Full wwPDB X-ray Structure Validation Report (i)

Sep 18, 2023 – 05:30 PM EDT

PDB ID	:	5D8B
Title	:	Crystal structure of T. thermophilus ribosome containing a P-site wobble mismatch
Authors	:	Svidritskiy, E.; Korostelev, A.A.
Deposited on	:	2015-08-17
Resolution	:	3.63 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp
with specific help available everywhere you see the (i) 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 (1)) were used in the production of this report:

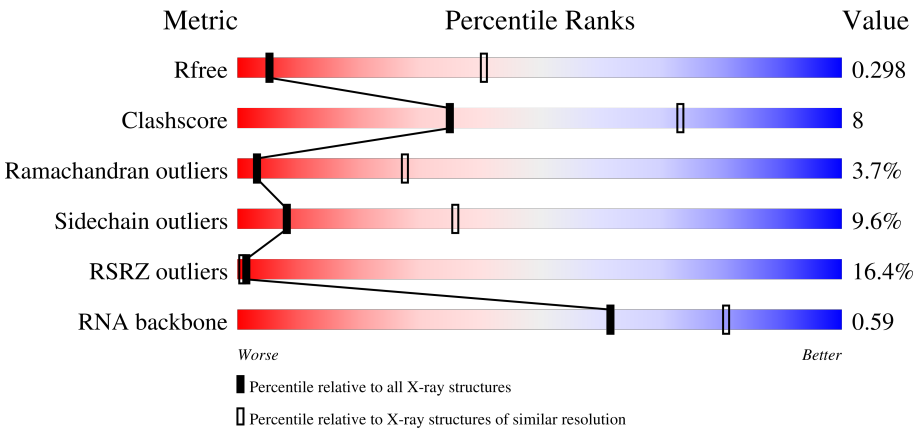
MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.63 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1341 (3.78-3.50)
Clashscore	141614	1439 (3.78-3.50)
Ramachandran outliers	138981	1391 (3.78-3.50)
Sidechain outliers	138945	1391 (3.78-3.50)
RSRZ outliers	127900	1242 (3.78-3.50)
RNA backbone	3102	1019 (4.26-3.00)

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

Mol	Chain	Length	Quality of chain
1	A	271	4% 65% 30% 6%
1	WA	271	9% 63% 31% 5%
2	B	206	29% 67% 25% 7% •
2	XA	206	5% 67% 24% 7% •

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Mol	Chain	Length	Quality of chain
3	C	205	%, 60%, 34%
3	YA	205	6%, 61%, 35%
4	D	182	23%, 60%, 31%, 8%
4	ZA	182	19%, 62%, 30%, 8%
5	AB	180	19%, 73%, 23%
5	E	180	48%, 72%, 23%
6	BB	148	15%, 66%, 27%, 5%
6	F	148	24%, 71%, 22%, 5%
7	CB	147	73%, 60%, 35%, 5%
7	G	147	78%, 61%, 33%, 5%
8	DB	140	6%, 61%, 30%, 6%
8	H	140	11%, 64%, 29%, 6%
9	EB	122	9%, 60%, 37%
9	I	122	13%, 61%, 36%
10	FB	150	13%, 42%, 39%, 15%
10	J	150	21%, 42%, 39%, 14%
11	GB	141	57%, 52%, 36%, 6%, 5%
11	K	141	43%, 50%, 40%, 5%, 5%
12	HB	118	35%, 59%, 31%, 8%
12	L	118	43%, 58%, 32%, 8%
13	IB	112	29%, 81%, 16%
13	M	112	40%, 79%, 19%
14	JB	146	13%, 56%, 32%, 5%, 6%
14	N	146	10%, 56%, 33%, 5%, 6%
15	KB	118	2%, 67%, 27%, 5%

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Mol	Chain	Length	Quality of chain
15	O	118	25% 65% 29% 5%
16	LB	101	5% 64% 32%
16	P	101	% 64% 31% 5%
17	MB	113	3% 65% 32%
17	Q	113	4% 64% 34%
18	NB	96	8% 71% 24%
18	R	96	10% 71% 24%
19	OB	110	26% 54% 30% 7% 9%
19	S	110	47% 53% 31% 7% 9%
20	PB	206	8% 66% 23% 9%
20	T	206	23% 64% 24% 9%
21	QB	85	38% 52% 31% 7% 11%
21	U	85	25% 52% 32% 6% 11%
22	RB	98	5% 44% 37% 9% 10%
22	V	98	8% 48% 35% 7% 10%
23	SB	72	7% 42% 33% 10% 14%
23	W	72	18% 43% 33% 8% 14%
24	TB	60	5% 73% 22%
24	X	60	40% 73% 22%
25	UB	60	3% 60% 23% 13%
25	Y	60	3% 58% 27% 13%
26	VB	54	76% 37% 37% 7% 19%
26	Z	54	70% 37% 37% 7% 19%
27	AA	49	4% 65% 31%
27	WB	49	6% 63% 33%

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Mol	Chain	Length	Quality of chain
28	BA	65	57% 51% 38% 8%
28	XB	65	51% 51% 38% 8%
29	CA	256	18% 62% 26% 9%
29	YB	256	18% 64% 24% 9%
30	DA	239	5% 57% 26% 14%
30	ZB	239	11% 55% 27% 14%
31	AC	209	26% 68% 29%
31	EA	209	27% 67% 29%
32	BC	162	6% 62% 28% 7%
32	FA	162	6% 60% 30% 7%
33	CC	101	% 70% 27%
33	GA	101	13% 70% 27%
34	DC	156	12% 79% 20%
34	HA	156	11% 78% 21%
35	EC	138	20% 74% 22%
35	IA	138	17% 75% 20%
36	FC	128	62% 66% 30%
36	JA	128	59% 66% 30%
37	GC	105	60% 57% 27% 10% 7%
37	KA	105	26% 57% 26% 10% 7%
38	HC	129	8% 58% 26% 5% 12%
38	LA	129	13% 58% 26% 5% 12%
39	IC	132	30% 67% 22% 8%
39	MA	132	30% 63% 26% 8%
40	JC	126	21% 60% 28% 6% 7%

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Mol	Chain	Length	Quality of chain
40	NA	126	25% 62% 25% 6% 7%
41	KC	61	43% 70% 26%
41	OA	61	52% 64% 28% 7%
42	LC	89	18% 69% 22% 8%
42	PA	89	19% 73% 18% 8%
43	MC	88	70% 65% 28% 6%
43	QA	88	47% 68% 25% 6%
44	NC	105	6% 66% 26% 6%
44	RA	105	17% 67% 26% 6%
45	OC	88	2% 59% 19% 20%
45	SA	88	13% 59% 17% 20%
46	PC	93	43% 44% 35% 16%
46	TA	93	44% 44% 34% 5% 16%
47	QC	106	41% 69% 23% 7%
47	UA	106	27% 66% 25% 7%
48	RC	27	85% 63% 22% 11%
48	VA	27	85% 70% 15% 11%
49	SC	71	18% 27% 15% 58%
49	TC	71	28% 27% 14% 58%
50	UC	1509	6% 62% 33% 5%
50	YC	1509	12% 61% 34% 5%
51	VC	2893	6% 61% 32% 6%
51	ZC	2893	7% 61% 33% 6%
52	AD	121	2% 69% 24% 5%
52	WC	121	3% 71% 22% 5%

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Mol	Chain	Length	Quality of chain
53	BD	77	21% 57% 36% 5%
53	ED	77	6% 74% 26%
53	FD	77	3% 78% 22%
53	XC	77	19% 56% 36% 6%
54	GD	27	19% 22% 7% 70%
54	HD	27	19% 19% 11% 70%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	A	303	-	-	-	X
55	MG	A	305	-	-	-	X
55	MG	AC	302	-	-	-	X
55	MG	AD	201	-	-	-	X
55	MG	AD	204	-	-	-	X
55	MG	AD	205	-	-	-	X
55	MG	AD	206	-	-	-	X
55	MG	AD	207	-	-	-	X
55	MG	AD	209	-	-	-	X
55	MG	AD	212	-	-	-	X
55	MG	AD	215	-	-	-	X
55	MG	AD	223	-	-	-	X
55	MG	AD	225	-	-	-	X
55	MG	AD	227	-	-	-	X
55	MG	AD	228	-	-	-	X
55	MG	BA	101	-	-	-	X
55	MG	BB	202	-	-	-	X
55	MG	BC	201	-	-	-	X
55	MG	BD	102	-	-	-	X
55	MG	BD	103	-	-	-	X
55	MG	BD	106	-	-	-	X
55	MG	BD	107	-	-	-	X
55	MG	BD	108	-	-	-	X
55	MG	CB	201	-	-	-	X
55	MG	D	201	-	-	-	X
55	MG	D	203	-	-	-	X
55	MG	DB	201	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	EB	202	-	-	-	X
55	MG	ED	104	-	-	-	X
55	MG	ED	105	-	-	-	X
55	MG	ED	109	-	-	-	X
55	MG	ED	110	-	-	-	X
55	MG	ED	111	-	-	-	X
55	MG	ED	113	-	-	-	X
55	MG	ED	114	-	-	-	X
55	MG	ED	115	-	-	-	X
55	MG	ED	116	-	-	-	X
55	MG	FB	203	-	-	-	X
55	MG	FC	201	-	-	-	X
55	MG	FD	108	-	-	-	X
55	MG	FD	109	-	-	-	X
55	MG	FD	110	-	-	-	X
55	MG	FD	113	-	-	-	X
55	MG	FD	114	-	-	-	X
55	MG	HA	201	-	-	-	X
55	MG	HA	202	-	-	-	X
55	MG	HB	201	-	-	-	X
55	MG	IB	201	-	-	-	X
55	MG	J	201	-	-	-	X
55	MG	J	202	-	-	-	X
55	MG	LA	201	-	-	-	X
55	MG	LA	203	-	-	-	X
55	MG	LC	101	-	-	-	X
55	MG	O	202	-	-	-	X
55	MG	OA	102	-	-	-	X
55	MG	OA	103	-	-	-	X
55	MG	PA	101	-	-	-	X
55	MG	PA	102	-	-	-	X
55	MG	RA	201	-	-	-	X
55	MG	RC	101	-	-	-	X
55	MG	UC	1605	-	-	-	X
55	MG	UC	1606	-	-	-	X
55	MG	UC	1612	-	-	-	X
55	MG	UC	1613	-	-	-	X
55	MG	UC	1617	-	-	-	X
55	MG	UC	1622	-	-	-	X
55	MG	UC	1625	-	-	-	X
55	MG	UC	1637	-	-	-	X
55	MG	UC	1639	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	UC	1643	-	-	-	X
55	MG	UC	1644	-	-	-	X
55	MG	UC	1645	-	-	-	X
55	MG	UC	1647	-	-	-	X
55	MG	UC	1651	-	-	-	X
55	MG	UC	1653	-	-	-	X
55	MG	UC	1657	-	-	-	X
55	MG	UC	1658	-	-	-	X
55	MG	UC	1664	-	-	-	X
55	MG	UC	1667	-	-	-	X
55	MG	UC	1669	-	-	-	X
55	MG	UC	1674	-	-	-	X
55	MG	UC	1676	-	-	-	X
55	MG	UC	1678	-	-	-	X
55	MG	UC	1682	-	-	-	X
55	MG	UC	1684	-	-	-	X
55	MG	UC	1691	-	-	-	X
55	MG	UC	1693	-	-	-	X
55	MG	UC	1697	-	-	-	X
55	MG	UC	1698	-	-	-	X
55	MG	UC	1703	-	-	-	X
55	MG	UC	1705	-	-	-	X
55	MG	UC	1712	-	-	-	X
55	MG	UC	1718	-	-	-	X
55	MG	UC	1719	-	-	-	X
55	MG	UC	1725	-	-	-	X
55	MG	UC	1727	-	-	-	X
55	MG	UC	1728	-	-	-	X
55	MG	UC	1733	-	-	-	X
55	MG	UC	1735	-	-	-	X
55	MG	UC	1737	-	-	-	X
55	MG	UC	1743	-	-	-	X
55	MG	UC	1744	-	-	-	X
55	MG	UC	1746	-	-	-	X
55	MG	UC	1747	-	-	-	X
55	MG	UC	1750	-	-	-	X
55	MG	UC	1754	-	-	-	X
55	MG	UC	1757	-	-	-	X
55	MG	UC	1758	-	-	-	X
55	MG	UC	1760	-	-	-	X
55	MG	UC	1762	-	-	-	X
55	MG	UC	1763	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	UC	1767	-	-	-	X
55	MG	UC	1770	-	-	-	X
55	MG	UC	1773	-	-	-	X
55	MG	UC	1779	-	-	-	X
55	MG	UC	1780	-	-	-	X
55	MG	UC	1786	-	-	-	X
55	MG	UC	1791	-	-	-	X
55	MG	UC	1794	-	-	-	X
55	MG	UC	1795	-	-	-	X
55	MG	UC	1797	-	-	-	X
55	MG	UC	1798	-	-	-	X
55	MG	UC	1800	-	-	-	X
55	MG	UC	1802	-	-	-	X
55	MG	UC	1807	-	-	-	X
55	MG	UC	1810	-	-	-	X
55	MG	UC	1814	-	-	-	X
55	MG	UC	1815	-	-	-	X
55	MG	UC	1820	-	-	-	X
55	MG	UC	1824	-	-	-	X
55	MG	UC	1825	-	-	-	X
55	MG	UC	1830	-	-	-	X
55	MG	UC	1832	-	-	-	X
55	MG	UC	1835	-	-	-	X
55	MG	UC	1839	-	-	-	X
55	MG	UC	1854	-	-	-	X
55	MG	UC	1855	-	-	-	X
55	MG	V	101	-	-	-	X
55	MG	VC	3001	-	-	-	X
55	MG	VC	3006	-	-	-	X
55	MG	VC	3011	-	-	-	X
55	MG	VC	3015	-	-	-	X
55	MG	VC	3026	-	-	-	X
55	MG	VC	3027	-	-	-	X
55	MG	VC	3031	-	-	-	X
55	MG	VC	3036	-	-	-	X
55	MG	VC	3040	-	-	-	X
55	MG	VC	3043	-	-	-	X
55	MG	VC	3044	-	-	-	X
55	MG	VC	3048	-	-	-	X
55	MG	VC	3053	-	-	-	X
55	MG	VC	3054	-	-	-	X
55	MG	VC	3055	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	VC	3059	-	-	-	X
55	MG	VC	3060	-	-	-	X
55	MG	VC	3062	-	-	-	X
55	MG	VC	3066	-	-	-	X
55	MG	VC	3071	-	-	-	X
55	MG	VC	3075	-	-	-	X
55	MG	VC	3076	-	-	-	X
55	MG	VC	3096	-	-	-	X
55	MG	VC	3112	-	-	-	X
55	MG	VC	3114	-	-	-	X
55	MG	VC	3117	-	-	-	X
55	MG	VC	3120	-	-	-	X
55	MG	VC	3124	-	-	-	X
55	MG	VC	3127	-	-	-	X
55	MG	VC	3130	-	-	-	X
55	MG	VC	3131	-	-	-	X
55	MG	VC	3132	-	-	-	X
55	MG	VC	3134	-	-	-	X
55	MG	VC	3138	-	-	-	X
55	MG	VC	3145	-	-	-	X
55	MG	VC	3150	-	-	-	X
55	MG	VC	3151	-	-	-	X
55	MG	VC	3153	-	-	-	X
55	MG	VC	3154	-	-	-	X
55	MG	VC	3155	-	-	-	X
55	MG	VC	3162	-	-	-	X
55	MG	VC	3164	-	-	-	X
55	MG	VC	3165	-	-	-	X
55	MG	VC	3166	-	-	-	X
55	MG	VC	3168	-	-	-	X
55	MG	VC	3190	-	-	-	X
55	MG	VC	3199	-	-	-	X
55	MG	VC	3201	-	-	-	X
55	MG	VC	3204	-	-	-	X
55	MG	VC	3213	-	-	-	X
55	MG	VC	3220	-	-	-	X
55	MG	VC	3221	-	-	-	X
55	MG	VC	3228	-	-	-	X
55	MG	VC	3231	-	-	-	X
55	MG	VC	3236	-	-	-	X
55	MG	VC	3253	-	-	-	X
55	MG	VC	3255	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	VC	3256	-	-	-	X
55	MG	VC	3258	-	-	-	X
55	MG	VC	3261	-	-	-	X
55	MG	VC	3263	-	-	-	X
55	MG	VC	3265	-	-	-	X
55	MG	VC	3271	-	-	-	X
55	MG	VC	3275	-	-	-	X
55	MG	VC	3276	-	-	-	X
55	MG	VC	3280	-	-	-	X
55	MG	VC	3283	-	-	-	X
55	MG	VC	3287	-	-	-	X
55	MG	VC	3288	-	-	-	X
55	MG	VC	3289	-	-	-	X
55	MG	VC	3291	-	-	-	X
55	MG	VC	3292	-	-	-	X
55	MG	VC	3300	-	-	-	X
55	MG	VC	3310	-	-	-	X
55	MG	VC	3311	-	-	-	X
55	MG	VC	3314	-	-	-	X
55	MG	VC	3315	-	-	-	X
55	MG	VC	3317	-	-	-	X
55	MG	VC	3333	-	-	-	X
55	MG	VC	3344	-	-	-	X
55	MG	VC	3345	-	-	-	X
55	MG	VC	3347	-	-	-	X
55	MG	VC	3350	-	-	-	X
55	MG	VC	3360	-	-	-	X
55	MG	VC	3361	-	-	-	X
55	MG	VC	3362	-	-	-	X
55	MG	VC	3366	-	-	-	X
55	MG	VC	3368	-	-	-	X
55	MG	VC	3372	-	-	-	X
55	MG	VC	3376	-	-	-	X
55	MG	VC	3381	-	-	-	X
55	MG	VC	3383	-	-	-	X
55	MG	VC	3387	-	-	-	X
55	MG	VC	3392	-	-	-	X
55	MG	VC	3402	-	-	-	X
55	MG	VC	3407	-	-	-	X
55	MG	VC	3412	-	-	-	X
55	MG	VC	3415	-	-	-	X
55	MG	VC	3416	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	VC	3418	-	-	-	X
55	MG	VC	3420	-	-	-	X
55	MG	VC	3422	-	-	-	X
55	MG	VC	3423	-	-	-	X
55	MG	VC	3431	-	-	-	X
55	MG	VC	3432	-	-	-	X
55	MG	VC	3433	-	-	-	X
55	MG	VC	3438	-	-	-	X
55	MG	VC	3439	-	-	-	X
55	MG	VC	3441	-	-	-	X
55	MG	VC	3444	-	-	-	X
55	MG	VC	3446	-	-	-	X
55	MG	VC	3447	-	-	-	X
55	MG	VC	3448	-	-	-	X
55	MG	VC	3449	-	-	-	X
55	MG	VC	3450	-	-	-	X
55	MG	VC	3455	-	-	-	X
55	MG	VC	3464	-	-	-	X
55	MG	VC	3466	-	-	-	X
55	MG	VC	3468	-	-	-	X
55	MG	VC	3474	-	-	-	X
55	MG	VC	3478	-	-	-	X
55	MG	VC	3487	-	-	-	X
55	MG	VC	3488	-	-	-	X
55	MG	VC	3489	-	-	-	X
55	MG	VC	3490	-	-	-	X
55	MG	VC	3493	-	-	-	X
55	MG	VC	3496	-	-	-	X
55	MG	VC	3498	-	-	-	X
55	MG	VC	3500	-	-	-	X
55	MG	VC	3505	-	-	-	X
55	MG	VC	3506	-	-	-	X
55	MG	VC	3510	-	-	-	X
55	MG	VC	3512	-	-	-	X
55	MG	VC	3514	-	-	-	X
55	MG	VC	3515	-	-	-	X
55	MG	VC	3516	-	-	-	X
55	MG	VC	3520	-	-	-	X
55	MG	VC	3524	-	-	-	X
55	MG	VC	3526	-	-	-	X
55	MG	VC	3533	-	-	-	X
55	MG	VC	3537	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	VC	3539	-	-	-	X
55	MG	VC	3546	-	-	-	X
55	MG	VC	3548	-	-	-	X
55	MG	VC	3568	-	-	-	X
55	MG	VC	3570	-	-	-	X
55	MG	VC	3579	-	-	-	X
55	MG	VC	3585	-	-	-	X
55	MG	VC	3587	-	-	-	X
55	MG	VC	3588	-	-	-	X
55	MG	VC	3590	-	-	-	X
55	MG	VC	3594	-	-	-	X
55	MG	VC	3596	-	-	-	X
55	MG	VC	3599	-	-	-	X
55	MG	VC	3602	-	-	-	X
55	MG	VC	3603	-	-	-	X
55	MG	VC	3604	-	-	-	X
55	MG	VC	3608	-	-	-	X
55	MG	VC	3609	-	-	-	X
55	MG	VC	3614	-	-	-	X
55	MG	VC	3616	-	-	-	X
55	MG	VC	3625	-	-	-	X
55	MG	VC	3630	-	-	-	X
55	MG	VC	3633	-	-	-	X
55	MG	VC	3635	-	-	-	X
55	MG	VC	3641	-	-	-	X
55	MG	VC	3646	-	-	-	X
55	MG	VC	3652	-	-	-	X
55	MG	VC	3653	-	-	-	X
55	MG	VC	3669	-	-	-	X
55	MG	VC	3673	-	-	-	X
55	MG	VC	3675	-	-	-	X
55	MG	VC	3676	-	-	-	X
55	MG	VC	3677	-	-	-	X
55	MG	VC	3682	-	-	-	X
55	MG	VC	3683	-	-	-	X
55	MG	VC	3692	-	-	-	X
55	MG	VC	3702	-	-	-	X
55	MG	VC	3707	-	-	-	X
55	MG	WA	302	-	-	-	X
55	MG	WA	303	-	-	-	X
55	MG	WA	304	-	-	-	X
55	MG	WA	305	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	WC	201	-	-	-	X
55	MG	WC	204	-	-	-	X
55	MG	WC	205	-	-	-	X
55	MG	WC	207	-	-	-	X
55	MG	WC	208	-	-	-	X
55	MG	WC	210	-	-	-	X
55	MG	WC	211	-	-	-	X
55	MG	WC	212	-	-	-	X
55	MG	WC	213	-	-	-	X
55	MG	WC	217	-	-	-	X
55	MG	WC	218	-	-	-	X
55	MG	WC	221	-	-	-	X
55	MG	WC	224	-	-	-	X
55	MG	XA	301	-	-	-	X
55	MG	XC	101	-	-	-	X
55	MG	XC	105	-	-	-	X
55	MG	YA	301	-	-	-	X
55	MG	YA	303	-	-	-	X
55	MG	YC	1604	-	-	-	X
55	MG	YC	1614	-	-	-	X
55	MG	YC	1615	-	-	-	X
55	MG	YC	1617	-	-	-	X
55	MG	YC	1620	-	-	-	X
55	MG	YC	1624	-	-	-	X
55	MG	YC	1625	-	-	-	X
55	MG	YC	1627	-	-	-	X
55	MG	YC	1630	-	-	-	X
55	MG	YC	1631	-	-	-	X
55	MG	YC	1633	-	-	-	X
55	MG	YC	1635	-	-	-	X
55	MG	YC	1636	-	-	-	X
55	MG	YC	1639	-	-	-	X
55	MG	YC	1641	-	-	-	X
55	MG	YC	1643	-	-	-	X
55	MG	YC	1646	-	-	-	X
55	MG	YC	1649	-	-	-	X
55	MG	YC	1650	-	-	-	X
55	MG	YC	1652	-	-	-	X
55	MG	YC	1659	-	-	-	X
55	MG	YC	1661	-	-	-	X
55	MG	YC	1663	-	-	-	X
55	MG	YC	1665	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	YC	1668	-	-	-	X
55	MG	YC	1670	-	-	-	X
55	MG	YC	1671	-	-	-	X
55	MG	YC	1672	-	-	-	X
55	MG	YC	1677	-	-	-	X
55	MG	YC	1678	-	-	-	X
55	MG	YC	1680	-	-	-	X
55	MG	YC	1686	-	-	-	X
55	MG	YC	1687	-	-	-	X
55	MG	YC	1689	-	-	-	X
55	MG	YC	1690	-	-	-	X
55	MG	YC	1691	-	-	-	X
55	MG	YC	1694	-	-	-	X
55	MG	YC	1697	-	-	-	X
55	MG	YC	1698	-	-	-	X
55	MG	YC	1699	-	-	-	X
55	MG	YC	1704	-	-	-	X
55	MG	YC	1706	-	-	-	X
55	MG	YC	1711	-	-	-	X
55	MG	YC	1717	-	-	-	X
55	MG	YC	1718	-	-	-	X
55	MG	YC	1719	-	-	-	X
55	MG	YC	1721	-	-	-	X
55	MG	YC	1725	-	-	-	X
55	MG	YC	1726	-	-	-	X
55	MG	YC	1728	-	-	-	X
55	MG	YC	1733	-	-	-	X
55	MG	YC	1737	-	-	-	X
55	MG	YC	1740	-	-	-	X
55	MG	YC	1741	-	-	-	X
55	MG	YC	1742	-	-	-	X
55	MG	YC	1746	-	-	-	X
55	MG	YC	1747	-	-	-	X
55	MG	YC	1748	-	-	-	X
55	MG	YC	1750	-	-	-	X
55	MG	YC	1752	-	-	-	X
55	MG	YC	1757	-	-	-	X
55	MG	YC	1758	-	-	-	X
55	MG	YC	1759	-	-	-	X
55	MG	YC	1763	-	-	-	X
55	MG	YC	1764	-	-	-	X
55	MG	YC	1765	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	YC	1766	-	-	-	X
55	MG	YC	1769	-	-	-	X
55	MG	YC	1775	-	-	-	X
55	MG	YC	1781	-	-	-	X
55	MG	YC	1784	-	-	-	X
55	MG	YC	1786	-	-	-	X
55	MG	YC	1792	-	-	-	X
55	MG	YC	1797	-	-	-	X
55	MG	YC	1799	-	-	-	X
55	MG	YC	1800	-	-	-	X
55	MG	YC	1801	-	-	-	X
55	MG	YC	1806	-	-	-	X
55	MG	YC	1808	-	-	-	X
55	MG	YC	1809	-	-	-	X
55	MG	YC	1813	-	-	-	X
55	MG	YC	1816	-	-	-	X
55	MG	YC	1817	-	-	-	X
55	MG	YC	1818	-	-	-	X
55	MG	YC	1821	-	-	-	X
55	MG	YC	1829	-	-	-	X
55	MG	YC	1834	-	-	-	X
55	MG	YC	1840	-	-	-	X
55	MG	YC	1843	-	-	-	X
55	MG	YC	1845	-	-	-	X
55	MG	YC	1846	-	-	-	X
55	MG	YC	1847	-	-	-	X
55	MG	YC	1849	-	-	-	X
55	MG	YC	1853	-	-	-	X
55	MG	YC	1858	-	-	-	X
55	MG	YC	1859	-	-	-	X
55	MG	YC	1862	-	-	-	X
55	MG	YC	1863	-	-	-	X
55	MG	YC	1864	-	-	-	X
55	MG	ZC	3009	-	-	-	X
55	MG	ZC	3038	-	-	-	X
55	MG	ZC	3043	-	-	-	X
55	MG	ZC	3045	-	-	-	X
55	MG	ZC	3050	-	-	-	X
55	MG	ZC	3051	-	-	-	X
55	MG	ZC	3053	-	-	-	X
55	MG	ZC	3055	-	-	-	X
55	MG	ZC	3061	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	ZC	3064	-	-	-	X
55	MG	ZC	3070	-	-	-	X
55	MG	ZC	3076	-	-	-	X
55	MG	ZC	3079	-	-	-	X
55	MG	ZC	3089	-	-	-	X
55	MG	ZC	3090	-	-	-	X
55	MG	ZC	3098	-	-	-	X
55	MG	ZC	3104	-	-	-	X
55	MG	ZC	3110	-	-	-	X
55	MG	ZC	3113	-	-	-	X
55	MG	ZC	3130	-	-	-	X
55	MG	ZC	3132	-	-	-	X
55	MG	ZC	3133	-	-	-	X
55	MG	ZC	3134	-	-	-	X
55	MG	ZC	3147	-	-	-	X
55	MG	ZC	3152	-	-	-	X
55	MG	ZC	3154	-	-	-	X
55	MG	ZC	3163	-	-	-	X
55	MG	ZC	3165	-	-	-	X
55	MG	ZC	3177	-	-	-	X
55	MG	ZC	3180	-	-	-	X
55	MG	ZC	3186	-	-	-	X
55	MG	ZC	3194	-	-	-	X
55	MG	ZC	3197	-	-	-	X
55	MG	ZC	3198	-	-	-	X
55	MG	ZC	3215	-	-	-	X
55	MG	ZC	3217	-	-	-	X
55	MG	ZC	3218	-	-	-	X
55	MG	ZC	3225	-	-	-	X
55	MG	ZC	3226	-	-	-	X
55	MG	ZC	3228	-	-	-	X
55	MG	ZC	3239	-	-	-	X
55	MG	ZC	3241	-	-	-	X
55	MG	ZC	3244	-	-	-	X
55	MG	ZC	3260	-	-	-	X
55	MG	ZC	3261	-	-	-	X
55	MG	ZC	3262	-	-	-	X
55	MG	ZC	3264	-	-	-	X
55	MG	ZC	3265	-	-	-	X
55	MG	ZC	3270	-	-	-	X
55	MG	ZC	3273	-	-	-	X
55	MG	ZC	3274	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	ZC	3279	-	-	-	X
55	MG	ZC	3282	-	-	-	X
55	MG	ZC	3283	-	-	-	X
55	MG	ZC	3284	-	-	-	X
55	MG	ZC	3288	-	-	-	X
55	MG	ZC	3299	-	-	-	X
55	MG	ZC	3302	-	-	-	X
55	MG	ZC	3307	-	-	-	X
55	MG	ZC	3310	-	-	-	X
55	MG	ZC	3314	-	-	-	X
55	MG	ZC	3316	-	-	-	X
55	MG	ZC	3329	-	-	-	X
55	MG	ZC	3330	-	-	-	X
55	MG	ZC	3333	-	-	-	X
55	MG	ZC	3335	-	-	-	X
55	MG	ZC	3338	-	-	-	X
55	MG	ZC	3347	-	-	-	X
55	MG	ZC	3360	-	-	-	X
55	MG	ZC	3363	-	-	-	X
55	MG	ZC	3365	-	-	-	X
55	MG	ZC	3371	-	-	-	X
55	MG	ZC	3374	-	-	-	X
55	MG	ZC	3384	-	-	-	X
55	MG	ZC	3388	-	-	-	X
55	MG	ZC	3389	-	-	-	X
55	MG	ZC	3390	-	-	-	X
55	MG	ZC	3393	-	-	-	X
55	MG	ZC	3394	-	-	-	X
55	MG	ZC	3398	-	-	-	X
55	MG	ZC	3399	-	-	-	X
55	MG	ZC	3401	-	-	-	X
55	MG	ZC	3403	-	-	-	X
55	MG	ZC	3405	-	-	-	X
55	MG	ZC	3414	-	-	-	X
55	MG	ZC	3415	-	-	-	X
55	MG	ZC	3416	-	-	-	X
55	MG	ZC	3420	-	-	-	X
55	MG	ZC	3421	-	-	-	X
55	MG	ZC	3422	-	-	-	X
55	MG	ZC	3428	-	-	-	X
55	MG	ZC	3433	-	-	-	X
55	MG	ZC	3443	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	ZC	3447	-	-	-	X
55	MG	ZC	3454	-	-	-	X
55	MG	ZC	3458	-	-	-	X
55	MG	ZC	3466	-	-	-	X
55	MG	ZC	3472	-	-	-	X
55	MG	ZC	3478	-	-	-	X
55	MG	ZC	3483	-	-	-	X
55	MG	ZC	3485	-	-	-	X
55	MG	ZC	3487	-	-	-	X
55	MG	ZC	3494	-	-	-	X
55	MG	ZC	3503	-	-	-	X
55	MG	ZC	3521	-	-	-	X
55	MG	ZC	3527	-	-	-	X
55	MG	ZC	3534	-	-	-	X
55	MG	ZC	3538	-	-	-	X
55	MG	ZC	3545	-	-	-	X
55	MG	ZC	3551	-	-	-	X
55	MG	ZC	3554	-	-	-	X
55	MG	ZC	3566	-	-	-	X
55	MG	ZC	3571	-	-	-	X
55	MG	ZC	3577	-	-	-	X
55	MG	ZC	3592	-	-	-	X
55	MG	ZC	3596	-	-	-	X
55	MG	ZC	3613	-	-	-	X
55	MG	ZC	3616	-	-	-	X
55	MG	ZC	3622	-	-	-	X
55	MG	ZC	3623	-	-	-	X
55	MG	ZC	3624	-	-	-	X
55	MG	ZC	3625	-	-	-	X
55	MG	ZC	3626	-	-	-	X
55	MG	ZC	3629	-	-	-	X
55	MG	ZC	3630	-	-	-	X
55	MG	ZC	3635	-	-	-	X
55	MG	ZC	3637	-	-	-	X
55	MG	ZC	3638	-	-	-	X
55	MG	ZC	3640	-	-	-	X
55	MG	ZC	3648	-	-	-	X
55	MG	ZC	3651	-	-	-	X
55	MG	ZC	3654	-	-	-	X
55	MG	ZC	3659	-	-	-	X
55	MG	ZC	3661	-	-	-	X
55	MG	ZC	3669	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	ZC	3674	-	-	-	X
55	MG	ZC	3679	-	-	-	X
55	MG	ZC	3680	-	-	-	X
55	MG	ZC	3681	-	-	-	X
55	MG	ZC	3685	-	-	-	X
55	MG	ZC	3686	-	-	-	X
55	MG	ZC	3688	-	-	-	X
55	MG	ZC	3690	-	-	-	X
55	MG	ZC	3696	-	-	-	X
55	MG	ZC	3705	-	-	-	X
55	MG	ZC	3706	-	-	-	X
55	MG	ZC	3707	-	-	-	X
55	MG	ZC	3714	-	-	-	X
55	MG	ZC	3718	-	-	-	X
55	MG	ZC	3723	-	-	-	X
55	MG	ZC	3728	-	-	-	X
55	MG	ZC	3732	-	-	-	X
55	MG	ZC	3733	-	-	-	X
55	MG	ZC	3737	-	-	-	X
55	MG	ZC	3741	-	-	-	X
55	MG	ZC	3748	-	-	-	X
55	MG	ZC	3750	-	-	-	X
55	MG	ZC	3755	-	-	-	X
55	MG	ZC	3757	-	-	-	X
55	MG	ZC	3762	-	-	-	X
55	MG	ZC	3763	-	-	-	X
55	MG	ZC	3765	-	-	-	X
55	MG	ZC	3769	-	-	-	X
55	MG	ZC	3771	-	-	-	X

