C1'-N1	9.91	116.13	108.20
32	S1	1385	C	N1-C1'-C2'	9.91	126.88	114.00
32	S1	1459	G	C3'-C2'-C1'	-9.91	93.57	101.50
32	S1	1792	A	C1'-O4'-C4'	9.91	117.83	109.90
33	L1	1831	A	C1'-O4'-C4'	9.91	117.83	109.90
13	SQ	138	ARG	C-N-CA	9.90	146.46	121.70
32	S1	218	G	O4'-C1'-N9	9.90	116.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1108	U	O4'-C1'-N1	9.90	116.12	108.20
33	L1	2197	C	C1'-O4'-C4'	-9.90	101.98	109.90
33	L1	462	C	N1-C1'-C2'	9.90	126.87	114.00
33	L1	974	G	O4'-C1'-N9	9.90	116.12	108.20
64	LG	87	ARG	NE-CZ-NH2	-9.90	115.35	120.30
32	S1	290	C	C1'-O4'-C4'	-9.90	101.98	109.90
33	L1	3289	U	O4'-C1'-C2'	-9.90	95.90	105.80
33	L1	306	A	O4'-C1'-C2'	9.90	116.51	107.60
33	L1	255	C	N1-C1'-C2'	9.90	126.86	114.00
33	L1	283	A	N9-C1'-C2'	-9.90	101.11	112.00
67	LS	70	ASN	N-CA-CB	9.90	128.42	110.60
33	L1	716	A	O4'-C1'-N9	-9.89	100.29	108.20
35	L2	25	C	C3'-C2'-C1'	9.89	109.42	101.50
4	SD	240	LYS	CA-C-N	9.89	135.98	116.20
32	S1	1067	A	O3'-P-O5'	-9.89	85.20	104.00
33	L1	241	G	O4'-C1'-C2'	9.89	116.50	107.60
33	L1	1171	U	O4'-C1'-N1	9.89	116.11	108.20
33	L1	3234	G	C3'-C2'-C1'	-9.89	93.59	101.50
32	S1	298	C	C3'-C2'-C1'	9.88	109.41	101.50
32	S1	835	U	O4'-C1'-N1	9.88	116.11	108.20
33	L1	2390	G	C5'-C4'-C3'	9.88	131.81	116.00
32	S1	1484	U	O4'-C1'-N1	9.88	116.11	108.20
33	L1	1116	G	O4'-C1'-N9	9.88	116.11	108.20
33	L1	1812	A	C1'-O4'-C4'	-9.88	102.00	109.90
1	Sa	28	ARG	NE-CZ-NH2	-9.88	115.36	120.30
32	S1	24	U	O4'-C1'-N1	9.88	116.10	108.20
33	L1	1013	A	P-O3'-C3'	9.87	131.55	119.70
33	L1	1564	C	C3'-C2'-C1'	9.88	109.40	101.50
33	L1	2379	U	O3'-P-O5'	-9.87	85.24	104.00
33	L1	2763	C	O4'-C1'-C2'	-9.87	95.93	105.80
33	L1	3352	C	N1-C1'-C2'	-9.87	101.14	112.00
33	L1	944	G	O4'-C1'-N9	9.87	116.09	108.20
32	S1	1663	A	C3'-C2'-C1'	9.87	109.39	101.50
51	LY	23	SER	N-CA-CB	9.87	125.30	110.50
12	SO	57	GLN	N-CA-CB	9.86	128.35	110.60
32	S1	1638	U	O4'-C1'-N1	9.86	116.09	108.20
33	L1	246	C	O4'-C1'-N1	9.86	116.09	108.20
42	LP	67	ARG	NE-CZ-NH1	9.86	125.23	120.30
33	L1	882	U	N1-C1'-C2'	9.86	126.82	114.00
80	LC	69	LYS	CA-C-O	-9.86	99.40	120.10
32	S1	1210	U	O4'-C1'-N1	9.86	116.08	108.20
33	L1	597	C	O4'-C1'-N1	9.86	116.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2517	U	O4'-C1'-N1	9.86	116.08	108.20
33	L1	3306	A	C1'-O4'-C4'	-9.86	102.01	109.90
67	LS	28	ARG	N-CA-C	-9.86	84.39	111.00
32	S1	542	A	P-O3'-C3'	9.85	131.52	119.70
32	S1	430	G	O4'-C1'-N9	9.85	116.08	108.20
33	L1	2108	C	C5'-C4'-C3'	-9.85	100.25	116.00
33	L1	2836	G	N9-C1'-C2'	9.85	126.80	114.00
47	LU	122	ARG	NE-CZ-NH2	-9.85	115.38	120.30
79	Ls	231	ALA	CB-CA-C	9.84	124.86	110.10
33	L1	528	C	O4'-C1'-C2'	-9.84	95.96	105.80
33	L1	2632	U	C1'-O4'-C4'	9.84	117.77	109.90
79	Ls	258	THR	N-CA-CB	-9.84	91.60	110.30
15	SS	27	ARG	NE-CZ-NH1	9.84	125.22	120.30
32	S1	253	C	P-O3'-C3'	9.84	131.50	119.70
33	L1	263	A	O4'-C1'-N9	-9.84	100.33	108.20
33	L1	543	C	C2'-C3'-O3'	9.84	131.14	109.50
33	L1	846	A	P-O3'-C3'	9.84	131.50	119.70
66	LN	99	ARG	CB-CA-C	-9.84	90.73	110.40
33	L1	935	U	O4'-C1'-C2'	-9.83	95.97	105.80
35	L2	94	C	C3'-C2'-C1'	-9.83	93.63	101.50
32	S1	1467	C	O4'-C1'-N1	9.83	116.07	108.20
33	L1	1038	C	O4'-C1'-N1	9.83	116.07	108.20
66	LN	109	LYS	N-CA-CB	9.83	128.30	110.60
32	S1	12	U	O4'-C1'-N1	9.83	116.06	108.20
32	S1	951	U	C1'-O4'-C4'	9.83	117.77	109.90
32	S1	1163	C	O4'-C1'-C2'	-9.83	95.97	105.80
33	L1	2059	C	O4'-C1'-C2'	-9.83	95.97	105.80
35	L2	65	A	O4'-C1'-N9	9.83	116.06	108.20
33	L1	1035	C	C1'-O4'-C4'	-9.83	102.04	109.90
33	L1	1192	A	N9-C1'-C2'	-9.83	101.19	112.00
33	L1	1541	G	O4'-C1'-N9	9.83	116.06	108.20
33	L1	3234	G	C5'-C4'-O4'	9.83	120.89	109.10
33	L1	3309	U	O4'-C1'-N1	-9.83	100.34	108.20
3	SB	30	ALA	CB-CA-C	-9.83	95.36	110.10
33	L1	975	G	C1'-O4'-C4'	-9.83	102.04	109.90
33	L1	682	G	P-O3'-C3'	9.82	131.49	119.70
33	L1	2369	G	N9-C1'-C2'	9.82	126.77	114.00
32	S1	833	U	O4'-C1'-N1	9.82	116.06	108.20
23	SU	72	GLY	CA-C-N	9.82	135.83	116.20
33	L1	282	A	C1'-O4'-C4'	9.82	117.75	109.90
33	L1	327	A	P-O3'-C3'	-9.82	107.92	119.70
33	L1	599	C	C1'-O4'-C4'	-9.82	102.05	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1700	U	O4'-C1'-C2'	-9.82	95.98	105.80
37	LB	93	ARG	NE-CZ-NH1	9.81	125.21	120.30
39	LF	174	PHE	CB-CG-CD2	-9.81	113.93	120.80
23	SU	25	ARG	C-N-CA	9.81	146.23	121.70
32	S1	624	A	O4'-C1'-C2'	-9.81	95.99	105.80
33	L1	2731	G	C3'-C2'-C1'	-9.81	93.65	101.50
51	LY	74	ARG	NE-CZ-NH2	9.81	125.21	120.30
70	Li	43	LYS	C-N-CA	9.81	146.22	121.70
45	LQ	120	TYR	CB-CG-CD2	9.81	126.89	121.00
67	LS	70	ASN	CA-C-N	9.81	144.56	117.10
33	L1	2614	U	N1-C1'-C2'	-9.81	101.21	112.00
66	LN	50	PHE	CB-CG-CD2	-9.80	113.94	120.80
32	S1	1040	G	O4'-C1'-N9	9.80	116.04	108.20
33	L1	1297	U	O4'-C1'-C2'	9.80	116.42	107.60
35	L2	138	G	O4'-C1'-N9	-9.80	100.36	108.20
73	Lp	21	ARG	NE-CZ-NH2	9.80	125.20	120.30
33	L1	1361	G	O4'-C1'-N9	9.80	116.04	108.20
33	L1	1802	A	N9-C1'-C2'	9.80	126.74	114.00
33	L1	1236	C	C1'-O4'-C4'	-9.80	102.06	109.90
33	L1	802	G	O4'-C1'-N9	9.79	116.03	108.20
32	S1	161	G	O4'-C1'-C2'	-9.79	96.01	105.80
32	S1	357	A	O4'-C1'-C2'	-9.79	96.01	105.80
32	S1	374	A	N9-C1'-C2'	-9.79	101.23	112.00
32	S1	893	U	C1'-O4'-C4'	-9.79	102.07	109.90
33	L1	2749	A	C1'-O4'-C4'	-9.79	102.07	109.90
64	LG	97	LYS	N-CA-CB	9.79	128.22	110.60
33	L1	1772	G	N9-C1'-C2'	-9.79	101.23	112.00
32	S1	1091	A	C1'-O4'-C4'	-9.79	102.07	109.90
33	L1	528	C	C3'-C2'-C1'	9.78	109.33	101.50
33	L1	2355	A	C3'-C2'-C1'	9.79	109.33	101.50
33	L1	2720	U	P-O3'-C3'	-9.78	107.96	119.70
32	S1	574	A	N9-C1'-C2'	-9.78	101.24	112.00
33	L1	2475	C	C3'-C2'-C1'	9.78	109.32	101.50
33	L1	306	A	O5'-P-OP2	-9.78	96.90	105.70
33	L1	1445	U	O4'-C1'-N1	9.78	116.02	108.20
8	SJ	86	TRP	CB-CG-CD2	-9.78	113.89	126.60
33	L1	3169	C	O4'-C1'-C2'	-9.78	96.02	105.80
33	L1	3354	A	O4'-C1'-C2'	-9.78	96.02	105.80
7	SI	129	ARG	NE-CZ-NH2	9.77	125.19	120.30
32	S1	198	G	O4'-C1'-N9	9.77	116.02	108.20
10	SL	116	GLY	O-C-N	9.77	138.33	122.70
33	L1	2882	U	N1-C1'-C2'	9.77	126.70	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LV	4	TYR	CB-CG-CD2	-9.77	115.14	121.00
32	S1	1603	U	O4'-C1'-N1	9.77	116.01	108.20
33	L1	932	A	O4'-C1'-N9	9.77	116.01	108.20
34	L3	61	C	O4'-C1'-N1	9.77	116.01	108.20
33	L1	2868	C	C1'-O4'-C4'	9.76	117.71	109.90
11	SM	27	MET	CG-SD-CE	9.76	115.82	100.20
33	L1	19	C	O4'-C1'-N1	-9.76	100.39	108.20
33	L1	180	G	O4'-C1'-N9	9.76	116.01	108.20
33	L1	2724	A	C3'-C2'-C1'	9.76	109.31	101.50
33	L1	2885	U	O4'-C1'-N1	9.76	116.01	108.20
5	SE	21	ARG	NE-CZ-NH1	9.76	125.18	120.30
32	S1	472	A	O4'-C1'-N9	9.76	116.01	108.20
33	L1	1259	C	O4'-C1'-C2'	-9.76	96.04	105.80
6	SF	148	TYR	CB-CG-CD1	9.76	126.85	121.00
33	L1	1253	G	N9-C1'-C2'	-9.76	101.27	112.00
33	L1	1739	G	O4'-C1'-N9	9.76	116.01	108.20
33	L1	2105	G	N9-C1'-C2'	-9.76	101.27	112.00
6	SF	81	LYS	CB-CA-C	-9.76	90.89	110.40
33	L1	181	G	O4'-C1'-N9	9.76	116.00	108.20
33	L1	1007	A	N9-C1'-C2'	9.76	126.68	114.00
59	Lo	49	LEU	C-N-CA	9.75	142.78	122.30
33	L1	1014	G	O4'-C1'-C2'	-9.75	96.05	105.80
33	L1	1103	U	C1'-O4'-C4'	9.75	117.70	109.90
32	S1	1225	A	O3'-P-O5'	-9.75	85.48	104.00
23	SU	95	TYR	CG-CD1-CE1	-9.74	113.50	121.30
31	S2	37	G	O4'-C1'-C2'	9.74	116.37	107.60
33	L1	3308	A	C3'-C2'-C1'	9.74	109.30	101.50
32	S1	372	U	C3'-C2'-C1'	-9.74	93.71	101.50
33	L1	1127	U	N1-C1'-C2'	9.74	126.67	114.00
33	L1	1710	G	C3'-C2'-C1'	-9.74	93.71	101.50
33	L1	2467	A	P-O3'-C3'	9.74	131.39	119.70
33	L1	2786	G	O3'-P-O5'	-9.74	85.49	104.00
23	SU	7	ALA	CA-C-O	-9.74	99.65	120.10
33	L1	907	A	O4'-C1'-N9	-9.74	100.41	108.20
32	S1	1581	A	O4'-C1'-N9	9.74	115.99	108.20
33	L1	2534	G	O4'-C1'-N9	9.74	115.99	108.20
33	L1	1943	G	P-O3'-C3'	9.74	131.39	119.70
31	S2	49	G	O4'-C1'-N9	9.74	115.99	108.20
33	L1	1592	U	O4'-C1'-C2'	-9.74	96.06	105.80
35	L2	92	A	C3'-C2'-C1'	9.74	109.29	101.50
33	L1	1259	C	O4'-C1'-N1	9.73	115.99	108.20
32	S1	147	C	P-O3'-C3'	-9.73	108.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1810	G	O4'-C1'-N9	9.73	115.99	108.20
32	S1	1761	G	N9-C1'-C2'	9.73	126.65	114.00
33	L1	496	U	O4'-C1'-N1	9.73	115.98	108.20
33	L1	1143	G	C3'-C2'-C1'	-9.73	93.71	101.50
33	L1	3211	C	O4'-C1'-C2'	-9.73	96.07	105.80
33	L1	681	A	O4'-C1'-C2'	-9.73	96.07	105.80
33	L1	1382	C	C5'-C4'-C3'	9.73	131.56	116.00
33	L1	1919	C	O4'-C1'-N1	9.73	115.98	108.20
32	S1	1741	A	P-O3'-C3'	9.73	131.37	119.70
33	L1	2165	A	C5'-C4'-C3'	-9.73	100.44	116.00
32	S1	404	A	C3'-C2'-C1'	-9.72	93.72	101.50
32	S1	1727	C	C1'-O4'-C4'	-9.72	102.12	109.90
33	L1	272	G	C3'-C2'-C1'	-9.72	93.72	101.50
31	S2	57	A	O4'-C1'-N9	9.72	115.98	108.20
34	L3	74	A	P-O3'-C3'	-9.72	108.03	119.70
47	LU	63	ARG	NE-CZ-NH2	-9.72	115.44	120.30
80	LC	315	PHE	CB-CG-CD1	9.72	127.60	120.80
33	L1	3372	C	OP1-P-OP2	-9.71	105.04	119.60
48	LV	37	ARG	NE-CZ-NH1	9.71	125.15	120.30
33	L1	2927	C	O4'-C1'-C2'	-9.71	96.09	105.80
32	S1	1593	U	O4'-C1'-N1	9.70	115.96	108.20
34	L3	41	G	O4'-C1'-N9	-9.71	100.44	108.20
32	S1	553	G	O4'-C1'-N9	9.70	115.96	108.20
32	S1	610	A	O4'-C1'-C2'	9.70	116.33	107.60
32	S1	959	G	O4'-C1'-N9	9.70	115.96	108.20
27	SH	121	VAL	CA-CB-CG2	9.70	125.44	110.90
32	S1	716	A	P-O5'-C5'	9.70	136.41	120.90
32	S1	1756	A	O3'-P-O5'	-9.69	85.58	104.00
33	L1	108	A	C4'-C3'-C2'	-9.69	92.91	102.60
33	L1	1247	G	O4'-C1'-C2'	9.69	116.32	107.60
35	L2	56	A	O4'-C1'-C2'	-9.69	96.11	105.80
33	L1	1369	G	O4'-C1'-N9	9.69	115.95	108.20
33	L1	1766	U	P-O5'-C5'	9.69	136.40	120.90
35	L2	115	G	C1'-O4'-C4'	9.69	117.65	109.90
33	L1	2654	G	P-O3'-C3'	9.69	131.32	119.70
43	LO	26	ARG	NE-CZ-NH1	9.69	125.14	120.30
33	L1	1863	A	O4'-C1'-C2'	-9.68	96.12	105.80
32	S1	1371	U	N1-C1'-C2'	9.68	126.58	114.00
33	L1	1100	G	P-O3'-C3'	9.68	131.31	119.70
32	S1	605	A	C1'-O4'-C4'	9.68	117.64	109.90
33	L1	1634	G	C1'-O4'-C4'	-9.68	102.16	109.90
33	L1	82	C	N1-C1'-C2'	9.67	126.57	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	SC	18	ARG	O-C-N	9.67	138.17	122.70
32	S1	1138	A	O4'-C1'-N9	9.67	115.94	108.20
33	L1	514	G	P-O5'-C5'	9.67	136.37	120.90
32	S1	1457	C	P-O3'-C3'	-9.67	108.10	119.70
33	L1	1665	G	O4'-C1'-N9	9.67	115.93	108.20
33	L1	2470	C	C5'-C4'-C3'	9.67	131.47	116.00
33	L1	31	U	C5'-C4'-C3'	9.67	131.47	116.00
42	LP	44	ARG	NE-CZ-NH1	9.67	125.13	120.30
32	S1	1109	U	O4'-C1'-C2'	-9.66	96.14	105.80
33	L1	1037	U	O4'-C1'-N1	9.66	115.93	108.20
33	L1	2723	G	C3'-C2'-C1'	9.66	109.23	101.50
71	Lj	3	GLY	N-CA-C	-9.66	88.94	113.10
35	L2	27	C	P-O3'-C3'	9.66	131.29	119.70
32	S1	1803	G	N9-C1'-C2'	-9.66	101.37	112.00
66	LN	48	ILE	C-N-CA	9.66	145.85	121.70
32	S1	794	G	P-O3'-C3'	9.66	131.29	119.70
33	L1	409	U	O4'-C1'-C2'	9.66	116.29	107.60
33	L1	805	C	C3'-C2'-C1'	9.66	109.22	101.50
33	L1	1942	A	C3'-C2'-C1'	-9.66	93.77	101.50
14	SP	91	TYR	CB-CG-CD1	-9.65	115.21	121.00
32	S1	58	U	O4'-C1'-N1	9.65	115.92	108.20
33	L1	1450	G	P-O3'-C3'	9.65	131.28	119.70
33	L1	1729	G	C1'-O4'-C4'	-9.65	102.18	109.90
33	L1	2848	U	O4'-C1'-N1	9.65	115.92	108.20
33	L1	3058	U	O4'-C1'-N1	-9.65	100.48	108.20
33	L1	12	G	C1'-O4'-C4'	-9.65	102.18	109.90
54	Lf	90	ARG	NE-CZ-NH2	-9.65	115.47	120.30
33	L1	1773	U	O4'-C1'-N1	9.65	115.92	108.20
42	LP	188	ARG	NE-CZ-NH2	-9.65	115.47	120.30
4	SD	137	PRO	N-CA-CB	-9.65	91.72	103.30
32	S1	582	U	O4'-C1'-C2'	-9.65	96.15	105.80
32	S1	1427	A	C3'-C2'-C1'	-9.65	93.78	101.50
42	LP	108	ARG	NE-CZ-NH1	9.64	125.12	120.30
32	S1	305	A	O4'-C1'-N9	9.64	115.91	108.20
32	S1	1224	C	O3'-P-O5'	9.64	122.31	104.00
81	LD	60	ARG	CD-NE-CZ	-9.64	110.11	123.60
31	S2	64	G	C3'-C2'-C1'	9.63	109.21	101.50
35	L2	142	G	O4'-C1'-N9	9.63	115.91	108.20
31	S2	52	G	O4'-C1'-C2'	9.63	116.27	107.60
33	L1	1075	G	O4'-C1'-N9	9.63	115.91	108.20
34	L3	8	A	O4'-C1'-C2'	9.63	116.27	107.60
33	L1	6	A	O4'-C1'-C2'	-9.63	96.17	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	70	A	O4'-C1'-C2'	9.63	116.27	107.60
32	S1	998	A	P-O5'-C5'	9.63	136.31	120.90
34	L3	90	A	O4'-C1'-N9	9.63	115.90	108.20
32	S1	1280	U	O4'-C1'-N1	9.62	115.90	108.20
33	L1	461	A	N9-C1'-C2'	9.62	126.51	114.00
33	L1	911	G	O4'-C1'-C2'	-9.62	96.18	105.80
33	L1	1034	U	P-O5'-C5'	-9.62	105.50	120.90
33	L1	3127	C	C1'-O4'-C4'	-9.62	102.20	109.90
56	Lh	128	ARG	NE-CZ-NH1	9.63	125.11	120.30
32	S1	938	A	N9-C1'-C2'	9.62	126.51	114.00
33	L1	549	G	P-O3'-C3'	9.62	131.25	119.70
33	L1	2492	C	P-O3'-C3'	9.62	131.24	119.70
33	L1	3059	C	P-O5'-C5'	9.62	136.29	120.90
32	S1	1065	A	O4'-C1'-C2'	-9.62	96.18	105.80
32	S1	1442	A	P-O3'-C3'	-9.62	108.16	119.70
33	L1	1163	A	O4'-C1'-N9	9.62	115.89	108.20
32	S1	455	G	P-O3'-C3'	9.62	131.24	119.70
33	L1	3231	G	O4'-C1'-N9	9.62	115.89	108.20
64	LG	69	THR	N-CA-CB	9.61	128.57	110.30
81	LD	314	VAL	N-CA-CB	-9.61	90.35	111.50
33	L1	2377	C	N1-C1'-C2'	9.61	126.49	114.00
64	LG	44	ALA	O-C-N	9.61	138.08	122.70
33	L1	801	G	P-O3'-C3'	9.61	131.23	119.70
33	L1	692	U	O4'-C1'-C2'	-9.61	96.19	105.80
33	L1	1764	G	C1'-O4'-C4'	-9.61	102.22	109.90
33	L1	2946	U	O5'-P-OP2	-9.61	97.06	105.70
32	S1	830	U	O4'-C1'-N1	9.60	115.88	108.20
33	L1	2581	C	P-O3'-C3'	9.60	131.22	119.70
33	L1	961	C	O4'-C1'-N1	9.60	115.88	108.20
33	L1	3142	C	N1-C1'-C2'	9.60	126.48	114.00
60	Lr	45	ARG	NE-CZ-NH1	9.60	125.10	120.30
81	LD	303	VAL	C-N-CA	9.60	145.69	121.70
33	L1	668	U	P-O3'-C3'	-9.60	108.18	119.70
32	S1	1722	C	C1'-O4'-C4'	-9.59	102.23	109.90
33	L1	2091	U	O4'-C1'-N1	9.59	115.87	108.20
4	SD	94	LYS	CB-CA-C	9.59	129.58	110.40
33	L1	11	A	N9-C1'-C2'	9.59	126.47	114.00
33	L1	736	U	O4'-C1'-N1	9.59	115.87	108.20
33	L1	2450	G	C4'-C3'-C2'	-9.59	93.01	102.60
32	S1	931	A	O4'-C1'-N9	9.58	115.87	108.20
32	S1	1156	A	O4'-C1'-N9	9.58	115.86	108.20
33	L1	1775	C	O4'-C1'-N1	9.58	115.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	30	C	N1-C1'-C2'	9.58	126.45	114.00
33	L1	1711	G	C1'-O4'-C4'	-9.58	102.24	109.90
33	L1	2751	A	O4'-C1'-N9	9.57	115.86	108.20
33	L1	642	C	P-O3'-C3'	9.57	131.19	119.70
33	L1	3210	G	O4'-C1'-N9	9.57	115.86	108.20
33	L1	3358	A	C3'-C2'-C1'	-9.57	93.84	101.50
15	SS	27	ARG	NE-CZ-NH2	-9.57	115.51	120.30
32	S1	391	A	N9-C1'-C2'	-9.57	101.47	112.00
32	S1	1093	A	O4'-C1'-C2'	-9.57	96.23	105.80
32	S1	1485	A	O4'-C1'-N9	9.57	115.86	108.20
33	L1	1808	G	O4'-C1'-N9	9.57	115.86	108.20
36	LA	214	ARG	NE-CZ-NH2	9.57	125.08	120.30
15	SS	80	LYS	CB-CA-C	9.57	129.53	110.40
33	L1	1224	A	P-O3'-C3'	9.57	131.18	119.70
4	SD	153	ILE	CA-C-N	9.56	138.24	117.20
32	S1	1076	C	N1-C1'-C2'	9.56	126.43	114.00
33	L1	305	G	N9-C1'-C2'	-9.56	101.48	112.00
33	L1	655	G	C1'-O4'-C4'	-9.56	102.25	109.90
33	L1	896	C	O4'-C1'-N1	9.56	115.85	108.20
60	Lr	11	TYR	CB-CG-CD1	9.56	126.74	121.00
33	L1	431	G	N9-C1'-C2'	9.56	126.43	114.00
20	SZ	44	PHE	C-N-CA	9.56	145.60	121.70
33	L1	527	G	C3'-C2'-C1'	9.56	109.15	101.50
32	S1	1249	G	C1'-O4'-C4'	-9.56	102.25	109.90
33	L1	3023	G	O4'-C1'-N9	9.56	115.84	108.20
81	LD	308	LYS	CA-C-N	9.56	143.86	117.10
3	SB	64	ARG	NE-CZ-NH1	-9.55	115.52	120.30
33	L1	618	G	C3'-C2'-C1'	-9.55	93.86	101.50
33	L1	840	A	O4'-C1'-C2'	9.55	116.20	107.60
33	L1	2067	G	N9-C1'-C2'	9.55	126.42	114.00
1	Sa	82	VAL	O-C-N	9.55	137.98	122.70
32	S1	441	A	O4'-C1'-N9	9.55	115.84	108.20
33	L1	365	A	C1'-O4'-C4'	9.55	117.54	109.90
33	L1	2219	A	C4'-C3'-C2'	-9.55	93.05	102.60
45	LQ	257	THR	CA-CB-CG2	9.55	125.77	112.40
34	L3	55	A	N9-C1'-C2'	-9.54	101.50	112.00
32	S1	1537	U	O3'-P-O5'	-9.54	85.87	104.00
59	Lo	21	ARG	NE-CZ-NH1	-9.54	115.53	120.30
33	L1	725	G	P-O3'-C3'	9.54	131.15	119.70
33	L1	2813	A	O4'-C1'-C2'	9.54	116.19	107.60
33	L1	1824	C	C1'-O4'-C4'	-9.54	102.27	109.90
33	L1	2755	U	C3'-C2'-C1'	9.54	109.13	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1663	A	O4'-C1'-C2'	-9.54	96.27	105.80
33	L1	1538	A	O4'-C1'-C2'	-9.54	96.26	105.80
33	L1	809	A	O4'-C1'-N9	-9.53	100.57	108.20
33	L1	815	G	O4'-C1'-N9	9.53	115.83	108.20
13	SQ	45	ARG	NE-CZ-NH2	9.53	125.07	120.30
33	L1	2988	U	O4'-C1'-N1	9.53	115.83	108.20
33	L1	1197	A	C3'-C2'-C1'	-9.53	93.88	101.50
33	L1	3377	G	O4'-C1'-C2'	-9.53	96.27	105.80
35	L2	54	C	O4'-C1'-N1	9.53	115.82	108.20
33	L1	110	C	N1-C1'-C2'	9.53	126.38	114.00
33	L1	1812	A	C4'-C3'-C2'	-9.52	93.08	102.60
35	L2	64	U	N1-C1'-C2'	9.52	126.38	114.00
33	L1	1449	A	O4'-C1'-N9	9.52	115.82	108.20
33	L1	1959	U	O4'-C1'-N1	9.52	115.82	108.20
20	SZ	42	ARG	C-N-CA	9.52	145.50	121.70
8	SJ	86	TRP	CB-CG-CD1	9.52	139.37	127.00
33	L1	272	G	N9-C1'-C2'	9.52	126.37	114.00
33	L1	1649	G	C5'-C4'-C3'	9.52	131.23	116.00
33	L1	1885	G	O4'-C1'-C2'	9.52	116.17	107.60
33	L1	2804	A	P-O3'-C3'	9.52	131.12	119.70
23	SU	83	ASP	N-CA-C	9.52	136.69	111.00
33	L1	366	G	C1'-O4'-C4'	9.52	117.51	109.90
33	L1	1010	A	C1'-O4'-C4'	9.52	117.51	109.90
33	L1	2518	A	O3'-P-O5'	-9.52	85.92	104.00
32	S1	599	G	P-O3'-C3'	9.51	131.11	119.70
33	L1	2613	G	N9-C1'-C2'	-9.51	101.53	112.00
33	L1	3328	A	C3'-C2'-C1'	9.51	109.11	101.50
33	L1	639	A	C3'-C2'-C1'	-9.51	93.89	101.50
33	L1	2252	C	O4'-C1'-C2'	-9.51	96.29	105.80
33	L1	3030	A	P-O3'-C3'	9.51	131.11	119.70
44	LR	35	PHE	CB-CG-CD1	9.51	127.46	120.80
64	LG	26	TRP	C-N-CA	-9.51	97.92	121.70
32	S1	373	U	P-O5'-C5'	9.51	136.11	120.90
33	L1	1316	C	O4'-C1'-C2'	-9.51	96.29	105.80
3	SB	161	GLY	N-CA-C	-9.51	89.34	113.10
33	L1	174	G	C1'-O4'-C4'	-9.51	102.30	109.90
7	SI	76	ARG	NE-CZ-NH2	-9.50	115.55	120.30
32	S1	1232	G	C1'-O4'-C4'	-9.50	102.30	109.90
33	L1	311	G	O4'-C1'-N9	9.50	115.80	108.20
33	L1	3000	U	O4'-C1'-N1	9.50	115.80	108.20
33	L1	2006	A	P-O3'-C3'	9.50	131.10	119.70
39	LF	89	TYR	CB-CG-CD1	-9.50	115.30	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	97	G	O4'-C1'-N9	9.50	115.80	108.20
33	L1	2260	C	O5'-P-OP2	-9.50	97.15	105.70
32	S1	1453	U	O4'-C1'-C2'	-9.49	96.31	105.80
33	L1	2478	G	O4'-C1'-N9	-9.49	100.61	108.20
33	L1	2543	G	N9-C1'-C2'	9.49	126.34	114.00
32	S1	631	C	O4'-C1'-C2'	-9.49	96.31	105.80
33	L1	1959	U	C5'-C4'-C3'	9.48	131.18	116.00
33	L1	2054	A	O5'-C5'-C4'	9.48	129.72	111.70
78	Le	223	TYR	CB-CG-CD2	-9.48	115.31	121.00
32	S1	873	G	N9-C1'-C2'	-9.48	101.57	112.00
35	L2	94	C	P-O3'-C3'	9.48	131.07	119.70
27	SH	78	ARG	C-N-CA	-9.47	98.02	121.70
33	L1	1373	A	P-O3'-C3'	-9.47	108.34	119.70
47	LU	12	ARG	NE-CZ-NH1	9.47	125.03	120.30
33	L1	826	C	C1'-O4'-C4'	-9.47	102.33	109.90
33	L1	2493	C	N1-C1'-C2'	9.47	126.31	114.00
33	L1	1923	G	O4'-C1'-N9	9.47	115.77	108.20
35	L2	155	G	O4'-C1'-N9	-9.47	100.63	108.20
32	S1	357	A	C1'-O4'-C4'	9.46	117.47	109.90
33	L1	255	C	P-O3'-C3'	9.46	131.06	119.70
33	L1	2760	U	O4'-C1'-N1	9.46	115.77	108.20
33	L1	818	G	O4'-C1'-C2'	9.46	116.11	107.60
33	L1	1488	G	C3'-C2'-C1'	9.46	109.07	101.50
32	S1	513	G	O4'-C1'-N9	-9.46	100.63	108.20
35	L2	45	A	O4'-C1'-N9	9.46	115.77	108.20
32	S1	925	U	O4'-C1'-N1	9.46	115.77	108.20
33	L1	1671	G	O4'-C1'-N9	9.45	115.76	108.20
33	L1	3156	G	P-O5'-C5'	9.45	136.03	120.90
32	S1	50	C	O4'-C1'-N1	9.45	115.76	108.20
32	S1	1639	A	O3'-P-O5'	-9.45	86.04	104.00
32	S1	1743	C	P-O5'-C5'	9.45	136.02	120.90
31	S2	75	A	C1'-O4'-C4'	9.45	117.46	109.90
33	L1	1804	G	O4'-C1'-C2'	-9.45	96.35	105.80
33	L1	3211	C	C3'-C2'-C1'	9.45	109.06	101.50
33	L1	3389	C	P-O3'-C3'	9.45	131.04	119.70
71	Lj	57	TYR	CB-CG-CD1	-9.45	115.33	121.00
33	L1	2935	A	N9-C1'-C2'	9.45	126.28	114.00
33	L1	1737	C	C3'-C2'-C1'	9.44	109.06	101.50
33	L1	2618	G	O4'-C1'-N9	9.44	115.75	108.20
32	S1	1214	C	N1-C1'-C2'	9.44	126.27	114.00
32	S1	504	C	O4'-C1'-C2'	-9.44	96.36	105.80
32	S1	882	G	C3'-C2'-C1'	-9.44	93.95	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	9	C	N1-C1'-C2'	9.44	126.27	114.00
33	L1	452	G	O4'-C1'-N9	9.44	115.75	108.20
33	L1	3353	G	O4'-C1'-C2'	-9.44	96.36	105.80
32	S1	1096	A	O3'-P-O5'	-9.44	86.07	104.00
32	S1	1398	U	O4'-C1'-N1	9.44	115.75	108.20
33	L1	212	G	O4'-C1'-N9	9.44	115.75	108.20
33	L1	1894	G	C5'-C4'-C3'	9.44	131.10	116.00
33	L1	1270	G	N9-C1'-C2'	9.43	126.26	114.00
33	L1	2460	A	C3'-C2'-C1'	-9.43	93.95	101.50
33	L1	3100	C	C3'-C2'-C1'	9.43	109.05	101.50
33	L1	3148	A	N9-C1'-C2'	9.43	126.26	114.00
33	L1	2059	C	O4'-C1'-N1	-9.43	100.66	108.20
33	L1	1545	G	P-O3'-C3'	9.43	131.01	119.70
33	L1	3341	C	C1'-O4'-C4'	-9.43	102.36	109.90
66	LN	99	ARG	NE-CZ-NH1	-9.43	115.59	120.30
33	L1	157	G	O4'-C1'-N9	9.42	115.74	108.20
34	L3	40	A	O4'-C1'-C2'	-9.42	96.38	105.80
23	SU	19	THR	CA-CB-OG1	9.42	128.78	109.00
33	L1	1243	C	C1'-O4'-C4'	-9.42	102.36	109.90
33	L1	1957	G	P-O3'-C3'	9.42	131.00	119.70
11	SM	126	TYR	CE1-CZ-OH	-9.42	94.67	120.10
32	S1	108	C	O4'-C1'-N1	9.41	115.73	108.20
33	L1	1804	G	P-O5'-C5'	9.41	135.96	120.90
32	S1	450	A	O4'-C1'-N9	9.41	115.73	108.20
33	L1	1755	A	C4'-C3'-C2'	-9.41	93.19	102.60
33	L1	318	G	C1'-O4'-C4'	-9.41	102.37	109.90
33	L1	690	G	N9-C1'-C2'	-9.41	101.65	112.00
33	L1	1618	U	O4'-C1'-N1	9.41	115.73	108.20
45	LQ	7	PHE	CB-CG-CD1	9.41	127.39	120.80
46	LT	163	ARG	NE-CZ-NH1	9.41	125.00	120.30
33	L1	12	G	N9-C1'-C2'	9.41	126.23	114.00
33	L1	520	G	O4'-C1'-N9	9.41	115.73	108.20
33	L1	811	A	C3'-C2'-C1'	-9.40	93.98	101.50
13	SQ	86	PRO	CA-N-CD	-9.40	98.34	111.50
33	L1	472	U	O4'-C1'-C2'	9.40	116.06	107.60
33	L1	898	G	N9-C1'-C2'	9.40	126.22	114.00
33	L1	2170	G	C1'-O4'-C4'	-9.40	102.38	109.90
32	S1	929	A	O4'-C1'-N9	9.40	115.72	108.20
33	L1	2755	U	N1-C1'-C2'	9.40	126.22	114.00
35	L2	152	C	N1-C1'-C2'	9.40	126.22	114.00
32	S1	1200	A	O4'-C1'-N9	9.40	115.72	108.20
32	S1	1290	U	O4'-C1'-C2'	-9.40	96.40	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1112	C	O5'-P-OP2	-9.40	97.24	105.70
33	L1	1269	U	O4'-C1'-N1	9.40	115.72	108.20
35	L2	31	U	P-O5'-C5'	9.40	135.94	120.90
64	LG	64	ARG	NE-CZ-NH2	-9.40	115.60	120.30
78	Le	241	ARG	NE-CZ-NH2	-9.40	115.60	120.30
33	L1	1072	C	O4'-C1'-C2'	9.39	116.06	107.60
33	L1	1146	A	O4'-C1'-N9	9.39	115.72	108.20
35	L2	18	C	N1-C1'-C2'	9.39	126.21	114.00
31	S2	67	G	O4'-C1'-N9	9.39	115.71	108.20
32	S1	278	C	P-O3'-C3'	9.39	130.97	119.70
33	L1	2200	U	C3'-C2'-C1'	9.39	109.01	101.50
55	Lg	80	ARG	NE-CZ-NH2	-9.39	115.61	120.30
10	SL	120	LYS	N-CA-C	9.39	136.34	111.00
32	S1	1586	U	P-O5'-C5'	9.39	135.92	120.90
32	S1	1658	U	C5'-C4'-O4'	9.39	120.36	109.10
33	L1	1119	G	C3'-C2'-C1'	-9.39	93.99	101.50
33	L1	1648	C	O4'-C1'-N1	9.39	115.71	108.20
33	L1	2668	U	C3'-C2'-C1'	-9.39	93.99	101.50
33	L1	2400	A	C3'-C2'-C1'	9.38	109.01	101.50
33	L1	3092	A	N9-C1'-C2'	9.38	126.20	114.00
35	L2	128	C	C3'-C2'-C1'	9.38	109.01	101.50
56	Lh	42	ARG	NE-CZ-NH1	9.39	124.99	120.30
81	LD	368	PRO	CA-N-CD	-9.39	98.36	111.50
32	S1	66	U	O4'-C1'-N1	9.38	115.70	108.20
32	S1	94	A	O4'-C1'-C2'	9.38	116.05	107.60
32	S1	933	G	C3'-C2'-C1'	-9.38	94.00	101.50
32	S1	1202	G	C1'-O4'-C4'	-9.38	102.39	109.90
33	L1	860	G	P-O5'-C5'	9.38	135.91	120.90
32	S1	280	U	O4'-C1'-N1	9.38	115.70	108.20
33	L1	667	C	O4'-C1'-N1	9.38	115.70	108.20
33	L1	818	G	C3'-C2'-C1'	-9.38	94.00	101.50
33	L1	1622	G	O4'-C1'-C2'	-9.38	96.42	105.80
33	L1	1749	G	C1'-O4'-C4'	-9.38	102.40	109.90
33	L1	1904	A	C1'-O4'-C4'	-9.38	102.40	109.90
33	L1	2624	G	C1'-O4'-C4'	-9.38	102.40	109.90
32	S1	1443	U	P-O5'-C5'	9.38	135.90	120.90
33	L1	844	A	O4'-C1'-C2'	9.37	116.04	107.60
33	L1	2667	C	C1'-O4'-C4'	-9.38	102.40	109.90
33	L1	2669	C	C3'-C2'-C1'	-9.37	94.00	101.50
33	L1	2754	G	N9-C1'-C2'	-9.38	101.69	112.00
35	L2	163	G	O4'-C1'-N9	9.37	115.70	108.20
23	SU	89	LYS	CA-C-N	9.37	137.82	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	231	C	N1-C1'-C2'	9.37	126.18	114.00
33	L1	1271	U	O4'-C1'-N1	9.37	115.70	108.20
33	L1	1793	A	O4'-C1'-N9	9.37	115.70	108.20
32	S1	1395	C	N1-C1'-C2'	9.37	126.18	114.00
33	L1	1822	C	C3'-C2'-C1'	9.37	108.99	101.50
37	LB	128	ARG	NE-CZ-NH1	9.37	124.98	120.30
60	Lr	46	LYS	CB-CA-C	9.37	129.13	110.40
25	SC	171	PRO	N-CA-CB	9.37	114.54	103.30
33	L1	2131	U	O4'-C1'-N1	9.37	115.69	108.20
10	SL	119	PHE	N-CA-C	9.36	136.28	111.00
32	S1	1279	A	C1'-O4'-C4'	-9.36	102.41	109.90
35	L2	73	U	P-O3'-C3'	9.36	130.94	119.70
33	L1	762	U	O4'-C1'-N1	9.36	115.69	108.20
33	L1	2808	U	O4'-C1'-C2'	9.36	116.03	107.60
33	L1	2991	U	P-O5'-C5'	9.36	135.87	120.90
34	L3	50	A	C3'-C2'-C1'	9.35	108.98	101.50
33	L1	700	C	O4'-C1'-N1	-9.35	100.72	108.20
33	L1	2688	G	O4'-C1'-C2'	9.35	116.01	107.60
33	L1	3301	G	N9-C1'-C2'	-9.35	101.72	112.00
59	Lo	36	ARG	NE-CZ-NH1	9.35	124.97	120.30
32	S1	823	A	C3'-C2'-C1'	9.35	108.98	101.50
32	S1	856	G	O4'-C1'-N9	9.35	115.68	108.20
32	S1	1431	A	P-O3'-C3'	9.35	130.91	119.70
33	L1	550	C	O4'-C1'-N1	9.35	115.68	108.20
48	LV	158	VAL	N-CA-CB	9.35	132.06	111.50
32	S1	1022	U	O4'-C1'-N1	9.34	115.67	108.20
32	S1	1486	U	O4'-C1'-N1	9.34	115.67	108.20
32	S1	1611	U	O4'-C1'-N1	9.34	115.67	108.20
33	L1	1732	G	O4'-C1'-C2'	9.34	116.01	107.60
33	L1	204	G	O4'-C1'-N9	9.34	115.67	108.20
33	L1	1350	G	C1'-O4'-C4'	9.34	117.37	109.90
34	L3	14	C	C3'-C2'-C1'	9.34	108.97	101.50
33	L1	348	C	O4'-C1'-N1	-9.34	100.73	108.20
35	L2	150	G	O4'-C1'-N9	9.34	115.67	108.20
33	L1	6	A	O4'-C1'-N9	9.34	115.67	108.20
33	L1	1227	A	O4'-C1'-N9	9.34	115.67	108.20
33	L1	2580	C	N1-C1'-C2'	9.34	126.14	114.00
3	SB	148	LYS	CA-C-N	9.33	137.74	117.20
32	S1	776	A	P-O5'-C5'	-9.33	105.97	120.90
33	L1	374	G	O4'-C1'-N9	9.33	115.67	108.20
33	L1	408	U	P-O5'-C5'	9.33	135.83	120.90
33	L1	1507	A	O4'-C1'-C2'	9.33	116.00	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	LH	98	GLU	N-CA-C	9.33	136.20	111.00
32	S1	943	G	C1'-O4'-C4'	-9.33	102.44	109.90
33	L1	643	G	C1'-O4'-C4'	-9.33	102.44	109.90
33	L1	1165	C	O4'-C1'-N1	9.33	115.66	108.20
33	L1	165	C	N1-C1'-C2'	9.32	126.12	114.00
33	L1	769	C	C3'-C2'-C1'	9.32	108.96	101.50
33	L1	2219	A	O4'-C1'-N9	9.32	115.66	108.20
33	L1	3072	A	C3'-C2'-C1'	9.32	108.96	101.50
34	L3	2	G	O3'-P-O5'	9.32	121.71	104.00
52	Lb	111	TYR	CB-CG-CD2	-9.32	115.41	121.00
42	LP	6	TYR	CB-CG-CD1	-9.32	115.41	121.00
79	Ls	239	ALA	N-CA-CB	-9.32	97.05	110.10
31	S2	58	U	O4'-C1'-C2'	-9.32	96.48	105.80
2	SA	38	MET	CG-SD-CE	-9.31	85.30	100.20
33	L1	77	U	C1'-O4'-C4'	9.31	117.35	109.90
33	L1	112	C	C3'-C2'-C1'	9.31	108.95	101.50
33	L1	671	C	O4'-C1'-N1	9.31	115.65	108.20
33	L1	2228	A	N9-C1'-C2'	-9.31	101.75	112.00
49	LX	61	ALA	N-CA-CB	9.31	123.14	110.10
73	Lp	16	ASP	CB-CA-C	9.31	129.03	110.40
67	LS	109	TYR	CB-CG-CD2	-9.31	115.41	121.00
33	L1	3358	A	C1'-O4'-C4'	-9.31	102.45	109.90
33	L1	837	C	P-O3'-C3'	9.31	130.87	119.70
33	L1	1649	G	P-O3'-C3'	9.30	130.86	119.70
33	L1	3269	C	O4'-C1'-N1	9.30	115.64	108.20
32	S1	391	A	O3'-P-O5'	9.30	121.67	104.00
33	L1	2170	G	O4'-C1'-C2'	9.30	115.97	107.60
34	L3	4	U	O3'-P-O5'	-9.30	86.33	104.00
64	LG	88	TYR	CB-CG-CD2	-9.30	115.42	121.00
33	L1	2465	G	C1'-O4'-C4'	-9.30	102.46	109.90
32	S1	598	A	O4'-C1'-N9	9.30	115.64	108.20
32	S1	897	A	O4'-C1'-N9	9.30	115.64	108.20
32	S1	1560	U	O4'-C1'-C2'	9.30	115.97	107.60
69	La	11	VAL	CB-CA-C	-9.30	93.73	111.40
13	SQ	109	LEU	CA-C-O	-9.29	100.58	120.10
33	L1	3024	U	O4'-C1'-C2'	-9.30	96.50	105.80
31	S2	61	C	N1-C1'-C2'	9.29	126.08	114.00
32	S1	1449	U	O4'-C1'-N1	9.29	115.64	108.20
33	L1	1886	U	O4'-C1'-N1	9.29	115.64	108.20
33	L1	2125	A	O4'-C1'-N9	9.29	115.64	108.20
33	L1	3299	A	C1'-O4'-C4'	9.29	117.34	109.90
34	L3	64	G	N9-C1'-C2'	9.29	126.08	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2423	A	O4'-C1'-C2'	9.29	115.96	107.60
33	L1	3317	G	P-O5'-C5'	-9.29	106.03	120.90
32	S1	119	U	P-O3'-C3'	9.29	130.85	119.70
33	L1	641	C	C4'-C3'-C2'	-9.29	93.31	102.60
33	L1	55	G	C3'-C2'-C1'	-9.29	94.07	101.50
33	L1	422	G	O4'-C1'-N9	9.29	115.63	108.20
33	L1	1019	A	O4'-C1'-C2'	-9.29	96.51	105.80
33	L1	1868	C	N1-C1'-C2'	9.29	126.07	114.00
33	L1	2437	A	O4'-C1'-N9	-9.29	100.77	108.20
33	L1	892	U	C3'-C2'-C1'	9.29	108.93	101.50
33	L1	1016	G	O4'-C1'-N9	9.29	115.63	108.20
33	L1	2666	G	C3'-C2'-C1'	-9.28	94.07	101.50
32	S1	1083	C	N1-C1'-C2'	9.28	126.06	114.00
33	L1	875	A	C3'-C2'-C1'	-9.28	94.08	101.50
33	L1	1323	G	O4'-C1'-N9	9.28	115.62	108.20
34	L3	20	C	O4'-C1'-N1	9.28	115.62	108.20
57	Ll	43	ARG	NE-CZ-NH2	-9.28	115.66	120.30
33	L1	1883	A	C1'-O4'-C4'	9.28	117.32	109.90
34	L3	1	G	O3'-P-O5'	9.28	121.63	104.00
32	S1	1386	U	O4'-C1'-N1	9.28	115.62	108.20
33	L1	226	U	O4'-C1'-N1	9.28	115.62	108.20
32	S1	148	C	N1-C1'-C2'	9.27	126.06	114.00
33	L1	254	G	C1'-O4'-C4'	-9.27	102.48	109.90
57	Ll	8	PHE	CB-CG-CD2	9.27	127.29	120.80
33	L1	2202	A	C3'-C2'-C1'	9.27	108.92	101.50
33	L1	3342	C	C3'-C2'-C1'	9.27	108.92	101.50
32	S1	354	G	C3'-C2'-C1'	9.27	108.92	101.50
32	S1	1749	C	N1-C1'-C2'	9.27	126.05	114.00
33	L1	2053	A	C3'-C2'-C1'	9.27	108.91	101.50
33	L1	2624	G	N9-C1'-C2'	9.27	126.05	114.00
31	S2	4	G	C1'-O4'-C4'	-9.27	102.49	109.90
32	S1	5	U	O4'-C1'-N1	9.27	115.61	108.20
33	L1	2584	U	C1'-O4'-C4'	-9.27	102.49	109.90
33	L1	3086	G	P-O3'-C3'	9.27	130.82	119.70
33	L1	3390	G	O4'-C1'-N9	9.27	115.61	108.20
42	LP	94	PHE	CB-CG-CD1	-9.27	114.31	120.80
33	L1	3144	U	C3'-C2'-C1'	9.26	108.91	101.50
32	S1	1689	A	O4'-C1'-N9	9.26	115.61	108.20
33	L1	88	A	O4'-C1'-N9	9.26	115.61	108.20
33	L1	1577	A	C4'-C3'-C2'	-9.26	93.34	102.60
34	L3	18	C	O4'-C1'-N1	9.26	115.61	108.20
32	S1	954	C	O4'-C1'-N1	9.26	115.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	311	G	C4'-C3'-C2'	-9.26	93.34	102.60
33	L1	2165	A	C4'-C3'-C2'	-9.26	93.34	102.60
33	L1	2659	A	N9-C1'-C2'	9.26	126.03	114.00
33	L1	2758	C	N1-C1'-C2'	9.26	126.03	114.00
33	L1	1574	C	N1-C1'-C2'	9.25	126.03	114.00
32	S1	230	C	O4'-C1'-N1	9.25	115.60	108.20
33	L1	3099	G	C5'-C4'-C3'	9.25	130.80	116.00
34	L3	77	A	O4'-C1'-C2'	-9.25	96.55	105.80
34	L3	117	U	O4'-C1'-N1	9.25	115.60	108.20
32	S1	1759	A	C5'-C4'-O4'	9.25	120.20	109.10
32	S1	1791	A	C3'-C2'-C1'	9.25	108.90	101.50
33	L1	348	C	N1-C1'-C2'	9.25	126.02	114.00
33	L1	1403	G	OP1-P-OP2	-9.24	105.73	119.60
64	LG	12	LYS	O-C-N	-9.24	107.91	122.70
33	L1	845	G	C1'-O4'-C4'	-9.24	102.50	109.90
33	L1	1708	C	C1'-O4'-C4'	-9.24	102.51	109.90
33	L1	1753	A	P-O5'-C5'	9.24	135.69	120.90
33	L1	267	G	O4'-C1'-C2'	-9.24	96.56	105.80
33	L1	1564	C	O4'-C1'-C2'	-9.24	96.56	105.80
25	SC	147	SER	N-CA-CB	9.24	124.36	110.50
32	S1	44	U	OP1-P-OP2	-9.24	105.74	119.60
32	S1	1684	U	O4'-C1'-N1	9.24	115.59	108.20
33	L1	714	G	C1'-O4'-C4'	-9.24	102.51	109.90
33	L1	2667	C	N1-C1'-C2'	9.24	126.01	114.00
13	SQ	71	LEU	C-N-CA	9.23	144.79	121.70
33	L1	3218	C	P-O3'-C3'	9.23	130.78	119.70
33	L1	812	G	C1'-O4'-C4'	-9.23	102.51	109.90
33	L1	1257	U	N1-C1'-C2'	-9.23	101.84	112.00
31	S2	7	A	P-O3'-C3'	9.23	130.78	119.70
32	S1	61	A	N9-C1'-C2'	-9.23	101.85	112.00
32	S1	293	C	C3'-C2'-C1'	9.23	108.89	101.50
33	L1	2022	U	P-O5'-C5'	9.23	135.67	120.90
33	L1	2478	G	C1'-O4'-C4'	-9.23	102.52	109.90
64	LG	152	LYS	CB-CA-C	9.23	128.86	110.40
31	S2	57	A	C3'-C2'-C1'	9.23	108.88	101.50
33	L1	244	G	O4'-C1'-N9	9.23	115.58	108.20
33	L1	714	G	C3'-C2'-C1'	-9.23	94.12	101.50
33	L1	719	U	N1-C1'-C2'	9.23	126.00	114.00
32	S1	1714	G	C1'-O4'-C4'	-9.23	102.52	109.90
33	L1	888	U	P-O5'-C5'	9.23	135.66	120.90
33	L1	1555	G	N9-C1'-C2'	9.23	126.00	114.00
34	L3	46	C	C1'-O4'-C4'	-9.22	102.52	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SM	121	ARG	NE-CZ-NH2	-9.22	115.69	120.30
33	L1	2020	G	P-O3'-C3'	9.22	130.77	119.70
33	L1	1785	G	C3'-C2'-C1'	-9.22	94.12	101.50
5	SE	135	ARG	NE-CZ-NH2	9.22	124.91	120.30
80	LC	117	ARG	NE-CZ-NH1	9.22	124.91	120.30
33	L1	210	G	O4'-C1'-N9	-9.22	100.83	108.20
31	S2	50	G	O4'-C1'-N9	9.21	115.57	108.20
33	L1	1365	C	C3'-C2'-C1'	9.21	108.87	101.50
34	L3	2	G	C1'-O4'-C4'	9.21	117.27	109.90
24	SX	75	LEU	CB-CA-C	-9.21	92.70	110.20
33	L1	20	G	P-O3'-C3'	9.21	130.75	119.70
33	L1	3013	A	O4'-C1'-N9	9.21	115.57	108.20
64	LG	16	ARG	NE-CZ-NH1	9.21	124.91	120.30
32	S1	1470	G	O4'-C1'-N9	9.21	115.57	108.20
33	L1	141	C	N1-C1'-C2'	9.21	125.97	114.00
33	L1	2883	C	O4'-C1'-N1	9.21	115.57	108.20
32	S1	688	U	O4'-C1'-N1	9.21	115.57	108.20
33	L1	1576	C	P-O5'-C5'	9.21	135.63	120.90
33	L1	3246	U	N1-C1'-C2'	9.21	125.97	114.00
12	SO	64	LYS	O-C-N	-9.20	107.97	122.70
44	LR	39	ARG	NE-CZ-NH1	9.20	124.90	120.30
59	Lo	30	ARG	N-CA-CB	-9.20	94.03	110.60
32	S1	147	C	O4'-C1'-C2'	-9.20	96.60	105.80
32	S1	1640	C	O4'-C1'-N1	9.20	115.56	108.20
33	L1	840	A	O3'-P-O5'	-9.20	86.52	104.00
33	L1	1275	A	O4'-C1'-N9	9.20	115.56	108.20
33	L1	2451	G	O4'-C1'-C2'	-9.20	96.60	105.80
33	L1	1436	A	C3'-C2'-C1'	-9.20	94.14	101.50
32	S1	288	G	C1'-O4'-C4'	-9.20	102.54	109.90
33	L1	745	G	O4'-C1'-C2'	-9.20	96.60	105.80
33	L1	1414	C	O4'-C1'-C2'	9.20	115.88	107.60
33	L1	1361	G	N9-C1'-C2'	-9.20	101.89	112.00
33	L1	2668	U	C1'-O4'-C4'	9.19	117.25	109.90
55	Lg	119	VAL	N-CA-C	9.19	135.82	111.00
4	SD	205	PHE	CB-CG-CD1	-9.19	114.36	120.80
32	S1	1322	G	O4'-C1'-N9	9.19	115.55	108.20
33	L1	264	C	C3'-C2'-C1'	9.19	108.85	101.50
33	L1	661	A	N9-C1'-C2'	-9.19	101.89	112.00
32	S1	1057	U	N1-C1'-C2'	-9.19	101.89	112.00
33	L1	212	G	C1'-O4'-C4'	9.19	117.25	109.90
33	L1	1115	A	C1'-O4'-C4'	9.19	117.25	109.90
33	L1	2758	C	C3'-C2'-C1'	9.19	108.85	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3149	C	C3'-C2'-C1'	9.19	108.85	101.50
79	Ls	77	GLU	N-CA-CB	-9.19	94.06	110.60
8	SJ	75	ARG	NE-CZ-NH2	-9.19	115.71	120.30
11	SM	116	LYS	CB-CA-C	9.19	128.77	110.40
33	L1	1798	C	O4'-C1'-C2'	-9.19	96.61	105.80
33	L1	2766	U	O4'-C1'-N1	9.19	115.55	108.20
43	LO	53	PHE	CB-CG-CD2	-9.19	114.37	120.80
33	L1	3374	C	O4'-C1'-N1	9.19	115.55	108.20
57	Ll	79	ARG	NH1-CZ-NH2	9.19	129.50	119.40
32	S1	610	A	C5'-C4'-O4'	9.18	120.12	109.10
32	S1	1093	A	C3'-C2'-C1'	9.18	108.85	101.50
32	S1	1419	U	O4'-C1'-N1	9.18	115.55	108.20
33	L1	3373	C	O4'-C1'-N1	9.18	115.55	108.20
32	S1	788	G	C5'-C4'-C3'	9.18	130.69	116.00
33	L1	1955	G	C3'-C2'-C1'	-9.18	94.16	101.50
33	L1	740	G	P-O3'-C3'	9.18	130.72	119.70
33	L1	2766	U	P-O3'-C3'	9.18	130.71	119.70
33	L1	3099	G	C1'-O4'-C4'	9.18	117.24	109.90
33	L1	3151	C	P-O3'-C3'	9.18	130.72	119.70
81	LD	367	SER	C-N-CD	-9.18	100.41	120.60
31	S2	16	U	P-O3'-C3'	9.18	130.71	119.70
33	L1	2673	G	N9-C1'-C2'	9.18	125.93	114.00
33	L1	3222	G	C5'-C4'-C3'	9.18	130.68	116.00
33	L1	320	U	O4'-C1'-N1	9.18	115.54	108.20
17	SV	34	LYS	N-CA-CB	9.17	127.11	110.60
32	S1	1332	G	O4'-C1'-C2'	-9.17	96.63	105.80
33	L1	817	U	P-O3'-C3'	-9.17	108.69	119.70
33	L1	2623	G	C5'-C4'-C3'	9.17	130.68	116.00
68	LW	28	SER	C-N-CA	-9.17	98.76	121.70
33	L1	2701	G	OP1-P-O3'	9.17	125.38	105.20
33	L1	510	C	C1'-O4'-C4'	-9.17	102.56	109.90
33	L1	1367	A	P-O3'-C3'	9.17	130.70	119.70
33	L1	1923	G	OP1-P-OP2	-9.17	105.85	119.60
45	LQ	16	TYR	CB-CA-C	9.17	128.74	110.40
52	Lb	123	ARG	NE-CZ-NH2	-9.17	115.72	120.30
33	L1	1622	G	P-O5'-C5'	9.17	135.57	120.90
68	LW	80	PHE	CB-CG-CD1	9.17	127.22	120.80
32	S1	836	U	O4'-C1'-N1	9.16	115.53	108.20
32	S1	1754	A	P-O3'-C3'	9.16	130.70	119.70
33	L1	1098	U	P-O3'-C3'	9.16	130.70	119.70
33	L1	2896	C	C3'-C2'-C1'	9.16	108.83	101.50
32	S1	1262	U	O4'-C1'-N1	9.16	115.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	SB	154	ASP	CA-C-N	-9.16	97.88	116.20
32	S1	1556	U	O4'-C1'-N1	9.16	115.53	108.20
33	L1	347	A	N9-C1'-C2'	9.16	125.91	114.00
33	L1	1196	U	N1-C1'-C2'	-9.16	101.92	112.00
33	L1	2765	A	P-O3'-C3'	9.16	130.69	119.70
33	L1	2798	G	O4'-C1'-N9	9.16	115.53	108.20
33	L1	2841	G	N9-C1'-C2'	9.16	125.91	114.00
33	L1	297	G	C5'-C4'-C3'	9.16	130.65	116.00
33	L1	1241	G	O4'-C1'-N9	-9.16	100.87	108.20
32	S1	1323	U	O4'-C1'-C2'	-9.16	96.64	105.80
33	L1	1739	G	O4'-C1'-C2'	9.16	115.84	107.60
33	L1	1817	U	N1-C1'-C2'	9.16	125.90	114.00
33	L1	1991	U	C5'-C4'-C3'	9.16	130.65	116.00
33	L1	2393	G	C1'-O4'-C4'	-9.16	102.57	109.90
33	L1	2595	G	C1'-O4'-C4'	9.16	117.22	109.90
33	L1	3019	C	O4'-C1'-N1	9.16	115.53	108.20
33	L1	400	G	O4'-C1'-C2'	9.15	115.84	107.60
33	L1	1066	G	O4'-C1'-C2'	9.15	115.84	107.60
33	L1	2151	G	O4'-C1'-C2'	-9.15	96.64	105.80
32	S1	491	G	O4'-C1'-N9	9.15	115.52	108.20
33	L1	521	G	O4'-C1'-C2'	9.15	115.84	107.60
33	L1	1364	C	C3'-C2'-C1'	9.15	108.82	101.50
33	L1	1867	U	C1'-O4'-C4'	-9.15	102.58	109.90
33	L1	2482	A	C3'-C2'-C1'	-9.15	94.18	101.50
35	L2	119	C	C1'-O4'-C4'	-9.15	102.58	109.90
33	L1	571	G	C3'-C2'-C1'	9.15	108.82	101.50
33	L1	2781	A	P-O3'-C3'	9.15	130.68	119.70
32	S1	11	A	O4'-C1'-C2'	-9.14	96.66	105.80
32	S1	884	G	O4'-C1'-N9	9.14	115.51	108.20
68	LW	29	LYS	CB-CA-C	-9.14	92.11	110.40
32	S1	1083	C	O4'-C1'-N1	9.14	115.51	108.20
33	L1	1022	G	C3'-C2'-C1'	-9.14	94.19	101.50
33	L1	1182	A	O4'-C1'-N9	9.14	115.51	108.20
33	L1	2171	A	O4'-C1'-C2'	-9.14	96.66	105.80
32	S1	407	G	O4'-C1'-N9	9.14	115.51	108.20
33	L1	1123	A	C3'-C2'-C1'	-9.13	94.19	101.50
68	LW	117	ARG	NE-CZ-NH1	9.13	124.87	120.30
7	SI	51	ARG	NE-CZ-NH2	-9.13	115.73	120.30
38	LE	143	ARG	NE-CZ-NH2	-9.13	115.73	120.30
31	S2	1	U	OP1-P-OP2	-9.13	105.91	119.60
32	S1	932	C	O4'-C1'-N1	9.13	115.50	108.20
33	L1	148	U	P-O5'-C5'	9.13	135.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1508	C	C1'-O4'-C4'	-9.13	102.59	109.90
32	S1	1336	C	C3'-C2'-C1'	9.13	108.80	101.50
33	L1	559	U	O4'-C1'-N1	9.13	115.50	108.20
33	L1	779	U	N1-C1'-C2'	-9.13	101.96	112.00
47	LU	56	PHE	CB-CG-CD1	-9.13	114.41	120.80
32	S1	83	U	O4'-C1'-N1	9.13	115.50	108.20
32	S1	447	C	O4'-C1'-C2'	-9.13	96.67	105.80
57	Ll	72	ARG	NE-CZ-NH2	-9.13	115.74	120.30
31	S2	4	G	O4'-C1'-C2'	9.12	115.81	107.60
33	L1	457	C	C3'-C2'-C1'	9.12	108.80	101.50
33	L1	1061	A	C3'-C2'-C1'	9.12	108.80	101.50
33	L1	1066	G	C1'-O4'-C4'	-9.12	102.60	109.90
33	L1	2795	G	C3'-C2'-C1'	-9.13	94.20	101.50
31	S2	41	G	O4'-C1'-C2'	9.12	115.81	107.60
33	L1	1000	A	C3'-C2'-C1'	9.12	108.80	101.50
35	L2	151	C	C5'-C4'-O4'	9.12	120.04	109.10
33	L1	2398	A	O3'-P-O5'	9.12	121.32	104.00
48	LV	166	ILE	C-N-CA	-9.12	98.90	121.70
33	L1	487	C	N1-C1'-C2'	9.11	125.85	114.00
33	L1	1636	C	P-O3'-C3'	9.12	130.64	119.70
33	L1	1912	U	N1-C1'-C2'	9.12	125.85	114.00
33	L1	1950	G	O4'-C1'-N9	9.12	115.49	108.20
34	L3	14	C	C1'-O4'-C4'	9.12	117.19	109.90
4	SD	148	ARG	CA-C-N	9.11	137.25	117.20
33	L1	262	A	C3'-C2'-C1'	9.11	108.79	101.50
33	L1	1147	U	N1-C1'-C2'	9.11	125.85	114.00
33	L1	2099	G	C3'-C2'-C1'	-9.11	94.21	101.50
33	L1	389	A	C1'-O4'-C4'	-9.11	102.61	109.90
32	S1	1100	U	N1-C1'-C2'	9.11	125.84	114.00
33	L1	1393	G	P-O3'-C3'	9.11	130.63	119.70
33	L1	1534	C	O4'-C1'-N1	9.11	115.49	108.20
64	LG	13	ARG	NE-CZ-NH1	9.11	124.86	120.30
33	L1	2862	U	O4'-C1'-C2'	-9.11	96.69	105.80
32	S1	581	G	P-O3'-C3'	9.11	130.63	119.70
33	L1	102	G	C3'-C2'-C1'	9.11	108.78	101.50
33	L1	1710	G	C1'-O4'-C4'	-9.11	102.61	109.90
33	L1	2511	U	C1'-O4'-C4'	9.11	117.19	109.90
32	S1	376	G	O4'-C1'-N9	9.10	115.48	108.20
32	S1	1600	G	C1'-O4'-C4'	-9.10	102.62	109.90
39	LF	187	THR	C-N-CA	-9.10	98.96	121.70
32	S1	1150	U	O4'-C1'-N1	9.10	115.48	108.20
32	S1	1537	U	O4'-C1'-N1	9.10	115.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1647	C	O4'-C1'-C2'	-9.10	96.70	105.80
33	L1	1788	C	P-O3'-C3'	9.10	130.61	119.70
35	L2	159	U	P-O3'-C3'	9.09	130.61	119.70
32	S1	1245	G	O4'-C1'-C2'	-9.09	96.71	105.80
33	L1	3023	G	N9-C1'-C2'	9.09	125.82	114.00
33	L1	1841	G	O4'-C1'-C2'	9.09	115.78	107.60
33	L1	1875	A	P-O3'-C3'	9.09	130.61	119.70
6	SF	165	ILE	CG1-CB-CG2	9.09	131.40	111.40
33	L1	406	A	O4'-C1'-N9	9.09	115.47	108.20
33	L1	1064	U	N1-C1'-C2'	-9.09	102.00	112.00
33	L1	3307	A	O4'-C1'-C2'	-9.09	96.71	105.80
32	S1	1133	C	C5'-C4'-C3'	-9.09	101.46	116.00
39	LF	89	TYR	CB-CG-CD2	9.09	126.45	121.00
48	LV	91	PHE	CB-CG-CD2	-9.09	114.44	120.80
4	SD	167	ASN	CA-C-N	-9.08	97.22	117.20
32	S1	182	C	O4'-C1'-N1	9.08	115.47	108.20
37	LB	34	PHE	N-CA-CB	9.08	126.95	110.60
33	L1	1216	G	O4'-C1'-N9	9.08	115.46	108.20
33	L1	3206	C	O4'-C1'-N1	9.08	115.46	108.20
33	L1	1792	G	C3'-C2'-C1'	9.08	108.76	101.50
33	L1	2348	U	N1-C1'-C2'	9.08	125.80	114.00
43	LO	53	PHE	CB-CG-CD1	9.08	127.16	120.80
33	L1	375	G	O4'-C1'-C2'	9.08	115.77	107.60
33	L1	725	G	N9-C1'-C2'	9.08	125.80	114.00
33	L1	966	G	O4'-C1'-C2'	-9.08	96.72	105.80
33	L1	1249	A	O4'-C1'-C2'	-9.08	96.72	105.80
45	LQ	198	TYR	CB-CG-CD1	9.08	126.44	121.00
46	LT	110	ARG	NE-CZ-NH2	-9.08	115.76	120.30
35	L2	27	C	C1'-O4'-C4'	-9.07	102.64	109.90
32	S1	124	G	C3'-C2'-C1'	-9.07	94.25	101.50
33	L1	1826	G	P-O3'-C3'	-9.07	108.82	119.70
34	L3	1	G	OP1-P-OP2	-9.07	106.00	119.60
11	SM	113	ARG	CA-CB-CG	9.07	133.35	113.40
32	S1	509	A	C3'-C2'-C1'	9.07	108.75	101.50
32	S1	1609	G	N9-C1'-C2'	9.07	125.79	114.00
33	L1	2799	U	C1'-O4'-C4'	-9.07	102.65	109.90
32	S1	292	A	O4'-C1'-C2'	-9.06	96.74	105.80
32	S1	1147	A	C3'-C2'-C1'	9.06	108.75	101.50
33	L1	1361	G	C1'-O4'-C4'	9.06	117.15	109.90
33	L1	1806	C	P-O3'-C3'	9.06	130.58	119.70
33	L1	3145	G	C3'-C2'-C1'	9.06	108.75	101.50
33	L1	3002	U	O4'-C1'-N1	9.06	115.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	198	A	C1'-O4'-C4'	9.06	117.15	109.90
33	L1	2996	A	C3'-C2'-C1'	-9.06	94.25	101.50
32	S1	1458	U	P-O5'-C5'	9.06	135.40	120.90
64	LG	65	LYS	CA-C-N	9.06	142.47	117.10
2	SA	84	ARG	NE-CZ-NH1	9.06	124.83	120.30
13	SQ	23	ARG	NE-CZ-NH1	-9.06	115.77	120.30
33	L1	1143	G	O4'-C1'-C2'	9.06	115.75	107.60
10	SL	54	ILE	O-C-N	-9.05	107.81	123.20
33	L1	2203	A	C1'-O4'-C4'	9.05	117.14	109.90
73	Lp	13	TYR	CB-CG-CD2	9.06	126.43	121.00
33	L1	2647	C	C1'-O4'-C4'	9.05	117.14	109.90
35	L2	59	U	P-O5'-C5'	9.05	135.38	120.90
77	Lc	47	ARG	NE-CZ-NH2	-9.05	115.77	120.30
73	Lp	52	LYS	N-CA-C	9.05	135.44	111.00
33	L1	2763	C	O4'-C1'-N1	9.05	115.44	108.20
33	L1	2952	G	N9-C1'-C2'	-9.05	102.05	112.00
33	L1	3343	U	N1-C1'-C2'	9.05	125.77	114.00
32	S1	302	C	C3'-C2'-C1'	9.05	108.74	101.50
32	S1	1198	A	C1'-O4'-C4'	-9.05	102.66	109.90
33	L1	3140	A	N9-C1'-C2'	-9.05	102.05	112.00
45	LQ	27	ARG	NE-CZ-NH1	9.05	124.82	120.30
47	LU	122	ARG	NE-CZ-NH1	9.05	124.82	120.30
4	SD	240	LYS	C-N-CA	-9.04	103.31	122.30
32	S1	1657	C	O4'-C1'-C2'	-9.05	96.75	105.80
33	L1	595	C	O4'-C1'-N1	9.04	115.44	108.20
33	L1	2145	C	O4'-C1'-C2'	-9.04	96.76	105.80
32	S1	1246	A	P-O3'-C3'	9.04	130.55	119.70
32	S1	1795	U	O4'-C1'-N1	9.04	115.44	108.20
33	L1	558	G	C1'-O4'-C4'	-9.04	102.67	109.90
33	L1	1027	C	C5'-C4'-C3'	9.04	130.47	116.00
64	LG	140	GLN	N-CA-CB	9.04	126.88	110.60
33	L1	1133	A	C1'-O4'-C4'	9.04	117.13	109.90
33	L1	2636	U	O4'-C1'-C2'	-9.04	96.76	105.80
6	SF	164	THR	C-N-CA	9.04	144.30	121.70
32	S1	1736	C	O4'-C1'-N1	-9.04	100.97	108.20
33	L1	246	C	O4'-C1'-C2'	-9.04	96.76	105.80
51	LY	62	TYR	CG-CD2-CE2	-9.04	114.07	121.30
32	S1	1616	U	O3'-P-O5'	-9.04	86.83	104.00
33	L1	1850	C	O4'-C1'-N1	9.04	115.43	108.20
33	L1	2762	U	O4'-C1'-C2'	-9.04	96.76	105.80
33	L1	3052	U	O4'-C1'-N1	9.04	115.43	108.20
32	S1	1485	A	C1'-O4'-C4'	9.04	117.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1741	G	O4'-C1'-C2'	9.04	115.73	107.60
72	Lk	56	TYR	CB-CG-CD1	9.04	126.42	121.00
84	LI	109	ASP	CA-CB-CG	-9.04	93.52	113.40
68	LW	88	LEU	CB-CA-C	9.03	127.36	110.20
32	S1	1228	G	C3'-C2'-C1'	9.03	108.72	101.50
32	S1	1350	C	N1-C1'-C2'	9.03	125.74	114.00
35	L2	67	C	P-O3'-C3'	9.03	130.53	119.70
33	L1	802	G	P-O3'-C3'	9.03	130.53	119.70
33	L1	994	U	C1'-O4'-C4'	-9.03	102.68	109.90
33	L1	1664	G	O4'-C1'-C2'	-9.03	96.78	105.80
32	S1	1323	U	C1'-O4'-C4'	9.02	117.12	109.90
33	L1	1091	C	O4'-C1'-N1	9.02	115.42	108.20
33	L1	1623	C	C3'-C2'-C1'	9.02	108.72	101.50
31	S2	53	U	O4'-C1'-N1	9.02	115.42	108.20
38	LE	108	ILE	O-C-N	-9.02	108.27	122.70
33	L1	1408	C	C1'-O4'-C4'	-9.02	102.69	109.90
32	S1	899	A	P-O5'-C5'	9.02	135.33	120.90
33	L1	2480	G	C3'-C2'-C1'	-9.02	94.29	101.50
33	L1	2620	U	N1-C1'-C2'	-9.02	102.08	112.00
72	Lk	68	LYS	CG-CD-CE	9.02	138.95	111.90
33	L1	975	G	O4'-C1'-N9	9.02	115.41	108.20
33	L1	1734	G	OP1-P-OP2	-9.02	106.08	119.60
33	L1	2506	G	P-O3'-C3'	9.02	130.52	119.70
33	L1	1754	C	C5'-C4'-C3'	-9.01	101.58	116.00
42	LP	30	TYR	CB-CG-CD1	9.01	126.41	121.00
23	SU	80	LEU	CB-CG-CD2	9.01	126.32	111.00
12	SO	124	ARG	N-CA-CB	-9.01	94.39	110.60
31	S2	48	C	C3'-C2'-C1'	9.01	108.70	101.50
33	L1	513	C	C3'-C2'-C1'	9.01	108.70	101.50
59	Lo	25	TYR	CD1-CG-CD2	9.01	127.81	117.90
67	LS	138	ARG	NE-CZ-NH1	9.01	124.80	120.30
32	S1	469	G	O4'-C1'-N9	9.00	115.40	108.20
33	L1	324	U	N1-C1'-C2'	9.00	125.70	114.00
33	L1	2762	U	N1-C1'-C2'	-9.00	102.10	112.00
71	Lj	79	HIS	N-CA-C	-9.00	86.70	111.00
32	S1	523	C	P-O3'-C3'	9.00	130.50	119.70
33	L1	2722	U	N1-C1'-C2'	-9.00	102.10	112.00
32	S1	121	U	O4'-C1'-N1	9.00	115.40	108.20
32	S1	327	A	OP1-P-OP2	-9.00	106.11	119.60
32	S1	915	C	O4'-C1'-N1	9.00	115.40	108.20
32	S1	377	G	N9-C1'-C2'	8.99	125.69	114.00
33	L1	1823	C	C1'-O4'-C4'	-8.99	102.70	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
73	Lp	35	ARG	CB-CA-C	-8.99	92.42	110.40
32	S1	33	U	O4'-C1'-C2'	-8.99	96.81	105.80
33	L1	1112	C	N1-C1'-C2'	8.99	125.69	114.00
33	L1	2177	U	C5'-C4'-C3'	8.99	130.38	116.00
33	L1	2457	G	O4'-C1'-N9	8.99	115.39	108.20
33	L1	2842	C	O4'-C1'-N1	8.99	115.39	108.20
33	L1	3158	C	C5'-C4'-C3'	8.99	130.38	116.00
35	L2	102	U	N1-C1'-C2'	8.99	125.69	114.00
33	L1	430	G	N9-C1'-C2'	8.99	125.68	114.00
36	LA	83	TYR	CB-CG-CD1	-8.99	115.61	121.00
32	S1	1156	A	O3'-P-O5'	8.99	121.07	104.00
33	L1	1181	A	C4'-C3'-C2'	8.99	111.59	102.60
33	L1	2318	U	OP1-P-OP2	-8.98	106.12	119.60
32	S1	1443	U	O4'-C1'-C2'	-8.98	96.82	105.80
33	L1	1509	G	P-O3'-C3'	-8.98	108.92	119.70
13	SQ	33	LYS	CB-CG-CD	8.98	134.95	111.60
32	S1	508	U	P-O3'-C3'	8.98	130.48	119.70
33	L1	228	C	O4'-C1'-C2'	-8.98	96.82	105.80
33	L1	807	C	O4'-C1'-N1	8.98	115.38	108.20
74	LJ	93	ARG	CD-NE-CZ	-8.98	111.03	123.60
32	S1	1574	U	C1'-O4'-C4'	-8.98	102.72	109.90
33	L1	312	U	P-O5'-C5'	-8.98	106.53	120.90
33	L1	537	U	C3'-C2'-C1'	8.98	108.68	101.50
33	L1	1169	G	O4'-C1'-N9	8.98	115.38	108.20
33	L1	596	C	C3'-C2'-C1'	8.98	108.68	101.50
33	L1	1023	G	O4'-C1'-N9	8.98	115.38	108.20
35	L2	6	G	OP1-P-OP2	-8.98	106.14	119.60
32	S1	880	G	O4'-C1'-C2'	-8.97	96.83	105.80
33	L1	2077	C	C3'-C2'-C1'	-8.97	94.32	101.50
33	L1	2681	A	O5'-P-OP1	-8.97	97.62	105.70
33	L1	538	C	N1-C1'-C2'	-8.97	102.13	112.00
33	L1	2626	G	O4'-C1'-C2'	-8.97	96.83	105.80
57	Ll	12	ARG	NE-CZ-NH1	8.97	124.79	120.30
9	SK	85	LYS	CG-CD-CE	-8.97	85.00	111.90
32	S1	715	U	P-O5'-C5'	8.97	135.25	120.90
33	L1	2497	A	O4'-C1'-N9	8.97	115.38	108.20
52	Lb	96	PHE	CB-CG-CD2	-8.97	114.52	120.80
32	S1	1683	G	O4'-C1'-C2'	8.97	115.67	107.60
33	L1	63	G	C3'-C2'-C1'	8.97	108.67	101.50
34	L3	79	A	N9-C1'-C2'	-8.97	102.14	112.00
32	S1	1387	U	N1-C1'-C2'	-8.96	102.14	112.00
33	L1	1368	U	N1-C1'-C2'	8.96	125.65	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1456	A	O4'-C1'-N9	8.96	115.37	108.20
33	L1	2656	C	P-O3'-C3'	-8.96	108.94	119.70
35	L2	64	U	O4'-C1'-N1	-8.96	101.03	108.20
55	Lg	8	ALA	CB-CA-C	8.96	123.54	110.10
13	SQ	100	LYS	CB-CA-C	8.96	128.32	110.40
33	L1	828	U	O4'-C1'-N1	8.96	115.37	108.20
33	L1	650	A	C1'-O4'-C4'	8.96	117.07	109.90
33	L1	1295	A	N9-C1'-C2'	-8.96	102.15	112.00
33	L1	2459	U	C3'-C2'-C1'	8.96	108.67	101.50
35	L2	64	U	P-O3'-C3'	8.96	130.45	119.70
33	L1	3153	U	P-O5'-C5'	8.95	135.23	120.90
32	S1	21	U	O4'-C1'-N1	8.95	115.36	108.20
32	S1	1692	G	O4'-C1'-N9	8.95	115.36	108.20
33	L1	677	U	O4'-C1'-C2'	8.95	115.66	107.60
33	L1	1277	A	O3'-P-O5'	-8.95	86.99	104.00
33	L1	1438	A	P-O3'-C3'	8.95	130.44	119.70
32	S1	1561	G	O4'-C1'-N9	8.95	115.36	108.20
33	L1	858	U	O4'-C4'-C3'	-8.95	95.05	104.00
33	L1	1902	G	N9-C1'-C2'	-8.95	102.16	112.00
33	L1	2513	U	N1-C1'-C2'	-8.95	102.16	112.00
35	L2	40	G	O5'-P-OP2	8.95	121.44	110.70
25	SC	65	ASP	CB-CG-OD2	8.95	126.35	118.30
32	S1	181	C	O4'-C1'-C2'	-8.95	96.85	105.80
32	S1	1095	C	N1-C1'-C2'	8.95	125.63	114.00
33	L1	2401	A	O4'-C1'-C2'	-8.95	96.85	105.80
33	L1	3149	C	N1-C1'-C2'	8.95	125.63	114.00
33	L1	3088	A	N9-C1'-C2'	8.95	125.63	114.00
34	L3	51	G	O4'-C1'-N9	8.95	115.36	108.20
64	LG	12	LYS	C-N-CA	-8.95	99.34	121.70
31	S2	16	U	C5'-C4'-C3'	8.94	130.31	116.00
33	L1	372	A	N9-C1'-C2'	-8.94	102.16	112.00
34	L3	113	G	O4'-C1'-N9	8.94	115.35	108.20
35	L2	55	G	C1'-O4'-C4'	8.94	117.05	109.90
82	LK	154	TYR	CB-CG-CD1	-8.94	115.64	121.00
3	SB	30	ALA	C-N-CA	8.94	144.05	121.70
32	S1	303	A	OP1-P-O3'	-8.94	85.53	105.20
33	L1	1747	A	O4'-C1'-N9	8.94	115.35	108.20
32	S1	1651	U	C1'-O4'-C4'	-8.94	102.75	109.90
33	L1	1955	G	O4'-C1'-C2'	8.94	115.64	107.60
34	L3	95	U	O4'-C1'-N1	8.94	115.35	108.20
32	S1	1383	U	O4'-C1'-N1	8.94	115.35	108.20
33	L1	2223	A	O4'-C1'-N9	8.94	115.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	LP	49	ARG	NE-CZ-NH2	-8.94	115.83	120.30
33	L1	1130	G	P-O3'-C3'	-8.94	108.98	119.70
33	L1	2248	G	C4'-C3'-C2'	-8.94	93.67	102.60
33	L1	2800	C	N1-C1'-C2'	8.94	125.62	114.00
33	L1	2673	G	C1'-O4'-C4'	-8.93	102.75	109.90
33	L1	1575	G	N9-C1'-C2'	8.93	125.61	114.00
33	L1	1904	A	N9-C1'-C2'	8.93	125.61	114.00
9	SK	92	LEU	CB-CG-CD1	8.93	126.18	111.00
84	LI	32	ARG	NE-CZ-NH2	-8.93	115.84	120.30
4	SD	93	PRO	CA-C-O	-8.93	98.78	120.20
32	S1	1190	U	O4'-C1'-N1	8.92	115.34	108.20
32	S1	1226	U	C5'-C4'-C3'	-8.92	101.72	116.00
33	L1	2730	A	N9-C1'-C2'	-8.92	102.18	112.00
33	L1	2756	G	C5'-C4'-C3'	8.92	130.28	116.00
15	SS	8	THR	C-N-CA	-8.92	99.41	121.70
32	S1	1421	U	OP1-P-OP2	-8.92	106.22	119.60
33	L1	490	G	C1'-O4'-C4'	-8.92	102.77	109.90
23	SU	90	LYS	N-CA-CB	8.91	126.64	110.60
33	L1	1261	C	O4'-C1'-N1	8.91	115.33	108.20
81	LD	208	ARG	NE-CZ-NH1	-8.91	115.84	120.30
31	S2	58	U	N1-C1'-C2'	-8.91	102.20	112.00
33	L1	1015	A	C1'-O4'-C4'	8.91	117.03	109.90
33	L1	1952	U	O4'-C1'-N1	8.91	115.33	108.20
33	L1	2073	U	O4'-C1'-N1	8.91	115.33	108.20
33	L1	2950	C	O4'-C1'-N1	8.91	115.33	108.20
33	L1	3331	G	C3'-C2'-C1'	-8.91	94.37	101.50
32	S1	152	G	P-O5'-C5'	8.91	135.15	120.90
32	S1	1661	C	O4'-C1'-N1	8.91	115.33	108.20
59	Lo	37	TYR	CB-CG-CD2	-8.91	115.66	121.00
33	L1	3128	A	C1'-O4'-C4'	-8.90	102.78	109.90
32	S1	1730	G	O4'-C1'-N9	8.90	115.32	108.20
33	L1	3173	A	P-O3'-C3'	8.90	130.38	119.70
11	SM	94	ARG	N-CA-CB	8.90	126.61	110.60
33	L1	3036	C	N1-C1'-C2'	8.90	125.57	114.00
32	S1	902	C	O4'-C1'-C2'	-8.90	96.90	105.80
32	S1	917	U	C5'-C4'-C3'	-8.90	101.77	116.00
33	L1	2278	G	C2'-C3'-O3'	8.90	129.07	109.50
32	S1	685	U	O4'-C1'-N1	8.89	115.31	108.20
33	L1	268	U	C5'-C4'-C3'	8.89	130.23	116.00
34	L3	13	A	P-O5'-C5'	-8.89	106.67	120.90
33	L1	745	G	O4'-C1'-N9	8.89	115.31	108.20
33	L1	2300	G	P-O5'-C5'	8.89	135.13	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	154	A	N9-C1'-C2'	-8.89	102.22	112.00
32	S1	1138	A	O4'-C1'-C2'	-8.89	96.91	105.80
74	LJ	126	MET	CG-SD-CE	-8.89	85.97	100.20
33	L1	543	C	C1'-O4'-C4'	-8.89	102.79	109.90
33	L1	1732	G	C1'-O4'-C4'	-8.89	102.79	109.90
33	L1	590	C	P-O5'-C5'	8.88	135.11	120.90
32	S1	1797	C	C3'-C2'-C1'	8.88	108.60	101.50
33	L1	127	G	C1'-O4'-C4'	-8.88	102.80	109.90
33	L1	1517	C	C3'-C2'-C1'	8.88	108.61	101.50
33	L1	2230	C	C3'-C2'-C1'	-8.88	94.39	101.50
34	L3	117	U	C5'-C4'-C3'	8.88	130.21	116.00
31	S2	70	G	C1'-O4'-C4'	-8.88	102.80	109.90
33	L1	24	C	C4'-C3'-C2'	-8.88	93.72	102.60
32	S1	1090	G	O4'-C1'-N9	8.88	115.30	108.20
32	S1	1468	G	N9-C1'-C2'	-8.88	102.23	112.00
33	L1	2665	A	O4'-C1'-N9	-8.88	101.10	108.20
34	L3	85	G	O4'-C1'-N9	8.88	115.30	108.20
32	S1	137	A	OP1-P-OP2	-8.88	106.29	119.60
33	L1	1496	G	N9-C1'-C2'	-8.88	102.24	112.00
33	L1	2748	G	C1'-O4'-C4'	8.88	117.00	109.90
35	L2	46	G	C5'-C4'-C3'	-8.87	101.80	116.00
33	L1	809	A	N9-C1'-C2'	-8.87	102.24	112.00
32	S1	119	U	N1-C1'-C2'	8.87	125.53	114.00
33	L1	511	C	O4'-C1'-N1	8.87	115.30	108.20
33	L1	722	C	P-O5'-C5'	8.87	135.09	120.90
35	L2	34	C	N1-C1'-C2'	-8.87	102.24	112.00
43	LO	42	ARG	NE-CZ-NH1	8.87	124.74	120.30
33	L1	2518	A	O4'-C4'-C3'	-8.87	95.13	104.00
33	L1	2658	U	O4'-C1'-N1	8.87	115.30	108.20
33	L1	2184	U	O4'-C1'-N1	8.87	115.30	108.20
33	L1	3353	G	C5'-C4'-O4'	8.87	119.74	109.10
13	SQ	66	VAL	N-CA-C	8.87	134.94	111.00
32	S1	947	G	O4'-C1'-C2'	8.87	115.58	107.60
33	L1	1134	G	C2'-C3'-O3'	8.87	129.00	109.50
33	L1	2302	G	C3'-C2'-C1'	8.87	108.59	101.50
34	L3	98	G	O4'-C1'-N9	8.87	115.29	108.20
33	L1	141	C	C1'-O4'-C4'	-8.86	102.81	109.90
38	LE	2	SER	C-N-CA	8.86	143.85	121.70
32	S1	344	U	O4'-C1'-N1	8.86	115.29	108.20
33	L1	209	G	C1'-O4'-C4'	-8.86	102.81	109.90
33	L1	2390	G	O4'-C1'-C2'	8.86	115.57	107.60
33	L1	2803	A	O4'-C1'-N9	8.86	115.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
67	LS	120	PHE	N-CA-CB	8.86	126.55	110.60
31	S2	6	G	C1'-O4'-C4'	-8.86	102.81	109.90
32	S1	1226	U	C4'-C3'-C2'	-8.86	93.74	102.60
33	L1	72	A	P-O3'-C3'	8.86	130.33	119.70
33	L1	507	C	O4'-C1'-N1	-8.86	101.11	108.20
33	L1	3296	C	C3'-C2'-C1'	-8.86	94.42	101.50
35	L2	40	G	C3'-C2'-C1'	-8.86	94.42	101.50
32	S1	1317	A	N9-C1'-C2'	-8.85	102.26	112.00
33	L1	1057	A	C1'-O4'-C4'	8.85	116.98	109.90
32	S1	963	U	O4'-C1'-N1	8.85	115.28	108.20
32	S1	1027	C	C3'-C2'-C1'	8.85	108.58	101.50
33	L1	2771	U	N1-C1'-C2'	-8.85	102.26	112.00
33	L1	3249	G	O4'-C1'-N9	8.85	115.28	108.20
32	S1	364	A	C5'-C4'-C3'	8.85	130.16	116.00
32	S1	1199	C	C3'-C2'-C1'	8.85	108.58	101.50
33	L1	1957	G	O4'-C1'-N9	8.85	115.28	108.20
33	L1	2204	U	C5'-C4'-O4'	-8.85	98.48	109.10
33	L1	3307	A	C3'-C2'-C1'	8.85	108.58	101.50
33	L1	693	C	C3'-C2'-C1'	8.85	108.58	101.50
35	L2	29	G	C3'-C2'-C1'	-8.85	94.42	101.50
32	S1	513	G	N9-C1'-C2'	8.84	125.50	114.00
33	L1	1843	A	P-O3'-C3'	8.84	130.31	119.70
33	L1	2807	G	O4'-C1'-C2'	8.84	115.56	107.60
33	L1	2941	G	O4'-C1'-C2'	8.84	115.56	107.60
51	LY	125	ARG	NH1-CZ-NH2	-8.84	109.67	119.40
32	S1	1116	G	N9-C1'-C2'	8.84	125.49	114.00
32	S1	452	C	O4'-C1'-N1	8.84	115.27	108.20
1	Sa	251	ASP	CB-CA-C	-8.84	92.72	110.40
32	S1	550	U	O4'-C1'-N1	8.84	115.27	108.20
33	L1	1280	U	O4'-C1'-N1	8.84	115.27	108.20
30	S3	12	A	OP1-P-OP2	-8.84	106.35	119.60
33	L1	1504	U	N1-C1'-C2'	8.83	125.48	114.00
33	L1	2437	A	N9-C1'-C2'	8.83	125.48	114.00
3	SB	34	TYR	CB-CG-CD1	-8.83	115.70	121.00
23	SU	78	PHE	CA-CB-CG	8.83	135.09	113.90
33	L1	1351	C	O4'-C1'-N1	8.83	115.27	108.20
33	L1	3295	G	O4'-C1'-C2'	8.83	115.55	107.60
32	S1	643	U	O4'-C1'-N1	8.83	115.26	108.20
33	L1	2783	U	O4'-C1'-C2'	-8.83	96.97	105.80
32	S1	377	G	C1'-O4'-C4'	-8.83	102.84	109.90
32	S1	1281	G	O4'-C1'-N9	8.83	115.26	108.20
33	L1	2109	G	P-O3'-C3'	8.83	130.29	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1382	C	O4'-C1'-N1	8.82	115.26	108.20
32	S1	1651	U	O4'-C1'-C2'	8.82	115.54	107.60
33	L1	1415	G	O4'-C1'-N9	8.82	115.26	108.20
33	L1	2809	U	P-O3'-C3'	-8.82	109.11	119.70
37	LB	252	ALA	C-N-CA	8.82	143.76	121.70
45	LQ	143	ARG	N-CA-CB	8.82	126.48	110.60
48	LV	83	ARG	NE-CZ-NH1	-8.82	115.89	120.30
33	L1	1574	C	C3'-C2'-C1'	8.82	108.56	101.50
32	S1	111	U	O4'-C1'-N1	8.82	115.25	108.20
33	L1	1532	A	O4'-C1'-N9	8.82	115.25	108.20
33	L1	689	G	C3'-C2'-C1'	-8.82	94.45	101.50
32	S1	1760	A	O4'-C1'-C2'	-8.82	96.98	105.80
33	L1	1949	G	C1'-O4'-C4'	8.82	116.95	109.90
25	SC	128	ARG	NE-CZ-NH2	8.81	124.71	120.30
25	SC	65	ASP	CB-CA-C	8.81	128.03	110.40
33	L1	649	A	O4'-C1'-N9	-8.81	101.15	108.20
33	L1	1215	U	N1-C1'-C2'	8.81	125.46	114.00
33	L1	1563	G	P-O3'-C3'	8.81	130.28	119.70
33	L1	1575	G	O3'-P-O5'	8.81	120.75	104.00
32	S1	597	U	O4'-C1'-N1	8.81	115.25	108.20
33	L1	3207	C	C1'-O4'-C4'	-8.81	102.85	109.90
35	L2	130	A	O4'-C1'-N9	8.81	115.25	108.20
31	S2	41	G	C3'-C2'-C1'	-8.81	94.45	101.50
33	L1	24	C	O4'-C1'-N1	8.81	115.25	108.20
33	L1	342	A	P-O3'-C3'	-8.81	109.13	119.70
33	L1	763	G	O4'-C1'-N9	-8.81	101.15	108.20
33	L1	1855	A	O4'-C1'-N9	8.81	115.25	108.20
33	L1	2789	G	C3'-C2'-C1'	-8.81	94.45	101.50
4	SD	205	PHE	CB-CG-CD2	8.81	126.97	120.80
7	SI	128	ARG	NE-CZ-NH2	-8.80	115.90	120.30
33	L1	969	U	C5'-C4'-C3'	-8.81	101.91	116.00
33	L1	1518	A	C3'-C2'-C1'	8.81	108.55	101.50
33	L1	1650	G	C3'-C2'-C1'	8.81	108.55	101.50
32	S1	14	C	C1'-O4'-C4'	-8.80	102.86	109.90
32	S1	1663	A	P-O5'-C5'	8.80	134.99	120.90
33	L1	13	G	C1'-O4'-C4'	-8.80	102.86	109.90
33	L1	1207	A	C1'-O4'-C4'	-8.80	102.86	109.90
33	L1	2177	U	O4'-C1'-N1	8.80	115.24	108.20
7	SI	32	ARG	N-CA-CB	8.80	126.44	110.60
32	S1	1665	U	N1-C1'-C2'	8.80	125.44	114.00
33	L1	1174	G	O4'-C1'-N9	8.80	115.24	108.20
33	L1	2839	A	O4'-C1'-N9	8.80	115.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3347	U	P-O5'-C5'	8.80	134.98	120.90
34	L3	86	G	O4'-C1'-N9	8.80	115.24	108.20
33	L1	723	G	C5'-C4'-C3'	8.80	130.08	116.00
33	L1	869	A	O4'-C1'-N9	8.80	115.24	108.20
42	LP	71	ARG	NE-CZ-NH1	8.80	124.70	120.30
33	L1	2708	A	P-O3'-C3'	8.80	130.26	119.70
33	L1	3049	A	C3'-C2'-C1'	8.80	108.54	101.50
33	L1	312	U	C1'-O4'-C4'	-8.79	102.86	109.90
33	L1	1242	U	C3'-C2'-C1'	-8.79	94.47	101.50
84	LI	109	ASP	CB-CG-OD2	-8.79	110.39	118.30
1	Sa	215	SER	N-CA-CB	8.79	123.69	110.50
32	S1	1452	A	OP1-P-OP2	-8.79	106.41	119.60
33	L1	1651	A	O4'-C1'-N9	-8.79	101.17	108.20
60	Lr	87	ARG	NE-CZ-NH1	8.79	124.70	120.30
6	SF	144	ASN	CB-CA-C	-8.79	92.83	110.40
27	SH	78	ARG	CA-C-N	8.79	136.53	117.20
33	L1	842	C	C3'-C2'-C1'	8.79	108.53	101.50
33	L1	3090	C	N1-C1'-C2'	8.79	125.42	114.00
33	L1	231	C	C3'-C2'-C1'	8.79	108.53	101.50
69	La	27	ARG	NE-CZ-NH2	-8.79	115.91	120.30
23	SU	70	PHE	N-CA-C	-8.78	87.29	111.00
32	S1	871	G	OP1-P-OP2	-8.78	106.43	119.60
33	L1	975	G	N9-C1'-C2'	-8.78	102.34	112.00
33	L1	2744	C	N1-C1'-C2'	8.78	125.42	114.00
33	L1	3096	U	P-O5'-C5'	8.78	134.95	120.90
2	SA	45	ARG	N-CA-C	8.78	134.71	111.00
3	SB	148	LYS	O-C-N	-8.78	108.65	122.70
25	SC	164	SER	O-C-N	-8.78	104.42	121.10
33	L1	2590	C	C3'-C2'-C1'	8.78	108.52	101.50
32	S1	926	G	O4'-C1'-N9	8.78	115.22	108.20
32	S1	1797	C	N1-C1'-C2'	8.78	125.41	114.00
33	L1	3216	G	N9-C1'-C2'	-8.78	102.34	112.00
41	LM	68	GLY	CA-C-O	-8.78	104.80	120.60
32	S1	1464	G	OP1-P-OP2	-8.78	106.44	119.60
32	S1	189	U	P-O3'-C3'	8.78	130.23	119.70
33	L1	671	C	C1'-O4'-C4'	-8.78	102.88	109.90
33	L1	1312	A	P-O3'-C3'	8.78	130.23	119.70
33	L1	3122	U	C1'-O4'-C4'	-8.78	102.88	109.90
32	S1	1483	G	O4'-C1'-C2'	8.77	115.50	107.60
33	L1	357	C	O4'-C1'-N1	8.77	115.22	108.20
32	S1	118	U	O4'-C1'-N1	8.77	115.22	108.20
33	L1	3168	C	O4'-C1'-C2'	-8.77	97.03	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	Lm	1	MET	CG-SD-CE	-8.77	86.16	100.20
83	Lm	7	LYS	N-CA-CB	8.77	126.39	110.60
33	L1	1350	G	N9-C1'-C2'	-8.77	102.35	112.00
23	SU	33	LEU	CB-CG-CD1	8.77	125.91	111.00
32	S1	1261	U	N1-C1'-C2'	-8.77	102.36	112.00
33	L1	988	G	O4'-C1'-N9	8.77	115.22	108.20
32	S1	38	C	C3'-C2'-C1'	8.77	108.51	101.50
32	S1	1004	U	OP2-P-O3'	8.77	124.48	105.20
33	L1	2113	A	P-O3'-C3'	8.77	130.22	119.70
40	LH	76	PHE	CB-CG-CD1	-8.77	114.66	120.80
32	S1	391	A	C1'-O4'-C4'	8.76	116.91	109.90
23	SU	25	ARG	N-CA-C	8.76	134.66	111.00
32	S1	1196	C	N1-C1'-C2'	8.76	125.39	114.00
33	L1	1066	G	O4'-C1'-N9	8.76	115.21	108.20
33	L1	1944	G	O4'-C1'-N9	8.76	115.21	108.20
33	L1	2106	U	C1'-O4'-C4'	-8.76	102.89	109.90
10	SL	120	LYS	CA-C-N	8.76	136.47	117.20
23	SU	24	SER	CA-C-N	-8.76	97.93	117.20
27	SH	120	ASN	CB-CA-C	8.76	127.92	110.40
32	S1	278	C	O4'-C1'-N1	8.76	115.21	108.20
32	S1	1183	G	C5'-C4'-C3'	8.76	130.02	116.00
32	S1	1517	C	O4'-C1'-C2'	-8.76	97.04	105.80
64	LG	62	SER	CB-CA-C	8.76	126.75	110.10
33	L1	3084	G	C3'-C2'-C1'	-8.76	94.49	101.50
35	L2	89	G	C1'-O4'-C4'	-8.76	102.89	109.90
27	SH	121	VAL	CG1-CB-CG2	-8.76	96.89	110.90
32	S1	1	U	OP1-P-OP2	-8.76	106.46	119.60
32	S1	1753	U	C5'-C4'-C3'	8.76	130.01	116.00
33	L1	3100	C	C1'-O4'-C4'	8.76	116.91	109.90
32	S1	1550	G	O4'-C1'-N9	8.76	115.20	108.20
33	L1	1664	G	C3'-C2'-C1'	8.76	108.50	101.50
34	L3	25	G	O5'-C5'-C4'	-8.76	95.06	111.70
32	S1	942	C	O4'-C1'-N1	8.75	115.20	108.20
32	S1	127	G	C3'-C2'-C1'	8.75	108.50	101.50
33	L1	3109	G	C3'-C2'-C1'	-8.75	94.50	101.50
33	L1	299	G	C1'-O4'-C4'	8.75	116.90	109.90
33	L1	2850	G	C1'-O4'-C4'	-8.75	102.90	109.90
33	L1	641	C	O4'-C4'-C3'	-8.75	95.25	104.00
33	L1	2134	U	P-O3'-C3'	8.75	130.20	119.70
33	L1	2176	A	O4'-C1'-C2'	-8.75	97.05	105.80
32	S1	220	C	P-O5'-C5'	8.75	134.90	120.90
29	ST	15	ARG	NE-CZ-NH2	8.75	124.67	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	109	G	C1'-O4'-C4'	8.75	116.90	109.90
33	L1	771	G	O4'-C1'-N9	8.75	115.20	108.20
33	L1	627	G	N9-C1'-C2'	8.75	125.37	114.00
33	L1	3334	A	C4'-C3'-C2'	-8.75	93.85	102.60
4	SD	148	ARG	NE-CZ-NH2	-8.74	115.93	120.30
32	S1	1073	C	O4'-C1'-N1	8.74	115.19	108.20
33	L1	1853	C	O4'-C1'-N1	8.74	115.20	108.20
33	L1	1893	G	C3'-C2'-C1'	-8.74	94.50	101.50
33	L1	2951	U	O4'-C1'-N1	8.74	115.19	108.20
33	L1	3065	U	OP1-P-OP2	-8.74	106.48	119.60
32	S1	377	G	P-O5'-C5'	8.74	134.89	120.90
32	S1	1728	G	OP2-P-O3'	-8.74	85.97	105.20
33	L1	2469	C	C3'-C2'-C1'	8.74	108.49	101.50
23	SU	68	THR	C-N-CA	-8.74	99.85	121.70
33	L1	995	C	P-O5'-C5'	-8.74	106.92	120.90
46	LT	74	ARG	NE-CZ-NH2	-8.74	115.93	120.30
79	Ls	249	LYS	CB-CA-C	-8.74	92.92	110.40
82	LK	79	ARG	NE-CZ-NH1	8.74	124.67	120.30
25	SC	106	PHE	N-CA-CB	8.74	126.33	110.60
32	S1	113	A	O4'-C1'-N9	8.74	115.19	108.20
33	L1	1255	A	O4'-C1'-C2'	8.74	115.46	107.60
33	L1	3347	U	C3'-C2'-C1'	8.74	108.49	101.50
35	L2	40	G	C1'-O4'-C4'	-8.74	102.91	109.90
35	L2	58	A	P-O3'-C3'	8.74	130.18	119.70
33	L1	519	C	N1-C1'-C2'	8.73	125.36	114.00
1	Sa	234	ASP	CB-CG-OD2	-8.73	110.44	118.30
31	S2	18	G	O4'-C1'-C2'	8.73	115.46	107.60
32	S1	1677	U	O4'-C1'-N1	8.73	115.19	108.20
33	L1	1914	C	C3'-C2'-C1'	8.73	108.49	101.50
33	L1	2201	G	O4'-C1'-C2'	-8.73	97.07	105.80
33	L1	2772	A	C5'-C4'-C3'	-8.73	102.03	116.00
33	L1	3365	U	O4'-C1'-C2'	-8.73	97.06	105.80
35	L2	145	C	C1'-O4'-C4'	8.73	116.89	109.90
32	S1	970	U	O4'-C1'-N1	8.73	115.19	108.20
33	L1	1610	A	O4'-C1'-N9	8.73	115.18	108.20
32	S1	1155	G	O4'-C1'-C2'	8.73	115.46	107.60
33	L1	3288	A	P-O3'-C3'	-8.73	109.22	119.70
57	Ll	2	GLY	N-CA-C	8.73	134.92	113.10
31	S2	69	G	O4'-C1'-N9	8.73	115.18	108.20
33	L1	3002	U	C3'-C2'-C1'	-8.73	94.52	101.50
33	L1	684	C	C1'-O4'-C4'	8.72	116.88	109.90
33	L1	1754	C	O4'-C1'-C2'	-8.72	97.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1671	G	O4'-C1'-N9	8.72	115.18	108.20
33	L1	2729	C	OP1-P-OP2	-8.72	106.51	119.60
32	S1	1445	C	P-O3'-C3'	8.72	130.17	119.70
32	S1	1799	G	P-O3'-C3'	-8.72	109.23	119.70
33	L1	240	U	N1-C1'-C2'	8.72	125.34	114.00
60	Lr	61	LYS	CA-C-N	8.72	136.38	117.20
32	S1	1542	G	P-O5'-C5'	8.72	134.85	120.90
32	S1	1747	A	O4'-C1'-N9	8.72	115.17	108.20
33	L1	1776	G	O4'-C1'-C2'	8.72	115.45	107.60
33	L1	3355	U	O4'-C1'-C2'	-8.72	97.08	105.80
33	L1	381	G	N9-C1'-C2'	-8.72	102.41	112.00
33	L1	755	C	P-O5'-C5'	8.71	134.84	120.90
33	L1	2918	U	P-O3'-C3'	-8.71	109.24	119.70
71	Lj	8	ARG	CA-C-N	8.71	136.37	117.20
2	SA	43	TYR	CB-CG-CD1	8.71	126.23	121.00
33	L1	308	U	C5'-C4'-C3'	8.71	129.94	116.00
34	L3	56	G	P-O3'-C3'	-8.71	109.25	119.70
32	S1	188	U	O4'-C1'-N1	8.71	115.17	108.20
32	S1	871	G	O4'-C1'-N9	8.71	115.17	108.20
33	L1	1541	G	O4'-C1'-C2'	8.71	115.44	107.60
33	L1	1877	G	O4'-C1'-N9	8.71	115.17	108.20
33	L1	781	C	O4'-C1'-C2'	-8.71	97.09	105.80
33	L1	1011	U	O4'-C1'-N1	8.71	115.17	108.20
32	S1	962	G	O4'-C1'-N9	8.71	115.16	108.20
33	L1	2997	C	P-O3'-C3'	8.70	130.14	119.70
35	L2	127	G	O4'-C1'-N9	8.70	115.16	108.20
36	LA	12	ALA	CB-CA-C	8.70	123.15	110.10
32	S1	1283	C	O4'-C1'-N1	8.70	115.16	108.20
33	L1	644	U	O4'-C1'-N1	8.70	115.16	108.20
33	L1	1348	G	N9-C1'-C2'	8.70	125.31	114.00
11	SM	133	GLY	N-CA-C	8.70	134.84	113.10
31	S2	44	A	O4'-C1'-N9	8.70	115.16	108.20
32	S1	646	G	O4'-C1'-N9	8.70	115.16	108.20
32	S1	791	C	P-O3'-C3'	8.70	130.13	119.70
32	S1	919	G	C5'-C4'-C3'	8.70	129.91	116.00
33	L1	887	A	N9-C1'-C2'	-8.70	102.43	112.00
33	L1	3227	U	N1-C1'-C2'	-8.70	102.43	112.00
4	SD	167	ASN	C-N-CA	-8.69	99.97	121.70
32	S1	1169	G	N9-C1'-C2'	-8.70	102.44	112.00
31	S2	52	G	C1'-O4'-C4'	-8.69	102.95	109.90
33	L1	1673	A	O4'-C1'-C2'	8.69	115.42	107.60
32	S1	272	G	C1'-O4'-C4'	-8.69	102.95	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1117	G	C3'-C2'-C1'	-8.69	94.55	101.50
33	L1	23	A	P-O3'-C3'	-8.69	109.27	119.70
33	L1	521	G	OP1-P-O3'	-8.69	86.08	105.20
33	L1	2375	G	C3'-C2'-C1'	8.69	108.45	101.50
57	Ll	21	ARG	NE-CZ-NH1	-8.69	115.95	120.30
11	SM	92	ASP	CA-CB-CG	8.69	132.51	113.40
32	S1	904	G	C3'-C2'-C1'	8.69	108.45	101.50
33	L1	2544	C	C1'-O4'-C4'	-8.69	102.95	109.90
33	L1	232	C	N1-C1'-C2'	8.69	125.30	114.00
33	L1	3021	U	C5'-C4'-C3'	8.69	129.90	116.00
33	L1	3390	G	C3'-C2'-C1'	8.69	108.45	101.50
35	L2	136	G	O4'-C1'-C2'	-8.69	97.11	105.80
33	L1	328	G	O4'-C1'-N9	8.69	115.15	108.20
33	L1	1056	U	N1-C1'-C2'	8.69	125.29	114.00
33	L1	1559	G	P-O3'-C3'	8.69	130.12	119.70
69	La	29	PHE	CA-CB-CG	8.69	134.75	113.90
33	L1	2906	U	O4'-C1'-C2'	8.69	115.42	107.60
67	LS	165	LEU	CB-CA-C	8.68	126.70	110.20
33	L1	1237	G	C1'-O4'-C4'	-8.68	102.95	109.90
33	L1	2376	G	C1'-O4'-C4'	8.68	116.84	109.90
33	L1	1618	U	C1'-O4'-C4'	-8.68	102.96	109.90
74	LJ	14	PHE	CB-CG-CD2	8.68	126.88	120.80
78	Le	57	TYR	CB-CG-CD1	8.68	126.21	121.00
32	S1	1189	U	O4'-C1'-N1	8.68	115.14	108.20
33	L1	430	G	C3'-C2'-C1'	-8.68	94.56	101.50
33	L1	1700	U	O4'-C1'-N1	8.68	115.14	108.20
45	LQ	183	PHE	N-CA-CB	-8.68	94.98	110.60
25	SC	164	SER	CB-CA-C	-8.68	93.61	110.10
32	S1	300	U	N1-C1'-C2'	-8.68	102.46	112.00
33	L1	334	A	C1'-O4'-C4'	-8.68	102.96	109.90
33	L1	684	C	O4'-C1'-C2'	-8.68	97.12	105.80
81	LD	313	GLU	OE1-CD-OE2	-8.68	112.89	123.30
32	S1	1751	U	O4'-C1'-N1	8.67	115.14	108.20
33	L1	307	C	O3'-P-O5'	-8.67	87.52	104.00
33	L1	1638	U	N1-C1'-C2'	-8.67	102.46	112.00
33	L1	3215	U	N1-C1'-C2'	-8.67	102.46	112.00
74	LJ	58	ARG	NE-CZ-NH2	-8.67	115.96	120.30
10	SL	116	GLY	CA-C-N	-8.67	98.12	117.20
32	S1	505	U	P-O3'-C3'	8.67	130.10	119.70
33	L1	69	U	P-O3'-C3'	8.67	130.10	119.70
33	L1	1344	A	O4'-C1'-C2'	-8.67	97.13	105.80
32	S1	1662	G	O4'-C1'-N9	8.67	115.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1483	G	O4'-C1'-N9	8.67	115.14	108.20
33	L1	1675	G	C1'-O4'-C4'	8.67	116.83	109.90
35	L2	24	U	C1'-O4'-C4'	-8.67	102.97	109.90
33	L1	1066	G	C3'-C2'-C1'	-8.67	94.56	101.50
33	L1	1425	G	O4'-C1'-N9	8.67	115.14	108.20
33	L1	101	C	P-O3'-C3'	8.67	130.10	119.70
36	LA	83	TYR	CA-CB-CG	-8.67	96.93	113.40
80	LC	116	ARG	NE-CZ-NH1	-8.67	115.97	120.30
32	S1	161	G	C3'-C2'-C1'	8.66	108.43	101.50
32	S1	1084	U	O4'-C1'-C2'	-8.66	97.14	105.80
32	S1	416	A	N9-C1'-C2'	-8.66	102.47	112.00
33	L1	159	G	P-O5'-C5'	-8.66	107.04	120.90
33	L1	1254	A	C1'-O4'-C4'	8.66	116.83	109.90
33	L1	1131	U	O4'-C1'-N1	-8.66	101.27	108.20
33	L1	2595	G	C3'-C2'-C1'	8.66	108.43	101.50
33	L1	2792	A	O4'-C1'-C2'	8.66	115.40	107.60
31	S2	45	G	O4'-C1'-C2'	-8.66	97.14	105.80
33	L1	8	C	O4'-C1'-N1	8.66	115.13	108.20
1	Sa	16	ALA	CA-C-N	-8.66	98.16	117.20
32	S1	150	U	N1-C1'-C2'	-8.66	102.48	112.00
34	L3	9	U	O4'-C1'-N1	8.66	115.13	108.20
70	Li	110	GLN	CA-C-N	8.66	136.25	117.20
33	L1	798	G	O4'-C1'-N9	8.65	115.12	108.20
33	L1	1508	C	P-O3'-C3'	8.65	130.09	119.70
10	SL	120	LYS	C-N-CA	8.65	143.33	121.70
32	S1	195	A	P-O3'-C3'	8.65	130.08	119.70
33	L1	527	G	O4'-C1'-C2'	-8.65	97.15	105.80
45	LQ	199	ILE	N-CA-CB	8.65	130.70	110.80
2	SA	200	ASP	N-CA-C	8.65	134.36	111.00
33	L1	2796	G	O4'-C1'-N9	8.65	115.12	108.20
32	S1	148	C	P-O5'-C5'	8.65	134.74	120.90
33	L1	381	G	O4'-C1'-C2'	-8.65	97.15	105.80
33	L1	2392	G	O4'-C1'-N9	8.65	115.12	108.20
34	L3	119	C	P-O3'-C3'	8.65	130.08	119.70
80	LC	351	SER	N-CA-CB	8.65	123.47	110.50
83	Lm	14	TYR	CB-CG-CD2	-8.65	115.81	121.00
31	S2	6	G	O4'-C1'-C2'	8.65	115.38	107.60
33	L1	249	A	O4'-C1'-N9	8.65	115.12	108.20
33	L1	406	A	P-O3'-C3'	8.65	130.08	119.70
33	L1	1449	A	C3'-C2'-C1'	8.65	108.42	101.50
33	L1	1565	G	C5'-C4'-C3'	-8.65	102.16	116.00
25	SC	163	THR	CB-CA-C	-8.65	88.26	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	S2	27	G	O4'-C1'-N9	8.65	115.12	108.20
33	L1	2166	U	C1'-O4'-C4'	-8.65	102.98	109.90
33	L1	2690	G	P-O3'-C3'	8.65	130.08	119.70
33	L1	2093	G	O4'-C1'-C2'	8.64	115.38	107.60
28	SN	22	ARG	N-CA-CB	-8.64	95.05	110.60
31	S2	32	U	O4'-C1'-N1	8.64	115.11	108.20
32	S1	164	C	N1-C1'-C2'	8.64	125.23	114.00
32	S1	614	G	O4'-C1'-C2'	8.64	115.38	107.60
32	S1	208	U	P-O3'-C3'	8.64	130.07	119.70
33	L1	2230	C	P-O3'-C3'	-8.64	109.33	119.70
33	L1	2230	C	C1'-O4'-C4'	-8.64	102.99	109.90
27	SH	121	VAL	CA-CB-CG1	8.64	123.86	110.90
32	S1	484	A	C1'-O4'-C4'	-8.64	102.99	109.90
33	L1	607	U	C3'-C2'-C1'	-8.64	94.59	101.50
33	L1	1608	C	C3'-C2'-C1'	8.64	108.41	101.50
33	L1	2619	C	C3'-C2'-C1'	8.64	108.41	101.50
39	LF	36	ARG	NH1-CZ-NH2	-8.64	109.90	119.40
33	L1	87	A	O4'-C1'-N9	8.64	115.11	108.20
33	L1	1060	U	C5'-C4'-O4'	8.63	119.46	109.10
33	L1	3042	U	C1'-O4'-C4'	8.64	116.81	109.90
33	L1	1083	C	N1-C1'-C2'	-8.63	102.50	112.00
33	L1	1239	U	N1-C1'-C2'	8.63	125.23	114.00
67	LS	28	ARG	CB-CA-C	-8.63	93.13	110.40
32	S1	1418	G	O4'-C1'-N9	8.63	115.11	108.20
33	L1	1	G	OP1-P-OP2	-8.63	106.65	119.60
33	L1	2569	G	C3'-C2'-C1'	-8.63	94.59	101.50
33	L1	3306	A	C4'-C3'-C2'	-8.63	93.97	102.60
37	LB	87	PHE	CB-CG-CD2	-8.63	114.76	120.80
33	L1	2441	G	C3'-C2'-C1'	-8.63	94.60	101.50
3	SB	44	MET	CG-SD-CE	-8.63	86.40	100.20
33	L1	1527	A	O4'-C1'-C2'	-8.63	97.17	105.80
33	L1	257	C	N1-C1'-C2'	8.62	125.21	114.00
33	L1	545	C	N1-C1'-C2'	8.62	125.21	114.00
33	L1	1785	G	C1'-O4'-C4'	-8.62	103.00	109.90
33	L1	2931	C	O4'-C1'-N1	8.63	115.10	108.20
47	LU	155	ASP	N-CA-CB	-8.62	95.08	110.60
33	L1	767	U	O4'-C1'-N1	8.62	115.10	108.20
33	L1	1948	G	P-O3'-C3'	8.62	130.05	119.70
66	LN	48	ILE	CB-CA-C	8.62	128.85	111.60
69	La	22	LYS	CB-CA-C	8.62	127.64	110.40
32	S1	119	U	O4'-C1'-N1	8.62	115.09	108.20
32	S1	501	U	O3'-P-O5'	-8.62	87.62	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	338	C	C1'-O4'-C4'	-8.62	103.00	109.90
33	L1	1651	A	N9-C1'-C2'	8.62	125.20	114.00
32	S1	947	G	O4'-C1'-N9	8.61	115.09	108.20
32	S1	1067	A	C3'-C2'-C1'	8.62	108.39	101.50
33	L1	1253	G	C3'-C2'-C1'	-8.62	94.61	101.50
33	L1	1775	C	P-O3'-C3'	-8.61	109.36	119.70
33	L1	2684	U	C1'-O4'-C4'	-8.61	103.01	109.90
33	L1	2846	C	C3'-C2'-C1'	8.61	108.39	101.50
35	L2	159	U	O4'-C1'-N1	8.61	115.09	108.20
3	SB	31	GLU	N-CA-CB	8.61	126.10	110.60
33	L1	855	U	O4'-C1'-N1	8.61	115.09	108.20
32	S1	512	U	O3'-P-O5'	-8.61	87.64	104.00
40	LH	130	TYR	CB-CG-CD1	-8.61	115.83	121.00
64	LG	26	TRP	CA-C-N	8.61	136.14	117.20
33	L1	14	U	O4'-C1'-N1	8.61	115.08	108.20
33	L1	1211	G	C1'-O4'-C4'	8.61	116.79	109.90
33	L1	785	U	P-O5'-C5'	8.61	134.67	120.90
33	L1	2117	G	O4'-C1'-N9	8.60	115.08	108.20
35	L2	145	C	O4'-C1'-C2'	-8.60	97.20	105.80
32	S1	371	A	N9-C1'-C2'	-8.60	102.54	112.00
32	S1	1714	G	C3'-C2'-C1'	-8.60	94.62	101.50
35	L2	65	A	C4'-C3'-C2'	8.60	111.20	102.60
32	S1	623	A	C3'-C2'-C1'	8.60	108.38	101.50
64	LG	87	ARG	NE-CZ-NH1	8.60	124.60	120.30
32	S1	1438	U	P-O3'-C3'	8.60	130.02	119.70
33	L1	316	A	O4'-C1'-N9	8.60	115.08	108.20
33	L1	601	G	C1'-O4'-C4'	-8.60	103.02	109.90
42	LP	62	TYR	CB-CG-CD2	-8.60	115.84	121.00
81	LD	336	TYR	CB-CG-CD1	8.60	126.16	121.00
33	L1	2772	A	C1'-O4'-C4'	-8.60	103.02	109.90
32	S1	301	U	N1-C1'-C2'	8.60	125.17	114.00
32	S1	1201	C	O4'-C1'-C2'	-8.60	97.20	105.80
33	L1	238	C	O4'-C1'-C2'	-8.60	97.20	105.80
33	L1	1260	G	N9-C1'-C2'	8.60	125.18	114.00
33	L1	2579	G	O4'-C1'-C2'	8.60	115.34	107.60
81	LD	150	THR	C-N-CA	8.60	143.19	121.70
32	S1	1608	A	C1'-O4'-C4'	8.60	116.78	109.90
33	L1	1699	C	N1-C1'-C2'	8.60	125.17	114.00
33	L1	2375	G	O4'-C1'-C2'	-8.60	97.20	105.80
1	Sa	66	SER	N-CA-CB	-8.59	97.61	110.50
32	S1	1037	G	N9-C1'-C2'	8.59	125.17	114.00
33	L1	310	C	C3'-C2'-C1'	8.59	108.38	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	869	A	C1'-O4'-C4'	-8.59	103.03	109.90
33	L1	2562	A	C1'-O4'-C4'	8.59	116.77	109.90
71	Lj	1	MET	CA-C-N	-8.59	98.30	117.20
32	S1	289	G	C1'-O4'-C4'	-8.59	103.03	109.90
32	S1	1425	G	N9-C1'-C2'	8.59	125.17	114.00
32	S1	1632	C	N1-C1'-C2'	8.59	125.16	114.00
33	L1	2162	C	C3'-C2'-C1'	8.59	108.37	101.50
33	L1	2530	G	C1'-O4'-C4'	-8.59	103.03	109.90
33	L1	3187	C	P-O3'-C3'	8.59	130.00	119.70
32	S1	358	C	C3'-C2'-C1'	8.58	108.37	101.50
33	L1	3016	C	C4'-C3'-C2'	-8.58	94.02	102.60
34	L3	3	A	O4'-C1'-N9	-8.58	101.33	108.20
32	S1	18	C	C3'-C2'-C1'	8.58	108.36	101.50
33	L1	1882	A	O4'-C1'-N9	8.58	115.06	108.20
66	LN	104	ASP	N-CA-CB	-8.58	95.15	110.60
33	L1	857	G	O3'-P-O5'	-8.58	87.70	104.00
34	L3	81	G	O4'-C1'-N9	8.58	115.06	108.20
64	LG	186	ALA	N-CA-CB	8.58	122.11	110.10
32	S1	1622	A	O4'-C1'-N9	8.58	115.06	108.20
33	L1	1099	G	P-O3'-C3'	8.58	129.99	119.70
33	L1	2707	A	O4'-C1'-C2'	8.58	115.32	107.60
9	SK	134	VAL	N-CA-C	-8.57	87.85	111.00
32	S1	1201	C	C5'-C4'-O4'	8.57	119.39	109.10
33	L1	734	C	C3'-C2'-C1'	8.57	108.36	101.50
34	L3	14	C	O4'-C1'-N1	8.57	115.06	108.20
80	LC	160	VAL	CA-CB-CG1	8.57	123.76	110.90
31	S2	13	U	N1-C1'-C2'	-8.57	102.57	112.00
32	S1	128	G	N9-C1'-C2'	-8.57	102.57	112.00
32	S1	692	C	C3'-C2'-C1'	8.57	108.36	101.50
33	L1	2441	G	N9-C1'-C2'	-8.57	102.57	112.00
33	L1	2613	G	C1'-O4'-C4'	8.57	116.76	109.90
33	L1	2955	U	C5'-C4'-O4'	8.57	119.39	109.10
33	L1	2992	G	C3'-C2'-C1'	-8.57	94.64	101.50
35	L2	49	C	N1-C1'-C2'	8.57	125.14	114.00
46	LT	136	ARG	CA-C-N	8.57	136.06	117.20
33	L1	1707	C	C3'-C2'-C1'	-8.57	94.64	101.50
33	L1	3333	C	N1-C1'-C2'	8.57	125.14	114.00
38	LE	126	GLY	CA-C-N	-8.57	98.34	117.20
49	LX	52	ARG	NE-CZ-NH1	-8.57	116.02	120.30
33	L1	971	G	C5'-C4'-C3'	8.57	129.71	116.00
35	L2	66	C	C1'-O4'-C4'	-8.57	103.05	109.90
49	LX	34	LYS	N-CA-C	8.57	134.13	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	56	G	N9-C1'-C2'	8.56	125.13	114.00
33	L1	73	A	C1'-O4'-C4'	8.56	116.75	109.90
33	L1	918	A	C1'-O4'-C4'	-8.56	103.05	109.90
32	S1	1506	G	OP1-P-O3'	8.56	124.03	105.20
33	L1	228	C	O4'-C1'-N1	8.56	115.05	108.20
51	LY	120	ARG	NE-CZ-NH1	8.56	124.58	120.30
33	L1	1976	U	O4'-C1'-N1	8.56	115.05	108.20
33	L1	2438	A	C1'-O4'-C4'	-8.56	103.05	109.90
33	L1	2351	A	O4'-C1'-N9	8.56	115.05	108.20
35	L2	67	C	N1-C1'-C2'	8.56	125.13	114.00
32	S1	1698	A	O4'-C1'-C2'	-8.56	97.24	105.80
32	S1	1353	G	C3'-C2'-C1'	8.55	108.34	101.50
32	S1	1455	U	O4'-C1'-N1	8.55	115.04	108.20
33	L1	2197	C	O4'-C1'-N1	8.55	115.04	108.20
33	L1	2740	C	N1-C1'-C2'	8.55	125.12	114.00
33	L1	584	G	C1'-O4'-C4'	8.55	116.74	109.90
33	L1	1298	A	C1'-O4'-C4'	8.55	116.74	109.90
50	LZ	54	THR	CA-CB-CG2	-8.55	100.43	112.40
78	Le	57	TYR	CB-CG-CD2	-8.55	115.87	121.00
13	SQ	81	ARG	CB-CA-C	8.55	127.50	110.40
32	S1	872	G	O4'-C1'-N9	8.55	115.04	108.20
33	L1	304	A	O4'-C1'-C2'	8.55	115.29	107.60
33	L1	328	G	O5'-C5'-C4'	8.55	127.94	111.70
33	L1	1537	A	C3'-C2'-C1'	8.55	108.34	101.50
52	Lb	116	LEU	CB-CG-CD2	8.55	125.53	111.00
69	La	45	GLY	N-CA-C	-8.55	91.73	113.10
23	SU	96	ARG	NE-CZ-NH2	-8.55	116.03	120.30
33	L1	38	A	O4'-C1'-N9	8.55	115.04	108.20
33	L1	484	C	C3'-C2'-C1'	8.54	108.33	101.50
33	L1	1905	A	O4'-C1'-C2'	-8.54	97.26	105.80
33	L1	3352	C	O4'-C1'-C2'	-8.54	97.25	105.80
32	S1	1303	G	O4'-C1'-C2'	-8.54	97.26	105.80
33	L1	555	G	OP2-P-O3'	-8.54	86.41	105.20
33	L1	2260	C	P-O3'-C3'	8.54	129.95	119.70
17	SV	34	LYS	CB-CA-C	8.54	127.48	110.40
33	L1	2159	U	O4'-C1'-C2'	-8.54	97.26	105.80
37	LB	174	ARG	NE-CZ-NH1	8.54	124.57	120.30
48	LV	25	HIS	CA-CB-CG	8.54	128.12	113.60
15	SS	5	THR	N-CA-C	8.54	134.05	111.00
33	L1	1277	A	O4'-C1'-N9	8.54	115.03	108.20
48	LV	155	GLU	CA-CB-CG	8.54	132.18	113.40
32	S1	114	U	N1-C1'-C2'	-8.54	102.61	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1456	U	C4'-C3'-C2'	-8.54	94.06	102.60
33	L1	1271	U	O4'-C4'-C3'	-8.54	95.46	104.00
33	L1	2743	A	C3'-C2'-C1'	-8.54	94.67	101.50
78	Le	11	PRO	N-CA-CB	8.54	113.54	103.30
28	SN	38	CYS	N-CA-CB	8.53	125.96	110.60
33	L1	1311	G	N9-C1'-C2'	-8.53	102.62	112.00
33	L1	1695	C	O4'-C1'-N1	8.53	115.03	108.20
33	L1	1081	U	P-O3'-C3'	-8.53	109.47	119.70
33	L1	3001	G	N9-C1'-C2'	8.53	125.09	114.00
34	L3	118	C	O5'-P-OP2	-8.53	98.02	105.70
34	L3	91	C	O4'-C1'-N1	8.53	115.02	108.20
32	S1	1610	C	O4'-C1'-C2'	-8.53	97.27	105.80
32	S1	1006	A	C3'-C2'-C1'	8.53	108.32	101.50
32	S1	1609	G	P-O3'-C3'	8.53	129.93	119.70
33	L1	532	G	C3'-C2'-C1'	-8.53	94.68	101.50
33	L1	766	C	N1-C1'-C2'	8.53	125.08	114.00
33	L1	814	U	C1'-O4'-C4'	-8.53	103.08	109.90
45	LQ	19	ARG	O-C-N	-8.53	109.06	122.70
15	SS	11	ASP	N-CA-C	8.52	134.01	111.00
33	L1	1662	G	C3'-C2'-C1'	-8.52	94.68	101.50
33	L1	3279	G	P-O3'-C3'	8.52	129.93	119.70
10	SL	3	LYS	O-C-N	-8.52	109.06	122.70
32	S1	1038	C	O4'-C1'-C2'	-8.52	97.28	105.80
17	SV	69	ARG	NH1-CZ-NH2	-8.52	110.03	119.40
32	S1	124	G	C1'-O4'-C4'	-8.52	103.08	109.90
32	S1	1597	C	O4'-C1'-C2'	-8.52	97.28	105.80
32	S1	1645	C	P-O3'-C3'	8.52	129.93	119.70
33	L1	856	G	C1'-O4'-C4'	-8.52	103.08	109.90
33	L1	910	G	P-O3'-C3'	8.52	129.93	119.70
33	L1	1082	U	OP1-P-OP2	-8.52	106.82	119.60
33	L1	1341	G	O4'-C1'-N9	8.52	115.02	108.20
37	LB	196	TRP	CB-CA-C	8.52	127.44	110.40
33	L1	1197	A	N9-C1'-C2'	8.52	125.07	114.00
67	LS	83	TYR	N-CA-CB	8.52	125.93	110.60
7	SI	76	ARG	NE-CZ-NH1	8.51	124.56	120.30
34	L3	29	C	O4'-C1'-N1	8.51	115.01	108.20
32	S1	426	G	O4'-C1'-N9	8.51	115.01	108.20
33	L1	579	G	P-O3'-C3'	-8.51	109.48	119.70
33	L1	1240	G	N9-C1'-C2'	8.51	125.07	114.00
33	L1	1316	C	P-O3'-C3'	-8.51	109.48	119.70
33	L1	2064	C	O4'-C1'-N1	-8.51	101.39	108.20
33	L1	2900	G	N9-C1'-C2'	8.51	125.07	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3016	C	O4'-C1'-C2'	-8.51	97.29	105.80
33	L1	1105	G	O4'-C1'-N9	8.51	115.01	108.20
33	L1	2370	G	O4'-C1'-N9	8.51	115.01	108.20
33	L1	1871	G	C3'-C2'-C1'	-8.51	94.69	101.50
33	L1	2468	G	C3'-C2'-C1'	-8.51	94.69	101.50
33	L1	3157	C	C3'-C2'-C1'	8.51	108.31	101.50
33	L1	431	G	C1'-O4'-C4'	-8.51	103.09	109.90
33	L1	2755	U	O4'-C1'-N1	-8.51	101.39	108.20
33	L1	718	C	C1'-O4'-C4'	-8.51	103.09	109.90
33	L1	1715	C	C5'-C4'-O4'	8.51	119.31	109.10
33	L1	2481	C	P-O3'-C3'	8.51	129.91	119.70
70	Li	9	LYS	CB-CA-C	8.51	127.41	110.40
32	S1	1120	U	O4'-C1'-N1	8.50	115.00	108.20
33	L1	1467	G	P-O3'-C3'	8.50	129.91	119.70
57	Ll	45	ARG	NE-CZ-NH2	-8.50	116.05	120.30
33	L1	2176	A	C1'-O4'-C4'	8.50	116.70	109.90
32	S1	1539	A	O4'-C1'-C2'	-8.50	97.30	105.80
32	S1	1628	C	C3'-C2'-C1'	8.50	108.30	101.50
33	L1	492	G	N9-C1'-C2'	-8.50	102.65	112.00
33	L1	928	A	C1'-O4'-C4'	-8.50	103.10	109.90
33	L1	2797	U	O4'-C1'-N1	8.50	115.00	108.20
32	S1	1399	G	O4'-C1'-N9	8.50	115.00	108.20
32	S1	1464	G	C1'-O4'-C4'	-8.50	103.10	109.90
32	S1	1619	A	O4'-C1'-N9	8.50	115.00	108.20
33	L1	1005	C	C1'-O4'-C4'	8.50	116.70	109.90
33	L1	2725	U	N1-C1'-C2'	8.50	125.05	114.00
33	L1	2784	U	C1'-O4'-C4'	-8.50	103.10	109.90
33	L1	2927	C	C3'-C2'-C1'	8.50	108.30	101.50
15	SS	11	ASP	CB-CG-OD2	-8.49	110.66	118.30
32	S1	968	A	O4'-C1'-N9	8.49	115.00	108.20
32	S1	1133	C	O4'-C1'-N1	8.49	115.00	108.20
32	S1	1123	G	C3'-C2'-C1'	-8.49	94.71	101.50
33	L1	639	A	O5'-C5'-C4'	8.49	127.83	111.70
33	L1	963	U	C1'-O4'-C4'	-8.49	103.11	109.90
69	La	25	ILE	N-CA-C	-8.49	88.07	111.00
33	L1	945	U	O4'-C1'-N1	8.49	114.99	108.20
33	L1	1894	G	O4'-C1'-C2'	-8.49	97.31	105.80
33	L1	3081	G	P-O3'-C3'	8.49	129.89	119.70
33	L1	1056	U	C3'-C2'-C1'	8.49	108.29	101.50
33	L1	1880	A	P-O5'-C5'	8.49	134.48	120.90
33	L1	2657	C	C1'-O4'-C4'	8.49	116.69	109.90
33	L1	3236	A	O4'-C1'-N9	-8.49	101.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	584	A	C3'-C2'-C1'	8.48	108.29	101.50
32	S1	611	G	N9-C1'-C2'	8.48	125.03	114.00
32	S1	1119	G	C4'-C3'-C2'	-8.48	94.12	102.60
32	S1	1361	G	O4'-C1'-C2'	8.48	115.24	107.60
33	L1	347	A	P-O5'-C5'	8.48	134.47	120.90
33	L1	1706	C	C3'-C2'-C1'	8.48	108.29	101.50
33	L1	2772	A	N9-C1'-C2'	8.48	125.03	114.00
33	L1	2784	U	O4'-C1'-C2'	8.48	115.23	107.60
48	LV	113	LEU	CB-CG-CD1	-8.48	96.58	111.00
33	L1	852	C	O4'-C1'-N1	8.48	114.98	108.20
33	L1	2501	U	O4'-C1'-N1	8.48	114.99	108.20
33	L1	2585	C	C1'-O4'-C4'	-8.48	103.12	109.90
32	S1	1186	U	O4'-C1'-N1	8.48	114.98	108.20
33	L1	30	C	N1-C1'-C2'	8.48	125.02	114.00
33	L1	1075	G	N9-C1'-C2'	8.48	125.02	114.00
33	L1	1078	U	O4'-C1'-C2'	-8.48	97.32	105.80
33	L1	2053	A	O3'-P-O5'	8.48	120.10	104.00
33	L1	2459	U	O4'-C1'-C2'	-8.48	97.32	105.80
33	L1	2562	A	C5'-C4'-C3'	8.48	129.56	116.00
34	L3	48	G	O3'-P-O5'	-8.48	87.89	104.00
32	S1	308	U	N1-C1'-C2'	8.47	125.02	114.00
5	SE	35	ARG	NE-CZ-NH1	-8.47	116.06	120.30
32	S1	1134	U	P-O3'-C3'	8.47	129.87	119.70
33	L1	260	U	O4'-C1'-N1	8.47	114.98	108.20
33	L1	2465	G	C3'-C2'-C1'	-8.47	94.72	101.50
33	L1	2882	U	C3'-C2'-C1'	-8.47	94.72	101.50
35	L2	135	G	P-O3'-C3'	8.47	129.87	119.70
32	S1	379	U	C3'-C2'-C1'	-8.47	94.72	101.50
32	S1	1250	C	C1'-O4'-C4'	-8.47	103.12	109.90
33	L1	1325	G	O4'-C1'-N9	8.47	114.98	108.20
33	L1	1409	G	C3'-C2'-C1'	-8.47	94.72	101.50
33	L1	2813	A	C1'-O4'-C4'	-8.47	103.12	109.90
15	SS	132	ARG	NE-CZ-NH2	8.47	124.53	120.30
16	SR	130	ILE	CB-CA-C	8.47	128.54	111.60
32	S1	1070	A	P-O5'-C5'	8.47	134.45	120.90
32	S1	196	G	O4'-C1'-N9	8.47	114.97	108.20
32	S1	221	U	O4'-C1'-N1	8.47	114.97	108.20
32	S1	263	C	P-O3'-C3'	-8.47	109.54	119.70
32	S1	1729	A	N9-C1'-C2'	8.47	125.01	114.00
48	LV	70	THR	N-CA-C	-8.47	88.13	111.00
66	LN	79	ASP	CB-CG-OD2	-8.47	110.68	118.30
49	LX	31	ARG	NE-CZ-NH2	-8.47	116.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	913	U	O4'-C1'-N1	8.46	114.97	108.20
34	L3	57	C	O4'-C1'-N1	8.46	114.97	108.20
33	L1	2070	C	O4'-C1'-C2'	-8.46	97.34	105.80
33	L1	2585	C	O4'-C1'-N1	-8.46	101.43	108.20
32	S1	161	G	C4'-C3'-C2'	-8.46	94.14	102.60
33	L1	846	A	O4'-C4'-C3'	-8.46	95.54	104.00
32	S1	1427	A	O4'-C1'-N9	8.46	114.97	108.20
34	L3	20	C	P-O5'-C5'	8.46	134.43	120.90
32	S1	955	C	N1-C1'-C2'	8.46	124.99	114.00
33	L1	498	G	OP1-P-O3'	8.46	123.80	105.20
3	SB	160	SER	O-C-N	8.45	137.57	123.20
32	S1	1168	A	P-O3'-C3'	8.46	129.85	119.70
32	S1	1349	A	C3'-C2'-C1'	8.46	108.26	101.50
33	L1	2109	G	C1'-O4'-C4'	-8.45	103.14	109.90
33	L1	2533	A	O4'-C1'-N9	8.45	114.96	108.20
25	SC	45	TRP	N-CA-CB	8.45	125.81	110.60
32	S1	465	G	O4'-C1'-N9	8.45	114.96	108.20
32	S1	1787	G	O4'-C1'-N9	8.45	114.96	108.20
33	L1	282	A	P-O3'-C3'	8.45	129.84	119.70
33	L1	1670	G	C3'-C2'-C1'	-8.45	94.74	101.50
33	L1	2738	U	C4'-C3'-C2'	-8.45	94.15	102.60
32	S1	258	U	N1-C1'-C2'	8.45	124.98	114.00
32	S1	1308	G	O4'-C1'-N9	8.45	114.96	108.20
32	S1	1804	A	N9-C1'-C2'	-8.45	102.71	112.00
33	L1	953	G	C1'-O4'-C4'	-8.45	103.14	109.90
33	L1	77	U	O4'-C1'-C2'	-8.45	97.35	105.80
68	LW	87	TYR	CB-CG-CD2	8.45	126.07	121.00
32	S1	1195	U	C1'-O4'-C4'	-8.45	103.14	109.90
32	S1	1593	U	O4'-C1'-C2'	-8.44	97.36	105.80
33	L1	2796	G	C4'-C3'-C2'	-8.45	94.16	102.60
33	L1	3271	A	C3'-C2'-C1'	8.44	108.25	101.50
35	L2	31	U	O4'-C1'-N1	8.44	114.95	108.20
33	L1	2904	A	O4'-C1'-C2'	-8.44	97.36	105.80
33	L1	475	U	O4'-C1'-N1	8.44	114.95	108.20
33	L1	1937	C	C3'-C2'-C1'	8.44	108.25	101.50
7	SI	148	TYR	CB-CG-CD1	-8.43	115.94	121.00
33	L1	2459	U	O4'-C1'-N1	8.43	114.94	108.20
33	L1	2587	G	C3'-C2'-C1'	-8.43	94.75	101.50
35	L2	51	U	O4'-C1'-C2'	-8.43	97.37	105.80
82	LK	11	ARG	NE-CZ-NH1	8.43	124.52	120.30
31	S2	50	G	C1'-O4'-C4'	-8.43	103.16	109.90
32	S1	396	G	O4'-C1'-N9	8.43	114.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1655	U	O4'-C1'-N1	8.43	114.94	108.20
33	L1	1552	C	C1'-O4'-C4'	-8.43	103.16	109.90
33	L1	3295	G	N9-C1'-C2'	8.43	124.96	114.00
32	S1	1094	U	O4'-C1'-C2'	-8.43	97.37	105.80
32	S1	1628	C	O4'-C1'-C2'	-8.43	97.37	105.80
33	L1	2676	A	O4'-C1'-C2'	-8.43	97.37	105.80
48	LV	94	ASP	CB-CG-OD1	8.43	125.89	118.30
32	S1	534	C	P-O5'-C5'	-8.43	107.42	120.90
32	S1	336	U	O4'-C1'-C2'	-8.43	97.38	105.80
32	S1	1370	C	N1-C1'-C2'	8.43	124.95	114.00
33	L1	465	C	N1-C1'-C2'	8.43	124.95	114.00
33	L1	655	G	O4'-C1'-C2'	8.43	115.18	107.60
33	L1	1506	A	N9-C1'-C2'	8.43	124.95	114.00
33	L1	1664	G	C4'-C3'-C2'	-8.43	94.17	102.60
33	L1	3213	A	O4'-C1'-C2'	-8.43	97.37	105.80
25	SC	144	ASN	C-N-CA	-8.42	100.64	121.70
33	L1	261	C	O4'-C1'-N1	8.42	114.94	108.20
33	L1	2514	A	O4'-C1'-N9	8.42	114.94	108.20
32	S1	4	C	C3'-C2'-C1'	8.42	108.24	101.50
32	S1	1008	A	O4'-C1'-N9	8.42	114.94	108.20
33	L1	1401	C	C1'-O4'-C4'	8.42	116.64	109.90
33	L1	1824	C	C4'-C3'-C2'	-8.42	94.18	102.60
33	L1	2966	G	O4'-C1'-N9	8.42	114.94	108.20
33	L1	1748	A	C3'-C2'-C1'	8.42	108.24	101.50
55	Lg	18	ARG	NE-CZ-NH2	-8.42	116.09	120.30
33	L1	1480	G	O4'-C1'-N9	8.42	114.93	108.20
33	L1	2004	U	O4'-C1'-N1	8.42	114.93	108.20
35	L2	47	A	O4'-C1'-N9	8.42	114.93	108.20
41	LM	131	ARG	NE-CZ-NH2	-8.42	116.09	120.30
8	SJ	30	ARG	NE-CZ-NH1	8.41	124.51	120.30
32	S1	903	A	C1'-O4'-C4'	8.41	116.63	109.90
33	L1	82	C	O4'-C1'-N1	8.41	114.93	108.20
33	L1	2354	G	O4'-C1'-N9	8.41	114.93	108.20
33	L1	2469	C	O4'-C1'-C2'	-8.41	97.39	105.80
33	L1	1840	C	O5'-P-OP2	-8.41	98.13	105.70
33	L1	2564	G	C1'-O4'-C4'	-8.41	103.17	109.90
33	L1	3053	G	C1'-O4'-C4'	-8.41	103.17	109.90
32	S1	1145	G	O4'-C1'-N9	8.41	114.93	108.20
33	L1	2787	A	C3'-C2'-C1'	-8.41	94.77	101.50
33	L1	1786	G	O4'-C1'-N9	8.41	114.92	108.20
34	L3	49	A	N9-C1'-C2'	8.41	124.93	114.00
35	L2	44	A	P-O3'-C3'	-8.41	109.61	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	SI	141	ARG	NE-CZ-NH1	8.40	124.50	120.30
33	L1	1533	U	C3'-C2'-C1'	8.40	108.22	101.50
33	L1	1829	G	C1'-O4'-C4'	-8.40	103.18	109.90
33	L1	2179	U	N1-C1'-C2'	8.40	124.92	114.00
33	L1	3038	U	C1'-O4'-C4'	-8.40	103.18	109.90
47	LU	63	ARG	NE-CZ-NH1	8.40	124.50	120.30
32	S1	979	A	C5'-C4'-O4'	8.40	119.18	109.10
33	L1	785	U	C5'-C4'-O4'	8.40	119.18	109.10
33	L1	1620	U	O3'-P-O5'	-8.40	88.03	104.00
81	LD	117	ARG	NE-CZ-NH1	-8.40	116.10	120.30
81	LD	118	ARG	NE-CZ-NH1	8.40	124.50	120.30
33	L1	219	A	OP1-P-OP2	-8.40	107.00	119.60
33	L1	302	G	O4'-C1'-N9	8.40	114.92	108.20
33	L1	857	G	C3'-C2'-C1'	-8.40	94.78	101.50
33	L1	1062	G	O4'-C1'-N9	8.40	114.92	108.20
16	SR	98	MET	CG-SD-CE	8.39	113.63	100.20
33	L1	711	A	C3'-C2'-C1'	-8.39	94.78	101.50
33	L1	1626	U	O4'-C1'-N1	8.39	114.92	108.20
33	L1	2697	A	N9-C1'-C2'	8.39	124.91	114.00
73	Lp	35	ARG	NE-CZ-NH1	8.39	124.50	120.30
33	L1	3218	C	C3'-C2'-C1'	8.39	108.21	101.50
32	S1	668	C	OP2-P-O3'	-8.39	86.74	105.20
2	SA	40	ARG	NE-CZ-NH2	-8.39	116.11	120.30
33	L1	222	C	N1-C1'-C2'	8.39	124.91	114.00
33	L1	747	A	O4'-C1'-N9	8.39	114.91	108.20
33	L1	2897	G	O4'-C1'-N9	8.39	114.91	108.20
33	L1	877	U	C1'-O4'-C4'	-8.39	103.19	109.90
33	L1	2433	U	O4'-C1'-N1	8.39	114.91	108.20
64	LG	12	LYS	CA-C-N	8.39	135.66	117.20
31	S2	56	A	O4'-C1'-N9	8.39	114.91	108.20
32	S1	1453	U	C3'-C2'-C1'	8.39	108.21	101.50
33	L1	1389	C	N1-C1'-C2'	-8.39	102.77	112.00
5	SE	90	MET	N-CA-CB	8.39	125.70	110.60
32	S1	669	A	OP1-P-OP2	-8.39	107.02	119.60
33	L1	1723	C	O4'-C1'-C2'	-8.39	97.41	105.80
33	L1	2793	G	O4'-C1'-N9	8.39	114.91	108.20
49	LX	75	TYR	CB-CG-CD2	-8.39	115.97	121.00
15	SS	93	PRO	N-CA-CB	-8.38	93.24	103.30
30	S3	15	A	P-O3'-C3'	-8.38	109.64	119.70
32	S1	573	C	C3'-C2'-C1'	8.38	108.21	101.50
32	S1	607	U	O4'-C1'-N1	8.38	114.91	108.20
33	L1	297	G	O4'-C1'-N9	8.38	114.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	714	G	O4'-C1'-C2'	8.38	115.14	107.60
33	L1	1073	G	C3'-C2'-C1'	-8.38	94.79	101.50
33	L1	2202	A	O4'-C1'-N9	-8.38	101.49	108.20
35	L2	13	G	C1'-O4'-C4'	-8.38	103.19	109.90
13	SQ	97	ARG	CB-CA-C	8.38	127.16	110.40
33	L1	1008	U	O4'-C1'-C2'	-8.38	97.42	105.80
53	Ld	45	TYR	CB-CG-CD2	-8.38	115.97	121.00
32	S1	1777	G	O4'-C1'-N9	-8.38	101.50	108.20
33	L1	1479	G	O4'-C1'-N9	8.38	114.90	108.20
33	L1	3042	U	O4'-C1'-C2'	-8.38	97.42	105.80
33	L1	268	U	O5'-P-OP2	8.38	120.75	110.70
33	L1	2165	A	O4'-C1'-C2'	8.38	115.14	107.60
32	S1	1316	A	O4'-C1'-C2'	-8.37	97.43	105.80
33	L1	235	G	P-O3'-C3'	8.37	129.75	119.70
34	L3	21	U	O4'-C1'-N1	8.37	114.90	108.20
33	L1	1406	C	P-O3'-C3'	-8.37	109.66	119.70
33	L1	2747	U	N1-C1'-C2'	8.37	124.88	114.00
33	L1	1367	A	O4'-C1'-C2'	-8.37	97.43	105.80
33	L1	1507	A	O4'-C1'-N9	8.37	114.89	108.20
33	L1	1646	U	O4'-C1'-N1	8.37	114.89	108.20
32	S1	372	U	O4'-C4'-C3'	-8.37	95.63	104.00
32	S1	937	A	O4'-C1'-C2'	-8.37	97.43	105.80
32	S1	1314	U	N1-C1'-C2'	-8.36	102.80	112.00
33	L1	2619	C	N1-C1'-C2'	8.36	124.87	114.00
33	L1	3349	C	N1-C1'-C2'	8.37	124.87	114.00
32	S1	493	C	C1'-O4'-C4'	-8.36	103.21	109.90
32	S1	513	G	C3'-C2'-C1'	8.36	108.19	101.50
32	S1	951	U	O4'-C1'-C2'	-8.36	97.44	105.80
33	L1	1474	U	O4'-C1'-N1	8.36	114.89	108.20
33	L1	1801	G	O4'-C1'-N9	-8.36	101.51	108.20
33	L1	97	G	C4'-C3'-C2'	-8.36	94.24	102.60
33	L1	922	U	N1-C1'-C2'	8.36	124.87	114.00
33	L1	1498	U	N1-C1'-C2'	8.36	124.87	114.00
34	L3	117	U	P-O5'-C5'	-8.36	107.52	120.90
35	L2	97	U	C3'-C2'-C1'	-8.36	94.81	101.50
50	LZ	31	PHE	CB-CG-CD1	-8.36	114.95	120.80
71	Lj	95	PRO	CA-C-N	8.36	135.59	117.20
33	L1	1587	G	O4'-C1'-C2'	-8.36	97.44	105.80
33	L1	2497	A	P-O5'-C5'	8.36	134.27	120.90
45	LQ	180	PHE	CB-CG-CD1	8.36	126.65	120.80
35	L2	125	A	C1'-O4'-C4'	-8.35	103.22	109.90
15	SS	14	PRO	N-CA-C	8.35	133.81	112.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	35	U	C1'-O4'-C4'	-8.35	103.22	109.90
33	L1	226	U	P-O5'-C5'	8.35	134.26	120.90
33	L1	1252	C	C1'-O4'-C4'	-8.35	103.22	109.90
33	L1	1317	G	O5'-P-OP2	-8.35	98.18	105.70
33	L1	1800	G	C5'-C4'-O4'	-8.35	99.08	109.10
32	S1	1658	U	N1-C1'-C2'	8.35	124.85	114.00
33	L1	1550	A	C3'-C2'-C1'	8.35	108.18	101.50
33	L1	166	U	N1-C1'-C2'	8.35	124.85	114.00
33	L1	366	G	O4'-C1'-C2'	-8.35	97.45	105.80
33	L1	397	A	C5'-C4'-C3'	-8.35	102.65	116.00
33	L1	1137	G	O4'-C1'-N9	8.35	114.88	108.20
33	L1	2626	G	O4'-C1'-N9	8.35	114.88	108.20
33	L1	3087	A	C3'-C2'-C1'	8.35	108.18	101.50
33	L1	3147	G	C1'-O4'-C4'	-8.35	103.22	109.90
35	L2	99	G	P-O3'-C3'	8.34	129.71	119.70
32	S1	1065	A	P-O3'-C3'	8.34	129.71	119.70
33	L1	2774	A	O3'-P-O5'	-8.34	88.15	104.00
33	L1	2950	C	O5'-P-OP2	-8.34	98.19	105.70
32	S1	338	G	O4'-C1'-N9	8.34	114.87	108.20
33	L1	1310	G	C3'-C2'-C1'	-8.34	94.83	101.50
33	L1	1536	U	N1-C1'-C2'	-8.34	102.83	112.00
35	L2	128	C	N1-C1'-C2'	8.34	124.84	114.00
81	LD	227	ARG	NH1-CZ-NH2	-8.34	110.23	119.40
15	SS	70	ARG	NE-CZ-NH1	8.34	124.47	120.30
30	S3	16	G	P-O3'-C3'	8.34	129.71	119.70
32	S1	1624	G	O4'-C1'-N9	8.34	114.87	108.20
33	L1	19	C	O4'-C1'-C2'	-8.34	97.46	105.80
33	L1	81	C	C3'-C2'-C1'	8.34	108.17	101.50
33	L1	1095	C	N1-C1'-C2'	8.34	124.84	114.00
33	L1	2390	G	C3'-C2'-C1'	-8.34	94.83	101.50
67	LS	138	ARG	CD-NE-CZ	8.34	135.27	123.60
33	L1	2677	A	C1'-O4'-C4'	8.34	116.57	109.90
33	L1	3142	C	O4'-C1'-C2'	-8.34	97.47	105.80
23	SU	62	PHE	CB-CG-CD1	-8.33	114.97	120.80
32	S1	7	G	O4'-C1'-C2'	8.33	115.10	107.60
33	L1	581	G	C1'-O4'-C4'	-8.33	103.23	109.90
33	L1	715	A	P-O3'-C3'	8.33	129.70	119.70
33	L1	1083	C	C3'-C2'-C1'	-8.33	94.83	101.50
33	L1	1102	A	O3'-P-O5'	-8.33	88.17	104.00
33	L1	1625	G	N9-C1'-C2'	-8.33	102.83	112.00
46	LT	151	ARG	NE-CZ-NH2	-8.33	116.13	120.30
25	SC	176	ARG	NE-CZ-NH1	8.33	124.47	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	222	G	P-O5'-C5'	8.33	134.23	120.90
33	L1	1512	A	O4'-C1'-C2'	-8.33	97.47	105.80
35	L2	151	C	O4'-C1'-C2'	-8.33	97.47	105.80
6	SF	167	GLU	N-CA-CB	8.33	125.59	110.60
33	L1	487	C	C3'-C2'-C1'	8.33	108.16	101.50
33	L1	2561	A	C1'-O4'-C4'	8.33	116.56	109.90
33	L1	1598	U	C1'-O4'-C4'	8.33	116.56	109.90
33	L1	2870	U	O5'-P-OP2	-8.33	98.21	105.70
33	L1	3080	U	C1'-O4'-C4'	8.33	116.56	109.90
78	Le	69	ARG	NE-CZ-NH2	8.32	124.46	120.30
2	SA	43	TYR	CB-CG-CD2	-8.32	116.01	121.00
32	S1	1714	G	O4'-C1'-C2'	8.32	115.09	107.60
32	S1	114	U	C1'-O4'-C4'	8.32	116.56	109.90
33	L1	1002	A	C3'-C2'-C1'	8.32	108.16	101.50
33	L1	2405	C	C1'-O4'-C4'	-8.32	103.24	109.90
25	SC	18	ARG	CA-C-N	-8.32	98.90	117.20
32	S1	36	C	N1-C1'-C2'	8.32	124.81	114.00
32	S1	317	U	C3'-C2'-C1'	8.32	108.15	101.50
32	S1	1030	A	O4'-C1'-C2'	-8.32	97.48	105.80
33	L1	3240	C	C1'-O4'-C4'	-8.32	103.25	109.90
33	L1	3294	U	P-O3'-C3'	-8.32	109.72	119.70
1	Sa	144	ASP	CB-CG-OD1	-8.31	110.82	118.30
32	S1	54	C	N1-C1'-C2'	-8.31	102.85	112.00
32	S1	1521	G	P-O3'-C3'	8.31	129.68	119.70
33	L1	54	G	O4'-C1'-N9	8.31	114.85	108.20
33	L1	2502	U	O3'-P-O5'	-8.31	88.20	104.00
33	L1	1222	U	O4'-C1'-N1	8.31	114.85	108.20
32	S1	1480	G	O4'-C1'-N9	8.31	114.85	108.20
33	L1	264	C	C5'-C4'-O4'	8.31	119.07	109.10
33	L1	978	C	C3'-C2'-C1'	8.31	108.15	101.50
33	L1	1042	C	C3'-C2'-C1'	8.31	108.15	101.50
33	L1	1728	G	N9-C1'-C2'	-8.31	102.86	112.00
34	L3	13	A	C3'-C2'-C1'	8.31	108.15	101.50
33	L1	340	A	P-O3'-C3'	8.31	129.67	119.70
33	L1	361	G	O4'-C1'-N9	8.31	114.85	108.20
33	L1	2234	G	C1'-O4'-C4'	-8.31	103.25	109.90
57	Ll	11	ARG	NE-CZ-NH1	8.31	124.45	120.30
3	SB	40	ARG	NE-CZ-NH1	8.30	124.45	120.30
32	S1	994	U	N1-C1'-C2'	-8.30	102.86	112.00
33	L1	1512	A	P-O3'-C3'	-8.30	109.73	119.70
32	S1	416	A	O4'-C1'-C2'	-8.30	97.50	105.80
48	LV	91	PHE	CB-CG-CD1	8.30	126.61	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	223	A	O4'-C1'-N9	8.30	114.84	108.20
33	L1	373	A	O4'-C1'-N9	8.30	114.84	108.20
33	L1	3087	A	N9-C1'-C2'	8.30	124.79	114.00
45	LQ	252	THR	CB-CA-C	-8.30	89.19	111.60
33	L1	723	G	N9-C1'-C2'	-8.30	102.87	112.00
33	L1	1415	G	C1'-O4'-C4'	-8.30	103.26	109.90
33	L1	1947	U	O4'-C1'-N1	8.30	114.84	108.20
33	L1	2936	A	C3'-C2'-C1'	8.30	108.14	101.50
68	LW	114	TYR	CB-CG-CD1	8.30	125.98	121.00
33	L1	246	C	N1-C1'-C2'	-8.30	102.88	112.00
33	L1	3280	U	P-O3'-C3'	8.30	129.66	119.70
33	L1	1254	A	C3'-C2'-C1'	-8.29	94.86	101.50
33	L1	1524	G	C3'-C2'-C1'	-8.29	94.86	101.50
2	SA	235	TYR	CB-CG-CD2	-8.29	116.03	121.00
33	L1	491	G	C4'-C3'-C2'	-8.29	94.31	102.60
33	L1	667	C	P-O3'-C3'	8.29	129.65	119.70
33	L1	3365	U	C1'-O4'-C4'	8.29	116.53	109.90
17	SV	56	PRO	CA-N-CD	-8.29	99.89	111.50
32	S1	1636	U	O4'-C1'-N1	8.29	114.83	108.20
4	SD	149	TYR	CB-CG-CD1	-8.29	116.03	121.00
33	L1	784	G	C1'-O4'-C4'	-8.29	103.27	109.90
33	L1	2114	A	P-O3'-C3'	-8.29	109.76	119.70
33	L1	3232	C	C1'-O4'-C4'	-8.29	103.27	109.90
34	L3	15	C	O4'-C1'-N1	-8.29	101.57	108.20
33	L1	2332	C	C1'-O4'-C4'	-8.28	103.28	109.90
32	S1	102	U	O4'-C1'-N1	8.28	114.82	108.20
33	L1	590	C	C5'-C4'-O4'	8.28	119.03	109.10
33	L1	1650	G	C5'-C4'-C3'	8.28	129.24	116.00
33	L1	1247	G	C4'-C3'-C2'	-8.28	94.33	102.60
41	LM	14	PHE	CB-CG-CD2	-8.28	115.01	120.80
23	SU	79	GLY	CA-C-N	8.27	135.40	117.20
32	S1	605	A	O4'-C1'-N9	8.27	114.82	108.20
13	SQ	62	GLN	C-N-CA	8.27	142.38	121.70
33	L1	1855	A	C5'-C4'-C3'	-8.27	102.77	116.00
32	S1	190	C	P-O3'-C3'	8.27	129.62	119.70
32	S1	221	U	P-O5'-C5'	8.27	134.13	120.90
32	S1	258	U	C4'-C3'-C2'	-8.27	94.33	102.60
32	S1	1516	C	O3'-P-O5'	8.27	119.71	104.00
33	L1	784	G	O4'-C1'-C2'	8.27	115.04	107.60
33	L1	2087	A	N9-C1'-C2'	-8.27	102.91	112.00
25	SC	3	ARG	NE-CZ-NH1	8.27	124.43	120.30
33	L1	1272	G	C3'-C2'-C1'	8.27	108.11	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3011	U	N1-C1'-C2'	-8.27	102.91	112.00
33	L1	3092	A	P-O3'-C3'	8.27	129.62	119.70
33	L1	3310	A	C5'-C4'-C3'	8.27	129.22	116.00
59	Lo	25	TYR	CB-CG-CD2	-8.27	116.04	121.00
33	L1	2354	G	C1'-O4'-C4'	8.26	116.51	109.90
33	L1	2464	G	C1'-O4'-C4'	-8.26	103.29	109.90
33	L1	2760	U	P-O5'-C5'	8.26	134.12	120.90
32	S1	1011	C	C3'-C2'-C1'	8.26	108.11	101.50
33	L1	472	U	C1'-O4'-C4'	-8.26	103.29	109.90
34	L3	41	G	N9-C1'-C2'	8.26	124.74	114.00
35	L2	101	G	O3'-P-O5'	8.26	119.70	104.00
33	L1	333	G	C1'-O4'-C4'	-8.26	103.29	109.90
33	L1	347	A	C1'-O4'-C4'	-8.26	103.29	109.90
33	L1	667	C	C5'-C4'-C3'	8.26	129.22	116.00
33	L1	2726	U	N1-C1'-C2'	8.26	124.74	114.00
33	L1	3071	A	C3'-C2'-C1'	-8.26	94.89	101.50
80	LC	352	ARG	NE-CZ-NH2	-8.26	116.17	120.30
11	SM	94	ARG	CB-CA-C	8.26	126.92	110.40
32	S1	1083	C	P-O3'-C3'	-8.26	109.79	119.70
33	L1	2182	G	P-O3'-C3'	8.26	129.61	119.70
33	L1	2784	U	P-O3'-C3'	-8.26	109.79	119.70
46	LT	64	ARG	NE-CZ-NH2	-8.26	116.17	120.30
32	S1	880	G	O4'-C1'-N9	8.26	114.80	108.20
33	L1	443	G	O4'-C1'-C2'	8.26	115.03	107.60
33	L1	1787	C	C1'-O4'-C4'	-8.26	103.30	109.90
33	L1	2218	A	C1'-O4'-C4'	-8.26	103.30	109.90
33	L1	2738	U	O5'-P-OP1	-8.26	98.27	105.70
38	LE	33	THR	C-N-CA	8.26	142.34	121.70
33	L1	2577	G	C1'-O4'-C4'	-8.25	103.30	109.90
57	Ll	52	LYS	N-CA-CB	-8.25	95.74	110.60
33	L1	1662	G	O4'-C1'-C2'	8.25	115.03	107.60
33	L1	1261	C	C3'-C2'-C1'	-8.25	94.90	101.50
33	L1	1875	A	N9-C1'-C2'	8.25	124.72	114.00
33	L1	2668	U	C5'-C4'-C3'	-8.25	102.80	116.00
68	LW	82	LYS	CB-CA-C	8.25	126.90	110.40
33	L1	2274	A	C4'-C3'-C2'	-8.25	94.35	102.60
33	L1	3379	C	O4'-C1'-C2'	-8.25	97.55	105.80
80	LC	364	ASP	C-N-CA	8.25	142.32	121.70
33	L1	138	G	C1'-O4'-C4'	-8.25	103.30	109.90
33	L1	2215	A	O4'-C1'-N9	-8.25	101.60	108.20
7	SI	117	ARG	NE-CZ-NH1	8.25	124.42	120.30
32	S1	124	G	O4'-C1'-N9	8.25	114.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1273	U	O4'-C1'-N1	8.25	114.80	108.20
33	L1	518	G	N9-C1'-C2'	8.25	124.72	114.00
33	L1	569	C	N1-C1'-C2'	8.25	124.72	114.00
48	LV	70	THR	CA-CB-OG1	8.25	126.32	109.00
16	SR	86	ARG	NE-CZ-NH2	-8.24	116.18	120.30
32	S1	362	U	O4'-C1'-N1	8.24	114.79	108.20
33	L1	662	G	C1'-O4'-C4'	-8.24	103.31	109.90
32	S1	221	U	P-O3'-C3'	-8.24	109.81	119.70
33	L1	327	A	O4'-C1'-C2'	8.24	115.02	107.60
33	L1	958	U	C3'-C2'-C1'	8.24	108.09	101.50
33	L1	1181	A	P-O3'-C3'	8.24	129.59	119.70
66	LN	85	GLU	N-CA-CB	8.24	125.43	110.60
32	S1	1720	G	N9-C1'-C2'	8.24	124.71	114.00
33	L1	2858	G	C3'-C2'-C1'	-8.24	94.91	101.50
37	LB	83	TYR	CB-CG-CD2	-8.24	116.06	121.00
33	L1	897	U	N1-C1'-C2'	8.24	124.71	114.00
33	L1	905	G	O4'-C1'-N9	8.24	114.79	108.20
71	Lj	8	ARG	CB-CA-C	-8.24	93.93	110.40
33	L1	854	C	N1-C1'-C2'	8.23	124.70	114.00
32	S1	569	C	O4'-C1'-C2'	-8.23	97.57	105.80
32	S1	1326	A	C3'-C2'-C1'	8.23	108.08	101.50
33	L1	437	C	O4'-C1'-N1	8.23	114.78	108.20
55	Lg	83	ILE	N-CA-CB	-8.23	91.88	110.80
33	L1	725	G	C3'-C2'-C1'	8.22	108.08	101.50
32	S1	356	G	O4'-C1'-N9	8.22	114.78	108.20
32	S1	1218	U	O4'-C1'-N1	8.22	114.78	108.20
33	L1	3304	U	P-O3'-C3'	-8.22	109.83	119.70
33	L1	978	C	O4'-C1'-N1	8.22	114.78	108.20
33	L1	1261	C	P-O5'-C5'	8.22	134.05	120.90
33	L1	2077	C	O5'-P-OP2	-8.22	98.30	105.70
70	Li	108	LYS	N-CA-CB	8.22	125.40	110.60
1	Sa	165	TYR	CB-CG-CD1	8.22	125.93	121.00
32	S1	416	A	O4'-C1'-N9	8.22	114.77	108.20
32	S1	1275	G	O3'-P-O5'	-8.22	88.38	104.00
33	L1	400	G	N9-C1'-C2'	-8.22	102.96	112.00
32	S1	1195	U	C3'-C2'-C1'	-8.22	94.93	101.50
33	L1	1348	G	C5'-C4'-C3'	8.22	129.15	116.00
4	SD	212	ASP	CA-C-N	-8.21	99.13	117.20
33	L1	1103	U	O4'-C1'-C2'	-8.21	97.59	105.80
32	S1	1396	U	C1'-O4'-C4'	8.21	116.47	109.90
33	L1	3376	C	C5'-C4'-O4'	-8.21	99.24	109.10
25	SC	194	GLU	O-C-N	-8.21	109.56	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	248	U	P-O3'-C3'	8.21	129.55	119.70
33	L1	1659	G	P-O3'-C3'	8.21	129.55	119.70
81	LD	335	PRO	CA-N-CD	-8.21	100.00	111.50
1	Sa	89	ARG	NE-CZ-NH1	8.21	124.40	120.30
32	S1	1112	G	C1'-O4'-C4'	-8.21	103.33	109.90
32	S1	1585	A	O4'-C1'-N9	8.21	114.76	108.20
33	L1	238	C	C3'-C2'-C1'	8.21	108.06	101.50
35	L2	110	C	P-O3'-C3'	8.21	129.55	119.70
32	S1	1753	U	O4'-C1'-N1	8.20	114.76	108.20
56	Lh	105	LYS	O-C-N	-8.20	109.57	122.70
33	L1	664	A	C3'-C2'-C1'	-8.20	94.94	101.50
34	L3	114	C	O3'-P-O5'	-8.20	88.42	104.00
32	S1	408	G	O4'-C1'-C2'	-8.20	97.60	105.80
33	L1	1569	U	P-O3'-C3'	8.20	129.54	119.70
33	L1	2313	U	N1-C1'-C2'	-8.20	102.98	112.00
64	LG	52	PRO	CA-N-CD	-8.20	100.02	111.50
32	S1	274	A	O4'-C1'-N9	8.20	114.76	108.20
32	S1	485	A	P-O5'-C5'	8.20	134.02	120.90
32	S1	1184	C	N1-C1'-C2'	8.20	124.66	114.00
32	S1	1328	G	C1'-O4'-C4'	-8.20	103.34	109.90
33	L1	2866	A	C3'-C2'-C1'	-8.20	94.94	101.50
33	L1	271	G	C1'-O4'-C4'	-8.20	103.34	109.90
33	L1	856	G	O4'-C1'-N9	8.19	114.75	108.20
33	L1	1094	G	C1'-O4'-C4'	-8.20	103.34	109.90
33	L1	2501	U	C3'-C2'-C1'	-8.20	94.94	101.50
34	L3	101	A	N9-C1'-C2'	8.20	124.65	114.00
82	LK	66	ARG	NE-CZ-NH2	-8.20	116.20	120.30
31	S2	70	G	O4'-C1'-C2'	8.19	114.97	107.60
32	S1	1007	G	C1'-O4'-C4'	-8.19	103.35	109.90
33	L1	2112	C	N1-C1'-C2'	8.19	124.65	114.00
37	LB	9	ARG	NE-CZ-NH2	8.19	124.40	120.30
33	L1	2974	G	P-O3'-C3'	-8.19	109.87	119.70
1	Sa	54	THR	CA-CB-CG2	8.19	123.86	112.40
5	SE	12	ARG	NE-CZ-NH2	8.19	124.39	120.30
32	S1	1278	C	C3'-C2'-C1'	-8.19	94.95	101.50
33	L1	695	G	C1'-O4'-C4'	8.19	116.45	109.90
33	L1	913	G	O4'-C1'-N9	8.19	114.75	108.20
33	L1	2275	A	C1'-O4'-C4'	8.19	116.45	109.90
33	L1	2456	G	O4'-C1'-C2'	8.19	114.97	107.60
29	ST	15	ARG	NE-CZ-NH1	-8.19	116.21	120.30
33	L1	2211	G	C4'-C3'-C2'	-8.19	94.42	102.60
33	L1	2756	G	P-O3'-C3'	8.19	129.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3087	A	C5'-C4'-C3'	8.19	129.10	116.00
5	SE	24	ARG	NE-CZ-NH1	8.18	124.39	120.30
32	S1	321	C	C3'-C2'-C1'	8.18	108.05	101.50
33	L1	178	C	C1'-O4'-C4'	-8.18	103.35	109.90
33	L1	1266	G	N9-C1'-C2'	8.18	124.63	114.00
33	L1	1346	C	N1-C1'-C2'	8.18	124.63	114.00
66	LN	117	ARG	NE-CZ-NH1	-8.18	116.21	120.30
75	Lt	62	VAL	CA-CB-CG1	8.18	123.17	110.90
14	SP	107	ASN	CA-C-N	8.18	135.19	117.20
6	SF	148	TYR	CB-CG-CD2	-8.18	116.09	121.00
32	S1	615	U	O4'-C1'-N1	8.18	114.74	108.20
34	L3	19	A	P-O3'-C3'	8.18	129.51	119.70
33	L1	74	G	N9-C1'-C2'	8.17	124.62	114.00
33	L1	227	C	P-O3'-C3'	8.17	129.51	119.70
2	SA	34	CYS	CA-CB-SG	8.17	128.70	114.00
32	S1	1192	G	O4'-C1'-N9	8.17	114.74	108.20
32	S1	1649	C	C3'-C2'-C1'	8.17	108.04	101.50
33	L1	2775	C	P-O3'-C3'	-8.17	109.89	119.70
33	L1	2369	G	C1'-O4'-C4'	-8.17	103.36	109.90
33	L1	3011	U	C1'-O4'-C4'	8.17	116.44	109.90
34	L3	9	U	P-O5'-C5'	8.17	133.97	120.90
32	S1	1204	G	O4'-C1'-N9	8.17	114.73	108.20
33	L1	113	A	O4'-C1'-C2'	-8.17	97.63	105.80
33	L1	336	A	O4'-C1'-N9	-8.17	101.67	108.20
33	L1	2228	A	C1'-O4'-C4'	8.17	116.43	109.90
6	SF	144	ASN	N-CA-CB	-8.16	95.91	110.60
33	L1	1131	U	C1'-O4'-C4'	-8.16	103.37	109.90
32	S1	1541	C	C3'-C2'-C1'	-8.16	94.97	101.50
33	L1	2389	A	C1'-O4'-C4'	-8.16	103.37	109.90
61	Lq	23	ARG	NE-CZ-NH1	8.16	124.38	120.30
46	LT	109	TYR	CG-CD1-CE1	-8.16	114.77	121.30
32	S1	631	C	C3'-C2'-C1'	8.16	108.03	101.50
33	L1	1411	G	O4'-C1'-N9	8.16	114.73	108.20
33	L1	2213	G	N9-C1'-C2'	8.16	124.61	114.00
68	LW	44	PHE	CB-CG-CD1	8.16	126.51	120.80
80	LC	117	ARG	NE-CZ-NH2	-8.16	116.22	120.30
32	S1	586	U	C3'-C2'-C1'	8.15	108.02	101.50
33	L1	80	C	N1-C1'-C2'	8.15	124.60	114.00
33	L1	2012	C	P-O3'-C3'	8.15	129.49	119.70
33	L1	2529	C	O4'-C1'-N1	8.15	114.72	108.20
68	LW	82	LYS	N-CA-C	-8.15	88.99	111.00
23	SU	79	GLY	CA-C-O	-8.15	105.93	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1462	C	N1-C1'-C2'	8.15	124.59	114.00
32	S1	526	U	O5'-C5'-C4'	8.15	127.18	111.70
32	S1	1587	G	O3'-P-O5'	8.15	119.48	104.00
33	L1	840	A	C3'-C2'-C1'	-8.15	94.98	101.50
33	L1	1142	G	C1'-O4'-C4'	-8.15	103.38	109.90
33	L1	1208	A	O4'-C1'-C2'	-8.15	97.65	105.80
33	L1	1286	G	C1'-O4'-C4'	-8.15	103.38	109.90
33	L1	2245	G	P-O3'-C3'	8.15	129.48	119.70
33	L1	1860	A	O4'-C1'-N9	8.15	114.72	108.20
33	L1	2790	C	N1-C1'-C2'	8.15	124.59	114.00
39	LF	147	GLY	O-C-N	-8.15	109.66	122.70
33	L1	2460	A	P-O5'-C5'	8.14	133.93	120.90
33	L1	2507	U	N1-C1'-C2'	8.14	124.59	114.00
33	L1	2569	G	O4'-C1'-C2'	8.14	114.93	107.60
42	LP	120	TRP	N-CA-CB	-8.14	95.94	110.60
32	S1	932	C	P-O3'-C3'	8.14	129.47	119.70
32	S1	1058	G	O5'-P-OP2	-8.14	98.37	105.70
33	L1	70	A	C1'-O4'-C4'	-8.14	103.39	109.90
35	L2	50	G	C1'-O4'-C4'	-8.14	103.39	109.90
15	SS	131	ARG	NE-CZ-NH2	-8.14	116.23	120.30
33	L1	1862	C	C3'-C2'-C1'	8.14	108.01	101.50
33	L1	2769	U	P-O3'-C3'	-8.14	109.93	119.70
33	L1	471	C	C3'-C2'-C1'	8.14	108.01	101.50
15	SS	8	THR	N-CA-CB	8.13	125.76	110.30
32	S1	1058	G	P-O5'-C5'	8.13	133.91	120.90
33	L1	897	U	P-O3'-C3'	8.13	129.46	119.70
33	L1	1278	A	P-O3'-C3'	8.13	129.46	119.70
33	L1	2233	G	O4'-C1'-C2'	8.13	114.92	107.60
33	L1	2234	G	N9-C1'-C2'	8.13	124.58	114.00
33	L1	2617	G	P-O5'-C5'	-8.13	107.88	120.90
33	L1	3095	G	N9-C1'-C2'	8.13	124.58	114.00
33	L1	3121	C	P-O3'-C3'	-8.14	109.94	119.70
34	L3	49	A	C4'-C3'-C2'	-8.14	94.46	102.60
39	LF	1	MET	N-CA-CB	-8.14	95.95	110.60
32	S1	1547	G	C3'-C2'-C1'	8.13	108.01	101.50
33	L1	1912	U	C3'-C2'-C1'	8.13	108.01	101.50
33	L1	2561	A	O4'-C1'-N9	8.13	114.71	108.20
64	LG	20	TYR	CA-CB-CG	-8.13	97.95	113.40
1	Sa	128	LEU	CA-CB-CG	8.13	134.00	115.30
4	SD	149	TYR	CB-CG-CD2	8.13	125.88	121.00
32	S1	1098	A	C3'-C2'-C1'	8.13	108.00	101.50
33	L1	327	A	C3'-C2'-C1'	-8.13	95.00	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1660	C	C3'-C2'-C1'	8.13	108.00	101.50
33	L1	2772	A	P-O3'-C3'	-8.13	109.94	119.70
64	LG	68	PRO	CA-C-N	8.13	135.09	117.20
33	L1	177	C	O4'-C1'-N1	-8.13	101.70	108.20
33	L1	1107	G	N9-C1'-C2'	8.13	124.56	114.00
32	S1	629	C	O4'-C1'-N1	8.13	114.70	108.20
32	S1	1314	U	O4'-C1'-N1	8.13	114.70	108.20
33	L1	9	C	C3'-C2'-C1'	8.12	108.00	101.50
33	L1	706	U	N1-C1'-C2'	8.12	124.56	114.00
33	L1	973	U	N1-C1'-C2'	8.13	124.56	114.00
33	L1	1223	U	C3'-C2'-C1'	-8.12	95.00	101.50
33	L1	2824	U	N1-C1'-C2'	-8.12	103.06	112.00
33	L1	3183	G	N9-C1'-C2'	8.12	124.56	114.00
34	L3	27	A	C3'-C2'-C1'	8.12	108.00	101.50
34	L3	32	A	N9-C1'-C2'	8.12	124.56	114.00
71	Lj	37	GLU	N-CA-CB	-8.12	95.97	110.60
29	ST	38	HIS	CA-CB-CG	-8.12	99.79	113.60
33	L1	1422	G	O4'-C1'-N9	8.12	114.70	108.20
33	L1	2418	A	C1'-O4'-C4'	-8.12	103.40	109.90
33	L1	3046	C	O4'-C1'-N1	8.12	114.70	108.20
35	L2	68	U	O4'-C1'-N1	8.12	114.70	108.20
33	L1	2850	G	O4'-C1'-N9	8.12	114.70	108.20
34	L3	37	G	O4'-C1'-N9	8.12	114.70	108.20
64	LG	143	ASP	CA-CB-CG	8.12	131.27	113.40
74	LJ	95	LYS	N-CA-C	8.12	132.93	111.00
33	L1	50	A	O5'-P-OP1	8.12	120.44	110.70
33	L1	838	G	C3'-C2'-C1'	8.12	108.00	101.50
33	L1	2821	U	C4'-C3'-C2'	-8.12	94.48	102.60
35	L2	30	C	C3'-C2'-C1'	8.12	108.00	101.50
33	L1	1201	C	O4'-C1'-C2'	-8.12	97.68	105.80
70	Li	66	ARG	NE-CZ-NH1	-8.12	116.24	120.30
32	S1	94	A	C1'-O4'-C4'	-8.11	103.41	109.90
33	L1	84	A	O5'-P-OP2	8.11	120.44	110.70
33	L1	822	U	O4'-C1'-N1	8.11	114.69	108.20
38	LE	1	MET	C-N-CA	8.12	141.99	121.70
27	SH	67	GLY	CA-C-N	-8.11	99.35	117.20
33	L1	1621	G	P-O3'-C3'	8.11	129.44	119.70
35	L2	148	C	N1-C1'-C2'	8.11	124.55	114.00
32	S1	904	G	O4'-C1'-C2'	-8.11	97.69	105.80
33	L1	1589	G	C3'-C2'-C1'	-8.11	95.02	101.50
33	L1	2479	C	C1'-O4'-C4'	8.11	116.38	109.90
67	LS	77	TYR	CB-CG-CD2	-8.11	116.14	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1145	G	O4'-C1'-C2'	-8.10	97.70	105.80
32	S1	1163	C	C1'-O4'-C4'	8.10	116.38	109.90
32	S1	1549	G	C1'-O4'-C4'	-8.10	103.42	109.90
33	L1	1710	G	O4'-C1'-N9	8.10	114.68	108.20
32	S1	452	C	C3'-C2'-C1'	8.10	107.98	101.50
33	L1	2818	G	C2'-C3'-O3'	8.10	127.32	109.50
32	S1	1538	C	O4'-C1'-C2'	-8.10	97.70	105.80
33	L1	641	C	C5'-C4'-C3'	-8.10	103.04	116.00
33	L1	1527	A	C3'-C2'-C1'	8.10	107.98	101.50
33	L1	1874	A	O4'-C1'-C2'	-8.10	97.70	105.80
33	L1	1995	U	P-O3'-C3'	8.10	129.42	119.70
33	L1	2491	A	O4'-C1'-C2'	8.10	114.89	107.60
33	L1	2748	G	C4'-C3'-C2'	-8.10	94.50	102.60
72	Lk	44	ARG	NE-CZ-NH1	8.10	124.35	120.30
13	SQ	53	PHE	CB-CA-C	8.10	126.59	110.40
33	L1	138	G	C3'-C2'-C1'	-8.10	95.02	101.50
33	L1	71	C	P-O3'-C3'	8.09	129.41	119.70
33	L1	2672	C	C4'-C3'-C2'	-8.09	94.51	102.60
23	SU	15	ARG	NE-CZ-NH2	-8.09	116.25	120.30
23	SU	89	LYS	O-C-N	-8.09	109.75	122.70
33	L1	162	G	O4'-C1'-N9	8.09	114.67	108.20
42	LP	188	ARG	NE-CZ-NH1	8.09	124.35	120.30
32	S1	1674	C	O3'-P-O5'	-8.09	88.63	104.00
33	L1	2918	U	O4'-C1'-N1	8.09	114.67	108.20
14	SP	50	ILE	O-C-N	-8.09	109.76	122.70
33	L1	19	C	N1-C1'-C2'	8.09	124.52	114.00
33	L1	543	C	O4'-C1'-C2'	-8.09	97.71	105.80
33	L1	1086	U	N1-C1'-C2'	-8.09	103.10	112.00
33	L1	3335	G	O4'-C4'-C3'	-8.09	95.91	104.00
33	L1	1116	G	P-O3'-C3'	8.09	129.40	119.70
33	L1	1952	U	C1'-O4'-C4'	8.09	116.37	109.90
59	Lo	25	TYR	CB-CG-CD1	-8.09	116.15	121.00
33	L1	2141	A	P-O3'-C3'	8.09	129.40	119.70
33	L1	2887	C	O4'-C1'-N1	-8.09	101.73	108.20
33	L1	3303	C	N1-C1'-C2'	8.09	124.51	114.00
80	LC	367	SER	N-CA-C	8.09	132.83	111.00
32	S1	258	U	P-O5'-C5'	8.08	133.83	120.90
33	L1	1654	C	P-O3'-C3'	8.08	129.40	119.70
33	L1	2807	G	C3'-C2'-C1'	-8.08	95.03	101.50
33	L1	3111	C	N1-C1'-C2'	8.08	124.51	114.00
35	L2	147	C	O4'-C1'-N1	8.08	114.67	108.20
20	SZ	46	THR	N-CA-CB	8.08	125.65	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	SU	81	ILE	C-N-CA	8.08	141.90	121.70
27	SH	57	ARG	NE-CZ-NH1	8.08	124.34	120.30
32	S1	1137	A	P-O3'-C3'	8.08	129.40	119.70
32	S1	1512	C	C3'-C2'-C1'	8.08	107.96	101.50
33	L1	2537	G	O4'-C1'-N9	8.08	114.67	108.20
33	L1	2680	G	C4'-C3'-C2'	-8.08	94.52	102.60
33	L1	1044	A	P-O3'-C3'	8.08	129.40	119.70
33	L1	1648	C	O4'-C1'-C2'	-8.08	97.72	105.80
25	SC	163	THR	O-C-N	8.08	135.62	122.70
33	L1	3332	G	O4'-C1'-C2'	8.08	114.87	107.60
33	L1	1095	C	O4'-C1'-N1	8.08	114.66	108.20
32	S1	1704	G	C3'-C2'-C1'	8.07	107.96	101.50
33	L1	971	G	C5'-C4'-O4'	-8.07	99.41	109.10
33	L1	3295	G	P-O3'-C3'	8.07	129.39	119.70
35	L2	140	G	O4'-C1'-N9	8.07	114.66	108.20
57	Ll	51	VAL	CG1-CB-CG2	-8.07	97.98	110.90
33	L1	846	A	C4'-C3'-C2'	-8.07	94.53	102.60
33	L1	1722	G	O4'-C1'-N9	8.07	114.66	108.20
45	LQ	124	VAL	CB-CA-C	8.07	126.73	111.40
10	SL	106	ARG	NE-CZ-NH1	8.07	124.33	120.30
32	S1	1483	G	C3'-C2'-C1'	-8.07	95.05	101.50
33	L1	734	C	P-O3'-C3'	8.07	129.38	119.70
33	L1	2060	C	O4'-C4'-C3'	8.07	112.55	106.10
33	L1	2621	G	O4'-C1'-C2'	-8.07	97.73	105.80
38	LE	89	LYS	CB-CA-C	-8.07	94.26	110.40
11	SM	82	TRP	C-N-CA	8.06	141.86	121.70
33	L1	1529	C	O4'-C1'-N1	8.06	114.65	108.20
32	S1	480	U	C5'-C4'-O4'	8.06	118.78	109.10
32	S1	1312	G	O4'-C1'-N9	8.06	114.65	108.20
32	S1	417	U	N1-C1'-C2'	8.06	124.48	114.00
5	SE	117	ASN	N-CA-CB	8.06	125.11	110.60
32	S1	1132	G	C3'-C2'-C1'	-8.06	95.05	101.50
33	L1	1018	C	C3'-C2'-C1'	8.06	107.95	101.50
33	L1	2378	U	O4'-C1'-N1	8.06	114.65	108.20
35	L2	57	A	O4'-C1'-N9	-8.06	101.75	108.20
82	LK	66	ARG	NE-CZ-NH1	8.06	124.33	120.30
15	SS	5	THR	CB-CA-C	-8.06	89.84	111.60
13	SQ	53	PHE	CB-CG-CD1	-8.06	115.16	120.80
33	L1	539	C	O4'-C1'-N1	8.06	114.65	108.20
33	L1	1754	C	O4'-C1'-N1	-8.06	101.75	108.20
33	L1	1980	C	O3'-P-O5'	8.06	119.31	104.00
34	L3	41	G	C1'-O4'-C4'	-8.06	103.45	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1197	A	O4'-C1'-C2'	8.06	114.85	107.60
33	L1	2596	A	C3'-C2'-C1'	8.06	107.94	101.50
33	L1	304	A	N9-C1'-C2'	-8.05	103.14	112.00
33	L1	731	G	O4'-C1'-N9	8.06	114.64	108.20
33	L1	1279	C	N1-C1'-C2'	-8.05	103.14	112.00
33	L1	1607	C	C1'-O4'-C4'	-8.06	103.46	109.90
33	L1	1523	G	P-O3'-C3'	-8.05	110.04	119.70
33	L1	1564	C	N1-C1'-C2'	8.05	124.47	114.00
33	L1	2945	G	C1'-O4'-C4'	-8.05	103.46	109.90
81	LD	322	ASN	CB-CA-C	-8.05	94.29	110.40
33	L1	1610	A	C4'-C3'-C2'	-8.05	94.55	102.60
33	L1	2725	U	C3'-C2'-C1'	-8.05	95.06	101.50
35	L2	107	G	N9-C1'-C2'	8.05	124.47	114.00
64	LG	140	GLN	C-N-CA	-8.05	101.57	121.70
4	SD	93	PRO	CA-C-N	8.05	134.91	117.20
32	S1	1588	C	C3'-C2'-C1'	8.05	107.94	101.50
33	L1	2178	G	C1'-O4'-C4'	-8.05	103.46	109.90
49	LX	37	ARG	NE-CZ-NH2	-8.05	116.28	120.30
32	S1	885	C	O4'-C1'-C2'	-8.05	97.75	105.80
33	L1	566	G	O4'-C1'-C2'	8.05	114.84	107.60
33	L1	1501	A	N9-C1'-C2'	8.05	124.46	114.00
33	L1	1967	C	O4'-C1'-N1	8.05	114.64	108.20
25	SC	162	LEU	CA-C-N	8.04	134.90	117.20
33	L1	226	U	P-O3'-C3'	8.04	129.35	119.70
38	LE	130	PHE	CB-CG-CD1	-8.04	115.17	120.80
32	S1	288	G	C3'-C2'-C1'	-8.04	95.06	101.50
32	S1	357	A	P-O3'-C3'	8.04	129.35	119.70
32	S1	586	U	N1-C1'-C2'	8.04	124.46	114.00
33	L1	560	C	N1-C1'-C2'	-8.04	103.15	112.00
33	L1	1284	C	O4'-C1'-N1	8.04	114.63	108.20
33	L1	2696	C	C3'-C2'-C1'	8.04	107.93	101.50
48	LV	128	ARG	NE-CZ-NH1	8.04	124.32	120.30
12	SO	142	GLU	N-CA-CB	-8.04	96.13	110.60
33	L1	2908	C	C3'-C2'-C1'	8.04	107.93	101.50
33	L1	1017	G	P-O5'-C5'	8.04	133.76	120.90
33	L1	1765	G	O5'-P-OP2	8.04	120.34	110.70
67	LS	111	GLU	O-C-N	-8.04	109.84	122.70
67	LS	152	PRO	CA-N-CD	-8.04	100.25	111.50
32	S1	169	A	P-O3'-C3'	8.04	129.34	119.70
32	S1	776	A	O5'-P-OP2	-8.04	98.47	105.70
33	L1	135	G	C5'-C4'-O4'	8.04	118.74	109.10
33	L1	431	G	O4'-C1'-N9	8.04	114.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1924	G	O4'-C1'-N9	8.04	114.63	108.20
33	L1	3086	G	C3'-C2'-C1'	-8.04	95.07	101.50
73	Lp	52	LYS	CB-CA-C	-8.04	94.33	110.40
31	S2	11	U	C3'-C2'-C1'	8.03	107.92	101.50
33	L1	1163	A	O5'-P-OP1	-8.03	98.47	105.70
33	L1	2784	U	C3'-C2'-C1'	-8.03	95.07	101.50
33	L1	1309	U	C1'-O4'-C4'	-8.03	103.47	109.90
33	L1	1663	G	C1'-O4'-C4'	-8.03	103.47	109.90
31	S2	46	A	N9-C1'-C2'	-8.03	103.17	112.00
32	S1	1347	U	O4'-C1'-N1	8.03	114.62	108.20
33	L1	30	C	C3'-C2'-C1'	8.03	107.92	101.50
32	S1	1038	C	O4'-C1'-N1	8.03	114.62	108.20
33	L1	309	C	C5'-C4'-C3'	8.03	128.84	116.00
33	L1	339	G	C1'-O4'-C4'	-8.03	103.48	109.90
33	L1	1027	C	N1-C1'-C2'	-8.03	103.17	112.00
33	L1	1637	G	O4'-C1'-N9	8.03	114.62	108.20
33	L1	1868	C	C1'-O4'-C4'	-8.03	103.48	109.90
33	L1	256	G	N9-C1'-C2'	8.02	124.43	114.00
33	L1	3175	C	O4'-C1'-C2'	-8.02	97.78	105.80
33	L1	3210	G	C1'-O4'-C4'	8.02	116.32	109.90
4	SD	61	VAL	C-N-CA	8.02	141.75	121.70
23	SU	25	ARG	NE-CZ-NH1	8.02	124.31	120.30
33	L1	1273	U	N1-C1'-C2'	8.02	124.42	114.00
33	L1	3128	A	N9-C1'-C2'	8.02	124.42	114.00
38	LE	114	LEU	C-N-CA	-8.02	105.46	122.30
69	La	28	VAL	CA-CB-CG2	8.02	122.93	110.90
81	LD	371	ALA	CB-CA-C	8.02	122.13	110.10
27	SH	82	GLY	N-CA-C	8.02	133.14	113.10
31	S2	68	C	O4'-C1'-N1	-8.02	101.79	108.20
32	S1	1641	A	P-O5'-C5'	-8.02	108.07	120.90
33	L1	761	C	O4'-C1'-N1	8.02	114.61	108.20
33	L1	1488	G	O4'-C1'-N9	8.02	114.61	108.20
33	L1	2673	G	P-O3'-C3'	-8.02	110.08	119.70
32	S1	144	U	C3'-C2'-C1'	8.01	107.91	101.50
32	S1	622	U	C3'-C2'-C1'	8.01	107.91	101.50
32	S1	1801	A	C3'-C2'-C1'	-8.01	95.09	101.50
33	L1	294	A	C3'-C2'-C1'	8.01	107.91	101.50
33	L1	522	C	C3'-C2'-C1'	8.01	107.91	101.50
33	L1	949	C	C1'-O4'-C4'	8.01	116.31	109.90
33	L1	1473	U	O4'-C1'-N1	8.01	114.61	108.20
33	L1	2219	A	C1'-O4'-C4'	8.01	116.31	109.90
33	L1	178	C	P-O3'-C3'	8.01	129.31	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	LT	85	ARG	NE-CZ-NH1	-8.01	116.29	120.30
32	S1	978	A	P-O5'-C5'	-8.01	108.09	120.90
33	L1	629	U	C3'-C2'-C1'	8.01	107.91	101.50
1	Sa	128	LEU	CB-CG-CD2	8.01	124.61	111.00
33	L1	2843	G	C5'-C4'-C3'	8.01	128.81	116.00
33	L1	3024	U	C1'-O4'-C4'	8.01	116.30	109.90
34	L3	77	A	C3'-C2'-C1'	8.01	107.91	101.50
41	LM	70	PRO	C-N-CA	8.01	141.71	121.70
32	S1	449	A	O4'-C1'-C2'	-8.00	97.80	105.80
32	S1	1243	C	C3'-C2'-C1'	8.00	107.90	101.50
33	L1	443	G	C1'-O4'-C4'	-8.00	103.50	109.90
33	L1	592	U	O4'-C1'-N1	8.00	114.60	108.20
33	L1	656	G	C3'-C2'-C1'	8.00	107.90	101.50
33	L1	1499	C	C1'-O4'-C4'	-8.00	103.50	109.90
33	L1	3094	C	P-O3'-C3'	8.00	129.30	119.70
45	LQ	266	ARG	NE-CZ-NH2	-8.00	116.30	120.30
33	L1	41	C	N1-C1'-C2'	8.00	124.40	114.00
33	L1	2866	A	C1'-O4'-C4'	-8.00	103.50	109.90
33	L1	3202	G	C3'-C2'-C1'	-8.00	95.10	101.50
32	S1	316	A	C1'-O4'-C4'	-8.00	103.50	109.90
33	L1	1432	G	P-O3'-C3'	8.00	129.30	119.70
33	L1	2019	G	O4'-C1'-N9	8.00	114.60	108.20
33	L1	867	G	O4'-C1'-N9	8.00	114.60	108.20
33	L1	3014	U	O4'-C1'-N1	8.00	114.60	108.20
33	L1	295	U	C1'-O4'-C4'	7.99	116.30	109.90
33	L1	1054	U	C1'-O4'-C4'	-7.99	103.50	109.90
33	L1	1875	A	C3'-C2'-C1'	7.99	107.89	101.50
33	L1	642	C	C1'-O4'-C4'	-7.99	103.51	109.90
33	L1	1880	A	O5'-P-OP1	-7.99	98.51	105.70
33	L1	1606	C	N1-C1'-C2'	7.99	124.39	114.00
33	L1	2376	G	P-O3'-C3'	7.99	129.29	119.70
33	L1	2867	U	C3'-C2'-C1'	7.99	107.89	101.50
34	L3	99	G	P-O5'-C5'	-7.99	108.11	120.90
67	LS	166	LYS	CB-CA-C	-7.99	94.42	110.40
33	L1	673	U	O4'-C1'-N1	7.99	114.59	108.20
52	Lb	127	VAL	CA-CB-CG1	7.99	122.88	110.90
33	L1	2465	G	O4'-C1'-C2'	7.99	114.79	107.60
33	L1	3319	G	C5'-C4'-C3'	-7.99	103.22	116.00
66	LN	117	ARG	CB-CA-C	7.99	126.37	110.40
33	L1	1436	A	N9-C1'-C2'	-7.99	103.22	112.00
33	L1	1361	G	O4'-C4'-C3'	-7.98	96.02	104.00
32	S1	602	U	O4'-C1'-N1	7.98	114.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1257	U	C1'-O4'-C4'	7.98	116.28	109.90
33	L1	1317	G	P-O5'-C5'	-7.98	108.13	120.90
33	L1	3385	G	O4'-C1'-C2'	7.98	114.78	107.60
34	L3	116	U	N1-C1'-C2'	7.98	124.38	114.00
33	L1	3081	G	O4'-C1'-N9	-7.98	101.82	108.20
34	L3	46	C	N1-C1'-C2'	7.98	124.37	114.00
70	Li	65	PRO	CA-N-CD	-7.98	100.33	111.50
45	LQ	180	PHE	CB-CG-CD2	-7.98	115.22	120.80
33	L1	456	G	O4'-C1'-N9	7.98	114.58	108.20
33	L1	1998	A	O4'-C1'-N9	7.98	114.58	108.20
33	L1	3040	G	O4'-C1'-C2'	7.98	114.78	107.60
35	L2	125	A	N9-C1'-C2'	7.98	124.37	114.00
38	LE	63	ARG	N-CA-CB	7.98	124.96	110.60
31	S2	32	U	O4'-C1'-C2'	7.98	114.78	107.60
33	L1	605	A	C4'-C3'-C2'	-7.98	94.62	102.60
33	L1	1317	G	O4'-C1'-N9	7.97	114.58	108.20
1	Sa	323	TYR	CG-CD1-CE1	-7.97	114.92	121.30
31	S2	1	U	O4'-C1'-N1	7.97	114.58	108.20
32	S1	1798	G	O4'-C1'-N9	7.97	114.58	108.20
33	L1	816	G	O4'-C1'-C2'	7.97	114.78	107.60
33	L1	2639	A	O5'-P-OP1	7.97	120.27	110.70
80	LC	61	GLU	N-CA-CB	7.97	124.95	110.60
25	SC	144	ASN	O-C-N	7.97	135.45	122.70
32	S1	1065	A	C3'-C2'-C1'	7.97	107.88	101.50
32	S1	1677	U	C3'-C2'-C1'	7.97	107.88	101.50
33	L1	238	C	N1-C1'-C2'	7.97	124.36	114.00
33	L1	1142	G	O4'-C1'-C2'	7.97	114.77	107.60
54	Lf	88	TYR	CB-CG-CD2	7.97	125.78	121.00
70	Li	66	ARG	NE-CZ-NH2	7.97	124.28	120.30
33	L1	1618	U	OP1-P-OP2	-7.97	107.65	119.60
81	LD	118	ARG	NE-CZ-NH2	-7.97	116.32	120.30
9	SK	34	ALA	N-CA-C	-7.96	89.50	111.00
11	SM	99	VAL	CA-CB-CG1	-7.96	98.95	110.90
31	S2	46	A	P-O3'-C3'	7.96	129.26	119.70
33	L1	922	U	C1'-O4'-C4'	-7.96	103.53	109.90
33	L1	1318	C	C3'-C2'-C1'	7.96	107.87	101.50
33	L1	1394	C	P-O3'-C3'	7.96	129.26	119.70
33	L1	2183	A	O4'-C1'-N9	7.96	114.57	108.20
29	ST	41	GLU	N-CA-C	7.96	132.50	111.00
33	L1	92	C	C3'-C2'-C1'	7.96	107.87	101.50
33	L1	1196	U	O4'-C4'-C3'	-7.96	96.04	104.00
33	L1	3220	A	P-O3'-C3'	7.96	129.25	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	Ls	186	PHE	CB-CG-CD2	7.96	126.37	120.80
32	S1	1474	U	O4'-C1'-C2'	-7.96	97.84	105.80
33	L1	3161	C	P-O3'-C3'	-7.96	110.15	119.70
33	L1	3226	G	O4'-C1'-C2'	-7.96	97.84	105.80
33	L1	2508	U	C4'-C3'-C2'	7.96	110.56	102.60
33	L1	2716	U	P-O5'-C5'	7.96	133.63	120.90
33	L1	3323	U	O4'-C1'-N1	7.96	114.56	108.20
32	S1	582	U	O4'-C1'-N1	-7.95	101.84	108.20
33	L1	2102	C	C3'-C2'-C1'	7.95	107.86	101.50
33	L1	3337	G	C3'-C2'-C1'	-7.95	95.14	101.50
33	L1	1311	G	C1'-O4'-C4'	-7.95	103.54	109.90
33	L1	1673	A	N9-C1'-C2'	7.95	124.34	114.00
48	LV	37	ARG	N-CA-CB	7.95	124.91	110.60
32	S1	1546	U	O4'-C1'-C2'	-7.95	97.85	105.80
38	LE	145	ARG	NE-CZ-NH2	7.95	124.27	120.30
32	S1	7	G	C1'-O4'-C4'	-7.95	103.54	109.90
33	L1	2789	G	OP1-P-O3'	7.95	122.68	105.20
48	LV	31	GLU	N-CA-CB	7.95	124.90	110.60
33	L1	641	C	OP1-P-OP2	-7.94	107.68	119.60
34	L3	38	U	N1-C1'-C2'	7.94	124.33	114.00
38	LE	31	ARG	NE-CZ-NH1	7.94	124.27	120.30
32	S1	980	C	O4'-C1'-C2'	-7.94	97.86	105.80
33	L1	64	A	O4'-C1'-C2'	7.94	114.75	107.60
33	L1	943	G	O4'-C1'-N9	7.94	114.55	108.20
33	L1	2166	U	O5'-C5'-C4'	7.94	126.79	111.70
33	L1	2279	C	C3'-C2'-C1'	7.94	107.85	101.50
33	L1	2411	G	O4'-C1'-C2'	7.94	114.75	107.60
35	L2	154	G	C1'-O4'-C4'	-7.94	103.55	109.90
79	Ls	34	ASP	N-CA-CB	-7.94	96.31	110.60
35	L2	76	A	O3'-P-O5'	-7.94	88.92	104.00
48	LV	90	ARG	NE-CZ-NH1	7.94	124.27	120.30
33	L1	589	G	N9-C1'-C2'	7.94	124.32	114.00
33	L1	679	C	N1-C1'-C2'	7.94	124.32	114.00
34	L3	103	U	C3'-C2'-C1'	7.94	107.85	101.50
68	LW	117	ARG	NE-CZ-NH2	-7.94	116.33	120.30
33	L1	827	C	C1'-O4'-C4'	-7.94	103.55	109.90
32	S1	511	U	O4'-C1'-N1	7.93	114.55	108.20
32	S1	919	G	O4'-C1'-C2'	-7.93	97.86	105.80
32	S1	1518	C	O4'-C1'-N1	7.93	114.55	108.20
33	L1	690	G	C3'-C2'-C1'	-7.93	95.15	101.50
33	L1	770	U	P-O3'-C3'	7.93	129.22	119.70
32	S1	950	U	C1'-O4'-C4'	-7.93	103.55	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	160	G	O4'-C1'-C2'	7.93	114.74	107.60
33	L1	372	A	O4'-C1'-N9	7.93	114.55	108.20
33	L1	1697	G	O4'-C1'-N9	7.93	114.55	108.20
72	Lk	42	PHE	CB-CG-CD2	-7.93	115.25	120.80
32	S1	1263	C	C3'-C2'-C1'	7.93	107.84	101.50
33	L1	2036	C	C3'-C2'-C1'	7.93	107.84	101.50
33	L1	2842	C	C3'-C2'-C1'	-7.93	95.16	101.50
10	SL	5	ARG	NE-CZ-NH1	-7.93	116.34	120.30
32	S1	1734	U	O4'-C1'-N1	7.93	114.54	108.20
33	L1	3318	G	P-O3'-C3'	-7.93	110.19	119.70
33	L1	1644	A	C3'-C2'-C1'	7.92	107.84	101.50
33	L1	2411	G	C3'-C2'-C1'	-7.92	95.16	101.50
33	L1	2771	U	C5'-C4'-O4'	-7.92	99.59	109.10
33	L1	3244	G	O4'-C1'-N9	7.92	114.54	108.20
32	S1	1116	G	C3'-C2'-C1'	-7.92	95.17	101.50
33	L1	522	C	C5'-C4'-O4'	7.92	118.60	109.10
33	L1	1048	U	O4'-C1'-N1	7.92	114.53	108.20
32	S1	1461	G	P-O5'-C5'	-7.92	108.23	120.90
33	L1	140	C	C1'-O4'-C4'	-7.92	103.57	109.90
33	L1	705	A	P-O3'-C3'	7.92	129.20	119.70
33	L1	2275	A	O4'-C1'-N9	7.92	114.53	108.20
5	SE	191	ARG	NE-CZ-NH1	7.92	124.26	120.30
33	L1	1554	C	N1-C1'-C2'	7.92	124.29	114.00
4	SD	94	LYS	CA-C-O	-7.91	103.48	120.10
32	S1	4	C	O4'-C1'-C2'	-7.91	97.89	105.80
32	S1	438	G	C4'-C3'-C2'	-7.91	94.69	102.60
32	S1	1699	C	C1'-O4'-C4'	-7.91	103.57	109.90
33	L1	16	A	O4'-C4'-C3'	7.91	112.43	106.10
33	L1	1875	A	O4'-C1'-C2'	-7.91	97.89	105.80
66	LN	29	ASP	CB-CG-OD1	7.91	125.42	118.30
32	S1	33	U	C3'-C2'-C1'	7.91	107.83	101.50
32	S1	1315	U	OP1-P-O3'	7.91	122.60	105.20
33	L1	1589	G	N9-C1'-C2'	-7.91	103.30	112.00
34	L3	68	G	O4'-C1'-N9	-7.91	101.87	108.20
33	L1	2373	C	C5'-C4'-O4'	7.91	118.59	109.10
33	L1	43	U	O4'-C1'-N1	7.91	114.53	108.20
33	L1	230	G	N9-C1'-C2'	7.91	124.28	114.00
35	L2	101	G	P-O3'-C3'	7.91	129.19	119.70
50	LZ	23	PHE	CB-CG-CD1	-7.91	115.27	120.80
32	S1	192	G	O4'-C1'-C2'	7.91	114.72	107.60
32	S1	258	U	O3'-P-O5'	7.91	119.02	104.00
32	S1	405	A	O4'-C1'-C2'	-7.91	97.89	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1673	A	C1'-O4'-C4'	-7.91	103.58	109.90
33	L1	1866	C	P-O3'-C3'	7.91	129.19	119.70
33	L1	2790	C	C3'-C2'-C1'	7.91	107.83	101.50
33	L1	3145	G	P-O5'-C5'	7.91	133.55	120.90
45	LQ	198	TYR	CB-CG-CD2	-7.91	116.26	121.00
33	L1	1058	A	O3'-P-O5'	-7.90	88.98	104.00
33	L1	2900	G	P-O5'-C5'	7.90	133.55	120.90
32	S1	915	C	O4'-C1'-C2'	-7.90	97.90	105.80
33	L1	367	A	C2'-C3'-O3'	7.90	126.88	109.50
33	L1	782	G	O4'-C1'-N9	7.90	114.52	108.20
33	L1	831	G	O5'-P-OP2	-7.90	98.59	105.70
33	L1	1054	U	C3'-C2'-C1'	-7.90	95.18	101.50
32	S1	1652	C	P-O3'-C3'	7.90	129.18	119.70
33	L1	48	A	C5'-C4'-O4'	7.90	118.58	109.10
33	L1	2749	A	O4'-C1'-C2'	7.90	114.71	107.60
67	LS	118	VAL	N-CA-C	-7.90	89.67	111.00
33	L1	2910	C	C1'-O4'-C4'	-7.90	103.58	109.90
32	S1	32	U	C5'-C4'-C3'	7.90	128.63	116.00
34	L3	3	A	N9-C1'-C2'	-7.90	103.31	112.00
66	LN	8	GLU	C-N-CA	7.90	141.45	121.70
33	L1	1529	C	P-O3'-C3'	7.89	129.17	119.70
33	L1	2133	A	C1'-O4'-C4'	-7.89	103.58	109.90
33	L1	29	G	O4'-C1'-N9	7.89	114.52	108.20
33	L1	71	C	O4'-C1'-C2'	-7.89	97.91	105.80
33	L1	3054	G	O5'-P-OP1	7.89	120.17	110.70
35	L2	101	G	C1'-O4'-C4'	-7.89	103.58	109.90
69	La	40	HIS	C-N-CA	7.89	141.43	121.70
33	L1	1575	G	C5'-C4'-C3'	-7.89	103.37	116.00
32	S1	378	U	N1-C1'-C2'	7.89	124.26	114.00
32	S1	1224	C	N1-C1'-C2'	-7.89	103.32	112.00
33	L1	567	G	O4'-C1'-N9	7.89	114.51	108.20
34	L3	115	A	C4'-C3'-O3'	-7.89	92.83	109.40
8	SJ	99	ASP	CB-CG-OD1	-7.89	111.20	118.30
33	L1	233	C	N1-C1'-C2'	7.89	124.25	114.00
35	L2	98	C	C5'-C4'-O4'	7.89	118.56	109.10
32	S1	1766	A	N9-C1'-C2'	-7.89	103.32	112.00
33	L1	1075	G	C3'-C2'-C1'	-7.89	95.19	101.50
46	LT	23	TRP	CA-CB-CG	7.89	128.69	113.70
57	Ll	55	ARG	NE-CZ-NH2	-7.89	116.36	120.30
32	S1	1553	A	C4'-C3'-C2'	-7.88	94.72	102.60
33	L1	1887	A	P-O3'-C3'	-7.88	110.24	119.70
33	L1	2405	C	O4'-C1'-C2'	7.88	114.70	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2647	C	O4'-C1'-C2'	-7.88	97.92	105.80
33	L1	271	G	C3'-C2'-C1'	-7.88	95.19	101.50
32	S1	1405	U	O4'-C1'-N1	-7.88	101.89	108.20
32	S1	1771	U	P-O5'-C5'	7.88	133.51	120.90
33	L1	1703	C	N1-C1'-C2'	7.88	124.25	114.00
61	Lq	9	ARG	NE-CZ-NH2	-7.88	116.36	120.30
33	L1	1761	C	O4'-C1'-N1	7.88	114.50	108.20
33	L1	2762	U	O4'-C1'-N1	7.88	114.50	108.20
46	LT	187	ARG	NE-CZ-NH1	7.88	124.24	120.30
57	Ll	52	LYS	N-CA-C	7.88	132.28	111.00
59	Lo	1	MET	CG-SD-CE	-7.88	87.59	100.20
33	L1	380	U	O4'-C1'-N1	7.88	114.50	108.20
33	L1	1946	C	O4'-C1'-N1	7.88	114.50	108.20
33	L1	251	G	C1'-O4'-C4'	-7.88	103.60	109.90
33	L1	711	A	P-O3'-C3'	7.88	129.15	119.70
33	L1	823	A	C3'-C2'-C1'	7.88	107.80	101.50
46	LT	104	ARG	NE-CZ-NH2	7.88	124.24	120.30
47	LU	126	ILE	N-CA-C	7.88	132.26	111.00
31	S2	71	A	C4'-C3'-C2'	7.88	110.47	102.60
32	S1	302	C	OP1-P-O3'	7.88	122.53	105.20
33	L1	1865	C	O4'-C1'-N1	7.88	114.50	108.20
32	S1	1080	C	C3'-C2'-C1'	7.87	107.80	101.50
33	L1	449	G	C1'-O4'-C4'	-7.87	103.60	109.90
45	LQ	249	ALA	CB-CA-C	7.87	121.91	110.10
31	S2	45	G	C1'-O4'-C4'	7.87	116.20	109.90
33	L1	1432	G	O4'-C1'-N9	-7.87	101.90	108.20
33	L1	1922	C	O5'-C5'-C4'	7.87	126.66	111.70
33	L1	2394	G	C1'-O4'-C4'	-7.87	103.60	109.90
33	L1	279	G	O4'-C1'-N9	7.87	114.50	108.20
33	L1	1255	A	P-O5'-C5'	7.87	133.49	120.90
32	S1	1007	G	O4'-C1'-N9	-7.87	101.90	108.20
35	L2	102	U	O3'-P-O5'	-7.87	89.05	104.00
32	S1	1226	U	O4'-C1'-N1	7.87	114.49	108.20
33	L1	2764	G	C1'-O4'-C4'	-7.87	103.61	109.90
33	L1	3332	G	P-O3'-C3'	7.87	129.14	119.70
32	S1	33	U	O4'-C1'-N1	7.86	114.49	108.20
33	L1	966	G	C1'-O4'-C4'	7.86	116.19	109.90
45	LQ	48	TYR	CG-CD1-CE1	-7.86	115.01	121.30
32	S1	1248	A	O4'-C1'-N9	7.86	114.49	108.20
33	L1	137	C	N1-C1'-C2'	7.86	124.22	114.00
33	L1	1517	C	N1-C1'-C2'	7.86	124.22	114.00
33	L1	2225	C	P-O5'-C5'	7.86	133.47	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
67	LS	121	PRO	CA-N-CD	-7.86	100.50	111.50
33	L1	1767	G	C1'-O4'-C4'	7.86	116.18	109.90
81	LD	37	ARG	NE-CZ-NH2	-7.86	116.37	120.30
33	L1	1909	G	O4'-C1'-N9	7.85	114.48	108.20
17	SV	78	ARG	NE-CZ-NH2	-7.85	116.37	120.30
35	L2	24	U	O5'-P-OP2	-7.85	98.63	105.70
78	Le	235	TYR	CB-CG-CD2	-7.85	116.29	121.00
81	LD	109	THR	C-N-CA	7.85	141.33	121.70
16	SR	127	GLU	O-C-N	-7.85	110.14	122.70
32	S1	1586	U	C4'-C3'-C2'	-7.85	94.75	102.60
33	L1	1869	U	N1-C1'-C2'	7.85	124.21	114.00
33	L1	153	U	P-O3'-C3'	7.85	129.12	119.70
48	LV	60	PHE	CB-CG-CD2	-7.85	115.31	120.80
32	S1	1453	U	O4'-C1'-N1	-7.85	101.92	108.20
33	L1	2106	U	N1-C1'-C2'	7.85	124.20	114.00
11	SM	12	ILE	CA-CB-CG2	-7.85	95.21	110.90
33	L1	522	C	O3'-P-O5'	7.85	118.91	104.00
33	L1	543	C	C5'-C4'-C3'	7.85	128.55	116.00
33	L1	3234	G	O4'-C4'-C3'	-7.85	96.15	104.00
59	Lo	42	ARG	NE-CZ-NH2	-7.85	116.38	120.30
6	SF	141	ARG	NE-CZ-NH1	7.84	124.22	120.30
32	S1	1239	C	C3'-C2'-C1'	-7.84	95.22	101.50
33	L1	652	C	O4'-C1'-C2'	-7.84	97.95	105.80
33	L1	1576	C	N1-C1'-C2'	7.84	124.20	114.00
13	SQ	73	LEU	N-CA-C	-7.84	89.83	111.00
32	S1	239	C	P-O3'-C3'	7.84	129.11	119.70
32	S1	1482	U	O4'-C1'-N1	7.84	114.47	108.20
32	S1	1703	G	C5'-C4'-C3'	7.84	128.55	116.00
33	L1	213	G	C4'-C3'-C2'	-7.84	94.76	102.60
33	L1	746	C	O4'-C1'-N1	7.84	114.47	108.20
32	S1	890	G	N9-C1'-C2'	7.84	124.19	114.00
32	S1	2	A	C5'-C4'-O4'	7.84	118.50	109.10
32	S1	44	U	O4'-C1'-N1	7.84	114.47	108.20
33	L1	931	C	C1'-O4'-C4'	-7.83	103.63	109.90
33	L1	1342	C	O4'-C1'-N1	7.83	114.47	108.20
33	L1	2952	G	P-O3'-C3'	7.83	129.10	119.70
11	SM	55	ARG	NE-CZ-NH1	7.83	124.22	120.30
33	L1	1222	U	C3'-C2'-C1'	7.83	107.77	101.50
76	Lv	39	MET	CG-SD-CE	-7.83	87.67	100.20
32	S1	1007	G	O4'-C1'-C2'	7.83	114.65	107.60
32	S1	1063	U	P-O3'-C3'	7.83	129.10	119.70
33	L1	705	A	O4'-C1'-C2'	-7.83	97.97	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1899	U	O4'-C1'-C2'	7.83	114.65	107.60
33	L1	2404	C	C3'-C2'-C1'	-7.83	95.24	101.50
32	S1	1380	A	N9-C1'-C2'	-7.83	103.39	112.00
33	L1	980	C	O4'-C1'-N1	7.83	114.46	108.20
33	L1	2373	C	C5'-C4'-C3'	-7.83	103.48	116.00
51	LY	15	ARG	NE-CZ-NH1	7.83	124.21	120.30
33	L1	1064	U	P-O3'-C3'	-7.82	110.31	119.70
33	L1	1285	U	O4'-C1'-N1	7.82	114.46	108.20
33	L1	1716	G	O4'-C1'-N9	7.82	114.46	108.20
34	L3	15	C	O4'-C1'-C2'	-7.82	97.98	105.80
32	S1	1561	G	O4'-C1'-C2'	-7.82	97.98	105.80
33	L1	1804	G	C1'-O4'-C4'	-7.82	103.64	109.90
33	L1	2901	C	N1-C1'-C2'	7.82	124.17	114.00
33	L1	3007	A	N9-C1'-C2'	7.82	124.17	114.00
32	S1	578	G	O4'-C4'-C3'	-7.82	96.18	104.00
32	S1	1091	A	N9-C1'-C2'	7.82	124.16	114.00
33	L1	1332	C	O4'-C1'-N1	7.82	114.45	108.20
33	L1	1624	G	C5'-C4'-C3'	-7.82	103.49	116.00
32	S1	1674	C	C1'-O4'-C4'	7.82	116.15	109.90
33	L1	786	U	N1-C1'-C2'	7.82	124.16	114.00
23	SU	8	PRO	C-N-CA	-7.81	102.17	121.70
41	LM	69	LYS	CA-C-N	7.81	138.98	117.10
32	S1	918	G	O4'-C1'-N9	7.81	114.45	108.20
33	L1	360	G	O4'-C1'-N9	7.81	114.45	108.20
33	L1	2773	G	O4'-C1'-N9	7.81	114.45	108.20
33	L1	3379	C	P-O5'-C5'	-7.81	108.40	120.90
33	L1	484	C	P-O5'-C5'	7.81	133.40	120.90
33	L1	2645	A	O4'-C1'-C2'	7.81	114.63	107.60
33	L1	2765	A	C5'-C4'-C3'	7.81	128.50	116.00
33	L1	2875	U	N1-C1'-C2'	-7.81	103.41	112.00
32	S1	352	U	O4'-C1'-N1	7.81	114.45	108.20
33	L1	2780	G	O4'-C1'-C2'	-7.81	97.99	105.80
33	L1	2942	A	N9-C1'-C2'	7.81	124.15	114.00
32	S1	1355	U	N1-C1'-C2'	-7.81	103.41	112.00
33	L1	907	A	C5'-C4'-O4'	7.81	118.47	109.10
34	L3	4	U	P-O3'-C3'	7.81	129.07	119.70
35	L2	118	G	O4'-C1'-N9	7.80	114.44	108.20
33	L1	2235	G	N9-C1'-C2'	7.80	124.14	114.00
33	L1	2899	A	C1'-O4'-C4'	7.80	116.14	109.90
33	L1	3225	G	O4'-C1'-C2'	7.80	114.62	107.60
13	SQ	139	ASP	CA-C-O	7.80	136.49	120.10
32	S1	1802	G	P-O5'-C5'	7.80	133.38	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	31	U	P-O5'-C5'	7.80	133.38	120.90
33	L1	740	G	O4'-C1'-N9	7.80	114.44	108.20
33	L1	2628	C	P-O3'-C3'	7.80	129.06	119.70
33	L1	558	G	C4'-C3'-C2'	-7.80	94.80	102.60
33	L1	2174	C	C5'-C4'-O4'	-7.80	99.74	109.10
33	L1	2232	C	C4'-C3'-C2'	-7.80	94.80	102.60
33	L1	2974	G	C5'-C4'-O4'	-7.80	99.74	109.10
33	L1	3333	C	C3'-C2'-C1'	7.80	107.74	101.50
33	L1	498	G	P-O5'-C5'	7.80	133.38	120.90
33	L1	568	C	C3'-C2'-C1'	7.80	107.74	101.50
33	L1	619	C	O5'-C5'-C4'	7.80	126.51	111.70
33	L1	1912	U	O5'-P-OP2	-7.80	98.68	105.70
33	L1	2163	G	O4'-C1'-N9	7.80	114.44	108.20
33	L1	2497	A	O4'-C1'-C2'	-7.80	98.00	105.80
32	S1	584	A	O4'-C4'-C3'	7.79	112.34	106.10
33	L1	651	A	O4'-C1'-C2'	-7.79	98.01	105.80
11	SM	12	ILE	CA-CB-CG1	7.79	125.80	111.00
32	S1	1247	G	C3'-C2'-C1'	-7.79	95.27	101.50
33	L1	603	G	N9-C1'-C2'	7.79	124.13	114.00
48	LV	136	ARG	NE-CZ-NH1	7.79	124.20	120.30
56	Lh	48	LYS	C-N-CA	7.79	138.66	122.30
20	SZ	43	ARG	N-CA-CB	-7.79	96.58	110.60
33	L1	3003	C	C1'-O4'-C4'	-7.79	103.67	109.90
60	Lr	89	LYS	C-N-CA	7.79	141.17	121.70
78	Le	68	LYS	CB-CG-CD	7.79	131.85	111.60
32	S1	1775	A	C1'-O4'-C4'	-7.79	103.67	109.90
33	L1	643	G	C4'-C3'-C2'	-7.79	94.81	102.60
33	L1	2770	U	C1'-O4'-C4'	7.79	116.13	109.90
59	Lo	49	LEU	CA-C-N	-7.79	100.62	116.20
33	L1	285	G	O4'-C1'-N9	7.79	114.43	108.20
70	Li	19	GLN	N-CA-CB	7.79	124.62	110.60
32	S1	1473	C	C4'-C3'-C2'	-7.79	94.81	102.60
70	Li	44	CYS	N-CA-C	-7.79	89.98	111.00
8	SJ	88	ARG	O-C-N	7.78	135.16	122.70
33	L1	2754	G	C5'-C4'-O4'	7.78	118.44	109.10
6	SF	131	ARG	NE-CZ-NH1	7.78	124.19	120.30
6	SF	142	ARG	NE-CZ-NH1	7.78	124.19	120.30
32	S1	60	C	N1-C1'-C2'	7.78	124.11	114.00
33	L1	1115	A	P-O3'-C3'	7.78	129.04	119.70
33	L1	2165	A	O4'-C1'-N9	7.78	114.42	108.20
33	L1	2407	U	C1'-O4'-C4'	-7.78	103.67	109.90
32	S1	1288	C	C1'-O4'-C4'	7.78	116.12	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1458	U	N1-C1'-C2'	7.78	124.11	114.00
67	LS	158	VAL	CB-CA-C	-7.78	96.62	111.40
32	S1	143	A	O4'-C1'-N9	7.78	114.42	108.20
32	S1	970	U	N1-C1'-C2'	7.78	124.11	114.00
32	S1	1143	A	C1'-O4'-C4'	7.78	116.12	109.90
33	L1	891	U	O4'-C1'-C2'	-7.78	98.02	105.80
69	La	28	VAL	N-CA-CB	-7.78	94.39	111.50
32	S1	611	G	O4'-C1'-C2'	7.78	114.60	107.60
33	L1	2893	U	O4'-C1'-N1	7.78	114.42	108.20
33	L1	766	C	C3'-C2'-C1'	7.77	107.72	101.50
33	L1	3386	A	P-O5'-C5'	7.77	133.34	120.90
10	SL	96	ASN	CA-CB-CG	-7.77	96.30	113.40
33	L1	348	C	O4'-C1'-C2'	-7.77	98.03	105.80
33	L1	2491	A	N9-C1'-C2'	7.77	124.10	114.00
32	S1	1752	U	O4'-C1'-N1	7.77	114.42	108.20
32	S1	350	G	N9-C1'-C2'	7.77	124.10	114.00
32	S1	1022	U	N1-C1'-C2'	7.77	124.10	114.00
33	L1	337	C	N1-C1'-C2'	7.77	124.10	114.00
33	L1	883	G	N9-C1'-C2'	7.77	124.10	114.00
33	L1	1005	C	O4'-C1'-C2'	-7.77	98.03	105.80
33	L1	1337	C	C3'-C2'-C1'	7.77	107.72	101.50
33	L1	1474	U	P-O5'-C5'	7.77	133.33	120.90
33	L1	1622	G	C3'-C2'-C1'	7.77	107.72	101.50
33	L1	2866	A	O4'-C1'-N9	7.77	114.42	108.20
33	L1	2996	A	C5'-C4'-C3'	7.77	128.43	116.00
13	SQ	139	ASP	CA-C-N	-7.77	100.11	117.20
28	SN	52	PHE	N-CA-C	-7.77	90.03	111.00
31	S2	74	C	O4'-C1'-N1	7.77	114.42	108.20
32	S1	1782	C	O5'-P-OP1	-7.77	98.71	105.70
33	L1	2674	A	C1'-O4'-C4'	7.77	116.11	109.90
33	L1	2756	G	O4'-C1'-N9	7.77	114.41	108.20
32	S1	1289	U	O4'-C1'-N1	7.77	114.41	108.20
33	L1	20	G	C1'-O4'-C4'	-7.76	103.69	109.90
33	L1	84	A	N9-C1'-C2'	-7.76	103.46	112.00
11	SM	32	SER	O-C-N	7.76	135.12	122.70
32	S1	1660	C	N1-C1'-C2'	7.76	124.09	114.00
33	L1	1318	C	C1'-O4'-C4'	-7.76	103.69	109.90
33	L1	2237	A	N9-C1'-C2'	7.76	124.09	114.00
33	L1	3126	U	O4'-C1'-N1	7.76	114.41	108.20
41	LM	15	ARG	NE-CZ-NH1	-7.76	116.42	120.30
69	La	31	GLU	CA-C-N	7.76	131.72	116.20
33	L1	471	C	O4'-C1'-N1	7.76	114.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1907	A	O4'-C1'-C2'	7.76	114.58	107.60
33	L1	2149	G	O4'-C1'-N9	7.76	114.40	108.20
32	S1	651	G	O4'-C1'-N9	7.75	114.40	108.20
81	LD	351	ARG	NH1-CZ-NH2	-7.75	110.87	119.40
33	L1	1873	C	C1'-O4'-C4'	-7.75	103.70	109.90
35	L2	148	C	C1'-O4'-C4'	-7.75	103.70	109.90
32	S1	476	U	N1-C1'-C2'	-7.75	103.48	112.00
33	L1	842	C	C5'-C4'-C3'	7.75	128.40	116.00
33	L1	1277	A	C5'-C4'-C3'	7.75	128.40	116.00
33	L1	2052	G	O4'-C1'-N9	7.75	114.40	108.20
33	L1	2172	C	C3'-C2'-C1'	7.75	107.70	101.50
34	L3	55	A	P-O3'-C3'	7.75	129.00	119.70
32	S1	1457	C	P-O5'-C5'	7.75	133.29	120.90
41	LM	131	ARG	NE-CZ-NH1	7.75	124.17	120.30
33	L1	2519	U	O4'-C1'-C2'	-7.74	98.06	105.80
33	L1	2734	C	O4'-C1'-C2'	-7.74	98.06	105.80
33	L1	2745	C	C1'-O4'-C4'	-7.74	103.71	109.90
33	L1	3316	C	P-O3'-C3'	7.74	128.99	119.70
66	LN	122	ARG	NH1-CZ-NH2	-7.74	110.88	119.40
46	LT	187	ARG	CB-CA-C	7.74	125.88	110.40
71	Lj	1	MET	CG-SD-CE	7.74	112.58	100.20
32	S1	1022	U	P-O5'-C5'	-7.74	108.52	120.90
35	L2	100	A	P-O3'-C3'	7.74	128.99	119.70
33	L1	1277	A	N9-C1'-C2'	7.74	124.06	114.00
33	L1	1320	G	C4'-C3'-C2'	-7.74	94.86	102.60
33	L1	1819	A	C1'-O4'-C4'	-7.74	103.71	109.90
33	L1	2076	C	C3'-C2'-C1'	-7.74	95.31	101.50
44	LR	34	ARG	NE-CZ-NH1	7.74	124.17	120.30
32	S1	152	G	C3'-C2'-C1'	7.73	107.69	101.50
33	L1	2765	A	C3'-C2'-C1'	-7.73	95.31	101.50
33	L1	3056	C	C3'-C2'-C1'	7.73	107.69	101.50
13	SQ	97	ARG	NE-CZ-NH1	-7.73	116.43	120.30
32	S1	448	C	C3'-C2'-C1'	7.73	107.69	101.50
33	L1	1678	U	P-O5'-C5'	7.73	133.27	120.90
33	L1	1799	C	O4'-C1'-N1	7.73	114.39	108.20
33	L1	2717	G	P-O3'-C3'	-7.73	110.42	119.70
32	S1	397	C	C1'-O4'-C4'	-7.73	103.72	109.90
33	L1	204	G	N9-C1'-C2'	-7.73	103.50	112.00
33	L1	890	G	C1'-O4'-C4'	-7.73	103.72	109.90
32	S1	624	A	C3'-C2'-C1'	7.73	107.68	101.50
47	LU	159	ASP	CB-CG-OD2	-7.73	111.34	118.30
33	L1	127	G	C3'-C2'-C1'	-7.73	95.32	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	441	G	C3'-C2'-C1'	-7.73	95.32	101.50
33	L1	1297	U	O4'-C1'-N1	7.73	114.38	108.20
33	L1	2998	A	P-O5'-C5'	-7.73	108.54	120.90
33	L1	3238	U	C4'-C3'-C2'	-7.73	94.87	102.60
32	S1	916	U	N1-C1'-C2'	-7.72	103.50	112.00
32	S1	1683	G	N9-C1'-C2'	7.72	124.04	114.00
33	L1	2219	A	O4'-C1'-C2'	-7.72	98.08	105.80
80	LC	362	PHE	CB-CG-CD2	-7.72	115.39	120.80
32	S1	1155	G	C1'-O4'-C4'	-7.72	103.72	109.90
34	L3	109	U	O4'-C1'-N1	7.72	114.38	108.20
32	S1	1012	C	C3'-C2'-C1'	7.72	107.68	101.50
33	L1	1371	G	P-O3'-C3'	-7.72	110.44	119.70
33	L1	2475	C	O4'-C1'-C2'	-7.72	98.08	105.80
33	L1	537	U	O4'-C1'-C2'	-7.72	98.08	105.80
33	L1	674	G	C1'-O4'-C4'	-7.72	103.72	109.90
33	L1	679	C	C3'-C2'-C1'	7.72	107.68	101.50
33	L1	2700	A	O3'-P-O5'	-7.72	89.33	104.00
33	L1	2771	U	C3'-C2'-C1'	-7.72	95.32	101.50
32	S1	1372	C	C3'-C2'-C1'	7.72	107.67	101.50
32	S1	1643	A	C1'-O4'-C4'	7.72	116.07	109.90
33	L1	985	C	O4'-C1'-N1	7.72	114.37	108.20
33	L1	1743	C	C4'-C3'-C2'	-7.72	94.88	102.60
33	L1	2810	A	C5'-C4'-C3'	7.72	128.35	116.00
73	Lp	43	ASN	CB-CA-C	7.72	125.83	110.40
10	SL	5	ARG	C-N-CA	7.71	138.50	122.30
15	SS	139	GLY	N-CA-C	7.71	132.38	113.10
25	SC	166	PHE	N-CA-C	-7.71	90.17	111.00
32	S1	1225	A	C4'-C3'-C2'	7.71	110.31	102.60
33	L1	959	U	P-O5'-C5'	7.71	133.24	120.90
33	L1	1931	G	C3'-C2'-C1'	7.71	107.67	101.50
71	Lj	4	ARG	N-CA-C	-7.71	90.17	111.00
32	S1	1137	A	O4'-C1'-N9	7.71	114.37	108.20
33	L1	2578	G	C1'-O4'-C4'	-7.71	103.73	109.90
34	L3	47	C	O4'-C1'-N1	7.71	114.37	108.20
36	LA	21	ARG	NE-CZ-NH1	7.71	124.16	120.30
48	LV	75	SER	C-N-CA	7.71	140.98	121.70
32	S1	1299	G	O4'-C1'-N9	7.71	114.37	108.20
32	S1	1690	U	O4'-C1'-N1	7.71	114.37	108.20
33	L1	1039	G	O4'-C1'-N9	7.71	114.37	108.20
33	L1	17	G	O4'-C1'-C2'	7.71	114.54	107.60
33	L1	1633	C	P-O5'-C5'	7.71	133.24	120.90
33	L1	2188	U	O4'-C1'-N1	7.71	114.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1912	U	P-O5'-C5'	7.71	133.23	120.90
33	L1	2225	C	C1'-O4'-C4'	-7.71	103.74	109.90
33	L1	2699	A	C3'-C2'-C1'	7.71	107.67	101.50
33	L1	3147	G	O4'-C1'-N9	7.71	114.37	108.20
51	LY	45	ARG	NE-CZ-NH1	7.71	124.15	120.30
33	L1	473	G	O4'-C4'-C3'	-7.71	96.30	104.00
33	L1	25	U	C5'-C4'-O4'	-7.70	99.86	109.10
33	L1	1635	A	O4'-C1'-N9	7.70	114.36	108.20
23	SU	18	MET	N-CA-CB	7.70	124.46	110.60
33	L1	1574	C	O4'-C1'-N1	-7.70	102.04	108.20
33	L1	1955	G	C1'-O4'-C4'	-7.70	103.74	109.90
72	Lk	100	MET	N-CA-CB	-7.70	96.74	110.60
32	S1	1801	A	P-O3'-C3'	7.70	128.94	119.70
35	L2	7	A	O4'-C1'-C2'	-7.70	98.10	105.80
35	L2	155	G	C5'-C4'-O4'	-7.70	99.86	109.10
33	L1	841	G	C4'-C3'-C2'	-7.70	94.91	102.60
33	L1	1458	U	C3'-C2'-C1'	-7.70	95.34	101.50
42	LP	53	TYR	CB-CG-CD1	-7.70	116.38	121.00
66	LN	99	ARG	N-CA-C	7.70	131.78	111.00
33	L1	423	C	N1-C1'-C2'	7.69	124.00	114.00
32	S1	934	A	P-O5'-C5'	-7.69	108.59	120.90
33	L1	656	G	C1'-O4'-C4'	-7.69	103.75	109.90
33	L1	2486	G	O4'-C1'-C2'	-7.69	98.11	105.80
78	Le	197	PHE	CB-CG-CD2	-7.69	115.42	120.80
33	L1	2199	C	O4'-C1'-N1	-7.69	102.05	108.20
33	L1	2975	G	O4'-C1'-N9	7.69	114.35	108.20
34	L3	38	U	O4'-C1'-N1	7.69	114.35	108.20
45	LQ	183	PHE	CB-CG-CD2	7.69	126.18	120.80
32	S1	903	A	C3'-C2'-C1'	7.69	107.65	101.50
33	L1	897	U	O4'-C1'-C2'	7.69	114.52	107.60
33	L1	2481	C	N1-C1'-C2'	7.69	124.00	114.00
33	L1	2564	G	C3'-C2'-C1'	-7.69	95.35	101.50
23	SU	82	TYR	C-N-CA	-7.69	102.48	121.70
33	L1	3353	G	C2'-C3'-O3'	7.69	126.41	109.50
32	S1	222	G	O4'-C1'-N9	7.69	114.35	108.20
33	L1	1725	G	C5'-C4'-C3'	-7.69	103.70	116.00
32	S1	1244	U	O4'-C1'-N1	7.68	114.35	108.20
33	L1	810	A	C3'-C2'-C1'	7.68	107.65	101.50
33	L1	1192	A	C1'-O4'-C4'	7.68	116.05	109.90
33	L1	1821	G	O4'-C1'-C2'	-7.68	98.12	105.80
33	L1	3334	A	P-O3'-C3'	-7.68	110.48	119.70
33	L1	2062	U	O4'-C1'-N1	7.68	114.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2532	A	C1'-O4'-C4'	-7.68	103.75	109.90
40	LH	61	ARG	NE-CZ-NH1	7.68	124.14	120.30
11	SM	36	VAL	CA-C-N	7.68	131.56	116.20
32	S1	123	U	O4'-C1'-C2'	-7.68	98.12	105.80
32	S1	562	U	C1'-O4'-C4'	7.68	116.04	109.90
32	S1	1278	C	P-O3'-C3'	-7.68	110.48	119.70
32	S1	1348	A	C1'-O4'-C4'	7.68	116.04	109.90
32	S1	1613	G	C1'-O4'-C4'	-7.68	103.76	109.90
32	S1	1614	C	C5'-C4'-O4'	7.68	118.32	109.10
33	L1	2375	G	O3'-P-O5'	-7.68	89.41	104.00
33	L1	1881	C	O5'-P-OP1	7.68	119.91	110.70
32	S1	467	U	C1'-O4'-C4'	-7.68	103.76	109.90
32	S1	1128	C	C3'-C2'-C1'	7.68	107.64	101.50
33	L1	2598	A	P-O3'-C3'	-7.68	110.49	119.70
53	Ld	45	TYR	CB-CG-CD1	7.68	125.61	121.00
83	Lm	20	ALA	CB-CA-C	-7.68	98.59	110.10
32	S1	953	G	N9-C1'-C2'	-7.67	103.56	112.00
33	L1	686	A	N9-C1'-C2'	7.67	123.98	114.00
33	L1	903	G	N9-C1'-C2'	-7.67	103.56	112.00
33	L1	1049	C	O4'-C1'-N1	7.67	114.34	108.20
33	L1	2871	U	C3'-C2'-C1'	7.67	107.64	101.50
32	S1	684	C	O4'-C1'-N1	7.67	114.34	108.20
33	L1	771	G	C4'-C3'-C2'	-7.67	94.93	102.60
33	L1	3362	A	N9-C1'-C2'	-7.67	103.56	112.00
33	L1	1119	G	O4'-C1'-N9	7.67	114.34	108.20
43	LO	79	TRP	CB-CG-CD2	7.67	136.57	126.60
32	S1	950	U	N1-C1'-C2'	7.67	123.97	114.00
32	S1	1430	A	C3'-C2'-C1'	7.67	107.64	101.50
48	LV	76	ARG	CB-CA-C	-7.67	95.06	110.40
59	Lo	25	TYR	CG-CD2-CE2	-7.67	115.17	121.30
67	LS	117	ARG	N-CA-CB	7.67	124.40	110.60
28	SN	51	GLY	CA-C-N	-7.67	100.33	117.20
33	L1	963	U	C3'-C2'-C1'	7.67	107.63	101.50
33	L1	2015	G	O4'-C1'-N9	7.67	114.33	108.20
80	LC	261	ALA	N-CA-CB	-7.67	99.37	110.10
32	S1	1196	C	O4'-C1'-N1	-7.67	102.07	108.20
33	L1	304	A	O4'-C1'-N9	7.67	114.33	108.20
33	L1	385	A	C1'-O4'-C4'	-7.66	103.77	109.90
45	LQ	248	ARG	CB-CG-CD	7.66	131.53	111.60
32	S1	1305	U	O4'-C1'-N1	7.66	114.33	108.20
32	S1	297	U	O4'-C1'-N1	7.66	114.33	108.20
33	L1	2631	A	C5'-C4'-C3'	-7.66	103.74	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3150	G	O4'-C4'-C3'	-7.66	96.34	104.00
8	SJ	89	PHE	CB-CG-CD1	-7.66	115.44	120.80
32	S1	1041	A	O4'-C1'-N9	7.66	114.33	108.20
32	S1	1769	C	O4'-C1'-N1	7.66	114.33	108.20
33	L1	650	A	P-O3'-C3'	7.66	128.89	119.70
33	L1	2465	G	C4'-C3'-C2'	-7.66	94.94	102.60
33	L1	3202	G	C1'-O4'-C4'	-7.66	103.77	109.90
34	L3	72	G	C1'-O4'-C4'	-7.66	103.77	109.90
13	SQ	30	THR	CA-CB-CG2	-7.66	101.68	112.40
32	S1	1563	A	C1'-O4'-C4'	7.66	116.03	109.90
70	Li	10	ARG	N-CA-CB	7.66	124.38	110.60
33	L1	2568	G	O4'-C1'-C2'	-7.65	98.15	105.80
32	S1	484	A	O4'-C1'-N9	7.65	114.32	108.20
33	L1	1282	A	P-O5'-C5'	-7.65	108.66	120.90
33	L1	3242	G	O4'-C1'-N9	7.65	114.32	108.20
33	L1	1610	A	N9-C1'-C2'	-7.65	103.58	112.00
33	L1	2394	G	C3'-C2'-C1'	-7.65	95.38	101.50
33	L1	3033	A	N9-C1'-C2'	-7.65	103.58	112.00
32	S1	556	G	O4'-C1'-N9	7.65	114.32	108.20
32	S1	1373	C	N1-C1'-C2'	7.65	123.94	114.00
58	Ln	37	ARG	NE-CZ-NH2	-7.65	116.47	120.30
14	SP	43	PHE	CB-CG-CD1	-7.65	115.45	120.80
33	L1	1745	G	O4'-C1'-N9	7.65	114.32	108.20
33	L1	2362	A	O4'-C1'-C2'	-7.65	98.15	105.80
32	S1	36	C	C3'-C2'-C1'	7.64	107.62	101.50
32	S1	984	A	O4'-C1'-N9	7.64	114.31	108.20
32	S1	59	G	O4'-C1'-N9	7.64	114.31	108.20
32	S1	787	C	P-O3'-C3'	7.64	128.87	119.70
33	L1	1171	U	C4'-C3'-C2'	-7.64	94.96	102.60
32	S1	1572	U	O3'-P-O5'	-7.64	89.48	104.00
33	L1	547	C	O4'-C1'-C2'	-7.64	98.16	105.80
33	L1	2225	C	N1-C1'-C2'	7.64	123.93	114.00
33	L1	2450	G	P-O5'-C5'	7.64	133.12	120.90
32	S1	172	U	O4'-C1'-N1	7.64	114.31	108.20
35	L2	157	C	P-O5'-C5'	7.64	133.12	120.90
13	SQ	138	ARG	NE-CZ-NH2	-7.64	116.48	120.30
33	L1	778	G	C1'-O4'-C4'	-7.64	103.79	109.90
33	L1	1606	C	C3'-C2'-C1'	7.64	107.61	101.50
32	S1	127	G	O4'-C1'-C2'	-7.63	98.17	105.80
33	L1	1753	A	O4'-C1'-N9	7.63	114.31	108.20
33	L1	2640	A	O4'-C4'-C3'	-7.63	96.36	104.00
69	La	25	ILE	CA-CB-CG1	7.63	125.51	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	SE	21	ARG	NH1-CZ-NH2	-7.63	111.00	119.40
32	S1	647	G	C5'-C4'-C3'	7.63	128.21	116.00
33	L1	1240	G	O4'-C1'-N9	7.63	114.31	108.20
14	SP	41	LEU	CB-CG-CD1	7.63	123.97	111.00
32	S1	1183	G	O3'-P-O5'	7.63	118.50	104.00
32	S1	1541	C	O4'-C1'-C2'	7.63	114.47	107.60
33	L1	1565	G	C1'-O4'-C4'	-7.63	103.80	109.90
33	L1	1942	A	P-O5'-C5'	7.63	133.11	120.90
33	L1	2451	G	C3'-C2'-C1'	7.63	107.61	101.50
33	L1	2935	A	C3'-C2'-C1'	7.63	107.61	101.50
69	La	8	GLY	CA-C-N	7.63	133.99	117.20
74	LJ	94	LYS	C-N-CA	7.63	140.77	121.70
33	L1	840	A	C5'-C4'-O4'	-7.63	99.95	109.10
33	L1	1755	A	C1'-O4'-C4'	-7.63	103.80	109.90
33	L1	2282	C	O4'-C1'-C2'	-7.63	98.17	105.80
33	L1	3113	G	N9-C1'-C2'	-7.63	103.61	112.00
33	L1	3166	C	P-O3'-C3'	7.63	128.85	119.70
69	La	34	ARG	CG-CD-NE	7.63	127.82	111.80
32	S1	61	A	C3'-C2'-C1'	7.63	107.60	101.50
32	S1	1021	C	O4'-C1'-C2'	-7.63	98.17	105.80
33	L1	531	G	P-O5'-C5'	-7.63	108.70	120.90
35	L2	27	C	C3'-C2'-C1'	7.63	107.60	101.50
48	LV	157	PRO	CA-N-CD	-7.63	100.82	111.50
33	L1	384	A	C5'-C4'-O4'	-7.62	99.95	109.10
33	L1	1075	G	O4'-C1'-C2'	7.62	114.46	107.60
20	SZ	5	HIS	N-CA-CB	7.62	124.32	110.60
33	L1	1004	C	N1-C1'-C2'	7.62	123.91	114.00
33	L1	2374	G	P-O3'-C3'	7.62	128.85	119.70
33	L1	2759	C	C1'-O4'-C4'	-7.62	103.80	109.90
35	L2	92	A	P-O3'-C3'	-7.62	110.55	119.70
82	LK	119	ARG	CD-NE-CZ	7.62	134.27	123.60
32	S1	734	C	C5'-C4'-C3'	7.62	128.19	116.00
33	L1	1715	C	C4'-C3'-C2'	-7.62	94.98	102.60
33	L1	318	G	O4'-C1'-N9	7.62	114.30	108.20
33	L1	1615	G	O4'-C1'-N9	7.62	114.30	108.20
15	SS	124	ARG	CB-CA-C	-7.62	95.17	110.40
32	S1	1165	A	O4'-C1'-N9	7.62	114.30	108.20
33	L1	2685	C	C5'-C4'-C3'	7.62	128.19	116.00
33	L1	2001	U	O4'-C1'-N1	7.62	114.29	108.20
32	S1	351	G	O4'-C1'-N9	7.62	114.29	108.20
32	S1	934	A	O4'-C1'-C2'	7.62	114.45	107.60
32	S1	1346	C	O4'-C1'-N1	-7.62	102.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1755	A	O4'-C1'-C2'	-7.62	98.18	105.80
33	L1	2502	U	O5'-C5'-C4'	7.62	126.17	111.70
32	S1	1713	C	C1'-O4'-C4'	-7.61	103.81	109.90
33	L1	1730	U	N1-C1'-C2'	-7.61	103.63	112.00
33	L1	2572	U	C1'-O4'-C4'	7.61	115.99	109.90
59	Lo	51	PHE	N-CA-C	7.61	131.56	111.00
81	LD	203	ARG	NE-CZ-NH1	7.61	124.11	120.30
32	S1	35	U	O4'-C1'-N1	7.61	114.29	108.20
33	L1	248	C	P-O3'-C3'	-7.61	110.57	119.70
33	L1	1537	A	C1'-O4'-C4'	7.61	115.99	109.90
33	L1	1571	A	P-O3'-C3'	7.61	128.83	119.70
35	L2	109	A	C1'-O4'-C4'	-7.61	103.81	109.90
74	LJ	93	ARG	O-C-N	-7.61	110.52	122.70
81	LD	53	ARG	NE-CZ-NH2	7.61	124.11	120.30
33	L1	656	G	O4'-C1'-N9	-7.61	102.11	108.20
35	L2	119	C	P-O3'-C3'	7.61	128.83	119.70
32	S1	341	G	O4'-C1'-C2'	-7.61	98.19	105.80
32	S1	1080	C	N1-C1'-C2'	7.61	123.89	114.00
33	L1	917	A	C3'-C2'-C1'	7.61	107.59	101.50
79	Ls	235	PRO	N-CA-C	7.61	131.88	112.10
32	S1	876	A	O4'-C1'-N9	7.61	114.28	108.20
31	S2	29	C	P-O5'-C5'	7.60	133.07	120.90
33	L1	1008	U	C3'-C2'-C1'	7.60	107.58	101.50
33	L1	1563	G	C3'-C2'-C1'	7.60	107.58	101.50
33	L1	2497	A	C3'-C2'-C1'	7.60	107.58	101.50
33	L1	1602	A	P-O3'-C3'	7.60	128.82	119.70
33	L1	2345	C	C1'-O4'-C4'	-7.60	103.82	109.90
64	LG	59	ARG	CD-NE-CZ	-7.60	112.96	123.60
33	L1	1677	G	P-O3'-C3'	7.60	128.82	119.70
52	Lb	128	TYR	CG-CD1-CE1	7.60	127.38	121.30
32	S1	576	C	C1'-O4'-C4'	-7.60	103.82	109.90
32	S1	1158	G	O4'-C1'-N9	7.60	114.28	108.20
80	LC	236	TRP	CH2-CZ2-CE2	7.60	125.00	117.40
6	SF	118	ARG	NE-CZ-NH1	7.59	124.10	120.30
46	LT	78	TYR	CB-CG-CD2	-7.59	116.44	121.00
11	SM	117	ILE	CA-CB-CG2	7.59	126.08	110.90
33	L1	3348	G	C1'-O4'-C4'	7.59	115.97	109.90
31	S2	30	G	O4'-C1'-N9	7.59	114.27	108.20
32	S1	34	G	O4'-C1'-N9	7.59	114.27	108.20
32	S1	1249	G	N9-C1'-C2'	7.59	123.87	114.00
33	L1	682	G	N9-C1'-C2'	7.59	123.87	114.00
33	L1	1612	C	C1'-O4'-C4'	-7.59	103.83	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1886	U	P-O5'-C5'	7.59	133.04	120.90
33	L1	1903	C	C3'-C2'-C1'	7.59	107.57	101.50
33	L1	3320	G	C1'-O4'-C4'	7.59	115.97	109.90
46	LT	159	PHE	CB-CG-CD1	-7.59	115.49	120.80
33	L1	1952	U	O4'-C1'-C2'	-7.59	98.21	105.80
35	L2	112	C	C3'-C2'-C1'	7.59	107.57	101.50
46	LT	88	ARG	NE-CZ-NH1	7.59	124.09	120.30
32	S1	1663	A	C1'-O4'-C4'	7.59	115.97	109.90
33	L1	1132	A	C3'-C2'-C1'	7.59	107.57	101.50
33	L1	3322	A	O4'-C4'-C3'	-7.59	96.41	104.00
33	L1	3328	A	O4'-C1'-N9	-7.59	102.13	108.20
31	S2	6	G	C3'-C2'-C1'	-7.58	95.43	101.50
33	L1	840	A	C1'-O4'-C4'	-7.58	103.83	109.90
32	S1	1774	C	C3'-C2'-C1'	7.58	107.57	101.50
33	L1	131	C	C1'-O4'-C4'	7.58	115.97	109.90
33	L1	811	A	C4'-C3'-C2'	7.58	110.18	102.60
33	L1	1416	G	O4'-C1'-N9	7.58	114.27	108.20
33	L1	2999	G	C2'-C3'-O3'	7.58	126.18	109.50
33	L1	491	G	C1'-O4'-C4'	-7.58	103.83	109.90
32	S1	54	C	C1'-O4'-C4'	7.58	115.96	109.90
32	S1	1354	C	N1-C1'-C2'	7.58	123.86	114.00
32	S1	257	A	O4'-C1'-N9	7.58	114.26	108.20
33	L1	1587	G	O4'-C1'-N9	-7.58	102.14	108.20
34	L3	19	A	C3'-C2'-C1'	7.58	107.56	101.50
69	La	28	VAL	N-CA-C	7.58	131.46	111.00
2	SA	197	HIS	N-CA-C	-7.58	90.54	111.00
32	S1	1583	G	O4'-C1'-N9	7.58	114.26	108.20
32	S1	178	A	O4'-C1'-C2'	-7.58	98.22	105.80
32	S1	957	A	C1'-O4'-C4'	7.58	115.96	109.90
33	L1	201	G	O4'-C1'-N9	7.58	114.26	108.20
33	L1	721	A	P-O3'-C3'	7.58	128.79	119.70
33	L1	1513	C	C1'-O4'-C4'	-7.58	103.84	109.90
33	L1	2080	G	P-O3'-C3'	-7.58	110.61	119.70
33	L1	2516	U	C3'-C2'-C1'	7.58	107.56	101.50
33	L1	3048	C	C4'-C3'-C2'	-7.58	95.02	102.60
32	S1	1759	A	P-O3'-C3'	7.57	128.79	119.70
33	L1	3020	C	O4'-C1'-C2'	-7.57	98.23	105.80
57	Ll	92	ALA	C-N-CA	7.57	140.64	121.70
32	S1	587	C	N1-C1'-C2'	7.57	123.84	114.00
33	L1	1714	A	N9-C1'-C2'	7.57	123.84	114.00
33	L1	2654	G	C1'-O4'-C4'	-7.57	103.84	109.90
33	L1	2753	C	O4'-C1'-C2'	-7.57	98.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
72	Lk	78	ARG	NE-CZ-NH1	7.57	124.08	120.30
33	L1	515	C	C3'-C2'-C1'	7.57	107.55	101.50
32	S1	1373	C	C3'-C2'-C1'	7.57	107.55	101.50
33	L1	3112	U	N1-C1'-C2'	-7.57	103.68	112.00
52	Lb	87	TYR	N-CA-CB	7.56	124.22	110.60
2	SA	235	TYR	N-CA-CB	7.56	124.21	110.60
33	L1	64	A	C2'-C3'-O3'	7.56	126.14	109.50
33	L1	309	C	C5'-C4'-O4'	-7.56	100.03	109.10
33	L1	1885	G	O4'-C1'-N9	7.56	114.25	108.20
33	L1	3348	G	C4'-C3'-C2'	-7.56	95.04	102.60
1	Sa	36	ASP	CB-CG-OD1	7.56	125.10	118.30
32	S1	1427	A	C1'-O4'-C4'	-7.56	103.85	109.90
33	L1	846	A	C1'-O4'-C4'	7.56	115.95	109.90
33	L1	886	A	C1'-O4'-C4'	-7.56	103.85	109.90
33	L1	2562	A	P-O5'-C5'	7.56	133.00	120.90
46	LT	98	ARG	CB-CA-C	-7.56	95.28	110.40
64	LG	110	PHE	CB-CG-CD1	-7.56	115.51	120.80
33	L1	209	G	O4'-C1'-C2'	-7.56	98.24	105.80
1	Sa	257	PHE	CB-CG-CD2	7.56	126.09	120.80
13	SQ	39	SER	CB-CA-C	7.56	124.46	110.10
32	S1	1254	U	P-O3'-C3'	7.56	128.77	119.70
33	L1	2781	A	O4'-C1'-N9	7.56	114.24	108.20
33	L1	301	G	O4'-C1'-C2'	7.55	114.40	107.60
33	L1	472	U	O4'-C1'-N1	7.55	114.24	108.20
33	L1	1414	C	C1'-O4'-C4'	-7.55	103.86	109.90
33	L1	2037	C	C3'-C2'-C1'	7.55	107.54	101.50
35	L2	136	G	C3'-C2'-C1'	7.55	107.54	101.50
32	S1	1648	C	O4'-C1'-C2'	-7.55	98.25	105.80
32	S1	1705	C	C1'-O4'-C4'	-7.55	103.86	109.90
33	L1	1694	A	O4'-C1'-C2'	-7.55	98.25	105.80
33	L1	1752	C	P-O3'-C3'	7.55	128.76	119.70
33	L1	2062	U	C1'-O4'-C4'	7.55	115.94	109.90
33	L1	3355	U	P-O5'-C5'	7.55	132.98	120.90
72	Lk	56	TYR	CD1-CE1-CZ	7.55	126.60	119.80
15	SS	5	THR	CA-C-N	-7.55	100.59	117.20
33	L1	972	C	O4'-C4'-C3'	-7.55	96.45	104.00
33	L1	2594	A	N9-C1'-C2'	-7.55	103.69	112.00
33	L1	1057	A	C4'-C3'-C2'	-7.55	95.05	102.60
32	S1	961	U	N1-C1'-C2'	7.55	123.81	114.00
33	L1	1792	G	O4'-C1'-N9	-7.55	102.16	108.20
33	L1	2260	C	C3'-C2'-C1'	-7.55	95.46	101.50
69	La	9	LYS	N-CA-C	7.55	131.38	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	64	A	O4'-C1'-N9	7.54	114.24	108.20
1	Sa	165	TYR	CB-CG-CD2	-7.54	116.47	121.00
32	S1	938	A	C1'-O4'-C4'	-7.54	103.86	109.90
33	L1	2994	U	O4'-C1'-C2'	-7.54	98.26	105.80
33	L1	699	C	C1'-O4'-C4'	-7.54	103.87	109.90
33	L1	1237	G	C3'-C2'-C1'	-7.54	95.47	101.50
33	L1	1409	G	P-O3'-C3'	7.54	128.75	119.70
33	L1	1518	A	P-O5'-C5'	7.54	132.97	120.90
33	L1	1910	G	C1'-O4'-C4'	-7.54	103.87	109.90
73	Lp	35	ARG	N-CA-C	7.54	131.36	111.00
80	LC	26	ARG	NH1-CZ-NH2	-7.54	111.10	119.40
81	LD	329	ALA	N-CA-C	7.54	131.36	111.00
81	LD	363	ARG	NE-CZ-NH2	-7.54	116.53	120.30
33	L1	721	A	N9-C1'-C2'	7.54	123.80	114.00
32	S1	921	U	O4'-C1'-N1	7.54	114.23	108.20
33	L1	1894	G	O4'-C1'-N9	7.54	114.23	108.20
33	L1	2053	A	O4'-C1'-C2'	-7.54	98.26	105.80
33	L1	81	C	N1-C1'-C2'	7.54	123.80	114.00
33	L1	347	A	O4'-C1'-C2'	7.54	114.38	107.60
33	L1	384	A	O4'-C1'-N9	-7.54	102.17	108.20
23	SU	80	LEU	CA-C-N	7.54	133.78	117.20
33	L1	1199	A	O4'-C1'-N9	7.54	114.23	108.20
33	L1	2505	C	O4'-C1'-N1	7.54	114.23	108.20
12	SO	56	ASP	CB-CG-OD2	-7.53	111.52	118.30
33	L1	123	U	C5'-C4'-O4'	7.53	118.14	109.10
35	L2	69	G	O4'-C1'-N9	7.53	114.23	108.20
33	L1	1823	C	N1-C1'-C2'	7.53	123.79	114.00
33	L1	2910	C	C5'-C4'-C3'	-7.53	103.95	116.00
32	S1	1224	C	C5'-C4'-C3'	7.53	128.05	116.00
34	L3	74	A	C3'-C2'-C1'	-7.53	95.48	101.50
35	L2	44	A	O4'-C1'-N9	-7.53	102.17	108.20
11	SM	133	GLY	CA-C-N	7.53	133.76	117.20
32	S1	302	C	N1-C1'-C2'	7.53	123.79	114.00
31	S2	71	A	N9-C1'-C2'	7.53	123.79	114.00
33	L1	2151	G	C3'-C2'-C1'	7.53	107.52	101.50
11	SM	34	LYS	N-CA-C	-7.53	90.68	111.00
32	S1	1592	G	C3'-C2'-C1'	-7.53	95.48	101.50
33	L1	3387	U	P-O5'-C5'	7.53	132.94	120.90
32	S1	1237	G	N9-C1'-C2'	-7.52	103.72	112.00
33	L1	407	A	O4'-C1'-C2'	-7.52	98.28	105.80
33	L1	1080	C	C3'-C2'-C1'	7.52	107.52	101.50
34	L3	8	A	C3'-C2'-C1'	-7.52	95.48	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1672	U	O4'-C1'-N1	7.52	114.22	108.20
33	L1	39	A	O4'-C1'-N9	7.52	114.22	108.20
33	L1	279	G	N9-C1'-C2'	-7.52	103.73	112.00
33	L1	838	G	P-O3'-C3'	-7.52	110.67	119.70
35	L2	146	G	O4'-C1'-N9	7.52	114.22	108.20
64	LG	26	TRP	CA-C-O	-7.52	104.30	120.10
33	L1	845	G	C5'-C4'-C3'	-7.52	103.97	116.00
32	S1	32	U	C3'-C2'-C1'	7.52	107.52	101.50
32	S1	1153	C	O4'-C1'-N1	7.52	114.22	108.20
33	L1	1014	G	C1'-O4'-C4'	7.52	115.92	109.90
33	L1	2637	U	C5'-C4'-O4'	7.52	118.12	109.10
32	S1	843	G	O4'-C1'-N9	7.52	114.21	108.20
32	S1	1648	C	C3'-C2'-C1'	7.52	107.51	101.50
33	L1	283	A	C1'-O4'-C4'	7.52	115.91	109.90
33	L1	1518	A	O4'-C1'-N9	-7.52	102.19	108.20
32	S1	300	U	C1'-O4'-C4'	7.52	115.91	109.90
31	S2	75	A	C5'-C4'-C3'	-7.51	103.98	116.00
33	L1	2483	A	C5'-C4'-C3'	7.51	128.02	116.00
67	LS	109	TYR	CB-CG-CD1	7.51	125.51	121.00
33	L1	2684	U	O4'-C1'-N1	-7.51	102.19	108.20
42	LP	63	ARG	NE-CZ-NH2	-7.51	116.54	120.30
44	LR	5	LEU	N-CA-CB	-7.51	95.37	110.40
33	L1	886	A	C3'-C2'-C1'	7.51	107.51	101.50
33	L1	2876	G	P-O3'-C3'	-7.51	110.69	119.70
44	LR	10	ARG	NE-CZ-NH2	-7.51	116.55	120.30
11	SM	82	TRP	N-CA-C	-7.51	90.72	111.00
33	L1	547	C	C3'-C2'-C1'	7.51	107.51	101.50
33	L1	1725	G	P-O3'-C3'	-7.51	110.69	119.70
33	L1	3320	G	C4'-C3'-C2'	-7.51	95.09	102.60
33	L1	44	A	P-O3'-C3'	7.51	128.71	119.70
15	SS	98	SER	CB-CA-C	7.51	124.36	110.10
33	L1	890	G	O4'-C1'-N9	7.51	114.21	108.20
33	L1	1507	A	C5'-C4'-C3'	7.51	128.01	116.00
33	L1	2758	C	C4'-C3'-C2'	-7.51	95.09	102.60
32	S1	634	A	O4'-C1'-N9	7.50	114.20	108.20
32	S1	1266	U	O4'-C1'-N1	-7.50	102.20	108.20
35	L2	66	C	C3'-C2'-C1'	7.50	107.50	101.50
15	SS	8	THR	CA-C-O	-7.50	104.34	120.10
32	S1	406	C	C3'-C2'-C1'	7.50	107.50	101.50
32	S1	663	C	O3'-P-O5'	7.50	118.25	104.00
32	S1	1147	A	O4'-C1'-C2'	-7.50	98.30	105.80
32	S1	1702	G	N9-C1'-C2'	7.50	123.75	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2618	G	C5'-C4'-C3'	7.50	128.00	116.00
33	L1	2763	C	C5'-C4'-C3'	7.50	128.00	116.00
33	L1	2840	A	C4'-C3'-C2'	-7.50	95.10	102.60
4	SD	191	ARG	NE-CZ-NH2	7.50	124.05	120.30
56	Lh	22	HIS	N-CA-CB	7.50	124.10	110.60
32	S1	890	G	C3'-C2'-C1'	-7.50	95.50	101.50
33	L1	406	A	N9-C1'-C2'	-7.50	103.75	112.00
33	L1	676	G	O4'-C1'-C2'	7.50	114.35	107.60
33	L1	2308	A	O4'-C1'-C2'	-7.50	98.30	105.80
32	S1	989	G	P-O5'-C5'	7.50	132.89	120.90
33	L1	1191	U	O4'-C1'-N1	7.50	114.20	108.20
33	L1	1281	C	O4'-C1'-C2'	-7.50	98.30	105.80
33	L1	1451	U	O4'-C1'-N1	7.50	114.20	108.20
33	L1	1888	G	N9-C1'-C2'	-7.50	103.75	112.00
33	L1	2059	C	C5'-C4'-C3'	7.50	128.00	116.00
42	LP	147	ARG	NE-CZ-NH1	7.50	124.05	120.30
64	LG	74	THR	C-N-CA	7.50	140.44	121.70
32	S1	1558	A	C1'-O4'-C4'	-7.50	103.90	109.90
78	Le	90	ARG	NE-CZ-NH1	7.50	124.05	120.30
33	L1	1387	G	P-O3'-C3'	-7.49	110.71	119.70
33	L1	308	U	P-O3'-C3'	-7.49	110.71	119.70
33	L1	1193	A	P-O5'-C5'	-7.49	108.92	120.90
42	LP	172	ARG	NH1-CZ-NH2	-7.49	111.16	119.40
31	S2	26	G	O4'-C1'-C2'	7.49	114.34	107.60
33	L1	1392	U	O5'-P-OP1	7.49	119.68	110.70
33	L1	1525	U	C1'-O4'-C4'	-7.49	103.91	109.90
33	L1	2246	G	C1'-O4'-C4'	-7.49	103.91	109.90
34	L3	114	C	O4'-C1'-N1	7.49	114.19	108.20
2	SA	211	PRO	CA-C-N	7.49	133.67	117.20
27	SH	89	TRP	N-CA-CB	7.49	124.08	110.60
32	S1	483	C	O4'-C1'-C2'	-7.49	98.31	105.80
32	S1	836	U	N1-C1'-C2'	-7.49	103.77	112.00
32	S1	1789	U	C3'-C2'-C1'	-7.49	95.51	101.50
33	L1	2998	A	P-O3'-C3'	7.49	128.68	119.70
32	S1	1308	G	C1'-O4'-C4'	7.48	115.89	109.90
32	S1	1784	G	O4'-C1'-C2'	7.48	114.33	107.60
38	LE	127	MET	CG-SD-CE	7.48	112.17	100.20
6	SF	165	ILE	C-N-CA	-7.48	102.99	121.70
32	S1	120	G	O4'-C1'-N9	7.48	114.19	108.20
32	S1	162	A	O4'-C1'-N9	7.48	114.19	108.20
32	S1	1651	U	O4'-C1'-N1	7.48	114.19	108.20
33	L1	1949	G	O5'-P-OP2	-7.48	98.97	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2463	U	O4'-C4'-C3'	-7.48	96.52	104.00
70	Li	15	THR	CA-CB-CG2	-7.48	101.92	112.40
30	S3	12	A	O4'-C1'-C2'	7.48	114.33	107.60
33	L1	1164	G	C5'-C4'-C3'	-7.48	104.03	116.00
19	SY	47	ARG	NE-CZ-NH2	7.48	124.04	120.30
32	S1	1296	G	C3'-C2'-C1'	-7.48	95.52	101.50
32	S1	1504	U	O4'-C1'-C2'	-7.48	98.32	105.80
80	LC	350	THR	N-CA-CB	7.48	124.51	110.30
67	LS	115	ARG	NE-CZ-NH1	7.48	124.04	120.30
32	S1	916	U	O3'-P-O5'	-7.47	89.80	104.00
33	L1	1020	U	O4'-C1'-N1	7.47	114.18	108.20
33	L1	1508	C	O4'-C1'-N1	-7.47	102.22	108.20
33	L1	1743	C	P-O5'-C5'	-7.47	108.94	120.90
34	L3	57	C	P-O5'-C5'	7.47	132.86	120.90
78	Le	162	ARG	CB-CA-C	-7.47	95.45	110.40
4	SD	136	ILE	CG1-CB-CG2	-7.47	94.96	111.40
32	S1	1147	A	C1'-O4'-C4'	7.47	115.88	109.90
33	L1	622	U	P-O3'-C3'	7.47	128.67	119.70
33	L1	701	U	C1'-O4'-C4'	7.47	115.88	109.90
33	L1	1232	A	O4'-C1'-N9	7.47	114.18	108.20
33	L1	1952	U	P-O5'-C5'	7.47	132.86	120.90
33	L1	2094	A	P-O3'-C3'	7.47	128.67	119.70
33	L1	290	C	P-O3'-C3'	-7.47	110.73	119.70
33	L1	105	A	C5'-C4'-C3'	-7.47	104.05	116.00
33	L1	1240	G	P-O3'-C3'	-7.47	110.74	119.70
33	L1	1706	C	P-O3'-C3'	7.47	128.66	119.70
33	L1	3336	A	O4'-C1'-N9	7.47	114.18	108.20
34	L3	111	U	C1'-O4'-C4'	-7.47	103.92	109.90
45	LQ	247	ILE	C-N-CA	7.47	140.38	121.70
32	S1	331	U	O5'-P-OP2	7.47	119.66	110.70
32	S1	1071	C	P-O3'-C3'	7.47	128.66	119.70
33	L1	256	G	C1'-O4'-C4'	-7.47	103.93	109.90
33	L1	366	G	O4'-C1'-N9	7.47	114.17	108.20
33	L1	1923	G	O4'-C1'-C2'	7.47	114.32	107.60
33	L1	3059	C	O4'-C1'-C2'	-7.47	98.33	105.80
33	L1	3307	A	C1'-O4'-C4'	7.47	115.87	109.90
37	LB	63	PHE	CB-CG-CD2	7.47	126.03	120.80
31	S2	11	U	N1-C1'-C2'	7.46	123.70	114.00
33	L1	2079	A	N9-C1'-C2'	-7.46	103.79	112.00
68	LW	60	GLY	CA-C-N	-7.46	100.78	117.20
23	SU	17	PHE	CB-CG-CD1	7.46	126.02	120.80
25	SC	92	GLN	CB-CA-C	7.46	125.32	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	769	C	P-O3'-C3'	7.46	128.65	119.70
12	SO	89	TYR	CB-CG-CD1	-7.46	116.53	121.00
33	L1	528	C	C4'-C3'-C2'	-7.46	95.14	102.60
33	L1	2563	G	P-O3'-C3'	-7.46	110.75	119.70
57	Ll	43	ARG	NE-CZ-NH1	7.46	124.03	120.30
32	S1	258	U	C5'-C4'-C3'	-7.46	104.07	116.00
32	S1	1452	A	O4'-C1'-C2'	-7.46	98.34	105.80
34	L3	67	C	O3'-P-O5'	-7.46	89.83	104.00
37	LB	31	SER	N-CA-CB	7.46	121.69	110.50
60	Lr	46	LYS	CA-C-N	7.46	133.61	117.20
33	L1	1667	C	P-O3'-C3'	-7.46	110.75	119.70
52	Lb	129	ARG	NE-CZ-NH1	-7.46	116.57	120.30
5	SE	195	LYS	N-CA-CB	7.45	124.02	110.60
33	L1	747	A	C5'-C4'-O4'	7.45	118.04	109.10
33	L1	989	U	O4'-C1'-C2'	-7.45	98.35	105.80
34	L3	54	A	O4'-C4'-C3'	-7.45	96.55	104.00
33	L1	1483	G	C3'-C2'-C1'	-7.45	95.54	101.50
33	L1	3107	A	O4'-C1'-N9	7.45	114.16	108.20
33	L1	446	C	C1'-O4'-C4'	-7.45	103.94	109.90
33	L1	2773	G	C5'-C4'-C3'	-7.45	104.08	116.00
33	L1	3125	G	O4'-C1'-N9	7.45	114.16	108.20
32	S1	363	G	C3'-C2'-C1'	7.45	107.46	101.50
32	S1	1242	A	N9-C1'-C2'	-7.45	103.81	112.00
33	L1	71	C	C1'-O4'-C4'	7.45	115.86	109.90
33	L1	557	C	C1'-O4'-C4'	-7.45	103.94	109.90
33	L1	1679	U	N1-C1'-C2'	-7.45	103.81	112.00
33	L1	1942	A	C1'-O4'-C4'	-7.45	103.94	109.90
33	L1	3296	C	N1-C1'-C2'	-7.45	103.81	112.00
67	LS	12	VAL	N-CA-CB	7.45	127.89	111.50
81	LD	310	LEU	O-C-N	-7.45	110.78	122.70
32	S1	219	G	O4'-C1'-N9	7.45	114.16	108.20
32	S1	1755	G	O4'-C1'-N9	7.45	114.16	108.20
33	L1	1136	A	C3'-C2'-C1'	-7.45	95.54	101.50
33	L1	1954	G	O4'-C1'-N9	7.45	114.16	108.20
37	LB	193	ARG	NE-CZ-NH1	7.45	124.02	120.30
45	LQ	28	ARG	NH1-CZ-NH2	-7.45	111.21	119.40
64	LG	210	ASP	CB-CG-OD2	-7.45	111.60	118.30
11	SM	21	ASP	CA-C-N	7.44	131.09	116.20
16	SR	127	GLU	N-CA-CB	-7.44	97.20	110.60
32	S1	273	C	OP1-P-OP2	-7.44	108.43	119.60
32	S1	453	C	C1'-O4'-C4'	7.44	115.86	109.90
33	L1	183	C	O5'-P-OP1	-7.44	99.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	22	U	O5'-P-OP2	-7.44	99.00	105.70
32	S1	939	C	O4'-C1'-C2'	-7.44	98.36	105.80
33	L1	1254	A	P-O3'-C3'	-7.44	110.77	119.70
33	L1	2151	G	O4'-C1'-N9	-7.44	102.25	108.20
33	L1	2404	C	O4'-C1'-N1	7.44	114.15	108.20
33	L1	3289	U	C3'-C2'-C1'	7.44	107.45	101.50
32	S1	177	C	O4'-C1'-N1	7.44	114.15	108.20
32	S1	836	U	O4'-C1'-C2'	-7.44	98.36	105.80
32	S1	1275	G	O4'-C1'-N9	7.44	114.15	108.20
32	S1	1567	G	P-O3'-C3'	7.44	128.63	119.70
33	L1	478	G	C3'-C2'-C1'	7.44	107.45	101.50
33	L1	1910	G	N9-C1'-C2'	7.44	123.67	114.00
33	L1	2876	G	P-O5'-C5'	-7.44	109.00	120.90
33	L1	489	C	O4'-C1'-C2'	-7.44	98.36	105.80
33	L1	1912	U	C4'-C3'-C2'	-7.44	95.16	102.60
33	L1	3016	C	O4'-C1'-N1	7.44	114.15	108.20
16	SR	139	ARG	CB-CA-C	-7.44	95.53	110.40
33	L1	1876	U	C1'-O4'-C4'	-7.44	103.95	109.90
33	L1	342	A	P-O5'-C5'	7.43	132.80	120.90
33	L1	2058	C	O4'-C1'-C2'	-7.43	98.36	105.80
55	Lg	4	LYS	N-CA-CB	7.43	123.98	110.60
32	S1	636	U	O4'-C1'-N1	-7.43	102.25	108.20
32	S1	885	C	C3'-C2'-C1'	7.43	107.45	101.50
32	S1	975	A	O4'-C1'-N9	7.43	114.15	108.20
33	L1	1738	A	O4'-C1'-N9	7.43	114.14	108.20
33	L1	1871	G	O4'-C1'-C2'	7.43	114.29	107.60
33	L1	2273	C	O5'-P-OP2	-7.43	99.01	105.70
34	L3	2	G	P-O5'-C5'	7.43	132.79	120.90
32	S1	174	C	O4'-C1'-C2'	-7.43	98.37	105.80
32	S1	1299	G	OP1-P-O3'	7.43	121.54	105.20
33	L1	127	G	N9-C1'-C2'	7.43	123.66	114.00
33	L1	906	U	N1-C1'-C2'	-7.43	103.83	112.00
33	L1	1210	G	O4'-C1'-N9	7.43	114.14	108.20
33	L1	2644	U	O4'-C1'-C2'	7.43	114.29	107.60
39	LF	98	PHE	CB-CG-CD2	7.43	126.00	120.80
32	S1	354	G	O4'-C1'-C2'	-7.43	98.37	105.80
32	S1	159	U	C3'-C2'-C1'	7.43	107.44	101.50
32	S1	1378	C	O4'-C1'-C2'	-7.43	98.37	105.80
33	L1	534	G	P-O5'-C5'	-7.43	109.02	120.90
33	L1	1768	U	P-O3'-C3'	7.43	128.61	119.70
33	L1	2199	C	P-O3'-C3'	7.43	128.61	119.70
32	S1	646	G	N9-C1'-C2'	-7.42	103.83	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1465	C	O4'-C1'-C2'	-7.42	98.38	105.80
33	L1	47	A	N9-C1'-C2'	-7.42	103.83	112.00
64	LG	19	THR	C-N-CA	7.42	140.26	121.70
31	S2	27	G	O4'-C1'-C2'	7.42	114.28	107.60
32	S1	35	U	P-O3'-C3'	7.42	128.61	119.70
33	L1	1825	G	O4'-C1'-C2'	7.42	114.28	107.60
32	S1	572	G	C3'-C2'-C1'	-7.42	95.56	101.50
32	S1	646	G	C3'-C2'-C1'	7.42	107.44	101.50
33	L1	292	A	P-O3'-C3'	-7.42	110.80	119.70
33	L1	974	G	P-O3'-C3'	7.42	128.61	119.70
33	L1	2580	C	C1'-O4'-C4'	-7.42	103.96	109.90
33	L1	2910	C	N1-C1'-C2'	7.42	123.65	114.00
35	L2	64	U	C1'-O4'-C4'	-7.42	103.96	109.90
80	LC	369	PHE	CB-CG-CD2	7.42	126.00	120.80
33	L1	108	A	C3'-C2'-C1'	7.42	107.44	101.50
33	L1	2131	U	N1-C1'-C2'	-7.42	103.84	112.00
33	L1	306	A	C3'-C2'-C1'	-7.42	95.56	101.50
33	L1	1508	C	P-O5'-C5'	7.42	132.77	120.90
33	L1	1547	G	N9-C1'-C2'	7.42	123.64	114.00
33	L1	1867	U	P-O3'-C3'	-7.42	110.80	119.70
33	L1	3161	C	C3'-C2'-C1'	7.42	107.43	101.50
33	L1	3322	A	OP1-P-OP2	-7.42	108.47	119.60
32	S1	1038	C	C3'-C2'-C1'	7.42	107.43	101.50
33	L1	2997	C	C3'-C2'-C1'	7.42	107.43	101.50
33	L1	24	C	O5'-P-OP1	-7.41	99.03	105.70
33	L1	294	A	O4'-C1'-N9	7.41	114.13	108.20
33	L1	1035	C	C5'-C4'-C3'	7.41	127.86	116.00
33	L1	1593	C	O4'-C1'-N1	-7.41	102.27	108.20
33	L1	1614	G	C5'-C4'-C3'	-7.41	104.14	116.00
33	L1	1756	C	C3'-C2'-C1'	7.41	107.43	101.50
33	L1	2009	C	N1-C1'-C2'	7.41	123.64	114.00
4	SD	186	GLY	N-CA-C	7.41	131.63	113.10
33	L1	563	C	C2'-C3'-O3'	7.41	125.81	109.50
33	L1	31	U	C1'-O4'-C4'	7.41	115.83	109.90
33	L1	962	C	O4'-C1'-C2'	-7.41	98.39	105.80
33	L1	1248	A	O4'-C1'-N9	7.41	114.13	108.20
33	L1	1648	C	C3'-C2'-C1'	7.41	107.43	101.50
33	L1	3343	U	C5'-C4'-C3'	7.41	127.85	116.00
46	LT	177	ARG	NE-CZ-NH1	-7.41	116.60	120.30
33	L1	2356	A	N9-C1'-C2'	7.41	123.63	114.00
33	L1	2408	G	O4'-C1'-C2'	-7.41	98.39	105.80
32	S1	1754	A	O3'-P-O5'	-7.41	89.93	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2643	A	C5'-C4'-O4'	7.41	117.99	109.10
67	LS	28	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
32	S1	1659	A	P-O3'-C3'	-7.40	110.81	119.70
33	L1	3292	U	N1-C1'-C2'	-7.40	103.86	112.00
48	LV	4	TYR	N-CA-C	7.40	130.99	111.00
67	LS	12	VAL	CB-CA-C	-7.40	97.33	111.40
33	L1	682	G	C1'-O4'-C4'	-7.40	103.98	109.90
33	L1	858	U	C1'-O4'-C4'	-7.40	103.98	109.90
33	L1	1496	G	OP1-P-OP2	-7.40	108.50	119.60
61	Lq	21	ARG	NE-CZ-NH1	7.40	124.00	120.30
33	L1	180	G	P-O3'-C3'	-7.40	110.82	119.70
33	L1	1751	G	C3'-C2'-C1'	7.40	107.42	101.50
33	L1	1954	G	C1'-O4'-C4'	-7.40	103.98	109.90
33	L1	2449	A	C5'-C4'-C3'	7.40	127.84	116.00
33	L1	2939	G	O4'-C1'-N9	7.40	114.12	108.20
35	L2	56	A	N9-C1'-C2'	-7.40	103.86	112.00
25	SC	171	PRO	CB-CG-CD	-7.40	77.64	106.50
32	S1	1734	U	P-O5'-C5'	7.40	132.74	120.90
32	S1	259	A	C3'-C2'-C1'	7.40	107.42	101.50
32	S1	1797	C	C1'-O4'-C4'	-7.40	103.98	109.90
33	L1	2268	G	N9-C1'-C2'	7.40	123.62	114.00
33	L1	3037	G	C5'-C4'-C3'	-7.40	104.17	116.00
82	LK	134	LEU	CB-CG-CD1	-7.40	98.42	111.00
1	Sa	115	ALA	N-CA-CB	7.40	120.45	110.10
25	SC	161	SER	N-CA-C	-7.40	91.03	111.00
32	S1	1413	C	C3'-C2'-C1'	7.40	107.42	101.50
32	S1	1676	G	C3'-C2'-C1'	-7.40	95.58	101.50
23	SU	81	ILE	N-CA-C	7.39	130.97	111.00
32	S1	1760	A	C3'-C2'-C1'	7.39	107.42	101.50
33	L1	542	G	N9-C1'-C2'	7.39	123.61	114.00
70	Li	13	TYR	CB-CA-C	7.39	125.19	110.40
32	S1	1589	C	C1'-O4'-C4'	-7.39	103.99	109.90
33	L1	2165	A	C3'-C2'-C1'	-7.39	95.59	101.50
73	Lp	46	ARG	CB-CA-C	7.39	125.18	110.40
33	L1	1763	C	N1-C1'-C2'	7.39	123.61	114.00
32	S1	1197	A	O4'-C1'-N9	7.39	114.11	108.20
32	S1	1350	C	C3'-C2'-C1'	7.39	107.41	101.50
1	Sa	63	GLN	CB-CG-CD	7.39	130.81	111.60
33	L1	3372	C	O4'-C1'-C2'	-7.39	98.41	105.80
32	S1	1131	G	C5'-C4'-O4'	7.39	117.96	109.10
32	S1	1677	U	P-O3'-C3'	7.39	128.56	119.70
32	S1	1792	A	O4'-C1'-N9	7.39	114.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LV	155	GLU	N-CA-CB	-7.39	97.30	110.60
71	Lj	14	ARG	NE-CZ-NH1	7.39	123.99	120.30
81	LD	358	LYS	CA-CB-CG	-7.39	97.15	113.40
33	L1	315	A	N9-C1'-C2'	7.38	123.60	114.00
33	L1	2564	G	O4'-C1'-N9	7.38	114.11	108.20
33	L1	3349	C	C1'-O4'-C4'	-7.38	103.99	109.90
4	SD	133	GLN	O-C-N	-7.38	110.89	122.70
32	S1	621	U	P-O3'-C3'	7.38	128.56	119.70
33	L1	1336	A	C3'-C2'-C1'	7.38	107.41	101.50
33	L1	2955	U	O5'-P-OP2	-7.38	99.06	105.70
48	LV	74	LYS	CB-CA-C	7.38	125.17	110.40
7	SI	99	TYR	CB-CG-CD1	7.38	125.43	121.00
32	S1	1014	U	O4'-C1'-N1	7.38	114.11	108.20
33	L1	2088	C	O4'-C1'-N1	7.38	114.10	108.20
33	L1	3034	A	C3'-C2'-C1'	-7.38	95.60	101.50
33	L1	3142	C	C3'-C2'-C1'	7.38	107.40	101.50
33	L1	811	A	O3'-P-O5'	-7.38	89.98	104.00
33	L1	1361	G	P-O5'-C5'	7.38	132.70	120.90
33	L1	1688	U	P-O3'-C3'	7.38	128.56	119.70
70	Li	103	VAL	CB-CA-C	-7.38	97.38	111.40
33	L1	297	G	C5'-C4'-O4'	-7.38	100.25	109.10
33	L1	2106	U	O4'-C1'-C2'	7.38	114.24	107.60
1	Sa	373	PHE	CB-CG-CD2	-7.38	115.64	120.80
32	S1	1116	G	C1'-O4'-C4'	-7.38	104.00	109.90
33	L1	1818	C	C5'-C4'-C3'	7.38	127.80	116.00
33	L1	2737	A	N9-C1'-C2'	7.38	123.59	114.00
32	S1	1473	C	C3'-C2'-C1'	7.37	107.40	101.50
33	L1	2512	U	N1-C1'-C2'	7.37	123.59	114.00
33	L1	3048	C	C5'-C4'-O4'	-7.37	100.25	109.10
33	L1	3207	C	N1-C1'-C2'	7.37	123.58	114.00
35	L2	141	G	O4'-C1'-N9	7.37	114.10	108.20
64	LG	142	PHE	CB-CG-CD2	-7.37	115.64	120.80
14	SP	109	PRO	CB-CA-C	-7.37	93.57	112.00
32	S1	1042	C	C3'-C2'-C1'	7.37	107.40	101.50
33	L1	22	G	C1'-O4'-C4'	-7.37	104.00	109.90
33	L1	705	A	C1'-O4'-C4'	7.37	115.80	109.90
33	L1	2340	G	OP1-P-OP2	-7.37	108.54	119.60
33	L1	2582	G	C4'-C3'-C2'	7.37	109.97	102.60
54	Lf	39	ARG	NE-CZ-NH2	-7.37	116.61	120.30
3	SB	178	ARG	NE-CZ-NH1	-7.37	116.61	120.30
33	L1	2901	C	O4'-C1'-C2'	-7.37	98.43	105.80
32	S1	67	G	C1'-O4'-C4'	-7.37	104.00	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1710	G	OP2-P-O3'	7.37	121.41	105.20
32	S1	1755	G	P-O3'-C3'	7.37	128.54	119.70
55	Lg	16	VAL	CA-CB-CG1	7.37	121.95	110.90
32	S1	1375	C	O4'-C1'-C2'	-7.37	98.43	105.80
33	L1	1736	C	C3'-C2'-C1'	7.37	107.39	101.50
33	L1	3135	A	O4'-C1'-N9	7.37	114.09	108.20
33	L1	3353	G	O4'-C1'-N9	7.37	114.09	108.20
33	L1	2276	A	O4'-C1'-N9	7.36	114.09	108.20
33	L1	2653	U	O4'-C1'-N1	7.36	114.09	108.20
33	L1	2709	G	O4'-C1'-C2'	7.36	114.23	107.60
40	LH	98	GLU	CB-CA-C	-7.36	95.67	110.40
74	LJ	124	LYS	N-CA-CB	7.36	123.85	110.60
33	L1	376	A	N9-C1'-C2'	7.36	123.57	114.00
32	S1	1076	C	C3'-C2'-C1'	7.36	107.39	101.50
32	S1	1309	U	N1-C1'-C2'	7.36	123.57	114.00
33	L1	1974	C	O4'-C1'-N1	7.36	114.09	108.20
33	L1	2101	A	O3'-P-O5'	-7.36	90.02	104.00
8	SJ	92	ARG	NE-CZ-NH1	7.36	123.98	120.30
33	L1	409	U	C1'-O4'-C4'	-7.36	104.02	109.90
33	L1	590	C	C2'-C3'-O3'	7.36	125.69	109.50
33	L1	2985	C	O4'-C1'-C2'	-7.36	98.44	105.80
35	L2	115	G	N9-C1'-C2'	-7.36	103.91	112.00
70	Li	111	LYS	N-CA-CB	7.36	123.84	110.60
33	L1	1694	A	O4'-C1'-N9	7.36	114.08	108.20
33	L1	304	A	O3'-P-O5'	7.35	117.97	104.00
23	SU	24	SER	O-C-N	7.35	134.46	122.70
33	L1	2567	C	P-O3'-C3'	7.35	128.52	119.70
74	LJ	14	PHE	CB-CG-CD1	-7.35	115.65	120.80
79	Ls	257	GLU	C-N-CA	7.35	140.08	121.70
33	L1	1112	C	P-O5'-C5'	7.35	132.66	120.90
64	LG	92	ARG	NE-CZ-NH1	7.35	123.97	120.30
3	SB	30	ALA	O-C-N	-7.35	110.94	122.70
33	L1	58	G	C1'-O4'-C4'	7.35	115.78	109.90
33	L1	309	C	C1'-O4'-C4'	-7.35	104.02	109.90
33	L1	3060	G	O4'-C1'-N9	7.35	114.08	108.20
10	SL	117	VAL	N-CA-C	-7.35	91.16	111.00
32	S1	839	G	O4'-C1'-N9	7.35	114.08	108.20
32	S1	1069	G	O4'-C1'-N9	7.35	114.08	108.20
33	L1	611	C	O4'-C1'-C2'	-7.35	98.45	105.80
33	L1	2027	G	O4'-C1'-N9	7.35	114.08	108.20
81	LD	303	VAL	CA-C-O	7.35	135.53	120.10
33	L1	1558	A	P-O3'-C3'	7.35	128.51	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2632	U	P-O3'-C3'	-7.35	110.89	119.70
34	L3	2	G	C4'-C3'-O3'	-7.35	93.97	109.40
33	L1	87	A	O4'-C1'-C2'	7.34	114.21	107.60
33	L1	1911	A	P-O5'-C5'	-7.34	109.15	120.90
33	L1	2235	G	O4'-C1'-C2'	7.34	114.21	107.60
81	LD	303	VAL	CA-C-N	-7.34	101.04	117.20
33	L1	3093	C	P-O3'-C3'	7.34	128.51	119.70
17	SV	63	PRO	CA-N-CD	-7.34	101.22	111.50
33	L1	1567	G	C3'-C2'-C1'	-7.34	95.63	101.50
34	L3	10	C	O4'-C1'-N1	-7.34	102.33	108.20
7	SI	144	PHE	CB-CG-CD2	7.34	125.94	120.80
17	SV	52	LEU	CB-CG-CD2	7.34	123.48	111.00
33	L1	2201	G	N9-C1'-C2'	-7.34	103.93	112.00
33	L1	537	U	C1'-O4'-C4'	7.34	115.77	109.90
33	L1	1588	G	O4'-C1'-C2'	7.34	114.20	107.60
64	LG	122	GLN	C-N-CA	7.34	140.04	121.70
3	SB	190	LEU	CB-CA-C	7.34	124.14	110.20
32	S1	1282	G	O4'-C1'-C2'	-7.34	98.46	105.80
33	L1	1103	U	O3'-P-O5'	-7.34	90.06	104.00
33	L1	2450	G	P-O3'-C3'	7.34	128.50	119.70
33	L1	2532	A	O4'-C1'-N9	7.34	114.07	108.20
45	LQ	153	THR	N-CA-CB	7.34	124.24	110.30
27	SH	107	SER	N-CA-CB	7.33	121.50	110.50
32	S1	937	A	C3'-C2'-C1'	7.33	107.37	101.50
32	S1	380	C	P-O3'-C3'	7.33	128.50	119.70
32	S1	1541	C	N1-C1'-C2'	7.33	123.53	114.00
33	L1	1252	C	N1-C1'-C2'	7.33	123.53	114.00
35	L2	96	A	C4'-C3'-C2'	-7.33	95.27	102.60
35	L2	144	A	C3'-C2'-C1'	7.33	107.37	101.50
32	S1	959	G	N9-C1'-C2'	-7.33	103.94	112.00
33	L1	398	G	O4'-C1'-C2'	7.33	114.20	107.60
33	L1	1629	A	O4'-C1'-N9	7.33	114.06	108.20
23	SU	62	PHE	CB-CG-CD2	7.33	125.93	120.80
32	S1	234	G	C1'-O4'-C4'	-7.33	104.04	109.90
32	S1	1597	C	C3'-C2'-C1'	7.33	107.36	101.50
33	L1	3044	C	O4'-C1'-N1	7.33	114.06	108.20
13	SQ	94	GLU	C-N-CA	-7.33	103.38	121.70
33	L1	77	U	N1-C1'-C2'	-7.33	103.94	112.00
33	L1	1582	C	C1'-O4'-C4'	-7.33	104.04	109.90
33	L1	2215	A	P-O3'-C3'	-7.33	110.91	119.70
25	SC	163	THR	CA-C-N	-7.33	101.08	117.20
33	L1	877	U	P-O3'-C3'	-7.33	110.91	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	973	U	C5'-C4'-C3'	-7.33	104.28	116.00
33	L1	2339	U	P-O3'-C3'	-7.33	110.91	119.70
33	L1	3036	C	C1'-O4'-C4'	-7.33	104.04	109.90
66	LN	55	LEU	CB-CA-C	7.33	124.12	110.20
78	Le	223	TYR	CG-CD1-CE1	-7.33	115.44	121.30
32	S1	384	U	N1-C1'-C2'	7.32	123.52	114.00
33	L1	1375	G	O4'-C1'-N9	7.32	114.06	108.20
33	L1	1495	G	C1'-O4'-C4'	7.32	115.76	109.90
32	S1	875	C	O4'-C1'-N1	7.32	114.06	108.20
33	L1	3237	G	O4'-C1'-C2'	7.32	114.19	107.60
32	S1	1653	G	O4'-C1'-N9	7.32	114.06	108.20
33	L1	3049	A	P-O5'-C5'	-7.32	109.19	120.90
33	L1	3107	A	C3'-C2'-C1'	7.32	107.36	101.50
66	LN	32	ASP	N-CA-CB	7.32	123.78	110.60
32	S1	645	G	C1'-O4'-C4'	-7.32	104.05	109.90
32	S1	1110	C	O4'-C1'-N1	7.32	114.06	108.20
33	L1	306	A	C1'-O4'-C4'	-7.32	104.05	109.90
33	L1	2746	G	C3'-C2'-C1'	-7.32	95.65	101.50
33	L1	2778	C	P-O3'-C3'	-7.32	110.92	119.70
74	LJ	115	ARG	NE-CZ-NH1	7.32	123.96	120.30
23	SU	23	LEU	N-CA-CB	-7.32	95.77	110.40
33	L1	1753	A	C5'-C4'-C3'	7.32	127.71	116.00
33	L1	1777	C	O4'-C1'-C2'	-7.32	98.48	105.80
33	L1	2640	A	C3'-C2'-C1'	-7.32	95.65	101.50
32	S1	1519	G	C3'-C2'-C1'	-7.31	95.65	101.50
32	S1	1751	U	C5'-C4'-C3'	-7.31	104.30	116.00
33	L1	1205	C	C1'-O4'-C4'	-7.31	104.05	109.90
33	L1	2343	U	N1-C1'-C2'	7.31	123.51	114.00
33	L1	3033	A	O4'-C1'-C2'	-7.31	98.49	105.80
5	SE	27	ARG	NE-CZ-NH1	-7.31	116.64	120.30
32	S1	1372	C	O4'-C1'-N1	7.31	114.05	108.20
33	L1	1819	A	N9-C1'-C2'	7.31	123.51	114.00
32	S1	1229	C	C3'-C2'-C1'	7.31	107.35	101.50
32	S1	1391	G	N9-C1'-C2'	7.31	123.50	114.00
33	L1	642	C	C3'-C2'-C1'	7.31	107.35	101.50
33	L1	1050	A	C5'-C4'-C3'	7.31	127.70	116.00
33	L1	2664	G	O4'-C1'-C2'	7.31	114.18	107.60
33	L1	2686	U	C5'-C4'-O4'	-7.31	100.33	109.10
32	S1	1329	A	O4'-C1'-N9	7.31	114.05	108.20
33	L1	1887	A	C1'-O4'-C4'	7.31	115.75	109.90
35	L2	69	G	P-O3'-C3'	7.31	128.47	119.70
33	L1	832	C	N1-C1'-C2'	-7.31	103.96	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1415	G	C3'-C2'-C1'	-7.31	95.65	101.50
33	L1	1835	A	O4'-C1'-N9	-7.31	102.36	108.20
32	S1	962	G	C1'-O4'-C4'	-7.31	104.06	109.90
33	L1	3123	A	C3'-C2'-C1'	7.31	107.34	101.50
55	Lg	118	VAL	C-N-CA	7.31	139.97	121.70
60	Lr	28	TYR	CB-CG-CD1	-7.31	116.62	121.00
11	SM	132	ARG	NE-CZ-NH1	7.30	123.95	120.30
17	SV	91	ARG	NE-CZ-NH2	-7.30	116.65	120.30
32	S1	146	A	P-O3'-C3'	7.30	128.47	119.70
32	S1	890	G	O4'-C1'-C2'	7.30	114.17	107.60
32	S1	1729	A	C5'-C4'-C3'	7.30	127.69	116.00
33	L1	3183	G	C5'-C4'-C3'	7.30	127.69	116.00
81	LD	227	ARG	NE-CZ-NH2	7.30	123.95	120.30
33	L1	2624	G	O4'-C1'-C2'	7.30	114.17	107.60
35	L2	145	C	O4'-C1'-N1	7.30	114.04	108.20
32	S1	442	A	C3'-C2'-C1'	7.30	107.34	101.50
32	S1	1146	G	C4'-C3'-C2'	-7.30	95.30	102.60
32	S1	1602	G	P-O3'-C3'	-7.30	110.94	119.70
33	L1	32	G	C1'-O4'-C4'	-7.30	104.06	109.90
33	L1	229	G	O4'-C1'-C2'	-7.30	98.50	105.80
33	L1	465	C	C3'-C2'-C1'	7.30	107.34	101.50
71	Lj	8	ARG	C-N-CA	-7.30	103.45	121.70
80	LC	92	TYR	CG-CD1-CE1	-7.30	115.46	121.30
82	LK	42	ARG	NE-CZ-NH2	-7.30	116.65	120.30
17	SV	13	SER	O-C-N	-7.30	111.02	122.70
23	SU	17	PHE	CA-C-N	7.30	133.26	117.20
33	L1	1281	C	P-O3'-C3'	7.30	128.46	119.70
33	L1	2081	C	P-O3'-C3'	7.30	128.46	119.70
33	L1	2829	U	OP2-P-O3'	7.30	121.26	105.20
34	L3	21	U	P-O3'-C3'	7.30	128.46	119.70
73	Lp	35	ARG	N-CA-CB	-7.30	97.46	110.60
34	L3	41	G	P-O3'-C3'	7.30	128.46	119.70
3	SB	64	ARG	NE-CZ-NH2	7.30	123.95	120.30
32	S1	772	C	P-O3'-C3'	7.30	128.46	119.70
32	S1	1229	C	C1'-O4'-C4'	-7.30	104.06	109.90
33	L1	1208	A	C1'-O4'-C4'	7.30	115.74	109.90
33	L1	2493	C	O5'-P-OP2	-7.30	99.13	105.70
33	L1	2703	G	C1'-O4'-C4'	-7.29	104.06	109.90
32	S1	1071	C	O4'-C4'-C3'	-7.29	96.71	104.00
32	S1	1184	C	C5'-C4'-C3'	7.29	127.67	116.00
32	S1	1544	G	N9-C1'-C2'	7.29	123.48	114.00
33	L1	3234	G	C1'-O4'-C4'	7.29	115.73	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1501	A	P-O3'-C3'	7.29	128.45	119.70
33	L1	2738	U	C1'-O4'-C4'	-7.29	104.07	109.90
33	L1	3290	C	C3'-C2'-C1'	7.29	107.33	101.50
33	L1	3336	A	O3'-P-O5'	-7.29	90.14	104.00
33	L1	1336	A	OP1-P-OP2	-7.29	108.67	119.60
33	L1	2381	G	O4'-C1'-C2'	7.29	114.16	107.60
32	S1	1512	C	P-O3'-C3'	7.29	128.44	119.70
33	L1	68	U	C5'-C4'-C3'	7.29	127.66	116.00
33	L1	1621	G	O4'-C4'-C3'	-7.29	96.71	104.00
33	L1	2021	G	O3'-P-O5'	-7.29	90.15	104.00
33	L1	2162	C	O4'-C1'-C2'	-7.29	98.51	105.80
66	LN	87	SER	N-CA-C	7.29	130.68	111.00
33	L1	565	C	N1-C1'-C2'	7.29	123.47	114.00
33	L1	2380	G	C1'-O4'-C4'	-7.29	104.07	109.90
33	L1	3033	A	C1'-O4'-C4'	7.29	115.73	109.90
35	L2	48	A	O3'-P-O5'	-7.29	90.16	104.00
66	LN	98	ARG	NH1-CZ-NH2	-7.29	111.39	119.40
5	SE	72	VAL	CA-CB-CG1	7.29	121.83	110.90
33	L1	563	C	C1'-O4'-C4'	-7.29	104.07	109.90
33	L1	2202	A	P-O5'-C5'	-7.29	109.24	120.90
33	L1	3140	A	C3'-C2'-C1'	7.29	107.33	101.50
32	S1	1540	U	O3'-P-O5'	7.28	117.84	104.00
67	LS	138	ARG	N-CA-CB	7.28	123.71	110.60
80	LC	69	LYS	C-N-CA	-7.28	103.49	121.70
33	L1	1105	G	C1'-O4'-C4'	7.28	115.73	109.90
33	L1	2849	A	C3'-C2'-C1'	7.28	107.33	101.50
33	L1	387	A	P-O3'-C3'	7.28	128.44	119.70
33	L1	619	C	OP1-P-OP2	-7.28	108.68	119.60
15	SS	7	ARG	CB-CA-C	7.28	124.95	110.40
32	S1	357	A	C3'-C2'-C1'	7.28	107.32	101.50
33	L1	1624	G	P-O3'-C3'	-7.28	110.97	119.70
33	L1	2804	A	N9-C1'-C2'	-7.28	104.00	112.00
33	L1	3072	A	P-O5'-C5'	7.28	132.54	120.90
67	LS	48	ARG	NE-CZ-NH2	-7.28	116.66	120.30
33	L1	186	A	C1'-O4'-C4'	-7.28	104.08	109.90
33	L1	1509	G	C5'-C4'-C3'	-7.28	104.36	116.00
33	L1	1643	A	P-O5'-C5'	-7.28	109.26	120.90
31	S2	20	C	O4'-C1'-N1	7.27	114.02	108.20
33	L1	536	C	C3'-C2'-C1'	7.27	107.32	101.50
33	L1	661	A	C1'-O4'-C4'	7.27	115.72	109.90
32	S1	1543	U	C5'-C4'-C3'	-7.27	104.37	116.00
33	L1	1850	C	O4'-C1'-C2'	-7.27	98.53	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	467	U	N1-C1'-C2'	7.27	123.45	114.00
33	L1	640	C	O5'-P-OP2	-7.27	99.16	105.70
33	L1	1689	G	O3'-P-O5'	-7.27	90.19	104.00
33	L1	1749	G	OP1-P-OP2	-7.27	108.70	119.60
33	L1	1880	A	O5'-C5'-C4'	7.27	125.51	111.70
2	SA	35	ASP	CB-CG-OD2	7.27	124.84	118.30
3	SB	178	ARG	NE-CZ-NH2	7.27	123.93	120.30
32	S1	530	A	C5'-C4'-C3'	-7.27	104.37	116.00
32	S1	1798	G	C1'-O4'-C4'	-7.27	104.09	109.90
33	L1	1237	G	C5'-C4'-O4'	-7.27	100.38	109.10
44	LR	65	ARG	NE-CZ-NH2	-7.27	116.67	120.30
32	S1	1460	G	C1'-O4'-C4'	-7.27	104.09	109.90
33	L1	542	G	C3'-C2'-C1'	-7.27	95.69	101.50
33	L1	1291	A	C1'-O4'-C4'	7.27	115.71	109.90
38	LE	50	SER	N-CA-CB	7.27	121.40	110.50
11	SM	104	ASP	CB-CA-C	-7.26	95.87	110.40
46	LT	81	ARG	NE-CZ-NH1	-7.26	116.67	120.30
11	SM	112	GLU	C-N-CA	-7.26	103.54	121.70
32	S1	1285	G	N9-C1'-C2'	7.26	123.44	114.00
34	L3	1	G	O4'-C4'-C3'	-7.26	96.74	104.00
41	LM	59	ASP	CB-CG-OD1	-7.26	111.77	118.30
78	Le	130	ARG	NE-CZ-NH2	7.26	123.93	120.30
3	SB	76	ARG	NH1-CZ-NH2	-7.26	111.42	119.40
32	S1	666	C	N1-C1'-C2'	7.26	123.44	114.00
33	L1	1760	G	O4'-C1'-N9	7.26	114.01	108.20
33	L1	3361	G	O5'-P-OP2	-7.26	99.17	105.70
34	L3	35	C	C3'-C2'-C1'	7.26	107.31	101.50
33	L1	967	G	P-O3'-C3'	-7.26	110.99	119.70
32	S1	630	U	C4'-C3'-C2'	7.26	109.86	102.60
32	S1	1144	A	P-O3'-C3'	7.26	128.41	119.70
33	L1	813	A	O4'-C1'-N9	7.26	114.00	108.20
33	L1	3269	C	N1-C1'-C2'	7.26	123.43	114.00
67	LS	164	LYS	CA-CB-CG	7.26	129.36	113.40
35	L2	122	C	C1'-O4'-C4'	-7.25	104.10	109.90
64	LG	65	LYS	CB-CA-C	7.25	124.91	110.40
32	S1	1163	C	C3'-C2'-C1'	7.25	107.30	101.50
33	L1	49	U	C3'-C2'-C1'	7.25	107.30	101.50
33	L1	323	A	O4'-C1'-C2'	7.25	114.13	107.60
33	L1	974	G	C1'-O4'-C4'	-7.25	104.10	109.90
33	L1	906	U	C5'-C4'-C3'	7.25	127.60	116.00
33	L1	1566	C	C3'-C2'-C1'	7.25	107.30	101.50
33	L1	2619	C	P-O3'-C3'	7.25	128.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3162	C	C3'-C2'-C1'	7.25	107.30	101.50
33	L1	875	A	C1'-O4'-C4'	-7.25	104.10	109.90
33	L1	2445	U	N1-C1'-C2'	7.25	123.42	114.00
33	L1	3299	A	N9-C1'-C2'	-7.25	104.03	112.00
32	S1	1200	A	O4'-C1'-C2'	-7.25	98.55	105.80
32	S1	1315	U	O4'-C1'-C2'	-7.25	98.55	105.80
33	L1	732	G	O4'-C1'-N9	7.25	114.00	108.20
33	L1	1910	G	O4'-C1'-C2'	7.25	114.12	107.60
32	S1	441	A	P-O3'-C3'	7.25	128.40	119.70
32	S1	501	U	C1'-O4'-C4'	-7.25	104.10	109.90
33	L1	239	C	C1'-O4'-C4'	7.25	115.70	109.90
33	L1	1507	A	C3'-C2'-C1'	-7.25	95.70	101.50
33	L1	2639	A	P-O3'-C3'	7.25	128.40	119.70
33	L1	1778	C	O3'-P-O5'	-7.25	90.23	104.00
23	SU	51	LYS	CB-CA-C	-7.24	95.91	110.40
32	S1	37	U	C3'-C2'-C1'	7.24	107.29	101.50
32	S1	622	U	O4'-C1'-N1	7.24	114.00	108.20
32	S1	1212	A	O4'-C1'-N9	7.24	114.00	108.20
33	L1	3107	A	C4'-C3'-C2'	-7.24	95.36	102.60
78	Le	163	ILE	N-CA-CB	-7.24	94.14	110.80
23	SU	68	THR	CA-C-N	7.24	133.13	117.20
30	S3	12	A	C3'-C2'-C1'	-7.24	95.71	101.50
33	L1	2820	U	O4'-C1'-N1	7.24	113.99	108.20
72	Lk	96	VAL	CG1-CB-CG2	-7.24	99.31	110.90
33	L1	1233	G	P-O5'-C5'	7.24	132.48	120.90
33	L1	2092	C	C5'-C4'-C3'	7.24	127.59	116.00
23	SU	8	PRO	CA-C-O	-7.24	102.83	120.20
23	SU	23	LEU	CB-CG-CD1	-7.24	98.69	111.00
32	S1	301	U	P-O3'-C3'	7.24	128.39	119.70
32	S1	1478	C	C3'-C2'-C1'	7.24	107.29	101.50
33	L1	238	C	C4'-C3'-C2'	-7.24	95.36	102.60
33	L1	338	C	N1-C1'-C2'	7.24	123.41	114.00
4	SD	45	ILE	CA-CB-CG2	7.24	125.38	110.90
23	SU	21	ARG	N-CA-C	7.24	130.54	111.00
32	S1	1707	G	O4'-C1'-N9	7.24	113.99	108.20
32	S1	157	U	O4'-C1'-N1	7.24	113.99	108.20
33	L1	1727	A	N9-C1'-C2'	7.24	123.41	114.00
33	L1	1812	A	O4'-C1'-N9	7.24	113.99	108.20
33	L1	2999	G	C1'-O4'-C4'	-7.24	104.11	109.90
57	Ll	79	ARG	NE-CZ-NH1	-7.24	116.68	120.30
79	Ls	33	ALA	N-CA-CB	7.24	120.23	110.10
33	L1	1164	G	C1'-O4'-C4'	-7.23	104.11	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3024	U	C5'-C4'-O4'	7.23	117.78	109.10
32	S1	852	A	C1'-O4'-C4'	-7.23	104.11	109.90
33	L1	2665	A	C3'-C2'-C1'	7.23	107.29	101.50
33	L1	3065	U	O4'-C1'-N1	7.23	113.99	108.20
34	L3	77	A	C1'-O4'-C4'	7.23	115.69	109.90
34	L3	89	G	O4'-C1'-N9	7.23	113.99	108.20
60	Lr	61	LYS	CB-CA-C	-7.23	95.94	110.40
31	S2	21	A	C3'-C2'-C1'	7.23	107.28	101.50
32	S1	103	U	O4'-C1'-N1	7.23	113.98	108.20
33	L1	2046	G	O4'-C1'-N9	7.23	113.98	108.20
67	LS	121	PRO	N-CA-CB	7.23	111.98	103.30
32	S1	631	C	N1-C1'-C2'	-7.23	104.05	112.00
33	L1	1422	G	N9-C1'-C2'	-7.23	104.05	112.00
84	LI	69	ARG	NE-CZ-NH1	7.23	123.92	120.30
32	S1	137	A	O4'-C1'-N9	7.23	113.98	108.20
32	S1	392	G	O4'-C1'-N9	7.23	113.98	108.20
32	S1	508	U	C2'-C3'-O3'	7.23	125.40	109.50
32	S1	1096	A	O4'-C1'-N9	7.23	113.98	108.20
31	S2	25	U	O4'-C1'-N1	7.23	113.98	108.20
32	S1	1434	G	C1'-O4'-C4'	-7.23	104.12	109.90
33	L1	306	A	C5'-C4'-C3'	7.23	127.56	116.00
33	L1	533	G	C5'-C4'-C3'	7.23	127.56	116.00
33	L1	990	U	O4'-C1'-N1	7.23	113.98	108.20
72	Lk	96	VAL	CA-CB-CG1	7.23	121.74	110.90
33	L1	455	U	O4'-C1'-N1	7.22	113.98	108.20
32	S1	1096	A	P-O3'-C3'	-7.22	111.03	119.70
32	S1	1688	G	C3'-C2'-C1'	-7.22	95.72	101.50
33	L1	20	G	O4'-C1'-C2'	7.22	114.10	107.60
33	L1	371	A	O4'-C1'-C2'	7.22	114.10	107.60
33	L1	1394	C	C5'-C4'-C3'	7.22	127.56	116.00
33	L1	1242	U	P-O3'-C3'	7.22	128.36	119.70
33	L1	1776	G	O4'-C1'-N9	7.22	113.97	108.20
33	L1	2134	U	P-O5'-C5'	7.22	132.45	120.90
33	L1	2430	C	O5'-P-OP2	-7.22	99.20	105.70
33	L1	2543	G	O4'-C1'-N9	-7.22	102.42	108.20
34	L3	116	U	O4'-C1'-C2'	-7.22	98.58	105.80
35	L2	51	U	C3'-C2'-C1'	7.22	107.28	101.50
46	LT	136	ARG	N-CA-C	-7.22	91.51	111.00
33	L1	2487	A	C3'-C2'-C1'	-7.22	95.72	101.50
31	S2	49	G	O4'-C1'-C2'	7.22	114.09	107.60
33	L1	1388	C	P-O3'-C3'	7.22	128.36	119.70
33	L1	1525	U	O5'-P-OP1	7.22	119.36	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1273	U	C1'-O4'-C4'	-7.21	104.13	109.90
33	L1	1596	G	N9-C1'-C2'	7.21	123.38	114.00
33	L1	548	G	P-O5'-C5'	-7.21	109.36	120.90
33	L1	2689	U	O4'-C1'-N1	7.21	113.97	108.20
35	L2	131	C	C3'-C2'-C1'	7.21	107.27	101.50
10	SL	106	ARG	CD-NE-CZ	7.21	133.70	123.60
32	S1	498	U	O4'-C1'-N1	7.21	113.97	108.20
33	L1	619	C	P-O5'-C5'	-7.21	109.36	120.90
33	L1	926	C	O4'-C1'-N1	7.21	113.97	108.20
33	L1	997	G	O5'-P-OP1	-7.21	99.21	105.70
33	L1	1494	A	N9-C1'-C2'	-7.21	104.07	112.00
32	S1	1663	A	O4'-C1'-N9	7.21	113.97	108.20
33	L1	1577	A	C5'-C4'-O4'	7.21	117.75	109.10
33	L1	1757	G	N9-C1'-C2'	-7.21	104.07	112.00
32	S1	179	A	P-O3'-C3'	7.21	128.35	119.70
33	L1	215	U	C1'-O4'-C4'	-7.21	104.13	109.90
33	L1	311	G	OP1-P-OP2	-7.21	108.79	119.60
33	L1	339	G	N9-C1'-C2'	7.21	123.37	114.00
33	L1	389	A	O4'-C1'-C2'	7.21	114.09	107.60
33	L1	638	G	C1'-O4'-C4'	-7.21	104.13	109.90
33	L1	2171	A	C1'-O4'-C4'	7.21	115.67	109.90
39	LF	31	ARG	NE-CZ-NH2	-7.21	116.70	120.30
32	S1	1299	G	C1'-O4'-C4'	-7.21	104.14	109.90
33	L1	1176	U	O5'-P-OP2	-7.21	99.21	105.70
33	L1	1752	C	C5'-C4'-O4'	-7.21	100.45	109.10
33	L1	2875	U	C5'-C4'-C3'	-7.21	104.47	116.00
84	LI	109	ASP	CA-C-O	-7.21	104.97	120.10
32	S1	140	C	O4'-C1'-N1	7.21	113.96	108.20
32	S1	257	A	C4'-C3'-C2'	-7.21	95.39	102.60
11	SM	117	ILE	CA-CB-CG1	-7.20	97.31	111.00
33	L1	882	U	P-O3'-C3'	7.20	128.34	119.70
33	L1	1906	A	N9-C1'-C2'	-7.20	104.08	112.00
33	L1	2762	U	P-O5'-C5'	7.20	132.42	120.90
84	LI	10	ARG	NE-CZ-NH2	-7.20	116.70	120.30
33	L1	1249	A	P-O3'-C3'	7.20	128.34	119.70
45	LQ	259	LYS	CB-CA-C	7.20	124.80	110.40
50	LZ	22	ARG	NE-CZ-NH1	7.20	123.90	120.30
32	S1	900	G	O4'-C1'-N9	7.20	113.96	108.20
33	L1	45	U	O4'-C1'-N1	7.20	113.96	108.20
33	L1	3287	A	C3'-C2'-C1'	7.20	107.26	101.50
35	L2	46	G	O4'-C1'-C2'	-7.20	98.60	105.80
69	La	28	VAL	C-N-CA	7.20	139.70	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	502	G	O4'-C1'-N9	7.20	113.96	108.20
32	S1	1039	C	C3'-C2'-C1'	7.20	107.26	101.50
32	S1	1167	C	N1-C1'-C2'	7.20	123.36	114.00
32	S1	1614	C	C1'-O4'-C4'	-7.20	104.14	109.90
33	L1	1125	U	O4'-C1'-N1	7.20	113.96	108.20
33	L1	2097	C	C3'-C2'-C1'	7.20	107.26	101.50
33	L1	2179	U	O4'-C1'-C2'	-7.20	98.60	105.80
33	L1	3361	G	O4'-C1'-N9	-7.20	102.44	108.20
33	L1	2798	G	C5'-C4'-O4'	7.20	117.74	109.10
2	SA	26	ASP	CB-CG-OD2	-7.20	111.82	118.30
10	SL	118	ARG	N-CA-C	-7.20	91.57	111.00
11	SM	100	SER	CA-CB-OG	7.20	130.63	111.20
33	L1	676	G	C1'-O4'-C4'	-7.20	104.14	109.90
33	L1	1903	C	N1-C1'-C2'	-7.20	104.08	112.00
33	L1	2092	C	O4'-C1'-N1	7.20	113.96	108.20
33	L1	2896	C	C5'-C4'-C3'	-7.20	104.49	116.00
34	L3	39	C	O4'-C1'-C2'	-7.20	98.61	105.80
82	LK	135	GLN	O-C-N	-7.20	107.43	121.10
32	S1	1794	C	N1-C1'-C2'	7.19	123.35	114.00
33	L1	1118	G	C3'-C2'-C1'	7.19	107.25	101.50
34	L3	67	C	C5'-C4'-C3'	7.19	127.51	116.00
46	LT	172	ARG	CB-CA-C	-7.19	96.01	110.40
32	S1	1602	G	OP1-P-O3'	7.19	121.02	105.20
33	L1	605	A	C5'-C4'-C3'	-7.19	104.49	116.00
33	L1	2774	A	C3'-C2'-C1'	7.19	107.25	101.50
35	L2	92	A	O4'-C1'-N9	-7.19	102.45	108.20
35	L2	122	C	N1-C1'-C2'	7.19	123.35	114.00
1	Sa	234	ASP	CB-CG-OD1	7.19	124.77	118.30
32	S1	1310	C	C3'-C2'-C1'	7.19	107.25	101.50
33	L1	407	A	C4'-C3'-C2'	-7.19	95.41	102.60
33	L1	422	G	P-O5'-C5'	7.19	132.40	120.90
33	L1	921	C	N1-C1'-C2'	-7.19	104.09	112.00
33	L1	1762	G	N9-C1'-C2'	7.19	123.35	114.00
33	L1	1806	C	C1'-O4'-C4'	-7.19	104.15	109.90
64	LG	144	ASP	N-CA-C	7.19	130.41	111.00
69	La	78	THR	N-CA-CB	7.19	123.96	110.30
32	S1	1698	A	C1'-O4'-C4'	7.19	115.65	109.90
33	L1	1920	U	C3'-C2'-C1'	7.19	107.25	101.50
33	L1	1954	G	C4'-C3'-C2'	-7.19	95.41	102.60
64	LG	79	THR	C-N-CA	7.19	139.67	121.70
67	LS	10	GLN	CA-CB-CG	7.19	129.21	113.40
67	LS	141	THR	C-N-CA	7.19	139.67	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2661	G	C4'-C3'-C2'	-7.19	95.41	102.60
32	S1	459	C	O4'-C1'-C2'	-7.18	98.62	105.80
33	L1	651	A	P-O3'-C3'	7.18	128.32	119.70
33	L1	2150	C	N1-C1'-C2'	7.18	123.34	114.00
32	S1	412	C	C3'-C2'-C1'	7.18	107.25	101.50
33	L1	1859	G	O4'-C1'-C2'	-7.18	98.62	105.80
33	L1	2044	C	O4'-C1'-N1	7.18	113.95	108.20
33	L1	3123	A	N9-C1'-C2'	7.18	123.34	114.00
67	LS	44	TRP	CB-CA-C	7.18	124.77	110.40
33	L1	1587	G	P-O5'-C5'	7.18	132.39	120.90
70	Li	110	GLN	C-N-CA	-7.18	103.75	121.70
32	S1	372	U	N1-C1'-C2'	7.18	123.33	114.00
48	LV	117	HIS	CB-CA-C	7.18	124.76	110.40
33	L1	683	U	N1-C1'-C2'	7.18	123.33	114.00
34	L3	11	A	C4'-C3'-C2'	-7.18	95.42	102.60
64	LG	139	VAL	N-CA-CB	7.18	127.29	111.50
33	L1	2562	A	C5'-C4'-O4'	-7.18	100.49	109.10
33	L1	1005	C	N1-C1'-C2'	-7.17	104.11	112.00
25	SC	43	GLU	CA-C-N	7.17	132.98	117.20
31	S2	66	C	O4'-C1'-N1	7.17	113.94	108.20
33	L1	541	C	N1-C1'-C2'	7.17	123.33	114.00
33	L1	3052	U	P-O3'-C3'	-7.17	111.09	119.70
32	S1	574	A	O4'-C1'-C2'	-7.17	98.63	105.80
33	L1	765	U	O4'-C1'-N1	7.17	113.94	108.20
33	L1	785	U	C1'-O4'-C4'	-7.17	104.16	109.90
67	LS	89	TYR	CG-CD1-CE1	-7.17	115.56	121.30
33	L1	450	C	N1-C1'-C2'	7.17	123.32	114.00
33	L1	1281	C	C1'-O4'-C4'	7.17	115.64	109.90
33	L1	1664	G	O4'-C1'-N9	-7.17	102.46	108.20
80	LC	355	LEU	CB-CG-CD1	-7.17	98.81	111.00
32	S1	422	G	C1'-O4'-C4'	-7.17	104.17	109.90
32	S1	784	C	P-O3'-C3'	7.17	128.30	119.70
27	SH	120	ASN	N-CA-C	-7.17	91.65	111.00
33	L1	793	C	P-O3'-C3'	-7.17	111.10	119.70
33	L1	2229	G	C3'-C2'-C1'	-7.17	95.77	101.50
32	S1	419	C	O4'-C1'-C2'	-7.17	98.64	105.80
35	L2	76	A	C5'-C4'-C3'	-7.17	104.54	116.00
32	S1	299	A	O4'-C1'-N9	7.16	113.93	108.20
32	S1	1745	U	C1'-O4'-C4'	7.16	115.63	109.90
33	L1	319	C	O4'-C1'-N1	7.16	113.93	108.20
33	L1	2466	G	C4'-C3'-C2'	-7.16	95.44	102.60
70	Li	70	ASN	N-CA-CB	7.16	123.50	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	232	C	O4'-C1'-C2'	-7.16	98.64	105.80
33	L1	760	C	O4'-C1'-N1	7.16	113.93	108.20
33	L1	2167	G	O4'-C1'-N9	7.16	113.93	108.20
33	L1	2456	G	C1'-O4'-C4'	-7.16	104.17	109.90
49	LX	139	ASP	CB-CG-OD1	-7.16	111.86	118.30
32	S1	324	U	C3'-C2'-C1'	7.16	107.23	101.50
32	S1	1657	C	C3'-C2'-C1'	7.16	107.23	101.50
33	L1	2498	C	C4'-C3'-C2'	-7.16	95.44	102.60
33	L1	3051	U	C1'-O4'-C4'	-7.16	104.17	109.90
33	L1	1525	U	P-O3'-C3'	7.16	128.29	119.70
32	S1	159	U	C4'-C3'-C2'	-7.16	95.44	102.60
33	L1	1320	G	C1'-O4'-C4'	-7.16	104.18	109.90
35	L2	164	C	O4'-C1'-N1	7.16	113.92	108.20
32	S1	1247	G	C1'-O4'-C4'	-7.15	104.18	109.90
33	L1	1911	A	N9-C1'-C2'	-7.15	104.13	112.00
33	L1	2204	U	O5'-C5'-C4'	7.15	125.29	111.70
11	SM	118	ARG	NE-CZ-NH1	7.15	123.88	120.30
33	L1	2156	U	O4'-C1'-N1	7.15	113.92	108.20
8	SJ	64	ARG	NE-CZ-NH2	7.15	123.88	120.30
33	L1	810	A	O4'-C1'-N9	-7.15	102.48	108.20
33	L1	2944	C	O4'-C1'-C2'	-7.15	98.65	105.80
35	L2	21	A	O4'-C1'-C2'	7.15	114.03	107.60
33	L1	1245	U	N1-C1'-C2'	-7.15	104.14	112.00
33	L1	1424	G	C3'-C2'-C1'	-7.15	95.78	101.50
2	SA	228	ASP	CB-CG-OD2	-7.15	111.87	118.30
32	S1	293	C	N1-C1'-C2'	7.15	123.29	114.00
32	S1	1784	G	C1'-O4'-C4'	-7.15	104.18	109.90
57	Ll	11	ARG	CA-C-O	-7.15	105.09	120.10
32	S1	1179	C	O4'-C1'-N1	7.14	113.92	108.20
33	L1	326	C	C4'-C3'-C2'	7.14	109.74	102.60
33	L1	2114	A	C5'-C4'-C3'	-7.14	104.57	116.00
33	L1	2865	G	O4'-C1'-N9	7.14	113.92	108.20
32	S1	176	A	O4'-C1'-N9	7.14	113.91	108.20
32	S1	1226	U	C2'-C3'-O3'	7.14	125.21	109.50
33	L1	1738	A	O3'-P-O5'	-7.14	90.43	104.00
33	L1	2093	G	O4'-C1'-N9	7.14	113.91	108.20
33	L1	2813	A	C3'-C2'-C1'	-7.14	95.79	101.50
80	LC	245	THR	CA-CB-CG2	-7.14	102.40	112.40
83	Lm	14	TYR	CB-CG-CD1	7.14	125.28	121.00
31	S2	9	A	P-O3'-C3'	7.14	128.27	119.70
32	S1	475	A	C3'-C2'-C1'	7.14	107.21	101.50
33	L1	2424	G	O4'-C1'-C2'	7.14	114.03	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	439	C	C4'-C3'-C2'	7.14	109.74	102.60
33	L1	381	G	O4'-C1'-N9	7.14	113.91	108.20
33	L1	476	C	O4'-C1'-N1	7.14	113.91	108.20
33	L1	1731	A	N9-C1'-C2'	7.14	123.28	114.00
33	L1	1807	C	O4'-C1'-N1	7.14	113.91	108.20
33	L1	3100	C	O3'-P-O5'	7.14	117.56	104.00
33	L1	3211	C	O4'-C1'-N1	7.14	113.91	108.20
70	Li	41	GLY	CA-C-N	7.14	137.09	117.10
33	L1	1374	G	C4'-C3'-C2'	-7.14	95.46	102.60
32	S1	357	A	N9-C1'-C2'	-7.14	104.15	112.00
33	L1	502	G	N9-C1'-C2'	-7.14	104.15	112.00
33	L1	2750	A	C3'-C2'-C1'	7.14	107.21	101.50
33	L1	3231	G	C1'-O4'-C4'	-7.14	104.19	109.90
64	LG	49	LYS	C-N-CA	-7.14	103.86	121.70
79	Ls	260	TYR	CB-CG-CD1	7.14	125.28	121.00
82	LK	135	GLN	CB-CA-C	-7.14	96.13	110.40
32	S1	1064	U	O4'-C1'-C2'	-7.13	98.67	105.80
33	L1	1595	G	P-O3'-C3'	-7.13	111.14	119.70
33	L1	1644	A	O4'-C1'-N9	-7.13	102.49	108.20
32	S1	1803	G	P-O5'-C5'	-7.13	109.49	120.90
33	L1	71	C	O4'-C1'-N1	7.13	113.91	108.20
31	S2	55	C	P-O3'-C3'	7.13	128.26	119.70
45	LQ	246	ALA	N-CA-C	-7.13	91.74	111.00
47	LU	159	ASP	CB-CG-OD1	7.13	124.72	118.30
32	S1	1046	G	O4'-C1'-N9	7.13	113.90	108.20
33	L1	182	C	OP2-P-O3'	7.13	120.88	105.20
33	L1	282	A	C5'-C4'-C3'	-7.13	104.60	116.00
33	L1	676	G	C5'-C4'-O4'	7.13	117.65	109.10
33	L1	1510	G	C3'-C2'-C1'	-7.13	95.80	101.50
27	SH	113	HIS	N-CA-CB	7.13	123.43	110.60
33	L1	1082	U	O4'-C1'-N1	7.13	113.90	108.20
33	L1	2502	U	P-O5'-C5'	-7.13	109.50	120.90
33	L1	2562	A	N9-C1'-C2'	-7.13	104.16	112.00
33	L1	685	G	N9-C1'-C2'	7.12	123.26	114.00
33	L1	1018	C	O4'-C1'-C2'	-7.12	98.67	105.80
33	L1	2362	A	C3'-C2'-C1'	-7.12	95.80	101.50
32	S1	181	C	N1-C1'-C2'	7.12	123.26	114.00
33	L1	639	A	P-O5'-C5'	-7.12	109.50	120.90
23	SU	33	LEU	CB-CA-C	7.12	123.73	110.20
33	L1	1940	U	C5'-C4'-O4'	7.12	117.64	109.10
34	L3	102	G	C1'-O4'-C4'	7.12	115.60	109.90
55	Lg	83	ILE	CB-CA-C	7.12	125.84	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	SR	117	LYS	CA-CB-CG	7.12	129.06	113.40
33	L1	188	U	N1-C1'-C2'	-7.12	104.17	112.00
33	L1	614	C	C3'-C2'-C1'	7.12	107.20	101.50
3	SB	158	ILE	CA-C-N	7.12	132.86	117.20
33	L1	1753	A	C2'-C3'-O3'	7.12	125.16	109.50
35	L2	23	A	C3'-C2'-C1'	-7.12	95.81	101.50
32	S1	255	U	O4'-C1'-N1	7.12	113.89	108.20
32	S1	1099	G	N9-C1'-C2'	7.12	123.25	114.00
32	S1	1385	C	C5'-C4'-O4'	7.12	117.64	109.10
33	L1	2255	U	O4'-C1'-N1	7.12	113.89	108.20
64	LG	153	THR	N-CA-CB	7.12	123.82	110.30
32	S1	1051	G	O4'-C1'-N9	7.12	113.89	108.20
33	L1	1304	G	C1'-O4'-C4'	-7.12	104.21	109.90
33	L1	2087	A	C4'-C3'-C2'	-7.12	95.48	102.60
33	L1	3305	U	C5'-C4'-O4'	7.12	117.64	109.10
32	S1	365	C	C3'-C2'-C1'	7.11	107.19	101.50
32	S1	474	A	O4'-C1'-C2'	-7.11	98.69	105.80
33	L1	949	C	C3'-C2'-C1'	7.11	107.19	101.50
33	L1	1104	C	P-O5'-C5'	7.11	132.28	120.90
33	L1	2546	C	N1-C1'-C2'	7.11	123.25	114.00
33	L1	3335	G	C5'-C4'-O4'	-7.11	100.56	109.10
