



Full wwPDB EM Validation Report ⓘ

Jan 25, 2023 – 12:37 PM EST

PDB ID : 4V6W
EMDB ID : EMD-5591
Title : Structure of the *D. melanogaster* 80S ribosome
Authors : Anger, A.M.; Armache, J.-P.; Berninghausen, O.; Habeck, M.; Subklewe, M.;
Wilson, D.N.; Beckmann, R.
Deposited on : 2013-02-27
Resolution : 6.00 Å(reported)

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:

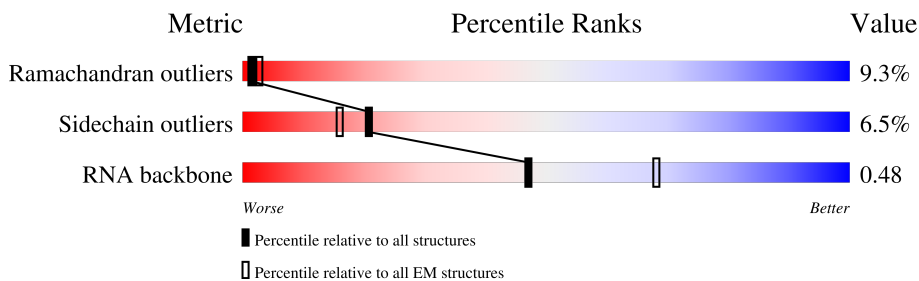
EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

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 6.00 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.



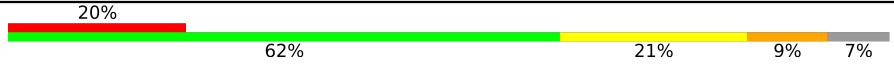
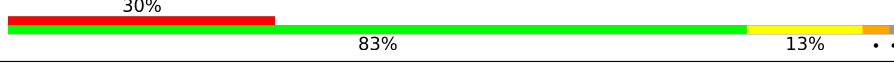
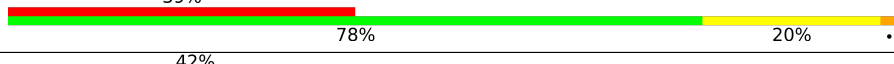


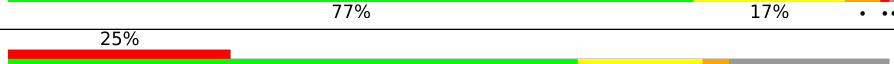
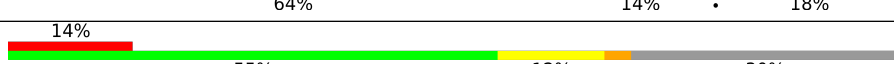
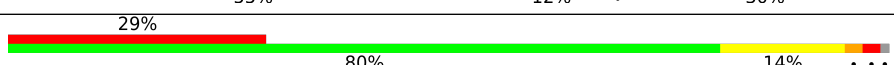
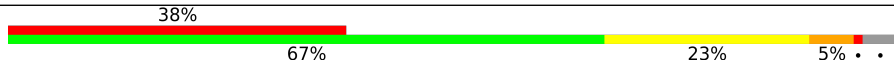
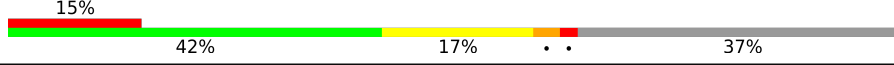

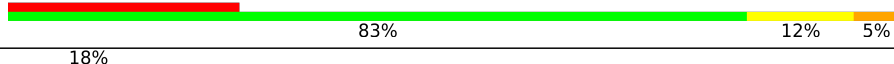
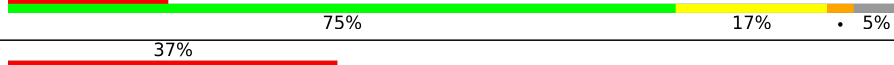












Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

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 $\leq 5\%$. 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	Az	844	
2	Ag	318	
3	AU	120	
4	AK	163	
5	AO	151	
6	AX	143	
7	AM	139	
8	AS	152	

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Mol	Chain	Length	Quality of chain
9	Ad	56	
10	AN	151	
11	AL	155	
12	AR	131	
13	AP	148	
14	AT	156	
15	AB	268	
16	AA	313	
17	AV	83	
18	AY	131	
19	AZ	117	
20	Aa	114	
21	Ab	84	
22	Ac	65	
23	AD	246	
24	Ae	132	
25	Af	80	
26	AJ	195	
27	AE	261	
28	AC	267	
29	AG	248	
30	AF	228	
31	AH	194	
32	AW	130	
33	AI	208	

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Mol	Chain	Length	Quality of chain
34	AQ	148	
35	Ah	121	
36	B2	1995	
37	BC	75	
38	Cz	218	
39	Cq	223	
40	CK	165	
41	CO	205	
42	CL	218	
43	CV	140	
44	CM	166	
45	Ca	149	
46	CN	204	
47	CI	218	
48	CD	299	
49	CQ	188	
50	CR	203	
51	CA	256	
52	CS	177	
53	CT	159	
54	CP	186	
55	CU	299	
56	CX	277	
57	CY	149	
58	CW	155	



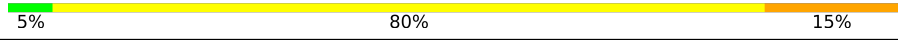
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Mol	Chain	Length	Quality of chain
59	CZ	135	19% 77% 20% ...
60	Cr	144	24% 58% 28% 5% 7%
61	Ch	123	29% 82% 15%
62	Cb	76	14% 71% 20% 5%
63	CB	416	21% 80% 15%
64	CF	252	12% 73% 15% 9%
65	Cc	111	14% 74% 13% 10%
66	Cd	124	15% 74% 14% 10%
67	Ce	134	11% 75% 16%
68	Cf	157	25% 68% 18% 13%
69	Cg	162	14% 54% 11% 30%
70	Ci	115	14% 69% 24%
71	Cj	93	14% 78% 17%
72	Ck	70	33% 79% 17%
73	Cl	51	14% 80% 12%
74	CC	401	14% 71% 21% 5%
75	Cm	52	37% 79% 19%
76	Cn	25	12% 72% 24%
77	Cp	92	22% 79% 20%
78	Co	104	15% 73% 18% 9%
79	CJ	184	35% 75% 18% 5%
80	CH	190	38% 78% 17%
81	CE	243	24% 56% 27% 10% 6%
82	CG	271	29% 70% 15% 11%
83	A5	3970	8% 10% 60% 25%

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Mol	Chain	Length	Quality of chain
84	A9	30	 77% 23%
85	A7	120	 5% 74% 21%
86	A8	123	 5% 80% 15%

2 Entry composition [i](#)

There are 86 unique types of molecules in this entry. The entry contains 230721 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 Elongation factor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	Az	837	6574	4170	1123	1235	46	0	0

- Molecule 2 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	Ag	318	2511	1577	444	480	10	0	0

- Molecule 3 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AU	102	815	505	161	145	4	0	0

- Molecule 4 is a protein called 40S ribosomal protein S10a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AK	95	797	522	136	137	2	0	0

- Molecule 5 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AO	134	1003	616	196	187	4	0	0

- Molecule 6 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AX	143	1131	712	226	191	2	0	0

- Molecule 7 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	AM	119	924	582	165	171	6	0	0

- Molecule 8 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AS	137	1128	707	220	198	3	0	0

- Molecule 9 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	Ad	52	433	269	87	72	5	0	0

- Molecule 10 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	AN	150	1202	767	229	203	3	0	0

- Molecule 11 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	AL	155	1274	803	254	211	6	0	0

- Molecule 12 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	AR	120	981	618	183	176	4	0	0

- Molecule 13 is a protein called 40S ribosomal protein S15, isoform A.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	AP	124	1016	652	189	169	6	0	0

- Molecule 14 is a protein called 40S ribosomal protein S19a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	AT	154	1203	762	230	207	4	0	0

- Molecule 15 is a protein called 40S ribosomal protein S3a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	AB	220	1798	1138	328	324	8	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	AA	218	1737	1113	298	321	5	0	0

- Molecule 17 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	AV	82	617	373	114	125	5	0	0

There are 13 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AV	2	GLN	GLU	conflict	UNP O76927
AV	8	PHE	ASN	conflict	UNP O76927
AV	25	GLY	HIS	conflict	UNP O76927
AV	32	ILE	VAL	conflict	UNP O76927
AV	34	MET	LEU	conflict	UNP O76927
AV	35	ASN	SER	conflict	UNP O76927
AV	36	VAL	ILE	conflict	UNP O76927
AV	58	ALA	GLU	conflict	UNP O76927
AV	68	SER	CYS	conflict	UNP O76927
AV	70	LEU	VAL	conflict	UNP O76927
AV	75	ALA	LYS	conflict	UNP O76927
AV	79	VAL	ILE	conflict	UNP O76927
AV	80	SER	THR	conflict	UNP O76927

- Molecule 18 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	AY	126	1016	644	196	171	5	0	0

- Molecule 19 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	AZ	74	608	390	112	106		0	0

- Molecule 20 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	Aa	107	867	539	182	140	6	0	0

- Molecule 21 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	Ab	84	653	412	123	110	8	0	0

- Molecule 22 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	Ac	62	498	307	100	89	2	0	0

- Molecule 23 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	AD	227	1782	1127	319	326	10	0	0

- Molecule 24 is a protein called 40S ribosomal protein S30, isoform A.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
24	Ae	58	469	289	105	75	0	0

- Molecule 25 is a protein called 40S ribosomal protein S27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Af	80	Total	C	N	O	S	0	0
			659	417	128	109	5		

- Molecule 26 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AJ	181	Total	C	N	O	S	0	0
			1503	957	298	247	1		

- Molecule 27 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	AE	261	Total	C	N	O	S	0	0
			2054	1314	380	353	7		

- Molecule 28 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	AC	227	Total	C	N	O	S	0	0
			1746	1126	302	311	7		

- Molecule 29 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	AG	231	Total	C	N	O	S	0	0
			1866	1172	372	315	7		

- Molecule 30 is a protein called 40S ribosomal protein S5a.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	AF	190	Total	C	N	O	S	0	0
			1497	934	285	269	9		

- Molecule 31 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	AH	194	Total	C	N	O	S	0	0
			1566	1006	278	281	1		

- Molecule 32 is a protein called 40S ribosomal protein S15Aa.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	AW	129	Total	C	N	O	S	0	0
			1028	656	189	176	7		

- Molecule 33 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	AI	207	Total	C	N	O	S	0	0
			1665	1037	329	296	3		

- Molecule 34 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	AQ	148	Total	C	N	O	S	0	0
			1183	753	223	204	3		

- Molecule 35 is a protein called Vig2, isoform B.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	Ah	58	Total	C	N	O	S	0	0
			486	298	93	94	1		

There are 7 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
Ah	212	LYS	GLU	conflict	UNP Q9VBX3
Ah	213	GLU	ASP	conflict	UNP Q9VBX3
Ah	215	PRO	SER	conflict	UNP Q9VBX3
Ah	217	GLU	GLN	conflict	UNP Q9VBX3
Ah	226	ILE	LEU	conflict	UNP Q9VBX3
Ah	227	GLN	ARG	conflict	UNP Q9VBX3
Ah	228	ASN	ASP	conflict	UNP Q9VBX3

- Molecule 36 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	B2	1957	Total	C	N	O	P	0	0
			39523	17589	6780	13198	1956		

- Molecule 37 is a RNA chain called E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	BC	75	Total	C	N	O	P	0	0
			1605	717	296	518	74		

- Molecule 38 is a protein called 60S ribosomal protein L10a-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
38	Cz	217	1702	1084	303	305	10	0	0

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
Cz	72A	SER	-	expression tag	UNP Q9VTP4

- Molecule 39 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
39	Cq	223	1710	1089	297	314	10	0	0

- Molecule 40 is a protein called 60S ribosomal protein L12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
40	CK	158	1180	739	213	222	6	0	0

- Molecule 41 is a protein called 60S ribosomal protein L13a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
41	CO	205	1668	1063	331	268	6	0	0

- Molecule 42 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
42	CL	210	1695	1066	342	284	3	0	0

- Molecule 43 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
43	CV	134	998	629	190	173	6	0	0

- Molecule 44 is a protein called 60S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
44	CM	159	1302	826	256	218	2	0	0

- Molecule 45 is a protein called 60S ribosomal protein L27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
45	Ca	149	1204	769	242	189	4	0	0

- Molecule 46 is a protein called 60S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
46	CN	203	1710	1072	362	271	5	0	0

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
47	CI	217	1785	1125	343	304	13	0	0

- Molecule 48 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
48	CD	290	2334	1471	434	423	6	0	0

- Molecule 49 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
49	CQ	187	1518	957	306	251	4	0	0

- Molecule 50 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
50	CR	203	1683	1047	350	277	9	0	0

- Molecule 51 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	CA	253	Total	C	N	O	S	0	0
			1935	1206	395	326	8		

- Molecule 52 is a protein called 60S ribosomal protein L18a.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	CS	173	Total	C	N	O	S	0	0
			1454	935	275	240	4		

- Molecule 53 is a protein called 60S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	CT	158	Total	C	N	O	S	0	0
			1297	829	253	212	3		

- Molecule 54 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	CP	185	Total	C	N	O	S	0	0
			1505	928	305	263	9		

- Molecule 55 is a protein called 60S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	CU	116	Total	C	N	O	S	0	0
			961	607	167	185	2		

- Molecule 56 is a protein called 60S ribosomal protein L23A.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	CX	120	Total	C	N	O	S	0	0
			984	625	192	165	2		

- Molecule 57 is a protein called 60S ribosomal protein L26.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	CY	131	Total	C	N	O	S	0	0
			1078	676	224	176	2		

- Molecule 58 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
58	CW	130	1047	662	207	172	6	0	0

- Molecule 59 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
59	CZ	134	1115	723	209	180	3	0	0

- Molecule 60 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
60	Cr	134	1051	670	205	176	0	0

- Molecule 61 is a protein called 60S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
61	Ch	123	1015	646	202	164	3	0	0

- Molecule 62 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
62	Cb	75	619	378	133	107	1	0	0

- Molecule 63 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
63	CB	414	3287	2083	621	565	18	0	0

- Molecule 64 is a protein called 60S ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
64	CF	229	1921	1234	372	312	3	0	0

- Molecule 65 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
65	Cc	100	770	486	132	147	5	0	0

- Molecule 66 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
66	Cd	111	924	573	180	169	2	0	0

- Molecule 67 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
67	Ce	132	1110	698	230	177	5	0	0

- Molecule 68 is a protein called 60S ribosomal protein L35A.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
68	Cf	157	1244	781	255	203	5	0	0

- Molecule 69 is a protein called 60S ribosomal protein L34a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
69	Cg	113	926	575	193	152	6	0	0

- Molecule 70 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
70	Ci	113	934	585	193	153	3	0	0

- Molecule 71 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
71	Cj	92	737	450	160	122	5	0	0

- Molecule 72 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	Ck	70	Total	C	N	O	S	0	0
			576	366	108	100	2		

- Molecule 73 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				AltConf	Trace
73	Cl	50	Total	C	N	O	0	0
			437	276	98	63		

- Molecule 74 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	CC	392	Total	C	N	O	S	0	0
			3109	1959	622	522	6		

- Molecule 75 is a protein called 60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	Cm	52	Total	C	N	O	S	0	0
			429	267	89	67	6		

- Molecule 76 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	Cn	25	Total	C	N	O	S	0	0
			236	143	63	27	3		

- Molecule 77 is a protein called 60S ribosomal protein L37a.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	Cp	91	Total	C	N	O	S	0	0
			710	441	140	122	7		

- Molecule 78 is a protein called 60S ribosomal protein L36A.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	Co	104	Total	C	N	O	S	0	0
			874	548	180	138	8		

- Molecule 79 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	CJ	182	Total	C	N	O	S	0	0
			1468	926	278	258	6		

- Molecule 80 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	CH	190	Total	C	N	O	S	0	0
			1499	947	265	278	9		

- Molecule 81 is a protein called 60S ribosomal protein L6, isoform A.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	CE	228	Total	C	N	O	S	0	0
			1845	1185	351	305	4		

- Molecule 82 is a protein called 60S ribosomal protein L7a.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	CG	241	Total	C	N	O	S	0	0
			1936	1237	368	327	4		

- Molecule 83 is a RNA chain called 28S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	A5	3806	Total	C	N	O	P	0	0
			77967	34770	13566	25827	3804		

- Molecule 84 is a RNA chain called 2S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	A9	30	Total	C	N	O	P	0	0
			639	286	111	213	29		

- Molecule 85 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	A7	120	Total	C	N	O	P	0	0
			2554	1141	456	838	119		

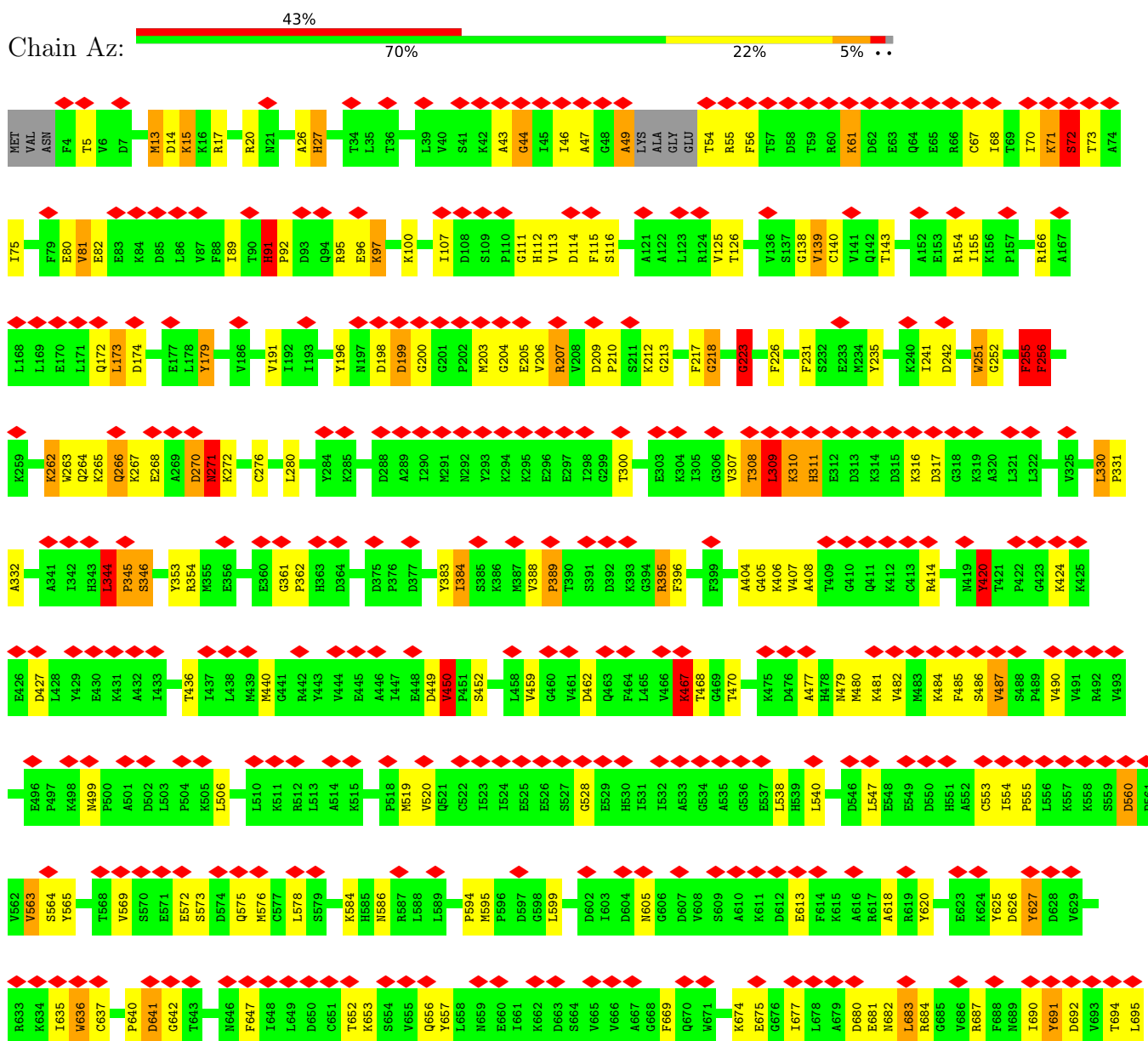
- Molecule 86 is a RNA chain called 5.8S ribosomal RNA.

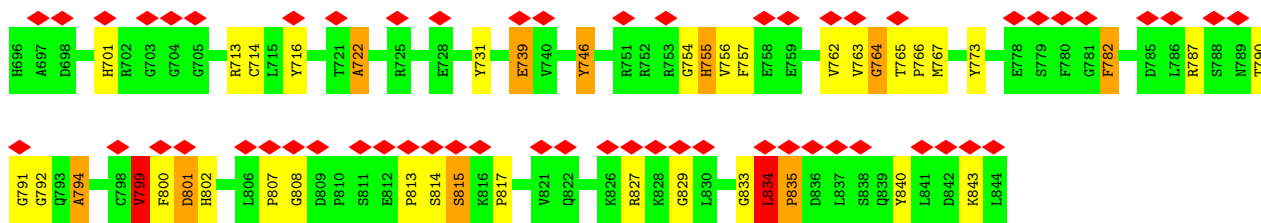
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
86	A8	123	2621	1173	474	852	122	0	0

3 Residue-property plots

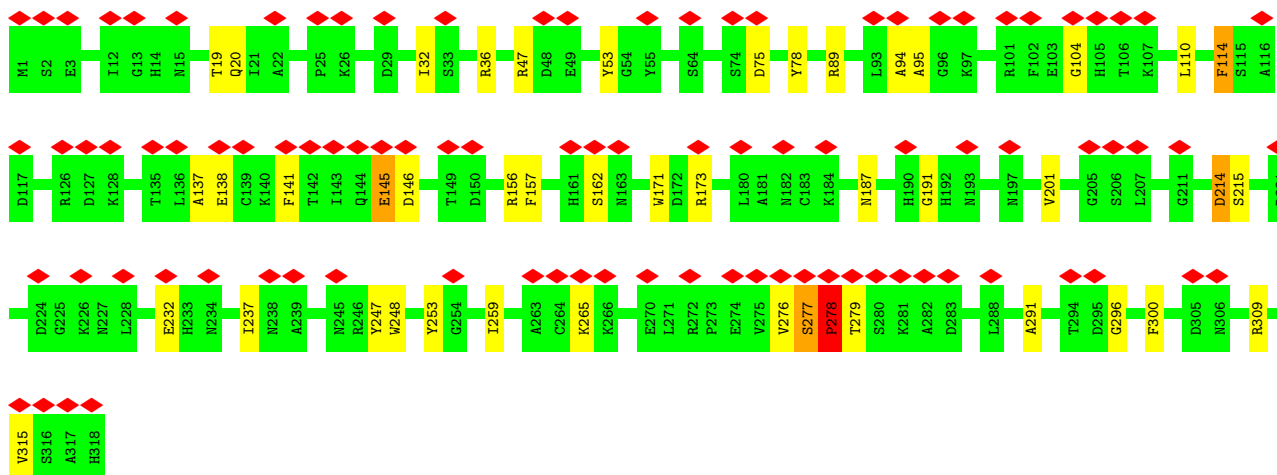
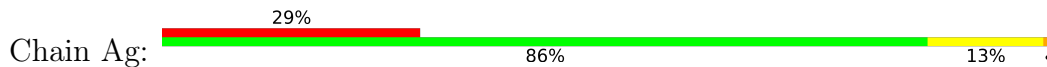
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Elongation factor 2

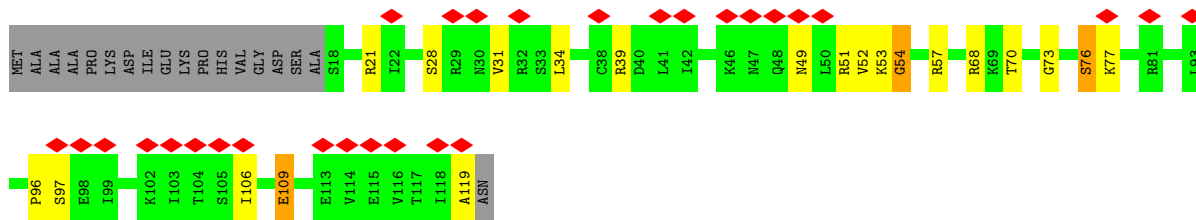




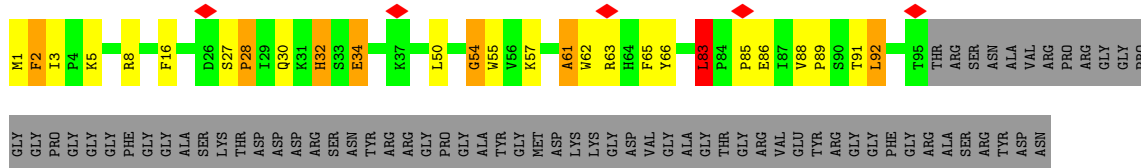
• Molecule 2: Guanine nucleotide-binding protein subunit beta-like protein



• Molecule 3: 40S ribosomal protein S20

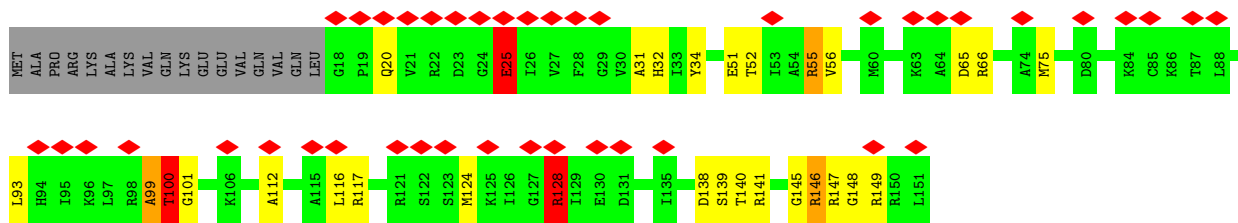


• Molecule 4: 40S ribosomal protein S10a

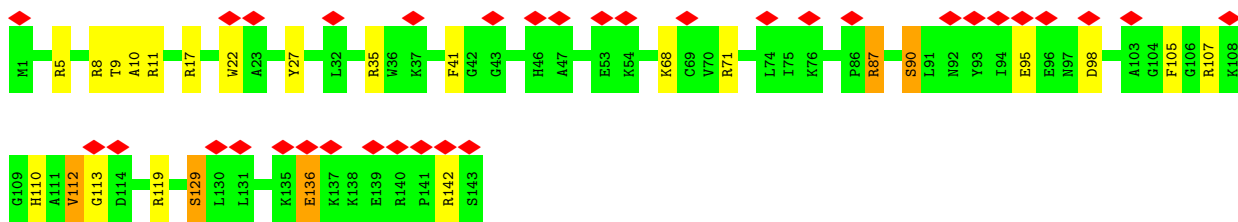
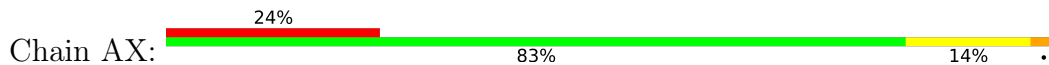


• Molecule 5: 40S ribosomal protein S14

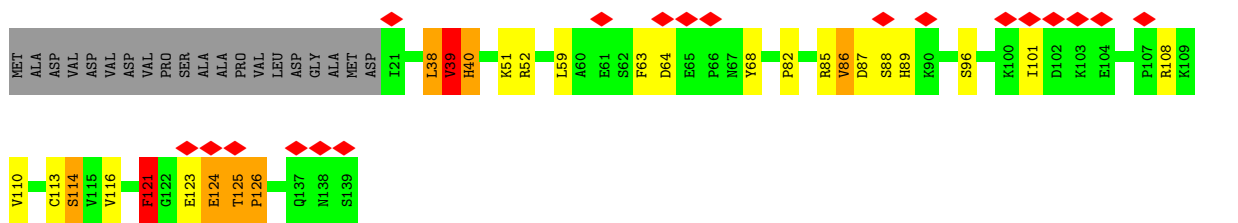




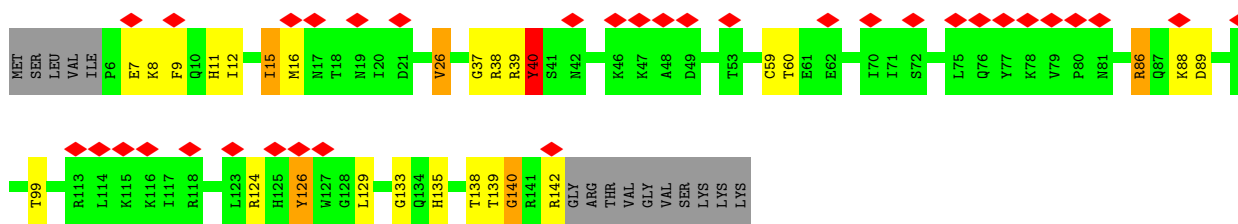
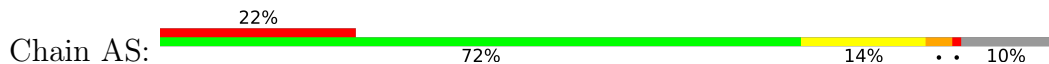
• Molecule 6: 40S ribosomal protein S23



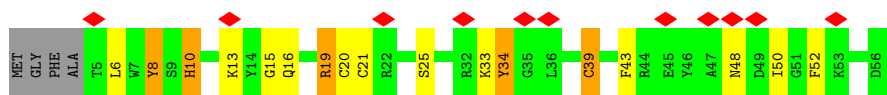
• Molecule 7: 40S ribosomal protein S12



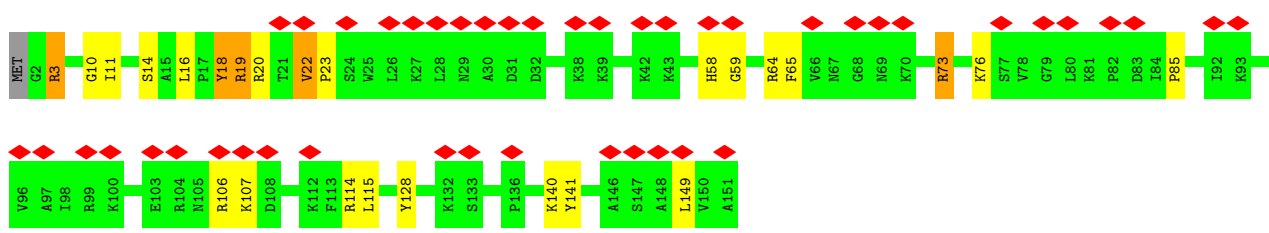
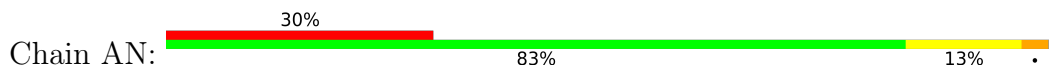
• Molecule 8: 40S ribosomal protein S18



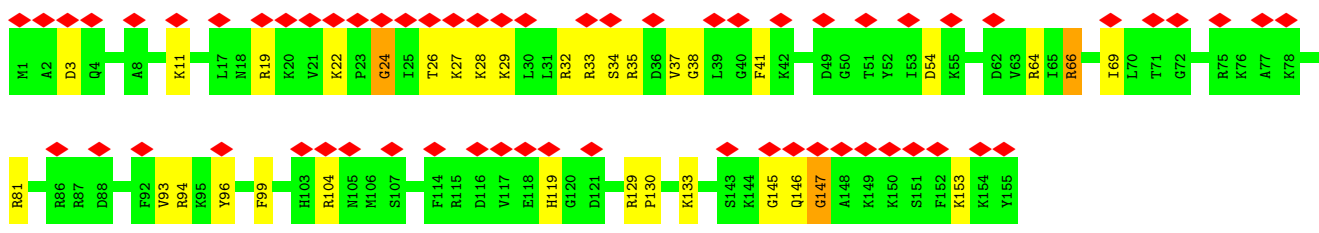
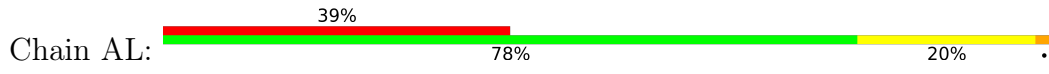
• Molecule 9: 40S ribosomal protein S29



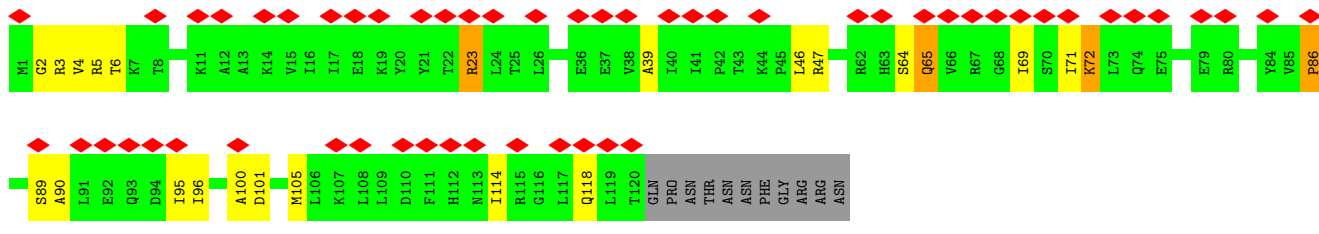
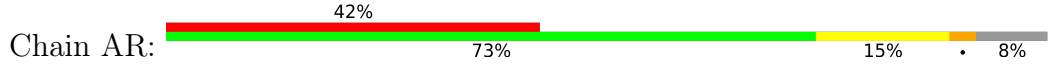
• Molecule 10: 40S ribosomal protein S13



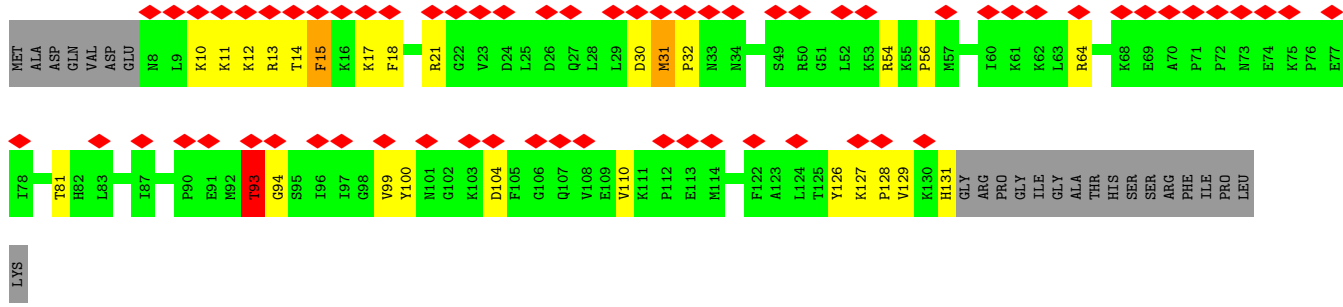
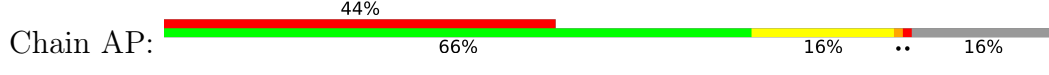
• Molecule 11: 40S ribosomal protein S11



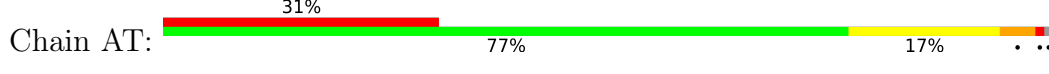
• Molecule 12: 40S ribosomal protein S17

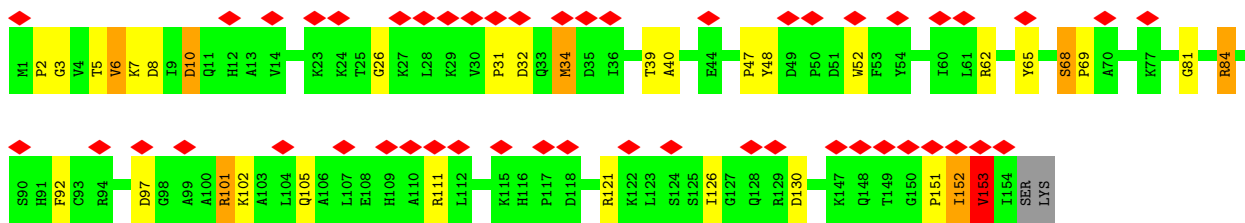


• Molecule 13: 40S ribosomal protein S15, isoform A

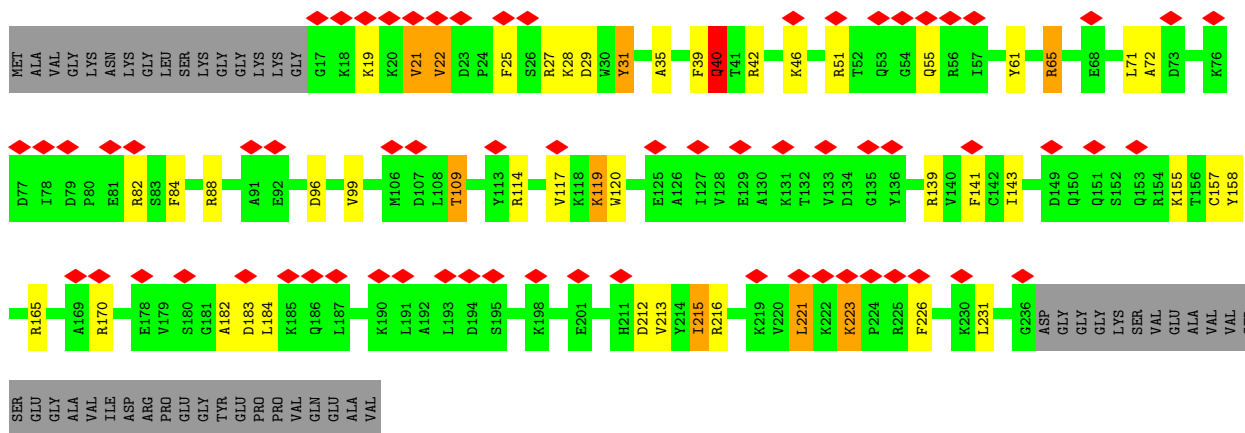


• Molecule 14: 40S ribosomal protein S19a

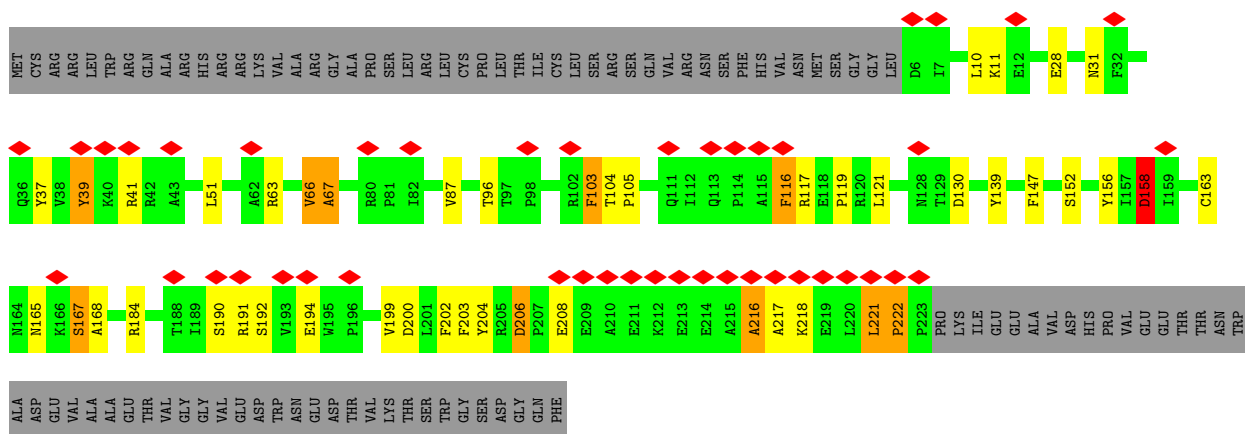




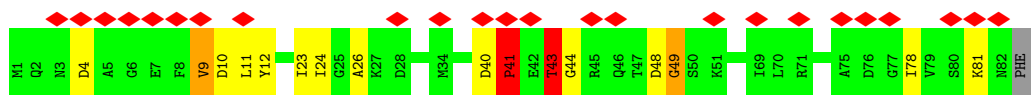
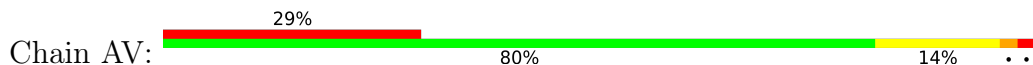
• Molecule 15: 40S ribosomal protein S3a



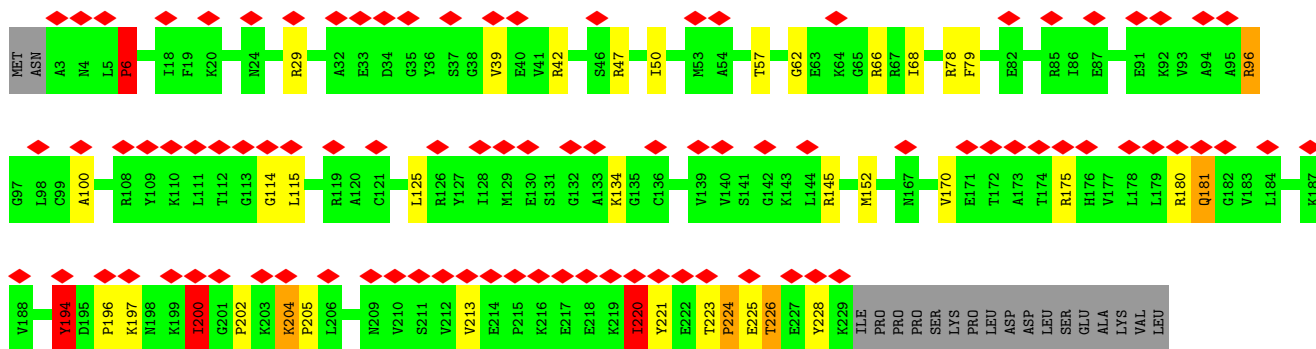
• Molecule 16: 40S ribosomal protein SA



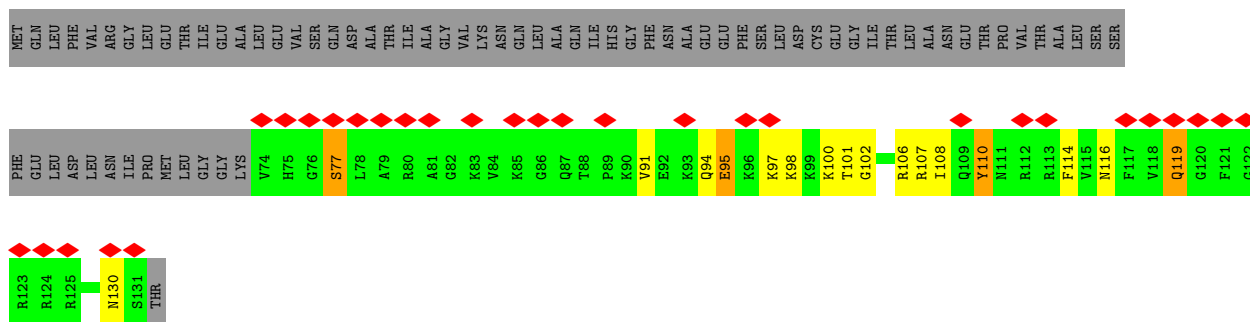
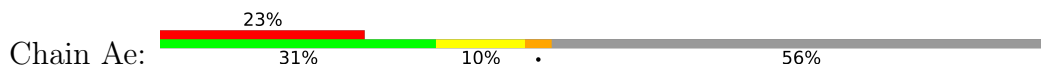
• Molecule 17: 40S ribosomal protein S21



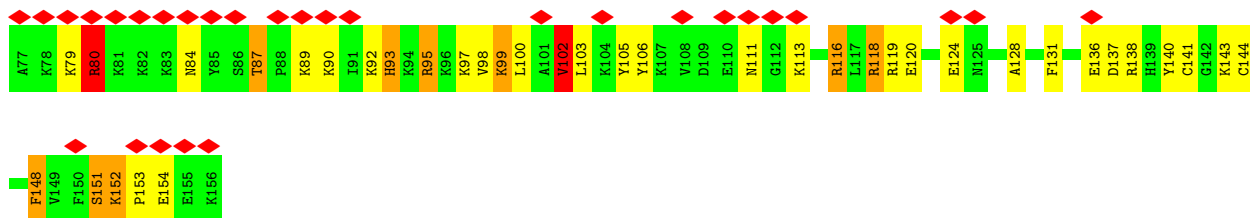
• Molecule 18: 40S ribosomal protein S24



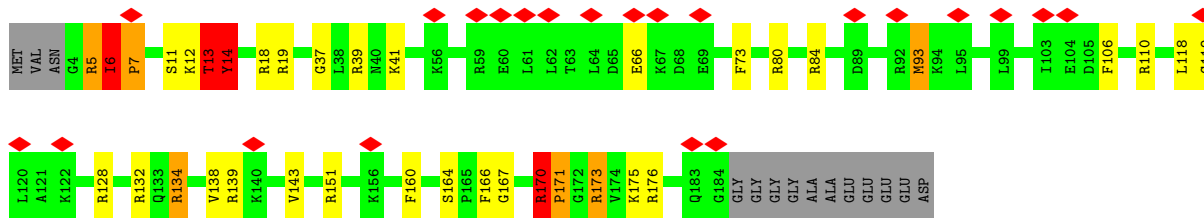
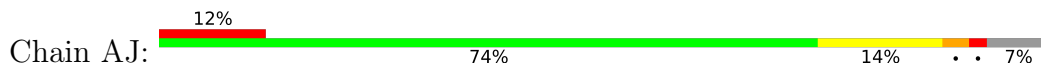
• Molecule 24: 40S ribosomal protein S30, isoform A



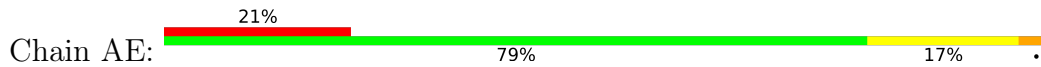
• Molecule 25: 40S ribosomal protein S27a

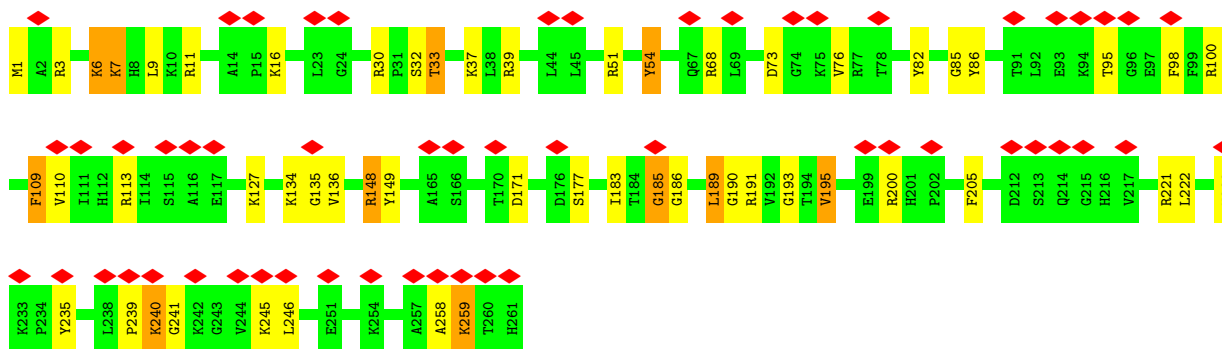


• Molecule 26: 40S ribosomal protein S9

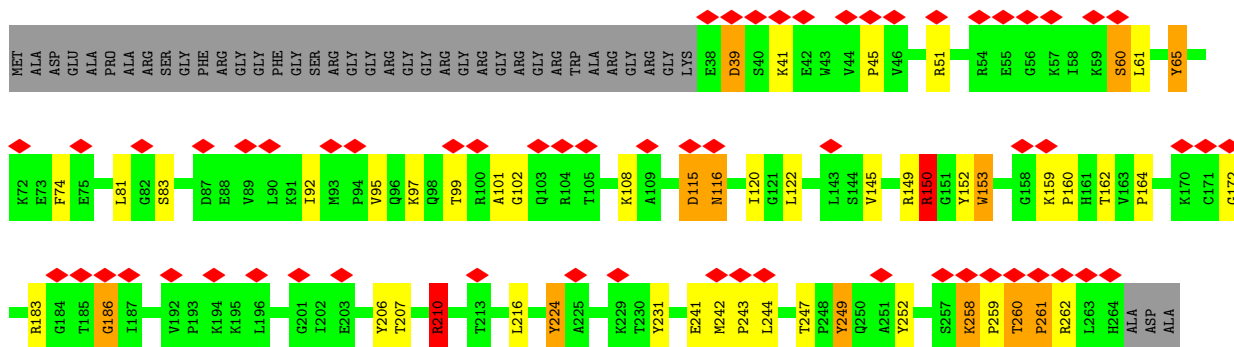


• Molecule 27: 40S ribosomal protein S4

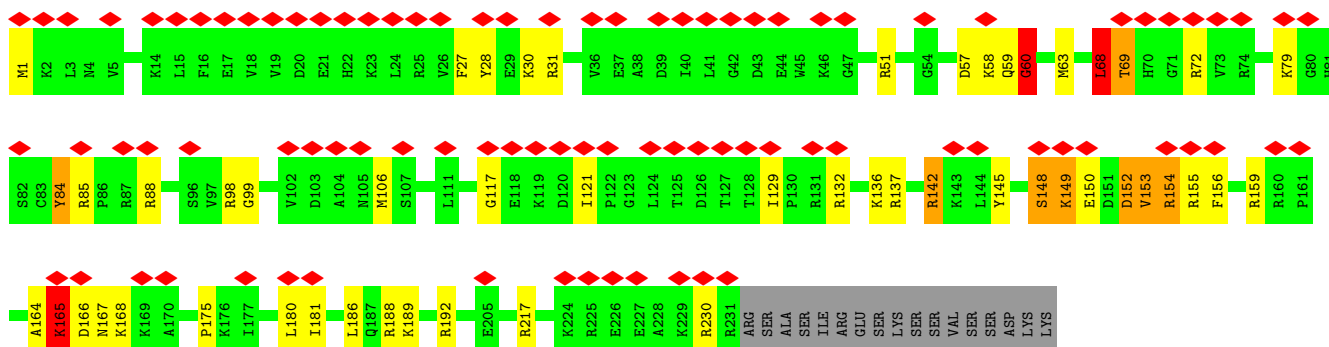
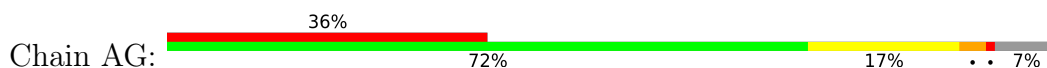




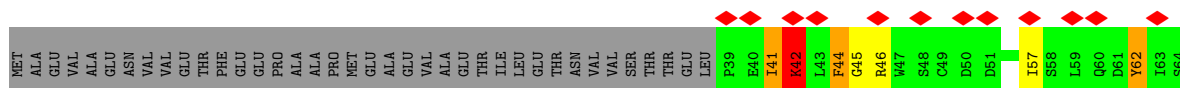
• Molecule 28: 40S ribosomal protein S2

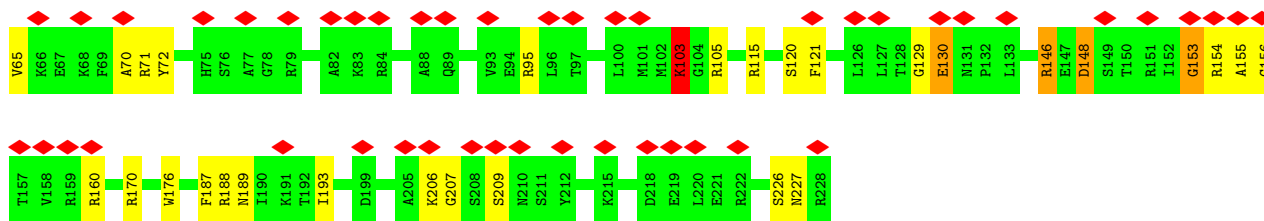


• Molecule 29: 40S ribosomal protein S6

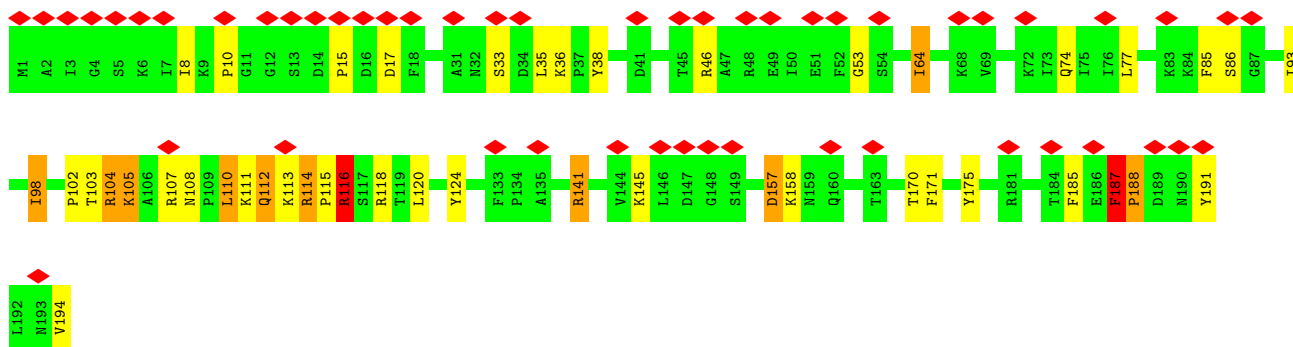
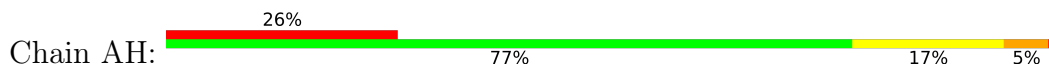


• Molecule 30: 40S ribosomal protein S5a

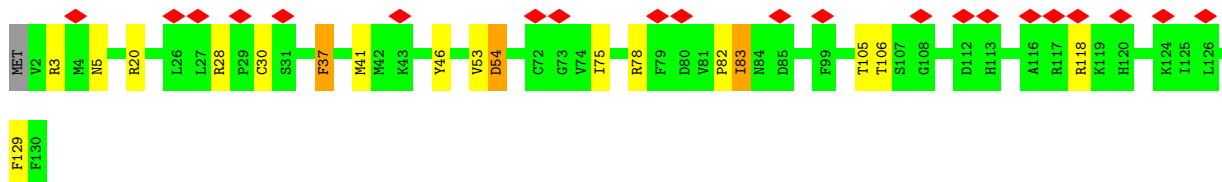
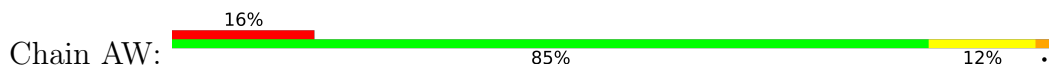




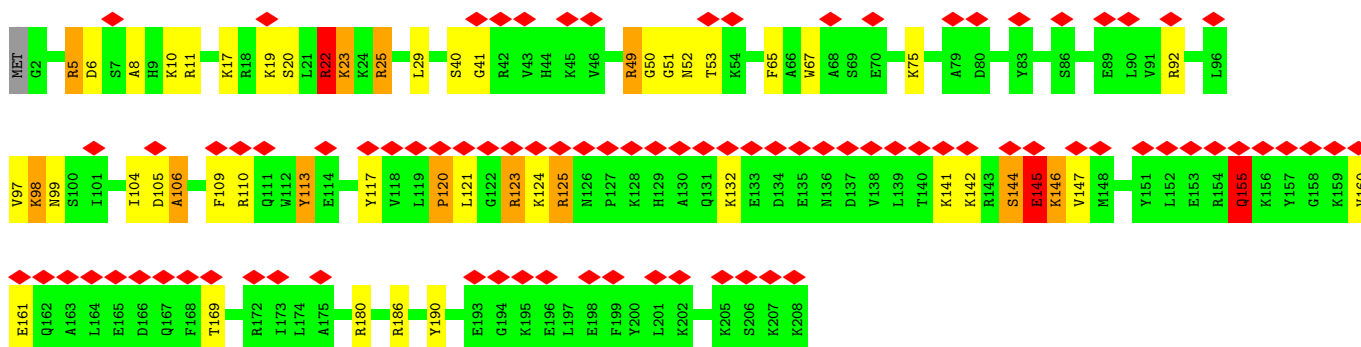
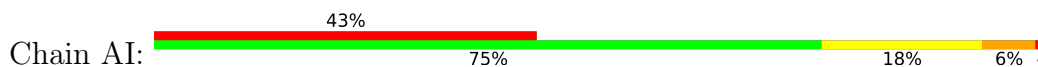
- Molecule 31: 40S ribosomal protein S7



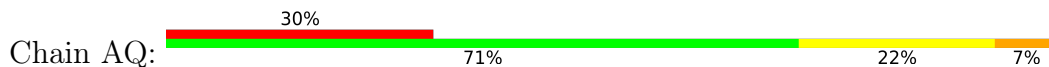
- Molecule 32: 40S ribosomal protein S15Aa

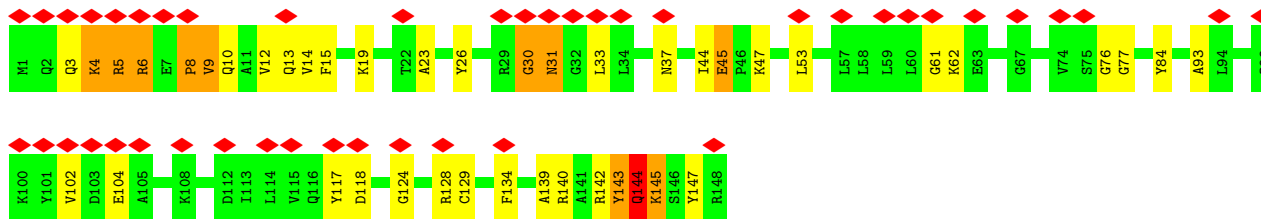


- Molecule 33: 40S ribosomal protein S8

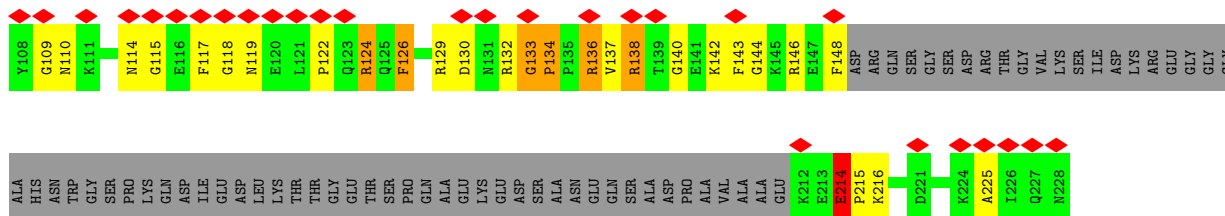
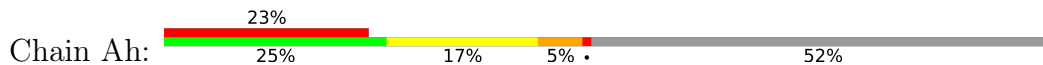


- Molecule 34: 40S ribosomal protein S16

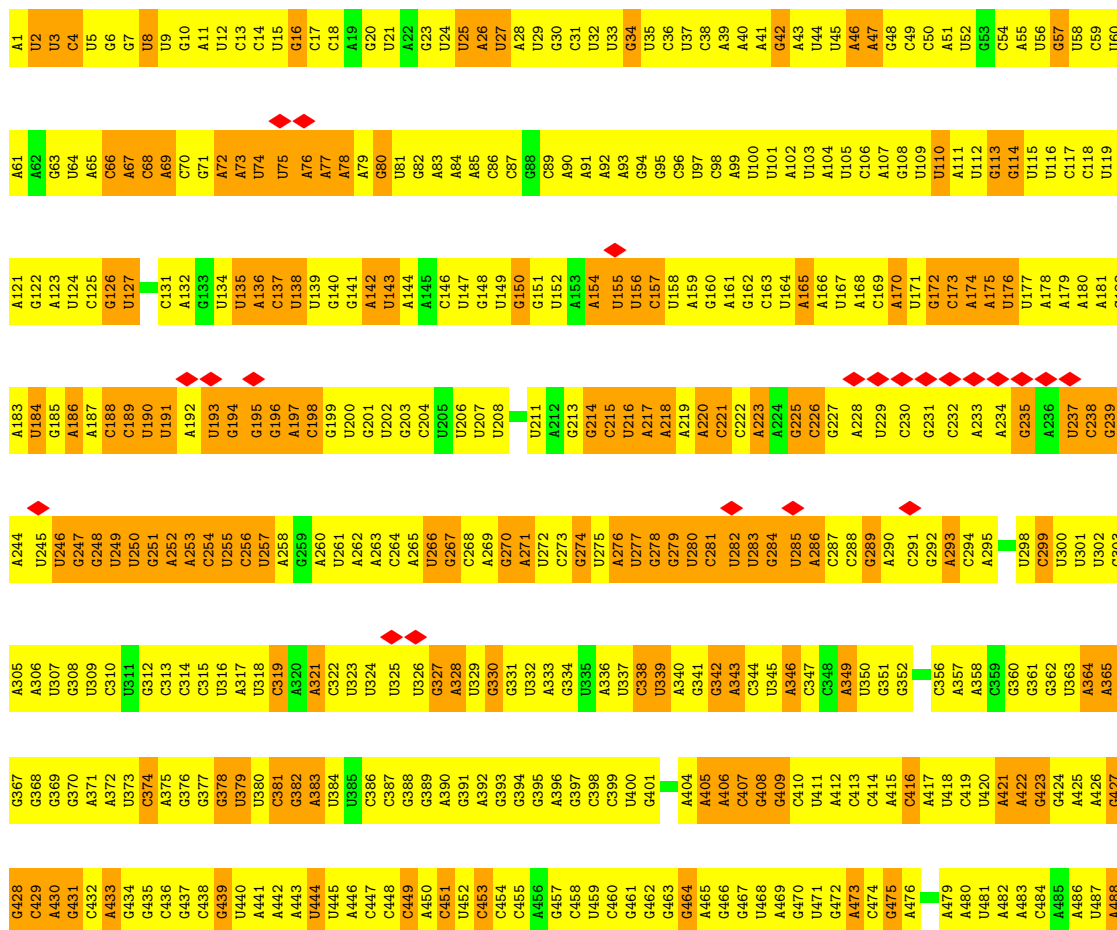
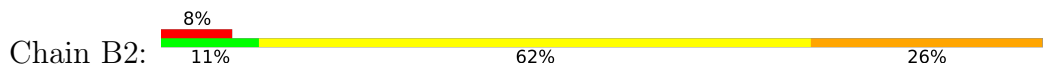




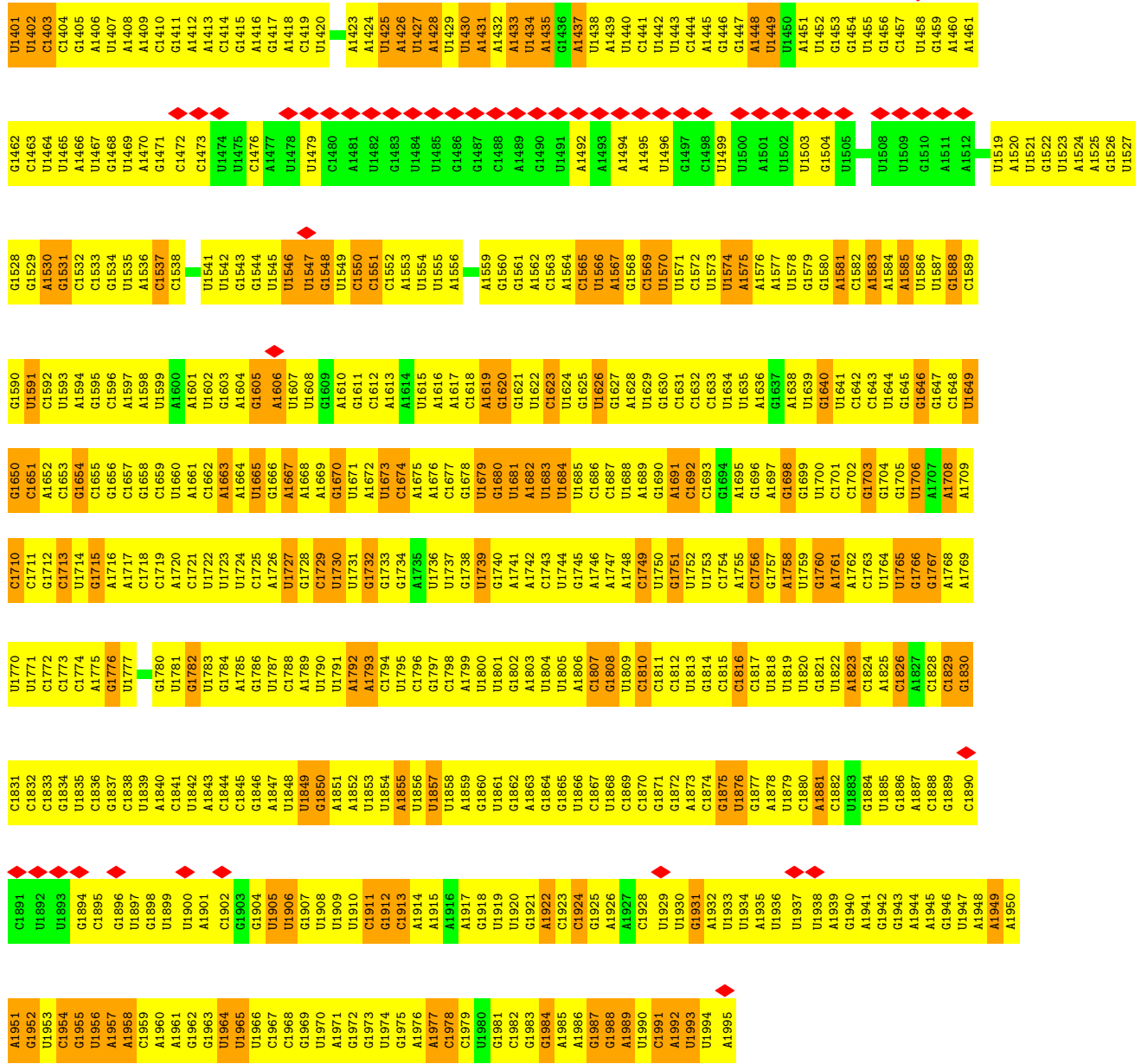
• Molecule 35: Vig2, isoform B



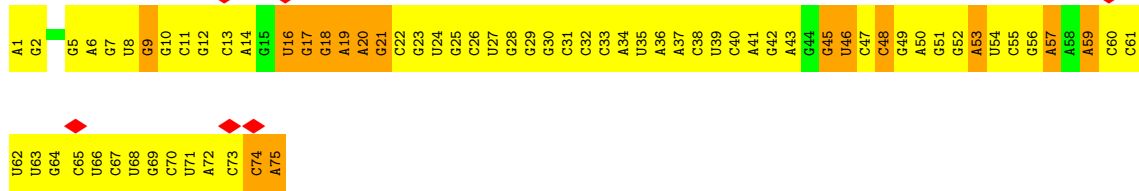
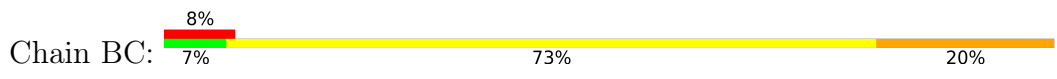
• Molecule 36: 18S ribosomal RNA



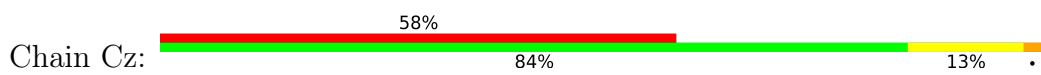
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C1342	C1280	A1220	C1159	C1098	A1038	C978	U917	C855	G792	U732	U611	C551	A490
A1343	A1281	A1221	A1160	U1099	A1039	G979	C918	A856	C793	A733	A612	A552	G491
U1344	C1282	C1222	G1161	A1100	A1040	A980	A919	G857	U794	U734	A613	A553	C492
U1345	C1283	U1223	C1162	G1101	G1041	G981	U920	C858	U795	G735	G615	U554	A493
C1346	C1284	A1224	G1164	U1102	U1042	G982	U921	C859	U796	U736	U616	G555	U494
U1347	G1285	A1225	C1165	C1103	U1043	C983	G922	U860	G797	U737	U617	G557	C495
A1348	G1286	A1226	U1166	C1104	G1044	A985	G923	U861	U798	U738	G618	A558	A496
U1349	A1287	A1227	U1167	A1105	U1045	A986	U924	C862	U799	U739	U619	G559	U498
G1350	A1288	G1228	C1168	A1106	A1046	A987	U925	A863	A798	U740	U620	G560	A499
G1351	A1289	G1229	C1169	A1107	U1047	G988	U926	A864	U799	U741	G621	G561	U500
C1352	A1290	A1230	C1170	C1108	U1048	G989	U927	U866	A800	U742	G622	C562	C501
U1353	A1291	U1231	G1171	C1109	C1049	U990	C928	C867	C801	U743	G623	A563	C502
G1354	A1292	U1232	U1172	A1110	A1050	G991	U929	U868	G802	U744	G624	A564	
C1355	U1293	U1233	A1173	C1111	U1051	A992	U930	C868	A803	U745	U625	G565	
U1356	U1294	A1234	G1174	A1112	U1052	A993	A931	C869	A804	U746	U626	U566	
G1357	U1295	G1235	A1175	A1113	A1053	A994	U932	U870	G804	U747	U627	C567	
U1358	A1296	A1236	C1176	A1114	A1054	A994	U933	U871	G805	U748	A628	U568	
C1359	C1297	G1237	C1177	C1115	U1055	U995	C933	A872	U805	U749	A629	U569	
U1360	C1298	A1238	C1178	G1116	C1056	U996	G936	A873	G806	U750	A630	G569	
C1361	A1299	A1239	A1179	A1117	A1057	C997	A937	U874	U807	U751	G631	G570	
A1362	G1300	U1240	A1179	U1118	A1058	U998	G938	A875	U808	U752	C632	G572	
U1363	G1301	G1241	A1180	G1119	A1059	U999	G939	U876	U809	U753	C633	C573	
G1364	U1302	G1242	G1181	C1120	A1060	G1000	U940	U877	A809	U754	U634	C574	
C1365	C1303	G1243	C1182	C1121	A1061	G1001	A941	C878	U810	U755	U635	A575	
U1366	G1304	C1244	U1183	A1122	C1062	A1002	A942	U879	U811	U756	C635	A576	
C1367	A1305	A1245	U1184	G1123	G1063	C1003	U943	G880	U812	U757	G636	G577	
U1368	A1306	C1246	U1185	C1124	A1064	C1004	U944	U881	G812	U758	U637	U515	
G1369	C1307	A1247	A1186	U1125	A1065	G1005	A945	G882	U813	U759	U638	U516	
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		A1251	U1190	A1129	U1069	U1009	A949	U886	C818	U763	U647	G580	
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		C1253	U1192	G1131	G1071	U1011	U950	G888	C820	U765	U649	A520	
		A1254	C1193	U1132	A1072	G1012	U951	A889	A822	U766	U650	C529	
		G1255	C1194	G1133	G1073	A1013	A952	U890	C823	U767	C651	C592	
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		A1258	G1197	U1136	U1076	A1016	G955	A895	A826	U770	C654	G594	
		G1259	U1198	C1137	C1077	U1017	C956	A896	U827	U771	U655	A533	
		C1260	G1199	U1138	G1078	C1018	A957	A897	C766	U772	U656	A534	
		A1261	A1200	A1139	G1079	U1019	G958	A898	C767	U773	C658	U536	
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		G1272	C1151	U1151	G1089	G1029	U969	G908	U776	U783	A668	A546	
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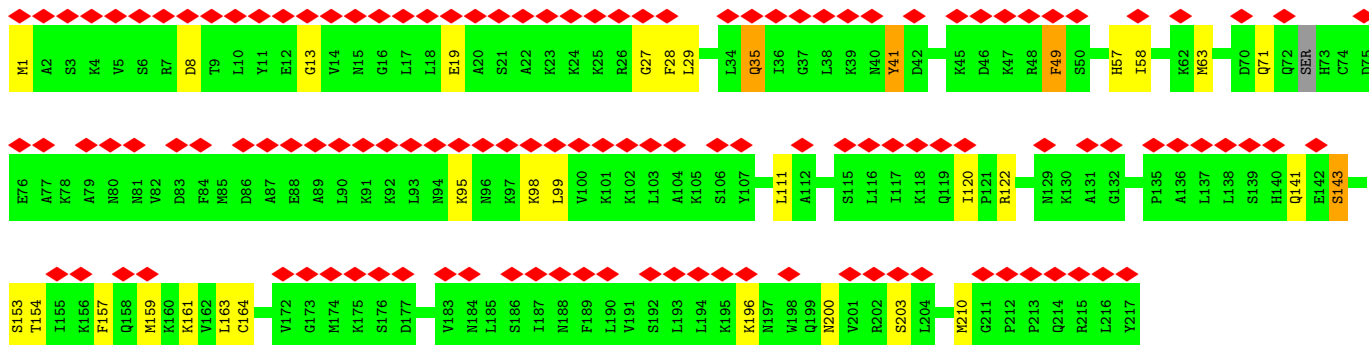


• Molecule 37: E-tRNA

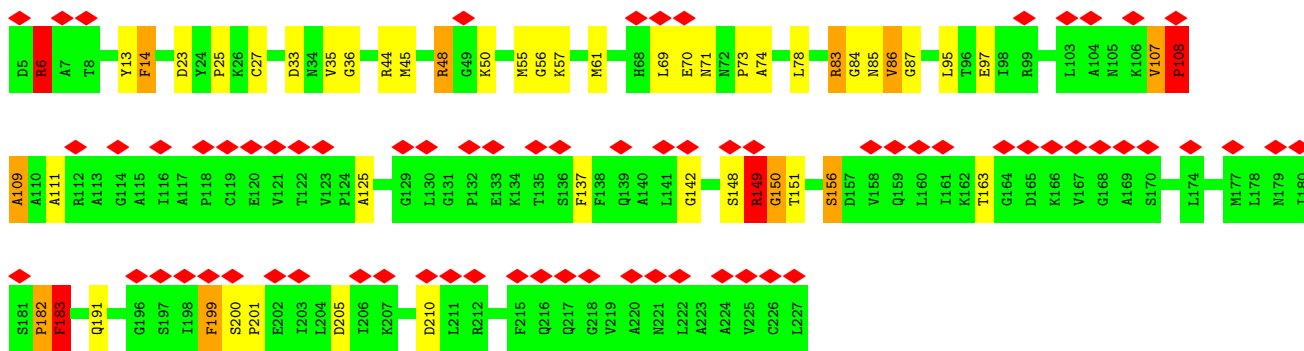
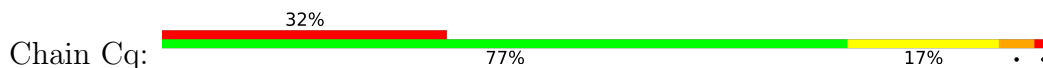


• Molecule 38: 60S ribosomal protein L10a-2

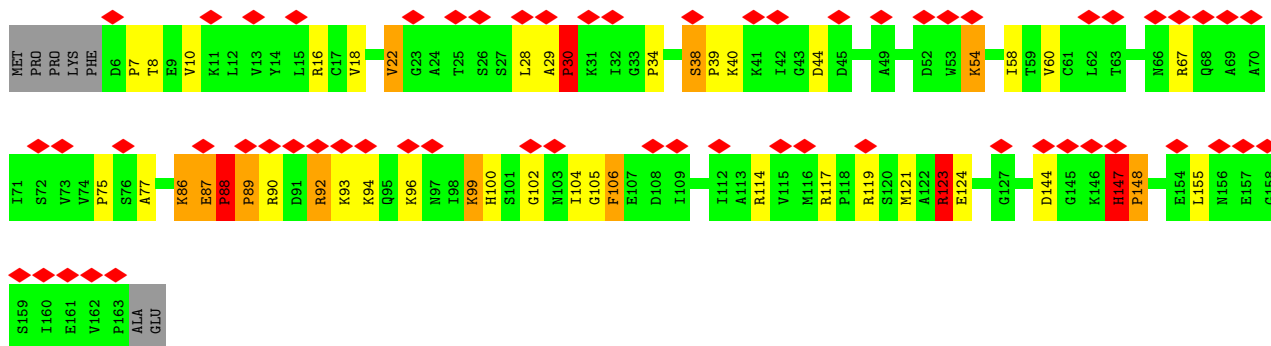




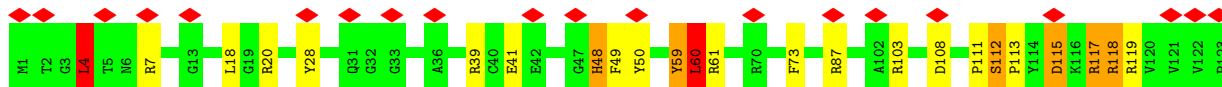
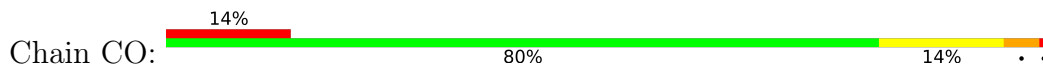
• Molecule 39: 60S acidic ribosomal protein P0



• Molecule 40: 60S ribosomal protein L12

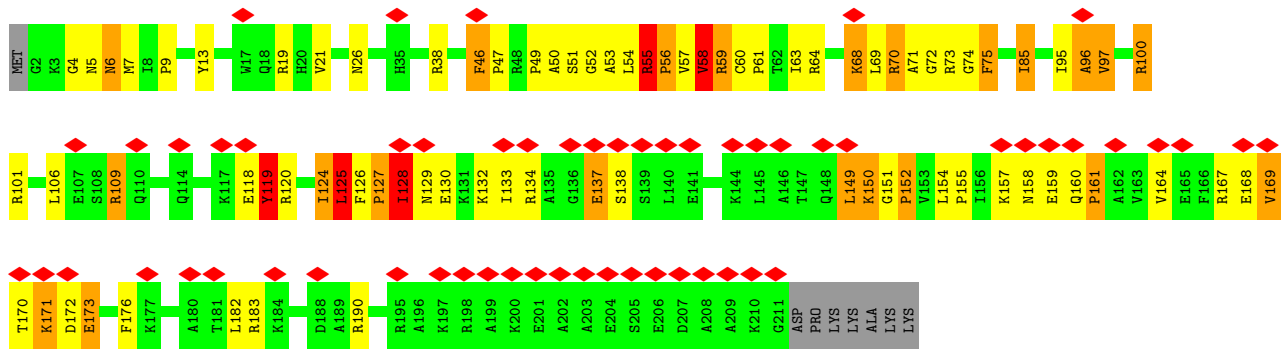


• Molecule 41: 60S ribosomal protein L13a

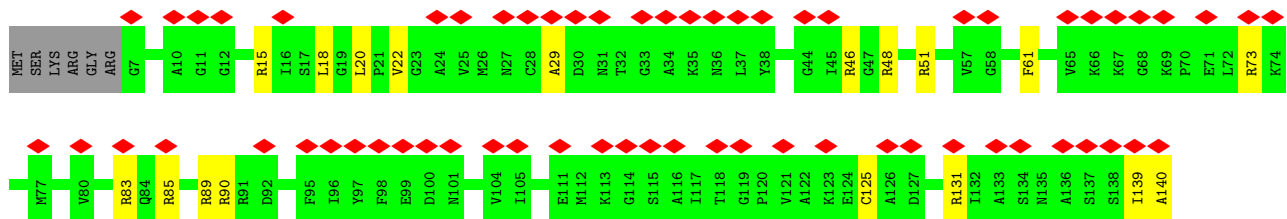
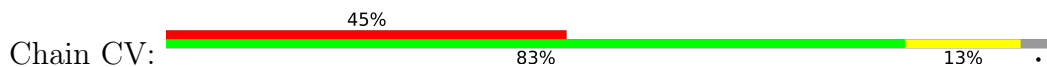




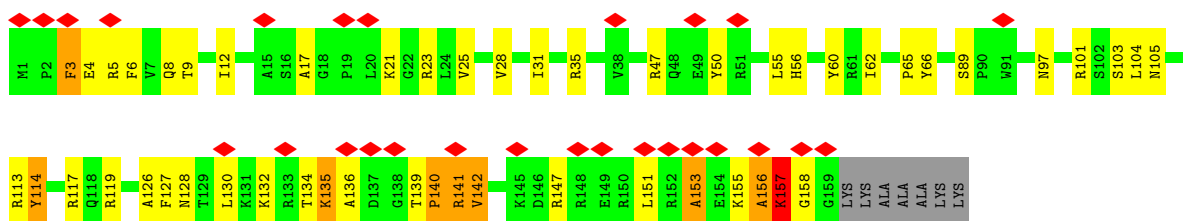
• Molecule 42: 60S ribosomal protein L13



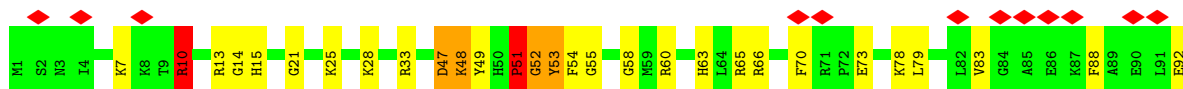
• Molecule 43: 60S ribosomal protein L23

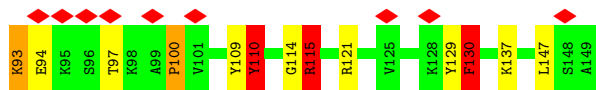


• Molecule 44: 60S ribosomal protein L14

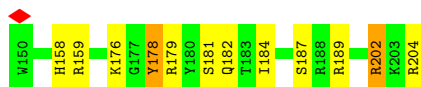
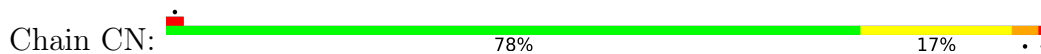


• Molecule 45: 60S ribosomal protein L27a

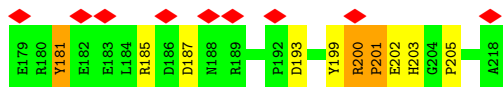
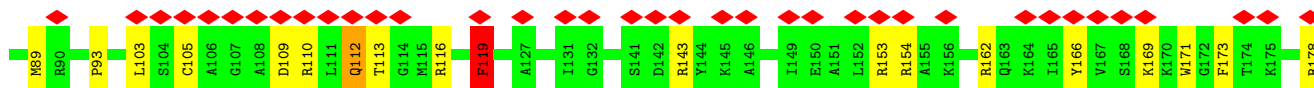
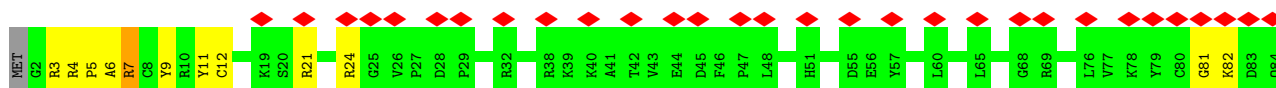
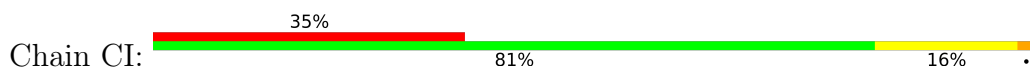




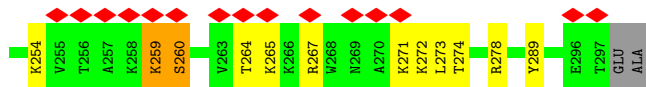
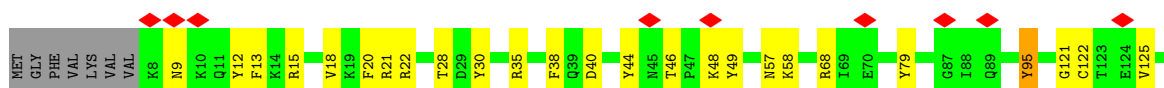
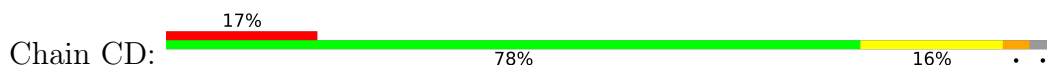
- Molecule 46: 60S ribosomal protein L15



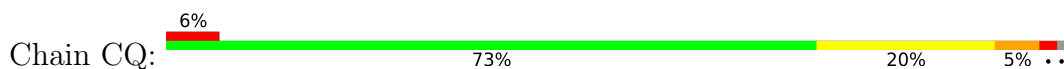
- Molecule 47: 60S ribosomal protein L10

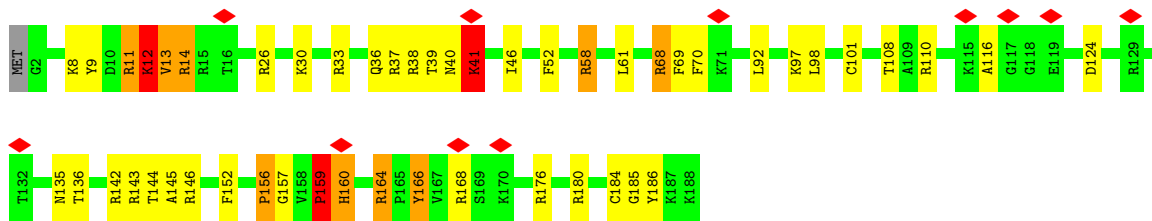


- Molecule 48: 60S ribosomal protein L5

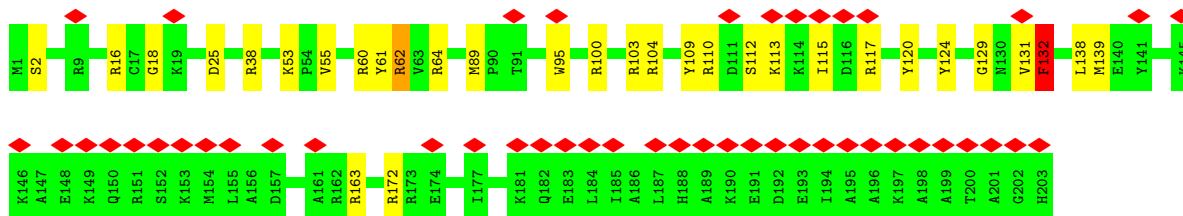
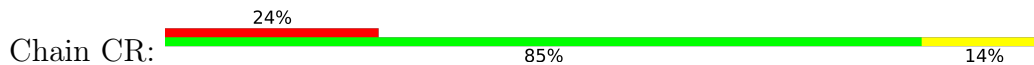


- Molecule 49: 60S ribosomal protein L18

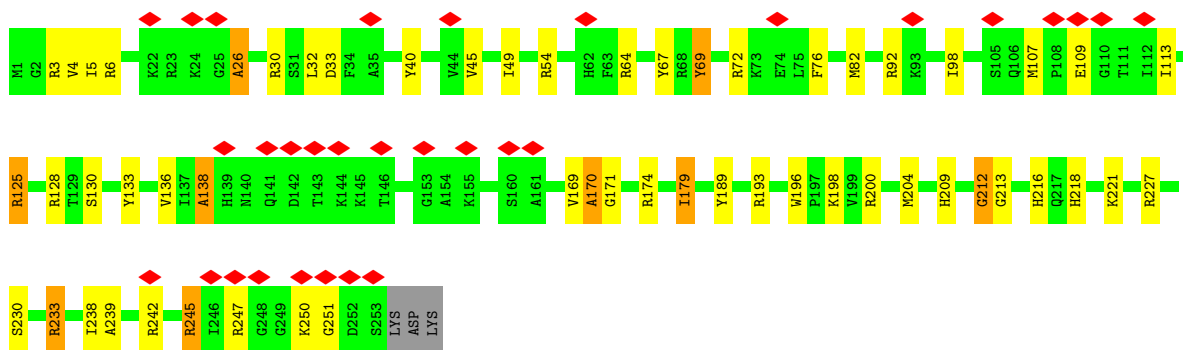
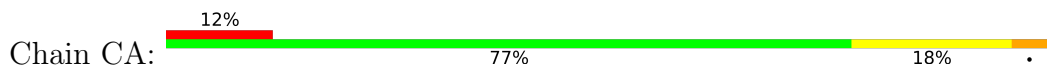




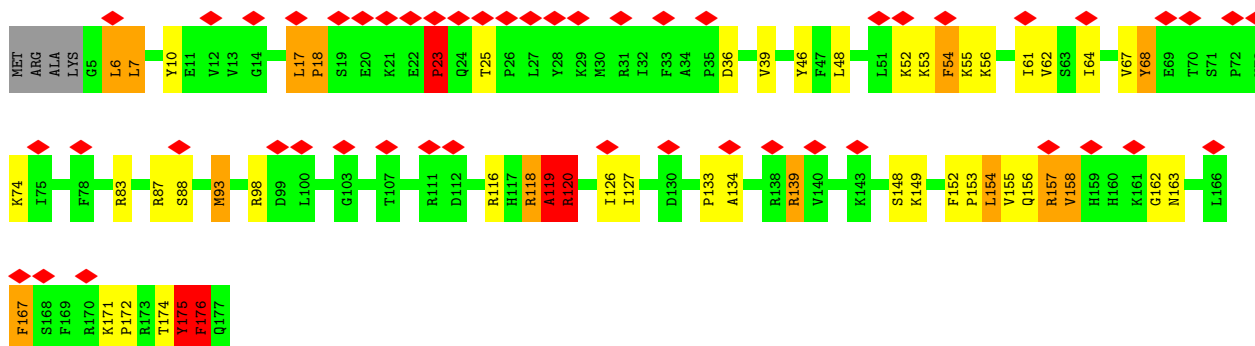
• Molecule 50: 60S ribosomal protein L19



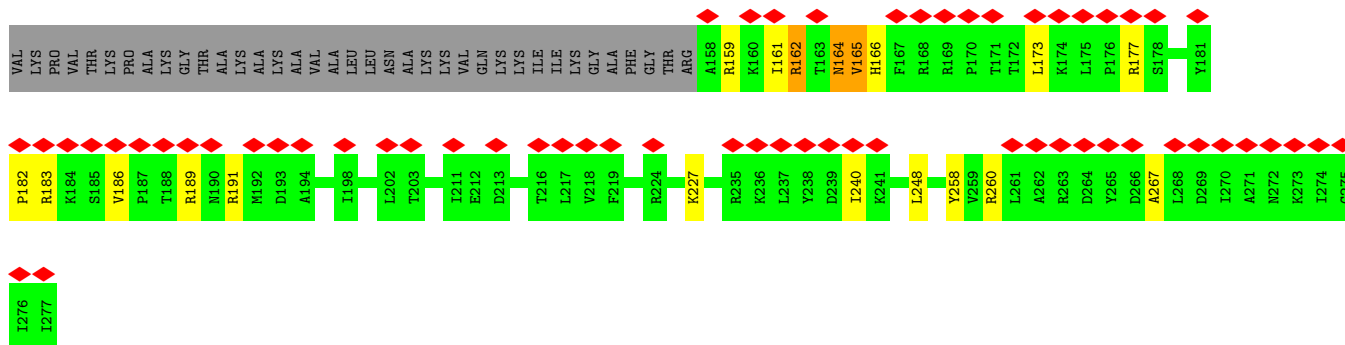
• Molecule 51: 60S ribosomal protein L8



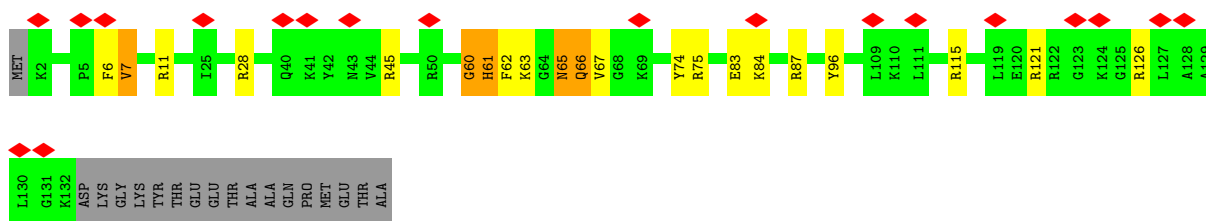
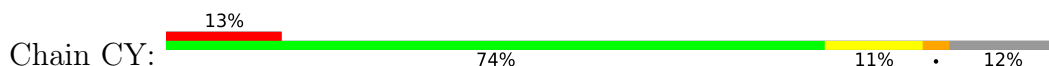
• Molecule 52: 60S ribosomal protein L18a



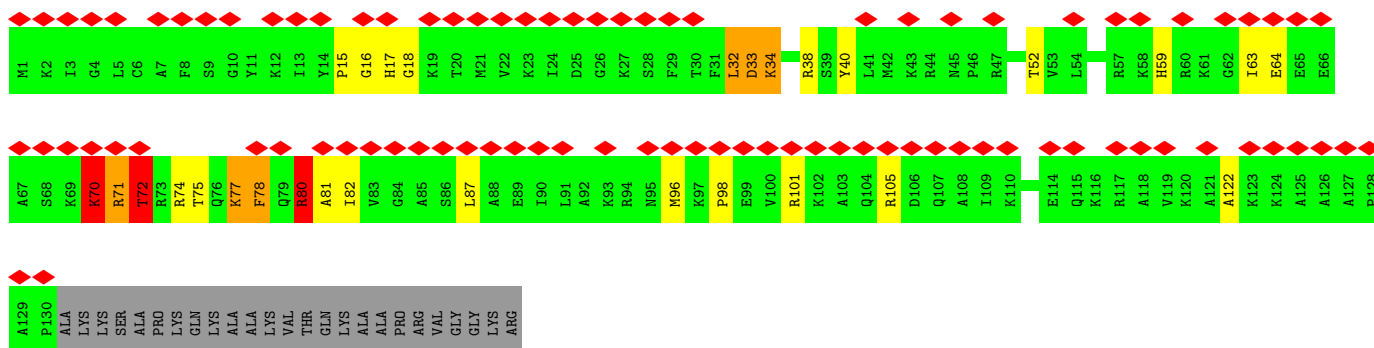
• Molecule 53: 60S ribosomal protein L21



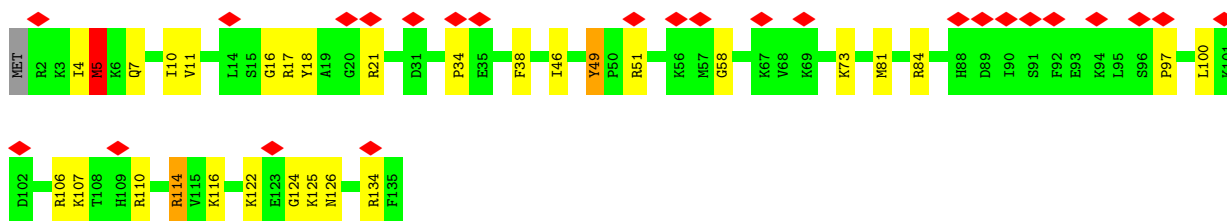
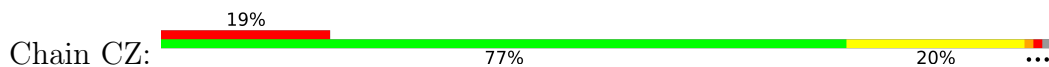
• Molecule 57: 60S ribosomal protein L26



• Molecule 58: 60S ribosomal protein L24



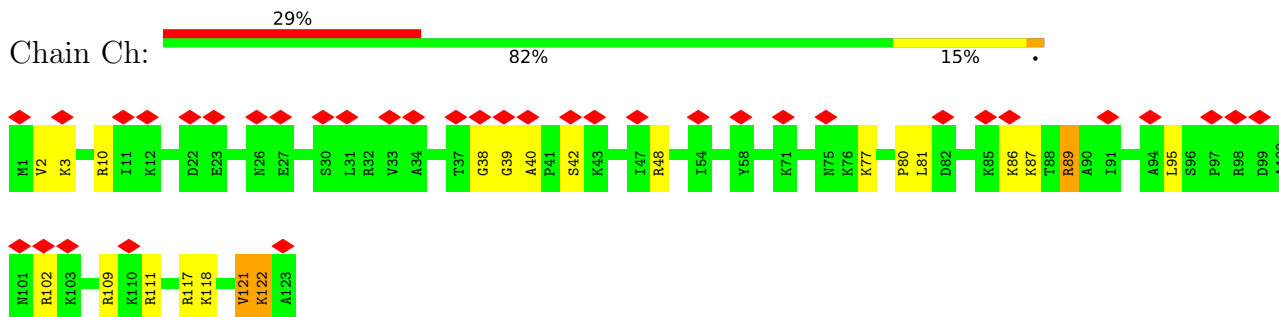
• Molecule 59: 60S ribosomal protein L27



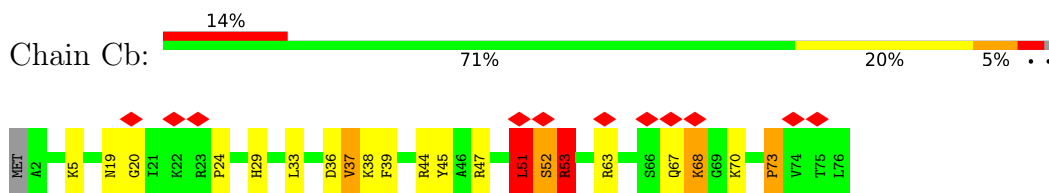
• Molecule 60: 60S ribosomal protein L28



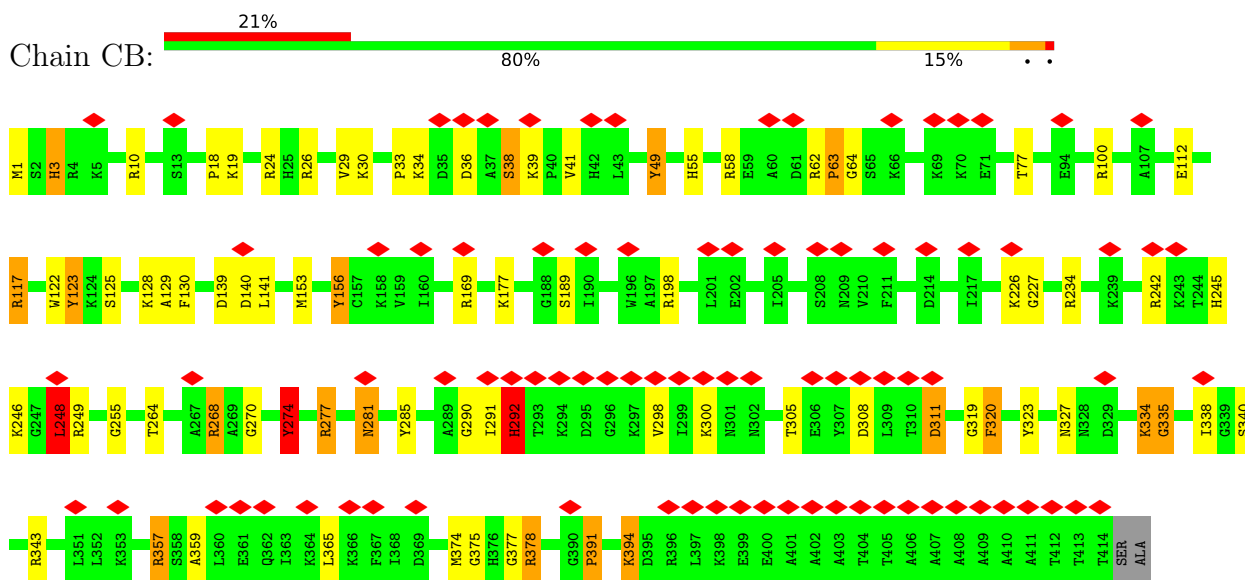
• Molecule 61: 60S ribosomal protein L35



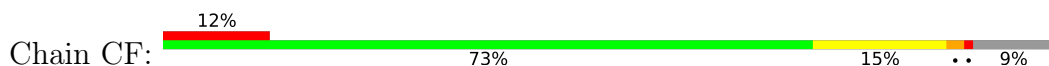
• Molecule 62: 60S ribosomal protein L29

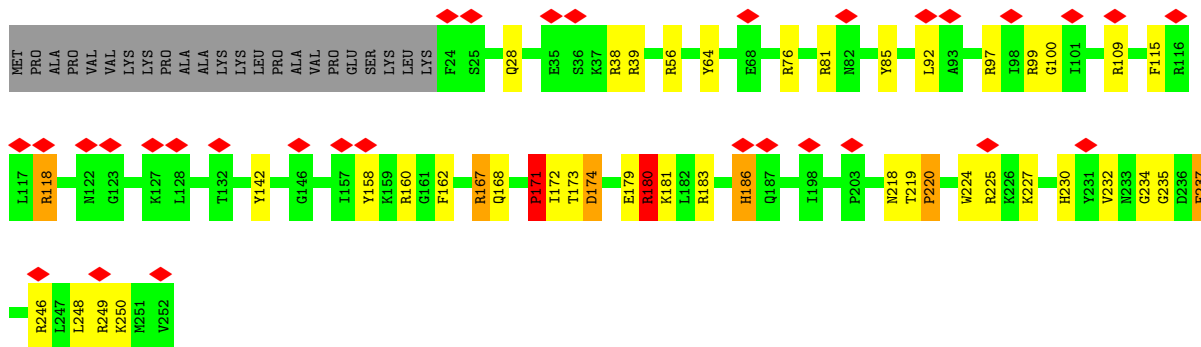


• Molecule 63: 60S ribosomal protein L3

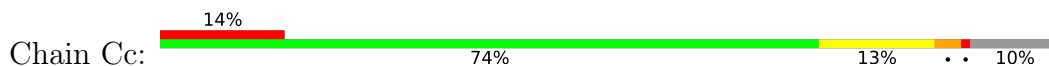


• Molecule 64: 60S ribosomal protein L7

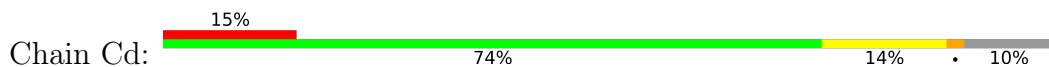




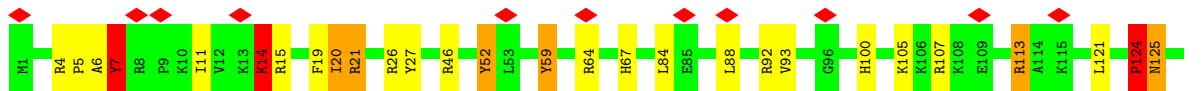
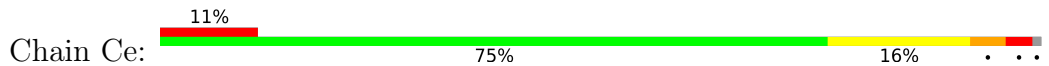
• Molecule 65: 60S ribosomal protein L30



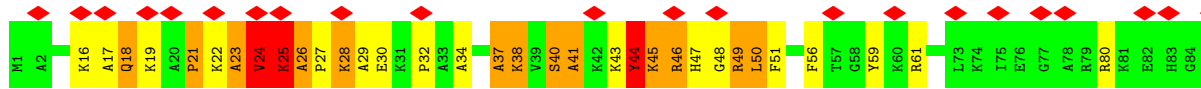
• Molecule 66: 60S ribosomal protein L31

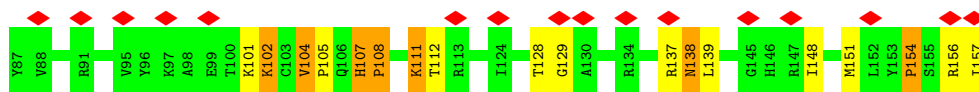


• Molecule 67: 60S ribosomal protein L32

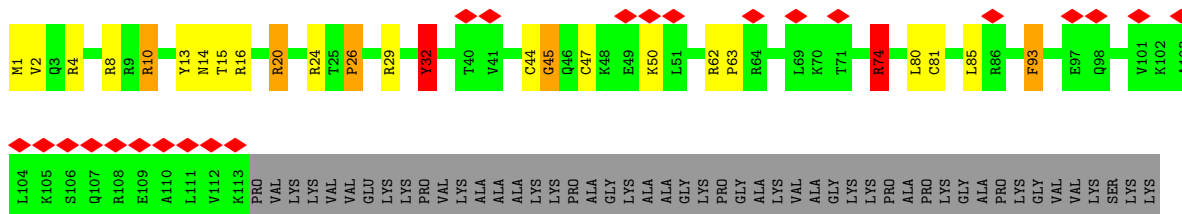


• Molecule 68: 60S ribosomal protein L35A

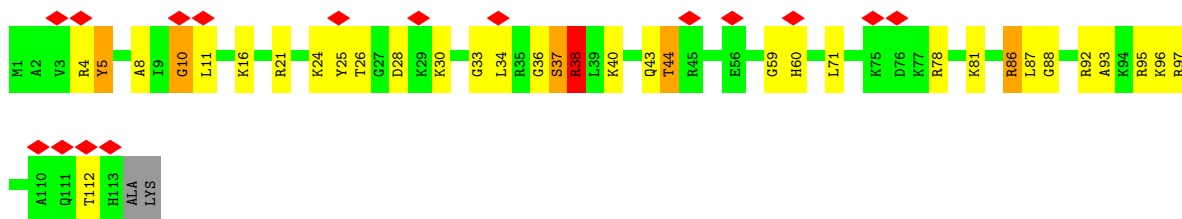




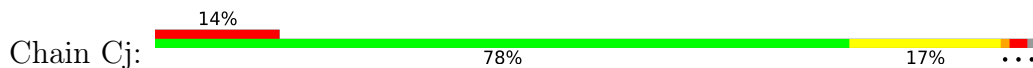
- Molecule 69: 60S ribosomal protein L34a



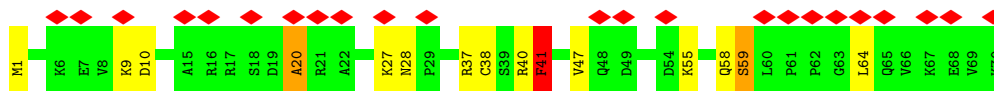
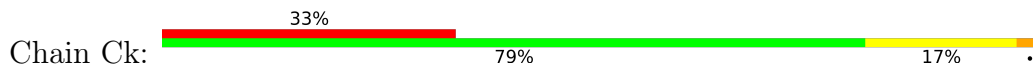
- Molecule 70: 60S ribosomal protein L36



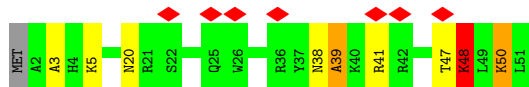
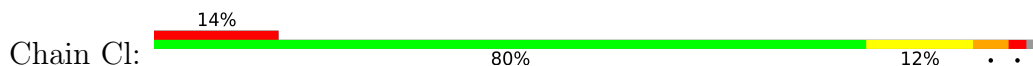
- Molecule 71: 60S ribosomal protein L37-A



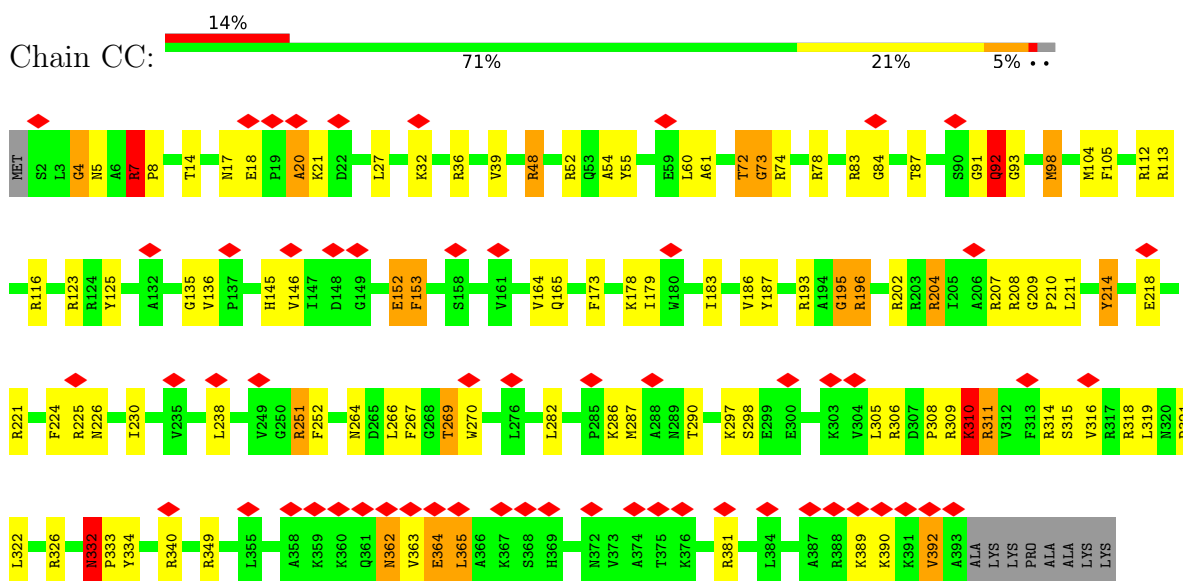
- Molecule 72: 60S ribosomal protein L38



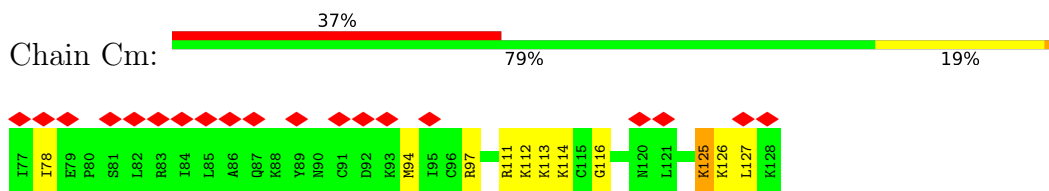
- Molecule 73: 60S ribosomal protein L39



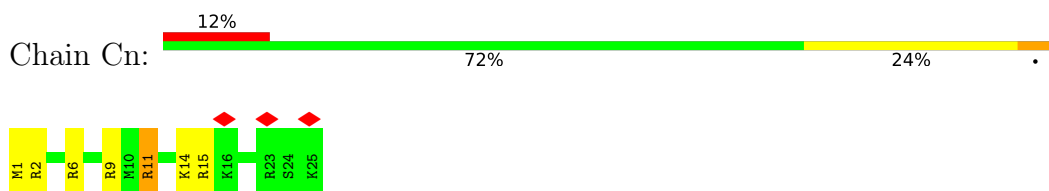
- Molecule 74: 60S ribosomal protein L4



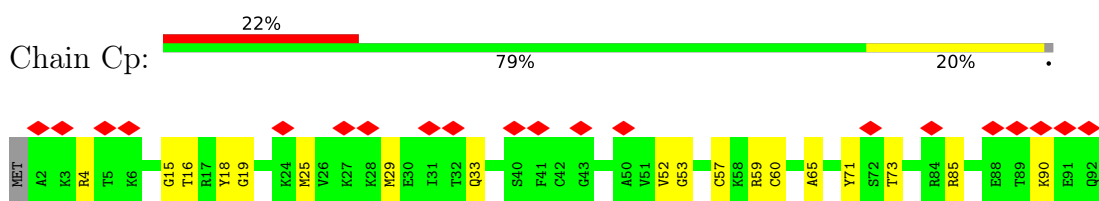
• Molecule 75: 60S ribosomal protein L40



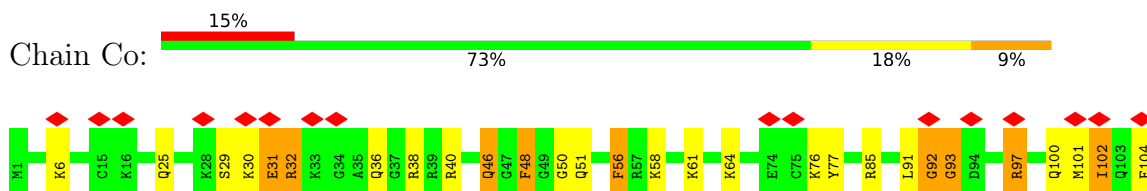
• Molecule 76: 60S ribosomal protein L41



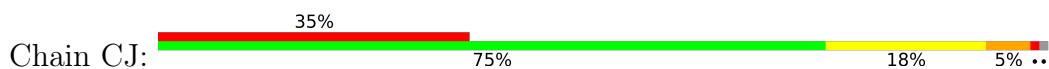
• Molecule 77: 60S ribosomal protein L37a

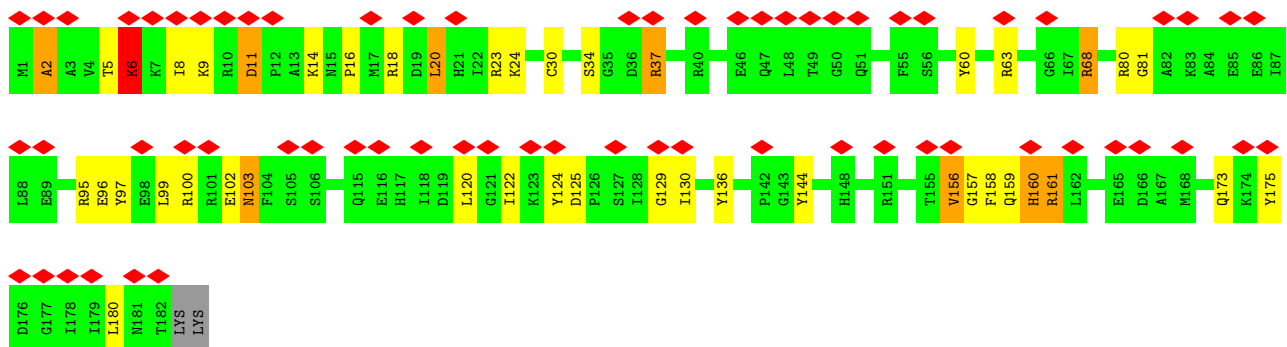


• Molecule 78: 60S ribosomal protein L36A

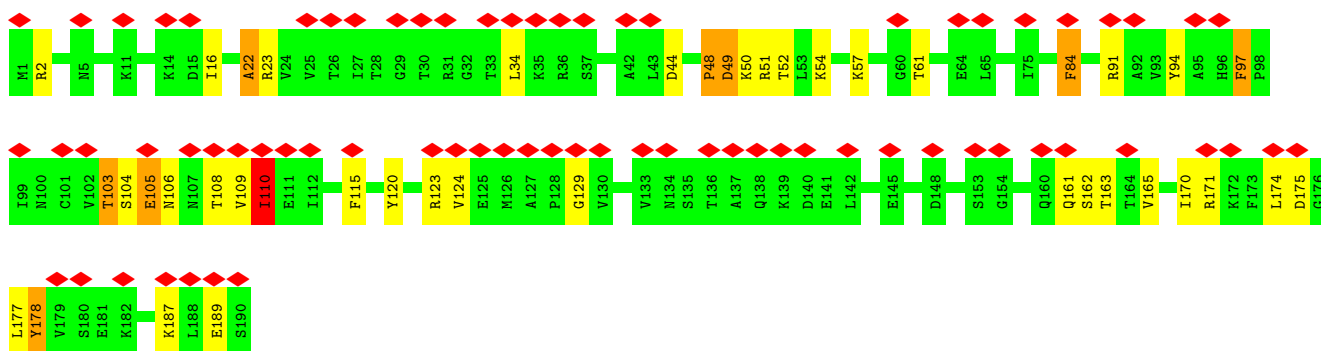
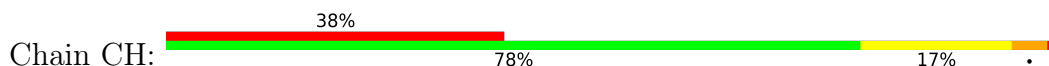


• Molecule 79: 60S ribosomal protein L11

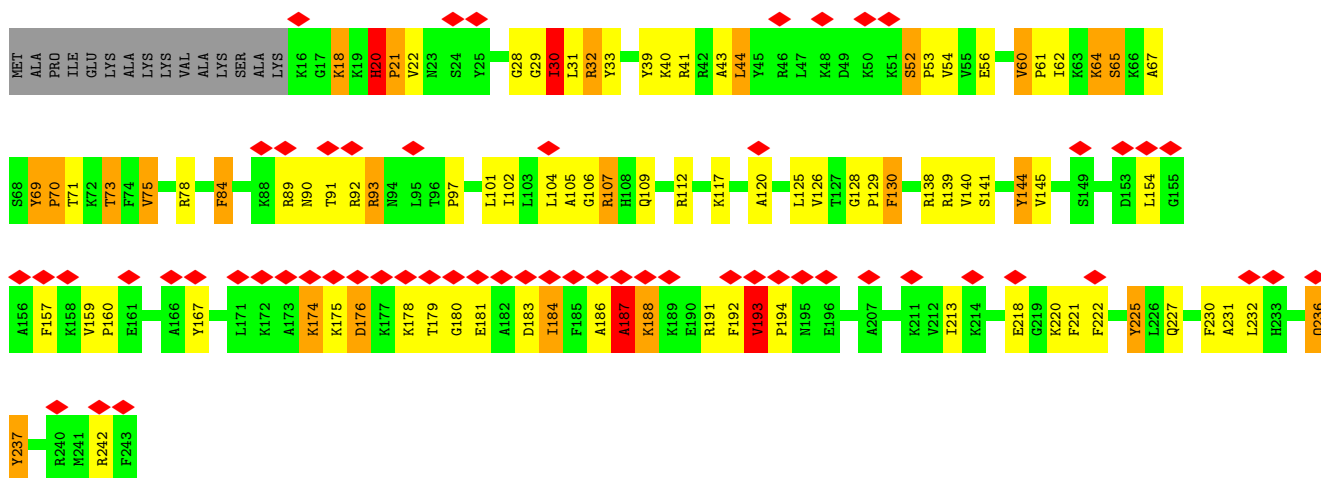




• Molecule 80: 60S ribosomal protein L9

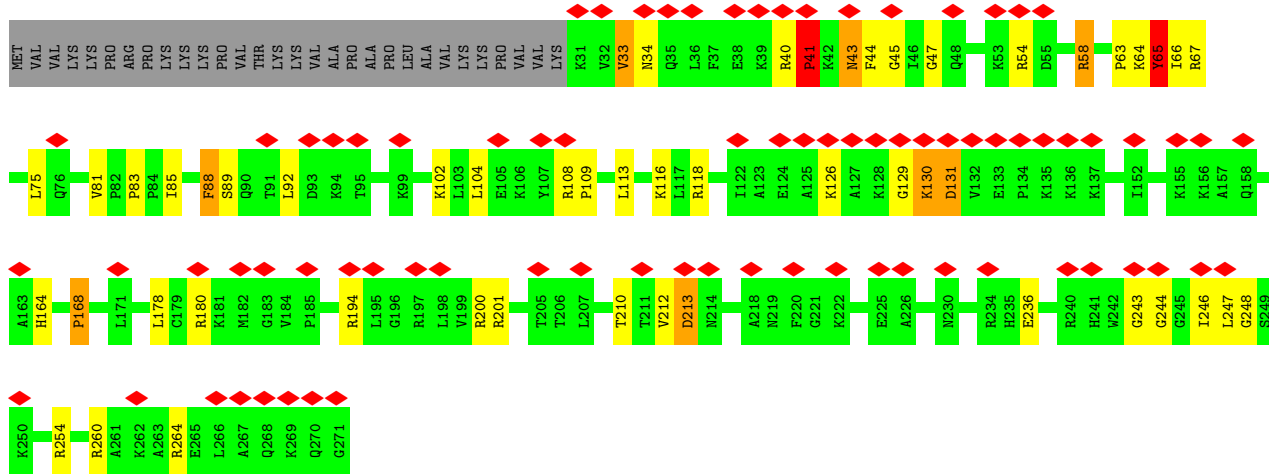


• Molecule 81: 60S ribosomal protein L6, isoform A

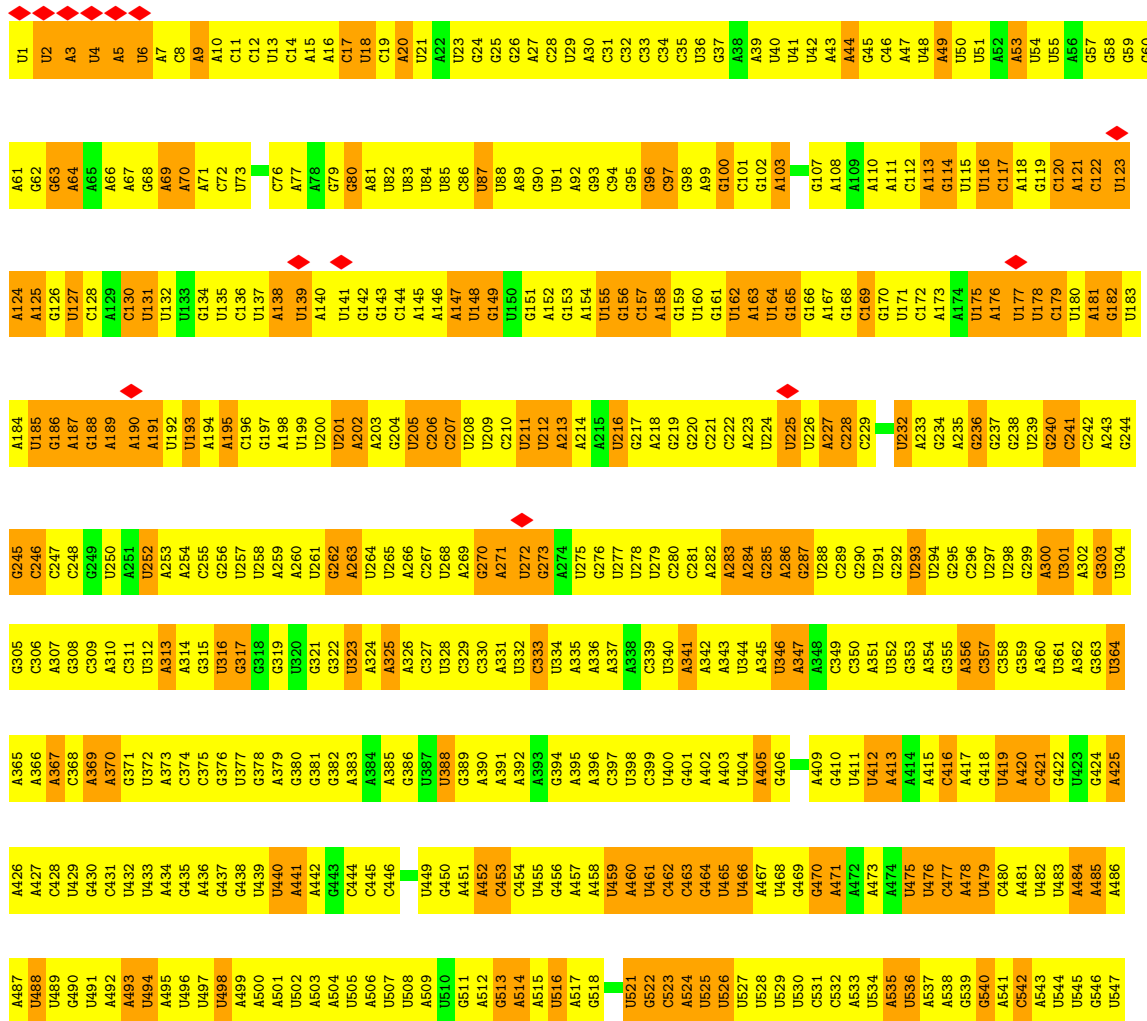
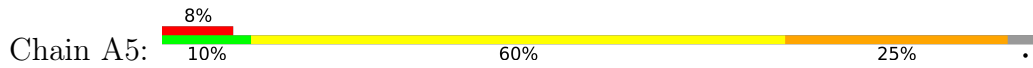


• Molecule 82: 60S ribosomal protein L7a





• Molecule 83: 28S ribosomal RNA

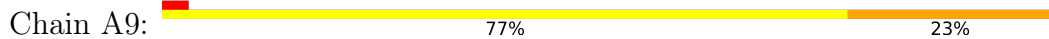


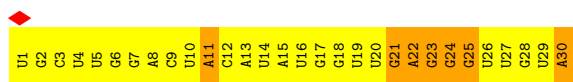
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A1400	U1340	C1279	U1156	A1096	U1033	U973	U913	C853	G673	A733	U672	U612	C551
C1401	U1341	U1281	C1157	A1097	U1034	G974	C914	U854	G794	U734	U673	U613	U552
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A1404	A1343	U1282	U1099	U1099	A1036	A976	C916	U856	U796	A736	C675	G615	U554
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A	A2144	U2083	U2083	U2083	C1961	C1899	G1779	G1719	U1535	U1473
A	G2205	A2023	G2083	A2023	U1962	C1899	U1780	G1720	U1536	A1474
A	G2146	U2024	U2084	U2024	U1963	U1900	U1781	G1721	G1537	A1475
A	A2207	G2025	G2085	G2025	A1964	G1901	C1782	G1722	U1538	G1476
A	C2147	G2026	U2086	G2026	A1965	U1902	A1783	U1723	A1539	G1477
G	C2148	A2027	U2087	A2027	A1966	U1903	C1783	G1723	U1540	A1478
G	U2150	A2028	G2088	A2028	G1967	G1904	A1784	A1724	A1541	A1479
G	A2151	G2029	U2089	G2029	A1968	A1905	G1785	A1725	U1542	U1480
A	C2152	U2030	U2090	U2030	A1969	U1906	A1786	G1726	C1543	G1481
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G	C2096	C2037	U2096	C2037	C1975	G1912	G1792	A1732	A1549	C1487
G	U2158	U2038	U2097	U2038	G1976	U1913	C1793	G1733	U1550	A1488
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A	C2203	G2043	G2103	G2043	U1981	U1918	A1798	U1738	U1556	U1496
G	C2165	A2044	A2104	A2044	U1982	U1919	U1799	U1739	A1557	G1497
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C	G2179	C2058	A2117	C2058	C1997	G1928	C1812	G1752	U1570	G1510
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C	A2181	A2060	G2119	A2060	U1999	G1930	A1813	U1754	A1572	C1512
C	U2241	G2061	U2120	G2061	G1875	U1931	A1814	G1755	U1573	C1513
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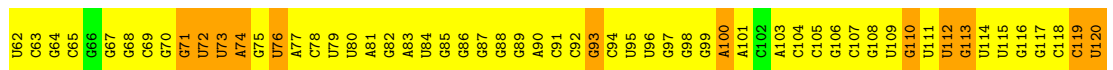
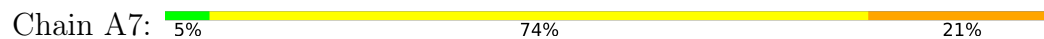
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A3272	A3336	A3337	U3455	U3510	A3567	C3627	A3690	U3753	C3813	A3874	U3933	
C3273	U3338	U3339	U3456	U3511	G3568	U3628	A3691	C3754	U3814	U3875	C3934	
A3274	C3339	C3340	C3457	C3512	C3569	C3629	C3692	C3755	G3815	G3876	A3935	
A3275	U3339	U3340	U3458	C3513	C3570	U3630	G3693	A3756	G3816	U3877	A3936	
			U3459	C3514	C3571	U3631	U3694	U3757	U3817	U3878	U3937	
			C3459	C3515	C3572	U3632	G3695	C3758	U3818	A3879	C3938	
				C3516	C3573	U3633	G3696	C3759	C3819	A3880	C3939	
				C3517	C3574	U3634	A3697	A3760	C3820	A3881	A3940	
				C3518	C3575	U3635	G3697	U3761	C3821	C3882	U3941	
				C3519	C3576	U3636	A3698	C3762	C3822	G3883	G3942	
				C3520	C3577	U3637	U3699	U3763	C3823	A3884	A3943	
				C3521	C3578	U3638	U3701		C3824	A3885	A3944	

• Molecule 84: 2S ribosomal RNA

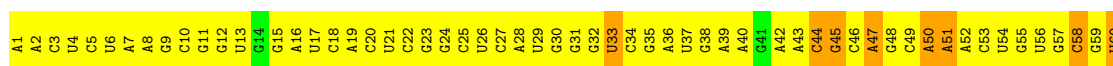




• Molecule 85: 5S ribosomal RNA



• Molecule 86: 5.8S ribosomal RNA



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	134500	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	each subvolume	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	90000	Depositor
Image detector	FEI EAGLE (4k x 4k)	Depositor
Maximum map value	1.943	Depositor
Minimum map value	-0.877	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.168	Depositor
Recommended contour level	0.49	Depositor
Map size (\AA)	455.4, 455.4, 455.4	wwPDB
Map dimensions	368, 368, 368	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.2375, 1.2375, 1.2375	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	Az	1.21	2/6704 (0.0%)	1.68	114/9051 (1.3%)
2	Ag	1.19	0/2574	1.46	21/3506 (0.6%)
3	AU	1.26	1/825 (0.1%)	1.52	9/1111 (0.8%)
4	AK	1.20	0/819	1.52	10/1110 (0.9%)
5	AO	1.27	1/1016 (0.1%)	1.59	17/1364 (1.2%)
6	AX	1.30	1/1152 (0.1%)	1.50	11/1540 (0.7%)
7	AM	1.15	0/937	1.59	15/1260 (1.2%)
8	AS	1.25	1/1146 (0.1%)	1.64	19/1535 (1.2%)
9	Ad	1.38	0/443	1.61	7/589 (1.2%)
10	AN	1.26	1/1225 (0.1%)	1.45	13/1641 (0.8%)
11	AL	1.35	2/1296 (0.2%)	1.53	12/1725 (0.7%)
12	AR	1.26	1/993 (0.1%)	1.41	6/1333 (0.5%)
13	AP	1.22	0/1036	1.44	8/1383 (0.6%)
14	AT	1.23	0/1228	1.51	12/1653 (0.7%)
15	AB	1.24	2/1825 (0.1%)	1.49	22/2448 (0.9%)
16	AA	1.25	3/1777 (0.2%)	1.63	29/2422 (1.2%)
17	AV	1.29	0/622	1.47	4/835 (0.5%)
18	AY	2.40	7/1032 (0.7%)	1.64	17/1373 (1.2%)
19	AZ	1.27	1/616 (0.2%)	1.61	10/826 (1.2%)
20	Aa	1.34	2/883 (0.2%)	1.65	18/1184 (1.5%)
21	Ab	1.28	1/668 (0.1%)	1.48	4/898 (0.4%)
22	Ac	1.41	0/502	1.46	2/670 (0.3%)
23	AD	1.28	4/1808 (0.2%)	1.50	13/2427 (0.5%)
24	Ae	1.33	1/475 (0.2%)	1.53	7/625 (1.1%)
25	Af	1.30	3/672 (0.4%)	1.69	11/887 (1.2%)
26	AJ	1.34	6/1526 (0.4%)	1.65	23/2037 (1.1%)
27	AE	1.27	6/2096 (0.3%)	1.54	27/2819 (1.0%)
28	AC	1.24	3/1785 (0.2%)	1.57	26/2415 (1.1%)
29	AG	1.31	0/1891	1.61	34/2519 (1.3%)
30	AF	1.28	2/1518 (0.1%)	1.53	21/2037 (1.0%)
31	AH	1.25	2/1593 (0.1%)	1.63	19/2145 (0.9%)
32	AW	1.26	3/1046 (0.3%)	1.51	14/1402 (1.0%)
33	AI	1.31	2/1689 (0.1%)	1.62	29/2250 (1.3%)
34	AQ	1.30	1/1202 (0.1%)	1.70	25/1608 (1.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
35	Ah	1.37	1/495 (0.2%)	1.76	13/658 (2.0%)
36	B2	2.32	1859/44058 (4.2%)	2.09	2463/68404 (3.6%)
37	BC	2.25	72/1796 (4.0%)	1.89	84/2800 (3.0%)
38	Cz	1.18	0/1727	1.43	7/2308 (0.3%)
39	Cq	1.20	2/1736 (0.1%)	1.56	24/2342 (1.0%)
40	CK	1.19	1/1196 (0.1%)	1.57	13/1614 (0.8%)
41	CO	1.33	4/1700 (0.2%)	1.51	22/2277 (1.0%)
42	CL	1.35	4/1726 (0.2%)	1.76	47/2308 (2.0%)
43	CV	1.28	1/1014 (0.1%)	1.52	14/1362 (1.0%)
44	CM	1.37	1/1326 (0.1%)	1.65	20/1780 (1.1%)
45	Ca	1.28	2/1235 (0.2%)	1.66	29/1640 (1.8%)
46	CN	1.43	8/1750 (0.5%)	1.62	26/2335 (1.1%)
47	CI	1.33	2/1827 (0.1%)	1.54	14/2447 (0.6%)
48	CD	1.32	2/2379 (0.1%)	1.55	31/3196 (1.0%)
49	CQ	1.34	3/1544 (0.2%)	1.64	40/2069 (1.9%)
50	CR	1.27	3/1703 (0.2%)	1.46	19/2255 (0.8%)
51	CA	1.33	4/1970 (0.2%)	1.61	29/2635 (1.1%)
52	CS	1.29	1/1491 (0.1%)	1.66	26/1998 (1.3%)
53	CT	1.28	3/1326 (0.2%)	1.53	13/1773 (0.7%)
54	CP	1.31	2/1529 (0.1%)	1.50	16/2042 (0.8%)
55	CU	1.21	1/974 (0.1%)	1.46	6/1302 (0.5%)
56	CX	1.27	1/1001 (0.1%)	1.58	7/1348 (0.5%)
57	CY	1.36	3/1094 (0.3%)	1.51	14/1456 (1.0%)
58	CW	1.29	1/1063 (0.1%)	1.55	9/1410 (0.6%)
59	CZ	1.28	1/1141 (0.1%)	1.56	10/1517 (0.7%)
60	Cr	1.29	0/1069	1.70	20/1432 (1.4%)
61	Ch	1.30	0/1024	1.45	8/1353 (0.6%)
62	Cb	1.29	2/628 (0.3%)	1.67	12/832 (1.4%)
63	CB	1.24	3/3356 (0.1%)	1.61	41/4494 (0.9%)
64	CF	1.31	2/1958 (0.1%)	1.56	29/2622 (1.1%)
65	Cc	1.20	1/779 (0.1%)	1.55	9/1048 (0.9%)
66	Cd	1.28	0/939	1.54	10/1262 (0.8%)
67	Ce	1.36	1/1132 (0.1%)	1.54	13/1508 (0.9%)
68	Cf	1.33	0/1270	1.74	22/1696 (1.3%)
69	Cg	1.44	2/938 (0.2%)	1.65	19/1252 (1.5%)
70	Ci	1.30	1/944 (0.1%)	1.62	16/1250 (1.3%)
71	Cj	1.41	1/750 (0.1%)	1.47	5/993 (0.5%)
72	Ck	1.26	0/583	1.72	10/774 (1.3%)
73	Cl	1.39	0/445	1.46	3/589 (0.5%)
74	CC	1.32	5/3163 (0.2%)	1.57	43/4253 (1.0%)
75	Cm	1.24	0/435	1.51	4/575 (0.7%)
76	Cn	1.55	0/237	1.43	3/300 (1.0%)
77	Cp	1.30	0/719	1.49	9/954 (0.9%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
78	Co	1.30	2/887 (0.2%)	1.63	15/1162 (1.3%)
79	CJ	1.30	3/1494 (0.2%)	1.53	15/2001 (0.7%)
80	CH	1.21	0/1519	1.54	23/2042 (1.1%)
81	CE	1.29	3/1883 (0.2%)	1.75	45/2514 (1.8%)
82	CG	1.26	7/1968 (0.4%)	1.47	21/2637 (0.8%)
83	A5	2.33	3665/87035 (4.2%)	2.12	5062/135254 (3.7%)
84	A9	2.28	39/714 (5.5%)	2.32	45/1112 (4.0%)
85	A7	2.35	134/2854 (4.7%)	2.03	160/4447 (3.6%)
86	A8	2.29	115/2932 (3.9%)	2.05	138/4568 (3.0%)
All	All	1.95	6027/247076 (2.4%)	1.91	9425/360828 (2.6%)

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	Az	105	86
2	Ag	0	4
3	AU	0	3
4	AK	0	8
5	AO	2	1
6	AX	0	3
7	AM	1	7
8	AS	0	6
9	Ad	0	4
10	AN	0	6
11	AL	0	9
12	AR	0	5
13	AP	1	4
14	AT	2	11
15	AB	0	4
16	AA	0	6
17	AV	0	2
18	AY	0	11
19	AZ	1	2
20	Aa	1	6
21	Ab	0	4
22	Ac	0	3
23	AD	1	10
24	Ae	0	2
25	Af	0	10

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Mol	Chain	#Chirality outliers	#Planarity outliers
26	AJ	0	7
27	AE	0	13
28	AC	0	14
29	AG	0	11
30	AF	0	7
31	AH	2	8
32	AW	0	2
33	AI	0	12
34	AQ	0	12
35	Ah	0	6
36	B2	1	0
38	Cz	1	2
39	Cq	1	16
40	CK	0	13
41	CO	0	9
42	CL	29	21
43	CV	0	4
44	CM	2	15
45	Ca	1	12
46	CN	1	13
47	CI	0	11
48	CD	1	8
49	CQ	0	7
50	CR	0	5
51	CA	0	8
52	CS	28	22
53	CT	1	12
54	CP	1	4
55	CU	0	4
56	CX	1	4
57	CY	0	4
58	CW	0	10
59	CZ	0	6
60	Cr	0	14
61	Ch	0	3
62	Cb	0	4
63	CB	1	24
64	CF	1	7
65	Cc	0	5
66	Cd	1	3
67	Ce	0	8
68	Cf	7	22

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Mol	Chain	#Chirality outliers	#Planarity outliers
69	Cg	0	7
70	Ci	0	5
71	Cj	0	3
72	Ck	0	2
73	Cl	0	4
74	CC	1	21
75	Cm	0	2
76	Cn	0	2
77	Cp	0	2
78	Co	0	5
79	CJ	1	10
80	CH	1	11
81	CE	3	26
82	CG	1	7
83	A5	7	0
All	All	208	716