2 Entry composition (i)

There are 56 unique types of molecules in this entry. The entry contains 295576 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	271	2105	1329	416	357	3	0	0	0
1	WA	271	2105	1329	416	357	3	0	0	0

- Molecule 2 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	204	1563	988	299	270	6	0	0	0
2	XA	204	1563	988	299	270	6	0	0	0

- Molecule 3 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	202	1586	1011	297	275	3	0	0	0
3	YA	202	1586	1011	297	275	3	0	0	0

- Molecule 4 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	181	1475	943	268	260	4	0	0	0
4	ZA	181	1475	943	268	260	4	0	0	0

- Molecule 5 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	E	174	1330	845	248	236	1	0	0	0
5	AB	174	1330	845	248	236	1	0	0	0

- Molecule 6 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	F	145	1132	724	200	207	1	0	0	0
6	BB	145	1132	724	200	207	1	0	0	0

- Molecule 7 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	G	147	1088	692	191	199	6	0	0	0
7	CB	147	1088	692	191	199	6	0	0	0

- Molecule 8 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	H	137	1096	707	205	181	3	0	0	0
8	DB	137	1096	707	205	181	3	0	0	0

- Molecule 9 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	I	122	932	587	171	170	4	0	0	0
9	EB	122	932	587	171	170	4	0	0	0

- Molecule 10 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	J	146	1114	692	227	193	2	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	FB	146	1114	692	227	193	2	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	K	134	1064	680	201	178	5	0	0	0
11	GB	134	1064	680	201	178	5	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
12	L	117	960	599	202	159	0	0	0
12	HB	117	960	599	202	159	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
13	M	110	877	553	175	149	0	0	0
13	IB	110	877	553	175	149	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	N	137	1143	713	234	195	1	0	0	0
14	JB	137	1143	713	234	195	1	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	O	117	964	610	202	151	1	0	0	0
15	KB	117	964	610	202	151	1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	P	101	779	501	142	135	1	0	0	0
16	LB	101	779	501	142	135	1	0	0	0

- Molecule 17 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	Q	112	890	560	175	153	2	0	0	0
17	MB	112	890	560	175	153	2	0	0	0

- Molecule 18 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	R	92	725	471	131	123	0	0	0
18	NB	92	725	471	131	123	0	0	0

- Molecule 19 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	S	100	775	500	148	123	4	0	0	0
19	OB	100	775	500	148	123	4	0	0	0

- Molecule 20 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	T	187	1482	945	264	271	2	0	0	0
20	PB	187	1482	945	264	271	2	0	0	0

- Molecule 21 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
21	U	76	605	376	126	102	1	0	0	0
21	QB	76	605	376	126	102	1	0	0	0

- Molecule 22 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
22	V	88	694	435	141	118	0	0	0
22	RB	88	694	435	141	118	0	0	0

- Molecule 23 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
23	W	62	520	325	102	91	2	0	0	0
23	SB	62	520	325	102	91	2	0	0	0

- Molecule 24 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
24	X	59	467	298	90	78	1	0	0	0
24	TB	59	467	298	90	78	1	0	0	0

- Molecule 25 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	Y	52	404	255	79	65	5	0	0	0
25	UB	52	404	255	79	65	5	0	0	0

- Molecule 26 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	Z	44	380	235	77	64	4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	VB	44	380	235	77	64	4	0	0	0

- Molecule 27 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
27	AA	48	418	257	104	55	2	0	0	0
27	WB	48	418	257	104	55	2	0	0	0

- Molecule 28 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	BA	63	507	326	101	78	2	0	0	0
28	XB	63	507	326	101	78	2	0	0	0

- Molecule 29 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	CA	234	1900	1213	341	341	5	0	0	0
29	YB	234	1900	1213	341	341	5	0	0	0

- Molecule 30 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	DA	206	1612	1016	314	281	1	0	0	0
30	ZB	206	1612	1016	314	281	1	0	0	0

- Molecule 31 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	EA	208	1703	1066	339	291	7	0	0	0
31	AC	208	1703	1066	339	291	7	0	0	0

- Molecule 32 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	FA	151	1155	729	218	204	4	0	0	0
32	BC	151	1155	729	218	204	4	0	0	0

- Molecule 33 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	GA	101	843	531	155	154	3	0	0	0
33	CC	101	843	531	155	154	3	0	0	0

- Molecule 34 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	HA	155	1257	781	252	218	6	0	0	0
34	DC	155	1257	781	252	218	6	0	0	0

- Molecule 35 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	IA	138	1116	705	215	193	3	0	0	0
35	EC	138	1116	705	215	193	3	0	0	0

- Molecule 36 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
36	JA	127	1011	639	198	174	0	0	0
36	FC	127	1011	639	198	174	0	0	0

- Molecule 37 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
37	KA	98	794	499	156	138	1	0	0	0
37	GC	98	794	499	156	138	1	0	0	0

- Molecule 38 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
38	LA	114	842	522	159	158	3	0	0	0
38	HC	114	842	522	159	158	3	0	0	0

- Molecule 39 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
39	MA	122	956	603	193	159	1	0	0	0
39	IC	122	956	603	193	159	1	0	0	0

- Molecule 40 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	NA	117	933	577	192	162	2	0	0	0
40	JC	117	933	577	192	162	2	0	0	0

- Molecule 41 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	OA	60	492	312	104	72	4	0	0	0
41	KC	60	492	312	104	72	4	0	0	0

- Molecule 42 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	PA	88	734	459	147	126	2	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	LC	88	734	459	147	126	2	0	0	0

- Molecule 43 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	QA	83	700	443	139	117	1	0	0	0
43	MC	83	700	443	139	117	1	0	0	0

- Molecule 44 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	RA	99	823	528	152	141	2	0	0	0
44	NC	99	823	528	152	141	2	0	0	0

- Molecule 45 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
45	SA	70	574	367	112	95	0	0	0
45	OC	70	574	367	112	95	0	0	0

- Molecule 46 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
46	TA	78	629	403	114	110	2	0	0	0
46	PC	78	629	403	114	110	2	0	0	0

- Molecule 47 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	UA	99	762	469	162	129	2	0	0	0
47	QC	99	762	469	162	129	2	0	0	0

- Molecule 48 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
48	VA	24	208	128	50	30	0	0	0
48	RC	24	208	128	50	30	0	0	0

- Molecule 49 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
49	SC	30	225	142	36	43	4	0	0	0
49	TC	30	225	142	36	43	4	0	0	0

- Molecule 50 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
50	UC	1504	32332	14391	5994	10444	1503	0	0	0
50	YC	1504	32332	14391	5994	10444	1503	0	0	0

- Molecule 51 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
51	VC	2879	62000	27595	11586	19941	2878	0	0	0
51	ZC	2879	62000	27595	11586	19941	2878	0	0	0

- Molecule 52 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
52	WC	119	2551	1136	471	826	118	0	0	0
52	AD	119	2551	1136	471	826	118	0	0	0

- Molecule 53 is a RNA chain called tRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
53	XC	77	1640	732	297	535	76	0	0	0
53	BD	77	1640	732	297	535	76	0	0	0
53	ED	77	1640	732	297	535	76	0	0	0
53	FD	77	1640	732	297	535	76	0	0	0

- Molecule 54 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
54	GD	8	170	77	32	53	8	0	0	0
54	HD	8	170	77	32	53	8	0	0	0

- Molecule 55 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
55	A	5	5	5	0	0
55	B	2	2	2	0	0
55	C	3	3	3	0	0
55	D	3	3	3	0	0
55	H	2	2	2	0	0
55	I	1	1	1	0	0
55	J	3	3	3	0	0
55	L	1	1	1	0	0
55	N	1	1	1	0	0
55	O	2	2	2	0	0
55	P	2	2	2	0	0
55	Q	1	1	1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
55	V	1	1	1	0	0
55	X	1	1	1	0	0
55	Y	1	1	1	0	0
55	AA	1	1	1	0	0
55	BA	2	2	2	0	0
55	EA	1	1	1	0	0
55	FA	1	1	1	0	0
55	HA	2	2	2	0	0
55	LA	4	4	4	0	0
55	OA	2	2	2	0	0
55	PA	2	2	2	0	0
55	QA	1	1	1	0	0
55	RA	1	1	1	0	0
55	UA	2	2	2	0	0
55	WA	5	5	5	0	0
55	XA	3	3	3	0	0
55	YA	8	8	8	0	0
55	BB	2	2	2	0	0
55	CB	1	1	1	0	0
55	DB	1	1	1	0	0
55	EB	3	3	3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
55	FB	4	4	4	0	0
55	GB	1	1	1	0	0
55	HB	2	2	2	0	0
55	IB	1	1	1	0	0
55	JB	1	1	1	0	0
55	MB	1	1	1	0	0
55	NB	1	1	1	0	0
55	OB	1	1	1	0	0
55	QB	2	2	2	0	0
55	SB	1	1	1	0	0
55	WB	2	2	2	0	0
55	AC	1	1	1	0	0
55	BC	3	3	3	0	0
55	DC	1	1	1	0	0
55	FC	1	1	1	0	0
55	IC	1	1	1	0	0
55	LC	1	1	1	0	0
55	RC	1	1	1	0	0
55	UC	264	264	264	0	0
55	VC	707	707	707	0	0
55	WC	29	29	29	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
55	XC	5	5	5	0	0
			Total	Mg		
55	YC	271	271	271	0	0
			Total	Mg		
55	ZC	774	774	774	0	0
			Total	Mg		
55	AD	30	30	30	0	0
			Total	Mg		
55	BD	8	8	8	0	0
			Total	Mg		
55	ED	16	16	16	0	0
			Total	Mg		
55	FD	16	16	16	0	0
			Total	Mg		
55	HD	1	1	1	0	0

- Molecule 56 is ZINC ION (three-letter code: ZN) (formula: Zn).

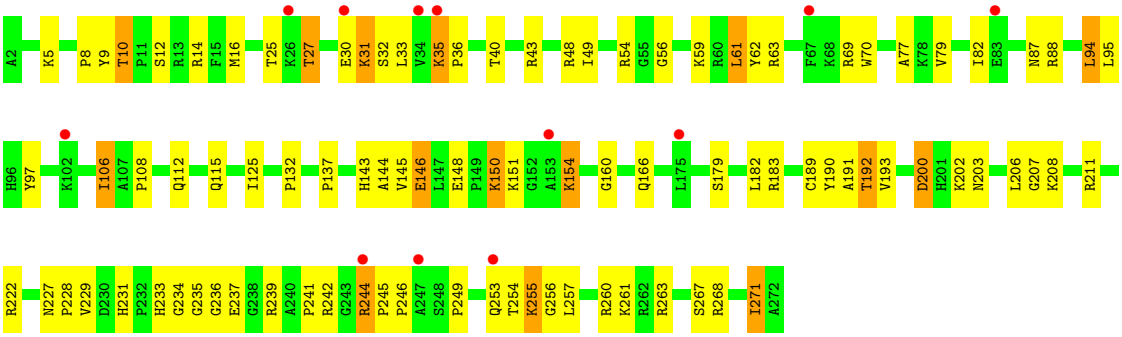
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
56	EA	1	1	1	0	0
			Total	Zn		
56	OA	1	1	1	0	0
			Total	Zn		
56	AC	1	1	1	0	0
			Total	Zn		
56	KC	1	1	1	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron 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 dot above a residue indicates a poor fit to the electron density (RSRZ > 2). 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.

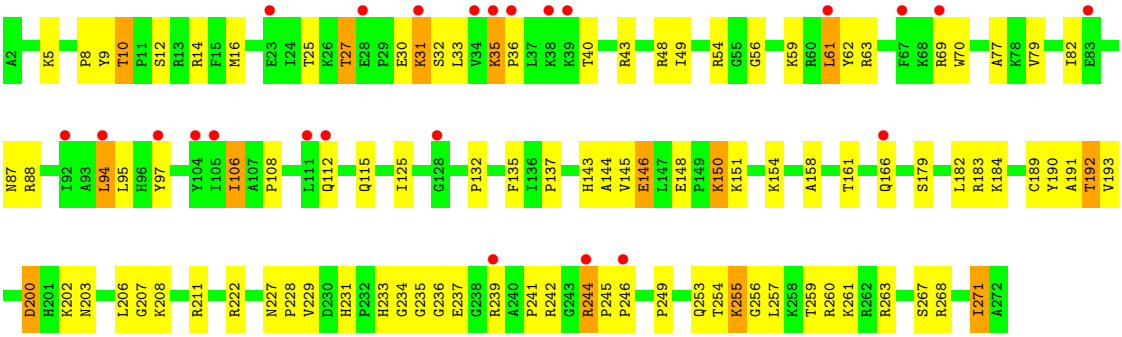
• Molecule 1: 50S ribosomal protein L2

Chain A: 4% 65% 30% 6%



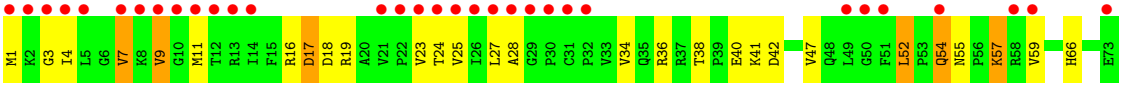
• Molecule 1: 50S ribosomal protein L2

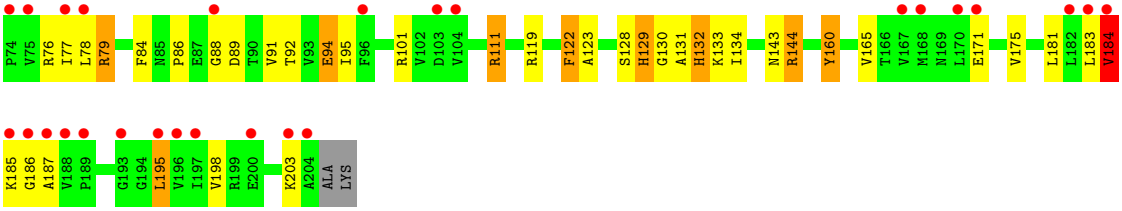
Chain WA: 9% 63% 31% 5%



• Molecule 2: 50S ribosomal protein L3

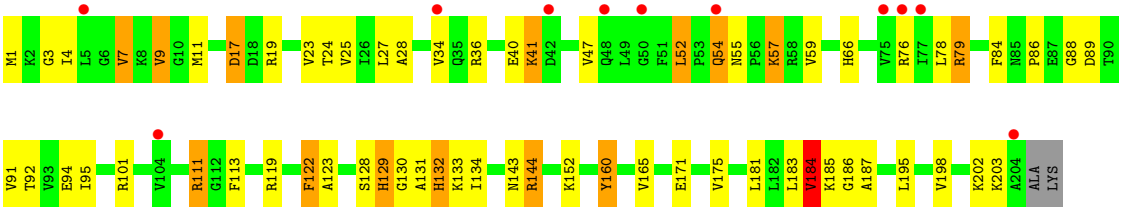
Chain B: 29% 67% 25% 7%





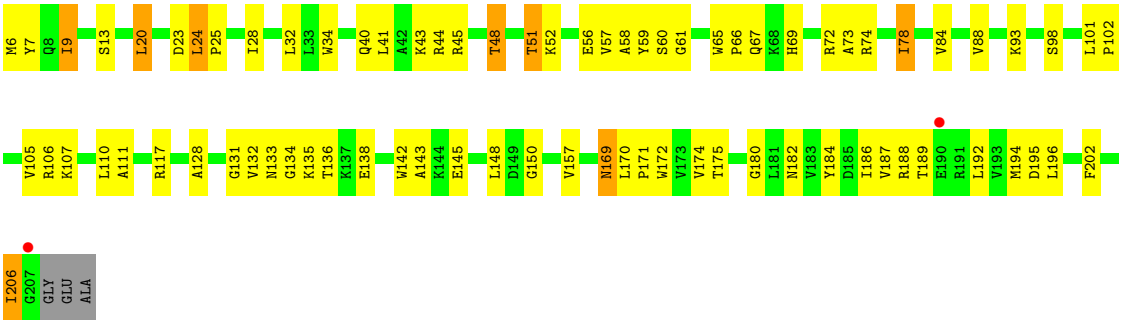
• Molecule 2: 50S ribosomal protein L3

Chain XA:



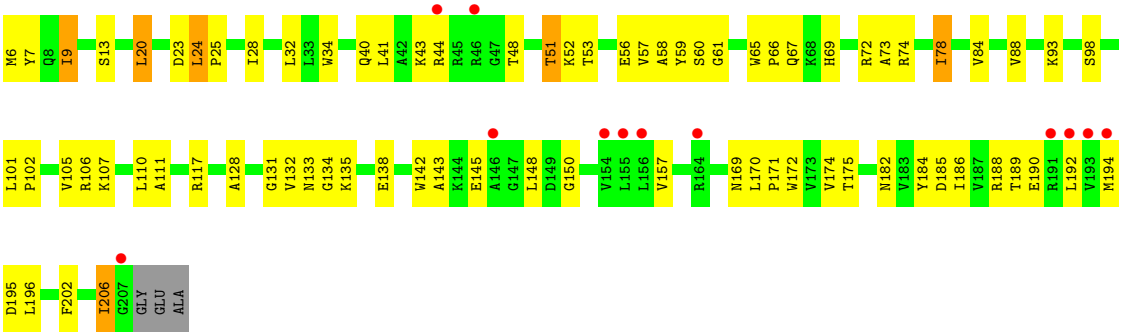
• Molecule 3: 50S ribosomal protein L4

Chain C:



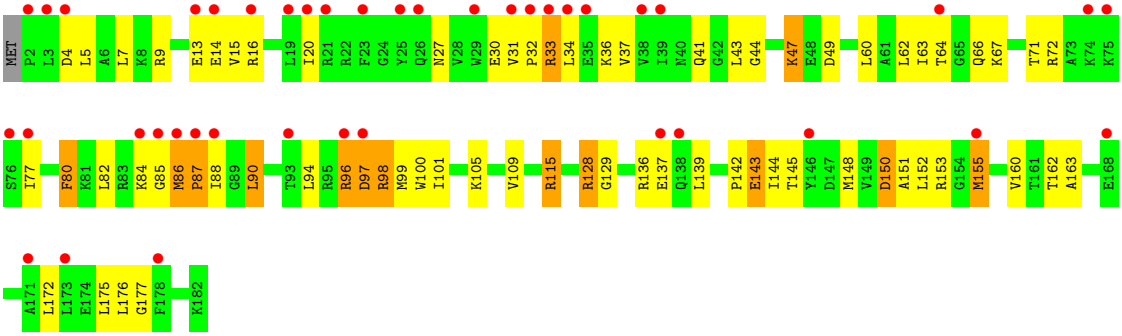
• Molecule 3: 50S ribosomal protein L4

Chain YA:



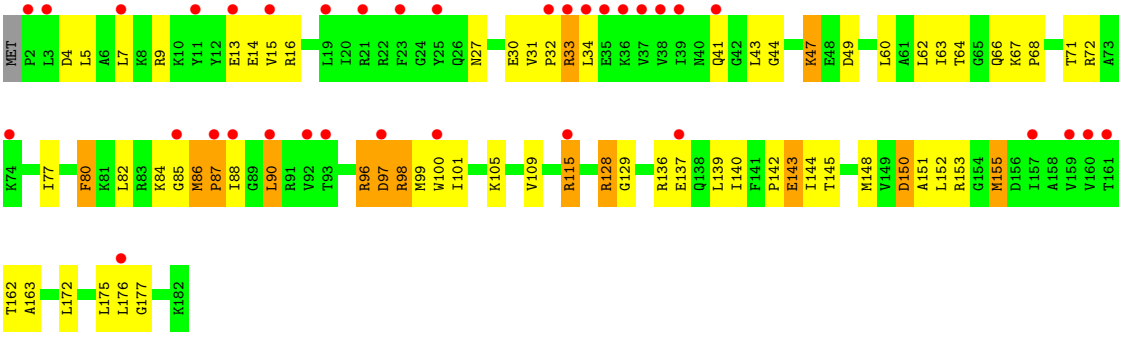
• Molecule 4: 50S ribosomal protein L5

Chain D:



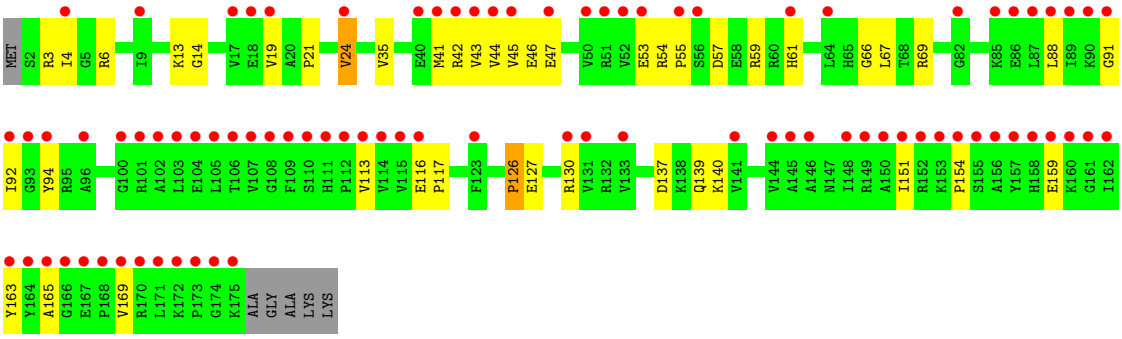
- Molecule 4: 50S ribosomal protein L5

Chain ZA:



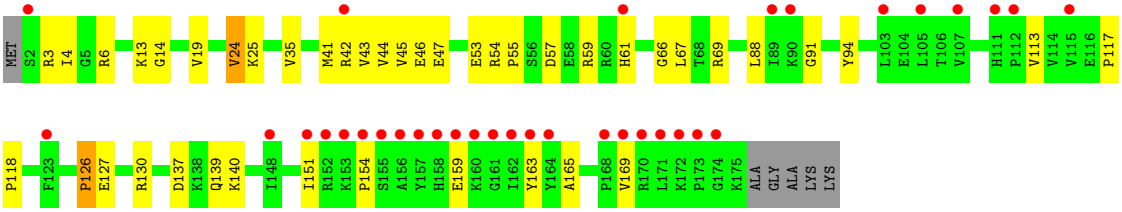
- Molecule 5: 50S ribosomal protein L6

Chain E:



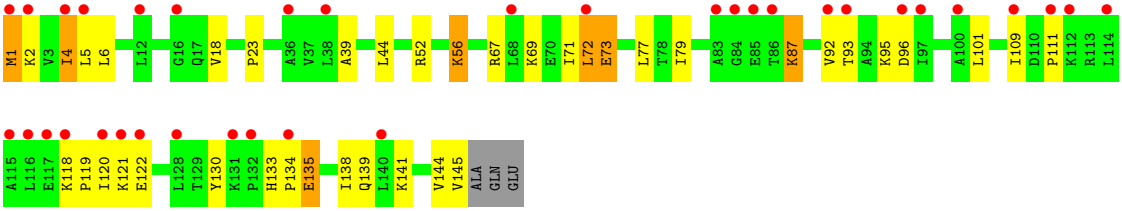
- Molecule 5: 50S ribosomal protein L6

Chain AB:



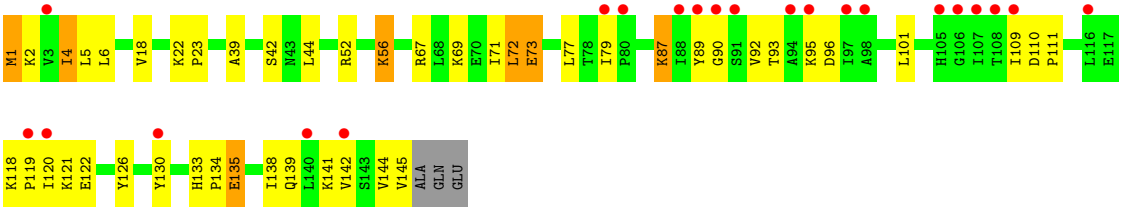
- Molecule 6: 50S ribosomal protein L9

Chain F:



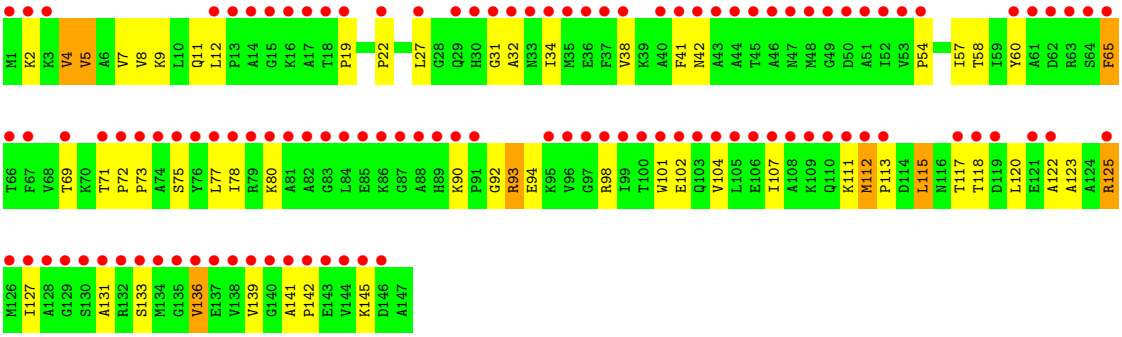
- Molecule 6: 50S ribosomal protein L9

Chain BB:



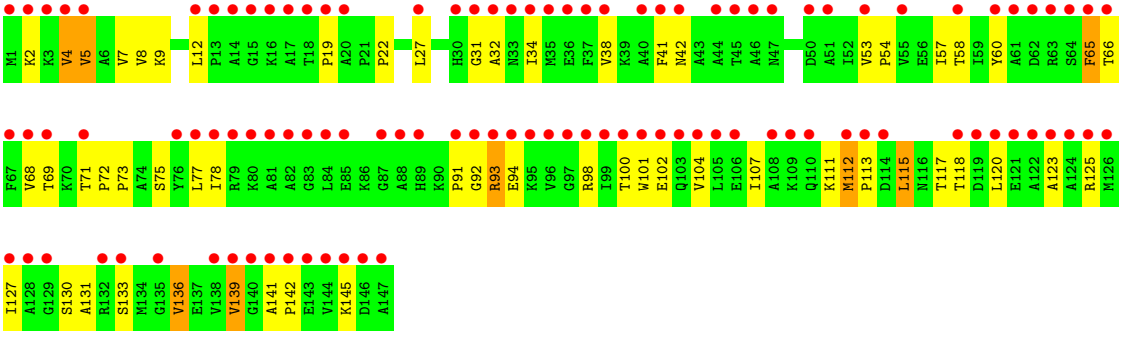
- Molecule 7: 50S ribosomal protein L11

Chain G:



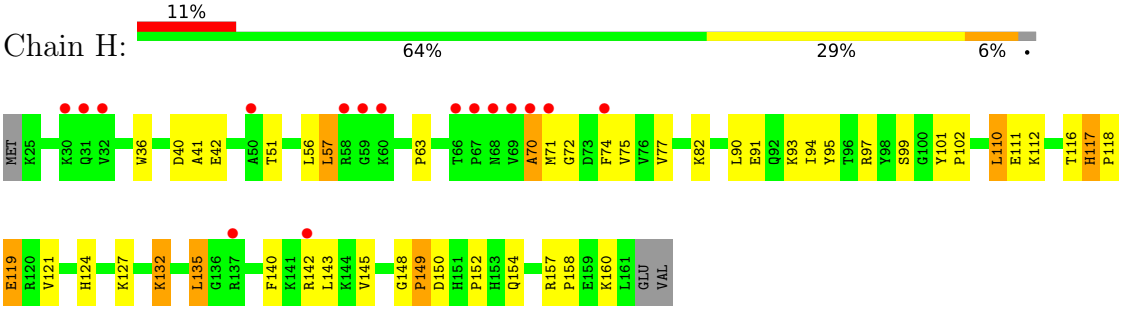
- Molecule 7: 50S ribosomal protein L11

Chain CB:



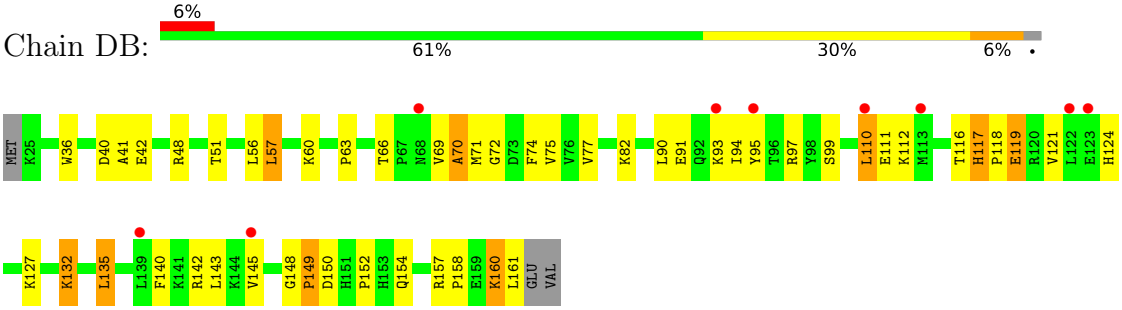
• Molecule 8: 50S ribosomal protein L13

Chain H:



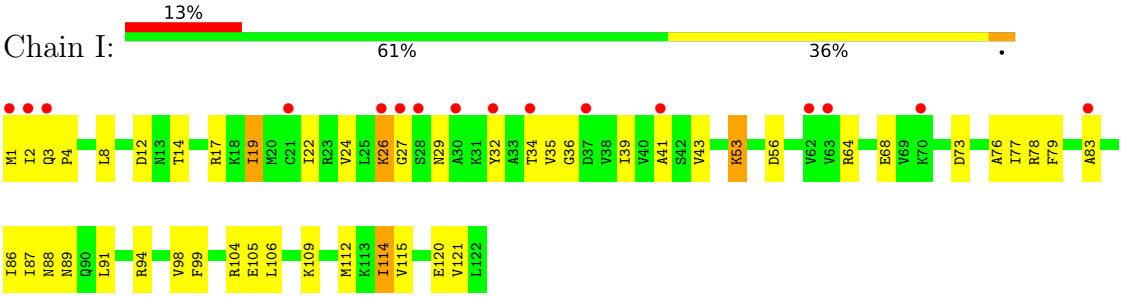
• Molecule 8: 50S ribosomal protein L13

Chain DB:



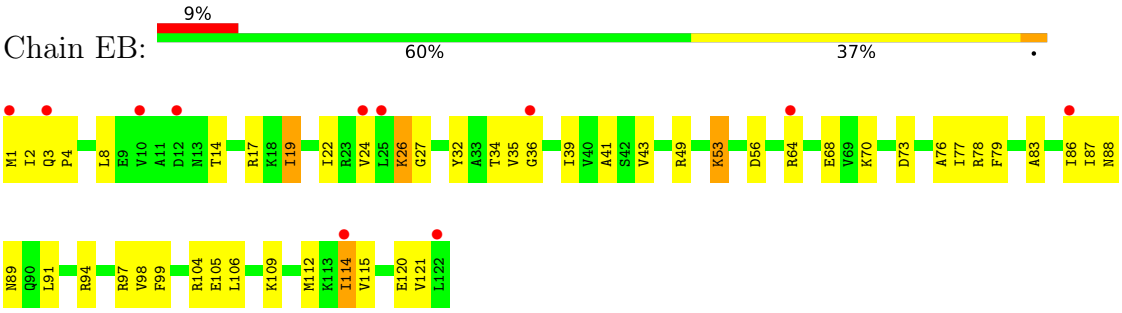
• Molecule 9: 50S ribosomal protein L14

Chain I:



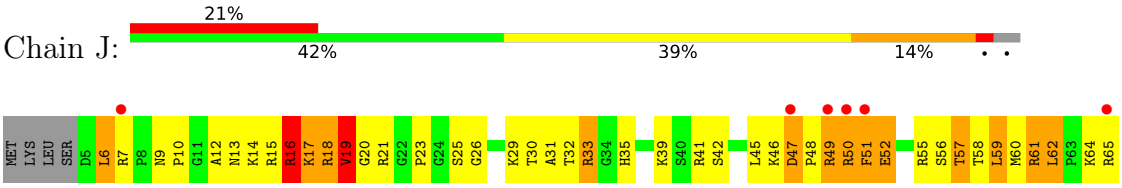
• Molecule 9: 50S ribosomal protein L14

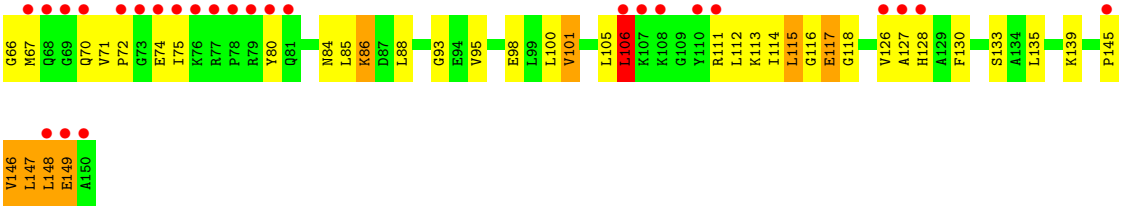
Chain EB:



• Molecule 10: 50S ribosomal protein L15

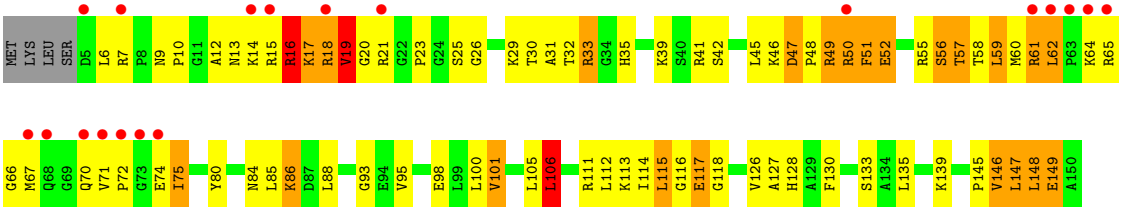
Chain J:





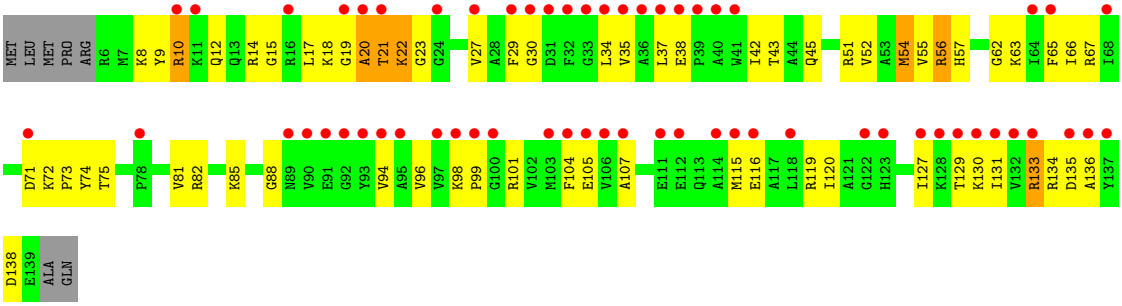
• Molecule 10: 50S ribosomal protein L15