60	Lr	43	TYR	CB-CG-CD1	7.11	125.27	121.00
15	SS	7	ARG	O-C-N	7.11	134.08	122.70
17	SV	78	ARG	N-CA-CB	7.11	123.40	110.60
32	S1	396	G	C1'-O4'-C4'	-7.11	104.21	109.90
32	S1	579	C	C3'-C2'-C1'	7.11	107.19	101.50
33	L1	486	G	P-O3'-C3'	-7.11	111.17	119.70
33	L1	2332	C	O4'-C1'-C2'	7.11	114.00	107.60
33	L1	2729	C	C5'-C4'-O4'	7.11	117.63	109.10
33	L1	3359	C	O4'-C1'-N1	7.11	113.89	108.20
56	Lh	5	LEU	CB-CA-C	7.11	123.71	110.20
32	S1	1563	A	P-O3'-C3'	7.11	128.23	119.70
33	L1	599	C	C5'-C4'-O4'	7.11	117.63	109.10
33	L1	1442	U	C1'-O4'-C4'	-7.11	104.22	109.90
33	L1	2118	G	O4'-C1'-N9	7.11	113.89	108.20
33	L1	2227	A	C1'-O4'-C4'	-7.11	104.21	109.90
32	S1	107	U	O4'-C1'-N1	7.11	113.88	108.20
33	L1	2302	G	P-O3'-C3'	7.11	128.23	119.70
33	L1	2369	G	O4'-C1'-N9	7.11	113.89	108.20
33	L1	451	C	N1-C1'-C2'	7.10	123.23	114.00
33	L1	499	A	P-O3'-C3'	7.10	128.22	119.70
33	L1	611	C	C3'-C2'-C1'	7.10	107.18	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1624	G	P-O5'-C5'	7.10	132.26	120.90
53	Ld	49	HIS	CA-CB-CG	7.10	125.67	113.60
33	L1	2748	G	C3'-C2'-C1'	-7.10	95.82	101.50
24	SX	52	SER	O-C-N	7.10	134.06	122.70
32	S1	174	C	C3'-C2'-C1'	7.10	107.18	101.50
33	L1	640	C	OP1-P-O3'	7.10	120.82	105.20
38	LE	12	ARG	NE-CZ-NH1	7.10	123.85	120.30
81	LD	359	LEU	CB-CA-C	-7.10	96.71	110.20
33	L1	13	G	N9-C1'-C2'	7.10	123.23	114.00
33	L1	3318	G	O4'-C1'-N9	7.10	113.88	108.20
3	SB	87	TYR	CB-CG-CD2	-7.09	116.74	121.00
28	SN	40	ARG	NE-CZ-NH2	7.09	123.85	120.30
33	L1	2653	U	C4'-C3'-C2'	-7.09	95.50	102.60
33	L1	3322	A	C5'-C4'-C3'	7.09	127.35	116.00
32	S1	333	G	N9-C1'-C2'	7.09	123.22	114.00
32	S1	607	U	N1-C1'-C2'	7.09	123.22	114.00
33	L1	3337	G	O4'-C4'-C3'	-7.09	96.91	104.00
69	La	26	VAL	N-CA-CB	-7.09	95.89	111.50
81	LD	95	ALA	N-CA-CB	-7.09	100.17	110.10
5	SE	137	ALA	N-CA-CB	7.09	120.03	110.10
31	S2	28	G	N9-C1'-C2'	-7.09	104.20	112.00
32	S1	1146	G	N9-C1'-C2'	7.09	123.22	114.00
32	S1	1473	C	O5'-C5'-C4'	-7.09	98.22	111.70
32	S1	1641	A	O4'-C1'-N9	7.09	113.87	108.20
32	S1	1669	U	O4'-C1'-N1	7.09	113.87	108.20
33	L1	364	A	C1'-O4'-C4'	-7.09	104.23	109.90
33	L1	1633	C	C3'-C2'-C1'	7.09	107.17	101.50
33	L1	2843	G	O4'-C4'-C3'	-7.09	96.91	104.00
64	LG	96	LEU	CB-CA-C	7.09	123.67	110.20
32	S1	1661	C	O3'-P-O5'	7.09	117.47	104.00
33	L1	2442	A	O4'-C1'-N9	7.09	113.87	108.20
32	S1	199	G	N9-C1'-C2'	7.09	123.22	114.00
33	L1	2098	A	O4'-C1'-N9	7.09	113.87	108.20
78	Le	47	TYR	CB-CG-CD2	-7.09	116.75	121.00
33	L1	3034	A	P-O3'-C3'	7.09	128.20	119.70
64	LG	68	PRO	O-C-N	-7.09	111.36	122.70
32	S1	557	G	C1'-O4'-C4'	-7.08	104.23	109.90
32	S1	1139	C	C3'-C2'-C1'	7.08	107.17	101.50
33	L1	1630	C	C3'-C2'-C1'	7.08	107.17	101.50
33	L1	845	G	O4'-C1'-C2'	7.08	113.97	107.60
32	S1	1088	G	O4'-C1'-C2'	-7.08	98.72	105.80
33	L1	138	G	C4'-C3'-O3'	7.08	127.16	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1317	G	O5'-P-OP1	7.08	119.20	110.70
33	L1	2792	A	P-O3'-C3'	-7.08	111.20	119.70
2	SA	211	PRO	C-N-CA	-7.08	104.00	121.70
4	SD	189	THR	N-CA-CB	7.08	123.75	110.30
20	SZ	1	MET	CG-SD-CE	-7.08	88.88	100.20
32	S1	1602	G	C1'-O4'-C4'	-7.08	104.24	109.90
33	L1	1260	G	P-O3'-C3'	7.08	128.19	119.70
33	L1	2738	U	C4'-C3'-O3'	7.08	127.16	113.00
33	L1	2801	A	C3'-C2'-C1'	7.08	107.16	101.50
33	L1	473	G	O4'-C1'-C2'	-7.08	98.72	105.80
33	L1	2223	A	P-O5'-C5'	7.08	132.22	120.90
33	L1	2595	G	O4'-C4'-C3'	-7.08	96.92	104.00
35	L2	41	A	C1'-O4'-C4'	-7.08	104.24	109.90
77	Lc	95	ARG	CA-CB-CG	7.08	128.97	113.40
15	SS	51	TYR	CB-CG-CD1	-7.07	116.76	121.00
32	S1	1442	A	O4'-C1'-C2'	-7.07	98.73	105.80
33	L1	3217	G	P-O3'-C3'	7.07	128.19	119.70
33	L1	2171	A	P-O3'-C3'	7.07	128.19	119.70
32	S1	152	G	O4'-C1'-N9	-7.07	102.54	108.20
32	S1	1101	C	O4'-C1'-C2'	-7.07	98.73	105.80
33	L1	800	C	O4'-C1'-C2'	-7.07	98.73	105.80
33	L1	2628	C	C4'-C3'-C2'	7.07	109.67	102.60
33	L1	2770	U	P-O5'-C5'	7.07	132.21	120.90
34	L3	84	U	P-O3'-C3'	7.07	128.18	119.70
32	S1	442	A	O4'-C1'-C2'	-7.07	98.73	105.80
32	S1	1750	A	N9-C1'-C2'	-7.07	104.22	112.00
33	L1	637	C	O4'-C1'-C2'	-7.07	98.73	105.80
33	L1	668	U	C4'-C3'-C2'	-7.07	95.53	102.60
33	L1	689	G	O4'-C1'-C2'	7.07	113.96	107.60
33	L1	1042	C	O4'-C1'-C2'	-7.07	98.73	105.80
44	LR	25	TYR	CZ-CE2-CD2	-7.07	113.44	119.80
32	S1	411	A	O4'-C1'-N9	7.07	113.85	108.20
32	S1	570	C	C1'-O4'-C4'	-7.07	104.25	109.90
33	L1	297	G	P-O3'-C3'	7.07	128.18	119.70
33	L1	1135	C	C3'-C2'-C1'	7.07	107.16	101.50
33	L1	1180	C	OP2-P-O3'	7.07	120.75	105.20
11	SM	66	ARG	NE-CZ-NH1	-7.07	116.77	120.30
32	S1	880	G	C1'-O4'-C4'	7.07	115.55	109.90
33	L1	1664	G	N9-C1'-C2'	7.07	123.19	114.00
33	L1	1812	A	O4'-C1'-C2'	7.07	113.96	107.60
33	L1	3065	U	N1-C1'-C2'	7.07	123.18	114.00
33	L1	3087	A	P-O5'-C5'	7.07	132.21	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3287	A	P-O5'-C5'	7.07	132.20	120.90
33	L1	975	G	P-O5'-C5'	-7.06	109.60	120.90
33	L1	2021	G	O4'-C1'-C2'	-7.06	98.74	105.80
38	LE	30	ASP	CB-CA-C	7.06	124.53	110.40
32	S1	1472	G	O4'-C1'-C2'	7.06	113.96	107.60
33	L1	816	G	C1'-O4'-C4'	-7.06	104.25	109.90
33	L1	972	C	C1'-O4'-C4'	7.06	115.55	109.90
33	L1	1954	G	C5'-C4'-C3'	7.06	127.30	116.00
33	L1	2618	G	C1'-O4'-C4'	7.06	115.55	109.90
33	L1	3245	G	N9-C1'-C2'	7.06	123.18	114.00
3	SB	107	TYR	CB-CG-CD1	7.06	125.24	121.00
28	SN	14	TYR	N-CA-CB	7.06	123.31	110.60
32	S1	502	G	P-O5'-C5'	7.06	132.19	120.90
33	L1	540	G	C1'-O4'-C4'	-7.06	104.25	109.90
57	Ll	47	TYR	CG-CD1-CE1	-7.06	115.65	121.30
33	L1	1428	G	C5'-C4'-O4'	7.06	117.57	109.10
33	L1	2234	G	C5'-C4'-C3'	7.06	127.29	116.00
56	Lh	106	ARG	NE-CZ-NH1	7.06	123.83	120.30
66	LN	53	LEU	N-CA-C	-7.06	91.95	111.00
32	S1	831	C	O4'-C1'-N1	7.06	113.84	108.20
37	LB	16	PHE	CB-CG-CD2	7.06	125.74	120.80
8	SJ	30	ARG	NE-CZ-NH2	-7.05	116.77	120.30
32	S1	11	A	O4'-C1'-N9	7.05	113.84	108.20
33	L1	881	G	P-O3'-C3'	7.05	128.16	119.70
34	L3	1	G	C3'-C2'-C1'	7.05	107.14	101.50
66	LN	89	TRP	CB-CG-CD2	7.05	135.77	126.60
32	S1	912	A	C4'-C3'-C2'	-7.05	95.55	102.60
33	L1	3037	G	N9-C1'-C2'	7.05	123.17	114.00
25	SC	46	ARG	NH1-CZ-NH2	-7.05	111.65	119.40
32	S1	512	U	C5'-C4'-C3'	7.05	127.28	116.00
32	S1	1357	U	O4'-C1'-N1	7.05	113.84	108.20
32	S1	1648	C	O4'-C1'-N1	7.05	113.84	108.20
33	L1	1850	C	C4'-C3'-C2'	-7.05	95.55	102.60
34	L3	15	C	O3'-P-O5'	-7.05	90.61	104.00
33	L1	1180	C	O4'-C4'-C3'	7.05	111.74	106.10
33	L1	3027	G	C3'-C2'-C1'	7.05	107.14	101.50
33	L1	3034	A	O4'-C1'-N9	7.05	113.84	108.20
12	SO	89	TYR	CB-CG-CD2	7.05	125.23	121.00
31	S2	20	C	P-O3'-C3'	7.05	128.16	119.70
32	S1	1325	A	O4'-C1'-N9	7.05	113.84	108.20
33	L1	3049	A	C1'-O4'-C4'	7.05	115.54	109.90
69	La	38	TYR	O-C-N	-7.05	111.22	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	Ls	49	ARG	NE-CZ-NH1	7.05	123.82	120.30
33	L1	2707	A	C3'-C2'-C1'	-7.04	95.86	101.50
45	LQ	162	ALA	CB-CA-C	7.04	120.67	110.10
32	S1	1110	C	O4'-C1'-C2'	-7.04	98.76	105.80
33	L1	1248	A	C4'-C3'-C2'	-7.04	95.56	102.60
33	L1	1826	G	O4'-C4'-C3'	-7.04	96.96	104.00
40	LH	137	TYR	CZ-CE2-CD2	7.04	126.14	119.80
32	S1	559	A	O4'-C1'-N9	7.04	113.83	108.20
33	L1	938	U	P-O5'-C5'	7.04	132.17	120.90
33	L1	1620	U	C4'-C3'-C2'	-7.04	95.56	102.60
33	L1	2644	U	N1-C1'-C2'	7.04	123.15	114.00
34	L3	67	C	P-O3'-C3'	7.04	128.15	119.70
78	Le	192	THR	CA-CB-CG2	7.04	122.26	112.40
32	S1	1301	G	N9-C1'-C2'	-7.04	104.26	112.00
33	L1	371	A	O4'-C4'-C3'	7.04	111.73	106.10
33	L1	444	C	C1'-O4'-C4'	-7.04	104.27	109.90
33	L1	957	U	N1-C1'-C2'	7.04	123.15	114.00
33	L1	1409	G	O4'-C1'-C2'	7.04	113.94	107.60
36	LA	83	TYR	CD1-CG-CD2	7.04	125.64	117.90
37	LB	9	ARG	NH1-CZ-NH2	-7.04	111.66	119.40
69	La	10	ALA	N-CA-CB	7.04	119.95	110.10
69	La	11	VAL	CG1-CB-CG2	7.04	122.16	110.90
73	Lp	51	ILE	N-CA-C	7.04	130.00	111.00
80	LC	6	PHE	CB-CG-CD1	-7.04	115.87	120.80
33	L1	1630	C	N1-C1'-C2'	7.04	123.15	114.00
33	L1	1696	G	C3'-C2'-C1'	7.04	107.13	101.50
33	L1	3351	A	O4'-C1'-N9	7.04	113.83	108.20
2	SA	108	THR	C-N-CA	7.04	151.55	122.00
31	S2	43	C	N1-C1'-C2'	7.04	123.15	114.00
33	L1	1437	G	C1'-O4'-C4'	-7.04	104.27	109.90
33	L1	1681	U	N1-C1'-C2'	-7.04	104.26	112.00
33	L1	2601	G	C4'-C3'-C2'	-7.04	95.56	102.60
33	L1	2636	U	C1'-O4'-C4'	7.04	115.53	109.90
33	L1	2918	U	OP1-P-OP2	-7.04	109.05	119.60
32	S1	946	A	O4'-C1'-N9	7.03	113.83	108.20
32	S1	1549	G	O4'-C1'-N9	-7.03	102.57	108.20
33	L1	1503	G	P-O3'-C3'	7.03	128.14	119.70
33	L1	2876	G	C5'-C4'-C3'	-7.03	104.75	116.00
34	L3	26	C	C1'-O4'-C4'	-7.03	104.27	109.90
66	LN	49	ASN	N-CA-C	-7.03	92.01	111.00
33	L1	495	G	C3'-C2'-C1'	-7.03	95.87	101.50
33	L1	3085	C	C5'-C4'-C3'	7.03	127.25	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	LB	87	PHE	CB-CG-CD1	7.03	125.72	120.80
33	L1	239	C	C5'-C4'-C3'	7.03	127.25	116.00
33	L1	2253	U	N1-C1'-C2'	7.03	123.14	114.00
48	LV	152	SER	CA-C-O	-7.03	105.33	120.10
33	L1	1717	G	N9-C1'-C2'	-7.03	104.27	112.00
9	SK	83	ARG	NE-CZ-NH1	7.03	123.81	120.30
32	S1	1767	G	O4'-C1'-N9	7.03	113.82	108.20
33	L1	2338	C	N1-C1'-C2'	7.03	123.14	114.00
33	L1	3035	C	O4'-C1'-N1	-7.03	102.58	108.20
34	L3	76	U	O3'-P-O5'	-7.03	90.65	104.00
48	LV	51	VAL	CG1-CB-CG2	-7.03	99.66	110.90
15	SS	8	THR	OG1-CB-CG2	-7.03	93.84	110.00
32	S1	1179	C	C3'-C2'-C1'	7.03	107.12	101.50
33	L1	681	A	N9-C1'-C2'	-7.03	104.27	112.00
33	L1	1630	C	P-O3'-C3'	7.03	128.13	119.70
33	L1	1826	G	O4'-C1'-N9	7.03	113.82	108.20
33	L1	2160	C	O4'-C1'-C2'	-7.03	98.77	105.80
34	L3	15	C	OP2-P-O3'	7.03	120.65	105.20
78	Le	49	ARG	NE-CZ-NH2	7.03	123.81	120.30
82	LK	134	LEU	CB-CA-C	-7.03	96.85	110.20
32	S1	1265	A	C4'-C3'-C2'	-7.02	95.58	102.60
32	S1	1405	U	P-O5'-C5'	7.02	132.14	120.90
33	L1	2460	A	C1'-O4'-C4'	-7.02	104.28	109.90
33	L1	2472	U	O4'-C1'-N1	7.02	113.82	108.20
64	LG	20	TYR	CZ-CE2-CD2	-7.02	113.48	119.80
32	S1	582	U	C3'-C2'-C1'	7.02	107.12	101.50
32	S1	1640	C	N1-C1'-C2'	7.02	123.12	114.00
33	L1	1885	G	C1'-O4'-C4'	-7.02	104.28	109.90
33	L1	2722	U	P-O5'-C5'	7.02	132.13	120.90
13	SQ	82	MET	CB-CA-C	-7.02	96.36	110.40
32	S1	151	A	O4'-C1'-N9	7.02	113.81	108.20
33	L1	2686	U	C5'-C4'-C3'	7.02	127.23	116.00
33	L1	3315	A	O4'-C1'-N9	7.02	113.81	108.20
33	L1	3324	U	O5'-P-OP2	-7.02	99.38	105.70
34	L3	5	G	O4'-C1'-N9	7.02	113.81	108.20
81	LD	400	TRP	CA-CB-CG	7.02	127.03	113.70
33	L1	1950	G	P-O5'-C5'	7.02	132.13	120.90
33	L1	3150	G	C3'-C2'-C1'	-7.02	95.89	101.50
13	SQ	45	ARG	NE-CZ-NH1	-7.01	116.79	120.30
25	SC	36	TYR	CB-CG-CD1	-7.01	116.79	121.00
32	S1	1220	C	P-O3'-C3'	-7.01	111.28	119.70
33	L1	98	A	O4'-C4'-C3'	-7.01	96.98	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1269	U	P-O3'-C3'	-7.01	111.28	119.70
32	S1	438	G	O4'-C1'-N9	7.01	113.81	108.20
33	L1	3197	C	O3'-P-O5'	-7.01	90.68	104.00
35	L2	43	G	N9-C1'-C2'	7.01	123.12	114.00
33	L1	1278	A	P-O5'-C5'	7.01	132.12	120.90
33	L1	1949	G	C3'-C2'-C1'	-7.01	95.89	101.50
16	SR	126	ALA	N-CA-C	-7.01	92.07	111.00
32	S1	1400	G	O4'-C1'-N9	7.01	113.81	108.20
33	L1	579	G	C5'-C4'-C3'	7.01	127.22	116.00
33	L1	924	A	O4'-C1'-C2'	-7.01	98.79	105.80
34	L3	8	A	O5'-P-OP1	-7.01	99.39	105.70
38	LE	170	GLU	N-CA-C	-7.01	92.08	111.00
33	L1	636	C	N1-C1'-C2'	7.01	123.11	114.00
33	L1	2649	C	C1'-O4'-C4'	-7.01	104.29	109.90
38	LE	58	SER	N-CA-CB	7.01	121.01	110.50
49	LX	97	ASP	CB-CG-OD2	-7.01	111.99	118.30
57	Ll	73	ARG	NE-CZ-NH1	7.01	123.80	120.30
33	L1	789	A	O4'-C1'-C2'	-7.00	98.80	105.80
33	L1	1259	C	C3'-C2'-C1'	7.00	107.10	101.50
33	L1	2635	G	P-O5'-C5'	-7.00	109.69	120.90
2	SA	227	PRO	CA-N-CD	-7.00	101.70	111.50
32	S1	138	C	N1-C1'-C2'	7.00	123.11	114.00
32	S1	566	G	O4'-C1'-N9	7.00	113.80	108.20
32	S1	1073	C	C3'-C2'-C1'	-7.00	95.90	101.50
33	L1	796	C	P-O5'-C5'	7.00	132.10	120.90
33	L1	994	U	C5'-C4'-O4'	7.00	117.50	109.10
33	L1	2538	G	C3'-C2'-C1'	-7.00	95.90	101.50
33	L1	3190	U	P-O3'-C3'	7.00	128.10	119.70
44	LR	83	VAL	N-CA-CB	-7.00	96.09	111.50
32	S1	64	U	O4'-C1'-N1	7.00	113.80	108.20
32	S1	944	A	O4'-C1'-N9	7.00	113.80	108.20
32	S1	1084	U	O4'-C1'-N1	7.00	113.80	108.20
32	S1	1328	G	P-O5'-C5'	7.00	132.10	120.90
32	S1	1668	A	O4'-C1'-N9	7.00	113.80	108.20
33	L1	1664	G	P-O3'-C3'	7.00	128.10	119.70
33	L1	1896	A	O4'-C1'-C2'	7.00	113.90	107.60
33	L1	2201	G	P-O3'-C3'	7.00	128.10	119.70
33	L1	1119	G	N9-C1'-C2'	-7.00	104.30	112.00
33	L1	2904	A	N9-C1'-C2'	-7.00	104.30	112.00
32	S1	1225	A	C5'-C4'-O4'	7.00	117.50	109.10
33	L1	1194	C	O4'-C1'-C2'	-7.00	98.80	105.80
33	L1	2259	U	O4'-C1'-N1	7.00	113.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SM	36	VAL	CA-CB-CG1	7.00	121.39	110.90
32	S1	171	G	O4'-C1'-N9	7.00	113.80	108.20
32	S1	400	G	O4'-C1'-C2'	-7.00	98.80	105.80
32	S1	1771	U	C1'-O4'-C4'	7.00	115.50	109.90
33	L1	277	U	O4'-C1'-N1	7.00	113.80	108.20
33	L1	812	G	O4'-C1'-C2'	7.00	113.90	107.60
33	L1	2590	C	O4'-C4'-C3'	-7.00	97.00	104.00
2	SA	211	PRO	O-C-N	-7.00	111.51	122.70
32	S1	1060	U	P-O3'-C3'	7.00	128.09	119.70
32	S1	1472	G	N9-C1'-C2'	6.99	123.09	114.00
32	S1	1659	A	N9-C1'-C2'	6.99	123.09	114.00
33	L1	2152	A	C1'-O4'-C4'	6.99	115.50	109.90
23	SU	92	GLU	N-CA-CB	-6.99	98.02	110.60
32	S1	95	U	O4'-C1'-N1	6.99	113.79	108.20
32	S1	302	C	OP2-P-O3'	-6.99	89.82	105.20
33	L1	1236	C	C4'-C3'-C2'	-6.99	95.61	102.60
33	L1	1528	G	O5'-P-OP2	-6.99	99.41	105.70
33	L1	3281	G	C4'-C3'-C2'	-6.99	95.61	102.60
25	SC	58	ALA	N-CA-CB	6.99	119.89	110.10
32	S1	1349	A	C5'-C4'-C3'	6.99	127.18	116.00
33	L1	2143	A	O4'-C1'-C2'	6.99	113.89	107.60
34	L3	55	A	O3'-P-O5'	6.99	117.28	104.00
66	LN	8	GLU	N-CA-CB	6.99	123.18	110.60
80	LC	5	LYS	N-CA-CB	6.99	123.18	110.60
32	S1	57	G	O4'-C1'-N9	6.99	113.79	108.20
32	S1	1569	U	C3'-C2'-C1'	6.99	107.09	101.50
32	S1	1628	C	O4'-C1'-N1	6.99	113.79	108.20
33	L1	2451	G	O4'-C1'-N9	-6.99	102.61	108.20
33	L1	3250	C	P-O3'-C3'	6.99	128.08	119.70
64	LG	137	VAL	C-N-CA	6.99	139.17	121.70
32	S1	1178	C	O4'-C1'-C2'	-6.99	98.81	105.80
32	S1	1540	U	C3'-C2'-C1'	-6.99	95.91	101.50
33	L1	1570	C	O4'-C1'-C2'	-6.99	98.81	105.80
33	L1	1829	G	N9-C1'-C2'	6.99	123.08	114.00
33	L1	1855	A	C3'-C2'-C1'	-6.99	95.91	101.50
32	S1	1101	C	C5'-C4'-O4'	6.98	117.48	109.10
33	L1	1267	A	O4'-C1'-N9	6.98	113.79	108.20
33	L1	1959	U	C5'-C4'-O4'	-6.98	100.72	109.10
33	L1	2313	U	C4'-C3'-C2'	-6.98	95.62	102.60
33	L1	1385	C	C1'-O4'-C4'	-6.98	104.31	109.90
33	L1	1752	C	C4'-C3'-O3'	6.98	126.97	113.00
33	L1	2658	U	C5'-C4'-O4'	6.98	117.48	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	LH	61	ARG	CD-NE-CZ	6.98	133.38	123.60
32	S1	148	C	O3'-P-O5'	-6.98	90.74	104.00
32	S1	301	U	O4'-C1'-C2'	-6.98	98.82	105.80
32	S1	571	A	C3'-C2'-C1'	6.98	107.08	101.50
33	L1	736	U	N1-C1'-C2'	-6.98	104.32	112.00
33	L1	3312	G	O4'-C1'-C2'	6.98	113.88	107.60
71	Lj	12	TYR	N-CA-CB	6.98	123.16	110.60
11	SM	99	VAL	CB-CA-C	6.98	124.66	111.40
32	S1	1465	C	O4'-C1'-N1	6.98	113.78	108.20
34	L3	103	U	N1-C1'-C2'	6.98	123.07	114.00
72	Lk	62	GLU	CB-CA-C	6.98	124.36	110.40
32	S1	1068	G	C4'-C3'-C2'	6.98	109.58	102.60
33	L1	83	U	O3'-P-O5'	-6.98	90.74	104.00
33	L1	374	G	C1'-O4'-C4'	-6.98	104.32	109.90
33	L1	555	G	O4'-C1'-N9	6.98	113.78	108.20
33	L1	705	A	C5'-C4'-C3'	6.98	127.17	116.00
33	L1	1081	U	C4'-C3'-C2'	-6.98	95.62	102.60
33	L1	1527	A	C2'-C3'-O3'	6.98	124.86	113.70
33	L1	1613	C	N1-C1'-C2'	6.98	123.07	114.00
33	L1	2212	U	P-O5'-C5'	6.98	132.06	120.90
33	L1	3039	U	O4'-C1'-N1	6.98	113.78	108.20
33	L1	589	G	O4'-C1'-N9	6.98	113.78	108.20
33	L1	1535	C	C3'-C2'-C1'	6.98	107.08	101.50
32	S1	664	G	O3'-P-O5'	-6.97	90.75	104.00
32	S1	1134	U	N1-C1'-C2'	-6.97	104.33	112.00
33	L1	831	G	O4'-C1'-N9	6.97	113.78	108.20
33	L1	1904	A	C4'-C3'-C2'	-6.97	95.63	102.60
2	SA	43	TYR	CA-CB-CG	6.97	126.65	113.40
32	S1	1643	A	O4'-C1'-C2'	-6.97	98.83	105.80
33	L1	3351	A	C3'-C2'-C1'	-6.97	95.92	101.50
38	LE	126	GLY	CA-C-O	6.97	133.15	120.60
67	LS	164	LYS	CB-CA-C	-6.97	96.45	110.40
33	L1	2906	U	C1'-O4'-C4'	-6.97	104.32	109.90
3	SB	217	ASN	C-N-CA	6.97	139.12	121.70
4	SD	67	GLN	O-C-N	6.97	133.85	122.70
32	S1	466	G	C1'-O4'-C4'	-6.97	104.33	109.90
32	S1	1342	C	C3'-C2'-C1'	6.97	107.08	101.50
33	L1	1815	G	C5'-C4'-O4'	-6.97	100.74	109.10
33	L1	2339	U	C5'-C4'-C3'	-6.97	104.85	116.00
35	L2	49	C	C5'-C4'-C3'	6.97	127.15	116.00
43	LO	137	GLY	C-N-CA	-6.97	107.67	122.30
46	LT	23	TRP	CZ3-CH2-CZ2	-6.97	113.24	121.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	SS	11	ASP	O-C-N	-6.97	111.55	122.70
32	S1	141	G	P-O3'-C3'	6.97	128.06	119.70
32	S1	1145	G	N9-C1'-C2'	6.97	123.06	114.00
32	S1	1351	U	C3'-C2'-C1'	6.97	107.07	101.50
33	L1	2850	G	C4'-C3'-C2'	-6.97	95.63	102.60
33	L1	423	C	C1'-O4'-C4'	-6.96	104.33	109.90
33	L1	722	C	C5'-C4'-C3'	6.96	127.14	116.00
33	L1	780	U	C5'-C4'-C3'	6.96	127.14	116.00
33	L1	1731	A	C1'-O4'-C4'	-6.96	104.33	109.90
33	L1	2516	U	O4'-C1'-C2'	-6.96	98.83	105.80
32	S1	149	G	C5'-C4'-C3'	-6.96	104.86	116.00
32	S1	1483	G	C1'-O4'-C4'	-6.96	104.33	109.90
33	L1	731	G	C5'-C4'-C3'	6.96	127.14	116.00
33	L1	1551	C	C1'-O4'-C4'	-6.96	104.33	109.90
33	L1	3205	C	O4'-C1'-N1	6.96	113.77	108.20
84	LI	24	ARG	NE-CZ-NH1	6.96	123.78	120.30
2	SA	7	ALA	N-CA-CB	6.96	119.84	110.10
10	SL	3	LYS	N-CA-C	-6.96	92.21	111.00
78	Le	110	LEU	N-CA-CB	6.96	124.32	110.40
1	Sa	306	PHE	CB-CG-CD1	-6.96	115.93	120.80
32	S1	1613	G	O4'-C1'-N9	6.96	113.77	108.20
33	L1	956	G	N9-C1'-C2'	6.96	123.05	114.00
33	L1	1289	G	C2'-C3'-O3'	6.96	124.83	113.70
33	L1	1740	U	P-O5'-C5'	6.96	132.03	120.90
84	LI	109	ASP	C-N-CA	-6.96	104.30	121.70
23	SU	33	LEU	CA-C-O	-6.96	105.49	120.10
32	S1	271	C	N1-C1'-C2'	6.96	123.04	114.00
32	S1	332	A	N9-C1'-C2'	-6.96	104.35	112.00
33	L1	1389	C	O5'-P-OP2	-6.96	99.44	105.70
11	SM	79	VAL	CG1-CB-CG2	-6.96	99.77	110.90
33	L1	391	U	C1'-O4'-C4'	-6.96	104.34	109.90
33	L1	1052	A	C1'-O4'-C4'	6.96	115.46	109.90
33	L1	645	C	O4'-C1'-N1	6.95	113.76	108.20
33	L1	2937	U	O4'-C1'-C2'	-6.95	98.85	105.80
40	LH	234	MET	CG-SD-CE	-6.95	89.08	100.20
72	Lk	56	TYR	CB-CG-CD2	-6.95	116.83	121.00
51	LY	39	ARG	NE-CZ-NH2	6.95	123.78	120.30
60	Lr	87	ARG	NE-CZ-NH2	-6.95	116.82	120.30
66	LN	29	ASP	CB-CG-OD2	-6.95	112.04	118.30
32	S1	614	G	C3'-C2'-C1'	-6.95	95.94	101.50
32	S1	1124	G	O4'-C1'-N9	6.95	113.76	108.20
33	L1	1226	G	OP1-P-OP2	-6.95	109.17	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1259	C	C1'-O4'-C4'	6.95	115.46	109.90
32	S1	186	A	O4'-C1'-N9	6.95	113.76	108.20
33	L1	704	G	O4'-C1'-C2'	-6.95	98.85	105.80
33	L1	1674	A	O4'-C1'-C2'	-6.95	98.85	105.80
35	L2	13	G	O4'-C1'-N9	6.95	113.76	108.20
3	SB	76	ARG	CB-CA-C	-6.95	96.50	110.40
33	L1	771	G	O3'-P-O5'	-6.95	90.80	104.00
33	L1	2918	U	C5'-C4'-O4'	6.95	117.44	109.10
52	Lb	128	TYR	CD1-CE1-CZ	-6.95	113.55	119.80
1	Sa	26	ARG	NE-CZ-NH1	6.95	123.77	120.30
32	S1	281	U	O4'-C1'-N1	6.95	113.76	108.20
33	L1	303	U	O4'-C1'-N1	6.95	113.76	108.20
33	L1	343	G	O4'-C1'-N9	-6.95	102.64	108.20
33	L1	744	C	P-O3'-C3'	6.95	128.03	119.70
1	Sa	16	ALA	C-N-CA	-6.94	104.34	121.70
38	LE	8	LEU	N-CA-C	6.94	129.75	111.00
33	L1	1887	A	C3'-C2'-C1'	6.94	107.05	101.50
33	L1	2110	G	O4'-C1'-N9	6.94	113.75	108.20
66	LN	113	ALA	N-CA-C	6.94	129.74	111.00
82	LK	54	ARG	NE-CZ-NH1	-6.94	116.83	120.30
32	S1	1383	U	C1'-O4'-C4'	-6.94	104.35	109.90
33	L1	1247	G	C5'-C4'-O4'	6.94	117.43	109.10
33	L1	3363	G	P-O5'-C5'	6.94	132.01	120.90
35	L2	68	U	O3'-P-O5'	-6.94	90.81	104.00
33	L1	308	U	C5'-C4'-O4'	-6.94	100.77	109.10
33	L1	2614	U	C3'-C2'-C1'	6.94	107.05	101.50
57	Ll	11	ARG	CA-C-N	6.94	132.47	117.20
32	S1	558	C	O4'-C1'-C2'	-6.94	98.86	105.80
33	L1	1857	G	O4'-C1'-N9	6.94	113.75	108.20
32	S1	1397	A	C3'-C2'-C1'	6.94	107.05	101.50
48	LV	131	TYR	CB-CG-CD2	-6.94	116.84	121.00
32	S1	178	A	N9-C1'-C2'	-6.93	104.37	112.00
32	S1	1036	U	C3'-C2'-C1'	6.93	107.05	101.50
32	S1	1226	U	C3'-C2'-C1'	6.93	107.05	101.50
33	L1	532	G	N9-C1'-C2'	6.93	123.01	114.00
33	L1	2973	A	C1'-O4'-C4'	6.93	115.45	109.90
35	L2	95	C	P-O3'-C3'	-6.93	111.38	119.70
35	L2	117	U	O4'-C1'-N1	6.93	113.75	108.20
57	Ll	52	LYS	CB-CA-C	-6.93	96.53	110.40
32	S1	1005	C	P-O5'-C5'	6.93	131.99	120.90
32	S1	1761	G	C3'-C2'-C1'	6.93	107.05	101.50
33	L1	711	A	C4'-C3'-C2'	-6.93	95.67	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1188	C	N1-C1'-C2'	-6.93	104.37	112.00
2	SA	40	ARG	NH1-CZ-NH2	-6.93	111.78	119.40
32	S1	565	G	O4'-C1'-N9	6.93	113.74	108.20
32	S1	1290	U	P-O5'-C5'	-6.93	109.81	120.90
33	L1	1693	A	C3'-C2'-C1'	6.93	107.05	101.50
33	L1	3330	U	N1-C1'-C2'	-6.93	104.38	112.00
32	S1	288	G	N9-C1'-C2'	6.93	123.01	114.00
33	L1	459	G	C1'-O4'-C4'	-6.93	104.36	109.90
33	L1	1545	G	C1'-O4'-C4'	-6.93	104.36	109.90
33	L1	2687	C	P-O5'-C5'	-6.93	109.81	120.90
80	LC	169	ARG	NE-CZ-NH2	-6.93	116.83	120.30
25	SC	162	LEU	CB-CG-CD2	6.93	122.78	111.00
15	SS	85	ARG	NE-CZ-NH2	-6.93	116.84	120.30
32	S1	142	G	O4'-C1'-N9	6.93	113.74	108.20
33	L1	841	G	C1'-O4'-C4'	-6.93	104.36	109.90
33	L1	1728	G	O5'-P-OP2	-6.93	99.47	105.70
33	L1	3087	A	O4'-C4'-C3'	-6.93	97.07	104.00
34	L3	96	U	O4'-C1'-N1	6.93	113.74	108.20
16	SR	124	TYR	CB-CG-CD1	6.92	125.16	121.00
32	S1	919	G	C4'-C3'-C2'	-6.92	95.68	102.60
32	S1	1803	G	C3'-C2'-C1'	-6.92	95.96	101.50
33	L1	854	C	OP1-P-OP2	-6.92	109.21	119.60
33	L1	2455	A	N9-C1'-C2'	-6.92	104.38	112.00
35	L2	108	A	O4'-C1'-N9	-6.92	102.66	108.20
51	LY	62	TYR	CB-CG-CD2	-6.92	116.84	121.00
67	LS	38	ARG	NE-CZ-NH2	-6.92	116.84	120.30
17	SV	30	LYS	N-CA-CB	6.92	123.06	110.60
33	L1	281	G	C1'-O4'-C4'	-6.92	104.36	109.90
32	S1	991	G	N9-C1'-C2'	6.92	123.00	114.00
33	L1	23	A	C3'-C2'-C1'	-6.92	95.96	101.50
33	L1	2654	G	C4'-C3'-C2'	-6.92	95.68	102.60
48	LV	151	LEU	CB-CA-C	-6.92	97.05	110.20
59	Lo	36	ARG	NE-CZ-NH2	-6.92	116.84	120.30
60	Lr	61	LYS	CA-CB-CG	6.92	128.63	113.40
64	LG	51	TYR	N-CA-C	6.92	129.69	111.00
80	LC	123	CYS	CA-CB-SG	6.92	126.46	114.00
1	Sa	51	PHE	CB-CG-CD2	-6.92	115.96	120.80
3	SB	29	LEU	CD1-CG-CD2	-6.92	89.74	110.50
32	S1	576	C	O4'-C1'-C2'	-6.92	98.88	105.80
33	L1	1092	G	C3'-C2'-C1'	-6.92	95.96	101.50
32	S1	1799	G	O4'-C1'-N9	6.92	113.73	108.20
33	L1	135	G	C1'-O4'-C4'	-6.92	104.36	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	607	U	N1-C1'-C2'	-6.92	104.39	112.00
33	L1	721	A	O4'-C1'-N9	6.92	113.73	108.20
33	L1	1064	U	C4'-C3'-C2'	-6.92	95.68	102.60
33	L1	1321	A	O4'-C1'-N9	-6.92	102.67	108.20
33	L1	2676	A	P-O3'-C3'	6.92	128.00	119.70
42	LP	74	PRO	N-CA-CB	6.92	111.60	103.30
64	LG	88	TYR	CG-CD2-CE2	-6.92	115.77	121.30
32	S1	296	A	C3'-C2'-C1'	6.92	107.03	101.50
32	S1	436	G	P-O3'-C3'	6.92	128.00	119.70
32	S1	1097	A	C4'-C3'-C2'	-6.92	95.68	102.60
32	S1	1262	U	C3'-C2'-C1'	6.92	107.03	101.50
33	L1	22	G	C3'-C2'-C1'	-6.92	95.97	101.50
33	L1	221	C	N1-C1'-C2'	6.92	122.99	114.00
33	L1	1817	U	O4'-C1'-N1	6.92	113.73	108.20
33	L1	2616	U	P-O3'-C3'	-6.92	111.40	119.70
33	L1	2862	U	C1'-O4'-C4'	6.92	115.43	109.90
35	L2	54	C	C3'-C2'-C1'	6.92	107.03	101.50
13	SQ	53	PHE	CB-CG-CD2	6.92	125.64	120.80
33	L1	826	C	N1-C1'-C2'	6.92	122.99	114.00
32	S1	1753	U	P-O5'-C5'	-6.91	109.84	120.90
33	L1	2546	C	C1'-O4'-C4'	-6.91	104.37	109.90
35	L2	94	C	C4'-C3'-C2'	6.91	109.51	102.60
64	LG	20	TYR	CG-CD2-CE2	-6.91	115.77	121.30
13	SQ	140	ARG	NE-CZ-NH2	-6.91	116.84	120.30
33	L1	858	U	O5'-P-OP2	6.91	119.00	110.70
33	L1	1059	A	C1'-O4'-C4'	-6.91	104.37	109.90
33	L1	1394	C	P-O5'-C5'	6.91	131.96	120.90
42	LP	20	ARG	N-CA-CB	6.91	123.04	110.60
27	SH	97	ARG	N-CA-CB	6.91	123.04	110.60
32	S1	1206	A	P-O3'-C3'	6.91	127.99	119.70
32	S1	1226	U	P-O5'-C5'	6.91	131.96	120.90
32	S1	1320	C	P-O3'-C3'	6.91	127.99	119.70
33	L1	52	G	O4'-C1'-N9	6.91	113.73	108.20
35	L2	56	A	C1'-O4'-C4'	6.91	115.43	109.90
57	Ll	74	PHE	N-CA-CB	6.91	123.04	110.60
33	L1	2628	C	C2'-C3'-O3'	6.91	124.75	113.70
81	LD	322	ASN	CA-CB-CG	6.91	128.60	113.40
32	S1	622	U	O4'-C1'-C2'	-6.91	98.89	105.80
33	L1	2896	C	C1'-O4'-C4'	6.91	115.42	109.90
32	S1	311	G	O4'-C4'-C3'	-6.90	97.10	104.00
33	L1	2273	C	O4'-C1'-N1	6.90	113.72	108.20
8	SJ	88	ARG	CA-C-N	-6.90	102.01	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	913	G	O5'-P-OP2	-6.90	99.49	105.70
33	L1	1306	A	P-O3'-C3'	-6.90	111.42	119.70
33	L1	1701	G	C1'-O4'-C4'	-6.90	104.38	109.90
34	L3	56	G	C1'-O4'-C4'	-6.90	104.38	109.90
67	LS	158	VAL	CG1-CB-CG2	6.90	121.95	110.90
11	SM	40	PHE	CB-CG-CD1	-6.90	115.97	120.80
33	L1	563	C	C5'-C4'-C3'	6.90	127.04	116.00
33	L1	963	U	C5'-C4'-O4'	6.90	117.38	109.10
33	L1	1226	G	O5'-P-OP1	6.90	118.98	110.70
33	L1	2498	C	O3'-P-O5'	-6.90	90.89	104.00
37	LB	179	MET	CG-SD-CE	-6.90	89.16	100.20
67	LS	115	ARG	NE-CZ-NH2	-6.90	116.85	120.30
33	L1	514	G	N9-C1'-C2'	6.90	122.97	114.00
33	L1	1232	A	C5'-C4'-C3'	6.90	127.03	116.00
64	LG	124	TYR	O-C-N	-6.90	111.67	122.70
64	LG	143	ASP	CB-CA-C	6.90	124.19	110.40
80	LC	369	PHE	CG-CD2-CE2	6.90	128.39	120.80
83	Lm	71	MET	CG-SD-CE	-6.90	89.17	100.20
8	SJ	90	GLU	N-CA-CB	6.89	123.01	110.60
32	S1	193	G	O4'-C1'-N9	6.89	113.72	108.20
33	L1	2169	U	P-O3'-C3'	-6.89	111.43	119.70
33	L1	2476	G	P-O5'-C5'	6.89	131.93	120.90
33	L1	2655	U	P-O3'-C3'	-6.89	111.43	119.70
33	L1	2771	U	O4'-C1'-C2'	6.89	113.81	107.60
32	S1	563	C	C3'-C2'-C1'	6.89	107.01	101.50
32	S1	1757	G	O5'-P-OP1	6.89	118.97	110.70
33	L1	651	A	N9-C1'-C2'	6.89	122.96	114.00
33	L1	2505	C	O4'-C1'-C2'	-6.89	98.91	105.80
31	S2	58	U	C3'-C2'-C1'	6.89	107.01	101.50
33	L1	825	G	O4'-C1'-N9	6.89	113.71	108.20
33	L1	894	G	O4'-C1'-N9	6.89	113.71	108.20
32	S1	100	C	O4'-C1'-C2'	-6.89	98.91	105.80
32	S1	1172	G	C1'-O4'-C4'	-6.89	104.39	109.90
33	L1	1718	U	P-O3'-C3'	-6.89	111.43	119.70
67	LS	113	ALA	N-CA-C	6.89	129.60	111.00
84	LI	116	ARG	C-N-CA	6.89	136.77	122.30
31	S2	51	G	O4'-C1'-C2'	6.89	113.80	107.60
32	S1	419	C	C3'-C2'-C1'	6.89	107.01	101.50
33	L1	1113	C	O4'-C1'-N1	6.89	113.71	108.20
33	L1	2536	G	C1'-O4'-C4'	-6.89	104.39	109.90
35	L2	107	G	C1'-O4'-C4'	-6.89	104.39	109.90
41	LM	49	LEU	C-N-CA	6.89	138.92	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	Lg	15	VAL	CB-CA-C	-6.89	98.31	111.40
71	Lj	69	ARG	NE-CZ-NH2	-6.89	116.86	120.30
16	SR	129	SER	CB-CA-C	-6.88	97.02	110.10
10	SL	118	ARG	CA-C-N	-6.88	102.06	117.20
11	SM	136	THR	CA-CB-CG2	-6.88	102.77	112.40
32	S1	1324	U	O4'-C1'-N1	6.88	113.70	108.20
33	L1	1737	C	O3'-P-O5'	6.88	117.08	104.00
33	L1	2517	U	O4'-C1'-C2'	-6.88	98.92	105.80
33	L1	3193	C	P-O5'-C5'	6.88	131.91	120.90
33	L1	56	A	C1'-O4'-C4'	6.88	115.40	109.90
33	L1	536	C	O4'-C1'-C2'	-6.88	98.92	105.80
33	L1	560	C	C5'-C4'-C3'	6.88	127.01	116.00
33	L1	1598	U	C3'-C2'-C1'	6.88	107.00	101.50
33	L1	2365	C	N1-C1'-C2'	6.88	122.94	114.00
33	L1	2450	G	C3'-C2'-C1'	-6.88	96.00	101.50
32	S1	1729	A	P-O3'-C3'	6.88	127.95	119.70
33	L1	1434	G	N9-C1'-C2'	6.88	122.94	114.00
33	L1	3051	U	C3'-C2'-C1'	-6.88	96.00	101.50
33	L1	778	G	O4'-C1'-C2'	6.88	113.79	107.60
33	L1	2814	C	C3'-C2'-C1'	6.88	107.00	101.50
33	L1	1074	C	N1-C1'-C2'	6.87	122.94	114.00
33	L1	2197	C	O4'-C1'-C2'	6.87	113.79	107.60
33	L1	2876	G	N9-C1'-C2'	6.87	122.94	114.00
33	L1	2909	A	C5'-C4'-C3'	6.87	127.00	116.00
33	L1	2998	A	O4'-C1'-N9	6.87	113.70	108.20
46	LT	136	ARG	CA-C-O	-6.87	105.67	120.10
13	SQ	63	ARG	C-N-CA	-6.87	107.87	122.30
32	S1	437	C	N1-C1'-C2'	6.87	122.93	114.00
32	S1	590	G	O4'-C1'-N9	6.87	113.70	108.20
33	L1	312	U	O4'-C1'-C2'	6.87	113.78	107.60
33	L1	1392	U	C4'-C3'-C2'	-6.87	95.73	102.60
33	L1	3093	C	C3'-C2'-C1'	6.87	107.00	101.50
33	L1	3317	G	C1'-O4'-C4'	6.87	115.40	109.90
34	L3	22	A	O4'-C1'-C2'	6.87	113.78	107.60
45	LQ	274	TYR	CB-CG-CD2	-6.87	116.88	121.00
67	LS	133	PHE	CD1-CE1-CZ	-6.87	111.86	120.10
32	S1	37	U	P-O5'-C5'	-6.87	109.91	120.90
33	L1	2507	U	O4'-C4'-C3'	-6.87	97.13	104.00
70	Li	90	ARG	NE-CZ-NH1	6.87	123.73	120.30
4	SD	60	GLU	CB-CA-C	6.87	124.14	110.40
32	S1	524	A	P-O3'-C3'	-6.87	111.46	119.70
33	L1	473	G	N9-C1'-C2'	-6.87	104.44	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1843	A	C2'-C3'-O3'	6.87	124.69	113.70
33	L1	2129	U	C1'-O4'-C4'	-6.87	104.41	109.90
33	L1	2518	A	C5'-C4'-C3'	6.87	126.99	116.00
33	L1	1077	C	C1'-O4'-C4'	-6.87	104.41	109.90
33	L1	1274	A	C4'-C3'-C2'	6.87	109.47	102.60
2	SA	196	GLY	C-N-CA	-6.87	104.54	121.70
33	L1	1684	U	N1-C1'-C2'	-6.87	104.45	112.00
30	S3	19	U	O4'-C1'-N1	6.86	113.69	108.20
31	S2	2	C	C1'-O4'-C4'	-6.86	104.41	109.90
32	S1	1262	U	O4'-C1'-C2'	-6.86	98.94	105.80
32	S1	1512	C	N1-C1'-C2'	6.86	122.92	114.00
32	S1	1561	G	C3'-C2'-C1'	6.86	106.99	101.50
32	S1	1583	G	O4'-C1'-C2'	6.86	113.78	107.60
33	L1	1087	G	O4'-C1'-C2'	6.86	113.78	107.60
33	L1	2226	C	C5'-C4'-O4'	6.86	117.34	109.10
45	LQ	7	PHE	CD1-CE1-CZ	-6.86	111.86	120.10
33	L1	124	C	C1'-O4'-C4'	-6.86	104.41	109.90
33	L1	1742	G	O4'-C1'-C2'	-6.86	98.94	105.80
33	L1	2651	G	O4'-C1'-C2'	6.86	113.78	107.60
33	L1	2769	U	OP2-P-O3'	6.86	120.30	105.20
9	SK	142	LYS	N-CA-C	6.86	129.52	111.00
32	S1	789	C	O5'-C5'-C4'	6.86	124.74	111.70
33	L1	138	G	C2'-C3'-O3'	6.86	124.68	113.70
33	L1	829	G	O4'-C1'-N9	6.86	113.69	108.20
33	L1	1624	G	O4'-C1'-C2'	-6.86	98.94	105.80
11	SM	110	ASP	O-C-N	-6.86	111.72	122.70
32	S1	1300	A	C1'-O4'-C4'	-6.86	104.41	109.90
32	S1	1362	A	C5'-C4'-O4'	6.86	117.33	109.10
33	L1	241	G	C1'-O4'-C4'	-6.86	104.41	109.90
32	S1	982	A	C5'-C4'-O4'	6.86	117.33	109.10
32	S1	1759	A	C5'-C4'-C3'	-6.86	105.03	116.00
33	L1	1122	C	O4'-C1'-C2'	-6.86	98.94	105.80
33	L1	3346	C	O4'-C1'-N1	6.86	113.69	108.20
32	S1	27	U	O4'-C1'-N1	6.86	113.69	108.20
32	S1	299	A	O4'-C1'-C2'	-6.86	98.94	105.80
32	S1	1082	C	N1-C1'-C2'	6.86	122.91	114.00
32	S1	1227	A	C1'-O4'-C4'	6.86	115.38	109.90
35	L2	154	G	P-O3'-C3'	6.86	127.93	119.70
47	LU	88	ARG	NE-CZ-NH1	6.86	123.73	120.30
33	L1	220	G	C1'-O4'-C4'	-6.85	104.42	109.90
33	L1	2858	G	O4'-C1'-C2'	6.85	113.77	107.60
33	L1	3093	C	N1-C1'-C2'	6.85	122.91	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	SD	148	ARG	NE-CZ-NH1	6.85	123.73	120.30
33	L1	3377	G	C1'-O4'-C4'	6.85	115.38	109.90
32	S1	1731	A	N9-C1'-C2'	6.85	122.91	114.00
33	L1	2124	G	P-O3'-C3'	6.85	127.92	119.70
33	L1	2198	U	O4'-C1'-N1	6.85	113.68	108.20
33	L1	2223	A	N9-C1'-C2'	6.85	122.91	114.00
80	LC	69	LYS	CA-C-N	6.85	132.27	117.20
12	SO	124	ARG	CA-CB-CG	-6.85	98.33	113.40
23	SU	41	SER	N-CA-CB	6.85	120.78	110.50
32	S1	1730	G	P-O3'-C3'	6.85	127.92	119.70
33	L1	1541	G	P-O5'-C5'	6.85	131.86	120.90
34	L3	60	G	O4'-C1'-N9	6.85	113.68	108.20
80	LC	115	ARG	NE-CZ-NH2	-6.85	116.88	120.30
14	SP	100	ARG	CG-CD-NE	-6.85	97.42	111.80
32	S1	974	C	O4'-C1'-C2'	-6.85	98.95	105.80
33	L1	649	A	C3'-C2'-C1'	-6.85	96.02	101.50
33	L1	1583	G	C1'-O4'-C4'	6.85	115.38	109.90
33	L1	2131	U	P-O5'-C5'	-6.85	109.94	120.90
33	L1	2542	U	O4'-C1'-N1	6.85	113.68	108.20
35	L2	13	G	C4'-C3'-C2'	-6.85	95.75	102.60
47	LU	15	PHE	CB-CG-CD2	-6.85	116.01	120.80
59	Lo	30	ARG	CB-CA-C	-6.85	96.70	110.40
15	SS	8	THR	CA-CB-OG1	6.85	123.38	109.00
33	L1	129	G	O4'-C1'-C2'	6.85	113.76	107.60
33	L1	1553	C	C3'-C2'-C1'	6.85	106.98	101.50
33	L1	1698	C	P-O3'-C3'	-6.85	111.48	119.70
71	Lj	93	LEU	CB-CA-C	-6.85	97.19	110.20
1	Sa	67	GLY	N-CA-C	-6.84	95.99	113.10
7	SI	85	TYR	CD1-CE1-CZ	6.84	125.96	119.80
32	S1	501	U	P-O3'-C3'	-6.84	111.49	119.70
32	S1	1336	C	N1-C1'-C2'	6.84	122.90	114.00
32	S1	1612	C	O4'-C1'-N1	6.84	113.68	108.20
33	L1	628	C	C3'-C2'-C1'	6.84	106.98	101.50
33	L1	1395	A	C5'-C4'-O4'	-6.84	100.89	109.10
33	L1	2615	U	N1-C1'-C2'	6.84	122.90	114.00
33	L1	3037	G	O4'-C1'-C2'	6.84	113.76	107.60
42	LP	26	ARG	NE-CZ-NH1	6.84	123.72	120.30
69	La	10	ALA	N-CA-C	6.84	129.48	111.00
33	L1	928	A	O4'-C1'-N9	-6.84	102.73	108.20
33	L1	2902	A	P-O3'-C3'	6.84	127.91	119.70
33	L1	3156	G	OP1-P-OP2	-6.84	109.34	119.60
5	SE	207	THR	CA-CB-CG2	6.84	121.98	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	SU	71	GLY	CA-C-N	6.84	129.88	116.20
32	S1	3	C	C4'-C3'-C2'	6.84	109.44	102.60
33	L1	707	G	C3'-C2'-C1'	6.84	106.97	101.50
33	L1	2595	G	P-O5'-C5'	6.84	131.84	120.90
32	S1	1214	C	C1'-O4'-C4'	-6.84	104.43	109.90
33	L1	307	C	C5'-C4'-O4'	-6.84	100.89	109.10
33	L1	1879	A	C4'-C3'-C2'	-6.84	95.76	102.60
35	L2	33	U	O4'-C1'-N1	6.84	113.67	108.20
35	L2	132	U	O4'-C1'-N1	6.84	113.67	108.20
5	SE	8	ARG	NE-CZ-NH2	-6.84	116.88	120.30
32	S1	237	C	O4'-C1'-N1	6.84	113.67	108.20
33	L1	735	C	C3'-C2'-C1'	6.84	106.97	101.50
33	L1	1197	A	C5'-C4'-O4'	-6.84	100.90	109.10
33	L1	1350	G	O5'-P-OP2	-6.84	99.55	105.70
33	L1	1415	G	O4'-C1'-C2'	6.84	113.75	107.60
33	L1	2390	G	P-O3'-C3'	-6.84	111.50	119.70
33	L1	2638	A	OP1-P-O3'	-6.84	90.16	105.20
33	L1	3086	G	O4'-C1'-N9	6.84	113.67	108.20
37	LB	196	TRP	N-CA-C	-6.84	92.54	111.00
32	S1	1745	U	C5'-C4'-C3'	-6.83	105.06	116.00
33	L1	125	G	C1'-O4'-C4'	-6.83	104.43	109.90
33	L1	1466	U	C3'-C2'-C1'	-6.83	96.03	101.50
70	Li	11	HIS	CB-CA-C	6.83	124.07	110.40
16	SR	116	ILE	N-CA-CB	-6.83	95.08	110.80
32	S1	647	G	C5'-C4'-O4'	-6.83	100.90	109.10
32	S1	795	A	P-O5'-C5'	6.83	131.84	120.90
32	S1	1294	U	P-O3'-C3'	6.83	127.90	119.70
32	S1	1517	C	P-O3'-C3'	-6.83	111.50	119.70
32	S1	1662	G	O5'-P-OP2	-6.83	99.55	105.70
33	L1	48	A	N9-C1'-C2'	6.83	122.89	114.00
33	L1	1439	U	C1'-O4'-C4'	-6.83	104.43	109.90
33	L1	2059	C	C1'-O4'-C4'	-6.83	104.43	109.90
33	L1	2275	A	C4'-C3'-C2'	6.83	109.43	102.60
34	L3	83	A	N9-C1'-C2'	-6.83	104.48	112.00
44	LR	97	ALA	C-N-CA	-6.83	104.62	121.70
70	Li	64	ARG	NE-CZ-NH1	6.83	123.72	120.30
32	S1	1476	C	N1-C1'-C2'	6.83	122.88	114.00
33	L1	503	U	O4'-C1'-N1	6.83	113.67	108.20
33	L1	1154	U	C3'-C2'-C1'	6.83	106.97	101.50
33	L1	1588	G	C3'-C2'-C1'	-6.83	96.03	101.50
33	L1	1875	A	P-O5'-C5'	6.83	131.83	120.90
33	L1	2218	A	O4'-C1'-C2'	6.83	113.75	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2678	C	O4'-C1'-N1	6.83	113.67	108.20
33	L1	3380	G	O4'-C1'-N9	6.83	113.67	108.20
64	LG	154	ARG	NE-CZ-NH1	6.83	123.72	120.30
81	LD	315	LYS	CA-CB-CG	-6.83	98.37	113.40
32	S1	377	G	C3'-C2'-C1'	-6.83	96.04	101.50
32	S1	1352	A	O5'-P-OP1	6.83	118.90	110.70
33	L1	1421	A	C5'-C4'-C3'	-6.83	105.07	116.00
33	L1	1528	G	N9-C1'-C2'	6.83	122.88	114.00
41	LM	72	LEU	CA-C-O	-6.83	105.76	120.10
32	S1	1064	U	C1'-O4'-C4'	6.83	115.36	109.90
33	L1	1432	G	P-O5'-C5'	-6.83	109.97	120.90
33	L1	2336	C	O4'-C1'-N1	6.83	113.66	108.20
1	Sa	257	PHE	CG-CD1-CE1	6.83	128.31	120.80
33	L1	173	C	P-O3'-C3'	-6.83	111.51	119.70
33	L1	787	G	C1'-O4'-C4'	6.83	115.36	109.90
33	L1	1625	G	O4'-C1'-C2'	-6.83	98.97	105.80
33	L1	1883	A	O4'-C1'-C2'	-6.83	98.97	105.80
33	L1	2101	A	C3'-C2'-C1'	6.83	106.96	101.50
33	L1	2529	C	C4'-C3'-C2'	-6.83	95.78	102.60
74	LJ	91	ARG	NE-CZ-NH2	6.83	123.71	120.30
32	S1	1303	G	O4'-C1'-N9	-6.82	102.74	108.20
33	L1	1424	G	O4'-C1'-C2'	6.82	113.74	107.60
70	Li	58	ARG	CB-CA-C	-6.82	96.75	110.40
32	S1	940	U	O4'-C1'-N1	6.82	113.66	108.20
33	L1	418	G	O4'-C1'-N9	-6.82	102.74	108.20
33	L1	3177	A	C5'-C4'-O4'	6.82	117.29	109.10
33	L1	3299	A	C4'-C3'-C2'	6.82	109.42	102.60
32	S1	1031	A	C3'-C2'-C1'	6.82	106.96	101.50
32	S1	1674	C	C5'-C4'-C3'	6.82	126.91	116.00
48	LV	113	LEU	CB-CG-CD2	6.82	122.60	111.00
32	S1	690	G	O3'-P-O5'	-6.82	91.05	104.00
32	S1	1379	U	C1'-O4'-C4'	-6.82	104.44	109.90
34	L3	98	G	C1'-O4'-C4'	-6.82	104.44	109.90
5	SE	27	ARG	NE-CZ-NH2	6.82	123.71	120.30
32	S1	446	C	O4'-C1'-C2'	-6.82	98.98	105.80
33	L1	2344	A	C5'-C4'-C3'	-6.82	105.09	116.00
33	L1	2855	G	N9-C1'-C2'	-6.82	104.50	112.00
39	LF	180	VAL	CA-CB-CG2	-6.82	100.67	110.90
84	LI	109	ASP	CA-C-N	6.82	132.20	117.20
1	Sa	74	TRP	CB-CG-CD2	-6.82	117.74	126.60
33	L1	215	U	O5'-P-OP2	6.82	118.88	110.70
33	L1	332	A	O4'-C1'-N9	6.82	113.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1443	G	O4'-C1'-N9	6.82	113.65	108.20
33	L1	2459	U	P-O5'-C5'	-6.82	110.00	120.90
32	S1	283	G	O4'-C1'-N9	6.81	113.65	108.20
60	Lr	90	HIS	N-CA-CB	6.81	122.86	110.60
32	S1	1174	G	N9-C1'-C2'	6.81	122.86	114.00
33	L1	811	A	P-O5'-C5'	6.81	131.80	120.90
33	L1	857	G	O4'-C4'-C3'	-6.81	97.19	104.00
33	L1	1214	U	O4'-C1'-N1	6.81	113.65	108.20
33	L1	1552	C	O4'-C1'-C2'	6.81	113.73	107.60
33	L1	1579	C	C3'-C2'-C1'	6.81	106.95	101.50
33	L1	1727	A	O4'-C1'-C2'	-6.81	98.99	105.80
33	L1	2159	U	N1-C1'-C2'	-6.81	104.50	112.00
33	L1	1922	C	O4'-C1'-C2'	-6.81	98.99	105.80
33	L1	2199	C	C5'-C4'-C3'	6.81	126.90	116.00
2	SA	235	TYR	CB-CG-CD1	6.81	125.08	121.00
32	S1	1095	C	O4'-C1'-C2'	6.81	113.73	107.60
33	L1	2227	A	N9-C1'-C2'	6.81	122.85	114.00
38	LE	74	ARG	CB-CA-C	6.81	124.02	110.40
32	S1	1303	G	N9-C1'-C2'	6.81	122.85	114.00
32	S1	1713	C	C5'-C4'-O4'	6.81	117.27	109.10
33	L1	108	A	O4'-C1'-N9	6.81	113.64	108.20
33	L1	1774	G	P-O3'-C3'	-6.81	111.53	119.70
67	LS	119	ARG	N-CA-C	-6.81	92.62	111.00
32	S1	1801	A	C1'-O4'-C4'	-6.81	104.45	109.90
33	L1	1076	G	O4'-C1'-N9	6.81	113.64	108.20
33	L1	2464	G	O4'-C1'-C2'	6.81	113.73	107.60
35	L2	23	A	O4'-C1'-C2'	6.81	113.72	107.60
32	S1	117	U	O4'-C1'-N1	6.80	113.64	108.20
32	S1	1181	G	O4'-C1'-N9	6.80	113.64	108.20
33	L1	972	C	C5'-C4'-O4'	-6.80	100.93	109.10
33	L1	1322	A	O4'-C1'-N9	6.80	113.64	108.20
33	L1	1693	A	O4'-C1'-N9	-6.80	102.76	108.20
58	Ln	38	CYS	N-CA-CB	6.80	122.85	110.60
11	SM	135	HIS	N-CA-CB	6.80	122.84	110.60
33	L1	806	C	O4'-C1'-N1	6.80	113.64	108.20
32	S1	347	C	O4'-C1'-N1	6.80	113.64	108.20
32	S1	1306	U	N1-C1'-C2'	6.80	122.84	114.00
33	L1	296	C	C3'-C2'-C1'	6.80	106.94	101.50
33	L1	390	G	C1'-O4'-C4'	6.80	115.34	109.90
81	LD	39	ASP	N-CA-CB	-6.80	98.36	110.60
11	SM	36	VAL	CG1-CB-CG2	-6.80	100.02	110.90
32	S1	1249	G	O4'-C1'-N9	-6.80	102.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	803	G	C3'-C2'-C1'	-6.80	96.06	101.50
33	L1	1646	U	C3'-C2'-C1'	6.80	106.94	101.50
33	L1	1889	G	C1'-O4'-C4'	-6.80	104.46	109.90
24	SX	74	ARG	N-CA-CB	-6.80	98.37	110.60
32	S1	1196	C	O5'-P-OP1	-6.80	99.58	105.70
33	L1	3001	G	C3'-C2'-C1'	-6.80	96.06	101.50
33	L1	3127	C	N1-C1'-C2'	6.80	122.84	114.00
78	Le	131	ARG	NE-CZ-NH1	6.80	123.70	120.30
32	S1	1467	C	P-O3'-C3'	6.79	127.85	119.70
32	S1	1610	C	C1'-O4'-C4'	6.79	115.34	109.90
31	S2	45	G	N9-C1'-C2'	-6.79	104.53	112.00
32	S1	937	A	P-O5'-C5'	-6.79	110.03	120.90
33	L1	998	G	C3'-C2'-C1'	-6.79	96.06	101.50
33	L1	1547	G	C3'-C2'-C1'	6.79	106.93	101.50
33	L1	3142	C	C5'-C4'-C3'	-6.79	105.13	116.00
49	LX	140	TYR	CB-CG-CD1	-6.79	116.92	121.00
66	LN	111	MET	CG-SD-CE	-6.79	89.33	100.20
31	S2	62	C	N1-C1'-C2'	6.79	122.83	114.00
33	L1	29	G	P-O3'-C3'	6.79	127.85	119.70
33	L1	326	C	C3'-C2'-C1'	6.79	106.93	101.50
33	L1	523	C	N1-C1'-C2'	-6.79	104.53	112.00
33	L1	538	C	C1'-O4'-C4'	6.79	115.33	109.90
33	L1	1214	U	C4'-C3'-C2'	-6.79	95.81	102.60
33	L1	1257	U	P-O3'-C3'	6.79	127.85	119.70
33	L1	3011	U	O4'-C1'-C2'	-6.79	99.01	105.80
58	Ln	37	ARG	NE-CZ-NH1	6.79	123.70	120.30
33	L1	1923	G	P-O5'-C5'	-6.79	110.03	120.90
33	L1	3146	C	N1-C1'-C2'	-6.79	104.53	112.00
32	S1	279	C	O4'-C1'-N1	6.79	113.63	108.20
33	L1	58	G	O4'-C1'-C2'	-6.79	99.01	105.80
33	L1	160	G	C5'-C4'-O4'	6.79	117.25	109.10
33	L1	969	U	O4'-C1'-N1	6.79	113.63	108.20
33	L1	1437	G	O4'-C1'-N9	-6.79	102.77	108.20
33	L1	2336	C	N1-C1'-C2'	6.79	122.83	114.00
33	L1	3208	G	O4'-C4'-C3'	-6.79	97.21	104.00
35	L2	8	C	O4'-C1'-C2'	-6.79	99.01	105.80
33	L1	1547	G	C5'-C4'-O4'	6.79	117.24	109.10
33	L1	1818	C	O3'-P-O5'	-6.79	91.10	104.00
58	Ln	27	ARG	NE-CZ-NH2	6.79	123.69	120.30
32	S1	586	U	C5'-C4'-C3'	-6.79	105.14	116.00
32	S1	1239	C	O4'-C4'-C3'	-6.79	97.21	104.00
33	L1	1193	A	C5'-C4'-C3'	-6.79	105.14	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1684	U	C5'-C4'-C3'	6.79	126.86	116.00
33	L1	2847	A	O4'-C1'-C2'	-6.79	99.01	105.80
33	L1	3149	C	O4'-C1'-N1	-6.79	102.77	108.20
33	L1	3236	A	C5'-C4'-C3'	-6.79	105.14	116.00
34	L3	50	A	O4'-C1'-C2'	-6.79	99.01	105.80
69	La	46	LEU	N-CA-CB	6.79	123.97	110.40
70	Li	10	ARG	CD-NE-CZ	-6.79	114.10	123.60
1	Sa	143	ARG	NE-CZ-NH1	6.78	123.69	120.30
32	S1	1596	G	O4'-C1'-N9	6.78	113.63	108.20
32	S1	1606	U	OP1-P-O3'	6.78	120.12	105.20
33	L1	376	A	P-O3'-C3'	-6.78	111.56	119.70
33	L1	978	C	C2'-C3'-O3'	6.78	124.55	113.70
33	L1	1317	G	C1'-O4'-C4'	6.78	115.33	109.90
33	L1	2112	C	P-O3'-C3'	6.78	127.84	119.70
33	L1	2547	C	O4'-C1'-C2'	6.78	113.71	107.60
33	L1	2601	G	O4'-C1'-N9	6.78	113.63	108.20
33	L1	3212	C	C1'-O4'-C4'	-6.78	104.47	109.90
33	L1	1338	C	OP1-P-OP2	-6.78	109.43	119.60
34	L3	117	U	O3'-P-O5'	6.78	116.89	104.00
68	LW	83	ARG	CA-C-N	-6.78	102.28	117.20
33	L1	21	G	P-O5'-C5'	-6.78	110.05	120.90
33	L1	869	A	C3'-C2'-C1'	-6.78	96.08	101.50
33	L1	2234	G	P-O3'-C3'	6.78	127.84	119.70
32	S1	1736	C	P-O3'-C3'	-6.78	111.56	119.70
33	L1	971	G	OP1-P-O3'	6.78	120.11	105.20
33	L1	745	G	C1'-O4'-C4'	6.78	115.32	109.90
33	L1	1577	A	O4'-C1'-C2'	-6.78	99.02	105.80
33	L1	1710	G	P-O3'-C3'	-6.78	111.57	119.70
33	L1	2002	G	P-O3'-C3'	6.78	127.83	119.70
33	L1	3326	U	O5'-P-OP2	-6.78	99.60	105.70
40	LH	58	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
33	L1	36	U	O4'-C1'-N1	6.78	113.62	108.20
33	L1	701	U	O4'-C1'-C2'	-6.78	99.03	105.80
33	L1	1701	G	P-O5'-C5'	6.78	131.74	120.90
33	L1	2787	A	C5'-C4'-O4'	6.77	117.23	109.10
32	S1	1518	C	P-O3'-C3'	-6.77	111.57	119.70
32	S1	1602	G	N9-C1'-C2'	6.77	122.80	114.00
33	L1	959	U	C3'-C2'-C1'	6.77	106.92	101.50
32	S1	572	G	C5'-C4'-O4'	6.77	117.22	109.10
32	S1	1304	A	O4'-C1'-N9	6.77	113.62	108.20
33	L1	2088	C	C1'-O4'-C4'	-6.77	104.48	109.90
35	L2	29	G	O4'-C1'-N9	6.77	113.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	Le	68	LYS	CB-CA-C	6.77	123.94	110.40
33	L1	470	G	P-O5'-C5'	6.77	131.73	120.90
33	L1	617	C	O4'-C1'-N1	6.77	113.61	108.20
33	L1	763	G	C3'-C2'-C1'	6.77	106.92	101.50
33	L1	793	C	O4'-C1'-N1	6.77	113.61	108.20
33	L1	2526	G	O5'-P-OP1	-6.77	99.61	105.70
33	L1	2939	G	P-O3'-C3'	-6.77	111.58	119.70
44	LR	146	ARG	NE-CZ-NH2	-6.77	116.92	120.30
32	S1	1263	C	C5'-C4'-O4'	6.77	117.22	109.10
33	L1	248	C	OP2-P-O3'	6.77	120.09	105.20
33	L1	248	C	O4'-C1'-N1	6.77	113.61	108.20
32	S1	906	G	O4'-C1'-C2'	6.77	113.69	107.60
32	S1	1458	U	C1'-O4'-C4'	-6.77	104.49	109.90
33	L1	3017	A	P-O3'-C3'	6.77	127.82	119.70
33	L1	3027	G	N9-C1'-C2'	-6.77	104.56	112.00
5	SE	115	ASP	CB-CG-OD1	-6.76	112.21	118.30
13	SQ	11	LYS	CA-CB-CG	6.76	128.28	113.40
32	S1	276	G	O4'-C1'-N9	6.76	113.61	108.20
33	L1	937	G	C3'-C2'-C1'	-6.76	96.09	101.50
33	L1	1536	U	O4'-C1'-C2'	-6.76	99.03	105.80
33	L1	1768	U	O4'-C1'-N1	6.76	113.61	108.20
33	L1	2640	A	C4'-C3'-C2'	-6.76	95.84	102.60
33	L1	2721	C	C4'-C3'-C2'	-6.76	95.84	102.60
33	L1	3057	A	C5'-C4'-O4'	-6.76	100.98	109.10
48	LV	76	ARG	CA-CB-CG	6.76	128.28	113.40
11	SM	33	ILE	N-CA-CB	6.76	126.36	110.80
32	S1	19	A	O4'-C1'-C2'	-6.76	99.04	105.80
32	S1	1537	U	N1-C1'-C2'	6.76	122.79	114.00
33	L1	615	A	O4'-C1'-N9	6.76	113.61	108.20
33	L1	1683	U	O4'-C1'-C2'	-6.76	99.04	105.80
43	LO	79	TRP	CB-CG-CD1	-6.76	118.21	127.00
81	LD	312	LYS	CB-CA-C	6.76	123.92	110.40
32	S1	32	U	O4'-C4'-C3'	-6.76	97.24	104.00
32	S1	318	C	N1-C1'-C2'	6.76	122.79	114.00
33	L1	501	U	O4'-C1'-N1	6.76	113.61	108.20
33	L1	516	C	O4'-C1'-N1	6.76	113.61	108.20
33	L1	1089	G	N9-C1'-C2'	6.76	122.79	114.00
33	L1	1593	C	O4'-C1'-C2'	-6.76	99.04	105.80
33	L1	2526	G	P-O3'-C3'	6.76	127.81	119.70
33	L1	2787	A	C1'-O4'-C4'	-6.76	104.49	109.90
33	L1	3323	U	P-O3'-C3'	-6.76	111.59	119.70
34	L3	75	G	C5'-C4'-O4'	6.76	117.21	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	Lq	11	ARG	NE-CZ-NH1	6.76	123.68	120.30
67	LS	160	PRO	N-CA-CB	6.76	111.41	103.30
33	L1	229	G	O4'-C1'-N9	6.76	113.61	108.20
33	L1	1307	A	OP1-P-OP2	-6.76	109.46	119.60
33	L1	1607	C	C3'-C2'-C1'	6.76	106.91	101.50
33	L1	1680	A	C3'-C2'-C1'	6.76	106.91	101.50
32	S1	645	G	P-O3'-C3'	6.76	127.81	119.70
32	S1	1083	C	C1'-O4'-C4'	-6.76	104.50	109.90
33	L1	160	G	C1'-O4'-C4'	-6.76	104.50	109.90
33	L1	2101	A	P-O3'-C3'	6.76	127.81	119.70
36	LA	211	LYS	N-CA-CB	-6.76	98.44	110.60
69	La	26	VAL	CA-CB-CG1	6.76	121.03	110.90
70	Li	78	TYR	CB-CG-CD1	6.76	125.05	121.00
23	SU	24	SER	N-CA-CB	6.75	120.63	110.50
32	S1	915	C	C1'-O4'-C4'	6.75	115.30	109.90
33	L1	2343	U	C1'-O4'-C4'	-6.75	104.50	109.90
32	S1	1447	C	P-O3'-C3'	6.75	127.80	119.70
33	L1	702	G	N9-C1'-C2'	6.75	122.78	114.00
33	L1	2280	C	C3'-C2'-C1'	6.75	106.90	101.50
1	Sa	22	ARG	NE-CZ-NH2	-6.75	116.92	120.30
13	SQ	67	ARG	C-N-CA	-6.75	108.12	122.30
32	S1	686	A	O4'-C1'-N9	6.75	113.60	108.20
32	S1	998	A	C1'-O4'-C4'	-6.75	104.50	109.90
33	L1	88	A	O4'-C1'-C2'	6.75	113.68	107.60
33	L1	1137	G	C4'-C3'-C2'	-6.75	95.85	102.60
33	L1	1631	G	C2'-C3'-O3'	6.75	124.50	113.70
33	L1	2895	G	O4'-C1'-N9	6.75	113.60	108.20
33	L1	3098	U	P-O3'-C3'	6.75	127.80	119.70
32	S1	1591	A	P-O3'-C3'	6.75	127.80	119.70
33	L1	757	G	O4'-C1'-N9	6.75	113.60	108.20
46	LT	67	HIS	CA-CB-CG	-6.75	102.12	113.60
32	S1	480	U	P-O3'-C3'	6.75	127.80	119.70
33	L1	55	G	O4'-C1'-C2'	6.75	113.67	107.60
33	L1	1636	C	N1-C1'-C2'	6.75	122.77	114.00
33	L1	2230	C	C5'-C4'-C3'	6.75	126.80	116.00
33	L1	2395	G	O4'-C1'-C2'	6.75	113.67	107.60
33	L1	2940	G	O4'-C1'-N9	6.75	113.60	108.20
33	L1	3010	G	O4'-C1'-N9	6.75	113.60	108.20
69	La	10	ALA	CB-CA-C	-6.75	99.98	110.10
33	L1	325	A	C3'-C2'-C1'	-6.75	96.10	101.50
33	L1	846	A	C3'-C2'-C1'	-6.75	96.10	101.50
33	L1	1855	A	P-O5'-C5'	-6.75	110.10	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2276	A	C2'-C3'-O3'	6.75	124.49	113.70
33	L1	2447	A	O5'-P-OP1	6.75	118.80	110.70
33	L1	2822	A	P-O3'-C3'	-6.75	111.61	119.70
33	L1	3247	C	C1'-O4'-C4'	-6.75	104.50	109.90
38	LE	110	GLU	CB-CA-C	-6.75	96.91	110.40
67	LS	61	LEU	CB-CG-CD2	6.75	122.47	111.00
33	L1	631	C	C1'-O4'-C4'	-6.75	104.50	109.90
11	SM	21	ASP	C-N-CA	6.74	136.46	122.30
33	L1	638	G	C4'-C3'-C2'	6.74	109.34	102.60
33	L1	724	A	C5'-C4'-C3'	6.74	126.79	116.00
33	L1	3157	C	O4'-C1'-C2'	-6.74	99.06	105.80
32	S1	933	G	C1'-O4'-C4'	6.74	115.29	109.90
32	S1	1485	A	O4'-C1'-C2'	-6.74	99.06	105.80
33	L1	316	A	N9-C1'-C2'	6.74	122.76	114.00
33	L1	2051	G	O4'-C1'-N9	6.74	113.59	108.20
70	Li	58	ARG	N-CA-CB	6.74	122.74	110.60
28	SN	34	TYR	CB-CG-CD2	-6.74	116.96	121.00
33	L1	856	G	C5'-C4'-C3'	6.74	126.79	116.00
33	L1	1552	C	N1-C1'-C2'	6.74	122.76	114.00
33	L1	1902	G	O4'-C1'-C2'	-6.74	99.06	105.80
33	L1	2091	U	C5'-C4'-C3'	6.74	126.78	116.00
33	L1	2566	C	C1'-O4'-C4'	-6.74	104.51	109.90
33	L1	3335	G	O4'-C1'-C2'	-6.74	99.06	105.80
69	La	24	VAL	CA-CB-CG1	6.74	121.01	110.90
32	S1	289	G	C5'-C4'-C3'	-6.74	105.22	116.00
33	L1	557	C	O4'-C1'-N1	-6.74	102.81	108.20
33	L1	3020	C	P-O5'-C5'	6.74	131.68	120.90
38	LE	88	VAL	CA-C-O	-6.74	105.95	120.10
32	S1	1445	C	O4'-C1'-N1	6.74	113.59	108.20
33	L1	1299	G	C1'-O4'-C4'	-6.74	104.51	109.90
33	L1	2449	A	O4'-C1'-N9	6.74	113.59	108.20
33	L1	2693	G	P-O3'-C3'	6.74	127.78	119.70
33	L1	3166	C	O4'-C1'-N1	6.74	113.59	108.20
34	L3	4	U	O4'-C1'-N1	6.74	113.59	108.20
32	S1	882	G	O4'-C1'-C2'	6.74	113.66	107.60
32	S1	1791	A	N9-C1'-C2'	6.74	122.76	114.00
33	L1	1368	U	C5'-C4'-C3'	6.74	126.78	116.00
33	L1	1409	G	C1'-O4'-C4'	-6.74	104.51	109.90
33	L1	1714	A	P-O3'-C3'	6.74	127.78	119.70
33	L1	1744	C	C1'-O4'-C4'	-6.74	104.51	109.90
34	L3	115	A	N9-C1'-C2'	6.74	122.76	114.00
33	L1	2564	G	O4'-C1'-C2'	6.73	113.66	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	43	A	O4'-C1'-N9	6.73	113.59	108.20
46	LT	163	ARG	NE-CZ-NH2	-6.73	116.93	120.30
23	SU	34	HIS	CA-C-N	6.73	135.95	117.10
33	L1	877	U	O4'-C1'-C2'	6.73	113.66	107.60
33	L1	1899	U	O4'-C1'-N1	6.73	113.58	108.20
33	L1	1913	C	C1'-O4'-C4'	-6.73	104.51	109.90
33	L1	2865	G	C4'-C3'-C2'	-6.73	95.87	102.60
4	SD	136	ILE	CA-C-O	-6.73	105.97	120.10
9	SK	43	VAL	CA-CB-CG2	-6.73	100.80	110.90
32	S1	417	U	C1'-O4'-C4'	-6.73	104.52	109.90
32	S1	1778	G	N9-C1'-C2'	6.73	122.75	114.00
33	L1	614	C	C4'-C3'-C2'	-6.73	95.87	102.60
33	L1	632	C	N1-C1'-C2'	6.73	122.75	114.00
33	L1	2538	G	O4'-C1'-C2'	6.73	113.66	107.60
35	L2	8	C	O4'-C1'-N1	6.73	113.58	108.20
37	LB	16	PHE	CB-CG-CD1	-6.73	116.09	120.80
64	LG	68	PRO	C-N-CA	-6.73	104.87	121.70
78	Le	32	VAL	N-CA-CB	6.73	126.31	111.50
82	LK	165	ARG	NE-CZ-NH2	-6.73	116.93	120.30
25	SC	55	ARG	NE-CZ-NH2	6.73	123.67	120.30
32	S1	1226	U	O5'-C5'-C4'	-6.73	98.91	111.70
32	S1	565	G	O4'-C1'-C2'	6.73	113.65	107.60
32	S1	1298	G	P-O3'-C3'	-6.73	111.63	119.70
32	S1	1405	U	C5'-C4'-C3'	6.73	126.76	116.00
33	L1	61	A	P-O3'-C3'	6.73	127.77	119.70
33	L1	799	U	N1-C1'-C2'	6.73	122.75	114.00
33	L1	2171	A	C3'-C2'-C1'	6.73	106.88	101.50
74	LJ	14	PHE	N-CA-CB	6.73	122.71	110.60
32	S1	637	U	O4'-C1'-N1	6.73	113.58	108.20
33	L1	940	G	O4'-C1'-N9	-6.73	102.82	108.20
33	L1	1488	G	O4'-C1'-C2'	-6.73	99.07	105.80
33	L1	1751	G	C4'-C3'-C2'	-6.73	95.87	102.60
33	L1	3241	C	C1'-O4'-C4'	-6.73	104.52	109.90
13	SQ	82	MET	C-N-CA	-6.72	104.89	121.70
32	S1	1790	G	C3'-C2'-C1'	6.72	106.88	101.50
33	L1	98	A	OP2-P-O3'	-6.72	90.41	105.20
33	L1	1060	U	C4'-C3'-C2'	-6.72	95.88	102.60
33	L1	2484	G	C4'-C3'-C2'	-6.72	95.88	102.60
34	L3	15	C	C5'-C4'-O4'	6.72	117.17	109.10
48	LV	7	GLU	CA-CB-CG	6.72	128.19	113.40
52	Lb	96	PHE	CG-CD1-CE1	-6.72	113.40	120.80
64	LG	23	ARG	CB-CA-C	-6.72	96.95	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	SD	136	ILE	CB-CG1-CD1	6.72	132.72	113.90
11	SM	21	ASP	O-C-N	-6.72	111.77	123.20
32	S1	355	U	C3'-C2'-C1'	6.72	106.88	101.50
33	L1	300	C	O4'-C1'-N1	6.72	113.58	108.20
33	L1	1526	A	C3'-C2'-C1'	-6.72	96.12	101.50
33	L1	2839	A	C1'-O4'-C4'	6.72	115.28	109.90
33	L1	3385	G	C4'-C3'-C2'	-6.72	95.88	102.60
40	LH	90	LYS	O-C-N	-6.72	111.95	122.70
32	S1	1326	A	O4'-C1'-C2'	-6.72	99.08	105.80
33	L1	164	C	C1'-O4'-C4'	-6.72	104.52	109.90
33	L1	936	A	C3'-C2'-C1'	-6.72	96.12	101.50
33	L1	1256	A	C5'-C4'-O4'	6.72	117.17	109.10
33	L1	2151	G	C5'-C4'-C3'	6.72	126.75	116.00
44	LR	150	ARG	NE-CZ-NH1	6.72	123.66	120.30
67	LS	30	LYS	N-CA-CB	6.72	122.70	110.60
32	S1	455	G	O4'-C1'-N9	6.72	113.58	108.20
35	L2	52	A	O4'-C1'-C2'	6.72	113.65	107.60
67	LS	62	ALA	N-CA-CB	6.72	119.51	110.10
32	S1	1592	G	OP1-P-O3'	6.72	119.98	105.20
14	SP	103	LYS	CG-CD-CE	6.72	132.05	111.90
33	L1	1821	G	O4'-C4'-C3'	-6.72	97.28	104.00
33	L1	2458	A	O4'-C1'-N9	6.72	113.57	108.20
33	L1	2770	U	O3'-P-O5'	-6.72	91.24	104.00
1	Sa	323	TYR	CB-CG-CD2	-6.71	116.97	121.00
33	L1	1140	C	O4'-C1'-C2'	-6.71	99.08	105.80
33	L1	1382	C	P-O5'-C5'	6.71	131.64	120.90
33	L1	1685	U	O4'-C1'-N1	6.71	113.57	108.20
33	L1	2200	U	O4'-C1'-C2'	-6.71	99.09	105.80
46	LT	80	LYS	N-CA-CB	6.71	122.69	110.60
32	S1	389	A	N9-C1'-C2'	-6.71	104.62	112.00
51	LY	10	SER	N-CA-CB	6.71	120.57	110.50
11	SM	118	ARG	N-CA-CB	6.71	122.68	110.60
33	L1	712	A	O4'-C1'-C2'	-6.71	99.09	105.80
33	L1	841	G	O3'-P-O5'	-6.71	91.25	104.00
33	L1	1298	A	O4'-C4'-C3'	-6.71	97.29	104.00
33	L1	2792	A	C3'-C2'-C1'	-6.71	96.13	101.50
33	L1	2900	G	C4'-C3'-C2'	6.71	109.31	102.60
80	LC	278	ARG	CG-CD-NE	-6.71	97.71	111.80
33	L1	3124	A	C3'-C2'-C1'	6.71	106.87	101.50
32	S1	1200	A	C1'-O4'-C4'	-6.71	104.53	109.90
33	L1	1004	C	C1'-O4'-C4'	-6.71	104.53	109.90
29	ST	12	TYR	CB-CG-CD2	-6.71	116.98	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2927	C	N1-C1'-C2'	6.71	122.72	114.00
33	L1	3360	U	C1'-O4'-C4'	-6.71	104.54	109.90
32	S1	21	U	C5'-C4'-O4'	6.70	117.14	109.10
32	S1	1198	A	N9-C1'-C2'	6.70	122.72	114.00
33	L1	1937	C	N1-C1'-C2'	6.70	122.71	114.00
33	L1	3237	G	C5'-C4'-C3'	-6.70	105.28	116.00
33	L1	3331	G	N9-C1'-C2'	-6.70	104.63	112.00
57	Ll	11	ARG	NE-CZ-NH2	-6.70	116.95	120.30
66	LN	23	ARG	NE-CZ-NH2	-6.70	116.95	120.30
32	S1	937	A	C1'-O4'-C4'	6.70	115.26	109.90
33	L1	1598	U	OP1-P-OP2	-6.70	109.55	119.60
79	Ls	36	VAL	CA-CB-CG1	6.70	120.95	110.90
33	L1	105	A	C1'-O4'-C4'	6.70	115.26	109.90
33	L1	1596	G	P-O5'-C5'	-6.70	110.18	120.90
42	LP	127	TYR	CG-CD1-CE1	-6.70	115.94	121.30
27	SH	78	ARG	CB-CA-C	-6.70	97.01	110.40
31	S2	26	G	C1'-O4'-C4'	-6.70	104.54	109.90
54	Lf	21	VAL	CA-CB-CG1	6.70	120.94	110.90
73	Lp	30	ARG	NE-CZ-NH1	6.70	123.65	120.30
33	L1	923	A	N9-C1'-C2'	-6.69	104.64	112.00
3	SB	27	ARG	NE-CZ-NH2	-6.69	116.95	120.30
32	S1	385	C	C3'-C2'-C1'	6.69	106.85	101.50
32	S1	849	G	P-O3'-C3'	6.69	127.73	119.70
33	L1	1351	C	C5'-C4'-O4'	-6.69	101.07	109.10
33	L1	1524	G	C1'-O4'-C4'	-6.69	104.55	109.90
32	S1	1632	C	C4'-C3'-C2'	-6.69	95.91	102.60
33	L1	2917	U	O4'-C1'-N1	6.69	113.55	108.20
35	L2	39	C	C1'-O4'-C4'	-6.69	104.55	109.90
45	LQ	219	PHE	CB-CG-CD1	6.69	125.48	120.80
25	SC	43	GLU	O-C-N	-6.69	112.00	122.70
33	L1	1761	C	O4'-C1'-C2'	-6.69	99.11	105.80
2	SA	257	ALA	CB-CA-C	6.69	120.13	110.10
23	SU	72	GLY	CA-C-O	-6.69	108.56	120.60
33	L1	428	G	C3'-C2'-C1'	6.69	106.85	101.50
33	L1	566	G	OP1-P-O3'	6.69	119.91	105.20
33	L1	1181	A	C1'-O4'-C4'	6.69	115.25	109.90
33	L1	2806	A	C3'-C2'-C1'	6.69	106.85	101.50
64	LG	184	ILE	C-N-CA	-6.69	104.98	121.70
81	LD	400	TRP	CB-CG-CD1	6.69	135.69	127.00
32	S1	1199	C	C5'-C4'-O4'	6.69	117.12	109.10
32	S1	1644	C	P-O3'-C3'	-6.69	111.68	119.70
33	L1	3341	C	N1-C1'-C2'	6.69	122.69	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	99	G	O3'-P-O5'	-6.69	91.30	104.00
5	SE	193	PRO	CA-C-N	6.68	131.90	117.20
33	L1	1747	A	C3'-C2'-C1'	-6.68	96.15	101.50
33	L1	1797	U	O4'-C1'-N1	6.68	113.55	108.20
20	SZ	7	SER	O-C-N	-6.68	112.01	122.70
32	S1	1600	G	N9-C1'-C2'	6.68	122.69	114.00
33	L1	1276	C	O4'-C1'-N1	6.68	113.55	108.20
33	L1	1284	C	C4'-C3'-C2'	-6.68	95.92	102.60
33	L1	1953	C	C3'-C2'-C1'	6.68	106.85	101.50
67	LS	33	ALA	N-CA-CB	-6.68	100.74	110.10
12	SO	141	TYR	CB-CG-CD2	-6.68	116.99	121.00
32	S1	1600	G	O4'-C1'-C2'	6.68	113.61	107.60
32	S1	1745	U	O4'-C4'-C3'	-6.68	97.32	104.00
33	L1	1621	G	O3'-P-O5'	-6.68	91.31	104.00
13	SQ	137	ARG	NE-CZ-NH1	6.68	123.64	120.30
32	S1	1712	C	O4'-C1'-N1	6.68	113.54	108.20
33	L1	347	A	C5'-C4'-C3'	6.68	126.69	116.00
33	L1	447	C	P-O5'-C5'	6.68	131.59	120.90
33	L1	1052	A	P-O3'-C3'	6.68	127.72	119.70
33	L1	1171	U	P-O3'-C3'	-6.68	111.69	119.70
33	L1	2493	C	P-O3'-C3'	6.68	127.72	119.70
56	Lh	95	ALA	CB-CA-C	-6.68	100.08	110.10
70	Li	46	VAL	CA-CB-CG2	-6.68	100.88	110.90
32	S1	383	U	O4'-C1'-N1	6.68	113.54	108.20
33	L1	453	U	N1-C1'-C2'	6.68	122.68	114.00
33	L1	1681	U	O4'-C1'-N1	6.68	113.54	108.20
33	L1	2745	C	O5'-P-OP1	6.68	118.71	110.70
32	S1	1300	A	N9-C1'-C2'	6.68	122.68	114.00
33	L1	1694	A	N9-C1'-C2'	-6.68	104.66	112.00
33	L1	1748	A	C2'-C3'-O3'	6.68	124.38	113.70
33	L1	3149	C	P-O3'-C3'	-6.68	111.69	119.70
35	L2	126	G	P-O5'-C5'	6.68	131.58	120.90
32	S1	431	C	C3'-C2'-C1'	6.67	106.84	101.50
32	S1	545	A	C5'-C4'-C3'	6.67	126.68	116.00
33	L1	18	G	O4'-C1'-N9	6.67	113.54	108.20
33	L1	297	G	P-O5'-C5'	-6.67	110.22	120.90
33	L1	1622	G	O4'-C4'-C3'	-6.67	97.33	104.00
35	L2	86	C	P-O5'-C5'	6.67	131.58	120.90
64	LG	111	LYS	N-CA-C	6.67	129.02	111.00
66	LN	87	SER	O-C-N	6.67	133.38	122.70
32	S1	367	G	O4'-C1'-N9	6.67	113.54	108.20
32	S1	1021	C	N1-C1'-C2'	6.67	122.67	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1016	G	O3'-P-O5'	6.67	116.68	104.00
32	S1	1056	A	C1'-O4'-C4'	-6.67	104.56	109.90
32	S1	1291	A	O4'-C1'-N9	6.67	113.54	108.20
32	S1	1341	G	O4'-C1'-N9	6.67	113.54	108.20
33	L1	1384	G	O5'-P-OP1	-6.67	99.70	105.70
33	L1	2543	G	C3'-C2'-C1'	6.67	106.84	101.50
33	L1	3317	G	O4'-C1'-C2'	6.67	113.61	107.60
37	LB	9	ARG	NE-CZ-NH1	6.67	123.64	120.30
45	LQ	249	ALA	C-N-CA	6.67	138.38	121.70
70	Li	102	ILE	O-C-N	-6.67	112.03	122.70
4	SD	107	GLY	O-C-N	-6.67	112.03	122.70
4	SD	163	ASP	CB-CA-C	6.67	123.74	110.40
33	L1	713	G	C1'-O4'-C4'	-6.67	104.56	109.90
33	L1	2458	A	O4'-C1'-C2'	6.67	113.60	107.60
33	L1	1731	A	P-O5'-C5'	6.67	131.57	120.90
33	L1	3303	C	O5'-P-OP2	-6.67	99.70	105.70
35	L2	123	C	O4'-C1'-N1	6.67	113.53	108.20
52	Lb	69	ALA	CB-CA-C	-6.67	100.10	110.10
78	Le	43	THR	CA-CB-CG2	-6.67	103.06	112.40
32	S1	146	A	O4'-C1'-N9	6.67	113.53	108.20
33	L1	669	G	O4'-C1'-N9	6.67	113.53	108.20
33	L1	1822	C	C4'-C3'-C2'	-6.67	95.93	102.60
33	L1	1893	G	C1'-O4'-C4'	-6.67	104.57	109.90
33	L1	2569	G	P-O3'-C3'	6.67	127.70	119.70
42	LP	44	ARG	NH1-CZ-NH2	-6.67	112.07	119.40
72	Lk	93	MET	CA-CB-CG	6.67	124.63	113.30
32	S1	993	C	O4'-C1'-N1	6.67	113.53	108.20
33	L1	1008	U	O4'-C1'-N1	6.67	113.53	108.20
33	L1	1585	A	C1'-O4'-C4'	-6.67	104.57	109.90
2	SA	199	TRP	N-CA-CB	6.66	122.59	110.60
33	L1	1623	C	N1-C1'-C2'	6.66	122.66	114.00
32	S1	1660	C	C5'-C4'-C3'	6.66	126.66	116.00
33	L1	21	G	N9-C1'-C2'	-6.66	104.67	112.00
33	L1	1707	C	N1-C1'-C2'	-6.66	104.67	112.00
34	L3	69	A	O4'-C1'-N9	6.66	113.53	108.20
34	L3	71	A	C1'-O4'-C4'	6.66	115.23	109.90
6	SF	82	LYS	N-CA-CB	6.66	122.59	110.60
32	S1	111	U	P-O5'-C5'	6.66	131.56	120.90
33	L1	1119	G	O4'-C4'-C3'	-6.66	97.34	104.00
33	L1	2383	G	N9-C1'-C2'	6.66	122.66	114.00
33	L1	2662	A	O4'-C4'-C3'	-6.66	97.34	104.00
33	L1	2918	U	O3'-P-O5'	-6.66	91.34	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	LQ	44	ASP	CB-CG-OD2	6.66	124.30	118.30
58	Ln	42	LEU	N-CA-C	6.66	128.99	111.00
33	L1	1262	U	C3'-C2'-C1'	-6.66	96.17	101.50
33	L1	1731	A	C3'-C2'-C1'	6.66	106.83	101.50
33	L1	2404	C	O4'-C1'-C2'	6.66	113.59	107.60
33	L1	2946	U	C3'-C2'-C1'	6.66	106.83	101.50
33	L1	3305	U	O4'-C1'-C2'	-6.66	99.14	105.80
45	LQ	267	TYR	CG-CD1-CE1	-6.66	115.97	121.30
55	Lg	10	THR	CA-CB-CG2	-6.66	103.08	112.40
33	L1	2578	G	O4'-C1'-N9	6.66	113.53	108.20
34	L3	92	C	O4'-C1'-N1	6.66	113.53	108.20
23	SU	28	PHE	C-N-CA	6.66	138.34	121.70
32	S1	1091	A	O4'-C1'-C2'	6.66	113.59	107.60
33	L1	345	G	N9-C1'-C2'	6.66	122.65	114.00
38	LE	70	TYR	CB-CG-CD1	-6.66	117.01	121.00
1	Sa	70	TYR	CB-CG-CD1	-6.65	117.01	121.00
32	S1	1212	A	N9-C1'-C2'	6.65	122.65	114.00
33	L1	1225	A	O4'-C1'-C2'	6.65	113.59	107.60
13	SQ	94	GLU	CA-C-N	6.65	131.84	117.20
25	SC	59	ARG	NE-CZ-NH2	-6.65	116.97	120.30
30	S3	19	U	O4'-C1'-C2'	-6.65	99.15	105.80
33	L1	3150	G	N9-C1'-C2'	-6.65	104.68	112.00
36	LA	121	ARG	CB-CA-C	6.65	123.70	110.40
33	L1	104	G	O4'-C1'-N9	6.65	113.52	108.20
33	L1	265	G	O4'-C1'-N9	-6.65	102.88	108.20
33	L1	372	A	C2'-C3'-O3'	6.65	124.34	113.70
33	L1	1063	G	C3'-C2'-C1'	6.65	106.82	101.50
33	L1	1282	A	O5'-C5'-C4'	6.65	124.33	111.70
33	L1	1849	U	O4'-C1'-C2'	-6.65	99.15	105.80
33	L1	2687	C	C3'-C2'-C1'	6.65	106.82	101.50
33	L1	3229	C	C1'-O4'-C4'	-6.65	104.58	109.90
48	LV	30	ARG	NE-CZ-NH1	6.65	123.62	120.30
59	Lo	30	ARG	O-C-N	-6.65	112.06	122.70
46	LT	137	VAL	N-CA-CB	6.65	126.13	111.50
33	L1	60	G	C5'-C4'-C3'	-6.65	105.36	116.00
33	L1	1550	A	O3'-P-O5'	6.65	116.63	104.00
33	L1	2222	C	O4'-C1'-N1	6.65	113.52	108.20
33	L1	2369	G	C3'-C2'-C1'	-6.65	96.18	101.50
3	SB	147	ALA	N-CA-CB	6.64	119.40	110.10
25	SC	164	SER	C-N-CA	-6.64	94.10	122.00
32	S1	355	U	O4'-C1'-N1	6.64	113.52	108.20
32	S1	1093	A	O4'-C1'-N9	6.64	113.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	563	C	O4'-C1'-C2'	-6.64	99.16	105.80
33	L1	936	A	C2'-C3'-O3'	6.64	124.33	113.70
33	L1	1215	U	C4'-C3'-C2'	-6.64	95.96	102.60
33	L1	2108	C	O3'-P-O5'	6.64	116.62	104.00
33	L1	283	A	P-O5'-C5'	-6.64	110.27	120.90
33	L1	310	C	C5'-C4'-O4'	-6.64	101.13	109.10
33	L1	1572	C	O4'-C1'-C2'	-6.64	99.16	105.80
33	L1	2381	G	C3'-C2'-C1'	-6.64	96.19	101.50
33	L1	2392	G	P-O5'-C5'	6.64	131.53	120.90
34	L3	111	U	O4'-C1'-N1	6.64	113.52	108.20
58	Ln	20	ALA	N-CA-CB	-6.64	100.80	110.10
73	Lp	37	LYS	CB-CA-C	-6.64	97.12	110.40
33	L1	1577	A	C3'-C2'-C1'	-6.64	96.19	101.50
31	S2	69	G	N9-C1'-C2'	6.64	122.63	114.00
32	S1	141	G	O4'-C1'-N9	6.64	113.51	108.20
33	L1	994	U	O4'-C1'-C2'	6.64	113.58	107.60
33	L1	1669	C	P-O5'-C5'	6.64	131.52	120.90
33	L1	182	C	C1'-O4'-C4'	-6.64	104.59	109.90
33	L1	183	C	O4'-C1'-C2'	-6.64	99.16	105.80
33	L1	297	G	C1'-O4'-C4'	-6.64	104.59	109.90
33	L1	522	C	O4'-C1'-C2'	-6.64	99.16	105.80
33	L1	2437	A	O4'-C1'-C2'	-6.64	99.16	105.80
32	S1	201	G	P-O3'-C3'	-6.64	111.74	119.70
33	L1	2386	A	N9-C1'-C2'	6.64	122.63	114.00
35	L2	70	G	N9-C1'-C2'	-6.64	104.70	112.00
35	L2	147	C	C1'-O4'-C4'	-6.64	104.59	109.90
32	S1	1071	C	C3'-C2'-C1'	-6.63	96.19	101.50
33	L1	3168	C	O4'-C1'-N1	6.63	113.51	108.20
81	LD	37	ARG	NE-CZ-NH1	6.63	123.62	120.30
32	S1	1437	C	O4'-C1'-N1	6.63	113.51	108.20
33	L1	556	U	C1'-O4'-C4'	6.63	115.21	109.90
42	LP	127	TYR	CB-CG-CD2	-6.63	117.02	121.00
32	S1	1240	A	C1'-O4'-C4'	-6.63	104.59	109.90
32	S1	1447	C	P-O5'-C5'	-6.63	110.29	120.90
33	L1	247	C	O4'-C1'-N1	6.63	113.50	108.20
33	L1	2751	A	O4'-C4'-C3'	-6.63	97.37	104.00
33	L1	2347	A	N9-C1'-C2'	6.63	122.62	114.00
4	SD	134	LYS	N-CA-CB	6.63	122.53	110.60
33	L1	433	C	N1-C1'-C2'	6.63	122.62	114.00
33	L1	1296	C	P-O3'-C3'	6.63	127.65	119.70
33	L1	2338	C	P-O3'-C3'	6.63	127.66	119.70
35	L2	95	C	C5'-C4'-O4'	-6.63	101.15	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	LA	83	TYR	CG-CD1-CE1	-6.63	116.00	121.30
84	LI	108	ALA	O-C-N	-6.63	112.09	122.70
32	S1	908	U	O4'-C1'-N1	6.63	113.50	108.20
32	S1	1389	G	C1'-O4'-C4'	-6.63	104.60	109.90
33	L1	1068	A	P-O3'-C3'	-6.63	111.75	119.70
33	L1	3129	G	C1'-O4'-C4'	-6.63	104.60	109.90
47	LU	56	PHE	CB-CG-CD2	6.63	125.44	120.80
33	L1	2837	C	C4'-C3'-C2'	-6.62	95.97	102.60
31	S2	2	C	C5'-C4'-O4'	6.62	117.05	109.10
32	S1	54	C	C4'-C3'-C2'	-6.62	95.98	102.60
32	S1	605	A	O4'-C4'-C3'	-6.62	97.38	104.00
32	S1	1676	G	O4'-C1'-C2'	6.62	113.56	107.60
33	L1	293	A	C3'-C2'-C1'	-6.62	96.20	101.50
33	L1	1572	C	C3'-C2'-C1'	6.62	106.80	101.50
33	L1	1872	C	C4'-C3'-C2'	-6.62	95.98	102.60
32	S1	1206	A	C3'-C2'-C1'	-6.62	96.20	101.50
32	S1	1642	C	C5'-C4'-C3'	6.62	126.60	116.00
33	L1	1016	G	P-O3'-C3'	-6.62	111.75	119.70
33	L1	1077	C	O4'-C1'-N1	6.62	113.50	108.20
68	LW	87	TYR	CB-CA-C	6.62	123.64	110.40
80	LC	302	PHE	C-N-CA	6.62	138.25	121.70
33	L1	876	C	C3'-C2'-C1'	6.62	106.80	101.50
1	Sa	129	ASP	CB-CA-C	-6.62	97.16	110.40
32	S1	1036	U	N1-C1'-C2'	6.62	122.60	114.00
33	L1	460	A	O4'-C1'-C2'	-6.62	99.18	105.80
33	L1	492	G	O4'-C1'-C2'	6.62	113.56	107.60
33	L1	1780	C	C3'-C2'-C1'	6.62	106.80	101.50
33	L1	2846	C	O5'-P-OP1	-6.62	99.74	105.70
38	LE	126	GLY	N-CA-C	6.62	129.65	113.10
5	SE	152	TYR	CB-CG-CD2	-6.62	117.03	121.00
32	S1	946	A	P-O3'-C3'	6.62	127.64	119.70
32	S1	1623	C	C3'-C2'-C1'	6.62	106.79	101.50
32	S1	1640	C	C4'-C3'-C2'	-6.62	95.98	102.60
32	S1	1788	G	N9-C1'-C2'	-6.62	104.72	112.00
33	L1	1683	U	P-O5'-C5'	6.62	131.49	120.90
45	LQ	256	SER	CA-C-N	6.62	131.76	117.20
80	LC	366	SER	CB-CA-C	6.62	122.67	110.10
33	L1	967	G	C5'-C4'-O4'	6.62	117.04	109.10
33	L1	2994	U	N1-C1'-C2'	6.62	122.60	114.00
33	L1	3290	C	O5'-C5'-C4'	-6.62	99.13	111.70
32	S1	152	G	N9-C1'-C2'	6.61	122.60	114.00
32	S1	1149	U	O4'-C1'-N1	6.61	113.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1081	U	O4'-C4'-C3'	-6.61	97.39	104.00
33	L1	2280	C	P-O3'-C3'	6.61	127.64	119.70
33	L1	2490	U	C5'-C4'-C3'	6.61	126.58	116.00
33	L1	2881	C	O4'-C1'-N1	-6.61	102.91	108.20
33	L1	3351	A	O4'-C4'-C3'	-6.61	97.39	104.00
45	LQ	7	PHE	CB-CG-CD2	-6.61	116.17	120.80
32	S1	298	C	N1-C1'-C2'	6.61	122.59	114.00
32	S1	628	G	C3'-C2'-C1'	6.61	106.79	101.50
32	S1	944	A	C1'-O4'-C4'	-6.61	104.61	109.90
33	L1	316	A	C5'-C4'-C3'	6.61	126.58	116.00
33	L1	781	C	C3'-C2'-C1'	6.61	106.79	101.50
33	L1	1050	A	C2'-C3'-O3'	6.61	124.28	113.70
33	L1	1478	A	N9-C1'-C2'	-6.61	104.73	112.00
33	L1	1890	C	P-O5'-C5'	6.61	131.48	120.90
33	L1	1969	G	O4'-C1'-N9	6.61	113.49	108.20
39	LF	172	ARG	NE-CZ-NH2	-6.61	116.99	120.30
80	LC	68	HIS	C-N-CA	6.61	138.22	121.70
32	S1	986	U	O4'-C1'-N1	6.61	113.49	108.20
33	L1	429	G	O4'-C1'-C2'	6.61	113.55	107.60
33	L1	755	C	C3'-C2'-C1'	-6.61	96.22	101.50
33	L1	891	U	P-O5'-C5'	6.61	131.47	120.90
33	L1	1874	A	C1'-O4'-C4'	6.61	115.19	109.90
33	L1	2658	U	C1'-O4'-C4'	-6.61	104.61	109.90
42	LP	1	MET	CG-SD-CE	-6.61	89.63	100.20
67	LS	94	LYS	CA-CB-CG	6.61	127.94	113.40
33	L1	68	U	C4'-C3'-C2'	-6.61	95.99	102.60
33	L1	659	C	C5'-C4'-C3'	6.61	126.57	116.00
33	L1	2108	C	O4'-C1'-N1	6.61	113.48	108.20
33	L1	2877	U	C4'-C3'-C2'	-6.61	95.99	102.60
70	Li	78	TYR	CB-CG-CD2	-6.61	117.04	121.00
32	S1	1729	A	O4'-C1'-C2'	6.60	113.54	107.60
32	S1	92	G	O4'-C1'-N9	6.60	113.48	108.20
33	L1	995	C	O4'-C4'-C3'	-6.60	97.40	104.00
33	L1	2621	G	P-O3'-C3'	-6.60	111.78	119.70
46	LT	55	GLN	N-CA-CB	6.60	122.48	110.60
32	S1	1799	G	C1'-O4'-C4'	-6.60	104.62	109.90
33	L1	640	C	O5'-P-OP1	6.60	118.62	110.70
33	L1	1143	G	O4'-C4'-C3'	-6.60	97.40	104.00
34	L3	6	C	O4'-C1'-N1	6.60	113.48	108.20
70	Li	42	PRO	O-C-N	-6.60	112.14	122.70
32	S1	1447	C	N1-C1'-C2'	6.60	122.58	114.00
33	L1	1139	A	P-O3'-C3'	6.60	127.62	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	SK	77	SER	C-N-CA	6.60	138.19	121.70
13	SQ	61	ILE	N-CA-CB	-6.60	95.63	110.80
33	L1	31	U	O4'-C1'-N1	6.60	113.48	108.20
33	L1	372	A	O4'-C1'-C2'	-6.60	99.20	105.80
33	L1	3357	C	P-O5'-C5'	6.60	131.46	120.90
67	LS	21	ASP	N-CA-CB	-6.60	98.72	110.60
81	LD	320	ARG	NE-CZ-NH1	-6.60	117.00	120.30
35	L2	36	C	C3'-C2'-C1'	6.60	106.78	101.50
33	L1	540	G	P-O3'-C3'	-6.59	111.79	119.70
33	L1	2507	U	P-O3'-C3'	-6.59	111.79	119.70
9	SK	72	ALA	N-CA-CB	6.59	119.33	110.10
33	L1	785	U	C3'-C2'-C1'	-6.59	96.23	101.50
33	L1	1990	A	P-O3'-C3'	6.59	127.61	119.70
32	S1	376	G	C4'-C3'-C2'	-6.59	96.01	102.60
33	L1	258	C	N1-C1'-C2'	6.59	122.57	114.00
33	L1	1543	A	N9-C1'-C2'	-6.59	104.75	112.00
33	L1	1897	A	OP1-P-OP2	-6.59	109.71	119.60
33	L1	2273	C	O4'-C1'-C2'	-6.59	99.21	105.80
35	L2	96	A	P-O3'-C3'	-6.59	111.79	119.70
15	SS	142	ASP	CB-CG-OD1	6.59	124.23	118.30
32	S1	401	A	O4'-C1'-N9	6.59	113.47	108.20
32	S1	1065	A	C1'-O4'-C4'	6.59	115.17	109.90
33	L1	2716	U	C3'-C2'-C1'	-6.59	96.23	101.50
33	L1	3339	G	C4'-C3'-C2'	-6.59	96.01	102.60
36	LA	27	PHE	N-CA-CB	-6.59	98.74	110.60
49	LX	140	TYR	CB-CG-CD2	6.59	124.95	121.00
19	SY	8	ALA	N-CA-CB	6.59	119.32	110.10
32	S1	139	U	C5'-C4'-O4'	6.59	117.01	109.10
32	S1	1504	U	C1'-O4'-C4'	6.59	115.17	109.90
33	L1	534	G	C5'-C4'-O4'	6.59	117.01	109.10
33	L1	2883	C	O4'-C1'-C2'	-6.59	99.21	105.80
44	LR	160	HIS	N-CA-CB	6.59	122.46	110.60
1	Sa	179	ASP	C-N-CA	6.59	138.17	121.70
10	SL	5	ARG	CA-CB-CG	6.59	127.89	113.40
29	ST	42	ASN	N-CA-CB	6.59	122.45	110.60
32	S1	1007	G	N9-C1'-C2'	6.59	122.56	114.00
34	L3	39	C	P-O3'-C3'	6.59	127.60	119.70
67	LS	71	PRO	CA-N-CD	-6.59	102.28	111.50
32	S1	82	G	C3'-C2'-C1'	6.58	106.77	101.50
33	L1	1249	A	O4'-C1'-N9	-6.58	102.93	108.20
33	L1	3027	G	C1'-O4'-C4'	6.58	115.17	109.90
41	LM	69	LYS	N-CA-CB	6.58	122.45	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	SE	152	TYR	N-CA-CB	6.58	122.45	110.60
33	L1	3239	G	C3'-C2'-C1'	-6.58	96.23	101.50
74	LJ	96	VAL	CA-CB-CG1	6.58	120.77	110.90
3	SB	27	ARG	NE-CZ-NH1	6.58	123.59	120.30
31	S2	2	C	N1-C1'-C2'	6.58	122.56	114.00
33	L1	113	A	O4'-C1'-N9	6.58	113.47	108.20
33	L1	294	A	N9-C1'-C2'	-6.58	104.76	112.00
33	L1	1332	C	P-O3'-C3'	6.58	127.60	119.70
33	L1	2200	U	O4'-C1'-N1	6.58	113.47	108.20
11	SM	36	VAL	O-C-N	-6.58	112.02	123.20
13	SQ	97	ARG	C-N-CA	6.58	138.15	121.70
38	LE	136	ALA	N-CA-CB	-6.58	100.89	110.10
45	LQ	120	TYR	CG-CD2-CE2	6.58	126.56	121.30
32	S1	1361	G	O4'-C1'-N9	6.58	113.46	108.20
32	S1	1404	U	O4'-C1'-C2'	6.58	113.52	107.60
33	L1	1627	U	O4'-C1'-C2'	-6.58	99.22	105.80
33	L1	2599	U	N1-C1'-C2'	-6.58	104.77	112.00
33	L1	2664	G	N9-C1'-C2'	6.58	122.55	114.00
46	LT	74	ARG	NE-CZ-NH1	6.58	123.59	120.30
1	Sa	209	LEU	N-CA-CB	6.58	123.56	110.40
32	S1	1195	U	O4'-C1'-C2'	6.58	113.52	107.60
33	L1	694	U	N1-C1'-C2'	-6.58	104.77	112.00
33	L1	1883	A	O4'-C1'-N9	6.58	113.46	108.20
33	L1	3145	G	O4'-C1'-C2'	-6.58	99.22	105.80
2	SA	11	ALA	O-C-N	-6.58	112.18	122.70
33	L1	867	G	N9-C1'-C2'	-6.58	104.77	112.00
33	L1	1135	C	N1-C1'-C2'	6.58	122.55	114.00
33	L1	1458	U	O4'-C1'-C2'	6.58	113.52	107.60
33	L1	2592	G	N9-C1'-C2'	6.58	122.55	114.00
35	L2	142	G	C3'-C2'-C1'	-6.58	96.24	101.50
45	LQ	119	GLU	CB-CA-C	6.58	123.55	110.40
32	S1	572	G	C2'-C3'-O3'	6.57	124.22	113.70
32	S1	1720	G	C1'-O4'-C4'	-6.57	104.64	109.90
33	L1	933	U	O4'-C1'-N1	6.57	113.46	108.20
33	L1	3123	A	C5'-C4'-C3'	-6.57	105.48	116.00
57	Ll	11	ARG	CB-CA-C	-6.57	97.25	110.40
78	Le	67	LEU	C-N-CA	6.57	138.13	121.70
32	S1	37	U	O4'-C1'-C2'	-6.57	99.23	105.80
33	L1	1151	G	O4'-C1'-C2'	6.57	113.52	107.60
33	L1	2629	C	C4'-C3'-C2'	-6.57	96.03	102.60
34	L3	1	G	C1'-O4'-C4'	-6.57	104.64	109.90
33	L1	1053	C	N1-C1'-C2'	6.57	122.54	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1580	C	C1'-O4'-C4'	-6.57	104.64	109.90
33	L1	3285	U	OP1-P-OP2	-6.57	109.75	119.60
35	L2	160	C	C3'-C2'-C1'	6.57	106.76	101.50
48	LV	7	GLU	C-N-CA	6.57	138.13	121.70
25	SC	137	ARG	N-CA-CB	6.57	122.42	110.60
33	L1	32	G	P-O5'-C5'	6.57	131.41	120.90
33	L1	228	C	C1'-O4'-C4'	6.57	115.15	109.90
37	LB	165	MET	CG-SD-CE	-6.57	89.69	100.20
45	LQ	277	ARG	NH1-CZ-NH2	-6.57	112.18	119.40
32	S1	1434	G	N9-C1'-C2'	6.57	122.53	114.00
32	S1	1733	G	O3'-P-O5'	-6.57	91.52	104.00
33	L1	545	C	C1'-O4'-C4'	-6.57	104.65	109.90
33	L1	2502	U	C4'-C3'-C2'	6.57	109.17	102.60
33	L1	2966	G	N9-C1'-C2'	-6.57	104.78	112.00
33	L1	3063	C	C1'-O4'-C4'	-6.57	104.65	109.90
33	L1	3376	C	C4'-C3'-C2'	6.57	109.17	102.60
84	LI	10	ARG	NE-CZ-NH1	6.57	123.58	120.30
32	S1	1067	A	P-O3'-C3'	6.56	127.58	119.70
32	S1	1673	C	P-O5'-C5'	6.56	131.40	120.90
33	L1	1248	A	O4'-C1'-C2'	-6.56	99.24	105.80
33	L1	1663	G	O4'-C1'-C2'	6.56	113.51	107.60
33	L1	2344	A	C3'-C2'-C1'	-6.56	96.25	101.50
33	L1	3008	U	C1'-O4'-C4'	6.56	115.15	109.90
3	SB	160	SER	N-CA-CB	-6.56	100.66	110.50
33	L1	750	G	O4'-C1'-N9	6.56	113.45	108.20
33	L1	1741	G	C1'-O4'-C4'	-6.56	104.65	109.90
34	L3	41	G	O4'-C1'-C2'	6.56	113.51	107.60
32	S1	449	A	P-O3'-C3'	-6.56	111.83	119.70
33	L1	877	U	OP1-P-OP2	-6.56	109.76	119.60
33	L1	1755	A	O4'-C1'-N9	-6.56	102.95	108.20
46	LT	62	ARG	NH1-CZ-NH2	-6.56	112.18	119.40
33	L1	280	G	C2'-C3'-O3'	6.56	124.19	113.70
33	L1	1619	G	P-O5'-C5'	-6.56	110.41	120.90
33	L1	2933	C	P-O3'-C3'	-6.56	111.83	119.70
33	L1	3343	U	C5'-C4'-O4'	-6.56	101.23	109.10
35	L2	133	C	N1-C1'-C2'	6.56	122.53	114.00
48	LV	154	LYS	N-CA-CB	6.56	122.41	110.60
50	LZ	53	TRP	CB-CA-C	6.56	123.52	110.40
64	LG	141	LYS	CB-CA-C	-6.56	97.28	110.40
32	S1	1611	U	C3'-C2'-C1'	6.56	106.75	101.50
33	L1	466	U	O4'-C1'-N1	6.56	113.45	108.20
33	L1	640	C	C1'-O4'-C4'	-6.56	104.65	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1626	U	C1'-O4'-C4'	-6.56	104.65	109.90
33	L1	3082	G	O4'-C1'-C2'	-6.56	99.24	105.80
32	S1	1552	U	O4'-C1'-N1	6.56	113.44	108.20
33	L1	568	C	C1'-O4'-C4'	-6.56	104.66	109.90
33	L1	652	C	C1'-O4'-C4'	6.56	115.14	109.90
33	L1	756	C	O4'-C1'-N1	6.56	113.44	108.20
33	L1	771	G	O4'-C4'-C3'	-6.56	97.44	104.00
33	L1	2221	U	O4'-C1'-C2'	-6.56	99.24	105.80
80	LC	312	MET	CG-SD-CE	-6.56	89.71	100.20
10	SL	22	TRP	CD1-CG-CD2	-6.55	101.06	106.30
32	S1	1084	U	C1'-O4'-C4'	6.55	115.14	109.90
33	L1	26	A	C1'-O4'-C4'	-6.55	104.66	109.90
33	L1	902	U	C2'-C3'-O3'	6.55	124.19	113.70
33	L1	1650	G	P-O5'-C5'	-6.55	110.41	120.90
24	SX	74	ARG	CG-CD-NE	6.55	125.56	111.80
32	S1	388	G	O4'-C1'-N9	6.55	113.44	108.20
33	L1	1041	C	C1'-O4'-C4'	6.55	115.14	109.90
33	L1	1251	U	P-O5'-C5'	6.55	131.38	120.90
32	S1	1232	G	O4'-C1'-N9	6.55	113.44	108.20
33	L1	2421	C	O4'-C1'-N1	6.55	113.44	108.20
33	L1	3275	G	O4'-C1'-N9	6.55	113.44	108.20
70	Li	107	LEU	C-N-CA	-6.55	105.32	121.70
73	Lp	51	ILE	N-CA-CB	-6.55	95.73	110.80
10	SL	54	ILE	CA-C-N	6.55	129.30	116.20
32	S1	138	C	C1'-O4'-C4'	-6.55	104.66	109.90
32	S1	630	U	C5'-C4'-C3'	6.55	126.48	116.00
32	S1	1618	G	P-O5'-C5'	-6.55	110.42	120.90
33	L1	264	C	C1'-O4'-C4'	-6.55	104.66	109.90
33	L1	434	C	P-O5'-C5'	6.55	131.38	120.90
33	L1	2818	G	C3'-C2'-C1'	6.55	106.74	101.50
35	L2	20	G	O4'-C1'-N9	6.55	113.44	108.20
35	L2	153	U	N1-C1'-C2'	6.55	122.51	114.00
33	L1	2671	A	P-O3'-C3'	-6.55	111.84	119.70
1	Sa	323	TYR	N-CA-CB	6.55	122.38	110.60
31	S2	75	A	C3'-C2'-C1'	-6.55	96.26	101.50
33	L1	1181	A	N9-C1'-C2'	-6.55	104.80	112.00
33	L1	1336	A	P-O3'-C3'	6.55	127.56	119.70
33	L1	3309	U	P-O5'-C5'	6.55	131.38	120.90
44	LR	34	ARG	NE-CZ-NH2	6.55	123.57	120.30
33	L1	1857	G	N9-C1'-C2'	-6.54	104.80	112.00
3	SB	212	PRO	CA-C-N	6.54	135.42	117.10
11	SM	82	TRP	CB-CG-CD2	-6.54	118.09	126.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	513	C	N1-C1'-C2'	6.54	122.51	114.00
33	L1	2396	A	N9-C1'-C2'	6.54	122.51	114.00
33	L1	2708	A	C4'-C3'-C2'	6.54	109.14	102.60
32	S1	988	G	N9-C1'-C2'	6.54	122.50	114.00
33	L1	1533	U	O3'-P-O5'	-6.54	91.57	104.00
33	L1	2043	A	O4'-C1'-N9	6.54	113.43	108.20
33	L1	2347	A	O4'-C1'-N9	6.54	113.43	108.20
33	L1	2646	A	C1'-O4'-C4'	6.54	115.13	109.90
70	Li	65	PRO	N-CA-CB	6.54	111.15	103.30
9	SK	66	ASP	N-CA-CB	6.54	122.37	110.60
15	SS	46	LYS	N-CA-C	6.54	128.66	111.00
33	L1	841	G	O5'-P-OP2	6.54	118.55	110.70
33	L1	1429	U	O4'-C1'-C2'	-6.54	99.26	105.80
33	L1	1814	C	C1'-O4'-C4'	-6.54	104.67	109.90
34	L3	15	C	P-O3'-C3'	-6.54	111.85	119.70
50	LZ	31	PHE	CB-CG-CD2	6.54	125.38	120.80
11	SM	81	ASP	CB-CG-OD1	6.54	124.19	118.30
32	S1	679	C	C3'-C2'-C1'	6.54	106.73	101.50
32	S1	852	A	O4'-C1'-N9	6.54	113.43	108.20
32	S1	1001	C	O4'-C1'-N1	6.54	113.43	108.20
33	L1	1146	A	O5'-P-OP1	-6.54	99.81	105.70
33	L1	1388	C	C1'-O4'-C4'	-6.54	104.67	109.90
33	L1	2724	A	N9-C1'-C2'	6.54	122.50	114.00
33	L1	2956	U	C1'-O4'-C4'	6.54	115.13	109.90
42	LP	79	ILE	CB-CA-C	6.54	124.67	111.60
33	L1	84	A	O4'-C1'-C2'	-6.54	99.26	105.80
33	L1	1746	G	P-O3'-C3'	6.54	127.55	119.70
29	ST	42	ASN	CB-CA-C	-6.54	97.33	110.40
32	S1	567	U	C1'-O4'-C4'	6.54	115.13	109.90
33	L1	641	C	C1'-O4'-C4'	6.54	115.13	109.90
33	L1	2621	G	OP2-P-O3'	6.54	119.58	105.20
44	LR	34	ARG	NH1-CZ-NH2	-6.54	112.21	119.40
32	S1	834	A	O4'-C1'-N9	-6.53	102.97	108.20
33	L1	439	A	P-O3'-C3'	6.53	127.54	119.70
33	L1	2236	U	P-O3'-C3'	6.53	127.54	119.70
33	L1	2397	A	O4'-C1'-N9	-6.53	102.97	108.20
34	L3	75	G	C4'-C3'-C2'	-6.53	96.07	102.60
72	Lk	59	ARG	CD-NE-CZ	-6.53	114.45	123.60
15	SS	14	PRO	N-CD-CG	-6.53	93.40	103.20
35	L2	101	G	C5'-C4'-C3'	6.53	126.45	116.00
32	S1	938	A	C3'-C2'-C1'	6.53	106.72	101.50
33	L1	594	C	C5'-C4'-O4'	6.53	116.94	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1644	A	O4'-C1'-C2'	-6.53	99.27	105.80
33	L1	2627	G	C1'-O4'-C4'	-6.53	104.67	109.90
35	L2	66	C	O4'-C1'-C2'	6.53	113.48	107.60
33	L1	16	A	C4'-C3'-C2'	-6.53	96.07	102.60
33	L1	1754	C	C3'-C2'-C1'	6.53	106.72	101.50
33	L1	2232	C	O4'-C1'-N1	-6.53	102.98	108.20
32	S1	1331	C	O4'-C1'-C2'	-6.53	99.27	105.80
33	L1	391	U	O4'-C1'-N1	6.53	113.42	108.20
33	L1	528	C	O3'-P-O5'	-6.53	91.60	104.00
33	L1	2104	G	O4'-C1'-C2'	6.53	113.47	107.60
49	LX	88	ASP	CB-CG-OD2	-6.53	112.43	118.30
78	Le	147	ARG	NE-CZ-NH2	6.53	123.56	120.30
4	SD	54	TYR	CB-CA-C	6.53	123.45	110.40
4	SD	136	ILE	CB-CA-C	-6.53	98.55	111.60
32	S1	439	C	C1'-O4'-C4'	-6.53	104.68	109.90
32	S1	1389	G	O4'-C1'-N9	6.53	113.42	108.20
33	L1	513	C	C4'-C3'-C2'	6.53	109.13	102.60
33	L1	517	G	O4'-C1'-C2'	6.53	113.47	107.60
32	S1	1678	G	C4'-C3'-C2'	-6.52	96.08	102.60
33	L1	1756	C	O4'-C1'-C2'	-6.52	99.28	105.80
33	L1	3362	A	C1'-O4'-C4'	6.52	115.12	109.90
67	LS	61	LEU	CA-CB-CG	6.52	130.30	115.30
32	S1	1191	U	C1'-O4'-C4'	6.52	115.12	109.90
35	L2	155	G	O4'-C1'-C2'	6.52	113.47	107.60
70	Li	81	VAL	N-CA-CB	6.52	125.85	111.50
23	SU	21	ARG	NE-CZ-NH2	-6.52	117.04	120.30
32	S1	610	A	C4'-C3'-C2'	6.52	109.12	102.60
32	S1	1548	G	N9-C1'-C2'	6.52	122.47	114.00
33	L1	2936	A	O4'-C1'-C2'	-6.52	99.28	105.80
7	SI	102	TYR	CG-CD1-CE1	6.52	126.52	121.30
33	L1	975	G	O4'-C4'-C3'	6.52	111.31	106.10
33	L1	2087	A	P-O3'-C3'	-6.52	111.88	119.70
33	L1	2692	G	O4'-C1'-C2'	6.52	113.47	107.60
57	Ll	1	MET	CG-SD-CE	-6.52	89.77	100.20
60	Lr	80	TYR	N-CA-CB	-6.52	98.87	110.60
32	S1	203	A	P-O3'-C3'	6.52	127.52	119.70
33	L1	2134	U	O4'-C1'-N1	6.52	113.41	108.20
33	L1	2518	A	C4'-C3'-C2'	6.52	109.12	102.60
33	L1	3066	G	C1'-O4'-C4'	-6.52	104.69	109.90
64	LG	65	LYS	CA-C-O	-6.52	106.42	120.10
68	LW	100	ASP	N-CA-CB	6.52	122.33	110.60
32	S1	216	A	O4'-C1'-N9	6.51	113.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1855	A	P-O3'-C3'	6.51	127.52	119.70
33	L1	2739	A	C5'-C4'-O4'	-6.51	101.28	109.10
34	L3	20	C	O4'-C1'-C2'	-6.51	99.29	105.80
32	S1	965	U	O4'-C1'-N1	6.51	113.41	108.20
33	L1	2620	U	P-O5'-C5'	6.51	131.32	120.90
37	LB	67	PHE	CB-CG-CD1	-6.51	116.24	120.80
70	Li	112	THR	N-CA-C	6.51	128.59	111.00
33	L1	2058	C	C5'-C4'-C3'	6.51	126.42	116.00
33	L1	2510	U	P-O3'-C3'	6.51	127.52	119.70
33	L1	2519	U	O5'-P-OP2	6.51	118.51	110.70
34	L3	22	A	C3'-C2'-C1'	-6.51	96.29	101.50
25	SC	71	ARG	NE-CZ-NH1	6.51	123.56	120.30
33	L1	697	A	O4'-C1'-N9	6.51	113.41	108.20
33	L1	2839	A	P-O3'-C3'	-6.51	111.89	119.70
81	LD	314	VAL	CA-CB-CG1	6.51	120.67	110.90
32	S1	1278	C	O3'-P-O5'	6.51	116.37	104.00
33	L1	1615	G	C4'-C3'-C2'	-6.51	96.09	102.60
33	L1	2653	U	OP1-P-OP2	-6.51	109.84	119.60
32	S1	168	U	O4'-C1'-N1	6.51	113.41	108.20
32	S1	1118	A	O4'-C1'-N9	-6.51	103.00	108.20
32	S1	1122	U	C5'-C4'-C3'	6.51	126.41	116.00
33	L1	822	U	N1-C1'-C2'	-6.51	104.84	112.00
33	L1	1295	A	C1'-O4'-C4'	6.51	115.11	109.90
33	L1	1436	A	O5'-P-OP1	-6.51	99.84	105.70
33	L1	2737	A	C3'-C2'-C1'	6.51	106.70	101.50
33	L1	2773	G	O3'-P-O5'	-6.51	91.64	104.00
64	LG	27	ALA	N-CA-CB	6.51	119.21	110.10
3	SB	159	SER	CA-CB-OG	-6.50	93.64	111.20
32	S1	41	A	C3'-C2'-C1'	6.50	106.70	101.50
68	LW	19	GLY	N-CA-C	-6.50	96.84	113.10
79	Ls	30	ILE	CB-CA-C	6.50	124.61	111.60
32	S1	1084	U	P-O5'-C5'	-6.50	110.49	120.90
33	L1	411	C	N1-C1'-C2'	6.50	122.45	114.00
33	L1	666	U	O3'-P-O5'	-6.50	91.64	104.00
33	L1	1296	C	C1'-O4'-C4'	6.50	115.10	109.90
33	L1	1717	G	O4'-C1'-C2'	6.50	113.45	107.60
69	La	84	ARG	NE-CZ-NH2	-6.50	117.05	120.30
82	LK	57	MET	CA-CB-CG	6.50	124.36	113.30
33	L1	1487	A	C3'-C2'-C1'	6.50	106.70	101.50
33	L1	2070	C	C1'-O4'-C4'	6.50	115.10	109.90
33	L1	2565	C	O4'-C1'-C2'	-6.50	99.30	105.80
68	LW	57	GLY	C-N-CA	6.50	137.96	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	Lm	33	GLN	CA-CB-CG	6.50	127.70	113.40
32	S1	431	C	N1-C1'-C2'	6.50	122.45	114.00
32	S1	1159	G	O4'-C1'-N9	6.50	113.40	108.20
32	S1	1643	A	C4'-C3'-C2'	-6.50	96.10	102.60
33	L1	180	G	P-O5'-C5'	-6.50	110.50	120.90
33	L1	916	A	P-O3'-C3'	-6.50	111.90	119.70
33	L1	1954	G	P-O5'-C5'	6.50	131.30	120.90
33	L1	2397	A	O4'-C1'-C2'	-6.50	99.30	105.80
4	SD	93	PRO	CB-CA-C	-6.50	95.75	112.00
4	SD	150	PRO	CA-N-CD	-6.50	102.40	111.50
32	S1	298	C	O4'-C1'-C2'	-6.50	99.30	105.80
33	L1	2497	A	O4'-C4'-C3'	-6.50	97.50	104.00
66	LN	81	LYS	CB-CA-C	6.50	123.40	110.40
84	LI	110	ARG	C-N-CA	6.50	137.95	121.70
33	L1	888	U	O4'-C1'-C2'	-6.50	99.30	105.80
33	L1	3327	A	P-O3'-C3'	6.50	127.50	119.70
34	L3	30	G	C1'-O4'-C4'	-6.50	104.70	109.90
72	Lk	84	LYS	CB-CA-C	-6.50	97.41	110.40
75	Lu	62	VAL	CA-CB-CG1	6.50	120.64	110.90
3	SB	151	LYS	CB-CA-C	6.49	123.39	110.40
3	SB	211	HIS	CA-C-N	6.49	135.28	117.10
33	L1	1711	G	N9-C1'-C2'	6.49	122.44	114.00
33	L1	2507	U	C5'-C4'-C3'	6.49	126.39	116.00
33	L1	2621	G	N9-C1'-C2'	-6.49	104.86	112.00
33	L1	3237	G	O5'-P-OP1	-6.49	99.86	105.70
29	ST	11	LEU	N-CA-C	6.49	128.53	111.00
33	L1	2730	A	C1'-O4'-C4'	6.49	115.09	109.90
33	L1	3177	A	O4'-C1'-N9	6.49	113.39	108.20
11	SM	75	ARG	CA-CB-CG	6.49	127.68	113.40
11	SM	124	ARG	NE-CZ-NH1	6.49	123.55	120.30
15	SS	11	ASP	CB-CG-OD1	6.49	124.14	118.30
33	L1	328	G	O5'-P-OP1	6.49	118.49	110.70
33	L1	1386	G	C1'-O4'-C4'	-6.49	104.71	109.90
42	LP	31	ARG	NE-CZ-NH1	6.49	123.55	120.30
44	LR	38	ARG	NE-CZ-NH1	-6.49	117.05	120.30
13	SQ	61	ILE	CA-CB-CG1	6.49	123.33	111.00
32	S1	905	A	P-O5'-C5'	6.49	131.28	120.90
32	S1	1059	U	O4'-C4'-C3'	-6.49	97.51	104.00
33	L1	528	C	N1-C1'-C2'	6.49	122.44	114.00
33	L1	1429	U	C3'-C2'-C1'	6.49	106.69	101.50
33	L1	1433	U	C3'-C2'-C1'	-6.49	96.31	101.50
33	L1	2485	U	N1-C1'-C2'	-6.49	104.86	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3210	G	N9-C1'-C2'	-6.49	104.86	112.00
32	S1	93	A	C3'-C2'-C1'	-6.49	96.31	101.50
32	S1	1662	G	P-O3'-C3'	-6.49	111.92	119.70
33	L1	1827	U	O4'-C1'-N1	6.49	113.39	108.20
33	L1	2391	C	O3'-P-O5'	-6.49	91.68	104.00
33	L1	2787	A	P-O5'-C5'	-6.49	110.52	120.90
48	LV	69	ARG	CA-C-N	6.49	131.47	117.20
25	SC	145	ILE	O-C-N	6.48	133.42	121.10
33	L1	839	A	C5'-C4'-O4'	-6.48	101.32	109.10
33	L1	1257	U	C5'-C4'-C3'	6.48	126.37	116.00
33	L1	1742	G	OP1-P-OP2	-6.48	109.87	119.60
33	L1	2185	U	P-O3'-C3'	6.48	127.48	119.70
48	LV	128	ARG	NH1-CZ-NH2	-6.48	112.27	119.40
59	Lo	47	THR	O-C-N	-6.48	112.33	122.70
13	SQ	21	TYR	CA-C-O	-6.48	106.49	120.10
33	L1	1317	G	P-O3'-C3'	6.48	127.48	119.70
33	L1	1604	U	O4'-C1'-N1	-6.48	103.01	108.20
32	S1	554	A	O4'-C1'-C2'	-6.48	99.32	105.80
32	S1	1229	C	O4'-C1'-C2'	-6.48	99.32	105.80
33	L1	68	U	C3'-C2'-C1'	-6.48	96.31	101.50
33	L1	632	C	O4'-C1'-N1	-6.48	103.02	108.20
33	L1	1095	C	O5'-P-OP2	-6.48	99.87	105.70
33	L1	1296	C	C5'-C4'-C3'	6.48	126.37	116.00
33	L1	3376	C	P-O3'-C3'	-6.48	111.92	119.70
33	L1	398	G	C4'-C3'-C2'	-6.48	96.12	102.60
33	L1	582	C	C1'-O4'-C4'	-6.48	104.72	109.90
33	L1	1423	C	C4'-C3'-C2'	-6.48	96.12	102.60
42	LP	53	TYR	CB-CG-CD2	6.48	124.89	121.00
32	S1	623	A	C1'-O4'-C4'	6.48	115.08	109.90
33	L1	2336	C	C1'-O4'-C4'	-6.48	104.72	109.90
82	LK	154	TYR	CG-CD1-CE1	-6.48	116.12	121.30
31	S2	10	G	P-O5'-C5'	-6.48	110.54	120.90
33	L1	224	C	O4'-C4'-C3'	-6.48	97.52	104.00
32	S1	15	U	C5'-C4'-O4'	6.47	116.87	109.10
32	S1	1396	U	O4'-C1'-C2'	-6.47	99.33	105.80
33	L1	133	G	C3'-C2'-C1'	-6.47	96.32	101.50
33	L1	933	U	C3'-C2'-C1'	-6.47	96.32	101.50
33	L1	1076	G	C5'-C4'-C3'	6.47	126.36	116.00
33	L1	1875	A	O4'-C4'-C3'	-6.47	97.53	104.00
33	L1	1881	C	P-O5'-C5'	-6.47	110.54	120.90
45	LQ	28	ARG	NE-CZ-NH1	6.47	123.54	120.30
33	L1	2573	U	O4'-C1'-N1	6.47	113.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2751	A	O4'-C1'-C2'	-6.47	99.33	105.80
55	Lg	13	ASP	CA-C-N	-6.47	102.96	117.20
32	S1	94	A	N9-C1'-C2'	6.47	122.41	114.00
32	S1	1562	C	O4'-C1'-C2'	-6.47	99.33	105.80
32	S1	1650	G	C4'-C3'-C2'	-6.47	96.13	102.60
33	L1	492	G	C1'-O4'-C4'	6.47	115.08	109.90
35	L2	87	C	P-O5'-C5'	6.47	131.25	120.90
33	L1	60	G	C1'-O4'-C4'	-6.47	104.72	109.90
33	L1	619	C	P-O3'-C3'	-6.47	111.94	119.70
33	L1	1213	G	N9-C1'-C2'	6.47	122.41	114.00
33	L1	1474	U	O4'-C1'-C2'	6.47	113.42	107.60
33	L1	2278	G	C1'-O4'-C4'	6.47	115.08	109.90
33	L1	2337	C	C4'-C3'-C2'	-6.47	96.13	102.60
72	Lk	41	HIS	CA-CB-CG	6.47	124.60	113.60
33	L1	608	G	C3'-C2'-C1'	6.47	106.67	101.50
33	L1	876	C	P-O3'-C3'	6.47	127.46	119.70
33	L1	974	G	O4'-C1'-C2'	6.47	113.42	107.60
33	L1	3248	G	O4'-C1'-N9	6.47	113.37	108.20
33	L1	3329	G	C3'-C2'-C1'	-6.47	96.33	101.50
34	L3	77	A	O4'-C4'-C3'	-6.47	97.53	104.00
79	Ls	64	ARG	NE-CZ-NH1	6.47	123.53	120.30
27	SH	108	ALA	C-N-CA	6.46	135.88	122.30
32	S1	303	A	O4'-C1'-N9	6.46	113.37	108.20
32	S1	661	U	O4'-C1'-N1	6.46	113.37	108.20
33	L1	138	G	O4'-C1'-C2'	6.46	113.42	107.60
33	L1	198	A	N9-C1'-C2'	-6.46	104.89	112.00
33	L1	236	A	O4'-C1'-N9	6.46	113.37	108.20
33	L1	1543	A	P-O5'-C5'	-6.46	110.56	120.90
33	L1	1623	C	C5'-C4'-O4'	-6.46	101.34	109.10
33	L1	2053	A	P-O3'-C3'	6.46	127.46	119.70
33	L1	2637	U	P-O5'-C5'	6.46	131.24	120.90
33	L1	2703	G	C3'-C2'-C1'	-6.46	96.33	101.50
35	L2	48	A	N9-C1'-C2'	6.46	122.40	114.00
66	LN	31	VAL	CG1-CB-CG2	6.46	121.24	110.90
70	Li	90	ARG	NE-CZ-NH2	-6.46	117.07	120.30
32	S1	226	C	C3'-C2'-C1'	6.46	106.67	101.50
32	S1	449	A	P-O5'-C5'	6.46	131.24	120.90
32	S1	1498	A	P-O3'-C3'	6.46	127.45	119.70
33	L1	28	C	C4'-C3'-C2'	-6.46	96.14	102.60
33	L1	469	U	P-O3'-C3'	6.46	127.45	119.70
33	L1	2512	U	O4'-C1'-N1	6.46	113.37	108.20
33	L1	2839	A	C3'-C2'-C1'	-6.46	96.33	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L3	34	C	O4'-C1'-N1	6.46	113.37	108.20
35	L2	32	C	C4'-C3'-C2'	-6.46	96.14	102.60
54	Lf	54	PRO	N-CA-CB	-6.46	95.49	102.60
64	LG	23	ARG	N-CA-CB	6.46	122.23	110.60
74	LJ	123	ALA	N-CA-C	6.46	128.45	111.00
32	S1	1611	U	C4'-C3'-C2'	-6.46	96.14	102.60
33	L1	1423	C	P-O3'-C3'	-6.46	111.95	119.70
32	S1	408	G	C3'-C2'-C1'	6.46	106.67	101.50
32	S1	770	U	O3'-P-O5'	-6.46	91.73	104.00
33	L1	581	G	P-O3'-C3'	6.46	127.45	119.70
33	L1	1393	G	O3'-P-O5'	-6.46	91.73	104.00
33	L1	1631	G	O4'-C1'-N9	6.46	113.37	108.20
33	L1	1807	C	N1-C1'-C2'	-6.46	104.90	112.00
33	L1	2041	G	P-O3'-C3'	6.46	127.45	119.70
34	L3	59	U	O4'-C1'-N1	6.46	113.37	108.20
70	Li	43	LYS	N-CA-C	6.46	128.44	111.00
7	SI	120	ARG	NE-CZ-NH1	-6.46	117.07	120.30
32	S1	646	G	C1'-O4'-C4'	6.46	115.06	109.90
32	S1	1350	C	O4'-C1'-C2'	-6.46	99.34	105.80
33	L1	166	U	O4'-C1'-N1	6.46	113.36	108.20
33	L1	533	G	O4'-C1'-C2'	6.46	113.41	107.60
33	L1	1940	U	O4'-C1'-N1	6.46	113.36	108.20
33	L1	2720	U	O4'-C1'-C2'	6.46	113.41	107.60
35	L2	46	G	O5'-P-OP1	-6.46	99.89	105.70
32	S1	336	U	C1'-O4'-C4'	6.46	115.06	109.90
33	L1	1320	G	P-O5'-C5'	-6.46	110.57	120.90
33	L1	3036	C	P-O5'-C5'	6.46	131.23	120.90
80	LC	61	GLU	N-CA-C	-6.46	93.57	111.00
32	S1	794	G	C5'-C4'-C3'	6.45	126.33	116.00
33	L1	655	G	C3'-C2'-C1'	-6.45	96.34	101.50
33	L1	1276	C	C3'-C2'-C1'	6.45	106.66	101.50
33	L1	1879	A	P-O5'-C5'	-6.45	110.57	120.90
33	L1	1886	U	O4'-C4'-C3'	-6.45	97.55	104.00
32	S1	878	U	O4'-C1'-N1	6.45	113.36	108.20
33	L1	356	G	O4'-C1'-N9	6.45	113.36	108.20
33	L1	1736	C	N1-C1'-C2'	6.45	122.39	114.00
33	L1	2226	C	N1-C1'-C2'	-6.45	104.91	112.00
33	L1	3352	C	C1'-O4'-C4'	6.45	115.06	109.90
32	S1	1298	G	C4'-C3'-C2'	-6.45	96.15	102.60
32	S1	1446	C	N1-C1'-C2'	6.45	122.38	114.00
32	S1	1606	U	C3'-C2'-C1'	6.45	106.66	101.50
33	L1	49	U	O4'-C1'-C2'	-6.45	99.35	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	137	C	C3'-C2'-C1'	6.45	106.66	101.50
33	L1	888	U	C1'-O4'-C4'	6.45	115.06	109.90
33	L1	1694	A	C3'-C2'-C1'	6.45	106.66	101.50
33	L1	2790	C	O4'-C1'-C2'	-6.45	99.35	105.80
33	L1	2875	U	C5'-C4'-O4'	6.45	116.84	109.10
60	Lr	12	CYS	C-N-CA	6.45	137.82	121.70
64	LG	62	SER	N-CA-CB	-6.45	100.83	110.50
33	L1	1751	G	C2'-C3'-O3'	6.45	124.02	113.70
33	L1	3233	C	P-O3'-C3'	6.45	127.44	119.70
33	L1	1055	U	O4'-C1'-N1	6.45	113.36	108.20
33	L1	2862	U	O4'-C4'-C3'	-6.45	97.56	104.00
48	LV	73	ALA	C-N-CA	6.45	137.82	121.70
1	Sa	251	ASP	C-N-CA	-6.44	105.59	121.70
32	S1	19	A	C3'-C2'-C1'	6.44	106.66	101.50
33	L1	1310	G	O4'-C1'-N9	6.44	113.36	108.20
33	L1	2677	A	O4'-C1'-C2'	-6.44	99.36	105.80
33	L1	3227	U	C4'-C3'-C2'	-6.44	96.16	102.60
32	S1	1667	A	C3'-C2'-C1'	6.44	106.65	101.50
33	L1	301	G	C1'-O4'-C4'	-6.44	104.75	109.90
33	L1	1425	G	C3'-C2'-C1'	-6.44	96.35	101.50
33	L1	2520	U	O4'-C1'-N1	6.44	113.35	108.20
54	Lf	56	ARG	NE-CZ-NH1	-6.44	117.08	120.30
27	SH	109	GLY	O-C-N	-6.44	112.39	122.70
33	L1	2142	A	C3'-C2'-C1'	6.44	106.65	101.50
73	Lp	13	TYR	N-CA-CB	-6.44	99.01	110.60
78	Le	244	ASN	CB-CA-C	-6.44	97.52	110.40
32	S1	33	U	C5'-C4'-O4'	6.44	116.83	109.10
33	L1	759	C	N1-C1'-C2'	6.44	122.37	114.00
1	Sa	63	GLN	CA-CB-CG	6.44	127.56	113.40
32	S1	380	C	N1-C1'-C2'	6.44	122.37	114.00
32	S1	1184	C	O4'-C1'-N1	-6.44	103.05	108.20
32	S1	1226	U	C1'-O4'-C4'	6.44	115.05	109.90
32	S1	1688	G	N9-C1'-C2'	-6.44	104.92	112.00
33	L1	510	C	N1-C1'-C2'	6.44	122.37	114.00
33	L1	952	C	P-O3'-C3'	-6.44	111.98	119.70
33	L1	1044	A	O4'-C1'-N9	6.44	113.35	108.20
33	L1	1350	G	C5'-C4'-O4'	-6.44	101.37	109.10
33	L1	1530	C	C3'-C2'-C1'	6.44	106.65	101.50
33	L1	2098	A	C3'-C2'-C1'	-6.44	96.35	101.50
33	L1	3156	G	O3'-P-O5'	-6.44	91.77	104.00
38	LE	117	LYS	CB-CA-C	-6.44	97.53	110.40
69	La	21	ARG	NE-CZ-NH2	-6.44	117.08	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	S2	30	G	C1'-O4'-C4'	-6.43	104.75	109.90
32	S1	846	U	O4'-C1'-N1	6.43	113.35	108.20
32	S1	1245	G	C3'-C2'-C1'	6.43	106.65	101.50
33	L1	309	C	O4'-C1'-C2'	-6.43	99.36	105.80
33	L1	1340	G	C3'-C2'-C1'	-6.43	96.35	101.50
33	L1	1432	G	N9-C1'-C2'	6.43	122.36	114.00
33	L1	1741	G	OP2-P-O3'	6.43	119.36	105.20
68	LW	87	TYR	CA-C-N	-6.43	103.05	117.20
81	LD	204	ARG	NE-CZ-NH1	6.43	123.52	120.30
32	S1	1656	C	C3'-C2'-C1'	6.43	106.64	101.50
33	L1	229	G	O3'-P-O5'	-6.43	91.78	104.00
33	L1	384	A	C4'-C3'-C2'	-6.43	96.17	102.60
33	L1	452	G	P-O3'-C3'	6.43	127.42	119.70
36	LA	33	LEU	CA-CB-CG	6.43	130.09	115.30
68	LW	106	ALA	N-CA-CB	6.43	119.11	110.10
32	S1	1649	C	C1'-O4'-C4'	6.43	115.05	109.90
33	L1	436	G	O4'-C1'-C2'	-6.43	99.37	105.80
33	L1	2362	A	P-O5'-C5'	-6.43	110.61	120.90
28	SN	10	HIS	CA-C-O	-6.43	106.60	120.10
32	S1	220	C	O3'-P-O5'	6.43	116.22	104.00
32	S1	584	A	O4'-C1'-C2'	-6.43	99.37	105.80
32	S1	594	C	C5'-C4'-C3'	6.43	126.29	116.00
33	L1	168	A	O4'-C1'-N9	6.43	113.34	108.20
33	L1	460	A	C1'-O4'-C4'	6.43	115.04	109.90
32	S1	1144	A	P-O5'-C5'	-6.43	110.61	120.90
32	S1	1543	U	C1'-O4'-C4'	6.43	115.04	109.90
32	S1	127	G	N9-C1'-C2'	-6.43	104.93	112.00
33	L1	583	C	C3'-C2'-C1'	6.43	106.64	101.50
33	L1	1166	C	C3'-C2'-C1'	6.43	106.64	101.50
33	L1	1561	U	O5'-C5'-C4'	6.43	123.91	111.70
33	L1	3350	C	O4'-C1'-C2'	6.43	113.38	107.60
33	L1	3358	A	C4'-C3'-C2'	-6.43	96.17	102.60
80	LC	373	ARG	NE-CZ-NH1	6.43	123.51	120.30
82	LK	134	LEU	N-CA-C	6.43	128.35	111.00
32	S1	575	G	C1'-O4'-C4'	-6.42	104.76	109.90
32	S1	850	G	C5'-C4'-O4'	6.42	116.81	109.10
33	L1	1820	C	O3'-P-O5'	-6.42	91.79	104.00
31	S2	70	G	C3'-C2'-C1'	-6.42	96.36	101.50
33	L1	102	G	C4'-C3'-C2'	-6.42	96.18	102.60
33	L1	1182	A	P-O5'-C5'	6.42	131.18	120.90
33	L1	2665	A	P-O3'-C3'	-6.42	111.99	119.70
33	L1	2736	A	N9-C1'-C2'	-6.42	104.93	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	39	C	O4'-C1'-N1	6.42	113.34	108.20
19	SY	47	ARG	CA-C-N	6.42	131.32	117.20
33	L1	2121	U	O4'-C1'-N1	6.42	113.34	108.20
33	L1	2406	C	N1-C1'-C2'	6.42	122.35	114.00
33	L1	2625	C	O4'-C1'-N1	6.42	113.34	108.20
33	L1	2633	C	O4'-C1'-C2'	-6.42	99.38	105.80
35	L2	107	G	P-O3'-C3'	-6.42	111.99	119.70
64	LG	53	ALA	C-N-CA	6.42	137.75	121.70
25	SC	15	LYS	N-CA-C	6.42	128.33	111.00
32	S1	123	U	C1'-O4'-C4'	6.42	115.04	109.90
33	L1	1853	C	P-O3'-C3'	6.42	127.41	119.70
33	L1	2350	C	C4'-C3'-C2'	-6.42	96.18	102.60
33	L1	2600	U	O4'-C1'-N1	6.42	113.34	108.20
70	Li	88	ARG	NE-CZ-NH1	6.42	123.51	120.30
3	SB	62	LYS	C-N-CA	6.42	135.78	122.30
3	SB	131	ALA	C-N-CA	6.42	137.75	121.70
33	L1	21	G	P-O3'-C3'	6.42	127.40	119.70
33	L1	351	G	N9-C1'-C2'	6.42	122.34	114.00
33	L1	1246	G	O4'-C1'-C2'	-6.42	99.38	105.80
33	L1	1526	A	C5'-C4'-O4'	6.42	116.80	109.10
33	L1	1788	C	P-O5'-C5'	-6.42	110.63	120.90
70	Li	41	GLY	CA-C-O	-6.42	109.05	120.60
32	S1	1212	A	O4'-C1'-C2'	6.42	113.38	107.60
33	L1	1128	U	C1'-O4'-C4'	-6.42	104.77	109.90
33	L1	1302	C	O4'-C1'-N1	6.42	113.33	108.20
64	LG	174	PRO	CA-C-N	6.42	131.32	117.20
1	Sa	74	TRP	CB-CG-CD1	6.42	135.34	127.00
33	L1	2283	G	N9-C1'-C2'	6.42	122.34	114.00
33	L1	2764	G	C3'-C2'-C1'	-6.42	96.37	101.50
35	L2	99	G	N9-C1'-C2'	-6.42	104.94	112.00
64	LG	39	ALA	N-CA-CB	6.42	119.08	110.10
84	LI	118	ALA	C-N-CA	6.42	137.74	121.70
23	SU	76	THR	N-CA-C	-6.41	93.69	111.00
32	S1	1775	A	O4'-C1'-C2'	6.41	113.37	107.60
33	L1	1416	G	C3'-C2'-C1'	-6.41	96.37	101.50
33	L1	1524	G	OP1-P-OP2	-6.41	109.98	119.60
33	L1	1825	G	O4'-C1'-N9	6.41	113.33	108.20
33	L1	2431	U	P-O3'-C3'	6.41	127.40	119.70
33	L1	2787	A	O4'-C1'-N9	6.41	113.33	108.20
32	S1	856	G	C1'-O4'-C4'	-6.41	104.77	109.90
33	L1	2759	C	O5'-P-OP2	-6.41	99.93	105.70
33	L1	2823	C	O4'-C1'-N1	6.41	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	S2	1	U	O5'-P-OP2	-6.41	99.93	105.70
32	S1	1363	G	O4'-C1'-C2'	6.41	113.37	107.60
32	S1	1424	G	O4'-C1'-N9	6.41	113.33	108.20
33	L1	2731	G	P-O3'-C3'	6.41	127.39	119.70
33	L1	2807	G	C1'-O4'-C4'	-6.41	104.77	109.90
33	L1	1953	C	C5'-C4'-C3'	6.41	126.25	116.00
11	SM	12	ILE	CB-CA-C	-6.41	98.78	111.60
31	S2	18	G	C4'-C3'-C2'	-6.41	96.19	102.60
33	L1	1693	A	N9-C1'-C2'	6.41	122.33	114.00
34	L3	115	A	O4'-C1'-N9	6.41	113.33	108.20
1	Sa	142	ASP	CB-CG-OD1	-6.41	112.53	118.30
32	S1	349	U	O4'-C1'-N1	6.41	113.33	108.20
32	S1	978	A	O4'-C1'-N9	6.41	113.32	108.20
32	S1	1592	G	O4'-C1'-C2'	-6.41	99.39	105.80
33	L1	1140	C	C3'-C2'-C1'	6.41	106.62	101.50
33	L1	1688	U	O4'-C1'-N1	6.41	113.32	108.20
33	L1	1732	G	N9-C1'-C2'	6.41	122.33	114.00
41	LM	90	ARG	NE-CZ-NH1	6.41	123.50	120.30
64	LG	152	LYS	N-CA-C	6.41	128.30	111.00
1	Sa	266	THR	CA-CB-OG1	6.40	122.44	109.00
23	SU	11	THR	C-N-CA	6.40	137.71	121.70
33	L1	73	A	O3'-P-O5'	-6.40	91.83	104.00
33	L1	281	G	O4'-C1'-C2'	6.40	113.36	107.60
33	L1	978	C	C4'-C3'-C2'	6.40	109.00	102.60
33	L1	1340	G	O4'-C1'-C2'	6.40	113.36	107.60
33	L1	2112	C	C2'-C3'-O3'	6.40	123.94	113.70
33	L1	2200	U	C5'-C4'-C3'	6.40	126.24	116.00
33	L1	2764	G	O5'-P-OP1	6.40	118.38	110.70
54	Lf	88	TYR	CZ-CE2-CD2	-6.40	114.04	119.80
79	Ls	64	ARG	NE-CZ-NH2	-6.40	117.10	120.30
25	SC	171	PRO	CB-CA-C	6.40	128.00	112.00
31	S2	28	G	O4'-C1'-N9	6.40	113.32	108.20
32	S1	36	C	O4'-C1'-C2'	-6.40	99.40	105.80
33	L1	1088	A	O4'-C1'-N9	6.40	113.32	108.20
33	L1	1154	U	P-O3'-C3'	-6.40	112.02	119.70
33	L1	2738	U	N1-C1'-C2'	6.40	122.32	114.00
33	L1	3095	G	C3'-C2'-C1'	-6.40	96.38	101.50
69	La	33	THR	CA-CB-CG2	-6.40	103.44	112.40
2	SA	212	GLU	N-CA-C	6.40	128.28	111.00
32	S1	1	U	C1'-O4'-C4'	6.40	115.02	109.90
32	S1	623	A	O4'-C1'-C2'	-6.40	99.40	105.80
12	SO	129	TYR	CB-CG-CD2	-6.40	117.16	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	169	A	O4'-C1'-C2'	-6.40	99.40	105.80
32	S1	203	A	OP1-P-OP2	-6.40	110.00	119.60
32	S1	227	G	O4'-C1'-N9	6.40	113.32	108.20
33	L1	1636	C	OP1-P-O3'	6.40	119.28	105.20
33	L1	1762	G	P-O5'-C5'	6.40	131.14	120.90
34	L3	74	A	C1'-O4'-C4'	-6.40	104.78	109.90
35	L2	102	U	O5'-P-OP2	-6.40	99.94	105.70
82	LK	135	GLN	CA-C-N	6.40	135.01	117.10
33	L1	88	A	C1'-O4'-C4'	-6.39	104.78	109.90
33	L1	1715	C	O5'-C5'-C4'	6.39	123.85	111.70
33	L1	1768	U	O4'-C1'-C2'	-6.39	99.41	105.80
34	L3	97	G	C5'-C4'-C3'	-6.39	105.77	116.00
35	L2	90	U	P-O5'-C5'	6.39	131.13	120.90
16	SR	120	MET	CG-SD-CE	-6.39	89.97	100.20
32	S1	302	C	O4'-C1'-N1	6.39	113.31	108.20
32	S1	1213	C	N1-C1'-C2'	6.39	122.31	114.00
32	S1	1621	U	N1-C1'-C2'	-6.39	104.97	112.00
33	L1	445	C	O4'-C1'-C2'	-6.39	99.41	105.80
33	L1	529	C	P-O5'-C5'	-6.39	110.67	120.90
33	L1	729	G	P-O3'-C3'	-6.39	112.03	119.70
33	L1	1613	C	C1'-O4'-C4'	-6.39	104.79	109.90
33	L1	2103	U	N1-C1'-C2'	-6.39	104.97	112.00
33	L1	2248	G	OP1-P-OP2	-6.39	110.01	119.60
33	L1	2334	G	C1'-O4'-C4'	-6.39	104.79	109.90
33	L1	2677	A	P-O3'-C3'	6.39	127.37	119.70
33	L1	2968	G	N9-C1'-C2'	6.39	122.31	114.00
34	L3	74	A	N9-C1'-C2'	6.39	122.31	114.00
13	SQ	98	VAL	CA-CB-CG2	6.39	120.49	110.90
33	L1	2627	G	O4'-C1'-C2'	6.39	113.35	107.60
35	L2	147	C	N1-C1'-C2'	6.39	122.31	114.00
47	LU	83	ARG	CD-NE-CZ	6.39	132.55	123.60
64	LG	174	PRO	O-C-N	-6.39	112.47	122.70
32	S1	890	G	C1'-O4'-C4'	-6.39	104.79	109.90
33	L1	1258	C	O5'-C5'-C4'	6.39	123.84	111.70
33	L1	3183	G	C4'-C3'-C2'	-6.39	96.21	102.60
33	L1	3384	G	P-O5'-C5'	6.39	131.12	120.90
34	L3	120	C	O4'-C1'-C2'	6.39	113.35	107.60
35	L2	33	U	C4'-C3'-C2'	-6.39	96.21	102.60
37	LB	28	ARG	NE-CZ-NH1	6.39	123.50	120.30
38	LE	31	ARG	NE-CZ-NH2	-6.39	117.11	120.30
32	S1	998	A	O4'-C1'-N9	6.39	113.31	108.20
32	S1	1665	U	O3'-P-O5'	-6.39	91.86	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	168	A	O4'-C1'-C2'	-6.39	99.41	105.80
33	L1	855	U	P-O3'-C3'	-6.39	112.03	119.70
33	L1	2918	U	OP1-P-O3'	6.39	119.25	105.20
33	L1	3059	C	C5'-C4'-O4'	-6.39	101.44	109.10
33	L1	3246	U	C1'-O4'-C4'	-6.39	104.79	109.90
33	L1	3387	U	C3'-C2'-C1'	6.39	106.61	101.50
43	LO	120	VAL	CB-CA-C	6.39	123.54	111.40
32	S1	965	U	O3'-P-O5'	6.39	116.14	104.00
32	S1	1740	G	C4'-C3'-C2'	-6.39	96.21	102.60
33	L1	281	G	OP1-P-OP2	-6.39	110.02	119.60
33	L1	1860	A	O4'-C1'-C2'	-6.39	99.41	105.80
33	L1	2633	C	O4'-C4'-C3'	-6.39	97.61	104.00
33	L1	2646	A	O4'-C1'-C2'	-6.39	99.41	105.80
39	LF	31	ARG	NE-CZ-NH1	6.39	123.49	120.30
45	LQ	260	GLU	CA-C-N	6.39	134.98	117.10
32	S1	624	A	C2'-C3'-O3'	6.38	123.92	113.70
32	S1	1571	G	O4'-C1'-N9	6.38	113.31	108.20
33	L1	128	C	C3'-C2'-C1'	6.38	106.61	101.50
33	L1	2480	G	C5'-C4'-O4'	6.38	116.76	109.10
33	L1	3031	G	C5'-C4'-C3'	6.38	126.22	116.00
64	LG	210	ASP	CB-CG-OD1	6.38	124.05	118.30
68	LW	66	THR	N-CA-CB	6.38	122.43	110.30
33	L1	2750	A	O4'-C1'-N9	6.38	113.31	108.20
32	S1	13	C	C1'-O4'-C4'	-6.38	104.79	109.90
32	S1	259	A	O4'-C1'-C2'	-6.38	99.42	105.80
32	S1	1297	U	N1-C1'-C2'	-6.38	104.98	112.00
32	S1	1561	G	C1'-O4'-C4'	6.38	115.00	109.90
33	L1	2590	C	P-O3'-C3'	-6.38	112.04	119.70
48	LV	14	SER	CB-CA-C	-6.38	97.98	110.10
32	S1	622	U	C5'-C4'-O4'	6.38	116.76	109.10
32	S1	834	A	O4'-C1'-C2'	6.38	113.34	107.60
33	L1	2495	C	C1'-O4'-C4'	-6.38	104.80	109.90
1	Sa	200	PHE	CB-CG-CD1	-6.38	116.33	120.80
32	S1	1057	U	O4'-C1'-C2'	-6.38	99.42	105.80
32	S1	1397	A	C1'-O4'-C4'	6.38	115.00	109.90
32	S1	1565	U	O4'-C1'-C2'	-6.38	99.42	105.80
33	L1	53	C	O4'-C1'-N1	6.38	113.30	108.20
33	L1	995	C	O4'-C1'-N1	6.38	113.30	108.20
33	L1	1980	C	P-O3'-C3'	6.38	127.36	119.70
33	L1	2627	G	C3'-C2'-C1'	-6.38	96.40	101.50
33	L1	2795	G	C1'-O4'-C4'	-6.38	104.80	109.90
33	L1	3304	U	O4'-C4'-C3'	-6.38	97.62	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
80	LC	49	TYR	CB-CG-CD1	-6.38	117.17	121.00
32	S1	1713	C	P-O3'-C3'	6.38	127.35	119.70
33	L1	12	G	O4'-C1'-N9	-6.38	103.10	108.20
33	L1	1150	G	O4'-C1'-N9	6.38	113.30	108.20
33	L1	1182	A	P-O3'-C3'	-6.38	112.05	119.70
33	L1	1694	A	C1'-O4'-C4'	6.38	115.00	109.90
33	L1	1800	G	N9-C1'-C2'	-6.38	104.98	112.00
33	L1	2685	C	O4'-C1'-N1	6.38	113.30	108.20
33	L1	2748	G	N9-C1'-C2'	-6.38	104.98	112.00
33	L1	3168	C	C1'-O4'-C4'	6.38	115.00	109.90
33	L1	3169	C	P-O5'-C5'	6.38	131.10	120.90
32	S1	456	A	C1'-O4'-C4'	6.38	115.00	109.90
32	S1	802	A	P-O5'-C5'	-6.38	110.70	120.90
33	L1	72	A	O3'-P-O5'	-6.38	91.89	104.00
72	Lk	39	ARG	C-N-CA	6.38	137.64	121.70
79	Ls	260	TYR	CB-CG-CD2	-6.38	117.17	121.00
1	Sa	192	ARG	NE-CZ-NH2	-6.37	117.11	120.30
32	S1	1006	A	N9-C1'-C2'	6.37	122.28	114.00
33	L1	242	U	C1'-O4'-C4'	-6.37	104.80	109.90
33	L1	642	C	OP1-P-O3'	-6.37	91.18	105.20
33	L1	831	G	P-O3'-C3'	-6.37	112.05	119.70
80	LC	17	LEU	CB-CA-C	-6.37	98.09	110.20
80	LC	373	ARG	NE-CZ-NH2	-6.37	117.11	120.30
83	Lm	4	ARG	CB-CG-CD	-6.37	95.03	111.60
9	SK	33	PHE	C-N-CA	6.37	137.63	121.70
27	SH	92	ARG	NH1-CZ-NH2	-6.37	112.39	119.40
32	S1	153	U	P-O3'-C3'	6.37	127.35	119.70
33	L1	1438	A	O4'-C1'-C2'	6.37	113.33	107.60
33	L1	3156	G	C3'-C2'-C1'	-6.37	96.40	101.50
35	L2	89	G	O4'-C1'-N9	-6.37	103.10	108.20
82	LK	206	TYR	CD1-CE1-CZ	-6.37	114.07	119.80
32	S1	1282	G	C3'-C2'-C1'	6.37	106.60	101.50
33	L1	1496	G	C3'-C2'-C1'	-6.37	96.40	101.50
33	L1	1766	U	C5'-C4'-O4'	6.37	116.74	109.10
7	SI	135	PHE	CB-CG-CD1	6.37	125.26	120.80
32	S1	37	U	P-O3'-C3'	6.37	127.34	119.70
32	S1	437	C	C3'-C2'-C1'	6.37	106.59	101.50
32	S1	540	C	OP1-P-OP2	-6.37	110.05	119.60
32	S1	1241	G	C1'-O4'-C4'	-6.37	104.81	109.90
33	L1	800	C	C3'-C2'-C1'	6.37	106.59	101.50
33	L1	3004	G	C1'-O4'-C4'	-6.37	104.81	109.90
33	L1	3303	C	O4'-C1'-C2'	6.37	113.33	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	141	G	C1'-O4'-C4'	-6.37	104.81	109.90
38	LE	170	GLU	CA-CB-CG	6.37	127.41	113.40
11	SM	99	VAL	CA-CB-CG2	6.37	120.45	110.90
32	S1	1469	C	C4'-C3'-C2'	-6.37	96.23	102.60
33	L1	896	C	OP1-P-O3'	6.37	119.21	105.20
33	L1	1429	U	C4'-C3'-C2'	-6.37	96.23	102.60
33	L1	1698	C	C1'-O4'-C4'	-6.37	104.81	109.90
33	L1	2866	A	O4'-C1'-C2'	6.37	113.33	107.60
35	L2	55	G	O4'-C1'-C2'	-6.37	99.43	105.80
78	Le	69	ARG	C-N-CA	6.37	137.62	121.70
33	L1	26	A	OP1-P-OP2	-6.37	110.05	119.60
33	L1	171	G	O4'-C1'-N9	6.37	113.29	108.20
33	L1	1690	C	C1'-O4'-C4'	6.37	114.99	109.90
33	L1	3361	G	P-O3'-C3'	-6.37	112.06	119.70
47	LU	10	ARG	N-CA-CB	6.37	122.06	110.60
64	LG	52	PRO	N-CA-C	6.37	128.65	112.10
5	SE	38	ARG	NE-CZ-NH1	6.36	123.48	120.30
23	SU	78	PHE	CA-C-N	6.36	128.93	116.20
33	L1	3295	G	C5'-C4'-C3'	-6.36	105.82	116.00
35	L2	140	G	O4'-C1'-C2'	6.36	113.33	107.60
44	LR	10	ARG	CD-NE-CZ	6.36	132.51	123.60
47	LU	105	PHE	CB-CG-CD2	-6.36	116.35	120.80
72	Lk	75	VAL	CA-CB-CG1	6.36	120.44	110.90
33	L1	2644	U	C5'-C4'-C3'	-6.36	105.82	116.00
33	L1	2870	U	OP1-P-OP2	6.36	129.14	119.60
32	S1	318	C	C1'-O4'-C4'	-6.36	104.81	109.90
33	L1	228	C	C5'-C4'-C3'	-6.36	105.82	116.00
33	L1	463	G	P-O3'-C3'	6.36	127.33	119.70
33	L1	2450	G	N9-C1'-C2'	-6.36	105.00	112.00
33	L1	3280	U	O4'-C1'-N1	6.36	113.29	108.20
55	Lg	5	LYS	CB-CA-C	6.36	123.12	110.40
67	LS	12	VAL	CG1-CB-CG2	-6.36	100.72	110.90
8	SJ	114	THR	CA-CB-CG2	-6.36	103.50	112.40
32	S1	475	A	O4'-C1'-C2'	-6.36	99.44	105.80
33	L1	2386	A	O4'-C1'-N9	-6.36	103.11	108.20
31	S2	57	A	P-O5'-C5'	6.36	131.07	120.90
32	S1	1207	A	C3'-C2'-C1'	6.36	106.59	101.50
32	S1	1681	G	P-O3'-C3'	6.36	127.33	119.70
33	L1	1763	C	C3'-C2'-C1'	6.36	106.59	101.50
33	L1	2223	A	C1'-O4'-C4'	-6.36	104.81	109.90
33	L1	2587	G	O4'-C1'-C2'	6.36	113.32	107.60
14	SP	100	ARG	NE-CZ-NH1	6.36	123.48	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	590	C	C3'-C2'-C1'	-6.36	96.42	101.50
33	L1	954	A	OP1-P-OP2	-6.36	110.07	119.60
33	L1	1728	G	C3'-C2'-C1'	6.36	106.58	101.50
33	L1	1742	G	O5'-P-OP1	-6.36	99.98	105.70
33	L1	1900	C	O5'-P-OP1	-6.36	99.98	105.70
33	L1	2803	A	N9-C1'-C2'	6.36	122.26	114.00
33	L1	3081	G	OP1-P-O3'	6.36	119.18	105.20
57	Ll	8	PHE	CG-CD1-CE1	6.36	127.79	120.80
57	Ll	33	THR	CA-CB-CG2	-6.36	103.50	112.40
33	L1	1764	G	O3'-P-O5'	-6.35	91.93	104.00
32	S1	417	U	O4'-C1'-N1	6.35	113.28	108.20
32	S1	1430	A	O4'-C1'-N9	6.35	113.28	108.20
33	L1	1951	C	P-O5'-C5'	6.35	131.06	120.90
33	L1	2456	G	P-O3'-C3'	6.35	127.32	119.70
33	L1	2774	A	OP1-P-O3'	6.35	119.17	105.20
45	LQ	158	ARG	NE-CZ-NH1	6.35	123.48	120.30
55	Lg	29	HIS	N-CA-CB	6.35	122.03	110.60
70	Li	111	LYS	C-N-CA	6.35	137.58	121.70
80	LC	321	VAL	CA-CB-CG2	-6.35	101.37	110.90
33	L1	421	A	P-O3'-C3'	-6.35	112.08	119.70
33	L1	2201	G	C2'-C3'-O3'	6.35	123.86	113.70
32	S1	1181	G	O3'-P-O5'	6.35	116.06	104.00
32	S1	1539	A	C3'-C2'-C1'	6.35	106.58	101.50
33	L1	3	G	O4'-C1'-N9	6.35	113.28	108.20
33	L1	112	C	P-O5'-C5'	6.35	131.06	120.90
33	L1	125	G	N9-C1'-C2'	6.35	122.25	114.00
33	L1	972	C	O3'-P-O5'	-6.35	91.93	104.00
33	L1	1394	C	O5'-C5'-C4'	-6.35	99.64	111.70
33	L1	2691	U	C4'-C3'-C2'	-6.35	96.25	102.60
33	L1	2782	G	C3'-C2'-C1'	-6.35	96.42	101.50
49	LX	107	ALA	N-CA-CB	6.35	118.99	110.10
32	S1	1364	C	O4'-C1'-N1	6.35	113.28	108.20
32	S1	1514	G	N9-C1'-C2'	6.35	122.25	114.00
32	S1	1639	A	O4'-C1'-N9	6.35	113.28	108.20
33	L1	371	A	N9-C1'-C2'	-6.35	105.02	112.00
33	L1	597	C	C4'-C3'-C2'	-6.35	96.25	102.60
33	L1	1026	A	C1'-O4'-C4'	-6.35	104.82	109.90
33	L1	2280	C	N1-C1'-C2'	6.35	122.25	114.00
33	L1	2808	U	P-O3'-C3'	-6.35	112.08	119.70
33	L1	3010	G	C5'-C4'-C3'	6.35	126.16	116.00
40	LH	181	ARG	NE-CZ-NH1	6.35	123.47	120.30
47	LU	48	VAL	N-CA-C	-6.35	93.86	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	528	C	C5'-C4'-C3'	-6.35	105.85	116.00
32	S1	1728	G	OP1-P-O3'	6.34	119.16	105.20
33	L1	2177	U	C5'-C4'-O4'	-6.34	101.49	109.10
8	SJ	49	VAL	CA-CB-CG1	6.34	120.41	110.90
11	SM	145	THR	O-C-N	-6.34	112.55	122.70
32	S1	185	G	O4'-C1'-N9	6.34	113.27	108.20
32	S1	569	C	O4'-C1'-N1	6.34	113.27	108.20
32	S1	1122	U	C4'-C3'-C2'	6.34	108.94	102.60
32	S1	1403	G	N9-C1'-C2'	6.34	122.25	114.00
33	L1	188	U	C4'-C3'-C2'	6.34	108.94	102.60
33	L1	1943	G	O4'-C1'-N9	6.34	113.27	108.20
33	L1	1951	C	P-O3'-C3'	6.34	127.31	119.70
33	L1	2742	A	C4'-C3'-C2'	-6.34	96.26	102.60
33	L1	2763	C	C5'-C4'-O4'	-6.34	101.49	109.10
42	LP	120	TRP	CB-CG-CD2	-6.34	118.36	126.60
32	S1	1034	G	O4'-C1'-C2'	-6.34	99.46	105.80
32	S1	1107	G	P-O3'-C3'	-6.34	112.09	119.70
33	L1	2076	C	N1-C1'-C2'	-6.34	105.03	112.00
32	S1	1710	C	O5'-C5'-C4'	6.34	123.74	111.70
45	LQ	17	PHE	N-CA-CB	6.34	122.01	110.60
32	S1	1254	U	C5'-C4'-C3'	6.34	126.14	116.00
33	L1	995	C	P-O3'-C3'	6.34	127.30	119.70
33	L1	2744	C	C3'-C2'-C1'	6.34	106.57	101.50
33	L1	2856	U	N1-C1'-C2'	-6.34	105.03	112.00
56	Lh	42	ARG	NH1-CZ-NH2	-6.34	112.43	119.40
81	LD	166	GLU	OE1-CD-OE2	6.34	130.90	123.30
33	L1	1666	C	O4'-C1'-C2'	-6.33	99.47	105.80
33	L1	1820	C	O4'-C4'-C3'	-6.33	97.67	104.00
39	LF	135	ARG	NE-CZ-NH1	6.33	123.47	120.30
41	LM	72	LEU	CB-CA-C	-6.33	98.16	110.20
5	SE	56	GLU	CB-CA-C	-6.33	97.73	110.40
10	SL	6	GLY	N-CA-C	6.33	128.93	113.10
32	S1	2	A	C5'-C4'-C3'	6.33	126.14	116.00
32	S1	49	C	O4'-C1'-N1	6.33	113.27	108.20
32	S1	1804	A	C5'-C4'-C3'	6.33	126.13	116.00
80	LC	278	ARG	NE-CZ-NH1	6.33	123.47	120.30
45	LQ	257	THR	CB-CA-C	-6.33	94.50	111.60
4	SD	148	ARG	CA-C-O	-6.33	106.81	120.10
32	S1	644	U	O4'-C1'-N1	6.33	113.26	108.20
33	L1	103	G	O4'-C1'-N9	6.33	113.26	108.20
33	L1	2013	G	C5'-C4'-O4'	6.33	116.70	109.10
33	L1	2567	C	C1'-O4'-C4'	-6.33	104.84	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	LD	311	ASN	O-C-N	-6.33	112.57	122.70
31	S2	47	U	O4'-C1'-N1	6.33	113.26	108.20
32	S1	492	G	C2'-C3'-O3'	6.33	123.83	113.70
32	S1	1183	G	C1'-O4'-C4'	6.33	114.96	109.90
33	L1	487	C	O4'-C1'-C2'	-6.33	99.47	105.80
33	L1	3234	G	O4'-C1'-C2'	-6.33	99.47	105.80
33	L1	3383	C	P-O3'-C3'	6.33	127.29	119.70
34	L3	73	U	O4'-C1'-N1	6.33	113.26	108.20
34	L3	110	G	O4'-C1'-N9	6.33	113.26	108.20
67	LS	35	ASN	N-CA-CB	6.33	121.99	110.60
32	S1	1283	C	C3'-C2'-C1'	6.33	106.56	101.50
33	L1	2587	G	C1'-O4'-C4'	-6.33	104.84	109.90
35	L2	61	C	C1'-O4'-C4'	-6.33	104.84	109.90
32	S1	1151	G	N9-C1'-C2'	6.33	122.22	114.00
32	S1	1381	G	C4'-C3'-C2'	-6.33	96.28	102.60
32	S1	1477	A	O4'-C1'-N9	6.33	113.26	108.20
42	LP	194	ARG	NE-CZ-NH2	-6.33	117.14	120.30
70	Li	43	LYS	CA-C-N	6.33	131.12	117.20
73	Lp	53	ASN	CB-CA-C	-6.33	97.75	110.40
33	L1	1457	A	P-O5'-C5'	6.32	131.02	120.90
33	L1	2398	A	P-O3'-C3'	-6.32	112.11	119.70
70	Li	99	GLU	OE1-CD-OE2	-6.32	115.71	123.30
32	S1	888	U	O4'-C1'-C2'	-6.32	99.48	105.80
32	S1	1576	C	O4'-C1'-C2'	-6.32	99.48	105.80
33	L1	2493	C	C3'-C2'-C1'	6.32	106.56	101.50
45	LQ	73	ASP	O-C-N	-6.32	112.58	122.70
33	L1	754	G	C3'-C2'-C1'	-6.32	96.44	101.50
31	S2	39	G	C5'-C4'-C3'	6.32	126.11	116.00
32	S1	568	G	N9-C1'-C2'	-6.32	105.05	112.00
33	L1	1701	G	C2'-C3'-O3'	6.32	123.81	113.70
33	L1	1995	U	O4'-C1'-N1	6.32	113.26	108.20
64	LG	138	ASN	N-CA-CB	6.32	121.97	110.60
1	Sa	271	GLY	N-CA-C	6.32	128.89	113.10
32	S1	169	A	N9-C1'-C2'	-6.32	105.05	112.00
32	S1	1119	G	P-O3'-C3'	6.32	127.28	119.70
32	S1	1231	A	O4'-C1'-C2'	-6.32	99.48	105.80
32	S1	1369	C	C3'-C2'-C1'	6.32	106.55	101.50
32	S1	1417	A	N9-C1'-C2'	-6.32	105.05	112.00
32	S1	1688	G	C1'-O4'-C4'	6.32	114.95	109.90
33	L1	293	A	O4'-C1'-C2'	6.32	113.29	107.60
33	L1	1224	A	C5'-C4'-O4'	-6.32	101.52	109.10
33	L1	2409	U	N1-C1'-C2'	-6.32	105.05	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2683	A	C1'-O4'-C4'	6.32	114.95	109.90
45	LQ	296	ASP	CB-CG-OD1	6.32	123.98	118.30
46	LT	109	TYR	CB-CG-CD1	6.32	124.79	121.00
32	S1	194	G	OP1-P-OP2	-6.32	110.13	119.60
33	L1	1391	A	C1'-O4'-C4'	-6.32	104.85	109.90
33	L1	1695	C	P-O3'-C3'	6.32	127.28	119.70
46	LT	42	ARG	NE-CZ-NH2	-6.32	117.14	120.30
32	S1	767	G	C5'-C4'-C3'	-6.31	105.90	116.00
32	S1	1625	U	C3'-C2'-C1'	6.31	106.55	101.50
33	L1	478	G	C1'-O4'-C4'	-6.31	104.85	109.90
33	L1	1115	A	C2'-C3'-O3'	6.31	123.80	113.70
33	L1	1858	U	O4'-C1'-C2'	-6.31	99.49	105.80
36	LA	83	TYR	CG-CD2-CE2	-6.31	116.25	121.30
33	L1	2629	C	C3'-C2'-C1'	-6.31	96.45	101.50
32	S1	2	A	C2'-C3'-O3'	6.31	123.80	113.70
33	L1	3276	G	O4'-C1'-N9	6.31	113.25	108.20
33	L1	3296	C	P-O3'-C3'	-6.31	112.13	119.70
45	LQ	177	ASP	CB-CG-OD2	6.31	123.98	118.30
15	SS	7	ARG	NE-CZ-NH2	6.31	123.45	120.30
15	SS	63	ILE	CB-CA-C	6.31	124.22	111.60
23	SU	94	LYS	N-CA-CB	6.31	121.95	110.60
33	L1	163	U	N1-C1'-C2'	-6.31	105.06	112.00
33	L1	253	G	C1'-O4'-C4'	-6.31	104.85	109.90
33	L1	3362	A	C5'-C4'-C3'	-6.31	105.91	116.00
35	L2	163	G	P-O3'-C3'	6.31	127.27	119.70
32	S1	1276	U	O3'-P-O5'	6.31	115.98	104.00
33	L1	746	C	C1'-O4'-C4'	-6.31	104.86	109.90
11	SM	121	ARG	NE-CZ-NH1	6.30	123.45	120.30
29	ST	15	ARG	CB-CA-C	-6.30	97.79	110.40
32	S1	1099	G	C1'-O4'-C4'	-6.30	104.86	109.90
33	L1	503	U	N1-C1'-C2'	6.30	122.19	114.00
32	S1	1191	U	O4'-C1'-C2'	-6.30	99.50	105.80
32	S1	1302	C	O4'-C1'-N1	6.30	113.24	108.20
33	L1	1515	U	C1'-O4'-C4'	-6.30	104.86	109.90
33	L1	2703	G	N9-C1'-C2'	6.30	122.19	114.00
33	L1	2879	G	N9-C1'-C2'	-6.30	105.07	112.00
35	L2	126	G	O4'-C1'-C2'	-6.30	99.50	105.80
57	Ll	12	ARG	NE-CZ-NH2	-6.30	117.15	120.30
25	SC	136	ILE	N-CA-C	6.30	128.01	111.00
32	S1	578	G	N9-C1'-C2'	-6.30	105.07	112.00
33	L1	575	C	C5'-C4'-C3'	-6.30	105.92	116.00
33	L1	663	G	C1'-O4'-C4'	-6.30	104.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	665	G	P-O5'-C5'	-6.30	110.82	120.90
33	L1	2656	C	C3'-C2'-C1'	-6.30	96.46	101.50
33	L1	2899	A	O4'-C1'-C2'	-6.30	99.50	105.80
33	L1	3049	A	O4'-C1'-C2'	-6.30	99.50	105.80
13	SQ	69	ILE	CB-CA-C	6.30	124.20	111.60
33	L1	1211	G	C4'-C3'-C2'	-6.30	96.30	102.60
33	L1	1631	G	P-O3'-C3'	6.30	127.26	119.70
3	SB	162	GLN	O-C-N	-6.30	109.14	121.10
32	S1	686	A	P-O3'-C3'	6.30	127.25	119.70
33	L1	211	A	O4'-C1'-C2'	-6.30	99.50	105.80
33	L1	702	G	C1'-O4'-C4'	-6.30	104.86	109.90
33	L1	1058	A	C1'-O4'-C4'	-6.30	104.86	109.90
33	L1	2589	G	P-O5'-C5'	6.30	130.97	120.90
33	L1	2741	G	OP1-P-OP2	-6.30	110.16	119.60
33	L1	2909	A	O4'-C1'-C2'	-6.30	99.50	105.80
45	LQ	237	GLU	C-N-CA	6.30	137.44	121.70
47	LU	88	ARG	O-C-N	-6.30	112.63	122.70
25	SC	160	PHE	CB-CG-CD1	6.29	125.21	120.80
32	S1	834	A	C1'-O4'-C4'	-6.29	104.86	109.90
33	L1	789	A	O3'-P-O5'	6.29	115.96	104.00
33	L1	2744	C	C5'-C4'-C3'	-6.29	105.93	116.00
15	SS	51	TYR	CA-CB-CG	6.29	125.36	113.40
33	L1	1666	C	C1'-O4'-C4'	-6.29	104.86	109.90
33	L1	2599	U	C1'-O4'-C4'	6.29	114.93	109.90
33	L1	3287	A	OP1-P-OP2	-6.29	110.16	119.60
45	LQ	183	PHE	CA-CB-CG	6.29	129.00	113.90
32	S1	1683	G	O4'-C1'-N9	-6.29	103.17	108.20
33	L1	2502	U	C3'-C2'-C1'	-6.29	96.47	101.50
33	L1	3339	G	OP2-P-O3'	6.29	119.04	105.20
49	LX	56	TYR	CG-CD2-CE2	6.29	126.33	121.30
67	LS	114	SER	CB-CA-C	6.29	122.06	110.10
32	S1	589	A	N9-C1'-C2'	6.29	122.18	114.00
33	L1	960	C	C1'-O4'-C4'	-6.29	104.87	109.90
33	L1	1388	C	C2'-C3'-O3'	6.29	123.77	113.70
33	L1	2670	A	C3'-C2'-C1'	6.29	106.53	101.50
81	LD	328	ALA	CB-CA-C	-6.29	100.67	110.10
20	SZ	11	ALA	N-CA-CB	6.29	118.90	110.10
25	SC	161	SER	C-N-CA	6.29	137.42	121.70
33	L1	548	G	C1'-O4'-C4'	-6.29	104.87	109.90
33	L1	1534	C	P-O5'-C5'	6.29	130.96	120.90
33	L1	3040	G	C3'-C2'-C1'	-6.29	96.47	101.50
33	L1	3048	C	C3'-C2'-C1'	6.29	106.53	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3099	G	N9-C1'-C2'	6.29	122.17	114.00
33	L1	3112	U	O4'-C1'-N1	6.29	113.23	108.20
41	LM	51	ARG	N-CA-C	6.29	127.98	111.00
57	Ll	77	ASN	N-CA-CB	6.29	121.92	110.60
72	Lk	49	GLU	CB-CA-C	-6.29	97.82	110.40
4	SD	153	ILE	CA-CB-CG2	6.29	123.47	110.90
32	S1	611	G	C4'-C3'-C2'	6.29	108.89	102.60
32	S1	1098	A	P-O3'-C3'	-6.29	112.16	119.70
33	L1	759	C	C1'-O4'-C4'	-6.29	104.87	109.90
33	L1	2679	A	O4'-C1'-N9	6.29	113.23	108.20
2	SA	228	ASP	CB-CG-OD1	6.29	123.96	118.30
31	S2	56	A	C1'-O4'-C4'	6.29	114.93	109.90
32	S1	210	A	O4'-C1'-N9	6.29	113.23	108.20
32	S1	1421	U	C4'-C3'-C2'	-6.29	96.31	102.60
33	L1	1742	G	C4'-C3'-C2'	-6.29	96.31	102.60
33	L1	2633	C	O3'-P-O5'	-6.29	92.06	104.00
33	L1	3031	G	N9-C1'-C2'	6.29	122.17	114.00
33	L1	3155	C	C5'-C4'-C3'	-6.29	105.94	116.00
33	L1	3236	A	N9-C1'-C2'	6.29	122.17	114.00
83	Lm	27	LYS	N-CA-CB	6.29	121.91	110.60
33	L1	2654	G	N9-C1'-C2'	6.28	122.17	114.00
33	L1	2680	G	P-O3'-C3'	6.28	127.24	119.70
81	LD	313	GLU	C-N-CA	6.28	137.41	121.70
32	S1	988	G	P-O3'-C3'	6.28	127.24	119.70
2	SA	159	ARG	NE-CZ-NH1	6.28	123.44	120.30
23	SU	16	LYS	N-CA-CB	6.28	121.90	110.60
32	S1	375	G	O4'-C1'-N9	6.28	113.22	108.20
32	S1	1665	U	O5'-C5'-C4'	6.28	123.64	111.70
33	L1	318	G	C4'-C3'-C2'	-6.28	96.32	102.60
33	L1	989	U	P-O3'-C3'	6.28	127.24	119.70
33	L1	1515	U	O4'-C1'-N1	6.28	113.22	108.20
33	L1	1751	G	C5'-C4'-C3'	-6.28	105.95	116.00
33	L1	2636	U	C3'-C2'-C1'	6.28	106.53	101.50
48	LV	154	LYS	CB-CA-C	-6.28	97.84	110.40
33	L1	2599	U	O4'-C4'-C3'	6.28	111.12	106.10
52	Lb	93	ARG	NE-CZ-NH1	-6.28	117.16	120.30
32	S1	990	G	C3'-C2'-C1'	6.28	106.52	101.50
32	S1	1401	C	C3'-C2'-C1'	6.28	106.52	101.50
32	S1	1795	U	O4'-C1'-C2'	-6.28	99.52	105.80
33	L1	474	G	O4'-C1'-C2'	6.28	113.25	107.60
33	L1	491	G	N9-C1'-C2'	6.28	122.16	114.00
33	L1	616	A	O4'-C1'-N9	6.28	113.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	LQ	248	ARG	NE-CZ-NH2	-6.28	117.16	120.30
1	Sa	257	PHE	CB-CG-CD1	-6.28	116.41	120.80
15	SS	92	PRO	N-CA-CB	-6.28	95.70	102.60
32	S1	1297	U	C4'-C3'-C2'	-6.28	96.32	102.60
33	L1	664	A	O4'-C1'-N9	6.28	113.22	108.20
33	L1	1975	G	P-O5'-C5'	6.28	130.94	120.90
33	L1	2852	G	C3'-C2'-C1'	6.28	106.52	101.50
79	Ls	234	TYR	CB-CA-C	6.28	122.95	110.40
13	SQ	98	VAL	N-CA-CB	6.27	125.30	111.50
25	SC	71	ARG	NE-CZ-NH2	-6.27	117.16	120.30
32	S1	1741	A	O4'-C1'-N9	6.27	113.22	108.20
32	S1	1742	A	O4'-C1'-N9	6.27	113.22	108.20
70	Li	93	ARG	CB-CA-C	6.27	122.94	110.40
33	L1	427	U	O4'-C1'-N1	6.27	113.22	108.20
33	L1	3121	C	C1'-O4'-C4'	-6.27	104.88	109.90
80	LC	5	LYS	O-C-N	-6.27	112.67	122.70
2	SA	11	ALA	CA-C-N	6.27	130.99	117.20
20	SZ	10	ARG	NE-CZ-NH2	6.27	123.44	120.30
32	S1	353	G	O4'-C1'-N9	6.27	113.22	108.20
32	S1	693	C	O4'-C1'-C2'	-6.27	99.53	105.80
33	L1	1200	A	O4'-C1'-N9	6.27	113.22	108.20
33	L1	3329	G	O4'-C1'-C2'	6.27	113.24	107.60
35	L2	151	C	P-O3'-C3'	6.27	127.22	119.70
14	SP	91	TYR	CB-CG-CD2	6.27	124.76	121.00
32	S1	538	A	P-O3'-C3'	6.27	127.22	119.70
32	S1	584	A	O4'-C1'-N9	-6.27	103.19	108.20
33	L1	1090	C	C4'-C3'-C2'	-6.27	96.33	102.60
33	L1	3236	A	C1'-O4'-C4'	-6.27	104.89	109.90
59	Lo	24	PRO	N-CA-C	-6.27	95.80	112.10
71	Lj	9	VAL	N-CA-CB	6.27	125.29	111.50
78	Le	67	LEU	N-CA-CB	6.27	122.93	110.40
3	SB	148	LYS	CB-CA-C	6.27	122.93	110.40
23	SU	81	ILE	CA-C-N	6.27	130.98	117.20
32	S1	416	A	C1'-O4'-C4'	6.27	114.91	109.90
33	L1	557	C	C3'-C2'-C1'	6.26	106.51	101.50
33	L1	1083	C	P-O5'-C5'	6.26	130.92	120.90
33	L1	1276	C	N1-C1'-C2'	-6.26	105.11	112.00
33	L1	2412	A	OP1-P-O3'	6.26	118.98	105.20
33	L1	2611	G	OP2-P-O3'	6.26	118.98	105.20
33	L1	2741	G	O4'-C1'-N9	6.26	113.21	108.20
33	L1	2808	U	C3'-C2'-C1'	-6.26	96.49	101.50
33	L1	3269	C	C3'-C2'-C1'	6.26	106.51	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
71	Lj	4	ARG	N-CA-CB	6.26	121.88	110.60
73	Lp	52	LYS	CB-CG-CD	6.26	127.89	111.60
33	L1	678	G	C3'-C2'-C1'	6.26	106.51	101.50
32	S1	1780	U	OP1-P-O3'	6.26	118.97	105.20
33	L1	720	G	O4'-C1'-N9	-6.26	103.19	108.20
33	L1	1067	G	O3'-P-O5'	6.26	115.90	104.00
33	L1	2615	U	O5'-P-OP2	-6.26	100.06	105.70
80	LC	352	ARG	CB-CA-C	-6.26	97.88	110.40
4	SD	54	TYR	N-CA-C	-6.26	94.10	111.00
5	SE	100	ARG	NE-CZ-NH1	-6.26	117.17	120.30
27	SH	110	ILE	CA-CB-CG2	-6.26	98.38	110.90
31	S2	64	G	O4'-C1'-N9	6.26	113.21	108.20
32	S1	1592	G	C5'-C4'-O4'	6.26	116.61	109.10
32	S1	1685	U	N1-C1'-C2'	-6.26	105.12	112.00
33	L1	1405	G	N9-C1'-C2'	-6.26	105.11	112.00
33	L1	1525	U	OP1-P-OP2	-6.26	110.21	119.60
33	L1	2061	C	O4'-C1'-C2'	6.26	113.23	107.60
34	L3	25	G	C5'-C4'-C3'	6.26	126.02	116.00
32	S1	479	A	C5'-C4'-C3'	-6.26	105.99	116.00
33	L1	1025	G	O4'-C1'-N9	6.26	113.20	108.20
33	L1	3241	C	C3'-C2'-C1'	6.26	106.50	101.50
55	Lg	86	LYS	CB-CA-C	-6.26	97.89	110.40
69	La	93	GLU	CB-CA-C	6.26	122.91	110.40
79	Ls	235	PRO	C-N-CA	-6.26	106.06	121.70
2	SA	44	LYS	C-N-CA	6.25	137.34	121.70
10	SL	5	ARG	O-C-N	-6.25	112.57	123.20
27	SH	90	THR	O-C-N	-6.25	112.69	122.70
32	S1	1537	U	P-O3'-C3'	6.25	127.20	119.70
32	S1	1631	C	C1'-O4'-C4'	-6.25	104.90	109.90
33	L1	1373	A	O4'-C1'-C2'	6.25	113.23	107.60
33	L1	1606	C	OP1-P-OP2	-6.25	110.22	119.60
33	L1	1710	G	O4'-C1'-C2'	6.25	113.23	107.60
33	L1	3085	C	C3'-C2'-C1'	6.25	106.50	101.50
34	L3	14	C	C5'-C4'-O4'	-6.25	101.60	109.10
23	SU	28	PHE	O-C-N	6.25	132.70	122.70
33	L1	1160	G	C1'-O4'-C4'	-6.25	104.90	109.90
33	L1	1537	A	N9-C1'-C2'	-6.25	105.12	112.00
33	L1	3094	C	C2'-C3'-O3'	6.25	123.70	113.70
34	L3	8	A	N9-C1'-C2'	6.25	122.13	114.00
33	L1	3011	U	C5'-C4'-C3'	6.25	126.00	116.00
37	LB	126	PHE	CB-CG-CD2	6.25	125.17	120.80
32	S1	1073	C	C1'-O4'-C4'	-6.25	104.90	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	397	A	O5'-P-OP2	6.25	118.20	110.70
33	L1	642	C	N1-C1'-C2'	-6.25	105.13	112.00
33	L1	683	U	P-O3'-C3'	6.25	127.20	119.70
33	L1	1142	G	N9-C1'-C2'	6.25	122.12	114.00
33	L1	2701	G	O3'-P-O5'	-6.25	92.13	104.00
33	L1	2999	G	C4'-C3'-O3'	6.25	125.50	113.00
33	L1	3379	C	C5'-C4'-O4'	-6.25	101.60	109.10
80	LC	32	PHE	CB-CG-CD2	-6.25	116.43	120.80
23	SU	17	PHE	CA-C-O	-6.25	106.98	120.10
32	S1	1156	A	OP1-P-O3'	-6.25	91.46	105.20
33	L1	907	A	P-O3'-C3'	-6.25	112.20	119.70
33	L1	1150	G	C1'-O4'-C4'	-6.25	104.90	109.90
33	L1	1371	G	C1'-O4'-C4'	-6.25	104.90	109.90
33	L1	1385	C	O4'-C1'-N1	6.25	113.20	108.20
33	L1	1515	U	N1-C1'-C2'	6.25	122.12	114.00
33	L1	1780	C	O4'-C1'-C2'	-6.25	99.55	105.80
15	SS	124	ARG	N-CA-CB	-6.25	99.36	110.60
33	L1	220	G	C3'-C2'-C1'	-6.25	96.50	101.50
32	S1	94	A	O4'-C1'-N9	6.24	113.19	108.20
32	S1	584	A	C2'-C3'-O3'	6.24	123.69	113.70
32	S1	1509	C	C3'-C2'-C1'	6.24	106.50	101.50
32	S1	1804	A	C1'-O4'-C4'	6.24	114.89	109.90
33	L1	38	A	O4'-C1'-C2'	-6.24	99.56	105.80
33	L1	718	C	O4'-C1'-N1	6.24	113.19	108.20
33	L1	1486	G	C3'-C2'-C1'	-6.24	96.50	101.50
33	L1	2011	G	O4'-C1'-N9	6.24	113.19	108.20
71	Lj	8	ARG	CA-C-O	-6.24	106.99	120.10
32	S1	1503	C	O4'-C1'-C2'	-6.24	99.56	105.80
33	L1	1737	C	C5'-C4'-C3'	-6.24	106.01	116.00
32	S1	1402	C	O4'-C1'-C2'	-6.24	99.56	105.80
33	L1	1205	C	N1-C1'-C2'	6.24	122.11	114.00
33	L1	1753	A	C3'-C2'-C1'	6.24	106.49	101.50
33	L1	3057	A	C3'-C2'-C1'	6.24	106.49	101.50
43	LO	14	HIS	C-N-CA	6.24	137.30	121.70
4	SD	130	GLN	N-CA-C	-6.24	94.16	111.00
32	S1	476	U	C3'-C2'-C1'	6.24	106.49	101.50
32	S1	611	G	C1'-O4'-C4'	-6.24	104.91	109.90
32	S1	909	G	O4'-C1'-N9	6.24	113.19	108.20
33	L1	581	G	P-O5'-C5'	-6.24	110.92	120.90
33	L1	710	C	P-O5'-C5'	6.24	130.88	120.90
33	L1	1650	G	N9-C1'-C2'	6.24	122.11	114.00
33	L1	2668	U	O5'-C5'-C4'	6.24	123.55	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SM	42	ASN	CA-CB-CG	6.24	127.12	113.40
32	S1	1682	U	C3'-C2'-C1'	6.24	106.49	101.50
33	L1	383	A	C3'-C2'-C1'	6.24	106.49	101.50
4	SD	138	TYR	N-CA-C	-6.24	94.16	111.00
32	S1	578	G	C4'-C3'-C2'	6.24	108.84	102.60
32	S1	1122	U	O4'-C4'-C3'	-6.24	97.77	104.00
33	L1	307	C	O5'-C5'-C4'	6.24	123.55	111.70
33	L1	1335	C	O4'-C1'-N1	-6.24	103.21	108.20
33	L1	1744	C	C3'-C2'-C1'	6.24	106.49	101.50
33	L1	2620	U	C1'-O4'-C4'	6.24	114.89	109.90
34	L3	117	U	C5'-C4'-O4'	-6.24	101.62	109.10
83	Lm	20	ALA	N-CA-C	6.24	127.83	111.00
33	L1	1268	G	O4'-C1'-N9	6.23	113.19	108.20
33	L1	2397	A	C3'-C2'-C1'	6.23	106.49	101.50
33	L1	2862	U	P-O5'-C5'	6.23	130.87	120.90
33	L1	3137	G	O4'-C1'-C2'	6.23	113.21	107.60
32	S1	1017	U	C1'-O4'-C4'	-6.23	104.91	109.90
33	L1	1007	A	C3'-C2'-C1'	6.23	106.48	101.50
33	L1	1194	C	O4'-C1'-N1	-6.23	103.21	108.20
33	L1	2253	U	O4'-C1'-N1	6.23	113.19	108.20
33	L1	3334	A	C5'-C4'-C3'	-6.23	106.03	116.00
80	LC	92	TYR	CB-CG-CD1	-6.23	117.26	121.00
3	SB	29	LEU	CB-CG-CD1	6.23	121.59	111.00
32	S1	1802	G	O4'-C1'-C2'	6.23	113.21	107.60
33	L1	132	U	O4'-C1'-N1	6.23	113.18	108.20
33	L1	488	U	C5'-C4'-O4'	6.23	116.58	109.10
33	L1	571	G	C1'-O4'-C4'	-6.23	104.92	109.90
33	L1	1627	U	C3'-C2'-C1'	6.23	106.48	101.50
33	L1	1975	G	O4'-C1'-N9	6.23	113.19	108.20
33	L1	2064	C	C1'-O4'-C4'	-6.23	104.92	109.90
64	LG	194	ALA	N-CA-CB	6.23	118.82	110.10
32	S1	410	U	O4'-C1'-N1	6.23	113.18	108.20
32	S1	716	A	O5'-C5'-C4'	6.23	123.53	111.70
33	L1	302	G	C1'-O4'-C4'	6.23	114.88	109.90
33	L1	814	U	N1-C1'-C2'	6.23	122.10	114.00
33	L1	25	U	C1'-O4'-C4'	6.23	114.88	109.90
33	L1	551	A	C3'-C2'-C1'	6.23	106.48	101.50
33	L1	953	G	N9-C1'-C2'	6.23	122.09	114.00
33	L1	966	G	C3'-C2'-C1'	6.23	106.48	101.50
33	L1	1564	C	O4'-C4'-C3'	-6.23	97.77	104.00
33	L1	1683	U	O4'-C1'-N1	6.23	113.18	108.20
33	L1	1828	C	N1-C1'-C2'	6.23	122.10	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3339	G	O3'-P-O5'	-6.23	92.17	104.00
32	S1	977	G	C1'-O4'-C4'	-6.23	104.92	109.90
33	L1	1458	U	C5'-C4'-C3'	-6.23	106.04	116.00
33	L1	3298	G	O4'-C4'-C3'	-6.23	97.77	104.00
48	LV	26	PHE	CB-CG-CD1	6.23	125.16	120.80
4	SD	151	ASP	N-CA-CB	6.22	121.80	110.60
32	S1	565	G	C3'-C2'-C1'	-6.22	96.52	101.50
32	S1	1134	U	O4'-C1'-C2'	-6.22	99.58	105.80
33	L1	704	G	C3'-C2'-C1'	6.22	106.48	101.50
33	L1	1134	G	O4'-C1'-N9	-6.22	103.22	108.20
33	L1	3297	A	P-O3'-C3'	6.22	127.17	119.70
27	SH	70	ASN	N-CA-CB	-6.22	99.40	110.60
32	S1	484	A	P-O5'-C5'	6.22	130.85	120.90
32	S1	574	A	OP2-P-O3'	6.22	118.89	105.20
33	L1	567	G	N9-C1'-C2'	6.22	122.09	114.00
33	L1	1604	U	C3'-C2'-C1'	6.22	106.48	101.50
32	S1	1342	C	O4'-C1'-C2'	-6.22	99.58	105.80
32	S1	1788	G	C4'-C3'-C2'	-6.22	96.38	102.60
33	L1	742	G	O4'-C1'-N9	6.22	113.17	108.20
33	L1	1373	A	C3'-C2'-C1'	-6.22	96.53	101.50
33	L1	2124	G	O4'-C1'-N9	6.22	113.18	108.20
33	L1	2356	A	O4'-C1'-N9	-6.22	103.22	108.20
33	L1	2529	C	C1'-O4'-C4'	-6.22	104.92	109.90
35	L2	151	C	C3'-C2'-C1'	6.22	106.47	101.50
78	Le	61	ASP	CB-CG-OD2	-6.22	112.70	118.30
84	LI	108	ALA	CA-C-N	6.22	130.88	117.20
6	SF	70	ASN	N-CA-CB	-6.22	99.41	110.60
33	L1	208	G	P-O5'-C5'	6.22	130.85	120.90
33	L1	2159	U	C3'-C2'-C1'	6.22	106.47	101.50
40	LH	76	PHE	O-C-N	-6.22	112.75	122.70
4	SD	133	GLN	CA-CB-CG	6.22	127.08	113.40
32	S1	591	C	C1'-O4'-C4'	-6.22	104.93	109.90
32	S1	1287	U	O4'-C1'-N1	6.22	113.17	108.20
33	L1	212	G	O4'-C1'-C2'	-6.22	99.58	105.80
33	L1	2753	C	C1'-O4'-C4'	-6.22	104.93	109.90
33	L1	3045	A	C3'-C2'-C1'	6.22	106.47	101.50
35	L2	8	C	O3'-P-O5'	6.22	115.81	104.00
33	L1	1038	C	O4'-C1'-C2'	-6.21	99.59	105.80
33	L1	2219	A	C3'-C2'-C1'	6.21	106.47	101.50
35	L2	27	C	O4'-C1'-C2'	-6.21	99.58	105.80
47	LU	57	TYR	CB-CG-CD2	-6.21	117.27	121.00
32	S1	167	A	O4'-C1'-N9	6.21	113.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	665	G	C3'-C2'-C1'	6.21	106.47	101.50
33	L1	1959	U	C1'-O4'-C4'	6.21	114.87	109.90
67	LS	120	PHE	O-C-N	-6.21	109.30	121.10
78	Le	205	TRP	N-CA-CB	6.21	121.78	110.60
1	Sa	126	GLY	C-N-CA	-6.21	109.26	122.30
17	SV	28	TRP	N-CA-CB	6.21	121.78	110.60
32	S1	31	C	O4'-C1'-N1	6.21	113.17	108.20
33	L1	1542	A	N9-C1'-C2'	6.21	122.08	114.00
33	L1	1693	A	O4'-C1'-C2'	-6.21	99.59	105.80
33	L1	2632	U	O4'-C1'-C2'	-6.21	99.59	105.80
33	L1	2858	G	C1'-O4'-C4'	-6.21	104.93	109.90
33	L1	3304	U	C3'-C2'-C1'	-6.21	96.53	101.50
33	L1	3337	G	C5'-C4'-O4'	-6.21	101.65	109.10
33	L1	1343	C	C4'-C3'-C2'	6.21	108.81	102.60
68	LW	107	ALA	N-CA-CB	6.21	118.79	110.10
33	L1	592	U	P-O3'-C3'	-6.21	112.25	119.70
33	L1	2776	U	O4'-C1'-C2'	-6.21	99.59	105.80
33	L1	2859	C	C1'-O4'-C4'	-6.21	104.93	109.90
33	L1	3174	C	P-O3'-C3'	6.21	127.15	119.70
32	S1	1396	U	O4'-C1'-N1	6.21	113.17	108.20
32	S1	1421	U	O4'-C1'-N1	6.21	113.17	108.20
32	S1	1543	U	P-O3'-C3'	-6.21	112.25	119.70
33	L1	1865	C	O4'-C1'-C2'	-6.21	99.59	105.80
33	L1	2681	A	C3'-C2'-C1'	6.21	106.46	101.50
52	Lb	93	ARG	N-CA-CB	6.21	121.77	110.60
72	Lk	101	ARG	NE-CZ-NH2	6.21	123.40	120.30
32	S1	483	C	O3'-P-O5'	6.21	115.79	104.00
32	S1	1748	U	O4'-C1'-N1	-6.21	103.24	108.20
33	L1	2507	U	C4'-C3'-C2'	6.21	108.81	102.60
78	Le	197	PHE	CB-CG-CD1	6.21	125.14	120.80
32	S1	1294	U	O4'-C1'-N1	6.20	113.16	108.20
33	L1	164	C	P-O5'-C5'	6.20	130.83	120.90
33	L1	255	C	C3'-C2'-C1'	6.20	106.46	101.50
33	L1	562	G	C4'-C3'-C2'	-6.20	96.40	102.60
33	L1	1262	U	C5'-C4'-C3'	6.20	125.92	116.00
33	L1	1905	A	C1'-O4'-C4'	6.20	114.86	109.90
33	L1	2409	U	C5'-C4'-C3'	-6.20	106.08	116.00
33	L1	2766	U	O4'-C4'-C3'	-6.20	97.80	104.00
46	LT	9	ARG	NH1-CZ-NH2	-6.20	112.58	119.40
47	LU	126	ILE	CB-CA-C	-6.20	99.19	111.60
47	LU	140	MET	N-CA-C	-6.20	94.25	111.00
66	LN	64	ARG	C-N-CA	6.20	137.21	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SM	117	ILE	CA-C-O	6.20	133.12	120.10
33	L1	1110	C	O4'-C1'-N1	6.20	113.16	108.20
33	L1	1715	C	P-O5'-C5'	6.20	130.82	120.90
33	L1	2100	A	C3'-C2'-C1'	6.20	106.46	101.50
33	L1	2568	G	C3'-C2'-C1'	6.20	106.46	101.50
33	L1	2851	C	O4'-C1'-N1	6.20	113.16	108.20
3	SB	78	ASN	CB-CA-C	6.20	122.80	110.40
32	S1	1753	U	C3'-C2'-C1'	-6.20	96.54	101.50
33	L1	176	A	OP1-P-OP2	-6.20	110.30	119.60
33	L1	1778	C	O4'-C1'-C2'	-6.20	99.60	105.80
33	L1	3169	C	C3'-C2'-C1'	6.20	106.46	101.50
33	L1	3247	C	N1-C1'-C2'	6.20	122.06	114.00
79	Ls	35	ASN	N-CA-CB	-6.20	99.44	110.60
4	SD	136	ILE	N-CA-CB	6.20	125.06	110.80
23	SU	16	LYS	CA-CB-CG	6.20	127.03	113.40
33	L1	498	G	C4'-C3'-O3'	6.20	125.40	113.00
33	L1	2663	U	O4'-C1'-N1	6.20	113.16	108.20
33	L1	2906	U	N1-C1'-C2'	6.20	122.06	114.00
35	L2	53	G	C3'-C2'-C1'	-6.20	96.54	101.50
66	LN	21	TYR	CD1-CE1-CZ	6.20	125.38	119.80
70	Li	43	LYS	N-CA-CB	6.20	121.76	110.60
33	L1	449	G	N9-C1'-C2'	6.20	122.06	114.00
33	L1	1789	C	P-O5'-C5'	-6.20	110.99	120.90
33	L1	2945	G	O5'-P-OP2	-6.20	100.12	105.70
38	LE	116	MET	C-N-CA	6.20	137.19	121.70
80	LC	179	ALA	CB-CA-C	-6.20	100.80	110.10
33	L1	585	A	N9-C1'-C2'	6.20	122.05	114.00
33	L1	1391	A	O3'-P-O5'	-6.20	92.23	104.00
33	L1	2867	U	O4'-C1'-N1	6.20	113.16	108.20
34	L3	110	G	O4'-C4'-C3'	-6.20	97.81	104.00
73	Lp	26	ARG	NE-CZ-NH1	6.20	123.40	120.30
32	S1	826	C	P-O5'-C5'	6.19	130.81	120.90
32	S1	1136	A	O4'-C1'-N9	6.19	113.16	108.20
32	S1	109	A	P-O3'-C3'	6.19	127.13	119.70
32	S1	896	C	C3'-C2'-C1'	6.19	106.45	101.50
32	S1	936	C	OP1-P-OP2	-6.19	110.31	119.60
33	L1	1723	C	N1-C1'-C2'	6.19	122.05	114.00
35	L2	112	C	N1-C1'-C2'	6.19	122.05	114.00
73	Lp	51	ILE	C-N-CA	6.19	137.18	121.70
32	S1	1297	U	O4'-C1'-C2'	-6.19	99.61	105.80
32	S1	1615	G	O4'-C1'-C2'	-6.19	99.61	105.80
33	L1	2791	U	C4'-C3'-C2'	-6.19	96.41	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2998	A	O4'-C1'-C2'	-6.19	99.61	105.80
34	L3	100	A	P-O3'-C3'	-6.19	112.27	119.70
42	LP	13	ARG	NE-CZ-NH2	-6.19	117.20	120.30
32	S1	1664	U	P-O3'-C3'	-6.19	112.27	119.70
33	L1	1165	C	P-O3'-C3'	6.19	127.13	119.70
33	L1	2205	G	C5'-C4'-C3'	6.19	125.90	116.00
33	L1	2740	C	P-O3'-C3'	-6.19	112.27	119.70
32	S1	1092	A	P-O5'-C5'	6.19	130.80	120.90
33	L1	4	C	O4'-C1'-C2'	-6.19	99.61	105.80
33	L1	58	G	OP1-P-OP2	-6.19	110.32	119.60
33	L1	2582	G	P-O3'-C3'	6.19	127.12	119.70
33	L1	3091	U	C3'-C2'-C1'	6.19	106.45	101.50
33	L1	460	A	P-O5'-C5'	-6.19	111.00	120.90
33	L1	1954	G	O3'-P-O5'	6.19	115.75	104.00
32	S1	1512	C	O4'-C1'-C2'	-6.18	99.61	105.80
32	S1	1660	C	O4'-C4'-C3'	-6.18	97.81	104.00
33	L1	2679	A	N9-C1'-C2'	6.18	122.04	114.00
33	L1	3160	G	C5'-C4'-C3'	-6.18	106.11	116.00
33	L1	3305	U	C2'-C3'-O3'	6.18	123.60	113.70
44	LR	88	ASP	CB-CG-OD2	6.18	123.87	118.30
20	SZ	24	GLN	N-CA-CB	6.18	121.73	110.60
25	SC	162	LEU	CA-CB-CG	-6.18	101.08	115.30
33	L1	331	G	OP2-P-O3'	6.18	118.80	105.20
33	L1	426	A	N9-C1'-C2'	6.18	122.04	114.00
33	L1	437	C	C1'-O4'-C4'	6.18	114.85	109.90
33	L1	1802	A	O4'-C1'-C2'	6.18	113.16	107.60
33	L1	2774	A	O4'-C1'-C2'	-6.18	99.62	105.80
32	S1	350	G	C1'-O4'-C4'	-6.18	104.95	109.90
33	L1	1057	A	C5'-C4'-C3'	6.18	125.89	116.00
42	LP	192	TRP	CB-CG-CD2	-6.18	118.56	126.60
69	La	88	ASP	CB-CG-OD1	6.18	123.86	118.30
81	LD	113	ARG	NE-CZ-NH1	-6.18	117.21	120.30
32	S1	124	G	P-O3'-C3'	6.18	127.11	119.70
32	S1	160	A	O4'-C1'-N9	6.18	113.14	108.20
32	S1	625	A	O4'-C1'-N9	6.18	113.14	108.20
32	S1	1175	G	N9-C1'-C2'	6.18	122.03	114.00
32	S1	1732	A	O4'-C1'-N9	6.18	113.14	108.20
33	L1	398	G	OP1-P-OP2	-6.18	110.33	119.60
33	L1	564	A	O4'-C1'-N9	6.18	113.14	108.20
33	L1	1226	G	O5'-C5'-C4'	6.18	123.44	111.70
33	L1	1329	G	O4'-C1'-N9	6.18	113.14	108.20
33	L1	1785	G	P-O3'-C3'	-6.18	112.28	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1939	C	N1-C1'-C2'	6.18	122.03	114.00
33	L1	1967	C	O4'-C1'-C2'	-6.18	99.62	105.80
33	L1	2247	A	C5'-C4'-C3'	-6.18	106.11	116.00
33	L1	2396	A	O4'-C1'-N9	-6.18	103.26	108.20
35	L2	41	A	OP1-P-OP2	-6.18	110.33	119.60
32	S1	480	U	C4'-C3'-C2'	-6.18	96.42	102.60
33	L1	1150	G	O4'-C1'-C2'	6.18	113.16	107.60
33	L1	2174	C	P-O3'-C3'	6.18	127.11	119.70
36	LA	119	ILE	CA-C-N	6.18	134.40	117.10
49	LX	101	ASP	CB-CG-OD2	6.18	123.86	118.30
32	S1	670	C	N1-C1'-C2'	6.18	122.03	114.00
32	S1	1306	U	O4'-C1'-N1	6.18	113.14	108.20
33	L1	1893	G	O4'-C1'-C2'	6.18	113.16	107.60
74	LJ	122	MET	CB-CA-C	6.18	122.75	110.40
33	L1	227	C	C3'-C2'-C1'	6.17	106.44	101.50
33	L1	2213	G	O4'-C1'-N9	6.17	113.14	108.20
33	L1	2989	A	C3'-C2'-C1'	6.17	106.44	101.50
69	La	38	TYR	N-CA-CB	-6.17	99.49	110.60
12	SO	123	HIS	N-CA-CB	6.17	121.71	110.60
33	L1	926	C	P-O3'-C3'	6.17	127.11	119.70
15	SS	124	ARG	CA-CB-CG	6.17	126.98	113.40
23	SU	64	PHE	CB-CG-CD2	6.17	125.12	120.80
33	L1	2125	A	P-O3'-C3'	-6.17	112.29	119.70
33	L1	2226	C	C3'-C2'-C1'	-6.17	96.56	101.50
49	LX	146	ALA	CB-CA-C	-6.17	100.84	110.10
2	SA	199	TRP	C-N-CA	6.17	137.12	121.70
45	LQ	142	PHE	C-N-CA	6.17	137.13	121.70
80	LC	72	THR	N-CA-CB	6.17	122.02	110.30
8	SJ	54	ASP	CB-CG-OD2	6.17	123.85	118.30
32	S1	159	U	P-O5'-C5'	6.17	130.77	120.90
32	S1	854	C	C3'-C2'-C1'	6.17	106.44	101.50
33	L1	1217	G	O4'-C1'-C2'	6.17	113.15	107.60
33	L1	3088	A	OP1-P-O3'	6.17	118.77	105.20
46	LT	98	ARG	NH1-CZ-NH2	-6.17	112.61	119.40
33	L1	1827	U	C3'-C2'-C1'	-6.17	96.57	101.50
42	LP	50	ARG	NE-CZ-NH1	-6.17	117.22	120.30
33	L1	2347	A	C5'-C4'-O4'	6.17	116.50	109.10
33	L1	3234	G	P-O3'-C3'	-6.17	112.30	119.70
33	L1	68	U	P-O3'-C3'	-6.16	112.30	119.70
33	L1	1509	G	O4'-C1'-N9	6.16	113.13	108.20
33	L1	2469	C	P-O5'-C5'	-6.16	111.04	120.90
33	L1	3039	U	O5'-P-OP2	6.16	118.10	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3226	G	C3'-C2'-C1'	6.16	106.43	101.50
35	L2	38	U	O4'-C1'-N1	6.16	113.13	108.20
47	LU	105	PHE	CB-CG-CD1	6.16	125.11	120.80
80	LC	368	LYS	N-CA-C	-6.16	94.36	111.00
32	S1	8	U	P-O3'-C3'	6.16	127.09	119.70
39	LF	167	LYS	CA-CB-CG	6.16	126.95	113.40
3	SB	162	GLN	CA-C-N	6.16	134.35	117.10
32	S1	557	G	C3'-C2'-C1'	6.16	106.43	101.50
32	S1	1737	A	O4'-C1'-C2'	-6.16	99.64	105.80
33	L1	1193	A	O4'-C1'-N9	-6.16	103.27	108.20
33	L1	2591	G	O4'-C1'-N9	6.16	113.13	108.20
33	L1	2748	G	P-O3'-C3'	-6.16	112.31	119.70
33	L1	3379	C	O5'-C5'-C4'	6.16	123.40	111.70
38	LE	46	SER	N-CA-CB	6.16	119.74	110.50
32	S1	185	G	OP1-P-OP2	-6.16	110.36	119.60
33	L1	1530	C	N1-C1'-C2'	6.16	122.01	114.00
33	L1	2299	C	C5'-C4'-C3'	6.16	125.86	116.00
35	L2	51	U	C4'-C3'-C2'	-6.16	96.44	102.60
80	LC	357	GLU	C-N-CA	-6.16	106.30	121.70
32	S1	381	G	C3'-C2'-C1'	-6.16	96.57	101.50
32	S1	884	G	C4'-C3'-C2'	-6.16	96.44	102.60
33	L1	734	C	N1-C1'-C2'	6.16	122.00	114.00
33	L1	3306	A	OP1-P-OP2	-6.16	110.36	119.60
8	SJ	59	VAL	CA-CB-CG1	6.16	120.13	110.90
13	SQ	39	SER	CA-C-N	6.16	130.74	117.20
24	SX	74	ARG	C-N-CA	-6.16	106.31	121.70
33	L1	197	A	O4'-C1'-N9	6.16	113.12	108.20
33	L1	1538	A	O4'-C1'-N9	-6.16	103.28	108.20
33	L1	3082	G	OP1-P-OP2	-6.16	110.37	119.60
33	L1	226	U	O3'-P-O5'	-6.15	92.31	104.00
33	L1	444	C	N1-C1'-C2'	6.15	122.00	114.00
33	L1	1207	A	O4'-C1'-C2'	6.15	113.14	107.60
45	LQ	37	ARG	NE-CZ-NH1	6.15	123.38	120.30
83	Lm	7	LYS	C-N-CA	-6.15	106.31	121.70
1	Sa	317	TYR	CG-CD2-CE2	-6.15	116.38	121.30
33	L1	71	C	C5'-C4'-C3'	-6.15	106.16	116.00
33	L1	442	C	P-O3'-C3'	-6.15	112.32	119.70
33	L1	1710	G	P-O5'-C5'	6.15	130.74	120.90
33	L1	2940	G	O5'-P-OP2	-6.15	100.16	105.70
44	LR	21	SER	N-CA-CB	6.15	119.73	110.50
25	SC	178	ASN	N-CA-CB	6.15	121.67	110.60
32	S1	236	U	O4'-C1'-N1	6.15	113.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	563	C	N1-C1'-C2'	6.15	122.00	114.00
33	L1	1279	C	O4'-C1'-C2'	-6.15	99.65	105.80
33	L1	2173	G	N9-C1'-C2'	6.15	122.00	114.00
64	LG	55	ASP	N-CA-CB	6.15	121.67	110.60
82	LK	136	PRO	N-CA-CB	6.15	110.68	103.30
33	L1	860	G	O4'-C1'-C2'	6.15	113.13	107.60
33	L1	1167	G	N9-C1'-C2'	-6.15	105.24	112.00
68	LW	36	MET	N-CA-C	-6.15	94.40	111.00
9	SK	91	ALA	C-N-CA	6.15	137.07	121.70
33	L1	460	A	C5'-C4'-C3'	6.15	125.83	116.00
33	L1	1201	C	C1'-O4'-C4'	6.15	114.82	109.90
33	L1	1575	G	O4'-C1'-N9	-6.15	103.28	108.20
33	L1	1991	U	O4'-C1'-N1	6.15	113.12	108.20
33	L1	3274	G	C3'-C2'-C1'	6.15	106.42	101.50
1	Sa	376	HIS	O-C-N	6.15	132.53	122.70
32	S1	892	A	P-O5'-C5'	-6.15	111.07	120.90
33	L1	1289	G	C4'-C3'-O3'	6.15	125.29	113.00
33	L1	1483	G	C1'-O4'-C4'	-6.15	104.98	109.90
33	L1	2358	C	N1-C1'-C2'	6.15	121.99	114.00
33	L1	2400	A	P-O3'-C3'	6.15	127.08	119.70
32	S1	520	G	P-O5'-C5'	-6.14	111.07	120.90
32	S1	1369	C	N1-C1'-C2'	6.14	121.99	114.00
32	S1	1664	U	P-O5'-C5'	6.14	130.73	120.90
33	L1	2206	U	O4'-C1'-C2'	6.14	113.13	107.60
33	L1	3152	C	C1'-O4'-C4'	6.14	114.82	109.90
40	LH	234	MET	CB-CA-C	6.14	122.69	110.40
74	LJ	115	ARG	NH1-CZ-NH2	-6.14	112.64	119.40
31	S2	15	A	C3'-C2'-C1'	-6.14	96.59	101.50
32	S1	788	G	C4'-C3'-O3'	6.14	125.28	113.00
33	L1	1226	G	N9-C1'-C2'	-6.14	105.24	112.00
33	L1	1233	G	O5'-P-OP2	6.14	118.07	110.70
33	L1	1567	G	O4'-C1'-C2'	6.14	113.13	107.60
33	L1	3149	C	P-O5'-C5'	6.14	130.73	120.90
64	LG	183	VAL	N-CA-C	6.14	127.58	111.00
73	Lp	44	GLN	N-CA-CB	-6.14	99.54	110.60
32	S1	991	G	C1'-O4'-C4'	-6.14	104.99	109.90
33	L1	218	G	P-O5'-C5'	-6.14	111.07	120.90
33	L1	358	G	N9-C1'-C2'	6.14	121.98	114.00
33	L1	590	C	C1'-O4'-C4'	-6.14	104.99	109.90
33	L1	1056	U	O4'-C1'-N1	-6.14	103.29	108.20
33	L1	2390	G	C4'-C3'-C2'	6.14	108.74	102.60
33	L1	3055	U	C1'-O4'-C4'	6.14	114.81	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3231	G	O4'-C1'-C2'	6.14	113.13	107.60
67	LS	83	TYR	CB-CG-CD1	-6.14	117.32	121.00
32	S1	442	A	C5'-C4'-O4'	6.14	116.47	109.10
32	S1	948	C	O4'-C1'-N1	6.14	113.11	108.20
32	S1	1285	G	C4'-C3'-C2'	-6.14	96.46	102.60
32	S1	1287	U	C3'-C2'-C1'	6.14	106.41	101.50
33	L1	212	G	O4'-C4'-C3'	-6.14	97.86	104.00
33	L1	592	U	N1-C1'-C2'	6.14	121.98	114.00
33	L1	858	U	C4'-C3'-C2'	-6.14	96.46	102.60
33	L1	1876	U	O4'-C1'-N1	6.14	113.11	108.20
32	S1	409	C	N1-C1'-C2'	6.14	121.98	114.00
32	S1	481	A	C5'-C4'-C3'	6.14	125.82	116.00
37	LB	93	ARG	CB-CA-C	6.14	122.68	110.40
48	LV	47	TYR	O-C-N	-6.14	112.88	122.70
31	S2	24	A	O4'-C1'-C2'	6.14	113.12	107.60
32	S1	1151	G	C1'-O4'-C4'	-6.14	104.99	109.90
33	L1	685	G	C3'-C2'-C1'	6.14	106.41	101.50
33	L1	918	A	O5'-P-OP1	6.14	118.06	110.70
33	L1	1251	U	N1-C1'-C2'	-6.14	105.25	112.00
33	L1	3210	G	P-O3'-C3'	6.14	127.06	119.70
73	Lp	14	ASN	N-CA-CB	6.14	121.65	110.60
82	LK	134	LEU	CD1-CG-CD2	6.14	128.91	110.50
12	SO	123	HIS	CB-CA-C	6.13	122.67	110.40
33	L1	2902	A	C4'-C3'-C2'	-6.13	96.47	102.60
1	Sa	7	LEU	CB-CG-CD2	-6.13	100.57	111.00
32	S1	512	U	N1-C1'-C2'	-6.13	105.25	112.00
33	L1	316	A	P-O5'-C5'	-6.13	111.09	120.90
33	L1	650	A	P-O5'-C5'	-6.13	111.09	120.90
33	L1	1113	C	C1'-O4'-C4'	-6.13	104.99	109.90
33	L1	1233	G	O4'-C4'-C3'	-6.13	97.87	104.00
33	L1	3221	A	P-O3'-C3'	6.13	127.06	119.70
35	L2	130	A	N9-C1'-C2'	-6.13	105.25	112.00
37	LB	89	TYR	CA-CB-CG	-6.13	101.75	113.40
52	Lb	108	SER	N-CA-CB	6.13	119.70	110.50
32	S1	1802	G	C1'-O4'-C4'	-6.13	104.99	109.90
33	L1	2358	C	C1'-O4'-C4'	-6.13	105.00	109.90
35	L2	44	A	C1'-O4'-C4'	-6.13	105.00	109.90
35	L2	102	U	C5'-C4'-C3'	-6.13	106.19	116.00
40	LH	60	ARG	NE-CZ-NH2	6.13	123.37	120.30
31	S2	66	C	C3'-C2'-C1'	6.13	106.40	101.50
33	L1	308	U	C4'-C3'-C2'	-6.13	96.47	102.60
33	L1	1563	G	O3'-P-O5'	-6.13	92.35	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	SU	11	THR	N-CA-C	6.13	127.55	111.00
33	L1	1317	G	O4'-C1'-C2'	-6.13	99.67	105.80
33	L1	1710	G	O3'-P-O5'	-6.13	92.36	104.00
33	L1	2708	A	O4'-C1'-C2'	-6.13	99.67	105.80
80	LC	112	GLU	C-N-CA	6.13	137.02	121.70
11	SM	88	LYS	C-N-CA	6.13	137.01	121.70
27	SH	81	VAL	C-N-CA	6.13	135.17	122.30
32	S1	771	G	O3'-P-O5'	-6.13	92.36	104.00
33	L1	847	G	O4'-C1'-N9	6.13	113.10	108.20
33	L1	1104	C	C5'-C4'-O4'	6.13	116.45	109.10
33	L1	1495	G	OP1-P-O3'	6.13	118.68	105.20
32	S1	442	A	C4'-C3'-C2'	6.12	108.72	102.60
33	L1	1233	G	O4'-C1'-N9	6.12	113.10	108.20
33	L1	1642	G	C3'-C2'-C1'	-6.12	96.60	101.50
33	L1	2221	U	C4'-C3'-C2'	-6.12	96.47	102.60
59	Lo	36	ARG	N-CA-CB	6.12	121.63	110.60
32	S1	374	A	O4'-C1'-N9	6.12	113.10	108.20
33	L1	83	U	O5'-P-OP2	-6.12	100.19	105.70
33	L1	1085	G	P-O3'-C3'	6.12	127.05	119.70
33	L1	2167	G	C1'-O4'-C4'	6.12	114.80	109.90
33	L1	2633	C	N1-C1'-C2'	6.12	121.96	114.00
33	L1	2648	G	O4'-C1'-N9	6.12	113.10	108.20
33	L1	3034	A	O4'-C1'-C2'	6.12	113.11	107.60
71	Lj	13	VAL	N-CA-CB	6.12	124.97	111.50
71	Lj	24	LYS	C-N-CA	-6.12	106.39	121.70
28	SN	30	LEU	CA-C-N	-6.12	103.73	117.20
33	L1	179	G	C4'-C3'-C2'	-6.12	96.48	102.60
33	L1	415	G	N9-C1'-C2'	-6.12	105.27	112.00
46	LT	113	LYS	N-CA-CB	6.12	121.62	110.60
33	L1	338	C	OP1-P-OP2	-6.12	110.42	119.60
33	L1	1730	U	P-O3'-C3'	-6.12	112.36	119.70
33	L1	2131	U	C5'-C4'-C3'	6.12	125.79	116.00
78	Le	167	ASN	C-N-CA	6.12	137.00	121.70
32	S1	147	C	O4'-C1'-N1	-6.12	103.31	108.20
32	S1	493	C	C5'-C4'-O4'	6.12	116.44	109.10
32	S1	724	U	P-O3'-C3'	6.12	127.04	119.70
32	S1	1771	U	C5'-C4'-O4'	6.12	116.44	109.10
33	L1	502	G	C1'-O4'-C4'	6.12	114.79	109.90
33	L1	2782	G	O4'-C4'-C3'	-6.12	97.88	104.00
34	L3	39	C	C3'-C2'-C1'	6.12	106.39	101.50
81	LD	390	ASP	C-N-CA	6.12	137.00	121.70
8	SJ	92	ARG	NE-CZ-NH2	-6.12	117.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	SO	106	ARG	NE-CZ-NH1	6.12	123.36	120.30
32	S1	1760	A	C1'-O4'-C4'	6.12	114.79	109.90
69	La	22	LYS	CD-CE-NZ	6.12	125.77	111.70
32	S1	1179	C	O4'-C1'-C2'	-6.12	99.68	105.80
32	S1	1297	U	C1'-O4'-C4'	6.12	114.79	109.90
32	S1	1308	G	N9-C1'-C2'	-6.12	105.27	112.00
32	S1	1707	G	C1'-O4'-C4'	6.12	114.79	109.90
32	S1	1750	A	C1'-O4'-C4'	6.12	114.79	109.90
33	L1	84	A	O3'-P-O5'	-6.12	92.38	104.00
33	L1	979	C	C5'-C4'-O4'	6.12	116.44	109.10
33	L1	2149	G	O4'-C1'-C2'	6.12	113.10	107.60
33	L1	2638	A	O3'-P-O5'	6.12	115.62	104.00
3	SB	148	LYS	C-N-CA	6.11	136.99	121.70
4	SD	242	LYS	N-CA-CB	6.11	121.61	110.60
15	SS	18	VAL	CA-CB-CG2	-6.11	101.73	110.90
25	SC	3	ARG	N-CA-CB	6.11	121.61	110.60
32	S1	690	G	O4'-C1'-C2'	-6.11	99.69	105.80
32	S1	1656	C	N1-C1'-C2'	6.11	121.95	114.00
33	L1	1297	U	C4'-C3'-C2'	-6.11	96.49	102.60
33	L1	1879	A	OP1-P-OP2	-6.11	110.43	119.60
33	L1	1989	G	P-O3'-C3'	-6.11	112.36	119.70
34	L3	12	U	OP1-P-OP2	-6.11	110.43	119.60
35	L2	15	C	P-O3'-C3'	-6.11	112.36	119.70
55	Lg	13	ASP	C-N-CA	6.11	136.99	121.70
68	LW	36	MET	CG-SD-CE	-6.11	90.42	100.20
33	L1	548	G	P-O3'-C3'	6.11	127.03	119.70
33	L1	2380	G	C5'-C4'-C3'	-6.11	106.22	116.00
10	SL	122	VAL	N-CA-C	-6.11	94.50	111.00
33	L1	2516	U	N1-C1'-C2'	6.11	121.94	114.00
67	LS	43	PHE	CB-CG-CD2	-6.11	116.52	120.80
70	Li	42	PRO	CA-C-N	6.11	130.64	117.20
82	LK	18	HIS	CB-CA-C	6.11	122.62	110.40
32	S1	854	C	N1-C1'-C2'	6.11	121.94	114.00
33	L1	2699	A	N9-C1'-C2'	6.11	121.94	114.00
35	L2	116	U	C1'-O4'-C4'	6.11	114.79	109.90
23	SU	41	SER	CB-CA-C	-6.11	98.50	110.10
33	L1	93	G	N9-C1'-C2'	6.11	121.94	114.00
2	SA	215	LYS	CA-C-N	-6.11	103.77	117.20
32	S1	397	C	P-O3'-C3'	6.11	127.03	119.70
32	S1	1672	U	O3'-P-O5'	-6.11	92.40	104.00
33	L1	525	A	O4'-C1'-N9	6.11	113.08	108.20
33	L1	1391	A	C5'-C4'-O4'	6.11	116.43	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2691	U	C5'-C4'-O4'	6.11	116.43	109.10
35	L2	139	A	P-O3'-C3'	6.11	127.03	119.70
38	LE	63	ARG	NE-CZ-NH2	-6.11	117.25	120.30
38	LE	108	ILE	CB-CA-C	-6.11	99.39	111.60
51	LY	45	ARG	N-CA-CB	6.11	121.59	110.60
57	Ll	25	ARG	NE-CZ-NH2	-6.11	117.25	120.30
64	LG	142	PHE	CB-CG-CD1	6.11	125.07	120.80
23	SU	34	HIS	CA-CB-CG	6.10	123.97	113.60
28	SN	21	CYS	O-C-N	6.10	132.46	122.70
32	S1	453	C	O4'-C1'-N1	6.10	113.08	108.20
33	L1	565	C	O4'-C1'-N1	6.10	113.08	108.20
33	L1	578	C	C5'-C4'-O4'	-6.10	101.78	109.10
33	L1	1126	U	O4'-C1'-C2'	-6.10	99.70	105.80
33	L1	1747	A	C5'-C4'-C3'	6.10	125.77	116.00
39	LF	187	THR	CA-CB-CG2	6.10	120.94	112.40
2	SA	223	ALA	N-CA-CB	6.10	118.64	110.10
33	L1	2695	A	C1'-O4'-C4'	-6.10	105.02	109.90
35	L2	45	A	O4'-C4'-C3'	-6.10	97.90	104.00
45	LQ	208	MET	CG-SD-CE	-6.10	90.44	100.20
80	LC	131	THR	CA-CB-CG2	6.10	120.94	112.40
32	S1	290	C	N1-C1'-C2'	6.10	121.93	114.00
32	S1	590	G	N9-C1'-C2'	-6.10	105.29	112.00
32	S1	1062	C	N1-C1'-C2'	6.10	121.93	114.00
33	L1	167	C	C3'-C2'-C1'	6.10	106.38	101.50
33	L1	1711	G	P-O5'-C5'	6.10	130.66	120.90
33	L1	1826	G	C3'-C2'-C1'	-6.10	96.62	101.50
33	L1	2418	A	P-O5'-C5'	-6.10	111.14	120.90
33	L1	2438	A	N9-C1'-C2'	6.10	121.93	114.00
66	LN	31	VAL	CB-CA-C	6.10	122.99	111.40
32	S1	1204	G	N9-C1'-C2'	-6.10	105.29	112.00
33	L1	1089	G	O4'-C1'-C2'	-6.10	99.70	105.80
33	L1	1248	A	O4'-C4'-C3'	6.10	110.98	106.10
36	LA	25	ARG	CB-CA-C	-6.10	98.21	110.40
56	Lh	26	TYR	CG-CD1-CE1	-6.10	116.42	121.30
31	S2	67	G	C1'-O4'-C4'	-6.10	105.02	109.90
33	L1	609	C	C5'-C4'-O4'	6.10	116.42	109.10
33	L1	3222	G	C1'-O4'-C4'	-6.10	105.02	109.90
32	S1	1440	U	O4'-C1'-N1	6.09	113.08	108.20
33	L1	708	C	O4'-C1'-C2'	-6.09	99.70	105.80
33	L1	784	G	O3'-P-O5'	-6.09	92.42	104.00
33	L1	1034	U	O4'-C1'-N1	6.09	113.08	108.20
35	L2	26	U	C5'-C4'-C3'	-6.09	106.25	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	SB	131	ALA	N-CA-C	6.09	127.45	111.00
33	L1	979	C	C2'-C3'-O3'	6.09	123.45	113.70
33	L1	1318	C	P-O3'-C3'	-6.09	112.39	119.70
33	L1	1923	G	C5'-C4'-O4'	6.09	116.41	109.10
33	L1	3061	C	O3'-P-O5'	6.09	115.58	104.00
34	L3	14	C	P-O5'-C5'	-6.09	111.15	120.90
35	L2	57	A	O4'-C4'-C3'	-6.09	97.91	104.00
3	SB	190	LEU	CA-CB-CG	6.09	129.31	115.30
7	SI	33	GLY	N-CA-C	-6.09	97.87	113.10
9	SK	112	GLN	CB-CA-C	-6.09	98.22	110.40
13	SQ	38	VAL	N-CA-C	-6.09	94.55	111.00
32	S1	183	C	O4'-C1'-N1	6.09	113.07	108.20
32	S1	1375	C	C3'-C2'-C1'	6.09	106.37	101.50
33	L1	128	C	N1-C1'-C2'	6.09	121.92	114.00
33	L1	396	G	O4'-C1'-C2'	6.09	113.08	107.60
33	L1	472	U	C5'-C4'-C3'	6.09	125.75	116.00
33	L1	1002	A	O4'-C1'-N9	-6.09	103.33	108.20
33	L1	1290	A	O4'-C1'-C2'	-6.09	99.71	105.80
33	L1	1742	G	N9-C1'-C2'	-6.09	105.30	112.00
33	L1	1852	C	C4'-C3'-C2'	6.09	108.69	102.60
33	L1	2708	A	C5'-C4'-C3'	-6.09	106.25	116.00
33	L1	2730	A	P-O3'-C3'	-6.09	112.39	119.70
33	L1	2796	G	N9-C1'-C2'	-6.09	105.30	112.00
51	LY	119	ASP	CB-CG-OD1	6.09	123.78	118.30
31	S2	25	U	C3'-C2'-C1'	-6.09	96.63	101.50
32	S1	140	C	O4'-C1'-C2'	-6.09	99.71	105.80
32	S1	639	G	O4'-C1'-N9	6.09	113.07	108.20
32	S1	1090	G	N9-C1'-C2'	-6.09	105.30	112.00
32	S1	1507	G	C2'-C3'-O3'	6.09	123.44	113.70
33	L1	371	A	C1'-O4'-C4'	-6.09	105.03	109.90
33	L1	2031	G	C1'-O4'-C4'	-6.09	105.03	109.90
33	L1	2185	U	O4'-C1'-N1	6.09	113.07	108.20
4	SD	145	ARG	N-CA-CB	6.09	121.56	110.60
81	LD	144	ARG	NE-CZ-NH1	6.09	123.34	120.30
31	S2	49	G	C4'-C3'-C2'	-6.09	96.51	102.60
33	L1	630	C	C5'-C4'-C3'	6.09	125.74	116.00
33	L1	1567	G	P-O3'-C3'	6.09	127.00	119.70
33	L1	2174	C	P-O5'-C5'	-6.09	111.16	120.90
33	L1	3232	C	P-O5'-C5'	6.09	130.64	120.90
42	LP	77	LYS	C-N-CA	6.09	135.08	122.30
78	Le	109	ARG	NH1-CZ-NH2	-6.09	112.71	119.40
1	Sa	124	ALA	CB-CA-C	-6.08	100.97	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	691	U	C2'-C3'-O3'	6.08	123.44	113.70
33	L1	1440	C	C1'-O4'-C4'	-6.08	105.03	109.90
46	LT	72	LYS	N-CA-CB	6.08	121.55	110.60
33	L1	93	G	C1'-O4'-C4'	-6.08	105.03	109.90
33	L1	1535	C	O4'-C1'-N1	6.08	113.07	108.20
33	L1	2784	U	N1-C1'-C2'	6.08	121.91	114.00
33	L1	3215	U	C4'-C3'-C2'	-6.08	96.52	102.60
4	SD	145	ARG	CB-CA-C	-6.08	98.24	110.40
33	L1	1143	G	O4'-C1'-N9	6.08	113.07	108.20
33	L1	2577	G	C3'-C2'-C1'	-6.08	96.63	101.50
33	L1	3231	G	N9-C1'-C2'	6.08	121.91	114.00
35	L2	54	C	O4'-C1'-C2'	-6.08	99.72	105.80
49	LX	64	ARG	NE-CZ-NH1	6.08	123.34	120.30
60	Lr	89	LYS	N-CA-C	6.08	127.42	111.00
32	S1	1686	C	P-O3'-C3'	6.08	127.00	119.70
33	L1	1606	C	C1'-O4'-C4'	-6.08	105.04	109.90
33	L1	1955	G	O3'-P-O5'	6.08	115.55	104.00
32	S1	127	G	C1'-O4'-C4'	6.08	114.76	109.90
32	S1	995	C	O4'-C1'-C2'	-6.08	99.72	105.80
32	S1	1397	A	O4'-C1'-N9	-6.08	103.34	108.20
33	L1	133	G	O4'-C1'-N9	6.08	113.06	108.20
33	L1	439	A	C5'-C4'-C3'	-6.08	106.27	116.00
33	L1	596	C	C1'-O4'-C4'	-6.08	105.04	109.90
33	L1	843	C	O5'-C5'-C4'	6.08	123.25	111.70
33	L1	1180	C	C5'-C4'-C3'	-6.08	106.27	116.00
33	L1	1608	C	N1-C1'-C2'	6.08	121.90	114.00
33	L1	2759	C	C4'-C3'-C2'	-6.08	96.52	102.60
33	L1	2765	A	C5'-C4'-O4'	-6.08	101.81	109.10
33	L1	3163	G	C3'-C2'-C1'	6.08	106.36	101.50
40	LH	89	PHE	CB-CG-CD1	-6.08	116.54	120.80
2	SA	41	TYR	O-C-N	-6.08	112.98	122.70
32	S1	331	U	O4'-C1'-N1	6.08	113.06	108.20
32	S1	483	C	C5'-C4'-C3'	6.08	125.72	116.00
32	S1	1131	G	O4'-C1'-N9	6.08	113.06	108.20
33	L1	336	A	P-O3'-C3'	6.08	126.99	119.70
44	LR	159	PRO	C-N-CA	6.08	136.89	121.70
76	Lw	35	ASP	N-CA-C	6.08	127.41	111.00
77	Lc	111	ARG	NE-CZ-NH2	6.08	123.34	120.30
29	ST	59	ARG	CG-CD-NE	-6.08	99.04	111.80
33	L1	86	U	O4'-C1'-N1	6.08	113.06	108.20
33	L1	745	G	N9-C1'-C2'	-6.08	105.32	112.00
33	L1	3099	G	O4'-C1'-C2'	-6.08	99.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	LG	29	LYS	CG-CD-CE	6.08	130.13	111.90
32	S1	1586	U	O4'-C1'-N1	6.07	113.06	108.20
33	L1	1105	G	C3'-C2'-C1'	6.07	106.36	101.50
33	L1	1373	A	C1'-O4'-C4'	-6.07	105.04	109.90
33	L1	1984	C	O4'-C1'-N1	6.07	113.06	108.20
33	L1	2318	U	C3'-C2'-C1'	-6.07	96.64	101.50
33	L1	2374	G	C1'-O4'-C4'	-6.07	105.04	109.90
35	L2	115	G	O4'-C1'-N9	6.07	113.06	108.20
47	LU	83	ARG	NE-CZ-NH2	6.07	123.34	120.30
78	Le	13	LYS	O-C-N	-6.07	112.98	122.70
79	Ls	234	TYR	C-N-CA	6.07	147.51	122.00
33	L1	1325	G	O4'-C1'-C2'	6.07	113.06	107.60
33	L1	1874	A	C5'-C4'-O4'	6.07	116.39	109.10
33	L1	2105	G	OP2-P-O3'	6.07	118.56	105.20
33	L1	2861	U	O3'-P-O5'	-6.07	92.46	104.00
33	L1	1382	C	C4'-C3'-C2'	6.07	108.67	102.60
33	L1	2945	G	P-O3'-C3'	6.07	126.98	119.70
33	L1	3050	A	O4'-C1'-C2'	-6.07	99.73	105.80
33	L1	225	G	O4'-C1'-N9	6.07	113.06	108.20
33	L1	2259	U	O5'-P-OP2	-6.07	100.24	105.70
32	S1	1154	G	O4'-C1'-N9	6.07	113.05	108.20
32	S1	1205	G	O4'-C1'-N9	6.07	113.05	108.20
32	S1	1665	U	C5'-C4'-O4'	-6.07	101.82	109.10
71	Lj	102	VAL	CB-CA-C	6.07	122.93	111.40
3	SB	34	TYR	CG-CD1-CE1	6.07	126.15	121.30
33	L1	22	G	O4'-C1'-N9	6.07	113.05	108.20
33	L1	531	G	C1'-O4'-C4'	-6.07	105.05	109.90
33	L1	811	A	O4'-C4'-C3'	-6.07	97.94	104.00
33	L1	1346	C	O4'-C1'-N1	6.07	113.05	108.20
33	L1	1790	A	C1'-O4'-C4'	-6.07	105.05	109.90
33	L1	1927	A	O4'-C1'-N9	-6.07	103.35	108.20
33	L1	2631	A	P-O3'-C3'	-6.07	112.42	119.70
33	L1	1938	U	O4'-C1'-N1	6.06	113.05	108.20
33	L1	2617	G	C1'-O4'-C4'	-6.06	105.05	109.90
33	L1	3167	G	O4'-C1'-C2'	-6.06	99.74	105.80
29	ST	5	GLU	CB-CA-C	-6.06	98.27	110.40
32	S1	545	A	P-O5'-C5'	6.06	130.60	120.90
32	S1	859	U	N1-C1'-C2'	-6.06	105.33	112.00
32	S1	1123	G	C5'-C4'-O4'	6.06	116.38	109.10
33	L1	339	G	C2'-C3'-O3'	6.06	123.40	113.70
33	L1	564	A	C5'-C4'-C3'	6.06	125.70	116.00
33	L1	722	C	C4'-C3'-O3'	6.06	125.12	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1272	G	C1'-O4'-C4'	-6.06	105.05	109.90
33	L1	1472	C	P-O5'-C5'	6.06	130.60	120.90
33	L1	2653	U	O4'-C1'-C2'	6.06	113.06	107.60
45	LQ	115	GLY	C-N-CA	6.06	136.86	121.70
13	SQ	140	ARG	CD-NE-CZ	6.06	132.09	123.60
32	S1	144	U	N1-C1'-C2'	6.06	121.88	114.00
15	SS	84	GLY	N-CA-C	-6.06	97.95	113.10
32	S1	397	C	C3'-C2'-C1'	6.06	106.35	101.50
32	S1	1354	C	C3'-C2'-C1'	6.06	106.35	101.50
33	L1	2333	U	C5'-C4'-C3'	6.06	125.70	116.00
33	L1	3190	U	P-O5'-C5'	6.06	130.59	120.90
10	SL	8	GLY	N-CA-C	6.06	128.24	113.10
32	S1	1191	U	N1-C1'-C2'	-6.06	105.34	112.00
32	S1	1437	C	C1'-O4'-C4'	6.06	114.75	109.90
33	L1	392	C	P-O5'-C5'	6.06	130.59	120.90
33	L1	490	G	N9-C1'-C2'	6.06	121.88	114.00
33	L1	653	A	O4'-C1'-N9	6.06	113.05	108.20
33	L1	1080	C	P-O3'-C3'	6.06	126.97	119.70
33	L1	1474	U	C1'-O4'-C4'	-6.06	105.05	109.90
33	L1	1615	G	O4'-C1'-C2'	6.06	113.05	107.60
33	L1	1680	A	C1'-O4'-C4'	6.06	114.75	109.90
33	L1	2702	G	C4'-C3'-C2'	-6.06	96.54	102.60
42	LP	73	ARG	NE-CZ-NH2	6.06	123.33	120.30
79	Ls	230	LEU	CB-CG-CD2	6.06	121.30	111.00
81	LD	318	GLU	CG-CD-OE2	-6.06	106.18	118.30
32	S1	1417	A	C1'-O4'-C4'	6.06	114.74	109.90
33	L1	1695	C	C5'-C4'-C3'	6.06	125.69	116.00
33	L1	2221	U	P-O5'-C5'	6.06	130.59	120.90
33	L1	2700	A	C4'-C3'-C2'	-6.06	96.54	102.60
33	L1	3158	C	C3'-C2'-C1'	6.06	106.34	101.50
78	Le	111	ARG	NE-CZ-NH1	-6.06	117.27	120.30
29	ST	9	VAL	C-N-CA	6.05	136.84	121.70
32	S1	1091	A	O3'-P-O5'	-6.05	92.50	104.00
32	S1	1297	U	O4'-C1'-N1	6.05	113.04	108.20
33	L1	214	G	P-O3'-C3'	6.05	126.97	119.70
33	L1	1167	G	O4'-C1'-N9	6.05	113.04	108.20
33	L1	1180	C	N1-C1'-C2'	6.05	121.87	114.00
33	L1	1206	A	P-O5'-C5'	6.05	130.59	120.90
33	L1	1957	G	C3'-C2'-C1'	-6.05	96.66	101.50
33	L1	2092	C	O4'-C4'-C3'	-6.05	97.94	104.00
34	L3	45	U	C3'-C2'-C1'	6.05	106.34	101.50
34	L3	119	C	C3'-C2'-C1'	6.05	106.34	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	Lg	13	ASP	O-C-N	6.05	132.39	122.70
67	LS	151	PHE	CB-CA-C	6.05	122.51	110.40
33	L1	2439	A	O4'-C1'-N9	6.05	113.04	108.20
33	L1	2641	A	P-O3'-C3'	-6.05	112.44	119.70
64	LG	18	HIS	CA-CB-CG	6.05	123.89	113.60
72	Lk	96	VAL	N-CA-CB	6.05	124.82	111.50
78	Le	92	ARG	NE-CZ-NH2	-6.05	117.27	120.30
32	S1	263	C	O3'-P-O5'	6.05	115.50	104.00
32	S1	1040	G	C1'-O4'-C4'	6.05	114.74	109.90
32	S1	1507	G	OP1-P-OP2	-6.05	110.52	119.60
33	L1	1668	U	C5'-C4'-O4'	6.05	116.36	109.10
33	L1	1709	U	O4'-C1'-N1	6.05	113.04	108.20
30	S3	18	C	P-O5'-C5'	6.05	130.58	120.90
32	S1	603	A	O4'-C1'-C2'	6.05	113.05	107.60
32	S1	1586	U	O3'-P-O5'	6.05	115.49	104.00
33	L1	121	A	OP1-P-O3'	6.05	118.51	105.20
33	L1	743	C	N1-C1'-C2'	6.05	121.86	114.00
33	L1	2148	U	O4'-C1'-N1	6.05	113.04	108.20
33	L1	2362	A	C4'-C3'-C2'	-6.05	96.55	102.60
33	L1	2671	A	N9-C1'-C2'	-6.05	105.35	112.00
33	L1	3137	G	C4'-C3'-C2'	-6.05	96.55	102.60
32	S1	890	G	O4'-C1'-N9	6.05	113.04	108.20
36	LA	25	ARG	NE-CZ-NH2	-6.05	117.28	120.30
33	L1	2933	C	O4'-C1'-C2'	-6.05	99.75	105.80
68	LW	44	PHE	CB-CG-CD2	-6.05	116.57	120.80
33	L1	1548	U	O4'-C1'-N1	6.04	113.04	108.20
33	L1	2561	A	C3'-C2'-C1'	6.04	106.34	101.50
72	Lk	62	GLU	CB-CG-CD	6.04	130.52	114.20
32	S1	51	A	C3'-C2'-C1'	6.04	106.33	101.50
32	S1	1064	U	O3'-P-O5'	-6.04	92.52	104.00
32	S1	1304	A	P-O3'-C3'	6.04	126.95	119.70
32	S1	1666	G	C1'-O4'-C4'	-6.04	105.07	109.90
33	L1	1595	G	O4'-C1'-N9	6.04	113.03	108.20
33	L1	2686	U	N1-C1'-C2'	6.04	121.86	114.00
33	L1	2864	U	C4'-C3'-C2'	-6.04	96.56	102.60
32	S1	993	C	C4'-C3'-C2'	-6.04	96.56	102.60
32	S1	1283	C	O4'-C1'-C2'	-6.04	99.76	105.80
33	L1	176	A	C2'-C3'-O3'	6.04	123.37	113.70
33	L1	3330	U	C4'-C3'-C2'	-6.04	96.56	102.60
35	L2	106	U	N1-C1'-C2'	6.04	121.85	114.00
43	LO	25	HIS	N-CA-C	-6.04	94.69	111.00
47	LU	65	TRP	N-CA-CB	-6.04	99.72	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	SB	112	GLY	C-N-CA	6.04	136.80	121.70
33	L1	15	C	P-O3'-C3'	-6.04	112.45	119.70
33	L1	1080	C	O4'-C4'-C3'	-6.04	97.96	104.00
33	L1	3008	U	O4'-C1'-N1	6.04	113.03	108.20
3	SB	94	ARG	N-CA-CB	-6.04	99.73	110.60
32	S1	96	G	O4'-C1'-N9	6.04	113.03	108.20
32	S1	931	A	C5'-C4'-C3'	-6.04	106.34	116.00
33	L1	164	C	O5'-C5'-C4'	6.04	123.17	111.70
33	L1	227	C	OP2-P-O3'	6.04	118.48	105.20
33	L1	2465	G	O5'-C5'-C4'	6.04	123.17	111.70
33	L1	2703	G	C4'-C3'-C2'	-6.04	96.56	102.60
33	L1	3177	A	C3'-C2'-C1'	-6.04	96.67	101.50
68	LW	89	THR	CA-CB-CG2	-6.04	103.95	112.40
78	Le	67	LEU	CA-C-N	-6.04	103.91	117.20
82	LK	106	ARG	NE-CZ-NH1	6.04	123.32	120.30
4	SD	107	GLY	N-CA-C	6.04	128.19	113.10
33	L1	1343	C	P-O5'-C5'	6.04	130.56	120.90
2	SA	11	ALA	N-CA-C	6.04	127.30	111.00
2	SA	35	ASP	CB-CG-OD1	-6.04	112.87	118.30
14	SP	112	VAL	N-CA-CB	6.04	124.78	111.50
32	S1	1065	A	N9-C1'-C2'	-6.04	105.36	112.00
33	L1	229	G	C4'-C3'-C2'	-6.04	96.56	102.60
33	L1	1382	C	N1-C1'-C2'	6.04	121.85	114.00
33	L1	2221	U	O4'-C1'-N1	6.04	113.03	108.20
38	LE	111	HIS	N-CA-CB	-6.04	99.73	110.60
11	SM	14	ARG	CB-CA-C	-6.03	98.33	110.40
31	S2	59	U	O4'-C1'-N1	6.03	113.03	108.20
33	L1	1512	A	C1'-O4'-C4'	6.03	114.73	109.90
33	L1	2692	G	C5'-C4'-C3'	6.03	125.65	116.00
33	L1	2837	C	N1-C1'-C2'	6.03	121.84	114.00
34	L3	76	U	O4'-C4'-C3'	-6.03	97.97	104.00
33	L1	1598	U	O4'-C1'-N1	6.03	113.03	108.20
24	SX	52	SER	CA-C-N	-6.03	103.93	117.20
33	L1	2674	A	O4'-C1'-N9	6.03	113.02	108.20
32	S1	1074	C	P-O3'-C3'	6.03	126.94	119.70
1	Sa	226	CYS	CA-CB-SG	6.03	124.85	114.00
32	S1	1208	A	N9-C1'-C2'	6.03	121.84	114.00
32	S1	1506	G	O3'-P-O5'	-6.03	92.55	104.00
32	S1	1625	U	O4'-C1'-C2'	-6.03	99.77	105.80
33	L1	959	U	O4'-C1'-N1	-6.03	103.38	108.20
33	L1	1880	A	N9-C1'-C2'	6.03	121.84	114.00
33	L1	2274	A	O4'-C4'-C3'	6.03	110.92	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	Ln	22	SER	N-CA-C	6.03	127.27	111.00
60	Lr	80	TYR	N-CA-C	6.03	127.27	111.00
80	LC	291	SER	CA-C-N	6.03	128.26	116.20
23	SU	93	PRO	O-C-N	-6.03	113.06	122.70
31	S2	3	C	O4'-C1'-N1	6.03	113.02	108.20
32	S1	624	A	C1'-O4'-C4'	6.03	114.72	109.90
32	S1	1457	C	O4'-C1'-N1	6.03	113.02	108.20
33	L1	139	U	O4'-C1'-N1	6.03	113.02	108.20
33	L1	859	G	N9-C1'-C2'	6.03	121.83	114.00
33	L1	1275	A	O3'-P-O5'	6.03	115.45	104.00
33	L1	2142	A	P-O3'-C3'	6.03	126.93	119.70
33	L1	3138	C	C3'-C2'-C1'	6.03	106.32	101.50
33	L1	3323	U	P-O5'-C5'	-6.03	111.26	120.90
34	L3	72	G	C5'-C4'-C3'	6.03	125.64	116.00
57	Ll	3	LYS	C-N-CA	6.03	134.96	122.30
69	La	32	GLY	N-CA-C	-6.03	98.03	113.10
33	L1	86	U	P-O3'-C3'	6.02	126.93	119.70
33	L1	2412	A	C4'-C3'-C2'	-6.02	96.58	102.60
32	S1	1465	C	N1-C1'-C2'	-6.02	105.38	112.00
33	L1	328	G	P-O5'-C5'	-6.02	111.26	120.90
33	L1	1203	C	O4'-C1'-C2'	-6.02	99.78	105.80
33	L1	1337	C	OP1-P-OP2	-6.02	110.56	119.60
33	L1	1992	U	O4'-C1'-N1	6.02	113.02	108.20
31	S2	17	G	O4'-C1'-N9	6.02	113.02	108.20
32	S1	482	A	O3'-P-O5'	6.02	115.44	104.00
33	L1	3003	C	OP1-P-OP2	-6.02	110.57	119.60
57	Ll	45	ARG	NE-CZ-NH1	6.02	123.31	120.30
33	L1	1619	G	O4'-C1'-N9	6.02	113.02	108.20
33	L1	1954	G	C5'-C4'-O4'	-6.02	101.88	109.10
33	L1	3058	U	N1-C1'-C2'	6.02	121.83	114.00
35	L2	67	C	O4'-C1'-N1	6.02	113.02	108.20
58	Ln	27	ARG	NE-CZ-NH1	6.02	123.31	120.30
64	LG	80	VAL	CG1-CB-CG2	-6.02	101.27	110.90
66	LN	8	GLU	CA-C-N	-6.02	103.95	117.20
71	Lj	19	GLY	O-C-N	-6.02	113.07	122.70
71	Lj	55	TYR	CB-CG-CD1	-6.02	117.39	121.00
32	S1	52	U	P-O3'-C3'	6.02	126.92	119.70
32	S1	371	A	O4'-C1'-C2'	-6.02	99.78	105.80
32	S1	1300	A	C4'-C3'-C2'	-6.02	96.58	102.60
32	S1	1696	C	C3'-C2'-C1'	6.02	106.31	101.50
33	L1	1767	G	C4'-C3'-C2'	-6.02	96.58	102.60
33	L1	2500	U	C5'-C4'-C3'	-6.02	106.37	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2755	U	O5'-P-OP2	-6.02	100.28	105.70
46	LT	150	ALA	CB-CA-C	6.02	119.12	110.10
46	LT	152	GLU	OE1-CD-OE2	-6.02	116.08	123.30
32	S1	274	A	O5'-C5'-C4'	-6.02	100.27	111.70
32	S1	581	G	O4'-C1'-N9	6.02	113.01	108.20
32	S1	911	A	O4'-C1'-N9	6.02	113.01	108.20
35	L2	140	G	C1'-O4'-C4'	-6.02	105.09	109.90
7	SI	72	ARG	CA-CB-CG	6.01	126.63	113.40
11	SM	32	SER	CA-C-N	-6.01	103.97	117.20
27	SH	89	TRP	CD1-CG-CD2	-6.01	101.49	106.30
32	S1	1352	A	N9-C1'-C2'	6.01	121.82	114.00
33	L1	244	G	O4'-C1'-C2'	6.01	113.01	107.60
33	L1	925	U	C5'-C4'-O4'	6.01	116.32	109.10
33	L1	2047	A	O4'-C1'-N9	6.01	113.01	108.20
33	L1	2440	U	C3'-C2'-C1'	-6.01	96.69	101.50
33	L1	2727	U	C1'-O4'-C4'	-6.01	105.09	109.90
33	L1	3169	C	O4'-C1'-N1	6.01	113.01	108.20
35	L2	45	A	C1'-O4'-C4'	6.01	114.71	109.90
77	Lc	74	TYR	CZ-CE2-CD2	6.01	125.21	119.80
1	Sa	151	ARG	N-CA-CB	6.01	121.42	110.60
32	S1	1232	G	N9-C1'-C2'	6.01	121.82	114.00
33	L1	1259	C	P-O3'-C3'	6.01	126.92	119.70
33	L1	2657	C	C3'-C2'-C1'	6.01	106.31	101.50
33	L1	3350	C	N1-C1'-C2'	6.01	121.82	114.00
38	LE	85	GLY	CA-C-O	-6.01	109.78	120.60
80	LC	301	GLU	C-N-CA	6.01	136.73	121.70
1	Sa	266	THR	C-N-CA	-6.01	109.67	122.30
30	S3	15	A	N9-C1'-C2'	-6.01	105.39	112.00
32	S1	300	U	C5'-C4'-C3'	6.01	125.62	116.00
32	S1	1659	A	O4'-C1'-N9	-6.01	103.39	108.20
33	L1	1679	U	P-O3'-C3'	6.01	126.92	119.70
33	L1	2279	C	N1-C1'-C2'	6.01	121.81	114.00
33	L1	2389	A	C3'-C2'-C1'	-6.01	96.69	101.50
33	L1	2405	C	O5'-P-OP2	-6.01	100.29	105.70
33	L1	2870	U	C1'-O4'-C4'	-6.01	105.09	109.90
33	L1	3238	U	N1-C1'-C2'	-6.01	105.39	112.00
37	LB	67	PHE	CB-CG-CD2	6.01	125.01	120.80
58	Ln	27	ARG	NH1-CZ-NH2	-6.01	112.79	119.40
80	LC	49	TYR	CG-CD2-CE2	-6.01	116.49	121.30
3	SB	160	SER	C-N-CA	6.01	134.92	122.30
32	S1	170	C	N1-C1'-C2'	6.01	121.81	114.00
32	S1	1617	U	P-O5'-C5'	6.01	130.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	442	C	C3'-C2'-C1'	6.01	106.31	101.50
33	L1	2821	U	O4'-C1'-N1	6.01	113.01	108.20
33	L1	3332	G	C1'-O4'-C4'	-6.01	105.09	109.90
32	S1	1509	C	C5'-C4'-O4'	6.01	116.31	109.10
33	L1	1271	U	OP2-P-O3'	6.01	118.42	105.20
72	Lk	42	PHE	CG-CD2-CE2	6.01	127.41	120.80
81	LD	343	MET	O-C-N	-6.01	113.09	122.70
32	S1	579	C	O4'-C1'-C2'	-6.01	99.79	105.80
32	S1	996	G	O4'-C1'-N9	6.01	113.00	108.20
33	L1	60	G	N9-C1'-C2'	6.01	121.81	114.00
33	L1	738	A	O4'-C1'-N9	6.01	113.00	108.20
33	L1	996	A	C1'-C2'-O2'	6.01	128.62	110.60
33	L1	3335	G	O4'-C1'-N9	6.01	113.00	108.20
64	LG	54	ASP	CB-CG-OD2	-6.01	112.89	118.30
64	LG	161	GLU	N-CA-CB	-6.01	99.79	110.60
72	Lk	85	ARG	NE-CZ-NH2	6.01	123.30	120.30
80	LC	302	PHE	CB-CG-CD2	-6.01	116.60	120.80
32	S1	432	A	O4'-C1'-N9	6.00	113.00	108.20
33	L1	252	A	O4'-C1'-C2'	-6.00	99.80	105.80
33	L1	2655	U	O4'-C1'-N1	6.00	113.00	108.20
1	Sa	326	ASP	CB-CG-OD2	6.00	123.70	118.30
5	SE	140	LEU	CB-CG-CD2	6.00	121.21	111.00
10	SL	120	LYS	O-C-N	-6.00	113.09	122.70
33	L1	571	G	O4'-C1'-N9	-6.00	103.40	108.20
33	L1	738	A	N9-C1'-C2'	-6.00	105.39	112.00
33	L1	2452	U	C1'-O4'-C4'	6.00	114.70	109.90
33	L1	2465	G	C5'-C4'-C3'	6.00	125.61	116.00
32	S1	909	G	C1'-O4'-C4'	-6.00	105.10	109.90
33	L1	1481	C	N1-C1'-C2'	6.00	121.80	114.00
33	L1	1936	G	P-O3'-C3'	-6.00	112.50	119.70
33	L1	2340	G	C3'-C2'-C1'	-6.00	96.70	101.50
23	SU	22	LEU	CB-CA-C	6.00	121.60	110.20
33	L1	2070	C	N1-C1'-C2'	6.00	121.80	114.00
33	L1	2561	A	OP1-P-OP2	-6.00	110.60	119.60
23	SU	70	PHE	N-CA-CB	6.00	121.40	110.60
32	S1	956	A	C1'-O4'-C4'	6.00	114.70	109.90
32	S1	1777	G	C3'-C2'-C1'	6.00	106.30	101.50
33	L1	785	U	C4'-C3'-C2'	6.00	108.60	102.60
33	L1	1458	U	P-O3'-C3'	6.00	126.90	119.70
35	L2	42	U	OP1-P-OP2	-6.00	110.60	119.60
37	LB	182	ALA	N-CA-CB	6.00	118.50	110.10
31	S2	44	A	O4'-C1'-C2'	6.00	113.00	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	732	G	P-O3'-C3'	6.00	126.90	119.70
32	S1	1118	A	P-O3'-C3'	6.00	126.90	119.70
32	S1	1271	G	N9-C1'-C2'	6.00	121.80	114.00
33	L1	1041	C	P-O3'-C3'	6.00	126.90	119.70
33	L1	1491	G	O4'-C1'-N9	6.00	113.00	108.20
33	L1	1680	A	O4'-C1'-N9	6.00	113.00	108.20
33	L1	2482	A	C4'-C3'-C2'	-6.00	96.60	102.60
33	L1	2771	U	O3'-P-O5'	-6.00	92.61	104.00
33	L1	3143	A	C1'-O4'-C4'	-6.00	105.10	109.90
34	L3	25	G	C5'-C4'-O4'	-6.00	101.90	109.10
48	LV	108	LEU	CB-CG-CD1	6.00	121.19	111.00
33	L1	2704	U	O4'-C1'-N1	6.00	113.00	108.20
55	Lg	98	TYR	CG-CD2-CE2	-6.00	116.50	121.30
2	SA	21	MET	N-CA-CB	5.99	121.39	110.60
15	SS	142	ASP	CB-CG-OD2	-5.99	112.91	118.30
33	L1	1444	G	O4'-C1'-N9	5.99	112.99	108.20
33	L1	2691	U	C3'-C2'-C1'	5.99	106.29	101.50
33	L1	3055	U	O4'-C1'-N1	5.99	113.00	108.20
34	L3	96	U	P-O3'-C3'	-5.99	112.51	119.70
44	LR	155	ALA	N-CA-CB	5.99	118.49	110.10
47	LU	85	ILE	O-C-N	-5.99	113.11	122.70
54	Lf	35	LEU	CA-CB-CG	5.99	129.09	115.30
66	LN	84	TRP	O-C-N	5.99	132.29	122.70
15	SS	7	ARG	CG-CD-NE	-5.99	99.22	111.80
33	L1	822	U	C5'-C4'-O4'	5.99	116.29	109.10
33	L1	1931	G	C1'-O4'-C4'	5.99	114.69	109.90
66	LN	79	ASP	C-N-CA	5.99	136.68	121.70
5	SE	15	PHE	CZ-CE2-CD2	5.99	127.29	120.10
32	S1	1344	U	P-O5'-C5'	5.99	130.49	120.90
32	S1	1790	G	P-O3'-C3'	5.99	126.89	119.70
33	L1	98	A	C5'-C4'-O4'	-5.99	101.91	109.10
33	L1	180	G	C3'-C2'-C1'	-5.99	96.71	101.50
33	L1	198	A	O4'-C1'-C2'	-5.99	99.81	105.80
45	LQ	87	TYR	CB-CG-CD2	5.99	124.59	121.00
81	LD	318	GLU	CB-CG-CD	-5.99	98.03	114.20
3	SB	111	GLY	N-CA-C	5.99	128.07	113.10
32	S1	1614	C	C5'-C4'-C3'	-5.99	106.42	116.00
33	L1	875	A	C2'-C3'-O3'	5.99	123.28	113.70
33	L1	2013	G	C1'-O4'-C4'	-5.99	105.11	109.90
33	L1	2269	U	N1-C1'-C2'	5.99	121.78	114.00
33	L1	2485	U	C4'-C3'-C2'	-5.99	96.61	102.60
39	LF	173	LYS	N-CA-C	5.99	127.17	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	630	U	C2'-C3'-O3'	5.99	123.28	113.70
33	L1	1164	G	C3'-C2'-C1'	-5.99	96.71	101.50
33	L1	1776	G	C1'-O4'-C4'	-5.99	105.11	109.90
33	L1	2103	U	O4'-C1'-C2'	-5.99	99.81	105.80
33	L1	2537	G	C1'-O4'-C4'	-5.99	105.11	109.90
34	L3	65	G	P-O3'-C3'	-5.99	112.52	119.70
35	L2	119	C	C5'-C4'-C3'	-5.99	106.42	116.00
32	S1	800	U	C5'-C4'-C3'	-5.99	106.42	116.00
32	S1	1679	A	O4'-C1'-C2'	-5.99	99.81	105.80
33	L1	1022	G	N9-C1'-C2'	-5.99	105.42	112.00
33	L1	1868	C	C3'-C2'-C1'	5.99	106.29	101.50
33	L1	2183	A	P-O5'-C5'	5.99	130.48	120.90
35	L2	125	A	O4'-C1'-N9	-5.99	103.41	108.20
33	L1	791	C	C3'-C2'-C1'	5.98	106.29	101.50
33	L1	2090	G	O4'-C1'-C2'	-5.98	99.82	105.80
33	L1	2806	A	C5'-C4'-C3'	5.98	125.58	116.00
35	L2	41	A	N9-C1'-C2'	5.98	121.78	114.00
3	SB	31	GLU	N-CA-C	-5.98	94.85	111.00
32	S1	35	U	O4'-C4'-C3'	-5.98	98.02	104.00
32	S1	99	U	O4'-C1'-N1	5.98	112.98	108.20
32	S1	360	G	P-O3'-C3'	-5.98	112.52	119.70
32	S1	366	G	O4'-C1'-N9	5.98	112.99	108.20
33	L1	2246	G	O3'-P-O5'	-5.98	92.63	104.00
77	Lc	103	ARG	NE-CZ-NH2	-5.98	117.31	120.30
8	SJ	28	ARG	NE-CZ-NH2	-5.98	117.31	120.30
33	L1	1325	G	C1'-O4'-C4'	-5.98	105.12	109.90
33	L1	1382	C	O3'-P-O5'	-5.98	92.64	104.00
34	L3	62	U	P-O3'-C3'	5.98	126.88	119.70
45	LQ	219	PHE	CB-CG-CD2	-5.98	116.61	120.80
25	SC	43	GLU	C-N-CA	5.98	136.65	121.70
32	S1	1545	A	N9-C1'-C2'	5.98	121.77	114.00
32	S1	1607	C	O4'-C1'-C2'	-5.98	99.82	105.80
16	SR	139	ARG	CD-NE-CZ	-5.98	115.23	123.60
29	ST	64	ALA	N-CA-C	5.98	127.14	111.00
32	S1	342	C	C3'-C2'-C1'	5.98	106.28	101.50
32	S1	1715	C	C3'-C2'-C1'	-5.98	96.72	101.50
32	S1	1802	G	O5'-P-OP2	5.98	117.87	110.70
33	L1	544	C	C1'-O4'-C4'	-5.98	105.12	109.90
33	L1	2154	G	C1'-O4'-C4'	-5.98	105.12	109.90
33	L1	3055	U	N1-C1'-C2'	-5.98	105.42	112.00
36	LA	160	LYS	N-CA-CB	5.98	121.36	110.60
48	LV	132	ARG	CD-NE-CZ	5.98	131.97	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	Lo	13	LEU	CB-CA-C	5.98	121.56	110.20
81	LD	369	GLU	N-CA-CB	5.98	121.36	110.60
7	SI	148	TYR	CB-CG-CD2	5.98	124.59	121.00
33	L1	1078	U	C3'-C2'-C1'	5.98	106.28	101.50
52	Lb	87	TYR	CA-CB-CG	5.98	124.75	113.40
64	LG	87	ARG	N-CA-CB	5.98	121.36	110.60
70	Li	30	LEU	C-N-CA	5.98	136.64	121.70
32	S1	1071	C	C5'-C4'-O4'	5.97	116.27	109.10
32	S1	1076	C	OP1-P-OP2	-5.97	110.64	119.60
33	L1	263	A	P-O5'-C5'	5.97	130.46	120.90
33	L1	1320	G	O4'-C1'-C2'	5.97	112.98	107.60
33	L1	1815	G	P-O5'-C5'	5.97	130.46	120.90
33	L1	1887	A	O4'-C1'-N9	-5.97	103.42	108.20
33	L1	2341	U	C3'-C2'-C1'	5.97	106.28	101.50
33	L1	2637	U	O4'-C1'-N1	5.97	112.98	108.20
33	L1	3140	A	C4'-C3'-C2'	-5.97	96.62	102.60
33	L1	3274	G	C5'-C4'-O4'	5.97	116.27	109.10
69	La	67	ARG	NE-CZ-NH1	-5.97	117.31	120.30
27	SH	97	ARG	NE-CZ-NH1	5.97	123.29	120.30
29	ST	29	HIS	N-CA-CB	5.97	121.35	110.60
33	L1	1906	A	C1'-O4'-C4'	5.97	114.68	109.90
33	L1	2864	U	C3'-C2'-C1'	5.97	106.28	101.50
33	L1	3384	G	OP1-P-OP2	-5.97	110.64	119.60
69	La	41	CYS	CB-CA-C	5.97	122.34	110.40
32	S1	442	A	P-O3'-C3'	5.97	126.86	119.70
33	L1	819	A	C1'-O4'-C4'	-5.97	105.12	109.90
33	L1	2428	G	C3'-C2'-C1'	-5.97	96.72	101.50
56	Lh	48	LYS	CB-CG-CD	5.97	127.12	111.60
33	L1	3018	A	P-O3'-C3'	-5.97	112.54	119.70
24	SX	74	ARG	O-C-N	-5.97	113.15	122.70
31	S2	8	U	O4'-C1'-C2'	-5.97	99.83	105.80
33	L1	126	G	C3'-C2'-C1'	-5.97	96.73	101.50
33	L1	2051	G	P-O3'-C3'	-5.97	112.54	119.70
4	SD	59	ARG	NE-CZ-NH1	-5.97	117.32	120.30
32	S1	633	U	O5'-C5'-C4'	-5.97	100.36	111.70
33	L1	744	C	C2'-C3'-O3'	5.97	123.25	113.70
33	L1	1890	C	C3'-C2'-C1'	5.97	106.27	101.50
33	L1	2801	A	C5'-C4'-O4'	5.97	116.26	109.10
39	LF	88	ARG	NE-CZ-NH1	5.97	123.28	120.30
60	Lr	46	LYS	CA-C-O	-5.97	107.57	120.10
32	S1	1226	U	OP1-P-O3'	5.96	118.32	105.20
32	S1	1295	G	N9-C1'-C2'	5.96	121.75	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1307	U	C4'-C3'-C2'	-5.96	96.64	102.60
32	S1	1678	G	P-O3'-C3'	5.96	126.86	119.70
67	LS	28	ARG	CG-CD-NE	5.96	124.33	111.80
70	Li	83	SER	N-CA-C	5.96	127.10	111.00
71	Lj	1	MET	N-CA-C	5.96	127.10	111.00
1	Sa	31	THR	CA-C-N	5.96	130.32	117.20
33	L1	2121	U	N1-C1'-C2'	-5.96	105.44	112.00
33	L1	3077	C	N1-C1'-C2'	5.96	121.75	114.00
33	L1	3213	A	C3'-C2'-C1'	5.96	106.27	101.50
1	Sa	242	VAL	CB-CA-C	-5.96	100.07	111.40
4	SD	93	PRO	C-N-CA	-5.96	106.80	121.70
16	SR	126	ALA	CB-CA-C	5.96	119.04	110.10
32	S1	1574	U	O4'-C1'-N1	5.96	112.97	108.20
33	L1	2435	U	C3'-C2'-C1'	5.96	106.27	101.50
33	L1	2724	A	OP2-P-O3'	5.96	118.32	105.20
37	LB	31	SER	C-N-CA	5.96	136.60	121.70
32	S1	1801	A	C5'-C4'-O4'	5.96	116.25	109.10
33	L1	1876	U	O4'-C1'-C2'	5.96	112.96	107.60
33	L1	2220	U	N1-C1'-C2'	-5.96	105.44	112.00
33	L1	2498	C	P-O3'-C3'	-5.96	112.55	119.70
33	L1	3216	G	C3'-C2'-C1'	-5.96	96.73	101.50
33	L1	3323	U	O5'-P-OP1	5.96	117.85	110.70
34	L3	84	U	O4'-C1'-N1	5.96	112.97	108.20
45	LQ	250	ASP	N-CA-CB	5.96	121.33	110.60
32	S1	264	G	C5'-C4'-C3'	5.96	125.53	116.00
32	S1	1055	G	C5'-C4'-C3'	5.96	125.53	116.00
32	S1	1517	C	O4'-C1'-N1	-5.96	103.43	108.20
33	L1	547	C	O4'-C1'-N1	5.96	112.97	108.20
33	L1	1298	A	N9-C1'-C2'	-5.96	105.44	112.00
33	L1	2281	U	N1-C1'-C2'	5.96	121.75	114.00
33	L1	2456	G	C5'-C4'-C3'	5.96	125.53	116.00
25	SC	166	PHE	N-CA-CB	5.96	121.32	110.60
33	L1	1239	U	O4'-C1'-N1	-5.96	103.43	108.20
33	L1	2790	C	P-O3'-C3'	-5.96	112.55	119.70
33	L1	2983	U	OP1-P-O3'	5.96	118.31	105.20
33	L1	3316	C	C5'-C4'-C3'	5.96	125.53	116.00
49	LX	34	LYS	C-N-CA	-5.96	106.81	121.70
69	La	9	LYS	CA-CB-CG	5.96	126.50	113.40
32	S1	1306	U	C1'-O4'-C4'	-5.96	105.14	109.90
33	L1	638	G	OP1-P-OP2	-5.96	110.67	119.60
33	L1	2901	C	C3'-C2'-C1'	5.96	106.26	101.50
64	LG	85	ALA	O-C-N	-5.96	113.08	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	840	A	N9-C1'-C2'	5.95	121.74	114.00
33	L1	2455	A	P-O5'-C5'	5.95	130.43	120.90
33	L1	3388	U	C5'-C4'-C3'	5.95	125.53	116.00
67	LS	5	ARG	N-CA-CB	5.95	121.32	110.60
71	Lj	25	SER	CB-CA-C	-5.95	98.79	110.10
77	Lc	74	TYR	CB-CG-CD1	-5.95	117.43	121.00
31	S2	56	A	O4'-C1'-C2'	-5.95	99.85	105.80
32	S1	878	U	C5'-C4'-O4'	5.95	116.24	109.10
32	S1	1127	G	P-O5'-C5'	-5.95	111.38	120.90
33	L1	563	C	C5'-C4'-O4'	5.95	116.24	109.10
34	L3	10	C	O4'-C1'-C2'	-5.95	99.85	105.80
25	SC	149	MET	N-CA-CB	5.95	121.31	110.60
31	S2	1	U	P-O3'-C3'	5.95	126.84	119.70
32	S1	1443	U	O3'-P-O5'	5.95	115.31	104.00
33	L1	1063	G	O4'-C1'-N9	-5.95	103.44	108.20
33	L1	2361	C	C5'-C4'-O4'	-5.95	101.96	109.10
33	L1	3210	G	O4'-C1'-C2'	-5.95	99.85	105.80
35	L2	15	C	C1'-O4'-C4'	-5.95	105.14	109.90
35	L2	100	A	C4'-C3'-C2'	-5.95	96.65	102.60
48	LV	145	CYS	N-CA-CB	5.95	121.31	110.60
17	SV	99	GLN	N-CA-CB	5.95	121.31	110.60
32	S1	295	C	C3'-C2'-C1'	5.95	106.26	101.50
32	S1	334	G	C1'-O4'-C4'	-5.95	105.14	109.90
32	S1	1481	A	O4'-C1'-N9	5.95	112.96	108.20
32	S1	1634	U	O4'-C1'-N1	5.95	112.96	108.20
33	L1	391	U	O4'-C1'-C2'	5.95	112.95	107.60
33	L1	492	G	P-O5'-C5'	-5.95	111.38	120.90
33	L1	2712	C	C3'-C2'-C1'	5.95	106.26	101.50
33	L1	2758	C	O4'-C4'-C3'	5.95	110.86	106.10
39	LF	174	PHE	CG-CD1-CE1	-5.95	114.26	120.80
59	Lo	45	ARG	NE-CZ-NH2	5.95	123.27	120.30
1	Sa	24	ARG	NE-CZ-NH2	5.95	123.27	120.30
23	SU	52	LEU	O-C-N	-5.95	113.19	122.70
33	L1	2166	U	P-O3'-C3'	5.95	126.84	119.70
3	SB	131	ALA	O-C-N	-5.95	113.19	122.70
32	S1	91	C	O4'-C1'-N1	5.95	112.96	108.20
33	L1	333	G	N9-C1'-C2'	5.95	121.73	114.00
33	L1	3297	A	O3'-P-O5'	5.95	115.30	104.00
33	L1	3323	U	O5'-P-OP2	-5.95	100.35	105.70
33	L1	3337	G	N9-C1'-C2'	-5.95	105.46	112.00
43	LO	52	TYR	CD1-CE1-CZ	5.95	125.15	119.80
84	LI	109	ASP	CB-CA-C	-5.95	98.51	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SM	114	LEU	CB-CA-C	5.94	121.49	110.20
32	S1	336	U	C4'-C3'-C2'	-5.94	96.66	102.60
33	L1	437	C	O4'-C1'-C2'	-5.94	99.86	105.80
35	L2	105	U	O4'-C1'-N1	5.94	112.95	108.20
10	SL	54	ILE	C-N-CA	5.94	134.78	122.30
33	L1	772	U	C1'-O4'-C4'	5.94	114.65	109.90
33	L1	1892	A	C1'-O4'-C4'	-5.94	105.15	109.90
82	LK	136	PRO	CA-N-CD	-5.94	103.18	111.50
1	Sa	276	PHE	CB-CG-CD1	-5.94	116.64	120.80
5	SE	21	ARG	NE-CZ-NH2	5.94	123.27	120.30
32	S1	234	G	O4'-C1'-C2'	5.94	112.95	107.60
32	S1	626	A	N9-C1'-C2'	5.94	121.72	114.00
33	L1	933	U	C1'-O4'-C4'	-5.94	105.15	109.90
33	L1	1000	A	O4'-C1'-C2'	-5.94	99.86	105.80
33	L1	1040	A	O4'-C1'-N9	5.94	112.95	108.20
33	L1	1742	G	C1'-O4'-C4'	5.94	114.65	109.90
33	L1	3299	A	O4'-C1'-C2'	-5.94	99.86	105.80
35	L2	24	U	C3'-C2'-C1'	-5.94	96.75	101.50
47	LU	45	ASN	CA-CB-CG	-5.94	100.33	113.40
5	SE	52	ARG	N-CA-CB	5.94	121.29	110.60
64	LG	139	VAL	C-N-CA	5.94	136.55	121.70
1	Sa	177	SER	CA-C-N	5.94	128.07	116.20
2	SA	18	ASP	N-CA-CB	5.94	121.29	110.60
32	S1	675	A	O4'-C1'-N9	5.94	112.95	108.20
32	S1	1343	C	O4'-C1'-N1	-5.94	103.45	108.20
33	L1	228	C	N1-C1'-C2'	-5.94	105.47	112.00
33	L1	962	C	O4'-C1'-N1	5.94	112.95	108.20
33	L1	1166	C	C5'-C4'-C3'	5.94	125.50	116.00
33	L1	2113	A	C5'-C4'-O4'	5.94	116.23	109.10
33	L1	2161	G	C3'-C2'-C1'	-5.94	96.75	101.50
33	L1	2421	C	N1-C1'-C2'	5.94	121.72	114.00
33	L1	2779	G	O4'-C1'-C2'	-5.94	99.86	105.80
35	L2	53	G	C5'-C4'-O4'	5.94	116.22	109.10
42	LP	164	LEU	CB-CA-C	-5.94	98.92	110.20
44	LR	160	HIS	C-N-CA	5.94	136.54	121.70
11	SM	36	VAL	N-CA-C	5.94	127.03	111.00
33	L1	445	C	O4'-C1'-N1	5.94	112.95	108.20
33	L1	1267	A	O4'-C1'-C2'	5.94	112.94	107.60
35	L2	62	G	O5'-P-OP1	5.94	117.82	110.70
72	Lk	66	VAL	N-CA-CB	5.94	124.56	111.50
13	SQ	72	LYS	N-CA-C	5.93	127.02	111.00
28	SN	14	TYR	CA-C-O	5.93	132.56	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1015	C	P-O5'-C5'	-5.93	111.40	120.90
33	L1	495	G	N9-C1'-C2'	-5.93	105.47	112.00
33	L1	1112	C	OP1-P-OP2	-5.93	110.70	119.60
33	L1	1549	A	C1'-O4'-C4'	-5.93	105.15	109.90
33	L1	1878	G	O4'-C1'-N9	5.93	112.95	108.20
35	L2	50	G	C3'-C2'-C1'	-5.93	96.75	101.50
15	SS	44	ARG	C-N-CA	5.93	136.53	121.70
25	SC	162	LEU	O-C-N	5.93	132.19	122.70
32	S1	1599	C	O4'-C1'-N1	5.93	112.95	108.20
33	L1	37	U	O4'-C1'-N1	5.93	112.95	108.20
33	L1	2739	A	OP2-P-O3'	5.93	118.25	105.20
33	L1	2783	U	C5'-C4'-O4'	-5.93	101.98	109.10
33	L1	2795	G	P-O5'-C5'	5.93	130.39	120.90
33	L1	3054	G	OP1-P-OP2	-5.93	110.70	119.60
33	L1	3317	G	C3'-C2'-C1'	-5.93	96.75	101.50
64	LG	26	TRP	N-CA-CB	5.93	121.28	110.60
23	SU	91	TYR	CB-CA-C	5.93	122.26	110.40
33	L1	528	C	O4'-C4'-C3'	5.93	110.84	106.10
33	L1	1645	G	C3'-C2'-C1'	5.93	106.25	101.50
33	L1	2753	C	C4'-C3'-C2'	-5.93	96.67	102.60
33	L1	2863	U	O4'-C1'-N1	5.93	112.94	108.20
13	SQ	73	LEU	C-N-CA	-5.93	106.88	121.70
31	S2	62	C	O4'-C4'-C3'	-5.93	98.07	104.00
32	S1	196	G	OP1-P-OP2	-5.93	110.70	119.60
32	S1	378	U	OP1-P-OP2	-5.93	110.70	119.60
33	L1	1114	A	O4'-C1'-C2'	5.93	112.94	107.60
33	L1	2731	G	OP1-P-OP2	-5.93	110.70	119.60
33	L1	2984	A	OP1-P-OP2	-5.93	110.70	119.60
33	L1	3227	U	P-O5'-C5'	5.93	130.39	120.90
33	L1	3325	G	C1'-O4'-C4'	-5.93	105.16	109.90
35	L2	152	C	C3'-C2'-C1'	5.93	106.24	101.50
39	LF	88	ARG	CD-NE-CZ	-5.93	115.30	123.60
59	Lo	6	THR	CA-CB-CG2	-5.93	104.10	112.40
5	SE	152	TYR	CG-CD2-CE2	-5.93	116.56	121.30
33	L1	1074	C	O4'-C1'-N1	5.93	112.94	108.20
66	LN	90	GLY	N-CA-C	5.93	127.92	113.10
13	SQ	93	VAL	CA-CB-CG2	5.93	119.79	110.90
25	SC	8	TYR	N-CA-CB	5.93	121.27	110.60
33	L1	705	A	O4'-C4'-C3'	-5.93	98.07	104.00
33	L1	745	G	O4'-C4'-C3'	-5.93	98.07	104.00
33	L1	764	A	C3'-C2'-C1'	5.93	106.24	101.50
33	L1	940	G	OP1-P-O3'	5.93	118.24	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1975	G	O4'-C1'-C2'	-5.93	99.87	105.80
33	L1	2013	G	O4'-C1'-C2'	5.93	112.93	107.60
33	L1	2430	C	N1-C1'-C2'	-5.93	105.48	112.00
35	L2	38	U	N1-C1'-C2'	5.93	121.70	114.00
25	SC	148	PHE	CB-CG-CD1	5.92	124.95	120.80
32	S1	337	A	O4'-C1'-N9	5.92	112.94	108.20
33	L1	74	G	C3'-C2'-C1'	-5.92	96.76	101.50
33	L1	1067	G	O4'-C1'-N9	5.92	112.94	108.20
33	L1	2332	C	O4'-C1'-N1	5.92	112.94	108.20
33	L1	2694	A	C4'-C3'-C2'	-5.92	96.67	102.60
33	L1	2723	G	O4'-C1'-N9	-5.92	103.46	108.20
34	L3	75	G	O3'-P-O5'	5.92	115.25	104.00
43	LO	32	ARG	NE-CZ-NH1	5.92	123.26	120.30
80	LC	25	HIS	N-CA-CB	-5.92	99.94	110.60
31	S2	55	C	C1'-O4'-C4'	-5.92	105.16	109.90
33	L1	814	U	O4'-C1'-C2'	5.92	112.93	107.60
33	L1	839	A	O4'-C1'-C2'	-5.92	99.88	105.80
50	LZ	13	GLN	O-C-N	-5.92	113.22	122.70
1	Sa	252	ILE	CB-CA-C	5.92	123.44	111.60
16	SR	144	ALA	N-CA-CB	5.92	118.39	110.10
32	S1	1009	U	O4'-C1'-N1	5.92	112.94	108.20
33	L1	257	C	C1'-O4'-C4'	-5.92	105.16	109.90
33	L1	433	C	C3'-C2'-C1'	5.92	106.24	101.50
33	L1	1300	C	O4'-C1'-C2'	-5.92	99.88	105.80
33	L1	2765	A	O4'-C1'-C2'	5.92	112.93	107.60
28	SN	11	PRO	C-N-CA	5.92	136.50	121.70
33	L1	687	C	C3'-C2'-C1'	5.92	106.24	101.50
52	Lb	113	ARG	NE-CZ-NH2	-5.92	117.34	120.30
3	SB	75	LYS	N-CA-C	-5.92	95.02	111.00
31	S2	42	C	N1-C1'-C2'	5.92	121.69	114.00
32	S1	88	C	C3'-C2'-C1'	5.92	106.23	101.50
32	S1	331	U	OP1-P-OP2	-5.92	110.72	119.60
33	L1	652	C	C3'-C2'-C1'	5.92	106.23	101.50
33	L1	1654	C	O4'-C1'-N1	-5.92	103.47	108.20
33	L1	1674	A	P-O5'-C5'	5.92	130.37	120.90
33	L1	2736	A	O5'-P-OP1	-5.92	100.37	105.70
38	LE	3	THR	C-N-CA	5.92	136.49	121.70
49	LX	88	ASP	CB-CG-OD1	5.92	123.63	118.30
32	S1	1263	C	O4'-C1'-C2'	-5.92	99.88	105.80
33	L1	1441	U	O3'-P-O5'	-5.92	92.76	104.00
33	L1	1595	G	C1'-O4'-C4'	-5.92	105.17	109.90
33	L1	1611	G	O4'-C1'-N9	5.92	112.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1648	C	N1-C1'-C2'	-5.92	105.49	112.00
33	L1	2346	U	C1'-O4'-C4'	5.92	114.63	109.90
33	L1	2946	U	O4'-C1'-N1	5.92	112.93	108.20
33	L1	3274	G	N9-C1'-C2'	5.92	121.69	114.00
33	L1	1740	U	O4'-C1'-C2'	-5.92	99.89	105.80
33	L1	1785	G	O4'-C1'-N9	5.92	112.93	108.20
33	L1	1873	C	O4'-C1'-N1	-5.92	103.47	108.20
33	L1	1891	A	C3'-C2'-C1'	5.92	106.23	101.50
31	S2	17	G	O5'-C5'-C4'	5.91	122.94	111.70
33	L1	838	G	C5'-C4'-C3'	5.91	125.46	116.00
33	L1	1077	C	O4'-C1'-C2'	5.91	112.92	107.60
33	L1	1681	U	OP1-P-OP2	-5.91	110.73	119.60
33	L1	1709	U	N1-C1'-C2'	5.91	121.69	114.00
33	L1	2088	C	O4'-C1'-C2'	5.91	112.92	107.60
33	L1	2563	G	P-O5'-C5'	5.91	130.36	120.90
42	LP	166	SER	CB-CA-C	-5.91	98.86	110.10
55	Lg	85	ARG	N-CA-CB	-5.91	99.95	110.60
5	SE	4	ARG	NE-CZ-NH2	-5.91	117.34	120.30
33	L1	3167	G	C1'-O4'-C4'	5.91	114.63	109.90
5	SE	79	GLU	N-CA-CB	5.91	121.24	110.60
27	SH	28	ARG	CA-C-N	5.91	133.65	117.10
32	S1	1603	U	C4'-C3'-C2'	5.91	108.51	102.60
33	L1	856	G	C3'-C2'-C1'	-5.91	96.77	101.50
33	L1	2177	U	P-O3'-C3'	5.91	126.79	119.70
66	LN	87	SER	CA-C-O	-5.91	107.69	120.10
81	LD	124	ARG	NE-CZ-NH1	5.91	123.26	120.30
32	S1	1328	G	N9-C1'-C2'	-5.91	105.50	112.00
33	L1	917	A	O4'-C1'-N9	-5.91	103.47	108.20
33	L1	2532	A	O4'-C1'-C2'	5.91	112.92	107.60
37	LB	141	PRO	N-CA-C	-5.91	96.74	112.10
42	LP	30	TYR	CB-CG-CD2	-5.91	117.45	121.00
45	LQ	256	SER	C-N-CA	-5.91	106.93	121.70
45	LQ	298	ASP	CB-CG-OD1	-5.91	112.98	118.30
66	LN	28	VAL	CA-CB-CG1	-5.91	102.04	110.90
33	L1	2199	C	O3'-P-O5'	-5.91	92.78	104.00
33	L1	3151	C	C5'-C4'-C3'	5.91	125.45	116.00
34	L3	100	A	C3'-C2'-C1'	5.91	106.22	101.50
32	S1	273	C	P-O5'-C5'	-5.91	111.45	120.90
32	S1	1224	C	O4'-C4'-C3'	-5.91	98.09	104.00
33	L1	71	C	P-O5'-C5'	5.91	130.35	120.90
33	L1	1043	U	C1'-O4'-C4'	-5.91	105.18	109.90
64	LG	59	ARG	NE-CZ-NH2	5.91	123.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
84	LI	35	ASP	CB-CG-OD1	5.91	123.61	118.30
23	SU	92	GLU	C-N-CD	-5.90	107.61	120.60
32	S1	652	G	O4'-C1'-C2'	-5.90	99.90	105.80
34	L3	74	A	OP2-P-O3'	5.90	118.19	105.20
45	LQ	55	PHE	CB-CG-CD2	-5.90	116.67	120.80
32	S1	535	C	P-O3'-C3'	5.90	126.78	119.70
33	L1	2376	G	C4'-C3'-C2'	5.90	108.50	102.60
33	L1	2578	G	N9-C1'-C2'	5.90	121.67	114.00
32	S1	912	A	C1'-O4'-C4'	-5.90	105.18	109.90
32	S1	1155	G	C5'-C4'-C3'	5.90	125.44	116.00
32	S1	1468	G	C1'-O4'-C4'	5.90	114.62	109.90
32	S1	1468	G	C5'-C4'-C3'	5.90	125.44	116.00
33	L1	530	C	O4'-C4'-C3'	-5.90	98.10	104.00
33	L1	2782	G	P-O3'-C3'	-5.90	112.62	119.70
45	LQ	1	MET	CG-SD-CE	-5.90	90.76	100.20
33	L1	1381	G	O4'-C1'-N9	5.90	112.92	108.20
33	L1	1717	G	C5'-C4'-C3'	5.90	125.44	116.00
33	L1	2652	G	OP1-P-O3'	5.90	118.18	105.20
25	SC	109	ARG	NE-CZ-NH1	5.90	123.25	120.30
32	S1	104	A	C3'-C2'-C1'	5.90	106.22	101.50
32	S1	1544	G	C3'-C2'-C1'	-5.90	96.78	101.50
33	L1	589	G	C1'-O4'-C4'	-5.90	105.18	109.90
34	L3	71	A	O4'-C1'-N9	5.90	112.92	108.20
38	LE	63	ARG	NE-CZ-NH1	5.90	123.25	120.30
42	LP	11	TRP	CB-CG-CD1	5.90	134.67	127.00
52	Lb	86	LEU	CB-CG-CD1	-5.90	100.97	111.00
52	Lb	116	LEU	CB-CG-CD1	-5.90	100.97	111.00
32	S1	562	U	O4'-C1'-C2'	-5.90	99.90	105.80
32	S1	1629	U	O4'-C4'-C3'	-5.90	98.10	104.00
33	L1	1921	U	C1'-O4'-C4'	5.90	114.62	109.90
33	L1	2621	G	OP1-P-OP2	-5.90	110.75	119.60
32	S1	1746	U	O4'-C1'-N1	-5.89	103.48	108.20
33	L1	1025	G	C5'-C4'-C3'	5.89	125.43	116.00
33	L1	1621	G	C4'-C3'-C2'	-5.89	96.71	102.60
33	L1	1789	C	O4'-C1'-C2'	-5.89	99.91	105.80
33	L1	2876	G	O5'-C5'-C4'	5.89	122.90	111.70
37	LB	83	TYR	CB-CA-C	-5.89	98.61	110.40
4	SD	130	GLN	N-CA-CB	5.89	121.21	110.60
32	S1	427	G	O4'-C1'-C2'	-5.89	99.91	105.80
33	L1	212	G	N9-C1'-C2'	-5.89	105.52	112.00
33	L1	418	G	C5'-C4'-C3'	-5.89	106.57	116.00
33	L1	495	G	O4'-C1'-C2'	5.89	112.90	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	LA	27	PHE	CB-CG-CD1	-5.89	116.67	120.80
39	LF	184	GLY	N-CA-C	-5.89	98.37	113.10
41	LM	51	ARG	NE-CZ-NH1	5.89	123.25	120.30
46	LT	177	ARG	CD-NE-CZ	5.89	131.85	123.60
32	S1	851	G	O4'-C4'-C3'	-5.89	98.11	104.00
32	S1	1161	C	C3'-C2'-C1'	5.89	106.21	101.50
32	S1	1402	C	P-O3'-C3'	5.89	126.77	119.70
25	SC	160	PHE	CB-CG-CD2	-5.89	116.68	120.80
33	L1	145	U	P-O5'-C5'	5.89	130.32	120.90
33	L1	1195	C	N1-C1'-C2'	5.89	121.66	114.00
33	L1	3322	A	C1'-O4'-C4'	-5.89	105.19	109.90
37	LB	76	PHE	CB-CG-CD1	5.89	124.92	120.80
43	LO	120	VAL	N-CA-CB	5.89	124.46	111.50
64	LG	191	ALA	N-CA-CB	5.89	118.34	110.10
77	Lc	95	ARG	NH1-CZ-NH2	-5.89	112.92	119.40
33	L1	597	C	P-O3'-C3'	5.89	126.77	119.70
32	S1	884	G	N9-C1'-C2'	-5.89	105.53	112.00
33	L1	279	G	OP1-P-OP2	-5.89	110.77	119.60
33	L1	1893	G	C5'-C4'-C3'	5.89	125.42	116.00
33	L1	1930	G	O4'-C1'-N9	5.89	112.91	108.20
33	L1	3384	G	P-O3'-C3'	5.89	126.76	119.70
37	LB	93	ARG	NE-CZ-NH2	-5.89	117.36	120.30
48	LV	127	ARG	O-C-N	-5.89	113.28	122.70
25	SC	68	ASN	CA-C-O	-5.88	107.74	120.10
32	S1	337	A	N9-C1'-C2'	5.88	121.65	114.00
32	S1	949	A	C1'-O4'-C4'	5.88	114.61	109.90
32	S1	1660	C	P-O5'-C5'	5.88	130.31	120.90
33	L1	3316	C	C4'-C3'-C2'	5.88	108.48	102.60
33	L1	3351	A	C1'-O4'-C4'	5.88	114.61	109.90
51	LY	62	TYR	CD1-CG-CD2	5.88	124.37	117.90
66	LN	80	VAL	C-N-CA	5.88	136.41	121.70
78	Le	78	TYR	CB-CG-CD2	-5.88	117.47	121.00
9	SK	49	ARG	NE-CZ-NH2	-5.88	117.36	120.30
32	S1	1127	G	C3'-C2'-C1'	5.88	106.21	101.50
33	L1	1819	A	C5'-C4'-C3'	5.88	125.41	116.00
6	SF	171	ASP	N-CA-CB	-5.88	100.01	110.60
32	S1	857	A	C5'-C4'-C3'	5.88	125.41	116.00
32	S1	944	A	C4'-C3'-C2'	-5.88	96.72	102.60
32	S1	1207	A	C4'-C3'-C2'	-5.88	96.72	102.60
33	L1	2211	G	O4'-C1'-C2'	5.88	112.89	107.60
33	L1	2864	U	P-O5'-C5'	5.88	130.31	120.90
69	La	10	ALA	CA-C-N	5.88	130.14	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3053	G	C4'-C3'-C2'	-5.88	96.72	102.60
45	LQ	48	TYR	CD1-CG-CD2	5.88	124.37	117.90
74	LJ	115	ARG	NE-CZ-NH2	5.88	123.24	120.30
82	LK	17	ARG	NE-CZ-NH1	5.88	123.24	120.30
1	Sa	270	ASP	CB-CG-OD2	5.88	123.59	118.30
32	S1	971	A	O4'-C1'-N9	5.88	112.90	108.20
32	S1	1055	G	OP1-P-OP2	-5.88	110.78	119.60
32	S1	1088	G	O5'-C5'-C4'	-5.88	100.53	111.70
33	L1	1888	G	C5'-C4'-O4'	5.88	116.16	109.10
33	L1	2531	G	C1'-O4'-C4'	-5.88	105.20	109.90
33	L1	3373	C	P-O5'-C5'	-5.88	111.49	120.90
19	SY	5	VAL	CA-CB-CG1	-5.88	102.09	110.90
33	L1	1064	U	C1'-O4'-C4'	5.88	114.60	109.90
33	L1	1551	C	C5'-C4'-O4'	5.88	116.15	109.10
33	L1	2274	A	OP2-P-O3'	5.88	118.13	105.20
33	L1	2351	A	P-O5'-C5'	5.88	130.30	120.90
33	L1	2466	G	P-O3'-C3'	5.88	126.75	119.70
33	L1	2508	U	C1'-O4'-C4'	5.88	114.60	109.90
35	L2	88	C	O4'-C1'-C2'	-5.88	99.92	105.80
67	LS	98	ASP	C-N-CA	5.88	136.39	121.70
33	L1	599	C	P-O5'-C5'	-5.88	111.50	120.90
33	L1	606	C	O4'-C1'-C2'	-5.88	99.92	105.80
33	L1	1424	G	O4'-C1'-N9	5.88	112.90	108.20
1	Sa	175	THR	CA-CB-CG2	-5.87	104.18	112.40
32	S1	323	U	O4'-C1'-N1	5.87	112.90	108.20
32	S1	689	C	N1-C1'-C2'	5.87	121.64	114.00
32	S1	913	U	O4'-C4'-C3'	-5.87	98.13	104.00
32	S1	1613	G	O3'-P-O5'	5.87	115.16	104.00
33	L1	1168	G	C1'-O4'-C4'	5.87	114.60	109.90
39	LF	152	LEU	CB-CA-C	5.87	121.36	110.20
46	LT	59	SER	N-CA-CB	5.87	119.31	110.50
67	LS	93	TYR	CB-CG-CD2	5.87	124.52	121.00
79	Ls	213	ASP	N-CA-CB	-5.87	100.03	110.60
32	S1	159	U	O3'-P-O5'	5.87	115.15	104.00
32	S1	192	G	C1'-O4'-C4'	-5.87	105.20	109.90
32	S1	1393	G	C1'-O4'-C4'	-5.87	105.20	109.90
33	L1	312	U	O5'-P-OP2	-5.87	100.42	105.70
33	L1	1034	U	C5'-C4'-C3'	5.87	125.39	116.00
33	L1	3214	U	C3'-C2'-C1'	-5.87	96.80	101.50
34	L3	65	G	P-O5'-C5'	5.87	130.29	120.90
35	L2	96	A	C5'-C4'-O4'	5.87	116.15	109.10
69	La	34	ARG	CB-CA-C	5.87	122.14	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	830	U	N1-C1'-C2'	-5.87	105.54	112.00
33	L1	1022	G	O5'-P-OP2	-5.87	100.42	105.70
67	LS	139	ASP	N-CA-CB	5.87	121.17	110.60
32	S1	593	C	P-O3'-C3'	-5.87	112.66	119.70
32	S1	1799	G	OP2-P-O3'	5.87	118.11	105.20
33	L1	1244	A	OP2-P-O3'	5.87	118.11	105.20
33	L1	1651	A	O4'-C4'-C3'	5.87	110.79	106.10
33	L1	3342	C	C4'-C3'-C2'	-5.87	96.73	102.60
33	L1	2621	G	C2'-C3'-O3'	5.87	123.09	113.70
66	LN	96	GLN	CA-CB-CG	5.87	126.31	113.40
72	Lk	49	GLU	CA-CB-CG	5.87	126.31	113.40
8	SJ	89	PHE	N-CA-C	-5.87	95.16	111.00
31	S2	26	G	P-O5'-C5'	5.87	130.28	120.90
32	S1	1156	A	O4'-C1'-C2'	-5.87	99.93	105.80
33	L1	1914	C	O4'-C1'-N1	5.87	112.89	108.20
33	L1	2057	G	O4'-C1'-N9	5.87	112.89	108.20
33	L1	2284	U	C1'-O4'-C4'	-5.87	105.21	109.90
33	L1	2461	A	O4'-C1'-N9	5.87	112.89	108.20
33	L1	2918	U	O5'-P-OP2	-5.87	100.42	105.70
48	LV	112	THR	O-C-N	-5.87	113.31	122.70
57	Ll	57	LYS	O-C-N	5.87	132.09	122.70
64	LG	44	ALA	CB-CA-C	5.87	118.90	110.10
27	SH	119	LYS	N-CA-CB	5.86	121.16	110.60
31	S2	74	C	P-O5'-C5'	5.86	130.28	120.90
33	L1	325	A	P-O3'-C3'	5.86	126.74	119.70
33	L1	650	A	O5'-P-OP2	-5.86	100.42	105.70
33	L1	681	A	O4'-C1'-N9	5.86	112.89	108.20
33	L1	1902	G	C5'-C4'-O4'	5.86	116.14	109.10
35	L2	138	G	C4'-C3'-C2'	5.86	108.46	102.60
47	LU	136	LYS	N-CA-C	5.86	126.83	111.00
69	La	29	PHE	N-CA-C	5.86	126.83	111.00
77	Lc	95	ARG	NE-CZ-NH2	5.86	123.23	120.30
5	SE	24	ARG	NH1-CZ-NH2	-5.86	112.95	119.40
33	L1	2643	A	O4'-C4'-C3'	-5.86	98.14	104.00
33	L1	3086	G	O3'-P-O5'	5.86	115.14	104.00
23	SU	10	VAL	CA-CB-CG1	5.86	119.69	110.90
25	SC	60	HIS	N-CA-C	5.86	126.82	111.00
32	S1	118	U	P-O3'-C3'	-5.86	112.67	119.70
32	S1	1615	G	C4'-C3'-C2'	-5.86	96.74	102.60
33	L1	496	U	C4'-C3'-C2'	-5.86	96.74	102.60
33	L1	844	A	P-O3'-C3'	-5.86	112.67	119.70
33	L1	1825	G	C4'-C3'-C2'	-5.86	96.74	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1990	A	O4'-C1'-N9	5.86	112.89	108.20
34	L3	107	C	O4'-C1'-N1	5.86	112.89	108.20
58	Ln	22	SER	CB-CA-C	-5.86	98.97	110.10
33	L1	2661	G	P-O5'-C5'	5.86	130.28	120.90
32	S1	1461	G	O4'-C1'-C2'	5.86	112.87	107.60
33	L1	588	G	O4'-C1'-C2'	5.86	112.87	107.60
33	L1	729	G	C1'-O4'-C4'	5.86	114.59	109.90
33	L1	1109	G	O4'-C1'-N9	5.86	112.89	108.20
46	LT	88	ARG	N-CA-CB	-5.86	100.06	110.60
47	LU	54	HIS	C-N-CA	5.86	136.34	121.70
33	L1	141	C	OP2-P-O3'	5.86	118.08	105.20
33	L1	410	G	C5'-C4'-C3'	5.86	125.37	116.00
33	L1	1250	G	O4'-C1'-N9	5.86	112.89	108.20
33	L1	1576	C	OP1-P-OP2	-5.86	110.82	119.60
33	L1	2729	C	C4'-C3'-C2'	-5.86	96.75	102.60
35	L2	96	A	O5'-C5'-C4'	5.86	122.83	111.70
32	S1	577	C	N1-C1'-C2'	5.85	121.61	114.00
33	L1	2858	G	O4'-C1'-N9	5.85	112.88	108.20
33	L1	2998	A	C1'-O4'-C4'	5.85	114.58	109.90
33	L1	588	G	O4'-C1'-N9	5.85	112.88	108.20
33	L1	1130	G	C1'-O4'-C4'	-5.85	105.22	109.90
33	L1	1349	G	O4'-C1'-C2'	5.85	112.87	107.60
33	L1	1369	G	C5'-C4'-O4'	-5.85	102.08	109.10
33	L1	1431	G	C1'-O4'-C4'	-5.85	105.22	109.90
33	L1	2346	U	O4'-C1'-N1	5.85	112.88	108.20
33	L1	228	C	C5'-C4'-O4'	5.85	116.12	109.10
33	L1	938	U	C1'-O4'-C4'	5.85	114.58	109.90
33	L1	2239	A	O4'-C1'-N9	5.85	112.88	108.20
35	L2	89	G	C3'-C2'-C1'	5.85	106.18	101.50
45	LQ	267	TYR	CB-CG-CD1	-5.85	117.49	121.00
80	LC	369	PHE	CB-CG-CD1	-5.85	116.70	120.80
32	S1	1314	U	C1'-O4'-C4'	5.85	114.58	109.90
32	S1	1572	U	N1-C1'-C2'	5.85	121.60	114.00
33	L1	98	A	P-O5'-C5'	5.85	130.26	120.90
33	L1	458	G	O4'-C1'-N9	5.85	112.88	108.20
33	L1	1389	C	C5'-C4'-C3'	-5.85	106.64	116.00
33	L1	2783	U	N1-C1'-C2'	-5.85	105.57	112.00
33	L1	3328	A	P-O3'-C3'	5.85	126.72	119.70
55	Lg	5	LYS	N-CA-C	-5.85	95.21	111.00
32	S1	1324	U	C5'-C4'-O4'	5.85	116.12	109.10
33	L1	1213	G	C1'-O4'-C4'	-5.85	105.22	109.90
33	L1	2483	A	O4'-C1'-C2'	5.85	112.86	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	LP	124	ASP	CB-CG-OD2	5.85	123.56	118.30
2	SA	20	GLN	N-CA-CB	5.85	121.12	110.60
32	S1	1738	U	N1-C1'-C2'	5.85	121.60	114.00
39	LF	114	ARG	NE-CZ-NH1	5.85	123.22	120.30
80	LC	258	TRP	CH2-CZ2-CE2	-5.85	111.55	117.40
32	S1	372	U	O3'-P-O5'	-5.84	92.90	104.00
32	S1	1155	G	C3'-C2'-C1'	-5.84	96.82	101.50
33	L1	495	G	P-O5'-C5'	-5.84	111.55	120.90
33	L1	874	U	C3'-C2'-C1'	-5.84	96.82	101.50
33	L1	2149	G	C3'-C2'-C1'	-5.84	96.83	101.50
54	Lf	26	LYS	CA-CB-CG	5.84	126.26	113.40
67	LS	159	ARG	C-N-CD	-5.84	107.74	120.60
33	L1	1747	A	P-O3'-C3'	-5.84	112.69	119.70
32	S1	881	G	C5'-C4'-O4'	5.84	116.11	109.10
32	S1	1471	C	N1-C1'-C2'	5.84	121.59	114.00
33	L1	570	G	C4'-C3'-C2'	-5.84	96.76	102.60
33	L1	2468	G	C5'-C4'-C3'	5.84	125.35	116.00
27	SH	91	ALA	N-CA-CB	5.84	118.28	110.10
33	L1	447	C	C3'-C2'-C1'	5.84	106.17	101.50
33	L1	1347	U	O4'-C1'-N1	5.84	112.87	108.20
33	L1	3212	C	P-O3'-C3'	5.84	126.71	119.70
38	LE	139	ARG	NE-CZ-NH2	-5.84	117.38	120.30
32	S1	1356	A	P-O3'-C3'	5.84	126.71	119.70
33	L1	1546	G	C5'-C4'-O4'	5.84	116.11	109.10
33	L1	2732	U	C1'-O4'-C4'	-5.84	105.23	109.90
29	ST	12	TYR	CB-CG-CD1	5.84	124.50	121.00
33	L1	2512	U	C4'-C3'-C2'	-5.84	96.76	102.60
34	L3	30	G	O4'-C1'-C2'	5.84	112.85	107.60
6	SF	168	CYS	N-CA-CB	5.83	121.10	110.60
32	S1	594	C	C4'-C3'-C2'	-5.83	96.77	102.60
32	S1	1182	C	O3'-P-O5'	5.83	115.09	104.00
25	SC	5	PRO	N-CD-CG	5.83	111.95	103.20
32	S1	683	C	N1-C1'-C2'	5.83	121.58	114.00
32	S1	1320	C	P-O5'-C5'	-5.83	111.57	120.90
32	S1	1568	U	O4'-C1'-N1	5.83	112.87	108.20
33	L1	525	A	P-O3'-C3'	-5.83	112.70	119.70
33	L1	886	A	O4'-C1'-N9	-5.83	103.53	108.20
33	L1	2829	U	C1'-O4'-C4'	5.83	114.57	109.90
70	Li	88	ARG	N-CA-CB	5.83	121.10	110.60
14	SP	112	VAL	CB-CA-C	-5.83	100.32	111.40
19	SY	16	ARG	CA-CB-CG	5.83	126.23	113.40
25	SC	146	PRO	N-CA-CB	5.83	110.30	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2230	C	O4'-C1'-N1	5.83	112.86	108.20
33	L1	2771	U	C1'-O4'-C4'	-5.83	105.23	109.90
33	L1	3334	A	O4'-C1'-C2'	-5.83	99.97	105.80
37	LB	91	GLY	C-N-CA	5.83	136.28	121.70
80	LC	124	LYS	CB-CA-C	5.83	122.06	110.40
33	L1	2058	C	C5'-C4'-O4'	-5.83	102.10	109.10
58	Ln	43	TYR	C-N-CA	5.83	136.28	121.70
32	S1	1068	G	C5'-C4'-C3'	5.83	125.33	116.00
33	L1	977	G	P-O3'-C3'	-5.83	112.71	119.70
33	L1	1190	C	O4'-C1'-N1	5.83	112.86	108.20
33	L1	2062	U	O4'-C1'-C2'	-5.83	99.97	105.80
69	La	42	LEU	CB-CA-C	5.83	121.27	110.20
32	S1	1036	U	O4'-C1'-C2'	-5.83	99.97	105.80
33	L1	397	A	C1'-O4'-C4'	-5.83	105.24	109.90
41	LM	71	ASP	N-CA-C	-5.83	95.27	111.00
32	S1	1757	G	O5'-P-OP2	-5.83	100.46	105.70
33	L1	271	G	O4'-C1'-C2'	5.83	112.84	107.60
33	L1	475	U	C1'-O4'-C4'	5.83	114.56	109.90
33	L1	1542	A	P-O3'-C3'	5.83	126.69	119.70
33	L1	1800	G	C1'-O4'-C4'	5.83	114.56	109.90
33	L1	2463	U	P-O3'-C3'	-5.83	112.71	119.70
33	L1	2645	A	P-O3'-C3'	5.83	126.69	119.70
38	LE	110	GLU	N-CA-CB	5.83	121.09	110.60
32	S1	582	U	N1-C1'-C2'	5.82	121.57	114.00
33	L1	911	G	C3'-C2'-C1'	5.82	106.16	101.50
33	L1	1276	C	O3'-P-O5'	5.82	115.06	104.00
33	L1	3323	U	OP2-P-O3'	5.82	118.01	105.20
78	Le	118	PHE	CB-CG-CD2	5.82	124.88	120.80
32	S1	307	U	O4'-C1'-N1	5.82	112.86	108.20
32	S1	1543	U	O5'-C5'-C4'	-5.82	100.64	111.70
33	L1	902	U	C3'-C2'-C1'	5.82	106.16	101.50
33	L1	2676	A	C1'-O4'-C4'	5.82	114.56	109.90
46	LT	88	ARG	CG-CD-NE	-5.82	99.57	111.80
77	Lc	85	ARG	CA-CB-CG	5.82	126.21	113.40
9	SK	132	THR	CA-C-O	5.82	132.32	120.10
32	S1	832	C	C5'-C4'-O4'	5.82	116.08	109.10
33	L1	1078	U	C1'-O4'-C4'	-5.82	105.24	109.90
33	L1	1128	U	C3'-C2'-C1'	5.82	106.16	101.50
33	L1	2363	G	O4'-C1'-N9	5.82	112.86	108.20
33	L1	2666	G	O4'-C1'-C2'	5.82	112.84	107.60
33	L1	2730	A	O4'-C1'-C2'	-5.82	99.98	105.80
39	LF	92	ARG	NE-CZ-NH2	-5.82	117.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	SO	80	LEU	CB-CA-C	-5.82	99.14	110.20
31	S2	54	U	C5'-C4'-C3'	5.82	125.31	116.00
33	L1	972	C	C5'-C4'-C3'	5.82	125.31	116.00
19	SY	2	ASP	N-CA-C	-5.82	95.29	111.00
19	SY	24	THR	CB-CA-C	5.82	127.31	111.60
32	S1	657	C	C3'-C2'-C1'	5.82	106.15	101.50
33	L1	1192	A	P-O5'-C5'	5.82	130.21	120.90
33	L1	1215	U	C1'-O4'-C4'	-5.82	105.25	109.90
33	L1	1691	U	P-O3'-C3'	-5.82	112.72	119.70
83	Lm	73	THR	N-CA-CB	5.82	121.35	110.30
32	S1	663	C	C3'-C2'-C1'	5.82	106.15	101.50
32	S1	875	C	C4'-C3'-C2'	-5.82	96.78	102.60
32	S1	1359	C	O4'-C1'-N1	5.82	112.85	108.20
33	L1	970	A	P-O3'-C3'	-5.82	112.72	119.70
33	L1	1252	C	O4'-C1'-N1	-5.82	103.55	108.20
33	L1	1866	C	N1-C1'-C2'	5.82	121.56	114.00
34	L3	27	A	C4'-C3'-C2'	-5.82	96.78	102.60
32	S1	977	G	O4'-C1'-N9	5.81	112.85	108.20
33	L1	1959	U	O4'-C1'-C2'	-5.81	99.99	105.80
66	LN	93	LEU	O-C-N	-5.81	113.40	122.70
70	Li	1	MET	CB-CA-C	5.81	122.03	110.40
5	SE	5	GLY	N-CA-C	-5.81	98.57	113.10
25	SC	8	TYR	CB-CA-C	-5.81	98.78	110.40
31	S2	54	U	O4'-C1'-N1	5.81	112.85	108.20
32	S1	1024	A	O4'-C1'-C2'	-5.81	99.99	105.80
33	L1	364	A	C3'-C2'-C1'	-5.81	96.85	101.50
33	L1	873	A	O3'-P-O5'	-5.81	92.96	104.00
35	L2	103	C	C3'-C2'-C1'	5.81	106.15	101.50
59	Lo	32	ASP	CB-CA-C	5.81	122.02	110.40
77	Lc	31	GLY	CA-C-O	-5.81	110.14	120.60
83	Lm	8	ALA	CB-CA-C	5.81	118.82	110.10
32	S1	1211	U	C3'-C2'-C1'	5.81	106.15	101.50
33	L1	305	G	C1'-O4'-C4'	-5.81	105.25	109.90
33	L1	1331	C	C3'-C2'-C1'	5.81	106.15	101.50
33	L1	3050	A	N9-C1'-C2'	-5.81	105.61	112.00
35	L2	48	A	C1'-O4'-C4'	-5.81	105.25	109.90
67	LS	41	SER	C-N-CA	5.81	136.23	121.70
32	S1	556	G	P-O3'-C3'	5.81	126.67	119.70
32	S1	1177	G	N9-C1'-C2'	-5.81	105.61	112.00
33	L1	265	G	C1'-O4'-C4'	5.81	114.55	109.90
33	L1	788	G	O4'-C1'-N9	5.81	112.85	108.20
33	L1	1627	U	C5'-C4'-O4'	5.81	116.07	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	LO	135	ALA	N-CA-C	5.81	126.69	111.00
48	LV	157	PRO	N-CA-CB	5.81	110.27	103.30
80	LC	235	ARG	CD-NE-CZ	5.81	131.73	123.60
1	Sa	107	HIS	CA-C-N	5.81	129.98	117.20
32	S1	1225	A	C4'-C3'-O3'	-5.81	97.20	109.40
33	L1	44	A	O4'-C1'-C2'	-5.81	99.99	105.80
33	L1	1143	G	N9-C1'-C2'	5.81	121.55	114.00
33	L1	1611	G	C4'-C3'-C2'	-5.81	96.79	102.60
33	L1	3245	G	C1'-O4'-C4'	-5.81	105.25	109.90
38	LE	169	TYR	N-CA-CB	5.81	121.05	110.60
56	Lh	58	TYR	CB-CG-CD1	5.81	124.48	121.00
12	SO	56	ASP	CB-CG-OD1	5.81	123.53	118.30
32	S1	447	C	O4'-C1'-N1	5.81	112.84	108.20
33	L1	995	C	O4'-C1'-C2'	-5.81	99.99	105.80
33	L1	2635	G	C5'-C4'-C3'	5.81	125.29	116.00
39	LF	186	ILE	CB-CA-C	5.81	123.21	111.60
66	LN	52	ARG	C-N-CA	5.81	136.21	121.70
28	SN	32	ARG	NE-CZ-NH1	-5.80	117.40	120.30
32	S1	620	G	C1'-O4'-C4'	-5.80	105.26	109.90
32	S1	656	G	C3'-C2'-C1'	5.80	106.14	101.50
33	L1	1583	G	C4'-C3'-C2'	-5.80	96.80	102.60
33	L1	1949	G	N9-C1'-C2'	-5.80	105.62	112.00
33	L1	2595	G	C5'-C4'-C3'	5.80	125.29	116.00
49	LX	58	ARG	N-CA-C	5.80	126.67	111.00
83	Lm	1	MET	N-CA-CB	-5.80	100.15	110.60
32	S1	434	G	O4'-C1'-N9	5.80	112.84	108.20
32	S1	1697	G	P-O3'-C3'	-5.80	112.74	119.70
33	L1	111	C	C3'-C2'-C1'	5.80	106.14	101.50
33	L1	561	G	O4'-C4'-C3'	-5.80	98.20	104.00
33	L1	1743	C	O4'-C1'-N1	5.80	112.84	108.20
33	L1	2219	A	C5'-C4'-O4'	-5.80	102.14	109.10
64	LG	30	ALA	N-CA-CB	-5.80	101.98	110.10
32	S1	797	A	P-O3'-C3'	5.80	126.66	119.70
32	S1	1467	C	O4'-C1'-C2'	-5.80	100.00	105.80
33	L1	111	C	O4'-C1'-N1	5.80	112.84	108.20
33	L1	164	C	O4'-C4'-C3'	-5.80	98.20	104.00
33	L1	554	C	O3'-P-O5'	-5.80	92.98	104.00
33	L1	1163	A	C4'-C3'-C2'	-5.80	96.80	102.60
33	L1	1288	C	N1-C1'-C2'	5.80	121.54	114.00
33	L1	1953	C	C1'-O4'-C4'	5.80	114.54	109.90
33	L1	2740	C	C3'-C2'-C1'	5.80	106.14	101.50
33	L1	2839	A	N9-C1'-C2'	-5.80	105.62	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3225	G	N9-C1'-C2'	-5.80	105.62	112.00
35	L2	128	C	O4'-C1'-C2'	-5.80	100.00	105.80
41	LM	97	TYR	CB-CG-CD2	5.80	124.48	121.00
17	SV	69	ARG	NE-CZ-NH1	5.80	123.20	120.30
32	S1	656	G	P-O5'-C5'	5.80	130.18	120.90
32	S1	1222	G	C5'-C4'-C3'	5.80	125.28	116.00
33	L1	1059	A	C3'-C2'-C1'	5.80	106.14	101.50
33	L1	1087	G	C5'-C4'-C3'	5.80	125.28	116.00
33	L1	1310	G	P-O5'-C5'	-5.80	111.62	120.90
33	L1	1856	G	O4'-C1'-C2'	-5.80	100.00	105.80
33	L1	2228	A	O4'-C1'-N9	5.80	112.84	108.20
33	L1	3092	A	C4'-C3'-C2'	-5.80	96.80	102.60
33	L1	3240	C	P-O5'-C5'	5.80	130.18	120.90