All (6027) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1668	U	C2'-C1'	-31.14	1.19	1.53
36	B2	1320	G	C2'-C1'	-30.14	1.20	1.53
18	AY	77	TYR	CE1-CZ	30.11	1.77	1.38
18	AY	77	TYR	CE2-CZ	28.88	1.76	1.38
18	AY	77	TYR	CG-CD1	27.53	1.75	1.39
83	A5	973	G	C2'-C1'	-27.48	1.23	1.53
18	AY	77	TYR	CG-CD2	26.96	1.74	1.39
83	A5	2767	U	C2'-C1'	-25.82	1.25	1.53
83	A5	3474	G	C2'-C1'	-25.27	1.25	1.53
83	A5	874	G	C2'-C1'	-24.85	1.26	1.53
83	A5	1689	G	C2'-C1'	-23.99	1.26	1.53
36	B2	1821	G	C2'-C1'	-23.93	1.27	1.53
83	A5	3670	G	C2'-C1'	-23.89	1.27	1.53
83	A5	1417	G	C2'-C1'	-23.37	1.27	1.53
83	A5	2085	G	C2'-C1'	-23.34	1.27	1.53
18	AY	77	TYR	CD2-CE2	23.14	1.74	1.39
83	A5	1948	C	C2'-C1'	-23.08	1.27	1.53
83	A5	775	U	C2'-C1'	-22.44	1.28	1.53
83	A5	1564	G	C2'-C1'	-22.38	1.28	1.53
83	A5	1250	C	C2'-C1'	-22.38	1.28	1.53
36	B2	1620	G	C2'-C1'	-22.30	1.28	1.53
83	A5	24	G	C2'-C1'	-22.17	1.28	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	717	C	C2'-C1'	-22.12	1.29	1.53
36	B2	430	A	C2'-C1'	-21.97	1.29	1.53
83	A5	2673	A	C2'-C1'	-21.85	1.29	1.53
36	B2	1089	G	C2'-C1'	-21.82	1.29	1.53
83	A5	801	G	C2'-C1'	-21.79	1.29	1.53
83	A5	118	A	C2'-C1'	-21.69	1.29	1.53
83	A5	1503	G	C2'-C1'	-21.59	1.29	1.53
83	A5	1534	G	C2'-C1'	-21.42	1.29	1.53
83	A5	3190	G	C2'-C1'	-21.34	1.29	1.53
83	A5	761	C	C2'-C1'	-21.18	1.30	1.53
83	A5	3759	G	C2'-C1'	-21.16	1.30	1.53
83	A5	3906	U	C2'-C1'	-21.13	1.30	1.53
83	A5	1181	A	C2'-C1'	-20.94	1.30	1.53
36	B2	267	G	C2'-C1'	-20.89	1.30	1.53
83	A5	973	G	O4'-C1'	20.89	1.68	1.41
83	A5	2737	C	C2'-C1'	-20.66	1.30	1.53
83	A5	3586	A	C2'-C1'	-20.51	1.30	1.53
18	AY	77	TYR	CD1-CE1	20.26	1.69	1.39
36	B2	1596	C	C2'-C1'	-20.17	1.31	1.53
83	A5	1599	C	C2'-C1'	-20.12	1.31	1.53
83	A5	3807	G	C2'-C1'	-20.08	1.31	1.53
83	A5	932	G	C2'-C1'	-20.05	1.31	1.53
83	A5	815	A	C2'-C1'	-19.98	1.31	1.53
83	A5	1368	A	O4'-C1'	-19.97	1.15	1.41
83	A5	2122	G	C2'-C1'	-19.93	1.31	1.53
83	A5	542	C	O4'-C1'	19.90	1.67	1.41
36	B2	249	U	C2'-C1'	-19.61	1.31	1.53
83	A5	1757	A	C2'-C1'	-19.60	1.31	1.53
83	A5	875	G	C2'-C1'	-19.53	1.31	1.53
36	B2	1243	G	C2'-C1'	-19.52	1.31	1.53
36	B2	1402	U	C2'-C1'	-19.52	1.31	1.53
36	B2	1650	G	C2'-C1'	-19.50	1.31	1.53
36	B2	1127	G	C2'-C1'	-19.46	1.31	1.53
83	A5	3843	U	C2'-C1'	19.34	1.74	1.53
83	A5	220	G	C2'-C1'	-19.32	1.32	1.53
83	A5	117	C	C2'-C1'	-19.26	1.32	1.53
83	A5	3563	G	C2'-C1'	-19.21	1.32	1.53
83	A5	3784	C	C2'-C1'	-19.17	1.32	1.53
83	A5	1873	A	C2'-C1'	-19.11	1.32	1.53
83	A5	3683	G	C2'-C1'	-19.11	1.32	1.53
83	A5	2767	U	O4'-C1'	19.08	1.66	1.41
83	A5	3151	G	C2'-C1'	-18.95	1.32	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1359	U	C2'-C1'	-18.94	1.32	1.53
36	B2	1569	C	O4'-C1'	18.80	1.66	1.41
36	B2	1342	G	O4'-C1'	-18.79	1.17	1.41
83	A5	1132	U	C2'-C1'	-18.75	1.32	1.53
83	A5	1015	G	C2'-C1'	-18.62	1.32	1.53
83	A5	12	C	C2'-C1'	-18.59	1.32	1.53
83	A5	2794	U	C2'-C1'	-18.56	1.32	1.53
83	A5	1195	U	C2'-C1'	-18.52	1.32	1.53
86	A8	70	A	C2'-C1'	-18.42	1.33	1.53
83	A5	1029	C	C2'-C1'	-18.35	1.33	1.53
83	A5	677	G	C2'-C1'	-18.33	1.33	1.53
36	B2	817	C	C2'-C1'	-18.20	1.33	1.53
83	A5	2138	C	C2'-C1'	-18.11	1.33	1.53
83	A5	260	A	C2'-C1'	-18.05	1.33	1.53
83	A5	117	C	O4'-C1'	18.03	1.65	1.41
83	A5	2753	G	C2'-C1'	-17.95	1.33	1.53
83	A5	11	C	C2'-C1'	-17.95	1.33	1.53
83	A5	3389	C	C2'-C1'	-17.90	1.33	1.53
83	A5	2680	G	C2'-C1'	-17.86	1.33	1.53
83	A5	1404	A	C2'-C1'	-17.79	1.33	1.53
83	A5	2014	C	C2'-C1'	-17.76	1.33	1.53
36	B2	650	G	C2'-C1'	-17.75	1.33	1.53
83	A5	2572	G	C2'-C1'	-17.73	1.33	1.53
83	A5	3249	C	C2'-C1'	-17.71	1.33	1.53
36	B2	1290	A	C2'-C1'	-17.68	1.33	1.53
83	A5	3395	G	C2'-C1'	-17.65	1.33	1.53
83	A5	937	G	C2'-C1'	-17.64	1.33	1.53
36	B2	867	G	C2'-C1'	-17.62	1.33	1.53
83	A5	155	U	C2'-C1'	-17.61	1.33	1.53
83	A5	3569	C	C2'-C1'	-17.61	1.33	1.53
83	A5	3952	C	C2'-C1'	-17.60	1.33	1.53
36	B2	1960	A	C2'-C1'	-17.59	1.33	1.53
36	B2	1218	G	C2'-C1'	-17.56	1.34	1.53
83	A5	1556	C	C2'-C1'	-17.56	1.34	1.53
83	A5	3925	G	C2'-C1'	-17.55	1.34	1.53
83	A5	1003	C	C2'-C1'	-17.52	1.34	1.53
36	B2	1123	G	C2'-C1'	-17.52	1.34	1.53
83	A5	2481	U	C2'-C1'	-17.51	1.34	1.53
36	B2	419	C	C2'-C1'	-17.50	1.34	1.53
36	B2	1674	C	O4'-C1'	17.48	1.64	1.41
83	A5	488	U	C2'-C1'	-17.48	1.34	1.53
36	B2	429	C	C2'-C1'	-17.46	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	959	U	O4 ² -C1'	17.43	1.64	1.41
36	B2	1965	U	C2 ² -C1'	-17.43	1.34	1.53
86	A8	74	G	C2 ² -C1'	-17.42	1.34	1.53
83	A5	691	C	C2 ² -C1'	-17.39	1.34	1.53
83	A5	2030	U	C2 ² -C1'	-17.37	1.34	1.53
83	A5	864	G	O4 ² -C1'	17.36	1.64	1.41
36	B2	394	G	C2 ² -C1'	-17.35	1.34	1.53
36	B2	1833	C	O4 ² -C1'	17.34	1.64	1.41
83	A5	623	C	O4 ² -C1'	17.32	1.64	1.41
83	A5	1077	C	C2 ² -C1'	-17.28	1.34	1.53
36	B2	654	C	C2 ² -C1'	-17.21	1.34	1.53
83	A5	2996	U	C2 ² -C1'	-17.19	1.34	1.53
36	B2	1912	G	C2 ² -C1'	-17.18	1.34	1.53
37	BC	33	C	C2 ² -C1'	-17.17	1.34	1.53
83	A5	1689	G	O4 ² -C1'	17.15	1.64	1.41
36	B2	458	C	O4 ² -C1'	17.12	1.64	1.41
36	B2	1925	G	C2 ² -C1'	-17.12	1.34	1.53
83	A5	2558	A	C2 ² -C1'	-17.09	1.34	1.53
83	A5	1752	G	C2 ² -C1'	-17.09	1.34	1.53
83	A5	3583	C	C2 ² -C1'	-17.09	1.34	1.53
83	A5	922	G	C2 ² -C1'	-17.05	1.34	1.53
36	B2	621	G	C2 ² -C1'	-17.03	1.34	1.53
36	B2	431	G	C2 ² -C1'	-17.01	1.34	1.53
83	A5	1940	C	O4 ² -C1'	17.01	1.63	1.41
83	A5	1886	C	O4 ² -C1'	17.01	1.63	1.41
83	A5	2066	G	O4 ² -C1'	17.00	1.63	1.41
83	A5	3796	G	C2 ² -C1'	-17.00	1.34	1.53
83	A5	2487	C	O4 ² -C1'	16.99	1.63	1.41
36	B2	94	G	C2 ² -C1'	-16.98	1.34	1.53
83	A5	3357	C	O4 ² -C1'	16.92	1.63	1.41
83	A5	3224	G	C2 ² -C1'	-16.91	1.34	1.53
83	A5	1976	G	C2 ² -C1'	-16.91	1.34	1.53
83	A5	2844	G	C2 ² -C1'	-16.90	1.34	1.53
36	B2	651	C	O4 ² -C1'	16.87	1.63	1.41
83	A5	3384	C	O4 ² -C1'	16.82	1.63	1.41
83	A5	3687	A	C2 ² -C1'	-16.81	1.34	1.53
83	A5	1803	C	O4 ² -C1'	16.79	1.63	1.41
83	A5	1013	G	C2 ² -C1'	-16.77	1.34	1.53
83	A5	3160	A	C2 ² -C1'	-16.73	1.34	1.53
83	A5	300	A	O4 ² -C1'	16.72	1.63	1.41
83	A5	3515	C	O4 ² -C1'	16.71	1.63	1.41
36	B2	458	C	C2 ² -C1'	-16.71	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1298	C	C2'-C1'	-16.69	1.34	1.53
36	B2	1792	A	C2'-C1'	-16.68	1.35	1.53
83	A5	1770	C	O4'-C1'	16.67	1.63	1.41
83	A5	3807	G	O4'-C1'	16.67	1.63	1.41
36	B2	1877	G	C2'-C1'	-16.63	1.35	1.53
83	A5	33	C	O4'-C1'	16.62	1.63	1.41
83	A5	2078	C	O4'-C1'	16.61	1.63	1.41
36	B2	284	G	O4'-C1'	16.57	1.63	1.41
83	A5	3237	U	O4'-C1'	16.55	1.63	1.41
36	B2	1173	A	C2'-C1'	-16.54	1.35	1.53
36	B2	1320	G	O4'-C1'	16.53	1.63	1.41
36	B2	1030	C	O4'-C1'	16.52	1.63	1.41
83	A5	2138	C	O4'-C1'	16.49	1.63	1.41
83	A5	156	G	C2'-C1'	-16.48	1.35	1.53
83	A5	3419	A	C2'-C1'	-16.43	1.35	1.53
83	A5	3811	A	C2'-C1'	-16.43	1.35	1.53
83	A5	3514	C	O4'-C1'	-16.41	1.20	1.41
83	A5	3552	G	C2'-C1'	-16.41	1.35	1.53
83	A5	746	G	C2'-C1'	-16.38	1.35	1.53
36	B2	591	C	C2'-C1'	-16.37	1.35	1.53
83	A5	801	G	O4'-C1'	16.36	1.62	1.41
83	A5	238	G	C2'-C1'	-16.36	1.35	1.53
83	A5	2798	C	C2'-C1'	-16.32	1.35	1.53
83	A5	3690	A	O4'-C1'	16.30	1.62	1.41
83	A5	2727	U	C2'-C1'	-16.29	1.35	1.53
83	A5	1687	U	C2'-C1'	-16.27	1.35	1.53
83	A5	3820	C	O4'-C1'	16.27	1.62	1.41
36	B2	574	C	C2'-C1'	-16.24	1.35	1.53
83	A5	533	A	C2'-C1'	-16.22	1.35	1.53
36	B2	705	G	C2'-C1'	-16.22	1.35	1.53
83	A5	1095	G	C2'-C1'	-16.18	1.35	1.53
83	A5	920	G	O4'-C1'	16.16	1.62	1.41
36	B2	1206	G	C2'-C1'	-16.14	1.35	1.53
83	A5	3628	G	O4'-C1'	16.09	1.62	1.41
36	B2	948	A	C2'-C1'	-16.09	1.35	1.53
83	A5	2740	C	O4'-C1'	16.09	1.62	1.41
36	B2	106	C	C2'-C1'	-16.07	1.35	1.53
83	A5	3124	G	C2'-C1'	-16.05	1.35	1.53
83	A5	2131	C	O4'-C1'	16.03	1.62	1.41
83	A5	3695	G	C2'-C1'	-16.03	1.35	1.53
83	A5	1941	A	C2'-C1'	-16.03	1.35	1.53
36	B2	598	C	C2'-C1'	-16.02	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A7	43	U	C2'-C1'	-16.02	1.35	1.53
83	A5	3905	U	C2'-C1'	-16.02	1.35	1.53
83	A5	2926	G	C2'-C1'	-16.01	1.35	1.53
83	A5	1554	C	C2'-C1'	-16.00	1.35	1.53
36	B2	1087	C	O4'-C1'	-15.97	1.20	1.41
36	B2	163	C	O4'-C1'	15.95	1.62	1.41
83	A5	2196	U	C2'-C1'	15.95	1.70	1.53
83	A5	1574	A	C2'-C1'	-15.95	1.35	1.53
36	B2	1695	A	O4'-C1'	-15.93	1.21	1.41
83	A5	1722	U	C2'-C1'	-15.92	1.35	1.53
83	A5	1404	A	O4'-C1'	15.90	1.62	1.41
36	B2	1658	G	C2'-C1'	-15.86	1.35	1.53
83	A5	626	A	C2'-C1'	-15.84	1.35	1.53
83	A5	1160	U	O4'-C1'	15.84	1.62	1.41
83	A5	1024	U	C2'-C1'	-15.82	1.35	1.53
83	A5	3812	C	O4'-C1'	15.79	1.62	1.41
83	A5	1701	C	O4'-C1'	15.78	1.62	1.41
83	A5	3309	A	C2'-C1'	-15.78	1.35	1.53
36	B2	1975	G	C2'-C1'	-15.78	1.35	1.53
83	A5	2155	A	C2'-C1'	-15.76	1.36	1.53
83	A5	2557	C	O4'-C1'	15.75	1.62	1.41
83	A5	3584	C	O4'-C1'	15.75	1.62	1.41
83	A5	3852	A	C2'-C1'	-15.70	1.36	1.53
83	A5	1647	A	C2'-C1'	-15.68	1.36	1.53
36	B2	565	G	C2'-C1'	-15.68	1.36	1.53
83	A5	2152	C	C2'-C1'	-15.67	1.36	1.53
85	A7	99	G	C2'-C1'	-15.67	1.36	1.53
36	B2	1701	C	O4'-C1'	15.67	1.62	1.41
83	A5	761	C	O4'-C1'	15.67	1.62	1.41
83	A5	2882	A	C2'-C1'	-15.66	1.36	1.53
83	A5	557	G	C2'-C1'	-15.66	1.36	1.53
83	A5	3642	G	C2'-C1'	-15.66	1.36	1.53
83	A5	2503	G	C2'-C1'	-15.63	1.36	1.53
36	B2	1430	U	C2'-C1'	-15.63	1.36	1.53
83	A5	1948	C	O4'-C1'	15.61	1.61	1.41
36	B2	857	G	C2'-C1'	-15.60	1.36	1.53
36	B2	1246	C	O4'-C1'	15.57	1.61	1.41
36	B2	1271	A	O4'-C1'	15.56	1.61	1.41
36	B2	1447	G	C2'-C1'	-15.55	1.36	1.53
36	B2	1886	G	C2'-C1'	-15.53	1.36	1.53
83	A5	2828	A	O4'-C1'	15.53	1.61	1.41
83	A5	2792	G	C2'-C1'	-15.52	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2756	C	C2'-C1'	-15.52	1.36	1.53
36	B2	272	U	O4'-C1'	15.51	1.61	1.41
83	A5	625	C	O4'-C1'	15.51	1.61	1.41
83	A5	2625	G	C2'-C1'	-15.50	1.36	1.53
36	B2	416	C	O4'-C1'	15.48	1.61	1.41
83	A5	1144	C	O4'-C1'	15.48	1.61	1.41
83	A5	1174	G	C2'-C1'	-15.46	1.36	1.53
83	A5	3233	C	C2'-C1'	-15.45	1.36	1.53
36	B2	1029	G	C2'-C1'	-15.45	1.36	1.53
83	A5	1132	U	O4'-C1'	15.45	1.61	1.41
83	A5	2710	A	O4'-C1'	15.43	1.61	1.41
36	B2	1290	A	O4'-C1'	15.42	1.61	1.41
85	A7	1	G	C2'-C1'	-15.42	1.36	1.53
36	B2	157	C	O4'-C1'	15.41	1.61	1.41
86	A8	68	U	C2'-C1'	-15.41	1.36	1.53
36	B2	96	C	C2'-C1'	-15.39	1.36	1.53
83	A5	743	C	C2'-C1'	-15.39	1.36	1.53
83	A5	317	G	C2'-C1'	-15.39	1.36	1.53
83	A5	1616	G	C2'-C1'	-15.38	1.36	1.53
36	B2	1024	C	O4'-C1'	15.37	1.61	1.41
83	A5	2887	U	C2'-C1'	-15.36	1.36	1.53
36	B2	399	C	C2'-C1'	-15.35	1.36	1.53
36	B2	1036	C	O4'-C1'	15.35	1.61	1.41
83	A5	1992	G	C2'-C1'	-15.35	1.36	1.53
36	B2	657	A	O4'-C1'	15.34	1.61	1.41
36	B2	1077	C	O4'-C1'	15.33	1.61	1.41
83	A5	503	A	C2'-C1'	-15.31	1.36	1.53
83	A5	2613	C	O4'-C1'	15.28	1.61	1.41
36	B2	1687	C	O4'-C1'	15.25	1.61	1.41
36	B2	264	C	O4'-C1'	15.23	1.61	1.41
83	A5	15	A	C2'-C1'	-15.22	1.36	1.53
83	A5	1355	C	C2'-C1'	-15.22	1.36	1.53
36	B2	1788	C	O4'-C1'	-15.19	1.22	1.41
83	A5	188	G	C2'-C1'	-15.17	1.36	1.53
83	A5	6	U	C2'-C1'	-15.16	1.36	1.53
83	A5	1470	C	C2'-C1'	-15.15	1.36	1.53
83	A5	2061	G	C2'-C1'	-15.15	1.36	1.53
83	A5	3188	A	C2'-C1'	-15.15	1.36	1.53
36	B2	375	A	C2'-C1'	-15.13	1.36	1.53
83	A5	397	C	C2'-C1'	-15.13	1.36	1.53
83	A5	1748	C	O4'-C1'	15.12	1.61	1.41
83	A5	1554	C	O4'-C1'	15.12	1.61	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1796	C	O4 ² -C1'	15.10	1.61	1.41
83	A5	3206	A	O4 ² -C1'	15.09	1.61	1.41
36	B2	1603	G	C2 ² -C1'	-15.06	1.36	1.53
83	A5	3569	C	O4 ² -C1'	15.06	1.61	1.41
83	A5	3676	C	C2 ² -C1'	15.05	1.70	1.53
83	A5	1873	A	O4 ² -C1'	15.04	1.61	1.41
36	B2	1096	C	O4 ² -C1'	15.03	1.61	1.41
36	B2	438	C	C2 ² -C1'	-15.02	1.36	1.53
83	A5	242	C	C2 ² -C1'	-15.01	1.36	1.53
83	A5	3803	C	O4 ² -C1'	15.01	1.61	1.41
36	B2	1276	G	C2 ² -C1'	-14.99	1.36	1.53
36	B2	248	G	O4 ² -C1'	14.97	1.61	1.41
83	A5	3933	G	C2 ² -C1'	-14.97	1.36	1.53
83	A5	1159	C	O4 ² -C1'	14.96	1.61	1.41
83	A5	2151	A	O4 ² -C1'	14.96	1.61	1.41
36	B2	573	C	O4 ² -C1'	14.95	1.61	1.41
83	A5	1701	C	C2 ² -C1'	-14.94	1.36	1.53
83	A5	3273	C	O4 ² -C1'	14.93	1.61	1.41
36	B2	1314	G	C2 ² -C1'	-14.92	1.36	1.53
36	B2	574	C	O4 ² -C1'	14.92	1.61	1.41
86	A8	74	G	O4 ² -C1'	14.91	1.61	1.41
36	B2	635	C	C2 ² -C1'	-14.91	1.36	1.53
83	A5	31	C	C2 ² -C1'	-14.90	1.36	1.53
83	A5	3590	C	O4 ² -C1'	14.90	1.61	1.41
36	B2	474	C	O4 ² -C1'	14.90	1.61	1.41
83	A5	1661	C	O4 ² -C1'	14.87	1.60	1.41
36	B2	106	C	O4 ² -C1'	14.86	1.60	1.41
36	B2	1871	G	C2 ² -C1'	-14.86	1.37	1.53
83	A5	169	C	C2 ² -C1'	-14.86	1.37	1.53
83	A5	1471	G	C2 ² -C1'	-14.85	1.37	1.53
83	A5	2686	C	O4 ² -C1'	14.85	1.60	1.41
83	A5	299	G	C2 ² -C1'	-14.84	1.37	1.53
36	B2	1799	A	C2 ² -C1'	-14.83	1.37	1.53
36	B2	230	C	O4 ² -C1'	14.82	1.60	1.41
83	A5	3383	A	C2 ² -C1'	-14.81	1.37	1.53
83	A5	3478	G	C2 ² -C1'	-14.81	1.37	1.53
83	A5	2194	G	C2 ² -C1'	-14.81	1.37	1.53
84	A9	2	G	C2 ² -C1'	-14.81	1.37	1.53
36	B2	96	C	O4 ² -C1'	14.80	1.60	1.41
83	A5	3812	C	C2 ² -C1'	-14.80	1.37	1.53
83	A5	2487	C	C2 ² -C1'	-14.79	1.37	1.53
83	A5	3952	C	O4 ² -C1'	14.78	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3166	C	O4 ² -C1'	14.76	1.60	1.41
83	A5	615	C	O4 ² -C1'	14.73	1.60	1.41
36	B2	1807	C	C2 ² -C1'	-14.73	1.37	1.53
85	A7	94	C	C2 ² -C1'	-14.72	1.37	1.53
83	A5	2520	U	O4 ² -C1'	14.72	1.60	1.41
83	A5	12	C	O4 ² -C1'	14.72	1.60	1.41
83	A5	3654	C	C2 ² -C1'	-14.71	1.37	1.53
83	A5	3575	G	C2 ² -C1'	-14.71	1.37	1.53
83	A5	2497	C	O4 ² -C1'	14.71	1.60	1.41
83	A5	309	C	O4 ² -C1'	14.71	1.60	1.41
36	B2	592	C	C2 ² -C1'	-14.69	1.37	1.53
36	B2	55	A	C2 ² -C1'	-14.68	1.37	1.53
36	B2	1662	C	C2 ² -C1'	-14.68	1.37	1.53
83	A5	327	C	O4 ² -C1'	14.68	1.60	1.41
83	A5	1139	U	C2 ² -C1'	-14.68	1.37	1.53
36	B2	817	C	O4 ² -C1'	14.67	1.60	1.41
83	A5	280	C	O4 ² -C1'	14.66	1.60	1.41
83	A5	1511	C	O4 ² -C1'	14.66	1.60	1.41
83	A5	1583	G	C2 ² -C1'	-14.66	1.37	1.53
83	A5	462	C	O4 ² -C1'	14.65	1.60	1.41
36	B2	1211	C	O4 ² -C1'	14.65	1.60	1.41
83	A5	1327	G	C2 ² -C1'	-14.65	1.37	1.53
83	A5	3727	A	O4 ² -C1'	-14.65	1.22	1.41
36	B2	543	A	C2 ² -C1'	-14.64	1.37	1.53
83	A5	1199	C	O4 ² -C1'	14.62	1.60	1.41
83	A5	1036	A	O4 ² -C1'	14.62	1.60	1.41
36	B2	706	U	C2 ² -C1'	-14.61	1.37	1.53
83	A5	3757	U	C2 ² -C1'	-14.61	1.37	1.53
36	B2	1584	A	O4 ² -C1'	14.58	1.60	1.41
83	A5	3571	C	O4 ² -C1'	14.56	1.60	1.41
83	A5	3626	A	O4 ² -C1'	14.56	1.60	1.41
83	A5	2459	C	O4 ² -C1'	14.55	1.60	1.41
83	A5	1641	U	O4 ² -C1'	14.54	1.60	1.41
83	A5	1002	C	O4 ² -C1'	14.51	1.60	1.41
83	A5	3810	C	O4 ² -C1'	14.51	1.60	1.41
36	B2	718	C	O4 ² -C1'	14.50	1.60	1.41
83	A5	3876	U	C2 ² -C1'	-14.50	1.37	1.53
85	A7	4	A	C2 ² -C1'	-14.50	1.37	1.53
36	B2	1378	C	C2 ² -C1'	-14.50	1.37	1.53
36	B2	1763	C	O4 ² -C1'	14.50	1.60	1.41
83	A5	1938	C	C2 ² -C1'	-14.50	1.37	1.53
83	A5	143	G	C2 ² -C1'	-14.49	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	386	C	O4 ² -C1'	14.49	1.60	1.41
36	B2	706	U	O4 ² -C1'	14.48	1.60	1.41
36	B2	1696	G	C2 ² -C1'	-14.47	1.37	1.53
86	A8	49	C	O4 ² -C1'	14.46	1.60	1.41
36	B2	654	C	O4 ² -C1'	14.46	1.60	1.41
83	A5	331	A	C2 ² -C1'	-14.45	1.37	1.53
83	A5	2772	G	C2 ² -C1'	-14.43	1.37	1.53
83	A5	169	C	O4 ² -C1'	14.43	1.60	1.41
83	A5	2013	C	O4 ² -C1'	14.42	1.60	1.41
83	A5	2624	G	C2 ² -C1'	-14.42	1.37	1.53
83	A5	3577	U	C2 ² -C1'	-14.42	1.37	1.53
36	B2	293	A	C2 ² -C1'	-14.41	1.37	1.53
36	B2	1756	C	C2 ² -C1'	-14.41	1.37	1.53
36	B2	1339	C	O4 ² -C1'	14.39	1.60	1.41
83	A5	1756	G	O4 ² -C1'	14.39	1.60	1.41
83	A5	1668	U	O4 ² -C1'	14.39	1.60	1.41
36	B2	173	C	C2 ² -C1'	-14.38	1.37	1.53
36	B2	38	C	O4 ² -C1'	14.38	1.60	1.41
83	A5	2018	C	O4 ² -C1'	14.38	1.60	1.41
83	A5	2663	C	O4 ² -C1'	14.38	1.60	1.41
36	B2	1962	G	C2 ² -C1'	-14.36	1.37	1.53
83	A5	2616	G	C2 ² -C1'	-14.36	1.37	1.53
83	A5	3604	G	C2 ² -C1'	-14.35	1.37	1.53
83	A5	1457	G	C2 ² -C1'	-14.35	1.37	1.53
36	B2	1817	C	C2 ² -C1'	-14.34	1.37	1.53
83	A5	2494	G	C2 ² -C1'	-14.34	1.37	1.53
83	A5	3368	C	O4 ² -C1'	-14.34	1.23	1.41
83	A5	1719	G	C2 ² -C1'	-14.34	1.37	1.53
36	B2	1990	U	C2 ² -C1'	-14.34	1.37	1.53
83	A5	1527	C	O4 ² -C1'	14.32	1.60	1.41
83	A5	1077	C	O4 ² -C1'	14.32	1.60	1.41
83	A5	3711	G	C2 ² -C1'	14.30	1.69	1.53
36	B2	1378	C	O4 ² -C1'	14.29	1.60	1.41
83	A5	3516	C	C2 ² -C1'	-14.29	1.37	1.53
83	A5	397	C	O4 ² -C1'	14.29	1.60	1.41
36	B2	955	G	C2 ² -C1'	-14.27	1.37	1.53
83	A5	98	G	C2 ² -C1'	-14.26	1.37	1.53
83	A5	44	A	C2 ² -C1'	-14.25	1.37	1.53
83	A5	2841	G	C2 ² -C1'	-14.24	1.37	1.53
83	A5	3906	U	O4 ² -C1'	14.23	1.60	1.41
36	B2	1261	C	C2 ² -C1'	-14.22	1.37	1.53
83	A5	1409	G	C2 ² -C1'	-14.21	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	36	C	O4 ² -C1'	14.20	1.60	1.41
83	A5	3696	C	O4 ² -C1'	14.18	1.60	1.41
83	A5	2109	G	O4 ² -C1'	14.16	1.60	1.41
83	A5	2770	C	O4 ² -C1'	14.16	1.60	1.41
83	A5	3890	G	C2 ² -C1'	-14.14	1.37	1.53
83	A5	667	U	C2 ² -C1'	-14.14	1.37	1.53
83	A5	3272	A	C2 ² -C1'	-14.14	1.37	1.53
36	B2	1243	G	O4 ² -C1'	14.13	1.60	1.41
83	A5	475	U	O4 ² -C1'	14.12	1.60	1.41
83	A5	1670	G	C2 ² -C1'	-14.12	1.37	1.53
83	A5	1931	C	O4 ² -C1'	14.11	1.59	1.41
83	A5	1869	C	O4 ² -C1'	14.11	1.59	1.41
83	A5	3624	C	O4 ² -C1'	14.11	1.59	1.41
36	B2	298	U	C2 ² -C1'	-14.10	1.37	1.53
83	A5	2031	C	O4 ² -C1'	14.10	1.59	1.41
83	A5	793	U	O4 ² -C1'	14.10	1.59	1.41
83	A5	2769	G	C2 ² -C1'	-14.10	1.37	1.53
83	A5	446	C	C2 ² -C1'	-14.09	1.37	1.53
36	B2	1419	C	C2 ² -C1'	-14.09	1.37	1.53
83	A5	3405	U	C2 ² -C1'	-14.08	1.37	1.53
36	B2	1003	C	O4 ² -C1'	14.07	1.59	1.41
36	B2	1267	G	C2 ² -C1'	-14.07	1.37	1.53
36	B2	1850	G	C2 ² -C1'	-14.07	1.37	1.53
36	B2	1642	C	O4 ² -C1'	14.07	1.59	1.41
83	A5	3890	G	O4 ² -C1'	14.07	1.59	1.41
36	B2	1640	G	C2 ² -C1'	-14.06	1.37	1.53
36	B2	538	C	O4 ² -C1'	14.05	1.59	1.41
83	A5	1225	G	C2 ² -C1'	-14.05	1.37	1.53
36	B2	1630	G	C2 ² -C1'	-14.04	1.38	1.53
83	A5	3943	G	C2 ² -C1'	-14.04	1.38	1.53
36	B2	17	C	O4 ² -C1'	14.03	1.59	1.41
36	B2	1099	U	C2 ² -C1'	-14.02	1.38	1.53
83	A5	2028	A	C2 ² -C1'	-14.02	1.38	1.53
37	BC	70	C	C2 ² -C1'	-14.02	1.38	1.53
86	A8	49	C	C2 ² -C1'	-14.00	1.38	1.53
83	A5	1598	A	C2 ² -C1'	-14.00	1.38	1.53
83	A5	522	G	C2 ² -C1'	-13.99	1.38	1.53
83	A5	1330	G	O4 ² -C1'	13.98	1.59	1.41
83	A5	102	G	O4 ² -C1'	13.98	1.59	1.41
83	A5	1145	C	C2 ² -C1'	-13.98	1.38	1.53
83	A5	1160	U	C2 ² -C1'	-13.98	1.38	1.53
83	A5	3515	C	C2 ² -C1'	-13.97	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1701	C	C2'-C1'	-13.96	1.38	1.53
83	A5	2756	C	O4'-C1'	13.96	1.59	1.41
83	A5	3775	A	O4'-C1'	13.95	1.59	1.41
83	A5	1209	A	C2'-C1'	-13.95	1.38	1.53
83	A5	1367	A	C2'-C1'	-13.95	1.38	1.53
83	A5	1567	G	C2'-C1'	-13.95	1.38	1.53
83	A5	2018	C	C2'-C1'	-13.93	1.38	1.53
36	B2	460	C	O4'-C1'	13.93	1.59	1.41
36	B2	903	C	O4'-C1'	13.91	1.59	1.41
83	A5	2582	C	C2'-C1'	-13.90	1.38	1.53
83	A5	1663	G	C2'-C1'	-13.90	1.38	1.53
36	B2	717	C	O4'-C1'	13.90	1.59	1.41
36	B2	1005	G	C2'-C1'	-13.88	1.38	1.53
83	A5	3398	C	O4'-C1'	13.88	1.59	1.41
36	B2	871	G	C2'-C1'	-13.88	1.38	1.53
36	B2	388	G	C2'-C1'	-13.87	1.38	1.53
83	A5	2676	U	C2'-C1'	-13.87	1.38	1.53
83	A5	2000	U	O4'-C1'	13.87	1.59	1.41
83	A5	1708	G	O4'-C1'	13.87	1.59	1.41
36	B2	438	C	O4'-C1'	13.86	1.59	1.41
83	A5	3703	C	C2'-C1'	-13.86	1.38	1.53
36	B2	163	C	C2'-C1'	-13.84	1.38	1.53
36	B2	1711	C	O4'-C1'	13.84	1.59	1.41
83	A5	4	U	C2'-C1'	13.84	1.68	1.53
83	A5	3636	G	C2'-C1'	-13.83	1.38	1.53
36	B2	895	A	O4'-C1'	13.83	1.59	1.41
83	A5	1782	C	C2'-C1'	-13.82	1.38	1.53
83	A5	116	U	C2'-C1'	13.82	1.68	1.53
36	B2	899	A	C2'-C1'	-13.81	1.38	1.53
85	A7	94	C	O4'-C1'	13.80	1.59	1.41
36	B2	562	C	O4'-C1'	13.80	1.59	1.41
36	B2	1003	C	C2'-C1'	-13.80	1.38	1.53
36	B2	848	C	C2'-C1'	-13.79	1.38	1.53
36	B2	1119	G	C2'-C1'	-13.79	1.38	1.53
36	B2	1780	G	C2'-C1'	-13.78	1.38	1.53
36	B2	1305	A	O4'-C1'	-13.77	1.23	1.41
36	B2	604	C	O4'-C1'	13.77	1.59	1.41
36	B2	828	A	C2'-C1'	-13.77	1.38	1.53
83	A5	390	A	C2'-C1'	-13.77	1.38	1.53
83	A5	885	U	C2'-C1'	-13.76	1.38	1.53
83	A5	1245	C	C2'-C1'	-13.76	1.38	1.53
83	A5	2507	C	C2'-C1'	-13.74	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3166	C	C2'-C1'	-13.73	1.38	1.53
83	A5	1547	A	C2'-C1'	-13.72	1.38	1.53
83	A5	67	A	C2'-C1'	-13.72	1.38	1.53
36	B2	1651	C	O4'-C1'	13.70	1.59	1.41
83	A5	3367	C	O4'-C1'	13.70	1.59	1.41
36	B2	1954	C	O4'-C1'	13.70	1.59	1.41
83	A5	1499	C	O4'-C1'	13.69	1.59	1.41
83	A5	2220	C	C2'-C1'	-13.69	1.38	1.53
83	A5	2155	A	O4'-C1'	13.69	1.59	1.41
83	A5	863	U	C2'-C1'	-13.68	1.38	1.53
36	B2	183	A	O4'-C1'	13.68	1.59	1.41
83	A5	3198	C	O4'-C1'	13.68	1.59	1.41
36	B2	92	A	C2'-C1'	-13.67	1.38	1.53
36	B2	615	G	C2'-C1'	-13.67	1.38	1.53
36	B2	1659	C	C2'-C1'	-13.66	1.38	1.53
83	A5	3654	C	O4'-C1'	13.66	1.59	1.41
83	A5	2230	G	C2'-C1'	-13.65	1.38	1.53
83	A5	775	U	O4'-C1'	13.65	1.59	1.41
83	A5	982	C	C2'-C1'	-13.65	1.38	1.53
83	A5	1256	C	C2'-C1'	-13.63	1.38	1.53
36	B2	43	A	O4'-C1'	13.63	1.59	1.41
36	B2	829	C	C2'-C1'	-13.62	1.38	1.53
36	B2	1018	C	O4'-C1'	13.62	1.59	1.41
83	A5	3441	C	O4'-C1'	13.62	1.59	1.41
83	A5	305	G	C2'-C1'	-13.61	1.38	1.53
83	A5	1869	C	C2'-C1'	-13.61	1.38	1.53
36	B2	1569	C	C2'-C1'	-13.60	1.38	1.53
83	A5	2000	U	C2'-C1'	-13.59	1.38	1.53
36	B2	1871	G	O4'-C1'	13.58	1.59	1.41
83	A5	1888	A	C2'-C1'	-13.57	1.38	1.53
36	B2	204	C	O4'-C1'	13.57	1.59	1.41
36	B2	314	C	O4'-C1'	13.57	1.59	1.41
83	A5	531	C	O4'-C1'	13.57	1.59	1.41
83	A5	2078	C	C2'-C1'	-13.57	1.38	1.53
86	A8	116	C	C2'-C1'	-13.57	1.38	1.53
83	A5	1182	A	C2'-C1'	-13.56	1.38	1.53
83	A5	2615	C	O4'-C1'	13.56	1.59	1.41
36	B2	516	U	C2'-C1'	-13.55	1.38	1.53
85	A7	49	A	O4'-C1'	13.55	1.59	1.41
83	A5	426	A	O4'-C1'	13.54	1.59	1.41
37	BC	23	G	O4'-C1'	13.54	1.59	1.41
36	B2	590	U	C2'-C1'	-13.54	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	146	C	O4 ² -C1'	13.53	1.59	1.41
36	B2	533	A	C2 ² -C1'	-13.53	1.38	1.53
36	B2	869	C	C2 ² -C1'	-13.52	1.38	1.53
36	B2	651	C	C2 ² -C1'	-13.51	1.38	1.53
83	A5	1737	U	C2 ² -C1'	-13.51	1.38	1.53
83	A5	2813	G	O4 ² -C1'	13.50	1.59	1.41
83	A5	2052	G	O4 ² -C1'	13.48	1.59	1.41
83	A5	2901	C	C2 ² -C1'	-13.48	1.38	1.53
85	A7	99	G	O4 ² -C1'	13.48	1.59	1.41
83	A5	985	G	O4 ² -C1'	-13.47	1.24	1.41
83	A5	2516	U	O4 ² -C1'	13.46	1.59	1.41
83	A5	3603	C	O4 ² -C1'	13.46	1.59	1.41
83	A5	2087	C	O4 ² -C1'	13.46	1.59	1.41
83	A5	1361	G	C2 ² -C1'	-13.46	1.38	1.53
36	B2	520	A	O4 ² -C1'	13.45	1.59	1.41
83	A5	2228	U	C2 ² -C1'	-13.45	1.38	1.53
83	A5	2717	C	O4 ² -C1'	13.45	1.59	1.41
83	A5	3111	G	C2 ² -C1'	-13.44	1.38	1.53
36	B2	936	G	C2 ² -C1'	-13.44	1.38	1.53
83	A5	1708	G	C2 ² -C1'	-13.44	1.38	1.53
36	B2	1237	G	C2 ² -C1'	-13.43	1.38	1.53
83	A5	1478	A	C2 ² -C1'	-13.42	1.38	1.53
36	B2	399	C	O4 ² -C1'	13.42	1.59	1.41
83	A5	2882	A	O4 ² -C1'	13.41	1.59	1.41
36	B2	243	U	O4 ² -C1'	13.41	1.59	1.41
36	B2	947	U	C2 ² -C1'	-13.40	1.38	1.53
36	B2	1184	U	O4 ² -C1'	13.40	1.59	1.41
83	A5	788	C	C2 ² -C1'	-13.40	1.38	1.53
83	A5	2573	C	O4 ² -C1'	13.40	1.59	1.41
83	A5	3666	C	C2 ² -C1'	-13.39	1.38	1.53
83	A5	206	C	O4 ² -C1'	13.38	1.59	1.41
36	B2	906	C	C2 ² -C1'	-13.38	1.38	1.53
83	A5	292	G	C2 ² -C1'	-13.37	1.38	1.53
86	A8	116	C	O4 ² -C1'	13.37	1.59	1.41
36	B2	1789	A	C2 ² -C1'	-13.37	1.38	1.53
83	A5	1157	C	O4 ² -C1'	13.37	1.59	1.41
83	A5	3130	G	C2 ² -C1'	-13.35	1.38	1.53
36	B2	1943	G	C2 ² -C1'	-13.35	1.38	1.53
36	B2	1434	U	C2 ² -C1'	-13.33	1.38	1.53
36	B2	848	C	O4 ² -C1'	13.31	1.58	1.41
83	A5	1665	C	O4 ² -C1'	13.31	1.58	1.41
83	A5	1009	G	C2 ² -C1'	-13.31	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	213	A	O4 ² -C1'	13.31	1.58	1.41
83	A5	1971	C	O4 ² -C1'	13.29	1.58	1.41
83	A5	1258	C	C2 ² -C1'	-13.29	1.38	1.53
83	A5	1607	A	O4 ² -C1'	13.29	1.58	1.41
83	A5	2245	G	O4 ² -C1'	13.29	1.58	1.41
83	A5	1204	C	O4 ² -C1'	13.28	1.58	1.41
83	A5	2031	C	C2 ² -C1'	-13.28	1.38	1.53
83	A5	3507	A	C2 ² -C1'	-13.28	1.38	1.53
83	A5	1068	C	O4 ² -C1'	13.28	1.58	1.41
36	B2	474	C	C2 ² -C1'	-13.28	1.38	1.53
36	B2	869	C	O4 ² -C1'	13.28	1.58	1.41
83	A5	3661	C	C2 ² -C1'	-13.27	1.38	1.53
83	A5	463	C	O4 ² -C1'	13.27	1.58	1.41
83	A5	3539	C	C2 ² -C1'	-13.27	1.38	1.53
83	A5	2265	A	C2 ² -C1'	-13.26	1.38	1.53
86	A8	39	A	O4 ² -C1'	13.26	1.58	1.41
83	A5	1466	A	O4 ² -C1'	13.25	1.58	1.41
36	B2	31	C	C2 ² -C1'	-13.25	1.38	1.53
85	A7	8	A	C2 ² -C1'	-13.25	1.38	1.53
83	A5	1469	C	O4 ² -C1'	13.24	1.58	1.41
36	B2	1824	C	C2 ² -C1'	-13.24	1.38	1.53
86	A8	3	C	C2 ² -C1'	-13.24	1.38	1.53
83	A5	3675	A	O4 ² -C1'	13.24	1.58	1.41
83	A5	1324	C	O4 ² -C1'	13.23	1.58	1.41
36	B2	637	U	C2 ² -C1'	-13.23	1.38	1.53
36	B2	1207	G	C2 ² -C1'	-13.23	1.38	1.53
36	B2	1417	G	C2 ² -C1'	-13.23	1.38	1.53
36	B2	1945	A	O4 ² -C1'	13.23	1.58	1.41
83	A5	3593	A	O4 ² -C1'	-13.22	1.24	1.41
36	B2	1298	C	O4 ² -C1'	13.21	1.58	1.41
83	A5	1111	C	C2 ² -C1'	-13.21	1.38	1.53
83	A5	463	C	C2 ² -C1'	-13.21	1.38	1.53
83	A5	1138	C	C2 ² -C1'	-13.21	1.38	1.53
83	A5	3263	C	O4 ² -C1'	13.21	1.58	1.41
36	B2	635	C	O4 ² -C1'	13.20	1.58	1.41
36	B2	340	A	C2 ² -C1'	-13.20	1.38	1.53
83	A5	1126	A	C2 ² -C1'	-13.20	1.38	1.53
36	B2	315	C	C2 ² -C1'	-13.19	1.38	1.53
83	A5	1774	C	O4 ² -C1'	13.19	1.58	1.41
83	A5	527	U	O4 ² -C1'	13.19	1.58	1.41
83	A5	1303	C	O4 ² -C1'	13.19	1.58	1.41
36	B2	419	C	O4 ² -C1'	13.18	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1062	C	C2'-C1'	-13.18	1.38	1.53
83	A5	3626	A	C2'-C1'	-13.18	1.38	1.53
83	A5	641	A	O4'-C1'	13.17	1.58	1.41
83	A5	1876	G	C2'-C1'	-13.17	1.38	1.53
83	A5	1159	C	C2'-C1'	-13.17	1.38	1.53
83	A5	926	U	C2'-C1'	-13.16	1.38	1.53
83	A5	2526	A	C2'-C1'	-13.15	1.38	1.53
36	B2	1304	G	C2'-C1'	-13.15	1.38	1.53
83	A5	1984	U	C2'-C1'	-13.15	1.38	1.53
36	B2	595	C	O4'-C1'	13.14	1.58	1.41
83	A5	3754	C	O4'-C1'	13.14	1.58	1.41
83	A5	1279	C	O4'-C1'	13.13	1.58	1.41
83	A5	2675	U	O4'-C1'	13.13	1.58	1.41
83	A5	1886	C	C2'-C1'	-13.11	1.39	1.53
36	B2	455	C	O4'-C1'	13.10	1.58	1.41
36	B2	1089	G	O4'-C1'	13.09	1.58	1.41
83	A5	1893	C	O4'-C1'	13.09	1.58	1.41
83	A5	458	A	O4'-C1'	13.09	1.58	1.41
36	B2	1404	C	C2'-C1'	-13.09	1.39	1.53
83	A5	2131	C	C2'-C1'	-13.08	1.39	1.53
83	A5	2884	C	O4'-C1'	13.08	1.58	1.41
83	A5	1303	C	C2'-C1'	-13.08	1.39	1.53
36	B2	956	C	C2'-C1'	-13.07	1.39	1.53
36	B2	137	C	O4'-C1'	13.05	1.58	1.41
36	B2	838	A	O4'-C1'	13.04	1.58	1.41
36	B2	1766	G	O4'-C1'	13.04	1.58	1.41
37	BC	22	C	O4'-C1'	13.04	1.58	1.41
85	A7	117	G	C2'-C1'	-13.04	1.39	1.53
83	A5	1894	G	C2'-C1'	-13.03	1.39	1.53
36	B2	991	G	C2'-C1'	-13.03	1.39	1.53
36	B2	435	G	C2'-C1'	-13.03	1.39	1.53
36	B2	1419	C	O4'-C1'	13.03	1.58	1.41
36	B2	1678	G	O4'-C1'	-13.03	1.24	1.41
83	A5	2072	C	O4'-C1'	13.03	1.58	1.41
83	A5	3013	C	O4'-C1'	13.03	1.58	1.41
83	A5	1502	A	O4'-C1'	13.01	1.58	1.41
83	A5	3445	C	O4'-C1'	13.00	1.58	1.41
36	B2	1756	C	O4'-C1'	13.00	1.58	1.41
83	A5	1487	C	O4'-C1'	12.99	1.58	1.41
83	A5	3154	C	O4'-C1'	12.99	1.58	1.41
83	A5	3806	C	O4'-C1'	12.99	1.58	1.41
36	B2	1098	C	O4'-C1'	12.98	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2716	C	C2'-C1'	-12.97	1.39	1.53
83	A5	3381	C	O4'-C1'	12.97	1.58	1.41
83	A5	206	C	C2'-C1'	-12.97	1.39	1.53
83	A5	95	G	C2'-C1'	-12.97	1.39	1.53
83	A5	3693	G	C2'-C1'	-12.97	1.39	1.53
83	A5	1716	G	C2'-C1'	-12.96	1.39	1.53
86	A8	99	U	C2'-C1'	-12.96	1.39	1.53
83	A5	2547	C	O4'-C1'	12.94	1.58	1.41
86	A8	100	G	C2'-C1'	-12.94	1.39	1.53
83	A5	2662	C	O4'-C1'	12.94	1.58	1.41
83	A5	2180	A	O4'-C1'	12.92	1.58	1.41
83	A5	400	U	O4'-C1'	12.91	1.58	1.41
83	A5	3292	C	O4'-C1'	12.91	1.58	1.41
83	A5	1293	A	C2'-C1'	12.90	1.67	1.53
86	A8	5	C	O4'-C1'	12.90	1.58	1.41
36	B2	218	A	O4'-C1'	12.89	1.58	1.41
83	A5	3784	C	O4'-C1'	12.89	1.58	1.41
36	B2	164	U	C2'-C1'	-12.89	1.39	1.53
36	B2	1969	G	C2'-C1'	-12.88	1.39	1.53
83	A5	2142	A	O4'-C1'	12.88	1.58	1.41
83	A5	1081	C	C2'-C1'	-12.87	1.39	1.53
83	A5	2106	C	O4'-C1'	12.87	1.58	1.41
83	A5	1541	A	C2'-C1'	-12.87	1.39	1.53
83	A5	2220	C	O4'-C1'	12.87	1.58	1.41
83	A5	3295	U	O4'-C1'	12.87	1.58	1.41
85	A7	44	C	O4'-C1'	12.86	1.58	1.41
83	A5	784	G	C2'-C1'	-12.86	1.39	1.53
83	A5	2496	A	C2'-C1'	-12.85	1.39	1.53
83	A5	97	C	O4'-C1'	12.84	1.58	1.41
83	A5	3473	C	O4'-C1'	12.84	1.58	1.41
83	A5	2857	C	O4'-C1'	12.84	1.58	1.41
83	A5	3931	C	O4'-C1'	12.84	1.58	1.41
83	A5	3228	A	O4'-C1'	12.83	1.58	1.41
83	A5	1568	A	C2'-C1'	-12.83	1.39	1.53
36	B2	559	G	C2'-C1'	-12.83	1.39	1.53
83	A5	549	A	O4'-C1'	12.82	1.58	1.41
83	A5	3430	G	C2'-C1'	-12.82	1.39	1.53
36	B2	1651	C	C2'-C1'	-12.81	1.39	1.53
83	A5	3721	C	O4'-C1'	12.81	1.58	1.41
83	A5	693	G	C2'-C1'	-12.81	1.39	1.53
83	A5	161	G	O4'-C1'	12.81	1.58	1.41
83	A5	349	C	O4'-C1'	12.81	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1416	A	O4 ² -C1'	12.80	1.58	1.41
83	A5	1349	A	C2 ² -C1'	-12.80	1.39	1.53
36	B2	264	C	C2 ² -C1'	-12.80	1.39	1.53
83	A5	2631	G	C2 ² -C1'	-12.79	1.39	1.53
83	A5	1707	A	C2 ² -C1'	-12.79	1.39	1.53
83	A5	3532	G	C2 ² -C1'	-12.79	1.39	1.53
36	B2	1357	G	C2 ² -C1'	-12.79	1.39	1.53
85	A7	57	C	C2 ² -C1'	-12.78	1.39	1.53
83	A5	1547	A	O4 ² -C1'	12.77	1.58	1.41
36	B2	454	C	O4 ² -C1'	12.77	1.58	1.41
83	A5	2601	A	O4 ² -C1'	12.77	1.58	1.41
83	A5	1657	G	O4 ² -C1'	12.76	1.58	1.41
83	A5	3131	C	O4 ² -C1'	12.76	1.58	1.41
83	A5	2235	G	O4 ² -C1'	12.75	1.58	1.41
83	A5	1634	A	C2 ² -C1'	-12.75	1.39	1.53
83	A5	3570	C	O4 ² -C1'	12.75	1.58	1.41
83	A5	388	U	C2 ² -C1'	-12.74	1.39	1.53
83	A5	1052	U	C2 ² -C1'	-12.74	1.39	1.53
83	A5	965	C	O4 ² -C1'	12.73	1.58	1.41
83	A5	2166	U	O4 ² -C1'	12.73	1.58	1.41
36	B2	303	C	O4 ² -C1'	12.72	1.58	1.41
83	A5	2132	A	C2 ² -C1'	-12.72	1.39	1.53
36	B2	1402	U	O4 ² -C1'	12.72	1.58	1.41
36	B2	1079	A	O4 ² -C1'	-12.72	1.25	1.41
83	A5	856	A	O4 ² -C1'	12.70	1.58	1.41
83	A5	1062	C	O4 ² -C1'	12.70	1.58	1.41
36	B2	883	C	O4 ² -C1'	12.69	1.58	1.41
83	A5	2582	C	O4 ² -C1'	12.68	1.58	1.41
83	A5	1892	C	O4 ² -C1'	12.68	1.58	1.41
83	A5	2101	C	O4 ² -C1'	12.66	1.58	1.41
83	A5	717	A	C2 ² -C1'	-12.66	1.39	1.53
36	B2	253	A	C2 ² -C1'	-12.65	1.39	1.53
36	B2	1746	A	C2 ² -C1'	-12.65	1.39	1.53
83	A5	446	C	O4 ² -C1'	12.65	1.58	1.41
83	A5	35	C	O4 ² -C1'	12.65	1.58	1.41
83	A5	2798	C	O4 ² -C1'	12.65	1.58	1.41
83	A5	874	G	O4 ² -C1'	12.64	1.58	1.41
83	A5	3574	A	C2 ² -C1'	-12.64	1.39	1.53
83	A5	3362	G	O4 ² -C1'	12.64	1.58	1.41
83	A5	2105	C	O4 ² -C1'	12.64	1.58	1.41
83	A5	2747	G	C2 ² -C1'	-12.63	1.39	1.53
83	A5	255	C	O4 ² -C1'	12.63	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1724	A	C2'-C1'	-12.62	1.39	1.53
36	B2	1807	C	O4'-C1'	12.61	1.58	1.41
83	A5	3911	G	C2'-C1'	-12.61	1.39	1.53
36	B2	1020	U	C2'-C1'	-12.60	1.39	1.53
36	B2	120	U	C2'-C1'	-12.60	1.39	1.53
83	A5	1678	C	C2'-C1'	-12.60	1.39	1.53
83	A5	2009	A	C2'-C1'	-12.60	1.39	1.53
83	A5	3713	C	C2'-C1'	12.60	1.67	1.53
83	A5	1204	C	C2'-C1'	-12.59	1.39	1.53
85	A7	2	C	O4'-C1'	12.59	1.58	1.41
83	A5	271	A	C2'-C1'	-12.59	1.39	1.53
83	A5	824	G	C2'-C1'	-12.59	1.39	1.53
85	A7	107	C	O4'-C1'	12.58	1.58	1.41
36	B2	1168	C	O4'-C1'	12.58	1.58	1.41
36	B2	1732	G	C2'-C1'	-12.57	1.39	1.53
36	B2	1988	G	O4'-C1'	12.57	1.57	1.41
83	A5	1285	C	O4'-C1'	12.57	1.57	1.41
83	A5	2159	C	C2'-C1'	-12.57	1.39	1.53
83	A5	2802	A	O4'-C1'	12.57	1.57	1.41
83	A5	2201	U	O4'-C1'	12.56	1.57	1.41
36	B2	591	C	O4'-C1'	12.56	1.57	1.41
36	B2	247	G	C2'-C1'	-12.56	1.39	1.53
83	A5	2887	U	O4'-C1'	12.56	1.57	1.41
36	B2	1940	G	C2'-C1'	-12.56	1.39	1.53
83	A5	1892	C	C2'-C1'	-12.55	1.39	1.53
83	A5	3500	A	C2'-C1'	-12.55	1.39	1.53
83	A5	707	C	O4'-C1'	12.54	1.57	1.41
36	B2	188	C	O4'-C1'	12.53	1.57	1.41
36	B2	1924	C	C2'-C1'	-12.53	1.39	1.53
83	A5	375	C	C2'-C1'	-12.53	1.39	1.53
37	BC	13	C	O4'-C1'	12.53	1.57	1.41
83	A5	2070	G	C2'-C1'	-12.53	1.39	1.53
83	A5	3915	U	O4'-C1'	12.52	1.57	1.41
36	B2	1339	C	C2'-C1'	-12.52	1.39	1.53
83	A5	691	C	O4'-C1'	12.52	1.57	1.41
83	A5	3919	G	C2'-C1'	-12.52	1.39	1.53
83	A5	1369	C	O4'-C1'	12.51	1.57	1.41
36	B2	429	C	O4'-C1'	12.51	1.57	1.41
86	A8	120	G	C2'-C1'	-12.51	1.39	1.53
83	A5	1599	C	O4'-C1'	12.50	1.57	1.41
37	BC	22	C	C2'-C1'	-12.49	1.39	1.53
83	A5	390	A	O4'-C1'	12.49	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	862	C	O4 ² -C1'	12.49	1.57	1.41
83	A5	3457	C	O4 ² -C1'	12.49	1.57	1.41
83	A5	3388	G	C2 ² -C1'	-12.49	1.39	1.53
83	A5	3345	A	C2 ² -C1'	-12.47	1.39	1.53
83	A5	2497	C	C2 ² -C1'	-12.46	1.39	1.53
83	A5	2884	C	C2 ² -C1'	-12.46	1.39	1.53
83	A5	32	C	O4 ² -C1'	12.45	1.57	1.41
83	A5	430	G	C2 ² -C1'	-12.45	1.39	1.53
83	A5	2992	A	O4 ² -C1'	12.45	1.57	1.41
36	B2	13	C	O4 ² -C1'	12.44	1.57	1.41
36	B2	453	C	C2 ² -C1'	-12.44	1.39	1.53
36	B2	1713	C	O4 ² -C1'	12.44	1.57	1.41
83	A5	1325	C	O4 ² -C1'	12.43	1.57	1.41
83	A5	327	C	C2 ² -C1'	-12.43	1.39	1.53
83	A5	778	C	O4 ² -C1'	12.43	1.57	1.41
36	B2	1670	G	C2 ² -C1'	-12.41	1.39	1.53
83	A5	2055	G	C2 ² -C1'	-12.41	1.39	1.53
83	A5	349	C	C2 ² -C1'	-12.41	1.39	1.53
36	B2	567	C	O4 ² -C1'	12.40	1.57	1.41
83	A5	217	G	C2 ² -C1'	-12.40	1.39	1.53
83	A5	661	G	C2 ² -C1'	-12.40	1.39	1.53
83	A5	652	G	C2 ² -C1'	-12.40	1.39	1.53
83	A5	2160	C	C2 ² -C1'	-12.40	1.39	1.53
83	A5	2257	C	C2 ² -C1'	-12.40	1.39	1.53
83	A5	260	A	O4 ² -C1'	12.39	1.57	1.41
85	A7	43	U	O4 ² -C1'	12.39	1.57	1.41
83	A5	3585	A	O4 ² -C1'	12.37	1.57	1.41
83	A5	1138	C	O4 ² -C1'	12.36	1.57	1.41
83	A5	2896	U	C2 ² -C1'	-12.36	1.39	1.53
36	B2	1059	G	C2 ² -C1'	-12.35	1.39	1.53
83	A5	1233	G	C2 ² -C1'	-12.35	1.39	1.53
83	A5	626	A	O4 ² -C1'	12.34	1.57	1.41
36	B2	594	G	C2 ² -C1'	-12.34	1.39	1.53
83	A5	2928	G	C2 ² -C1'	-12.34	1.39	1.53
36	B2	1921	G	C2 ² -C1'	-12.33	1.39	1.53
83	A5	1782	C	O4 ² -C1'	12.32	1.57	1.41
36	B2	829	C	O4 ² -C1'	12.32	1.57	1.41
83	A5	506	A	C2 ² -C1'	-12.32	1.39	1.53
83	A5	3813	C	O4 ² -C1'	12.32	1.57	1.41
83	A5	1596	A	O4 ² -C1'	12.31	1.57	1.41
83	A5	3669	U	O4 ² -C1'	12.31	1.57	1.41
36	B2	603	G	C2 ² -C1'	-12.31	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	770	C	O4 ² -C1'	12.30	1.57	1.41
36	B2	1647	G	C2 ² -C1'	-12.29	1.39	1.53
83	A5	1051	C	O4 ² -C1'	12.29	1.57	1.41
83	A5	1104	A	C2 ² -C1'	-12.29	1.39	1.53
83	A5	3187	C	O4 ² -C1'	12.29	1.57	1.41
83	A5	428	C	O4 ² -C1'	12.29	1.57	1.41
83	A5	1280	C	O4 ² -C1'	12.28	1.57	1.41
83	A5	122	C	O4 ² -C1'	12.28	1.57	1.41
83	A5	1728	G	C2 ² -C1'	-12.28	1.39	1.53
83	A5	3351	A	O4 ² -C1'	12.28	1.57	1.41
36	B2	31	C	O4 ² -C1'	12.27	1.57	1.41
36	B2	1817	C	O4 ² -C1'	12.27	1.57	1.41
36	B2	1055	U	O4 ² -C1'	12.26	1.57	1.41
37	BC	60	C	O4 ² -C1'	12.26	1.57	1.41
83	A5	1087	G	C2 ² -C1'	-12.26	1.39	1.53
36	B2	1434	U	O4 ² -C1'	12.26	1.57	1.41
36	B2	6	G	C2 ² -C1'	-12.25	1.39	1.53
36	B2	1071	G	C2 ² -C1'	-12.25	1.39	1.53
83	A5	210	C	O4 ² -C1'	12.24	1.57	1.41
36	B2	213	G	O4 ² -C1'	12.23	1.57	1.41
36	B2	544	C	O4 ² -C1'	12.23	1.57	1.41
83	A5	49	A	C2 ² -C1'	-12.23	1.40	1.53
83	A5	459	U	C2 ² -C1'	12.21	1.66	1.53
36	B2	494	C	O4 ² -C1'	12.21	1.57	1.41
83	A5	617	U	O4 ² -C1'	12.21	1.57	1.41
83	A5	996	C	O4 ² -C1'	12.21	1.57	1.41
83	A5	3191	G	C2 ² -C1'	-12.21	1.40	1.53
83	A5	2686	C	C2 ² -C1'	-12.21	1.40	1.53
86	A8	91	C	O4 ² -C1'	12.21	1.57	1.41
83	A5	563	A	C2 ² -C1'	-12.20	1.40	1.53
83	A5	3173	U	C2 ² -C1'	-12.20	1.40	1.53
83	A5	2645	C	O4 ² -C1'	12.19	1.57	1.41
36	B2	558	A	C2 ² -C1'	-12.19	1.40	1.53
36	B2	1748	A	C2 ² -C1'	-12.18	1.40	1.53
83	A5	1670	G	O4 ² -C1'	12.17	1.57	1.41
36	B2	1836	C	C2 ² -C1'	-12.17	1.40	1.53
83	A5	1321	G	C2 ² -C1'	-12.17	1.40	1.53
83	A5	1793	C	C2 ² -C1'	-12.17	1.40	1.53
83	A5	1447	C	C2 ² -C1'	-12.16	1.40	1.53
83	A5	3722	C	O4 ² -C1'	12.16	1.57	1.41
83	A5	3353	C	O4 ² -C1'	12.16	1.57	1.41
83	A5	1397	A	C2 ² -C1'	-12.16	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	48	C	O4 ² -C1'	12.15	1.57	1.41
83	A5	3616	G	C2 ² -C1'	-12.15	1.40	1.53
36	B2	75	U	C2 ² -C1'	12.14	1.66	1.53
83	A5	3938	C	O4 ² -C1'	12.14	1.57	1.41
83	A5	1773	U	O4 ² -C1'	12.14	1.57	1.41
36	B2	1086	U	C2 ² -C1'	-12.14	1.40	1.53
83	A5	11	C	O4 ² -C1'	12.14	1.57	1.41
83	A5	3473	C	C2 ² -C1'	-12.14	1.40	1.53
36	B2	865	A	O4 ² -C1'	12.13	1.57	1.41
83	A5	2172	C	C2 ² -C1'	-12.13	1.40	1.53
83	A5	992	U	O4 ² -C1'	12.13	1.57	1.41
83	A5	2525	C	O4 ² -C1'	12.12	1.57	1.41
83	A5	113	A	C2 ² -C1'	-12.12	1.40	1.53
36	B2	1610	A	O4 ² -C1'	12.11	1.57	1.41
83	A5	329	C	O4 ² -C1'	12.11	1.57	1.41
36	B2	327	G	C2 ² -C1'	-12.11	1.40	1.53
83	A5	3198	C	C2 ² -C1'	-12.11	1.40	1.53
86	A8	121	C	O4 ² -C1'	12.11	1.57	1.41
83	A5	568	A	C2 ² -C1'	-12.10	1.40	1.53
83	A5	3680	A	O4 ² -C1'	12.10	1.57	1.41
83	A5	3953	C	O4 ² -C1'	12.10	1.57	1.41
83	A5	2626	C	C2 ² -C1'	-12.08	1.40	1.53
83	A5	3666	C	O4 ² -C1'	12.08	1.57	1.41
36	B2	590	U	O4 ² -C1'	12.08	1.57	1.41
83	A5	3267	C	O4 ² -C1'	12.08	1.57	1.41
86	A8	27	C	C2 ² -C1'	-12.08	1.40	1.53
83	A5	1556	C	O4 ² -C1'	12.07	1.57	1.41
36	B2	1188	G	O4 ² -C1'	12.07	1.57	1.41
83	A5	439	U	C2 ² -C1'	-12.07	1.40	1.53
83	A5	3504	G	C2 ² -C1'	-12.07	1.40	1.53
36	B2	449	C	C2 ² -C1'	-12.06	1.40	1.53
36	B2	1404	C	O4 ² -C1'	12.06	1.57	1.41
83	A5	2473	C	O4 ² -C1'	12.06	1.57	1.41
36	B2	1037	C	O4 ² -C1'	12.06	1.57	1.41
83	A5	1020	A	O4 ² -C1'	12.05	1.57	1.41
83	A5	1250	C	O4 ² -C1'	12.05	1.57	1.41
83	A5	1800	U	O4 ² -C1'	12.05	1.57	1.41
83	A5	2739	A	C2 ² -C1'	-12.04	1.40	1.53
83	A5	2837	A	C2 ² -C1'	-12.04	1.40	1.53
83	A5	1232	G	C2 ² -C1'	-12.03	1.40	1.53
83	A5	3167	A	C2 ² -C1'	-12.03	1.40	1.53
36	B2	1958	A	C2 ² -C1'	-12.03	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A8	102	A	C2'-C1'	-12.03	1.40	1.53
83	A5	436	A	O4'-C1'	12.02	1.57	1.41
36	B2	902	A	O4'-C1'	12.02	1.57	1.41
36	B2	1262	C	C2'-C1'	-12.02	1.40	1.53
83	A5	1793	C	O4'-C1'	12.02	1.57	1.41
83	A5	2122	G	O4'-C1'	12.02	1.57	1.41
86	A8	10	C	O4'-C1'	12.02	1.57	1.41
36	B2	34	G	C2'-C1'	-12.02	1.40	1.53
83	A5	2856	C	O4'-C1'	12.02	1.57	1.41
37	BC	33	C	O4'-C1'	12.01	1.57	1.41
83	A5	2507	C	O4'-C1'	12.00	1.57	1.41
83	A5	1413	C	O4'-C1'	11.98	1.57	1.41
84	A9	29	U	C2'-C1'	-11.98	1.40	1.53
36	B2	251	G	O4'-C1'	11.97	1.57	1.41
83	A5	3567	A	O4'-C1'	11.97	1.57	1.41
36	B2	49	C	O4'-C1'	11.97	1.57	1.41
37	BC	60	C	C2'-C1'	-11.97	1.40	1.53
83	A5	1432	C	O4'-C1'	11.97	1.57	1.41
83	A5	2201	U	C2'-C1'	-11.97	1.40	1.53
36	B2	1659	C	O4'-C1'	11.96	1.57	1.41
83	A5	2797	A	O4'-C1'	11.96	1.57	1.41
83	A5	785	A	O4'-C1'	11.95	1.57	1.41
36	B2	920	U	C2'-C1'	-11.95	1.40	1.53
83	A5	3168	A	C2'-C1'	-11.95	1.40	1.53
36	B2	272	U	C2'-C1'	-11.94	1.40	1.53
83	A5	1100	G	C2'-C1'	-11.94	1.40	1.53
83	A5	3676	C	O4'-C1'	-11.94	1.26	1.41
86	A8	121	C	C2'-C1'	-11.94	1.40	1.53
36	B2	1115	C	O4'-C1'	11.94	1.57	1.41
86	A8	27	C	O4'-C1'	11.94	1.57	1.41
83	A5	1095	G	O4'-C1'	11.93	1.57	1.41
83	A5	179	C	O4'-C1'	11.92	1.57	1.41
36	B2	1374	A	C2'-C1'	-11.91	1.40	1.53
83	A5	53	A	C2'-C1'	-11.91	1.40	1.53
86	A8	103	C	O4'-C1'	11.91	1.57	1.41
83	A5	2596	G	C2'-C1'	-11.91	1.40	1.53
83	A5	102	G	C2'-C1'	-11.91	1.40	1.53
83	A5	2775	A	C2'-C1'	-11.91	1.40	1.53
83	A5	717	A	O4'-C1'	11.91	1.57	1.41
36	B2	1824	C	O4'-C1'	11.90	1.57	1.41
83	A5	3559	A	O4'-C1'	11.90	1.57	1.41
86	A8	105	C	C2'-C1'	-11.90	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1204	A	C2'-C1'	-11.90	1.40	1.53
36	B2	1869	C	C2'-C1'	-11.90	1.40	1.53
36	B2	867	G	O4'-C1'	11.90	1.57	1.41
83	A5	3282	C	O4'-C1'	11.90	1.57	1.41
36	B2	1526	G	C2'-C1'	-11.89	1.40	1.53
83	A5	2213	G	C2'-C1'	-11.89	1.40	1.53
36	B2	1036	C	C2'-C1'	-11.89	1.40	1.53
86	A8	94	C	C2'-C1'	-11.89	1.40	1.53
83	A5	445	C	C2'-C1'	-11.88	1.40	1.53
36	B2	593	A	C2'-C1'	-11.88	1.40	1.53
36	B2	193	U	O4'-C1'	11.88	1.57	1.41
83	A5	3156	G	C2'-C1'	-11.88	1.40	1.53
83	A5	50	U	C2'-C1'	-11.88	1.40	1.53
83	A5	358	C	O4'-C1'	11.87	1.57	1.41
36	B2	1359	U	O4'-C1'	11.86	1.57	1.41
85	A7	98	G	C2'-C1'	-11.86	1.40	1.53
36	B2	1793	A	O4'-C1'	11.86	1.57	1.41
36	B2	1773	C	O4'-C1'	11.85	1.57	1.41
83	A5	16	A	C2'-C1'	-11.85	1.40	1.53
83	A5	35	C	C2'-C1'	-11.84	1.40	1.53
36	B2	890	U	C2'-C1'	-11.84	1.40	1.53
37	BC	49	G	C2'-C1'	-11.83	1.40	1.53
36	B2	1413	A	O4'-C1'	11.83	1.57	1.41
83	A5	3454	G	C2'-C1'	-11.83	1.40	1.53
36	B2	440	U	C2'-C1'	-11.82	1.40	1.53
36	B2	916	U	O4'-C1'	11.82	1.57	1.41
83	A5	790	U	C2'-C1'	-11.82	1.40	1.53
83	A5	2198	G	C2'-C1'	-11.82	1.40	1.53
36	B2	1251	A	O4'-C1'	11.82	1.57	1.41
83	A5	1351	C	O4'-C1'	11.82	1.57	1.41
83	A5	2168	G	C2'-C1'	-11.81	1.40	1.53
83	A5	2233	C	O4'-C1'	11.81	1.57	1.41
36	B2	1250	C	O4'-C1'	11.81	1.57	1.41
83	A5	1466	A	C2'-C1'	-11.80	1.40	1.53
83	A5	1986	G	C2'-C1'	-11.80	1.40	1.53
83	A5	2234	C	O4'-C1'	11.80	1.56	1.41
83	A5	3260	G	C2'-C1'	-11.80	1.40	1.53
83	A5	3518	A	O4'-C1'	11.80	1.56	1.41
36	B2	1631	C	O4'-C1'	11.79	1.56	1.41
36	B2	1761	A	O4'-C1'	11.79	1.56	1.41
36	B2	1952	G	C2'-C1'	-11.79	1.40	1.53
36	B2	1544	G	C2'-C1'	-11.77	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1719	C	O4 ² -C1'	11.77	1.56	1.41
83	A5	2693	G	C2 ² -C1'	-11.77	1.40	1.53
83	A5	3216	C	O4 ² -C1'	11.77	1.56	1.41
36	B2	30	G	C2 ² -C1'	-11.76	1.40	1.53
83	A5	428	C	C2 ² -C1'	-11.76	1.40	1.53
36	B2	4	C	O4 ² -C1'	11.75	1.56	1.41
83	A5	2466	C	O4 ² -C1'	11.75	1.56	1.41
36	B2	1677	C	C2 ² -C1'	-11.75	1.40	1.53
36	B2	1771	U	C2 ² -C1'	-11.75	1.40	1.53
37	BC	73	C	O4 ² -C1'	11.75	1.56	1.41
83	A5	1512	C	C2 ² -C1'	-11.75	1.40	1.53
83	A5	3769	C	O4 ² -C1'	11.74	1.56	1.41
36	B2	1224	U	C2 ² -C1'	-11.74	1.40	1.53
36	B2	1355	G	C2 ² -C1'	-11.74	1.40	1.53
83	A5	1959	A	C2 ² -C1'	-11.74	1.40	1.53
83	A5	445	C	O4 ² -C1'	11.74	1.56	1.41
83	A5	1343	A	C2 ² -C1'	-11.74	1.40	1.53
83	A5	3644	C	O4 ² -C1'	11.74	1.56	1.41
36	B2	1314	G	O4 ² -C1'	11.73	1.56	1.41
83	A5	228	C	O4 ² -C1'	11.73	1.56	1.41
36	B2	1177	C	O4 ² -C1'	11.73	1.56	1.41
83	A5	2530	C	O4 ² -C1'	11.73	1.56	1.41
83	A5	3119	U	C2 ² -C1'	-11.73	1.40	1.53
83	A5	1266	A	O4 ² -C1'	11.72	1.56	1.41
83	A5	1898	C	O4 ² -C1'	11.72	1.56	1.41
83	A5	1692	G	C2 ² -C1'	-11.72	1.40	1.53
83	A5	1646	U	C2 ² -C1'	-11.72	1.40	1.53
83	A5	358	C	C2 ² -C1'	-11.71	1.40	1.53
83	A5	1634	A	O4 ² -C1'	11.71	1.56	1.41
37	BC	74	C	O4 ² -C1'	11.71	1.56	1.41
83	A5	3758	G	C2 ² -C1'	11.71	1.66	1.53
83	A5	3652	C	O4 ² -C1'	11.70	1.56	1.41
85	A7	6	C	O4 ² -C1'	11.70	1.56	1.41
83	A5	1357	C	O4 ² -C1'	11.69	1.56	1.41
83	A5	793	U	C2 ² -C1'	-11.69	1.40	1.53
83	A5	3768	C	O4 ² -C1'	11.69	1.56	1.41
83	A5	1131	C	C2 ² -C1'	-11.69	1.40	1.53
83	A5	185	U	O4 ² -C1'	11.68	1.56	1.41
83	A5	3621	A	O4 ² -C1'	11.68	1.56	1.41
83	A5	3710	U	C2 ² -C1'	11.68	1.66	1.53
83	A5	499	A	O4 ² -C1'	11.67	1.56	1.41
86	A8	93	A	C2 ² -C1'	-11.67	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1358	G	C2'-C1'	-11.66	1.40	1.53
36	B2	980	A	O4'-C1'	11.66	1.56	1.41
83	A5	2805	C	O4'-C1'	11.66	1.56	1.41
83	A5	2172	C	O4'-C1'	11.65	1.56	1.41
86	A8	30	G	C2'-C1'	-11.65	1.40	1.53
83	A5	1340	G	C2'-C1'	-11.65	1.40	1.53
36	B2	636	G	C2'-C1'	-11.64	1.40	1.53
83	A5	1960	C	O4'-C1'	11.64	1.56	1.41
36	B2	1641	U	C2'-C1'	-11.63	1.40	1.53
83	A5	547	U	O4'-C1'	11.62	1.56	1.41
86	A8	73	U	O4'-C1'	11.62	1.56	1.41
36	B2	1844	C	O4'-C1'	11.62	1.56	1.41
83	A5	1175	C	O4'-C1'	11.62	1.56	1.41
83	A5	3272	A	O4'-C1'	11.62	1.56	1.41
83	A5	1606	G	O4'-C1'	11.61	1.56	1.41
36	B2	933	C	C2'-C1'	-11.61	1.40	1.53
83	A5	400	U	C2'-C1'	-11.60	1.40	1.53
83	A5	964	C	O4'-C1'	11.60	1.56	1.41
36	B2	715	U	O4'-C1'	11.60	1.56	1.41
36	B2	179	A	C2'-C1'	-11.59	1.40	1.53
83	A5	3014	G	O4'-C1'	11.58	1.56	1.41
83	A5	3016	G	C2'-C1'	-11.58	1.40	1.53
83	A5	1040	C	O4'-C1'	11.58	1.56	1.41
83	A5	2728	C	C2'-C1'	-11.57	1.40	1.53
83	A5	3161	U	C2'-C1'	-11.57	1.40	1.53
36	B2	1524	A	C2'-C1'	-11.57	1.40	1.53
83	A5	1543	C	C2'-C1'	-11.57	1.40	1.53
83	A5	1898	C	C2'-C1'	-11.57	1.40	1.53
36	B2	1297	C	O4'-C1'	11.56	1.56	1.41
83	A5	3970	A	C2'-C1'	11.56	1.66	1.53
83	A5	3691	A	C2'-C1'	-11.56	1.40	1.53
83	A5	1034	U	C2'-C1'	-11.56	1.40	1.53
83	A5	503	A	O4'-C1'	11.55	1.56	1.41
83	A5	2929	U	O4'-C1'	11.55	1.56	1.41
83	A5	263	A	O4'-C1'	11.54	1.56	1.41
83	A5	3193	C	O4'-C1'	-11.54	1.26	1.41
83	A5	3263	C	C2'-C1'	-11.54	1.40	1.53
36	B2	87	C	O4'-C1'	11.54	1.56	1.41
83	A5	985	G	C2'-C1'	11.54	1.66	1.53
83	A5	3550	C	O4'-C1'	11.54	1.56	1.41
86	A8	28	A	C2'-C1'	-11.53	1.40	1.53
37	BC	70	C	O4'-C1'	11.52	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1350	A	C2'-C1'	-11.52	1.40	1.53
36	B2	1090	A	C2'-C1'	-11.51	1.40	1.53
36	B2	1582	C	O4'-C1'	-11.51	1.26	1.41
36	B2	67	A	C2'-C1'	-11.51	1.40	1.53
36	B2	880	G	O4'-C1'	-11.50	1.26	1.41
36	B2	906	C	O4'-C1'	11.49	1.56	1.41
83	A5	786	C	O4'-C1'	11.49	1.56	1.41
83	A5	1003	C	O4'-C1'	11.49	1.56	1.41
36	B2	1008	G	C2'-C1'	-11.48	1.40	1.53
83	A5	466	U	C2'-C1'	-11.48	1.40	1.53
83	A5	1732	A	C2'-C1'	-11.48	1.40	1.53
83	A5	2925	C	C2'-C1'	-11.48	1.40	1.53
36	B2	1257	G	O4'-C1'	11.47	1.56	1.41
83	A5	1713	U	C2'-C1'	-11.47	1.40	1.53
83	A5	3356	G	O4'-C1'	11.47	1.56	1.41
83	A5	2812	U	O4'-C1'	-11.47	1.26	1.41
83	A5	323	U	O4'-C1'	11.46	1.56	1.41
83	A5	2002	C	O4'-C1'	11.46	1.56	1.41
36	B2	1550	C	O4'-C1'	11.46	1.56	1.41
36	B2	1537	C	C2'-C1'	-11.46	1.40	1.53
83	A5	1555	G	C2'-C1'	-11.46	1.40	1.53
83	A5	2146	G	O4'-C1'	11.45	1.56	1.41
36	B2	975	U	C2'-C1'	-11.45	1.40	1.53
83	A5	531	C	C2'-C1'	-11.45	1.40	1.53
83	A5	2066	G	C2'-C1'	-11.44	1.40	1.53
37	BC	21	G	C2'-C1'	-11.43	1.40	1.53
86	A8	117	C	O4'-C1'	11.43	1.56	1.41
83	A5	2743	C	O4'-C1'	11.43	1.56	1.41
83	A5	1256	C	O4'-C1'	11.42	1.56	1.41
85	A7	46	C	O4'-C1'	11.42	1.56	1.41
85	A7	118	C	O4'-C1'	11.42	1.56	1.41
83	A5	3656	A	C2'-C1'	-11.42	1.40	1.53
83	A5	247	C	O4'-C1'	11.41	1.56	1.41
85	A7	104	C	O4'-C1'	11.41	1.56	1.41
83	A5	937	G	O4'-C1'	11.41	1.56	1.41
36	B2	1222	C	C2'-C1'	-11.40	1.40	1.53
36	B2	1271	A	C2'-C1'	-11.40	1.40	1.53
37	BC	61	C	O4'-C1'	11.40	1.56	1.41
83	A5	3953	C	C2'-C1'	-11.40	1.40	1.53
36	B2	1293	C	C2'-C1'	-11.38	1.40	1.53
83	A5	1001	A	O4'-C1'	11.38	1.56	1.41
83	A5	1973	G	C2'-C1'	-11.38	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1667	A	C2'-C1'	-11.37	1.40	1.53
83	A5	1461	G	C2'-C1'	-11.37	1.40	1.53
83	A5	941	A	O4'-C1'	11.36	1.56	1.41
85	A7	105	C	O4'-C1'	11.36	1.56	1.41
36	B2	577	C	O4'-C1'	11.36	1.56	1.41
83	A5	100	G	C2'-C1'	-11.35	1.40	1.53
36	B2	1364	G	C2'-C1'	-11.34	1.40	1.53
83	A5	551	C	O4'-C1'	11.34	1.56	1.41
83	A5	900	C	O4'-C1'	11.34	1.56	1.41
85	A7	76	U	O4'-C1'	11.34	1.56	1.41
36	B2	331	G	C2'-C1'	-11.34	1.40	1.53
83	A5	959	U	C2'-C1'	-11.33	1.40	1.53
83	A5	2491	C	O4'-C1'	-11.33	1.26	1.41
83	A5	2547	C	C2'-C1'	-11.33	1.40	1.53
36	B2	1913	C	O4'-C1'	11.32	1.56	1.41
83	A5	1424	G	C2'-C1'	-11.32	1.40	1.53
36	B2	1755	A	C2'-C1'	-11.32	1.40	1.53
36	B2	1124	C	O4'-C1'	11.32	1.56	1.41
83	A5	1691	A	C2'-C1'	-11.32	1.40	1.53
36	B2	46	A	O4'-C1'	11.32	1.56	1.41
36	B2	1278	C	O4'-C1'	11.31	1.56	1.41
83	A5	1486	A	O4'-C1'	11.30	1.56	1.41
83	A5	2622	A	O4'-C1'	11.30	1.56	1.41
83	A5	3357	C	C2'-C1'	-11.30	1.41	1.53
36	B2	1985	A	C2'-C1'	-11.29	1.41	1.53
83	A5	3341	C	C2'-C1'	-11.30	1.41	1.53
36	B2	1048	U	C2'-C1'	-11.29	1.41	1.53
36	B2	1460	A	O4'-C1'	11.29	1.56	1.41
83	A5	214	A	O4'-C1'	11.29	1.56	1.41
83	A5	2224	A	O4'-C1'	11.29	1.56	1.41
83	A5	71	A	C2'-C1'	-11.28	1.41	1.53
83	A5	3320	C	C2'-C1'	-11.29	1.41	1.53
36	B2	1440	U	O4'-C1'	11.28	1.56	1.41
83	A5	178	U	O4'-C1'	11.28	1.56	1.41
83	A5	439	U	O4'-C1'	11.28	1.56	1.41
36	B2	613	A	O4'-C1'	11.28	1.56	1.41
83	A5	1291	U	O4'-C1'	11.27	1.56	1.41
83	A5	1542	C	O4'-C1'	11.27	1.56	1.41
83	A5	86	C	C2'-C1'	-11.27	1.41	1.53
83	A5	354	A	C2'-C1'	-11.27	1.41	1.53
83	A5	1655	A	C2'-C1'	-11.26	1.41	1.53
36	B2	657	A	C2'-C1'	-11.25	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2588	G	O4 ² -C1'	11.25	1.56	1.41
83	A5	2685	G	C2 ² -C1'	-11.24	1.41	1.53
36	B2	1186	U	C2 ² -C1'	-11.23	1.41	1.53
83	A5	3607	C	C2 ² -C1'	-11.22	1.41	1.53
36	B2	343	A	O4 ² -C1'	11.21	1.56	1.41
83	A5	1646	U	O4 ² -C1'	11.21	1.56	1.41
36	B2	1677	C	O4 ² -C1'	11.21	1.56	1.41
83	A5	558	C	C2 ² -C1'	-11.21	1.41	1.53
83	A5	1630	G	C2 ² -C1'	-11.21	1.41	1.53
83	A5	49	A	O4 ² -C1'	11.21	1.56	1.41
83	A5	1050	C	O4 ² -C1'	11.20	1.56	1.41
83	A5	2231	A	C2 ² -C1'	-11.20	1.41	1.53
36	B2	883	C	C2 ² -C1'	-11.20	1.41	1.53
83	A5	3182	U	O4 ² -C1'	11.20	1.56	1.41
83	A5	3192	C	O4 ² -C1'	11.20	1.56	1.41
83	A5	2241	U	O4 ² -C1'	11.20	1.56	1.41
83	A5	3270	G	C2 ² -C1'	-11.20	1.41	1.53
36	B2	113	G	O4 ² -C1'	11.19	1.56	1.41
36	B2	1798	C	O4 ² -C1'	11.19	1.56	1.41
36	B2	1283	C	C2 ² -C1'	-11.19	1.41	1.53
37	BC	32	C	O4 ² -C1'	11.19	1.56	1.41
36	B2	486	A	C2 ² -C1'	-11.19	1.41	1.53
83	A5	1251	C	O4 ² -C1'	11.19	1.56	1.41
83	A5	766	G	C2 ² -C1'	-11.19	1.41	1.53
86	A8	44	C	O4 ² -C1'	11.18	1.56	1.41
36	B2	16	G	O4 ² -C1'	11.18	1.56	1.41
83	A5	522	G	O4 ² -C1'	11.18	1.56	1.41
36	B2	547	G	C2 ² -C1'	-11.18	1.41	1.53
83	A5	2626	C	O4 ² -C1'	11.17	1.56	1.41
83	A5	2127	C	O4 ² -C1'	11.17	1.56	1.41
36	B2	1168	C	C2 ² -C1'	-11.17	1.41	1.53
83	A5	116	U	O4 ² -C1'	-11.17	1.27	1.41
83	A5	2153	C	O4 ² -C1'	11.16	1.56	1.41
83	A5	2245	G	C2 ² -C1'	-11.16	1.41	1.53
36	B2	1128	C	O4 ² -C1'	11.16	1.56	1.41
83	A5	589	A	O4 ² -C1'	11.16	1.56	1.41
85	A7	67	G	C2 ² -C1'	-11.16	1.41	1.53
83	A5	2237	A	O4 ² -C1'	11.15	1.56	1.41
36	B2	423	G	C2 ² -C1'	-11.15	1.41	1.53
36	B2	882	G	C2 ² -C1'	-11.15	1.41	1.53
83	A5	1486	A	C2 ² -C1'	-11.15	1.41	1.53
85	A7	106	G	C2 ² -C1'	-11.15	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	17	C	O4 ² -C1'	11.14	1.56	1.41
83	A5	1860	A	C2 ² -C1'	11.14	1.65	1.53
36	B2	1198	G	O4 ² -C1'	11.14	1.56	1.41
83	A5	2913	G	C2 ² -C1'	-11.14	1.41	1.53
83	A5	805	C	O4 ² -C1'	11.14	1.56	1.41
36	B2	646	U	C2 ² -C1'	-11.13	1.41	1.53
83	A5	2740	C	C2 ² -C1'	-11.13	1.41	1.53
83	A5	1409	G	O4 ² -C1'	11.12	1.56	1.41
36	B2	550	C	O4 ² -C1'	-11.12	1.27	1.41
36	B2	1430	U	O4 ² -C1'	11.12	1.56	1.41
83	A5	1084	A	C2 ² -C1'	11.12	1.65	1.53
36	B2	73	A	O4 ² -C1'	-11.12	1.27	1.41
36	B2	527	C	O4 ² -C1'	11.12	1.56	1.41
83	A5	872	A	O4 ² -C1'	-11.12	1.27	1.41
83	A5	2109	G	C2 ² -C1'	-11.11	1.41	1.53
83	A5	741	C	C2 ² -C1'	-11.11	1.41	1.53
83	A5	1335	C	O4 ² -C1'	11.11	1.56	1.41
83	A5	2856	C	C2 ² -C1'	-11.10	1.41	1.53
83	A5	1131	C	O4 ² -C1'	11.10	1.56	1.41
83	A5	3824	C	O4 ² -C1'	11.10	1.56	1.41
83	A5	1049	C	C2 ² -C1'	-11.10	1.41	1.53
36	B2	967	C	O4 ² -C1'	11.10	1.56	1.41
83	A5	2688	U	O4 ² -C1'	11.10	1.56	1.41
83	A5	3217	A	O4 ² -C1'	11.09	1.56	1.41
83	A5	3479	C	O4 ² -C1'	11.09	1.56	1.41
83	A5	1535	U	O4 ² -C1'	11.09	1.56	1.41
36	B2	146	C	C2 ² -C1'	-11.08	1.41	1.53
83	A5	642	A	O4 ² -C1'	11.08	1.56	1.41
83	A5	3365	G	C2 ² -C1'	-11.08	1.41	1.53
83	A5	2654	G	C2 ² -C1'	-11.08	1.41	1.53
83	A5	3788	G	O4 ² -C1'	-11.08	1.27	1.41
86	A8	25	C	O4 ² -C1'	11.08	1.56	1.41
36	B2	1303	C	O4 ² -C1'	11.08	1.56	1.41
83	A5	48	U	O4 ² -C1'	11.08	1.56	1.41
36	B2	990	U	O4 ² -C1'	11.07	1.56	1.41
83	A5	2906	C	O4 ² -C1'	11.07	1.56	1.41
83	A5	1672	A	O4 ² -C1'	11.07	1.56	1.41
83	A5	2992	A	C2 ² -C1'	-11.07	1.41	1.53
83	A5	273	G	O4 ² -C1'	11.07	1.56	1.41
83	A5	3342	C	O4 ² -C1'	11.06	1.56	1.41
83	A5	1958	G	C2 ² -C1'	-11.06	1.41	1.53
83	A5	1288	U	O4 ² -C1'	11.06	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3794	U	C2'-C1'	-11.06	1.41	1.53
83	A5	1015	G	O4'-C1'	11.05	1.56	1.41
36	B2	1864	G	C2'-C1'	-11.04	1.41	1.53
36	B2	1041	G	C2'-C1'	-11.03	1.41	1.53
36	B2	633	U	C2'-C1'	-11.02	1.41	1.53
83	A5	3239	C	O4'-C1'	11.02	1.55	1.41
83	A5	3287	C	O4'-C1'	11.02	1.55	1.41
83	A5	1324	C	C2'-C1'	-11.02	1.41	1.53
36	B2	10	G	C2'-C1'	-11.01	1.41	1.53
36	B2	1971	A	C2'-C1'	-11.01	1.41	1.53
83	A5	2613	C	C2'-C1'	-11.01	1.41	1.53
83	A5	31	C	O4'-C1'	11.01	1.55	1.41
83	A5	2925	C	O4'-C1'	11.01	1.55	1.41
36	B2	1596	C	O4'-C1'	11.00	1.55	1.41
83	A5	2580	C	O4'-C1'	10.99	1.55	1.41
36	B2	252	A	C2'-C1'	-10.99	1.41	1.53
83	A5	2902	C	C2'-C1'	-10.99	1.41	1.53
36	B2	111	A	C2'-C1'	-10.98	1.41	1.53
36	B2	975	U	O4'-C1'	10.98	1.55	1.41
85	A7	19	C	C2'-C1'	-10.98	1.41	1.53
83	A5	2543	C	O4'-C1'	10.97	1.55	1.41
36	B2	1850	G	O4'-C1'	10.97	1.55	1.41
83	A5	1880	A	C2'-C1'	-10.97	1.41	1.53
83	A5	1023	C	O4'-C1'	10.96	1.55	1.41
36	B2	1420	U	O4'-C1'	10.96	1.55	1.41
85	A7	2	C	C2'-C1'	-10.96	1.41	1.53
83	A5	1657	G	C2'-C1'	-10.96	1.41	1.53
83	A5	3440	C	O4'-C1'	10.96	1.55	1.41
36	B2	107	A	O4'-C1'	10.95	1.55	1.41
83	A5	3502	A	O4'-C1'	-10.95	1.27	1.41
85	A7	91	C	O4'-C1'	10.95	1.55	1.41
83	A5	60	G	C2'-C1'	-10.95	1.41	1.53
83	A5	2584	G	O4'-C1'	10.94	1.55	1.41
36	B2	1083	C	O4'-C1'	10.93	1.55	1.41
83	A5	2083	G	C2'-C1'	-10.93	1.41	1.53
83	A5	1102	G	C2'-C1'	-10.92	1.41	1.53
83	A5	3864	C	C2'-C1'	-10.92	1.41	1.53
83	A5	1671	U	C2'-C1'	-10.92	1.41	1.53
83	A5	3399	C	O4'-C1'	10.92	1.55	1.41
83	A5	2916	U	O4'-C1'	10.92	1.55	1.41
83	A5	3389	C	O4'-C1'	10.91	1.55	1.41
36	B2	1662	C	O4'-C1'	10.91	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1619	C	O4 ² -C1'	10.91	1.55	1.41
83	A5	3562	A	O4 ² -C1'	10.91	1.55	1.41
83	A5	2038	A	O4 ² -C1'	10.90	1.55	1.41
83	A5	3966	U	C2 ² -C1'	-10.90	1.41	1.53
37	BC	25	G	C2 ² -C1'	-10.90	1.41	1.53
83	A5	189	A	O4 ² -C1'	-10.90	1.27	1.41
83	A5	312	U	C2 ² -C1'	-10.89	1.41	1.53
85	A7	37	G	O4 ² -C1'	10.89	1.55	1.41
83	A5	1956	A	C2 ² -C1'	-10.89	1.41	1.53
36	B2	1249	C	C2 ² -C1'	-10.88	1.41	1.53
37	BC	29	G	C2 ² -C1'	-10.88	1.41	1.53
83	A5	1129	A	C2 ² -C1'	-10.88	1.41	1.53
36	B2	295	A	O4 ² -C1'	10.87	1.55	1.41
83	A5	1029	C	O4 ² -C1'	10.87	1.55	1.41
36	B2	1762	A	O4 ² -C1'	10.86	1.55	1.41
83	A5	3539	C	O4 ² -C1'	10.86	1.55	1.41
36	B2	552	A	O4 ² -C1'	10.86	1.55	1.41
36	B2	598	C	O4 ² -C1'	10.86	1.55	1.41
83	A5	3526	C	O4 ² -C1'	10.86	1.55	1.41
36	B2	1218	G	O4 ² -C1'	10.85	1.55	1.41
83	A5	1002	C	C2 ² -C1'	-10.85	1.41	1.53
83	A5	3904	G	C2 ² -C1'	-10.85	1.41	1.53
83	A5	1166	U	O4 ² -C1'	10.85	1.55	1.41
83	A5	2707	C	O4 ² -C1'	10.84	1.55	1.41
36	B2	1813	U	C2 ² -C1'	-10.84	1.41	1.53
83	A5	3716	C	C2 ² -C1'	-10.84	1.41	1.53
83	A5	421	C	O4 ² -C1'	10.84	1.55	1.41
83	A5	2834	A	O4 ² -C1'	10.84	1.55	1.41
83	A5	81	A	O4 ² -C1'	10.83	1.55	1.41
36	B2	1048	U	O4 ² -C1'	10.83	1.55	1.41
37	BC	10	G	O4 ² -C1'	10.83	1.55	1.41
83	A5	2641	C	O4 ² -C1'	10.83	1.55	1.41
36	B2	645	C	O4 ² -C1'	10.83	1.55	1.41
83	A5	2625	G	O4 ² -C1'	10.83	1.55	1.41
85	A7	41	G	C2 ² -C1'	-10.83	1.41	1.53
36	B2	1923	C	O4 ² -C1'	10.82	1.55	1.41
83	A5	2239	C	C2 ² -C1'	-10.82	1.41	1.53
83	A5	2555	G	C2 ² -C1'	-10.82	1.41	1.53
83	A5	3259	A	O4 ² -C1'	10.82	1.55	1.41
36	B2	4	C	C2 ² -C1'	-10.82	1.41	1.53
36	B2	953	A	C2 ² -C1'	-10.81	1.41	1.53
83	A5	879	U	C2 ² -C1'	-10.81	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2083	G	O4 ² -C1'	10.81	1.55	1.41
83	A5	280	C	C2 ² -C1'	-10.81	1.41	1.53
83	A5	2183	A	O4 ² -C1'	10.81	1.55	1.41
36	B2	1928	C	O4 ² -C1'	10.80	1.55	1.41
83	A5	2622	A	C2 ² -C1'	-10.80	1.41	1.53
85	A7	93	G	C2 ² -C1'	-10.80	1.41	1.53
36	B2	249	U	O4 ² -C1'	10.79	1.55	1.41
83	A5	1370	C	C2 ² -C1'	-10.79	1.41	1.53
83	A5	673	U	C2 ² -C1'	-10.78	1.41	1.53
84	A9	5	U	C2 ² -C1'	-10.78	1.41	1.53
36	B2	961	U	O4 ² -C1'	10.78	1.55	1.41
36	B2	230	C	C2 ² -C1'	-10.77	1.41	1.53
83	A5	1747	A	O4 ² -C1'	10.77	1.55	1.41
83	A5	2174	A	O4 ² -C1'	-10.77	1.27	1.41
36	B2	853	A	C2 ² -C1'	-10.77	1.41	1.53
36	B2	40	A	O4 ² -C1'	10.76	1.55	1.41
83	A5	3459	C	O4 ² -C1'	10.76	1.55	1.41
36	B2	1924	C	O4 ² -C1'	10.75	1.55	1.41
36	B2	1176	C	C2 ² -C1'	-10.75	1.41	1.53
36	B2	1762	A	C2 ² -C1'	-10.75	1.41	1.53
83	A5	2737	C	O4 ² -C1'	10.75	1.55	1.41
83	A5	2924	A	O4 ² -C1'	10.75	1.55	1.41
36	B2	855	C	O4 ² -C1'	10.75	1.55	1.41
36	B2	1268	C	C2 ² -C1'	-10.75	1.41	1.53
83	A5	158	A	C2 ² -C1'	-10.75	1.41	1.53
83	A5	3251	C	O4 ² -C1'	10.75	1.55	1.41
83	A5	3110	U	C2 ² -C1'	-10.74	1.41	1.53
83	A5	1110	G	C2 ² -C1'	-10.74	1.41	1.53
83	A5	2588	G	C2 ² -C1'	-10.74	1.41	1.53
83	A5	3875	U	O4 ² -C1'	10.74	1.55	1.41
36	B2	518	G	C2 ² -C1'	-10.73	1.41	1.53
83	A5	918	G	C2 ² -C1'	-10.73	1.41	1.53
37	BC	23	G	C2 ² -C1'	-10.73	1.41	1.53
83	A5	1018	C	O4 ² -C1'	10.72	1.55	1.41
83	A5	2673	A	O4 ² -C1'	10.72	1.55	1.41
36	B2	597	C	O4 ² -C1'	10.72	1.55	1.41
36	B2	1124	C	C2 ² -C1'	-10.72	1.41	1.53
83	A5	1885	U	O4 ² -C1'	10.72	1.55	1.41
83	A5	3119	U	O4 ² -C1'	10.71	1.55	1.41
36	B2	648	G	O4 ² -C1'	10.71	1.55	1.41
36	B2	1273	U	C2 ² -C1'	-10.71	1.41	1.53
83	A5	119	G	O4 ² -C1'	10.71	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	709	G	C2'-C1'	-10.70	1.41	1.53
83	A5	818	A	C2'-C1'	-10.70	1.41	1.53
85	A7	34	C	C2'-C1'	-10.70	1.41	1.53
83	A5	3293	G	C2'-C1'	10.70	1.65	1.53
83	A5	3576	G	C2'-C1'	-10.70	1.41	1.53
83	A5	1145	C	O4'-C1'	10.69	1.55	1.41
85	A7	96	U	O4'-C1'	10.69	1.55	1.41
36	B2	592	C	O4'-C1'	10.68	1.55	1.41
83	A5	1489	A	O4'-C1'	10.68	1.55	1.41
83	A5	3772	U	C2'-C1'	-10.68	1.41	1.53
36	B2	901	G	C2'-C1'	-10.68	1.41	1.53
36	B2	543	A	O4'-C1'	10.68	1.55	1.41
36	B2	1	A	O4'-C1'	10.67	1.55	1.41
36	B2	260	A	C2'-C1'	-10.67	1.41	1.53
83	A5	3881	A	O4'-C1'	10.67	1.55	1.41
83	A5	3510	U	C2'-C1'	-10.67	1.41	1.53
36	B2	647	U	C2'-C1'	10.67	1.65	1.53
83	A5	1325	C	C2'-C1'	-10.66	1.41	1.53
83	A5	2868	A	C2'-C1'	-10.66	1.41	1.53
85	A7	36	C	C2'-C1'	-10.66	1.41	1.53
83	A5	1695	A	C2'-C1'	-10.66	1.41	1.53
36	B2	86	C	C2'-C1'	-10.66	1.41	1.53
83	A5	555	U	C2'-C1'	-10.66	1.41	1.53
36	B2	284	G	C2'-C1'	-10.66	1.41	1.53
36	B2	618	G	O4'-C1'	-10.65	1.27	1.41
86	A8	39	A	C2'-C1'	-10.65	1.41	1.53
83	A5	2708	C	O4'-C1'	10.65	1.55	1.41
83	A5	1081	C	O4'-C1'	10.65	1.55	1.41
83	A5	2689	G	C2'-C1'	-10.65	1.41	1.53
85	A7	9	C	O4'-C1'	10.65	1.55	1.41
36	B2	1446	G	C2'-C1'	-10.64	1.41	1.53
83	A5	63	G	O4'-C1'	10.64	1.55	1.41
83	A5	2813	G	C2'-C1'	-10.64	1.41	1.53
86	A8	64	C	O4'-C1'	10.64	1.55	1.41
36	B2	1931	G	C2'-C1'	-10.64	1.41	1.53
83	A5	1959	A	O4'-C1'	10.64	1.55	1.41
83	A5	3804	U	C2'-C1'	-10.64	1.41	1.53
83	A5	6	U	O4'-C1'	10.63	1.55	1.41
83	A5	342	A	O4'-C1'	10.63	1.55	1.41
36	B2	347	C	O4'-C1'	10.62	1.55	1.41
83	A5	34	C	C2'-C1'	-10.62	1.41	1.53
83	A5	1355	C	O4'-C1'	10.62	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1413	C	C2'-C1'	-10.62	1.41	1.53
36	B2	287	C	C2'-C1'	-10.62	1.41	1.53
36	B2	1639	U	C2'-C1'	-10.62	1.41	1.53
37	BC	16	U	O4'-C1'	-10.62	1.27	1.41
83	A5	2771	G	C2'-C1'	-10.62	1.41	1.53
83	A5	310	A	O4'-C1'	10.62	1.55	1.41
36	B2	310	C	C2'-C1'	-10.61	1.41	1.53
83	A5	3627	C	O4'-C1'	10.61	1.55	1.41
36	B2	497	A	C2'-C1'	-10.61	1.41	1.53
83	A5	185	U	C2'-C1'	-10.61	1.41	1.53
83	A5	295	G	C2'-C1'	-10.60	1.41	1.53
83	A5	3355	G	C2'-C1'	-10.60	1.41	1.53
83	A5	2514	U	O4'-C1'	10.59	1.55	1.41
83	A5	2529	G	C2'-C1'	-10.59	1.41	1.53
36	B2	1017	A	O4'-C1'	10.59	1.55	1.41
83	A5	1331	G	C2'-C1'	-10.59	1.41	1.53
83	A5	2717	C	C2'-C1'	-10.59	1.41	1.53
83	A5	2894	A	O4'-C1'	10.58	1.55	1.41
83	A5	2907	U	C2'-C1'	10.58	1.65	1.53
83	A5	1875	G	C2'-C1'	-10.58	1.41	1.53
83	A5	375	C	O4'-C1'	10.58	1.55	1.41
83	A5	3367	C	C2'-C1'	-10.58	1.41	1.53
36	B2	1553	A	C2'-C1'	-10.57	1.41	1.53
83	A5	237	G	O4'-C1'	10.57	1.55	1.41
83	A5	2738	C	O4'-C1'	10.56	1.55	1.41
86	A8	91	C	C2'-C1'	-10.56	1.41	1.53
36	B2	1954	C	C2'-C1'	-10.56	1.41	1.53
83	A5	673	U	O4'-C1'	10.56	1.55	1.41
36	B2	1802	G	O4'-C1'	10.55	1.55	1.41
83	A5	1069	A	C2'-C1'	-10.54	1.41	1.53
36	B2	175	A	O4'-C1'	10.54	1.55	1.41
83	A5	1512	C	O4'-C1'	10.54	1.55	1.41
83	A5	3458	A	C2'-C1'	-10.54	1.41	1.53
36	B2	196	G	C2'-C1'	-10.53	1.41	1.53
83	A5	33	C	C2'-C1'	-10.54	1.41	1.53
83	A5	1270	G	O4'-C1'	10.54	1.55	1.41
83	A5	2902	C	O4'-C1'	10.53	1.55	1.41
36	B2	248	G	C2'-C1'	-10.53	1.41	1.53
83	A5	1128	C	O4'-C1'	10.53	1.55	1.41
37	BC	61	C	C2'-C1'	-10.52	1.41	1.53
36	B2	1191	C	O4'-C1'	10.52	1.55	1.41
83	A5	2	U	O4'-C1'	10.52	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2669	A	C2'-C1'	-10.52	1.41	1.53
83	A5	1050	C	C2'-C1'	-10.52	1.41	1.53
84	A9	21	G	C2'-C1'	-10.52	1.41	1.53
36	B2	1759	U	C2'-C1'	-10.51	1.41	1.53
86	A8	117	C	C2'-C1'	-10.51	1.41	1.53
36	B2	1826	C	O4'-C1'	10.50	1.55	1.41
83	A5	3839	A	O4'-C1'	-10.50	1.28	1.41
36	B2	622	C	O4'-C1'	10.49	1.55	1.41
83	A5	3249	C	O4'-C1'	10.49	1.55	1.41
83	A5	3011	C	O4'-C1'	10.49	1.55	1.41
36	B2	1293	C	O4'-C1'	10.49	1.55	1.41
83	A5	67	A	O4'-C1'	10.49	1.55	1.41
83	A5	2900	U	O4'-C1'	10.49	1.55	1.41
86	A8	88	C	C2'-C1'	-10.49	1.41	1.53
83	A5	756	C	O4'-C1'	10.48	1.55	1.41
83	A5	2479	A	O4'-C1'	-10.48	1.28	1.41
83	A5	1292	G	O4'-C1'	-10.48	1.28	1.41
36	B2	291	C	O4'-C1'	10.48	1.55	1.41
83	A5	3216	C	C2'-C1'	-10.47	1.41	1.53
36	B2	291	C	C2'-C1'	-10.47	1.41	1.53
83	A5	3492	G	O4'-C1'	10.47	1.55	1.41
36	B2	268	C	O4'-C1'	10.46	1.55	1.41
85	A7	35	U	C2'-C1'	-10.46	1.41	1.53
36	B2	1144	C	O4'-C1'	10.46	1.55	1.41
36	B2	1565	C	O4'-C1'	10.46	1.55	1.41
36	B2	1650	G	O4'-C1'	10.46	1.55	1.41
36	B2	1870	C	O4'-C1'	10.46	1.55	1.41
83	A5	2832	G	C2'-C1'	-10.46	1.41	1.53
36	B2	1816	C	O4'-C1'	10.45	1.55	1.41
85	A7	110	G	C2'-C1'	-10.45	1.41	1.53
36	B2	707	A	O4'-C1'	10.45	1.55	1.41
83	A5	1285	C	C2'-C1'	-10.45	1.41	1.53
83	A5	1502	A	C2'-C1'	-10.45	1.41	1.53
83	A5	3945	A	C2'-C1'	-10.44	1.41	1.53
83	A5	748	A	C2'-C1'	-10.44	1.41	1.53
83	A5	2270	G	C2'-C1'	-10.44	1.41	1.53
36	B2	1017	A	C2'-C1'	-10.44	1.41	1.53
83	A5	113	A	O4'-C1'	10.43	1.55	1.41
83	A5	3140	G	C2'-C1'	-10.43	1.41	1.53
83	A5	3501	C	O4'-C1'	10.43	1.55	1.41
83	A5	1756	G	C2'-C1'	-10.43	1.41	1.53
83	A5	1000	G	O4'-C1'	10.43	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1169	C	O4 ² -C1'	10.42	1.55	1.41
83	A5	1594	U	C2 ² -C1'	10.42	1.64	1.53
83	A5	3851	U	C2 ² -C1'	-10.42	1.41	1.53
36	B2	538	C	C2 ² -C1'	-10.41	1.41	1.53
36	B2	1174	A	C2 ² -C1'	-10.41	1.41	1.53
36	B2	1361	C	O4 ² -C1'	-10.41	1.28	1.41
36	B2	1968	C	O4 ² -C1'	10.41	1.55	1.41
83	A5	881	G	C2 ² -C1'	-10.41	1.41	1.53
36	B2	1261	C	O4 ² -C1'	10.41	1.55	1.41
36	B2	1837	G	C2 ² -C1'	-10.41	1.42	1.53
83	A5	2217	A	C2 ² -C1'	-10.41	1.42	1.53
83	A5	964	C	C2 ² -C1'	-10.40	1.42	1.53
83	A5	3692	G	C2 ² -C1'	-10.40	1.42	1.53
83	A5	808	G	C2 ² -C1'	-10.40	1.42	1.53
83	A5	1062	C	C2 ² -C1'	-10.40	1.42	1.53
83	A5	3760	A	O4 ² -C1'	10.38	1.55	1.41
85	A7	108	G	C2 ² -C1'	-10.38	1.42	1.53
36	B2	1588	G	C2 ² -C1'	-10.38	1.42	1.53
83	A5	1126	A	O4 ² -C1'	10.38	1.55	1.41
83	A5	1715	G	C2 ² -C1'	-10.38	1.42	1.53
36	B2	449	C	O4 ² -C1'	10.37	1.55	1.41
83	A5	2218	G	C2 ² -C1'	-10.37	1.42	1.53
83	A5	2830	G	O4 ² -C1'	10.37	1.55	1.41
83	A5	3928	A	O4 ² -C1'	-10.37	1.28	1.41
36	B2	561	G	C2 ² -C1'	-10.37	1.42	1.53
83	A5	3449	G	C2 ² -C1'	-10.37	1.42	1.53
83	A5	3248	U	O4 ² -C1'	10.35	1.55	1.41
83	A5	2039	G	C2 ² -C1'	-10.35	1.42	1.53
83	A5	3251	C	C2 ² -C1'	-10.35	1.42	1.53
83	A5	3898	C	C2 ² -C1'	-10.35	1.42	1.53
36	B2	327	G	O4 ² -C1'	10.34	1.55	1.41
83	A5	677	G	O4 ² -C1'	10.34	1.55	1.41
83	A5	59	G	C2 ² -C1'	-10.33	1.42	1.53
83	A5	306	C	O4 ² -C1'	10.33	1.55	1.41
83	A5	3311	A	C2 ² -C1'	-10.33	1.42	1.53
86	A8	55	G	C2 ² -C1'	-10.33	1.42	1.53
36	B2	1366	C	O4 ² -C1'	10.32	1.55	1.41
83	A5	879	U	O4 ² -C1'	10.32	1.55	1.41
83	A5	1788	G	O4 ² -C1'	10.31	1.55	1.41
85	A7	119	C	O4 ² -C1'	10.31	1.55	1.41
36	B2	912	U	C2 ² -C1'	-10.30	1.42	1.53
83	A5	2231	A	O4 ² -C1'	10.30	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3962	A	C2'-C1'	-10.30	1.42	1.53
36	B2	544	C	C2'-C1'	-10.29	1.42	1.53
36	B2	1260	G	C2'-C1'	-10.29	1.42	1.53
83	A5	3647	A	O4'-C1'	10.29	1.55	1.41
83	A5	755	A	O4'-C1'	10.29	1.55	1.41
83	A5	2776	A	O4'-C1'	10.29	1.55	1.41
83	A5	871	A	C2'-C1'	10.29	1.64	1.53
83	A5	2800	C	C2'-C1'	-10.29	1.42	1.53
83	A5	815	A	O4'-C1'	10.29	1.55	1.41
83	A5	3218	C	O4'-C1'	10.29	1.55	1.41
36	B2	1427	U	C2'-C1'	-10.29	1.42	1.53
83	A5	523	C	O4'-C1'	10.29	1.55	1.41
83	A5	3376	C	O4'-C1'	10.29	1.55	1.41
83	A5	3624	C	C2'-C1'	-10.28	1.42	1.53
83	A5	3835	U	O4'-C1'	10.28	1.55	1.41
83	A5	3920	C	O4'-C1'	10.28	1.55	1.41
36	B2	1639	U	O4'-C1'	10.27	1.55	1.41
83	A5	3909	A	O4'-C1'	10.27	1.55	1.41
36	B2	1193	C	O4'-C1'	10.26	1.54	1.41
36	B2	378	G	C2'-C1'	-10.26	1.42	1.53
83	A5	2166	U	C2'-C1'	-10.26	1.42	1.53
83	A5	2623	C	C2'-C1'	-10.26	1.42	1.53
36	B2	380	U	C2'-C1'	-10.26	1.42	1.53
83	A5	3623	G	C2'-C1'	-10.26	1.42	1.53
36	B2	1108	C	O4'-C1'	10.25	1.54	1.41
83	A5	2688	U	C2'-C1'	-10.25	1.42	1.53
83	A5	804	C	O4'-C1'	10.25	1.54	1.41
83	A5	208	U	O4'-C1'	10.24	1.54	1.41
83	A5	1772	G	C2'-C1'	-10.24	1.42	1.53
83	A5	3512	U	O4'-C1'	10.24	1.54	1.41
83	A5	311	C	C2'-C1'	-10.24	1.42	1.53
83	A5	2707	C	C2'-C1'	-10.24	1.42	1.53
83	A5	2153	C	C2'-C1'	-10.24	1.42	1.53
86	A8	12	G	C2'-C1'	-10.23	1.42	1.53
83	A5	2668	C	O4'-C1'	10.22	1.54	1.41
83	A5	147	A	O4'-C1'	10.22	1.54	1.41
83	A5	853	G	C2'-C1'	-10.22	1.42	1.53
36	B2	1002	A	C2'-C1'	-10.22	1.42	1.53
36	B2	1081	G	C2'-C1'	-10.21	1.42	1.53
83	A5	1907	U	O4'-C1'	10.21	1.54	1.41
36	B2	68	C	O4'-C1'	-10.20	1.28	1.41
36	B2	1537	C	O4'-C1'	10.20	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2125	G	C2'-C1'	10.20	1.64	1.53
83	A5	2682	C	O4'-C1'	10.19	1.54	1.41
83	A5	3407	U	O4'-C1'	10.19	1.54	1.41
83	A5	3579	C	C2'-C1'	-10.19	1.42	1.53
83	A5	3827	G	O4'-C1'	10.18	1.54	1.41
85	A7	80	U	C2'-C1'	-10.18	1.42	1.53
83	A5	255	C	C2'-C1'	-10.18	1.42	1.53
36	B2	1812	C	O4'-C1'	10.18	1.54	1.41
83	A5	323	U	C2'-C1'	-10.18	1.42	1.53
83	A5	139	U	O4'-C1'	10.17	1.54	1.41
83	A5	1647	A	O4'-C1'	10.17	1.54	1.41
83	A5	3443	A	O4'-C1'	-10.17	1.28	1.41
36	B2	1953	U	C2'-C1'	-10.16	1.42	1.53
83	A5	2202	A	C2'-C1'	-10.16	1.42	1.53
36	B2	196	G	O4'-C1'	10.16	1.54	1.41
36	B2	918	C	O4'-C1'	10.16	1.54	1.41
83	A5	1440	A	O4'-C1'	10.16	1.54	1.41
83	A5	3207	C	O4'-C1'	10.16	1.54	1.41
83	A5	3407	U	C2'-C1'	-10.16	1.42	1.53
86	A8	105	C	O4'-C1'	10.15	1.54	1.41
83	A5	2248	A	C2'-C1'	10.15	1.64	1.53
83	A5	3516	C	O4'-C1'	10.15	1.54	1.41
36	B2	1725	C	O4'-C1'	10.15	1.54	1.41
83	A5	1673	C	O4'-C1'	10.15	1.54	1.41
36	B2	1925	G	O4'-C1'	10.14	1.54	1.41
83	A5	2777	A	C2'-C1'	-10.14	1.42	1.53
36	B2	1761	A	C2'-C1'	-10.14	1.42	1.53
83	A5	2822	C	O4'-C1'	10.14	1.54	1.41
83	A5	2058	C	O4'-C1'	10.14	1.54	1.41
83	A5	2989	G	C2'-C1'	-10.14	1.42	1.53
83	A5	3233	C	O4'-C1'	10.13	1.54	1.41
83	A5	3276	C	O4'-C1'	10.13	1.54	1.41
83	A5	3775	A	C2'-C1'	-10.13	1.42	1.53
36	B2	48	G	C2'-C1'	-10.13	1.42	1.53
36	B2	1020	U	O4'-C1'	10.12	1.54	1.41
83	A5	3325	G	C2'-C1'	-10.12	1.42	1.53
83	A5	680	C	O4'-C1'	10.12	1.54	1.41
36	B2	287	C	O4'-C1'	10.12	1.54	1.41
83	A5	3526	C	C2'-C1'	-10.12	1.42	1.53
85	A7	68	G	C2'-C1'	-10.11	1.42	1.53
37	BC	65	C	O4'-C1'	10.11	1.54	1.41
83	A5	1370	C	O4'-C1'	10.11	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	387	C	O4 ² -C1'	10.11	1.54	1.41
36	B2	1084	G	C2 ² -C1'	-10.11	1.42	1.53
83	A5	1143	U	C2 ² -C1'	-10.11	1.42	1.53
36	B2	636	G	O4 ² -C1'	10.11	1.54	1.41
83	A5	2048	G	C2 ² -C1'	-10.11	1.42	1.53
83	A5	3804	U	O4 ² -C1'	10.11	1.54	1.41
83	A5	247	C	C2 ² -C1'	-10.11	1.42	1.53
36	B2	1356	U	C2 ² -C1'	-10.11	1.42	1.53
83	A5	353	G	C2 ² -C1'	-10.11	1.42	1.53
83	A5	2014	C	O4 ² -C1'	10.10	1.54	1.41
36	B2	1410	C	O4 ² -C1'	10.10	1.54	1.41
86	A8	72	C	C2 ² -C1'	-10.10	1.42	1.53
83	A5	2770	C	C2 ² -C1'	-10.09	1.42	1.53
86	A8	112	C	O4 ² -C1'	10.09	1.54	1.41
36	B2	1286	G	C2 ² -C1'	-10.09	1.42	1.53
83	A5	3520	U	O4 ² -C1'	10.09	1.54	1.41
83	A5	1027	A	C2 ² -C1'	-10.09	1.42	1.53
83	A5	1600	U	C2 ² -C1'	-10.08	1.42	1.53
36	B2	164	U	O4 ² -C1'	10.07	1.54	1.41
36	B2	621	G	O4 ² -C1'	10.07	1.54	1.41
86	A8	63	U	C2 ² -C1'	10.07	1.64	1.53
36	B2	1464	U	O4 ² -C1'	10.06	1.54	1.41
83	A5	2755	G	C2 ² -C1'	10.06	1.64	1.53
83	A5	32	C	C2 ² -C1'	-10.06	1.42	1.53
36	B2	578	A	O4 ² -C1'	10.06	1.54	1.41
83	A5	799	A	C2 ² -C1'	-10.05	1.42	1.53
83	A5	3297	C	C2 ² -C1'	-10.06	1.42	1.53
83	A5	3254	U	O4 ² -C1'	10.05	1.54	1.41
36	B2	634	U	O4 ² -C1'	10.05	1.54	1.41
36	B2	1394	U	C2 ² -C1'	10.05	1.64	1.53
36	B2	1965	U	O4 ² -C1'	10.05	1.54	1.41
83	A5	649	A	O4 ² -C1'	10.05	1.54	1.41
36	B2	104	A	O4 ² -C1'	10.05	1.54	1.41
83	A5	196	C	O4 ² -C1'	10.04	1.54	1.41
37	BC	67	C	O4 ² -C1'	10.04	1.54	1.41
36	B2	59	C	O4 ² -C1'	10.04	1.54	1.41
83	A5	432	U	C2 ² -C1'	-10.04	1.42	1.53
83	A5	3813	C	C2 ² -C1'	-10.04	1.42	1.53
36	B2	56	U	O4 ² -C1'	10.04	1.54	1.41
36	B2	1792	A	O4 ² -C1'	10.04	1.54	1.41
86	A8	94	C	O4 ² -C1'	10.04	1.54	1.41
36	B2	294	C	O4 ² -C1'	10.03	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	34	G	O4 ² -C1'	10.03	1.54	1.41
36	B2	1335	C	O4 ² -C1'	10.03	1.54	1.41
37	BC	12	G	C2 ² -C1'	-10.03	1.42	1.53
83	A5	1016	A	O4 ² -C1'	-10.03	1.28	1.41
83	A5	514	A	C2 ² -C1'	-10.02	1.42	1.53
83	A5	2620	C	O4 ² -C1'	10.02	1.54	1.41
36	B2	1463	C	C2 ² -C1'	-10.02	1.42	1.53
36	B2	1463	C	O4 ² -C1'	10.02	1.54	1.41
85	A7	8	A	O4 ² -C1'	10.02	1.54	1.41
36	B2	1001	G	O4 ² -C1'	10.02	1.54	1.41
36	B2	1836	C	O4 ² -C1'	10.02	1.54	1.41
83	A5	391	A	O4 ² -C1'	10.02	1.54	1.41
83	A5	3126	C	C2 ² -C1'	-10.02	1.42	1.53
36	B2	26	A	C2 ² -C1'	10.02	1.64	1.53
36	B2	988	G	O4 ² -C1'	-10.02	1.28	1.41
36	B2	1635	U	C2 ² -C1'	10.02	1.64	1.53
36	B2	1866	U	C2 ² -C1'	-10.02	1.42	1.53
83	A5	3127	A	O4 ² -C1'	-10.02	1.28	1.41
36	B2	1935	A	C2 ² -C1'	-10.02	1.42	1.53
83	A5	1640	U	O4 ² -C1'	10.02	1.54	1.41
83	A5	3405	U	O4 ² -C1'	10.01	1.54	1.41
36	B2	1332	G	O4 ² -C1'	-10.01	1.28	1.41
36	B2	1693	C	C2 ² -C1'	-10.00	1.42	1.53
83	A5	1042	G	C2 ² -C1'	-10.00	1.42	1.53
83	A5	3759	G	O4 ² -C1'	10.00	1.54	1.41
36	B2	972	G	C2 ² -C1'	-10.00	1.42	1.53
36	B2	75	U	O4 ² -C1'	-10.00	1.28	1.41
36	B2	1673	U	O4 ² -C1'	10.00	1.54	1.41
83	A5	192	U	C2 ² -C1'	-10.00	1.42	1.53
83	A5	3479	C	C2 ² -C1'	-10.00	1.42	1.53
83	A5	655	C	C2 ² -C1'	-9.99	1.42	1.53
83	A5	1964	A	C2 ² -C1'	-9.99	1.42	1.53
36	B2	13	C	C2 ² -C1'	-9.99	1.42	1.53
36	B2	835	A	C2 ² -C1'	9.99	1.64	1.53
83	A5	227	A	O4 ² -C1'	9.98	1.54	1.41
83	A5	1501	A	O4 ² -C1'	9.98	1.54	1.41
83	A5	1644	C	O4 ² -C1'	9.98	1.54	1.41
85	A7	33	U	C2 ² -C1'	-9.98	1.42	1.53
83	A5	345	A	C2 ² -C1'	-9.98	1.42	1.53
83	A5	2481	U	O4 ² -C1'	9.98	1.54	1.41
84	A9	23	G	O4 ² -C1'	9.97	1.54	1.41
83	A5	3671	C	C2 ² -C1'	-9.97	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A7	109	U	C2'-C1'	-9.97	1.42	1.53
83	A5	204	G	O4'-C1'	9.97	1.54	1.41
36	B2	279	G	C2'-C1'	-9.97	1.42	1.53
83	A5	2126	A	C2'-C1'	9.96	1.64	1.53
83	A5	3474	G	O4'-C1'	9.96	1.54	1.41
83	A5	248	C	O4'-C1'	9.96	1.54	1.41
83	A5	1420	A	C2'-C1'	-9.96	1.42	1.53
36	B2	366	C	O4'-C1'	9.96	1.54	1.41
83	A5	2570	C	O4'-C1'	9.96	1.54	1.41
83	A5	2873	C	O4'-C1'	9.96	1.54	1.41
36	B2	1758	A	C2'-C1'	-9.95	1.42	1.53
36	B2	956	C	O4'-C1'	9.95	1.54	1.41
83	A5	3892	A	C2'-C1'	9.95	1.64	1.53
83	A5	2812	U	C2'-C1'	9.95	1.64	1.53
36	B2	1283	C	O4'-C1'	9.95	1.54	1.41
83	A5	3296	C	O4'-C1'	9.95	1.54	1.41
36	B2	1953	U	O4'-C1'	9.94	1.54	1.41
83	A5	2787	U	O4'-C1'	9.94	1.54	1.41
83	A5	3183	G	O4'-C1'	-9.94	1.28	1.41
83	A5	2021	C	O4'-C1'	9.94	1.54	1.41
83	A5	2690	A	O4'-C1'	9.94	1.54	1.41
83	A5	3530	A	C2'-C1'	9.93	1.64	1.53
83	A5	3764	G	C2'-C1'	9.93	1.64	1.53
83	A5	3851	U	O4'-C1'	9.93	1.54	1.41
83	A5	2043	G	C2'-C1'	9.93	1.64	1.53
83	A5	3014	G	C2'-C1'	-9.93	1.42	1.53
85	A7	31	G	C2'-C1'	-9.93	1.42	1.53
83	A5	1783	A	O4'-C1'	9.93	1.54	1.41
85	A7	27	A	O4'-C1'	9.93	1.54	1.41
83	A5	3152	G	C2'-C1'	-9.93	1.42	1.53
83	A5	3114	C	O4'-C1'	9.92	1.54	1.41
83	A5	1433	U	O4'-C1'	9.92	1.54	1.41
83	A5	3927	C	O4'-C1'	9.92	1.54	1.41
36	B2	1814	G	C2'-C1'	-9.92	1.42	1.53
83	A5	410	G	C2'-C1'	-9.92	1.42	1.53
83	A5	3562	A	C2'-C1'	-9.92	1.42	1.53
83	A5	420	A	O4'-C1'	-9.92	1.28	1.41
83	A5	1268	A	C2'-C1'	-9.92	1.42	1.53
83	A5	2783	C	O4'-C1'	9.91	1.54	1.41
83	A5	3128	U	C2'-C1'	-9.91	1.42	1.53
83	A5	3287	C	C2'-C1'	-9.91	1.42	1.53
83	A5	1687	U	O4'-C1'	9.91	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	459	U	O4 ² -C1'	9.90	1.54	1.41
83	A5	586	C	C2 ² -C1'	-9.90	1.42	1.53
83	A5	2508	C	O4 ² -C1'	9.90	1.54	1.41
36	B2	1580	G	O4 ² -C1'	9.90	1.54	1.41
83	A5	1665	C	C2 ² -C1'	-9.90	1.42	1.53
83	A5	3519	C	O4 ² -C1'	9.89	1.54	1.41
36	B2	925	U	C2 ² -C1'	9.89	1.64	1.53
83	A5	996	C	C2 ² -C1'	-9.89	1.42	1.53
83	A5	2671	C	C2 ² -C1'	9.89	1.64	1.53
83	A5	3317	U	C2 ² -C1'	-9.89	1.42	1.53
36	B2	1887	A	C2 ² -C1'	-9.88	1.42	1.53
83	A5	450	G	C2 ² -C1'	-9.88	1.42	1.53
36	B2	1423	A	C2 ² -C1'	-9.88	1.42	1.53
83	A5	1707	A	O4 ² -C1'	9.88	1.54	1.41
83	A5	3369	A	C2 ² -C1'	9.88	1.64	1.53
83	A5	2022	C	C2 ² -C1'	-9.88	1.42	1.53
36	B2	1743	C	O4 ² -C1'	9.87	1.54	1.41
36	B2	292	G	O4 ² -C1'	-9.87	1.28	1.41
36	B2	1581	A	O4 ² -C1'	9.87	1.54	1.41
36	B2	1829	C	O4 ² -C1'	9.87	1.54	1.41
36	B2	1926	A	O4 ² -C1'	9.87	1.54	1.41
83	A5	1685	G	C2 ² -C1'	-9.87	1.42	1.53
83	A5	2160	C	O4 ² -C1'	9.87	1.54	1.41
36	B2	1911	C	C2 ² -C1'	9.87	1.64	1.53
83	A5	1504	C	O4 ² -C1'	9.87	1.54	1.41
83	A5	2656	C	C2 ² -C1'	-9.87	1.42	1.53
36	B2	1222	C	O4 ² -C1'	9.86	1.54	1.41
83	A5	919	G	O4 ² -C1'	-9.86	1.28	1.41
83	A5	2621	A	C2 ² -C1'	-9.86	1.42	1.53
86	A8	46	C	O4 ² -C1'	9.86	1.54	1.41
36	B2	67	A	O4 ² -C1'	9.86	1.54	1.41
36	B2	1580	G	C2 ² -C1'	-9.86	1.42	1.53
83	A5	3492	G	C2 ² -C1'	-9.86	1.42	1.53
83	A5	965	C	C2 ² -C1'	-9.85	1.42	1.53
83	A5	1864	U	O4 ² -C1'	9.84	1.54	1.41
83	A5	3671	C	O4 ² -C1'	9.84	1.54	1.41
36	B2	173	C	O4 ² -C1'	9.84	1.54	1.41
83	A5	2759	G	C2 ² -C1'	-9.84	1.42	1.53
36	B2	1910	U	O4 ² -C1'	9.84	1.54	1.41
83	A5	1654	C	O4 ² -C1'	9.84	1.54	1.41
83	A5	3162	C	O4 ² -C1'	9.84	1.54	1.41
83	A5	1951	C	O4 ² -C1'	9.83	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2985	U	C2'-C1'	-9.83	1.42	1.53
83	A5	3125	A	O4'-C1'	9.83	1.54	1.41
83	A5	1672	A	C2'-C1'	-9.82	1.42	1.53
85	A7	95	U	C2'-C1'	9.82	1.64	1.53
36	B2	702	U	C2'-C1'	-9.82	1.42	1.53
36	B2	976	U	C2'-C1'	-9.82	1.42	1.53
83	A5	1618	A	C2'-C1'	-9.82	1.42	1.53
86	A8	51	A	O4'-C1'	9.82	1.54	1.41
36	B2	1001	G	C2'-C1'	-9.82	1.42	1.53
83	A5	455	U	O4'-C1'	9.82	1.54	1.41
83	A5	1382	U	C2'-C1'	9.82	1.64	1.53
83	A5	1407	C	O4'-C1'	9.82	1.54	1.41
83	A5	2219	U	C2'-C1'	9.82	1.64	1.53
83	A5	1957	C	C2'-C1'	-9.81	1.42	1.53
36	B2	413	C	O4'-C1'	9.81	1.54	1.41
83	A5	788	C	O4'-C1'	9.81	1.54	1.41
83	A5	2493	C	O4'-C1'	9.81	1.54	1.41
83	A5	3496	U	O4'-C1'	9.81	1.54	1.41
36	B2	432	C	O4'-C1'	9.81	1.54	1.41
83	A5	1458	G	C2'-C1'	-9.80	1.42	1.53
83	A5	97	C	C2'-C1'	-9.80	1.42	1.53
83	A5	2732	C	C2'-C1'	-9.80	1.42	1.53
83	A5	2021	C	C2'-C1'	-9.80	1.42	1.53
83	A5	2635	C	O4'-C1'	9.80	1.54	1.41
83	A5	187	A	C2'-C1'	-9.80	1.42	1.53
36	B2	1153	C	O4'-C1'	9.80	1.54	1.41
36	B2	1354	G	C2'-C1'	-9.80	1.42	1.53
83	A5	2124	G	C2'-C1'	-9.80	1.42	1.53
83	A5	81	A	C2'-C1'	-9.80	1.42	1.53
83	A5	3691	A	O4'-C1'	9.79	1.54	1.41
36	B2	1108	C	C2'-C1'	-9.79	1.42	1.53
83	A5	3149	U	C2'-C1'	-9.79	1.42	1.53
36	B2	1192	U	C2'-C1'	-9.79	1.42	1.53
85	A7	60	C	O4'-C1'	9.79	1.54	1.41
36	B2	427	G	C2'-C1'	-9.78	1.42	1.53
36	B2	1042	A	O4'-C1'	9.78	1.54	1.41
83	A5	2929	U	C2'-C1'	-9.78	1.42	1.53
36	B2	430	A	O4'-C1'	9.78	1.54	1.41
36	B2	1929	U	O4'-C1'	9.78	1.54	1.41
83	A5	3182	U	C2'-C1'	-9.78	1.42	1.53
83	A5	1442	C	O4'-C1'	9.77	1.54	1.41
83	A5	1691	A	O4'-C1'	9.77	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3652	C	C2'-C1'	-9.77	1.42	1.53
36	B2	92	A	O4'-C1'	9.76	1.54	1.41
83	A5	1472	C	O4'-C1'	9.76	1.54	1.41
83	A5	1609	U	O4'-C1'	9.76	1.54	1.41
83	A5	1116	G	C2'-C1'	-9.76	1.42	1.53
83	A5	3757	U	O4'-C1'	9.76	1.54	1.41
83	A5	2012	G	O4'-C1'	9.76	1.54	1.41
83	A5	1564	G	O4'-C1'	9.76	1.54	1.41
83	A5	2539	G	C2'-C1'	-9.76	1.42	1.53
83	A5	3512	U	C2'-C1'	-9.75	1.42	1.53
36	B2	928	C	C2'-C1'	-9.75	1.42	1.53
83	A5	1750	G	C2'-C1'	9.75	1.64	1.53
86	A8	45	G	C2'-C1'	-9.74	1.42	1.53
36	B2	50	C	O4'-C1'	9.74	1.54	1.41
83	A5	900	C	C2'-C1'	-9.74	1.42	1.53
83	A5	3185	C	O4'-C1'	9.74	1.54	1.41
83	A5	755	A	C2'-C1'	9.74	1.64	1.53
36	B2	342	G	C2'-C1'	-9.73	1.42	1.53
83	A5	1111	C	O4'-C1'	9.73	1.54	1.41
83	A5	3172	A	O4'-C1'	9.73	1.54	1.41
86	A8	64	C	C2'-C1'	-9.73	1.42	1.53
83	A5	3409	G	C2'-C1'	-9.73	1.42	1.53
36	B2	467	G	C2'-C1'	-9.73	1.42	1.53
36	B2	1937	U	C2'-C1'	-9.73	1.42	1.53
83	A5	554	U	C2'-C1'	-9.73	1.42	1.53
83	A5	3600	G	C2'-C1'	-9.73	1.42	1.53
83	A5	2735	A	O4'-C1'	9.73	1.54	1.41
36	B2	1282	A	C2'-C1'	-9.72	1.42	1.53
83	A5	3396	A	O4'-C1'	9.72	1.54	1.41
83	A5	1801	U	C2'-C1'	9.72	1.64	1.53
36	B2	496	C	C2'-C1'	-9.72	1.42	1.53
83	A5	835	G	C2'-C1'	-9.72	1.42	1.53
83	A5	2746	A	C2'-C1'	-9.72	1.42	1.53
83	A5	1803	C	C2'-C1'	-9.71	1.42	1.53
83	A5	1997	C	O4'-C1'	9.71	1.54	1.41
36	B2	715	U	C2'-C1'	-9.71	1.42	1.53
83	A5	1931	C	C2'-C1'	-9.71	1.42	1.53
36	B2	95	G	C2'-C1'	-9.70	1.42	1.53
36	B2	440	U	O4'-C1'	9.70	1.54	1.41
83	A5	3733	U	O4'-C1'	9.70	1.54	1.41
36	B2	1690	G	C2'-C1'	-9.70	1.42	1.53
83	A5	330	C	O4'-C1'	9.70	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1332	C	O4 ² -C1'	9.69	1.54	1.41
83	A5	34	C	O4 ² -C1'	9.69	1.54	1.41
83	A5	2024	U	O4 ² -C1'	9.69	1.54	1.41
36	B2	1548	G	C2 ² -C1'	-9.69	1.42	1.53
83	A5	3902	G	C2 ² -C1'	-9.68	1.42	1.53
83	A5	2753	G	O4 ² -C1'	9.68	1.54	1.41
83	A5	3615	G	C2 ² -C1'	-9.68	1.42	1.53
83	A5	3416	C	C2 ² -C1'	-9.68	1.42	1.53
36	B2	501	C	O4 ² -C1'	9.67	1.54	1.41
83	A5	1928	G	C2 ² -C1'	-9.67	1.42	1.53
83	A5	2162	C	C2 ² -C1'	9.67	1.64	1.53
83	A5	90	G	O4 ² -C1'	9.67	1.54	1.41
83	A5	335	A	C2 ² -C1'	-9.66	1.42	1.53
36	B2	1010	A	O4 ² -C1'	9.66	1.54	1.41
36	B2	1956	U	O4 ² -C1'	9.66	1.54	1.41
83	A5	1937	G	C2 ² -C1'	9.66	1.64	1.53
36	B2	1865	G	C2 ² -C1'	-9.65	1.42	1.53
83	A5	3583	C	O4 ² -C1'	9.65	1.54	1.41
37	BC	31	C	O4 ² -C1'	9.65	1.54	1.41
36	B2	1643	C	O4 ² -C1'	9.65	1.54	1.41
83	A5	1349	A	O4 ² -C1'	9.65	1.54	1.41
83	A5	3863	G	C2 ² -C1'	-9.65	1.42	1.53
83	A5	2182	G	C2 ² -C1'	-9.65	1.42	1.53
83	A5	3176	C	C2 ² -C1'	-9.65	1.42	1.53
83	A5	3504	G	O4 ² -C1'	9.65	1.54	1.41
83	A5	3721	C	C2 ² -C1'	-9.65	1.42	1.53
86	A8	3	C	O4 ² -C1'	9.65	1.54	1.41
83	A5	926	U	O4 ² -C1'	9.64	1.54	1.41
36	B2	1767	G	C2 ² -C1'	-9.64	1.42	1.53
36	B2	1799	A	O4 ² -C1'	9.64	1.54	1.41
83	A5	289	C	O4 ² -C1'	9.64	1.54	1.41
83	A5	210	C	C2 ² -C1'	-9.64	1.42	1.53
83	A5	406	G	C2 ² -C1'	-9.64	1.42	1.53
83	A5	1372	A	C2 ² -C1'	9.64	1.64	1.53
83	A5	1292	G	C2 ² -C1'	9.63	1.64	1.53
83	A5	2841	G	O4 ² -C1'	9.63	1.54	1.41
83	A5	3219	A	C2 ² -C1'	9.63	1.64	1.53
36	B2	86	C	O4 ² -C1'	9.63	1.54	1.41
83	A5	1574	A	O4 ² -C1'	9.63	1.54	1.41
83	A5	1433	U	C2 ² -C1'	-9.63	1.42	1.53
83	A5	477	C	O4 ² -C1'	9.63	1.54	1.41
86	A8	87	A	O4 ² -C1'	9.63	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	330	C	C2'-C1'	-9.62	1.42	1.53
83	A5	3779	U	O4'-C1'	9.62	1.54	1.41
36	B2	254	C	O4'-C1'	9.62	1.54	1.41
83	A5	1360	U	O4'-C1'	9.62	1.54	1.41
83	A5	2623	C	O4'-C1'	9.62	1.54	1.41
83	A5	3923	C	O4'-C1'	9.62	1.54	1.41
83	A5	803	A	O4'-C1'	9.62	1.54	1.41
83	A5	992	U	C2'-C1'	-9.61	1.42	1.53
36	B2	865	A	C2'-C1'	-9.61	1.42	1.53
83	A5	1216	A	O4'-C1'	9.61	1.54	1.41
83	A5	1626	A	O4'-C1'	9.61	1.54	1.41
83	A5	2900	U	C2'-C1'	-9.61	1.42	1.53
83	A5	571	U	O4'-C1'	9.60	1.54	1.41
36	B2	487	U	C2'-C1'	-9.60	1.42	1.53
36	B2	1648	C	O4'-C1'	-9.60	1.29	1.41
83	A5	3115	C	O4'-C1'	9.60	1.54	1.41
83	A5	966	U	O4'-C1'	9.59	1.54	1.41
83	A5	1979	A	C2'-C1'	-9.59	1.42	1.53
83	A5	3427	G	O4'-C1'	9.59	1.54	1.41
83	A5	3297	C	O4'-C1'	9.58	1.54	1.41
83	A5	2273	A	C2'-C1'	9.58	1.63	1.53
83	A5	1391	A	O4'-C1'	9.58	1.54	1.41
83	A5	2883	C	O4'-C1'	9.58	1.54	1.41
83	A5	317	G	O4'-C1'	9.58	1.54	1.41
83	A5	455	U	C2'-C1'	-9.58	1.42	1.53
83	A5	201	U	C2'-C1'	9.57	1.63	1.53
83	A5	688	U	O4'-C1'	9.57	1.54	1.41
36	B2	387	C	C2'-C1'	-9.57	1.42	1.53
83	A5	2663	C	C2'-C1'	-9.57	1.42	1.53
83	A5	144	C	O4'-C1'	9.57	1.54	1.41
83	A5	221	C	O4'-C1'	9.57	1.54	1.41
36	B2	1231	A	O4'-C1'	9.57	1.54	1.41
83	A5	1061	A	C2'-C1'	-9.57	1.42	1.53
86	A8	9	G	C2'-C1'	-9.57	1.42	1.53
36	B2	508	C	O4'-C1'	9.56	1.54	1.41
83	A5	3591	A	C2'-C1'	9.56	1.63	1.53
83	A5	773	G	O4'-C1'	9.56	1.54	1.41
83	A5	1289	C	C2'-C1'	9.56	1.63	1.53
83	A5	2593	A	O4'-C1'	9.56	1.54	1.41
36	B2	1643	C	C2'-C1'	-9.56	1.42	1.53
83	A5	3650	G	C2'-C1'	-9.56	1.42	1.53
36	B2	1056	C	C2'-C1'	-9.56	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2728	C	O4 ² -C1'	9.56	1.54	1.41
36	B2	107	A	C2 ² -C1'	-9.56	1.42	1.53
83	A5	199	U	C2 ² -C1'	-9.55	1.42	1.53
83	A5	1086	C	O4 ² -C1'	9.55	1.54	1.41
83	A5	2205	G	C2 ² -C1'	-9.55	1.42	1.53
83	A5	3835	U	C2 ² -C1'	-9.55	1.42	1.53
83	A5	3482	G	O4 ² -C1'	9.54	1.54	1.41
83	A5	64	A	O4 ² -C1'	9.54	1.54	1.41
83	A5	1056	G	C2 ² -C1'	-9.54	1.42	1.53
36	B2	1444	C	O4 ² -C1'	9.53	1.54	1.41
83	A5	3607	C	O4 ² -C1'	9.53	1.54	1.41
85	A7	57	C	O4 ² -C1'	9.53	1.54	1.41
36	B2	1815	C	O4 ² -C1'	9.53	1.54	1.41
36	B2	304	A	O4 ² -C1'	9.52	1.54	1.41
36	B2	1780	G	O4 ² -C1'	9.52	1.54	1.41
83	A5	2734	A	O4 ² -C1'	9.52	1.54	1.41
36	B2	1623	C	O4 ² -C1'	9.52	1.54	1.41
83	A5	2243	G	O4 ² -C1'	-9.52	1.29	1.41
36	B2	821	U	C2 ² -C1'	-9.52	1.42	1.53
83	A5	3687	A	O4 ² -C1'	9.52	1.54	1.41
83	A5	2790	G	C2 ² -C1'	-9.52	1.42	1.53
36	B2	221	C	O4 ² -C1'	9.51	1.54	1.41
36	B2	1696	G	O4 ² -C1'	9.51	1.54	1.41
36	B2	49	C	C2 ² -C1'	-9.51	1.42	1.53
83	A5	3320	C	O4 ² -C1'	9.51	1.54	1.41
83	A5	1167	A	C2 ² -C1'	-9.51	1.42	1.53
83	A5	3151	G	O4 ² -C1'	9.51	1.54	1.41
83	A5	3460	C	O4 ² -C1'	9.51	1.54	1.41
36	B2	589	U	C2 ² -C1'	-9.51	1.42	1.53
36	B2	1128	C	C2 ² -C1'	-9.50	1.42	1.53
36	B2	1917	A	O4 ² -C1'	9.50	1.54	1.41
83	A5	2774	G	C2 ² -C1'	-9.50	1.42	1.53
83	A5	2724	C	O4 ² -C1'	9.50	1.53	1.41
83	A5	1518	A	O4 ² -C1'	-9.50	1.29	1.41
83	A5	2164	G	O4 ² -C1'	9.50	1.53	1.41
36	B2	10	G	O4 ² -C1'	9.49	1.53	1.41
36	B2	552	A	C2 ² -C1'	-9.49	1.43	1.53
83	A5	2552	G	C2 ² -C1'	-9.49	1.43	1.53
36	B2	1379	G	C2 ² -C1'	-9.49	1.43	1.53
83	A5	2792	G	O4 ² -C1'	9.49	1.53	1.41
83	A5	2741	A	C2 ² -C1'	-9.48	1.43	1.53
83	A5	3232	G	C2 ² -C1'	-9.48	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1085	U	C2'-C1'	-9.48	1.43	1.53
36	B2	1049	C	O4'-C1'	9.48	1.53	1.41
83	A5	256	G	C2'-C1'	-9.48	1.43	1.53
83	A5	3630	C	O4'-C1'	9.48	1.53	1.41
83	A5	625	C	C2'-C1'	-9.47	1.43	1.53
83	A5	2230	G	O4'-C1'	9.47	1.53	1.41
83	A5	3772	U	O4'-C1'	9.47	1.53	1.41
36	B2	381	C	C2'-C1'	-9.47	1.43	1.53
36	B2	72	A	C2'-C1'	9.47	1.63	1.53
37	BC	2	G	C2'-C1'	-9.46	1.43	1.53
83	A5	28	C	O4'-C1'	9.46	1.53	1.41
83	A5	1957	C	O4'-C1'	9.46	1.53	1.41
83	A5	1724	A	O4'-C1'	9.45	1.53	1.41
83	A5	42	U	O4'-C1'	9.45	1.53	1.41
83	A5	825	C	O4'-C1'	9.45	1.53	1.41
83	A5	1755	U	C2'-C1'	9.45	1.63	1.53
83	A5	2612	G	C2'-C1'	-9.45	1.43	1.53
83	A5	168	G	C2'-C1'	-9.44	1.43	1.53
83	A5	2129	C	C2'-C1'	9.44	1.63	1.53
86	A8	53	C	O4'-C1'	9.44	1.53	1.41
86	A8	68	U	O4'-C1'	9.44	1.53	1.41
36	B2	1385	U	C2'-C1'	-9.44	1.43	1.53
83	A5	1519	A	C2'-C1'	9.44	1.63	1.53
83	A5	3366	G	C2'-C1'	-9.43	1.43	1.53
83	A5	1262	C	O4'-C1'	9.43	1.53	1.41
83	A5	3612	A	C2'-C1'	-9.43	1.43	1.53
83	A5	2730	A	O4'-C1'	9.43	1.53	1.41
36	B2	1186	U	O4'-C1'	9.43	1.53	1.41
83	A5	2722	U	O4'-C1'	9.43	1.53	1.41
83	A5	3136	U	C2'-C1'	-9.43	1.43	1.53
83	A5	3916	U	C2'-C1'	-9.43	1.43	1.53
85	A7	77	A	C2'-C1'	-9.42	1.43	1.53
83	A5	1388	C	C2'-C1'	-9.42	1.43	1.53
83	A5	1148	C	O4'-C1'	9.42	1.53	1.41
36	B2	1687	C	C2'-C1'	-9.42	1.43	1.53
83	A5	515	A	C2'-C1'	9.42	1.63	1.53
83	A5	1408	A	C2'-C1'	-9.42	1.43	1.53
36	B2	18	C	O4'-C1'	9.41	1.53	1.41
36	B2	1545	U	C2'-C1'	9.41	1.63	1.53
36	B2	1811	C	O4'-C1'	9.41	1.53	1.41
83	A5	2147	C	O4'-C1'	9.41	1.53	1.41
36	B2	1353	U	C2'-C1'	9.41	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1877	G	O4 ² -C1'	9.41	1.53	1.41
83	A5	3765	A	O4 ² -C1'	-9.41	1.29	1.41
83	A5	1018	C	C2 ² -C1'	-9.40	1.43	1.53
36	B2	328	A	C2 ² -C1'	-9.40	1.43	1.53
36	B2	581	C	O4 ² -C1'	9.40	1.53	1.41
83	A5	818	A	O4 ² -C1'	9.40	1.53	1.41
83	A5	2554	U	O4 ² -C1'	9.40	1.53	1.41
83	A5	3416	C	O4 ² -C1'	9.40	1.53	1.41
83	A5	1297	G	C2 ² -C1'	-9.40	1.43	1.53
83	A5	989	A	O4 ² -C1'	9.40	1.53	1.41
84	A9	9	C	O4 ² -C1'	9.40	1.53	1.41
36	B2	260	A	O4 ² -C1'	9.39	1.53	1.41
36	B2	1305	A	C2 ² -C1'	9.39	1.63	1.53
36	B2	1796	C	C2 ² -C1'	-9.39	1.43	1.53
83	A5	3611	C	O4 ² -C1'	9.39	1.53	1.41
83	A5	859	A	C2 ² -C1'	-9.39	1.43	1.53
83	A5	3577	U	O4 ² -C1'	9.38	1.53	1.41
36	B2	298	U	O4 ² -C1'	9.38	1.53	1.41
83	A5	1543	C	O4 ² -C1'	9.38	1.53	1.41
83	A5	986	A	C2 ² -C1'	-9.38	1.43	1.53
83	A5	3361	U	C2 ² -C1'	9.38	1.63	1.53
83	A5	1686	A	O4 ² -C1'	9.38	1.53	1.41
83	A5	2889	C	C2 ² -C1'	-9.37	1.43	1.53
36	B2	218	A	C2 ² -C1'	-9.37	1.43	1.53
36	B2	1661	A	C2 ² -C1'	-9.37	1.43	1.53
83	A5	3237	U	C2 ² -C1'	-9.37	1.43	1.53
83	A5	2855	A	C2 ² -C1'	-9.37	1.43	1.53
83	A5	3891	U	O4 ² -C1'	-9.37	1.29	1.41
83	A5	845	C	O4 ² -C1'	9.36	1.53	1.41
83	A5	966	U	C2 ² -C1'	-9.36	1.43	1.53
83	A5	1396	A	C2 ² -C1'	9.36	1.63	1.53
36	B2	1268	C	O4 ² -C1'	9.35	1.53	1.41
83	A5	1388	C	O4 ² -C1'	9.35	1.53	1.41
83	A5	3209	G	C2 ² -C1'	-9.35	1.43	1.53
83	A5	3296	C	C2 ² -C1'	-9.35	1.43	1.53
36	B2	1969	G	O4 ² -C1'	9.35	1.53	1.41
83	A5	223	A	O4 ² -C1'	9.35	1.53	1.41
83	A5	916	C	O4 ² -C1'	9.35	1.53	1.41
83	A5	1000	G	C2 ² -C1'	-9.35	1.43	1.53
83	A5	2989	G	O4 ² -C1'	9.35	1.53	1.41
83	A5	1176	A	C2 ² -C1'	9.34	1.63	1.53
83	A5	2866	G	C2 ² -C1'	-9.34	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	523	A	O4 ² -C1'	9.34	1.53	1.41
83	A5	804	C	C2 ² -C1'	-9.34	1.43	1.53
83	A5	2247	U	O4 ² -C1'	9.34	1.53	1.41
37	BC	38	C	C2 ² -C1'	-9.33	1.43	1.53
83	A5	2814	U	C2 ² -C1'	9.33	1.63	1.53
83	A5	416	C	O4 ² -C1'	9.33	1.53	1.41
83	A5	802	G	C2 ² -C1'	-9.33	1.43	1.53
83	A5	1713	U	O4 ² -C1'	9.33	1.53	1.41
83	A5	2176	G	C2 ² -C1'	-9.33	1.43	1.53
83	A5	2615	C	C2 ² -C1'	-9.33	1.43	1.53
83	A5	3017	U	C2 ² -C1'	-9.33	1.43	1.53
83	A5	2591	A	O4 ² -C1'	9.32	1.53	1.41
83	A5	3822	C	O4 ² -C1'	9.32	1.53	1.41
83	A5	3764	G	O4 ² -C1'	-9.32	1.29	1.41
83	A5	3803	C	C2 ² -C1'	-9.32	1.43	1.53
36	B2	1164	G	C2 ² -C1'	-9.32	1.43	1.53
83	A5	1356	G	O4 ² -C1'	9.32	1.53	1.41
83	A5	1414	C	O4 ² -C1'	9.32	1.53	1.41
83	A5	1985	C	O4 ² -C1'	9.32	1.53	1.41
83	A5	849	U	C2 ² -C1'	-9.31	1.43	1.53
83	A5	856	A	C2 ² -C1'	-9.31	1.43	1.53
36	B2	489	C	O4 ² -C1'	9.31	1.53	1.41
83	A5	3127	A	C2 ² -C1'	9.31	1.63	1.53
83	A5	3510	U	O4 ² -C1'	9.31	1.53	1.41
37	BC	26	C	O4 ² -C1'	9.31	1.53	1.41
83	A5	2901	C	O4 ² -C1'	9.31	1.53	1.41
83	A5	1983	A	C2 ² -C1'	-9.30	1.43	1.53
36	B2	497	A	O4 ² -C1'	9.30	1.53	1.41
36	B2	1958	A	O4 ² -C1'	9.30	1.53	1.41
36	B2	181	A	C2 ² -C1'	-9.30	1.43	1.53
36	B2	496	C	O4 ² -C1'	9.30	1.53	1.41
36	B2	1524	A	O4 ² -C1'	9.29	1.53	1.41
83	A5	383	A	C2 ² -C1'	-9.30	1.43	1.53
83	A5	3384	C	C2 ² -C1'	-9.29	1.43	1.53
36	B2	377	G	O4 ² -C1'	9.29	1.53	1.41
83	A5	837	A	O4 ² -C1'	9.29	1.53	1.41
83	A5	2152	C	O4 ² -C1'	9.29	1.53	1.41
83	A5	2526	A	O4 ² -C1'	9.29	1.53	1.41
83	A5	1270	G	C2 ² -C1'	-9.29	1.43	1.53
36	B2	1880	C	O4 ² -C1'	9.28	1.53	1.41
83	A5	1010	A	C2 ² -C1'	-9.28	1.43	1.53
83	A5	3876	U	O4 ² -C1'	9.28	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	579	G	O4 ² -C1'	9.28	1.53	1.41
83	A5	1207	G	O4 ² -C1'	9.28	1.53	1.41
36	B2	90	A	O4 ² -C1'	9.28	1.53	1.41
36	B2	1236	C	C2 ² -C1'	-9.28	1.43	1.53
83	A5	398	U	C2 ² -C1'	-9.28	1.43	1.53
83	A5	1787	C	C2 ² -C1'	-9.28	1.43	1.53
83	A5	1318	A	O4 ² -C1'	9.28	1.53	1.41
36	B2	182	C	O4 ² -C1'	9.27	1.53	1.41
83	A5	1073	C	O4 ² -C1'	9.27	1.53	1.41
83	A5	1697	U	O4 ² -C1'	-9.27	1.29	1.41
36	B2	1721	C	O4 ² -C1'	9.27	1.53	1.41
83	A5	813	C	O4 ² -C1'	9.27	1.53	1.41
83	A5	851	G	O4 ² -C1'	9.26	1.53	1.41
83	A5	345	A	O4 ² -C1'	9.26	1.53	1.41
83	A5	2069	U	O4 ² -C1'	9.26	1.53	1.41
36	B2	622	C	C2 ² -C1'	-9.26	1.43	1.53
83	A5	1538	U	C2 ² -C1'	9.26	1.63	1.53
83	A5	3148	C	C2 ² -C1'	-9.26	1.43	1.53
36	B2	889	A	O4 ² -C1'	9.25	1.53	1.41
83	A5	1122	U	C2 ² -C1'	9.25	1.63	1.53
83	A5	3490	C	O4 ² -C1'	9.25	1.53	1.41
83	A5	3500	A	O4 ² -C1'	9.25	1.53	1.41
83	A5	2193	C	C2 ² -C1'	-9.25	1.43	1.53
37	BC	57	A	O4 ² -C1'	9.25	1.53	1.41
36	B2	1099	U	O4 ² -C1'	9.25	1.53	1.41
36	B2	1394	U	O4 ² -C1'	-9.25	1.29	1.41
37	BC	36	A	O4 ² -C1'	9.25	1.53	1.41
83	A5	3372	C	O4 ² -C1'	9.25	1.53	1.41
36	B2	391	G	O4 ² -C1'	9.24	1.53	1.41
36	B2	1140	G	O4 ² -C1'	9.24	1.53	1.41
83	A5	311	C	O4 ² -C1'	9.24	1.53	1.41
83	A5	637	U	C2 ² -C1'	9.24	1.63	1.53
36	B2	1630	G	O4 ² -C1'	9.24	1.53	1.41
36	B2	1867	C	O4 ² -C1'	9.24	1.53	1.41
36	B2	1633	C	O4 ² -C1'	9.24	1.53	1.41
36	B2	1714	U	O4 ² -C1'	9.24	1.53	1.41
36	B2	1097	C	O4 ² -C1'	9.23	1.53	1.41
36	B2	1303	C	C2 ² -C1'	-9.23	1.43	1.53
83	A5	3852	A	O4 ² -C1'	9.23	1.53	1.41
86	A8	2	A	C2 ² -C1'	-9.23	1.43	1.53
36	B2	1247	C	O4 ² -C1'	9.22	1.53	1.41
36	B2	1907	G	C2 ² -C1'	-9.22	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3427	G	C2'-C1'	-9.22	1.43	1.53
36	B2	1759	U	O4'-C1'	9.22	1.53	1.41
36	B2	905	U	C2'-C1'	-9.22	1.43	1.53
36	B2	1520	A	C2'-C1'	-9.22	1.43	1.53
83	A5	275	U	O4'-C1'	9.22	1.53	1.41
83	A5	2200	A	C2'-C1'	9.22	1.63	1.53
36	B2	1621	G	C2'-C1'	-9.21	1.43	1.53
86	A8	79	A	C2'-C1'	-9.21	1.43	1.53
36	B2	206	U	C2'-C1'	-9.21	1.43	1.53
83	A5	1139	U	O4'-C1'	9.21	1.53	1.41
83	A5	844	C	O4'-C1'	9.21	1.53	1.41
83	A5	2878	A	C2'-C1'	-9.21	1.43	1.53
83	A5	1967	G	C2'-C1'	-9.21	1.43	1.53
36	B2	1093	C	O4'-C1'	9.20	1.53	1.41
36	B2	1657	C	O4'-C1'	9.20	1.53	1.41
83	A5	1007	A	C2'-C1'	-9.20	1.43	1.53
83	A5	2478	A	C2'-C1'	-9.20	1.43	1.53
83	A5	3194	A	O4'-C1'	9.20	1.53	1.41
36	B2	208	U	C2'-C1'	-9.20	1.43	1.53
36	B2	616	U	C2'-C1'	-9.20	1.43	1.53
36	B2	275	U	O4'-C1'	9.20	1.53	1.41
36	B2	1312	G	O4'-C1'	9.20	1.53	1.41
83	A5	1915	U	O4'-C1'	9.20	1.53	1.41
83	A5	3894	C	C2'-C1'	-9.20	1.43	1.53
85	A7	118	C	C2'-C1'	-9.20	1.43	1.53
83	A5	3262	A	O4'-C1'	9.20	1.53	1.41
36	B2	1211	C	C2'-C1'	-9.19	1.43	1.53
36	B2	1802	G	C2'-C1'	-9.19	1.43	1.53
83	A5	806	A	C2'-C1'	-9.19	1.43	1.53
83	A5	831	A	O4'-C1'	9.19	1.53	1.41
36	B2	283	U	O4'-C1'	-9.19	1.29	1.41
36	B2	1810	C	O4'-C1'	9.19	1.53	1.41
83	A5	700	A	C2'-C1'	-9.19	1.43	1.53
83	A5	859	A	O4'-C1'	9.19	1.53	1.41
36	B2	656	U	C2'-C1'	9.18	1.63	1.53
83	A5	309	C	C2'-C1'	-9.18	1.43	1.53
36	B2	948	A	O4'-C1'	9.18	1.53	1.41
83	A5	2805	C	C2'-C1'	-9.18	1.43	1.53
83	A5	1697	U	C2'-C1'	9.18	1.63	1.53
36	B2	1390	U	C2'-C1'	-9.17	1.43	1.53
83	A5	136	C	C2'-C1'	-9.17	1.43	1.53
36	B2	40	A	C2'-C1'	-9.17	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A8	92	G	O4 ² -C1'	9.17	1.53	1.41
83	A5	3865	C	O4 ² -C1'	9.17	1.53	1.41
36	B2	1452	U	C2 ² -C1'	9.17	1.63	1.53
83	A5	2587	U	O4 ² -C1'	9.17	1.53	1.41
85	A7	111	U	C2 ² -C1'	-9.17	1.43	1.53
83	A5	2741	A	O4 ² -C1'	9.16	1.53	1.41
83	A5	2233	C	C2 ² -C1'	-9.16	1.43	1.53
83	A5	922	G	O4 ² -C1'	9.16	1.53	1.41
83	A5	3408	C	O4 ² -C1'	9.16	1.53	1.41
36	B2	1016	A	C2 ² -C1'	-9.15	1.43	1.53
83	A5	2710	A	C2 ² -C1'	-9.15	1.43	1.53
85	A7	60	C	C2 ² -C1'	-9.15	1.43	1.53
36	B2	509	C	O4 ² -C1'	9.15	1.53	1.41
36	B2	1655	C	O4 ² -C1'	9.15	1.53	1.41
83	A5	1079	U	C2 ² -C1'	-9.15	1.43	1.53
83	A5	586	C	O4 ² -C1'	9.15	1.53	1.41
83	A5	812	U	O4 ² -C1'	9.15	1.53	1.41
83	A5	1578	C	O4 ² -C1'	9.15	1.53	1.41
36	B2	1079	A	C2 ² -C1'	9.15	1.63	1.53
83	A5	3588	G	C2 ² -C1'	-9.15	1.43	1.53
83	A5	385	A	C2 ² -C1'	9.14	1.63	1.53
83	A5	3276	C	C2 ² -C1'	-9.14	1.43	1.53
83	A5	3387	C	O4 ² -C1'	9.14	1.53	1.41
83	A5	1899	C	O4 ² -C1'	9.14	1.53	1.41
83	A5	3938	C	C2 ² -C1'	-9.14	1.43	1.53
83	A5	3945	A	O4 ² -C1'	9.14	1.53	1.41
36	B2	1257	G	C2 ² -C1'	-9.13	1.43	1.53
83	A5	1870	G	C2 ² -C1'	-9.14	1.43	1.53
83	A5	3594	A	O4 ² -C1'	9.13	1.53	1.41
85	A7	19	C	O4 ² -C1'	9.13	1.53	1.41
36	B2	1319	A	C2 ² -C1'	-9.13	1.43	1.53
83	A5	3538	G	C2 ² -C1'	-9.13	1.43	1.53
83	A5	3840	G	C2 ² -C1'	9.13	1.63	1.53
83	A5	426	A	C2 ² -C1'	-9.13	1.43	1.53
83	A5	1650	C	O4 ² -C1'	9.12	1.53	1.41
37	BC	13	C	C2 ² -C1'	-9.12	1.43	1.53
83	A5	3128	U	O4 ² -C1'	9.12	1.53	1.41
36	B2	1613	A	C2 ² -C1'	-9.12	1.43	1.53
85	A7	59	G	C2 ² -C1'	-9.12	1.43	1.53
83	A5	754	A	O4 ² -C1'	9.12	1.53	1.41
83	A5	186	G	O4 ² -C1'	9.11	1.53	1.41
83	A5	3469	G	O4 ² -C1'	9.11	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	180	U	O4 ² -C1'	9.11	1.53	1.41
83	A5	2170	C	O4 ² -C1'	9.11	1.53	1.41
37	BC	35	U	C2 ² -C1'	-9.11	1.43	1.53
83	A5	1761	C	O4 ² -C1'	9.10	1.53	1.41
83	A5	991	A	O4 ² -C1'	9.10	1.53	1.41
83	A5	869	A	O4 ² -C1'	-9.10	1.29	1.41
86	A8	6	U	C2 ² -C1'	9.10	1.63	1.53
83	A5	3475	U	O4 ² -C1'	9.10	1.53	1.41
83	A5	3924	U	C2 ² -C1'	9.10	1.63	1.53
36	B2	207	U	C2 ² -C1'	9.09	1.63	1.53
36	B2	545	A	C2 ² -C1'	-9.09	1.43	1.53
36	B2	1322	C	C2 ² -C1'	-9.09	1.43	1.53
36	B2	1599	U	O4 ² -C1'	9.09	1.53	1.41
83	A5	55	U	O4 ² -C1'	9.09	1.53	1.41
83	A5	2276	C	O4 ² -C1'	9.09	1.53	1.41
86	A8	50	A	C2 ² -C1'	-9.09	1.43	1.53
36	B2	1640	G	O4 ² -C1'	9.09	1.53	1.41
83	A5	971	C	O4 ² -C1'	9.09	1.53	1.41
83	A5	2096	C	C2 ² -C1'	-9.09	1.43	1.53
83	A5	3226	A	C2 ² -C1'	-9.09	1.43	1.53
36	B2	1344	A	C2 ² -C1'	-9.08	1.43	1.53
36	B2	1464	U	C2 ² -C1'	-9.08	1.43	1.53
83	A5	2207	A	C2 ² -C1'	9.08	1.63	1.53
86	A8	81	A	O4 ² -C1'	9.08	1.53	1.41
83	A5	83	U	C2 ² -C1'	-9.08	1.43	1.53
83	A5	1620	A	C2 ² -C1'	-9.08	1.43	1.53
83	A5	1730	A	C2 ² -C1'	-9.07	1.43	1.53
83	A5	1463	C	O4 ² -C1'	9.07	1.53	1.41
36	B2	470	G	C2 ² -C1'	-9.07	1.43	1.53
83	A5	3174	A	C2 ² -C1'	-9.07	1.43	1.53
83	A5	2621	A	O4 ² -C1'	9.07	1.53	1.41
83	A5	95	G	O4 ² -C1'	9.06	1.53	1.41
83	A5	1544	U	O4 ² -C1'	9.06	1.53	1.41
83	A5	2520	U	C2 ² -C1'	-9.06	1.43	1.53
36	B2	217	A	C2 ² -C1'	-9.05	1.43	1.53
83	A5	1237	G	C2 ² -C1'	9.05	1.63	1.53
83	A5	3404	A	O4 ² -C1'	-9.05	1.29	1.41
83	A5	667	U	O4 ² -C1'	9.05	1.53	1.41
83	A5	2140	C	O4 ² -C1'	9.05	1.53	1.41
83	A5	3441	C	C2 ² -C1'	-9.05	1.43	1.53
36	B2	926	U	O4 ² -C1'	9.05	1.53	1.41
83	A5	2178	U	O4 ² -C1'	9.05	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3258	C	C2'-C1'	-9.04	1.43	1.53
83	A5	1704	A	C2'-C1'	9.04	1.63	1.53
83	A5	1231	A	C2'-C1'	-9.04	1.43	1.53
36	B2	933	C	O4'-C1'	9.04	1.53	1.41
83	A5	324	A	O4'-C1'	9.03	1.53	1.41
83	A5	939	A	C2'-C1'	-9.04	1.43	1.53
36	B2	1772	C	O4'-C1'	9.03	1.53	1.41
83	A5	1464	G	C2'-C1'	-9.03	1.43	1.53
83	A5	2474	A	C2'-C1'	-9.03	1.43	1.53
84	A9	12	C	O4'-C1'	9.03	1.53	1.41
36	B2	1549	U	O4'-C1'	9.03	1.53	1.41
83	A5	500	A	O4'-C1'	9.03	1.53	1.41
83	A5	671	A	C2'-C1'	-9.03	1.43	1.53
83	A5	2730	A	C2'-C1'	-9.03	1.43	1.53
83	A5	276	G	C2'-C1'	-9.02	1.43	1.53
36	B2	658	C	C2'-C1'	-9.02	1.43	1.53
36	B2	65	A	C2'-C1'	9.02	1.63	1.53
83	A5	512	A	C2'-C1'	9.02	1.63	1.53
83	A5	2729	U	C2'-C1'	9.02	1.63	1.53
36	B2	914	C	C2'-C1'	9.02	1.63	1.53
83	A5	1682	G	C2'-C1'	-9.02	1.43	1.53
83	A5	1558	A	C2'-C1'	-9.01	1.43	1.53
83	A5	1809	A	C2'-C1'	-9.01	1.43	1.53
83	A5	2237	A	C2'-C1'	-9.01	1.43	1.53
83	A5	188	G	O4'-C1'	9.00	1.53	1.41
83	A5	759	U	C2'-C1'	-9.00	1.43	1.53
36	B2	593	A	O4'-C1'	9.00	1.53	1.41
83	A5	967	C	C2'-C1'	-9.00	1.43	1.53
83	A5	2256	G	C2'-C1'	-9.00	1.43	1.53
83	A5	2258	U	O4'-C1'	9.00	1.53	1.41
36	B2	295	A	C2'-C1'	-8.99	1.43	1.53
83	A5	1455	A	O4'-C1'	8.99	1.53	1.41
83	A5	2135	C	O4'-C1'	8.99	1.53	1.41
36	B2	1280	C	O4'-C1'	8.99	1.53	1.41
36	B2	1370	U	O4'-C1'	8.99	1.53	1.41
83	A5	172	C	O4'-C1'	8.99	1.53	1.41
83	A5	2558	A	O4'-C1'	8.99	1.53	1.41
86	A8	88	C	O4'-C1'	8.99	1.53	1.41
36	B2	54	C	O4'-C1'	8.98	1.53	1.41
36	B2	1869	C	O4'-C1'	8.98	1.53	1.41
83	A5	3148	C	O4'-C1'	8.98	1.53	1.41
83	A5	3894	C	O4'-C1'	8.98	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3360	G	C2'-C1'	-8.98	1.43	1.53
36	B2	424	G	O4'-C1'	8.97	1.53	1.41
36	B2	595	C	C2'-C1'	-8.97	1.43	1.53
83	A5	3708	U	O4'-C1'	8.97	1.53	1.41
36	B2	990	U	C2'-C1'	-8.97	1.43	1.53
83	A5	1149	C	C2'-C1'	-8.97	1.43	1.53
83	A5	2654	G	O4'-C1'	8.97	1.53	1.41
85	A7	75	G	C2'-C1'	-8.97	1.43	1.53
36	B2	452	U	C2'-C1'	-8.96	1.43	1.53
36	B2	1146	U	C2'-C1'	-8.96	1.43	1.53
36	B2	1755	A	O4'-C1'	8.96	1.53	1.41
83	A5	912	A	C2'-C1'	-8.97	1.43	1.53
83	A5	1354	G	C2'-C1'	-8.96	1.43	1.53
36	B2	414	C	O4'-C1'	8.96	1.53	1.41
36	B2	1720	A	C2'-C1'	-8.96	1.43	1.53
83	A5	3932	U	O4'-C1'	8.96	1.53	1.41
36	B2	655	A	C2'-C1'	8.96	1.63	1.53
83	A5	2239	C	O4'-C1'	8.96	1.53	1.41
36	B2	1161	G	C2'-C1'	-8.96	1.43	1.53
83	A5	1326	A	O4'-C1'	8.96	1.53	1.41
83	A5	3639	U	C2'-C1'	-8.96	1.43	1.53
83	A5	1877	A	C2'-C1'	-8.95	1.43	1.53
36	B2	1669	A	C2'-C1'	8.95	1.63	1.53
83	A5	359	G	C2'-C1'	8.95	1.63	1.53
83	A5	1985	C	C2'-C1'	-8.95	1.43	1.53
83	A5	3113	U	C2'-C1'	-8.95	1.43	1.53
36	B2	964	G	C2'-C1'	8.94	1.63	1.53
83	A5	404	U	O4'-C1'	8.94	1.53	1.41
83	A5	2587	U	C2'-C1'	-8.94	1.43	1.53
36	B2	1625	G	C2'-C1'	-8.94	1.43	1.53
83	A5	1773	U	C2'-C1'	-8.94	1.43	1.53
36	B2	306	A	O4'-C1'	8.94	1.53	1.41
83	A5	481	A	O4'-C1'	8.94	1.53	1.41
83	A5	530	U	C2'-C1'	8.94	1.63	1.53
83	A5	207	C	O4'-C1'	8.93	1.53	1.41
83	A5	2709	U	C2'-C1'	-8.93	1.43	1.53
83	A5	3910	A	C2'-C1'	-8.93	1.43	1.53
36	B2	1393	C	O4'-C1'	8.93	1.53	1.41
83	A5	3630	C	C2'-C1'	-8.93	1.43	1.53
86	A8	104	G	C2'-C1'	-8.93	1.43	1.53
36	B2	87	C	C2'-C1'	-8.93	1.43	1.53
36	B2	1721	C	C2'-C1'	-8.93	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3245	U	O4 ² -C1'	8.93	1.53	1.41
36	B2	1769	A	C2 ² -C1'	-8.92	1.43	1.53
86	A8	72	C	O4 ² -C1'	8.92	1.53	1.41
83	A5	566	A	O4 ² -C1'	8.92	1.53	1.41
83	A5	2643	C	O4 ² -C1'	8.92	1.53	1.41
83	A5	2634	A	C2 ² -C1'	8.92	1.63	1.53
85	A7	89	G	C2 ² -C1'	-8.92	1.43	1.53
36	B2	246	U	C2 ² -C1'	-8.92	1.43	1.53
83	A5	297	U	C2 ² -C1'	8.92	1.63	1.53
83	A5	1552	A	O4 ² -C1'	8.91	1.53	1.41
83	A5	2159	C	O4 ² -C1'	8.91	1.53	1.41
36	B2	1056	C	O4 ² -C1'	8.91	1.53	1.41
83	A5	1258	C	O4 ² -C1'	8.91	1.53	1.41
83	A5	2242	C	O4 ² -C1'	8.91	1.53	1.41
36	B2	962	G	C2 ² -C1'	-8.91	1.43	1.53
83	A5	2772	G	O4 ² -C1'	8.91	1.53	1.41
83	A5	1157	C	C2 ² -C1'	-8.90	1.43	1.53
36	B2	890	U	O4 ² -C1'	8.90	1.53	1.41
36	B2	344	C	O4 ² -C1'	8.90	1.53	1.41
36	B2	831	U	O4 ² -C1'	8.90	1.53	1.41
36	B2	451	C	O4 ² -C1'	8.89	1.53	1.41
83	A5	3898	C	O4 ² -C1'	8.89	1.53	1.41
83	A5	1618	A	O4 ² -C1'	8.89	1.53	1.41
36	B2	1063	G	C2 ² -C1'	-8.89	1.43	1.53
83	A5	2665	C	O4 ² -C1'	8.89	1.53	1.41
83	A5	3651	C	O4 ² -C1'	8.88	1.53	1.41
83	A5	594	U	C2 ² -C1'	-8.88	1.43	1.53
36	B2	627	A	C2 ² -C1'	-8.88	1.43	1.53
83	A5	246	C	O4 ² -C1'	8.88	1.53	1.41
83	A5	1032	G	C2 ² -C1'	-8.88	1.43	1.53
37	BC	31	C	C2 ² -C1'	-8.88	1.43	1.53
83	A5	2063	A	O4 ² -C1'	-8.88	1.30	1.41
36	B2	859	C	O4 ² -C1'	8.88	1.53	1.41
36	B2	1173	A	O4 ² -C1'	8.88	1.53	1.41
83	A5	351	A	C2 ² -C1'	-8.88	1.43	1.53
83	A5	3661	C	O4 ² -C1'	8.88	1.53	1.41
36	B2	1457	C	O4 ² -C1'	8.87	1.53	1.41
36	B2	1904	G	C2 ² -C1'	-8.87	1.43	1.53
36	B2	126	G	O4 ² -C1'	8.86	1.53	1.41
83	A5	1524	U	O4 ² -C1'	8.87	1.53	1.41
83	A5	2889	C	O4 ² -C1'	8.87	1.53	1.41
83	A5	862	U	O4 ² -C1'	8.86	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1684	G	C2'-C1'	-8.86	1.43	1.53
83	A5	920	G	C2'-C1'	-8.86	1.43	1.53
36	B2	61	A	C2'-C1'	-8.86	1.43	1.53
36	B2	1219	A	C2'-C1'	-8.85	1.43	1.53
83	A5	1252	U	O4'-C1'	8.85	1.53	1.41
83	A5	3591	A	O4'-C1'	-8.85	1.30	1.41
83	A5	544	U	O4'-C1'	8.84	1.53	1.41
83	A5	742	A	O4'-C1'	8.84	1.53	1.41
83	A5	850	A	C2'-C1'	-8.84	1.43	1.53
83	A5	1725	A	O4'-C1'	-8.84	1.30	1.41
83	A5	402	A	O4'-C1'	8.84	1.53	1.41
83	A5	2708	C	C2'-C1'	-8.84	1.43	1.53
83	A5	3667	C	O4'-C1'	8.84	1.53	1.41
83	A5	3284	C	C2'-C1'	8.84	1.63	1.53
83	A5	615	C	C2'-C1'	-8.83	1.43	1.53
83	A5	3368	C	C2'-C1'	8.83	1.63	1.53
83	A5	163	A	O4'-C1'	8.83	1.53	1.41
36	B2	281	C	O4'-C1'	8.82	1.53	1.41
83	A5	2771	G	O4'-C1'	8.82	1.53	1.41
83	A5	1117	A	O4'-C1'	8.82	1.53	1.41
83	A5	2099	C	O4'-C1'	8.82	1.53	1.41
83	A5	3899	A	O4'-C1'	8.82	1.53	1.41
83	A5	791	C	O4'-C1'	8.81	1.53	1.41
83	A5	1711	C	C2'-C1'	8.81	1.63	1.53
83	A5	1859	U	O4'-C1'	8.81	1.53	1.41
83	A5	3679	C	O4'-C1'	8.81	1.53	1.41
84	A9	3	C	O4'-C1'	8.81	1.53	1.41
36	B2	1941	A	C2'-C1'	-8.81	1.43	1.53
83	A5	3853	C	O4'-C1'	8.81	1.53	1.41
83	A5	3967	U	O4'-C1'	8.81	1.53	1.41
83	A5	197	G	O4'-C1'	8.81	1.53	1.41
83	A5	2572	G	O4'-C1'	8.81	1.53	1.41
83	A5	42	U	C2'-C1'	-8.81	1.43	1.53
83	A5	301	U	O4'-C1'	-8.80	1.30	1.41
36	B2	1764	U	C2'-C1'	-8.80	1.43	1.53
83	A5	1267	A	O4'-C1'	8.80	1.53	1.41
83	A5	2180	A	C2'-C1'	-8.80	1.43	1.53
83	A5	2818	G	C2'-C1'	-8.80	1.43	1.53
84	A9	8	A	O4'-C1'	8.79	1.53	1.41
83	A5	1783	A	C2'-C1'	8.79	1.63	1.53
85	A7	69	C	O4'-C1'	8.79	1.53	1.41
36	B2	391	G	C2'-C1'	-8.79	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2500	G	O4'-C1'	8.79	1.53	1.41
36	B2	1538	C	O4'-C1'	8.78	1.53	1.41
36	B2	1838	C	O4'-C1'	8.78	1.53	1.41
83	A5	1440	A	C2'-C1'	-8.78	1.43	1.53
36	B2	161	A	C2'-C1'	-8.78	1.43	1.53
36	B2	908	G	C2'-C1'	-8.78	1.43	1.53
83	A5	3714	U	C2'-C1'	8.78	1.63	1.53
86	A8	104	G	O4'-C1'	8.77	1.53	1.41
36	B2	1287	G	C2'-C1'	8.77	1.62	1.53
83	A5	1690	U	O4'-C1'	8.77	1.53	1.41
36	B2	879	U	O4'-C1'	8.77	1.53	1.41
36	B2	1187	U	O4'-C1'	-8.77	1.30	1.41
83	A5	1378	A	O4'-C1'	8.77	1.53	1.41
83	A5	1920	U	C2'-C1'	-8.76	1.43	1.53
83	A5	3860	A	O4'-C1'	8.76	1.53	1.41
83	A5	197	G	C2'-C1'	-8.76	1.43	1.53
83	A5	3599	U	C2'-C1'	-8.76	1.43	1.53
83	A5	1738	U	O4'-C1'	8.75	1.53	1.41
36	B2	1396	G	C2'-C1'	-8.75	1.43	1.53
83	A5	2722	U	C2'-C1'	-8.75	1.43	1.53
36	B2	1373	U	C2'-C1'	-8.74	1.43	1.53
83	A5	1864	U	C2'-C1'	-8.74	1.43	1.53
36	B2	25	U	C2'-C1'	8.74	1.62	1.53
36	B2	1736	U	C2'-C1'	8.74	1.62	1.53
83	A5	3157	U	C2'-C1'	8.74	1.62	1.53
36	B2	868	C	O4'-C1'	8.74	1.53	1.41
36	B2	1249	C	O4'-C1'	8.73	1.53	1.41
83	A5	1364	A	O4'-C1'	8.73	1.53	1.41
83	A5	2023	A	C2'-C1'	-8.73	1.43	1.53
83	A5	1528	G	C2'-C1'	-8.73	1.43	1.53
83	A5	1813	A	O4'-C1'	8.73	1.52	1.41
83	A5	3593	A	C2'-C1'	8.73	1.62	1.53
36	B2	251	G	C2'-C1'	8.73	1.62	1.53
36	B2	1962	G	O4'-C1'	8.73	1.52	1.41
83	A5	631	A	O4'-C1'	8.73	1.52	1.41
83	A5	778	C	C2'-C1'	-8.73	1.43	1.53
83	A5	1649	G	O4'-C1'	-8.73	1.30	1.41
36	B2	433	A	C2'-C1'	-8.73	1.43	1.53
83	A5	3752	G	O4'-C1'	8.73	1.52	1.41
83	A5	3892	A	O4'-C1'	-8.73	1.30	1.41
83	A5	891	U	C2'-C1'	-8.72	1.43	1.53
83	A5	2711	C	O4'-C1'	8.72	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3125	A	C2'-C1'	8.72	1.62	1.53
83	A5	3483	G	O4'-C1'	8.71	1.52	1.41
36	B2	1121	C	O4'-C1'	8.71	1.52	1.41
83	A5	3605	A	O4'-C1'	8.71	1.52	1.41
83	A5	1746	A	O4'-C1'	8.71	1.52	1.41
36	B2	217	A	O4'-C1'	8.71	1.52	1.41
36	B2	981	C	O4'-C1'	8.71	1.52	1.41
36	B2	1468	G	C2'-C1'	-8.70	1.43	1.53
83	A5	265	U	O4'-C1'	8.70	1.52	1.41
83	A5	3604	G	O4'-C1'	8.70	1.52	1.41
86	A8	53	C	C2'-C1'	-8.70	1.43	1.53
36	B2	1103	U	O4'-C1'	8.70	1.52	1.41
83	A5	1686	A	C2'-C1'	-8.69	1.43	1.53
83	A5	3414	U	O4'-C1'	8.70	1.52	1.41
36	B2	118	C	O4'-C1'	8.69	1.52	1.41
83	A5	2035	C	O4'-C1'	8.69	1.52	1.41
36	B2	1162	U	C2'-C1'	8.69	1.62	1.53
83	A5	1279	C	C2'-C1'	-8.69	1.43	1.53
83	A5	2165	C	C2'-C1'	-8.68	1.43	1.53
84	A9	30	A	C2'-C1'	8.68	1.62	1.53
36	B2	237	U	C2'-C1'	-8.68	1.43	1.53
36	B2	1387	A	C2'-C1'	8.68	1.62	1.53
83	A5	191	A	C2'-C1'	-8.67	1.43	1.53
36	B2	1731	U	C2'-C1'	8.67	1.62	1.53
36	B2	418	U	O4'-C1'	8.67	1.52	1.41
36	B2	1409	A	C2'-C1'	-8.66	1.43	1.53
83	A5	2676	U	O4'-C1'	8.66	1.52	1.41
83	A5	2872	U	O4'-C1'	8.66	1.52	1.41
83	A5	1473	U	O4'-C1'	-8.66	1.30	1.41
83	A5	2785	C	O4'-C1'	8.66	1.52	1.41
83	A5	810	A	O4'-C1'	8.65	1.52	1.41
36	B2	1311	A	C2'-C1'	-8.65	1.43	1.53
83	A5	2072	C	C2'-C1'	-8.65	1.43	1.53
36	B2	1611	G	C2'-C1'	-8.65	1.43	1.53
83	A5	649	A	C2'-C1'	-8.65	1.43	1.53
36	B2	1027	A	C2'-C1'	8.65	1.62	1.53
36	B2	1233	U	C2'-C1'	-8.65	1.43	1.53
83	A5	43	A	O4'-C1'	8.65	1.52	1.41
83	A5	552	U	C2'-C1'	8.65	1.62	1.53
83	A5	1260	A	C2'-C1'	-8.65	1.43	1.53
83	A5	1750	G	O4'-C1'	-8.65	1.30	1.41
83	A5	1944	C	C2'-C1'	-8.65	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3227	A	C2'-C1'	8.65	1.62	1.53
83	A5	3719	A	O4'-C1'	-8.65	1.30	1.41
36	B2	1087	C	C2'-C1'	8.64	1.62	1.53
36	B2	1847	A	C2'-C1'	8.64	1.62	1.53
83	A5	155	U	O4'-C1'	8.64	1.52	1.41
83	A5	213	A	C2'-C1'	-8.64	1.43	1.53
83	A5	238	G	O4'-C1'	8.64	1.52	1.41
36	B2	924	U	O4'-C1'	8.64	1.52	1.41
36	B2	1413	A	C2'-C1'	-8.64	1.43	1.53
36	B2	1093	C	C2'-C1'	-8.63	1.43	1.53
83	A5	3545	C	C2'-C1'	-8.63	1.43	1.53
83	A5	942	A	O4'-C1'	8.63	1.52	1.41
83	A5	2906	C	C2'-C1'	-8.63	1.43	1.53
83	A5	281	C	O4'-C1'	8.62	1.52	1.41
86	A8	1	A	O4'-C1'	8.62	1.52	1.41
83	A5	262	G	C2'-C1'	-8.62	1.43	1.53
36	B2	262	A	O4'-C1'	8.62	1.52	1.41
83	A5	2990	C	C2'-C1'	-8.62	1.43	1.53
83	A5	906	A	O4'-C1'	8.62	1.52	1.41
36	B2	1238	G	O4'-C1'	8.61	1.52	1.41
36	B2	1794	C	C2'-C1'	-8.61	1.43	1.53
36	B2	455	C	C2'-C1'	-8.61	1.43	1.53
36	B2	1202	G	O4'-C1'	-8.61	1.30	1.41
83	A5	679	G	C2'-C1'	-8.61	1.43	1.53
83	A5	3146	G	C2'-C1'	-8.61	1.43	1.53
83	A5	705	G	C2'-C1'	-8.61	1.43	1.53
83	A5	3796	G	O4'-C1'	8.60	1.52	1.41
36	B2	1322	C	O4'-C1'	8.60	1.52	1.41
36	B2	1549	U	C2'-C1'	-8.60	1.43	1.53
83	A5	1529	C	C2'-C1'	-8.60	1.43	1.53
36	B2	282	U	C2'-C1'	8.60	1.62	1.53
83	A5	2182	G	O4'-C1'	8.60	1.52	1.41
36	B2	1352	G	C2'-C1'	-8.60	1.43	1.53
83	A5	2216	A	C2'-C1'	8.60	1.62	1.53
36	B2	1692	C	O4'-C1'	8.59	1.52	1.41
83	A5	3914	G	C2'-C1'	-8.59	1.43	1.53
83	A5	451	A	O4'-C1'	8.59	1.52	1.41
83	A5	1537	G	O4'-C1'	-8.59	1.30	1.41
36	B2	713	A	C2'-C1'	8.59	1.62	1.53
36	B2	1990	U	O4'-C1'	8.59	1.52	1.41
37	BC	38	C	O4'-C1'	8.59	1.52	1.41
83	A5	30	A	C2'-C1'	-8.59	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1173	U	O4'-C1'	8.59	1.52	1.41
36	B2	55	A	O4'-C1'	8.58	1.52	1.41
83	A5	2910	C	O4'-C1'	8.58	1.52	1.41
36	B2	1182	C	O4'-C1'	8.58	1.52	1.41
83	A5	308	G	C2'-C1'	-8.58	1.44	1.53
83	A5	1541	A	O4'-C1'	8.58	1.52	1.41
83	A5	921	C	O4'-C1'	8.57	1.52	1.41
83	A5	2635	C	C2'-C1'	-8.57	1.44	1.53
83	A5	2736	A	O4'-C1'	8.57	1.52	1.41
83	A5	1983	A	O4'-C1'	8.57	1.52	1.41
36	B2	826	U	C2'-C1'	-8.56	1.44	1.53
36	B2	649	U	C2'-C1'	-8.56	1.44	1.53
36	B2	1523	U	O4'-C1'	8.56	1.52	1.41
83	A5	3343	A	C2'-C1'	-8.56	1.44	1.53
36	B2	1560	G	C2'-C1'	-8.56	1.44	1.53
36	B2	1752	U	C2'-C1'	8.56	1.62	1.53
83	A5	3773	G	O4'-C1'	-8.56	1.30	1.41
36	B2	1730	U	C2'-C1'	-8.55	1.44	1.53
83	A5	1289	C	O4'-C1'	8.55	1.52	1.41
83	A5	2725	U	O4'-C1'	8.55	1.52	1.41
36	B2	1366	C	C2'-C1'	-8.55	1.44	1.53
36	B2	1860	G	C2'-C1'	-8.55	1.44	1.53
83	A5	2991	A	C2'-C1'	-8.55	1.44	1.53
83	A5	3565	G	C2'-C1'	-8.55	1.44	1.53
83	A5	3567	A	C2'-C1'	8.55	1.62	1.53
83	A5	130	C	O4'-C1'	8.54	1.52	1.41
83	A5	3537	U	C2'-C1'	8.54	1.62	1.53
36	B2	280	U	C2'-C1'	8.54	1.62	1.53
85	A7	9	C	C2'-C1'	-8.54	1.44	1.53
36	B2	1443	U	O4'-C1'	8.54	1.52	1.41
83	A5	733	A	C2'-C1'	-8.54	1.44	1.53
83	A5	1164	G	C2'-C1'	-8.53	1.44	1.53
83	A5	3247	A	C2'-C1'	-8.54	1.44	1.53
36	B2	216	U	C2'-C1'	-8.53	1.44	1.53
36	B2	1094	C	O4'-C1'	8.53	1.52	1.41
83	A5	1786	G	C2'-C1'	-8.53	1.44	1.53
36	B2	1024	C	C2'-C1'	-8.53	1.44	1.53
83	A5	1805	A	O4'-C1'	8.53	1.52	1.41
83	A5	2181	A	O4'-C1'	8.53	1.52	1.41
83	A5	3440	C	C2'-C1'	-8.52	1.44	1.53
83	A5	2921	G	C2'-C1'	-8.52	1.44	1.53
83	A5	3907	G	C2'-C1'	8.52	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	953	A	O4'-C1'	8.51	1.52	1.41
83	A5	3347	G	O4'-C1'	8.51	1.52	1.41
36	B2	340	A	O4'-C1'	8.51	1.52	1.41
36	B2	1216	C	O4'-C1'	8.51	1.52	1.41
36	B2	339	U	C2'-C1'	8.51	1.62	1.53
83	A5	2877	G	O4'-C1'	-8.51	1.30	1.41
83	A5	1928	G	O4'-C1'	8.51	1.52	1.41
86	A8	25	C	C2'-C1'	-8.51	1.44	1.53
83	A5	3153	G	C2'-C1'	-8.50	1.44	1.53
36	B2	976	U	O4'-C1'	8.50	1.52	1.41
36	B2	1798	C	C2'-C1'	-8.49	1.44	1.53
36	B2	1870	C	C2'-C1'	-8.49	1.44	1.53
83	A5	440	U	P-O5'	-8.49	1.51	1.59
83	A5	256	G	O4'-C1'	8.49	1.52	1.41
83	A5	3491	C	O4'-C1'	8.49	1.52	1.41
83	A5	296	C	O4'-C1'	8.49	1.52	1.41
83	A5	525	U	C2'-C1'	8.49	1.62	1.53
83	A5	2656	C	O4'-C1'	8.49	1.52	1.41
36	B2	1703	G	C2'-C1'	-8.48	1.44	1.53
36	B2	104	A	C2'-C1'	-8.48	1.44	1.53
83	A5	240	G	O4'-C1'	-8.48	1.30	1.41
36	B2	515	U	C2'-C1'	-8.47	1.44	1.53
83	A5	876	G	C2'-C1'	-8.47	1.44	1.53
83	A5	3606	G	C2'-C1'	-8.47	1.44	1.53
36	B2	408	G	C2'-C1'	-8.47	1.44	1.53
36	B2	1321	A	O4'-C1'	8.47	1.52	1.41
83	A5	3864	C	O4'-C1'	8.47	1.52	1.41
36	B2	527	C	C2'-C1'	-8.46	1.44	1.53
83	A5	2105	C	C2'-C1'	-8.47	1.44	1.53
83	A5	3403	G	C2'-C1'	-8.46	1.44	1.53
86	A8	44	C	O3'-P	-8.46	1.50	1.61
36	B2	1015	U	O4'-C1'	8.46	1.52	1.41
83	A5	2867	U	C2'-C1'	-8.46	1.44	1.53
83	A5	1245	C	O4'-C1'	8.46	1.52	1.41
83	A5	3665	U	O4'-C1'	8.46	1.52	1.41
36	B2	1774	C	O4'-C1'	8.45	1.52	1.41
83	A5	3611	C	C2'-C1'	-8.45	1.44	1.53
83	A5	496	U	C2'-C1'	-8.45	1.44	1.53
83	A5	3172	A	C2'-C1'	-8.45	1.44	1.53
83	A5	2922	G	C2'-C1'	-8.45	1.44	1.53
36	B2	860	U	C2'-C1'	8.44	1.62	1.53
36	B2	534	A	C2'-C1'	-8.44	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2059	U	O4'-C1'	8.44	1.52	1.41
83	A5	3160	A	O4'-C1'	8.44	1.52	1.41
83	A5	1251	C	C2'-C1'	-8.43	1.44	1.53
83	A5	3644	C	C2'-C1'	-8.43	1.44	1.53
83	A5	786	C	C2'-C1'	-8.43	1.44	1.53
83	A5	1247	U	O4'-C1'	8.43	1.52	1.41
83	A5	1744	U	O4'-C1'	8.43	1.52	1.41
83	A5	2206	U	O4'-C1'	8.43	1.52	1.41
36	B2	271	A	C2'-C1'	-8.43	1.44	1.53
83	A5	3461	C	O4'-C1'	8.43	1.52	1.41
36	B2	1100	A	C2'-C1'	-8.42	1.44	1.53
36	B2	1944	A	C2'-C1'	8.42	1.62	1.53
36	B2	180	A	O4'-C1'	8.41	1.52	1.41
83	A5	315	G	C2'-C1'	8.41	1.62	1.53
83	A5	1501	A	C2'-C1'	8.41	1.62	1.53
83	A5	3665	U	C2'-C1'	-8.41	1.44	1.53
83	A5	817	C	O4'-C1'	8.41	1.52	1.41
83	A5	1703	A	O4'-C1'	8.41	1.52	1.41
83	A5	3362	G	C2'-C1'	-8.41	1.44	1.53
83	A5	61	A	O4'-C1'	8.41	1.52	1.41
83	A5	3566	G	C2'-C1'	-8.41	1.44	1.53
83	A5	3501	C	C2'-C1'	-8.40	1.44	1.53
83	A5	559	A	C2'-C1'	-8.40	1.44	1.53
83	A5	560	U	O4'-C1'	8.40	1.52	1.41
83	A5	1384	C	O4'-C1'	8.40	1.52	1.41
83	A5	1664	C	O4'-C1'	8.40	1.52	1.41
83	A5	3114	C	C2'-C1'	-8.39	1.44	1.53
83	A5	1363	G	O4'-C1'	8.39	1.52	1.41
83	A5	2851	U	C2'-C1'	8.39	1.62	1.53
83	A5	2734	A	C2'-C1'	-8.39	1.44	1.53
84	A9	25	G	C2'-C1'	-8.39	1.44	1.53
83	A5	653	U	O4'-C1'	8.38	1.52	1.41
84	A9	17	G	O4'-C1'	8.38	1.52	1.41
36	B2	416	C	C2'-C1'	-8.38	1.44	1.53
83	A5	1237	G	O4'-C1'	-8.38	1.30	1.41
83	A5	2514	U	C2'-C1'	-8.38	1.44	1.53
83	A5	1710	G	O4'-C1'	8.38	1.52	1.41
83	A5	2764	A	O4'-C1'	8.38	1.52	1.41
83	A5	3585	A	C2'-C1'	-8.38	1.44	1.53
36	B2	529	C	O4'-C1'	8.38	1.52	1.41
36	B2	1685	U	O4'-C1'	8.38	1.52	1.41
37	BC	72	A	O4'-C1'	8.37	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1100	G	O4 ² -C1'	8.38	1.52	1.41
83	A5	3905	U	O4 ² -C1'	8.38	1.52	1.41
83	A5	695	A	O4 ² -C1'	8.37	1.52	1.41
83	A5	733	A	O4 ² -C1'	8.36	1.52	1.41
83	A5	2744	C	O4 ² -C1'	8.36	1.52	1.41
36	B2	1391	G	C2 ² -C1'	-8.36	1.44	1.53
83	A5	2073	A	C2 ² -C1'	-8.36	1.44	1.53
83	A5	3395	G	O4 ² -C1'	8.36	1.52	1.41
83	A5	3889	U	O4 ² -C1'	8.36	1.52	1.41
83	A5	1178	U	C2 ² -C1'	-8.36	1.44	1.53
83	A5	3015	A	O4 ² -C1'	8.36	1.52	1.41
83	A5	3457	C	C2 ² -C1'	-8.36	1.44	1.53
36	B2	701	G	C2 ² -C1'	8.35	1.62	1.53
83	A5	619	U	C2 ² -C1'	-8.35	1.44	1.53
36	B2	1718	C	O4 ² -C1'	8.35	1.52	1.41
83	A5	91	U	O4 ² -C1'	8.35	1.52	1.41
83	A5	1045	G	C2 ² -C1'	8.35	1.62	1.53
36	B2	124	U	O4 ² -C1'	8.34	1.52	1.41
83	A5	1311	U	O4 ² -C1'	8.34	1.52	1.41
83	A5	3845	A	O4 ² -C1'	8.34	1.52	1.41
36	B2	89	C	O4 ² -C1'	8.33	1.52	1.41
83	A5	135	U	C2 ² -C1'	-8.33	1.44	1.53
83	A5	1570	U	C2 ² -C1'	-8.33	1.44	1.53
83	A5	2462	U	O4 ² -C1'	8.33	1.52	1.41
83	A5	3856	U	C2 ² -C1'	8.33	1.62	1.53
83	A5	2709	U	O4 ² -C1'	8.33	1.52	1.41
83	A5	2500	G	C2 ² -C1'	-8.33	1.44	1.53
36	B2	1576	A	O4 ² -C1'	8.32	1.52	1.41
83	A5	2163	A	O4 ² -C1'	8.32	1.52	1.41
36	B2	1642	C	C2 ² -C1'	-8.32	1.44	1.53
83	A5	1141	G	C2 ² -C1'	-8.32	1.44	1.53
83	A5	1390	C	C2 ² -C1'	-8.32	1.44	1.53
83	A5	3126	C	O4 ² -C1'	8.32	1.52	1.41
83	A5	3484	U	C2 ² -C1'	-8.32	1.44	1.53
36	B2	823	C	O4 ² -C1'	8.31	1.52	1.41
83	A5	179	C	C2 ² -C1'	-8.31	1.44	1.53
83	A5	3351	A	C2 ² -C1'	-8.31	1.44	1.53
83	A5	1130	U	O4 ² -C1'	8.31	1.52	1.41
36	B2	490	A	C2 ² -C1'	-8.31	1.44	1.53
36	B2	1251	A	C2 ² -C1'	-8.31	1.44	1.53
83	A5	564	C	O4 ² -C1'	8.31	1.52	1.41
83	A5	1086	C	C2 ² -C1'	-8.31	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3517	U	O4 ² -C1'	8.31	1.52	1.41
37	BC	11	C	O4 ² -C1'	8.30	1.52	1.41
36	B2	1371	C	O4 ² -C1'	8.30	1.52	1.41
83	A5	1442	C	C2 ² -C1'	-8.30	1.44	1.53
83	A5	2470	U	O4 ² -C1'	8.30	1.52	1.41
83	A5	2677	A	O4 ² -C1'	8.30	1.52	1.41
83	A5	1699	A	C2 ² -C1'	-8.30	1.44	1.53
83	A5	3373	G	C2 ² -C1'	8.30	1.62	1.53
36	B2	1011	A	C2 ² -C1'	8.29	1.62	1.53
36	B2	1693	C	O4 ² -C1'	8.29	1.52	1.41
36	B2	389	G	C2 ² -C1'	-8.29	1.44	1.53
83	A5	2515	C	O4 ² -C1'	8.29	1.52	1.41
83	A5	3517	U	C2 ² -C1'	-8.29	1.44	1.53
83	A5	3563	G	O4 ² -C1'	8.29	1.52	1.41
83	A5	252	U	O4 ² -C1'	8.29	1.52	1.41
36	B2	437	G	C2 ² -C1'	-8.28	1.44	1.53
83	A5	1479	G	O4 ² -C1'	8.28	1.52	1.41
83	A5	1520	U	C2 ² -C1'	8.28	1.62	1.53
83	A5	128	C	O4 ² -C1'	8.28	1.52	1.41
83	A5	3684	A	O4 ² -C1'	8.28	1.52	1.41
36	B2	573	C	C2 ² -C1'	-8.27	1.44	1.53
36	B2	441	A	C2 ² -C1'	8.27	1.62	1.53
83	A5	257	U	O4 ² -C1'	8.27	1.52	1.41
83	A5	3316	U	O4 ² -C1'	8.27	1.52	1.41
83	A5	3438	C	O4 ² -C1'	8.27	1.52	1.41
83	A5	1	U	C2 ² -C1'	8.27	1.62	1.53
83	A5	3234	A	O4 ² -C1'	8.27	1.52	1.41
83	A5	25	G	O4 ² -C1'	-8.27	1.30	1.41
36	B2	1831	C	O4 ² -C1'	8.26	1.52	1.41
83	A5	1262	C	C2 ² -C1'	-8.26	1.44	1.53
83	A5	1530	U	O4 ² -C1'	8.26	1.52	1.41
83	A5	3419	A	O4 ² -C1'	8.26	1.52	1.41
83	A5	3549	C	O4 ² -C1'	8.26	1.52	1.41
36	B2	1743	C	C2 ² -C1'	-8.26	1.44	1.53
36	B2	1844	C	C2 ² -C1'	-8.26	1.44	1.53
83	A5	1631	U	O4 ² -C1'	-8.26	1.30	1.41
83	A5	2276	C	C2 ² -C1'	-8.26	1.44	1.53
36	B2	900	A	C2 ² -C1'	8.26	1.62	1.53
83	A5	170	G	C2 ² -C1'	-8.26	1.44	1.53
83	A5	743	C	O4 ² -C1'	8.26	1.52	1.41
83	A5	2050	U	C2 ² -C1'	-8.26	1.44	1.53
83	A5	2777	A	O4 ² -C1'	8.26	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A7	70	G	C2'-C1'	-8.26	1.44	1.53
36	B2	1174	A	O4'-C1'	8.26	1.52	1.41
83	A5	3156	G	O4'-C1'	8.26	1.52	1.41
83	A5	24	G	O4'-C1'	8.25	1.52	1.41
83	A5	444	C	O4'-C1'	8.25	1.52	1.41
83	A5	2894	A	C2'-C1'	-8.25	1.44	1.53
36	B2	349	A	O4'-C1'	8.24	1.52	1.41
85	A7	77	A	O4'-C1'	8.24	1.52	1.41
36	B2	341	G	O4'-C1'	-8.24	1.30	1.41
36	B2	1699	G	C2'-C1'	-8.24	1.44	1.53
83	A5	2164	G	C2'-C1'	-8.24	1.44	1.53
83	A5	3545	C	O4'-C1'	8.24	1.52	1.41
36	B2	1619	A	O4'-C1'	-8.24	1.30	1.41
83	A5	1169	C	C2'-C1'	-8.24	1.44	1.53
84	A9	22	A	O4'-C1'	8.24	1.52	1.41
36	B2	1754	C	C2'-C1'	-8.23	1.44	1.53
83	A5	2784	C	O4'-C1'	8.23	1.52	1.41
36	B2	835	A	O4'-C1'	8.22	1.52	1.41
36	B2	1674	C	C2'-C1'	-8.22	1.44	1.53
83	A5	971	C	C2'-C1'	-8.22	1.44	1.53
83	A5	2477	C	O4'-C1'	8.22	1.52	1.41
85	A7	10	C	O4'-C1'	8.22	1.52	1.41
36	B2	109	U	C2'-C1'	-8.22	1.44	1.53
36	B2	1740	G	O4'-C1'	8.22	1.52	1.41
83	A5	241	C	C2'-C1'	-8.22	1.44	1.53
83	A5	3344	U	C2'-C1'	-8.22	1.44	1.53
83	A5	333	C	O4'-C1'	8.22	1.52	1.41
83	A5	3723	A	O4'-C1'	8.22	1.52	1.41
36	B2	1605	G	C2'-C1'	-8.21	1.44	1.53
83	A5	177	U	O4'-C1'	8.21	1.52	1.41
83	A5	279	U	C2'-C1'	-8.21	1.44	1.53
85	A7	54	A	C2'-C1'	-8.21	1.44	1.53
36	B2	11	A	C2'-C1'	8.21	1.62	1.53
83	A5	1158	C	O4'-C1'	8.21	1.52	1.41
83	A5	1347	A	O4'-C1'	8.21	1.52	1.41
83	A5	3305	U	C2'-C1'	-8.21	1.44	1.53
86	A8	13	U	C2'-C1'	-8.21	1.44	1.53
36	B2	1103	U	C2'-C1'	-8.20	1.44	1.53
36	B2	1704	G	C2'-C1'	-8.20	1.44	1.53
83	A5	3595	U	O4'-C1'	8.20	1.52	1.41
83	A5	3914	G	O4'-C1'	8.20	1.52	1.41
36	B2	1431	A	O4'-C1'	8.20	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	583	C	O4 ² -C1'	8.20	1.52	1.41
36	B2	1255	G	C2 ² -C1'	-8.19	1.44	1.53
83	A5	565	C	O4 ² -C1'	8.19	1.52	1.41
83	A5	3282	C	C2 ² -C1'	-8.19	1.44	1.53
83	A5	780	U	C2 ² -C1'	8.19	1.62	1.53
83	A5	3253	G	C2 ² -C1'	-8.19	1.44	1.53
36	B2	137	C	C2 ² -C1'	-8.18	1.44	1.53
83	A5	3245	U	C2 ² -C1'	-8.18	1.44	1.53
83	A5	800	C	O4 ² -C1'	8.18	1.52	1.41
83	A5	2659	A	O4 ² -C1'	-8.18	1.31	1.41
36	B2	1717	A	O4 ² -C1'	8.18	1.52	1.41
83	A5	2918	A	C2 ² -C1'	8.18	1.62	1.53
83	A5	3402	C	C2 ² -C1'	8.18	1.62	1.53
83	A5	159	G	C2 ² -C1'	-8.17	1.44	1.53
83	A5	1683	U	O4 ² -C1'	8.17	1.52	1.41
83	A5	3347	G	C2 ² -C1'	-8.17	1.44	1.53
83	A5	2542	C	O4 ² -C1'	8.16	1.52	1.41
83	A5	2985	U	O4 ² -C1'	8.16	1.52	1.41
83	A5	3690	A	C2 ² -C1'	-8.16	1.44	1.53
83	A5	2716	C	O4 ² -C1'	8.16	1.52	1.41
85	A7	3	C	O4 ² -C1'	8.15	1.52	1.41
36	B2	1763	C	C2 ² -C1'	-8.14	1.44	1.53
83	A5	1548	C	O4 ² -C1'	8.14	1.52	1.41
83	A5	2459	C	C2 ² -C1'	-8.14	1.44	1.53
36	B2	190	U	O4 ² -C1'	-8.14	1.31	1.41
83	A5	2552	G	O4 ² -C1'	8.14	1.52	1.41
37	BC	53	A	C2 ² -C1'	-8.14	1.44	1.53
83	A5	72	C	O4 ² -C1'	8.14	1.52	1.41
83	A5	2188	C	O4 ² -C1'	8.14	1.52	1.41
83	A5	1043	G	C2 ² -C1'	-8.13	1.44	1.53
83	A5	3648	A	O4 ² -C1'	8.13	1.52	1.41
36	B2	1776	G	O4 ² -C1'	8.13	1.52	1.41
37	BC	40	C	O4 ² -C1'	8.13	1.52	1.41
83	A5	1056	G	O4 ² -C1'	8.13	1.52	1.41
83	A5	656	U	O4 ² -C1'	8.13	1.52	1.41
83	A5	2478	A	O4 ² -C1'	8.13	1.52	1.41
36	B2	1459	G	O4 ² -C1'	8.12	1.52	1.41
83	A5	378	G	C2 ² -C1'	-8.12	1.44	1.53
83	A5	1076	A	O4 ² -C1'	8.12	1.52	1.41
36	B2	1902	C	O4 ² -C1'	8.12	1.52	1.41
83	A5	207	C	C2 ² -C1'	-8.12	1.44	1.53
83	A5	2201	U	P-O5'	-8.12	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	350	U	O4 ² -C1'	8.12	1.52	1.41
83	A5	362	A	C2 ² -C1'	-8.12	1.44	1.53
83	A5	798	C	O4 ² -C1'	-8.11	1.31	1.41
83	A5	1333	C	O4 ² -C1'	8.11	1.52	1.41
36	B2	1098	C	C2 ² -C1'	-8.10	1.44	1.53
36	B2	839	A	O4 ² -C1'	8.10	1.52	1.41
36	B2	1007	C	O4 ² -C1'	8.10	1.52	1.41
83	A5	2871	G	O4 ² -C1'	8.10	1.52	1.41
36	B2	1120	C	O4 ² -C1'	8.09	1.52	1.41
36	B2	1328	G	O4 ² -C1'	-8.09	1.31	1.41
36	B2	1955	G	O4 ² -C1'	8.09	1.52	1.41
83	A5	130	C	C2 ² -C1'	-8.09	1.44	1.53
83	A5	1181	A	O4 ² -C1'	8.09	1.52	1.41
36	B2	447	C	O4 ² -C1'	8.09	1.52	1.41
36	B2	1348	A	C2 ² -C1'	-8.09	1.44	1.53
83	A5	3449	G	O4 ² -C1'	8.09	1.52	1.41
36	B2	1864	G	O4 ² -C1'	8.08	1.52	1.41
83	A5	1178	U	O4 ² -C1'	8.08	1.52	1.41
83	A5	2715	C	O4 ² -C1'	8.08	1.52	1.41
83	A5	3228	A	C2 ² -C1'	-8.08	1.44	1.53
83	A5	1414	C	C2 ² -C1'	-8.08	1.44	1.53
83	A5	3176	C	O4 ² -C1'	8.08	1.52	1.41
83	A5	2551	U	O4 ² -C1'	8.07	1.52	1.41
36	B2	43	A	C2 ² -C1'	-8.07	1.44	1.53
36	B2	1155	C	O4 ² -C1'	8.07	1.52	1.41
83	A5	3442	A	C2 ² -C1'	-8.07	1.44	1.53
36	B2	1304	G	O4 ² -C1'	8.07	1.52	1.41
83	A5	392	A	O4 ² -C1'	-8.07	1.31	1.41
36	B2	981	C	C2 ² -C1'	-8.06	1.44	1.53
36	B2	920	U	O4 ² -C1'	8.06	1.52	1.41
36	B2	1393	C	C2 ² -C1'	-8.06	1.44	1.53
83	A5	2227	U	C2 ² -C1'	-8.06	1.44	1.53
36	B2	866	U	O4 ² -C1'	8.06	1.52	1.41
83	A5	3265	C	O4 ² -C1'	8.06	1.52	1.41
83	A5	3597	C	O4 ² -C1'	8.06	1.52	1.41
83	A5	1663	G	O4 ² -C1'	8.05	1.52	1.41
36	B2	1190	G	C2 ² -C1'	-8.05	1.44	1.53
83	A5	1234	G	C2 ² -C1'	-8.05	1.44	1.53
36	B2	1123	G	O4 ² -C1'	8.05	1.52	1.41
37	BC	39	U	O4 ² -C1'	8.05	1.52	1.41
83	A5	2477	C	C2 ² -C1'	-8.05	1.44	1.53
36	B2	1775	A	C2 ² -C1'	-8.04	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1062	C	O4 ² -C1'	8.04	1.52	1.41
36	B2	1975	G	O4 ² -C1'	8.03	1.52	1.41
36	B2	1845	C	O4 ² -C1'	8.03	1.52	1.41
36	B2	1523	U	C2 ² -C1'	-8.03	1.44	1.53
83	A5	1737	U	O4 ² -C1'	8.03	1.52	1.41
83	A5	2830	G	C2 ² -C1'	-8.03	1.44	1.53
83	A5	2895	U	C2 ² -C1'	8.03	1.62	1.53
36	B2	195	G	O4 ² -C1'	-8.03	1.31	1.41
36	B2	310	C	O4 ² -C1'	8.03	1.52	1.41
36	B2	1002	A	O4 ² -C1'	8.03	1.52	1.41
83	A5	1932	C	O4 ² -C1'	8.03	1.52	1.41
83	A5	1893	C	C2 ² -C1'	-8.02	1.44	1.53
83	A5	1951	C	C2 ² -C1'	-8.02	1.44	1.53
36	B2	1754	C	O4 ² -C1'	8.02	1.52	1.41
36	B2	193	U	C2 ² -C1'	-8.01	1.44	1.53
36	B2	720	G	O4 ² -C1'	8.01	1.52	1.41
36	B2	1194	C	C2 ² -C1'	-8.01	1.44	1.53
83	A5	585	A	C2 ² -C1'	-8.01	1.44	1.53
83	A5	2689	G	O4 ² -C1'	8.01	1.52	1.41
37	BC	55	C	O4 ² -C1'	8.01	1.52	1.41
83	A5	1397	A	O4 ² -C1'	8.01	1.52	1.41
83	A5	3284	C	O4 ² -C1'	8.01	1.52	1.41
83	A5	3779	U	C2 ² -C1'	-8.01	1.44	1.53
83	A5	3909	A	C2 ² -C1'	-8.01	1.44	1.53
37	BC	37	A	O4 ² -C1'	8.01	1.52	1.41
83	A5	308	G	O4 ² -C1'	8.01	1.52	1.41
83	A5	357	C	O4 ² -C1'	8.01	1.52	1.41
83	A5	1938	C	O4 ² -C1'	8.01	1.52	1.41
36	B2	1675	A	O4 ² -C1'	8.00	1.52	1.41
83	A5	2043	G	O4 ² -C1'	-8.00	1.31	1.41
36	B2	1059	G	O4 ² -C1'	8.00	1.52	1.41
83	A5	546	G	O4 ² -C1'	8.00	1.52	1.41
83	A5	908	C	O4 ² -C1'	8.00	1.52	1.41
83	A5	915	C	O4 ² -C1'	8.00	1.52	1.41
36	B2	156	U	C2 ² -C1'	-7.99	1.44	1.53
83	A5	2199	A	O4 ² -C1'	7.99	1.52	1.41
36	B2	1729	C	O4 ² -C1'	7.99	1.52	1.41
83	A5	2473	C	C2 ² -C1'	-7.99	1.44	1.53
83	A5	2579	G	O4 ² -C1'	7.99	1.52	1.41
85	A7	72	U	O4 ² -C1'	7.99	1.52	1.41
36	B2	247	G	O4 ² -C1'	7.99	1.52	1.41
83	A5	3456	U	O4 ² -C1'	7.99	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	351	G	O4 ² -C1'	7.99	1.52	1.41
36	B2	1536	A	O4 ² -C1'	7.99	1.52	1.41
83	A5	2071	A	C2 ² -C1'	-7.99	1.44	1.53
83	A5	2165	C	O4 ² -C1'	7.99	1.52	1.41
85	A7	1	G	O4 ² -C1'	7.98	1.52	1.41
83	A5	3341	C	O4 ² -C1'	7.98	1.52	1.41
83	A5	3620	G	O4 ² -C1'	-7.98	1.31	1.41
36	B2	1722	U	C2 ² -C1'	-7.98	1.44	1.53
83	A5	2484	G	C2 ² -C1'	-7.98	1.44	1.53
36	B2	939	G	O4 ² -C1'	-7.97	1.31	1.41
36	B2	471	U	C2 ² -C1'	-7.97	1.44	1.53
83	A5	1598	A	O4 ² -C1'	7.97	1.52	1.41
36	B2	951	A	C2 ² -C1'	7.97	1.62	1.53
83	A5	617	U	C2 ² -C1'	-7.97	1.44	1.53
83	A5	2602	A	C2 ² -C1'	7.97	1.62	1.53
83	A5	3315	U	O4 ² -C1'	7.97	1.52	1.41
83	A5	2610	A	O4 ² -C1'	7.96	1.52	1.41
83	A5	2576	A	O4 ² -C1'	7.96	1.52	1.41
83	A5	1917	U	C2 ² -C1'	7.96	1.62	1.53
36	B2	856	A	O4 ² -C1'	-7.96	1.31	1.41
83	A5	1154	U	O4 ² -C1'	7.96	1.51	1.41
83	A5	2601	A	C2 ² -C1'	-7.95	1.44	1.53
83	A5	337	A	C2 ² -C1'	-7.95	1.44	1.53
83	A5	720	G	C2 ² -C1'	-7.95	1.44	1.53
83	A5	635	G	C2 ² -C1'	-7.95	1.44	1.53
83	A5	1447	C	O4 ² -C1'	7.95	1.51	1.41
83	A5	986	A	O4 ² -C1'	7.94	1.51	1.41
36	B2	1697	A	O4 ² -C1'	7.94	1.51	1.41
36	B2	426	A	C2 ² -C1'	7.94	1.62	1.53
83	A5	2853	A	C2 ² -C1'	-7.94	1.44	1.53
36	B2	821	U	O4 ² -C1'	7.94	1.51	1.41
83	A5	2027	A	O4 ² -C1'	7.94	1.51	1.41
85	A7	16	A	O4 ² -C1'	7.94	1.51	1.41
83	A5	3758	G	O4 ² -C1'	-7.93	1.31	1.41
36	B2	1244	C	O4 ² -C1'	7.93	1.51	1.41
83	A5	1136	A	O4 ² -C1'	7.93	1.51	1.41
36	B2	66	C	O4 ² -C1'	7.93	1.51	1.41
36	B2	273	C	O4 ² -C1'	7.93	1.51	1.41
36	B2	255	U	O3 ² -P	-7.93	1.51	1.61
36	B2	1856	U	O4 ² -C1'	7.93	1.51	1.41
83	A5	760	G	O4 ² -C1'	7.93	1.51	1.41
86	A8	47	A	O4 ² -C1'	7.93	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1641	U	C2'-C1'	-7.93	1.44	1.53
83	A5	2559	C	O4'-C1'	7.93	1.51	1.41
36	B2	397	G	C2'-C1'	7.92	1.62	1.53
83	A5	2808	G	C2'-C1'	-7.92	1.44	1.53
36	B2	1603	G	O4'-C1'	7.92	1.51	1.41
83	A5	1105	U	O4'-C1'	7.92	1.51	1.41
36	B2	208	U	O4'-C1'	7.92	1.51	1.41
36	B2	978	C	O4'-C1'	7.92	1.51	1.41
36	B2	1991	C	C2'-C1'	7.92	1.62	1.53
83	A5	96	G	C2'-C1'	-7.91	1.44	1.53
83	A5	663	U	O4'-C1'	7.91	1.51	1.41
83	A5	2743	C	C2'-C1'	-7.91	1.44	1.53
83	A5	342	A	C2'-C1'	-7.91	1.44	1.53
83	A5	1006	A	C2'-C1'	-7.91	1.44	1.53
83	A5	1105	U	C2'-C1'	-7.91	1.44	1.53
83	A5	1586	A	C2'-C1'	-7.91	1.44	1.53
83	A5	1405	U	O4'-C1'	7.91	1.51	1.41
83	A5	389	G	C2'-C1'	-7.91	1.44	1.53
36	B2	454	C	C2'-C1'	-7.91	1.44	1.53
36	B2	524	G	C2'-C1'	-7.90	1.44	1.53
83	A5	3426	U	O4'-C1'	7.90	1.51	1.41
83	A5	3778	U	C2'-C1'	7.90	1.62	1.53
83	A5	521	U	C2'-C1'	7.90	1.62	1.53
83	A5	1472	C	C2'-C1'	-7.90	1.44	1.53
85	A7	109	U	O4'-C1'	7.90	1.51	1.41
83	A5	3961	G	C2'-C1'	-7.89	1.44	1.53
85	A7	46	C	C2'-C1'	-7.89	1.44	1.53
86	A8	48	G	C2'-C1'	-7.89	1.44	1.53
36	B2	229	U	C2'-C1'	-7.89	1.44	1.53
36	B2	1215	G	C2'-C1'	-7.89	1.44	1.53
36	B2	1470	A	O4'-C1'	7.89	1.51	1.41
83	A5	655	C	O4'-C1'	7.89	1.51	1.41
36	B2	1554	U	C2'-C1'	7.89	1.62	1.53
36	B2	1863	A	C2'-C1'	-7.89	1.44	1.53
83	A5	478	A	C2'-C1'	-7.89	1.44	1.53
83	A5	3163	U	O4'-C1'	7.89	1.51	1.41
36	B2	91	A	O4'-C1'	7.88	1.51	1.41
83	A5	1787	C	O4'-C1'	7.88	1.51	1.41
83	A5	201	U	O4'-C1'	-7.88	1.31	1.41
83	A5	3668	G	C2'-C1'	-7.88	1.44	1.53
83	A5	285	G	O4'-C1'	7.88	1.51	1.41
36	B2	928	C	O4'-C1'	7.88	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	574	C	O4 ² -C1'	7.88	1.51	1.41
36	B2	1044	G	C2 ² -C1'	-7.88	1.44	1.53
83	A5	1684	G	O4 ² -C1'	7.88	1.51	1.41
83	A5	3939	C	O4 ² -C1'	7.88	1.51	1.41
36	B2	837	A	C2 ² -C1'	-7.87	1.44	1.53
36	B2	1141	C	O4 ² -C1'	7.87	1.51	1.41
83	A5	92	A	O4 ² -C1'	7.87	1.51	1.41
83	A5	2924	A	C2 ² -C1'	-7.87	1.44	1.53
83	A5	1746	A	C2 ² -C1'	-7.87	1.44	1.53
36	B2	1468	G	O4 ² -C1'	7.87	1.51	1.41
83	A5	1471	G	O4 ² -C1'	7.87	1.51	1.41
36	B2	314	C	C2 ² -C1'	-7.86	1.44	1.53
36	B2	1176	C	O4 ² -C1'	7.86	1.51	1.41
36	B2	36	C	C2 ² -C1'	-7.86	1.44	1.53
83	A5	3285	G	C2 ² -C1'	-7.86	1.44	1.53
83	A5	3891	U	C2 ² -C1'	7.86	1.61	1.53
36	B2	332	U	O4 ² -C1'	7.85	1.51	1.41
36	B2	1325	A	O4 ² -C1'	7.85	1.51	1.41
36	B2	1401	U	C2 ² -C1'	7.85	1.61	1.53
83	A5	969	A	O4 ² -C1'	7.85	1.51	1.41
36	B2	625	U	O4 ² -C1'	7.85	1.51	1.41
83	A5	1874	G	C2 ² -C1'	-7.85	1.44	1.53
83	A5	1553	C	O4 ² -C1'	7.85	1.51	1.41
83	A5	3532	G	O4 ² -C1'	7.84	1.51	1.41
85	A7	88	G	C2 ² -C1'	-7.84	1.44	1.53
83	A5	1133	A	O4 ² -C1'	7.84	1.51	1.41
83	A5	1911	C	C2 ² -C1'	7.84	1.61	1.53
83	A5	3307	A	C2 ² -C1'	-7.83	1.44	1.53
36	B2	1466	A	O4 ² -C1'	7.83	1.51	1.41
83	A5	3540	G	C2 ² -C1'	7.83	1.61	1.53
36	B2	1773	C	C2 ² -C1'	-7.83	1.44	1.53
36	B2	1587	U	C2 ² -C1'	7.83	1.61	1.53
83	A5	1264	U	O4 ² -C1'	7.83	1.51	1.41
83	A5	1317	A	O4 ² -C1'	7.83	1.51	1.41
83	A5	3194	A	C2 ² -C1'	-7.83	1.44	1.53
83	A5	290	G	C2 ² -C1'	-7.82	1.44	1.53
83	A5	2098	C	C2 ² -C1'	7.82	1.61	1.53
83	A5	360	A	C2 ² -C1'	7.82	1.61	1.53
83	A5	2752	C	O4 ² -C1'	7.82	1.51	1.41
36	B2	78	A	C2 ² -C1'	7.82	1.61	1.53
36	B2	550	C	C2 ² -C1'	7.82	1.61	1.53
83	A5	3783	A	O4 ² -C1'	7.82	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2652	U	O4 ² -C1'	7.81	1.51	1.41
83	A5	2257	C	O4 ² -C1'	7.81	1.51	1.41
36	B2	1995	A	O4 ² -C1'	-7.81	1.31	1.41
83	A5	2796	G	O4 ² -C1'	-7.81	1.31	1.41
83	A5	3434	A	O4 ² -C1'	7.81	1.51	1.41
36	B2	511	G	C2 ² -C1'	7.81	1.61	1.53
83	A5	737	U	O4 ² -C1'	7.81	1.51	1.41
83	A5	2137	U	C2 ² -C1'	7.81	1.61	1.53
83	A5	1357	C	C2 ² -C1'	-7.80	1.44	1.53
83	A5	3302	G	C2 ² -C1'	-7.80	1.44	1.53
83	A5	1529	C	O4 ² -C1'	7.80	1.51	1.41
83	A5	2096	C	O4 ² -C1'	7.80	1.51	1.41
36	B2	84	A	O4 ² -C1'	7.80	1.51	1.41
83	A5	1310	A	C2 ² -C1'	7.80	1.61	1.53
83	A5	3371	G	C2 ² -C1'	-7.79	1.44	1.53
36	B2	373	U	C2 ² -C1'	7.79	1.61	1.53
36	B2	1307	C	O4 ² -C1'	7.79	1.51	1.41
83	A5	2873	C	C2 ² -C1'	-7.79	1.44	1.53
83	A5	679	G	O4 ² -C1'	7.79	1.51	1.41
36	B2	242	A	O4 ² -C1'	7.79	1.51	1.41
83	A5	1906	G	C2 ² -C1'	-7.79	1.44	1.53
36	B2	41	A	C2 ² -C1'	7.79	1.61	1.53
36	B2	1742	A	C2 ² -C1'	-7.79	1.44	1.53
36	B2	203	G	O4 ² -C1'	7.78	1.51	1.41
86	A8	100	G	O4 ² -C1'	7.78	1.51	1.41
83	A5	485	A	O4 ² -C1'	7.78	1.51	1.41
36	B2	141	G	O4 ² -C1'	7.78	1.51	1.41
36	B2	1989	A	C2 ² -C1'	-7.78	1.44	1.53
83	A5	453	C	O4 ² -C1'	7.78	1.51	1.41
83	A5	3696	C	C2 ² -C1'	-7.78	1.44	1.53
83	A5	2224	A	C2 ² -C1'	-7.78	1.44	1.53
83	A5	1930	G	C2 ² -C1'	7.77	1.61	1.53
36	B2	825	A	O4 ² -C1'	7.76	1.51	1.41
83	A5	8	C	O4 ² -C1'	7.76	1.51	1.41
83	A5	1518	A	C2 ² -C1'	7.76	1.61	1.53
36	B2	1141	C	C2 ² -C1'	-7.76	1.44	1.53
83	A5	2745	A	C2 ² -C1'	-7.76	1.44	1.53
83	A5	3572	G	C2 ² -C1'	-7.76	1.44	1.53
83	A5	3337	G	C2 ² -C1'	-7.76	1.44	1.53
83	A5	3175	A	O4 ² -C1'	7.75	1.51	1.41
36	B2	371	A	C2 ² -C1'	7.75	1.61	1.53
36	B2	1581	A	C2 ² -C1'	-7.75	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1872	A	C2'-C1'	-7.75	1.44	1.53
83	A5	3379	A	O4'-C1'	7.75	1.51	1.41
36	B2	486	A	O4'-C1'	7.75	1.51	1.41
83	A5	3421	C	O4'-C1'	7.75	1.51	1.41
83	A5	3429	A	P-O5'	-7.74	1.52	1.59
36	B2	150	G	C2'-C1'	-7.74	1.44	1.53
36	B2	58	U	C2'-C1'	7.74	1.61	1.53
83	A5	1920	U	O4'-C1'	7.74	1.51	1.41
83	A5	3316	U	C2'-C1'	-7.74	1.44	1.53
36	B2	992	A	O4'-C1'	7.74	1.51	1.41
83	A5	475	U	C2'-C1'	-7.74	1.44	1.53
36	B2	533	A	O4'-C1'	7.73	1.51	1.41
83	A5	1774	C	C2'-C1'	-7.73	1.44	1.53
36	B2	189	C	C2'-C1'	7.73	1.61	1.53
36	B2	349	A	C2'-C1'	-7.73	1.44	1.53
83	A5	2603	U	C2'-C1'	7.73	1.61	1.53
83	A5	131	U	O4'-C1'	7.72	1.51	1.41
83	A5	1019	U	C2'-C1'	7.72	1.61	1.53
36	B2	299	C	C2'-C1'	-7.72	1.44	1.53
36	B2	925	U	O4'-C1'	-7.72	1.31	1.41
36	B2	1318	A	O4'-C1'	7.71	1.51	1.41
83	A5	2745	A	O4'-C1'	7.71	1.51	1.41
36	B2	1618	C	C2'-C1'	7.71	1.61	1.53
36	B2	1097	C	C2'-C1'	-7.71	1.44	1.53
83	A5	3327	U	C2'-C1'	7.71	1.61	1.53
85	A7	82	G	C2'-C1'	-7.71	1.44	1.53
36	B2	1329	A	C2'-C1'	-7.71	1.44	1.53
83	A5	103	A	C2'-C1'	7.70	1.61	1.53
36	B2	1784	G	C2'-C1'	-7.70	1.44	1.53
83	A5	120	C	O4'-C1'	7.70	1.51	1.41
83	A5	1359	G	C2'-C1'	-7.70	1.44	1.53
83	A5	2206	U	C2'-C1'	-7.70	1.44	1.53
83	A5	222	C	O4'-C1'	7.70	1.51	1.41
83	A5	3330	C	O4'-C1'	7.70	1.51	1.41
36	B2	513	A	C2'-C1'	7.70	1.61	1.53
83	A5	890	C	O4'-C1'	7.70	1.51	1.41
83	A5	1231	A	O4'-C1'	7.70	1.51	1.41
83	A5	3696	C	P-O5'	7.70	1.67	1.59
84	A9	7	G	O4'-C1'	7.70	1.51	1.41
36	B2	74	U	O4'-C1'	-7.69	1.31	1.41
36	B2	1410	C	C2'-C1'	-7.69	1.44	1.53
83	A5	286	A	C2'-C1'	7.69	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	467	A	C2'-C1'	-7.69	1.44	1.53
36	B2	14	C	C2'-C1'	-7.68	1.44	1.53
36	B2	714	U	O4'-C1'	7.68	1.51	1.41
83	A5	1585	U	C2'-C1'	7.68	1.61	1.53
83	A5	2563	G	C2'-C1'	-7.68	1.44	1.53
83	A5	3444	G	O4'-C1'	7.68	1.51	1.41
36	B2	710	C	O4'-C1'	7.68	1.51	1.41
36	B2	1741	A	C2'-C1'	-7.68	1.45	1.53
83	A5	1211	A	C2'-C1'	-7.68	1.45	1.53
83	A5	571	U	C2'-C1'	-7.67	1.45	1.53
36	B2	1862	G	O4'-C1'	7.67	1.51	1.41
83	A5	636	U	C2'-C1'	7.67	1.61	1.53
83	A5	3267	C	C2'-C1'	-7.67	1.45	1.53
83	A5	969	A	C2'-C1'	-7.67	1.45	1.53
83	A5	2800	C	O4'-C1'	7.67	1.51	1.41
36	B2	161	A	O4'-C1'	7.66	1.51	1.41
83	A5	493	A	O4'-C1'	7.66	1.51	1.41
83	A5	539	G	O4'-C1'	7.66	1.51	1.41
83	A5	1321	G	O4'-C1'	7.66	1.51	1.41
83	A5	2607	A	C2'-C1'	-7.66	1.45	1.53
83	A5	773	G	O3'-P	-7.66	1.51	1.61
36	B2	1291	A	O4'-C1'	7.66	1.51	1.41
83	A5	444	C	C2'-C1'	-7.66	1.45	1.53
83	A5	2158	U	C2'-C1'	-7.66	1.45	1.53
83	A5	2896	U	O4'-C1'	7.66	1.51	1.41
83	A5	3294	A	C2'-C1'	7.66	1.61	1.53
85	A7	69	C	C2'-C1'	-7.66	1.45	1.53
36	B2	203	G	C2'-C1'	-7.65	1.45	1.53
83	A5	1358	U	C2'-C1'	7.65	1.61	1.53
83	A5	1780	U	O3'-P	-7.65	1.51	1.61
83	A5	3756	A	O4'-C1'	7.65	1.51	1.41
83	A5	236	G	O4'-C1'	7.65	1.51	1.41
83	A5	403	A	C2'-C1'	-7.65	1.45	1.53
83	A5	1872	A	O4'-C1'	7.65	1.51	1.41
83	A5	3200	G	C2'-C1'	7.65	1.61	1.53
36	B2	959	U	O4'-C1'	7.64	1.51	1.41
83	A5	331	A	O4'-C1'	7.64	1.51	1.41
83	A5	885	U	O4'-C1'	7.64	1.51	1.41
83	A5	2100	U	C2'-C1'	7.64	1.61	1.53
36	B2	513	A	O4'-C1'	7.64	1.51	1.41
36	B2	913	G	O4'-C1'	7.64	1.51	1.41
36	B2	1566	U	O4'-C1'	7.63	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	438	G	C2'-C1'	-7.63	1.45	1.53
83	A5	267	C	O4'-C1'	7.63	1.51	1.41
36	B2	39	A	C2'-C1'	7.63	1.61	1.53
36	B2	1929	U	C2'-C1'	-7.63	1.45	1.53
83	A5	416	C	C2'-C1'	7.62	1.61	1.53
36	B2	1432	A	C2'-C1'	7.62	1.61	1.53
83	A5	857	U	O4'-C1'	7.62	1.51	1.41
36	B2	1469	U	O4'-C1'	7.62	1.51	1.41
83	A5	1656	U	C2'-C1'	-7.62	1.45	1.53
83	A5	1770	C	C2'-C1'	-7.62	1.45	1.53
83	A5	2470	U	C2'-C1'	-7.61	1.45	1.53
83	A5	2141	A	C2'-C1'	7.61	1.61	1.53
36	B2	143	U	C2'-C1'	-7.61	1.45	1.53
36	B2	1615	U	O4'-C1'	7.61	1.51	1.41
83	A5	2927	U	O4'-C1'	7.61	1.51	1.41
83	A5	3960	U	C2'-C1'	7.61	1.61	1.53
86	A8	9	G	O4'-C1'	7.60	1.51	1.41
83	A5	1678	C	O4'-C1'	7.60	1.51	1.41
83	A5	3121	A	O4'-C1'	7.60	1.51	1.41
83	A5	1261	A	C2'-C1'	-7.60	1.45	1.53
36	B2	1194	C	O4'-C1'	7.60	1.51	1.41
83	A5	3129	U	C2'-C1'	-7.60	1.45	1.53
83	A5	3725	U	C2'-C1'	7.60	1.61	1.53
83	A5	1235	U	O4'-C1'	7.59	1.51	1.41
36	B2	278	G	O4'-C1'	7.58	1.51	1.41
36	B2	1684	U	O4'-C1'	7.58	1.51	1.41
83	A5	1654	C	C2'-C1'	-7.58	1.45	1.53
83	A5	2130	G	O4'-C1'	-7.58	1.31	1.41
83	A5	355	G	C2'-C1'	-7.58	1.45	1.53
36	B2	1872	G	O4'-C1'	-7.58	1.31	1.41
83	A5	1693	C	O4'-C1'	7.58	1.51	1.41
83	A5	1243	A	C2'-C1'	-7.57	1.45	1.53
36	B2	379	U	C2'-C1'	-7.57	1.45	1.53
36	B2	442	A	C2'-C1'	7.57	1.61	1.53
83	A5	1751	U	C2'-C1'	-7.57	1.45	1.53
36	B2	1531	G	O4'-C1'	7.57	1.51	1.41
83	A5	3490	C	C2'-C1'	-7.57	1.45	1.53
36	B2	1739	U	C2'-C1'	-7.57	1.45	1.53
36	B2	1832	C	O4'-C1'	7.57	1.51	1.41
83	A5	1808	A	C2'-C1'	-7.56	1.45	1.53
85	A7	120	U	C2'-C1'	-7.56	1.45	1.53
36	B2	47	A	O4'-C1'	7.56	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	165	G	C2'-C1'	-7.56	1.45	1.53
83	A5	2918	A	O4'-C1'	-7.56	1.31	1.41
83	A5	3487	A	O4'-C1'	7.56	1.51	1.41
36	B2	1963	G	C2'-C1'	-7.56	1.45	1.53
83	A5	341	A	O4'-C1'	7.55	1.51	1.41
83	A5	782	G	O4'-C1'	7.55	1.51	1.41
83	A5	1552	A	C2'-C1'	-7.55	1.45	1.53
36	B2	862	C	C2'-C1'	-7.55	1.45	1.53
83	A5	1464	G	O4'-C1'	7.55	1.51	1.41
36	B2	878	C	C2'-C1'	7.55	1.61	1.53
84	A9	26	U	C2'-C1'	-7.55	1.45	1.53
83	A5	2068	A	C2'-C1'	-7.55	1.45	1.53
83	A5	1051	C	C2'-C1'	-7.54	1.45	1.53
83	A5	3546	A	C2'-C1'	-7.54	1.45	1.53
36	B2	1022	A	O4'-C1'	7.54	1.51	1.41
83	A5	115	U	C2'-C1'	7.54	1.61	1.53
36	B2	1760	G	O3'-P	-7.54	1.52	1.61
36	B2	457	G	O4'-C1'	7.54	1.51	1.41
83	A5	1351	C	C2'-C1'	-7.54	1.45	1.53
83	A5	1765	U	O4'-C1'	7.54	1.51	1.41
83	A5	1878	A	O4'-C1'	7.54	1.51	1.41
36	B2	46	A	C2'-C1'	-7.53	1.45	1.53
36	B2	983	C	O4'-C1'	7.53	1.51	1.41
36	B2	1604	A	O4'-C1'	7.53	1.51	1.41
83	A5	648	U	O4'-C1'	7.52	1.51	1.41
83	A5	690	U	O4'-C1'	7.52	1.51	1.41
36	B2	1265	C	O4'-C1'	7.52	1.51	1.41
83	A5	759	U	O4'-C1'	7.52	1.51	1.41
83	A5	2550	G	C2'-C1'	-7.52	1.45	1.53
83	A5	3579	C	O4'-C1'	7.52	1.51	1.41
83	A5	157	C	C2'-C1'	7.51	1.61	1.53
83	A5	3669	U	C2'-C1'	-7.51	1.45	1.53
36	B2	902	A	C2'-C1'	-7.51	1.45	1.53
36	B2	1845	C	C2'-C1'	-7.51	1.45	1.53
85	A7	78	C	O4'-C1'	7.51	1.51	1.41
83	A5	3648	A	C2'-C1'	-7.50	1.45	1.53
36	B2	1080	A	C2'-C1'	-7.50	1.45	1.53
83	A5	1098	U	O4'-C1'	7.50	1.51	1.41
83	A5	3599	U	O4'-C1'	7.50	1.51	1.41
83	A5	1144	C	C2'-C1'	-7.50	1.45	1.53
83	A5	2120	G	C2'-C1'	-7.50	1.45	1.53
83	A5	2823	A	C2'-C1'	-7.50	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	662	A	O4 ² -C1'	-7.49	1.31	1.41
83	A5	2485	A	O4 ² -C1'	7.49	1.51	1.41
36	B2	82	G	C2 ² -C1'	-7.49	1.45	1.53
36	B2	176	U	C2 ² -C1'	-7.49	1.45	1.53
83	A5	3181	G	C2 ² -C1'	-7.49	1.45	1.53
83	A5	3459	C	C2 ² -C1'	-7.49	1.45	1.53
83	A5	336	A	C2 ² -C1'	-7.49	1.45	1.53
36	B2	1948	A	O4 ² -C1'	7.48	1.51	1.41
83	A5	1717	A	C2 ² -C1'	-7.48	1.45	1.53
36	B2	571	U	C2 ² -C1'	-7.48	1.45	1.53
83	A5	3186	C	O4 ² -C1'	7.48	1.51	1.41
83	A5	3202	G	C2 ² -C1'	-7.48	1.45	1.53
83	A5	3370	A	C2 ² -C1'	7.48	1.61	1.53
83	A5	2877	G	C2 ² -C1'	7.47	1.61	1.53
86	A8	48	G	O4 ² -C1'	7.47	1.51	1.41
86	A8	65	G	C2 ² -C1'	-7.47	1.45	1.53
36	B2	843	G	C2 ² -C1'	-7.47	1.45	1.53
36	B2	1813	U	O4 ² -C1'	7.47	1.51	1.41
83	A5	122	C	C2 ² -C1'	-7.47	1.45	1.53
83	A5	1298	A	O4 ² -C1'	7.47	1.51	1.41
83	A5	2249	A	O4 ² -C1'	7.47	1.51	1.41
84	A9	12	C	C2 ² -C1'	-7.47	1.45	1.53
36	B2	329	U	C2 ² -C1'	7.46	1.61	1.53
36	B2	1282	A	O4 ² -C1'	7.46	1.51	1.41
83	A5	2914	A	C2 ² -C1'	-7.46	1.45	1.53
36	B2	1035	G	C2 ² -C1'	-7.46	1.45	1.53
83	A5	3210	A	C2 ² -C1'	-7.46	1.45	1.53
36	B2	1830	G	O4 ² -C1'	7.45	1.51	1.41
36	B2	1039	A	C2 ² -C1'	-7.45	1.45	1.53
83	A5	1530	U	C2 ² -C1'	-7.45	1.45	1.53
83	A5	62	G	C2 ² -C1'	-7.45	1.45	1.53
83	A5	3366	G	O4 ² -C1'	7.45	1.51	1.41
37	BC	19	A	O4 ² -C1'	7.45	1.51	1.41
83	A5	620	U	C2 ² -C1'	7.45	1.61	1.53
83	A5	3543	A	O4 ² -C1'	-7.45	1.31	1.41
83	A5	977	C	C2 ² -C1'	-7.45	1.45	1.53
36	B2	1010	A	C2 ² -C1'	-7.45	1.45	1.53
83	A5	370	A	O4 ² -C1'	-7.44	1.31	1.41
84	A9	28	G	O4 ² -C1'	-7.44	1.31	1.41
36	B2	453	C	O4 ² -C1'	7.44	1.51	1.41
36	B2	1768	A	O4 ² -C1'	7.44	1.51	1.41
83	A5	1323	C	O4 ² -C1'	7.44	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	222	C	O4 ² -C1'	7.43	1.51	1.41
83	A5	3816	A	C2 ² -C1'	7.43	1.61	1.53
36	B2	580	C	O4 ² -C1'	7.43	1.51	1.41
36	B2	1681	U	O4 ² -C1'	-7.43	1.31	1.41
83	A5	2498	U	C2 ² -C1'	-7.43	1.45	1.53
83	A5	2990	C	O4 ² -C1'	7.43	1.51	1.41
83	A5	3688	A	C2 ² -C1'	-7.43	1.45	1.53
83	A5	3144	U	C2 ² -C1'	7.42	1.61	1.53
36	B2	937	A	C2 ² -C1'	-7.42	1.45	1.53
83	A5	1610	A	O4 ² -C1'	7.42	1.51	1.41
36	B2	1589	C	O4 ² -C1'	7.42	1.51	1.41
36	B2	1634	U	C2 ² -C1'	7.42	1.61	1.53
83	A5	1522	G	O4 ² -C1'	7.42	1.51	1.41
85	A7	48	G	O4 ² -C1'	-7.42	1.32	1.41
85	A7	3	C	C2 ² -C1'	-7.42	1.45	1.53
83	A5	1096	A	O4 ² -C1'	-7.41	1.32	1.41
83	A5	2598	A	C2 ² -C1'	-7.41	1.45	1.53
36	B2	1456	G	O4 ² -C1'	7.41	1.51	1.41
36	B2	1559	A	O4 ² -C1'	7.41	1.51	1.41
83	A5	1280	C	C2 ² -C1'	-7.41	1.45	1.53
83	A5	1511	C	C2 ² -C1'	-7.41	1.45	1.53
83	A5	1558	A	O4 ² -C1'	7.41	1.51	1.41
36	B2	588	A	C2 ² -C1'	-7.41	1.45	1.53
36	B2	1881	A	O4 ² -C1'	7.41	1.51	1.41
83	A5	3528	A	C2 ² -C1'	7.41	1.61	1.53
36	B2	1082	G	O4 ² -C1'	-7.41	1.32	1.41
36	B2	1633	C	C2 ² -C1'	-7.41	1.45	1.53
83	A5	3631	C	O4 ² -C1'	7.40	1.51	1.41
36	B2	1331	A	O3 ² -P	-7.40	1.52	1.61
36	B2	1032	U	O4 ² -C1'	7.40	1.51	1.41
83	A5	936	U	O4 ² -C1'	7.40	1.51	1.41
36	B2	1342	G	C2 ² -C1'	7.40	1.61	1.53
83	A5	2062	A	C2 ² -C1'	7.40	1.61	1.53
85	A7	116	G	C2 ² -C1'	-7.40	1.45	1.53
83	A5	3677	U	O4 ² -C1'	7.40	1.51	1.41
86	A8	98	U	C2 ² -C1'	-7.40	1.45	1.53
83	A5	1880	A	O4 ² -C1'	7.39	1.51	1.41
83	A5	2022	C	O4 ² -C1'	7.39	1.51	1.41
84	A9	8	A	C2 ² -C1'	-7.39	1.45	1.53
36	B2	386	C	C2 ² -C1'	-7.39	1.45	1.53
83	A5	2095	U	C2 ² -C1'	-7.39	1.45	1.53
83	A5	459	U	O4 ² -C1'	-7.39	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3742	C	O4 ² -C1'	7.39	1.51	1.41
36	B2	1705	G	C2 ² -C1'	-7.39	1.45	1.53
83	A5	235	A	C2 ² -C1'	7.39	1.61	1.53
83	A5	1183	U	O4 ² -C1'	7.39	1.51	1.41
36	B2	1081	G	O4 ² -C1'	7.38	1.51	1.41
36	B2	1770	U	C2 ² -C1'	-7.38	1.45	1.53
83	A5	136	C	C5 ² -C4'	7.38	1.60	1.51
83	A5	1742	U	O4 ² -C1'	7.38	1.51	1.41
36	B2	322	C	O4 ² -C1'	7.38	1.51	1.41
36	B2	1427	U	O4 ² -C1'	7.38	1.51	1.41
83	A5	1229	U	O4 ² -C1'	7.38	1.51	1.41
83	A5	1249	A	O4 ² -C1'	7.38	1.51	1.41
83	A5	2469	U	O4 ² -C1'	7.38	1.51	1.41
83	A5	2234	C	C2 ² -C1'	-7.38	1.45	1.53
83	A5	2788	U	O4 ² -C1'	7.38	1.51	1.41
36	B2	461	G	O4 ² -C1'	7.37	1.51	1.41
83	A5	1698	A	O4 ² -C1'	-7.37	1.32	1.41
83	A5	2550	G	O4 ² -C1'	7.37	1.51	1.41
83	A5	3606	G	O4 ² -C1'	7.37	1.51	1.41
36	B2	879	U	C2 ² -C1'	-7.37	1.45	1.53
36	B2	1208	U	O4 ² -C1'	7.37	1.51	1.41
86	A8	31	G	C2 ² -C1'	-7.37	1.45	1.53
36	B2	1405	G	C2 ² -C1'	-7.37	1.45	1.53
36	B2	374	C	O4 ² -C1'	7.36	1.51	1.41
36	B2	960	U	C2 ² -C1'	7.36	1.61	1.53
36	B2	232	C	O4 ² -C1'	7.36	1.51	1.41
36	B2	1199	G	C2 ² -C1'	-7.36	1.45	1.53
83	A5	1593	U	O4 ² -C1'	-7.36	1.32	1.41
36	B2	263	A	C2 ² -C1'	7.36	1.61	1.53
36	B2	1262	C	O4 ² -C1'	7.36	1.51	1.41
36	B2	1075	U	O4 ² -C1'	7.35	1.51	1.41
84	A9	14	U	C2 ² -C1'	-7.35	1.45	1.53
83	A5	554	U	O4 ² -C1'	7.35	1.51	1.41
83	A5	2646	U	C2 ² -C1'	7.35	1.61	1.53
83	A5	69	A	O4 ² -C1'	-7.35	1.32	1.41
83	A5	1403	C	C5 ² -C4'	7.35	1.60	1.51
83	A5	1972	C	O4 ² -C1'	7.35	1.51	1.41
83	A5	3781	U	C2 ² -C1'	7.34	1.61	1.53
83	A5	3866	U	C2 ² -C1'	-7.34	1.45	1.53
83	A5	624	A	C2 ² -C1'	7.34	1.61	1.53
83	A5	1209	A	O4 ² -C1'	7.34	1.51	1.41
83	A5	2067	C	O4 ² -C1'	7.34	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3514	C	C2'-C1'	7.34	1.61	1.53
83	A5	2556	A	O4'-C1'	7.34	1.51	1.41
36	B2	1014	C	C2'-C1'	-7.34	1.45	1.53
36	B2	1555	U	O4'-C1'	7.34	1.51	1.41
83	A5	239	U	C2'-C1'	-7.34	1.45	1.53
83	A5	1882	G	O4'-C1'	-7.33	1.32	1.41
83	A5	3330	C	C2'-C1'	-7.33	1.45	1.53
83	A5	2706	U	C2'-C1'	-7.33	1.45	1.53
86	A8	56	U	C2'-C1'	-7.33	1.45	1.53
83	A5	2803	A	O4'-C1'	7.33	1.51	1.41
83	A5	224	U	O4'-C1'	7.33	1.51	1.41
83	A5	3503	G	C2'-C1'	-7.33	1.45	1.53
83	A5	3913	G	C2'-C1'	-7.33	1.45	1.53
36	B2	980	A	C2'-C1'	-7.32	1.45	1.53
83	A5	711	A	O4'-C1'	7.32	1.51	1.41
85	A7	74	A	C2'-C1'	7.32	1.61	1.53
37	BC	67	C	C2'-C1'	-7.32	1.45	1.53
83	A5	395	A	P-O5'	-7.32	1.52	1.59
83	A5	1765	U	C2'-C1'	-7.32	1.45	1.53
36	B2	1555	U	O3'-P	-7.32	1.52	1.61
83	A5	1981	A	O4'-C1'	7.32	1.51	1.41
36	B2	367	G	C2'-C1'	-7.32	1.45	1.53
36	B2	1013	A	O4'-C1'	7.32	1.51	1.41
83	A5	3560	C	C2'-C1'	7.31	1.61	1.53
83	A5	1617	U	O4'-C1'	7.31	1.51	1.41
83	A5	768	U	C2'-C1'	7.31	1.61	1.53
36	B2	1816	C	C2'-C1'	-7.31	1.45	1.53
83	A5	2002	C	C2'-C1'	-7.31	1.45	1.53
85	A7	76	U	C2'-C1'	-7.31	1.45	1.53
36	B2	52	U	O4'-C1'	7.30	1.51	1.41
83	A5	1104	A	O4'-C1'	7.30	1.51	1.41
36	B2	1295	U	C4'-C3'	7.30	1.61	1.53
83	A5	2053	A	C2'-C1'	-7.30	1.45	1.53
83	A5	2001	U	O4'-C1'	7.30	1.51	1.41
84	A9	24	G	C2'-C1'	7.30	1.61	1.53
86	A8	56	U	O4'-C1'	7.30	1.51	1.41
83	A5	1545	A	C2'-C1'	-7.29	1.45	1.53
36	B2	1333	C	P-O5'	-7.29	1.52	1.59
36	B2	1599	U	C2'-C1'	-7.29	1.45	1.53
36	B2	1752	U	O4'-C1'	-7.29	1.32	1.41
83	A5	135	U	O4'-C1'	7.29	1.51	1.41
83	A5	809	G	C2'-C1'	-7.29	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1690	U	C2'-C1'	7.29	1.61	1.53
83	A5	3307	A	O4'-C1'	7.29	1.51	1.41
83	A5	2058	C	C2'-C1'	-7.29	1.45	1.53
36	B2	1632	C	O4'-C1'	7.29	1.51	1.41
83	A5	1477	G	O4'-C1'	7.29	1.51	1.41
83	A5	2009	A	O4'-C1'	7.29	1.51	1.41
83	A5	1891	U	C2'-C1'	7.28	1.61	1.53
85	A7	54	A	O4'-C1'	7.28	1.51	1.41
83	A5	528	U	C2'-C1'	-7.28	1.45	1.53
83	A5	2539	G	O4'-C1'	7.28	1.51	1.41
83	A5	2650	G	O4'-C1'	-7.28	1.32	1.41
36	B2	614	A	C2'-C1'	-7.28	1.45	1.53
83	A5	433	U	O4'-C1'	7.28	1.51	1.41
36	B2	195	G	C2'-C1'	7.28	1.61	1.53
83	A5	1881	C	O4'-C1'	7.28	1.51	1.41
86	A8	45	G	C5'-C4'	7.28	1.60	1.51
36	B2	885	U	C2'-C1'	7.28	1.61	1.53
83	A5	896	A	C2'-C1'	-7.28	1.45	1.53
84	A9	23	G	C2'-C1'	-7.28	1.45	1.53
83	A5	3806	C	C2'-C1'	-7.27	1.45	1.53
36	B2	1681	U	C2'-C1'	7.27	1.61	1.53
83	A5	2981	G	C4'-C3'	7.27	1.61	1.53
83	A5	3873	A	O4'-C1'	7.27	1.51	1.41
36	B2	85	A	C2'-C1'	7.26	1.61	1.53
36	B2	616	U	O4'-C1'	7.26	1.51	1.41
83	A5	3618	A	C2'-C1'	-7.26	1.45	1.53
83	A5	1901	G	C2'-C1'	-7.26	1.45	1.53
83	A5	1012	G	C2'-C1'	-7.26	1.45	1.53
83	A5	3363	G	C2'-C1'	-7.26	1.45	1.53
36	B2	1028	A	O4'-C1'	7.26	1.51	1.41
83	A5	1228	C	C2'-C1'	7.26	1.61	1.53
83	A5	1276	G	C2'-C1'	-7.26	1.45	1.53
83	A5	2834	A	C2'-C1'	-7.26	1.45	1.53
37	BC	54	U	P-O5'	-7.26	1.52	1.59
83	A5	3445	C	C2'-C1'	-7.25	1.45	1.53
83	A5	3774	U	O4'-C1'	7.25	1.51	1.41
36	B2	1529	G	C2'-C1'	7.25	1.61	1.53
83	A5	685	A	C2'-C1'	-7.25	1.45	1.53
36	B2	1205	U	C2'-C1'	-7.25	1.45	1.53
36	B2	1532	C	O4'-C1'	7.25	1.51	1.41
83	A5	1389	C	O4'-C1'	7.25	1.51	1.41
36	B2	9	U	O4'-C1'	7.25	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	428	G	O4 ² -C1'	7.25	1.51	1.41
83	A5	3511	U	O4 ² -C1'	7.24	1.51	1.41
36	B2	215	C	O4 ² -C1'	7.24	1.51	1.41
36	B2	274	G	C2 ² -C1'	-7.24	1.45	1.53
83	A5	1229	U	C2 ² -C1'	-7.24	1.45	1.53
83	A5	2750	A	O4 ² -C1'	-7.24	1.32	1.41
83	A5	1930	G	O4 ² -C1'	-7.23	1.32	1.41
36	B2	1709	A	O4 ² -C1'	7.23	1.51	1.41
83	A5	3102	C	O4 ² -C1'	7.23	1.51	1.41
36	B2	288	C	O4 ² -C1'	7.23	1.51	1.41
36	B2	457	G	C2 ² -C1'	-7.23	1.45	1.53
83	A5	1314	U	C2 ² -C1'	-7.23	1.45	1.53
83	A5	3742	C	C2 ² -C1'	-7.23	1.45	1.53
84	A9	9	C	C2 ² -C1'	-7.23	1.45	1.53
83	A5	988	C	O4 ² -C1'	7.22	1.51	1.41
83	A5	2861	G	O4 ² -C1'	7.22	1.51	1.41
37	BC	16	U	C2 ² -C1'	7.22	1.61	1.53
83	A5	555	U	O4 ² -C1'	7.22	1.51	1.41
83	A5	1693	C	C2 ² -C1'	-7.22	1.45	1.53
36	B2	1216	C	C2 ² -C1'	-7.22	1.45	1.53
83	A5	488	U	O4 ² -C1'	7.22	1.51	1.41
83	A5	537	A	O4 ² -C1'	7.22	1.51	1.41
83	A5	1308	U	C2 ² -C1'	-7.22	1.45	1.53
36	B2	406	A	C2 ² -C1'	-7.21	1.45	1.53
36	B2	1679	U	C2 ² -C1'	7.21	1.61	1.53
83	A5	1513	C	C2 ² -C1'	-7.21	1.45	1.53
83	A5	3836	A	C2 ² -C1'	-7.21	1.45	1.53
83	A5	1149	C	O4 ² -C1'	7.21	1.51	1.41
83	A5	1273	U	O4 ² -C1'	7.21	1.51	1.41
83	A5	1507	C	O4 ² -C1'	7.21	1.51	1.41
83	A5	3716	C	O4 ² -C1'	7.21	1.51	1.41
37	BC	10	G	C2 ² -C1'	-7.20	1.45	1.53
86	A8	18	C	O4 ² -C1'	7.20	1.51	1.41
36	B2	539	U	O4 ² -C1'	7.20	1.51	1.41
83	A5	1243	A	O4 ² -C1'	7.20	1.51	1.41
36	B2	1307	C	C2 ² -C1'	-7.19	1.45	1.53
36	B2	1858	U	O4 ² -C1'	7.19	1.50	1.41
83	A5	193	U	O4 ² -C1'	7.19	1.50	1.41
83	A5	1792	G	C4 ² -C3'	7.18	1.61	1.53
83	A5	2277	G	O4 ² -C1'	7.18	1.50	1.41
83	A5	3400	U	C2 ² -C1'	-7.18	1.45	1.53
83	A5	828	G	C2 ² -C1'	7.18	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1428	A	C2'-C1'	7.17	1.61	1.53
36	B2	1724	U	C2'-C1'	-7.17	1.45	1.53
83	A5	430	G	O4'-C1'	7.17	1.50	1.41
83	A5	840	U	C2'-C1'	-7.17	1.45	1.53
83	A5	3829	U	C2'-C1'	7.17	1.61	1.53
36	B2	1154	U	O4'-C1'	7.17	1.50	1.41
83	A5	1578	C	C2'-C1'	-7.17	1.45	1.53
83	A5	2684	C	O4'-C1'	-7.17	1.32	1.41
36	B2	1294	U	C2'-C1'	-7.17	1.45	1.53
36	B2	1889	G	C2'-C1'	-7.17	1.45	1.53
83	A5	1232	G	O4'-C1'	7.17	1.50	1.41
36	B2	1086	U	O4'-C1'	7.17	1.50	1.41
36	B2	197	A	O4'-C1'	7.16	1.50	1.41
83	A5	1677	U	O4'-C1'	7.16	1.50	1.41
83	A5	3332	G	O4'-C1'	7.16	1.50	1.41
36	B2	979	G	C2'-C1'	-7.16	1.45	1.53
83	A5	1744	U	C2'-C1'	-7.16	1.45	1.53
83	A5	3793	U	O4'-C1'	7.16	1.50	1.41
36	B2	1955	G	C2'-C1'	-7.15	1.45	1.53
83	A5	1127	C	O4'-C1'	7.15	1.50	1.41
83	A5	1532	A	O4'-C1'	-7.15	1.32	1.41
83	A5	3505	U	O4'-C1'	7.15	1.50	1.41
85	A7	100	A	C2'-C1'	-7.15	1.45	1.53
83	A5	3553	C	O4'-C1'	7.15	1.50	1.41
83	A5	3730	G	C2'-C1'	7.15	1.61	1.53
83	A5	796	A	P-O5'	-7.15	1.52	1.59
36	B2	1324	G	C2'-C1'	-7.14	1.45	1.53
83	A5	1308	U	O4'-C1'	7.14	1.50	1.41
83	A5	3413	C	C2'-C1'	7.14	1.61	1.53
37	BC	65	C	C2'-C1'	-7.14	1.45	1.53
36	B2	118	C	C2'-C1'	-7.14	1.45	1.53
36	B2	1655	C	C2'-C1'	-7.14	1.45	1.53
83	A5	1570	U	O4'-C1'	7.14	1.50	1.41
83	A5	3734	A	O4'-C1'	7.14	1.50	1.41
83	A5	1148	C	C2'-C1'	-7.13	1.45	1.53
36	B2	872	A	O4'-C1'	7.13	1.50	1.41
83	A5	925	C	O4'-C1'	7.13	1.50	1.41
83	A5	1004	C	O4'-C1'	7.13	1.50	1.41
83	A5	1431	G	O4'-C1'	-7.13	1.32	1.41
83	A5	1730	A	O4'-C1'	7.13	1.50	1.41
36	B2	398	C	O4'-C1'	7.13	1.50	1.41
36	B2	904	C	O4'-C1'	7.13	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1070	G	O4'-C1'	7.13	1.50	1.41
83	A5	2920	U	O4'-C1'	7.13	1.50	1.41
83	A5	163	A	O3'-P	-7.12	1.52	1.61
83	A5	1600	U	O4'-C1'	7.12	1.50	1.41
83	A5	1945	U	O4'-C1'	7.12	1.50	1.41
36	B2	882	G	O4'-C1'	7.12	1.50	1.41
36	B2	1403	C	C2'-C1'	-7.12	1.45	1.53
83	A5	124	A	C2'-C1'	7.12	1.61	1.53
83	A5	1789	A	O4'-C1'	7.12	1.50	1.41
83	A5	3243	C	O4'-C1'	7.12	1.50	1.41
36	B2	1220	A	C2'-C1'	-7.12	1.45	1.53
36	B2	1672	A	O4'-C1'	7.12	1.50	1.41
36	B2	1192	U	O4'-C1'	7.12	1.50	1.41
83	A5	676	A	O4'-C1'	7.12	1.50	1.41
83	A5	1966	A	C2'-C1'	-7.11	1.45	1.53
85	A7	93	G	O4'-C1'	7.11	1.50	1.41
83	A5	3520	U	C2'-C1'	-7.11	1.45	1.53
83	A5	1032	G	O4'-C1'	7.11	1.50	1.41
83	A5	1368	A	C2'-C1'	7.11	1.61	1.53
85	A7	44	C	C2'-C1'	-7.11	1.45	1.53
36	B2	611	U	C2'-C1'	7.10	1.61	1.53
83	A5	1411	U	C2'-C1'	7.10	1.61	1.53
36	B2	345	U	O4'-C1'	7.10	1.50	1.41
36	B2	1863	A	O4'-C1'	7.10	1.50	1.41
83	A5	2604	U	O4'-C1'	7.10	1.50	1.41
36	B2	1403	C	O4'-C1'	7.10	1.50	1.41
36	B2	832	U	C2'-C1'	-7.10	1.45	1.53
83	A5	2512	U	O4'-C1'	7.10	1.50	1.41
83	A5	359	G	O4'-C1'	-7.10	1.32	1.41
83	A5	3190	G	O4'-C1'	7.10	1.50	1.41
83	A5	478	A	O4'-C1'	7.10	1.50	1.41
83	A5	1215	A	C2'-C1'	-7.09	1.45	1.53
36	B2	68	C	C2'-C1'	7.09	1.61	1.53
36	B2	658	C	O4'-C1'	7.09	1.50	1.41
36	B2	1595	G	C2'-C1'	-7.09	1.45	1.53
36	B2	1933	U	C2'-C1'	-7.09	1.45	1.53
83	A5	1035	G	O4'-C1'	-7.09	1.32	1.41
83	A5	2991	A	O4'-C1'	7.08	1.50	1.41
83	A5	769	U	O4'-C1'	7.08	1.50	1.41
83	A5	3762	G	C2'-C1'	-7.08	1.45	1.53
83	A5	1078	G	C2'-C1'	7.08	1.61	1.53
83	A5	3131	C	C2'-C1'	-7.08	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1259	A	C2'-C1'	-7.08	1.45	1.53
36	B2	1841	C	O4'-C1'	7.08	1.50	1.41
83	A5	1748	C	C2'-C1'	-7.08	1.45	1.53
36	B2	294	C	C2'-C1'	-7.07	1.45	1.53
83	A5	2773	G	C2'-C1'	-7.07	1.45	1.53
83	A5	30	A	O4'-C1'	7.07	1.50	1.41
83	A5	1888	A	O4'-C1'	7.07	1.50	1.41
83	A5	3205	G	C2'-C1'	7.07	1.61	1.53
37	BC	53	A	O4'-C1'	7.07	1.50	1.41
36	B2	971	A	C2'-C1'	-7.07	1.45	1.53
83	A5	657	G	C2'-C1'	-7.06	1.45	1.53
83	A5	2119	G	C2'-C1'	-7.06	1.45	1.53
36	B2	588	A	O4'-C1'	7.06	1.50	1.41
83	A5	3227	A	O4'-C1'	-7.06	1.32	1.41
83	A5	3243	C	C2'-C1'	-7.06	1.45	1.53
36	B2	1788	C	C2'-C1'	7.06	1.61	1.53
83	A5	2833	U	O4'-C1'	7.06	1.50	1.41
36	B2	570	G	C2'-C1'	-7.06	1.45	1.53
36	B2	1114	A	P-O5'	-7.05	1.52	1.59
83	A5	192	U	O4'-C1'	7.05	1.50	1.41
83	A5	3411	C	O4'-C1'	7.05	1.50	1.41
83	A5	855	A	C2'-C1'	7.05	1.61	1.53
83	A5	1590	A	C2'-C1'	-7.05	1.45	1.53
83	A5	3937	U	C2'-C1'	7.05	1.61	1.53
36	B2	1786	G	C2'-C1'	-7.05	1.45	1.53
36	B2	1559	A	C2'-C1'	-7.04	1.45	1.53
36	B2	1095	G	C2'-C1'	-7.04	1.45	1.53
36	B2	1284	A	C2'-C1'	7.04	1.61	1.53
83	A5	245	G	C2'-C1'	-7.04	1.45	1.53
83	A5	1432	C	C2'-C1'	-7.04	1.45	1.53
83	A5	3141	A	C2'-C1'	-7.04	1.45	1.53
83	A5	1729	G	C2'-C1'	-7.03	1.45	1.53
83	A5	1906	G	O4'-C1'	7.03	1.50	1.41
83	A5	1912	G	O4'-C1'	7.03	1.50	1.41
36	B2	366	C	C2'-C1'	-7.03	1.45	1.53
83	A5	672	U	O3'-P	-7.03	1.52	1.61
83	A5	1709	A	C2'-C1'	7.03	1.61	1.53
36	B2	521	U	C2'-C1'	7.03	1.61	1.53
83	A5	3926	C	O4'-C1'	7.03	1.50	1.41
83	A5	2038	A	C2'-C1'	-7.02	1.45	1.53
36	B2	1374	A	O4'-C1'	7.02	1.50	1.41
83	A5	654	G	C2'-C1'	-7.02	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1448	G	O4'-C1'	-7.02	1.32	1.41
83	A5	1476	G	O4'-C1'	7.02	1.50	1.41
83	A5	1134	G	O4'-C1'	7.02	1.50	1.41
84	A9	10	U	O4'-C1'	7.02	1.50	1.41
36	B2	1809	U	C2'-C1'	-7.02	1.45	1.53
36	B2	519	A	C2'-C1'	-7.01	1.45	1.53
36	B2	1380	U	C2'-C1'	7.01	1.61	1.53
83	A5	315	G	O4'-C1'	-7.01	1.32	1.41
83	A5	1439	C	O4'-C1'	7.01	1.50	1.41
83	A5	2537	A	O4'-C1'	7.01	1.50	1.41
36	B2	1139	A	C2'-C1'	7.01	1.61	1.53
36	B2	1801	U	C2'-C1'	-7.01	1.45	1.53
83	A5	257	U	C2'-C1'	-7.01	1.45	1.53
83	A5	2534	G	C2'-C1'	-7.01	1.45	1.53
86	A8	106	A	C2'-C1'	-7.01	1.45	1.53
83	A5	2762	A	O4'-C1'	7.01	1.50	1.41
83	A5	3460	C	C2'-C1'	-7.01	1.45	1.53
83	A5	2787	U	C2'-C1'	-7.00	1.45	1.53
36	B2	50	C	C2'-C1'	-7.00	1.45	1.53
83	A5	825	C	C2'-C1'	-7.00	1.45	1.53
36	B2	487	U	O4'-C1'	6.99	1.50	1.41
36	B2	913	G	C2'-C1'	-6.99	1.45	1.53
83	A5	41	U	C2'-C1'	-6.99	1.45	1.53
83	A5	763	A	C2'-C1'	6.99	1.61	1.53
83	A5	3766	U	O4'-C1'	6.99	1.50	1.41
83	A5	3831	C	O4'-C1'	6.99	1.50	1.41
36	B2	32	U	C2'-C1'	6.99	1.61	1.53
36	B2	1992	A	C2'-C1'	6.99	1.61	1.53
83	A5	3112	A	C2'-C1'	-6.99	1.45	1.53
83	A5	1725	A	C2'-C1'	6.98	1.61	1.53
36	B2	1479	U	C5'-C4'	6.98	1.59	1.51
83	A5	431	C	O4'-C1'	6.98	1.50	1.41
85	A7	106	G	O4'-C1'	6.98	1.50	1.41
36	B2	563	A	O4'-C1'	6.97	1.50	1.41
36	B2	1014	C	O4'-C1'	6.97	1.50	1.41
36	B2	1255	G	O4'-C1'	6.97	1.50	1.41
83	A5	1416	U	O4'-C1'	6.97	1.50	1.41
36	B2	229	U	O4'-C1'	6.97	1.50	1.41
83	A5	1986	G	O4'-C1'	6.97	1.50	1.41
84	A9	13	A	C2'-C1'	-6.97	1.45	1.53
85	A7	92	C	C2'-C1'	-6.97	1.45	1.53
83	A5	1963	U	O4'-C1'	6.96	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3491	C	C2'-C1'	-6.96	1.45	1.53
83	A5	72	C	C2'-C1'	-6.96	1.45	1.53
36	B2	14	C	O4'-C1'	6.95	1.50	1.41
36	B2	1415	G	O4'-C1'	6.95	1.50	1.41
83	A5	288	U	C2'-C1'	-6.95	1.45	1.53
83	A5	1470	C	O4'-C1'	6.95	1.50	1.41
83	A5	2200	A	O4'-C1'	6.95	1.50	1.41
83	A5	3203	C	O4'-C1'	6.95	1.50	1.41
83	A5	3450	G	C2'-C1'	-6.95	1.45	1.53
83	A5	2581	U	C2'-C1'	-6.95	1.45	1.53
36	B2	1015	U	C2'-C1'	-6.95	1.45	1.53
83	A5	138	A	C2'-C1'	6.95	1.60	1.53
83	A5	181	A	O4'-C1'	6.95	1.50	1.41
83	A5	826	A	C2'-C1'	6.95	1.60	1.53
83	A5	1806	G	C2'-C1'	6.95	1.60	1.53
36	B2	1392	U	O4'-C1'	-6.95	1.32	1.41
83	A5	2143	C	O4'-C1'	6.95	1.50	1.41
85	A7	52	U	O4'-C1'	6.95	1.50	1.41
36	B2	279	G	O4'-C1'	6.95	1.50	1.41
83	A5	2766	U	C2'-C1'	-6.95	1.45	1.53
83	A5	3815	G	C2'-C1'	-6.95	1.45	1.53
36	B2	1628	A	O4'-C1'	6.94	1.50	1.41
86	A8	101	A	O4'-C1'	6.94	1.50	1.41
83	A5	1431	G	C2'-C1'	6.94	1.60	1.53
83	A5	3162	C	C2'-C1'	-6.94	1.45	1.53
83	A5	2054	U	C5'-C4'	6.94	1.59	1.51
36	B2	1315	U	O4'-C1'	6.93	1.50	1.41
83	A5	960	U	O4'-C1'	6.93	1.50	1.41
83	A5	2259	C	O4'-C1'	6.93	1.50	1.41
83	A5	2797	A	C2'-C1'	-6.93	1.45	1.53
36	B2	179	A	O4'-C1'	6.93	1.50	1.41
83	A5	267	C	C2'-C1'	-6.93	1.45	1.53
83	A5	890	C	P-O5'	-6.93	1.52	1.59
83	A5	2186	C	O4'-C1'	6.93	1.50	1.41
36	B2	1751	G	O4'-C1'	-6.92	1.32	1.41
36	B2	1771	U	O4'-C1'	6.92	1.50	1.41
36	B2	1046	U	O4'-C1'	-6.92	1.32	1.41
36	B2	1459	G	C2'-C1'	-6.92	1.45	1.53
83	A5	498	U	C2'-C1'	-6.92	1.45	1.53
83	A5	3829	U	O4'-C1'	-6.92	1.32	1.41
36	B2	1702	C	O4'-C1'	6.92	1.50	1.41
36	B2	800	A	C5'-C4'	6.92	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3442	A	O4 ² -C1'	6.92	1.50	1.41
36	B2	1381	G	C2 ² -C1'	-6.92	1.45	1.53
36	B2	306	A	C2 ² -C1'	-6.91	1.45	1.53
83	A5	3571	C	C2 ² -C1'	-6.91	1.45	1.53
83	A5	3333	A	C2 ² -C1'	-6.91	1.45	1.53
86	A8	10	C	C2 ² -C1'	-6.91	1.45	1.53
36	B2	826	U	O4 ² -C1'	6.91	1.50	1.41
83	A5	643	U	C2 ² -C1'	-6.91	1.45	1.53
36	B2	1026	A	O4 ² -C1'	6.90	1.50	1.41
36	B2	1733	G	C2 ² -C1'	-6.90	1.45	1.53
83	A5	1141	G	O4 ² -C1'	6.90	1.50	1.41
83	A5	1942	U	C2 ² -C1'	-6.90	1.45	1.53
83	A5	3381	C	C2 ² -C1'	-6.90	1.45	1.53
36	B2	858	G	C2 ² -C1'	-6.90	1.45	1.53
36	B2	982	G	O4 ² -C1'	-6.90	1.32	1.41
36	B2	1276	G	O4 ² -C1'	6.90	1.50	1.41
83	A5	1142	U	C2 ² -C1'	-6.89	1.45	1.53
83	A5	2820	G	O4 ² -C1'	6.89	1.50	1.41
36	B2	1236	C	O4 ² -C1'	6.89	1.50	1.41
36	B2	1686	C	C2 ² -C1'	-6.89	1.45	1.53
36	B2	1323	A	C2 ² -C1'	-6.89	1.45	1.53
83	A5	71	A	O4 ² -C1'	6.89	1.50	1.41
83	A5	1011	U	O4 ² -C1'	6.89	1.50	1.41
83	A5	2217	A	O4 ² -C1'	6.89	1.50	1.41
36	B2	1790	U	C2 ² -C1'	-6.88	1.45	1.53
83	A5	172	C	C2 ² -C1'	-6.88	1.45	1.53
83	A5	1312	G	C2 ² -C1'	-6.88	1.45	1.53
83	A5	3680	A	C2 ² -C1'	-6.88	1.45	1.53
83	A5	576	U	O4 ² -C1'	6.88	1.50	1.41
36	B2	1406	A	O4 ² -C1'	6.88	1.50	1.41
83	A5	248	C	C2 ² -C1'	-6.88	1.45	1.53
83	A5	3622	C	O4 ² -C1'	6.88	1.50	1.41
83	A5	1577	A	C2 ² -C1'	-6.88	1.45	1.53
36	B2	514	A	C2 ² -C1'	-6.87	1.45	1.53
83	A5	1156	U	C2 ² -C1'	-6.87	1.45	1.53
83	A5	139	U	C2 ² -C1'	-6.87	1.45	1.53
83	A5	236	G	C2 ² -C1'	-6.87	1.45	1.53
83	A5	1739	U	O4 ² -C1'	6.87	1.50	1.41
36	B2	711	G	C2 ² -C1'	-6.87	1.45	1.53
36	B2	1445	A	O4 ² -C1'	6.87	1.50	1.41
83	A5	1797	A	C2 ² -C1'	6.87	1.60	1.53
36	B2	1375	G	O4 ² -C1'	6.86	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1921	U	O4 ² -C1'	6.86	1.50	1.41
83	A5	266	A	C2 ² -C1'	-6.86	1.45	1.53
83	A5	253	A	C2 ² -C1'	-6.86	1.45	1.53
36	B2	841	U	O4 ² -C1'	6.86	1.50	1.41
83	A5	680	C	C2 ² -C1'	-6.86	1.45	1.53
83	A5	2225	A	O4 ² -C1'	6.86	1.50	1.41
83	A5	2725	U	C2 ² -C1'	-6.86	1.45	1.53
83	A5	1125	A	O4 ² -C1'	6.85	1.50	1.41
36	B2	1325	A	C2 ² -C1'	-6.85	1.45	1.53
83	A5	19	C	O4 ² -C1'	6.85	1.50	1.41
36	B2	415	A	C2 ² -C1'	-6.85	1.45	1.53
36	B2	1311	A	O4 ² -C1'	6.85	1.50	1.41
36	B2	1445	A	C2 ² -C1'	6.85	1.60	1.53
83	A5	218	A	O4 ² -C1'	6.85	1.50	1.41
83	A5	2655	C	C2 ² -C1'	-6.85	1.45	1.53
83	A5	85	U	O4 ² -C1'	6.84	1.50	1.41
83	A5	454	C	C2 ² -C1'	-6.84	1.45	1.53
83	A5	2917	A	O4 ² -C1'	-6.84	1.32	1.41
36	B2	719	G	C2 ² -C1'	-6.84	1.45	1.53
36	B2	1092	A	O4 ² -C1'	6.84	1.50	1.41
83	A5	932	G	O4 ² -C1'	6.84	1.50	1.41
85	A7	18	G	C2 ² -C1'	-6.84	1.45	1.53
36	B2	899	A	O3 ² -P	-6.84	1.52	1.61
83	A5	2485	A	C2 ² -C1'	6.84	1.60	1.53
83	A5	3697	A	O3 ² -P	-6.84	1.52	1.61
83	A5	3348	G	O4 ² -C1'	6.83	1.50	1.41
83	A5	2749	G	C2 ² -C1'	-6.83	1.45	1.53
83	A5	2763	U	C2 ² -C1'	-6.83	1.45	1.53
36	B2	214	G	O4 ² -C1'	-6.83	1.32	1.41
36	B2	232	C	C2 ² -C1'	-6.83	1.45	1.53
36	B2	1054	A	C2 ² -C1'	-6.83	1.45	1.53
36	B2	1439	A	C2 ² -C1'	-6.83	1.45	1.53
36	B2	1586	U	O4 ² -C1'	6.83	1.50	1.41
83	A5	3222	G	C2 ² -C1'	-6.83	1.45	1.53
83	A5	3464	G	C2 ² -C1'	6.83	1.60	1.53
85	A7	78	C	C2 ² -C1'	-6.83	1.45	1.53
36	B2	1611	G	O4 ² -C1'	6.83	1.50	1.41
36	B2	1021	A	O4 ² -C1'	-6.83	1.32	1.41
36	B2	142	A	C2 ² -C1'	6.82	1.60	1.53
83	A5	3143	U	C5 ² -C4'	6.82	1.59	1.51
36	B2	529	C	C2 ² -C1'	-6.82	1.45	1.53
36	B2	38	C	C2 ² -C1'	-6.82	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	313	C	O4'-C1'	-6.82	1.32	1.41
83	A5	3842	A	P-O5'	-6.82	1.52	1.59
36	B2	515	U	O4'-C1'	6.82	1.50	1.41
83	A5	3543	A	C2'-C1'	6.82	1.60	1.53
83	A5	1017	A	C2'-C1'	-6.81	1.45	1.53
83	A5	3820	C	C2'-C1'	-6.81	1.45	1.53
85	A7	104	C	C2'-C1'	-6.81	1.45	1.53
83	A5	616	A	O4'-C1'	6.81	1.50	1.41
36	B2	301	U	O4'-C1'	6.81	1.50	1.41
83	A5	114	G	C2'-C1'	6.81	1.60	1.53
36	B2	713	A	O4'-C1'	-6.81	1.32	1.41
83	A5	799	A	O4'-C1'	6.81	1.50	1.41
83	A5	2736	A	C2'-C1'	-6.81	1.45	1.53
83	A5	3709	A	C2'-C1'	-6.81	1.45	1.53
84	A9	19	U	O4'-C1'	6.81	1.50	1.41
36	B2	596	U	C2'-C1'	6.80	1.60	1.53
83	A5	398	U	O4'-C1'	6.80	1.50	1.41
36	B2	607	A	O4'-C1'	6.80	1.50	1.41
83	A5	826	A	O4'-C1'	6.80	1.50	1.41
85	A7	80	U	O4'-C1'	6.80	1.50	1.41
83	A5	1134	G	C2'-C1'	-6.80	1.45	1.53
83	A5	491	U	O4'-C1'	6.79	1.50	1.41
85	A7	5	A	C2'-C1'	-6.79	1.45	1.53
36	B2	502	C	O4'-C1'	6.79	1.50	1.41
83	A5	2760	G	C2'-C1'	-6.79	1.45	1.53
83	A5	914	C	C2'-C1'	-6.79	1.45	1.53
83	A5	2172	C	O3'-P	-6.79	1.53	1.61
83	A5	1061	A	O4'-C1'	6.79	1.50	1.41
36	B2	697	U	O3'-P	-6.78	1.53	1.61
83	A5	155	U	O3'-P	-6.78	1.53	1.61
83	A5	1449	G	O4'-C1'	6.78	1.50	1.41
83	A5	1640	U	C2'-C1'	-6.78	1.45	1.53
83	A5	1740	C	O4'-C1'	6.78	1.50	1.41
83	A5	2212	A	O4'-C1'	6.78	1.50	1.41
84	A9	27	U	O4'-C1'	6.78	1.50	1.41
36	B2	1657	C	C2'-C1'	-6.78	1.45	1.53
83	A5	830	U	C2'-C1'	-6.78	1.45	1.53
83	A5	3145	U	C2'-C1'	6.78	1.60	1.53
83	A5	208	U	C2'-C1'	-6.78	1.45	1.53
84	A9	17	G	C2'-C1'	-6.78	1.45	1.53
83	A5	2580	C	C2'-C1'	-6.78	1.45	1.53
83	A5	3454	G	O4'-C1'	6.78	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3888	U	C2'-C1'	-6.78	1.45	1.53
36	B2	97	U	C2'-C1'	-6.77	1.45	1.53
36	B2	1794	C	O4'-C1'	6.77	1.50	1.41
83	A5	652	G	O4'-C1'	6.77	1.50	1.41
83	A5	1342	U	O4'-C1'	6.77	1.50	1.41
83	A5	754	A	C2'-C1'	6.77	1.60	1.53
36	B2	277	U	C2'-C1'	-6.77	1.46	1.53
83	A5	1712	C	O4'-C1'	6.77	1.50	1.41
83	A5	3238	G	C2'-C1'	-6.76	1.46	1.53
83	A5	2994	C	C2'-C1'	6.76	1.60	1.53
83	A5	2133	A	C2'-C1'	-6.76	1.46	1.53
36	B2	1389	U	O4'-C1'	6.76	1.50	1.41
83	A5	771	A	O4'-C1'	6.76	1.50	1.41
36	B2	370	G	C2'-C1'	6.76	1.60	1.53
83	A5	2555	G	O4'-C1'	6.76	1.50	1.41
83	A5	3122	A	O4'-C1'	6.76	1.50	1.41
83	A5	3260	G	C5'-C4'	6.76	1.59	1.51
36	B2	148	G	C2'-C1'	-6.75	1.46	1.53
83	A5	1275	A	C2'-C1'	-6.75	1.46	1.53
36	B2	1073	G	O4'-C1'	6.75	1.50	1.41
83	A5	558	C	O4'-C1'	6.75	1.50	1.41
83	A5	3008	U	O4'-C1'	6.75	1.50	1.41
36	B2	556	G	C2'-C1'	-6.75	1.46	1.53
36	B2	1865	G	P-O5'	-6.75	1.52	1.59
83	A5	1338	U	C2'-C1'	-6.75	1.46	1.53
36	B2	1691	A	C2'-C1'	-6.75	1.46	1.53
83	A5	560	U	C2'-C1'	-6.75	1.46	1.53
83	A5	3533	U	O4'-C1'	6.75	1.50	1.41
36	B2	98	C	C2'-C1'	6.75	1.60	1.53
36	B2	1063	G	O4'-C1'	6.75	1.50	1.41
83	A5	2700	C	O4'-C1'	6.75	1.50	1.41
36	B2	1597	A	C2'-C1'	-6.75	1.46	1.53
83	A5	2810	A	O4'-C1'	6.75	1.50	1.41
83	A5	1612	G	C2'-C1'	-6.74	1.46	1.53
83	A5	3101	A	O4'-C1'	6.74	1.50	1.41
36	B2	568	U	C2'-C1'	-6.74	1.46	1.53
85	A7	92	C	O4'-C1'	6.74	1.50	1.41
83	A5	1971	C	C2'-C1'	-6.74	1.46	1.53
83	A5	3509	U	C2'-C1'	-6.74	1.46	1.53
83	A5	3720	A	O4'-C1'	6.74	1.50	1.41
36	B2	1971	A	O4'-C1'	6.73	1.50	1.41
83	A5	382	G	C2'-C1'	-6.73	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	732	U	C2'-C1'	6.73	1.60	1.53
83	A5	1780	U	O4'-C1'	6.73	1.50	1.41
83	A5	834	G	C2'-C1'	6.73	1.60	1.53
83	A5	547	U	C2'-C1'	-6.73	1.46	1.53
36	B2	55	A	O3'-P	-6.72	1.53	1.61
83	A5	3186	C	C2'-C1'	-6.72	1.46	1.53
83	A5	3401	U	O4'-C1'	6.72	1.50	1.41
83	A5	2809	C	O4'-C1'	6.72	1.50	1.41
83	A5	595	U	C2'-C1'	-6.72	1.46	1.53
83	A5	1034	U	O4'-C1'	6.72	1.50	1.41
36	B2	1976	A	C2'-C1'	-6.72	1.46	1.53
83	A5	392	A	C2'-C1'	6.72	1.60	1.53
83	A5	2718	U	O4'-C1'	6.72	1.50	1.41
36	B2	1412	A	O4'-C1'	6.71	1.50	1.41
83	A5	838	U	C2'-C1'	-6.71	1.46	1.53
83	A5	165	G	O4'-C1'	6.71	1.50	1.41
83	A5	1049	C	O4'-C1'	6.71	1.50	1.41
83	A5	1248	A	O3'-P	-6.71	1.53	1.61
36	B2	911	C	C2'-C1'	-6.71	1.46	1.53
36	B2	1030	C	C2'-C1'	-6.71	1.46	1.53
83	A5	1154	U	C2'-C1'	-6.71	1.46	1.53
83	A5	3573	C	C2'-C1'	-6.71	1.46	1.53
83	A5	3354	U	O4'-C1'	6.71	1.50	1.41
36	B2	1329	A	O4'-C1'	6.70	1.50	1.41
83	A5	807	A	O4'-C1'	6.70	1.50	1.41
36	B2	1164	G	O4'-C1'	6.70	1.50	1.41
36	B2	1189	G	C2'-C1'	-6.70	1.46	1.53
83	A5	723	U	O4'-C1'	6.70	1.50	1.41
83	A5	1425	U	O4'-C1'	6.70	1.50	1.41
36	B2	446	A	O4'-C1'	6.70	1.50	1.41
83	A5	279	U	O4'-C1'	6.70	1.50	1.41
83	A5	413	A	O4'-C1'	6.70	1.50	1.41
83	A5	2035	C	C2'-C1'	-6.70	1.46	1.53
83	A5	1540	U	O4'-C1'	6.69	1.50	1.41
36	B2	1407	U	C2'-C1'	-6.69	1.46	1.53
83	A5	562	U	O4'-C1'	6.69	1.50	1.41
83	A5	3737	A	O4'-C1'	6.69	1.50	1.41
36	B2	1336	U	O4'-C1'	6.69	1.50	1.41
83	A5	970	A	O4'-C1'	6.69	1.50	1.41
36	B2	914	C	P-O5'	-6.69	1.53	1.59
83	A5	2851	U	O4'-C1'	6.68	1.50	1.41
83	A5	3866	U	O4'-C1'	6.68	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A7	73	U	O4 ² -C1'	6.68	1.50	1.41
36	B2	1295	U	O4 ² -C1'	6.68	1.50	1.41
83	A5	2908	U	O4 ² -C1'	6.68	1.50	1.41
83	A5	286	A	O4 ² -C1'	-6.68	1.32	1.41
83	A5	3375	U	C2 ² -C1'	6.68	1.60	1.53
83	A5	1332	C	C2 ² -C1'	-6.68	1.46	1.53
83	A5	1859	U	C2 ² -C1'	-6.68	1.46	1.53
85	A7	114	U	O4 ² -C1'	6.68	1.50	1.41
83	A5	3897	G	C2 ² -C1'	-6.68	1.46	1.53
36	B2	1433	A	O4 ² -C1'	6.67	1.50	1.41
83	A5	1665	C	P-O5'	-6.67	1.53	1.59
83	A5	2076	U	P-O5'	-6.67	1.53	1.59
36	B2	1676	A	O4 ² -C1'	6.67	1.50	1.41
83	A5	486	A	C2 ² -C1'	6.67	1.60	1.53
83	A5	3269	G	C2 ² -C1'	-6.67	1.46	1.53
83	A5	3487	A	C2 ² -C1'	6.67	1.60	1.53
85	A7	52	U	C2 ² -C1'	-6.67	1.46	1.53
83	A5	852	C	O4 ² -C1'	6.67	1.50	1.41
83	A5	3642	G	O4 ² -C1'	6.67	1.50	1.41
36	B2	871	G	O4 ² -C1'	6.66	1.50	1.41
36	B2	1800	U	C2 ² -C1'	-6.66	1.46	1.53
36	B2	1926	A	P-O5'	-6.66	1.53	1.59
83	A5	3493	U	O4 ² -C1'	6.66	1.50	1.41
83	A5	3509	U	O4 ² -C1'	6.66	1.50	1.41
83	A5	977	C	O4 ² -C1'	6.66	1.50	1.41
83	A5	1234	G	C5 ² -C4'	6.66	1.59	1.51
83	A5	1236	C	O4 ² -C1'	6.66	1.50	1.41
83	A5	927	A	C2 ² -C1'	-6.65	1.46	1.53
83	A5	966	U	C5 ² -C4'	6.65	1.59	1.51
83	A5	3242	A	C2 ² -C1'	-6.65	1.46	1.53
83	A5	222	C	C2 ² -C1'	-6.65	1.46	1.53
83	A5	2008	U	C2 ² -C1'	-6.65	1.46	1.53
37	BC	59	A	O4 ² -C1'	6.65	1.50	1.41
83	A5	3273	C	C2 ² -C1'	-6.65	1.46	1.53
83	A5	665	U	O4 ² -C1'	6.65	1.50	1.41
83	A5	2994	C	O4 ² -C1'	6.65	1.50	1.41
83	A5	1575	U	O4 ² -C1'	6.64	1.50	1.41
83	A5	3656	A	O4 ² -C1'	6.64	1.50	1.41
36	B2	1936	U	C2 ² -C1'	-6.64	1.46	1.53
83	A5	2177	G	C2 ² -C1'	-6.64	1.46	1.53
36	B2	1050	A	O4 ² -C1'	-6.64	1.33	1.41
36	B2	219	A	C2 ² -C1'	-6.64	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	75	A	C2'-C1'	-6.64	1.46	1.53
83	A5	820	A	O4'-C1'	6.64	1.50	1.41
83	A5	2045	U	C2'-C1'	-6.64	1.46	1.53
83	A5	3201	U	O4'-C1'	6.64	1.50	1.41
36	B2	1050	A	C2'-C1'	6.63	1.60	1.53
36	B2	1100	A	O4'-C1'	6.63	1.50	1.41
83	A5	803	A	C2'-C1'	-6.63	1.46	1.53
83	A5	978	G	C2'-C1'	-6.63	1.46	1.53
83	A5	2212	A	O3'-P	-6.63	1.53	1.61
83	A5	3703	C	O4'-C1'	6.63	1.50	1.41
83	A5	350	C	C2'-C1'	-6.63	1.46	1.53
83	A5	1327	G	O4'-C1'	6.63	1.50	1.41
83	A5	1934	C	O4'-C1'	6.63	1.50	1.41
36	B2	66	C	C2'-C1'	6.63	1.60	1.53
83	A5	726	U	C2'-C1'	-6.62	1.46	1.53
83	A5	1490	C	O4'-C1'	6.62	1.50	1.41
83	A5	2801	U	O4'-C1'	6.62	1.50	1.41
36	B2	1004	C	O4'-C1'	6.62	1.50	1.41
83	A5	45	G	C2'-C1'	-6.61	1.46	1.53
83	A5	2600	A	C2'-C1'	6.61	1.60	1.53
83	A5	1009	G	O4'-C1'	6.61	1.50	1.41
83	A5	1885	U	C2'-C1'	-6.61	1.46	1.53
36	B2	443	A	C2'-C1'	-6.61	1.46	1.53
83	A5	3508	G	O4'-C1'	6.61	1.50	1.41
37	BC	25	G	O4'-C1'	6.61	1.50	1.41
83	A5	982	C	O4'-C1'	6.61	1.50	1.41
36	B2	612	A	O4'-C1'	6.60	1.50	1.41
83	A5	66	A	O4'-C1'	6.60	1.50	1.41
83	A5	316	U	O4'-C1'	6.60	1.50	1.41
83	A5	3675	A	C2'-C1'	-6.60	1.46	1.53
36	B2	1164	G	O3'-P	-6.60	1.53	1.61
83	A5	2727	U	O4'-C1'	6.60	1.50	1.41
83	A5	2472	A	C2'-C1'	6.60	1.60	1.53
36	B2	303	C	C2'-C1'	-6.59	1.46	1.53
37	BC	42	G	C2'-C1'	-6.59	1.46	1.53
83	A5	1498	C	O4'-C1'	6.59	1.50	1.41
36	B2	1751	G	C2'-C1'	6.59	1.60	1.53
83	A5	1633	G	C2'-C1'	6.59	1.60	1.53
36	B2	126	G	C2'-C1'	-6.59	1.46	1.53
36	B2	1253	G	C2'-C1'	-6.59	1.46	1.53
83	A5	2789	U	O4'-C1'	6.59	1.50	1.41
83	A5	3636	G	O4'-C1'	6.59	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	76	A	C2'-C1'	6.59	1.60	1.53
36	B2	1829	C	C2'-C1'	-6.59	1.46	1.53
83	A5	1063	C	O4'-C1'	6.59	1.50	1.41
83	A5	3754	C	C2'-C1'	-6.59	1.46	1.53
83	A5	2761	A	O4'-C1'	6.59	1.50	1.41
83	A5	96	G	O4'-C1'	6.59	1.50	1.41
83	A5	1538	U	O4'-C1'	6.58	1.50	1.41
36	B2	189	C	C4'-C3'	6.58	1.60	1.53
83	A5	258	U	P-O5'	-6.58	1.53	1.59
83	A5	695	A	C2'-C1'	-6.58	1.46	1.53
83	A5	2099	C	C2'-C1'	-6.58	1.46	1.53
86	A8	97	U	C2'-C1'	-6.58	1.46	1.53
36	B2	268	C	C2'-C1'	-6.58	1.46	1.53
83	A5	341	A	C5'-C4'	6.58	1.59	1.51
83	A5	3670	G	O4'-C1'	6.58	1.50	1.41
83	A5	3916	U	O4'-C1'	6.58	1.50	1.41
83	A5	3908	U	C2'-C1'	-6.58	1.46	1.53
83	A5	2525	C	C2'-C1'	-6.58	1.46	1.53
36	B2	1224	U	O4'-C1'	6.58	1.50	1.41
36	B2	1730	U	O4'-C1'	6.58	1.50	1.41
83	A5	1621	A	O4'-C1'	6.58	1.50	1.41
83	A5	2056	G	C2'-C1'	-6.58	1.46	1.53
36	B2	276	A	C2'-C1'	6.57	1.60	1.53
36	B2	1424	A	C2'-C1'	6.57	1.60	1.53
83	A5	2465	U	O4'-C1'	6.57	1.50	1.41
83	A5	2739	A	O4'-C1'	6.57	1.50	1.41
83	A5	3817	U	O4'-C1'	6.57	1.50	1.41
36	B2	1181	G	C2'-C1'	-6.56	1.46	1.53
36	B2	1392	U	C4'-C3'	6.56	1.60	1.53
83	A5	3838	A	O3'-P	-6.56	1.53	1.61
83	A5	998	G	C2'-C1'	-6.56	1.46	1.53
83	A5	2128	A	C2'-C1'	-6.56	1.46	1.53
83	A5	2687	A	O4'-C1'	6.56	1.50	1.41
36	B2	1934	U	C2'-C1'	-6.56	1.46	1.53
83	A5	1695	A	O4'-C1'	6.55	1.50	1.41
83	A5	2754	G	O4'-C1'	6.55	1.50	1.41
36	B2	1302	U	O4'-C1'	6.55	1.50	1.41
83	A5	181	A	O3'-P	-6.55	1.53	1.61
36	B2	1157	C	O4'-C1'	6.54	1.50	1.41
83	A5	3760	A	C2'-C1'	-6.54	1.46	1.53
36	B2	1307	C	P-O5'	-6.54	1.53	1.59
83	A5	1967	G	P-O5'	-6.54	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2138	C	C5'-C4'	6.54	1.59	1.51
83	A5	3904	G	O4'-C1'	6.54	1.50	1.41
85	A7	103	A	C2'-C1'	-6.54	1.46	1.53
36	B2	243	U	C2'-C1'	-6.54	1.46	1.53
83	A5	629	A	O4'-C1'	6.54	1.50	1.41
83	A5	3783	A	C2'-C1'	-6.54	1.46	1.53
36	B2	265	A	O4'-C1'	6.54	1.50	1.41
83	A5	2949	A	C5'-C4'	6.54	1.59	1.51
85	A7	105	C	C2'-C1'	-6.54	1.46	1.53
83	A5	3137	A	C2'-C1'	6.53	1.60	1.53
83	A5	1683	U	C2'-C1'	-6.53	1.46	1.53
83	A5	3893	A	O4'-C1'	-6.53	1.33	1.41
86	A8	106	A	O4'-C1'	6.53	1.50	1.41
36	B2	443	A	O4'-C1'	6.53	1.50	1.41
36	B2	1383	A	C2'-C1'	-6.53	1.46	1.53
83	A5	3513	A	O4'-C1'	6.53	1.50	1.41
83	A5	1386	U	O3'-P	-6.53	1.53	1.61
83	A5	492	A	C2'-C1'	6.53	1.60	1.53
83	A5	1017	A	O4'-C1'	6.53	1.50	1.41
36	B2	516	U	O4'-C1'	6.52	1.50	1.41
36	B2	1626	U	C2'-C1'	-6.52	1.46	1.53
36	B2	1897	U	O4'-C1'	6.52	1.50	1.41
83	A5	259	A	O4'-C1'	6.52	1.50	1.41
36	B2	250	U	O4'-C1'	6.52	1.50	1.41
83	A5	3846	U	C5'-C4'	6.52	1.59	1.51
36	B2	97	U	O4'-C1'	6.52	1.50	1.41
36	B2	383	A	C2'-C1'	-6.52	1.46	1.53
36	B2	1397	U	C2'-C1'	6.52	1.60	1.53
83	A5	1577	A	O4'-C1'	6.52	1.50	1.41
36	B2	1959	C	O4'-C1'	6.52	1.50	1.41
85	A7	108	G	O4'-C1'	6.52	1.50	1.41
83	A5	2713	G	O4'-C1'	-6.51	1.33	1.41
36	B2	707	A	C2'-C1'	-6.51	1.46	1.53
36	B2	900	A	O4'-C1'	-6.51	1.33	1.41
83	A5	2912	U	C2'-C1'	6.51	1.60	1.53
36	B2	596	U	O4'-C1'	6.50	1.50	1.41
36	B2	965	G	P-O5'	-6.50	1.53	1.59
83	A5	3830	A	O4'-C1'	6.50	1.50	1.41
85	A7	75	G	P-O5'	-6.50	1.53	1.59
83	A5	1944	C	O4'-C1'	6.50	1.50	1.41
83	A5	3298	U	O4'-C1'	6.50	1.50	1.41
36	B2	371	A	O4'-C1'	6.50	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1535	U	P-O5'	-6.50	1.53	1.59
83	A5	1666	A	O4'-C1'	6.50	1.50	1.41
83	A5	1727	U	C4'-C3'	6.50	1.60	1.53
83	A5	1434	U	C2'-C1'	-6.50	1.46	1.53
85	A7	4	A	O4'-C1'	6.50	1.50	1.41
36	B2	1385	U	O4'-C1'	6.49	1.50	1.41
83	A5	1071	U	O4'-C1'	6.49	1.50	1.41
83	A5	2094	U	C2'-C1'	-6.49	1.46	1.53
83	A5	3485	U	O4'-C1'	6.49	1.50	1.41
83	A5	1055	U	O4'-C1'	6.49	1.50	1.41
83	A5	1367	A	O4'-C1'	6.49	1.50	1.41
86	A8	49	C	C5'-C4'	6.49	1.59	1.51
36	B2	143	U	O4'-C1'	6.49	1.50	1.41
36	B2	1622	U	C2'-C1'	6.49	1.60	1.53
83	A5	595	U	O4'-C1'	6.49	1.50	1.41
36	B2	315	C	O4'-C1'	6.49	1.50	1.41
36	B2	1932	A	O4'-C1'	6.49	1.50	1.41
83	A5	3232	G	O4'-C1'	6.49	1.50	1.41
83	A5	353	G	O3'-P	-6.48	1.53	1.61
36	B2	524	G	O4'-C1'	6.48	1.50	1.41
83	A5	2527	A	O3'-P	-6.48	1.53	1.61
83	A5	3197	U	P-O5'	-6.48	1.53	1.59
36	B2	405	A	C2'-C1'	6.48	1.60	1.53
83	A5	243	A	O4'-C1'	6.48	1.50	1.41
83	A5	403	A	O4'-C1'	6.48	1.50	1.41
83	A5	629	A	C2'-C1'	-6.48	1.46	1.53
83	A5	3226	A	O4'-C1'	6.48	1.50	1.41
36	B2	1099	U	C4'-O4'	-6.48	1.37	1.45
36	B2	1746	A	O4'-C1'	6.48	1.50	1.41
37	BC	74	C	C2'-C1'	-6.48	1.46	1.53
83	A5	489	U	C2'-C1'	6.48	1.60	1.53
83	A5	1475	A	C2'-C1'	6.47	1.60	1.53
36	B2	220	A	C2'-C1'	6.47	1.60	1.53
36	B2	1414	C	O4'-C1'	6.47	1.50	1.41
83	A5	1125	A	C2'-C1'	-6.47	1.46	1.53
83	A5	2181	A	C2'-C1'	-6.47	1.46	1.53
36	B2	246	U	O4'-C1'	6.47	1.50	1.41
36	B2	1499	U	O3'-P	-6.47	1.53	1.61
37	BC	35	U	O4'-C1'	6.47	1.50	1.41
83	A5	2564	U	C2'-C1'	-6.47	1.46	1.53
83	A5	2880	A	C2'-C1'	6.47	1.60	1.53
36	B2	1896	G	C5'-C4'	6.47	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3353	C	C2'-C1'	-6.47	1.46	1.53
36	B2	597	C	C2'-C1'	-6.46	1.46	1.53
83	A5	1506	A	C2'-C1'	-6.46	1.46	1.53
83	A5	3262	A	C2'-C1'	-6.46	1.46	1.53
83	A5	3741	A	C2'-C1'	6.46	1.60	1.53
36	B2	831	U	C2'-C1'	-6.46	1.46	1.53
83	A5	2837	A	O4'-C1'	6.46	1.50	1.41
36	B2	1281	A	O4'-C1'	6.46	1.50	1.41
36	B2	1983	G	C2'-C1'	-6.46	1.46	1.53
83	A5	785	A	C2'-C1'	-6.46	1.46	1.53
83	A5	2075	A	O4'-C1'	6.46	1.50	1.41
83	A5	1037	A	O4'-C1'	6.46	1.50	1.41
36	B2	638	A	C2'-C1'	-6.45	1.46	1.53
83	A5	335	A	O3'-P	-6.45	1.53	1.61
83	A5	2228	U	O4'-C1'	6.45	1.50	1.41
36	B2	996	U	O4'-C1'	6.45	1.50	1.41
83	A5	1096	A	C2'-C1'	6.45	1.60	1.53
83	A5	18	U	C2'-C1'	-6.45	1.46	1.53
83	A5	646	G	C2'-C1'	-6.44	1.46	1.53
36	B2	6	G	P-O5'	-6.44	1.53	1.59
36	B2	309	U	O4'-C1'	6.44	1.50	1.41
36	B2	406	A	O4'-C1'	6.44	1.50	1.41
83	A5	1745	G	C2'-C1'	6.44	1.60	1.53
83	A5	2816	A	C2'-C1'	-6.44	1.46	1.53
36	B2	1846	G	C2'-C1'	-6.44	1.46	1.53
83	A5	1519	A	O4'-C1'	-6.44	1.33	1.41
83	A5	2790	G	O4'-C1'	6.44	1.50	1.41
83	A5	3140	G	O4'-C1'	6.44	1.50	1.41
83	A5	92	A	C2'-C1'	-6.44	1.46	1.53
83	A5	734	U	O4'-C1'	6.44	1.50	1.41
83	A5	1996	U	O4'-C1'	6.43	1.50	1.41
83	A5	2515	C	O3'-P	-6.43	1.53	1.61
83	A5	374	C	O4'-C1'	6.43	1.50	1.41
83	A5	2565	G	C2'-C1'	-6.43	1.46	1.53
83	A5	3751	C	O4'-C1'	6.43	1.50	1.41
86	A8	59	G	C2'-C1'	-6.43	1.46	1.53
83	A5	3961	G	O4'-C1'	6.43	1.50	1.41
83	A5	2025	G	O4'-C1'	6.43	1.50	1.41
36	B2	840	U	C2'-C1'	-6.42	1.46	1.53
83	A5	513	G	C5'-C4'	6.42	1.59	1.51
83	A5	724	U	C2'-C1'	6.42	1.60	1.53
83	A5	1685	G	O4'-C1'	6.42	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3843	U	O3'-P	-6.42	1.53	1.61
83	A5	1424	G	O4'-C1'	6.42	1.50	1.41
83	A5	528	U	O4'-C1'	6.42	1.50	1.41
83	A5	2156	U	O4'-C1'	6.42	1.50	1.41
36	B2	847	G	C2'-C1'	6.42	1.60	1.53
83	A5	2498	U	O4'-C1'	6.42	1.50	1.41
83	A5	237	G	C2'-C1'	-6.42	1.46	1.53
83	A5	470	G	C2'-C1'	-6.42	1.46	1.53
36	B2	1169	C	O3'-P	-6.41	1.53	1.61
83	A5	216	U	O3'-P	-6.41	1.53	1.61
83	A5	1807	U	O4'-C1'	6.41	1.50	1.41
36	B2	1125	U	C2'-C1'	-6.40	1.46	1.53
36	B2	1256	U	C2'-C1'	-6.40	1.46	1.53
83	A5	1539	A	O4'-C1'	6.40	1.50	1.41
36	B2	1067	G	C2'-C1'	-6.40	1.46	1.53
84	A9	15	A	O4'-C1'	6.40	1.50	1.41
36	B2	1360	G	C2'-C1'	-6.39	1.46	1.53
36	B2	1769	A	O4'-C1'	6.39	1.50	1.41
83	A5	282	A	C2'-C1'	-6.39	1.46	1.53
83	A5	1310	A	O4'-C1'	6.39	1.50	1.41
83	A5	2204	U	C2'-C1'	6.39	1.60	1.53
83	A5	2903	U	O4'-C1'	6.39	1.50	1.41
83	A5	3120	C	C2'-C1'	-6.39	1.46	1.53
83	A5	2055	G	O4'-C1'	6.39	1.50	1.41
36	B2	168	A	P-O5'	-6.38	1.53	1.59
83	A5	58	G	O4'-C1'	-6.38	1.33	1.41
83	A5	3724	U	C2'-C1'	6.38	1.60	1.53
36	B2	165	A	C2'-C1'	-6.38	1.46	1.53
83	A5	3169	A	O4'-C1'	6.38	1.50	1.41
36	B2	2	U	O4'-C1'	6.38	1.50	1.41
20	Aa	42	ARG	NE-CZ	6.38	1.41	1.33
83	A5	184	A	C2'-C1'	6.38	1.60	1.53
83	A5	3746	A	C2'-C1'	-6.38	1.46	1.53
83	A5	3274	A	C2'-C1'	-6.38	1.46	1.53
36	B2	1411	G	C2'-C1'	-6.37	1.46	1.53
83	A5	712	U	O4'-C1'	6.37	1.50	1.41
83	A5	3451	A	O4'-C1'	6.37	1.50	1.41
83	A5	156	G	P-O5'	-6.37	1.53	1.59
83	A5	3947	C	O4'-C1'	6.37	1.50	1.41
83	A5	914	C	O4'-C1'	6.37	1.50	1.41
36	B2	95	G	O4'-C1'	6.37	1.50	1.41
83	A5	1235	U	C2'-C1'	-6.37	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2554	U	C2'-C1'	-6.37	1.46	1.53
83	A5	1389	C	C2'-C1'	-6.37	1.46	1.53
83	A5	2065	A	C2'-C1'	-6.37	1.46	1.53
83	A5	1362	G	C2'-C1'	-6.36	1.46	1.53
36	B2	1937	U	O4'-C1'	6.36	1.50	1.41
83	A5	861	C	O4'-C1'	6.36	1.50	1.41
83	A5	1568	A	O4'-C1'	6.36	1.50	1.41
83	A5	146	A	O4'-C1'	6.36	1.50	1.41
36	B2	1140	G	C2'-C1'	-6.36	1.46	1.53
36	B2	1578	U	O4'-C1'	6.36	1.50	1.41
83	A5	190	A	C2'-C1'	6.35	1.60	1.53
36	B2	1238	G	C2'-C1'	-6.35	1.46	1.53
83	A5	136	C	O4'-C1'	6.35	1.50	1.41
83	A5	1694	A	O4'-C1'	6.35	1.50	1.41
83	A5	2785	C	C2'-C1'	-6.35	1.46	1.53
83	A5	3402	C	O4'-C1'	6.35	1.50	1.41
37	BC	20	A	C2'-C1'	6.35	1.60	1.53
83	A5	1284	A	C2'-C1'	6.35	1.60	1.53
36	B2	534	A	O4'-C1'	6.35	1.50	1.41
36	B2	1201	A	C2'-C1'	-6.35	1.46	1.53
83	A5	894	U	O4'-C1'	6.35	1.50	1.41
83	A5	2897	G	O4'-C1'	-6.35	1.33	1.41
83	A5	3917	G	C2'-C1'	-6.35	1.46	1.53
36	B2	1993	U	C4'-C3'	-6.35	1.46	1.53
36	B2	1073	G	C2'-C1'	-6.34	1.46	1.53
36	B2	545	A	O4'-C1'	6.34	1.49	1.41
83	A5	1296	U	C2'-C1'	-6.34	1.46	1.53
36	B2	1077	C	C2'-C1'	-6.34	1.46	1.53
83	A5	2143	C	C2'-C1'	-6.34	1.46	1.53
36	B2	75	U	C5'-C4'	6.34	1.58	1.51
83	A5	3946	G	C2'-C1'	-6.34	1.46	1.53
36	B2	911	C	O4'-C1'	6.33	1.49	1.41
83	A5	1097	A	C2'-C1'	-6.33	1.46	1.53
83	A5	3495	G	O4'-C1'	-6.33	1.33	1.41
36	B2	1028	A	C2'-C1'	-6.33	1.46	1.53
36	B2	1867	C	C2'-C1'	-6.33	1.46	1.53
83	A5	306	C	C2'-C1'	-6.33	1.46	1.53
36	B2	338	C	O4'-C1'	6.33	1.49	1.41
36	B2	488	A	O3'-P	-6.32	1.53	1.61
83	A5	3868	G	C2'-C1'	-6.32	1.46	1.53
83	A5	3282	C	C5'-C4'	6.32	1.58	1.51
83	A5	141	U	C2'-C1'	6.32	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2739	A	P-O5'	-6.32	1.53	1.59
83	A5	2835	G	C2'-C1'	-6.32	1.46	1.53
83	A5	715	U	C2'-C1'	6.32	1.60	1.53
83	A5	2761	A	C2'-C1'	-6.32	1.46	1.53
36	B2	1886	G	O4'-C1'	6.31	1.49	1.41
36	B2	174	A	O4'-C1'	-6.31	1.33	1.41
36	B2	1242	G	C2'-C1'	-6.31	1.46	1.53
36	B2	1349	U	O4'-C1'	6.31	1.49	1.41
83	A5	527	U	C2'-C1'	-6.31	1.46	1.53
83	A5	1195	U	O4'-C1'	6.31	1.49	1.41
83	A5	1339	U	O4'-C1'	6.31	1.49	1.41
83	A5	2215	G	P-O5'	-6.31	1.53	1.59
83	A5	1322	U	O4'-C1'	6.31	1.49	1.41
36	B2	1806	A	O4'-C1'	-6.31	1.33	1.41
83	A5	740	G	C2'-C1'	-6.31	1.46	1.53
83	A5	1170	U	C2'-C1'	6.31	1.60	1.53
83	A5	1591	U	C2'-C1'	-6.31	1.46	1.53
83	A5	2636	U	O4'-C1'	6.31	1.49	1.41
83	A5	3475	U	P-O5'	-6.31	1.53	1.59
83	A5	3638	U	C2'-C1'	-6.31	1.46	1.53
83	A5	3921	A	O4'-C1'	6.31	1.49	1.41
83	A5	1123	C	O4'-C1'	6.30	1.49	1.41
83	A5	2732	C	O4'-C1'	6.30	1.49	1.41
86	A8	98	U	O4'-C1'	6.30	1.49	1.41
56	CX	260	ARG	NE-CZ	6.30	1.41	1.33
83	A5	524	A	C2'-C1'	6.30	1.60	1.53
36	B2	993	A	O4'-C1'	6.29	1.49	1.41
83	A5	644	U	C2'-C1'	-6.29	1.46	1.53
83	A5	3211	A	O4'-C1'	-6.29	1.33	1.41
83	A5	3843	U	O4'-C1'	-6.29	1.33	1.41
83	A5	2071	A	O4'-C1'	6.29	1.49	1.41
36	B2	364	A	C2'-C1'	6.29	1.60	1.53
36	B2	535	A	O4'-C1'	6.29	1.49	1.41
83	A5	820	A	C2'-C1'	-6.29	1.46	1.53
36	B2	1285	C	O4'-C1'	6.28	1.49	1.41
83	A5	3164	C	O4'-C1'	6.28	1.49	1.41
83	A5	3120	C	O4'-C1'	6.28	1.49	1.41
83	A5	1224	A	O4'-C1'	6.28	1.49	1.41
83	A5	635	G	O4'-C1'	6.28	1.49	1.41
83	A5	2260	U	P-O5'	-6.28	1.53	1.59
83	A5	3345	A	O4'-C1'	6.28	1.49	1.41
83	A5	3513	A	C2'-C1'	-6.28	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	634	U	C5'-C4'	6.27	1.58	1.51
83	A5	176	A	C2'-C1'	-6.27	1.46	1.53
83	A5	1403	C	O4'-C1'	6.27	1.49	1.41
83	A5	2246	A	O4'-C1'	6.27	1.49	1.41
83	A5	891	U	O4'-C1'	6.27	1.49	1.41
83	A5	3435	A	O4'-C1'	6.27	1.49	1.41
36	B2	64	U	C2'-C1'	6.27	1.60	1.53
36	B2	1114	A	C2'-C1'	6.27	1.60	1.53
83	A5	367	A	C2'-C1'	6.27	1.60	1.53
83	A5	3385	G	P-O5'	-6.27	1.53	1.59
83	A5	1276	G	O4'-C1'	6.26	1.49	1.41
83	A5	1712	C	C2'-C1'	-6.26	1.46	1.53
83	A5	2796	G	C2'-C1'	6.26	1.60	1.53
83	A5	3586	A	O4'-C1'	6.26	1.49	1.41
83	A5	3469	G	C5'-C4'	6.26	1.58	1.51
36	B2	299	C	O4'-C1'	6.26	1.49	1.41
83	A5	3380	G	C2'-C1'	-6.26	1.46	1.53
36	B2	637	U	O4'-C1'	6.26	1.49	1.41
36	B2	958	G	O4'-C1'	6.26	1.49	1.41
36	B2	1654	G	O4'-C1'	-6.26	1.33	1.41
83	A5	3573	C	O4'-C1'	6.26	1.49	1.41
36	B2	1438	U	O4'-C1'	6.25	1.49	1.41
83	A5	1467	A	O3'-P	-6.25	1.53	1.61
83	A5	1718	G	O4'-C1'	6.25	1.49	1.41
82	CG	180	ARG	CZ-NH2	6.25	1.41	1.33
36	B2	1151	G	C2'-C1'	-6.25	1.46	1.53
36	B2	1858	U	C2'-C1'	-6.25	1.46	1.53
83	A5	1080	G	O3'-P	-6.25	1.53	1.61
83	A5	3536	U	O4'-C1'	6.25	1.49	1.41
83	A5	1445	G	C2'-C1'	-6.25	1.46	1.53
83	A5	2901	C	O3'-P	-6.25	1.53	1.61
83	A5	1271	G	O4'-C1'	-6.24	1.33	1.41
86	A8	89	A	O4'-C1'	6.24	1.49	1.41
83	A5	2030	U	O4'-C1'	6.24	1.49	1.41
36	B2	1200	A	O4'-C1'	6.24	1.49	1.41
83	A5	2680	G	O4'-C1'	6.24	1.49	1.41
36	B2	192	A	C2'-C1'	6.24	1.60	1.53
83	A5	480	C	O4'-C1'	6.24	1.49	1.41
83	A5	1974	U	C2'-C1'	-6.24	1.46	1.53
83	A5	3506	U	O4'-C1'	6.23	1.49	1.41
86	A8	24	G	O3'-P	-6.23	1.53	1.61
36	B2	308	G	C2'-C1'	-6.23	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	906	A	C2'-C1'	-6.23	1.46	1.53
83	A5	2187	U	C2'-C1'	6.23	1.60	1.53
83	A5	3649	C	O4'-C1'	6.23	1.49	1.41
83	A5	460	A	C2'-C1'	-6.23	1.46	1.53
83	A5	3814	U	C2'-C1'	6.23	1.60	1.53
36	B2	1441	C	O4'-C1'	6.23	1.49	1.41
83	A5	864	G	C2'-C1'	-6.23	1.46	1.53
83	A5	101	C	O4'-C1'	6.22	1.49	1.41
83	A5	2204	U	O4'-C1'	6.22	1.49	1.41
26	AJ	134	ARG	CD-NE	6.22	1.57	1.46
36	B2	1702	C	C2'-C1'	-6.22	1.46	1.53
83	A5	2591	A	C2'-C1'	-6.22	1.46	1.53
83	A5	372	U	O4'-C1'	6.22	1.49	1.41
83	A5	627	G	C2'-C1'	-6.22	1.46	1.53
83	A5	462	C	C2'-C1'	-6.22	1.46	1.53
83	A5	1435	A	C2'-C1'	6.21	1.60	1.53
36	B2	1673	U	C2'-C1'	-6.21	1.46	1.53
36	B2	168	A	C2'-C1'	-6.21	1.46	1.53
36	B2	881	U	C2'-C1'	-6.21	1.46	1.53
36	B2	1027	A	O4'-C1'	6.21	1.49	1.41
83	A5	795	A	O4'-C1'	6.21	1.49	1.41
83	A5	3199	A	O4'-C1'	6.21	1.49	1.41
36	B2	954	A	O4'-C1'	6.21	1.49	1.41
83	A5	3942	U	C2'-C1'	-6.20	1.46	1.53
36	B2	1285	C	C2'-C1'	6.20	1.60	1.53
83	A5	1024	U	O4'-C1'	6.20	1.49	1.41
83	A5	1989	A	O4'-C1'	6.20	1.49	1.41
83	A5	3283	U	O4'-C1'	6.20	1.49	1.41
36	B2	1039	A	O4'-C1'	6.20	1.49	1.41
83	A5	21	U	P-O5'	-6.20	1.53	1.59
83	A5	587	U	O4'-C1'	6.20	1.49	1.41
36	B2	1928	C	C2'-C1'	-6.20	1.46	1.53
36	B2	531	U	O4'-C1'	6.19	1.49	1.41
83	A5	3309	A	O4'-C1'	6.19	1.49	1.41
83	A5	497	U	O3'-P	-6.19	1.53	1.61
36	B2	1843	A	C4'-C3'	6.19	1.59	1.53
83	A5	2510	A	O4'-C1'	6.19	1.49	1.41
36	B2	270	G	C2'-C1'	-6.19	1.46	1.53
83	A5	565	C	C2'-C1'	-6.19	1.46	1.53
83	A5	357	C	C2'-C1'	-6.18	1.46	1.53
83	A5	1521	G	O4'-C1'	6.18	1.49	1.41
83	A5	395	A	O4'-C1'	6.18	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2161	G	C2'-C1'	-6.18	1.46	1.53
36	B2	649	U	O4'-C1'	6.18	1.49	1.41
36	B2	183	A	C2'-C1'	-6.18	1.46	1.53
83	A5	1804	A	O3'-P	-6.18	1.53	1.61
36	B2	989	G	C2'-C1'	-6.17	1.46	1.53
36	B2	1105	U	O4'-C1'	6.17	1.49	1.41
83	A5	2171	U	O4'-C1'	6.17	1.49	1.41
83	A5	2529	G	O4'-C1'	6.17	1.49	1.41
36	B2	1125	U	P-O5'	-6.17	1.53	1.59
36	B2	1583	A	C2'-C1'	6.17	1.60	1.53
83	A5	2266	U	O4'-C1'	6.17	1.49	1.41
36	B2	1831	C	C4'-C3'	-6.16	1.46	1.53
83	A5	3822	C	C2'-C1'	-6.16	1.46	1.53
83	A5	3920	C	O3'-P	-6.16	1.53	1.61
36	B2	1200	A	C2'-C1'	-6.16	1.46	1.53
36	B2	1894	G	C5'-C4'	6.16	1.58	1.51
83	A5	1395	U	O4'-C1'	6.16	1.49	1.41
36	B2	94	G	O4'-C1'	6.16	1.49	1.41
83	A5	3110	U	O4'-C1'	6.15	1.49	1.41
36	B2	542	A	O4'-C1'	6.15	1.49	1.41
36	B2	1069	U	C2'-C1'	-6.15	1.46	1.53
37	BC	72	A	C2'-C1'	-6.15	1.46	1.53
83	A5	186	G	C2'-C1'	-6.15	1.46	1.53
83	A5	1277	A	O4'-C1'	6.15	1.49	1.41
83	A5	2147	C	C2'-C1'	-6.15	1.46	1.53
83	A5	2715	C	C2'-C1'	-6.15	1.46	1.53
86	A8	4	U	C2'-C1'	-6.15	1.46	1.53
86	A8	23	G	C2'-C1'	-6.15	1.46	1.53
85	A7	90	A	C2'-C1'	6.15	1.60	1.53
83	A5	796	A	O4'-C1'	6.15	1.49	1.41
36	B2	395	G	O4'-C1'	-6.14	1.33	1.41
36	B2	1156	U	O4'-C1'	6.14	1.49	1.41
83	A5	1758	U	O4'-C1'	6.14	1.49	1.41
83	A5	2209	G	C2'-C1'	-6.14	1.46	1.53
36	B2	1029	G	C5'-C4'	6.14	1.58	1.51
36	B2	1811	C	C2'-C1'	-6.14	1.46	1.53
36	B2	1047	U	O4'-C1'	6.14	1.49	1.41
37	BC	28	G	C2'-C1'	-6.14	1.46	1.53
36	B2	1019	U	O4'-C1'	6.14	1.49	1.41
36	B2	1437	A	O4'-C1'	6.14	1.49	1.41
36	B2	1127	G	O4'-C1'	6.14	1.49	1.41
83	A5	2627	G	C2'-C1'	-6.14	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A8	38	G	C5'-C4'	6.14	1.58	1.51
36	B2	698	U	C5'-C4'	6.13	1.58	1.51
83	A5	536	U	C2'-C1'	6.13	1.60	1.53
36	B2	1737	U	O4'-C1'	6.13	1.49	1.41
83	A5	3612	A	O4'-C1'	6.13	1.49	1.41
36	B2	1775	A	O4'-C1'	6.13	1.49	1.41
83	A5	1604	G	C2'-C1'	-6.13	1.46	1.53
83	A5	3256	U	C2'-C1'	-6.13	1.46	1.53
83	A5	1030	A	O4'-C1'	6.12	1.49	1.41
83	A5	1947	G	C2'-C1'	6.12	1.60	1.53
21	Ab	80	ARG	NE-CZ	6.12	1.41	1.33
83	A5	120	C	C2'-C1'	6.12	1.60	1.53
36	B2	1297	C	C2'-C1'	-6.12	1.46	1.53
83	A5	2769	G	O4'-C1'	6.12	1.49	1.41
36	B2	555	U	C2'-C1'	-6.12	1.46	1.53
36	B2	1165	C	O4'-C1'	6.12	1.49	1.41
36	B2	1326	U	C2'-C1'	-6.12	1.46	1.53
83	A5	1770	C	C5'-C4'	6.12	1.58	1.51
36	B2	231	G	C2'-C1'	6.12	1.60	1.53
36	B2	276	A	O4'-C1'	6.12	1.49	1.41
83	A5	863	U	O4'-C1'	6.12	1.49	1.41
83	A5	1298	A	C2'-C1'	-6.11	1.46	1.53
83	A5	980	A	O3'-P	-6.11	1.53	1.61
83	A5	2632	U	O4'-C1'	6.11	1.49	1.41
83	A5	482	U	O4'-C1'	6.11	1.49	1.41
83	A5	172	C	C5'-C4'	6.11	1.58	1.51
83	A5	2628	G	C2'-C1'	-6.11	1.46	1.53
83	A5	2658	A	O4'-C1'	6.11	1.49	1.41
85	A7	70	G	O4'-C1'	6.11	1.49	1.41
36	B2	383	A	O4'-C1'	6.11	1.49	1.41
83	A5	2486	A	O4'-C1'	6.11	1.49	1.41
83	A5	2757	U	C2'-C1'	6.10	1.60	1.53
36	B2	1008	G	O4'-C1'	6.10	1.49	1.41
36	B2	270	G	O4'-C1'	6.10	1.49	1.41
83	A5	3420	U	O4'-C1'	6.10	1.49	1.41
83	A5	1359	G	O4'-C1'	6.10	1.49	1.41
83	A5	2175	A	P-O5'	-6.10	1.53	1.59
83	A5	3393	U	O4'-C1'	6.10	1.49	1.41
83	A5	3388	G	O3'-P	-6.10	1.53	1.61
36	B2	70	C	O4'-C1'	6.09	1.49	1.41
83	A5	938	U	O4'-C1'	6.09	1.49	1.41
36	B2	824	U	O4'-C1'	6.09	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	AC	262	ARG	NE-CZ	6.09	1.41	1.33
36	B2	875	A	C2'-C1'	-6.09	1.46	1.53
83	A5	1151	A	C2'-C1'	-6.09	1.46	1.53
85	A7	99	G	C5'-C4'	6.09	1.58	1.51
36	B2	546	A	C2'-C1'	6.09	1.60	1.53
36	B2	1772	C	C2'-C1'	-6.09	1.46	1.53
83	A5	3437	U	O4'-C1'	6.09	1.49	1.41
36	B2	1901	A	C5'-C4'	6.08	1.58	1.51
83	A5	116	U	C5'-C4'	6.08	1.58	1.51
36	B2	1323	A	O4'-C1'	6.08	1.49	1.41
83	A5	984	U	O4'-C1'	-6.08	1.33	1.41
83	A5	1055	U	C2'-C1'	-6.08	1.46	1.53
36	B2	735	G	O3'-P	-6.08	1.53	1.61
83	A5	2513	G	O4'-C1'	6.08	1.49	1.41
83	A5	240	G	C2'-C1'	6.08	1.60	1.53
36	B2	1182	C	C2'-C1'	-6.08	1.46	1.53
36	B2	1555	U	C2'-C1'	-6.08	1.46	1.53
36	B2	1428	A	O4'-C1'	6.08	1.49	1.41
83	A5	2093	U	C2'-C1'	-6.08	1.46	1.53
36	B2	136	A	O4'-C1'	-6.07	1.33	1.41
36	B2	876	U	C2'-C1'	6.07	1.60	1.53
83	A5	892	A	C2'-C1'	-6.07	1.46	1.53
83	A5	967	C	O4'-C1'	6.07	1.49	1.41
83	A5	2551	U	C2'-C1'	-6.07	1.46	1.53
83	A5	366	A	O4'-C1'	6.07	1.49	1.41
83	A5	3088	U	P-O5'	-6.07	1.53	1.59
83	A5	1097	A	O4'-C1'	6.07	1.49	1.41
85	A7	113	G	O4'-C1'	6.07	1.49	1.41
83	A5	2024	U	C2'-C1'	-6.07	1.46	1.53
84	A9	27	U	C2'-C1'	-6.07	1.46	1.53
37	BC	5	G	C2'-C1'	-6.06	1.46	1.53
36	B2	1526	G	O4'-C1'	6.06	1.49	1.41
86	A8	80	C	O4'-C1'	-6.06	1.33	1.41
36	B2	1458	U	C5'-C4'	6.06	1.58	1.51
83	A5	441	A	O4'-C1'	6.06	1.49	1.41
36	B2	1555	U	P-O5'	-6.06	1.53	1.59
83	A5	2575	C	O4'-C1'	6.06	1.49	1.41
83	A5	1677	U	C2'-C1'	6.05	1.60	1.53
83	A5	2214	G	C2'-C1'	-6.05	1.46	1.53
83	A5	2806	U	O4'-C1'	6.05	1.49	1.41
83	A5	3157	U	O3'-P	-6.05	1.53	1.61
86	A8	16	A	O4'-C1'	6.05	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	572	G	O4 ² -C1'	6.05	1.49	1.41
83	A5	1469	C	C2 ² -C1'	-6.05	1.46	1.53
83	A5	3562	A	C3 ² -C2'	-6.05	1.46	1.52
83	A5	1941	A	O4 ² -C1'	6.05	1.49	1.41
83	A5	2551	U	O3 ² -P	-6.05	1.53	1.61
36	B2	1295	U	O3 ² -P	-6.04	1.53	1.61
83	A5	3247	A	O4 ² -C1'	6.04	1.49	1.41
36	B2	1372	U	O4 ² -C1'	-6.04	1.33	1.41
83	A5	1076	A	C2 ² -C1'	-6.04	1.46	1.53
83	A5	3557	G	C4 ² -C3'	6.04	1.59	1.53
36	B2	1364	G	O4 ² -C1'	6.04	1.49	1.41
83	A5	360	A	O4 ² -C1'	-6.04	1.33	1.41
83	A5	1963	U	C2 ² -C1'	6.04	1.59	1.53
36	B2	551	C	O4 ² -C1'	6.03	1.49	1.41
83	A5	868	A	C5 ² -C4'	6.03	1.58	1.51
36	B2	302	U	O4 ² -C1'	6.03	1.49	1.41
83	A5	2499	U	O4 ² -C1'	6.03	1.49	1.41
36	B2	1158	U	O4 ² -C1'	6.03	1.49	1.41
36	B2	166	A	C2 ² -C1'	6.03	1.59	1.53
36	B2	1332	G	C2 ² -C1'	6.03	1.59	1.53
83	A5	3686	A	O4 ² -C1'	-6.03	1.33	1.41
83	A5	1582	U	O4 ² -C1'	6.02	1.49	1.41
83	A5	2694	G	C4 ² -C3'	-6.02	1.46	1.53
83	A5	3639	U	O4 ² -C1'	6.02	1.49	1.41
83	A5	2490	G	O3 ² -P	-6.02	1.53	1.61
83	A5	676	A	C2 ² -C1'	-6.02	1.46	1.53
83	A5	880	A	O4 ² -C1'	6.01	1.49	1.41
83	A5	921	C	P-O5'	-6.01	1.53	1.59
83	A5	3342	C	C2 ² -C1'	-6.01	1.46	1.53
36	B2	343	A	C2 ² -C1'	-6.01	1.46	1.53
83	A5	1504	C	C2 ² -C1'	-6.01	1.46	1.53
36	B2	832	U	O4 ² -C1'	6.01	1.49	1.41
83	A5	1314	U	O4 ² -C1'	6.01	1.49	1.41
83	A5	3502	A	C2 ² -C1'	6.01	1.59	1.53
83	A5	351	A	O4 ² -C1'	6.01	1.49	1.41
83	A5	1320	U	O4 ² -C1'	6.01	1.49	1.41
83	A5	1465	A	O4 ² -C1'	6.01	1.49	1.41
83	A5	2175	A	O4 ² -C1'	6.01	1.49	1.41
36	B2	39	A	O3 ² -P	-6.01	1.53	1.61
83	A5	2129	C	C5 ² -C4'	6.01	1.58	1.51
83	A5	3793	U	C2 ² -C1'	-6.01	1.46	1.53
36	B2	237	U	O4 ² -C1'	6.00	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	849	U	C2'-C1'	-6.00	1.46	1.53
36	B2	887	G	C2'-C1'	-6.00	1.46	1.53
83	A5	666	A	C2'-C1'	6.00	1.59	1.53
36	B2	1461	A	O4'-C1'	6.00	1.49	1.41
36	B2	1686	C	O4'-C1'	6.00	1.49	1.41
83	A5	1887	C	C2'-C1'	6.00	1.59	1.53
83	A5	3112	A	O4'-C1'	6.00	1.49	1.41
83	A5	3496	U	C2'-C1'	-6.00	1.46	1.53
36	B2	1299	A	O4'-C1'	6.00	1.49	1.41
83	A5	202	A	C2'-C1'	6.00	1.59	1.53
83	A5	1758	U	C2'-C1'	-6.00	1.46	1.53
83	A5	272	U	O4'-C1'	6.00	1.49	1.41
36	B2	375	A	O4'-C1'	5.99	1.49	1.41
83	A5	3364	C	O4'-C1'	5.99	1.49	1.41
83	A5	162	U	O4'-C1'	-5.99	1.33	1.41
83	A5	2619	U	O4'-C1'	5.99	1.49	1.41
83	A5	325	A	O4'-C1'	5.99	1.49	1.41
83	A5	2225	A	C2'-C1'	-5.99	1.46	1.53
83	A5	3597	C	C2'-C1'	-5.99	1.46	1.53
83	A5	3836	A	O4'-C1'	5.99	1.49	1.41
83	A5	1513	C	O4'-C1'	5.98	1.49	1.41
83	A5	2270	G	O4'-C1'	5.98	1.49	1.41
36	B2	69	A	O4'-C1'	5.98	1.49	1.41
36	B2	1088	A	O4'-C1'	5.98	1.49	1.41
36	B2	1264	G	C2'-C1'	-5.98	1.46	1.53
36	B2	1559	A	C5'-C4'	5.98	1.58	1.51
47	CI	153	ARG	CZ-NH1	5.98	1.40	1.33
59	CZ	110	ARG	NE-CZ	5.98	1.40	1.33
36	B2	992	A	O3'-P	-5.98	1.53	1.61
83	A5	917	G	C2'-C1'	-5.98	1.46	1.53
83	A5	3527	A	O4'-C1'	5.98	1.49	1.41
83	A5	185	U	C4'-C3'	5.98	1.59	1.53
83	A5	3762	G	O4'-C1'	-5.98	1.33	1.41
36	B2	959	U	C2'-C1'	-5.98	1.46	1.53
36	B2	241	U	O4'-C1'	5.97	1.49	1.41
36	B2	1287	G	O4'-C1'	-5.97	1.33	1.41
83	A5	2253	U	C2'-C1'	-5.97	1.46	1.53
83	A5	123	U	C2'-C1'	5.97	1.59	1.53
83	A5	319	G	C2'-C1'	-5.97	1.46	1.53
83	A5	1290	U	C2'-C1'	-5.97	1.46	1.53
83	A5	3679	C	C2'-C1'	-5.97	1.46	1.53
83	A5	1740	C	C2'-C1'	-5.97	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1979	A	O4'-C1'	5.97	1.49	1.41
83	A5	2748	G	C4'-C3'	5.97	1.59	1.53
36	B2	1277	A	C2'-C1'	5.96	1.59	1.53
71	Cj	75	ARG	CZ-NH1	5.96	1.40	1.33
83	A5	1446	A	C2'-C1'	5.96	1.59	1.53
83	A5	2004	G	O4'-C1'	5.96	1.49	1.41
83	A5	2173	C	O4'-C1'	5.96	1.49	1.41
36	B2	1296	A	O4'-C1'	-5.96	1.33	1.41
36	B2	390	A	O4'-C1'	5.96	1.49	1.41
83	A5	2784	C	C2'-C1'	-5.96	1.46	1.53
83	A5	908	C	C2'-C1'	-5.96	1.46	1.53
36	B2	319	C	O4'-C1'	5.96	1.49	1.41
83	A5	98	G	O3'-P	-5.96	1.54	1.61
36	B2	1994	U	C2'-C1'	5.96	1.59	1.53
83	A5	3865	C	C2'-C1'	-5.96	1.46	1.53
36	B2	1472	C	O3'-P	-5.95	1.54	1.61
36	B2	1522	G	C2'-C1'	-5.95	1.46	1.53
85	A7	20	U	C2'-C1'	-5.95	1.46	1.53
36	B2	1653	C	C2'-C1'	5.95	1.59	1.53
83	A5	542	C	C2'-C1'	-5.95	1.46	1.53
83	A5	1423	C	O4'-C1'	5.95	1.49	1.41
83	A5	1481	G	O4'-C1'	5.95	1.49	1.41
83	A5	2718	U	C2'-C1'	-5.95	1.46	1.53
36	B2	653	U	O4'-C1'	5.95	1.49	1.41
41	CO	20	ARG	CZ-NH2	5.95	1.40	1.33
83	A5	997	U	O4'-C1'	5.95	1.49	1.41
84	A9	15	A	C2'-C1'	-5.95	1.46	1.53
83	A5	2831	U	O4'-C1'	5.95	1.49	1.41
83	A5	1155	U	C2'-C1'	-5.95	1.46	1.53
36	B2	1528	G	O4'-C1'	5.94	1.49	1.41
83	A5	5	A	O4'-C1'	-5.94	1.33	1.41
83	A5	3598	U	C2'-C1'	5.94	1.59	1.53
83	A5	2189	U	O4'-C1'	5.94	1.49	1.41
36	B2	1534	G	C2'-C1'	-5.94	1.46	1.53
83	A5	244	G	C2'-C1'	-5.94	1.46	1.53
83	A5	2538	U	O4'-C1'	5.94	1.49	1.41
86	A8	58	C	C2'-C1'	-5.94	1.46	1.53
35	Ah	138	ARG	NE-CZ	5.94	1.40	1.33
36	B2	1715	G	O4'-C1'	-5.94	1.33	1.41
83	A5	2255	G	C2'-C1'	-5.94	1.46	1.53
83	A5	1054	A	C5'-C4'	5.94	1.58	1.51
83	A5	1292	G	C4'-C3'	5.93	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3924	U	O4'-C1'	5.93	1.49	1.41
83	A5	2898	U	C2'-C1'	5.93	1.59	1.53
36	B2	788	U	P-O5'	-5.93	1.53	1.59
83	A5	2988	U	O3'-P	-5.93	1.54	1.61
83	A5	3374	U	C2'-C1'	-5.93	1.46	1.53
83	A5	3224	G	O4'-C1'	5.92	1.49	1.41
83	A5	1116	G	O3'-P	-5.92	1.54	1.61
83	A5	396	A	O4'-C1'	5.92	1.49	1.41
36	B2	855	C	C2'-C1'	-5.91	1.46	1.53
36	B2	922	G	C2'-C1'	-5.91	1.46	1.53
83	A5	2599	G	C2'-C1'	-5.91	1.46	1.53
36	B2	1851	A	P-O5'	-5.91	1.53	1.59
83	A5	346	U	O3'-P	-5.91	1.54	1.61
83	A5	3626	A	C5'-C4'	5.91	1.58	1.51
20	Aa	15	ARG	NE-CZ	5.91	1.40	1.33
36	B2	332	U	C4'-C3'	5.91	1.59	1.53
36	B2	828	A	O4'-C1'	5.91	1.49	1.41
83	A5	2577	G	O3'-P	-5.91	1.54	1.61
85	A7	55	A	C2'-C1'	-5.91	1.46	1.53
83	A5	3688	A	O4'-C1'	5.90	1.49	1.41
36	B2	222	C	C2'-C1'	-5.90	1.46	1.53
36	B2	1466	A	C2'-C1'	-5.90	1.46	1.53
83	A5	3193	C	C2'-C1'	5.90	1.59	1.53
36	B2	582	G	O3'-P	-5.90	1.54	1.61
36	B2	1940	G	O3'-P	-5.90	1.54	1.61
83	A5	718	U	C2'-C1'	-5.90	1.46	1.53
83	A5	2506	U	O3'-P	-5.90	1.54	1.61
83	A5	3006	A	O4'-C1'	5.90	1.49	1.41
83	A5	1615	G	C2'-C1'	-5.90	1.46	1.53
36	B2	1641	U	C5'-C4'	5.89	1.58	1.51
83	A5	1023	C	O3'-P	-5.89	1.54	1.61
36	B2	1354	G	O4'-C1'	5.89	1.49	1.41
36	B2	866	U	C2'-C1'	-5.89	1.46	1.53
36	B2	1417	G	O4'-C1'	5.89	1.49	1.41
83	A5	17	C	C2'-C1'	-5.89	1.46	1.53
36	B2	688	A	O3'-P	-5.88	1.54	1.61
83	A5	3931	C	C2'-C1'	-5.88	1.46	1.53
36	B2	1239	A	C2'-C1'	5.88	1.59	1.53
36	B2	1256	U	O4'-C1'	5.88	1.49	1.41
83	A5	49	A	P-O5'	-5.88	1.53	1.59
83	A5	549	A	C2'-C1'	-5.88	1.46	1.53
83	A5	907	A	O4'-C1'	5.88	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	220	A	O4'-C1'	5.88	1.49	1.41
36	B2	1068	U	C2'-C1'	-5.88	1.46	1.53
83	A5	3668	G	C4'-C3'	-5.88	1.46	1.52
36	B2	381	C	O4'-C1'	5.88	1.49	1.41
83	A5	1391	A	P-O5'	-5.88	1.53	1.59
36	B2	1888	C	O4'-C1'	5.88	1.49	1.41
36	B2	1835	U	C2'-C1'	-5.87	1.46	1.53
83	A5	3940	A	C2'-C1'	-5.87	1.46	1.53
86	A8	29	U	C5'-C4'	5.87	1.58	1.51
83	A5	1474	A	O4'-C1'	-5.87	1.34	1.41
36	B2	1741	A	O4'-C1'	5.87	1.49	1.41
18	AY	34	SER	CA-CB	5.86	1.61	1.52
83	A5	21	U	O4'-C1'	5.86	1.49	1.41
83	A5	1089	U	O4'-C1'	5.86	1.49	1.41
83	A5	1943	C	C5'-C4'	5.86	1.58	1.51
83	A5	3161	U	O4'-C1'	5.86	1.49	1.41
36	B2	587	A	C2'-C1'	-5.86	1.47	1.53
36	B2	1977	A	P-O5'	-5.86	1.53	1.59
83	A5	1475	A	O4'-C1'	-5.86	1.34	1.41
83	A5	1987	G	C2'-C1'	-5.86	1.47	1.53
83	A5	1526	G	C2'-C1'	-5.86	1.47	1.53
36	B2	773	U	C4'-C3'	5.85	1.59	1.53
36	B2	586	U	O4'-C1'	5.85	1.49	1.41
36	B2	1851	A	C2'-C1'	5.85	1.59	1.53
83	A5	882	U	O4'-C1'	5.85	1.49	1.41
83	A5	2104	A	P-O5'	-5.85	1.53	1.59
57	CY	45	ARG	CD-NE	5.85	1.56	1.46
83	A5	44	A	O4'-C1'	5.85	1.49	1.41
83	A5	3252	G	O4'-C1'	-5.85	1.34	1.41
83	A5	3275	G	C2'-C1'	-5.85	1.47	1.53
83	A5	308	G	O3'-P	-5.85	1.54	1.61
83	A5	1718	G	C2'-C1'	-5.85	1.47	1.53
83	A5	2117	A	O4'-C1'	5.85	1.49	1.41
83	A5	2629	G	O4'-C1'	5.85	1.49	1.41
83	A5	2847	G	C2'-C1'	-5.85	1.47	1.53
36	B2	921	U	C2'-C1'	5.84	1.59	1.53
83	A5	2591	A	P-O5'	-5.84	1.53	1.59
83	A5	2875	A	C2'-C1'	5.84	1.59	1.53
83	A5	908	C	O3'-P	-5.84	1.54	1.61
83	A5	1006	A	O4'-C1'	5.84	1.49	1.41
83	A5	1879	U	C5'-C4'	5.84	1.58	1.51
36	B2	1157	C	P-O5'	5.84	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
69	Cg	29	ARG	NE-CZ	5.84	1.40	1.33
83	A5	3863	G	O4'-C1'	5.84	1.49	1.41
85	A7	48	G	C2'-C1'	-5.84	1.47	1.53
86	A8	69	G	P-O5'	-5.83	1.53	1.59
36	B2	42	G	C2'-C1'	-5.83	1.47	1.53
36	B2	1204	A	O4'-C1'	5.83	1.49	1.41
83	A5	484	A	O3'-P	-5.83	1.54	1.61
83	A5	2525	C	P-O5'	-5.83	1.53	1.59
36	B2	10	G	C5'-C4'	5.83	1.58	1.51
36	B2	1947	U	C5'-C4'	5.83	1.58	1.51
83	A5	594	U	O4'-C1'	5.83	1.49	1.41
83	A5	3303	G	C4'-C3'	5.83	1.59	1.53
36	B2	969	U	C2'-C1'	-5.83	1.47	1.53
83	A5	877	A	C2'-C1'	-5.83	1.47	1.53
83	A5	1553	C	P-O5'	-5.83	1.53	1.59
83	A5	2685	G	C4'-C3'	5.83	1.59	1.53
83	A5	1309	U	O4'-C1'	5.83	1.49	1.41
83	A5	557	G	O4'-C1'	5.82	1.49	1.41
83	A5	3376	C	C2'-C1'	-5.82	1.47	1.53
83	A5	716	C	O4'-C1'	5.82	1.49	1.41
83	A5	3235	A	C2'-C1'	5.82	1.59	1.53
83	A5	3530	A	O4'-C1'	-5.82	1.34	1.41
83	A5	3187	C	C2'-C1'	-5.82	1.47	1.53
36	B2	846	U	O4'-C1'	5.82	1.49	1.41
83	A5	3373	G	O4'-C1'	-5.82	1.34	1.41
83	A5	3596	A	C2'-C1'	5.82	1.59	1.53
83	A5	3668	G	P-O5'	-5.82	1.53	1.59
36	B2	1061	A	O4'-C1'	5.82	1.49	1.41
36	B2	1302	U	C2'-C1'	-5.82	1.47	1.53
83	A5	1596	A	C2'-C1'	-5.82	1.47	1.53
83	A5	93	G	O4'-C1'	-5.81	1.34	1.41
36	B2	564	A	C2'-C1'	5.81	1.59	1.53
83	A5	54	U	O4'-C1'	5.81	1.49	1.41
83	A5	2192	U	O4'-C1'	5.81	1.49	1.41
83	A5	14	C	C2'-C1'	-5.80	1.47	1.53
83	A5	118	A	O4'-C1'	5.80	1.49	1.41
83	A5	686	U	C2'-C1'	-5.80	1.47	1.53
83	A5	1443	A	O4'-C1'	5.80	1.49	1.41
83	A5	1732	A	O4'-C1'	5.80	1.49	1.41
83	A5	1874	G	O4'-C1'	5.80	1.49	1.41
83	A5	2695	A	O4'-C1'	5.80	1.49	1.41
83	A5	2659	A	C2'-C1'	5.80	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3529	A	C2'-C1'	-5.80	1.47	1.53
36	B2	500	U	C2'-C1'	5.80	1.59	1.53
36	B2	1101	G	C2'-C1'	5.80	1.59	1.53
83	A5	377	U	C2'-C1'	-5.80	1.47	1.53
83	A5	738	A	O4'-C1'	5.80	1.49	1.41
83	A5	3204	G	O4'-C1'	5.80	1.49	1.41
83	A5	3917	G	O4'-C1'	5.80	1.49	1.41
83	A5	1430	U	C5'-C4'	5.79	1.58	1.51
83	A5	2726	A	O3'-P	-5.79	1.54	1.61
36	B2	368	G	O3'-P	-5.79	1.54	1.61
36	B2	620	U	O4'-C1'	5.79	1.49	1.41
36	B2	1336	U	C2'-C1'	-5.79	1.47	1.53
83	A5	126	G	C2'-C1'	-5.79	1.47	1.53
36	B2	56	U	C2'-C1'	-5.79	1.47	1.53
36	B2	1433	A	C3'-C2'	5.79	1.59	1.52
36	B2	24	U	O3'-P	-5.79	1.54	1.61
36	B2	461	G	C2'-C1'	-5.79	1.47	1.53
83	A5	2212	A	C2'-C1'	-5.79	1.47	1.53
36	B2	1012	G	C2'-C1'	-5.79	1.47	1.53
36	B2	1317	U	O4'-C1'	5.79	1.49	1.41
83	A5	989	A	C2'-C1'	-5.79	1.47	1.53
83	A5	2803	A	P-O5'	-5.79	1.53	1.59
83	A5	3334	A	C2'-C1'	5.79	1.59	1.53
86	A8	26	U	C2'-C1'	-5.79	1.47	1.53
36	B2	1615	U	C2'-C1'	-5.78	1.47	1.53
36	B2	1683	U	O4'-C1'	-5.78	1.34	1.41
83	A5	1319	A	C2'-C1'	-5.78	1.47	1.53
86	A8	81	A	C2'-C1'	5.78	1.59	1.53
83	A5	32	C	O3'-P	-5.78	1.54	1.61
83	A5	1863	U	C2'-C1'	-5.78	1.47	1.53
83	A5	3842	A	C3'-C2'	5.78	1.59	1.52
83	A5	2007	U	C2'-C1'	5.78	1.59	1.53
83	A5	3511	U	P-O5'	-5.78	1.53	1.59
83	A5	601	A	C5'-C4'	5.78	1.58	1.51
83	A5	3192	C	C2'-C1'	-5.78	1.47	1.53
83	A5	3557	G	C2'-C1'	-5.78	1.47	1.53
86	A8	25	C	P-O5'	-5.78	1.53	1.59
83	A5	2492	A	C4'-C3'	-5.78	1.46	1.52
83	A5	2514	U	C5'-C4'	5.77	1.58	1.51
36	B2	20	G	C2'-C1'	-5.77	1.47	1.53
83	A5	3466	A	C2'-C1'	5.77	1.59	1.53
83	A5	3702	G	O4'-C1'	5.77	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1394	U	P-O5'	-5.77	1.53	1.59
36	B2	1546	U	O3'-P	-5.77	1.54	1.61
83	A5	3668	G	O4'-C1'	5.77	1.49	1.41
36	B2	373	U	P-O5'	-5.77	1.53	1.59
36	B2	574	C	O3'-P	-5.77	1.54	1.61
36	B2	1597	A	O4'-C1'	5.77	1.49	1.41
36	B2	1476	C	O3'-P	-5.77	1.54	1.61
83	A5	234	G	O4'-C1'	-5.77	1.34	1.41
83	A5	844	C	O3'-P	-5.77	1.54	1.61
36	B2	560	G	O4'-C1'	-5.76	1.34	1.41
83	A5	1865	U	C2'-C1'	-5.76	1.47	1.53
83	A5	2850	A	O4'-C1'	5.76	1.49	1.41
36	B2	556	G	C5'-C4'	5.76	1.58	1.51
83	A5	3697	A	O4'-C1'	-5.76	1.34	1.41
83	A5	1408	A	O4'-C1'	5.76	1.49	1.41
36	B2	1113	A	C2'-C1'	5.76	1.59	1.53
83	A5	199	U	O4'-C1'	5.76	1.49	1.41
83	A5	1239	A	C2'-C1'	-5.76	1.47	1.53
83	A5	1499	C	P-O5'	-5.76	1.53	1.59
83	A5	1790	A	O4'-C1'	5.76	1.49	1.41
83	A5	2001	U	C5'-C4'	5.76	1.58	1.51
36	B2	1189	G	O4'-C1'	5.76	1.49	1.41
37	BC	8	U	O4'-C1'	5.76	1.49	1.41
83	A5	121	A	O4'-C1'	-5.76	1.34	1.41
83	A5	2023	A	O4'-C1'	5.75	1.49	1.41
36	B2	608	U	O4'-C1'	5.75	1.49	1.41
83	A5	2844	G	O4'-C1'	5.75	1.49	1.41
83	A5	1345	G	C2'-C1'	-5.75	1.47	1.53
83	A5	1801	U	O3'-P	-5.75	1.54	1.61
83	A5	968	U	O4'-C1'	5.75	1.49	1.41
83	A5	1206	G	O4'-C1'	-5.75	1.34	1.41
83	A5	2655	C	O4'-C1'	5.75	1.49	1.41
83	A5	347	A	C5'-C4'	5.74	1.58	1.51
36	B2	919	A	C2'-C1'	5.74	1.59	1.53
83	A5	63	G	O3'-P	-5.74	1.54	1.61
83	A5	995	G	C2'-C1'	-5.74	1.47	1.53
83	A5	1152	A	P-O5'	-5.74	1.54	1.59
36	B2	584	G	O4'-C1'	5.74	1.49	1.41
83	A5	1387	G	O4'-C1'	5.74	1.49	1.41
83	A5	2052	G	C2'-C1'	-5.74	1.47	1.53
83	A5	2628	G	C5'-C4'	5.74	1.58	1.51
83	A5	2861	G	C2'-C1'	-5.74	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3908	U	O4'-C1'	5.74	1.49	1.41
26	AJ	110	ARG	CZ-NH1	5.74	1.40	1.33
78	Co	85	ARG	CZ-NH1	5.74	1.40	1.33
83	A5	83	U	P-O5'	-5.74	1.54	1.59
83	A5	959	U	P-O5'	-5.74	1.54	1.59
36	B2	1456	G	C5'-C4'	5.73	1.58	1.51
83	A5	1542	C	C2'-C1'	-5.73	1.47	1.53
83	A5	3967	U	C4'-C3'	5.73	1.59	1.53
83	A5	1534	G	O4'-C1'	5.73	1.49	1.41
36	B2	1234	G	O3'-P	-5.73	1.54	1.61
83	A5	434	A	O3'-P	-5.73	1.54	1.61
83	A5	1200	U	C2'-C1'	-5.73	1.47	1.53
83	A5	1705	U	C5'-C4'	5.73	1.58	1.51
83	A5	1764	G	O3'-P	-5.73	1.54	1.61
83	A5	3482	G	C2'-C1'	5.73	1.59	1.53
83	A5	578	A	P-O5'	-5.73	1.54	1.59
83	A5	3141	A	O4'-C1'	5.73	1.49	1.41
36	B2	80	G	O4'-C1'	5.73	1.49	1.41
36	B2	1276	G	C5'-C4'	5.73	1.58	1.51
53	CT	107	ARG	CZ-NH1	5.73	1.40	1.33
69	Cg	10	ARG	NE-CZ	5.73	1.40	1.33
83	A5	2657	A	O4'-C1'	5.73	1.49	1.41
83	A5	3295	U	C2'-C1'	-5.73	1.47	1.53
83	A5	584	A	C2'-C1'	5.72	1.59	1.53
36	B2	1013	A	C2'-C1'	-5.72	1.47	1.53
83	A5	48	U	C2'-C1'	-5.72	1.47	1.53
83	A5	612	U	C5'-C4'	5.72	1.58	1.51
83	A5	1667	U	C2'-C1'	-5.72	1.47	1.53
36	B2	582	G	C2'-C1'	-5.72	1.47	1.53
83	A5	2042	A	O4'-C1'	5.72	1.49	1.41
36	B2	493	A	C2'-C1'	-5.72	1.47	1.53
83	A5	460	A	C5'-C4'	5.72	1.58	1.51
83	A5	2205	G	O4'-C1'	5.72	1.49	1.41
83	A5	3113	U	O4'-C1'	5.72	1.49	1.41
83	A5	458	A	C2'-C1'	-5.71	1.47	1.53
83	A5	1388	C	O3'-P	-5.71	1.54	1.61
83	A5	1868	A	C2'-C1'	-5.71	1.47	1.53
83	A5	1649	G	C5'-C4'	5.71	1.58	1.51
83	A5	3091	A	P-O5'	-5.71	1.54	1.59
86	A8	66	U	O4'-C1'	5.71	1.49	1.41
83	A5	2157	A	O4'-C1'	-5.71	1.34	1.41
83	A5	3429	A	C2'-C1'	5.71	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	765	U	O3'-P	-5.71	1.54	1.61
83	A5	305	G	O4'-C1'	5.71	1.49	1.41
83	A5	613	U	O4'-C1'	5.71	1.49	1.41
36	B2	1049	C	C2'-C1'	-5.70	1.47	1.53
36	B2	1915	A	C2'-C1'	5.70	1.59	1.53
36	B2	1919	U	C2'-C1'	-5.70	1.47	1.53
83	A5	1617	U	C2'-C1'	-5.70	1.47	1.53
83	A5	3643	C	O4'-C1'	5.70	1.49	1.41
83	A5	252	U	C2'-C1'	-5.70	1.47	1.53
83	A5	157	C	C3'-C2'	5.70	1.59	1.52
83	A5	1763	A	C3'-C2'	-5.70	1.46	1.52
83	A5	2103	G	O4'-C1'	5.70	1.49	1.41
36	B2	363	U	O4'-C1'	5.70	1.49	1.41
36	B2	421	A	C2'-C1'	5.70	1.59	1.53
83	A5	646	G	O3'-P	-5.70	1.54	1.61
83	A5	1501	A	O3'-P	-5.70	1.54	1.61
36	B2	942	A	O4'-C1'	-5.70	1.34	1.41
83	A5	887	U	C3'-C2'	-5.70	1.46	1.52
36	B2	1826	C	C2'-C1'	-5.70	1.47	1.53
83	A5	15	A	O4'-C1'	5.70	1.49	1.41
36	B2	1043	U	C5'-C4'	5.69	1.58	1.51
36	B2	1161	G	O4'-C1'	5.69	1.49	1.41
36	B2	1895	C	P-O5'	-5.69	1.54	1.59
83	A5	623	C	C2'-C1'	-5.69	1.47	1.53
83	A5	3463	U	C2'-C1'	-5.69	1.47	1.53
83	A5	1868	A	O4'-C1'	5.69	1.49	1.41
36	B2	1171	G	C2'-C1'	-5.69	1.47	1.53
83	A5	2846	A	C2'-C1'	5.69	1.59	1.53
83	A5	1252	U	C2'-C1'	-5.69	1.47	1.53
36	B2	638	A	C5'-C4'	5.68	1.58	1.51
83	A5	844	C	C5'-C4'	5.68	1.58	1.51
83	A5	3548	U	O4'-C1'	5.68	1.49	1.41
83	A5	2575	C	O3'-P	-5.68	1.54	1.61
83	A5	492	A	O3'-P	-5.68	1.54	1.61
36	B2	1388	U	P-O5'	-5.68	1.54	1.59
83	A5	2013	C	C2'-C1'	-5.67	1.47	1.53
36	B2	1589	C	C2'-C1'	-5.67	1.47	1.53
83	A5	1943	C	O3'-P	-5.67	1.54	1.61
83	A5	3223	A	C2'-C1'	-5.67	1.47	1.53
36	B2	491	G	C2'-C1'	-5.67	1.47	1.53
83	A5	708	A	C2'-C1'	-5.67	1.47	1.53
83	A5	1415	A	C2'-C1'	5.67	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	629	A	O3'-P	-5.67	1.54	1.61
83	A5	878	U	O4'-C1'	5.67	1.49	1.41
85	A7	43	U	O3'-P	-5.67	1.54	1.61
36	B2	761	A	C4'-C3'	5.67	1.59	1.53
37	BC	45	G	C5'-C4'	5.67	1.58	1.51
83	A5	2135	C	C2'-C1'	-5.67	1.47	1.53
83	A5	2577	G	C2'-C1'	5.67	1.59	1.53
83	A5	3326	G	P-O5'	-5.67	1.54	1.59
36	B2	1014	C	P-O5'	-5.67	1.54	1.59
83	A5	391	A	O3'-P	-5.66	1.54	1.61
83	A5	603	U	P-O5'	-5.66	1.54	1.59
83	A5	1900	U	C2'-C1'	5.66	1.59	1.53
36	B2	1940	G	O4'-C1'	5.66	1.49	1.41
36	B2	1150	U	O4'-C1'	5.66	1.49	1.41
36	B2	1781	U	O4'-C1'	5.66	1.49	1.41
83	A5	2196	U	O4'-C1'	-5.66	1.34	1.41
36	B2	113	G	O3'-P	-5.66	1.54	1.61
36	B2	1107	A	O4'-C1'	5.66	1.49	1.41
83	A5	3747	U	C2'-C1'	-5.66	1.47	1.53
83	A5	319	G	P-O5'	-5.66	1.54	1.59
36	B2	1198	G	C2'-C1'	-5.66	1.47	1.53
36	B2	1252	G	C2'-C1'	-5.66	1.47	1.53
83	A5	451	A	C2'-C1'	-5.66	1.47	1.53
83	A5	3010	U	C2'-C1'	-5.66	1.47	1.53
36	B2	599	A	C2'-C1'	-5.65	1.47	1.53
83	A5	1984	U	O4'-C1'	5.65	1.49	1.41
83	A5	3725	U	O4'-C1'	5.65	1.49	1.41
85	A7	7	G	C2'-C1'	-5.65	1.47	1.53
36	B2	8	U	C2'-C1'	5.65	1.59	1.53
36	B2	888	G	C2'-C1'	-5.65	1.47	1.53
36	B2	1006	U	O4'-C1'	5.65	1.49	1.41
83	A5	1305	A	O4'-C1'	5.65	1.49	1.41
36	B2	427	G	O3'-P	-5.64	1.54	1.61
36	B2	1242	G	O4'-C1'	5.64	1.49	1.41
83	A5	2751	A	O4'-C1'	5.64	1.49	1.41
36	B2	363	U	C2'-C1'	-5.64	1.47	1.53
83	A5	1421	G	C2'-C1'	-5.64	1.47	1.53
36	B2	240	U	C2'-C1'	5.64	1.59	1.53
83	A5	532	C	O4'-C1'	5.64	1.49	1.41
83	A5	997	U	C2'-C1'	-5.64	1.47	1.53
83	A5	883	U	O4'-C1'	5.64	1.49	1.41
36	B2	1995	A	P-O5'	-5.63	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	562	U	C2'-C1'	-5.63	1.47	1.53
83	A5	618	U	O4'-C1'	5.63	1.49	1.41
83	A5	2836	A	O4'-C1'	5.63	1.49	1.41
83	A5	2853	A	O4'-C1'	5.63	1.49	1.41
83	A5	202	A	C4'-C3'	5.63	1.59	1.53
83	A5	2597	A	C2'-C1'	-5.63	1.47	1.53
36	B2	842	A	O4'-C1'	5.63	1.49	1.41
36	B2	948	A	C5'-C4'	5.63	1.58	1.51
83	A5	1214	G	C2'-C1'	-5.63	1.47	1.53
83	A5	1488	A	C2'-C1'	5.63	1.59	1.53
83	A5	3244	U	O4'-C1'	5.63	1.49	1.41
36	B2	356	C	O4'-C1'	5.63	1.49	1.41
83	A5	993	A	C2'-C1'	-5.63	1.47	1.53
36	B2	1981	G	O3'-P	-5.62	1.54	1.61
83	A5	27	A	O4'-C1'	5.62	1.49	1.41
83	A5	370	A	C2'-C1'	5.62	1.59	1.53
36	B2	216	U	O3'-P	-5.62	1.54	1.61
83	A5	1902	U	P-O5'	-5.62	1.54	1.59
83	A5	2677	A	P-O5'	-5.62	1.54	1.59
83	A5	2683	G	O4'-C1'	-5.62	1.34	1.41
83	A5	3463	U	O4'-C1'	5.62	1.49	1.41
16	AA	167	SER	CA-CB	5.62	1.61	1.52
36	B2	1970	U	C2'-C1'	5.62	1.59	1.53
36	B2	261	U	O4'-C1'	5.62	1.49	1.41
36	B2	1566	U	C5'-C4'	5.62	1.58	1.51
36	B2	1742	A	O3'-P	-5.62	1.54	1.61
83	A5	1427	G	O3'-P	-5.62	1.54	1.61
83	A5	2670	U	O4'-C1'	5.62	1.49	1.41
83	A5	3925	G	O4'-C1'	5.62	1.49	1.41
36	B2	973	U	O4'-C1'	5.61	1.49	1.41
83	A5	2221	G	O3'-P	-5.61	1.54	1.61
36	B2	1760	G	O4'-C1'	-5.61	1.34	1.41
83	A5	3009	A	C2'-C1'	-5.61	1.47	1.53
36	B2	1390	U	O4'-C1'	5.61	1.49	1.41
36	B2	1420	U	C2'-C1'	-5.61	1.47	1.53
36	B2	1461	A	C2'-C1'	5.61	1.59	1.53
36	B2	1494	A	C5'-C4'	5.61	1.58	1.51
83	A5	258	U	O4'-C1'	5.61	1.49	1.41
32	AW	20	ARG	CZ-NH1	5.61	1.40	1.33
44	CM	35	ARG	CZ-NH1	5.61	1.40	1.33
63	CB	268	ARG	CZ-NH2	5.61	1.40	1.33
83	A5	1091	G	P-O5'	-5.61	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3735	U	C5'-C4'	5.61	1.58	1.51
37	BC	67	C	P-O5'	-5.61	1.54	1.59
83	A5	44	A	O3'-P	-5.61	1.54	1.61
83	A5	619	U	O3'-P	-5.61	1.54	1.61
83	A5	2733	G	O4'-C1'	5.61	1.49	1.41
83	A5	1014	U	O3'-P	-5.60	1.54	1.61
83	A5	1584	A	O4'-C1'	5.60	1.49	1.41
83	A5	1688	A	C2'-C1'	-5.60	1.47	1.53
83	A5	277	U	O4'-C1'	5.60	1.49	1.41
83	A5	504	A	O4'-C1'	5.60	1.49	1.41
83	A5	3826	A	O4'-C1'	-5.60	1.34	1.41
36	B2	708	A	O4'-C1'	5.60	1.49	1.41
83	A5	1792	G	O4'-C1'	5.60	1.49	1.41
83	A5	2086	U	C2'-C1'	5.60	1.59	1.53
11	AL	81	ARG	NE-CZ	5.60	1.40	1.33
83	A5	666	A	C5'-C4'	5.60	1.58	1.51
36	B2	653	U	C5'-C4'	5.60	1.58	1.51
36	B2	1715	G	C2'-C1'	5.60	1.59	1.53
83	A5	2692	U	C5'-C4'	5.60	1.58	1.51
83	A5	3196	C	O4'-C1'	5.60	1.49	1.41
3	AU	21	ARG	CD-NE	5.59	1.55	1.46
83	A5	2584	G	C2'-C1'	-5.59	1.47	1.53
83	A5	2803	A	C2'-C1'	-5.59	1.47	1.53
83	A5	3919	G	P-O5'	-5.59	1.54	1.59
36	B2	1069	U	O4'-C1'	5.59	1.49	1.41
83	A5	59	G	P-O5'	-5.59	1.54	1.59
83	A5	1439	C	P-O5'	-5.59	1.54	1.59
83	A5	1485	A	C2'-C1'	-5.59	1.47	1.53
83	A5	89	A	P-O5'	-5.59	1.54	1.59
36	B2	1241	G	C2'-C1'	-5.59	1.47	1.53
83	A5	3171	A	O4'-C1'	5.59	1.49	1.41
83	A5	3842	A	C5'-C4'	5.59	1.58	1.51
83	A5	3954	U	O4'-C1'	5.59	1.49	1.41
83	A5	225	U	O3'-P	-5.58	1.54	1.61
36	B2	1318	A	C5'-C4'	5.58	1.58	1.51
83	A5	747	U	C2'-C1'	-5.58	1.47	1.53
83	A5	3923	C	C2'-C1'	5.58	1.59	1.53
83	A5	187	A	P-O5'	-5.58	1.54	1.59
83	A5	198	A	O4'-C1'	5.58	1.49	1.41
83	A5	3299	U	C2'-C1'	5.58	1.59	1.53
83	A5	1766	U	O4'-C1'	5.58	1.49	1.41
83	A5	862	U	P-O5'	-5.58	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	99	A	O4'-C1'	5.58	1.48	1.41
83	A5	339	C	O4'-C1'	5.58	1.48	1.41
83	A5	2156	U	C3'-C2'	5.58	1.59	1.52
83	A5	3356	G	C2'-C1'	-5.58	1.47	1.53
70	Ci	38	ARG	NE-CZ	5.57	1.40	1.33
83	A5	70	A	O4'-C1'	-5.57	1.34	1.41
83	A5	2888	A	C2'-C1'	-5.57	1.47	1.53
83	A5	1875	G	O4'-C1'	5.57	1.48	1.41
36	B2	346	A	C5'-C4'	5.57	1.58	1.51
83	A5	681	G	O4'-C1'	-5.57	1.34	1.41
83	A5	3225	C	C3'-C2'	-5.57	1.46	1.52
36	B2	1593	U	O4'-C1'	5.57	1.48	1.41
36	B2	1706	U	O3'-P	-5.57	1.54	1.61
83	A5	2714	U	C2'-C1'	5.57	1.59	1.53
83	A5	2867	U	O4'-C1'	5.57	1.48	1.41
36	B2	420	U	C2'-C1'	5.57	1.59	1.53
36	B2	1834	G	C2'-C1'	-5.57	1.47	1.53
83	A5	687	U	O3'-P	-5.57	1.54	1.61
83	A5	1792	G	C5'-C4'	5.57	1.58	1.51
83	A5	1896	A	O4'-C1'	5.57	1.48	1.41
83	A5	2993	G	O4'-C1'	5.57	1.48	1.41
86	A8	33	U	C2'-C1'	-5.57	1.47	1.53
52	CS	120	ARG	CZ-NH1	5.56	1.40	1.33
83	A5	3941	C	O4'-C1'	5.56	1.48	1.41
36	B2	1248	A	O4'-C1'	5.56	1.48	1.41
83	A5	529	U	O4'-C1'	5.56	1.48	1.41
83	A5	2258	U	C2'-C1'	-5.56	1.47	1.53
83	A5	3518	A	C2'-C1'	-5.56	1.47	1.53
36	B2	638	A	O4'-C1'	5.56	1.48	1.41
36	B2	448	C	C3'-C2'	-5.56	1.46	1.52
83	A5	2255	G	O4'-C1'	5.56	1.48	1.41
36	B2	328	A	O4'-C1'	5.56	1.48	1.41
36	B2	1791	U	O3'-P	-5.56	1.54	1.61
83	A5	1021	U	C2'-C1'	5.56	1.59	1.53
83	A5	1757	A	O4'-C1'	5.56	1.48	1.41
83	A5	3410	G	C3'-C2'	5.56	1.59	1.52
83	A5	2994	C	C4'-C3'	5.56	1.59	1.53
83	A5	1460	A	C2'-C1'	-5.55	1.47	1.53
85	A7	101	A	P-O5'	-5.55	1.54	1.59
36	B2	774	U	O3'-P	-5.55	1.54	1.61
36	B2	977	A	C4'-C3'	-5.55	1.47	1.52
46	CN	179	ARG	CZ-NH2	5.55	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	CP	126	ARG	NE-CZ	5.55	1.40	1.33
83	A5	2168	G	O4'-C1'	5.55	1.48	1.41
36	B2	859	C	C2'-C1'	-5.55	1.47	1.53
74	CC	202	ARG	CZ-NH2	5.55	1.40	1.33
83	A5	1367	A	P-O5'	-5.55	1.54	1.59
83	A5	1936	U	O3'-P	-5.55	1.54	1.61
36	B2	805	U	O3'-P	-5.55	1.54	1.61
45	Ca	121	ARG	NE-CZ	5.55	1.40	1.33
83	A5	167	A	C2'-C1'	5.55	1.59	1.53
83	A5	670	G	O4'-C1'	5.55	1.48	1.41
36	B2	1551	C	O4'-C1'	5.54	1.48	1.41
65	Cc	106	ARG	NE-CZ	5.54	1.40	1.33
42	CL	100	ARG	CZ-NH2	5.54	1.40	1.33
83	A5	837	A	C2'-C1'	-5.54	1.47	1.53
83	A5	3790	A	O4'-C1'	-5.54	1.34	1.41
86	A8	42	A	C2'-C1'	-5.54	1.47	1.53
36	B2	181	A	O4'-C1'	5.54	1.48	1.41
83	A5	3877	G	C2'-C1'	5.54	1.59	1.53
36	B2	655	A	O4'-C1'	5.54	1.48	1.41
83	A5	832	U	O4'-C1'	5.54	1.48	1.41
83	A5	3754	C	C4'-C3'	-5.54	1.47	1.52
36	B2	407	C	C2'-C1'	5.53	1.59	1.53
36	B2	565	G	C4'-C3'	5.53	1.59	1.53
83	A5	987	G	C2'-C1'	-5.53	1.47	1.53
83	A5	1759	C	C2'-C1'	5.53	1.59	1.53
83	A5	2222	G	C2'-C1'	-5.53	1.47	1.53
36	B2	393	G	C2'-C1'	-5.53	1.47	1.53
36	B2	852	A	C2'-C1'	5.53	1.59	1.53
83	A5	7	A	C2'-C1'	5.53	1.59	1.53
36	B2	81	U	O4'-C1'	5.53	1.48	1.41
83	A5	1233	G	C5'-C4'	5.53	1.57	1.51
83	A5	1617	U	P-O5'	-5.53	1.54	1.59
37	BC	48	C	O3'-P	-5.53	1.54	1.61
83	A5	630	U	O4'-C1'	5.53	1.48	1.41
83	A5	2026	G	O4'-C1'	-5.53	1.34	1.41
83	A5	2561	A	O4'-C1'	5.53	1.48	1.41
36	B2	216	U	C5'-C4'	5.52	1.57	1.51
83	A5	1757	A	O3'-P	-5.52	1.54	1.61
36	B2	451	C	P-O5'	-5.52	1.54	1.59
83	A5	1458	G	O4'-C1'	5.52	1.48	1.41
36	B2	143	U	C5'-C4'	5.52	1.57	1.51
36	B2	1387	A	O4'-C1'	-5.52	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2097	U	O4'-C1'	5.52	1.48	1.41
85	A7	34	C	O4'-C1'	5.52	1.48	1.41
36	B2	578	A	C2'-C1'	-5.51	1.47	1.53
47	CI	7	ARG	CZ-NH1	5.51	1.40	1.33
83	A5	1859	U	O3'-P	-5.51	1.54	1.61
83	A5	2511	C	O4'-C1'	5.51	1.48	1.41
83	A5	2592	A	C2'-C1'	5.51	1.59	1.53
83	A5	3447	U	O4'-C1'	5.51	1.48	1.41
36	B2	1610	A	C2'-C1'	-5.51	1.47	1.53
83	A5	751	A	C2'-C1'	-5.51	1.47	1.53
83	A5	814	U	C2'-C1'	5.51	1.59	1.53
83	A5	2927	U	C2'-C1'	-5.51	1.47	1.53
83	A5	3437	U	O3'-P	-5.51	1.54	1.61
36	B2	460	C	C3'-C2'	5.51	1.59	1.52
83	A5	2608	G	O4'-C1'	-5.51	1.34	1.41
83	A5	3864	C	P-O5'	-5.51	1.54	1.59
37	BC	64	G	O4'-C1'	-5.51	1.34	1.41
83	A5	1697	U	C5'-C4'	5.51	1.57	1.51
36	B2	1564	A	O3'-P	-5.51	1.54	1.61
36	B2	221	C	C5'-C4'	5.51	1.57	1.51
83	A5	324	A	O3'-P	-5.51	1.54	1.61
83	A5	1217	U	C2'-C1'	-5.51	1.47	1.53
83	A5	2801	U	C2'-C1'	-5.51	1.47	1.53
83	A5	3947	C	P-O5'	-5.51	1.54	1.59
36	B2	965	G	C2'-C1'	-5.50	1.47	1.53
83	A5	369	A	C2'-C1'	5.50	1.59	1.53
83	A5	3383	A	O4'-C1'	5.50	1.48	1.41
36	B2	708	A	C2'-C1'	-5.50	1.47	1.53
83	A5	1695	A	O3'-P	-5.50	1.54	1.61
83	A5	2486	A	C2'-C1'	-5.50	1.47	1.53
83	A5	3476	G	O4'-C1'	-5.50	1.34	1.41
83	A5	3853	C	C2'-C1'	-5.50	1.47	1.53
36	B2	898	U	C2'-C1'	-5.50	1.47	1.53
83	A5	3903	U	O4'-C1'	5.50	1.48	1.41
83	A5	1406	G	C5'-C4'	5.50	1.57	1.51
36	B2	1084	G	O4'-C1'	5.50	1.48	1.41
83	A5	1462	U	O4'-C1'	5.50	1.48	1.41
83	A5	3844	U	C2'-C1'	-5.50	1.47	1.53
83	A5	3893	A	C2'-C1'	5.49	1.59	1.53
36	B2	1919	U	O4'-C1'	5.49	1.48	1.41
83	A5	176	A	O4'-C1'	-5.49	1.34	1.41
83	A5	436	A	C2'-C1'	-5.49	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1527	U	C2'-C1'	-5.49	1.47	1.53
42	CL	19	ARG	CZ-NH2	5.49	1.40	1.33
83	A5	1632	A	C2'-C1'	-5.49	1.47	1.53
1	Az	179	TYR	CE2-CZ	5.49	1.45	1.38
15	AB	139	ARG	CZ-NH1	5.49	1.40	1.33
36	B2	77	A	C2'-C1'	5.49	1.59	1.53
36	B2	1967	C	O3'-P	-5.49	1.54	1.61
83	A5	2127	C	C2'-C1'	-5.49	1.47	1.53
83	A5	2459	C	P-O5'	-5.49	1.54	1.59
83	A5	3312	G	C2'-C1'	-5.49	1.47	1.53
83	A5	3314	U	O4'-C1'	5.49	1.48	1.41
83	A5	479	U	C2'-C1'	5.48	1.59	1.53
36	B2	537	C	O4'-C1'	5.48	1.48	1.41
83	A5	538	A	C4'-C3'	5.48	1.59	1.53
36	B2	1292	A	O4'-C1'	5.48	1.48	1.41
82	CG	264	ARG	CD-NE	5.48	1.55	1.46
79	CJ	100	ARG	NE-CZ	5.48	1.40	1.33
83	A5	862	U	C4'-C3'	-5.48	1.47	1.52
83	A5	1155	U	O4'-C1'	5.48	1.48	1.41
83	A5	1864	U	C3'-C2'	5.48	1.58	1.52
36	B2	64	U	O4'-C1'	5.48	1.48	1.41
83	A5	2221	G	O4'-C1'	-5.48	1.34	1.41
83	A5	2275	U	C2'-C1'	5.48	1.59	1.53
83	A5	3617	U	O4'-C1'	5.48	1.48	1.41
84	A9	6	G	C2'-C1'	5.48	1.59	1.53
36	B2	1617	A	O4'-C1'	5.47	1.48	1.41
83	A5	369	A	O3'-P	-5.47	1.54	1.61
36	B2	266	U	O4'-C1'	-5.47	1.34	1.41
83	A5	1573	U	O3'-P	-5.47	1.54	1.61
36	B2	949	A	O4'-C1'	5.47	1.48	1.41
6	AX	8	ARG	NE-CZ	5.47	1.40	1.33
83	A5	435	G	C2'-C1'	5.47	1.59	1.53
83	A5	493	A	O3'-P	-5.47	1.54	1.61
86	A8	89	A	C5'-C4'	5.47	1.57	1.51
36	B2	190	U	C2'-C1'	5.47	1.59	1.53
83	A5	970	A	C2'-C1'	-5.47	1.47	1.53
83	A5	1604	G	O4'-C1'	5.47	1.48	1.41
83	A5	3805	U	C2'-C1'	5.47	1.59	1.53
85	A7	114	U	C2'-C1'	-5.47	1.47	1.53
83	A5	329	C	C2'-C1'	-5.46	1.47	1.53
83	A5	2820	G	C2'-C1'	-5.46	1.47	1.53
83	A5	3600	G	O4'-C1'	-5.46	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3720	A	C2'-C1'	-5.46	1.47	1.53
83	A5	845	C	C2'-C1'	-5.46	1.47	1.53
83	A5	3782	A	C2'-C1'	-5.46	1.47	1.53
83	A5	653	U	C2'-C1'	-5.46	1.47	1.53
83	A5	1398	C	O4'-C1'	5.46	1.48	1.41
83	A5	3070	U	O3'-P	-5.46	1.54	1.61
85	A7	37	G	C2'-C1'	-5.46	1.47	1.53
32	AW	118	ARG	CD-NE	5.46	1.55	1.46
36	B2	1019	U	O3'-P	-5.46	1.54	1.61
83	A5	753	U	O3'-P	-5.46	1.54	1.61
83	A5	3092	A	C5'-C4'	5.46	1.57	1.51
84	A9	29	U	O4'-C1'	5.46	1.48	1.41
11	AL	33	ARG	CZ-NH2	5.46	1.40	1.33
27	AE	200	ARG	NE-CZ	5.46	1.40	1.33
30	AF	120	SER	CA-CB	5.46	1.61	1.52
36	B2	1618	C	O4'-C1'	5.46	1.48	1.41
51	CA	64	ARG	CZ-NH2	5.46	1.40	1.33
41	CO	61	ARG	CD-NE	5.45	1.55	1.46
83	A5	2652	U	P-O5'	-5.45	1.54	1.59
83	A5	3112	A	O3'-P	-5.45	1.54	1.61
86	A8	97	U	O4'-C1'	5.45	1.48	1.41
83	A5	1452	A	C2'-C1'	5.45	1.59	1.53
83	A5	1896	A	C2'-C1'	-5.45	1.47	1.53
83	A5	3216	C	P-O5'	-5.45	1.54	1.59
86	A8	90	U	O3'-P	-5.45	1.54	1.61
36	B2	1412	A	C2'-C1'	-5.45	1.47	1.53
83	A5	765	A	O4'-C1'	5.45	1.48	1.41
83	A5	1156	U	O4'-C1'	5.45	1.48	1.41
83	A5	1182	A	C5'-C4'	5.45	1.57	1.51
83	A5	710	A	C5'-C4'	5.44	1.57	1.51
83	A5	2190	A	C2'-C1'	5.44	1.59	1.53
36	B2	1899	U	O4'-C1'	5.44	1.48	1.41
83	A5	188	G	C4'-C3'	5.44	1.59	1.53
83	A5	3231	G	C5'-C4'	5.44	1.57	1.51
83	A5	1684	G	O3'-P	-5.44	1.54	1.61
36	B2	964	G	O4'-C1'	5.44	1.48	1.41
83	A5	339	C	O3'-P	-5.44	1.54	1.61
83	A5	2504	A	C2'-C1'	5.44	1.59	1.53
85	A7	33	U	O4'-C1'	5.44	1.48	1.41
83	A5	3285	G	O3'-P	-5.44	1.54	1.61
36	B2	882	G	C4'-C3'	5.43	1.59	1.53
83	A5	1694	A	C2'-C1'	-5.43	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	867	U	C2'-C1'	-5.43	1.47	1.53
83	A5	1420	A	O4'-C1'	5.43	1.48	1.41
83	A5	1879	U	C2'-C1'	5.43	1.59	1.53
83	A5	2690	A	C2'-C1'	5.43	1.59	1.53
83	A5	411	U	O4'-C1'	5.43	1.48	1.41
83	A5	913	U	P-O5'	-5.43	1.54	1.59
83	A5	1959	A	P-O5'	-5.43	1.54	1.59
36	B2	24	U	C2'-C1'	5.43	1.59	1.53
83	A5	1011	U	P-O5'	-5.43	1.54	1.59
31	AH	107	ARG	CZ-NH1	5.43	1.40	1.33
36	B2	400	U	C2'-C1'	-5.43	1.47	1.53
83	A5	1215	A	C4'-C3'	5.43	1.59	1.53
83	A5	2561	A	P-O5'	-5.42	1.54	1.59
36	B2	1319	A	P-O5'	-5.42	1.54	1.59
36	B2	1389	U	C2'-C1'	-5.42	1.47	1.53
36	B2	1604	A	C2'-C1'	5.42	1.59	1.53
36	B2	1369	U	P-O5'	-5.42	1.54	1.59
74	CC	340	ARG	CD-NE	5.42	1.55	1.46
83	A5	1165	A	C2'-C1'	-5.42	1.47	1.53
83	A5	1921	U	C4'-C3'	5.42	1.59	1.53
26	AJ	84	ARG	NE-CZ	5.42	1.40	1.33
83	A5	301	U	C5'-C4'	5.42	1.57	1.51
83	A5	1897	A	O4'-C1'	5.42	1.48	1.41
36	B2	599	A	C5'-C4'	5.42	1.57	1.51
36	B2	152	U	C2'-C1'	5.41	1.59	1.53
83	A5	3674	G	O4'-C1'	5.41	1.48	1.41
36	B2	252	A	O3'-P	-5.41	1.54	1.61
36	B2	1347	U	O4'-C1'	5.41	1.48	1.41
83	A5	149	G	O4'-C1'	5.41	1.48	1.41
83	A5	1127	C	C2'-C1'	-5.41	1.47	1.53
83	A5	1729	G	C5'-C4'	5.41	1.57	1.51
83	A5	2051	A	C2'-C1'	-5.41	1.47	1.53
83	A5	3946	G	O4'-C1'	5.41	1.48	1.41
83	A5	1669	G	C4'-C3'	5.41	1.59	1.53
83	A5	2107	U	O4'-C1'	5.41	1.48	1.41
36	B2	369	G	C2'-C1'	-5.41	1.47	1.53
74	CC	52	ARG	NE-CZ	5.41	1.40	1.33
83	A5	716	C	C2'-C1'	-5.41	1.47	1.53
83	A5	2593	A	C2'-C1'	-5.41	1.47	1.53
83	A5	3738	U	C2'-C1'	5.41	1.59	1.53
83	A5	824	G	O4'-C1'	5.40	1.48	1.41
83	A5	2213	G	O4'-C1'	5.40	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	961	A	O4'-C1'	5.40	1.48	1.41
86	A8	95	A	C2'-C1'	-5.40	1.47	1.53
83	A5	3312	G	O4'-C1'	5.40	1.48	1.41
36	B2	1571	U	O4'-C1'	-5.40	1.34	1.41
36	B2	1828	C	O4'-C1'	5.40	1.48	1.41
83	A5	899	G	C2'-C1'	-5.40	1.47	1.53
83	A5	3257	U	C2'-C1'	5.40	1.59	1.53
83	A5	983	U	O4'-C1'	5.39	1.48	1.41
83	A5	2603	U	C5'-C4'	5.39	1.57	1.51
83	A5	3737	A	C4'-C3'	5.39	1.59	1.53
36	B2	154	A	C5'-C4'	5.39	1.57	1.51
83	A5	2674	A	C4'-C3'	-5.39	1.47	1.52
36	B2	316	U	C2'-C1'	5.39	1.59	1.53
36	B2	1124	C	C5'-C4'	5.39	1.57	1.51
36	B2	1367	C	O4'-C1'	5.39	1.48	1.41
83	A5	1454	C	O4'-C1'	5.39	1.48	1.41
83	A5	2165	C	C5'-C4'	5.39	1.57	1.51
83	A5	3479	C	P-O5'	-5.39	1.54	1.59
83	A5	207	C	C5'-C4'	5.39	1.57	1.51
83	A5	2906	C	P-O5'	-5.39	1.54	1.59
83	A5	2223	C	O3'-P	-5.39	1.54	1.61
85	A7	8	A	O3'-P	-5.39	1.54	1.61
36	B2	955	G	O3'-P	-5.39	1.54	1.61
63	CB	378	ARG	NE-CZ	5.39	1.40	1.33
83	A5	340	U	O3'-P	-5.39	1.54	1.61
83	A5	94	C	C2'-C1'	-5.38	1.47	1.53
83	A5	3810	C	C2'-C1'	-5.38	1.47	1.53
36	B2	1595	G	O3'-P	-5.38	1.54	1.61
83	A5	2627	G	O3'-P	-5.38	1.54	1.61
83	A5	3522	A	C2'-C1'	-5.38	1.47	1.53
86	A8	70	A	P-O5'	-5.38	1.54	1.59
36	B2	422	A	C2'-C1'	5.38	1.59	1.53
83	A5	2056	G	C5'-C4'	5.38	1.57	1.51
83	A5	3837	A	C2'-C1'	5.38	1.59	1.53
85	A7	42	A	O4'-C1'	5.38	1.48	1.41
36	B2	1547	U	O4'-C1'	5.38	1.48	1.41
83	A5	752	U	O4'-C1'	5.38	1.48	1.41
36	B2	31	C	C5'-C4'	5.37	1.57	1.51
36	B2	1533	C	C2'-C1'	-5.37	1.47	1.53
64	CF	76	ARG	NE-CZ	5.37	1.40	1.33
83	A5	791	C	C5'-C4'	5.37	1.57	1.51
86	A8	1	A	C2'-C1'	-5.37	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	309	U	P-O5'	-5.37	1.54	1.59
42	CL	64	ARG	NE-CZ	5.37	1.40	1.33
83	A5	506	A	O4'-C1'	5.37	1.48	1.41
83	A5	3852	A	C5'-C4'	5.37	1.57	1.51
62	Cb	47	ARG	CZ-NH1	5.37	1.40	1.33
83	A5	920	G	O3'-P	-5.37	1.54	1.61
83	A5	999	U	C2'-C1'	5.37	1.59	1.53
36	B2	1968	C	C2'-C1'	-5.37	1.47	1.53
83	A5	1804	A	C5'-C4'	5.37	1.57	1.51
83	A5	2093	U	C5'-C4'	5.37	1.57	1.51
83	A5	3967	U	P-O5'	-5.37	1.54	1.59
36	B2	557	G	C2'-C1'	-5.37	1.47	1.53
36	B2	514	A	O4'-C1'	5.37	1.48	1.41
36	B2	1553	A	O4'-C1'	5.37	1.48	1.41
46	CN	127	TYR	CG-CD1	5.37	1.46	1.39
36	B2	1295	U	C2'-C1'	-5.36	1.47	1.53
83	A5	422	G	C2'-C1'	-5.36	1.47	1.53
83	A5	781	C	O4'-C1'	5.36	1.48	1.41
83	A5	1272	G	C3'-C2'	-5.36	1.46	1.52
36	B2	1625	G	O4'-C1'	5.36	1.48	1.41
83	A5	271	A	O4'-C1'	5.36	1.48	1.41
36	B2	551	C	C5'-C4'	5.36	1.57	1.51
83	A5	389	G	O4'-C1'	5.36	1.48	1.41
83	A5	1781	U	O4'-C1'	5.36	1.48	1.41
83	A5	1956	A	O4'-C1'	5.36	1.48	1.41
83	A5	3710	U	O4'-C1'	-5.36	1.34	1.41
85	A7	120	U	O4'-C1'	5.36	1.48	1.41
36	B2	1467	U	O4'-C1'	5.36	1.48	1.41
83	A5	1680	U	P-O5'	-5.36	1.54	1.59
83	A5	2043	G	O3'-P	-5.36	1.54	1.61
83	A5	2257	C	O3'-P	-5.36	1.54	1.61
83	A5	3686	A	P-O5'	-5.36	1.54	1.59
36	B2	512	U	O4'-C1'	5.36	1.48	1.41
36	B2	1150	U	O3'-P	-5.36	1.54	1.61
83	A5	884	U	C5'-C4'	5.36	1.57	1.51
83	A5	1667	U	O3'-P	-5.36	1.54	1.61
63	CB	343	ARG	CZ-NH1	5.35	1.40	1.33
83	A5	1472	C	P-O5'	-5.35	1.54	1.59
83	A5	460	A	C4'-O4'	-5.35	1.38	1.45
8	AS	38	ARG	CZ-NH2	5.35	1.40	1.33
36	B2	1899	U	C5'-C4'	5.35	1.57	1.51
64	CF	246	ARG	CZ-NH2	5.35	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3434	A	C2'-C1'	-5.35	1.47	1.53
36	B2	639	G	C2'-C1'	-5.35	1.47	1.53
36	B2	913	G	C5'-C4'	5.35	1.57	1.51
83	A5	1581	G	O4'-C1'	-5.35	1.34	1.41
36	B2	1351	G	O4'-C1'	5.34	1.48	1.41
74	CC	381	ARG	NE-CZ	5.34	1.40	1.33
83	A5	380	G	C2'-C1'	-5.34	1.47	1.53
83	A5	1411	U	C5'-C4'	5.34	1.57	1.51
83	A5	3364	C	P-O5'	-5.34	1.54	1.59
84	A9	26	U	O4'-C1'	5.34	1.48	1.41
36	B2	512	U	C2'-C1'	-5.34	1.47	1.53
36	B2	1664	A	C2'-C1'	5.34	1.59	1.53
79	CJ	95	ARG	CZ-NH2	5.34	1.40	1.33
83	A5	1613	A	O4'-C1'	5.34	1.48	1.41
85	A7	9	C	P-O5'	-5.34	1.54	1.59
85	A7	82	G	O4'-C1'	5.34	1.48	1.41
83	A5	764	A	O4'-C1'	5.34	1.48	1.41
36	B2	639	G	O4'-C1'	5.34	1.48	1.41
53	CT	79	ARG	CZ-NH2	5.34	1.40	1.33
83	A5	529	U	C5'-C4'	5.34	1.57	1.51
83	A5	848	A	C2'-C1'	-5.34	1.47	1.53
85	A7	87	G	O4'-C1'	5.34	1.48	1.41
36	B2	853	A	O4'-C1'	5.33	1.48	1.41
36	B2	1096	C	C2'-C1'	-5.33	1.47	1.53
36	B2	1619	A	O3'-P	-5.33	1.54	1.61
37	BC	1	A	C2'-C1'	-5.33	1.47	1.53
83	A5	2627	G	O4'-C1'	5.33	1.48	1.41
36	B2	351	G	C2'-C1'	-5.33	1.47	1.53
36	B2	1233	U	O3'-P	-5.33	1.54	1.61
83	A5	628	A	O4'-C1'	5.33	1.48	1.41
83	A5	3004	A	O3'-P	-5.33	1.54	1.61
83	A5	545	U	C2'-C1'	5.33	1.59	1.53
36	B2	379	U	O4'-C1'	5.33	1.48	1.41
36	B2	974	A	C2'-C1'	-5.33	1.47	1.53
83	A5	495	A	C2'-C1'	-5.33	1.47	1.53
83	A5	1152	A	O4'-C1'	5.33	1.48	1.41
83	A5	3466	A	O4'-C1'	5.33	1.48	1.41
36	B2	174	A	C2'-C1'	5.32	1.59	1.53
83	A5	2032	U	C2'-C1'	5.32	1.59	1.53
83	A5	2506	U	C2'-C1'	5.32	1.59	1.53
83	A5	2856	C	O3'-P	-5.32	1.54	1.61
83	A5	3229	A	O3'-P	-5.32	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3319	A	P-O5'	-5.32	1.54	1.59
36	B2	327	G	C4'-C3'	5.32	1.59	1.53
83	A5	439	U	O3'-P	-5.32	1.54	1.61
83	A5	476	U	O4'-C1'	5.32	1.48	1.41
83	A5	1268	A	O4'-C1'	5.32	1.48	1.41
83	A5	3965	A	O4'-C1'	5.32	1.48	1.41
46	CN	204	ARG	CZ-NH1	5.32	1.40	1.33
83	A5	1763	A	O4'-C1'	5.32	1.48	1.41
36	B2	1753	U	C2'-C1'	-5.32	1.47	1.53
83	A5	13	U	O4'-C1'	5.32	1.48	1.41
83	A5	2702	A	C2'-C1'	5.32	1.59	1.53
83	A5	1792	G	C2'-C1'	-5.31	1.47	1.53
83	A5	3179	A	O4'-C1'	5.31	1.48	1.41
36	B2	1810	C	C5'-C4'	5.31	1.57	1.51
83	A5	209	U	O4'-C1'	5.31	1.48	1.41
83	A5	616	A	C2'-C1'	-5.31	1.47	1.53
83	A5	628	A	C2'-C1'	5.31	1.59	1.53
83	A5	2465	U	C2'-C1'	-5.31	1.47	1.53
83	A5	2681	A	C2'-C1'	-5.31	1.47	1.53
83	A5	2930	A	C3'-C2'	-5.31	1.47	1.52
83	A5	3678	G	O4'-C1'	5.31	1.48	1.41
83	A5	3776	A	C2'-C1'	5.31	1.59	1.53
83	A5	516	U	C2'-C1'	-5.31	1.47	1.53
83	A5	1566	U	P-O5'	-5.31	1.54	1.59
36	B2	915	U	C2'-C1'	-5.31	1.47	1.53
83	A5	869	A	C2'-C1'	5.31	1.59	1.53
83	A5	3109	A	C2'-C1'	-5.31	1.47	1.53
83	A5	3494	C	O4'-C1'	5.31	1.48	1.41
83	A5	2603	U	O4'-C1'	5.31	1.48	1.41
83	A5	3068	U	C5'-C4'	5.31	1.57	1.51
36	B2	736	U	P-O5'	-5.30	1.54	1.59
36	B2	1104	C	O4'-C1'	5.30	1.48	1.41
36	B2	1624	U	C2'-C1'	5.30	1.59	1.53
36	B2	1584	A	C5'-C4'	5.30	1.57	1.51
83	A5	3005	A	O3'-P	-5.30	1.54	1.61
36	B2	1966	U	C5'-C4'	5.30	1.57	1.51
36	B2	213	G	C4'-O4'	5.30	1.52	1.45
83	A5	2685	G	O4'-C1'	5.30	1.48	1.41
83	A5	1019	U	O3'-P	-5.29	1.54	1.61
83	A5	2148	C	O4'-C1'	5.29	1.48	1.41
83	A5	3753	A	O3'-P	-5.29	1.54	1.61
83	A5	3914	G	O3'-P	-5.29	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	714	U	P-O5'	-5.29	1.54	1.59
36	B2	1808	G	C2'-C1'	-5.29	1.47	1.53
83	A5	240	G	C5'-C4'	5.29	1.57	1.51
83	A5	1293	A	C5'-C4'	5.29	1.57	1.51
83	A5	1480	U	C2'-C1'	5.29	1.59	1.53
85	A7	21	G	P-O5'	-5.29	1.54	1.59
36	B2	1619	A	C2'-C1'	-5.29	1.47	1.53
36	B2	912	U	C4'-C3'	5.29	1.58	1.53
83	A5	1272	G	C2'-C1'	-5.29	1.47	1.53
84	A9	11	A	O4'-C1'	5.29	1.48	1.41
5	AO	147	ARG	NE-CZ	5.28	1.40	1.33
83	A5	2664	U	O4'-C1'	5.28	1.48	1.41
83	A5	3184	U	O3'-P	-5.28	1.54	1.61
36	B2	1713	C	C2'-C1'	5.28	1.59	1.53
37	BC	73	C	C2'-C1'	-5.28	1.47	1.53
83	A5	3	A	O4'-C1'	5.28	1.48	1.41
83	A5	2653	A	C2'-C1'	-5.28	1.47	1.53
51	CA	72	ARG	CZ-NH2	5.28	1.40	1.33
83	A5	291	U	C2'-C1'	5.28	1.59	1.53
83	A5	1350	A	O4'-C1'	5.28	1.48	1.41
85	A7	36	C	O4'-C1'	5.28	1.48	1.41
83	A5	3343	A	O4'-C1'	5.28	1.48	1.41
83	A5	3343	A	P-O5'	-5.28	1.54	1.59
36	B2	201	G	O4'-C1'	5.27	1.48	1.41
36	B2	1795	U	C2'-C1'	5.27	1.59	1.53
83	A5	1596	A	C5'-C4'	5.27	1.57	1.51
36	B2	1742	A	O4'-C1'	5.27	1.48	1.41
49	CQ	146	ARG	NE-CZ	5.27	1.40	1.33
83	A5	2169	U	C2'-C1'	5.27	1.59	1.53
83	A5	2546	G	C2'-C1'	-5.27	1.47	1.53
84	A9	3	C	P-O5'	-5.27	1.54	1.59
83	A5	180	U	C2'-C1'	-5.27	1.47	1.53
83	A5	245	G	O4'-C1'	-5.27	1.34	1.41
83	A5	2581	U	O4'-C1'	5.27	1.48	1.41
83	A5	2701	G	C2'-C1'	5.27	1.59	1.53
83	A5	3586	A	O3'-P	-5.27	1.54	1.61
83	A5	3823	G	O3'-P	-5.27	1.54	1.61
85	A7	111	U	O4'-C1'	5.27	1.48	1.41
36	B2	1806	A	C2'-C1'	5.26	1.59	1.53
74	CC	208	ARG	NE-CZ	5.26	1.39	1.33
83	A5	2629	G	C2'-C1'	-5.26	1.47	1.53
83	A5	3918	A	C2'-C1'	-5.26	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1392	U	C2'-C1'	-5.26	1.47	1.53
83	A5	659	U	O4'-C1'	5.26	1.48	1.41
83	A5	862	U	C5'-C4'	5.26	1.57	1.51
36	B2	1920	U	O4'-C1'	5.26	1.48	1.41
83	A5	787	C	C2'-C1'	5.26	1.59	1.53
83	A5	1503	G	O4'-C1'	5.26	1.48	1.41
83	A5	2494	G	O4'-C1'	5.26	1.48	1.41
23	AD	66	ARG	CZ-NH2	5.26	1.39	1.33
25	Af	116	ARG	NE-CZ	5.26	1.39	1.33
27	AE	11	ARG	CZ-NH1	5.26	1.39	1.33
36	B2	1268	C	P-O5'	-5.26	1.54	1.59
36	B2	1426	A	O3'-P	-5.26	1.54	1.61
83	A5	343	A	O4'-C1'	5.26	1.48	1.41
36	B2	1126	A	C5'-C4'	5.25	1.57	1.51
83	A5	3558	U	C2'-C1'	-5.25	1.47	1.53
83	A5	3881	A	C2'-C1'	-5.25	1.47	1.53
36	B2	175	A	C5'-C4'	5.25	1.57	1.51
83	A5	162	U	O3'-P	-5.25	1.54	1.61
83	A5	1313	A	O4'-C1'	5.25	1.48	1.41
83	A5	3940	A	P-O5'	-5.25	1.54	1.59
12	AR	23	ARG	NE-CZ	5.25	1.39	1.33
36	B2	1613	A	O4'-C1'	5.25	1.48	1.41
37	BC	41	A	C2'-C1'	5.25	1.59	1.53
83	A5	701	U	C2'-C1'	5.25	1.59	1.53
83	A5	1485	A	O4'-C1'	5.25	1.48	1.41
83	A5	1908	A	C2'-C1'	-5.25	1.47	1.53
83	A5	2663	C	C5'-C4'	5.25	1.57	1.51
36	B2	657	A	C5'-C4'	5.25	1.57	1.51
83	A5	1905	A	O4'-C1'	5.25	1.48	1.41
36	B2	1739	U	O4'-C1'	5.24	1.48	1.41
36	B2	776	A	C5'-C4'	5.24	1.57	1.51
83	A5	664	U	C2'-C1'	-5.24	1.47	1.53
83	A5	2096	C	C5'-C4'	5.24	1.57	1.51
83	A5	2926	G	C5'-C4'	5.24	1.57	1.51
36	B2	332	U	C2'-C1'	-5.24	1.47	1.53
83	A5	1473	U	C2'-C1'	5.24	1.59	1.53
36	B2	652	U	C2'-C1'	-5.23	1.47	1.53
36	B2	1897	U	P-O5'	-5.23	1.54	1.59
83	A5	1319	A	O4'-C1'	5.23	1.48	1.41
84	A9	22	A	C2'-C1'	-5.23	1.47	1.53
27	AE	191	ARG	CD-NE	5.23	1.55	1.46
36	B2	1365	G	C2'-C1'	-5.23	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3106	G	O4'-C1'	-5.23	1.34	1.41
85	A7	97	G	C2'-C1'	-5.23	1.47	1.53
82	CG	236	GLU	CB-CG	5.23	1.62	1.52
36	B2	26	A	O4'-C1'	-5.22	1.34	1.41
36	B2	1552	C	O4'-C1'	5.22	1.48	1.41
36	B2	1846	G	O4'-C1'	5.22	1.48	1.41
83	A5	783	G	C2'-C1'	-5.22	1.47	1.53
83	A5	1272	G	O4'-C1'	5.22	1.48	1.41
83	A5	3026	U	C5'-C4'	5.22	1.57	1.51
36	B2	172	G	O4'-C1'	-5.22	1.34	1.41
58	CW	105	ARG	NE-CZ	5.22	1.39	1.33
83	A5	117	C	O3'-P	-5.22	1.54	1.61
83	A5	1345	G	C5'-C4'	5.22	1.57	1.51
36	B2	1011	A	O4'-C1'	5.22	1.48	1.41
36	B2	1783	U	O4'-C1'	5.22	1.48	1.41
83	A5	797	A	C2'-C1'	-5.22	1.47	1.53
83	A5	1168	G	O4'-C1'	5.22	1.48	1.41
83	A5	1476	G	C2'-C1'	-5.22	1.47	1.53
83	A5	1731	G	C2'-C1'	-5.22	1.47	1.53
83	A5	3256	U	O3'-P	-5.22	1.54	1.61
83	A5	1925	U	C2'-C1'	5.22	1.59	1.53
78	Co	40	ARG	NE-CZ	5.22	1.39	1.33
83	A5	1491	U	O3'-P	-5.22	1.54	1.61
83	A5	2819	A	O4'-C1'	5.22	1.48	1.41
83	A5	3331	A	O4'-C1'	5.22	1.48	1.41
23	AD	29	ARG	NE-CZ	5.21	1.39	1.33
83	A5	572	A	O4'-C1'	5.21	1.48	1.41
83	A5	1718	G	C4'-C3'	-5.21	1.47	1.52
83	A5	3873	A	C2'-C1'	-5.21	1.47	1.53
83	A5	124	A	O4'-C1'	-5.21	1.34	1.41
83	A5	3254	U	C2'-C1'	-5.21	1.47	1.53
36	B2	1266	G	C2'-C1'	-5.21	1.47	1.53
36	B2	1596	C	P-O5'	-5.21	1.54	1.59
86	A8	27	C	P-O5'	-5.21	1.54	1.59
36	B2	1446	G	P-O5'	-5.21	1.54	1.59
83	A5	1879	U	O4'-C1'	-5.21	1.34	1.41
27	AE	68	ARG	NE-CZ	5.21	1.39	1.33
49	CQ	164	ARG	CZ-NH2	5.21	1.39	1.33
83	A5	1208	U	C2'-C1'	5.21	1.59	1.53
86	A8	4	U	O4'-C1'	5.21	1.48	1.41
16	AA	41	ARG	CZ-NH2	5.21	1.39	1.33
36	B2	1722	U	O4'-C1'	5.21	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1040	C	P-O5'	-5.21	1.54	1.59
83	A5	1359	G	P-O5'	-5.21	1.54	1.59
83	A5	2131	C	O3'-P	-5.21	1.54	1.61
36	B2	1193	C	C2'-C1'	-5.20	1.47	1.53
55	CU	237	SER	CA-CB	5.20	1.60	1.52
36	B2	269	A	C5'-C4'	5.20	1.57	1.51
36	B2	1641	U	O4'-C1'	5.20	1.48	1.41
62	Cb	53	ARG	CZ-NH2	5.20	1.39	1.33
83	A5	1114	A	C2'-C1'	5.20	1.59	1.53
83	A5	2762	A	C2'-C1'	5.20	1.59	1.53
37	BC	6	A	C2'-C1'	-5.20	1.47	1.53
51	CA	30	ARG	CZ-NH2	5.20	1.39	1.33
33	AI	144	SER	CA-CB	5.20	1.60	1.52
25	Af	80	ARG	CD-NE	5.20	1.55	1.46
83	A5	1162	A	C2'-C1'	-5.20	1.47	1.53
83	A5	3372	C	C2'-C1'	-5.20	1.47	1.53
83	A5	3892	A	O3'-P	-5.20	1.54	1.61
83	A5	512	A	O4'-C1'	5.19	1.48	1.41
83	A5	158	A	O4'-C1'	5.19	1.48	1.41
83	A5	339	C	C2'-C1'	-5.19	1.47	1.53
83	A5	1743	G	C2'-C1'	-5.19	1.47	1.53
83	A5	1879	U	O3'-P	-5.19	1.54	1.61
83	A5	2134	A	C5'-C4'	5.19	1.57	1.51
83	A5	3428	A	C2'-C1'	-5.19	1.47	1.53
19	AZ	79	ARG	CD-NE	5.19	1.55	1.46
36	B2	364	A	P-O5'	-5.19	1.54	1.59
36	B2	1712	G	P-O5'	-5.19	1.54	1.59
83	A5	91	U	C2'-C1'	-5.19	1.47	1.53
83	A5	379	A	C3'-C2'	5.19	1.58	1.52
83	A5	988	C	P-O5'	-5.19	1.54	1.59
83	A5	3032	C	O3'-P	-5.19	1.54	1.61
83	A5	3431	C	C2'-C1'	-5.19	1.47	1.53
85	A7	98	G	P-O5'	-5.19	1.54	1.59
36	B2	960	U	C5'-C4'	5.19	1.57	1.51
36	B2	1263	U	C4'-C3'	-5.19	1.47	1.52
42	CL	55	ARG	CZ-NH2	5.19	1.39	1.33
83	A5	3400	U	O3'-P	-5.19	1.54	1.61
37	BC	21	G	O4'-C1'	5.18	1.48	1.41
83	A5	171	U	O4'-C1'	5.18	1.48	1.41
83	A5	707	C	O3'-P	-5.18	1.54	1.61
83	A5	2121	U	O4'-C1'	5.18	1.48	1.41
85	A7	68	G	O4'-C1'	5.18	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1571	U	P-O5'	-5.18	1.54	1.59
85	A7	112	U	O4'-C1'	-5.18	1.34	1.41
36	B2	1335	C	C3'-C2'	-5.18	1.47	1.52
83	A5	1428	G	C2'-C1'	-5.18	1.47	1.53
85	A7	72	U	C2'-C1'	-5.18	1.47	1.53
36	B2	1057	A	C2'-C1'	5.18	1.59	1.53
83	A5	1164	G	O3'-P	-5.18	1.54	1.61
83	A5	1869	C	C5'-C4'	5.18	1.57	1.51
36	B2	286	A	O4'-C1'	5.17	1.48	1.41
36	B2	1122	A	C2'-C1'	-5.17	1.47	1.53
36	B2	1259	A	O4'-C1'	5.17	1.48	1.41
83	A5	1516	A	O3'-P	-5.17	1.54	1.61
83	A5	3440	C	C4'-C3'	-5.17	1.47	1.52
83	A5	3684	A	C2'-C1'	-5.17	1.47	1.53
36	B2	840	U	O4'-C1'	5.17	1.48	1.41
83	A5	725	U	C2'-C1'	5.17	1.59	1.53
36	B2	6	G	O4'-C1'	5.17	1.48	1.41
36	B2	1649	U	C2'-C1'	5.17	1.59	1.53
36	B2	1652	A	O4'-C1'	-5.17	1.34	1.41
46	CN	109	ARG	NE-CZ	5.17	1.39	1.33
49	CQ	168	ARG	NE-CZ	5.17	1.39	1.33
36	B2	1605	G	C5'-C4'	5.17	1.57	1.51
37	BC	26	C	O3'-P	-5.17	1.54	1.61
46	CN	202	ARG	NE-CZ	5.17	1.39	1.33
50	CR	60	ARG	CZ-NH2	5.17	1.39	1.33
83	A5	1741	G	C2'-C1'	-5.17	1.47	1.53
83	A5	2629	G	C5'-C4'	5.17	1.57	1.51
83	A5	3556	A	O3'-P	-5.17	1.54	1.61
83	A5	872	A	C5'-C4'	5.17	1.57	1.51
36	B2	1801	U	O4'-C1'	5.16	1.48	1.41
36	B2	1922	A	O4'-C1'	5.16	1.48	1.41
83	A5	1536	U	C2'-C1'	5.16	1.59	1.53
83	A5	1671	U	C5'-C4'	5.16	1.57	1.51
83	A5	2609	U	O4'-C1'	5.16	1.48	1.41
83	A5	977	C	C5'-C4'	5.16	1.57	1.51
83	A5	1579	U	C5'-C4'	5.16	1.57	1.51
81	CE	78	ARG	CZ-NH2	5.16	1.39	1.33
86	A8	18	C	C4'-C3'	-5.16	1.47	1.52
36	B2	718	C	C2'-C1'	-5.16	1.47	1.53
36	B2	1260	G	O4'-C1'	5.16	1.48	1.41
57	CY	75	ARG	CZ-NH2	5.16	1.39	1.33
36	B2	1312	G	C2'-C1'	-5.16	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	312	G	C5'-C4'	5.16	1.57	1.51
82	CG	194	ARG	CD-NE	5.16	1.55	1.46
83	A5	673	U	P-O5'	-5.16	1.54	1.59
83	A5	2170	C	C2'-C1'	-5.16	1.47	1.53
83	A5	3465	C	O4'-C1'	5.16	1.48	1.41
83	A5	3902	G	O4'-C1'	5.16	1.48	1.41
36	B2	526	A	C2'-C1'	-5.15	1.47	1.53
36	B2	1312	G	P-O5'	-5.15	1.54	1.59
36	B2	1910	U	C2'-C1'	-5.15	1.47	1.53
83	A5	242	C	O4'-C1'	5.15	1.48	1.41
83	A5	1336	U	P-O5'	-5.15	1.54	1.59
83	A5	1743	G	C5'-C4'	5.15	1.57	1.51
50	CR	104	ARG	CD-NE	5.15	1.55	1.46
83	A5	1432	C	O3'-P	-5.15	1.54	1.61
83	A5	2515	C	P-O5'	-5.15	1.54	1.59
83	A5	2822	C	C2'-C1'	-5.15	1.47	1.53
28	AC	210	ARG	NE-CZ	5.15	1.39	1.33
83	A5	2278	G	O3'-P	-5.15	1.54	1.61
83	A5	2678	G	O4'-C1'	-5.15	1.34	1.41
48	CD	68	ARG	NE-CZ	5.15	1.39	1.33
82	CG	67	ARG	CZ-NH1	5.15	1.39	1.33
83	A5	182	G	C2'-C1'	-5.15	1.47	1.53
83	A5	2545	A	C2'-C1'	-5.15	1.47	1.53
83	A5	587	U	P-O5'	-5.15	1.54	1.59
83	A5	838	U	O4'-C1'	5.15	1.48	1.41
36	B2	1912	G	O4'-C1'	5.15	1.48	1.41
36	B2	1964	U	C5'-C4'	5.15	1.57	1.51
83	A5	3689	U	O4'-C1'	5.15	1.48	1.41
36	B2	633	U	C5'-C4'	5.14	1.57	1.51
36	B2	1606	A	C2'-C1'	-5.14	1.47	1.53
83	A5	1448	G	P-O5'	-5.14	1.54	1.59
83	A5	3319	A	O3'-P	-5.14	1.54	1.61
83	A5	3553	C	C2'-C1'	-5.14	1.47	1.53
85	A7	29	C	C2'-C1'	5.14	1.59	1.53
26	AJ	170	ARG	CD-NE	5.14	1.55	1.46
36	B2	242	A	C2'-C1'	-5.14	1.47	1.53
36	B2	396	A	O4'-C1'	5.14	1.48	1.41
36	B2	1816	C	P-O5'	-5.14	1.54	1.59
83	A5	1487	C	C2'-C1'	-5.14	1.47	1.53
83	A5	3158	A	C2'-C1'	5.14	1.59	1.53
36	B2	152	U	P-O5'	-5.14	1.54	1.59
36	B2	888	G	O4'-C1'	5.14	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	AH	38	TYR	CG-CD1	5.14	1.45	1.39
36	B2	300	U	O4'-C1'	5.14	1.48	1.41
32	AW	118	ARG	NE-CZ	5.14	1.39	1.33
36	B2	388	G	O4'-C1'	5.14	1.48	1.41
36	B2	520	A	O3'-P	-5.14	1.54	1.61
36	B2	1575	A	O4'-C1'	-5.14	1.34	1.41
83	A5	46	C	O4'-C1'	5.14	1.48	1.41
83	A5	3429	A	O4'-C1'	5.14	1.48	1.41
36	B2	192	A	O4'-C1'	-5.13	1.34	1.41
36	B2	1636	A	C2'-C1'	5.13	1.58	1.53
83	A5	1448	G	C5'-C4'	5.13	1.57	1.51
83	A5	3663	U	O4'-C1'	5.13	1.48	1.41
83	A5	3202	G	O4'-C1'	-5.13	1.34	1.41
36	B2	1935	A	O4'-C1'	5.13	1.48	1.41
36	B2	1940	G	C5'-C4'	5.13	1.57	1.51
50	CR	100	ARG	NE-CZ	5.13	1.39	1.33
83	A5	1550	U	O4'-C1'	5.13	1.48	1.41
36	B2	1914	A	O4'-C1'	5.13	1.48	1.41
79	CJ	80	ARG	CZ-NH2	5.13	1.39	1.33
83	A5	1036	A	C2'-C1'	-5.13	1.47	1.53
36	B2	372	A	P-O5'	-5.13	1.54	1.59
36	B2	1926	A	C2'-C1'	-5.13	1.47	1.53
36	B2	1798	C	P-O5'	-5.13	1.54	1.59
83	A5	2032	U	O4'-C1'	5.13	1.48	1.41
83	A5	2104	A	O4'-C1'	5.13	1.48	1.41
83	A5	2911	U	O3'-P	-5.13	1.54	1.61
83	A5	2675	U	C2'-C1'	-5.12	1.47	1.53
27	AE	113	ARG	NE-CZ	5.12	1.39	1.33
36	B2	17	C	C2'-C1'	-5.12	1.47	1.53
36	B2	961	U	C2'-C1'	-5.12	1.47	1.53
36	B2	1009	U	C5'-C4'	5.12	1.57	1.51
82	CG	201	ARG	NE-CZ	5.12	1.39	1.33
83	A5	454	C	O4'-C1'	5.12	1.48	1.41
83	A5	3139	G	C2'-C1'	-5.12	1.47	1.53
45	Ca	115	ARG	CZ-NH1	5.12	1.39	1.33
83	A5	1064	G	C2'-C1'	-5.12	1.47	1.53
83	A5	2598	A	O4'-C1'	5.12	1.48	1.41
83	A5	3651	C	O3'-P	-5.12	1.55	1.61
23	AD	180	ARG	CD-NE	5.12	1.55	1.46
36	B2	1280	C	P-O5'	-5.12	1.54	1.59
36	B2	1828	C	C2'-C1'	-5.12	1.47	1.53
83	A5	1222	A	C2'-C1'	-5.12	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	3481	G	C2'-C1'	-5.12	1.47	1.53
1	Az	414	ARG	CD-NE	5.12	1.55	1.46
83	A5	709	U	C2'-C1'	5.12	1.58	1.53
83	A5	1179	U	C2'-C1'	-5.12	1.47	1.53
83	A5	3218	C	O3'-P	-5.12	1.55	1.61
36	B2	173	C	C5'-C4'	5.12	1.57	1.51
83	A5	564	C	C2'-C1'	-5.12	1.47	1.53
83	A5	868	A	O4'-C1'	5.12	1.48	1.41
83	A5	1805	A	P-O5'	-5.12	1.54	1.59
36	B2	389	G	O4'-C1'	5.11	1.48	1.41
83	A5	3408	C	C2'-C1'	-5.11	1.47	1.53
83	A5	3667	C	C4'-C3'	5.11	1.58	1.53
36	B2	1286	G	O4'-C1'	5.11	1.48	1.41
85	A7	41	G	O3'-P	-5.11	1.55	1.61
36	B2	195	G	C5'-C4'	5.11	1.57	1.51
36	B2	578	A	C5'-C4'	5.11	1.57	1.51
36	B2	704	U	C5'-C4'	5.11	1.57	1.51
36	B2	999	U	O4'-C1'	5.11	1.48	1.41
83	A5	264	U	O4'-C1'	5.11	1.48	1.41
83	A5	724	U	P-O5'	-5.11	1.54	1.59
30	AF	105	ARG	NE-CZ	5.10	1.39	1.33
54	CP	135	ARG	NE-CZ	5.10	1.39	1.33
36	B2	532	U	O4'-C1'	5.10	1.48	1.41
85	A7	75	G	C5'-C4'	5.10	1.57	1.51
83	A5	6	U	P-O5'	-5.10	1.54	1.59
83	A5	405	A	C4'-C3'	5.10	1.58	1.53
26	AJ	151	ARG	CZ-NH1	5.10	1.39	1.33
36	B2	1711	C	O3'-P	-5.10	1.55	1.61
36	B2	1839	U	O4'-C1'	5.10	1.48	1.41
83	A5	433	U	C5'-C4'	5.10	1.57	1.51
83	A5	466	U	O4'-C1'	5.10	1.48	1.41
83	A5	1053	G	O4'-C1'	-5.10	1.35	1.41
85	A7	95	U	O4'-C1'	-5.10	1.35	1.41
36	B2	541	U	C2'-C1'	5.10	1.58	1.53
36	B2	1542	U	O4'-C1'	5.10	1.48	1.41
83	A5	2459	C	C5'-C4'	5.10	1.57	1.51
36	B2	376	G	O4'-C1'	-5.10	1.35	1.41
83	A5	3450	G	O4'-C1'	5.10	1.48	1.41
46	CN	20	ARG	CD-NE	5.09	1.55	1.46
83	A5	1562	U	C2'-C1'	-5.09	1.47	1.53
83	A5	1595	G	O4'-C1'	-5.09	1.35	1.41
83	A5	762	G	O4'-C1'	5.09	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	1741	G	O4'-C1'	5.09	1.48	1.41
83	A5	3936	A	C2'-C1'	-5.09	1.47	1.53
36	B2	1065	A	C2'-C1'	-5.09	1.47	1.53
57	CY	87	ARG	NE-CZ	5.09	1.39	1.33
83	A5	3647	A	C2'-C1'	-5.09	1.47	1.53
36	B2	1726	A	C2'-C1'	-5.09	1.47	1.53
83	A5	405	A	P-O5'	-5.09	1.54	1.59
83	A5	1248	A	C2'-C1'	-5.09	1.47	1.53
83	A5	1722	U	O4'-C1'	5.09	1.48	1.41
83	A5	3138	G	C2'-C1'	-5.09	1.47	1.53
86	A8	91	C	O3'-P	-5.09	1.55	1.61
26	AJ	18	ARG	NE-CZ	5.09	1.39	1.33
41	CO	87	ARG	CZ-NH1	5.09	1.39	1.33
67	Ce	26	ARG	CZ-NH2	5.09	1.39	1.33
83	A5	1352	U	C2'-C1'	5.09	1.58	1.53
83	A5	1456	U	C2'-C1'	-5.09	1.47	1.53
83	A5	1532	A	O3'-P	-5.09	1.55	1.61
83	A5	3015	A	O3'-P	-5.09	1.55	1.61
16	AA	63	ARG	CZ-NH2	5.08	1.39	1.33
36	B2	1384	G	O4'-C1'	5.08	1.48	1.41
39	Cq	83	ARG	CZ-NH1	5.08	1.39	1.33
83	A5	119	G	C5'-C4'	5.08	1.57	1.51
83	A5	425	A	C2'-C1'	-5.08	1.47	1.53
83	A5	2168	G	O3'-P	-5.08	1.55	1.61
83	A5	3773	G	O3'-P	-5.08	1.55	1.61
36	B2	1748	A	C4'-C3'	5.08	1.58	1.53
83	A5	190	A	O4'-C1'	5.08	1.48	1.41
83	A5	2242	C	O3'-P	-5.08	1.55	1.61
83	A5	3714	U	O4'-C1'	-5.08	1.35	1.41
83	A5	3944	A	O4'-C1'	5.08	1.48	1.41
36	B2	1954	C	C5'-C4'	5.08	1.57	1.51
36	B2	1963	G	O4'-C1'	5.08	1.48	1.41
83	A5	1607	A	O3'-P	-5.08	1.55	1.61
83	A5	2098	C	O4'-C1'	5.08	1.48	1.41
83	A5	2535	U	C2'-C1'	5.08	1.58	1.53
36	B2	44	U	C2'-C1'	5.08	1.58	1.53
36	B2	1130	A	O3'-P	-5.08	1.55	1.61
83	A5	2871	G	C2'-C1'	5.08	1.58	1.53
85	A7	35	U	O4'-C1'	5.08	1.48	1.41
36	B2	412	A	C3'-C2'	-5.08	1.47	1.52
48	CD	22	ARG	NE-CZ	5.08	1.39	1.33
81	CE	191	ARG	CZ-NH2	5.08	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	178	U	P-O5'	-5.08	1.54	1.59
37	BC	19	A	C2'-C1'	-5.07	1.47	1.53
82	CG	118	ARG	NE-CZ	5.07	1.39	1.33
83	A5	160	U	O3'-P	-5.07	1.55	1.61
83	A5	1882	G	C2'-C1'	5.07	1.58	1.53
84	A9	5	U	O4'-C1'	5.07	1.48	1.41
24	Ae	114	PHE	CG-CD1	5.07	1.46	1.38
39	Cq	200	SER	CA-CB	5.07	1.60	1.52
83	A5	100	G	C5'-C4'	5.07	1.57	1.51
83	A5	893	U	O3'-P	-5.07	1.55	1.61
83	A5	1930	G	C5'-C4'	5.07	1.57	1.51
83	A5	227	A	O3'-P	-5.07	1.55	1.61
36	B2	1349	U	O3'-P	-5.07	1.55	1.61
41	CO	39	ARG	CZ-NH1	5.07	1.39	1.33
84	A9	6	G	O4'-C1'	5.07	1.48	1.41
27	AE	51	ARG	CZ-NH2	5.07	1.39	1.33
36	B2	1004	C	C2'-C1'	5.07	1.58	1.53
51	CA	247	ARG	CZ-NH2	5.07	1.39	1.33
83	A5	507	U	P-O5'	-5.07	1.54	1.59
83	A5	3325	G	O4'-C1'	5.07	1.48	1.41
83	A5	756	C	C2'-C1'	-5.06	1.47	1.53
83	A5	1013	G	O4'-C1'	5.06	1.48	1.41
10	AN	106	ARG	CD-NE	5.06	1.55	1.46
83	A5	1311	U	C2'-C1'	5.06	1.58	1.53
83	A5	2696	U	O4'-C1'	5.06	1.48	1.41
86	A8	11	G	C2'-C1'	-5.06	1.47	1.53
83	A5	3910	A	O4'-C1'	5.06	1.48	1.41
53	CT	32	ARG	CZ-NH1	5.06	1.39	1.33
83	A5	575	A	O4'-C1'	5.06	1.48	1.41
83	A5	655	C	C5'-C4'	5.06	1.57	1.51
83	A5	2562	U	P-O5'	-5.06	1.54	1.59
83	A5	3636	G	C3'-C2'	5.06	1.58	1.52
36	B2	763	G	C4'-C3'	5.06	1.58	1.53
36	B2	1936	U	O4'-C1'	5.06	1.48	1.41
40	CK	16	ARG	NE-CZ	5.06	1.39	1.33
83	A5	364	U	C5'-C4'	5.06	1.57	1.51
83	A5	378	G	O4'-C1'	5.06	1.48	1.41
83	A5	548	A	O4'-C1'	5.06	1.48	1.41
83	A5	1001	A	C5'-C4'	5.06	1.57	1.51
83	A5	2793	C	O4'-C1'	5.06	1.48	1.41
83	A5	3325	G	C3'-C2'	-5.06	1.47	1.52
36	B2	1370	U	C4'-C3'	-5.06	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	678	U	P-O5'	-5.06	1.54	1.59
36	B2	1528	G	C2'-C1'	-5.05	1.47	1.53
46	CN	143	ARG	CZ-NH1	5.05	1.39	1.33
83	A5	1997	C	P-O5'	-5.05	1.54	1.59
83	A5	2579	G	C2'-C1'	-5.05	1.47	1.53
83	A5	3202	G	O3'-P	-5.05	1.55	1.61
83	A5	3565	G	O4'-C1'	-5.05	1.35	1.41
36	B2	579	G	C4'-C3'	5.05	1.58	1.53
83	A5	461	U	C5'-C4'	5.05	1.57	1.51
83	A5	2634	A	P-O5'	-5.05	1.54	1.59
83	A5	3668	G	O3'-P	-5.05	1.55	1.61
36	B2	267	G	O4'-C1'	5.05	1.48	1.41
36	B2	1329	A	O3'-P	-5.05	1.55	1.61
83	A5	212	U	O4'-C1'	5.05	1.48	1.41
83	A5	349	C	O3'-P	-5.05	1.55	1.61
86	A8	79	A	O4'-C1'	-5.05	1.35	1.41
83	A5	419	U	O4'-C1'	5.05	1.48	1.41
83	A5	1601	U	C5'-C4'	5.05	1.57	1.51
83	A5	1718	G	P-O5'	-5.05	1.54	1.59
83	A5	3458	A	C5'-C4'	5.05	1.57	1.51
83	A5	483	U	C2'-C1'	5.05	1.58	1.53
83	A5	2617	G	C2'-C1'	5.05	1.58	1.53
83	A5	1320	U	C5'-C4'	5.05	1.57	1.51
83	A5	2644	U	O4'-C1'	5.05	1.48	1.41
36	B2	1796	C	P-O5'	-5.04	1.54	1.59
83	A5	929	A	O3'-P	-5.04	1.55	1.61
34	AQ	6	ARG	CZ-NH1	5.04	1.39	1.33
36	B2	116	U	O4'-C1'	5.04	1.48	1.41
36	B2	1504	G	O3'-P	-5.04	1.55	1.61
83	A5	790	U	O3'-P	-5.04	1.55	1.61
83	A5	1454	C	C2'-C1'	-5.04	1.47	1.53
83	A5	1480	U	O4'-C1'	5.04	1.48	1.41
25	Af	138	ARG	NE-CZ	5.04	1.39	1.33
83	A5	46	C	C2'-C1'	-5.04	1.47	1.53
83	A5	1238	A	C2'-C1'	5.04	1.58	1.53
83	A5	1975	C	P-O5'	-5.04	1.54	1.59
83	A5	3393	U	C2'-C1'	5.04	1.58	1.53
36	B2	519	A	O4'-C1'	5.04	1.48	1.41
83	A5	3332	G	C2'-C1'	5.04	1.58	1.53
46	CN	41	ARG	CD-NE	5.04	1.55	1.46
33	AI	20	SER	CA-CB	5.03	1.60	1.52
83	A5	788	C	C4'-O4'	-5.03	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	A5	2067	C	P-O5'	-5.03	1.54	1.59
36	B2	1254	A	C2'-C1'	5.03	1.58	1.53
36	B2	337	U	O4'-C1'	5.03	1.48	1.41
83	A5	2029	G	C5'-C4'	5.03	1.57	1.51
85	A7	7	G	P-O5'	-5.03	1.54	1.59
36	B2	1995	A	C2'-C1'	5.02	1.58	1.53
43	CV	48	ARG	NE-CZ	5.02	1.39	1.33
81	CE	139	ARG	NE-CZ	5.02	1.39	1.33
83	A5	453	C	C2'-C1'	-5.02	1.47	1.53
83	A5	994	U	C2'-C1'	5.02	1.58	1.53
83	A5	2079	U	O4'-C1'	5.02	1.48	1.41
23	AD	145	ARG	CZ-NH2	5.02	1.39	1.33
36	B2	956	C	P-O5'	-5.02	1.54	1.59
28	AC	51	ARG	CZ-NH2	5.02	1.39	1.33
83	A5	516	U	C5'-C4'	5.02	1.57	1.51
83	A5	3185	C	C2'-C1'	-5.02	1.47	1.53
85	A7	119	C	O3'-P	-5.02	1.55	1.61
83	A5	15	A	C5'-C4'	5.02	1.57	1.51
83	A5	1576	U	C2'-C1'	5.02	1.58	1.53
15	AB	82	ARG	CZ-NH1	5.02	1.39	1.33
83	A5	3678	G	C2'-C1'	-5.02	1.47	1.53
83	A5	44	A	P-O5'	-5.01	1.54	1.59
83	A5	3412	U	C3'-O3'	5.01	1.49	1.42
36	B2	1866	U	O4'-C1'	5.01	1.48	1.41
83	A5	1199	C	C2'-C1'	-5.01	1.47	1.53
36	B2	1839	U	C2'-C1'	-5.01	1.47	1.53
83	A5	2706	U	O4'-C1'	5.01	1.48	1.41
83	A5	2781	G	P-O5'	-5.01	1.54	1.59
83	A5	3193	C	P-O5'	-5.01	1.54	1.59
36	B2	1096	C	C5'-C4'	5.00	1.57	1.51
83	A5	2772	G	C5'-C4'	5.00	1.57	1.51
83	A5	2903	U	C5'-C4'	5.00	1.57	1.51
83	A5	326	A	P-O5'	-5.00	1.54	1.59
83	A5	1087	G	P-O5'	-5.00	1.54	1.59
83	A5	2583	U	C2'-C1'	5.00	1.58	1.53
83	A5	2990	C	C5'-C4'	5.00	1.57	1.51
83	A5	3967	U	C2'-C1'	-5.00	1.47	1.53
84	A9	7	G	O3'-P	-5.00	1.55	1.61
83	A5	1558	A	O3'-P	-5.00	1.55	1.61
83	A5	2720	U	O4'-C1'	5.00	1.48	1.41
83	A5	2883	C	P-O5'	-5.00	1.54	1.59