Chain FB:



• Molecule 11: 50S ribosomal protein L16

Chain K:

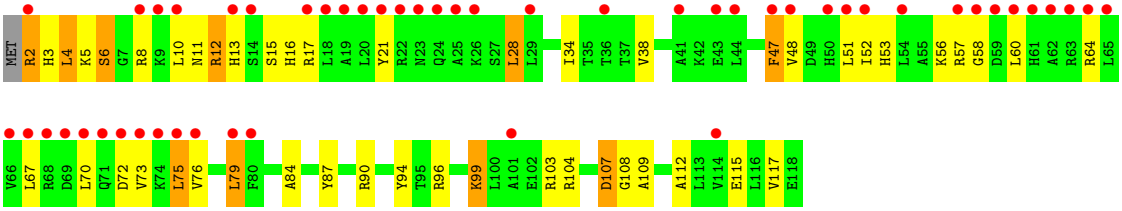


• Molecule 11: 50S ribosomal protein L16

Chain GB:

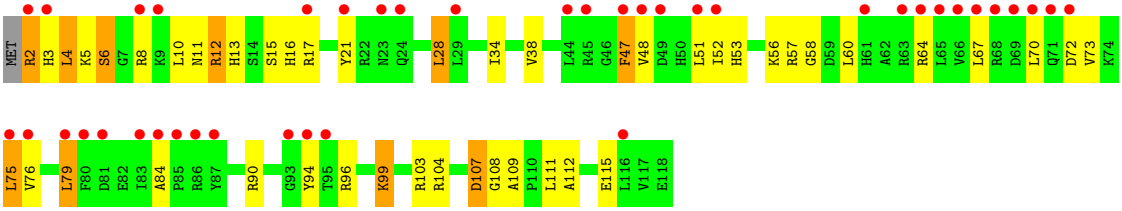
• Molecule 12: 50S ribosomal protein L17

Chain L:



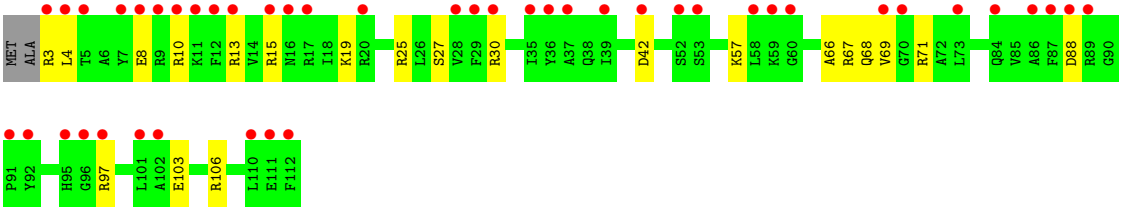
- Molecule 12: 50S ribosomal protein L17

Chain HB:



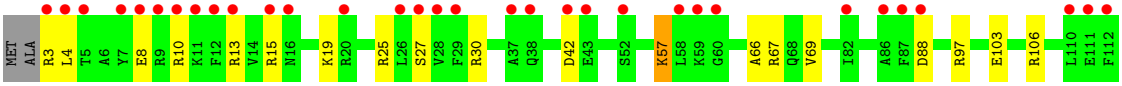
- Molecule 13: 50S ribosomal protein L18

Chain M:



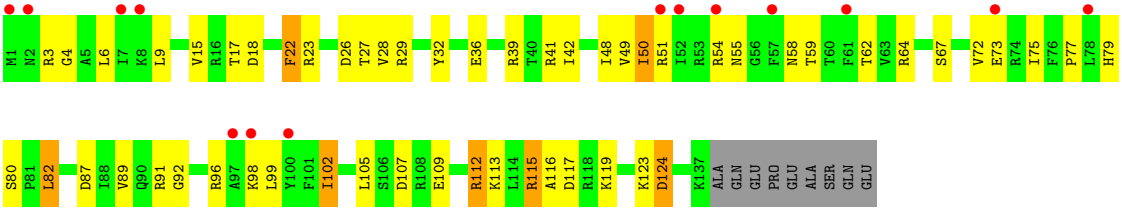
- Molecule 13: 50S ribosomal protein L18

Chain IB:



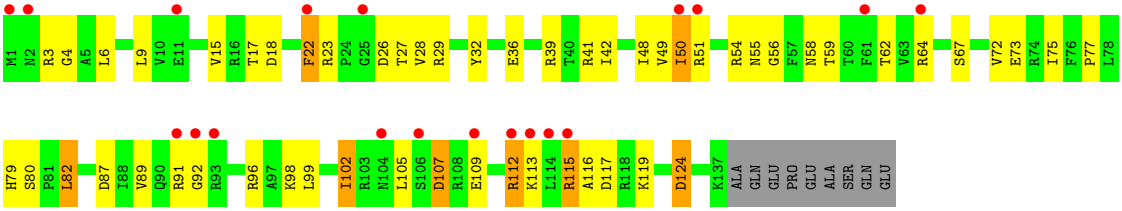
- Molecule 14: 50S ribosomal protein L19

Chain N:



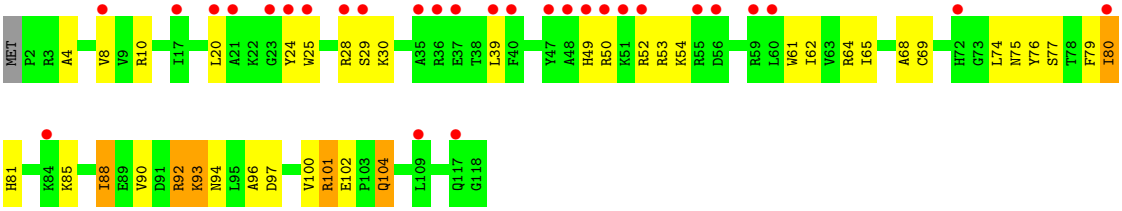
- Molecule 14: 50S ribosomal protein L19

Chain JB:



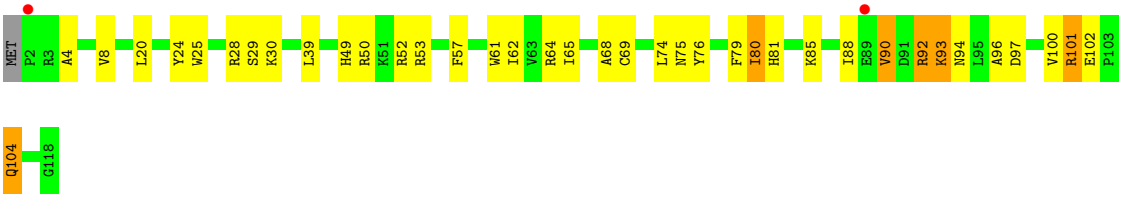
• Molecule 15: 50S ribosomal protein L20

Chain O:



• Molecule 15: 50S ribosomal protein L20

Chain KB:

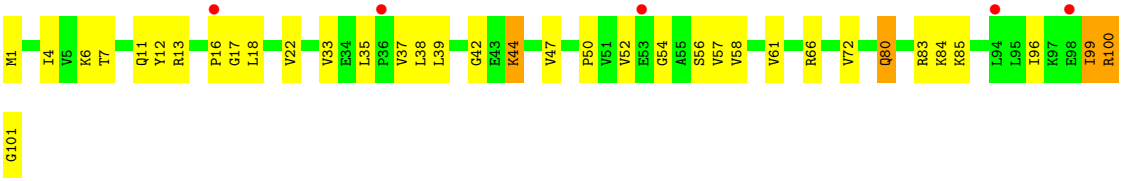


• Molecule 16: 50S ribosomal protein L21

Chain P:

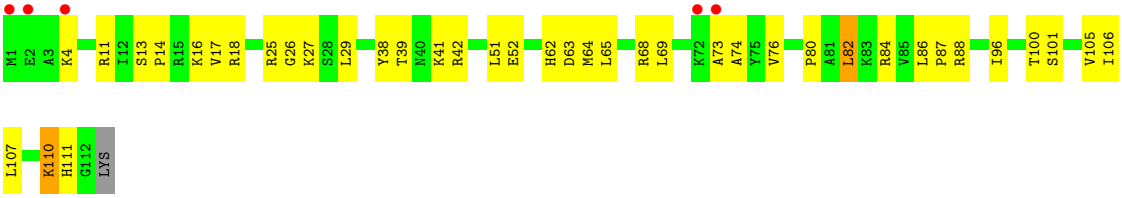
• Molecule 16: 50S ribosomal protein L21

Chain LB:



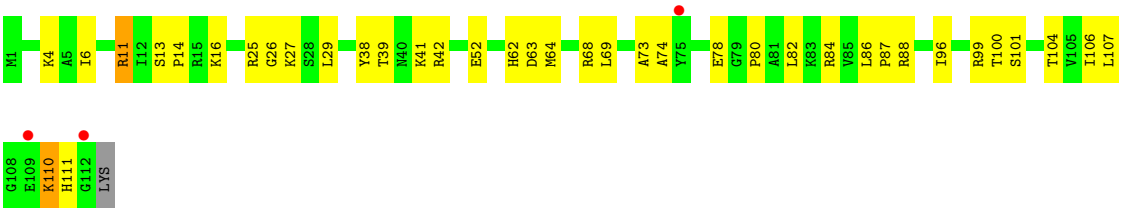
• Molecule 17: 50S ribosomal protein L22

Chain Q:



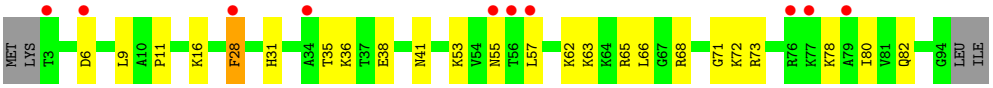
• Molecule 17: 50S ribosomal protein L22

Chain MB:



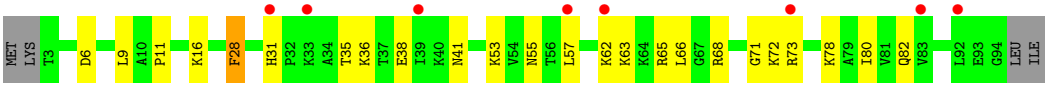
• Molecule 18: 50S ribosomal protein L23

Chain R:



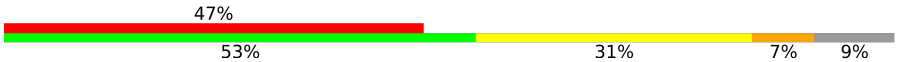
• Molecule 18: 50S ribosomal protein L23

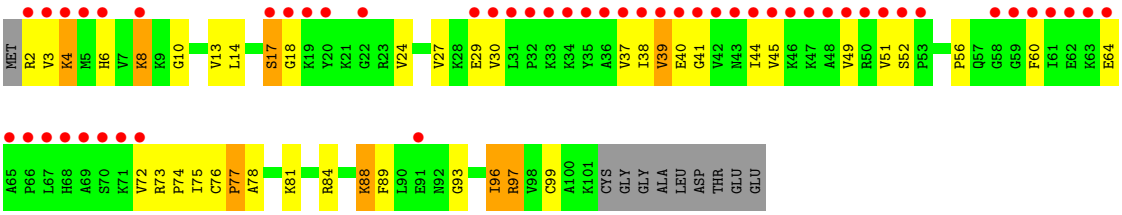
Chain NB:



• Molecule 19: 50S ribosomal protein L24

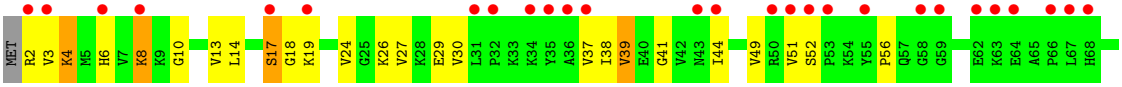
Chain S:

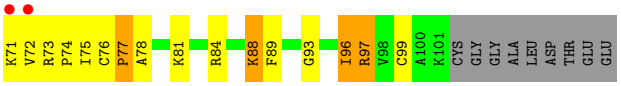




• Molecule 19: 50S ribosomal protein L24

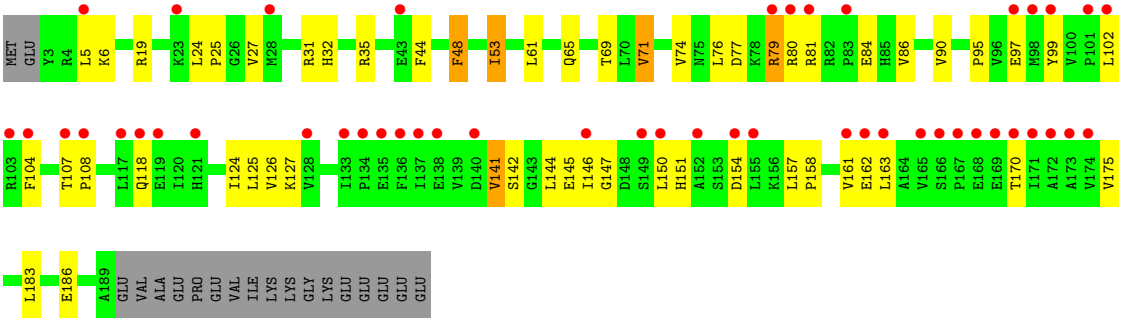
Chain OB:





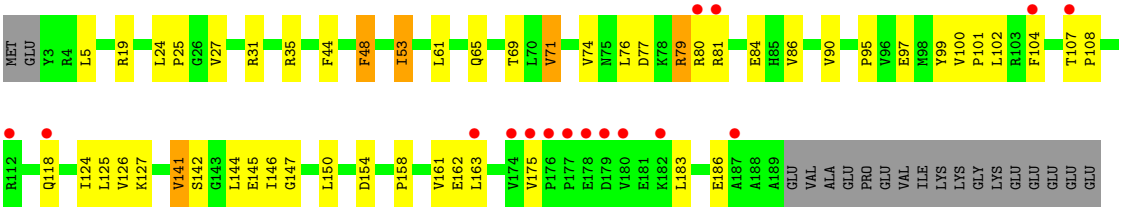
• Molecule 20: 50S ribosomal protein L25

Chain T:



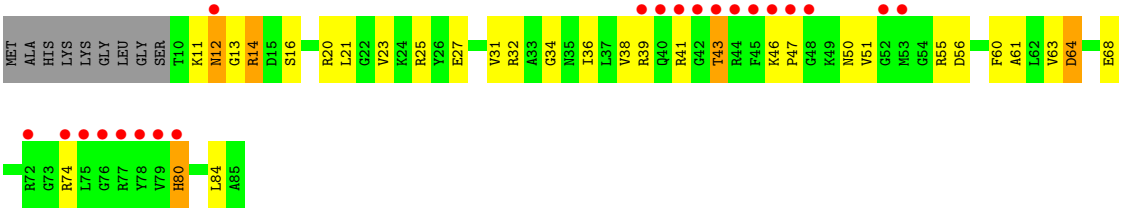
• Molecule 20: 50S ribosomal protein L25

Chain PB:



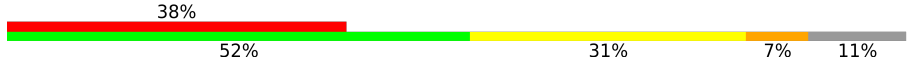
• Molecule 21: 50S ribosomal protein L27

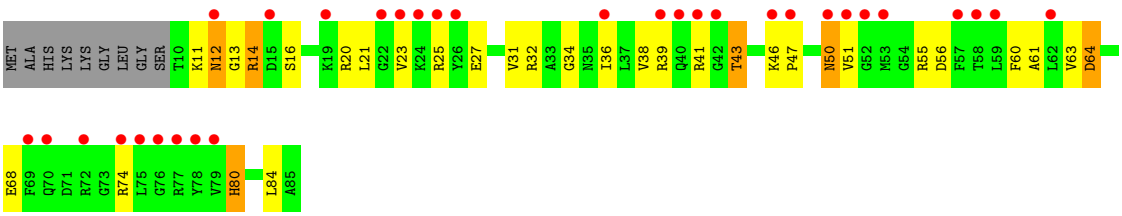
Chain U:



• Molecule 21: 50S ribosomal protein L27

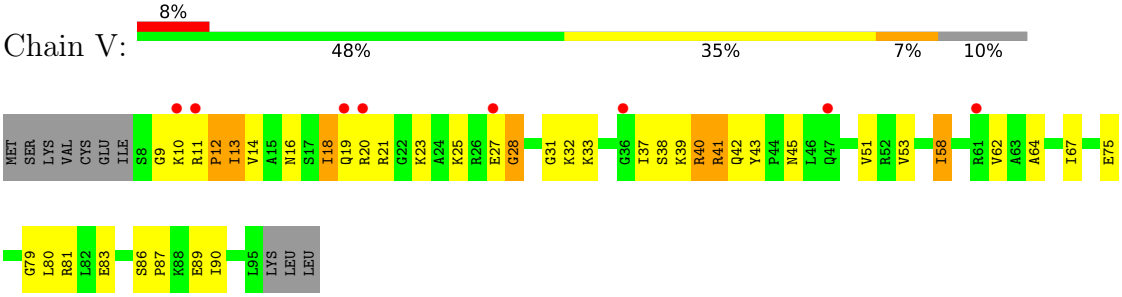
Chain QB:





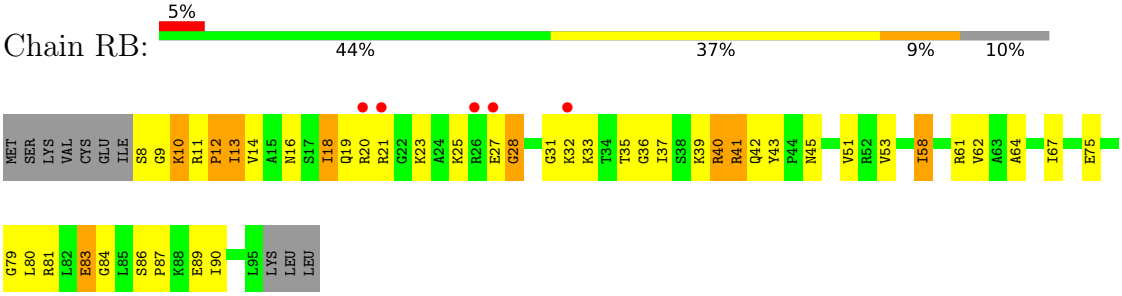
• Molecule 22: 50S ribosomal protein L28

Chain V:



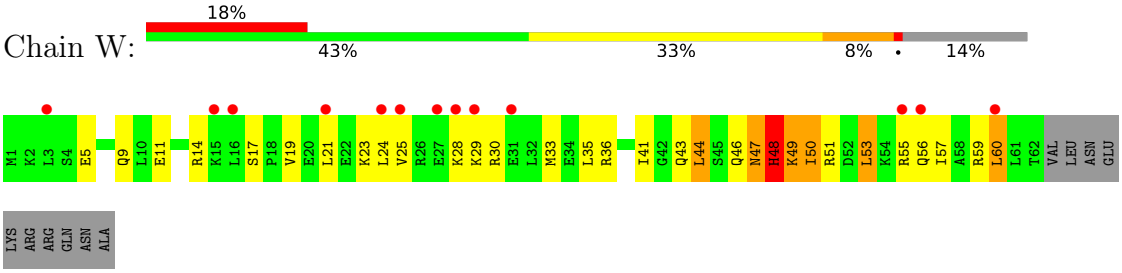
• Molecule 22: 50S ribosomal protein L28

Chain RB:



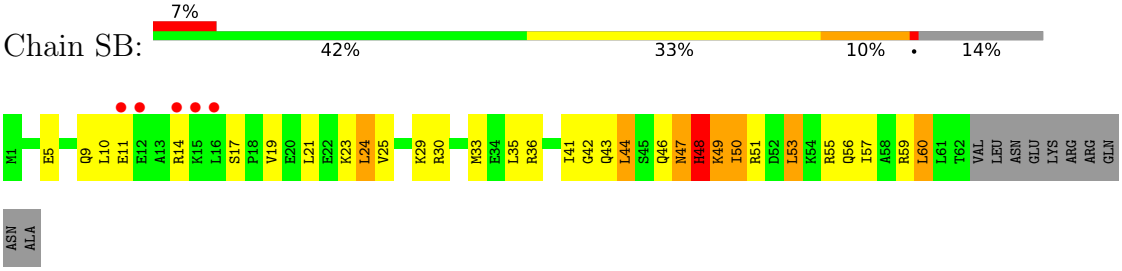
• Molecule 23: 50S ribosomal protein L29

Chain W:



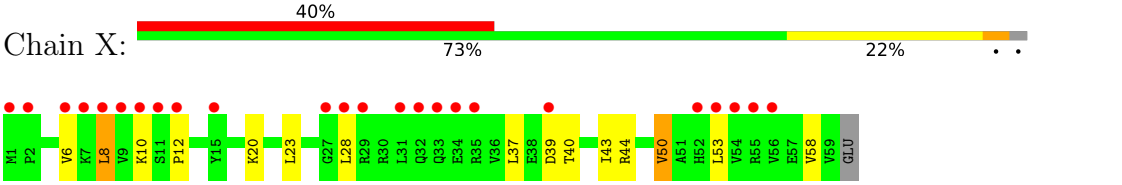
• Molecule 23: 50S ribosomal protein L29

Chain SB:



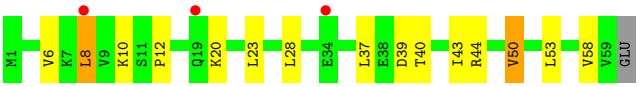
• Molecule 24: 50S ribosomal protein L30

Chain X:



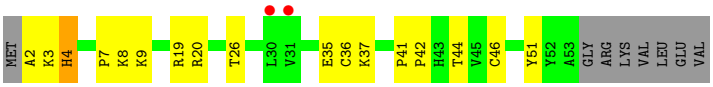
• Molecule 24: 50S ribosomal protein L30

Chain TB:



• Molecule 25: 50S ribosomal protein L32

Chain Y:

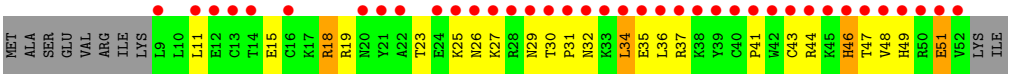


• Molecule 25: 50S ribosomal protein L32

Chain UB:

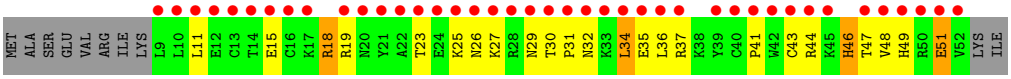
• Molecule 26: 50S ribosomal protein L33

Chain Z:



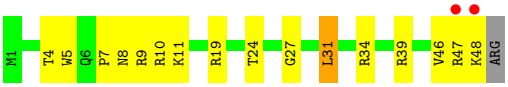
• Molecule 26: 50S ribosomal protein L33

Chain VB:



• Molecule 27: 50S ribosomal protein L34

Chain AA:

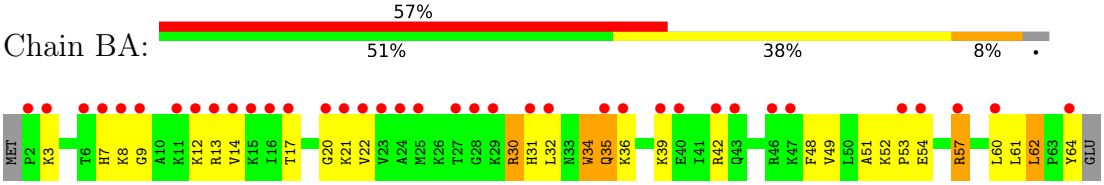


• Molecule 27: 50S ribosomal protein L34

Chain WB:

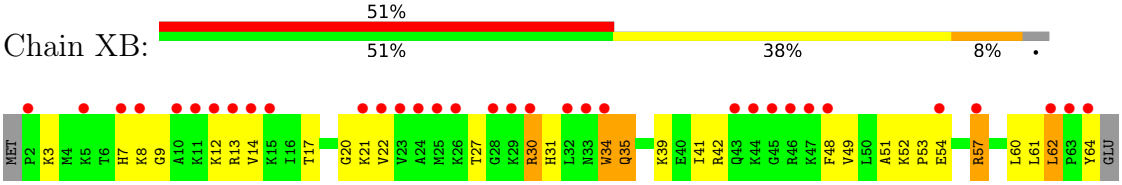
• Molecule 28: 50S ribosomal protein L35

Chain BA:



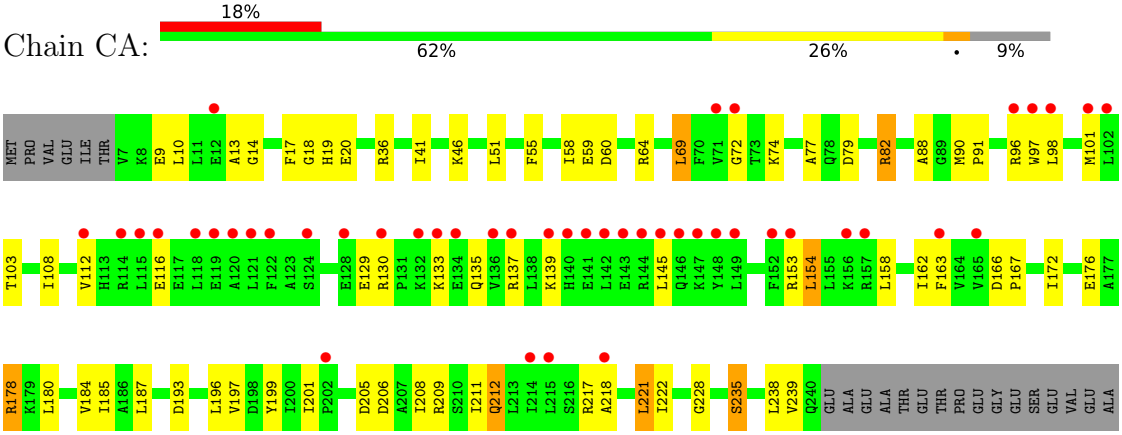
• Molecule 28: 50S ribosomal protein L35

Chain XB:



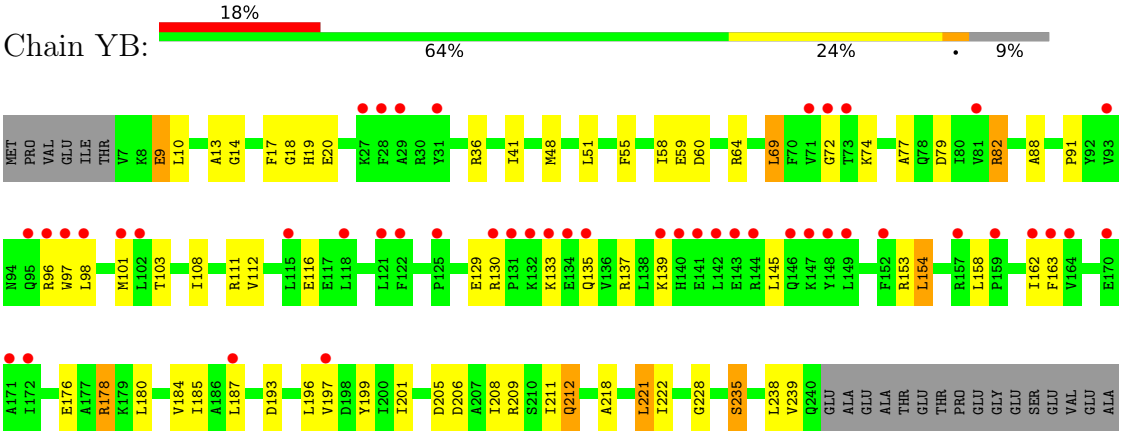
• Molecule 29: 30S ribosomal protein S2

Chain CA:



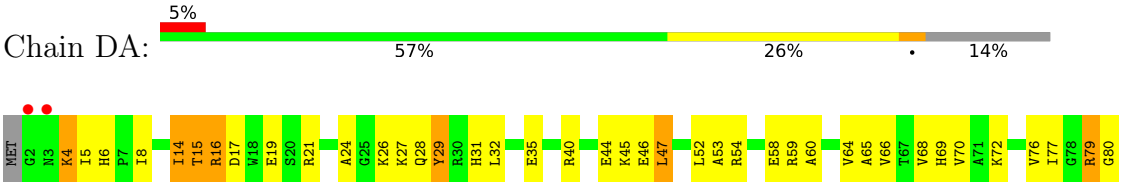
• Molecule 29: 30S ribosomal protein S2

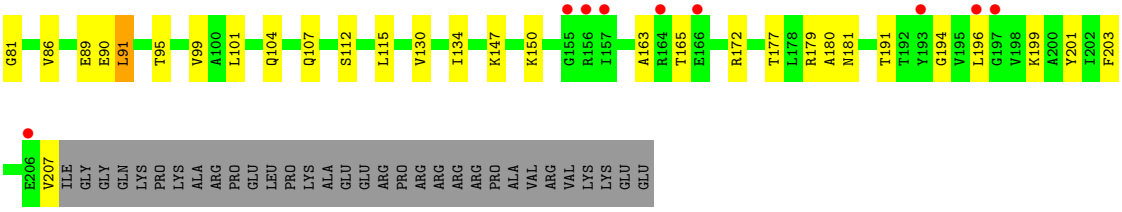
Chain YB:



• Molecule 30: 30S ribosomal protein S3

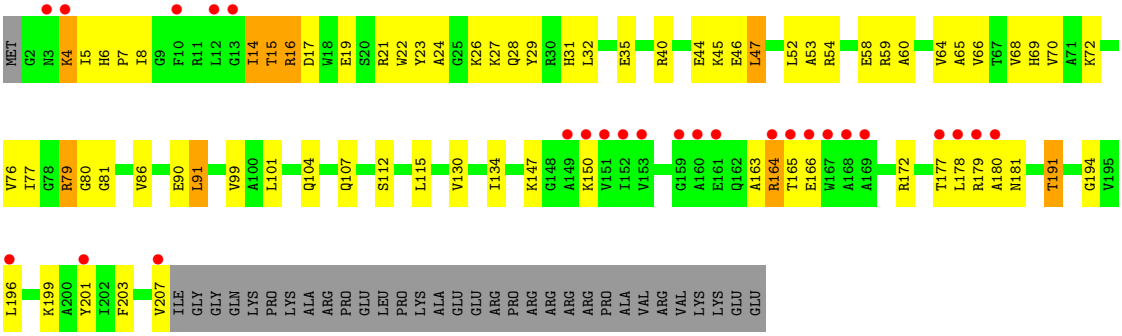
Chain DA:





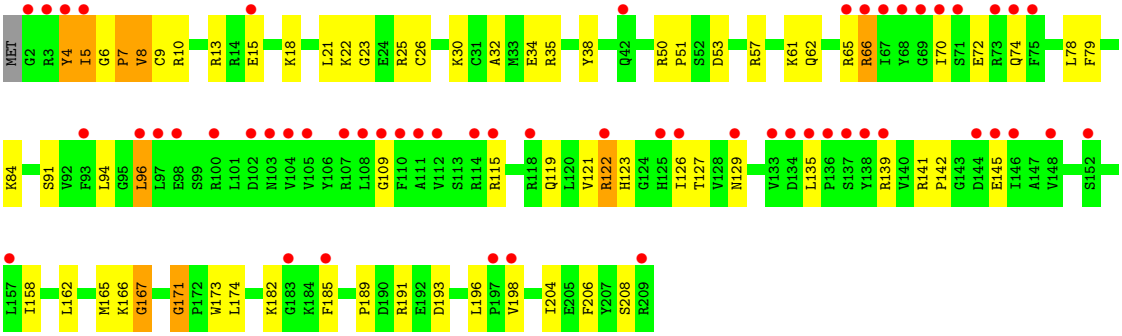
• Molecule 30: 30S ribosomal protein S3

Chain ZB:



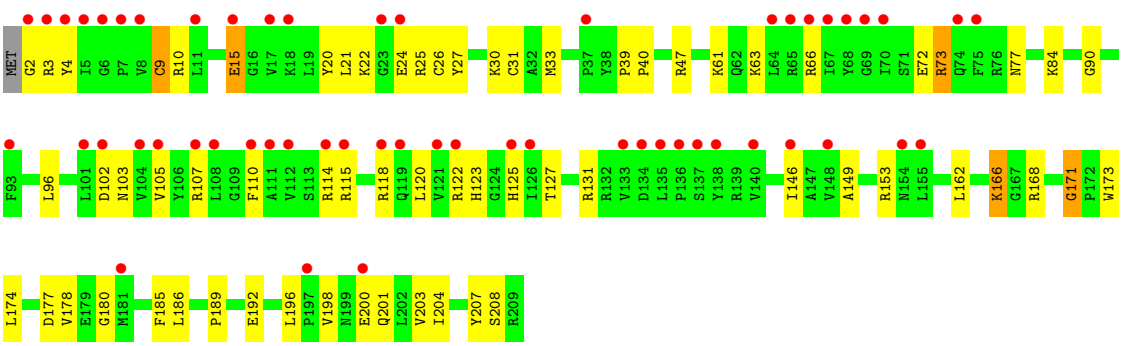
• Molecule 31: 30S ribosomal protein S4

Chain EA:



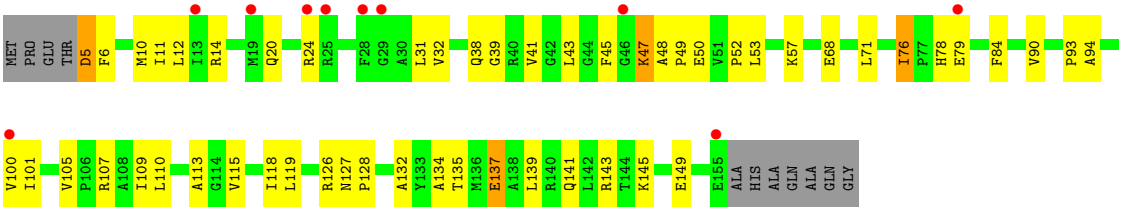
• Molecule 31: 30S ribosomal protein S4

Chain AC:



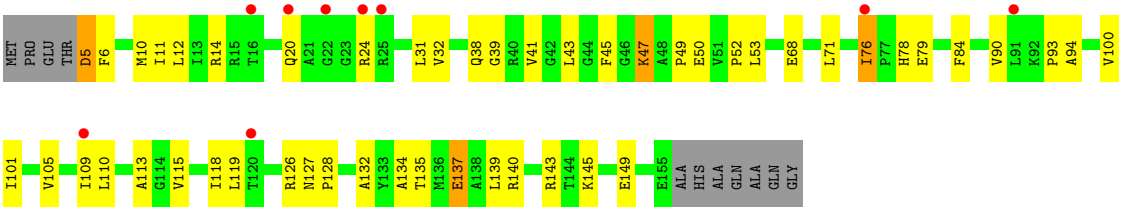
• Molecule 32: 30S ribosomal protein S5

Chain FA:



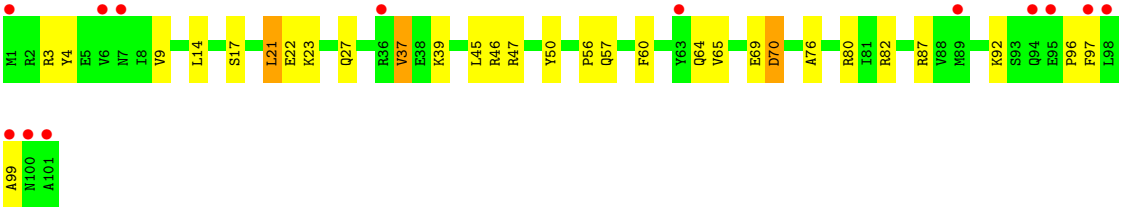
• Molecule 32: 30S ribosomal protein S5

Chain BC:



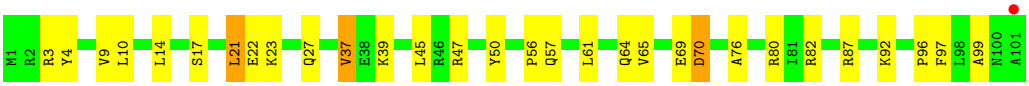
• Molecule 33: 30S ribosomal protein S6

Chain GA:



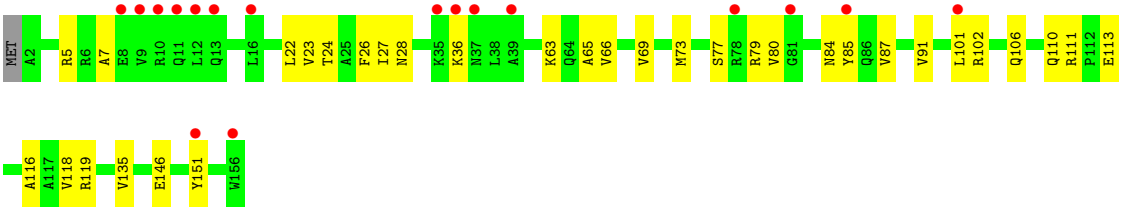
• Molecule 33: 30S ribosomal protein S6

Chain CC:



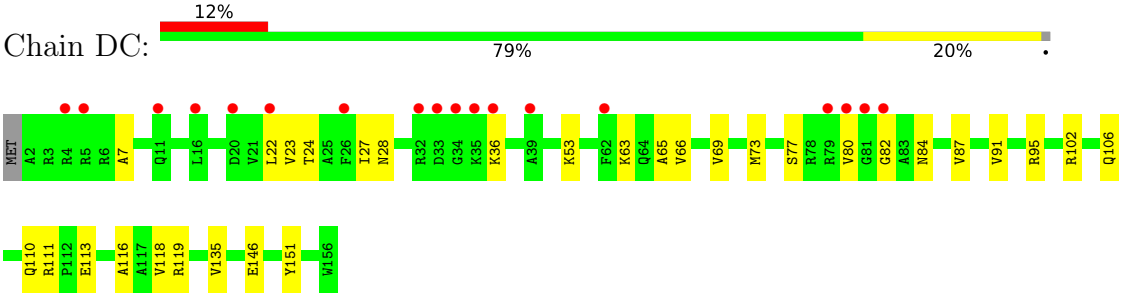
• Molecule 34: 30S ribosomal protein S7

Chain HA:



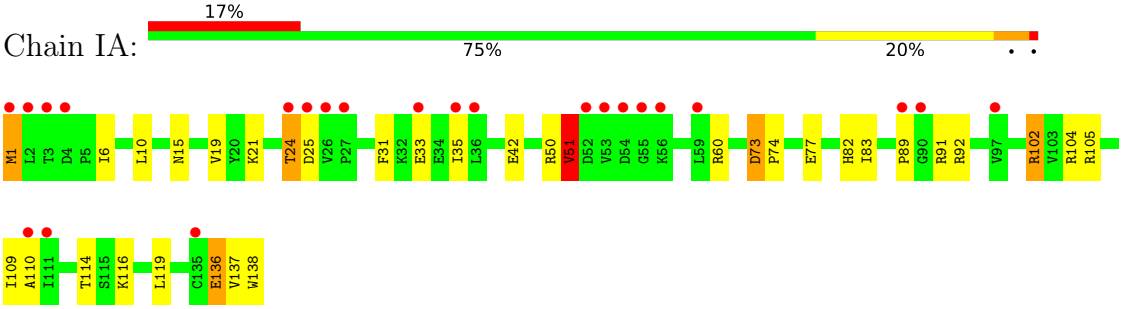
• Molecule 34: 30S ribosomal protein S7

Chain DC:



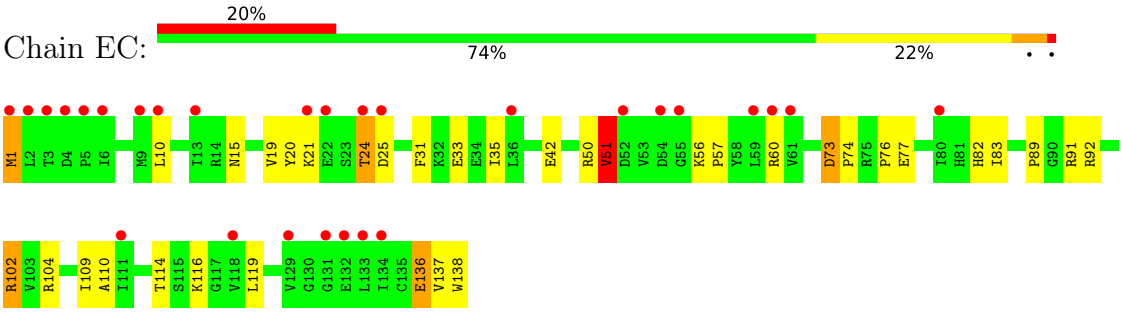
• Molecule 35: 30S ribosomal protein S8

Chain IA:



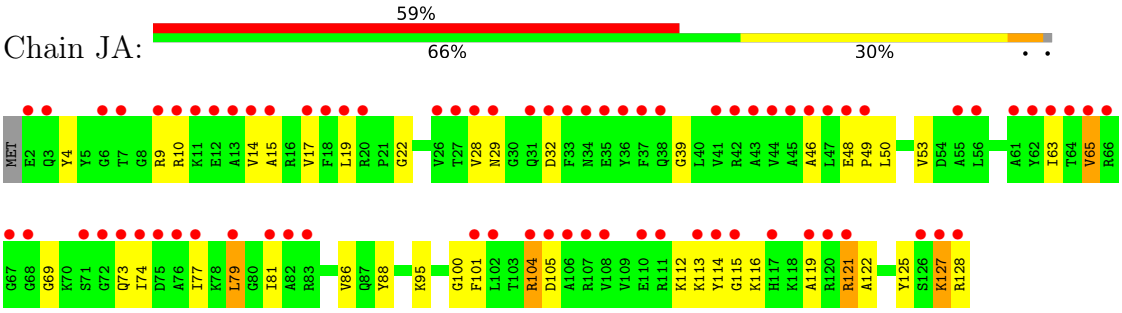
• Molecule 35: 30S ribosomal protein S8

Chain EC:



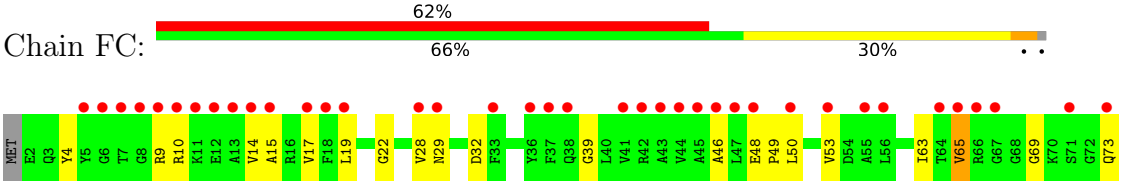
• Molecule 36: 30S ribosomal protein S9

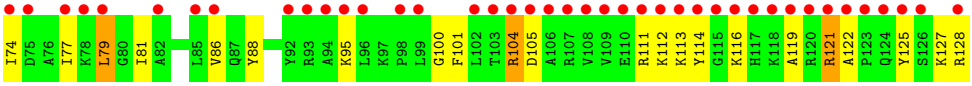
Chain JA:



• Molecule 36: 30S ribosomal protein S9

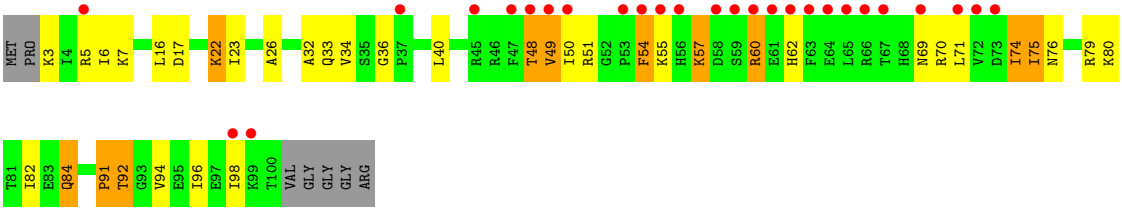
Chain FC:





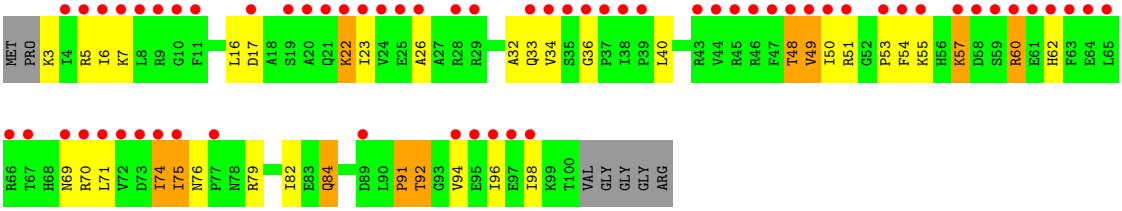
• Molecule 37: 30S ribosomal protein S10

Chain KA:



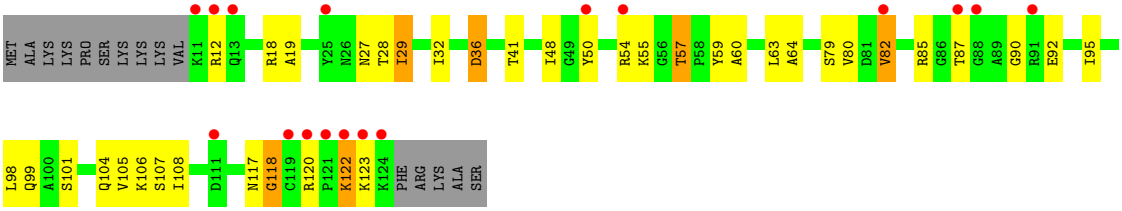
• Molecule 37: 30S ribosomal protein S10

Chain GC:



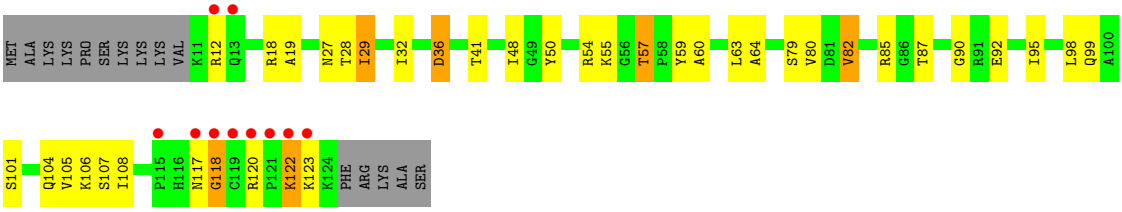
• Molecule 38: 30S ribosomal protein S11

Chain LA:



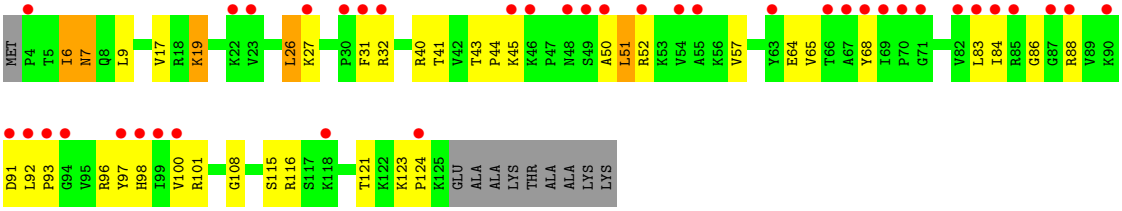
• Molecule 38: 30S ribosomal protein S11

Chain HC:



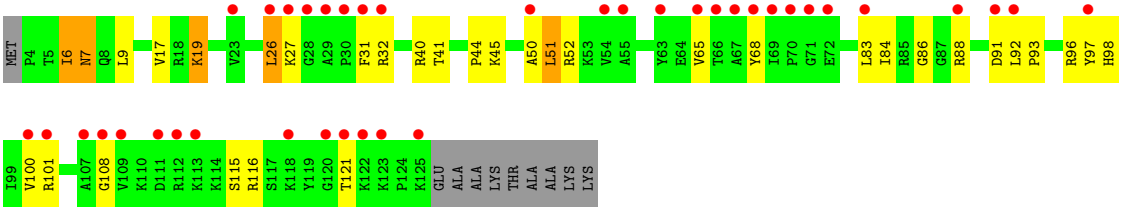
• Molecule 39: 30S ribosomal protein S12

Chain MA:



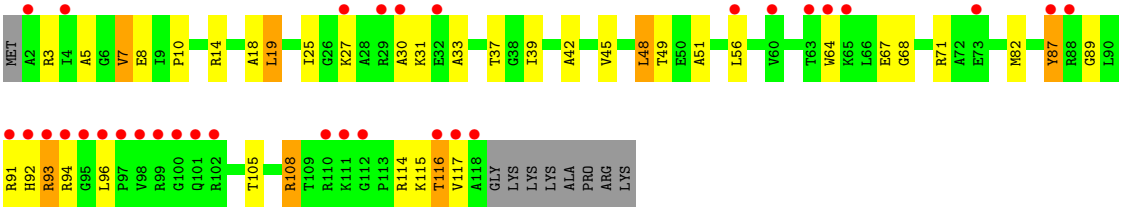
- Molecule 39: 30S ribosomal protein S12

Chain IC:



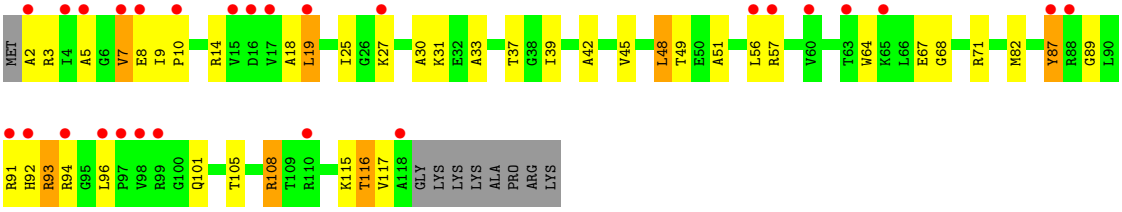
- Molecule 40: 30S ribosomal protein S13

Chain NA:



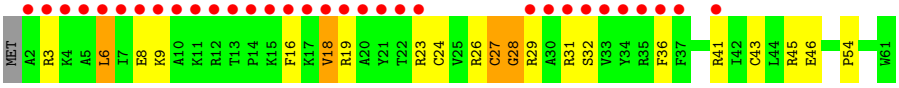
- Molecule 40: 30S ribosomal protein S13

Chain JC:



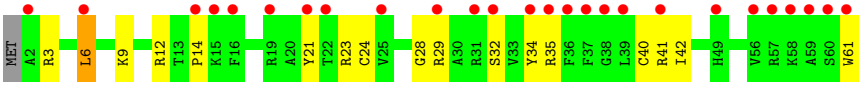
- Molecule 41: 30S ribosomal protein S14

Chain OA:



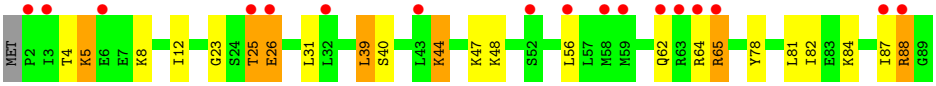
- Molecule 41: 30S ribosomal protein S14

Chain KC:



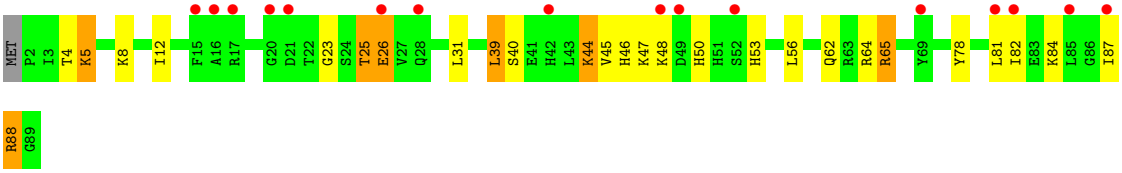
• Molecule 42: 30S ribosomal protein S15

Chain PA:



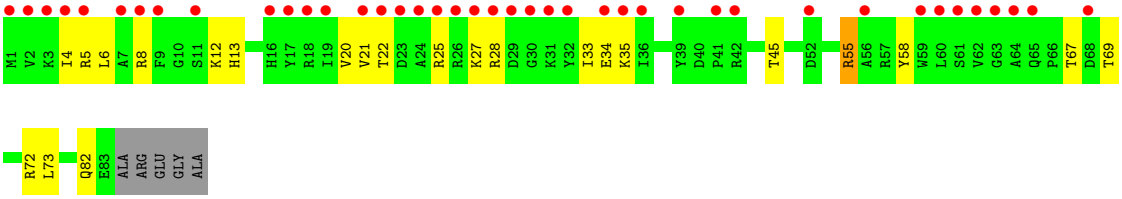
• Molecule 42: 30S ribosomal protein S15

Chain LC:



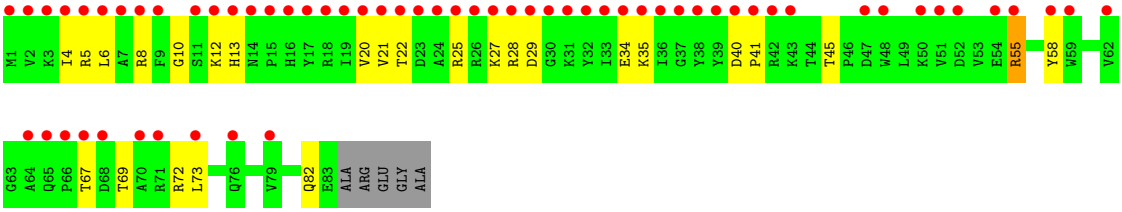
• Molecule 43: 30S ribosomal protein S16

Chain QA:



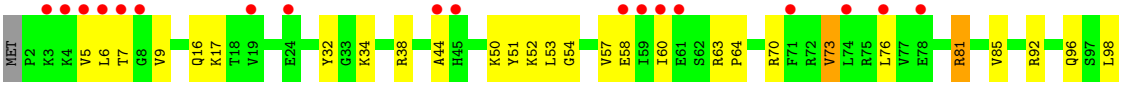
• Molecule 43: 30S ribosomal protein S16

Chain MC:



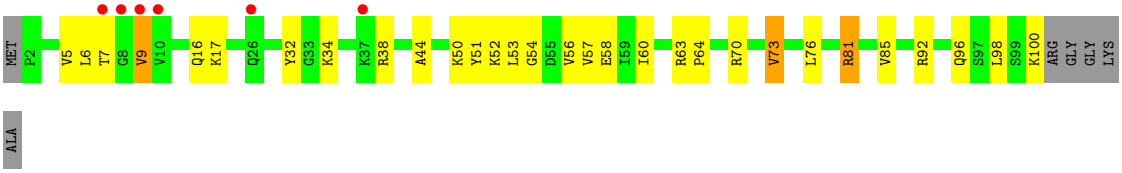
• Molecule 44: 30S ribosomal protein S17

Chain RA:



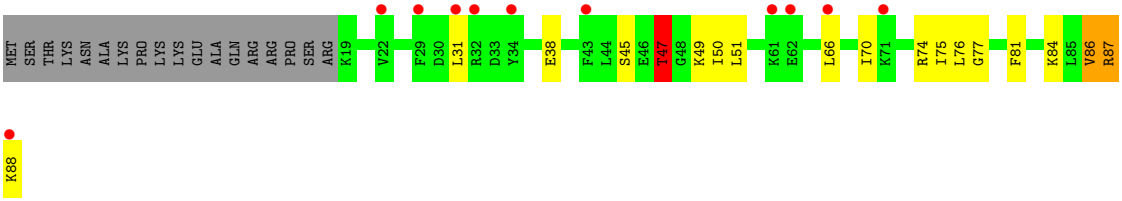
• Molecule 44: 30S ribosomal protein S17

Chain NC:



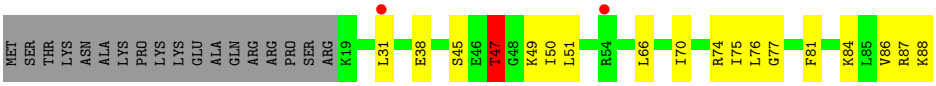
• Molecule 45: 30S ribosomal protein S18

Chain SA:



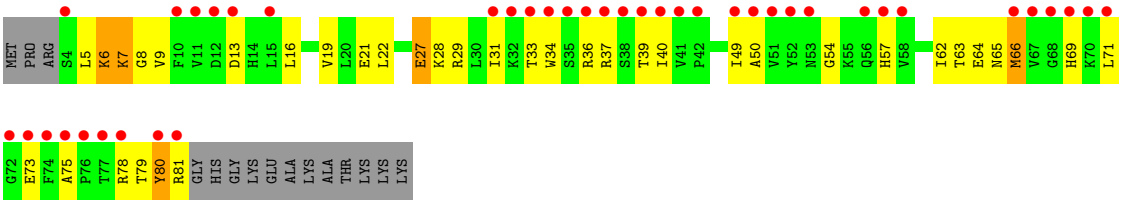
• Molecule 45: 30S ribosomal protein S18

Chain OC:



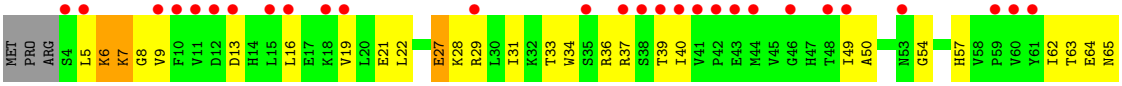
• Molecule 46: 30S ribosomal protein S19

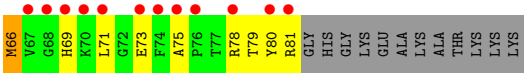
Chain TA:



• Molecule 46: 30S ribosomal protein S19

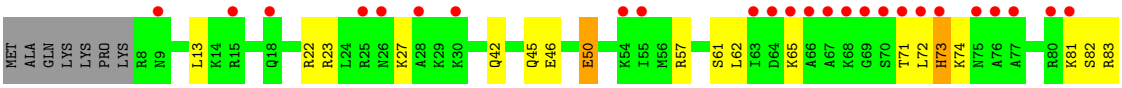
Chain PC:

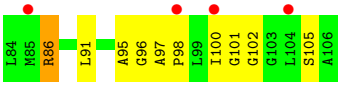




• Molecule 47: 30S ribosomal protein S20

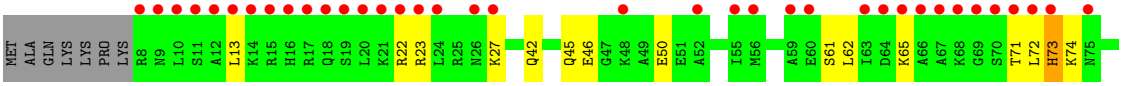
Chain UA:

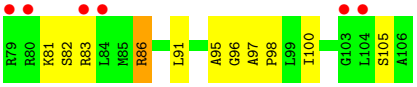




• Molecule 47: 30S ribosomal protein S20

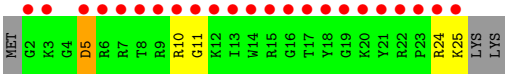
Chain QC:





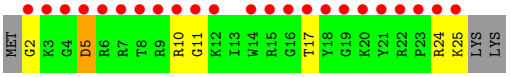
• Molecule 48: 30S ribosomal protein Thx

Chain VA:



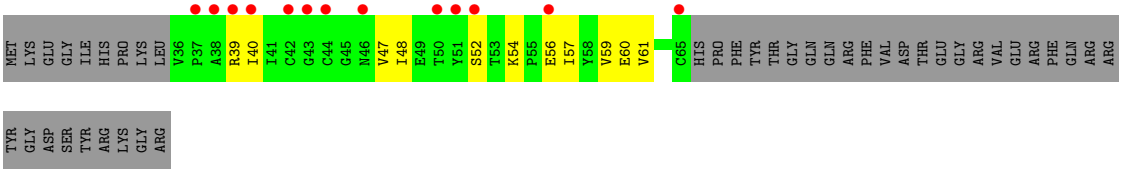
• Molecule 48: 30S ribosomal protein Thx

Chain RC:



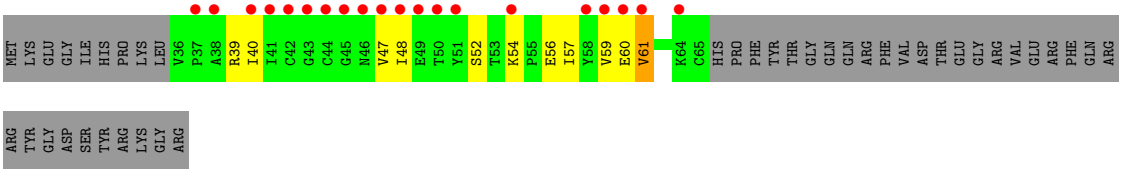
• Molecule 49: 50S ribosomal protein L31

Chain SC:



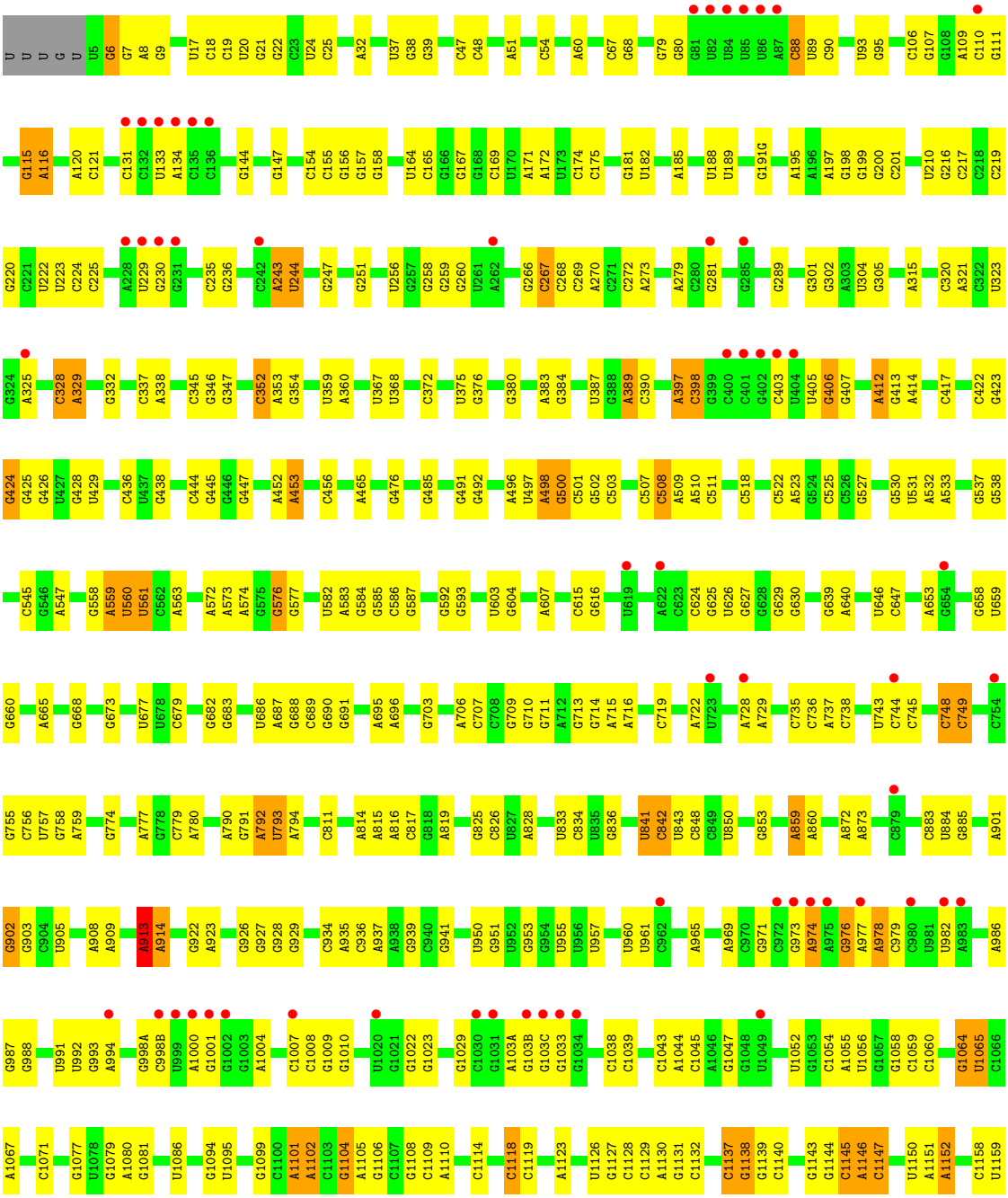
• Molecule 49: 50S ribosomal protein L31

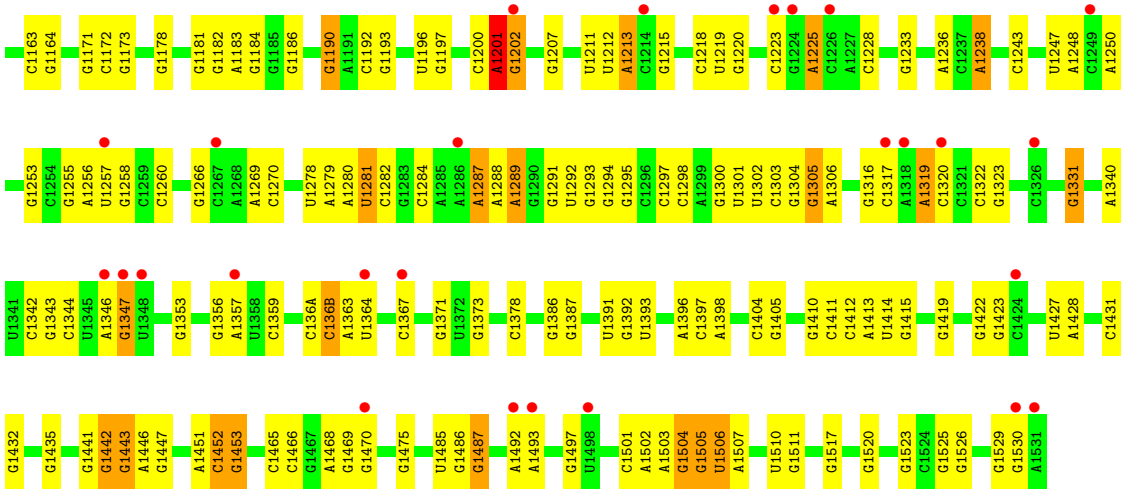
Chain TC:



• Molecule 50: 16S ribosomal RNA

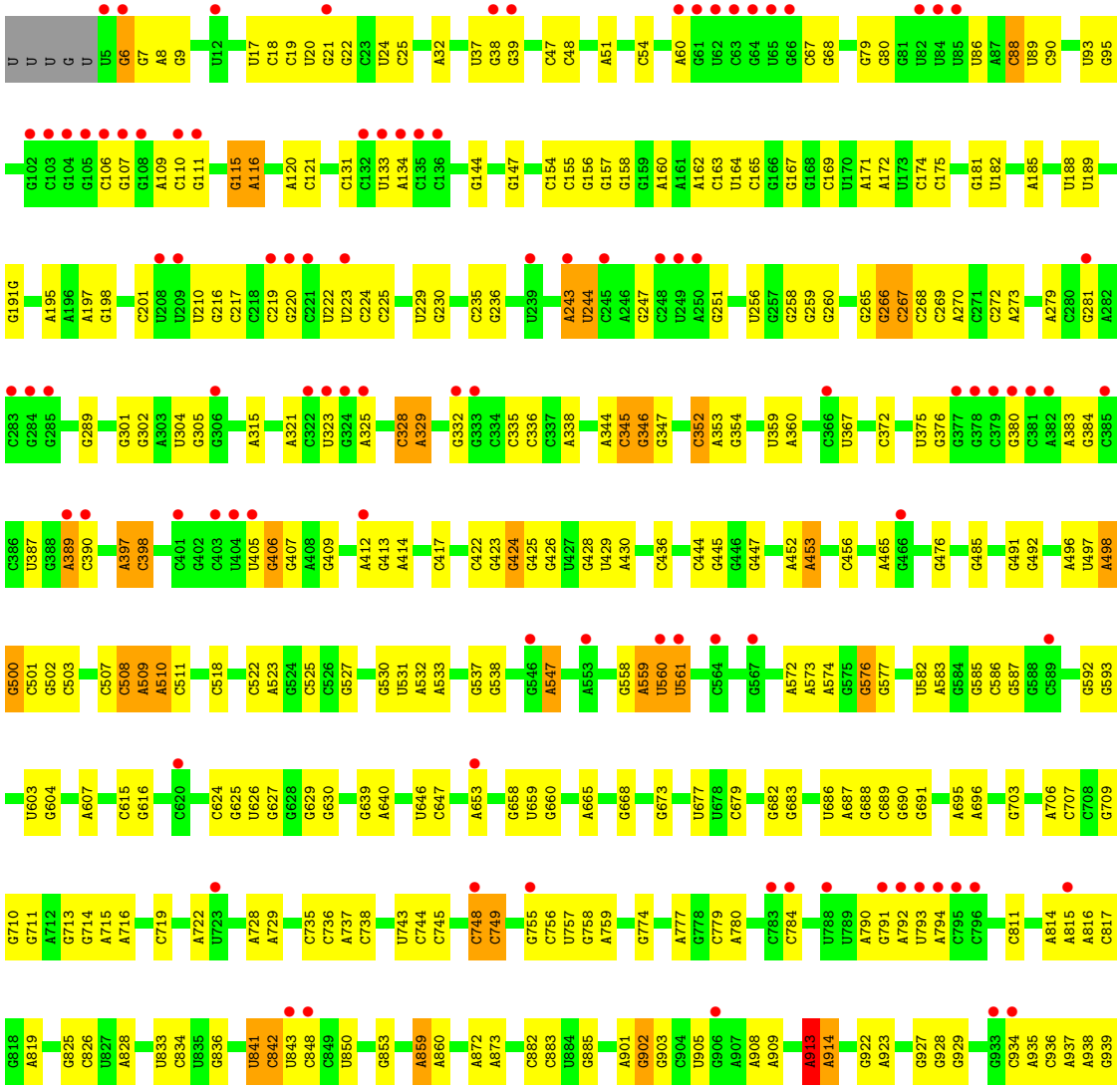
Chain UC:

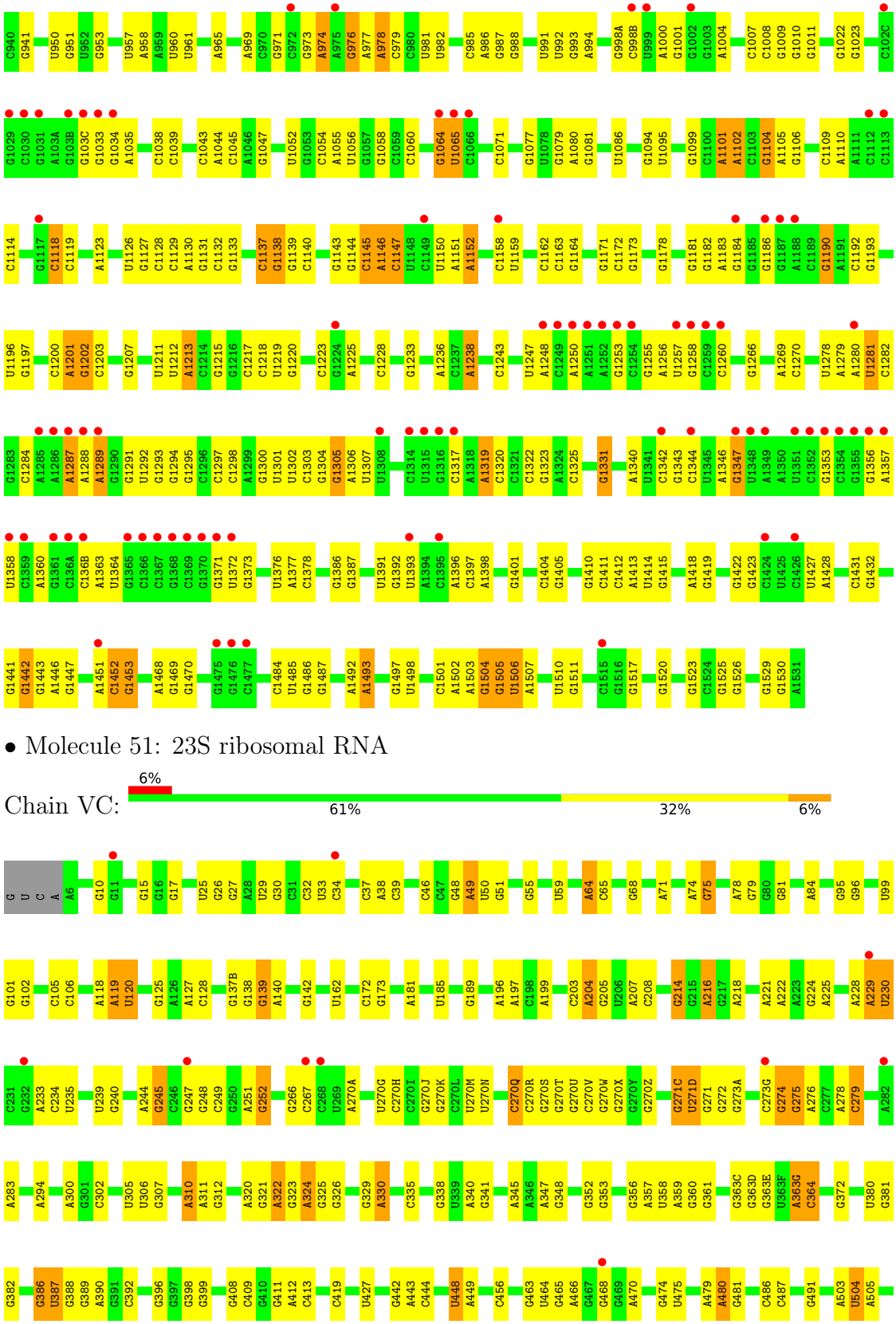




- Molecule 50: 16S ribosomal RNA

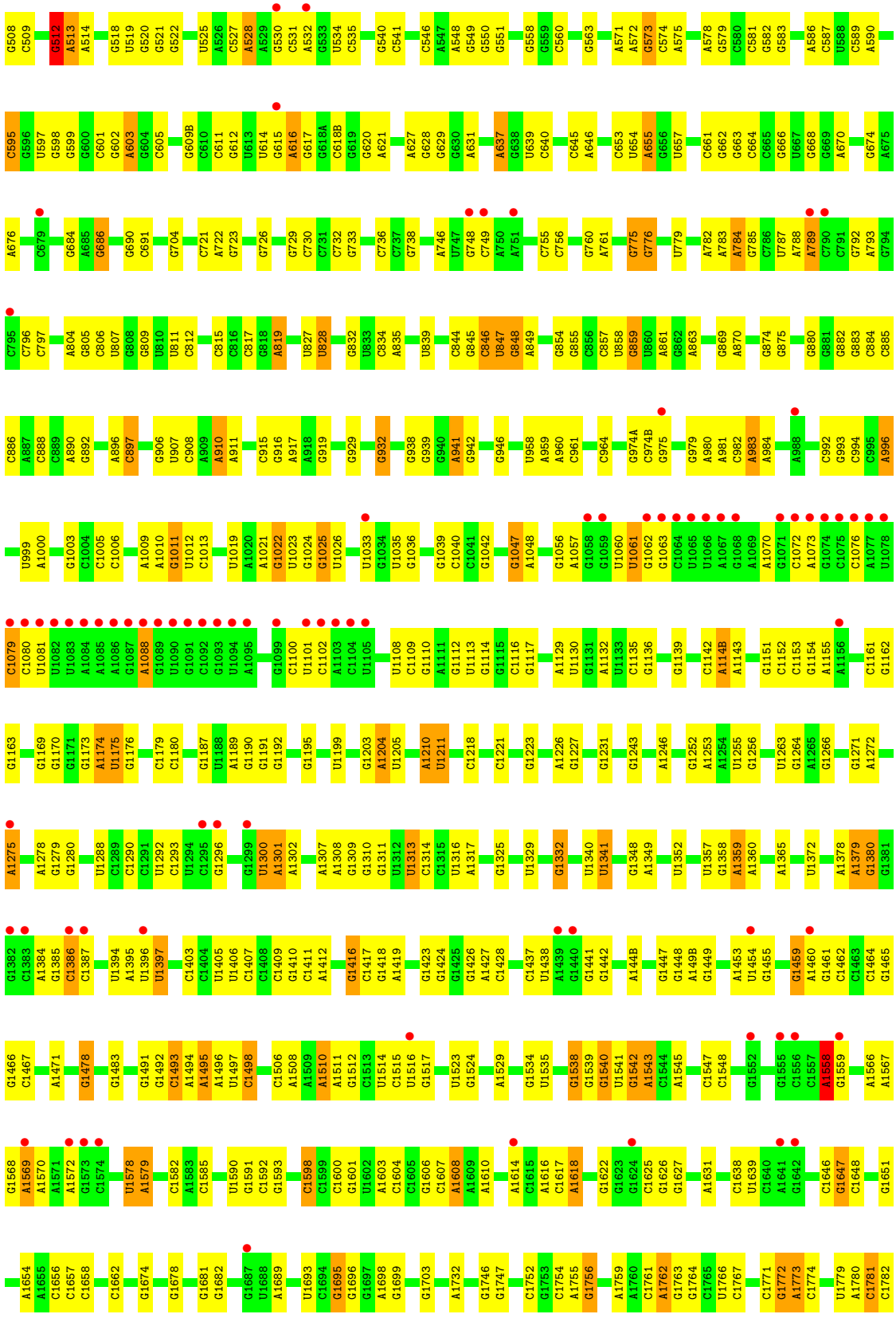
Chain YC:





• Molecule 51: 23S ribosomal RNA

Chain VC:


G508 C509 G512 A513 A514 G518 U519 G520 G521 G522 U525 A526 C527 A528 A529 G530 C531 A532 G533 U534 C535 G540 C541 C546 A547 A548 G549 G550 G551 G558 G559 C560 G563 A571 A572 G573 C574 A575 A578 G579 C580 C581 G582 G583 A586 C587 U588 C589 A590
C595 G596 U597 G598 G599 G600 C601 G602 A603 G604 C605 G609B C610 C611 G612 U613 U614 G615 A616 G617 G618A C618B G619 G620 A621 A627 G628 G629 G630 A631 A637 G638 U639 C640 C645 A646 C653 U654 A655 G656 U657 C661 G662 G663 C664 C665 G666 U667 G668 G669 A670 G674 A675
A676 C679 G684 A685 G686 G690 C691 G704 C721 A722 G723 G726 G729 C730 C731 C732 G733 C736 C737 G738 A746 U747 G748 C749 A750 A751 C755 C756 G760 A761 G775 G776 U779 A782 A783 A784 G785 C786 U787 A788 A789 C790 C791 G792 A793 G794
C795 C796 C797 A804 G805 C806 U807 G808 G809 U810 U811 C812 C815 C816 C817 G818 A819 U827 U828 G832 U833 C834 A835 U839 C844 G845 C846 U847 G848 A849 G854 G855 C856 C857 U858 G859 U860 A861 G862 A863 G869 A870 G874 G875 G880 G881 G882 G883 C884 C885
C886 A887 C888 C889 A890 G892 A896 C897 G906 U907 C908 A909 A910 A911 C915 G916 A917 A918 G919 G929 G932 G938 G939 G940 A941 G942 G946 U958 A959 A960 C961 C964 G974A C974B G975 G979 A980 A981 C982 A983 A984 A988 C992 G993 C994 C995 A996
U999 A1000 G1003 C1004 C1005 C1006 A1009 A1010 G1011 U1012 C1013 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 U1033 G1034 U1035 G1036 G1039 C1040 C1041 G1042 G1047 A1048 G1056 A1057 G1058 G1059 U1060 U1061 G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076 A1077 U1078
C1079 C1080 U1081 U1082 U1083 A1084 A1085 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 G1099 C1100 U1101 C1102 A1103 C1104 U1105 U1108 C1109 G1110 A1111 G1112 U1113 G1114 G1115 C1116 G1117 A1129 U1130 G1131 A1132 U1133 C1135 G1136 G1139 C1142 A114B A1143 G1151 C1152 C1153 G1154 A1155 A1156 C1161 G1162
G1163 G1169 G1170 G1171 G1173 A1174 U1175 G1176 C1179 C1180 G1187 U1188 A1189 G1190 G1191 G1192 G1195 U1199 G1203 A1204 U1205 A1210 U1211 C1218 C1221 G1223 A1226 G1227 G1231 G1243 A1246 G1252 A1253 A1254 U1255 G1256 U1263 G1264 A1265 G1266 G1271 A1272
A1275 A1278 G1279 G1280 U1288 C1289 C1290 C1291 U1292 C1293 U1294 C1295 G1296 G1299 U1300 A1301 A1302 A1307 A1308 G1309 G1310 G1311 U1312 U1313 C1314 C1315 U1316 A1317 G1325 U1329 G1332 U1340 U1341 G1348 A1349 U1352 U1357 G1358 A1359 A1360 A1365 U1372 A1378 A1379 G1380 G1381
G1382 C1383 A1384 G1385 C1386 C1387 U1394 A1395 U1396 U1397 C1403 C1404 U1405 U1406 C1407 C1408 C1409 G1410 C1411 A1412 G1416 C1417 G1418 A1419 G1423 G1424 G1425 G1426 A1427 C1428 C1437 U1438 A1439 G1440 G1441 G1442 A144B G1447 G1448 A149B G1449 A1453 U1454 G1455 G1459 A1460 G1461 C1462 C1463 C1464 G1465
G1466 C1467 A1471 G1478 G1483 G1491 G1492 C1493 A1494 A1495 A1496 U1497 C1498 C1506 A1508 A1509 A1510 A1511 G1512 C1513 U1514 C1515 U1516 G1517 U1523 G1524 A1529 G1534 U1535 G1538 G1539 G1540 U1541 G1542 A1543 C1544 A1545 C1547 C1548 G1552 G1555 C1556 C1557 A1558 G1559 A1566 A1567
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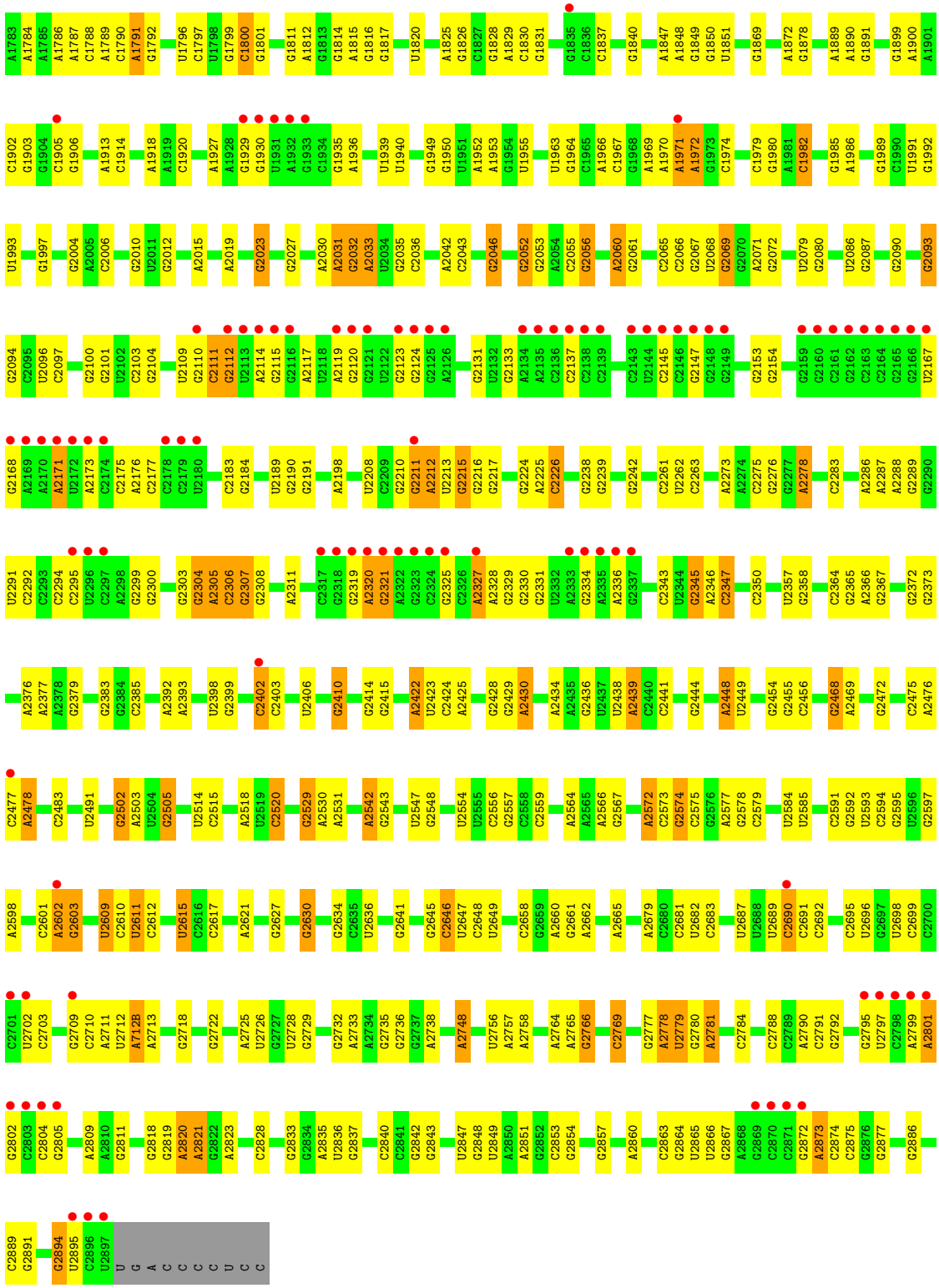
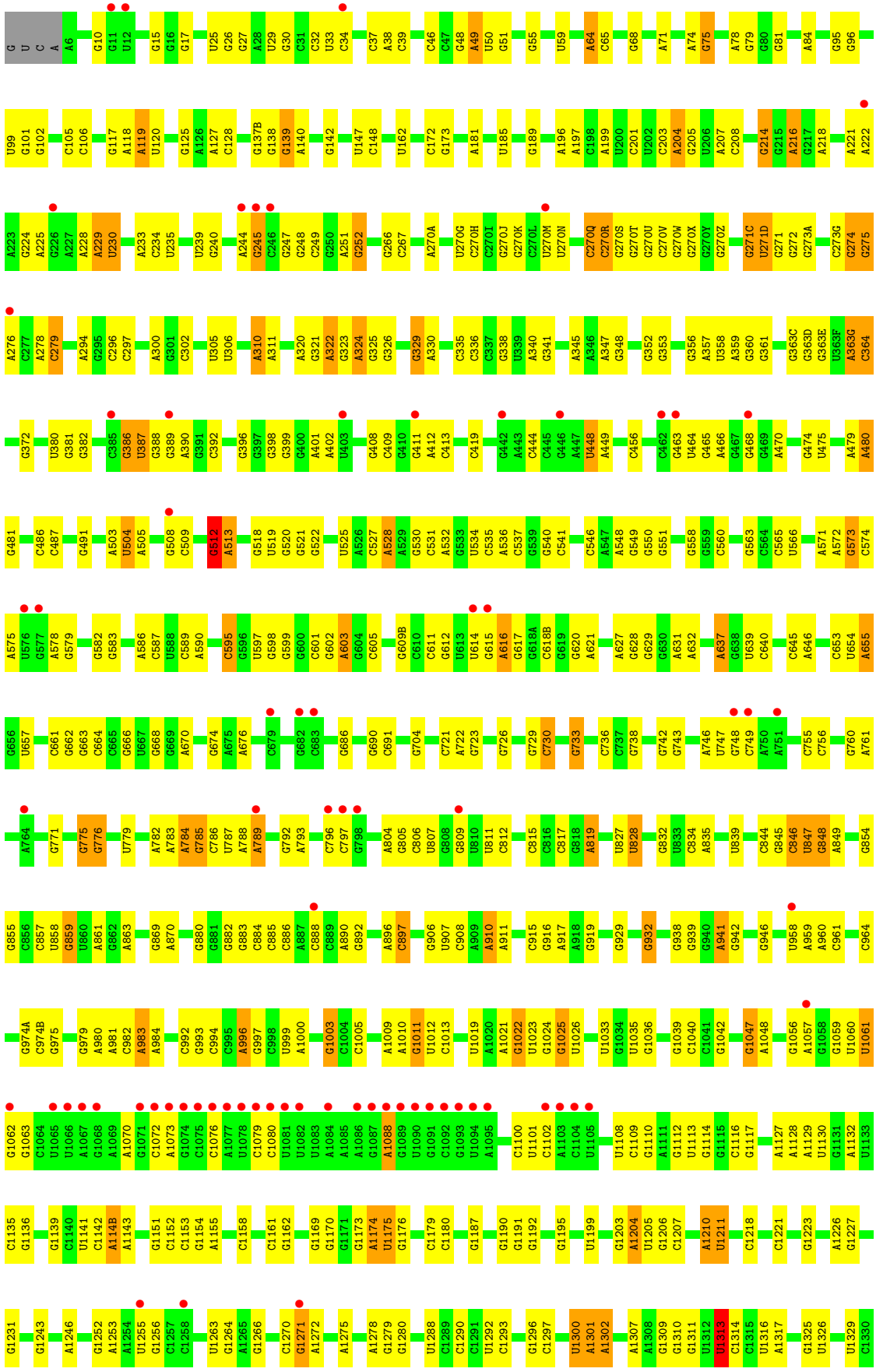


• Molecule 51: 23S ribosomal RNA

Chain ZC:


G
U
C
A
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U99 G101 G102 C105 C106 G117 A118 A119 U120 G125 A126 A127 C128 G137B G138 G139 A140 G142 U147 C148 U162 C172 G173 A181 U185 G189 A196 A197 C198 A199 U200 C201 U202 C203 A204 G205 U206 A207 C208 G214 G215 A216 G217 A218 A221 A222
A223 G224 A225 G226 A227 A228 A229 U230 A233 C234 U235 U239 G240 A244 G245 C246 G247 G248 C249 G250 A251 G252 C266 C267 A270A U270G C270H C270I G270J G270K C270L U270M U270N C270Q C270R G270S G270T G270U C270V G270W G270X G270Y G270Z G271C U271D G271 G272 G273A C273G G274 G275
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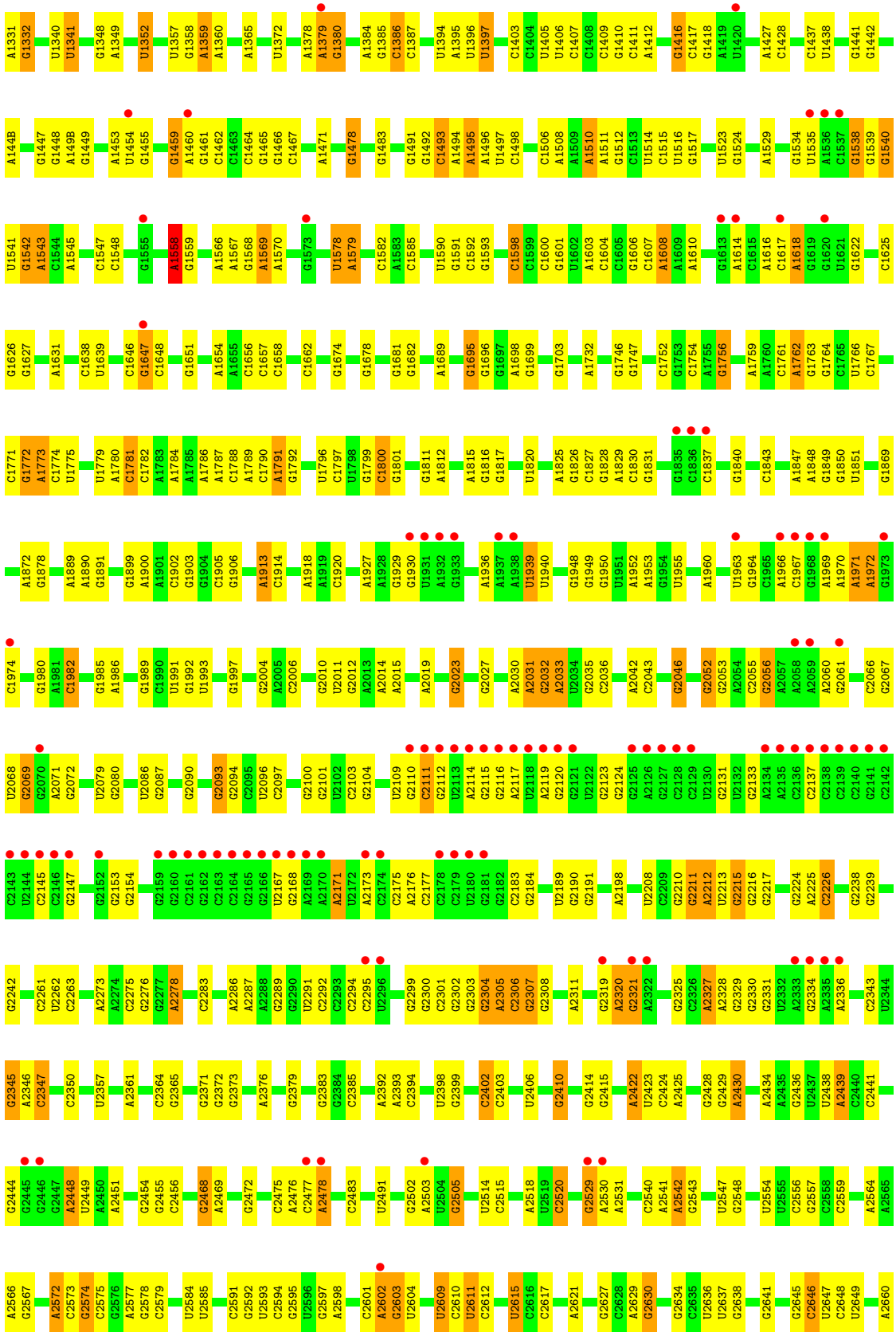
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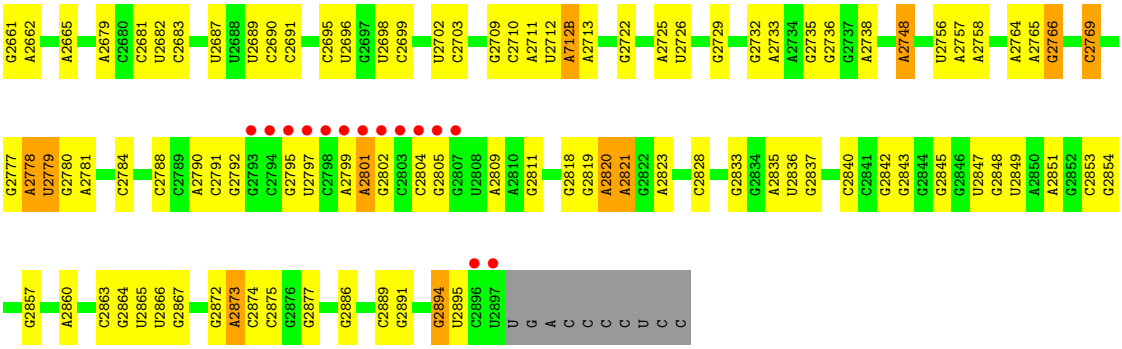
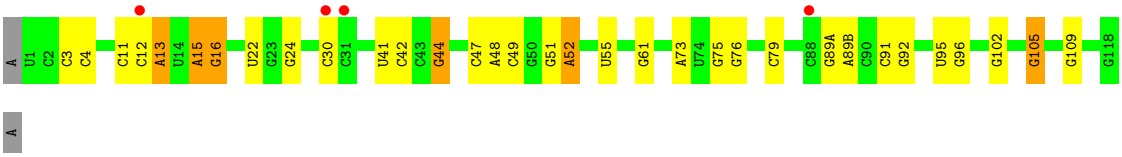


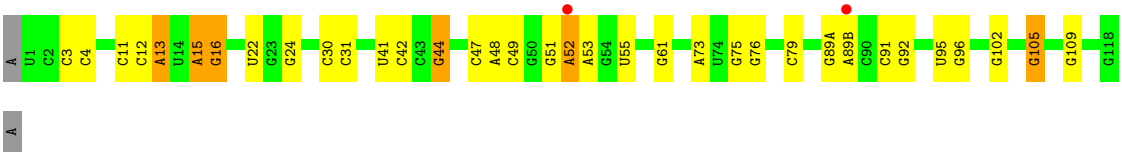
- Molecule 52: 5S ribosomal RNA

Chain WC:



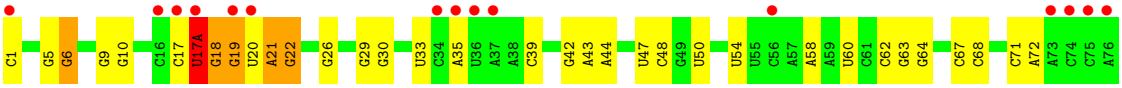
- Molecule 52: 5S ribosomal RNA

Chain AD:



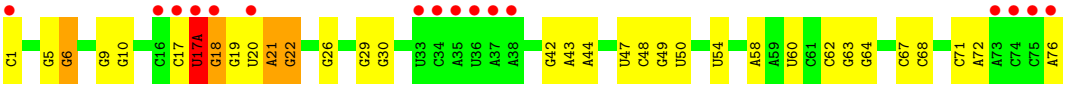
- Molecule 53: tRNA

Chain XC:



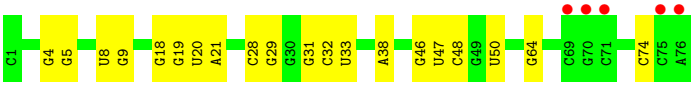
- Molecule 53: tRNA

Chain BD:



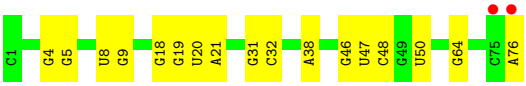
- Molecule 53: tRNA

Chain ED:



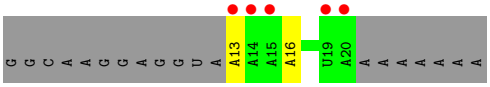
• Molecule 53: tRNA

Chain FD:



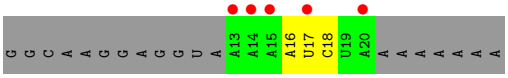
• Molecule 54: mRNA

Chain GD:



• Molecule 54: mRNA

Chain HD:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	211.98Å 453.75Å 620.72Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	60.00 – 3.63 87.52 – 3.63	Depositor EDS
% Data completeness (in resolution range)	99.3 (60.00-3.63) 99.2 (87.52-3.63)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.32 (at 3.67Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.268 , 0.287 0.282 , 0.298	Depositor DCC
R_{free} test set	6615 reflections (1.00%)	wwPDB-VP
Wilson B-factor (Å^2)	115.3	Xtriage
Anisotropy	0.262	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.24 , 80.1	EDS
L-test for twinning[2]	$< \|L\| > = 0.41$, $< L^2 > = 0.23$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.86	EDS
Total number of atoms	295576	wwPDB-VP
Average B, all atoms (Å^2)	147.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.69% of the height of the origin peak. No significant pseudotranslation is detected.*

[1]Intensities estimated from amplitudes.