33	L1	3316	C	O3'-P-O5'	-5.80	92.98	104.00
45	LQ	44	ASP	N-CA-CB	5.80	121.04	110.60
81	LD	345	THR	N-CA-CB	5.80	121.32	110.30
31	S2	33	U	O4'-C1'-N1	5.80	112.84	108.20
33	L1	1473	U	C1'-O4'-C4'	-5.80	105.26	109.90
33	L1	2724	A	C1'-O4'-C4'	-5.80	105.26	109.90
33	L1	3057	A	P-O5'-C5'	-5.80	111.62	120.90
51	LY	28	VAL	CA-CB-CG2	-5.80	102.20	110.90
32	S1	1147	A	C4'-C3'-C2'	-5.80	96.80	102.60
32	S1	1747	A	O4'-C1'-C2'	-5.80	100.00	105.80
35	L2	55	G	OP2-P-O3'	5.80	117.95	105.20
13	SQ	81	ARG	O-C-N	-5.79	113.43	122.70
32	S1	1310	C	O4'-C1'-C2'	-5.79	100.00	105.80
33	L1	1232	A	P-O5'-C5'	5.79	130.17	120.90
33	L1	3019	C	C5'-C4'-C3'	5.79	125.27	116.00
48	LV	152	SER	C-N-CA	5.79	136.19	121.70
2	SA	89	ARG	NE-CZ-NH1	5.79	123.20	120.30
27	SH	81	VAL	CB-CA-C	5.79	122.41	111.40
32	S1	225	G	O4'-C1'-N9	5.79	112.83	108.20
33	L1	1090	C	P-O3'-C3'	5.79	126.65	119.70
33	L1	1146	A	C4'-C3'-C2'	-5.79	96.81	102.60
33	L1	2172	C	O4'-C1'-C2'	-5.79	100.01	105.80
56	Lh	26	TYR	CZ-CE2-CD2	-5.79	114.59	119.80
3	SB	110	LEU	N-CA-C	-5.79	95.36	111.00
12	SO	80	LEU	N-CA-C	5.79	126.64	111.00
23	SU	75	SER	N-CA-C	-5.79	95.36	111.00
32	S1	732	G	C5'-C4'-C3'	5.79	125.27	116.00
33	L1	105	A	C5'-C4'-O4'	5.79	116.05	109.10
33	L1	330	C	C5'-C4'-C3'	5.79	125.27	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	852	C	C3'-C2'-C1'	5.79	106.13	101.50
33	L1	919	G	N9-C1'-C2'	5.79	121.53	114.00
33	L1	1968	C	O4'-C1'-N1	5.79	112.83	108.20
33	L1	2622	G	C4'-C3'-C2'	-5.79	96.81	102.60
33	L1	2758	C	C1'-O4'-C4'	-5.79	105.27	109.90
33	L1	2995	G	O4'-C1'-C2'	-5.79	100.01	105.80
35	L2	67	C	OP2-P-O3'	5.79	117.94	105.20
35	L2	69	G	C5'-C4'-O4'	5.79	116.05	109.10
46	LT	81	ARG	O-C-N	-5.79	113.43	122.70
32	S1	488	C	O4'-C4'-C3'	-5.79	98.21	104.00
33	L1	530	C	O4'-C1'-C2'	-5.79	100.01	105.80
33	L1	1224	A	C2'-C3'-O3'	5.79	122.96	113.70
33	L1	1800	G	O4'-C4'-C3'	-5.79	98.21	104.00
33	L1	2454	U	C5'-C4'-O4'	5.79	116.05	109.10
33	L1	2863	U	P-O5'-C5'	-5.79	111.64	120.90
33	L1	3293	U	C1'-O4'-C4'	-5.79	105.27	109.90
71	Lj	4	ARG	CA-C-N	-5.79	104.46	117.20
33	L1	396	G	O4'-C1'-N9	5.79	112.83	108.20
33	L1	715	A	C1'-O4'-C4'	5.79	114.53	109.90
33	L1	1053	C	C3'-C2'-C1'	5.79	106.13	101.50
33	L1	2513	U	O4'-C4'-C3'	-5.79	98.21	104.00
33	L1	2589	G	O5'-P-OP2	-5.79	100.49	105.70
33	L1	2808	U	P-O5'-C5'	5.79	130.16	120.90
42	LP	86	HIS	CA-CB-CG	-5.79	103.76	113.60
57	Ll	11	ARG	N-CA-C	5.79	126.63	111.00
32	S1	1245	G	C1'-O4'-C4'	5.79	114.53	109.90
33	L1	2404	C	C1'-O4'-C4'	-5.79	105.27	109.90
33	L1	2828	U	N1-C1'-C2'	5.79	121.52	114.00
37	LB	51	ASP	CB-CG-OD2	-5.79	113.09	118.30
32	S1	517	U	C5'-C4'-C3'	5.79	125.26	116.00
32	S1	1020	U	O4'-C1'-N1	5.79	112.83	108.20
32	S1	1314	U	O4'-C1'-C2'	-5.79	100.02	105.80
32	S1	1760	A	P-O5'-C5'	5.79	130.16	120.90
33	L1	121	A	P-O5'-C5'	5.79	130.16	120.90
33	L1	868	A	O4'-C1'-C2'	5.79	112.81	107.60
35	L2	48	A	OP1-P-O3'	5.79	117.93	105.20
73	Lp	18	MET	CG-SD-CE	5.79	109.46	100.20
13	SQ	81	ARG	NE-CZ-NH1	5.78	123.19	120.30
31	S2	5	U	C3'-C2'-C1'	-5.78	96.87	101.50
32	S1	1072	U	C1'-O4'-C4'	-5.78	105.27	109.90
32	S1	1194	C	C3'-C2'-C1'	5.78	106.13	101.50
33	L1	126	G	O4'-C1'-N9	5.78	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3027	G	P-O3'-C3'	5.78	126.64	119.70
64	LG	101	SER	N-CA-CB	5.78	119.18	110.50
72	Lk	48	ARG	N-CA-CB	5.78	121.01	110.60
33	L1	603	G	C3'-C2'-C1'	-5.78	96.87	101.50
33	L1	1871	G	C1'-O4'-C4'	-5.78	105.27	109.90
33	L1	2877	U	O4'-C1'-C2'	5.78	112.80	107.60
35	L2	33	U	O5'-P-OP1	5.78	117.64	110.70
1	Sa	134	ILE	N-CA-C	-5.78	95.39	111.00
3	SB	110	LEU	N-CA-CB	5.78	121.96	110.40
7	SI	66	PHE	CB-CG-CD1	-5.78	116.75	120.80
11	SM	116	LYS	CA-CB-CG	5.78	126.12	113.40
25	SC	194	GLU	C-N-CA	5.78	136.15	121.70
32	S1	138	C	O4'-C1'-N1	-5.78	103.58	108.20
33	L1	804	A	C1'-C2'-O2'	-5.78	93.26	110.60
33	L1	1417	G	O4'-C1'-N9	5.78	112.83	108.20
71	Lj	20	TYR	CB-CG-CD1	-5.78	117.53	121.00
23	SU	80	LEU	CD1-CG-CD2	-5.78	93.16	110.50
32	S1	596	A	O4'-C1'-N9	5.78	112.82	108.20
33	L1	915	G	O5'-P-OP2	-5.78	100.50	105.70
80	LC	100	ARG	NE-CZ-NH2	-5.78	117.41	120.30
32	S1	496	A	O4'-C1'-C2'	-5.78	100.02	105.80
32	S1	965	U	O4'-C1'-C2'	-5.78	100.02	105.80
33	L1	1534	C	C4'-C3'-C2'	-5.78	96.82	102.60
33	L1	1601	G	O4'-C1'-N9	-5.78	103.58	108.20
56	Lh	13	LYS	CB-CA-C	5.78	121.96	110.40
32	S1	16	G	C4'-C3'-C2'	-5.78	96.82	102.60
32	S1	394	G	O4'-C1'-N9	5.78	112.82	108.20
32	S1	609	A	O4'-C1'-C2'	-5.78	100.02	105.80
32	S1	1060	U	C1'-O4'-C4'	-5.78	105.28	109.90
32	S1	1426	C	P-O5'-C5'	-5.78	111.66	120.90
33	L1	1654	C	N1-C1'-C2'	5.78	121.51	114.00
33	L1	2685	C	C5'-C4'-O4'	-5.78	102.17	109.10
33	L1	2972	C	C5'-C4'-C3'	5.78	125.24	116.00
37	LB	225	VAL	CA-CB-CG1	5.78	119.56	110.90
49	LX	108	ALA	N-CA-CB	5.78	118.19	110.10
77	Lc	95	ARG	NE-CZ-NH1	5.78	123.19	120.30
7	SI	99	TYR	CB-CG-CD2	-5.77	117.54	121.00
32	S1	523	C	P-O5'-C5'	5.77	130.14	120.90
32	S1	1032	A	C3'-C2'-C1'	5.77	106.12	101.50
33	L1	398	G	C1'-O4'-C4'	-5.77	105.28	109.90
33	L1	1643	A	P-O3'-C3'	-5.77	112.77	119.70
32	S1	1162	A	O4'-C1'-N9	5.77	112.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1781	U	OP2-P-O3'	5.77	117.90	105.20
33	L1	2109	G	C3'-C2'-C1'	-5.77	96.88	101.50
33	L1	2278	G	C4'-C3'-C2'	5.77	108.37	102.60
33	L1	2364	C	O4'-C1'-N1	5.77	112.82	108.20
33	L1	2800	C	O4'-C1'-C2'	5.77	112.80	107.60
46	LT	62	ARG	NE-CZ-NH1	-5.77	117.41	120.30
49	LX	94	PHE	CB-CG-CD1	5.77	124.84	120.80
32	S1	206	U	O4'-C1'-N1	5.77	112.82	108.20
3	SB	189	MET	N-CA-CB	-5.77	100.21	110.60
32	S1	340	G	O4'-C1'-N9	5.77	112.82	108.20
32	S1	984	A	P-O3'-C3'	-5.77	112.78	119.70
32	S1	1226	U	C5'-C4'-O4'	5.77	116.02	109.10
33	L1	1071	G	C3'-C2'-C1'	-5.77	96.88	101.50
33	L1	3150	G	C1'-O4'-C4'	5.77	114.52	109.90
34	L3	38	U	C5'-C4'-C3'	-5.77	106.77	116.00
35	L2	58	A	O4'-C1'-N9	5.77	112.81	108.20
35	L2	100	A	C5'-C4'-C3'	5.77	125.23	116.00
37	LB	140	ASN	N-CA-C	-5.77	95.42	111.00
31	S2	47	U	C5'-C4'-O4'	5.77	116.02	109.10
32	S1	1040	G	O4'-C4'-C3'	-5.77	98.23	104.00
33	L1	281	G	N9-C1'-C2'	5.77	121.50	114.00
33	L1	1646	U	C4'-C3'-C2'	-5.77	96.83	102.60
33	L1	2586	C	O4'-C1'-C2'	-5.77	100.03	105.80
42	LP	75	VAL	CA-C-N	5.77	133.25	117.10
49	LX	63	GLY	O-C-N	-5.77	113.47	122.70
66	LN	107	ARG	NE-CZ-NH1	5.77	123.18	120.30
32	S1	1629	U	O4'-C1'-N1	5.77	112.81	108.20
33	L1	3298	G	C3'-C2'-C1'	-5.77	96.89	101.50
1	Sa	223	SER	CB-CA-C	5.76	121.05	110.10
4	SD	131	PHE	N-CA-CB	-5.76	100.22	110.60
33	L1	638	G	O4'-C4'-C3'	-5.76	98.24	104.00
33	L1	1135	C	O4'-C1'-C2'	-5.76	100.03	105.80
33	L1	1191	U	O5'-P-OP2	-5.76	100.51	105.70
33	L1	1266	G	P-O5'-C5'	5.76	130.12	120.90
33	L1	2424	G	P-O3'-C3'	5.76	126.62	119.70
35	L2	43	G	C5'-C4'-O4'	-5.76	102.18	109.10
42	LP	93	LYS	CB-CA-C	5.76	121.93	110.40
60	Lr	17	CYS	N-CA-CB	5.76	120.98	110.60
70	Li	49	LYS	O-C-N	5.76	131.92	122.70
32	S1	1777	G	C5'-C4'-C3'	-5.76	106.78	116.00
35	L2	99	G	C2'-C3'-O3'	5.76	122.92	113.70
33	L1	1451	U	C1'-O4'-C4'	5.76	114.51	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1603	U	C1'-O4'-C4'	-5.76	105.29	109.90
33	L1	1805	A	P-O5'-C5'	5.76	130.12	120.90
33	L1	2658	U	N1-C1'-C2'	-5.76	105.66	112.00
33	L1	3142	C	C4'-C3'-C2'	-5.76	96.84	102.60
45	LQ	153	THR	C-N-CA	5.76	136.11	121.70
48	LV	137	ILE	O-C-N	-5.76	113.48	122.70
25	SC	94	LYS	C-N-CA	5.76	136.10	121.70
32	S1	282	C	C1'-O4'-C4'	5.76	114.51	109.90
32	S1	1587	G	C5'-C4'-O4'	5.76	116.01	109.10
33	L1	448	G	C1'-O4'-C4'	-5.76	105.29	109.90
33	L1	506	U	O4'-C1'-N1	5.76	112.81	108.20
33	L1	1729	G	C3'-C2'-C1'	-5.76	96.89	101.50
33	L1	1960	C	C5'-C4'-C3'	5.76	125.21	116.00
33	L1	2076	C	C4'-C3'-C2'	-5.76	96.84	102.60
33	L1	2736	A	C1'-O4'-C4'	5.76	114.51	109.90
33	L1	3377	G	O4'-C1'-N9	5.76	112.81	108.20
48	LV	84	TRP	CE3-CZ3-CH2	-5.76	114.86	121.20
64	LG	141	LYS	CA-CB-CG	5.76	126.07	113.40
80	LC	349	GLN	C-N-CA	5.76	136.10	121.70
16	SR	116	ILE	CA-C-O	-5.76	108.01	120.10
23	SU	12	LEU	CB-CG-CD1	5.76	120.79	111.00
32	S1	974	C	C5'-C4'-O4'	5.76	116.01	109.10
33	L1	900	C	N1-C1'-C2'	5.76	121.48	114.00
33	L1	1582	C	N1-C1'-C2'	5.76	121.48	114.00
33	L1	2626	G	C4'-C3'-C2'	-5.76	96.84	102.60
32	S1	524	A	C4'-C3'-O3'	5.76	124.51	113.00
32	S1	1108	U	O4'-C4'-C3'	-5.76	98.24	104.00
33	L1	646	U	O4'-C1'-N1	5.76	112.81	108.20
11	SM	112	GLU	O-C-N	5.75	131.91	122.70
33	L1	1226	G	C3'-C2'-C1'	-5.75	96.90	101.50
33	L1	1794	A	O4'-C1'-N9	5.75	112.80	108.20
33	L1	2069	G	C3'-C2'-C1'	5.75	106.10	101.50
32	S1	577	C	C1'-O4'-C4'	-5.75	105.30	109.90
32	S1	611	G	C3'-C2'-C1'	-5.75	96.90	101.50
32	S1	974	C	N1-C1'-C2'	-5.75	105.67	112.00
33	L1	787	G	N9-C1'-C2'	-5.75	105.67	112.00
33	L1	1350	G	C4'-C3'-C2'	-5.75	96.85	102.60
33	L1	2418	A	O3'-P-O5'	-5.75	93.07	104.00
33	L1	2521	C	O4'-C1'-N1	5.75	112.80	108.20
33	L1	2698	A	C3'-C2'-C1'	5.75	106.10	101.50
35	L2	95	C	O4'-C1'-N1	5.75	112.80	108.20
40	LH	122	ALA	O-C-N	-5.75	113.50	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	LT	23	TRP	CH2-CZ2-CE2	5.75	123.15	117.40
79	Ls	97	ASP	N-CA-CB	5.75	120.96	110.60
82	LK	92	MET	CG-SD-CE	-5.75	91.00	100.20
5	SE	30	ARG	N-CA-CB	5.75	120.95	110.60
32	S1	489	C	C3'-C2'-C1'	5.75	106.10	101.50
32	S1	1374	G	C3'-C2'-C1'	-5.75	96.90	101.50
33	L1	602	G	C1'-O4'-C4'	-5.75	105.30	109.90
33	L1	3390	G	P-O5'-C5'	5.75	130.10	120.90
54	Lf	102	SER	N-CA-CB	5.75	119.13	110.50
80	LC	300	THR	N-CA-CB	5.75	121.23	110.30
4	SD	52	LEU	CB-CA-C	-5.75	99.28	110.20
33	L1	826	C	C3'-C2'-C1'	-5.75	96.90	101.50
33	L1	1370	A	C4'-C3'-C2'	5.75	108.35	102.60
33	L1	2063	U	C3'-C2'-C1'	5.75	106.10	101.50
33	L1	2078	G	C4'-C3'-C2'	-5.75	96.85	102.60
31	S2	18	G	C1'-O4'-C4'	-5.75	105.30	109.90
32	S1	619	A	C5'-C4'-O4'	5.75	116.00	109.10
32	S1	1587	G	N9-C1'-C2'	5.75	121.47	114.00
33	L1	954	A	O5'-P-OP1	5.75	117.60	110.70
33	L1	1326	C	C3'-C2'-C1'	5.75	106.10	101.50
33	L1	2185	U	C4'-C3'-C2'	-5.75	96.85	102.60
33	L1	2695	A	P-O5'-C5'	5.75	130.10	120.90
33	L1	2873	G	N9-C1'-C2'	5.75	121.47	114.00
33	L1	3035	C	P-O5'-C5'	5.75	130.10	120.90
33	L1	3334	A	OP2-P-O3'	5.75	117.85	105.20
34	L3	63	U	C4'-C3'-C2'	-5.75	96.85	102.60
35	L2	19	G	N9-C1'-C2'	5.75	121.47	114.00
38	LE	115	GLY	CA-C-N	-5.75	104.55	117.20
67	LS	155	TYR	CB-CA-C	-5.75	98.90	110.40
72	Lk	84	LYS	CA-CB-CG	5.75	126.05	113.40
32	S1	50	C	O3'-P-O5'	5.75	114.92	104.00
32	S1	335	A	O4'-C1'-N9	5.75	112.80	108.20
33	L1	1495	G	O4'-C4'-C3'	-5.75	98.25	104.00
33	L1	2072	U	P-O3'-C3'	5.75	126.60	119.70
33	L1	2393	G	N9-C1'-C2'	5.75	121.47	114.00
33	L1	2647	C	C3'-C2'-C1'	5.75	106.10	101.50
33	L1	3365	U	OP1-P-OP2	-5.75	110.98	119.60
35	L2	107	G	O4'-C1'-C2'	5.75	112.77	107.60
45	LQ	186	ASP	CB-CG-OD1	-5.75	113.13	118.30
47	LU	158	ASN	CB-CA-C	5.75	121.89	110.40
67	LS	163	ARG	CA-CB-CG	5.75	126.04	113.40
25	SC	162	LEU	CB-CA-C	-5.75	99.28	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1498	U	O4'-C4'-C3'	-5.75	98.25	104.00
33	L1	2499	U	P-O5'-C5'	5.75	130.09	120.90
3	SB	172	VAL	CA-CB-CG2	5.74	119.52	110.90
32	S1	323	U	C3'-C2'-C1'	5.74	106.09	101.50
32	S1	1070	A	O4'-C1'-C2'	-5.74	100.06	105.80
32	S1	1274	G	O4'-C1'-C2'	-5.74	100.06	105.80
32	S1	1311	U	C1'-O4'-C4'	-5.74	105.31	109.90
33	L1	450	C	O4'-C4'-C3'	-5.74	98.26	104.00
33	L1	959	U	C1'-O4'-C4'	-5.74	105.31	109.90
33	L1	1064	U	C3'-C2'-C1'	5.74	106.09	101.50
33	L1	2529	C	N1-C1'-C2'	5.74	121.47	114.00
38	LE	142	ARG	NH1-CZ-NH2	5.74	125.72	119.40
64	LG	182	LYS	C-N-CA	5.74	136.06	121.70
32	S1	648	C	C3'-C2'-C1'	5.74	106.09	101.50
32	S1	1304	A	N9-C1'-C2'	-5.74	105.68	112.00
33	L1	1053	C	O4'-C1'-C2'	-5.74	100.06	105.80
33	L1	1899	U	OP2-P-O3'	5.74	117.83	105.20
33	L1	2468	G	C2'-C3'-O3'	5.74	122.89	113.70
45	LQ	259	LYS	N-CA-CB	5.74	120.94	110.60
32	S1	1413	C	N1-C1'-C2'	5.74	121.46	114.00
32	S1	1545	A	OP1-P-OP2	-5.74	110.99	119.60
32	S1	1562	C	C3'-C2'-C1'	5.74	106.09	101.50
33	L1	743	C	O4'-C1'-C2'	-5.74	100.06	105.80
33	L1	1095	C	C4'-C3'-C2'	-5.74	96.86	102.60
33	L1	1371	G	C3'-C2'-C1'	5.74	106.09	101.50
33	L1	2675	G	O3'-P-O5'	-5.74	93.09	104.00
46	LT	172	ARG	CD-NE-CZ	-5.74	115.56	123.60
48	LV	128	ARG	CA-CB-CG	5.74	126.03	113.40
51	LY	27	ARG	N-CA-CB	-5.74	100.27	110.60
33	L1	1578	U	O4'-C1'-N1	5.74	112.79	108.20
1	Sa	330	ALA	N-CA-CB	5.74	118.13	110.10
32	S1	381	G	N9-C1'-C2'	-5.74	105.69	112.00
33	L1	1948	G	C4'-C3'-C2'	-5.74	96.86	102.60
48	LV	112	THR	C-N-CA	-5.74	107.36	121.70
67	LS	94	LYS	CB-CG-CD	5.74	126.52	111.60
17	SV	76	LEU	CB-CG-CD2	5.74	120.75	111.00
32	S1	1059	U	P-O5'-C5'	5.74	130.08	120.90
32	S1	1681	G	O4'-C1'-N9	5.74	112.79	108.20
33	L1	860	G	C1'-O4'-C4'	-5.74	105.31	109.90
33	L1	974	G	P-O5'-C5'	-5.74	111.72	120.90
33	L1	1892	A	C5'-C4'-C3'	-5.74	106.82	116.00
33	L1	2410	U	P-O3'-C3'	-5.74	112.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2691	U	N1-C1'-C2'	5.74	121.46	114.00
66	LN	109	LYS	CA-CB-CG	5.74	126.02	113.40
78	Le	128	MET	CB-CA-C	5.74	121.87	110.40
33	L1	381	G	P-O3'-C3'	5.73	126.58	119.70
33	L1	841	G	OP1-P-OP2	-5.73	111.00	119.60
33	L1	1129	G	C5'-C4'-C3'	5.73	125.17	116.00
33	L1	2171	A	C2'-C3'-O3'	5.73	122.88	113.70
33	L1	2568	G	C1'-O4'-C4'	5.73	114.49	109.90
33	L1	3026	C	C1'-O4'-C4'	-5.73	105.31	109.90
15	SS	44	ARG	NH1-CZ-NH2	-5.73	113.09	119.40
32	S1	124	G	O3'-P-O5'	-5.73	93.11	104.00
32	S1	404	A	P-O5'-C5'	5.73	130.07	120.90
32	S1	565	G	P-O3'-C3'	-5.73	112.82	119.70
32	S1	1290	U	OP1-P-OP2	-5.73	111.00	119.60
33	L1	639	A	C1'-C2'-O2'	5.73	127.80	110.60
33	L1	1495	G	P-O3'-C3'	5.73	126.58	119.70
33	L1	1972	C	O4'-C1'-N1	5.73	112.79	108.20
33	L1	2758	C	OP2-P-O3'	5.73	117.81	105.20
34	L3	107	C	C1'-O4'-C4'	-5.73	105.31	109.90
70	Li	40	SER	N-CA-C	5.73	126.48	111.00
2	SA	88	GLN	CB-CA-C	-5.73	98.94	110.40
29	ST	12	TYR	CB-CA-C	5.73	121.86	110.40
32	S1	476	U	O4'-C1'-C2'	-5.73	100.07	105.80
32	S1	1414	G	O4'-C1'-N9	5.73	112.78	108.20
33	L1	303	U	C4'-C3'-C2'	-5.73	96.87	102.60
33	L1	705	A	O4'-C1'-N9	5.73	112.78	108.20
33	L1	1028	G	C5'-C4'-C3'	5.73	125.17	116.00
33	L1	1202	C	N1-C1'-C2'	5.73	121.45	114.00
33	L1	1877	G	C3'-C2'-C1'	-5.73	96.92	101.50
33	L1	2417	G	OP2-P-O3'	5.73	117.81	105.20
33	L1	2669	C	O4'-C1'-C2'	5.73	112.76	107.60
33	L1	2951	U	P-O5'-C5'	5.73	130.07	120.90
33	L1	3362	A	O4'-C1'-N9	5.73	112.78	108.20
42	LP	68	ARG	NE-CZ-NH1	-5.73	117.44	120.30
45	LQ	197	LYS	C-N-CA	5.73	136.03	121.70
59	Lo	21	ARG	NE-CZ-NH2	5.73	123.17	120.30
70	Li	71	ARG	CA-CB-CG	5.73	126.01	113.40
2	SA	171	GLY	C-N-CA	5.73	136.02	121.70
32	S1	1138	A	O4'-C4'-C3'	-5.73	98.27	104.00
33	L1	1088	A	N9-C1'-C2'	5.73	121.45	114.00
33	L1	2417	G	O4'-C1'-N9	5.73	112.78	108.20
33	L1	2936	A	O4'-C1'-N9	5.73	112.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LV	60	PHE	CB-CG-CD1	5.73	124.81	120.80
70	Li	18	ASN	N-CA-CB	5.73	120.91	110.60
31	S2	33	U	O4'-C4'-C3'	-5.73	98.27	104.00
32	S1	250	A	P-O3'-C3'	5.73	126.57	119.70
32	S1	618	C	C3'-C2'-C1'	5.73	106.08	101.50
32	S1	842	G	O4'-C1'-N9	5.73	112.78	108.20
33	L1	1350	G	C3'-C2'-C1'	-5.73	96.92	101.50
33	L1	2090	G	C4'-C3'-C2'	-5.73	96.87	102.60
33	L1	2761	A	N9-C1'-C2'	5.73	121.45	114.00
33	L1	2803	A	O4'-C1'-C2'	5.73	112.75	107.60
72	Lk	66	VAL	CA-C-N	5.73	127.65	116.20
33	L1	2485	U	C1'-O4'-C4'	5.73	114.48	109.90
32	S1	1701	G	O4'-C1'-C2'	5.72	112.75	107.60
33	L1	914	C	P-O3'-C3'	-5.72	112.83	119.70
33	L1	1007	A	C1'-O4'-C4'	-5.72	105.32	109.90
33	L1	1666	C	P-O3'-C3'	-5.72	112.83	119.70
33	L1	2975	G	O4'-C1'-C2'	5.72	112.75	107.60
35	L2	119	C	C4'-C3'-C2'	-5.72	96.88	102.60
67	LS	5	ARG	NH1-CZ-NH2	5.72	125.70	119.40
81	LD	359	LEU	N-CA-CB	5.72	121.85	110.40
32	S1	82	G	O5'-P-OP1	5.72	117.57	110.70
32	S1	103	U	C3'-C2'-C1'	5.72	106.08	101.50
33	L1	555	G	N9-C1'-C2'	5.72	121.44	114.00
33	L1	1022	G	O4'-C1'-C2'	5.72	112.75	107.60
33	L1	1111	U	P-O3'-C3'	-5.72	112.83	119.70
33	L1	1321	A	C3'-C2'-C1'	5.72	106.08	101.50
33	L1	1666	C	C5'-C4'-O4'	5.72	115.97	109.10
33	L1	2659	A	C4'-C3'-O3'	5.72	124.44	113.00
33	L1	2721	C	C5'-C4'-O4'	-5.72	102.23	109.10
46	LT	124	TYR	CB-CG-CD1	-5.72	117.57	121.00
54	Lf	20	LEU	N-CA-CB	-5.72	98.95	110.40
32	S1	1069	G	O4'-C4'-C3'	-5.72	98.28	104.00
33	L1	879	A	C5'-C4'-O4'	5.72	115.97	109.10
33	L1	2630	A	P-O5'-C5'	5.72	130.05	120.90
33	L1	2803	A	C1'-O4'-C4'	-5.72	105.32	109.90
10	SL	22	TRP	CA-CB-CG	5.72	124.57	113.70
33	L1	877	U	O5'-P-OP1	5.72	117.56	110.70
33	L1	2621	G	C1'-O4'-C4'	5.72	114.48	109.90
33	L1	2975	G	C5'-C4'-C3'	5.72	125.15	116.00
68	LW	68	ASP	CB-CG-OD1	5.72	123.45	118.30
81	LD	335	PRO	O-C-N	-5.72	113.55	122.70
33	L1	1507	A	OP2-P-O3'	5.72	117.78	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	57	A	C1'-O4'-C4'	-5.72	105.33	109.90
33	L1	209	G	P-O5'-C5'	5.72	130.04	120.90
33	L1	1115	A	O4'-C1'-N9	-5.72	103.63	108.20
33	L1	1282	A	C1'-O4'-C4'	5.72	114.47	109.90
38	LE	86	LEU	N-CA-CB	5.72	121.83	110.40
38	LE	108	ILE	CG1-CB-CG2	5.72	123.98	111.40
39	LF	119	GLU	N-CA-CB	5.72	120.89	110.60
42	LP	99	ARG	NE-CZ-NH1	5.72	123.16	120.30
84	LI	153	ARG	NE-CZ-NH1	5.72	123.16	120.30
32	S1	409	C	C3'-C2'-C1'	5.71	106.07	101.50
32	S1	1115	G	O4'-C1'-N9	5.71	112.77	108.20
33	L1	406	A	C4'-C3'-C2'	-5.71	96.89	102.60
33	L1	917	A	O5'-P-OP1	5.71	117.56	110.70
45	LQ	260	GLU	CB-CA-C	5.71	121.83	110.40
64	LG	184	ILE	N-CA-CB	-5.71	97.66	110.80
81	LD	42	ARG	N-CA-CB	5.71	120.89	110.60
32	S1	2	A	P-O5'-C5'	5.71	130.04	120.90
32	S1	1069	G	P-O5'-C5'	5.71	130.04	120.90
33	L1	1427	C	OP2-P-O3'	5.71	117.77	105.20
33	L1	1768	U	C4'-C3'-C2'	-5.71	96.89	102.60
33	L1	2489	A	O4'-C1'-C2'	-5.71	100.09	105.80
33	L1	2631	A	O4'-C1'-N9	5.71	112.77	108.20
34	L3	101	A	O4'-C1'-C2'	-5.71	100.09	105.80
47	LU	74	VAL	CA-CB-CG1	5.71	119.47	110.90
1	Sa	59	CYS	CA-CB-SG	-5.71	103.72	114.00
4	SD	153	ILE	N-CA-CB	-5.71	97.67	110.80
32	S1	979	A	O5'-C5'-C4'	-5.71	100.85	111.70
33	L1	2620	U	C3'-C2'-C1'	-5.71	96.93	101.50
33	L1	2870	U	C5'-C4'-O4'	5.71	115.95	109.10
33	L1	3170	C	C4'-C3'-C2'	-5.71	96.89	102.60
33	L1	3375	G	P-O5'-C5'	5.71	130.04	120.90
51	LY	109	LYS	N-CA-CB	5.71	120.88	110.60
52	Lb	67	ASP	C-N-CA	5.71	135.98	121.70
84	LI	32	ARG	NE-CZ-NH1	5.71	123.16	120.30
32	S1	25	C	N1-C1'-C2'	5.71	121.42	114.00
32	S1	982	A	O4'-C1'-N9	5.71	112.77	108.20
33	L1	612	U	P-O5'-C5'	-5.71	111.76	120.90
33	L1	2746	G	P-O3'-C3'	5.71	126.55	119.70
33	L1	3225	G	P-O3'-C3'	5.71	126.55	119.70
16	SR	128	PHE	N-CA-C	5.71	126.41	111.00
32	S1	1200	A	P-O3'-C3'	5.71	126.55	119.70
33	L1	2340	G	O4'-C1'-C2'	5.71	112.74	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	LM	71	ASP	N-CA-CB	5.71	120.88	110.60
47	LU	158	ASN	CA-CB-CG	5.71	125.96	113.40
55	Lg	102	THR	CA-CB-CG2	5.71	120.39	112.40
72	Lk	93	MET	CG-SD-CE	-5.71	91.07	100.20
32	S1	1587	G	C3'-C2'-C1'	5.71	106.06	101.50
33	L1	810	A	C1'-O4'-C4'	5.71	114.47	109.90
33	L1	1638	U	C1'-O4'-C4'	5.71	114.47	109.90
40	LH	137	TYR	CG-CD2-CE2	-5.71	116.73	121.30
45	LQ	21	GLN	N-CA-CB	-5.71	100.33	110.60
45	LQ	141	PRO	N-CA-C	5.71	126.94	112.10
84	LI	7	ARG	NE-CZ-NH2	-5.71	117.45	120.30
33	L1	2532	A	N9-C1'-C2'	5.71	121.42	114.00
81	LD	104	ARG	NE-CZ-NH2	5.71	123.15	120.30
33	L1	1164	G	N9-C1'-C2'	5.70	121.42	114.00
33	L1	2109	G	P-O5'-C5'	5.70	130.03	120.90
33	L1	2476	G	C3'-C2'-C1'	-5.70	96.94	101.50
33	L1	2681	A	O4'-C1'-C2'	-5.70	100.10	105.80
33	L1	2858	G	N9-C1'-C2'	5.70	121.42	114.00
33	L1	3349	C	O4'-C1'-N1	5.70	112.76	108.20
33	L1	3357	C	C4'-C3'-C2'	-5.70	96.90	102.60
37	LB	20	THR	N-CA-CB	5.70	121.14	110.30
73	Lp	53	ASN	CA-CB-CG	5.70	125.95	113.40
31	S2	10	G	C4'-C3'-C2'	5.70	108.30	102.60
33	L1	2386	A	C1'-O4'-C4'	-5.70	105.34	109.90
66	LN	98	ARG	CA-CB-CG	5.70	125.94	113.40
24	SX	53	GLN	N-CA-CB	-5.70	100.34	110.60
33	L1	618	G	P-O5'-C5'	-5.70	111.78	120.90
33	L1	1245	U	OP1-P-OP2	-5.70	111.05	119.60
33	L1	1830	U	OP1-P-O3'	5.70	117.74	105.20
33	L1	2653	U	C2'-C3'-O3'	5.70	122.82	113.70
33	L1	3101	C	N1-C1'-C2'	5.70	121.41	114.00
32	S1	955	C	O4'-C4'-C3'	-5.70	98.30	104.00
33	L1	1368	U	OP1-P-OP2	-5.70	111.05	119.60
33	L1	1388	C	C5'-C4'-C3'	5.70	125.12	116.00
33	L1	1530	C	P-O3'-C3'	-5.70	112.86	119.70
33	L1	1900	C	O5'-C5'-C4'	5.70	122.53	111.70
33	L1	2877	U	P-O3'-C3'	5.70	126.54	119.70
35	L2	62	G	O4'-C1'-N9	-5.70	103.64	108.20
48	LV	114	TYR	CB-CA-C	5.70	121.80	110.40
54	Lf	39	ARG	CG-CD-NE	-5.70	99.83	111.80
59	Lo	41	ARG	CD-NE-CZ	-5.70	115.62	123.60
16	SR	124	TYR	CB-CG-CD2	-5.70	117.58	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1800	G	O4'-C1'-C2'	5.70	112.73	107.60
32	S1	659	G	O4'-C1'-N9	5.70	112.76	108.20
32	S1	1055	G	C1'-O4'-C4'	-5.70	105.34	109.90
32	S1	1416	A	C3'-C2'-C1'	5.70	106.06	101.50
33	L1	992	U	O4'-C1'-N1	5.70	112.76	108.20
33	L1	1964	G	O4'-C1'-N9	5.70	112.76	108.20
33	L1	3141	G	C3'-C2'-C1'	-5.70	96.94	101.50
33	L1	3198	C	P-O3'-C3'	5.70	126.53	119.70
33	L1	3381	C	C5'-C4'-C3'	5.70	125.11	116.00
34	L3	11	A	O4'-C1'-N9	5.70	112.76	108.20
38	LE	106	PHE	CB-CG-CD1	5.70	124.79	120.80
64	LG	58	PRO	N-CD-CG	5.70	111.74	103.20
1	Sa	62	LEU	CB-CA-C	-5.69	99.38	110.20
33	L1	1825	G	OP1-P-OP2	-5.69	111.06	119.60
33	L1	2715	U	O4'-C1'-C2'	5.69	112.72	107.60
33	L1	2854	C	N1-C1'-C2'	5.69	121.40	114.00
51	LY	111	ASP	CB-CG-OD1	-5.69	113.17	118.30
32	S1	1171	C	O4'-C1'-N1	5.69	112.75	108.20
33	L1	136	C	C3'-C2'-C1'	5.69	106.05	101.50
33	L1	1822	C	O3'-P-O5'	-5.69	93.19	104.00
33	L1	2498	C	C5'-C4'-C3'	5.69	125.11	116.00
33	L1	2636	U	O4'-C1'-N1	5.69	112.75	108.20
45	LQ	265	LYS	CB-CA-C	-5.69	99.01	110.40
32	S1	975	A	C1'-O4'-C4'	5.69	114.45	109.90
32	S1	1061	G	C1'-O4'-C4'	-5.69	105.35	109.90
33	L1	282	A	O5'-C5'-C4'	5.69	122.51	111.70
33	L1	468	U	C4'-C3'-C2'	-5.69	96.91	102.60
33	L1	1624	G	O4'-C4'-C3'	-5.69	98.31	104.00
33	L1	3093	C	P-O5'-C5'	5.69	130.00	120.90
33	L1	3327	A	O3'-P-O5'	-5.69	93.19	104.00
32	S1	355	U	P-O3'-C3'	5.69	126.53	119.70
33	L1	3059	C	N1-C1'-C2'	5.69	121.39	114.00
1	Sa	199	GLU	N-CA-C	5.69	126.35	111.00
3	SB	131	ALA	CB-CA-C	-5.69	101.57	110.10
33	L1	1560	A	OP1-P-O3'	5.69	117.71	105.20
33	L1	1996	C	O4'-C1'-N1	5.69	112.75	108.20
33	L1	2453	G	O3'-P-O5'	-5.69	93.19	104.00
33	L1	2586	C	C3'-C2'-C1'	5.69	106.05	101.50
35	L2	106	U	C1'-O4'-C4'	-5.69	105.35	109.90
36	LA	63	ARG	CD-NE-CZ	5.69	131.56	123.60
76	Lv	1	MET	CG-SD-CE	-5.69	91.10	100.20
78	Le	49	ARG	NH1-CZ-NH2	-5.69	113.14	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Sa	129	ASP	N-CA-C	5.69	126.35	111.00
32	S1	1119	G	C5'-C4'-O4'	5.69	115.92	109.10
32	S1	1123	G	N9-C1'-C2'	5.69	121.39	114.00
32	S1	1226	U	OP2-P-O3'	5.69	117.71	105.20
32	S1	1457	C	O5'-C5'-C4'	-5.69	100.90	111.70
33	L1	1824	C	C3'-C2'-C1'	5.69	106.05	101.50
38	LE	119	ASP	CB-CG-OD2	-5.69	113.18	118.30
80	LC	122	TRP	CB-CG-CD2	-5.69	119.21	126.60
32	S1	1023	C	O4'-C1'-N1	5.68	112.75	108.20
32	S1	1091	A	OP1-P-OP2	-5.68	111.07	119.60
33	L1	129	G	O4'-C1'-N9	5.68	112.75	108.20
33	L1	1320	G	OP1-P-OP2	-5.68	111.08	119.60
67	LS	138	ARG	NE-CZ-NH2	-5.68	117.46	120.30
82	LK	62	PHE	CB-CG-CD2	5.68	124.78	120.80
9	SK	51	THR	C-N-CA	5.68	135.91	121.70
33	L1	174	G	O4'-C1'-C2'	5.68	112.72	107.60
33	L1	176	A	C5'-C4'-O4'	5.68	115.92	109.10
33	L1	216	G	N9-C1'-C2'	5.68	121.39	114.00
33	L1	789	A	C4'-C3'-C2'	-5.68	96.92	102.60
33	L1	1074	C	C3'-C2'-C1'	5.68	106.05	101.50
33	L1	1368	U	O4'-C4'-C3'	5.68	110.65	106.10
33	L1	1404	G	O4'-C1'-N9	5.68	112.75	108.20
33	L1	1938	U	P-O5'-C5'	-5.68	111.81	120.90
33	L1	2670	A	O5'-P-OP1	-5.68	100.59	105.70
33	L1	3085	C	O4'-C1'-N1	5.68	112.75	108.20
35	L2	111	G	O4'-C1'-C2'	5.68	112.71	107.60
45	LQ	256	SER	CB-CA-C	5.68	120.90	110.10
64	LG	171	LYS	CA-C-N	5.68	129.70	117.20
76	Lw	1	MET	CG-SD-CE	-5.68	91.11	100.20
13	SQ	97	ARG	O-C-N	-5.68	113.61	122.70
32	S1	299	A	C5'-C4'-C3'	5.68	125.09	116.00
32	S1	338	G	P-O5'-C5'	-5.68	111.81	120.90
33	L1	19	C	C5'-C4'-C3'	5.68	125.09	116.00
33	L1	897	U	O4'-C1'-N1	5.68	112.75	108.20
33	L1	2031	G	O4'-C1'-N9	5.68	112.75	108.20
17	SV	65	VAL	CB-CA-C	5.68	122.19	111.40
25	SC	51	LEU	CB-CA-C	-5.68	99.41	110.20
32	S1	1508	C	C5'-C4'-O4'	-5.68	102.28	109.10
33	L1	415	G	O4'-C1'-N9	5.68	112.74	108.20
33	L1	506	U	OP1-P-OP2	-5.68	111.08	119.60
33	L1	1991	U	P-O5'-C5'	-5.68	111.81	120.90
33	L1	2575	C	O4'-C1'-N1	5.68	112.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
67	LS	104	ALA	N-CA-CB	-5.68	102.15	110.10
32	S1	419	C	C1'-O4'-C4'	5.68	114.44	109.90
32	S1	1105	G	P-O3'-C3'	-5.68	112.89	119.70
32	S1	1783	C	N1-C1'-C2'	5.68	121.38	114.00
33	L1	2747	U	C4'-C3'-C2'	-5.68	96.92	102.60
33	L1	2849	A	OP1-P-OP2	-5.68	111.08	119.60
45	LQ	107	ALA	N-CA-CB	-5.68	102.15	110.10
76	Lw	56	ALA	C-N-CA	-5.68	107.50	121.70
32	S1	610	A	C3'-C2'-C1'	-5.68	96.96	101.50
32	S1	1299	G	O3'-P-O5'	-5.68	93.22	104.00
33	L1	80	C	C1'-O4'-C4'	-5.68	105.36	109.90
33	L1	542	G	P-O3'-C3'	5.68	126.51	119.70
33	L1	1238	G	P-O3'-C3'	5.68	126.51	119.70
33	L1	1874	A	C5'-C4'-C3'	-5.68	106.92	116.00
33	L1	2459	U	OP1-P-O3'	5.68	117.69	105.20
33	L1	3228	C	P-O3'-C3'	5.68	126.51	119.70
42	LP	6	TYR	CB-CG-CD2	5.68	124.41	121.00
73	Lp	26	ARG	NE-CZ-NH2	-5.68	117.46	120.30
76	Lv	56	ALA	C-N-CA	-5.68	107.51	121.70
27	SH	109	GLY	CA-C-O	5.67	130.81	120.60
32	S1	466	G	O4'-C1'-C2'	5.67	112.71	107.60
32	S1	1728	G	P-O3'-C3'	5.67	126.51	119.70
33	L1	1239	U	C1'-O4'-C4'	5.67	114.44	109.90
33	L1	1667	C	C5'-C4'-C3'	-5.67	106.92	116.00
31	S2	73	C	C5'-C4'-C3'	-5.67	106.92	116.00
33	L1	92	C	O4'-C1'-C2'	-5.67	100.13	105.80
33	L1	102	G	N9-C1'-C2'	-5.67	105.76	112.00
33	L1	1034	U	OP2-P-O3'	5.67	117.68	105.20
33	L1	2389	A	O4'-C1'-C2'	5.67	112.70	107.60
46	LT	119	MET	CG-SD-CE	-5.67	91.13	100.20
32	S1	1603	U	OP1-P-OP2	-5.67	111.09	119.60
33	L1	843	C	O4'-C1'-N1	-5.67	103.66	108.20
11	SM	133	GLY	O-C-N	-5.67	113.63	122.70
27	SH	105	THR	N-CA-CB	5.67	121.07	110.30
32	S1	42	G	O4'-C1'-N9	5.67	112.73	108.20
33	L1	323	A	C3'-C2'-C1'	-5.67	96.97	101.50
33	L1	1188	C	O4'-C1'-N1	5.67	112.73	108.20
33	L1	1668	U	O5'-P-OP2	-5.67	100.60	105.70
33	L1	1960	C	P-O5'-C5'	-5.67	111.83	120.90
3	SB	82	ASN	N-CA-C	5.67	126.30	111.00
12	SO	55	ARG	NE-CZ-NH2	5.67	123.13	120.30
32	S1	124	G	O4'-C1'-C2'	5.67	112.70	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	646	G	O4'-C1'-C2'	-5.67	100.13	105.80
32	S1	1033	C	C5'-C4'-O4'	5.67	115.90	109.10
32	S1	1443	U	C4'-C3'-C2'	-5.67	96.93	102.60
33	L1	697	A	C5'-C4'-C3'	5.67	125.07	116.00
33	L1	1514	U	C3'-C2'-C1'	5.67	106.03	101.50
33	L1	1714	A	C3'-C2'-C1'	5.67	106.03	101.50
33	L1	2750	A	N9-C1'-C2'	5.67	121.37	114.00
38	LE	74	ARG	NE-CZ-NH2	-5.67	117.47	120.30
3	SB	75	LYS	CB-CG-CD	5.67	126.33	111.60
33	L1	8	C	P-O5'-C5'	-5.67	111.84	120.90
33	L1	567	G	C1'-O4'-C4'	-5.67	105.37	109.90
33	L1	2582	G	O4'-C1'-N9	-5.67	103.67	108.20
33	L1	3033	A	OP1-P-OP2	-5.67	111.10	119.60
47	LU	60	ARG	NE-CZ-NH2	-5.67	117.47	120.30
3	SB	172	VAL	N-CA-C	-5.66	95.71	111.00
32	S1	331	U	N1-C1'-C2'	-5.66	105.77	112.00
32	S1	1455	U	N1-C1'-C2'	5.66	121.36	114.00
33	L1	382	A	O5'-P-OP1	-5.66	100.60	105.70
33	L1	1997	G	N9-C1'-C2'	5.66	121.36	114.00
73	Lp	15	GLN	CA-C-N	-5.66	104.74	117.20
33	L1	933	U	C4'-C3'-C2'	-5.66	96.94	102.60
33	L1	2797	U	N1-C1'-C2'	5.66	121.36	114.00
38	LE	145	ARG	N-CA-CB	5.66	120.79	110.60
73	Lp	30	ARG	NE-CZ-NH2	-5.66	117.47	120.30
24	SX	53	GLN	CA-C-O	-5.66	108.21	120.10
31	S2	72	G	O4'-C1'-C2'	-5.66	100.14	105.80
32	S1	567	U	O4'-C1'-C2'	-5.66	100.14	105.80
32	S1	671	G	O4'-C1'-N9	5.66	112.73	108.20
32	S1	1003	A	O4'-C1'-N9	5.66	112.73	108.20
32	S1	1162	A	O3'-P-O5'	5.66	114.75	104.00
33	L1	81	C	P-O3'-C3'	5.66	126.49	119.70
33	L1	246	C	C1'-O4'-C4'	5.66	114.43	109.90
33	L1	513	C	C2'-C3'-O3'	5.66	122.76	113.70
33	L1	618	G	OP2-P-O3'	5.66	117.65	105.20
33	L1	789	A	C2'-C3'-O3'	5.66	122.76	113.70
33	L1	1717	G	C5'-C4'-O4'	-5.66	102.31	109.10
33	L1	3005	C	O4'-C1'-N1	-5.66	103.67	108.20
33	L1	3300	C	O5'-P-OP2	-5.66	100.61	105.70
33	L1	3335	G	C4'-C3'-O3'	5.66	124.32	113.00
64	LG	175	ASP	N-CA-CB	5.66	120.79	110.60
5	SE	142	LYS	N-CA-CB	5.66	120.78	110.60
9	SK	96	LEU	N-CA-CB	5.66	121.72	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	SS	5	THR	CA-C-O	5.66	131.98	120.10
32	S1	1266	U	C1'-O4'-C4'	-5.66	105.37	109.90
32	S1	1358	G	C5'-C4'-O4'	5.66	115.89	109.10
33	L1	507	C	P-O3'-C3'	-5.66	112.91	119.70
33	L1	2235	G	O4'-C1'-N9	5.66	112.73	108.20
50	LZ	36	SER	O-C-N	-5.66	113.65	122.70
32	S1	635	G	C5'-C4'-O4'	5.66	115.89	109.10
33	L1	210	G	C1'-O4'-C4'	-5.66	105.38	109.90
33	L1	1560	A	C5'-C4'-C3'	-5.66	106.95	116.00
33	L1	1786	G	C4'-C3'-C2'	-5.66	96.94	102.60
33	L1	1919	C	N1-C1'-C2'	5.66	121.35	114.00
33	L1	3212	C	C3'-C2'-C1'	5.66	106.03	101.50
35	L2	49	C	O5'-P-OP2	-5.66	100.61	105.70
51	LY	26	ARG	NH1-CZ-NH2	-5.66	113.18	119.40
1	Sa	276	PHE	CB-CG-CD2	5.66	124.76	120.80
13	SQ	34	VAL	CA-CB-CG1	5.66	119.38	110.90
14	SP	109	PRO	CA-N-CD	-5.66	103.58	111.50
32	S1	397	C	N1-C1'-C2'	5.66	121.35	114.00
33	L1	469	U	O4'-C1'-N1	5.66	112.72	108.20
33	L1	712	A	N9-C1'-C2'	-5.66	105.78	112.00
33	L1	1613	C	O4'-C1'-N1	5.66	112.72	108.20
70	Li	20	THR	N-CA-CB	5.66	121.05	110.30
71	Lj	39	VAL	CB-CA-C	5.66	122.15	111.40
32	S1	844	C	P-O3'-C3'	5.65	126.48	119.70
33	L1	1734	G	C1'-O4'-C4'	-5.65	105.38	109.90
11	SM	89	ASP	CA-C-N	5.65	129.64	117.20
27	SH	110	ILE	CG1-CB-CG2	5.65	123.83	111.40
32	S1	1201	C	O4'-C1'-N1	5.65	112.72	108.20
33	L1	421	A	O4'-C1'-C2'	-5.65	100.15	105.80
33	L1	2518	A	C4'-C3'-O3'	5.65	124.31	113.00
48	LV	83	ARG	NE-CZ-NH2	5.65	123.13	120.30
67	LS	6	PHE	CB-CG-CD1	5.65	124.76	120.80
76	Lw	56	ALA	CA-C-N	5.65	129.63	117.20
1	Sa	289	ARG	N-CA-C	-5.65	95.75	111.00
5	SE	206	PHE	N-CA-CB	5.65	120.77	110.60
32	S1	176	A	OP1-P-OP2	-5.65	111.12	119.60
32	S1	256	G	O4'-C1'-N9	5.65	112.72	108.20
32	S1	1613	G	C4'-C3'-C2'	-5.65	96.95	102.60
33	L1	1931	G	C2'-C3'-O3'	5.65	122.74	113.70
33	L1	3060	G	C5'-C4'-C3'	5.65	125.04	116.00
78	Le	204	LEU	C-N-CA	5.65	135.83	121.70
33	L1	173	C	OP1-P-OP2	-5.65	111.13	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1942	A	O5'-P-OP2	-5.65	100.62	105.70
33	L1	2720	U	C4'-C3'-C2'	-5.65	96.95	102.60
33	L1	2996	A	N9-C1'-C2'	-5.65	105.79	112.00
81	LD	224	LYS	N-CA-CB	-5.65	100.43	110.60
82	LK	123	MET	CA-CB-CG	5.65	122.90	113.30
11	SM	28	PHE	CA-CB-CG	-5.65	100.35	113.90
16	SR	116	ILE	N-CA-C	5.65	126.25	111.00
19	SY	27	ARG	N-CA-CB	5.65	120.77	110.60
27	SH	28	ARG	CA-C-O	-5.65	108.24	120.10
33	L1	109	G	O4'-C1'-N9	5.65	112.72	108.20
33	L1	863	G	O4'-C1'-N9	5.65	112.72	108.20
33	L1	2039	G	O4'-C1'-N9	5.65	112.72	108.20
33	L1	3056	C	O5'-P-OP1	-5.65	100.62	105.70
33	L1	3388	U	C1'-O4'-C4'	5.65	114.42	109.90
35	L2	56	A	O4'-C1'-N9	-5.65	103.68	108.20
60	Lr	48	SER	N-CA-CB	5.65	118.97	110.50
81	LD	316	ARG	CA-CB-CG	5.65	125.83	113.40
32	S1	1705	C	O4'-C1'-C2'	5.65	112.68	107.60
33	L1	1	G	P-O3'-C3'	5.65	126.47	119.70
19	SY	16	ARG	CB-CG-CD	5.64	126.27	111.60
20	SZ	51	PHE	C-N-CA	5.64	134.15	122.30
25	SC	165	PRO	CA-N-CD	-5.64	103.60	111.50
32	S1	485	A	O4'-C1'-N9	5.64	112.72	108.20
32	S1	1603	U	C1'-O4'-C4'	5.64	114.42	109.90
33	L1	272	G	O4'-C1'-C2'	5.64	112.68	107.60
33	L1	309	C	P-O5'-C5'	-5.64	111.87	120.90
33	L1	337	C	O5'-P-OP1	5.64	117.47	110.70
33	L1	811	A	O4'-C1'-N9	-5.64	103.68	108.20
33	L1	906	U	O4'-C4'-C3'	-5.64	98.36	104.00
33	L1	1279	C	O5'-P-OP2	5.64	117.47	110.70
33	L1	1573	G	C5'-C4'-C3'	5.64	125.03	116.00
33	L1	1802	A	O4'-C1'-N9	-5.64	103.69	108.20
33	L1	2696	C	P-O5'-C5'	5.64	129.93	120.90
80	LC	63	PRO	CA-N-CD	-5.64	103.60	111.50
82	LK	133	ARG	N-CA-C	-5.64	95.76	111.00
15	SS	68	TYR	CB-CG-CD2	-5.64	117.61	121.00
32	S1	214	A	OP1-P-OP2	-5.64	111.14	119.60
32	S1	1050	C	C1'-O4'-C4'	-5.64	105.39	109.90
32	S1	1056	A	OP2-P-O3'	5.64	117.61	105.20
32	S1	1307	U	C5'-C4'-O4'	5.64	115.87	109.10
33	L1	1574	C	P-O3'-C3'	5.64	126.47	119.70
33	L1	1606	C	O4'-C1'-N1	-5.64	103.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1971	A	O4'-C1'-C2'	-5.64	100.16	105.80
33	L1	2692	G	N9-C1'-C2'	5.64	121.34	114.00
35	L2	36	C	P-O5'-C5'	5.64	129.93	120.90
51	LY	30	MET	CA-CB-CG	5.64	122.89	113.30
70	Li	19	GLN	CB-CA-C	5.64	121.69	110.40
5	SE	79	GLU	OE1-CD-OE2	5.64	130.07	123.30
15	SS	57	TYR	CG-CD2-CE2	-5.64	116.79	121.30
33	L1	1772	G	P-O3'-C3'	-5.64	112.93	119.70
70	Li	107	LEU	N-CA-CB	5.64	121.68	110.40
25	SC	68	ASN	CA-C-N	5.64	132.89	117.10
32	S1	1178	C	C3'-C2'-C1'	5.64	106.01	101.50
33	L1	1916	U	O4'-C1'-N1	5.64	112.71	108.20
32	S1	903	A	C2'-C3'-O3'	5.64	122.72	113.70
70	Li	66	ARG	CB-CA-C	-5.64	99.12	110.40
83	Lm	8	ALA	N-CA-C	-5.64	95.78	111.00
3	SB	29	LEU	CA-CB-CG	-5.64	102.33	115.30
32	S1	22	A	P-O3'-C3'	-5.64	112.94	119.70
32	S1	1536	U	OP1-P-O3'	5.64	117.60	105.20
33	L1	505	G	P-O3'-C3'	-5.64	112.94	119.70
33	L1	1385	C	P-O3'-C3'	-5.64	112.94	119.70
33	L1	1693	A	OP1-P-O3'	5.64	117.60	105.20
33	L1	2069	G	C5'-C4'-C3'	5.64	125.02	116.00
33	L1	2274	A	C5'-C4'-C3'	5.64	125.02	116.00
33	L1	2639	A	N9-C1'-C2'	5.64	121.33	114.00
34	L3	104	C	C3'-C2'-C1'	5.64	106.01	101.50
79	Ls	256	VAL	N-CA-C	5.64	126.22	111.00
33	L1	248	C	O4'-C1'-C2'	-5.63	100.17	105.80
33	L1	506	U	C5'-C4'-O4'	-5.63	102.34	109.10
33	L1	1239	U	P-O3'-C3'	5.63	126.46	119.70
33	L1	2021	G	O4'-C1'-N9	5.63	112.71	108.20
33	L1	2134	U	C5'-C4'-C3'	5.63	125.02	116.00
33	L1	2178	G	N9-C1'-C2'	5.63	121.32	114.00
33	L1	2446	G	C1'-O4'-C4'	-5.63	105.39	109.90
33	L1	3385	G	OP1-P-OP2	-5.63	111.15	119.60
64	LG	91	LYS	CA-CB-CG	5.63	125.80	113.40
32	S1	686	A	C3'-C2'-C1'	5.63	106.01	101.50
33	L1	283	A	C5'-C4'-C3'	-5.63	106.99	116.00
33	L1	607	U	O4'-C4'-C3'	-5.63	98.37	104.00
33	L1	2192	C	O4'-C1'-N1	-5.63	103.69	108.20
70	Li	112	THR	C-N-CA	-5.63	107.62	121.70
24	SX	65	LEU	CB-CA-C	5.63	120.90	110.20
31	S2	73	C	C1'-O4'-C4'	-5.63	105.39	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	409	C	O4'-C4'-C3'	-5.63	98.37	104.00
33	L1	398	G	O4'-C1'-N9	5.63	112.71	108.20
33	L1	681	A	C1'-O4'-C4'	5.63	114.41	109.90
33	L1	1730	U	OP1-P-OP2	-5.63	111.15	119.60
33	L1	2622	G	O4'-C1'-N9	-5.63	103.69	108.20
64	LG	68	PRO	N-CA-C	-5.63	97.46	112.10
68	LW	60	GLY	O-C-N	5.63	131.71	122.70
80	LC	128	LYS	C-N-CA	5.63	135.78	121.70
32	S1	32	U	C5'-C4'-O4'	-5.63	102.34	109.10
32	S1	690	G	O4'-C4'-C3'	-5.63	98.37	104.00
32	S1	1791	A	O4'-C1'-C2'	-5.63	100.17	105.80
33	L1	819	A	P-O3'-C3'	-5.63	112.94	119.70
33	L1	2628	C	O5'-C5'-C4'	-5.63	101.00	111.70
39	LF	70	ARG	NE-CZ-NH1	5.63	123.11	120.30
43	LO	26	ARG	CB-CG-CD	5.63	126.24	111.60
67	LS	131	VAL	CB-CA-C	5.63	122.10	111.40
68	LW	93	LEU	CB-CA-C	-5.63	99.50	110.20
68	LW	104	VAL	N-CA-CB	5.63	123.89	111.50
4	SD	153	ILE	CB-CA-C	5.63	122.86	111.60
33	L1	244	G	C1'-O4'-C4'	-5.63	105.40	109.90
33	L1	806	C	C3'-C2'-C1'	-5.63	97.00	101.50
33	L1	1625	G	P-O3'-C3'	-5.63	112.95	119.70
33	L1	1753	A	OP1-P-O3'	5.63	117.58	105.20
33	L1	2150	C	C3'-C2'-C1'	5.63	106.00	101.50
33	L1	2949	G	O5'-P-OP2	5.63	117.45	110.70
16	SR	146	HIS	N-CA-CB	5.63	120.73	110.60
32	S1	30	G	C4'-C3'-C2'	-5.63	96.97	102.60
32	S1	826	C	C3'-C2'-C1'	5.63	106.00	101.50
32	S1	1618	G	O4'-C1'-N9	5.63	112.70	108.20
33	L1	1236	C	O5'-P-OP2	5.63	117.45	110.70
33	L1	2059	C	OP2-P-O3'	5.63	117.58	105.20
33	L1	2707	A	OP2-P-O3'	5.63	117.58	105.20
48	LV	74	LYS	N-CA-CB	5.63	120.73	110.60
68	LW	34	LYS	CB-CA-C	-5.63	99.15	110.40
1	Sa	80	TRP	CG-CD2-CE3	-5.62	128.84	133.90
32	S1	773	U	O3'-P-O5'	-5.62	93.31	104.00
32	S1	1472	G	OP2-P-O3'	5.62	117.58	105.20
33	L1	916	A	O4'-C1'-N9	5.62	112.70	108.20
67	LS	27	TYR	C-N-CA	5.62	135.76	121.70
32	S1	329	G	N9-C1'-C2'	-5.62	105.81	112.00
33	L1	385	A	C5'-C4'-O4'	-5.62	102.35	109.10
33	L1	1119	G	O5'-C5'-C4'	5.62	122.39	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1416	G	C1'-O4'-C4'	-5.62	105.40	109.90
33	L1	3225	G	C3'-C2'-C1'	-5.62	97.00	101.50
54	Lf	63	TYR	CB-CG-CD2	-5.62	117.63	121.00
32	S1	1507	G	P-O3'-C3'	5.62	126.45	119.70
32	S1	1780	U	C4'-C3'-C2'	-5.62	96.98	102.60
33	L1	839	A	C4'-C3'-O3'	5.62	124.24	113.00
33	L1	942	U	O4'-C1'-N1	5.62	112.70	108.20
33	L1	2879	G	O4'-C1'-N9	5.62	112.70	108.20
34	L3	11	A	N9-C1'-C2'	5.62	121.31	114.00
35	L2	34	C	O5'-P-OP2	-5.62	100.64	105.70
49	LX	46	LYS	N-CA-CB	5.62	120.72	110.60
66	LN	20	ASP	N-CA-CB	5.62	120.72	110.60
67	LS	32	TRP	CG-CD2-CE3	-5.62	128.84	133.90
68	LW	58	ASN	N-CA-C	5.62	126.18	111.00
33	L1	87	A	P-O5'-C5'	5.62	129.89	120.90
7	SI	85	TYR	CG-CD1-CE1	-5.62	116.81	121.30
25	SC	150	VAL	C-N-CA	5.62	135.75	121.70
31	S2	29	C	C3'-C2'-C1'	5.62	105.99	101.50
32	S1	167	A	O4'-C1'-C2'	-5.62	100.18	105.80
32	S1	533	C	P-O5'-C5'	-5.62	111.91	120.90
32	S1	630	U	OP1-P-O3'	5.62	117.56	105.20
32	S1	1209	C	P-O3'-C3'	5.62	126.44	119.70
32	S1	1375	C	N1-C1'-C2'	5.62	121.30	114.00
32	S1	1563	A	O4'-C1'-N9	5.62	112.69	108.20
33	L1	86	U	O5'-P-OP2	-5.62	100.64	105.70
33	L1	1736	C	C1'-O4'-C4'	-5.62	105.41	109.90
33	L1	2090	G	O4'-C1'-N9	5.62	112.69	108.20
33	L1	2342	C	O4'-C1'-N1	5.62	112.69	108.20
33	L1	2376	G	C2'-C3'-O3'	5.62	122.69	113.70
33	L1	2944	C	C1'-O4'-C4'	5.62	114.39	109.90
78	Le	117	VAL	O-C-N	-5.62	113.71	122.70
32	S1	1477	A	C1'-O4'-C4'	5.62	114.39	109.90
33	L1	273	U	O5'-P-OP2	-5.62	100.64	105.70
33	L1	1613	C	P-O3'-C3'	-5.62	112.96	119.70
33	L1	2424	G	O4'-C1'-N9	-5.62	103.71	108.20
33	L1	2527	G	P-O3'-C3'	5.62	126.44	119.70
35	L2	64	U	O4'-C1'-C2'	-5.62	100.18	105.80
44	LR	13	ARG	N-CA-CB	-5.62	100.49	110.60
17	SV	61	ILE	CB-CA-C	-5.62	100.37	111.60
32	S1	898	U	P-O3'-C3'	-5.62	112.96	119.70
32	S1	983	A	N9-C1'-C2'	5.62	121.30	114.00
32	S1	1371	U	C5'-C4'-O4'	5.62	115.84	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1560	U	C1'-O4'-C4'	-5.62	105.41	109.90
33	L1	827	C	N1-C1'-C2'	5.62	121.30	114.00
33	L1	2233	G	C5'-C4'-C3'	5.62	124.98	116.00
33	L1	2942	A	C1'-O4'-C4'	-5.62	105.41	109.90
33	L1	2950	C	C1'-O4'-C4'	-5.62	105.41	109.90
34	L3	103	U	OP1-P-OP2	-5.62	111.18	119.60
5	SE	9	GLY	N-CA-C	-5.61	99.06	113.10
20	SZ	5	HIS	N-CA-C	5.61	126.16	111.00
32	S1	50	C	C4'-C3'-C2'	-5.61	96.99	102.60
32	S1	154	A	O4'-C1'-C2'	-5.61	100.19	105.80
32	S1	332	A	C1'-O4'-C4'	5.61	114.39	109.90
32	S1	670	C	C3'-C2'-C1'	5.61	105.99	101.50
32	S1	686	A	C5'-C4'-C3'	5.61	124.98	116.00
32	S1	1262	U	O3'-P-O5'	5.61	114.67	104.00
32	S1	1747	A	N9-C1'-C2'	-5.61	105.83	112.00
33	L1	138	G	C5'-C4'-O4'	5.61	115.84	109.10
33	L1	483	U	N1-C1'-C2'	5.61	121.30	114.00
33	L1	1002	A	N9-C1'-C2'	-5.61	105.83	112.00
33	L1	1382	C	C1'-O4'-C4'	-5.61	105.41	109.90
33	L1	1680	A	O4'-C1'-C2'	-5.61	100.19	105.80
33	L1	1689	G	O4'-C1'-C2'	-5.61	100.19	105.80
33	L1	2232	C	O5'-P-OP2	5.61	117.44	110.70
33	L1	2339	U	O4'-C1'-N1	5.61	112.69	108.20
33	L1	2737	A	O4'-C1'-N9	5.61	112.69	108.20
33	L1	3095	G	C5'-C4'-C3'	-5.61	107.02	116.00
38	LE	85	GLY	C-N-CA	5.61	135.73	121.70
38	LE	96	ARG	NH1-CZ-NH2	-5.61	113.22	119.40
52	Lb	67	ASP	CB-CG-OD1	5.61	123.35	118.30
57	Ll	25	ARG	CD-NE-CZ	-5.61	115.74	123.60
66	LN	52	ARG	NE-CZ-NH1	5.61	123.11	120.30
78	Le	69	ARG	NH1-CZ-NH2	-5.61	113.22	119.40
13	SQ	21	TYR	CB-CG-CD2	5.61	124.37	121.00
32	S1	249	G	OP1-P-OP2	-5.61	111.18	119.60
32	S1	1645	C	C5'-C4'-O4'	5.61	115.83	109.10
33	L1	326	C	O3'-P-O5'	5.61	114.66	104.00
33	L1	588	G	N9-C1'-C2'	-5.61	105.83	112.00
33	L1	2789	G	N9-C1'-C2'	-5.61	105.83	112.00
25	SC	49	TYR	CG-CD1-CE1	5.61	125.79	121.30
32	S1	513	G	C1'-O4'-C4'	-5.61	105.41	109.90
32	S1	1271	G	C3'-C2'-C1'	5.61	105.99	101.50
32	S1	1339	C	C3'-C2'-C1'	5.61	105.99	101.50
45	LQ	256	SER	CA-CB-OG	5.61	126.35	111.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	373	U	C4'-C3'-C2'	-5.61	96.99	102.60
32	S1	1603	U	P-O3'-C3'	5.61	126.43	119.70
33	L1	581	G	N9-C1'-C2'	5.61	121.29	114.00
33	L1	2386	A	C3'-C2'-C1'	5.61	105.99	101.50
33	L1	3284	C	O3'-P-O5'	5.61	114.66	104.00
1	Sa	40	TYR	CG-CD2-CE2	-5.61	116.81	121.30
1	Sa	274	ARG	NE-CZ-NH1	5.61	123.10	120.30
3	SB	79	PHE	CA-CB-CG	5.61	127.36	113.90
33	L1	41	C	C1'-O4'-C4'	-5.61	105.42	109.90
33	L1	1206	A	N9-C1'-C2'	5.61	121.29	114.00
33	L1	1235	A	O5'-C5'-C4'	5.61	122.36	111.70
33	L1	1246	G	N9-C1'-C2'	-5.61	105.83	112.00
33	L1	3277	C	N1-C1'-C2'	5.61	121.29	114.00
70	Li	70	ASN	N-CA-C	5.61	126.14	111.00
3	SB	46	THR	N-CA-CB	5.61	120.95	110.30
32	S1	483	C	P-O3'-C3'	-5.61	112.97	119.70
33	L1	939	A	O4'-C1'-C2'	5.61	112.64	107.60
33	L1	2401	A	P-O3'-C3'	-5.61	112.97	119.70
33	L1	3086	G	C2'-C3'-O3'	5.61	122.67	113.70
34	L3	1	G	C2'-C3'-O3'	5.61	122.67	113.70
35	L2	70	G	C3'-C2'-C1'	-5.61	97.02	101.50
81	LD	400	TRP	N-CA-CB	5.61	120.69	110.60
32	S1	1791	A	OP2-P-O3'	5.60	117.53	105.20
33	L1	108	A	N9-C1'-C2'	5.60	121.28	114.00
33	L1	1633	C	C1'-O4'-C4'	-5.60	105.42	109.90
33	L1	3391	U	O4'-C1'-N1	5.60	112.68	108.20
45	LQ	251	PRO	N-CA-CB	5.60	110.02	103.30
71	Lj	39	VAL	CA-CB-CG1	5.60	119.31	110.90
76	Lv	56	ALA	CA-C-N	5.60	129.53	117.20
3	SB	178	ARG	CD-NE-CZ	-5.60	115.76	123.60
32	S1	512	U	P-O5'-C5'	5.60	129.86	120.90
32	S1	1099	G	C4'-C3'-C2'	-5.60	97.00	102.60
33	L1	730	A	O4'-C1'-N9	5.60	112.68	108.20
33	L1	2596	A	C2'-C3'-O3'	5.60	122.66	113.70
33	L1	3318	G	OP1-P-O3'	5.60	117.52	105.20
35	L2	65	A	C3'-C2'-C1'	-5.60	97.02	101.50
67	LS	9	TYR	C-N-CA	5.60	135.70	121.70
27	SH	92	ARG	NE-CZ-NH2	-5.60	117.50	120.30
33	L1	1361	G	O4'-C1'-C2'	-5.60	100.20	105.80
33	L1	2059	C	C5'-C4'-O4'	-5.60	102.38	109.10
33	L1	2419	C	C1'-O4'-C4'	-5.60	105.42	109.90
33	L1	2583	A	O4'-C1'-N9	5.60	112.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2680	G	O4'-C1'-C2'	-5.60	100.20	105.80
33	L1	2763	C	OP1-P-OP2	-5.60	111.20	119.60
34	L3	14	C	C4'-C3'-C2'	5.60	108.20	102.60
29	ST	29	HIS	C-N-CA	5.60	135.70	121.70
32	S1	1238	A	C4'-C3'-C2'	-5.60	97.00	102.60
33	L1	588	G	C1'-O4'-C4'	-5.60	105.42	109.90
33	L1	1939	C	O4'-C1'-C2'	-5.60	100.20	105.80
33	L1	2390	G	C5'-C4'-O4'	-5.60	102.38	109.10
33	L1	2455	A	C5'-C4'-C3'	5.60	124.96	116.00
33	L1	2850	G	O4'-C1'-C2'	5.60	112.64	107.60
35	L2	83	A	C5'-C4'-C3'	-5.60	107.04	116.00
46	LT	187	ARG	CB-CG-CD	5.60	126.16	111.60
64	LG	186	ALA	CB-CA-C	-5.60	101.70	110.10
5	SE	15	PHE	CB-CG-CD1	-5.60	116.88	120.80
17	SV	39	ASN	O-C-N	-5.60	113.74	122.70
32	S1	491	G	C1'-O4'-C4'	-5.60	105.42	109.90
33	L1	1310	G	C1'-O4'-C4'	-5.60	105.42	109.90
33	L1	1799	C	O4'-C1'-C2'	-5.60	100.20	105.80
33	L1	3005	C	O4'-C1'-C2'	5.60	112.64	107.60
39	LF	92	ARG	NE-CZ-NH1	5.60	123.10	120.30
78	Le	186	LEU	CB-CG-CD2	-5.60	101.48	111.00
32	S1	1660	C	C4'-C3'-C2'	5.60	108.20	102.60
33	L1	2646	A	C3'-C2'-C1'	5.60	105.98	101.50
33	L1	2889	A	O4'-C1'-N9	-5.60	103.72	108.20
33	L1	3078	A	C3'-C2'-C1'	5.60	105.98	101.50
40	LH	129	LYS	CB-CA-C	5.60	121.59	110.40
79	Ls	77	GLU	CA-CB-CG	5.60	125.71	113.40
11	SM	33	ILE	CB-CA-C	5.59	122.79	111.60
32	S1	1508	C	C4'-C3'-C2'	-5.59	97.01	102.60
33	L1	1272	G	C5'-C4'-C3'	5.59	124.95	116.00
33	L1	1773	U	O3'-P-O5'	-5.59	93.37	104.00
33	L1	2390	G	C2'-C3'-O3'	5.59	122.65	113.70
33	L1	2712	C	C1'-O4'-C4'	-5.59	105.42	109.90
33	L1	3150	G	O4'-C1'-C2'	-5.59	100.20	105.80
34	L3	66	G	C3'-C2'-C1'	5.59	105.97	101.50
35	L2	150	G	C3'-C2'-C1'	-5.59	97.03	101.50
42	LP	88	GLY	CA-C-O	-5.59	110.53	120.60
61	Lq	11	ARG	O-C-N	-5.59	113.75	122.70
69	La	11	VAL	N-CA-C	5.59	126.11	111.00
32	S1	1388	A	C5'-C4'-O4'	5.59	115.81	109.10
33	L1	1870	G	C5'-C4'-O4'	5.59	115.81	109.10
33	L1	2353	C	O4'-C1'-N1	5.59	112.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2612	A	C1'-O4'-C4'	5.59	114.37	109.90
33	L1	2744	C	C1'-O4'-C4'	-5.59	105.43	109.90
11	SM	98	VAL	CB-CA-C	5.59	122.02	111.40
14	SP	86	ILE	CA-CB-CG2	5.59	122.08	110.90
32	S1	861	A	C5'-C4'-O4'	5.59	115.81	109.10
32	S1	1586	U	C3'-C2'-C1'	5.59	105.97	101.50
33	L1	38	A	P-O3'-C3'	5.59	126.41	119.70
33	L1	1668	U	C1'-O4'-C4'	-5.59	105.43	109.90
33	L1	2561	A	P-O3'-C3'	5.59	126.41	119.70
49	LX	125	ARG	NE-CZ-NH1	5.59	123.10	120.30
55	Lg	41	ILE	CB-CA-C	5.59	122.78	111.60
82	LK	128	ALA	C-N-CA	5.59	135.68	121.70
12	SO	67	THR	CA-C-N	5.59	127.38	116.20
32	S1	18	C	O4'-C1'-N1	5.59	112.67	108.20
32	S1	480	U	O4'-C1'-N1	5.59	112.67	108.20
33	L1	311	G	P-O3'-C3'	-5.59	112.99	119.70
33	L1	525	A	O4'-C1'-C2'	-5.59	100.21	105.80
33	L1	1323	G	C3'-C2'-C1'	-5.59	97.03	101.50
33	L1	1504	U	C1'-O4'-C4'	-5.59	105.43	109.90
33	L1	2587	G	O5'-P-OP1	-5.59	100.67	105.70
33	L1	2617	G	O4'-C1'-N9	5.59	112.67	108.20
33	L1	2681	A	O4'-C4'-C3'	-5.59	98.41	104.00
33	L1	2734	C	C5'-C4'-C3'	5.59	124.94	116.00
33	L1	3215	U	C5'-C4'-O4'	5.59	115.81	109.10
33	L1	140	C	N1-C1'-C2'	5.59	121.26	114.00
33	L1	184	C	N1-C1'-C2'	-5.59	105.85	112.00
33	L1	565	C	C5'-C4'-C3'	5.59	124.94	116.00
33	L1	1561	U	P-O5'-C5'	5.59	129.84	120.90
11	SM	108	ARG	NE-CZ-NH1	5.59	123.09	120.30
32	S1	15	U	C1'-O4'-C4'	-5.59	105.43	109.90
32	S1	377	G	C4'-C3'-C2'	5.59	108.19	102.60
32	S1	1097	A	C5'-C4'-O4'	5.59	115.80	109.10
33	L1	2	C	O4'-C1'-N1	5.59	112.67	108.20
33	L1	1336	A	N9-C1'-C2'	5.59	121.26	114.00
33	L1	1852	C	N1-C1'-C2'	-5.59	105.86	112.00
33	L1	1989	G	N9-C1'-C2'	-5.59	105.86	112.00
33	L1	2831	U	C1'-O4'-C4'	5.59	114.37	109.90
38	LE	31	ARG	CD-NE-CZ	5.59	131.42	123.60
42	LP	59	TYR	CB-CG-CD1	5.59	124.35	121.00
48	LV	153	GLU	N-CA-CB	5.59	120.66	110.60
59	Lo	7	PHE	N-CA-CB	-5.59	100.54	110.60
32	S1	1265	A	C1'-O4'-C4'	-5.58	105.43	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	769	C	O4'-C1'-C2'	-5.58	100.22	105.80
23	SU	27	GLN	CB-CA-C	-5.58	99.23	110.40
31	S2	45	G	C5'-C4'-O4'	5.58	115.80	109.10
33	L1	570	G	C3'-C2'-C1'	-5.58	97.03	101.50
33	L1	1518	A	C4'-C3'-C2'	-5.58	97.02	102.60
33	L1	1878	G	P-O3'-C3'	-5.58	113.00	119.70
33	L1	1945	A	O4'-C4'-C3'	-5.58	98.42	104.00
33	L1	3206	C	O4'-C1'-C2'	-5.58	100.22	105.80
33	L1	3340	G	O4'-C1'-N9	5.58	112.67	108.20
38	LE	108	ILE	N-CA-C	5.58	126.08	111.00
81	LD	33	ARG	NE-CZ-NH1	5.58	123.09	120.30
7	SI	32	ARG	CD-NE-CZ	-5.58	115.79	123.60
32	S1	646	G	P-O3'-C3'	5.58	126.40	119.70
33	L1	611	C	O4'-C1'-N1	5.58	112.67	108.20
33	L1	1063	G	C5'-C4'-C3'	5.58	124.93	116.00
33	L1	2231	G	C3'-C2'-C1'	-5.58	97.03	101.50
33	L1	2588	G	P-O3'-C3'	-5.58	113.00	119.70
34	L3	5	G	C1'-O4'-C4'	-5.58	105.44	109.90
45	LQ	116	LEU	C-N-CA	-5.58	107.75	121.70
66	LN	96	GLN	CB-CA-C	-5.58	99.24	110.40
81	LD	227	ARG	CA-CB-CG	5.58	125.68	113.40
32	S1	1544	G	O4'-C1'-C2'	5.58	112.62	107.60
33	L1	650	A	C5'-C4'-O4'	-5.58	102.40	109.10
34	L3	77	A	C5'-C4'-C3'	5.58	124.93	116.00
46	LT	157	ASP	CB-CG-OD1	5.58	123.32	118.30
81	LD	400	TRP	CB-CG-CD2	-5.58	119.35	126.60
3	SB	120	TYR	CB-CG-CD2	-5.58	117.65	121.00
32	S1	127	G	C5'-C4'-O4'	5.58	115.79	109.10
32	S1	200	C	P-O5'-C5'	5.58	129.83	120.90
32	S1	473	C	C3'-C2'-C1'	5.58	105.96	101.50
32	S1	903	A	O4'-C1'-C2'	-5.58	100.22	105.80
32	S1	1343	C	O4'-C1'-C2'	-5.58	100.22	105.80
33	L1	1076	G	C3'-C2'-C1'	5.58	105.96	101.50
33	L1	2391	C	C1'-O4'-C4'	5.58	114.36	109.90
33	L1	2523	G	O4'-C1'-C2'	5.58	112.62	107.60
33	L1	3310	A	C3'-C2'-C1'	-5.58	97.04	101.50
35	L2	89	G	O4'-C4'-C3'	-5.58	98.42	104.00
59	Lo	44	TRP	CE3-CZ3-CH2	-5.58	115.06	121.20
66	LN	85	GLU	CB-CG-CD	5.58	129.26	114.20
80	LC	268	ALA	O-C-N	-5.58	113.77	122.70
2	SA	153	ASP	O-C-N	-5.58	113.78	122.70
33	L1	1019	A	O4'-C4'-C3'	-5.58	98.42	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1401	C	C3'-C2'-C1'	5.58	105.96	101.50
33	L1	2952	G	C1'-O4'-C4'	5.58	114.36	109.90
38	LE	30	ASP	CB-CG-OD2	-5.58	113.28	118.30
61	Lq	15	ARG	CB-CG-CD	5.58	126.10	111.60
32	S1	1433	A	C1'-O4'-C4'	5.58	114.36	109.90
33	L1	1271	U	O3'-P-O5'	-5.58	93.41	104.00
33	L1	1407	G	C4'-C3'-C2'	-5.58	97.03	102.60
33	L1	1423	C	C3'-C2'-C1'	5.58	105.96	101.50
33	L1	1808	G	C2'-C3'-O3'	5.58	122.62	113.70
33	L1	2758	C	C5'-C4'-C3'	-5.58	107.08	116.00
33	L1	2990	C	O4'-C1'-N1	5.58	112.66	108.20
33	L1	3228	C	C3'-C2'-C1'	5.58	105.96	101.50
15	SS	8	THR	N-CA-C	-5.57	95.95	111.00
25	SC	106	PHE	C-N-CA	5.57	135.63	121.70
32	S1	1445	C	C5'-C4'-C3'	5.57	124.92	116.00
33	L1	733	C	O4'-C1'-N1	5.57	112.66	108.20
33	L1	3027	G	C5'-C4'-C3'	5.57	124.92	116.00
35	L2	37	A	P-O3'-C3'	5.57	126.39	119.70
47	LU	92	ARG	CB-CA-C	-5.57	99.25	110.40
48	LV	154	LYS	CA-C-N	5.57	129.46	117.20
59	Lo	20	ASN	CB-CG-OD1	-5.57	110.45	121.60
80	LC	295	SER	CB-CA-C	-5.57	99.51	110.10
12	SO	81	ALA	N-CA-CB	-5.57	102.30	110.10
33	L1	396	G	N9-C1'-C2'	5.57	121.24	114.00
9	SK	91	ALA	CA-C-N	-5.57	104.94	117.20
32	S1	468	A	C1'-O4'-C4'	5.57	114.36	109.90
32	S1	483	C	O5'-C5'-C4'	-5.57	101.11	111.70
32	S1	1224	C	C2'-C3'-O3'	5.57	122.61	113.70
32	S1	1564	A	O4'-C1'-C2'	-5.57	100.23	105.80
32	S1	1608	A	N9-C1'-C2'	-5.57	105.87	112.00
33	L1	384	A	C5'-C4'-C3'	5.57	124.91	116.00
33	L1	1270	G	O4'-C1'-C2'	5.57	112.61	107.60
33	L1	2219	A	OP1-P-OP2	-5.57	111.25	119.60
33	L1	2518	A	C1'-C2'-O2'	5.57	127.31	110.60
33	L1	2730	A	C5'-C4'-C3'	-5.57	107.09	116.00
33	L1	3151	C	C2'-C3'-O3'	5.57	122.61	113.70
67	LS	145	HIS	CA-CB-CG	-5.57	104.13	113.60
32	S1	1718	C	C1'-O4'-C4'	-5.57	105.44	109.90
33	L1	816	G	C3'-C2'-C1'	-5.57	97.05	101.50
33	L1	1436	A	O4'-C1'-N9	5.57	112.66	108.20
33	L1	2212	U	C5'-C4'-C3'	5.57	124.91	116.00
35	L2	105	U	N1-C1'-C2'	5.57	121.24	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1173	U	O4'-C1'-N1	5.57	112.66	108.20
32	S1	1394	A	N9-C1'-C2'	5.57	121.24	114.00
32	S1	1739	U	O4'-C1'-C2'	-5.57	100.23	105.80
33	L1	109	G	P-O3'-C3'	5.57	126.38	119.70
33	L1	3018	A	O4'-C1'-N9	5.57	112.65	108.20
33	L1	3358	A	O4'-C1'-N9	5.57	112.66	108.20
55	Lg	107	PRO	N-CA-CB	5.57	109.98	103.30
81	LD	61	ARG	NH1-CZ-NH2	-5.57	113.28	119.40
29	ST	25	THR	CA-CB-OG1	5.57	120.69	109.00
33	L1	184	C	O3'-P-O5'	5.57	114.58	104.00
33	L1	1043	U	C5'-C4'-C3'	5.57	124.91	116.00
33	L1	1120	G	N9-C1'-C2'	5.57	121.23	114.00
33	L1	1277	A	C3'-C2'-C1'	-5.57	97.05	101.50
33	L1	1423	C	OP1-P-OP2	-5.57	111.25	119.60
33	L1	3143	A	C5'-C4'-O4'	5.57	115.78	109.10
46	LT	76	SER	CB-CA-C	-5.57	99.53	110.10
46	LT	90	PRO	O-C-N	-5.57	113.80	122.70
2	SA	179	PHE	CB-CG-CD1	-5.56	116.91	120.80
32	S1	584	A	C5'-C4'-C3'	-5.56	107.10	116.00
33	L1	956	G	O4'-C4'-C3'	-5.56	98.44	104.00
33	L1	2428	G	O4'-C1'-C2'	5.56	112.61	107.60
66	LN	109	LYS	CD-CE-NZ	5.56	124.50	111.70
32	S1	240	U	OP1-P-OP2	-5.56	111.25	119.60
32	S1	1161	C	P-O5'-C5'	-5.56	112.00	120.90
32	S1	1581	A	N9-C1'-C2'	-5.56	105.88	112.00
33	L1	326	C	O4'-C1'-N1	5.56	112.65	108.20
33	L1	1226	G	O4'-C1'-C2'	5.56	112.61	107.60
33	L1	3001	G	C5'-C4'-C3'	5.56	124.90	116.00
77	Lc	118	ARG	NE-CZ-NH2	-5.56	117.52	120.30
32	S1	632	G	N9-C1'-C2'	-5.56	105.88	112.00
32	S1	1573	C	C3'-C2'-C1'	5.56	105.95	101.50
33	L1	840	A	OP2-P-O3'	5.56	117.44	105.20
33	L1	2040	G	O4'-C1'-N9	5.56	112.65	108.20
37	LB	193	ARG	N-CA-CB	-5.56	100.59	110.60
66	LN	4	LYS	CB-CA-C	-5.56	99.28	110.40
2	SA	184	ARG	NE-CZ-NH2	-5.56	117.52	120.30
23	SU	95	TYR	CD1-CG-CD2	5.56	124.02	117.90
33	L1	367	A	C1'-O4'-C4'	5.56	114.35	109.90
33	L1	672	A	O4'-C1'-N9	5.56	112.65	108.20
33	L1	708	C	C3'-C2'-C1'	5.56	105.95	101.50
33	L1	1263	A	OP1-P-OP2	-5.56	111.26	119.60
33	L1	1532	A	O4'-C1'-C2'	-5.56	100.24	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	LR	91	ARG	NH1-CZ-NH2	5.56	125.52	119.40
47	LU	130	ARG	N-CA-CB	5.56	120.61	110.60
80	LC	314	GLY	CA-C-O	5.56	130.61	120.60
32	S1	180	A	C4'-C3'-C2'	-5.56	97.04	102.60
32	S1	918	G	O4'-C1'-C2'	-5.56	100.24	105.80
33	L1	971	G	OP2-P-O3'	-5.56	92.98	105.20
70	Li	102	ILE	CB-CA-C	5.56	122.72	111.60
13	SQ	67	ARG	CD-NE-CZ	-5.56	115.82	123.60
25	SC	145	ILE	CA-C-O	-5.56	108.43	120.10
32	S1	1620	C	C3'-C2'-C1'	5.56	105.94	101.50
33	L1	27	C	N1-C1'-C2'	5.56	121.22	114.00
45	LQ	266	ARG	NE-CZ-NH1	5.56	123.08	120.30
15	SS	11	ASP	C-N-CA	5.55	135.59	121.70
28	SN	14	TYR	C-N-CA	5.55	133.96	122.30
32	S1	1069	G	C4'-C3'-C2'	-5.55	97.05	102.60
32	S1	1322	G	O4'-C4'-C3'	-5.55	98.45	104.00
32	S1	1693	C	P-O3'-C3'	-5.55	113.03	119.70
33	L1	1518	A	OP2-P-O3'	5.55	117.42	105.20
33	L1	2022	U	C5'-C4'-C3'	5.55	124.89	116.00
44	LR	34	ARG	N-CA-CB	5.55	120.60	110.60
38	LE	127	MET	CA-CB-CG	5.55	122.74	113.30
80	LC	57	VAL	CA-CB-CG2	-5.55	102.57	110.90
11	SM	104	ASP	N-CA-CB	5.55	120.59	110.60
31	S2	72	G	P-O5'-C5'	-5.55	112.02	120.90
33	L1	466	U	P-O3'-C3'	5.55	126.36	119.70
33	L1	721	A	C5'-C4'-C3'	5.55	124.88	116.00
33	L1	1250	G	O4'-C1'-C2'	5.55	112.60	107.60
33	L1	2496	U	C4'-C3'-C2'	-5.55	97.05	102.60
33	L1	3302	A	OP2-P-O3'	5.55	117.41	105.20
33	L1	3325	G	O4'-C1'-N9	5.55	112.64	108.20
35	L2	23	A	N9-C1'-C2'	-5.55	105.89	112.00
80	LC	102	LEU	CB-CA-C	-5.55	99.65	110.20
32	S1	151	A	O3'-P-O5'	-5.55	93.45	104.00
32	S1	282	C	O4'-C1'-C2'	-5.55	100.25	105.80
32	S1	1132	G	O4'-C1'-C2'	5.55	112.59	107.60
33	L1	1097	A	C3'-C2'-C1'	-5.55	97.06	101.50
33	L1	1279	C	O4'-C1'-N1	5.55	112.64	108.20
34	L3	18	C	N1-C1'-C2'	-5.55	105.89	112.00
41	LM	55	ALA	N-CA-CB	-5.55	102.33	110.10
3	SB	74	GLN	CB-CA-C	-5.55	99.31	110.40
33	L1	1130	G	O3'-P-O5'	5.55	114.54	104.00
45	LQ	109	ARG	NE-CZ-NH1	5.55	123.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
72	Lk	96	VAL	CB-CA-C	-5.55	100.86	111.40
32	S1	1224	C	OP2-P-O3'	-5.55	93.00	105.20
33	L1	1511	C	O3'-P-O5'	-5.55	93.46	104.00
32	S1	23	G	P-O5'-C5'	-5.54	112.03	120.90
32	S1	1540	U	C5'-C4'-C3'	5.54	124.87	116.00
33	L1	1865	C	C3'-C2'-C1'	5.54	105.94	101.50
56	Lh	107	LYS	O-C-N	5.54	131.57	122.70
32	S1	158	C	P-O3'-C3'	-5.54	113.05	119.70
32	S1	273	C	C5'-C4'-C3'	-5.54	107.13	116.00
32	S1	1378	C	P-O3'-C3'	-5.54	113.05	119.70
32	S1	1383	U	C5'-C4'-O4'	5.54	115.75	109.10
33	L1	161	C	N1-C1'-C2'	5.54	121.21	114.00
33	L1	1289	G	OP1-P-O3'	5.54	117.39	105.20
33	L1	2477	G	OP1-P-OP2	-5.54	111.28	119.60
48	LV	112	THR	CA-CB-OG1	5.54	120.64	109.00
70	Li	47	THR	N-CA-C	-5.54	96.03	111.00
80	LC	129	ALA	N-CA-C	5.54	125.97	111.00
32	S1	1748	U	O5'-C5'-C4'	-5.54	101.17	111.70
33	L1	239	C	C3'-C2'-C1'	-5.54	97.07	101.50
33	L1	302	G	P-O3'-C3'	5.54	126.35	119.70
33	L1	2283	G	O4'-C1'-N9	5.54	112.63	108.20
33	L1	3203	G	C3'-C2'-C1'	-5.54	97.07	101.50
38	LE	1	MET	CG-SD-CE	-5.54	91.33	100.20
41	LM	69	LYS	O-C-N	-5.54	110.57	121.10
41	LM	89	ARG	CG-CD-NE	-5.54	100.16	111.80
68	LW	105	ILE	O-C-N	-5.54	113.83	122.70
69	La	28	VAL	CA-C-N	5.54	129.39	117.20
23	SU	7	ALA	N-CA-C	5.54	125.96	111.00
33	L1	2702	G	P-O5'-C5'	5.54	129.76	120.90
70	Li	19	GLN	N-CA-C	-5.54	96.04	111.00
27	SH	28	ARG	NE-CZ-NH2	-5.54	117.53	120.30
32	S1	9	U	O4'-C1'-C2'	-5.54	100.26	105.80
32	S1	1076	C	O4'-C1'-C2'	-5.54	100.26	105.80
32	S1	1593	U	O5'-P-OP1	5.54	117.35	110.70
32	S1	1632	C	P-O5'-C5'	-5.54	112.04	120.90
33	L1	1369	G	O5'-C5'-C4'	5.54	122.22	111.70
33	L1	1684	U	P-O3'-C3'	5.54	126.34	119.70
33	L1	3101	C	O4'-C1'-C2'	-5.54	100.26	105.80
34	L3	16	A	O4'-C1'-N9	5.54	112.63	108.20
35	L2	54	C	C4'-C3'-C2'	-5.54	97.06	102.60
54	Lf	20	LEU	CB-CG-CD2	5.54	120.42	111.00
31	S2	47	U	O4'-C1'-C2'	-5.54	100.26	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1375	C	O4'-C1'-N1	5.54	112.63	108.20
32	S1	1625	U	O4'-C4'-C3'	5.54	110.53	106.10
33	L1	527	G	P-O3'-C3'	5.54	126.34	119.70
6	SF	123	ARG	NE-CZ-NH1	5.54	123.07	120.30
31	S2	62	C	C4'-C3'-C2'	5.54	108.14	102.60
32	S1	1331	C	N1-C1'-C2'	-5.54	105.91	112.00
33	L1	637	C	C3'-C2'-C1'	5.54	105.93	101.50
33	L1	912	G	O4'-C4'-C3'	-5.54	98.47	104.00
33	L1	2206	U	C3'-C2'-C1'	5.54	105.93	101.50
33	L1	2798	G	O4'-C4'-C3'	-5.54	98.46	104.00
67	LS	10	GLN	N-CA-CB	-5.54	100.64	110.60
16	SR	128	PHE	CB-CG-CD2	5.53	124.67	120.80
31	S2	17	G	C3'-C2'-C1'	5.53	105.93	101.50
33	L1	1754	C	OP2-P-O3'	5.53	117.37	105.20
33	L1	2494	A	O5'-P-OP2	5.53	117.34	110.70
33	L1	2849	A	P-O3'-C3'	-5.53	113.06	119.70
33	L1	2927	C	O4'-C1'-N1	5.53	112.63	108.20
45	LQ	250	ASP	CB-CA-C	5.53	121.47	110.40
48	LV	79	ASN	N-CA-C	-5.53	96.06	111.00
67	LS	82	ARG	N-CA-CB	5.53	120.56	110.60
72	Lk	67	GLY	N-CA-C	5.53	126.94	113.10
32	S1	1281	G	C4'-C3'-C2'	-5.53	97.07	102.60
33	L1	163	U	C4'-C3'-C2'	-5.53	97.07	102.60
33	L1	437	C	N1-C1'-C2'	-5.53	105.92	112.00
33	L1	878	G	P-O3'-C3'	5.53	126.34	119.70
37	LB	84	THR	N-CA-CB	5.53	120.81	110.30
46	LT	61	SER	CB-CA-C	-5.53	99.59	110.10
32	S1	337	A	C1'-O4'-C4'	-5.53	105.48	109.90
32	S1	385	C	N1-C1'-C2'	5.53	121.19	114.00
32	S1	1747	A	C5'-C4'-C3'	5.53	124.85	116.00
33	L1	2467	A	C2'-C3'-O3'	5.53	122.55	113.70
33	L1	2596	A	C5'-C4'-O4'	5.53	115.74	109.10
33	L1	3175	C	OP1-P-OP2	-5.53	111.30	119.60
33	L1	3292	U	C4'-C3'-C2'	-5.53	97.07	102.60
34	L3	111	U	O4'-C1'-C2'	5.53	112.58	107.60
35	L2	158	G	P-O3'-C3'	-5.53	113.06	119.70
60	Lr	60	LYS	C-N-CA	-5.53	107.87	121.70
68	LW	23	PHE	CB-CG-CD2	5.53	124.67	120.80
83	Lm	4	ARG	CA-CB-CG	-5.53	101.23	113.40
10	SL	23	ALA	C-N-CA	5.53	135.52	121.70
33	L1	734	C	P-O5'-C5'	5.53	129.75	120.90
33	L1	2510	U	P-O5'-C5'	-5.53	112.05	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
70	Li	101	LYS	C-N-CA	5.53	135.52	121.70
16	SR	116	ILE	CA-C-N	5.53	129.36	117.20
23	SU	19	THR	OG1-CB-CG2	-5.53	97.29	110.00
33	L1	1021	U	OP2-P-O3'	5.53	117.36	105.20
33	L1	1151	G	N9-C1'-C2'	5.53	121.19	114.00
33	L1	1290	A	P-O3'-C3'	5.53	126.33	119.70
33	L1	1336	A	C5'-C4'-C3'	-5.53	107.16	116.00
2	SA	185	MET	CG-SD-CE	-5.53	91.36	100.20
32	S1	827	C	O4'-C1'-N1	5.53	112.62	108.20
32	S1	1019	G	O4'-C1'-N9	5.53	112.62	108.20
32	S1	1566	U	OP1-P-OP2	-5.53	111.31	119.60
32	S1	1626	C	C3'-C2'-C1'	-5.53	97.08	101.50
32	S1	1637	G	C1'-O4'-C4'	-5.53	105.48	109.90
33	L1	749	C	O4'-C1'-N1	5.53	112.62	108.20
33	L1	939	A	P-O3'-C3'	5.53	126.33	119.70
33	L1	1015	A	C3'-C2'-C1'	5.53	105.92	101.50
33	L1	1772	G	C1'-O4'-C4'	5.53	114.32	109.90
33	L1	2260	C	O4'-C1'-N1	5.53	112.62	108.20
33	L1	2758	C	O3'-P-O5'	-5.53	93.50	104.00
33	L1	2767	C	C3'-C2'-C1'	5.53	105.92	101.50
33	L1	2774	A	O5'-P-OP2	5.53	117.33	110.70
35	L2	117	U	P-O3'-C3'	-5.53	113.07	119.70
71	Lj	90	ARG	NE-CZ-NH2	-5.53	117.54	120.30
32	S1	1319	U	O4'-C4'-C3'	-5.52	98.48	104.00
32	S1	1567	G	C3'-C2'-C1'	5.52	105.92	101.50
39	LF	185	THR	CA-CB-CG2	-5.52	104.67	112.40
1	Sa	198	SER	C-N-CA	5.52	135.51	121.70
32	S1	1515	G	O3'-P-O5'	5.52	114.49	104.00
32	S1	1579	C	O4'-C1'-N1	5.52	112.62	108.20
33	L1	64	A	N9-C1'-C2'	5.52	121.18	114.00
33	L1	997	G	C2'-C3'-O3'	5.52	122.54	113.70
33	L1	1194	C	C3'-C2'-C1'	-5.52	97.08	101.50
33	L1	1431	G	N9-C1'-C2'	5.52	121.18	114.00
33	L1	1771	G	C4'-C3'-C2'	-5.52	97.08	102.60
33	L1	3081	G	C2'-C3'-O3'	5.52	122.53	113.70
34	L3	103	U	O4'-C1'-N1	-5.52	103.78	108.20
35	L2	48	A	OP2-P-O3'	5.52	117.35	105.20
14	SP	50	ILE	CA-C-N	5.52	129.35	117.20
20	SZ	44	PHE	CA-C-N	-5.52	105.05	117.20
33	L1	213	G	C3'-C2'-C1'	-5.52	97.08	101.50
33	L1	282	A	N9-C1'-C2'	-5.52	105.93	112.00
33	L1	1383	G	C1'-O4'-C4'	-5.52	105.48	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2515	C	C3'-C2'-C1'	5.52	105.92	101.50
32	S1	1047	G	O4'-C1'-N9	5.52	112.61	108.20
32	S1	1504	U	C3'-C2'-C1'	5.52	105.92	101.50
33	L1	459	G	N9-C1'-C2'	5.52	121.17	114.00
33	L1	615	A	N9-C1'-C2'	5.52	121.17	114.00
33	L1	2114	A	P-O5'-C5'	5.52	129.73	120.90
33	L1	2364	C	C5'-C4'-C3'	5.52	124.83	116.00
33	L1	3233	C	OP2-P-O3'	5.52	117.34	105.20
35	L2	22	U	C1'-O4'-C4'	-5.52	105.48	109.90
35	L2	98	C	C4'-C3'-C2'	5.52	108.12	102.60
42	LP	13	ARG	CG-CD-NE	-5.52	100.21	111.80
32	S1	231	U	C3'-C2'-C1'	-5.52	97.09	101.50
32	S1	1353	G	N9-C1'-C2'	5.52	121.17	114.00
32	S1	1477	A	O4'-C1'-C2'	-5.52	100.28	105.80
32	S1	1793	C	O4'-C4'-C3'	5.52	110.51	106.10
33	L1	2841	G	C4'-C3'-C2'	-5.52	97.08	102.60
33	L1	3377	G	O4'-C4'-C3'	-5.52	98.48	104.00
35	L2	157	C	C5'-C4'-O4'	5.52	115.72	109.10
56	Lh	26	TYR	CG-CD2-CE2	5.52	125.71	121.30
61	Lq	9	ARG	NE-CZ-NH1	5.52	123.06	120.30
74	LJ	39	PRO	N-CD-CG	5.52	111.48	103.20
31	S2	39	G	O4'-C1'-C2'	5.52	112.56	107.60
48	LV	169	ARG	C-N-CA	5.52	135.49	121.70
70	Li	41	GLY	C-N-CD	-5.52	108.47	120.60
14	SP	116	PHE	CZ-CE2-CD2	-5.51	113.48	120.10
15	SS	68	TYR	CB-CG-CD1	5.51	124.31	121.00
32	S1	1146	G	C5'-C4'-O4'	5.51	115.72	109.10
32	S1	1648	C	P-O3'-C3'	-5.51	113.08	119.70
33	L1	1532	A	P-O3'-C3'	5.51	126.32	119.70
33	L1	1554	C	C1'-O4'-C4'	-5.51	105.49	109.90
33	L1	3124	A	C1'-O4'-C4'	5.51	114.31	109.90
35	L2	67	C	C2'-C3'-O3'	5.51	122.52	113.70
45	LQ	34	TYR	CB-CG-CD2	-5.51	117.69	121.00
51	LY	8	THR	N-CA-CB	5.51	120.78	110.30
68	LW	88	LEU	N-CA-CB	-5.51	99.37	110.40
15	SS	34	PRO	CA-N-CD	-5.51	103.78	111.50
25	SC	25	ARG	NE-CZ-NH1	-5.51	117.54	120.30
32	S1	973	U	O4'-C1'-N1	5.51	112.61	108.20
33	L1	1172	A	C1'-O4'-C4'	5.51	114.31	109.90
33	L1	2091	U	O4'-C1'-C2'	-5.51	100.29	105.80
27	SH	26	LEU	CB-CA-C	-5.51	99.73	110.20
31	S2	43	C	C1'-O4'-C4'	-5.51	105.49	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	257	A	P-O3'-C3'	5.51	126.31	119.70
32	S1	942	C	C4'-C3'-C2'	-5.51	97.09	102.60
33	L1	207	U	C4'-C3'-C2'	-5.51	97.09	102.60
33	L1	1377	G	O4'-C1'-N9	5.51	112.61	108.20
33	L1	2007	C	O4'-C1'-C2'	-5.51	100.29	105.80
33	L1	2174	C	C4'-C3'-C2'	-5.51	97.09	102.60
33	L1	2687	C	C1'-O4'-C4'	-5.51	105.49	109.90
32	S1	731	G	P-O3'-C3'	-5.51	113.09	119.70
32	S1	776	A	O5'-C5'-C4'	5.51	122.17	111.70
32	S1	1745	U	C3'-C2'-C1'	5.51	105.91	101.50
32	S1	1747	A	O3'-P-O5'	-5.51	93.53	104.00
33	L1	2143	A	O4'-C1'-N9	5.51	112.61	108.20
33	L1	2576	C	P-O5'-C5'	-5.51	112.09	120.90
33	L1	2612	A	N9-C1'-C2'	-5.51	105.94	112.00
38	LE	129	PHE	CZ-CE2-CD2	-5.51	113.49	120.10
42	LP	120	TRP	CB-CG-CD1	5.51	134.16	127.00
76	Lv	35	ASP	CB-CG-OD2	-5.51	113.34	118.30
11	SM	12	ILE	N-CA-CB	5.51	123.47	110.80
11	SM	39	ARG	NE-CZ-NH1	5.51	123.05	120.30
33	L1	300	C	N1-C1'-C2'	5.51	121.16	114.00
57	Ll	17	THR	N-CA-CB	5.51	120.77	110.30
7	SI	32	ARG	NH1-CZ-NH2	-5.51	113.34	119.40
32	S1	213	U	OP1-P-OP2	-5.51	111.34	119.60
32	S1	1023	C	C5'-C4'-O4'	5.51	115.71	109.10
32	S1	1062	C	O3'-P-O5'	-5.51	93.54	104.00
32	S1	1757	G	P-O5'-C5'	5.51	129.71	120.90
33	L1	309	C	O3'-P-O5'	5.51	114.46	104.00
33	L1	319	C	P-O3'-C3'	-5.51	113.09	119.70
33	L1	1050	A	P-O5'-C5'	-5.51	112.09	120.90
33	L1	1395	A	C1'-C2'-O2'	5.51	127.12	110.60
33	L1	1921	U	C5'-C4'-C3'	-5.51	107.19	116.00
33	L1	1924	G	C5'-C4'-C3'	5.51	124.81	116.00
33	L1	3087	A	C4'-C3'-C2'	5.51	108.11	102.60
33	L1	3364	A	C5'-C4'-C3'	5.51	124.81	116.00
38	LE	130	PHE	CG-CD1-CE1	-5.51	114.74	120.80
40	LH	106	ARG	NE-CZ-NH1	5.51	123.05	120.30
48	LV	132	ARG	N-CA-CB	-5.51	100.69	110.60
32	S1	672	G	O4'-C1'-N9	5.50	112.60	108.20
37	LB	50	HIS	O-C-N	-5.50	113.89	122.70
55	Lg	97	LEU	O-C-N	-5.50	113.89	122.70
67	LS	77	TYR	CG-CD1-CE1	-5.50	116.90	121.30
32	S1	564	U	C3'-C2'-C1'	5.50	105.90	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	839	G	C1'-O4'-C4'	-5.50	105.50	109.90
32	S1	1182	C	C5'-C4'-C3'	5.50	124.81	116.00
33	L1	584	G	O4'-C1'-N9	-5.50	103.80	108.20
33	L1	1373	A	O4'-C1'-N9	5.50	112.60	108.20
33	L1	1948	G	C3'-C2'-C1'	-5.50	97.10	101.50
33	L1	3271	A	N9-C1'-C2'	5.50	121.16	114.00
14	SP	104	ARG	NE-CZ-NH1	-5.50	117.55	120.30
25	SC	8	TYR	CB-CG-CD1	5.50	124.30	121.00
33	L1	29	G	N9-C1'-C2'	-5.50	105.95	112.00
33	L1	124	C	O4'-C1'-N1	-5.50	103.80	108.20
33	L1	1539	G	C3'-C2'-C1'	-5.50	97.10	101.50
33	L1	1665	G	N9-C1'-C2'	-5.50	105.95	112.00
33	L1	1693	A	P-O3'-C3'	-5.50	113.10	119.70
33	L1	1867	U	N1-C1'-C2'	5.50	121.15	114.00
13	SQ	125	ALA	CA-C-N	5.50	132.50	117.10
33	L1	2232	C	C1'-O4'-C4'	-5.50	105.50	109.90
48	LV	157	PRO	N-CD-CG	5.50	111.45	103.20
5	SE	148	VAL	N-CA-C	-5.50	96.15	111.00
32	S1	226	C	O4'-C1'-C2'	-5.50	100.30	105.80
32	S1	1767	G	C1'-O4'-C4'	-5.50	105.50	109.90
33	L1	2750	A	P-O3'-C3'	-5.50	113.10	119.70
33	L1	3056	C	O4'-C1'-C2'	-5.50	100.30	105.80
56	Lh	131	GLU	C-N-CA	5.50	135.44	121.70
69	La	25	ILE	CG1-CB-CG2	-5.50	99.30	111.40
32	S1	420	A	O4'-C1'-C2'	-5.50	100.30	105.80
33	L1	506	U	C5'-C4'-C3'	5.50	124.79	116.00
33	L1	1121	C	O4'-C1'-N1	5.50	112.60	108.20
33	L1	1573	G	N9-C1'-C2'	5.50	121.14	114.00
33	L1	1798	C	N1-C1'-C2'	5.50	121.15	114.00
33	L1	1985	G	O4'-C1'-N9	5.50	112.60	108.20
33	L1	2449	A	O3'-P-O5'	-5.50	93.56	104.00
33	L1	3376	C	C4'-C3'-O3'	5.50	123.99	113.00
2	SA	73	GLU	OE1-CD-OE2	5.50	129.89	123.30
32	S1	468	A	P-O5'-C5'	5.50	129.69	120.90
32	S1	825	U	P-O3'-C3'	-5.50	113.11	119.70
32	S1	1097	A	OP2-P-O3'	5.50	117.29	105.20
33	L1	1283	C	C4'-C3'-C2'	5.50	108.09	102.60
39	LF	91	MET	CG-SD-CE	-5.50	91.41	100.20
5	SE	124	VAL	CA-CB-CG1	5.49	119.14	110.90
7	SI	135	PHE	CA-CB-CG	5.49	127.09	113.90
32	S1	967	C	O4'-C1'-N1	5.49	112.59	108.20
33	L1	139	U	N1-C1'-C2'	5.49	121.14	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	312	U	N1-C1'-C2'	-5.49	105.96	112.00
33	L1	638	G	P-O5'-C5'	5.49	129.69	120.90
33	L1	1264	A	O4'-C4'-C3'	-5.49	98.51	104.00
33	L1	2115	G	C5'-C4'-C3'	5.49	124.79	116.00
71	Lj	34	LEU	N-CA-CB	-5.49	99.41	110.40
81	LD	101	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
32	S1	224	C	O4'-C1'-N1	5.49	112.59	108.20
32	S1	774	C	O3'-P-O5'	-5.49	93.56	104.00
32	S1	1328	G	C5'-C4'-O4'	5.49	115.69	109.10
33	L1	1268	G	P-O3'-C3'	5.49	126.29	119.70
33	L1	1660	C	P-O5'-C5'	5.49	129.69	120.90
47	LU	135	PRO	N-CA-C	5.49	126.38	112.10
59	Lo	27	ILE	N-CA-C	5.49	125.83	111.00
32	S1	421	A	P-O5'-C5'	-5.49	112.11	120.90
33	L1	1423	C	N1-C1'-C2'	-5.49	105.96	112.00
33	L1	2466	G	P-O5'-C5'	-5.49	112.12	120.90
33	L1	2722	U	C4'-C3'-C2'	-5.49	97.11	102.60
33	L1	2824	U	C3'-C2'-C1'	-5.49	97.11	101.50
39	LF	95	TYR	N-CA-C	-5.49	96.17	111.00
3	SB	97	CYS	CA-CB-SG	5.49	123.88	114.00
33	L1	1663	G	N9-C1'-C2'	5.49	121.13	114.00
33	L1	1739	G	C1'-O4'-C4'	-5.49	105.51	109.90
33	L1	1873	C	C4'-C3'-C2'	-5.49	97.11	102.60
33	L1	2075	C	P-O5'-C5'	5.49	129.68	120.90
33	L1	3175	C	O3'-P-O5'	-5.49	93.57	104.00
80	LC	343	ARG	NE-CZ-NH1	5.49	123.04	120.30
23	SU	25	ARG	CB-CG-CD	5.49	125.87	111.60
32	S1	1317	A	C1'-O4'-C4'	5.49	114.29	109.90
32	S1	1758	G	OP2-P-O3'	5.49	117.27	105.20
33	L1	2135	U	C4'-C3'-C2'	5.49	108.09	102.60
32	S1	548	C	O3'-P-O5'	5.49	114.42	104.00
32	S1	1544	G	C1'-O4'-C4'	-5.49	105.51	109.90
33	L1	125	G	C3'-C2'-C1'	-5.49	97.11	101.50
33	L1	180	G	O5'-P-OP2	5.49	117.28	110.70
33	L1	409	U	OP2-P-O3'	5.49	117.27	105.20
33	L1	1655	G	N9-C1'-C2'	5.49	121.13	114.00
35	L2	102	U	C4'-C3'-C2'	-5.49	97.11	102.60
32	S1	736	U	C4'-C3'-O3'	5.48	123.97	113.00
32	S1	1132	G	O3'-P-O5'	-5.48	93.58	104.00
33	L1	1301	C	P-O5'-C5'	5.48	129.67	120.90
33	L1	3323	U	C5'-C4'-C3'	-5.48	107.23	116.00
34	L3	106	U	OP2-P-O3'	-5.48	93.14	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	LX	114	ASP	O-C-N	-5.48	113.93	122.70
55	Lg	16	VAL	N-CA-C	-5.48	96.19	111.00
81	LD	319	LYS	N-CA-C	-5.48	96.19	111.00
23	SU	7	ALA	CA-C-N	-5.48	101.75	117.10
32	S1	477	A	C3'-C2'-C1'	5.48	105.89	101.50
32	S1	851	G	O4'-C1'-N9	5.48	112.58	108.20
32	S1	997	A	O4'-C1'-N9	5.48	112.59	108.20
32	S1	1024	A	O4'-C4'-C3'	-5.48	98.52	104.00
32	S1	1677	U	C4'-C3'-C2'	-5.48	97.12	102.60
33	L1	2439	A	C4'-C3'-C2'	-5.48	97.12	102.60
33	L1	2795	G	O4'-C1'-N9	5.48	112.59	108.20
35	L2	14	G	C1'-O4'-C4'	5.48	114.29	109.90
66	LN	17	TYR	N-CA-CB	5.48	120.47	110.60
28	SN	43	PHE	CG-CD1-CE1	5.48	126.83	120.80
33	L1	527	G	O4'-C1'-N9	-5.48	103.82	108.20
33	L1	1165	C	N1-C1'-C2'	5.48	121.13	114.00
33	L1	1174	G	OP1-P-OP2	-5.48	111.38	119.60
33	L1	1746	G	P-O5'-C5'	-5.48	112.13	120.90
33	L1	3059	C	C5'-C4'-C3'	5.48	124.77	116.00
43	LO	107	LEU	CB-CG-CD1	-5.48	101.69	111.00
32	S1	1000	A	O4'-C1'-C2'	5.48	112.53	107.60
32	S1	1373	C	P-O5'-C5'	-5.48	112.13	120.90
32	S1	1693	C	O4'-C1'-C2'	-5.48	100.32	105.80
33	L1	1133	A	P-O3'-C3'	5.48	126.28	119.70
33	L1	1505	G	O4'-C4'-C3'	5.48	110.48	106.10
33	L1	2646	A	P-O5'-C5'	-5.48	112.13	120.90
40	LH	127	VAL	CG1-CB-CG2	5.48	119.67	110.90
32	S1	630	U	P-O3'-C3'	5.48	126.27	119.70
32	S1	940	U	C4'-C3'-C2'	5.48	108.08	102.60
33	L1	1744	C	P-O3'-C3'	5.48	126.27	119.70
33	L1	1764	G	C1'-C2'-O2'	5.48	127.03	110.60
33	L1	1936	G	O4'-C1'-N9	5.48	112.58	108.20
33	L1	2260	C	C5'-C4'-C3'	5.48	124.76	116.00
33	L1	2438	A	C5'-C4'-O4'	5.48	115.67	109.10
33	L1	2506	G	O4'-C4'-C3'	-5.48	98.52	104.00
33	L1	2640	A	P-O3'-C3'	-5.48	113.13	119.70
35	L2	95	C	O4'-C1'-C2'	-5.48	100.32	105.80
38	LE	12	ARG	NE-CZ-NH2	-5.48	117.56	120.30
32	S1	232	C	C1'-O4'-C4'	5.48	114.28	109.90
12	SO	129	TYR	CB-CG-CD1	5.47	124.28	121.00
32	S1	844	C	O4'-C1'-N1	5.47	112.58	108.20
32	S1	972	A	O4'-C1'-N9	5.47	112.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1408	G	O4'-C1'-N9	5.47	112.58	108.20
33	L1	1953	C	C5'-C4'-O4'	-5.47	102.53	109.10
35	L2	12	C	P-O3'-C3'	-5.47	113.13	119.70
23	SU	92	GLU	CA-C-N	5.47	132.42	117.10
32	S1	178	A	O4'-C1'-N9	5.47	112.58	108.20
32	S1	439	C	N1-C1'-C2'	5.47	121.11	114.00
32	S1	1145	G	C3'-C2'-C1'	5.47	105.88	101.50
32	S1	1541	C	C4'-C3'-C2'	-5.47	97.13	102.60
33	L1	299	G	O4'-C1'-C2'	-5.47	100.33	105.80
33	L1	1150	G	C3'-C2'-C1'	-5.47	97.12	101.50
33	L1	1604	U	C5'-C4'-C3'	-5.47	107.24	116.00
33	L1	2340	G	O4'-C1'-N9	5.47	112.58	108.20
33	L1	2491	A	P-O5'-C5'	5.47	129.66	120.90
33	L1	2941	G	P-O3'-C3'	-5.47	113.13	119.70
12	SO	141	TYR	CB-CG-CD1	5.47	124.28	121.00
32	S1	627	A	N9-C1'-C2'	-5.47	105.98	112.00
32	S1	1344	U	O4'-C1'-C2'	-5.47	100.33	105.80
33	L1	797	U	O4'-C1'-C2'	-5.47	100.33	105.80
33	L1	2052	G	N9-C1'-C2'	-5.47	105.98	112.00
64	LG	65	LYS	O-C-N	-5.47	110.70	121.10
84	LI	107	GLY	N-CA-C	-5.47	99.42	113.10
6	SF	70	ASN	CB-CA-C	5.47	121.34	110.40
29	ST	52	PHE	N-CA-CB	5.47	120.44	110.60
32	S1	791	C	P-O5'-C5'	5.47	129.65	120.90
32	S1	1321	C	O4'-C1'-N1	5.47	112.58	108.20
33	L1	711	A	O4'-C1'-C2'	5.47	112.52	107.60
33	L1	1747	A	P-O5'-C5'	-5.47	112.15	120.90
33	L1	1752	C	N1-C1'-C2'	5.47	121.11	114.00
33	L1	1980	C	O4'-C1'-N1	5.47	112.58	108.20
33	L1	2464	G	P-O5'-C5'	-5.47	112.15	120.90
33	L1	3122	U	C4'-C3'-C2'	-5.47	97.13	102.60
35	L2	104	U	C5'-C4'-C3'	-5.47	107.25	116.00
32	S1	1803	G	O5'-C5'-C4'	5.47	122.09	111.70
33	L1	2949	G	C3'-C2'-C1'	5.47	105.87	101.50
36	LA	119	ILE	O-C-N	-5.47	110.71	121.10
45	LQ	241	LYS	O-C-N	-5.47	113.95	122.70
9	SK	59	MET	N-CA-CB	5.47	120.44	110.60
23	SU	72	GLY	N-CA-C	5.47	126.77	113.10
33	L1	554	C	O4'-C1'-C2'	-5.47	100.33	105.80
33	L1	3090	C	O4'-C1'-C2'	-5.47	100.33	105.80
69	La	26	VAL	N-CA-C	-5.47	96.24	111.00
23	SU	16	LYS	N-CA-C	-5.46	96.25	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	391	A	O4'-C1'-C2'	-5.46	100.34	105.80
32	S1	443	U	C5'-C4'-C3'	-5.46	107.26	116.00
33	L1	162	G	P-O3'-C3'	5.46	126.26	119.70
33	L1	232	C	C3'-C2'-C1'	5.46	105.87	101.50
33	L1	867	G	C3'-C2'-C1'	5.46	105.87	101.50
49	LX	33	SER	N-CA-CB	5.46	118.70	110.50
9	SK	96	LEU	CA-CB-CG	-5.46	102.73	115.30
33	L1	335	G	OP2-P-O3'	5.46	117.22	105.20
33	L1	1140	C	C1'-O4'-C4'	5.46	114.27	109.90
33	L1	1183	C	C2'-C3'-O3'	5.46	122.44	113.70
28	SN	10	HIS	C-N-CD	5.46	139.87	128.40
32	S1	1123	G	O4'-C1'-C2'	5.46	112.52	107.60
32	S1	1739	U	O3'-P-O5'	-5.46	93.62	104.00
32	S1	1764	G	N9-C1'-C2'	5.46	121.10	114.00
33	L1	924	A	C1'-O4'-C4'	5.46	114.27	109.90
33	L1	1362	C	C2'-C3'-O3'	5.46	122.44	113.70
33	L1	2045	G	O4'-C1'-N9	5.46	112.57	108.20
33	L1	2076	C	O4'-C4'-C3'	-5.46	98.54	104.00
33	L1	2581	C	C4'-C3'-C2'	-5.46	97.14	102.60
33	L1	2782	G	OP1-P-OP2	-5.46	111.41	119.60
33	L1	2868	C	N1-C1'-C2'	-5.46	105.99	112.00
35	L2	64	U	OP1-P-OP2	-5.46	111.41	119.60
46	LT	176	ARG	N-CA-CB	-5.46	100.77	110.60
48	LV	76	ARG	CD-NE-CZ	5.46	131.25	123.60
67	LS	137	LYS	CB-CA-C	5.46	121.33	110.40
70	Li	10	ARG	C-N-CA	5.46	135.35	121.70
33	L1	349	A	N9-C1'-C2'	-5.46	105.99	112.00
81	LD	309	PRO	CB-CG-CD	-5.46	85.20	106.50
11	SM	133	GLY	CA-C-O	-5.46	110.77	120.60
23	SU	76	THR	C-N-CA	-5.46	110.84	122.30
32	S1	932	C	O4'-C1'-C2'	-5.46	100.34	105.80
33	L1	314	C	C3'-C2'-C1'	5.46	105.87	101.50
33	L1	876	C	C1'-O4'-C4'	-5.46	105.53	109.90
33	L1	2806	A	P-O3'-C3'	-5.46	113.15	119.70
33	L1	3216	G	C1'-O4'-C4'	5.46	114.27	109.90
34	L3	31	G	O4'-C1'-N9	5.46	112.57	108.20
34	L3	69	A	C4'-C3'-C2'	-5.46	97.14	102.60
38	LE	41	GLN	CB-CG-CD	-5.46	97.41	111.60
23	SU	36	GLY	N-CA-C	-5.46	99.46	113.10
32	S1	291	G	O4'-C1'-N9	5.46	112.56	108.20
32	S1	410	U	N1-C1'-C2'	5.46	121.09	114.00
32	S1	927	A	OP1-P-O3'	5.46	117.20	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	975	A	C4'-C3'-C2'	-5.46	97.14	102.60
32	S1	1026	C	C3'-C2'-C1'	5.46	105.87	101.50
32	S1	1077	C	O4'-C1'-N1	5.46	112.56	108.20
33	L1	1742	G	O4'-C4'-C3'	-5.46	98.54	104.00
33	L1	1820	C	C5'-C4'-C3'	5.46	124.73	116.00
33	L1	2104	G	C1'-O4'-C4'	-5.46	105.53	109.90
33	L1	2952	G	C2'-C3'-O3'	5.46	122.43	113.70
35	L2	116	U	P-O5'-C5'	-5.46	112.17	120.90
37	LB	207	VAL	CA-CB-CG1	5.46	119.08	110.90
74	LJ	93	ARG	NE-CZ-NH1	-5.46	117.57	120.30
6	SF	85	ALA	N-CA-CB	5.46	117.74	110.10
23	SU	80	LEU	O-C-N	-5.46	113.97	122.70
32	S1	35	U	C5'-C4'-C3'	5.46	124.73	116.00
33	L1	907	A	N9-C1'-C2'	5.46	121.09	114.00
51	LY	24	SER	N-CA-CB	5.46	118.68	110.50
19	SY	39	MET	N-CA-CB	5.45	120.42	110.60
32	S1	435	C	O4'-C1'-N1	5.45	112.56	108.20
32	S1	1069	G	P-O3'-C3'	5.45	126.24	119.70
32	S1	1197	A	C3'-C2'-C1'	-5.45	97.14	101.50
32	S1	1592	G	C1'-O4'-C4'	5.45	114.26	109.90
33	L1	1374	G	OP1-P-OP2	-5.45	111.42	119.60
35	L2	57	A	C4'-C3'-C2'	-5.45	97.15	102.60
81	LD	311	ASN	CA-C-N	5.45	129.20	117.20
83	Lm	41	PHE	CB-CG-CD1	5.45	124.62	120.80
32	S1	919	G	P-O5'-C5'	5.45	129.62	120.90
32	S1	1426	C	C3'-C2'-C1'	5.45	105.86	101.50
33	L1	1	G	O4'-C1'-N9	5.45	112.56	108.20
33	L1	405	A	P-O3'-C3'	-5.45	113.16	119.70
33	L1	3080	U	O5'-P-OP2	-5.45	100.79	105.70
48	LV	157	PRO	CA-C-N	5.45	129.19	117.20
31	S2	44	A	P-O5'-C5'	5.45	129.62	120.90
32	S1	1017	U	C3'-C2'-C1'	5.45	105.86	101.50
32	S1	1686	C	C1'-O4'-C4'	-5.45	105.54	109.90
33	L1	243	C	O4'-C1'-N1	5.45	112.56	108.20
33	L1	307	C	C1'-O4'-C4'	-5.45	105.54	109.90
33	L1	1757	G	C4'-C3'-C2'	-5.45	97.15	102.60
33	L1	2829	U	O4'-C1'-C2'	-5.45	100.35	105.80
33	L1	424	G	O4'-C1'-C2'	-5.45	100.35	105.80
34	L3	73	U	C4'-C3'-C2'	-5.45	97.15	102.60
43	LO	12	ARG	NE-CZ-NH2	-5.45	117.58	120.30
54	Lf	39	ARG	CB-CG-CD	-5.45	97.44	111.60
82	LK	133	ARG	C-N-CA	-5.45	108.08	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	SF	165	ILE	CA-CB-CG2	-5.45	100.01	110.90
32	S1	996	G	C5'-C4'-C3'	-5.45	107.28	116.00
33	L1	1102	A	O5'-C5'-C4'	5.45	122.05	111.70
33	L1	1401	C	O4'-C1'-N1	5.45	112.56	108.20
33	L1	1602	A	O5'-P-OP2	-5.45	100.80	105.70
33	L1	1691	U	C4'-C3'-C2'	-5.45	97.15	102.60
33	L1	2706	A	O5'-C5'-C4'	5.45	122.05	111.70
34	L3	2	G	C5'-C4'-O4'	-5.45	102.56	109.10
41	LM	15	ARG	CD-NE-CZ	5.45	131.23	123.60
47	LU	131	GLN	CA-C-O	-5.45	108.66	120.10
4	SD	149	TYR	CA-CB-CG	5.45	123.75	113.40
32	S1	8	U	C1'-O4'-C4'	-5.45	105.54	109.90
32	S1	1794	C	P-O5'-C5'	-5.45	112.19	120.90
33	L1	973	U	P-O3'-C3'	-5.45	113.17	119.70
33	L1	1202	C	O4'-C1'-C2'	-5.45	100.36	105.80
33	L1	2234	G	C4'-C3'-C2'	-5.45	97.15	102.60
5	SE	78	VAL	CG1-CB-CG2	5.44	119.61	110.90
33	L1	727	G	O4'-C1'-N9	5.44	112.56	108.20
33	L1	2724	A	O4'-C1'-C2'	-5.44	100.36	105.80
42	LP	21	PHE	CA-CB-CG	5.44	126.97	113.90
81	LD	310	LEU	CB-CG-CD2	5.44	120.25	111.00
13	SQ	96	ILE	CA-CB-CG1	5.44	121.34	111.00
32	S1	199	G	OP1-P-OP2	-5.44	111.44	119.60
32	S1	1642	C	P-O3'-C3'	5.44	126.23	119.70
33	L1	599	C	N1-C1'-C2'	5.44	121.08	114.00
33	L1	1773	U	C3'-C2'-C1'	-5.44	97.15	101.50
33	L1	1775	C	C4'-C3'-C2'	-5.44	97.16	102.60
33	L1	2159	U	O4'-C1'-N1	5.44	112.55	108.20
35	L2	70	G	OP1-P-OP2	-5.44	111.44	119.60
32	S1	494	G	C4'-C3'-C2'	-5.44	97.16	102.60
33	L1	1141	U	C5'-C4'-C3'	5.44	124.70	116.00
33	L1	1282	A	C3'-C2'-C1'	5.44	105.85	101.50
33	L1	1517	C	O4'-C1'-C2'	-5.44	100.36	105.80
33	L1	1526	A	O4'-C1'-C2'	5.44	112.50	107.60
33	L1	2641	A	O5'-P-OP2	-5.44	100.80	105.70
64	LG	20	TYR	CE1-CZ-CE2	-5.44	111.10	119.80
67	LS	32	TRP	CE3-CZ3-CH2	-5.44	115.22	121.20
4	SD	65	LEU	N-CA-CB	-5.44	99.52	110.40
32	S1	1630	G	C5'-C4'-O4'	5.44	115.63	109.10
33	L1	251	G	O4'-C1'-C2'	5.44	112.50	107.60
33	L1	508	G	O4'-C4'-C3'	-5.44	98.56	104.00
33	L1	1264	A	P-O5'-C5'	-5.44	112.20	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	SH	89	TRP	CB-CG-CD1	5.44	134.07	127.00
32	S1	380	C	O3'-P-O5'	-5.44	93.67	104.00
33	L1	26	A	O5'-C5'-C4'	5.44	122.03	111.70
33	L1	1469	G	N9-C1'-C2'	5.44	121.07	114.00
33	L1	1527	A	P-O3'-C3'	5.44	126.22	119.70
33	L1	1682	C	C3'-C2'-C1'	5.44	105.85	101.50
33	L1	1932	A	O4'-C1'-C2'	5.44	112.49	107.60
33	L1	2113	A	C2'-C3'-O3'	5.44	122.40	113.70
33	L1	2139	A	OP1-P-O3'	5.44	117.16	105.20
35	L2	86	C	O4'-C1'-C2'	-5.44	100.36	105.80
8	SJ	127	ASP	N-CA-C	-5.44	96.32	111.00
32	S1	1110	C	C1'-O4'-C4'	5.44	114.25	109.90
32	S1	1591	A	C3'-C2'-C1'	5.44	105.85	101.50
33	L1	11	A	C1'-O4'-C4'	-5.44	105.55	109.90
33	L1	375	G	C1'-O4'-C4'	-5.44	105.55	109.90
33	L1	897	U	C2'-C3'-O3'	5.44	122.40	113.70
33	L1	1169	G	C5'-C4'-O4'	5.44	115.62	109.10
33	L1	1942	A	P-O3'-C3'	-5.44	113.18	119.70
35	L2	101	G	N9-C1'-C2'	5.44	121.07	114.00
36	LA	157	GLN	CB-CA-C	5.44	121.27	110.40
38	LE	22	ASN	N-CA-C	-5.44	96.32	111.00
1	Sa	26	ARG	NE-CZ-NH2	-5.43	117.58	120.30
32	S1	287	C	O4'-C1'-N1	5.43	112.55	108.20
32	S1	1508	C	O4'-C1'-C2'	-5.43	100.37	105.80
33	L1	593	G	C1'-O4'-C4'	-5.43	105.55	109.90
33	L1	856	G	O4'-C1'-C2'	5.43	112.49	107.60
33	L1	1101	A	C4'-C3'-O3'	5.43	123.87	113.00
33	L1	2593	A	P-O3'-C3'	-5.43	113.18	119.70
33	L1	2886	C	N1-C1'-C2'	5.43	121.06	114.00
52	Lb	86	LEU	CB-CG-CD2	5.43	120.24	111.00
64	LG	64	ARG	NE-CZ-NH1	5.43	123.02	120.30
80	LC	276	HIS	CA-CB-CG	5.43	122.84	113.60
83	Lm	27	LYS	CB-CA-C	-5.43	99.53	110.40
2	SA	94	PHE	CB-CA-C	-5.43	99.54	110.40
3	SB	90	LYS	C-N-CA	5.43	135.28	121.70
32	S1	308	U	O4'-C1'-N1	5.43	112.55	108.20
32	S1	406	C	O4'-C1'-C2'	-5.43	100.37	105.80
33	L1	1576	C	C2'-C3'-O3'	5.43	122.39	113.70
33	L1	1699	C	C4'-C3'-C2'	5.43	108.03	102.60
33	L1	2738	U	C3'-C2'-C1'	-5.43	97.15	101.50
33	L1	2779	G	C3'-C2'-C1'	-5.43	97.15	101.50
33	L1	2881	C	C4'-C3'-C2'	-5.43	97.17	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	30	C	C4'-C3'-C2'	-5.43	97.17	102.60
35	L2	100	A	O5'-C5'-C4'	5.43	122.02	111.70
42	LP	29	GLU	OE1-CD-OE2	-5.43	116.78	123.30
33	L1	296	C	N1-C1'-C2'	5.43	121.06	114.00
33	L1	650	A	O4'-C1'-N9	5.43	112.55	108.20
33	L1	2313	U	O5'-P-OP2	-5.43	100.81	105.70
33	L1	2823	C	C1'-O4'-C4'	5.43	114.25	109.90
45	LQ	207	TYR	CG-CD1-CE1	-5.43	116.95	121.30
73	Lp	14	ASN	C-N-CA	-5.43	108.12	121.70
8	SJ	64	ARG	CG-CD-NE	-5.43	100.40	111.80
32	S1	1625	U	O4'-C1'-N1	-5.43	103.86	108.20
33	L1	1725	G	C1'-O4'-C4'	-5.43	105.56	109.90
33	L1	2178	G	P-O3'-C3'	-5.43	113.19	119.70
33	L1	2905	A	P-O3'-C3'	-5.43	113.18	119.70
33	L1	33	A	OP1-P-OP2	-5.43	111.46	119.60
33	L1	861	A	C5'-C4'-C3'	-5.43	107.31	116.00
33	L1	870	G	N9-C1'-C2'	-5.43	106.03	112.00
33	L1	1123	A	C1'-O4'-C4'	-5.43	105.56	109.90
33	L1	1890	C	O4'-C1'-N1	5.43	112.54	108.20
46	LT	171	GLU	CB-CA-C	5.43	121.26	110.40
31	S2	39	G	O4'-C1'-N9	5.43	112.54	108.20
32	S1	947	G	C3'-C2'-C1'	-5.43	97.16	101.50
32	S1	1574	U	OP1-P-OP2	-5.43	111.46	119.60
33	L1	35	U	OP1-P-OP2	-5.43	111.46	119.60
33	L1	43	U	O4'-C1'-C2'	-5.43	100.37	105.80
33	L1	1533	U	C5'-C4'-C3'	-5.43	107.32	116.00
33	L1	3223	C	C5'-C4'-C3'	-5.43	107.32	116.00
35	L2	124	G	C3'-C2'-C1'	5.43	105.84	101.50
67	LS	48	ARG	NE-CZ-NH1	5.43	123.01	120.30
81	LD	166	GLU	CG-CD-OE2	-5.43	107.45	118.30
4	SD	184	THR	CA-C-N	5.42	127.05	116.20
32	S1	1406	U	C1'-O4'-C4'	-5.42	105.56	109.90
32	S1	1505	U	P-O3'-C3'	-5.42	113.19	119.70
32	S1	1713	C	P-O5'-C5'	-5.42	112.22	120.90
33	L1	185	A	O4'-C1'-C2'	5.42	112.48	107.60
33	L1	1695	C	C5'-C4'-O4'	-5.42	102.59	109.10
33	L1	1990	A	N9-C1'-C2'	5.42	121.05	114.00
33	L1	2464	G	C4'-C3'-C2'	-5.42	97.18	102.60
33	L1	2673	G	C5'-C4'-C3'	5.42	124.68	116.00
37	LB	189	TYR	CB-CG-CD1	-5.42	117.75	121.00
42	LP	41	ARG	NE-CZ-NH2	-5.42	117.59	120.30
45	LQ	14	HIS	N-CA-CB	5.42	120.36	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
80	LC	60	VAL	N-CA-C	5.42	125.64	111.00
32	S1	1200	A	C5'-C4'-O4'	5.42	115.61	109.10
32	S1	1675	G	C1'-O4'-C4'	5.42	114.24	109.90
33	L1	384	A	C1'-C2'-O2'	5.42	126.87	110.60
33	L1	2176	A	N9-C1'-C2'	-5.42	106.03	112.00
33	L1	2501	U	P-O5'-C5'	5.42	129.58	120.90
33	L1	3215	U	C5'-C4'-C3'	-5.42	107.32	116.00
34	L3	14	C	C2'-C3'-O3'	5.42	122.38	113.70
45	LQ	40	LEU	CB-CG-CD1	5.42	120.22	111.00
45	LQ	67	TYR	CB-CG-CD2	-5.42	117.75	121.00
32	S1	1212	A	C1'-O4'-C4'	-5.42	105.56	109.90
33	L1	601	G	C4'-C3'-C2'	-5.42	97.18	102.60
33	L1	999	U	C3'-C2'-C1'	5.42	105.84	101.50
33	L1	1126	U	C1'-O4'-C4'	5.42	114.24	109.90
33	L1	1663	G	C4'-C3'-C2'	-5.42	97.18	102.60
33	L1	2543	G	O4'-C1'-C2'	-5.42	100.38	105.80
33	L1	3163	G	N9-C1'-C2'	5.42	121.05	114.00
35	L2	129	C	C3'-C2'-C1'	5.42	105.84	101.50
36	LA	204	TYR	CA-CB-CG	5.42	123.70	113.40
40	LH	60	ARG	N-CA-CB	5.42	120.36	110.60
46	LT	157	ASP	CB-CG-OD2	-5.42	113.42	118.30
51	LY	45	ARG	NH1-CZ-NH2	-5.42	113.44	119.40
67	LS	72	THR	N-CA-CB	5.42	120.60	110.30
15	SS	92	PRO	CA-C-N	5.42	132.28	117.10
33	L1	388	G	O4'-C1'-N9	-5.42	103.86	108.20
33	L1	1017	G	C5'-C4'-C3'	5.42	124.67	116.00
33	L1	1625	G	OP2-P-O3'	5.42	117.12	105.20
33	L1	2984	A	O4'-C1'-C2'	5.42	112.48	107.60
56	Lh	24	ASP	O-C-N	-5.42	114.03	122.70
3	SB	123	LEU	C-N-CA	5.42	135.25	121.70
32	S1	919	G	O4'-C1'-N9	-5.42	103.86	108.20
33	L1	869	A	C5'-C4'-O4'	5.42	115.60	109.10
33	L1	976	A	O4'-C1'-N9	5.42	112.53	108.20
33	L1	1645	G	N9-C1'-C2'	-5.42	106.04	112.00
33	L1	1922	C	C1'-O4'-C4'	5.42	114.23	109.90
33	L1	3085	C	N1-C1'-C2'	-5.42	106.04	112.00
33	L1	3152	C	N1-C1'-C2'	-5.42	106.04	112.00
34	L3	25	G	P-O5'-C5'	5.42	129.57	120.90
35	L2	116	U	O4'-C1'-N1	5.42	112.53	108.20
37	LB	87	PHE	CD1-CE1-CZ	-5.42	113.60	120.10
59	Lo	4	HIS	CA-C-O	5.42	131.48	120.10
67	LS	162	THR	N-CA-C	5.42	125.63	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	Lm	41	PHE	CB-CG-CD2	-5.42	117.01	120.80
5	SE	106	ARG	NE-CZ-NH2	5.42	123.01	120.30
32	S1	1744	C	C3'-C2'-C1'	5.42	105.83	101.50
35	L2	58	A	C1'-O4'-C4'	5.42	114.23	109.90
1	Sa	31	THR	CA-C-O	-5.42	108.73	120.10
3	SB	82	ASN	CB-CG-ND2	-5.42	103.70	116.70
14	SP	104	ARG	NE-CZ-NH2	5.42	123.01	120.30
20	SZ	21	VAL	C-N-CA	5.42	135.24	121.70
32	S1	128	G	C3'-C2'-C1'	5.42	105.83	101.50
32	S1	502	G	C5'-C4'-C3'	5.42	124.66	116.00
32	S1	1782	C	P-O3'-C3'	-5.42	113.20	119.70
33	L1	1115	A	N9-C1'-C2'	-5.42	106.04	112.00
33	L1	2703	G	O3'-P-O5'	-5.42	93.71	104.00
4	SD	215	GLY	O-C-N	-5.41	114.04	122.70
13	SQ	95	GLU	C-N-CA	5.41	135.23	121.70
31	S2	52	G	O5'-C5'-C4'	5.41	121.99	111.70
32	S1	1514	G	C1'-O4'-C4'	-5.41	105.57	109.90
32	S1	1570	G	O4'-C1'-N9	5.41	112.53	108.20
33	L1	1086	U	C3'-C2'-C1'	5.41	105.83	101.50
33	L1	1372	U	N1-C1'-C2'	5.41	121.04	114.00
33	L1	2577	G	O4'-C1'-N9	5.41	112.53	108.20
69	La	28	VAL	CG1-CB-CG2	-5.41	102.24	110.90
33	L1	2690	G	OP1-P-OP2	-5.41	111.48	119.60
35	L2	22	U	N1-C1'-C2'	5.41	121.03	114.00
9	SK	77	SER	CA-C-O	5.41	131.46	120.10
25	SC	16	LYS	CA-C-N	5.41	132.25	117.10
32	S1	34	G	N9-C1'-C2'	-5.41	106.05	112.00
32	S1	53	G	C3'-C2'-C1'	5.41	105.83	101.50
32	S1	571	A	N9-C1'-C2'	-5.41	106.05	112.00
32	S1	1246	A	O3'-P-O5'	5.41	114.28	104.00
32	S1	1330	A	P-O3'-C3'	5.41	126.19	119.70
33	L1	113	A	C3'-C2'-C1'	5.41	105.83	101.50
33	L1	249	A	OP2-P-O3'	5.41	117.11	105.20
33	L1	295	U	C3'-C2'-C1'	-5.41	97.17	101.50
33	L1	2077	C	C1'-O4'-C4'	-5.41	105.57	109.90
33	L1	2406	C	P-O3'-C3'	-5.41	113.21	119.70
34	L3	78	C	C1'-O4'-C4'	5.41	114.23	109.90
34	L3	97	G	C1'-O4'-C4'	-5.41	105.57	109.90
38	LE	127	MET	N-CA-CB	-5.41	100.86	110.60
48	LV	90	ARG	NE-CZ-NH2	-5.41	117.59	120.30
49	LX	117	ALA	N-CA-CB	5.41	117.67	110.10
78	Le	200	ALA	CB-CA-C	-5.41	101.98	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	883	G	C4'-C3'-C2'	-5.41	97.19	102.60
32	S1	1219	C	C3'-C2'-C1'	5.41	105.83	101.50
32	S1	1654	C	C3'-C2'-C1'	5.41	105.83	101.50
33	L1	1810	G	C5'-C4'-O4'	5.41	115.59	109.10
33	L1	1934	U	C3'-C2'-C1'	5.41	105.83	101.50
33	L1	2740	C	C2'-C3'-O3'	5.41	122.35	113.70
35	L2	59	U	O4'-C1'-N1	5.41	112.53	108.20
54	Lf	89	TYR	O-C-N	-5.41	114.05	122.70
69	La	25	ILE	CB-CG1-CD1	5.41	129.04	113.90
79	Ls	96	GLY	CA-C-N	5.41	129.10	117.20
81	LD	363	ARG	NE-CZ-NH1	5.41	123.00	120.30
32	S1	539	A	OP1-P-OP2	-5.41	111.49	119.60
32	S1	931	A	C3'-C2'-C1'	-5.41	97.17	101.50
27	SH	119	LYS	CB-CA-C	5.41	121.21	110.40
32	S1	170	C	C3'-C2'-C1'	5.41	105.83	101.50
33	L1	626	G	O4'-C1'-N9	5.41	112.53	108.20
33	L1	720	G	C1'-O4'-C4'	5.41	114.22	109.90
33	L1	1113	C	C4'-C3'-C2'	-5.41	97.19	102.60
33	L1	2429	A	C1'-O4'-C4'	-5.41	105.58	109.90
33	L1	2460	A	C1'-C2'-O2'	5.41	126.82	110.60
33	L1	2651	G	C5'-C4'-C3'	5.41	124.65	116.00
33	L1	3233	C	O4'-C1'-N1	5.41	112.53	108.20
34	L3	2	G	O5'-C5'-C4'	-5.41	101.43	111.70
46	LT	85	ARG	CB-CA-C	-5.41	99.59	110.40
67	LS	23	HIS	CA-C-N	5.41	132.23	117.10
80	LC	122	TRP	CG-CD2-CE3	-5.41	129.03	133.90
32	S1	1130	A	O4'-C1'-C2'	-5.40	100.40	105.80
33	L1	1432	G	C3'-C2'-C1'	-5.40	97.18	101.50
33	L1	1797	U	C3'-C2'-C1'	-5.40	97.18	101.50
33	L1	2102	C	O4'-C1'-N1	5.40	112.52	108.20
33	L1	2339	U	C3'-C2'-C1'	-5.40	97.18	101.50
33	L1	2500	U	O4'-C1'-N1	5.40	112.52	108.20
4	SD	191	ARG	CD-NE-CZ	-5.40	116.04	123.60
33	L1	40	G	O4'-C1'-N9	5.40	112.52	108.20
33	L1	175	G	P-O3'-C3'	-5.40	113.22	119.70
33	L1	918	A	P-O5'-C5'	5.40	129.54	120.90
33	L1	1122	C	O5'-P-OP2	-5.40	100.84	105.70
35	L2	152	C	P-O5'-C5'	5.40	129.54	120.90
64	LG	189	ILE	N-CA-CB	5.40	123.23	110.80
70	Li	45	PRO	CA-N-CD	-5.40	103.94	111.50
80	LC	262	ARG	N-CA-CB	5.40	120.33	110.60
1	Sa	342	SER	N-CA-CB	5.40	118.60	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	SD	184	THR	O-C-N	-5.40	114.02	123.20
33	L1	461	A	O4'-C1'-N9	-5.40	103.88	108.20
33	L1	1090	C	O4'-C1'-N1	5.40	112.52	108.20
33	L1	1423	C	O4'-C1'-C2'	-5.40	100.40	105.80
33	L1	1486	G	C1'-O4'-C4'	5.40	114.22	109.90
33	L1	1740	U	OP1-P-O3'	5.40	117.08	105.20
33	L1	2776	U	O4'-C1'-N1	5.40	112.52	108.20
6	SF	163	LYS	N-CA-C	-5.40	96.42	111.00
33	L1	608	G	O4'-C1'-C2'	-5.40	100.40	105.80
33	L1	1634	G	C5'-C4'-O4'	5.40	115.58	109.10
64	LG	91	LYS	N-CA-CB	5.40	120.32	110.60
2	SA	91	VAL	CA-CB-CG1	5.40	119.00	110.90
32	S1	1213	C	C3'-C2'-C1'	5.40	105.82	101.50
32	S1	1432	C	P-O3'-C3'	5.40	126.18	119.70
32	S1	1593	U	O5'-P-OP2	-5.40	100.84	105.70
33	L1	993	A	O4'-C1'-C2'	-5.40	100.40	105.80
33	L1	1174	G	C4'-C3'-C2'	-5.40	97.20	102.60
33	L1	2331	A	O4'-C1'-C2'	-5.40	100.40	105.80
33	L1	3305	U	C1'-O4'-C4'	5.40	114.22	109.90
46	LT	170	ARG	NE-CZ-NH2	-5.40	117.60	120.30
13	SQ	27	ASP	N-CA-C	5.40	125.57	111.00
29	ST	30	ALA	N-CA-C	-5.40	96.43	111.00
32	S1	114	U	OP1-P-OP2	-5.40	111.51	119.60
40	LH	97	PRO	C-N-CA	-5.40	108.21	121.70
40	LH	181	ARG	NE-CZ-NH2	5.40	123.00	120.30
47	LU	138	GLY	C-N-CA	-5.40	108.21	121.70
80	LC	357	GLU	CB-CA-C	5.40	121.19	110.40
2	SA	153	ASP	CA-CB-CG	5.39	125.27	113.40
32	S1	909	G	N9-C1'-C2'	5.39	121.01	114.00
33	L1	30	C	O4'-C1'-C2'	-5.39	100.41	105.80
33	L1	666	U	N1-C1'-C2'	5.39	121.01	114.00
33	L1	676	G	O4'-C1'-N9	5.39	112.52	108.20
33	L1	843	C	P-O5'-C5'	-5.39	112.27	120.90
33	L1	887	A	C1'-O4'-C4'	5.39	114.22	109.90
33	L1	1592	U	O3'-P-O5'	-5.39	93.75	104.00
32	S1	1030	A	P-O3'-C3'	5.39	126.17	119.70
32	S1	1224	C	P-O3'-C3'	-5.39	113.23	119.70
32	S1	1358	G	O4'-C1'-N9	-5.39	103.89	108.20
33	L1	509	G	O4'-C4'-C3'	-5.39	98.61	104.00
33	L1	1035	C	O4'-C4'-C3'	-5.39	98.61	104.00
33	L1	1179	C	P-O3'-C3'	-5.39	113.23	119.70
33	L1	3019	C	O4'-C1'-C2'	-5.39	100.41	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	SN	12	LYS	C-N-CA	5.39	135.18	121.70
32	S1	82	G	O4'-C1'-N9	5.39	112.51	108.20
32	S1	916	U	P-O5'-C5'	5.39	129.53	120.90
32	S1	1623	C	O4'-C1'-C2'	-5.39	100.41	105.80
33	L1	133	G	N9-C1'-C2'	-5.39	106.07	112.00
33	L1	327	A	P-O5'-C5'	-5.39	112.27	120.90
33	L1	1963	G	O4'-C1'-N9	5.39	112.51	108.20
33	L1	2232	C	O4'-C1'-C2'	-5.39	100.41	105.80
32	S1	1073	C	P-O3'-C3'	-5.39	113.23	119.70
32	S1	1380	A	P-O5'-C5'	-5.39	112.28	120.90
33	L1	1642	G	P-O3'-C3'	5.39	126.17	119.70
33	L1	1897	A	OP2-P-O3'	5.39	117.06	105.20
33	L1	3093	C	O5'-C5'-C4'	5.39	121.94	111.70
33	L1	3176	C	O4'-C1'-C2'	-5.39	100.41	105.80
39	LF	95	TYR	N-CA-CB	5.39	120.30	110.60
47	LU	47	ALA	N-CA-CB	-5.39	102.56	110.10
70	Li	32	TYR	CB-CG-CD2	-5.39	117.77	121.00
1	Sa	134	ILE	C-N-CA	-5.39	108.23	121.70
2	SA	218	GLU	N-CA-CB	-5.39	100.90	110.60
15	SS	57	TYR	CB-CG-CD2	-5.39	117.77	121.00
31	S2	16	U	O4'-C1'-C2'	-5.39	100.41	105.80
32	S1	1465	C	P-O3'-C3'	5.39	126.17	119.70
32	S1	1747	A	C3'-C2'-C1'	5.39	105.81	101.50
33	L1	398	G	P-O3'-C3'	5.39	126.17	119.70
33	L1	631	C	O4'-C1'-C2'	-5.39	100.41	105.80
33	L1	1500	C	P-O3'-C3'	-5.39	113.23	119.70
33	L1	1668	U	P-O3'-C3'	-5.39	113.23	119.70
33	L1	2574	A	O3'-P-O5'	-5.39	93.76	104.00
33	L1	2685	C	OP1-P-OP2	-5.39	111.52	119.60
33	L1	2757	G	C2'-C3'-O3'	5.39	122.32	113.70
55	Lg	64	ASN	O-C-N	-5.39	114.08	122.70
1	Sa	106	LEU	N-CA-C	-5.39	96.46	111.00
32	S1	162	A	C1'-O4'-C4'	5.39	114.21	109.90
32	S1	551	U	N1-C1'-C2'	-5.39	106.08	112.00
32	S1	1148	A	C3'-C2'-C1'	5.39	105.81	101.50
32	S1	1437	C	O4'-C1'-C2'	-5.39	100.41	105.80
33	L1	58	G	C5'-C4'-C3'	5.39	124.62	116.00
33	L1	511	C	P-O5'-C5'	-5.39	112.28	120.90
33	L1	576	C	P-O5'-C5'	-5.39	112.28	120.90
33	L1	1085	G	O4'-C1'-C2'	5.39	112.45	107.60
33	L1	2159	U	C1'-O4'-C4'	5.39	114.21	109.90
33	L1	2634	U	O4'-C1'-N1	5.39	112.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2732	U	P-O5'-C5'	-5.39	112.28	120.90
34	L3	78	C	P-O3'-C3'	-5.39	113.24	119.70
70	Li	37	LYS	N-CA-CB	5.39	120.30	110.60
11	SM	36	VAL	CB-CA-C	5.38	121.63	111.40
15	SS	54	ASP	CB-CG-OD2	-5.38	113.45	118.30
25	SC	123	SER	CB-CA-C	-5.38	99.87	110.10
33	L1	231	C	P-O3'-C3'	5.38	126.16	119.70
33	L1	427	U	N1-C1'-C2'	5.38	121.00	114.00
33	L1	506	U	C2'-C3'-O3'	5.38	122.31	113.70
33	L1	1152	G	C3'-C2'-C1'	5.38	105.81	101.50
33	L1	1225	A	N9-C1'-C2'	5.38	121.00	114.00
33	L1	2632	U	O3'-P-O5'	-5.38	93.77	104.00
33	L1	2709	G	O4'-C1'-N9	5.38	112.51	108.20
33	L1	3246	U	C5'-C4'-O4'	5.38	115.56	109.10
46	LT	95	TRP	CE3-CZ3-CH2	-5.38	115.28	121.20
71	Lj	1	MET	CA-C-O	5.38	131.41	120.10
3	SB	141	LYS	N-CA-CB	5.38	120.29	110.60
32	S1	1407	A	O4'-C1'-N9	5.38	112.51	108.20
32	S1	1731	A	O3'-P-O5'	-5.38	93.77	104.00
33	L1	636	C	C3'-C2'-C1'	5.38	105.81	101.50
33	L1	861	A	O5'-P-OP1	-5.38	100.86	105.70
33	L1	985	C	O4'-C1'-C2'	-5.38	100.42	105.80
33	L1	1209	G	O4'-C1'-C2'	5.38	112.44	107.60
33	L1	1457	A	C1'-O4'-C4'	-5.38	105.59	109.90
33	L1	2723	G	N9-C1'-C2'	5.38	121.00	114.00
32	S1	182	C	O4'-C4'-C3'	-5.38	98.62	104.00
33	L1	1260	G	OP2-P-O3'	5.38	117.03	105.20
33	L1	2700	A	C1'-O4'-C4'	-5.38	105.60	109.90
57	Ll	73	ARG	NH1-CZ-NH2	-5.38	113.48	119.40
2	SA	54	ASN	CB-CG-OD1	5.38	132.36	121.60
2	SA	147	PRO	N-CA-CB	5.38	109.75	103.30
5	SE	82	VAL	CA-CB-CG1	-5.38	102.83	110.90
32	S1	251	U	OP1-P-OP2	-5.38	111.53	119.60
33	L1	522	C	C5'-C4'-C3'	-5.38	107.39	116.00
33	L1	1256	A	P-O3'-C3'	5.38	126.16	119.70
33	L1	1377	G	C1'-O4'-C4'	-5.38	105.60	109.90
33	L1	2797	U	C1'-O4'-C4'	-5.38	105.60	109.90
33	L1	3010	G	P-O3'-C3'	5.38	126.15	119.70
33	L1	3067	G	O4'-C1'-C2'	5.38	112.44	107.60
35	L2	39	C	P-O5'-C5'	5.38	129.51	120.90
45	LQ	207	TYR	CD1-CE1-CZ	5.38	124.64	119.80
64	LG	66	PRO	C-N-CA	5.38	135.15	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	LG	124	TYR	CG-CD2-CE2	5.38	125.60	121.30
64	LG	141	LYS	O-C-N	-5.38	114.09	122.70
69	La	32	GLY	C-N-CA	-5.38	108.25	121.70
80	LC	67	LEU	CB-CA-C	5.38	120.42	110.20
14	SP	92	LEU	CB-CG-CD1	-5.38	101.86	111.00
32	S1	879	C	O4'-C1'-N1	-5.38	103.90	108.20
33	L1	1457	A	O4'-C4'-C3'	5.38	110.40	106.10
33	L1	1544	G	P-O3'-C3'	5.38	126.15	119.70
33	L1	2462	G	C1'-O4'-C4'	5.38	114.20	109.90
33	L1	2677	A	C5'-C4'-O4'	5.38	115.55	109.10
33	L1	3306	A	P-O5'-C5'	-5.38	112.30	120.90
47	LU	155	ASP	O-C-N	-5.38	114.10	122.70
32	S1	19	A	P-O3'-C3'	-5.38	113.25	119.70
32	S1	451	U	O4'-C1'-N1	5.38	112.50	108.20
33	L1	1145	G	OP1-P-O3'	5.38	117.03	105.20
42	LP	11	TRP	CB-CG-CD2	-5.38	119.61	126.60
11	SM	10	GLN	O-C-N	-5.37	114.10	122.70
32	S1	1508	C	C5'-C4'-C3'	5.37	124.60	116.00
33	L1	295	U	OP1-P-OP2	-5.37	111.54	119.60
33	L1	1118	G	O4'-C1'-C2'	-5.37	100.43	105.80
33	L1	1388	C	C3'-C2'-C1'	5.37	105.80	101.50
33	L1	3055	U	C3'-C2'-C1'	5.37	105.80	101.50
33	L1	3237	G	C2'-C3'-O3'	5.37	122.30	113.70
33	L1	3356	C	C5'-C4'-O4'	5.37	115.55	109.10
55	Lg	59	ILE	O-C-N	-5.37	114.10	122.70
68	LW	33	ASP	CB-CG-OD2	-5.37	113.46	118.30
70	Li	10	ARG	CA-C-N	-5.37	105.38	117.20
80	LC	122	TRP	CD1-NE1-CE2	-5.37	104.16	109.00
80	LC	230	GLU	CB-CA-C	-5.37	99.65	110.40
32	S1	1036	U	OP1-P-OP2	-5.37	111.54	119.60
33	L1	547	C	C4'-C3'-C2'	-5.37	97.23	102.60
33	L1	628	C	O4'-C1'-C2'	-5.37	100.43	105.80
33	L1	1650	G	O4'-C4'-C3'	5.37	110.40	106.10
33	L1	1877	G	N9-C1'-C2'	-5.37	106.09	112.00
33	L1	1881	C	C5'-C4'-O4'	-5.37	102.66	109.10
33	L1	3344	U	C1'-O4'-C4'	-5.37	105.60	109.90
51	LY	77	TRP	CB-CG-CD2	-5.37	119.62	126.60
64	LG	12	LYS	CB-CA-C	-5.37	99.66	110.40
66	LN	23	ARG	CB-CA-C	-5.37	99.66	110.40
84	LI	7	ARG	CD-NE-CZ	-5.37	116.08	123.60
25	SC	15	LYS	C-N-CA	5.37	135.12	121.70
32	S1	915	C	OP2-P-O3'	5.37	117.01	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1575	U	N1-C1'-C2'	5.37	120.98	114.00
33	L1	1482	C	O4'-C1'-N1	5.37	112.50	108.20
49	LX	75	TYR	CG-CD2-CE2	-5.37	117.00	121.30
32	S1	52	U	O4'-C1'-N1	5.37	112.50	108.20
32	S1	1298	G	OP2-P-O3'	5.37	117.01	105.20
33	L1	561	G	C5'-C4'-O4'	5.37	115.54	109.10
33	L1	869	A	O4'-C1'-C2'	5.37	112.43	107.60
33	L1	906	U	C3'-C2'-C1'	-5.37	97.20	101.50
33	L1	1837	A	O4'-C1'-C2'	5.37	112.43	107.60
33	L1	2440	U	O4'-C1'-C2'	5.37	112.43	107.60
33	L1	3282	G	C5'-C4'-O4'	5.37	115.54	109.10
50	LZ	3	LEU	CA-C-N	5.37	129.01	117.20
55	Lg	80	ARG	NE-CZ-NH1	5.37	122.98	120.30
32	S1	856	G	O4'-C1'-C2'	5.37	112.43	107.60
33	L1	1262	U	C4'-C3'-C2'	-5.37	97.23	102.60
33	L1	1696	G	C5'-C4'-C3'	5.37	124.59	116.00
46	LT	121	HIS	CB-CA-C	-5.37	99.67	110.40
84	LI	101	LYS	CB-CA-C	-5.37	99.67	110.40
25	SC	141	GLN	C-N-CA	5.37	135.11	121.70
27	SH	3	ARG	C-N-CA	5.37	135.11	121.70
28	SN	54	LYS	N-CA-C	-5.37	96.51	111.00
33	L1	92	C	O4'-C1'-N1	5.37	112.49	108.20
33	L1	2455	A	P-O3'-C3'	5.37	126.14	119.70
33	L1	2945	G	N9-C1'-C2'	5.37	120.98	114.00
33	L1	3086	G	C1'-O4'-C4'	-5.37	105.61	109.90
57	Ll	7	SER	C-N-CA	5.37	135.11	121.70
67	LS	32	TRP	CA-CB-CG	5.37	123.89	113.70
32	S1	1632	C	C1'-O4'-C4'	-5.36	105.61	109.90
32	S1	1632	C	C3'-C2'-C1'	5.36	105.79	101.50
33	L1	504	U	C1'-O4'-C4'	5.36	114.19	109.90
33	L1	3233	C	C2'-C3'-O3'	5.36	122.28	113.70
33	L1	3322	A	O4'-C1'-C2'	5.36	112.43	107.60
35	L2	82	G	OP1-P-O3'	5.36	117.00	105.20
35	L2	126	G	O4'-C1'-N9	5.36	112.49	108.20
4	SD	216	HIS	O-C-N	5.36	131.28	122.70
25	SC	12	TYR	CB-CG-CD2	5.36	124.22	121.00
32	S1	271	C	C3'-C2'-C1'	5.36	105.79	101.50
24	SX	75	LEU	CB-CG-CD2	5.36	120.11	111.00
25	SC	69	PRO	CA-C-N	-5.36	105.41	117.20
32	S1	593	C	C5'-C4'-O4'	5.36	115.53	109.10
32	S1	1218	U	C4'-C3'-C2'	-5.36	97.24	102.60
33	L1	56	A	O4'-C1'-C2'	-5.36	100.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	912	G	C5'-C4'-C3'	-5.36	107.42	116.00
33	L1	1700	U	C1'-O4'-C4'	5.36	114.19	109.90
33	L1	2584	U	O4'-C1'-C2'	5.36	112.42	107.60
33	L1	3326	U	C3'-C2'-C1'	-5.36	97.21	101.50
34	L3	1	G	C4'-C3'-O3'	5.36	123.72	113.00
34	L3	39	C	O5'-C5'-C4'	-5.36	101.52	111.70
35	L2	130	A	C1'-O4'-C4'	5.36	114.19	109.90
45	LQ	257	THR	C-N-CA	5.36	135.10	121.70
71	Lj	40	ASN	C-N-CA	5.36	135.10	121.70
33	L1	2140	C	OP1-P-OP2	-5.36	111.56	119.60
33	L1	3308	A	N9-C1'-C2'	5.36	120.97	114.00
48	LV	3	LYS	C-N-CA	5.36	135.10	121.70
5	SE	106	ARG	N-CA-CB	5.36	120.25	110.60
31	S2	52	G	C3'-C2'-C1'	-5.36	97.21	101.50
32	S1	405	A	P-O5'-C5'	-5.36	112.33	120.90
32	S1	1568	U	N1-C1'-C2'	-5.36	106.11	112.00
32	S1	1703	G	P-O3'-C3'	5.36	126.13	119.70
33	L1	1229	A	O4'-C1'-N9	5.36	112.48	108.20
33	L1	1810	G	P-O3'-C3'	5.36	126.13	119.70
33	L1	1903	C	C5'-C4'-O4'	5.36	115.53	109.10
33	L1	2491	A	C5'-C4'-C3'	5.36	124.57	116.00
58	Ln	48	PHE	N-CA-CB	5.36	120.24	110.60
60	Lr	11	TYR	CB-CG-CD2	-5.36	117.79	121.00
64	LG	116	PRO	N-CA-CB	5.36	109.73	103.30
72	Lk	93	MET	C-N-CA	5.36	135.10	121.70
77	Lc	38	VAL	CA-CB-CG2	5.36	118.94	110.90
1	Sa	27	GLN	CB-CA-C	5.36	121.11	110.40
7	SI	124	VAL	CA-CB-CG1	-5.36	102.87	110.90
8	SJ	78	PRO	N-CA-CB	5.36	109.73	103.30
11	SM	117	ILE	CG1-CB-CG2	5.36	123.18	111.40
32	S1	676	G	O4'-C1'-N9	5.36	112.48	108.20
33	L1	712	A	P-O5'-C5'	5.36	129.47	120.90
33	L1	1019	A	C4'-C3'-C2'	-5.36	97.24	102.60
33	L1	2995	G	N9-C1'-C2'	-5.36	106.11	112.00
43	LO	2	THR	C-N-CA	5.36	135.09	121.70
17	SV	68	GLU	CB-CG-CD	5.35	128.66	114.20
32	S1	653	U	N1-C1'-C2'	-5.35	106.11	112.00
33	L1	2206	U	C4'-C3'-C2'	5.35	107.95	102.60
33	L1	2933	C	C1'-O4'-C4'	5.35	114.18	109.90
49	LX	139	ASP	CB-CG-OD2	5.35	123.12	118.30
4	SD	240	LYS	N-CA-C	5.35	125.45	111.00
32	S1	253	C	OP1-P-OP2	-5.35	111.57	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1670	G	C1'-O4'-C4'	5.35	114.18	109.90
32	S1	1750	A	O4'-C1'-N9	5.35	112.48	108.20
33	L1	1400	C	C4'-C3'-C2'	-5.35	97.25	102.60
33	L1	2175	A	C5'-C4'-C3'	5.35	124.56	116.00
33	L1	2501	U	OP1-P-O3'	5.35	116.97	105.20
34	L3	39	C	O4'-C1'-N1	5.35	112.48	108.20
34	L3	110	G	P-O3'-C3'	-5.35	113.28	119.70
34	L3	118	C	O4'-C1'-N1	5.35	112.48	108.20
47	LU	10	ARG	O-C-N	-5.35	114.14	122.70
54	Lf	22	MET	CG-SD-CE	-5.35	91.64	100.20
82	LK	176	ARG	NE-CZ-NH1	5.35	122.98	120.30
25	SC	16	LYS	CA-C-O	-5.35	108.86	120.10
31	S2	47	U	C1'-O4'-C4'	5.35	114.18	109.90
32	S1	94	A	C3'-C2'-C1'	5.35	105.78	101.50
32	S1	1743	C	C5'-C4'-C3'	5.35	124.56	116.00
33	L1	2536	G	O4'-C1'-N9	5.35	112.48	108.20
69	La	77	PHE	CB-CA-C	5.35	121.10	110.40
70	Li	49	LYS	N-CA-CB	5.35	120.23	110.60
8	SJ	91	MET	N-CA-CB	5.35	120.23	110.60
19	SY	9	VAL	CA-CB-CG1	5.35	118.92	110.90
19	SY	47	ARG	N-CA-C	-5.35	96.56	111.00
32	S1	248	U	OP1-P-OP2	-5.35	111.58	119.60
32	S1	282	C	P-O3'-C3'	5.35	126.12	119.70
32	S1	913	U	C4'-C3'-C2'	5.35	107.95	102.60
32	S1	947	G	C1'-O4'-C4'	-5.35	105.62	109.90
32	S1	1096	A	C1'-O4'-C4'	5.35	114.18	109.90
33	L1	356	G	OP2-P-O3'	5.35	116.97	105.20
33	L1	1448	U	O4'-C1'-N1	5.35	112.48	108.20
33	L1	1989	G	C3'-C2'-C1'	-5.35	97.22	101.50
13	SQ	92	GLU	O-C-N	5.35	131.26	122.70
32	S1	293	C	O4'-C1'-N1	5.35	112.48	108.20
32	S1	599	G	O5'-C5'-C4'	5.35	121.86	111.70
32	S1	1433	A	OP1-P-OP2	-5.35	111.58	119.60
33	L1	1058	A	O4'-C4'-C3'	-5.35	98.65	104.00
33	L1	1602	A	OP2-P-O3'	5.35	116.96	105.20
33	L1	1736	C	C4'-C3'-C2'	-5.35	97.25	102.60
35	L2	55	G	C3'-C2'-C1'	5.35	105.78	101.50
68	LW	121	ILE	N-CA-C	-5.35	96.56	111.00
15	SS	11	ASP	CA-C-N	5.35	128.96	117.20
33	L1	291	C	N1-C1'-C2'	5.35	120.95	114.00
35	L2	130	A	O4'-C1'-C2'	-5.35	100.45	105.80
41	LM	18	LEU	O-C-N	-5.35	114.11	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	Le	78	TYR	CB-CG-CD1	5.35	124.21	121.00
25	SC	36	TYR	N-CA-CB	5.34	120.22	110.60
32	S1	1220	C	C5'-C4'-C3'	-5.34	107.45	116.00
33	L1	1305	A	N9-C1'-C2'	5.34	120.95	114.00
33	L1	2320	A	O4'-C1'-N9	5.34	112.47	108.20
35	L2	25	C	O4'-C1'-N1	-5.34	103.92	108.20
42	LP	4	TYR	CB-CG-CD2	5.34	124.21	121.00
57	Ll	80	GLU	OE1-CD-OE2	5.34	129.71	123.30
70	Li	19	GLN	CA-C-N	-5.34	105.44	117.20
81	LD	43	PHE	CG-CD2-CE2	-5.34	114.92	120.80
31	S2	7	A	C3'-C2'-C1'	-5.34	97.23	101.50
32	S1	1307	U	C1'-O4'-C4'	-5.34	105.62	109.90
33	L1	1734	G	C5'-C4'-O4'	5.34	115.51	109.10
33	L1	3161	C	O4'-C1'-C2'	-5.34	100.46	105.80
33	L1	3336	A	OP2-P-O3'	5.34	116.95	105.20
40	LH	102	ALA	N-CA-CB	-5.34	102.62	110.10
23	SU	78	PHE	O-C-N	-5.34	114.12	123.20
32	S1	63	G	N9-C1'-C2'	-5.34	106.12	112.00
33	L1	67	C	C3'-C2'-C1'	5.34	105.77	101.50
33	L1	675	C	O4'-C1'-N1	5.34	112.47	108.20
33	L1	1059	A	O4'-C1'-N9	5.34	112.47	108.20
33	L1	1060	U	C2'-C3'-O3'	5.34	122.25	113.70
33	L1	1146	A	P-O5'-C5'	-5.34	112.35	120.90
70	Li	64	ARG	N-CA-CB	-5.34	100.98	110.60
78	Le	140	TYR	CD1-CE1-CZ	5.34	124.61	119.80
32	S1	301	U	P-O5'-C5'	5.34	129.44	120.90
32	S1	366	G	C4'-C3'-C2'	-5.34	97.26	102.60
32	S1	1358	G	C1'-O4'-C4'	-5.34	105.63	109.90
32	S1	1557	C	P-O3'-C3'	5.34	126.11	119.70
32	S1	1689	A	C5'-C4'-C3'	5.34	124.54	116.00
32	S1	1695	G	C1'-O4'-C4'	-5.34	105.63	109.90
33	L1	1890	C	O5'-P-OP1	5.34	117.11	110.70
33	L1	1898	G	O5'-P-OP2	-5.34	100.89	105.70
33	L1	2203	A	C2'-C3'-O3'	5.34	122.24	113.70
33	L1	3088	A	C5'-C4'-C3'	5.34	124.54	116.00
40	LH	181	ARG	NH1-CZ-NH2	-5.34	113.53	119.40
51	LY	39	ARG	CA-CB-CG	5.34	125.15	113.40
16	SR	65	LEU	CB-CG-CD2	-5.34	101.93	111.00
33	L1	149	A	OP1-P-OP2	-5.34	111.59	119.60
33	L1	715	A	C3'-C2'-C1'	5.34	105.77	101.50
33	L1	907	A	OP2-P-O3'	5.34	116.94	105.20
2	SA	1	MET	N-CA-CB	-5.34	100.99	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	SB	65	ARG	NE-CZ-NH2	-5.34	117.63	120.30
4	SD	137	PRO	N-CD-CG	-5.34	95.20	103.20
32	S1	965	U	O5'-C5'-C4'	5.34	121.84	111.70
32	S1	980	C	O4'-C1'-N1	5.34	112.47	108.20
32	S1	1058	G	O3'-P-O5'	5.34	114.14	104.00
32	S1	1654	C	O4'-C1'-N1	5.34	112.47	108.20
33	L1	267	G	O5'-P-OP2	-5.34	100.90	105.70
33	L1	2349	C	O4'-C1'-N1	5.34	112.47	108.20
33	L1	2495	C	O4'-C1'-C2'	5.34	112.40	107.60
33	L1	2673	G	C4'-C3'-C2'	-5.34	97.26	102.60
33	L1	2738	U	OP2-P-O3'	5.34	116.94	105.20
32	S1	604	U	C3'-C2'-C1'	5.33	105.77	101.50
32	S1	622	U	P-O3'-C3'	-5.33	113.30	119.70
33	L1	1311	G	C5'-C4'-O4'	5.33	115.50	109.10
33	L1	1957	G	C5'-C4'-C3'	5.33	124.53	116.00
33	L1	2785	U	C4'-C3'-C2'	-5.33	97.27	102.60
38	LE	100	ASP	CB-CA-C	5.33	121.07	110.40
1	Sa	4	VAL	CA-CB-CG2	-5.33	102.90	110.90
4	SD	94	LYS	CA-C-N	5.33	128.93	117.20
11	SM	82	TRP	CB-CG-CD1	5.33	133.93	127.00
31	S2	60	C	OP2-P-O3'	5.33	116.94	105.20
32	S1	10	G	N9-C1'-C2'	5.33	120.93	114.00
32	S1	138	C	O5'-C5'-C4'	5.33	121.83	111.70
32	S1	1382	C	N1-C1'-C2'	5.33	120.93	114.00
32	S1	1617	U	O5'-C5'-C4'	-5.33	101.57	111.70
32	S1	1729	A	O3'-P-O5'	-5.33	93.87	104.00
33	L1	20	G	O3'-P-O5'	5.33	114.14	104.00
33	L1	162	G	N9-C1'-C2'	-5.33	106.13	112.00
33	L1	470	G	OP1-P-OP2	-5.33	111.60	119.60
33	L1	1425	G	O5'-C5'-C4'	-5.33	101.57	111.70
33	L1	2641	A	O5'-P-OP1	-5.33	100.90	105.70
46	LT	81	ARG	N-CA-CB	-5.33	101.00	110.60
55	Lg	33	PHE	CB-CG-CD1	5.33	124.53	120.80
70	Li	30	LEU	O-C-N	-5.33	114.17	122.70
11	SM	38	ARG	NE-CZ-NH1	5.33	122.97	120.30
11	SM	92	ASP	CB-CG-OD2	5.33	123.10	118.30
31	S2	31	C	C3'-C2'-C1'	5.33	105.77	101.50
32	S1	205	U	P-O5'-C5'	5.33	129.43	120.90
32	S1	502	G	C1'-O4'-C4'	5.33	114.17	109.90
32	S1	1253	U	P-O3'-C3'	5.33	126.10	119.70
33	L1	1319	U	N1-C1'-C2'	-5.33	106.14	112.00
33	L1	1755	A	OP1-P-OP2	-5.33	111.60	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1856	G	C1'-O4'-C4'	5.33	114.17	109.90
33	L1	1960	C	O4'-C1'-C2'	-5.33	100.47	105.80
33	L1	2204	U	C1'-O4'-C4'	-5.33	105.64	109.90
33	L1	3038	U	O4'-C1'-C2'	5.33	112.40	107.60
33	L1	3046	C	P-O3'-C3'	-5.33	113.30	119.70
46	LT	122	ASP	CB-CG-OD2	-5.33	113.50	118.30
5	SE	94	PRO	N-CD-CG	5.33	111.19	103.20
33	L1	770	U	C1'-O4'-C4'	5.33	114.16	109.90
33	L1	2623	G	N9-C1'-C2'	-5.33	106.14	112.00
46	LT	2	VAL	N-CA-C	-5.33	96.61	111.00
28	SN	15	GLY	N-CA-C	-5.33	99.78	113.10
32	S1	166	A	O4'-C1'-N9	5.33	112.46	108.20
32	S1	1356	A	O4'-C1'-C2'	-5.33	100.47	105.80
32	S1	1744	C	N1-C1'-C2'	5.33	120.93	114.00
33	L1	330	C	C3'-C2'-C1'	5.33	105.76	101.50
33	L1	1191	U	P-O3'-C3'	-5.33	113.31	119.70
33	L1	1953	C	O5'-P-OP2	-5.33	100.91	105.70
33	L1	2479	C	P-O3'-C3'	5.33	126.09	119.70
33	L1	2539	G	N9-C1'-C2'	5.33	120.93	114.00
45	LQ	34	TYR	CB-CG-CD1	5.33	124.20	121.00
78	Le	8	VAL	CB-CA-C	5.33	121.53	111.40
32	S1	1658	U	O4'-C1'-C2'	-5.33	100.47	105.80
33	L1	1225	A	C1'-O4'-C4'	-5.33	105.64	109.90
33	L1	1819	A	OP2-P-O3'	5.33	116.92	105.20
33	L1	2081	C	OP1-P-OP2	-5.33	111.61	119.60
17	SV	73	ASN	CB-CA-C	5.33	121.05	110.40
32	S1	579	C	C5'-C4'-O4'	5.33	115.49	109.10
32	S1	680	C	N1-C1'-C2'	5.33	120.92	114.00
32	S1	968	A	N9-C1'-C2'	-5.33	106.14	112.00
32	S1	1069	G	O5'-P-OP1	5.33	117.09	110.70
32	S1	1702	G	O4'-C1'-N9	5.33	112.46	108.20
33	L1	604	C	C5'-C4'-O4'	5.33	115.49	109.10
33	L1	1080	C	O4'-C1'-C2'	-5.33	100.47	105.80
33	L1	2680	G	O4'-C4'-C3'	5.33	110.36	106.10
33	L1	2737	A	P-O3'-C3'	-5.33	113.31	119.70
33	L1	2793	G	OP2-P-O3'	5.33	116.92	105.20
38	LE	77	LYS	O-C-N	-5.33	114.18	122.70
47	LU	56	PHE	CA-CB-CG	5.33	126.68	113.90
78	Le	135	TYR	N-CA-CB	5.33	120.19	110.60
4	SD	184	THR	C-N-CA	-5.32	111.12	122.30
24	SX	70	GLY	CA-C-N	-5.32	105.55	116.20
31	S2	50	G	C3'-C2'-C1'	-5.32	97.24	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1510	G	C5'-C4'-O4'	5.32	115.49	109.10
33	L1	1079	G	O4'-C1'-N9	5.32	112.46	108.20
33	L1	1596	G	OP1-P-OP2	-5.32	111.61	119.60
33	L1	1668	U	C4'-C3'-C2'	-5.32	97.28	102.60
35	L2	58	A	N9-C1'-C2'	5.32	120.92	114.00
48	LV	5	SER	CB-CA-C	5.32	120.22	110.10
50	LZ	14	LYS	N-CA-CB	-5.32	101.02	110.60
74	LJ	123	ALA	O-C-N	-5.32	114.18	122.70
33	L1	1528	G	OP1-P-OP2	-5.32	111.62	119.60
33	L1	2569	G	C1'-O4'-C4'	-5.32	105.64	109.90
33	L1	3090	C	C3'-C2'-C1'	5.32	105.76	101.50
41	LM	69	LYS	N-CA-C	5.32	125.37	111.00
1	Sa	301	VAL	CA-CB-CG2	5.32	118.88	110.90
9	SK	54	ARG	N-CA-CB	5.32	120.18	110.60
32	S1	32	U	C4'-C3'-C2'	-5.32	97.28	102.60
32	S1	137	A	C3'-C2'-C1'	5.32	105.76	101.50
32	S1	927	A	O4'-C1'-N9	5.32	112.46	108.20
32	S1	1508	C	C3'-C2'-C1'	5.32	105.76	101.50
33	L1	366	G	C3'-C2'-C1'	5.32	105.76	101.50
33	L1	835	G	C3'-C2'-C1'	-5.32	97.24	101.50
33	L1	1457	A	C3'-C2'-C1'	5.32	105.76	101.50
33	L1	2434	G	C4'-C3'-C2'	-5.32	97.28	102.60
57	Ll	10	LYS	N-CA-CB	5.32	120.17	110.60
32	S1	552	G	P-O5'-C5'	5.32	129.41	120.90
32	S1	842	G	C5'-C4'-O4'	5.32	115.48	109.10
32	S1	1791	A	C4'-C3'-C2'	-5.32	97.28	102.60
33	L1	3058	U	OP1-P-OP2	-5.32	111.62	119.60
79	Ls	188	TYR	CB-CG-CD2	5.32	124.19	121.00
3	SB	158	ILE	O-C-N	-5.32	114.19	122.70
13	SQ	117	VAL	N-CA-C	-5.32	96.64	111.00
23	SU	81	ILE	CA-C-O	-5.32	108.93	120.10
31	S2	11	U	O4'-C1'-C2'	-5.32	100.48	105.80
32	S1	170	C	O3'-P-O5'	5.32	114.10	104.00
32	S1	1589	C	C3'-C2'-C1'	5.32	105.75	101.50
33	L1	369	G	N9-C1'-C2'	-5.32	106.15	112.00
33	L1	425	G	O4'-C1'-N9	-5.32	103.95	108.20
46	LT	49	PHE	CB-CG-CD1	-5.32	117.08	120.80
48	LV	109	ASP	CA-CB-CG	-5.32	101.70	113.40
49	LX	69	GLN	N-CA-CB	5.32	120.17	110.60
72	Lk	62	GLU	OE1-CD-OE2	-5.32	116.92	123.30
3	SB	215	GLU	N-CA-C	-5.32	96.65	111.00
4	SD	81	THR	N-CA-CB	5.32	120.40	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	108	C	C4'-C3'-C2'	-5.32	97.28	102.60
32	S1	1648	C	C1'-O4'-C4'	-5.32	105.65	109.90
33	L1	969	U	O4'-C1'-C2'	-5.32	100.48	105.80
33	L1	1339	C	P-O3'-C3'	-5.32	113.32	119.70
67	LS	96	TYR	CB-CG-CD1	5.32	124.19	121.00
77	Lc	67	ARG	NE-CZ-NH1	-5.32	117.64	120.30
79	Ls	249	LYS	CA-CB-CG	5.32	125.09	113.40
9	SK	131	VAL	O-C-N	-5.31	114.20	122.70
32	S1	376	G	O4'-C4'-C3'	-5.31	98.69	104.00
32	S1	1367	U	P-O3'-C3'	5.31	126.08	119.70
33	L1	2993	A	O4'-C1'-C2'	5.31	112.38	107.60
34	L3	2	G	OP1-P-O3'	-5.31	93.51	105.20
34	L3	49	A	C1'-O4'-C4'	-5.31	105.65	109.90
32	S1	1014	U	OP2-P-O3'	-5.31	93.51	105.20
33	L1	581	G	C5'-C4'-C3'	5.31	124.50	116.00
33	L1	603	G	O4'-C1'-C2'	5.31	112.38	107.60
33	L1	1211	G	P-O3'-C3'	5.31	126.08	119.70
33	L1	1784	C	O4'-C1'-C2'	-5.31	100.49	105.80
33	L1	2763	C	C4'-C3'-C2'	5.31	107.91	102.60
33	L1	3137	G	C5'-C4'-O4'	-5.31	102.72	109.10
50	LZ	73	ARG	NE-CZ-NH1	5.31	122.96	120.30
70	Li	21	ARG	C-N-CA	5.31	134.98	121.70
80	LC	74	GLU	N-CA-C	-5.31	96.66	111.00
81	LD	405	GLN	CA-C-O	-5.31	108.94	120.10
3	SB	194	PRO	O-C-N	-5.31	114.20	122.70
7	SI	66	PHE	N-CA-CB	5.31	120.16	110.60
32	S1	573	C	P-O5'-C5'	5.31	129.40	120.90
33	L1	903	G	C1'-O4'-C4'	5.31	114.15	109.90
33	L1	2434	G	O4'-C4'-C3'	-5.31	98.69	104.00
33	L1	2770	U	OP1-P-OP2	-5.31	111.63	119.60
32	S1	6	G	C5'-C4'-O4'	5.31	115.47	109.10
32	S1	228	G	C1'-O4'-C4'	-5.31	105.65	109.90
32	S1	1247	G	O4'-C1'-C2'	5.31	112.38	107.60
33	L1	2023	C	O4'-C1'-N1	5.31	112.45	108.20
33	L1	2162	C	C5'-C4'-C3'	5.31	124.49	116.00
49	LX	50	LYS	N-CA-C	5.31	125.34	111.00
64	LG	188	LEU	CB-CA-C	-5.31	100.11	110.20
66	LN	3	PHE	N-CA-C	5.31	125.34	111.00
32	S1	192	G	O4'-C4'-C3'	-5.31	98.69	104.00
32	S1	321	C	O4'-C1'-N1	5.31	112.45	108.20
32	S1	1061	G	C5'-C4'-C3'	5.31	124.49	116.00
32	S1	1269	G	N9-C1'-C2'	-5.31	106.16	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1756	A	OP2-P-O3'	5.31	116.88	105.20
33	L1	215	U	N1-C1'-C2'	5.31	120.90	114.00
33	L1	2625	C	C5'-C4'-C3'	-5.31	107.51	116.00
75	Lu	61	SER	CB-CA-C	5.31	120.19	110.10
79	Ls	224	MET	CA-CB-CG	5.31	122.32	113.30
13	SQ	69	ILE	C-N-CA	5.31	134.97	121.70
32	S1	311	G	C1'-O4'-C4'	-5.31	105.66	109.90
32	S1	580	G	O5'-P-OP2	-5.31	100.92	105.70
32	S1	653	U	C1'-O4'-C4'	5.31	114.14	109.90
33	L1	737	C	C3'-C2'-C1'	5.31	105.75	101.50
33	L1	2091	U	O3'-P-O5'	-5.31	93.92	104.00
33	L1	2755	U	C1'-O4'-C4'	-5.31	105.66	109.90
5	SE	108	LYS	CA-CB-CG	5.30	125.07	113.40
28	SN	38	CYS	CA-CB-SG	5.30	123.55	114.00
32	S1	1621	U	C1'-O4'-C4'	5.30	114.14	109.90
33	L1	1975	G	C1'-O4'-C4'	5.30	114.14	109.90
33	L1	2453	G	P-O5'-C5'	-5.30	112.41	120.90
33	L1	2473	C	O4'-C1'-C2'	-5.30	100.50	105.80
33	L1	2677	A	O4'-C1'-N9	5.30	112.44	108.20
33	L1	2862	U	O4'-C1'-N1	5.30	112.44	108.20
71	Lj	38	GLY	N-CA-C	5.30	126.36	113.10
84	LI	128	ARG	NE-CZ-NH1	5.30	122.95	120.30
9	SK	106	THR	CB-CA-C	5.30	125.92	111.60
32	S1	164	C	C1'-O4'-C4'	-5.30	105.66	109.90
32	S1	464	A	O4'-C1'-N9	5.30	112.44	108.20
32	S1	1312	G	N9-C1'-C2'	-5.30	106.17	112.00
33	L1	1261	C	P-O3'-C3'	-5.30	113.34	119.70
33	L1	2097	C	P-O3'-C3'	-5.30	113.34	119.70
13	SQ	137	ARG	CD-NE-CZ	5.30	131.02	123.60
32	S1	1101	C	P-O3'-C3'	5.30	126.06	119.70
32	S1	1372	C	P-O5'-C5'	5.30	129.38	120.90
33	L1	717	G	C5'-C4'-C3'	-5.30	107.52	116.00
33	L1	930	C	N1-C1'-C2'	5.30	120.89	114.00
33	L1	968	A	C4'-C3'-C2'	5.30	107.90	102.60
33	L1	1393	G	O4'-C1'-C2'	5.30	112.37	107.60
33	L1	1801	G	OP1-P-O3'	5.30	116.86	105.20
33	L1	1870	G	O4'-C1'-N9	5.30	112.44	108.20
42	LP	96	ARG	NE-CZ-NH2	-5.30	117.65	120.30
83	Lm	35	SER	N-CA-CB	5.30	118.45	110.50
3	SB	75	LYS	CG-CD-CE	5.30	127.80	111.90
9	SK	86	GLU	OE1-CD-OE2	5.30	129.66	123.30
33	L1	815	G	C5'-C4'-C3'	5.30	124.48	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1912	U	O4'-C1'-N1	-5.30	103.96	108.20
33	L1	2001	U	P-O3'-C3'	5.30	126.06	119.70
44	LR	147	GLU	C-N-CA	5.30	134.95	121.70
71	Lj	14	ARG	NH1-CZ-NH2	-5.30	113.57	119.40
76	Lv	58	GLY	N-CA-C	-5.30	99.85	113.10
76	Lw	58	GLY	N-CA-C	-5.30	99.85	113.10
8	SJ	86	TRP	CA-CB-CG	5.30	123.77	113.70
17	SV	21	GLY	CA-C-N	-5.30	105.54	117.20
32	S1	518	G	C5'-C4'-C3'	-5.30	107.52	116.00
32	S1	1082	C	O4'-C1'-N1	5.30	112.44	108.20
33	L1	348	C	C5'-C4'-C3'	-5.30	107.52	116.00
33	L1	1254	A	C4'-C3'-O3'	5.30	123.60	113.00
35	L2	21	A	O4'-C1'-N9	5.30	112.44	108.20
38	LE	8	LEU	C-N-CA	5.30	134.94	121.70
32	S1	1474	U	C1'-O4'-C4'	5.30	114.14	109.90
33	L1	152	C	C5'-C4'-C3'	5.30	124.47	116.00
37	LB	246	LEU	CB-CG-CD1	5.30	120.00	111.00
61	Lq	18	ARG	NE-CZ-NH2	5.30	122.95	120.30
80	LC	243	ARG	N-CA-C	-5.30	96.70	111.00
5	SE	263	LEU	CA-C-O	-5.29	108.98	120.10
33	L1	2156	U	P-O5'-C5'	5.29	129.37	120.90
33	L1	2877	U	C1'-O4'-C4'	-5.29	105.66	109.90
35	L2	54	C	C1'-O4'-C4'	5.29	114.14	109.90
38	LE	69	CYS	N-CA-CB	5.29	120.13	110.60
2	SA	229	TYR	C-N-CA	5.29	133.42	122.30
13	SQ	118	GLU	CB-CA-C	-5.29	99.81	110.40
32	S1	1203	G	C1'-O4'-C4'	5.29	114.13	109.90
32	S1	1574	U	C3'-C2'-C1'	-5.29	97.27	101.50
33	L1	2229	G	C1'-O4'-C4'	5.29	114.14	109.90
35	L2	32	C	O4'-C1'-N1	5.29	112.44	108.20
41	LM	83	ARG	NE-CZ-NH1	5.29	122.95	120.30
48	LV	129	ARG	NH1-CZ-NH2	-5.29	113.58	119.40
57	Ll	67	MET	O-C-N	-5.29	114.23	122.70
67	LS	166	LYS	N-CA-CB	-5.29	101.07	110.60
5	SE	75	HIS	N-CA-CB	5.29	120.13	110.60
31	S2	7	A	C2'-C3'-O3'	5.29	122.17	113.70
32	S1	638	G	N9-C1'-C2'	-5.29	106.18	112.00
33	L1	994	U	P-O3'-C3'	5.29	126.05	119.70
33	L1	1851	U	C3'-C2'-C1'	-5.29	97.27	101.50
33	L1	1863	A	O3'-P-O5'	5.29	114.06	104.00
33	L1	1896	A	OP2-P-O3'	5.29	116.84	105.20
33	L1	2139	A	O4'-C1'-N9	-5.29	103.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2642	G	P-O3'-C3'	-5.29	113.35	119.70
33	L1	3158	C	P-O3'-C3'	5.29	126.05	119.70
34	L3	49	A	O3'-P-O5'	5.29	114.05	104.00
69	La	81	MET	CA-CB-CG	5.29	122.30	113.30
70	Li	58	ARG	CA-C-N	5.29	131.92	117.10
5	SE	30	ARG	CD-NE-CZ	-5.29	116.19	123.60
32	S1	618	C	N1-C1'-C2'	5.29	120.88	114.00
33	L1	517	G	C1'-O4'-C4'	-5.29	105.67	109.90
33	L1	1462	C	O4'-C1'-N1	-5.29	103.97	108.20
33	L1	2431	U	O4'-C1'-C2'	5.29	112.36	107.60
70	Li	10	ARG	CB-CG-CD	5.29	125.36	111.60
6	SF	72	LEU	CB-CA-C	-5.29	100.15	110.20
11	SM	61	ALA	CB-CA-C	-5.29	102.17	110.10
33	L1	292	A	N9-C1'-C2'	5.29	120.88	114.00
33	L1	545	C	P-O3'-C3'	-5.29	113.35	119.70
33	L1	596	C	O4'-C1'-N1	-5.29	103.97	108.20
33	L1	1518	A	P-O3'-C3'	5.29	126.05	119.70
46	LT	128	LYS	O-C-N	-5.29	114.21	123.20
59	Lo	37	TYR	CG-CD2-CE2	-5.29	117.07	121.30
66	LN	17	TYR	CB-CA-C	5.29	120.97	110.40
81	LD	313	GLU	CA-CB-CG	5.29	125.03	113.40
82	LK	61	ARG	N-CA-CB	5.29	120.12	110.60
32	S1	1039	C	N1-C1'-C2'	-5.29	106.18	112.00
32	S1	1061	G	O4'-C1'-N9	-5.29	103.97	108.20
33	L1	1549	A	C5'-C4'-C3'	-5.29	107.54	116.00
52	Lb	100	ALA	N-CA-CB	5.29	117.50	110.10
61	Lq	14	LYS	O-C-N	-5.29	114.24	122.70
71	Lj	14	ARG	NE-CZ-NH2	-5.29	117.66	120.30
77	Lc	96	LEU	CA-CB-CG	5.29	127.46	115.30
32	S1	856	G	O5'-P-OP2	-5.29	100.94	105.70
32	S1	1295	G	C1'-O4'-C4'	-5.29	105.67	109.90
32	S1	1348	A	O4'-C1'-N9	5.29	112.43	108.20
33	L1	219	A	O5'-P-OP2	5.29	117.04	110.70
33	L1	1273	U	OP1-P-OP2	-5.29	111.67	119.60
33	L1	1867	U	O4'-C4'-C3'	-5.29	98.71	104.00
33	L1	1988	G	O4'-C1'-N9	5.29	112.43	108.20
33	L1	2348	U	C5'-C4'-C3'	-5.29	107.54	116.00
33	L1	2680	G	C3'-C2'-C1'	5.29	105.73	101.50
33	L1	2695	A	O3'-P-O5'	5.29	114.04	104.00
72	Lk	51	ALA	CB-CA-C	-5.29	102.17	110.10
81	LD	368	PRO	N-CD-CG	5.29	111.13	103.20
3	SB	126	VAL	CA-CB-CG2	-5.28	102.97	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	SP	42	GLY	O-C-N	-5.28	114.25	122.70
32	S1	414	A	C4'-C3'-C2'	-5.28	97.32	102.60
32	S1	537	U	P-O3'-C3'	5.28	126.04	119.70
32	S1	640	A	O4'-C1'-N9	5.28	112.43	108.20
32	S1	1017	U	O4'-C4'-C3'	5.28	110.33	106.10
32	S1	1460	G	C3'-C2'-C1'	-5.28	97.27	101.50
32	S1	1673	C	P-O3'-C3'	5.28	126.04	119.70
33	L1	629	U	O4'-C1'-C2'	-5.28	100.52	105.80
35	L2	43	G	O4'-C1'-C2'	-5.28	100.52	105.80
14	SP	94	PHE	CB-CG-CD2	5.28	124.50	120.80
32	S1	1507	G	O4'-C1'-C2'	5.28	112.35	107.60
32	S1	1691	C	C1'-O4'-C4'	-5.28	105.67	109.90
33	L1	170	C	O4'-C1'-N1	5.28	112.42	108.20
33	L1	3021	U	C5'-C4'-O4'	-5.28	102.76	109.10
67	LS	159	ARG	CB-CA-C	5.28	120.96	110.40
74	LJ	124	LYS	CA-CB-CG	5.28	125.02	113.40
81	LD	355	ARG	N-CA-CB	5.28	120.11	110.60
1	Sa	302	THR	O-C-N	-5.28	114.25	122.70
2	SA	260	ALA	CA-C-O	-5.28	109.01	120.10
15	SS	94	HIS	N-CA-CB	5.28	120.10	110.60
32	S1	491	G	O4'-C1'-C2'	5.28	112.35	107.60
32	S1	1042	C	N1-C1'-C2'	5.28	120.86	114.00
33	L1	22	G	P-O3'-C3'	-5.28	113.36	119.70
33	L1	333	G	OP1-P-OP2	-5.28	111.68	119.60
33	L1	389	A	C5'-C4'-C3'	5.28	124.45	116.00
33	L1	407	A	P-O5'-C5'	5.28	129.35	120.90
33	L1	989	U	C1'-O4'-C4'	5.28	114.12	109.90
33	L1	1128	U	C4'-C3'-C2'	-5.28	97.32	102.60
33	L1	1800	G	O3'-P-O5'	5.28	114.03	104.00
33	L1	1897	A	O5'-P-OP2	5.28	117.04	110.70
33	L1	2133	A	P-O5'-C5'	-5.28	112.45	120.90
33	L1	2390	G	O4'-C4'-C3'	-5.28	98.72	104.00
33	L1	2772	A	C4'-C3'-C2'	-5.28	97.32	102.60
35	L2	103	C	C5'-C4'-C3'	5.28	124.45	116.00
69	La	42	LEU	CB-CG-CD1	5.28	119.98	111.00
33	L1	614	C	C1'-O4'-C4'	5.28	114.12	109.90
35	L2	58	A	O4'-C4'-C3'	-5.28	98.72	104.00
56	Lh	53	MET	O-C-N	-5.28	111.07	121.10
1	Sa	107	HIS	O-C-N	-5.28	114.26	122.70
1	Sa	236	ARG	NE-CZ-NH1	-5.28	117.66	120.30
12	SO	127	ARG	NE-CZ-NH2	-5.28	117.66	120.30
24	SX	82	ARG	CA-C-O	-5.28	109.02	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	S2	65	U	C4'-C3'-C2'	-5.28	97.32	102.60
32	S1	1403	G	P-O5'-C5'	5.28	129.34	120.90
32	S1	1568	U	C5'-C4'-O4'	5.28	115.43	109.10
33	L1	763	G	C1'-O4'-C4'	-5.28	105.68	109.90
33	L1	1062	G	C4'-C3'-C2'	-5.28	97.32	102.60
33	L1	1766	U	O4'-C1'-C2'	-5.28	100.52	105.80
33	L1	3101	C	O4'-C1'-N1	-5.28	103.98	108.20
33	L1	3288	A	OP1-P-OP2	-5.28	111.68	119.60
33	L1	3360	U	P-O5'-C5'	-5.28	112.46	120.90
34	L3	52	U	O4'-C1'-N1	5.28	112.42	108.20
38	LE	120	PRO	N-CA-CB	5.28	109.63	103.30
52	Lb	113	ARG	N-CA-CB	5.28	120.10	110.60
78	Le	179	ASN	N-CA-CB	5.28	120.10	110.60
80	LC	16	PHE	CA-CB-CG	-5.28	101.24	113.90
83	Lm	23	ARG	NE-CZ-NH1	5.28	122.94	120.30
84	LI	109	ASP	OD1-CG-OD2	5.28	133.33	123.30
1	Sa	306	PHE	CG-CD1-CE1	-5.28	115.00	120.80
25	SC	95	LEU	O-C-N	-5.28	114.26	122.70
32	S1	60	C	C3'-C2'-C1'	5.28	105.72	101.50
32	S1	513	G	P-O3'-C3'	5.28	126.03	119.70
32	S1	1362	A	C3'-C2'-C1'	5.28	105.72	101.50
32	S1	1498	A	O3'-P-O5'	5.28	114.02	104.00
33	L1	516	C	N1-C1'-C2'	5.28	120.86	114.00
33	L1	1289	G	C4'-C3'-C2'	5.28	107.88	102.60
33	L1	2741	G	N9-C1'-C2'	5.28	120.86	114.00
33	L1	2941	G	C3'-C2'-C1'	-5.28	97.28	101.50
34	L3	105	C	O4'-C1'-N1	5.28	112.42	108.20
45	LQ	35	ARG	NE-CZ-NH2	-5.28	117.66	120.30
54	Lf	53	PRO	CA-C-N	5.28	131.87	117.10
32	S1	1057	U	OP2-P-O3'	5.27	116.80	105.20
32	S1	1478	C	O4'-C1'-C2'	-5.27	100.53	105.80
33	L1	141	C	C3'-C2'-C1'	5.27	105.72	101.50
33	L1	1691	U	O4'-C4'-C3'	-5.27	98.73	104.00
33	L1	2588	G	OP2-P-O3'	5.27	116.80	105.20
1	Sa	340	GLN	CA-C-N	-5.27	105.60	117.20
32	S1	1229	C	C4'-C3'-C2'	-5.27	97.33	102.60
32	S1	1284	C	C3'-C2'-C1'	5.27	105.72	101.50
32	S1	1388	A	O4'-C1'-N9	5.27	112.42	108.20
33	L1	38	A	C3'-C2'-C1'	5.27	105.72	101.50
33	L1	952	C	C4'-C3'-C2'	-5.27	97.33	102.60
33	L1	1862	C	C1'-O4'-C4'	-5.27	105.68	109.90
71	Lj	60	LYS	C-N-CA	5.27	134.88	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	SE	145	VAL	CA-CB-CG1	-5.27	102.99	110.90
13	SQ	21	TYR	CB-CA-C	-5.27	99.86	110.40
31	S2	21	A	N9-C1'-C2'	-5.27	106.20	112.00
32	S1	1518	C	C5'-C4'-O4'	5.27	115.42	109.10
33	L1	142	G	N9-C1'-C2'	5.27	120.85	114.00
33	L1	281	G	P-O5'-C5'	5.27	129.33	120.90
33	L1	1342	C	C5'-C4'-O4'	-5.27	102.78	109.10
13	SQ	139	ASP	N-CA-CB	-5.27	101.11	110.60
16	SR	132	TYR	CB-CG-CD2	-5.27	117.84	121.00
25	SC	85	TYR	CB-CG-CD2	5.27	124.16	121.00
31	S2	43	C	C5'-C4'-O4'	5.27	115.42	109.10
32	S1	1054	G	P-O5'-C5'	-5.27	112.47	120.90
33	L1	2227	A	P-O3'-C3'	5.27	126.02	119.70
33	L1	2412	A	P-O5'-C5'	5.27	129.33	120.90
33	L1	2482	A	C5'-C4'-C3'	5.27	124.43	116.00
33	L1	2973	A	C3'-C2'-C1'	-5.27	97.28	101.50
55	Lg	26	LYS	CA-CB-CG	5.27	124.99	113.40
69	La	26	VAL	CA-CB-CG2	5.27	118.80	110.90
69	La	38	TYR	CA-C-O	5.27	131.17	120.10
32	S1	297	U	N1-C1'-C2'	5.27	120.85	114.00
32	S1	312	C	N1-C1'-C2'	-5.27	106.21	112.00
32	S1	624	A	OP2-P-O3'	5.27	116.79	105.20
33	L1	517	G	N9-C1'-C2'	5.27	120.85	114.00
33	L1	801	G	C1'-O4'-C4'	5.27	114.11	109.90
33	L1	1345	U	C1'-O4'-C4'	-5.27	105.69	109.90
33	L1	1576	C	OP1-P-O3'	5.27	116.79	105.20
33	L1	2468	G	C5'-C4'-O4'	5.27	115.42	109.10
33	L1	2666	G	N9-C1'-C2'	-5.27	106.21	112.00
56	Lh	64	THR	CA-CB-CG2	-5.27	105.03	112.40
11	SM	40	PHE	O-C-N	5.27	131.12	122.70
32	S1	1766	A	C1'-O4'-C4'	5.27	114.11	109.90
33	L1	1331	C	C5'-C4'-C3'	-5.27	107.57	116.00
33	L1	2792	A	C4'-C3'-C2'	-5.27	97.33	102.60
39	LF	187	THR	N-CA-C	-5.27	96.78	111.00
48	LV	54	HIS	O-C-N	-5.27	114.28	122.70
52	Lb	64	GLY	N-CA-C	-5.27	99.94	113.10
32	S1	886	A	C5'-C4'-O4'	5.26	115.42	109.10
32	S1	1446	C	P-O5'-C5'	5.26	129.32	120.90
33	L1	1241	G	C1'-O4'-C4'	5.26	114.11	109.90
33	L1	2747	U	P-O3'-C3'	-5.26	113.38	119.70
35	L2	32	C	OP1-P-OP2	-5.26	111.70	119.60
38	LE	165	PHE	CA-CB-CG	-5.26	101.26	113.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	Le	92	ARG	CG-CD-NE	-5.26	100.75	111.80
83	Lm	37	TYR	CB-CG-CD2	-5.26	117.84	121.00
32	S1	1182	C	O4'-C1'-N1	5.26	112.41	108.20
33	L1	185	A	OP1-P-OP2	-5.26	111.71	119.60
33	L1	2761	A	O4'-C1'-N9	5.26	112.41	108.20
1	Sa	255	VAL	CB-CA-C	-5.26	101.40	111.40
10	SL	142	SER	CA-C-O	-5.26	109.05	120.10
25	SC	71	ARG	CG-CD-NE	-5.26	100.75	111.80
32	S1	1604	C	C5'-C4'-O4'	5.26	115.41	109.10
33	L1	98	A	C5'-C4'-C3'	5.26	124.42	116.00
33	L1	639	A	C5'-C4'-O4'	5.26	115.41	109.10
33	L1	1209	G	C3'-C2'-C1'	-5.26	97.29	101.50
33	L1	1364	C	C1'-O4'-C4'	-5.26	105.69	109.90
33	L1	1395	A	C3'-C2'-C1'	-5.26	97.29	101.50
33	L1	1734	G	P-O3'-C3'	-5.26	113.39	119.70
33	L1	1998	A	P-O3'-C3'	5.26	126.01	119.70
33	L1	3165	C	O4'-C1'-N1	5.26	112.41	108.20
41	LM	83	ARG	NE-CZ-NH2	-5.26	117.67	120.30
56	Lh	26	TYR	CB-CG-CD1	5.26	124.16	121.00
5	SE	244	PHE	CB-CA-C	5.26	120.92	110.40
32	S1	195	A	OP1-P-OP2	-5.26	111.71	119.60
32	S1	1328	G	C5'-C4'-C3'	5.26	124.42	116.00
32	S1	1518	C	N1-C1'-C2'	5.26	120.84	114.00
33	L1	1713	A	C3'-C2'-C1'	5.26	105.71	101.50
33	L1	1836	U	C2'-C3'-O3'	5.26	122.12	113.70
45	LQ	36	ALA	CB-CA-C	5.26	117.99	110.10
68	LW	82	LYS	O-C-N	5.26	131.12	122.70
78	Le	217	LYS	N-CA-CB	5.26	120.07	110.60
32	S1	836	U	P-O3'-C3'	5.26	126.01	119.70
33	L1	559	U	C1'-O4'-C4'	5.26	114.11	109.90
33	L1	2651	G	C4'-C3'-C2'	-5.26	97.34	102.60
33	L1	2722	U	O4'-C4'-C3'	-5.26	98.74	104.00
37	LB	47	ASP	CB-CG-OD2	-5.26	113.57	118.30
6	SF	73	MET	N-CA-CB	5.26	120.06	110.60
32	S1	243	U	OP1-P-OP2	-5.26	111.72	119.60
32	S1	346	C	C3'-C2'-C1'	5.26	105.70	101.50
32	S1	680	C	O4'-C1'-N1	5.26	112.41	108.20
33	L1	925	U	P-O5'-C5'	5.26	129.31	120.90
33	L1	1196	U	C3'-C2'-C1'	-5.26	97.30	101.50
33	L1	1223	U	P-O3'-C3'	5.26	126.01	119.70
33	L1	2917	U	OP2-P-O3'	5.26	116.76	105.20
33	L1	2985	C	C1'-O4'-C4'	5.26	114.11	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3223	C	O3'-P-O5'	-5.26	94.01	104.00
37	LB	58	LEU	CB-CA-C	-5.26	100.21	110.20
43	LO	21	ARG	NE-CZ-NH1	5.26	122.93	120.30
71	Lj	7	GLN	N-CA-C	-5.26	96.81	111.00
81	LD	395	ASP	CB-CG-OD2	5.26	123.03	118.30
31	S2	74	C	O3'-P-O5'	5.25	113.98	104.00
32	S1	1294	U	C1'-O4'-C4'	-5.25	105.70	109.90
33	L1	528	C	C2'-C3'-O3'	5.25	122.11	113.70
33	L1	1437	G	N9-C1'-C2'	5.25	120.83	114.00
29	ST	10	ASP	CB-CG-OD1	-5.25	113.57	118.30
32	S1	30	G	C5'-C4'-C3'	5.25	124.41	116.00
32	S1	680	C	O4'-C1'-C2'	-5.25	100.55	105.80
32	S1	1793	C	C5'-C4'-O4'	5.25	115.41	109.10
33	L1	409	U	O3'-P-O5'	-5.25	94.02	104.00
33	L1	2997	C	C5'-C4'-C3'	-5.25	107.59	116.00
50	LZ	34	ALA	N-CA-C	5.25	125.19	111.00
57	Ll	11	ARG	C-N-CA	-5.25	108.57	121.70
60	Lr	80	TYR	CB-CA-C	5.25	120.91	110.40
66	LN	112	LEU	N-CA-CB	5.25	120.91	110.40
7	SI	117	ARG	CD-NE-CZ	-5.25	116.25	123.60
15	SS	54	ASP	N-CA-C	5.25	125.18	111.00
23	SU	69	HIS	C-N-CA	5.25	134.83	121.70
32	S1	124	G	C5'-C4'-C3'	5.25	124.40	116.00
32	S1	895	U	O4'-C1'-N1	5.25	112.40	108.20
33	L1	391	U	P-O5'-C5'	5.25	129.30	120.90
33	L1	1369	G	P-O3'-C3'	5.25	126.00	119.70
41	LM	72	LEU	CA-CB-CG	5.25	127.38	115.30
46	LT	11	ALA	N-CA-CB	5.25	117.45	110.10
66	LN	61	ASP	CA-CB-CG	-5.25	101.85	113.40
78	Le	143	LEU	CB-CG-CD1	5.25	119.93	111.00
33	L1	1497	U	O5'-P-OP2	5.25	117.00	110.70
33	L1	2216	G	C5'-C4'-O4'	-5.25	102.80	109.10
33	L1	2908	C	C4'-C3'-C2'	-5.25	97.35	102.60
33	L1	3159	C	O4'-C1'-N1	5.25	112.40	108.20
15	SS	14	PRO	N-CA-CB	5.25	109.60	103.30
32	S1	1178	C	C1'-O4'-C4'	5.25	114.10	109.90
33	L1	606	C	C2'-C3'-O3'	5.25	122.10	113.70
33	L1	1074	C	O4'-C1'-C2'	-5.25	100.55	105.80
33	L1	1298	A	P-O5'-C5'	5.25	129.30	120.90
33	L1	1730	U	C3'-C2'-C1'	5.25	105.70	101.50
33	L1	2109	G	O4'-C1'-N9	5.25	112.40	108.20
34	L3	12	U	C1'-O4'-C4'	-5.25	105.70	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	LM	48	ARG	NE-CZ-NH2	-5.25	117.68	120.30
15	SS	43	ALA	N-CA-CB	-5.25	102.75	110.10
31	S2	10	G	C1'-O4'-C4'	-5.25	105.70	109.90
33	L1	481	G	O4'-C1'-N9	5.25	112.40	108.20
33	L1	1136	A	N9-C1'-C2'	5.25	120.82	114.00
33	L1	1983	U	O3'-P-O5'	-5.25	94.03	104.00
33	L1	2512	U	O4'-C4'-C3'	-5.25	98.75	104.00
33	L1	2581	C	O4'-C1'-N1	5.25	112.40	108.20
45	LQ	52	LYS	CA-CB-CG	5.25	124.94	113.40
50	LZ	3	LEU	C-N-CA	-5.25	108.58	121.70
66	LN	121	ILE	CB-CA-C	-5.25	101.11	111.60
3	SB	168	ILE	N-CA-C	-5.25	96.84	111.00
17	SV	83	ASP	CB-CG-OD2	5.25	123.02	118.30
32	S1	959	G	O4'-C4'-C3'	-5.25	98.75	104.00
33	L1	180	G	OP1-P-OP2	-5.25	111.73	119.60
33	L1	2229	G	O3'-P-O5'	5.25	113.97	104.00
55	Lg	105	GLU	CA-CB-CG	5.25	124.94	113.40
81	LD	369	GLU	CB-CA-C	5.25	120.89	110.40
81	LD	400	TRP	CB-CA-C	-5.25	99.91	110.40
82	LK	135	GLN	C-N-CA	-5.25	99.97	122.00
1	Sa	22	ARG	NE-CZ-NH1	5.24	122.92	120.30
3	SB	218	GLU	N-CA-C	-5.24	96.84	111.00
32	S1	1068	G	C2'-C3'-O3'	5.24	122.09	113.70
32	S1	1101	C	C4'-C3'-C2'	-5.24	97.36	102.60
32	S1	1435	G	O4'-C1'-C2'	5.24	112.32	107.60
32	S1	1673	C	O4'-C1'-C2'	-5.24	100.56	105.80
33	L1	505	G	C5'-C4'-C3'	5.24	124.39	116.00
33	L1	586	A	C1'-O4'-C4'	-5.24	105.70	109.90
33	L1	2302	G	P-O5'-C5'	5.24	129.29	120.90
33	L1	2745	C	N1-C1'-C2'	5.24	120.82	114.00
42	LP	118	SER	O-C-N	-5.24	114.31	122.70
70	Li	37	LYS	CB-CA-C	5.24	120.89	110.40
32	S1	250	A	OP1-P-OP2	-5.24	111.74	119.60
33	L1	2354	G	C4'-C3'-C2'	5.24	107.84	102.60
33	L1	3152	C	C4'-C3'-C2'	-5.24	97.36	102.60
81	LD	319	LYS	C-N-CA	-5.24	108.59	121.70
32	S1	447	C	OP1-P-OP2	-5.24	111.74	119.60
33	L1	407	A	P-O3'-C3'	5.24	125.99	119.70
33	L1	1017	G	N9-C1'-C2'	5.24	120.81	114.00
33	L1	1555	G	C1'-O4'-C4'	-5.24	105.71	109.90
48	LV	71	ALA	CB-CA-C	5.24	117.96	110.10
6	SF	67	ARG	NE-CZ-NH1	5.24	122.92	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	33	U	N1-C1'-C2'	-5.24	106.24	112.00
32	S1	935	A	C5'-C4'-O4'	5.24	115.39	109.10
32	S1	1504	U	C5'-C4'-O4'	5.24	115.39	109.10
33	L1	108	A	OP1-P-O3'	5.24	116.72	105.20
33	L1	595	C	N1-C1'-C2'	5.24	120.81	114.00
33	L1	628	C	P-O3'-C3'	5.24	125.99	119.70
33	L1	2035	G	O4'-C1'-N9	5.24	112.39	108.20
33	L1	2471	C	O5'-P-OP1	5.24	116.99	110.70
33	L1	2785	U	C5'-C4'-O4'	5.24	115.39	109.10
33	L1	2940	G	OP1-P-O3'	5.24	116.73	105.20
78	Le	73	MET	N-CA-CB	5.24	120.03	110.60
7	SI	124	VAL	CG1-CB-CG2	5.24	119.28	110.90
32	S1	1803	G	O4'-C1'-C2'	5.24	112.31	107.60
33	L1	1298	A	P-O3'-C3'	-5.24	113.42	119.70
6	SF	171	ASP	CA-CB-CG	5.24	124.92	113.40
9	SK	77	SER	CA-C-N	-5.24	105.68	117.20
9	SK	143	GLY	N-CA-C	5.24	126.19	113.10
31	S2	73	C	O3'-P-O5'	5.24	113.95	104.00
33	L1	594	C	P-O5'-C5'	-5.24	112.52	120.90
33	L1	781	C	C5'-C4'-C3'	-5.24	107.62	116.00
33	L1	1226	G	O5'-P-OP2	5.24	116.98	110.70
33	L1	2366	A	N9-C1'-C2'	5.24	120.81	114.00
33	L1	3213	A	C1'-O4'-C4'	5.24	114.09	109.90
33	L1	3362	A	C4'-C3'-C2'	5.24	107.84	102.60
51	LY	9	SER	CB-CA-C	5.24	120.05	110.10
52	Lb	106	GLN	N-CA-CB	5.24	120.03	110.60
68	LW	55	LYS	CA-CB-CG	5.24	124.92	113.40
75	Lt	45	LEU	CB-CG-CD2	5.24	119.90	111.00
33	L1	183	C	C1'-O4'-C4'	-5.23	105.71	109.90
33	L1	962	C	P-O5'-C5'	-5.23	112.53	120.90
33	L1	1299	G	C4'-C3'-C2'	-5.23	97.37	102.60
33	L1	2261	U	C1'-O4'-C4'	-5.23	105.71	109.90
33	L1	2732	U	O5'-C5'-C4'	5.23	121.64	111.70
33	L1	3048	C	OP1-P-OP2	-5.23	111.75	119.60
32	S1	1565	U	N1-C1'-C2'	5.23	120.80	114.00
33	L1	472	U	C3'-C2'-C1'	-5.23	97.31	101.50
33	L1	659	C	P-O5'-C5'	-5.23	112.53	120.90
33	L1	916	A	N9-C1'-C2'	-5.23	106.25	112.00
33	L1	1596	G	C3'-C2'-C1'	5.23	105.69	101.50
33	L1	1678	U	C1'-O4'-C4'	5.23	114.09	109.90
33	L1	1734	G	O4'-C1'-N9	5.23	112.39	108.20
33	L1	1743	C	C3'-C2'-C1'	5.23	105.69	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1838	A	O4'-C1'-N9	-5.23	104.01	108.20
33	L1	2149	G	C1'-O4'-C4'	-5.23	105.71	109.90
33	L1	2598	A	O3'-P-O5'	-5.23	94.06	104.00
33	L1	2782	G	O3'-P-O5'	-5.23	94.06	104.00
33	L1	2812	C	P-O3'-C3'	-5.23	113.42	119.70
70	Li	105	LYS	N-CA-C	5.23	125.13	111.00
81	LD	106	PHE	CB-CG-CD2	-5.23	117.14	120.80
32	S1	90	G	O4'-C1'-N9	5.23	112.39	108.20
32	S1	1158	G	C1'-O4'-C4'	-5.23	105.72	109.90
32	S1	1301	G	P-O5'-C5'	-5.23	112.53	120.90
32	S1	1343	C	N1-C1'-C2'	5.23	120.80	114.00
32	S1	1716	C	P-O3'-C3'	-5.23	113.42	119.70
33	L1	129	G	C3'-C2'-C1'	-5.23	97.31	101.50
33	L1	1053	C	OP2-P-O3'	5.23	116.71	105.20
33	L1	1270	G	C1'-C2'-O2'	5.23	126.29	110.60
33	L1	2219	A	N9-C1'-C2'	-5.23	106.25	112.00
33	L1	2741	G	O5'-P-OP2	5.23	116.98	110.70
78	Le	71	ALA	N-CA-CB	5.23	117.42	110.10
32	S1	922	U	C1'-O4'-C4'	5.23	114.08	109.90
32	S1	1559	U	C1'-O4'-C4'	5.23	114.08	109.90
33	L1	3276	G	P-O3'-C3'	5.23	125.97	119.70
5	SE	100	ARG	NE-CZ-NH2	5.23	122.91	120.30
25	SC	8	TYR	CG-CD1-CE1	-5.23	117.12	121.30
32	S1	571	A	C2'-C3'-O3'	5.23	122.06	113.70
32	S1	594	C	C5'-C4'-O4'	-5.23	102.83	109.10
32	S1	918	G	N9-C1'-C2'	-5.23	106.25	112.00
33	L1	282	A	C5'-C4'-O4'	5.23	115.37	109.10
33	L1	2620	U	C4'-C3'-C2'	5.23	107.83	102.60
46	LT	1	MET	CA-CB-CG	5.23	122.19	113.30
48	LV	47	TYR	CB-CG-CD1	5.23	124.14	121.00
59	Lo	47	THR	CA-C-N	5.23	128.70	117.20
76	Lw	34	ILE	CA-C-N	-5.23	105.70	117.20
81	LD	344	ALA	C-N-CA	5.23	134.77	121.70
33	L1	678	G	P-O3'-C3'	5.23	125.97	119.70
33	L1	993	A	O3'-P-O5'	-5.23	94.07	104.00
33	L1	1570	C	C1'-O4'-C4'	5.23	114.08	109.90
33	L1	2098	A	C5'-C4'-C3'	-5.23	107.64	116.00
33	L1	2562	A	O5'-C5'-C4'	5.23	121.63	111.70
33	L1	3333	C	C1'-O4'-C4'	-5.23	105.72	109.90
64	LG	13	ARG	N-CA-CB	5.23	120.01	110.60
6	SF	148	TYR	CD1-CE1-CZ	-5.22	115.10	119.80
13	SQ	92	GLU	CA-C-N	-5.22	105.71	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	SH	64	GLU	N-CA-CB	5.22	120.00	110.60
32	S1	162	A	N9-C1'-C2'	-5.22	106.25	112.00
80	LC	90	VAL	CG1-CB-CG2	-5.22	102.54	110.90
3	SB	81	GLU	CA-C-N	-5.22	105.71	117.20
32	S1	192	G	C4'-C3'-C2'	-5.22	97.38	102.60
32	S1	1042	C	O4'-C1'-C2'	-5.22	100.58	105.80
32	S1	1171	C	C3'-C2'-C1'	5.22	105.68	101.50
32	S1	1462	C	O4'-C1'-N1	-5.22	104.02	108.20
32	S1	1721	A	P-O3'-C3'	-5.22	113.43	119.70
33	L1	305	G	O3'-P-O5'	5.22	113.92	104.00
33	L1	639	A	C5'-C4'-C3'	-5.22	107.64	116.00
33	L1	946	U	N1-C1'-C2'	5.22	120.79	114.00
33	L1	1400	C	OP1-P-OP2	-5.22	111.77	119.60
33	L1	1611	G	C5'-C4'-C3'	-5.22	107.64	116.00
33	L1	2114	A	N9-C1'-C2'	5.22	120.79	114.00
33	L1	2341	U	C1'-O4'-C4'	-5.22	105.72	109.90
33	L1	2566	C	N1-C1'-C2'	5.22	120.79	114.00
33	L1	2622	G	O3'-P-O5'	-5.22	94.08	104.00
35	L2	6	G	O4'-C1'-C2'	-5.22	100.58	105.80
35	L2	16	A	C1'-O4'-C4'	5.22	114.08	109.90
35	L2	37	A	C1'-O4'-C4'	-5.22	105.72	109.90
72	Lk	66	VAL	C-N-CA	5.22	133.27	122.30
78	Le	49	ARG	NE-CZ-NH1	5.22	122.91	120.30
79	Ls	190	LEU	O-C-N	-5.22	114.34	122.70
27	SH	24	GLN	O-C-N	-5.22	114.35	122.70
32	S1	1227	A	C3'-C2'-C1'	-5.22	97.32	101.50
32	S1	1559	U	O4'-C1'-C2'	-5.22	100.58	105.80
32	S1	1628	C	C4'-C3'-C2'	-5.22	97.38	102.60
59	Lo	48	LYS	CB-CA-C	-5.22	99.96	110.40
17	SV	49	ASP	CB-CG-OD2	5.22	123.00	118.30
25	SC	85	TYR	CG-CD2-CE2	-5.22	117.12	121.30
32	S1	855	G	P-O5'-C5'	-5.22	112.55	120.90
32	S1	1355	U	C5'-C4'-O4'	5.22	115.36	109.10
32	S1	1547	G	C1'-O4'-C4'	5.22	114.08	109.90
33	L1	245	C	C3'-C2'-C1'	5.22	105.67	101.50
33	L1	1044	A	C5'-C4'-O4'	5.22	115.36	109.10
33	L1	1168	G	C5'-C4'-O4'	-5.22	102.84	109.10
33	L1	1235	A	O3'-P-O5'	5.22	113.92	104.00
33	L1	1897	A	C3'-C2'-C1'	5.22	105.68	101.50
45	LQ	154	THR	N-CA-C	-5.22	96.91	111.00
59	Lo	4	HIS	O-C-N	-5.22	114.35	122.70
1	Sa	36	ASP	CB-CG-OD2	-5.22	113.60	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	SV	44	ASP	CB-CG-OD2	5.22	123.00	118.30
32	S1	403	A	P-O3'-C3'	5.22	125.96	119.70
32	S1	831	C	C3'-C2'-C1'	5.22	105.67	101.50
33	L1	311	G	O5'-P-OP2	5.22	116.96	110.70
33	L1	1515	U	C5'-C4'-O4'	-5.22	102.84	109.10
33	L1	2615	U	C4'-C3'-C2'	-5.22	97.38	102.60
78	Le	118	PHE	CB-CG-CD1	-5.22	117.15	120.80
1	Sa	89	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	Sa	346	ARG	CD-NE-CZ	-5.22	116.30	123.60
3	SB	152	PHE	CB-CG-CD1	5.22	124.45	120.80
5	SE	208	SER	N-CA-CB	-5.22	102.67	110.50
11	SM	95	PHE	N-CA-CB	5.22	119.99	110.60
13	SQ	73	LEU	N-CA-CB	-5.22	99.97	110.40
20	SZ	7	SER	N-CA-CB	-5.22	102.67	110.50
23	SU	15	ARG	NE-CZ-NH1	5.22	122.91	120.30
32	S1	1021	C	C4'-C3'-C2'	-5.22	97.38	102.60
32	S1	1387	U	O4'-C4'-C3'	-5.22	98.78	104.00
33	L1	73	A	N9-C1'-C2'	-5.22	106.26	112.00
33	L1	649	A	O4'-C1'-C2'	-5.22	100.58	105.80
33	L1	712	A	O4'-C1'-N9	5.22	112.37	108.20
33	L1	2445	U	O4'-C1'-N1	5.22	112.37	108.20
33	L1	3101	C	P-O3'-C3'	5.22	125.96	119.70
23	SU	42	LYS	N-CA-C	5.21	125.08	111.00
32	S1	1079	G	C3'-C2'-C1'	5.21	105.67	101.50
32	S1	1302	C	C4'-C3'-C2'	-5.21	97.39	102.60
32	S1	1747	A	O5'-C5'-C4'	-5.21	101.79	111.70
33	L1	142	G	O4'-C1'-C2'	-5.21	100.59	105.80
33	L1	1634	G	O4'-C1'-N9	-5.21	104.03	108.20
33	L1	1754	C	P-O5'-C5'	-5.21	112.56	120.90
33	L1	2248	G	O4'-C1'-N9	5.21	112.37	108.20
33	L1	2685	C	C4'-C3'-C2'	-5.21	97.39	102.60
41	LM	68	GLY	O-C-N	-5.21	114.36	122.70
67	LS	100	THR	CA-CB-CG2	-5.21	105.10	112.40
68	LW	101	TRP	N-CA-CB	5.21	119.98	110.60
13	SQ	70	SER	C-N-CA	5.21	134.73	121.70
35	L2	127	G	O4'-C1'-C2'	-5.21	100.59	105.80
42	LP	12	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
29	ST	63	ASP	C-N-CA	5.21	134.73	121.70
32	S1	211	G	OP1-P-OP2	-5.21	111.78	119.60
32	S1	312	C	C3'-C2'-C1'	5.21	105.67	101.50
32	S1	1704	G	O4'-C4'-C3'	5.21	110.27	106.10
33	L1	1659	G	C3'-C2'-C1'	5.21	105.67	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1922	C	P-O3'-C3'	-5.21	113.45	119.70
33	L1	3303	C	C3'-C2'-C1'	-5.21	97.33	101.50
45	LQ	2	SER	CB-CA-C	5.21	120.00	110.10
32	S1	1650	G	O4'-C1'-C2'	-5.21	100.59	105.80
33	L1	671	C	P-O3'-C3'	-5.21	113.45	119.70
33	L1	768	U	O4'-C1'-N1	5.21	112.37	108.20
35	L2	80	C	P-O5'-C5'	5.21	129.24	120.90
19	SY	24	THR	N-CA-CB	5.21	120.20	110.30
32	S1	385	C	O4'-C1'-C2'	-5.21	100.59	105.80
32	S1	1209	C	O4'-C4'-C3'	-5.21	98.79	104.00
32	S1	1474	U	C4'-C3'-C2'	-5.21	97.39	102.60
33	L1	1456	A	C3'-C2'-C1'	-5.21	97.33	101.50
33	L1	3202	G	P-O3'-C3'	-5.21	113.45	119.70
35	L2	16	A	O4'-C1'-N9	5.21	112.37	108.20
37	LB	64	ARG	NE-CZ-NH1	5.21	122.90	120.30
37	LB	69	TYR	CB-CG-CD2	-5.21	117.88	121.00
71	Lj	25	SER	N-CA-C	5.21	125.06	111.00
79	Ls	5	ARG	NE-CZ-NH1	5.21	122.91	120.30
32	S1	689	C	C3'-C2'-C1'	5.21	105.67	101.50
32	S1	1091	A	C4'-C3'-C2'	-5.21	97.39	102.60
32	S1	1135	G	OP1-P-OP2	-5.21	111.79	119.60
32	S1	1727	C	C4'-C3'-C2'	5.21	107.81	102.60
33	L1	8	C	C3'-C2'-C1'	5.21	105.67	101.50
33	L1	819	A	C5'-C4'-C3'	-5.21	107.67	116.00
33	L1	2984	A	C5'-C4'-C3'	-5.21	107.67	116.00
33	L1	3209	U	C5'-C4'-C3'	5.21	124.33	116.00
33	L1	3289	U	C4'-C3'-C2'	-5.21	97.39	102.60
36	LA	200	VAL	O-C-N	-5.21	114.37	122.70
48	LV	63	TYR	CG-CD2-CE2	5.21	125.47	121.30
50	LZ	23	PHE	CB-CG-CD2	5.21	124.44	120.80
74	LJ	118	ARG	NE-CZ-NH2	-5.21	117.70	120.30
4	SD	73	ASP	CB-CG-OD2	5.21	122.98	118.30
32	S1	831	C	P-O5'-C5'	-5.21	112.57	120.90
33	L1	818	G	P-O3'-C3'	5.21	125.95	119.70
3	SB	12	VAL	C-N-CA	5.20	134.71	121.70
9	SK	52	LEU	CA-CB-CG	5.20	127.27	115.30
31	S2	1	U	C5'-C4'-O4'	5.20	115.34	109.10
32	S1	791	C	C5'-C4'-C3'	5.20	124.32	116.00
32	S1	913	U	P-O5'-C5'	5.20	129.22	120.90
32	S1	1790	G	C1'-O4'-C4'	-5.20	105.74	109.90
33	L1	471	C	P-O5'-C5'	5.20	129.22	120.90
33	L1	2910	C	C4'-C3'-C2'	-5.20	97.40	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	3009	A	O4'-C1'-N9	5.20	112.36	108.20
33	L1	3335	G	C2'-C3'-O3'	5.20	122.02	113.70
35	L2	70	G	P-O3'-C3'	5.20	125.94	119.70
35	L2	160	C	O4'-C1'-C2'	-5.20	100.60	105.80
55	Lg	20	TYR	N-CA-CB	5.20	119.97	110.60
57	Ll	33	THR	CA-CB-OG1	5.20	119.93	109.00
67	LS	151	PHE	C-N-CD	-5.20	109.15	120.60
80	LC	122	TRP	CB-CG-CD1	5.20	133.76	127.00
7	SI	50	LEU	N-CA-CB	5.20	120.80	110.40
11	SM	110	ASP	N-CA-CB	-5.20	101.24	110.60
32	S1	436	G	N9-C1'-C2'	5.20	120.76	114.00
32	S1	1287	U	O4'-C1'-C2'	-5.20	100.60	105.80
33	L1	471	C	O4'-C1'-C2'	-5.20	100.60	105.80
32	S1	461	G	O4'-C1'-N9	5.20	112.36	108.20
32	S1	495	C	C1'-O4'-C4'	-5.20	105.74	109.90
33	L1	185	A	O4'-C1'-N9	-5.20	104.04	108.20
33	L1	1208	A	N9-C1'-C2'	5.20	120.76	114.00
33	L1	1388	C	O4'-C1'-C2'	5.20	112.28	107.60
33	L1	3047	A	C4'-C3'-C2'	-5.20	97.40	102.60
45	LQ	188	LYS	C-N-CA	5.20	134.70	121.70
71	Lj	93	LEU	O-C-N	5.20	130.98	121.10
33	L1	1035	C	O5'-P-OP1	5.20	116.94	110.70
33	L1	1625	G	C4'-C3'-C2'	-5.20	97.40	102.60
33	L1	2171	A	O4'-C1'-N9	5.20	112.36	108.20
33	L1	2594	A	O3'-P-O5'	-5.20	94.12	104.00
33	L1	3070	G	C5'-C4'-O4'	5.20	115.34	109.10
33	L1	3250	C	C3'-C2'-C1'	5.20	105.66	101.50
39	LF	95	TYR	CB-CG-CD1	5.20	124.12	121.00
47	LU	132	PRO	N-CA-C	5.20	125.62	112.10
67	LS	155	TYR	CB-CG-CD2	-5.20	117.88	121.00
78	Le	147	ARG	CA-CB-CG	5.20	124.84	113.40
5	SE	191	ARG	NE-CZ-NH2	-5.20	117.70	120.30
14	SP	99	GLN	O-C-N	-5.20	114.38	122.70
51	LY	35	SER	N-CA-CB	5.20	118.30	110.50
23	SU	28	PHE	CB-CG-CD1	5.20	124.44	120.80
32	S1	252	U	OP1-P-OP2	-5.20	111.81	119.60
32	S1	341	G	C2'-C3'-O3'	5.20	122.01	113.70
32	S1	450	A	C3'-C2'-C1'	5.20	105.66	101.50
32	S1	485	A	C5'-C4'-O4'	5.20	115.33	109.10
32	S1	1075	G	P-O5'-C5'	-5.20	112.59	120.90
33	L1	1852	C	O4'-C1'-C2'	5.20	112.28	107.60
33	L1	2021	G	C1'-O4'-C4'	5.20	114.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	LK	198	LEU	CA-CB-CG	5.20	127.25	115.30
32	S1	118	U	P-O5'-C5'	5.19	129.21	120.90
33	L1	2424	G	N9-C1'-C2'	5.19	120.75	114.00
68	LW	82	LYS	CA-C-O	-5.19	109.19	120.10
82	LK	113	VAL	O-C-N	-5.19	111.23	121.10
32	S1	1287	U	P-O5'-C5'	-5.19	112.59	120.90
32	S1	1435	G	O5'-C5'-C4'	-5.19	101.83	111.70
32	S1	1688	G	O3'-P-O5'	-5.19	94.13	104.00
33	L1	155	G	C5'-C4'-C3'	5.19	124.31	116.00
33	L1	593	G	O4'-C1'-N9	5.19	112.35	108.20
33	L1	1681	U	C5'-C4'-O4'	5.19	115.33	109.10
33	L1	3012	A	C1'-O4'-C4'	5.19	114.05	109.90
45	LQ	25	LYS	O-C-N	-5.19	114.39	122.70
48	LV	67	VAL	N-CA-CB	-5.19	100.08	111.50
81	LD	254	PHE	CB-CG-CD2	-5.19	117.17	120.80
33	L1	978	C	P-O3'-C3'	5.19	125.93	119.70
32	S1	975	A	O4'-C1'-C2'	-5.19	100.61	105.80
33	L1	993	A	OP1-P-O3'	5.19	116.62	105.20
33	L1	1835	A	C3'-C2'-C1'	5.19	105.65	101.50
33	L1	2568	G	N9-C1'-C2'	-5.19	106.29	112.00
11	SM	15	VAL	CB-CA-C	5.19	121.26	111.40
20	SZ	51	PHE	N-CA-CB	5.19	119.94	110.60
32	S1	239	C	OP1-P-OP2	-5.19	111.82	119.60
32	S1	477	A	P-O5'-C5'	-5.19	112.60	120.90
32	S1	1240	A	C3'-C2'-C1'	-5.19	97.35	101.50
33	L1	902	U	O4'-C1'-N1	5.19	112.35	108.20
33	L1	1393	G	C1'-O4'-C4'	-5.19	105.75	109.90
33	L1	2142	A	O4'-C1'-N9	-5.19	104.05	108.20
33	L1	2579	G	C3'-C2'-C1'	-5.19	97.35	101.50
33	L1	2614	U	C4'-C3'-C2'	-5.19	97.41	102.60
33	L1	2721	C	OP1-P-OP2	-5.19	111.82	119.60
33	L1	2933	C	P-O5'-C5'	-5.19	112.60	120.90
74	LJ	77	SER	C-N-CA	5.19	134.67	121.70
80	LC	338	ARG	NE-CZ-NH1	5.19	122.89	120.30
32	S1	36	C	P-O5'-C5'	-5.19	112.60	120.90
33	L1	126	G	C5'-C4'-O4'	5.19	115.32	109.10
33	L1	1331	C	C4'-C3'-C2'	-5.19	97.41	102.60
33	L1	1488	G	C1'-O4'-C4'	5.19	114.05	109.90
33	L1	3146	C	O4'-C1'-N1	5.19	112.35	108.20
80	LC	312	MET	CB-CA-C	5.19	120.77	110.40
4	SD	212	ASP	CA-C-O	5.18	130.99	120.10
13	SQ	122	GLU	N-CA-C	5.18	125.00	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	SP	117	ARG	NE-CZ-NH1	5.18	122.89	120.30
16	SR	124	TYR	O-C-N	-5.18	114.41	122.70
32	S1	1245	G	C4'-C3'-C2'	-5.18	97.42	102.60
32	S1	1403	G	O4'-C1'-C2'	5.18	112.27	107.60
33	L1	55	G	N9-C1'-C2'	-5.18	106.30	112.00
33	L1	859	G	C3'-C2'-C1'	5.18	105.65	101.50
33	L1	881	G	N9-C1'-C2'	5.18	120.74	114.00
33	L1	1244	A	P-O3'-C3'	5.18	125.92	119.70
33	L1	2659	A	C4'-C3'-C2'	5.18	107.78	102.60
37	LB	28	ARG	CD-NE-CZ	-5.18	116.34	123.60
48	LV	61	ARG	CA-CB-CG	5.18	124.81	113.40
50	LZ	40	ARG	NE-CZ-NH2	5.18	122.89	120.30
57	Ll	8	PHE	CD1-CE1-CZ	-5.18	113.88	120.10
66	LN	88	SER	C-N-CA	5.18	134.66	121.70
1	Sa	4	VAL	C-N-CA	5.18	134.66	121.70
4	SD	216	HIS	N-CA-C	5.18	124.99	111.00
14	SP	61	PHE	CB-CG-CD1	5.18	124.43	120.80
32	S1	359	G	N9-C1'-C2'	5.18	120.74	114.00
32	S1	1059	U	C3'-C2'-C1'	-5.18	97.35	101.50
33	L1	232	C	C1'-O4'-C4'	-5.18	105.75	109.90
33	L1	513	C	C5'-C4'-O4'	-5.18	102.88	109.10
35	L2	48	A	O4'-C4'-C3'	-5.18	98.82	104.00
32	S1	1149	U	O4'-C1'-C2'	-5.18	100.62	105.80
32	S1	1303	G	O3'-P-O5'	-5.18	94.16	104.00
33	L1	1810	G	O4'-C1'-C2'	-5.18	100.62	105.80
33	L1	2247	A	C2'-C3'-O3'	5.18	121.99	113.70
33	L1	2840	A	O4'-C1'-C2'	5.18	112.26	107.60
23	SU	94	LYS	N-CA-C	-5.18	97.02	111.00
32	S1	1157	A	N9-C1'-C2'	-5.18	106.30	112.00
32	S1	1334	G	O4'-C1'-N9	5.18	112.34	108.20
33	L1	430	G	O4'-C1'-C2'	5.18	112.26	107.60
33	L1	1067	G	OP2-P-O3'	5.18	116.60	105.20
33	L1	2371	A	N9-C1'-C2'	5.18	120.73	114.00
33	L1	3209	U	O5'-C5'-C4'	5.18	121.54	111.70
33	L1	3347	U	C4'-C3'-C2'	-5.18	97.42	102.60
44	LR	37	VAL	CA-CB-CG2	-5.18	103.13	110.90
47	LU	133	ALA	N-CA-CB	5.18	117.35	110.10
70	Li	11	HIS	C-N-CA	5.18	134.65	121.70
2	SA	59	TRP	CB-CG-CD2	-5.18	119.87	126.60
11	SM	34	LYS	N-CA-CB	-5.18	101.28	110.60
32	S1	1563	A	C4'-C3'-C2'	5.18	107.78	102.60
33	L1	649	A	C1'-O4'-C4'	-5.18	105.76	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
77	Lc	19	LEU	CB-CG-CD1	5.18	119.80	111.00
14	SP	89	ARG	NE-CZ-NH1	5.18	122.89	120.30
25	SC	53	ARG	NE-CZ-NH1	5.18	122.89	120.30
32	S1	858	G	O4'-C1'-C2'	-5.18	100.62	105.80
32	S1	920	A	O4'-C1'-N9	5.18	112.34	108.20
32	S1	1772	A	C5'-C4'-O4'	5.18	115.31	109.10
33	L1	225	G	N9-C1'-C2'	5.18	120.73	114.00
33	L1	551	A	O4'-C1'-C2'	-5.18	100.62	105.80
33	L1	1082	U	OP2-P-O3'	5.18	116.59	105.20
33	L1	1625	G	C1'-O4'-C4'	5.18	114.04	109.90
33	L1	1759	C	C3'-C2'-C1'	5.18	105.64	101.50
33	L1	1786	G	O5'-P-OP2	5.18	116.91	110.70
33	L1	2197	C	N1-C1'-C2'	5.18	120.73	114.00
33	L1	2804	A	C4'-C3'-C2'	5.18	107.78	102.60
33	L1	3070	G	C1'-O4'-C4'	-5.18	105.76	109.90
33	L1	3288	A	P-O5'-C5'	5.18	129.18	120.90
33	L1	3317	G	N9-C1'-C2'	-5.18	106.31	112.00
38	LE	139	ARG	N-CA-CB	-5.18	101.28	110.60
67	LS	82	ARG	NE-CZ-NH2	-5.18	117.71	120.30
81	LD	207	ASN	O-C-N	-5.18	114.42	122.70
82	LK	132	LEU	N-CA-CB	5.18	120.75	110.40
3	SB	35	SER	C-N-CA	5.17	133.17	122.30
3	SB	76	ARG	N-CA-C	5.17	124.97	111.00
7	SI	54	ALA	CB-CA-C	-5.17	102.34	110.10
23	SU	78	PHE	CB-CG-CD1	5.17	124.42	120.80
32	S1	558	C	O4'-C1'-N1	-5.17	104.06	108.20
32	S1	1143	A	C5'-C4'-C3'	-5.17	107.72	116.00
33	L1	1547	G	O4'-C1'-C2'	-5.17	100.62	105.80
33	L1	1818	C	C4'-C3'-O3'	5.17	123.35	113.00
33	L1	1868	C	P-O3'-C3'	5.17	125.91	119.70
33	L1	2941	G	N9-C1'-C2'	5.17	120.73	114.00
67	LS	53	VAL	CB-CA-C	5.17	121.23	111.40
2	SA	228	ASP	O-C-N	-5.17	114.42	122.70
23	SU	94	LYS	C-N-CA	5.17	134.63	121.70
32	S1	1494	G	C5'-C4'-C3'	5.17	124.28	116.00
33	L1	2380	G	C3'-C2'-C1'	-5.17	97.36	101.50
67	LS	111	GLU	CB-CA-C	5.17	120.75	110.40
78	Le	203	PHE	CB-CG-CD1	-5.17	117.18	120.80
16	SR	116	ILE	CB-CA-C	-5.17	101.26	111.60
23	SU	38	ALA	N-CA-C	5.17	124.96	111.00
32	S1	300	U	O4'-C1'-C2'	-5.17	100.63	105.80
32	S1	790	U	P-O5'-C5'	5.17	129.17	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	828	G	O4'-C1'-C2'	5.17	112.25	107.60
32	S1	1170	G	O4'-C1'-N9	5.17	112.34	108.20
33	L1	381	G	C3'-C2'-C1'	5.17	105.64	101.50
33	L1	905	G	C4'-C3'-C2'	-5.17	97.43	102.60
33	L1	1034	U	O4'-C4'-C3'	-5.17	98.83	104.00
33	L1	1268	G	OP1-P-OP2	-5.17	111.84	119.60
33	L1	1392	U	C5'-C4'-C3'	-5.17	107.73	116.00
33	L1	3296	C	O4'-C1'-C2'	-5.17	100.63	105.80
48	LV	27	LYS	CB-CA-C	5.17	120.74	110.40
48	LV	55	LYS	CB-CA-C	5.17	120.74	110.40
51	LY	3	ARG	N-CA-C	5.17	124.96	111.00
51	LY	74	ARG	NH1-CZ-NH2	-5.17	113.71	119.40
80	LC	120	LYS	N-CA-CB	5.17	119.91	110.60
33	L1	856	G	O3'-P-O5'	-5.17	94.18	104.00
33	L1	2770	U	N1-C1'-C2'	-5.17	106.31	112.00
32	S1	1043	C	C3'-C2'-C1'	5.17	105.64	101.50
32	S1	1283	C	N1-C1'-C2'	5.17	120.72	114.00
32	S1	1310	C	N1-C1'-C2'	5.17	120.72	114.00
32	S1	1492	G	P-O3'-C3'	-5.17	113.50	119.70
32	S1	1514	G	C5'-C4'-O4'	5.17	115.30	109.10
33	L1	159	G	C3'-C2'-C1'	-5.17	97.37	101.50
33	L1	819	A	P-O5'-C5'	-5.17	112.63	120.90
33	L1	1176	U	O4'-C1'-N1	5.17	112.33	108.20
33	L1	2714	U	C4'-C3'-C2'	-5.17	97.43	102.60
33	L1	2717	G	C1'-O4'-C4'	-5.17	105.77	109.90
34	L3	115	A	O4'-C4'-C3'	-5.17	98.83	104.00
73	Lp	50	LYS	C-N-CA	5.17	134.62	121.70
76	Lw	41	LEU	N-CA-CB	5.17	120.74	110.40
1	Sa	269	ASP	CB-CA-C	5.17	120.73	110.40
9	SK	52	LEU	C-N-CA	5.17	134.62	121.70
33	L1	542	G	C5'-C4'-C3'	5.17	124.27	116.00
33	L1	875	A	C4'-C3'-C2'	5.17	107.77	102.60
33	L1	1767	G	N9-C1'-C2'	-5.17	106.32	112.00
33	L1	1921	U	P-O5'-C5'	-5.17	112.63	120.90
33	L1	2145	C	C1'-O4'-C4'	5.17	114.03	109.90
33	L1	2335	U	N1-C1'-C2'	5.17	120.72	114.00
33	L1	2515	C	C5'-C4'-C3'	-5.17	107.73	116.00
39	LF	188	GLU	N-CA-CB	5.17	119.90	110.60
43	LO	77	ARG	NH1-CZ-NH2	5.17	125.08	119.40
78	Le	68	LYS	CA-CB-CG	5.17	124.76	113.40
9	SK	71	TYR	CA-C-N	5.17	128.56	117.20
25	SC	55	ARG	NH1-CZ-NH2	-5.17	113.72	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	187	C	OP1-P-OP2	-5.17	111.85	119.60
32	S1	286	C	C3'-C2'-C1'	5.17	105.63	101.50
32	S1	884	G	O4'-C1'-C2'	5.17	112.25	107.60
32	S1	1746	U	C1'-O4'-C4'	-5.17	105.77	109.90
33	L1	260	U	C5'-C4'-C3'	-5.17	107.74	116.00
33	L1	1899	U	OP1-P-O3'	-5.17	93.84	105.20
33	L1	2028	C	C3'-C2'-C1'	5.17	105.63	101.50
31	S2	49	G	C3'-C2'-C1'	-5.16	97.37	101.50
31	S2	60	C	O4'-C1'-N1	5.16	112.33	108.20
33	L1	310	C	C1'-O4'-C4'	-5.16	105.77	109.90
33	L1	548	G	C5'-C4'-O4'	5.16	115.30	109.10
33	L1	564	A	P-O3'-C3'	-5.16	113.50	119.70
33	L1	1394	C	OP1-P-O3'	5.16	116.56	105.20
33	L1	1625	G	O4'-C4'-C3'	-5.16	98.84	104.00
33	L1	1798	C	C4'-C3'-C2'	-5.16	97.44	102.60
33	L1	2161	G	C5'-C4'-C3'	5.16	124.26	116.00
33	L1	2388	C	O5'-P-OP1	5.16	116.90	110.70
33	L1	2476	G	C5'-C4'-C3'	5.16	124.26	116.00
33	L1	2999	G	P-O3'-C3'	5.16	125.90	119.70
35	L2	143	C	C3'-C2'-C1'	5.16	105.63	101.50
46	LT	91	THR	C-N-CA	5.16	134.61	121.70
66	LN	85	GLU	OE1-CD-OE2	5.16	129.50	123.30
8	SJ	119	VAL	CA-CB-CG2	-5.16	103.16	110.90
32	S1	195	A	O4'-C1'-N9	5.16	112.33	108.20
32	S1	913	U	O4'-C1'-C2'	-5.16	100.64	105.80
32	S1	1167	C	C3'-C2'-C1'	5.16	105.63	101.50
32	S1	1730	G	C1'-O4'-C4'	5.16	114.03	109.90
55	Lg	59	ILE	CA-C-O	5.16	130.94	120.10
71	Lj	75	VAL	CA-CB-CG1	5.16	118.64	110.90
81	LD	394	PHE	C-N-CA	5.16	134.60	121.70
31	S2	51	G	C1'-O4'-C4'	-5.16	105.77	109.90
32	S1	144	U	C1'-O4'-C4'	-5.16	105.77	109.90
32	S1	309	C	P-O3'-C3'	-5.16	113.51	119.70
32	S1	1225	A	OP1-P-OP2	-5.16	111.86	119.60
32	S1	1402	C	OP1-P-O3'	5.16	116.56	105.20
32	S1	1572	U	O4'-C1'-N1	-5.16	104.07	108.20
33	L1	1389	C	C1'-O4'-C4'	5.16	114.03	109.90
33	L1	1400	C	N1-C1'-C2'	5.16	120.71	114.00
33	L1	1636	C	O4'-C1'-N1	5.16	112.33	108.20
33	L1	2225	C	O4'-C1'-N1	-5.16	104.07	108.20
33	L1	2512	U	C5'-C4'-C3'	5.16	124.26	116.00
36	LA	40	TYR	CG-CD2-CE2	-5.16	117.17	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	LE	38	VAL	CB-CA-C	5.16	121.20	111.40
38	LE	69	CYS	CA-CB-SG	-5.16	104.71	114.00
45	LQ	124	VAL	N-CA-C	-5.16	97.07	111.00
80	LC	357	GLU	N-CA-CB	5.16	119.89	110.60
11	SM	130	ARG	CB-CA-C	5.16	120.72	110.40
29	ST	28	ASP	CB-CA-C	5.16	120.72	110.40
33	L1	699	C	N1-C1'-C2'	5.16	120.71	114.00
33	L1	1561	U	O5'-P-OP1	5.16	116.89	110.70
33	L1	1960	C	C3'-C2'-C1'	5.16	105.63	101.50
33	L1	2269	U	C1'-O4'-C4'	-5.16	105.77	109.90
33	L1	2333	U	O4'-C4'-C3'	-5.16	98.84	104.00
33	L1	2353	C	N1-C1'-C2'	5.16	120.71	114.00
33	L1	2841	G	C1'-O4'-C4'	-5.16	105.77	109.90
33	L1	3174	C	OP1-P-OP2	-5.16	111.86	119.60
67	LS	83	TYR	CB-CG-CD2	5.16	124.09	121.00
80	LC	21	ARG	NE-CZ-NH2	5.16	122.88	120.30
80	LC	116	ARG	CB-CG-CD	5.16	125.01	111.60
2	SA	189	MET	C-N-CA	5.16	134.59	121.70
13	SQ	86	PRO	N-CA-C	5.16	125.51	112.10
32	S1	177	C	N1-C1'-C2'	-5.16	106.33	112.00
33	L1	1434	G	O4'-C1'-N9	-5.16	104.07	108.20
32	S1	632	G	O5'-P-OP1	5.16	116.89	110.70
32	S1	877	G	C1'-O4'-C4'	5.16	114.03	109.90
33	L1	1083	C	C5'-C4'-C3'	-5.16	107.75	116.00
33	L1	1122	C	P-O5'-C5'	5.16	129.15	120.90
33	L1	1254	A	P-O5'-C5'	5.16	129.15	120.90
33	L1	3233	C	C4'-C3'-C2'	5.16	107.76	102.60
2	SA	161	VAL	CA-CB-CG1	-5.15	103.17	110.90
32	S1	1720	G	O4'-C1'-C2'	5.15	112.24	107.60
33	L1	19	C	O4'-C4'-C3'	-5.15	98.85	104.00
33	L1	125	G	P-O5'-C5'	-5.15	112.65	120.90
33	L1	1887	A	N9-C1'-C2'	-5.15	106.33	112.00
33	L1	3317	G	C2'-C3'-O3'	5.15	121.95	113.70
41	LM	72	LEU	O-C-N	-5.15	114.45	122.70
71	Lj	94	PRO	CA-C-N	5.15	131.53	117.10
3	SB	152	PHE	CB-CG-CD2	-5.15	117.19	120.80
3	SB	178	ARG	CG-CD-NE	5.15	122.62	111.80
9	SK	35	SER	N-CA-CB	5.15	118.23	110.50
32	S1	1021	C	C3'-C2'-C1'	5.15	105.62	101.50
33	L1	120	G	P-O3'-C3'	-5.15	113.52	119.70
33	L1	161	C	O4'-C1'-N1	5.15	112.32	108.20
33	L1	552	G	C3'-C2'-C1'	5.15	105.62	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	792	A	O4'-C1'-N9	5.15	112.32	108.20
33	L1	2395	G	O5'-P-OP1	5.15	116.88	110.70
33	L1	2773	G	C4'-C3'-C2'	-5.15	97.45	102.60
45	LQ	52	LYS	CA-C-N	5.15	128.53	117.20
57	Ll	49	TRP	CB-CG-CD2	5.15	133.30	126.60
2	SA	43	TYR	CB-CA-C	5.15	120.70	110.40
32	S1	9	U	C1'-O4'-C4'	-5.15	105.78	109.90
32	S1	154	A	C1'-O4'-C4'	5.15	114.02	109.90
32	S1	471	G	N9-C1'-C2'	-5.15	106.33	112.00
32	S1	849	G	C1'-O4'-C4'	5.15	114.02	109.90
32	S1	1363	G	P-O5'-C5'	5.15	129.14	120.90
32	S1	1465	C	C1'-O4'-C4'	5.15	114.02	109.90
33	L1	206	C	P-O3'-C3'	-5.15	113.52	119.70
33	L1	748	C	N1-C1'-C2'	5.15	120.69	114.00
33	L1	1181	A	OP1-P-OP2	-5.15	111.87	119.60
33	L1	1470	A	C3'-C2'-C1'	-5.15	97.38	101.50
33	L1	1632	G	C1'-O4'-C4'	-5.15	105.78	109.90
33	L1	1791	U	P-O3'-C3'	5.15	125.88	119.70
33	L1	2004	U	C5'-C4'-O4'	5.15	115.28	109.10
33	L1	3083	C	C5'-C4'-O4'	-5.15	102.92	109.10
33	L1	3301	G	C1'-O4'-C4'	5.15	114.02	109.90
33	L1	3302	A	N9-C1'-C2'	-5.15	106.33	112.00
66	LN	33	GLN	CA-CB-CG	5.15	124.73	113.40
78	Le	173	GLU	N-CA-CB	5.15	119.87	110.60
29	ST	10	ASP	C-N-CA	5.15	134.57	121.70
32	S1	331	U	C3'-C2'-C1'	5.15	105.62	101.50
32	S1	1716	C	C1'-O4'-C4'	-5.15	105.78	109.90
33	L1	1591	A	O3'-P-O5'	-5.15	94.22	104.00
33	L1	1769	C	C3'-C2'-C1'	5.15	105.62	101.50
33	L1	2106	U	O5'-P-OP1	-5.15	101.07	105.70
32	S1	11	A	C4'-C3'-C2'	-5.15	97.45	102.60
32	S1	64	U	P-O3'-C3'	5.15	125.88	119.70
32	S1	138	C	C5'-C4'-O4'	5.15	115.28	109.10
32	S1	692	C	C5'-C4'-O4'	5.15	115.28	109.10
32	S1	1020	U	C3'-C2'-C1'	5.15	105.62	101.50
33	L1	304	A	C3'-C2'-C1'	-5.15	97.38	101.50
33	L1	819	A	O5'-C5'-C4'	-5.15	101.92	111.70
33	L1	844	A	N9-C1'-C2'	5.15	120.69	114.00
33	L1	1246	G	O5'-C5'-C4'	5.15	121.48	111.70
33	L1	2614	U	O4'-C1'-N1	5.15	112.32	108.20
33	L1	2661	G	C5'-C4'-O4'	-5.15	102.92	109.10
35	L2	93	A	C5'-C4'-C3'	5.15	124.23	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	LM	70	PRO	CB-CA-C	-5.15	99.13	112.00
44	LR	25	TYR	CB-CA-C	5.15	120.70	110.40
55	Lg	20	TYR	CB-CG-CD2	-5.15	117.91	121.00
7	SI	65	ARG	NE-CZ-NH2	-5.15	117.73	120.30
32	S1	244	C	OP1-P-OP2	-5.15	111.88	119.60
32	S1	1146	G	C5'-C4'-C3'	-5.15	107.77	116.00
33	L1	941	C	C1'-O4'-C4'	-5.15	105.78	109.90
33	L1	1117	U	C5'-C4'-C3'	-5.15	107.77	116.00
33	L1	1950	G	C1'-O4'-C4'	5.15	114.02	109.90
33	L1	2641	A	O4'-C1'-C2'	-5.15	100.65	105.80
33	L1	2840	A	N9-C1'-C2'	5.15	120.69	114.00
33	L1	3160	G	O4'-C1'-N9	5.15	112.32	108.20
39	LF	170	ASP	N-CA-CB	5.15	119.86	110.60
47	LU	154	TYR	CB-CG-CD1	-5.15	117.91	121.00
56	Lh	37	LYS	N-CA-C	5.15	124.89	111.00
13	SQ	78	ARG	NH1-CZ-NH2	-5.14	113.74	119.40
20	SZ	7	SER	C-N-CA	5.14	134.56	121.70
32	S1	447	C	C4'-C3'-C2'	-5.14	97.45	102.60
32	S1	946	A	P-O5'-C5'	-5.14	112.67	120.90
32	S1	1013	G	O4'-C1'-N9	5.14	112.32	108.20
32	S1	1363	G	C1'-O4'-C4'	-5.14	105.78	109.90
33	L1	38	A	N9-C1'-C2'	-5.14	106.34	112.00
33	L1	518	G	OP1-P-OP2	-5.14	111.88	119.60
33	L1	1335	C	N1-C1'-C2'	5.14	120.69	114.00
33	L1	1375	G	P-O3'-C3'	-5.14	113.53	119.70
33	L1	1602	A	C2'-C3'-O3'	5.14	121.93	113.70
33	L1	1890	C	C2'-C3'-O3'	5.14	121.93	113.70
33	L1	2802	G	P-O5'-C5'	5.14	129.13	120.90
64	LG	188	LEU	CD1-CG-CD2	5.14	125.93	110.50
4	SD	67	GLN	CA-C-N	-5.14	105.89	117.20
8	SJ	82	GLY	N-CA-C	-5.14	100.24	113.10
32	S1	5	U	P-O5'-C5'	-5.14	112.67	120.90
32	S1	119	U	C4'-C3'-C2'	-5.14	97.46	102.60
32	S1	575	G	O4'-C1'-C2'	5.14	112.23	107.60
32	S1	943	G	O4'-C1'-C2'	5.14	112.23	107.60
32	S1	1364	C	O4'-C4'-C3'	-5.14	98.86	104.00
32	S1	1649	C	P-O3'-C3'	5.14	125.87	119.70
32	S1	1761	G	C4'-C3'-C2'	-5.14	97.46	102.60
33	L1	337	C	C5'-C4'-C3'	-5.14	107.77	116.00
33	L1	428	G	N9-C1'-C2'	5.14	120.69	114.00
33	L1	764	A	O4'-C1'-C2'	-5.14	100.66	105.80
33	L1	1137	G	O5'-P-OP2	-5.14	101.07	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2668	U	OP1-P-O3'	5.14	116.51	105.20
34	L3	34	C	C1'-O4'-C4'	-5.14	105.79	109.90
66	LN	93	LEU	CB-CG-CD2	5.14	119.74	111.00
68	LW	39	ALA	CB-CA-C	5.14	117.81	110.10
32	S1	969	U	O4'-C1'-C2'	-5.14	100.66	105.80
33	L1	1268	G	P-O5'-C5'	5.14	129.12	120.90
33	L1	2494	A	O3'-P-O5'	-5.14	94.23	104.00
33	L1	3042	U	C5'-C4'-O4'	5.14	115.27	109.10
43	LO	3	THR	CA-C-O	5.14	130.90	120.10
6	SF	87	ARG	NE-CZ-NH1	5.14	122.87	120.30
25	SC	25	ARG	CD-NE-CZ	-5.14	116.41	123.60
32	S1	1728	G	N9-C1'-C2'	5.14	120.68	114.00
33	L1	967	G	C5'-C4'-C3'	-5.14	107.78	116.00
33	L1	1575	G	O5'-P-OP2	-5.14	101.08	105.70
33	L1	3002	U	O4'-C1'-C2'	5.14	112.23	107.60
33	L1	3331	G	O4'-C1'-C2'	5.14	112.23	107.60
79	Ls	121	PRO	CB-CA-C	5.14	124.85	112.00
4	SD	48	ILE	CG1-CB-CG2	5.14	122.70	111.40
33	L1	1966	C	N1-C1'-C2'	5.14	120.68	114.00
33	L1	2135	U	C5'-C4'-O4'	5.14	115.27	109.10
3	SB	182	LEU	C-N-CA	5.14	133.09	122.30
32	S1	1699	C	N1-C1'-C2'	5.14	120.68	114.00
33	L1	407	A	O3'-P-O5'	5.14	113.76	104.00
33	L1	904	G	P-O3'-C3'	5.14	125.86	119.70
33	L1	2221	U	O5'-P-OP1	5.14	116.86	110.70
33	L1	2354	G	OP1-P-OP2	-5.14	111.89	119.60
33	L1	3156	G	C5'-C4'-C3'	-5.14	107.78	116.00
45	LQ	145	LEU	N-CA-CB	-5.14	100.13	110.40
48	LV	63	TYR	CA-C-O	5.14	130.89	120.10
52	Lb	79	LYS	N-CA-C	-5.14	97.13	111.00
60	Lr	86	LYS	N-CA-CB	5.14	119.85	110.60
66	LN	111	MET	N-CA-C	5.14	124.87	111.00
80	LC	350	THR	CA-C-N	5.14	128.50	117.20
11	SM	89	ASP	CB-CG-OD1	5.13	122.92	118.30
24	SX	70	GLY	C-N-CA	5.13	133.08	122.30
28	SN	30	LEU	O-C-N	5.13	130.91	122.70
32	S1	691	A	P-O3'-C3'	-5.13	113.54	119.70
32	S1	1007	G	C5'-C4'-C3'	5.13	124.21	116.00
32	S1	1101	C	O4'-C1'-N1	5.13	112.31	108.20
32	S1	1747	A	C4'-C3'-C2'	-5.13	97.47	102.60
32	S1	1809	U	O5'-P-OP2	-5.13	101.08	105.70
33	L1	720	G	N9-C1'-C2'	-5.13	106.35	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1539	G	P-O5'-C5'	5.13	129.12	120.90
33	L1	1983	U	O4'-C1'-N1	5.13	112.31	108.20
48	LV	69	ARG	CB-CG-CD	5.13	124.95	111.60
64	LG	59	ARG	O-C-N	-5.13	114.48	122.70
66	LN	15	VAL	O-C-N	-5.13	114.48	122.70
71	Lj	41	THR	CA-CB-CG2	5.13	119.59	112.40
81	LD	316	ARG	CD-NE-CZ	-5.13	116.41	123.60
31	S2	57	A	OP1-P-OP2	-5.13	111.90	119.60
33	L1	533	G	C4'-C3'-C2'	-5.13	97.47	102.60
33	L1	1321	A	O5'-P-OP2	-5.13	101.08	105.70
32	S1	875	C	C3'-C2'-C1'	5.13	105.61	101.50
33	L1	739	C	N1-C1'-C2'	5.13	120.67	114.00
33	L1	1167	G	C1'-O4'-C4'	-5.13	105.80	109.90
33	L1	1430	C	C5'-C4'-C3'	5.13	124.21	116.00
33	L1	1649	G	C5'-C4'-O4'	-5.13	102.94	109.10
38	LE	31	ARG	CB-CA-C	-5.13	100.14	110.40
81	LD	208	ARG	O-C-N	-5.13	114.49	122.70
14	SP	44	LYS	CD-CE-NZ	5.13	123.50	111.70
32	S1	435	C	N1-C1'-C2'	5.13	120.67	114.00
32	S1	506	G	O4'-C1'-N9	5.13	112.30	108.20
32	S1	1337	C	C3'-C2'-C1'	5.13	105.60	101.50
33	L1	900	C	C1'-O4'-C4'	-5.13	105.80	109.90
33	L1	1612	C	P-O3'-C3'	-5.13	113.54	119.70
33	L1	1648	C	C1'-O4'-C4'	5.13	114.00	109.90
33	L1	3209	U	O4'-C1'-N1	5.13	112.30	108.20
33	L1	3332	G	O4'-C1'-N9	5.13	112.30	108.20
42	LP	103	GLU	CB-CG-CD	-5.13	100.35	114.20
77	Lc	105	LEU	O-C-N	-5.13	114.49	122.70
79	Ls	208	ASP	CB-CG-OD1	5.13	122.92	118.30
1	Sa	142	ASP	CB-CG-OD2	5.13	122.92	118.30
32	S1	128	G	O4'-C1'-N9	5.13	112.30	108.20
32	S1	715	U	OP2-P-O3'	5.13	116.48	105.20
40	LH	137	TYR	CB-CG-CD1	-5.13	117.92	121.00
64	LG	55	ASP	CA-CB-CG	-5.13	102.12	113.40
32	S1	418	C	C3'-C2'-C1'	5.13	105.60	101.50
32	S1	776	A	C4'-C3'-O3'	-5.13	98.63	109.40
32	S1	913	U	C1'-O4'-C4'	5.13	114.00	109.90
32	S1	1629	U	N1-C1'-C2'	-5.13	106.36	112.00
32	S1	1662	G	C5'-C4'-C3'	-5.13	107.80	116.00
33	L1	98	A	O4'-C1'-N9	5.13	112.30	108.20
33	L1	445	C	C1'-O4'-C4'	5.13	114.00	109.90
33	L1	1466	U	P-O5'-C5'	5.13	129.10	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1897	A	C1'-O4'-C4'	-5.13	105.80	109.90
33	L1	2288	C	O4'-C1'-N1	-5.13	104.10	108.20
33	L1	3062	G	P-O5'-C5'	5.13	129.10	120.90
46	LT	52	ARG	CA-CB-CG	5.13	124.68	113.40
48	LV	111	ASP	O-C-N	5.13	130.90	122.70
64	LG	91	LYS	CB-CG-CD	5.13	124.93	111.60
67	LS	72	THR	C-N-CA	5.13	134.52	121.70
32	S1	175	A	OP1-P-OP2	-5.12	111.91	119.60
32	S1	777	A	C5'-C4'-C3'	-5.12	107.80	116.00
32	S1	1558	A	C5'-C4'-O4'	5.12	115.25	109.10
33	L1	1706	C	O4'-C1'-C2'	-5.12	100.67	105.80
33	L1	3111	C	C4'-C3'-C2'	-5.12	97.47	102.60
60	Lr	32	LYS	N-CA-CB	-5.12	101.38	110.60
82	LK	193	LYS	N-CA-C	5.12	124.84	111.00
4	SD	107	GLY	CA-C-N	5.12	128.47	117.20
29	ST	27	LYS	C-N-CA	5.12	134.51	121.70
32	S1	98	C	C3'-C2'-C1'	5.12	105.60	101.50
32	S1	1551	A	O4'-C1'-N9	5.12	112.30	108.20
32	S1	1755	G	C1'-O4'-C4'	-5.12	105.80	109.90
33	L1	24	C	P-O5'-C5'	-5.12	112.70	120.90
33	L1	959	U	P-O3'-C3'	-5.12	113.55	119.70
33	L1	1462	C	N1-C1'-C2'	5.12	120.66	114.00
33	L1	1953	C	O4'-C1'-C2'	-5.12	100.68	105.80
33	L1	2349	C	C3'-C2'-C1'	-5.12	97.40	101.50
33	L1	2523	G	C3'-C2'-C1'	-5.12	97.40	101.50
33	L1	3222	G	O4'-C1'-C2'	5.12	112.21	107.60
33	L1	3228	C	N1-C1'-C2'	5.12	120.66	114.00
39	LF	88	ARG	CB-CA-C	-5.12	100.15	110.40
42	LP	95	GLN	CG-CD-OE1	-5.12	111.35	121.60
47	LU	9	SER	N-CA-C	5.12	124.83	111.00
48	LV	13	LYS	CB-CG-CD	5.12	124.92	111.60
48	LV	124	GLN	N-CA-C	-5.12	97.17	111.00
64	LG	178	LYS	N-CA-CB	5.12	119.82	110.60
78	Le	135	TYR	CB-CG-CD1	-5.12	117.93	121.00
83	Lm	91	GLU	C-N-CA	5.12	134.51	121.70
5	SE	106	ARG	N-CA-C	-5.12	97.17	111.00
32	S1	181	C	O4'-C4'-C3'	-5.12	98.88	104.00
32	S1	193	G	OP1-P-OP2	-5.12	111.92	119.60
32	S1	547	C	P-O3'-C3'	-5.12	113.56	119.70
32	S1	1746	U	C3'-C2'-C1'	5.12	105.60	101.50
33	L1	316	A	C4'-C3'-C2'	5.12	107.72	102.60
33	L1	1000	A	C5'-C4'-C3'	5.12	124.19	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	1316	C	C2'-C3'-O3'	5.12	121.89	113.70
33	L1	1618	U	O3'-P-O5'	-5.12	94.27	104.00
33	L1	1627	U	C4'-C3'-C2'	-5.12	97.48	102.60
33	L1	3291	C	O4'-C1'-C2'	-5.12	100.68	105.80
33	L1	3305	U	O4'-C1'-N1	5.12	112.30	108.20
54	Lf	20	LEU	CA-CB-CG	5.12	127.08	115.30
32	S1	1431	A	C3'-C2'-C1'	5.12	105.60	101.50
33	L1	159	G	O4'-C1'-N9	5.12	112.30	108.20
33	L1	245	C	O4'-C1'-N1	5.12	112.30	108.20
33	L1	1223	U	OP1-P-OP2	-5.12	111.92	119.60
33	L1	1317	G	C4'-C3'-C2'	5.12	107.72	102.60
33	L1	2102	C	O4'-C1'-C2'	-5.12	100.68	105.80
33	L1	3197	C	P-O3'-C3'	5.12	125.84	119.70
35	L2	150	G	P-O3'-C3'	5.12	125.84	119.70
1	Sa	245	TYR	CG-CD1-CE1	5.12	125.39	121.30
27	SH	89	TRP	CA-CB-CG	5.12	123.42	113.70
32	S1	445	A	N9-C1'-C2'	5.12	120.65	114.00
33	L1	212	G	P-O3'-C3'	-5.12	113.56	119.70
33	L1	1206	A	O4'-C4'-C3'	-5.12	98.88	104.00
35	L2	26	U	P-O3'-C3'	-5.12	113.56	119.70
36	LA	210	GLY	C-N-CA	5.12	134.50	121.70
80	LC	238	VAL	CA-CB-CG2	-5.12	103.22	110.90
32	S1	1415	G	C3'-C2'-C1'	5.12	105.59	101.50
32	S1	1521	G	OP1-P-OP2	-5.12	111.92	119.60
33	L1	279	G	OP1-P-O3'	5.12	116.46	105.20
33	L1	526	A	C3'-C2'-C1'	5.12	105.59	101.50
33	L1	1634	G	C2'-C3'-O3'	5.12	121.89	113.70
33	L1	2099	G	N9-C1'-C2'	5.12	120.65	114.00
41	LM	42	VAL	O-C-N	-5.12	114.51	122.70
59	Lo	45	ARG	N-CA-C	5.12	124.82	111.00
66	LN	85	GLU	O-C-N	-5.12	114.51	122.70
77	Lc	117	GLN	C-N-CA	5.12	134.49	121.70
77	Lc	120	PHE	CG-CD2-CE2	-5.12	115.17	120.80
79	Ls	214	LEU	CB-CA-C	5.12	119.92	110.20
25	SC	19	ARG	CB-CA-C	-5.12	100.17	110.40
32	S1	857	A	C3'-C2'-C1'	-5.12	97.41	101.50
33	L1	183	C	C4'-C3'-C2'	-5.12	97.48	102.60
33	L1	1481	C	C1'-O4'-C4'	-5.12	105.81	109.90
33	L1	1630	C	P-O5'-C5'	5.12	129.09	120.90
33	L1	2262	C	O4'-C1'-N1	5.12	112.29	108.20
33	L1	2616	U	C1'-O4'-C4'	-5.12	105.81	109.90
33	L1	2741	G	C3'-C2'-C1'	-5.12	97.41	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	LH	196	LEU	CB-CG-CD1	5.12	119.70	111.00
52	Lb	71	VAL	O-C-N	5.12	130.89	122.70
77	Lc	67	ARG	CD-NE-CZ	-5.12	116.44	123.60
32	S1	1019	G	C1'-O4'-C4'	-5.11	105.81	109.90
32	S1	1244	U	O4'-C1'-C2'	-5.11	100.69	105.80
33	L1	70	A	C3'-C2'-C1'	5.11	105.59	101.50
33	L1	517	G	C3'-C2'-C1'	-5.11	97.41	101.50
33	L1	977	G	O4'-C1'-N9	5.11	112.29	108.20
33	L1	1394	C	C2'-C3'-O3'	5.11	121.88	113.70
33	L1	1498	U	C3'-C2'-C1'	5.11	105.59	101.50
33	L1	1788	C	O4'-C1'-N1	5.11	112.29	108.20
33	L1	2151	G	C2'-C3'-O3'	5.11	121.88	113.70
33	L1	2804	A	O4'-C1'-N9	5.11	112.29	108.20
33	L1	2871	U	C1'-O4'-C4'	-5.11	105.81	109.90
44	LR	41	LYS	N-CA-CB	-5.11	101.40	110.60
20	SZ	5	HIS	CA-C-N	5.11	126.42	116.20
32	S1	109	A	O4'-C1'-N9	5.11	112.29	108.20
33	L1	853	U	C5'-C4'-C3'	5.11	124.18	116.00
33	L1	1264	A	C5'-C4'-O4'	5.11	115.23	109.10
33	L1	3082	G	P-O3'-C3'	5.11	125.83	119.70
35	L2	127	G	N9-C1'-C2'	-5.11	106.38	112.00
64	LG	1	MET	O-C-N	-5.11	114.52	122.70
74	LJ	74	VAL	CA-CB-CG1	5.11	118.57	110.90
33	L1	1041	C	C4'-C3'-C2'	-5.11	97.49	102.60
33	L1	1286	G	C3'-C2'-C1'	5.11	105.59	101.50
33	L1	2419	C	C4'-C3'-C2'	-5.11	97.49	102.60
48	LV	128	ARG	N-CA-CB	5.11	119.80	110.60
64	LG	29	LYS	CA-C-O	-5.11	109.37	120.10
11	SM	132	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
32	S1	731	G	C5'-C4'-C3'	-5.11	107.83	116.00
32	S1	1092	A	C1'-O4'-C4'	5.11	113.99	109.90
40	LH	230	GLY	N-CA-C	-5.11	100.33	113.10
80	LC	235	ARG	NE-CZ-NH2	-5.11	117.75	120.30
14	SP	43	PHE	CB-CG-CD2	5.11	124.38	120.80
28	SN	36	LEU	CB-CG-CD2	5.11	119.68	111.00
32	S1	440	A	C5'-C4'-C3'	-5.11	107.83	116.00
32	S1	1567	G	C5'-C4'-C3'	-5.11	107.83	116.00
32	S1	1583	G	C1'-O4'-C4'	-5.11	105.81	109.90
33	L1	136	C	O4'-C4'-C3'	5.11	110.19	106.10
33	L1	1078	U	C4'-C3'-C2'	-5.11	97.49	102.60
33	L1	1534	C	O4'-C1'-C2'	-5.11	100.69	105.80
33	L1	2588	G	C5'-C4'-C3'	5.11	124.17	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LV	153	GLU	CB-CG-CD	5.11	127.99	114.20
11	SM	97	GLN	CG-CD-NE2	-5.11	104.44	116.70
32	S1	1653	G	C1'-O4'-C4'	-5.11	105.82	109.90
32	S1	1785	U	N1-C1'-C2'	-5.11	106.38	112.00
33	L1	130	G	C3'-C2'-C1'	-5.11	97.42	101.50
33	L1	268	U	C3'-C2'-C1'	5.11	105.58	101.50
33	L1	958	U	P-O3'-C3'	5.11	125.83	119.70
33	L1	1024	G	C1'-O4'-C4'	-5.11	105.82	109.90
33	L1	2074	C	O4'-C1'-N1	5.11	112.28	108.20
33	L1	2735	G	OP2-P-O3'	5.11	116.43	105.20
56	Lh	8	LYS	O-C-N	-5.11	114.53	122.70
13	SQ	97	ARG	CB-CG-CD	5.10	124.87	111.60
32	S1	964	U	C3'-C2'-C1'	5.10	105.58	101.50
32	S1	1740	G	C5'-C4'-C3'	5.10	124.17	116.00
33	L1	543	C	C1'-C2'-O2'	5.10	125.91	110.60
33	L1	638	G	O4'-C1'-N9	5.10	112.28	108.20
33	L1	928	A	O3'-P-O5'	-5.10	94.30	104.00
33	L1	1443	G	OP1-P-OP2	-5.10	111.94	119.60
33	L1	2176	A	O5'-C5'-C4'	-5.10	102.00	111.70
33	L1	3349	C	P-O3'-C3'	5.10	125.83	119.70
34	L3	5	G	O4'-C1'-C2'	5.10	112.19	107.60
81	LD	351	ARG	C-N-CA	5.10	134.46	121.70
1	Sa	11	HIS	CA-CB-CG	5.10	122.27	113.60
5	SE	149	ARG	NE-CZ-NH2	-5.10	117.75	120.30
25	SC	161	SER	O-C-N	-5.10	114.54	122.70
32	S1	483	C	OP1-P-OP2	-5.10	111.95	119.60
32	S1	799	A	P-O3'-C3'	-5.10	113.58	119.70
32	S1	1330	A	C3'-C2'-C1'	5.10	105.58	101.50
33	L1	208	G	O4'-C1'-N9	5.10	112.28	108.20
33	L1	744	C	O4'-C1'-N1	5.10	112.28	108.20
33	L1	1789	C	C5'-C4'-C3'	-5.10	107.83	116.00
33	L1	2745	C	C5'-C4'-O4'	5.10	115.22	109.10
33	L1	3127	C	O4'-C1'-N1	5.10	112.28	108.20
35	L2	117	U	N1-C1'-C2'	5.10	120.63	114.00
59	Lo	21	ARG	CA-CB-CG	5.10	124.62	113.40
70	Li	10	ARG	NE-CZ-NH2	-5.10	117.75	120.30
72	Lk	111	LYS	N-CA-CB	5.10	119.79	110.60
32	S1	648	C	P-O3'-C3'	5.10	125.82	119.70
32	S1	1293	U	C4'-C3'-C2'	-5.10	97.50	102.60
33	L1	546	C	C2'-C3'-O3'	5.10	121.86	113.70
33	L1	2565	C	C3'-C2'-C1'	5.10	105.58	101.50
33	L1	2660	A	O4'-C1'-N9	-5.10	104.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LV	26	PHE	CB-CG-CD2	-5.10	117.23	120.80
67	LS	61	LEU	CB-CG-CD1	5.10	119.67	111.00
81	LD	253	ARG	NE-CZ-NH1	5.10	122.85	120.30
1	Sa	28	ARG	CA-CB-CG	5.10	124.62	113.40
9	SK	33	PHE	CA-C-N	-5.10	105.98	117.20
15	SS	95	PHE	CB-CG-CD1	-5.10	117.23	120.80
32	S1	245	C	OP1-P-OP2	-5.10	111.95	119.60
32	S1	447	C	C3'-C2'-C1'	5.10	105.58	101.50
33	L1	668	U	O3'-P-O5'	5.10	113.69	104.00
33	L1	1003	G	P-O3'-C3'	5.10	125.82	119.70
33	L1	1164	G	P-O5'-C5'	5.10	129.06	120.90
33	L1	1297	U	P-O5'-C5'	5.10	129.06	120.90
33	L1	1952	U	C3'-C2'-C1'	5.10	105.58	101.50
33	L1	2308	A	C3'-C2'-C1'	5.10	105.58	101.50
33	L1	2758	C	C5'-C4'-O4'	5.10	115.22	109.10
33	L1	2796	G	OP1-P-OP2	-5.10	111.95	119.60
33	L1	3151	C	C4'-C3'-C2'	-5.10	97.50	102.60
66	LN	5	ARG	N-CA-CB	5.10	119.78	110.60
67	LS	154	VAL	C-N-CA	5.10	134.45	121.70
69	La	11	VAL	C-N-CA	5.10	134.45	121.70
78	Le	120	LYS	CB-CA-C	5.10	120.60	110.40
2	SA	60	GLU	OE1-CD-OE2	-5.10	117.18	123.30
29	ST	42	ASN	CA-CB-CG	5.10	124.61	113.40
32	S1	917	U	O3'-P-O5'	-5.10	94.31	104.00
32	S1	1755	G	C3'-C2'-C1'	-5.10	97.42	101.50
33	L1	526	A	C5'-C4'-C3'	-5.10	107.84	116.00
33	L1	1084	G	C1'-O4'-C4'	5.10	113.98	109.90
33	L1	1279	C	P-O5'-C5'	-5.10	112.74	120.90
33	L1	1684	U	C4'-C3'-C2'	-5.10	97.50	102.60
33	L1	2644	U	P-O5'-C5'	5.10	129.06	120.90
33	L1	3000	U	C1'-O4'-C4'	5.10	113.98	109.90
34	L3	73	U	N1-C1'-C2'	-5.10	106.39	112.00
40	LH	224	GLU	C-N-CA	5.10	134.44	121.70
45	LQ	242	LYS	O-C-N	-5.10	114.54	122.70
2	SA	17	GLN	N-CA-CB	5.10	119.77	110.60
32	S1	565	G	O4'-C4'-C3'	-5.10	98.90	104.00
33	L1	2299	C	C1'-O4'-C4'	-5.10	105.82	109.90
33	L1	3162	C	C4'-C3'-C2'	-5.10	97.50	102.60
39	LF	120	LYS	CB-CA-C	5.10	120.59	110.40
49	LX	43	HIS	CA-CB-CG	5.10	122.26	113.60
69	La	40	HIS	N-CA-CB	-5.10	101.43	110.60
74	LJ	16	ARG	N-CA-C	-5.10	97.24	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	SS	23	ALA	CB-CA-C	5.09	117.74	110.10
32	S1	603	A	C5'-C4'-O4'	5.09	115.21	109.10
33	L1	715	A	C2'-C3'-O3'	5.09	121.85	113.70
33	L1	743	C	C3'-C2'-C1'	5.09	105.58	101.50
33	L1	2281	U	C3'-C2'-C1'	5.09	105.58	101.50
33	L1	2571	C	O4'-C1'-N1	5.09	112.28	108.20
33	L1	2677	A	N9-C1'-C2'	-5.09	106.40	112.00
33	L1	2723	G	O3'-P-O5'	-5.09	94.32	104.00
33	L1	2801	A	O5'-P-OP2	-5.09	101.12	105.70
35	L2	102	U	C2'-C3'-O3'	5.09	121.85	113.70
3	SB	167	TYR	CB-CG-CD2	-5.09	117.94	121.00
30	S3	18	C	O5'-P-OP2	5.09	116.81	110.70
33	L1	211	A	P-O3'-C3'	-5.09	113.59	119.70
33	L1	738	A	C1'-O4'-C4'	5.09	113.97	109.90
33	L1	1278	A	O4'-C1'-N9	5.09	112.27	108.20
33	L1	1448	U	P-O3'-C3'	-5.09	113.59	119.70
11	SM	99	VAL	CG1-CB-CG2	-5.09	102.75	110.90
25	SC	164	SER	CA-CB-OG	5.09	124.95	111.20
32	S1	11	A	C1'-O4'-C4'	5.09	113.97	109.90
32	S1	831	C	O4'-C1'-C2'	-5.09	100.71	105.80
32	S1	849	G	C5'-C4'-O4'	5.09	115.21	109.10
33	L1	956	G	C1'-O4'-C4'	-5.09	105.83	109.90
33	L1	3333	C	O3'-P-O5'	5.09	113.67	104.00
35	L2	89	G	P-O5'-C5'	5.09	129.05	120.90
35	L2	98	C	N1-C1'-C2'	5.09	120.62	114.00
49	LX	34	LYS	CA-C-N	5.09	128.40	117.20
69	La	21	ARG	CA-C-N	5.09	128.40	117.20
17	SV	14	LYS	N-CA-C	-5.09	97.26	111.00
25	SC	145	ILE	N-CA-CB	5.09	122.51	110.80
27	SH	84	LYS	C-N-CA	5.09	134.43	121.70
32	S1	371	A	O4'-C1'-N9	5.09	112.27	108.20
32	S1	1131	G	C4'-C3'-C2'	-5.09	97.51	102.60
32	S1	1673	C	O4'-C1'-N1	5.09	112.27	108.20
33	L1	1361	G	C3'-C2'-C1'	-5.09	97.43	101.50
33	L1	1577	A	P-O3'-C3'	5.09	125.81	119.70
33	L1	1581	C	C1'-O4'-C4'	-5.09	105.83	109.90
33	L1	2452	U	C3'-C2'-C1'	5.09	105.57	101.50
33	L1	3002	U	O5'-P-OP2	-5.09	101.12	105.70
33	L1	3338	U	O4'-C4'-C3'	-5.09	98.91	104.00
34	L3	3	A	O5'-P-OP2	-5.09	101.12	105.70
38	LE	94	LEU	N-CA-CB	5.09	120.58	110.40
64	LG	151	LYS	CB-CA-C	5.09	120.58	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	SV	68	GLU	CB-CA-C	5.09	120.58	110.40
32	S1	1479	U	C1'-O4'-C4'	5.09	113.97	109.90
32	S1	1722	C	N1-C1'-C2'	5.09	120.61	114.00
33	L1	3121	C	P-O5'-C5'	5.09	129.04	120.90
41	LM	73	ARG	CA-CB-CG	5.09	124.59	113.40
6	SF	41	HIS	N-CA-CB	5.09	119.75	110.60
14	SP	63	GLY	N-CA-C	-5.09	100.39	113.10
19	SY	2	ASP	N-CA-CB	5.09	119.75	110.60
32	S1	599	G	O3'-P-O5'	5.09	113.66	104.00
32	S1	631	C	C5'-C4'-O4'	-5.09	103.00	109.10
32	S1	840	U	C5'-C4'-C3'	-5.09	107.86	116.00
32	S1	965	U	C4'-C3'-C2'	-5.09	97.51	102.60
33	L1	35	U	O5'-P-OP1	5.09	116.80	110.70
33	L1	1844	U	P-O5'-C5'	5.09	129.04	120.90
33	L1	2741	G	C1'-O4'-C4'	-5.09	105.83	109.90
34	L3	102	G	N9-C1'-C2'	-5.09	106.41	112.00
35	L2	116	U	C3'-C2'-C1'	5.09	105.57	101.50
68	LW	34	LYS	N-CA-CB	5.09	119.75	110.60
3	SB	170	ALA	CB-CA-C	-5.08	102.47	110.10
33	L1	100	C	C3'-C2'-C1'	5.08	105.57	101.50
33	L1	1548	U	P-O3'-C3'	5.08	125.80	119.70
33	L1	1844	U	O4'-C1'-N1	-5.08	104.13	108.20
33	L1	2252	C	N1-C1'-C2'	-5.08	106.41	112.00
33	L1	2756	G	N9-C1'-C2'	-5.08	106.41	112.00
33	L1	3213	A	O4'-C1'-N9	5.08	112.27	108.20
35	L2	31	U	O5'-P-OP2	-5.08	101.12	105.70
8	SJ	79	CYS	N-CA-CB	5.08	119.75	110.60
32	S1	311	G	N9-C1'-C2'	5.08	120.61	114.00
32	S1	1058	G	C4'-C3'-C2'	-5.08	97.52	102.60
32	S1	1157	A	O4'-C1'-N9	5.08	112.27	108.20
32	S1	1298	G	C1'-O4'-C4'	-5.08	105.83	109.90
32	S1	1309	U	P-O3'-C3'	5.08	125.80	119.70
32	S1	1511	A	O4'-C4'-C3'	-5.08	98.92	104.00
33	L1	303	U	O3'-P-O5'	5.08	113.66	104.00
33	L1	818	G	C5'-C4'-O4'	5.08	115.20	109.10
33	L1	949	C	O4'-C1'-C2'	-5.08	100.72	105.80
33	L1	1271	U	C3'-C2'-C1'	-5.08	97.43	101.50
33	L1	1429	U	O5'-P-OP2	5.08	116.80	110.70
33	L1	1974	C	O4'-C1'-C2'	-5.08	100.72	105.80
35	L2	27	C	N1-C1'-C2'	5.08	120.61	114.00
49	LX	134	VAL	O-C-N	-5.08	114.57	122.70
59	Lo	25	TYR	O-C-N	-5.08	114.57	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
67	LS	116	HIS	N-CA-C	5.08	124.72	111.00
8	SJ	33	LEU	N-CA-CB	5.08	120.56	110.40
32	S1	554	A	N9-C1'-C2'	-5.08	106.41	112.00
32	S1	623	A	OP1-P-OP2	-5.08	111.98	119.60
32	S1	1467	C	O3'-P-O5'	-5.08	94.35	104.00
33	L1	37	U	N1-C1'-C2'	5.08	120.61	114.00
33	L1	233	C	OP1-P-OP2	-5.08	111.98	119.60
33	L1	545	C	C5'-C4'-C3'	5.08	124.13	116.00
33	L1	636	C	O4'-C1'-C2'	-5.08	100.72	105.80
33	L1	1193	A	C1'-O4'-C4'	5.08	113.96	109.90
33	L1	2322	G	O4'-C1'-N9	5.08	112.27	108.20
33	L1	2871	U	P-O5'-C5'	-5.08	112.77	120.90
34	L3	97	G	P-O3'-C3'	-5.08	113.60	119.70
38	LE	73	ILE	CA-CB-CG1	5.08	120.66	111.00
46	LT	23	TRP	CG-CD1-NE1	5.08	115.18	110.10
48	LV	62	ARG	O-C-N	5.08	130.83	122.70
48	LV	70	THR	C-N-CA	5.08	134.40	121.70
32	S1	1103	U	P-O3'-C3'	5.08	125.80	119.70
32	S1	1282	G	O4'-C1'-N9	-5.08	104.14	108.20
32	S1	1288	C	P-O5'-C5'	-5.08	112.77	120.90
33	L1	2952	G	O4'-C4'-C3'	5.08	110.16	106.10
74	LJ	107	LEU	C-N-CA	5.08	134.40	121.70
15	SS	79	GLN	C-N-CA	5.08	134.40	121.70
27	SH	106	THR	C-N-CA	-5.08	109.00	121.70
33	L1	139	U	C1'-O4'-C4'	-5.08	105.84	109.90
33	L1	181	G	C3'-C2'-C1'	-5.08	97.44	101.50
33	L1	616	A	N9-C1'-C2'	-5.08	106.41	112.00
33	L1	815	G	C1'-O4'-C4'	5.08	113.96	109.90
33	L1	1882	A	C5'-C4'-C3'	5.08	124.13	116.00
33	L1	2050	G	O4'-C1'-N9	5.08	112.26	108.20
33	L1	2822	A	C3'-C2'-C1'	5.08	105.56	101.50
45	LQ	131	TYR	CB-CG-CD1	-5.08	117.95	121.00
1	Sa	211	LEU	N-CA-CB	5.08	120.55	110.40
2	SA	44	LYS	CB-CA-C	-5.08	100.25	110.40
13	SQ	21	TYR	CB-CG-CD1	-5.08	117.95	121.00
33	L1	454	A	N9-C1'-C2'	5.08	120.60	114.00
33	L1	2108	C	C1'-O4'-C4'	5.08	113.96	109.90
33	L1	2783	U	C3'-C2'-C1'	-5.08	97.44	101.50
56	Lh	101	VAL	CA-CB-CG2	-5.08	103.28	110.90
33	L1	937	G	C1'-C2'-O2'	5.08	125.82	110.60
33	L1	1052	A	O4'-C1'-C2'	-5.08	100.72	105.80
33	L1	1264	A	O4'-C1'-N9	5.08	112.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2420	U	O4'-C1'-N1	5.08	112.26	108.20
33	L1	2508	U	C3'-C2'-C1'	-5.08	97.44	101.50
33	L1	2748	G	C5'-C4'-O4'	5.08	115.19	109.10
33	L1	2995	G	C4'-C3'-C2'	-5.08	97.53	102.60
38	LE	113	ASP	N-CA-CB	5.08	119.74	110.60
42	LP	180	THR	CA-CB-CG2	5.08	119.50	112.40
32	S1	1545	A	O4'-C4'-C3'	-5.07	98.93	104.00
33	L1	230	G	O5'-C5'-C4'	5.07	121.34	111.70
33	L1	534	G	C2'-C3'-O3'	5.07	121.82	113.70
33	L1	609	C	O4'-C1'-N1	5.07	112.26	108.20
33	L1	1191	U	P-O5'-C5'	-5.07	112.78	120.90
33	L1	1866	C	C5'-C4'-C3'	5.07	124.12	116.00
56	Lh	22	HIS	CA-CB-CG	5.07	122.23	113.60
69	La	70	CYS	N-CA-CB	5.07	119.73	110.60
15	SS	45	PHE	C-N-CA	5.07	134.38	121.70
32	S1	877	G	P-O3'-C3'	5.07	125.79	119.70
33	L1	1152	G	C5'-C4'-O4'	5.07	115.19	109.10
33	L1	1666	C	C5'-C4'-C3'	-5.07	107.88	116.00
33	L1	2081	C	N1-C1'-C2'	5.07	120.59	114.00
51	LY	19	PHE	CB-CG-CD1	5.07	124.35	120.80
1	Sa	40	TYR	CB-CG-CD2	-5.07	117.96	121.00
32	S1	215	A	OP1-P-OP2	-5.07	111.99	119.60
32	S1	914	U	O4'-C1'-N1	5.07	112.26	108.20
32	S1	1288	C	C5'-C4'-O4'	5.07	115.18	109.10
33	L1	2462	G	C5'-C4'-C3'	5.07	124.11	116.00
33	L1	2998	A	C4'-C3'-C2'	-5.07	97.53	102.60
51	LY	21	ALA	N-CA-C	5.07	124.69	111.00
68	LW	104	VAL	CA-CB-CG1	5.07	118.50	110.90
11	SM	37	GLY	N-CA-C	-5.07	100.43	113.10
32	S1	1012	C	O4'-C1'-C2'	-5.07	100.73	105.80
33	L1	489	C	O4'-C1'-N1	5.07	112.25	108.20
33	L1	1212	U	O4'-C1'-N1	5.07	112.25	108.20
81	LD	40	VAL	O-C-N	-5.07	114.59	122.70
17	SV	17	LYS	N-CA-C	-5.07	97.31	111.00
32	S1	1782	C	O4'-C1'-N1	5.07	112.25	108.20
33	L1	2641	A	C5'-C4'-O4'	5.07	115.18	109.10
33	L1	3236	A	OP1-P-O3'	5.07	116.35	105.20
41	LM	33	GLY	CA-C-O	-5.07	111.48	120.60
49	LX	77	LEU	CB-CG-CD1	5.07	119.61	111.00
68	LW	103	ARG	C-N-CA	5.07	134.37	121.70
11	SM	34	LYS	CB-CA-C	5.07	120.53	110.40
32	S1	1344	U	C3'-C2'-C1'	5.07	105.55	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	72	A	O4'-C1'-C2'	-5.07	100.73	105.80
33	L1	844	A	O4'-C1'-N9	5.07	112.25	108.20
33	L1	1307	A	N9-C1'-C2'	-5.07	106.43	112.00
33	L1	2659	A	OP1-P-O3'	5.07	116.34	105.20
33	L1	2711	U	C3'-C2'-C1'	-5.07	97.45	101.50
33	L1	2747	U	C5'-C4'-C3'	-5.07	107.89	116.00
50	LZ	25	ARG	NE-CZ-NH1	5.07	122.83	120.30
50	LZ	36	SER	CB-CA-C	-5.07	100.47	110.10
52	Lb	106	GLN	CG-CD-OE1	5.07	131.73	121.60
67	LS	1	MET	CG-SD-CE	-5.07	92.09	100.20
81	LD	24	SER	N-CA-CB	5.07	118.10	110.50
2	SA	21	MET	CG-SD-CE	-5.06	92.10	100.20
15	SS	54	ASP	CB-CA-C	-5.06	100.27	110.40
32	S1	1125	U	O4'-C1'-N1	5.06	112.25	108.20
32	S1	1784	G	N9-C1'-C2'	5.06	120.58	114.00
33	L1	1089	G	P-O3'-C3'	-5.06	113.62	119.70
33	L1	1217	G	C4'-C3'-C2'	-5.06	97.54	102.60
33	L1	1790	A	C3'-C2'-C1'	5.06	105.55	101.50
33	L1	2888	U	O4'-C1'-N1	5.06	112.25	108.20
48	LV	76	ARG	CB-CG-CD	5.06	124.77	111.60
80	LC	230	GLU	CB-CG-CD	-5.06	100.53	114.20
1	Sa	207	ASP	O-C-N	-5.06	114.60	122.70
32	S1	482	A	P-O5'-C5'	5.06	129.00	120.90
32	S1	672	G	O4'-C1'-C2'	5.06	112.16	107.60
32	S1	919	G	C3'-C2'-C1'	5.06	105.55	101.50
32	S1	1351	U	C4'-C3'-C2'	5.06	107.66	102.60
32	S1	1433	A	N9-C1'-C2'	-5.06	106.43	112.00
32	S1	1580	G	C5'-C4'-O4'	5.06	115.18	109.10
32	S1	1637	G	O4'-C1'-C2'	5.06	112.16	107.60
33	L1	468	U	C3'-C2'-C1'	5.06	105.55	101.50
33	L1	921	C	P-O3'-C3'	-5.06	113.63	119.70
33	L1	2547	C	C4'-C3'-C2'	5.06	107.66	102.60
33	L1	2691	U	O4'-C1'-N1	5.06	112.25	108.20
33	L1	2796	G	P-O5'-C5'	-5.06	112.80	120.90
33	L1	3383	C	C4'-C3'-C2'	-5.06	97.54	102.60
49	LX	131	LYS	CA-CB-CG	5.06	124.54	113.40
52	Lb	120	ALA	C-N-CA	5.06	134.36	121.70
55	Lg	105	GLU	N-CA-CB	-5.06	101.49	110.60
80	LC	54	THR	N-CA-CB	5.06	119.92	110.30
32	S1	182	C	C4'-C3'-C2'	-5.06	97.54	102.60
33	L1	46	A	O4'-C1'-N9	5.06	112.25	108.20
33	L1	1020	U	O4'-C1'-C2'	-5.06	100.74	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2918	U	C4'-C3'-C2'	-5.06	97.54	102.60
34	L3	23	A	N9-C1'-C2'	-5.06	106.43	112.00
5	SE	94	PRO	CA-N-CD	-5.06	104.42	111.50
32	S1	603	A	O4'-C1'-N9	5.06	112.25	108.20
33	L1	147	G	C5'-C4'-C3'	5.06	124.10	116.00
33	L1	173	C	O4'-C1'-C2'	-5.06	100.74	105.80
33	L1	388	G	C4'-C3'-C2'	-5.06	97.54	102.60
33	L1	494	C	N1-C1'-C2'	5.06	120.58	114.00
33	L1	899	A	O4'-C1'-N9	5.06	112.25	108.20
33	L1	1817	U	C3'-C2'-C1'	5.06	105.55	101.50
33	L1	2230	C	C1'-C2'-O2'	5.06	125.78	110.60
34	L3	104	C	N1-C1'-C2'	5.06	120.58	114.00
49	LX	70	TYR	CB-CG-CD1	-5.06	117.96	121.00
55	Lg	18	ARG	NE-CZ-NH1	5.06	122.83	120.30
66	LN	3	PHE	CB-CG-CD2	5.06	124.34	120.80
3	SB	136	VAL	O-C-N	-5.06	114.61	122.70
15	SS	98	SER	N-CA-C	-5.06	97.35	111.00
32	S1	946	A	O4'-C1'-C2'	5.06	112.15	107.60
32	S1	1133	C	C5'-C4'-O4'	5.06	115.17	109.10
33	L1	545	C	O4'-C1'-N1	5.06	112.25	108.20
33	L1	1563	G	OP1-P-O3'	5.06	116.33	105.20
33	L1	1636	C	O3'-P-O5'	-5.06	94.39	104.00
33	L1	1830	U	O4'-C1'-N1	-5.06	104.16	108.20
32	S1	904	G	O4'-C1'-N9	5.06	112.25	108.20
33	L1	307	C	O4'-C4'-C3'	-5.06	98.94	104.00
33	L1	1428	G	O5'-P-OP1	-5.06	101.15	105.70
33	L1	2066	G	C4'-C3'-C2'	-5.06	97.54	102.60
33	L1	2204	U	O4'-C4'-C3'	-5.06	98.94	104.00
55	Lg	58	ARG	C-N-CA	5.06	134.34	121.70
72	Lk	48	ARG	CA-C-N	5.06	128.32	117.20
16	SR	60	ARG	NE-CZ-NH1	5.05	122.83	120.30
32	S1	17	C	O4'-C1'-N1	5.05	112.24	108.20
32	S1	985	G	P-O3'-C3'	5.05	125.77	119.70
32	S1	1088	G	C5'-C4'-O4'	5.05	115.16	109.10
33	L1	337	C	O4'-C4'-C3'	5.05	110.14	106.10
33	L1	474	G	C3'-C2'-C1'	-5.05	97.46	101.50
33	L1	1235	A	P-O3'-C3'	-5.05	113.63	119.70
33	L1	1442	U	P-O5'-C5'	5.05	128.99	120.90
33	L1	1560	A	O3'-P-O5'	-5.05	94.40	104.00
33	L1	2335	U	C1'-O4'-C4'	-5.05	105.86	109.90
44	LR	146	ARG	CG-CD-NE	-5.05	101.18	111.80
12	SO	87	ASP	N-CA-CB	5.05	119.69	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	1756	A	O4'-C1'-C2'	-5.05	100.75	105.80
33	L1	90	G	P-O3'-C3'	-5.05	113.64	119.70
33	L1	2861	U	P-O3'-C3'	-5.05	113.64	119.70
33	L1	2972	C	C4'-C3'-C2'	-5.05	97.55	102.60
32	S1	1028	A	C4'-C3'-C2'	-5.05	97.55	102.60
32	S1	1070	A	C4'-C3'-C2'	-5.05	97.55	102.60
33	L1	241	G	N9-C1'-C2'	5.05	120.57	114.00
33	L1	534	G	O4'-C1'-N9	-5.05	104.16	108.20
33	L1	715	A	C4'-C3'-C2'	-5.05	97.55	102.60
33	L1	2168	C	C2'-C3'-O3'	5.05	121.78	113.70
33	L1	2516	U	C2'-C3'-O3'	5.05	121.78	113.70
33	L1	2955	U	N1-C1'-C2'	-5.05	106.44	112.00
45	LQ	187	GLU	N-CA-CB	5.05	119.69	110.60
46	LT	52	ARG	NE-CZ-NH1	5.05	122.83	120.30
55	Lg	2	SER	N-CA-C	5.05	124.64	111.00
67	LS	46	PHE	CB-CG-CD2	-5.05	117.26	120.80
67	LS	162	THR	CA-C-N	5.05	128.31	117.20
81	LD	151	VAL	CA-CB-CG2	5.05	118.48	110.90
25	SC	16	LYS	CB-CA-C	5.05	120.50	110.40
32	S1	936	C	C3'-C2'-C1'	5.05	105.54	101.50
32	S1	1139	C	C5'-C4'-O4'	5.05	115.16	109.10
32	S1	1512	C	C5'-C4'-O4'	5.05	115.16	109.10
33	L1	263	A	C3'-C2'-C1'	5.05	105.54	101.50
33	L1	2379	U	OP1-P-O3'	5.05	116.31	105.20
33	L1	2903	G	P-O5'-C5'	-5.05	112.82	120.90
33	L1	3000	U	C5'-C4'-C3'	5.05	124.08	116.00
52	Lb	123	ARG	NE-CZ-NH1	5.05	122.83	120.30
70	Li	71	ARG	N-CA-CB	5.05	119.69	110.60
25	SC	52	SER	N-CA-CB	5.05	118.07	110.50
33	L1	1792	G	N9-C1'-C2'	5.05	120.56	114.00
33	L1	2219	A	P-O5'-C5'	5.05	128.98	120.90
66	LN	103	ASN	CA-C-N	-5.05	106.09	117.20
1	Sa	252	ILE	N-CA-C	-5.05	97.38	111.00
2	SA	188	GLN	C-N-CA	-5.05	109.08	121.70
11	SM	33	ILE	N-CA-C	-5.05	97.38	111.00
31	S2	25	U	C5'-C4'-C3'	5.05	124.07	116.00
31	S2	49	G	P-O5'-C5'	5.05	128.97	120.90
32	S1	437	C	C1'-O4'-C4'	-5.05	105.86	109.90
32	S1	505	U	C3'-C2'-C1'	5.05	105.54	101.50
32	S1	605	A	C5'-C4'-C3'	5.05	124.08	116.00
33	L1	24	C	P-O3'-C3'	-5.05	113.64	119.70
33	L1	348	C	C1'-O4'-C4'	-5.05	105.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	643	G	P-O5'-C5'	-5.05	112.82	120.90
33	L1	1514	U	O4'-C4'-C3'	5.05	110.14	106.10
33	L1	1710	G	N9-C1'-C2'	5.05	120.56	114.00
33	L1	2734	C	N1-C1'-C2'	5.05	120.56	114.00
33	L1	3378	U	C1'-O4'-C4'	5.05	113.94	109.90
45	LQ	35	ARG	CB-CG-CD	5.05	124.72	111.60
78	Le	63	GLU	O-C-N	-5.05	114.63	122.70
80	LC	169	ARG	CD-NE-CZ	-5.05	116.53	123.60
32	S1	1801	A	OP1-P-OP2	-5.04	112.03	119.60
33	L1	520	G	O4'-C1'-C2'	5.04	112.14	107.60
33	L1	684	C	O4'-C4'-C3'	-5.04	98.95	104.00
33	L1	1473	U	N1-C1'-C2'	5.04	120.56	114.00
33	L1	2350	C	N1-C1'-C2'	5.04	120.56	114.00
33	L1	2563	G	OP1-P-OP2	-5.04	112.03	119.60
34	L3	28	U	C1'-O4'-C4'	-5.04	105.86	109.90
55	Lg	58	ARG	NE-CZ-NH2	-5.04	117.78	120.30
5	SE	58	ARG	N-CA-CB	5.04	119.68	110.60
29	ST	67	ALA	N-CA-CB	5.04	117.16	110.10
32	S1	189	U	OP1-P-OP2	-5.04	112.03	119.60
32	S1	1309	U	O4'-C1'-N1	5.04	112.23	108.20
33	L1	51	A	O4'-C1'-C2'	-5.04	100.76	105.80
33	L1	1202	C	C3'-C2'-C1'	5.04	105.53	101.50
33	L1	2247	A	C5'-C4'-O4'	5.04	115.15	109.10
33	L1	2800	C	O4'-C1'-N1	-5.04	104.17	108.20
39	LF	95	TYR	CB-CG-CD2	-5.04	117.97	121.00
56	Lh	55	ASN	O-C-N	-5.04	114.63	122.70
67	LS	19	PRO	N-CA-C	5.04	125.21	112.10
67	LS	23	HIS	O-C-N	-5.04	111.52	121.10
32	S1	652	G	O4'-C4'-C3'	-5.04	98.96	104.00
32	S1	1320	C	C1'-O4'-C4'	5.04	113.93	109.90
33	L1	461	A	OP1-P-OP2	-5.04	112.04	119.60
33	L1	1768	U	N1-C1'-C2'	5.04	120.55	114.00
33	L1	1935	G	N9-C1'-C2'	5.04	120.56	114.00
33	L1	3270	C	C3'-C2'-C1'	5.04	105.53	101.50
33	L1	3337	G	O3'-P-O5'	-5.04	94.42	104.00
34	L3	55	A	C4'-C3'-C2'	-5.04	97.56	102.60
48	LV	43	LYS	CB-CA-C	5.04	120.48	110.40
54	Lf	88	TYR	CG-CD1-CE1	-5.04	117.27	121.30
10	SL	8	GLY	CA-C-O	-5.04	111.53	120.60
32	S1	503	U	C5'-C4'-O4'	5.04	115.15	109.10
33	L1	548	G	O4'-C1'-N9	-5.04	104.17	108.20
33	L1	2936	A	C1'-O4'-C4'	5.04	113.93	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	3	ALA	N-CA-CB	5.04	117.15	110.10
32	S1	1083	C	O3'-P-O5'	5.04	113.57	104.00
32	S1	1219	C	C5'-C4'-O4'	5.04	115.15	109.10
32	S1	1757	G	P-O3'-C3'	-5.04	113.66	119.70
33	L1	1210	G	N9-C1'-C2'	-5.04	106.46	112.00
33	L1	2068	G	O4'-C1'-N9	5.04	112.23	108.20
33	L1	2096	U	N1-C1'-C2'	-5.04	106.46	112.00
33	L1	2234	G	O5'-C5'-C4'	5.04	121.27	111.70
42	LP	135	VAL	CA-CB-CG1	5.04	118.46	110.90
68	LW	83	ARG	N-CA-C	5.04	124.60	111.00
32	S1	1361	G	C1'-O4'-C4'	-5.04	105.87	109.90
33	L1	1675	G	O4'-C1'-C2'	-5.04	100.76	105.80
33	L1	1691	U	C5'-C4'-O4'	5.04	115.14	109.10
33	L1	2439	A	C5'-C4'-C3'	5.04	124.06	116.00
48	LV	61	ARG	CD-NE-CZ	5.04	130.65	123.60
80	LC	267	VAL	CB-CA-C	5.04	120.97	111.40
20	SZ	22	ALA	CB-CA-C	5.04	117.66	110.10
25	SC	166	PHE	C-N-CA	5.04	132.87	122.30
31	S2	31	C	C1'-O4'-C4'	-5.04	105.87	109.90
32	S1	220	C	O4'-C1'-N1	5.04	112.23	108.20
33	L1	474	G	OP1-P-OP2	-5.04	112.05	119.60
33	L1	548	G	N9-C1'-C2'	5.04	120.55	114.00
33	L1	1729	G	O4'-C1'-C2'	5.04	112.13	107.60
33	L1	1771	G	N9-C1'-C2'	-5.04	106.46	112.00
33	L1	2645	A	C1'-O4'-C4'	-5.04	105.87	109.90
33	L1	2800	C	C1'-O4'-C4'	-5.04	105.87	109.90
50	LZ	53	TRP	CA-C-N	5.04	128.28	117.20
4	SD	211	GLU	O-C-N	5.03	130.75	122.70
32	S1	13	C	C4'-C3'-C2'	-5.03	97.57	102.60
32	S1	242	A	OP1-P-OP2	-5.03	112.05	119.60
32	S1	883	G	C3'-C2'-C1'	5.03	105.53	101.50
32	S1	997	A	C5'-C4'-C3'	-5.03	107.95	116.00
32	S1	1210	U	O4'-C1'-C2'	-5.03	100.77	105.80
33	L1	279	G	P-O3'-C3'	-5.03	113.66	119.70
33	L1	680	G	C5'-C4'-O4'	5.03	115.14	109.10
33	L1	703	G	C3'-C2'-C1'	5.03	105.53	101.50
33	L1	815	G	C3'-C2'-C1'	5.03	105.53	101.50
33	L1	1027	C	O4'-C1'-C2'	-5.03	100.77	105.80
33	L1	1122	C	O4'-C1'-N1	5.03	112.23	108.20
33	L1	1304	G	O4'-C1'-C2'	5.03	112.13	107.60
33	L1	1672	G	C5'-C4'-C3'	5.03	124.05	116.00
33	L1	2479	C	C5'-C4'-O4'	-5.03	103.06	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	LB	73	LYS	CB-CA-C	5.03	120.47	110.40
42	LP	186	PRO	N-CD-CG	5.03	110.75	103.20
44	LR	6	VAL	CA-CB-CG1	-5.03	103.35	110.90
46	LT	168	ALA	N-CA-CB	5.03	117.15	110.10
59	Lo	51	PHE	CB-CG-CD2	-5.03	117.28	120.80
67	LS	63	ILE	O-C-N	-5.03	114.64	122.70
79	Ls	40	GLN	N-CA-CB	-5.03	101.54	110.60
4	SD	172	PHE	CA-CB-CG	-5.03	101.82	113.90
32	S1	1349	A	O4'-C1'-C2'	-5.03	100.77	105.80
33	L1	1036	C	O5'-C5'-C4'	-5.03	102.14	111.70
33	L1	1308	A	O3'-P-O5'	5.03	113.56	104.00
33	L1	1626	U	N1-C1'-C2'	5.03	120.54	114.00
33	L1	1948	G	O4'-C1'-C2'	-5.03	100.77	105.80
33	L1	3372	C	C4'-C3'-C2'	-5.03	97.57	102.60
34	L3	49	A	O5'-C5'-C4'	-5.03	102.14	111.70
37	LB	34	PHE	O-C-N	-5.03	114.64	123.20
45	LQ	27	ARG	NE-CZ-NH2	-5.03	117.78	120.30
80	LC	165	HIS	O-C-N	-5.03	114.65	122.70
2	SA	70	VAL	CA-CB-CG1	5.03	118.45	110.90
33	L1	1119	G	O4'-C1'-C2'	5.03	112.13	107.60
33	L1	2945	G	O4'-C1'-C2'	5.03	112.13	107.60
35	L2	30	C	P-O5'-C5'	5.03	128.95	120.90
36	LA	212	ARG	C-N-CA	5.03	134.27	121.70
42	LP	1	MET	C-N-CA	5.03	132.86	122.30
43	LO	127	LYS	CB-CA-C	5.03	120.46	110.40
54	Lf	19	GLN	CA-C-O	5.03	130.66	120.10
70	Li	49	LYS	C-N-CA	5.03	134.28	121.70
73	Lp	14	ASN	CB-CG-OD1	-5.03	111.54	121.60
4	SD	49	ARG	NE-CZ-NH2	-5.03	117.78	120.30
32	S1	1789	U	C4'-C3'-C2'	-5.03	97.57	102.60
35	L2	96	A	N9-C1'-C2'	5.03	120.54	114.00
11	SM	81	ASP	CA-C-N	-5.03	106.14	117.20
32	S1	1301	G	C5'-C4'-O4'	5.03	115.13	109.10
32	S1	1770	G	O4'-C1'-N9	5.03	112.22	108.20
33	L1	1790	A	P-O5'-C5'	-5.03	112.86	120.90
33	L1	2397	A	O3'-P-O5'	5.03	113.55	104.00
33	L1	2718	A	P-O5'-C5'	5.03	128.94	120.90
33	L1	3008	U	O4'-C1'-C2'	-5.03	100.77	105.80
33	L1	3310	A	C5'-C4'-O4'	5.03	115.13	109.10
35	L2	123	C	C4'-C3'-C2'	-5.03	97.57	102.60
80	LC	5	LYS	CB-CA-C	-5.03	100.35	110.40
3	SB	91	VAL	CB-CA-C	-5.03	101.85	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	SQ	77	GLU	C-N-CA	5.03	134.26	121.70
32	S1	469	G	N9-C1'-C2'	-5.03	106.47	112.00
33	L1	128	C	C1'-O4'-C4'	-5.03	105.88	109.90
33	L1	627	G	C1'-O4'-C4'	-5.03	105.88	109.90
33	L1	688	G	N9-C1'-C2'	5.03	120.53	114.00
33	L1	778	G	O4'-C1'-N9	5.03	112.22	108.20
33	L1	1276	C	C5'-C4'-O4'	5.03	115.13	109.10
33	L1	1626	U	C5'-C4'-C3'	5.03	124.04	116.00
33	L1	1774	G	C5'-C4'-C3'	5.03	124.04	116.00
33	L1	2641	A	N9-C1'-C2'	5.03	120.53	114.00
33	L1	3352	C	OP2-P-O3'	5.03	116.26	105.20
33	L1	3361	G	C3'-C2'-C1'	5.03	105.52	101.50
37	LB	67	PHE	N-CA-CB	5.03	119.65	110.60
47	LU	38	GLU	N-CA-CB	5.03	119.64	110.60
81	LD	314	VAL	CB-CA-C	-5.03	101.85	111.40
4	SD	93	PRO	N-CA-CB	-5.02	97.07	102.60
14	SP	83	ARG	NH1-CZ-NH2	-5.02	113.87	119.40
17	SV	24	LYS	CB-CA-C	-5.02	100.35	110.40
17	SV	108	ALA	N-CA-CB	5.02	117.13	110.10
32	S1	1041	A	N9-C1'-C2'	-5.02	106.47	112.00
33	L1	494	C	O4'-C4'-C3'	-5.02	98.98	104.00
33	L1	1047	C	C3'-C2'-C1'	5.02	105.52	101.50
33	L1	2073	U	N1-C1'-C2'	5.02	120.53	114.00
70	Li	45	PRO	N-CA-CB	-5.02	97.07	102.60
33	L1	922	U	C5'-C4'-O4'	5.02	115.13	109.10
33	L1	1707	C	O5'-C5'-C4'	-5.02	102.16	111.70
33	L1	2092	C	C1'-O4'-C4'	5.02	113.92	109.90
33	L1	2203	A	C3'-C2'-C1'	-5.02	97.48	101.50
33	L1	2412	A	C1'-O4'-C4'	5.02	113.92	109.90
33	L1	3332	G	N9-C1'-C2'	5.02	120.53	114.00
34	L3	2	G	C5'-C4'-C3'	5.02	124.04	116.00
35	L2	43	G	C1'-C2'-O2'	-5.02	95.53	110.60
42	LP	136	ASP	CB-CG-OD1	-5.02	113.78	118.30
32	S1	850	G	C5'-C4'-C3'	-5.02	107.97	116.00
32	S1	1422	G	O4'-C1'-N9	5.02	112.22	108.20
33	L1	843	C	C1'-O4'-C4'	-5.02	105.88	109.90
33	L1	920	A	OP1-P-O3'	5.02	116.25	105.20
33	L1	2418	A	O4'-C4'-C3'	5.02	110.12	106.10
35	L2	119	C	P-O5'-C5'	5.02	128.93	120.90
3	SB	132	LYS	N-CA-CB	5.02	119.63	110.60
19	SY	40	ARG	NE-CZ-NH2	-5.02	117.79	120.30
32	S1	395	A	O4'-C1'-N9	5.02	112.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	S1	525	A	O5'-P-OP1	-5.02	101.18	105.70
32	S1	635	G	P-O3'-C3'	-5.02	113.68	119.70
32	S1	1062	C	O4'-C1'-C2'	-5.02	100.78	105.80
32	S1	1306	U	P-O3'-C3'	5.02	125.72	119.70
32	S1	1347	U	C1'-O4'-C4'	-5.02	105.89	109.90
33	L1	155	G	P-O5'-C5'	5.02	128.93	120.90
33	L1	169	G	O4'-C1'-N9	5.02	112.22	108.20
33	L1	422	G	P-O3'-C3'	5.02	125.72	119.70
33	L1	922	U	O4'-C1'-N1	-5.02	104.18	108.20
33	L1	990	U	C1'-O4'-C4'	-5.02	105.88	109.90
33	L1	3153	U	OP2-P-O3'	5.02	116.24	105.20
35	L2	79	G	OP1-P-OP2	-5.02	112.07	119.60
47	LU	56	PHE	N-CA-CB	-5.02	101.56	110.60
52	Lb	97	ARG	NE-CZ-NH1	5.02	122.81	120.30
60	Lr	81	SER	CB-CA-C	-5.02	100.56	110.10
3	SB	107	TYR	CG-CD1-CE1	5.02	125.31	121.30
23	SU	95	TYR	O-C-N	-5.02	114.67	122.70
25	SC	162	LEU	CD1-CG-CD2	5.02	125.55	110.50
33	L1	1119	G	C1'-O4'-C4'	-5.02	105.89	109.90
33	L1	1367	A	O3'-P-O5'	-5.02	94.47	104.00
33	L1	2092	C	P-O3'-C3'	-5.02	113.68	119.70
33	L1	2660	A	O3'-P-O5'	5.02	113.53	104.00
33	L1	3183	G	C1'-O4'-C4'	-5.02	105.89	109.90
74	LJ	12	ASP	CB-CG-OD2	-5.02	113.78	118.30
11	SM	148	VAL	N-CA-C	-5.02	97.46	111.00
33	L1	1214	U	O4'-C1'-C2'	-5.02	100.78	105.80
33	L1	1313	U	O4'-C1'-N1	5.02	112.21	108.20
33	L1	1497	U	OP1-P-OP2	-5.02	112.08	119.60
33	L1	1981	U	O4'-C1'-N1	5.02	112.21	108.20
33	L1	2881	C	C1'-C2'-O2'	5.02	125.65	110.60
34	L3	42	A	C3'-C2'-C1'	5.02	105.51	101.50
39	LF	139	VAL	C-N-CA	5.02	134.24	121.70
13	SQ	60	ARG	O-C-N	-5.01	114.68	122.70
31	S2	12	U	N1-C1'-C2'	-5.01	106.48	112.00
32	S1	178	A	C1'-O4'-C4'	5.01	113.91	109.90
32	S1	1543	U	N1-C1'-C2'	-5.01	106.48	112.00
33	L1	717	G	O4'-C1'-N9	5.01	112.21	108.20
33	L1	1322	A	C3'-C2'-C1'	5.01	105.51	101.50
33	L1	1419	G	N9-C1'-C2'	5.01	120.52	114.00
33	L1	1795	A	O4'-C1'-N9	5.01	112.21	108.20
33	L1	2233	G	C1'-O4'-C4'	-5.01	105.89	109.90
33	L1	2491	A	OP1-P-OP2	-5.01	112.08	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	2770	U	C5'-C4'-O4'	5.01	115.12	109.10
33	L1	2955	U	P-O5'-C5'	5.01	128.92	120.90
2	SA	243	TRP	CG-CD2-CE3	-5.01	129.39	133.90
32	S1	478	A	O4'-C1'-C2'	-5.01	100.79	105.80
33	L1	366	G	C5'-C4'-C3'	5.01	124.02	116.00
3	SB	177	LEU	N-CA-C	-5.01	97.47	111.00
32	S1	353	G	C4'-C3'-C2'	-5.01	97.59	102.60
32	S1	414	A	C5'-C4'-C3'	-5.01	107.98	116.00
32	S1	929	A	C4'-C3'-C2'	-5.01	97.59	102.60
32	S1	1302	C	C5'-C4'-C3'	5.01	124.02	116.00
33	L1	336	A	OP1-P-OP2	-5.01	112.08	119.60
33	L1	971	G	C4'-C3'-C2'	-5.01	97.59	102.60
33	L1	1895	G	P-O3'-C3'	-5.01	113.69	119.70
33	L1	2068	G	C1'-O4'-C4'	-5.01	105.89	109.90
34	L3	14	C	O5'-C5'-C4'	-5.01	102.18	111.70
45	LQ	183	PHE	CB-CA-C	5.01	120.42	110.40
64	LG	92	ARG	CD-NE-CZ	-5.01	116.58	123.60
1	Sa	250	GLY	O-C-N	-5.01	114.69	122.70
2	SA	72	ILE	CB-CA-C	5.01	121.62	111.60
3	SB	171	ALA	N-CA-CB	-5.01	103.09	110.10
15	SS	52	ASP	CA-C-N	5.01	131.12	117.10
31	S2	61	C	C3'-C2'-C1'	5.01	105.51	101.50
32	S1	216	A	OP1-P-OP2	-5.01	112.08	119.60
32	S1	1565	U	C3'-C2'-C1'	5.01	105.51	101.50
33	L1	255	C	O4'-C1'-C2'	-5.01	100.79	105.80
33	L1	317	G	C4'-C3'-C2'	-5.01	97.59	102.60
33	L1	899	A	C2'-C3'-O3'	5.01	121.71	113.70
33	L1	1285	U	C4'-C3'-C2'	-5.01	97.59	102.60
33	L1	1349	G	N9-C1'-C2'	-5.01	106.49	112.00
33	L1	1571	A	C3'-C2'-C1'	-5.01	97.49	101.50
33	L1	1766	U	O4'-C4'-C3'	-5.01	98.99	104.00
33	L1	2727	U	P-O3'-C3'	-5.01	113.69	119.70
35	L2	135	G	N9-C1'-C2'	5.01	120.51	114.00
56	Lh	101	VAL	O-C-N	-5.01	114.69	122.70
60	Lr	89	LYS	CA-C-N	5.01	128.22	117.20
72	Lk	51	ALA	N-CA-CB	5.01	117.11	110.10
77	Lc	98	PRO	CA-N-CD	-5.01	104.49	111.50
78	Le	123	LYS	N-CA-CB	5.01	119.62	110.60
84	LI	30	LYS	C-N-CA	5.01	134.23	121.70
25	SC	135	HIS	C-N-CA	5.01	134.22	121.70
32	S1	1721	A	OP2-P-O3'	5.01	116.22	105.20
33	L1	728	G	N9-C1'-C2'	-5.01	106.49	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	L1	885	A	OP2-P-O3'	5.01	116.22	105.20
33	L1	2804	A	C1'-O4'-C4'	5.01	113.91	109.90
42	LP	110	LEU	N-CA-C	-5.01	97.48	111.00
43	LO	3	THR	CA-CB-CG2	5.01	119.41	112.40
68	LW	47	GLU	CB-CA-C	5.01	120.42	110.40
81	LD	154	LEU	CB-CG-CD2	5.01	119.51	111.00
83	Lm	29	MET	CG-SD-CE	-5.01	92.19	100.20
15	SS	6	ALA	O-C-N	5.01	130.71	122.70
32	S1	67	G	P-O3'-C3'	5.01	125.71	119.70
32	S1	300	U	O3'-P-O5'	5.01	113.51	104.00
32	S1	351	G	C1'-O4'-C4'	-5.01	105.89	109.90
32	S1	951	U	C3'-C2'-C1'	5.01	105.51	101.50
33	L1	137	C	C1'-O4'-C4'	-5.01	105.89	109.90
33	L1	878	G	O4'-C1'-C2'	-5.01	100.79	105.80
33	L1	960	C	P-O3'-C3'	-5.01	113.69	119.70
33	L1	1638	U	C5'-C4'-O4'	5.01	115.11	109.10
33	L1	1880	A	C4'-C3'-O3'	5.01	123.01	113.00
33	L1	2138	A	O4'-C1'-N9	5.01	112.20	108.20
33	L1	2974	G	C3'-C2'-C1'	-5.01	97.50	101.50
33	L1	3035	C	P-O3'-C3'	5.01	125.71	119.70
69	La	24	VAL	C-N-CA	5.01	134.22	121.70
5	SE	135	ARG	NE-CZ-NH1	-5.00	117.80	120.30
25	SC	157	HIS	N-CA-CB	5.00	119.61	110.60
32	S1	216	A	P-O3'-C3'	5.00	125.71	119.70
32	S1	1107	G	C1'-O4'-C4'	-5.00	105.90	109.90
33	L1	103	G	C5'-C4'-C3'	5.00	124.01	116.00
33	L1	1081	U	O3'-P-O5'	5.00	113.51	104.00
33	L1	2115	G	N9-C1'-C2'	-5.00	106.49	112.00
33	L1	2166	U	P-O5'-C5'	-5.00	112.89	120.90
35	L2	103	C	O5'-P-OP1	5.00	116.71	110.70
37	LB	54	ARG	NE-CZ-NH2	-5.00	117.80	120.30
71	Lj	41	THR	N-CA-C	5.00	124.51	111.00
28	SN	10	HIS	N-CA-C	-5.00	97.49	111.00
28	SN	51	GLY	C-N-CA	-5.00	109.19	121.70
31	S2	42	C	O4'-C1'-C2'	-5.00	100.80	105.80
32	S1	589	A	C5'-C4'-O4'	5.00	115.11	109.10
33	L1	165	C	C3'-C2'-C1'	5.00	105.50	101.50
33	L1	2207	C	P-O5'-C5'	5.00	128.90	120.90
33	L1	2351	A	P-O3'-C3'	-5.00	113.70	119.70
33	L1	2482	A	C5'-C4'-O4'	5.00	115.11	109.10
33	L1	2891	C	O4'-C1'-N1	5.00	112.20	108.20
35	L2	35	G	C4'-C3'-C2'	-5.00	97.60	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L2	52	A	OP2-P-O3'	5.00	116.21	105.20
48	LV	13	LYS	O-C-N	-5.00	114.69	122.70
67	LS	136	CYS	CA-CB-SG	5.00	123.01	114.00
32	S1	142	G	O3'-P-O5'	-5.00	94.50	104.00
32	S1	602	U	OP2-P-O3'	5.00	116.20	105.20
32	S1	1804	A	O3'-P-O5'	5.00	113.50	104.00
33	L1	447	C	C1'-O4'-C4'	-5.00	105.90	109.90
33	L1	719	U	C3'-C2'-C1'	5.00	105.50	101.50
33	L1	770	U	O3'-P-O5'	5.00	113.50	104.00
33	L1	852	C	C4'-C3'-C2'	-5.00	97.60	102.60
33	L1	1035	C	O5'-P-OP2	-5.00	101.20	105.70
33	L1	1430	C	C4'-C3'-C2'	-5.00	97.60	102.60
34	L3	98	G	OP1-P-O3'	5.00	116.20	105.20
41	LM	71	ASP	C-N-CA	5.00	134.20	121.70
46	LT	84	THR	CA-CB-CG2	5.00	119.40	112.40
56	Lh	94	CYS	CA-CB-SG	5.00	123.00	114.00