All (9425) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3514	C	O4'-C1'-N1	37.72	138.37	108.20
83	A5	3368	C	O4'-C1'-N1	35.09	136.28	108.20
36	B2	1087	C	O4'-C1'-N1	32.98	134.59	108.20
83	A5	3676	C	O4'-C1'-N1	31.58	133.46	108.20
83	A5	2491	C	O4'-C1'-N1	31.03	133.03	108.20
36	B2	1472	C	P-O3'-C3'	30.72	156.56	119.70
36	B2	1788	C	O4'-C1'-N1	30.46	132.56	108.20
36	B2	550	C	O4'-C1'-N1	30.34	132.47	108.20
83	A5	668	A	P-O3'-C3'	30.33	156.09	119.70
83	A5	1368	A	O4'-C1'-N9	29.57	131.85	108.20
83	A5	866	C	P-O3'-C3'	29.37	154.94	119.70
83	A5	2812	U	O4'-C1'-N1	29.06	131.45	108.20
36	B2	75	U	O4'-C1'-N1	28.44	130.95	108.20
36	B2	1695	A	O4'-C1'-N9	28.26	130.81	108.20
36	B2	68	C	O4'-C1'-N1	28.19	130.75	108.20
36	B2	1371	C	P-O3'-C3'	28.07	153.39	119.70
83	A5	3846	U	O4'-C1'-N1	28.02	130.62	108.20
36	B2	1752	U	O4'-C1'-N1	26.97	129.78	108.20
36	B2	905	U	P-O3'-C3'	26.79	151.85	119.70
83	A5	3893	A	O4'-C1'-N9	26.75	129.60	108.20
84	A9	22	A	P-O3'-C3'	26.75	151.80	119.70
83	A5	3788	G	O4'-C1'-N9	26.66	129.53	108.20
36	B2	1571	U	O4'-C1'-N1	25.98	128.98	108.20
83	A5	1594	U	O4'-C1'-N1	25.92	128.93	108.20
36	B2	1333	C	O4'-C1'-N1	25.64	128.71	108.20
83	A5	420	A	O4'-C1'-N9	25.56	128.65	108.20
83	A5	315	G	O4'-C1'-N9	25.51	128.61	108.20
36	B2	1079	A	O4'-C1'-N9	25.51	128.61	108.20
36	B2	1681	U	O4'-C1'-N1	25.36	128.49	108.20
36	B2	1394	U	O4'-C1'-N1	25.16	128.33	108.20
36	B2	1342	G	O4'-C1'-N9	25.10	128.28	108.20
83	A5	303	G	P-O3'-C3'	25.08	149.79	119.70
86	A8	61	C	P-O3'-C3'	-24.88	89.85	119.70
83	A5	2479	A	O4'-C1'-N9	24.70	127.96	108.20
83	A5	116	U	O4'-C1'-N1	24.68	127.94	108.20
36	B2	1995	A	O4'-C1'-N9	24.57	127.85	108.20
36	B2	950	U	O4'-C1'-N1	24.20	127.56	108.20
83	A5	2091	A	P-O3'-C3'	24.16	148.69	119.70
36	B2	1727	U	P-O3'-C3'	24.14	148.67	119.70
86	A8	80	C	O4'-C1'-N1	23.93	127.34	108.20
83	A5	1237	G	O4'-C1'-N9	23.84	127.27	108.20
83	A5	1798	A	P-O3'-C3'	23.81	148.27	119.70
83	A5	1866	G	O4'-C1'-N9	23.55	127.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3023	A	P-O3'-C3'	23.53	147.94	119.70
83	A5	3968	C	P-O3'-C3'	23.46	147.85	119.70
83	A5	698	A	P-O3'-C3'	-23.45	91.56	119.70
36	B2	1591	U	O4'-C1'-N1	23.37	126.90	108.20
83	A5	985	G	O4'-C1'-N9	23.37	126.89	108.20
83	A5	3842	A	P-O5'-C5'	23.36	158.27	120.90
83	A5	211	U	P-O3'-C3'	23.33	147.70	119.70
36	B2	1648	C	O4'-C1'-N1	23.33	126.86	108.20
86	A8	44	C	P-O3'-C3'	23.28	147.63	119.70
83	A5	3193	C	O4'-C1'-N1	23.25	126.80	108.20
36	B2	1639	U	P-O3'-C3'	23.17	147.51	119.70
83	A5	872	A	O4'-C1'-N9	23.15	126.72	108.20
36	B2	225	G	P-O3'-C3'	23.02	147.33	119.70
86	A8	85	G	P-O3'-C3'	22.99	147.29	119.70
83	A5	2990	C	P-O3'-C3'	22.94	147.23	119.70
83	A5	3094	U	P-O3'-C3'	22.90	147.18	119.70
83	A5	5	A	O4'-C1'-N9	22.76	126.41	108.20
83	A5	3719	A	O4'-C1'-N9	22.63	126.30	108.20
83	A5	3713	C	O4'-C1'-N1	22.58	126.26	108.20
86	A8	58	C	O4'-C1'-N1	22.52	126.22	108.20
83	A5	138	A	O4'-C1'-N9	22.41	126.13	108.20
85	A7	12	U	P-O3'-C3'	-22.37	92.86	119.70
83	A5	1631	U	O4'-C1'-N1	22.22	125.98	108.20
83	A5	643	U	P-O3'-C3'	22.17	146.30	119.70
86	A8	108	A	P-O3'-C3'	-22.03	93.26	119.70
36	B2	984	G	P-O3'-C3'	21.89	145.96	119.70
36	B2	988	G	O4'-C1'-N9	21.85	125.68	108.20
36	B2	495	U	P-O3'-C3'	21.83	145.89	119.70
36	B2	488	A	P-O3'-C3'	21.55	145.56	119.70
83	A5	3841	C	P-O3'-C3'	21.42	145.40	119.70
83	A5	3819	C	P-O3'-C3'	21.40	145.38	119.70
83	A5	3843	U	P-O3'-C3'	21.37	145.34	119.70
36	B2	825	A	P-O3'-C3'	21.36	145.33	119.70
83	A5	1725	A	O4'-C1'-N9	21.27	125.21	108.20
83	A5	1565	A	P-O3'-C3'	21.25	145.20	119.70
36	B2	74	U	P-O3'-C3'	21.22	145.17	119.70
83	A5	1119	C	P-O3'-C3'	-21.15	94.32	119.70
36	B2	1806	A	O4'-C1'-N9	21.07	125.06	108.20
36	B2	656	U	O4'-C1'-N1	21.04	125.03	108.20
83	A5	2684	C	O4'-C1'-N1	21.00	125.00	108.20
36	B2	1169	C	P-O3'-C3'	20.98	144.88	119.70
36	B2	866	U	P-O3'-C3'	20.96	144.85	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	73	A	O4'-C1'-N9	20.91	124.93	108.20
83	A5	2838	U	P-O3'-C3'	20.90	144.78	119.70
85	A7	72	U	P-O3'-C3'	20.90	144.78	119.70
83	A5	163	A	P-O3'-C3'	20.78	144.64	119.70
36	B2	1473	C	P-O3'-C3'	20.66	144.49	119.70
83	A5	680	C	P-O3'-C3'	20.65	144.48	119.70
36	B2	1606	A	O4'-C1'-N9	20.60	124.68	108.20
83	A5	3928	A	O4'-C1'-N9	20.40	124.52	108.20
83	A5	3664	A	O4'-C1'-N9	20.39	124.51	108.20
83	A5	1863	U	P-O3'-C3'	20.37	144.15	119.70
36	B2	266	U	P-O3'-C3'	20.31	144.07	119.70
83	A5	773	G	P-O3'-C3'	20.29	144.05	119.70
83	A5	3706	U	O4'-C1'-N1	20.29	124.43	108.20
83	A5	984	U	O4'-C1'-N1	20.28	124.42	108.20
83	A5	3708	U	P-O3'-C3'	20.23	143.98	119.70
83	A5	3034	A	P-O3'-C3'	20.21	143.96	119.70
36	B2	283	U	O4'-C1'-N1	20.19	124.35	108.20
83	A5	1593	U	O4'-C1'-N1	20.19	124.35	108.20
36	B2	1749	C	P-O3'-C3'	20.17	143.90	119.70
83	A5	1436	A	P-O3'-C3'	20.07	143.79	119.70
83	A5	3127	A	O4'-C1'-N9	20.00	124.20	108.20
83	A5	3502	A	O4'-C1'-N9	20.00	124.20	108.20
36	B2	3	U	O4'-C1'-N1	19.99	124.19	108.20
36	B2	74	U	O4'-C1'-N1	19.93	124.15	108.20
83	A5	3593	A	O4'-C1'-N9	19.81	124.05	108.20
36	B2	1678	G	O4'-C1'-N9	19.77	124.02	108.20
36	B2	313	C	O4'-C1'-N1	19.75	124.00	108.20
36	B2	1046	U	O4'-C1'-N1	19.73	123.99	108.20
36	B2	226	C	P-O3'-C3'	19.70	143.34	119.70
83	A5	2015	G	P-O3'-C3'	19.65	143.28	119.70
36	B2	174	A	O4'-C1'-N9	19.62	123.90	108.20
83	A5	869	A	O4'-C1'-N9	19.60	123.88	108.20
83	A5	3760	A	P-O3'-C3'	19.56	143.17	119.70
83	A5	3765	A	O4'-C1'-N9	19.53	123.83	108.20
83	A5	459	U	O4'-C1'-N1	19.49	123.79	108.20
83	A5	2131	C	P-O3'-C3'	19.47	143.06	119.70
36	B2	1147	U	O4'-C1'-N1	19.44	123.75	108.20
83	A5	1913	U	O4'-C1'-N1	19.43	123.75	108.20
85	A7	64	G	P-O3'-C3'	-19.37	96.45	119.70
36	B2	1760	G	P-O3'-C3'	19.34	142.91	119.70
83	A5	3838	A	P-O3'-C3'	19.34	142.91	119.70
83	A5	2949	A	P-O3'-C3'	19.34	142.90	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	699	A	P-O3'-C3'	19.29	142.85	119.70
83	A5	3829	U	O4'-C1'-N1	19.29	123.63	108.20
83	A5	3591	A	P-O3'-C3'	19.26	142.82	119.70
83	A5	117	C	N1-C1'-C2'	19.24	139.01	114.00
83	A5	189	A	O4'-C1'-N9	19.22	123.58	108.20
36	B2	1372	U	O4'-C1'-N1	19.22	123.57	108.20
83	A5	3710	U	O4'-C1'-N1	19.14	123.52	108.20
83	A5	3950	A	O4'-C1'-N9	19.12	123.49	108.20
83	A5	1293	A	O4'-C1'-N9	19.11	123.49	108.20
83	A5	668	A	C4'-C3'-O3'	19.09	151.19	113.00
36	B2	631	C	O4'-C1'-N1	19.07	123.46	108.20
83	A5	3530	A	O4'-C1'-N9	19.03	123.43	108.20
83	A5	3773	G	O4'-C1'-N9	18.93	123.35	108.20
83	A5	225	U	P-O3'-C3'	18.92	142.41	119.70
83	A5	2278	G	P-O3'-C3'	18.92	142.40	119.70
83	A5	3764	G	O4'-C1'-N9	18.87	123.30	108.20
36	B2	1196	G	P-O3'-C3'	18.86	142.33	119.70
83	A5	1668	U	C1'-O4'-C4'	-18.84	94.82	109.90
36	B2	1305	A	O4'-C1'-N9	18.82	123.26	108.20
83	A5	2454	U	P-O3'-C3'	18.80	142.27	119.70
83	A5	2243	G	O4'-C1'-N9	18.76	123.21	108.20
85	A7	38	U	P-O3'-C3'	-18.76	97.19	119.70
83	A5	1750	G	O4'-C1'-N9	18.74	123.19	108.20
36	B2	690	U	P-O3'-C3'	18.71	142.16	119.70
83	A5	1296	U	O4'-C1'-N1	18.65	123.12	108.20
83	A5	2995	U	O4'-C1'-N1	18.65	123.12	108.20
36	B2	1331	A	P-O3'-C3'	18.64	142.07	119.70
36	B2	458	C	N1-C1'-C2'	18.58	138.16	114.00
83	A5	2128	A	P-O3'-C3'	18.50	141.91	119.70
36	B2	395	G	O4'-C1'-N9	18.49	122.99	108.20
84	A9	23	G	P-O3'-C3'	18.49	141.88	119.70
83	A5	2196	U	O4'-C1'-N1	18.47	122.98	108.20
83	A5	227	A	P-O3'-C3'	18.43	141.82	119.70
36	B2	904	C	P-O3'-C3'	18.41	141.79	119.70
83	A5	1780	U	P-O3'-C3'	18.37	141.75	119.70
36	B2	1547	U	P-O3'-C3'	18.32	141.69	119.70
83	A5	1562	U	P-O3'-C3'	18.32	141.69	119.70
36	B2	727	U	P-O3'-C3'	18.23	141.58	119.70
36	B2	824	U	P-O3'-C3'	18.14	141.47	119.70
83	A5	958	U	P-O3'-C3'	18.11	141.43	119.70
83	A5	201	U	P-O3'-C3'	18.08	141.40	119.70
83	A5	1292	G	O4'-C1'-N9	18.02	122.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2660	U	P-O3'-C3'	17.89	141.16	119.70
36	B2	195	G	O4'-C1'-N9	17.84	122.47	108.20
83	A5	3018	U	P-O3'-C3'	17.80	141.06	119.70
83	A5	1229	U	P-O3'-C3'	17.78	141.04	119.70
83	A5	2904	U	O4'-C1'-N1	17.78	122.42	108.20
36	B2	1991	C	O4'-C1'-N1	17.77	122.42	108.20
83	A5	3695	G	P-O3'-C3'	17.74	140.98	119.70
36	B2	1652	A	O4'-C1'-N9	17.69	122.35	108.20
36	B2	496	C	P-O5'-C5'	17.63	149.10	120.90
36	B2	908	G	P-O3'-C3'	17.59	140.81	119.70
83	A5	1308	U	P-O3'-C3'	17.58	140.80	119.70
83	A5	1250	C	N1-C1'-C2'	17.52	136.77	114.00
83	A5	2129	C	P-O3'-C3'	17.49	140.69	119.70
36	B2	713	A	O4'-C1'-N9	17.46	122.17	108.20
83	A5	1231	A	P-O3'-C3'	17.43	140.62	119.70
36	B2	1328	G	O4'-C1'-N9	17.43	122.14	108.20
83	A5	147	A	P-O3'-C3'	17.42	140.60	119.70
85	A7	62	U	P-O3'-C3'	-17.39	98.84	119.70
37	BC	17	G	P-O3'-C3'	17.36	140.54	119.70
83	A5	1668	U	N1-C1'-C2'	17.33	136.53	114.00
36	B2	278	G	P-O3'-C3'	17.31	140.47	119.70
36	B2	880	G	O4'-C1'-N9	17.27	122.02	108.20
36	B2	316	U	O4'-C1'-N1	17.26	122.01	108.20
36	B2	698	U	P-O3'-C3'	17.18	140.32	119.70
83	A5	3227	A	O4'-C1'-N9	17.18	121.94	108.20
83	A5	3626	A	P-O3'-C3'	17.14	140.27	119.70
83	A5	1649	G	O4'-C1'-N9	17.12	121.90	108.20
83	A5	3697	A	P-O3'-C3'	17.11	140.24	119.70
83	A5	1501	A	P-O3'-C3'	17.09	140.21	119.70
83	A5	1456	U	O4'-C1'-N1	17.09	121.87	108.20
36	B2	190	U	O4'-C1'-N1	17.07	121.85	108.20
83	A5	1518	A	O4'-C1'-N9	16.94	121.75	108.20
36	B2	1287	G	O4'-C1'-N9	16.93	121.74	108.20
36	B2	765	U	P-O3'-C3'	16.90	139.99	119.70
83	A5	1698	A	P-O3'-C3'	16.90	139.98	119.70
83	A5	2129	C	O4'-C1'-N1	16.90	121.72	108.20
36	B2	1492	A	P-O3'-C3'	16.89	139.96	119.70
83	A5	3211	A	O4'-C1'-N9	16.87	121.70	108.20
83	A5	3778	U	P-O5'-C5'	16.86	147.87	120.90
83	A5	1727	U	P-O3'-C3'	16.84	139.91	119.70
83	A5	2037	C	O4'-C1'-N1	16.80	121.64	108.20
83	A5	1295	A	O4'-C1'-N9	16.80	121.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	715	U	O4'-C1'-N1	16.80	121.64	108.20
83	A5	2157	A	O4'-C1'-N9	16.77	121.62	108.20
36	B2	156	U	O4'-C1'-N1	16.73	121.58	108.20
83	A5	615	C	P-O3'-C3'	16.73	139.77	119.70
83	A5	2815	A	O4'-C1'-N9	16.71	121.56	108.20
83	A5	3095	C	P-O3'-C3'	16.66	139.69	119.70
83	A5	3891	U	O4'-C1'-N1	16.65	121.52	108.20
83	A5	3856	U	O4'-C1'-N1	16.65	121.52	108.20
36	B2	697	U	P-O3'-C3'	16.62	139.65	119.70
83	A5	774	A	P-O3'-C3'	16.62	139.65	119.70
83	A5	2627	G	P-O3'-C3'	16.60	139.62	119.70
83	A5	1601	U	O4'-C1'-N1	16.58	121.47	108.20
83	A5	2490	G	P-O3'-C3'	16.55	139.56	119.70
83	A5	2904	U	P-O3'-C3'	16.52	139.52	119.70
83	A5	2796	G	O4'-C1'-N9	16.50	121.40	108.20
36	B2	1427	U	P-O3'-C3'	16.50	139.50	119.70
83	A5	3839	A	O4'-C1'-N9	16.50	121.40	108.20
84	A9	21	G	P-O3'-C3'	16.47	139.46	119.70
83	A5	201	U	O4'-C1'-N1	16.47	121.37	108.20
83	A5	497	U	O4'-C1'-N1	16.46	121.37	108.20
83	A5	2651	G	P-O3'-C3'	16.44	139.43	119.70
36	B2	1529	G	O4'-C1'-N9	16.41	121.33	108.20
36	B2	1320	G	C1'-O4'-C4'	-16.40	96.78	109.90
83	A5	675	C	P-O3'-C3'	16.36	139.33	119.70
86	A8	82	C	P-O3'-C3'	-16.35	100.08	119.70
36	B2	1313	U	P-O3'-C3'	16.34	139.31	119.70
83	A5	178	U	P-O3'-C3'	16.30	139.26	119.70
83	A5	1255	U	O4'-C1'-N1	16.30	121.24	108.20
83	A5	2174	A	O4'-C1'-N9	16.29	121.23	108.20
83	A5	2040	A	C4'-C3'-O3'	16.24	145.48	113.00
83	A5	1573	U	P-O3'-C3'	16.23	139.18	119.70
83	A5	1705	U	O4'-C1'-N1	16.22	121.17	108.20
83	A5	573	U	P-O3'-C3'	16.19	139.13	119.70
83	A5	1488	A	P-O3'-C3'	16.17	139.11	119.70
83	A5	3149	U	O4'-C1'-N1	16.17	121.13	108.20
83	A5	2877	G	O4'-C1'-N9	16.15	121.12	108.20
83	A5	642	A	P-O3'-C3'	16.14	139.07	119.70
83	A5	3627	C	P-O3'-C3'	16.14	139.07	119.70
83	A5	1183	U	P-O3'-C3'	16.08	139.00	119.70
83	A5	618	U	P-O3'-C3'	16.05	138.96	119.70
83	A5	761	C	N1-C1'-C2'	16.04	134.85	114.00
36	B2	1554	U	O4'-C1'-N1	16.03	121.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1296	A	O4'-C1'-N9	16.02	121.01	108.20
83	A5	164	U	P-O3'-C3'	16.02	138.92	119.70
83	A5	2085	G	C1'-O4'-C4'	-16.01	97.09	109.90
83	A5	1782	C	P-O3'-C3'	16.01	138.91	119.70
83	A5	3848	U	O4'-C1'-N1	15.99	120.99	108.20
36	B2	172	G	P-O3'-C3'	15.98	138.88	119.70
36	B2	1715	G	O4'-C1'-N9	15.98	120.98	108.20
36	B2	67	A	P-O3'-C3'	15.96	138.85	119.70
83	A5	2155	A	N9-C1'-C2'	15.94	134.72	114.00
83	A5	3697	A	O4'-C1'-N9	15.92	120.93	108.20
36	B2	258	A	P-O3'-C3'	15.91	138.79	119.70
83	A5	973	G	N9-C1'-C2'	15.90	134.67	114.00
36	B2	1202	G	O4'-C1'-N9	15.89	120.92	108.20
83	A5	3686	A	O4'-C1'-N9	15.89	120.91	108.20
83	A5	1811	A	P-O3'-C3'	-15.88	100.64	119.70
83	A5	1968	A	P-O3'-C3'	15.88	138.76	119.70
36	B2	1760	G	O4'-C1'-N9	15.86	120.89	108.20
83	A5	1879	U	O4'-C1'-N1	15.86	120.88	108.20
83	A5	872	A	P-O3'-C3'	15.85	138.72	119.70
83	A5	3841	C	O4'-C1'-N1	15.84	120.87	108.20
36	B2	266	U	O4'-C1'-N1	15.82	120.86	108.20
83	A5	672	U	P-O3'-C3'	15.81	138.68	119.70
83	A5	153	G	P-O3'-C3'	-15.80	100.74	119.70
83	A5	1808	A	P-O3'-C3'	15.79	138.65	119.70
36	B2	1426	A	P-O3'-C3'	15.77	138.62	119.70
37	BC	54	U	O4'-C1'-N1	15.76	120.81	108.20
83	A5	1939	U	O4'-C1'-N1	15.76	120.81	108.20
83	A5	3620	G	O4'-C1'-N9	15.75	120.80	108.20
83	A5	3212	A	O4'-C1'-N9	15.74	120.79	108.20
83	A5	3853	C	P-O3'-C3'	15.74	138.59	119.70
83	A5	3472	A	P-O3'-C3'	15.71	138.55	119.70
83	A5	1228	C	O4'-C1'-N1	15.70	120.76	108.20
83	A5	740	G	P-O3'-C3'	15.66	138.49	119.70
36	B2	250	U	P-O3'-C3'	15.64	138.47	119.70
83	A5	3728	A	P-O3'-C3'	15.61	138.43	119.70
36	B2	857	G	P-O3'-C3'	15.59	138.41	119.70
83	A5	93	G	O4'-C1'-N9	15.57	120.66	108.20
83	A5	3843	U	O4'-C1'-N1	15.56	120.65	108.20
36	B2	1656	G	O4'-C1'-N9	15.55	120.64	108.20
83	A5	530	U	O4'-C1'-N1	15.55	120.64	108.20
83	A5	753	U	O4'-C1'-N1	15.54	120.63	108.20
83	A5	1310	A	P-O3'-C3'	15.52	138.32	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	607	A	P-O3'-C3'	15.52	138.32	119.70
83	A5	3659	G	O4'-C1'-N9	15.52	120.61	108.20
83	A5	3431	C	O4'-C1'-N1	15.50	120.60	108.20
83	A5	1801	U	O4'-C1'-N1	15.50	120.60	108.20
36	B2	692	U	P-O3'-C3'	15.49	138.29	119.70
83	A5	2692	U	O4'-C1'-N1	15.47	120.58	108.20
83	A5	3775	A	P-O3'-C3'	15.46	138.25	119.70
83	A5	1390	C	O4'-C1'-N1	15.42	120.54	108.20
83	A5	3790	A	O4'-C1'-N9	15.42	120.54	108.20
36	B2	1582	C	O4'-C1'-N1	15.40	120.52	108.20
36	B2	1392	U	O4'-C1'-N1	15.39	120.51	108.20
36	B2	726	U	P-O3'-C3'	15.38	138.16	119.70
83	A5	300	A	P-O3'-C3'	15.36	138.13	119.70
83	A5	76	C	P-O3'-C3'	15.32	138.08	119.70
83	A5	268	U	O4'-C1'-N1	15.31	120.45	108.20
83	A5	1323	C	P-O3'-C3'	15.30	138.06	119.70
83	A5	3712	G	P-O3'-C3'	15.30	138.06	119.70
83	A5	523	C	P-O3'-C3'	15.30	138.06	119.70
36	B2	1000	G	P-O3'-C3'	15.29	138.05	119.70
47	CI	181	TYR	CB-CG-CD2	15.27	130.16	121.00
83	A5	3843	U	N1-C1'-C2'	-15.25	94.18	114.00
83	A5	1537	G	O4'-C1'-N9	15.24	120.39	108.20
36	B2	1849	U	O4'-C1'-N1	15.24	120.39	108.20
36	B2	1020	U	N1-C1'-C2'	15.22	133.79	114.00
83	A5	1096	A	O4'-C1'-N9	15.18	120.35	108.20
83	A5	2506	U	O4'-C1'-N1	15.17	120.33	108.20
83	A5	3236	A	O4'-C1'-N9	15.17	120.33	108.20
36	B2	199	G	C4'-C3'-O3'	-15.17	77.55	109.40
83	A5	186	G	P-O3'-C3'	15.14	137.87	119.70
83	A5	3727	A	O4'-C1'-N9	15.14	120.31	108.20
83	A5	1860	A	O4'-C1'-N9	15.12	120.30	108.20
83	A5	1640	U	P-O3'-C3'	15.11	137.83	119.70
83	A5	1475	A	O4'-C1'-N9	15.10	120.28	108.20
83	A5	3230	G	O4'-C1'-N9	15.06	120.25	108.20
83	A5	521	U	O4'-C1'-N1	15.04	120.23	108.20
83	A5	1316	U	O4'-C1'-N1	15.04	120.23	108.20
83	A5	2887	U	N1-C1'-C2'	15.03	133.54	114.00
83	A5	2820	G	P-O3'-C3'	15.02	137.72	119.70
83	A5	420	A	P-O3'-C3'	15.00	137.70	119.70
83	A5	896	A	O4'-C1'-N9	14.99	120.19	108.20
83	A5	3936	A	O4'-C1'-N9	14.99	120.19	108.20
83	A5	2085	G	O4'-C1'-C2'	14.94	121.04	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	346	U	P-O3'-C3'	14.93	137.62	119.70
83	A5	3373	G	O4'-C1'-N9	14.91	120.13	108.20
83	A5	2064	G	P-O3'-C3'	14.91	137.59	119.70
83	A5	2126	A	P-O3'-C3'	14.90	137.58	119.70
83	A5	3299	U	O4'-C1'-N1	14.89	120.12	108.20
83	A5	870	U	O4'-C1'-N1	14.88	120.11	108.20
83	A5	2892	U	O4'-C1'-N1	14.87	120.10	108.20
36	B2	1644	U	O4'-C1'-N1	14.84	120.08	108.20
83	A5	3758	G	O4'-C1'-N9	14.82	120.06	108.20
83	A5	2523	A	O4'-C1'-N9	14.81	120.05	108.20
83	A5	2799	U	O4'-C1'-N1	14.80	120.04	108.20
36	B2	1989	A	O4'-C1'-N9	14.78	120.03	108.20
83	A5	3892	A	O4'-C1'-N9	14.78	120.02	108.20
83	A5	3960	U	O4'-C1'-N1	14.78	120.02	108.20
36	B2	905	U	O4'-C1'-N1	14.77	120.02	108.20
83	A5	212	U	O4'-C1'-N1	14.77	120.02	108.20
83	A5	573	U	O4'-C1'-N1	14.75	120.00	108.20
83	A5	3304	U	O4'-C1'-N1	14.72	119.98	108.20
83	A5	1324	C	P-O3'-C3'	14.72	137.36	119.70
36	B2	509	C	P-O3'-C3'	14.71	137.36	119.70
83	A5	798	C	O4'-C1'-N1	14.71	119.97	108.20
83	A5	1711	C	O4'-C1'-N1	14.70	119.96	108.20
83	A5	2457	A	P-O3'-C3'	14.69	137.33	119.70
36	B2	960	U	O4'-C1'-N1	14.69	119.95	108.20
83	A5	2897	G	O4'-C1'-N9	14.69	119.95	108.20
83	A5	2968	C	P-O3'-C3'	14.68	137.31	119.70
83	A5	2063	A	O4'-C1'-N9	14.66	119.93	108.20
36	B2	909	U	O4'-C1'-N1	14.65	119.92	108.20
83	A5	1688	A	P-O3'-C3'	14.65	137.28	119.70
83	A5	184	A	O4'-C1'-N9	14.65	119.92	108.20
36	B2	113	G	P-O3'-C3'	14.63	137.26	119.70
83	A5	1745	G	O4'-C1'-N9	14.63	119.91	108.20
36	B2	1290	A	N9-C1'-C2'	14.63	133.01	114.00
83	A5	751	A	O4'-C1'-N9	14.61	119.89	108.20
83	A5	725	U	O4'-C1'-N1	14.59	119.87	108.20
83	A5	1544	U	P-O3'-C3'	14.59	137.21	119.70
36	B2	199	G	O3'-P-O5'	-14.58	76.30	104.00
47	CI	181	TYR	CB-CG-CD1	-14.57	112.26	121.00
36	B2	58	U	O4'-C1'-N1	14.55	119.84	108.20
83	A5	470	G	P-O3'-C3'	14.55	137.16	119.70
86	A8	21	U	O3'-P-O5'	14.53	131.60	104.00
36	B2	32	U	O4'-C1'-N1	14.52	119.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	77	A	P-O3'-C3'	14.52	137.13	119.70
36	B2	1751	G	O4'-C1'-N9	14.52	119.81	108.20
83	A5	493	A	P-O3'-C3'	14.50	137.10	119.70
36	B2	1635	U	O4'-C1'-N1	14.50	119.80	108.20
36	B2	1545	U	O4'-C1'-N1	14.48	119.78	108.20
83	A5	1588	A	O4'-C1'-N9	14.45	119.76	108.20
83	A5	3687	A	N9-C1'-C2'	14.41	132.74	114.00
83	A5	780	U	O4'-C1'-N1	14.39	119.71	108.20
36	B2	837	A	P-O3'-C3'	14.36	136.93	119.70
83	A5	610	G	P-O3'-C3'	14.35	136.91	119.70
86	A8	37	U	O4'-C1'-N1	14.34	119.67	108.20
83	A5	3744	U	O4'-C1'-N1	14.34	119.67	108.20
83	A5	2602	A	O4'-C1'-N9	14.33	119.67	108.20
83	A5	2659	A	O4'-C1'-N9	14.32	119.66	108.20
83	A5	667	U	N1-C1'-C2'	14.32	132.62	114.00
83	A5	2918	A	O4'-C1'-N9	14.31	119.65	108.20
36	B2	856	A	O4'-C1'-N9	14.30	119.64	108.20
83	A5	1581	G	P-O3'-C3'	14.30	136.87	119.70
36	B2	339	U	O4'-C1'-N1	14.26	119.61	108.20
83	A5	1304	A	O4'-C1'-N9	14.26	119.61	108.20
83	A5	2137	U	P-O3'-C3'	14.26	136.81	119.70
83	A5	995	G	O4'-C1'-N9	14.26	119.61	108.20
83	A5	359	G	O4'-C1'-N9	14.26	119.61	108.20
83	A5	270	G	O4'-C1'-N9	14.26	119.61	108.20
83	A5	3258	C	N1-C1'-C2'	14.26	132.53	114.00
83	A5	3753	A	O4'-C1'-N9	14.26	119.61	108.20
36	B2	1993	U	O4'-C1'-N1	14.25	119.60	108.20
36	B2	1683	U	O4'-C1'-N1	14.23	119.58	108.20
83	A5	2882	A	N9-C1'-C2'	14.22	132.49	114.00
83	A5	3567	A	P-O3'-C3'	14.22	136.77	119.70
83	A5	3969	G	P-O3'-C3'	14.20	136.74	119.70
36	B2	1188	G	P-O3'-C3'	14.19	136.73	119.70
36	B2	285	U	P-O3'-C3'	14.18	136.71	119.70
36	B2	860	U	O4'-C1'-N1	14.18	119.54	108.20
36	B2	1361	C	O4'-C1'-N1	14.17	119.54	108.20
85	A7	32	U	O4'-C1'-N1	14.16	119.53	108.20
83	A5	1116	G	P-O3'-C3'	14.15	136.68	119.70
83	A5	535	A	P-O3'-C3'	14.12	136.65	119.70
36	B2	1908	U	O4'-C1'-N1	14.11	119.49	108.20
83	A5	187	A	P-O3'-C3'	14.09	136.61	119.70
36	B2	429	C	N1-C1'-C2'	14.08	132.31	114.00
36	B2	187	A	P-O3'-C3'	14.06	136.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1358	U	O4'-C1'-N1	14.06	119.45	108.20
36	B2	587	A	O4'-C1'-N9	14.06	119.44	108.20
83	A5	1801	U	P-O3'-C3'	14.04	136.55	119.70
36	B2	1187	U	O4'-C1'-N1	14.03	119.43	108.20
83	A5	1309	U	P-O5'-C5'	14.01	143.32	120.90
86	A8	21	U	P-O3'-C3'	-14.01	102.89	119.70
83	A5	1714	U	O4'-C1'-N1	14.01	119.40	108.20
83	A5	1778	A	C4'-C3'-O3'	14.00	141.00	113.00
83	A5	3476	G	O4'-C1'-N9	14.00	119.40	108.20
36	B2	1329	A	P-O3'-C3'	13.99	136.49	119.70
83	A5	187	A	P-O5'-C5'	13.99	143.29	120.90
36	B2	199	G	P-O3'-C3'	13.98	136.47	119.70
36	B2	68	C	P-O3'-C3'	13.96	136.45	119.70
36	B2	207	U	O4'-C1'-N1	13.95	119.36	108.20
83	A5	2626	C	N1-C1'-C2'	13.95	132.13	114.00
83	A5	3857	G	O4'-C1'-N9	13.93	119.34	108.20
83	A5	392	A	O4'-C1'-N9	13.93	119.34	108.20
83	A5	652	G	P-O3'-C3'	13.92	136.40	119.70
85	A7	64	G	P-O5'-C5'	-13.92	98.63	120.90
36	B2	861	U	O4'-C1'-N1	13.89	119.31	108.20
85	A7	43	U	N1-C1'-C2'	13.89	132.06	114.00
83	A5	3404	A	O4'-C1'-N9	13.89	119.31	108.20
36	B2	1499	U	P-O3'-C3'	13.89	136.37	119.70
83	A5	157	C	P-O3'-C3'	13.89	136.36	119.70
36	B2	1169	C	C4'-C3'-O3'	-13.88	80.24	109.40
83	A5	645	U	O4'-C1'-N1	13.88	119.30	108.20
83	A5	1809	A	O4'-C1'-N9	13.88	119.30	108.20
83	A5	1724	A	N9-C1'-C2'	13.88	132.04	114.00
83	A5	3368	C	C3'-C2'-C1'	-13.87	90.41	101.50
83	A5	2122	G	N9-C1'-C2'	13.86	132.02	114.00
83	A5	525	U	O4'-C1'-N1	13.85	119.28	108.20
83	A5	2767	U	N1-C1'-C2'	13.84	131.99	114.00
83	A5	1581	G	O4'-C1'-N9	13.83	119.27	108.20
83	A5	2155	A	P-O3'-C3'	13.83	136.29	119.70
83	A5	2898	U	O4'-C1'-N1	13.82	119.26	108.20
83	A5	3689	U	O4'-C1'-N1	13.82	119.25	108.20
36	B2	1353	U	O4'-C1'-N1	13.81	119.25	108.20
83	A5	2054	U	O4'-C1'-N1	13.80	119.24	108.20
36	B2	647	U	O4'-C1'-N1	13.80	119.24	108.20
83	A5	2041	G	P-O3'-C3'	-13.80	103.14	119.70
83	A5	2833	U	P-O3'-C3'	13.79	136.25	119.70
83	A5	3833	U	O4'-C1'-N1	13.79	119.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3814	U	O4'-C1'-N1	13.76	119.21	108.20
36	B2	1679	U	P-O3'-C3'	13.76	136.21	119.70
86	A8	6	U	O4'-C1'-N1	13.76	119.21	108.20
86	A8	115	U	O4'-C1'-N1	13.76	119.21	108.20
83	A5	990	U	O4'-C1'-N1	13.75	119.20	108.20
83	A5	2824	U	O4'-C1'-N1	13.75	119.20	108.20
36	B2	216	U	P-O3'-C3'	13.75	136.20	119.70
36	B2	1586	U	O4'-C1'-N1	13.74	119.19	108.20
83	A5	1417	G	C1'-O4'-C4'	-13.73	98.92	109.90
83	A5	85	U	O4'-C1'-N1	13.72	119.18	108.20
83	A5	3746	A	O4'-C1'-N9	13.72	119.18	108.20
83	A5	2552	G	P-O3'-C3'	13.72	136.16	119.70
36	B2	942	A	O4'-C1'-N9	13.72	119.17	108.20
36	B2	283	U	P-O3'-C3'	13.71	136.15	119.70
83	A5	730	U	O4'-C1'-N1	13.70	119.16	108.20
83	A5	2634	A	O4'-C1'-N9	13.70	119.16	108.20
83	A5	1531	U	O4'-C1'-N1	13.68	119.15	108.20
83	A5	1160	U	C3'-C2'-C1'	13.68	112.44	101.50
36	B2	137	C	P-O3'-C3'	13.68	136.12	119.70
83	A5	1240	A	P-O3'-C3'	13.65	136.08	119.70
83	A5	2086	U	O4'-C1'-N1	13.60	119.08	108.20
83	A5	1306	G	P-O3'-C3'	13.60	136.02	119.70
83	A5	3891	U	P-O3'-C3'	13.60	136.02	119.70
83	A5	3803	C	N1-C1'-C2'	13.58	131.66	114.00
36	B2	1338	U	P-O3'-C3'	13.58	135.99	119.70
83	A5	2124	G	P-O3'-C3'	13.58	135.99	119.70
83	A5	2755	G	O4'-C1'-N9	13.58	119.06	108.20
83	A5	3412	U	O4'-C1'-N1	13.57	119.06	108.20
36	B2	422	A	P-O3'-C3'	13.55	135.97	119.70
83	A5	301	U	O4'-C1'-N1	13.55	119.04	108.20
83	A5	640	U	P-O3'-C3'	13.55	135.96	119.70
83	A5	929	A	P-O3'-C3'	13.54	135.94	119.70
83	A5	1698	A	O4'-C1'-N9	13.54	119.03	108.20
83	A5	3962	A	P-O3'-C3'	13.51	135.91	119.70
83	A5	2026	G	O4'-C1'-N9	13.51	119.01	108.20
36	B2	521	U	O4'-C1'-N1	13.51	119.01	108.20
36	B2	898	U	O4'-C1'-N1	13.51	119.00	108.20
83	A5	1394	U	O4'-C1'-N1	13.50	119.00	108.20
83	A5	1900	U	O4'-C1'-N1	13.49	119.00	108.20
83	A5	68	G	O4'-C1'-N9	13.49	118.99	108.20
83	A5	2782	A	O4'-C1'-N9	13.48	118.99	108.20
83	A5	1448	G	O4'-C1'-N9	13.47	118.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2981	G	P-O3'-C3'	13.47	135.87	119.70
83	A5	2929	U	P-O3'-C3'	13.46	135.86	119.70
83	A5	2471	A	P-O3'-C3'	13.46	135.85	119.70
83	A5	3024	U	C4'-C3'-O3'	-13.44	81.17	109.40
83	A5	2969	U	P-O3'-C3'	13.44	135.83	119.70
36	B2	1162	U	O4'-C1'-N1	13.43	118.94	108.20
83	A5	484	A	P-O3'-C3'	13.42	135.80	119.70
48	CD	226	TYR	CB-CG-CD2	-13.40	112.96	121.00
83	A5	261	U	O4'-C1'-N1	13.40	118.92	108.20
83	A5	2491	C	P-O3'-C3'	13.40	135.78	119.70
83	A5	3640	A	O4'-C1'-N9	13.40	118.92	108.20
83	A5	1594	U	P-O3'-C3'	13.39	135.76	119.70
83	A5	1302	U	O4'-C1'-N1	13.38	118.90	108.20
85	A7	73	U	P-O5'-C5'	13.37	142.29	120.90
36	B2	25	U	P-O3'-C3'	13.36	135.73	119.70
36	B2	611	U	O4'-C1'-N1	13.36	118.89	108.20
83	A5	1948	C	N1-C1'-C2'	13.34	131.34	114.00
83	A5	821	U	O4'-C1'-N1	13.34	118.87	108.20
83	A5	1336	U	O4'-C1'-N1	13.34	118.87	108.20
83	A5	228	C	P-O3'-C3'	13.32	135.69	119.70
36	B2	505	G	O4'-C1'-N9	13.31	118.85	108.20
7	AM	39	VAL	C-N-CA	13.31	154.97	121.70
36	B2	1442	U	O4'-C1'-N1	13.29	118.84	108.20
36	B2	1575	A	O4'-C1'-N9	13.29	118.83	108.20
36	B2	65	A	O4'-C1'-N9	13.29	118.83	108.20
83	A5	2495	G	O4'-C1'-N9	13.28	118.82	108.20
83	A5	176	A	O4'-C1'-N9	13.27	118.82	108.20
36	B2	93	A	O4'-C1'-N9	13.26	118.81	108.20
83	A5	1395	U	P-O3'-C3'	13.26	135.61	119.70
83	A5	1072	U	O4'-C1'-N1	13.24	118.79	108.20
83	A5	168	G	O4'-C1'-N9	13.24	118.79	108.20
83	A5	2139	U	O4'-C1'-N1	13.24	118.79	108.20
36	B2	1764	U	O4'-C1'-N1	13.23	118.78	108.20
83	A5	2839	A	P-O3'-C3'	-13.22	103.83	119.70
36	B2	878	C	P-O3'-C3'	13.21	135.56	119.70
36	B2	1587	U	O4'-C1'-N1	13.21	118.77	108.20
83	A5	3591	A	O4'-C1'-N9	13.20	118.76	108.20
83	A5	1090	U	O4'-C1'-N1	13.20	118.76	108.20
83	A5	846	U	O4'-C1'-N1	13.19	118.75	108.20
83	A5	1444	G	O4'-C1'-N9	13.18	118.75	108.20
36	B2	915	U	O4'-C1'-N1	13.17	118.73	108.20
36	B2	215	C	P-O3'-C3'	13.17	135.50	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	713	A	P-O3'-C3'	13.16	135.50	119.70
83	A5	3924	U	P-O3'-C3'	13.16	135.50	119.70
83	A5	3252	G	O4'-C1'-N9	13.16	118.72	108.20
83	A5	944	G	P-O3'-C3'	13.15	135.49	119.70
85	A7	115	U	O4'-C1'-N1	13.15	118.72	108.20
83	A5	412	U	O4'-C1'-N1	13.13	118.70	108.20
83	A5	1785	G	O4'-C1'-N9	13.13	118.70	108.20
83	A5	704	U	O4'-C1'-N1	13.12	118.69	108.20
83	A5	978	G	O4'-C1'-N9	13.11	118.69	108.20
36	B2	1875	G	O4'-C1'-N9	13.10	118.68	108.20
83	A5	1804	A	P-O3'-C3'	13.10	135.42	119.70
83	A5	614	G	O4'-C1'-N9	13.10	118.68	108.20
83	A5	4	U	P-O3'-C3'	13.09	135.41	119.70
83	A5	2996	U	N1-C1'-C2'	13.08	131.00	114.00
83	A5	304	U	P-O3'-C3'	13.07	135.38	119.70
83	A5	189	A	P-O3'-C3'	13.06	135.37	119.70
83	A5	3530	A	P-O3'-C3'	13.05	135.36	119.70
36	B2	1452	U	O4'-C1'-N1	13.04	118.63	108.20
83	A5	1181	A	N9-C1'-C2'	13.03	130.94	114.00
83	A5	731	U	O4'-C1'-N1	13.02	118.61	108.20
83	A5	2116	U	P-O3'-C3'	13.01	135.32	119.70
83	A5	771	A	P-O3'-C3'	13.01	135.31	119.70
36	B2	1145	U	O4'-C1'-N1	13.01	118.61	108.20
83	A5	1517	A	O4'-C1'-N9	13.01	118.61	108.20
83	A5	3754	C	N1-C1'-C2'	13.01	130.91	114.00
83	A5	188	G	P-O5'-C5'	12.99	141.69	120.90
83	A5	3673	G	O4'-C1'-N9	12.99	118.59	108.20
69	Cg	32	TYR	CB-CG-CD2	-12.99	113.21	121.00
83	A5	669	U	P-O3'-C3'	12.97	135.27	119.70
36	B2	1619	A	O4'-C1'-N9	12.97	118.58	108.20
83	A5	1177	U	O4'-C1'-N1	12.97	118.58	108.20
36	B2	495	U	O4'-C1'-N1	12.97	118.58	108.20
83	A5	3436	U	O4'-C1'-N1	12.96	118.57	108.20
83	A5	3754	C	C3'-C2'-C1'	12.95	111.86	101.50
83	A5	4	U	C1'-O4'-C4'	12.94	120.25	109.90
83	A5	1407	C	P-O3'-C3'	12.93	135.22	119.70
83	A5	1689	G	N9-C1'-C2'	12.91	130.78	114.00
83	A5	25	G	O4'-C1'-N9	12.91	118.53	108.20
83	A5	3049	A	P-O3'-C3'	12.91	135.19	119.70
83	A5	18	U	O4'-C1'-N1	12.89	118.52	108.20
86	A8	68	U	N1-C1'-C2'	12.89	130.75	114.00
86	A8	108	A	C4'-C3'-O3'	-12.88	82.35	109.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1542	U	O4'-C1'-N1	12.88	118.50	108.20
83	A5	175	U	O4'-C1'-N1	12.88	118.50	108.20
83	A5	386	G	P-O3'-C3'	-12.88	104.25	119.70
83	A5	1566	U	O4'-C1'-N1	12.86	118.49	108.20
83	A5	1933	U	O4'-C1'-N1	12.87	118.49	108.20
83	A5	1522	G	P-O3'-C3'	12.85	135.12	119.70
36	B2	251	G	O4'-C1'-C2'	-12.85	92.95	105.80
83	A5	3801	A	C5'-C4'-C3'	-12.85	95.45	116.00
83	A5	2535	U	O4'-C1'-N1	12.84	118.47	108.20
36	B2	1930	U	O4'-C1'-N1	12.84	118.47	108.20
83	A5	2729	U	O4'-C1'-N1	12.84	118.47	108.20
36	B2	704	U	P-O3'-C3'	12.83	135.10	119.70
83	A5	1404	A	N9-C1'-C2'	12.83	130.68	114.00
83	A5	1008	A	O4'-C1'-N9	12.83	118.46	108.20
36	B2	718	C	P-O3'-C3'	12.80	135.06	119.70
83	A5	903	A	O4'-C1'-N9	12.80	118.44	108.20
83	A5	3683	G	C1'-O4'-C4'	-12.80	99.66	109.90
36	B2	1327	U	O4'-C1'-N1	12.80	118.44	108.20
83	A5	3443	A	O4'-C1'-N9	12.79	118.44	108.20
83	A5	3838	A	O4'-C1'-N9	12.79	118.43	108.20
36	B2	33	U	O4'-C1'-N1	12.79	118.43	108.20
83	A5	2273	A	O4'-C1'-N9	12.79	118.43	108.20
83	A5	2155	A	C3'-C2'-C1'	12.78	111.72	101.50
36	B2	308	G	O4'-C1'-N9	12.78	118.42	108.20
83	A5	864	G	N9-C1'-C2'	12.78	130.61	114.00
83	A5	3534	U	O4'-C1'-N1	12.78	118.42	108.20
1	Az	255	PHE	CB-CG-CD1	-12.77	111.86	120.80
36	B2	1795	U	O4'-C1'-N1	12.77	118.41	108.20
84	A9	28	G	O4'-C1'-N9	12.76	118.41	108.20
38	Cz	28	PHE	CB-CG-CD2	12.76	129.73	120.80
83	A5	181	A	P-O3'-C3'	12.75	135.00	119.70
83	A5	2272	U	O4'-C1'-N1	12.75	118.40	108.20
83	A5	1180	U	O4'-C1'-N1	12.75	118.40	108.20
83	A5	2750	A	P-O3'-C3'	12.75	135.00	119.70
36	B2	866	U	O4'-C1'-N1	12.75	118.40	108.20
83	A5	1288	U	P-O3'-C3'	12.74	134.99	119.70
36	B2	1102	U	O4'-C1'-N1	12.74	118.39	108.20
83	A5	2041	G	C4'-C3'-O3'	-12.73	82.67	109.40
36	B2	1052	U	O4'-C1'-N1	12.72	118.38	108.20
83	A5	303	G	C4'-C3'-O3'	-12.72	82.69	109.40
83	A5	2608	G	O4'-C1'-N9	12.71	118.37	108.20
83	A5	176	A	P-O3'-C3'	12.71	134.95	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1503	U	P-O3'-C3'	12.70	134.94	119.70
83	A5	3334	A	O4'-C1'-N9	12.70	118.36	108.20
83	A5	1484	U	O4'-C1'-N1	12.69	118.35	108.20
83	A5	3712	G	N9-C1'-C2'	12.68	130.49	114.00
36	B2	1900	U	O4'-C1'-N1	12.68	118.34	108.20
83	A5	2115	U	O4'-C1'-N1	12.68	118.34	108.20
83	A5	3929	U	O4'-C1'-N1	12.68	118.34	108.20
36	B2	576	G	O4'-C1'-N9	12.67	118.34	108.20
36	B2	284	G	O4'-C1'-N9	-12.66	98.07	108.20
36	B2	420	U	O4'-C1'-N1	12.66	118.33	108.20
36	B2	647	U	P-O3'-C3'	12.65	134.88	119.70
83	A5	2907	U	C1'-O4'-C4'	12.64	120.02	109.90
83	A5	1891	U	P-O3'-C3'	12.63	134.86	119.70
83	A5	3338	U	O4'-C1'-N1	12.63	118.31	108.20
1	Az	255	PHE	CB-CG-CD2	12.63	129.64	120.80
83	A5	235	A	O4'-C1'-N9	12.63	118.31	108.20
36	B2	617	U	O4'-C1'-N1	12.62	118.30	108.20
85	A7	38	U	O3'-P-O5'	12.62	127.98	104.00
83	A5	1811	A	O3'-P-O5'	12.62	127.97	104.00
36	B2	1428	A	O4'-C1'-C2'	-12.62	93.18	105.80
83	A5	3896	G	O4'-C1'-N9	12.61	118.29	108.20
83	A5	2676	U	N1-C1'-C2'	12.59	130.37	114.00
36	B2	256	C	O3'-P-O5'	-12.59	80.08	104.00
36	B2	907	U	P-O3'-C3'	12.59	134.80	119.70
36	B2	917	U	O4'-C1'-N1	12.59	118.27	108.20
83	A5	416	C	O4'-C1'-C2'	-12.57	93.23	105.80
83	A5	2029	G	P-O3'-C3'	12.56	134.78	119.70
83	A5	3142	G	O4'-C1'-N9	12.56	118.25	108.20
36	B2	265	A	P-O3'-C3'	12.55	134.76	119.70
36	B2	1021	A	O4'-C1'-N9	12.55	118.24	108.20
83	A5	3786	U	O4'-C1'-N1	12.54	118.23	108.20
83	A5	1426	U	O4'-C1'-N1	12.53	118.23	108.20
36	B2	925	U	O4'-C1'-N1	12.53	118.22	108.20
83	A5	2536	G	O4'-C1'-N9	12.52	118.22	108.20
36	B2	1650	G	N9-C1'-C2'	12.52	130.27	114.00
83	A5	513	G	P-O3'-C3'	12.51	134.72	119.70
83	A5	2917	A	O4'-C1'-N9	12.51	118.21	108.20
83	A5	505	U	O4'-C1'-N1	12.50	118.20	108.20
83	A5	173	A	O4'-C1'-N9	12.49	118.19	108.20
83	A5	3361	U	O4'-C1'-N1	12.49	118.19	108.20
83	A5	3802	U	P-O3'-C3'	12.48	134.68	119.70
36	B2	154	A	P-O3'-C3'	12.48	134.67	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3670	G	C1'-O4'-C4'	-12.47	99.92	109.90
83	A5	1007	A	O4'-C1'-N9	12.46	118.17	108.20
83	A5	1382	U	O4'-C1'-N1	12.46	118.17	108.20
36	B2	1803	A	P-O3'-C3'	-12.45	104.76	119.70
36	B2	264	C	N1-C1'-C2'	12.45	130.18	114.00
86	A8	29	U	O4'-C1'-N1	12.45	118.16	108.20
83	A5	272	U	O4'-C1'-N1	12.44	118.15	108.20
85	A7	49	A	O4'-C1'-C2'	-12.43	93.37	105.80
83	A5	3592	C	O4'-C1'-N1	12.43	118.14	108.20
36	B2	640	U	O4'-C1'-N1	12.42	118.14	108.20
83	A5	194	A	P-O3'-C3'	12.42	134.60	119.70
36	B2	125	C	O4'-C1'-N1	12.41	118.13	108.20
83	A5	313	A	O4'-C1'-N9	12.41	118.13	108.20
83	A5	2899	U	O4'-C1'-N1	12.41	118.13	108.20
36	B2	624	G	O4'-C1'-N9	12.41	118.12	108.20
83	A5	29	U	O4'-C1'-N1	12.41	118.13	108.20
83	A5	3840	G	O4'-C1'-N9	12.40	118.12	108.20
36	B2	939	G	O4'-C1'-N9	12.40	118.12	108.20
83	A5	3405	U	N1-C1'-C2'	12.40	130.12	114.00
83	A5	87	U	O4'-C1'-N1	12.38	118.11	108.20
83	A5	3739	U	O4'-C1'-N1	12.39	118.11	108.20
83	A5	3763	U	O4'-C1'-N1	12.38	118.11	108.20
83	A5	234	G	O4'-C1'-N9	12.38	118.10	108.20
37	BC	74	C	P-O3'-C3'	12.37	134.54	119.70
36	B2	147	U	O4'-C1'-N1	12.36	118.09	108.20
83	A5	270	G	P-O3'-C3'	12.36	134.53	119.70
36	B2	1217	U	O4'-C1'-N1	12.35	118.08	108.20
83	A5	2786	U	O4'-C1'-N1	12.34	118.08	108.20
83	A5	2781	G	P-O3'-C3'	12.33	134.50	119.70
36	B2	886	G	O4'-C1'-N9	12.33	118.06	108.20
83	A5	17	C	C3'-C2'-C1'	12.33	111.36	101.50
85	A7	29	C	O4'-C1'-N1	12.33	118.06	108.20
36	B2	1090	A	N9-C1'-C2'	12.32	130.02	114.00
83	A5	914	C	O4'-C1'-N1	12.32	118.06	108.20
83	A5	930	U	O4'-C1'-N1	12.32	118.06	108.20
36	B2	1938	U	O4'-C1'-N1	12.32	118.05	108.20
79	CJ	100	ARG	NE-CZ-NH2	-12.32	114.14	120.30
83	A5	2126	A	C1'-O4'-C4'	12.32	119.75	109.90
83	A5	3304	U	P-O3'-C3'	12.32	134.48	119.70
36	B2	1401	U	O4'-C1'-N1	12.31	118.05	108.20
83	A5	1794	G	O4'-C1'-N9	12.30	118.04	108.20
36	B2	963	G	O4'-C1'-N9	12.29	118.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1491	U	C4'-C3'-O3'	-12.29	83.59	109.40
83	A5	1625	U	O4'-C1'-N1	12.29	118.03	108.20
36	B2	244	A	P-O3'-C3'	12.29	134.44	119.70
83	A5	24	G	N9-C1'-C2'	12.28	129.97	114.00
36	B2	1034	U	O4'-C1'-N1	12.28	118.02	108.20
37	BC	30	G	O4'-C1'-N9	12.28	118.02	108.20
83	A5	885	U	N1-C1'-C2'	12.28	129.96	114.00
83	A5	1862	U	P-O3'-C3'	12.28	134.43	119.70
36	B2	641	U	O4'-C1'-N1	12.27	118.02	108.20
83	A5	1473	U	O4'-C1'-N1	12.27	118.02	108.20
83	A5	9	A	P-O3'-C3'	12.27	134.42	119.70
83	A5	3539	C	N1-C1'-C2'	12.27	129.95	114.00
83	A5	4	U	O4'-C1'-N1	12.26	118.01	108.20
83	A5	3600	G	O4'-C1'-N9	12.26	118.01	108.20
83	A5	524	A	O4'-C1'-N9	12.26	118.00	108.20
83	A5	1289	C	O4'-C1'-N1	12.25	118.00	108.20
83	A5	2047	U	O4'-C1'-N1	12.24	118.00	108.20
83	A5	3125	A	O4'-C1'-C2'	-12.24	93.56	105.80
36	B2	267	G	C1'-O4'-C4'	-12.23	100.11	109.90
83	A5	3912	U	O4'-C1'-N1	12.23	117.99	108.20
83	A5	278	U	O4'-C1'-N1	12.23	117.98	108.20
83	A5	735	U	O4'-C1'-N1	12.23	117.98	108.20
83	A5	3801	A	C2'-C3'-O3'	12.22	136.38	109.50
83	A5	596	A	O4'-C1'-N9	12.21	117.97	108.20
36	B2	614	A	O4'-C1'-N9	12.21	117.96	108.20
36	B2	929	A	P-O3'-C3'	12.20	134.34	119.70
83	A5	2907	U	O4'-C1'-N1	12.20	117.96	108.20
83	A5	3025	A	P-O5'-C5'	-12.19	101.40	120.90
83	A5	1453	U	O4'-C1'-N1	12.18	117.94	108.20
36	B2	1872	G	O4'-C1'-N9	12.17	117.94	108.20
85	A7	47	C	P-O3'-C3'	12.16	134.29	119.70
37	BC	64	G	O4'-C1'-N9	12.15	117.92	108.20
83	A5	2472	A	O4'-C1'-N9	12.15	117.92	108.20
83	A5	3480	U	O4'-C1'-N1	12.15	117.92	108.20
83	A5	3514	C	N1-C1'-C2'	-12.15	98.20	114.00
83	A5	1709	A	O4'-C1'-N9	12.14	117.92	108.20
85	A7	95	U	O4'-C1'-N1	12.14	117.91	108.20
83	A5	871	A	O4'-C1'-N9	12.14	117.91	108.20
36	B2	139	U	P-O3'-C3'	-12.14	105.14	119.70
83	A5	2650	G	O4'-C1'-N9	12.13	117.91	108.20
36	B2	157	C	P-O5'-C5'	12.13	140.30	120.90
36	B2	1519	U	O4'-C1'-N1	12.13	117.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3629	U	O4'-C1'-N1	12.13	117.90	108.20
83	A5	1248	A	P-O3'-C3'	12.12	134.25	119.70
36	B2	300	U	O4'-C1'-N1	12.12	117.90	108.20
36	B2	1807	C	P-O3'-C3'	12.12	134.24	119.70
83	A5	1639	U	O4'-C1'-N1	12.12	117.89	108.20
83	A5	637	U	O4'-C1'-N1	12.11	117.89	108.20
5	AO	99	ALA	C-N-CA	12.10	151.96	121.70
83	A5	1764	G	O4'-C1'-N9	12.10	117.88	108.20
83	A5	2208	G	O4'-C1'-N9	12.10	117.88	108.20
83	A5	2879	A	P-O3'-C3'	12.09	134.21	119.70
83	A5	3682	U	O4'-C1'-N1	12.08	117.86	108.20
45	Ca	51	PRO	C-N-CA	12.08	147.66	122.30
36	B2	863	A	P-O3'-C3'	-12.08	105.21	119.70
83	A5	245	G	O4'-C1'-N9	12.07	117.86	108.20
83	A5	3118	U	P-O3'-C3'	12.07	134.19	119.70
83	A5	1177	U	P-O3'-C3'	12.06	134.18	119.70
83	A5	1891	U	O4'-C1'-N1	12.04	117.83	108.20
83	A5	465	U	O4'-C1'-N1	12.04	117.83	108.20
83	A5	3676	C	P-O3'-C3'	12.03	134.14	119.70
36	B2	1620	G	C1'-O4'-C4'	-12.02	100.28	109.90
36	B2	329	U	O4'-C1'-N1	12.02	117.82	108.20
36	B2	1951	A	O4'-C1'-N9	12.02	117.82	108.20
85	A7	71	G	P-O3'-C3'	12.00	134.10	119.70
83	A5	963	G	O4'-C1'-N9	11.99	117.79	108.20
83	A5	283	A	O4'-C1'-N9	11.98	117.79	108.20
36	B2	703	A	O4'-C1'-N9	11.98	117.78	108.20
83	A5	1914	U	O4'-C1'-N1	11.98	117.78	108.20
83	A5	3106	G	O4'-C1'-N9	11.97	117.78	108.20
59	CZ	114	ARG	NE-CZ-NH1	11.97	126.29	120.30
36	B2	138	U	C2'-C3'-O3'	11.97	135.83	109.50
83	A5	1180	U	P-O3'-C3'	11.97	134.06	119.70
36	B2	982	G	O4'-C1'-N9	11.97	117.77	108.20
83	A5	2007	U	O4'-C1'-N1	11.96	117.77	108.20
83	A5	1337	U	O4'-C1'-N1	11.96	117.77	108.20
83	A5	123	U	P-O3'-C3'	11.96	134.05	119.70
83	A5	199	U	O4'-C1'-N1	11.96	117.77	108.20
83	A5	1755	U	O4'-C1'-N1	11.96	117.76	108.20
83	A5	3554	G	C4'-C3'-O3'	-11.95	84.31	109.40
36	B2	1332	G	O4'-C1'-N9	11.94	117.75	108.20
83	A5	461	U	P-O3'-C3'	11.94	134.03	119.70
83	A5	764	A	P-O3'-C3'	11.94	134.03	119.70
83	A5	3837	A	O4'-C1'-N9	11.94	117.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1226	G	P-O3'-C3'	11.94	134.02	119.70
36	B2	1842	U	O4'-C1'-N1	11.93	117.75	108.20
83	A5	775	U	N1-C1'-C2'	11.93	129.51	114.00
83	A5	696	U	O4'-C1'-N1	11.93	117.75	108.20
83	A5	1605	U	O4'-C1'-N1	11.92	117.73	108.20
83	A5	58	G	O4'-C1'-N9	11.91	117.73	108.20
83	A5	2589	U	O4'-C1'-N1	11.91	117.73	108.20
83	A5	646	G	O4'-C1'-N9	11.91	117.73	108.20
83	A5	3803	C	C3'-C2'-C1'	11.90	111.02	101.50
83	A5	2673	A	N9-C1'-C2'	11.87	129.43	114.00
83	A5	2919	A	P-O3'-C3'	11.87	133.94	119.70
36	B2	824	U	O4'-C1'-N1	11.85	117.68	108.20
83	A5	919	G	O4'-C1'-N9	11.85	117.68	108.20
36	B2	560	G	O4'-C1'-N9	11.85	117.68	108.20
36	B2	1654	G	O4'-C1'-N9	11.85	117.68	108.20
83	A5	2758	U	O4'-C1'-N1	11.85	117.68	108.20
36	B2	1179	A	O4'-C1'-N9	11.84	117.67	108.20
83	A5	332	U	O4'-C1'-N1	11.84	117.67	108.20
83	A5	3641	U	O4'-C1'-N1	11.83	117.66	108.20
36	B2	155	U	O4'-C1'-N1	11.81	117.65	108.20
83	A5	1959	A	P-O5'-C5'	11.81	139.80	120.90
83	A5	3943	G	O4'-C1'-C2'	11.80	118.22	107.60
83	A5	3937	U	O4'-C1'-N1	11.80	117.64	108.20
36	B2	1284	A	P-O3'-C3'	11.79	133.85	119.70
36	B2	618	G	O4'-C1'-N9	11.79	117.63	108.20
36	B2	1550	C	P-O3'-C3'	11.79	133.84	119.70
83	A5	3876	U	N1-C1'-C2'	11.79	129.32	114.00
83	A5	177	U	O4'-C1'-N1	11.78	117.62	108.20
83	A5	3781	U	O4'-C1'-N1	11.78	117.62	108.20
83	A5	130	C	P-O3'-C3'	11.75	133.80	119.70
83	A5	1519	A	O4'-C1'-N9	11.75	117.60	108.20
36	B2	1992	A	P-O3'-C3'	11.74	133.79	119.70
83	A5	3086	G	P-O3'-C3'	11.73	133.77	119.70
36	B2	24	U	O4'-C1'-N1	11.72	117.58	108.20
83	A5	994	U	O4'-C1'-N1	11.72	117.57	108.20
36	B2	1326	U	O4'-C1'-N1	11.71	117.57	108.20
83	A5	687	U	O4'-C1'-N1	11.70	117.56	108.20
1	Az	731	TYR	CB-CG-CD1	-11.70	113.98	121.00
36	B2	1356	U	O4'-C1'-N1	11.70	117.56	108.20
1	Az	218	GLY	N-CA-C	11.69	142.32	113.10
83	A5	272	U	P-O3'-C3'	11.69	133.73	119.70
83	A5	1406	G	P-O3'-C3'	11.69	133.72	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3840	G	O4'-C1'-C2'	-11.68	94.12	105.80
86	A8	84	U	P-O3'-C3'	11.68	133.71	119.70
83	A5	2008	U	N1-C1'-C2'	11.67	129.18	114.00
36	B2	1857	U	O4'-C1'-N1	11.67	117.54	108.20
83	A5	1021	U	O4'-C1'-N1	11.67	117.53	108.20
83	A5	1668	U	C3'-C2'-C1'	-11.67	92.17	101.50
83	A5	2082	U	O4'-C1'-N1	11.66	117.53	108.20
52	CS	175	TYR	CB-CG-CD1	11.65	127.99	121.00
36	B2	591	C	N1-C1'-C2'	11.65	129.14	114.00
36	B2	1821	G	C1'-O4'-C4'	-11.65	100.58	109.90
36	B2	1695	A	C3'-C2'-C1'	-11.64	92.18	101.50
84	A9	4	U	O4'-C1'-N1	11.64	117.51	108.20
83	A5	2821	A	O4'-C1'-N9	11.64	117.51	108.20
36	B2	947	U	N1-C1'-C2'	11.63	129.12	114.00
63	CB	335	GLY	N-CA-C	11.63	142.18	113.10
36	B2	1429	U	O4'-C1'-N1	11.63	117.50	108.20
83	A5	2694	G	O4'-C1'-N9	11.63	117.50	108.20
84	A9	16	U	O4'-C1'-N1	11.63	117.50	108.20
83	A5	1257	U	O4'-C1'-N1	11.63	117.50	108.20
83	A5	3672	U	O4'-C1'-N1	11.62	117.50	108.20
14	AT	101	ARG	NE-CZ-NH2	-11.62	114.49	120.30
83	A5	3150	G	O4'-C1'-N9	11.62	117.50	108.20
83	A5	159	G	O4'-C1'-N9	11.61	117.49	108.20
83	A5	2216	A	N9-C1'-C2'	-11.61	98.91	114.00
83	A5	593	U	O4'-C1'-N1	11.60	117.48	108.20
36	B2	876	U	O4'-C1'-N1	11.59	117.47	108.20
36	B2	1397	U	O4'-C1'-N1	11.59	117.47	108.20
83	A5	1035	G	O4'-C1'-N9	11.59	117.47	108.20
83	A5	755	A	C1'-O4'-C4'	11.58	119.17	109.90
83	A5	3250	U	O4'-C1'-N1	11.58	117.47	108.20
83	A5	1807	U	O4'-C1'-N1	11.58	117.46	108.20
83	A5	3778	U	O4'-C1'-N1	11.57	117.46	108.20
36	B2	952	G	O4'-C1'-N9	11.57	117.46	108.20
83	A5	864	G	C3'-C2'-C1'	11.57	110.76	101.50
36	B2	39	A	O4'-C1'-N9	11.56	117.45	108.20
36	B2	1402	U	N1-C1'-C2'	11.56	129.03	114.00
83	A5	2487	C	N1-C1'-C2'	11.56	129.03	114.00
83	A5	526	U	O4'-C1'-N1	11.56	117.44	108.20
83	A5	2742	G	O4'-C1'-N9	11.56	117.44	108.20
83	A5	1410	A	O4'-C1'-N9	11.55	117.44	108.20
83	A5	1712	C	P-O5'-C5'	11.55	139.38	120.90
36	B2	698	U	P-O5'-C5'	11.54	139.37	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1127	G	C1'-O4'-C4'	-11.54	100.67	109.90
86	A8	15	G	O4'-C1'-N9	11.54	117.43	108.20
36	B2	1665	U	P-O3'-C3'	11.54	133.55	119.70
83	A5	1688	A	O4'-C1'-N9	11.54	117.43	108.20
83	A5	1988	A	P-O5'-C5'	11.53	139.35	120.90
83	A5	980	A	P-O3'-C3'	11.53	133.53	119.70
36	B2	1680	G	O4'-C1'-N9	11.53	117.42	108.20
36	B2	1185	U	P-O3'-C3'	11.52	133.53	119.70
36	B2	29	U	O4'-C1'-N1	11.51	117.41	108.20
83	A5	1810	A	P-O5'-C5'	11.51	139.32	120.90
83	A5	2221	G	O4'-C1'-N9	11.51	117.41	108.20
83	A5	3317	U	O4'-C1'-N1	11.51	117.40	108.20
72	Ck	40	ARG	C-N-CA	11.50	150.46	121.70
83	A5	1697	U	O4'-C1'-N1	11.50	117.40	108.20
83	A5	1903	U	O4'-C1'-N1	11.50	117.40	108.20
83	A5	1968	A	C4'-C3'-O3'	-11.50	85.24	109.40
83	A5	2796	G	P-O3'-C3'	11.50	133.50	119.70
36	B2	1245	A	P-O3'-C3'	11.50	133.50	119.70
83	A5	2007	U	P-O3'-C3'	11.50	133.50	119.70
83	A5	2997	C	C4'-C3'-O3'	11.50	136.00	113.00
83	A5	1561	G	P-O3'-C3'	11.49	133.49	119.70
36	B2	158	U	O4'-C1'-N1	11.49	117.39	108.20
83	A5	580	A	P-O3'-C3'	11.49	133.49	119.70
83	A5	23	U	O4'-C1'-N1	11.48	117.38	108.20
83	A5	1417	G	O4'-C1'-C2'	11.48	117.93	107.60
36	B2	985	A	P-O3'-C3'	11.47	133.46	119.70
83	A5	732	U	O4'-C1'-N1	11.46	117.37	108.20
83	A5	1108	G	O4'-C1'-N9	11.46	117.37	108.20
36	B2	1547	U	O4'-C1'-N1	11.46	117.37	108.20
83	A5	1220	U	O4'-C1'-N1	11.45	117.36	108.20
83	A5	1744	U	P-O3'-C3'	11.45	133.44	119.70
83	A5	1888	A	N9-C1'-C2'	11.45	128.89	114.00
83	A5	2553	U	P-O3'-C3'	11.45	133.44	119.70
36	B2	1341	C	P-O3'-C3'	11.45	133.44	119.70
36	B2	1186	U	N1-C1'-C2'	11.44	128.87	114.00
83	A5	567	A	P-O3'-C3'	11.44	133.43	119.70
83	A5	3730	G	O4'-C1'-N9	11.44	117.35	108.20
83	A5	1784	A	O4'-C1'-N9	11.44	117.35	108.20
36	B2	248	G	P-O3'-C3'	11.43	133.41	119.70
36	B2	1741	A	P-O3'-C3'	11.43	133.41	119.70
83	A5	972	U	O4'-C1'-N1	11.42	117.34	108.20
36	B2	1274	U	O4'-C1'-N1	11.41	117.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1320	G	N9-C1'-C2'	11.41	128.83	114.00
83	A5	623	C	O4'-C1'-C2'	-11.40	94.40	105.80
83	A5	3855	A	O4'-C1'-N9	11.40	117.32	108.20
83	A5	1922	A	C4'-C3'-O3'	-11.40	85.45	109.40
83	A5	3867	A	O4'-C1'-N9	11.40	117.32	108.20
83	A5	1112	G	O4'-C1'-N9	11.39	117.31	108.20
83	A5	1801	U	C1'-O4'-C4'	11.39	119.02	109.90
36	B2	1574	U	O4'-C1'-N1	11.39	117.31	108.20
83	A5	3004	A	P-O3'-C3'	11.39	133.36	119.70
36	B2	1944	A	O4'-C1'-N9	11.38	117.31	108.20
37	BC	66	U	O4'-C1'-N1	11.38	117.31	108.20
83	A5	456	G	O4'-C1'-N9	11.38	117.31	108.20
83	A5	1140	G	O4'-C1'-N9	11.38	117.31	108.20
83	A5	1995	U	O4'-C1'-N1	11.38	117.30	108.20
83	A5	3291	U	O4'-C1'-N1	11.38	117.30	108.20
83	A5	132	U	P-O3'-C3'	11.37	133.35	119.70
83	A5	486	A	O4'-C1'-N9	11.37	117.30	108.20
36	B2	1577	A	O4'-C1'-N9	11.37	117.30	108.20
85	A7	112	U	O4'-C1'-N1	11.37	117.30	108.20
83	A5	3170	U	O4'-C1'-N1	11.37	117.30	108.20
83	A5	2211	A	P-O3'-C3'	11.37	133.34	119.70
83	A5	2516	U	C3'-C2'-C1'	11.37	110.59	101.50
83	A5	491	U	O4'-C1'-N1	11.36	117.29	108.20
83	A5	2818	G	O4'-C1'-N9	11.36	117.29	108.20
83	A5	1562	U	O4'-C1'-N1	11.36	117.28	108.20
83	A5	1921	U	P-O3'-C3'	11.36	133.33	119.70
83	A5	2064	G	O4'-C1'-N9	11.35	117.28	108.20
83	A5	192	U	P-O3'-C3'	11.35	133.32	119.70
83	A5	2125	G	O4'-C1'-N9	11.35	117.28	108.20
85	A7	119	C	P-O3'-C3'	11.35	133.32	119.70
83	A5	1208	U	O4'-C1'-N1	11.34	117.28	108.20
83	A5	3536	U	O4'-C1'-N1	11.33	117.27	108.20
36	B2	704	U	O4'-C1'-N1	11.32	117.26	108.20
83	A5	697	U	P-O3'-C3'	-11.32	106.11	119.70
83	A5	3719	A	C3'-C2'-C1'	-11.32	92.44	101.50
36	B2	1729	C	O4'-C1'-C2'	-11.32	94.48	105.80
83	A5	424	G	P-O3'-C3'	-11.32	106.12	119.70
83	A5	2876	U	O4'-C1'-N1	11.32	117.25	108.20
83	A5	302	A	P-O3'-C3'	-11.31	106.13	119.70
36	B2	1431	A	P-O3'-C3'	11.30	133.27	119.70
83	A5	501	A	O4'-C1'-N9	11.30	117.24	108.20
83	A5	746	G	C1'-O4'-C4'	-11.30	100.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	297	U	O4'-C1'-N1	11.29	117.23	108.20
83	A5	745	U	P-O3'-C3'	11.29	133.25	119.70
36	B2	948	A	N9-C1'-C2'	11.29	128.68	114.00
36	B2	1451	A	O4'-C1'-N9	11.29	117.23	108.20
36	B2	1758	A	C1'-O4'-C4'	-11.29	100.87	109.90
37	BC	63	U	O4'-C1'-N1	11.29	117.23	108.20
83	A5	924	U	O4'-C1'-N1	11.28	117.23	108.20
83	A5	1930	G	O4'-C1'-N9	11.28	117.23	108.20
36	B2	904	C	O4'-C1'-N1	11.28	117.22	108.20
83	A5	3676	C	N1-C1'-C2'	-11.28	99.34	114.00
84	A9	14	U	O4'-C1'-N1	11.28	117.22	108.20
85	A7	17	C	O4'-C1'-N1	11.28	117.22	108.20
83	A5	3694	G	O4'-C1'-N9	11.27	117.22	108.20
83	A5	3717	U	P-O3'-C3'	11.27	133.22	119.70
37	BC	50	A	O4'-C1'-N9	11.26	117.21	108.20
83	A5	37	G	O4'-C1'-N9	11.26	117.21	108.20
83	A5	301	U	C3'-C2'-C1'	-11.26	92.49	101.50
83	A5	792	U	O4'-C1'-N1	11.26	117.21	108.20
83	A5	1282	U	O4'-C1'-N1	11.26	117.21	108.20
83	A5	1600	U	P-O3'-C3'	11.26	133.21	119.70
83	A5	2480	U	O4'-C1'-N1	11.26	117.20	108.20
83	A5	3404	A	P-O3'-C3'	11.25	133.21	119.70
36	B2	1949	A	P-O3'-C3'	11.25	133.20	119.70
83	A5	776	A	P-O3'-C3'	-11.24	106.21	119.70
85	A7	48	G	O4'-C1'-N9	11.24	117.19	108.20
36	B2	384	U	P-O3'-C3'	-11.24	106.21	119.70
83	A5	483	U	O4'-C1'-N1	11.24	117.19	108.20
83	A5	2270	G	C1'-O4'-C4'	-11.24	100.91	109.90
83	A5	1019	U	O4'-C1'-N1	11.23	117.18	108.20
83	A5	1882	G	O4'-C1'-N9	11.23	117.18	108.20
83	A5	1471	G	N9-C1'-C2'	11.23	128.59	114.00
83	A5	1890	U	O4'-C1'-N1	11.23	117.18	108.20
83	A5	73	U	O4'-C1'-N1	11.22	117.18	108.20
36	B2	794	U	P-O3'-C3'	11.22	133.16	119.70
36	B2	464	G	P-O3'-C3'	11.21	133.15	119.70
83	A5	865	A	P-O3'-C3'	11.21	133.15	119.70
83	A5	2603	U	O4'-C1'-N1	11.21	117.17	108.20
83	A5	901	U	O4'-C1'-N1	11.20	117.16	108.20
16	AA	202	PHE	CB-CG-CD2	11.20	128.64	120.80
36	B2	441	A	O4'-C1'-N9	11.19	117.15	108.20
36	B2	817	C	N1-C1'-C2'	11.19	128.55	114.00
83	A5	2817	G	O4'-C1'-N9	11.19	117.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2893	U	O4'-C1'-N1	11.19	117.15	108.20
36	B2	1146	U	O4'-C1'-N1	11.18	117.15	108.20
83	A5	841	A	P-O3'-C3'	11.18	133.12	119.70
83	A5	923	U	O4'-C1'-N1	11.18	117.15	108.20
36	B2	1854	U	O4'-C1'-N1	11.18	117.14	108.20
83	A5	2916	U	O4'-C1'-C2'	-11.17	94.63	105.80
36	B2	431	G	C1'-O4'-C4'	-11.17	100.96	109.90
83	A5	643	U	O4'-C1'-N1	11.17	117.13	108.20
83	A5	947	U	P-O5'-C5'	11.17	138.77	120.90
83	A5	69	A	P-O3'-C3'	11.16	133.10	119.70
83	A5	3729	A	P-O3'-C3'	-11.16	106.30	119.70
83	A5	3843	U	C1'-O4'-C4'	11.16	118.83	109.90
83	A5	3391	U	P-O3'-C3'	11.16	133.09	119.70
83	A5	3598	U	O4'-C1'-N1	11.16	117.13	108.20
83	A5	1571	U	O4'-C1'-N1	11.16	117.12	108.20
83	A5	1982	U	O4'-C1'-N1	11.16	117.12	108.20
36	B2	381	C	P-O3'-C3'	11.15	133.08	119.70
36	B2	1634	U	O4'-C1'-N1	11.15	117.12	108.20
83	A5	3762	G	P-O3'-C3'	11.15	133.08	119.70
83	A5	3790	A	P-O3'-C3'	11.15	133.08	119.70
36	B2	825	A	P-O5'-C5'	11.15	138.74	120.90
83	A5	874	G	C1'-O4'-C4'	-11.15	100.98	109.90
37	BC	16	U	O4'-C1'-N1	11.14	117.11	108.20
83	A5	77	A	C4'-C3'-O3'	-11.14	86.02	109.40
36	B2	566	U	P-O3'-C3'	11.13	133.06	119.70
36	B2	1679	U	O4'-C1'-N1	11.13	117.10	108.20
83	A5	200	U	P-O3'-C3'	11.12	133.05	119.70
83	A5	2118	U	O4'-C1'-N1	11.12	117.10	108.20
36	B2	410	C	P-O3'-C3'	-11.12	106.36	119.70
83	A5	671	A	O4'-C1'-N9	11.12	117.09	108.20
83	A5	962	U	O4'-C1'-N1	11.12	117.09	108.20
36	B2	280	U	O4'-C1'-N1	11.11	117.09	108.20
83	A5	2138	C	N1-C1'-C2'	11.11	128.44	114.00
36	B2	200	U	C2'-C3'-O3'	11.10	133.92	109.50
36	B2	1792	A	P-O3'-C3'	11.10	133.02	119.70
83	A5	1946	G	O4'-C1'-N9	11.10	117.08	108.20
36	B2	1956	U	P-O3'-C3'	11.10	133.02	119.70
7	AM	40	HIS	N-CA-C	11.10	140.96	111.00
83	A5	1015	G	N9-C1'-C2'	11.10	128.43	114.00
36	B2	900	A	O4'-C1'-N9	11.09	117.08	108.20
83	A5	2220	C	N1-C1'-C2'	11.09	128.42	114.00
83	A5	2405	A	P-O3'-C3'	11.09	133.01	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	508	U	O4'-C1'-N1	11.09	117.07	108.20
36	B2	177	U	O4'-C1'-N1	11.08	117.06	108.20
34	AQ	3	GLN	C-N-CA	11.08	149.39	121.70
36	B2	1791	U	O4'-C1'-N1	11.08	117.06	108.20
36	B2	171	U	O4'-C1'-N1	11.07	117.06	108.20
83	A5	1099	U	O4'-C1'-N1	11.07	117.06	108.20
83	A5	1569	U	O4'-C1'-N1	11.07	117.06	108.20
36	B2	245	U	P-O3'-C3'	-11.07	106.41	119.70
36	B2	1853	U	O4'-C1'-N1	11.07	117.06	108.20
83	A5	2548	G	O4'-C1'-N9	11.07	117.06	108.20
83	A5	334	U	O4'-C1'-N1	11.07	117.05	108.20
83	A5	479	U	O4'-C1'-N1	11.07	117.05	108.20
83	A5	1793	C	N1-C1'-C2'	11.07	128.39	114.00
83	A5	2636	U	O4'-C1'-N1	11.07	117.05	108.20
36	B2	511	G	C1'-O4'-C4'	11.05	118.74	109.90
36	B2	1347	U	O4'-C1'-N1	11.05	117.04	108.20
83	A5	344	U	O4'-C1'-N1	11.05	117.04	108.20
83	A5	3871	U	O4'-C1'-N1	11.05	117.04	108.20
36	B2	468	U	O4'-C1'-N1	11.05	117.04	108.20
83	A5	2196	U	N1-C1'-C2'	-11.05	99.64	114.00
83	A5	124	A	O4'-C1'-N9	11.04	117.04	108.20
83	A5	1525	G	O4'-C1'-N9	11.04	117.03	108.20
83	A5	3495	G	O4'-C1'-N9	11.03	117.03	108.20
29	AG	68	LEU	C-N-CA	11.03	149.26	121.70
83	A5	3000	G	C4'-C3'-O3'	-11.03	86.25	109.40
83	A5	3775	A	C3'-C2'-C1'	11.03	110.32	101.50
36	B2	463	G	O4'-C1'-N9	11.02	117.02	108.20
36	B2	511	G	P-O3'-C3'	11.02	132.93	119.70
83	A5	3165	U	O4'-C1'-N1	11.02	117.02	108.20
83	A5	515	A	C1'-O4'-C4'	11.01	118.71	109.90
83	A5	726	U	O4'-C1'-N1	11.01	117.01	108.20
83	A5	2720	U	O4'-C1'-N1	11.01	117.00	108.20
83	A5	3017	U	P-O3'-C3'	11.01	132.91	119.70
86	A8	96	U	O4'-C1'-N1	11.01	117.00	108.20
83	A5	652	G	C1'-O4'-C4'	-11.00	101.10	109.90
83	A5	1107	G	P-O3'-C3'	11.00	132.90	119.70
83	A5	1338	U	O4'-C1'-N1	10.99	116.99	108.20
36	B2	706	U	C3'-C2'-C1'	10.98	110.29	101.50
83	A5	2066	G	C3'-C2'-C1'	10.98	110.29	101.50
83	A5	3757	U	N1-C1'-C2'	10.98	128.28	114.00
36	B2	1453	G	O4'-C1'-N9	10.98	116.98	108.20
36	B2	1650	G	C1'-O4'-C4'	-10.98	101.12	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1583	A	O4'-C1'-N9	10.97	116.98	108.20
36	B2	1942	G	O4'-C1'-N9	10.97	116.98	108.20
36	B2	881	U	O4'-C1'-N1	10.97	116.97	108.20
36	B2	1521	U	O4'-C1'-N1	10.97	116.97	108.20
83	A5	1886	C	N1-C1'-C2'	10.97	128.26	114.00
83	A5	1680	U	O4'-C1'-N1	10.95	116.96	108.20
83	A5	3724	U	O4'-C1'-N1	10.95	116.96	108.20
83	A5	755	A	O4'-C1'-C2'	-10.95	94.86	105.80
36	B2	885	U	O4'-C1'-N1	10.94	116.95	108.20
36	B2	847	G	O4'-C1'-N9	10.94	116.95	108.20
83	A5	775	U	P-O5'-C5'	10.94	138.40	120.90
83	A5	1717	A	O4'-C1'-N9	10.94	116.95	108.20
83	A5	2214	G	O4'-C1'-N9	10.94	116.95	108.20
83	A5	973	G	C1'-O4'-C4'	-10.94	101.15	109.90
83	A5	3346	G	O4'-C1'-N9	10.94	116.95	108.20
86	A8	110	C	P-O3'-C3'	-10.93	106.58	119.70
36	B2	1570	U	O4'-C1'-C2'	-10.93	94.88	105.80
36	B2	292	G	O4'-C1'-N9	10.92	116.94	108.20
36	B2	1780	G	C1'-O4'-C4'	-10.92	101.16	109.90
74	CC	72	THR	C-N-CA	10.92	145.24	122.30
83	A5	1283	A	O4'-C1'-N9	10.92	116.94	108.20
83	A5	3392	U	P-O3'-C3'	-10.91	106.61	119.70
36	B2	195	G	P-O3'-C3'	10.91	132.79	119.70
83	A5	127	U	O4'-C1'-N1	10.90	116.92	108.20
83	A5	1532	A	O4'-C1'-N9	10.90	116.92	108.20
36	B2	442	A	O4'-C1'-N9	10.90	116.92	108.20
83	A5	3268	A	P-O3'-C3'	10.90	132.78	119.70
83	A5	1206	G	O4'-C1'-N9	10.89	116.91	108.20
83	A5	2907	U	P-O3'-C3'	10.88	132.76	119.70
83	A5	1253	A	O4'-C1'-N9	10.88	116.91	108.20
36	B2	868	C	O4'-C1'-N1	10.88	116.90	108.20
83	A5	492	A	O4'-C1'-N9	10.87	116.90	108.20
36	B2	867	G	C1'-O4'-C4'	-10.87	101.20	109.90
36	B2	635	C	N1-C1'-C2'	10.87	128.13	114.00
83	A5	82	U	O4'-C1'-N1	10.87	116.90	108.20
83	A5	1731	G	O4'-C1'-N9	10.86	116.89	108.20
84	A9	19	U	O4'-C1'-N1	10.86	116.89	108.20
83	A5	134	G	C2'-C3'-O3'	10.85	133.38	109.50
36	B2	563	A	P-O3'-C3'	10.84	132.71	119.70
36	B2	1171	G	O4'-C1'-N9	10.84	116.87	108.20
83	A5	3918	A	O4'-C1'-N9	10.84	116.87	108.20
65	Cc	31	TYR	CB-CG-CD1	10.83	127.50	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	A7	23	A	P-O3'-C3'	-10.83	106.70	119.70
36	B2	927	U	O4'-C1'-N1	10.83	116.86	108.20
83	A5	1700	U	O4'-C1'-N1	10.83	116.86	108.20
83	A5	3825	U	O4'-C1'-N1	10.82	116.86	108.20
83	A5	973	G	O4'-C1'-N9	-10.82	99.54	108.20
72	Ck	58	GLN	C-N-CA	10.82	148.74	121.70
83	A5	513	G	O4'-C1'-N9	10.82	116.85	108.20
83	A5	188	G	N9-C1'-C2'	10.81	128.05	114.00
83	A5	3255	G	O4'-C1'-N9	10.81	116.85	108.20
36	B2	200	U	C5'-C4'-C3'	-10.80	98.71	116.00
36	B2	101	U	O4'-C1'-N1	10.80	116.84	108.20
36	B2	1221	A	O4'-C1'-N9	10.79	116.83	108.20
36	B2	249	U	C1'-O4'-C4'	-10.79	101.27	109.90
83	A5	406	G	O4'-C1'-N9	10.79	116.83	108.20
83	A5	3533	U	O4'-C1'-N1	10.79	116.83	108.20
36	B2	57	G	O4'-C1'-N9	10.79	116.83	108.20
83	A5	3324	A	O4'-C1'-N9	10.78	116.83	108.20
83	A5	3729	A	P-O5'-C5'	-10.78	103.65	120.90
36	B2	138	U	O3'-P-O5'	-10.78	83.53	104.00
36	B2	1620	G	O4'-C1'-C2'	10.78	117.30	107.60
36	B2	530	U	O4'-C1'-N1	10.77	116.82	108.20
83	A5	301	U	O4'-C1'-C2'	10.77	117.30	107.60
36	B2	1678	G	C3'-C2'-C1'	-10.77	92.89	101.50
36	B2	1546	U	P-O3'-C3'	10.76	132.62	119.70
36	B2	1664	A	O4'-C1'-N9	10.76	116.81	108.20
36	B2	1729	C	C3'-C2'-C1'	10.76	110.11	101.50
83	A5	2150	U	O4'-C1'-N1	10.75	116.80	108.20
83	A5	1154	U	O4'-C1'-N1	10.75	116.80	108.20
83	A5	2752	C	O4'-C1'-C2'	-10.75	95.05	105.80
36	B2	849	U	O4'-C1'-N1	10.74	116.79	108.20
36	B2	326	U	O4'-C1'-N1	10.73	116.79	108.20
36	B2	1673	U	P-O3'-C3'	10.73	132.58	119.70
83	A5	3240	U	O4'-C1'-N1	10.73	116.79	108.20
86	A8	68	U	C1'-O4'-C4'	-10.73	101.31	109.90
36	B2	255	U	O3'-P-O5'	10.73	124.38	104.00
83	A5	2956	U	P-O3'-C3'	10.73	132.57	119.70
36	B2	1770	U	O4'-C1'-N1	10.72	116.78	108.20
84	A9	23	G	P-O5'-C5'	10.72	138.06	120.90
62	Cb	45	TYR	CB-CG-CD1	10.72	127.43	121.00
83	A5	211	U	O4'-C1'-N1	10.72	116.78	108.20
83	A5	1564	G	N9-C1'-C2'	10.72	127.93	114.00
83	A5	1015	G	C1'-O4'-C4'	-10.71	101.33	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1907	U	O4'-C1'-C2'	-10.72	95.08	105.80
83	A5	1689	G	O4'-C1'-N9	-10.71	99.64	108.20
83	A5	681	G	O4'-C1'-N9	10.70	116.76	108.20
83	A5	2488	U	O4'-C1'-N1	10.70	116.76	108.20
83	A5	1263	U	O4'-C1'-N1	10.69	116.76	108.20
36	B2	1765	U	P-O3'-C3'	10.69	132.53	119.70
68	Cf	44	TYR	CB-CG-CD2	-10.69	114.59	121.00
83	A5	1595	G	O4'-C1'-N9	10.69	116.75	108.20
86	A8	122	U	O4'-C1'-N1	10.69	116.75	108.20
83	A5	3660	U	O4'-C1'-N1	10.68	116.75	108.20
83	A5	3898	C	N1-C1'-C2'	10.68	127.89	114.00
36	B2	1068	U	O4'-C1'-N1	10.68	116.74	108.20
36	B2	1569	C	C3'-C2'-C1'	10.68	110.05	101.50
36	B2	1992	A	O4'-C1'-N9	10.68	116.74	108.20
83	A5	2646	U	O4'-C1'-N1	10.68	116.74	108.20
83	A5	1342	U	O4'-C1'-N1	10.68	116.74	108.20
36	B2	1856	U	O4'-C1'-N1	10.67	116.73	108.20
83	A5	2749	G	O4'-C1'-N9	10.67	116.73	108.20
39	Cq	199	PHE	CB-CG-CD2	10.66	128.26	120.80
86	A8	67	G	O4'-C1'-N9	10.65	116.72	108.20
83	A5	4	U	O4'-C1'-C2'	-10.64	95.16	105.80
83	A5	2895	U	O4'-C1'-N1	10.64	116.71	108.20
83	A5	1902	U	O4'-C1'-N1	10.64	116.71	108.20
83	A5	2093	U	P-O3'-C3'	10.64	132.47	119.70
83	A5	2045	U	O4'-C1'-N1	10.63	116.71	108.20
83	A5	3808	A	P-O3'-C3'	10.63	132.46	119.70
83	A5	352	U	O4'-C1'-N1	10.63	116.70	108.20
83	A5	2585	A	C4'-C3'-O3'	10.63	134.26	113.00
83	A5	2932	C	P-O3'-C3'	-10.63	106.94	119.70
83	A5	2881	U	O4'-C1'-N1	10.63	116.70	108.20
83	A5	264	U	O4'-C1'-N1	10.63	116.70	108.20
36	B2	401	G	O4'-C1'-N9	10.62	116.70	108.20
36	B2	142	A	O4'-C1'-N9	10.62	116.69	108.20
36	B2	1145	U	P-O3'-C3'	10.62	132.44	119.70
83	A5	134	G	C5'-C4'-C3'	-10.62	99.01	116.00
83	A5	746	G	C3'-C2'-C1'	-10.62	93.01	101.50
36	B2	214	G	P-O3'-C3'	10.62	132.44	119.70
83	A5	190	A	P-O3'-C3'	10.61	132.44	119.70
83	A5	1564	G	C1'-O4'-C4'	-10.61	101.41	109.90
83	A5	3693	G	C1'-O4'-C4'	-10.61	101.41	109.90
36	B2	253	A	O4'-C1'-C2'	10.61	117.15	107.60
36	B2	1273	U	N1-C1'-C2'	10.61	127.79	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1667	U	P-O3'-C3'	10.61	132.43	119.70
83	A5	3715	U	O4'-C1'-N1	10.61	116.69	108.20
36	B2	1582	C	O4'-C1'-C2'	10.60	117.14	107.60
36	B2	1753	U	O4'-C1'-N1	10.60	116.68	108.20
83	A5	420	A	C3'-C2'-C1'	-10.59	93.03	101.50
83	A5	3308	A	O4'-C1'-N9	10.59	116.67	108.20
36	B2	596	U	O4'-C1'-N1	10.59	116.67	108.20
36	B2	1603	G	N9-C1'-C2'	10.58	127.75	114.00
83	A5	2827	G	O4'-C1'-N9	10.58	116.66	108.20
83	A5	2869	U	O4'-C1'-N1	10.58	116.66	108.20
83	A5	3306	U	O4'-C1'-N1	10.58	116.66	108.20
83	A5	1	U	O4'-C1'-N1	10.57	116.66	108.20
83	A5	1940	C	O4'-C1'-C2'	-10.57	95.23	105.80
83	A5	2605	C	O4'-C1'-N1	10.57	116.66	108.20
83	A5	3183	G	O4'-C1'-C2'	10.57	117.11	107.60
83	A5	678	U	O4'-C1'-N1	10.57	116.65	108.20
36	B2	1210	G	O4'-C1'-N9	10.56	116.65	108.20
83	A5	836	G	O4'-C1'-N9	10.56	116.65	108.20
83	A5	1992	G	C1'-O4'-C4'	-10.56	101.45	109.90
83	A5	2912	U	O4'-C1'-N1	10.56	116.65	108.20
36	B2	54	C	C3'-C2'-C1'	10.55	109.94	101.50
83	A5	3711	G	O4'-C1'-N9	10.55	116.64	108.20
36	B2	509	C	O4'-C1'-N1	10.55	116.64	108.20
36	B2	1898	G	O4'-C1'-N9	10.54	116.64	108.20
83	A5	2595	U	O4'-C1'-N1	10.54	116.63	108.20
83	A5	582	A	O4'-C1'-N9	10.53	116.63	108.20
83	A5	641	A	P-O3'-C3'	10.54	132.34	119.70
83	A5	84	U	O4'-C1'-N1	10.53	116.62	108.20
83	A5	3228	A	C3'-C2'-C1'	10.53	109.93	101.50
83	A5	1190	U	P-O3'-C3'	10.52	132.32	119.70
83	A5	1376	U	O4'-C1'-N1	10.52	116.62	108.20
83	A5	701	U	O4'-C1'-N1	10.51	116.61	108.20
83	A5	121	A	O4'-C1'-N9	10.51	116.61	108.20
83	A5	240	G	O4'-C1'-N9	10.51	116.61	108.20
83	A5	3301	U	O4'-C1'-N1	10.51	116.61	108.20
83	A5	1585	U	O4'-C1'-N1	10.51	116.61	108.20
83	A5	1860	A	N9-C1'-C2'	-10.51	100.34	114.00
83	A5	2152	C	N1-C1'-C2'	10.51	127.66	114.00
36	B2	845	G	O4'-C1'-N9	10.50	116.60	108.20
83	A5	2061	G	C1'-O4'-C4'	-10.50	101.50	109.90
83	A5	2993	G	P-O3'-C3'	10.50	132.30	119.70
36	B2	830	U	O4'-C1'-N1	10.50	116.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	772	G	O4'-C1'-N9	10.50	116.60	108.20
83	A5	353	G	O4'-C1'-N9	10.49	116.59	108.20
83	A5	2070	G	O4'-C1'-N9	10.48	116.58	108.20
83	A5	3697	A	P-O5'-C5'	10.47	137.66	120.90
36	B2	378	G	P-O3'-C3'	10.47	132.27	119.70
83	A5	1520	U	O4'-C1'-N1	10.47	116.58	108.20
36	B2	1868	U	O4'-C1'-N1	10.47	116.57	108.20
36	B2	1223	U	O4'-C1'-N1	10.46	116.57	108.20
36	B2	430	A	N9-C1'-C2'	10.46	127.59	114.00
83	A5	328	U	O4'-C1'-N1	10.46	116.56	108.20
83	A5	2130	G	O4'-C1'-N9	10.46	116.56	108.20
83	A5	208	U	O4'-C1'-N1	10.45	116.56	108.20
36	B2	880	G	C3'-C2'-C1'	-10.45	93.14	101.50
36	B2	1139	A	O4'-C1'-N9	10.45	116.56	108.20
83	A5	117	C	C3'-C2'-C1'	10.45	109.86	101.50
36	B2	1316	G	O4'-C1'-N9	10.45	116.56	108.20
83	A5	3787	A	O4'-C1'-N9	10.45	116.56	108.20
83	A5	2767	U	C1'-O4'-C4'	-10.45	101.54	109.90
36	B2	1884	G	O4'-C1'-N9	10.44	116.56	108.20
36	B2	1713	C	O4'-C1'-C2'	-10.44	95.36	105.80
83	A5	3183	G	O4'-C1'-N9	10.44	116.55	108.20
83	A5	3895	A	O4'-C1'-N9	10.44	116.55	108.20
83	A5	3107	G	O4'-C1'-N9	10.43	116.55	108.20
83	A5	2005	U	O3'-P-O5'	-10.43	84.18	104.00
83	A5	363	G	O4'-C1'-N9	10.43	116.54	108.20
83	A5	618	U	O4'-C1'-N1	10.43	116.54	108.20
83	A5	2010	U	O4'-C1'-N1	10.42	116.54	108.20
36	B2	105	U	O4'-C1'-N1	10.42	116.54	108.20
83	A5	720	G	O4'-C1'-N9	10.42	116.54	108.20
83	A5	62	G	O4'-C1'-N9	10.42	116.53	108.20
83	A5	727	G	O4'-C1'-N9	10.42	116.53	108.20
36	B2	500	U	O4'-C1'-N1	10.41	116.53	108.20
36	B2	1750	U	P-O3'-C3'	10.41	132.19	119.70
1	Az	256	PHE	CB-CG-CD1	-10.41	113.52	120.80
83	A5	3572	G	O4'-C1'-N9	10.40	116.52	108.20
36	B2	944	G	O4'-C1'-N9	10.40	116.52	108.20
36	B2	1906	U	O4'-C1'-N1	10.40	116.52	108.20
36	B2	514	A	P-O3'-C3'	10.38	132.16	119.70
83	A5	1230	U	O4'-C1'-N1	10.39	116.51	108.20
83	A5	238	G	C1'-O4'-C4'	-10.38	101.59	109.90
83	A5	3653	U	O4'-C1'-N1	10.38	116.50	108.20
85	A7	65	C	C4'-C3'-O3'	10.38	133.75	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1185	U	O4'-C1'-N1	10.37	116.50	108.20
83	A5	3683	G	O4'-C1'-C2'	10.37	116.93	107.60
83	A5	3670	G	O4'-C1'-C2'	10.37	116.93	107.60
83	A5	1796	A	P-O3'-C3'	10.36	132.13	119.70
83	A5	429	U	O4'-C1'-N1	10.36	116.48	108.20
83	A5	2741	A	C1'-O4'-C4'	-10.36	101.61	109.90
83	A5	3029	U	P-O3'-C3'	10.35	132.12	119.70
83	A5	3157	U	O4'-C1'-N1	10.35	116.48	108.20
83	A5	3200	G	O4'-C1'-N9	10.35	116.48	108.20
83	A5	3529	A	P-O3'-C3'	10.35	132.12	119.70
85	A7	53	U	O4'-C1'-N1	10.35	116.48	108.20
83	A5	3567	A	O4'-C1'-C2'	-10.35	95.45	105.80
83	A5	734	U	O4'-C1'-N1	10.34	116.47	108.20
83	A5	3143	U	O4'-C1'-N1	10.34	116.47	108.20
83	A5	2811	G	O4'-C1'-N9	10.34	116.47	108.20
83	A5	3954	U	O4'-C1'-N1	10.34	116.47	108.20
36	B2	4	C	N1-C1'-C2'	10.34	127.44	114.00
83	A5	2032	U	O4'-C1'-N1	10.33	116.46	108.20
83	A5	2217	A	N9-C1'-C2'	10.33	127.43	114.00
86	A8	54	U	O4'-C1'-N1	10.33	116.47	108.20
83	A5	3791	A	C4'-C3'-O3'	10.33	133.66	113.00
86	A8	88	C	O4'-C1'-N1	10.33	116.46	108.20
83	A5	2030	U	O4'-C1'-N1	10.33	116.46	108.20
83	A5	2102	G	O4'-C1'-N9	10.32	116.46	108.20
37	BC	75	A	O4'-C1'-N9	10.32	116.46	108.20
83	A5	3474	G	C1'-O4'-C4'	-10.32	101.64	109.90
83	A5	943	U	P-O3'-C3'	10.32	132.08	119.70
36	B2	172	G	O4'-C1'-N9	10.31	116.45	108.20
45	Ca	47	ASP	C-N-CA	10.31	147.47	121.70
36	B2	137	C	N1-C1'-C2'	10.30	127.40	114.00
36	B2	1727	U	C4'-C3'-O3'	10.30	133.60	113.00
36	B2	1994	U	O4'-C1'-N1	10.30	116.44	108.20
83	A5	1430	U	O4'-C1'-N1	10.30	116.44	108.20
83	A5	2571	U	P-O3'-C3'	10.30	132.06	119.70
83	A5	2988	U	O4'-C1'-N1	10.30	116.44	108.20
83	A5	1557	U	O4'-C1'-N1	10.29	116.44	108.20
83	A5	2111	A	O4'-C1'-N9	10.29	116.44	108.20
83	A5	475	U	P-O3'-C3'	10.29	132.05	119.70
36	B2	877	U	O4'-C1'-N1	10.29	116.43	108.20
83	A5	654	G	O4'-C1'-N9	10.29	116.43	108.20
36	B2	362	G	O4'-C1'-N9	10.29	116.43	108.20
36	B2	1462	G	O4'-C1'-N9	10.29	116.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3397	U	O4'-C1'-N1	10.28	116.43	108.20
83	A5	3886	U	P-O3'-C3'	-10.28	107.36	119.70
36	B2	947	U	O4'-C1'-N1	10.28	116.42	108.20
83	A5	709	U	O4'-C1'-N1	10.28	116.42	108.20
83	A5	3531	C	P-O3'-C3'	10.28	132.03	119.70
36	B2	541	U	O4'-C1'-N1	10.27	116.42	108.20
36	B2	1136	U	O4'-C1'-N1	10.27	116.42	108.20
83	A5	3472	A	C2'-C3'-O3'	10.27	132.10	109.50
36	B2	140	G	P-O5'-C5'	10.27	137.33	120.90
36	B2	1748	A	N9-C1'-C2'	10.27	127.35	114.00
36	B2	1627	G	O4'-C1'-N9	10.27	116.41	108.20
83	A5	3567	A	C3'-C2'-C1'	10.27	109.71	101.50
83	A5	3735	U	O4'-C1'-N1	10.27	116.41	108.20
86	A8	110	C	O4'-C1'-N1	10.27	116.41	108.20
36	B2	1530	A	P-O3'-C3'	10.26	132.01	119.70
36	B2	1330	U	O4'-C1'-N1	10.26	116.41	108.20
83	A5	2520	U	C3'-C2'-C1'	10.26	109.71	101.50
36	B2	1388	U	O4'-C1'-N1	10.25	116.40	108.20
83	A5	2862	U	O4'-C1'-N1	10.25	116.40	108.20
83	A5	1225	G	P-O3'-C3'	10.25	132.00	119.70
36	B2	167	U	O4'-C1'-N1	10.25	116.40	108.20
36	B2	1649	U	O4'-C1'-N1	10.25	116.40	108.20
37	BC	68	U	O4'-C1'-N1	10.25	116.40	108.20
83	A5	871	A	P-O3'-C3'	10.25	132.00	119.70
71	Cj	73	ARG	NE-CZ-NH1	10.24	125.42	120.30
36	B2	404	A	O4'-C1'-C2'	-10.24	95.56	105.80
36	B2	1004	C	O4'-C1'-N1	10.24	116.39	108.20
83	A5	155	U	N1-C1'-C2'	10.24	127.31	114.00
83	A5	3949	U	P-O3'-C3'	10.24	131.98	119.70
36	B2	525	U	O4'-C1'-N1	10.23	116.39	108.20
36	B2	610	U	O4'-C1'-N1	10.23	116.39	108.20
83	A5	1757	A	N9-C1'-C2'	10.23	127.30	114.00
83	A5	2841	G	N9-C1'-C2'	10.23	127.30	114.00
83	A5	3483	G	O4'-C1'-N9	10.22	116.38	108.20
83	A5	3707	G	O4'-C1'-N9	10.22	116.38	108.20
36	B2	1960	A	N9-C1'-C2'	10.22	127.28	114.00
83	A5	815	A	N9-C1'-C2'	10.22	127.28	114.00
36	B2	1688	U	O4'-C1'-N1	10.21	116.37	108.20
36	B2	1792	A	N9-C1'-C2'	10.21	127.28	114.00
36	B2	1363	U	O4'-C1'-N1	10.21	116.37	108.20
83	A5	1431	G	O4'-C1'-N9	10.21	116.37	108.20
36	B2	1818	U	P-O3'-C3'	-10.21	107.45	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	157	C	O4'-C1'-N1	10.21	116.37	108.20
83	A5	3035	A	P-O5'-C5'	10.21	137.23	120.90
83	A5	3502	A	C3'-C2'-C1'	-10.21	93.33	101.50
86	A8	33	U	O4'-C1'-N1	10.21	116.36	108.20
36	B2	1579	G	O4'-C1'-N9	10.20	116.36	108.20
83	A5	1974	U	O4'-C1'-N1	10.20	116.36	108.20
83	A5	2638	U	O4'-C1'-N1	10.20	116.36	108.20
36	B2	1314	G	N9-C1'-C2'	10.19	127.25	114.00
48	CD	226	TYR	CB-CG-CD1	10.19	127.11	121.00
83	A5	118	A	O4'-C1'-C2'	10.19	116.77	107.60
83	A5	747	U	O4'-C1'-N1	10.19	116.35	108.20
83	A5	1292	G	P-O3'-C3'	10.19	131.92	119.70
1	Az	217	PHE	C-N-CA	10.18	143.68	122.30
83	A5	2557	C	O4'-C1'-C2'	-10.17	95.63	105.80
83	A5	3258	C	O4'-C1'-N1	10.17	116.34	108.20
83	A5	3628	G	C3'-C2'-C1'	10.17	109.64	101.50
36	B2	1246	C	O4'-C1'-N1	-10.17	100.07	108.20
83	A5	2105	C	C3'-C2'-C1'	10.16	109.63	101.50
83	A5	2644	U	O4'-C1'-N1	10.16	116.33	108.20
83	A5	2936	U	P-O3'-C3'	10.15	131.88	119.70
36	B2	1841	C	O4'-C1'-N1	10.15	116.32	108.20
36	B2	1353	U	C1'-O4'-C4'	10.14	118.01	109.90
83	A5	673	U	P-O5'-C5'	10.14	137.13	120.90
36	B2	1911	C	O4'-C1'-C2'	-10.14	95.66	105.80
83	A5	2760	G	O4'-C1'-N9	10.14	116.31	108.20
83	A5	3839	A	P-O3'-C3'	10.14	131.87	119.70
85	A7	99	G	N9-C1'-C2'	10.14	127.18	114.00
83	A5	1704	A	O4'-C1'-N9	10.13	116.31	108.20
83	A5	3537	U	O4'-C1'-N1	10.13	116.31	108.20
83	A5	550	U	O4'-C1'-N1	10.12	116.29	108.20
83	A5	2719	A	O4'-C1'-N9	10.12	116.29	108.20
83	A5	926	U	O4'-C1'-N1	10.11	116.29	108.20
83	A5	1911	C	O4'-C1'-C2'	-10.11	95.69	105.80
83	A5	1802	U	P-O5'-C5'	10.11	137.08	120.90
83	A5	2131	C	C3'-C2'-C1'	10.11	109.59	101.50
83	A5	1284	A	O4'-C1'-N9	10.11	116.29	108.20
83	A5	1726	G	O4'-C1'-N9	10.11	116.29	108.20
36	B2	1151	G	O4'-C1'-N9	10.10	116.28	108.20
83	A5	583	U	O4'-C1'-N1	10.10	116.28	108.20
36	B2	131	C	P-O3'-C3'	10.10	131.82	119.70
36	B2	1033	U	O4'-C1'-N1	10.10	116.28	108.20
83	A5	1433	U	N1-C1'-C2'	10.10	127.13	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3593	A	C3'-C2'-C1'	-10.10	93.42	101.50
36	B2	648	G	C3'-C2'-C1'	10.09	109.57	101.50
36	B2	1246	C	C3'-C2'-C1'	10.09	109.57	101.50
83	A5	2003	U	P-O3'-C3'	10.09	131.80	119.70
83	A5	3542	C	O4'-C1'-N1	10.09	116.27	108.20
83	A5	932	G	C1'-O4'-C4'	-10.08	101.83	109.90
83	A5	1279	C	C3'-C2'-C1'	10.08	109.57	101.50
83	A5	2520	U	O4'-C1'-N1	-10.08	100.14	108.20
36	B2	255	U	C4'-C3'-O3'	-10.08	88.23	109.40
36	B2	540	U	O4'-C1'-N1	10.08	116.26	108.20
83	A5	482	U	O4'-C1'-N1	10.08	116.26	108.20
83	A5	2109	G	N9-C1'-C2'	10.08	127.10	114.00
36	B2	1822	U	O4'-C1'-N1	10.07	116.26	108.20
83	A5	175	U	P-O3'-C3'	10.07	131.79	119.70
83	A5	290	G	O4'-C1'-N9	10.07	116.26	108.20
83	A5	2258	U	O4'-C1'-N1	10.07	116.26	108.20
83	A5	7	A	O4'-C1'-N9	10.07	116.26	108.20
36	B2	216	U	O4'-C1'-N1	10.07	116.25	108.20
79	CJ	102	GLU	C-N-CA	10.06	146.86	121.70
83	A5	2623	C	N1-C1'-C2'	10.06	127.08	114.00
83	A5	1812	C	P-O3'-C3'	10.06	131.78	119.70
36	B2	1706	U	O4'-C1'-N1	10.05	116.24	108.20
36	B2	701	G	C1'-O4'-C4'	10.05	117.94	109.90
83	A5	2628	G	O4'-C1'-N9	10.04	116.24	108.20
36	B2	873	A	P-O3'-C3'	-10.04	107.65	119.70
50	CR	109	TYR	CB-CG-CD2	-10.04	114.97	121.00
83	A5	746	G	P-O3'-C3'	10.04	131.75	119.70
83	A5	1170	U	O4'-C1'-N1	10.04	116.23	108.20
83	A5	1330	G	O4'-C1'-N9	-10.04	100.17	108.20
36	B2	474	C	N1-C1'-C2'	10.03	127.04	114.00
83	A5	744	U	O4'-C1'-N1	10.03	116.22	108.20
83	A5	2814	U	P-O3'-C3'	10.02	131.73	119.70
83	A5	3784	C	N1-C1'-C2'	10.02	127.03	114.00
36	B2	1636	A	O4'-C1'-N9	10.02	116.22	108.20
83	A5	258	U	O4'-C1'-N1	10.02	116.22	108.20
83	A5	2879	A	O4'-C1'-N9	10.02	116.22	108.20
81	CE	138	ARG	NE-CZ-NH1	10.02	125.31	120.30
83	A5	3339	U	O4'-C1'-N1	10.02	116.22	108.20
36	B2	951	A	O4'-C1'-N9	10.02	116.21	108.20
36	B2	515	U	P-O3'-C3'	10.01	131.72	119.70
26	AJ	14	TYR	CB-CG-CD2	-10.01	115.00	121.00
36	B2	341	G	C3'-C2'-C1'	-10.01	93.49	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	669	U	O5'-C5'-C4'	10.01	130.72	111.70
70	Ci	95	ARG	NE-CZ-NH1	10.01	125.30	120.30
83	A5	3429	A	O4'-C1'-N9	10.00	116.20	108.20
83	A5	445	C	C3'-C2'-C1'	9.99	109.49	101.50
36	B2	974	A	O4'-C1'-N9	9.99	116.19	108.20
83	A5	1736	G	O4'-C1'-N9	9.99	116.19	108.20
83	A5	3650	G	O4'-C1'-N9	9.99	116.19	108.20
83	A5	3919	G	C1'-O4'-C4'	-9.99	101.91	109.90
83	A5	893	U	O4'-C1'-N1	9.98	116.19	108.20
83	A5	3676	C	C3'-C2'-C1'	-9.98	93.52	101.50
36	B2	896	A	O4'-C1'-N9	9.98	116.18	108.20
83	A5	3225	C	O4'-C1'-N1	9.97	116.18	108.20
36	B2	474	C	P-O3'-C3'	9.97	131.66	119.70
36	B2	1698	G	O4'-C1'-N9	9.97	116.17	108.20
83	A5	3050	A	P-O3'-C3'	9.97	131.66	119.70
83	A5	559	A	O4'-C1'-N9	9.96	116.17	108.20
83	A5	1594	U	C1'-O4'-C4'	9.96	117.87	109.90
83	A5	3413	C	O4'-C1'-N1	9.96	116.17	108.20
37	BC	51	G	O4'-C1'-N9	9.96	116.17	108.20
36	B2	646	U	O4'-C1'-N1	9.95	116.16	108.20
83	A5	1000	G	C3'-C2'-C1'	9.96	109.46	101.50
26	AJ	80	ARG	NE-CZ-NH1	9.95	125.28	120.30
80	CH	51	ARG	NE-CZ-NH1	9.95	125.28	120.30
36	B2	394	G	C1'-O4'-C4'	-9.95	101.94	109.90
83	A5	2114	U	O4'-C1'-N1	9.95	116.16	108.20
83	A5	156	G	N9-C1'-C2'	9.95	126.93	114.00
83	A5	161	G	C3'-C2'-C1'	9.95	109.46	101.50
83	A5	2885	A	C4'-C3'-O3'	-9.95	88.51	109.40
36	B2	943	U	O3'-P-O5'	9.94	122.89	104.00
83	A5	1925	U	O4'-C1'-N1	9.94	116.16	108.20
83	A5	211	U	O3'-P-O5'	9.94	122.89	104.00
83	A5	1783	A	O4'-C1'-C2'	-9.94	95.86	105.80
83	A5	1095	G	N9-C1'-C2'	9.93	126.91	114.00
83	A5	567	A	O4'-C1'-N9	9.93	116.14	108.20
83	A5	112	C	O4'-C1'-N1	9.93	116.14	108.20
83	A5	126	G	O4'-C1'-N9	9.93	116.14	108.20
83	A5	1591	U	O4'-C1'-N1	9.93	116.14	108.20
83	A5	2084	U	O4'-C1'-N1	9.93	116.14	108.20
83	A5	2493	C	C3'-C2'-C1'	9.93	109.44	101.50
83	A5	754	A	O4'-C1'-C2'	-9.92	95.88	105.80
36	B2	554	U	O4'-C1'-N1	9.92	116.14	108.20
83	A5	663	U	O4'-C1'-N1	9.92	116.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3569	C	N1-C1'-C2'	9.92	126.89	114.00
83	A5	3621	A	N9-C1'-C2'	-9.92	101.09	112.00
83	A5	473	A	P-O3'-C3'	9.92	131.60	119.70
83	A5	2814	U	O4'-C1'-N1	9.92	116.13	108.20
36	B2	1995	A	C3'-C2'-C1'	-9.91	93.57	101.50
83	A5	2604	U	O4'-C1'-N1	9.91	116.13	108.20
36	B2	621	G	N9-C1'-C2'	9.91	126.88	114.00
83	A5	156	G	C3'-C2'-C1'	-9.90	93.58	101.50
83	A5	3418	U	P-O3'-C3'	9.90	131.59	119.70
83	A5	120	C	O4'-C1'-C2'	-9.90	95.90	105.80
83	A5	182	G	O4'-C1'-N9	9.90	116.12	108.20
83	A5	940	U	O4'-C1'-N1	9.90	116.12	108.20
83	A5	2532	U	O4'-C1'-N1	9.90	116.12	108.20
83	A5	3888	U	O4'-C1'-N1	9.89	116.11	108.20
86	A8	60	U	P-O3'-C3'	9.89	131.57	119.70
83	A5	3840	G	C1'-O4'-C4'	9.88	117.81	109.90
83	A5	452	A	O4'-C1'-N9	9.88	116.11	108.20
36	B2	1449	U	P-O3'-C3'	-9.88	107.85	119.70
37	BC	27	U	O4'-C1'-N1	9.87	116.10	108.20
85	A7	4	A	C1'-O4'-C4'	-9.87	102.00	109.90
36	B2	1873	A	C4'-C3'-O3'	9.87	132.74	113.00
83	A5	3831	C	O4'-C1'-N1	9.87	116.10	108.20
36	B2	1653	C	O4'-C1'-N1	9.87	116.09	108.20
37	BC	28	G	O4'-C1'-N9	9.87	116.09	108.20
83	A5	1025	U	O4'-C1'-N1	9.87	116.09	108.20
83	A5	1661	C	O4'-C1'-C2'	-9.87	95.93	105.80
36	B2	857	G	O4'-C1'-N9	9.86	116.09	108.20
83	A5	3389	C	N1-C1'-C2'	9.85	126.80	114.00
83	A5	3762	G	O4'-C1'-N9	9.85	116.08	108.20
1	Az	731	TYR	CB-CG-CD2	9.84	126.90	121.00
36	B2	166	A	O4'-C1'-N9	9.84	116.07	108.20
36	B2	1269	U	O4'-C1'-N1	9.84	116.07	108.20
83	A5	2798	C	N1-C1'-C2'	9.84	126.79	114.00
83	A5	1428	G	O4'-C1'-N9	9.84	116.07	108.20
36	B2	1988	G	O4'-C1'-C2'	-9.83	95.97	105.80
83	A5	496	U	O4'-C1'-N1	9.83	116.06	108.20
83	A5	1706	G	O4'-C1'-N9	9.83	116.06	108.20
83	A5	2219	U	O4'-C1'-N1	9.83	116.06	108.20
36	B2	1848	U	O4'-C1'-N1	9.82	116.06	108.20
84	A9	1	U	O4'-C1'-N1	9.82	116.06	108.20
83	A5	2835	G	O4'-C1'-N9	9.81	116.05	108.20
83	A5	966	U	P-O3'-C3'	9.81	131.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3552	G	C1'-O4'-C4'	-9.81	102.05	109.90
83	A5	2196	U	C1'-O4'-C4'	9.81	117.75	109.90
64	CF	85	TYR	CB-CG-CD1	-9.80	115.12	121.00
68	Cf	44	TYR	CB-CG-CD1	9.80	126.88	121.00
83	A5	1978	G	O4'-C1'-N9	9.80	116.04	108.20
57	CY	11	ARG	NE-CZ-NH2	-9.80	115.40	120.30
83	A5	755	A	C3'-C2'-C1'	9.80	109.34	101.50
83	A5	775	U	C1'-O4'-C4'	-9.80	102.06	109.90
36	B2	318	U	O4'-C1'-N1	9.79	116.03	108.20
83	A5	648	U	O4'-C1'-N1	9.79	116.04	108.20
83	A5	2200	A	O4'-C1'-C2'	-9.79	96.01	105.80
35	Ah	126	PHE	CB-CG-CD1	9.78	127.64	120.80
36	B2	189	C	O4'-C1'-N1	9.77	116.02	108.20
36	B2	1724	U	O4'-C1'-N1	9.77	116.02	108.20
83	A5	1416	U	O4'-C1'-N1	9.77	116.02	108.20
83	A5	2081	U	O4'-C1'-N1	9.77	116.02	108.20
83	A5	3772	U	O4'-C1'-N1	9.77	116.02	108.20
83	A5	163	A	O4'-C1'-N9	-9.77	100.38	108.20
1	Az	226	PHE	CB-CG-CD1	9.77	127.64	120.80
36	B2	1612	C	O4'-C1'-N1	9.77	116.01	108.20
83	A5	1159	C	C3'-C2'-C1'	9.77	109.32	101.50
83	A5	1579	U	O4'-C1'-N1	9.77	116.01	108.20
83	A5	724	U	O4'-C1'-N1	9.76	116.01	108.20
26	AJ	176	ARG	NE-CZ-NH1	9.76	125.18	120.30
83	A5	95	G	N9-C1'-C2'	9.76	126.68	114.00
83	A5	2088	G	O4'-C1'-N9	9.76	116.00	108.20
42	CL	169	VAL	C-N-CA	9.75	146.07	121.70
83	A5	1587	U	O4'-C1'-N1	9.75	116.00	108.20
36	B2	115	U	O4'-C1'-N1	9.74	115.99	108.20
83	A5	2765	A	O4'-C1'-N9	9.74	115.99	108.20
83	A5	2935	U	P-O3'-C3'	9.74	131.39	119.70
84	A9	30	A	O4'-C1'-N9	9.73	115.99	108.20
83	A5	99	A	O4'-C1'-N9	9.73	115.98	108.20
83	A5	2481	U	C1'-O4'-C4'	-9.73	102.11	109.90
83	A5	3232	G	C1'-O4'-C4'	-9.73	102.12	109.90
36	B2	1337	U	P-O3'-C3'	9.72	131.37	119.70
36	B2	852	A	O4'-C1'-N9	9.72	115.98	108.20
83	A5	1590	A	O4'-C1'-N9	9.72	115.98	108.20
83	A5	1948	C	C1'-O4'-C4'	-9.72	102.12	109.90
83	A5	1752	G	C1'-O4'-C4'	-9.72	102.13	109.90
83	A5	706	G	N9-C1'-C2'	-9.72	101.31	112.00
36	B2	1138	U	P-O3'-C3'	9.71	131.36	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
64	CF	173	THR	C-N-CA	9.71	145.98	121.70
83	A5	564	C	P-O3'-C3'	9.71	131.35	119.70
83	A5	689	U	O4'-C1'-N1	9.71	115.97	108.20
83	A5	2098	C	O4'-C1'-N1	9.71	115.97	108.20
83	A5	3729	A	N9-C1'-C2'	-9.71	101.32	112.00
83	A5	3810	C	P-O3'-C3'	9.71	131.35	119.70
36	B2	1438	U	O4'-C1'-N1	9.71	115.97	108.20
83	A5	2074	U	O4'-C1'-N1	9.71	115.97	108.20
83	A5	2926	G	C1'-O4'-C4'	-9.71	102.14	109.90
36	B2	1973	G	O4'-C1'-N9	9.70	115.96	108.20
83	A5	936	U	O4'-C1'-N1	9.70	115.96	108.20
83	A5	2542	C	O4'-C1'-N1	9.70	115.96	108.20
83	A5	728	U	O4'-C1'-N1	9.70	115.96	108.20
36	B2	1075	U	O4'-C1'-N1	9.69	115.95	108.20
83	A5	2236	U	O4'-C1'-N1	9.69	115.95	108.20
37	BC	12	G	O4'-C1'-C2'	9.69	116.32	107.60
83	A5	242	C	N1-C1'-C2'	9.69	126.59	114.00
83	A5	2129	C	C1'-O4'-C4'	9.69	117.65	109.90
83	A5	2624	G	C1'-O4'-C4'	-9.69	102.15	109.90
83	A5	3407	U	N1-C1'-C2'	9.69	126.60	114.00
83	A5	40	U	O4'-C1'-N1	9.69	115.95	108.20
86	A8	82	C	O3'-P-O5'	9.69	122.41	104.00
83	A5	2619	U	O4'-C1'-N1	9.69	115.95	108.20
36	B2	1387	A	O4'-C1'-N9	9.68	115.95	108.20
36	B2	1527	U	O4'-C1'-N1	9.68	115.95	108.20
83	A5	779	U	O4'-C1'-N1	9.67	115.94	108.20
83	A5	2828	A	O4'-C1'-C2'	-9.67	96.13	105.80
83	A5	316	U	O4'-C1'-N1	9.66	115.93	108.20
83	A5	3556	A	O4'-C1'-N9	9.66	115.93	108.20
36	B2	1123	G	C1'-O4'-C4'	-9.66	102.17	109.90
83	A5	333	C	N1-C1'-C2'	9.66	126.55	114.00
83	A5	3010	U	O4'-C1'-N1	9.66	115.92	108.20
83	A5	3127	A	C3'-C2'-C1'	-9.66	93.78	101.50
36	B2	1330	U	P-O3'-C3'	9.65	131.29	119.70
39	Cq	83	ARG	C-N-CA	9.65	142.58	122.30
16	AA	184	ARG	NE-CZ-NH1	9.65	125.13	120.30
83	A5	3478	G	O4'-C1'-C2'	9.65	116.29	107.60
83	A5	3691	A	P-O3'-C3'	9.65	131.28	119.70
83	A5	3543	A	N9-C1'-C2'	-9.64	101.39	112.00
83	A5	2678	G	O4'-C1'-N9	9.64	115.91	108.20
36	B2	1245	A	O4'-C1'-N9	9.64	115.91	108.20
36	B2	1987	G	O4'-C1'-N9	9.64	115.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	540	G	C4'-C3'-O3'	-9.63	89.17	109.40
83	A5	2884	C	C3'-C2'-C1'	9.64	109.21	101.50
36	B2	1253	G	O4'-C1'-N9	9.63	115.91	108.20
83	A5	3906	U	N1-C1'-C2'	9.63	126.52	114.00
83	A5	151	G	O4'-C1'-N9	9.63	115.90	108.20
83	A5	3187	C	C3'-C2'-C1'	9.63	109.20	101.50
83	A5	1392	A	O4'-C1'-N9	9.62	115.90	108.20
36	B2	1050	A	O4'-C1'-N9	9.62	115.90	108.20
36	B2	438	C	N1-C1'-C2'	9.62	126.51	114.00
83	A5	440	U	O4'-C1'-N1	9.62	115.90	108.20
36	B2	96	C	N1-C1'-C2'	9.62	126.50	114.00
83	A5	3924	U	O4'-C1'-N1	9.62	115.89	108.20
83	A5	887	U	O4'-C1'-N1	9.61	115.89	108.20
36	B2	835	A	O4'-C1'-C2'	-9.61	96.19	105.80
83	A5	405	A	N9-C1'-C2'	-9.61	101.43	112.00
83	A5	514	A	C1'-O4'-C4'	-9.61	102.21	109.90
83	A5	904	U	P-O3'-C3'	-9.61	108.17	119.70
83	A5	880	A	P-O3'-C3'	9.61	131.23	119.70
36	B2	35	U	O4'-C1'-N1	9.60	115.88	108.20
83	A5	3357	C	N1-C1'-C2'	9.60	126.48	114.00
83	A5	580	A	O4'-C1'-N9	9.60	115.88	108.20
83	A5	1328	U	P-O3'-C3'	-9.60	108.18	119.70
36	B2	373	U	O4'-C1'-N1	9.60	115.88	108.20
83	A5	2994	C	O4'-C1'-C2'	-9.60	96.20	105.80
36	B2	1425	U	O4'-C1'-N1	9.59	115.87	108.20
83	A5	3087	G	P-O3'-C3'	9.59	131.21	119.70
36	B2	431	G	C3'-C2'-C1'	-9.59	93.83	101.50
36	B2	1322	C	N1-C1'-C2'	9.59	126.46	114.00
83	A5	1911	C	C1'-O4'-C4'	9.59	117.57	109.90
36	B2	1658	G	C1'-O4'-C4'	-9.58	102.23	109.90
36	B2	1737	U	O4'-C1'-N1	9.58	115.87	108.20
83	A5	542	C	C3'-C2'-C1'	9.58	109.17	101.50
83	A5	902	A	O4'-C1'-N9	9.58	115.86	108.20
83	A5	2144	A	O4'-C1'-N9	9.58	115.86	108.20
83	A5	2712	U	O4'-C1'-N1	9.58	115.86	108.20
36	B2	1168	C	P-O3'-C3'	9.58	131.19	119.70
83	A5	156	G	C1'-O4'-C4'	-9.58	102.24	109.90
83	A5	1687	U	N1-C1'-C2'	9.58	126.45	114.00
36	B2	1439	A	O4'-C1'-N9	9.57	115.86	108.20
83	A5	512	A	O4'-C1'-N9	9.57	115.86	108.20
36	B2	411	U	P-O3'-C3'	-9.57	108.22	119.70
83	A5	2696	U	O4'-C1'-N1	9.57	115.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1182	A	O4'-C1'-N9	9.56	115.85	108.20
41	CO	87	ARG	NE-CZ-NH1	9.56	125.08	120.30
83	A5	3448	U	O4'-C1'-N1	9.56	115.85	108.20
83	A5	3759	G	C1'-O4'-C4'	-9.55	102.26	109.90
83	A5	3829	U	N1-C1'-C2'	-9.55	101.49	112.00
83	A5	3943	G	C1'-O4'-C4'	-9.55	102.26	109.90
83	A5	118	A	C1'-O4'-C4'	-9.55	102.26	109.90
83	A5	360	A	O4'-C1'-N9	9.55	115.84	108.20
83	A5	468	U	O4'-C1'-N1	9.55	115.84	108.20
83	A5	3863	G	O4'-C1'-N9	9.55	115.84	108.20
36	B2	1744	U	O4'-C1'-N1	9.55	115.84	108.20
83	A5	767	A	O4'-C1'-N9	9.54	115.83	108.20
83	A5	2266	U	O4'-C1'-N1	9.54	115.83	108.20
36	B2	1568	G	P-O3'-C3'	9.54	131.15	119.70
36	B2	1608	U	O4'-C1'-N1	9.54	115.83	108.20
83	A5	2076	U	O4'-C1'-N1	9.54	115.83	108.20
36	B2	14	C	N1-C1'-C2'	9.53	126.39	114.00
83	A5	3293	G	C1'-O4'-C4'	9.53	117.52	109.90
36	B2	1428	A	C1'-O4'-C4'	9.53	117.52	109.90
36	B2	1702	C	O4'-C1'-N1	9.53	115.82	108.20
81	CE	65	SER	C-N-CA	9.53	145.51	121.70
18	AY	62	ARG	NE-CZ-NH2	-9.52	115.54	120.30
83	A5	442	A	O4'-C1'-N9	9.52	115.82	108.20
83	A5	746	G	N9-C1'-C2'	9.52	126.38	114.00
83	A5	178	U	P-O5'-C5'	9.52	136.13	120.90
37	BC	48	C	O4'-C1'-C2'	-9.52	96.28	105.80
36	B2	907	U	O4'-C1'-N1	9.51	115.81	108.20
83	A5	3012	A	O4'-C1'-N9	9.51	115.81	108.20
83	A5	3807	G	N9-C1'-C2'	9.51	126.37	114.00
83	A5	490	G	O4'-C1'-N9	9.51	115.81	108.20
83	A5	3464	G	O4'-C1'-N9	9.51	115.81	108.20
36	B2	703	A	P-O3'-C3'	9.51	131.11	119.70
83	A5	3515	C	N1-C1'-C2'	9.50	126.35	114.00
83	A5	3970	A	C1'-O4'-C4'	9.50	117.50	109.90
83	A5	2988	U	P-O3'-C3'	9.50	131.10	119.70
83	A5	3259	A	C3'-C2'-C1'	9.50	109.10	101.50
36	B2	1373	U	O4'-C1'-N1	9.49	115.79	108.20
36	B2	1876	U	O4'-C1'-N1	9.49	115.80	108.20
37	BC	33	C	N1-C1'-C2'	9.49	126.34	114.00
36	B2	1038	A	O4'-C1'-N9	9.49	115.79	108.20
36	B2	1212	A	O4'-C1'-N9	9.49	115.79	108.20
83	A5	6	U	N1-C1'-C2'	9.49	126.33	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3395	G	C1'-O4'-C4'	-9.49	102.31	109.90
36	B2	598	C	N1-C1'-C2'	9.48	126.33	114.00
36	B2	1380	U	O4'-C1'-N1	9.48	115.78	108.20
83	A5	2846	A	P-O3'-C3'	9.48	131.08	119.70
85	A7	79	U	O4'-C1'-N1	9.48	115.78	108.20
64	CF	39	ARG	NE-CZ-NH2	-9.48	115.56	120.30
37	BC	5	G	O4'-C1'-N9	9.47	115.78	108.20
36	B2	1172	G	O4'-C1'-N9	9.47	115.78	108.20
36	B2	1317	U	O4'-C1'-N1	9.47	115.78	108.20
83	A5	21	U	O4'-C1'-N1	9.47	115.78	108.20
36	B2	606	U	O4'-C1'-N1	9.47	115.77	108.20
83	A5	1451	G	O4'-C1'-N9	9.47	115.77	108.20
83	A5	2804	U	O4'-C1'-N1	9.47	115.77	108.20
52	CS	18	PRO	N-CA-C	9.46	136.71	112.10
83	A5	210	C	C3'-C2'-C1'	9.46	109.07	101.50
83	A5	3619	U	O4'-C1'-N1	9.46	115.77	108.20
36	B2	299	C	O4'-C1'-N1	9.46	115.77	108.20
83	A5	1014	U	O4'-C1'-N1	9.46	115.77	108.20
83	A5	2472	A	P-O3'-C3'	9.46	131.05	119.70
83	A5	2738	C	C3'-C2'-C1'	9.46	109.07	101.50
16	AA	37	TYR	CB-CG-CD1	-9.46	115.33	121.00
36	B2	37	U	O4'-C1'-N1	9.46	115.77	108.20
36	B2	1584	A	O4'-C1'-C2'	-9.46	96.34	105.80
86	A8	70	A	N9-C1'-C2'	9.46	126.29	114.00
36	B2	1871	G	N9-C1'-C2'	9.46	126.29	114.00
26	AJ	106	PHE	CB-CG-CD1	-9.45	114.18	120.80
28	AC	115	ASP	C-N-CA	9.45	145.33	121.70
83	A5	2051	A	O4'-C1'-N9	9.45	115.76	108.20
86	A8	99	U	N1-C1'-C2'	9.45	126.29	114.00
36	B2	254	C	C3'-C2'-C1'	9.45	109.06	101.50
83	A5	1203	U	O4'-C1'-N1	9.45	115.76	108.20
36	B2	1671	U	O4'-C1'-N1	9.45	115.76	108.20
36	B2	1186	U	P-O3'-C3'	9.45	131.04	119.70
37	BC	42	G	O4'-C1'-N9	9.45	115.76	108.20
83	A5	819	U	O4'-C1'-N1	9.45	115.76	108.20
83	A5	849	U	O4'-C1'-N1	9.44	115.75	108.20
83	A5	3901	G	O4'-C1'-N9	9.44	115.75	108.20
86	A8	119	U	O4'-C1'-N1	9.44	115.75	108.20
48	CD	219	PHE	CB-CG-CD2	-9.44	114.19	120.80
83	A5	1003	C	C1'-O4'-C4'	-9.43	102.35	109.90
38	Cz	28	PHE	CB-CG-CD1	-9.43	114.20	120.80
83	A5	814	U	O4'-C1'-N1	9.43	115.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	143	U	O4'-C1'-N1	9.43	115.74	108.20
83	A5	3535	G	O4'-C1'-N9	9.43	115.74	108.20
36	B2	1087	C	C3'-C2'-C1'	-9.43	93.96	101.50
36	B2	1792	A	C1'-O4'-C4'	-9.43	102.36	109.90
83	A5	1348	G	O4'-C1'-N9	9.42	115.74	108.20
83	A5	77	A	P-O3'-C3'	-9.42	108.39	119.70
83	A5	1297	G	P-O3'-C3'	9.42	131.00	119.70
83	A5	662	A	O4'-C1'-N9	9.42	115.74	108.20
36	B2	1434	U	C4'-C3'-C2'	-9.42	93.18	102.60
83	A5	3244	U	O4'-C1'-N1	9.41	115.73	108.20
83	A5	3695	G	O4'-C1'-N9	9.41	115.73	108.20
26	AJ	5	ARG	C-N-CA	9.41	145.23	121.70
36	B2	274	G	O4'-C1'-N9	9.41	115.73	108.20
83	A5	11	C	N1-C1'-C2'	9.41	126.24	114.00
83	A5	1667	U	O4'-C1'-N1	9.41	115.73	108.20
83	A5	584	A	O4'-C1'-N9	9.41	115.73	108.20
83	A5	1398	C	O4'-C1'-N1	9.41	115.73	108.20
83	A5	2173	C	O4'-C1'-N1	9.41	115.73	108.20
83	A5	763	A	O4'-C1'-N9	9.41	115.73	108.20
83	A5	3368	C	N1-C1'-C2'	-9.41	101.65	112.00
26	AJ	166	PHE	C-N-CA	9.41	142.06	122.30
36	B2	1543	G	O4'-C1'-N9	9.41	115.73	108.20
83	A5	1238	A	O4'-C1'-N9	9.41	115.73	108.20
83	A5	3649	C	O4'-C1'-C2'	-9.41	96.39	105.80
36	B2	1587	U	C1'-O4'-C4'	9.40	117.42	109.90
83	A5	1592	U	O4'-C1'-N1	9.40	115.72	108.20
83	A5	1701	C	C1'-O4'-C4'	-9.40	102.38	109.90
83	A5	3704	A	O4'-C1'-N9	9.40	115.72	108.20
83	A5	2822	C	P-O3'-C3'	9.40	130.98	119.70
83	A5	3294	A	O4'-C1'-N9	9.40	115.72	108.20
83	A5	2905	A	O4'-C1'-N9	9.40	115.72	108.20
83	A5	1320	U	O4'-C1'-N1	9.39	115.72	108.20
83	A5	668	A	C2'-C3'-O3'	-9.39	88.84	109.50
83	A5	3481	G	O4'-C1'-N9	9.39	115.71	108.20
36	B2	1909	U	O4'-C1'-N1	9.39	115.71	108.20
83	A5	874	G	N9-C1'-C2'	9.39	126.20	114.00
36	B2	471	U	O4'-C1'-N1	9.38	115.71	108.20
65	Cc	31	TYR	CB-CG-CD2	-9.38	115.37	121.00
83	A5	487	A	P-O3'-C3'	9.38	130.96	119.70
36	B2	65	A	N9-C1'-C2'	-9.38	101.68	112.00
83	A5	3168	A	O4'-C1'-C2'	9.38	116.04	107.60
83	A5	1137	G	O4'-C1'-N9	9.38	115.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CT	5	LYS	C-N-CA	9.38	141.99	122.30
83	A5	882	U	O4'-C1'-N1	9.38	115.70	108.20
83	A5	3957	G	O4'-C1'-N9	9.37	115.70	108.20
83	A5	1314	U	O4'-C1'-N1	9.37	115.70	108.20
36	B2	169	C	O4'-C1'-N1	9.37	115.69	108.20
36	B2	465	A	P-O3'-C3'	9.37	130.94	119.70
36	B2	701	G	O4'-C1'-C2'	-9.37	96.43	105.80
83	A5	1271	G	O4'-C1'-N9	9.36	115.69	108.20
83	A5	2586	A	C4'-C3'-O3'	-9.37	89.73	109.40
83	A5	477	C	O4'-C1'-C2'	-9.36	96.44	105.80
8	AS	40	TYR	CB-CG-CD1	-9.36	115.38	121.00
36	B2	149	U	O4'-C1'-N1	9.36	115.69	108.20
36	B2	1313	U	O4'-C1'-N1	9.36	115.69	108.20
83	A5	1482	U	O4'-C1'-N1	9.36	115.69	108.20
83	A5	3618	A	O4'-C1'-N9	9.35	115.68	108.20
83	A5	3715	U	P-O3'-C3'	9.35	130.92	119.70
36	B2	1472	C	O3'-P-O5'	-9.35	86.24	104.00
83	A5	300	A	O4'-C1'-C2'	-9.35	96.45	105.80
15	AB	114	ARG	NE-CZ-NH2	-9.35	115.63	120.30
83	A5	2702	A	O4'-C1'-N9	9.35	115.68	108.20
36	B2	1665	U	C4'-C3'-O3'	9.34	131.68	113.00
83	A5	2992	A	N9-C1'-C2'	9.34	126.14	114.00
36	B2	848	C	C3'-C2'-C1'	9.34	108.97	101.50
83	A5	1411	U	O4'-C1'-C2'	-9.34	96.47	105.80
36	B2	921	U	O4'-C1'-N1	9.33	115.66	108.20
36	B2	1936	U	O4'-C1'-N1	9.33	115.66	108.20
31	AH	141	ARG	NE-CZ-NH2	-9.33	115.64	120.30
83	A5	569	U	P-O3'-C3'	-9.33	108.51	119.70
83	A5	1752	G	O4'-C1'-C2'	9.32	115.99	107.60
83	A5	839	A	O4'-C1'-N9	9.32	115.66	108.20
83	A5	1553	C	O4'-C1'-N1	9.32	115.66	108.20
83	A5	3738	U	O4'-C1'-N1	9.31	115.65	108.20
84	A9	21	G	C1'-O4'-C4'	-9.31	102.45	109.90
36	B2	1629	U	O4'-C1'-N1	9.31	115.64	108.20
36	B2	1606	A	C3'-C2'-C1'	-9.30	94.06	101.50
83	A5	2123	G	P-O3'-C3'	9.30	130.86	119.70
36	B2	1758	A	C3'-C2'-C1'	-9.30	94.06	101.50
83	A5	1776	U	O4'-C1'-N1	9.30	115.64	108.20
83	A5	3145	U	O4'-C1'-N1	9.30	115.64	108.20
83	A5	239	U	O4'-C1'-N1	9.30	115.64	108.20
83	A5	1992	G	O4'-C1'-C2'	9.30	115.97	107.60
83	A5	2642	U	O4'-C1'-N1	9.29	115.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3862	A	O4'-C1'-N9	9.29	115.64	108.20
86	A8	13	U	O4'-C1'-N1	9.29	115.63	108.20
36	B2	288	C	O4'-C1'-N1	9.29	115.63	108.20
83	A5	187	A	O4'-C1'-N9	9.29	115.63	108.20
15	AB	65	ARG	NE-CZ-NH1	9.28	124.94	120.30
83	A5	1290	U	O4'-C1'-N1	9.28	115.62	108.20
36	B2	364	A	O4'-C1'-N9	9.28	115.62	108.20
83	A5	459	U	C1'-O4'-C4'	9.28	117.32	109.90
83	A5	698	A	C4'-C3'-O3'	9.28	131.55	113.00
85	A7	56	G	O4'-C1'-N9	9.28	115.62	108.20
83	A5	761	C	P-O3'-C3'	9.28	130.83	119.70
36	B2	1396	G	O4'-C1'-N9	9.27	115.62	108.20
83	A5	294	U	O4'-C1'-N1	9.27	115.62	108.20
83	A5	761	C	C1'-O4'-C4'	-9.27	102.48	109.90
83	A5	2829	G	O4'-C1'-N9	9.27	115.62	108.20
85	A7	52	U	O4'-C1'-N1	9.27	115.62	108.20
36	B2	783	U	P-O3'-C3'	9.27	130.82	119.70
83	A5	1755	U	C1'-O4'-C4'	9.27	117.31	109.90
83	A5	1690	U	O4'-C1'-C2'	-9.26	96.54	105.80
83	A5	3967	U	O4'-C1'-N1	9.26	115.61	108.20
83	A5	1564	G	O4'-C1'-C2'	9.26	115.93	107.60
83	A5	1598	A	N9-C1'-C2'	9.26	126.03	114.00
83	A5	1669	G	O4'-C1'-N9	9.26	115.61	108.20
36	B2	1444	C	O4'-C1'-N1	9.25	115.60	108.20
36	B2	944	G	O4'-C4'-C3'	-9.25	94.75	104.00
36	B2	1788	C	C3'-C2'-C1'	-9.25	94.10	101.50
83	A5	2770	C	C3'-C2'-C1'	9.25	108.90	101.50
36	B2	1565	C	C3'-C2'-C1'	9.24	108.90	101.50
83	A5	1135	U	O4'-C1'-N1	9.24	115.59	108.20
83	A5	1976	G	C1'-O4'-C4'	-9.24	102.51	109.90
83	A5	3849	A	P-O3'-C3'	-9.24	108.61	119.70
36	B2	936	G	C1'-O4'-C4'	-9.24	102.51	109.90
68	Cf	40	SER	C-N-CA	9.24	144.79	121.70
83	A5	636	U	O4'-C1'-N1	9.23	115.59	108.20
83	A5	3151	G	N9-C1'-C2'	9.23	126.00	114.00
83	A5	3692	G	P-O3'-C3'	9.23	130.78	119.70
83	A5	1809	A	P-O3'-C3'	9.23	130.78	119.70
36	B2	488	A	O4'-C1'-N9	9.23	115.58	108.20
46	CN	5	ARG	NE-CZ-NH1	9.23	124.91	120.30
36	B2	1535	U	O4'-C1'-N1	9.22	115.58	108.20
83	A5	241	C	N1-C1'-C2'	9.22	125.99	114.00
83	A5	2571	U	O4'-C1'-N1	9.22	115.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2256	G	O4'-C1'-N9	9.22	115.58	108.20
83	A5	3588	G	O4'-C1'-N9	9.22	115.58	108.20
36	B2	1951	A	C3'-C2'-C1'	-9.22	94.12	101.50
83	A5	1218	G	O4'-C1'-N9	9.21	115.57	108.20
83	A5	2872	U	O4'-C1'-N1	9.21	115.57	108.20
83	A5	1277	A	P-O3'-C3'	9.21	130.75	119.70
36	B2	192	A	O4'-C1'-N9	9.21	115.57	108.20
36	B2	1901	A	O4'-C1'-N9	9.21	115.57	108.20
42	CL	57	VAL	C-N-CA	9.21	144.72	121.70
83	A5	1467	A	O4'-C1'-N9	9.21	115.57	108.20
36	B2	1717	A	O4'-C1'-C2'	-9.21	96.59	105.80
83	A5	717	A	N9-C1'-C2'	9.20	125.97	114.00
83	A5	865	A	O3'-P-O5'	-9.21	86.51	104.00
83	A5	679	G	O4'-C1'-N9	9.20	115.56	108.20
83	A5	2480	U	P-O3'-C3'	9.20	130.74	119.70
83	A5	3552	G	O4'-C1'-C2'	9.20	115.88	107.60
36	B2	61	A	O4'-C1'-N9	9.20	115.56	108.20
83	A5	123	U	C1'-O4'-C4'	9.20	117.26	109.90
83	A5	478	A	P-O3'-C3'	9.20	130.74	119.70
83	A5	980	A	O4'-C1'-N9	9.20	115.56	108.20
83	A5	3366	G	N9-C1'-C2'	9.19	125.95	114.00
36	B2	1244	C	O4'-C1'-N1	9.19	115.55	108.20
83	A5	1604	G	O4'-C1'-N9	9.19	115.55	108.20
83	A5	227	A	O4'-C1'-C2'	-9.19	96.61	105.80
83	A5	2122	G	C1'-O4'-C4'	-9.19	102.55	109.90
36	B2	92	A	N9-C1'-C2'	9.19	125.94	114.00
83	A5	2137	U	O4'-C1'-N1	9.19	115.55	108.20
36	B2	1340	U	P-O3'-C3'	9.19	130.72	119.70
51	CA	72	ARG	NE-CZ-NH1	9.19	124.89	120.30
36	B2	988	G	C3'-C2'-C1'	-9.18	94.16	101.50
83	A5	143	G	O4'-C1'-N9	9.18	115.54	108.20
83	A5	1717	A	P-O3'-C3'	9.18	130.72	119.70
83	A5	3827	G	O4'-C1'-N9	9.18	115.54	108.20
36	B2	393	G	O4'-C1'-N9	9.18	115.54	108.20
83	A5	1647	A	C3'-C2'-C1'	9.18	108.84	101.50
8	AS	126	TYR	CB-CG-CD2	-9.17	115.50	121.00
16	AA	116	PHE	CB-CG-CD2	9.17	127.22	120.80
85	A7	13	A	C4'-C3'-O3'	9.17	131.34	113.00
10	AN	58	HIS	C-N-CA	9.17	141.56	122.30
83	A5	1524	U	O4'-C1'-N1	9.17	115.54	108.20
11	AL	104	ARG	NE-CZ-NH2	-9.17	115.72	120.30
36	B2	61	A	O4'-C1'-C2'	9.16	115.85	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	568	U	O4'-C1'-N1	9.16	115.53	108.20
83	A5	2044	A	O4'-C1'-N9	9.16	115.53	108.20
83	A5	3249	C	N1-C1'-C2'	9.16	125.91	114.00
83	A5	3887	U	P-O3'-C3'	-9.16	108.71	119.70
83	A5	2852	U	O4'-C1'-N1	9.15	115.52	108.20
83	A5	2101	C	C3'-C2'-C1'	9.15	108.82	101.50
83	A5	2028	A	O4'-C1'-C2'	9.15	115.83	107.60
83	A5	2019	U	O4'-C1'-N1	9.15	115.52	108.20
36	B2	1741	A	O4'-C1'-N9	9.14	115.52	108.20
83	A5	1929	G	O4'-C1'-N9	9.14	115.52	108.20
83	A5	3944	A	O4'-C1'-N9	9.14	115.52	108.20
37	BC	57	A	O4'-C1'-C2'	-9.14	96.66	105.80
36	B2	1019	U	P-O3'-C3'	9.14	130.67	119.70
83	A5	2605	C	P-O3'-C3'	9.14	130.66	119.70
61	Ch	111	ARG	NE-CZ-NH2	-9.13	115.73	120.30
83	A5	817	C	O4'-C1'-N1	9.13	115.51	108.20
86	A8	66	U	O4'-C1'-N1	9.13	115.51	108.20
83	A5	933	U	O4'-C1'-N1	9.13	115.50	108.20
83	A5	3624	C	C3'-C2'-C1'	9.13	108.81	101.50
36	B2	122	G	O4'-C1'-N9	9.13	115.50	108.20
83	A5	2757	U	O4'-C1'-N1	9.12	115.50	108.20
83	A5	3486	U	O4'-C1'-N1	9.12	115.50	108.20
83	A5	3759	G	N9-C1'-C2'	9.12	125.86	114.00
83	A5	1097	A	C3'-C2'-C1'	9.12	108.79	101.50
10	AN	18	TYR	CB-CG-CD2	-9.11	115.53	121.00
36	B2	1711	C	C3'-C2'-C1'	9.11	108.79	101.50
83	A5	3295	U	C3'-C2'-C1'	9.11	108.79	101.50
44	CM	114	TYR	CB-CG-CD2	-9.11	115.53	121.00
83	A5	316	U	P-O3'-C3'	9.11	130.63	119.70
83	A5	3808	A	O4'-C1'-N9	9.11	115.49	108.20
83	A5	494	U	O4'-C1'-N1	9.11	115.49	108.20
36	B2	188	C	O4'-C1'-C2'	-9.11	96.69	105.80
83	A5	1503	G	C1'-O4'-C4'	-9.11	102.61	109.90
83	A5	2703	G	O4'-C1'-N9	9.11	115.49	108.20
63	CB	277	ARG	NE-CZ-NH1	9.10	124.85	120.30
83	A5	1179	U	N1-C1'-C2'	9.10	125.83	114.00
83	A5	1909	U	C4'-C3'-O3'	-9.10	90.29	109.40
36	B2	1723	U	O4'-C1'-N1	9.10	115.48	108.20
36	B2	1755	A	P-O3'-C3'	9.10	130.61	119.70
83	A5	1570	U	O4'-C1'-N1	9.10	115.48	108.20
64	CF	85	TYR	CB-CG-CD2	9.09	126.45	121.00
83	A5	1396	A	O4'-C1'-N9	9.09	115.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2154	A	C1'-O4'-C4'	9.09	117.17	109.90
36	B2	1098	C	C3'-C2'-C1'	9.09	108.77	101.50
36	B2	1934	U	O4'-C1'-N1	9.09	115.47	108.20
83	A5	692	G	O4'-C1'-N9	9.09	115.47	108.20
83	A5	3923	C	O4'-C1'-C2'	-9.09	96.71	105.80
83	A5	2274	G	O4'-C1'-N9	9.09	115.47	108.20
83	A5	3113	U	O4'-C1'-N1	9.08	115.47	108.20
36	B2	257	U	C4'-C3'-O3'	9.08	131.16	113.00
36	B2	1465	U	O4'-C1'-N1	9.08	115.46	108.20
83	A5	185	U	N1-C1'-C2'	9.08	125.81	114.00
83	A5	1411	U	O4'-C1'-N1	9.08	115.47	108.20
83	A5	3835	U	N1-C1'-C2'	9.08	125.80	114.00
20	Aa	97	PRO	CA-C-N	9.08	142.51	117.10
36	B2	1446	G	O4'-C1'-N9	9.07	115.46	108.20
83	A5	1626	A	P-O3'-C3'	9.07	130.59	119.70
83	A5	2560	A	O4'-C1'-N9	9.07	115.46	108.20
83	A5	637	U	N1-C1'-C2'	-9.07	102.02	112.00
83	A5	1551	U	O4'-C1'-N1	9.07	115.45	108.20
36	B2	1544	G	C1'-O4'-C4'	-9.07	102.65	109.90
36	B2	1005	G	C1'-O4'-C4'	-9.06	102.65	109.90
36	B2	1284	A	O4'-C1'-N9	9.06	115.45	108.20
83	A5	39	A	O4'-C1'-N9	9.06	115.45	108.20
83	A5	1281	U	O4'-C1'-N1	9.06	115.45	108.20
36	B2	1810	C	O4'-C1'-C2'	-9.06	96.74	105.80
83	A5	1622	U	O4'-C1'-N1	9.06	115.45	108.20
83	A5	3024	U	P-O3'-C3'	-9.06	108.83	119.70
83	A5	3136	U	O4'-C1'-N1	9.06	115.45	108.20
83	A5	3826	A	O4'-C1'-N9	9.06	115.45	108.20
1	Az	256	PHE	CB-CG-CD2	9.05	127.14	120.80
37	BC	56	G	O4'-C1'-N9	9.06	115.44	108.20
83	A5	569	U	O3'-P-O5'	9.05	121.20	104.00
83	A5	3478	G	C1'-O4'-C4'	-9.05	102.66	109.90
36	B2	214	G	O4'-C1'-N9	9.05	115.44	108.20
83	A5	576	U	O4'-C1'-N1	9.05	115.44	108.20
83	A5	233	A	O4'-C1'-N9	9.04	115.44	108.20
83	A5	1538	U	O4'-C1'-N1	9.05	115.44	108.20
36	B2	426	A	C1'-O4'-C4'	9.04	117.13	109.90
36	B2	1984	G	O4'-C1'-N9	9.04	115.43	108.20
62	Cb	45	TYR	CB-CG-CD2	-9.04	115.58	121.00
83	A5	1499	C	O4'-C1'-C2'	-9.04	96.76	105.80
83	A5	3705	U	O4'-C1'-N1	9.04	115.43	108.20
36	B2	1888	C	O4'-C1'-N1	9.04	115.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	435	G	O4'-C1'-N9	9.04	115.43	108.20
83	A5	997	U	O4'-C1'-N1	9.04	115.43	108.20
83	A5	1379	U	O4'-C1'-N1	9.04	115.43	108.20
83	A5	502	U	O4'-C1'-N1	9.04	115.43	108.20
83	A5	749	U	P-O3'-C3'	9.03	130.54	119.70
83	A5	2553	U	O4'-C1'-N1	9.03	115.42	108.20
83	A5	1329	G	P-O3'-C3'	-9.03	108.86	119.70
36	B2	836	C	O4'-C1'-N1	9.03	115.42	108.20
83	A5	2232	U	O4'-C1'-N1	9.03	115.42	108.20
36	B2	565	G	N9-C1'-C2'	9.02	125.73	114.00
36	B2	1144	C	O4'-C1'-C2'	-9.02	96.78	105.80
36	B2	627	A	O4'-C1'-C2'	9.02	115.72	107.60
83	A5	656	U	O4'-C1'-N1	9.02	115.42	108.20
83	A5	886	U	O4'-C1'-N1	9.02	115.42	108.20
83	A5	1306	G	O4'-C1'-N9	9.02	115.42	108.20
83	A5	2706	U	O4'-C1'-N1	9.02	115.41	108.20
36	B2	1275	U	O4'-C1'-N1	9.02	115.41	108.20
50	CR	104	ARG	NE-CZ-NH2	-9.02	115.79	120.30
83	A5	1689	G	C3'-C2'-C1'	9.01	108.71	101.50
62	Cb	63	ARG	NE-CZ-NH1	9.01	124.81	120.30
83	A5	1471	G	C1'-O4'-C4'	-9.01	102.69	109.90
36	B2	546	A	O4'-C1'-N9	9.01	115.41	108.20
54	CP	42	ARG	NE-CZ-NH2	-9.01	115.80	120.30
37	BC	70	C	N1-C1'-C2'	9.01	125.71	114.00
83	A5	1352	U	N1-C1'-C2'	-9.00	102.10	112.00
83	A5	1609	U	O4'-C1'-N1	9.00	115.40	108.20
83	A5	3436	U	C1'-O4'-C4'	9.00	117.10	109.90
83	A5	613	U	O4'-C1'-N1	9.00	115.40	108.20
36	B2	1674	C	C3'-C2'-C1'	8.99	108.69	101.50
36	B2	1967	C	O4'-C1'-N1	8.99	115.39	108.20
83	A5	1060	G	O4'-C1'-N9	8.99	115.40	108.20
83	A5	2393	A	P-O3'-C3'	8.99	130.49	119.70
36	B2	70	C	O4'-C1'-N1	8.99	115.39	108.20
36	B2	240	U	O4'-C1'-N1	8.99	115.39	108.20
83	A5	1534	G	C1'-O4'-C4'	-8.99	102.71	109.90
83	A5	1572	A	O4'-C1'-N9	8.99	115.39	108.20
7	AM	52	ARG	NE-CZ-NH2	-8.98	115.81	120.30
36	B2	239	G	P-O3'-C3'	8.98	130.48	119.70
36	B2	1091	U	O4'-C1'-N1	8.98	115.39	108.20
83	A5	163	A	C3'-C2'-C1'	8.98	108.69	101.50
83	A5	2762	A	O4'-C1'-C2'	-8.98	96.82	105.80
36	B2	25	U	O4'-C1'-N1	8.98	115.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	368	G	O4'-C1'-N9	8.98	115.39	108.20
83	A5	166	G	O4'-C1'-N9	8.98	115.39	108.20
83	A5	350	C	O4'-C1'-N1	8.98	115.38	108.20
83	A5	1474	A	O4'-C1'-N9	8.98	115.38	108.20
8	AS	126	TYR	CB-CG-CD1	8.97	126.38	121.00
36	B2	998	U	C5'-C4'-C3'	-8.96	101.66	116.00
83	A5	717	A	C1'-O4'-C4'	-8.96	102.73	109.90
83	A5	3260	G	O4'-C1'-C2'	8.96	115.67	107.60
36	B2	12	U	O4'-C1'-N1	8.96	115.37	108.20
36	B2	282	U	O4'-C1'-N1	8.96	115.37	108.20
83	A5	960	U	O4'-C1'-N1	8.96	115.37	108.20
36	B2	1645	G	O4'-C1'-N9	8.96	115.36	108.20
36	B2	430	A	C1'-O4'-C4'	-8.95	102.74	109.90
83	A5	2913	G	C1'-O4'-C4'	-8.95	102.74	109.90
83	A5	3243	C	O4'-C1'-N1	8.95	115.36	108.20
83	A5	3386	U	O4'-C1'-N1	8.95	115.36	108.20
83	A5	3806	C	P-O3'-C3'	8.95	130.44	119.70
36	B2	163	C	C3'-C2'-C1'	8.95	108.66	101.50
36	B2	285	U	O4'-C1'-N1	8.94	115.36	108.20
36	B2	902	A	C3'-C2'-C1'	8.94	108.66	101.50
36	B2	640	U	N1-C1'-C2'	-8.94	102.17	112.00
31	AH	171	PHE	CB-CG-CD2	-8.94	114.54	120.80
83	A5	381	G	O4'-C1'-N9	8.94	115.35	108.20
36	B2	821	U	O4'-C1'-N1	8.94	115.35	108.20
36	B2	1127	G	C3'-C2'-C1'	-8.94	94.35	101.50
37	BC	14	A	P-O3'-C3'	-8.93	108.98	119.70
83	A5	1917	U	O4'-C1'-N1	8.93	115.35	108.20
83	A5	2688	U	N1-C1'-C2'	8.93	125.61	114.00
83	A5	1134	G	N9-C1'-C2'	8.93	125.61	114.00
83	A5	3745	U	O4'-C1'-N1	8.93	115.34	108.20
36	B2	1170	G	P-O5'-C5'	-8.93	106.62	120.90
83	A5	745	U	O4'-C1'-N1	8.93	115.34	108.20
36	B2	17	C	C3'-C2'-C1'	8.92	108.64	101.50
83	A5	552	U	O4'-C1'-N1	8.92	115.34	108.20
36	B2	1331	A	O4'-C1'-N9	8.92	115.34	108.20
83	A5	1713	U	P-O5'-C5'	8.92	135.18	120.90
83	A5	3266	A	O4'-C1'-N9	8.92	115.34	108.20
83	A5	1007	A	O4'-C1'-C2'	8.92	115.63	107.60
29	AG	85	ARG	NE-CZ-NH2	-8.91	115.84	120.30
80	CH	97	PHE	CB-CG-CD1	8.91	127.04	120.80
83	A5	3610	A	O4'-C1'-N9	8.91	115.33	108.20
83	A5	304	U	O4'-C4'-C3'	-8.91	95.09	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1956	A	N9-C1'-C2'	8.91	125.59	114.00
83	A5	3415	U	O4'-C1'-N1	8.91	115.33	108.20
83	A5	2244	G	O4'-C1'-N9	8.91	115.33	108.20
36	B2	1258	G	O4'-C1'-N9	8.91	115.33	108.20
36	B2	1029	G	C1'-O4'-C4'	-8.91	102.77	109.90
83	A5	160	U	O4'-C1'-N1	8.91	115.33	108.20
83	A5	324	A	O4'-C1'-C2'	-8.91	96.89	105.80
83	A5	2519	U	O4'-C1'-N1	8.91	115.33	108.20
83	A5	1496	U	O4'-C1'-N1	8.91	115.33	108.20
83	A5	3297	C	O4'-C1'-N1	8.91	115.33	108.20
83	A5	2858	U	O4'-C1'-N1	8.91	115.33	108.20
83	A5	1089	U	O4'-C1'-N1	8.90	115.32	108.20
83	A5	201	U	N1-C1'-C2'	-8.90	102.21	112.00
83	A5	2124	G	O4'-C1'-N9	8.90	115.32	108.20
83	A5	706	G	O4'-C1'-N9	8.90	115.32	108.20
83	A5	3906	U	C3'-C2'-C1'	8.90	108.62	101.50
36	B2	18	C	C3'-C2'-C1'	8.89	108.62	101.50
83	A5	2492	A	O4'-C1'-N9	8.89	115.31	108.20
36	B2	27	U	O4'-C1'-N1	8.89	115.31	108.20
83	A5	358	C	N1-C1'-C2'	8.89	125.56	114.00
83	A5	1501	A	O4'-C1'-C2'	-8.89	96.91	105.80
83	A5	3494	C	O4'-C1'-N1	8.89	115.31	108.20
36	B2	1873	A	O3'-P-O5'	8.89	120.89	104.00
83	A5	1352	U	O4'-C1'-N1	8.88	115.31	108.20
83	A5	583	U	P-O3'-C3'	8.88	130.36	119.70
83	A5	2202	A	O4'-C1'-N9	8.88	115.31	108.20
36	B2	903	C	O4'-C1'-C2'	-8.88	96.92	105.80
83	A5	1051	C	N1-C1'-C2'	8.88	125.54	114.00
36	B2	1469	U	O4'-C1'-N1	8.88	115.30	108.20
83	A5	1641	U	C5'-C4'-C3'	-8.88	101.80	116.00
83	A5	884	U	O4'-C1'-N1	8.88	115.30	108.20
83	A5	2868	A	P-O3'-C3'	8.88	130.35	119.70
36	B2	712	U	O4'-C1'-N1	8.87	115.30	108.20
83	A5	1867	A	P-O5'-C5'	8.87	135.09	120.90
48	CD	260	SER	N-CA-CB	8.87	123.80	110.50
83	A5	768	U	O4'-C1'-N1	8.87	115.30	108.20
83	A5	2652	U	O4'-C1'-C2'	-8.86	96.94	105.80
83	A5	3666	C	N1-C1'-C2'	8.86	125.52	114.00
85	A7	31	G	C1'-O4'-C4'	-8.86	102.81	109.90
83	A5	359	G	C1'-O4'-C4'	8.86	116.99	109.90
83	A5	437	G	O4'-C1'-N9	8.86	115.28	108.20
83	A5	9	A	O4'-C1'-N9	8.85	115.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1385	G	C1'-O4'-C4'	8.85	116.98	109.90
83	A5	2609	U	O4'-C1'-N1	8.85	115.28	108.20
36	B2	423	G	N9-C1'-C2'	8.85	125.50	114.00
36	B2	623	G	O4'-C1'-N9	8.85	115.28	108.20
49	CQ	9	TYR	CB-CG-CD2	-8.85	115.69	121.00
83	A5	627	G	O4'-C1'-N9	8.85	115.28	108.20
36	B2	120	U	N1-C1'-C2'	8.84	125.49	114.00
83	A5	1247	U	O4'-C1'-N1	8.84	115.27	108.20
36	B2	1745	G	O4'-C1'-N9	8.84	115.27	108.20
83	A5	1437	A	P-O3'-C3'	-8.84	109.09	119.70
83	A5	3702	G	P-O3'-C3'	8.84	130.31	119.70
83	A5	1176	A	N9-C1'-C2'	-8.84	102.28	112.00
36	B2	215	C	O4'-C1'-C2'	-8.84	96.97	105.80
36	B2	1315	U	C3'-C2'-C1'	8.84	108.57	101.50
83	A5	3298	U	O4'-C1'-N1	8.84	115.27	108.20
83	A5	3824	C	P-O5'-C5'	8.84	135.04	120.90
36	B2	513	A	O4'-C1'-C2'	-8.83	96.97	105.80
36	B2	284	G	N9-C1'-C2'	8.83	125.48	114.00
83	A5	50	U	N1-C1'-C2'	8.83	125.48	114.00
83	A5	1250	C	C1'-O4'-C4'	-8.83	102.83	109.90
83	A5	1573	U	O4'-C1'-N1	8.83	115.27	108.20
83	A5	3276	C	N1-C1'-C2'	8.83	125.48	114.00
83	A5	421	C	O4'-C1'-N1	8.83	115.26	108.20
83	A5	3474	G	O4'-C1'-N9	-8.83	101.14	108.20
36	B2	1261	C	C3'-C2'-C1'	8.83	108.56	101.50
36	B2	1736	U	O4'-C1'-N1	8.82	115.26	108.20
83	A5	224	U	O4'-C1'-N1	8.82	115.26	108.20
83	A5	3005	A	O4'-C1'-N9	8.82	115.26	108.20
36	B2	310	C	N1-C1'-C2'	8.82	125.46	114.00
36	B2	1279	U	O4'-C1'-N1	8.82	115.25	108.20
83	A5	856	A	C3'-C2'-C1'	8.82	108.55	101.50
83	A5	1810	A	O3'-P-O5'	8.81	120.75	104.00
36	B2	512	U	O4'-C1'-N1	8.81	115.25	108.20
51	CA	30	ARG	NE-CZ-NH1	8.81	124.70	120.30
83	A5	3300	U	O4'-C1'-N1	8.81	115.25	108.20
83	A5	1927	U	O4'-C1'-N1	8.81	115.25	108.20
36	B2	1803	A	O3'-P-O5'	8.80	120.72	104.00
83	A5	211	U	P-O5'-C5'	8.80	134.98	120.90
83	A5	1909	U	O3'-P-O5'	8.80	120.72	104.00
83	A5	1927	U	C1'-C2'-O2'	-8.80	84.19	110.60
83	A5	2753	G	N9-C1'-C2'	8.80	125.44	114.00
83	A5	1589	A	O4'-C1'-N9	8.80	115.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3864	C	N1-C1'-C2'	8.80	125.44	114.00
83	A5	170	G	O4'-C1'-N9	8.80	115.24	108.20
25	Af	80	ARG	NE-CZ-NH1	8.79	124.70	120.30
83	A5	3104	C	O4'-C1'-N1	8.79	115.23	108.20
83	A5	116	U	N1-C1'-C2'	-8.79	102.33	112.00
83	A5	1751	U	O4'-C1'-N1	8.79	115.23	108.20
83	A5	2187	U	O4'-C1'-N1	8.79	115.23	108.20
36	B2	1215	G	O4'-C1'-C2'	8.79	115.51	107.60
36	B2	1427	U	N1-C1'-C2'	8.79	125.42	114.00
84	A9	26	U	O4'-C1'-N1	8.79	115.23	108.20
36	B2	251	G	C1'-O4'-C4'	8.78	116.93	109.90
36	B2	1849	U	P-O3'-C3'	8.79	130.24	119.70
83	A5	1470	C	N1-C1'-C2'	8.79	125.42	114.00
83	A5	1862	U	O4'-C1'-N1	8.78	115.23	108.20
83	A5	463	C	C3'-C2'-C1'	8.78	108.52	101.50
36	B2	1434	U	N1-C1'-C2'	8.77	125.41	114.00
36	B2	569	G	O4'-C1'-N9	8.77	115.22	108.20
36	B2	1582	C	C3'-C2'-C1'	-8.77	94.49	101.50
83	A5	2473	C	C3'-C2'-C1'	8.77	108.52	101.50
36	B2	1024	C	C3'-C2'-C1'	8.77	108.51	101.50
36	B2	1152	G	O4'-C1'-N9	8.76	115.21	108.20
36	B2	1874	C	O4'-C1'-N1	8.76	115.21	108.20
36	B2	379	U	O4'-C1'-N1	8.76	115.21	108.20
83	A5	2913	G	O4'-C1'-C2'	8.76	115.48	107.60
83	A5	183	U	O4'-C1'-N1	8.76	115.21	108.20
83	A5	3776	A	O4'-C1'-N9	8.76	115.21	108.20
83	A5	2126	A	N9-C1'-C2'	-8.75	102.37	112.00
36	B2	309	U	O4'-C1'-N1	8.75	115.20	108.20
83	A5	460	A	P-O5'-C5'	8.75	134.90	120.90
83	A5	3293	G	O4'-C1'-N9	8.75	115.20	108.20
83	A5	322	G	P-O3'-C3'	-8.75	109.20	119.70
84	A9	23	G	C3'-C2'-C1'	8.75	108.50	101.50
36	B2	1604	A	O4'-C1'-C2'	-8.74	97.06	105.80
83	A5	188	G	P-O3'-C3'	8.74	130.19	119.70
83	A5	1895	U	O4'-C1'-N1	8.74	115.19	108.20
36	B2	1839	U	O4'-C1'-N1	8.74	115.19	108.20
36	B2	1961	A	O4'-C1'-N9	8.74	115.19	108.20
83	A5	213	A	N9-C1'-C2'	8.74	125.36	114.00
83	A5	3465	C	O4'-C1'-N1	8.74	115.19	108.20
36	B2	132	A	P-O3'-C3'	8.74	130.18	119.70
36	B2	163	C	N1-C1'-C2'	8.73	125.36	114.00
36	B2	1038	A	N9-C1'-C2'	-8.73	102.39	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1561	G	O4'-C1'-N9	8.73	115.19	108.20
83	A5	1056	G	N9-C1'-C2'	8.73	125.35	114.00
79	CJ	63	ARG	NE-CZ-NH1	8.73	124.67	120.30
83	A5	1861	A	O4'-C1'-N9	8.73	115.19	108.20
36	B2	865	A	N9-C1'-C2'	8.73	125.35	114.00
86	A8	63	U	O4'-C1'-C2'	-8.73	97.07	105.80
83	A5	804	C	N1-C1'-C2'	8.72	125.34	114.00
36	B2	341	G	O4'-C1'-N9	8.72	115.18	108.20
36	B2	1642	C	C3'-C2'-C1'	8.72	108.48	101.50
36	B2	597	C	C3'-C2'-C1'	8.72	108.48	101.50
83	A5	1566	U	P-O3'-C3'	8.72	130.16	119.70
83	A5	3310	G	O4'-C1'-N9	8.71	115.17	108.20
83	A5	3549	C	O4'-C1'-N1	8.72	115.17	108.20
83	A5	3685	U	O4'-C1'-N1	8.71	115.17	108.20
36	B2	620	U	O4'-C1'-N1	8.71	115.17	108.20
83	A5	2769	G	C1'-O4'-C4'	-8.71	102.93	109.90
83	A5	3709	A	O4'-C1'-N9	8.71	115.17	108.20
36	B2	1573	U	C2'-C3'-O3'	8.71	128.66	109.50
83	A5	3916	U	C1'-O4'-C4'	-8.71	102.93	109.90
83	A5	2558	A	C1'-O4'-C4'	-8.71	102.93	109.90
83	A5	2834	A	O4'-C1'-N9	8.71	115.17	108.20
36	B2	1276	G	C1'-O4'-C4'	-8.71	102.94	109.90
80	CH	162	SER	C-N-CA	8.71	143.46	121.70
83	A5	1556	C	N1-C1'-C2'	8.71	125.32	114.00
58	CW	80	ARG	NE-CZ-NH2	-8.70	115.95	120.30
83	A5	1457	G	P-O3'-C3'	8.70	130.14	119.70
1	Az	198	ASP	C-N-CA	8.69	143.43	121.70
83	A5	2594	G	O4'-C1'-N9	8.69	115.16	108.20
83	A5	2651	G	O4'-C1'-C2'	-8.69	97.11	105.80
36	B2	1173	A	N9-C1'-C2'	8.69	125.29	114.00
83	A5	288	U	O4'-C1'-N1	8.69	115.15	108.20
83	A5	1721	C	P-O5'-C5'	8.68	134.79	120.90
7	AM	121	PHE	CB-CG-CD1	8.68	126.88	120.80
82	CG	88	PHE	C-N-CA	8.68	143.40	121.70
83	A5	595	U	O4'-C1'-N1	8.68	115.14	108.20
83	A5	691	C	C1'-O4'-C4'	-8.68	102.96	109.90
83	A5	1619	C	O4'-C1'-N1	8.68	115.14	108.20
36	B2	999	U	O4'-C1'-N1	8.68	115.14	108.20
83	A5	481	A	O4'-C1'-N9	8.68	115.14	108.20
83	A5	2806	U	O4'-C1'-N1	8.68	115.14	108.20
83	A5	3590	C	O4'-C1'-C2'	-8.68	97.12	105.80
83	A5	784	G	C1'-O4'-C4'	-8.67	102.96	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1338	U	C4'-C3'-O3'	8.67	130.34	113.00
83	A5	1047	A	O4'-C1'-N9	8.67	115.14	108.20
83	A5	1103	U	O4'-C1'-N1	8.67	115.14	108.20
83	A5	1957	C	P-O3'-C3'	8.67	130.10	119.70
83	A5	1945	U	O4'-C1'-N1	8.67	115.13	108.20
83	A5	1762	G	O4'-C1'-N9	8.66	115.13	108.20
36	B2	642	G	O4'-C1'-N9	8.66	115.13	108.20
83	A5	267	C	P-O3'-C3'	8.66	130.09	119.70
83	A5	858	U	O4'-C1'-N1	8.66	115.13	108.20
36	B2	183	A	C3'-C2'-C1'	8.66	108.42	101.50
80	CH	120	TYR	CB-CG-CD1	8.65	126.19	121.00
83	A5	214	A	C3'-C2'-C1'	8.65	108.42	101.50
36	B2	1766	G	C3'-C2'-C1'	8.65	108.42	101.50
83	A5	1178	U	C3'-C2'-C1'	8.65	108.42	101.50
83	A5	2117	A	C3'-C2'-C1'	8.65	108.42	101.50
83	A5	2204	U	O4'-C1'-N1	8.65	115.12	108.20
83	A5	1958	G	N9-C1'-C2'	8.65	125.24	114.00
36	B2	1201	A	O4'-C1'-N9	8.65	115.12	108.20
83	A5	732	U	N1-C1'-C2'	-8.65	102.49	112.00
86	A8	107	U	P-O3'-C3'	8.65	130.07	119.70
83	A5	913	U	O4'-C1'-N1	8.64	115.12	108.20
83	A5	2220	C	C3'-C2'-C1'	8.64	108.42	101.50
83	A5	3419	A	N9-C1'-C2'	8.64	125.23	114.00
36	B2	469	A	O4'-C1'-N9	8.64	115.11	108.20
83	A5	1627	U	O4'-C1'-N1	8.64	115.11	108.20
83	A5	2136	U	P-O3'-C3'	8.64	130.06	119.70
83	A5	3197	U	O4'-C1'-N1	8.63	115.11	108.20
85	A7	20	U	O4'-C1'-N1	8.63	115.11	108.20
83	A5	370	A	O4'-C1'-N9	8.63	115.11	108.20
83	A5	439	U	C1'-O4'-C4'	-8.63	103.00	109.90
83	A5	823	U	O4'-C1'-N1	8.63	115.10	108.20
83	A5	861	C	O4'-C1'-N1	8.63	115.10	108.20
36	B2	517	G	O4'-C1'-N9	8.63	115.10	108.20
83	A5	888	A	O4'-C1'-N9	8.63	115.10	108.20
36	B2	661	G	P-O3'-C3'	8.62	130.05	119.70
36	B2	1910	U	N1-C1'-C2'	8.62	125.21	114.00
36	B2	522	G	P-O3'-C3'	8.62	130.04	119.70
36	B2	439	G	O4'-C1'-N9	8.62	115.09	108.20
36	B2	1342	G	O4'-C1'-C2'	8.62	115.36	107.60
83	A5	148	U	O4'-C1'-N1	8.62	115.09	108.20
83	A5	304	U	N1-C1'-C2'	-8.62	102.52	112.00
64	CF	97	ARG	NE-CZ-NH2	-8.61	115.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2679	U	O4'-C1'-N1	8.61	115.09	108.20
36	B2	170	A	O4'-C1'-N9	8.61	115.09	108.20
83	A5	291	U	O4'-C1'-N1	8.61	115.09	108.20
83	A5	2529	G	C1'-O4'-C4'	-8.61	103.02	109.90
83	A5	3144	U	O4'-C1'-N1	8.61	115.08	108.20
83	A5	155	U	P-O3'-C3'	8.60	130.03	119.70
86	A8	76	A	P-O3'-C3'	-8.60	109.38	119.70
36	B2	1006	U	P-O5'-C5'	8.60	134.66	120.90
83	A5	2214	G	C3'-C2'-C1'	-8.60	94.62	101.50
31	AH	46	ARG	NE-CZ-NH2	-8.60	116.00	120.30
36	B2	1018	C	O4'-C1'-C2'	-8.60	97.20	105.80
83	A5	3117	A	C5'-C4'-O4'	-8.60	98.79	109.10
36	B2	625	U	O4'-C1'-N1	8.59	115.08	108.20
83	A5	123	U	O4'-C1'-N1	8.59	115.08	108.20
83	A5	225	U	O4'-C1'-N1	8.59	115.07	108.20
83	A5	241	C	O4'-C1'-N1	8.59	115.08	108.20
83	A5	3227	A	N9-C1'-C2'	-8.59	102.55	112.00
83	A5	440	U	P-O5'-C5'	8.59	134.64	120.90
83	A5	1576	U	O4'-C1'-N1	8.59	115.07	108.20
83	A5	1785	G	N9-C1'-C2'	-8.59	102.56	112.00
83	A5	3701	U	O4'-C1'-N1	8.59	115.07	108.20
36	B2	1369	U	O4'-C1'-N1	8.58	115.06	108.20
83	A5	876	G	O4'-C1'-N9	8.58	115.06	108.20
36	B2	1005	G	O4'-C1'-C2'	8.57	115.31	107.60
83	A5	187	A	N9-C1'-C2'	8.57	125.14	114.00
83	A5	873	U	O4'-C1'-N1	8.57	115.06	108.20
83	A5	1643	G	O4'-C1'-N9	8.57	115.06	108.20
36	B2	73	A	P-O3'-C3'	8.57	129.98	119.70
83	A5	12	C	N1-C1'-C2'	8.57	125.14	114.00
74	CC	153	PHE	CB-CG-CD2	8.56	126.80	120.80
83	A5	2572	G	N9-C1'-C2'	8.56	125.13	114.00
83	A5	3802	U	O4'-C1'-N1	8.56	115.05	108.20
36	B2	701	G	O4'-C1'-N9	8.56	115.05	108.20
83	A5	287	G	O4'-C1'-N9	8.56	115.05	108.20
36	B2	1585	A	O4'-C1'-N9	8.56	115.05	108.20
46	CN	5	ARG	NE-CZ-NH2	-8.56	116.02	120.30
83	A5	2986	G	O4'-C1'-N9	8.56	115.05	108.20
83	A5	1751	U	N1-C1'-C2'	8.56	125.12	114.00
42	CL	127	PRO	CA-N-CD	-8.55	99.52	111.50
83	A5	594	U	P-O5'-C5'	8.55	134.59	120.90
14	AT	101	ARG	NE-CZ-NH1	8.55	124.58	120.30
36	B2	1130	A	P-O3'-C3'	-8.55	109.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3206	A	C3'-C2'-C1'	8.55	108.34	101.50
36	B2	1658	G	O4'-C1'-C2'	8.55	115.30	107.60
83	A5	3417	C	C4'-C3'-O3'	-8.55	91.44	109.40
84	A9	6	G	O4'-C1'-C2'	-8.55	97.25	105.80
84	A9	23	G	C5'-C4'-C3'	8.55	129.68	116.00
36	B2	975	U	N1-C1'-C2'	8.55	125.11	114.00
36	B2	1766	G	O4'-C1'-N9	-8.55	101.36	108.20
83	A5	512	A	O4'-C1'-C2'	-8.55	97.25	105.80
83	A5	3625	U	O4'-C1'-N1	8.55	115.04	108.20
83	A5	511	G	O4'-C1'-N9	8.54	115.04	108.20
83	A5	3655	U	P-O3'-C3'	8.54	129.95	119.70
31	AH	175	TYR	CB-CG-CD2	-8.54	115.87	121.00
37	BC	49	G	C1'-O4'-C4'	-8.54	103.07	109.90
83	A5	3747	U	O4'-C1'-N1	8.54	115.03	108.20
20	Aa	51	ARG	NE-CZ-NH2	-8.54	116.03	120.30
83	A5	254	A	O4'-C1'-N9	8.54	115.03	108.20
83	A5	3313	U	O4'-C1'-N1	8.54	115.03	108.20
83	A5	2916	U	C3'-C2'-C1'	8.54	108.33	101.50
83	A5	3181	G	O4'-C1'-N9	8.54	115.03	108.20
83	A5	3811	A	P-O3'-C3'	8.54	129.94	119.70
83	A5	862	U	O4'-C1'-N1	8.53	115.03	108.20
83	A5	1996	U	O4'-C1'-N1	8.53	115.03	108.20
3	AU	119	ALA	N-CA-CB	8.53	122.04	110.10
83	A5	3571	C	N1-C1'-C2'	8.53	125.09	114.00
36	B2	498	U	O4'-C1'-N1	8.53	115.02	108.20
83	A5	1647	A	N9-C1'-C2'	8.53	125.09	114.00
83	A5	3176	C	C3'-C2'-C1'	8.53	108.32	101.50
36	B2	337	U	O4'-C1'-N1	8.53	115.02	108.20
36	B2	392	A	O4'-C1'-N9	8.53	115.02	108.20
36	B2	1820	U	O4'-C1'-N1	8.53	115.02	108.20
52	CS	167	PHE	CB-CG-CD2	8.53	126.77	120.80
83	A5	1872	A	C3'-C2'-C1'	8.53	108.32	101.50
83	A5	1397	A	C1'-O4'-C4'	-8.52	103.08	109.90
51	CA	76	PHE	CB-CG-CD1	8.52	126.76	120.80
83	A5	452	A	P-O3'-C3'	8.52	129.92	119.70
83	A5	171	U	O4'-C1'-N1	8.52	115.01	108.20
83	A5	529	U	O4'-C1'-N1	8.52	115.01	108.20
83	A5	1429	U	O4'-C1'-N1	8.52	115.01	108.20
36	B2	835	A	N9-C1'-C2'	-8.51	102.64	112.00
83	A5	1386	U	O4'-C1'-N1	8.51	115.01	108.20
83	A5	2039	G	O4'-C1'-N9	8.51	115.01	108.20
86	A8	6	U	N1-C1'-C2'	-8.51	102.64	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1445	A	O4'-C1'-C2'	-8.51	97.29	105.80
83	A5	156	G	O4'-C1'-C2'	8.51	115.26	107.60
36	B2	66	C	O4'-C1'-N1	8.51	115.01	108.20
36	B2	134	U	O3'-P-O5'	-8.51	87.84	104.00
36	B2	1804	U	P-O5'-C5'	8.51	134.51	120.90
83	A5	801	G	N9-C1'-C2'	8.51	125.06	114.00
83	A5	1801	U	P-O5'-C5'	8.51	134.51	120.90
83	A5	3232	G	N9-C1'-C2'	8.51	125.06	114.00
83	A5	3781	U	N1-C1'-C2'	-8.51	102.64	112.00
83	A5	3627	C	P-O5'-C5'	8.50	134.51	120.90
38	Cz	41	TYR	CB-CG-CD1	-8.50	115.90	121.00
83	A5	1513	C	O4'-C1'-N1	8.50	115.00	108.20
83	A5	2999	U	O4'-C1'-N1	8.50	115.00	108.20
83	A5	3840	G	C3'-C2'-C1'	8.49	108.30	101.50
83	A5	759	U	O4'-C1'-N1	8.49	114.99	108.20
36	B2	536	U	O4'-C1'-N1	8.49	114.99	108.20
83	A5	1455	A	O4'-C1'-C2'	-8.49	97.31	105.80
83	A5	3190	G	C1'-O4'-C4'	-8.49	103.11	109.90
83	A5	1132	U	O4'-C1'-N1	-8.49	101.41	108.20
41	CO	20	ARG	NE-CZ-NH1	8.48	124.54	120.30
83	A5	1200	U	O4'-C1'-N1	8.48	114.99	108.20
86	A8	19	A	O4'-C1'-N9	8.48	114.99	108.20
36	B2	922	G	O4'-C1'-N9	8.48	114.98	108.20
36	B2	1305	A	C1'-O4'-C4'	8.48	116.68	109.90
83	A5	3638	U	O4'-C1'-N1	8.48	114.98	108.20
31	AH	187	PHE	CB-CG-CD1	8.48	126.74	120.80
36	B2	566	U	O4'-C1'-N1	8.48	114.98	108.20
83	A5	2100	U	O4'-C1'-N1	8.48	114.98	108.20
83	A5	2917	A	P-O3'-C3'	8.47	129.87	119.70
83	A5	1059	A	O4'-C1'-N9	8.47	114.98	108.20
86	A8	44	C	O4'-C1'-N1	8.47	114.98	108.20
52	CS	175	TYR	CB-CG-CD2	-8.47	115.92	121.00
83	A5	927	A	O4'-C1'-N9	8.47	114.98	108.20
36	B2	95	G	C1'-O4'-C4'	-8.47	103.13	109.90
36	B2	1168	C	C3'-C2'-C1'	8.47	108.28	101.50
83	A5	1662	U	O4'-C1'-N1	8.47	114.97	108.20
83	A5	1873	A	O4'-C1'-N9	-8.47	101.43	108.20
83	A5	2578	U	O4'-C1'-N1	8.46	114.97	108.20
36	B2	1541	U	O4'-C1'-N1	8.46	114.97	108.20
36	B2	1821	G	N9-C1'-C2'	8.46	125.00	114.00
83	A5	2268	G	P-O3'-C3'	8.46	129.85	119.70
36	B2	1905	U	O4'-C1'-N1	8.46	114.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	298	U	O4'-C1'-N1	8.45	114.96	108.20
83	A5	2748	G	O4'-C1'-N9	8.45	114.96	108.20
36	B2	1681	U	C1'-O4'-C4'	8.45	116.66	109.90
83	A5	1708	G	O4'-C1'-N9	-8.45	101.44	108.20
36	B2	387	C	O4'-C1'-N1	8.45	114.96	108.20
83	A5	999	U	O4'-C1'-N1	8.45	114.96	108.20
36	B2	1031	A	O4'-C1'-C2'	-8.44	97.36	105.80
72	Ck	37	ARG	NE-CZ-NH2	-8.44	116.08	120.30
83	A5	3741	A	O4'-C1'-N9	8.45	114.96	108.20
36	B2	869	C	C1'-O4'-C4'	-8.44	103.15	109.90
83	A5	1417	G	N9-C1'-C2'	8.44	124.98	114.00
83	A5	1707	A	N9-C1'-C2'	8.44	124.97	114.00
83	A5	3809	U	O4'-C1'-N1	8.44	114.95	108.20
1	Az	834	LEU	N-CA-C	8.44	133.78	111.00
36	B2	235	G	O4'-C1'-N9	8.44	114.95	108.20
83	A5	1043	G	O4'-C1'-N9	8.44	114.95	108.20
36	B2	994	A	O4'-C1'-N9	8.44	114.95	108.20
36	B2	1861	U	O4'-C1'-N1	8.44	114.95	108.20
36	B2	1833	C	O4'-C1'-C2'	-8.43	97.37	105.80
83	A5	1087	G	C1'-O4'-C4'	-8.43	103.15	109.90
83	A5	1931	C	N1-C1'-C2'	8.43	124.97	114.00
36	B2	138	U	O4'-C1'-N1	-8.43	101.46	108.20
83	A5	800	C	C3'-C2'-C1'	8.43	108.24	101.50
83	A5	1249	A	P-O3'-C3'	8.43	129.81	119.70
83	A5	3558	U	O4'-C1'-N1	8.43	114.94	108.20
33	AI	110	ARG	NE-CZ-NH2	-8.42	116.09	120.30
83	A5	711	A	O4'-C1'-N9	8.42	114.94	108.20
37	BC	47	C	P-O5'-C5'	-8.42	107.43	120.90
83	A5	3335	A	O4'-C1'-N9	8.42	114.94	108.20
36	B2	65	A	C1'-O4'-C4'	8.42	116.64	109.90
36	B2	1703	G	O4'-C1'-N9	8.42	114.94	108.20
83	A5	523	C	C3'-C2'-C1'	8.42	108.24	101.50
36	B2	1156	U	O4'-C1'-N1	8.42	114.93	108.20
83	A5	3	A	O4'-C1'-N9	8.42	114.93	108.20
83	A5	1423	C	O4'-C1'-C2'	-8.42	97.38	105.80
83	A5	3948	U	O4'-C1'-N1	8.42	114.94	108.20
36	B2	1947	U	O4'-C1'-N1	8.41	114.93	108.20
83	A5	981	C	O4'-C1'-N1	8.41	114.93	108.20
83	A5	3807	G	C3'-C2'-C1'	8.41	108.23	101.50
83	A5	3272	A	N9-C1'-C2'	8.41	124.94	114.00
36	B2	226	C	O3'-P-O5'	8.41	119.98	104.00
83	A5	3926	C	O4'-C1'-C2'	-8.41	97.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	173	C	P-O3'-C3'	8.41	129.79	119.70
36	B2	484	C	C4'-C3'-O3'	-8.41	91.75	109.40
36	B2	973	U	O4'-C1'-N1	8.41	114.93	108.20
36	B2	1456	G	O4'-C1'-N9	8.41	114.93	108.20
83	A5	137	U	O4'-C1'-N1	8.41	114.92	108.20
83	A5	1237	G	C3'-C2'-C1'	-8.41	94.77	101.50
83	A5	2476	U	O4'-C1'-N1	8.41	114.92	108.20
42	CL	161	PRO	CA-N-CD	-8.40	99.73	111.50
48	CD	207	TYR	CB-CG-CD2	-8.40	115.96	121.00
36	B2	770	C	P-O3'-C3'	8.40	129.78	119.70
83	A5	3617	U	O4'-C1'-N1	8.40	114.92	108.20
26	AJ	14	TYR	CB-CG-CD1	8.40	126.04	121.00
36	B2	481	U	C5'-C4'-C3'	8.40	129.44	116.00
36	B2	1036	C	N1-C1'-C2'	8.40	124.92	114.00
36	B2	1089	G	C1'-O4'-C4'	-8.40	103.18	109.90
83	A5	2625	G	C1'-O4'-C4'	-8.40	103.18	109.90
83	A5	2737	C	N1-C1'-C2'	8.40	124.92	114.00
83	A5	1802	U	O4'-C1'-N1	8.40	114.92	108.20
37	BC	62	U	O4'-C1'-N1	8.39	114.92	108.20
83	A5	737	U	O4'-C1'-N1	8.39	114.92	108.20
83	A5	2043	G	P-O3'-C3'	8.39	129.77	119.70
83	A5	2207	A	O4'-C1'-N9	8.39	114.92	108.20
36	B2	139	U	O3'-P-O5'	8.39	119.94	104.00
2	Ag	173	ARG	NE-CZ-NH1	8.39	124.50	120.30
83	A5	2816	A	O4'-C1'-N9	8.39	114.91	108.20
83	A5	36	U	O4'-C1'-N1	8.39	114.91	108.20
83	A5	2226	A	O4'-C1'-N9	8.38	114.91	108.20
36	B2	1342	G	C3'-C2'-C1'	-8.38	94.80	101.50
83	A5	1312	G	O4'-C1'-N9	8.38	114.90	108.20
83	A5	3443	A	O4'-C1'-C2'	8.38	115.14	107.60
3	AU	57	ARG	NE-CZ-NH2	-8.38	116.11	120.30
36	B2	8	U	O4'-C1'-N1	8.38	114.90	108.20
36	B2	1349	U	O4'-C1'-N1	8.37	114.90	108.20
36	B2	1526	G	O4'-C1'-N9	8.38	114.90	108.20
83	A5	3580	G	O4'-C1'-N9	8.37	114.90	108.20
36	B2	75	U	N1-C1'-C2'	-8.37	102.79	112.00
36	B2	445	U	O4'-C1'-N1	8.37	114.90	108.20
36	B2	1418	A	O4'-C1'-N9	8.37	114.90	108.20
36	B2	1886	G	C1'-O4'-C4'	-8.37	103.20	109.90
83	A5	885	U	C1'-O4'-C4'	-8.37	103.20	109.90
83	A5	1907	U	O4'-C1'-N1	8.37	114.89	108.20
83	A5	2780	A	O4'-C1'-N9	8.37	114.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	380	G	O4'-C1'-N9	8.36	114.89	108.20
83	A5	3890	G	P-O3'-C3'	8.36	129.74	119.70
83	A5	1441	G	O4'-C1'-N9	8.36	114.89	108.20
36	B2	1596	C	C1'-O4'-C4'	-8.36	103.21	109.90
46	CN	53	TYR	CB-CG-CD2	-8.36	115.98	121.00
86	A8	90	U	O4'-C1'-N1	8.36	114.89	108.20
83	A5	1448	G	C3'-C2'-C1'	-8.36	94.81	101.50
36	B2	1819	U	P-O3'-C3'	-8.36	109.67	119.70
83	A5	833	U	O4'-C1'-N1	8.35	114.88	108.20
83	A5	1122	U	O4'-C1'-N1	8.35	114.88	108.20
83	A5	2198	G	C1'-O4'-C4'	-8.35	103.22	109.90
83	A5	3853	C	O4'-C1'-N1	8.35	114.88	108.20
83	A5	1554	C	N1-C1'-C2'	8.35	124.86	114.00
85	A7	116	G	O4'-C1'-N9	8.35	114.88	108.20
59	CZ	18	TYR	CB-CG-CD2	-8.35	115.99	121.00
36	B2	1806	A	C3'-C2'-C1'	-8.35	94.82	101.50
83	A5	1228	C	O4'-C1'-C2'	-8.35	97.45	105.80
86	A8	114	G	O4'-C1'-N9	8.35	114.88	108.20
36	B2	113	G	O4'-C1'-C2'	-8.35	97.45	105.80
36	B2	590	U	N1-C1'-C2'	8.35	124.85	114.00
1	Az	716	TYR	CB-CG-CD2	-8.34	116.00	121.00
37	BC	16	U	C3'-C2'-C1'	-8.34	94.83	101.50
83	A5	1565	A	O4'-C1'-N9	8.34	114.87	108.20
83	A5	3551	U	O4'-C1'-N1	8.34	114.87	108.20
83	A5	515	A	O4'-C1'-N9	8.33	114.87	108.20
83	A5	967	C	P-O3'-C3'	8.33	129.70	119.70
1	Az	746	TYR	CB-CG-CD1	-8.33	116.00	121.00
83	A5	1947	G	O4'-C1'-N9	8.33	114.86	108.20
83	A5	3180	G	O4'-C1'-N9	8.33	114.86	108.20
36	B2	1078	G	O4'-C1'-N9	8.33	114.86	108.20
83	A5	2123	G	O4'-C1'-N9	8.33	114.86	108.20
83	A5	2502	G	O4'-C1'-N9	8.33	114.86	108.20
14	AT	84	ARG	NE-CZ-NH2	-8.33	116.14	120.30
83	A5	2219	U	C1'-O4'-C4'	8.33	116.56	109.90
36	B2	120	U	C1'-O4'-C4'	-8.32	103.24	109.90
36	B2	356	C	O4'-C1'-N1	8.32	114.86	108.20
85	A7	58	A	O4'-C1'-N9	8.32	114.86	108.20
83	A5	3703	C	O4'-C1'-N1	8.32	114.86	108.20
83	A5	897	U	O4'-C1'-N1	8.32	114.86	108.20
83	A5	3925	G	N9-C1'-C2'	8.32	124.82	114.00
83	A5	878	U	O4'-C1'-N1	8.32	114.86	108.20
83	A5	3219	A	C1'-O4'-C4'	8.32	116.56	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	AZ	64	TYR	CB-CG-CD2	-8.32	116.01	121.00
83	A5	2141	A	N9-C1'-C2'	-8.32	102.85	112.00
83	A5	2503	G	O4'-C1'-C2'	8.32	115.08	107.60
36	B2	648	G	O4'-C1'-C2'	-8.31	97.49	105.80
80	CH	97	PHE	CB-CG-CD2	-8.31	114.98	120.80
83	A5	3257	U	O4'-C1'-N1	8.31	114.85	108.20
83	A5	562	U	N1-C1'-C2'	8.31	124.80	114.00
83	A5	2030	U	N1-C1'-C2'	8.31	124.80	114.00
36	B2	1220	A	O4'-C1'-N9	8.31	114.84	108.20
38	Cz	35	GLN	CB-CG-CD	8.31	133.20	111.60
83	A5	3711	G	N9-C1'-C2'	-8.31	102.86	112.00
83	A5	3002	U	C4'-C3'-O3'	8.30	129.61	113.00
86	A8	63	U	C1'-O4'-C4'	8.30	116.54	109.90
36	B2	1009	U	O4'-C1'-N1	8.30	114.84	108.20
83	A5	1266	A	O4'-C1'-C2'	-8.30	97.50	105.80
83	A5	3665	U	N1-C1'-C2'	8.30	124.79	114.00
83	A5	1293	A	N9-C1'-C2'	-8.30	102.87	112.00
83	A5	853	G	O4'-C1'-C2'	8.30	115.07	107.60
83	A5	2697	U	O4'-C1'-N1	8.30	114.84	108.20
83	A5	2718	U	O4'-C1'-N1	8.30	114.84	108.20
83	A5	641	A	C3'-C2'-C1'	8.29	108.14	101.50
83	A5	1421	G	O4'-C1'-N9	8.29	114.84	108.20
83	A5	2167	G	O4'-C1'-N9	8.29	114.83	108.20
36	B2	1247	C	C3'-C2'-C1'	8.29	108.14	101.50
83	A5	339	C	O4'-C1'-N1	8.29	114.83	108.20
83	A5	359	G	N9-C1'-C2'	-8.29	102.88	112.00
83	A5	3943	G	C3'-C2'-C1'	-8.29	94.87	101.50
83	A5	3946	G	O4'-C1'-N9	8.29	114.83	108.20
85	A7	98	G	O4'-C1'-N9	8.29	114.83	108.20
83	A5	122	C	O4'-C1'-N1	8.29	114.83	108.20
83	A5	1231	A	P-O5'-C5'	8.28	134.15	120.90
36	B2	1966	U	O4'-C1'-N1	8.28	114.82	108.20
83	A5	91	U	N1-C1'-C2'	8.28	124.76	114.00
36	B2	194	G	O4'-C1'-N9	8.28	114.82	108.20
36	B2	1346	C	P-O3'-C3'	8.28	129.63	119.70
83	A5	460	A	O4'-C1'-C2'	-8.28	97.52	105.80
83	A5	2520	U	N1-C1'-C2'	8.28	124.76	114.00
83	A5	1866	G	N9-C1'-C2'	-8.27	102.90	112.00
83	A5	3105	A	O4'-C1'-N9	8.27	114.82	108.20
83	A5	1447	C	O4'-C1'-N1	8.27	114.81	108.20
85	A7	28	U	C3'-C2'-C1'	8.27	108.11	101.50
36	B2	1913	C	P-O5'-C5'	8.27	134.12	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2776	A	C3'-C2'-C1'	8.27	108.11	101.50
83	A5	2627	G	P-O5'-C5'	8.26	134.12	120.90
36	B2	83	A	O4'-C1'-N9	8.26	114.81	108.20
36	B2	1105	U	O4'-C1'-N1	8.26	114.81	108.20
83	A5	572	A	O4'-C1'-N9	8.26	114.81	108.20
36	B2	11	A	N9-C1'-C2'	-8.25	102.92	112.00
36	B2	866	U	O4'-C1'-C2'	-8.25	97.55	105.80
83	A5	509	A	O4'-C1'-N9	8.25	114.80	108.20
83	A5	2801	U	O4'-C1'-N1	8.25	114.80	108.20
83	A5	178	U	C3'-C2'-C1'	8.25	108.10	101.50
83	A5	1146	U	O4'-C1'-N1	8.25	114.80	108.20
83	A5	3474	G	N9-C1'-C2'	8.25	124.72	114.00
36	B2	1455	U	C2'-C3'-O3'	8.25	127.64	109.50
86	A8	70	A	C1'-O4'-C4'	-8.25	103.30	109.90
66	Cd	47	ARG	NE-CZ-NH1	8.24	124.42	120.30
83	A5	2197	A	O4'-C1'-N9	8.24	114.80	108.20
83	A5	1976	G	O4'-C1'-C2'	8.24	115.02	107.60
83	A5	2464	A	O4'-C1'-N9	8.24	114.79	108.20
36	B2	521	U	O4'-C1'-C2'	-8.24	97.56	105.80
83	A5	3577	U	N1-C1'-C2'	8.24	124.71	114.00
36	B2	1076	U	O4'-C1'-N1	8.24	114.79	108.20
36	B2	1195	G	P-O3'-C3'	8.24	129.59	119.70
83	A5	3184	U	O4'-C1'-N1	8.24	114.79	108.20
83	A5	671	A	P-O3'-C3'	8.24	129.58	119.70
36	B2	1298	C	N1-C1'-C2'	8.23	124.70	114.00
36	B2	1399	A	P-O3'-C3'	-8.23	109.82	119.70
83	A5	1487	C	C3'-C2'-C1'	8.23	108.09	101.50
83	A5	1873	A	C1'-O4'-C4'	-8.23	103.31	109.90
83	A5	3712	G	O4'-C1'-N9	8.23	114.79	108.20
83	A5	476	U	O4'-C1'-N1	8.23	114.78	108.20
83	A5	1362	G	O4'-C1'-N9	8.23	114.78	108.20
83	A5	2701	G	O4'-C1'-C2'	-8.23	97.57	105.80
36	B2	237	U	P-O3'-C3'	8.22	129.57	119.70
36	B2	1749	C	C4'-C3'-O3'	8.22	129.44	113.00
36	B2	1544	G	O4'-C1'-N9	8.22	114.78	108.20
83	A5	1041	A	O4'-C1'-N9	8.22	114.77	108.20
83	A5	3369	A	O4'-C1'-C2'	-8.22	97.58	105.80
83	A5	1701	C	N1-C1'-C2'	8.22	124.68	114.00
83	A5	3737	A	O4'-C1'-N9	8.22	114.77	108.20
25	Af	106	TYR	CB-CG-CD2	-8.22	116.07	121.00
52	CS	93	MET	CG-SD-CE	-8.22	87.06	100.20
74	CC	195	GLY	C-N-CA	8.22	142.24	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	315	G	N9-C1'-C2'	-8.22	102.96	112.00
83	A5	463	C	P-O3'-C3'	8.22	129.56	119.70
83	A5	1195	U	P-O3'-C3'	8.22	129.56	119.70
83	A5	1327	G	C1'-O4'-C4'	-8.22	103.33	109.90
18	AY	42	ARG	NE-CZ-NH2	-8.21	116.19	120.30
36	B2	1044	G	O4'-C1'-N9	8.21	114.77	108.20
1	Az	226	PHE	CB-CG-CD2	-8.21	115.05	120.80
83	A5	2029	G	O4'-C1'-N9	8.21	114.77	108.20
36	B2	866	U	N1-C1'-C2'	8.21	124.67	114.00
36	B2	1545	U	C1'-O4'-C4'	8.20	116.46	109.90
83	A5	1657	G	C3'-C2'-C1'	8.21	108.06	101.50
83	A5	3469	G	O4'-C1'-N9	8.21	114.77	108.20
36	B2	263	A	O4'-C1'-N9	8.20	114.76	108.20
36	B2	1860	G	O4'-C1'-N9	8.20	114.76	108.20
36	B2	55	A	C1'-O4'-C4'	-8.20	103.34	109.90
36	B2	251	G	C3'-C2'-C1'	8.20	108.06	101.50
36	B2	450	A	O4'-C1'-N9	8.20	114.76	108.20
83	A5	2996	U	P-O3'-C3'	8.20	129.54	119.70
36	B2	1965	U	C1'-O4'-C4'	-8.20	103.34	109.90
83	A5	2783	C	C3'-C2'-C1'	8.20	108.06	101.50
69	Cg	10	ARG	NE-CZ-NH1	-8.20	116.20	120.30
83	A5	1684	G	O4'-C1'-N9	8.20	114.76	108.20
83	A5	2575	C	O4'-C1'-C2'	-8.20	97.60	105.80
83	A5	2926	G	C3'-C2'-C1'	-8.20	94.94	101.50
36	B2	638	A	O4'-C1'-N9	8.19	114.75	108.20
36	B2	1029	G	O4'-C1'-C2'	8.19	114.97	107.60
36	B2	1917	A	O4'-C1'-C2'	-8.19	97.61	105.80
54	CP	47	TYR	CB-CG-CD2	-8.20	116.08	121.00
59	CZ	106	ARG	NE-CZ-NH1	8.19	124.40	120.30
36	B2	162	G	O4'-C1'-N9	8.19	114.75	108.20
36	B2	1618	C	O4'-C1'-C2'	-8.19	97.61	105.80
83	A5	547	U	C3'-C2'-C1'	8.19	108.05	101.50
83	A5	1927	U	O5'-C5'-C4'	8.19	127.27	111.70
83	A5	3195	G	O4'-C1'-N9	8.19	114.75	108.20
86	A8	51	A	C3'-C2'-C1'	8.19	108.05	101.50
36	B2	371	A	O4'-C1'-C2'	-8.19	97.61	105.80
83	A5	1159	C	P-O3'-C3'	8.19	129.53	119.70
83	A5	2568	U	O4'-C1'-N1	8.19	114.75	108.20
83	A5	2601	A	C3'-C2'-C1'	8.19	108.05	101.50
36	B2	1147	U	C3'-C2'-C1'	-8.19	94.95	101.50
83	A5	1957	C	N1-C1'-C2'	8.19	124.64	114.00
83	A5	2997	C	O3'-P-O5'	8.19	119.55	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	A7	29	C	N1-C1'-C2'	-8.19	103.00	112.00
36	B2	223	A	O3'-P-O5'	-8.18	88.45	104.00
36	B2	470	G	O4'-C1'-N9	8.18	114.75	108.20
83	A5	354	A	C1'-O4'-C4'	-8.18	103.35	109.90
83	A5	1812	C	C5'-C4'-O4'	-8.18	99.28	109.10
37	BC	52	G	O4'-C1'-N9	8.18	114.74	108.20
83	A5	498	U	O4'-C1'-N1	8.18	114.74	108.20
83	A5	3646	G	O4'-C1'-N9	8.18	114.74	108.20
83	A5	2769	G	N9-C1'-C2'	8.18	124.63	114.00
83	A5	97	C	C3'-C2'-C1'	8.17	108.04	101.50
83	A5	1657	G	N9-C1'-C2'	8.17	124.62	114.00
36	B2	449	C	N1-C1'-C2'	8.17	124.62	114.00
83	A5	1721	C	P-O3'-C3'	8.17	129.50	119.70
83	A5	3265	C	O4'-C1'-N1	8.17	114.73	108.20
27	AE	113	ARG	NE-CZ-NH2	-8.16	116.22	120.30
56	CX	258	TYR	CB-CG-CD2	-8.16	116.10	121.00
83	A5	2235	G	C3'-C2'-C1'	8.16	108.03	101.50
83	A5	2000	U	N1-C1'-C2'	8.16	124.61	114.00
36	B2	1062	C	O4'-C1'-N1	8.16	114.73	108.20
83	A5	2194	G	N9-C1'-C2'	8.16	124.61	114.00
36	B2	1181	G	O4'-C1'-C2'	8.16	114.94	107.60
45	Ca	93	LYS	C-N-CA	8.16	142.09	121.70
83	A5	212	U	P-O5'-C5'	8.16	133.95	120.90
83	A5	2086	U	O4'-C4'-C3'	-8.16	95.84	104.00
83	A5	299	G	C1'-O4'-C4'	-8.16	103.38	109.90
83	A5	2162	C	O4'-C1'-N1	8.16	114.72	108.20
64	CF	97	ARG	NE-CZ-NH1	8.15	124.38	120.30
28	AC	231	TYR	CB-CG-CD2	-8.15	116.11	121.00
83	A5	3383	A	N9-C1'-C2'	8.15	124.60	114.00
83	A5	3819	C	C4'-C3'-O3'	-8.15	92.28	109.40
86	A8	23	G	O4'-C1'-N9	8.15	114.72	108.20
83	A5	1003	C	N1-C1'-C2'	8.15	124.59	114.00
83	A5	1029	C	N1-C1'-C2'	8.15	124.59	114.00
83	A5	2134	A	C1'-O4'-C4'	8.15	116.42	109.90
85	A7	76	U	O4'-C1'-N1	8.15	114.72	108.20
36	B2	869	C	C5'-C4'-O4'	8.14	118.87	109.10
36	B2	1323	A	O4'-C1'-N9	8.14	114.71	108.20
83	A5	1797	A	O4'-C1'-C2'	-8.14	97.66	105.80
36	B2	857	G	C1'-O4'-C4'	-8.13	103.39	109.90
83	A5	1163	G	O4'-C1'-N9	8.13	114.71	108.20
36	B2	14	C	C1'-O4'-C4'	-8.13	103.39	109.90
83	A5	3713	C	N1-C1'-C2'	-8.13	103.05	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	AQ	84	TYR	CB-CG-CD2	-8.13	116.12	121.00
36	B2	191	U	O4'-C1'-N1	8.13	114.70	108.20
36	B2	251	G	P-O3'-C3'	8.13	129.46	119.70
83	A5	464	G	O4'-C1'-N9	8.13	114.70	108.20
79	CJ	103	ASN	N-CA-C	8.13	132.94	111.00
37	BC	35	U	O4'-C1'-N1	8.12	114.70	108.20
83	A5	3565	G	O4'-C1'-C2'	8.12	114.91	107.60
85	A7	23	A	O3'-P-O5'	8.13	119.44	104.00
36	B2	1626	U	O4'-C1'-N1	8.12	114.70	108.20
83	A5	3527	A	P-O3'-C3'	8.12	129.44	119.70
2	Ag	94	ALA	C-N-CA	8.12	141.99	121.70
36	B2	1370	U	O4'-C1'-N1	8.12	114.69	108.20
83	A5	503	A	N9-C1'-C2'	8.12	124.56	114.00
36	B2	1411	G	O4'-C1'-N9	8.12	114.69	108.20
83	A5	1404	A	C1'-O4'-C4'	-8.12	103.41	109.90
83	A5	3103	U	O4'-C1'-N1	8.12	114.69	108.20
36	B2	328	A	N9-C1'-C2'	8.11	124.55	114.00
83	A5	286	A	O4'-C1'-N9	8.11	114.69	108.20
83	A5	1477	G	P-O3'-C3'	8.11	129.44	119.70
83	A5	2611	A	O4'-C1'-N9	8.11	114.69	108.20
36	B2	537	C	O4'-C1'-N1	8.11	114.69	108.20
36	B2	947	U	C1'-O4'-C4'	-8.11	103.41	109.90
83	A5	3559	A	C3'-C2'-C1'	8.11	107.99	101.50
85	A7	39	C	P-O3'-C3'	-8.11	109.97	119.70
36	B2	655	A	O4'-C1'-C2'	-8.11	97.69	105.80
36	B2	1357	G	C1'-O4'-C4'	-8.11	103.42	109.90
63	CB	123	TYR	CB-CG-CD1	-8.11	116.14	121.00
83	A5	1409	G	C3'-C2'-C1'	8.11	107.99	101.50
83	A5	1178	U	N1-C1'-C2'	8.10	124.54	114.00
83	A5	1435	A	O4'-C1'-N9	8.10	114.68	108.20
83	A5	2248	A	O4'-C1'-N9	8.10	114.68	108.20
36	B2	481	U	O4'-C1'-N1	8.10	114.68	108.20
36	B2	1398	U	O4'-C1'-N1	8.10	114.68	108.20
53	CT	17	ARG	NE-CZ-NH1	8.10	124.35	120.30
83	A5	2217	A	C1'-O4'-C4'	-8.10	103.42	109.90
83	A5	938	U	O4'-C1'-N1	8.10	114.68	108.20
83	A5	3246	G	O4'-C1'-N9	8.10	114.68	108.20
83	A5	3482	G	O4'-C1'-C2'	-8.10	97.70	105.80
84	A9	18	G	O4'-C1'-N9	8.10	114.68	108.20
83	A5	3762	G	C1'-O4'-C4'	-8.10	103.42	109.90
83	A5	834	G	O4'-C1'-N9	8.10	114.68	108.20
36	B2	908	G	O4'-C1'-N9	8.10	114.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1865	U	O4'-C1'-N1	8.10	114.68	108.20
83	A5	321	G	P-O3'-C3'	8.09	129.41	119.70
83	A5	535	A	O4'-C1'-N9	8.09	114.67	108.20
83	A5	3943	G	O4'-C1'-N9	8.09	114.67	108.20
36	B2	1622	U	P-O3'-C3'	8.09	129.41	119.70
34	AQ	128	ARG	NE-CZ-NH1	8.09	124.34	120.30
36	B2	419	C	N1-C1'-C2'	8.09	124.51	114.00
36	B2	1051	U	O4'-C1'-N1	8.09	114.67	108.20
83	A5	1699	A	P-O5'-C5'	8.09	133.84	120.90
83	A5	3162	C	N1-C1'-C2'	8.09	124.51	114.00
83	A5	1317	A	P-O5'-C5'	8.08	133.83	120.90
83	A5	2155	A	O4'-C1'-N9	-8.08	101.73	108.20
36	B2	1264	G	O4'-C1'-N9	8.08	114.66	108.20
83	A5	454	C	P-O3'-C3'	8.08	129.40	119.70
83	A5	1617	U	O4'-C1'-N1	8.08	114.67	108.20
36	B2	1318	A	O4'-C1'-C2'	-8.08	97.72	105.80
85	A7	49	A	C3'-C2'-C1'	8.08	107.96	101.50
36	B2	1127	G	O4'-C1'-C2'	8.07	114.87	107.60
36	B2	431	G	O4'-C1'-C2'	8.07	114.86	107.60
83	A5	641	A	O4'-C1'-C2'	-8.07	97.73	105.80
83	A5	1498	C	O4'-C1'-N1	8.07	114.66	108.20
83	A5	3544	G	O4'-C1'-N9	8.07	114.66	108.20
36	B2	267	G	O4'-C1'-C2'	8.07	114.86	107.60
36	B2	1582	C	P-O3'-C3'	8.07	129.38	119.70
36	B2	1690	G	O4'-C1'-N9	8.07	114.65	108.20
44	CM	141	ARG	NE-CZ-NH2	-8.07	116.27	120.30
83	A5	3523	U	O4'-C1'-N1	8.07	114.65	108.20
83	A5	588	U	P-O5'-C5'	8.06	133.81	120.90
83	A5	588	U	O4'-C1'-N1	8.06	114.65	108.20
83	A5	2108	U	O4'-C1'-N1	8.06	114.65	108.20
36	B2	1689	A	O4'-C1'-N9	8.06	114.65	108.20
36	B2	155	U	C3'-C2'-C1'	8.06	107.95	101.50
83	A5	1519	A	C1'-O4'-C4'	8.06	116.35	109.90
83	A5	2192	U	N1-C1'-C2'	8.06	124.48	114.00
36	B2	60	U	O4'-C1'-N1	8.06	114.64	108.20
36	B2	234	A	O4'-C1'-N9	8.05	114.64	108.20
83	A5	2260	U	O4'-C1'-N1	8.06	114.64	108.20
36	B2	483	A	O4'-C1'-N9	8.05	114.64	108.20
81	CE	225	TYR	CA-CB-CG	8.05	128.70	113.40
83	A5	1406	G	O4'-C1'-N9	8.05	114.64	108.20
83	A5	1786	G	N9-C1'-C2'	8.05	124.47	114.00
36	B2	1447	G	C1'-O4'-C4'	-8.05	103.46	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	931	A	O4'-C1'-N9	8.05	114.64	108.20
83	A5	3361	U	C1'-O4'-C4'	8.05	116.34	109.90
83	A5	1431	G	N9-C1'-C2'	-8.05	103.15	112.00
36	B2	897	A	O4'-C1'-N9	8.05	114.64	108.20
36	B2	1002	A	N9-C1'-C2'	8.05	124.46	114.00
36	B2	1357	G	O4'-C1'-C2'	8.05	114.84	107.60
83	A5	2574	C	O4'-C1'-N1	8.05	114.64	108.20
83	A5	2670	U	O4'-C1'-N1	8.05	114.64	108.20
36	B2	700	U	P-O3'-C3'	8.04	129.35	119.70
36	B2	1531	G	C3'-C2'-C1'	8.05	107.94	101.50
36	B2	1639	U	C3'-C2'-C1'	8.04	107.94	101.50
83	A5	2840	A	O4'-C1'-N9	8.04	114.64	108.20
83	A5	114	G	O4'-C1'-N9	8.04	114.64	108.20
36	B2	399	C	N1-C1'-C2'	8.04	124.45	114.00
83	A5	1077	C	N1-C1'-C2'	8.04	124.45	114.00
83	A5	3603	C	C3'-C2'-C1'	8.04	107.93	101.50
83	A5	1502	A	C3'-C2'-C1'	8.04	107.93	101.50
83	A5	1927	U	C4'-C3'-O3'	-8.04	92.53	109.40
85	A7	99	G	C1'-O4'-C4'	-8.04	103.47	109.90
36	B2	361	G	O4'-C1'-N9	8.03	114.63	108.20
16	AA	202	PHE	CB-CG-CD1	-8.03	115.18	120.80
36	B2	865	A	C3'-C2'-C1'	8.03	107.92	101.50
36	B2	1215	G	O4'-C1'-N9	8.03	114.63	108.20
83	A5	718	U	O4'-C1'-N1	8.03	114.63	108.20
83	A5	2570	C	O4'-C1'-N1	8.03	114.63	108.20
35	Ah	148	PHE	CB-CG-CD1	8.03	126.42	120.80
36	B2	1670	G	C1'-O4'-C4'	-8.03	103.48	109.90
83	A5	2735	A	C3'-C2'-C1'	8.03	107.92	101.50
83	A5	3598	U	N1-C1'-C2'	-8.03	103.17	112.00
26	AJ	132	ARG	NE-CZ-NH1	8.03	124.31	120.30
36	B2	1622	U	O4'-C1'-N1	8.03	114.62	108.20
83	A5	2913	G	C3'-C2'-C1'	-8.03	95.08	101.50
83	A5	3177	G	O4'-C1'-N9	8.03	114.62	108.20
83	A5	1138	C	C1'-O4'-C4'	-8.03	103.48	109.90
83	A5	362	A	O4'-C1'-N9	8.02	114.62	108.20
83	A5	910	C	C4'-C3'-O3'	8.02	129.05	113.00
83	A5	3553	C	O4'-C1'-N1	8.02	114.62	108.20
85	A7	84	U	O4'-C1'-N1	8.02	114.62	108.20
36	B2	1236	C	O4'-C1'-N1	8.02	114.62	108.20
83	A5	2911	U	O4'-C1'-N1	8.02	114.62	108.20
83	A5	1178	U	P-O3'-C3'	8.02	129.32	119.70
36	B2	325	U	O4'-C1'-N1	8.01	114.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1365	U	O4'-C1'-N1	8.01	114.61	108.20
36	B2	98	C	O4'-C1'-C2'	-8.01	97.79	105.80
36	B2	323	U	P-O3'-C3'	-8.01	110.09	119.70
67	Ce	124	PRO	C-N-CA	8.01	141.73	121.70
86	A8	45	G	O4'-C1'-N9	8.01	114.61	108.20
83	A5	1026	G	O4'-C1'-N9	8.01	114.61	108.20
36	B2	467	G	O4'-C1'-N9	8.01	114.61	108.20
36	B2	658	C	P-O3'-C3'	8.01	129.31	119.70
83	A5	3966	U	O4'-C1'-N1	8.01	114.61	108.20
36	B2	26	A	O4'-C1'-N9	8.01	114.60	108.20
83	A5	2602	A	C1'-O4'-C4'	8.01	116.30	109.90
36	B2	823	C	C3'-C2'-C1'	8.00	107.90	101.50
83	A5	1289	C	O4'-C1'-C2'	-8.00	97.80	105.80
83	A5	2544	U	O4'-C1'-N1	8.00	114.60	108.20
36	B2	1209	U	O4'-C1'-N1	8.00	114.60	108.20
36	B2	1618	C	C1'-O4'-C4'	8.00	116.30	109.90
37	BC	43	A	O4'-C1'-N9	8.00	114.60	108.20
81	CE	139	ARG	NE-CZ-NH2	-8.00	116.30	120.30
83	A5	1189	A	P-O3'-C3'	8.00	129.30	119.70
83	A5	863	U	N1-C1'-C2'	8.00	124.40	114.00
36	B2	421	A	C1'-O4'-C4'	7.99	116.30	109.90
83	A5	922	G	P-O3'-C3'	7.99	129.29	119.70
83	A5	1630	G	C1'-O4'-C4'	-7.99	103.51	109.90
83	A5	1800	U	P-O3'-C3'	-7.99	110.11	119.70
83	A5	1766	U	O4'-C1'-N1	7.99	114.59	108.20
36	B2	1402	U	C1'-O4'-C4'	-7.99	103.51	109.90
74	CC	309	ARG	NE-CZ-NH2	-7.99	116.31	120.30
83	A5	1492	C	P-O5'-C5'	-7.99	108.12	120.90
36	B2	1090	A	P-O3'-C3'	7.98	129.28	119.70
46	CN	129	TYR	CB-CG-CD1	7.98	125.79	121.00
83	A5	869	A	C3'-C2'-C1'	-7.98	95.11	101.50
83	A5	2932	C	C4'-C3'-O3'	-7.98	92.64	109.40
36	B2	565	G	O4'-C1'-N9	7.98	114.58	108.20
83	A5	1217	U	O4'-C1'-N1	7.98	114.58	108.20
83	A5	3191	G	O4'-C1'-N9	7.98	114.58	108.20
83	A5	3628	G	O4'-C1'-C2'	-7.98	97.82	105.80
36	B2	342	G	O4'-C1'-N9	7.98	114.58	108.20
83	A5	260	A	N9-C1'-C2'	7.98	124.37	114.00
83	A5	2686	C	C3'-C2'-C1'	7.97	107.88	101.50
36	B2	1373	U	N1-C1'-C2'	7.97	124.36	114.00
83	A5	3015	A	O4'-C1'-C2'	-7.97	97.83	105.80
36	B2	184	U	O4'-C1'-N1	7.97	114.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3661	C	N1-C1'-C2'	7.97	124.36	114.00
36	B2	83	A	N9-C1'-C2'	-7.96	103.25	112.00
36	B2	553	A	O4'-C1'-N9	7.96	114.57	108.20
83	A5	3751	C	O4'-C1'-N1	-7.96	101.83	108.20
36	B2	910	U	O4'-C1'-N1	7.96	114.56	108.20
39	Cq	199	PHE	CB-CG-CD1	-7.95	115.23	120.80
41	CO	59	TYR	C-N-CA	7.95	141.59	121.70
83	A5	69	A	O4'-C1'-N9	7.95	114.56	108.20
83	A5	3123	G	O4'-C1'-N9	7.95	114.56	108.20
46	CN	108	ARG	NE-CZ-NH2	-7.95	116.32	120.30
83	A5	1777	A	C4'-C3'-O3'	-7.95	92.70	109.40
1	Az	485	PHE	CB-CG-CD1	-7.95	115.24	120.80
83	A5	3188	A	O4'-C1'-C2'	7.95	114.75	107.60
8	AS	40	TYR	CB-CG-CD2	-7.94	116.23	121.00
36	B2	520	A	P-O3'-C3'	7.94	129.23	119.70
83	A5	677	G	C1'-O4'-C4'	-7.94	103.55	109.90
36	B2	1167	U	P-O3'-C3'	7.94	129.23	119.70
64	CF	39	ARG	NE-CZ-NH1	7.94	124.27	120.30
83	A5	841	A	C3'-C2'-C1'	7.94	107.85	101.50
83	A5	3740	U	O4'-C1'-N1	7.94	114.55	108.20
86	A8	76	A	C2'-C3'-O3'	7.94	126.97	109.50
36	B2	946	U	O4'-C1'-N1	7.94	114.55	108.20
83	A5	2770	C	N1-C1'-C2'	7.94	124.32	114.00
85	A7	117	G	N9-C1'-C2'	7.94	124.32	114.00
83	A5	3752	G	C3'-C2'-C1'	7.93	107.85	101.50
42	CL	134	ARG	NE-CZ-NH1	7.93	124.27	120.30
83	A5	2621	A	O4'-C1'-N9	-7.93	101.86	108.20
36	B2	776	A	P-O3'-C3'	7.93	129.21	119.70
83	A5	2015	G	O3'-P-O5'	-7.92	88.94	104.00
83	A5	2463	U	O4'-C1'-N1	7.92	114.54	108.20
83	A5	484	A	O4'-C1'-N9	7.92	114.54	108.20
83	A5	3572	G	C1'-O4'-C4'	-7.92	103.56	109.90
83	A5	3770	A	C4'-C3'-O3'	7.92	128.84	113.00
5	AO	100	THR	N-CA-C	7.92	132.38	111.00
36	B2	77	A	O4'-C1'-C2'	-7.92	97.88	105.80
36	B2	589	U	N1-C1'-C2'	7.92	124.29	114.00
8	AS	89	ASP	C-N-CA	7.92	141.49	121.70
29	AG	230	ARG	NE-CZ-NH1	7.91	124.26	120.30
83	A5	1719	G	C1'-O4'-C4'	-7.91	103.57	109.90
83	A5	2729	U	C1'-O4'-C4'	7.91	116.23	109.90
83	A5	2586	A	P-O3'-C3'	-7.91	110.20	119.70
83	A5	860	A	C3'-C2'-C1'	7.91	107.83	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3690	A	O4'-C1'-C2'	-7.91	97.89	105.80
83	A5	1497	G	O4'-C1'-N9	7.91	114.53	108.20
83	A5	2663	C	C3'-C2'-C1'	7.91	107.83	101.50
83	A5	3208	A	O4'-C1'-C2'	-7.91	97.89	105.80
86	A8	16	A	C3'-C2'-C1'	7.91	107.83	101.50
36	B2	1320	G	O4'-C1'-C2'	7.90	114.71	107.60
83	A5	1544	U	C3'-C2'-C1'	7.90	107.82	101.50
83	A5	3772	U	C1'-O4'-C4'	-7.90	103.58	109.90
53	CT	149	ALA	C-N-CA	7.90	141.45	121.70
83	A5	94	C	P-O3'-C3'	7.90	129.18	119.70
36	B2	186	A	P-O3'-C3'	7.90	129.18	119.70
36	B2	1233	U	O4'-C1'-N1	7.90	114.52	108.20
83	A5	180	U	O4'-C1'-N1	7.90	114.52	108.20
83	A5	816	A	O4'-C1'-N9	7.90	114.52	108.20
83	A5	3594	A	C3'-C2'-C1'	7.90	107.82	101.50
83	A5	3775	A	N9-C1'-C2'	7.89	124.26	114.00
83	A5	3874	A	O4'-C1'-N9	7.89	114.52	108.20
36	B2	932	U	O4'-C1'-N1	7.89	114.51	108.20
36	B2	1858	U	O4'-C1'-N1	7.89	114.51	108.20
83	A5	784	G	O4'-C1'-N9	7.89	114.51	108.20
36	B2	298	U	N1-C1'-C2'	7.89	124.26	114.00
83	A5	89	A	O4'-C1'-N9	7.89	114.51	108.20
83	A5	1637	U	P-O3'-C3'	-7.89	110.23	119.70
83	A5	2998	U	O4'-C1'-N1	7.89	114.51	108.20
83	A5	3587	U	O4'-C1'-N1	7.89	114.51	108.20
84	A9	23	G	O4'-C1'-N9	-7.89	101.89	108.20
83	A5	2762	A	C1'-O4'-C4'	7.89	116.21	109.90
83	A5	801	G	C1'-O4'-C4'	-7.88	103.59	109.90
83	A5	253	A	O4'-C1'-N9	7.88	114.51	108.20
83	A5	1039	U	O4'-C1'-N1	7.88	114.51	108.20
36	B2	152	U	O4'-C1'-C2'	-7.88	97.92	105.80
36	B2	137	C	O4'-C1'-C2'	-7.88	97.92	105.80
83	A5	1296	U	C1'-O4'-C4'	-7.88	103.60	109.90
19	AZ	79	ARG	NE-CZ-NH2	7.88	124.24	120.30
31	AH	124	TYR	CB-CG-CD2	-7.88	116.27	121.00
36	B2	123	A	O4'-C1'-N9	7.88	114.50	108.20
36	B2	276	A	N9-C1'-C2'	-7.88	103.33	112.00
64	CF	249	ARG	NE-CZ-NH1	7.88	124.24	120.30
83	A5	2685	G	C1'-O4'-C4'	-7.88	103.60	109.90
83	A5	3516	C	C3'-C2'-C1'	7.87	107.80	101.50
36	B2	1727	U	C2'-C3'-O3'	-7.87	92.18	109.50
36	B2	1562	A	O4'-C1'-N9	7.87	114.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	574	C	O4'-C1'-N1	7.87	114.49	108.20
78	Co	92	GLY	C-N-CA	7.86	138.81	122.30
83	A5	3411	C	O4'-C1'-N1	7.86	114.49	108.20
83	A5	1956	A	C1'-O4'-C4'	-7.86	103.61	109.90
36	B2	1385	U	C1'-O4'-C4'	-7.86	103.61	109.90
36	B2	1173	A	C1'-O4'-C4'	-7.86	103.61	109.90
36	B2	1297	C	C3'-C2'-C1'	7.86	107.79	101.50
83	A5	2106	C	O4'-C1'-C2'	-7.86	97.94	105.80
83	A5	3889	U	C3'-C2'-C1'	7.86	107.78	101.50
83	A5	3947	C	O4'-C1'-N1	7.85	114.48	108.20
83	A5	998	G	O4'-C1'-N9	7.85	114.48	108.20
85	A7	22	A	P-O3'-C3'	-7.85	110.28	119.70
36	B2	428	G	O4'-C1'-C2'	-7.84	97.95	105.80
83	A5	1269	U	O4'-C1'-N1	7.84	114.47	108.20
83	A5	2657	A	C3'-C2'-C1'	7.84	107.78	101.50
16	AA	147	PHE	CB-CG-CD1	-7.84	115.31	120.80
83	A5	995	G	O4'-C1'-C2'	7.84	114.66	107.60
83	A5	1452	A	C1'-O4'-C4'	7.84	116.17	109.90
83	A5	2184	G	O4'-C1'-N9	7.84	114.47	108.20
83	A5	2270	G	O4'-C1'-N9	7.84	114.47	108.20
36	B2	67	A	N9-C1'-C2'	7.84	124.19	114.00
83	A5	2674	A	O4'-C1'-N9	7.84	114.47	108.20
85	A7	27	A	O4'-C1'-C2'	-7.83	97.97	105.80
36	B2	345	U	N1-C1'-C2'	7.83	124.18	114.00
36	B2	1387	A	C1'-O4'-C4'	7.83	116.17	109.90
49	CQ	152	PHE	CB-CG-CD1	7.83	126.28	120.80
36	B2	1106	A	O4'-C1'-N9	7.83	114.46	108.20
36	B2	183	A	P-O3'-C3'	7.83	129.09	119.70
36	B2	1163	C	O4'-C1'-N1	7.83	114.46	108.20
1	Az	264	GLN	N-CA-C	7.83	132.13	111.00
36	B2	291	C	N1-C1'-C2'	7.82	124.17	114.00
83	A5	2107	U	O4'-C1'-N1	7.82	114.46	108.20
83	A5	2562	U	O4'-C1'-N1	7.82	114.46	108.20
36	B2	1721	C	O4'-C1'-N1	7.82	114.46	108.20
63	CB	49	TYR	CB-CG-CD1	-7.82	116.31	121.00
36	B2	1394	U	C3'-C2'-C1'	-7.82	95.25	101.50
36	B2	1690	G	C1'-O4'-C4'	-7.82	103.65	109.90
83	A5	507	U	O4'-C1'-N1	7.82	114.45	108.20
83	A5	3881	A	C3'-C2'-C1'	7.82	107.75	101.50
83	A5	1758	U	O4'-C1'-N1	7.82	114.45	108.20
86	A8	7	A	O4'-C1'-N9	7.82	114.45	108.20
36	B2	135	U	C5'-C4'-O4'	-7.81	99.72	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	595	C	C3'-C2'-C1'	7.81	107.75	101.50
36	B2	656	U	N1-C1'-C2'	-7.81	103.41	112.00
36	B2	1912	G	N9-C1'-C2'	7.81	124.16	114.00
85	A7	95	U	C1'-O4'-C4'	7.81	116.15	109.90
36	B2	871	G	N9-C1'-C2'	7.81	124.16	114.00
36	B2	1607	U	O4'-C1'-N1	7.81	114.45	108.20
83	A5	545	U	O4'-C1'-N1	7.81	114.45	108.20
83	A5	1400	A	O4'-C1'-N9	7.81	114.45	108.20
83	A5	2647	U	O4'-C1'-N1	7.81	114.45	108.20
36	B2	912	U	O4'-C1'-N1	7.81	114.45	108.20
83	A5	115	U	O4'-C1'-N1	7.81	114.45	108.20
83	A5	397	C	N1-C1'-C2'	7.81	124.15	114.00
83	A5	1645	G	O4'-C1'-N9	7.81	114.45	108.20
83	A5	2251	G	O4'-C1'-N9	7.81	114.45	108.20
83	A5	3934	C	O3'-P-O5'	7.81	118.84	104.00
36	B2	647	U	C1'-O4'-C4'	7.81	116.15	109.90
83	A5	122	C	N1-C1'-C2'	7.81	124.15	114.00
83	A5	162	U	O4'-C1'-N1	7.81	114.45	108.20
83	A5	1153	G	O4'-C1'-N9	7.80	114.44	108.20
83	A5	2006	U	P-O3'-C3'	-7.80	110.33	119.70
83	A5	2128	A	C4'-C3'-C2'	7.80	110.40	102.60
83	A5	3208	A	C1'-O4'-C4'	7.80	116.14	109.90
83	A5	3907	G	O4'-C1'-N9	7.80	114.44	108.20
36	B2	522	G	O4'-C1'-N9	7.80	114.44	108.20
83	A5	200	U	O4'-C1'-N1	7.80	114.44	108.20
83	A5	536	U	O4'-C1'-N1	7.80	114.44	108.20
41	CO	118	ARG	NE-CZ-NH1	7.80	124.20	120.30
83	A5	3872	C	O4'-C1'-N1	7.80	114.44	108.20
83	A5	3	A	N9-C1'-C2'	7.80	124.13	114.00
83	A5	881	G	O4'-C1'-N9	7.80	114.44	108.20
83	A5	630	U	O4'-C1'-N1	7.79	114.44	108.20
83	A5	1176	A	O4'-C1'-C2'	-7.79	98.00	105.80
83	A5	1256	C	N1-C1'-C2'	7.79	124.13	114.00
85	A7	64	G	C4'-C3'-O3'	-7.79	93.04	109.40
83	A5	533	A	C1'-O4'-C4'	-7.79	103.67	109.90
83	A5	3135	G	O4'-C1'-N9	7.79	114.43	108.20
83	A5	431	C	O4'-C1'-N1	7.79	114.43	108.20
83	A5	3687	A	P-O3'-C3'	7.79	129.04	119.70
36	B2	653	U	O4'-C1'-N1	7.79	114.43	108.20
36	B2	929	A	O4'-C1'-N9	7.79	114.43	108.20
72	Ck	40	ARG	CA-C-N	7.79	134.33	117.20
83	A5	1324	C	C3'-C2'-C1'	7.79	107.73	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	AG	28	TYR	CB-CG-CD2	-7.78	116.33	121.00
83	A5	203	A	O4'-C1'-N9	7.78	114.43	108.20
83	A5	549	A	C3'-C2'-C1'	7.78	107.73	101.50
83	A5	2620	C	O4'-C1'-C2'	-7.78	98.02	105.80
83	A5	631	A	N9-C1'-C2'	-7.78	103.44	112.00
83	A5	3692	G	C1'-O4'-C4'	-7.78	103.67	109.90
85	A7	97	G	O4'-C1'-N9	7.78	114.42	108.20
83	A5	476	U	P-O3'-C3'	7.78	129.03	119.70
83	A5	1805	A	O4'-C1'-C2'	-7.78	98.02	105.80
83	A5	1476	G	C3'-C2'-C1'	7.78	107.72	101.50
83	A5	489	U	O4'-C1'-N1	7.78	114.42	108.20
83	A5	1009	G	N9-C1'-C2'	7.78	124.11	114.00
83	A5	3394	U	O4'-C1'-N1	7.78	114.42	108.20
10	AN	20	ARG	NE-CZ-NH2	-7.77	116.41	120.30
36	B2	971	A	O4'-C1'-N9	7.77	114.42	108.20
49	CQ	152	PHE	CB-CG-CD2	-7.77	115.36	120.80
83	A5	862	U	O4'-C1'-C2'	-7.77	98.03	105.80
83	A5	3026	U	P-O3'-C3'	7.77	129.03	119.70
84	A9	20	U	O4'-C1'-N1	7.77	114.42	108.20
36	B2	1649	U	O4'-C1'-C2'	-7.77	98.03	105.80
36	B2	1659	C	N1-C1'-C2'	7.77	124.10	114.00
83	A5	2926	G	P-O3'-C3'	7.77	129.02	119.70
20	Aa	10	ARG	NE-CZ-NH2	-7.77	116.42	120.30
83	A5	3676	C	C1'-O4'-C4'	7.77	116.11	109.90
83	A5	35	C	N1-C1'-C2'	7.77	124.10	114.00
83	A5	195	A	O4'-C1'-N9	7.77	114.41	108.20
83	A5	542	C	O4'-C1'-C2'	-7.77	98.03	105.80
36	B2	1907	G	O4'-C1'-N9	7.76	114.41	108.20
83	A5	28	C	C3'-C2'-C1'	7.76	107.71	101.50
83	A5	1782	C	C3'-C2'-C1'	7.76	107.71	101.50
36	B2	1393	C	C3'-C2'-C1'	7.76	107.71	101.50
83	A5	2008	U	O4'-C1'-N1	7.76	114.41	108.20
36	B2	59	C	O4'-C1'-C2'	-7.76	98.04	105.80
36	B2	1072	A	O4'-C1'-N9	7.76	114.41	108.20
83	A5	312	U	O4'-C1'-N1	7.76	114.41	108.20
83	A5	1034	U	N1-C1'-C2'	7.76	124.09	114.00
83	A5	3179	A	O4'-C1'-N9	7.76	114.41	108.20
83	A5	3526	C	O4'-C1'-N1	7.76	114.41	108.20
37	BC	71	U	O4'-C1'-N1	7.76	114.41	108.20
83	A5	2987	A	O4'-C1'-N9	7.76	114.41	108.20
83	A5	2043	G	N9-C1'-C2'	-7.76	103.47	112.00
4	AK	16	PHE	CB-CG-CD1	-7.75	115.37	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
69	Cg	20	ARG	NE-CZ-NH2	-7.75	116.42	120.30
83	A5	3927	C	C3'-C2'-C1'	7.75	107.70	101.50
83	A5	2465	U	O4'-C1'-N1	7.75	114.40	108.20
83	A5	2466	C	C3'-C2'-C1'	7.75	107.70	101.50
75	Cm	97	ARG	NE-CZ-NH1	7.75	124.17	120.30
83	A5	1456	U	O4'-C1'-C2'	7.75	114.57	107.60
32	AW	46	TYR	CB-CG-CD2	-7.75	116.35	121.00
36	B2	1054	A	O4'-C1'-N9	7.75	114.40	108.20
36	B2	1162	U	N1-C1'-C2'	-7.75	103.48	112.00
83	A5	2683	G	O4'-C1'-N9	7.75	114.40	108.20
83	A5	1066	A	C4'-C3'-O3'	7.74	128.49	113.00
83	A5	2717	C	C3'-C2'-C1'	7.74	107.69	101.50
83	A5	3915	U	P-O3'-C3'	7.74	128.99	119.70
85	A7	64	G	O3'-P-O5'	7.74	118.71	104.00
83	A5	2267	U	O4'-C1'-N1	7.74	114.39	108.20
83	A5	2130	G	P-O5'-C5'	7.74	133.28	120.90
83	A5	1936	U	O4'-C1'-N1	7.74	114.39	108.20
63	CB	169	ARG	NE-CZ-NH1	7.74	124.17	120.30
74	CC	61	ALA	N-CA-CB	7.74	120.93	110.10
36	B2	1843	A	O4'-C1'-N9	7.74	114.39	108.20
83	A5	2586	A	O4'-C1'-N9	7.74	114.39	108.20
83	A5	2686	C	N1-C1'-C2'	7.74	124.06	114.00
83	A5	3621	A	O4'-C1'-C2'	-7.74	98.06	105.80
83	A5	3806	C	C3'-C2'-C1'	7.74	107.69	101.50
36	B2	618	G	O4'-C1'-C2'	7.73	114.56	107.60
42	CL	58	VAL	N-CA-C	7.73	131.88	111.00
1	Az	782	PHE	CB-CG-CD2	7.73	126.21	120.80
83	A5	3151	G	C1'-O4'-C4'	-7.73	103.71	109.90
83	A5	3368	C	O4'-C1'-C2'	7.73	114.56	107.60
83	A5	1241	C	P-O3'-C3'	7.73	128.98	119.70
83	A5	3727	A	P-O3'-C3'	7.73	128.98	119.70
20	Aa	97	PRO	CA-C-O	-7.73	101.65	120.20
36	B2	426	A	O4'-C1'-C2'	-7.73	98.07	105.80
36	B2	857	G	O4'-C1'-C2'	7.73	114.56	107.60
36	B2	1401	U	N1-C1'-C2'	-7.73	103.50	112.00
83	A5	3751	C	P-O3'-C3'	7.73	128.97	119.70
86	A8	108	A	O4'-C1'-N9	7.73	114.38	108.20
83	A5	3178	G	C1'-O4'-C4'	-7.73	103.72	109.90
83	A5	3963	U	O4'-C1'-N1	7.73	114.38	108.20
36	B2	97	U	O4'-C1'-N1	7.72	114.38	108.20
36	B2	1452	U	C1'-O4'-C4'	7.72	116.08	109.90
83	A5	875	G	C1'-O4'-C4'	-7.72	103.72	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
42	CL	109	ARG	NE-CZ-NH2	-7.72	116.44	120.30
83	A5	2003	U	O4'-C1'-N1	7.72	114.38	108.20
36	B2	827	U	O4'-C1'-N1	7.72	114.38	108.20
83	A5	12	C	C1'-O4'-C4'	-7.72	103.72	109.90
83	A5	3445	C	C3'-C2'-C1'	7.72	107.67	101.50
83	A5	3627	C	O4'-C1'-N1	7.72	114.37	108.20
36	B2	1646	G	O4'-C1'-N9	7.71	114.37	108.20
54	CP	18	ARG	NE-CZ-NH2	-7.71	116.44	120.30
83	A5	935	A	O4'-C1'-N9	7.71	114.37	108.20
83	A5	1462	U	O4'-C1'-N1	7.71	114.37	108.20
83	A5	1755	U	O4'-C1'-C2'	-7.71	98.09	105.80
83	A5	3395	G	N9-C1'-C2'	7.71	124.03	114.00
83	A5	1033	U	O4'-C1'-N1	7.71	114.37	108.20
36	B2	1135	G	O4'-C1'-N9	7.71	114.37	108.20
83	A5	1346	C	O4'-C1'-N1	7.71	114.37	108.20
83	A5	3102	C	O4'-C1'-N1	7.71	114.37	108.20
36	B2	1250	C	O4'-C1'-N1	7.71	114.37	108.20
72	Ck	41	PHE	N-CA-C	7.71	131.81	111.00
36	B2	1027	A	O4'-C1'-C2'	-7.71	98.09	105.80
36	B2	1708	A	O4'-C1'-N9	7.71	114.36	108.20
36	B2	462	G	O4'-C1'-N9	7.70	114.36	108.20
83	A5	1522	G	C3'-C2'-C1'	7.70	107.66	101.50
83	A5	1547	A	N9-C1'-C2'	7.70	124.02	114.00
83	A5	3540	G	O4'-C1'-N9	7.70	114.36	108.20
36	B2	1727	U	O4'-C1'-N1	7.70	114.36	108.20
49	CQ	152	PHE	C-N-CA	7.69	138.46	122.30
83	A5	2675	U	C3'-C2'-C1'	7.69	107.66	101.50
36	B2	106	C	N1-C1'-C2'	7.69	124.00	114.00
83	A5	681	G	N9-C1'-C2'	-7.69	103.54	112.00
29	AG	137	ARG	NE-CZ-NH1	7.69	124.14	120.30
83	A5	212	U	O4'-C1'-C2'	-7.69	98.11	105.80
74	CC	196	ARG	N-CA-C	7.69	131.76	111.00
36	B2	21	U	O4'-C1'-N1	7.69	114.35	108.20
64	CF	109	ARG	NE-CZ-NH1	7.69	124.14	120.30
85	A7	88	G	O4'-C1'-N9	7.69	114.35	108.20
47	CI	154	ARG	NE-CZ-NH2	-7.69	116.46	120.30
83	A5	1016	A	O4'-C1'-N9	7.69	114.35	108.20
36	B2	152	U	C1'-O4'-C4'	7.68	116.05	109.90
74	CC	73	GLY	N-CA-C	7.68	132.31	113.10
83	A5	2902	C	O4'-C1'-N1	7.68	114.35	108.20
83	A5	3557	G	O4'-C1'-N9	7.68	114.35	108.20
36	B2	1150	U	O4'-C1'-N1	7.68	114.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	736	A	O4'-C1'-N9	7.68	114.35	108.20
83	A5	1546	U	O4'-C1'-N1	7.68	114.34	108.20
36	B2	444	U	O4'-C1'-N1	7.68	114.34	108.20
36	B2	1280	C	O4'-C1'-N1	7.68	114.34	108.20
83	A5	844	C	O4'-C1'-N1	7.68	114.34	108.20
21	Ab	47	PHE	CB-CG-CD2	-7.68	115.43	120.80
36	B2	380	U	O4'-C1'-N1	7.67	114.34	108.20
83	A5	143	G	O4'-C1'-C2'	7.67	114.51	107.60
83	A5	533	A	O4'-C1'-C2'	7.67	114.51	107.60
83	A5	1292	G	C1'-O4'-C4'	7.67	116.04	109.90
83	A5	2680	G	C1'-O4'-C4'	-7.67	103.76	109.90
83	A5	326	A	O4'-C1'-N9	7.67	114.34	108.20
86	A8	79	A	O4'-C1'-N9	7.67	114.34	108.20
83	A5	1245	C	N1-C1'-C2'	7.67	123.97	114.00
16	AA	117	ARG	NE-CZ-NH1	7.67	124.13	120.30
83	A5	1514	U	O4'-C1'-N1	7.66	114.33	108.20
36	B2	1616	A	O4'-C1'-N9	7.66	114.33	108.20
83	A5	1080	G	O4'-C1'-N9	7.66	114.33	108.20
83	A5	3025	A	C4'-C3'-O3'	7.66	128.32	113.00
36	B2	108	G	O4'-C1'-N9	7.66	114.33	108.20
83	A5	2910	C	O4'-C1'-C2'	-7.66	98.14	105.80
86	A8	12	G	N9-C1'-C2'	7.66	123.96	114.00
36	B2	217	A	C3'-C2'-C1'	7.66	107.62	101.50
83	A5	1682	G	O4'-C1'-N9	7.66	114.32	108.20
36	B2	1496	U	P-O5'-C5'	-7.65	108.65	120.90
49	CQ	143	ARG	NE-CZ-NH1	7.65	124.13	120.30
36	B2	1991	C	O4'-C1'-C2'	-7.65	98.15	105.80
83	A5	662	A	P-O3'-C3'	7.65	128.88	119.70
83	A5	3711	G	C1'-O4'-C4'	7.65	116.02	109.90
36	B2	717	C	N1-C1'-C2'	7.65	123.94	114.00
36	B2	1354	G	O4'-C1'-N9	7.65	114.32	108.20
55	CU	284	ARG	NE-CZ-NH1	7.65	124.12	120.30
83	A5	281	C	O4'-C1'-N1	7.65	114.32	108.20
83	A5	3568	A	C1'-O4'-C4'	7.65	116.02	109.90
83	A5	3696	C	P-O3'-C3'	7.65	128.88	119.70
83	A5	2927	U	N1-C1'-C2'	7.65	123.94	114.00
36	B2	1086	U	N1-C1'-C2'	7.64	123.94	114.00
79	CJ	23	ARG	NE-CZ-NH1	7.64	124.12	120.30
83	A5	3839	A	C3'-C2'-C1'	-7.64	95.39	101.50
36	B2	394	G	O4'-C1'-C2'	7.64	114.47	107.60
36	B2	398	C	O4'-C1'-C2'	-7.64	98.16	105.80
78	Co	104	PHE	CB-CG-CD2	-7.64	115.45	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2837	A	C1'-O4'-C4'	-7.64	103.79	109.90
45	Ca	60	ARG	NE-CZ-NH1	7.64	124.12	120.30
83	A5	1022	A	O4'-C1'-N9	7.64	114.31	108.20
83	A5	1981	A	C3'-C2'-C1'	7.63	107.61	101.50
83	A5	3015	A	C1'-O4'-C4'	7.63	116.01	109.90
83	A5	3970	A	O4'-C1'-N9	7.63	114.31	108.20
85	A7	119	C	O4'-C1'-N1	7.63	114.31	108.20
74	CC	309	ARG	C-N-CA	7.63	140.78	121.70
36	B2	28	A	O4'-C1'-N9	7.63	114.31	108.20
36	B2	553	A	P-O3'-C3'	7.63	128.86	119.70
83	A5	3638	U	N1-C1'-C2'	7.63	123.92	114.00
36	B2	137	C	C2'-C3'-O3'	7.63	126.28	109.50
36	B2	1695	A	N9-C1'-C2'	-7.63	103.61	112.00
36	B2	1991	C	P-O3'-C3'	7.63	128.85	119.70
83	A5	894	U	P-O3'-C3'	7.63	128.85	119.70
83	A5	1469	C	N1-C1'-C2'	7.63	123.92	114.00
61	Ch	122	LYS	N-CA-CB	7.63	124.33	110.60
83	A5	77	A	O3'-P-O5'	-7.63	89.51	104.00
83	A5	309	C	C3'-C2'-C1'	7.63	107.60	101.50
83	A5	2006	U	P-O5'-C5'	-7.63	108.70	120.90
63	CB	277	ARG	NE-CZ-NH2	-7.62	116.49	120.30
36	B2	11	A	C1'-O4'-C4'	7.62	116.00	109.90
36	B2	1430	U	N1-C1'-C2'	7.62	123.91	114.00
39	Cq	14	PHE	CB-CG-CD2	-7.62	115.46	120.80
83	A5	770	C	C3'-C2'-C1'	7.62	107.60	101.50
83	A5	3661	C	O4'-C1'-N1	7.62	114.30	108.20
36	B2	989	G	O4'-C1'-N9	7.62	114.29	108.20
83	A5	2537	A	O4'-C1'-C2'	-7.62	98.18	105.80
83	A5	1174	G	C1'-O4'-C4'	-7.62	103.81	109.90
83	A5	675	C	O4'-C1'-N1	7.62	114.29	108.20
83	A5	3452	U	P-O3'-C3'	-7.62	110.56	119.70
36	B2	158	U	N1-C1'-C2'	-7.61	103.63	112.00
81	CE	187	ALA	N-CA-CB	7.61	120.75	110.10
83	A5	2059	U	O4'-C1'-N1	7.61	114.29	108.20
83	A5	2641	C	O4'-C1'-C2'	-7.61	98.19	105.80
83	A5	3418	U	C1'-C2'-O2'	-7.61	87.78	110.60
83	A5	1489	A	C3'-C2'-C1'	7.61	107.58	101.50
83	A5	421	C	O4'-C1'-C2'	-7.60	98.20	105.80
83	A5	3780	G	O4'-C1'-N9	7.60	114.28	108.20
36	B2	1525	A	N9-C1'-C2'	-7.60	103.64	112.00
83	A5	2632	U	O4'-C1'-N1	7.60	114.28	108.20
36	B2	1530	A	O4'-C1'-N9	7.60	114.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	CX	189	ARG	NE-CZ-NH1	7.60	124.10	120.30
83	A5	2789	U	O4'-C1'-N1	7.60	114.28	108.20
83	A5	1942	U	O4'-C1'-N1	7.60	114.28	108.20
83	A5	3588	G	C1'-O4'-C4'	-7.60	103.82	109.90
36	B2	899	A	N9-C1'-C2'	7.59	123.87	114.00
83	A5	2884	C	N1-C1'-C2'	7.59	123.87	114.00
36	B2	1809	U	O4'-C1'-N1	7.59	114.27	108.20
41	CO	103	ARG	NE-CZ-NH2	-7.59	116.50	120.30
83	A5	1977	A	O4'-C1'-N9	7.59	114.27	108.20
83	A5	3576	G	O4'-C1'-C2'	7.59	114.43	107.60
83	A5	3607	C	N1-C1'-C2'	7.59	123.87	114.00
54	CP	42	ARG	NE-CZ-NH1	7.59	124.09	120.30
83	A5	1585	U	P-O3'-C3'	7.59	128.81	119.70
83	A5	3584	C	C3'-C2'-C1'	7.59	107.57	101.50
83	A5	3137	A	O4'-C1'-N9	7.59	114.27	108.20
83	A5	3540	G	C1'-O4'-C4'	7.59	115.97	109.90
83	A5	2763	U	N1-C1'-C2'	7.59	123.86	114.00
83	A5	2270	G	N9-C1'-C2'	7.58	123.86	114.00
83	A5	1963	U	O4'-C1'-C2'	-7.58	98.22	105.80
83	A5	499	A	C3'-C2'-C1'	7.58	107.57	101.50
83	A5	3206	A	O4'-C1'-C2'	-7.58	98.22	105.80
36	B2	202	U	O4'-C1'-N1	7.58	114.26	108.20
83	A5	2185	U	O4'-C1'-N1	7.58	114.26	108.20
83	A5	2763	U	O4'-C1'-N1	7.58	114.26	108.20
83	A5	3828	U	O4'-C1'-N1	7.58	114.26	108.20
36	B2	1986	A	O4'-C1'-N9	7.58	114.26	108.20
83	A5	615	C	N1-C1'-C2'	7.58	123.85	114.00
83	A5	1280	C	C3'-C2'-C1'	7.58	107.56	101.50
36	B2	533	A	N9-C1'-C2'	7.58	123.85	114.00
36	B2	1119	G	C1'-O4'-C4'	-7.58	103.84	109.90
83	A5	193	U	O4'-C1'-N1	7.58	114.26	108.20
36	B2	156	U	P-O5'-C5'	7.57	133.02	120.90
83	A5	1221	U	O4'-C1'-N1	7.57	114.26	108.20
36	B2	1603	G	C1'-O4'-C4'	-7.57	103.84	109.90
83	A5	2590	C	O4'-C1'-N1	7.57	114.26	108.20
83	A5	3117	A	N9-C1'-C2'	-7.57	103.67	112.00
85	A7	90	A	C1'-O4'-C4'	7.57	115.96	109.90
36	B2	1179	A	C5'-C4'-O4'	7.57	118.18	109.10
83	A5	2141	A	O4'-C1'-N9	7.57	114.25	108.20
36	B2	294	C	O4'-C1'-N1	7.57	114.25	108.20
65	Cc	63	TYR	CB-CG-CD1	-7.57	116.46	121.00
83	A5	987	G	O4'-C1'-N9	7.57	114.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	A7	64	G	C5'-C4'-O4'	7.57	118.18	109.10
83	A5	1109	G	O4'-C1'-N9	7.56	114.25	108.20
83	A5	1382	U	C1'-O4'-C4'	7.56	115.95	109.90
83	A5	2152	C	C1'-O4'-C4'	-7.56	103.85	109.90
83	A5	457	A	P-O3'-C3'	7.56	128.77	119.70
83	A5	653	U	O4'-C1'-N1	7.56	114.25	108.20
83	A5	1461	G	C1'-O4'-C4'	-7.56	103.85	109.90
83	A5	3895	A	N9-C1'-C2'	-7.56	103.69	112.00
36	B2	1851	A	O4'-C1'-N9	7.56	114.25	108.20
83	A5	3807	G	O4'-C1'-N9	-7.56	102.16	108.20
83	A5	2038	A	C3'-C2'-C1'	7.55	107.54	101.50
83	A5	3916	U	N1-C1'-C2'	7.55	123.82	114.00
36	B2	1240	A	O4'-C1'-N9	7.55	114.24	108.20
83	A5	3202	G	O4'-C1'-N9	7.55	114.24	108.20
36	B2	45	U	C3'-C2'-C1'	7.55	107.54	101.50
36	B2	1740	G	C3'-C2'-C1'	7.55	107.54	101.50
83	A5	842	A	O4'-C1'-N9	7.55	114.24	108.20
83	A5	1567	G	C1'-O4'-C4'	-7.55	103.86	109.90
83	A5	2672	U	O4'-C1'-N1	7.55	114.24	108.20
83	A5	827	A	O4'-C1'-N9	7.55	114.24	108.20
83	A5	1668	U	O4'-C1'-C2'	7.55	114.39	107.60
83	A5	361	U	O4'-C1'-N1	7.55	114.24	108.20
83	A5	1000	G	N9-C1'-C2'	7.54	123.81	114.00
83	A5	2807	G	O4'-C1'-N9	7.54	114.24	108.20
83	A5	3487	A	O4'-C1'-N9	7.54	114.24	108.20
36	B2	705	G	O4'-C1'-C2'	7.54	114.39	107.60
83	A5	2620	C	C3'-C2'-C1'	7.54	107.53	101.50
36	B2	493	A	P-O3'-C3'	7.54	128.75	119.70
83	A5	1427	G	O4'-C1'-N9	7.54	114.23	108.20
83	A5	1894	G	O4'-C1'-C2'	7.54	114.39	107.60
83	A5	3778	U	C1'-O4'-C4'	7.54	115.93	109.90
83	A5	1453	U	P-O5'-C5'	7.54	132.97	120.90
42	CL	134	ARG	N-CA-CB	7.54	124.17	110.60
83	A5	3560	C	N1-C1'-C2'	-7.54	103.71	112.00
16	AA	158	ASP	C-N-CA	7.54	140.54	121.70
36	B2	1131	U	P-O5'-C5'	7.54	132.96	120.90
42	CL	75	PHE	CB-CG-CD1	-7.54	115.53	120.80
83	A5	1084	A	O4'-C1'-C2'	-7.54	98.26	105.80
83	A5	2767	U	O4'-C1'-N1	-7.54	102.17	108.20
85	A7	50	A	P-O3'-C3'	7.54	128.74	119.70
83	A5	1683	U	O4'-C1'-N1	7.53	114.23	108.20
36	B2	151	G	O4'-C1'-N9	7.53	114.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
74	CC	334	TYR	CB-CG-CD1	-7.53	116.48	121.00
83	A5	1294	U	C1'-O4'-C4'	7.53	115.92	109.90
83	A5	3454	G	N9-C1'-C2'	7.53	123.79	114.00
83	A5	530	U	N1-C1'-C2'	-7.53	103.72	112.00
83	A5	1894	G	C1'-O4'-C4'	-7.53	103.88	109.90
36	B2	1678	G	O4'-C1'-C2'	7.53	114.37	107.60
85	A7	1	G	C1'-O4'-C4'	-7.53	103.88	109.90
83	A5	3706	U	P-O3'-C3'	-7.52	110.67	119.70
66	Cd	38	ARG	CA-C-N	7.52	133.75	117.20
83	A5	710	A	O4'-C1'-N9	7.52	114.22	108.20
83	A5	2053	A	N9-C1'-C2'	7.52	123.78	114.00
83	A5	2872	U	C3'-C2'-C1'	7.52	107.52	101.50
83	A5	3216	C	O4'-C1'-N1	7.52	114.22	108.20
83	A5	3543	A	O4'-C1'-N9	7.52	114.22	108.20
83	A5	3690	A	C3'-C2'-C1'	7.52	107.52	101.50
83	A5	299	G	O4'-C1'-C2'	7.52	114.37	107.60
83	A5	532	C	O4'-C1'-N1	7.52	114.22	108.20
83	A5	1744	U	O4'-C1'-N1	7.52	114.22	108.20
83	A5	416	C	O4'-C1'-N1	7.52	114.22	108.20
83	A5	1559	A	O4'-C1'-N9	7.52	114.22	108.20
83	A5	169	C	N1-C1'-C2'	7.52	123.77	114.00
83	A5	1356	G	C3'-C2'-C1'	7.52	107.51	101.50
83	A5	13	U	O4'-C1'-N1	7.51	114.21	108.20
83	A5	1722	U	N1-C1'-C2'	7.51	123.77	114.00
36	B2	1318	A	C3'-C2'-C1'	7.51	107.51	101.50
83	A5	925	C	O4'-C1'-C2'	-7.51	98.29	105.80
83	A5	1062	C	C3'-C2'-C1'	7.51	107.51	101.50
83	A5	2563	G	O4'-C1'-N9	7.51	114.21	108.20
83	A5	388	U	N1-C1'-C2'	7.51	123.76	114.00
36	B2	622	C	C3'-C2'-C1'	7.51	107.51	101.50
83	A5	1744	U	C3'-C2'-C1'	7.51	107.51	101.50
36	B2	394	G	N9-C1'-C2'	7.51	123.76	114.00
83	A5	491	U	O4'-C1'-C2'	-7.51	98.29	105.80
83	A5	590	U	O4'-C1'-N1	7.51	114.21	108.20
83	A5	1891	U	C1'-O4'-C4'	7.50	115.90	109.90
36	B2	963	G	O4'-C1'-C2'	7.50	114.35	107.60
36	B2	1654	G	N9-C1'-C2'	-7.50	103.75	112.00
36	B2	1871	G	C3'-C2'-C1'	7.50	107.50	101.50
83	A5	2119	G	O4'-C1'-N9	7.50	114.20	108.20
36	B2	647	U	O4'-C1'-C2'	-7.50	98.30	105.80
83	A5	26	G	O4'-C1'-N9	7.50	114.20	108.20
36	B2	715	U	O4'-C1'-N1	7.50	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	A7	53	U	N1-C1'-C2'	-7.50	103.75	112.00
36	B2	448	C	O4'-C1'-N1	7.50	114.20	108.20
83	A5	1805	A	P-O5'-C5'	7.50	132.89	120.90
36	B2	979	G	O4'-C1'-N9	7.49	114.19	108.20
83	A5	1199	C	C3'-C2'-C1'	7.49	107.50	101.50
83	A5	3856	U	C1'-O4'-C4'	7.49	115.89	109.90
83	A5	676	A	O4'-C1'-N9	7.49	114.19	108.20
26	AJ	5	ARG	NE-CZ-NH2	-7.49	116.56	120.30
36	B2	409	G	O4'-C1'-N9	7.49	114.19	108.20
7	AM	39	VAL	CB-CA-C	7.49	125.63	111.40
56	CX	183	ARG	NE-CZ-NH1	7.49	124.04	120.30
83	A5	1424	G	C1'-O4'-C4'	-7.49	103.91	109.90
83	A5	3309	A	N9-C1'-C2'	7.49	123.74	114.00
36	B2	1885	U	O4'-C1'-N1	7.49	114.19	108.20
83	A5	1715	G	O4'-C1'-N9	7.49	114.19	108.20
83	A5	3695	G	O4'-C1'-C2'	7.49	114.34	107.60
36	B2	580	C	N1-C1'-C2'	7.49	123.73	114.00
36	B2	1131	U	P-O3'-C3'	-7.49	110.72	119.70
83	A5	541	A	P-O3'-C3'	-7.49	110.72	119.70
83	A5	3297	C	N1-C1'-C2'	7.49	123.73	114.00
36	B2	565	G	P-O3'-C3'	7.48	128.68	119.70
83	A5	279	U	O4'-C1'-N1	7.48	114.19	108.20
1	Az	71	LYS	C-N-CA	7.48	140.40	121.70
31	AH	141	ARG	NE-CZ-NH1	7.48	124.04	120.30
53	CT	144	LEU	C-N-CA	7.48	140.40	121.70
83	A5	277	U	O4'-C1'-N1	7.48	114.19	108.20
63	CB	100	ARG	NE-CZ-NH2	-7.48	116.56	120.30
83	A5	2794	U	C1'-O4'-C4'	-7.48	103.92	109.90
36	B2	1111	U	O4'-C1'-N1	7.48	114.18	108.20
83	A5	647	A	O4'-C1'-N9	7.48	114.18	108.20
83	A5	1173	U	O4'-C1'-C2'	-7.48	98.32	105.80
83	A5	3484	U	O4'-C1'-N1	7.48	114.18	108.20
64	CF	183	ARG	NE-CZ-NH1	7.47	124.04	120.30
83	A5	1369	C	N1-C1'-C2'	7.47	123.72	114.00
83	A5	3698	A	O4'-C1'-N9	7.47	114.18	108.20
83	A5	116	U	C1'-O4'-C4'	7.47	115.88	109.90
83	A5	460	A	C5'-C4'-O4'	7.47	118.07	109.10
83	A5	1078	G	N9-C1'-C2'	-7.47	103.78	112.00
83	A5	1585	U	C1'-O4'-C4'	7.47	115.88	109.90
83	A5	2551	U	N1-C1'-C2'	7.47	123.71	114.00
11	AL	41	PHE	CB-CG-CD1	7.47	126.03	120.80
83	A5	1202	A	O4'-C1'-N9	7.47	114.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	964	C	O4'-C1'-N1	7.46	114.17	108.20
83	A5	2124	G	C1'-O4'-C4'	-7.46	103.93	109.90
83	A5	2676	U	C3'-C2'-C1'	7.46	107.47	101.50
83	A5	3495	G	C3'-C2'-C1'	-7.46	95.53	101.50
83	A5	3762	G	O4'-C1'-C2'	7.46	114.32	107.60
14	AT	152	ILE	C-N-CA	7.46	140.36	121.70
83	A5	2587	U	P-O3'-C3'	7.46	128.66	119.70
31	AH	110	LEU	C-N-CA	7.46	140.35	121.70
83	A5	2865	G	O4'-C1'-N9	7.46	114.17	108.20
36	B2	1623	C	O4'-C1'-C2'	-7.46	98.34	105.80
83	A5	1691	A	P-O3'-C3'	7.46	128.65	119.70
83	A5	3002	U	P-O3'-C3'	7.46	128.65	119.70
83	A5	3393	U	O4'-C1'-C2'	-7.46	98.34	105.80
83	A5	3955	U	P-O3'-C3'	-7.46	110.75	119.70
36	B2	17	C	O4'-C1'-C2'	-7.46	98.34	105.80
36	B2	705	G	C1'-O4'-C4'	-7.45	103.94	109.90
47	CI	187	ASP	CB-CG-OD2	-7.45	111.59	118.30
83	A5	2614	G	O4'-C1'-N9	7.45	114.16	108.20
83	A5	2901	C	N1-C1'-C2'	7.45	123.69	114.00
83	A5	3674	G	O4'-C1'-C2'	-7.45	98.35	105.80
83	A5	3273	C	C3'-C2'-C1'	7.45	107.46	101.50
83	A5	3684	A	C3'-C2'-C1'	7.45	107.46	101.50
51	CA	76	PHE	CB-CG-CD2	-7.45	115.59	120.80
83	A5	1553	C	O4'-C1'-C2'	-7.45	98.35	105.80
85	A7	64	G	O5'-C5'-C4'	7.45	125.85	111.70
36	B2	376	G	O4'-C1'-N9	7.45	114.16	108.20
83	A5	1447	C	N1-C1'-C2'	7.45	123.68	114.00
83	A5	3793	U	O4'-C1'-N1	7.45	114.16	108.20
36	B2	66	C	P-O3'-C3'	7.44	128.63	119.70
63	CB	24	ARG	NE-CZ-NH2	-7.44	116.58	120.30
83	A5	2794	U	N1-C1'-C2'	7.44	123.68	114.00
84	A9	29	U	O4'-C1'-N1	7.44	114.16	108.20
36	B2	1599	U	O4'-C1'-N1	7.44	114.15	108.20
83	A5	138	A	C3'-C2'-C1'	-7.44	95.55	101.50
83	A5	1556	C	C3'-C2'-C1'	7.44	107.45	101.50
36	B2	1852	A	O4'-C1'-N9	7.44	114.15	108.20
85	A7	52	U	N1-C1'-C2'	7.44	123.67	114.00
1	Az	790	THR	C-N-CA	7.44	137.92	122.30
36	B2	1203	U	O4'-C1'-N1	7.44	114.15	108.20
83	A5	33	C	C3'-C2'-C1'	7.44	107.45	101.50
83	A5	3241	G	O4'-C1'-N9	7.44	114.15	108.20
36	B2	211	U	P-O3'-C3'	-7.44	110.78	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1575	A	C3'-C2'-C1'	-7.43	95.55	101.50
83	A5	1884	U	O4'-C1'-N1	7.43	114.15	108.20
36	B2	1443	U	O4'-C1'-N1	7.43	114.14	108.20
36	B2	1234	G	P-O3'-C3'	7.43	128.62	119.70
83	A5	154	A	P-O3'-C3'	7.43	128.62	119.70
83	A5	575	A	O4'-C1'-N9	7.43	114.14	108.20
83	A5	776	A	C4'-C3'-O3'	7.43	127.86	113.00
83	A5	1863	U	O4'-C1'-N1	7.43	114.14	108.20
83	A5	2837	A	N9-C1'-C2'	7.43	123.66	114.00
83	A5	1294	U	C3'-C2'-C1'	7.43	107.44	101.50
83	A5	1864	U	C3'-C2'-C1'	7.43	107.44	101.50
83	A5	3897	G	O4'-C1'-N9	7.43	114.14	108.20
36	B2	1567	A	P-O3'-C3'	7.42	128.61	119.70
83	A5	155	U	C5'-C4'-C3'	-7.42	104.12	116.00
63	CB	1	MET	CG-SD-CE	-7.42	88.32	100.20
83	A5	2238	A	O4'-C1'-N9	7.42	114.14	108.20
83	A5	3511	U	O4'-C1'-N1	7.42	114.14	108.20
83	A5	1225	G	C1'-O4'-C4'	-7.42	103.96	109.90
83	A5	2837	A	P-O3'-C3'	7.42	128.60	119.70
36	B2	1564	A	P-O3'-C3'	7.42	128.60	119.70
83	A5	3013	C	C3'-C2'-C1'	7.42	107.44	101.50
36	B2	72	A	P-O5'-C5'	7.42	132.77	120.90
36	B2	204	C	O4'-C1'-C2'	-7.42	98.38	105.80
36	B2	1184	U	C3'-C2'-C1'	7.42	107.43	101.50
83	A5	340	U	O4'-C1'-N1	7.42	114.13	108.20
83	A5	1535	U	O4'-C1'-N1	7.42	114.13	108.20
63	CB	100	ARG	NE-CZ-NH1	7.41	124.01	120.30
83	A5	560	U	O4'-C1'-N1	7.41	114.13	108.20
83	A5	1228	C	N1-C1'-C2'	-7.41	103.84	112.00
83	A5	1329	G	O4'-C1'-N9	7.41	114.13	108.20
83	A5	3375	U	C1'-O4'-C4'	7.41	115.83	109.90
83	A5	3516	C	N1-C1'-C2'	7.41	123.64	114.00
36	B2	160	G	P-O3'-C3'	-7.41	110.81	119.70
52	CS	118	ARG	NE-CZ-NH1	7.41	124.01	120.30
83	A5	1713	U	C1'-O4'-C4'	-7.41	103.97	109.90
83	A5	3472	A	C5'-C4'-C3'	-7.41	104.14	116.00
31	AH	114	ARG	NE-CZ-NH2	-7.41	116.59	120.30
34	AQ	30	GLY	C-N-CA	7.41	140.22	121.70
83	A5	1583	G	C1'-O4'-C4'	-7.41	103.97	109.90
83	A5	2475	A	O4'-C1'-N9	7.41	114.13	108.20
36	B2	100	U	O4'-C1'-N1	7.41	114.12	108.20
83	A5	1479	G	O4'-C1'-C2'	-7.41	98.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1028	A	C3'-C2'-C1'	7.40	107.42	101.50
36	B2	1052	U	N1-C1'-C2'	7.40	123.63	114.00
63	CB	38	SER	N-CA-CB	7.40	121.60	110.50
83	A5	682	U	O3'-P-O5'	-7.40	89.94	104.00
83	A5	1301	A	C4'-C3'-O3'	-7.40	93.86	109.40
83	A5	3115	C	O4'-C1'-N1	7.40	114.12	108.20
9	Ad	19	ARG	NE-CZ-NH1	7.40	124.00	120.30
83	A5	1690	U	O4'-C1'-N1	7.40	114.12	108.20
83	A5	329	C	C3'-C2'-C1'	7.40	107.42	101.50
83	A5	2075	A	P-O5'-C5'	-7.40	109.06	120.90
35	Ah	146	ARG	NE-CZ-NH1	7.40	124.00	120.30
83	A5	2461	A	O4'-C1'-N9	7.40	114.12	108.20
83	A5	3856	U	O4'-C1'-C2'	-7.40	98.40	105.80
1	Az	800	PHE	N-CA-C	7.39	130.97	111.00
83	A5	471	A	O4'-C1'-N9	7.39	114.11	108.20
83	A5	2494	G	N9-C1'-C2'	7.39	123.61	114.00
48	CD	232	ARG	NE-CZ-NH1	7.39	124.00	120.30
83	A5	822	G	O4'-C1'-N9	7.39	114.11	108.20
83	A5	1583	G	O4'-C1'-N9	7.39	114.11	108.20
48	CD	151	ALA	N-CA-CB	7.39	120.45	110.10
83	A5	1084	A	C1'-O4'-C4'	7.39	115.81	109.90
83	A5	1759	C	O4'-C1'-N1	7.39	114.11	108.20
59	CZ	122	LYS	C-N-CA	7.39	140.18	121.70
83	A5	3303	G	C5'-C4'-O4'	-7.39	100.23	109.10
36	B2	213	G	C3'-C2'-C1'	7.39	107.41	101.50
83	A5	833	U	P-O3'-C3'	7.39	128.57	119.70
36	B2	1588	G	O4'-C1'-N9	7.39	114.11	108.20
81	CE	78	ARG	NE-CZ-NH1	7.39	123.99	120.30
33	AI	121	LEU	C-N-CA	7.38	137.80	122.30
36	B2	938	G	O4'-C1'-N9	7.38	114.10	108.20
83	A5	586	C	P-O3'-C3'	7.38	128.56	119.70
83	A5	571	U	P-O3'-C3'	7.38	128.56	119.70
83	A5	1775	C	O4'-C1'-N1	7.38	114.10	108.20
83	A5	1492	C	O3'-P-O5'	-7.38	89.98	104.00
34	AQ	31	ASN	N-CA-C	7.38	130.92	111.00
36	B2	1194	C	O4'-C1'-N1	7.38	114.10	108.20
83	A5	514	A	C3'-C2'-C1'	-7.38	95.60	101.50
83	A5	1711	C	O3'-P-O5'	7.38	118.02	104.00
83	A5	624	A	O4'-C1'-N9	7.38	114.10	108.20
83	A5	2078	C	C3'-C2'-C1'	7.38	107.40	101.50
83	A5	3785	A	O4'-C1'-N9	7.38	114.10	108.20
36	B2	415	A	O4'-C1'-N9	7.37	114.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
72	Ck	40	ARG	O-C-N	-7.37	110.90	122.70
83	A5	1524	U	O4'-C1'-C2'	-7.37	98.43	105.80
83	A5	2776	A	O4'-C1'-C2'	-7.37	98.43	105.80
83	A5	2880	A	C1'-O4'-C4'	7.37	115.80	109.90
83	A5	3292	C	O4'-C1'-C2'	-7.37	98.43	105.80
83	A5	3920	C	C3'-C2'-C1'	7.37	107.40	101.50
36	B2	15	U	O4'-C1'-N1	7.37	114.10	108.20
83	A5	404	U	O4'-C1'-N1	7.37	114.10	108.20
83	A5	2043	G	O4'-C1'-N9	7.37	114.10	108.20
83	A5	3387	C	C3'-C2'-C1'	7.37	107.40	101.50
83	A5	2635	C	N1-C1'-C2'	7.37	123.58	114.00
83	A5	2768	A	C3'-C2'-C1'	7.37	107.39	101.50
83	A5	3778	U	N1-C1'-C2'	-7.37	103.89	112.00
83	A5	2626	C	C3'-C2'-C1'	7.37	107.39	101.50
36	B2	1817	C	C1'-O4'-C4'	-7.36	104.01	109.90
36	B2	1877	G	N9-C1'-C2'	7.36	123.57	114.00
45	Ca	65	ARG	NE-CZ-NH2	-7.36	116.62	120.30
83	A5	3962	A	N9-C1'-C2'	7.36	123.57	114.00
83	A5	3389	C	C1'-O4'-C4'	-7.36	104.01	109.90
30	AF	209	SER	C-N-CA	7.36	140.10	121.70
36	B2	1544	G	C3'-C2'-C1'	-7.36	95.61	101.50
83	A5	3345	A	C1'-O4'-C4'	-7.36	104.01	109.90
83	A5	3576	G	O4'-C1'-N9	7.36	114.09	108.20
83	A5	703	A	O4'-C1'-N9	7.36	114.08	108.20
83	A5	758	A	O4'-C1'-N9	7.36	114.08	108.20
85	A7	96	U	O4'-C1'-N1	7.36	114.08	108.20
60	Cr	30	SER	N-CA-CB	7.35	121.53	110.50
83	A5	985	G	C3'-C2'-C1'	-7.35	95.62	101.50
1	Az	310	LYS	N-CA-C	7.35	130.85	111.00
83	A5	889	G	O4'-C1'-N9	7.35	114.08	108.20
36	B2	1207	G	C1'-O4'-C4'	-7.35	104.02	109.90
83	A5	828	G	O4'-C1'-N9	7.35	114.08	108.20
83	A5	1536	U	O4'-C1'-N1	7.35	114.08	108.20
36	B2	1704	G	O4'-C1'-N9	7.35	114.08	108.20
83	A5	3157	U	C1'-O4'-C4'	7.35	115.78	109.90
13	AP	100	TYR	CB-CG-CD1	-7.35	116.59	121.00
36	B2	1108	C	N1-C1'-C2'	7.34	123.55	114.00
83	A5	2928	G	C1'-O4'-C4'	-7.34	104.02	109.90
83	A5	1417	G	C3'-C2'-C1'	-7.34	95.62	101.50
83	A5	743	C	C1'-O4'-C4'	-7.34	104.03	109.90
83	A5	1864	U	P-O3'-C3'	7.34	128.51	119.70
83	A5	2612	G	C1'-O4'-C4'	-7.34	104.03	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	563	A	C1'-O4'-C4'	-7.34	104.03	109.90
83	A5	2695	A	O4'-C1'-N9	7.34	114.07	108.20
36	B2	1419	C	N1-C1'-C2'	7.34	123.54	114.00
83	A5	3554	G	P-O3'-C3'	-7.34	110.89	119.70
33	AI	145	GLU	N-CA-CB	7.33	123.80	110.60
83	A5	3575	G	C1'-O4'-C4'	-7.33	104.03	109.90
58	CW	74	ARG	NE-CZ-NH1	7.33	123.97	120.30
83	A5	1293	A	C5'-C4'-O4'	7.33	117.90	109.10
83	A5	3344	U	O4'-C1'-N1	7.33	114.07	108.20
83	A5	817	C	O4'-C1'-C2'	-7.33	98.47	105.80
83	A5	2634	A	O4'-C1'-C2'	-7.33	98.47	105.80
67	Ce	46	ARG	NE-CZ-NH1	7.33	123.96	120.30
83	A5	157	C	C4'-C3'-C2'	-7.33	95.27	102.60
36	B2	652	U	O4'-C1'-N1	7.33	114.06	108.20
83	A5	1534	G	O4'-C1'-C2'	7.33	114.19	107.60
36	B2	1752	U	N1-C1'-C2'	-7.32	103.94	112.00
83	A5	304	U	C4'-C3'-O3'	-7.32	94.02	109.40
83	A5	1868	A	P-O3'-C3'	7.32	128.49	119.70
83	A5	131	U	O4'-C1'-N1	7.32	114.06	108.20
83	A5	1891	U	N1-C1'-C2'	-7.32	103.95	112.00
36	B2	429	C	C1'-O4'-C4'	-7.32	104.04	109.90
83	A5	2526	A	N9-C1'-C2'	7.32	123.52	114.00
83	A5	1176	A	O4'-C1'-N9	7.32	114.05	108.20
83	A5	2970	U	P-O5'-C5'	7.31	132.60	120.90
70	Ci	92	ARG	NE-CZ-NH2	7.31	123.96	120.30
83	A5	705	G	O4'-C1'-N9	7.31	114.05	108.20
83	A5	1030	A	O4'-C1'-N9	7.31	114.05	108.20
83	A5	2744	C	O4'-C1'-C2'	-7.31	98.49	105.80
83	A5	2880	A	O4'-C1'-N9	7.31	114.05	108.20
36	B2	175	A	O4'-C1'-C2'	-7.31	98.49	105.80
75	Cm	97	ARG	NE-CZ-NH2	-7.31	116.65	120.30
83	A5	1527	C	O4'-C1'-C2'	-7.31	98.49	105.80
83	A5	1567	G	O4'-C1'-N9	7.31	114.05	108.20
30	AF	121	PHE	CB-CG-CD2	-7.31	115.69	120.80
83	A5	2142	A	C3'-C2'-C1'	7.31	107.34	101.50
36	B2	590	U	C3'-C2'-C1'	7.30	107.34	101.50
36	B2	1295	U	P-O3'-C3'	7.30	128.47	119.70
83	A5	1052	U	N1-C1'-C2'	7.30	123.49	114.00
83	A5	709	U	N1-C1'-C2'	-7.30	103.97	112.00
83	A5	1791	A	O4'-C1'-N9	7.30	114.04	108.20
26	AJ	106	PHE	CB-CG-CD2	7.30	125.91	120.80
28	AC	231	TYR	CB-CG-CD1	7.30	125.38	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	229	U	O4'-C1'-N1	7.30	114.04	108.20
83	A5	2997	C	O4'-C1'-N1	7.30	114.04	108.20
83	A5	3755	A	O4'-C1'-N9	7.30	114.04	108.20
36	B2	1918	G	O4'-C1'-N9	7.30	114.04	108.20
83	A5	1493	A	C5'-C4'-C3'	-7.30	104.32	116.00
36	B2	421	A	O4'-C1'-N9	7.30	114.04	108.20
83	A5	1296	U	C3'-C2'-C1'	-7.30	95.66	101.50
83	A5	3584	C	O4'-C1'-C2'	-7.30	98.50	105.80
83	A5	3586	A	C1'-O4'-C4'	-7.29	104.06	109.90
36	B2	281	C	C3'-C2'-C1'	7.29	107.33	101.50
36	B2	1660	U	O4'-C1'-N1	7.29	114.03	108.20
82	CG	41	PRO	C-N-CA	7.29	139.93	121.70
83	A5	862	U	C3'-C2'-C1'	7.29	107.33	101.50
83	A5	2581	U	O4'-C1'-N1	7.29	114.03	108.20
83	A5	3527	A	O4'-C1'-N9	7.29	114.03	108.20
83	A5	3857	G	P-O3'-C3'	7.29	128.45	119.70
36	B2	1974	U	O4'-C1'-N1	7.29	114.03	108.20
39	Cq	183	PHE	CB-CG-CD2	7.29	125.90	120.80
45	Ca	130	PHE	CB-CG-CD1	7.29	125.90	120.80
51	CA	247	ARG	NE-CZ-NH2	-7.29	116.65	120.30
83	A5	2729	U	N1-C1'-C2'	-7.29	103.98	112.00
83	A5	1055	U	O4'-C1'-N1	7.29	114.03	108.20
83	A5	3239	C	O4'-C1'-C2'	-7.29	98.51	105.80
83	A5	3659	G	C3'-C2'-C1'	-7.29	95.67	101.50
64	CF	173	THR	O-C-N	-7.29	111.04	122.70
83	A5	3538	G	O4'-C1'-N9	7.29	114.03	108.20
36	B2	633	U	O4'-C1'-N1	7.28	114.03	108.20
83	A5	1244	U	O4'-C1'-N1	7.28	114.03	108.20
83	A5	1491	U	O3'-P-O5'	-7.28	90.16	104.00
29	AG	31	ARG	NE-CZ-NH1	7.28	123.94	120.30
79	CJ	80	ARG	NE-CZ-NH2	-7.28	116.66	120.30
83	A5	1373	A	P-O3'-C3'	-7.28	110.96	119.70
83	A5	1538	U	O4'-C1'-C2'	-7.28	98.52	105.80
83	A5	3333	A	O4'-C1'-N9	7.28	114.02	108.20
83	A5	3565	G	O4'-C1'-N9	7.28	114.02	108.20
36	B2	1571	U	C3'-C2'-C1'	-7.28	95.68	101.50
63	CB	63	PRO	C-N-CA	7.28	137.59	122.30
83	A5	2518	A	P-O3'-C3'	-7.28	110.97	119.70
83	A5	2275	U	O4'-C1'-N1	7.28	114.02	108.20
83	A5	3722	C	C3'-C2'-C1'	7.28	107.32	101.50
36	B2	120	U	O4'-C1'-N1	7.27	114.02	108.20
83	A5	570	U	P-O5'-C5'	7.27	132.54	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2766	U	O4'-C1'-N1	7.27	114.02	108.20
83	A5	3178	G	O4'-C1'-N9	7.27	114.02	108.20
36	B2	1767	G	C1'-O4'-C4'	-7.27	104.08	109.90
36	B2	1771	U	N1-C1'-C2'	7.27	123.45	114.00
83	A5	3173	U	N1-C1'-C2'	7.27	123.45	114.00
19	AZ	91	ARG	NE-CZ-NH1	7.27	123.94	120.30
36	B2	976	U	O4'-C1'-N1	7.27	114.02	108.20
37	BC	67	C	O4'-C1'-N1	7.27	114.02	108.20
83	A5	3354	U	O4'-C1'-N1	7.27	114.02	108.20
36	B2	1782	G	O4'-C1'-N9	7.27	114.01	108.20
83	A5	161	G	O4'-C1'-N9	-7.27	102.39	108.20
83	A5	623	C	C5'-C4'-C3'	7.27	127.63	116.00
83	A5	1809	A	C4'-C3'-C2'	-7.27	95.33	102.60
42	CL	51	SER	CB-CA-C	7.27	123.91	110.10
36	B2	887	G	O4'-C1'-N9	7.26	114.01	108.20
83	A5	2592	A	O4'-C1'-N9	7.26	114.01	108.20
36	B2	374	C	C3'-C2'-C1'	7.26	107.31	101.50
36	B2	719	G	O4'-C1'-N9	7.26	114.01	108.20
83	A5	250	U	O3'-P-O5'	7.26	117.80	104.00
83	A5	1722	U	C1'-O4'-C4'	-7.26	104.09	109.90
83	A5	2248	A	N9-C1'-C2'	-7.26	104.01	112.00
74	CC	36	ARG	NE-CZ-NH1	7.26	123.93	120.30
78	Co	97	ARG	NE-CZ-NH1	7.26	123.93	120.30
83	A5	199	U	C1'-O4'-C4'	-7.26	104.09	109.90
83	A5	263	A	O4'-C1'-C2'	-7.26	98.54	105.80
83	A5	297	U	O4'-C1'-C2'	-7.26	98.54	105.80
36	B2	846	U	O4'-C1'-N1	7.25	114.00	108.20
83	A5	495	A	O4'-C1'-N9	7.25	114.00	108.20
83	A5	665	U	O4'-C1'-N1	7.25	114.00	108.20
83	A5	805	C	C3'-C2'-C1'	7.25	107.30	101.50
36	B2	720	G	O4'-C1'-C2'	-7.25	98.55	105.80
83	A5	1776	U	C1'-O4'-C4'	7.25	115.70	109.90
36	B2	373	U	N1-C1'-C2'	-7.25	104.02	112.00
83	A5	516	U	O4'-C1'-N1	7.25	114.00	108.20
83	A5	577	A	P-O3'-C3'	7.25	128.40	119.70
72	Ck	59	SER	N-CA-C	7.25	130.57	111.00
36	B2	1006	U	O4'-C1'-N1	7.25	114.00	108.20
36	B2	1104	C	O4'-C1'-N1	7.25	114.00	108.20
36	B2	1455	U	C5'-C4'-C3'	-7.25	104.41	116.00
85	A7	75	G	C1'-O4'-C4'	-7.25	104.10	109.90
69	Cg	10	ARG	NE-CZ-NH2	7.24	123.92	120.30
83	A5	3012	A	N9-C1'-C2'	-7.24	104.03	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	55	G	O4'-C1'-N9	7.24	113.99	108.20
36	B2	5	U	O4'-C1'-N1	7.24	113.99	108.20
36	B2	1702	C	P-O3'-C3'	7.24	128.39	119.70
83	A5	1959	A	C3'-C2'-C1'	7.24	107.29	101.50
83	A5	1133	A	O4'-C1'-C2'	-7.24	98.56	105.80
34	AQ	117	TYR	CB-CG-CD2	-7.24	116.66	121.00
83	A5	304	U	C5'-C4'-O4'	-7.23	100.42	109.10
83	A5	1182	A	P-O3'-C3'	7.23	128.38	119.70
83	A5	2270	G	C3'-C2'-C1'	-7.23	95.71	101.50
36	B2	313	C	C3'-C2'-C1'	-7.23	95.72	101.50
36	B2	1815	C	C3'-C2'-C1'	7.23	107.28	101.50
83	A5	2055	G	O4'-C1'-N9	7.23	113.98	108.20
83	A5	3023	A	O3'-P-O5'	7.23	117.74	104.00
83	A5	1987	G	P-O3'-C3'	7.23	128.38	119.70
83	A5	2847	G	O4'-C1'-N9	7.23	113.98	108.20
30	AF	170	ARG	NE-CZ-NH1	7.23	123.91	120.30
36	B2	1007	C	C3'-C2'-C1'	7.23	107.28	101.50
83	A5	100	G	O4'-C1'-N9	7.23	113.98	108.20
83	A5	2092	U	C2'-C3'-O3'	-7.23	93.60	109.50
83	A5	2098	C	O4'-C1'-C2'	-7.23	98.57	105.80
83	A5	1358	U	C1'-O4'-C4'	7.22	115.68	109.90
83	A5	1684	G	C1'-O4'-C4'	-7.22	104.12	109.90
83	A5	3683	G	N9-C1'-C2'	7.22	123.39	114.00
36	B2	890	U	N1-C1'-C2'	7.22	123.39	114.00
83	A5	108	A	O4'-C1'-N9	7.22	113.98	108.20
83	A5	488	U	C1'-O4'-C4'	-7.22	104.12	109.90
36	B2	657	A	N9-C1'-C2'	7.22	123.39	114.00
83	A5	3627	C	O4'-C1'-C2'	-7.22	98.58	105.80
83	A5	1671	U	N1-C1'-C2'	7.22	123.38	114.00
18	AY	94	ARG	NE-CZ-NH2	7.22	123.91	120.30
36	B2	178	A	O4'-C1'-N9	7.22	113.97	108.20
83	A5	36	U	C1'-O4'-C4'	7.22	115.67	109.90
83	A5	3414	U	O4'-C1'-N1	7.22	113.97	108.20
36	B2	489	C	C3'-C2'-C1'	7.21	107.27	101.50
36	B2	1036	C	C1'-O4'-C4'	-7.21	104.13	109.90
36	B2	1829	C	N1-C1'-C2'	7.21	123.38	114.00
83	A5	1511	C	C3'-C2'-C1'	7.21	107.27	101.50
83	A5	2833	U	O4'-C1'-N1	7.21	113.97	108.20
20	Aa	5	ARG	NE-CZ-NH1	7.21	123.91	120.30
36	B2	92	A	C5'-C4'-C3'	-7.21	104.46	116.00
59	CZ	49	TYR	CB-CG-CD1	-7.21	116.67	121.00
68	Cf	104	VAL	CB-CA-C	7.21	125.10	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	100	G	O4'-C1'-C2'	7.21	114.09	107.60
83	A5	3319	A	P-O3'-C3'	7.21	128.35	119.70
83	A5	2950	C	P-O5'-C5'	7.21	132.44	120.90
36	B2	52	U	O4'-C1'-N1	7.21	113.97	108.20
36	B2	1457	C	O4'-C1'-C2'	-7.21	98.59	105.80
83	A5	1727	U	O4'-C1'-N1	7.21	113.96	108.20
83	A5	3711	G	C5'-C4'-O4'	7.21	117.75	109.10
83	A5	280	C	C3'-C2'-C1'	7.21	107.26	101.50
83	A5	3563	G	N9-C1'-C2'	7.20	123.37	114.00
82	CG	254	ARG	NE-CZ-NH1	7.20	123.90	120.30
83	A5	3234	A	C3'-C2'-C1'	7.20	107.26	101.50
85	A7	109	U	C3'-C2'-C1'	7.20	107.26	101.50
86	A8	86	A	P-O3'-C3'	7.20	128.34	119.70
36	B2	924	U	O4'-C1'-N1	7.20	113.96	108.20
83	A5	107	G	O4'-C1'-N9	7.20	113.96	108.20
83	A5	1872	A	N9-C1'-C2'	7.20	123.36	114.00
83	A5	3815	G	O4'-C1'-N9	7.20	113.96	108.20
55	CU	256	TYR	CB-CG-CD1	7.20	125.32	121.00
26	AJ	66	GLU	C-N-CA	7.19	139.68	121.70
39	Cq	6	ARG	NE-CZ-NH2	-7.19	116.70	120.30
82	CG	58	ARG	NE-CZ-NH2	-7.19	116.70	120.30
83	A5	143	G	C1'-O4'-C4'	-7.19	104.15	109.90
83	A5	1324	C	N1-C1'-C2'	7.19	123.35	114.00
83	A5	3192	C	O4'-C1'-N1	7.19	113.95	108.20
36	B2	1	A	P-O3'-C3'	7.19	128.33	119.70
83	A5	2151	A	O4'-C1'-N9	-7.19	102.45	108.20
28	AC	60	SER	N-CA-CB	7.19	121.28	110.50
33	AI	155	GLN	N-CA-CB	7.19	123.54	110.60
83	A5	596	A	P-O3'-C3'	7.19	128.33	119.70
83	A5	2503	G	C1'-O4'-C4'	-7.19	104.15	109.90
7	AM	52	ARG	NE-CZ-NH1	7.19	123.89	120.30
36	B2	20	G	O4'-C1'-N9	7.19	113.95	108.20
36	B2	1102	U	P-O3'-C3'	7.19	128.32	119.70
36	B2	1658	G	N9-C1'-C2'	7.19	123.34	114.00
36	B2	103	U	P-O3'-C3'	-7.18	111.08	119.70
82	CG	260	ARG	NE-CZ-NH2	-7.18	116.71	120.30
83	A5	751	A	P-O3'-C3'	7.18	128.32	119.70
83	A5	1478	A	N9-C1'-C2'	7.18	123.34	114.00
83	A5	2751	A	O4'-C1'-N9	7.18	113.95	108.20
86	A8	101	A	C3'-C2'-C1'	7.18	107.25	101.50
36	B2	1022	A	O4'-C1'-C2'	-7.18	98.62	105.80
83	A5	1504	C	O4'-C1'-N1	7.18	113.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1860	A	C1'-O4'-C4'	7.18	115.65	109.90
81	CE	141	SER	N-CA-CB	7.18	121.27	110.50
74	CC	252	PHE	CB-CG-CD1	7.18	125.83	120.80
83	A5	217	G	C1'-O4'-C4'	-7.18	104.16	109.90
28	AC	153	TRP	CB-CG-CD2	-7.18	117.27	126.60
83	A5	241	C	O4'-C1'-C2'	7.18	114.06	107.60
83	A5	1633	G	P-O3'-C3'	7.18	128.31	119.70
83	A5	2261	G	O4'-C1'-N9	7.18	113.94	108.20
83	A5	3471	A	P-O3'-C3'	-7.18	111.09	119.70
83	A5	1320	U	O4'-C1'-C2'	-7.17	98.63	105.80
83	A5	1611	G	O4'-C1'-N9	7.17	113.94	108.20
83	A5	1901	G	O4'-C1'-N9	7.17	113.94	108.20
83	A5	3350	U	O4'-C1'-N1	7.17	113.94	108.20
16	AA	216	ALA	N-CA-CB	7.17	120.14	110.10
36	B2	701	G	N9-C1'-C2'	-7.17	104.11	112.00
36	B2	971	A	C1'-O4'-C4'	-7.17	104.16	109.90
36	B2	1287	G	N9-C1'-C2'	-7.17	104.11	112.00
47	CI	21	ARG	NE-CZ-NH2	-7.17	116.71	120.30
83	A5	3938	C	N1-C1'-C2'	7.17	123.32	114.00
8	AS	142	ARG	N-CA-CB	7.17	123.51	110.60
37	BC	7	G	N9-C1'-C2'	-7.17	104.11	112.00
37	BC	37	A	O4'-C1'-C2'	-7.17	98.63	105.80
83	A5	1031	G	O4'-C1'-N9	7.17	113.94	108.20
42	CL	170	THR	N-CA-C	7.17	130.35	111.00
83	A5	1937	G	N9-C1'-C2'	-7.17	104.11	112.00
83	A5	2671	C	O4'-C1'-C2'	-7.17	98.63	105.80
36	B2	1686	C	N1-C1'-C2'	7.17	123.32	114.00
36	B2	423	G	O4'-C1'-N9	7.17	113.93	108.20
83	A5	2109	G	O4'-C1'-N9	-7.17	102.47	108.20
1	Az	95	ARG	C-N-CA	7.16	139.61	121.70
39	Cq	156	SER	N-CA-CB	7.16	121.24	110.50
74	CC	221	ARG	NE-CZ-NH1	7.16	123.88	120.30
83	A5	567	A	N9-C1'-C2'	-7.16	104.12	112.00
70	Ci	97	ARG	NE-CZ-NH2	-7.16	116.72	120.30
83	A5	145	A	O4'-C1'-N9	7.16	113.93	108.20
83	A5	2607	A	O4'-C1'-N9	7.16	113.93	108.20
83	A5	3700	U	C4'-C3'-O3'	7.16	127.32	113.00
36	B2	386	C	N1-C1'-C2'	7.16	123.31	114.00
83	A5	1601	U	N1-C1'-C2'	-7.16	104.13	112.00
83	A5	2593	A	O4'-C1'-C2'	-7.16	98.64	105.80
10	AN	73	ARG	NE-CZ-NH2	-7.15	116.72	120.30
83	A5	1499	C	C3'-C2'-C1'	7.15	107.22	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	555	U	O4'-C1'-N1	7.15	113.92	108.20
36	B2	1945	A	O4'-C1'-C2'	-7.15	98.65	105.80
37	BC	69	G	C4'-C3'-C2'	-7.15	95.45	102.60
35	Ah	126	PHE	CB-CG-CD2	-7.15	115.79	120.80
83	A5	228	C	N1-C1'-C2'	7.15	123.30	114.00
36	B2	574	C	C1'-O4'-C4'	-7.15	104.18	109.90
36	B2	1635	U	N1-C1'-C2'	-7.15	104.14	112.00
36	B2	1821	G	O4'-C1'-C2'	7.15	114.03	107.60
83	A5	1916	G	O4'-C1'-N9	7.15	113.92	108.20
36	B2	426	A	O4'-C1'-N9	7.15	113.92	108.20
36	B2	1622	U	C1'-O4'-C4'	7.15	115.62	109.90
83	A5	3244	U	C3'-C2'-C1'	7.15	107.22	101.50
83	A5	3845	A	O4'-C1'-C2'	-7.15	98.65	105.80
5	AO	99	ALA	CA-C-N	7.14	132.92	117.20
24	Ae	95	GLU	N-CA-CB	7.14	123.46	110.60
36	B2	1042	A	C3'-C2'-C1'	7.14	107.22	101.50
83	A5	2489	G	O4'-C1'-N9	7.14	113.92	108.20
29	AG	59	GLN	C-N-CA	7.14	137.30	122.30
83	A5	660	A	O4'-C1'-N9	7.14	113.91	108.20
83	A5	2467	A	P-O3'-C3'	7.14	128.27	119.70
83	A5	1896	A	C4'-C3'-C2'	-7.14	95.46	102.60
83	A5	2048	G	O4'-C1'-N9	7.14	113.91	108.20
36	B2	1529	G	C1'-O4'-C4'	7.14	115.61	109.90
36	B2	282	U	O4'-C1'-C2'	-7.14	98.66	105.80
36	B2	1005	G	O4'-C1'-N9	7.14	113.91	108.20
22	Ac	34	GLN	C-N-CA	7.13	139.54	121.70
40	CK	114	ARG	NE-CZ-NH1	7.13	123.87	120.30
83	A5	828	G	C1'-O4'-C4'	7.13	115.61	109.90
83	A5	3596	A	O4'-C1'-N9	7.13	113.91	108.20
36	B2	919	A	O4'-C1'-N9	7.13	113.91	108.20
83	A5	1166	U	O4'-C1'-N1	7.13	113.91	108.20
83	A5	1960	C	P-O3'-C3'	7.13	128.26	119.70
83	A5	2466	C	O4'-C1'-C2'	-7.13	98.67	105.80
1	Az	840	TYR	CB-CG-CD1	7.13	125.28	121.00
25	Af	106	TYR	CB-CG-CD1	7.13	125.28	121.00
83	A5	1774	C	N1-C1'-C2'	7.13	123.27	114.00
83	A5	67	A	N9-C1'-C2'	7.13	123.27	114.00
83	A5	2883	C	C3'-C2'-C1'	7.13	107.20	101.50
83	A5	3436	U	O4'-C1'-C2'	-7.13	98.67	105.80
35	Ah	136	ARG	N-CA-CB	7.13	123.43	110.60
83	A5	2557	C	C3'-C2'-C1'	7.13	107.20	101.50
84	A9	30	A	C1'-O4'-C4'	7.13	115.60	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1756	C	O4'-C1'-N1	7.12	113.90	108.20
83	A5	2206	U	N1-C1'-C2'	7.12	123.26	114.00
36	B2	1290	A	O4'-C1'-N9	-7.12	102.50	108.20
83	A5	915	C	O4'-C1'-N1	7.12	113.90	108.20
83	A5	2908	U	O4'-C1'-C2'	-7.12	98.68	105.80
34	AQ	5	ARG	C-N-CA	7.12	139.50	121.70
36	B2	1699	G	O4'-C1'-N9	7.12	113.89	108.20
44	CM	66	TYR	CB-CG-CD2	-7.12	116.73	121.00
36	B2	1270	U	O4'-C1'-N1	7.12	113.89	108.20
83	A5	2655	C	C1'-O4'-C4'	-7.12	104.21	109.90
63	CB	357	ARG	NE-CZ-NH1	7.11	123.86	120.30
80	CH	51	ARG	NE-CZ-NH2	-7.11	116.74	120.30
83	A5	2096	C	O4'-C1'-N1	7.11	113.89	108.20
26	AJ	118	LEU	C-N-CA	7.11	137.23	122.30
83	A5	1492	C	C2'-C3'-O3'	7.11	125.14	109.50
28	AC	224	TYR	CB-CG-CD1	7.11	125.27	121.00
83	A5	1248	A	O4'-C1'-N9	7.11	113.89	108.20
36	B2	951	A	C1'-O4'-C4'	7.11	115.59	109.90
74	CC	365	LEU	N-CA-CB	7.11	124.62	110.40
83	A5	438	G	C1'-O4'-C4'	-7.11	104.21	109.90
83	A5	2240	U	O4'-C1'-N1	7.11	113.89	108.20
83	A5	3335	A	C1'-O4'-C4'	7.11	115.59	109.90
36	B2	1463	C	N1-C1'-C2'	7.11	123.24	114.00
83	A5	1317	A	C1'-O4'-C4'	7.11	115.58	109.90
83	A5	2217	A	O4'-C1'-N9	7.11	113.88	108.20
83	A5	3622	C	O4'-C1'-N1	7.11	113.88	108.20
86	A8	57	G	O4'-C1'-N9	7.11	113.89	108.20
68	Cf	128	THR	C-N-CA	7.10	137.22	122.30
62	Cb	44	ARG	NE-CZ-NH1	7.10	123.85	120.30
83	A5	1351	C	O4'-C1'-N1	7.10	113.88	108.20
83	A5	3223	A	O4'-C1'-N9	7.10	113.88	108.20
36	B2	829	C	N1-C1'-C2'	7.10	123.23	114.00
70	Ci	5	TYR	CB-CG-CD2	-7.10	116.74	121.00
78	Co	77	TYR	CB-CG-CD1	7.10	125.26	121.00
83	A5	2060	A	O4'-C1'-N9	7.10	113.88	108.20
83	A5	3190	G	O4'-C1'-C2'	7.10	113.99	107.60
83	A5	2792	G	C1'-O4'-C4'	-7.10	104.22	109.90
83	A5	3522	A	O4'-C1'-N9	7.10	113.88	108.20
16	AA	37	TYR	CB-CG-CD2	7.10	125.26	121.00
36	B2	243	U	C3'-C2'-C1'	7.10	107.18	101.50
83	A5	1341	G	O4'-C1'-N9	7.10	113.88	108.20
83	A5	1893	C	N1-C1'-C2'	7.10	123.23	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3375	U	O4'-C1'-N1	7.10	113.88	108.20
83	A5	3455	U	O4'-C1'-N1	7.10	113.88	108.20
83	A5	1361	G	C1'-O4'-C4'	-7.10	104.22	109.90
1	Az	251	TRP	N-CA-CB	7.09	123.37	110.60
83	A5	1779	G	O4'-C4'-C3'	-7.09	96.91	104.00
83	A5	2159	C	N1-C1'-C2'	7.09	123.22	114.00
83	A5	2282	U	P-O3'-C3'	7.09	128.21	119.70
83	A5	2867	U	O4'-C1'-N1	7.09	113.87	108.20
36	B2	936	G	N9-C1'-C2'	7.09	123.22	114.00
36	B2	1115	C	O4'-C1'-C2'	-7.09	98.71	105.80
83	A5	1523	A	O4'-C1'-N9	7.09	113.87	108.20
83	A5	3271	G	O4'-C1'-N9	7.09	113.87	108.20
83	A5	1777	A	P-O3'-C3'	-7.09	111.19	119.70
36	B2	1747	A	C3'-C2'-C1'	7.09	107.17	101.50
83	A5	2485	A	O4'-C1'-C2'	-7.09	98.71	105.80
74	CC	116	ARG	NE-CZ-NH2	-7.09	116.76	120.30
83	A5	3284	C	O4'-C1'-C2'	-7.09	98.71	105.80
36	B2	119	U	O4'-C1'-N1	7.08	113.87	108.20
36	B2	856	A	O4'-C1'-C2'	7.08	113.98	107.60
83	A5	697	U	O3'-P-O5'	-7.08	90.54	104.00
83	A5	1183	U	C3'-C2'-C1'	7.08	107.17	101.50
83	A5	3756	A	O4'-C1'-N9	7.08	113.87	108.20
36	B2	1176	C	N1-C1'-C2'	7.08	123.20	114.00
83	A5	3015	A	C3'-C2'-C1'	7.08	107.16	101.50
83	A5	3258	C	C3'-C2'-C1'	-7.08	95.83	101.50
74	CC	7	ARG	NE-CZ-NH2	-7.08	116.76	120.30
83	A5	719	U	O4'-C1'-N1	7.08	113.86	108.20
83	A5	1251	C	O4'-C1'-N1	7.08	113.86	108.20
83	A5	3952	C	N1-C1'-C2'	7.08	123.20	114.00
27	AE	100	ARG	NE-CZ-NH2	-7.08	116.76	120.30
31	AH	187	PHE	CB-CG-CD2	-7.08	115.84	120.80
19	AZ	91	ARG	NE-CZ-NH2	-7.08	116.76	120.30
36	B2	9	U	O4'-C1'-N1	7.08	113.86	108.20
36	B2	567	C	C3'-C2'-C1'	7.08	107.16	101.50
36	B2	1546	U	O4'-C1'-N1	7.08	113.86	108.20
83	A5	624	A	C1'-O4'-C4'	7.08	115.56	109.90
83	A5	1788	G	O4'-C1'-C2'	-7.08	98.72	105.80
83	A5	3404	A	C1'-O4'-C4'	7.08	115.56	109.90
1	Az	207	ARG	NE-CZ-NH1	7.07	123.84	120.30
36	B2	463	G	C3'-C2'-C1'	-7.07	95.84	101.50
83	A5	319	G	O4'-C1'-N9	7.07	113.86	108.20
36	B2	1714	U	O4'-C1'-C2'	-7.07	98.73	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
42	CL	56	PRO	N-CA-C	7.07	130.49	112.10
83	A5	319	G	N9-C1'-C2'	7.07	123.19	114.00
83	A5	557	G	C1'-O4'-C4'	-7.07	104.24	109.90
83	A5	620	U	C1'-O4'-C4'	7.07	115.56	109.90
83	A5	3777	U	O4'-C1'-N1	7.07	113.86	108.20
36	B2	39	A	N9-C1'-C2'	-7.07	104.22	112.00
36	B2	475	G	O4'-C1'-N9	7.07	113.86	108.20
83	A5	3806	C	C1'-O4'-C4'	-7.07	104.25	109.90
36	B2	1339	C	N1-C1'-C2'	7.07	123.19	114.00
82	CG	200	ARG	NE-CZ-NH1	7.07	123.83	120.30
83	A5	1322	U	O4'-C1'-N1	7.07	113.85	108.20
83	A5	1522	G	O4'-C1'-C2'	-7.07	98.73	105.80
83	A5	1583	G	C3'-C2'-C1'	-7.07	95.85	101.50
83	A5	3148	C	O4'-C1'-N1	7.07	113.85	108.20
83	A5	779	U	P-O5'-C5'	-7.07	109.59	120.90
83	A5	1635	A	O4'-C1'-N9	7.07	113.85	108.20
83	A5	3159	C	O4'-C1'-C2'	-7.07	98.73	105.80
83	A5	3374	U	O4'-C1'-N1	7.07	113.85	108.20
36	B2	107	A	C3'-C2'-C1'	7.06	107.15	101.50
43	CV	131	ARG	NE-CZ-NH1	7.06	123.83	120.30
83	A5	2131	C	P-O5'-C5'	7.06	132.20	120.90
83	A5	3331	A	C3'-C2'-C1'	7.06	107.15	101.50
83	A5	2092	U	C5'-C4'-C3'	7.06	127.30	116.00
36	B2	1606	A	O4'-C1'-C2'	7.06	113.95	107.60
59	CZ	81	MET	CG-SD-CE	-7.06	88.90	100.20
83	A5	458	A	C3'-C2'-C1'	7.06	107.15	101.50
83	A5	1637	U	O3'-P-O5'	7.06	117.41	104.00
36	B2	896	A	P-O3'-C3'	7.06	128.17	119.70
83	A5	439	U	N1-C1'-C2'	7.06	123.17	114.00
83	A5	1955	A	C3'-C2'-C1'	7.06	107.15	101.50
86	A8	50	A	O4'-C1'-C2'	7.06	113.95	107.60
52	CS	167	PHE	CB-CG-CD1	-7.06	115.86	120.80
83	A5	852	C	O4'-C1'-N1	7.05	113.84	108.20
83	A5	2126	A	O4'-C1'-N9	7.05	113.84	108.20
83	A5	3517	U	C3'-C2'-C1'	7.05	107.14	101.50
36	B2	956	C	O4'-C1'-N1	7.05	113.84	108.20
36	B2	1027	A	P-O3'-C3'	7.05	128.16	119.70
36	B2	1315	U	O4'-C1'-N1	7.05	113.84	108.20
83	A5	691	C	C3'-C2'-C1'	7.05	107.14	101.50
83	A5	3902	G	C1'-O4'-C4'	-7.05	104.26	109.90
36	B2	1774	C	O4'-C1'-C2'	-7.05	98.75	105.80
83	A5	2831	U	O4'-C1'-N1	7.05	113.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Az	827	ARG	NE-CZ-NH1	7.05	123.82	120.30
83	A5	1633	G	O4'-C1'-N9	7.05	113.84	108.20
83	A5	1783	A	P-O3'-C3'	7.04	128.16	119.70
83	A5	2050	U	O4'-C1'-N1	7.04	113.84	108.20
83	A5	3927	C	O4'-C1'-C2'	-7.04	98.75	105.80
11	AL	94	ARG	NE-CZ-NH1	7.04	123.82	120.30
36	B2	1303	C	C3'-C2'-C1'	7.04	107.14	101.50
83	A5	1797	A	C1'-O4'-C4'	7.04	115.53	109.90
83	A5	3844	U	C1'-O4'-C4'	-7.04	104.27	109.90
83	A5	831	A	C3'-C2'-C1'	7.04	107.13	101.50
83	A5	2549	G	O4'-C1'-N9	7.04	113.83	108.20
83	A5	3154	C	O4'-C1'-C2'	-7.04	98.76	105.80
83	A5	3893	A	C3'-C2'-C1'	-7.04	95.87	101.50
85	A7	87	G	P-O3'-C3'	-7.04	111.25	119.70
83	A5	2461	A	N9-C1'-C2'	-7.04	104.26	112.00
83	A5	148	U	P-O3'-C3'	7.04	128.15	119.70
83	A5	1597	A	O4'-C1'-N9	7.04	113.83	108.20
48	CD	28	THR	CA-CB-CG2	-7.04	102.55	112.40
83	A5	1013	G	C1'-O4'-C4'	-7.04	104.27	109.90
83	A5	2689	G	C1'-O4'-C4'	-7.04	104.27	109.90
36	B2	959	U	O4'-C1'-N1	7.03	113.83	108.20
83	A5	2795	U	O4'-C1'-N1	7.03	113.83	108.20
83	A5	637	U	O4'-C1'-C2'	-7.03	98.77	105.80
32	AW	37	PHE	CB-CG-CD2	-7.03	115.88	120.80
33	AI	180	ARG	NE-CZ-NH2	-7.03	116.78	120.30
36	B2	1731	U	C1'-O4'-C4'	7.03	115.52	109.90
54	CP	4	TYR	CB-CG-CD1	-7.03	116.78	121.00
36	B2	1246	C	O4'-C1'-C2'	-7.03	98.77	105.80
83	A5	469	G	O4'-C1'-N9	7.03	113.82	108.20
36	B2	1794	C	O4'-C1'-N1	7.03	113.82	108.20
62	Cb	38	LYS	C-N-CA	7.03	139.27	121.70
83	A5	2107	U	O4'-C1'-C2'	-7.03	98.78	105.80
36	B2	1545	U	N1-C1'-C2'	-7.02	104.27	112.00
51	CA	189	TYR	CB-CG-CD2	-7.02	116.79	121.00
36	B2	1829	C	C3'-C2'-C1'	7.02	107.12	101.50
83	A5	1102	G	C1'-O4'-C4'	-7.02	104.28	109.90
83	A5	1626	A	C3'-C2'-C1'	7.02	107.12	101.50
36	B2	1303	C	N1-C1'-C2'	7.02	123.13	114.00
36	B2	434	G	O4'-C1'-N9	7.02	113.82	108.20
36	B2	1000	G	O4'-C1'-N9	7.02	113.82	108.20
83	A5	1515	U	O4'-C1'-N1	7.02	113.81	108.20
36	B2	287	C	N1-C1'-C2'	7.02	123.12	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	626	U	O4'-C1'-N1	7.02	113.81	108.20
59	CZ	106	ARG	NE-CZ-NH2	-7.02	116.79	120.30
83	A5	1182	A	N9-C1'-C2'	7.02	123.12	114.00
36	B2	1165	C	O4'-C1'-N1	7.02	113.81	108.20
7	AM	121	PHE	CB-CG-CD2	-7.01	115.89	120.80
8	AS	124	ARG	NE-CZ-NH2	7.01	123.81	120.30
83	A5	1207	G	C3'-C2'-C1'	7.01	107.11	101.50
83	A5	1781	U	O4'-C1'-N1	7.01	113.81	108.20
83	A5	3124	G	C1'-O4'-C4'	-7.01	104.29	109.90
85	A7	5	A	O4'-C1'-N9	7.01	113.81	108.20
83	A5	33	C	N1-C1'-C2'	7.01	123.12	114.00
83	A5	1527	C	C3'-C2'-C1'	7.01	107.11	101.50
36	B2	645	C	O4'-C1'-C2'	-7.01	98.79	105.80
36	B2	1946	G	O4'-C1'-N9	7.01	113.81	108.20
55	CU	256	TYR	CB-CG-CD2	-7.01	116.79	121.00
84	A9	19	U	O4'-C1'-C2'	-7.01	98.79	105.80
36	B2	146	C	N1-C1'-C2'	7.01	123.11	114.00
36	B2	1116	G	O4'-C1'-C2'	-7.01	98.79	105.80
83	A5	3286	G	O4'-C1'-N9	7.01	113.81	108.20
36	B2	1043	U	O4'-C1'-N1	7.01	113.80	108.20
41	CO	60	LEU	N-CA-C	7.01	129.92	111.00
83	A5	1233	G	O4'-C1'-C2'	7.01	113.91	107.60
83	A5	2507	C	N1-C1'-C2'	7.01	123.11	114.00
83	A5	2699	A	O4'-C1'-N9	7.01	113.81	108.20
83	A5	1692	G	O4'-C1'-N9	7.00	113.80	108.20
36	B2	1056	C	C3'-C2'-C1'	7.00	107.10	101.50
36	B2	1880	C	N1-C1'-C2'	7.00	123.10	114.00
83	A5	3153	G	O4'-C1'-N9	7.00	113.80	108.20
83	A5	3768	C	C3'-C2'-C1'	7.00	107.10	101.50
36	B2	1144	C	C3'-C2'-C1'	7.00	107.10	101.50
83	A5	1357	C	O4'-C1'-C2'	-7.00	98.80	105.80
85	A7	8	A	C1'-O4'-C4'	-7.00	104.30	109.90
36	B2	198	C	C4'-C3'-O3'	7.00	127.00	113.00
83	A5	1139	U	C1'-O4'-C4'	-7.00	104.30	109.90
83	A5	1976	G	C3'-C2'-C1'	-7.00	95.90	101.50
83	A5	3130	G	C1'-O4'-C4'	-6.99	104.31	109.90
36	B2	155	U	N1-C1'-C2'	-6.99	104.31	112.00
36	B2	550	C	N1-C1'-C2'	-6.99	104.31	112.00
58	CW	78	PHE	N-CA-CB	6.99	123.18	110.60
83	A5	1869	C	C3'-C2'-C1'	6.99	107.09	101.50
36	B2	459	U	C3'-C2'-C1'	6.99	107.09	101.50
36	B2	1045	U	O4'-C1'-N1	6.99	113.79	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	Cf	59	TYR	CB-CG-CD2	-6.99	116.81	121.00
83	A5	427	A	O4'-C1'-N9	6.99	113.79	108.20
83	A5	475	U	O4'-C1'-N1	-6.99	102.61	108.20
83	A5	3136	U	C1'-O4'-C4'	-6.99	104.31	109.90
16	AA	221	LEU	C-N-CD	-6.99	105.23	120.60
83	A5	1794	G	O4'-C1'-C2'	6.99	113.89	107.60
15	AB	61	TYR	CB-CG-CD2	-6.99	116.81	121.00
30	AF	187	PHE	CB-CG-CD2	-6.99	115.91	120.80
36	B2	404	A	C1'-O4'-C4'	6.99	115.49	109.90
36	B2	619	U	O4'-C1'-N1	6.99	113.79	108.20
83	A5	2253	U	O4'-C1'-N1	6.99	113.79	108.20
83	A5	2747	G	C1'-O4'-C4'	-6.99	104.31	109.90
36	B2	819	G	O3'-P-O5'	-6.98	90.73	104.00
79	CJ	23	ARG	NE-CZ-NH2	-6.98	116.81	120.30
16	AA	139	TYR	CB-CG-CD1	6.98	125.19	121.00
36	B2	956	C	P-O3'-C3'	6.98	128.08	119.70
83	A5	295	G	O4'-C1'-N9	6.98	113.79	108.20
83	A5	372	U	O4'-C1'-N1	6.98	113.79	108.20
36	B2	998	U	C2'-C3'-O3'	6.98	124.87	113.70
83	A5	1145	C	N1-C1'-C2'	6.98	123.08	114.00
36	B2	1879	U	O4'-C1'-N1	6.98	113.78	108.20
36	B2	1125	U	O4'-C1'-N1	6.98	113.78	108.20
36	B2	698	U	C5'-C4'-C3'	6.97	127.16	116.00
83	A5	2208	G	C3'-C2'-C1'	-6.97	95.92	101.50
83	A5	2812	U	C1'-O4'-C4'	6.97	115.48	109.90
86	A8	98	U	N1-C1'-C2'	6.97	123.07	114.00
1	Az	691	TYR	CB-CG-CD2	6.97	125.18	121.00
36	B2	366	C	O4'-C1'-N1	6.97	113.78	108.20
36	B2	888	G	C1'-O4'-C4'	-6.97	104.32	109.90
36	B2	1049	C	N1-C1'-C2'	6.97	123.06	114.00
83	A5	403	A	N9-C1'-C2'	6.97	123.06	114.00
36	B2	136	A	O4'-C1'-N9	6.97	113.77	108.20
36	B2	949	A	P-O3'-C3'	6.97	128.06	119.70
36	B2	970	U	O4'-C1'-N1	6.97	113.78	108.20
83	A5	1937	G	O4'-C1'-N9	6.97	113.78	108.20
36	B2	11	A	O4'-C1'-N9	6.97	113.77	108.20
36	B2	1529	G	C3'-C2'-C1'	6.96	107.07	101.50
49	CQ	14	ARG	NE-CZ-NH2	-6.96	116.82	120.30
83	A5	1801	U	C5'-C4'-O4'	-6.96	100.74	109.10
83	A5	2124	G	C3'-C2'-C1'	-6.96	95.93	101.50
83	A5	3711	G	O4'-C1'-C2'	-6.96	98.84	105.80
36	B2	261	U	O4'-C1'-N1	6.96	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	906	C	P-O3'-C3'	6.96	128.05	119.70
83	A5	1195	U	C1'-O4'-C4'	-6.96	104.33	109.90
83	A5	1711	C	P-O3'-C3'	6.96	128.06	119.70
83	A5	3272	A	C1'-O4'-C4'	-6.96	104.33	109.90
1	Az	799	VAL	C-N-CA	6.96	139.10	121.70
83	A5	3351	A	C1'-O4'-C4'	-6.96	104.33	109.90
27	AE	86	TYR	CB-CG-CD2	-6.96	116.83	121.00
29	AG	51	ARG	NE-CZ-NH1	6.96	123.78	120.30
36	B2	332	U	O4'-C1'-N1	6.96	113.77	108.20
36	B2	1178	A	O4'-C1'-N9	6.96	113.77	108.20
36	B2	1311	A	O4'-C1'-N9	6.96	113.76	108.20
83	A5	6	U	O5'-C5'-C4'	6.96	124.92	111.70
83	A5	2527	A	O4'-C1'-N9	6.96	113.77	108.20
29	AG	156	PHE	CB-CG-CD2	-6.96	115.93	120.80
83	A5	3585	A	C3'-C2'-C1'	6.96	107.06	101.50
62	Cb	73	PRO	N-CA-CB	-6.95	94.95	102.60
83	A5	503	A	C1'-O4'-C4'	-6.95	104.34	109.90
83	A5	723	U	O4'-C1'-N1	6.95	113.76	108.20
83	A5	242	C	O4'-C1'-N1	6.95	113.76	108.20
83	A5	3779	U	C1'-O4'-C4'	-6.95	104.34	109.90
36	B2	252	A	C1'-O4'-C4'	-6.95	104.34	109.90
36	B2	1824	C	C1'-O4'-C4'	-6.95	104.34	109.90
45	Ca	51	PRO	CA-C-N	6.95	130.09	116.20
36	B2	1943	G	O4'-C1'-C2'	6.94	113.85	107.60
69	Cg	16	ARG	NE-CZ-NH2	-6.94	116.83	120.30
78	Co	48	PHE	CB-CG-CD2	-6.94	115.94	120.80
83	A5	372	U	O4'-C1'-C2'	-6.94	98.86	105.80
83	A5	1596	A	N9-C1'-C2'	6.94	123.03	114.00
83	A5	2883	C	O4'-C1'-N1	6.94	113.75	108.20
13	AP	64	ARG	NE-CZ-NH1	6.94	123.77	120.30
27	AE	221	ARG	NE-CZ-NH1	6.94	123.77	120.30
36	B2	1708	A	P-O3'-C3'	6.94	128.03	119.70
36	B2	156	U	O3'-P-O5'	6.94	117.18	104.00
36	B2	996	U	C3'-C2'-C1'	6.94	107.05	101.50
83	A5	594	U	O4'-C1'-N1	6.94	113.75	108.20
85	A7	74	A	O4'-C1'-C2'	-6.94	98.86	105.80
26	AJ	6	ILE	N-CA-C	6.94	129.73	111.00
83	A5	554	U	O4'-C1'-N1	6.94	113.75	108.20
83	A5	1563	A	O4'-C1'-N9	6.94	113.75	108.20
83	A5	1547	A	C3'-C2'-C1'	6.93	107.05	101.50
83	A5	2984	U	P-O3'-C3'	6.93	128.02	119.70
83	A5	3409	G	O4'-C1'-N9	6.93	113.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	A7	21	G	O4'-C1'-N9	6.93	113.75	108.20
36	B2	706	U	N1-C1'-C2'	6.93	123.01	114.00
36	B2	990	U	N1-C1'-C2'	6.93	123.01	114.00
43	CV	90	ARG	NE-CZ-NH1	6.93	123.77	120.30
83	A5	356	A	O4'-C1'-C2'	-6.93	98.87	105.80
83	A5	3487	A	C3'-C2'-C1'	6.93	107.05	101.50
66	Cd	20	ARG	NE-CZ-NH1	6.93	123.77	120.30
36	B2	61	A	C1'-O4'-C4'	-6.93	104.36	109.90
83	A5	3570	C	O4'-C1'-N1	-6.93	102.66	108.20
83	A5	1477	G	C3'-C2'-C1'	6.93	107.04	101.50
83	A5	831	A	O4'-C1'-C2'	-6.93	98.87	105.80
83	A5	1463	C	O4'-C1'-C2'	-6.93	98.87	105.80
36	B2	7	G	O4'-C1'-N9	6.92	113.74	108.20
36	B2	225	G	C4'-C3'-O3'	6.92	126.85	113.00
83	A5	2062	A	O4'-C1'-C2'	-6.92	98.88	105.80
83	A5	3145	U	O4'-C1'-C2'	-6.92	98.88	105.80
83	A5	3918	A	O4'-C1'-C2'	6.92	113.83	107.60
36	B2	1323	A	C3'-C2'-C1'	6.92	107.04	101.50
36	B2	1688	U	C4'-C3'-C2'	-6.92	95.68	102.60
69	Cg	74	ARG	NE-CZ-NH1	6.92	123.76	120.30
83	A5	317	G	C1'-O4'-C4'	-6.92	104.36	109.90
83	A5	481	A	O4'-C1'-C2'	-6.92	98.88	105.80
83	A5	883	U	O4'-C1'-N1	6.92	113.74	108.20
83	A5	1599	C	N1-C1'-C2'	6.92	123.00	114.00
83	A5	1649	G	N9-C1'-C2'	-6.92	104.39	112.00
83	A5	3552	G	O4'-C1'-N9	6.92	113.74	108.20
85	A7	96	U	O4'-C1'-C2'	-6.92	98.88	105.80
36	B2	1826	C	C5'-C4'-O4'	6.92	117.40	109.10
36	B2	1968	C	C3'-C2'-C1'	6.92	107.03	101.50
37	BC	20	A	O4'-C1'-N9	6.92	113.73	108.20
82	CG	200	ARG	NE-CZ-NH2	-6.92	116.84	120.30
83	A5	686	U	O4'-C1'-N1	6.92	113.73	108.20
83	A5	1340	G	C1'-O4'-C4'	-6.92	104.36	109.90
83	A5	1988	A	O4'-C1'-N9	6.92	113.73	108.20
83	A5	2995	U	C3'-C2'-C1'	-6.92	95.97	101.50
86	A8	35	G	O4'-C1'-N9	6.92	113.73	108.20
36	B2	1211	C	C3'-C2'-C1'	6.92	107.03	101.50
37	BC	24	U	O4'-C1'-N1	6.92	113.73	108.20
33	AI	121	LEU	CA-C-N	6.92	130.03	116.20
83	A5	1480	U	O4'-C1'-C2'	-6.92	98.89	105.80
83	A5	2049	G	O4'-C1'-N9	6.92	113.73	108.20
83	A5	2142	A	O4'-C1'-C2'	-6.92	98.89	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3423	U	O4'-C1'-N1	6.92	113.73	108.20
83	A5	1461	G	O4'-C1'-C2'	6.91	113.82	107.60
83	A5	1938	C	C1'-O4'-C4'	-6.91	104.37	109.90
83	A5	3498	A	C4'-C3'-O3'	6.91	126.83	113.00
83	A5	3721	C	O4'-C4'-C3'	-6.91	97.09	104.00
36	B2	1234	G	O4'-C1'-N9	6.91	113.73	108.20
5	AO	34	TYR	CB-CG-CD2	-6.91	116.85	121.00
7	AM	39	VAL	CA-C-N	6.91	132.41	117.20
27	AE	39	ARG	NE-CZ-NH2	-6.91	116.84	120.30
49	CQ	52	PHE	CB-CG-CD1	6.91	125.64	120.80
83	A5	2194	G	C1'-O4'-C4'	-6.91	104.37	109.90
83	A5	3030	C	P-O3'-C3'	6.91	127.99	119.70
85	A7	28	U	O4'-C1'-N1	6.91	113.73	108.20
83	A5	2121	U	O4'-C1'-N1	6.91	113.72	108.20
36	B2	1074	G	O4'-C1'-N9	6.90	113.72	108.20
36	B2	1096	C	C3'-C2'-C1'	6.90	107.02	101.50
83	A5	1472	C	P-O5'-C5'	6.90	131.94	120.90
36	B2	1090	A	O4'-C1'-N9	6.90	113.72	108.20
83	A5	2514	U	N1-C1'-C2'	6.90	122.97	114.00
83	A5	2618	G	O4'-C1'-N9	6.90	113.72	108.20
85	A7	74	A	O4'-C1'-N9	6.90	113.72	108.20
36	B2	547	G	N9-C1'-C2'	6.89	122.96	114.00
83	A5	1681	G	O4'-C1'-N9	6.89	113.72	108.20
83	A5	2462	U	O4'-C1'-N1	6.89	113.72	108.20
83	A5	3515	C	C3'-C2'-C1'	6.89	107.02	101.50
83	A5	835	G	C1'-O4'-C4'	-6.89	104.39	109.90
83	A5	3560	C	O4'-C1'-N1	6.89	113.71	108.20
16	AA	63	ARG	NE-CZ-NH1	6.89	123.75	120.30
36	B2	193	U	C3'-C2'-C1'	6.89	107.01	101.50
36	B2	777	A	P-O3'-C3'	-6.89	111.43	119.70
49	CQ	70	PHE	CB-CA-C	-6.89	96.62	110.40
63	CB	130	PHE	CB-CG-CD1	-6.89	115.98	120.80
83	A5	2564	U	O4'-C1'-N1	6.89	113.71	108.20
83	A5	3201	U	O4'-C1'-N1	6.89	113.71	108.20
36	B2	613	A	C3'-C2'-C1'	6.89	107.01	101.50
83	A5	1117	A	C3'-C2'-C1'	6.89	107.01	101.50
83	A5	3294	A	N9-C1'-C2'	-6.89	104.42	112.00
83	A5	1713	U	O4'-C1'-N1	6.89	113.71	108.20
83	A5	2027	A	O4'-C1'-C2'	-6.89	98.91	105.80
83	A5	2154	A	C3'-C2'-C1'	6.89	107.01	101.50
83	A5	3843	U	O4'-C1'-C2'	-6.89	98.91	105.80
85	A7	120	U	O4'-C1'-N1	6.89	113.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	97	U	O4'-C1'-N1	6.89	113.71	108.20
29	AG	159	ARG	NE-CZ-NH2	-6.88	116.86	120.30
33	AI	110	ARG	NE-CZ-NH1	6.88	123.74	120.30
36	B2	589	U	O4'-C1'-N1	6.88	113.71	108.20
36	B2	1584	A	C3'-C2'-C1'	6.88	107.01	101.50
83	A5	1921	U	O3'-P-O5'	6.88	117.08	104.00
83	A5	2196	U	O4'-C1'-C2'	-6.88	98.92	105.80
36	B2	1581	A	C3'-C2'-C1'	6.88	107.01	101.50
83	A5	1235	U	N1-C1'-C2'	6.88	122.95	114.00
83	A5	1612	G	O4'-C1'-N9	6.88	113.71	108.20
36	B2	919	A	N9-C1'-C2'	-6.88	104.43	112.00
83	A5	1323	C	O4'-C1'-C2'	-6.88	98.92	105.80
86	A8	32	G	O4'-C1'-N9	6.88	113.71	108.20
36	B2	493	A	C1'-O4'-C4'	-6.88	104.40	109.90
83	A5	1976	G	N9-C1'-C2'	6.88	122.94	114.00
24	Ae	106	ARG	NE-CZ-NH1	-6.88	116.86	120.30
36	B2	1079	A	C3'-C2'-C1'	-6.88	96.00	101.50
78	Co	48	PHE	CB-CG-CD1	6.88	125.61	120.80
83	A5	500	A	O4'-C1'-N9	6.88	113.70	108.20
83	A5	1503	G	N9-C1'-C2'	6.88	122.94	114.00
83	A5	2268	G	O3'-P-O5'	-6.88	90.94	104.00
85	A7	78	C	O4'-C1'-N1	6.88	113.70	108.20
36	B2	414	C	O4'-C1'-C2'	-6.88	98.92	105.80
83	A5	1797	A	C3'-C2'-C1'	6.88	107.00	101.50
83	A5	123	U	C3'-C2'-C1'	6.87	107.00	101.50
83	A5	2098	C	C1'-O4'-C4'	6.87	115.40	109.90
86	A8	103	C	O4'-C1'-C2'	-6.87	98.93	105.80
36	B2	1030	C	C3'-C2'-C1'	6.87	107.00	101.50
36	B2	1065	A	O4'-C1'-N9	6.87	113.70	108.20
83	A5	3716	C	O4'-C1'-N1	6.87	113.70	108.20
85	A7	24	U	O3'-P-O5'	6.87	117.06	104.00
83	A5	296	C	C3'-C2'-C1'	6.87	107.00	101.50
82	CG	201	ARG	NE-CZ-NH1	6.87	123.73	120.30
83	A5	1028	U	O4'-C1'-N1	6.87	113.69	108.20
36	B2	231	G	N9-C1'-C2'	-6.87	104.45	112.00
83	A5	24	G	C1'-O4'-C4'	-6.87	104.41	109.90
83	A5	1300	G	C4'-C3'-O3'	6.87	126.73	113.00
54	CP	127	ARG	NE-CZ-NH1	6.86	123.73	120.30
83	A5	642	A	O4'-C1'-C2'	-6.86	98.94	105.80
83	A5	1178	U	O4'-C1'-N1	6.86	113.69	108.20
83	A5	3159	C	O4'-C1'-N1	6.86	113.69	108.20
36	B2	1278	C	P-O3'-C3'	6.86	127.93	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1628	A	O4'-C1'-N9	6.86	113.69	108.20
81	CE	78	ARG	NE-CZ-NH2	-6.86	116.87	120.30
83	A5	746	G	O4'-C1'-N9	6.86	113.69	108.20
83	A5	3770	A	C2'-C3'-O3'	-6.86	94.41	109.50
36	B2	1084	G	C3'-C2'-C1'	6.86	106.99	101.50
36	B2	1556	A	O4'-C1'-N9	6.86	113.69	108.20
25	Af	99	LYS	N-CA-CB	6.86	122.94	110.60
36	B2	650	G	C5'-C4'-C3'	6.86	126.97	116.00
36	B2	1368	G	O4'-C1'-N9	6.86	113.69	108.20
50	CR	61	TYR	CB-CG-CD1	6.86	125.11	121.00
51	CA	227	ARG	NE-CZ-NH1	6.86	123.73	120.30
36	B2	964	G	O4'-C1'-C2'	-6.85	98.95	105.80
36	B2	628	A	O3'-P-O5'	-6.85	90.98	104.00
36	B2	1902	C	O4'-C1'-N1	6.85	113.68	108.20
83	A5	223	A	O4'-C1'-C2'	-6.85	98.95	105.80
83	A5	1581	G	C3'-C2'-C1'	-6.85	96.02	101.50
83	A5	2145	G	O4'-C1'-N9	6.85	113.68	108.20
18	AY	108	ARG	NE-CZ-NH2	-6.85	116.88	120.30
83	A5	29	U	P-O3'-C3'	6.85	127.92	119.70
13	AP	64	ARG	NE-CZ-NH2	-6.85	116.88	120.30
36	B2	656	U	C1'-O4'-C4'	6.85	115.38	109.90
83	A5	2997	C	C2'-C3'-O3'	-6.85	94.43	109.50
83	A5	3401	U	O4'-C1'-N1	6.85	113.68	108.20
37	BC	21	G	C1'-O4'-C4'	-6.85	104.42	109.90
83	A5	579	A	O4'-C1'-N9	6.85	113.68	108.20
83	A5	1448	G	P-O5'-C5'	6.85	131.85	120.90
83	A5	2040	A	C2'-C3'-O3'	-6.85	94.43	109.50
36	B2	298	U	C1'-O4'-C4'	-6.85	104.42	109.90
36	B2	563	A	O4'-C1'-N9	6.84	113.67	108.20
36	B2	1424	A	N9-C1'-C2'	-6.84	104.47	112.00
83	A5	5	A	C3'-C2'-C1'	-6.84	96.02	101.50
83	A5	734	U	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	1348	G	C3'-C2'-C1'	-6.84	96.03	101.50
83	A5	2146	G	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	2693	G	O4'-C1'-N9	6.84	113.67	108.20
83	A5	3570	C	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	4	U	C3'-C2'-C1'	6.84	106.97	101.50
83	A5	3361	U	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	3725	U	O4'-C1'-N1	6.84	113.67	108.20
36	B2	433	A	O4'-C1'-N9	6.84	113.67	108.20
83	A5	3369	A	C1'-O4'-C4'	6.84	115.37	109.90
26	AJ	13	THR	CA-C-N	6.84	132.25	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
81	CE	191	ARG	NE-CZ-NH2	-6.84	116.88	120.30
83	A5	1470	C	C1'-O4'-C4'	-6.84	104.43	109.90
83	A5	2516	U	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	3721	C	C3'-C2'-C1'	6.84	106.97	101.50
36	B2	1526	G	C1'-O4'-C4'	-6.84	104.43	109.90
83	A5	926	U	N1-C1'-C2'	6.84	122.89	114.00
36	B2	1405	G	O4'-C1'-N9	6.84	113.67	108.20
83	A5	2162	C	O4'-C1'-C2'	-6.84	98.96	105.80
83	A5	2798	C	C1'-O4'-C4'	-6.84	104.43	109.90
85	A7	30	G	O4'-C1'-N9	6.84	113.67	108.20
36	B2	1940	G	C1'-O4'-C4'	-6.83	104.43	109.90
83	A5	2180	A	O4'-C1'-N9	-6.83	102.73	108.20
83	A5	3400	U	O4'-C1'-N1	6.83	113.67	108.20
83	A5	3693	G	O4'-C1'-N9	6.83	113.67	108.20
36	B2	1448	A	P-O3'-C3'	6.83	127.90	119.70
83	A5	2014	C	C1'-O4'-C4'	-6.83	104.43	109.90
83	A5	589	A	O4'-C1'-C2'	-6.83	98.97	105.80
83	A5	1317	A	O4'-C4'-C3'	-6.83	97.17	104.00
83	A5	1704	A	C1'-O4'-C4'	6.83	115.37	109.90
83	A5	2620	C	C1'-O4'-C4'	6.83	115.36	109.90
83	A5	989	A	C3'-C2'-C1'	6.83	106.96	101.50
36	B2	520	A	C2'-C3'-O3'	6.83	124.62	113.70
83	A5	1068	C	C3'-C2'-C1'	6.83	106.96	101.50
83	A5	1876	G	O4'-C1'-C2'	6.83	113.75	107.60
36	B2	1319	A	O4'-C1'-N9	6.83	113.66	108.20
85	A7	65	C	P-O3'-C3'	6.83	127.89	119.70
83	A5	125	A	O4'-C1'-C2'	-6.83	98.97	105.80
83	A5	205	U	C3'-C2'-C1'	6.83	106.96	101.50
83	A5	738	A	P-O3'-C3'	6.83	127.89	119.70
83	A5	783	G	O4'-C1'-N9	6.83	113.66	108.20
36	B2	1002	A	C3'-C2'-C1'	6.82	106.96	101.50
48	CD	13	PHE	CB-CG-CD1	6.82	125.58	120.80
83	A5	754	A	C3'-C2'-C1'	6.82	106.96	101.50
83	A5	3768	C	O4'-C1'-C2'	-6.82	98.98	105.80
83	A5	3751	C	C3'-C2'-C1'	6.82	106.96	101.50
83	A5	3911	G	C1'-O4'-C4'	-6.82	104.44	109.90
36	B2	330	G	O4'-C1'-N9	6.82	113.66	108.20
36	B2	1018	C	C3'-C2'-C1'	6.82	106.96	101.50
36	B2	1048	U	N1-C1'-C2'	6.82	122.87	114.00
83	A5	2094	U	O4'-C1'-N1	6.82	113.66	108.20
83	A5	262	G	P-O3'-C3'	6.82	127.88	119.70
83	A5	365	A	C3'-C2'-C1'	6.82	106.95	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	477	C	C3'-C2'-C1'	6.82	106.95	101.50
83	A5	935	A	N9-C1'-C2'	-6.82	104.50	112.00
83	A5	3618	A	C1'-O4'-C4'	-6.82	104.45	109.90
36	B2	515	U	N1-C1'-C2'	6.82	122.86	114.00
86	A8	51	A	O4'-C1'-C2'	-6.82	98.98	105.80
36	B2	883	C	N1-C1'-C2'	6.81	122.86	114.00
41	CO	28	TYR	CB-CG-CD1	-6.81	116.91	121.00
83	A5	3211	A	O4'-C1'-C2'	6.81	113.73	107.60
85	A7	63	C	C2'-C3'-O3'	6.81	124.60	113.70
36	B2	142	A	P-O3'-C3'	6.81	127.87	119.70
36	B2	1406	A	C3'-C2'-C1'	6.81	106.95	101.50
83	A5	1888	A	P-O3'-C3'	6.81	127.87	119.70
83	A5	2711	C	O4'-C1'-N1	6.81	113.65	108.20
83	A5	2887	U	C1'-O4'-C4'	-6.81	104.45	109.90
83	A5	3438	C	O4'-C1'-N1	6.81	113.65	108.20
83	A5	3835	U	O4'-C1'-N1	6.81	113.65	108.20
86	A8	73	U	C3'-C2'-C1'	6.81	106.95	101.50
36	B2	141	G	O4'-C1'-C2'	-6.81	98.99	105.80
36	B2	1192	U	O4'-C1'-N1	6.81	113.65	108.20
83	A5	1260	A	O4'-C1'-N9	6.81	113.65	108.20
83	A5	3141	A	N9-C1'-C2'	6.81	122.85	114.00
36	B2	1020	U	C3'-C2'-C1'	6.81	106.94	101.50
36	B2	1578	U	O4'-C1'-N1	6.81	113.64	108.20
26	AJ	160	PHE	CB-CG-CD2	-6.80	116.04	120.80
83	A5	1911	C	P-O3'-C3'	6.80	127.86	119.70
83	A5	2851	U	O4'-C1'-N1	6.80	113.64	108.20
83	A5	3528	A	C3'-C2'-C1'	6.80	106.94	101.50
36	B2	988	G	O4'-C1'-C2'	6.80	113.72	107.60
83	A5	1786	G	O4'-C1'-N9	6.80	113.64	108.20
36	B2	33	U	C1'-O4'-C4'	6.80	115.34	109.90
36	B2	1379	G	O4'-C1'-N9	6.80	113.64	108.20
36	B2	1904	G	O4'-C1'-N9	6.80	113.64	108.20
45	Ca	78	LYS	C-N-CA	6.80	138.71	121.70
83	A5	1011	U	O4'-C1'-N1	6.80	113.64	108.20
83	A5	3854	A	O4'-C1'-N9	6.80	113.64	108.20
36	B2	923	G	O4'-C1'-N9	6.80	113.64	108.20
83	A5	1748	C	C3'-C2'-C1'	6.80	106.94	101.50
83	A5	2235	G	O4'-C1'-C2'	-6.80	99.00	105.80
83	A5	3816	A	O4'-C1'-C2'	-6.80	99.00	105.80
50	CR	38	ARG	NE-CZ-NH2	6.80	123.70	120.30
83	A5	556	A	O4'-C1'-N9	6.80	113.64	108.20
83	A5	3838	A	C5'-C4'-O4'	6.80	117.25	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	100	G	N9-C1'-C2'	6.80	122.84	114.00
36	B2	1118	U	O4'-C1'-C2'	-6.79	99.01	105.80
84	A9	2	G	C1'-O4'-C4'	-6.79	104.47	109.90
74	CC	116	ARG	NE-CZ-NH1	6.79	123.69	120.30
83	A5	2875	A	C1'-O4'-C4'	6.79	115.33	109.90
83	A5	3418	U	N1-C1'-C2'	6.79	122.83	114.00
33	AI	22	ARG	N-CA-CB	6.79	122.82	110.60
36	B2	1071	G	O4'-C1'-N9	6.79	113.63	108.20
48	CD	68	ARG	NE-CZ-NH2	-6.79	116.91	120.30
83	A5	966	U	C3'-C2'-C1'	6.79	106.93	101.50
83	A5	2877	G	N9-C1'-C2'	-6.79	104.53	112.00
36	B2	856	A	C3'-C2'-C1'	-6.79	96.07	101.50
83	A5	2595	U	C1'-O4'-C4'	6.79	115.33	109.90
83	A5	3547	U	O4'-C1'-N1	6.79	113.63	108.20
83	A5	164	U	O4'-C1'-N1	6.79	113.63	108.20
83	A5	685	A	O4'-C1'-N9	6.79	113.63	108.20
83	A5	1018	C	C3'-C2'-C1'	6.79	106.93	101.50
83	A5	3555	U	P-O3'-C3'	-6.79	111.56	119.70
83	A5	2391	G	P-O3'-C3'	6.78	127.84	119.70
36	B2	1528	G	P-O3'-C3'	6.78	127.84	119.70
83	A5	3864	C	P-O5'-C5'	6.78	131.75	120.90
37	BC	18	G	P-O3'-C3'	6.78	127.84	119.70
61	Ch	10	ARG	NE-CZ-NH2	-6.78	116.91	120.30
83	A5	2031	C	C3'-C2'-C1'	6.78	106.92	101.50
36	B2	427	G	P-O3'-C3'	6.78	127.83	119.70
83	A5	1034	U	C1'-O4'-C4'	-6.78	104.48	109.90
4	AK	86	GLU	N-CA-C	-6.78	92.70	111.00
83	A5	658	A	O4'-C1'-N9	6.78	113.62	108.20
83	A5	3322	A	O4'-C1'-N9	6.78	113.62	108.20
83	A5	388	U	C1'-O4'-C4'	-6.78	104.48	109.90
83	A5	1162	A	P-O3'-C3'	-6.78	111.57	119.70
83	A5	2085	G	C3'-C2'-C1'	-6.78	96.08	101.50
83	A5	3260	G	N9-C1'-C2'	6.78	122.81	114.00
83	A5	3131	C	C3'-C2'-C1'	6.77	106.92	101.50
83	A5	3487	A	O4'-C1'-C2'	-6.77	99.03	105.80
83	A5	3688	A	C3'-C2'-C1'	6.77	106.92	101.50
36	B2	217	A	P-O5'-C5'	6.77	131.74	120.90
85	A7	57	C	C1'-O4'-C4'	-6.77	104.48	109.90
36	B2	978	C	O4'-C1'-N1	6.77	113.61	108.20
36	B2	1662	C	N1-C1'-C2'	6.77	122.80	114.00
79	CJ	159	GLN	C-N-CA	6.77	138.62	121.70
83	A5	1522	G	C1'-O4'-C4'	6.77	115.31	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3376	C	C3'-C2'-C1'	6.77	106.91	101.50
52	CS	55	LYS	N-CA-CB	6.77	122.78	110.60
36	B2	112	U	P-O3'-C3'	6.76	127.82	119.70
83	A5	1675	G	C1'-O4'-C4'	-6.76	104.49	109.90
86	A8	97	U	N1-C1'-C2'	6.76	122.79	114.00
83	A5	1059	A	N9-C1'-C2'	-6.76	104.56	112.00
83	A5	1383	A	P-O3'-C3'	6.76	127.81	119.70
86	A8	56	U	N1-C1'-C2'	6.76	122.79	114.00
83	A5	54	U	O4'-C1'-N1	6.76	113.61	108.20
83	A5	515	A	O4'-C1'-C2'	-6.76	99.04	105.80
83	A5	1294	U	O4'-C1'-C2'	-6.76	99.04	105.80
83	A5	373	A	O4'-C1'-N9	6.76	113.61	108.20
83	A5	1077	C	C1'-O4'-C4'	-6.76	104.49	109.90
83	A5	2266	U	N1-C1'-C2'	6.76	122.79	114.00
83	A5	3260	G	O4'-C1'-N9	6.76	113.61	108.20
30	AF	187	PHE	CB-CG-CD1	6.76	125.53	120.80
36	B2	398	C	C1'-O4'-C4'	6.76	115.31	109.90
36	B2	521	U	C1'-O4'-C4'	6.76	115.31	109.90
36	B2	1141	C	O4'-C1'-N1	6.76	113.61	108.20
36	B2	1254	A	C1'-O4'-C4'	6.76	115.31	109.90
83	A5	850	A	O4'-C1'-N9	6.76	113.61	108.20
83	A5	1583	G	O4'-C1'-C2'	6.76	113.68	107.60
83	A5	2097	U	O4'-C1'-N1	6.76	113.61	108.20
83	A5	2175	A	O4'-C1'-C2'	-6.76	99.04	105.80
83	A5	2926	G	N9-C1'-C2'	6.76	122.78	114.00
83	A5	7	A	N9-C1'-C2'	-6.75	104.57	112.00
86	A8	63	U	O4'-C1'-N1	6.75	113.60	108.20
36	B2	1859	A	O4'-C1'-N9	6.75	113.60	108.20
37	BC	9	G	O4'-C1'-C2'	-6.75	99.05	105.80
83	A5	269	A	O4'-C1'-N9	6.75	113.60	108.20
83	A5	527	U	N1-C1'-C2'	6.75	122.78	114.00
83	A5	1902	U	N1-C1'-C2'	-6.75	104.57	112.00
86	A8	46	C	O4'-C1'-N1	6.75	113.60	108.20
36	B2	243	U	N1-C1'-C2'	6.75	122.78	114.00
36	B2	1677	C	C1'-O4'-C4'	-6.75	104.50	109.90
83	A5	1065	A	O4'-C1'-N9	6.75	113.60	108.20
83	A5	1649	G	C3'-C2'-C1'	-6.75	96.10	101.50
83	A5	3670	G	N9-C1'-C2'	6.75	122.78	114.00
85	A7	85	G	O4'-C1'-N9	6.75	113.60	108.20
83	A5	2791	A	O4'-C1'-N9	6.75	113.60	108.20
83	A5	3224	G	N9-C1'-C2'	6.75	122.78	114.00
36	B2	276	A	O4'-C1'-C2'	-6.75	99.05	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	CA	98	ILE	C-N-CA	6.75	136.47	122.30
83	A5	982	C	N1-C1'-C2'	6.75	122.77	114.00
83	A5	2101	C	O4'-C1'-C2'	-6.75	99.05	105.80
83	A5	2461	A	C1'-O4'-C4'	6.75	115.30	109.90
36	B2	218	A	C3'-C2'-C1'	6.75	106.90	101.50
37	BC	33	C	C1'-O4'-C4'	-6.75	104.50	109.90
70	Ci	78	ARG	NE-CZ-NH2	-6.75	116.93	120.30
83	A5	781	C	O4'-C1'-N1	6.75	113.60	108.20
83	A5	3531	C	O4'-C1'-N1	6.75	113.60	108.20
36	B2	528	A	O4'-C1'-N9	6.75	113.60	108.20
36	B2	955	G	C1'-O4'-C4'	-6.75	104.50	109.90
83	A5	1690	U	P-O3'-C3'	-6.75	111.61	119.70
83	A5	2141	A	C1'-O4'-C4'	6.74	115.30	109.90
83	A5	3406	G	O4'-C1'-N9	6.74	113.59	108.20
36	B2	157	C	O4'-C1'-C2'	-6.74	99.06	105.80
83	A5	3695	G	C1'-O4'-C4'	-6.74	104.51	109.90
36	B2	1027	A	C1'-O4'-C4'	6.74	115.29	109.90
36	B2	1352	G	O4'-C1'-N9	6.74	113.59	108.20
49	CQ	37	ARG	NE-CZ-NH1	6.74	123.67	120.30
83	A5	1367	A	C1'-O4'-C4'	-6.74	104.51	109.90
83	A5	1413	C	C3'-C2'-C1'	6.74	106.89	101.50
36	B2	233	A	O4'-C1'-N9	6.74	113.59	108.20
36	B2	1576	A	C3'-C2'-C1'	6.74	106.89	101.50
83	A5	411	U	O4'-C1'-N1	6.74	113.59	108.20
83	A5	1401	C	P-O3'-C3'	-6.74	111.61	119.70
83	A5	1921	U	C4'-C3'-C2'	-6.74	95.86	102.60
83	A5	3025	A	O3'-P-O5'	6.74	116.80	104.00
83	A5	3771	A	P-O3'-C3'	-6.74	111.61	119.70
36	B2	600	A	C4'-C3'-O3'	6.74	126.47	113.00
36	B2	1583	A	N9-C1'-C2'	-6.74	104.59	112.00
36	B2	964	G	C1'-O4'-C4'	6.74	115.29	109.90
81	CE	64	LYS	N-CA-C	6.74	129.18	111.00
83	A5	624	A	N9-C1'-C2'	-6.74	104.59	112.00
83	A5	1079	U	C4'-C3'-C2'	-6.74	95.86	102.60
86	A8	83	A	P-O3'-C3'	-6.74	111.62	119.70
1	Az	840	TYR	CB-CG-CD2	-6.73	116.96	121.00
36	B2	551	C	P-O3'-C3'	6.73	127.78	119.70
36	B2	627	A	C1'-O4'-C4'	-6.73	104.51	109.90
83	A5	928	U	O4'-C1'-N1	6.73	113.58	108.20
83	A5	1005	G	O4'-C1'-N9	6.73	113.58	108.20
83	A5	1665	C	C3'-C2'-C1'	6.73	106.89	101.50
36	B2	1734	G	C4'-C3'-O3'	6.73	126.46	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	Cz	57	HIS	C-N-CA	6.73	138.53	121.70
64	CF	174	ASP	N-CA-C	6.73	129.17	111.00
83	A5	2022	C	N1-C1'-C2'	6.73	122.75	114.00
83	A5	2716	C	N1-C1'-C2'	6.73	122.75	114.00
83	A5	3155	G	O4'-C1'-N9	6.73	113.58	108.20
80	CH	120	TYR	CB-CG-CD2	-6.73	116.96	121.00
83	A5	2880	A	P-O5'-C5'	6.73	131.67	120.90
3	AU	53	LYS	C-N-CA	6.73	136.43	122.30
36	B2	1380	U	N1-C1'-C2'	-6.73	104.60	112.00
83	A5	1410	A	C1'-O4'-C4'	6.73	115.28	109.90
83	A5	1548	C	N1-C1'-C2'	6.73	122.75	114.00
83	A5	2671	C	C1'-O4'-C4'	6.73	115.28	109.90
83	A5	3745	U	C3'-C2'-C1'	6.73	106.88	101.50
83	A5	3886	U	C4'-C3'-O3'	-6.73	95.27	109.40
36	B2	1414	C	O4'-C1'-N1	6.73	113.58	108.20
69	Cg	74	ARG	NE-CZ-NH2	-6.73	116.94	120.30
85	A7	32	U	N1-C1'-C2'	-6.73	104.60	112.00
59	CZ	5	MET	N-CA-CB	6.72	122.70	110.60
83	A5	890	C	O4'-C1'-N1	6.72	113.58	108.20
83	A5	1503	G	O4'-C1'-C2'	6.72	113.65	107.60
83	A5	2481	U	N1-C1'-C2'	6.72	122.74	114.00
83	A5	2994	C	C3'-C2'-C1'	6.72	106.88	101.50
83	A5	3925	G	P-O3'-C3'	6.72	127.77	119.70
83	A5	1724	A	P-O3'-C3'	6.72	127.77	119.70
1	Az	827	ARG	NE-CZ-NH2	-6.72	116.94	120.30
36	B2	511	G	O4'-C1'-N9	6.72	113.58	108.20
36	B2	1359	U	N1-C1'-C2'	6.72	122.74	114.00
63	CB	249	ARG	NE-CZ-NH2	-6.72	116.94	120.30
79	CJ	80	ARG	NE-CZ-NH1	6.72	123.66	120.30
83	A5	32	C	N1-C1'-C2'	6.72	122.73	114.00
83	A5	3866	U	O4'-C1'-N1	6.72	113.58	108.20
83	A5	169	C	C3'-C2'-C1'	6.72	106.87	101.50
83	A5	2028	A	P-O3'-C3'	6.72	127.76	119.70
83	A5	2499	U	C3'-C2'-C1'	6.72	106.87	101.50
23	AD	78	ARG	NE-CZ-NH2	6.72	123.66	120.30
36	B2	295	A	C1'-O4'-C4'	-6.72	104.53	109.90
83	A5	315	G	C1'-O4'-C4'	6.72	115.27	109.90
36	B2	1271	A	C3'-C2'-C1'	6.71	106.87	101.50
34	AQ	147	TYR	CB-CG-CD2	-6.71	116.97	121.00
83	A5	1036	A	C3'-C2'-C1'	6.71	106.87	101.50
83	A5	1353	G	O4'-C1'-N9	6.71	113.57	108.20
28	AC	224	TYR	CB-CG-CD2	-6.71	116.97	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1278	C	O4'-C1'-C2'	-6.71	99.09	105.80
36	B2	1445	A	C1'-O4'-C4'	6.71	115.27	109.90
83	A5	290	G	C3'-C2'-C1'	-6.71	96.13	101.50
83	A5	2992	A	P-O5'-C5'	6.71	131.64	120.90
83	A5	2993	G	C3'-C2'-C1'	6.71	106.87	101.50
45	Ca	52	GLY	N-CA-C	6.71	129.87	113.10
36	B2	452	U	O4'-C1'-N1	6.71	113.57	108.20
2	Ag	156	ARG	NE-CZ-NH2	-6.71	116.95	120.30
35	Ah	133	GLY	CA-C-N	6.71	135.88	117.10
36	B2	655	A	P-O3'-C3'	6.71	127.75	119.70
83	A5	2907	U	C3'-C2'-C1'	6.71	106.86	101.50
18	AY	114	ARG	NE-CZ-NH1	6.70	123.65	120.30
83	A5	3595	U	O4'-C1'-N1	6.70	113.56	108.20
37	BC	34	A	O4'-C1'-N9	6.70	113.56	108.20
37	BC	41	A	O4'-C1'-C2'	-6.70	99.10	105.80
83	A5	2030	U	C1'-O4'-C4'	-6.70	104.54	109.90
36	B2	155	U	C1'-O4'-C4'	6.70	115.26	109.90
36	B2	1266	G	O4'-C1'-N9	6.70	113.56	108.20
51	CA	128	ARG	NE-CZ-NH2	-6.70	116.95	120.30
77	Cp	29	MET	CG-SD-CE	-6.70	89.48	100.20
83	A5	1024	U	O4'-C1'-N1	6.70	113.56	108.20
83	A5	1355	C	C1'-O4'-C4'	-6.70	104.54	109.90
36	B2	917	U	N1-C1'-C2'	-6.70	104.63	112.00
45	Ca	60	ARG	NE-CZ-NH2	-6.70	116.95	120.30
83	A5	455	U	C1'-O4'-C4'	-6.70	104.54	109.90
83	A5	1110	G	O4'-C1'-C2'	6.70	113.63	107.60
36	B2	1740	G	C1'-O4'-C4'	6.70	115.26	109.90
63	CB	62	ARG	NE-CZ-NH2	-6.70	116.95	120.30
30	AF	57	ILE	C-N-CA	6.70	138.44	121.70
36	B2	1284	A	O4'-C1'-C2'	-6.70	99.11	105.80
36	B2	1314	G	C3'-C2'-C1'	6.70	106.86	101.50
83	A5	176	A	O4'-C1'-C2'	6.70	113.63	107.60
36	B2	512	U	P-O3'-C3'	6.69	127.73	119.70
36	B2	1335	C	O4'-C1'-N1	6.69	113.55	108.20
83	A5	795	A	O4'-C1'-C2'	-6.69	99.11	105.80
83	A5	1130	U	O4'-C1'-N1	6.69	113.55	108.20
83	A5	1559	A	O4'-C4'-C3'	-6.69	97.31	104.00
36	B2	1829	C	P-O3'-C3'	6.69	127.73	119.70
37	BC	69	G	O4'-C1'-N9	6.69	113.55	108.20
83	A5	2999	U	O4'-C1'-C2'	-6.69	99.11	105.80
83	A5	3820	C	C3'-C2'-C1'	6.69	106.85	101.50
85	A7	76	U	N1-C1'-C2'	6.69	122.70	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1813	U	O4'-C1'-N1	6.69	113.55	108.20
37	BC	55	C	O4'-C1'-N1	6.69	113.55	108.20
1	Az	346	SER	CA-C-N	6.69	135.82	117.10
83	A5	1728	G	O4'-C1'-N9	6.69	113.55	108.20
83	A5	3293	G	N9-C1'-C2'	-6.69	104.64	112.00
83	A5	3294	A	C1'-O4'-C4'	6.69	115.25	109.90
83	A5	1339	U	O4'-C1'-N1	6.69	113.55	108.20
36	B2	859	C	O4'-C1'-N1	6.68	113.55	108.20
36	B2	1128	C	N1-C1'-C2'	6.68	122.69	114.00
82	CG	194	ARG	NE-CZ-NH1	6.68	123.64	120.30
83	A5	1767	A	O4'-C1'-N9	6.68	113.55	108.20
83	A5	3198	C	N1-C1'-C2'	6.68	122.69	114.00
36	B2	75	U	C1'-O4'-C4'	6.68	115.25	109.90
83	A5	2203	A	O4'-C1'-N9	6.68	113.55	108.20
83	A5	2671	C	C3'-C2'-C1'	6.68	106.84	101.50
83	A5	1739	U	O4'-C1'-C2'	-6.68	99.12	105.80
83	A5	3693	G	O4'-C1'-C2'	6.68	113.61	107.60
31	AH	86	SER	C-N-CA	6.68	136.32	122.30
36	B2	1427	U	O4'-C1'-N1	6.68	113.54	108.20
83	A5	3361	U	C5'-C4'-O4'	6.67	117.11	109.10
85	A7	119	C	O4'-C1'-C2'	-6.67	99.12	105.80
36	B2	82	G	O4'-C1'-N9	6.67	113.54	108.20
83	A5	657	G	O4'-C1'-N9	6.67	113.54	108.20
83	A5	3237	U	C3'-C2'-C1'	6.67	106.84	101.50
36	B2	126	G	O4'-C1'-C2'	-6.67	99.13	105.80
36	B2	1432	A	O4'-C1'-N9	6.67	113.54	108.20
36	B2	1855	A	C1'-O4'-C4'	6.67	115.24	109.90
83	A5	2409	U	P-O3'-C3'	6.67	127.71	119.70
83	A5	3699	U	P-O3'-C3'	-6.67	111.69	119.70
83	A5	3905	U	C1'-O4'-C4'	-6.67	104.56	109.90
83	A5	3933	G	N9-C1'-C2'	6.67	122.67	114.00
36	B2	600	A	N9-C1'-C2'	-6.67	104.66	112.00
53	CT	6	GLY	N-CA-C	6.67	129.77	113.10
83	A5	1752	G	N9-C1'-C2'	6.67	122.67	114.00
83	A5	1567	G	C3'-C2'-C1'	-6.67	96.17	101.50
83	A5	2759	G	O4'-C1'-N9	6.67	113.53	108.20
83	A5	3034	A	O3'-P-O5'	6.67	116.67	104.00
83	A5	3363	G	O4'-C1'-N9	6.67	113.53	108.20
36	B2	1086	U	C1'-O4'-C4'	-6.67	104.57	109.90
37	BC	73	C	N1-C1'-C2'	6.67	122.67	114.00
83	A5	227	A	C3'-C2'-C1'	6.67	106.83	101.50