[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ZN

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	A	0.26	0/2155	0.45	0/2905
1	WA	0.26	0/2155	0.45	0/2905
2	B	0.24	0/1596	0.46	0/2153
2	XA	0.24	0/1596	0.46	0/2153
3	C	0.25	0/1621	0.43	0/2194
3	YA	0.26	0/1621	0.43	0/2194
4	D	0.22	0/1500	0.44	0/2017
4	ZA	0.22	0/1500	0.44	0/2017
5	AB	0.22	0/1356	0.41	0/1834
5	E	0.21	0/1356	0.41	0/1834
6	BB	0.22	0/1147	0.41	0/1552
6	F	0.21	0/1147	0.41	0/1552
7	CB	0.21	0/1108	0.42	0/1500
7	G	0.21	0/1108	0.42	0/1500
8	DB	0.24	0/1123	0.44	0/1515
8	H	0.23	0/1123	0.44	0/1515
9	EB	0.25	0/942	0.43	0/1268
9	I	0.25	0/942	0.43	0/1268
10	FB	0.28	0/1131	0.62	0/1504
10	J	0.27	0/1131	0.62	0/1504
11	GB	0.23	0/1084	0.42	0/1449
11	K	0.22	0/1084	0.41	0/1449
12	HB	0.24	0/974	0.45	0/1302
12	L	0.24	0/974	0.44	0/1302
13	IB	0.23	0/887	0.39	0/1180
13	M	0.22	0/887	0.38	0/1180
14	JB	0.27	0/1157	0.41	0/1544
14	N	0.27	0/1157	0.41	0/1544
15	KB	0.28	0/982	0.43	0/1306
15	O	0.28	0/982	0.43	0/1306
16	LB	0.26	0/790	0.46	0/1057
16	P	0.25	0/790	0.46	0/1057

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	MB	0.26	0/901	0.45	0/1209
17	Q	0.26	0/901	0.45	0/1209
18	NB	0.27	0/739	0.43	0/993
18	R	0.25	0/739	0.43	0/993
19	OB	0.27	0/788	0.46	0/1051
19	S	0.26	0/788	0.46	0/1051
20	PB	0.22	0/1514	0.39	0/2056
20	T	0.21	0/1514	0.39	0/2056
21	QB	0.25	0/613	0.43	0/816
21	U	0.24	0/613	0.43	0/816
22	RB	0.27	0/701	0.52	0/932
22	V	0.27	0/701	0.52	0/932
23	SB	0.27	0/522	0.51	0/690
23	W	0.25	0/522	0.51	0/690
24	TB	0.22	0/472	0.42	0/634
24	X	0.22	0/472	0.41	0/634
25	UB	0.26	0/418	0.50	0/567
25	Y	0.24	0/418	0.49	0/567
26	VB	0.22	0/387	0.46	0/518
26	Z	0.23	0/387	0.46	0/518
27	AA	0.28	0/426	0.42	0/561
27	WB	0.29	0/426	0.44	0/561
28	BA	0.24	0/515	0.44	0/679
28	XB	0.25	0/515	0.44	0/679
29	CA	0.21	0/1935	0.40	0/2609
29	YB	0.21	0/1935	0.40	0/2609
30	DA	0.22	0/1636	0.41	0/2205
30	ZB	0.21	0/1636	0.41	0/2205
31	AC	0.22	0/1733	0.39	0/2318
31	EA	0.22	0/1733	0.41	0/2318
32	BC	0.23	0/1171	0.45	0/1576
32	FA	0.23	0/1171	0.45	0/1576
33	CC	0.22	0/856	0.42	0/1154
33	GA	0.22	0/856	0.42	0/1154
34	DC	0.21	0/1276	0.38	0/1709
34	HA	0.21	0/1276	0.38	0/1709
35	EC	0.21	0/1136	0.40	0/1527
35	IA	0.21	0/1136	0.41	0/1527
36	FC	0.22	0/1029	0.40	0/1378
36	JA	0.22	0/1029	0.40	0/1378
37	GC	0.21	0/807	0.41	0/1085
37	KA	0.21	0/807	0.41	0/1085
38	HC	0.21	0/856	0.41	0/1157

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	LA	0.22	0/856	0.41	0/1157
39	IC	0.22	0/972	0.44	0/1301
39	MA	0.23	0/972	0.44	0/1301
40	JC	0.20	0/943	0.41	0/1265
40	NA	0.20	0/943	0.41	0/1265
41	KC	0.22	0/501	0.38	0/664
41	OA	0.22	0/501	0.37	0/664
42	LC	0.24	0/745	0.39	0/992
42	PA	0.24	0/745	0.39	0/992
43	MC	0.22	0/716	0.40	0/963
43	QA	0.22	0/716	0.40	0/963
44	NC	0.23	0/836	0.40	0/1117
44	RA	0.23	0/836	0.40	0/1117
45	OC	0.22	0/579	0.41	0/768
45	SA	0.23	0/579	0.41	0/768
46	PC	0.22	0/642	0.40	0/865
46	TA	0.21	0/642	0.40	0/865
47	QC	0.22	0/764	0.41	0/1006
47	UA	0.22	0/764	0.42	0/1006
48	RC	0.19	0/212	0.37	0/277
48	VA	0.20	0/212	0.37	0/277
49	SC	0.22	0/228	0.44	0/309
49	TC	0.22	0/228	0.44	0/309
50	UC	0.19	0/36194	0.70	3/56493 (0.0%)
50	YC	0.18	0/36194	0.70	2/56493 (0.0%)
51	VC	0.24	1/69441 (0.0%)	0.73	14/108408 (0.0%)
51	ZC	0.26	2/69441 (0.0%)	0.74	14/108408 (0.0%)
52	AD	0.20	0/2853	0.71	0/4451
52	WC	0.18	0/2853	0.70	0/4451
53	BD	0.16	0/1832	0.71	1/2855 (0.0%)
53	ED	0.16	0/1832	0.68	0/2855
53	FD	0.17	0/1832	0.68	0/2855
53	XC	0.17	0/1832	0.71	1/2855 (0.0%)
54	GD	0.16	0/190	0.65	0/293
54	HD	0.15	0/190	0.65	0/293
All	All	0.23	3/318928 (0.0%)	0.66	35/477172 (0.0%)

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
10	FB	0	2
10	J	0	2
All	All	0	4

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
51	ZC	1142	C	O3'-P	12.04	1.75	1.61
51	VC	1142	C	O3'-P	11.78	1.75	1.61
51	ZC	1141	U	O3'-P	-6.04	1.53	1.61

All (35) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	VC	1493	C	C2-N1-C1'	8.04	127.64	118.80
51	ZC	1493	C	C2-N1-C1'	7.95	127.54	118.80
51	ZC	1493	C	N1-C2-O2	7.24	123.24	118.90
51	VC	1493	C	N1-C2-O2	7.18	123.21	118.90
51	ZC	828	U	C2-N1-C1'	6.96	126.06	117.70
51	VC	828	U	C2-N1-C1'	6.95	126.03	117.70
51	ZC	828	U	N1-C2-O2	6.67	127.47	122.80
51	VC	828	U	N1-C2-O2	6.43	127.30	122.80
51	ZC	828	U	N3-C2-O2	-6.26	117.82	122.20
51	VC	828	U	N3-C2-O2	-6.24	117.83	122.20
51	ZC	733	G	N1-C6-O6	6.08	123.55	119.90
53	XC	17(A)	U	P-O3'-C3'	6.02	126.93	119.70
53	BD	17(A)	U	P-O3'-C3'	5.98	126.88	119.70
51	ZC	1493	C	C6-N1-C1'	-5.67	113.99	120.80
51	VC	1493	C	C6-N1-C1'	-5.62	114.05	120.80
51	VC	1493	C	N3-C2-O2	-5.33	118.17	121.90
51	ZC	512	G	P-O3'-C3'	5.30	126.06	119.70
51	ZC	1493	C	N3-C2-O2	-5.27	118.21	121.90
50	UC	1158	C	C2-N1-C1'	5.26	124.58	118.80
51	VC	1313	U	C2-N1-C1'	5.24	123.99	117.70
51	ZC	1558	A	P-O3'-C3'	5.24	125.99	119.70
51	ZC	2321	G	C4-N9-C1'	5.24	133.31	126.50
51	ZC	2866	U	C2-N1-C1'	5.22	123.97	117.70
51	ZC	1313	U	C2-N1-C1'	5.18	123.92	117.70
51	VC	2321	G	C4-N9-C1'	5.17	133.22	126.50
51	VC	512	G	P-O3'-C3'	5.16	125.90	119.70
51	VC	2866	U	C2-N1-C1'	5.11	123.83	117.70
50	YC	1158	C	C2-N1-C1'	5.11	124.42	118.80
50	UC	1201	A	P-O3'-C3'	5.10	125.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	YC	913	A	P-O3'-C3'	5.09	125.81	119.70
51	VC	504	U	N3-C2-O2	-5.06	118.66	122.20
50	UC	913	A	P-O3'-C3'	5.06	125.78	119.70
51	VC	504	U	N1-C2-O2	5.06	126.34	122.80
51	VC	1558	A	P-O3'-C3'	5.04	125.75	119.70
51	ZC	504	U	N1-C2-O2	5.04	126.33	122.80

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
10	FB	51	PHE	Peptide
10	FB	9	ASN	Peptide
10	J	51	PHE	Peptide
10	J	9	ASN	Peptide

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2105	0	2182	63	0
1	WA	2105	0	2182	65	0
2	B	1563	0	1629	35	0
2	XA	1563	0	1629	34	0
3	C	1586	0	1632	43	0
3	YA	1586	0	1632	40	0
4	D	1475	0	1537	42	0
4	ZA	1475	0	1537	42	0
5	AB	1330	0	1407	22	0
5	E	1330	0	1407	22	1
6	BB	1132	0	1220	26	0
6	F	1132	0	1220	18	0
7	CB	1088	0	1138	34	0
7	G	1088	0	1138	34	0
8	DB	1096	0	1168	30	0
8	H	1096	0	1168	28	0
9	EB	932	0	994	30	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	I	932	0	994	28	0
10	FB	1114	0	1187	83	0
10	J	1114	0	1187	80	0
11	GB	1064	0	1114	33	0
11	K	1064	0	1114	33	0
12	HB	960	0	1021	32	0
12	L	960	0	1021	33	0
13	IB	877	0	938	12	0
13	M	877	0	938	13	0
14	JB	1143	0	1211	37	0
14	N	1143	0	1211	35	0
15	KB	964	0	1022	35	0
15	O	964	0	1022	38	0
16	LB	779	0	852	20	0
16	P	779	0	852	21	0
17	MB	890	0	951	20	0
17	Q	890	0	951	22	0
18	NB	725	0	778	15	0
18	R	725	0	778	15	0
19	OB	775	0	870	25	0
19	S	775	0	870	24	0
20	PB	1482	0	1507	27	0
20	T	1482	0	1507	29	0
21	QB	605	0	628	21	0
21	U	605	0	628	19	0
22	RB	694	0	764	29	0
22	V	694	0	764	26	0
23	SB	520	0	575	21	0
23	W	520	0	575	20	0
24	TB	467	0	523	6	0
24	X	467	0	523	7	0
25	UB	404	0	420	12	0
25	Y	404	0	420	12	0
26	VB	380	0	391	14	0
26	Z	380	0	391	12	0
27	AA	418	0	467	12	0
27	WB	418	0	467	13	0
28	BA	507	0	576	17	0
28	XB	507	0	576	20	0
29	CA	1900	0	1951	36	0
29	YB	1900	0	1951	34	0
30	DA	1612	0	1677	41	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	ZB	1612	0	1677	40	0
31	AC	1703	0	1765	37	0
31	EA	1703	0	1764	39	0
32	BC	1155	0	1213	27	0
32	FA	1155	0	1213	29	0
33	CC	843	0	857	18	0
33	GA	843	0	857	18	0
34	DC	1257	0	1296	16	0
34	HA	1257	0	1296	17	0
35	EC	1116	0	1177	23	0
35	IA	1116	0	1177	24	0
36	FC	1011	0	1043	21	0
36	JA	1011	0	1043	22	0
37	GC	794	0	840	22	0
37	KA	794	0	840	23	0
38	HC	842	0	859	22	0
38	LA	842	0	859	22	0
39	IC	956	0	1046	27	0
39	MA	956	0	1046	30	0
40	JC	933	0	992	27	0
40	NA	933	0	992	23	0
41	KC	492	0	531	17	0
41	OA	492	0	529	14	0
42	LC	734	0	771	18	0
42	PA	734	0	771	16	0
43	MC	700	0	720	16	0
43	QA	700	0	720	14	0
44	NC	823	0	893	18	0
44	RA	823	0	893	17	0
45	OC	574	0	644	12	0
45	SA	574	0	644	14	0
46	PC	629	0	652	25	0
46	TA	629	0	652	24	0
47	QC	762	0	859	13	0
47	UA	762	0	859	14	0
48	RC	208	0	221	5	0
48	VA	208	0	221	3	0
49	SC	225	0	229	6	0
49	TC	225	0	229	9	0
50	UC	32332	0	16315	326	0
50	YC	32332	0	16314	334	1
51	VC	62000	0	31247	661	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	ZC	62000	0	31244	660	0
52	AD	2551	0	1295	22	0
52	WC	2551	0	1295	20	0
53	BD	1640	0	837	20	0
53	ED	1640	0	837	9	0
53	FD	1640	0	837	7	0
53	XC	1640	0	837	23	0
54	GD	170	0	87	1	0
54	HD	170	0	87	2	0
55	A	5	0	0	0	0
55	AA	1	0	0	0	0
55	AC	1	0	0	0	0
55	AD	30	0	0	0	0
55	B	2	0	0	0	0
55	BA	2	0	0	0	0
55	BB	2	0	0	0	0
55	BC	3	0	0	0	0
55	BD	8	0	0	0	0
55	C	3	0	0	0	0
55	CB	1	0	0	0	0
55	D	3	0	0	0	0
55	DB	1	0	0	0	0
55	DC	1	0	0	0	0
55	EA	1	0	0	0	0
55	EB	3	0	0	0	0
55	ED	16	0	0	0	0
55	FA	1	0	0	0	0
55	FB	4	0	0	0	0
55	FC	1	0	0	0	0
55	FD	16	0	0	0	0
55	GB	1	0	0	0	0
55	H	2	0	0	0	0
55	HA	2	0	0	0	0
55	HB	2	0	0	0	0
55	HD	1	0	0	0	0
55	I	1	0	0	0	0
55	IB	1	0	0	0	0
55	IC	1	0	0	0	0
55	J	3	0	0	0	0
55	JB	1	0	0	0	0
55	L	1	0	0	0	0
55	LA	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	LC	1	0	0	0	0
55	MB	1	0	0	0	0
55	N	1	0	0	0	0
55	NB	1	0	0	0	0
55	O	2	0	0	0	0
55	OA	2	0	0	0	0
55	OB	1	0	0	0	0
55	P	2	0	0	0	0
55	PA	2	0	0	0	0
55	Q	1	0	0	0	0
55	QA	1	0	0	0	0
55	QB	2	0	0	0	0
55	RA	1	0	0	0	0
55	RC	1	0	0	0	0
55	SB	1	0	0	0	0
55	UA	2	0	0	0	0
55	UC	264	0	0	0	0
55	V	1	0	0	0	0
55	VC	707	0	0	0	0
55	WA	5	0	0	0	0
55	WB	2	0	0	0	0
55	WC	29	0	0	0	0
55	X	1	0	0	0	0
55	XA	3	0	0	0	0
55	XC	5	0	0	0	0
55	Y	1	0	0	0	0
55	YA	8	0	0	0	0
55	YC	271	0	0	0	0
55	ZC	774	0	0	0	0
56	AC	1	0	0	0	0
56	EA	1	0	0	0	0
56	KC	1	0	0	0	0
56	OA	1	0	0	0	0
All	All	295576	0	199105	3923	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 8.