All (111) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	Sa	128	LEU	CA
2	SA	199	TRP	CA
4	SD	56	LEU	CA
11	SM	116	LYS	CA
13	SQ	139	ASP	CA
15	SS	80	LYS	CA
20	SZ	24	GLN	CA
23	SU	34	HIS	CA
23	SU	65	LYS	CA
23	SU	91	TYR	CA
25	SC	17	PRO	CA
25	SC	60	HIS	CA
25	SC	65	ASP	CA
25	SC	76	GLU	CA
25	SC	163	THR	CB
25	SC	171	PRO	CA
28	SN	38	CYS	CA
29	ST	41	GLU	CA
29	ST	54	LEU	CA
32	S1	119	U	C1'
32	S1	297	U	C1'
32	S1	562	U	C3'

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Mol	Chain	Res	Type	Atom
32	S1	934	A	C1’
32	S1	968	A	C3’
32	S1	1341	G	C3’
32	S1	1440	U	C3’
32	S1	1450	A	C2’
32	S1	1766	A	C1’
33	L1	138	G	C3’
33	L1	492	G	C3’
33	L1	513	C	C3’
33	L1	522	C	C3’
33	L1	639	A	C1’
33	L1	641	C	C3’
33	L1	704	G	C4’
33	L1	708	C	C3’
33	L1	785	U	C2’
33	L1	946	U	C3’
33	L1	978	C	C3’
33	L1	996	A	C1’
33	L1	1050	A	C3’
33	L1	1263	A	C1’
33	L1	1270	G	C1’
33	L1	1289	G	C3’
33	L1	1366	G	C1’
33	L1	1369	G	C1’
33	L1	1384	G	C1’
33	L1	1388	C	C3’
33	L1	1540	G	C3’
33	L1	1616	G	C1’
33	L1	1698	C	C3’
33	L1	1746	G	C1’
33	L1	1752	C	C3’
33	L1	1764	G	C1’
33	L1	1767	G	C2’,C3’,C4’
33	L1	1852	C	C3’
33	L1	2131	U	C3’
33	L1	2206	U	C3’
33	L1	2361	C	C3’
33	L1	2383	G	C3’
33	L1	2460	A	C1’
33	L1	2483	A	C1’
33	L1	2518	A	C1’
33	L1	2760	U	C2’