83	A5	265	U	O4'-C1'-N1	6.67	113.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2705	U	O4'-C1'-N1	6.67	113.53	108.20
36	B2	655	A	C1'-O4'-C4'	6.67	115.23	109.90
83	A5	311	C	N1-C1'-C2'	6.67	122.66	114.00
83	A5	3268	A	O4'-C1'-N9	6.67	113.53	108.20
36	B2	1401	U	O4'-C1'-C2'	-6.66	99.14	105.80
83	A5	1274	A	O4'-C1'-N9	6.66	113.53	108.20
83	A5	3654	C	N1-C1'-C2'	6.66	122.66	114.00
41	CO	103	ARG	NE-CZ-NH1	6.66	123.63	120.30
83	A5	186	G	C3'-C2'-C1'	6.66	106.83	101.50
83	A5	1145	C	C1'-O4'-C4'	-6.66	104.57	109.90
42	CL	171	LYS	N-CA-C	6.66	128.98	111.00
83	A5	3161	U	N1-C1'-C2'	6.66	122.66	114.00
83	A5	3430	G	O4'-C1'-C2'	6.66	113.59	107.60
83	A5	3928	A	C3'-C2'-C1'	-6.66	96.17	101.50
1	Az	26	ALA	N-CA-CB	6.66	119.42	110.10
83	A5	617	U	C3'-C2'-C1'	6.66	106.83	101.50
36	B2	1284	A	C1'-O4'-C4'	6.66	115.22	109.90
83	A5	1642	G	O4'-C1'-N9	6.66	113.53	108.20
83	A5	2998	U	C5'-C4'-C3'	-6.66	105.35	116.00
42	CL	161	PRO	N-CA-C	6.65	129.40	112.10
36	B2	1812	C	C3'-C2'-C1'	6.65	106.82	101.50
83	A5	655	C	O4'-C1'-N1	6.65	113.52	108.20
83	A5	2137	U	O4'-C1'-C2'	-6.65	99.15	105.80
84	A9	29	U	N1-C1'-C2'	6.65	122.65	114.00
85	A7	75	G	O4'-C1'-N9	6.65	113.52	108.20
83	A5	293	U	O4'-C1'-N1	6.65	113.52	108.20
83	A5	1159	C	N1-C1'-C2'	6.65	122.64	114.00
83	A5	1369	C	O4'-C1'-C2'	-6.65	99.15	105.80
83	A5	3255	G	C3'-C2'-C1'	-6.65	96.18	101.50
36	B2	1350	G	O4'-C1'-N9	6.65	113.52	108.20
83	A5	184	A	N9-C1'-C2'	-6.65	104.69	112.00
83	A5	1540	U	O4'-C1'-N1	6.65	113.52	108.20
83	A5	2700	C	O4'-C1'-N1	6.65	113.52	108.20
28	AC	249	TYR	CB-CG-CD2	-6.64	117.01	121.00
83	A5	2693	G	C1'-O4'-C4'	-6.64	104.58	109.90
36	B2	55	A	N9-C1'-C2'	6.64	122.63	114.00
36	B2	549	A	O4'-C1'-N9	6.64	113.51	108.20
36	B2	1781	U	O4'-C1'-N1	6.64	113.51	108.20
83	A5	2137	U	C1'-O4'-C4'	6.64	115.22	109.90
83	A5	2479	A	C3'-C2'-C1'	-6.64	96.19	101.50
83	A5	2499	U	O4'-C1'-N1	6.64	113.52	108.20
26	AJ	80	ARG	NE-CZ-NH2	-6.64	116.98	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	48	G	N9-C1'-C2'	6.64	122.63	114.00
83	A5	714	A	O4'-C1'-N9	6.64	113.51	108.20
83	A5	3600	G	O4'-C1'-C2'	6.64	113.58	107.60
36	B2	1944	A	C1'-O4'-C4'	6.64	115.21	109.90
83	A5	3378	U	O4'-C1'-N1	6.64	113.51	108.20
36	B2	1181	G	O4'-C1'-N9	6.64	113.51	108.20
36	B2	1939	A	O4'-C1'-N9	6.64	113.51	108.20
36	B2	883	C	C1'-O4'-C4'	-6.63	104.59	109.90
37	BC	46	U	P-O3'-C3'	-6.63	111.74	119.70
48	CD	207	TYR	CB-CG-CD1	6.63	124.98	121.00
83	A5	1378	A	C3'-C2'-C1'	6.63	106.81	101.50
36	B2	1738	G	O4'-C1'-N9	6.63	113.51	108.20
83	A5	219	G	O4'-C1'-N9	6.63	113.51	108.20
83	A5	1289	C	C3'-C2'-C1'	6.63	106.81	101.50
83	A5	1415	A	C1'-O4'-C4'	6.63	115.21	109.90
83	A5	142	G	O4'-C1'-N9	6.63	113.50	108.20
83	A5	694	A	O4'-C1'-N9	6.63	113.51	108.20
30	AF	176	TRP	CB-CG-CD2	-6.63	117.98	126.60
43	CV	61	PHE	CB-CG-CD1	-6.63	116.16	120.80
77	Cp	33	GLN	N-CA-CB	6.63	122.53	110.60
10	AN	59	GLY	N-CA-C	6.63	129.67	113.10
36	B2	305	A	P-O3'-C3'	6.63	127.66	119.70
83	A5	2209	G	O4'-C1'-N9	6.63	113.50	108.20
83	A5	3506	U	O4'-C1'-N1	6.63	113.50	108.20
83	A5	3722	C	P-O5'-C5'	6.63	131.51	120.90
64	CF	118	ARG	NE-CZ-NH2	-6.63	116.99	120.30
83	A5	475	U	N1-C1'-C2'	6.63	122.61	114.00
83	A5	1296	U	O4'-C1'-C2'	6.63	113.56	107.60
27	AE	109	PHE	CB-CG-CD2	-6.62	116.16	120.80
36	B2	1021	A	P-O3'-C3'	6.62	127.65	119.70
83	A5	538	A	O4'-C1'-N9	6.62	113.50	108.20
83	A5	716	C	O4'-C1'-N1	6.62	113.50	108.20
83	A5	2899	U	P-O5'-C5'	6.62	131.50	120.90
5	AO	128	ARG	N-CA-CB	6.62	122.52	110.60
49	CQ	68	ARG	NE-CZ-NH2	-6.62	116.99	120.30
83	A5	701	U	N1-C1'-C2'	-6.62	104.72	112.00
34	AQ	4	LYS	N-CA-C	6.62	128.88	111.00
83	A5	2203	A	C3'-C2'-C1'	6.62	106.79	101.50
84	A9	27	U	O4'-C1'-N1	6.62	113.50	108.20
36	B2	1121	C	O4'-C1'-C2'	-6.62	99.18	105.80
83	A5	932	G	N9-C1'-C2'	6.62	122.60	114.00
83	A5	3931	C	N1-C1'-C2'	6.62	122.60	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	AX	17	ARG	NE-CZ-NH1	6.62	123.61	120.30
36	B2	515	U	C1'-O4'-C4'	-6.62	104.61	109.90
43	CV	85	ARG	NE-CZ-NH2	-6.62	116.99	120.30
36	B2	1438	U	C3'-C2'-C1'	6.61	106.79	101.50
46	CN	159	ARG	NE-CZ-NH1	-6.61	116.99	120.30
83	A5	2793	C	O4'-C1'-N1	6.61	113.49	108.20
84	A9	22	A	O4'-C1'-N9	6.61	113.49	108.20
36	B2	1353	U	O4'-C1'-C2'	-6.61	99.19	105.80
83	A5	2606	A	O4'-C1'-N9	6.61	113.49	108.20
83	A5	2903	U	O4'-C1'-N1	6.61	113.49	108.20
27	AE	6	LYS	N-CA-CB	6.61	122.50	110.60
36	B2	544	C	N1-C1'-C2'	6.61	122.59	114.00
83	A5	151	G	C5'-C4'-O4'	6.61	117.03	109.10
83	A5	3687	A	C1'-O4'-C4'	-6.61	104.61	109.90
36	B2	1061	A	O4'-C1'-N9	6.61	113.48	108.20
83	A5	3461	C	O4'-C1'-N1	6.61	113.48	108.20
83	A5	1533	A	O4'-C1'-N9	6.60	113.48	108.20
83	A5	3125	A	P-O3'-C3'	6.60	127.62	119.70
36	B2	1239	A	O4'-C1'-N9	6.60	113.48	108.20
36	B2	1986	A	N9-C1'-C2'	-6.60	104.74	112.00
42	CL	159	GLU	N-CA-CB	6.60	122.48	110.60
48	CD	184	SER	N-CA-CB	6.60	120.40	110.50
83	A5	422	G	O4'-C1'-N9	6.60	113.48	108.20
83	A5	1432	C	N1-C1'-C2'	6.60	122.58	114.00
83	A5	3332	G	O4'-C1'-C2'	-6.60	99.20	105.80
83	A5	3406	G	P-O5'-C5'	6.60	131.47	120.90
1	Az	467	LYS	C-N-CA	6.60	138.20	121.70
36	B2	466	G	O4'-C1'-N9	6.60	113.48	108.20
43	CV	131	ARG	NE-CZ-NH2	-6.60	117.00	120.30
83	A5	3567	A	C1'-O4'-C4'	6.60	115.18	109.90
83	A5	922	G	C1'-O4'-C4'	-6.60	104.62	109.90
18	AY	61	PHE	N-CA-CB	6.60	122.47	110.60
36	B2	869	C	N1-C1'-C2'	6.60	122.58	114.00
36	B2	1796	C	N1-C1'-C2'	6.60	122.58	114.00
83	A5	784	G	O4'-C1'-C2'	6.60	113.54	107.60
83	A5	3812	C	C3'-C2'-C1'	6.60	106.78	101.50
86	A8	4	U	O4'-C1'-N1	6.60	113.48	108.20
36	B2	1764	U	O4'-C1'-C2'	6.60	113.54	107.60
83	A5	2593	A	C3'-C2'-C1'	6.59	106.77	101.50
83	A5	2750	A	O4'-C1'-N9	6.59	113.47	108.20
36	B2	1345	U	C4'-C3'-O3'	6.59	126.18	113.00
36	B2	1758	A	C5'-C4'-O4'	6.59	117.01	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3890	G	N9-C1'-C2'	6.59	122.57	114.00
51	CA	40	TYR	CB-CG-CD1	-6.59	117.05	121.00
83	A5	836	G	P-O5'-C5'	6.59	131.44	120.90
83	A5	1489	A	O4'-C1'-C2'	-6.59	99.21	105.80
36	B2	567	C	O4'-C1'-C2'	-6.59	99.21	105.80
83	A5	3371	G	C3'-C2'-C1'	-6.59	96.23	101.50
1	Az	207	ARG	NE-CZ-NH2	-6.59	117.01	120.30
83	A5	770	C	O4'-C1'-C2'	-6.59	99.21	105.80
83	A5	3820	C	O4'-C1'-C2'	-6.59	99.21	105.80
60	Cr	132	GLY	C-N-CA	6.58	138.16	121.70
84	A9	13	A	O4'-C1'-N9	6.58	113.47	108.20
36	B2	290	A	C3'-C2'-C1'	6.58	106.77	101.50
36	B2	1913	C	O4'-C1'-C2'	-6.58	99.22	105.80
36	B2	1977	A	O4'-C1'-N9	6.58	113.47	108.20
83	A5	2764	A	O4'-C1'-C2'	-6.58	99.22	105.80
83	A5	2943	C	P-O3'-C3'	6.58	127.60	119.70
2	Ag	141	PHE	CB-CG-CD2	-6.58	116.19	120.80
36	B2	873	A	O3'-P-O5'	6.58	116.51	104.00
83	A5	3794	U	O4'-C1'-N1	6.58	113.47	108.20
49	CQ	145	ALA	CB-CA-C	-6.58	100.23	110.10
74	CC	314	ARG	NE-CZ-NH1	6.58	123.59	120.30
36	B2	635	C	C1'-O4'-C4'	-6.58	104.64	109.90
83	A5	1011	U	N1-C1'-C2'	6.58	122.55	114.00
83	A5	3136	U	C3'-C2'-C1'	-6.58	96.24	101.50
83	A5	135	U	O4'-C1'-N1	6.58	113.46	108.20
18	AY	111	ARG	NE-CZ-NH1	6.58	123.59	120.30
83	A5	304	U	C3'-C2'-C1'	-6.58	96.24	101.50
83	A5	1463	C	O4'-C1'-N1	6.58	113.46	108.20
83	A5	1927	U	O3'-P-O5'	-6.58	91.50	104.00
83	A5	3652	C	N1-C1'-C2'	6.58	122.55	114.00
35	Ah	117	PHE	C-N-CA	6.57	136.11	122.30
36	B2	1126	A	P-O3'-C3'	6.57	127.59	119.70
83	A5	357	C	N1-C1'-C2'	6.57	122.55	114.00
83	A5	878	U	C1'-O4'-C4'	-6.57	104.64	109.90
83	A5	1284	A	C1'-O4'-C4'	6.57	115.16	109.90
83	A5	631	A	O4'-C1'-C2'	-6.57	99.23	105.80
83	A5	1299	A	P-O3'-C3'	-6.57	111.81	119.70
83	A5	2836	A	O4'-C1'-C2'	-6.57	99.23	105.80
83	A5	835	G	O4'-C1'-C2'	6.57	113.51	107.60
83	A5	1436	A	C4'-C3'-O3'	-6.57	95.60	109.40
83	A5	3466	A	C1'-O4'-C4'	6.57	115.16	109.90
83	A5	3573	C	O4'-C1'-N1	6.57	113.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2788	U	O4'-C1'-N1	6.57	113.45	108.20
36	B2	1736	U	O4'-C1'-C2'	-6.57	99.23	105.80
83	A5	3191	G	C1'-O4'-C4'	-6.57	104.65	109.90
83	A5	3207	C	O4'-C1'-C2'	-6.57	99.23	105.80
16	AA	147	PHE	CB-CG-CD2	6.57	125.40	120.80
83	A5	514	A	O4'-C1'-N9	6.57	113.45	108.20
83	A5	3173	U	O4'-C1'-N1	6.57	113.45	108.20
27	AE	30	ARG	NE-CZ-NH1	6.56	123.58	120.30
36	B2	1261	C	N1-C1'-C2'	6.56	122.53	114.00
83	A5	90	G	O4'-C1'-C2'	-6.56	99.24	105.80
83	A5	1303	C	C3'-C2'-C1'	6.56	106.75	101.50
83	A5	3671	C	C1'-O4'-C4'	-6.56	104.65	109.90
83	A5	3789	U	P-O3'-C3'	6.56	127.58	119.70
86	A8	74	G	N9-C1'-C2'	6.56	122.53	114.00
83	A5	1311	U	O4'-C1'-C2'	-6.56	99.24	105.80
37	BC	49	G	O4'-C1'-C2'	6.56	113.50	107.60
46	CN	189	ARG	NE-CZ-NH2	-6.56	117.02	120.30
83	A5	547	U	N1-C1'-C2'	6.56	122.53	114.00
83	A5	3006	A	C3'-C2'-C1'	6.56	106.75	101.50
83	A5	3333	A	P-O3'-C3'	6.56	127.57	119.70
83	A5	3439	A	O4'-C1'-N9	6.56	113.45	108.20
36	B2	1748	A	O4'-C1'-N9	6.55	113.44	108.20
36	B2	1913	C	O4'-C1'-N1	6.55	113.44	108.20
44	CM	3	PHE	CB-CG-CD1	-6.55	116.21	120.80
83	A5	243	A	O4'-C1'-C2'	-6.55	99.25	105.80
83	A5	1144	C	N1-C1'-C2'	6.55	122.52	114.00
83	A5	2603	U	O4'-C1'-C2'	-6.55	99.25	105.80
83	A5	3402	C	O4'-C1'-C2'	-6.55	99.25	105.80
83	A5	2189	U	O4'-C1'-N1	6.55	113.44	108.20
44	CM	9	THR	C-N-CA	6.55	136.06	122.30
70	Ci	78	ARG	NE-CZ-NH1	6.55	123.58	120.30
68	Cf	40	SER	O-C-N	-6.55	112.22	122.70
83	A5	899	G	O4'-C1'-N9	6.55	113.44	108.20
83	A5	3439	A	N9-C1'-C2'	-6.55	104.80	112.00
83	A5	826	A	O4'-C1'-C2'	-6.55	99.25	105.80
48	CD	163	MET	CG-SD-CE	-6.54	89.73	100.20
49	CQ	180	ARG	NE-CZ-NH1	6.54	123.57	120.30
83	A5	995	G	C3'-C2'-C1'	-6.54	96.26	101.50
81	CE	230	PHE	CB-CG-CD2	-6.54	116.22	120.80
83	A5	534	U	O4'-C1'-N1	6.54	113.43	108.20
83	A5	1406	G	C1'-O4'-C4'	-6.54	104.67	109.90
83	A5	1520	U	N1-C1'-C2'	-6.54	104.80	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1728	G	C3'-C2'-C1'	-6.54	96.27	101.50
83	A5	3237	U	O4'-C1'-N1	-6.54	102.97	108.20
36	B2	222	C	O4'-C1'-N1	6.54	113.43	108.20
81	CE	71	THR	N-CA-CB	6.54	122.73	110.30
83	A5	2193	C	O4'-C1'-N1	6.54	113.43	108.20
85	A7	19	C	C3'-C2'-C1'	6.54	106.73	101.50
86	A8	81	A	O4'-C1'-C2'	-6.54	99.26	105.80
35	Ah	148	PHE	CB-CG-CD2	-6.54	116.22	120.80
36	B2	613	A	O4'-C1'-C2'	-6.54	99.26	105.80
83	A5	669	U	C4'-C3'-O3'	-6.54	95.67	109.40
83	A5	1088	A	O4'-C1'-N9	6.54	113.43	108.20
83	A5	1323	C	C3'-C2'-C1'	6.54	106.73	101.50
83	A5	3117	A	C4'-C3'-O3'	6.54	126.07	113.00
37	BC	21	G	O4'-C1'-N9	6.54	113.43	108.20
83	A5	2579	G	N9-C1'-C2'	6.54	122.50	114.00
36	B2	49	C	C3'-C2'-C1'	6.53	106.73	101.50
36	B2	198	C	O3'-P-O5'	-6.53	91.59	104.00
36	B2	464	G	C4'-C3'-O3'	-6.53	95.68	109.40
36	B2	1301	G	O4'-C1'-N9	6.53	113.43	108.20
83	A5	353	G	O4'-C1'-C2'	6.53	113.48	107.60
83	A5	1138	C	N1-C1'-C2'	6.53	122.49	114.00
83	A5	1250	C	C3'-C2'-C1'	-6.53	96.27	101.50
83	A5	1493	A	P-O3'-C3'	-6.53	111.86	119.70
83	A5	787	C	O4'-C1'-C2'	-6.53	99.27	105.80
83	A5	3441	C	C3'-C2'-C1'	6.53	106.72	101.50
5	AO	99	ALA	N-CA-CB	6.53	119.24	110.10
29	AG	28	TYR	CB-CG-CD1	6.53	124.92	121.00
83	A5	1424	G	O4'-C1'-N9	6.53	113.42	108.20
83	A5	1740	C	O4'-C1'-N1	6.53	113.42	108.20
83	A5	2218	G	N9-C1'-C2'	6.53	122.49	114.00
83	A5	3261	U	O4'-C1'-N1	6.53	113.42	108.20
13	AP	93	THR	C-N-CA	6.53	136.01	122.30
77	Cp	85	ARG	NE-CZ-NH2	-6.53	117.04	120.30
83	A5	2070	G	O4'-C1'-C2'	6.53	113.48	107.60
83	A5	3576	G	C3'-C2'-C1'	-6.53	96.28	101.50
36	B2	823	C	P-O5'-C5'	6.53	131.34	120.90
16	AA	208	GLU	C-N-CA	6.53	138.01	121.70
36	B2	459	U	O4'-C1'-N1	-6.53	102.98	108.20
49	CQ	143	ARG	NE-CZ-NH2	-6.53	117.04	120.30
83	A5	853	G	C1'-O4'-C4'	-6.53	104.68	109.90
83	A5	3814	U	O4'-C1'-C2'	-6.53	99.28	105.80
36	B2	1052	U	C3'-C2'-C1'	-6.52	96.28	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1110	G	O4'-C1'-N9	6.52	113.42	108.20
34	AQ	3	GLN	CA-C-N	6.52	131.55	117.20
36	B2	341	G	O4'-C1'-C2'	6.52	113.47	107.60
36	B2	650	G	O4'-C1'-C2'	6.52	113.47	107.60
63	CB	177	LYS	N-CA-CB	6.52	122.34	110.60
83	A5	690	U	O4'-C1'-N1	6.52	113.42	108.20
83	A5	2524	A	O4'-C1'-C2'	-6.52	99.28	105.80
83	A5	3162	C	O4'-C1'-N1	6.52	113.42	108.20
83	A5	431	C	O4'-C1'-C2'	-6.52	99.28	105.80
36	B2	1390	U	O4'-C1'-N1	6.52	113.42	108.20
66	Cd	84	ARG	NE-CZ-NH1	-6.52	117.04	120.30
83	A5	3816	A	C1'-O4'-C4'	6.52	115.12	109.90
37	BC	49	G	C3'-C2'-C1'	-6.52	96.29	101.50
83	A5	213	A	C3'-C2'-C1'	6.52	106.71	101.50
83	A5	2837	A	C5'-C4'-C3'	-6.52	105.57	116.00
83	A5	1674	A	C5'-C4'-O4'	6.52	116.92	109.10
83	A5	53	A	C1'-O4'-C4'	-6.51	104.69	109.90
83	A5	400	U	N1-C1'-C2'	6.51	122.47	114.00
83	A5	3505	U	O4'-C1'-N1	6.51	113.41	108.20
29	AG	154	ARG	NE-CZ-NH1	6.51	123.56	120.30
36	B2	1845	C	N1-C1'-C2'	6.51	122.47	114.00
83	A5	2907	U	N1-C1'-C2'	-6.51	104.84	112.00
27	AE	240	LYS	C-N-CA	6.51	135.97	122.30
36	B2	848	C	N1-C1'-C2'	6.51	122.46	114.00
36	B2	1719	C	O4'-C1'-C2'	-6.51	99.29	105.80
36	B2	1758	A	O4'-C1'-C2'	6.51	113.46	107.60
68	Cf	105	PRO	N-CA-C	6.51	129.03	112.10
81	CE	225	TYR	CB-CG-CD1	6.51	124.91	121.00
83	A5	2459	C	N1-C1'-C2'	6.51	122.46	114.00
83	A5	3583	C	N1-C1'-C2'	6.51	122.46	114.00
36	B2	1047	U	O4'-C1'-N1	6.51	113.41	108.20
83	A5	662	A	N9-C1'-C2'	-6.51	104.84	112.00
83	A5	3814	U	C1'-O4'-C4'	6.51	115.11	109.90
36	B2	1847	A	N9-C1'-C2'	-6.51	104.84	112.00
83	A5	1450	U	O4'-C1'-N1	6.51	113.41	108.20
83	A5	2150	U	C5'-C4'-O4'	6.51	116.91	109.10
36	B2	1003	C	C3'-C2'-C1'	6.50	106.70	101.50
50	CR	132	PHE	N-CA-CB	6.50	122.31	110.60
83	A5	2092	U	C4'-C3'-O3'	6.50	126.01	113.00
36	B2	1576	A	O4'-C1'-C2'	-6.50	99.30	105.80
53	CT	28	SER	N-CA-CB	6.50	120.25	110.50
66	Cd	111	PHE	CB-CG-CD1	6.50	125.35	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	366	A	C3'-C2'-C1'	6.50	106.70	101.50
36	B2	1077	C	N1-C1'-C2'	6.50	122.45	114.00
83	A5	2273	A	C1'-O4'-C4'	6.50	115.10	109.90
36	B2	495	U	O3'-P-O5'	6.50	116.35	104.00
36	B2	859	C	C3'-C2'-C1'	6.50	106.70	101.50
36	B2	992	A	O4'-C1'-C2'	-6.50	99.30	105.80
36	B2	1049	C	C3'-C2'-C1'	6.50	106.70	101.50
83	A5	624	A	O4'-C1'-C2'	-6.50	99.30	105.80
83	A5	2747	G	O4'-C1'-C2'	6.50	113.45	107.60
36	B2	574	C	N1-C1'-C2'	6.50	122.44	114.00
36	B2	1625	G	O4'-C1'-N9	6.50	113.40	108.20
83	A5	424	G	O4'-C1'-N9	6.50	113.40	108.20
83	A5	2583	U	O4'-C1'-N1	6.50	113.40	108.20
85	A7	34	C	O4'-C1'-N1	6.50	113.40	108.20
36	B2	596	U	C1'-O4'-C4'	6.50	115.10	109.90
36	B2	1596	C	N1-C1'-C2'	6.50	122.44	114.00
50	CR	103	ARG	NE-CZ-NH2	-6.50	117.05	120.30
83	A5	376	G	O4'-C1'-N9	6.50	113.40	108.20
83	A5	2991	A	P-O5'-C5'	6.50	131.29	120.90
26	AJ	73	PHE	CB-CG-CD1	6.49	125.35	120.80
36	B2	1257	G	C1'-O4'-C4'	-6.49	104.70	109.90
83	A5	986	A	C5'-C4'-O4'	6.49	116.89	109.10
83	A5	1310	A	C3'-C2'-C1'	6.49	106.69	101.50
11	AL	41	PHE	CB-CG-CD2	-6.49	116.25	120.80
83	A5	3561	G	O4'-C1'-N9	6.49	113.39	108.20
29	AG	72	ARG	NE-CZ-NH2	-6.49	117.06	120.30
36	B2	282	U	C5'-C4'-C3'	-6.49	105.62	116.00
36	B2	1452	U	N1-C1'-C2'	-6.49	104.86	112.00
83	A5	280	C	N1-C1'-C2'	6.49	122.43	114.00
36	B2	1546	U	P-O5'-C5'	-6.49	110.52	120.90
36	B2	1724	U	N1-C1'-C2'	6.49	122.43	114.00
83	A5	1557	U	C5'-C4'-O4'	6.49	116.89	109.10
83	A5	1793	C	P-O3'-C3'	6.49	127.48	119.70
36	B2	405	A	O4'-C1'-N9	6.49	113.39	108.20
49	CQ	9	TYR	CB-CG-CD1	6.49	124.89	121.00
83	A5	1586	A	O4'-C1'-N9	6.49	113.39	108.20
83	A5	3234	A	O4'-C1'-N9	6.49	113.39	108.20
86	A8	112	C	O4'-C1'-N1	6.49	113.39	108.20
83	A5	1079	U	O4'-C1'-N1	6.48	113.39	108.20
85	A7	33	U	O4'-C1'-N1	6.48	113.39	108.20
36	B2	109	U	O4'-C1'-N1	6.48	113.39	108.20
36	B2	842	A	O4'-C1'-N9	6.48	113.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1673	C	O4'-C1'-C2'	-6.48	99.32	105.80
36	B2	322	C	O4'-C1'-N1	6.48	113.38	108.20
1	Az	309	LEU	N-CA-C	6.48	128.49	111.00
83	A5	1756	G	C3'-C2'-C1'	6.48	106.68	101.50
83	A5	2070	G	C1'-O4'-C4'	-6.48	104.72	109.90
83	A5	3727	A	C3'-C2'-C1'	-6.48	96.32	101.50
36	B2	416	C	N1-C1'-C2'	6.48	122.42	114.00
83	A5	1529	C	N1-C1'-C2'	6.48	122.42	114.00
83	A5	2131	C	O4'-C1'-C2'	-6.48	99.32	105.80
83	A5	3713	C	C1'-O4'-C4'	6.48	115.08	109.90
83	A5	2109	G	P-O3'-C3'	6.47	127.47	119.70
86	A8	69	G	O4'-C1'-N9	6.47	113.38	108.20
1	Az	620	TYR	CB-CG-CD1	6.47	124.88	121.00
36	B2	706	U	O4'-C1'-N1	-6.47	103.02	108.20
36	B2	78	A	O4'-C1'-N9	6.47	113.38	108.20
83	A5	780	U	N1-C1'-C2'	-6.47	104.88	112.00
83	A5	1128	C	O4'-C1'-N1	6.47	113.38	108.20
83	A5	1368	A	C1'-O4'-C4'	6.47	115.08	109.90
83	A5	2923	A	C1'-O4'-C4'	6.47	115.08	109.90
83	A5	3841	C	O4'-C1'-C2'	-6.47	99.33	105.80
83	A5	2234	C	C3'-C2'-C1'	6.47	106.67	101.50
36	B2	1371	C	O4'-C1'-C2'	-6.47	99.33	105.80
36	B2	1740	G	O4'-C1'-C2'	-6.47	99.33	105.80
83	A5	644	U	N1-C1'-C2'	6.47	122.41	114.00
83	A5	2710	A	C1'-O4'-C4'	-6.47	104.73	109.90
85	A7	17	C	C1'-O4'-C4'	6.47	115.07	109.90
36	B2	821	U	P-O5'-C5'	6.46	131.25	120.90
83	A5	959	U	N1-C1'-C2'	6.46	122.40	114.00
83	A5	1173	U	C3'-C2'-C1'	6.46	106.67	101.50
83	A5	1859	U	N1-C1'-C2'	6.46	122.40	114.00
42	CL	169	VAL	CA-C-N	6.46	131.42	117.20
60	Cr	43	ARG	NE-CZ-NH1	-6.46	117.07	120.30
29	AG	58	LYS	C-N-CA	6.46	137.85	121.70
83	A5	34	C	C3'-C2'-C1'	6.46	106.67	101.50
83	A5	1029	C	C1'-O4'-C4'	-6.46	104.73	109.90
83	A5	2134	A	O4'-C1'-C2'	-6.46	99.34	105.80
83	A5	2835	G	N9-C1'-C2'	6.46	122.40	114.00
83	A5	3227	A	C1'-O4'-C4'	6.46	115.07	109.90
31	AH	171	PHE	CB-CG-CD1	6.46	125.32	120.80
36	B2	127	U	O4'-C1'-N1	6.46	113.37	108.20
83	A5	1213	C	P-O3'-C3'	-6.46	111.95	119.70
27	AE	11	ARG	NE-CZ-NH1	-6.46	117.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	AE	185	GLY	C-N-CA	6.46	135.86	122.30
83	A5	673	U	O4'-C1'-N1	6.46	113.37	108.20
57	CY	121	ARG	CB-CA-C	-6.46	97.49	110.40
83	A5	712	U	O4'-C1'-N1	6.46	113.36	108.20
83	A5	1742	U	O4'-C1'-N1	6.46	113.36	108.20
83	A5	2031	C	N1-C1'-C2'	6.46	122.39	114.00
83	A5	3433	A	O4'-C1'-N9	6.46	113.36	108.20
36	B2	71	G	O4'-C1'-N9	6.46	113.36	108.20
44	CM	8	GLN	C-N-CA	6.46	137.84	121.70
83	A5	165	G	O4'-C1'-N9	6.45	113.36	108.20
83	A5	260	A	O4'-C1'-N9	-6.45	103.04	108.20
83	A5	2847	G	O3'-P-O5'	-6.45	91.74	104.00
36	B2	525	U	C3'-C2'-C1'	-6.45	96.34	101.50
46	CN	144	ARG	NE-CZ-NH1	6.45	123.53	120.30
83	A5	2164	G	N9-C1'-C2'	6.45	122.39	114.00
83	A5	3498	A	O3'-P-O5'	6.45	116.26	104.00
34	AQ	3	GLN	O-C-N	-6.45	112.38	122.70
36	B2	1866	U	O4'-C1'-N1	6.45	113.36	108.20
56	CX	164	ASN	N-CA-CB	6.45	122.21	110.60
83	A5	2736	A	C3'-C2'-C1'	6.45	106.66	101.50
36	B2	1580	G	C3'-C2'-C1'	6.45	106.66	101.50
1	Az	266	GLN	N-CA-C	6.45	128.40	111.00
36	B2	1181	G	C1'-O4'-C4'	-6.45	104.74	109.90
78	Co	32	ARG	NE-CZ-NH2	-6.45	117.08	120.30
83	A5	1936	U	P-O3'-C3'	6.45	127.44	119.70
83	A5	3732	U	C4'-C3'-O3'	-6.45	95.87	109.40
36	B2	1361	C	N1-C1'-C2'	6.44	122.38	114.00
36	B2	1244	C	O4'-C1'-C2'	-6.44	99.36	105.80
37	BC	40	C	O4'-C1'-N1	6.44	113.35	108.20
83	A5	1384	C	C3'-C2'-C1'	6.44	106.65	101.50
83	A5	1575	U	O4'-C1'-N1	6.44	113.36	108.20
83	A5	1614	A	O4'-C1'-N9	6.44	113.36	108.20
83	A5	3119	U	N1-C1'-C2'	6.44	122.38	114.00
83	A5	3144	U	C1'-O4'-C4'	6.44	115.05	109.90
83	A5	3763	U	P-O3'-C3'	6.44	127.43	119.70
36	B2	113	G	C1'-O4'-C4'	-6.44	104.75	109.90
36	B2	983	C	C3'-C2'-C1'	6.44	106.65	101.50
36	B2	1089	G	N9-C1'-C2'	6.44	122.37	114.00
36	B2	1730	U	O4'-C1'-N1	6.44	113.35	108.20
69	Cg	32	TYR	CB-CG-CD1	6.44	124.86	121.00
83	A5	867	U	C3'-C2'-C1'	6.44	106.65	101.50
83	A5	1277	A	O4'-C1'-N9	6.44	113.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2915	U	O4'-C1'-N1	6.44	113.35	108.20
36	B2	1026	A	C3'-C2'-C1'	6.44	106.65	101.50
36	B2	1268	C	N1-C1'-C2'	6.44	122.37	114.00
42	CL	127	PRO	N-CA-C	6.44	128.84	112.10
85	A7	1	G	N9-C1'-C2'	6.44	122.37	114.00
83	A5	713	U	O4'-C1'-N1	6.44	113.35	108.20
36	B2	1836	C	C1'-O4'-C4'	-6.43	104.75	109.90
44	CM	156	ALA	N-CA-CB	6.43	119.11	110.10
83	A5	1317	A	O4'-C1'-C2'	-6.43	99.36	105.80
83	A5	1454	C	C5'-C4'-O4'	6.43	116.82	109.10
83	A5	2124	G	O4'-C1'-C2'	6.43	113.39	107.60
83	A5	2554	U	O4'-C1'-N1	6.43	113.35	108.20
36	B2	375	A	C1'-O4'-C4'	-6.43	104.75	109.90
36	B2	1229	G	P-O3'-C3'	-6.43	111.98	119.70
83	A5	2243	G	O4'-C1'-C2'	6.43	113.39	107.60
36	B2	45	U	O4'-C1'-N1	6.43	113.34	108.20
42	CL	119	TYR	CB-CG-CD1	-6.43	117.14	121.00
1	Az	353	TYR	CB-CG-CD2	-6.43	117.14	121.00
36	B2	170	A	P-O5'-C5'	6.43	131.18	120.90
36	B2	1358	G	C1'-O4'-C4'	-6.43	104.76	109.90
83	A5	661	G	O4'-C1'-C2'	6.43	113.39	107.60
83	A5	3781	U	O4'-C1'-C2'	-6.43	99.37	105.80
36	B2	1032	U	O4'-C1'-N1	6.43	113.34	108.20
83	A5	128	C	C3'-C2'-C1'	6.43	106.64	101.50
83	A5	273	G	C3'-C2'-C1'	6.43	106.64	101.50
83	A5	3499	G	O3'-P-O5'	-6.43	91.79	104.00
83	A5	3591	A	N9-C1'-C2'	-6.43	104.93	112.00
84	A9	19	U	C3'-C2'-C1'	6.43	106.64	101.50
6	AX	27	TYR	CB-CG-CD1	-6.42	117.14	121.00
36	B2	660	G	P-O3'-C3'	6.42	127.41	119.70
36	B2	857	G	C3'-C2'-C1'	-6.42	96.36	101.50
83	A5	3563	G	C1'-O4'-C4'	-6.42	104.76	109.90
34	AQ	6	ARG	N-CA-C	6.42	128.34	111.00
36	B2	1174	A	N9-C1'-C2'	6.42	122.35	114.00
36	B2	1993	U	C1'-O4'-C4'	6.42	115.04	109.90
83	A5	1743	G	O4'-C1'-N9	6.42	113.34	108.20
83	A5	1893	C	C3'-C2'-C1'	6.42	106.64	101.50
83	A5	3263	C	N1-C1'-C2'	6.42	122.35	114.00
83	A5	2077	A	O4'-C1'-C2'	-6.42	99.38	105.80
83	A5	2875	A	N9-C1'-C2'	-6.42	104.94	112.00
36	B2	347	C	C3'-C2'-C1'	6.42	106.64	101.50
80	CH	110	ILE	N-CA-CB	6.42	125.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	187	A	C5'-C4'-C3'	6.42	126.27	116.00
83	A5	1987	G	C4'-C3'-C2'	-6.42	96.18	102.60
84	A9	21	G	P-O5'-C5'	6.42	131.17	120.90
36	B2	30	G	O4'-C1'-C2'	6.42	113.38	107.60
83	A5	3966	U	N1-C1'-C2'	6.42	122.34	114.00
36	B2	41	A	C1'-O4'-C4'	6.41	115.03	109.90
36	B2	263	A	N9-C1'-C2'	-6.41	104.94	112.00
46	CN	176	LYS	C-N-CA	6.41	135.77	122.30
50	CR	62	ARG	NE-CZ-NH2	6.41	123.51	120.30
71	Cj	11	ARG	NE-CZ-NH2	-6.41	117.09	120.30
83	A5	942	A	O4'-C1'-C2'	-6.41	99.39	105.80
83	A5	1581	G	N9-C1'-C2'	-6.41	104.94	112.00
83	A5	3600	G	C1'-O4'-C4'	-6.41	104.77	109.90
83	A5	685	A	C1'-O4'-C4'	-6.41	104.77	109.90
83	A5	2573	C	C3'-C2'-C1'	6.41	106.63	101.50
36	B2	1752	U	C3'-C2'-C1'	-6.41	96.37	101.50
83	A5	793	U	C3'-C2'-C1'	6.41	106.63	101.50
83	A5	2584	G	C3'-C2'-C1'	6.41	106.63	101.50
83	A5	3160	A	C1'-O4'-C4'	-6.41	104.77	109.90
28	AC	150	ARG	NE-CZ-NH1	6.41	123.50	120.30
36	B2	1098	C	N1-C1'-C2'	6.41	122.33	114.00
83	A5	1911	C	C3'-C2'-C1'	6.41	106.63	101.50
83	A5	1963	U	O4'-C1'-N1	6.41	113.33	108.20
83	A5	2216	A	P-O3'-C3'	6.41	127.39	119.70
46	CN	11	TYR	CB-CG-CD1	-6.41	117.16	121.00
78	Co	31	GLU	N-CA-C	6.41	128.30	111.00
36	B2	916	U	O4'-C1'-C2'	-6.41	99.39	105.80
36	B2	1431	A	C3'-C2'-C1'	6.41	106.62	101.50
36	B2	1682	A	P-O3'-C3'	6.41	127.39	119.70
83	A5	1210	A	O4'-C1'-N9	6.41	113.33	108.20
83	A5	2109	G	C3'-C2'-C1'	6.41	106.62	101.50
83	A5	2639	G	P-O3'-C3'	-6.41	112.01	119.70
83	A5	3964	G	O4'-C1'-N9	6.41	113.32	108.20
68	Cf	40	SER	CA-C-N	6.40	131.29	117.20
83	A5	3158	A	O4'-C1'-N9	6.40	113.32	108.20
16	AA	116	PHE	CB-CG-CD1	-6.40	116.32	120.80
36	B2	1525	A	P-O3'-C3'	6.40	127.38	119.70
74	CC	48	ARG	NE-CZ-NH1	6.40	123.50	120.30
83	A5	262	G	P-O5'-C5'	6.40	131.15	120.90
83	A5	333	C	O4'-C1'-N1	6.40	113.32	108.20
83	A5	1630	G	N9-C1'-C2'	6.40	122.32	114.00
36	B2	826	U	O4'-C1'-N1	6.40	113.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1207	G	O4'-C1'-N9	6.40	113.32	108.20
83	A5	1501	A	N9-C1'-C2'	-6.40	104.96	112.00
83	A5	3447	U	O4'-C1'-N1	6.40	113.32	108.20
83	A5	3929	U	P-O5'-C5'	6.40	131.14	120.90
8	AS	86	ARG	NE-CZ-NH2	-6.40	117.10	120.30
82	CG	108	ARG	NE-CZ-NH1	6.40	123.50	120.30
83	A5	1087	G	O4'-C1'-C2'	6.40	113.36	107.60
83	A5	2721	C	O4'-C1'-N1	6.40	113.32	108.20
32	AW	118	ARG	NE-CZ-NH2	-6.40	117.10	120.30
36	B2	30	G	C1'-O4'-C4'	-6.40	104.78	109.90
36	B2	852	A	N9-C1'-C2'	-6.40	104.96	112.00
83	A5	1098	U	O4'-C1'-N1	6.40	113.32	108.20
83	A5	3510	U	N1-C1'-C2'	6.40	122.32	114.00
83	A5	3675	A	C3'-C2'-C1'	6.40	106.62	101.50
36	B2	560	G	C3'-C2'-C1'	-6.40	96.38	101.50
83	A5	2900	U	O4'-C1'-N1	6.40	113.32	108.20
83	A5	3925	G	C5'-C4'-O4'	6.40	116.78	109.10
1	Az	835	PRO	N-CA-C	6.39	128.73	112.10
34	AQ	84	TYR	CB-CG-CD1	6.39	124.84	121.00
83	A5	992	U	C3'-C2'-C1'	6.39	106.61	101.50
83	A5	1292	G	N9-C1'-C2'	-6.39	104.97	112.00
83	A5	2762	A	C3'-C2'-C1'	6.39	106.62	101.50
1	Az	198	ASP	O-C-N	-6.39	112.47	122.70
36	B2	885	U	N1-C1'-C2'	-6.39	104.97	112.00
36	B2	1671	U	O4'-C1'-C2'	-6.39	99.41	105.80
83	A5	2847	G	C1'-O4'-C4'	-6.39	104.79	109.90
36	B2	586	U	O4'-C1'-C2'	-6.39	99.41	105.80
49	CQ	124	ASP	CB-CG-OD2	-6.39	112.55	118.30
83	A5	325	A	C5'-C4'-O4'	6.39	116.77	109.10
39	Cq	48	ARG	NE-CZ-NH2	-6.39	117.11	120.30
83	A5	3316	U	O4'-C1'-N1	6.39	113.31	108.20
1	Az	226	PHE	N-CA-C	6.38	128.24	111.00
33	AI	92	ARG	NE-CZ-NH2	-6.38	117.11	120.30
36	B2	397	G	N9-C1'-C2'	-6.38	104.98	112.00
36	B2	480	A	C4'-C3'-O3'	-6.38	95.99	109.40
36	B2	1632	C	C3'-C2'-C1'	6.38	106.61	101.50
51	CA	67	TYR	CB-CG-CD1	-6.38	117.17	121.00
74	CC	251	ARG	NE-CZ-NH2	-6.38	117.11	120.30
83	A5	1197	A	C4'-C3'-O3'	6.38	125.77	113.00
64	CF	99	ARG	NE-CZ-NH2	-6.38	117.11	120.30
81	CE	237	TYR	CB-CG-CD2	-6.38	117.17	121.00
83	A5	2066	G	O4'-C1'-C2'	-6.38	99.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3302	G	O4'-C1'-N9	6.38	113.31	108.20
83	A5	3428	A	C3'-C2'-C1'	6.38	106.61	101.50
36	B2	442	A	C1'-O4'-C4'	6.38	115.00	109.90
83	A5	3933	G	C1'-O4'-C4'	-6.38	104.80	109.90
83	A5	1131	C	C1'-O4'-C4'	-6.38	104.80	109.90
83	A5	2866	G	O4'-C1'-N9	6.38	113.30	108.20
83	A5	3472	A	C4'-C3'-O3'	-6.38	96.00	109.40
1	Az	235	TYR	CB-CG-CD1	-6.38	117.17	121.00
68	Cf	41	ALA	N-CA-C	6.38	128.22	111.00
83	A5	1550	U	O4'-C1'-N1	6.38	113.30	108.20
83	A5	1560	A	O4'-C1'-N9	6.38	113.30	108.20
83	A5	3590	C	C3'-C2'-C1'	6.38	106.60	101.50
3	AU	68	ARG	NE-CZ-NH2	-6.38	117.11	120.30
63	CB	334	LYS	C-N-CA	6.38	135.69	122.30
83	A5	859	A	C3'-C2'-C1'	6.38	106.60	101.50
37	BC	12	G	C1'-O4'-C4'	-6.37	104.80	109.90
83	A5	2481	U	P-O3'-C3'	6.37	127.35	119.70
83	A5	2662	C	N1-C1'-C2'	6.37	122.28	114.00
83	A5	3292	C	C3'-C2'-C1'	6.37	106.60	101.50
83	A5	3352	A	O4'-C1'-N9	6.37	113.30	108.20
36	B2	1757	G	O4'-C1'-N9	6.37	113.30	108.20
40	CK	38	SER	C-N-CD	-6.37	106.58	120.60
47	CI	11	TYR	CB-CG-CD2	-6.37	117.18	121.00
83	A5	2782	A	C3'-C2'-C1'	-6.37	96.40	101.50
83	A5	3778	U	O4'-C1'-C2'	-6.37	99.43	105.80
83	A5	2128	A	O4'-C1'-C2'	6.37	113.33	107.60
83	A5	3857	G	O3'-P-O5'	-6.37	91.90	104.00
57	CY	75	ARG	NE-CZ-NH1	6.37	123.48	120.30
83	A5	1265	U	O4'-C1'-N1	6.37	113.30	108.20
83	A5	1907	U	C3'-C2'-C1'	6.37	106.59	101.50
36	B2	90	A	O4'-C1'-C2'	-6.37	99.43	105.80
36	B2	833	G	O4'-C1'-N9	6.37	113.29	108.20
52	CS	52	LYS	N-CA-CB	6.37	122.06	110.60
83	A5	3949	U	O4'-C1'-N1	6.37	113.29	108.20
12	AR	23	ARG	NE-CZ-NH2	-6.37	117.12	120.30
36	B2	1005	G	C3'-C2'-C1'	-6.37	96.41	101.50
36	B2	1199	G	C1'-O4'-C4'	-6.37	104.81	109.90
36	B2	1790	U	O4'-C1'-N1	6.37	113.29	108.20
68	Cf	107	HIS	C-N-CD	-6.37	106.60	120.60
83	A5	590	U	P-O3'-C3'	6.37	127.34	119.70
83	A5	3248	U	O4'-C1'-N1	6.37	113.29	108.20
20	Aa	107	ALA	C-N-CA	6.36	137.61	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	574	C	C3'-C2'-C1'	6.36	106.59	101.50
83	A5	623	C	O3'-P-O5'	-6.36	91.91	104.00
83	A5	840	U	O4'-C1'-N1	6.36	113.29	108.20
83	A5	2775	A	O4'-C1'-C2'	6.36	113.33	107.60
36	B2	1550	C	C3'-C2'-C1'	6.36	106.59	101.50
42	CL	5	ASN	N-CA-CB	6.36	122.05	110.60
83	A5	1959	A	O5'-C5'-C4'	6.36	123.79	111.70
83	A5	3508	G	C3'-C2'-C1'	6.36	106.59	101.50
83	A5	833	U	O4'-C1'-C2'	-6.36	99.44	105.80
83	A5	1001	A	C3'-C2'-C1'	6.36	106.59	101.50
83	A5	1666	A	C3'-C2'-C1'	6.36	106.59	101.50
85	A7	37	G	C3'-C2'-C1'	6.36	106.59	101.50
36	B2	538	C	C3'-C2'-C1'	6.36	106.59	101.50
21	Ab	67	THR	CA-CB-CG2	-6.36	103.50	112.40
36	B2	801	C	P-O5'-C5'	-6.36	110.73	120.90
83	A5	1722	U	O4'-C1'-C2'	6.36	113.32	107.60
83	A5	2482	C	C1'-O4'-C4'	6.36	114.98	109.90
83	A5	3282	C	N1-C1'-C2'	6.36	122.27	114.00
83	A5	3951	U	O4'-C1'-N1	6.36	113.29	108.20
36	B2	1923	C	O4'-C1'-N1	6.36	113.28	108.20
83	A5	1264	U	C3'-C2'-C1'	6.36	106.58	101.50
83	A5	3188	A	C1'-O4'-C4'	-6.36	104.81	109.90
36	B2	197	A	O4'-C1'-C2'	-6.35	99.45	105.80
83	A5	1524	U	C1'-O4'-C4'	6.35	114.98	109.90
10	AN	64	ARG	NE-CZ-NH1	6.35	123.48	120.30
86	A8	40	A	N9-C1'-C2'	-6.35	105.01	112.00
48	CD	21	ARG	NE-CZ-NH2	-6.35	117.12	120.30
83	A5	1468	U	O4'-C1'-N1	6.35	113.28	108.20
36	B2	1467	U	O4'-C1'-N1	6.35	113.28	108.20
83	A5	1732	A	O4'-C1'-N9	6.35	113.28	108.20
16	AA	39	TYR	CB-CG-CD2	-6.35	117.19	121.00
83	A5	1082	A	P-O3'-C3'	6.35	127.32	119.70
83	A5	1288	U	C3'-C2'-C1'	6.35	106.58	101.50
83	A5	1567	G	O4'-C1'-C2'	6.35	113.31	107.60
83	A5	1644	C	O4'-C1'-C2'	-6.35	99.45	105.80
86	A8	43	A	C3'-C2'-C1'	6.35	106.58	101.50
83	A5	87	U	N1-C1'-C2'	-6.35	105.02	112.00
83	A5	1723	G	O4'-C1'-C2'	-6.35	99.45	105.80
86	A8	83	A	P-O5'-C5'	6.35	131.05	120.90
50	CR	109	TYR	CB-CG-CD1	6.34	124.81	121.00
81	CE	89	ARG	NE-CZ-NH1	6.34	123.47	120.30
83	A5	1695	A	N9-C1'-C2'	6.34	122.25	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3647	A	C3'-C2'-C1'	6.34	106.58	101.50
83	A5	3904	G	C3'-C2'-C1'	6.34	106.58	101.50
51	CA	125	ARG	NE-CZ-NH2	-6.34	117.13	120.30
36	B2	962	G	C1'-O4'-C4'	-6.34	104.83	109.90
36	B2	1278	C	C3'-C2'-C1'	6.34	106.57	101.50
83	A5	187	A	C1'-O4'-C4'	-6.34	104.83	109.90
83	A5	1987	G	O4'-C1'-N9	6.34	113.27	108.20
83	A5	2024	U	N1-C1'-C2'	6.34	122.24	114.00
83	A5	2996	U	O4'-C1'-N1	6.34	113.27	108.20
36	B2	1321	A	C3'-C2'-C1'	6.34	106.57	101.50
83	A5	220	G	C1'-O4'-C4'	-6.34	104.83	109.90
83	A5	434	A	O4'-C1'-N9	6.34	113.27	108.20
1	Az	637	CYS	N-CA-CB	6.34	122.01	110.60
36	B2	74	U	C1'-O4'-C4'	6.34	114.97	109.90
36	B2	337	U	N1-C1'-C2'	6.34	122.24	114.00
36	B2	1915	A	C1'-O4'-C4'	6.34	114.97	109.90
83	A5	3287	C	N1-C1'-C2'	6.34	122.24	114.00
85	A7	83	A	P-O3'-C3'	6.34	127.30	119.70
36	B2	1686	C	C1'-O4'-C4'	-6.33	104.83	109.90
83	A5	3296	C	C3'-C2'-C1'	6.33	106.57	101.50
36	B2	280	U	N1-C1'-C2'	-6.33	105.03	112.00
36	B2	1957	A	O4'-C1'-N9	6.33	113.27	108.20
83	A5	102	G	C1'-O4'-C4'	-6.33	104.83	109.90
83	A5	397	C	C3'-C2'-C1'	6.33	106.57	101.50
83	A5	1797	A	N9-C1'-C2'	-6.33	105.03	112.00
36	B2	532	U	O4'-C1'-N1	6.33	113.27	108.20
83	A5	1957	C	C3'-C2'-C1'	6.33	106.56	101.50
83	A5	3892	A	C1'-O4'-C4'	6.33	114.96	109.90
84	A9	3	C	C3'-C2'-C1'	6.33	106.57	101.50
55	CU	268	ARG	NE-CZ-NH1	6.33	123.46	120.30
68	Cf	44	TYR	CA-CB-CG	6.33	125.42	113.40
83	A5	3491	C	O4'-C1'-N1	6.33	113.26	108.20
83	A5	3790	A	O3'-P-O5'	6.33	116.02	104.00
36	B2	420	U	C1'-O4'-C4'	6.33	114.96	109.90
39	Cq	6	ARG	NE-CZ-NH1	6.33	123.46	120.30
83	A5	860	A	O4'-C1'-C2'	-6.33	99.47	105.80
83	A5	3666	C	C1'-O4'-C4'	-6.33	104.84	109.90
83	A5	3856	U	N1-C1'-C2'	-6.33	105.04	112.00
86	A8	45	G	C5'-C4'-O4'	6.33	116.69	109.10
36	B2	472	G	O4'-C1'-N9	6.33	113.26	108.20
83	A5	661	G	C1'-O4'-C4'	-6.33	104.84	109.90
74	CC	310	LYS	N-CA-C	6.32	128.07	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
82	CG	58	ARG	NE-CZ-NH1	6.32	123.46	120.30
83	A5	1081	C	N1-C1'-C2'	6.32	122.22	114.00
83	A5	2018	C	C1'-O4'-C4'	-6.32	104.84	109.90
2	Ag	114	PHE	CB-CG-CD2	-6.32	116.38	120.80
36	B2	1495	A	P-O3'-C3'	-6.32	112.11	119.70
83	A5	614	G	N9-C1'-C2'	-6.32	105.05	112.00
83	A5	2141	A	O4'-C1'-C2'	-6.32	99.48	105.80
36	B2	221	C	O4'-C1'-C2'	-6.32	99.48	105.80
83	A5	2722	U	N1-C1'-C2'	6.32	122.22	114.00
36	B2	77	A	C1'-O4'-C4'	6.32	114.95	109.90
36	B2	77	A	O4'-C1'-N9	6.32	113.25	108.20
63	CB	117	ARG	NE-CZ-NH1	6.32	123.46	120.30
83	A5	2656	C	N1-C1'-C2'	6.32	122.21	114.00
36	B2	441	A	C1'-O4'-C4'	6.32	114.95	109.90
36	B2	826	U	C1'-O4'-C4'	-6.32	104.85	109.90
83	A5	1343	A	N9-C1'-C2'	6.32	122.21	114.00
83	A5	1385	G	O4'-C1'-C2'	-6.32	99.48	105.80
36	B2	822	A	P-O3'-C3'	6.31	127.28	119.70
36	B2	885	U	C1'-O4'-C4'	6.31	114.95	109.90
36	B2	1826	C	C3'-C2'-C1'	6.31	106.55	101.50
83	A5	2163	A	O4'-C1'-C2'	-6.31	99.49	105.80
83	A5	3237	U	O4'-C1'-C2'	-6.31	99.49	105.80
36	B2	662	U	C4'-C3'-O3'	-6.31	96.14	109.40
36	B2	1107	A	O4'-C1'-N9	6.31	113.25	108.20
36	B2	1783	U	O4'-C1'-N1	6.31	113.25	108.20
36	B2	1840	A	O4'-C1'-N9	6.31	113.25	108.20
36	B2	899	A	C1'-O4'-C4'	-6.31	104.85	109.90
36	B2	1222	C	O4'-C1'-N1	6.31	113.25	108.20
36	B2	1711	C	O4'-C1'-C2'	-6.31	99.49	105.80
36	B2	1257	G	N9-C1'-C2'	6.31	122.20	114.00
83	A5	1660	G	N9-C1'-C2'	-6.31	105.06	112.00
36	B2	596	U	O4'-C1'-C2'	-6.31	99.49	105.80
83	A5	1488	A	O4'-C1'-N9	6.31	113.25	108.20
83	A5	1557	U	N1-C1'-C2'	-6.31	105.06	112.00
83	A5	2555	G	C1'-O4'-C4'	-6.31	104.85	109.90
83	A5	3548	U	O4'-C1'-N1	6.31	113.25	108.20
83	A5	3621	A	C3'-C2'-C1'	6.31	106.55	101.50
36	B2	1710	C	O4'-C1'-N1	6.31	113.24	108.20
83	A5	666	A	N9-C1'-C2'	-6.31	105.06	112.00
36	B2	1990	U	N1-C1'-C2'	6.30	122.20	114.00
49	CQ	146	ARG	NE-CZ-NH2	-6.30	117.15	120.30
83	A5	2934	U	P-O3'-C3'	6.30	127.27	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3208	A	O4'-C1'-N9	6.30	113.24	108.20
11	AL	119	HIS	C-N-CA	6.30	135.53	122.30
36	B2	832	U	O4'-C1'-N1	6.30	113.24	108.20
36	B2	1004	C	O4'-C1'-C2'	-6.30	99.50	105.80
83	A5	1043	G	C1'-O4'-C4'	-6.30	104.86	109.90
83	A5	3709	A	P-O3'-C3'	6.30	127.26	119.70
86	A8	59	G	O4'-C1'-N9	6.30	113.24	108.20
36	B2	1469	U	O4'-C1'-C2'	-6.30	99.50	105.80
36	B2	1960	A	C3'-C2'-C1'	6.30	106.54	101.50
83	A5	737	U	O4'-C1'-C2'	-6.30	99.50	105.80
83	A5	2160	C	N1-C1'-C2'	6.30	122.19	114.00
83	A5	3602	U	O4'-C1'-N1	6.30	113.24	108.20
83	A5	3472	A	O3'-P-O5'	6.30	115.97	104.00
6	AX	90	SER	N-CA-C	6.30	128.00	111.00
36	B2	577	C	O4'-C1'-N1	6.30	113.24	108.20
36	B2	1444	C	O4'-C1'-C2'	-6.30	99.50	105.80
83	A5	639	U	C4'-C3'-O3'	-6.30	96.18	109.40
83	A5	3514	C	C1'-O4'-C4'	6.30	114.94	109.90
83	A5	3656	A	O4'-C1'-N9	6.30	113.24	108.20
36	B2	208	U	O4'-C1'-N1	6.29	113.24	108.20
83	A5	3535	G	C3'-C2'-C1'	6.29	106.54	101.50
36	B2	878	C	O4'-C1'-N1	6.29	113.23	108.20
36	B2	889	A	C3'-C2'-C1'	6.29	106.53	101.50
36	B2	1808	G	O4'-C1'-N9	6.29	113.23	108.20
61	Ch	109	ARG	NE-CZ-NH1	6.29	123.45	120.30
83	A5	1217	U	C1'-O4'-C4'	-6.29	104.86	109.90
83	A5	2216	A	O4'-C1'-N9	6.29	113.23	108.20
83	A5	2487	C	C1'-O4'-C4'	-6.29	104.86	109.90
83	A5	3633	U	O4'-C1'-N1	6.29	113.23	108.20
59	CZ	84	ARG	NE-CZ-NH2	-6.29	117.15	120.30
83	A5	285	G	C1'-O4'-C4'	6.29	114.93	109.90
83	A5	624	A	C5'-C4'-C3'	6.29	126.07	116.00
83	A5	3615	G	C1'-O4'-C4'	-6.29	104.87	109.90
36	B2	651	C	C1'-O4'-C4'	-6.29	104.87	109.90
83	A5	985	G	N9-C1'-C2'	-6.29	105.08	112.00
36	B2	979	G	C1'-O4'-C4'	-6.29	104.87	109.90
36	B2	1544	G	O4'-C1'-C2'	6.29	113.26	107.60
64	CF	186	HIS	O-C-N	-6.29	112.64	122.70
83	A5	1644	C	C3'-C2'-C1'	6.29	106.53	101.50
83	A5	1712	C	C5'-C4'-O4'	6.29	116.65	109.10
83	A5	3358	U	P-O3'-C3'	-6.29	112.15	119.70
85	A7	90	A	O4'-C1'-N9	6.29	113.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1425	U	C1'-O4'-C4'	6.29	114.93	109.90
83	A5	518	G	O4'-C1'-N9	6.29	113.23	108.20
83	A5	1982	U	P-O3'-C3'	6.29	127.25	119.70
83	A5	3536	U	O4'-C1'-C2'	-6.29	99.51	105.80
6	AX	71	ARG	NE-CZ-NH2	-6.29	117.16	120.30
36	B2	64	U	O4'-C1'-N1	6.29	113.23	108.20
36	B2	1532	C	C3'-C2'-C1'	6.29	106.53	101.50
83	A5	2466	C	O4'-C1'-N1	6.29	113.23	108.20
83	A5	3377	A	O3'-P-O5'	6.29	115.94	104.00
36	B2	1833	C	C3'-C2'-C1'	6.28	106.53	101.50
83	A5	2245	G	C3'-C2'-C1'	6.28	106.53	101.50
83	A5	2871	G	O4'-C1'-C2'	-6.28	99.52	105.80
36	B2	38	C	C3'-C2'-C1'	6.28	106.53	101.50
36	B2	156	U	C4'-C3'-C2'	-6.28	96.32	102.60
36	B2	352	G	O4'-C1'-N9	6.28	113.22	108.20
36	B2	438	C	C1'-O4'-C4'	-6.28	104.88	109.90
36	B2	1726	A	O4'-C1'-C2'	-6.28	99.52	105.80
83	A5	1671	U	O4'-C1'-N1	6.28	113.22	108.20
83	A5	1709	A	O4'-C1'-C2'	-6.28	99.52	105.80
83	A5	3904	G	N9-C1'-C2'	6.28	122.17	114.00
83	A5	3586	A	N9-C1'-C2'	6.28	122.16	114.00
83	A5	3790	A	N9-C1'-C2'	-6.28	105.09	112.00
83	A5	3811	A	C1'-O4'-C4'	-6.28	104.88	109.90
85	A7	105	C	C3'-C2'-C1'	6.28	106.52	101.50
36	B2	1434	U	O4'-C1'-N1	6.28	113.22	108.20
83	A5	1459	A	O4'-C1'-N9	6.28	113.22	108.20
83	A5	1757	A	C3'-C2'-C1'	6.28	106.52	101.50
83	A5	2756	C	N1-C1'-C2'	6.28	122.16	114.00
36	B2	431	G	N9-C1'-C2'	6.28	122.16	114.00
42	CL	38	ARG	NE-CZ-NH2	-6.28	117.16	120.30
83	A5	91	U	O4'-C1'-N1	6.28	113.22	108.20
51	CA	138	ALA	N-CA-CB	6.27	118.88	110.10
83	A5	784	G	C3'-C2'-C1'	-6.27	96.48	101.50
83	A5	1373	A	C4'-C3'-O3'	6.27	125.55	113.00
36	B2	25	U	C1'-O4'-C4'	6.27	114.92	109.90
83	A5	568	A	C1'-O4'-C4'	-6.27	104.88	109.90
83	A5	3615	G	O4'-C1'-N9	6.27	113.22	108.20
83	A5	3636	G	O4'-C1'-N9	6.27	113.22	108.20
83	A5	990	U	C3'-C2'-C1'	6.27	106.52	101.50
83	A5	1877	A	C1'-O4'-C4'	-6.27	104.88	109.90
83	A5	1937	G	C1'-O4'-C4'	6.27	114.92	109.90
83	A5	2200	A	C3'-C2'-C1'	6.27	106.52	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AB	221	LEU	N-CA-C	6.27	127.92	111.00
36	B2	1414	C	O4'-C1'-C2'	-6.27	99.53	105.80
36	B2	1912	G	O3'-P-O5'	-6.27	92.09	104.00
83	A5	1084	A	N9-C1'-C2'	-6.27	105.10	112.00
83	A5	2577	G	O4'-C1'-N9	6.27	113.22	108.20
83	A5	3215	A	O4'-C1'-N9	6.27	113.22	108.20
36	B2	588	A	O4'-C1'-C2'	-6.27	99.53	105.80
57	CY	115	ARG	NE-CZ-NH2	-6.27	117.17	120.30
83	A5	2	U	P-O3'-C3'	-6.27	112.18	119.70
83	A5	464	G	P-O3'-C3'	6.27	127.22	119.70
85	A7	80	U	O4'-C1'-N1	6.27	113.21	108.20
36	B2	969	U	C5'-C4'-O4'	6.27	116.62	109.10
83	A5	1061	A	C4'-C3'-C2'	-6.27	96.33	102.60
85	A7	42	A	O4'-C1'-C2'	-6.27	99.53	105.80
36	B2	197	A	C5'-C4'-O4'	6.26	116.62	109.10
36	B2	1022	A	O4'-C1'-N9	6.26	113.21	108.20
83	A5	209	U	O4'-C1'-N1	6.26	113.21	108.20
83	A5	396	A	O4'-C1'-C2'	-6.26	99.53	105.80
83	A5	398	U	C1'-O4'-C4'	-6.26	104.89	109.90
83	A5	1715	G	C1'-O4'-C4'	-6.26	104.89	109.90
83	A5	1763	A	O4'-C1'-N9	6.26	113.21	108.20
83	A5	3538	G	C1'-O4'-C4'	-6.26	104.89	109.90
36	B2	333	A	N9-C1'-C2'	-6.26	105.11	112.00
36	B2	1382	G	O4'-C1'-N9	6.26	113.21	108.20
36	B2	173	C	N1-C1'-C2'	6.26	122.14	114.00
83	A5	390	A	N9-C1'-C2'	6.26	122.14	114.00
82	CG	92	LEU	N-CA-CB	6.26	122.92	110.40
83	A5	2999	U	O3'-P-O5'	-6.26	92.11	104.00
36	B2	41	A	O4'-C1'-C2'	-6.26	99.54	105.80
83	A5	2039	G	C1'-O4'-C4'	-6.26	104.89	109.90
83	A5	2140	C	C3'-C2'-C1'	6.26	106.51	101.50
16	AA	105	PRO	C-N-CA	6.26	135.44	122.30
26	AJ	39	ARG	NE-CZ-NH2	-6.26	117.17	120.30
36	B2	1292	A	O4'-C1'-N9	6.26	113.20	108.20
83	A5	1205	U	O4'-C1'-N1	6.26	113.21	108.20
83	A5	3489	A	P-O3'-C3'	6.26	127.21	119.70
83	A5	1790	A	P-O3'-C3'	6.25	127.21	119.70
83	A5	2506	U	C1'-O4'-C4'	6.25	114.90	109.90
36	B2	1727	U	O3'-P-O5'	-6.25	92.12	104.00
83	A5	1708	G	N9-C1'-C2'	6.25	122.13	114.00
83	A5	3479	C	N1-C1'-C2'	6.25	122.13	114.00
14	AT	68	SER	CB-CA-C	6.25	121.98	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	853	A	C1'-O4'-C4'	-6.25	104.90	109.90
37	BC	2	G	C1'-O4'-C4'	-6.25	104.90	109.90
51	CA	233	ARG	NE-CZ-NH1	6.25	123.43	120.30
83	A5	1064	G	O4'-C1'-N9	6.25	113.20	108.20
83	A5	2138	C	C3'-C2'-C1'	6.25	106.50	101.50
83	A5	3431	C	C3'-C2'-C1'	-6.25	96.50	101.50
83	A5	3804	U	N1-C1'-C2'	6.25	122.13	114.00
36	B2	413	C	C3'-C2'-C1'	6.25	106.50	101.50
83	A5	3955	U	C4'-C3'-O3'	-6.25	96.28	109.40
1	Az	815	SER	N-CA-C	6.25	127.87	111.00
30	AF	206	LYS	C-N-CA	6.25	135.42	122.30
36	B2	334	G	O4'-C1'-N9	6.25	113.20	108.20
83	A5	1245	C	O4'-C1'-N1	6.25	113.20	108.20
1	Az	354	ARG	NE-CZ-NH2	-6.25	117.18	120.30
83	A5	2634	A	N9-C1'-C2'	-6.25	105.13	112.00
83	A5	2931	U	O3'-P-O5'	6.25	115.87	104.00
86	A8	3	C	C1'-O4'-C4'	-6.25	104.90	109.90
36	B2	1578	U	O4'-C1'-C2'	-6.25	99.56	105.80
83	A5	3466	A	O4'-C1'-C2'	-6.25	99.56	105.80
36	B2	1031	A	C1'-O4'-C4'	6.24	114.89	109.90
36	B2	1137	G	C4'-C3'-O3'	6.24	125.49	113.00
36	B2	1190	G	C1'-O4'-C4'	-6.24	104.91	109.90
36	B2	1232	U	O4'-C1'-N1	6.24	113.19	108.20
83	A5	1446	A	C1'-O4'-C4'	6.24	114.89	109.90
83	A5	1451	G	P-O3'-C3'	6.24	127.19	119.70
83	A5	3398	C	C3'-C2'-C1'	6.24	106.49	101.50
36	B2	1044	G	C1'-O4'-C4'	-6.24	104.91	109.90
45	Ca	110	TYR	CB-CG-CD1	-6.24	117.25	121.00
83	A5	2131	C	N1-C1'-C2'	6.24	122.11	114.00
83	A5	3327	U	O4'-C1'-N1	6.24	113.19	108.20
83	A5	3635	G	P-O5'-C5'	6.24	130.88	120.90
86	A8	60	U	C4'-C3'-O3'	6.24	125.48	113.00
34	AQ	76	GLY	C-N-CA	6.24	135.40	122.30
36	B2	573	C	O4'-C1'-C2'	-6.24	99.56	105.80
66	Cd	111	PHE	CB-CG-CD2	-6.24	116.43	120.80
83	A5	637	U	C1'-O4'-C4'	6.24	114.89	109.90
83	A5	1685	G	C1'-O4'-C4'	-6.24	104.91	109.90
86	A8	99	U	C1'-O4'-C4'	-6.24	104.91	109.90
83	A5	1301	A	O4'-C4'-C3'	-6.24	97.76	104.00
28	AC	116	ASN	N-CA-C	6.24	127.84	111.00
36	B2	1071	G	C1'-O4'-C4'	-6.24	104.91	109.90
83	A5	1228	C	C1'-O4'-C4'	6.24	114.89	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2766	U	N1-C1'-C2'	6.24	122.11	114.00
83	A5	1728	G	O4'-C1'-C2'	6.23	113.21	107.60
83	A5	128	C	O4'-C1'-N1	6.23	113.19	108.20
83	A5	2169	U	O4'-C1'-N1	6.23	113.19	108.20
83	A5	3919	G	O4'-C1'-C2'	6.23	113.21	107.60
28	AC	51	ARG	NE-CZ-NH2	-6.23	117.19	120.30
36	B2	1383	A	C1'-O4'-C4'	-6.23	104.92	109.90
36	B2	1631	C	C3'-C2'-C1'	6.23	106.48	101.50
48	CD	189	SER	CB-CA-C	6.23	121.93	110.10
86	A8	20	C	P-O3'-C3'	-6.23	112.23	119.70
31	AH	124	TYR	CB-CG-CD1	6.23	124.74	121.00
36	B2	1315	U	P-O3'-C3'	6.23	127.17	119.70
37	BC	11	C	O4'-C1'-N1	6.23	113.18	108.20
83	A5	3482	G	C3'-C2'-C1'	6.22	106.48	101.50
36	B2	437	G	C1'-O4'-C4'	-6.22	104.92	109.90
36	B2	702	U	O4'-C1'-N1	6.22	113.18	108.20
83	A5	1382	U	O4'-C1'-C2'	-6.22	99.58	105.80
83	A5	2503	G	O4'-C1'-N9	6.22	113.18	108.20
83	A5	2600	A	O4'-C1'-N9	6.22	113.18	108.20
43	CV	48	ARG	N-CA-CB	6.22	121.80	110.60
83	A5	603	U	P-O5'-C5'	6.22	130.85	120.90
36	B2	1588	G	C1'-O4'-C4'	-6.22	104.92	109.90
83	A5	1502	A	C5'-C4'-O4'	6.22	116.56	109.10
83	A5	3722	C	O4'-C1'-C2'	-6.22	99.58	105.80
32	AW	46	TYR	CB-CG-CD1	6.22	124.73	121.00
83	A5	101	C	O4'-C1'-N1	6.22	113.17	108.20
83	A5	1542	C	N1-C1'-C2'	6.22	122.08	114.00
83	A5	2682	C	C3'-C2'-C1'	6.22	106.47	101.50
28	AC	39	ASP	C-N-CA	6.21	137.24	121.70
36	B2	1975	G	C1'-O4'-C4'	-6.21	104.93	109.90
63	CB	305	THR	CA-CB-CG2	-6.21	103.70	112.40
64	CF	173	THR	CA-C-N	6.21	130.87	117.20
83	A5	1461	G	O4'-C1'-N9	6.21	113.17	108.20
83	A5	1592	U	P-O5'-C5'	-6.21	110.96	120.90
83	A5	1689	G	C1'-O4'-C4'	-6.21	104.93	109.90
83	A5	1194	A	O4'-C1'-N9	6.21	113.17	108.20
83	A5	3768	C	O4'-C1'-N1	6.21	113.17	108.20
36	B2	1729	C	P-O3'-C3'	6.21	127.15	119.70
83	A5	392	A	C3'-C2'-C1'	-6.21	96.53	101.50
83	A5	1704	A	N9-C1'-C2'	-6.21	105.17	112.00
46	CN	129	TYR	CB-CG-CD2	-6.21	117.27	121.00
83	A5	3597	C	O4'-C1'-N1	6.21	113.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3819	C	O4'-C1'-N1	6.21	113.17	108.20
79	CJ	2	ALA	N-CA-CB	6.21	118.79	110.10
83	A5	536	U	C1'-O4'-C4'	6.21	114.87	109.90
83	A5	1907	U	C1'-O4'-C4'	6.21	114.87	109.90
83	A5	2727	U	N1-C1'-C2'	6.21	122.07	114.00
83	A5	3330	C	N1-C1'-C2'	6.21	122.07	114.00
36	B2	97	U	N1-C1'-C2'	6.21	122.07	114.00
36	B2	820	G	O3'-P-O5'	6.21	115.79	104.00
16	AA	139	TYR	CB-CG-CD2	-6.21	117.28	121.00
36	B2	594	G	C1'-O4'-C4'	-6.21	104.94	109.90
36	B2	1934	U	C1'-O4'-C4'	-6.21	104.94	109.90
83	A5	3373	G	N9-C1'-C2'	-6.21	105.17	112.00
39	Cq	137	PHE	CB-CG-CD1	6.20	125.14	120.80
83	A5	672	U	O4'-C1'-N1	6.20	113.16	108.20
83	A5	1074	U	C4'-C3'-O3'	-6.20	96.37	109.40
33	AI	117	TYR	CB-CG-CD2	-6.20	117.28	121.00
36	B2	398	C	O4'-C1'-N1	6.20	113.16	108.20
83	A5	2906	C	N1-C1'-C2'	6.20	122.06	114.00
83	A5	3936	A	C1'-O4'-C4'	-6.20	104.94	109.90
36	B2	73	A	O4'-C1'-C2'	6.20	113.18	107.60
36	B2	858	G	O4'-C1'-N9	6.20	113.16	108.20
83	A5	476	U	P-O5'-C5'	-6.20	110.98	120.90
83	A5	2204	U	O4'-C1'-C2'	-6.20	99.60	105.80
83	A5	3207	C	O4'-C1'-N1	6.20	113.16	108.20
46	CN	144	ARG	NE-CZ-NH2	-6.20	117.20	120.30
83	A5	1061	A	C1'-O4'-C4'	-6.20	104.94	109.90
83	A5	1990	G	O4'-C1'-N9	6.20	113.16	108.20
83	A5	2489	G	C3'-C2'-C1'	6.20	106.46	101.50
36	B2	319	C	O4'-C1'-N1	6.20	113.16	108.20
36	B2	451	C	O4'-C1'-N1	6.20	113.16	108.20
83	A5	2739	A	C1'-O4'-C4'	-6.20	104.94	109.90
83	A5	3339	U	P-O3'-C3'	6.20	127.14	119.70
36	B2	914	C	O4'-C1'-C2'	-6.19	99.61	105.80
83	A5	1896	A	C3'-C2'-C1'	6.19	106.45	101.50
29	AG	132	ARG	NE-CZ-NH1	6.19	123.40	120.30
83	A5	1656	U	O4'-C1'-N1	6.19	113.16	108.20
83	A5	2191	G	O4'-C1'-N9	6.19	113.16	108.20
83	A5	3574	A	C1'-O4'-C4'	-6.19	104.95	109.90
36	B2	715	U	N1-C1'-C2'	6.19	122.05	114.00
83	A5	497	U	P-O3'-C3'	6.19	127.13	119.70
83	A5	1045	G	O4'-C1'-N9	6.19	113.15	108.20
83	A5	1940	C	C3'-C2'-C1'	6.19	106.45	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2743	C	C3'-C2'-C1'	6.19	106.45	101.50
36	B2	910	U	N1-C1'-C2'	6.19	122.04	114.00
83	A5	570	U	P-O3'-C3'	-6.19	112.28	119.70
83	A5	2037	C	C1'-O4'-C4'	6.19	114.85	109.90
83	A5	2482	C	O4'-C1'-N1	6.19	113.15	108.20
83	A5	3214	C	P-O3'-C3'	-6.19	112.27	119.70
36	B2	1606	A	C1'-O4'-C4'	-6.19	104.95	109.90
74	CC	74	ARG	NE-CZ-NH2	-6.19	117.21	120.30
83	A5	392	A	P-O3'-C3'	6.19	127.12	119.70
83	A5	3505	U	C5'-C4'-O4'	6.19	116.52	109.10
36	B2	367	G	C1'-O4'-C4'	-6.18	104.95	109.90
36	B2	1573	U	P-O3'-C3'	6.18	127.12	119.70
3	AU	39	ARG	NE-CZ-NH2	-6.18	117.21	120.30
36	B2	1021	A	O4'-C1'-C2'	6.18	113.16	107.60
36	B2	1218	G	C3'-C2'-C1'	6.18	106.45	101.50
36	B2	333	A	O4'-C1'-N9	6.18	113.14	108.20
36	B2	1454	G	O3'-P-O5'	-6.18	92.26	104.00
36	B2	1647	G	C1'-O4'-C4'	-6.18	104.96	109.90
83	A5	2832	G	C1'-O4'-C4'	-6.18	104.96	109.90
86	A8	50	A	N9-C1'-C2'	6.18	122.03	114.00
83	A5	454	C	O4'-C1'-N1	6.18	113.14	108.20
83	A5	2202	A	C1'-O4'-C4'	-6.18	104.96	109.90
36	B2	70	C	O4'-C1'-C2'	-6.18	99.62	105.80
36	B2	313	C	O4'-C1'-C2'	6.18	113.16	107.60
36	B2	1285	C	O4'-C1'-C2'	-6.18	99.62	105.80
83	A5	156	G	P-O5'-C5'	6.18	130.78	120.90
83	A5	477	C	O4'-C1'-N1	6.18	113.14	108.20
83	A5	1434	U	O4'-C1'-N1	6.18	113.14	108.20
83	A5	3370	A	O4'-C1'-N9	6.17	113.14	108.20
44	CM	23	ARG	NE-CZ-NH1	6.17	123.39	120.30
83	A5	20	A	O4'-C1'-N9	6.17	113.14	108.20
83	A5	376	G	P-O3'-C3'	-6.17	112.29	119.70
83	A5	2547	C	N1-C1'-C2'	6.17	122.02	114.00
83	A5	2859	C	O4'-C1'-N1	6.17	113.14	108.20
83	A5	2869	U	P-O5'-C5'	-6.17	111.02	120.90
85	A7	49	A	C1'-O4'-C4'	6.17	114.84	109.90
1	Az	694	THR	C-N-CA	6.17	137.13	121.70
83	A5	1526	G	C1'-O4'-C4'	-6.17	104.96	109.90
83	A5	2224	A	C3'-C2'-C1'	6.17	106.44	101.50
83	A5	3627	C	C2'-C3'-O3'	6.17	123.57	113.70
62	Cb	51	LEU	N-CA-C	6.17	127.66	111.00
36	B2	1256	U	O4'-C1'-N1	6.17	113.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	CK	105	GLY	N-CA-C	6.17	128.52	113.10
60	Cr	33	PRO	N-CA-C	6.17	128.14	112.10
62	Cb	39	PHE	N-CA-C	6.17	127.66	111.00
83	A5	128	C	O4'-C1'-C2'	-6.17	99.63	105.80
83	A5	410	G	O4'-C1'-N9	6.17	113.14	108.20
83	A5	3870	A	C4'-C3'-C2'	-6.17	96.43	102.60
85	A7	64	G	O5'-P-OP1	6.17	118.10	110.70
86	A8	121	C	N1-C1'-C2'	6.17	122.02	114.00
36	B2	717	C	C1'-O4'-C4'	-6.17	104.97	109.90
83	A5	763	A	N9-C1'-C2'	-6.17	105.22	112.00
83	A5	1618	A	C1'-O4'-C4'	-6.17	104.97	109.90
81	CE	65	SER	CA-C-N	6.16	130.76	117.20
83	A5	198	A	O4'-C1'-N9	6.16	113.13	108.20
36	B2	1679	U	O4'-C1'-C2'	-6.16	99.64	105.80
83	A5	629	A	O4'-C1'-N9	6.16	113.13	108.20
36	B2	72	A	C1'-O4'-C4'	6.16	114.83	109.90
83	A5	653	U	P-O5'-C5'	6.16	130.76	120.90
83	A5	826	A	C3'-C2'-C1'	6.16	106.43	101.50
83	A5	939	A	O4'-C1'-N9	6.16	113.13	108.20
83	A5	1084	A	O4'-C1'-N9	6.16	113.13	108.20
83	A5	3258	C	C1'-O4'-C4'	-6.16	104.97	109.90
83	A5	3677	U	C3'-C2'-C1'	6.16	106.43	101.50
36	B2	231	G	O4'-C1'-C2'	-6.16	99.64	105.80
83	A5	222	C	O4'-C1'-N1	6.16	113.13	108.20
14	AT	7	LYS	N-CA-CB	6.16	121.68	110.60
15	AB	51	ARG	NE-CZ-NH1	6.16	123.38	120.30
36	B2	581	C	C3'-C2'-C1'	6.16	106.42	101.50
36	B2	603	G	C5'-C4'-O4'	6.16	116.49	109.10
36	B2	1689	A	N9-C1'-C2'	-6.16	105.23	112.00
83	A5	2810	A	C3'-C2'-C1'	6.16	106.42	101.50
36	B2	1701	C	C3'-C2'-C1'	6.15	106.42	101.50
83	A5	1312	G	C1'-O4'-C4'	-6.15	104.98	109.90
83	A5	2269	A	P-O3'-C3'	6.15	127.08	119.70
83	A5	3090	U	P-O3'-C3'	6.15	127.08	119.70
4	AK	34	GLU	N-CA-CB	6.15	121.67	110.60
83	A5	139	U	N1-C1'-C2'	6.15	122.00	114.00
36	B2	1353	U	N1-C1'-C2'	-6.15	105.23	112.00
63	CB	123	TYR	CB-CG-CD2	6.15	124.69	121.00
83	A5	702	A	O4'-C1'-N9	6.15	113.12	108.20
12	AR	105	MET	CG-SD-CE	-6.15	90.36	100.20
36	B2	1140	G	C3'-C2'-C1'	6.15	106.42	101.50
83	A5	2485	A	C1'-O4'-C4'	6.15	114.82	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	749	U	C4'-C3'-O3'	6.15	125.30	113.00
83	A5	1395	U	O4'-C1'-N1	6.15	113.12	108.20
36	B2	1449	U	O3'-P-O5'	6.15	115.68	104.00
83	A5	57	G	O4'-C1'-N9	6.15	113.12	108.20
83	A5	1372	A	N9-C1'-C2'	-6.15	105.24	112.00
83	A5	2078	C	N1-C1'-C2'	6.15	121.99	114.00
36	B2	944	G	C4-N9-C1'	6.14	134.49	126.50
83	A5	2690	A	O4'-C1'-C2'	-6.14	99.66	105.80
82	CG	65	TYR	N-CA-CB	6.14	121.66	110.60
83	A5	2134	A	O4'-C1'-N9	6.14	113.11	108.20
83	A5	1926	A	O3'-P-O5'	-6.14	92.33	104.00
83	A5	2744	C	C3'-C2'-C1'	6.14	106.41	101.50
83	A5	3924	U	O4'-C1'-C2'	-6.14	99.66	105.80
83	A5	1658	G	O4'-C1'-N9	6.14	113.11	108.20
29	AG	27	PHE	CB-CG-CD2	6.14	125.10	120.80
83	A5	3161	U	C1'-O4'-C4'	-6.14	104.99	109.90
8	AS	142	ARG	NE-CZ-NH2	-6.14	117.23	120.30
37	BC	65	C	N1-C1'-C2'	6.14	121.98	114.00
83	A5	1517	A	N9-C1'-C2'	-6.14	105.25	112.00
83	A5	2228	U	N1-C1'-C2'	6.14	121.98	114.00
30	AF	189	ASN	N-CA-CB	6.13	121.64	110.60
81	CE	232	LEU	N-CA-CB	6.13	122.67	110.40
83	A5	3148	C	N1-C1'-C2'	6.13	121.97	114.00
83	A5	3373	G	C1'-O4'-C4'	6.13	114.81	109.90
1	Az	684	ARG	N-CA-CB	6.13	121.64	110.60
80	CH	178	TYR	CB-CG-CD2	-6.13	117.32	121.00
83	A5	118	A	N9-C1'-C2'	6.13	121.97	114.00
83	A5	756	C	O4'-C1'-C2'	-6.13	99.67	105.80
36	B2	189	C	P-O3'-C3'	6.13	127.06	119.70
83	A5	201	U	C1'-O4'-C4'	6.13	114.81	109.90
83	A5	371	G	O4'-C1'-C2'	-6.13	99.67	105.80
83	A5	377	U	N1-C1'-C2'	6.13	121.97	114.00
86	A8	36	A	O4'-C1'-N9	6.13	113.11	108.20
83	A5	431	C	N1-C1'-C2'	6.13	121.97	114.00
83	A5	1139	U	C3'-C2'-C1'	6.13	106.40	101.50
83	A5	1693	C	O4'-C1'-N1	6.13	113.10	108.20
83	A5	3643	C	O4'-C1'-N1	6.13	113.10	108.20
70	Ci	8	ALA	N-CA-CB	6.13	118.68	110.10
83	A5	1142	U	O4'-C1'-N1	6.13	113.10	108.20
85	A7	106	G	N9-C1'-C2'	6.13	121.97	114.00
36	B2	87	C	C3'-C2'-C1'	6.13	106.40	101.50
36	B2	143	U	N1-C1'-C2'	6.13	121.97	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	840	U	O4'-C1'-N1	6.13	113.10	108.20
36	B2	1552	C	C1'-O4'-C4'	6.13	114.80	109.90
36	B2	251	G	O4'-C1'-N9	-6.12	103.30	108.20
83	A5	1721	C	C4'-C3'-O3'	-6.12	96.54	109.40
36	B2	705	G	N9-C1'-C2'	6.12	121.96	114.00
80	CH	106	ASN	C-N-CA	6.12	137.01	121.70
83	A5	752	U	P-O3'-C3'	6.12	127.05	119.70
83	A5	1234	G	O4'-C1'-N9	6.12	113.10	108.20
83	A5	2926	G	O4'-C1'-C2'	6.12	113.11	107.60
27	AE	11	ARG	NE-CZ-NH2	6.12	123.36	120.30
69	Cg	44	CYS	C-N-CA	6.12	135.16	122.30
83	A5	3209	G	O4'-C1'-N9	6.12	113.10	108.20
36	B2	709	G	C1'-O4'-C4'	-6.12	105.00	109.90
36	B2	559	G	C1'-O4'-C4'	-6.12	105.01	109.90
36	B2	1945	A	C3'-C2'-C1'	6.12	106.39	101.50
83	A5	300	A	C3'-C2'-C1'	6.12	106.39	101.50
83	A5	372	U	C3'-C2'-C1'	6.12	106.39	101.50
83	A5	1123	C	O4'-C1'-C2'	-6.12	99.68	105.80
83	A5	2727	U	C1'-O4'-C4'	-6.12	105.00	109.90
83	A5	2839	A	O5'-C5'-C4'	6.12	123.33	111.70
83	A5	3297	C	P-O3'-C3'	-6.12	112.36	119.70
83	A5	1155	U	O4'-C1'-N1	6.12	113.09	108.20
83	A5	1284	A	N9-C1'-C2'	-6.12	105.27	112.00
83	A5	1501	A	C1'-O4'-C4'	6.12	114.79	109.90
83	A5	1595	G	C1'-O4'-C4'	6.12	114.79	109.90
83	A5	3372	C	O4'-C1'-N1	6.12	113.09	108.20
83	A5	3466	A	O4'-C1'-N9	6.12	113.09	108.20
36	B2	936	G	O4'-C1'-C2'	6.11	113.10	107.60
36	B2	972	G	C1'-O4'-C4'	-6.11	105.01	109.90
57	CY	7	VAL	CG1-CB-CG2	6.11	120.68	110.90
83	A5	671	A	N9-C1'-C2'	6.11	121.95	114.00
85	A7	7	G	P-O5'-C5'	6.11	130.68	120.90
83	A5	946	A	O3'-P-O5'	6.11	115.61	104.00
48	CD	189	SER	N-CA-CB	6.11	119.66	110.50
67	Ce	59	TYR	CB-CG-CD2	-6.11	117.33	121.00
36	B2	84	A	O4'-C1'-N9	6.11	113.08	108.20
73	C1	3	ALA	N-CA-CB	6.11	118.65	110.10
83	A5	618	U	P-O5'-C5'	6.11	130.67	120.90
83	A5	3550	C	C3'-C2'-C1'	6.11	106.39	101.50
36	B2	460	C	O4'-C1'-C2'	-6.11	99.69	105.80
69	Cg	93	PHE	CB-CG-CD2	-6.11	116.53	120.80
83	A5	391	A	C3'-C2'-C1'	6.11	106.38	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1126	A	C1'-O4'-C4'	-6.10	105.02	109.90
83	A5	3292	C	O4'-C1'-N1	6.10	113.08	108.20
8	AS	139	THR	C-N-CA	6.10	135.11	122.30
36	B2	449	C	C3'-C2'-C1'	6.10	106.38	101.50
36	B2	1447	G	C4'-C3'-C2'	-6.10	96.50	102.60
83	A5	1009	G	C1'-O4'-C4'	-6.10	105.02	109.90
83	A5	1164	G	O4'-C1'-N9	6.10	113.08	108.20
83	A5	2709	U	O4'-C1'-N1	6.10	113.08	108.20
48	CD	186	GLU	C-N-CA	6.10	136.94	121.70
52	CS	98	ARG	NE-CZ-NH2	-6.10	117.25	120.30
60	Cr	22	LYS	C-N-CA	6.10	136.95	121.70
83	A5	2062	A	C1'-O4'-C4'	6.10	114.78	109.90
36	B2	543	A	O4'-C1'-N9	-6.09	103.33	108.20
86	A8	111	G	P-O3'-C3'	-6.09	112.39	119.70
6	AX	119	ARG	NE-CZ-NH2	-6.09	117.25	120.30
36	B2	1878	A	N9-C1'-C2'	-6.09	105.30	112.00
83	A5	876	G	C3'-C2'-C1'	-6.09	96.63	101.50
83	A5	1143	U	C1'-O4'-C4'	-6.09	105.03	109.90
83	A5	1901	G	C1'-O4'-C4'	-6.09	105.03	109.90
83	A5	2507	C	C1'-O4'-C4'	-6.09	105.03	109.90
57	CY	121	ARG	NE-CZ-NH1	6.09	123.34	120.30
59	CZ	18	TYR	CB-CG-CD1	6.09	124.65	121.00
74	CC	20	ALA	N-CA-CB	6.09	118.63	110.10
83	A5	1739	U	C3'-C2'-C1'	6.09	106.37	101.50
83	A5	1754	U	O4'-C1'-N1	6.09	113.07	108.20
83	A5	2819	A	O4'-C1'-C2'	-6.09	99.71	105.80
84	A9	21	G	O4'-C1'-C2'	6.09	113.08	107.60
36	B2	1378	C	C3'-C2'-C1'	6.09	106.37	101.50
83	A5	31	C	C1'-O4'-C4'	-6.09	105.03	109.90
83	A5	271	A	C1'-O4'-C4'	-6.09	105.03	109.90
36	B2	1042	A	O4'-C1'-C2'	-6.09	99.71	105.80
36	B2	1383	A	O4'-C1'-C2'	6.09	113.08	107.60
44	CM	3	PHE	CB-CG-CD2	6.09	125.06	120.80
83	A5	573	U	N1-C1'-C2'	-6.09	105.31	112.00
83	A5	1801	U	O4'-C1'-C2'	-6.09	99.71	105.80
83	A5	2533	U	O4'-C1'-N1	6.09	113.07	108.20
85	A7	75	G	P-O3'-C3'	6.09	127.00	119.70
83	A5	1707	A	C1'-O4'-C4'	-6.08	105.03	109.90
83	A5	2242	C	O4'-C1'-C2'	-6.08	99.72	105.80
1	Az	199	ASP	N-CA-CB	6.08	121.55	110.60
36	B2	89	C	O4'-C1'-N1	6.08	113.07	108.20
36	B2	144	A	P-O3'-C3'	-6.08	112.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1602	U	O4'-C1'-N1	6.08	113.07	108.20
83	A5	1424	G	N9-C1'-C2'	6.08	121.91	114.00
83	A5	1601	U	O4'-C1'-C2'	-6.08	99.72	105.80
41	CO	59	TYR	CA-C-N	6.08	130.58	117.20
83	A5	2665	C	O4'-C1'-C2'	-6.08	99.72	105.80
83	A5	3864	C	P-O3'-C3'	6.08	127.00	119.70
18	AY	74	ALA	N-CA-CB	6.08	118.61	110.10
36	B2	647	U	C3'-C2'-C1'	6.08	106.36	101.50
36	B2	1062	C	N1-C1'-C2'	6.08	121.90	114.00
83	A5	1204	C	C1'-O4'-C4'	-6.08	105.04	109.90
83	A5	1955	A	P-O3'-C3'	6.08	126.99	119.70
83	A5	3417	C	P-O3'-C3'	6.08	126.99	119.70
36	B2	1304	G	N9-C1'-C2'	6.08	121.90	114.00
36	B2	1695	A	O4'-C1'-C2'	6.08	113.07	107.60
83	A5	708	A	O4'-C1'-N9	6.08	113.06	108.20
83	A5	812	U	C3'-C2'-C1'	6.08	106.36	101.50
83	A5	776	A	O3'-P-O5'	6.07	115.54	104.00
83	A5	3458	A	N9-C1'-C2'	6.07	121.89	114.00
83	A5	3799	G	O3'-P-O5'	-6.07	92.46	104.00
36	B2	1601	A	O4'-C1'-N9	6.07	113.06	108.20
36	B2	1663	A	O4'-C1'-N9	6.07	113.06	108.20
74	CC	204	ARG	N-CA-CB	6.07	121.53	110.60
83	A5	486	A	O4'-C1'-C2'	-6.07	99.73	105.80
36	B2	831	U	N1-C1'-C2'	6.07	121.89	114.00
83	A5	1666	A	O4'-C1'-C2'	-6.07	99.73	105.80
83	A5	1926	A	C4'-C3'-O3'	6.07	125.14	113.00
85	A7	94	C	C3'-C2'-C1'	6.07	106.36	101.50
36	B2	1962	G	O4'-C1'-N9	-6.07	103.34	108.20
83	A5	1120	A	P-O5'-C5'	-6.07	111.19	120.90
83	A5	1616	G	C1'-O4'-C4'	-6.07	105.05	109.90
83	A5	1806	G	O4'-C1'-N9	6.07	113.06	108.20
83	A5	3460	C	O4'-C1'-N1	6.07	113.06	108.20
11	AL	104	ARG	NE-CZ-NH1	6.07	123.33	120.30
36	B2	388	G	C1'-O4'-C4'	-6.07	105.05	109.90
36	B2	1148	U	C4'-C3'-O3'	6.07	125.14	113.00
36	B2	1205	U	C1'-O4'-C4'	-6.07	105.05	109.90
36	B2	1624	U	O4'-C1'-N1	6.07	113.05	108.20
36	B2	1669	A	O4'-C1'-N9	6.07	113.05	108.20
45	Ca	13	ARG	C-N-CA	6.07	135.04	122.30
83	A5	1079	U	C1'-O4'-C4'	-6.07	105.05	109.90
15	AB	182	ALA	N-CA-CB	6.07	118.59	110.10
30	AF	188	ARG	NE-CZ-NH1	6.07	123.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	54	C	O4'-C1'-C2'	-6.07	99.73	105.80
64	CF	56	ARG	NE-CZ-NH2	6.07	123.33	120.30
83	A5	766	G	C1'-O4'-C4'	-6.07	105.05	109.90
85	A7	113	G	O4'-C1'-N9	6.07	113.05	108.20
36	B2	908	G	P-O5'-C5'	6.06	130.60	120.90
36	B2	1324	G	O4'-C1'-N9	6.06	113.05	108.20
36	B2	1900	U	N1-C1'-C2'	-6.06	105.33	112.00
83	A5	791	C	O4'-C1'-C2'	-6.06	99.74	105.80
83	A5	2664	U	C3'-C2'-C1'	6.06	106.35	101.50
36	B2	1565	C	O4'-C1'-C2'	-6.06	99.74	105.80
42	CL	109	ARG	NE-CZ-NH1	6.06	123.33	120.30
70	Ci	92	ARG	NE-CZ-NH1	-6.06	117.27	120.30
83	A5	210	C	C1'-O4'-C4'	-6.06	105.05	109.90
83	A5	388	U	C5'-C4'-O4'	6.06	116.37	109.10
83	A5	1408	A	N9-C1'-C2'	6.06	121.88	114.00
84	A9	4	U	C1'-O4'-C4'	6.06	114.75	109.90
83	A5	2819	A	P-O5'-C5'	6.06	130.60	120.90
1	Az	308	THR	N-CA-C	6.06	127.36	111.00
36	B2	33	U	N1-C1'-C2'	-6.06	105.33	112.00
36	B2	1775	A	O4'-C1'-C2'	-6.06	99.74	105.80
45	Ca	53	TYR	CB-CG-CD1	-6.06	117.36	121.00
83	A5	514	A	O4'-C1'-C2'	6.06	113.05	107.60
83	A5	2713	G	O4'-C1'-N9	6.06	113.05	108.20
84	A9	30	A	N9-C1'-C2'	-6.06	105.33	112.00
85	A7	63	C	P-O3'-C3'	-6.06	112.43	119.70
36	B2	521	U	N1-C1'-C2'	-6.06	105.34	112.00
36	B2	1176	C	C1'-O4'-C4'	-6.06	105.06	109.90
83	A5	800	C	O4'-C1'-C2'	-6.06	99.74	105.80
83	A5	1711	C	C3'-C2'-C1'	6.06	106.35	101.50
83	A5	2061	G	O4'-C1'-C2'	6.06	113.05	107.60
85	A7	10	C	O4'-C1'-C2'	-6.06	99.74	105.80
37	BC	41	A	C1'-O4'-C4'	6.06	114.75	109.90
83	A5	3746	A	N9-C1'-C2'	-6.06	105.34	112.00
42	CL	149	LEU	C-N-CA	6.05	136.84	121.70
54	CP	41	LEU	CB-CG-CD2	6.05	121.29	111.00
74	CC	252	PHE	CB-CG-CD2	-6.05	116.56	120.80
83	A5	2462	U	O4'-C1'-C2'	-6.05	99.75	105.80
83	A5	2779	A	O4'-C1'-N9	6.05	113.04	108.20
83	A5	3196	C	O4'-C1'-N1	6.05	113.04	108.20
83	A5	3721	C	C5'-C4'-C3'	6.05	125.69	116.00
28	AC	162	THR	CA-CB-CG2	-6.05	103.92	112.40
36	B2	1100	A	C1'-O4'-C4'	-6.05	105.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1726	A	O4'-C1'-N9	6.05	113.04	108.20
78	Co	77	TYR	CB-CG-CD2	-6.05	117.37	121.00
80	CH	84	PHE	CB-CG-CD1	6.05	125.04	120.80
83	A5	2066	G	P-O5'-C5'	6.05	130.58	120.90
83	A5	3727	A	C4'-C3'-C2'	-6.05	96.55	102.60
83	A5	3008	U	O4'-C1'-N1	6.05	113.04	108.20
86	A8	121	C	C1'-O4'-C4'	-6.05	105.06	109.90
75	Cm	125	LYS	N-CA-CB	6.05	121.49	110.60
83	A5	2214	G	O4'-C1'-C2'	6.05	113.04	107.60
9	Ad	8	TYR	CB-CG-CD2	-6.05	117.37	121.00
83	A5	853	G	C3'-C2'-C1'	-6.05	96.66	101.50
83	A5	2168	G	N9-C1'-C2'	6.05	121.86	114.00
83	A5	2652	U	C1'-O4'-C4'	6.05	114.74	109.90
67	Ce	4	ARG	NE-CZ-NH2	-6.04	117.28	120.30
36	B2	1389	U	O4'-C1'-N1	6.04	113.03	108.20
36	B2	1970	U	O4'-C1'-N1	6.04	113.03	108.20
36	B2	1972	G	O4'-C1'-N9	6.04	113.04	108.20
42	CL	68	LYS	N-CA-CB	6.04	121.48	110.60
46	CN	182	GLN	C-N-CA	6.04	136.81	121.70
51	CA	242	ARG	NE-CZ-NH2	-6.04	117.28	120.30
83	A5	1024	U	N1-C1'-C2'	6.04	121.86	114.00
83	A5	1577	A	O4'-C1'-N9	6.04	113.03	108.20
2	Ag	309	ARG	NE-CZ-NH1	6.04	123.32	120.30
4	AK	8	ARG	NE-CZ-NH2	-6.04	117.28	120.30
36	B2	1381	G	O4'-C1'-N9	6.04	113.03	108.20
83	A5	670	G	O4'-C1'-C2'	-6.04	99.76	105.80
83	A5	878	U	N1-C1'-C2'	6.04	121.86	114.00
83	A5	3575	G	O4'-C1'-N9	6.04	113.03	108.20
36	B2	1535	U	C1'-O4'-C4'	6.04	114.73	109.90
83	A5	290	G	C1'-O4'-C4'	-6.04	105.07	109.90
83	A5	1225	G	O4'-C1'-N9	6.04	113.03	108.20
3	AU	51	ARG	NE-CZ-NH2	6.04	123.32	120.30
30	AF	62	TYR	CB-CG-CD2	-6.04	117.38	121.00
36	B2	702	U	N1-C1'-C2'	6.04	121.85	114.00
36	B2	1025	G	O4'-C1'-N9	6.04	113.03	108.20
74	CC	349	ARG	NE-CZ-NH2	6.04	123.32	120.30
83	A5	1052	U	C1'-O4'-C4'	-6.04	105.07	109.90
83	A5	3642	G	C1'-O4'-C4'	-6.04	105.07	109.90
36	B2	1844	C	C3'-C2'-C1'	6.04	106.33	101.50
83	A5	404	U	O4'-C1'-C2'	-6.04	99.76	105.80
83	A5	2504	A	O4'-C1'-N9	6.04	113.03	108.20
86	A8	39	A	N9-C1'-C2'	6.04	121.85	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	CR	139	MET	N-CA-CB	6.04	121.46	110.60
83	A5	286	A	C3'-C2'-C1'	-6.04	96.67	101.50
83	A5	2276	C	C1'-O4'-C4'	-6.04	105.07	109.90
28	AC	252	TYR	CB-CG-CD1	6.03	124.62	121.00
36	B2	1359	U	P-O3'-C3'	6.03	126.94	119.70
36	B2	1604	A	C3'-C2'-C1'	6.03	106.33	101.50
36	B2	1290	A	C1'-O4'-C4'	-6.03	105.07	109.90
83	A5	3801	A	C5'-C4'-O4'	-6.03	101.86	109.10
83	A5	3861	A	N9-C1'-C2'	-6.03	105.36	112.00
36	B2	457	G	N9-C1'-C2'	6.03	121.84	114.00
83	A5	372	U	C1'-O4'-C4'	6.03	114.72	109.90
83	A5	1397	A	N9-C1'-C2'	6.03	121.84	114.00
83	A5	1778	A	O3'-P-O5'	6.03	115.46	104.00
83	A5	3865	C	N1-C1'-C2'	6.03	121.84	114.00
83	A5	3903	U	O4'-C1'-N1	6.03	113.03	108.20
84	A9	23	G	C2'-C3'-O3'	6.03	123.35	113.70
36	B2	1206	G	C1'-O4'-C4'	-6.03	105.08	109.90
50	CR	117	ARG	NE-CZ-NH2	-6.03	117.29	120.30
83	A5	3353	C	C3'-C2'-C1'	6.03	106.32	101.50
83	A5	1229	U	C3'-C2'-C1'	6.03	106.32	101.50
83	A5	3456	U	O4'-C1'-N1	6.03	113.02	108.20
29	AG	68	LEU	CA-C-N	6.03	130.46	117.20
36	B2	331	G	O4'-C1'-C2'	6.03	113.02	107.60
36	B2	1733	G	C3'-C2'-C1'	6.03	106.32	101.50
83	A5	2774	G	N9-C1'-C2'	6.03	121.83	114.00
36	B2	1424	A	O4'-C1'-N9	6.02	113.02	108.20
36	B2	1917	A	C5'-C4'-O4'	6.02	116.33	109.10
83	A5	11	C	C1'-O4'-C4'	-6.02	105.08	109.90
83	A5	433	U	O4'-C1'-N1	6.02	113.02	108.20
83	A5	455	U	N1-C1'-C2'	6.02	121.83	114.00
83	A5	2830	G	N9-C1'-C2'	6.02	121.83	114.00
36	B2	1915	A	O4'-C1'-C2'	-6.02	99.78	105.80
83	A5	342	A	O4'-C1'-N9	-6.02	103.38	108.20
83	A5	2500	G	C3'-C2'-C1'	6.02	106.32	101.50
8	AS	40	TYR	N-CA-CB	6.02	121.43	110.60
36	B2	1461	A	O4'-C1'-C2'	-6.02	99.78	105.80
4	AK	16	PHE	CB-CG-CD2	6.02	125.01	120.80
83	A5	1585	U	O4'-C1'-C2'	-6.02	99.78	105.80
84	A9	29	U	C1'-O4'-C4'	-6.02	105.09	109.90
83	A5	2724	C	C3'-C2'-C1'	6.02	106.31	101.50
83	A5	3920	C	O4'-C1'-C2'	-6.02	99.78	105.80
5	AO	124	MET	CG-SD-CE	-6.01	90.58	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1434	U	P-O3'-C3'	6.01	126.92	119.70
36	B2	1912	G	C1'-O4'-C4'	-6.01	105.09	109.90
83	A5	1457	G	O4'-C1'-N9	6.01	113.01	108.20
46	CN	49	ARG	NE-CZ-NH1	6.01	123.31	120.30
83	A5	9	A	N9-C1'-C2'	-6.01	105.39	112.00
83	A5	1127	C	O4'-C1'-N1	6.01	113.01	108.20
83	A5	2062	A	O4'-C1'-N9	6.01	113.01	108.20
83	A5	2839	A	P-O5'-C5'	-6.01	111.28	120.90
5	AO	147	ARG	C-N-CA	6.01	134.92	122.30
36	B2	67	A	C3'-C2'-C1'	6.01	106.31	101.50
36	B2	509	C	P-O5'-C5'	6.01	130.52	120.90
36	B2	604	C	C3'-C2'-C1'	6.01	106.31	101.50
36	B2	969	U	O4'-C1'-N1	6.01	113.01	108.20
36	B2	1378	C	N1-C1'-C2'	6.01	121.81	114.00
36	B2	1709	A	C3'-C2'-C1'	6.01	106.31	101.50
42	CL	150	LYS	N-CA-C	6.01	127.23	111.00
60	Cr	23	ARG	CB-CA-C	6.01	122.42	110.40
83	A5	374	C	O4'-C1'-N1	6.01	113.01	108.20
83	A5	1432	C	P-O3'-C3'	6.01	126.92	119.70
14	AT	62	ARG	NE-CZ-NH1	-6.01	117.30	120.30
36	B2	1739	U	O4'-C1'-N1	6.01	113.01	108.20
83	A5	2468	A	O4'-C1'-C2'	-6.01	99.79	105.80
83	A5	100	G	C1'-O4'-C4'	-6.01	105.09	109.90
83	A5	3253	G	O4'-C1'-N9	6.01	113.00	108.20
36	B2	1115	C	C3'-C2'-C1'	6.00	106.30	101.50
8	AS	138	THR	CA-CB-CG2	-6.00	104.00	112.40
36	B2	565	G	C3'-C2'-C1'	6.00	106.30	101.50
83	A5	1971	C	N1-C1'-C2'	6.00	121.81	114.00
83	A5	2480	U	C1'-O4'-C4'	6.00	114.70	109.90
83	A5	3918	A	P-O3'-C3'	6.00	126.90	119.70
36	B2	457	G	C3'-C2'-C1'	6.00	106.30	101.50
36	B2	1087	C	N1-C1'-C2'	-6.00	105.40	112.00
36	B2	1169	C	C2'-C3'-O3'	6.00	123.30	113.70
36	B2	1664	A	O4'-C1'-C2'	-6.00	99.80	105.80
48	CD	188	LYS	C-N-CA	6.00	136.70	121.70
83	A5	899	G	C4'-C3'-C2'	-6.00	96.60	102.60
83	A5	1114	A	C5'-C4'-O4'	6.00	116.30	109.10
83	A5	843	A	C5'-C4'-C3'	-6.00	106.40	116.00
83	A5	3651	C	O4'-C1'-N1	6.00	113.00	108.20
36	B2	502	C	O4'-C1'-N1	6.00	113.00	108.20
40	CK	88	PRO	CA-C-N	6.00	133.89	117.10
48	CD	162	ALA	N-CA-CB	6.00	118.50	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	CA	174	ARG	NE-CZ-NH2	-6.00	117.30	120.30
83	A5	36	U	O4'-C1'-C2'	-6.00	99.80	105.80
83	A5	1969	A	P-O3'-C3'	6.00	126.90	119.70
36	B2	90	A	C3'-C2'-C1'	6.00	106.30	101.50
83	A5	418	G	O4'-C1'-C2'	-6.00	99.80	105.80
83	A5	3402	C	O4'-C1'-N1	6.00	113.00	108.20
83	A5	3405	U	C3'-C2'-C1'	6.00	106.30	101.50
86	A8	44	C	O4'-C1'-C2'	-6.00	99.80	105.80
36	B2	134	U	C4'-C3'-O3'	5.99	124.98	113.00
36	B2	1836	C	O4'-C1'-N1	5.99	112.99	108.20
83	A5	1196	A	P-O3'-C3'	5.99	126.89	119.70
83	A5	1422	G	O4'-C1'-N9	5.99	113.00	108.20
83	A5	1690	U	N1-C1'-C2'	-5.99	105.41	112.00
83	A5	2787	U	O4'-C1'-N1	5.99	112.99	108.20
36	B2	425	A	C3'-C2'-C1'	5.99	106.29	101.50
36	B2	1182	C	C3'-C2'-C1'	5.99	106.29	101.50
36	B2	1391	G	O4'-C1'-C2'	5.99	112.99	107.60
36	B2	356	C	O4'-C1'-C2'	-5.99	99.81	105.80
36	B2	1925	G	C1'-O4'-C4'	-5.99	105.11	109.90
42	CL	58	VAL	C-N-CA	5.99	136.67	121.70
83	A5	527	U	O4'-C1'-C2'	-5.99	99.81	105.80
83	A5	2473	C	O4'-C1'-C2'	-5.99	99.81	105.80
18	AY	77	TYR	CB-CG-CD1	-5.99	117.41	121.00
83	A5	3335	A	N9-C1'-C2'	-5.99	105.41	112.00
36	B2	1333	C	C3'-C2'-C1'	-5.99	96.71	101.50
83	A5	830	U	O4'-C1'-N1	5.99	112.99	108.20
83	A5	941	A	C3'-C2'-C1'	5.99	106.29	101.50
86	A8	123	G	O4'-C1'-N9	5.99	112.99	108.20
68	Cf	16	LYS	C-N-CA	5.99	136.67	121.70
83	A5	640	U	C2'-C3'-O3'	5.99	123.28	113.70
83	A5	1938	C	O4'-C1'-N1	5.99	112.99	108.20
36	B2	1118	U	O4'-C1'-N1	5.98	112.99	108.20
63	CB	234	ARG	NE-CZ-NH1	5.98	123.29	120.30
83	A5	2200	A	C1'-O4'-C4'	5.98	114.69	109.90
83	A5	3173	U	C1'-O4'-C4'	-5.98	105.11	109.90
27	AE	30	ARG	NE-CZ-NH2	-5.98	117.31	120.30
36	B2	1416	A	O4'-C1'-C2'	-5.98	99.82	105.80
83	A5	25	G	C3'-C2'-C1'	-5.98	96.72	101.50
83	A5	1225	G	N9-C1'-C2'	5.98	121.78	114.00
83	A5	1483	G	C5'-C4'-O4'	5.98	116.28	109.10
83	A5	1972	C	O4'-C1'-C2'	-5.98	99.82	105.80
83	A5	2794	U	O4'-C1'-N1	5.98	112.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3493	U	O4'-C1'-N1	5.98	112.99	108.20
36	B2	1953	U	N1-C1'-C2'	5.98	121.78	114.00
81	CE	221	PHE	N-CA-C	5.98	127.15	111.00
83	A5	2525	C	N1-C1'-C2'	5.98	121.78	114.00
83	A5	2701	G	N9-C1'-C2'	-5.98	105.42	112.00
83	A5	2707	C	C3'-C2'-C1'	5.98	106.28	101.50
83	A5	3835	U	C1'-O4'-C4'	-5.98	105.12	109.90
83	A5	2400	U	P-O5'-C5'	-5.98	111.33	120.90
23	AD	181	GLN	CA-C-N	5.98	128.15	116.20
36	B2	397	G	O4'-C1'-N9	5.98	112.98	108.20
36	B2	1803	A	C4'-C3'-O3'	5.98	124.95	113.00
67	Ce	129	ARG	N-CA-CB	5.98	121.36	110.60
36	B2	513	A	C1'-O4'-C4'	5.97	114.68	109.90
36	B2	1115	C	N1-C1'-C2'	5.97	121.77	114.00
83	A5	233	A	P-O3'-C3'	5.97	126.87	119.70
83	A5	479	U	C1'-O4'-C4'	5.97	114.68	109.90
83	A5	553	A	N9-C1'-C2'	-5.97	105.43	112.00
83	A5	1374	C	P-O3'-C3'	5.97	126.87	119.70
83	A5	2237	A	C3'-C2'-C1'	5.97	106.28	101.50
83	A5	2531	A	O4'-C1'-N9	5.97	112.98	108.20
10	AN	106	ARG	NE-CZ-NH1	5.97	123.29	120.30
36	B2	591	C	C1'-O4'-C4'	-5.97	105.12	109.90
36	B2	1761	A	P-O3'-C3'	5.97	126.87	119.70
83	A5	1164	G	O4'-C1'-C2'	5.97	112.98	107.60
83	A5	3331	A	P-O3'-C3'	5.97	126.87	119.70
83	A5	3407	U	C1'-O4'-C4'	-5.97	105.12	109.90
83	A5	3418	U	C4'-C3'-O3'	5.97	124.95	113.00
1	Az	674	LYS	C-N-CA	5.97	136.63	121.70
83	A5	717	A	C3'-C2'-C1'	5.97	106.28	101.50
85	A7	55	A	O4'-C1'-N9	5.97	112.98	108.20
36	B2	50	C	N1-C1'-C2'	5.97	121.76	114.00
36	B2	419	C	C1'-O4'-C4'	-5.97	105.12	109.90
36	B2	1195	G	O3'-P-O5'	-5.97	92.66	104.00
37	BC	7	G	O4'-C1'-N9	5.97	112.97	108.20
51	CA	6	ARG	NE-CZ-NH2	-5.97	117.31	120.30
83	A5	1123	C	O4'-C1'-N1	5.97	112.97	108.20
83	A5	1761	C	O4'-C1'-N1	5.97	112.97	108.20
86	A8	51	A	C5'-C4'-O4'	5.97	116.26	109.10
36	B2	252	A	O4'-C1'-C2'	5.97	112.97	107.60
37	BC	12	G	C3'-C2'-C1'	-5.97	96.72	101.50
36	B2	960	U	C1'-O4'-C4'	5.97	114.67	109.90
36	B2	1243	G	N9-C1'-C2'	5.97	121.76	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BC	32	C	O4'-C1'-N1	5.97	112.97	108.20
63	CB	156	TYR	CB-CG-CD1	-5.97	117.42	121.00
83	A5	235	A	C4'-C3'-C2'	-5.97	96.63	102.60
83	A5	1877	A	N9-C1'-C2'	5.97	121.76	114.00
83	A5	2921	G	O4'-C1'-C2'	5.97	112.97	107.60
83	A5	3120	C	O4'-C1'-N1	5.97	112.97	108.20
36	B2	516	U	O4'-C1'-N1	5.96	112.97	108.20
36	B2	1029	G	C3'-C2'-C1'	-5.96	96.73	101.50
53	CT	6	GLY	C-N-CA	5.96	136.61	121.70
83	A5	765	A	C3'-C2'-C1'	5.96	106.27	101.50
25	Af	92	LYS	C-N-CA	5.96	136.61	121.70
83	A5	2146	G	C5'-C4'-O4'	5.96	116.26	109.10
1	Az	713	ARG	NE-CZ-NH2	-5.96	117.32	120.30
36	B2	1127	G	N9-C1'-C2'	5.96	121.75	114.00
15	AB	165	ARG	NE-CZ-NH1	5.96	123.28	120.30
16	AA	156	TYR	CB-CG-CD1	-5.96	117.42	121.00
27	AE	195	VAL	N-CA-CB	5.96	124.61	111.50
36	B2	1328	G	O4'-C1'-C2'	5.96	112.96	107.60
36	B2	1763	C	C3'-C2'-C1'	5.96	106.27	101.50
36	B2	1889	G	O4'-C1'-C2'	5.96	112.96	107.60
57	CY	62	PHE	C-N-CA	5.96	136.60	121.70
82	CG	210	THR	CA-CB-CG2	-5.96	104.06	112.40
83	A5	1354	G	C1'-O4'-C4'	-5.96	105.13	109.90
83	A5	1619	C	O4'-C1'-C2'	-5.96	99.84	105.80
83	A5	1724	A	C1'-O4'-C4'	-5.96	105.13	109.90
83	A5	3163	U	O4'-C1'-N1	5.96	112.97	108.20
36	B2	880	G	O4'-C1'-C2'	5.96	112.96	107.60
83	A5	1712	C	C3'-C2'-C1'	5.96	106.27	101.50
36	B2	44	U	O4'-C1'-C2'	-5.96	99.84	105.80
36	B2	1328	G	C3'-C2'-C1'	-5.96	96.74	101.50
83	A5	61	A	C3'-C2'-C1'	5.96	106.26	101.50
11	AL	34	SER	C-N-CA	5.95	136.58	121.70
23	AD	79	PHE	CB-CG-CD1	-5.95	116.63	120.80
36	B2	497	A	N9-C1'-C2'	5.95	121.74	114.00
36	B2	920	U	N1-C1'-C2'	5.95	121.74	114.00
36	B2	962	G	O4'-C1'-N9	5.95	112.96	108.20
36	B2	1404	C	C3'-C2'-C1'	5.95	106.26	101.50
36	B2	1648	C	O4'-C1'-C2'	5.95	112.96	107.60
83	A5	1230	U	C5'-C4'-C3'	5.95	125.53	116.00
83	A5	1702	G	O4'-C1'-N9	5.95	112.96	108.20
83	A5	2588	G	N9-C1'-C2'	5.95	121.74	114.00
83	A5	3205	G	N9-C1'-C2'	-5.95	105.45	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3884	A	P-O3'-C3'	5.95	126.84	119.70
36	B2	1049	C	O4'-C1'-N1	5.95	112.96	108.20
83	A5	1331	G	O4'-C1'-C2'	5.95	112.96	107.60
83	A5	1677	U	O4'-C1'-C2'	-5.95	99.85	105.80
83	A5	2055	G	N9-C1'-C2'	5.95	121.74	114.00
83	A5	2729	U	O4'-C1'-C2'	-5.95	99.85	105.80
36	B2	1407	U	C3'-C2'-C1'	-5.95	96.74	101.50
36	B2	1658	G	C3'-C2'-C1'	-5.95	96.74	101.50
83	A5	207	C	O4'-C1'-N1	5.95	112.96	108.20
83	A5	1331	G	C1'-O4'-C4'	-5.95	105.14	109.90
83	A5	2880	A	O4'-C1'-C2'	-5.95	99.85	105.80
83	A5	3901	G	N9-C1'-C2'	-5.95	105.45	112.00
36	B2	75	U	C5'-C4'-O4'	5.95	116.24	109.10
83	A5	2132	A	P-O5'-C5'	5.95	130.42	120.90
83	A5	2154	A	O4'-C1'-C2'	-5.95	99.85	105.80
83	A5	3596	A	N9-C1'-C2'	-5.95	105.46	112.00
27	AE	100	ARG	NE-CZ-NH1	5.95	123.27	120.30
36	B2	1045	U	O4'-C1'-C2'	-5.95	99.85	105.80
83	A5	732	U	O4'-C1'-C2'	-5.95	99.85	105.80
33	AI	49	ARG	C-N-CA	5.95	134.79	122.30
36	B2	303	C	P-O3'-C3'	5.95	126.83	119.70
83	A5	1002	C	N1-C1'-C2'	5.95	121.73	114.00
36	B2	1215	G	C3'-C2'-C1'	-5.94	96.75	101.50
67	Ce	7	TYR	CB-CG-CD2	-5.94	117.43	121.00
83	A5	2901	C	C1'-O4'-C4'	-5.94	105.14	109.90
83	A5	248	C	C4'-C3'-C2'	-5.94	96.66	102.60
83	A5	323	U	C3'-C2'-C1'	5.94	106.25	101.50
33	AI	109	PHE	CB-CG-CD2	-5.94	116.64	120.80
36	B2	52	U	O4'-C1'-C2'	-5.94	99.86	105.80
36	B2	1322	C	O4'-C1'-N1	5.94	112.95	108.20
50	CR	110	ARG	NE-CZ-NH1	5.94	123.27	120.30
83	A5	491	U	C1'-O4'-C4'	5.94	114.65	109.90
83	A5	1574	A	C1'-O4'-C4'	-5.94	105.15	109.90
83	A5	1771	G	O4'-C1'-N9	5.94	112.95	108.20
83	A5	2870	C	O4'-C1'-N1	5.94	112.95	108.20
83	A5	3876	U	C1'-O4'-C4'	-5.94	105.15	109.90
16	AA	222	PRO	CB-CA-C	-5.94	97.15	112.00
16	AA	203	PHE	N-CA-CB	5.94	121.29	110.60
32	AW	20	ARG	NE-CZ-NH2	5.94	123.27	120.30
36	B2	31	C	N1-C1'-C2'	5.94	121.72	114.00
36	B2	152	U	O4'-C1'-N1	5.94	112.95	108.20
36	B2	594	G	N9-C1'-C2'	5.94	121.72	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	947	U	P-O3'-C3'	5.94	126.83	119.70
36	B2	1552	C	O4'-C1'-N1	5.94	112.95	108.20
36	B2	1963	G	P-O3'-C3'	5.94	126.83	119.70
29	AG	68	LEU	O-C-N	-5.94	113.20	122.70
83	A5	3639	U	O4'-C1'-N1	5.94	112.95	108.20
29	AG	60	GLY	N-CA-C	5.93	127.94	113.10
36	B2	1877	G	C1'-O4'-C4'	-5.93	105.15	109.90
68	Cf	56	PHE	N-CA-C	-5.93	94.98	111.00
83	A5	486	A	C1'-O4'-C4'	5.93	114.65	109.90
83	A5	1972	C	O4'-C1'-N1	5.93	112.95	108.20
83	A5	2516	U	N1-C1'-C2'	5.93	121.72	114.00
83	A5	3302	G	C5'-C4'-O4'	5.93	116.22	109.10
36	B2	523	A	O4'-C1'-N9	5.93	112.94	108.20
83	A5	959	U	O4'-C1'-C2'	-5.93	99.87	105.80
83	A5	1323	C	O4'-C1'-N1	5.93	112.95	108.20
83	A5	1746	A	C1'-O4'-C4'	-5.93	105.15	109.90
83	A5	2662	C	C3'-C2'-C1'	5.93	106.25	101.50
83	A5	3626	A	O4'-C1'-C2'	-5.93	99.87	105.80
83	A5	525	U	C1'-O4'-C4'	5.93	114.64	109.90
83	A5	2882	A	P-O3'-C3'	5.93	126.82	119.70
15	AB	88	ARG	NE-CZ-NH2	-5.93	117.34	120.30
34	AQ	142	ARG	NE-CZ-NH1	5.93	123.27	120.30
36	B2	1973	G	N9-C1'-C2'	-5.93	105.48	112.00
36	B2	1993	U	C4'-C3'-C2'	5.93	108.53	102.60
83	A5	431	C	C3'-C2'-C1'	5.93	106.24	101.50
83	A5	1310	A	O4'-C1'-C2'	-5.93	99.87	105.80
83	A5	3544	G	C1'-O4'-C4'	-5.93	105.16	109.90
83	A5	3697	A	C2'-C3'-O3'	5.93	123.19	113.70
36	B2	1552	C	O4'-C1'-C2'	-5.93	99.87	105.80
83	A5	94	C	N1-C1'-C2'	5.93	121.71	114.00
36	B2	182	C	O4'-C1'-N1	5.93	112.94	108.20
36	B2	961	U	N1-C1'-C2'	5.93	121.70	114.00
83	A5	216	U	N1-C1'-C2'	5.93	121.70	114.00
83	A5	2512	U	N1-C1'-C2'	5.93	121.71	114.00
9	Ad	39	CYS	N-CA-CB	5.92	121.27	110.60
36	B2	124	U	C3'-C2'-C1'	5.92	106.24	101.50
36	B2	329	U	C1'-O4'-C4'	5.92	114.64	109.90
36	B2	983	C	O4'-C1'-C2'	-5.92	99.88	105.80
37	BC	60	C	N1-C1'-C2'	5.92	121.70	114.00
27	AE	51	ARG	NE-CZ-NH2	-5.92	117.34	120.30
36	B2	225	G	O3'-P-O5'	-5.92	92.75	104.00
83	A5	2599	G	O4'-C1'-N9	5.92	112.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	459	U	N1-C1'-C2'	5.92	121.70	114.00
83	A5	527	U	C3'-C2'-C1'	5.92	106.24	101.50
83	A5	642	A	C3'-C2'-C1'	5.92	106.24	101.50
83	A5	2515	C	P-O3'-C3'	5.92	126.81	119.70
83	A5	2664	U	O4'-C1'-N1	5.92	112.94	108.20
36	B2	1732	G	C1'-O4'-C4'	-5.92	105.16	109.90
83	A5	1371	A	O4'-C1'-N9	5.92	112.94	108.20
83	A5	1444	G	N9-C1'-C2'	-5.92	105.49	112.00
83	A5	2213	G	O4'-C1'-N9	5.92	112.94	108.20
36	B2	1159	C	C4'-C3'-O3'	-5.92	96.98	109.40
36	B2	1302	U	O4'-C1'-N1	5.92	112.93	108.20
67	Ce	21	ARG	NE-CZ-NH1	5.92	123.26	120.30
83	A5	2080	G	O4'-C1'-N9	5.92	112.93	108.20
83	A5	2126	A	P-O5'-C5'	5.92	130.37	120.90
83	A5	2146	G	C3'-C2'-C1'	5.92	106.23	101.50
83	A5	3550	C	O4'-C1'-C2'	-5.92	99.88	105.80
83	A5	3664	A	C3'-C2'-C1'	-5.92	96.77	101.50
83	A5	3840	G	P-O3'-C3'	-5.92	112.60	119.70
36	B2	600	A	P-O3'-C3'	-5.92	112.60	119.70
83	A5	1060	G	O4'-C1'-C2'	5.92	112.92	107.60
83	A5	2627	G	C1'-O4'-C4'	-5.92	105.17	109.90
36	B2	96	C	C1'-O4'-C4'	-5.91	105.17	109.90
36	B2	900	A	O4'-C1'-C2'	-5.91	99.89	105.80
83	A5	212	U	C4'-C3'-C2'	-5.91	96.69	102.60
83	A5	2153	C	N1-C1'-C2'	5.91	121.69	114.00
2	Ag	36	ARG	CB-CA-C	-5.91	98.58	110.40
22	Ac	11	MET	CG-SD-CE	-5.91	90.74	100.20
83	A5	113	A	P-O3'-C3'	5.91	126.79	119.70
83	A5	179	C	C3'-C2'-C1'	5.91	106.23	101.50
83	A5	867	U	N1-C1'-C2'	5.91	121.68	114.00
83	A5	3775	A	O4'-C4'-C3'	-5.91	98.09	104.00
36	B2	1314	G	C5'-C4'-O4'	5.91	116.19	109.10
83	A5	682	U	C4'-C3'-O3'	5.91	124.82	113.00
83	A5	1053	G	N9-C1'-C2'	-5.91	105.50	112.00
83	A5	3295	U	O4'-C1'-C2'	-5.91	99.89	105.80
83	A5	3770	A	O4'-C1'-N9	5.91	112.93	108.20
83	A5	3951	U	C1'-O4'-C4'	5.91	114.63	109.90
83	A5	1318	A	O4'-C1'-N9	5.91	112.92	108.20
83	A5	1869	C	N1-C1'-C2'	5.91	121.68	114.00
10	AN	19	ARG	NE-CZ-NH2	-5.91	117.35	120.30
29	AG	63	MET	N-CA-CB	5.91	121.23	110.60
36	B2	256	C	P-O3'-C3'	5.91	126.79	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
42	CL	190	ARG	NE-CZ-NH2	-5.91	117.35	120.30
83	A5	123	U	O4'-C1'-C2'	-5.91	99.89	105.80
83	A5	3239	C	C3'-C2'-C1'	5.91	106.22	101.50
86	A8	118	A	N9-C1'-C2'	-5.91	105.50	112.00
36	B2	416	C	C5'-C4'-O4'	5.90	116.18	109.10
41	CO	60	LEU	CB-CA-C	-5.90	98.98	110.20
83	A5	1943	C	O4'-C1'-N1	5.90	112.92	108.20
83	A5	2036	G	C1'-O4'-C4'	5.90	114.62	109.90
83	A5	2810	A	P-O3'-C3'	5.90	126.78	119.70
21	Ab	51	GLN	N-CA-CB	5.90	121.23	110.60
83	A5	1480	U	O4'-C1'-N1	5.90	112.92	108.20
83	A5	3788	G	O4'-C1'-C2'	5.90	112.91	107.60
36	B2	26	A	O4'-C1'-C2'	-5.90	99.90	105.80
36	B2	196	G	C1'-O4'-C4'	-5.90	105.18	109.90
36	B2	1204	A	C1'-O4'-C4'	-5.90	105.18	109.90
36	B2	1743	C	C1'-O4'-C4'	-5.90	105.18	109.90
83	A5	220	G	C5'-C4'-O4'	5.90	116.18	109.10
83	A5	2920	U	C3'-C2'-C1'	5.90	106.22	101.50
83	A5	3115	C	C3'-C2'-C1'	5.90	106.22	101.50
36	B2	870	U	O4'-C1'-N1	5.90	112.92	108.20
36	B2	1215	G	C1'-O4'-C4'	-5.90	105.18	109.90
83	A5	1231	A	N9-C1'-C2'	5.90	121.67	114.00
83	A5	1284	A	P-O3'-C3'	5.90	126.78	119.70
83	A5	1399	A	O4'-C1'-N9	5.90	112.92	108.20
83	A5	1640	U	C2'-C3'-O3'	5.90	123.14	113.70
83	A5	2107	U	C3'-C2'-C1'	5.90	106.22	101.50
81	CE	237	TYR	N-CA-CB	-5.90	99.99	110.60
83	A5	27	A	C3'-C2'-C1'	5.90	106.22	101.50
83	A5	1965	A	C1'-O4'-C4'	5.90	114.62	109.90
15	AB	114	ARG	NE-CZ-NH1	5.89	123.25	120.30
36	B2	2	U	N1-C1'-C2'	5.89	121.66	114.00
36	B2	426	A	N9-C1'-C2'	-5.89	105.52	112.00
83	A5	259	A	O4'-C1'-C2'	-5.89	99.91	105.80
83	A5	370	A	C1'-O4'-C4'	5.89	114.61	109.90
83	A5	1481	G	P-O3'-C3'	-5.89	112.62	119.70
33	AI	98	LYS	N-CA-CB	5.89	121.21	110.60
36	B2	1867	C	O4'-C1'-N1	5.89	112.91	108.20
83	A5	98	G	C1'-O4'-C4'	-5.89	105.19	109.90
83	A5	462	C	C3'-C2'-C1'	5.89	106.21	101.50
83	A5	2897	G	C3'-C2'-C1'	-5.89	96.79	101.50
1	Az	450	VAL	CA-C-N	5.89	133.59	117.10
28	AC	252	TYR	CB-CG-CD2	-5.89	117.47	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	152	A	P-O3'-C3'	-5.89	112.63	119.70
83	A5	188	G	O5'-C5'-C4'	5.89	122.89	111.70
83	A5	1606	G	O4'-C1'-C2'	-5.89	99.91	105.80
83	A5	1789	A	C3'-C2'-C1'	5.89	106.21	101.50
83	A5	2187	U	C1'-O4'-C4'	5.89	114.61	109.90
83	A5	108	A	N9-C1'-C2'	-5.89	105.52	112.00
83	A5	1750	G	N9-C1'-C2'	-5.89	105.52	112.00
36	B2	465	A	C5'-C4'-C3'	5.89	125.42	116.00
53	CT	5	LYS	CA-C-N	5.89	127.97	116.20
63	CB	281	ASN	N-CA-CB	5.89	121.19	110.60
83	A5	2511	C	C3'-C2'-C1'	5.89	106.21	101.50
83	A5	3186	C	O4'-C1'-N1	5.89	112.91	108.20
83	A5	3622	C	P-O5'-C5'	-5.89	111.48	120.90
83	A5	3645	U	O4'-C1'-N1	5.89	112.91	108.20
86	A8	88	C	P-O5'-C5'	5.89	130.32	120.90
1	Az	198	ASP	CA-C-N	5.88	130.15	117.20
45	Ca	66	ARG	NE-CZ-NH1	5.88	123.24	120.30
74	CC	214	TYR	CB-CG-CD2	-5.88	117.47	121.00
83	A5	530	U	C4'-C3'-C2'	-5.88	96.72	102.60
83	A5	2928	G	O4'-C1'-C2'	5.88	112.89	107.60
36	B2	577	C	P-O3'-C3'	5.88	126.76	119.70
36	B2	1604	A	C1'-O4'-C4'	5.88	114.61	109.90
36	B2	1722	U	O4'-C1'-N1	5.88	112.91	108.20
36	B2	1880	C	C3'-C2'-C1'	5.88	106.20	101.50
49	CQ	58	ARG	NE-CZ-NH1	5.88	123.24	120.30
83	A5	1174	G	O4'-C1'-C2'	5.88	112.89	107.60
83	A5	2036	G	N9-C1'-C2'	-5.88	105.53	112.00
2	Ag	309	ARG	NE-CZ-NH2	-5.88	117.36	120.30
36	B2	242	A	P-O3'-C3'	5.88	126.76	119.70
83	A5	1342	U	O4'-C1'-C2'	-5.88	99.92	105.80
83	A5	2836	A	O4'-C1'-N9	5.88	112.90	108.20
36	B2	523	A	P-O5'-C5'	-5.88	111.50	120.90
36	B2	835	A	C1'-O4'-C4'	5.88	114.60	109.90
37	BC	20	A	O4'-C1'-C2'	-5.88	99.92	105.80
83	A5	1973	G	C1'-O4'-C4'	-5.88	105.20	109.90
83	A5	2187	U	O4'-C1'-C2'	-5.88	99.92	105.80
15	AB	109	THR	N-CA-CB	5.88	121.47	110.30
36	B2	150	G	O4'-C1'-N9	5.88	112.90	108.20
36	B2	416	C	O4'-C1'-C2'	-5.88	99.92	105.80
36	B2	902	A	O4'-C1'-C2'	-5.88	99.92	105.80
36	B2	1426	A	O4'-C1'-N9	5.88	112.90	108.20
36	B2	1825	A	N9-C1'-C2'	-5.88	105.53	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	CA	26	ALA	N-CA-CB	5.88	118.33	110.10
63	CB	311	ASP	CB-CG-OD1	5.88	123.59	118.30
83	A5	2787	U	C3'-C2'-C1'	5.88	106.20	101.50
83	A5	3604	G	N9-C1'-C2'	5.88	121.64	114.00
36	B2	1126	A	O4'-C1'-C2'	-5.88	99.92	105.80
83	A5	693	G	C1'-O4'-C4'	-5.88	105.20	109.90
36	B2	324	U	P-O3'-C3'	-5.87	112.65	119.70
36	B2	1610	A	C3'-C2'-C1'	5.87	106.20	101.50
82	CG	43	ASN	N-CA-CB	5.87	121.17	110.60
83	A5	695	A	C1'-O4'-C4'	-5.87	105.20	109.90
83	A5	2569	U	O4'-C1'-N1	5.87	112.90	108.20
83	A5	2904	U	C4'-C3'-C2'	-5.87	96.73	102.60
83	A5	3287	C	C1'-O4'-C4'	-5.87	105.20	109.90
83	A5	3923	C	C3'-C2'-C1'	5.87	106.20	101.50
29	AG	142	ARG	NE-CZ-NH2	-5.87	117.36	120.30
83	A5	665	U	C1'-O4'-C4'	-5.87	105.20	109.90
83	A5	2149	G	P-O3'-C3'	5.87	126.75	119.70
83	A5	2276	C	O4'-C1'-N1	5.87	112.90	108.20
85	A7	4	A	O4'-C1'-C2'	5.87	112.88	107.60
36	B2	974	A	N9-C1'-C2'	5.87	121.63	114.00
83	A5	2715	C	N1-C1'-C2'	5.87	121.63	114.00
85	A7	34	C	C1'-O4'-C4'	-5.87	105.20	109.90
10	AN	58	HIS	CA-C-N	5.87	127.94	116.20
27	AE	82	TYR	CB-CG-CD2	-5.87	117.48	121.00
36	B2	1956	U	C3'-C2'-C1'	5.87	106.19	101.50
69	Cg	20	ARG	NE-CZ-NH1	5.87	123.23	120.30
83	A5	273	G	O4'-C1'-C2'	-5.87	99.93	105.80
83	A5	1632	A	O4'-C1'-C2'	-5.87	99.93	105.80
83	A5	1981	A	O4'-C1'-C2'	-5.87	99.93	105.80
83	A5	2534	G	O4'-C1'-N9	5.87	112.89	108.20
83	A5	2559	C	O4'-C1'-N1	5.87	112.89	108.20
83	A5	3216	C	C3'-C2'-C1'	5.87	106.19	101.50
26	AJ	13	THR	O-C-N	-5.87	113.31	122.70
36	B2	400	U	O4'-C1'-N1	5.87	112.89	108.20
83	A5	911	A	O4'-C4'-C3'	-5.87	98.13	104.00
83	A5	2121	U	P-O5'-C5'	5.87	130.29	120.90
36	B2	1154	U	O4'-C1'-N1	5.87	112.89	108.20
36	B2	1334	U	O4'-C1'-N1	5.87	112.89	108.20
51	CA	212	GLY	C-N-CA	-5.87	109.98	122.30
83	A5	1229	U	C4'-C3'-C2'	5.87	108.47	102.60
81	CE	97	PRO	C-N-CA	5.86	134.61	122.30
83	A5	2546	G	O4'-C1'-N9	5.86	112.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3362	G	C1'-O4'-C4'	-5.86	105.21	109.90
42	CL	71	ALA	C-N-CA	5.86	134.61	122.30
83	A5	3249	C	C1'-O4'-C4'	-5.86	105.21	109.90
36	B2	220	A	O4'-C1'-C2'	-5.86	99.94	105.80
36	B2	1282	A	O4'-C1'-N9	5.86	112.89	108.20
36	B2	1728	G	P-O5'-C5'	-5.86	111.52	120.90
37	BC	13	C	C3'-C2'-C1'	5.86	106.19	101.50
83	A5	1029	C	O4'-C1'-N1	5.86	112.89	108.20
83	A5	3692	G	C4'-C3'-C2'	-5.86	96.74	102.60
36	B2	1441	C	O4'-C1'-N1	5.86	112.89	108.20
83	A5	3117	A	P-O3'-C3'	5.86	126.73	119.70
20	Aa	29	CYS	N-CA-CB	5.86	121.14	110.60
36	B2	279	G	O4'-C1'-N9	5.86	112.89	108.20
36	B2	552	A	N9-C1'-C2'	5.86	121.62	114.00
45	Ca	47	ASP	O-C-N	-5.86	113.33	122.70
83	A5	971	C	O4'-C1'-N1	5.86	112.89	108.20
83	A5	1734	G	P-O5'-C5'	-5.86	111.53	120.90
2	Ag	278	PRO	C-N-CA	5.86	136.34	121.70
83	A5	1301	A	O4'-C1'-N9	5.86	112.88	108.20
83	A5	1876	G	C1'-O4'-C4'	-5.86	105.22	109.90
83	A5	3421	C	O4'-C1'-N1	5.86	112.88	108.20
62	Cb	19	ASN	C-N-CA	5.85	134.59	122.30
83	A5	3577	U	O4'-C1'-N1	5.85	112.88	108.20
36	B2	944	G	C8-N9-C1'	-5.85	119.39	127.00
45	Ca	129	TYR	CB-CG-CD2	5.85	124.51	121.00
61	Ch	89	ARG	NE-CZ-NH2	-5.85	117.37	120.30
68	Cf	46	ARG	N-CA-C	5.85	126.80	111.00
83	A5	3160	A	N9-C1'-C2'	5.85	121.61	114.00
36	B2	1	A	O4'-C1'-C2'	-5.85	99.95	105.80
36	B2	187	A	O3'-P-O5'	5.85	115.12	104.00
36	B2	529	C	C3'-C2'-C1'	5.85	106.18	101.50
83	A5	290	G	O4'-C1'-C2'	5.85	112.86	107.60
83	A5	660	A	N9-C1'-C2'	-5.85	105.56	112.00
83	A5	894	U	O4'-C1'-N1	5.85	112.88	108.20
83	A5	2177	G	O4'-C1'-N9	5.85	112.88	108.20
83	A5	2503	G	P-O3'-C3'	-5.85	112.68	119.70
83	A5	3744	U	N1-C1'-C2'	-5.85	105.57	112.00
83	A5	3882	C	P-O3'-C3'	-5.85	112.68	119.70
84	A9	24	G	C1'-O4'-C4'	5.85	114.58	109.90
83	A5	1606	G	C3'-C2'-C1'	5.85	106.18	101.50
36	B2	1247	C	O4'-C1'-C2'	-5.85	99.95	105.80
83	A5	1696	A	N9-C1'-C2'	-5.85	105.57	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2814	U	C1'-O4'-C4'	5.85	114.58	109.90
6	AX	87	ARG	N-CA-CB	5.84	121.12	110.60
44	CM	113	ARG	NE-CZ-NH2	-5.84	117.38	120.30
83	A5	172	C	C3'-C2'-C1'	5.84	106.18	101.50
83	A5	1900	U	O4'-C1'-C2'	-5.84	99.95	105.80
36	B2	459	U	O4'-C1'-C2'	-5.84	99.96	105.80
83	A5	3720	A	C4'-C3'-C2'	-5.84	96.76	102.60
20	Aa	102	PHE	N-CA-CB	5.84	121.11	110.60
36	B2	396	A	C3'-C2'-C1'	5.84	106.17	101.50
36	B2	712	U	C5'-C4'-O4'	5.84	116.11	109.10
36	B2	1138	U	O4'-C4'-C3'	-5.84	98.16	104.00
36	B2	1390	U	N1-C1'-C2'	5.84	121.59	114.00
43	CV	22	VAL	C-N-CA	5.84	134.57	122.30
83	A5	756	C	C3'-C2'-C1'	5.84	106.17	101.50
83	A5	1023	C	N1-C1'-C2'	5.84	121.59	114.00
83	A5	2923	A	C3'-C2'-C1'	5.84	106.17	101.50
83	A5	3183	G	C3'-C2'-C1'	-5.84	96.83	101.50
85	A7	68	G	N9-C1'-C2'	5.84	121.59	114.00
15	AB	21	VAL	C-N-CA	5.84	136.30	121.70
36	B2	188	C	N1-C1'-C2'	5.84	121.59	114.00
36	B2	1692	C	O4'-C1'-N1	5.84	112.87	108.20
36	B2	1701	C	C1'-O4'-C4'	-5.84	105.23	109.90
83	A5	687	U	P-O3'-C3'	5.84	126.71	119.70
83	A5	1095	G	C1'-O4'-C4'	-5.84	105.23	109.90
83	A5	2735	A	O4'-C1'-C2'	-5.84	99.96	105.80
83	A5	2788	U	C3'-C2'-C1'	5.84	106.17	101.50
26	AJ	160	PHE	CB-CG-CD1	5.84	124.89	120.80
63	CB	292	HIS	N-CA-CB	5.84	121.11	110.60
14	AT	97	ASP	C-N-CA	5.84	134.56	122.30
42	CL	126	PHE	N-CA-CB	5.84	121.11	110.60
83	A5	2126	A	O4'-C1'-C2'	-5.84	99.96	105.80
83	A5	2624	G	O4'-C1'-N9	5.84	112.87	108.20
83	A5	3664	A	C5'-C4'-C3'	-5.84	106.66	116.00
60	Cr	123	ARG	NE-CZ-NH1	5.83	123.22	120.30
63	CB	285	TYR	CB-CG-CD1	5.83	124.50	121.00
83	A5	2013	C	C3'-C2'-C1'	5.83	106.17	101.50
83	A5	3654	C	C1'-O4'-C4'	-5.83	105.23	109.90
85	A7	25	A	P-O5'-C5'	-5.83	111.56	120.90
83	A5	544	U	O4'-C1'-N1	5.83	112.87	108.20
83	A5	1526	G	O4'-C1'-C2'	5.83	112.85	107.60
83	A5	2658	A	C3'-C2'-C1'	5.83	106.17	101.50
83	A5	2818	G	O4'-C4'-C3'	-5.83	98.17	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	110	C	O3'-P-O5'	-5.83	92.92	104.00
1	Az	835	PRO	CA-C-N	5.83	130.03	117.20
12	AR	47	ARG	NE-CZ-NH2	-5.83	117.38	120.30
53	CT	7	TYR	CB-CG-CD2	-5.83	117.50	121.00
54	CP	26	PHE	CB-CA-C	-5.83	98.74	110.40
83	A5	3779	U	P-O5'-C5'	5.83	130.23	120.90
36	B2	338	C	O4'-C1'-N1	5.83	112.86	108.20
36	B2	1108	C	C1'-O4'-C4'	-5.83	105.24	109.90
36	B2	1969	G	C1'-O4'-C4'	-5.83	105.24	109.90
85	A7	10	C	O4'-C1'-N1	5.83	112.86	108.20
36	B2	327	G	P-O3'-C3'	5.83	126.69	119.70
36	B2	969	U	N1-C1'-C2'	5.83	121.58	114.00
67	Ce	128	LEU	C-N-CA	5.83	136.27	121.70
78	Co	48	PHE	N-CA-CB	5.83	121.09	110.60
83	A5	2467	A	O4'-C1'-N9	5.83	112.86	108.20
83	A5	3570	C	C3'-C2'-C1'	5.83	106.16	101.50
83	A5	3791	A	O3'-P-O5'	5.83	115.07	104.00
36	B2	458	C	C1'-O4'-C4'	-5.83	105.24	109.90
36	B2	1953	U	C1'-O4'-C4'	-5.83	105.24	109.90
37	BC	34	A	C1'-O4'-C4'	5.83	114.56	109.90
61	Ch	38	GLY	C-N-CA	5.83	134.53	122.30
83	A5	523	C	O4'-C1'-C2'	-5.83	99.97	105.80
83	A5	1364	A	O4'-C1'-C2'	-5.83	99.97	105.80
83	A5	1886	C	C1'-O4'-C4'	-5.83	105.24	109.90
85	A7	107	C	P-O3'-C3'	5.83	126.69	119.70
36	B2	1875	G	C4'-C3'-C2'	-5.82	96.78	102.60
69	Cg	15	THR	CA-CB-CG2	-5.82	104.25	112.40
2	Ag	53	TYR	CB-CG-CD1	5.82	124.49	121.00
36	B2	189	C	O4'-C1'-C2'	-5.82	99.98	105.80
36	B2	326	U	P-O5'-C5'	-5.82	111.59	120.90
36	B2	998	U	C5'-C4'-O4'	-5.82	102.11	109.10
36	B2	1199	G	O4'-C1'-N9	5.82	112.86	108.20
36	B2	1797	G	O4'-C1'-N9	5.82	112.86	108.20
83	A5	228	C	O3'-P-O5'	5.82	115.06	104.00
83	A5	854	U	O4'-C1'-N1	5.82	112.86	108.20
36	B2	1642	C	O4'-C1'-C2'	-5.82	99.98	105.80
36	B2	1685	U	C3'-C2'-C1'	5.82	106.15	101.50
65	Cc	57	LYS	CB-CA-C	-5.82	98.77	110.40
81	CE	40	LYS	C-N-CA	5.82	136.25	121.70
83	A5	1048	A	O4'-C1'-N9	5.82	112.85	108.20
83	A5	1534	G	N9-C1'-C2'	5.82	121.56	114.00
83	A5	1793	C	C4'-C3'-C2'	5.82	108.42	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3381	C	C3'-C2'-C1'	5.82	106.15	101.50
84	A9	24	G	O4'-C1'-C2'	-5.82	99.98	105.80
31	AH	98	ILE	N-CA-C	5.82	126.70	111.00
36	B2	615	G	C1'-O4'-C4'	-5.82	105.25	109.90
83	A5	380	G	C3'-C2'-C1'	-5.82	96.85	101.50
83	A5	1333	C	O4'-C1'-N1	5.82	112.85	108.20
83	A5	2010	U	C3'-C2'-C1'	5.82	106.15	101.50
83	A5	2923	A	N9-C1'-C2'	-5.82	105.60	112.00
85	A7	70	G	O4'-C1'-N9	5.82	112.85	108.20
83	A5	1292	G	C5'-C4'-C3'	5.81	125.30	116.00
1	Az	605	ASN	C-N-CA	5.81	134.51	122.30
36	B2	246	U	P-O3'-C3'	5.81	126.68	119.70
36	B2	849	U	N1-C1'-C2'	5.81	121.56	114.00
36	B2	1692	C	N1-C1'-C2'	5.81	121.56	114.00
83	A5	543	A	O4'-C1'-N9	5.81	112.85	108.20
83	A5	1719	G	O4'-C1'-C2'	5.81	112.83	107.60
85	A7	31	G	O4'-C1'-N9	5.81	112.85	108.20
83	A5	536	U	O4'-C1'-C2'	-5.81	99.99	105.80
83	A5	911	A	P-O3'-C3'	-5.81	112.73	119.70
83	A5	1760	A	P-O3'-C3'	5.81	126.67	119.70
29	AG	156	PHE	CB-CG-CD1	5.81	124.87	120.80
36	B2	1851	A	O4'-C1'-C2'	-5.81	99.99	105.80
60	Cr	73	TYR	CB-CG-CD1	-5.81	117.51	121.00
83	A5	2584	G	N9-C1'-C2'	5.81	121.55	114.00
5	AO	25	GLU	N-CA-CB	5.81	121.05	110.60
36	B2	220	A	O4'-C1'-N9	5.81	112.85	108.20
36	B2	520	A	O4'-C1'-C2'	-5.81	99.99	105.80
83	A5	3406	G	N9-C1'-C2'	-5.81	105.61	112.00
34	AQ	15	PHE	CB-CG-CD2	-5.81	116.74	120.80
36	B2	977	A	O4'-C1'-N9	5.81	112.84	108.20
83	A5	3117	A	P-O5'-C5'	-5.81	111.61	120.90
36	B2	1123	G	O4'-C1'-C2'	5.80	112.82	107.60
36	B2	1993	U	N1-C1'-C2'	-5.80	105.61	112.00
83	A5	15	A	N9-C1'-C2'	5.80	121.55	114.00
83	A5	748	A	P-O3'-C3'	5.80	126.67	119.70
83	A5	1765	U	O4'-C1'-N1	5.80	112.84	108.20
83	A5	2227	U	O4'-C1'-N1	5.80	112.84	108.20
83	A5	2524	A	C1'-O4'-C4'	5.80	114.54	109.90
83	A5	3293	G	O4'-C1'-C2'	-5.80	100.00	105.80
36	B2	206	U	N1-C1'-C2'	5.80	121.54	114.00
36	B2	474	C	C1'-O4'-C4'	-5.80	105.26	109.90
36	B2	1679	U	C1'-O4'-C4'	5.80	114.54	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1762	A	N9-C1'-C2'	5.80	121.54	114.00
52	CS	87	ARG	NE-CZ-NH2	-5.80	117.40	120.30
83	A5	3970	A	N9-C1'-C2'	-5.80	105.62	112.00
36	B2	440	U	C3'-C2'-C1'	5.80	106.14	101.50
36	B2	1700	U	O4'-C1'-N1	5.80	112.84	108.20
42	CL	126	PHE	C-N-CD	-5.80	107.84	120.60
46	CN	68	ARG	N-CA-CB	5.80	121.04	110.60
54	CP	174	LYS	CB-CA-C	-5.80	98.80	110.40
83	A5	1269	U	O4'-C1'-C2'	-5.80	100.00	105.80
83	A5	1543	C	N1-C1'-C2'	5.80	121.54	114.00
83	A5	3420	U	O4'-C1'-C2'	-5.80	100.00	105.80
1	Az	256	PHE	N-CA-C	5.80	126.66	111.00
83	A5	724	U	C5'-C4'-O4'	5.80	116.06	109.10
83	A5	2172	C	N1-C1'-C2'	5.80	121.54	114.00
86	A8	22	C	P-O5'-C5'	5.80	130.18	120.90
36	B2	377	G	O4'-C1'-C2'	-5.80	100.00	105.80
65	Cc	88	TYR	CB-CG-CD2	5.80	124.48	121.00
70	Ci	112	THR	CA-CB-CG2	-5.80	104.28	112.40
83	A5	528	U	O4'-C1'-N1	5.80	112.84	108.20
83	A5	1074	U	P-O3'-C3'	-5.80	112.75	119.70
83	A5	1107	G	O4'-C1'-N9	5.80	112.84	108.20
36	B2	1599	U	N1-C1'-C2'	5.79	121.53	114.00
36	B2	198	C	P-O3'-C3'	5.79	126.65	119.70
52	CS	118	ARG	NE-CZ-NH2	-5.79	117.40	120.30
83	A5	50	U	C1'-O4'-C4'	-5.79	105.27	109.90
83	A5	280	C	P-O3'-C3'	5.79	126.65	119.70
83	A5	1864	U	O4'-C1'-C2'	-5.79	100.01	105.80
36	B2	143	U	C5'-C4'-O4'	5.79	116.05	109.10
68	Cf	111	LYS	C-N-CA	5.79	136.18	121.70
83	A5	6	U	C3'-C2'-C1'	5.79	106.13	101.50
83	A5	1923	A	C5'-C4'-C3'	-5.79	106.73	116.00
36	B2	175	A	C3'-C2'-C1'	5.79	106.13	101.50
36	B2	1380	U	C1'-O4'-C4'	5.79	114.53	109.90
83	A5	49	A	C3'-C2'-C1'	5.79	106.13	101.50
83	A5	506	A	C1'-O4'-C4'	-5.79	105.27	109.90
83	A5	1148	C	C1'-O4'-C4'	-5.79	105.27	109.90
83	A5	3968	C	O3'-P-O5'	-5.79	93.00	104.00
36	B2	1800	U	O4'-C1'-N1	5.79	112.83	108.20
74	CC	225	ARG	NE-CZ-NH2	-5.79	117.41	120.30
83	A5	739	U	O4'-C1'-N1	5.79	112.83	108.20
36	B2	522	G	C1'-O4'-C4'	5.79	114.53	109.90
36	B2	1788	C	N1-C1'-C2'	-5.79	105.64	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	496	U	C1'-O4'-C4'	-5.79	105.27	109.90
83	A5	1266	A	C3'-C2'-C1'	5.79	106.13	101.50
83	A5	3211	A	C3'-C2'-C1'	-5.79	96.87	101.50
36	B2	124	U	C1'-O4'-C4'	5.78	114.53	109.90
36	B2	1748	A	P-O3'-C3'	5.78	126.64	119.70
60	Cr	76	ARG	NE-CZ-NH2	5.78	123.19	120.30
83	A5	904	U	O3'-P-O5'	5.78	114.99	104.00
83	A5	2140	C	O4'-C1'-C2'	-5.78	100.02	105.80
83	A5	2219	U	O4'-C1'-C2'	-5.78	100.02	105.80
83	A5	2496	A	N9-C1'-C2'	5.78	121.52	114.00
83	A5	2665	C	C5'-C4'-O4'	5.78	116.04	109.10
83	A5	2882	A	C1'-O4'-C4'	-5.78	105.27	109.90
83	A5	3575	G	O4'-C1'-C2'	5.78	112.81	107.60
83	A5	3958	C	O3'-P-O5'	-5.78	93.01	104.00
6	AX	129	SER	N-CA-CB	5.78	119.17	110.50
33	AI	123	ARG	NE-CZ-NH2	-5.78	117.41	120.30
36	B2	1886	G	C4'-C3'-C2'	-5.78	96.82	102.60
36	B2	1985	A	C1'-O4'-C4'	-5.78	105.27	109.90
83	A5	2229	A	O4'-C1'-N9	5.78	112.83	108.20
85	A7	2	C	N1-C1'-C2'	5.78	121.52	114.00
85	A7	59	G	O4'-C1'-N9	5.78	112.83	108.20
33	AI	25	ARG	NE-CZ-NH2	-5.78	117.41	120.30
36	B2	1886	G	P-O3'-C3'	5.78	126.64	119.70
52	CS	10	TYR	CG-CD2-CE2	-5.78	116.67	121.30
83	A5	1780	U	O4'-C1'-N1	5.78	112.83	108.20
83	A5	3878	U	P-O5'-C5'	-5.78	111.65	120.90
36	B2	246	U	O4'-C1'-N1	5.78	112.82	108.20
83	A5	2888	A	C5'-C4'-O4'	5.78	116.03	109.10
83	A5	3345	A	O4'-C1'-N9	5.78	112.82	108.20
36	B2	114	G	O4'-C1'-N9	5.78	112.82	108.20
36	B2	906	C	N1-C1'-C2'	5.78	121.51	114.00
36	B2	1170	G	P-O3'-C3'	-5.78	112.77	119.70
36	B2	1222	C	C3'-C2'-C1'	5.78	106.12	101.50
83	A5	751	A	O4'-C1'-C2'	5.78	112.80	107.60
83	A5	2612	G	O4'-C1'-C2'	5.78	112.80	107.60
83	A5	2809	C	O4'-C1'-C2'	-5.78	100.02	105.80
83	A5	3458	A	C3'-C2'-C1'	-5.78	96.88	101.50
83	A5	3934	C	P-O3'-C3'	-5.78	112.77	119.70
2	Ag	114	PHE	CB-CG-CD1	5.78	124.84	120.80
36	B2	1547	U	P-O5'-C5'	5.78	130.14	120.90
36	B2	1563	C	O4'-C1'-N1	5.78	112.82	108.20
36	B2	1817	C	N1-C1'-C2'	5.78	121.51	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CT	128	LEU	N-CA-C	5.78	126.59	111.00
83	A5	531	C	O4'-C1'-N1	5.78	112.82	108.20
83	A5	1316	U	P-O3'-C3'	5.78	126.63	119.70
83	A5	2120	G	O4'-C1'-N9	5.78	112.82	108.20
83	A5	2217	A	P-O3'-C3'	5.78	126.63	119.70
83	A5	3721	C	P-O3'-C3'	5.78	126.63	119.70
83	A5	103	A	C5'-C4'-O4'	5.77	116.03	109.10
20	Aa	10	ARG	NE-CZ-NH1	5.77	123.19	120.30
26	AJ	134	ARG	NE-CZ-NH1	-5.77	117.41	120.30
27	AE	148	ARG	NE-CZ-NH2	5.77	123.19	120.30
36	B2	1620	G	N9-C1'-C2'	5.77	121.50	114.00
43	CV	73	ARG	NE-CZ-NH1	5.77	123.19	120.30
83	A5	1394	U	N1-C1'-C2'	-5.77	105.65	112.00
83	A5	3569	C	C1'-O4'-C4'	-5.77	105.28	109.90
83	A5	587	U	N1-C1'-C2'	5.77	121.50	114.00
83	A5	1066	A	O3'-P-O5'	5.77	114.96	104.00
83	A5	1174	G	N9-C1'-C2'	5.77	121.50	114.00
83	A5	1311	U	C1'-O4'-C4'	5.77	114.52	109.90
83	A5	3619	U	O4'-C1'-C2'	-5.77	100.03	105.80
83	A5	3933	G	O4'-C1'-C2'	5.77	112.79	107.60
27	AE	76	VAL	CA-CB-CG1	5.77	119.55	110.90
36	B2	568	U	C3'-C2'-C1'	-5.77	96.89	101.50
36	B2	1593	U	O4'-C1'-N1	5.77	112.81	108.20
36	B2	1905	U	C4'-C3'-C2'	-5.77	96.83	102.60
39	Cq	14	PHE	CB-CG-CD1	5.77	124.84	120.80
83	A5	3017	U	C1'-O4'-C4'	-5.77	105.29	109.90
36	B2	1776	G	O4'-C1'-C2'	-5.77	100.03	105.80
83	A5	1765	U	C3'-C2'-C1'	5.77	106.11	101.50
83	A5	2254	U	O4'-C1'-N1	5.77	112.81	108.20
83	A5	2597	A	O4'-C1'-N9	5.77	112.81	108.20
18	AY	36	VAL	N-CA-CB	5.76	124.18	111.50
23	AD	115	LEU	N-CA-C	5.76	126.56	111.00
36	B2	317	A	O4'-C1'-N9	5.76	112.81	108.20
83	A5	531	C	N1-C1'-C2'	5.76	121.49	114.00
83	A5	1480	U	C1'-O4'-C4'	5.76	114.51	109.90
83	A5	3154	C	O4'-C1'-N1	5.76	112.81	108.20
36	B2	1717	A	C1'-O4'-C4'	5.76	114.51	109.90
60	Cr	94	LEU	CB-CA-C	-5.76	99.25	110.20
83	A5	1183	U	P-O5'-C5'	5.76	130.12	120.90
83	A5	2622	A	C1'-O4'-C4'	-5.76	105.29	109.90
83	A5	2782	A	O4'-C1'-C2'	5.76	112.79	107.60
83	A5	3397	U	C4'-C3'-C2'	-5.76	96.84	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	336	A	O4'-C1'-N9	5.76	112.81	108.20
36	B2	463	G	O4'-C1'-C2'	5.76	112.78	107.60
36	B2	509	C	O4'-C1'-C2'	-5.76	100.04	105.80
36	B2	1133	G	O4'-C1'-N9	5.76	112.81	108.20
36	B2	1919	U	O4'-C1'-N1	5.76	112.81	108.20
83	A5	986	A	O4'-C1'-N9	-5.76	103.59	108.20
83	A5	1510	G	P-O3'-C3'	5.76	126.61	119.70
83	A5	2205	G	N9-C1'-C2'	5.76	121.49	114.00
85	A7	115	U	C1'-O4'-C4'	5.76	114.51	109.90
86	A8	47	A	O4'-C1'-C2'	-5.76	100.04	105.80
36	B2	290	A	P-O3'-C3'	5.76	126.61	119.70
51	CA	69	TYR	CB-CG-CD1	-5.76	117.55	121.00
83	A5	267	C	C4'-C3'-C2'	-5.76	96.84	102.60
83	A5	3562	A	C3'-C2'-C1'	5.76	106.11	101.50
29	AG	85	ARG	NE-CZ-NH1	5.76	123.18	120.30
36	B2	711	G	O4'-C1'-N9	5.76	112.81	108.20
36	B2	1162	U	C1'-O4'-C4'	5.76	114.50	109.90
83	A5	2586	A	P-O5'-C5'	-5.76	111.69	120.90
83	A5	3517	U	N1-C1'-C2'	5.76	121.48	114.00
83	A5	3613	G	O4'-C1'-N9	5.76	112.81	108.20
83	A5	3790	A	C1'-O4'-C4'	5.76	114.50	109.90
84	A9	2	G	O4'-C1'-C2'	5.76	112.78	107.60
85	A7	80	U	N1-C1'-C2'	5.76	121.48	114.00
36	B2	963	G	C3'-C2'-C1'	-5.75	96.90	101.50
45	Ca	65	ARG	NE-CZ-NH1	5.75	123.18	120.30
83	A5	681	G	C5'-C4'-O4'	5.75	116.01	109.10
83	A5	1388	C	O4'-C1'-N1	5.75	112.80	108.20
83	A5	3827	G	C3'-C2'-C1'	5.75	106.10	101.50
6	AX	5	ARG	NE-CZ-NH1	5.75	123.18	120.30
36	B2	1851	A	C1'-O4'-C4'	5.75	114.50	109.90
83	A5	615	C	O4'-C1'-C2'	-5.75	100.05	105.80
83	A5	733	A	O4'-C1'-N9	5.75	112.80	108.20
83	A5	1099	U	C5'-C4'-O4'	5.75	116.00	109.10
85	A7	20	U	C1'-O4'-C4'	-5.75	105.30	109.90
23	AD	152	MET	CG-SD-CE	-5.75	91.00	100.20
32	AW	41	MET	CG-SD-CE	-5.75	91.00	100.20
36	B2	114	G	N9-C1'-C2'	-5.75	105.67	112.00
36	B2	592	C	N1-C1'-C2'	5.75	121.48	114.00
83	A5	784	G	C4'-C3'-C2'	-5.75	96.85	102.60
83	A5	1543	C	C3'-C2'-C1'	5.75	106.10	101.50
83	A5	1772	G	O4'-C1'-C2'	5.75	112.78	107.60
83	A5	2035	C	O4'-C1'-N1	5.75	112.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2148	C	O4'-C1'-N1	5.75	112.80	108.20
83	A5	3364	C	C3'-C2'-C1'	5.75	106.10	101.50
83	A5	1792	G	C3'-C2'-C1'	5.75	106.10	101.50
36	B2	924	U	O4'-C1'-C2'	-5.75	100.05	105.80
58	CW	33	ASP	N-CA-CB	5.75	120.95	110.60
60	Cr	45	SER	N-CA-CB	5.75	119.12	110.50
83	A5	1158	C	C3'-C2'-C1'	5.75	106.10	101.50
83	A5	3817	U	P-O3'-C3'	5.75	126.60	119.70
83	A5	3877	G	O4'-C1'-C2'	-5.75	100.05	105.80
1	Az	687	ARG	NE-CZ-NH1	-5.75	117.43	120.30
36	B2	1621	G	O4'-C1'-N9	5.75	112.80	108.20
36	B2	1830	G	O4'-C1'-C2'	-5.75	100.05	105.80
71	Cj	73	ARG	NE-CZ-NH2	-5.75	117.43	120.30
81	CE	225	TYR	N-CA-CB	-5.75	100.25	110.60
83	A5	1181	A	C1'-O4'-C4'	-5.75	105.30	109.90
83	A5	1679	U	O4'-C1'-N1	5.75	112.80	108.20
83	A5	1725	A	C3'-C2'-C1'	-5.75	96.90	101.50
83	A5	2566	A	O3'-P-O5'	5.75	114.92	104.00
83	A5	2991	A	P-O3'-C3'	-5.75	112.81	119.70
83	A5	3224	G	C1'-O4'-C4'	-5.75	105.30	109.90
36	B2	286	A	O4'-C1'-N9	5.75	112.80	108.20
36	B2	422	A	O4'-C1'-N9	5.75	112.80	108.20
83	A5	3490	C	O4'-C1'-N1	5.75	112.80	108.20
83	A5	3848	U	P-O3'-C3'	5.75	126.59	119.70
83	A5	855	A	P-O3'-C3'	5.74	126.59	119.70
83	A5	871	A	C1'-O4'-C4'	5.74	114.50	109.90
83	A5	1404	A	C3'-C2'-C1'	5.74	106.09	101.50
83	A5	1720	A	C4'-C3'-O3'	5.74	124.49	113.00
36	B2	1647	G	O4'-C1'-N9	5.74	112.79	108.20
55	CU	284	ARG	NE-CZ-NH2	-5.74	117.43	120.30
83	A5	211	U	C5'-C4'-C3'	5.74	125.19	116.00
83	A5	2673	A	C1'-O4'-C4'	-5.74	105.31	109.90
85	A7	98	G	C1'-O4'-C4'	-5.74	105.31	109.90
28	AC	149	ARG	NE-CZ-NH2	-5.74	117.43	120.30
36	B2	1097	C	O4'-C1'-N1	5.74	112.79	108.20
36	B2	1191	C	O4'-C1'-C2'	-5.74	100.06	105.80
36	B2	1706	U	N1-C1'-C2'	5.74	121.46	114.00
36	B2	1814	G	O4'-C1'-N9	5.74	112.79	108.20
83	A5	117	C	C5'-C4'-C3'	-5.74	106.81	116.00
83	A5	832	U	C3'-C2'-C1'	5.74	106.09	101.50
83	A5	1569	U	C1'-O4'-C4'	5.74	114.49	109.90
83	A5	2106	C	C3'-C2'-C1'	5.74	106.09	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3789	U	O4'-C1'-N1	5.74	112.79	108.20
1	Az	620	TYR	CB-CG-CD2	-5.74	117.56	121.00
9	Ad	19	ARG	NE-CZ-NH2	-5.74	117.43	120.30
42	CL	132	LYS	CB-CA-C	-5.74	98.92	110.40
48	CD	259	LYS	C-N-CA	5.74	136.04	121.70
83	A5	102	G	C3'-C2'-C1'	5.74	106.09	101.50
1	Az	91	HIS	N-CA-CB	5.74	120.93	110.60
36	B2	1407	U	O4'-C1'-N1	5.74	112.79	108.20
2	Ag	53	TYR	CB-CG-CD2	-5.74	117.56	121.00
83	A5	1733	A	N9-C1'-C2'	-5.74	105.69	112.00
83	A5	2998	U	OP2-P-O3'	5.74	117.82	105.20
36	B2	599	A	C3'-C2'-C1'	5.73	106.09	101.50
51	CA	242	ARG	NE-CZ-NH1	5.73	123.17	120.30
83	A5	210	C	N1-C1'-C2'	5.73	121.45	114.00
36	B2	489	C	N1-C1'-C2'	5.73	121.45	114.00
36	B2	1560	G	O4'-C1'-N9	5.73	112.79	108.20
36	B2	1764	U	C1'-O4'-C4'	-5.73	105.31	109.90
49	CQ	97	LYS	N-CA-C	5.73	126.48	111.00
83	A5	699	U	P-O3'-C3'	-5.73	112.82	119.70
83	A5	829	U	O4'-C1'-C2'	-5.73	100.07	105.80
83	A5	2022	C	C3'-C2'-C1'	5.73	106.09	101.50
85	A7	81	A	O4'-C1'-N9	5.73	112.79	108.20
36	B2	307	U	O4'-C1'-N1	5.73	112.78	108.20
83	A5	14	C	O4'-C1'-N1	5.73	112.78	108.20
83	A5	1264	U	O4'-C1'-N1	5.73	112.78	108.20
83	A5	2129	C	P-O5'-C5'	5.73	130.07	120.90
83	A5	2201	U	C5'-C4'-O4'	5.73	115.98	109.10
83	A5	3106	G	N9-C1'-C2'	-5.73	105.70	112.00
42	CL	55	ARG	NE-CZ-NH2	-5.73	117.44	120.30
45	Ca	109	TYR	CB-CG-CD2	-5.73	117.56	121.00
83	A5	1075	G	P-O3'-C3'	-5.73	112.83	119.70
83	A5	1881	C	O4'-C1'-N1	5.73	112.78	108.20
83	A5	991	A	O4'-C4'-C3'	-5.73	98.27	104.00
83	A5	2843	G	P-O3'-C3'	5.73	126.57	119.70
36	B2	331	G	C1'-O4'-C4'	-5.72	105.32	109.90
83	A5	874	G	O4'-C1'-N9	-5.72	103.62	108.20
83	A5	1973	G	O4'-C1'-N9	5.72	112.78	108.20
83	A5	2714	U	O4'-C1'-N1	5.72	112.78	108.20
83	A5	3000	G	P-O3'-C3'	-5.72	112.83	119.70
85	A7	103	A	N9-C1'-C2'	5.72	121.44	114.00
36	B2	1703	G	C3'-C2'-C1'	-5.72	96.92	101.50
83	A5	28	C	O4'-C1'-C2'	-5.72	100.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2738	C	O4'-C1'-C2'	-5.72	100.08	105.80
83	A5	3200	G	C1'-O4'-C4'	5.72	114.48	109.90
36	B2	1166	U	O3'-P-O5'	-5.72	93.13	104.00
42	CL	101	ARG	NE-CZ-NH2	-5.72	117.44	120.30
83	A5	2086	U	N1-C1'-C2'	-5.72	105.71	112.00
1	Az	449	ASP	C-N-CA	5.72	136.00	121.70
1	Az	713	ARG	NE-CZ-NH1	5.72	123.16	120.30
36	B2	1052	U	O4'-C1'-C2'	5.72	112.75	107.60
83	A5	236	G	P-O3'-C3'	5.72	126.56	119.70
86	A8	8	A	O4'-C1'-N9	5.72	112.78	108.20
37	BC	46	U	C4'-C3'-O3'	5.72	124.44	113.00
47	CI	173	PHE	CB-CG-CD1	5.72	124.80	120.80
83	A5	3537	U	C1'-O4'-C4'	5.72	114.47	109.90
36	B2	1982	C	C1'-O4'-C4'	5.72	114.47	109.90
37	BC	69	G	C1'-O4'-C4'	-5.72	105.33	109.90
51	CA	227	ARG	NE-CZ-NH2	-5.72	117.44	120.30
73	Cl	38	ASN	C-N-CA	5.72	135.99	121.70
36	B2	194	G	C4'-C3'-C2'	-5.71	96.89	102.60
36	B2	1591	U	C5'-C4'-C3'	-5.71	106.86	116.00
37	BC	31	C	N1-C1'-C2'	5.71	121.43	114.00
67	Ce	124	PRO	CA-C-N	5.71	129.77	117.20
83	A5	40	U	C1'-O4'-C4'	5.71	114.47	109.90
83	A5	941	A	O4'-C1'-C2'	-5.71	100.08	105.80
83	A5	1634	A	C1'-O4'-C4'	-5.71	105.33	109.90
83	A5	1885	U	N1-C1'-C2'	5.71	121.43	114.00
83	A5	2746	A	O4'-C1'-N9	5.71	112.77	108.20
83	A5	3035	A	P-O3'-C3'	5.71	126.56	119.70
36	B2	1148	U	O4'-C1'-N1	5.71	112.77	108.20
83	A5	873	U	P-O3'-C3'	-5.71	112.84	119.70
83	A5	1160	U	C1'-O4'-C4'	-5.71	105.33	109.90
1	Az	794	ALA	N-CA-C	5.71	126.42	111.00
36	B2	197	A	P-O3'-C3'	5.71	126.55	119.70
52	CS	83	ARG	NE-CZ-NH2	-5.71	117.44	120.30
78	Co	25	GLN	C-N-CA	5.71	135.98	121.70
83	A5	1175	C	P-O3'-C3'	5.71	126.56	119.70
83	A5	3590	C	N1-C1'-C2'	5.71	121.42	114.00
12	AR	3	ARG	NE-CZ-NH1	5.71	123.16	120.30
36	B2	855	C	C3'-C2'-C1'	5.71	106.07	101.50
36	B2	1132	U	O4'-C1'-N1	5.71	112.77	108.20
83	A5	622	A	N9-C1'-C2'	-5.71	105.72	112.00
83	A5	809	G	P-O3'-C3'	5.71	126.55	119.70
36	B2	476	A	O4'-C1'-N9	5.71	112.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	998	U	C4'-C3'-O3'	5.71	124.41	113.00
36	B2	1944	A	O4'-C1'-C2'	-5.71	100.09	105.80
48	CD	142	PHE	CB-CA-C	-5.71	98.99	110.40
80	CH	174	LEU	C-N-CA	5.71	135.97	121.70
83	A5	221	C	N1-C1'-C2'	5.71	121.42	114.00
83	A5	581	U	O4'-C1'-N1	5.71	112.77	108.20
83	A5	3475	U	O4'-C1'-C2'	-5.71	100.09	105.80
36	B2	203	G	N9-C1'-C2'	5.71	121.42	114.00
36	B2	1650	G	P-O3'-C3'	5.71	126.55	119.70
15	AB	42	ARG	NE-CZ-NH2	-5.70	117.45	120.30
36	B2	573	C	N1-C1'-C2'	5.70	121.42	114.00
83	A5	382	G	O4'-C1'-N9	5.70	112.76	108.20
83	A5	684	A	C1'-O4'-C4'	-5.70	105.34	109.90
83	A5	1311	U	O4'-C1'-N1	5.70	112.76	108.20
83	A5	1567	G	C4'-C3'-C2'	-5.70	96.90	102.60
83	A5	2162	C	C1'-O4'-C4'	5.70	114.46	109.90
83	A5	3206	A	N9-C1'-C2'	5.70	121.42	114.00
83	A5	3297	C	C1'-O4'-C4'	-5.70	105.34	109.90
83	A5	3486	U	C4'-C3'-C2'	-5.70	96.90	102.60
36	B2	395	G	N9-C1'-C2'	-5.70	105.73	112.00
49	CQ	69	PHE	CB-CG-CD2	-5.70	116.81	120.80
56	CX	162	ARG	N-CA-CB	5.70	120.86	110.60
83	A5	1407	C	O4'-C1'-N1	5.70	112.76	108.20
37	BC	65	C	O4'-C1'-N1	5.70	112.76	108.20
46	CN	143	ARG	NE-CZ-NH1	5.70	123.15	120.30
82	CG	41	PRO	CA-C-N	5.70	129.74	117.20
83	A5	568	A	O4'-C1'-C2'	5.70	112.73	107.60
83	A5	591	A	P-O3'-C3'	-5.70	112.86	119.70
83	A5	1251	C	N1-C1'-C2'	5.70	121.41	114.00
83	A5	1631	U	N1-C1'-C2'	-5.70	105.73	112.00
83	A5	2632	U	O4'-C1'-C2'	-5.70	100.10	105.80
79	CJ	30	CYS	N-CA-CB	5.70	120.86	110.60
83	A5	621	A	P-O3'-C3'	-5.70	112.86	119.70
83	A5	2129	C	O4'-C1'-C2'	-5.70	100.10	105.80
83	A5	2813	G	C3'-C2'-C1'	5.70	106.06	101.50
36	B2	237	U	N1-C1'-C2'	5.70	121.41	114.00
74	CC	389	LYS	N-CA-CB	-5.70	100.34	110.60
80	CH	103	THR	N-CA-CB	5.70	121.12	110.30
35	Ah	133	GLY	CA-C-O	-5.70	110.35	120.60
83	A5	920	G	C5'-C4'-O4'	5.70	115.94	109.10
83	A5	3382	G	O4'-C1'-N9	5.70	112.76	108.20
86	A8	30	G	C1'-O4'-C4'	-5.70	105.34	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	CQ	52	PHE	CB-CG-CD2	-5.69	116.81	120.80
64	CF	225	ARG	NE-CZ-NH2	-5.69	117.45	120.30
83	A5	2041	G	O4'-C1'-N9	5.69	112.75	108.20
83	A5	3553	C	C3'-C2'-C1'	5.69	106.06	101.50
36	B2	1522	G	O4'-C1'-N9	5.69	112.75	108.20
47	CI	181	TYR	CA-CB-CG	5.69	124.21	113.40
83	A5	3367	C	O4'-C1'-N1	5.69	112.75	108.20
83	A5	3600	G	C3'-C2'-C1'	-5.69	96.95	101.50
83	A5	3960	U	C1'-O4'-C4'	5.69	114.45	109.90
36	B2	1564	A	O4'-C1'-N9	5.69	112.75	108.20
81	CE	91	THR	CA-CB-CG2	-5.69	104.43	112.40
83	A5	1226	G	C4'-C3'-O3'	5.69	124.38	113.00
36	B2	1633	C	C3'-C2'-C1'	5.69	106.05	101.50
83	A5	436	A	O4'-C1'-C2'	-5.69	100.11	105.80
83	A5	3778	U	O5'-C5'-C4'	5.69	122.51	111.70
6	AX	10	ALA	N-CA-CB	-5.69	102.14	110.10
24	Ae	77	SER	N-CA-CB	5.69	119.03	110.50
36	B2	1099	U	P-O5'-C5'	-5.69	111.80	120.90
36	B2	1192	U	C1'-O4'-C4'	-5.69	105.35	109.90
83	A5	1129	A	O4'-C1'-C2'	5.69	112.72	107.60
83	A5	1690	U	C1'-O4'-C4'	5.69	114.45	109.90
83	A5	2147	C	C3'-C2'-C1'	5.69	106.05	101.50
83	A5	2981	G	O3'-P-O5'	5.69	114.81	104.00
60	Cr	13	ARG	CB-CA-C	-5.68	99.03	110.40
83	A5	426	A	O4'-C1'-N9	-5.68	103.65	108.20
83	A5	2099	C	C3'-C2'-C1'	5.68	106.05	101.50
36	B2	81	U	O4'-C1'-N1	5.68	112.75	108.20
36	B2	138	U	N1-C1'-C2'	5.68	121.39	114.00
36	B2	1045	U	C1'-O4'-C4'	5.68	114.44	109.90
36	B2	1704	G	P-O3'-C3'	-5.68	112.88	119.70
36	B2	1978	C	O4'-C1'-N1	5.68	112.75	108.20
39	Cq	182	PRO	C-N-CA	5.68	135.91	121.70
57	CY	74	TYR	CB-CG-CD1	-5.68	117.59	121.00
83	A5	1606	G	C5'-C4'-O4'	5.68	115.92	109.10
36	B2	1056	C	O4'-C1'-N1	5.68	112.74	108.20
36	B2	1275	U	P-O3'-C3'	5.68	126.52	119.70
36	B2	1677	C	N1-C1'-C2'	5.68	121.38	114.00
36	B2	1940	G	O4'-C1'-C2'	5.68	112.71	107.60
70	Ci	38	ARG	N-CA-C	5.68	126.33	111.00
83	A5	2116	U	O4'-C1'-N1	5.68	112.74	108.20
83	A5	3696	C	P-O5'-C5'	-5.68	111.81	120.90
83	A5	3842	A	C1'-O4'-C4'	5.68	114.44	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AK	2	PHE	N-CA-CB	5.68	120.82	110.60
36	B2	232	C	O4'-C1'-N1	5.68	112.74	108.20
37	BC	29	G	O4'-C1'-N9	5.68	112.74	108.20
79	CJ	161	ARG	NE-CZ-NH2	-5.68	117.46	120.30
86	A8	24	G	C4'-C3'-C2'	-5.68	96.92	102.60
36	B2	431	G	O4'-C1'-N9	5.67	112.74	108.20
36	B2	835	A	C3'-C2'-C1'	5.67	106.04	101.50
36	B2	1168	C	O3'-P-O5'	5.67	114.78	104.00
83	A5	1212	G	C4'-C3'-O3'	-5.67	97.48	109.40
83	A5	3773	G	P-O5'-C5'	5.67	129.98	120.90
8	AS	39	ARG	NE-CZ-NH1	5.67	123.14	120.30
36	B2	43	A	C3'-C2'-C1'	5.67	106.04	101.50
83	A5	424	G	N9-C1'-C2'	-5.67	105.76	112.00
83	A5	1558	A	P-O5'-C5'	5.67	129.98	120.90
83	A5	1609	U	O4'-C1'-C2'	-5.67	100.13	105.80
83	A5	2859	C	C3'-C2'-C1'	5.67	106.04	101.50
36	B2	1345	U	O4'-C1'-N1	5.67	112.74	108.20
46	CN	54	ARG	NE-CZ-NH1	5.67	123.14	120.30
49	CQ	136	THR	CA-CB-CG2	-5.67	104.46	112.40
63	CB	129	ALA	C-N-CA	5.67	135.88	121.70
65	Cc	62	TYR	CB-CG-CD2	-5.67	117.60	121.00
83	A5	1966	A	O4'-C1'-N9	5.67	112.74	108.20
83	A5	2709	U	C1'-O4'-C4'	-5.67	105.36	109.90
83	A5	2764	A	C3'-C2'-C1'	5.67	106.04	101.50
83	A5	3128	U	O4'-C1'-N1	5.67	112.74	108.20
29	AG	132	ARG	NE-CZ-NH2	-5.67	117.47	120.30
36	B2	1254	A	O4'-C1'-N9	5.67	112.73	108.20
48	CD	188	LYS	N-CA-C	5.67	126.31	111.00
63	CB	139	ASP	C-N-CA	5.67	135.87	121.70
83	A5	410	G	N9-C1'-C2'	5.67	121.37	114.00
83	A5	521	U	C1'-O4'-C4'	5.67	114.44	109.90
83	A5	1938	C	N1-C1'-C2'	5.67	121.37	114.00
19	AZ	62	PRO	C-N-CA	5.67	135.87	121.70
36	B2	138	U	P-O3'-C3'	5.67	126.50	119.70
36	B2	1748	A	C5'-C4'-O4'	5.67	115.90	109.10
83	A5	1922	A	C2'-C3'-O3'	5.67	122.77	113.70
83	A5	2501	G	C4'-C3'-C2'	-5.67	96.93	102.60
83	A5	2784	C	O4'-C1'-N1	5.67	112.73	108.20
83	A5	3752	G	N9-C1'-C2'	5.67	121.37	114.00
36	B2	1944	A	N9-C1'-C2'	-5.67	105.77	112.00
80	CH	22	ALA	N-CA-CB	5.67	118.03	110.10
83	A5	2774	G	O4'-C1'-N9	5.67	112.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2831	U	O4'-C1'-C2'	-5.67	100.14	105.80
1	Az	231	PHE	CB-CG-CD2	5.66	124.76	120.80
30	AF	146	ARG	NE-CZ-NH1	5.66	123.13	120.30
35	Ah	124	ARG	NE-CZ-NH2	-5.66	117.47	120.30
36	B2	17	C	N1-C1'-C2'	5.66	121.36	114.00
36	B2	451	C	C5'-C4'-O4'	5.66	115.90	109.10
69	Cg	4	ARG	NE-CZ-NH2	-5.66	117.47	120.30
83	A5	67	A	C1'-O4'-C4'	-5.66	105.37	109.90
83	A5	825	C	C3'-C2'-C1'	5.66	106.03	101.50
83	A5	1630	G	O4'-C1'-C2'	5.66	112.70	107.60
83	A5	1999	U	P-O3'-C3'	-5.66	112.90	119.70
83	A5	2543	C	O4'-C1'-C2'	-5.66	100.14	105.80
85	A7	79	U	C3'-C2'-C1'	5.66	106.03	101.50
83	A5	1719	G	O4'-C1'-N9	5.66	112.73	108.20
36	B2	270	G	C3'-C2'-C1'	5.66	106.03	101.50
36	B2	439	G	N9-C1'-C2'	-5.66	105.77	112.00
47	CI	21	ARG	NE-CZ-NH1	5.66	123.13	120.30
83	A5	1930	G	C3'-C2'-C1'	-5.66	96.97	101.50
83	A5	3651	C	C4'-C3'-C2'	-5.66	96.94	102.60
36	B2	360	G	O4'-C1'-N9	5.66	112.73	108.20
66	Cd	23	THR	CA-CB-CG2	-5.66	104.48	112.40
83	A5	917	G	O4'-C1'-N9	5.66	112.73	108.20
83	A5	1145	C	O4'-C1'-N1	5.66	112.73	108.20
83	A5	2531	A	C4'-C3'-C2'	-5.66	96.94	102.60
83	A5	3604	G	C1'-O4'-C4'	-5.66	105.37	109.90
83	A5	3724	U	C1'-O4'-C4'	5.66	114.43	109.90
83	A5	1780	U	O4'-C1'-C2'	-5.66	100.14	105.80
30	AF	46	ARG	NE-CZ-NH1	5.66	123.13	120.30
36	B2	79	A	P-O3'-C3'	5.66	126.48	119.70
36	B2	1746	A	C1'-O4'-C4'	-5.66	105.38	109.90
50	CR	100	ARG	NE-CZ-NH1	5.66	123.13	120.30
64	CF	64	TYR	CB-CG-CD2	-5.66	117.61	121.00
83	A5	815	A	C1'-O4'-C4'	-5.66	105.38	109.90
83	A5	3559	A	P-O5'-C5'	-5.66	111.85	120.90
36	B2	1667	A	C1'-O4'-C4'	-5.65	105.38	109.90
36	B2	1823	A	C5'-C4'-O4'	5.65	115.88	109.10
36	B2	854	G	O4'-C1'-N9	5.65	112.72	108.20
36	B2	1297	C	N1-C1'-C2'	5.65	121.35	114.00
36	B2	1625	G	N9-C1'-C2'	5.65	121.35	114.00
64	CF	81	ARG	NE-CZ-NH2	-5.65	117.47	120.30
83	A5	512	A	C1'-O4'-C4'	5.65	114.42	109.90
83	A5	2095	U	P-O5'-C5'	5.65	129.94	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2509	G	O4'-C1'-N9	5.65	112.72	108.20
83	A5	299	G	O4'-C1'-N9	5.65	112.72	108.20
83	A5	1043	G	C3'-C2'-C1'	-5.65	96.98	101.50
83	A5	1809	A	P-O5'-C5'	5.65	129.94	120.90
83	A5	1990	G	P-O5'-C5'	-5.65	111.86	120.90
83	A5	3664	A	N9-C1'-C2'	5.65	121.34	114.00
86	A8	33	U	O4'-C1'-C2'	5.65	112.68	107.60
23	AD	204	LYS	CA-C-N	5.65	132.91	117.10
36	B2	1167	U	O3'-P-O5'	5.65	114.73	104.00
36	B2	1675	A	C3'-C2'-C1'	5.65	106.02	101.50
36	B2	1777	U	O3'-P-O5'	5.65	114.73	104.00
79	CJ	37	ARG	NE-CZ-NH2	-5.65	117.48	120.30
83	A5	405	A	C1'-O4'-C4'	5.65	114.42	109.90
83	A5	741	C	O4'-C1'-C2'	5.65	112.68	107.60
83	A5	1782	C	N1-C1'-C2'	5.65	121.34	114.00
83	A5	2631	G	O4'-C1'-C2'	5.65	112.68	107.60
83	A5	3411	C	O4'-C1'-C2'	-5.65	100.15	105.80
85	A7	50	A	O4'-C1'-N9	5.65	112.72	108.20
1	Az	799	VAL	CA-C-N	5.65	129.62	117.20
83	A5	1979	A	C1'-O4'-C4'	-5.65	105.38	109.90
83	A5	2001	U	O4'-C1'-N1	5.65	112.72	108.20
83	A5	3667	C	O4'-C1'-N1	5.65	112.72	108.20
85	A7	27	A	C3'-C2'-C1'	5.65	106.02	101.50
36	B2	1496	U	P-O3'-C3'	5.64	126.47	119.70
41	CO	73	PHE	CB-CG-CD2	-5.64	116.85	120.80
55	CU	220	LYS	N-CA-CB	5.64	120.76	110.60
83	A5	643	U	C4'-C3'-C2'	-5.64	96.96	102.60
83	A5	1161	C	O4'-C1'-C2'	-5.64	100.16	105.80
83	A5	1738	U	C3'-C2'-C1'	5.64	106.02	101.50
83	A5	2061	G	O3'-P-O5'	-5.64	93.28	104.00
83	A5	2832	G	O4'-C1'-N9	5.64	112.72	108.20
83	A5	3774	U	N1-C1'-C2'	5.64	121.34	114.00
83	A5	3903	U	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	23	G	P-O5'-C5'	-5.64	111.87	120.90
36	B2	1277	A	O4'-C1'-N9	5.64	112.71	108.20
45	Ca	48	LYS	N-CA-C	5.64	126.23	111.00
54	CP	26	PHE	CB-CG-CD2	-5.64	116.85	120.80
78	Co	38	ARG	NE-CZ-NH2	-5.64	117.48	120.30
78	Co	56	PHE	CB-CG-CD1	-5.64	116.85	120.80
83	A5	666	A	O4'-C1'-N9	5.64	112.71	108.20
83	A5	1007	A	C1'-O4'-C4'	-5.64	105.39	109.90
83	A5	2645	C	O4'-C1'-N1	5.64	112.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	CQ	116	ALA	C-N-CA	5.64	134.15	122.30
83	A5	586	C	N1-C1'-C2'	5.64	121.33	114.00
83	A5	1621	A	O4'-C1'-N9	5.64	112.71	108.20
83	A5	2225	A	O4'-C1'-N9	5.64	112.71	108.20
83	A5	3555	U	P-O5'-C5'	-5.64	111.88	120.90
83	A5	3745	U	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	972	G	O4'-C1'-N9	5.64	112.71	108.20
83	A5	161	G	O4'-C1'-C2'	-5.64	100.16	105.80
83	A5	1353	G	P-O5'-C5'	-5.64	111.88	120.90
36	B2	1799	A	C1'-O4'-C4'	-5.64	105.39	109.90
13	AP	131	HIS	CA-CB-CG	-5.64	104.02	113.60
83	A5	397	C	C1'-O4'-C4'	-5.64	105.39	109.90
83	A5	856	A	C5'-C4'-C3'	5.64	125.02	116.00
83	A5	937	G	C1'-O4'-C4'	-5.64	105.39	109.90
83	A5	1323	C	C1'-O4'-C4'	5.64	114.41	109.90
86	A8	30	G	C3'-C2'-C1'	-5.64	96.99	101.50
36	B2	76	A	P-O3'-C3'	-5.63	112.94	119.70
36	B2	584	G	O4'-C1'-N9	5.63	112.71	108.20
83	A5	3002	U	O4'-C1'-N1	-5.63	103.69	108.20
35	Ah	124	ARG	NE-CZ-NH1	5.63	123.12	120.30
36	B2	1554	U	N1-C1'-C2'	-5.63	105.80	112.00
36	B2	545	A	C1'-O4'-C4'	-5.63	105.39	109.90
36	B2	905	U	C3'-C2'-C1'	-5.63	96.99	101.50
70	Ci	86	ARG	NE-CZ-NH2	-5.63	117.48	120.30
81	CE	20	HIS	C-N-CD	-5.63	108.21	120.60
81	CE	93	ARG	NE-CZ-NH2	5.63	123.12	120.30
83	A5	707	C	N1-C1'-C2'	5.63	121.32	114.00
83	A5	1149	C	C1'-O4'-C4'	-5.63	105.39	109.90
83	A5	3354	U	P-O5'-C5'	-5.63	111.89	120.90
84	A9	20	U	P-O3'-C3'	5.63	126.46	119.70
36	B2	1598	A	O4'-C1'-N9	5.63	112.70	108.20
83	A5	1053	G	O4'-C1'-N9	5.63	112.70	108.20
83	A5	2553	U	C3'-C2'-C1'	5.63	106.00	101.50
83	A5	2896	U	C1'-O4'-C4'	-5.63	105.40	109.90
29	AG	69	THR	N-CA-C	5.63	126.20	111.00
31	AH	64	ILE	CA-C-N	5.63	132.86	117.10
83	A5	682	U	P-O3'-C3'	5.63	126.45	119.70
83	A5	1350	A	C1'-O4'-C4'	-5.63	105.40	109.90
83	A5	1455	A	C1'-O4'-C4'	5.63	114.40	109.90
83	A5	2052	G	N9-C1'-C2'	5.63	121.32	114.00
83	A5	1922	A	P-O3'-C3'	-5.63	112.95	119.70
83	A5	3725	U	C1'-O4'-C4'	5.63	114.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	383	A	O4'-C1'-N9	5.62	112.70	108.20
51	CA	67	TYR	CG-CD2-CE2	-5.62	116.80	121.30
36	B2	118	C	N1-C1'-C2'	5.62	121.31	114.00
36	B2	692	U	P-O5'-C5'	5.62	129.90	120.90
36	B2	863	A	O3'-P-O5'	5.62	114.69	104.00
36	B2	1687	C	N1-C1'-C2'	5.62	121.31	114.00
60	Cr	28	PRO	N-CA-CB	-5.62	96.41	102.60
81	CE	62	ILE	C-N-CA	5.62	135.76	121.70
83	A5	587	U	O4'-C1'-N1	5.62	112.70	108.20
83	A5	1158	C	O4'-C1'-C2'	-5.62	100.18	105.80
83	A5	1907	U	C4'-C3'-C2'	-5.62	96.98	102.60
83	A5	1984	U	N1-C1'-C2'	5.62	121.31	114.00
83	A5	2903	U	O4'-C1'-C2'	-5.62	100.18	105.80
83	A5	3515	C	O4'-C1'-N1	-5.62	103.70	108.20
83	A5	3925	G	C3'-C2'-C1'	5.62	106.00	101.50
84	A9	11	A	C5'-C4'-O4'	5.62	115.85	109.10
1	Az	72	SER	N-CA-C	5.62	126.18	111.00
15	AB	141	PHE	CB-CG-CD2	-5.62	116.86	120.80
83	A5	450	G	C3'-C2'-C1'	-5.62	97.00	101.50
83	A5	533	A	C3'-C2'-C1'	-5.62	97.00	101.50
83	A5	717	A	O4'-C1'-N9	-5.62	103.70	108.20
83	A5	3207	C	O4'-C4'-C3'	-5.62	98.38	104.00
30	AF	103	LYS	N-CA-CB	5.62	120.72	110.60
83	A5	2038	A	C4'-C3'-C2'	-5.62	96.98	102.60
83	A5	2725	U	C3'-C2'-C1'	5.62	106.00	101.50
43	CV	140	ALA	N-CA-CB	5.62	117.97	110.10
83	A5	1934	C	C1'-O4'-C4'	-5.62	105.41	109.90
36	B2	510	U	O4'-C1'-N1	5.62	112.69	108.20
36	B2	987	A	C3'-C2'-C1'	5.62	105.99	101.50
45	Ca	47	ASP	CA-C-N	5.62	129.56	117.20
83	A5	3384	C	N1-C1'-C2'	5.62	121.30	114.00
36	B2	527	C	N1-C1'-C2'	5.62	121.30	114.00
36	B2	1113	A	C3'-C2'-C1'	-5.62	97.01	101.50
36	B2	1126	A	O4'-C1'-N9	5.62	112.69	108.20
36	B2	1915	A	O4'-C1'-N9	5.62	112.69	108.20
80	CH	124	VAL	CA-CB-CG2	-5.62	102.47	110.90
83	A5	524	A	N9-C1'-C2'	-5.62	105.82	112.00
83	A5	1794	G	C3'-C2'-C1'	-5.62	97.01	101.50
83	A5	2822	C	C4'-C3'-C2'	-5.62	96.98	102.60
83	A5	2999	U	P-O3'-C3'	5.62	126.44	119.70
83	A5	3935	G	P-O5'-C5'	5.62	129.88	120.90
36	B2	250	U	O4'-C1'-N1	5.61	112.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1933	U	O4'-C1'-N1	5.61	112.69	108.20
77	Cp	65	ALA	N-CA-CB	5.61	117.96	110.10
83	A5	1156	U	N1-C1'-C2'	5.61	121.30	114.00
83	A5	1310	A	C1'-O4'-C4'	5.61	114.39	109.90
83	A5	1772	G	C1'-O4'-C4'	-5.61	105.41	109.90
83	A5	3643	C	O4'-C1'-C2'	-5.61	100.19	105.80
83	A5	206	C	N1-C1'-C2'	5.61	121.30	114.00
83	A5	3855	A	N9-C1'-C2'	-5.61	105.83	112.00
36	B2	340	A	C3'-C2'-C1'	5.61	105.99	101.50
58	CW	70	LYS	N-CA-CB	5.61	120.70	110.60
83	A5	3200	G	N9-C1'-C2'	-5.61	105.83	112.00
85	A7	115	U	N1-C1'-C2'	-5.61	105.83	112.00
33	AI	67	TRP	CB-CG-CD1	5.61	134.29	127.00
36	B2	323	U	C4'-C3'-O3'	-5.61	97.62	109.40
36	B2	421	A	O4'-C1'-C2'	-5.61	100.19	105.80
83	A5	791	C	C3'-C2'-C1'	5.61	105.99	101.50
83	A5	2629	G	O4'-C1'-N9	5.61	112.69	108.20
2	Ag	300	PHE	CB-CG-CD2	-5.61	116.88	120.80
28	AC	206	TYR	CB-CG-CD2	-5.61	117.64	121.00
36	B2	1119	G	N9-C1'-C2'	5.61	121.29	114.00
39	Cq	86	VAL	CA-CB-CG2	-5.61	102.49	110.90
40	CK	92	ARG	NE-CZ-NH1	5.61	123.10	120.30
63	CB	248	LEU	N-CA-C	5.61	126.14	111.00
83	A5	465	U	C4'-C3'-C2'	-5.61	96.99	102.60
83	A5	1068	C	O4'-C1'-C2'	-5.61	100.19	105.80
83	A5	1220	U	N1-C1'-C2'	-5.61	105.83	112.00
83	A5	1492	C	C5'-C4'-C3'	-5.61	107.03	116.00
83	A5	1729	G	C1'-O4'-C4'	-5.61	105.41	109.90
83	A5	3662	G	P-O3'-C3'	5.61	126.43	119.70
16	AA	158	ASP	CA-C-N	5.61	129.53	117.20
36	B2	1453	G	N9-C1'-C2'	-5.61	105.83	112.00
36	B2	1657	C	P-O5'-C5'	-5.61	111.93	120.90
36	B2	1705	G	C4'-C3'-C2'	-5.61	97.00	102.60
46	CN	50	ARG	N-CA-CB	5.61	120.69	110.60
69	Cg	4	ARG	NE-CZ-NH1	5.61	123.10	120.30
83	A5	2631	G	O4'-C1'-N9	5.61	112.69	108.20
62	Cb	38	LYS	CA-C-N	5.60	129.53	117.20
83	A5	1179	U	P-O3'-C3'	5.60	126.42	119.70
83	A5	3872	C	P-O3'-C3'	5.60	126.42	119.70
36	B2	110	U	O4'-C1'-N1	5.60	112.68	108.20
36	B2	1276	G	O4'-C1'-N9	5.60	112.68	108.20
49	CQ	33	ARG	NE-CZ-NH1	5.60	123.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	354	A	O4'-C1'-C2'	5.60	112.64	107.60
83	A5	3700	U	O4'-C1'-N1	5.60	112.68	108.20
83	A5	3906	U	P-O5'-C5'	5.60	129.86	120.90
36	B2	924	U	C4'-C3'-C2'	-5.60	97.00	102.60
36	B2	1286	G	C1'-O4'-C4'	-5.60	105.42	109.90
36	B2	160	G	O4'-C1'-N9	5.60	112.68	108.20
80	CH	91	ARG	NE-CZ-NH1	-5.60	117.50	120.30
83	A5	461	U	C2'-C3'-O3'	5.60	122.66	113.70
83	A5	1132	U	C3'-C2'-C1'	5.60	105.98	101.50
83	A5	1639	U	P-O3'-C3'	5.60	126.42	119.70
83	A5	3166	C	N1-C1'-C2'	5.60	121.28	114.00
84	A9	24	G	O4'-C1'-N9	5.60	112.68	108.20
36	B2	18	C	O4'-C1'-C2'	-5.60	100.20	105.80
36	B2	636	G	C3'-C2'-C1'	5.60	105.98	101.50
36	B2	1837	G	C1'-O4'-C4'	-5.60	105.42	109.90
83	A5	748	A	O4'-C1'-N9	5.60	112.68	108.20
83	A5	866	C	C5'-C4'-C3'	5.60	124.95	116.00
83	A5	995	G	C1'-O4'-C4'	-5.60	105.42	109.90
83	A5	1803	C	C3'-C2'-C1'	5.60	105.98	101.50
83	A5	3252	G	C3'-C2'-C1'	-5.60	97.02	101.50
36	B2	1383	A	C3'-C2'-C1'	-5.60	97.02	101.50
48	CD	12	TYR	CB-CG-CD2	5.60	124.36	121.00
83	A5	365	A	O4'-C1'-N9	5.60	112.68	108.20
83	A5	1800	U	O4'-C1'-N1	5.60	112.68	108.20
83	A5	1916	G	O4'-C1'-C2'	-5.60	100.20	105.80
36	B2	1243	G	C1'-O4'-C4'	-5.59	105.42	109.90
36	B2	1446	G	C1'-O4'-C4'	-5.59	105.42	109.90
83	A5	1749	A	O4'-C1'-N9	5.59	112.67	108.20
83	A5	2016	U	O4'-C1'-N1	5.59	112.67	108.20
83	A5	3458	A	C1'-O4'-C4'	-5.59	105.42	109.90
83	A5	3767	G	N9-C1'-C2'	-5.59	105.84	112.00
83	A5	3851	U	C3'-C2'-C1'	5.59	105.98	101.50
48	CD	95	TYR	CB-CA-C	-5.59	99.21	110.40
83	A5	2833	U	C3'-C2'-C1'	5.59	105.97	101.50
36	B2	1423	A	C1'-O4'-C4'	-5.59	105.43	109.90
36	B2	1434	U	C1'-O4'-C4'	-5.59	105.43	109.90
83	A5	1907	U	N1-C1'-C2'	-5.59	105.85	112.00
83	A5	3454	G	O4'-C1'-N9	5.59	112.67	108.20
83	A5	3618	A	C3'-C2'-C1'	-5.59	97.03	101.50
39	Cq	151	THR	CA-CB-CG2	-5.59	104.57	112.40
83	A5	1385	G	O4'-C1'-N9	5.59	112.67	108.20
83	A5	2587	U	O5'-C5'-C4'	-5.59	101.08	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	CV	48	ARG	NE-CZ-NH2	-5.59	117.51	120.30
83	A5	2885	A	C2'-C3'-O3'	5.59	122.64	113.70
85	A7	109	U	P-O3'-C3'	5.59	126.41	119.70
83	A5	1001	A	O4'-C1'-C2'	-5.59	100.21	105.80
83	A5	1127	C	N1-C1'-C2'	5.59	121.26	114.00
85	A7	10	C	N1-C1'-C2'	-5.59	105.86	112.00
60	Cr	27	LYS	N-CA-CB	-5.58	100.55	110.60
36	B2	992	A	O4'-C1'-N9	5.58	112.67	108.20
36	B2	1801	U	C4'-C3'-C2'	-5.58	97.02	102.60
70	Ci	37	SER	C-N-CA	5.58	135.66	121.70
83	A5	245	G	O4'-C1'-C2'	5.58	112.62	107.60
83	A5	3144	U	O4'-C1'-C2'	-5.58	100.22	105.80
83	A5	3251	C	N1-C1'-C2'	5.58	121.26	114.00
1	Az	684	ARG	CB-CA-C	5.58	121.56	110.40
36	B2	1079	A	P-O3'-C3'	5.58	126.40	119.70
36	B2	1344	A	C3'-C2'-C1'	5.58	105.97	101.50
83	A5	398	U	O4'-C1'-N1	5.58	112.67	108.20
83	A5	1268	A	P-O5'-C5'	-5.58	111.97	120.90
83	A5	1374	C	N1-C1'-C2'	5.58	121.26	114.00
83	A5	628	A	O4'-C1'-N9	5.58	112.66	108.20
83	A5	1313	A	O4'-C1'-N9	5.58	112.66	108.20
74	CC	193	ARG	NE-CZ-NH1	5.58	123.09	120.30
83	A5	1382	U	P-O3'-C3'	5.58	126.39	119.70
83	A5	2489	G	N9-C1'-C2'	-5.58	105.86	112.00
83	A5	2857	C	C3'-C2'-C1'	5.58	105.96	101.50
83	A5	3417	C	C2'-C3'-O3'	5.58	122.63	113.70
81	CE	21	PRO	CA-N-CD	-5.58	103.69	111.50
83	A5	1556	C	C1'-O4'-C4'	-5.58	105.44	109.90
83	A5	2069	U	O4'-C1'-N1	5.58	112.66	108.20
83	A5	2686	C	C1'-O4'-C4'	-5.58	105.44	109.90
83	A5	3631	C	O4'-C1'-N1	5.58	112.66	108.20
1	Az	268	GLU	CA-C-N	5.58	129.47	117.20
36	B2	897	A	C3'-C2'-C1'	-5.58	97.04	101.50
36	B2	1623	C	C3'-C2'-C1'	5.58	105.96	101.50
37	BC	18	G	O3'-P-O5'	5.58	114.59	104.00
83	A5	764	A	O4'-C1'-N9	5.58	112.66	108.20
83	A5	2543	C	C3'-C2'-C1'	5.58	105.96	101.50
83	A5	3274	A	C3'-C2'-C1'	5.58	105.96	101.50
83	A5	3647	A	O4'-C1'-C2'	-5.58	100.22	105.80
83	A5	3685	U	P-O5'-C5'	5.58	129.82	120.90
85	A7	40	C	O5'-C5'-C4'	-5.58	101.11	111.70
85	A7	53	U	O4'-C1'-C2'	-5.58	100.22	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Aa	107	ALA	CA-C-N	5.57	129.46	117.20
36	B2	1183	U	O4'-C1'-N1	5.57	112.66	108.20
39	Cq	44	ARG	NE-CZ-NH2	-5.57	117.51	120.30
83	A5	549	A	O4'-C1'-C2'	-5.57	100.23	105.80
83	A5	3485	U	C5'-C4'-O4'	5.57	115.79	109.10
37	BC	41	A	N9-C1'-C2'	-5.57	105.87	112.00
41	CO	73	PHE	CB-CG-CD1	5.57	124.70	120.80
83	A5	1332	C	C5'-C4'-O4'	5.57	115.78	109.10
83	A5	2288	G	P-O5'-C5'	-5.57	111.99	120.90
36	B2	1581	A	O4'-C1'-C2'	-5.57	100.23	105.80
83	A5	1390	C	C3'-C2'-C1'	5.57	105.95	101.50
36	B2	543	A	C1'-O4'-C4'	-5.57	105.45	109.90
52	CS	23	PRO	N-CA-C	5.57	126.57	112.10
83	A5	1598	A	C3'-C2'-C1'	5.57	105.95	101.50
83	A5	1661	C	C3'-C2'-C1'	5.57	105.95	101.50
83	A5	2212	A	N9-C1'-C2'	5.57	121.24	114.00
83	A5	2541	C	O4'-C1'-N1	5.57	112.65	108.20
9	Ad	48	ASN	C-N-CA	5.57	135.61	121.70
36	B2	248	G	C3'-C2'-C1'	5.57	105.95	101.50
36	B2	932	U	O4'-C4'-C3'	-5.57	98.43	104.00
83	A5	2928	G	O4'-C1'-N9	5.57	112.65	108.20
83	A5	3792	A	O4'-C4'-C3'	-5.57	98.44	104.00
83	A5	3834	A	C3'-C2'-C1'	5.57	105.95	101.50
83	A5	1362	G	C1'-O4'-C4'	-5.56	105.45	109.90
36	B2	651	C	O4'-C1'-N1	5.56	112.65	108.20
74	CC	152	GLU	N-CA-CB	5.56	120.61	110.60
83	A5	1873	A	N9-C1'-C2'	5.56	121.23	114.00
83	A5	2131	C	O3'-P-O5'	5.56	114.57	104.00
83	A5	2634	A	C5'-C4'-O4'	5.56	115.77	109.10
83	A5	3845	A	N9-C1'-C2'	-5.56	105.88	112.00
83	A5	3949	U	C3'-C2'-C1'	5.56	105.95	101.50
42	CL	96	ALA	N-CA-C	5.56	126.01	111.00
83	A5	2085	G	O4'-C1'-N9	5.56	112.65	108.20
24	Ae	107	ARG	NE-CZ-NH2	-5.56	117.52	120.30
36	B2	1288	G	O4'-C1'-N9	-5.56	103.75	108.20
48	CD	289	TYR	CB-CG-CD1	5.56	124.34	121.00
83	A5	967	C	O4'-C1'-N1	5.56	112.65	108.20
83	A5	3004	A	O4'-C1'-C2'	-5.56	100.24	105.80
83	A5	3238	G	O4'-C1'-N9	5.56	112.65	108.20
83	A5	3263	C	C1'-O4'-C4'	-5.56	105.45	109.90
36	B2	643	A	P-O3'-C3'	5.56	126.37	119.70
36	B2	1464	U	O4'-C1'-N1	5.56	112.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2100	U	N1-C1'-C2'	-5.56	105.89	112.00
83	A5	2530	C	C3'-C2'-C1'	5.56	105.95	101.50
83	A5	3335	A	O4'-C1'-C2'	-5.56	100.24	105.80
83	A5	1071	U	C5'-C4'-C3'	-5.56	107.11	116.00
83	A5	3824	C	O4'-C1'-C2'	-5.56	100.24	105.80
5	AO	99	ALA	O-C-N	-5.55	113.81	122.70
8	AS	38	ARG	NE-CZ-NH2	5.55	123.08	120.30
36	B2	1732	G	O4'-C1'-N9	5.55	112.64	108.20
36	B2	1874	C	P-O5'-C5'	5.55	129.79	120.90
83	A5	1810	A	P-O3'-C3'	5.55	126.37	119.70
83	A5	2086	U	C1'-O4'-C4'	5.55	114.34	109.90
83	A5	2095	U	O4'-C1'-N1	5.55	112.64	108.20
83	A5	3145	U	C1'-O4'-C4'	5.55	114.34	109.90
83	A5	3376	C	O4'-C1'-C2'	-5.55	100.25	105.80
83	A5	1409	G	C1'-O4'-C4'	-5.55	105.46	109.90
83	A5	2156	U	O4'-C1'-C2'	-5.55	100.25	105.80
63	CB	300	LYS	N-CA-CB	5.55	120.59	110.60
83	A5	194	A	O4'-C1'-N9	5.55	112.64	108.20
83	A5	1647	A	O4'-C1'-N9	-5.55	103.76	108.20
7	AM	124	GLU	N-CA-CB	5.55	120.59	110.60
33	AI	53	THR	CA-CB-CG2	-5.55	104.63	112.40
36	B2	1622	U	O4'-C1'-C2'	-5.55	100.25	105.80
42	CL	125	LEU	N-CA-C	5.55	125.98	111.00
70	Ci	33	GLY	C-N-CA	5.55	135.57	121.70
83	A5	1715	G	O4'-C1'-C2'	5.55	112.59	107.60
83	A5	2041	G	OP1-P-O3'	5.55	117.41	105.20
83	A5	2669	A	C1'-O4'-C4'	-5.55	105.46	109.90
83	A5	3357	C	O4'-C1'-C2'	-5.55	100.25	105.80
83	A5	3623	G	C1'-O4'-C4'	-5.55	105.46	109.90
28	AC	207	THR	N-CA-CB	5.55	120.84	110.30
36	B2	1110	A	O3'-P-O5'	-5.55	93.46	104.00
36	B2	1663	A	O4'-C1'-C2'	5.55	112.59	107.60
83	A5	3228	A	O4'-C1'-N9	-5.55	103.76	108.20
83	A5	3316	U	N1-C1'-C2'	5.55	121.21	114.00
36	B2	518	G	C4'-C3'-C2'	-5.55	97.05	102.60
83	A5	401	G	O4'-C1'-N9	5.55	112.64	108.20
83	A5	562	U	O4'-C1'-N1	5.55	112.64	108.20
83	A5	1403	C	O4'-C1'-N1	5.55	112.64	108.20
83	A5	3701	U	O4'-C4'-C3'	-5.55	98.45	104.00
83	A5	3754	C	O4'-C1'-C2'	-5.55	100.25	105.80
36	B2	287	C	C3'-C2'-C1'	5.54	105.94	101.50
36	B2	1231	A	O4'-C1'-N9	5.54	112.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	CP	69	ARG	NE-CZ-NH2	-5.54	117.53	120.30
83	A5	1210	A	C3'-C2'-C1'	5.54	105.94	101.50
83	A5	2241	U	O4'-C1'-C2'	-5.54	100.26	105.80
47	CI	3	ARG	NE-CZ-NH1	5.54	123.07	120.30
60	Cr	28	PRO	N-CA-C	5.54	126.51	112.10
83	A5	161	G	P-O3'-C3'	5.54	126.35	119.70
83	A5	1392	A	N9-C1'-C2'	-5.54	105.90	112.00
83	A5	2160	C	C1'-O4'-C4'	-5.54	105.47	109.90
85	A7	29	C	C5'-C4'-C3'	5.54	124.87	116.00
36	B2	1653	C	C5'-C4'-O4'	5.54	115.75	109.10
61	Ch	117	ARG	C-N-CA	5.54	135.55	121.70
63	CB	340	SER	N-CA-CB	5.54	118.81	110.50
83	A5	2257	C	N1-C1'-C2'	5.54	121.20	114.00
83	A5	3656	A	C1'-O4'-C4'	-5.54	105.47	109.90
36	B2	200	U	O4'-C4'-C3'	5.54	110.53	106.10
36	B2	547	G	C1'-O4'-C4'	-5.54	105.47	109.90
36	B2	1367	C	O4'-C1'-N1	5.54	112.63	108.20
52	CS	10	TYR	CB-CG-CD1	-5.54	117.68	121.00
70	Ci	37	SER	N-CA-CB	5.54	118.81	110.50
83	A5	504	A	O4'-C1'-N9	5.54	112.63	108.20
83	A5	1956	A	O4'-C1'-C2'	5.54	112.58	107.60
85	A7	39	C	O3'-P-O5'	5.54	114.52	104.00
36	B2	513	A	C3'-C2'-C1'	5.54	105.93	101.50
50	CR	172	ARG	NE-CZ-NH1	5.54	123.07	120.30
83	A5	458	A	O4'-C1'-C2'	-5.54	100.26	105.80
83	A5	1372	A	O4'-C1'-N9	5.54	112.63	108.20
83	A5	3677	U	O4'-C1'-N1	5.54	112.63	108.20
36	B2	567	C	O4'-C1'-N1	5.54	112.63	108.20
36	B2	615	G	O4'-C1'-C2'	5.54	112.58	107.60
56	CX	258	TYR	CB-CG-CD1	5.54	124.32	121.00
83	A5	223	A	C1'-O4'-C4'	5.54	114.33	109.90
83	A5	2020	A	O4'-C1'-N9	5.54	112.63	108.20
83	A5	2680	G	N9-C1'-C2'	5.54	121.20	114.00
84	A9	14	U	P-O3'-C3'	-5.54	113.06	119.70
36	B2	360	G	C1'-O4'-C4'	-5.53	105.47	109.90
47	CI	119	PHE	CB-CG-CD2	5.53	124.67	120.80
81	CE	167	TYR	CB-CG-CD1	-5.53	117.68	121.00
83	A5	195	A	N9-C1'-C2'	-5.53	105.91	112.00
83	A5	3475	U	O4'-C1'-N1	5.53	112.63	108.20
83	A5	167	A	C1'-O4'-C4'	5.53	114.33	109.90
83	A5	3348	G	O5'-C5'-C4'	-5.53	101.19	111.70
36	B2	657	A	O4'-C1'-N9	-5.53	103.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1092	A	O4'-C1'-N9	5.53	112.62	108.20
83	A5	201	U	O3'-P-O5'	-5.53	93.49	104.00
83	A5	285	G	O4'-C1'-C2'	-5.53	100.27	105.80
83	A5	844	C	O4'-C1'-C2'	-5.53	100.27	105.80
83	A5	1356	G	O4'-C1'-C2'	-5.53	100.27	105.80
37	BC	63	U	C4'-C3'-C2'	-5.53	97.07	102.60
74	CC	14	THR	CA-CB-CG2	-5.53	104.66	112.40
83	A5	113	A	C5'-C4'-C3'	-5.53	107.16	116.00
83	A5	3703	C	N1-C1'-C2'	5.53	121.19	114.00
36	B2	1073	G	O4'-C1'-N9	5.53	112.62	108.20
36	B2	1538	C	C3'-C2'-C1'	5.53	105.92	101.50
36	B2	1862	G	P-O3'-C3'	5.53	126.33	119.70
83	A5	177	U	C5'-C4'-O4'	5.53	115.73	109.10
83	A5	1130	U	N1-C1'-C2'	5.53	121.18	114.00
36	B2	272	U	C5'-C4'-O4'	5.52	115.73	109.10
36	B2	1452	U	O4'-C1'-C2'	-5.52	100.28	105.80
36	B2	1880	C	O4'-C1'-N1	5.52	112.62	108.20
53	CT	150	LEU	N-CA-C	5.52	125.91	111.00
28	AC	101	ALA	C-N-CA	5.52	133.90	122.30
36	B2	196	G	C3'-C2'-C1'	5.52	105.92	101.50
36	B2	617	U	O4'-C1'-C2'	-5.52	100.28	105.80
36	B2	1775	A	P-O3'-C3'	5.52	126.33	119.70
83	A5	3259	A	O4'-C1'-C2'	-5.52	100.28	105.80
83	A5	3774	U	O4'-C1'-N1	5.52	112.62	108.20
83	A5	3923	C	C1'-O4'-C4'	5.52	114.32	109.90
83	A5	3935	G	P-O3'-C3'	-5.52	113.07	119.70
86	A8	108	A	C5'-C4'-O4'	5.52	115.73	109.10
83	A5	461	U	O4'-C1'-N1	5.52	112.62	108.20
83	A5	3168	A	N9-C1'-C2'	5.52	121.18	114.00
83	A5	3953	C	C1'-O4'-C4'	-5.52	105.48	109.90
86	A8	17	U	O4'-C1'-N1	5.52	112.62	108.20
36	B2	247	G	N9-C1'-C2'	5.52	121.17	114.00
36	B2	340	A	C4'-C3'-C2'	-5.52	97.08	102.60
36	B2	905	U	O3'-P-O5'	5.52	114.49	104.00
36	B2	1590	G	O4'-C1'-N9	5.52	112.61	108.20
83	A5	141	U	O4'-C1'-N1	5.52	112.62	108.20
83	A5	268	U	N1-C1'-C2'	-5.52	105.93	112.00
83	A5	1812	C	O5'-C5'-C4'	5.52	122.19	111.70
83	A5	3408	C	O4'-C1'-N1	5.52	112.61	108.20
36	B2	422	A	N9-C1'-C2'	-5.52	105.93	112.00
36	B2	1952	G	C1'-O4'-C4'	-5.52	105.49	109.90
62	Cb	37	VAL	C-N-CA	5.52	135.50	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1144	C	C1'-O4'-C4'	-5.52	105.49	109.90
83	A5	3143	U	O4'-C1'-C2'	-5.52	100.28	105.80
83	A5	3164	C	O4'-C1'-N1	5.52	112.61	108.20
83	A5	3387	C	O4'-C1'-N1	5.52	112.61	108.20
36	B2	324	U	P-O5'-C5'	-5.52	112.08	120.90
51	CA	200	ARG	NE-CZ-NH1	5.51	123.06	120.30
83	A5	1457	G	C5'-C4'-O4'	5.51	115.72	109.10
83	A5	2713	G	C1'-O4'-C4'	5.51	114.31	109.90
6	AX	136	GLU	N-CA-CB	5.51	120.52	110.60
83	A5	3534	U	O4'-C1'-C2'	-5.51	100.29	105.80
36	B2	1101	G	N9-C1'-C2'	-5.51	105.94	112.00
36	B2	1982	C	O4'-C1'-N1	5.51	112.61	108.20
83	A5	284	A	O4'-C1'-N9	5.51	112.61	108.20
83	A5	2014	C	N1-C1'-C2'	5.51	121.17	114.00
83	A5	2859	C	N1-C1'-C2'	-5.51	105.94	112.00
83	A5	3684	A	C5'-C4'-O4'	5.51	115.71	109.10
83	A5	3788	G	O4'-C4'-C3'	-5.51	98.49	104.00
83	A5	3939	C	O4'-C1'-N1	5.51	112.61	108.20
36	B2	417	A	O4'-C1'-N9	5.51	112.61	108.20
36	B2	596	U	N1-C1'-C2'	-5.51	105.94	112.00
36	B2	1032	U	O4'-C1'-C2'	-5.51	100.29	105.80
44	CM	119	ARG	CB-CA-C	-5.51	99.38	110.40
83	A5	305	G	C1'-O4'-C4'	-5.51	105.49	109.90
83	A5	725	U	O4'-C1'-C2'	-5.51	100.29	105.80
83	A5	768	U	O4'-C1'-C2'	-5.51	100.29	105.80
83	A5	2479	A	N9-C1'-C2'	-5.51	105.94	112.00
84	A9	6	G	O4'-C1'-N9	5.51	112.61	108.20
17	AV	49	GLY	N-CA-C	-5.51	99.33	113.10
34	AQ	6	ARG	C-N-CA	5.51	135.47	121.70
36	B2	925	U	N1-C1'-C2'	-5.51	105.94	112.00
7	AM	39	VAL	O-C-N	-5.51	113.89	122.70
36	B2	284	G	C3'-C2'-C1'	5.51	105.91	101.50
36	B2	1318	A	O4'-C1'-N9	-5.51	103.79	108.20
83	A5	3437	U	O4'-C1'-N1	5.51	112.60	108.20
83	A5	3520	U	C3'-C2'-C1'	5.51	105.91	101.50
23	AD	42	ARG	NE-CZ-NH2	-5.50	117.55	120.30
83	A5	2725	U	O4'-C1'-N1	5.50	112.60	108.20
83	A5	2871	G	O4'-C1'-N9	5.50	112.60	108.20
36	B2	157	C	N1-C1'-C2'	5.50	121.15	114.00
83	A5	206	C	C3'-C2'-C1'	5.50	105.90	101.50
83	A5	573	U	C4'-C3'-C2'	-5.50	97.10	102.60
83	A5	2178	U	O4'-C1'-N1	5.50	112.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3244	U	O4'-C1'-C2'	-5.50	100.30	105.80
1	Az	384	ILE	N-CA-C	-5.50	96.15	111.00
36	B2	50	C	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	201	G	O4'-C1'-N9	5.50	112.60	108.20
83	A5	346	U	O4'-C1'-N1	5.50	112.60	108.20
83	A5	1164	G	C3'-C2'-C1'	-5.50	97.10	101.50
83	A5	2277	G	O4'-C1'-N9	5.50	112.60	108.20
83	A5	3758	G	C5'-C4'-O4'	5.50	115.70	109.10
83	A5	111	A	O4'-C1'-N9	5.50	112.60	108.20
85	A7	91	C	O4'-C1'-C2'	-5.50	100.30	105.80
86	A8	39	A	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	509	C	N1-C1'-C2'	5.50	121.15	114.00
36	B2	1545	U	O4'-C1'-C2'	-5.50	100.30	105.80
83	A5	2755	G	N9-C1'-C2'	-5.50	105.95	112.00
85	A7	72	U	C4'-C3'-C2'	-5.50	97.10	102.60
86	A8	30	G	O4'-C1'-C2'	5.50	112.55	107.60
86	A8	33	U	P-O3'-C3'	5.50	126.30	119.70
36	B2	965	G	O4'-C1'-N9	5.50	112.60	108.20
36	B2	995	U	O4'-C1'-N1	5.50	112.60	108.20
81	CE	242	ARG	NE-CZ-NH1	-5.50	117.55	120.30
83	A5	1110	G	C1'-O4'-C4'	-5.50	105.50	109.90
83	A5	2193	C	C3'-C2'-C1'	-5.50	97.10	101.50
83	A5	2201	U	C3'-C2'-C1'	5.50	105.90	101.50
83	A5	2490	G	C5'-C4'-C3'	-5.50	107.20	116.00
2	Ag	78	TYR	CB-CG-CD2	-5.50	117.70	121.00
28	AC	51	ARG	NE-CZ-NH1	5.50	123.05	120.30
42	CL	52	GLY	C-N-CA	5.50	135.44	121.70
49	CQ	13	VAL	N-CA-C	5.50	125.84	111.00
49	CQ	164	ARG	NE-CZ-NH1	5.50	123.05	120.30
36	B2	117	C	O4'-C1'-N1	5.49	112.59	108.20
36	B2	137	C	C5'-C4'-O4'	5.49	115.69	109.10
50	CR	120	TYR	CB-CG-CD2	-5.49	117.70	121.00
83	A5	548	A	C1'-O4'-C4'	5.49	114.29	109.90
83	A5	623	C	N1-C1'-C2'	5.49	121.14	114.00
83	A5	1809	A	O3'-P-O5'	5.49	114.44	104.00
83	A5	1864	U	C5'-C4'-C3'	-5.49	107.21	116.00
83	A5	3801	A	O3'-P-O5'	-5.49	93.56	104.00
4	AK	1	MET	CG-SD-CE	-5.49	91.41	100.20
36	B2	1805	U	O4'-C1'-N1	5.49	112.59	108.20
2	Ag	253	TYR	CB-CG-CD2	-5.49	117.70	121.00
16	AA	167	SER	N-CA-CB	5.49	118.74	110.50
83	A5	61	A	O4'-C1'-C2'	-5.49	100.31	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	486	A	N9-C1'-C2'	-5.49	105.96	112.00
83	A5	499	A	N9-C1'-C2'	5.49	121.14	114.00
36	B2	777	A	O3'-P-O5'	5.49	114.43	104.00
36	B2	948	A	P-O3'-C3'	5.49	126.28	119.70
83	A5	1311	U	P-O3'-C3'	-5.49	113.11	119.70
83	A5	1787	C	O4'-C1'-N1	5.49	112.59	108.20
83	A5	2198	G	O4'-C1'-C2'	5.49	112.54	107.60
83	A5	2896	U	N1-C1'-C2'	5.49	121.14	114.00
6	AX	41	PHE	CB-CG-CD2	-5.49	116.96	120.80
36	B2	302	U	O4'-C1'-N1	5.49	112.59	108.20
36	B2	1296	A	C5'-C4'-O4'	5.49	115.68	109.10
52	CS	176	PHE	CB-CG-CD2	5.49	124.64	120.80
83	A5	672	U	C1'-O4'-C4'	5.49	114.29	109.90
83	A5	911	A	O4'-C1'-N9	5.49	112.59	108.20
83	A5	1076	A	N9-C1'-C2'	5.49	121.13	114.00
83	A5	1794	G	C1'-O4'-C4'	-5.49	105.51	109.90
83	A5	1961	C	C4'-C3'-O3'	5.49	123.97	113.00
83	A5	2036	G	O4'-C1'-C2'	-5.49	100.31	105.80
83	A5	2808	G	O4'-C1'-N9	5.49	112.59	108.20
83	A5	47	A	O4'-C1'-N9	5.48	112.59	108.20
83	A5	3219	A	O4'-C1'-C2'	-5.48	100.32	105.80
4	AK	65	PHE	CB-CG-CD1	-5.48	116.96	120.80
36	B2	315	C	C3'-C2'-C1'	5.48	105.89	101.50
36	B2	1252	G	C4'-C3'-C2'	-5.48	97.12	102.60
36	B2	1745	G	C1'-O4'-C4'	5.48	114.29	109.90
49	CQ	180	ARG	NE-CZ-NH2	-5.48	117.56	120.30
83	A5	1436	A	N9-C1'-C2'	5.48	121.13	114.00
83	A5	1908	A	C3'-C2'-C1'	5.48	105.89	101.50
83	A5	3603	C	O4'-C1'-C2'	-5.48	100.32	105.80
83	A5	3746	A	P-O5'-C5'	-5.48	112.13	120.90
36	B2	240	U	C4'-C3'-C2'	-5.48	97.12	102.60
36	B2	964	G	N9-C1'-C2'	-5.48	105.97	112.00
36	B2	1181	G	C3'-C2'-C1'	-5.48	97.12	101.50
36	B2	1305	A	C3'-C2'-C1'	-5.48	97.12	101.50
36	B2	1430	U	C1'-O4'-C4'	-5.48	105.52	109.90
81	CE	39	TYR	CB-CG-CD1	5.48	124.29	121.00
83	A5	531	C	P-O5'-C5'	5.48	129.67	120.90
83	A5	746	G	C4'-C3'-C2'	-5.48	97.12	102.60
83	A5	3260	G	C4'-C3'-C2'	5.48	108.08	102.60
83	A5	1650	C	O4'-C1'-N1	5.48	112.58	108.20
83	A5	1725	A	N9-C1'-C2'	-5.48	105.97	112.00
83	A5	3811	A	N9-C1'-C2'	5.48	121.12	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	AF	42	LYS	N-CA-CB	5.48	120.46	110.60
36	B2	997	C	O3'-P-O5'	-5.48	93.59	104.00
36	B2	1717	A	O4'-C1'-N9	5.48	112.58	108.20
83	A5	306	C	C3'-C2'-C1'	5.48	105.88	101.50
83	A5	419	U	O4'-C1'-N1	5.48	112.58	108.20
83	A5	775	U	C5'-C4'-C3'	5.48	124.76	116.00
83	A5	2721	C	C3'-C2'-C1'	5.48	105.88	101.50
83	A5	3328	G	P-O3'-C3'	-5.48	113.13	119.70
36	B2	289	G	C5'-C4'-C3'	5.48	124.76	116.00
83	A5	347	A	O4'-C1'-N9	5.48	112.58	108.20
83	A5	1412	A	C1'-O4'-C4'	5.48	114.28	109.90
83	A5	3905	U	N1-C1'-C2'	5.48	121.12	114.00
1	Az	203	MET	C-N-CA	5.47	133.80	122.30
36	B2	872	A	C3'-C2'-C1'	5.47	105.88	101.50
36	B2	1018	C	C1'-O4'-C4'	5.47	114.28	109.90
36	B2	1271	A	N9-C1'-C2'	5.47	121.12	114.00
36	B2	1339	C	C3'-C2'-C1'	5.47	105.88	101.50
83	A5	1201	U	O4'-C1'-N1	5.47	112.58	108.20
83	A5	3714	U	C1'-O4'-C4'	5.47	114.28	109.90
32	AW	129	PHE	CB-CG-CD1	5.47	124.63	120.80
36	B2	473	A	P-O3'-C3'	-5.47	113.13	119.70
36	B2	714	U	O4'-C1'-C2'	-5.47	100.33	105.80
36	B2	1870	C	O4'-C1'-N1	5.47	112.58	108.20
83	A5	144	C	O4'-C1'-C2'	-5.47	100.33	105.80
83	A5	2092	U	P-O3'-C3'	5.47	126.27	119.70
83	A5	3132	C	P-O3'-C3'	-5.47	113.13	119.70
42	CL	172	ASP	C-N-CA	5.47	135.38	121.70
36	B2	277	U	N1-C1'-C2'	5.47	121.11	114.00
36	B2	940	U	P-O3'-C3'	5.47	126.26	119.70
36	B2	1527	U	C1'-O4'-C4'	-5.47	105.53	109.90
83	A5	297	U	C1'-O4'-C4'	5.47	114.28	109.90
83	A5	464	G	C5'-C4'-O4'	5.47	115.66	109.10
83	A5	776	A	C2'-C3'-O3'	-5.47	97.47	109.50
83	A5	829	U	O4'-C1'-N1	5.47	112.58	108.20
83	A5	976	A	O4'-C1'-N9	5.47	112.58	108.20
83	A5	1114	A	O4'-C1'-C2'	-5.47	100.33	105.80
83	A5	1805	A	O4'-C4'-C3'	-5.47	98.53	104.00
54	CP	47	TYR	CB-CG-CD1	5.47	124.28	121.00
83	A5	2857	C	O4'-C1'-N1	5.47	112.57	108.20
83	A5	3880	A	C5'-C4'-O4'	5.47	115.66	109.10
15	AB	25	PHE	CB-CG-CD1	-5.47	116.97	120.80
36	B2	1890	C	P-O3'-C3'	5.47	126.26	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BC	59	A	C5'-C4'-O4'	5.47	115.66	109.10
74	CC	251	ARG	NE-CZ-NH1	5.47	123.03	120.30
83	A5	980	A	C1'-O4'-C4'	-5.47	105.53	109.90
36	B2	903	C	C3'-C2'-C1'	5.46	105.87	101.50
83	A5	561	A	N9-C1'-C2'	-5.46	105.99	112.00
83	A5	2907	U	C4'-C3'-C2'	5.46	108.06	102.60
83	A5	3819	C	C5'-C4'-O4'	-5.46	102.54	109.10
83	A5	3969	G	N9-C1'-C2'	5.46	121.11	114.00
36	B2	231	G	C1'-O4'-C4'	5.46	114.27	109.90
36	B2	393	G	C3'-C2'-C1'	-5.46	97.13	101.50
46	CN	11	TYR	CB-CG-CD2	5.46	124.28	121.00
51	CA	3	ARG	C-N-CA	5.46	135.36	121.70
54	CP	87	SER	N-CA-CB	5.46	118.69	110.50
83	A5	1997	C	O4'-C1'-C2'	-5.46	100.34	105.80
4	AK	66	TYR	CB-CG-CD1	-5.46	117.72	121.00
36	B2	899	A	P-O3'-C3'	5.46	126.25	119.70
36	B2	1674	C	O4'-C1'-C2'	-5.46	100.34	105.80
41	CO	4	LEU	N-CA-CB	-5.46	99.48	110.40
83	A5	172	C	P-O5'-C5'	-5.46	112.16	120.90
83	A5	729	G	O4'-C1'-N9	5.46	112.57	108.20
83	A5	1104	A	C1'-O4'-C4'	-5.46	105.53	109.90
83	A5	1711	C	C1'-O4'-C4'	5.46	114.27	109.90
83	A5	2857	C	C4'-C3'-C2'	-5.46	97.14	102.60
83	A5	3504	G	C5'-C4'-O4'	5.46	115.65	109.10
85	A7	110	G	C1'-O4'-C4'	-5.46	105.53	109.90
13	AP	54	ARG	NE-CZ-NH2	-5.46	117.57	120.30
36	B2	51	A	O4'-C1'-N9	5.46	112.57	108.20
36	B2	408	G	O4'-C1'-C2'	5.46	112.51	107.60
36	B2	1149	A	O4'-C1'-N9	5.46	112.57	108.20
36	B2	1571	U	C5'-C4'-C3'	-5.46	107.26	116.00
57	CY	96	TYR	CB-CG-CD1	-5.46	117.72	121.00
72	Ck	28	ASN	CB-CA-C	-5.46	99.48	110.40
83	A5	42	U	O4'-C1'-N1	5.46	112.57	108.20
36	B2	526	A	O4'-C1'-N9	5.46	112.57	108.20
36	B2	1534	G	O4'-C1'-N9	5.46	112.57	108.20
36	B2	1849	U	O4'-C4'-C3'	-5.46	98.54	104.00
74	CC	193	ARG	NE-CZ-NH2	-5.46	117.57	120.30
83	A5	1886	C	C3'-C2'-C1'	5.46	105.87	101.50
83	A5	2620	C	C5'-C4'-C3'	-5.46	107.27	116.00
83	A5	3594	A	O4'-C1'-C2'	-5.46	100.34	105.80
85	A7	18	G	O4'-C1'-N9	5.46	112.57	108.20
85	A7	117	G	C1'-O4'-C4'	-5.46	105.53	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	109	U	N1-C1'-C2'	5.46	121.10	114.00
83	A5	2171	U	O4'-C1'-N1	5.46	112.56	108.20
83	A5	3518	A	C3'-C2'-C1'	5.46	105.87	101.50
36	B2	1431	A	O4'-C1'-C2'	-5.46	100.34	105.80
83	A5	3539	C	C1'-O4'-C4'	-5.46	105.54	109.90
26	AJ	138	VAL	CA-CB-CG2	-5.45	102.72	110.90
83	A5	161	G	P-O5'-C5'	5.45	129.63	120.90
83	A5	262	G	C2'-C3'-O3'	5.45	122.42	113.70
83	A5	1019	U	C1'-O4'-C4'	5.45	114.26	109.90
83	A5	2595	U	O4'-C1'-C2'	-5.45	100.35	105.80
36	B2	1281	A	P-O3'-C3'	5.45	126.24	119.70
81	CE	65	SER	O-C-N	-5.45	113.98	122.70
83	A5	2747	G	O4'-C1'-N9	5.45	112.56	108.20
84	A9	12	C	O4'-C1'-N1	5.45	112.56	108.20
23	AD	224	PRO	N-CA-C	5.45	126.27	112.10
33	AI	144	SER	CA-C-N	5.45	129.19	117.20
36	B2	825	A	O4'-C1'-C2'	-5.45	100.35	105.80
36	B2	1451	A	N9-C1'-C2'	-5.45	106.00	112.00
36	B2	1714	U	C3'-C2'-C1'	5.45	105.86	101.50
50	CR	64	ARG	NE-CZ-NH2	-5.45	117.58	120.30
81	CE	52	SER	N-CA-C	5.45	125.71	111.00
83	A5	1588	A	N9-C1'-C2'	-5.45	106.00	112.00
83	A5	2040	A	O3'-P-O5'	-5.45	93.64	104.00
83	A5	2739	A	N9-C1'-C2'	5.45	121.08	114.00
83	A5	478	A	C3'-C2'-C1'	5.45	105.86	101.50
83	A5	581	U	C3'-C2'-C1'	5.45	105.86	101.50
83	A5	1641	U	O4'-C1'-C2'	-5.45	100.35	105.80
83	A5	1801	U	N1-C1'-C2'	-5.45	106.01	112.00
83	A5	2645	C	O4'-C1'-C2'	-5.45	100.35	105.80
83	A5	2884	C	C5'-C4'-O4'	5.45	115.64	109.10
83	A5	3485	U	O4'-C1'-C2'	-5.45	100.35	105.80
83	A5	3868	G	C3'-C2'-C1'	5.45	105.86	101.50
83	A5	3917	G	O4'-C1'-N9	5.45	112.56	108.20
36	B2	49	C	N1-C1'-C2'	5.45	121.08	114.00
83	A5	2	U	O4'-C1'-N1	5.45	112.56	108.20
83	A5	180	U	C3'-C2'-C1'	5.45	105.86	101.50
83	A5	3666	C	C3'-C2'-C1'	5.45	105.86	101.50
36	B2	290	A	O4'-C1'-N9	5.45	112.56	108.20
36	B2	885	U	O4'-C4'-C3'	-5.45	98.55	104.00
74	CC	224	PHE	CB-CG-CD1	-5.45	116.99	120.80
83	A5	2075	A	O3'-P-O5'	-5.45	93.65	104.00
83	A5	2783	C	O4'-C1'-C2'	-5.45	100.35	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3189	A	O4'-C1'-N9	5.45	112.56	108.20
83	A5	3406	G	C5'-C4'-C3'	-5.45	107.29	116.00
36	B2	228	A	N9-C1'-C2'	-5.44	106.01	112.00
49	CQ	38	ARG	NE-CZ-NH1	5.44	123.02	120.30
36	B2	440	U	N1-C1'-C2'	5.44	121.08	114.00
36	B2	506	G	P-O3'-C3'	-5.44	113.17	119.70
36	B2	1012	G	O4'-C1'-N9	5.44	112.55	108.20
36	B2	1759	U	O4'-C1'-N1	5.44	112.55	108.20
42	CL	97	VAL	N-CA-C	5.44	125.69	111.00
57	CY	75	ARG	NE-CZ-NH2	-5.44	117.58	120.30
81	CE	188	LYS	CA-CB-CG	5.44	125.37	113.40
83	A5	1865	U	P-O5'-C5'	5.44	129.61	120.90
83	A5	2868	A	N9-C1'-C2'	5.44	121.08	114.00
83	A5	2914	A	P-O3'-C3'	-5.44	113.17	119.70
83	A5	3477	A	N9-C1'-C2'	-5.44	106.01	112.00
11	AL	3	ASP	CB-CG-OD2	-5.44	113.40	118.30
36	B2	595	C	O4'-C1'-C2'	-5.44	100.36	105.80
36	B2	1240	A	C4'-C3'-C2'	-5.44	97.16	102.60
83	A5	788	C	N1-C1'-C2'	5.44	121.07	114.00
83	A5	1179	U	O4'-C1'-N1	5.44	112.55	108.20
83	A5	3254	U	C3'-C2'-C1'	5.44	105.85	101.50
28	AC	101	ALA	CA-C-N	5.44	127.08	116.20
36	B2	1379	G	C1'-O4'-C4'	-5.44	105.55	109.90
83	A5	3433	A	P-O5'-C5'	5.44	129.60	120.90
83	A5	3655	U	O4'-C1'-C2'	-5.44	100.36	105.80
83	A5	3915	U	C5'-C4'-C3'	-5.44	107.30	116.00
10	AN	58	HIS	O-C-N	-5.44	113.96	123.20
19	AZ	112	THR	N-CA-C	5.44	125.68	111.00
36	B2	1587	U	O4'-C1'-C2'	-5.44	100.36	105.80
36	B2	1818	U	O3'-P-O5'	5.44	114.33	104.00
37	BC	70	C	C1'-O4'-C4'	-5.44	105.55	109.90
83	A5	42	U	N1-C1'-C2'	5.44	121.07	114.00
83	A5	1997	C	O4'-C1'-N1	5.44	112.55	108.20
83	A5	2921	G	C1'-O4'-C4'	-5.44	105.55	109.90
1	Az	722	ALA	N-CA-C	5.44	125.68	111.00
74	CC	269	THR	N-CA-CB	5.44	120.63	110.30
83	A5	1799	U	O3'-P-O5'	5.44	114.33	104.00
83	A5	3016	G	C1'-O4'-C4'	-5.44	105.55	109.90
83	A5	3898	C	P-O5'-C5'	5.44	129.60	120.90
20	Aa	38	LYS	C-N-CA	5.43	135.29	121.70
36	B2	288	C	O4'-C1'-C2'	-5.43	100.37	105.80
36	B2	388	G	N9-C1'-C2'	5.43	121.06	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1024	C	N1-C1'-C2'	5.43	121.06	114.00
36	B2	1159	C	P-O3'-C3'	-5.43	113.18	119.70
83	A5	36	U	C3'-C2'-C1'	5.43	105.85	101.50
83	A5	2233	C	C3'-C2'-C1'	5.43	105.85	101.50
83	A5	3479	C	C3'-C2'-C1'	5.43	105.85	101.50
83	A5	3715	U	O4'-C1'-C2'	-5.43	100.36	105.80
36	B2	1787	U	P-O3'-C3'	5.43	126.22	119.70
49	CQ	30	LYS	CA-CB-CG	5.43	125.35	113.40
83	A5	181	A	O4'-C1'-N9	5.43	112.55	108.20
83	A5	757	A	O4'-C1'-N9	5.43	112.55	108.20
36	B2	1434	U	O4'-C1'-C2'	-5.43	100.37	105.80
5	AO	34	TYR	CB-CG-CD1	5.43	124.26	121.00
52	CS	6	LEU	N-CA-C	5.43	125.66	111.00
83	A5	2112	A	O4'-C1'-N9	5.43	112.54	108.20
83	A5	3013	C	P-O3'-C3'	5.43	126.22	119.70
83	A5	3519	C	O4'-C1'-N1	5.43	112.54	108.20
76	Cn	14	LYS	N-CA-CB	5.43	120.37	110.60
15	AB	72	ALA	CB-CA-C	-5.43	101.96	110.10
20	Aa	42	ARG	NE-CZ-NH2	-5.43	117.59	120.30
36	B2	392	A	N9-C1'-C2'	-5.43	106.03	112.00
36	B2	1063	G	C3'-C2'-C1'	5.43	105.84	101.50
83	A5	493	A	O4'-C1'-N9	5.43	112.54	108.20
83	A5	671	A	P-O5'-C5'	5.43	129.58	120.90
83	A5	2040	A	P-O3'-C3'	5.43	126.21	119.70
83	A5	3500	A	C1'-O4'-C4'	-5.43	105.56	109.90
36	B2	975	U	C3'-C2'-C1'	5.42	105.84	101.50
36	B2	1755	A	C1'-O4'-C4'	-5.42	105.56	109.90
46	CN	181	SER	N-CA-CB	5.42	118.64	110.50
71	Cj	43	LYS	CB-CA-C	-5.42	99.55	110.40
83	A5	525	U	P-O3'-C3'	5.42	126.21	119.70
83	A5	566	A	C3'-C2'-C1'	5.42	105.84	101.50
83	A5	3742	C	O4'-C1'-N1	5.42	112.54	108.20
85	A7	24	U	P-O3'-C3'	-5.42	113.19	119.70
1	Az	43	ALA	C-N-CA	5.42	133.68	122.30
29	AG	149	LYS	N-CA-C	5.42	125.64	111.00
37	BC	9	G	O4'-C1'-N9	5.42	112.54	108.20
53	CT	149	ALA	N-CA-CB	5.42	117.69	110.10
83	A5	707	C	O4'-C1'-N1	5.42	112.54	108.20
83	A5	854	U	N1-C1'-C2'	-5.42	106.04	112.00
83	A5	916	C	O4'-C1'-N1	5.42	112.54	108.20
83	A5	1875	G	O4'-C1'-N9	5.42	112.54	108.20
83	A5	3355	G	C1'-O4'-C4'	-5.42	105.56	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3842	A	C2'-C3'-O3'	5.42	122.37	113.70
83	A5	163	A	O4'-C1'-C2'	-5.42	100.38	105.80
86	A8	52	A	O4'-C1'-N9	5.42	112.54	108.20
1	Az	499	ASN	CA-C-N	5.42	132.27	117.10
34	AQ	93	ALA	N-CA-CB	5.42	117.69	110.10
36	B2	171	U	P-O5'-C5'	5.42	129.57	120.90
36	B2	451	C	C3'-C2'-C1'	5.42	105.83	101.50
36	B2	556	G	O4'-C1'-N9	5.42	112.53	108.20
83	A5	177	U	P-O3'-C3'	5.42	126.20	119.70
83	A5	2527	A	C1'-O4'-C4'	5.42	114.23	109.90
83	A5	2788	U	C4'-C3'-C2'	-5.42	97.18	102.60
83	A5	3262	A	C3'-C2'-C1'	5.42	105.83	101.50
83	A5	3371	G	C1'-O4'-C4'	-5.42	105.57	109.90
15	AB	40	GLN	N-CA-CB	5.42	120.35	110.60
36	B2	213	G	O4'-C1'-N9	-5.42	103.87	108.20
36	B2	561	G	O4'-C1'-N9	5.42	112.53	108.20
36	B2	1183	U	P-O5'-C5'	-5.42	112.23	120.90
36	B2	1226	A	O4'-C1'-N9	5.42	112.53	108.20
64	CF	142	TYR	CB-CG-CD2	5.42	124.25	121.00
83	A5	3128	U	C1'-O4'-C4'	-5.42	105.57	109.90
4	AK	32	HIS	N-CA-CB	5.42	120.35	110.60
67	Ce	125	ASN	N-CA-C	5.42	125.62	111.00
83	A5	732	U	C1'-O4'-C4'	5.42	114.23	109.90
1	Az	15	LYS	N-CA-C	5.41	125.62	111.00
33	AI	144	SER	C-N-CA	5.41	135.24	121.70
36	B2	138	U	C5'-C4'-O4'	5.41	115.60	109.10
36	B2	427	G	O4'-C1'-N9	5.41	112.53	108.20
57	CY	66	GLN	N-CA-CB	5.41	120.34	110.60
83	A5	2140	C	O4'-C1'-N1	5.41	112.53	108.20
85	A7	46	C	O4'-C1'-C2'	-5.41	100.39	105.80
86	A8	120	G	O4'-C1'-N9	5.41	112.53	108.20
25	Af	151	SER	C-N-CA	5.41	135.23	121.70
83	A5	875	G	O4'-C1'-C2'	5.41	112.47	107.60
1	Az	802	HIS	N-CA-CB	5.41	120.34	110.60
36	B2	31	C	C1'-O4'-C4'	-5.41	105.57	109.90
36	B2	1177	C	C4'-C3'-C2'	-5.41	97.19	102.60
41	CO	49	PHE	CB-CG-CD2	5.41	124.59	120.80
83	A5	1111	C	C3'-C2'-C1'	5.41	105.83	101.50
19	AZ	111	ALA	C-N-CA	5.41	135.22	121.70
20	Aa	102	PHE	CB-CA-C	5.41	121.22	110.40
36	B2	366	C	O4'-C1'-C2'	-5.41	100.39	105.80
36	B2	604	C	O4'-C1'-C2'	-5.41	100.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	859	C	C5'-C4'-C3'	-5.41	107.35	116.00
36	B2	1393	C	N1-C1'-C2'	5.41	121.03	114.00
83	A5	358	C	C3'-C2'-C1'	5.41	105.83	101.50
83	A5	1133	A	O4'-C1'-N9	5.41	112.53	108.20
83	A5	1520	U	C1'-O4'-C4'	5.41	114.23	109.90
83	A5	2631	G	C1'-O4'-C4'	-5.41	105.57	109.90
83	A5	3953	C	N1-C1'-C2'	5.41	121.03	114.00
36	B2	1647	G	C3'-C2'-C1'	-5.41	97.17	101.50
52	CS	116	ARG	NE-CZ-NH2	-5.41	117.60	120.30
81	CE	18	LYS	N-CA-CB	5.41	120.33	110.60
18	AY	105	ARG	NE-CZ-NH2	-5.41	117.60	120.30
18	AY	108	ARG	NE-CZ-NH1	5.41	123.00	120.30
36	B2	363	U	O4'-C1'-N1	5.41	112.53	108.20
83	A5	1239	A	O4'-C1'-N9	5.41	112.52	108.20
83	A5	1728	G	C1'-O4'-C4'	-5.41	105.58	109.90
83	A5	2990	C	O4'-C1'-N1	5.41	112.53	108.20
83	A5	3017	U	O4'-C1'-N1	5.41	112.53	108.20
83	A5	3829	U	P-O3'-C3'	-5.41	113.21	119.70
85	A7	67	G	C1'-O4'-C4'	-5.41	105.58	109.90
86	A8	50	A	C1'-O4'-C4'	-5.41	105.58	109.90
83	A5	426	A	C3'-C2'-C1'	5.40	105.82	101.50
86	A8	59	G	P-O3'-C3'	5.40	126.19	119.70
86	A8	110	C	C5'-C4'-O4'	5.40	115.58	109.10
43	CV	20	LEU	CB-CA-C	-5.40	99.94	110.20
45	Ca	7	LYS	N-CA-CB	5.40	120.33	110.60
45	Ca	130	PHE	CB-CG-CD2	-5.40	117.02	120.80
83	A5	793	U	N1-C1'-C2'	5.40	121.02	114.00
83	A5	996	C	C3'-C2'-C1'	5.40	105.82	101.50
83	A5	3425	G	O4'-C1'-N9	5.40	112.52	108.20
36	B2	657	A	C3'-C2'-C1'	5.40	105.82	101.50
36	B2	1837	G	O4'-C1'-C2'	5.40	112.46	107.60
41	CO	160	ARG	NE-CZ-NH1	5.40	123.00	120.30
63	CB	378	ARG	NE-CZ-NH2	-5.40	117.60	120.30
83	A5	190	A	O4'-C1'-C2'	-5.40	100.40	105.80
83	A5	1987	G	O3'-P-O5'	5.40	114.26	104.00
83	A5	3606	G	O4'-C1'-N9	5.40	112.52	108.20
36	B2	267	G	O4'-C1'-N9	5.40	112.52	108.20
60	Cr	2	ALA	N-CA-CB	-5.40	102.54	110.10
83	A5	1370	C	C1'-O4'-C4'	-5.40	105.58	109.90
83	A5	2467	A	O4'-C1'-C2'	-5.40	100.40	105.80
83	A5	2920	U	C5'-C4'-O4'	5.40	115.58	109.10
20	Aa	97	PRO	CA-N-CD	-5.40	103.94	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1129	A	O4'-C1'-N9	5.40	112.52	108.20
83	A5	316	U	OP2-P-O3'	5.40	117.08	105.20
83	A5	367	A	O4'-C1'-C2'	-5.40	100.40	105.80
83	A5	1526	G	O4'-C1'-N9	5.40	112.52	108.20
86	A8	110	C	C2'-C3'-O3'	-5.40	97.63	109.50
36	B2	301	U	O4'-C1'-N1	5.40	112.52	108.20
83	A5	2719	A	C1'-O4'-C4'	5.40	114.22	109.90
83	A5	2861	G	O4'-C1'-N9	5.40	112.52	108.20
83	A5	3349	A	C1'-O4'-C4'	5.40	114.22	109.90
28	AC	65	TYR	CB-CG-CD1	5.39	124.24	121.00
36	B2	148	G	O4'-C1'-N9	5.39	112.52	108.20
36	B2	944	G	C4'-C3'-O3'	-5.39	98.07	109.40
71	Cj	27	TYR	CB-CG-CD1	-5.39	117.76	121.00
83	A5	286	A	O4'-C1'-C2'	-5.39	100.41	105.80
36	B2	607	A	C3'-C2'-C1'	5.39	105.81	101.50
36	B2	1630	G	C1'-O4'-C4'	-5.39	105.59	109.90
43	CV	73	ARG	NE-CZ-NH2	-5.39	117.60	120.30
44	CM	60	TYR	CB-CG-CD1	-5.39	117.76	121.00
74	CC	314	ARG	N-CA-C	5.39	125.56	111.00
83	A5	409	A	O4'-C1'-N9	5.39	112.51	108.20
83	A5	570	U	O4'-C1'-N1	5.39	112.51	108.20
83	A5	1738	U	P-O3'-C3'	5.39	126.17	119.70
83	A5	3724	U	O4'-C1'-C2'	-5.39	100.41	105.80
1	Az	268	GLU	CB-CA-C	5.39	121.18	110.40
83	A5	741	C	C1'-O4'-C4'	-5.39	105.59	109.90
83	A5	1381	U	O4'-C1'-N1	5.39	112.51	108.20
86	A8	31	G	C1'-O4'-C4'	-5.39	105.59	109.90
36	B2	1269	U	C1'-O4'-C4'	5.39	114.21	109.90
37	BC	48	C	O4'-C1'-N1	5.39	112.51	108.20
83	A5	98	G	N9-C1'-C2'	5.39	121.01	114.00
85	A7	108	G	N9-C1'-C2'	5.39	121.01	114.00
83	A5	1457	G	C3'-C2'-C1'	5.39	105.81	101.50
83	A5	2809	C	C3'-C2'-C1'	5.39	105.81	101.50
36	B2	126	G	C3'-C2'-C1'	5.39	105.81	101.50
36	B2	418	U	O4'-C1'-N1	5.39	112.51	108.20
74	CC	98	MET	CG-SD-CE	-5.39	91.58	100.20
83	A5	841	A	O4'-C1'-N9	5.39	112.51	108.20
83	A5	1785	G	P-O3'-C3'	-5.39	113.23	119.70
83	A5	3844	U	C3'-C2'-C1'	5.39	105.81	101.50
85	A7	42	A	C3'-C2'-C1'	5.39	105.81	101.50
36	B2	1188	G	O4'-C1'-N9	-5.38	103.89	108.20
52	CS	119	ALA	N-CA-C	5.38	125.54	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	470	G	O4'-C1'-N9	5.38	112.51	108.20
83	A5	1143	U	O4'-C1'-N1	5.38	112.51	108.20
83	A5	2180	A	C3'-C2'-C1'	5.38	105.81	101.50
83	A5	2719	A	N9-C1'-C2'	-5.38	106.08	112.00
83	A5	2913	G	O4'-C1'-N9	5.38	112.51	108.20
1	Az	452	SER	C-N-CA	5.38	133.60	122.30
36	B2	449	C	C5'-C4'-O4'	5.38	115.56	109.10
36	B2	710	C	O4'-C1'-N1	5.38	112.51	108.20
83	A5	802	G	O4'-C1'-N9	5.38	112.51	108.20
83	A5	2180	A	N9-C1'-C2'	5.38	121.00	114.00
83	A5	2524	A	C3'-C2'-C1'	5.38	105.81	101.50
83	A5	2850	A	N9-C1'-C2'	-5.38	106.08	112.00
36	B2	419	C	P-O5'-C5'	-5.38	112.29	120.90
36	B2	603	G	O4'-C1'-N9	5.38	112.51	108.20
36	B2	931	A	O3'-P-O5'	5.38	114.22	104.00
36	B2	1757	G	C5'-C4'-O4'	5.38	115.56	109.10
36	B2	1843	A	C4'-C3'-C2'	-5.38	97.22	102.60
40	CK	123	ARG	NE-CZ-NH1	-5.38	117.61	120.30
83	A5	1360	U	C3'-C2'-C1'	5.38	105.81	101.50
83	A5	1538	U	N1-C1'-C2'	-5.38	106.08	112.00
83	A5	1554	C	C3'-C2'-C1'	5.38	105.81	101.50
36	B2	1669	A	N9-C1'-C2'	-5.38	106.08	112.00
83	A5	1454	C	N1-C1'-C2'	5.38	120.99	114.00
83	A5	3664	A	C1'-O4'-C4'	-5.38	105.60	109.90
48	CD	289	TYR	CB-CG-CD2	-5.38	117.77	121.00
49	CQ	11	ARG	NE-CZ-NH2	-5.38	117.61	120.30
52	CS	98	ARG	NE-CZ-NH1	5.38	122.99	120.30
83	A5	66	A	O4'-C1'-N9	5.38	112.50	108.20
83	A5	1809	A	C1'-O4'-C4'	-5.38	105.60	109.90
83	A5	2141	A	C4'-C3'-C2'	-5.38	97.22	102.60
83	A5	3178	G	C3'-C2'-C1'	-5.38	97.20	101.50
29	AG	217	ARG	NE-CZ-NH2	-5.38	117.61	120.30
36	B2	248	G	N9-C1'-C2'	5.38	120.99	114.00
36	B2	473	A	O4'-C1'-C2'	-5.38	100.42	105.80
36	B2	1733	G	C1'-O4'-C4'	-5.38	105.60	109.90
36	B2	1881	A	P-O3'-C3'	5.38	126.15	119.70
83	A5	28	C	C4'-C3'-C2'	-5.38	97.22	102.60
83	A5	1320	U	C1'-O4'-C4'	5.38	114.20	109.90
83	A5	1624	G	O4'-C1'-N9	5.38	112.50	108.20
83	A5	2630	A	P-O3'-C3'	5.38	126.15	119.70
83	A5	2691	A	C3'-C2'-C1'	5.38	105.80	101.50
36	B2	1080	A	O4'-C1'-N9	5.38	112.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	Cf	23	ALA	N-CA-C	5.38	125.51	111.00
83	A5	2067	C	O4'-C1'-N1	5.38	112.50	108.20
36	B2	206	U	O4'-C1'-N1	5.37	112.50	108.20
36	B2	1118	U	N1-C1'-C2'	-5.37	106.09	112.00
49	CQ	159	PRO	N-CA-C	5.37	126.07	112.10
83	A5	1004	C	C3'-C2'-C1'	5.37	105.80	101.50
83	A5	1721	C	O3'-P-O5'	-5.37	93.79	104.00
83	A5	2719	A	O4'-C1'-C2'	-5.37	100.43	105.80
83	A5	3222	G	O4'-C1'-N9	5.37	112.50	108.20
36	B2	83	A	C1'-O4'-C4'	5.37	114.20	109.90
83	A5	95	G	C1'-O4'-C4'	-5.37	105.60	109.90
83	A5	403	A	O4'-C1'-N9	5.37	112.50	108.20
83	A5	1139	U	C4'-C3'-C2'	-5.37	97.23	102.60
83	A5	2168	G	O4'-C1'-N9	5.37	112.50	108.20
83	A5	3639	U	C1'-O4'-C4'	-5.37	105.60	109.90
36	B2	434	G	C1'-O4'-C4'	-5.37	105.61	109.90
36	B2	1550	C	O4'-C1'-C2'	-5.37	100.43	105.80
83	A5	567	A	C4'-C3'-C2'	-5.37	97.23	102.60
83	A5	826	A	O4'-C1'-N9	5.37	112.50	108.20
83	A5	2194	G	O4'-C1'-C2'	5.37	112.43	107.60
83	A5	3741	A	C1'-O4'-C4'	5.37	114.19	109.90
83	A5	3769	C	C3'-C2'-C1'	5.37	105.80	101.50
1	Az	61	LYS	C-N-CA	5.37	135.12	121.70
44	CM	157	LYS	C-N-CA	5.37	133.57	122.30
83	A5	2493	C	O4'-C1'-N1	5.37	112.49	108.20
83	A5	3865	C	O4'-C1'-N1	5.37	112.49	108.20
1	Az	618	ALA	N-CA-CB	5.37	117.61	110.10
31	AH	141	ARG	CA-CB-CG	5.37	125.21	113.40
36	B2	421	A	C5'-C4'-O4'	5.37	115.54	109.10
36	B2	1968	C	O4'-C1'-C2'	-5.37	100.43	105.80
80	CH	91	ARG	N-CA-C	5.37	125.49	111.00
83	A5	2104	A	C3'-C2'-C1'	5.37	105.79	101.50
83	A5	2234	C	O4'-C1'-N1	5.37	112.49	108.20
83	A5	3244	U	C1'-O4'-C4'	5.37	114.19	109.90
86	A8	45	G	C5'-C4'-C3'	5.37	124.58	116.00
86	A8	49	C	C3'-C2'-C1'	5.37	105.79	101.50
36	B2	183	A	O4'-C1'-C2'	-5.36	100.44	105.80
36	B2	1357	G	C5'-C4'-C3'	-5.36	107.42	116.00
83	A5	1132	U	N1-C1'-C2'	5.36	120.97	114.00
83	A5	1659	A	O3'-P-O5'	-5.36	93.81	104.00
83	A5	2174	A	O4'-C1'-C2'	5.36	112.43	107.60
83	A5	2558	A	O4'-C1'-C2'	5.36	112.43	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	479	A	O3'-P-O5'	5.36	114.19	104.00
36	B2	1044	G	C3'-C2'-C1'	-5.36	97.21	101.50
83	A5	2668	C	O4'-C1'-N1	5.36	112.49	108.20
85	A7	8	A	N9-C1'-C2'	5.36	120.97	114.00
7	AM	114	SER	N-CA-CB	5.36	118.54	110.50
74	CC	392	VAL	N-CA-CB	5.36	123.29	111.50
83	A5	32	C	C3'-C2'-C1'	5.36	105.79	101.50
83	A5	324	A	C1'-O4'-C4'	5.36	114.19	109.90
83	A5	1521	G	O4'-C1'-N9	-5.36	103.91	108.20
83	A5	3430	G	C1'-O4'-C4'	-5.36	105.61	109.90
1	Az	564	SER	N-CA-C	5.36	125.47	111.00
16	AA	204	TYR	CB-CG-CD2	-5.36	117.78	121.00
1	Az	404	ALA	N-CA-CB	5.36	117.60	110.10
36	B2	207	U	C1'-O4'-C4'	5.36	114.19	109.90
36	B2	408	G	C1'-O4'-C4'	-5.36	105.61	109.90
36	B2	990	U	C1'-O4'-C4'	-5.36	105.61	109.90
36	B2	1564	A	C5'-C4'-O4'	5.36	115.53	109.10
36	B2	1619	A	P-O3'-C3'	5.36	126.13	119.70
36	B2	1911	C	O4'-C1'-N1	5.36	112.49	108.20
83	A5	250	U	P-O3'-C3'	-5.36	113.27	119.70
83	A5	1315	A	O4'-C1'-N9	5.36	112.49	108.20
83	A5	1721	C	O5'-C5'-C4'	-5.36	101.52	111.70
83	A5	2688	U	O4'-C1'-N1	5.36	112.48	108.20
83	A5	3916	U	O4'-C1'-N1	5.36	112.49	108.20
36	B2	192	A	C1'-O4'-C4'	5.36	114.19	109.90
36	B2	436	C	O4'-C1'-N1	5.36	112.48	108.20
83	A5	1157	C	O4'-C1'-C2'	-5.36	100.44	105.80
86	A8	8	A	N9-C1'-C2'	-5.36	106.11	112.00
36	B2	285	U	C2'-C3'-O3'	5.35	122.27	113.70
33	AI	113	TYR	CB-CG-CD1	5.35	124.21	121.00
36	B2	1913	C	C3'-C2'-C1'	5.35	105.78	101.50
83	A5	812	U	O4'-C1'-N1	5.35	112.48	108.20
83	A5	842	A	C4'-C3'-C2'	-5.35	97.25	102.60
83	A5	2503	G	C3'-C2'-C1'	-5.35	97.22	101.50
83	A5	3805	U	O4'-C1'-C2'	-5.35	100.45	105.80
83	A5	3275	G	C1'-O4'-C4'	-5.35	105.62	109.90
16	AA	216	ALA	C-N-CA	5.35	135.07	121.70
36	B2	1615	U	O4'-C1'-N1	5.35	112.48	108.20
44	CM	66	TYR	CB-CG-CD1	5.35	124.21	121.00
53	CT	147	PRO	C-N-CA	5.35	135.07	121.70
83	A5	785	A	C5'-C4'-O4'	5.35	115.52	109.10
83	A5	1232	G	C5'-C4'-O4'	5.35	115.52	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1681	G	C3'-C2'-C1'	-5.35	97.22	101.50
30	AF	153	GLY	N-CA-C	5.35	126.47	113.10
19	AZ	93	LYS	N-CA-CB	5.35	120.22	110.60
36	B2	56	U	N1-C1'-C2'	5.35	120.95	114.00
36	B2	1106	A	C4'-C3'-C2'	-5.35	97.25	102.60
40	CK	102	GLY	N-CA-C	5.35	126.46	113.10
74	CC	54	ALA	CB-CA-C	-5.35	102.08	110.10
83	A5	2156	U	C4'-C3'-C2'	-5.35	97.25	102.60
83	A5	3408	C	N1-C1'-C2'	5.35	120.95	114.00
2	Ag	248	TRP	CA-CB-CG	5.34	123.86	113.70
8	AS	15	ILE	N-CA-C	-5.34	96.57	111.00
34	AQ	145	LYS	N-CA-CB	5.34	120.22	110.60
36	B2	542	A	P-O3'-C3'	-5.34	113.29	119.70
36	B2	771	U	P-O3'-C3'	5.34	126.11	119.70
36	B2	1357	G	C3'-C2'-C1'	-5.34	97.22	101.50
39	Cq	183	PHE	CA-C-N	5.34	128.96	117.20
46	CN	109	ARG	NE-CZ-NH1	5.34	122.97	120.30
83	A5	1180	U	O4'-C1'-C2'	-5.34	100.45	105.80
83	A5	1217	U	N1-C1'-C2'	5.34	120.95	114.00
83	A5	1359	G	O4'-C1'-N9	5.34	112.48	108.20
83	A5	2733	G	C3'-C2'-C1'	5.34	105.78	101.50
83	A5	3851	U	C4'-C3'-C2'	-5.34	97.25	102.60
36	B2	1274	U	C3'-C2'-C1'	5.34	105.77	101.50
61	Ch	102	ARG	NE-CZ-NH2	-5.34	117.63	120.30
36	B2	651	C	C3'-C2'-C1'	5.34	105.77	101.50
36	B2	1837	G	C3'-C2'-C1'	-5.34	97.23	101.50
82	CG	129	GLY	C-N-CA	5.34	135.05	121.70
83	A5	371	G	C4'-C3'-C2'	-5.34	97.26	102.60
83	A5	2923	A	O4'-C1'-C2'	-5.34	100.46	105.80
18	AY	95	HIS	C-N-CA	5.34	133.51	122.30
25	Af	152	LYS	CB-CA-C	5.34	121.08	110.40
36	B2	1057	A	O4'-C1'-C2'	-5.34	100.46	105.80
36	B2	1428	A	C3'-C2'-C1'	5.34	105.77	101.50
36	B2	1906	U	P-O5'-C5'	5.34	129.44	120.90
64	CF	115	PHE	CB-CG-CD2	-5.34	117.06	120.80
83	A5	72	C	O4'-C1'-N1	5.34	112.47	108.20
83	A5	974	G	O4'-C1'-N9	5.34	112.47	108.20
83	A5	977	C	P-O5'-C5'	5.34	129.44	120.90
83	A5	1473	U	P-O5'-C5'	5.34	129.44	120.90
83	A5	2181	A	C3'-C2'-C1'	5.34	105.77	101.50
83	A5	3399	C	N1-C1'-C2'	5.34	120.94	114.00
3	AU	39	ARG	NE-CZ-NH1	5.34	122.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1365	G	O4'-C1'-N9	5.34	112.47	108.20
80	CH	106	ASN	O-C-N	-5.34	114.16	122.70
83	A5	668	A	O4'-C1'-N9	5.34	112.47	108.20
83	A5	974	G	N9-C1'-C2'	-5.34	106.13	112.00
83	A5	1480	U	P-O5'-C5'	-5.34	112.36	120.90
86	A8	56	U	O4'-C1'-N1	5.34	112.47	108.20
36	B2	241	U	O4'-C1'-N1	5.34	112.47	108.20
36	B2	634	U	O4'-C1'-N1	5.34	112.47	108.20
83	A5	1160	U	N1-C1'-C2'	5.34	120.94	114.00
83	A5	1293	A	O4'-C4'-C3'	-5.34	98.66	104.00
36	B2	195	G	C3'-C2'-C1'	-5.33	97.23	101.50
36	B2	1691	A	O4'-C1'-N9	5.33	112.47	108.20
75	Cm	94	MET	N-CA-CB	5.33	120.20	110.60
83	A5	1081	C	C3'-C2'-C1'	5.33	105.77	101.50
83	A5	1454	C	O4'-C1'-N1	5.33	112.47	108.20
83	A5	1560	A	N9-C1'-C2'	-5.33	106.13	112.00
83	A5	1984	U	C1'-O4'-C4'	-5.33	105.63	109.90
83	A5	2750	A	C1'-O4'-C4'	5.33	114.17	109.90
36	B2	1753	U	C1'-O4'-C4'	-5.33	105.63	109.90
36	B2	1818	U	C2'-C3'-O3'	5.33	122.23	113.70
37	BC	41	A	O4'-C1'-N9	5.33	112.47	108.20
28	AC	150	ARG	NE-CZ-NH2	-5.33	117.63	120.30
30	AF	226	SER	C-N-CA	5.33	135.03	121.70
79	CJ	8	ILE	C-N-CA	5.33	135.03	121.70
81	CE	193	VAL	CA-C-N	5.33	132.03	117.10
83	A5	26	G	N9-C1'-C2'	-5.33	106.14	112.00
83	A5	785	A	O3'-P-O5'	-5.33	93.87	104.00
83	A5	1452	A	O4'-C1'-N9	5.33	112.47	108.20
83	A5	2651	G	C2'-C3'-O3'	5.33	122.23	113.70
83	A5	3713	C	O4'-C4'-C3'	-5.33	98.67	104.00
10	AN	85	PRO	N-CA-CB	5.33	109.70	103.30
16	AA	87	VAL	CA-CB-CG2	-5.33	102.91	110.90
83	A5	1368	A	C3'-C2'-C1'	-5.33	97.24	101.50
83	A5	3690	A	N9-C1'-C2'	5.33	120.93	114.00
36	B2	1631	C	O4'-C1'-C2'	-5.33	100.47	105.80
83	A5	3367	C	C1'-O4'-C4'	-5.33	105.64	109.90
83	A5	3521	A	N9-C1'-C2'	-5.33	106.14	112.00
24	Ae	116	ASN	C-N-CA	5.33	135.02	121.70
42	CL	157	LYS	C-N-CA	5.33	135.02	121.70
83	A5	49	A	O4'-C1'-N9	-5.33	103.94	108.20
83	A5	196	C	C3'-C2'-C1'	5.33	105.76	101.50
36	B2	1338	U	N1-C1'-C2'	5.33	120.92	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
81	CE	29	GLY	C-N-CA	5.33	135.01	121.70
83	A5	2838	U	O3'-P-O5'	-5.33	93.88	104.00
85	A7	75	G	N9-C1'-C2'	5.33	120.92	114.00
36	B2	1537	C	N1-C1'-C2'	5.32	120.92	114.00
36	B2	1865	G	O4'-C1'-N9	5.32	112.46	108.20
52	CS	148	SER	C-N-CA	5.32	135.01	121.70
74	CC	267	PHE	CB-CG-CD2	-5.32	117.07	120.80
83	A5	1692	G	O4'-C1'-C2'	5.32	112.39	107.60
83	A5	2055	G	C1'-O4'-C4'	-5.32	105.64	109.90
83	A5	3642	G	O4'-C1'-N9	5.32	112.46	108.20
83	A5	3869	A	O4'-C4'-C3'	-5.32	98.68	104.00
36	B2	2	U	C3'-C2'-C1'	5.32	105.76	101.50
68	Cf	50	LEU	N-CA-CB	5.32	121.04	110.40
83	A5	428	C	N1-C1'-C2'	5.32	120.92	114.00
83	A5	3970	A	P-O5'-C5'	5.32	129.41	120.90
1	Az	790	THR	CA-CB-CG2	-5.32	104.95	112.40
36	B2	1115	C	C5'-C4'-O4'	5.32	115.48	109.10
64	CF	167	ARG	N-CA-CB	5.32	120.17	110.60
73	C1	39	ALA	N-CA-C	5.32	125.36	111.00
80	CH	49	ASP	CB-CG-OD1	-5.32	113.51	118.30
83	A5	1569	U	O4'-C1'-C2'	-5.32	100.48	105.80
83	A5	1687	U	C1'-O4'-C4'	-5.32	105.64	109.90
36	B2	486	A	C1'-O4'-C4'	-5.32	105.64	109.90
36	B2	1979	C	O3'-P-O5'	-5.32	93.89	104.00
77	Cp	57	CYS	CA-CB-SG	-5.32	104.42	114.00
83	A5	2674	A	P-O5'-C5'	-5.32	112.39	120.90
36	B2	1617	A	O4'-C1'-N9	5.32	112.45	108.20
54	CP	128	ARG	N-CA-CB	5.32	120.17	110.60
83	A5	979	U	N1-C1'-C2'	5.32	120.91	114.00
83	A5	1309	U	C3'-C2'-C1'	5.32	105.75	101.50
83	A5	1447	C	C4'-C3'-C2'	-5.32	97.28	102.60
83	A5	1878	A	C3'-C2'-C1'	5.32	105.75	101.50
83	A5	2174	A	C3'-C2'-C1'	-5.32	97.25	101.50
26	AJ	73	PHE	CB-CG-CD2	-5.32	117.08	120.80
36	B2	1824	C	N1-C1'-C2'	5.32	120.91	114.00
37	BC	54	U	N1-C1'-C2'	-5.32	106.15	112.00
83	A5	2925	C	C3'-C2'-C1'	5.32	105.75	101.50
36	B2	1295	U	C3'-C2'-C1'	5.31	105.75	101.50
83	A5	1889	A	C1'-O4'-C4'	-5.31	105.65	109.90
83	A5	2707	C	C5'-C4'-O4'	-5.31	102.72	109.10
83	A5	3562	A	N9-C1'-C2'	5.31	120.91	114.00
2	Ag	19	THR	CA-CB-CG2	-5.31	104.96	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2135	C	O4'-C1'-C2'	-5.31	100.49	105.80
86	A8	27	C	C1'-O4'-C4'	-5.31	105.65	109.90
83	A5	2199	A	C3'-C2'-C1'	5.31	105.75	101.50
83	A5	3367	C	N1-C1'-C2'	5.31	120.91	114.00
36	B2	451	C	O4'-C1'-C2'	-5.31	100.49	105.80
36	B2	1630	G	N9-C1'-C2'	5.31	120.90	114.00
83	A5	13	U	O4'-C1'-C2'	-5.31	100.49	105.80
83	A5	908	C	O4'-C1'-C2'	-5.31	100.49	105.80
83	A5	1136	A	C3'-C2'-C1'	5.31	105.75	101.50
83	A5	2192	U	O4'-C1'-N1	5.31	112.45	108.20
83	A5	3937	U	C1'-O4'-C4'	5.31	114.15	109.90
36	B2	1047	U	O4'-C1'-C2'	-5.31	100.49	105.80
36	B2	1329	A	C2'-C3'-O3'	5.31	122.19	113.70
36	B2	1366	C	N1-C1'-C2'	5.31	120.90	114.00
83	A5	2085	G	N9-C1'-C2'	5.31	120.90	114.00
83	A5	2930	A	O4'-C1'-N9	5.31	112.45	108.20
83	A5	3578	A	O4'-C1'-N9	5.31	112.45	108.20
36	B2	284	G	P-O3'-C3'	5.31	126.07	119.70
83	A5	3400	U	C1'-O4'-C4'	-5.31	105.66	109.90
36	B2	1170	G	C5'-C4'-C3'	-5.30	107.51	116.00
36	B2	1471	G	P-O3'-C3'	5.30	126.06	119.70
83	A5	986	A	C3'-C2'-C1'	5.30	105.74	101.50
83	A5	1927	U	O4'-C4'-C3'	-5.30	98.70	104.00
83	A5	2743	C	C1'-O4'-C4'	-5.30	105.66	109.90
83	A5	3576	G	C1'-O4'-C4'	-5.30	105.66	109.90
85	A7	27	A	O4'-C1'-N9	5.30	112.44	108.20
1	Az	311	HIS	N-CA-CB	5.30	120.14	110.60
36	B2	1657	C	C4'-C3'-C2'	-5.30	97.30	102.60
83	A5	1741	G	O4'-C1'-N9	5.30	112.44	108.20
68	Cf	24	VAL	C-N-CA	5.30	134.95	121.70
83	A5	238	G	O4'-C1'-C2'	5.30	112.37	107.60
83	A5	619	U	C1'-O4'-C4'	-5.30	105.66	109.90
83	A5	1271	G	P-O3'-C3'	-5.30	113.34	119.70
83	A5	2781	G	O4'-C1'-C2'	-5.30	100.50	105.80
29	AG	165	LYS	N-CA-CB	5.30	120.14	110.60
33	AI	109	PHE	CB-CG-CD1	5.30	124.51	120.80
36	B2	121	A	N9-C1'-C2'	-5.30	106.17	112.00
83	A5	1010	A	O4'-C1'-N9	5.30	112.44	108.20
83	A5	1195	U	N1-C1'-C2'	5.30	120.89	114.00
83	A5	1971	C	P-O3'-C3'	-5.30	113.34	119.70
83	A5	2999	U	C2'-C3'-O3'	5.30	122.18	113.70
83	A5	3714	U	P-O3'-C3'	5.30	126.06	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3754	C	P-O3'-C3'	5.30	126.06	119.70
25	Af	148	PHE	N-CA-CB	5.30	120.14	110.60
45	Ca	63	HIS	N-CA-CB	5.30	120.14	110.60
83	A5	479	U	C5'-C4'-O4'	5.30	115.46	109.10
83	A5	1181	A	P-O3'-C3'	5.30	126.06	119.70
36	B2	858	G	O4'-C4'-C3'	-5.30	98.70	104.00
38	Cz	1	MET	CG-SD-CE	-5.30	91.73	100.20
83	A5	202	A	C4'-C3'-C2'	-5.30	97.30	102.60
83	A5	1157	C	N1-C1'-C2'	5.30	120.89	114.00
83	A5	2277	G	O4'-C1'-C2'	-5.30	100.50	105.80
83	A5	2908	U	C3'-C2'-C1'	5.30	105.74	101.50
83	A5	3298	U	O4'-C1'-C2'	-5.30	100.50	105.80
83	A5	3795	G	O4'-C1'-N9	5.30	112.44	108.20
85	A7	46	C	C3'-C2'-C1'	5.30	105.74	101.50
83	A5	289	C	O4'-C1'-N1	5.29	112.44	108.20
83	A5	1537	G	C3'-C2'-C1'	-5.29	97.26	101.50
83	A5	2772	G	C1'-O4'-C4'	-5.29	105.66	109.90
35	Ah	138	ARG	N-CA-CB	5.29	120.13	110.60
36	B2	641	U	C5'-C4'-C3'	-5.29	107.53	116.00
36	B2	1835	U	N1-C1'-C2'	5.29	120.88	114.00
83	A5	255	C	P-O5'-C5'	-5.29	112.43	120.90
83	A5	460	A	N9-C1'-C2'	5.29	120.88	114.00
83	A5	1474	A	C1'-O4'-C4'	5.29	114.14	109.90
85	A7	86	G	O4'-C1'-N9	5.29	112.44	108.20
36	B2	1077	C	O4'-C1'-C2'	-5.29	100.51	105.80
36	B2	1668	A	O4'-C1'-N9	5.29	112.43	108.20
83	A5	323	U	N1-C1'-C2'	5.29	120.88	114.00
83	A5	1587	U	C1'-O4'-C4'	5.29	114.13	109.90
83	A5	3187	C	O4'-C1'-C2'	-5.29	100.51	105.80
36	B2	828	A	C1'-O4'-C4'	-5.29	105.67	109.90
1	Az	782	PHE	CB-CG-CD1	-5.29	117.10	120.80
36	B2	508	C	O4'-C1'-N1	5.29	112.43	108.20
36	B2	605	G	O4'-C1'-N9	5.29	112.43	108.20
36	B2	1069	U	O4'-C1'-N1	5.29	112.43	108.20
39	Cq	69	LEU	C-N-CA	5.29	134.92	121.70
81	CE	193	VAL	CA-C-O	-5.29	108.99	120.10
84	A9	6	G	C1'-O4'-C4'	5.29	114.13	109.90
86	A8	29	U	C1'-O4'-C4'	5.29	114.13	109.90
36	B2	1290	A	C3'-C2'-C1'	5.29	105.73	101.50
36	B2	1655	C	C1'-O4'-C4'	-5.29	105.67	109.90
83	A5	252	U	O4'-C1'-N1	5.29	112.43	108.20
83	A5	1307	G	C1'-O4'-C4'	-5.29	105.67	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1946	G	C5'-C4'-C3'	5.29	124.46	116.00
36	B2	26	A	C4'-C3'-C2'	-5.29	97.31	102.60
36	B2	595	C	N1-C1'-C2'	5.29	120.87	114.00
36	B2	1544	G	C4'-C3'-C2'	-5.29	97.31	102.60
36	B2	1696	G	N9-C1'-C2'	5.29	120.87	114.00
57	CY	28	ARG	NE-CZ-NH1	5.29	122.94	120.30
83	A5	3228	A	N9-C1'-C2'	5.29	120.87	114.00
85	A7	96	U	C3'-C2'-C1'	5.29	105.73	101.50
10	AN	65	PHE	CB-CG-CD1	5.28	124.50	120.80
36	B2	252	A	C5'-C4'-O4'	5.28	115.44	109.10
36	B2	834	A	C3'-C2'-C1'	5.28	105.73	101.50
81	CE	130	PHE	CB-CG-CD2	-5.28	117.10	120.80
83	A5	1046	A	C3'-C2'-C1'	5.28	105.73	101.50
83	A5	3033	A	P-O3'-C3'	5.28	126.04	119.70
83	A5	3583	C	C1'-O4'-C4'	-5.28	105.67	109.90
86	A8	91	C	N1-C1'-C2'	5.28	120.87	114.00
83	A5	853	G	O4'-C1'-N9	5.28	112.43	108.20
83	A5	2666	G	C2'-C3'-O3'	5.28	122.15	113.70
36	B2	531	U	O4'-C1'-N1	5.28	112.42	108.20
36	B2	658	C	O4'-C1'-N1	5.28	112.42	108.20
36	B2	1430	U	C3'-C2'-C1'	5.28	105.72	101.50
36	B2	1782	G	O4'-C1'-C2'	-5.28	100.52	105.80
39	Cq	87	GLY	N-CA-C	-5.28	99.90	113.10
42	CL	69	LEU	CB-CA-C	5.28	120.23	110.20
78	Co	46	GLN	N-CA-CB	5.28	120.11	110.60
83	A5	552	U	N1-C1'-C2'	-5.28	106.19	112.00
83	A5	2775	A	N9-C1'-C2'	5.28	120.86	114.00
36	B2	987	A	O4'-C1'-N9	5.28	112.42	108.20
36	B2	1752	U	C1'-O4'-C4'	5.28	114.12	109.90
83	A5	1695	A	C3'-C2'-C1'	5.28	105.72	101.50
86	A8	62	A	P-O5'-C5'	-5.28	112.45	120.90
36	B2	93	A	P-O3'-C3'	5.28	126.03	119.70
36	B2	140	G	O5'-C5'-C4'	-5.28	101.67	111.70
36	B2	1206	G	O4'-C1'-C2'	5.28	112.35	107.60
81	CE	193	VAL	CB-CA-C	5.28	121.43	111.40
83	A5	400	U	C1'-O4'-C4'	-5.28	105.68	109.90
83	A5	2996	U	C5'-C4'-O4'	5.28	115.43	109.10
83	A5	3204	G	C5'-C4'-O4'	5.28	115.43	109.10
85	A7	88	G	N9-C1'-C2'	5.28	120.86	114.00
86	A8	44	C	O3'-P-O5'	-5.28	93.97	104.00
19	AZ	63	ALA	N-CA-C	5.28	125.25	111.00
31	AH	116	ARG	NE-CZ-NH2	-5.28	117.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	AI	125	ARG	NE-CZ-NH2	-5.28	117.66	120.30
36	B2	220	A	C1'-O4'-C4'	5.28	114.12	109.90
83	A5	101	C	N1-C1'-C2'	5.28	120.86	114.00
83	A5	115	U	N1-C1'-C2'	-5.28	106.20	112.00
83	A5	2862	U	O4'-C1'-C2'	-5.28	100.53	105.80
83	A5	3779	U	O4'-C1'-N1	5.28	112.42	108.20
36	B2	527	C	O4'-C1'-N1	5.27	112.42	108.20
36	B2	1870	C	N1-C1'-C2'	5.27	120.86	114.00
41	CO	118	ARG	NE-CZ-NH2	-5.27	117.66	120.30
83	A5	1297	G	C5'-C4'-C3'	-5.27	107.56	116.00
83	A5	1453	U	P-O3'-C3'	5.27	126.03	119.70
83	A5	1812	C	P-O5'-C5'	-5.27	112.46	120.90
14	AT	10	ASP	CB-CA-C	5.27	120.94	110.40
28	AC	83	SER	N-CA-C	-5.27	96.76	111.00
36	B2	1835	U	O4'-C1'-N1	5.27	112.42	108.20
37	BC	23	G	C3'-C2'-C1'	5.27	105.72	101.50
83	A5	2068	A	O4'-C1'-N9	5.27	112.42	108.20
83	A5	2122	G	O5'-C5'-C4'	-5.27	101.68	111.70
83	A5	3209	G	O4'-C1'-C2'	5.27	112.35	107.60
83	A5	3294	A	P-O3'-C3'	5.27	126.03	119.70
36	B2	1909	U	P-O3'-C3'	-5.27	113.38	119.70
83	A5	1246	U	O4'-C1'-N1	5.27	112.42	108.20
1	Az	790	THR	CA-C-N	5.27	126.74	116.20
8	AS	40	TYR	CG-CD1-CE1	-5.27	117.08	121.30
36	B2	312	G	P-O5'-C5'	-5.27	112.47	120.90
83	A5	626	A	C3'-C2'-C1'	5.27	105.72	101.50
83	A5	925	C	C3'-C2'-C1'	5.27	105.72	101.50
83	A5	1542	C	C1'-O4'-C4'	-5.27	105.68	109.90
83	A5	2641	C	C3'-C2'-C1'	5.27	105.72	101.50
83	A5	3460	C	C5'-C4'-C3'	-5.27	107.57	116.00
36	B2	1401	U	C1'-O4'-C4'	5.27	114.11	109.90
54	CP	127	ARG	NE-CZ-NH2	-5.27	117.67	120.30
83	A5	245	G	C3'-C2'-C1'	-5.27	97.29	101.50
83	A5	1443	A	O4'-C1'-C2'	-5.27	100.53	105.80
83	A5	2212	A	O4'-C1'-N9	5.27	112.41	108.20
83	A5	2998	U	C5'-C4'-O4'	5.27	115.42	109.10
83	A5	2130	G	C4'-C3'-C2'	-5.27	97.33	102.60
30	AF	44	PHE	CB-CG-CD1	-5.26	117.11	120.80
83	A5	260	A	C1'-O4'-C4'	-5.26	105.69	109.90
83	A5	399	C	O4'-C1'-N1	5.26	112.41	108.20
83	A5	491	U	N1-C1'-C2'	-5.26	106.21	112.00
83	A5	3369	A	O4'-C1'-N9	5.26	112.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	116	U	O4'-C1'-N1	5.26	112.41	108.20
36	B2	1070	A	O4'-C1'-N9	5.26	112.41	108.20
36	B2	1587	U	N1-C1'-C2'	-5.26	106.21	112.00
83	A5	1750	G	C1'-O4'-C4'	5.26	114.11	109.90
83	A5	1885	U	C3'-C2'-C1'	5.26	105.71	101.50
83	A5	3894	C	N1-C1'-C2'	5.26	120.84	114.00
36	B2	915	U	N1-C1'-C2'	5.26	120.84	114.00
63	CB	58	ARG	NE-CZ-NH1	5.26	122.93	120.30
68	Cf	25	LYS	N-CA-C	5.26	125.20	111.00
83	A5	982	C	P-O3'-C3'	5.26	126.01	119.70
83	A5	1251	C	C1'-O4'-C4'	-5.26	105.69	109.90
83	A5	1302	U	C3'-C2'-C1'	-5.26	97.29	101.50
83	A5	2726	A	O4'-C4'-C3'	-5.26	98.74	104.00
47	CI	154	ARG	NE-CZ-NH1	5.26	122.93	120.30
83	A5	1694	A	P-O3'-C3'	5.26	126.01	119.70
83	A5	2000	U	O3'-P-O5'	-5.26	94.01	104.00
83	A5	2646	U	N1-C1'-C2'	-5.26	106.22	112.00
36	B2	396	A	C4'-C3'-C2'	-5.26	97.34	102.60
36	B2	899	A	O4'-C1'-C2'	5.26	112.33	107.60
36	B2	1941	A	O4'-C1'-N9	5.26	112.41	108.20
50	CR	89	MET	N-CA-CB	5.26	120.06	110.60
83	A5	1601	U	C4'-C3'-C2'	-5.26	97.34	102.60
83	A5	1660	G	P-O5'-C5'	5.26	129.31	120.90
52	CS	116	ARG	NE-CZ-NH1	5.25	122.93	120.30
74	CC	204	ARG	NE-CZ-NH2	-5.25	117.67	120.30
83	A5	307	A	O4'-C1'-N9	5.25	112.40	108.20
83	A5	1776	U	O4'-C1'-C2'	-5.25	100.55	105.80
83	A5	3138	G	C5'-C4'-O4'	5.25	115.41	109.10
83	A5	3871	U	C3'-C2'-C1'	-5.25	97.30	101.50
1	Az	49	ALA	N-CA-CB	5.25	117.45	110.10
36	B2	229	U	C1'-O4'-C4'	-5.25	105.70	109.90
36	B2	562	C	O4'-C1'-C2'	-5.25	100.55	105.80
36	B2	820	G	O5'-C5'-C4'	-5.25	101.72	111.70
45	Ca	88	PHE	CB-CG-CD1	5.25	124.48	120.80
83	A5	553	A	O4'-C1'-N9	5.25	112.40	108.20
29	AG	88	ARG	NE-CZ-NH2	-5.25	117.67	120.30
32	AW	129	PHE	CB-CG-CD2	-5.25	117.12	120.80
33	AI	180	ARG	NE-CZ-NH1	5.25	122.93	120.30
36	B2	663	A	P-O3'-C3'	5.25	126.00	119.70
36	B2	1358	G	O4'-C1'-C2'	5.25	112.33	107.60
41	CO	201	TYR	C-N-CA	5.25	133.33	122.30
83	A5	1491	U	C2'-C3'-O3'	5.25	122.10	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3655	U	C1'-O4'-C4'	5.25	114.10	109.90
37	BC	39	U	C3'-C2'-C1'	5.25	105.70	101.50
83	A5	636	U	N1-C1'-C2'	-5.25	106.22	112.00
83	A5	1568	A	C1'-O4'-C4'	-5.25	105.70	109.90
83	A5	3929	U	C3'-C2'-C1'	-5.25	97.30	101.50
23	AD	115	LEU	N-CA-CB	5.25	120.90	110.40
27	AE	54	TYR	CB-CG-CD1	-5.25	117.85	121.00
36	B2	711	G	C5'-C4'-O4'	5.25	115.40	109.10
36	B2	936	G	C3'-C2'-C1'	-5.25	97.30	101.50
36	B2	1706	U	C5'-C4'-C3'	-5.25	107.60	116.00
36	B2	1788	C	O4'-C1'-C2'	5.25	112.32	107.60
57	CY	74	TYR	CB-CG-CD2	5.25	124.15	121.00
66	Cd	52	ARG	NE-CZ-NH2	-5.25	117.68	120.30
81	CE	180	GLY	N-CA-C	-5.25	99.98	113.10
83	A5	132	U	O3'-P-O5'	-5.25	94.03	104.00
83	A5	1768	G	O3'-P-O5'	5.25	113.97	104.00
83	A5	2079	U	O4'-C1'-N1	5.25	112.40	108.20
83	A5	2467	A	C1'-O4'-C4'	5.25	114.10	109.90
83	A5	3489	A	N9-C1'-C2'	-5.25	106.23	112.00
83	A5	3734	A	O4'-C1'-C2'	-5.25	100.55	105.80
17	AV	12	TYR	CB-CG-CD2	-5.25	117.85	121.00
36	B2	23	G	O4'-C1'-N9	5.25	112.40	108.20
36	B2	689	C	P-O3'-C3'	5.25	126.00	119.70
51	CA	72	ARG	NE-CZ-NH2	-5.25	117.68	120.30
83	A5	271	A	C5'-C4'-O4'	5.25	115.40	109.10
83	A5	2135	C	C5'-C4'-O4'	-5.25	102.80	109.10
1	Az	191	VAL	CA-CB-CG1	5.25	118.77	110.90
36	B2	216	U	C4'-C3'-C2'	-5.25	97.36	102.60
36	B2	1551	C	O4'-C1'-N1	5.25	112.40	108.20
36	B2	1874	C	C5'-C4'-C3'	-5.25	107.61	116.00
83	A5	1695	A	P-O5'-C5'	5.25	129.29	120.90
1	Az	56	PHE	CB-CG-CD2	-5.24	117.13	120.80
1	Az	95	ARG	CA-C-N	5.24	128.74	117.20
36	B2	249	U	N1-C1'-C2'	5.24	120.82	114.00
36	B2	523	A	O4'-C1'-C2'	-5.24	100.56	105.80
36	B2	916	U	O4'-C1'-N1	5.24	112.39	108.20
36	B2	1007	C	O4'-C1'-C2'	-5.24	100.56	105.80
36	B2	1523	U	O4'-C1'-N1	5.24	112.39	108.20
83	A5	993	A	O4'-C1'-N9	5.24	112.39	108.20
83	A5	1208	U	C1'-O4'-C4'	5.24	114.09	109.90
83	A5	1612	G	O4'-C1'-C2'	5.24	112.32	107.60
83	A5	3639	U	P-O5'-C5'	-5.24	112.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3766	U	O4'-C1'-N1	5.24	112.39	108.20
85	A7	95	U	N1-C1'-C2'	-5.24	106.23	112.00
27	AE	33	THR	N-CA-C	5.24	125.15	111.00
49	CQ	39	THR	CA-CB-CG2	-5.24	105.06	112.40
83	A5	211	U	OP1-P-OP2	-5.24	111.74	119.60
83	A5	2645	C	C3'-C2'-C1'	5.24	105.69	101.50
1	Az	251	TRP	CA-CB-CG	5.24	123.66	113.70
30	AF	176	TRP	CB-CG-CD1	5.24	133.81	127.00
36	B2	1230	A	O4'-C1'-N9	5.24	112.39	108.20
64	CF	180	ARG	N-CA-CB	5.24	120.03	110.60
70	Ci	93	ALA	N-CA-CB	5.24	117.44	110.10
80	CH	84	PHE	CB-CG-CD2	-5.24	117.13	120.80
83	A5	644	U	O4'-C1'-N1	5.24	112.39	108.20
8	AS	99	THR	CA-CB-CG2	-5.24	105.06	112.40
83	A5	214	A	O4'-C1'-C2'	-5.24	100.56	105.80
83	A5	517	A	N9-C1'-C2'	-5.24	106.24	112.00
83	A5	1875	G	C1'-O4'-C4'	-5.24	105.71	109.90
83	A5	1958	G	C3'-C2'-C1'	5.24	105.69	101.50
3	AU	109	GLU	CA-C-N	5.24	131.76	117.10
42	CL	101	ARG	NE-CZ-NH1	5.24	122.92	120.30
1	Az	300	THR	CA-CB-CG2	-5.24	105.07	112.40
79	CJ	68	ARG	NE-CZ-NH1	5.24	122.92	120.30
83	A5	3746	A	C3'-C2'-C1'	-5.24	97.31	101.50
2	Ag	291	ALA	N-CA-CB	5.23	117.43	110.10
83	A5	771	A	O4'-C1'-C2'	-5.23	100.57	105.80
81	CE	187	ALA	C-N-CA	5.23	134.78	121.70
83	A5	396	A	C1'-O4'-C4'	5.23	114.09	109.90
83	A5	498	U	O4'-C4'-C3'	-5.23	98.77	104.00
83	A5	503	A	C3'-C2'-C1'	-5.23	97.31	101.50
83	A5	1367	A	N9-C1'-C2'	5.23	120.80	114.00
83	A5	3880	A	O4'-C1'-N9	5.23	112.39	108.20
85	A7	17	C	O4'-C1'-C2'	-5.23	100.57	105.80
36	B2	489	C	P-O3'-C3'	5.23	125.98	119.70
36	B2	542	A	C3'-C2'-C1'	5.23	105.68	101.50
36	B2	698	U	O5'-C5'-C4'	5.23	121.64	111.70
36	B2	1174	A	P-O3'-C3'	5.23	125.98	119.70
63	CB	308	ASP	CB-CA-C	-5.23	99.94	110.40
68	Cf	102	LYS	N-CA-CB	5.23	120.01	110.60
83	A5	555	U	N1-C1'-C2'	5.23	120.80	114.00
83	A5	758	A	N9-C1'-C2'	-5.23	106.25	112.00
83	A5	1177	U	P-O5'-C5'	5.23	129.27	120.90
83	A5	2207	A	N9-C1'-C2'	-5.23	106.25	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3508	G	P-O3'-C3'	-5.23	113.42	119.70
83	A5	3764	G	C1'-O4'-C4'	5.23	114.08	109.90
83	A5	3829	U	C4'-C3'-C2'	-5.23	97.37	102.60
83	A5	3888	U	N1-C1'-C2'	5.23	120.80	114.00
5	AO	55	ARG	NE-CZ-NH1	5.23	122.91	120.30
36	B2	424	G	C3'-C2'-C1'	5.23	105.68	101.50
36	B2	1684	U	O4'-C1'-C2'	-5.23	100.57	105.80
36	B2	1725	C	C3'-C2'-C1'	5.23	105.68	101.50
83	A5	450	G	O4'-C1'-N9	5.23	112.38	108.20
1	Az	640	PRO	C-N-CA	5.23	134.77	121.70
36	B2	1112	A	C5'-C4'-O4'	5.23	115.37	109.10
83	A5	136	C	N1-C1'-C2'	5.23	120.80	114.00
9	Ad	10	HIS	N-CA-CB	5.23	120.01	110.60
83	A5	404	U	C4'-C3'-C2'	-5.23	97.37	102.60
83	A5	626	A	P-O3'-C3'	-5.23	113.43	119.70
83	A5	854	U	C3'-C2'-C1'	5.23	105.68	101.50
83	A5	1861	A	N9-C1'-C2'	-5.23	106.25	112.00
83	A5	3383	A	C1'-O4'-C4'	-5.23	105.72	109.90
83	A5	3410	G	P-O5'-C5'	5.23	129.26	120.90
83	A5	3817	U	O3'-P-O5'	5.23	113.93	104.00
36	B2	85	A	O4'-C1'-N9	5.22	112.38	108.20
36	B2	263	A	C1'-O4'-C4'	5.22	114.08	109.90
36	B2	465	A	O4'-C1'-N9	5.22	112.38	108.20
36	B2	575	A	O4'-C1'-N9	5.22	112.38	108.20
36	B2	1834	G	N9-C1'-C2'	5.22	120.79	114.00
83	A5	838	U	N1-C1'-C2'	5.22	120.79	114.00
83	A5	2688	U	C1'-O4'-C4'	-5.22	105.72	109.90
5	AO	141	ARG	NE-CZ-NH2	-5.22	117.69	120.30
9	Ad	43	PHE	CB-CG-CD1	5.22	124.46	120.80
23	AD	100	ALA	N-CA-CB	5.22	117.41	110.10
27	AE	221	ARG	NE-CZ-NH2	-5.22	117.69	120.30
36	B2	1599	U	P-O5'-C5'	-5.22	112.54	120.90
36	B2	1670	G	C3'-C2'-C1'	-5.22	97.32	101.50
83	A5	561	A	O4'-C1'-N9	5.22	112.38	108.20
83	A5	1619	C	C3'-C2'-C1'	5.22	105.68	101.50
83	A5	3182	U	N1-C1'-C2'	5.22	120.79	114.00
83	A5	117	C	C1'-O4'-C4'	-5.22	105.72	109.90
83	A5	3684	A	C4'-C3'-C2'	-5.22	97.38	102.60
83	A5	3840	G	C4'-C3'-C2'	-5.22	97.38	102.60
36	B2	1800	U	C1'-O4'-C4'	-5.22	105.72	109.90
70	Ci	38	ARG	NE-CZ-NH1	5.22	122.91	120.30
83	A5	88	U	O4'-C1'-N1	5.22	112.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3385	G	O4'-C1'-N9	5.22	112.38	108.20
36	B2	339	U	P-O5'-C5'	-5.22	112.55	120.90
36	B2	358	A	O3'-P-O5'	5.22	113.92	104.00
36	B2	435	G	C1'-O4'-C4'	-5.22	105.72	109.90
83	A5	333	C	O4'-C1'-C2'	-5.22	100.58	105.80
83	A5	1146	U	C5'-C4'-O4'	5.22	115.36	109.10
1	Az	264	GLN	CA-C-N	5.22	128.68	117.20
36	B2	636	G	N9-C1'-C2'	5.22	120.78	114.00
36	B2	1271	A	O4'-C1'-N9	-5.22	104.03	108.20
36	B2	1434	U	P-O5'-C5'	5.22	129.25	120.90
36	B2	1742	A	C3'-C2'-C1'	5.22	105.67	101.50
83	A5	3507	A	C1'-O4'-C4'	-5.22	105.73	109.90
1	Az	346	SER	CA-C-O	-5.21	109.15	120.10
1	Az	482	VAL	C-N-CA	5.21	134.73	121.70
23	AD	226	THR	CA-CB-CG2	-5.21	105.10	112.40
33	AI	186	ARG	NE-CZ-NH1	-5.21	117.69	120.30
36	B2	608	U	O4'-C1'-N1	5.21	112.37	108.20
36	B2	876	U	C1'-O4'-C4'	5.21	114.07	109.90
48	CD	35	ARG	NE-CZ-NH1	5.21	122.91	120.30
83	A5	327	C	C1'-O4'-C4'	-5.21	105.73	109.90
83	A5	466	U	O4'-C1'-N1	5.21	112.37	108.20
83	A5	1859	U	C1'-O4'-C4'	-5.21	105.73	109.90
83	A5	2170	C	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	1205	U	N1-C1'-C2'	5.21	120.78	114.00
83	A5	227	A	C1'-O4'-C4'	5.21	114.07	109.90
83	A5	2105	C	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	406	A	C3'-C2'-C1'	5.21	105.67	101.50
36	B2	511	G	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	1569	C	N1-C1'-C2'	5.21	120.78	114.00
83	A5	928	U	P-O5'-C5'	5.21	129.24	120.90
83	A5	1368	A	N9-C1'-C2'	-5.21	106.27	112.00
83	A5	1988	A	C1'-O4'-C4'	5.21	114.07	109.90
83	A5	3371	G	O4'-C1'-N9	5.21	112.37	108.20
83	A5	3931	C	O4'-C1'-C2'	-5.21	100.59	105.80
1	Az	223	GLY	N-CA-C	5.21	126.12	113.10
83	A5	167	A	N9-C1'-C2'	-5.21	106.27	112.00
36	B2	396	A	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	475	G	C5'-C4'-C3'	-5.21	107.67	116.00
83	A5	3692	G	O4'-C1'-C2'	5.21	112.29	107.60
33	AI	65	PHE	CB-CG-CD2	-5.21	117.16	120.80
44	CM	6	PHE	CB-CG-CD2	-5.21	117.16	120.80
83	A5	301	U	C1'-O4'-C4'	-5.21	105.73	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1124	G	P-O3'-C3'	-5.21	113.45	119.70
83	A5	2665	C	C3'-C2'-C1'	5.21	105.67	101.50
83	A5	3402	C	C3'-C2'-C1'	5.21	105.67	101.50
7	AM	121	PHE	N-CA-CB	5.21	119.97	110.60
36	B2	779	A	P-O3'-C3'	5.21	125.95	119.70
39	Cq	108	PRO	CA-N-CD	-5.21	104.21	111.50
83	A5	1490	C	O4'-C1'-N1	5.21	112.36	108.20
83	A5	3577	U	C5'-C4'-O4'	5.21	115.35	109.10
36	B2	1064	A	O4'-C1'-N9	5.20	112.36	108.20
41	CO	192	GLU	CA-C-N	5.20	131.67	117.10
44	CM	56	HIS	CB-CA-C	5.20	120.81	110.40
58	CW	72	THR	N-CA-CB	5.20	120.19	110.30
82	CG	63	PRO	C-N-CA	5.20	134.71	121.70
83	A5	981	C	P-O3'-C3'	5.20	125.94	119.70
83	A5	2691	A	O4'-C1'-C2'	-5.20	100.60	105.80
83	A5	3393	U	C1'-O4'-C4'	5.20	114.06	109.90
83	A5	3911	G	O4'-C1'-C2'	5.20	112.28	107.60
36	B2	272	U	C3'-C2'-C1'	5.20	105.66	101.50
36	B2	56	U	C3'-C2'-C1'	5.20	105.66	101.50
36	B2	167	U	C5'-C4'-O4'	5.20	115.34	109.10
36	B2	382	G	O4'-C1'-N9	5.20	112.36	108.20
36	B2	1990	U	C1'-O4'-C4'	-5.20	105.74	109.90
41	CO	117	ARG	NE-CZ-NH2	-5.20	117.70	120.30
41	CO	162	ARG	NE-CZ-NH2	-5.20	117.70	120.30
80	CH	48	PRO	C-N-CA	5.20	134.70	121.70
83	A5	356	A	P-O5'-C5'	5.20	129.22	120.90
25	Af	140	TYR	CB-CG-CD2	-5.20	117.88	121.00
36	B2	455	C	C3'-C2'-C1'	5.20	105.66	101.50
36	B2	874	U	O5'-C5'-C4'	-5.20	101.82	111.70
36	B2	1855	A	O4'-C1'-C2'	-5.20	100.60	105.80
69	Cg	1	MET	CG-SD-CE	-5.20	91.88	100.20
83	A5	235	A	N9-C1'-C2'	-5.20	106.28	112.00
83	A5	1013	G	O4'-C1'-C2'	5.20	112.28	107.60
83	A5	2228	U	C1'-O4'-C4'	-5.20	105.74	109.90
83	A5	3470	G	C5'-C4'-O4'	5.20	115.34	109.10
83	A5	3582	A	C3'-C2'-C1'	5.20	105.66	101.50
83	A5	3626	A	C3'-C2'-C1'	5.20	105.66	101.50
19	AZ	62	PRO	CA-C-N	5.20	128.63	117.20
29	AG	148	SER	C-N-CA	5.20	134.69	121.70
36	B2	1888	C	O4'-C1'-C2'	-5.20	100.60	105.80
46	CN	123	GLN	CB-CA-C	-5.20	100.01	110.40
83	A5	1298	A	P-O3'-C3'	-5.20	113.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3878	U	C5'-C4'-C3'	-5.20	107.69	116.00
83	A5	3956	U	O3'-P-O5'	-5.20	94.13	104.00
86	A8	45	G	P-O5'-C5'	5.20	129.21	120.90
36	B2	1	A	O4'-C1'-N9	-5.19	104.05	108.20
36	B2	1332	G	C5'-C4'-C3'	-5.19	107.69	116.00
49	CQ	110	ARG	NE-CZ-NH1	5.19	122.90	120.30
65	Cc	39	ARG	NE-CZ-NH1	5.19	122.90	120.30
83	A5	1368	A	O4'-C1'-C2'	5.19	112.28	107.60
83	A5	3143	U	C1'-O4'-C4'	5.19	114.06	109.90
11	AL	147	GLY	N-CA-C	-5.19	100.12	113.10
34	AQ	5	ARG	NE-CZ-NH1	5.19	122.90	120.30
36	B2	871	G	C1'-O4'-C4'	-5.19	105.75	109.90
36	B2	1785	A	O4'-C1'-N9	5.19	112.35	108.20
36	B2	1888	C	C1'-O4'-C4'	5.19	114.05	109.90
83	A5	620	U	P-O3'-C3'	5.19	125.93	119.70
83	A5	922	G	N9-C1'-C2'	5.19	120.75	114.00
83	A5	2919	A	O4'-C1'-N9	5.19	112.36	108.20
83	A5	3893	A	C4'-C3'-C2'	-5.19	97.41	102.60
7	AM	38	LEU	N-CA-CB	5.19	120.78	110.40
36	B2	1847	A	O4'-C1'-N9	5.19	112.35	108.20
36	B2	1873	A	P-O3'-C3'	-5.19	113.47	119.70
39	Cq	23	ASP	CB-CG-OD2	-5.19	113.63	118.30
40	CK	106	PHE	N-CA-C	5.19	125.01	111.00
83	A5	1037	A	C3'-C2'-C1'	5.19	105.65	101.50
83	A5	1791	A	P-O3'-C3'	5.19	125.93	119.70
85	A7	36	C	C5'-C4'-C3'	5.19	124.30	116.00
20	Aa	58	ILE	CB-CA-C	-5.19	101.22	111.60
20	Aa	106	MET	N-CA-CB	5.19	119.94	110.60
50	CR	95	TRP	CG-CD2-CE3	-5.19	129.23	133.90
82	CG	130	LYS	N-CA-C	5.19	125.01	111.00
83	A5	1599	C	C3'-C2'-C1'	5.19	105.65	101.50
83	A5	2057	G	O4'-C1'-N9	5.19	112.35	108.20
83	A5	2241	U	O4'-C1'-N1	-5.19	104.05	108.20
83	A5	3869	A	O4'-C1'-N9	5.19	112.35	108.20
36	B2	900	A	P-O3'-C3'	5.19	125.93	119.70
36	B2	908	G	C4'-C3'-C2'	5.19	107.79	102.60
39	Cq	109	ALA	C-N-CA	5.19	134.67	121.70
83	A5	1069	A	P-O3'-C3'	5.19	125.92	119.70
83	A5	2493	C	O4'-C1'-C2'	-5.19	100.61	105.80
83	A5	2697	U	C3'-C2'-C1'	5.19	105.65	101.50
2	Ag	157	PHE	CB-CG-CD1	-5.19	117.17	120.80
36	B2	985	A	O5'-C5'-C4'	5.19	121.55	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
60	Cr	28	PRO	CB-CA-C	-5.19	99.04	112.00
83	A5	3670	G	O4'-C1'-N9	-5.19	104.05	108.20
1	Az	764	GLY	N-CA-C	5.18	126.06	113.10
83	A5	3810	C	O4'-C1'-C2'	-5.18	100.62	105.80
1	Az	787	ARG	NE-CZ-NH2	5.18	122.89	120.30
32	AW	20	ARG	CB-CA-C	-5.18	100.04	110.40
36	B2	1044	G	O4'-C1'-C2'	5.18	112.26	107.60
39	Cq	210	ASP	CB-CG-OD2	-5.18	113.64	118.30
64	CF	171	PRO	N-CA-C	5.18	125.57	112.10
69	Cg	1	MET	C-N-CA	5.18	134.66	121.70
83	A5	518	G	N9-C1'-C2'	-5.18	106.30	112.00
83	A5	1258	C	N1-C1'-C2'	5.18	120.74	114.00
83	A5	3147	A	C1'-O4'-C4'	5.18	114.05	109.90
36	B2	393	G	C1'-O4'-C4'	-5.18	105.75	109.90
83	A5	3129	U	O4'-C1'-N1	5.18	112.34	108.20
36	B2	351	G	O4'-C1'-N9	5.18	112.34	108.20
36	B2	1355	G	O4'-C1'-N9	5.18	112.34	108.20
36	B2	1845	C	C3'-C2'-C1'	5.18	105.64	101.50
48	CD	232	ARG	NE-CZ-NH2	-5.18	117.71	120.30
11	AL	26	THR	C-N-CA	5.18	134.65	121.70
36	B2	640	U	P-O5'-C5'	-5.18	112.62	120.90
36	B2	1207	G	O4'-C1'-C2'	5.18	112.26	107.60
83	A5	3669	U	N1-C1'-C2'	5.18	120.73	114.00
34	AQ	144	GLN	N-CA-CB	5.18	119.92	110.60
83	A5	462	C	P-O5'-C5'	-5.18	112.62	120.90
83	A5	475	U	C3'-C2'-C1'	5.18	105.64	101.50
83	A5	3542	C	O4'-C1'-C2'	-5.18	100.62	105.80
83	A5	3775	A	O4'-C1'-C2'	-5.18	100.62	105.80
83	A5	3812	C	N1-C1'-C2'	5.18	120.73	114.00
13	AP	13	ARG	C-N-CA	5.17	134.63	121.70
36	B2	228	A	O4'-C1'-N9	5.17	112.34	108.20
36	B2	238	C	P-O3'-C3'	-5.17	113.49	119.70
36	B2	1933	U	C1'-O4'-C4'	-5.17	105.76	109.90
37	BC	2	G	O4'-C1'-N9	5.17	112.34	108.20
83	A5	312	U	C3'-C2'-C1'	5.17	105.64	101.50
83	A5	621	A	O3'-P-O5'	5.17	113.83	104.00
83	A5	779	U	C5'-C4'-O4'	5.17	115.31	109.10
83	A5	1880	A	C3'-C2'-C1'	5.17	105.64	101.50
83	A5	3952	C	C1'-O4'-C4'	-5.17	105.76	109.90
83	A5	650	A	P-O3'-C3'	-5.17	113.49	119.70
83	A5	3204	G	O4'-C1'-N9	5.17	112.34	108.20
83	A5	3892	A	N9-C1'-C2'	-5.17	106.31	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	AQ	139	ALA	CB-CA-C	-5.17	102.34	110.10
43	CV	125	CYS	CB-CA-C	-5.17	100.06	110.40
67	Ce	113	ARG	NE-CZ-NH1	5.17	122.89	120.30
83	A5	66	A	O4'-C1'-C2'	-5.17	100.63	105.80
83	A5	214	A	P-O5'-C5'	-5.17	112.63	120.90
83	A5	1202	A	C1'-O4'-C4'	5.17	114.04	109.90
83	A5	2155	A	C1'-O4'-C4'	-5.17	105.76	109.90
32	AW	106	THR	N-CA-CB	5.17	120.12	110.30
36	B2	1021	A	C5'-C4'-C3'	-5.17	107.73	116.00
38	Cz	27	GLY	C-N-CA	5.17	134.62	121.70
86	A8	62	A	O3'-P-O5'	-5.17	94.18	104.00
1	Az	271	ASN	CB-CA-C	-5.17	100.06	110.40
36	B2	168	A	O4'-C1'-N9	5.17	112.33	108.20
36	B2	392	A	C1'-O4'-C4'	5.17	114.03	109.90
36	B2	819	G	C5'-C4'-C3'	-5.17	107.73	116.00
36	B2	1388	U	O4'-C1'-C2'	-5.17	100.63	105.80
41	CO	174	ARG	NE-CZ-NH1	-5.17	117.72	120.30
83	A5	110	A	P-O5'-C5'	-5.17	112.63	120.90
83	A5	693	G	N9-C1'-C2'	5.17	120.72	114.00
83	A5	884	U	O4'-C1'-C2'	-5.17	100.63	105.80
83	A5	1457	G	N9-C1'-C2'	5.17	120.72	114.00
83	A5	2816	A	O4'-C4'-C3'	-5.17	98.83	104.00
83	A5	3621	A	C1'-O4'-C4'	5.17	114.03	109.90
83	A5	3862	A	N9-C1'-C2'	-5.17	106.31	112.00
85	A7	107	C	C3'-C2'-C1'	5.17	105.63	101.50
18	AY	60	GLY	N-CA-C	-5.17	100.18	113.10
23	AD	194	TYR	CA-CB-CG	5.17	123.22	113.40
36	B2	1413	A	O4'-C1'-C2'	-5.17	100.63	105.80
40	CK	90	ARG	NE-CZ-NH2	-5.17	117.72	120.30
83	A5	361	U	O4'-C1'-C2'	-5.17	100.63	105.80
83	A5	1616	G	O4'-C1'-C2'	5.17	112.25	107.60
83	A5	2587	U	C3'-C2'-C1'	5.17	105.63	101.50
86	A8	109	U	C4'-C3'-O3'	5.17	123.33	113.00
30	AF	130	GLU	N-CA-CB	5.17	119.90	110.60
36	B2	1943	G	C1'-O4'-C4'	-5.17	105.77	109.90
83	A5	1374	C	C4'-C3'-O3'	-5.17	98.55	109.40
36	B2	1732	G	N9-C1'-C2'	5.16	120.71	114.00
83	A5	304	U	O4'-C1'-N1	5.16	112.33	108.20
83	A5	456	G	C3'-C2'-C1'	-5.16	97.37	101.50
83	A5	567	A	O3'-P-O5'	5.16	113.81	104.00
83	A5	1941	A	P-O5'-C5'	-5.16	112.64	120.90
83	A5	2790	G	C1'-O4'-C4'	-5.16	105.77	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	2802	A	C3'-C2'-C1'	5.16	105.63	101.50
83	A5	3223	A	C3'-C2'-C1'	5.16	105.63	101.50
83	A5	3357	C	C3'-C2'-C1'	5.16	105.63	101.50
83	A5	1089	U	O4'-C1'-C2'	-5.16	100.64	105.80
85	A7	94	C	N1-C1'-C2'	5.16	120.71	114.00
1	Az	739	GLU	N-CA-C	5.16	124.93	111.00
36	B2	1675	A	O4'-C1'-C2'	-5.16	100.64	105.80
83	A5	381	G	C3'-C2'-C1'	-5.16	97.37	101.50
83	A5	850	A	C1'-O4'-C4'	-5.16	105.77	109.90
83	A5	2581	U	N1-C1'-C2'	5.16	120.71	114.00
83	A5	2989	G	C3'-C2'-C1'	5.16	105.63	101.50
83	A5	3136	U	N1-C1'-C2'	5.16	120.71	114.00
83	A5	3561	G	P-O5'-C5'	-5.16	112.64	120.90
29	AG	72	ARG	NE-CZ-NH1	5.16	122.88	120.30
37	BC	32	C	O4'-C1'-C2'	-5.16	100.64	105.80
83	A5	86	C	C1'-O4'-C4'	-5.16	105.77	109.90
83	A5	97	C	N1-C1'-C2'	5.16	120.71	114.00
83	A5	2163	A	C1'-O4'-C4'	5.16	114.03	109.90
83	A5	3009	A	O4'-C1'-N9	5.16	112.33	108.20
83	A5	3111	G	C1'-O4'-C4'	-5.16	105.77	109.90
83	A5	3682	U	C4'-C3'-C2'	-5.16	97.44	102.60
85	A7	44	C	C1'-O4'-C4'	-5.16	105.77	109.90
29	AG	188	ARG	NE-CZ-NH2	-5.16	117.72	120.30
63	CB	10	ARG	NE-CZ-NH1	5.16	122.88	120.30
83	A5	51	U	O4'-C1'-N1	5.16	112.33	108.20
83	A5	314	A	N9-C1'-C2'	-5.16	106.33	112.00
83	A5	3541	A	O4'-C1'-N9	5.16	112.33	108.20
83	A5	3716	C	O4'-C4'-C3'	-5.16	98.84	104.00
8	AS	40	TYR	CG-CD2-CE2	-5.16	117.17	121.30
36	B2	387	C	N1-C1'-C2'	5.16	120.70	114.00
36	B2	856	A	C5'-C4'-O4'	5.16	115.29	109.10
51	CA	218	HIS	C-N-CA	5.16	134.59	121.70
54	CP	146	VAL	CA-CB-CG2	-5.16	103.17	110.90
63	CB	125	SER	N-CA-CB	5.16	118.23	110.50
66	Cd	38	ARG	C-N-CA	5.16	134.59	121.70
83	A5	1001	A	P-O3'-C3'	5.16	125.89	119.70
83	A5	3504	G	C1'-O4'-C4'	-5.16	105.78	109.90
36	B2	173	C	C1'-O4'-C4'	-5.15	105.78	109.90
36	B2	488	A	O4'-C1'-C2'	-5.15	100.65	105.80
36	B2	1182	C	O4'-C1'-N1	5.15	112.32	108.20
36	B2	1406	A	O4'-C1'-N9	5.15	112.32	108.20
37	BC	39	U	O4'-C1'-N1	5.15	112.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	Cf	80	ARG	NE-CZ-NH2	-5.15	117.72	120.30
83	A5	3826	A	N9-C1'-C2'	-5.15	106.33	112.00
36	B2	1403	C	O4'-C1'-N1	5.15	112.32	108.20
77	Cp	25	MET	CG-SD-CE	-5.15	91.95	100.20
83	A5	37	G	N9-C1'-C2'	-5.15	106.33	112.00
83	A5	238	G	N9-C1'-C2'	5.15	120.70	114.00
83	A5	2006	U	O3'-P-O5'	-5.15	94.21	104.00
83	A5	2243	G	C3'-C2'-C1'	-5.15	97.38	101.50
36	B2	1001	G	C3'-C2'-C1'	5.15	105.62	101.50
36	B2	1015	U	C3'-C2'-C1'	5.15	105.62	101.50
36	B2	1782	G	C1'-O4'-C4'	5.15	114.02	109.90
47	CI	143	ARG	NE-CZ-NH2	5.15	122.88	120.30
81	CE	112	ARG	NE-CZ-NH2	-5.15	117.72	120.30
83	A5	2181	A	N9-C1'-C2'	5.15	120.69	114.00
83	A5	2715	C	C3'-C2'-C1'	5.15	105.62	101.50
83	A5	3881	A	O4'-C1'-C2'	-5.15	100.65	105.80
85	A7	89	G	C1'-O4'-C4'	-5.15	105.78	109.90
36	B2	1657	C	C3'-C2'-C1'	5.15	105.62	101.50
58	CW	122	ALA	CB-CA-C	-5.15	102.38	110.10
83	A5	1496	U	O4'-C1'-C2'	-5.15	100.65	105.80
83	A5	1675	G	C5'-C4'-O4'	5.15	115.28	109.10
83	A5	2106	C	O4'-C1'-N1	-5.15	104.08	108.20
83	A5	2163	A	C3'-C2'-C1'	5.15	105.62	101.50
83	A5	2706	U	C4'-C3'-C2'	-5.15	97.45	102.60
83	A5	2830	G	C5'-C4'-C3'	-5.15	107.76	116.00
5	AO	31	ALA	CB-CA-C	-5.15	102.38	110.10
12	AR	39	ALA	N-CA-CB	5.15	117.31	110.10
18	AY	42	ARG	NE-CZ-NH1	5.15	122.87	120.30
27	AE	189	LEU	CB-CG-CD1	5.15	119.75	111.00
36	B2	649	U	O4'-C1'-N1	5.15	112.32	108.20
36	B2	1666	G	P-O5'-C5'	5.15	129.13	120.90
49	CQ	41	LYS	N-CA-CB	-5.15	101.34	110.60
67	Ce	107	ARG	NE-CZ-NH1	5.15	122.87	120.30
83	A5	1019	U	O4'-C1'-C2'	-5.15	100.65	105.80
83	A5	1245	C	C1'-O4'-C4'	-5.15	105.78	109.90
83	A5	1799	U	P-O3'-C3'	5.15	125.88	119.70
36	B2	264	C	C3'-C2'-C1'	5.15	105.62	101.50
36	B2	1981	G	O4'-C1'-N9	5.15	112.32	108.20
83	A5	1723	G	P-O3'-C3'	-5.15	113.53	119.70
83	A5	1779	G	O4'-C1'-N9	5.15	112.32	108.20
83	A5	1965	A	O4'-C1'-C2'	-5.15	100.65	105.80
83	A5	3924	U	N1-C1'-C2'	-5.15	106.34	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	AT	68	SER	CA-C-N	5.14	131.51	117.10
36	B2	1195	G	C4'-C3'-O3'	-5.14	98.59	109.40
45	Ca	129	TYR	CB-CG-CD1	-5.14	117.91	121.00
83	A5	1407	C	C3'-C2'-C1'	5.14	105.62	101.50
83	A5	2875	A	O4'-C1'-C2'	-5.14	100.66	105.80
83	A5	3311	A	P-O3'-C3'	5.14	125.87	119.70
83	A5	3833	U	O4'-C1'-C2'	-5.14	100.66	105.80
5	AO	139	SER	C-N-CA	5.14	134.56	121.70
7	AM	108	ARG	N-CA-C	-5.14	97.12	111.00
35	Ah	214	GLU	CB-CA-C	5.14	120.69	110.40
83	A5	155	U	C1'-O4'-C4'	-5.14	105.78	109.90
83	A5	1939	U	P-O3'-C3'	-5.14	113.53	119.70
83	A5	2206	U	C1'-O4'-C4'	-5.14	105.78	109.90
83	A5	2875	A	O4'-C1'-N9	5.14	112.31	108.20
83	A5	3716	C	P-O3'-C3'	5.14	125.87	119.70
36	B2	140	G	C4'-C3'-O3'	-5.14	98.60	109.40
72	Ck	20	ALA	N-CA-CB	5.14	117.30	110.10
83	A5	126	G	P-O3'-C3'	5.14	125.87	119.70
85	A7	49	A	C5'-C4'-C3'	5.14	124.22	116.00
36	B2	373	U	C4'-C3'-C2'	-5.14	97.46	102.60
36	B2	454	C	C3'-C2'-C1'	5.14	105.61	101.50
36	B2	1082	G	O4'-C1'-C2'	5.14	112.22	107.60
83	A5	1989	A	O4'-C1'-N9	5.14	112.31	108.20
31	AH	185	PHE	CB-CG-CD1	-5.14	117.20	120.80
36	B2	10	G	C3'-C2'-C1'	5.14	105.61	101.50
52	CS	174	THR	CA-CB-CG2	-5.14	105.21	112.40
69	Cg	47	CYS	N-CA-C	-5.14	97.13	111.00
83	A5	727	G	P-O5'-C5'	-5.14	112.68	120.90
83	A5	3651	C	C3'-C2'-C1'	5.14	105.61	101.50
36	B2	1010	A	C3'-C2'-C1'	5.13	105.61	101.50
36	B2	1753	U	P-O5'-C5'	-5.13	112.68	120.90
52	CS	175	TYR	C-N-CA	5.13	134.54	121.70
64	CF	234	GLY	C-N-CA	5.13	133.08	122.30
83	A5	801	G	O4'-C1'-N9	-5.13	104.09	108.20
83	A5	1256	C	O4'-C1'-N1	5.13	112.31	108.20
83	A5	3255	G	O4'-C1'-C2'	5.13	112.22	107.60
83	A5	3822	C	O4'-C1'-N1	5.13	112.31	108.20
83	A5	3834	A	C1'-O4'-C4'	5.13	114.01	109.90
85	A7	42	A	C1'-O4'-C4'	5.13	114.01	109.90
36	B2	156	U	C1'-O4'-C4'	-5.13	105.79	109.90
36	B2	1144	C	C1'-O4'-C4'	5.13	114.01	109.90
69	Cg	13	TYR	CG-CD1-CE1	-5.13	117.19	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	3541	A	P-O3'-C3'	-5.13	113.54	119.70
36	B2	616	U	O4'-C1'-N1	5.13	112.31	108.20
36	B2	825	A	C3'-C2'-C1'	5.13	105.61	101.50
36	B2	1055	U	C3'-C2'-C1'	5.13	105.61	101.50
76	Cn	6	ARG	NE-CZ-NH1	5.13	122.87	120.30
83	A5	1928	G	P-O5'-C5'	-5.13	112.69	120.90
83	A5	3220	U	O4'-C1'-N1	5.13	112.31	108.20
36	B2	68	C	C3'-C2'-C1'	-5.13	97.40	101.50
46	CN	28	TRP	CB-CG-CD2	-5.13	119.93	126.60
30	AF	121	PHE	CB-CA-C	-5.13	100.14	110.40
49	CQ	159	PRO	C-N-CA	5.13	134.52	121.70
69	Cg	20	ARG	N-CA-CB	5.13	119.83	110.60
83	A5	292	G	C1'-O4'-C4'	-5.13	105.80	109.90
83	A5	1521	G	O4'-C1'-C2'	-5.13	100.67	105.80
83	A5	2585	A	C2'-C3'-O3'	-5.13	98.22	109.50
83	A5	3241	G	C5'-C4'-O4'	5.13	115.25	109.10
83	A5	3569	C	C3'-C2'-C1'	5.13	105.60	101.50
36	B2	909	U	O4'-C1'-C2'	-5.13	100.67	105.80
36	B2	1057	A	O4'-C1'-N9	5.13	112.30	108.20
83	A5	827	A	P-O3'-C3'	5.13	125.85	119.70
83	A5	3154	C	C3'-C2'-C1'	5.13	105.60	101.50
83	A5	3831	C	O4'-C1'-C2'	-5.13	100.67	105.80
86	A8	56	U	C1'-O4'-C4'	-5.13	105.80	109.90
36	B2	292	G	C3'-C2'-C1'	-5.12	97.40	101.50
83	A5	769	U	O4'-C1'-C2'	-5.12	100.67	105.80
1	Az	271	ASN	N-CA-C	5.12	124.83	111.00
18	AY	86	PHE	C-N-CA	5.12	134.51	121.70
25	Af	95	ARG	NE-CZ-NH2	-5.12	117.74	120.30
36	B2	514	A	C5'-C4'-O4'	5.12	115.25	109.10
36	B2	1289	A	C3'-C2'-C1'	5.12	105.60	101.50
46	CN	4	TYR	CB-CG-CD1	-5.12	117.93	121.00
58	CW	52	THR	CA-CB-CG2	-5.12	105.23	112.40
63	CB	3	HIS	CA-CB-CG	-5.12	104.89	113.60
83	A5	774	A	O4'-C1'-N9	5.12	112.30	108.20
83	A5	2262	A	O4'-C1'-N9	5.12	112.30	108.20
83	A5	2901	C	O4'-C1'-N1	5.12	112.30	108.20
83	A5	3900	A	O4'-C1'-C2'	-5.12	100.68	105.80
64	CF	179	GLU	C-N-CA	5.12	134.50	121.70
77	Cp	18	TYR	CB-CG-CD1	5.12	124.07	121.00
83	A5	77	A	N9-C1'-C2'	-5.12	106.37	112.00
83	A5	847	A	O4'-C1'-N9	5.12	112.30	108.20
83	A5	2072	C	O4'-C1'-N1	5.12	112.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	301	U	N1-C1'-C2'	5.12	120.66	114.00
83	A5	764	A	C3'-C2'-C1'	5.12	105.60	101.50
83	A5	3394	U	C1'-O4'-C4'	5.12	114.00	109.90
83	A5	3414	U	C5'-C4'-O4'	5.12	115.24	109.10
27	AE	54	TYR	CB-CG-CD2	5.12	124.07	121.00
36	B2	846	U	O4'-C1'-C2'	-5.12	100.68	105.80
36	B2	1814	G	C1'-O4'-C4'	-5.12	105.81	109.90
49	CQ	176	ARG	NE-CZ-NH1	5.12	122.86	120.30
83	A5	370	A	C3'-C2'-C1'	-5.12	97.41	101.50
83	A5	1028	U	C5'-C4'-C3'	-5.12	107.81	116.00
83	A5	1150	G	C1'-O4'-C4'	5.12	113.99	109.90
83	A5	1896	A	N9-C1'-C2'	-5.12	106.37	112.00
42	CL	169	VAL	O-C-N	-5.12	114.51	122.70
66	Cd	38	ARG	O-C-N	-5.12	114.51	122.70
83	A5	2125	G	N9-C1'-C2'	-5.12	106.37	112.00
83	A5	3488	G	O4'-C1'-C2'	-5.12	100.68	105.80
36	B2	449	C	C5'-C4'-C3'	-5.12	107.82	116.00
36	B2	1157	C	O4'-C1'-N1	5.12	112.29	108.20
36	B2	1917	A	C3'-C2'-C1'	5.12	105.59	101.50
50	CR	132	PHE	N-CA-C	-5.12	97.19	111.00
58	CW	75	THR	N-CA-C	5.12	124.81	111.00
86	A8	93	A	O4'-C1'-C2'	5.12	112.20	107.60
83	A5	828	G	O4'-C1'-C2'	-5.11	100.69	105.80
36	B2	340	A	N9-C1'-C2'	5.11	120.64	114.00
83	A5	3880	A	O5'-C5'-C4'	5.11	121.41	111.70
11	AL	19	ARG	NE-CZ-NH1	5.11	122.86	120.30
18	AY	18	LEU	CB-CA-C	-5.11	100.49	110.20
23	AD	202	PRO	N-CA-C	5.11	125.39	112.10
28	AC	224	TYR	CB-CA-C	-5.11	100.18	110.40
36	B2	365	A	O4'-C1'-N9	5.11	112.29	108.20
36	B2	936	G	O4'-C1'-N9	5.11	112.29	108.20
36	B2	1904	G	C1'-O4'-C4'	-5.11	105.81	109.90
42	CL	173	GLU	N-CA-C	5.11	124.80	111.00
45	Ca	109	TYR	CB-CG-CD1	5.11	124.07	121.00
80	CH	52	THR	N-CA-CB	5.11	120.01	110.30
83	A5	2826	A	P-O3'-C3'	-5.11	113.57	119.70
86	A8	72	C	N1-C1'-C2'	5.11	120.64	114.00
86	A8	73	U	O4'-C1'-C2'	-5.11	100.69	105.80
34	AQ	5	ARG	CA-C-N	5.11	128.44	117.20
36	B2	374	C	O4'-C1'-N1	5.11	112.29	108.20
36	B2	490	A	C1'-O4'-C4'	-5.11	105.81	109.90
83	A5	540	G	C2'-C3'-O3'	5.11	121.88	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	682	U	O4'-C1'-N1	5.11	112.29	108.20
83	A5	1731	G	C1'-O4'-C4'	-5.11	105.81	109.90
83	A5	3459	C	C3'-C2'-C1'	5.11	105.59	101.50
36	B2	818	C	C4'-C3'-O3'	-5.11	98.67	109.40
37	BC	64	G	C4'-C3'-C2'	-5.11	97.49	102.60
60	Cr	18	PHE	CB-CG-CD2	-5.11	117.22	120.80
67	Ce	14	LYS	C-N-CA	5.11	134.47	121.70
83	A5	2888	A	P-O5'-C5'	5.11	129.07	120.90
1	Az	755	HIS	N-CA-CB	5.11	119.79	110.60
36	B2	1457	C	O4'-C1'-N1	5.11	112.28	108.20
40	CK	99	LYS	N-CA-CB	5.11	119.79	110.60
45	Ca	10	ARG	NE-CZ-NH2	-5.11	117.75	120.30
63	CB	156	TYR	CA-CB-CG	-5.11	103.70	113.40
74	CC	27	LEU	CB-CA-C	-5.11	100.50	110.20
83	A5	265	U	O4'-C1'-C2'	-5.11	100.69	105.80
83	A5	3819	C	C2'-C3'-O3'	5.11	121.87	113.70
36	B2	1318	A	C1'-O4'-C4'	5.10	113.98	109.90
56	CX	227	LYS	N-CA-CB	5.10	119.79	110.60
83	A5	3678	G	O4'-C1'-N9	5.10	112.28	108.20
1	Az	276	CYS	N-CA-CB	5.10	119.78	110.60
5	AO	75	MET	CG-SD-CE	-5.10	92.04	100.20
76	Cn	11	ARG	NE-CZ-NH2	-5.10	117.75	120.30
83	A5	544	U	N1-C1'-C2'	5.10	120.63	114.00
83	A5	925	C	C4'-C3'-C2'	-5.10	97.50	102.60
83	A5	1309	U	N1-C1'-C2'	5.10	120.63	114.00
83	A5	1791	A	C1'-O4'-C4'	5.10	113.98	109.90
83	A5	2273	A	N9-C1'-C2'	-5.10	106.39	112.00
83	A5	3522	A	C5'-C4'-C3'	-5.10	107.84	116.00
21	Ab	33	MET	CA-CB-CG	5.10	121.97	113.30
27	AE	239	PRO	C-N-CA	5.10	134.45	121.70
41	CO	137	TYR	CB-CG-CD1	5.10	124.06	121.00
83	A5	282	A	P-O3'-C3'	5.10	125.82	119.70
83	A5	1861	A	O4'-C1'-C2'	-5.10	100.70	105.80
83	A5	1892	C	N1-C1'-C2'	5.10	120.63	114.00
83	A5	2785	C	N1-C1'-C2'	5.10	120.63	114.00
1	Az	44	GLY	N-CA-C	5.10	125.85	113.10
1	Az	166	ARG	NE-CZ-NH2	-5.10	117.75	120.30
15	AB	28	LYS	C-N-CA	5.10	134.45	121.70
25	Af	118	ARG	NE-CZ-NH2	-5.10	117.75	120.30
33	AI	22	ARG	NE-CZ-NH1	5.10	122.85	120.30
36	B2	933	C	N1-C1'-C2'	5.10	120.63	114.00
44	CM	141	ARG	NE-CZ-NH1	5.10	122.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	58	U	C1'-O4'-C4'	5.10	113.98	109.90
36	B2	360	G	C3'-C2'-C1'	-5.10	97.42	101.50
36	B2	519	A	P-O3'-C3'	-5.10	113.58	119.70
36	B2	888	G	O4'-C1'-C2'	5.10	112.19	107.60
83	A5	30	A	C1'-O4'-C4'	-5.10	105.82	109.90
83	A5	1139	U	N1-C1'-C2'	5.10	120.63	114.00
83	A5	1326	A	O4'-C1'-C2'	-5.10	100.70	105.80
83	A5	1524	U	C5'-C4'-O4'	5.10	115.22	109.10
83	A5	3596	A	C1'-O4'-C4'	5.10	113.98	109.90
83	A5	3699	U	O3'-P-O5'	5.10	113.69	104.00
36	B2	1651	C	N1-C1'-C2'	5.10	120.62	114.00
78	Co	93	GLY	N-CA-C	5.10	125.84	113.10
83	A5	2513	G	O4'-C1'-C2'	-5.10	100.70	105.80
1	Az	267	LYS	C-N-CA	5.09	134.44	121.70
1	Az	309	LEU	CB-CA-C	-5.09	100.52	110.20
36	B2	527	C	C3'-C2'-C1'	5.09	105.58	101.50
36	B2	551	C	O4'-C1'-N1	5.09	112.28	108.20
83	A5	45	G	N9-C1'-C2'	5.09	120.62	114.00
86	A8	92	G	C5'-C4'-O4'	5.09	115.21	109.10
36	B2	256	C	C2'-C3'-O3'	5.09	121.85	113.70
83	A5	545	U	C1'-O4'-C4'	5.09	113.97	109.90
83	A5	2910	C	O4'-C1'-N1	5.09	112.27	108.20
40	CK	147	HIS	C-N-CD	-5.09	109.40	120.60
83	A5	1574	A	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	2505	A	C1'-O4'-C4'	5.09	113.97	109.90
83	A5	2805	C	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	2906	C	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	3416	C	C5'-C4'-C3'	5.09	124.15	116.00
36	B2	1396	G	C1'-O4'-C4'	-5.09	105.83	109.90
36	B2	1815	C	O4'-C1'-C2'	-5.09	100.71	105.80
36	B2	1869	C	N1-C1'-C2'	5.09	120.62	114.00
49	CQ	156	PRO	C-N-CA	5.09	132.99	122.30
83	A5	55	U	OP1-P-OP2	-5.09	111.97	119.60
83	A5	1144	C	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	1923	A	P-O3'-C3'	-5.09	113.59	119.70
83	A5	2077	A	C1'-O4'-C4'	5.09	113.97	109.90
83	A5	2656	C	O4'-C1'-N1	5.09	112.27	108.20
83	A5	2715	C	O4'-C1'-C2'	-5.09	100.71	105.80
83	A5	2819	A	P-O3'-C3'	-5.09	113.59	119.70
83	A5	2841	G	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	3157	U	O4'-C1'-C2'	-5.09	100.71	105.80
15	AB	51	ARG	NE-CZ-NH2	-5.09	117.76	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1015	G	P-O5'-C5'	-5.09	112.76	120.90
34	AQ	45	GLU	N-CA-C	5.09	124.73	111.00
36	B2	86	C	N1-C1'-C2'	5.09	120.61	114.00
81	CE	107	ARG	NE-CZ-NH1	5.09	122.84	120.30
83	A5	342	A	C3'-C2'-C1'	5.09	105.57	101.50
83	A5	3463	U	C3'-C2'-C1'	5.09	105.57	101.50
15	AB	22	VAL	N-CA-CB	5.08	122.69	111.50
36	B2	102	A	P-O3'-C3'	5.08	125.80	119.70
36	B2	103	U	O4'-C1'-N1	5.08	112.27	108.20
36	B2	252	A	C4'-C3'-C2'	-5.08	97.52	102.60
36	B2	1249	C	O4'-C1'-N1	5.08	112.27	108.20
36	B2	1282	A	C4'-C3'-C2'	-5.08	97.52	102.60
83	A5	2482	C	C3'-C2'-C1'	5.08	105.57	101.50
83	A5	2992	A	C1'-O4'-C4'	-5.08	105.83	109.90
86	A8	110	C	C1'-O4'-C4'	-5.08	105.83	109.90
11	AL	94	ARG	NE-CZ-NH2	-5.08	117.76	120.30
36	B2	66	C	C1'-O4'-C4'	5.08	113.97	109.90
36	B2	780	A	P-O3'-C3'	-5.08	113.60	119.70
36	B2	900	A	C3'-C2'-C1'	-5.08	97.43	101.50
36	B2	1145	U	C5'-C4'-C3'	-5.08	107.87	116.00
36	B2	1905	U	P-O3'-C3'	5.08	125.80	119.70
48	CD	46	THR	N-CA-CB	5.08	119.96	110.30
83	A5	1119	C	C4'-C3'-O3'	-5.08	98.73	109.40
83	A5	1362	G	O4'-C1'-C2'	5.08	112.17	107.60
83	A5	2498	U	C3'-C2'-C1'	5.08	105.57	101.50
83	A5	2662	C	O4'-C1'-N1	5.08	112.27	108.20
83	A5	3317	U	C3'-C2'-C1'	-5.08	97.43	101.50
83	A5	3842	A	C5'-C4'-C3'	5.08	124.13	116.00
3	AU	76	SER	C-N-CA	5.08	134.40	121.70
36	B2	1968	C	O4'-C1'-N1	5.08	112.27	108.20
83	A5	96	G	C3'-C2'-C1'	5.08	105.57	101.50
83	A5	272	U	C2'-C3'-O3'	5.08	121.83	113.70
83	A5	1519	A	N9-C1'-C2'	-5.08	106.41	112.00
83	A5	2969	U	O3'-P-O5'	5.08	113.66	104.00
86	A8	63	U	C3'-C2'-C1'	5.08	105.56	101.50
36	B2	1220	A	P-O3'-C3'	-5.08	113.60	119.70
83	A5	396	A	C3'-C2'-C1'	5.08	105.56	101.50
83	A5	1116	G	C1'-O4'-C4'	-5.08	105.84	109.90
83	A5	1310	A	O4'-C1'-N9	5.08	112.26	108.20
83	A5	2061	G	N9-C1'-C2'	5.08	120.60	114.00
12	AR	72	LYS	N-CA-CB	5.08	119.74	110.60
15	AB	46	LYS	N-CA-CB	5.08	119.74	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	AG	30	LYS	N-CA-CB	5.08	119.74	110.60
36	B2	405	A	O4'-C1'-C2'	-5.08	100.72	105.80
36	B2	445	U	C3'-C2'-C1'	5.08	105.56	101.50
36	B2	1551	C	C3'-C2'-C1'	5.08	105.56	101.50
81	CE	32	ARG	NE-CZ-NH1	-5.08	117.76	120.30
17	AV	43	THR	C-N-CA	5.08	132.96	122.30
36	B2	321	A	C3'-C2'-C1'	5.08	105.56	101.50
36	B2	1925	G	C5'-C4'-O4'	5.08	115.19	109.10
65	Cc	59	GLU	CB-CA-C	-5.08	100.25	110.40
5	AO	112	ALA	CB-CA-C	-5.08	102.49	110.10
36	B2	197	A	C3'-C2'-C1'	5.08	105.56	101.50
36	B2	972	G	O4'-C1'-C2'	5.08	112.17	107.60
36	B2	1315	U	O4'-C1'-C2'	-5.08	100.72	105.80
64	CF	115	PHE	CB-CG-CD1	5.08	124.35	120.80
83	A5	1872	A	O4'-C1'-N9	-5.08	104.14	108.20
83	A5	2068	A	O4'-C4'-C3'	-5.08	98.92	104.00
83	A5	3013	C	O4'-C1'-C2'	-5.08	100.72	105.80
1	Az	262	LYS	N-CA-C	5.07	124.70	111.00
7	AM	86	VAL	C-N-CA	5.07	134.38	121.70
36	B2	591	C	C3'-C2'-C1'	5.07	105.56	101.50
36	B2	1293	C	N1-C1'-C2'	5.07	120.60	114.00
36	B2	1435	A	P-O3'-C3'	-5.07	113.61	119.70
36	B2	1759	U	N1-C1'-C2'	5.07	120.60	114.00
83	A5	197	G	C3'-C2'-C1'	5.07	105.56	101.50
83	A5	460	A	C1'-O4'-C4'	-5.07	105.84	109.90
83	A5	767	A	P-O3'-C3'	5.07	125.79	119.70
83	A5	2402	G	P-O3'-C3'	5.07	125.79	119.70
83	A5	3147	A	O4'-C1'-C2'	-5.07	100.73	105.80
1	Az	407	VAL	N-CA-C	5.07	124.69	111.00
32	AW	78	ARG	NE-CZ-NH1	5.07	122.84	120.30
83	A5	2000	U	O4'-C1'-N1	5.07	112.26	108.20
39	Cq	183	PHE	N-CA-CB	5.07	119.73	110.60
77	Cp	71	TYR	CG-CD1-CE1	-5.07	117.24	121.30
83	A5	993	A	O4'-C1'-C2'	5.07	112.16	107.60
83	A5	2483	A	O4'-C1'-N9	5.07	112.26	108.20
83	A5	3814	U	N1-C1'-C2'	-5.07	106.42	112.00
36	B2	1524	A	C1'-O4'-C4'	-5.07	105.84	109.90
36	B2	1772	C	C4'-C3'-C2'	-5.07	97.53	102.60
36	B2	1871	G	O4'-C1'-N9	-5.07	104.14	108.20
65	Cc	62	TYR	CA-CB-CG	-5.07	103.77	113.40
83	A5	3118	U	N1-C1'-C2'	5.07	120.59	114.00
10	AN	128	TYR	CZ-CE2-CD2	-5.07	115.24	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	142	A	O4'-C1'-C2'	-5.07	100.73	105.80
36	B2	948	A	C3'-C2'-C1'	5.07	105.55	101.50
36	B2	1171	G	C5'-C4'-O4'	5.07	115.18	109.10
36	B2	1178	A	O4'-C1'-C2'	5.07	112.16	107.60
40	CK	86	LYS	CB-CA-C	-5.07	100.27	110.40
63	CB	153	MET	CG-SD-CE	-5.07	92.09	100.20
63	CB	198	ARG	NE-CZ-NH2	5.07	122.83	120.30
83	A5	122	C	C5'-C4'-O4'	5.07	115.18	109.10
83	A5	593	U	O4'-C1'-C2'	-5.07	100.73	105.80
83	A5	1947	G	N9-C1'-C2'	-5.07	106.43	112.00
83	A5	2897	G	N9-C1'-C2'	-5.07	106.42	112.00
83	A5	3290	A	O4'-C1'-N9	5.07	112.25	108.20
14	AT	34	MET	N-CA-C	5.07	124.68	111.00
47	CI	187	ASP	CB-CG-OD1	5.07	122.86	118.30
60	Cr	70	LYS	N-CA-C	5.07	124.68	111.00
83	A5	3499	G	O4'-C4'-C3'	-5.07	98.93	104.00
83	A5	3573	C	C3'-C2'-C1'	5.07	105.55	101.50
1	Az	731	TYR	CB-CA-C	-5.06	100.27	110.40
24	Ae	110	TYR	CB-CG-CD1	-5.06	117.96	121.00
33	AI	180	ARG	N-CA-CB	5.06	119.72	110.60
37	BC	61	C	N1-C1'-C2'	5.06	120.58	114.00
43	CV	90	ARG	NE-CZ-NH2	-5.06	117.77	120.30
83	A5	194	A	O4'-C1'-C2'	-5.06	100.74	105.80
83	A5	773	G	C2'-C3'-O3'	5.06	121.80	113.70
83	A5	2208	G	C5'-C4'-O4'	5.06	115.18	109.10
36	B2	1813	U	C1'-O4'-C4'	-5.06	105.85	109.90
83	A5	202	A	O4'-C1'-N9	5.06	112.25	108.20
83	A5	613	U	O4'-C1'-C2'	-5.06	100.74	105.80
83	A5	2711	C	O4'-C1'-C2'	-5.06	100.74	105.80
83	A5	1327	G	O4'-C1'-N9	5.06	112.25	108.20
85	A7	22	A	C4'-C3'-O3'	-5.06	98.77	109.40
36	B2	228	A	C1'-O4'-C4'	5.06	113.95	109.90
36	B2	1928	C	O4'-C1'-N1	5.06	112.25	108.20
77	Cp	4	ARG	NE-CZ-NH1	5.06	122.83	120.30
83	A5	898	A	C5'-C4'-O4'	5.06	115.17	109.10
83	A5	2231	A	N9-C1'-C2'	5.06	120.58	114.00
83	A5	3656	A	N9-C1'-C2'	5.06	120.58	114.00
85	A7	59	G	N9-C1'-C2'	5.06	120.58	114.00
1	Az	332	ALA	N-CA-CB	5.06	117.18	110.10
36	B2	1045	U	C3'-C2'-C1'	5.06	105.55	101.50
36	B2	1083	C	N1-C1'-C2'	5.06	120.58	114.00
46	CN	4	TYR	CB-CG-CD2	5.06	124.03	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	CS	18	PRO	CA-C-N	5.06	128.32	117.20
82	CG	54	ARG	NE-CZ-NH1	5.06	122.83	120.30
83	A5	620	U	O4'-C1'-C2'	-5.06	100.74	105.80
83	A5	1267	A	C3'-C2'-C1'	5.06	105.55	101.50
83	A5	1682	G	C1'-O4'-C4'	-5.06	105.86	109.90
83	A5	2616	G	C1'-O4'-C4'	-5.06	105.85	109.90
36	B2	879	U	N1-C1'-C2'	5.06	120.57	114.00
42	CL	100	ARG	N-CA-C	-5.06	97.35	111.00
44	CM	153	ALA	CA-C-N	5.06	128.32	117.20
83	A5	3784	C	C1'-O4'-C4'	-5.06	105.86	109.90
20	Aa	22	ARG	NE-CZ-NH2	-5.05	117.77	120.30
83	A5	1478	A	C3'-C2'-C1'	5.05	105.54	101.50
83	A5	1946	G	P-O3'-C3'	-5.05	113.63	119.70
20	Aa	107	ALA	CB-CA-C	5.05	117.68	110.10
36	B2	1007	C	O4'-C1'-N1	5.05	112.24	108.20
83	A5	445	C	O4'-C1'-C2'	-5.05	100.75	105.80
85	A7	37	G	O4'-C1'-C2'	-5.05	100.75	105.80
40	CK	102	GLY	CA-C-N	5.05	128.31	117.20
83	A5	996	C	C1'-O4'-C4'	-5.05	105.86	109.90
83	A5	2103	G	P-O3'-C3'	-5.05	113.64	119.70
83	A5	3527	A	O4'-C1'-C2'	-5.05	100.75	105.80
83	A5	3714	U	O4'-C1'-C2'	-5.05	100.75	105.80
83	A5	3837	A	C4'-C3'-C2'	-5.05	97.55	102.60
83	A5	3849	A	O3'-P-O5'	5.05	113.60	104.00
32	AW	28	ARG	NE-CZ-NH1	5.05	122.83	120.30
36	B2	83	A	O4'-C1'-C2'	-5.05	100.75	105.80
36	B2	124	U	O4'-C1'-C2'	-5.05	100.75	105.80
36	B2	1696	G	C1'-O4'-C4'	-5.05	105.86	109.90
36	B2	1826	C	N1-C1'-C2'	5.05	120.56	114.00
36	B2	1932	A	O4'-C1'-C2'	-5.05	100.75	105.80
62	Cb	53	ARG	NE-CZ-NH1	5.05	122.83	120.30
83	A5	3275	G	O4'-C1'-N9	5.05	112.24	108.20
28	AC	81	LEU	N-CA-C	-5.05	97.37	111.00
42	CL	128	ILE	N-CA-C	5.05	124.63	111.00
83	A5	488	U	C3'-C2'-C1'	-5.05	97.46	101.50
83	A5	2542	C	O4'-C1'-C2'	-5.05	100.75	105.80
83	A5	3559	A	O4'-C1'-C2'	-5.05	100.75	105.80
8	AS	140	GLY	N-CA-C	5.05	125.71	113.10
36	B2	11	A	O4'-C1'-C2'	-5.05	100.75	105.80
36	B2	1571	U	P-O5'-C5'	-5.05	112.83	120.90
83	A5	193	U	O4'-C1'-C2'	-5.05	100.75	105.80
83	A5	1151	A	C1'-O4'-C4'	-5.05	105.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	1318	A	O4'-C1'-C2'	-5.05	100.75	105.80
83	A5	1547	A	C5'-C4'-C3'	-5.05	107.93	116.00
83	A5	1727	U	C2'-C3'-O3'	5.05	121.78	113.70
83	A5	2784	C	C5'-C4'-O4'	5.05	115.16	109.10
86	A8	62	A	O4'-C1'-N9	5.05	112.24	108.20
1	Az	13	MET	CG-SD-CE	-5.04	92.13	100.20
31	AH	17	ASP	CB-CG-OD1	5.04	122.84	118.30
36	B2	550	C	C1'-O4'-C4'	5.04	113.94	109.90
83	A5	2845	G	C5'-C4'-O4'	5.04	115.15	109.10
36	B2	27	U	N1-C1'-C2'	-5.04	106.45	112.00
36	B2	1041	G	O4'-C1'-N9	5.04	112.23	108.20
36	B2	1533	C	O4'-C1'-N1	5.04	112.23	108.20
36	B2	1926	A	C3'-C2'-C1'	5.04	105.53	101.50
83	A5	449	U	P-O3'-C3'	-5.04	113.65	119.70
83	A5	1766	U	C5'-C4'-O4'	5.04	115.15	109.10
83	A5	2086	U	O4'-C1'-C2'	-5.04	100.76	105.80
1	Az	389	PRO	N-CA-C	5.04	125.21	112.10
15	AB	170	ARG	NE-CZ-NH1	5.04	122.82	120.30
36	B2	1349	U	O4'-C1'-C2'	-5.04	100.76	105.80
36	B2	1804	U	O5'-C5'-C4'	-5.04	102.12	111.70
49	CQ	11	ARG	NE-CZ-NH1	5.04	122.82	120.30
49	CQ	12	LYS	N-CA-C	5.04	124.61	111.00
83	A5	522	G	C5'-C4'-O4'	5.04	115.15	109.10
83	A5	874	G	P-O3'-C3'	-5.04	113.65	119.70
83	A5	1458	G	C1'-O4'-C4'	-5.04	105.87	109.90
83	A5	2093	U	O4'-C1'-N1	5.04	112.23	108.20
36	B2	1912	G	O4'-C4'-C3'	-5.04	98.96	104.00
44	CM	12	ILE	N-CA-CB	-5.04	99.21	110.80
83	A5	1937	G	P-O3'-C3'	5.04	125.75	119.70
83	A5	2166	U	P-O3'-C3'	5.04	125.75	119.70
83	A5	3890	G	C1'-O4'-C4'	-5.04	105.87	109.90
24	Ae	101	THR	C-N-CA	5.04	132.88	122.30
29	AG	152	ASP	N-CA-C	5.04	124.61	111.00
83	A5	203	A	O4'-C4'-C3'	-5.04	98.96	104.00
83	A5	558	C	O4'-C1'-N1	5.04	112.23	108.20
83	A5	826	A	C1'-O4'-C4'	5.04	113.93	109.90
80	CH	123	ARG	NE-CZ-NH1	5.04	122.82	120.30
81	CE	44	LEU	N-CA-CB	5.04	120.47	110.40
83	A5	3110	U	C1'-O4'-C4'	-5.04	105.87	109.90
83	A5	3188	A	N9-C1'-C2'	5.04	120.55	114.00
36	B2	838	A	O4'-C1'-C2'	-5.04	100.77	105.80
36	B2	1807	C	C1'-O4'-C4'	-5.04	105.87	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	A5	47	A	P-O5'-C5'	-5.04	112.84	120.90
83	A5	103	A	C3'-C2'-C1'	5.04	105.53	101.50
83	A5	1500	G	O4'-C1'-N9	5.04	112.23	108.20
83	A5	1916	G	C3'-C2'-C1'	5.04	105.53	101.50
83	A5	3391	U	O3'-P-O5'	-5.04	94.43	104.00
83	A5	3425	G	C4'-C3'-C2'	-5.04	97.56	102.60
1	Az	280	LEU	N-CA-CB	5.03	120.47	110.40
36	B2	1138	U	O5'-C5'-C4'	5.03	121.27	111.70
36	B2	1184	U	P-O3'-C3'	5.03	125.74	119.70
36	B2	1264	G	O4'-C1'-C2'	5.03	112.13	107.60
36	B2	1566	U	O4'-C1'-N1	5.03	112.23	108.20
50	CR	61	TYR	CB-CA-C	-5.03	100.33	110.40
83	A5	404	U	C3'-C2'-C1'	5.03	105.53	101.50
83	A5	2540	G	O4'-C1'-N9	5.03	112.23	108.20
83	A5	2726	A	P-O3'-C3'	5.03	125.74	119.70
83	A5	2949	A	O3'-P-O5'	5.03	113.56	104.00
17	AV	41	PRO	N-CA-C	5.03	125.18	112.10
36	B2	1149	A	P-O5'-C5'	5.03	128.95	120.90
83	A5	2027	A	O4'-C1'-N9	-5.03	104.17	108.20
83	A5	3888	U	C1'-O4'-C4'	-5.03	105.87	109.90
36	B2	1131	U	O3'-P-O5'	-5.03	94.44	104.00
36	B2	1342	G	C1'-C2'-O2'	5.03	125.69	110.60
36	B2	1870	C	C3'-C2'-C1'	5.03	105.53	101.50
42	CL	73	ARG	C-N-CA	5.03	132.86	122.30
83	A5	1285	C	C3'-C2'-C1'	5.03	105.52	101.50
45	Ca	83	VAL	CA-CB-CG2	5.03	118.44	110.90
82	CG	83	PRO	CA-C-N	5.03	131.18	117.10
83	A5	1427	G	P-O3'-C3'	5.03	125.73	119.70
83	A5	3319	A	O5'-C5'-C4'	-5.03	102.15	111.70
14	AT	153	VAL	N-CA-CB	5.03	122.56	111.50
39	Cq	150	GLY	N-CA-C	5.03	125.67	113.10
83	A5	1708	G	C3'-C2'-C1'	5.03	105.52	101.50
16	AA	203	PHE	CB-CA-C	-5.03	100.35	110.40
34	AQ	142	ARG	NE-CZ-NH2	-5.03	117.79	120.30
36	B2	1756	C	C1'-O4'-C4'	-5.03	105.88	109.90
74	CC	112	ARG	NE-CZ-NH1	5.03	122.81	120.30
83	A5	80	G	C5'-C4'-O4'	5.03	115.13	109.10
83	A5	1073	C	P-O3'-C3'	5.03	125.73	119.70
83	A5	1450	U	N1-C1'-C2'	5.03	120.53	114.00
83	A5	2646	U	C1'-O4'-C4'	5.03	113.92	109.90
83	A5	3654	C	C3'-C2'-C1'	5.03	105.52	101.50
86	A8	43	A	O4'-C1'-C2'	-5.03	100.78	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	A8	57	G	N9-C1'-C2'	-5.03	106.47	112.00
36	B2	586	U	O4'-C1'-N1	5.02	112.22	108.20
57	CY	65	ASN	N-CA-CB	5.02	119.64	110.60
83	A5	1483	G	O4'-C1'-N9	5.02	112.22	108.20
83	A5	2900	U	P-O3'-C3'	-5.02	113.67	119.70
83	A5	3943	G	N9-C1'-C2'	5.02	120.53	114.00
13	AP	126	TYR	C-N-CA	5.02	134.26	121.70
36	B2	1113	A	O4'-C1'-C2'	-5.02	100.78	105.80
36	B2	1329	A	N9-C1'-C2'	5.02	120.53	114.00
36	B2	1543	G	P-O5'-C5'	-5.02	112.86	120.90
36	B2	1639	U	N1-C1'-C2'	5.02	120.53	114.00
42	CL	38	ARG	NE-CZ-NH1	5.02	122.81	120.30
44	CM	126	ALA	CB-CA-C	-5.02	102.57	110.10
49	CQ	184	CYS	C-N-CA	5.02	132.84	122.30
83	A5	455	U	O4'-C1'-N1	5.02	112.22	108.20
83	A5	2666	G	P-O3'-C3'	-5.02	113.67	119.70
36	B2	13	C	N1-C1'-C2'	5.02	120.53	114.00
36	B2	1582	C	C4'-C3'-C2'	5.02	107.62	102.60
64	CF	171	PRO	C-N-CA	5.02	134.25	121.70
83	A5	34	C	N1-C1'-C2'	5.02	120.53	114.00
83	A5	2028	A	C1'-O4'-C4'	-5.02	105.88	109.90
83	A5	2731	G	O4'-C1'-N9	5.02	112.22	108.20
36	B2	881	U	C4'-C3'-C2'	-5.02	97.58	102.60
36	B2	1277	A	C1'-O4'-C4'	5.02	113.92	109.90
51	CA	247	ARG	NE-CZ-NH1	5.02	122.81	120.30
83	A5	696	U	P-O5'-C5'	5.02	128.93	120.90
83	A5	3115	C	O4'-C1'-C2'	-5.02	100.78	105.80
83	A5	3566	G	C1'-O4'-C4'	-5.02	105.88	109.90
83	A5	232	U	P-O3'-C3'	-5.02	113.68	119.70
83	A5	303	G	P-O5'-C5'	-5.02	112.87	120.90
83	A5	1621	A	C3'-C2'-C1'	5.02	105.51	101.50
83	A5	2043	G	C1'-O4'-C4'	5.02	113.92	109.90
83	A5	3402	C	C1'-O4'-C4'	5.02	113.91	109.90
83	A5	3419	A	C3'-C2'-C1'	5.02	105.51	101.50
48	CD	79	TYR	CB-CG-CD2	-5.02	117.99	121.00
49	CQ	164	ARG	NE-CZ-NH2	-5.02	117.79	120.30
83	A5	566	A	O4'-C1'-C2'	-5.02	100.78	105.80
83	A5	653	U	C5'-C4'-C3'	-5.02	107.97	116.00
1	Az	231	PHE	CB-CG-CD1	-5.01	117.29	120.80
15	AB	215	ILE	C-N-CA	5.01	134.24	121.70
16	AA	158	ASP	O-C-N	-5.01	114.68	122.70
36	B2	111	A	C1'-O4'-C4'	-5.01	105.89	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1520	A	C3'-C2'-C1'	5.01	105.51	101.50
36	B2	1552	C	N1-C1'-C2'	-5.01	106.48	112.00
51	CA	179	ILE	N-CA-CB	5.01	122.33	110.80
83	A5	487	A	C5'-C4'-C3'	5.01	124.02	116.00
83	A5	749	U	O3'-P-O5'	-5.01	94.47	104.00
83	A5	1709	A	C1'-O4'-C4'	5.01	113.91	109.90
83	A5	3392	U	C5'-C4'-C3'	-5.01	107.98	116.00
83	A5	3512	U	N1-C1'-C2'	5.01	120.52	114.00
85	A7	20	U	C3'-C2'-C1'	-5.01	97.49	101.50
85	A7	51	A	C3'-C2'-C1'	5.01	105.51	101.50
2	Ag	247	TYR	CB-CG-CD2	5.01	124.01	121.00
36	B2	558	A	P-O3'-C3'	-5.01	113.69	119.70
32	AW	28	ARG	NE-CZ-NH2	-5.01	117.79	120.30
33	AI	106	ALA	CB-CA-C	-5.01	102.58	110.10
36	B2	169	C	C5'-C4'-O4'	5.01	115.11	109.10
36	B2	202	U	P-O5'-C5'	5.01	128.92	120.90
83	A5	620	U	O4'-C1'-N1	5.01	112.21	108.20
83	A5	1091	G	C5'-C4'-O4'	5.01	115.11	109.10
83	A5	2506	U	O4'-C1'-C2'	-5.01	100.79	105.80
83	A5	2522	A	P-O3'-C3'	-5.01	113.69	119.70
83	A5	3598	U	C1'-O4'-C4'	5.01	113.91	109.90
36	B2	312	G	O4'-C1'-N9	5.01	112.21	108.20
36	B2	1035	G	O4'-C1'-N9	5.01	112.21	108.20
83	A5	2155	A	O3'-P-O5'	5.01	113.52	104.00
32	AW	5	ASN	N-CA-CB	5.01	119.61	110.60
36	B2	420	U	O4'-C1'-C2'	-5.01	100.79	105.80
83	A5	402	A	O4'-C1'-N9	5.01	112.21	108.20
83	A5	623	C	C3'-C2'-C1'	5.01	105.51	101.50
83	A5	1183	U	C1'-O4'-C4'	5.01	113.91	109.90
83	A5	3525	A	C3'-C2'-C1'	5.01	105.51	101.50
27	AE	235	TYR	CB-CG-CD2	-5.01	118.00	121.00
33	AI	22	ARG	NE-CZ-NH2	-5.01	117.80	120.30
83	A5	79	G	O4'-C1'-N9	5.01	112.21	108.20
83	A5	849	U	N1-C1'-C2'	5.01	120.51	114.00
83	A5	1931	C	C3'-C2'-C1'	5.01	105.51	101.50
60	Cr	23	ARG	CA-CB-CG	5.00	124.41	113.40
83	A5	1160	U	O4'-C1'-N1	-5.00	104.20	108.20
83	A5	3250	U	O4'-C1'-C2'	-5.00	100.80	105.80
83	A5	3947	C	C3'-C2'-C1'	5.00	105.50	101.50
2	Ag	110	LEU	CB-CA-C	-5.00	100.69	110.20
27	AE	32	SER	C-N-CA	5.00	134.21	121.70
36	B2	1119	G	C3'-C2'-C1'	-5.00	97.50	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	B2	1437	A	C3'-C2'-C1'	5.00	105.50	101.50
45	Ca	33	ARG	NE-CZ-NH2	5.00	122.80	120.30
46	CN	119	TYR	CB-CG-CD1	-5.00	118.00	121.00
48	CD	49	TYR	N-CA-CB	5.00	119.61	110.60
72	Ck	10	ASP	CB-CG-OD2	-5.00	113.80	118.30
83	A5	677	G	N9-C1'-C2'	5.00	120.50	114.00
83	A5	805	C	C5'-C4'-C3'	5.00	124.01	116.00
83	A5	1392	A	C1'-O4'-C4'	5.00	113.90	109.90
85	A7	52	U	C1'-O4'-C4'	-5.00	105.90	109.90
36	B2	159	A	P-O3'-C3'	-5.00	113.70	119.70
36	B2	631	C	P-O3'-C3'	5.00	125.70	119.70
36	B2	1170	G	C2'-C3'-O3'	5.00	121.70	113.70
42	CL	26	ASN	CB-CA-C	-5.00	100.40	110.40
83	A5	1059	A	C1'-O4'-C4'	5.00	113.90	109.90
83	A5	1326	A	N9-C1'-C2'	5.00	120.50	114.00
83	A5	3244	U	P-O5'-C5'	5.00	128.90	120.90