All (3923) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:ZB:6:HIS:HD2	30:ZB:7:PRO:HD2	1.24	1.00
7:CB:75:SER:HB3	51:ZC:1063:G:H5"	1.55	0.89
32:FA:41:VAL:HG21	32:FA:113:ALA:HA	1.55	0.87
35:IA:102:ARG:HE	35:IA:102:ARG:H	1.23	0.86
35:EC:102:ARG:H	35:EC:102:ARG:HE	1.24	0.86
32:BC:41:VAL:HG21	32:BC:113:ALA:HA	1.56	0.86
6:BB:90:GLY:HA2	50:UC:368:U:H5"	1.57	0.84
22:RB:86:SER:HB3	22:RB:89:GLU:HB2	1.60	0.83
11:GB:23:GLY:HA3	11:GB:98:LYS:HB2	1.61	0.83
11:K:23:GLY:HA3	11:K:98:LYS:HB2	1.61	0.82
2:XA:132:HIS:ND1	51:ZC:1658:C:OP1	2.13	0.82
2:B:132:HIS:ND1	51:VC:1658:C:OP1	2.12	0.82
22:V:86:SER:HB3	22:V:89:GLU:HB2	1.59	0.81
10:FB:128:HIS:HA	10:FB:147:LEU:HB3	1.63	0.80
4:ZA:41:GLN:HG2	4:ZA:155:MET:HB3	1.65	0.79
51:ZC:413:C:H42	51:ZC:2410:G:H1	1.31	0.79
10:J:128:HIS:HA	10:J:147:LEU:HB3	1.63	0.78
21:QB:12:ASN:HD21	51:ZC:2278:A:H5"	1.48	0.78
29:YB:77:ALA:HB2	29:YB:211:ILE:HD13	1.66	0.78
51:VC:2068:U:H3	51:VC:2430:A:H2	1.32	0.78
50:UC:978:A:OP2	50:UC:136(B):C:N4	2.18	0.77
51:ZC:229:A:H5'	51:ZC:230:U:H5'	1.67	0.77
29:CA:77:ALA:HB2	29:CA:211:ILE:HD13	1.67	0.77
10:FB:57:THR:HB	10:FB:59:LEU:H	1.48	0.77
4:D:41:GLN:HG2	4:D:155:MET:HB3	1.65	0.77
10:J:57:THR:HB	10:J:59:LEU:H	1.48	0.77
21:U:12:ASN:HD21	51:VC:2278:A:H5"	1.48	0.77
30:ZB:6:HIS:CD2	30:ZB:7:PRO:HD2	2.15	0.76
18:R:63:LYS:HD2	18:R:72:LYS:HA	1.68	0.76
10:FB:23:PRO:HB2	10:FB:33:ARG:HG3	1.68	0.76
18:R:11:PRO:HA	18:R:28:PHE:HB3	1.68	0.76
50:YC:380:G:N2	50:YC:383:A:OP2	2.19	0.76
20:T:31:ARG:HB3	52:WC:105:G:H5'	1.68	0.75
2:XA:128:SER:OG	2:XA:129:HIS:N	2.19	0.75
18:NB:63:LYS:HD2	18:NB:72:LYS:HA	1.68	0.75
51:VC:392:C:H5"	51:VC:409:C:H5"	1.69	0.75
35:IA:91:ARG:HD2	39:MA:6:ILE:HG21	1.67	0.75
18:NB:11:PRO:HA	18:NB:28:PHE:HB3	1.67	0.75
35:EC:91:ARG:HD2	39:IC:6:ILE:HG21	1.67	0.75
37:KA:36:GLY:HA3	50:UC:1123:A:H4'	1.69	0.75
51:VC:229:A:H5'	51:VC:230:U:H5'	1.69	0.75
51:VC:1851:U:H4'	53:XC:71:C:H4'	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:23:PRO:HB2	10:J:33:ARG:HG3	1.69	0.74
25:UB:19:ARG:HA	51:ZC:2046:G:H5'	1.68	0.74
51:ZC:392:C:H5"	51:ZC:409:C:H5"	1.69	0.74
51:ZC:571:A:O2'	51:ZC:573:G:OP2	2.05	0.74
51:VC:413:C:H42	51:VC:2410:G:H1	1.31	0.74
14:JB:64:ARG:HD3	14:JB:102:ILE:HD11	1.69	0.74
25:Y:19:ARG:HA	51:VC:2046:G:H5'	1.67	0.74
41:KC:35:ARG:NH2	50:YC:1360:A:OP2	2.20	0.74
50:UC:1211:U:H4'	50:UC:1213:A:H1'	1.69	0.74
51:ZC:2068:U:H3	51:ZC:2430:A:H2	1.33	0.74
10:J:21:ARG:HD2	51:VC:663:G:H5"	1.69	0.74
37:GC:36:GLY:HA3	50:YC:1123:A:H4'	1.69	0.73
51:ZC:1840:G:H1	51:ZC:1902:C:H42	1.34	0.73
14:N:64:ARG:HD3	14:N:102:ILE:HD11	1.69	0.73
2:B:128:SER:O	2:B:130:GLY:N	2.22	0.73
51:VC:819:A:OP2	51:VC:1187:G:N2	2.22	0.73
51:VC:1840:G:H1	51:VC:1902:C:H42	1.36	0.73
25:UB:2:ALA:HA	51:ZC:2015:A:H1'	1.71	0.73
38:HC:123:LYS:NZ	50:YC:1523:G:OP1	2.21	0.73
4:D:32:PRO:HB2	4:D:172:LEU:HD13	1.71	0.72
14:N:113:LYS:NZ	51:VC:1754:C:OP2	2.22	0.72
48:RC:2:GLY:N	50:YC:1304:G:OP1	2.22	0.72
51:VC:571:A:O2'	51:VC:573:G:OP2	2.04	0.72
2:B:128:SER:OG	2:B:129:HIS:N	2.19	0.72
51:VC:1024:G:H3'	51:VC:1025:G:H5"	1.72	0.72
2:XA:24:THR:HB	2:XA:186:GLY:HA2	1.71	0.72
10:FB:21:ARG:HD2	51:ZC:663:G:H5"	1.71	0.72
50:YC:1393:U:HO2'	50:YC:1501:C:HO2'	1.36	0.72
51:ZC:1024:G:H3'	51:ZC:1025:G:H5"	1.71	0.72
2:B:24:THR:HB	2:B:186:GLY:HA2	1.72	0.72
25:Y:2:ALA:HA	51:VC:2015:A:H1'	1.72	0.72
29:YB:176:GLU:OE2	50:YC:1101:A:N6	2.23	0.72
50:YC:147:G:H1	50:YC:175:C:H42	1.36	0.72
50:YC:1211:U:H4'	50:YC:1213:A:H1'	1.70	0.72
16:LB:72:VAL:HG22	16:LB:85:LYS:HB2	1.72	0.72
4:ZA:32:PRO:HB2	4:ZA:172:LEU:HD13	1.71	0.71
2:XA:128:SER:O	2:XA:130:GLY:N	2.22	0.71
51:ZC:819:A:OP2	51:ZC:1187:G:N2	2.22	0.71
16:P:72:VAL:HG22	16:P:85:LYS:HB2	1.73	0.71
15:KB:92:ARG:HD3	51:ZC:996:A:H4'	1.73	0.71
38:LA:123:LYS:NZ	50:UC:1523:G:OP1	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:92:ARG:HD3	51:VC:996:A:H4'	1.72	0.70
38:LA:57:THR:HG22	38:LA:60:ALA:H	1.56	0.70
50:UC:380:G:N2	50:UC:383:A:OP2	2.19	0.70
14:JB:96:ARG:NH1	51:ZC:1754:C:OP1	2.23	0.70
10:J:88:LEU:HD11	10:J:95:VAL:HG11	1.72	0.70
14:N:96:ARG:NH1	51:VC:1754:C:OP1	2.25	0.70
32:FA:50:GLU:HG3	32:FA:52:PRO:HD2	1.73	0.70
14:JB:113:LYS:NZ	51:ZC:1754:C:OP2	2.22	0.70
22:V:79:GLY:HA3	51:VC:270(S):G:H1'	1.73	0.70
42:PA:39:LEU:HD12	42:PA:56:LEU:HB2	1.74	0.70
10:FB:86:LYS:HB3	10:FB:118:GLY:HA3	1.74	0.70
20:PB:31:ARG:HB3	52:AD:105:G:H5'	1.74	0.70
22:RB:79:GLY:HA3	51:ZC:270(S):G:H1'	1.74	0.70
42:LC:39:LEU:HD12	42:LC:56:LEU:HB2	1.74	0.70
51:VC:2032:G:OP1	51:VC:2454:G:O2'	2.10	0.70
33:CC:47:ARG:HH22	33:CC:56:PRO:HB2	1.56	0.70
10:FB:88:LEU:HD11	10:FB:95:VAL:HG11	1.72	0.69
14:JB:36:GLU:HB3	14:JB:39:ARG:HE	1.58	0.69
4:D:44:GLY:HA3	51:VC:2311:A:H2	1.58	0.69
50:UC:79:G:H1	50:UC:90:C:H42	1.40	0.69
50:UC:147:G:H1	50:UC:175:C:H42	1.37	0.69
34:HA:36:LYS:HE3	50:UC:1373:G:H5"	1.74	0.69
33:GA:47:ARG:HH22	33:GA:56:PRO:HB2	1.56	0.69
34:DC:36:LYS:HE3	50:YC:1373:G:H5"	1.74	0.69
40:JC:10:PRO:HB2	40:JC:18:ALA:HB1	1.75	0.69
50:UC:790:A:OP1	53:ED:38:A:O2'	2.10	0.69
4:ZA:44:GLY:HA3	51:ZC:2311:A:H2	1.58	0.69
32:BC:50:GLU:HG3	32:BC:52:PRO:HD2	1.73	0.69
14:N:36:GLU:HB3	14:N:39:ARG:HE	1.58	0.69
23:W:14:ARG:HA	23:W:17:SER:HB2	1.74	0.69
15:KB:24:TYR:HB2	15:KB:29:SER:HB3	1.75	0.69
17:MB:68:ARG:HB2	17:MB:110:LYS:HB2	1.75	0.69
26:VB:23:THR:HB	28:XB:35:GLN:HA	1.75	0.69
42:PA:5:LYS:HD3	42:PA:5:LYS:H	1.58	0.69
51:VC:2520:C:H41	51:VC:2542:A:H62	1.41	0.69
39:IC:86:GLY:HA2	39:IC:97:TYR:HA	1.76	0.68
20:T:141:VAL:HG23	20:T:144:LEU:HD23	1.75	0.68
26:Z:23:THR:HB	28:BA:35:GLN:HA	1.74	0.68
51:ZC:2032:G:OP1	51:ZC:2454:G:O2'	2.11	0.68
32:FA:49:PRO:HG2	50:UC:1071:C:H5"	1.76	0.68
21:QB:23:VAL:HG21	51:ZC:857:C:H4'	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:2520:C:H41	51:ZC:2542:A:H62	1.41	0.68
10:J:86:LYS:HB3	10:J:118:GLY:HA3	1.73	0.68
17:Q:68:ARG:HB2	17:Q:110:LYS:HB2	1.75	0.68
51:VC:2475:C:H42	51:VC:2529:G:H22	1.42	0.68
9:I:19:ILE:HG22	9:I:43:VAL:HA	1.76	0.68
38:HC:57:THR:HG22	38:HC:60:ALA:H	1.58	0.68
50:UC:677:U:H3	50:UC:713:G:H22	1.42	0.68
51:VC:27:G:N2	51:VC:513:A:OP2	2.27	0.68
39:IC:31:PHE:HB3	39:IC:83:LEU:HD11	1.75	0.68
15:O:49:HIS:HA	15:O:52:ARG:HB2	1.75	0.67
10:FB:35:HIS:HB2	51:ZC:942:G:H5'	1.76	0.67
20:PB:141:VAL:HG23	20:PB:144:LEU:HD23	1.75	0.67
26:VB:18:ARG:NH1	26:VB:43:CYS:O	2.27	0.67
42:LC:5:LYS:H	42:LC:5:LYS:HD3	1.57	0.67
50:YC:79:G:H1	50:YC:90:C:H42	1.42	0.67
22:V:11:ARG:HB3	22:V:12:PRO:HD2	1.76	0.67
1:WA:241:PRO:HG3	51:ZC:1971:A:C4	2.30	0.67
39:MA:86:GLY:HA2	39:MA:97:TYR:HA	1.75	0.67
22:RB:11:ARG:HB3	22:RB:12:PRO:HD2	1.75	0.67
39:IC:116:ARG:NH2	50:YC:501:C:OP1	2.23	0.67
46:PC:50:ALA:HB1	46:PC:57:HIS:HB3	1.76	0.67
21:U:23:VAL:HG21	51:VC:857:C:H4'	1.77	0.67
26:Z:18:ARG:NH1	26:Z:43:CYS:O	2.27	0.67
15:O:24:TYR:HB2	15:O:29:SER:HB3	1.75	0.67
23:W:41:ILE:HD11	23:W:44:LEU:HB2	1.76	0.67
40:NA:10:PRO:HB2	40:NA:18:ALA:HB1	1.76	0.67
23:SB:14:ARG:HA	23:SB:17:SER:HB2	1.76	0.67
25:UB:4:HIS:O	51:ZC:2056:G:N2	2.23	0.67
32:FA:5:ASP:OD1	32:FA:5:ASP:N	2.28	0.67
12:HB:72:ASP:HB3	12:HB:75:LEU:HB2	1.77	0.67
47:QC:83:ARG:NH1	50:YC:260:G:OP2	2.27	0.67
50:UC:21:G:H21	50:UC:914:A:H62	1.43	0.67
15:KB:49:HIS:HA	15:KB:52:ARG:HB2	1.76	0.67
39:MA:31:PHE:HB3	39:MA:83:LEU:HD11	1.76	0.67
46:TA:50:ALA:HB1	46:TA:57:HIS:HB3	1.76	0.67
47:UA:83:ARG:NH1	50:UC:260:G:OP2	2.28	0.67
22:RB:86:SER:HB2	22:RB:90:ILE:HG12	1.77	0.67
51:ZC:27:G:N2	51:ZC:513:A:OP2	2.27	0.66
30:DA:45:LYS:HG3	30:DA:46:GLU:HG3	1.77	0.66
22:V:13:ILE:HG22	22:V:62:VAL:HG23	1.77	0.66
21:QB:55:ARG:NH2	51:ZC:2364:C:OP1	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BC:20:GLN:HA	50:YC:922:G:H4'	1.77	0.66
51:VC:586:A:N1	51:VC:809:G:O2'	2.25	0.66
22:V:86:SER:HB2	22:V:90:ILE:HG12	1.77	0.66
27:AA:39:ARG:NH2	51:VC:468:G:N7	2.44	0.66
21:U:55:ARG:NH2	51:VC:2364:C:OP1	2.28	0.66
32:FA:20:GLN:HA	50:UC:922:G:H4'	1.77	0.66
9:EB:19:ILE:HG22	9:EB:43:VAL:HA	1.77	0.66
19:OB:2:ARG:HE	51:ZC:106:C:H1'	1.61	0.66
51:VC:1541:U:H3'	51:VC:1542:G:H3'	1.78	0.66
25:Y:4:HIS:O	51:VC:2056:G:N2	2.22	0.66
30:DA:14:ILE:O	30:DA:16:ARG:N	2.29	0.66
27:WB:39:ARG:NH2	51:ZC:468:G:N7	2.43	0.66
1:A:241:PRO:HG3	51:VC:1971:A:C4	2.30	0.66
10:J:35:HIS:HB2	51:VC:942:G:H5'	1.77	0.66
36:JA:121:ARG:NH1	36:JA:122:ALA:O	2.29	0.66
22:RB:13:ILE:HG22	22:RB:62:VAL:HG23	1.78	0.66
30:ZB:14:ILE:O	30:ZB:16:ARG:N	2.29	0.66
12:HB:104:ARG:HD3	12:HB:109:ALA:HB3	1.78	0.66
50:UC:417:C:H42	50:UC:426:G:H1	1.42	0.66
7:CB:133:SER:HB3	51:ZC:1062:G:H21	1.61	0.65
51:VC:1459:G:O2'	51:VC:1461:G:OP2	2.14	0.65
50:YC:417:C:H42	50:YC:426:G:H1	1.42	0.65
51:ZC:1541:U:H3'	51:ZC:1542:G:H3'	1.77	0.65
50:YC:677:U:H3	50:YC:713:G:H22	1.42	0.65
30:ZB:45:LYS:HG3	30:ZB:46:GLU:HG3	1.77	0.65
36:FC:121:ARG:NH1	36:FC:122:ALA:O	2.29	0.65
41:KC:23:ARG:NH1	41:KC:28:GLY:O	2.28	0.65
19:S:2:ARG:HE	51:VC:106:C:H1'	1.61	0.65
36:FC:4:TYR:HB2	36:FC:19:LEU:HB2	1.79	0.65
50:UC:559:A:H4'	50:UC:560:U:H3'	1.79	0.65
7:G:112:MET:H	7:G:113:PRO:HD2	1.62	0.65
51:VC:1678:G:H21	51:VC:1989:G:H22	1.45	0.65
10:J:35:HIS:HA	51:VC:1190:G:H5"	1.79	0.65
39:MA:101:ARG:HB3	39:MA:108:GLY:HA2	1.78	0.65
50:UC:1043:C:H2'	50:UC:1044:A:H8	1.61	0.65
51:VC:1510:A:H2'	51:VC:1511:A:C8	2.32	0.65
51:ZC:1341:U:OP2	51:ZC:1394:U:O2'	2.15	0.65
51:ZC:1510:A:H2'	51:ZC:1511:A:C8	2.32	0.65
6:F:92:VAL:HG23	6:F:96:ASP:HB2	1.79	0.65
31:EA:196:LEU:HB2	31:EA:198:VAL:HG22	1.79	0.65
21:QB:64:ASP:OD1	21:QB:64:ASP:N	2.25	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:SB:41:ILE:HD11	23:SB:44:LEU:HB2	1.77	0.65
26:VB:46:HIS:HD2	51:ZC:2371:G:O2'	1.79	0.65
51:ZC:1678:G:H21	51:ZC:1989:G:H22	1.44	0.65
12:L:72:ASP:HB3	12:L:75:LEU:HB2	1.77	0.65
50:YC:559:A:H4'	50:YC:560:U:H3'	1.79	0.65
17:Q:84:ARG:HB2	17:Q:96:ILE:HG22	1.79	0.65
16:LB:84:LYS:NZ	51:ZC:1226:A:OP1	2.25	0.65
51:ZC:2475:C:H42	51:ZC:2529:G:H22	1.43	0.64
13:IB:30:ARG:HD2	13:IB:97:ARG:HD3	1.79	0.64
50:YC:21:G:H21	50:YC:914:A:H62	1.43	0.64
32:BC:5:ASP:N	32:BC:5:ASP:OD1	2.29	0.64
39:IC:101:ARG:HB3	39:IC:108:GLY:HA2	1.79	0.64
51:VC:880:G:H1	51:VC:897:C:H42	1.45	0.64
50:YC:1043:C:H2'	50:YC:1044:A:H8	1.61	0.64
50:YC:1306:A:H61	50:YC:1331:G:H1'	1.62	0.64
51:ZC:1459:G:O2'	51:ZC:1461:G:OP2	2.14	0.64
29:YB:51:LEU:HD23	29:YB:201:ILE:HD12	1.79	0.64
37:GC:6:ILE:HG22	37:GC:98:ILE:HG12	1.80	0.64
40:NA:5:ALA:HB3	40:NA:8:GLU:HB2	1.78	0.64
6:BB:92:VAL:HG23	6:BB:96:ASP:HB2	1.78	0.64
8:H:93:LYS:HG2	8:H:110:LEU:HD12	1.80	0.64
29:CA:51:LEU:HD23	29:CA:201:ILE:HD12	1.79	0.64
33:GA:3:ARG:HH11	33:GA:64:GLN:HE22	1.46	0.64
30:ZB:19:GLU:HB2	30:ZB:40:ARG:HH22	1.62	0.64
51:ZC:270(K):G:H1	51:ZC:270(Q):C:H42	1.44	0.64
5:E:24:VAL:HG23	5:E:35:VAL:HB	1.79	0.64
4:ZA:77:ILE:HB	4:ZA:82:LEU:HD12	1.80	0.64
21:U:27:GLU:HG3	21:U:68:GLU:HA	1.80	0.64
41:OA:27:CYS:SG	41:OA:28:GLY:N	2.71	0.64
40:JC:5:ALA:HB3	40:JC:8:GLU:HB2	1.78	0.64
51:VC:1060:U:H3	51:VC:1088:A:H8	1.44	0.64
10:J:66:GLY:HA3	51:VC:2415:G:H4'	1.79	0.64
11:GB:42:ILE:HD11	11:GB:127:ILE:HD11	1.80	0.64
23:SB:47:ASN:O	23:SB:49:LYS:N	2.31	0.64
2:XA:36:ARG:HH21	2:XA:88:GLY:HA2	1.63	0.64
25:UB:20:ARG:NH1	51:ZC:1266:G:OP2	2.30	0.64
53:XC:17(A):U:O2'	53:XC:18:G:O5'	2.15	0.64
29:CA:176:GLU:OE2	50:UC:1101:A:N6	2.31	0.63
8:DB:93:LYS:HG2	8:DB:110:LEU:HD12	1.80	0.63
10:FB:35:HIS:HA	51:ZC:1190:G:H5"	1.79	0.63
33:CC:3:ARG:HH11	33:CC:64:GLN:HE22	1.45	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:XC:54:U:H3	53:XC:58:A:H62	1.46	0.63
51:ZC:2438:U:O2'	51:ZC:2439:A:OP2	2.16	0.63
2:B:36:ARG:HH21	2:B:88:GLY:HA2	1.62	0.63
12:L:104:ARG:HD3	12:L:109:ALA:HB3	1.80	0.63
17:MB:84:ARG:HB2	17:MB:96:ILE:HG22	1.80	0.63
51:ZC:586:A:N1	51:ZC:809:G:O2'	2.28	0.63
1:A:244:ARG:HB2	51:VC:1902:C:O2'	1.99	0.63
14:N:27:THR:HA	14:N:48:ILE:HA	1.80	0.63
30:DA:24:ALA:HB1	30:DA:28:GLN:HB2	1.80	0.63
51:ZC:846:C:H4'	51:ZC:847:U:H5'	1.80	0.63
30:DA:19:GLU:HB2	30:DA:40:ARG:HH22	1.62	0.63
36:JA:4:TYR:HB2	36:JA:19:LEU:HB2	1.80	0.63
5:AB:24:VAL:HG23	5:AB:35:VAL:HB	1.80	0.63
7:CB:38:VAL:HA	7:CB:41:PHE:HB3	1.80	0.63
7:CB:112:MET:H	7:CB:113:PRO:HD2	1.62	0.63
10:FB:66:GLY:HA3	51:ZC:2415:G:H4'	1.79	0.63
51:VC:846:C:H4'	51:VC:847:U:H5'	1.80	0.63
51:VC:1341:U:OP2	51:VC:1394:U:O2'	2.16	0.63
4:ZA:15:VAL:HG21	4:ZA:176:LEU:HD23	1.80	0.63
10:FB:50:ARG:HH11	28:XB:7:HIS:HD2	1.47	0.63
30:ZB:24:ALA:HB1	30:ZB:28:GLN:HB2	1.81	0.63
51:VC:1449:G:H1	51:VC:1462:C:H42	1.46	0.63
51:VC:1849:G:H2'	51:VC:1850:G:H8	1.64	0.63
51:ZC:1849:G:H2'	51:ZC:1850:G:H8	1.63	0.63
7:G:7:VAL:HA	7:G:58:THR:HA	1.81	0.63
37:KA:6:ILE:HG22	37:KA:98:ILE:HG12	1.80	0.63
48:VA:10:ARG:NH1	50:UC:1289:A:OP1	2.31	0.63
41:KC:6:LEU:HD11	50:YC:982:U:H5"	1.79	0.63
51:ZC:1449:G:H1	51:ZC:1462:C:H42	1.46	0.63
10:J:50:ARG:HH11	28:BA:7:HIS:HD2	1.45	0.63
14:JB:27:THR:HA	14:JB:48:ILE:HA	1.80	0.63
51:ZC:1060:U:H3	51:ZC:1088:A:H8	1.44	0.63
6:F:77:LEU:HD21	6:F:101:LEU:HD13	1.80	0.63
30:DA:70:VAL:HG21	30:DA:76:VAL:HG11	1.81	0.63
32:FA:14:ARG:NH2	50:UC:1079:G:O3'	2.31	0.63
10:FB:17:LYS:HB3	10:FB:19:VAL:HG22	1.80	0.63
12:HB:103:ARG:NH1	12:HB:108:GLY:O	2.31	0.63
29:YB:185:ILE:HG22	29:YB:199:TYR:HB2	1.79	0.63
31:AC:166:LYS:HA	31:AC:178:VAL:HG21	1.81	0.63
51:ZC:2071:A:H2'	51:ZC:2072:G:H8	1.63	0.63
31:EA:167:GLY:HA3	1:WA:135:PHE:HE2	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:IA:89:PRO:HA	35:IA:92:ARG:HH11	1.64	0.63
46:TA:79:THR:HB	50:UC:957:U:H4'	1.81	0.63
1:WA:244:ARG:HB2	51:ZC:1902:C:O2'	1.99	0.63
6:BB:77:LEU:HD21	6:BB:101:LEU:HD13	1.80	0.63
7:CB:7:VAL:HA	7:CB:58:THR:HA	1.81	0.63
51:ZC:880:G:H1	51:ZC:897:C:H42	1.46	0.63
25:Y:20:ARG:NH1	51:VC:1266:G:OP2	2.31	0.62
35:EC:89:PRO:HA	35:EC:92:ARG:HH11	1.64	0.62
50:UC:660:G:H1	50:UC:745:C:H42	1.46	0.62
51:ZC:2584:U:H2'	51:ZC:2585:U:H2'	1.81	0.62
7:G:38:VAL:HA	7:G:41:PHE:HB3	1.80	0.62
29:CA:185:ILE:HG22	29:CA:199:TYR:HB2	1.79	0.62
7:CB:131:ALA:HB1	7:CB:136:VAL:HG13	1.81	0.62
51:VC:270(K):G:H1	51:VC:270(Q):C:H42	1.45	0.62
53:XC:1:C:H42	53:XC:72:A:H61	1.48	0.62
51:VC:2071:A:H2'	51:VC:2072:G:H8	1.64	0.62
50:YC:902:G:H2'	50:YC:903:G:H8	1.63	0.62
52:AD:89(A):G:H2'	52:AD:89(B):A:C8	2.35	0.62
53:BD:54:U:H3	53:BD:58:A:H62	1.47	0.62
4:D:115:ARG:HH22	4:D:136:ARG:H	1.48	0.62
2:XA:52:LEU:O	2:XA:76:ARG:N	2.27	0.62
21:QB:27:GLU:HG3	21:QB:68:GLU:HA	1.80	0.62
51:VC:2123:G:H2'	51:VC:2124:G:H8	1.65	0.62
51:VC:2584:U:H2'	51:VC:2585:U:H2'	1.82	0.62
30:DA:70:VAL:HG12	30:DA:72:LYS:H	1.63	0.62
10:FB:133:SER:OG	51:ZC:637:A:OP1	2.16	0.62
22:RB:64:ALA:HA	22:RB:67:ILE:HG13	1.82	0.62
51:ZC:2595:G:N2	51:ZC:2598:A:OP2	2.27	0.62
53:BD:17(A):U:O2'	53:BD:18:G:O5'	2.16	0.62
2:B:52:LEU:O	2:B:76:ARG:N	2.26	0.62
44:RA:7:THR:HG22	44:RA:58:GLU:HG2	1.81	0.62
20:T:27:VAL:HG21	52:WC:75:G:H1'	1.82	0.62
40:NA:91:ARG:HD2	46:TA:81:ARG:HH22	1.65	0.62
4:D:77:ILE:HB	4:D:82:LEU:HD12	1.80	0.62
13:M:30:ARG:HD2	13:M:97:ARG:HD3	1.80	0.62
1:WA:179:SER:OG	51:ZC:1799:G:N7	2.30	0.62
51:ZC:521:G:H2'	51:ZC:522:G:H8	1.65	0.62
12:L:103:ARG:NH1	12:L:108:GLY:O	2.32	0.62
7:CB:78:ILE:HG21	7:CB:136:VAL:HG11	1.81	0.62
10:FB:146:VAL:HG22	10:FB:147:LEU:H	1.63	0.62
11:GB:14:ARG:NH1	51:ZC:958:U:OP2	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:NC:7:THR:HG22	44:NC:58:GLU:HG2	1.81	0.62
50:UC:1306:A:H61	50:UC:1331:G:H1'	1.63	0.62
51:ZC:2123:G:H2'	51:ZC:2124:G:H8	1.65	0.62
52:AD:51:G:N2	52:AD:52:A:N7	2.48	0.62
4:D:15:VAL:HG21	4:D:176:LEU:HD23	1.80	0.61
4:ZA:128:ARG:HE	4:ZA:129:GLY:H	1.47	0.61
12:HB:38:VAL:HG22	12:HB:112:ALA:HB2	1.82	0.61
7:G:131:ALA:HB1	7:G:136:VAL:HG13	1.81	0.61
33:GA:97:PHE:HD2	45:SA:31:LEU:HD21	1.64	0.61
49:SC:40:ILE:HA	49:SC:57:ILE:HB	1.81	0.61
10:J:146:VAL:HG22	10:J:147:LEU:H	1.64	0.61
51:VC:2843:G:H1	51:VC:2874:C:H42	1.47	0.61
51:ZC:994:C:O2'	51:ZC:996:A:OP1	2.15	0.61
7:G:71:THR:HG21	7:G:111:LYS:HA	1.82	0.61
10:FB:33:ARG:NH1	51:ZC:587:C:OP2	2.33	0.61
46:PC:79:THR:HB	50:YC:957:U:H4'	1.81	0.61
12:L:38:VAL:HG22	12:L:112:ALA:HB2	1.82	0.61
31:EA:5:ILE:HD12	50:UC:406:G:H5"	1.81	0.61
37:KA:48:THR:HA	37:KA:62:HIS:HB3	1.82	0.61
50:YC:1128:C:H42	50:YC:1143:G:H22	1.49	0.61
4:D:128:ARG:HE	4:D:129:GLY:H	1.49	0.61
7:G:78:ILE:HG21	7:G:136:VAL:HG11	1.81	0.61
30:ZB:70:VAL:HG12	30:ZB:72:LYS:H	1.64	0.61
49:TC:40:ILE:HA	49:TC:57:ILE:HB	1.81	0.61
53:XC:26:G:H1	53:XC:44:A:H61	1.47	0.61
11:GB:37:LEU:HD11	11:GB:130:LYS:HG3	1.83	0.61
26:Z:37:ARG:NH2	51:VC:2286:A:O2'	2.34	0.61
31:EA:5:ILE:H	31:EA:115:ARG:HH12	1.48	0.61
18:NB:55:ASN:HB2	18:NB:80:ILE:HG12	1.83	0.61
51:ZC:2843:G:H1	51:ZC:2874:C:H42	1.47	0.61
37:GC:48:THR:HA	37:GC:62:HIS:HB3	1.82	0.61
52:WC:89(A):G:H2'	52:WC:89(B):A:C8	2.35	0.61
51:ZC:2735:G:H1	51:ZC:2769:C:H42	1.49	0.61
53:BD:26:G:H1	53:BD:44:A:H61	1.47	0.61
1:A:246:PRO:HB2	1:A:255:LYS:HE3	1.83	0.61
11:K:42:ILE:HD11	11:K:127:ILE:HD11	1.82	0.61
30:DA:150:LYS:HB3	30:DA:201:TYR:HB2	1.83	0.61
4:ZA:115:ARG:HH22	4:ZA:136:ARG:H	1.49	0.61
20:PB:27:VAL:HG21	52:AD:75:G:H1'	1.82	0.61
34:HA:116:ALA:HA	34:HA:119:ARG:HE	1.65	0.60
51:VC:2735:G:H1	51:VC:2769:C:H42	1.49	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:ZB:179:ARG:HD2	30:ZB:207:VAL:HG22	1.83	0.60
40:JC:91:ARG:HD2	46:PC:81:ARG:HH22	1.65	0.60
50:UC:902:G:H2'	50:UC:903:G:H8	1.64	0.60
23:W:19:VAL:HG12	23:W:23:LYS:HE3	1.83	0.60
24:X:39:ASP:OD1	24:X:44:ARG:NH2	2.34	0.60
3:YA:32:LEU:HD11	3:YA:105:VAL:HG13	1.83	0.60
23:SB:46:GLN:HB3	51:ZC:95:G:H4'	1.84	0.60
11:K:14:ARG:NH1	51:VC:958:U:OP2	2.34	0.60
23:SB:48:HIS:O	23:SB:51:ARG:HG2	2.01	0.60
10:J:17:LYS:HB3	10:J:19:VAL:HG22	1.81	0.60
10:J:33:ARG:NH1	51:VC:587:C:OP2	2.32	0.60
46:TA:69:HIS:HB3	46:TA:73:GLU:HG3	1.83	0.60
9:EB:2:ILE:HG21	9:EB:8:LEU:HD21	1.83	0.60
15:KB:62:ILE:HD11	15:KB:93:LYS:HD3	1.83	0.60
33:CC:97:PHE:HD2	45:OC:31:LEU:HD21	1.64	0.60
51:VC:994:C:O2'	51:VC:996:A:OP1	2.17	0.60
51:ZC:224:G:O6	51:ZC:419:C:O2'	2.18	0.60
53:BD:1:C:H42	53:BD:72:A:H61	1.48	0.60
8:H:116:THR:OG1	8:H:117:HIS:N	2.34	0.60
22:V:64:ALA:HA	22:V:67:ILE:HG13	1.83	0.60
23:W:47:ASN:O	23:W:49:LYS:N	2.34	0.60
23:W:48:HIS:O	23:W:51:ARG:HG2	2.01	0.60
18:NB:35:THR:HG21	51:ZC:142:G:H4'	1.84	0.60
41:KC:32:SER:N	50:YC:976:G:OP1	2.32	0.60
16:P:84:LYS:NZ	51:VC:1226:A:OP1	2.25	0.60
30:DA:179:ARG:HD2	30:DA:207:VAL:HG22	1.83	0.60
1:WA:246:PRO:HB2	1:WA:255:LYS:HE3	1.82	0.60
15:KB:90:VAL:HG23	16:LB:39:LEU:HG	1.83	0.60
26:VB:37:ARG:NH2	51:ZC:2286:A:O2'	2.33	0.60
47:QC:82:SER:O	47:QC:86:ARG:HB3	2.02	0.60
4:D:97:ASP:HA	4:D:100:TRP:HD1	1.65	0.60
16:P:6:LYS:HG3	16:P:11:GLN:HG2	1.84	0.60
30:DA:199:LYS:NZ	50:UC:1058:G:OP1	2.35	0.60
1:WA:259:THR:OG1	51:ZC:1797:C:O2'	2.17	0.60
4:ZA:5:LEU:HD12	4:ZA:101:ILE:HG22	1.84	0.60
50:UC:624:C:H2'	50:UC:625:G:H8	1.66	0.60
51:VC:573:G:N1	51:VC:2031:A:OP2	2.30	0.60
51:VC:1796:U:H2'	51:VC:1797:C:C6	2.37	0.60
52:WC:51:G:N2	52:WC:52:A:N7	2.49	0.60
50:YC:660:G:H1	50:YC:745:C:H42	1.48	0.60
50:YC:811:C:O2'	50:YC:901:A:N1	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:5:LEU:HD12	4:D:101:ILE:HG22	1.84	0.60
22:V:40:ARG:HH21	22:V:42:GLN:HG2	1.66	0.60
4:ZA:97:ASP:HA	4:ZA:100:TRP:HD1	1.66	0.60
7:CB:71:THR:HG21	7:CB:111:LYS:HA	1.82	0.60
24:TB:39:ASP:OD1	24:TB:44:ARG:NH2	2.34	0.60
34:DC:116:ALA:HA	34:DC:119:ARG:HE	1.66	0.60
15:O:62:ILE:HD11	15:O:93:LYS:HD3	1.83	0.60
22:V:20:ARG:HB3	51:VC:380:U:O2'	2.02	0.60
29:CA:187:LEU:HD22	29:CA:205:ASP:HB3	1.83	0.60
3:YA:74:ARG:HD3	51:ZC:674:G:H1'	1.84	0.60
30:ZB:70:VAL:HG21	30:ZB:76:VAL:HG11	1.82	0.60
43:MC:55:ARG:HA	43:MC:58:TYR:HB3	1.83	0.60
51:VC:2438:U:O2'	51:VC:2439:A:OP2	2.17	0.60
41:OA:6:LEU:HD22	41:OA:23:ARG:HH22	1.66	0.59
51:VC:521:G:H2'	51:VC:522:G:H8	1.65	0.59
50:YC:1143:G:H2'	50:YC:1144:G:C8	2.37	0.59
3:C:57:VAL:HG13	3:C:59:TYR:H	1.67	0.59
4:D:137:GLU:HG2	4:D:152:LEU:HD13	1.84	0.59
31:EA:122:ARG:NH2	50:UC:403:C:O2'	2.35	0.59
43:QA:55:ARG:HA	43:QA:58:TYR:HB3	1.84	0.59
8:DB:116:THR:OG1	8:DB:117:HIS:N	2.34	0.59
12:HB:53:HIS:HB2	12:HB:94:TYR:HE1	1.67	0.59
16:LB:56:SER:H	16:LB:101:GLY:HA2	1.67	0.59
15:O:53:ARG:NH2	51:VC:994:C:OP1	2.35	0.59
21:U:64:ASP:OD1	21:U:64:ASP:N	2.25	0.59
39:MA:116:ARG:NH2	50:UC:501:C:OP1	2.26	0.59
23:SB:19:VAL:HG12	23:SB:23:LYS:HE3	1.83	0.59
46:PC:69:HIS:HB3	46:PC:73:GLU:HG3	1.84	0.59
51:VC:463:G:N2	51:VC:466:A:OP2	2.28	0.59
51:VC:1358:G:N1	51:VC:1372:U:OP2	2.32	0.59
51:VC:1379:A:H4'	51:VC:1380:G:OP2	2.01	0.59
51:ZC:380:U:H2'	51:ZC:381:G:H8	1.67	0.59
2:B:143:ASN:ND2	51:VC:2574:G:N3	2.51	0.59
35:IA:15:ASN:ND2	50:UC:826:C:O2	2.35	0.59
8:DB:132:LYS:HD3	8:DB:132:LYS:H	1.67	0.59
37:GC:34:VAL:HG22	37:GC:74:ILE:HG22	1.84	0.59
50:UC:811:C:O2'	50:UC:901:A:N1	2.35	0.59
50:YC:624:C:H2'	50:YC:625:G:H8	1.66	0.59
8:H:70:ALA:HB2	8:H:135:LEU:HD12	1.84	0.59
11:K:37:LEU:HD11	11:K:130:LYS:HG3	1.83	0.59
38:LA:118:GLY:HA2	50:UC:716:A:H1'	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:GB:99:PRO:HB2	20:PB:79:ARG:HG2	1.85	0.59
48:RC:10:ARG:NH1	50:YC:1289:A:OP1	2.34	0.59
18:R:55:ASN:HB2	18:R:80:ILE:HG12	1.82	0.59
47:UA:82:SER:O	47:UA:86:ARG:HB3	2.02	0.59
19:OB:37:VAL:HG21	19:OB:72:VAL:HG21	1.84	0.59
39:IC:88:ARG:HA	39:IC:96:ARG:HA	1.84	0.59
51:VC:2811:G:H1	51:VC:2889:C:H42	1.49	0.59
51:ZC:1678:G:N2	51:ZC:1989:G:H22	1.99	0.59
16:P:56:SER:H	16:P:101:GLY:HA2	1.66	0.59
4:ZA:137:GLU:HG2	4:ZA:152:LEU:HD13	1.84	0.59
44:NC:57:VAL:HG12	44:NC:76:LEU:HA	1.85	0.59
51:VC:1300:U:H4'	51:VC:1301:A:O5'	2.02	0.59
51:VC:2712:U:H1'	51:VC:712(B):A:C8	2.37	0.59
51:ZC:1300:U:H4'	51:ZC:1301:A:O5'	2.02	0.59
6:F:133:HIS:O	6:F:135:GLU:N	2.34	0.59
8:H:132:LYS:H	8:H:132:LYS:HD3	1.67	0.59
30:DA:6:HIS:HD2	30:DA:8:ILE:H	1.51	0.59
32:FA:24:ARG:NH2	50:UC:1397:C:OP2	2.36	0.59
38:HC:118:GLY:HA2	50:YC:716:A:H1'	1.84	0.59
50:UC:501:C:H2'	50:UC:502:G:H8	1.68	0.59
51:VC:1791:A:N6	51:VC:1828:G:O2'	2.35	0.59
51:VC:1899:G:N2	51:VC:1902:C:H41	2.01	0.59
12:L:53:HIS:HB2	12:L:94:TYR:HE1	1.68	0.59
30:DA:172:ARG:HG2	50:UC:1106:G:H5"	1.85	0.59
33:GA:37:VAL:HA	33:GA:65:VAL:HG12	1.85	0.59
2:XA:143:ASN:ND2	51:ZC:2574:G:N3	2.50	0.59
4:ZA:67:LYS:O	52:AD:42:C:O2'	2.20	0.59
16:LB:16:PRO:HB3	16:LB:99:ILE:HD12	1.84	0.59
30:ZB:14:ILE:HG12	30:ZB:15:THR:H	1.68	0.59
30:ZB:199:LYS:NZ	50:YC:1058:G:OP1	2.35	0.59
35:EC:15:ASN:ND2	50:YC:826:C:O2	2.36	0.59
51:VC:1678:G:N2	51:VC:1989:G:H22	2.00	0.59
50:YC:1105:A:H2'	50:YC:1106:G:H8	1.68	0.59
51:ZC:1791:A:N6	51:ZC:1828:G:O2'	2.36	0.59
1:A:148:GLU:HB2	1:A:151:LYS:HD2	1.84	0.58
3:C:32:LEU:HD11	3:C:105:VAL:HG13	1.84	0.58
16:P:16:PRO:HB3	16:P:99:ILE:HD12	1.84	0.58
19:S:37:VAL:HG21	19:S:72:VAL:HG21	1.85	0.58
31:EA:4:TYR:O	31:EA:6:GLY:N	2.35	0.58
43:MC:20:VAL:HG23	43:MC:35:LYS:HA	1.84	0.58
50:UC:259:G:H1	50:UC:267:C:H42	1.50	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:1143:G:H2'	50:UC:1144:G:C8	2.38	0.58
51:VC:2110:G:H5"	51:VC:2111:C:H5	1.68	0.58
50:YC:950:U:H2'	50:YC:951:G:H8	1.68	0.58
7:G:104:VAL:HG13	7:G:127:ILE:HB	1.85	0.58
8:H:63:PRO:HB3	15:O:68:ALA:HB2	1.85	0.58
9:I:2:ILE:HG21	9:I:8:LEU:HD21	1.84	0.58
23:W:46:GLN:HB3	51:VC:95:G:H4'	1.85	0.58
37:KA:34:VAL:HG22	37:KA:74:ILE:HG22	1.85	0.58
6:BB:133:HIS:O	6:BB:135:GLU:N	2.34	0.58
10:FB:61:ARG:HH11	28:XB:13:ARG:HD2	1.68	0.58
22:RB:20:ARG:HB3	51:ZC:380:U:O2'	2.02	0.58
50:UC:973:G:H3'	50:UC:974:A:H5"	1.84	0.58
20:PB:19:ARG:NH2	52:AD:76:G:O3'	2.36	0.58
51:ZC:527:C:N4	51:ZC:2779:U:OP2	2.36	0.58
51:ZC:1379:A:H4'	51:ZC:1380:G:OP2	2.01	0.58
51:ZC:1796:U:H2'	51:ZC:1797:C:C6	2.37	0.58
32:FA:10:MET:HA	32:FA:32:VAL:HA	1.84	0.58
38:LA:79:SER:HA	38:LA:104:GLN:HB3	1.85	0.58
19:OB:4:LYS:H	19:OB:4:LYS:HD3	1.69	0.58
50:UC:1105:A:H2'	50:UC:1106:G:H8	1.68	0.58
51:VC:224:G:O6	51:VC:419:C:O2'	2.20	0.58
51:VC:1752:C:H42	51:VC:1756:G:H1	1.51	0.58
7:G:90:LYS:HE3	51:VC:1076:C:H5'	1.85	0.58
11:K:99:PRO:HB2	20:T:79:ARG:HG2	1.85	0.58
15:KB:53:ARG:NH2	51:ZC:994:C:OP1	2.37	0.58
16:LB:6:LYS:HG3	16:LB:11:GLN:HG2	1.85	0.58
30:ZB:172:ARG:HG2	50:YC:1106:G:H5"	1.86	0.58
32:BC:24:ARG:NH2	50:YC:1397:C:OP2	2.36	0.58
32:BC:49:PRO:HG2	50:YC:1071:C:H5"	1.85	0.58
51:ZC:676:A:H8	51:ZC:2069:G:H21	1.51	0.58
51:ZC:2110:G:H5"	51:ZC:2111:C:H5	1.68	0.58
51:ZC:2712:U:H1'	51:ZC:712(B):A:C8	2.38	0.58
44:RA:57:VAL:HG12	44:RA:76:LEU:HA	1.84	0.58
10:FB:16:ARG:O	51:ZC:661:C:O2'	2.18	0.58
28:XB:22:VAL:HB	28:XB:54:GLU:HG3	1.85	0.58
31:AC:22:LYS:HB2	31:AC:26:CYS:SG	2.44	0.58
50:UC:1128:C:H42	50:UC:1143:G:H22	1.49	0.58
51:ZC:746:A:O2'	51:ZC:2611:U:O2'	2.21	0.58
51:ZC:1358:G:N1	51:ZC:1372:U:OP2	2.31	0.58
16:P:4:ILE:O	16:P:39:LEU:N	2.36	0.58
6:BB:42:SER:HB3	51:ZC:270(R):C:H4'	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:KB:92:ARG:HD2	15:KB:94:ASN:HB3	1.86	0.58