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Mol	Chain	Res	Type	Atom
33	L1	2763	C	C3'
33	L1	2793	G	C1'
33	L1	2972	C	C3'
33	L1	3023	G	C1'
33	L1	3045	A	C3'
33	L1	3093	C	C3'
33	L1	3295	G	C1'
34	L3	1	G	C3'
34	L3	10	C	C4'
35	L2	98	C	C3'
35	L2	124	G	C3'
35	L2	138	G	C3'
35	L2	144	A	C3'
38	LE	1	MET	CA
45	LQ	17	PHE	CA
45	LQ	119	GLU	CA
45	LQ	143	ARG	CA
45	LQ	259	LYS	CA
46	LT	187	ARG	CA
47	LU	83	ARG	CA
49	LX	46	LYS	CA
56	Lh	13	LYS	CA
60	Lr	46	LYS	CA
64	LG	26	TRP	CA
64	LG	152	LYS	CA
66	LN	1	MET	CA
66	LN	117	ARG	CA
67	LS	117	ARG	CA
67	LS	161	PRO	CA
70	Li	70	ASN	CA
70	Li	71	ARG	CA
72	Lk	66	VAL	CA
73	Lp	51	ILE	CA,CB
74	LJ	124	LYS	CA
79	Ls	231	ALA	CA
80	LC	67	LEU	CA
80	LC	123	CYS	CA
80	LC	129	ALA	CA
80	LC	350	THR	CA
80	LC	369	PHE	CA
81	LD	90	ARG	CA
81	LD	344	ALA	CA