All (208) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	Az	4	PHE	CA
1	Az	15	LYS	CA
1	Az	49	ALA	CA
1	Az	55	ARG	CA
1	Az	68	ILE	CA
1	Az	71	LYS	CA
1	Az	72	SER	CA
1	Az	74	ALA	CA
1	Az	81	VAL	CA
1	Az	82	GLU	CA
1	Az	91	HIS	CA
1	Az	92	PRO	CA
1	Az	108	ASP	CA
1	Az	109	SER	CA
1	Az	112	HIS	CA
1	Az	116	SER	CA
1	Az	126	THR	CA
1	Az	140	CYS	CA
1	Az	155	ILE	CA
1	Az	173	LEU	CA
1	Az	174	ASP	CA
1	Az	199	ASP	CA

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Mol	Chain	Res	Type	Atom
1	Az	207	ARG	CA
1	Az	219	SER	CA
1	Az	224	TRP	CA
1	Az	225	ALA	CA
1	Az	226	PHE	CA
1	Az	227	THR	CA
1	Az	241	ILE	CA
1	Az	242	ASP	CA
1	Az	251	TRP	CA
1	Az	254	ASN	CA
1	Az	255	PHE	CA
1	Az	256	PHE	CA
1	Az	262	LYS	CA
1	Az	264	GLN	CA
1	Az	266	GLN	CA
1	Az	268	GLU	CA
1	Az	271	ASN	CA
1	Az	272	LYS	CA
1	Az	307	VAL	CA
1	Az	308	THR	CA
1	Az	309	LEU	CA
1	Az	310	LYS	CA
1	Az	330	LEU	CA
1	Az	331	PRO	CA
1	Az	344	LEU	CA
1	Az	345	PRO	CA
1	Az	346	SER	CA
1	Az	362	PRO	CA
1	Az	385	SER	CA
1	Az	389	PRO	CA
1	Az	395	ARG	CA
1	Az	396	PHE	CA
1	Az	404	ALA	CA
1	Az	407	VAL	CA
1	Az	408	ALA	CA
1	Az	420	TYR	CA
1	Az	424	LYS	CA
1	Az	450	VAL	CA
1	Az	465	LEU	CA
1	Az	467	LYS	CA
1	Az	468	THR	CA
1	Az	474	PHE	CA

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Mol	Chain	Res	Type	Atom
1	Az	478	HIS	CA
1	Az	480	MET	CA
1	Az	483	MET	CA
1	Az	499	ASN	CA
1	Az	520	VAL	CA
1	Az	554	ILE	CA
1	Az	555	PRO	CA
1	Az	564	SER	CA
1	Az	565	TYR	CA
1	Az	572	GLU	CA
1	Az	575	GLN	CA
1	Az	576	MET	CA
1	Az	586	ASN	CA
1	Az	595	MET	CA
1	Az	608	VAL	CA
1	Az	609	SER	CA
1	Az	612	ASP	CA
1	Az	625	TYR	CA
1	Az	627	TYR	CA
1	Az	636	TRP	CA
1	Az	637	CYS	CA
1	Az	657	TYR	CA
1	Az	675	GLU	CA
1	Az	681	GLU	CA
1	Az	683	LEU	CA
1	Az	684	ARG	CA
1	Az	691	TYR	CA
1	Az	695	LEU	CA
1	Az	722	ALA	CA
1	Az	755	HIS	CA
1	Az	757	PHE	CA
1	Az	766	PRO	CA
1	Az	794	ALA	CA
1	Az	802	HIS	CA
1	Az	814	SER	CA
1	Az	815	SER	CA
1	Az	830	LEU	CA
1	Az	834	LEU	CA
1	Az	835	PRO	CA
1	Az	842	ASP	CA
1	Az	843	LYS	CA
5	AO	138	ASP	CA