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Mol	Chain	Res	Type	Atom
82	LK	136	PRO	CA
82	LK	153	ASN	CA

All (1482) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
36	LA	1	MET	Peptide
36	LA	163	CYS	Peptide
36	LA	204	TYR	Sidechain
36	LA	208	THR	Peptide
37	LB	128	ARG	Sidechain
37	LB	180	LEU	Peptide
37	LB	189	TYR	Sidechain
37	LB	19	HIS	Sidechain
37	LB	190	ARG	Sidechain
37	LB	196	TRP	Mainchain
37	LB	225	VAL	Peptide
37	LB	226	ARG	Sidechain
37	LB	244	GLY	Peptide
37	LB	28	ARG	Sidechain
37	LB	29	PHE	Sidechain
37	LB	33	ASP	Mainchain
37	LB	36	GLU	Peptide
37	LB	39	GLY	Peptide
37	LB	40	TYR	Peptide,Sidechain
37	LB	54	ARG	Sidechain
37	LB	62	THR	Peptide
37	LB	64	ARG	Sidechain
37	LB	68	ARG	Peptide
37	LB	69	TYR	Peptide,Sidechain
37	LB	70	LYS	Peptide
37	LB	73	LYS	Mainchain
37	LB	93	ARG	Sidechain
80	LC	1	MET	Mainchain
80	LC	10	ARG	Sidechain
80	LC	100	ARG	Sidechain
80	LC	109	HIS	Peptide
80	LC	115	ARG	Sidechain
80	LC	119	TYR	Sidechain
80	LC	120	LYS	Mainchain,Peptide
80	LC	121	ASN	Peptide
80	LC	130	PHE	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
80	LC	137	TYR	Sidechain
80	LC	138	ASP	Peptide
80	LC	156	TYR	Sidechain
80	LC	157	ALA	Peptide
80	LC	169	ARG	Sidechain
80	LC	17	LEU	Mainchain,Peptide
80	LC	235	ARG	Sidechain
80	LC	24	ARG	Sidechain
80	LC	243	ARG	Sidechain
80	LC	245	THR	Peptide
80	LC	250	ARG	Sidechain
80	LC	259	HIS	Peptide
80	LC	291	SER	Mainchain,Peptide
80	LC	292	GLY	Mainchain,Peptide
80	LC	294	GLU	Peptide
80	LC	295	SER	Mainchain,Peptide
80	LC	298	ALA	Peptide
80	LC	304	ARG	Sidechain
80	LC	318	TYR	Peptide
80	LC	349	GLN	Mainchain,Peptide
80	LC	350	THR	Mainchain,Peptide
80	LC	352	ARG	Mainchain,Sidechain
80	LC	357	GLU	Mainchain,Peptide
80	LC	362	PHE	Peptide
80	LC	369	PHE	Sidechain
80	LC	372	GLY	Mainchain
80	LC	374	PHE	Sidechain
80	LC	385	GLY	Mainchain,Peptide
80	LC	4	ARG	Sidechain
80	LC	40	PRO	Peptide
80	LC	42	HIS	Peptide
80	LC	5	LYS	Peptide
80	LC	58	ARG	Sidechain
80	LC	59	GLU	Peptide
80	LC	61	GLU	Peptide
80	LC	69	LYS	Mainchain
80	LC	8	HIS	Sidechain
80	LC	92	TYR	Sidechain
81	LD	104	ARG	Mainchain,Peptide
81	LD	107	ALA	Peptide
81	LD	108	PRO	Peptide
81	LD	117	ARG	Sidechain