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Mol	Chain	Res	Type	Atom
5	AO	140	THR	CB
7	AM	40	HIS	CA
13	AP	128	PRO	CA
14	AT	7	LYS	CA
14	AT	153	VAL	CA
19	AZ	112	THR	CA
20	Aa	88	SER	CA
23	AD	198	ASN	CA
31	AH	104	ARG	CA
31	AH	106	ALA	CA
36	B2	713	A	C1'
38	Cz	28	PHE	CA
39	Cq	57	LYS	CA
42	CL	3	LYS	CA
42	CL	5	ASN	CA
42	CL	6	ASN	CA
42	CL	7	MET	CA
42	CL	46	PHE	CA
42	CL	48	ARG	CA
42	CL	53	ALA	CA
42	CL	55	ARG	CA
42	CL	56	PRO	CA
42	CL	62	THR	CA
42	CL	68	LYS	CA
42	CL	69	LEU	CA
42	CL	75	PHE	CA
42	CL	76	THR	CA
42	CL	85	ILE	CA
42	CL	95	ILE	CA
42	CL	96	ALA	CA
42	CL	97	VAL	CA
42	CL	102	LYS	CA
42	CL	125	LEU	CA
42	CL	126	PHE	CA
42	CL	127	PRO	CA
42	CL	132	LYS	CA
42	CL	134	ARG	CA
42	CL	138	SER	CA
42	CL	157	LYS	CA
42	CL	167	ARG	CA
42	CL	171	LYS	CA
42	CL	176	PHE	CA

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Mol	Chain	Res	Type	Atom
44	CM	140	PRO	CA
44	CM	156	ALA	CA
45	Ca	98	LYS	CA
46	CN	144	ARG	CA
48	CD	189	SER	CA
52	CS	6	LEU	CA
52	CS	7	LEU	CA
52	CS	18	PRO	CA
52	CS	22	GLU	CA
52	CS	23	PRO	CA
52	CS	36	ASP	CA
52	CS	52	LYS	CA
52	CS	55	LYS	CA
52	CS	60	GLU	CA
52	CS	62	VAL	CA
52	CS	68	TYR	CA
52	CS	74	LYS	CA
52	CS	75	ILE	CA
52	CS	101	THR	CA
52	CS	119	ALA	CA
52	CS	120	ARG	CA
52	CS	127	ILE	CA
52	CS	134	ALA	CA
52	CS	139	ARG	CA
52	CS	154	LEU	CA
52	CS	155	VAL	CA
52	CS	158	VAL	CA
52	CS	159	HIS	CA
52	CS	163	ASN	CA
52	CS	165	LYS	CA
52	CS	167	PHE	CA
52	CS	173	ARG	CA
52	CS	176	PHE	CA
53	CT	157	PHE	CA
54	CP	168	LYS	CA
56	CX	186	VAL	CA
63	CB	103	VAL	CA
64	CF	180	ARG	CA
66	Cd	122	SER	CA
68	Cf	19	LYS	CA
68	Cf	20	ALA	CA
68	Cf	22	LYS	CA

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Mol	Chain	Res	Type	Atom
68	Cf	23	ALA	CA
68	Cf	41	ALA	CA
68	Cf	43	LYS	CA
68	Cf	45	LYS	CA
74	CC	362	ASN	CA
79	CJ	158	PHE	CA
80	CH	190	SER	CA
81	CE	71	THR	CA
81	CE	105	ALA	CA
81	CE	176	ASP	CA
82	CG	65	TYR	CA
83	A5	1594	U	C1'
83	A5	1668	U	C1'
83	A5	2077	A	C2'
83	A5	3258	C	C1'
83	A5	3714	U	C1'
83	A5	3768	C	C2'
83	A5	3846	U	C1'

All (716) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	AA	152	SER	Peptide
16	AA	158	ASP	Peptide
16	AA	163	CYS	Peptide
16	AA	206	ASP	Peptide
16	AA	66	VAL	Peptide
16	AA	67	ALA	Peptide
15	AB	27	ARG	Sidechain
15	AB	31	TYR	Sidechain
15	AB	39	PHE	Peptide
15	AB	40	GLN	Peptide
28	AC	102	GLY	Peptide
28	AC	115	ASP	Peptide
28	AC	150	ARG	Sidechain
28	AC	152	TYR	Sidechain
28	AC	153	TRP	Peptide
28	AC	186	GLY	Peptide
28	AC	210	ARG	Peptide
28	AC	224	TYR	Sidechain
28	AC	258	LYS	Peptide
28	AC	260	THR	Peptide

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Mol	Chain	Res	Type	Group
28	AC	261	PRO	Peptide
28	AC	39	ASP	Peptide
28	AC	65	TYR	Sidechain
28	AC	99	THR	Peptide
23	AD	114	GLY	Peptide
23	AD	175	ARG	Sidechain
23	AD	181	GLN	Peptide
23	AD	194	TYR	Sidechain
23	AD	196	PRO	Peptide
23	AD	197	LYS	Peptide
23	AD	200	ILE	Peptide
23	AD	220	ILE	Peptide
23	AD	228	TYR	Sidechain
23	AD	6	PRO	Peptide
27	AE	109	PHE	Sidechain
27	AE	135	GLY	Peptide
27	AE	148	ARG	Sidechain
27	AE	177	SER	Peptide
27	AE	185	GLY	Peptide
27	AE	189	LEU	Peptide
27	AE	240	LYS	Peptide
27	AE	258	ALA	Peptide
27	AE	259	LYS	Peptide
27	AE	3	ARG	Sidechain,Peptide
27	AE	54	TYR	Sidechain
27	AE	95	THR	Peptide
30	AF	103	LYS	Peptide
30	AF	160	ARG	Sidechain
30	AF	41	ILE	Peptide
30	AF	45	GLY	Peptide
30	AF	62	TYR	Sidechain
30	AF	71	ARG	Peptide
30	AF	95	ARG	Sidechain
29	AG	129	ILE	Peptide
29	AG	150	GLU	Peptide
29	AG	153	VAL	Peptide
29	AG	166	ASP	Peptide
29	AG	167	ASN	Peptide
29	AG	192	ARG	Sidechain
29	AG	57	ASP	Peptide
29	AG	60	GLY	Peptide
29	AG	79	LYS	Peptide

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Mol	Chain	Res	Type	Group
29	AG	84	TYR	Sidechain
29	AG	99	GLY	Peptide
31	AH	10	PRO	Peptide
31	AH	103	THR	Peptide
31	AH	104	ARG	Sidechain
31	AH	112	GLN	Peptide
31	AH	113	LYS	Peptide
31	AH	116	ARG	Sidechain
31	AH	157	ASP	Peptide
31	AH	187	PHE	Peptide
33	AI	113	TYR	Sidechain
33	AI	145	GLU	Peptide
33	AI	146	LYS	Peptide
33	AI	155	GLN	Peptide
33	AI	190	TYR	Sidechain
33	AI	22	ARG	Peptide
33	AI	23	LYS	Peptide
33	AI	25	ARG	Sidechain
33	AI	49	ARG	Sidechain,Peptide
33	AI	5	ARG	Sidechain
33	AI	98	LYS	Peptide
26	AJ	128	ARG	Sidechain
26	AJ	13	THR	Peptide
26	AJ	14	TYR	Peptide
26	AJ	164	SER	Peptide
26	AJ	170	ARG	Peptide
26	AJ	19	ARG	Sidechain
26	AJ	7	PRO	Peptide
4	AK	2	PHE	Sidechain
4	AK	27	SER	Peptide
4	AK	54	GLY	Peptide
4	AK	61	ALA	Peptide
4	AK	63	ARG	Sidechain
4	AK	83	LEU	Peptide
4	AK	85	PRO	Peptide
4	AK	92	LEU	Peptide
11	AL	129	ARG	Peptide
11	AL	130	PRO	Peptide
11	AL	145	GLY	Peptide
11	AL	146	GLN	Peptide
11	AL	24	GLY	Peptide
11	AL	38	GLY	Peptide

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Mol	Chain	Res	Type	Group
11	AL	66	ARG	Peptide
11	AL	96	TYR	Sidechain
11	AL	99	PHE	Peptide
7	AM	125	THR	Peptide
7	AM	38	LEU	Peptide
7	AM	51	LYS	Peptide
7	AM	64	ASP	Peptide
7	AM	68	TYR	Sidechain
7	AM	88	SER	Peptide
7	AM	89	HIS	Sidechain
10	AN	114	ARG	Sidechain
10	AN	141	TYR	Sidechain
10	AN	18	TYR	Sidechain
10	AN	19	ARG	Sidechain
10	AN	22	VAL	Peptide
10	AN	73	ARG	Sidechain
5	AO	25	GLU	Peptide
13	AP	21	ARG	Peptide
13	AP	30	ASP	Peptide
13	AP	31	MET	Peptide
13	AP	93	THR	Peptide
34	AQ	13	GLN	Peptide
34	AQ	140	ARG	Sidechain
34	AQ	143	TYR	Peptide
34	AQ	144	GLN	Peptide
34	AQ	23	ALA	Peptide
34	AQ	26	TYR	Sidechain
34	AQ	30	GLY	Peptide
34	AQ	33	LEU	Peptide
34	AQ	45	GLU	Peptide
34	AQ	5	ARG	Peptide
34	AQ	8	PRO	Peptide
34	AQ	9	VAL	Peptide
12	AR	118	GLN	Peptide
12	AR	2	GLY	Peptide
12	AR	86	PRO	Peptide
12	AR	89	SER	Peptide
12	AR	90	ALA	Peptide
8	AS	15	ILE	Peptide
8	AS	40	TYR	Sidechain
8	AS	8	LYS	Peptide
8	AS	86	ARG	Peptide

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Mol	Chain	Res	Type	Group
8	AS	88	LYS	Peptide
8	AS	9	PHE	Peptide
14	AT	101	ARG	Sidechain
14	AT	151	PRO	Peptide
14	AT	152	ILE	Peptide
14	AT	2	PRO	Peptide
14	AT	3	GLY	Peptide
14	AT	39	THR	Peptide
14	AT	40	ALA	Peptide
14	AT	6	VAL	Peptide
14	AT	65	TYR	Sidechain
14	AT	8	ASP	Peptide
14	AT	81	GLY	Peptide
3	AU	106	ILE	Peptide
3	AU	54	GLY	Peptide
3	AU	70	THR	Peptide
17	AV	48	ASP	Peptide
17	AV	9	VAL	Peptide
32	AW	3	ARG	Sidechain
32	AW	54	ASP	Peptide
6	AX	107	ARG	Sidechain
6	AX	87	ARG	Peptide
6	AX	9	THR	Peptide
18	AY	100	GLN	Peptide
18	AY	103	GLN	Peptide
18	AY	104	THR	Peptide
18	AY	105	ARG	Sidechain
18	AY	119	ARG	Sidechain
18	AY	23	GLN	Peptide
18	AY	30	HIS	Peptide
18	AY	60	GLY	Peptide
18	AY	67	GLY	Peptide
18	AY	87	GLU	Peptide
18	AY	96	GLY	Peptide
19	AZ	54	TYR	Sidechain
19	AZ	79	ARG	Sidechain
20	Aa	105	ASP	Peptide
20	Aa	107	ALA	Peptide
20	Aa	108	ARG	Sidechain
20	Aa	5	ARG	Sidechain
20	Aa	87	ARG	Peptide
20	Aa	95	ARG	Sidechain

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Mol	Chain	Res	Type	Group
21	Ab	47	PHE	Sidechain
21	Ab	49	HIS	Peptide
21	Ab	5	LYS	Peptide
21	Ab	53	VAL	Peptide
22	Ac	40	ARG	Sidechain
22	Ac	49	GLY	Peptide
22	Ac	62	ARG	Peptide
9	Ad	20	CYS	Peptide
9	Ad	33	LYS	Peptide
9	Ad	34	TYR	Sidechain
9	Ad	8	TYR	Sidechain
24	Ae	110	TYR	Sidechain
24	Ae	119	GLN	Peptide
25	Af	102	VAL	Peptide
25	Af	116	ARG	Sidechain
25	Af	128	ALA	Peptide
25	Af	136	GLU	Peptide
25	Af	144	CYS	Peptide
25	Af	151	SER	Peptide
25	Af	80	ARG	Sidechain
25	Af	84	ASN	Peptide
25	Af	93	HIS	Peptide
25	Af	95	ARG	Peptide
2	Ag	145	GLU	Peptide
2	Ag	214	ASP	Peptide
2	Ag	277	SER	Peptide
2	Ag	89	ARG	Sidechain
35	Ah	109	GLY	Peptide
35	Ah	110	ASN	Peptide
35	Ah	118	GLY	Peptide
35	Ah	132	ARG	Sidechain
35	Ah	134	PRO	Peptide
35	Ah	214	GLU	Peptide
1	Az	107	ILE	Peptide
1	Az	111	GLY	Peptide
1	Az	115	PHE	Peptide
1	Az	125	VAL	Peptide
1	Az	139	VAL	Peptide
1	Az	14	ASP	Peptide
1	Az	154	ARG	Peptide
1	Az	172	GLN	Peptide
1	Az	173	LEU	Peptide

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Mol	Chain	Res	Type	Group
1	Az	179	TYR	Sidechain
1	Az	196	TYR	Sidechain
1	Az	20	ARG	Sidechain
1	Az	200	GLY	Peptide
1	Az	206	VAL	Peptide
1	Az	207	ARG	Sidechain
1	Az	212	LYS	Peptide
1	Az	223	GLY	Peptide
1	Az	241	ILE	Peptide
1	Az	251	TRP	Peptide
1	Az	252	GLY	Peptide
1	Az	255	PHE	Peptide
1	Az	263	TRP	Peptide
1	Az	265	LYS	Peptide
1	Az	27	HIS	Peptide
1	Az	270	ASP	Peptide
1	Az	271	ASN	Peptide
1	Az	309	LEU	Peptide
1	Az	317	ASP	Peptide
1	Az	330	LEU	Peptide
1	Az	344	LEU	Peptide
1	Az	345	PRO	Peptide
1	Az	361	GLY	Peptide
1	Az	384	ILE	Peptide
1	Az	388	VAL	Peptide
1	Az	395	ARG	Peptide
1	Az	406	LYS	Peptide
1	Az	408	ALA	Peptide
1	Az	420	TYR	Sidechain
1	Az	436	THR	Peptide
1	Az	440	MET	Peptide
1	Az	459	VAL	Peptide
1	Az	47	ALA	Peptide
1	Az	477	ALA	Peptide
1	Az	479	ASN	Peptide
1	Az	486	SER	Peptide
1	Az	487	VAL	Peptide
1	Az	49	ALA	Peptide
1	Az	55	ARG	Peptide
1	Az	554	ILE	Peptide
1	Az	560	ASP	Peptide
1	Az	563	VAL	Peptide

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Mol	Chain	Res	Type	Group
1	Az	575	GLN	Peptide
1	Az	594	PRO	Peptide
1	Az	626	ASP	Peptide
1	Az	635	ILE	Peptide
1	Az	636	TRP	Peptide
1	Az	641	ASP	Peptide
1	Az	647	PHE	Sidechain
1	Az	653	LYS	Peptide
1	Az	67	CYS	Peptide
1	Az	680	ASP	Peptide
1	Az	682	ASN	Peptide
1	Az	690	ILE	Peptide
1	Az	70	ILE	Peptide
1	Az	701	HIS	Peptide
1	Az	72	SER	Peptide
1	Az	73	THR	Peptide
1	Az	746	TYR	Sidechain
1	Az	754	GLY	Peptide
1	Az	756	VAL	Peptide
1	Az	763	VAL	Peptide
1	Az	765	THR	Peptide
1	Az	773	TYR	Sidechain
1	Az	791	GLY	Peptide
1	Az	799	VAL	Peptide
1	Az	80	GLU	Peptide
1	Az	801	ASP	Peptide
1	Az	807	PRO	Peptide
1	Az	81	VAL	Peptide
1	Az	813	PRO	Peptide
1	Az	829	GLY	Peptide
1	Az	833	GLY	Peptide
1	Az	834	LEU	Peptide
1	Az	91	HIS	Peptide
1	Az	96	GLU	Peptide
1	Az	97	LYS	Peptide
51	CA	125	ARG	Sidechain
51	CA	133	TYR	Sidechain
51	CA	170	ALA	Peptide
51	CA	212	GLY	Peptide
51	CA	213	GLY	Peptide
51	CA	216	HIS	Sidechain,Peptide
51	CA	54	ARG	Sidechain

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Mol	Chain	Res	Type	Group
63	CB	117	ARG	Sidechain
63	CB	156	TYR	Sidechain
63	CB	226	LYS	Peptide
63	CB	227	GLY	Peptide
63	CB	255	GLY	Peptide
63	CB	268	ARG	Sidechain
63	CB	270	GLY	Peptide
63	CB	274	TYR	Sidechain
63	CB	277	ARG	Sidechain
63	CB	290	GLY	Peptide
63	CB	292	HIS	Peptide
63	CB	320	PHE	Sidechain,Peptide
63	CB	323	TYR	Sidechain,Peptide
63	CB	327	ASN	Peptide
63	CB	334	LYS	Peptide
63	CB	359	ALA	Peptide
63	CB	374	MET	Peptide
63	CB	378	ARG	Sidechain
63	CB	39	LYS	Peptide
63	CB	49	TYR	Sidechain
63	CB	55	HIS	Sidechain
63	CB	63	PRO	Peptide
74	CC	104	MET	Peptide
74	CC	105	PHE	Peptide
74	CC	113	ARG	Sidechain
74	CC	214	TYR	Sidechain
74	CC	218	GLU	Peptide
74	CC	297	LYS	Peptide
74	CC	298	SER	Peptide
74	CC	308	PRO	Peptide
74	CC	310	LYS	Peptide
74	CC	318	ARG	Peptide
74	CC	321	PRO	Peptide
74	CC	332	ASN	Peptide
74	CC	362	ASN	Peptide
74	CC	364	GLU	Peptide
74	CC	390	LYS	Peptide
74	CC	4	GLY	Peptide
74	CC	48	ARG	Sidechain
74	CC	55	TYR	Sidechain
74	CC	72	THR	Peptide
74	CC	91	GLY	Peptide

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Mol	Chain	Res	Type	Group
74	CC	92	GLN	Peptide
48	CD	143	ARG	Sidechain
48	CD	187	THR	Peptide
48	CD	219	PHE	Sidechain
48	CD	221	ARG	Sidechain
48	CD	267	ARG	Peptide
48	CD	278	ARG	Sidechain
48	CD	57	ASN	Peptide
48	CD	95	TYR	Sidechain
81	CE	104	LEU	Peptide
81	CE	128	GLY	Peptide
81	CE	144	TYR	Sidechain
81	CE	157	PHE	Sidechain
81	CE	174	LYS	Peptide
81	CE	175	LYS	Peptide
81	CE	184	ILE	Peptide
81	CE	186	ALA	Peptide
81	CE	187	ALA	Peptide
81	CE	192	PHE	Peptide
81	CE	193	VAL	Peptide
81	CE	20	HIS	Peptide
81	CE	222	PHE	Sidechain
81	CE	227	GLN	Peptide
81	CE	231	ALA	Peptide
81	CE	236	GLN	Peptide
81	CE	28	GLY	Peptide
81	CE	30	ILE	Peptide
81	CE	33	TYR	Sidechain
81	CE	56	GLU	Peptide
81	CE	60	VAL	Peptide
81	CE	69	TYR	Peptide
81	CE	70	PRO	Peptide
81	CE	73	THR	Peptide
81	CE	84	PHE	Sidechain
81	CE	92	ARG	Peptide
64	CF	100	GLY	Peptide
64	CF	158	TYR	Sidechain
64	CF	180	ARG	Sidechain
64	CF	181	LYS	Peptide
64	CF	220	PRO	Peptide
64	CF	235	GLY	Peptide
64	CF	38	ARG	Sidechain

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Mol	Chain	Res	Type	Group
82	CG	131	ASP	Peptide
82	CG	168	PRO	Peptide
82	CG	213	ASP	Peptide
82	CG	33	VAL	Peptide
82	CG	58	ARG	Sidechain
82	CG	65	TYR	Sidechain
82	CG	85	ILE	Peptide
80	CH	105	GLU	Peptide
80	CH	108	THR	Peptide
80	CH	115	PHE	Sidechain,Peptide
80	CH	178	TYR	Sidechain
80	CH	187	LYS	Peptide
80	CH	2	ARG	Sidechain
80	CH	23	ARG	Sidechain
80	CH	48	PRO	Peptide
80	CH	50	LYS	Peptide
80	CH	94	TYR	Sidechain
47	CI	112	GLN	Peptide
47	CI	116	ARG	Peptide
47	CI	166	TYR	Sidechain
47	CI	185	ARG	Sidechain
47	CI	193	ASP	Peptide
47	CI	199	TYR	Peptide
47	CI	200	ARG	Peptide
47	CI	201	PRO	Peptide
47	CI	203	HIS	Peptide
47	CI	7	ARG	Sidechain
47	CI	9	TYR	Sidechain
79	CJ	11	ASP	Peptide
79	CJ	124	TYR	Sidechain
79	CJ	136	TYR	Sidechain
79	CJ	156	VAL	Peptide
79	CJ	157	GLY	Peptide
79	CJ	160	HIS	Peptide
79	CJ	175	TYR	Sidechain
79	CJ	18	ARG	Peptide
79	CJ	37	ARG	Sidechain
79	CJ	6	LYS	Peptide
40	CK	100	HIS	Sidechain
40	CK	117	ARG	Peptide
40	CK	147	HIS	Peptide
40	CK	148	PRO	Peptide

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Mol	Chain	Res	Type	Group
40	CK	29	ALA	Peptide
40	CK	30	PRO	Peptide
40	CK	38	SER	Peptide
40	CK	54	LYS	Peptide
40	CK	87	GLU	Peptide
40	CK	88	PRO	Peptide
40	CK	89	PRO	Peptide
40	CK	93	LYS	Peptide
40	CK	94	LYS	Peptide
42	CL	109	ARG	Sidechain
42	CL	118	GLU	Peptide
42	CL	119	TYR	Sidechain
42	CL	124	ILE	Peptide
42	CL	128	ILE	Peptide
42	CL	129	ASN	Peptide
42	CL	13	TYR	Sidechain
42	CL	130	GLU	Peptide
42	CL	137	GLU	Peptide
42	CL	151	GLY	Peptide
42	CL	152	PRO	Peptide
42	CL	154	LEU	Peptide
42	CL	167	ARG	Peptide
42	CL	4	GLY	Peptide
42	CL	49	PRO	Peptide
42	CL	55	ARG	Peptide
42	CL	58	VAL	Peptide
42	CL	6	ASN	Peptide
42	CL	70	ARG	Peptide
42	CL	75	PHE	Sidechain,Peptide
44	CM	101	ARG	Peptide
44	CM	105	ASN	Peptide
44	CM	130	LEU	Peptide
44	CM	132	LYS	Peptide
44	CM	135	LYS	Peptide
44	CM	139	THR	Peptide
44	CM	140	PRO	Peptide
44	CM	141	ARG	Peptide
44	CM	151	LEU	Peptide
44	CM	153	ALA	Peptide
44	CM	155	LYS	Peptide
44	CM	156	ALA	Peptide
44	CM	17	ALA	Peptide

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Mol	Chain	Res	Type	Group
44	CM	47	ARG	Sidechain
44	CM	65	PRO	Peptide
46	CN	108	ARG	Sidechain
46	CN	119	TYR	Sidechain
46	CN	145	ASP	Peptide
46	CN	178	TYR	Sidechain
46	CN	187	SER	Peptide
46	CN	202	ARG	Sidechain
46	CN	30	TYR	Sidechain
46	CN	38	ARG	Peptide
46	CN	50	ARG	Sidechain
46	CN	65	ARG	Sidechain
46	CN	68	ARG	Peptide
46	CN	71	ARG	Sidechain
46	CN	95	TYR	Sidechain
41	CO	111	PRO	Peptide
41	CO	112	SER	Peptide
41	CO	118	ARG	Sidechain
41	CO	127	ARG	Sidechain
41	CO	137	TYR	Sidechain
41	CO	4	LEU	Peptide
41	CO	50	TYR	Sidechain
41	CO	59	TYR	Peptide
41	CO	7	ARG	Sidechain
54	CP	162	ASP	Peptide
54	CP	165	PRO	Peptide
54	CP	20	PRO	Peptide
54	CP	5	SER	Peptide
49	CQ	11	ARG	Sidechain
49	CQ	12	LYS	Peptide
49	CQ	160	HIS	Peptide
49	CQ	166	TYR	Sidechain
49	CQ	186	TYR	Sidechain
49	CQ	26	ARG	Sidechain
49	CQ	8	LYS	Peptide
50	CR	112	SER	Peptide
50	CR	124	TYR	Sidechain
50	CR	129	GLY	Peptide
50	CR	132	PHE	Sidechain
50	CR	16	ARG	Sidechain
52	CS	118	ARG	Peptide
52	CS	119	ALA	Peptide

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Mol	Chain	Res	Type	Group
52	CS	126	ILE	Peptide
52	CS	133	PRO	Peptide
52	CS	149	LYS	Peptide
52	CS	153	PRO	Peptide
52	CS	154	LEU	Peptide
52	CS	157	ARG	Sidechain,Peptide
52	CS	158	VAL	Peptide
52	CS	162	GLY	Peptide
52	CS	17	LEU	Peptide
52	CS	172	PRO	Peptide
52	CS	176	PHE	Sidechain
52	CS	23	PRO	Peptide
52	CS	25	THR	Peptide
52	CS	46	TYR	Sidechain
52	CS	56	LYS	Peptide
52	CS	61	ILE	Peptide
52	CS	67	VAL	Peptide
52	CS	74	LYS	Peptide
52	CS	88	SER	Peptide
53	CT	124	GLN	Peptide
53	CT	136	LYS	Peptide
53	CT	145	GLU	Peptide
53	CT	147	PRO	Peptide
53	CT	148	ILE	Peptide
53	CT	152	PRO	Peptide
53	CT	153	ILE	Peptide
53	CT	154	PRO	Peptide
53	CT	155	TYR	Sidechain
53	CT	157	PHE	Peptide
53	CT	2	THR	Peptide
53	CT	5	LYS	Peptide
55	CU	186	LYS	Peptide
55	CU	237	SER	Peptide
55	CU	251	LYS	Peptide
55	CU	297	ASP	Peptide
43	CV	29	ALA	Peptide
43	CV	46	ARG	Sidechain
43	CV	83	ARG	Sidechain
43	CV	89	ARG	Peptide
58	CW	101	ARG	Sidechain
58	CW	15	PRO	Peptide
58	CW	18	GLY	Peptide

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Mol	Chain	Res	Type	Group
58	CW	32	LEU	Peptide
58	CW	38	ARG	Sidechain
58	CW	40	TYR	Sidechain
58	CW	71	ARG	Peptide
58	CW	77	LYS	Peptide
58	CW	80	ARG	Sidechain
58	CW	81	ALA	Peptide
56	CX	159	ARG	Sidechain
56	CX	162	ARG	Peptide
56	CX	166	HIS	Peptide
56	CX	191	ARG	Peptide
57	CY	6	PHE	Peptide
57	CY	60	GLY	Peptide
57	CY	61	HIS	Peptide
57	CY	83	GLU	Peptide
59	CZ	114	ARG	Sidechain
59	CZ	134	ARG	Sidechain
59	CZ	38	PHE	Sidechain
59	CZ	4	ILE	Peptide
59	CZ	49	TYR	Sidechain
59	CZ	51	ARG	Sidechain
45	Ca	10	ARG	Sidechain
45	Ca	110	TYR	Sidechain
45	Ca	114	GLY	Peptide
45	Ca	115	ARG	Sidechain
45	Ca	130	PHE	Peptide
45	Ca	14	GLY	Peptide
45	Ca	147	LEU	Peptide
45	Ca	51	PRO	Peptide
45	Ca	58	GLY	Peptide
45	Ca	92	GLU	Peptide
45	Ca	93	LYS	Peptide
45	Ca	97	THR	Peptide
62	Cb	52	SER	Peptide
62	Cb	53	ARG	Sidechain
62	Cb	67	GLN	Peptide
62	Cb	68	LYS	Peptide
65	Cc	102	SER	Peptide
65	Cc	11	LEU	Peptide
65	Cc	12	GLU	Peptide
65	Cc	62	TYR	Sidechain
65	Cc	74	TYR	Sidechain

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Mol	Chain	Res	Type	Group
66	Cd	119	VAL	Peptide
66	Cd	38	ARG	Peptide
66	Cd	87	ARG	Sidechain
67	Ce	113	ARG	Sidechain
67	Ce	124	PRO	Peptide
67	Ce	129	ARG	Peptide
67	Ce	14	LYS	Peptide
67	Ce	27	TYR	Sidechain
67	Ce	52	TYR	Sidechain
67	Ce	59	TYR	Sidechain
67	Ce	7	TYR	Sidechain
68	Cf	107	HIS	Peptide
68	Cf	108	PRO	Peptide
68	Cf	137	ARG	Peptide
68	Cf	148	ILE	Peptide
68	Cf	17	ALA	Peptide
68	Cf	18	GLN	Peptide
68	Cf	21	PRO	Peptide
68	Cf	22	LYS	Peptide
68	Cf	24	VAL	Peptide
68	Cf	26	ALA	Peptide
68	Cf	28	LYS	Peptide
68	Cf	29	ALA	Peptide
68	Cf	30	GLU	Peptide
68	Cf	34	ALA	Peptide
68	Cf	37	ALA	Peptide
68	Cf	38	LYS	Peptide
68	Cf	41	ALA	Peptide
68	Cf	44	TYR	Sidechain,Peptide
68	Cf	48	GLY	Peptide
68	Cf	49	ARG	Peptide
68	Cf	61	ARG	Peptide
69	Cg	10	ARG	Sidechain
69	Cg	24	ARG	Sidechain
69	Cg	32	TYR	Sidechain
69	Cg	45	GLY	Peptide
69	Cg	74	ARG	Sidechain
69	Cg	8	ARG	Sidechain
69	Cg	80	LEU	Peptide
61	Ch	121	VAL	Peptide
61	Ch	48	ARG	Sidechain
61	Ch	89	ARG	Sidechain

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Mol	Chain	Res	Type	Group
70	Ci	10	GLY	Peptide
70	Ci	16	LYS	Peptide
70	Ci	24	LYS	Peptide
70	Ci	37	SER	Peptide
70	Ci	88	GLY	Peptide
71	Cj	27	TYR	Sidechain
71	Cj	43	LYS	Peptide
71	Cj	63	ARG	Sidechain
72	Ck	1	MET	Peptide
72	Ck	38	CYS	Peptide
73	Cl	41	ARG	Sidechain
73	Cl	47	THR	Peptide
73	Cl	48	LYS	Peptide
73	Cl	50	LYS	Peptide
75	Cm	112	LYS	Peptide
75	Cm	113	LYS	Peptide
76	Cn	11	ARG	Sidechain
76	Cn	9	ARG	Sidechain
78	Co	101	MET	Peptide
78	Co	46	GLN	Peptide
78	Co	48	PHE	Peptide
78	Co	91	LEU	Peptide
78	Co	97	ARG	Sidechain
77	Cp	52	VAL	Peptide
77	Cp	59	ARG	Peptide
39	Cq	107	VAL	Peptide
39	Cq	13	TYR	Sidechain
39	Cq	14	PHE	Sidechain
39	Cq	142	GLY	Peptide
39	Cq	148	SER	Peptide
39	Cq	149	ARG	Peptide
39	Cq	183	PHE	Peptide
39	Cq	25	PRO	Peptide
39	Cq	36	GLY	Peptide
39	Cq	55	MET	Peptide
39	Cq	56	GLY	Peptide
39	Cq	57	LYS	Peptide
39	Cq	6	ARG	Peptide
39	Cq	71	ASN	Peptide
39	Cq	83	ARG	Peptide
39	Cq	86	VAL	Peptide
60	Cr	110	LEU	Peptide

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Mol	Chain	Res	Type	Group
60	Cr	132	GLY	Peptide
60	Cr	133	LYS	Peptide
60	Cr	24	ASP	Peptide
60	Cr	27	LYS	Peptide
60	Cr	28	PRO	Peptide
60	Cr	39	VAL	Peptide
60	Cr	42	TYR	Sidechain
60	Cr	46	GLY	Peptide
60	Cr	49	HIS	Peptide
60	Cr	72	LYS	Peptide
60	Cr	75	GLN	Peptide
60	Cr	79	LYS	Peptide
60	Cr	92	ARG	Sidechain
38	Cz	210	MET	Peptide
38	Cz	41	TYR	Sidechain

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	Az	835/844 (99%)	647 (78%)	96 (12%)	92 (11%)	0 7
2	Ag	316/318 (99%)	274 (87%)	25 (8%)	17 (5%)	2 19
3	AU	100/120 (83%)	84 (84%)	6 (6%)	10 (10%)	0 9
4	AK	93/163 (57%)	75 (81%)	7 (8%)	11 (12%)	0 6
5	AO	132/151 (87%)	104 (79%)	13 (10%)	15 (11%)	0 7
6	AX	141/143 (99%)	118 (84%)	15 (11%)	8 (6%)	1 18
7	AM	117/139 (84%)	85 (73%)	16 (14%)	16 (14%)	0 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	AS	135/152 (89%)	107 (79%)	16 (12%)	12 (9%)	1	11
9	Ad	50/56 (89%)	30 (60%)	10 (20%)	10 (20%)	0	2
10	AN	148/151 (98%)	136 (92%)	7 (5%)	5 (3%)	3	26
11	AL	153/155 (99%)	128 (84%)	16 (10%)	9 (6%)	1	17
12	AR	118/131 (90%)	99 (84%)	12 (10%)	7 (6%)	1	17
13	AP	122/148 (82%)	95 (78%)	13 (11%)	14 (12%)	0	6
14	AT	152/156 (97%)	125 (82%)	17 (11%)	10 (7%)	1	15
15	AB	218/268 (81%)	179 (82%)	23 (11%)	16 (7%)	1	13
16	AA	216/313 (69%)	174 (81%)	22 (10%)	20 (9%)	0	10
17	AV	80/83 (96%)	64 (80%)	6 (8%)	10 (12%)	0	5
18	AY	124/131 (95%)	96 (77%)	10 (8%)	18 (14%)	0	4
19	AZ	72/117 (62%)	49 (68%)	11 (15%)	12 (17%)	0	3
20	Aa	105/114 (92%)	75 (71%)	14 (13%)	16 (15%)	0	3
21	Ab	82/84 (98%)	64 (78%)	12 (15%)	6 (7%)	1	13
22	Ac	60/65 (92%)	53 (88%)	1 (2%)	6 (10%)	0	9
23	AD	225/246 (92%)	183 (81%)	29 (13%)	13 (6%)	1	17
24	Ae	56/132 (42%)	37 (66%)	10 (18%)	9 (16%)	0	3
25	Af	78/80 (98%)	46 (59%)	15 (19%)	17 (22%)	0	2
26	AJ	179/195 (92%)	148 (83%)	17 (10%)	14 (8%)	1	12
27	AE	259/261 (99%)	204 (79%)	37 (14%)	18 (7%)	1	14
28	AC	225/267 (84%)	186 (83%)	17 (8%)	22 (10%)	0	9
29	AG	229/248 (92%)	196 (86%)	20 (9%)	13 (6%)	1	18
30	AF	188/228 (82%)	152 (81%)	20 (11%)	16 (8%)	1	11
31	AH	192/194 (99%)	147 (77%)	28 (15%)	17 (9%)	1	11
32	AW	127/130 (98%)	114 (90%)	10 (8%)	3 (2%)	6	33
33	AI	205/208 (99%)	164 (80%)	12 (6%)	29 (14%)	0	4
34	AQ	146/148 (99%)	114 (78%)	14 (10%)	18 (12%)	0	5
35	Ah	54/121 (45%)	31 (57%)	6 (11%)	17 (32%)	0	0
38	Cz	215/218 (99%)	186 (86%)	17 (8%)	12 (6%)	2	18
39	Cq	221/223 (99%)	183 (83%)	21 (10%)	17 (8%)	1	13
40	CK	156/165 (94%)	95 (61%)	29 (19%)	32 (20%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
41	CO	203/205 (99%)	183 (90%)	12 (6%)	8 (4%)	3	23
42	CL	208/218 (95%)	141 (68%)	28 (14%)	39 (19%)	0	2
43	CV	132/140 (94%)	116 (88%)	13 (10%)	3 (2%)	6	34
44	CM	157/166 (95%)	123 (78%)	20 (13%)	14 (9%)	1	11
45	Ca	147/149 (99%)	116 (79%)	17 (12%)	14 (10%)	0	10
46	CN	201/204 (98%)	175 (87%)	20 (10%)	6 (3%)	4	28
47	CI	215/218 (99%)	176 (82%)	19 (9%)	20 (9%)	0	10
48	CD	288/299 (96%)	242 (84%)	20 (7%)	26 (9%)	1	11
49	CQ	185/188 (98%)	153 (83%)	18 (10%)	14 (8%)	1	13
50	CR	201/203 (99%)	187 (93%)	7 (4%)	7 (4%)	3	25
51	CA	251/256 (98%)	205 (82%)	27 (11%)	19 (8%)	1	13
52	CS	171/177 (97%)	131 (77%)	18 (10%)	22 (13%)	0	5
53	CT	156/159 (98%)	122 (78%)	17 (11%)	17 (11%)	0	7
54	CP	183/186 (98%)	154 (84%)	16 (9%)	13 (7%)	1	14
55	CU	114/299 (38%)	88 (77%)	18 (16%)	8 (7%)	1	14
56	CX	118/277 (43%)	96 (81%)	15 (13%)	7 (6%)	1	17
57	CY	129/149 (87%)	113 (88%)	9 (7%)	7 (5%)	2	19
58	CW	128/155 (83%)	102 (80%)	12 (9%)	14 (11%)	0	7
59	CZ	132/135 (98%)	111 (84%)	15 (11%)	6 (4%)	2	22
60	Cr	132/144 (92%)	88 (67%)	22 (17%)	22 (17%)	0	3
61	Ch	121/123 (98%)	99 (82%)	10 (8%)	12 (10%)	0	9
62	Cb	73/76 (96%)	53 (73%)	11 (15%)	9 (12%)	0	5
63	CB	412/416 (99%)	325 (79%)	56 (14%)	31 (8%)	1	13
64	CF	227/252 (90%)	195 (86%)	17 (8%)	15 (7%)	1	15
65	Cc	98/111 (88%)	91 (93%)	3 (3%)	4 (4%)	3	22
66	Cd	109/124 (88%)	91 (84%)	14 (13%)	4 (4%)	3	25
67	Ce	130/134 (97%)	101 (78%)	16 (12%)	13 (10%)	0	9
68	Cf	155/157 (99%)	115 (74%)	14 (9%)	26 (17%)	0	3
69	Cg	111/162 (68%)	92 (83%)	12 (11%)	7 (6%)	1	16
70	Ci	111/115 (96%)	82 (74%)	16 (14%)	13 (12%)	0	6
71	Cj	90/93 (97%)	75 (83%)	9 (10%)	6 (7%)	1	15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
72	Ck	68/70 (97%)	61 (90%)	4 (6%)	3 (4%)	2	22
73	Cl	48/51 (94%)	40 (83%)	4 (8%)	4 (8%)	1	12
74	CC	390/401 (97%)	309 (79%)	36 (9%)	45 (12%)	0	6
75	Cm	50/52 (96%)	38 (76%)	6 (12%)	6 (12%)	0	6
76	Cn	23/25 (92%)	22 (96%)	0	1 (4%)	2	22
77	Cp	89/92 (97%)	77 (86%)	8 (9%)	4 (4%)	2	22
78	Co	102/104 (98%)	79 (78%)	10 (10%)	13 (13%)	0	5
79	CJ	180/184 (98%)	139 (77%)	17 (9%)	24 (13%)	0	4
80	CH	188/190 (99%)	160 (85%)	16 (8%)	12 (6%)	1	16
81	CE	226/243 (93%)	149 (66%)	34 (15%)	43 (19%)	0	2
82	CG	239/271 (88%)	197 (82%)	22 (9%)	20 (8%)	1	11
All	All	13015/14439 (90%)	10459 (80%)	1348 (10%)	1208 (9%)	1	10

All (1208) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	Az	5	THR
1	Az	15	LYS
1	Az	44	GLY
1	Az	54	THR
1	Az	82	GLU
1	Az	89	ILE
1	Az	92	PRO
1	Az	100	LYS
1	Az	116	SER
1	Az	140	CYS
1	Az	174	ASP
1	Az	204	GLY
1	Az	209	ASP
1	Az	210	PRO
1	Az	213	GLY
1	Az	218	GLY
1	Az	223	GLY
1	Az	256	PHE
1	Az	266	GLN
1	Az	270	ASP
1	Az	272	LYS
1	Az	307	VAL

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Mol	Chain	Res	Type
1	Az	308	THR
1	Az	309	LEU
1	Az	311	HIS
1	Az	331	PRO
1	Az	345	PRO
1	Az	389	PRO
1	Az	395	ARG
1	Az	405	GLY
1	Az	427	ASP
1	Az	450	VAL
1	Az	467	LYS
1	Az	481	LYS
1	Az	484	LYS
1	Az	487	VAL
1	Az	520	VAL
1	Az	528	GLY
1	Az	555	PRO
1	Az	560	ASP
1	Az	584	LYS
1	Az	636	TRP
1	Az	642	GLY
1	Az	675	GLU
1	Az	691	TYR
1	Az	722	ALA
1	Az	739	GLU
1	Az	762	VAL
1	Az	766	PRO
1	Az	792	GLY
1	Az	794	ALA
1	Az	814	SER
1	Az	834	LEU
1	Az	835	PRO
2	Ag	137	ALA
2	Ag	146	ASP
2	Ag	215	SER
2	Ag	277	SER
2	Ag	279	THR
3	AU	49	ASN
3	AU	54	GLY
3	AU	73	GLY
3	AU	77	LYS
3	AU	96	PRO

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Mol	Chain	Res	Type
3	AU	109	GLU
4	AK	28	PRO
4	AK	34	GLU
4	AK	62	TRP
4	AK	88	VAL
4	AK	89	PRO
5	AO	20	GLN
5	AO	56	VAL
5	AO	100	THR
5	AO	101	GLY
5	AO	128	ARG
5	AO	140	THR
5	AO	148	GLY
5	AO	149	ARG
6	AX	90	SER
6	AX	95	GLU
6	AX	110	HIS
6	AX	112	VAL
6	AX	142	ARG
7	AM	40	HIS
7	AM	85	ARG
7	AM	86	VAL
7	AM	87	ASP
7	AM	121	PHE
7	AM	123	GLU
7	AM	124	GLU
8	AS	11	HIS
8	AS	129	LEU
8	AS	140	GLY
9	Ad	13	LYS
9	Ad	16	GLN
9	Ad	21	CYS
9	Ad	52	PHE
11	AL	22	LYS
11	AL	24	GLY
11	AL	27	LYS
11	AL	28	LYS
11	AL	133	LYS
12	AR	6	THR
12	AR	23	ARG
12	AR	64	SER
12	AR	86	PRO

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Mol	Chain	Res	Type
12	AR	114	ILE
13	AP	10	LYS
13	AP	14	THR
13	AP	17	LYS
13	AP	18	PHE
13	AP	94	GLY
13	AP	128	PRO
14	AT	6	VAL
14	AT	32	ASP
14	AT	34	MET
14	AT	68	SER
15	AB	21	VAL
15	AB	22	VAL
15	AB	29	ASP
15	AB	35	ALA
15	AB	40	GLN
15	AB	119	LYS
15	AB	120	TRP
15	AB	183	ASP
15	AB	212	ASP
15	AB	216	ARG
15	AB	221	LEU
16	AA	10	LEU
16	AA	67	ALA
16	AA	165	ASN
16	AA	167	SER
16	AA	190	SER
16	AA	192	SER
16	AA	194	GLU
16	AA	206	ASP
16	AA	216	ALA
16	AA	217	ALA
16	AA	221	LEU
16	AA	222	PRO
17	AV	4	ASP
17	AV	10	ASP
17	AV	23	ILE
17	AV	40	ASP
17	AV	41	PRO
18	AY	34	SER
18	AY	35	SER
18	AY	36	VAL

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Mol	Chain	Res	Type
18	AY	37	ASN
18	AY	52	THR
18	AY	57	PHE
18	AY	61	PHE
18	AY	64	ASN
18	AY	87	GLU
19	AZ	45	ASN
19	AZ	48	LEU
19	AZ	67	ILE
19	AZ	76	LEU
19	AZ	77	LYS
19	AZ	93	LYS
19	AZ	112	THR
20	Aa	28	ARG
20	Aa	46	GLU
20	Aa	86	ASN
20	Aa	88	SER
20	Aa	96	THR
20	Aa	97	PRO
20	Aa	98	PRO
20	Aa	102	PHE
20	Aa	103	PRO
20	Aa	106	MET
21	Ab	5	LYS
21	Ab	18	LYS
21	Ab	57	ALA
21	Ab	62	ILE
22	Ac	35	ASN
22	Ac	62	ARG
23	AD	6	PRO
23	AD	96	ARG
23	AD	204	LYS
23	AD	205	PRO
23	AD	225	GLU
24	Ae	77	SER
24	Ae	94	GLN
24	Ae	95	GLU
24	Ae	100	LYS
24	Ae	119	GLN
25	Af	90	LYS
25	Af	93	HIS
25	Af	99	LYS

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Mol	Chain	Res	Type
25	Af	100	LEU
25	Af	102	VAL
25	Af	103	LEU
25	Af	137	ASP
25	Af	148	PHE
25	Af	152	LYS
25	Af	153	PRO
26	AJ	7	PRO
26	AJ	12	LYS
26	AJ	14	TYR
26	AJ	119	GLY
26	AJ	134	ARG
26	AJ	139	ARG
26	AJ	167	GLY
26	AJ	170	ARG
26	AJ	171	PRO
27	AE	33	THR
27	AE	136	VAL
27	AE	171	ASP
27	AE	190	GLY
27	AE	232	ASN
27	AE	241	GLY
28	AC	41	LYS
28	AC	60	SER
28	AC	116	ASN
28	AC	186	GLY
28	AC	216	LEU
28	AC	241	GLU
28	AC	242	MET
28	AC	247	THR
28	AC	258	LYS
28	AC	259	PRO
28	AC	260	THR
28	AC	261	PRO
29	AG	60	GLY
29	AG	69	THR
29	AG	117	GLY
29	AG	148	SER
29	AG	149	LYS
29	AG	152	ASP
29	AG	154	ARG
30	AF	42	LYS

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Mol	Chain	Res	Type
30	AF	65	VAL
30	AF	70	ALA
30	AF	103	LYS
30	AF	130	GLU
30	AF	154	ARG
30	AF	207	GLY
31	AH	64	ILE
31	AH	104	ARG
31	AH	110	LEU
31	AH	111	LYS
31	AH	112	GLN
31	AH	114	ARG
31	AH	157	ASP
31	AH	188	PRO
32	AW	30	CYS
33	AI	6	ASP
33	AI	8	ALA
33	AI	23	LYS
33	AI	41	GLY
33	AI	52	ASN
33	AI	99	ASN
33	AI	105	ASP
33	AI	120	PRO
33	AI	141	LYS
33	AI	144	SER
33	AI	145	GLU
33	AI	155	GLN
34	AQ	4	LYS
34	AQ	31	ASN
34	AQ	47	LYS
34	AQ	61	GLY
34	AQ	102	VAL
34	AQ	144	GLN
34	AQ	145	LYS
35	Ah	114	ASN
35	Ah	115	GLY
35	Ah	119	ASN
35	Ah	122	PRO
35	Ah	124	ARG
35	Ah	136	ARG
35	Ah	137	VAL
35	Ah	140	GLY

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Mol	Chain	Res	Type
35	Ah	142	LYS
35	Ah	143	PHE
35	Ah	144	GLY
35	Ah	215	PRO
35	Ah	225	ALA
38	Cz	19	GLU
38	Cz	58	ILE
38	Cz	71	GLN
38	Cz	98	LYS
38	Cz	143	SER
38	Cz	196	LYS
39	Cq	27	CYS
39	Cq	70	GLU
39	Cq	73	PRO
39	Cq	108	PRO
39	Cq	150	GLY
39	Cq	156	SER
40	CK	8	THR
40	CK	30	PRO
40	CK	39	PRO
40	CK	40	LYS
40	CK	75	PRO
40	CK	77	ALA
40	CK	86	LYS
40	CK	87	GLU
40	CK	88	PRO
40	CK	106	PHE
40	CK	119	ARG
40	CK	121	MET
40	CK	124	GLU
40	CK	144	ASP
40	CK	147	HIS
40	CK	148	PRO
41	CO	112	SER
41	CO	113	PRO
41	CO	192	GLU
41	CO	202	GLY
41	CO	203	TYR
42	CL	21	VAL
42	CL	46	PHE
42	CL	50	ALA
42	CL	53	ALA

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Mol	Chain	Res	Type
42	CL	54	LEU
42	CL	56	PRO
42	CL	58	VAL
42	CL	95	ILE
42	CL	96	ALA
42	CL	106	LEU
42	CL	125	LEU
42	CL	128	ILE
42	CL	133	ILE
42	CL	137	GLU
42	CL	138	SER
42	CL	149	LEU
42	CL	152	PRO
42	CL	155	PRO
42	CL	160	GLN
42	CL	161	PRO
42	CL	171	LYS
42	CL	173	GLU
43	CV	15	ARG
43	CV	139	ILE
44	CM	3	PHE
44	CM	31	ILE
44	CM	128	ASN
44	CM	135	LYS
44	CM	140	PRO
44	CM	157	LYS
45	Ca	21	GLY
45	Ca	25	LYS
45	Ca	48	LYS
45	Ca	54	PHE
45	Ca	79	LEU
45	Ca	100	PRO
46	CN	81	TYR
46	CN	125	ALA
46	CN	178	TYR
47	CI	4	ARG
47	CI	5	PRO
47	CI	105	CYS
47	CI	110	ARG
47	CI	112	GLN
47	CI	178	ARG
47	CI	202	GLU

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Mol	Chain	Res	Type
47	CI	205	PRO
48	CD	20	PHE
48	CD	44	TYR
48	CD	121	GLY
48	CD	122	CYS
48	CD	129	GLU
48	CD	189	SER
48	CD	232	ARG
48	CD	260	SER
48	CD	264	THR
48	CD	272	LYS
48	CD	274	THR
49	CQ	13	VAL
49	CQ	40	ASN
49	CQ	41	LYS
49	CQ	98	LEU
49	CQ	156	PRO
49	CQ	159	PRO
50	CR	113	LYS
50	CR	131	VAL
50	CR	132	PHE
51	CA	32	LEU
51	CA	138	ALA
51	CA	170	ALA
51	CA	179	ILE
51	CA	230	SER
52	CS	6	LEU
52	CS	18	PRO
52	CS	53	LYS
52	CS	119	ALA
52	CS	120	ARG
52	CS	134	ALA
52	CS	154	LEU
52	CS	155	VAL
52	CS	158	VAL
52	CS	163	ASN
53	CT	3	ASN
53	CT	84	ILE
53	CT	127	SER
53	CT	128	LEU
53	CT	144	LEU
53	CT	148	ILE

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Mol	Chain	Res	Type
53	CT	149	ALA
53	CT	150	LEU
53	CT	151	ALA
53	CT	152	PRO
53	CT	154	PRO
54	CP	7	GLU
54	CP	11	VAL
54	CP	163	ASP
54	CP	168	LYS
55	CU	248	HIS
55	CU	278	LYS
55	CU	288	ILE
56	CX	173	LEU
56	CX	182	PRO
56	CX	186	VAL
56	CX	267	ALA
57	CY	60	GLY
57	CY	63	LYS
57	CY	65	ASN
57	CY	66	GLN
57	CY	84	LYS
58	CW	16	GLY
58	CW	34	LYS
58	CW	63	ILE
58	CW	64	GLU
58	CW	70	LYS
58	CW	71	ARG
58	CW	72	THR
58	CW	78	PHE
58	CW	87	LEU
59	CZ	5	MET
59	CZ	97	PRO
59	CZ	100	LEU
59	CZ	124	GLY
60	Cr	23	ARG
60	Cr	28	PRO
60	Cr	33	PRO
60	Cr	39	VAL
60	Cr	70	LYS
60	Cr	74	ALA
60	Cr	78	ALA
60	Cr	134	LYS

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Mol	Chain	Res	Type
61	Ch	39	GLY
61	Ch	87	LYS
61	Ch	118	LYS
61	Ch	122	LYS
62	Cb	5	LYS
62	Cb	24	PRO
62	Cb	33	LEU
62	Cb	36	ASP
62	Cb	37	VAL
62	Cb	51	LEU
62	Cb	52	SER
62	Cb	68	LYS
63	CB	3	HIS
63	CB	19	LYS
63	CB	30	LYS
63	CB	34	LYS
63	CB	112	GLU
63	CB	140	ASP
63	CB	242	ARG
63	CB	248	LEU
63	CB	274	TYR
63	CB	281	ASN
63	CB	291	ILE
63	CB	292	HIS
63	CB	298	VAL
63	CB	311	ASP
63	CB	320	PHE
63	CB	335	GLY
63	CB	391	PRO
63	CB	394	LYS
64	CF	171	PRO
64	CF	172	ILE
64	CF	174	ASP
64	CF	180	ARG
64	CF	186	HIS
64	CF	218	ASN
64	CF	224	TRP
64	CF	227	LYS
64	CF	237	PHE
65	Cc	11	LEU
65	Cc	12	GLU
66	Cd	73	GLY

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Mol	Chain	Res	Type
66	Cd	74	ILE
67	Ce	14	LYS
67	Ce	20	ILE
67	Ce	21	ARG
67	Ce	52	TYR
67	Ce	129	ARG
68	Cf	19	LYS
68	Cf	21	PRO
68	Cf	23	ALA
68	Cf	25	LYS
68	Cf	45	LYS
68	Cf	101	LYS
68	Cf	102	LYS
68	Cf	104	VAL
68	Cf	108	PRO
68	Cf	112	THR
68	Cf	129	GLY
69	Cg	45	GLY
69	Cg	50	LYS
69	Cg	62	ARG
69	Cg	63	PRO
70	Ci	4	ARG
70	Ci	11	LEU
70	Ci	28	ASP
70	Ci	38	ARG
70	Ci	44	THR
71	Cj	36	GLN
71	Cj	38	GLY
71	Cj	39	TYR
71	Cj	40	PRO
71	Cj	42	ALA
72	Ck	59	SER
73	Cl	39	ALA
73	Cl	48	LYS
74	CC	7	ARG
74	CC	20	ALA
74	CC	73	GLY
74	CC	83	ARG
74	CC	84	GLY
74	CC	178	LYS
74	CC	186	VAL
74	CC	187	TYR

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Mol	Chain	Res	Type
74	CC	196	ARG
74	CC	269	THR
74	CC	290	THR
74	CC	310	LYS
74	CC	315	SER
74	CC	316	VAL
74	CC	332	ASN
74	CC	333	PRO
74	CC	364	GLU
74	CC	365	LEU
74	CC	392	VAL
77	Cp	19	GLY
77	Cp	60	CYS
78	Co	30	LYS
78	Co	31	GLU
78	Co	32	ARG
78	Co	58	LYS
78	Co	61	LYS
78	Co	93	GLY
78	Co	102	ILE
79	CJ	2	ALA
79	CJ	9	LYS
79	CJ	11	ASP
79	CJ	16	PRO
79	CJ	20	LEU
79	CJ	103	ASN
79	CJ	122	ILE
79	CJ	156	VAL
79	CJ	160	HIS
79	CJ	180	LEU
80	CH	49	ASP
80	CH	61	THR
80	CH	103	THR
80	CH	104	SER
80	CH	110	ILE
80	CH	163	THR
81	CE	20	HIS
81	CE	21	PRO
81	CE	31	LEU
81	CE	41	ARG
81	CE	52	SER
81	CE	64	LYS

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Mol	Chain	Res	Type
81	CE	65	SER
81	CE	69	TYR
81	CE	70	PRO
81	CE	73	THR
81	CE	75	VAL
81	CE	84	PHE
81	CE	176	ASP
81	CE	181	GLU
81	CE	183	ASP
81	CE	187	ALA
81	CE	188	LYS
81	CE	193	VAL
81	CE	218	GLU
82	CG	34	ASN
82	CG	41	PRO
82	CG	43	ASN
82	CG	45	GLY
82	CG	64	LYS
82	CG	109	PRO
82	CG	168	PRO
82	CG	212	VAL
1	Az	72	SER
1	Az	97	LYS
1	Az	138	GLY
1	Az	155	ILE
1	Az	205	GLU
1	Az	242	ASP
1	Az	255	PHE
1	Az	262	LYS
1	Az	310	LYS
1	Az	346	SER
1	Az	362	PRO
1	Az	420	TYR
1	Az	468	THR
1	Az	563	VAL
1	Az	573	SER
1	Az	627	TYR
1	Az	764	GLY
1	Az	808	GLY
1	Az	815	SER
1	Az	843	LYS
2	Ag	47	ARG

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Mol	Chain	Res	Type
2	Ag	95	ALA
2	Ag	145	GLU
2	Ag	162	SER
2	Ag	265	LYS
2	Ag	276	VAL
2	Ag	296	GLY
3	AU	31	VAL
3	AU	52	VAL
3	AU	76	SER
3	AU	97	SER
4	AK	30	GLN
4	AK	54	GLY
4	AK	55	TRP
4	AK	61	ALA
5	AO	32	HIS
5	AO	99	ALA
5	AO	145	GLY
6	AX	113	GLY
6	AX	136	GLU
7	AM	39	VAL
7	AM	82	PRO
7	AM	101	ILE
7	AM	114	SER
8	AS	7	GLU
8	AS	12	ILE
8	AS	16	MET
9	Ad	15	GLY
9	Ad	39	CYS
10	AN	10	GLY
11	AL	29	LYS
11	AL	54	ASP
13	AP	11	LYS
13	AP	12	LYS
13	AP	32	PRO
13	AP	129	VAL
14	AT	31	PRO
14	AT	153	VAL
15	AB	19	LYS
15	AB	96	ASP
15	AB	157	CYS
16	AA	11	LYS
16	AA	31	ASN

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Mol	Chain	Res	Type
16	AA	96	THR
16	AA	191	ARG
17	AV	9	VAL
17	AV	26	ALA
17	AV	44	GLY
18	AY	66	GLY
18	AY	88	PRO
18	AY	96	GLY
18	AY	121	THR
19	AZ	78	ILE
19	AZ	95	LEU
20	Aa	3	LYS
20	Aa	16	GLY
22	Ac	34	GLN
22	Ac	59	ARG
23	AD	200	ILE
23	AD	220	ILE
23	AD	221	TYR
25	Af	89	LYS
25	Af	98	VAL
26	AJ	37	GLY
26	AJ	93	MET
26	AJ	173	ARG
27	AE	73	ASP
27	AE	98	PHE
27	AE	186	GLY
27	AE	205	PHE
27	AE	246	LEU
28	AC	172	GLY
30	AF	41	ILE
30	AF	44	PHE
30	AF	155	ALA
30	AF	227	ASN
31	AH	33	SER
31	AH	53	GLY
31	AH	74	GLN
31	AH	102	PRO
31	AH	105	LYS
32	AW	83	ILE
33	AI	5	ARG
33	AI	11	ARG
33	AI	19	LYS

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Mol	Chain	Res	Type
33	AI	22	ARG
33	AI	40	SER
33	AI	51	GLY
33	AI	123	ARG
33	AI	124	LYS
33	AI	147	VAL
33	AI	160	VAL
34	AQ	8	PRO
34	AQ	9	VAL
34	AQ	44	ILE
34	AQ	77	GLY
34	AQ	129	CYS
35	Ah	130	ASP
35	Ah	138	ARG
38	Cz	95	LYS
38	Cz	153	SER
39	Cq	84	GLY
39	Cq	85	ASN
39	Cq	109	ALA
39	Cq	125	ALA
39	Cq	149	ARG
39	Cq	163	THR
40	CK	7	PRO
40	CK	34	PRO
40	CK	54	LYS
40	CK	89	PRO
40	CK	96	LYS
40	CK	99	LYS
40	CK	123	ARG
41	CO	48	HIS
42	CL	7	MET
42	CL	59	ARG
42	CL	72	GLY
42	CL	74	GLY
42	CL	100	ARG
42	CL	119	TYR
42	CL	124	ILE
42	CL	169	VAL
44	CM	21	LYS
44	CM	103	SER
44	CM	136	ALA
44	CM	142	VAL

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Mol	Chain	Res	Type
44	CM	158	GLY
45	Ca	15	HIS
45	Ca	52	GLY
45	Ca	55	GLY
45	Ca	94	GLU
47	CI	6	ALA
47	CI	103	LEU
47	CI	109	ASP
48	CD	18	VAL
48	CD	30	TYR
48	CD	188	LYS
48	CD	271	LYS
49	CQ	12	LYS
49	CQ	36	GLN
49	CQ	185	GLY
51	CA	4	VAL
51	CA	171	GLY
51	CA	198	LYS
51	CA	238	ILE
51	CA	245	ARG
51	CA	250	LYS
51	CA	251	GLY
52	CS	7	LEU
52	CS	23	PRO
52	CS	62	VAL
52	CS	68	TYR
52	CS	139	ARG
53	CT	5	LYS
53	CT	55	LYS
53	CT	133	GLU
54	CP	3	ARG
54	CP	6	ARG
54	CP	156	LEU
54	CP	165	PRO
55	CU	222	ASN
55	CU	247	VAL
55	CU	289	SER
55	CU	291	ASN
55	CU	292	ASP
56	CX	164	ASN
57	CY	61	HIS
57	CY	67	VAL

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Mol	Chain	Res	Type
58	CW	17	HIS
58	CW	82	ILE
59	CZ	58	GLY
60	Cr	5	SER
60	Cr	32	GLU
60	Cr	47	ILE
60	Cr	81	THR
60	Cr	92	ARG
60	Cr	130	VAL
61	Ch	2	VAL
61	Ch	3	LYS
61	Ch	86	LYS
61	Ch	95	LEU
62	Cb	20	GLY
63	CB	36	ASP
63	CB	38	SER
63	CB	41	VAL
63	CB	141	LEU
63	CB	319	GLY
63	CB	357	ARG
63	CB	375	GLY
64	CF	28	GLN
64	CF	167	ARG
64	CF	168	GLN
67	Ce	6	ALA
67	Ce	7	TYR
67	Ce	15	ARG
67	Ce	124	PRO
67	Ce	125	ASN
68	Cf	28	LYS
68	Cf	40	SER
68	Cf	138	ASN
69	Cg	14	ASN
70	Ci	25	TYR
70	Ci	43	GLN
70	Ci	60	HIS
71	Cj	89	ALA
72	Ck	20	ALA
72	Ck	41	PHE
74	CC	78	ARG
74	CC	92	GLN
74	CC	93	GLY

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Mol	Chain	Res	Type
74	CC	145	HIS
74	CC	146	VAL
74	CC	164	VAL
74	CC	195	GLY
74	CC	204	ARG
74	CC	207	ARG
74	CC	209	GLY
74	CC	210	PRO
74	CC	264	ASN
74	CC	305	LEU
74	CC	362	ASN
75	Cm	78	ILE
75	Cm	125	LYS
77	Cp	15	GLY
78	Co	92	GLY
78	Co	100	GLN
79	CJ	14	LYS
79	CJ	81	GLY
79	CJ	97	TYR
79	CJ	129	GLY
80	CH	22	ALA
80	CH	129	GLY
80	CH	165	VAL
80	CH	189	GLU
81	CE	30	ILE
81	CE	43	ALA
81	CE	44	LEU
81	CE	60	VAL
81	CE	90	ASN
81	CE	93	ARG
81	CE	106	GLY
81	CE	120	ALA
81	CE	130	PHE
81	CE	178	LYS
81	CE	179	THR
81	CE	184	ILE
82	CG	47	GLY
82	CG	89	SER
82	CG	246	ILE
82	CG	248	GLY
1	Az	61	LYS
1	Az	71	LYS

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Mol	Chain	Res	Type
1	Az	113	VAL
1	Az	553	CYS
1	Az	656	GLN
1	Az	799	VAL
2	Ag	278	PRO
8	AS	26	VAL
8	AS	37	GLY
8	AS	135	HIS
10	AN	107	LYS
11	AL	35	ARG
12	AR	100	ALA
13	AP	104	ASP
18	AY	89	LYS
18	AY	101	LYS
18	AY	119	ARG
19	AZ	42	LYS
20	Aa	64	LEU
23	AD	62	GLY
23	AD	213	VAL
23	AD	224	PRO
24	Ae	91	VAL
24	Ae	97	LYS
25	Af	118	ARG
25	Af	124	GLU
25	Af	131	PHE
27	AE	6	LYS
27	AE	85	GLY
27	AE	134	LYS
28	AC	61	LEU
28	AC	183	ARG
29	AG	181	ILE
30	AF	148	ASP
33	AI	17	LYS
34	AQ	6	ARG
34	AQ	37	ASN
34	AQ	62	LYS
38	Cz	29	LEU
39	Cq	111	ALA
40	CK	10	VAL
40	CK	18	VAL
41	CO	115	ASP
42	CL	61	PRO

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Mol	Chain	Res	Type
43	CV	18	LEU
45	Ca	49	TYR
47	CI	24	ARG
47	CI	82	LYS
47	CI	162	ARG
48	CD	142	PHE
48	CD	221	ARG
48	CD	259	LYS
49	CQ	157	GLY
49	CQ	160	HIS
50	CR	2	SER
51	CA	204	MET
52	CS	127	ILE
52	CS	152	PHE
52	CS	175	TYR
54	CP	8	SER
54	CP	20	PRO
54	CP	159	LYS
56	CX	177	ARG
58	CW	33	ASP
58	CW	96	MET
60	Cr	82	VAL
60	Cr	111	THR
60	Cr	132	GLY
61	Ch	81	LEU
63	CB	64	GLY
64	CF	92	LEU
65	Cc	54	ALA
67	Ce	11	ILE
68	Cf	18	GLN
69	Cg	26	PRO
70	Ci	10	GLY
73	Cl	20	ASN
73	Cl	50	LYS
74	CC	5	ASN
74	CC	8	PRO
74	CC	306	ARG
75	Cm	126	LYS
76	Cn	2	ARG
78	Co	29	SER
78	Co	50	GLY
78	Co	51	GLN

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Mol	Chain	Res	Type
79	CJ	130	ILE
79	CJ	161	ARG
79	CJ	173	GLN
80	CH	175	ASP
81	CE	18	LYS
81	CE	53	PRO
81	CE	67	ALA
81	CE	105	ALA
81	CE	129	PRO
81	CE	194	PRO
82	CG	244	GLY
82	CG	247	LEU
1	Az	344	LEU
1	Az	613	GLU
1	Az	767	MET
2	Ag	138	GLU
4	AK	83	LEU
4	AK	92	LEU
5	AO	65	ASP
5	AO	138	ASP
5	AO	146	ARG
7	AM	96	SER
7	AM	113	CYS
7	AM	125	THR
8	AS	59	CYS
8	AS	60	THR
9	Ad	6	LEU
9	Ad	10	HIS
10	AN	3	ARG
10	AN	14	SER
12	AR	65	GLN
14	AT	69	PRO
16	AA	103	PHE
17	AV	43	THR
18	AY	6	ALA
18	AY	120	GLY
19	AZ	49	PHE
22	Ac	61	ALA
23	AD	57	THR
23	AD	223	THR
25	Af	87	THR
28	AC	159	LYS

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Mol	Chain	Res	Type
28	AC	243	PRO
28	AC	244	LEU
29	AG	68	LEU
29	AG	175	PRO
33	AI	161	GLU
34	AQ	19	LYS
34	AQ	124	GLY
35	Ah	133	GLY
38	Cz	99	LEU
39	Cq	33	ASP
39	Cq	182	PRO
40	CK	28	LEU
40	CK	67	ARG
41	CO	60	LEU
42	CL	85	ILE
42	CL	120	ARG
44	CM	134	THR
45	Ca	28	LYS
45	Ca	115	ARG
47	CI	81	GLY
47	CI	201	PRO
48	CD	251	PRO
48	CD	265	LYS
49	CQ	166	TYR
50	CR	53	LYS
52	CS	54	PHE
52	CS	156	GLN
52	CS	171	LYS
54	CP	162	ASP
59	CZ	16	GLY
61	Ch	40	ALA
63	CB	189	SER
65	Cc	88	TYR
67	Ce	67	HIS
68	Cf	24	VAL
68	Cf	38	LYS
68	Cf	43	LYS
68	Cf	47	HIS
68	Cf	111	LYS
68	Cf	139	LEU
70	Ci	87	LEU
74	CC	17	ASN

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Mol	Chain	Res	Type
74	CC	18	GLU
74	CC	238	LEU
74	CC	311	ARG
74	CC	319	LEU
78	Co	56	PHE
79	CJ	6	LYS
79	CJ	34	SER
79	CJ	96	GLU
80	CH	109	VAL
81	CE	22	VAL
81	CE	107	ARG
81	CE	159	VAL
82	CG	44	PHE
82	CG	131	ASP
82	CG	213	ASP
82	CG	243	GLY
1	Az	112	HIS
1	Az	114	ASP
1	Az	139	VAL
1	Az	316	LYS
1	Az	683	LEU
2	Ag	104	GLY
5	AO	25	GLU
6	AX	129	SER
7	AM	110	VAL
7	AM	126	PRO
9	Ad	34	TYR
10	AN	23	PRO
13	AP	15	PHE
13	AP	31	MET
14	AT	10	ASP
14	AT	47	PRO
15	AB	184	LEU
16	AA	104	THR
16	AA	168	ALA
19	AZ	62	PRO
20	Aa	62	TYR
20	Aa	63	VAL
20	Aa	100	ARG
21	Ab	2	PRO
21	Ab	83	PRO
22	Ac	45	PRO

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Mol	Chain	Res	Type
24	Ae	102	GLY
24	Ae	130	ASN
25	Af	111	ASN
27	AE	7	LYS
27	AE	245	LYS
28	AC	45	PRO
28	AC	145	VAL
29	AG	164	ALA
29	AG	165	LYS
30	AF	156	GLY
33	AI	10	LYS
33	AI	50	GLY
33	AI	142	LYS
34	AQ	118	ASP
39	Cq	74	ALA
40	CK	22	VAL
40	CK	155	LEU
42	CL	97	VAL
42	CL	158	ASN
45	Ca	51	PRO
46	CN	50	ARG
46	CN	68	ARG
46	CN	158	HIS
47	CI	12	CYS
47	CI	119	PHE
47	CI	171	TRP
48	CD	38	PHE
48	CD	58	LYS
48	CD	254	LYS
49	CQ	164	ARG
51	CA	26	ALA
51	CA	130	SER
53	CT	146	GLU
60	Cr	76	ARG
60	Cr	90	PRO
61	Ch	42	SER
63	CB	33	PRO
63	CB	377	GLY
67	Ce	19	PHE
68	Cf	26	ALA
68	Cf	37	ALA
68	Cf	51	PHE

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Mol	Chain	Res	Type
70	Ci	30	LYS
74	CC	4	GLY
74	CC	135	GLY
74	CC	322	LEU
75	Cm	114	LYS
75	Cm	127	LEU
79	CJ	99	LEU
79	CJ	144	TYR
79	CJ	158	PHE
8	AS	133	GLY
14	AT	26	GLY
15	AB	223	LYS
26	AJ	11	SER
28	AC	160	PRO
30	AF	72	TYR
31	AH	98	ILE
31	AH	187	PHE
33	AI	106	ALA
38	Cz	13	GLY
38	Cz	49	PHE
40	CK	58	ILE
40	CK	60	VAL
40	CK	92	ARG
42	CL	9	PRO
42	CL	168	GLU
44	CM	28	VAL
47	CI	169	LYS
48	CD	9	ASN
48	CD	273	LEU
51	CA	5	ILE
51	CA	33	ASP
51	CA	239	ALA
52	CS	17	LEU
54	CP	164	GLU
58	CW	98	PRO
60	Cr	57	PRO
60	Cr	131	LYS
61	Ch	80	PRO
64	CF	220	PRO
64	CF	230	HIS
66	Cd	91	ASP
68	Cf	27	PRO

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Mol	Chain	Res	Type
74	CC	136	VAL
77	Cp	53	GLY
82	CG	40	ARG
1	Az	81	VAL
2	Ag	191	GLY
2	Ag	315	VAL
11	AL	147	GLY
27	AE	195	VAL
28	AC	164	PRO
30	AF	153	GLY
32	AW	82	PRO
33	AI	104	ILE
81	CE	61	PRO
1	Az	490	VAL
1	Az	817	PRO
13	AP	56	PRO
16	AA	199	VAL
29	AG	153	VAL
31	AH	15	PRO
50	CR	18	GLY
51	CA	196	TRP
53	CT	126	VAL
60	Cr	48	VAL
66	Cd	39	ALA
70	Ci	36	GLY
70	Ci	59	GLY
79	CJ	125	ASP
1	Az	68	ILE
31	AH	115	PRO
42	CL	55	ARG
50	CR	55	VAL
75	Cm	116	GLY
81	CE	160	PRO
9	Ad	50	ILE
17	AV	49	GLY
26	AJ	6	ILE
27	AE	193	GLY
30	AF	129	GLY
44	CM	89	SER
48	CD	125	VAL
53	CT	135	PRO
56	CX	165	VAL

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Mol	Chain	Res	Type
63	CB	338	ILE
68	Cf	154	PRO
81	CE	54	VAL
39	Cq	107	VAL
42	CL	60	CYS
49	CQ	58	ARG
69	Cg	2	VAL
82	CG	33	VAL
35	Ah	134	PRO
63	CB	18	PRO

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	Az	721/726 (99%)	667 (92%)	54 (8%)	13	38
2	Ag	280/280 (100%)	268 (96%)	12 (4%)	29	54
3	AU	95/108 (88%)	93 (98%)	2 (2%)	53	72
4	AK	88/132 (67%)	80 (91%)	8 (9%)	9	30
5	AO	103/118 (87%)	92 (89%)	11 (11%)	6	24
6	AX	116/116 (100%)	109 (94%)	7 (6%)	19	44
7	AM	104/119 (87%)	98 (94%)	6 (6%)	20	45
8	AS	123/136 (90%)	120 (98%)	3 (2%)	49	69
9	Ad	45/47 (96%)	43 (96%)	2 (4%)	28	53
10	AN	130/131 (99%)	122 (94%)	8 (6%)	18	43
11	AL	138/138 (100%)	130 (94%)	8 (6%)	20	45
12	AR	108/118 (92%)	98 (91%)	10 (9%)	9	29
13	AP	111/130 (85%)	105 (95%)	6 (5%)	22	47
14	AT	125/127 (98%)	113 (90%)	12 (10%)	8	27
15	AB	199/233 (85%)	182 (92%)	17 (8%)	10	33
16	AA	190/271 (70%)	178 (94%)	12 (6%)	18	43

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	AV	67/68 (98%)	61 (91%)	6 (9%)	9	30
18	AY	105/110 (96%)	103 (98%)	2 (2%)	57	75
19	AZ	67/100 (67%)	57 (85%)	10 (15%)	3	15
20	Aa	94/101 (93%)	92 (98%)	2 (2%)	53	72
21	Ab	72/72 (100%)	69 (96%)	3 (4%)	30	54
22	Ac	54/57 (95%)	50 (93%)	4 (7%)	13	38
23	AD	192/210 (91%)	179 (93%)	13 (7%)	16	41
24	Ae	47/108 (44%)	45 (96%)	2 (4%)	29	54
25	Af	70/70 (100%)	58 (83%)	12 (17%)	2	11
26	AJ	161/169 (95%)	152 (94%)	9 (6%)	21	46
27	AE	220/220 (100%)	209 (95%)	11 (5%)	24	49
28	AC	188/209 (90%)	178 (95%)	10 (5%)	22	48
29	AG	200/216 (93%)	185 (92%)	15 (8%)	13	38
30	AF	161/193 (83%)	156 (97%)	5 (3%)	40	62
31	AH	175/175 (100%)	157 (90%)	18 (10%)	7	25
32	AW	113/114 (99%)	107 (95%)	6 (5%)	22	48
33	AI	175/176 (99%)	167 (95%)	8 (5%)	27	52
34	AQ	122/122 (100%)	115 (94%)	7 (6%)	20	46
35	Ah	51/100 (51%)	47 (92%)	4 (8%)	12	36
38	Cz	190/191 (100%)	173 (91%)	17 (9%)	9	31
39	Cq	186/186 (100%)	170 (91%)	16 (9%)	10	33
40	CK	131/137 (96%)	126 (96%)	5 (4%)	33	57
41	CO	175/175 (100%)	158 (90%)	17 (10%)	8	27
42	CL	173/180 (96%)	157 (91%)	16 (9%)	9	29
43	CV	101/106 (95%)	100 (99%)	1 (1%)	76	86
44	CM	138/142 (97%)	124 (90%)	14 (10%)	7	25
45	Ca	122/122 (100%)	112 (92%)	10 (8%)	11	34
46	CN	174/175 (99%)	165 (95%)	9 (5%)	23	48
47	CI	187/188 (100%)	181 (97%)	6 (3%)	39	62
48	CD	241/248 (97%)	234 (97%)	7 (3%)	42	64
49	CQ	164/165 (99%)	151 (92%)	13 (8%)	12	36

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
50	CR	176/176 (100%)	171 (97%)	5 (3%)	43	65
51	CA	195/198 (98%)	180 (92%)	15 (8%)	13	37
52	CS	156/159 (98%)	142 (91%)	14 (9%)	9	30
53	CT	137/138 (99%)	129 (94%)	8 (6%)	20	45
54	CP	160/161 (99%)	153 (96%)	7 (4%)	28	53
55	CU	108/203 (53%)	104 (96%)	4 (4%)	34	58
56	CX	106/205 (52%)	102 (96%)	4 (4%)	33	57
57	CY	116/130 (89%)	114 (98%)	2 (2%)	60	78
58	CW	107/124 (86%)	100 (94%)	7 (6%)	17	42
59	CZ	121/122 (99%)	108 (89%)	13 (11%)	6	24
60	Cr	112/120 (93%)	102 (91%)	10 (9%)	9	31
61	Ch	112/112 (100%)	110 (98%)	2 (2%)	59	77
62	Cb	67/68 (98%)	62 (92%)	5 (8%)	13	38
63	CB	349/350 (100%)	335 (96%)	14 (4%)	31	55
64	CF	203/222 (91%)	194 (96%)	9 (4%)	28	53
65	Cc	84/93 (90%)	78 (93%)	6 (7%)	14	39
66	Cd	103/114 (90%)	96 (93%)	7 (7%)	16	41
67	Ce	120/122 (98%)	108 (90%)	12 (10%)	7	26
68	Cf	123/123 (100%)	111 (90%)	12 (10%)	8	27
69	Cg	104/137 (76%)	97 (93%)	7 (7%)	16	41
70	Ci	100/101 (99%)	89 (89%)	11 (11%)	6	23
71	Cj	77/78 (99%)	67 (87%)	10 (13%)	4	18
72	Ck	65/65 (100%)	59 (91%)	6 (9%)	9	29
73	Cl	45/46 (98%)	43 (96%)	2 (4%)	28	53
74	CC	323/329 (98%)	294 (91%)	29 (9%)	9	30
75	Cm	48/48 (100%)	47 (98%)	1 (2%)	53	72
76	Cn	23/23 (100%)	21 (91%)	2 (9%)	10	31
77	Cp	74/75 (99%)	71 (96%)	3 (4%)	30	55
78	Co	94/94 (100%)	89 (95%)	5 (5%)	22	48
79	CJ	155/157 (99%)	148 (96%)	7 (4%)	27	52
80	CH	169/169 (100%)	156 (92%)	13 (8%)	13	37

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
81	CE	197/208 (95%)	177 (90%)	20 (10%)	7	25
82	CG	210/237 (89%)	196 (93%)	14 (7%)	16	41
All	All	11331/12242 (93%)	10589 (94%)	742 (6%)	21	42

All (742) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	Az	13	MET
1	Az	17	ARG
1	Az	27	HIS
1	Az	46	ILE
1	Az	75	ILE
1	Az	91	HIS
1	Az	126	THR
1	Az	143	THR
1	Az	173	LEU
1	Az	199	ASP
1	Az	255	PHE
1	Az	256	PHE
1	Az	271	ASN
1	Az	309	LEU
1	Az	330	LEU
1	Az	344	LEU
1	Az	383	TYR
1	Az	396	PHE
1	Az	420	TYR
1	Az	424	LYS
1	Az	450	VAL
1	Az	462	ASP
1	Az	467	LYS
1	Az	470	THR
1	Az	480	MET
1	Az	506	LEU
1	Az	519	MET
1	Az	538	LEU
1	Az	540	LEU
1	Az	547	LEU
1	Az	565	TYR
1	Az	569	VAL
1	Az	572	GLU
1	Az	576	MET

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Mol	Chain	Res	Type
1	Az	578	LEU
1	Az	586	ASN
1	Az	595	MET
1	Az	599	LEU
1	Az	625	TYR
1	Az	627	TYR
1	Az	641	ASP
1	Az	652	THR
1	Az	657	TYR
1	Az	669	PHE
1	Az	677	ILE
1	Az	681	GLU
1	Az	683	LEU
1	Az	692	ASP
1	Az	695	LEU
1	Az	714	CYS
1	Az	755	HIS
1	Az	757	PHE
1	Az	782	PHE
1	Az	801	ASP
2	Ag	20	GLN
2	Ag	32	ILE
2	Ag	75	ASP
2	Ag	114	PHE
2	Ag	171	TRP
2	Ag	187	ASN
2	Ag	201	VAL
2	Ag	214	ASP
2	Ag	232	GLU
2	Ag	237	ILE
2	Ag	259	ILE
2	Ag	278	PRO
3	AU	28	SER
3	AU	34	LEU
4	AK	3	ILE
4	AK	5	LYS
4	AK	28	PRO
4	AK	32	HIS
4	AK	50	LEU
4	AK	57	LYS
4	AK	83	LEU
4	AK	91	THR

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Mol	Chain	Res	Type
5	AO	25	GLU
5	AO	51	GLU
5	AO	52	THR
5	AO	55	ARG
5	AO	66	ARG
5	AO	93	LEU
5	AO	100	THR
5	AO	116	LEU
5	AO	117	ARG
5	AO	128	ARG
5	AO	146	ARG
6	AX	11	ARG
6	AX	22	TRP
6	AX	35	ARG
6	AX	68	LYS
6	AX	98	ASP
6	AX	105	PHE
6	AX	112	VAL
7	AM	39	VAL
7	AM	59	LEU
7	AM	63	PHE
7	AM	116	VAL
7	AM	121	PHE
7	AM	126	PRO
8	AS	26	VAL
8	AS	40	TYR
8	AS	126	TYR
9	Ad	19	ARG
9	Ad	25	SER
10	AN	3	ARG
10	AN	11	ILE
10	AN	16	LEU
10	AN	22	VAL
10	AN	76	LYS
10	AN	115	LEU
10	AN	140	LYS
10	AN	149	LEU
11	AL	11	LYS
11	AL	32	ARG
11	AL	37	VAL
11	AL	64	ARG
11	AL	66	ARG

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Mol	Chain	Res	Type
11	AL	69	ILE
11	AL	93	VAL
11	AL	153	LYS
12	AR	4	VAL
12	AR	5	ARG
12	AR	46	LEU
12	AR	65	GLN
12	AR	69	ILE
12	AR	71	ILE
12	AR	72	LYS
12	AR	95	ILE
12	AR	96	ILE
12	AR	101	ASP
13	AP	15	PHE
13	AP	81	THR
13	AP	93	THR
13	AP	99	VAL
13	AP	110	VAL
13	AP	127	LYS
14	AT	5	THR
14	AT	48	TYR
14	AT	52	TRP
14	AT	84	ARG
14	AT	92	PHE
14	AT	102	LYS
14	AT	105	GLN
14	AT	111	ARG
14	AT	121	ARG
14	AT	126	ILE
14	AT	130	ASP
14	AT	153	VAL
15	AB	31	TYR
15	AB	55	GLN
15	AB	65	ARG
15	AB	71	LEU
15	AB	84	PHE
15	AB	99	VAL
15	AB	109	THR
15	AB	117	VAL
15	AB	119	LYS
15	AB	143	ILE
15	AB	155	LYS

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Mol	Chain	Res	Type
15	AB	158	TYR
15	AB	213	VAL
15	AB	215	ILE
15	AB	223	LYS
15	AB	226	PHE
15	AB	231	LEU
16	AA	28	GLU
16	AA	39	TYR
16	AA	51	LEU
16	AA	66	VAL
16	AA	103	PHE
16	AA	116	PHE
16	AA	119	PRO
16	AA	121	LEU
16	AA	130	ASP
16	AA	158	ASP
16	AA	200	ASP
16	AA	218	LYS
17	AV	11	LEU
17	AV	24	ILE
17	AV	41	PRO
17	AV	43	THR
17	AV	78	ILE
17	AV	81	LYS
18	AY	55	VAL
18	AY	105	ARG
19	AZ	53	THR
19	AZ	67	ILE
19	AZ	81	SER
19	AZ	93	LYS
19	AZ	102	HIS
19	AZ	103	HIS
19	AZ	105	GLN
19	AZ	106	VAL
19	AZ	109	THR
19	AZ	112	THR
20	Aa	15	ARG
20	Aa	62	TYR
21	Ab	33	MET
21	Ab	43	ILE
21	Ab	51	GLN
22	Ac	26	VAL

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Mol	Chain	Res	Type
22	Ac	31	LEU
22	Ac	46	VAL
22	Ac	60	GLU
23	AD	6	PRO
23	AD	39	VAL
23	AD	47	ARG
23	AD	50	ILE
23	AD	68	ILE
23	AD	96	ARG
23	AD	125	LEU
23	AD	134	LYS
23	AD	170	VAL
23	AD	194	TYR
23	AD	200	ILE
23	AD	220	ILE
23	AD	226	THR
24	Ae	98	LYS
24	Ae	108	ILE
25	Af	79	LYS
25	Af	80	ARG
25	Af	87	THR
25	Af	97	LYS
25	Af	102	VAL
25	Af	105	TYR
25	Af	113	LYS
25	Af	119	ARG
25	Af	120	GLU
25	Af	141	CYS
25	Af	143	LYS
25	Af	154	GLU
26	AJ	5	ARG
26	AJ	6	ILE
26	AJ	13	THR
26	AJ	41	LYS
26	AJ	93	MET
26	AJ	143	VAL
26	AJ	171	PRO
26	AJ	173	ARG
26	AJ	175	LYS
27	AE	1	MET
27	AE	7	LYS
27	AE	9	LEU

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Mol	Chain	Res	Type
27	AE	16	LYS
27	AE	37	LYS
27	AE	110	VAL
27	AE	127	LYS
27	AE	149	TYR
27	AE	183	ILE
27	AE	222	LEU
27	AE	259	LYS
28	AC	74	PHE
28	AC	92	ILE
28	AC	95	VAL
28	AC	97	LYS
28	AC	108	LYS
28	AC	120	ILE
28	AC	122	LEU
28	AC	150	ARG
28	AC	210	ARG
28	AC	249	TYR
29	AG	1	MET
29	AG	68	LEU
29	AG	84	TYR
29	AG	98	ARG
29	AG	106	MET
29	AG	121	ILE
29	AG	136	LYS
29	AG	142	ARG
29	AG	145	TYR
29	AG	155	ARG
29	AG	165	LYS
29	AG	168	LYS
29	AG	180	LEU
29	AG	186	LEU
29	AG	189	LYS
30	AF	42	LYS
30	AF	115	ARG
30	AF	146	ARG
30	AF	148	ASP
30	AF	193	ILE
31	AH	8	ILE
31	AH	35	LEU
31	AH	36	LYS
31	AH	77	LEU

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Mol	Chain	Res	Type
31	AH	85	PHE
31	AH	93	ILE
31	AH	105	LYS
31	AH	108	ASN
31	AH	116	ARG
31	AH	118	ARG
31	AH	120	LEU
31	AH	141	ARG
31	AH	145	LYS
31	AH	158	LYS
31	AH	170	THR
31	AH	188	PRO
31	AH	191	TYR
31	AH	194	VAL
32	AW	37	PHE
32	AW	53	VAL
32	AW	54	ASP
32	AW	75	ILE
32	AW	83	ILE
32	AW	105	THR
33	AI	29	LEU
33	AI	75	LYS
33	AI	97	VAL
33	AI	120	PRO
33	AI	125	ARG
33	AI	132	LYS
33	AI	146	LYS
33	AI	169	THR
34	AQ	10	GLN
34	AQ	12	VAL
34	AQ	14	VAL
34	AQ	53	LEU
34	AQ	104	GLU
34	AQ	134	PHE
34	AQ	143	TYR
35	Ah	126	PHE
35	Ah	129	ARG
35	Ah	214	GLU
35	Ah	216	LYS
38	Cz	8	ASP
38	Cz	35	GLN
38	Cz	49	PHE

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Mol	Chain	Res	Type
38	Cz	63	MET
38	Cz	111	LEU
38	Cz	120	ILE
38	Cz	122	ARG
38	Cz	141	GLN
38	Cz	143	SER
38	Cz	154	THR
38	Cz	157	PHE
38	Cz	159	MET
38	Cz	161	LYS
38	Cz	163	LEU
38	Cz	164	CYS
38	Cz	200	ASN
38	Cz	203	SER
39	Cq	6	ARG
39	Cq	35	VAL
39	Cq	45	MET
39	Cq	48	ARG
39	Cq	50	LYS
39	Cq	61	MET
39	Cq	78	LEU
39	Cq	95	LEU
39	Cq	97	GLU
39	Cq	108	PRO
39	Cq	149	ARG
39	Cq	183	PHE
39	Cq	191	GLN
39	Cq	199	PHE
39	Cq	201	PRO
39	Cq	205	ASP
40	CK	22	VAL
40	CK	30	PRO
40	CK	44	ASP
40	CK	104	ILE
40	CK	123	ARG
41	CO	4	LEU
41	CO	18	LEU
41	CO	41	GLU
41	CO	48	HIS
41	CO	60	LEU
41	CO	108	ASP
41	CO	115	ASP

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Mol	Chain	Res	Type
41	CO	117	ARG
41	CO	119	ARG
41	CO	162	ARG
41	CO	166	LEU
41	CO	172	HIS
41	CO	176	LEU
41	CO	182	LYS
41	CO	189	LYS
41	CO	197	ILE
41	CO	205	VAL
42	CL	6	ASN
42	CL	46	PHE
42	CL	47	PRO
42	CL	59	ARG
42	CL	63	ILE
42	CL	68	LYS
42	CL	70	ARG
42	CL	85	ILE
42	CL	125	LEU
42	CL	127	PRO
42	CL	128	ILE
42	CL	150	LYS
42	CL	164	VAL
42	CL	176	PHE
42	CL	182	LEU
42	CL	183	ARG
43	CV	51	ARG
44	CM	4	GLU
44	CM	5	ARG
44	CM	25	VAL
44	CM	50	TYR
44	CM	55	LEU
44	CM	62	ILE
44	CM	97	ASN
44	CM	104	LEU
44	CM	114	TYR
44	CM	117	ARG
44	CM	127	PHE
44	CM	142	VAL
44	CM	147	ARG
44	CM	157	LYS
45	Ca	10	ARG

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Mol	Chain	Res	Type
45	Ca	47	ASP
45	Ca	53	TYR
45	Ca	70	PHE
45	Ca	73	GLU
45	Ca	100	PRO
45	Ca	110	TYR
45	Ca	115	ARG
45	Ca	130	PHE
45	Ca	137	LYS
46	CN	37	HIS
46	CN	39	SER
46	CN	46	ASP
46	CN	53	TYR
46	CN	62	TYR
46	CN	87	HIS
46	CN	129	TYR
46	CN	144	ARG
46	CN	184	ILE
47	CI	89	MET
47	CI	93	PRO
47	CI	113	THR
47	CI	119	PHE
47	CI	181	TYR
47	CI	200	ARG
48	CD	15	ARG
48	CD	40	ASP
48	CD	48	LYS
48	CD	146	LEU
48	CD	190	PHE
48	CD	207	TYR
48	CD	223	PHE
49	CQ	12	LYS
49	CQ	14	ARG
49	CQ	41	LYS
49	CQ	46	ILE
49	CQ	61	LEU
49	CQ	68	ARG
49	CQ	92	LEU
49	CQ	101	CYS
49	CQ	108	THR
49	CQ	135	ASN
49	CQ	142	ARG

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Mol	Chain	Res	Type
49	CQ	144	THR
49	CQ	159	PRO
50	CR	25	ASP
50	CR	62	ARG
50	CR	115	ILE
50	CR	138	LEU
50	CR	163	ARG
51	CA	45	VAL
51	CA	49	ILE
51	CA	69	TYR
51	CA	82	MET
51	CA	92	ARG
51	CA	107	MET
51	CA	109	GLU
51	CA	113	ILE
51	CA	136	VAL
51	CA	169	VAL
51	CA	193	ARG
51	CA	209	HIS
51	CA	221	LYS
51	CA	233	ARG
51	CA	245	ARG
52	CS	7	LEU
52	CS	36	ASP
52	CS	39	VAL
52	CS	48	LEU
52	CS	54	PHE
52	CS	64	ILE
52	CS	68	TYR
52	CS	93	MET
52	CS	120	ARG
52	CS	139	ARG
52	CS	157	ARG
52	CS	167	PHE
52	CS	175	TYR
52	CS	176	PHE
53	CT	17	ARG
53	CT	22	HIS
53	CT	126	VAL
53	CT	127	SER
53	CT	128	LEU
53	CT	140	PHE

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Mol	Chain	Res	Type
53	CT	150	LEU
53	CT	157	PHE
54	CP	11	VAL
54	CP	23	ARG
54	CP	25	HIS
54	CP	69	ARG
54	CP	139	TYR
54	CP	168	LYS
54	CP	182	MET
55	CU	192	ARG
55	CU	204	SER
55	CU	234	PHE
55	CU	276	ASN
56	CX	161	ILE
56	CX	165	VAL
56	CX	240	ILE
56	CX	248	LEU
57	CY	7	VAL
57	CY	126	ARG
58	CW	32	LEU
58	CW	34	LYS
58	CW	59	HIS
58	CW	70	LYS
58	CW	72	THR
58	CW	77	LYS
58	CW	80	ARG
59	CZ	5	MET
59	CZ	7	GLN
59	CZ	10	ILE
59	CZ	11	VAL
59	CZ	17	ARG
59	CZ	21	ARG
59	CZ	34	PRO
59	CZ	46	ILE
59	CZ	73	LYS
59	CZ	107	LYS
59	CZ	116	LYS
59	CZ	125	LYS
59	CZ	126	ASN
60	Cr	9	TRP
60	Cr	23	ARG
60	Cr	52	THR

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Mol	Chain	Res	Type
60	Cr	62	LYS
60	Cr	84	VAL
60	Cr	86	PHE
60	Cr	100	LEU
60	Cr	107	ARG
60	Cr	110	LEU
60	Cr	112	GLN
61	Ch	77	LYS
61	Ch	121	VAL
62	Cb	29	HIS
62	Cb	51	LEU
62	Cb	53	ARG
62	Cb	70	LYS
62	Cb	73	PRO
63	CB	26	ARG
63	CB	29	VAL
63	CB	77	THR
63	CB	122	TRP
63	CB	123	TYR
63	CB	128	LYS
63	CB	245	HIS
63	CB	246	LYS
63	CB	248	LEU
63	CB	264	THR
63	CB	274	TYR
63	CB	365	LEU
63	CB	391	PRO
63	CB	394	LYS
64	CF	118	ARG
64	CF	160	ARG
64	CF	162	PHE
64	CF	171	PRO
64	CF	219	THR
64	CF	232	VAL
64	CF	237	PHE
64	CF	248	LEU
64	CF	250	LYS
65	Cc	27	TYR
65	Cc	29	LEU
65	Cc	55	LEU
65	Cc	62	TYR
65	Cc	92	CYS

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Mol	Chain	Res	Type
65	Cc	93	THR
66	Cd	66	ASN
66	Cd	89	ARG
66	Cd	98	LYS
66	Cd	106	VAL
66	Cd	112	LYS
66	Cd	116	THR
66	Cd	119	VAL
67	Ce	5	PRO
67	Ce	20	ILE
67	Ce	64	ARG
67	Ce	84	LEU
67	Ce	88	LEU
67	Ce	92	ARG
67	Ce	93	VAL
67	Ce	100	HIS
67	Ce	105	LYS
67	Ce	121	LEU
67	Ce	129	ARG
67	Ce	132	GLU
68	Cf	25	LYS
68	Cf	32	PRO
68	Cf	44	TYR
68	Cf	45	LYS
68	Cf	46	ARG
68	Cf	49	ARG
68	Cf	50	LEU
68	Cf	138	ASN
68	Cf	151	MET
68	Cf	154	PRO
68	Cf	156	ARG
68	Cf	157	ILE
69	Cg	20	ARG
69	Cg	26	PRO
69	Cg	32	TYR
69	Cg	74	ARG
69	Cg	81	CYS
69	Cg	85	LEU
69	Cg	93	PHE
70	Ci	5	TYR
70	Ci	21	ARG
70	Ci	26	THR

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Mol	Chain	Res	Type
70	Ci	34	LEU
70	Ci	38	ARG
70	Ci	40	LYS
70	Ci	44	THR
70	Ci	71	LEU
70	Ci	81	LYS
70	Ci	86	ARG
70	Ci	96	LYS
71	Cj	5	THR
71	Cj	20	ARG
71	Cj	27	TYR
71	Cj	40	PRO
71	Cj	43	LYS
71	Cj	52	LYS
71	Cj	67	LEU
71	Cj	83	GLN
71	Cj	85	LYS
71	Cj	87	LYS
72	Ck	9	LYS
72	Ck	27	LYS
72	Ck	41	PHE
72	Ck	47	VAL
72	Ck	55	LYS
72	Ck	64	LEU
73	Cl	5	LYS
73	Cl	48	LYS
74	CC	7	ARG
74	CC	21	LYS
74	CC	32	LYS
74	CC	39	VAL
74	CC	60	LEU
74	CC	87	THR
74	CC	92	GLN
74	CC	98	MET
74	CC	123	ARG
74	CC	125	TYR
74	CC	152	GLU
74	CC	153	PHE
74	CC	165	GLN
74	CC	173	PHE
74	CC	179	ILE
74	CC	183	ILE

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Mol	Chain	Res	Type
74	CC	211	LEU
74	CC	226	ASN
74	CC	230	ILE
74	CC	251	ARG
74	CC	266	LEU
74	CC	270	TRP
74	CC	282	LEU
74	CC	286	LYS
74	CC	287	MET
74	CC	311	ARG
74	CC	326	ARG
74	CC	332	ASN
74	CC	363	VAL
75	Cm	111	ARG
76	Cn	1	MET
76	Cn	15	ARG
77	Cp	16	THR
77	Cp	73	THR
77	Cp	90	LYS
78	Co	6	LYS
78	Co	36	GLN
78	Co	64	LYS
78	Co	76	LYS
78	Co	102	ILE
79	CJ	5	THR
79	CJ	6	LYS
79	CJ	20	LEU
79	CJ	24	LYS
79	CJ	60	TYR
79	CJ	68	ARG
79	CJ	120	LEU
80	CH	16	ILE
80	CH	34	LEU
80	CH	44	ASP
80	CH	54	LYS
80	CH	57	LYS
80	CH	84	PHE
80	CH	97	PHE
80	CH	105	GLU
80	CH	110	ILE
80	CH	161	GLN
80	CH	170	ILE

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Mol	Chain	Res	Type
80	CH	171	ARG
80	CH	177	LEU
81	CE	30	ILE
81	CE	32	ARG
81	CE	75	VAL
81	CE	101	LEU
81	CE	102	ILE
81	CE	109	GLN
81	CE	117	LYS
81	CE	125	LEU
81	CE	126	VAL
81	CE	140	VAL
81	CE	144	TYR
81	CE	145	VAL
81	CE	154	LEU
81	CE	174	LYS
81	CE	176	ASP
81	CE	213	ILE
81	CE	220	LYS
81	CE	225	TYR
81	CE	236	GLN
81	CE	237	TYR
82	CG	41	PRO
82	CG	65	TYR
82	CG	66	ILE
82	CG	75	LEU
82	CG	81	VAL
82	CG	88	PHE
82	CG	102	LYS
82	CG	104	LEU
82	CG	113	LEU
82	CG	116	LYS
82	CG	126	LYS
82	CG	130	LYS
82	CG	164	HIS
82	CG	178	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (147) such sidechains are listed below:

Mol	Chain	Res	Type
1	Az	27	HIS
1	Az	30	HIS

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Mol	Chain	Res	Type
1	Az	190	ASN
1	Az	257	ASN
1	Az	363	HIS
1	Az	585	HIS
1	Az	696	HIS
2	Ag	20	GLN
2	Ag	160	ASN
2	Ag	187	ASN
2	Ag	189	HIS
2	Ag	192	HIS
2	Ag	193	ASN
3	AU	87	HIS
3	AU	107	ASN
5	AO	32	HIS
5	AO	43	HIS
6	AX	13	HIS
6	AX	110	HIS
7	AM	26	GLN
7	AM	43	HIS
7	AM	44	GLN
8	AS	10	GLN
8	AS	11	HIS
8	AS	135	HIS
10	AN	67	ASN
11	AL	91	HIS
12	AR	63	HIS
13	AP	41	HIS
13	AP	82	HIS
13	AP	107	GLN
13	AP	117	HIS
14	AT	12	HIS
15	AB	211	HIS
16	AA	24	HIS
16	AA	110	ASN
17	AV	33	GLN
17	AV	35	ASN
17	AV	82	ASN
18	AY	30	HIS
18	AY	64	ASN
18	AY	95	HIS
19	AZ	45	ASN
20	Aa	72	HIS

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Mol	Chain	Res	Type
22	Ac	20	GLN
23	AD	176	HIS
25	Af	93	HIS
26	AJ	125	HIS
26	AJ	133	GLN
26	AJ	135	HIS
26	AJ	178	ASN
27	AE	36	HIS
27	AE	50	ASN
28	AC	161	HIS
28	AC	218	ASN
28	AC	250	GLN
31	AH	112	GLN
31	AH	150	GLN
33	AI	167	GLN
38	Cz	94	ASN
38	Cz	184	ASN
39	Cq	72	ASN
40	CK	100	HIS
41	CO	52	ASN
41	CO	65	ASN
41	CO	172	HIS
42	CL	11	GLN
42	CL	12	HIS
42	CL	14	HIS
42	CL	66	HIS
42	CL	158	ASN
44	CM	105	ASN
45	Ca	20	HIS
45	Ca	29	HIS
45	Ca	41	HIS
46	CN	139	HIS
47	CI	84	GLN
47	CI	86	HIS
47	CI	95	HIS
48	CD	81	HIS
48	CD	195	HIS
48	CD	253	HIS
48	CD	285	HIS
49	CQ	125	GLN
50	CR	118	HIS
50	CR	121	HIS

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Mol	Chain	Res	Type
50	CR	130	ASN
50	CR	188	HIS
51	CA	100	ASN
51	CA	132	ASN
51	CA	209	HIS
51	CA	215	ASN
51	CA	216	HIS
52	CS	91	HIS
52	CS	125	GLN
53	CT	22	HIS
53	CT	58	HIS
54	CP	34	GLN
54	CP	118	GLN
54	CP	145	HIS
56	CX	166	HIS
56	CX	246	ASN
57	CY	61	HIS
58	CW	17	HIS
58	CW	59	HIS
59	CZ	79	HIS
60	Cr	80	ASN
60	Cr	99	ASN
63	CB	3	HIS
63	CB	11	HIS
63	CB	109	HIS
63	CB	165	HIS
63	CB	179	HIS
63	CB	271	GLN
63	CB	276	HIS
64	CF	62	ASN
64	CF	186	HIS
64	CF	189	GLN
64	CF	218	ASN
65	Cc	51	ASN
66	Cd	25	HIS
66	Cd	66	ASN
67	Ce	91	ASN
67	Ce	100	HIS
68	Cf	47	HIS
68	Cf	106	GLN
73	Cl	4	HIS
73	Cl	38	ASN

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Mol	Chain	Res	Type
74	CC	44	HIS
74	CC	145	HIS
74	CC	234	ASN
74	CC	284	GLN
75	Cm	104	HIS
77	Cp	33	GLN
77	Cp	34	HIS
78	Co	3	ASN
78	Co	46	GLN
79	CJ	103	ASN
79	CJ	109	ASN
80	CH	114	ASN
81	CE	216	HIS
81	CE	228	ASN
81	CE	233	HIS
81	CE	236	GLN
81	CE	239	HIS
82	CG	158	GLN
82	CG	241	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
36	B2	1794/1995 (89%)	501 (27%)	117 (6%)
37	BC	74/75 (98%)	12 (16%)	3 (4%)
83	A5	3568/3970 (89%)	947 (26%)	263 (7%)
84	A9	29/30 (96%)	7 (24%)	2 (6%)
85	A7	119/120 (99%)	23 (19%)	5 (4%)
86	A8	122/123 (99%)	18 (14%)	4 (3%)
All	All	5706/6313 (90%)	1508 (26%)	394 (6%)

All (1508) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
36	B2	2	U
36	B2	3	U
36	B2	4	C
36	B2	8	U
36	B2	16	G
36	B2	25	U
36	B2	26	A

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Mol	Chain	Res	Type
36	B2	27	U
36	B2	34	G
36	B2	42	G
36	B2	46	A
36	B2	47	A
36	B2	57	G
36	B2	63	G
36	B2	66	C
36	B2	67	A
36	B2	68	C
36	B2	69	A
36	B2	72	A
36	B2	73	A
36	B2	74	U
36	B2	75	U
36	B2	76	A
36	B2	77	A
36	B2	78	A
36	B2	80	G
36	B2	110	U
36	B2	113	G
36	B2	114	G
36	B2	126	G
36	B2	127	U
36	B2	136	A
36	B2	137	C
36	B2	138	U
36	B2	142	A
36	B2	143	U
36	B2	150	G
36	B2	155	U
36	B2	156	U
36	B2	157	C
36	B2	165	A
36	B2	170	A
36	B2	173	C
36	B2	174	A
36	B2	175	A
36	B2	176	U
36	B2	184	U
36	B2	185	G
36	B2	186	A

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Mol	Chain	Res	Type
36	B2	188	C
36	B2	189	C
36	B2	190	U
36	B2	191	U
36	B2	193	U
36	B2	194	G
36	B2	195	G
36	B2	196	G
36	B2	197	A
36	B2	198	C
36	B2	214	G
36	B2	215	C
36	B2	216	U
36	B2	217	A
36	B2	218	A
36	B2	220	A
36	B2	221	C
36	B2	223	A
36	B2	225	G
36	B2	227	G
36	B2	235	G
36	B2	237	U
36	B2	238	C
36	B2	240	U
36	B2	246	U
36	B2	247	G
36	B2	248	G
36	B2	249	U
36	B2	250	U
36	B2	251	G
36	B2	252	A
36	B2	253	A
36	B2	254	C
36	B2	255	U
36	B2	257	U
36	B2	266	U
36	B2	267	G
36	B2	270	G
36	B2	271	A
36	B2	274	G
36	B2	276	A
36	B2	277	U

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Mol	Chain	Res	Type
36	B2	279	G
36	B2	280	U
36	B2	281	C
36	B2	282	U
36	B2	283	U
36	B2	284	G
36	B2	285	U
36	B2	286	A
36	B2	289	G
36	B2	293	A
36	B2	299	C
36	B2	304	A
36	B2	319	C
36	B2	321	A
36	B2	327	G
36	B2	328	A
36	B2	330	G
36	B2	338	C
36	B2	342	G
36	B2	343	A
36	B2	346	A
36	B2	349	A
36	B2	357	A
36	B2	364	A
36	B2	365	A
36	B2	366	C
36	B2	374	C
36	B2	379	U
36	B2	382	G
36	B2	383	A
36	B2	405	A
36	B2	406	A
36	B2	407	C
36	B2	408	G
36	B2	409	G
36	B2	416	C
36	B2	421	A
36	B2	423	G
36	B2	427	G
36	B2	428	G
36	B2	429	C
36	B2	430	A

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Mol	Chain	Res	Type
36	B2	431	G
36	B2	433	A
36	B2	439	G
36	B2	444	U
36	B2	449	C
36	B2	451	C
36	B2	453	C
36	B2	464	G
36	B2	475	G
36	B2	482	A
36	B2	489	C
36	B2	490	A
36	B2	491	G
36	B2	494	C
36	B2	496	C
36	B2	497	A
36	B2	498	U
36	B2	499	A
36	B2	510	U
36	B2	511	G
36	B2	512	U
36	B2	513	A
36	B2	514	A
36	B2	515	U
36	B2	516	U
36	B2	518	G
36	B2	519	A
36	B2	521	U
36	B2	523	A
36	B2	524	G
36	B2	535	A
36	B2	540	U
36	B2	547	G
36	B2	549	A
36	B2	551	C
36	B2	552	A
36	B2	555	U
36	B2	563	A
36	B2	564	A
36	B2	565	G
36	B2	566	U
36	B2	567	C

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Mol	Chain	Res	Type
36	B2	569	G
36	B2	573	C
36	B2	578	A
36	B2	587	A
36	B2	588	A
36	B2	593	A
36	B2	600	A
36	B2	602	A
36	B2	603	G
36	B2	615	G
36	B2	616	U
36	B2	618	G
36	B2	619	U
36	B2	627	A
36	B2	628	A
36	B2	630	A
36	B2	632	G
36	B2	638	A
36	B2	647	U
36	B2	648	G
36	B2	649	U
36	B2	655	A
36	B2	656	U
36	B2	657	A
36	B2	701	G
36	B2	702	U
36	B2	703	A
36	B2	704	U
36	B2	705	G
36	B2	709	G
36	B2	711	G
36	B2	712	U
36	B2	713	A
36	B2	714	U
36	B2	715	U
36	B2	717	C
36	B2	718	C
36	B2	719	G
36	B2	823	C
36	B2	824	U
36	B2	825	A
36	B2	826	U

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Mol	Chain	Res	Type
36	B2	833	G
36	B2	836	C
36	B2	837	A
36	B2	838	A
36	B2	847	G
36	B2	848	C
36	B2	853	A
36	B2	856	A
36	B2	857	G
36	B2	858	G
36	B2	866	U
36	B2	867	G
36	B2	868	C
36	B2	869	C
36	B2	873	A
36	B2	879	U
36	B2	891	A
36	B2	895	A
36	B2	896	A
36	B2	897	A
36	B2	898	U
36	B2	900	A
36	B2	901	G
36	B2	903	C
36	B2	904	C
36	B2	905	U
36	B2	906	C
36	B2	908	G
36	B2	909	U
36	B2	916	U
36	B2	918	C
36	B2	922	G
36	B2	923	G
36	B2	925	U
36	B2	926	U
36	B2	929	A
36	B2	930	G
36	B2	940	U
36	B2	942	A
36	B2	948	A
36	B2	949	A
36	B2	950	U

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Mol	Chain	Res	Type
36	B2	958	G
36	B2	963	G
36	B2	996	U
36	B2	999	U
36	B2	1000	G
36	B2	1001	G
36	B2	1002	A
36	B2	1008	G
36	B2	1020	U
36	B2	1022	A
36	B2	1029	G
36	B2	1031	A
36	B2	1047	U
36	B2	1053	A
36	B2	1055	U
36	B2	1061	A
36	B2	1069	U
36	B2	1079	A
36	B2	1080	A
36	B2	1081	G
36	B2	1084	G
36	B2	1090	A
36	B2	1091	U
36	B2	1092	A
36	B2	1102	U
36	B2	1103	U
36	B2	1107	A
36	B2	1108	C
36	B2	1113	A
36	B2	1115	C
36	B2	1118	U
36	B2	1126	A
36	B2	1127	G
36	B2	1139	A
36	B2	1140	G
36	B2	1141	C
36	B2	1145	U
36	B2	1146	U
36	B2	1147	U
36	B2	1148	U
36	B2	1153	C
36	B2	1161	G

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Mol	Chain	Res	Type
36	B2	1166	U
36	B2	1168	C
36	B2	1169	C
36	B2	1171	G
36	B2	1173	A
36	B2	1178	A
36	B2	1179	A
36	B2	1180	A
36	B2	1183	U
36	B2	1184	U
36	B2	1185	U
36	B2	1186	U
36	B2	1187	U
36	B2	1188	G
36	B2	1189	G
36	B2	1192	U
36	B2	1197	G
36	B2	1199	G
36	B2	1201	A
36	B2	1226	A
36	B2	1227	A
36	B2	1234	G
36	B2	1237	G
36	B2	1239	A
36	B2	1240	A
36	B2	1243	G
36	B2	1245	A
36	B2	1246	C
36	B2	1247	C
36	B2	1248	A
36	B2	1252	G
36	B2	1255	G
36	B2	1267	G
36	B2	1268	C
36	B2	1273	U
36	B2	1276	G
36	B2	1279	U
36	B2	1281	A
36	B2	1282	A
36	B2	1283	C
36	B2	1284	A
36	B2	1285	C

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Mol	Chain	Res	Type
36	B2	1287	G
36	B2	1288	G
36	B2	1290	A
36	B2	1291	A
36	B2	1295	U
36	B2	1296	A
36	B2	1305	A
36	B2	1308	A
36	B2	1313	U
36	B2	1314	G
36	B2	1315	U
36	B2	1316	G
36	B2	1320	G
36	B2	1330	U
36	B2	1331	A
36	B2	1332	G
36	B2	1337	U
36	B2	1339	C
36	B2	1342	G
36	B2	1344	A
36	B2	1345	U
36	B2	1347	U
36	B2	1354	G
36	B2	1359	U
36	B2	1372	U
36	B2	1373	U
36	B2	1375	G
36	B2	1378	C
36	B2	1385	U
36	B2	1388	U
36	B2	1401	U
36	B2	1402	U
36	B2	1403	C
36	B2	1408	A
36	B2	1425	U
36	B2	1427	U
36	B2	1428	A
36	B2	1430	U
36	B2	1431	A
36	B2	1433	A
36	B2	1434	U
36	B2	1435	A

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Mol	Chain	Res	Type
36	B2	1437	A
36	B2	1448	A
36	B2	1449	U
36	B2	1531	G
36	B2	1537	C
36	B2	1547	U
36	B2	1548	G
36	B2	1551	C
36	B2	1565	C
36	B2	1566	U
36	B2	1567	A
36	B2	1569	C
36	B2	1570	U
36	B2	1572	C
36	B2	1574	U
36	B2	1575	A
36	B2	1581	A
36	B2	1583	A
36	B2	1585	A
36	B2	1588	G
36	B2	1591	U
36	B2	1592	C
36	B2	1594	A
36	B2	1605	G
36	B2	1606	A
36	B2	1619	A
36	B2	1620	G
36	B2	1623	C
36	B2	1626	U
36	B2	1638	A
36	B2	1640	G
36	B2	1646	G
36	B2	1649	U
36	B2	1650	G
36	B2	1651	C
36	B2	1654	G
36	B2	1663	A
36	B2	1665	U
36	B2	1667	A
36	B2	1670	G
36	B2	1673	U
36	B2	1674	C

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Mol	Chain	Res	Type
36	B2	1680	G
36	B2	1681	U
36	B2	1682	A
36	B2	1683	U
36	B2	1684	U
36	B2	1691	A
36	B2	1692	C
36	B2	1698	G
36	B2	1703	G
36	B2	1706	U
36	B2	1708	A
36	B2	1710	C
36	B2	1713	C
36	B2	1715	G
36	B2	1716	A
36	B2	1727	U
36	B2	1729	C
36	B2	1730	U
36	B2	1732	G
36	B2	1739	U
36	B2	1749	C
36	B2	1751	G
36	B2	1756	C
36	B2	1758	A
36	B2	1760	G
36	B2	1761	A
36	B2	1765	U
36	B2	1766	G
36	B2	1767	G
36	B2	1776	G
36	B2	1782	G
36	B2	1793	A
36	B2	1807	C
36	B2	1808	G
36	B2	1810	C
36	B2	1816	C
36	B2	1823	A
36	B2	1826	C
36	B2	1829	C
36	B2	1830	G
36	B2	1849	U
36	B2	1850	G

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Mol	Chain	Res	Type
36	B2	1855	A
36	B2	1857	U
36	B2	1875	G
36	B2	1876	U
36	B2	1882	C
36	B2	1905	U
36	B2	1906	U
36	B2	1911	C
36	B2	1912	G
36	B2	1913	C
36	B2	1922	A
36	B2	1924	C
36	B2	1931	G
36	B2	1949	A
36	B2	1950	A
36	B2	1951	A
36	B2	1952	G
36	B2	1954	C
36	B2	1955	G
36	B2	1957	A
36	B2	1958	A
36	B2	1964	U
36	B2	1965	U
36	B2	1977	A
36	B2	1978	C
36	B2	1984	G
36	B2	1987	G
36	B2	1988	G
36	B2	1989	A
36	B2	1991	C
36	B2	1992	A
36	B2	1993	U
37	BC	9	G
37	BC	16	U
37	BC	17	G
37	BC	19	A
37	BC	20	A
37	BC	21	G
37	BC	46	U
37	BC	48	C
37	BC	53	A
37	BC	57	A

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Mol	Chain	Res	Type
37	BC	59	A
37	BC	75	A
83	A5	2	U
83	A5	3	A
83	A5	4	U
83	A5	5	A
83	A5	6	U
83	A5	10	A
83	A5	17	C
83	A5	18	U
83	A5	20	A
83	A5	44	A
83	A5	49	A
83	A5	53	A
83	A5	63	G
83	A5	64	A
83	A5	69	A
83	A5	70	A
83	A5	80	G
83	A5	87	U
83	A5	96	G
83	A5	97	C
83	A5	100	G
83	A5	103	A
83	A5	113	A
83	A5	114	G
83	A5	117	C
83	A5	120	C
83	A5	121	A
83	A5	122	C
83	A5	124	A
83	A5	125	A
83	A5	127	U
83	A5	131	U
83	A5	138	A
83	A5	139	U
83	A5	140	A
83	A5	148	U
83	A5	149	G
83	A5	155	U
83	A5	156	G
83	A5	158	A

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Mol	Chain	Res	Type
83	A5	162	U
83	A5	163	A
83	A5	164	U
83	A5	165	G
83	A5	169	C
83	A5	176	A
83	A5	177	U
83	A5	178	U
83	A5	179	C
83	A5	182	G
83	A5	185	U
83	A5	186	G
83	A5	187	A
83	A5	188	G
83	A5	189	A
83	A5	190	A
83	A5	191	A
83	A5	193	U
83	A5	195	A
83	A5	201	U
83	A5	202	A
83	A5	205	U
83	A5	206	C
83	A5	207	C
83	A5	211	U
83	A5	212	U
83	A5	213	A
83	A5	216	U
83	A5	226	U
83	A5	228	C
83	A5	229	C
83	A5	232	U
83	A5	236	G
83	A5	240	G
83	A5	241	C
83	A5	246	C
83	A5	252	U
83	A5	262	G
83	A5	263	A
83	A5	271	A
83	A5	273	G
83	A5	283	A

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Mol	Chain	Res	Type
83	A5	284	A
83	A5	285	G
83	A5	286	A
83	A5	287	G
83	A5	293	U
83	A5	301	U
83	A5	313	A
83	A5	316	U
83	A5	317	G
83	A5	323	U
83	A5	325	A
83	A5	333	C
83	A5	341	A
83	A5	347	A
83	A5	356	A
83	A5	357	C
83	A5	364	U
83	A5	367	A
83	A5	369	A
83	A5	370	A
83	A5	388	U
83	A5	394	G
83	A5	405	A
83	A5	412	U
83	A5	413	A
83	A5	415	A
83	A5	416	C
83	A5	417	A
83	A5	419	U
83	A5	421	C
83	A5	425	A
83	A5	440	U
83	A5	441	A
83	A5	453	C
83	A5	459	U
83	A5	460	A
83	A5	462	C
83	A5	464	G
83	A5	465	U
83	A5	466	U
83	A5	471	A
83	A5	476	U

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Mol	Chain	Res	Type
83	A5	477	C
83	A5	478	A
83	A5	479	U
83	A5	485	A
83	A5	488	U
83	A5	494	U
83	A5	498	U
83	A5	514	A
83	A5	516	U
83	A5	521	U
83	A5	522	G
83	A5	523	C
83	A5	524	A
83	A5	525	U
83	A5	526	U
83	A5	536	U
83	A5	540	G
83	A5	542	C
83	A5	565	C
83	A5	568	A
83	A5	569	U
83	A5	572	A
83	A5	574	C
83	A5	578	A
83	A5	579	A
83	A5	580	A
83	A5	581	U
83	A5	584	A
83	A5	587	U
83	A5	588	U
83	A5	591	A
83	A5	613	U
83	A5	616	A
83	A5	619	U
83	A5	621	A
83	A5	623	C
83	A5	625	C
83	A5	626	A
83	A5	632	A
83	A5	633	A
83	A5	638	A
83	A5	641	A

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Mol	Chain	Res	Type
83	A5	642	A
83	A5	643	U
83	A5	644	U
83	A5	652	G
83	A5	653	U
83	A5	654	G
83	A5	663	U
83	A5	664	U
83	A5	667	U
83	A5	668	A
83	A5	669	U
83	A5	670	G
83	A5	671	A
83	A5	672	U
83	A5	673	U
83	A5	676	A
83	A5	681	G
83	A5	682	U
83	A5	691	C
83	A5	707	C
83	A5	718	U
83	A5	719	U
83	A5	739	U
83	A5	741	C
83	A5	746	G
83	A5	747	U
83	A5	749	U
83	A5	751	A
83	A5	752	U
83	A5	755	A
83	A5	763	A
83	A5	765	A
83	A5	766	G
83	A5	772	G
83	A5	774	A
83	A5	775	U
83	A5	776	A
83	A5	786	C
83	A5	798	C
83	A5	799	A
83	A5	806	A
83	A5	808	G

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Mol	Chain	Res	Type
83	A5	810	A
83	A5	811	G
83	A5	812	U
83	A5	818	A
83	A5	827	A
83	A5	831	A
83	A5	832	U
83	A5	833	U
83	A5	841	A
83	A5	842	A
83	A5	843	A
83	A5	847	A
83	A5	858	U
83	A5	862	U
83	A5	865	A
83	A5	867	U
83	A5	868	A
83	A5	869	A
83	A5	870	U
83	A5	872	A
83	A5	873	U
83	A5	878	U
83	A5	879	U
83	A5	881	G
83	A5	891	U
83	A5	894	U
83	A5	909	A
83	A5	923	U
83	A5	926	U
83	A5	928	U
83	A5	929	A
83	A5	930	U
83	A5	937	G
83	A5	966	U
83	A5	967	C
83	A5	968	U
83	A5	977	C
83	A5	980	A
83	A5	981	C
83	A5	984	U
83	A5	986	A
83	A5	1001	A

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Mol	Chain	Res	Type
83	A5	1006	A
83	A5	1017	A
83	A5	1030	A
83	A5	1037	A
83	A5	1049	C
83	A5	1051	C
83	A5	1061	A
83	A5	1062	C
83	A5	1070	G
83	A5	1074	U
83	A5	1079	U
83	A5	1091	G
83	A5	1095	G
83	A5	1096	A
83	A5	1097	A
83	A5	1107	G
83	A5	1108	G
83	A5	1113	A
83	A5	1114	A
83	A5	1116	G
83	A5	1117	A
83	A5	1124	G
83	A5	1125	A
83	A5	1137	G
83	A5	1138	C
83	A5	1143	U
83	A5	1144	C
83	A5	1147	U
83	A5	1159	C
83	A5	1160	U
83	A5	1161	C
83	A5	1163	G
83	A5	1174	G
83	A5	1176	A
83	A5	1178	U
83	A5	1179	U
83	A5	1180	U
83	A5	1181	A
83	A5	1182	A
83	A5	1183	U
83	A5	1192	A
83	A5	1193	A

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Mol	Chain	Res	Type
83	A5	1194	A
83	A5	1195	U
83	A5	1196	A
83	A5	1199	C
83	A5	1207	G
83	A5	1214	G
83	A5	1215	A
83	A5	1219	A
83	A5	1223	G
83	A5	1226	G
83	A5	1228	C
83	A5	1229	U
83	A5	1230	U
83	A5	1231	A
83	A5	1232	G
83	A5	1233	G
83	A5	1234	G
83	A5	1237	G
83	A5	1243	A
83	A5	1249	A
83	A5	1250	C
83	A5	1260	A
83	A5	1262	C
83	A5	1265	U
83	A5	1270	G
83	A5	1277	A
83	A5	1278	A
83	A5	1285	C
83	A5	1288	U
83	A5	1289	C
83	A5	1293	A
83	A5	1294	U
83	A5	1295	A
83	A5	1296	U
83	A5	1297	G
83	A5	1298	A
83	A5	1307	G
83	A5	1308	U
83	A5	1309	U
83	A5	1311	U
83	A5	1316	U
83	A5	1317	A

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Mol	Chain	Res	Type
83	A5	1324	C
83	A5	1325	C
83	A5	1326	A
83	A5	1330	G
83	A5	1331	G
83	A5	1345	G
83	A5	1347	A
83	A5	1367	A
83	A5	1373	A
83	A5	1378	A
83	A5	1383	A
83	A5	1384	C
83	A5	1393	A
83	A5	1394	U
83	A5	1395	U
83	A5	1396	A
83	A5	1397	A
83	A5	1399	A
83	A5	1406	G
83	A5	1407	C
83	A5	1408	A
83	A5	1416	U
83	A5	1421	G
83	A5	1424	G
83	A5	1428	G
83	A5	1435	A
83	A5	1436	A
83	A5	1438	A
83	A5	1440	A
83	A5	1442	C
83	A5	1447	C
83	A5	1448	G
83	A5	1449	G
83	A5	1452	A
83	A5	1454	C
83	A5	1456	U
83	A5	1457	G
83	A5	1458	G
83	A5	1460	A
83	A5	1461	G
83	A5	1462	U
83	A5	1463	C

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Mol	Chain	Res	Type
83	A5	1464	G
83	A5	1467	A
83	A5	1472	C
83	A5	1473	U
83	A5	1477	G
83	A5	1478	A
83	A5	1479	G
83	A5	1480	U
83	A5	1481	G
83	A5	1484	U
83	A5	1486	A
83	A5	1487	C
83	A5	1489	A
83	A5	1497	G
83	A5	1500	G
83	A5	1501	A
83	A5	1502	A
83	A5	1519	A
83	A5	1520	U
83	A5	1523	A
83	A5	1524	U
83	A5	1528	G
83	A5	1545	A
83	A5	1557	U
83	A5	1558	A
83	A5	1562	U
83	A5	1563	A
83	A5	1564	G
83	A5	1565	A
83	A5	1566	U
83	A5	1567	G
83	A5	1574	A
83	A5	1579	U
83	A5	1581	G
83	A5	1582	U
83	A5	1586	A
83	A5	1593	U
83	A5	1594	U
83	A5	1595	G
83	A5	1596	A
83	A5	1598	A
83	A5	1601	U

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Mol	Chain	Res	Type
83	A5	1606	G
83	A5	1627	U
83	A5	1628	G
83	A5	1632	A
83	A5	1640	U
83	A5	1641	U
83	A5	1642	G
83	A5	1659	A
83	A5	1663	G
83	A5	1674	A
83	A5	1675	G
83	A5	1678	C
83	A5	1681	G
83	A5	1686	A
83	A5	1687	U
83	A5	1688	A
83	A5	1689	G
83	A5	1692	G
83	A5	1695	A
83	A5	1696	A
83	A5	1697	U
83	A5	1699	A
83	A5	1703	A
83	A5	1712	C
83	A5	1713	U
83	A5	1718	G
83	A5	1724	A
83	A5	1725	A
83	A5	1727	U
83	A5	1728	G
83	A5	1738	U
83	A5	1739	U
83	A5	1745	G
83	A5	1746	A
83	A5	1751	U
83	A5	1753	G
83	A5	1766	U
83	A5	1770	C
83	A5	1771	G
83	A5	1772	G
83	A5	1776	U
83	A5	1781	U

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Mol	Chain	Res	Type
83	A5	1782	C
83	A5	1783	A
83	A5	1784	A
83	A5	1792	G
83	A5	1794	G
83	A5	1795	A
83	A5	1797	A
83	A5	1798	A
83	A5	1800	U
83	A5	1801	U
83	A5	1802	U
83	A5	1803	C
83	A5	1804	A
83	A5	1805	A
83	A5	1809	A
83	A5	1810	A
83	A5	1811	A
83	A5	1813	A
83	A5	1863	U
83	A5	1864	U
83	A5	1865	U
83	A5	1866	G
83	A5	1867	A
83	A5	1872	A
83	A5	1873	A
83	A5	1877	A
83	A5	1889	A
83	A5	1891	U
83	A5	1892	C
83	A5	1909	U
83	A5	1911	C
83	A5	1912	G
83	A5	1913	U
83	A5	1924	A
83	A5	1925	U
83	A5	1926	A
83	A5	1937	G
83	A5	1940	C
83	A5	1943	C
83	A5	1955	A
83	A5	1956	A
83	A5	1957	C

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Mol	Chain	Res	Type
83	A5	1958	G
83	A5	1959	A
83	A5	1961	C
83	A5	1967	G
83	A5	1970	G
83	A5	1988	A
83	A5	1989	A
83	A5	1995	U
83	A5	1996	U
83	A5	2004	G
83	A5	2028	A
83	A5	2030	U
83	A5	2037	C
83	A5	2038	A
83	A5	2042	A
83	A5	2043	G
83	A5	2049	G
83	A5	2059	U
83	A5	2063	A
83	A5	2064	G
83	A5	2065	A
83	A5	2066	G
83	A5	2083	G
83	A5	2093	U
83	A5	2094	U
83	A5	2095	U
83	A5	2110	A
83	A5	2117	A
83	A5	2123	G
83	A5	2124	G
83	A5	2125	G
83	A5	2126	A
83	A5	2127	C
83	A5	2128	A
83	A5	2129	C
83	A5	2130	G
83	A5	2132	A
83	A5	2135	C
83	A5	2136	U
83	A5	2138	C
83	A5	2150	U
83	A5	2155	A

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Mol	Chain	Res	Type
83	A5	2156	U
83	A5	2157	A
83	A5	2158	U
83	A5	2162	C
83	A5	2166	U
83	A5	2171	U
83	A5	2174	A
83	A5	2175	A
83	A5	2182	G
83	A5	2192	U
83	A5	2195	A
83	A5	2196	U
83	A5	2202	A
83	A5	2209	G
83	A5	2221	G
83	A5	2222	G
83	A5	2267	U
83	A5	2270	G
83	A5	2467	A
83	A5	2468	A
83	A5	2469	U
83	A5	2471	A
83	A5	2472	A
83	A5	2480	U
83	A5	2481	U
83	A5	2490	G
83	A5	2491	C
83	A5	2492	A
83	A5	2500	G
83	A5	2501	G
83	A5	2509	G
83	A5	2510	A
83	A5	2512	U
83	A5	2519	U
83	A5	2537	A
83	A5	2553	U
83	A5	2554	U
83	A5	2565	G
83	A5	2571	U
83	A5	2572	G
83	A5	2582	C
83	A5	2583	U

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Mol	Chain	Res	Type
83	A5	2587	U
83	A5	2588	G
83	A5	2601	A
83	A5	2603	U
83	A5	2606	A
83	A5	2622	A
83	A5	2626	C
83	A5	2627	G
83	A5	2628	G
83	A5	2630	A
83	A5	2631	G
83	A5	2633	A
83	A5	2634	A
83	A5	2635	C
83	A5	2641	C
83	A5	2650	G
83	A5	2651	G
83	A5	2652	U
83	A5	2658	A
83	A5	2659	A
83	A5	2660	U
83	A5	2666	G
83	A5	2673	A
83	A5	2683	G
83	A5	2684	C
83	A5	2685	G
83	A5	2687	A
83	A5	2688	U
83	A5	2691	A
83	A5	2692	U
83	A5	2693	G
83	A5	2704	A
83	A5	2707	C
83	A5	2708	C
83	A5	2712	U
83	A5	2714	U
83	A5	2740	C
83	A5	2749	G
83	A5	2751	A
83	A5	2752	C
83	A5	2753	G
83	A5	2755	G

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Mol	Chain	Res	Type
83	A5	2756	C
83	A5	2764	A
83	A5	2766	U
83	A5	2771	G
83	A5	2775	A
83	A5	2780	A
83	A5	2781	G
83	A5	2782	A
83	A5	2784	C
83	A5	2789	U
83	A5	2796	G
83	A5	2797	A
83	A5	2811	G
83	A5	2813	G
83	A5	2821	A
83	A5	2823	A
83	A5	2829	G
83	A5	2832	G
83	A5	2834	A
83	A5	2836	A
83	A5	2838	U
83	A5	2840	A
83	A5	2846	A
83	A5	2847	G
83	A5	2848	A
83	A5	2861	G
83	A5	2869	U
83	A5	2870	C
83	A5	2876	U
83	A5	2877	G
83	A5	2880	A
83	A5	2881	U
83	A5	2882	A
83	A5	2883	C
83	A5	2884	C
83	A5	2885	A
83	A5	2887	U
83	A5	2901	C
83	A5	2905	A
83	A5	2907	U
83	A5	2908	U
83	A5	2909	A

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Mol	Chain	Res	Type
83	A5	2914	A
83	A5	2916	U
83	A5	2917	A
83	A5	2918	A
83	A5	2920	U
83	A5	2923	A
83	A5	2925	C
83	A5	2927	U
83	A5	2930	A
83	A5	2989	G
83	A5	2990	C
83	A5	2991	A
83	A5	2992	A
83	A5	2993	G
83	A5	2994	C
83	A5	2995	U
83	A5	2997	C
83	A5	2999	U
83	A5	3000	G
83	A5	3004	A
83	A5	3005	A
83	A5	3011	C
83	A5	3012	A
83	A5	3013	C
83	A5	3014	G
83	A5	3101	A
83	A5	3108	U
83	A5	3113	U
83	A5	3114	C
83	A5	3116	A
83	A5	3118	U
83	A5	3119	U
83	A5	3125	A
83	A5	3126	C
83	A5	3128	U
83	A5	3130	G
83	A5	3138	G
83	A5	3139	G
83	A5	3146	G
83	A5	3167	A
83	A5	3169	A
83	A5	3184	U

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Mol	Chain	Res	Type
83	A5	3187	C
83	A5	3188	A
83	A5	3193	C
83	A5	3204	G
83	A5	3206	A
83	A5	3207	C
83	A5	3208	A
83	A5	3209	G
83	A5	3210	A
83	A5	3213	C
83	A5	3220	U
83	A5	3221	A
83	A5	3222	G
83	A5	3223	A
83	A5	3225	C
83	A5	3226	A
83	A5	3228	A
83	A5	3231	G
83	A5	3235	A
83	A5	3236	A
83	A5	3240	U
83	A5	3241	G
83	A5	3246	G
83	A5	3251	C
83	A5	3258	C
83	A5	3260	G
83	A5	3269	G
83	A5	3283	U
83	A5	3284	C
83	A5	3285	G
83	A5	3286	G
83	A5	3287	C
83	A5	3294	A
83	A5	3302	G
83	A5	3303	G
83	A5	3304	U
83	A5	3305	U
83	A5	3311	A
83	A5	3328	G
83	A5	3331	A
83	A5	3332	G
83	A5	3333	A

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Mol	Chain	Res	Type
83	A5	3334	A
83	A5	3338	U
83	A5	3342	C
83	A5	3348	G
83	A5	3349	A
83	A5	3350	U
83	A5	3361	U
83	A5	3374	U
83	A5	3377	A
83	A5	3381	C
83	A5	3393	U
83	A5	3399	C
83	A5	3403	G
83	A5	3404	A
83	A5	3405	U
83	A5	3406	G
83	A5	3407	U
83	A5	3410	G
83	A5	3411	C
83	A5	3419	A
83	A5	3421	C
83	A5	3428	A
83	A5	3429	A
83	A5	3430	G
83	A5	3431	C
83	A5	3455	U
83	A5	3459	C
83	A5	3465	C
83	A5	3467	A
83	A5	3468	G
83	A5	3473	C
83	A5	3476	G
83	A5	3478	G
83	A5	3481	G
83	A5	3482	G
83	A5	3486	U
83	A5	3488	G
83	A5	3502	A
83	A5	3504	G
83	A5	3514	C
83	A5	3521	A
83	A5	3523	U

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Mol	Chain	Res	Type
83	A5	3528	A
83	A5	3529	A
83	A5	3530	A
83	A5	3531	C
83	A5	3532	G
83	A5	3547	U
83	A5	3556	A
83	A5	3558	U
83	A5	3568	A
83	A5	3592	C
83	A5	3593	A
83	A5	3594	A
83	A5	3613	G
83	A5	3615	G
83	A5	3621	A
83	A5	3623	G
83	A5	3626	A
83	A5	3627	C
83	A5	3628	G
83	A5	3647	A
83	A5	3650	G
83	A5	3651	C
83	A5	3653	U
83	A5	3662	G
83	A5	3664	A
83	A5	3665	U
83	A5	3668	G
83	A5	3673	G
83	A5	3676	C
83	A5	3677	U
83	A5	3678	G
83	A5	3685	U
83	A5	3686	A
83	A5	3687	A
83	A5	3688	A
83	A5	3690	A
83	A5	3691	A
83	A5	3692	G
83	A5	3693	G
83	A5	3696	C
83	A5	3697	A
83	A5	3698	A

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Mol	Chain	Res	Type
83	A5	3699	U
83	A5	3702	G
83	A5	3703	C
83	A5	3709	A
83	A5	3710	U
83	A5	3711	G
83	A5	3712	G
83	A5	3713	C
83	A5	3714	U
83	A5	3715	U
83	A5	3716	C
83	A5	3720	A
83	A5	3723	A
83	A5	3727	A
83	A5	3728	A
83	A5	3742	C
83	A5	3743	U
83	A5	3751	C
83	A5	3752	G
83	A5	3753	A
83	A5	3756	A
83	A5	3757	U
83	A5	3758	G
83	A5	3759	G
83	A5	3761	U
83	A5	3763	U
83	A5	3764	G
83	A5	3765	A
83	A5	3766	U
83	A5	3767	G
83	A5	3769	C
83	A5	3772	U
83	A5	3773	G
83	A5	3774	U
83	A5	3775	A
83	A5	3776	A
83	A5	3777	U
83	A5	3778	U
83	A5	3779	U
83	A5	3782	A
83	A5	3783	A
83	A5	3785	A

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Mol	Chain	Res	Type
83	A5	3790	A
83	A5	3791	A
83	A5	3802	U
83	A5	3803	C
83	A5	3805	U
83	A5	3806	C
83	A5	3807	G
83	A5	3808	A
83	A5	3809	U
83	A5	3811	A
83	A5	3818	G
83	A5	3820	C
83	A5	3821	G
83	A5	3822	C
83	A5	3823	G
83	A5	3824	C
83	A5	3836	A
83	A5	3837	A
83	A5	3838	A
83	A5	3839	A
83	A5	3840	G
83	A5	3841	C
83	A5	3842	A
83	A5	3843	U
83	A5	3844	U
83	A5	3846	U
83	A5	3847	U
83	A5	3849	A
83	A5	3854	A
83	A5	3860	A
83	A5	3863	G
83	A5	3864	C
83	A5	3868	G
83	A5	3869	A
83	A5	3877	G
83	A5	3878	U
83	A5	3881	A
83	A5	3888	U
83	A5	3891	U
83	A5	3892	A
83	A5	3893	A
83	A5	3894	C

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Mol	Chain	Res	Type
83	A5	3904	G
83	A5	3905	U
83	A5	3906	U
83	A5	3909	A
83	A5	3915	U
83	A5	3916	U
83	A5	3919	G
83	A5	3921	A
83	A5	3922	G
83	A5	3923	C
83	A5	3925	G
83	A5	3926	C
83	A5	3927	C
83	A5	3929	U
83	A5	3930	A
83	A5	3943	G
83	A5	3944	A
83	A5	3949	U
83	A5	3950	A
83	A5	3952	C
83	A5	3957	G
83	A5	3963	U
83	A5	3964	G
83	A5	3968	C
83	A5	3970	A
84	A9	11	A
84	A9	21	G
84	A9	22	A
84	A9	23	G
84	A9	24	G
84	A9	25	G
84	A9	30	A
85	A7	11	A
85	A7	21	G
85	A7	22	A
85	A7	29	C
85	A7	33	U
85	A7	41	G
85	A7	42	A
85	A7	45	A
85	A7	48	G
85	A7	50	A

Continued on next page...

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Mol	Chain	Res	Type
85	A7	52	U
85	A7	53	U
85	A7	54	A
85	A7	72	U
85	A7	73	U
85	A7	74	A
85	A7	76	U
85	A7	93	G
85	A7	100	A
85	A7	110	G
85	A7	112	U
85	A7	113	G
85	A7	120	U
86	A8	33	U
86	A8	34	C
86	A8	45	G
86	A8	47	A
86	A8	50	A
86	A8	51	A
86	A8	58	C
86	A8	60	U
86	A8	74	G
86	A8	75	C
86	A8	80	C
86	A8	81	A
86	A8	88	C
86	A8	90	U
86	A8	92	G
86	A8	101	A
86	A8	102	A
86	A8	103	C

All (394) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
36	B2	3	U
36	B2	25	U
36	B2	66	C
36	B2	67	A
36	B2	68	C
36	B2	73	A
36	B2	74	U

Continued on next page...

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Mol	Chain	Res	Type
36	B2	77	A
36	B2	113	G
36	B2	126	G
36	B2	135	U
36	B2	137	C
36	B2	154	A
36	B2	155	U
36	B2	172	G
36	B2	197	A
36	B2	214	G
36	B2	215	C
36	B2	216	U
36	B2	226	C
36	B2	239	G
36	B2	248	G
36	B2	250	U
36	B2	251	G
36	B2	252	A
36	B2	253	A
36	B2	256	C
36	B2	266	U
36	B2	276	A
36	B2	278	G
36	B2	282	U
36	B2	283	U
36	B2	285	U
36	B2	327	G
36	B2	339	U
36	B2	378	G
36	B2	381	C
36	B2	405	A
36	B2	422	A
36	B2	473	A
36	B2	488	A
36	B2	509	C
36	B2	511	G
36	B2	520	A
36	B2	549	A
36	B2	563	A
36	B2	565	G
36	B2	566	U
36	B2	631	C

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Mol	Chain	Res	Type
36	B2	646	U
36	B2	647	U
36	B2	701	G
36	B2	703	A
36	B2	704	U
36	B2	713	A
36	B2	718	C
36	B2	824	U
36	B2	825	A
36	B2	835	A
36	B2	837	A
36	B2	857	G
36	B2	866	U
36	B2	878	C
36	B2	896	A
36	B2	897	A
36	B2	904	C
36	B2	905	U
36	B2	907	U
36	B2	908	G
36	B2	929	A
36	B2	1000	G
36	B2	1091	U
36	B2	1116	G
36	B2	1117	A
36	B2	1118	U
36	B2	1138	U
36	B2	1145	U
36	B2	1168	C
36	B2	1185	U
36	B2	1186	U
36	B2	1187	U
36	B2	1188	G
36	B2	1245	A
36	B2	1246	C
36	B2	1284	A
36	B2	1295	U
36	B2	1313	U
36	B2	1316	G
36	B2	1329	A
36	B2	1330	U
36	B2	1331	A

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Mol	Chain	Res	Type
36	B2	1342	G
36	B2	1371	C
36	B2	1408	A
36	B2	1426	A
36	B2	1427	U
36	B2	1434	U
36	B2	1448	A
36	B2	1530	A
36	B2	1546	U
36	B2	1547	U
36	B2	1550	C
36	B2	1649	U
36	B2	1673	U
36	B2	1679	U
36	B2	1729	C
36	B2	1760	G
36	B2	1765	U
36	B2	1792	A
36	B2	1807	C
36	B2	1829	C
36	B2	1849	U
36	B2	1881	A
36	B2	1949	A
36	B2	1956	U
36	B2	1991	C
36	B2	1992	A
37	BC	18	G
37	BC	45	G
37	BC	74	C
83	A5	9	A
83	A5	17	C
83	A5	69	A
83	A5	116	U
83	A5	121	A
83	A5	123	U
83	A5	130	C
83	A5	147	A
83	A5	157	C
83	A5	164	U
83	A5	175	U
83	A5	176	A
83	A5	178	U

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Mol	Chain	Res	Type
83	A5	181	A
83	A5	186	G
83	A5	187	A
83	A5	188	G
83	A5	189	A
83	A5	190	A
83	A5	201	U
83	A5	211	U
83	A5	225	U
83	A5	227	A
83	A5	228	C
83	A5	245	G
83	A5	262	G
83	A5	270	G
83	A5	272	U
83	A5	300	A
83	A5	303	G
83	A5	316	U
83	A5	323	U
83	A5	346	U
83	A5	368	C
83	A5	415	A
83	A5	420	A
83	A5	452	A
83	A5	460	A
83	A5	461	U
83	A5	463	C
83	A5	470	G
83	A5	475	U
83	A5	478	A
83	A5	484	A
83	A5	493	A
83	A5	513	G
83	A5	523	C
83	A5	535	A
83	A5	573	U
83	A5	580	A
83	A5	583	U
83	A5	615	C
83	A5	618	U
83	A5	620	U
83	A5	624	A

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Mol	Chain	Res	Type
83	A5	631	A
83	A5	632	A
83	A5	640	U
83	A5	641	A
83	A5	643	U
83	A5	652	G
83	A5	662	A
83	A5	667	U
83	A5	675	C
83	A5	680	C
83	A5	740	G
83	A5	745	U
83	A5	746	G
83	A5	751	A
83	A5	764	A
83	A5	773	G
83	A5	774	A
83	A5	798	C
83	A5	831	A
83	A5	841	A
83	A5	871	A
83	A5	872	A
83	A5	880	A
83	A5	929	A
83	A5	967	C
83	A5	1016	A
83	A5	1073	C
83	A5	1096	A
83	A5	1107	G
83	A5	1116	G
83	A5	1137	G
83	A5	1143	U
83	A5	1177	U
83	A5	1178	U
83	A5	1180	U
83	A5	1181	A
83	A5	1182	A
83	A5	1183	U
83	A5	1193	A
83	A5	1195	U
83	A5	1229	U
83	A5	1231	A

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Mol	Chain	Res	Type
83	A5	1248	A
83	A5	1277	A
83	A5	1288	U
83	A5	1293	A
83	A5	1294	U
83	A5	1297	G
83	A5	1306	G
83	A5	1308	U
83	A5	1310	A
83	A5	1323	C
83	A5	1324	C
83	A5	1394	U
83	A5	1395	U
83	A5	1406	G
83	A5	1407	C
83	A5	1411	U
83	A5	1423	C
83	A5	1436	A
83	A5	1488	A
83	A5	1501	A
83	A5	1516	A
83	A5	1522	G
83	A5	1544	U
83	A5	1562	U
83	A5	1565	A
83	A5	1573	U
83	A5	1581	G
83	A5	1593	U
83	A5	1594	U
83	A5	1600	U
83	A5	1639	U
83	A5	1640	U
83	A5	1675	G
83	A5	1688	A
83	A5	1698	A
83	A5	1709	A
83	A5	1717	A
83	A5	1724	A
83	A5	1727	U
83	A5	1744	U
83	A5	1745	G
83	A5	1780	U

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Mol	Chain	Res	Type
83	A5	1782	C
83	A5	1793	C
83	A5	1801	U
83	A5	1808	A
83	A5	1810	A
83	A5	1812	C
83	A5	1862	U
83	A5	1863	U
83	A5	1864	U
83	A5	1872	A
83	A5	1889	A
83	A5	1891	U
83	A5	1960	C
83	A5	2003	U
83	A5	2029	G
83	A5	2064	G
83	A5	2093	U
83	A5	2094	U
83	A5	2106	C
83	A5	2107	U
83	A5	2124	G
83	A5	2126	A
83	A5	2128	A
83	A5	2129	C
83	A5	2134	A
83	A5	2137	U
83	A5	2155	A
83	A5	2200	A
83	A5	2471	A
83	A5	2480	U
83	A5	2491	C
83	A5	2552	G
83	A5	2571	U
83	A5	2587	U
83	A5	2605	C
83	A5	2627	G
83	A5	2634	A
83	A5	2651	G
83	A5	2658	A
83	A5	2659	A
83	A5	2683	G
83	A5	2750	A

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Mol	Chain	Res	Type
83	A5	2751	A
83	A5	2762	A
83	A5	2781	G
83	A5	2796	G
83	A5	2820	G
83	A5	2833	U
83	A5	2837	A
83	A5	2846	A
83	A5	2868	A
83	A5	2879	A
83	A5	2904	U
83	A5	2907	U
83	A5	2908	U
83	A5	2916	U
83	A5	2917	A
83	A5	2919	A
83	A5	2988	U
83	A5	2990	C
83	A5	2993	G
83	A5	2994	C
83	A5	2999	U
83	A5	3004	A
83	A5	3017	U
83	A5	3117	A
83	A5	3118	U
83	A5	3125	A
83	A5	3284	C
83	A5	3303	G
83	A5	3304	U
83	A5	3350	U
83	A5	3404	A
83	A5	3405	U
83	A5	3481	G
83	A5	3514	C
83	A5	3527	A
83	A5	3529	A
83	A5	3530	A
83	A5	3531	C
83	A5	3567	A
83	A5	3591	A
83	A5	3592	C
83	A5	3621	A

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Mol	Chain	Res	Type
83	A5	3626	A
83	A5	3627	C
83	A5	3673	G
83	A5	3676	C
83	A5	3687	A
83	A5	3692	G
83	A5	3695	G
83	A5	3697	A
83	A5	3708	U
83	A5	3712	G
83	A5	3727	A
83	A5	3758	G
83	A5	3760	A
83	A5	3762	G
83	A5	3765	A
83	A5	3774	U
83	A5	3775	A
83	A5	3790	A
83	A5	3802	U
83	A5	3803	C
83	A5	3806	C
83	A5	3808	A
83	A5	3819	C
83	A5	3838	A
83	A5	3839	A
83	A5	3841	C
83	A5	3842	A
83	A5	3843	U
83	A5	3844	U
83	A5	3846	U
83	A5	3848	U
83	A5	3853	C
83	A5	3890	G
83	A5	3891	U
83	A5	3904	G
83	A5	3915	U
83	A5	3924	U
83	A5	3925	G
83	A5	3949	U
83	A5	3962	A
84	A9	21	G
84	A9	22	A

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Mol	Chain	Res	Type
85	A7	47	C
85	A7	49	A
85	A7	71	G
85	A7	72	U
85	A7	119	C
86	A8	44	C
86	A8	45	G
86	A8	79	A
86	A8	108	A

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

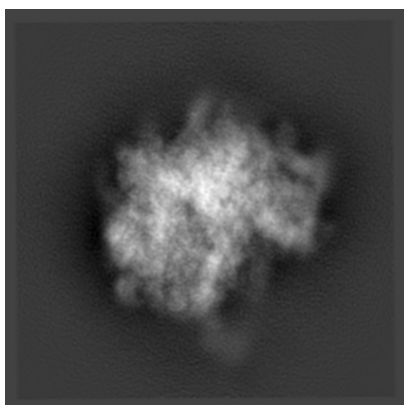
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5591. These allow visual inspection of the internal detail of the map and identification of artifacts.

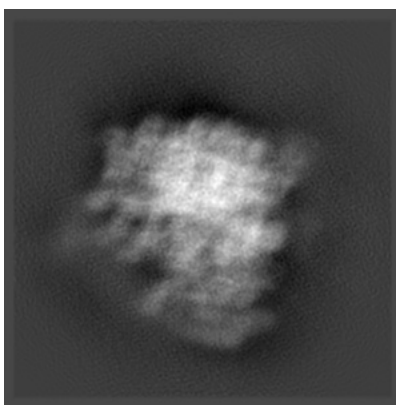
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

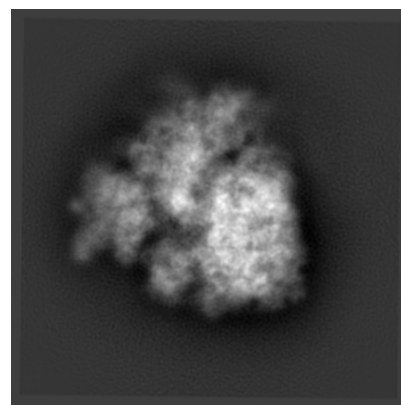
6.1.1 Primary map



X



Y

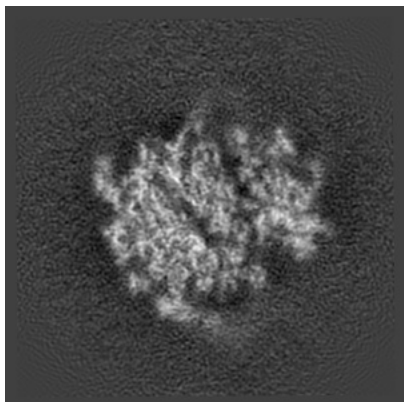


Z

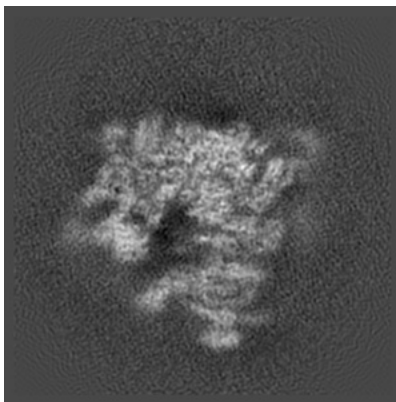
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

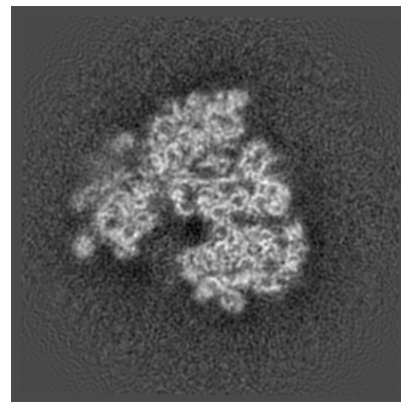
6.2.1 Primary map



X Index: 184



Y Index: 184

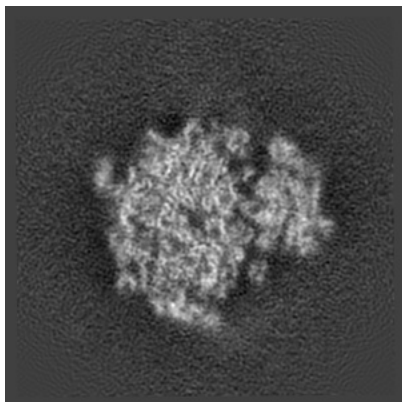


Z Index: 184

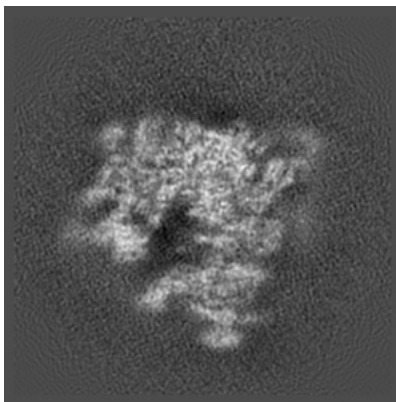
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

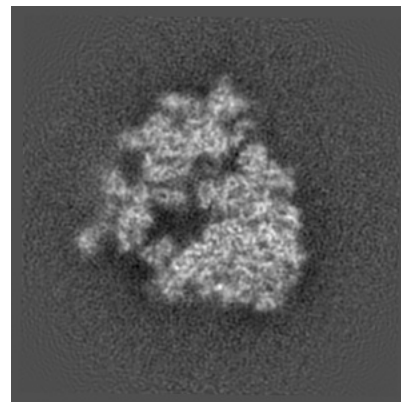
6.3.1 Primary map



X Index: 190



Y Index: 183



Z Index: 172

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 0.49. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

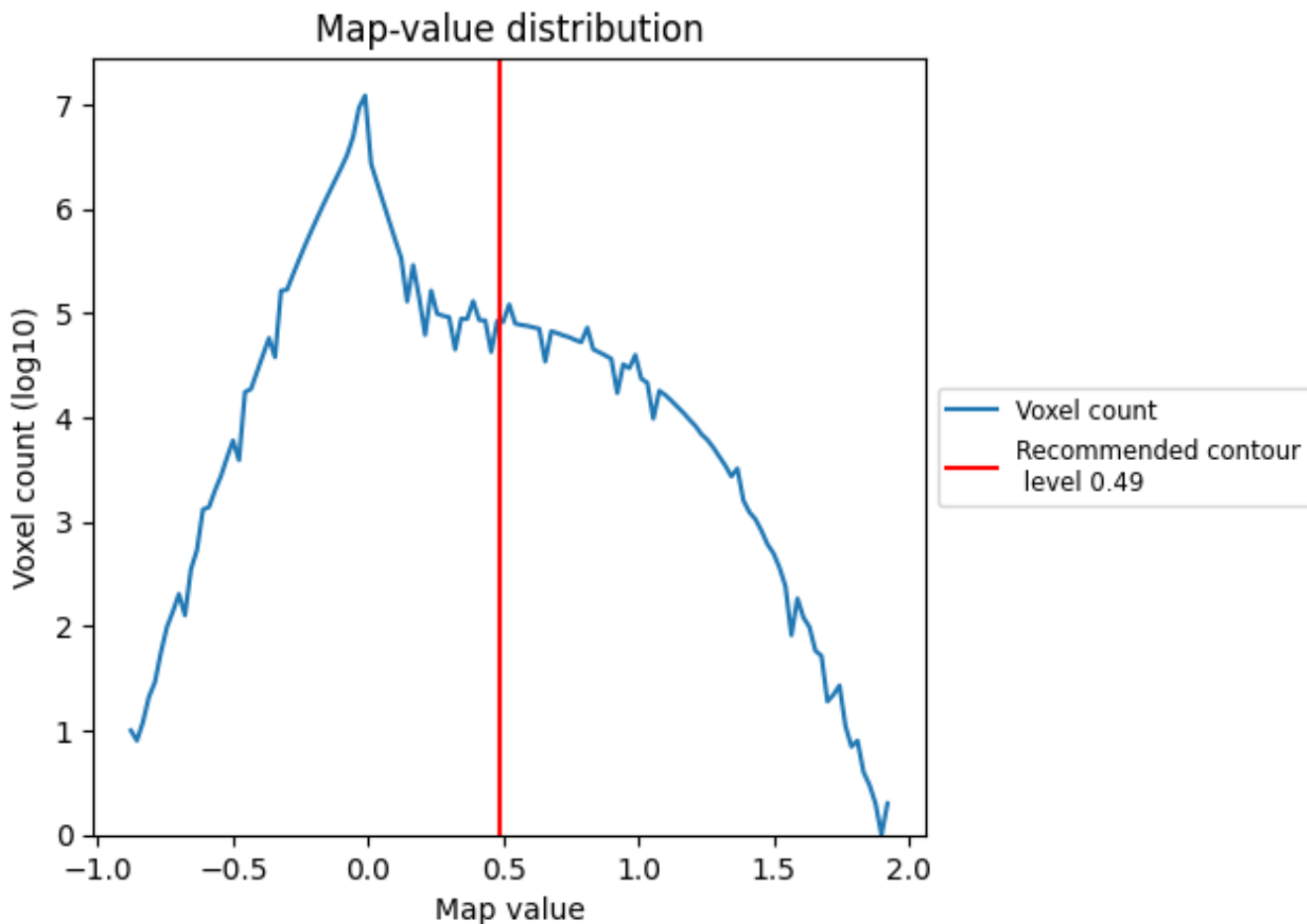
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

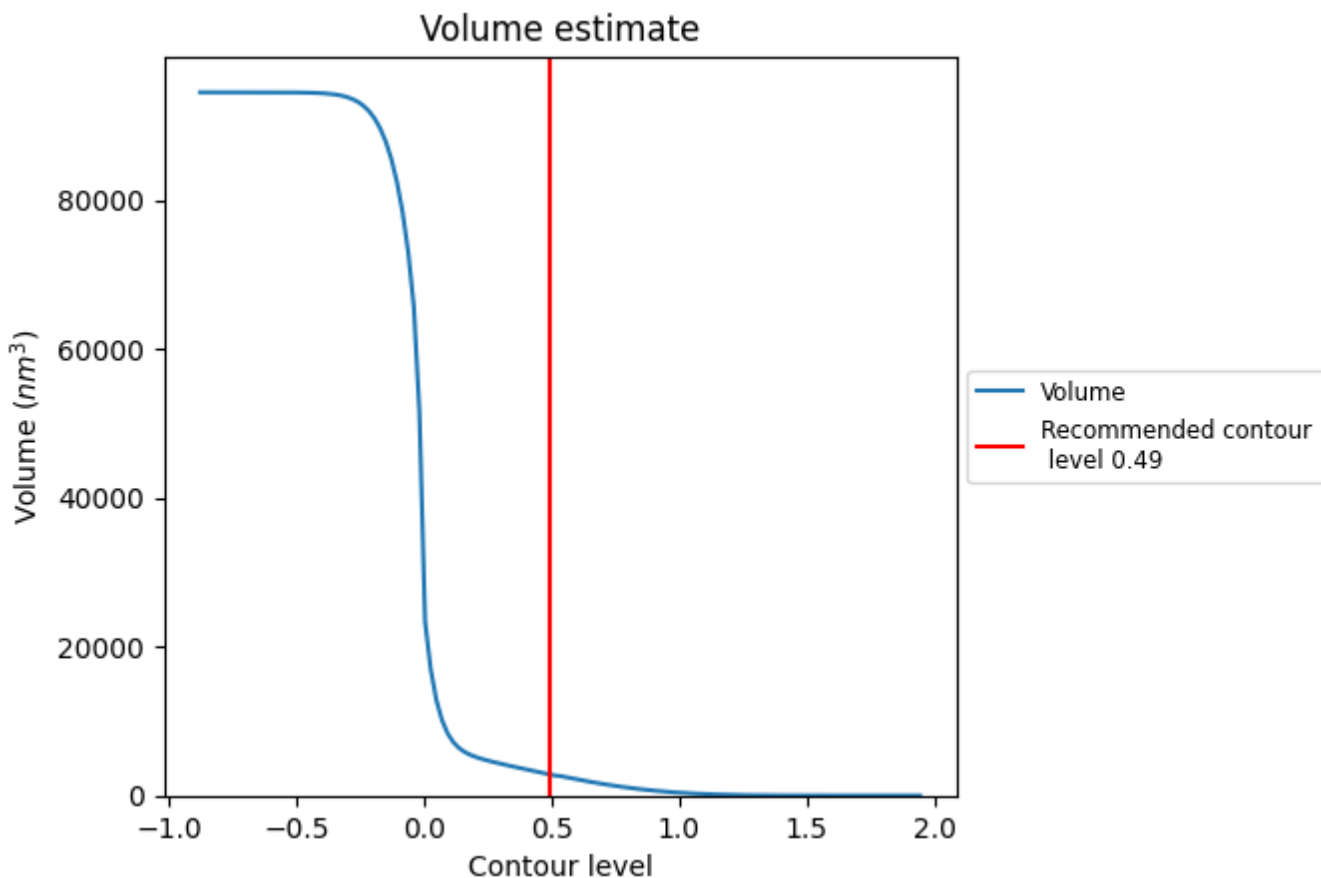
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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.

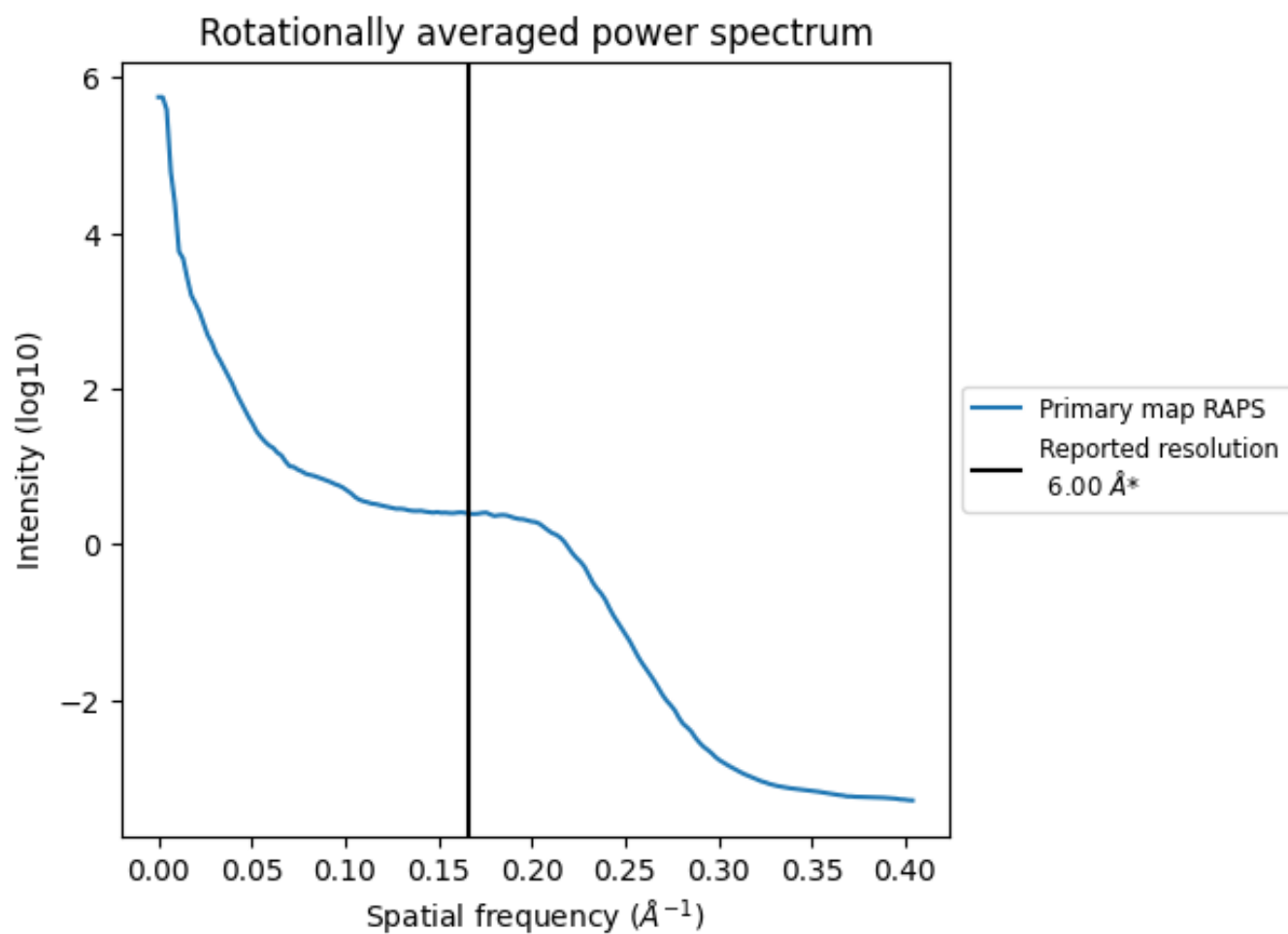
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 2852 nm^3 ; this corresponds to an approximate mass of 2576 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 [\(i\)](#)



*Reported resolution corresponds to spatial frequency of 0.167\AA^{-1}

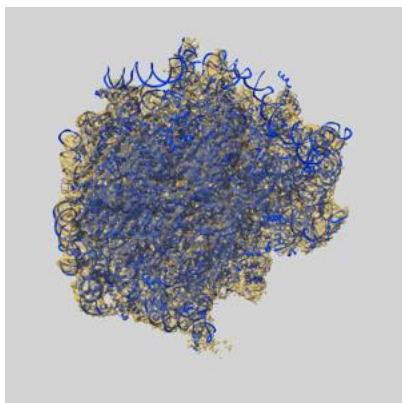
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

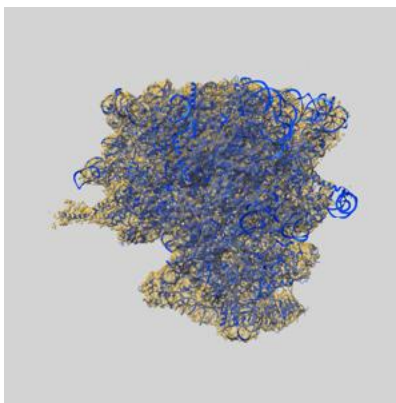
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-5591 and PDB model 4V6W. Per-residue inclusion information can be found in section [3](#) on page [21](#).

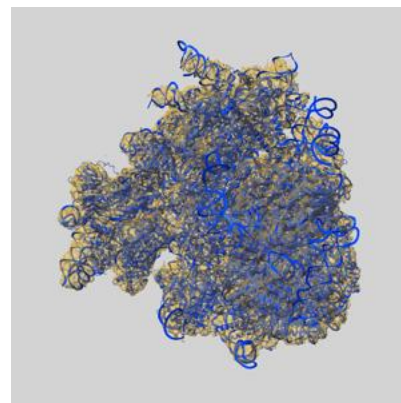
9.1 Map-model overlay [i](#)



X



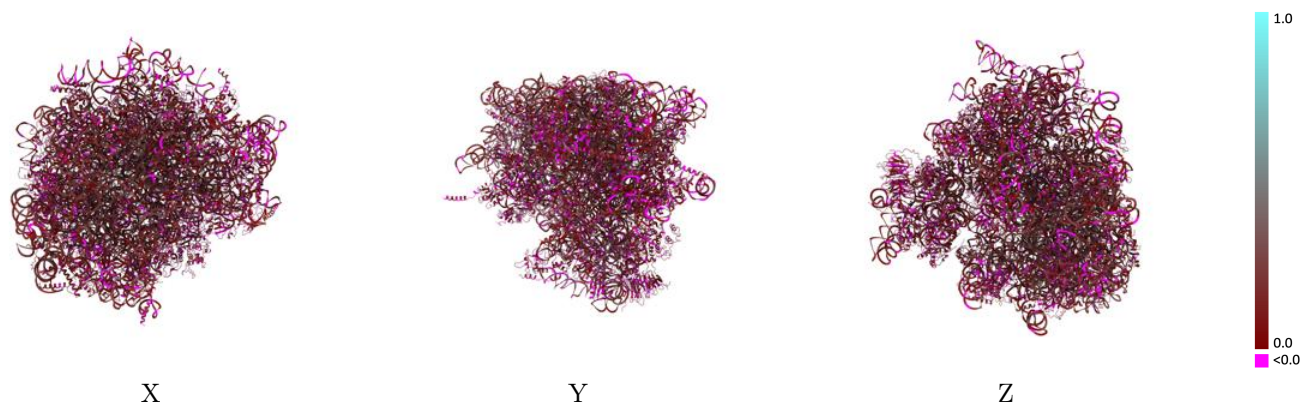
Y



Z

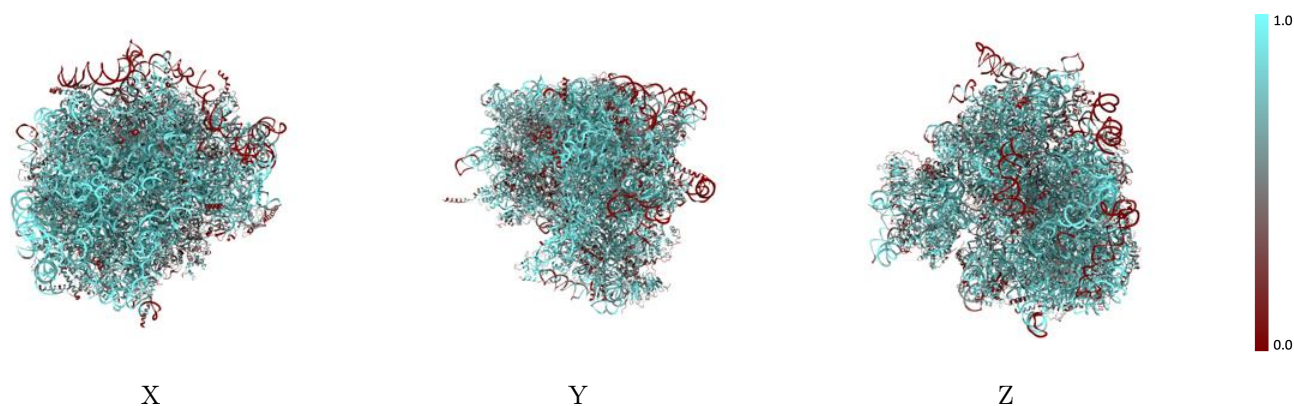
The images above show the 3D surface view of the map at the recommended contour level 0.49 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



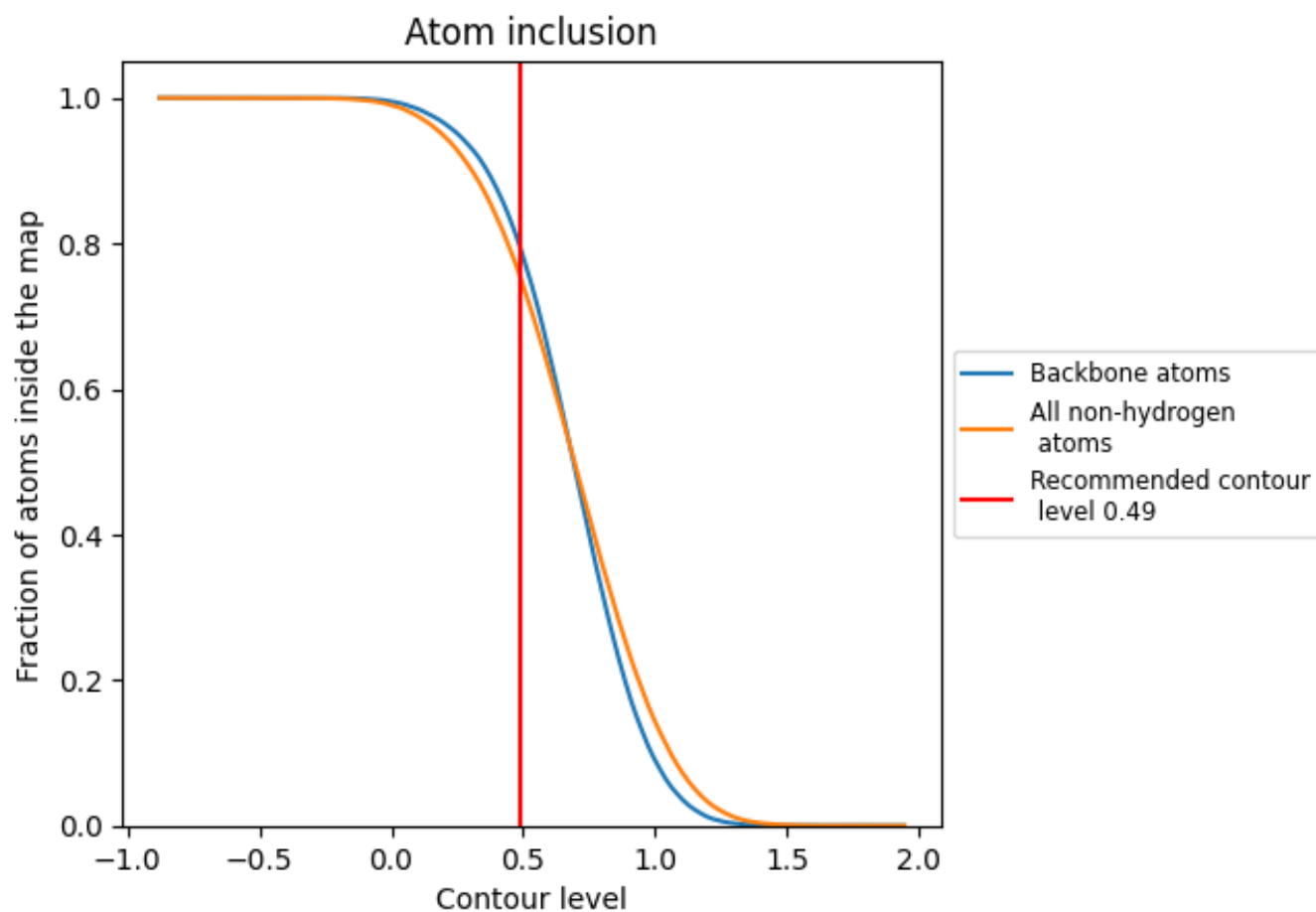
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 [i](#)



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 (0.49).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 79% of all backbone atoms, 75% 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 (0.49) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7528	 0.1570
A5	 0.8875	 0.2040
A7	 0.9448	 0.2030
A8	 0.9252	 0.2330
A9	 0.8216	 0.2100
AA	 0.6569	 0.1060
AB	 0.5773	 0.0940
AC	 0.5684	 0.1340
AD	 0.4870	 0.1230
AE	 0.6539	 0.1060
AF	 0.5939	 0.0880
AG	 0.5125	 0.0690
AH	 0.6117	 0.1000
AI	 0.4733	 0.0910
AJ	 0.7222	 0.1220
AK	 0.8141	 0.1170
AL	 0.5216	 0.0890
AM	 0.7374	 0.0940
AN	 0.5954	 0.1050
AO	 0.5889	 0.0500
AP	 0.4214	 0.0960
AQ	 0.5711	 0.0960
AR	 0.4407	 0.1060
AS	 0.5940	 0.1060
AT	 0.5528	 0.0950
AU	 0.6190	 0.1120
AV	 0.5738	 0.1020
AW	 0.6498	 0.1020
AX	 0.6129	 0.1020
AY	 0.5320	 0.0900
AZ	 0.6267	 0.1060
Aa	 0.6378	 0.1240
Ab	 0.6448	 0.1240
Ac	 0.6660	 0.0940
Ad	 0.7101	 0.0920























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Chain	Atom inclusion	Q-score
Ae	0.4378	0.1370
Af	0.5770	0.0610
Ag	0.5916	0.1010
Ah	0.4280	0.0890
Az	0.4648	0.1100
B2	0.8706	0.1770
BC	0.7146	0.1770
CA	0.7250	0.1370
CB	0.6331	0.1340
CC	0.6905	0.1210
CD	0.6853	0.1110
CE	0.6224	0.1160
CF	0.6430	0.1340
CG	0.5217	0.1280
CH	0.4969	0.1400
CI	0.5550	0.1330
CJ	0.5232	0.1410
CK	0.5293	0.1020
CL	0.6260	0.1150
CM	0.6614	0.1170
CN	0.8286	0.1090
CO	0.6451	0.1390
CP	0.6660	0.1160
CQ	0.7570	0.1090
CR	0.6424	0.1390
CS	0.5928	0.1190
CT	0.6330	0.1250
CU	0.4223	0.1090
CV	0.4173	0.1400
CW	0.3245	0.1040
CX	0.4053	0.1310
CY	0.6927	0.1370
CZ	0.5868	0.1250
Ca	0.7406	0.1160
Cb	0.7362	0.1450
Cc	0.6724	0.1420
Cd	0.7281	0.1300
Ce	0.7176	0.1490
Cf	0.5727	0.0630
Cg	0.6799	0.1540
Ch	0.5371	0.1190
Ci	0.7092	0.1360

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Chain	Atom inclusion	Q-score
Cj	 0.7397	 0.1370
Ck	 0.5595	 0.0880
Cl	 0.7212	 0.1180
Cm	 0.5205	 0.1570
Cn	 0.6744	 0.1080
Co	 0.6706	 0.0950
Cp	 0.6272	 0.1340
Cq	 0.6165	 0.0900
Cr	 0.6143	 0.1170
Cz	 0.3547	 0.0350