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Mol	Chain	Res	Type	Group
81	LD	118	ARG	Sidechain
81	LD	12	LYS	Peptide
81	LD	144	ARG	Sidechain
81	LD	153	GLU	Peptide
81	LD	18	MET	Mainchain,Peptide
81	LD	181	TYR	Sidechain
81	LD	194	ARG	Sidechain
81	LD	20	THR	Mainchain,Peptide
81	LD	201	ARG	Sidechain
81	LD	208	ARG	Sidechain
81	LD	215	TYR	Sidechain
81	LD	227	ARG	Sidechain
81	LD	23	SER	Mainchain,Peptide
81	LD	304	GLN	Mainchain,Peptide
81	LD	310	LEU	Mainchain
81	LD	316	ARG	Sidechain
81	LD	318	GLU	Sidechain
81	LD	320	ARG	Sidechain
81	LD	323	PRO	Mainchain
81	LD	328	ALA	Mainchain,Peptide
81	LD	329	ALA	Mainchain,Peptide
81	LD	331	LEU	Peptide
81	LD	355	ARG	Peptide,Sidechain
81	LD	363	ARG	Sidechain
81	LD	369	GLU	Mainchain
81	LD	37	ARG	Sidechain
81	LD	371	ALA	Mainchain
81	LD	383	LYS	Peptide
81	LD	4	GLN	Peptide
81	LD	42	ARG	Sidechain
81	LD	46	ARG	Sidechain
81	LD	51	ASN	Peptide
81	LD	53	ARG	Sidechain
81	LD	6	ARG	Sidechain
81	LD	60	ARG	Sidechain
81	LD	61	ARG	Sidechain
81	LD	79	ARG	Sidechain
81	LD	83	VAL	Peptide
81	LD	84	PRO	Mainchain,Peptide
81	LD	85	GLY	Peptide
81	LD	90	ARG	Mainchain
81	LD	94	GLY	Mainchain

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Mol	Chain	Res	Type	Group
81	LD	95	ALA	Mainchain,Peptide
81	LD	96	PHE	Peptide
38	LE	118	TYR	Sidechain
38	LE	128	ASP	Peptide
38	LE	136	ALA	Mainchain
38	LE	142	ARG	Sidechain
38	LE	143	ARG	Sidechain
38	LE	144	ARG	Sidechain
38	LE	155	ARG	Sidechain
38	LE	31	ARG	Sidechain
38	LE	55	THR	Peptide
38	LE	6	LYS	Peptide
38	LE	62	ARG	Peptide,Sidechain
38	LE	7	GLN	Peptide
38	LE	74	ARG	Sidechain
38	LE	88	VAL	Mainchain
38	LE	89	LYS	Peptide
38	LE	9	ASN	Peptide
38	LE	96	ARG	Sidechain
39	LF	1	MET	Peptide
39	LF	123	ARG	Sidechain
39	LF	136	SER	Peptide
39	LF	168	ASN	Peptide
39	LF	169	LYS	Peptide
39	LF	172	ARG	Sidechain
39	LF	187	THR	Mainchain,Peptide
39	LF	2	LYS	Mainchain,Peptide
39	LF	31	ARG	Sidechain
39	LF	36	ARG	Sidechain
39	LF	42	ASN	Peptide
39	LF	70	ARG	Sidechain
39	LF	95	TYR	Sidechain
64	LG	10	GLY	Peptide
64	LG	100	GLN	Peptide
64	LG	106	ILE	Peptide
64	LG	114	GLY	Peptide
64	LG	116	PRO	Mainchain,Peptide
64	LG	12	LYS	Mainchain,Peptide
64	LG	122	GLN	Peptide
64	LG	124	TYR	Sidechain
64	LG	133	ASP	Peptide
64	LG	139	VAL	Peptide

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Mol	Chain	Res	Type	Group
64	LG	142	PHE	Sidechain
64	LG	143	ASP	Peptide
64	LG	144	ASP	Peptide
64	LG	146	TYR	Peptide
64	LG	16	ARG	Sidechain
64	LG	163	PHE	Sidechain
64	LG	169	ALA	Peptide
64	LG	171	LYS	Mainchain
64	LG	175	ASP	Peptide
64	LG	183	VAL	Peptide
64	LG	184	ILE	Mainchain,Peptide
64	LG	185	ASP	Mainchain,Peptide
64	LG	20	TYR	Sidechain
64	LG	206	PHE	Sidechain
64	LG	209	ARG	Sidechain
64	LG	216	GLU	Peptide
64	LG	23	ARG	Sidechain
64	LG	26	TRP	Mainchain
64	LG	27	ALA	Peptide
64	LG	29	LYS	Mainchain,Peptide
64	LG	36	LEU	Peptide
64	LG	40	GLU	Peptide
64	LG	41	LYS	Peptide
64	LG	44	ALA	Mainchain,Peptide
64	LG	49	LYS	Mainchain,Peptide
64	LG	51	TYR	Mainchain,Peptide,Sidechain
64	LG	59	ARG	Sidechain
64	LG	62	SER	Mainchain
64	LG	66	PRO	Peptide
64	LG	68	PRO	Mainchain,Peptide
64	LG	78	GLY	Peptide
64	LG	79	THR	Mainchain,Peptide
64	LG	8	ALA	Peptide
64	LG	87	ARG	Sidechain
64	LG	88	TYR	Peptide
64	LG	9	LEU	Peptide
64	LG	92	ARG	Sidechain
64	LG	98	GLN	Peptide
40	LH	106	ARG	Sidechain
40	LH	110	ARG	Sidechain
40	LH	113	ALA	Peptide
40	LH	115	ALA	Peptide

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Mol	Chain	Res	Type	Group
40	LH	126	ILE	Peptide
40	LH	130	TYR	Sidechain
40	LH	134	HIS	Sidechain
40	LH	137	TYR	Sidechain
40	LH	154	ASP	Peptide
40	LH	202	GLU	Peptide
40	LH	222	PHE	Peptide
40	LH	233	VAL	Mainchain,Peptide
40	LH	256	ARG	Peptide
40	LH	60	ARG	Sidechain
40	LH	63	LEU	Peptide
40	LH	66	ARG	Sidechain
40	LH	76	PHE	Sidechain
40	LH	87	ASN	Mainchain,Peptide
40	LH	90	LYS	Peptide
40	LH	93	LEU	Peptide
40	LH	94	LYS	Peptide
40	LH	95	TYR	Peptide
40	LH	96	ARG	Peptide,Sidechain
40	LH	97	PRO	Mainchain
40	LH	98	GLU	Peptide
84	LI	104	SER	Peptide
84	LI	109	ASP	Peptide
84	LI	116	ARG	Mainchain
84	LI	139	ARG	Sidechain
84	LI	141	LYS	Peptide
84	LI	153	ARG	Sidechain
84	LI	154	ARG	Sidechain
84	LI	172	GLY	Peptide
84	LI	24	ARG	Sidechain
84	LI	3	ARG	Peptide,Sidechain
84	LI	4	ARG	Sidechain
84	LI	7	ARG	Sidechain
84	LI	75	TYR	Sidechain
84	LI	88	ARG	Sidechain
84	LI	9	TYR	Sidechain
84	LI	98	ARG	Sidechain
74	LJ	115	ARG	Sidechain
74	LJ	118	ARG	Peptide,Sidechain
74	LJ	120	ARG	Peptide,Sidechain
74	LJ	123	ALA	Peptide
74	LJ	34	PRO	Peptide

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Mol	Chain	Res	Type	Group
74	LJ	40	LYS	Peptide
74	LJ	58	ARG	Sidechain
74	LJ	75	VAL	Peptide
74	LJ	91	ARG	Sidechain
74	LJ	93	ARG	Sidechain
82	LK	11	ARG	Mainchain,Peptide,Sidechain
82	LK	115	PRO	Peptide
82	LK	116	PRO	Peptide
82	LK	117	TYR	Sidechain
82	LK	125	ILE	Peptide
82	LK	132	LEU	Peptide
82	LK	135	GLN	Mainchain,Peptide
82	LK	154	TYR	Sidechain
82	LK	159	ARG	Sidechain
82	LK	165	ARG	Sidechain
82	LK	175	ARG	Sidechain
82	LK	192	GLU	Peptide
82	LK	196	THR	Peptide
82	LK	205	LYS	Peptide
82	LK	206	TYR	Sidechain
82	LK	5	SER	Peptide
82	LK	54	ARG	Sidechain
82	LK	61	ARG	Sidechain
82	LK	69	THR	Peptide
82	LK	70	LYS	Peptide
82	LK	71	PRO	Peptide
82	LK	87	ARG	Sidechain
82	LK	90	ARG	Sidechain
65	LL	103	UNK	Mainchain
65	LL	108	UNK	Peptide
65	LL	115	UNK	Peptide
65	LL	122	UNK	Peptide
65	LL	128	UNK	Mainchain,Peptide
65	LL	146	UNK	Mainchain,Peptide
65	LL	148	UNK	Peptide
65	LL	150	UNK	Peptide
65	LL	151	UNK	Peptide
65	LL	153	UNK	Peptide
65	LL	155	UNK	Peptide
65	LL	156	UNK	Peptide
65	LL	16	UNK	Peptide
65	LL	169	UNK	Peptide

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Mol	Chain	Res	Type	Group
65	LL	191	UNK	Peptide
65	LL	192	UNK	Mainchain
65	LL	193	UNK	Peptide
65	LL	20	UNK	Mainchain,Peptide
65	LL	22	UNK	Peptide
65	LL	24	UNK	Peptide
65	LL	28	UNK	Peptide
65	LL	52	UNK	Peptide
65	LL	54	UNK	Mainchain
65	LL	55	UNK	Peptide
65	LL	57	UNK	Peptide
65	LL	58	UNK	Peptide
65	LL	59	UNK	Peptide
65	LL	61	UNK	Peptide
65	LL	82	UNK	Peptide
65	LL	83	UNK	Peptide
65	LL	85	UNK	Mainchain,Peptide
65	LL	86	UNK	Peptide
65	LL	87	UNK	Mainchain,Peptide
65	LL	93	UNK	Peptide
41	LM	38	TYR	Sidechain
41	LM	71	ASP	Mainchain
41	LM	73	ARG	Sidechain
41	LM	8	GLY	Peptide
41	LM	89	ARG	Sidechain
66	LN	1	MET	Peptide
66	LN	103	ASN	Peptide
66	LN	105	PHE	Sidechain
66	LN	107	ARG	Sidechain
66	LN	11	ARG	Sidechain
66	LN	117	ARG	Sidechain
66	LN	122	ARG	Sidechain
66	LN	16	ASN	Peptide
66	LN	2	PRO	Peptide
66	LN	20	ASP	Peptide
66	LN	22	GLY	Peptide
66	LN	30	VAL	Peptide
66	LN	31	VAL	Peptide
66	LN	45	ARG	Sidechain
66	LN	51	LYS	Peptide
66	LN	6	PHE	Peptide
66	LN	87	SER	Peptide

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Mol	Chain	Res	Type	Group
66	LN	88	SER	Peptide
66	LN	89	TRP	Mainchain,Peptide
66	LN	90	GLY	Peptide
43	LO	116	ARG	Peptide,Sidechain
43	LO	12	ARG	Sidechain
43	LO	127	LYS	Mainchain,Peptide
43	LO	137	GLY	Mainchain,Peptide
43	LO	14	HIS	Peptide,Sidechain
43	LO	22	ILE	Peptide
43	LO	24	LYS	Peptide
43	LO	29	PRO	Peptide
43	LO	3	THR	Peptide
43	LO	40	HIS	Mainchain,Peptide
43	LO	42	ARG	Sidechain
43	LO	59	ARG	Sidechain
43	LO	70	CYS	Peptide
43	LO	77	ARG	Sidechain
43	LO	8	ASN	Peptide
42	LP	114	ARG	Sidechain
42	LP	12	ARG	Sidechain
42	LP	127	TYR	Sidechain
42	LP	129	TYR	Sidechain
42	LP	13	ARG	Sidechain
42	LP	137	VAL	Peptide
42	LP	162	ARG	Sidechain
42	LP	171	TYR	Sidechain
42	LP	177	LYS	Peptide
42	LP	193	LYS	Peptide
42	LP	194	ARG	Sidechain
42	LP	20	ARG	Sidechain
42	LP	24	ARG	Sidechain
42	LP	26	ARG	Sidechain
42	LP	30	TYR	Sidechain
42	LP	31	ARG	Sidechain
42	LP	41	ARG	Sidechain
42	LP	47	LYS	Peptide
42	LP	50	ARG	Sidechain
42	LP	6	TYR	Sidechain
42	LP	62	TYR	Sidechain
42	LP	63	ARG	Sidechain
42	LP	67	ARG	Sidechain
42	LP	74	PRO	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
42	LP	80	VAL	Peptide
42	LP	81	TYR	Sidechain
42	LP	94	PHE	Sidechain
42	LP	95	GLN	Peptide
45	LQ	100	TYR	Sidechain
45	LQ	112	THR	Mainchain,Peptide
45	LQ	113	LEU	Peptide
45	LQ	114	ARG	Peptide
45	LQ	116	LEU	Mainchain,Peptide
45	LQ	124	VAL	Mainchain
45	LQ	129	GLU	Peptide
45	LQ	130	ASP	Peptide
45	LQ	131	TYR	Sidechain
45	LQ	132	TYR	Sidechain
45	LQ	133	VAL	Peptide
45	LQ	137	ASP	Mainchain,Peptide
45	LQ	138	GLU	Peptide
45	LQ	152	ARG	Peptide,Sidechain
45	LQ	158	ARG	Sidechain
45	LQ	16	TYR	Mainchain,Peptide,Sidechain
45	LQ	170	GLY	Peptide
45	LQ	183	PHE	Sidechain
45	LQ	185	LYS	Peptide
45	LQ	187	GLU	Peptide
45	LQ	190	LEU	Peptide
45	LQ	198	TYR	Sidechain
45	LQ	2	SER	Peptide
45	LQ	201	GLY	Peptide
45	LQ	203	HIS	Peptide
45	LQ	217	GLU	Peptide
45	LQ	218	LYS	Peptide
45	LQ	223	PHE	Sidechain
45	LQ	226	TYR	Peptide
45	LQ	233	ALA	Peptide
45	LQ	235	GLY	Mainchain
45	LQ	237	GLU	Mainchain
45	LQ	238	SER	Mainchain,Peptide
45	LQ	247	ILE	Peptide
45	LQ	248	ARG	Peptide
45	LQ	249	ALA	Mainchain
45	LQ	256	SER	Mainchain
45	LQ	257	THR	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
45	LQ	260	GLU	Peptide
45	LQ	266	ARG	Sidechain
45	LQ	267	TYR	Sidechain
45	LQ	27	ARG	Sidechain
45	LQ	28	ARG	Sidechain
45	LQ	290	SER	Mainchain
45	LQ	291	SER	Peptide
45	LQ	35	ARG	Sidechain
45	LQ	44	ASP	Peptide
45	LQ	53	TYR	Sidechain
45	LQ	55	PHE	Peptide
45	LQ	67	TYR	Sidechain
45	LQ	80	TYR	Sidechain
44	LR	1	MET	Peptide
44	LR	10	ARG	Sidechain
44	LR	12	LYS	Peptide
44	LR	129	ARG	Sidechain
44	LR	13	ARG	Sidechain
44	LR	14	THR	Peptide
44	LR	142	PRO	Peptide
44	LR	150	ARG	Sidechain
44	LR	157	GLY	Peptide
44	LR	159	PRO	Peptide
44	LR	16	ARG	Peptide
44	LR	162	HIS	Peptide
44	LR	20	LYS	Peptide
44	LR	25	TYR	Sidechain
44	LR	33	TYR	Sidechain
44	LR	44	PHE	Sidechain
44	LR	51	ARG	Sidechain
44	LR	53	PHE	Peptide
44	LR	59	ARG	Sidechain
44	LR	60	PRO	Peptide
44	LR	65	ARG	Sidechain
44	LR	66	ARG	Sidechain
44	LR	71	MET	Peptide
44	LR	74	LYS	Peptide
44	LR	91	ARG	Sidechain
44	LR	97	ALA	Mainchain,Peptide
67	LS	109	TYR	Sidechain
67	LS	119	ARG	Sidechain
67	LS	121	PRO	Peptide

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Mol	Chain	Res	Type	Group
67	LS	137	LYS	Peptide
67	LS	138	ARG	Sidechain
67	LS	139	ASP	Peptide
67	LS	14	ARG	Peptide
67	LS	144	PHE	Sidechain
67	LS	145	HIS	Sidechain
67	LS	150	LYS	Mainchain,Peptide
67	LS	151	PHE	Peptide,Sidechain
67	LS	153	LEU	Peptide
67	LS	156	ARG	Peptide
67	LS	157	LYS	Peptide
67	LS	159	ARG	Peptide,Sidechain
67	LS	161	PRO	Peptide
67	LS	165	LEU	Peptide
67	LS	18	THR	Peptide
67	LS	28	ARG	Peptide,Sidechain
67	LS	4	PHE	Peptide
67	LS	43	PHE	Sidechain
67	LS	5	ARG	Sidechain
67	LS	57	ASN	Peptide
67	LS	64	ASN	Mainchain
67	LS	67	PHE	Peptide
67	LS	69	LYS	Peptide
67	LS	70	ASN	Mainchain
67	LS	73	THR	Peptide
67	LS	74	ILE	Peptide
67	LS	77	TYR	Sidechain
67	LS	80	TRP	Peptide
67	LS	83	TYR	Sidechain
67	LS	9	TYR	Sidechain
67	LS	93	TYR	Sidechain
67	LS	95	GLU	Mainchain
67	LS	96	TYR	Sidechain
67	LS	97	ARG	Sidechain
46	LT	100	ARG	Sidechain
46	LT	103	ARG	Sidechain
46	LT	107	ARG	Sidechain
46	LT	136	ARG	Mainchain
46	LT	137	VAL	Peptide
46	LT	151	ARG	Sidechain
46	LT	172	ARG	Sidechain
46	LT	187	ARG	Sidechain

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Mol	Chain	Res	Type	Group
46	LT	55	GLN	Peptide
46	LT	58	HIS	Peptide
46	LT	59	SER	Peptide
46	LT	60	ARG	Sidechain
46	LT	67	HIS	Sidechain
46	LT	71	GLN	Mainchain,Peptide
46	LT	76	SER	Peptide
46	LT	78	TYR	Sidechain
46	LT	81	ARG	Peptide,Sidechain
46	LT	82	ARG	Peptide,Sidechain
46	LT	84	THR	Peptide
46	LT	90	PRO	Mainchain
46	LT	91	THR	Peptide
46	LT	97	ARG	Sidechain
46	LT	98	ARG	Sidechain
47	LU	10	ARG	Peptide,Sidechain
47	LU	125	VAL	Peptide
47	LU	126	ILE	Mainchain,Peptide
47	LU	130	ARG	Sidechain
47	LU	135	PRO	Peptide
47	LU	136	LYS	Peptide
47	LU	138	GLY	Mainchain,Peptide
47	LU	140	MET	Mainchain,Peptide
47	LU	15	PHE	Sidechain
47	LU	152	ILE	Peptide
47	LU	154	TYR	Peptide
47	LU	17	ARG	Sidechain
47	LU	57	TYR	Sidechain
47	LU	60	ARG	Sidechain
47	LU	63	ARG	Sidechain
47	LU	69	LYS	Peptide
47	LU	70	ARG	Sidechain
48	LV	1	MET	Peptide
48	LV	112	THR	Peptide
48	LV	114	TYR	Sidechain
48	LV	128	ARG	Sidechain
48	LV	140	TYR	Sidechain
48	LV	153	GLU	Peptide
48	LV	162	PRO	Peptide
48	LV	166	ILE	Mainchain,Peptide
48	LV	168	ALA	Peptide
48	LV	170	LYS	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
48	LV	25	HIS	Sidechain
48	LV	3	LYS	Peptide
48	LV	36	ILE	Mainchain
48	LV	4	TYR	Sidechain
48	LV	46	ARG	Sidechain
48	LV	47	TYR	Sidechain
48	LV	62	ARG	Sidechain
48	LV	63	TYR	Sidechain
48	LV	67	VAL	Peptide
48	LV	69	ARG	Mainchain,Sidechain
48	LV	7	GLU	Sidechain
48	LV	74	LYS	Peptide
48	LV	75	SER	Peptide
48	LV	76	ARG	Sidechain
48	LV	77	HIS	Peptide
48	LV	90	ARG	Sidechain
68	LW	100	ASP	Peptide
68	LW	104	VAL	Mainchain,Peptide
68	LW	105	ILE	Peptide
68	LW	106	ALA	Peptide
68	LW	110	ASP	Peptide
68	LW	114	TYR	Sidechain
68	LW	27	CYS	Peptide
68	LW	28	SER	Mainchain,Peptide
68	LW	30	PRO	Peptide
68	LW	32	GLU	Peptide
68	LW	33	ASP	Peptide
68	LW	37	GLU	Peptide
68	LW	48	ARG	Sidechain
68	LW	54	GLY	Peptide
68	LW	60	GLY	Peptide
68	LW	80	PHE	Mainchain
68	LW	83	ARG	Sidechain
68	LW	84	TYR	Sidechain
68	LW	87	TYR	Mainchain
68	LW	92	TYR	Sidechain
68	LW	96	HIS	Peptide
68	LW	97	ASN	Peptide
49	LX	113	TYR	Sidechain
49	LX	125	ARG	Sidechain
49	LX	31	ARG	Sidechain
49	LX	33	SER	Mainchain

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Mol	Chain	Res	Type	Group
49	LX	34	LYS	Peptide
49	LX	42	PHE	Sidechain
49	LX	45	PRO	Peptide
49	LX	52	ARG	Peptide
49	LX	58	ARG	Sidechain
49	LX	70	TYR	Sidechain
49	LX	75	TYR	Sidechain
51	LY	109	LYS	Mainchain
51	LY	120	ARG	Sidechain
51	LY	2	LYS	Peptide
51	LY	21	ALA	Peptide
51	LY	22	PRO	Peptide
51	LY	27	ARG	Sidechain
51	LY	39	ARG	Sidechain
51	LY	49	ILE	Peptide
51	LY	62	TYR	Sidechain
51	LY	86	ARG	Sidechain
51	LY	9	SER	Mainchain,Peptide
50	LZ	16	TYR	Peptide,Sidechain
50	LZ	22	ARG	Sidechain
50	LZ	25	ARG	Sidechain
50	LZ	3	LEU	Peptide
50	LZ	50	LYS	Peptide
50	LZ	53	TRP	Mainchain,Peptide
50	LZ	58	ARG	Sidechain
50	LZ	64	ASP	Peptide
50	LZ	71	LYS	Peptide
50	LZ	73	ARG	Sidechain
69	La	12	ILE	Peptide
69	La	13	LEU	Peptide
69	La	20	GLY	Peptide
69	La	21	ARG	Peptide,Sidechain
69	La	25	ILE	Peptide
69	La	26	VAL	Peptide
69	La	27	ARG	Peptide,Sidechain
69	La	29	PHE	Mainchain,Peptide
69	La	30	GLU	Peptide
69	La	31	GLU	Mainchain
69	La	37	PRO	Peptide
69	La	38	TYR	Sidechain
69	La	46	LEU	Peptide
69	La	47	ALA	Peptide

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Mol	Chain	Res	Type	Group
69	La	48	LYS	Peptide
69	La	49	TYR	Peptide
69	La	54	ILE	Peptide
69	La	55	ARG	Peptide,Sidechain
69	La	64	LYS	Peptide
69	La	67	ARG	Sidechain
69	La	7	PRO	Mainchain
69	La	8	GLY	Mainchain,Peptide
69	La	85	TYR	Sidechain
52	Lb	123	ARG	Sidechain
52	Lb	128	TYR	Sidechain
77	Lc	106	GLU	Peptide
77	Lc	111	ARG	Sidechain
77	Lc	116	PRO	Peptide
77	Lc	118	ARG	Sidechain
77	Lc	5	LYS	Mainchain,Peptide
77	Lc	52	ARG	Sidechain
77	Lc	71	ARG	Sidechain
77	Lc	74	TYR	Sidechain
77	Lc	79	TYR	Sidechain
77	Lc	80	ALA	Peptide
77	Lc	85	ARG	Sidechain
77	Lc	94	ARG	Sidechain
77	Lc	95	ARG	Sidechain
77	Lc	98	PRO	Mainchain,Peptide
53	Ld	47	ARG	Sidechain
53	Ld	49	HIS	Peptide
78	Le	108	LEU	Peptide
78	Le	111	ARG	Sidechain
78	Le	131	ARG	Sidechain
78	Le	135	TYR	Sidechain
78	Le	138	TYR	Sidechain
78	Le	147	ARG	Sidechain
78	Le	151	TYR	Sidechain
78	Le	153	ARG	Sidechain
78	Le	161	GLN	Peptide
78	Le	162	ARG	Mainchain,Peptide
78	Le	163	ILE	Peptide
78	Le	204	LEU	Mainchain
78	Le	216	LEU	Peptide
78	Le	217	LYS	Peptide
78	Le	220	ARG	Sidechain

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Mol	Chain	Res	Type	Group
78	Le	57	TYR	Sidechain
78	Le	61	ASP	Peptide
78	Le	69	ARG	Sidechain
78	Le	74	LYS	Peptide
78	Le	83	ALA	Mainchain,Peptide
78	Le	98	HIS	Sidechain
54	Lf	102	SER	Peptide
54	Lf	25	GLY	Peptide
54	Lf	27	TYR	Sidechain
54	Lf	56	ARG	Sidechain
54	Lf	89	TYR	Sidechain
54	Lf	90	ARG	Sidechain
55	Lg	101	VAL	Peptide
55	Lg	102	THR	Peptide
55	Lg	118	VAL	Peptide
55	Lg	119	VAL	Peptide
55	Lg	2	SER	Peptide
55	Lg	20	TYR	Sidechain
55	Lg	25	HIS	Sidechain
55	Lg	58	ARG	Sidechain
55	Lg	6	ARG	Peptide
55	Lg	73	ARG	Sidechain
55	Lg	8	ALA	Peptide
56	Lh	104	ARG	Sidechain
56	Lh	106	ARG	Sidechain
56	Lh	13	LYS	Mainchain
56	Lh	130	GLN	Peptide
56	Lh	131	GLU	Peptide
56	Lh	14	ARG	Sidechain
56	Lh	15	VAL	Peptide
56	Lh	26	TYR	Sidechain
56	Lh	47	PHE	Sidechain
56	Lh	58	TYR	Sidechain
56	Lh	65	ARG	Sidechain
56	Lh	72	PHE	Sidechain
56	Lh	93	TYR	Sidechain
70	Li	10	ARG	Mainchain,Peptide,Sidechain
70	Li	106	VAL	Peptide
70	Li	107	LEU	Mainchain,Peptide
70	Li	11	HIS	Peptide,Sidechain
70	Li	110	GLN	Mainchain,Peptide
70	Li	112	THR	Peptide

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Mol	Chain	Res	Type	Group
70	Li	117	THR	Peptide
70	Li	12	SER	Peptide
70	Li	16	LYS	Peptide
70	Li	17	SER	Peptide
70	Li	29	LYS	Mainchain
70	Li	30	LEU	Peptide
70	Li	32	TYR	Sidechain
70	Li	34	TYR	Peptide
70	Li	38	ARG	Sidechain
70	Li	39	ALA	Peptide
70	Li	42	PRO	Mainchain,Peptide
70	Li	44	CYS	Mainchain,Peptide
70	Li	53	GLY	Peptide
70	Li	54	ILE	Peptide
70	Li	61	GLU	Peptide
70	Li	62	TYR	Peptide
70	Li	64	ARG	Peptide
70	Li	65	PRO	Peptide
70	Li	66	ARG	Peptide
70	Li	7	TYR	Sidechain
70	Li	70	ASN	Mainchain,Peptide
70	Li	71	ARG	Sidechain
70	Li	73	THR	Peptide
70	Li	79	GLY	Peptide
70	Li	81	VAL	Peptide
70	Li	82	LEU	Peptide
70	Li	88	ARG	Sidechain
70	Li	9	LYS	Peptide
70	Li	95	PHE	Sidechain
71	Lj	1	MET	Peptide
71	Lj	103	ARG	Peptide,Sidechain
71	Lj	12	TYR	Mainchain
71	Lj	14	ARG	Sidechain
71	Lj	20	TYR	Sidechain
71	Lj	24	LYS	Mainchain,Peptide
71	Lj	25	SER	Mainchain,Peptide
71	Lj	37	GLU	Peptide
71	Lj	39	VAL	Peptide
71	Lj	4	ARG	Peptide
71	Lj	40	ASN	Peptide
71	Lj	41	THR	Peptide
71	Lj	44	GLU	Peptide

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Mol	Chain	Res	Type	Group
71	Lj	47	TRP	Peptide
71	Lj	48	TYR	Peptide
71	Lj	49	ALA	Peptide
71	Lj	55	TYR	Sidechain
71	Lj	57	TYR	Sidechain
71	Lj	6	GLY	Peptide
71	Lj	61	THR	Peptide
71	Lj	8	ARG	Mainchain
71	Lj	80	GLY	Peptide
71	Lj	94	PRO	Peptide
72	Lk	111	LYS	Peptide
72	Lk	37	THR	Peptide
72	Lk	39	ARG	Sidechain
72	Lk	40	VAL	Peptide
72	Lk	56	TYR	Sidechain
72	Lk	59	ARG	Sidechain
72	Lk	66	VAL	Mainchain
72	Lk	93	MET	Mainchain
72	Lk	95	SER	Mainchain,Peptide
57	Ll	11	ARG	Mainchain,Peptide
57	Ll	12	ARG	Peptide
57	Ll	21	ARG	Sidechain
57	Ll	43	ARG	Sidechain
57	Ll	45	ARG	Sidechain
57	Ll	47	TYR	Sidechain
57	Ll	51	VAL	Peptide
57	Ll	56	ARG	Sidechain
57	Ll	68	ARG	Sidechain
57	Ll	87	ARG	Peptide
83	Lm	1	MET	Peptide
83	Lm	10	ILE	Peptide
83	Lm	17	ARG	Sidechain
83	Lm	18	TYR	Sidechain
83	Lm	23	ARG	Sidechain
83	Lm	4	ARG	Sidechain
83	Lm	49	ARG	Sidechain
83	Lm	6	LYS	Peptide
83	Lm	69	TYR	Sidechain
83	Lm	7	LYS	Mainchain,Peptide
83	Lm	72	ASN	Peptide
58	Ln	16	ARG	Sidechain
58	Ln	24	ARG	Peptide

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Mol	Chain	Res	Type	Group
58	Ln	26	LYS	Peptide
58	Ln	40	LYS	Peptide
58	Ln	41	TYR	Peptide
58	Ln	42	LEU	Peptide
58	Ln	43	TYR	Peptide
58	Ln	44	THR	Peptide
58	Ln	47	VAL	Mainchain,Peptide
58	Ln	48	PHE	Peptide
59	Lo	18	ARG	Sidechain
59	Lo	3	SER	Peptide
59	Lo	30	ARG	Mainchain,Peptide
59	Lo	34	THR	Peptide
59	Lo	37	TYR	Sidechain
59	Lo	38	ASN	Peptide
59	Lo	4	HIS	Sidechain
59	Lo	41	ARG	Sidechain
59	Lo	42	ARG	Sidechain
59	Lo	45	ARG	Sidechain
59	Lo	7	PHE	Sidechain
73	Lp	13	TYR	Sidechain
73	Lp	21	ARG	Sidechain
73	Lp	24	TYR	Sidechain
73	Lp	28	HIS	Peptide
73	Lp	35	ARG	Sidechain
73	Lp	39	CYS	Peptide
73	Lp	46	ARG	Sidechain
73	Lp	49	LYS	Peptide
73	Lp	52	LYS	Mainchain,Peptide
61	Lq	12	ARG	Sidechain
61	Lq	15	ARG	Sidechain
61	Lq	17	ARG	Sidechain
61	Lq	23	ARG	Mainchain,Peptide
60	Lr	101	GLY	Mainchain,Peptide
60	Lr	104	LEU	Peptide
60	Lr	11	TYR	Sidechain
60	Lr	2	VAL	Peptide
60	Lr	28	TYR	Peptide
60	Lr	32	LYS	Mainchain,Peptide
60	Lr	45	ARG	Peptide
60	Lr	46	LYS	Mainchain,Peptide
60	Lr	55	LYS	Peptide
60	Lr	58	PHE	Peptide

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Mol	Chain	Res	Type	Group
60	Lr	60	LYS	Peptide
60	Lr	61	LYS	Mainchain,Peptide
60	Lr	63	LYS	Peptide
60	Lr	64	THR	Peptide
60	Lr	68	ILE	Peptide
60	Lr	79	HIS	Peptide
60	Lr	80	TYR	Sidechain
60	Lr	83	HIS	Sidechain
60	Lr	85	ILE	Peptide
60	Lr	86	LYS	Peptide
60	Lr	87	ARG	Sidechain
60	Lr	89	LYS	Mainchain,Peptide
60	Lr	94	GLY	Peptide
79	Ls	186	PHE	Sidechain
79	Ls	208	ASP	Peptide
79	Ls	234	TYR	Sidechain
79	Ls	235	PRO	Peptide
79	Ls	236	THR	Peptide
79	Ls	244	PHE	Sidechain
79	Ls	257	GLU	Peptide
79	Ls	259	GLU	Peptide
79	Ls	260	TYR	Peptide
79	Ls	45	ARG	Sidechain
79	Ls	5	ARG	Sidechain
79	Ls	52	SER	Peptide
79	Ls	63	ARG	Sidechain
75	Lt	53	ARG	Peptide
75	Lt	61	SER	Peptide
75	Lu	41	TYR	Sidechain
75	Lu	53	ARG	Peptide
75	Lu	61	SER	Peptide
76	Lv	56	ALA	Peptide
76	Lw	34	ILE	Peptide
76	Lw	56	ALA	Peptide
62	Lx	17	UNK	Peptide
62	Lx	3	UNK	Mainchain,Peptide
62	Lx	6	UNK	Peptide
62	Lx	8	UNK	Peptide
62	Ly	19	UNK	Peptide
63	Lz	1	UNK	Peptide
63	Lz	2	UNK	Mainchain
2	SA	109	PRO	Mainchain

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Mol	Chain	Res	Type	Group
2	SA	160	TYR	Sidechain
2	SA	17	GLN	Peptide
2	SA	184	ARG	Sidechain
2	SA	19	ILE	Peptide
2	SA	196	GLY	Peptide
2	SA	197	HIS	Peptide
2	SA	198	LYS	Peptide
2	SA	199	TRP	Peptide
2	SA	200	ASP	Peptide
2	SA	204	ASP	Mainchain
2	SA	207	PHE	Peptide
2	SA	211	PRO	Mainchain,Peptide
2	SA	213	GLU	Peptide
2	SA	235	TYR	Sidechain
2	SA	27	VAL	Peptide
2	SA	28	HIS	Sidechain
2	SA	41	TYR	Sidechain
2	SA	45	ARG	Peptide
2	SA	72	ILE	Peptide
2	SA	74	ASN	Peptide
2	SA	89	ARG	Sidechain
2	SA	97	TYR	Sidechain
3	SB	107	TYR	Sidechain
3	SB	116	ARG	Sidechain
3	SB	129	SER	Peptide
3	SB	152	PHE	Sidechain
3	SB	156	TYR	Sidechain
3	SB	157	MET	Peptide
3	SB	161	GLY	Peptide
3	SB	167	TYR	Sidechain
3	SB	171	ALA	Peptide
3	SB	173	ARG	Sidechain
3	SB	174	HIS	Mainchain
3	SB	178	ARG	Sidechain
3	SB	179	GLN	Peptide
3	SB	192	TRP	Peptide
3	SB	193	ASP	Peptide
3	SB	210	ILE	Mainchain
3	SB	212	PRO	Mainchain,Peptide
3	SB	218	GLU	Peptide
3	SB	27	ARG	Sidechain
3	SB	34	TYR	Sidechain

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Mol	Chain	Res	Type	Group
3	SB	45	ARG	Sidechain
3	SB	54	ARG	Peptide
3	SB	64	ARG	Sidechain
3	SB	76	ARG	Sidechain
3	SB	77	PHE	Peptide
3	SB	78	ASN	Peptide
3	SB	79	PHE	Peptide
3	SB	81	GLU	Mainchain
3	SB	93	ASN	Peptide
3	SB	94	ARG	Sidechain
3	SB	96	LEU	Peptide
25	SC	105	ASN	Peptide
25	SC	109	ARG	Sidechain
25	SC	116	PHE	Sidechain
25	SC	128	ARG	Sidechain
25	SC	132	ARG	Sidechain
25	SC	135	HIS	Sidechain
25	SC	136	ILE	Mainchain
25	SC	137	ARG	Peptide
25	SC	14	THR	Peptide
25	SC	143	VAL	Mainchain,Peptide
25	SC	144	ASN	Mainchain,Peptide
25	SC	146	PRO	Mainchain
25	SC	150	VAL	Peptide
25	SC	158	ILE	Peptide
25	SC	159	ASP	Peptide
25	SC	16	LYS	Peptide
25	SC	161	SER	Mainchain,Peptide
25	SC	162	LEU	Peptide
25	SC	164	SER	Mainchain
25	SC	173	ARG	Sidechain
25	SC	176	ARG	Sidechain
25	SC	18	ARG	Peptide
25	SC	194	GLU	Mainchain
25	SC	24	GLU	Mainchain
25	SC	25	ARG	Sidechain
25	SC	29	GLU	Sidechain
25	SC	33	VAL	Mainchain
25	SC	36	TYR	Sidechain
25	SC	42	ARG	Sidechain
25	SC	44	LEU	Mainchain,Peptide
25	SC	53	ARG	Sidechain

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Mol	Chain	Res	Type	Group
25	SC	55	ARG	Sidechain
25	SC	6	ARG	Sidechain
25	SC	65	ASP	Peptide
25	SC	70	ARG	Sidechain
25	SC	8	TYR	Sidechain
25	SC	81	ARG	Sidechain
25	SC	84	ARG	Sidechain
25	SC	85	TYR	Sidechain
4	SD	131	PHE	Mainchain,Peptide
4	SD	132	GLY	Mainchain,Peptide
4	SD	134	LYS	Peptide
4	SD	136	ILE	Mainchain
4	SD	150	PRO	Mainchain,Peptide
4	SD	153	ILE	Mainchain,Peptide
4	SD	172	PHE	Sidechain
4	SD	191	ARG	Sidechain
4	SD	201	HIS	Sidechain
4	SD	211	GLU	Peptide
4	SD	212	ASP	Peptide
4	SD	221	ARG	Sidechain
4	SD	239	PRO	Mainchain,Peptide
4	SD	240	LYS	Mainchain,Peptide
4	SD	49	ARG	Sidechain
4	SD	54	TYR	Sidechain
4	SD	59	ARG	Sidechain
4	SD	75	LYS	Mainchain
4	SD	77	ARG	Sidechain
4	SD	82	TYR	Sidechain
4	SD	90	ILE	Peptide
4	SD	93	PRO	Mainchain,Peptide
4	SD	94	LYS	Peptide
4	SD	99	TYR	Sidechain
5	SE	101	ALA	Mainchain,Peptide
5	SE	104	ARG	Sidechain
5	SE	137	ALA	Peptide
5	SE	146	VAL	Peptide
5	SE	149	ARG	Sidechain
5	SE	15	PHE	Sidechain
5	SE	150	ARG	Sidechain
5	SE	152	TYR	Sidechain
5	SE	183	ARG	Sidechain
5	SE	206	PHE	Sidechain

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Mol	Chain	Res	Type	Group
5	SE	240	ARG	Sidechain
5	SE	252	TYR	Sidechain
5	SE	28	GLY	Mainchain,Peptide
5	SE	30	ARG	Sidechain
5	SE	31	ARG	Sidechain
5	SE	38	ARG	Sidechain
5	SE	4	ARG	Peptide
5	SE	8	ARG	Sidechain
5	SE	90	MET	Mainchain,Peptide
5	SE	94	PRO	Peptide
6	SF	118	ARG	Sidechain
6	SF	131	ARG	Sidechain
6	SF	132	ARG	Sidechain
6	SF	138	SER	Peptide
6	SF	148	TYR	Sidechain
6	SF	160	ARG	Sidechain
6	SF	165	ILE	Peptide
6	SF	44	TYR	Sidechain
6	SF	55	LYS	Peptide
6	SF	58	ARG	Peptide,Sidechain
6	SF	62	CYS	Peptide
6	SF	66	GLU	Mainchain
6	SF	78	ASN	Peptide
26	SG	10	UNK	Mainchain,Peptide
26	SG	100	UNK	Mainchain,Peptide
26	SG	101	UNK	Mainchain
26	SG	103	UNK	Mainchain,Peptide
26	SG	104	UNK	Mainchain,Peptide
26	SG	107	UNK	Peptide
26	SG	109	UNK	Peptide
26	SG	11	UNK	Mainchain,Peptide
26	SG	128	UNK	Mainchain
26	SG	21	UNK	Mainchain,Peptide
26	SG	35	UNK	Mainchain,Peptide
26	SG	37	UNK	Peptide
26	SG	38	UNK	Peptide
26	SG	52	UNK	Mainchain,Peptide
26	SG	53	UNK	Peptide
26	SG	55	UNK	Mainchain
26	SG	56	UNK	Peptide
26	SG	71	UNK	Peptide
26	SG	75	UNK	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
26	SG	80	UNK	Peptide
26	SG	81	UNK	Mainchain,Peptide
26	SG	83	UNK	Mainchain,Peptide
26	SG	86	UNK	Mainchain,Peptide
26	SG	87	UNK	Mainchain,Peptide
26	SG	9	UNK	Mainchain,Peptide
26	SG	96	UNK	Mainchain,Peptide
26	SG	97	UNK	Mainchain,Peptide
27	SH	105	THR	Peptide
27	SH	106	THR	Peptide
27	SH	120	ASN	Mainchain
27	SH	30	SER	Peptide
27	SH	78	ARG	Mainchain
27	SH	82	GLY	Mainchain,Peptide
27	SH	83	VAL	Peptide
27	SH	84	LYS	Peptide
27	SH	85	GLU	Peptide
27	SH	92	ARG	Sidechain
7	SI	125	ALA	Peptide
7	SI	129	ARG	Sidechain
7	SI	141	ARG	Sidechain
7	SI	148	TYR	Peptide
7	SI	98	TYR	Sidechain
8	SJ	10	PRO	Peptide
8	SJ	126	SER	Mainchain,Peptide
8	SJ	21	SER	Peptide
8	SJ	28	ARG	Peptide
8	SJ	30	ARG	Sidechain
8	SJ	66	PRO	Peptide
8	SJ	75	ARG	Sidechain
8	SJ	76	LYS	Peptide
8	SJ	77	SER	Peptide
8	SJ	78	PRO	Mainchain,Peptide
8	SJ	79	CYS	Peptide
8	SJ	81	GLU	Peptide
8	SJ	87	ASP	Peptide
8	SJ	89	PHE	Peptide
9	SK	132	THR	Peptide
9	SK	133	PRO	Peptide
9	SK	141	ARG	Peptide
9	SK	144	GLY	Peptide
9	SK	49	ARG	Sidechain

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Mol	Chain	Res	Type	Group
9	SK	64	ASP	Peptide
9	SK	65	ARG	Sidechain
9	SK	69	SER	Mainchain
9	SK	71	TYR	Peptide
9	SK	72	ALA	Peptide
9	SK	73	ALA	Peptide
9	SK	83	ARG	Sidechain
9	SK	88	GLY	Mainchain
9	SK	91	ALA	Mainchain
10	SL	118	ARG	Peptide
10	SL	121	VAL	Peptide
10	SL	123	LYS	Peptide
10	SL	27	TYR	Peptide
10	SL	3	LYS	Mainchain
10	SL	32	LEU	Peptide
10	SL	4	THR	Peptide
10	SL	5	ARG	Sidechain
10	SL	81	ALA	Peptide
10	SL	84	VAL	Mainchain,Peptide
11	SM	113	ARG	Peptide,Sidechain
11	SM	114	LEU	Mainchain
11	SM	118	ARG	Sidechain
11	SM	126	TYR	Sidechain
11	SM	13	LEU	Peptide
11	SM	132	ARG	Sidechain
11	SM	133	GLY	Mainchain
11	SM	134	GLN	Peptide
11	SM	136	THR	Peptide
11	SM	138	THR	Peptide
11	SM	144	LYS	Peptide
11	SM	147	GLY	Peptide
11	SM	148	VAL	Peptide
11	SM	34	LYS	Peptide
11	SM	82	TRP	Peptide
11	SM	89	ASP	Mainchain,Peptide
11	SM	9	PHE	Peptide
11	SM	90	TYR	Sidechain
11	SM	94	ARG	Sidechain
11	SM	95	PHE	Sidechain
11	SM	97	GLN	Mainchain
11	SM	98	VAL	Mainchain
28	SN	10	HIS	Mainchain

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Mol	Chain	Res	Type	Group
28	SN	22	ARG	Sidechain
28	SN	30	LEU	Peptide
28	SN	34	TYR	Mainchain,Peptide
28	SN	55	TYR	Peptide
12	SO	104	ARG	Sidechain
12	SO	106	ARG	Sidechain
12	SO	121	ARG	Sidechain
12	SO	124	ARG	Mainchain
12	SO	141	TYR	Sidechain
12	SO	31	ALA	Peptide
12	SO	55	ARG	Sidechain
12	SO	56	ASP	Mainchain
12	SO	64	LYS	Mainchain
12	SO	67	THR	Mainchain,Peptide
12	SO	80	LEU	Mainchain,Peptide
12	SO	99	ARG	Sidechain
14	SP	41	LEU	Mainchain
14	SP	53	THR	Peptide
14	SP	83	ARG	Sidechain
14	SP	89	ARG	Sidechain
14	SP	91	TYR	Sidechain
14	SP	98	TYR	Sidechain
13	SQ	109	LEU	Mainchain
13	SQ	112	ALA	Peptide
13	SQ	116	GLY	Peptide
13	SQ	119	ARG	Sidechain
13	SQ	123	VAL	Peptide
13	SQ	124	SER	Peptide
13	SQ	130	ARG	Peptide
13	SQ	136	PRO	Peptide
13	SQ	14	ARG	Sidechain
13	SQ	140	ARG	Sidechain
13	SQ	21	TYR	Mainchain,Peptide
13	SQ	23	ARG	Sidechain
13	SQ	26	LEU	Mainchain,Peptide
13	SQ	38	VAL	Peptide
13	SQ	47	ARG	Sidechain
13	SQ	60	ARG	Peptide
13	SQ	61	ILE	Peptide
13	SQ	63	ARG	Peptide
13	SQ	65	PRO	Peptide
13	SQ	67	ARG	Peptide,Sidechain

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Mol	Chain	Res	Type	Group
13	SQ	73	LEU	Mainchain,Peptide
13	SQ	74	GLN	Peptide
13	SQ	76	GLU	Peptide
13	SQ	81	ARG	Peptide
13	SQ	82	MET	Mainchain,Peptide
13	SQ	83	ASP	Peptide
13	SQ	86	PRO	Peptide
13	SQ	94	GLU	Mainchain,Peptide
13	SQ	96	ILE	Peptide
13	SQ	97	ARG	Peptide,Sidechain
16	SR	106	TYR	Sidechain
16	SR	139	ARG	Sidechain
16	SR	74	LYS	Peptide
16	SR	90	ARG	Sidechain
15	SS	123	GLY	Mainchain
15	SS	13	ASN	Mainchain
15	SS	132	ARG	Sidechain
15	SS	138	ALA	Mainchain,Peptide
15	SS	14	PRO	Mainchain
15	SS	17	PHE	Sidechain
15	SS	27	ARG	Sidechain
15	SS	29	GLY	Peptide
15	SS	33	LEU	Peptide
15	SS	4	SER	Mainchain
15	SS	42	THR	Peptide
15	SS	48	LEU	Peptide
15	SS	50	PRO	Peptide
15	SS	62	SER	Mainchain
15	SS	65	ARG	Sidechain
15	SS	68	TYR	Sidechain
15	SS	80	LYS	Peptide
15	SS	82	TYR	Sidechain
15	SS	92	PRO	Mainchain,Peptide
15	SS	93	PRO	Mainchain,Peptide
15	SS	98	SER	Mainchain,Peptide
29	ST	15	ARG	Sidechain
29	ST	26	ALA	Peptide
29	ST	28	ASP	Peptide
29	ST	40	ASP	Peptide
29	ST	8	MET	Peptide
29	ST	9	VAL	Peptide
23	SU	100	ASN	Peptide

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Mol	Chain	Res	Type	Group
23	SU	17	PHE	Sidechain
23	SU	22	LEU	Peptide
23	SU	25	ARG	Sidechain
23	SU	26	LYS	Peptide
23	SU	30	LEU	Peptide
23	SU	32	VAL	Peptide
23	SU	33	LEU	Mainchain,Peptide
23	SU	34	HIS	Mainchain,Peptide
23	SU	37	ARG	Peptide
23	SU	38	ALA	Peptide
23	SU	39	ASN	Peptide
23	SU	41	SER	Peptide
23	SU	5	LYS	Peptide
23	SU	53	TYR	Peptide
23	SU	68	THR	Mainchain,Peptide
23	SU	7	ALA	Mainchain,Peptide
23	SU	70	PHE	Peptide
23	SU	71	GLY	Mainchain,Peptide
23	SU	74	LYS	Peptide
23	SU	75	SER	Peptide
23	SU	76	THR	Peptide
23	SU	77	GLY	Peptide
23	SU	78	PHE	Sidechain
23	SU	79	GLY	Mainchain,Peptide
23	SU	8	PRO	Mainchain
23	SU	82	TYR	Mainchain,Peptide
23	SU	91	TYR	Sidechain
23	SU	92	GLU	Peptide
23	SU	95	TYR	Peptide,Sidechain
17	SV	104	ARG	Sidechain
17	SV	107	ASN	Peptide
17	SV	30	LYS	Peptide
17	SV	39	ASN	Mainchain
17	SV	78	ARG	Sidechain
18	SW	106	UNK	Peptide
18	SW	107	UNK	Mainchain,Peptide
18	SW	108	UNK	Peptide
18	SW	13	UNK	Peptide
18	SW	14	UNK	Mainchain,Peptide
18	SW	76	UNK	Peptide
18	SW	79	UNK	Peptide
18	SW	80	UNK	Peptide

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Mol	Chain	Res	Type	Group
18	SW	81	UNK	Peptide
18	SW	87	UNK	Peptide
24	SX	53	GLN	Mainchain
24	SX	65	LEU	Peptide
24	SX	74	ARG	Mainchain
19	SY	1	MET	Peptide
19	SY	21	GLY	Peptide
19	SY	22	GLN	Peptide
19	SY	23	VAL	Peptide
19	SY	27	ARG	Sidechain
19	SY	54	LEU	Peptide
20	SZ	1	MET	Peptide
20	SZ	10	ARG	Sidechain
20	SZ	18	THR	Peptide
20	SZ	22	ALA	Peptide
20	SZ	24	GLN	Peptide
20	SZ	3	LYS	Peptide
20	SZ	44	PHE	Mainchain,Peptide
20	SZ	46	THR	Peptide
1	Sa	105	LYS	Peptide
1	Sa	107	HIS	Peptide
1	Sa	133	SER	Peptide
1	Sa	143	ARG	Sidechain
1	Sa	148	PRO	Peptide
1	Sa	151	ARG	Sidechain
1	Sa	159	TYR	Sidechain
1	Sa	172	ARG	Sidechain
1	Sa	173	LEU	Peptide
1	Sa	200	PHE	Peptide
1	Sa	203	GLY	Peptide
1	Sa	206	ALA	Peptide
1	Sa	241	ALA	Peptide
1	Sa	243	ARG	Sidechain
1	Sa	245	TYR	Sidechain
1	Sa	247	GLY	Mainchain
1	Sa	26	ARG	Sidechain
1	Sa	274	ARG	Sidechain
1	Sa	287	TYR	Sidechain
1	Sa	301	VAL	Peptide
1	Sa	344	GLU	Peptide
1	Sa	346	ARG	Sidechain
1	Sa	63	GLN	Sidechain

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Mol	Chain	Res	Type	Group
1	Sa	70	TYR	Sidechain
1	Sa	82	VAL	Mainchain
21	Sc	3	UNK	Peptide

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	Sa	376/380 (99%)	330 (88%)	24 (6%)	22 (6%)	1 17
2	SA	258/260 (99%)	194 (75%)	31 (12%)	33 (13%)	0 5
3	SB	206/208 (99%)	117 (57%)	35 (17%)	54 (26%)	0 1
4	SD	198/200 (99%)	164 (83%)	17 (9%)	17 (9%)	1 12
5	SE	261/263 (99%)	186 (71%)	45 (17%)	30 (12%)	0 6
6	SF	189/191 (99%)	157 (83%)	25 (13%)	7 (4%)	3 24
7	SI	124/126 (98%)	90 (73%)	17 (14%)	17 (14%)	0 4
8	SJ	126/128 (98%)	103 (82%)	14 (11%)	9 (7%)	1 14
9	SK	117/119 (98%)	85 (73%)	13 (11%)	19 (16%)	0 3
10	SL	140/142 (99%)	93 (66%)	18 (13%)	29 (21%)	0 2
11	SM	150/152 (99%)	101 (67%)	22 (15%)	27 (18%)	0 3
12	SO	119/121 (98%)	95 (80%)	11 (9%)	13 (11%)	0 8
13	SQ	139/141 (99%)	87 (63%)	27 (19%)	25 (18%)	0 3
14	SP	83/85 (98%)	64 (77%)	12 (14%)	7 (8%)	1 12
15	SS	144/146 (99%)	119 (83%)	13 (9%)	12 (8%)	1 12
16	SR	89/91 (98%)	65 (73%)	15 (17%)	9 (10%)	0 9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
17	SV	98/100 (98%)	70 (71%)	12 (12%)	16 (16%)	0 3
19	SY	56/58 (97%)	38 (68%)	8 (14%)	10 (18%)	0 3
20	SZ	60/62 (97%)	43 (72%)	9 (15%)	8 (13%)	0 5
23	SU	96/98 (98%)	70 (73%)	12 (12%)	14 (15%)	0 4
24	SX	48/50 (96%)	36 (75%)	8 (17%)	4 (8%)	1 12
25	SC	193/195 (99%)	127 (66%)	34 (18%)	32 (17%)	0 3
27	SH	128/130 (98%)	100 (78%)	17 (13%)	11 (9%)	1 12
28	SN	46/48 (96%)	30 (65%)	4 (9%)	12 (26%)	0 1
29	ST	80/82 (98%)	67 (84%)	4 (5%)	9 (11%)	0 7
36	LA	214/216 (99%)	191 (89%)	14 (6%)	9 (4%)	3 22
37	LB	253/255 (99%)	224 (88%)	18 (7%)	11 (4%)	2 22
38	LE	168/170 (99%)	129 (77%)	16 (10%)	23 (14%)	0 4
39	LF	188/190 (99%)	165 (88%)	16 (8%)	7 (4%)	3 24
40	LH	199/201 (99%)	149 (75%)	26 (13%)	24 (12%)	0 6
41	LM	138/140 (99%)	123 (89%)	9 (6%)	6 (4%)	2 22
42	LP	192/194 (99%)	169 (88%)	18 (9%)	5 (3%)	5 31
43	LO	142/144 (99%)	106 (75%)	17 (12%)	19 (13%)	0 5
44	LR	161/163 (99%)	127 (79%)	18 (11%)	16 (10%)	0 9
45	LQ	302/304 (99%)	218 (72%)	39 (13%)	45 (15%)	0 3
46	LT	187/189 (99%)	167 (89%)	12 (6%)	8 (4%)	2 22
47	LU	162/164 (99%)	136 (84%)	18 (11%)	8 (5%)	2 20
48	LV	169/171 (99%)	131 (78%)	20 (12%)	18 (11%)	0 8
49	LX	120/122 (98%)	98 (82%)	12 (10%)	10 (8%)	1 12
50	LZ	73/75 (97%)	53 (73%)	13 (18%)	7 (10%)	0 10
51	LY	128/130 (98%)	113 (88%)	9 (7%)	6 (5%)	2 21
52	Lb	71/73 (97%)	48 (68%)	12 (17%)	11 (16%)	0 3
53	Ld	21/23 (91%)	18 (86%)	2 (10%)	1 (5%)	2 21
54	Lf	110/112 (98%)	95 (86%)	8 (7%)	7 (6%)	1 16
55	Lg	118/120 (98%)	96 (81%)	13 (11%)	9 (8%)	1 13
56	Lh	131/133 (98%)	113 (86%)	9 (7%)	9 (7%)	1 15
57	Ll	92/94 (98%)	60 (65%)	18 (20%)	14 (15%)	0 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
58	Ln	67/69 (97%)	51 (76%)	11 (16%)	5 (8%)	1 13
59	Lo	49/51 (96%)	33 (67%)	6 (12%)	10 (20%)	0 2
60	Lr	103/105 (98%)	75 (73%)	16 (16%)	12 (12%)	0 6
61	Lq	23/25 (92%)	20 (87%)	3 (13%)	0	100 100
64	LG	217/219 (99%)	149 (69%)	24 (11%)	44 (20%)	0 2
66	LN	132/134 (98%)	96 (73%)	15 (11%)	21 (16%)	0 3
67	LS	165/167 (99%)	115 (70%)	24 (14%)	26 (16%)	0 3
68	LW	106/108 (98%)	73 (69%)	15 (14%)	18 (17%)	0 3
69	La	97/99 (98%)	68 (70%)	15 (16%)	14 (14%)	0 4
70	Li	117/119 (98%)	72 (62%)	13 (11%)	32 (27%)	0 0
71	Lj	102/104 (98%)	74 (72%)	17 (17%)	11 (11%)	0 8
72	Lk	75/77 (97%)	60 (80%)	5 (7%)	10 (13%)	0 5
73	Lp	39/41 (95%)	28 (72%)	8 (20%)	3 (8%)	1 13
74	LJ	126/128 (98%)	97 (77%)	15 (12%)	14 (11%)	0 7
75	Lt	56/58 (97%)	54 (96%)	1 (2%)	1 (2%)	8 40
75	Lu	56/58 (97%)	54 (96%)	1 (2%)	1 (2%)	8 40
76	Lv	57/59 (97%)	54 (95%)	2 (4%)	1 (2%)	8 40
76	Lw	57/59 (97%)	54 (95%)	2 (4%)	1 (2%)	8 40
77	Lc	122/124 (98%)	106 (87%)	7 (6%)	9 (7%)	1 14
78	Le	239/244 (98%)	212 (89%)	17 (7%)	10 (4%)	3 22
79	Ls	260/262 (99%)	233 (90%)	17 (6%)	10 (4%)	3 24
80	LC	387/389 (100%)	298 (77%)	43 (11%)	46 (12%)	0 6
81	LD	368/372 (99%)	306 (83%)	38 (10%)	24 (6%)	1 16
82	LK	204/206 (99%)	179 (88%)	15 (7%)	10 (5%)	2 20
83	Lm	90/92 (98%)	77 (86%)	9 (10%)	4 (4%)	2 22
84	LI	182/184 (99%)	140 (77%)	26 (14%)	16 (9%)	1 11
All	All	10359/10512 (98%)	8138 (79%)	1149 (11%)	1072 (10%)	1 8

All (1072) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	Sa	2	ALA
1	Sa	112	MET

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Mol	Chain	Res	Type
1	Sa	129	ASP
1	Sa	149	VAL
1	Sa	150	SER
1	Sa	151	ARG
1	Sa	202	SER
1	Sa	203	GLY
1	Sa	216	LEU
1	Sa	271	GLY
1	Sa	342	SER
1	Sa	343	HIS
2	SA	3	ALA
2	SA	8	ALA
2	SA	10	ARG
2	SA	11	ALA
2	SA	21	MET
2	SA	172	LYS
2	SA	190	ARG
2	SA	192	THR
2	SA	199	TRP
2	SA	200	ASP
2	SA	210	ASP
2	SA	211	PRO
2	SA	214	ALA
2	SA	215	LYS
2	SA	232	VAL
2	SA	233	ALA
2	SA	235	TYR
2	SA	239	ALA
2	SA	257	ALA
3	SB	31	GLU
3	SB	36	GLY
3	SB	48	ILE
3	SB	55	THR
3	SB	63	GLY
3	SB	71	SER
3	SB	78	ASN
3	SB	81	GLU
3	SB	90	LYS
3	SB	91	VAL
3	SB	93	ASN
3	SB	96	LEU
3	SB	99	ILE

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Mol	Chain	Res	Type
3	SB	111	GLY
3	SB	113	LEU
3	SB	125	PHE
3	SB	126	VAL
3	SB	131	ALA
3	SB	156	TYR
3	SB	162	GLN
3	SB	172	VAL
3	SB	183	GLY
3	SB	184	ILE
3	SB	197	LYS
3	SB	200	PRO
3	SB	206	ASP
3	SB	211	HIS
3	SB	213	PRO
3	SB	215	GLU
3	SB	216	GLU
3	SB	217	ASN
3	SB	218	GLU
4	SD	53	LYS
4	SD	58	TYR
4	SD	137	PRO
4	SD	150	PRO
4	SD	153	ILE
4	SD	154	ILE
5	SE	17	ARG
5	SE	30	ARG
5	SE	37	PRO
5	SE	46	PRO
5	SE	47	VAL
5	SE	50	LEU
5	SE	83	PRO
5	SE	95	VAL
5	SE	109	ALA
5	SE	128	LYS
5	SE	129	GLU
5	SE	134	ILE
5	SE	231	TYR
5	SE	247	SER
5	SE	260	THR
6	SF	41	HIS
6	SF	57	PHE

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Mol	Chain	Res	Type
6	SF	63	PRO
6	SF	178	LYS
7	SI	36	LYS
7	SI	45	ILE
7	SI	76	ARG
7	SI	90	ALA
7	SI	91	ILE
7	SI	142	ALA
8	SJ	3	ALA
9	SK	66	ASP
9	SK	72	ALA
9	SK	73	ALA
9	SK	93	HIS
9	SK	94	ILE
9	SK	138	SER
9	SK	142	LYS
9	SK	144	GLY
10	SL	5	ARG
10	SL	7	MET
10	SL	8	GLY
10	SL	9	ALA
10	SL	24	ASP
10	SL	26	ALA
10	SL	28	LYS
10	SL	30	SER
10	SL	78	LYS
10	SL	96	ASN
10	SL	119	PHE
10	SL	120	LYS
10	SL	123	LYS
10	SL	131	ALA
11	SM	5	ALA
11	SM	8	GLU
11	SM	9	PHE
11	SM	17	ASN
11	SM	74	PRO
11	SM	75	ARG
11	SM	80	PRO
11	SM	83	PHE
11	SM	87	LYS
11	SM	100	SER
11	SM	137	LYS

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Mol	Chain	Res	Type
11	SM	149	SER
12	SO	69	SER
12	SO	109	LYS
12	SO	111	SER
12	SO	137	PRO
13	SQ	22	SER
13	SQ	27	ASP
13	SQ	40	ILE
13	SQ	63	ARG
13	SQ	71	LEU
13	SQ	72	LYS
13	SQ	74	GLN
13	SQ	78	ARG
13	SQ	86	PRO
13	SQ	97	ARG
13	SQ	98	VAL
13	SQ	123	VAL
13	SQ	125	ALA
13	SQ	126	PRO
13	SQ	137	ARG
14	SP	109	PRO
14	SP	110	ALA
14	SP	120	GLU
14	SP	123	HIS
15	SS	10	LYS
15	SS	11	ASP
15	SS	14	PRO
15	SS	34	PRO
15	SS	40	VAL
15	SS	45	PHE
15	SS	46	LYS
15	SS	48	LEU
16	SR	66	ILE
16	SR	70	ARG
16	SR	71	LYS
16	SR	116	ILE
16	SR	139	ARG
17	SV	11	PRO
17	SV	13	SER
17	SV	18	SER
17	SV	24	LYS
17	SV	26	LYS

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Mol	Chain	Res	Type
17	SV	28	TRP
17	SV	29	SER
17	SV	33	GLN
17	SV	101	ILE
19	SY	2	ASP
19	SY	7	LEU
19	SY	13	VAL
19	SY	16	ARG
19	SY	17	THR
19	SY	24	THR
20	SZ	22	ALA
20	SZ	46	THR
20	SZ	57	PRO
20	SZ	59	SER
23	SU	8	PRO
23	SU	34	HIS
23	SU	35	PRO
23	SU	37	ARG
23	SU	40	VAL
23	SU	54	GLU
23	SU	95	TYR
24	SX	62	GLN
24	SX	69	THR
24	SX	79	CYS
25	SC	16	LYS
25	SC	17	PRO
25	SC	58	ALA
25	SC	66	GLU
25	SC	136	ILE
25	SC	137	ARG
25	SC	138	VAL
25	SC	141	GLN
25	SC	147	SER
25	SC	150	VAL
25	SC	154	SER
25	SC	158	ILE
25	SC	159	ASP
25	SC	161	SER
25	SC	164	SER
25	SC	171	PRO
25	SC	173	ARG
27	SH	4	VAL

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Mol	Chain	Res	Type
27	SH	52	PHE
27	SH	53	VAL
27	SH	65	LEU
27	SH	66	ASN
27	SH	96	SER
27	SH	97	ARG
28	SN	11	PRO
28	SN	14	TYR
28	SN	19	ARG
28	SN	20	VAL
28	SN	53	ILE
29	ST	10	ASP
29	ST	11	LEU
29	ST	29	HIS
29	ST	54	LEU
36	LA	73	VAL
36	LA	134	PRO
36	LA	150	THR
36	LA	167	ALA
36	LA	197	TRP
36	LA	198	GLN
37	LB	67	PHE
37	LB	68	ARG
38	LE	2	SER
38	LE	3	THR
38	LE	7	GLN
38	LE	9	ASN
38	LE	10	PRO
38	LE	27	GLU
38	LE	58	SER
38	LE	63	ARG
38	LE	88	VAL
38	LE	89	LYS
38	LE	113	ASP
39	LF	126	ASP
39	LF	140	LYS
39	LF	183	LYS
40	LH	61	ARG
40	LH	63	LEU
40	LH	86	THR
40	LH	90	LYS
40	LH	94	LYS

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Mol	Chain	Res	Type
40	LH	98	GLU
40	LH	225	VAL
40	LH	233	VAL
40	LH	234	MET
41	LM	12	ASN
41	LM	13	LYS
41	LM	36	ASN
42	LP	122	ASN
43	LO	3	THR
43	LO	4	ARG
43	LO	15	VAL
43	LO	22	ILE
44	LR	13	ARG
44	LR	98	MET
44	LR	156	PRO
44	LR	158	VAL
44	LR	161	SER
45	LQ	3	LEU
45	LQ	16	TYR
45	LQ	73	ASP
45	LQ	74	ILE
45	LQ	89	LEU
45	LQ	116	LEU
45	LQ	144	ALA
45	LQ	183	PHE
45	LQ	187	GLU
45	LQ	188	LYS
45	LQ	199	ILE
45	LQ	200	TYR
45	LQ	203	HIS
45	LQ	204	VAL
45	LQ	288	LEU
45	LQ	289	ASN
45	LQ	290	SER
46	LT	54	PRO
46	LT	55	GLN
46	LT	56	LYS
46	LT	57	ILE
46	LT	59	SER
46	LT	72	LYS
47	LU	5	HIS
47	LU	10	ARG

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Mol	Chain	Res	Type
47	LU	70	ARG
47	LU	137	PRO
47	LU	139	PHE
48	LV	8	ALA
48	LV	9	ASN
48	LV	70	THR
48	LV	112	THR
48	LV	168	ALA
49	LX	34	LYS
49	LX	46	LYS
49	LX	50	LYS
49	LX	58	ARG
50	LZ	72	LYS
51	LY	8	THR
51	LY	10	SER
52	Lb	110	ASN
53	Ld	51	LYS
54	Lf	89	TYR
54	Lf	102	SER
55	Lg	87	ARG
55	Lg	101	VAL
55	Lg	102	THR
55	Lg	119	VAL
56	Lh	13	LYS
56	Lh	66	HIS
56	Lh	121	THR
56	Lh	132	ASP
57	Ll	4	GLY
57	Ll	11	ARG
57	Ll	51	VAL
57	Ll	76	SER
57	Ll	84	ALA
57	Ll	87	ARG
57	Ll	90	ALA
57	Ll	93	ALA
58	Ln	19	ASP
58	Ln	31	ALA
58	Ln	44	THR
58	Ln	49	ASP
59	Lo	27	ILE
59	Lo	34	THR
59	Lo	38	ASN

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Mol	Chain	Res	Type
59	Lo	47	THR
60	Lr	14	ASN
60	Lr	48	SER
64	LG	12	LYS
64	LG	26	TRP
64	LG	28	ILE
64	LG	29	LYS
64	LG	37	PRO
64	LG	39	ALA
64	LG	40	GLU
64	LG	44	ALA
64	LG	51	TYR
64	LG	52	PRO
64	LG	54	ASP
64	LG	75	ILE
64	LG	76	THR
64	LG	112	ILE
64	LG	117	ILE
64	LG	122	GLN
64	LG	123	ALA
64	LG	139	VAL
64	LG	173	LEU
64	LG	182	LYS
64	LG	184	ILE
64	LG	188	LEU
64	LG	191	ALA
64	LG	196	PRO
64	LG	198	LEU
66	LN	6	PHE
66	LN	7	VAL
66	LN	17	TYR
66	LN	21	TYR
66	LN	23	ARG
66	LN	31	VAL
66	LN	32	ASP
66	LN	66	PRO
66	LN	80	VAL
66	LN	89	TRP
66	LN	90	GLY
66	LN	102	LEU
67	LS	4	PHE
67	LS	6	PHE

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Mol	Chain	Res	Type
67	LS	17	PRO
67	LS	19	PRO
67	LS	22	GLU
67	LS	23	HIS
67	LS	35	ASN
67	LS	54	LYS
67	LS	70	ASN
67	LS	71	PRO
67	LS	73	THR
67	LS	86	ARG
67	LS	87	THR
67	LS	117	ARG
67	LS	138	ARG
67	LS	151	PHE
67	LS	152	PRO
67	LS	157	LYS
67	LS	161	PRO
67	LS	162	THR
68	LW	29	LYS
68	LW	30	PRO
68	LW	31	VAL
68	LW	34	LYS
68	LW	37	GLU
68	LW	55	LYS
68	LW	58	ASN
68	LW	79	ALA
68	LW	83	ARG
68	LW	100	ASP
68	LW	101	TRP
68	LW	104	VAL
68	LW	105	ILE
68	LW	106	ALA
69	La	11	VAL
69	La	20	GLY
69	La	31	GLU
69	La	37	PRO
69	La	55	ARG
70	Li	11	HIS
70	Li	12	SER
70	Li	18	ASN
70	Li	19	GLN
70	Li	20	THR

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Mol	Chain	Res	Type
70	Li	34	TYR
70	Li	37	LYS
70	Li	40	SER
70	Li	55	PRO
70	Li	57	LEU
70	Li	58	ARG
70	Li	65	PRO
70	Li	69	ARG
70	Li	70	ASN
70	Li	81	VAL
70	Li	101	LYS
70	Li	102	ILE
70	Li	105	LYS
70	Li	107	LEU
70	Li	108	LYS
71	Lj	13	VAL
71	Lj	25	SER
71	Lj	39	VAL
71	Lj	42	LYS
71	Lj	61	THR
71	Lj	62	LYS
72	Lk	66	VAL
73	Lp	51	ILE
74	LJ	32	ILE
74	LJ	37	LEU
74	LJ	67	ASN
74	LJ	76	PRO
74	LJ	78	ALA
74	LJ	94	LYS
74	LJ	96	VAL
75	Lt	62	VAL
75	Lu	62	VAL
77	Lc	45	LEU
77	Lc	117	GLN
78	Le	109	ARG
78	Le	159	ASN
78	Le	205	TRP
79	Ls	12	VAL
79	Ls	63	ARG
79	Ls	236	THR
80	LC	6	PHE
80	LC	40	PRO

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Mol	Chain	Res	Type
80	LC	60	VAL
80	LC	61	GLU
80	LC	63	PRO
80	LC	69	LYS
80	LC	70	LYS
80	LC	124	LYS
80	LC	129	ALA
80	LC	131	THR
80	LC	303	ASP
80	LC	335	PRO
80	LC	351	SER
80	LC	358	ILE
80	LC	369	PHE
80	LC	374	PHE
81	LD	90	ARG
81	LD	95	ALA
81	LD	110	LYS
81	LD	111	THR
81	LD	202	ASN
81	LD	208	ARG
81	LD	330	VAL
81	LD	345	THR
81	LD	348	GLU
81	LD	349	ALA
82	LK	71	PRO
82	LK	126	PRO
82	LK	132	LEU
82	LK	135	GLN
82	LK	136	PRO
82	LK	193	LYS
83	Lm	6	LYS
84	LI	18	PRO
84	LI	39	LYS
84	LI	118	ALA
1	Sa	68	LYS
1	Sa	111	VAL
1	Sa	301	VAL
2	SA	7	ALA
2	SA	15	ARG
2	SA	16	GLU
2	SA	18	ASP
2	SA	26	ASP

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Mol	Chain	Res	Type
2	SA	129	THR
2	SA	201	VAL
2	SA	203	VAL
2	SA	209	ARG
2	SA	212	GLU
2	SA	213	GLU
2	SA	236	ALA
3	SB	32	ASP
3	SB	61	GLU
3	SB	62	LYS
3	SB	80	LEU
3	SB	95	GLY
3	SB	98	ALA
3	SB	107	TYR
3	SB	109	LEU
3	SB	140	GLY
3	SB	149	SER
3	SB	173	ARG
4	SD	56	LEU
4	SD	151	ASP
4	SD	213	ALA
5	SE	16	GLY
5	SE	92	ILE
5	SE	259	PRO
6	SF	136	ASP
7	SI	41	PRO
7	SI	92	ALA
7	SI	138	ARG
8	SJ	30	ARG
8	SJ	58	LYS
8	SJ	66	PRO
8	SJ	127	ASP
9	SK	75	LEU
9	SK	76	ALA
9	SK	88	GLY
9	SK	89	ILE
9	SK	97	ARG
9	SK	133	PRO
9	SK	143	GLY
10	SL	22	TRP
10	SL	27	TYR
10	SL	99	VAL

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Mol	Chain	Res	Type
10	SL	117	VAL
10	SL	118	ARG
11	SM	7	GLU
11	SM	15	VAL
11	SM	79	VAL
11	SM	91	LYS
11	SM	94	ARG
11	SM	95	PHE
11	SM	99	VAL
12	SO	32	ASP
12	SO	41	ALA
12	SO	57	GLN
12	SO	149	LEU
13	SQ	5	ARG
13	SQ	7	LYS
13	SQ	26	LEU
13	SQ	85	VAL
15	SS	99	SER
17	SV	34	LYS
17	SV	44	ASP
19	SY	4	GLN
19	SY	25	GLN
23	SU	39	ASN
23	SU	71	GLY
24	SX	68	PRO
25	SC	20	PRO
25	SC	44	LEU
25	SC	45	TRP
25	SC	142	ILE
25	SC	143	VAL
25	SC	146	PRO
25	SC	151	ARG
25	SC	156	LYS
25	SC	162	LEU
25	SC	167	GLY
27	SH	50	PHE
27	SH	92	ARG
27	SH	95	PRO
28	SN	16	ALA
28	SN	33	LYS
28	SN	48	LYS
29	ST	9	VAL

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Mol	Chain	Res	Type
29	ST	52	PHE
36	LA	98	LEU
37	LB	11	GLY
37	LB	23	ARG
37	LB	38	ASN
37	LB	63	PHE
37	LB	253	THR
38	LE	8	LEU
38	LE	74	ARG
38	LE	108	ILE
38	LE	124	ILE
39	LF	186	ILE
40	LH	64	LYS
40	LH	73	LEU
40	LH	118	LYS
40	LH	126	ILE
40	LH	146	LEU
40	LH	201	ASN
41	LM	9	SER
42	LP	56	LYS
43	LO	10	LYS
43	LO	11	LYS
43	LO	28	HIS
43	LO	99	THR
43	LO	127	LYS
44	LR	20	LYS
44	LR	94	GLU
44	LR	119	GLU
44	LR	160	HIS
45	LQ	14	HIS
45	LQ	52	LYS
45	LQ	55	PHE
45	LQ	59	LYS
45	LQ	119	GLU
45	LQ	141	PRO
45	LQ	207	TYR
45	LQ	218	LYS
45	LQ	284	ARG
46	LT	91	THR
46	LT	137	VAL
47	LU	80	VAL
47	LU	125	VAL

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Mol	Chain	Res	Type
48	LV	31	GLU
48	LV	38	LYS
48	LV	68	GLY
48	LV	74	LYS
48	LV	79	ASN
48	LV	128	ARG
48	LV	166	ILE
48	LV	169	ARG
49	LX	47	THR
49	LX	49	LYS
51	LY	21	ALA
52	Lb	67	ASP
52	Lb	90	SER
52	Lb	91	VAL
52	Lb	93	ARG
54	Lf	23	LYS
55	Lg	2	SER
55	Lg	11	ARG
55	Lg	16	VAL
56	Lh	59	GLY
56	Lh	65	ARG
57	Ll	26	SER
57	Ll	41	ALA
57	Ll	61	THR
57	Ll	77	ASN
59	Lo	4	HIS
59	Lo	25	TYR
59	Lo	35	ILE
59	Lo	39	ALA
60	Lr	34	SER
60	Lr	37	ALA
60	Lr	76	SER
60	Lr	80	TYR
64	LG	69	THR
64	LG	116	PRO
64	LG	129	SER
64	LG	138	ASN
64	LG	144	ASP
64	LG	186	ALA
64	LG	189	ILE
64	LG	194	ALA
66	LN	3	PHE

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Mol	Chain	Res	Type
66	LN	88	SER
67	LS	3	ALA
67	LS	16	LEU
67	LS	52	LYS
67	LS	68	GLU
67	LS	130	THR
68	LW	107	ALA
68	LW	108	ASN
69	La	54	ILE
69	La	98	PRO
70	Li	30	LEU
70	Li	36	LYS
70	Li	43	LYS
70	Li	63	LYS
70	Li	103	VAL
70	Li	112	THR
71	Lj	100	LYS
72	Lk	42	PHE
72	Lk	80	LEU
72	Lk	81	GLY
72	Lk	94	SER
74	LJ	55	LYS
74	LJ	77	SER
74	LJ	92	ASP
74	LJ	122	MET
78	Le	62	LYS
78	Le	206	PRO
79	Ls	52	SER
79	Ls	211	GLU
80	LC	62	LYS
80	LC	103	ASN
80	LC	123	CYS
80	LC	126	LYS
80	LC	137	TYR
80	LC	205	GLU
80	LC	350	THR
80	LC	353	LEU
80	LC	365	THR
81	LD	3	THR
81	LD	20	THR
81	LD	94	GLY
83	Lm	18	TYR

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Mol	Chain	Res	Type
84	LI	99	ILE
84	LI	110	ARG
84	LI	115	MET
1	Sa	340	GLN
3	SB	70	THR
3	SB	157	MET
3	SB	194	PRO
3	SB	195	LYS
5	SE	117	ASN
5	SE	119	HIS
7	SI	30	PRO
7	SI	31	GLY
7	SI	32	ARG
7	SI	81	THR
7	SI	146	LYS
8	SJ	13	LYS
8	SJ	25	VAL
9	SK	107	PRO
9	SK	109	PRO
10	SL	10	GLY
10	SL	107	LYS
11	SM	49	ASP
11	SM	98	VAL
11	SM	151	LYS
12	SO	78	HIS
12	SO	86	GLU
12	SO	87	ASP
14	SP	56	ASP
14	SP	82	ASN
16	SR	90	ARG
17	SV	89	ALA
17	SV	96	HIS
19	SY	8	ALA
20	SZ	19	PRO
20	SZ	47	ALA
23	SU	65	LYS
25	SC	18	ARG
25	SC	170	PRO
28	SN	47	ALA
29	ST	68	LEU
37	LB	34	PHE
37	LB	66	PRO

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Mol	Chain	Res	Type
37	LB	140	ASN
38	LE	4	GLU
38	LE	31	ARG
39	LF	109	THR
40	LH	97	PRO
40	LH	200	LYS
41	LM	49	LEU
43	LO	66	ASN
43	LO	138	GLY
44	LR	11	ASN
44	LR	78	ASN
44	LR	140	ARG
44	LR	149	VAL
45	LQ	23	LYS
45	LQ	131	TYR
45	LQ	197	LYS
45	LQ	212	ALA
45	LQ	248	ARG
47	LU	94	GLU
48	LV	63	TYR
48	LV	77	HIS
49	LX	67	LEU
50	LZ	63	LYS
52	Lb	108	SER
54	Lf	77	ASN
55	Lg	105	GLU
56	Lh	17	GLN
56	Lh	90	ASN
57	Ll	75	LYS
57	Ll	89	ARG
59	Lo	24	PRO
60	Lr	94	GLY
60	Lr	97	LYS
64	LG	41	LYS
64	LG	42	PRO
64	LG	77	PRO
64	LG	143	ASP
64	LG	185	ASP
66	LN	20	ASP
66	LN	65	VAL
66	LN	67	LYS
66	LN	78	ALA

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Mol	Chain	Res	Type
66	LN	105	PHE
68	LW	97	ASN
69	La	14	LEU
69	La	19	ALA
69	La	51	LYS
69	La	97	GLY
70	Li	82	LEU
72	Lk	38	LYS
72	Lk	65	LYS
72	Lk	95	SER
74	LJ	124	LYS
76	Lv	19	SER
76	Lw	19	SER
77	Lc	90	ARG
77	Lc	113	VAL
77	Lc	116	PRO
78	Le	167	ASN
79	Ls	73	THR
79	Ls	258	THR
80	LC	35	ASP
80	LC	215	ASP
80	LC	242	PRO
80	LC	262	ARG
80	LC	270	ALA
80	LC	296	HIS
80	LC	375	GLN
81	LD	62	ALA
81	LD	84	PRO
81	LD	87	GLY
81	LD	113	ARG
81	LD	160	ASP
84	LI	44	ASP
1	Sa	31	THR
1	Sa	237	ILE
1	Sa	241	ALA
2	SA	167	ALA
2	SA	259	PRO
3	SB	30	ALA
3	SB	64	ARG
4	SD	94	LYS
4	SD	149	TYR
4	SD	241	GLY

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Mol	Chain	Res	Type
5	SE	55	LYS
5	SE	150	ARG
5	SE	221	LYS
5	SE	258	LYS
6	SF	79	ASN
7	SI	132	PRO
9	SK	52	LEU
9	SK	145	ARG
10	SL	23	ALA
10	SL	32	LEU
10	SL	129	LEU
11	SM	139	THR
11	SM	140	GLY
11	SM	150	LYS
13	SQ	42	PRO
16	SR	117	LYS
16	SR	118	PRO
19	SY	19	SER
20	SZ	16	GLY
23	SU	59	ASN
25	SC	166	PHE
28	SN	38	CYS
38	LE	65	GLU
38	LE	145	ARG
39	LF	49	GLU
40	LH	60	ARG
40	LH	72	ALA
40	LH	91	MET
40	LH	199	VAL
40	LH	232	GLY
41	LM	6	ARG
42	LP	78	GLY
43	LO	5	PHE
43	LO	12	ARG
43	LO	117	PRO
44	LR	142	PRO
45	LQ	17	PHE
45	LQ	90	GLU
45	LQ	112	THR
45	LQ	117	ASP
45	LQ	118	GLN
45	LQ	123	ASN

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Mol	Chain	Res	Type
45	LQ	132	TYR
45	LQ	293	GLY
49	LX	97	ASP
50	LZ	51	LEU
50	LZ	71	LYS
52	Lb	87	TYR
54	Lf	67	ALA
58	Ln	38	CYS
60	Lr	35	LEU
60	Lr	56	PRO
60	Lr	91	PHE
66	LN	79	ASP
69	La	59	ALA
70	Li	39	ALA
70	Li	104	LYS
70	Li	106	VAL
71	Lj	49	ALA
71	Lj	50	GLY
71	Lj	81	ASN
72	Lk	43	VAL
74	LJ	75	VAL
77	Lc	80	ALA
77	Lc	98	PRO
78	Le	108	LEU
79	Ls	74	GLY
80	LC	4	ARG
80	LC	111	SER
80	LC	158	THR
80	LC	204	LYS
80	LC	359	LYS
80	LC	368	LYS
80	LC	386	ARG
81	LD	109	THR
81	LD	331	LEU
81	LD	343	MET
81	LD	389	SER
82	LK	42	ARG
83	Lm	2	THR
83	Lm	73	THR
84	LI	85	PHE
84	LI	113	THR
3	SB	65	ARG

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Mol	Chain	Res	Type
3	SB	152	PHE
3	SB	185	LYS
3	SB	214	LYS
4	SD	92	ILE
4	SD	163	ASP
5	SE	93	THR
5	SE	108	LYS
5	SE	112	VAL
5	SE	248	PRO
7	SI	148	TYR
10	SL	83	PHE
11	SM	136	THR
12	SO	148	THR
13	SQ	21	TYR
13	SQ	140	ARG
15	SS	33	LEU
16	SR	63	MET
17	SV	23	GLN
20	SZ	60	SER
23	SU	24	SER
29	ST	33	GLN
37	LB	71	HIS
38	LE	6	LYS
43	LO	7	LYS
43	LO	114	PRO
43	LO	134	LYS
44	LR	159	PRO
45	LQ	2	SER
45	LQ	249	ALA
45	LQ	292	ALA
48	LV	3	LYS
48	LV	37	ARG
50	LZ	60	GLN
50	LZ	66	HIS
51	LY	4	ASN
52	Lb	62	PRO
54	Lf	7	ALA
54	Lf	75	HIS
56	Lh	51	THR
60	Lr	46	LYS
64	LG	88	TYR
64	LG	217	MET

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Mol	Chain	Res	Type
67	LS	139	ASP
68	LW	111	ARG
71	Lj	40	ASN
77	Lc	108	THR
78	Le	164	PRO
78	Le	175	LEU
79	Ls	136	SER
80	LC	121	ASN
80	LC	216	GLU
80	LC	260	PRO
80	LC	355	LEU
81	LD	182	ALA
82	LK	131	VAL
84	LI	40	LYS
84	LI	84	ALA
84	LI	98	ARG
4	SD	234	PRO
5	SE	107	PHE
6	SF	138	SER
7	SI	123	LEU
8	SJ	77	SER
10	SL	56	ILE
10	SL	115	PRO
13	SQ	68	GLY
15	SS	13	ASN
17	SV	25	LYS
17	SV	30	LYS
23	SU	64	PHE
38	LE	33	THR
40	LH	69	VAL
43	LO	35	ALA
45	LQ	140	ARG
45	LQ	208	MET
48	LV	2	VAL
50	LZ	45	ARG
52	Lb	81	ASN
64	LG	137	VAL
66	LN	34	ASN
69	La	17	ARG
69	La	49	TYR
70	Li	64	ARG
73	Lp	29	PRO

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Mol	Chain	Res	Type
74	LJ	118	ARG
78	Le	160	LYS
80	LC	297	GLU
80	LC	348	LYS
84	LI	93	PRO
84	LI	114	GLY
84	LI	116	ARG
1	Sa	255	VAL
3	SB	37	VAL
4	SD	152	PRO
5	SE	111	VAL
10	SL	54	ILE
15	SS	53	PRO
25	SC	69	PRO
28	SN	10	HIS
29	ST	43	GLY
36	LA	133	PHE
42	LP	148	ILE
45	LQ	215	GLU
59	Lo	2	PRO
64	LG	45	ILE
70	Li	79	GLY
73	Lp	28	HIS
1	Sa	127	GLY
1	Sa	166	VAL
11	SM	6	GLY
14	SP	60	PRO
25	SC	165	PRO
27	SH	29	PRO
28	SN	15	GLY
36	LA	60	PRO
38	LE	25	VAL
38	LE	75	GLY
51	LY	22	PRO
13	SQ	66	VAL
23	SU	92	GLU
39	LF	122	VAL
40	LH	117	GLY
44	LR	157	GLY
49	LX	62	PRO
52	Lb	60	ILE
72	Lk	40	VAL

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Mol	Chain	Res	Type
77	Lc	97	SER
79	Ls	113	PRO
80	LC	12	GLY
81	LD	386	ILE
82	LK	116	PRO
8	SJ	9	ALA
10	SL	85	PRO
12	SO	66	VAL
42	LP	34	PRO
43	LO	93	ALA
51	LY	49	ILE
52	Lb	83	PRO
55	Lg	15	VAL
82	LK	94	PRO
84	LI	160	PRO
4	SD	132	GLY
13	SQ	65	PRO
49	LX	54	PRO
64	LG	68	PRO
64	LG	90	GLY

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	Sa	301/323 (93%)	275 (91%)	26 (9%)	10 32
2	SA	190/204 (93%)	161 (85%)	29 (15%)	2 14
3	SB	150/175 (86%)	126 (84%)	24 (16%)	2 13
4	SD	176/176 (100%)	152 (86%)	24 (14%)	3 17
5	SE	211/211 (100%)	190 (90%)	21 (10%)	7 26
6	SF	158/159 (99%)	144 (91%)	14 (9%)	9 30
7	SI	103/103 (100%)	91 (88%)	12 (12%)	5 21
8	SJ	91/113 (80%)	84 (92%)	7 (8%)	13 37

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	SK	78/94 (83%)	66 (85%)	12 (15%)	2 14
10	SL	79/113 (70%)	71 (90%)	8 (10%)	7 25
11	SM	116/133 (87%)	91 (78%)	25 (22%)	1 6
12	SO	106/106 (100%)	97 (92%)	9 (8%)	10 33
13	SQ	123/127 (97%)	100 (81%)	23 (19%)	1 9
14	SP	63/74 (85%)	53 (84%)	10 (16%)	2 13
15	SS	121/121 (100%)	96 (79%)	25 (21%)	1 6
16	SR	77/77 (100%)	64 (83%)	13 (17%)	2 12
17	SV	76/87 (87%)	70 (92%)	6 (8%)	12 35
19	SY	49/52 (94%)	41 (84%)	8 (16%)	2 13
20	SZ	44/49 (90%)	38 (86%)	6 (14%)	3 17
23	SU	70/84 (83%)	42 (60%)	28 (40%)	0 0
24	SX	44/44 (100%)	40 (91%)	4 (9%)	9 29
25	SC	154/167 (92%)	136 (88%)	18 (12%)	5 21
27	SH	113/113 (100%)	95 (84%)	18 (16%)	2 13
28	SN	27/40 (68%)	24 (89%)	3 (11%)	6 22
29	ST	68/68 (100%)	59 (87%)	9 (13%)	4 18
36	LA	192/192 (100%)	179 (93%)	13 (7%)	16 41
37	LB	193/195 (99%)	175 (91%)	18 (9%)	9 28
38	LE	148/149 (99%)	126 (85%)	22 (15%)	3 15
39	LF	164/164 (100%)	152 (93%)	12 (7%)	14 39
40	LH	164/173 (95%)	135 (82%)	29 (18%)	2 10
41	LM	103/109 (94%)	91 (88%)	12 (12%)	5 21
42	LP	167/167 (100%)	143 (86%)	24 (14%)	3 16
43	LO	104/110 (94%)	88 (85%)	16 (15%)	2 14
44	LR	138/138 (100%)	117 (85%)	21 (15%)	3 14
45	LQ	242/251 (96%)	196 (81%)	46 (19%)	1 8
46	LT	166/166 (100%)	144 (87%)	22 (13%)	4 18
47	LU	129/140 (92%)	110 (85%)	19 (15%)	3 15
48	LV	136/144 (94%)	112 (82%)	24 (18%)	2 11
49	LX	109/109 (100%)	95 (87%)	14 (13%)	4 18

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
50	LZ	54/66 (82%)	49 (91%)	5 (9%)	9 28
51	LY	115/115 (100%)	98 (85%)	17 (15%)	3 15
52	Lb	64/64 (100%)	57 (89%)	7 (11%)	6 23
53	Ld	21/21 (100%)	20 (95%)	1 (5%)	25 51
54	Lf	90/98 (92%)	72 (80%)	18 (20%)	1 7
55	Lg	99/103 (96%)	85 (86%)	14 (14%)	3 16
56	Lh	119/122 (98%)	111 (93%)	8 (7%)	16 41
57	Ll	72/77 (94%)	61 (85%)	11 (15%)	2 14
58	Ln	59/63 (94%)	48 (81%)	11 (19%)	1 9
59	Lo	48/48 (100%)	37 (77%)	11 (23%)	1 4
60	Lr	91/94 (97%)	75 (82%)	16 (18%)	2 11
61	Lq	24/24 (100%)	22 (92%)	2 (8%)	11 34
64	LG	185/185 (100%)	152 (82%)	33 (18%)	2 10
66	LN	116/116 (100%)	88 (76%)	28 (24%)	0 4
67	LS	153/153 (100%)	123 (80%)	30 (20%)	1 8
68	LW	89/94 (95%)	75 (84%)	14 (16%)	2 14
69	La	73/83 (88%)	56 (77%)	17 (23%)	1 4
70	Li	105/107 (98%)	78 (74%)	27 (26%)	0 3
71	Lj	80/89 (90%)	63 (79%)	17 (21%)	1 6
72	Lk	62/62 (100%)	45 (73%)	17 (27%)	0 3
73	Lp	38/38 (100%)	26 (68%)	12 (32%)	0 2
74	LJ	104/105 (99%)	80 (77%)	24 (23%)	1 4
75	Lt	46/46 (100%)	45 (98%)	1 (2%)	52 71
75	Lu	46/46 (100%)	46 (100%)	0	100 100
76	Lv	48/48 (100%)	47 (98%)	1 (2%)	53 72
76	Lw	48/48 (100%)	46 (96%)	2 (4%)	30 54
77	Lc	107/109 (98%)	99 (92%)	8 (8%)	13 38
78	Le	206/206 (100%)	171 (83%)	35 (17%)	2 12
79	Ls	222/222 (100%)	199 (90%)	23 (10%)	7 24
80	LC	328/335 (98%)	276 (84%)	52 (16%)	2 13
81	LD	294/302 (97%)	257 (87%)	37 (13%)	4 19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
82	LK	173/173 (100%)	141 (82%)	32 (18%)	1 9
83	Lm	73/73 (100%)	67 (92%)	6 (8%)	11 34
84	LI	152/156 (97%)	135 (89%)	17 (11%)	6 22
All	All	8547/8911 (96%)	7319 (86%)	1228 (14%)	6 16

All (1228) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	Sa	11	HIS
1	Sa	35	THR
1	Sa	70	TYR
1	Sa	72	LEU
1	Sa	85	SER
1	Sa	89	ARG
1	Sa	99	GLN
1	Sa	106	LEU
1	Sa	107	HIS
1	Sa	112	MET
1	Sa	116	PHE
1	Sa	128	LEU
1	Sa	143	ARG
1	Sa	148	PRO
1	Sa	151	ARG
1	Sa	175	THR
1	Sa	199	GLU
1	Sa	200	PHE
1	Sa	207	ASP
1	Sa	220	MET
1	Sa	225	SER
1	Sa	227	ASP
1	Sa	230	VAL
1	Sa	242	VAL
1	Sa	258	PHE
1	Sa	350	LEU
2	SA	10	ARG
2	SA	16	GLU
2	SA	20	GLN
2	SA	33	ASN
2	SA	40	ARG
2	SA	43	TYR
2	SA	44	LYS

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Mol	Chain	Res	Type
2	SA	53	ILE
2	SA	55	LEU
2	SA	61	LYS
2	SA	73	GLU
2	SA	76	GLN
2	SA	86	TYR
2	SA	91	VAL
2	SA	106	ARG
2	SA	137	PRO
2	SA	160	TYR
2	SA	162	ASP
2	SA	169	ASN
2	SA	170	LYS
2	SA	172	LYS
2	SA	179	PHE
2	SA	194	LEU
2	SA	199	TRP
2	SA	227	PRO
2	SA	228	ASP
2	SA	255	PRO
2	SA	258	ILE
2	SA	259	PRO
3	SB	14	ASP
3	SB	40	ARG
3	SB	43	PRO
3	SB	59	LEU
3	SB	75	LYS
3	SB	78	ASN
3	SB	79	PHE
3	SB	84	VAL
3	SB	91	VAL
3	SB	92	VAL
3	SB	97	CYS
3	SB	99	ILE
3	SB	108	LYS
3	SB	123	LEU
3	SB	151	LYS
3	SB	153	LYS
3	SB	158	ILE
3	SB	159	SER
3	SB	166	GLU
3	SB	168	ILE

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Mol	Chain	Res	Type
3	SB	184	ILE
3	SB	193	ASP
3	SB	194	PRO
3	SB	197	LYS
4	SD	44	LEU
4	SD	62	ILE
4	SD	80	LYS
4	SD	83	PRO
4	SD	94	LYS
4	SD	104	ASP
4	SD	106	LYS
4	SD	133	GLN
4	SD	134	LYS
4	SD	136	ILE
4	SD	137	PRO
4	SD	138	TYR
4	SD	149	TYR
4	SD	150	PRO
4	SD	151	ASP
4	SD	153	ILE
4	SD	168	LYS
4	SD	172	PHE
4	SD	189	THR
4	SD	191	ARG
4	SD	208	ILE
4	SD	224	ASN
4	SD	240	LYS
4	SD	242	LYS
5	SE	30	ARG
5	SE	34	ARG
5	SE	35	ARG
5	SE	46	PRO
5	SE	52	ARG
5	SE	61	LYS
5	SE	90	MET
5	SE	91	LYS
5	SE	128	LYS
5	SE	135	ARG
5	SE	139	ILE
5	SE	146	VAL
5	SE	159	GLN
5	SE	165	CYS

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Mol	Chain	Res	Type
5	SE	191	ARG
5	SE	202	ILE
5	SE	226	CYS
5	SE	231	TYR
5	SE	238	PHE
5	SE	241	ASP
5	SE	259	PRO
6	SF	30	LEU
6	SF	37	SER
6	SF	59	LYS
6	SF	75	HIS
6	SF	88	ILE
6	SF	113	ILE
6	SF	132	ARG
6	SF	144	ASN
6	SF	145	GLN
6	SF	155	ARG
6	SF	160	ARG
6	SF	178	LYS
6	SF	183	SER
6	SF	197	LYS
7	SI	27	TYR
7	SI	88	ARG
7	SI	114	ILE
7	SI	121	THR
7	SI	124	VAL
7	SI	129	ARG
7	SI	130	CYS
7	SI	135	PHE
7	SI	141	ARG
7	SI	143	ARG
7	SI	144	PHE
7	SI	149	ARG
8	SJ	30	ARG
8	SJ	37	SER
8	SJ	43	LYS
8	SJ	76	LYS
8	SJ	89	PHE
8	SJ	92	ARG
8	SJ	109	GLN
9	SK	36	PHE
9	SK	49	ARG

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Mol	Chain	Res	Type
9	SK	53	VAL
9	SK	64	ASP
9	SK	65	ARG
9	SK	67	GLU
9	SK	77	SER
9	SK	84	CYS
9	SK	92	LEU
9	SK	118	LEU
9	SK	123	MET
9	SK	134	VAL
10	SL	4	THR
10	SL	5	ARG
10	SL	22	TRP
10	SL	51	LEU
10	SL	78	LYS
10	SL	79	LYS
10	SL	84	VAL
10	SL	98	GLU
11	SM	9	PHE
11	SM	11	HIS
11	SM	12	ILE
11	SM	21	ASP
11	SM	24	GLN
11	SM	25	LYS
11	SM	36	VAL
11	SM	38	ARG
11	SM	42	ASN
11	SM	58	GLU
11	SM	66	ARG
11	SM	78	LYS
11	SM	81	ASP
11	SM	87	LYS
11	SM	92	ASP
11	SM	95	PHE
11	SM	98	VAL
11	SM	100	SER
11	SM	101	ASN
11	SM	114	LEU
11	SM	116	LYS
11	SM	117	ILE
11	SM	135	HIS
11	SM	136	THR

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Mol	Chain	Res	Type
11	SM	138	THR
12	SO	32	ASP
12	SO	42	LYS
12	SO	56	ASP
12	SO	64	LYS
12	SO	70	LYS
12	SO	72	LEU
12	SO	78	HIS
12	SO	124	ARG
12	SO	134	LYS
13	SQ	19	LYS
13	SQ	22	SER
13	SQ	23	ARG
13	SQ	28	PHE
13	SQ	49	LYS
13	SQ	61	ILE
13	SQ	66	VAL
13	SQ	71	LEU
13	SQ	75	GLU
13	SQ	79	GLU
13	SQ	86	PRO
13	SQ	87	GLU
13	SQ	88	LYS
13	SQ	97	ARG
13	SQ	98	VAL
13	SQ	102	THR
13	SQ	113	ASP
13	SQ	114	LEU
13	SQ	119	ARG
13	SQ	122	GLU
13	SQ	123	VAL
13	SQ	137	ARG
13	SQ	139	ASP
14	SP	41	LEU
14	SP	78	SER
14	SP	86	ILE
14	SP	91	TYR
14	SP	96	LYS
14	SP	100	ARG
14	SP	102	GLU
14	SP	116	PHE
14	SP	118	VAL

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Mol	Chain	Res	Type
14	SP	120	GLU
15	SS	3	ASP
15	SS	4	SER
15	SS	8	THR
15	SS	10	LYS
15	SS	16	GLU
15	SS	18	VAL
15	SS	21	TYR
15	SS	33	LEU
15	SS	34	PRO
15	SS	38	ASP
15	SS	42	THR
15	SS	46	LYS
15	SS	51	TYR
15	SS	55	TRP
15	SS	56	TYR
15	SS	68	TYR
15	SS	81	ILE
15	SS	85	ARG
15	SS	91	ARG
15	SS	93	PRO
15	SS	106	ILE
15	SS	124	ARG
15	SS	128	SER
15	SS	133	ASP
15	SS	144	THR
16	SR	59	LYS
16	SR	60	ARG
16	SR	61	LYS
16	SR	98	MET
16	SR	99	ILE
16	SR	110	THR
16	SR	112	ASN
16	SR	115	GLU
16	SR	116	ILE
16	SR	124	TYR
16	SR	130	ILE
16	SR	139	ARG
16	SR	140	PRO
17	SV	52	LEU
17	SV	61	ILE
17	SV	68	GLU

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Mol	Chain	Res	Type
17	SV	69	ARG
17	SV	78	ARG
17	SV	104	ARG
19	SY	1	MET
19	SY	5	VAL
19	SY	16	ARG
19	SY	31	LEU
19	SY	37	LEU
19	SY	39	MET
19	SY	41	ASN
19	SY	47	ARG
20	SZ	24	GLN
20	SZ	27	LYS
20	SZ	28	LYS
20	SZ	36	LYS
20	SZ	45	VAL
20	SZ	54	LYS
23	SU	10	VAL
23	SU	15	ARG
23	SU	18	MET
23	SU	19	THR
23	SU	21	ARG
23	SU	22	LEU
23	SU	24	SER
23	SU	25	ARG
23	SU	26	LYS
23	SU	28	PHE
23	SU	30	LEU
23	SU	32	VAL
23	SU	33	LEU
23	SU	34	HIS
23	SU	37	ARG
23	SU	44	ASP
23	SU	49	LEU
23	SU	63	VAL
23	SU	64	PHE
23	SU	70	PHE
23	SU	75	SER
23	SU	76	THR
23	SU	78	PHE
23	SU	80	LEU
23	SU	86	ASP

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Mol	Chain	Res	Type
23	SU	90	LYS
23	SU	91	TYR
23	SU	95	TYR
24	SX	40	GLN
24	SX	53	GLN
24	SX	66	CYS
24	SX	76	THR
25	SC	40	CYS
25	SC	48	GLN
25	SC	52	SER
25	SC	53	ARG
25	SC	59	ARG
25	SC	63	THR
25	SC	64	LEU
25	SC	67	LYS
25	SC	68	ASN
25	SC	76	GLU
25	SC	109	ARG
25	SC	150	VAL
25	SC	160	PHE
25	SC	161	SER
25	SC	162	LEU
25	SC	176	ARG
25	SC	180	LYS
25	SC	181	LYS
27	SH	1	MET
27	SH	2	VAL
27	SH	18	GLU
27	SH	28	ARG
27	SH	29	PRO
27	SH	30	SER
27	SH	43	LYS
27	SH	55	ASP
27	SH	64	GLU
27	SH	65	LEU
27	SH	71	LYS
27	SH	93	LEU
27	SH	94	LEU
27	SH	103	VAL
27	SH	104	LEU
27	SH	107	SER
27	SH	113	HIS

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Mol	Chain	Res	Type
27	SH	125	VAL
28	SN	11	PRO
28	SN	26	ASN
28	SN	36	LEU
29	ST	11	LEU
29	ST	22	ARG
29	ST	28	ASP
29	ST	36	ILE
29	ST	38	HIS
29	ST	49	PHE
29	ST	52	PHE
29	ST	71	LEU
29	ST	82	GLN
36	LA	10	LYS
36	LA	17	VAL
36	LA	33	LEU
36	LA	39	ASN
36	LA	46	LYS
36	LA	96	LYS
36	LA	100	LYS
36	LA	129	LYS
36	LA	160	LYS
36	LA	164	MET
36	LA	182	ILE
36	LA	206	LYS
36	LA	211	LYS
37	LB	1	MET
37	LB	19	HIS
37	LB	21	HIS
37	LB	34	PHE
37	LB	37	ARG
37	LB	40	TYR
37	LB	52	PRO
37	LB	58	LEU
37	LB	68	ARG
37	LB	69	TYR
37	LB	70	LYS
37	LB	83	TYR
37	LB	84	THR
37	LB	102	LEU
37	LB	177	LYS
37	LB	193	ARG

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Mol	Chain	Res	Type
37	LB	227	ARG
37	LB	247	ARG
38	LE	2	SER
38	LE	7	GLN
38	LE	8	LEU
38	LE	12	ARG
38	LE	31	ARG
38	LE	34	ARG
38	LE	38	VAL
38	LE	51	LYS
38	LE	57	ARG
38	LE	66	LYS
38	LE	69	CYS
38	LE	70	TYR
38	LE	89	LYS
38	LE	96	ARG
38	LE	106	PHE
38	LE	110	GLU
38	LE	112	ILE
38	LE	127	MET
38	LE	145	ARG
38	LE	150	VAL
38	LE	155	ARG
38	LE	158	LYS
39	LF	1	MET
39	LF	5	LEU
39	LF	39	LYS
39	LF	40	HIS
39	LF	44	ASP
39	LF	70	ARG
39	LF	81	THR
39	LF	85	LYS
39	LF	108	ASN
39	LF	135	ARG
39	LF	173	LYS
39	LF	176	ASP
40	LH	58	ARG
40	LH	61	ARG
40	LH	63	LEU
40	LH	66	ARG
40	LH	68	LYS
40	LH	73	LEU

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Mol	Chain	Res	Type
40	LH	82	LYS
40	LH	87	ASN
40	LH	96	ARG
40	LH	98	GLU
40	LH	104	LYS
40	LH	106	ARG
40	LH	126	ILE
40	LH	128	VAL
40	LH	132	LEU
40	LH	134	HIS
40	LH	143	LYS
40	LH	167	ARG
40	LH	187	HIS
40	LH	189	LYS
40	LH	190	THR
40	LH	207	PHE
40	LH	214	ILE
40	LH	215	LYS
40	LH	217	ASN
40	LH	219	ASN
40	LH	221	LYS
40	LH	225	VAL
40	LH	245	ARG
41	LM	13	LYS
41	LM	16	MET
41	LM	39	ILE
41	LM	64	THR
41	LM	72	LEU
41	LM	75	LYS
41	LM	78	PRO
41	LM	91	LYS
41	LM	92	ASP
41	LM	96	MET
41	LM	123	LYS
41	LM	137	ASN
42	LP	21	PHE
42	LP	24	ARG
42	LP	36	ILE
42	LP	50	ARG
42	LP	64	VAL
42	LP	67	ARG
42	LP	77	LYS

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Mol	Chain	Res	Type
42	LP	87	GLN
42	LP	89	ILE
42	LP	96	ARG
42	LP	97	ASN
42	LP	108	ARG
42	LP	113	LEU
42	LP	120	TRP
42	LP	126	THR
42	LP	147	ARG
42	LP	156	HIS
42	LP	172	ARG
42	LP	175	ARG
42	LP	180	THR
42	LP	182	HIS
42	LP	183	LYS
42	LP	192	TRP
42	LP	193	LYS
43	LO	6	LYS
43	LO	9	ARG
43	LO	19	HIS
43	LO	21	ARG
43	LO	22	ILE
43	LO	26	ARG
43	LO	27	LYS
43	LO	47	LYS
43	LO	49	HIS
43	LO	76	GLU
43	LO	77	ARG
43	LO	85	GLU
43	LO	113	PRO
43	LO	117	PRO
43	LO	120	VAL
43	LO	130	GLU
44	LR	4	ASP
44	LR	6	VAL
44	LR	10	ARG
44	LR	14	THR
44	LR	35	PHE
44	LR	56	LYS
44	LR	67	LEU
44	LR	74	LYS
44	LR	76	GLU

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Mol	Chain	Res	Type
44	LR	77	LYS
44	LR	87	THR
44	LR	91	ARG
44	LR	103	LEU
44	LR	106	THR
44	LR	107	GLU
44	LR	123	PHE
44	LR	124	ASP
44	LR	125	GLN
44	LR	143	LYS
44	LR	146	ARG
44	LR	161	SER
45	LQ	12	LYS
45	LQ	13	THR
45	LQ	19	ARG
45	LQ	23	LYS
45	LQ	26	ARG
45	LQ	28	ARG
45	LQ	31	LYS
45	LQ	42	ASN
45	LQ	43	GLN
45	LQ	52	LYS
45	LQ	54	ARG
45	LQ	60	ASP
45	LQ	61	ILE
45	LQ	75	VAL
45	LQ	91	VAL
45	LQ	119	GLU
45	LQ	132	TYR
45	LQ	143	ARG
45	LQ	145	LEU
45	LQ	158	ARG
45	LQ	176	SER
45	LQ	180	PHE
45	LQ	183	PHE
45	LQ	184	LYS
45	LQ	193	ASP
45	LQ	198	TYR
45	LQ	199	ILE
45	LQ	200	TYR
45	LQ	208	MET
45	LQ	219	PHE

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Mol	Chain	Res	Type
45	LQ	223	PHE
45	LQ	225	GLU
45	LQ	234	ASP
45	LQ	236	MET
45	LQ	241	LYS
45	LQ	242	LYS
45	LQ	244	HIS
45	LQ	247	ILE
45	LQ	248	ARG
45	LQ	250	ASP
45	LQ	252	THR
45	LQ	256	SER
45	LQ	259	LYS
45	LQ	281	LEU
45	LQ	301	GLU
45	LQ	302	ASP
46	LT	1	MET
46	LT	21	LYS
46	LT	46	LYS
46	LT	55	GLN
46	LT	56	LYS
46	LT	58	HIS
46	LT	75	HIS
46	LT	89	LEU
46	LT	91	THR
46	LT	93	ILE
46	LT	95	TRP
46	LT	105	LEU
46	LT	107	ARG
46	LT	113	LYS
46	LT	114	LYS
46	LT	122	ASP
46	LT	131	MET
46	LT	132	PHE
46	LT	135	LYS
46	LT	153	LYS
46	LT	171	GLU
46	LT	176	ARG
47	LU	9	SER
47	LU	12	ARG
47	LU	13	ASP
47	LU	27	LEU

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Mol	Chain	Res	Type
47	LU	49	HIS
47	LU	56	PHE
47	LU	60	ARG
47	LU	63	ARG
47	LU	70	ARG
47	LU	77	ASN
47	LU	88	ARG
47	LU	105	PHE
47	LU	112	ASN
47	LU	113	ASP
47	LU	125	VAL
47	LU	154	TYR
47	LU	158	ASN
47	LU	160	LEU
47	LU	161	LYS
48	LV	4	TYR
48	LV	6	ARG
48	LV	7	GLU
48	LV	29	THR
48	LV	30	ARG
48	LV	37	ARG
48	LV	55	LYS
48	LV	61	ARG
48	LV	70	THR
48	LV	74	LYS
48	LV	75	SER
48	LV	76	ARG
48	LV	79	ASN
48	LV	81	GLN
48	LV	84	TRP
48	LV	93	LEU
48	LV	113	LEU
48	LV	114	TYR
48	LV	124	GLN
48	LV	128	ARG
48	LV	153	GLU
48	LV	154	LYS
48	LV	158	VAL
48	LV	159	LYS
49	LX	31	ARG
49	LX	43	HIS
49	LX	47	THR

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Mol	Chain	Res	Type
49	LX	50	LYS
49	LX	55	LYS
49	LX	66	LYS
49	LX	80	GLU
49	LX	95	ILE
49	LX	98	LEU
49	LX	122	THR
49	LX	124	ILE
49	LX	133	TYR
49	LX	140	TYR
49	LX	149	ILE
50	LZ	19	LYS
50	LZ	35	ASN
50	LZ	40	ARG
50	LZ	59	LYS
50	LZ	66	HIS
51	LY	1	MET
51	LY	8	THR
51	LY	9	SER
51	LY	11	ARG
51	LY	19	PHE
51	LY	23	SER
51	LY	31	SER
51	LY	47	ILE
51	LY	51	LYS
51	LY	59	ARG
51	LY	73	TYR
51	LY	74	ARG
51	LY	86	ARG
51	LY	95	ASN
51	LY	114	ARG
51	LY	120	ARG
51	LY	129	LYS
52	Lb	80	GLN
52	Lb	86	LEU
52	Lb	87	TYR
52	Lb	91	VAL
52	Lb	92	MET
52	Lb	113	ARG
52	Lb	116	LEU
53	Ld	51	LYS
54	Lf	14	ILE

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Mol	Chain	Res	Type
54	Lf	17	LYS
54	Lf	20	LEU
54	Lf	21	VAL
54	Lf	26	LYS
54	Lf	27	TYR
54	Lf	32	LYS
54	Lf	54	PRO
54	Lf	57	LYS
54	Lf	60	ILE
54	Lf	68	LYS
54	Lf	75	HIS
54	Lf	77	ASN
54	Lf	85	CYS
54	Lf	90	ARG
54	Lf	91	VAL
54	Lf	95	SER
54	Lf	104	ILE
55	Lg	1	MET
55	Lg	13	ASP
55	Lg	14	GLU
55	Lg	15	VAL
55	Lg	17	THR
55	Lg	25	HIS
55	Lg	32	THR
55	Lg	33	PHE
55	Lg	50	LYS
55	Lg	57	ILE
55	Lg	59	ILE
55	Lg	86	LYS
55	Lg	88	ASN
55	Lg	105	GLU
56	Lh	22	HIS
56	Lh	25	ARG
56	Lh	29	LEU
56	Lh	50	CYS
56	Lh	94	CYS
56	Lh	118	ILE
56	Lh	119	VAL
56	Lh	120	VAL
57	Ll	1	MET
57	Ll	14	LYS
57	Ll	30	GLN

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Mol	Chain	Res	Type
57	Ll	33	THR
57	Ll	43	ARG
57	Ll	50	SER
57	Ll	52	LYS
57	Ll	63	ARG
57	Ll	72	ARG
57	Ll	79	ARG
57	Ll	80	GLU
58	Ln	6	HIS
58	Ln	16	ARG
58	Ln	18	LYS
58	Ln	22	SER
58	Ln	36	VAL
58	Ln	42	LEU
58	Ln	44	THR
58	Ln	48	PHE
58	Ln	52	LYS
58	Ln	55	LYS
58	Ln	64	LEU
59	Lo	1	MET
59	Lo	7	PHE
59	Lo	11	GLN
59	Lo	21	ARG
59	Lo	23	ILE
59	Lo	27	ILE
59	Lo	31	THR
59	Lo	33	ASN
59	Lo	37	TYR
59	Lo	45	ARG
59	Lo	48	LYS
60	Lr	10	THR
60	Lr	14	ASN
60	Lr	33	ASP
60	Lr	44	ASP
60	Lr	46	LYS
60	Lr	47	GLN
60	Lr	50	TYR
60	Lr	53	GLN
60	Lr	60	LYS
60	Lr	61	LYS
60	Lr	71	LYS
60	Lr	75	GLN

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Mol	Chain	Res	Type
60	Lr	78	LYS
60	Lr	80	TYR
60	Lr	82	GLN
60	Lr	93	ILE
61	Lq	11	ARG
61	Lq	25	LYS
64	LG	4	THR
64	LG	18	HIS
64	LG	19	THR
64	LG	22	ARG
64	LG	29	LYS
64	LG	38	LYS
64	LG	50	PHE
64	LG	52	PRO
64	LG	55	ASP
64	LG	69	THR
64	LG	77	PRO
64	LG	82	ILE
64	LG	91	LYS
64	LG	93	VAL
64	LG	98	GLN
64	LG	105	LEU
64	LG	111	LYS
64	LG	115	VAL
64	LG	122	GLN
64	LG	125	VAL
64	LG	139	VAL
64	LG	143	ASP
64	LG	150	GLU
64	LG	152	LYS
64	LG	153	THR
64	LG	158	THR
64	LG	166	ASP
64	LG	183	VAL
64	LG	184	ILE
64	LG	188	LEU
64	LG	190	LYS
64	LG	199	LYS
64	LG	219	PHE
66	LN	3	PHE
66	LN	5	ARG
66	LN	6	PHE

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Mol	Chain	Res	Type
66	LN	7	VAL
66	LN	8	GLU
66	LN	14	LEU
66	LN	17	TYR
66	LN	25	VAL
66	LN	31	VAL
66	LN	32	ASP
66	LN	49	ASN
66	LN	50	PHE
66	LN	53	LEU
66	LN	55	LEU
66	LN	62	ILE
66	LN	63	LYS
66	LN	64	ARG
66	LN	89	TRP
66	LN	94	ILE
66	LN	96	GLN
66	LN	98	ARG
66	LN	99	ARG
66	LN	103	ASN
66	LN	105	PHE
66	LN	106	ASP
66	LN	109	LYS
66	LN	112	LEU
66	LN	117	ARG
67	LS	21	ASP
67	LS	23	HIS
67	LS	28	ARG
67	LS	29	MET
67	LS	31	LEU
67	LS	32	TRP
67	LS	40	LYS
67	LS	50	LEU
67	LS	52	LYS
67	LS	53	VAL
67	LS	55	LYS
67	LS	56	SER
67	LS	74	ILE
67	LS	76	ASN
67	LS	79	ILE
67	LS	86	ARG
67	LS	94	LYS

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Mol	Chain	Res	Type
67	LS	97	ARG
67	LS	107	GLN
67	LS	115	ARG
67	LS	116	HIS
67	LS	119	ARG
67	LS	120	PHE
67	LS	123	ILE
67	LS	132	HIS
67	LS	138	ARG
67	LS	152	PRO
67	LS	158	VAL
67	LS	162	THR
67	LS	166	LYS
68	LW	29	LYS
68	LW	31	VAL
68	LW	48	ARG
68	LW	55	LYS
68	LW	67	ARG
68	LW	76	SER
68	LW	81	SER
68	LW	83	ARG
68	LW	95	LYS
68	LW	99	ARG
68	LW	101	TRP
68	LW	103	ARG
68	LW	111	ARG
68	LW	117	ARG
69	La	9	LYS
69	La	11	VAL
69	La	13	LEU
69	La	14	LEU
69	La	24	VAL
69	La	26	VAL
69	La	27	ARG
69	La	30	GLU
69	La	34	ARG
69	La	42	LEU
69	La	54	ILE
69	La	55	ARG
69	La	56	LYS
69	La	68	VAL
69	La	72	LEU

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Mol	Chain	Res	Type
69	La	73	LYS
69	La	81	MET
70	Li	3	GLN
70	Li	9	LYS
70	Li	10	ARG
70	Li	16	LYS
70	Li	18	ASN
70	Li	19	GLN
70	Li	20	THR
70	Li	23	VAL
70	Li	29	LYS
70	Li	45	PRO
70	Li	57	LEU
70	Li	58	ARG
70	Li	63	LYS
70	Li	66	ARG
70	Li	70	ASN
70	Li	72	ARG
70	Li	73	THR
70	Li	82	LEU
70	Li	99	GLU
70	Li	100	GLN
70	Li	103	VAL
70	Li	108	LYS
70	Li	109	ILE
70	Li	111	LYS
70	Li	113	LYS
70	Li	115	LYS
70	Li	118	LYS
71	Lj	5	GLN
71	Lj	12	TYR
71	Lj	14	ARG
71	Lj	17	ILE
71	Lj	21	LYS
71	Lj	22	ARG
71	Lj	23	SER
71	Lj	30	ASN
71	Lj	39	VAL
71	Lj	40	ASN
71	Lj	41	THR
71	Lj	47	TRP
71	Lj	48	TYR

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Mol	Chain	Res	Type
71	Lj	75	VAL
71	Lj	76	THR
71	Lj	77	ARG
71	Lj	104	VAL
72	Lk	37	THR
72	Lk	40	VAL
72	Lk	42	PHE
72	Lk	46	LEU
72	Lk	58	LYS
72	Lk	62	GLU
72	Lk	68	LYS
72	Lk	69	ASP
72	Lk	74	LYS
72	Lk	75	VAL
72	Lk	78	ARG
72	Lk	87	LYS
72	Lk	88	LYS
72	Lk	99	LYS
72	Lk	100	MET
72	Lk	101	ARG
72	Lk	110	LYS
73	Lp	13	TYR
73	Lp	14	ASN
73	Lp	21	ARG
73	Lp	22	LYS
73	Lp	26	ARG
73	Lp	27	LEU
73	Lp	28	HIS
73	Lp	35	ARG
73	Lp	44	GLN
73	Lp	46	ARG
73	Lp	52	LYS
73	Lp	53	ASN
74	LJ	14	PHE
74	LJ	16	ARG
74	LJ	18	THR
74	LJ	32	ILE
74	LJ	35	LEU
74	LJ	41	LYS
74	LJ	42	ILE
74	LJ	49	GLU
74	LJ	50	THR

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Mol	Chain	Res	Type
74	LJ	55	LYS
74	LJ	57	LEU
74	LJ	58	ARG
74	LJ	62	LYS
74	LJ	66	GLN
74	LJ	83	ILE
74	LJ	84	LYS
74	LJ	87	LYS
74	LJ	96	VAL
74	LJ	98	ASN
74	LJ	104	ASN
74	LJ	108	ASP
74	LJ	119	ASN
74	LJ	124	LYS
74	LJ	125	GLU
75	Lt	41	TYR
76	Lv	7	TYR
76	Lw	7	TYR
76	Lw	41	LEU
77	Lc	16	LYS
77	Lc	35	ILE
77	Lc	37	LYS
77	Lc	44	LYS
77	Lc	70	LEU
77	Lc	75	LYS
77	Lc	90	ARG
77	Lc	107	LYS
78	Le	32	VAL
78	Le	51	GLU
78	Le	61	ASP
78	Le	62	LYS
78	Le	66	GLN
78	Le	67	LEU
78	Le	68	LYS
78	Le	69	ARG
78	Le	72	ARG
78	Le	74	LYS
78	Le	78	TYR
78	Le	80	SER
78	Le	82	GLU
78	Le	84	LYS
78	Le	98	HIS

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Mol	Chain	Res	Type
78	Le	109	ARG
78	Le	115	ASN
78	Le	128	MET
78	Le	129	LEU
78	Le	143	LEU
78	Le	144	LYS
78	Le	165	LEU
78	Le	171	ILE
78	Le	178	HIS
78	Le	183	ILE
78	Le	185	ASP
78	Le	190	ILE
78	Le	192	THR
78	Le	201	ASN
78	Le	205	TRP
78	Le	212	PRO
78	Le	225	GLU
78	Le	228	ASP
78	Le	232	ARG
78	Le	234	ASN
79	Ls	30	ILE
79	Ls	40	GLN
79	Ls	44	ILE
79	Ls	51	ASP
79	Ls	58	LYS
79	Ls	63	ARG
79	Ls	71	ASP
79	Ls	76	LYS
79	Ls	92	ILE
79	Ls	98	LEU
79	Ls	100	GLU
79	Ls	130	ASN
79	Ls	137	GLN
79	Ls	168	ASP
79	Ls	174	GLU
79	Ls	187	SER
79	Ls	205	GLU
79	Ls	214	LEU
79	Ls	217	LYS
79	Ls	229	SER
79	Ls	233	SER
79	Ls	243	MET

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Mol	Chain	Res	Type
79	Ls	260	TYR
80	LC	4	ARG
80	LC	8	HIS
80	LC	26	ARG
80	LC	28	LYS
80	LC	29	VAL
80	LC	30	LYS
80	LC	39	LYS
80	LC	40	PRO
80	LC	60	VAL
80	LC	72	THR
80	LC	76	VAL
80	LC	94	LYS
80	LC	95	THR
80	LC	97	ARG
80	LC	101	THR
80	LC	113	ASP
80	LC	117	ARG
80	LC	118	PHE
80	LC	124	LYS
80	LC	125	SER
80	LC	126	LYS
80	LC	131	THR
80	LC	132	LYS
80	LC	168	ILE
80	LC	176	GLN
80	LC	177	LYS
80	LC	178	LYS
80	LC	182	MET
80	LC	186	VAL
80	LC	194	LYS
80	LC	203	GLU
80	LC	204	LYS
80	LC	208	VAL
80	LC	246	HIS
80	LC	259	HIS
80	LC	267	VAL
80	LC	291	SER
80	LC	306	GLU
80	LC	316	PRO
80	LC	322	LYS
80	LC	324	ASP

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Mol	Chain	Res	Type
80	LC	327	MET
80	LC	332	CYS
80	LC	333	VAL
80	LC	347	LEU
80	LC	348	LYS
80	LC	352	ARG
80	LC	357	GLU
80	LC	363	ILE
80	LC	364	ASP
80	LC	369	PHE
80	LC	378	ASP
81	LD	8	LEU
81	LD	23	SER
81	LD	36	LEU
81	LD	43	PHE
81	LD	60	ARG
81	LD	61	ARG
81	LD	66	THR
81	LD	82	ARG
81	LD	90	ARG
81	LD	96	PHE
81	LD	99	MET
81	LD	109	THR
81	LD	114	LYS
81	LD	116	HIS
81	LD	117	ARG
81	LD	140	LEU
81	LD	151	VAL
81	LD	165	ILE
81	LD	176	LYS
81	LD	188	LYS
81	LD	190	SER
81	LD	200	MET
81	LD	224	LYS
81	LD	227	ARG
81	LD	228	ASN
81	LD	239	ARG
81	LD	241	ASN
81	LD	313	GLU
81	LD	315	LYS
81	LD	319	LYS
81	LD	320	ARG

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Mol	Chain	Res	Type
81	LD	322	ASN
81	LD	352	ILE
81	LD	355	ARG
81	LD	359	LEU
81	LD	368	PRO
81	LD	403	VAL
82	LK	18	HIS
82	LK	19	HIS
82	LK	37	ARG
82	LK	52	LEU
82	LK	54	ARG
82	LK	57	MET
82	LK	62	PHE
82	LK	63	LEU
82	LK	65	LYS
82	LK	66	ARG
82	LK	76	ILE
82	LK	90	ARG
82	LK	92	MET
82	LK	101	GLU
82	LK	119	ARG
82	LK	121	LYS
82	LK	123	MET
82	LK	125	ILE
82	LK	129	LEU
82	LK	135	GLN
82	LK	152	TRP
82	LK	153	ASN
82	LK	154	TYR
82	LK	157	THR
82	LK	158	ILE
82	LK	164	LYS
82	LK	174	ASP
82	LK	181	LYS
82	LK	185	LYS
82	LK	188	LYS
82	LK	193	LYS
82	LK	205	LYS
83	Lm	6	LYS
83	Lm	21	SER
83	Lm	29	MET
83	Lm	31	VAL

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Mol	Chain	Res	Type
83	Lm	33	GLN
83	Lm	41	PHE
84	LI	7	ARG
84	LI	15	LYS
84	LI	28	ASP
84	LI	39	LYS
84	LI	41	LYS
84	LI	44	ASP
84	LI	57	LYS
84	LI	69	ARG
84	LI	79	ASN
84	LI	88	ARG
84	LI	90	ARG
84	LI	109	ASP
84	LI	141	LYS
84	LI	156	LYS
84	LI	159	PHE
84	LI	179	GLU
84	LI	183	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (143) such sidechains are listed below:

Mol	Chain	Res	Type
1	Sa	99	GLN
1	Sa	282	HIS
1	Sa	288	ASN
1	Sa	343	HIS
1	Sa	367	ASN
2	SA	63	GLN
2	SA	74	ASN
2	SA	76	GLN
2	SA	81	GLN
2	SA	96	GLN
2	SA	101	HIS
2	SA	107	HIS
2	SA	114	ASN
2	SA	117	GLN
2	SA	136	GLN
2	SA	197	HIS
3	SB	74	GLN
3	SB	82	ASN
4	SD	69	HIS

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Mol	Chain	Res	Type
4	SD	112	GLN
4	SD	209	HIS
5	SE	96	GLN
5	SE	161	HIS
6	SF	10	GLN
6	SF	144	ASN
8	SJ	84	ASN
9	SK	37	ASN
9	SK	82	GLN
10	SL	45	HIS
11	SM	53	ASN
11	SM	134	GLN
11	SM	135	HIS
12	SO	123	HIS
13	SQ	62	GLN
14	SP	90	ASN
14	SP	93	HIS
17	SV	38	ASN
17	SV	73	ASN
19	SY	22	GLN
19	SY	41	ASN
20	SZ	35	HIS
23	SU	27	GLN
24	SX	40	GLN
24	SX	44	ASN
24	SX	51	HIS
24	SX	62	GLN
25	SC	105	ASN
25	SC	178	ASN
27	SH	8	ASN
27	SH	42	GLN
27	SH	70	ASN
29	ST	29	HIS
29	ST	82	GLN
36	LA	15	GLN
36	LA	72	HIS
36	LA	95	ASN
36	LA	140	GLN
36	LA	148	ASN
36	LA	170	ASN
36	LA	177	GLN
36	LA	179	GLN

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Mol	Chain	Res	Type
36	LA	196	ASN
36	LA	199	ASN
37	LB	50	HIS
37	LB	71	HIS
37	LB	119	HIS
37	LB	168	GLN
37	LB	209	HIS
37	LB	218	HIS
37	LB	221	HIS
38	LE	7	GLN
38	LE	153	HIS
39	LF	162	GLN
39	LF	165	HIS
40	LH	112	GLN
42	LP	97	ASN
42	LP	139	HIS
42	LP	144	ASN
42	LP	149	ASN
42	LP	181	HIS
43	LO	39	HIS
43	LO	40	HIS
44	LR	160	HIS
45	LQ	46	ASN
45	LQ	49	ASN
45	LQ	58	ASN
45	LQ	82	HIS
45	LQ	195	HIS
45	LQ	222	HIS
45	LQ	244	HIS
46	LT	58	HIS
47	LU	54	HIS
47	LU	90	HIS
47	LU	111	ASN
47	LU	112	ASN
48	LV	9	ASN
48	LV	54	HIS
48	LV	98	ASN
48	LV	102	ASN
48	LV	134	HIS
49	LX	116	GLN
51	LY	99	HIS
52	Lb	88	HIS

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Mol	Chain	Res	Type
54	Lf	72	HIS
54	Lf	78	ASN
55	Lg	70	ASN
55	Lg	88	ASN
56	Lh	22	HIS
56	Lh	55	ASN
56	Lh	70	ASN
56	Lh	79	ASN
56	Lh	100	ASN
57	Ll	16	HIS
59	Lo	43	HIS
60	Lr	79	HIS
64	LG	18	HIS
64	LG	21	HIS
67	LS	57	ASN
67	LS	116	HIS
67	LS	145	HIS
69	La	40	HIS
69	La	79	HIS
70	Li	56	HIS
71	Lj	40	ASN
73	Lp	41	HIS
77	Lc	32	GLN
78	Le	98	HIS
78	Le	115	ASN
78	Le	178	HIS
78	Le	222	HIS
79	Ls	35	ASN
79	Ls	130	ASN
79	Ls	137	GLN
80	LC	25	HIS
80	LC	165	HIS
80	LC	176	GLN
80	LC	180	HIS
81	LD	45	HIS
81	LD	64	HIS
82	LK	138	HIS
82	LK	145	GLN
83	Lm	25	GLN
83	Lm	34	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
30	S3	10/11 (90%)	3 (30%)	1 (10%)
31	S2	74/75 (98%)	22 (29%)	5 (6%)
32	S1	1492/1743 (85%)	439 (29%)	156 (10%)
33	L1	3192/3352 (95%)	903 (28%)	413 (12%)
34	L3	120/120 (100%)	49 (40%)	17 (14%)
35	L2	143/159 (89%)	55 (38%)	28 (19%)
All	All	5031/5460 (92%)	1471 (29%)	620 (12%)

All (1471) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
30	S3	13	A
30	S3	14	A
30	S3	18	C
31	S2	2	C
31	S2	8	U
31	S2	17	G
31	S2	18	G
31	S2	19	U
31	S2	20	C
31	S2	21	A
31	S2	22	G
31	S2	32	U
31	S2	33	U
31	S2	37	G
31	S2	38	C
31	S2	42	C
31	S2	45	G
31	S2	47	U
31	S2	51	G
31	S2	56	A
31	S2	60	C
31	S2	68	C
31	S2	73	C
31	S2	74	C
31	S2	75	A
32	S1	2	A
32	S1	3	C
32	S1	4	C
32	S1	5	U
32	S1	26	A
32	S1	29	U
32	S1	30	G

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Mol	Chain	Res	Type
32	S1	32	U
32	S1	34	G
32	S1	37	U
32	S1	42	G
32	S1	45	U
32	S1	47	A
32	S1	57	G
32	S1	58	U
32	S1	59	G
32	S1	60	C
32	S1	61	A
32	S1	64	U
32	S1	65	A
32	S1	68	A
32	S1	85	A
32	S1	99	U
32	S1	105	A
32	S1	106	A
32	S1	115	A
32	S1	116	G
32	S1	117	U
32	S1	120	G
32	S1	138	C
32	S1	139	U
32	S1	140	C
32	S1	141	G
32	S1	144	U
32	S1	147	C
32	S1	149	G
32	S1	151	A
32	S1	152	G
32	S1	154	A
32	S1	156	U
32	S1	160	A
32	S1	161	G
32	S1	167	A
32	S1	168	U
32	S1	171	G
32	S1	172	U
32	S1	173	G
32	S1	174	C
32	S1	175	A

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Mol	Chain	Res	Type
32	S1	176	A
32	S1	177	C
32	S1	178	A
32	S1	179	A
32	S1	180	A
32	S1	181	C
32	S1	182	C
32	S1	185	G
32	S1	186	A
32	S1	188	U
32	S1	192	G
32	S1	193	G
32	S1	194	G
32	S1	196	G
32	S1	198	G
32	S1	200	C
32	S1	205	U
32	S1	220	C
32	S1	225	G
32	S1	232	C
32	S1	233	U
32	S1	234	G
32	S1	238	G
32	S1	255	U
32	S1	256	G
32	S1	258	U
32	S1	259	A
32	S1	270	U
32	S1	274	A
32	S1	279	C
32	S1	283	G
32	S1	292	A
32	S1	293	C
32	S1	298	C
32	S1	299	A
32	S1	302	C
32	S1	317	U
32	S1	320	A
32	S1	324	U
32	S1	328	U
32	S1	341	G
32	S1	342	C

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Mol	Chain	Res	Type
32	S1	349	U
32	S1	354	G
32	S1	356	G
32	S1	358	C
32	S1	363	G
32	S1	365	C
32	S1	373	U
32	S1	377	G
32	S1	389	A
32	S1	390	G
32	S1	391	A
32	S1	404	A
32	S1	405	A
32	S1	408	G
32	S1	417	U
32	S1	420	A
32	S1	425	A
32	S1	427	G
32	S1	428	C
32	S1	429	A
32	S1	430	G
32	S1	436	G
32	S1	439	C
32	S1	443	U
32	S1	448	C
32	S1	449	A
32	S1	453	C
32	S1	456	A
32	S1	457	C
32	S1	458	A
32	S1	459	C
32	S1	460	G
32	S1	463	G
32	S1	464	A
32	S1	471	G
32	S1	472	A
32	S1	473	C
32	S1	477	A
32	S1	478	A
32	S1	480	U
32	S1	483	C
32	S1	485	A

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Mol	Chain	Res	Type
32	S1	486	U
32	S1	488	C
32	S1	489	C
32	S1	490	G
32	S1	491	G
32	S1	493	C
32	S1	494	G
32	S1	495	C
32	S1	496	A
32	S1	500	G
32	S1	501	U
32	S1	502	G
32	S1	503	U
32	S1	504	C
32	S1	506	G
32	S1	508	U
32	S1	509	A
32	S1	510	A
32	S1	512	U
32	S1	552	G
32	S1	555	G
32	S1	558	C
32	S1	559	A
32	S1	560	A
32	S1	562	U
32	S1	563	C
32	S1	569	C
32	S1	582	U
32	S1	583	A
32	S1	584	A
32	S1	585	U
32	S1	586	U
32	S1	593	C
32	S1	595	A
32	S1	598	A
32	S1	601	G
32	S1	608	U
32	S1	610	A
32	S1	611	G
32	S1	612	U
32	S1	615	U
32	S1	617	G

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Mol	Chain	Res	Type
32	S1	622	U
32	S1	623	A
32	S1	624	A
32	S1	627	A
32	S1	628	G
32	S1	631	C
32	S1	633	U
32	S1	634	A
32	S1	648	C
32	S1	649	C
32	S1	650	G
32	S1	653	U
32	S1	664	G
32	S1	666	C
32	S1	681	G
32	S1	682	A
32	S1	683	C
32	S1	684	C
32	S1	687	C
32	S1	690	G
32	S1	692	C
32	S1	828	G
32	S1	835	U
32	S1	836	U
32	S1	838	U
32	S1	845	C
32	S1	854	C
32	S1	862	U
32	S1	881	G
32	S1	903	A
32	S1	904	G
32	S1	917	U
32	S1	918	G
32	S1	919	G
32	S1	935	A
32	S1	939	C
32	S1	940	U
32	S1	947	G
32	S1	949	A
32	S1	950	U
32	S1	965	U
32	S1	968	A

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Mol	Chain	Res	Type
32	S1	969	U
32	S1	970	U
32	S1	971	A
32	S1	982	A
32	S1	1009	U
32	S1	1012	C
32	S1	1031	A
32	S1	1032	A
32	S1	1033	C
32	S1	1037	G
32	S1	1044	A
32	S1	1049	U
32	S1	1055	G
32	S1	1061	G
32	S1	1062	C
32	S1	1063	U
32	S1	1064	U
32	S1	1065	A
32	S1	1066	U
32	S1	1068	G
32	S1	1069	G
32	S1	1071	C
32	S1	1072	U
32	S1	1073	C
32	S1	1081	A
32	S1	1085	U
32	S1	1092	A
32	S1	1096	A
32	S1	1097	A
32	S1	1098	A
32	S1	1100	U
32	S1	1101	C
32	S1	1106	G
32	S1	1113	G
32	S1	1114	G
32	S1	1123	G
32	S1	1143	A
32	S1	1156	A
32	S1	1163	C
32	S1	1165	A
32	S1	1184	C
32	S1	1189	U

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Mol	Chain	Res	Type
32	S1	1191	U
32	S1	1194	C
32	S1	1195	U
32	S1	1198	A
32	S1	1200	A
32	S1	1201	C
32	S1	1202	G
32	S1	1203	G
32	S1	1204	G
32	S1	1206	A
32	S1	1207	A
32	S1	1213	C
32	S1	1219	C
32	S1	1224	C
32	S1	1225	A
32	S1	1226	U
32	S1	1232	G
32	S1	1237	G
32	S1	1238	A
32	S1	1241	G
32	S1	1243	C
32	S1	1246	A
32	S1	1247	G
32	S1	1250	C
32	S1	1262	U
32	S1	1263	C
32	S1	1266	U
32	S1	1267	G
32	S1	1269	G
32	S1	1272	G
32	S1	1274	G
32	S1	1278	C
32	S1	1279	A
32	S1	1285	G
32	S1	1288	C
32	S1	1289	U
32	S1	1290	U
32	S1	1294	U
32	S1	1295	G
32	S1	1309	U
32	S1	1310	C
32	S1	1314	U

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Mol	Chain	Res	Type
32	S1	1316	A
32	S1	1318	U
32	S1	1325	A
32	S1	1328	G
32	S1	1329	A
32	S1	1341	G
32	S1	1342	C
32	S1	1346	C
32	S1	1353	G
32	S1	1358	G
32	S1	1359	C
32	S1	1361	G
32	S1	1362	A
32	S1	1369	C
32	S1	1370	C
32	S1	1371	U
32	S1	1372	C
32	S1	1383	U
32	S1	1392	G
32	S1	1393	G
32	S1	1394	A
32	S1	1395	C
32	S1	1396	U
32	S1	1402	C
32	S1	1403	G
32	S1	1404	U
32	S1	1407	A
32	S1	1408	G
32	S1	1411	C
32	S1	1415	G
32	S1	1416	A
32	S1	1422	G
32	S1	1423	A
32	S1	1424	G
32	S1	1426	C
32	S1	1431	A
32	S1	1433	A
32	S1	1434	G
32	S1	1438	U
32	S1	1439	G
32	S1	1440	U
32	S1	1442	A

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Mol	Chain	Res	Type
32	S1	1444	G
32	S1	1446	C
32	S1	1447	C
32	S1	1448	U
32	S1	1450	A
32	S1	1454	G
32	S1	1457	C
32	S1	1458	U
32	S1	1459	G
32	S1	1466	A
32	S1	1474	U
32	S1	1475	A
32	S1	1477	A
32	S1	1478	C
32	S1	1483	G
32	S1	1507	G
32	S1	1508	C
32	S1	1509	C
32	S1	1510	G
32	S1	1513	A
32	S1	1514	G
32	S1	1517	C
32	S1	1537	U
32	S1	1538	C
32	S1	1539	A
32	S1	1542	G
32	S1	1543	U
32	S1	1544	G
32	S1	1545	A
32	S1	1546	U
32	S1	1550	G
32	S1	1557	C
32	S1	1558	A
32	S1	1565	U
32	S1	1568	U
32	S1	1572	U
32	S1	1576	C
32	S1	1581	A
32	S1	1586	U
32	S1	1587	G
32	S1	1589	C
32	S1	1590	U

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Mol	Chain	Res	Type
32	S1	1591	A
32	S1	1592	G
32	S1	1598	G
32	S1	1609	G
32	S1	1610	C
32	S1	1611	U
32	S1	1614	C
32	S1	1615	G
32	S1	1616	U
32	S1	1617	U
32	S1	1622	A
32	S1	1623	C
32	S1	1625	U
32	S1	1626	C
32	S1	1640	C
32	S1	1641	A
32	S1	1644	C
32	S1	1653	G
32	S1	1658	U
32	S1	1662	G
32	S1	1664	U
32	S1	1667	A
32	S1	1673	C
32	S1	1674	C
32	S1	1678	G
32	S1	1686	C
32	S1	1688	G
32	S1	1695	G
32	S1	1730	G
32	S1	1731	A
32	S1	1733	G
32	S1	1734	U
32	S1	1742	A
32	S1	1745	U
32	S1	1746	U
32	S1	1755	G
32	S1	1760	A
32	S1	1761	G
32	S1	1764	G
32	S1	1766	A
32	S1	1767	G
32	S1	1771	U

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Mol	Chain	Res	Type
32	S1	1772	A
32	S1	1774	C
32	S1	1775	A
32	S1	1776	A
32	S1	1777	G
32	S1	1778	G
32	S1	1779	U
32	S1	1781	U
32	S1	1793	C
32	S1	1796	G
32	S1	1802	G
32	S1	1803	G
33	L1	2	C
33	L1	3	G
33	L1	8	C
33	L1	21	G
33	L1	26	A
33	L1	29	G
33	L1	39	A
33	L1	42	A
33	L1	43	U
33	L1	45	U
33	L1	59	A
33	L1	62	A
33	L1	63	G
33	L1	65	A
33	L1	69	U
33	L1	71	C
33	L1	72	A
33	L1	73	A
33	L1	76	A
33	L1	82	C
33	L1	91	G
33	L1	92	C
33	L1	108	A
33	L1	109	G
33	L1	128	C
33	L1	131	C
33	L1	133	G
33	L1	134	U
33	L1	135	G
33	L1	136	C

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Mol	Chain	Res	Type
33	L1	138	G
33	L1	139	U
33	L1	159	G
33	L1	164	C
33	L1	168	A
33	L1	169	G
33	L1	177	C
33	L1	184	C
33	L1	188	U
33	L1	189	C
33	L1	208	G
33	L1	209	G
33	L1	210	G
33	L1	216	G
33	L1	217	A
33	L1	228	C
33	L1	229	G
33	L1	247	C
33	L1	248	C
33	L1	259	G
33	L1	262	A
33	L1	263	A
33	L1	264	C
33	L1	267	G
33	L1	279	G
33	L1	281	G
33	L1	283	A
33	L1	284	U
33	L1	293	A
33	L1	296	C
33	L1	297	G
33	L1	302	G
33	L1	306	A
33	L1	309	C
33	L1	325	A
33	L1	327	A
33	L1	328	G
33	L1	340	A
33	L1	348	C
33	L1	349	A
33	L1	365	A
33	L1	368	U

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Mol	Chain	Res	Type
33	L1	372	A
33	L1	373	A
33	L1	374	G
33	L1	376	A
33	L1	396	G
33	L1	397	A
33	L1	398	G
33	L1	400	G
33	L1	401	C
33	L1	407	A
33	L1	423	C
33	L1	424	G
33	L1	425	G
33	L1	432	G
33	L1	435	G
33	L1	453	U
33	L1	464	G
33	L1	465	C
33	L1	466	U
33	L1	467	C
33	L1	469	U
33	L1	474	G
33	L1	479	C
33	L1	482	C
33	L1	483	U
33	L1	484	C
33	L1	485	G
33	L1	488	U
33	L1	489	C
33	L1	492	G
33	L1	493	G
33	L1	506	U
33	L1	507	C
33	L1	513	C
33	L1	514	G
33	L1	521	G
33	L1	522	C
33	L1	523	C
33	L1	524	A
33	L1	525	A
33	L1	527	G
33	L1	539	C

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Mol	Chain	Res	Type
33	L1	543	C
33	L1	544	C
33	L1	549	G
33	L1	550	C
33	L1	552	G
33	L1	554	C
33	L1	555	G
33	L1	563	C
33	L1	564	A
33	L1	571	G
33	L1	577	G
33	L1	581	G
33	L1	585	A
33	L1	586	A
33	L1	588	G
33	L1	590	C
33	L1	591	G
33	L1	598	U
33	L1	601	G
33	L1	607	U
33	L1	608	G
33	L1	638	G
33	L1	639	A
33	L1	640	C
33	L1	641	C
33	L1	642	C
33	L1	651	A
33	L1	652	C
33	L1	653	A
33	L1	667	C
33	L1	668	U
33	L1	669	G
33	L1	677	U
33	L1	678	G
33	L1	679	C
33	L1	680	G
33	L1	681	A
33	L1	682	G
33	L1	683	U
33	L1	684	C
33	L1	685	G
33	L1	686	A

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Mol	Chain	Res	Type
33	L1	687	C
33	L1	692	U
33	L1	694	U
33	L1	695	G
33	L1	696	A
33	L1	704	G
33	L1	705	A
33	L1	706	U
33	L1	707	G
33	L1	708	C
33	L1	709	G
33	L1	711	A
33	L1	712	A
33	L1	715	A
33	L1	716	A
33	L1	720	G
33	L1	721	A
33	L1	722	C
33	L1	723	G
33	L1	725	G
33	L1	726	C
33	L1	731	G
33	L1	734	C
33	L1	735	C
33	L1	736	U
33	L1	737	C
33	L1	739	C
33	L1	745	G
33	L1	746	C
33	L1	756	C
33	L1	766	C
33	L1	767	U
33	L1	768	U
33	L1	770	U
33	L1	772	U
33	L1	773	G
33	L1	785	U
33	L1	786	U
33	L1	787	G
33	L1	788	G
33	L1	789	A
33	L1	790	G

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Mol	Chain	Res	Type
33	L1	796	C
33	L1	802	G
33	L1	803	G
33	L1	811	A
33	L1	820	A
33	L1	841	G
33	L1	842	C
33	L1	843	C
33	L1	852	C
33	L1	860	G
33	L1	861	A
33	L1	864	C
33	L1	867	G
33	L1	868	A
33	L1	877	U
33	L1	882	U
33	L1	887	A
33	L1	897	U
33	L1	898	G
33	L1	899	A
33	L1	900	C
33	L1	910	G
33	L1	911	G
33	L1	917	A
33	L1	919	G
33	L1	920	A
33	L1	924	A
33	L1	927	G
33	L1	937	G
33	L1	940	G
33	L1	947	C
33	L1	962	C
33	L1	963	U
33	L1	964	C
33	L1	965	A
33	L1	969	U
33	L1	972	C
33	L1	978	C
33	L1	979	C
33	L1	980	C
33	L1	988	G
33	L1	990	U

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Mol	Chain	Res	Type
33	L1	994	U
33	L1	996	A
33	L1	997	G
33	L1	998	G
33	L1	999	U
33	L1	1000	A
33	L1	1004	C
33	L1	1011	U
33	L1	1014	G
33	L1	1017	G
33	L1	1025	G
33	L1	1026	A
33	L1	1027	C
33	L1	1028	G
33	L1	1045	U
33	L1	1046	U
33	L1	1050	A
33	L1	1051	A
33	L1	1053	C
33	L1	1057	A
33	L1	1058	A
33	L1	1059	A
33	L1	1061	A
33	L1	1063	G
33	L1	1064	U
33	L1	1067	G
33	L1	1070	G
33	L1	1079	G
33	L1	1082	U
33	L1	1083	C
33	L1	1097	A
33	L1	1103	U
33	L1	1104	C
33	L1	1108	U
33	L1	1117	U
33	L1	1118	G
33	L1	1119	G
33	L1	1120	G
33	L1	1133	A
33	L1	1134	G
33	L1	1135	C
33	L1	1140	C

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Mol	Chain	Res	Type
33	L1	1146	A
33	L1	1147	U
33	L1	1148	G
33	L1	1156	A
33	L1	1164	G
33	L1	1181	A
33	L1	1182	A
33	L1	1183	C
33	L1	1184	U
33	L1	1185	G
33	L1	1194	C
33	L1	1196	U
33	L1	1197	A
33	L1	1198	G
33	L1	1199	A
33	L1	1201	C
33	L1	1202	C
33	L1	1205	C
33	L1	1212	U
33	L1	1223	U
33	L1	1224	A
33	L1	1225	A
33	L1	1226	G
33	L1	1235	A
33	L1	1236	C
33	L1	1240	G
33	L1	1241	G
33	L1	1246	G
33	L1	1247	G
33	L1	1248	A
33	L1	1249	A
33	L1	1250	G
33	L1	1252	C
33	L1	1255	A
33	L1	1256	A
33	L1	1262	U
33	L1	1263	A
33	L1	1267	A
33	L1	1269	U
33	L1	1273	U
33	L1	1274	A
33	L1	1278	A

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Mol	Chain	Res	Type
33	L1	1282	A
33	L1	1283	C
33	L1	1290	A
33	L1	1291	A
33	L1	1309	U
33	L1	1312	A
33	L1	1313	U
33	L1	1314	G
33	L1	1317	G
33	L1	1318	C
33	L1	1320	G
33	L1	1348	G
33	L1	1365	C
33	L1	1370	A
33	L1	1388	C
33	L1	1389	C
33	L1	1395	A
33	L1	1410	A
33	L1	1411	G
33	L1	1421	A
33	L1	1422	G
33	L1	1433	U
33	L1	1435	C
33	L1	1436	A
33	L1	1437	G
33	L1	1440	C
33	L1	1449	A
33	L1	1450	G
33	L1	1457	A
33	L1	1458	U
33	L1	1459	A
33	L1	1468	A
33	L1	1483	G
33	L1	1484	A
33	L1	1485	A
33	L1	1486	G
33	L1	1487	A
33	L1	1488	G
33	L1	1496	G
33	L1	1509	G
33	L1	1517	C
33	L1	1527	A

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Mol	Chain	Res	Type
33	L1	1528	G
33	L1	1530	C
33	L1	1533	U
33	L1	1534	C
33	L1	1539	G
33	L1	1540	G
33	L1	1541	G
33	L1	1543	A
33	L1	1544	G
33	L1	1545	G
33	L1	1546	G
33	L1	1550	A
33	L1	1553	C
33	L1	1554	C
33	L1	1555	G
33	L1	1564	C
33	L1	1565	G
33	L1	1566	C
33	L1	1567	G
33	L1	1568	A
33	L1	1570	C
33	L1	1571	A
33	L1	1572	C
33	L1	1577	A
33	L1	1578	U
33	L1	1584	A
33	L1	1585	A
33	L1	1586	A
33	L1	1599	A
33	L1	1604	U
33	L1	1620	U
33	L1	1621	G
33	L1	1622	G
33	L1	1623	C
33	L1	1624	G
33	L1	1627	U
33	L1	1629	A
33	L1	1630	C
33	L1	1631	G
33	L1	1632	G
33	L1	1633	C
33	L1	1634	G

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Mol	Chain	Res	Type
33	L1	1635	A
33	L1	1636	C
33	L1	1637	G
33	L1	1638	U
33	L1	1642	G
33	L1	1645	G
33	L1	1646	U
33	L1	1654	C
33	L1	1655	G
33	L1	1659	G
33	L1	1665	G
33	L1	1666	C
33	L1	1669	C
33	L1	1673	A
33	L1	1676	A
33	L1	1680	A
33	L1	1681	U
33	L1	1683	U
33	L1	1684	U
33	L1	1685	U
33	L1	1686	U
33	L1	1689	G
33	L1	1690	C
33	L1	1691	U
33	L1	1698	C
33	L1	1699	C
33	L1	1700	U
33	L1	1701	G
33	L1	1706	C
33	L1	1707	C
33	L1	1708	C
33	L1	1710	G
33	L1	1715	C
33	L1	1716	G
33	L1	1726	G
33	L1	1727	A
33	L1	1728	G
33	L1	1729	G
33	L1	1731	A
33	L1	1732	G
33	L1	1735	U
33	L1	1736	C

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Mol	Chain	Res	Type
33	L1	1740	U
33	L1	1742	G
33	L1	1743	C
33	L1	1744	C
33	L1	1746	G
33	L1	1749	G
33	L1	1750	A
33	L1	1752	C
33	L1	1753	A
33	L1	1754	C
33	L1	1756	C
33	L1	1757	G
33	L1	1758	U
33	L1	1762	G
33	L1	1763	C
33	L1	1766	U
33	L1	1767	G
33	L1	1768	U
33	L1	1769	C
33	L1	1774	G
33	L1	1775	C
33	L1	1777	C
33	L1	1779	C
33	L1	1790	A
33	L1	1793	A
33	L1	1802	A
33	L1	1803	G
33	L1	1805	A
33	L1	1806	C
33	L1	1807	C
33	L1	1809	A
33	L1	1810	G
33	L1	1811	U
33	L1	1812	A
33	L1	1813	C
33	L1	1815	G
33	L1	1825	G
33	L1	1826	G
33	L1	1827	U
33	L1	1835	A
33	L1	1837	A
33	L1	1844	U

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Mol	Chain	Res	Type
33	L1	1845	C
33	L1	1846	A
33	L1	1852	C
33	L1	1853	C
33	L1	1854	A
33	L1	1856	G
33	L1	1859	G
33	L1	1860	A
33	L1	1861	A
33	L1	1867	U
33	L1	1868	C
33	L1	1869	U
33	L1	1874	A
33	L1	1875	A
33	L1	1876	U
33	L1	1880	A
33	L1	1881	C
33	L1	1882	A
33	L1	1900	C
33	L1	1902	G
33	L1	1903	C
33	L1	1904	A
33	L1	1924	G
33	L1	1928	A
33	L1	1938	U
33	L1	1945	A
33	L1	1949	G
33	L1	1950	G
33	L1	1958	G
33	L1	1959	U
33	L1	1970	A
33	L1	1990	A
33	L1	1991	U
33	L1	1996	C
33	L1	1997	G
33	L1	1999	G
33	L1	2003	C
33	L1	2004	U
33	L1	2005	C
33	L1	2006	A
33	L1	2007	C
33	L1	2008	G

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Mol	Chain	Res	Type
33	L1	2012	C
33	L1	2013	G
33	L1	2015	G
33	L1	2021	G
33	L1	2042	G
33	L1	2057	G
33	L1	2060	C
33	L1	2073	U
33	L1	2087	A
33	L1	2095	C
33	L1	2097	C
33	L1	2101	A
33	L1	2109	G
33	L1	2110	G
33	L1	2112	C
33	L1	2113	A
33	L1	2114	A
33	L1	2115	G
33	L1	2116	G
33	L1	2125	A
33	L1	2131	U
33	L1	2132	A
33	L1	2133	A
33	L1	2151	G
33	L1	2152	A
33	L1	2168	C
33	L1	2170	G
33	L1	2172	C
33	L1	2173	G
33	L1	2174	C
33	L1	2202	A
33	L1	2203	A
33	L1	2204	U
33	L1	2205	G
33	L1	2206	U
33	L1	2207	C
33	L1	2220	U
33	L1	2226	C
33	L1	2231	G
33	L1	2232	C
33	L1	2239	A
33	L1	2253	U

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Mol	Chain	Res	Type
33	L1	2261	U
33	L1	2268	G
33	L1	2270	A
33	L1	2274	A
33	L1	2276	A
33	L1	2277	U
33	L1	2278	G
33	L1	2279	C
33	L1	2281	U
33	L1	2282	C
33	L1	2290	A
33	L1	2293	U
33	L1	2300	G
33	L1	2301	C
33	L1	2302	G
33	L1	2305	U
33	L1	2308	A
33	L1	2309	U
33	L1	2310	G
33	L1	2334	G
33	L1	2335	U
33	L1	2361	C
33	L1	2362	A
33	L1	2363	G
33	L1	2364	C
33	L1	2372	A
33	L1	2373	C
33	L1	2374	G
33	L1	2375	G
33	L1	2376	G
33	L1	2377	C
33	L1	2383	G
33	L1	2384	G
33	L1	2386	A
33	L1	2391	C
33	L1	2396	A
33	L1	2400	A
33	L1	2401	A
33	L1	2402	G
33	L1	2408	G
33	L1	2410	U
33	L1	2434	G

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Mol	Chain	Res	Type
33	L1	2437	A
33	L1	2438	A
33	L1	2439	A
33	L1	2443	C
33	L1	2444	U
33	L1	2445	U
33	L1	2450	G
33	L1	2451	G
33	L1	2452	U
33	L1	2453	G
33	L1	2454	U
33	L1	2457	G
33	L1	2458	A
33	L1	2460	A
33	L1	2462	G
33	L1	2465	G
33	L1	2467	A
33	L1	2468	G
33	L1	2469	C
33	L1	2472	U
33	L1	2473	C
33	L1	2475	C
33	L1	2478	G
33	L1	2480	G
33	L1	2481	C
33	L1	2482	A
33	L1	2483	A
33	L1	2484	G
33	L1	2485	U
33	L1	2490	U
33	L1	2491	A
33	L1	2492	C
33	L1	2493	C
33	L1	2494	A
33	L1	2495	C
33	L1	2496	U
33	L1	2497	A
33	L1	2498	C
33	L1	2499	U
33	L1	2501	U
33	L1	2502	U
33	L1	2503	A

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Mol	Chain	Res	Type
33	L1	2504	A
33	L1	2505	C
33	L1	2511	U
33	L1	2512	U
33	L1	2513	U
33	L1	2517	U
33	L1	2518	A
33	L1	2519	U
33	L1	2529	C
33	L1	2541	A
33	L1	2542	U
33	L1	2543	G
33	L1	2544	C
33	L1	2562	A
33	L1	2563	G
33	L1	2570	U
33	L1	2571	C
33	L1	2572	U
33	L1	2573	U
33	L1	2574	A
33	L1	2582	G
33	L1	2590	C
33	L1	2595	G
33	L1	2596	A
33	L1	2597	C
33	L1	2599	U
33	L1	2609	G
33	L1	2610	G
33	L1	2617	G
33	L1	2621	G
33	L1	2622	G
33	L1	2623	G
33	L1	2624	G
33	L1	2625	C
33	L1	2629	C
33	L1	2630	A
33	L1	2631	A
33	L1	2635	G
33	L1	2638	A
33	L1	2639	A
33	L1	2640	A
33	L1	2643	A

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Mol	Chain	Res	Type
33	L1	2654	G
33	L1	2655	U
33	L1	2658	U
33	L1	2659	A
33	L1	2660	A
33	L1	2670	A
33	L1	2677	A
33	L1	2678	C
33	L1	2679	A
33	L1	2680	G
33	L1	2681	A
33	L1	2683	A
33	L1	2684	U
33	L1	2691	U
33	L1	2692	G
33	L1	2699	A
33	L1	2706	A
33	L1	2707	A
33	L1	2708	A
33	L1	2709	G
33	L1	2717	G
33	L1	2718	A
33	L1	2723	G
33	L1	2730	A
33	L1	2731	G
33	L1	2732	U
33	L1	2739	A
33	L1	2740	C
33	L1	2750	A
33	L1	2755	U
33	L1	2758	C
33	L1	2761	A
33	L1	2762	U
33	L1	2763	C
33	L1	2764	G
33	L1	2766	U
33	L1	2767	C
33	L1	2779	G
33	L1	2782	G
33	L1	2797	U
33	L1	2798	G
33	L1	2799	U

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Mol	Chain	Res	Type
33	L1	2800	C
33	L1	2801	A
33	L1	2802	G
33	L1	2803	A
33	L1	2804	A
33	L1	2805	A
33	L1	2810	A
33	L1	2811	C
33	L1	2812	C
33	L1	2818	G
33	L1	2819	A
33	L1	2843	G
33	L1	2845	U
33	L1	2847	A
33	L1	2863	U
33	L1	2869	C
33	L1	2870	U
33	L1	2873	G
33	L1	2874	A
33	L1	2875	U
33	L1	2877	U
33	L1	2889	A
33	L1	2900	G
33	L1	2915	U
33	L1	2918	U
33	L1	2925	U
33	L1	2937	U
33	L1	2938	A
33	L1	2943	A
33	L1	2944	C
33	L1	2945	G
33	L1	2949	G
33	L1	2953	G
33	L1	2956	U
33	L1	2970	G
33	L1	2972	C
33	L1	2973	A
33	L1	2974	G
33	L1	2985	C
33	L1	2995	G
33	L1	2996	A
33	L1	2998	A

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Mol	Chain	Res	Type
33	L1	2999	G
33	L1	3000	U
33	L1	3012	A
33	L1	3013	A
33	L1	3036	C
33	L1	3045	A
33	L1	3046	C
33	L1	3057	A
33	L1	3058	U
33	L1	3072	A
33	L1	3073	A
33	L1	3080	U
33	L1	3082	G
33	L1	3088	A
33	L1	3093	C
33	L1	3094	C
33	L1	3095	G
33	L1	3100	C
33	L1	3101	C
33	L1	3114	A
33	L1	3117	G
33	L1	3123	A
33	L1	3131	A
33	L1	3137	G
33	L1	3138	C
33	L1	3142	C
33	L1	3145	G
33	L1	3151	C
33	L1	3152	C
33	L1	3156	G
33	L1	3157	C
33	L1	3158	C
33	L1	3161	C
33	L1	3162	C
33	L1	3164	C
33	L1	3165	C
33	L1	3166	C
33	L1	3168	C
33	L1	3169	C
33	L1	3170	C
33	L1	3175	C
33	L1	3176	C

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Mol	Chain	Res	Type
33	L1	3177	A
33	L1	3202	G
33	L1	3205	C
33	L1	3206	C
33	L1	3207	C
33	L1	3208	G
33	L1	3211	C
33	L1	3214	U
33	L1	3215	U
33	L1	3217	G
33	L1	3218	C
33	L1	3222	G
33	L1	3223	C
33	L1	3224	C
33	L1	3225	G
33	L1	3226	G
33	L1	3229	C
33	L1	3230	G
33	L1	3231	G
33	L1	3232	C
33	L1	3234	G
33	L1	3235	A
33	L1	3236	A
33	L1	3238	U
33	L1	3240	C
33	L1	3241	C
33	L1	3242	G
33	L1	3244	G
33	L1	3245	G
33	L1	3246	U
33	L1	3247	C
33	L1	3248	G
33	L1	3249	G
33	L1	3250	C
33	L1	3273	C
33	L1	3274	G
33	L1	3275	G
33	L1	3277	C
33	L1	3278	G
33	L1	3280	U
33	L1	3281	G
33	L1	3296	C

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Mol	Chain	Res	Type
33	L1	3305	U
33	L1	3308	A
33	L1	3309	U
33	L1	3310	A
33	L1	3311	C
33	L1	3317	G
33	L1	3318	G
33	L1	3326	U
33	L1	3328	A
33	L1	3329	G
33	L1	3334	A
33	L1	3335	G
33	L1	3336	A
33	L1	3337	G
33	L1	3338	U
33	L1	3342	C
33	L1	3353	G
33	L1	3354	A
33	L1	3355	U
33	L1	3356	C
33	L1	3360	U
33	L1	3361	G
33	L1	3362	A
33	L1	3365	U
33	L1	3376	C
33	L1	3377	G
33	L1	3378	U
33	L1	3379	C
33	L1	3382	A
33	L1	3383	C
33	L1	3389	C
33	L1	3390	G
33	L1	3391	U
34	L3	3	A
34	L3	4	U
34	L3	10	C
34	L3	11	A
34	L3	12	U
34	L3	13	A
34	L3	18	C
34	L3	19	A
34	L3	20	C

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Mol	Chain	Res	Type
34	L3	21	U
34	L3	22	A
34	L3	23	A
34	L3	24	G
34	L3	25	G
34	L3	26	C
34	L3	27	A
34	L3	28	U
34	L3	33	U
34	L3	34	C
34	L3	36	C
34	L3	40	A
34	L3	42	A
34	L3	46	C
34	L3	49	A
34	L3	50	A
34	L3	52	U
34	L3	54	A
34	L3	55	A
34	L3	56	G
34	L3	57	C
34	L3	58	G
34	L3	62	U
34	L3	64	G
34	L3	69	A
34	L3	74	A
34	L3	75	G
34	L3	76	U
34	L3	85	G
34	L3	91	C
34	L3	100	A
34	L3	102	G
34	L3	103	U
34	L3	108	G
34	L3	109	U
34	L3	110	G
34	L3	114	C
34	L3	116	U
34	L3	118	C
34	L3	120	C
35	L2	7	A
35	L2	8	C

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Mol	Chain	Res	Type
35	L2	27	C
35	L2	40	G
35	L2	41	A
35	L2	42	U
35	L2	43	G
35	L2	53	G
35	L2	56	A
35	L2	63	A
35	L2	64	U
35	L2	65	A
35	L2	66	C
35	L2	67	C
35	L2	68	U
35	L2	70	G
35	L2	87	C
35	L2	88	C
35	L2	89	G
35	L2	90	U
35	L2	92	A
35	L2	93	A
35	L2	94	C
35	L2	95	C
35	L2	96	A
35	L2	98	C
35	L2	99	G
35	L2	100	A
35	L2	101	G
35	L2	102	U
35	L2	104	U
35	L2	109	A
35	L2	110	C
35	L2	111	G
35	L2	115	G
35	L2	116	U
35	L2	117	U
35	L2	124	G
35	L2	125	A
35	L2	126	G
35	L2	131	C
35	L2	132	U
35	L2	134	G
35	L2	136	G

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Mol	Chain	Res	Type
35	L2	138	G
35	L2	139	A
35	L2	140	G
35	L2	144	A
35	L2	145	C
35	L2	151	C
35	L2	156	G
35	L2	157	C
35	L2	158	G
35	L2	163	G
35	L2	164	C

All (620) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
30	S3	16	G
31	S2	32	U
31	S2	37	G
31	S2	58	U
31	S2	72	G
31	S2	73	C
32	S1	2	A
32	S1	3	C
32	S1	4	C
32	S1	25	C
32	S1	32	U
32	S1	36	C
32	S1	44	U
32	S1	61	A
32	S1	98	C
32	S1	104	A
32	S1	119	U
32	S1	123	U
32	S1	137	A
32	S1	139	U
32	S1	140	C
32	S1	146	A
32	S1	148	C
32	S1	151	A
32	S1	159	U
32	S1	167	A
32	S1	169	A

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Mol	Chain	Res	Type
32	S1	174	C
32	S1	180	A
32	S1	184	C
32	S1	192	G
32	S1	193	G
32	S1	195	A
32	S1	278	C
32	S1	293	C
32	S1	297	U
32	S1	299	A
32	S1	316	A
32	S1	341	G
32	S1	372	U
32	S1	373	U
32	S1	381	G
32	S1	389	A
32	S1	404	A
32	S1	442	A
32	S1	452	C
32	S1	476	U
32	S1	477	A
32	S1	489	C
32	S1	492	G
32	S1	505	U
32	S1	508	U
32	S1	512	U
32	S1	559	A
32	S1	562	U
32	S1	574	A
32	S1	581	G
32	S1	584	A
32	S1	592	U
32	S1	594	C
32	S1	610	A
32	S1	611	G
32	S1	617	G
32	S1	624	A
32	S1	626	A
32	S1	630	U
32	S1	632	G
32	S1	633	U
32	S1	635	G

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Mol	Chain	Res	Type
32	S1	636	U
32	S1	648	C
32	S1	652	G
32	S1	663	C
32	S1	683	C
32	S1	689	C
32	S1	860	A
32	S1	877	G
32	S1	880	G
32	S1	903	A
32	S1	964	U
32	S1	968	A
32	S1	1011	C
32	S1	1030	A
32	S1	1068	G
32	S1	1070	A
32	S1	1071	C
32	S1	1072	U
32	S1	1083	C
32	S1	1099	G
32	S1	1142	A
32	S1	1200	A
32	S1	1201	C
32	S1	1205	G
32	S1	1224	C
32	S1	1225	A
32	S1	1226	U
32	S1	1237	G
32	S1	1289	U
32	S1	1316	A
32	S1	1328	G
32	S1	1332	G
32	S1	1341	G
32	S1	1364	C
32	S1	1369	C
32	S1	1378	C
32	S1	1394	A
32	S1	1395	C
32	S1	1396	U
32	S1	1402	C
32	S1	1407	A
32	S1	1410	C

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Mol	Chain	Res	Type
32	S1	1414	G
32	S1	1421	U
32	S1	1422	G
32	S1	1438	U
32	S1	1440	U
32	S1	1443	U
32	S1	1445	C
32	S1	1446	C
32	S1	1456	U
32	S1	1460	G
32	S1	1473	C
32	S1	1474	U
32	S1	1479	U
32	S1	1482	U
32	S1	1506	G
32	S1	1507	G
32	S1	1508	C
32	S1	1509	C
32	S1	1513	A
32	S1	1516	C
32	S1	1536	U
32	S1	1538	C
32	S1	1545	A
32	S1	1547	G
32	S1	1556	U
32	S1	1566	U
32	S1	1571	G
32	S1	1586	U
32	S1	1588	C
32	S1	1589	C
32	S1	1614	C
32	S1	1615	G
32	S1	1625	U
32	S1	1639	A
32	S1	1640	C
32	S1	1658	U
32	S1	1673	C
32	S1	1685	U
32	S1	1730	G
32	S1	1741	A
32	S1	1744	C
32	S1	1745	U

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Mol	Chain	Res	Type
32	S1	1754	A
32	S1	1759	A
32	S1	1760	A
32	S1	1763	A
32	S1	1765	A
32	S1	1771	U
32	S1	1775	A
32	S1	1777	G
32	S1	1795	U
33	L1	2	C
33	L1	20	G
33	L1	25	U
33	L1	28	C
33	L1	42	A
33	L1	61	A
33	L1	62	A
33	L1	64	A
33	L1	70	A
33	L1	71	C
33	L1	72	A
33	L1	102	G
33	L1	105	A
33	L1	112	C
33	L1	123	U
33	L1	131	C
33	L1	135	G
33	L1	138	G
33	L1	167	C
33	L1	176	A
33	L1	183	C
33	L1	208	G
33	L1	209	G
33	L1	228	C
33	L1	246	C
33	L1	261	C
33	L1	262	A
33	L1	264	C
33	L1	280	G
33	L1	283	A
33	L1	294	A
33	L1	296	C
33	L1	324	U

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Mol	Chain	Res	Type
33	L1	327	A
33	L1	339	G
33	L1	367	A
33	L1	372	A
33	L1	400	G
33	L1	406	A
33	L1	423	C
33	L1	431	G
33	L1	434	C
33	L1	444	C
33	L1	481	G
33	L1	483	U
33	L1	484	C
33	L1	492	G
33	L1	506	U
33	L1	513	C
33	L1	522	C
33	L1	534	G
33	L1	543	C
33	L1	553	C
33	L1	554	C
33	L1	563	C
33	L1	570	G
33	L1	571	G
33	L1	580	C
33	L1	590	C
33	L1	606	C
33	L1	638	G
33	L1	641	C
33	L1	642	C
33	L1	651	A
33	L1	667	C
33	L1	676	G
33	L1	680	G
33	L1	682	G
33	L1	683	U
33	L1	684	C
33	L1	686	A
33	L1	704	G
33	L1	705	A
33	L1	708	C
33	L1	711	A

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Mol	Chain	Res	Type
33	L1	714	G
33	L1	715	A
33	L1	716	A
33	L1	730	A
33	L1	744	C
33	L1	745	G
33	L1	747	A
33	L1	755	C
33	L1	771	G
33	L1	772	U
33	L1	785	U
33	L1	786	U
33	L1	788	G
33	L1	803	G
33	L1	810	A
33	L1	841	G
33	L1	846	A
33	L1	860	G
33	L1	883	G
33	L1	897	U
33	L1	899	A
33	L1	911	G
33	L1	919	G
33	L1	936	A
33	L1	946	U
33	L1	962	C
33	L1	971	G
33	L1	978	C
33	L1	979	C
33	L1	987	A
33	L1	989	U
33	L1	995	C
33	L1	997	G
33	L1	998	G
33	L1	999	U
33	L1	1004	C
33	L1	1010	A
33	L1	1013	A
33	L1	1024	G
33	L1	1025	G
33	L1	1027	C
33	L1	1050	A

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Mol	Chain	Res	Type
33	L1	1052	A
33	L1	1057	A
33	L1	1058	A
33	L1	1060	U
33	L1	1067	G
33	L1	1082	U
33	L1	1083	C
33	L1	1086	U
33	L1	1119	G
33	L1	1126	U
33	L1	1134	G
33	L1	1147	U
33	L1	1155	G
33	L1	1163	A
33	L1	1181	A
33	L1	1183	C
33	L1	1196	U
33	L1	1197	A
33	L1	1201	C
33	L1	1211	G
33	L1	1212	U
33	L1	1222	U
33	L1	1224	A
33	L1	1225	A
33	L1	1240	G
33	L1	1245	U
33	L1	1247	G
33	L1	1248	A
33	L1	1249	A
33	L1	1258	C
33	L1	1265	G
33	L1	1272	G
33	L1	1281	C
33	L1	1289	G
33	L1	1307	A
33	L1	1312	A
33	L1	1317	G
33	L1	1321	A
33	L1	1348	G
33	L1	1361	G
33	L1	1370	A
33	L1	1388	C

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Mol	Chain	Res	Type
33	L1	1394	C
33	L1	1395	A
33	L1	1409	G
33	L1	1432	G
33	L1	1458	U
33	L1	1484	A
33	L1	1485	A
33	L1	1486	G
33	L1	1487	A
33	L1	1496	G
33	L1	1516	G
33	L1	1527	A
33	L1	1529	C
33	L1	1532	A
33	L1	1533	U
33	L1	1540	G
33	L1	1543	A
33	L1	1545	G
33	L1	1546	G
33	L1	1563	G
33	L1	1568	A
33	L1	1569	U
33	L1	1576	C
33	L1	1577	A
33	L1	1583	G
33	L1	1585	A
33	L1	1598	U
33	L1	1602	A
33	L1	1619	G
33	L1	1620	U
33	L1	1621	G
33	L1	1623	C
33	L1	1630	C
33	L1	1631	G
33	L1	1632	G
33	L1	1634	G
33	L1	1646	U
33	L1	1654	C
33	L1	1658	G
33	L1	1663	G
33	L1	1665	G
33	L1	1675	G

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Mol	Chain	Res	Type
33	L1	1679	U
33	L1	1682	C
33	L1	1683	U
33	L1	1688	U
33	L1	1694	A
33	L1	1696	G
33	L1	1698	C
33	L1	1699	C
33	L1	1706	C
33	L1	1707	C
33	L1	1709	U
33	L1	1714	A
33	L1	1728	G
33	L1	1735	U
33	L1	1739	G
33	L1	1742	G
33	L1	1745	G
33	L1	1748	A
33	L1	1751	G
33	L1	1752	C
33	L1	1753	A
33	L1	1754	C
33	L1	1755	A
33	L1	1765	G
33	L1	1766	U
33	L1	1767	G
33	L1	1773	U
33	L1	1774	G
33	L1	1775	C
33	L1	1777	C
33	L1	1806	C
33	L1	1810	G
33	L1	1812	A
33	L1	1826	G
33	L1	1836	U
33	L1	1843	A
33	L1	1852	C
33	L1	1854	A
33	L1	1858	U
33	L1	1860	A
33	L1	1863	A
33	L1	1866	C

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Mol	Chain	Res	Type
33	L1	1868	C
33	L1	1873	C
33	L1	1874	A
33	L1	1880	A
33	L1	1887	A
33	L1	1944	G
33	L1	1958	G
33	L1	2004	U
33	L1	2006	A
33	L1	2012	C
33	L1	2013	G
33	L1	2020	G
33	L1	2053	A
33	L1	2096	U
33	L1	2100	A
33	L1	2108	C
33	L1	2112	C
33	L1	2125	A
33	L1	2131	U
33	L1	2151	G
33	L1	2167	G
33	L1	2171	A
33	L1	2172	C
33	L1	2203	A
33	L1	2204	U
33	L1	2206	U
33	L1	2219	A
33	L1	2229	G
33	L1	2247	A
33	L1	2250	A
33	L1	2275	A
33	L1	2276	A
33	L1	2278	G
33	L1	2281	U
33	L1	2292	U
33	L1	2299	C
33	L1	2308	A
33	L1	2318	U
33	L1	2331	A
33	L1	2355	A
33	L1	2361	C
33	L1	2362	A

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Mol	Chain	Res	Type
33	L1	2363	G
33	L1	2374	G
33	L1	2375	G
33	L1	2376	G
33	L1	2383	G
33	L1	2390	G
33	L1	2399	G
33	L1	2407	U
33	L1	2433	U
33	L1	2436	G
33	L1	2438	A
33	L1	2450	G
33	L1	2459	U
33	L1	2461	A
33	L1	2466	G
33	L1	2467	A
33	L1	2468	G
33	L1	2473	C
33	L1	2474	A
33	L1	2477	G
33	L1	2482	A
33	L1	2485	U
33	L1	2486	G
33	L1	2490	U
33	L1	2496	U
33	L1	2497	A
33	L1	2501	U
33	L1	2502	U
33	L1	2503	A
33	L1	2504	A
33	L1	2511	U
33	L1	2512	U
33	L1	2516	U
33	L1	2518	A
33	L1	2541	A
33	L1	2561	A
33	L1	2562	A
33	L1	2574	A
33	L1	2581	C
33	L1	2594	A
33	L1	2596	A
33	L1	2614	U

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Mol	Chain	Res	Type
33	L1	2620	U
33	L1	2621	G
33	L1	2622	G
33	L1	2623	G
33	L1	2624	G
33	L1	2628	C
33	L1	2634	U
33	L1	2643	A
33	L1	2654	G
33	L1	2657	C
33	L1	2658	U
33	L1	2659	A
33	L1	2669	C
33	L1	2679	A
33	L1	2706	A
33	L1	2708	A
33	L1	2722	U
33	L1	2739	A
33	L1	2757	G
33	L1	2763	C
33	L1	2765	A
33	L1	2766	U
33	L1	2781	A
33	L1	2796	G
33	L1	2799	U
33	L1	2801	A
33	L1	2802	G
33	L1	2803	A
33	L1	2804	A
33	L1	2810	A
33	L1	2818	G
33	L1	2842	C
33	L1	2862	U
33	L1	2875	U
33	L1	2896	C
33	L1	2918	U
33	L1	2943	A
33	L1	2944	C
33	L1	2952	G
33	L1	2972	C
33	L1	2973	A
33	L1	2995	G

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Mol	Chain	Res	Type
33	L1	3023	G
33	L1	3042	U
33	L1	3045	A
33	L1	3049	A
33	L1	3079	G
33	L1	3081	G
33	L1	3087	A
33	L1	3093	C
33	L1	3094	C
33	L1	3122	U
33	L1	3124	A
33	L1	3137	G
33	L1	3152	C
33	L1	3175	C
33	L1	3177	A
33	L1	3183	G
33	L1	3205	C
33	L1	3206	C
33	L1	3211	C
33	L1	3217	G
33	L1	3227	U
33	L1	3228	C
33	L1	3234	G
33	L1	3237	G
33	L1	3240	C
33	L1	3250	C
33	L1	3277	C
33	L1	3280	U
33	L1	3295	G
33	L1	3308	A
33	L1	3317	G
33	L1	3324	U
33	L1	3333	C
33	L1	3337	G
33	L1	3352	C
33	L1	3353	G
33	L1	3354	A
33	L1	3360	U
33	L1	3375	G
33	L1	3376	C
33	L1	3377	G
33	L1	3378	U

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Mol	Chain	Res	Type
33	L1	3389	C
33	L1	3390	G
34	L3	1	G
34	L3	3	A
34	L3	10	C
34	L3	19	A
34	L3	23	A
34	L3	25	G
34	L3	26	C
34	L3	48	G
34	L3	53	U
34	L3	54	A
34	L3	55	A
34	L3	63	U
34	L3	73	U
34	L3	75	G
34	L3	101	A
34	L3	102	G
34	L3	117	U
35	L2	27	C
35	L2	42	U
35	L2	43	G
35	L2	67	C
35	L2	69	G
35	L2	89	G
35	L2	91	G
35	L2	92	A
35	L2	93	A
35	L2	94	C
35	L2	97	U
35	L2	98	C
35	L2	99	G
35	L2	100	A
35	L2	101	G
35	L2	110	C
35	L2	116	U
35	L2	123	C
35	L2	124	G
35	L2	125	A
35	L2	135	G
35	L2	137	C
35	L2	138	G

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Mol	Chain	Res	Type
35	L2	143	C
35	L2	144	A
35	L2	155	G
35	L2	157	C
35	L2	162	C

5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
32	S1	23
33	L1	20
26	SG	3
78	Le	2
25	SC	2
9	SK	2
19	SY	2
2	SA	2
81	LD	1
18	SW	1
1	Sa	1

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Mol	Chain	Number of breaks
4	SD	1
16	SR	1
3	SB	1
28	SN	1
5	SE	1
24	SX	1
15	SS	1
10	SL	1
14	SP	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	S1	694:C	O3'	701:C	P	33.58
1	S1	803:G	O3'	823:A	P	30.95
1	L1	2547:C	O3'	2561:A	P	30.63
1	S1	744:G	O3'	764:U	P	27.26
1	S1	862:U	O3'	871:G	P	24.78
1	LD	269:TYR	C	303:VAL	N	23.06
1	L1	3285:U	O3'	3287:A	P	10.99
1	SW	31:UNK	C	73:UNK	N	10.13
1	S1	1419:U	O3'	1421:U	P	9.36
1	S1	42:G	O3'	44:U	P	7.57
1	L1	113:A	O3'	119:A	P	7.47
1	L1	3320:G	O3'	3322:A	P	6.65
1	S1	1086:A	O3'	1088:G	P	6.14
1	S1	128:G	O3'	137:A	P	5.98
1	L1	1616:G	O3'	1618:U	P	5.77
1	S1	1450:A	O3'	1452:A	P	5.62
1	S1	324:U	O3'	327:A	P	5.53
1	L1	3063:C	O3'	3065:U	P	4.59
1	L1	3365:U	O3'	3372:C	P	4.55
1	L1	2313:U	O3'	2318:U	P	3.87
1	S1	1462:C	O3'	1464:G	P	3.67
1	L1	1401:C	O3'	1403:G	P	3.50
1	L1	1732:G	O3'	1734:G	P	3.35
1	L1	1389:C	O3'	1391:A	P	3.22
1	L1	1604:U	O3'	1606:C	P	2.91
1	Le	36:LYS	C	37:ILE	N	2.57
1	SG	127:UNK	C	128:UNK	N	2.51
1	Sa	97:THR	C	98:SER	N	2.30
1	Le	35:GLU	C	36:LYS	N	2.03
1	L1	2700:A	O3'	2701:G	P	1.98

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	S1	303:A	O3'	304:A	P	1.92
1	L1	618:G	O3'	619:C	P	1.92
1	SC	43:GLU	C	44:LEU	N	1.86
1	L1	521:G	O3'	522:C	P	1.86
1	SD	167:ASN	C	168:LYS	N	1.85
1	SK	93:HIS	C	94:ILE	N	1.85
1	SR	86:ARG	C	87:THR	N	1.80
1	SB	154:ASP	C	155:GLY	N	1.79
1	S1	1298:G	O3'	1299:G	P	1.79
1	S1	1592:G	O3'	1593:U	P	1.79
1	L1	1523:G	O3'	1524:G	P	1.78
1	SG	64:UNK	C	65:UNK	N	1.72
1	SN	51:GLY	C	52:PHE	N	1.72
1	SE	250:GLN	C	251:GLU	N	1.68
1	SY	47:ARG	C	48:GLU	N	1.67
1	SK	126:GLY	C	127:ARG	N	1.66
1	SC	143:VAL	C	144:ASN	N	1.64
1	SY	46:VAL	C	47:ARG	N	1.62
1	S1	623:A	O3'	624:A	P	1.40
1	S1	1647:C	O3'	1648:C	P	1.34
1	L1	18:G	O3'	19:C	P	1.33
1	L1	1034:U	O3'	1035:C	P	1.30
1	S1	187:C	O3'	188:U	P	1.29
1	S1	535:C	O3'	536:U	P	1.27
1	L1	522:C	O3'	523:C	P	1.23
1	S1	1004:U	O3'	1005:C	P	1.21
1	SA	108:THR	C	109:PRO	N	1.20
1	SX	71:GLY	C	72:LYS	N	1.19
1	S1	1156:A	O3'	1157:A	P	1.18
1	SS	5:THR	C	6:ALA	N	1.13
1	S1	1083:C	O3'	1084:U	P	1.10
1	SL	54:ILE	C	55:GLY	N	1.04
1	SG	126:UNK	C	127:UNK	N	1.04
1	SP	50:ILE	C	51:GLU	N	1.02
1	L1	2398:A	O3'	2399:G	P	0.92
1	S1	860:A	O3'	861:A	P	0.84
1	SA	109:PRO	C	110:GLY	N	0.75
1	S1	1315:U	O3'	1316:A	P	0.74

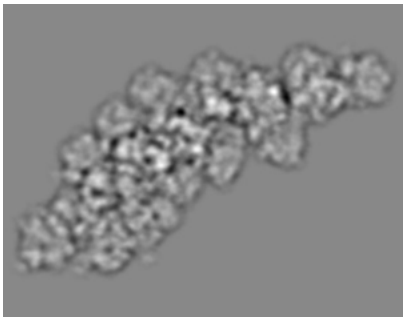
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-2790. These allow visual inspection of the internal detail of the map and identification of artifacts.

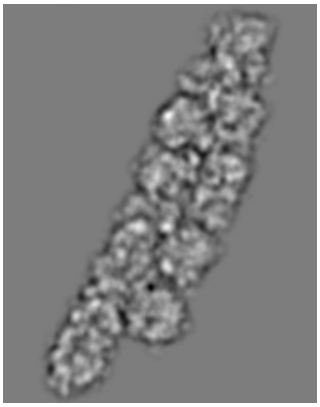
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

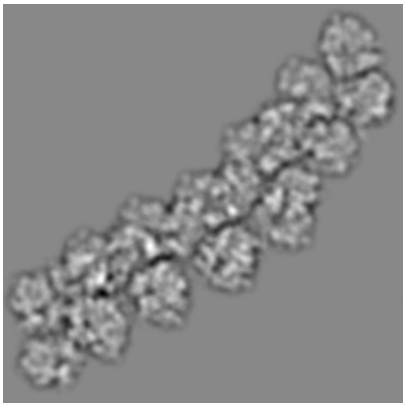
6.1.1 Primary map



X



Y

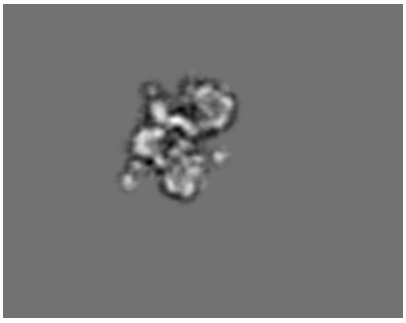


Z

The images above show the map projected in three orthogonal directions.

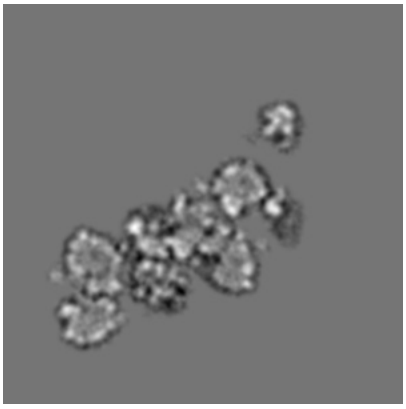
6.2 Central slices

6.2.1 Primary map



X Index: 128

Y Index: 128



Z Index: 100

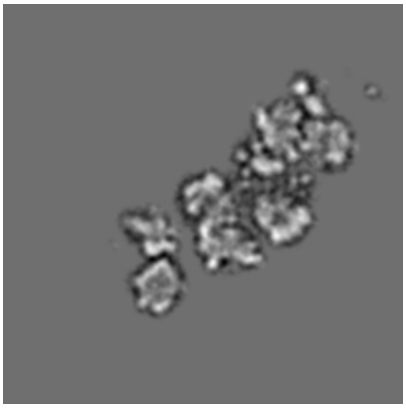
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 44

Y Index: 93



Z Index: 126

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X

Y

Z

The images above show the 3D surface view of the map at the recommended contour level 1.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

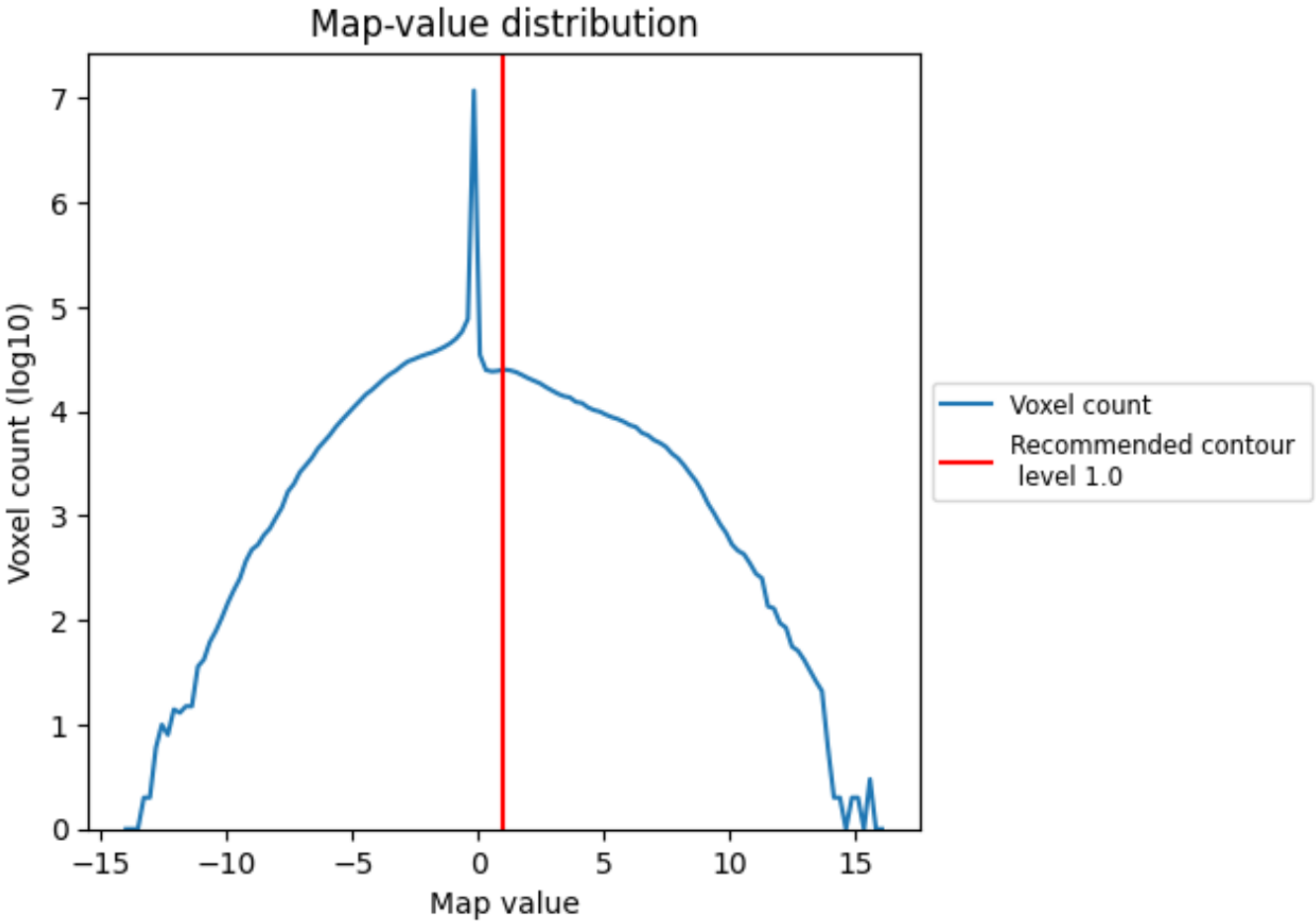
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

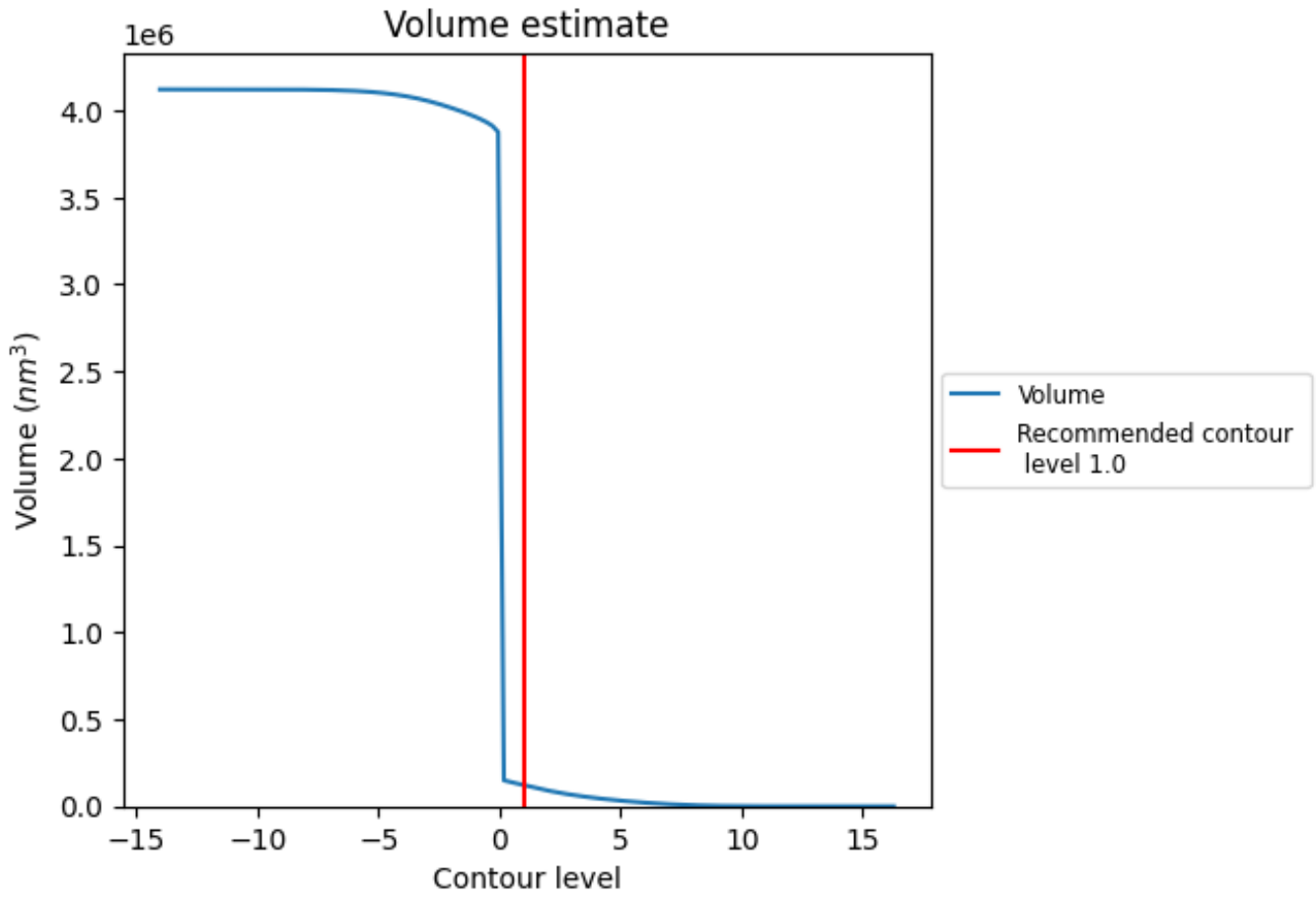
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate (i)



The volume at the recommended contour level is 122092 nm^3; this corresponds to an approximate mass of 110289 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

8 Fourier-Shell correlation (i)

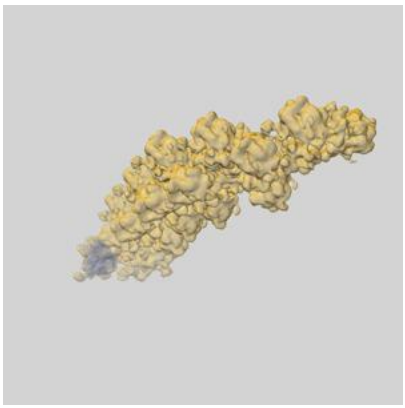
This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit

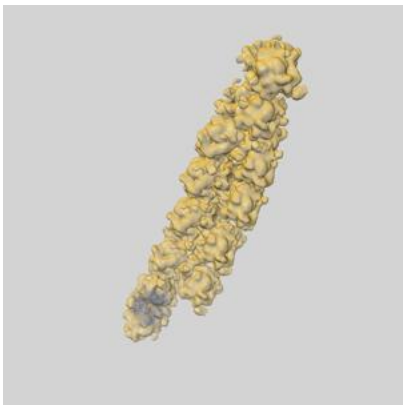
This section contains information regarding the fit between EMDB map EMD-2790 and PDB model 4V3P. Per-residue inclusion information can be found in section 3 on page 20.

9.1 Map-model overlays

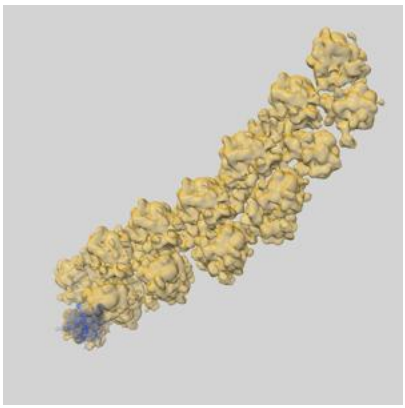
9.1.1 Map-model overlay



X

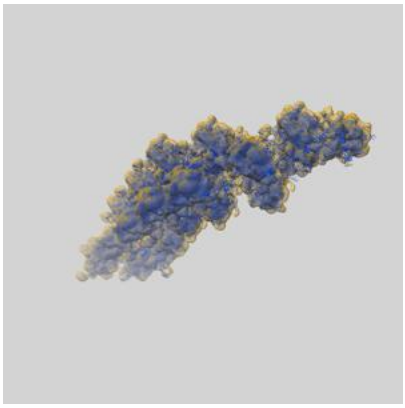


Y

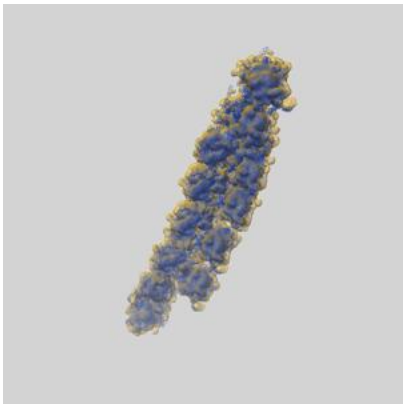


Z

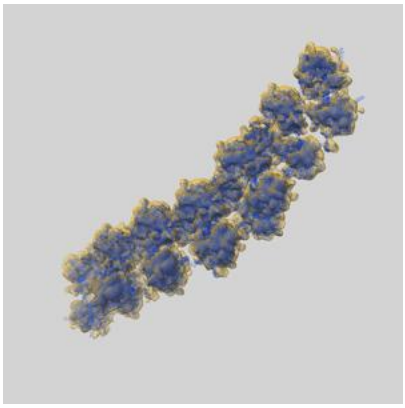
9.1.2 Map-model assembly overlay



X



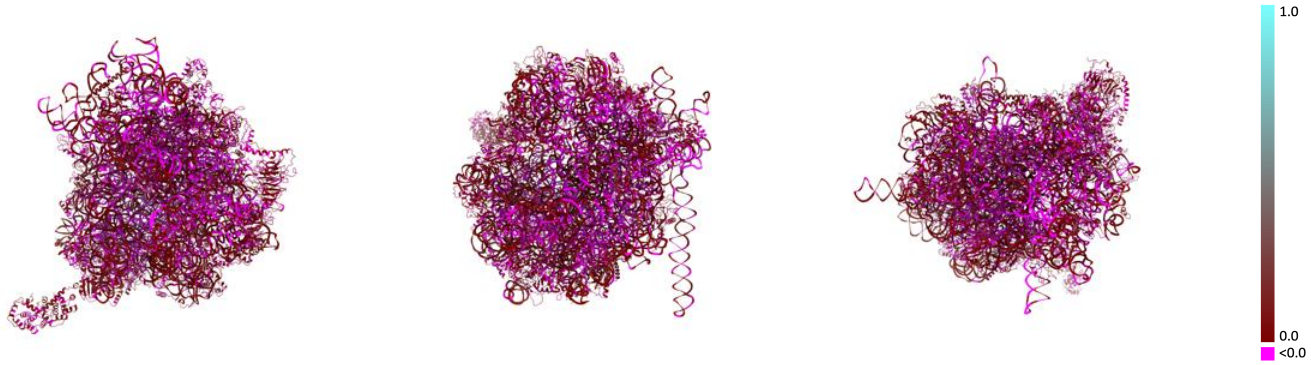
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 1.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

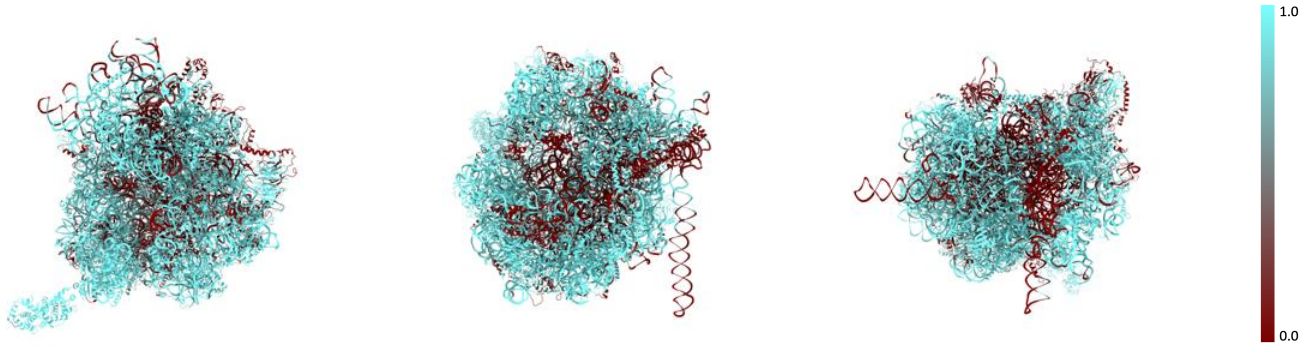
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

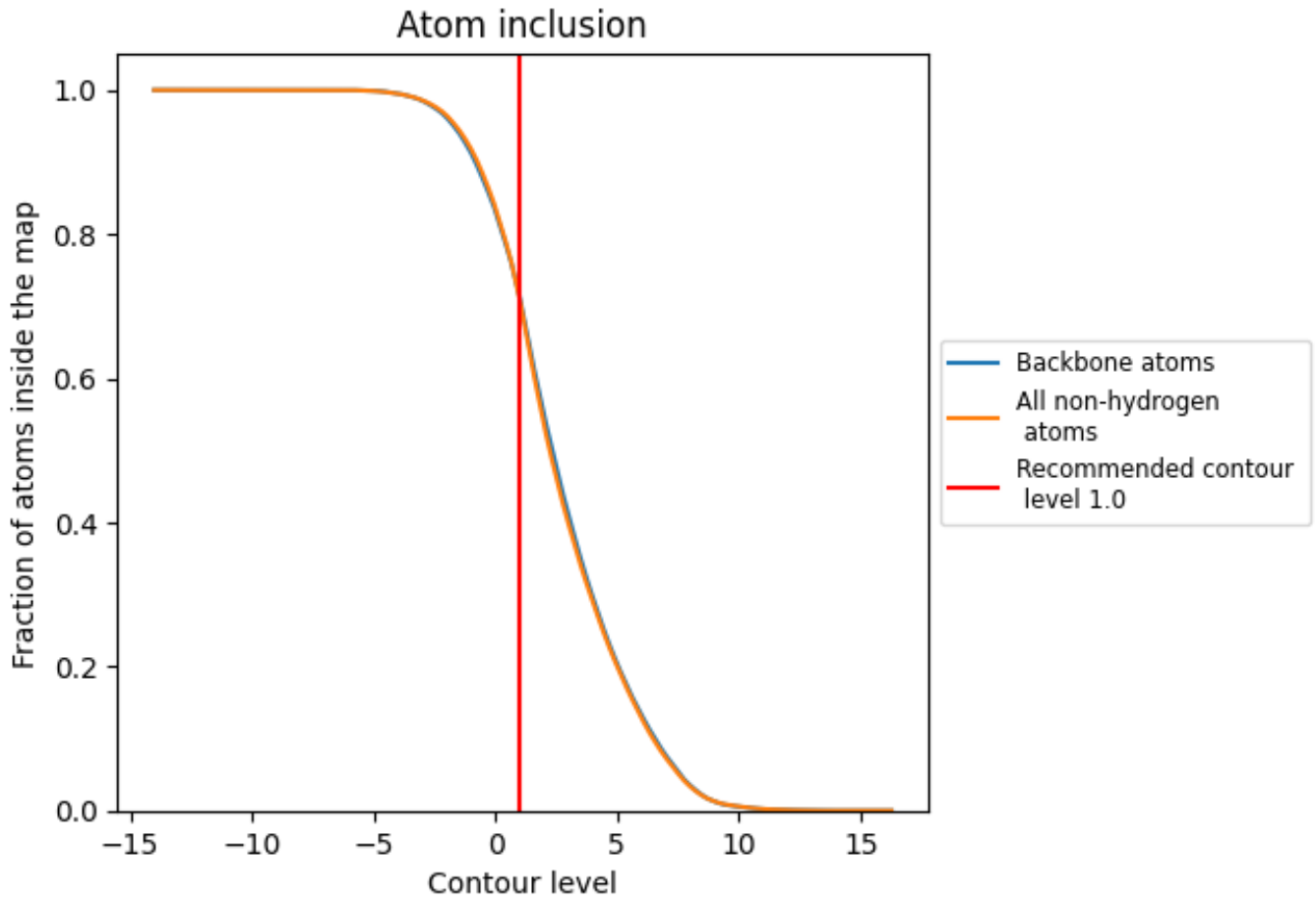
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (1.0).

9.4 Atom inclusion (i)



At the recommended contour level, 71% of all backbone atoms, 71% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (1.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7105	0.0160
L1	0.7195	0.0180
L2	0.8095	0.0040
L3	0.9400	0.0370
LA	0.0136	-0.0110
LB	0.2945	-0.0160
LC	0.9568	0.0250
LD	0.7453	0.0060
LE	0.8461	0.0270
LF	0.8747	0.0510
LG	0.9888	0.0500
LH	0.8814	0.0350
LI	0.5715	0.0040
LJ	0.9851	0.0470
LK	0.5417	-0.0260
LL	0.6670	0.0050
LM	0.3938	-0.0240
LN	0.9658	0.0150
LO	0.8244	0.0400
LP	0.7394	-0.0220
LQ	0.9863	0.0420
LR	0.8748	0.0340
LS	0.9615	0.0030
LT	0.6817	0.0060
LU	0.5639	-0.0170
LV	0.6151	0.0030
LW	0.9609	0.0590
LX	0.8666	0.0280
LY	1.0000	0.0440
LZ	0.7768	-0.0020
La	0.9398	0.0030
Lb	1.0000	0.0500
Lc	0.9805	0.0470
Ld	1.0000	-0.0110
Le	0.8055	-0.0040

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Chain	Atom inclusion	Q-score
Lf	0.7334	0.0220
Lg	0.6918	0.0010
Lh	0.6698	-0.0050
Li	1.0000	0.0700
Lj	0.7757	-0.0140
Lk	0.9054	0.0460
Ll	0.3227	-0.0400
Lm	0.1081	-0.0130
Ln	0.5366	0.0300
Lo	0.4587	-0.0550
Lp	0.9849	-0.0140
Lq	0.7032	0.0370
Lr	0.6039	0.0130
Ls	0.8262	0.0350
Lt	1.0000	0.0840
Lu	0.9439	0.0330
Lv	0.9977	0.0540
Lw	0.9931	0.0220
Lx	0.9208	0.0120
Ly	1.0000	0.0200
Lz	1.0000	-0.0620
S1	0.6480	0.0130
S2	0.1920	-0.0060
S3	1.0000	0.0580
SA	0.7039	0.0150
SB	0.6261	0.0000
SC	0.8903	0.0220
SD	0.9503	0.0040
SE	0.9356	0.0110
SF	0.3649	0.0150
SG	0.6271	0.0250
SH	0.9645	0.0030
SI	0.8924	0.0190
SJ	0.6789	-0.0170
SK	0.8192	0.0470
SL	0.0782	-0.0180
SM	0.6308	0.0170
SN	1.0000	0.0080
SO	0.2027	-0.0070
SP	0.0081	-0.0010
SQ	0.6636	0.0240
SR	0.6476	0.0330

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Chain	Atom inclusion	Q-score
SS	1.0000	0.0720
ST	0.5197	0.0230
SU	0.3725	-0.0060
SV	0.4420	0.0210
SW	0.9543	0.0840
SX	0.1536	-0.0240
SY	0.6204	0.0330
SZ	0.6283	0.0340
Sa	0.6628	0.0350
Sb	1.0000	0.1390
Sc	0.7619	0.0180