17:MB:42:ARG:HB2	51:ZC:2010:G:H5"	1.84	0.58
22:RB:40:ARG:HH21	22:RB:42:GLN:HG2	1.68	0.58
32:BC:10:MET:HA	32:BC:32:VAL:HA	1.85	0.58
38:HC:79:SER:HA	38:HC:104:GLN:HB3	1.84	0.58
51:VC:2698:U:H2'	51:VC:2699:C:C6	2.39	0.58
50:YC:501:C:H2'	50:YC:502:G:H8	1.69	0.58
50:YC:973:G:H3'	50:YC:974:A:H5"	1.84	0.58
2:B:19:ARG:HA	9:I:73:ASP:HA	1.84	0.58
42:PA:82:ILE:HD11	42:PA:88:ARG:HB2	1.85	0.58
45:SA:31:LEU:HD23	45:SA:31:LEU:H	1.69	0.58
2:XA:19:ARG:HA	9:EB:73:ASP:HA	1.84	0.58
11:GB:30:GLY:HA2	11:GB:107:ALA:HB2	1.85	0.58
15:KB:50:ARG:NH2	51:ZC:993:G:OP1	2.37	0.58
29:YB:187:LEU:HD22	29:YB:205:ASP:HB3	1.84	0.58
45:OC:31:LEU:H	45:OC:31:LEU:HD23	1.68	0.58
50:UC:376:G:N2	50:UC:387:U:O2	2.34	0.58
51:VC:1047:G:H1'	51:VC:1110:G:H1	1.69	0.58
1:A:179:SER:OG	51:VC:1799:G:N7	2.31	0.58
10:J:61:ARG:HH11	28:BA:13:ARG:HD2	1.69	0.58
28:BA:53:PRO:O	28:BA:57:ARG:NH1	2.37	0.58
43:QA:20:VAL:HG23	43:QA:35:LYS:HA	1.84	0.58
50:YC:259:G:H1	50:YC:267:C:H42	1.51	0.58
1:A:63:ARG:NH2	51:VC:1567:A:O2'	2.37	0.58
11:K:30:GLY:HA2	11:K:107:ALA:HB2	1.85	0.58
20:T:19:ARG:NH2	52:WC:76:G:O3'	2.37	0.58
30:DA:14:ILE:HG12	30:DA:15:THR:H	1.68	0.58
39:MA:88:ARG:HA	39:MA:96:ARG:HA	1.85	0.58
25:UB:36:CYS:SG	25:UB:37:LYS:N	2.77	0.58
37:GC:53:PRO:HA	41:KC:42:ILE:HD11	1.86	0.58
42:LC:82:ILE:HD11	42:LC:88:ARG:HB2	1.86	0.58
51:VC:676:A:H8	51:VC:2069:G:H21	1.51	0.58
1:A:242:ARG:HG2	1:A:246:PRO:HG3	1.86	0.57
16:P:58:VAL:HG21	16:P:100:ARG:HE	1.69	0.57
8:DB:70:ALA:HB2	8:DB:135:LEU:HD12	1.85	0.57
16:LB:58:VAL:HG21	16:LB:100:ARG:HE	1.68	0.57
51:ZC:1047:G:H1'	51:ZC:1110:G:H1	1.69	0.57
52:AD:44:G:N3	52:AD:47:C:N4	2.45	0.57
17:Q:42:ARG:HB2	51:VC:2010:G:H5"	1.85	0.57
1:WA:206:LEU:HD12	51:ZC:1791:A:H5"	1.86	0.57
28:XB:53:PRO:O	28:XB:57:ARG:NH1	2.36	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CC:37:VAL:HA	33:CC:65:VAL:HG12	1.85	0.57
51:VC:527:C:N4	51:VC:2779:U:OP2	2.37	0.57
51:VC:746:A:O2'	51:VC:2611:U:O2'	2.22	0.57
51:ZC:106:C:HO2'	51:ZC:294:A:HO2'	1.52	0.57
51:ZC:1662:C:O2'	51:ZC:2687:U:OP1	2.21	0.57
7:CB:104:VAL:HG13	7:CB:127:ILE:HB	1.85	0.57
15:KB:52:ARG:HH22	51:ZC:560:C:H4'	1.70	0.57
50:UC:950:U:H2'	50:UC:951:G:H8	1.68	0.57
51:VC:380:U:H2'	51:VC:381:G:H8	1.68	0.57
51:ZC:885:C:H1'	51:ZC:892:G:H22	1.69	0.57
5:AB:54:ARG:NH2	5:AB:57:ASP:OD2	2.37	0.57
10:FB:64:LYS:O	10:FB:66:GLY:N	2.37	0.57
51:VC:885:C:H1'	51:VC:892:G:H22	1.69	0.57
50:YC:376:G:N2	50:YC:387:U:O2	2.34	0.57
51:ZC:1019:U:H3	51:ZC:114(B):A:H62	1.52	0.57
51:ZC:1899:G:N2	51:ZC:1902:C:H41	2.03	0.57
1:A:222:ARG:NH2	51:VC:1788:C:OP1	2.37	0.57
1:WA:260:ARG:NH1	1:WA:267:SER:OG	2.35	0.57
11:GB:75:THR:HA	11:GB:88:GLY:HA3	1.87	0.57
30:ZB:47:LEU:HD21	30:ZB:68:VAL:HG11	1.87	0.57
50:UC:537:G:H2'	50:UC:538:G:H8	1.70	0.57
5:E:137:ASP:HB3	5:E:140:LYS:HB3	1.86	0.57
18:R:35:THR:HG21	51:VC:142:G:H4'	1.84	0.57
30:DA:59:ARG:HG2	30:DA:64:VAL:HG22	1.86	0.57
3:YA:57:VAL:HG13	3:YA:59:TYR:H	1.68	0.57
16:LB:4:ILE:O	16:LB:39:LEU:N	2.37	0.57
30:ZB:150:LYS:HB3	30:ZB:201:TYR:HB2	1.85	0.57
50:UC:103(C):G:H2'	50:UC:1033:G:C8	2.40	0.57
51:VC:1310:G:H1	51:VC:1604:C:H42	1.51	0.57
51:ZC:573:G:N1	51:ZC:2031:A:OP2	2.31	0.57
51:ZC:1010:A:H1'	51:ZC:1153:C:H1'	1.87	0.57
51:ZC:2811:G:H1	51:ZC:2889:C:H42	1.51	0.57
15:O:90:VAL:HG23	16:P:39:LEU:HG	1.85	0.57
28:BA:22:VAL:HB	28:BA:54:GLU:HG3	1.85	0.57
39:MA:84:ILE:HD11	39:MA:97:TYR:HB3	1.86	0.57
2:XA:91:VAL:HB	2:XA:95:ILE:HD11	1.85	0.57
8:DB:40:ASP:OD1	8:DB:41:ALA:N	2.36	0.57
9:EB:34:THR:OG1	9:EB:35:VAL:N	2.38	0.57
11:GB:75:THR:HG21	11:GB:85:LYS:HE3	1.87	0.57
31:AC:73:ARG:O	31:AC:77:ASN:ND2	2.37	0.57
51:VC:859:G:O2'	51:VC:916:G:O6	2.21	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:154:C:H42	50:YC:167:G:H1	1.53	0.57
15:O:92:ARG:HD2	15:O:94:ASN:HB3	1.85	0.57
21:U:39:ARG:NH1	21:U:56:ASP:OD2	2.38	0.57
1:WA:63:ARG:NH2	51:ZC:1567:A:O2'	2.37	0.57
22:RB:25:LYS:NZ	51:ZC:387:U:OP2	2.38	0.57
50:UC:1393:U:O2'	50:UC:1501:C:O2'	2.18	0.57
50:UC:1510:U:H2'	50:UC:1511:G:C8	2.40	0.57
5:E:4:ILE:HD12	51:VC:2748:A:H5'	1.86	0.57
3:YA:117:ARG:NH2	3:YA:189:THR:O	2.37	0.57
5:AB:137:ASP:HB3	5:AB:140:LYS:HB3	1.86	0.57
15:KB:76:TYR:HE2	51:ZC:1153:C:H5'	1.70	0.57
51:VC:964:C:O2'	51:VC:2273:A:N3	2.35	0.57
51:ZC:2698:U:H2'	51:ZC:2699:C:C6	2.39	0.57
4:D:150:ASP:OD1	4:D:150:ASP:N	2.35	0.57
5:E:54:ARG:NH2	5:E:57:ASP:OD2	2.38	0.57
30:DA:47:LEU:HD21	30:DA:68:VAL:HG11	1.87	0.57
35:IA:83:ILE:HG13	35:IA:137:VAL:HG22	1.86	0.57
3:YA:128:ALA:O	3:YA:142:TRP:NE1	2.37	0.57
1:A:245:PRO:HB2	1:A:255:LYS:HZ3	1.68	0.56
3:C:128:ALA:O	3:C:142:TRP:NE1	2.38	0.56
1:WA:148:GLU:HB2	1:WA:151:LYS:HD2	1.86	0.56
12:HB:28:LEU:HD12	12:HB:48:VAL:HG21	1.86	0.56
30:ZB:6:HIS:HD2	30:ZB:7:PRO:CD	2.08	0.56
51:ZC:1752:C:H42	51:ZC:1756:G:H1	1.53	0.56
34:HA:69:VAL:HG22	34:HA:135:VAL:HG22	1.87	0.56
8:DB:63:PRO:HB3	15:KB:68:ALA:HB2	1.86	0.56
14:JB:92:GLY:HA2	14:JB:117:ASP:H	1.69	0.56
19:OB:76:CYS:HB3	19:OB:96:ILE:HD13	1.87	0.56
34:DC:69:VAL:HG22	34:DC:135:VAL:HG22	1.87	0.56
51:ZC:2889:C:H2'	51:ZC:2891:G:O4'	2.05	0.56
2:B:91:VAL:HB	2:B:95:ILE:HD11	1.86	0.56
4:D:96:ARG:HG3	4:D:98:ARG:HG2	1.88	0.56
10:J:64:LYS:O	10:J:66:GLY:N	2.38	0.56
10:J:80:TYR:HA	10:J:111:ARG:HB2	1.88	0.56
22:V:45:ASN:OD1	51:VC:2090:G:N2	2.35	0.56
30:DA:8:ILE:HG23	30:DA:16:ARG:HG2	1.87	0.56
30:ZB:59:ARG:HG2	30:ZB:64:VAL:HG22	1.87	0.56
39:IC:84:ILE:HD11	39:IC:97:TYR:HB3	1.86	0.56
51:VC:273(G):C:H3'	51:VC:274:G:H5"	1.87	0.56
51:VC:1010:A:H1'	51:VC:1153:C:H1'	1.87	0.56
51:VC:1019:U:H3	51:VC:114(B):A:H62	1.52	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:60:A:N6	50:YC:110:C:N3	2.53	0.56
50:YC:537:G:H2'	50:YC:538:G:H8	1.69	0.56
50:YC:1144:G:H21	50:YC:1146:A:H62	1.53	0.56
51:ZC:1153:C:H2'	51:ZC:1154:G:O4'	2.06	0.56
51:ZC:2394:C:N3	53:BD:76:A:O2'	2.29	0.56
51:ZC:2681:C:H5	51:ZC:2725:A:H62	1.52	0.56
10:J:16:ARG:O	51:VC:661:C:O2'	2.19	0.56
22:V:25:LYS:NZ	51:VC:387:U:OP2	2.38	0.56
38:LA:82:VAL:HG12	38:LA:108:ILE:HA	1.88	0.56
43:QA:4:ILE:HG12	43:QA:21:VAL:HG12	1.87	0.56
1:WA:222:ARG:NH2	51:ZC:1788:C:OP1	2.39	0.56
7:CB:4:VAL:HA	7:CB:60:TYR:HA	1.87	0.56
17:MB:86:LEU:HD12	17:MB:87:PRO:HD2	1.87	0.56
21:QB:51:VAL:HG21	21:QB:80:HIS:HA	1.88	0.56
35:EC:83:ILE:HG13	35:EC:137:VAL:HG22	1.86	0.56
43:MC:4:ILE:HG12	43:MC:21:VAL:HG12	1.86	0.56
53:XC:35:A:H61	54:GD:13:A:H61	1.52	0.56
1:A:88:ARG:NH2	51:VC:1817:G:OP1	2.39	0.56
19:S:4:LYS:H	19:S:4:LYS:HD3	1.69	0.56
38:LA:85:ARG:NH1	50:UC:707:C:OP1	2.39	0.56
30:ZB:17:ASP:HB3	30:ZB:21:ARG:HH21	1.69	0.56
50:UC:60:A:N6	50:UC:110:C:N3	2.53	0.56
51:ZC:1310:G:H1	51:ZC:1604:C:H42	1.51	0.56
1:A:260:ARG:NH1	1:A:267:SER:OG	2.35	0.56
30:DA:17:ASP:HB3	30:DA:21:ARG:HH21	1.70	0.56
38:LA:105:VAL:O	38:LA:107:SER:N	2.38	0.56
5:AB:4:ILE:HD12	51:ZC:2748:A:H5'	1.86	0.56
50:UC:154:C:H42	50:UC:167:G:H1	1.53	0.56
50:UC:269:C:H2'	50:UC:270:A:C8	2.41	0.56
51:VC:2681:C:H5	51:VC:2725:A:H62	1.53	0.56
50:YC:269:C:H2'	50:YC:270:A:C8	2.41	0.56
51:ZC:2052:G:H2'	51:ZC:2053:G:H8	1.71	0.56
7:G:4:VAL:HA	7:G:60:TYR:HA	1.87	0.56
11:K:38:GLU:HB2	11:K:127:ILE:HG23	1.88	0.56
12:L:28:LEU:HD12	12:L:48:VAL:HG21	1.87	0.56
6:BB:90:GLY:HA2	50:UC:368:U:C5'	2.32	0.56
50:UC:1086:U:H3	50:UC:1099:G:H22	1.54	0.56
50:UC:1359:C:H1'	50:UC:136(A):C:H41	1.70	0.56
50:YC:1510:U:H2'	50:YC:1511:G:C8	2.41	0.56
51:ZC:859:G:O2'	51:ZC:916:G:O6	2.21	0.56
35:IA:19:VAL:HG23	35:IA:21:LYS:HG2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:JB:62:THR:HG22	14:JB:75:ILE:HG13	1.88	0.56
31:AC:24:GLU:HA	31:AC:27:TYR:HD1	1.70	0.56
51:VC:2889:C:H2'	51:VC:2891:G:O4'	2.05	0.56
50:YC:1452:C:HO2'	50:YC:1453:G:N2	2.04	0.56
51:ZC:1218:C:O2	51:ZC:1231:G:N2	2.38	0.56
7:CB:93:ARG:H	7:CB:93:ARG:HD2	1.71	0.56
10:FB:55:ARG:HG3	10:FB:56:SER:H	1.71	0.56
11:GB:52:VAL:O	11:GB:56:ARG:HB2	2.06	0.56
30:ZB:91:LEU:HB3	30:ZB:99:VAL:HG11	1.88	0.56
51:VC:2307:G:N2	51:VC:2311:A:OP2	2.39	0.56
51:ZC:463:G:N2	51:ZC:466:A:OP2	2.29	0.56
3:C:117:ARG:NH2	3:C:189:THR:O	2.38	0.56
10:J:55:ARG:HG3	10:J:56:SER:H	1.70	0.56
11:K:52:VAL:O	11:K:56:ARG:HB2	2.06	0.56
14:N:62:THR:HG22	14:N:75:ILE:HG13	1.88	0.56
19:S:76:CYS:SG	19:S:77:PRO:HD2	2.46	0.56
41:OA:32:SER:N	50:UC:976:G:OP1	2.38	0.56
6:BB:89:TYR:HB3	50:UC:368:U:C4	2.40	0.56
9:EB:98:VAL:HG11	9:EB:114:ILE:HG22	1.88	0.56
17:MB:88:ARG:H	51:ZC:1614:A:H61	1.54	0.56
19:OB:30:VAL:HG22	19:OB:37:VAL:HG12	1.88	0.56
51:VC:1662:C:O2'	51:VC:2687:U:OP1	2.23	0.56
51:VC:2595:G:N2	51:VC:2598:A:OP2	2.28	0.56
1:A:125:ILE:HG12	1:A:137:PRO:HD3	1.88	0.55
1:A:206:LEU:HD12	51:VC:1791:A:H5"	1.87	0.55
9:I:14:THR:HG21	9:I:86:ILE:HD12	1.88	0.55
9:I:98:VAL:HG11	9:I:114:ILE:HG22	1.88	0.55
19:S:30:VAL:HG22	19:S:37:VAL:HG12	1.88	0.55
37:GC:5:ARG:HD3	37:GC:71:LEU:HD11	1.88	0.55
51:VC:839:U:H3	51:VC:939:G:H1	1.54	0.55
51:ZC:2224:G:H4'	51:ZC:2226:C:C2	2.41	0.55
9:I:34:THR:OG1	9:I:35:VAL:N	2.38	0.55
11:K:75:THR:HG21	11:K:85:LYS:HE3	1.87	0.55
30:DA:147:LYS:HB2	30:DA:203:PHE:HD2	1.71	0.55
39:MA:68:TYR:HB3	39:MA:98:HIS:HD2	1.71	0.55
38:HC:105:VAL:O	38:HC:107:SER:N	2.39	0.55
51:VC:1153:C:H2'	51:VC:1154:G:O4'	2.05	0.55
10:J:49:ARG:NH1	51:VC:666:G:H4'	2.20	0.55
10:J:57:THR:HB	10:J:59:LEU:HB2	1.88	0.55
16:P:47:VAL:HG12	16:P:52:VAL:HB	1.88	0.55
25:Y:36:CYS:SG	25:Y:37:LYS:N	2.77	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TA:37:ARG:NH2	50:UC:1220:G:OP1	2.40	0.55
46:PC:31:ILE:HG23	46:PC:49:ILE:HG23	1.88	0.55
51:VC:271(C):G:H4'	51:VC:271(D):U:O5'	2.07	0.55
51:VC:1218:C:O2	51:VC:1231:G:N2	2.40	0.55
50:YC:1342:C:H2'	50:YC:1343:G:H8	1.71	0.55
15:O:50:ARG:NH2	51:VC:993:G:OP1	2.39	0.55
19:S:84:ARG:NH2	51:VC:300:A:OP1	2.39	0.55
22:RB:81:ARG:HD2	51:ZC:270(J):G:H4'	1.88	0.55
51:VC:2052:G:H2'	51:VC:2053:G:H8	1.71	0.55
1:A:244:ARG:HD3	51:VC:1902:C:H1'	1.89	0.55
4:D:27:ASN:HB3	4:D:30:GLU:HG3	1.88	0.55
7:G:78:ILE:HG12	7:G:131:ALA:HB2	1.88	0.55
46:TA:31:ILE:HG23	46:TA:49:ILE:HG23	1.88	0.55
31:AC:3:ARG:HE	31:AC:118:ARG:HD3	1.72	0.55
36:FC:29:ASN:ND2	36:FC:65:VAL:O	2.40	0.55
15:O:76:TYR:HE2	51:VC:1153:C:H5'	1.71	0.55
39:MA:52:ARG:HH12	39:MA:91:ASP:HB3	1.72	0.55
10:FB:57:THR:HB	10:FB:59:LEU:HB2	1.88	0.55
39:IC:27:LYS:HB2	39:IC:32:ARG:HH12	1.72	0.55
50:UC:836:G:H1	50:UC:850:U:H3	1.55	0.55
50:YC:537:G:H2'	50:YC:538:G:C8	2.41	0.55
50:YC:1266:G:N2	50:YC:1269:A:OP2	2.40	0.55
3:C:6:MET:HG2	3:C:7:TYR:HD1	1.72	0.55
9:I:104:ARG:HG2	9:I:121:VAL:HG12	1.89	0.55
14:N:92:GLY:HA2	14:N:117:ASP:H	1.72	0.55
14:N:119:LYS:NZ	51:VC:2867:G:OP2	2.22	0.55
31:EA:158:ILE:O	31:EA:162:LEU:HG	2.07	0.55
19:OB:76:CYS:SG	19:OB:77:PRO:HD2	2.47	0.55
20:PB:69:THR:HG22	20:PB:90:VAL:HG22	1.89	0.55
21:QB:39:ARG:NH1	21:QB:56:ASP:OD2	2.39	0.55
30:ZB:147:LYS:HB2	30:ZB:203:PHE:HD2	1.71	0.55
50:UC:1144:G:H21	50:UC:1146:A:H62	1.53	0.55
50:UC:1163:C:H2'	50:UC:1164:G:H8	1.72	0.55
50:YC:987:G:H2'	50:YC:988:G:H8	1.71	0.55
50:YC:1163:C:H2'	50:YC:1164:G:H8	1.72	0.55
50:YC:1342:C:H2'	50:YC:1343:G:C8	2.42	0.55
51:ZC:1411:C:H2'	51:ZC:1412:A:C8	2.42	0.55
11:K:75:THR:HA	11:K:88:GLY:HA3	1.88	0.55
21:U:51:VAL:HG21	21:U:80:HIS:HA	1.88	0.55
36:JA:39:GLY:HA3	50:UC:1291:G:H4'	1.88	0.55
44:RA:16:GLN:HE21	50:UC:273:A:H1'	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:WA:61:LEU:O	1:WA:63:ARG:NH1	2.35	0.55
1:WA:125:ILE:HG12	1:WA:137:PRO:HD3	1.87	0.55
10:FB:49:ARG:NH1	51:ZC:666:G:H4'	2.21	0.55
10:FB:80:TYR:HA	10:FB:111:ARG:HB2	1.88	0.55
27:WB:9:ARG:NH1	51:ZC:1309:G:OP2	2.40	0.55
50:UC:576:G:H22	50:UC:759:A:H5"	1.72	0.55
50:YC:103(C):G:H2'	50:YC:1033:G:H8	1.72	0.55
22:V:81:ARG:HD2	51:VC:270(J):G:H4'	1.88	0.55
33:CC:99:ALA:HB2	45:OC:31:LEU:HD22	1.89	0.55
39:IC:68:TYR:HB3	39:IC:98:HIS:HD2	1.72	0.55
51:ZC:2307:G:N2	51:ZC:2311:A:OP2	2.39	0.55
15:O:52:ARG:HH22	51:VC:560:C:H4'	1.70	0.55
37:KA:5:ARG:HD3	37:KA:71:LEU:HD11	1.88	0.55
39:MA:44:PRO:HG2	39:MA:50:ALA:H	1.71	0.55
19:OB:84:ARG:NH2	51:ZC:300:A:OP1	2.40	0.55
38:HC:82:VAL:HG12	38:HC:108:ILE:HA	1.88	0.55
44:NC:16:GLN:HE21	50:YC:273:A:H1'	1.70	0.55
50:UC:537:G:H2'	50:UC:538:G:C8	2.42	0.55
50:YC:836:G:H1	50:YC:850:U:H3	1.55	0.55
51:ZC:1416:G:N2	51:ZC:1582:C:O2	2.40	0.55
21:U:20:ARG:NH1	51:VC:2357:U:OP1	2.40	0.54
26:Z:25:LYS:HD2	28:BA:34:TRP:CZ3	2.42	0.54
38:LA:36:ASP:OD2	38:LA:36:ASP:N	2.40	0.54
45:SA:47:THR:HB	45:SA:49:LYS:HG2	1.89	0.54
1:WA:242:ARG:HG2	1:WA:246:PRO:HG3	1.88	0.54
3:YA:6:MET:HG2	3:YA:7:TYR:HD1	1.72	0.54
10:FB:23:PRO:HD2	10:FB:33:ARG:HH21	1.72	0.54
16:LB:47:VAL:HG12	16:LB:52:VAL:HB	1.88	0.54
20:PB:53:ILE:HD11	20:PB:99:TYR:HB2	1.89	0.54
38:HC:85:ARG:NH1	50:YC:707:C:OP1	2.39	0.54
50:UC:1452:C:O2'	50:UC:1453:G:N2	2.40	0.54
51:VC:81:G:H1	51:VC:105:C:H42	1.53	0.54
51:VC:579:G:O2'	51:VC:2019:A:OP1	2.24	0.54
50:YC:922:G:H2'	50:YC:923:A:C8	2.43	0.54
51:ZC:2646:C:OP2	51:ZC:2732:G:O2'	2.22	0.54
3:C:195:ASP:OD1	3:C:196:LEU:N	2.41	0.54
17:Q:4:LYS:HG3	17:Q:106:ILE:HG22	1.89	0.54
23:W:56:GLN:HA	23:W:59:ARG:HE	1.72	0.54
30:DA:91:LEU:HB3	30:DA:99:VAL:HG11	1.88	0.54
3:YA:195:ASP:OD1	3:YA:196:LEU:N	2.41	0.54
10:FB:59:LEU:HG	28:XB:13:ARG:HH12	1.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:RB:25:LYS:HD3	22:RB:33:LYS:HE2	1.89	0.54
23:SB:56:GLN:HA	23:SB:59:ARG:HE	1.73	0.54
50:UC:987:G:H2'	50:UC:988:G:H8	1.71	0.54
51:VC:2224:G:H4'	51:VC:2226:C:C2	2.41	0.54
4:D:44:GLY:HA3	51:VC:2311:A:C2	2.42	0.54
3:YA:60:SER:OG	3:YA:61:GLY:N	2.39	0.54
4:ZA:27:ASN:HB3	4:ZA:30:GLU:HG3	1.89	0.54
4:ZA:96:ARG:HG3	4:ZA:98:ARG:HG2	1.88	0.54
26:VB:25:LYS:HD2	28:XB:34:TRP:CZ3	2.42	0.54
30:ZB:8:ILE:HG23	30:ZB:16:ARG:HG2	1.89	0.54
39:IC:19:LYS:HD3	39:IC:19:LYS:H	1.72	0.54
39:IC:44:PRO:HG2	39:IC:50:ALA:H	1.72	0.54
51:VC:2068:U:N3	51:VC:2430:A:H2	2.03	0.54
50:YC:950:U:H2'	50:YC:951:G:C8	2.43	0.54
4:D:60:LEU:HD22	4:D:63:ILE:HD11	1.89	0.54
1:WA:88:ARG:NH2	51:ZC:1817:G:OP1	2.40	0.54
1:WA:244:ARG:HD3	51:ZC:1902:C:H1'	1.89	0.54
7:CB:130:SER:HA	51:ZC:1088:A:H62	1.72	0.54
24:TB:12:PRO:HB2	24:TB:20:LYS:HD2	1.89	0.54
31:AC:4:TYR:HE2	31:AC:66:ARG:HE	1.54	0.54
11:K:52:VAL:HA	11:K:55:VAL:HG22	1.89	0.54
1:WA:245:PRO:HB2	1:WA:255:LYS:HZ3	1.71	0.54
50:UC:1266:G:N2	50:UC:1269:A:OP2	2.40	0.54
50:UC:1342:C:H2'	50:UC:1343:G:C8	2.42	0.54
51:ZC:1495:A:O2'	51:ZC:1579:A:H5"	2.08	0.54
51:ZC:1592:C:H2'	51:ZC:1593:G:C8	2.41	0.54
5:E:3:ARG:HG2	5:E:6:ARG:HE	1.73	0.54
6:F:71:ILE:HG13	6:F:72:LEU:HD22	1.89	0.54
20:T:69:THR:HG22	20:T:90:VAL:HG22	1.89	0.54
9:EB:104:ARG:HG2	9:EB:121:VAL:HG12	1.88	0.54
36:FC:39:GLY:HA3	50:YC:1291:G:H4'	1.89	0.54
46:PC:37:ARG:NH2	50:YC:1220:G:OP1	2.40	0.54
50:UC:1342:C:H2'	50:UC:1343:G:H8	1.71	0.54
51:VC:1405:U:H2'	51:VC:1406:U:C6	2.43	0.54
50:YC:626:U:H2'	50:YC:627:G:H8	1.73	0.54
51:ZC:398:G:H2'	51:ZC:399:G:H8	1.73	0.54
1:A:239:ARG:NH2	51:VC:1828:G:OP2	2.39	0.54
7:G:98:ARG:HA	7:G:136:VAL:HG23	1.90	0.54
10:J:59:LEU:HG	28:BA:13:ARG:HH12	1.73	0.54
7:CB:130:SER:HA	51:ZC:1088:A:N6	2.23	0.54
42:LC:8:LYS:NZ	50:YC:659:U:OP2	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:KA:49:VAL:HG23	41:OA:41:ARG:HB2	1.89	0.54
9:EB:14:THR:HG21	9:EB:86:ILE:HD12	1.89	0.54
30:ZB:177:THR:HB	30:ZB:180:ALA:HB2	1.90	0.54
39:IC:52:ARG:HH12	39:IC:91:ASP:HB3	1.73	0.54
51:VC:251:A:C5	51:VC:252:G:H1'	2.43	0.54
51:ZC:271(C):G:H4'	51:ZC:271(D):U:O5'	2.06	0.54
51:ZC:273(G):C:H3'	51:ZC:274:G:H5"	1.88	0.54
51:ZC:839:U:H3	51:ZC:939:G:H1	1.53	0.54
51:ZC:1779:U:H5"	51:ZC:1780:A:H5"	1.90	0.54
4:D:67:LYS:O	52:WC:42:C:O2'	2.21	0.54
13:M:27:SER:HA	13:M:88:ASP:HB3	1.89	0.54
19:S:76:CYS:HB3	19:S:96:ILE:HD13	1.89	0.54
27:AA:9:ARG:NE	27:AA:47:ARG:HB2	2.23	0.54
32:FA:84:PHE:HB2	32:FA:134:ALA:HB2	1.90	0.54
37:KA:51:ARG:HG2	50:UC:1060:C:H5"	1.90	0.54
3:YA:184:TYR:O	3:YA:188:ARG:HG3	2.08	0.54
11:GB:52:VAL:HA	11:GB:55:VAL:HG22	1.89	0.54
28:XB:17:THR:OG1	28:XB:21:LYS:N	2.41	0.54
42:LC:47:LYS:H	42:LC:47:LYS:HD2	1.72	0.54
51:ZC:1600:C:H2'	51:ZC:1601:G:H8	1.73	0.54
3:C:9:ILE:HD11	3:C:20:LEU:HB3	1.90	0.54
10:J:18:ARG:O	10:J:20:GLY:N	2.41	0.54
10:J:70:GLN:HG3	51:VC:389:G:N1	2.22	0.54
17:Q:29:LEU:HD22	17:Q:69:LEU:HD11	1.90	0.54
17:Q:86:LEU:HD12	17:Q:87:PRO:HD2	1.89	0.54
39:MA:27:LYS:HB2	39:MA:32:ARG:HH12	1.72	0.54
42:PA:8:LYS:NZ	50:UC:659:U:OP2	2.38	0.54
7:CB:78:ILE:HG12	7:CB:131:ALA:HB2	1.88	0.54
37:GC:51:ARG:HG2	50:YC:1060:C:H5"	1.90	0.54
38:HC:36:ASP:OD2	38:HC:36:ASP:N	2.40	0.54
50:UC:444:C:H2'	50:UC:445:G:H8	1.73	0.54
50:UC:922:G:H2'	50:UC:923:A:C8	2.43	0.54
50:YC:93:U:H2'	50:YC:95:G:C8	2.43	0.54
50:YC:444:C:H2'	50:YC:445:G:H8	1.73	0.54
50:YC:576:G:H22	50:YC:759:A:H5"	1.73	0.54
50:YC:784:C:H4'	51:ZC:1837:C:OP1	2.08	0.54
51:ZC:595:C:H42	51:ZC:662:G:H1	1.56	0.54
51:ZC:1592:C:H2'	51:ZC:1593:G:H8	1.73	0.54
7:G:93:ARG:H	7:G:93:ARG:HD2	1.72	0.53
9:I:120:GLU:OE1	14:N:67:SER:OG	2.26	0.53
14:N:50:ILE:HD11	14:N:102:ILE:HG12	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:29:GLU:HB3	19:S:38:ILE:HB	1.90	0.53
33:GA:99:ALA:HB2	45:SA:31:LEU:HD22	1.89	0.53
14:JB:50:ILE:HD11	14:JB:102:ILE:HG12	1.90	0.53
19:OB:17:SER:OG	19:OB:18:GLY:N	2.39	0.53
47:QC:72:LEU:HD22	47:QC:73:HIS:H	1.73	0.53
50:UC:626:U:H2'	50:UC:627:G:C8	2.44	0.53
51:VC:1190:G:H2'	51:VC:1191:G:H8	1.73	0.53
50:YC:1452:C:O2'	50:YC:1453:G:N2	2.40	0.53
10:J:23:PRO:HD2	10:J:33:ARG:HH21	1.73	0.53
24:X:12:PRO:HB2	24:X:20:LYS:HD2	1.89	0.53
30:DA:29:TYR:OH	41:OA:54:PRO:O	2.19	0.53
10:FB:70:GLN:HG3	51:ZC:389:G:N1	2.22	0.53
19:OB:29:GLU:HB3	19:OB:38:ILE:HB	1.90	0.53
36:FC:113:LYS:H	36:FC:119:ALA:HA	1.73	0.53
50:YC:626:U:H2'	50:YC:627:G:C8	2.43	0.53
51:ZC:964:C:O2'	51:ZC:2273:A:N3	2.36	0.53
39:MA:19:LYS:H	39:MA:19:LYS:HD3	1.73	0.53
27:WB:10:ARG:NH1	51:ZC:125:G:O6	2.41	0.53
35:EC:19:VAL:HG23	35:EC:21:LYS:HG2	1.89	0.53
45:OC:47:THR:HB	45:OC:49:LYS:HG2	1.90	0.53
51:VC:398:G:H2'	51:VC:399:G:H8	1.73	0.53
3:C:60:SER:OG	3:C:61:GLY:N	2.42	0.53
7:G:93:ARG:HG2	7:G:94:GLU:HG3	1.90	0.53
9:I:68:GLU:H	9:I:68:GLU:CD	2.11	0.53
15:O:25:TRP:CZ3	51:VC:17:G:H4'	2.43	0.53
20:T:95:PRO:HB2	20:T:127:LYS:HE2	1.91	0.53
34:HA:77:SER:HB3	34:HA:84:ASN:HD21	1.74	0.53
36:JA:29:ASN:ND2	36:JA:65:VAL:O	2.40	0.53
40:NA:33:ALA:O	40:NA:37:THR:OG1	2.21	0.53
1:WA:227:ASN:HB3	1:WA:228:PRO:HD2	1.90	0.53
3:YA:101:LEU:O	3:YA:106:ARG:NH1	2.40	0.53
39:IC:52:ARG:NH2	50:YC:522:C:H41	2.06	0.53
51:VC:861:A:N3	52:WC:79:C:O2'	2.41	0.53
51:ZC:1608:A:H1'	51:ZC:1610:A:OP2	2.09	0.53
16:P:4:ILE:HB	16:P:39:LEU:HB2	1.90	0.53
31:EA:74:GLN:O	31:EA:78:LEU:HG	2.09	0.53
7:CB:9:LYS:HB3	51:ZC:1061:U:C4	2.44	0.53
29:YB:196:LEU:HD12	29:YB:197:VAL:HG23	1.91	0.53
39:IC:6:ILE:HA	39:IC:9:LEU:HD12	1.91	0.53
46:PC:6:LYS:HG2	46:PC:7:LYS:HD3	1.91	0.53
50:UC:950:U:H2'	50:UC:951:G:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:1592:C:H2'	51:VC:1593:G:C8	2.43	0.53
50:YC:1086:U:H3	50:YC:1099:G:H22	1.55	0.53
51:ZC:251:A:C5	51:ZC:252:G:H1'	2.44	0.53
51:ZC:503:A:H4'	51:ZC:504:U:H5"	1.91	0.53
51:ZC:1405:U:H2'	51:ZC:1406:U:C6	2.43	0.53
51:ZC:2183:C:H2'	51:ZC:2184:G:H8	1.74	0.53
15:O:76:TYR:CZ	15:O:80:ILE:HG12	2.44	0.53
20:T:53:ILE:HD11	20:T:99:TYR:HB2	1.89	0.53
27:AA:10:ARG:NH1	51:VC:125:G:O6	2.41	0.53
30:DA:177:THR:HB	30:DA:180:ALA:HB2	1.91	0.53
40:NA:49:THR:HG22	40:NA:51:ALA:H	1.74	0.53
47:UA:72:LEU:HD22	47:UA:73:HIS:H	1.73	0.53
14:JB:64:ARG:HG3	14:JB:73:GLU:HG2	1.91	0.53
31:AC:105:VAL:HG13	31:AC:110:PHE:HB2	1.89	0.53
32:BC:84:PHE:HB2	32:BC:134:ALA:HB2	1.90	0.53
51:VC:224:G:OP2	51:VC:408:G:N2	2.42	0.53
51:VC:2093:G:H2'	51:VC:2094:G:H8	1.73	0.53
10:J:88:LEU:HD13	10:J:100:LEU:HD11	1.91	0.53
14:N:64:ARG:HG3	14:N:73:GLU:HG2	1.91	0.53
42:PA:47:LYS:H	42:PA:47:LYS:HD2	1.73	0.53
7:CB:98:ARG:HA	7:CB:136:VAL:HG23	1.90	0.53
20:PB:24:LEU:HD12	20:PB:25:PRO:HD2	1.91	0.53
51:VC:2818:G:H1	51:VC:2828:C:H42	1.55	0.53
50:YC:89:U:H2'	50:YC:90:C:C6	2.44	0.53
50:YC:359:U:H2'	50:YC:360:A:C8	2.43	0.53
3:C:101:LEU:O	3:C:106:ARG:NH1	2.41	0.53
8:H:40:ASP:OD1	8:H:41:ALA:N	2.37	0.53
31:EA:79:PHE:HZ	31:EA:204:ILE:HA	1.74	0.53
7:CB:93:ARG:HG2	7:CB:94:GLU:HG3	1.90	0.53
50:UC:603:U:H2'	50:UC:604:G:C8	2.44	0.53
51:VC:1411:C:H2'	51:VC:1412:A:C8	2.44	0.53
32:FA:11:ILE:HG21	32:FA:105:VAL:HG13	1.91	0.53
15:KB:25:TRP:CZ3	51:ZC:17:G:H4'	2.43	0.53
17:MB:4:LYS:HG3	17:MB:106:ILE:HG22	1.91	0.53
21:QB:27:GLU:OE2	51:ZC:855:G:O2'	2.26	0.53
43:MC:72:ARG:HB2	50:YC:453:A:H4'	1.91	0.53
50:UC:89:U:H2'	50:UC:90:C:C6	2.44	0.53
50:UC:359:U:H2'	50:UC:360:A:C8	2.43	0.53
50:UC:491:G:H2'	50:UC:492:G:H8	1.74	0.53
50:UC:501:C:H2'	50:UC:502:G:C8	2.44	0.53
51:VC:503:A:H4'	51:VC:504:U:H5"	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:1416:G:N2	51:VC:1582:C:O2	2.42	0.53
36:JA:113:LYS:H	36:JA:119:ALA:HA	1.73	0.53
4:ZA:150:ASP:OD1	4:ZA:150:ASP:N	2.35	0.53
10:FB:18:ARG:O	10:FB:20:GLY:N	2.42	0.53
10:FB:21:ARG:NH2	51:ZC:1192:G:OP2	2.42	0.53
11:GB:38:GLU:HB2	11:GB:127:ILE:HG23	1.90	0.53
31:AC:15:GLU:HG2	31:AC:63:LYS:HG3	1.90	0.53
32:BC:11:ILE:HG21	32:BC:105:VAL:HG13	1.92	0.53
36:FC:28:VAL:HG22	36:FC:63:ILE:HB	1.91	0.53
40:JC:108:ARG:HH22	50:YC:1228:C:P	2.31	0.53
50:UC:1292:U:H2'	50:UC:1293:G:C8	2.44	0.53
51:VC:106:C:HO2'	51:VC:294:A:HO2'	1.54	0.53
50:YC:629:G:H2'	50:YC:630:G:C8	2.44	0.53
51:ZC:1516:U:H2'	51:ZC:1517:G:H8	1.74	0.53
15:O:80:ILE:HG22	51:VC:1152:C:H5"	1.91	0.52
39:MA:52:ARG:NH2	50:UC:522:C:H41	2.07	0.52
5:AB:91:GLY:HA3	5:AB:94:TYR:CD2	2.44	0.52
13:IB:27:SER:HA	13:IB:88:ASP:HB3	1.91	0.52
50:UC:444:C:H2'	50:UC:445:G:C8	2.44	0.52
51:ZC:270(T):G:H2'	51:ZC:270(U):G:H8	1.74	0.52
51:ZC:2818:G:H1	51:ZC:2828:C:H42	1.55	0.52
10:J:21:ARG:NH2	51:VC:1192:G:OP2	2.42	0.52
22:V:25:LYS:HD3	22:V:33:LYS:HE2	1.90	0.52
30:DA:191:THR:OG1	30:DA:194:GLY:O	2.27	0.52
31:EA:129:ASN:HA	31:EA:145:GLU:HB2	1.91	0.52
43:QA:72:ARG:HB2	50:UC:453:A:H4'	1.90	0.52
6:BB:71:ILE:HG13	6:BB:72:LEU:HD22	1.90	0.52
10:FB:15:ARG:HH12	10:FB:17:LYS:HD2	1.74	0.52
30:ZB:58:GLU:HB2	30:ZB:65:ALA:HB3	1.92	0.52
41:KC:41:ARG:NH1	50:YC:974:A:OP2	2.33	0.52
51:VC:27:G:H22	51:VC:512:G:H1'	1.73	0.52
51:VC:1899:G:H22	51:VC:1902:C:H41	1.57	0.52
50:YC:447:G:H1	50:YC:485:G:HO2'	1.57	0.52
51:ZC:398:G:H2'	51:ZC:399:G:C8	2.44	0.52
19:S:17:SER:OG	19:S:18:GLY:N	2.40	0.52
29:CA:208:ILE:HA	29:CA:211:ILE:HD12	1.91	0.52
36:JA:28:VAL:HG22	36:JA:63:ILE:HB	1.90	0.52
47:UA:45:GLN:HB2	47:UA:91:LEU:HD13	1.91	0.52
4:ZA:60:LEU:HD22	4:ZA:63:ILE:HD11	1.91	0.52
32:BC:101:ILE:HD11	32:BC:119:LEU:HG	1.90	0.52
34:DC:77:SER:HB3	34:DC:84:ASN:HD21	1.73	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:2183:C:H2'	51:VC:2184:G:H8	1.74	0.52
50:YC:748:C:H4'	50:YC:749:C:O5'	2.09	0.52
51:ZC:81:G:H1	51:ZC:105:C:H42	1.56	0.52
10:J:41:ARG:HH12	10:J:45:LEU:HD22	1.75	0.52
11:K:134:ARG:NH1	11:K:138:ASP:OD1	2.40	0.52
1:WA:8:PRO:HB3	1:WA:14:ARG:HB3	1.92	0.52
1:WA:239:ARG:NH2	51:ZC:1828:G:OP2	2.40	0.52
2:XA:1:MET:O	2:XA:84:PHE:HB2	2.09	0.52
51:VC:324:A:N6	51:VC:338:G:O2'	2.43	0.52
51:VC:398:G:H2'	51:VC:399:G:C8	2.44	0.52
51:ZC:2079:U:O2	51:ZC:2242:G:N2	2.43	0.52
5:E:91:GLY:HA3	5:E:94:TYR:CD2	2.45	0.52
13:M:106:ARG:NH2	51:VC:2376:A:N3	2.54	0.52
17:Q:88:ARG:H	51:VC:1614:A:H61	1.56	0.52
46:TA:6:LYS:HG2	46:TA:7:LYS:HD3	1.91	0.52
2:XA:78:LEU:O	2:XA:79:ARG:HD2	2.10	0.52
29:YB:162:ILE:HD11	29:YB:184:VAL:HG22	1.91	0.52
50:UC:1391:U:H2'	50:UC:1392:G:C8	2.44	0.52
5:E:154:PRO:HB3	5:E:163:TYR:CZ	2.44	0.52
12:L:56:LYS:HA	12:L:84:ALA:HB1	1.91	0.52
13:M:15:ARG:O	13:M:19:LYS:HG2	2.09	0.52
27:AA:9:ARG:NH1	51:VC:1309:G:OP2	2.42	0.52
29:CA:196:LEU:HD12	29:CA:197:VAL:HG23	1.91	0.52
38:LA:55:LYS:NZ	50:UC:691:G:O6	2.42	0.52
1:WA:43:ARG:HB2	1:WA:48:ARG:O	2.09	0.52
3:YA:9:ILE:HD11	3:YA:20:LEU:HB3	1.90	0.52
5:AB:154:PRO:HB3	5:AB:163:TYR:CZ	2.45	0.52
9:EB:68:GLU:CD	9:EB:68:GLU:H	2.13	0.52
9:EB:88:ASN:OD1	9:EB:89:ASN:N	2.43	0.52
14:JB:41:ARG:NE	50:YC:345:C:H5'	2.24	0.52
32:BC:43:LEU:HD11	32:BC:132:ALA:HB1	1.92	0.52
50:UC:103(C):G:H2'	50:UC:1033:G:H8	1.74	0.52
51:VC:595:C:H42	51:VC:662:G:H1	1.57	0.52
51:VC:1495:A:O2'	51:VC:1579:A:H5"	2.10	0.52
51:VC:1600:C:H2'	51:VC:1601:G:H8	1.74	0.52
51:VC:1825:A:H2'	51:VC:1826:G:C8	2.45	0.52
51:ZC:579:G:O2'	51:ZC:2019:A:OP1	2.28	0.52
51:ZC:1825:A:H2'	51:ZC:1826:G:C8	2.44	0.52
1:A:43:ARG:HB2	1:A:48:ARG:O	2.10	0.52
29:CA:162:ILE:HD11	29:CA:184:VAL:HG22	1.91	0.52
32:FA:101:ILE:HD11	32:FA:119:LEU:HG	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:RA:53:LEU:HD11	44:RA:85:VAL:HG11	1.92	0.52
36:FC:128:ARG:NH1	53:FD:32:C:OP2	2.43	0.52
37:GC:49:VAL:HG23	41:KC:41:ARG:HB2	1.92	0.52
51:VC:2189:U:H2'	51:VC:2190:G:C8	2.45	0.52
50:YC:444:C:H2'	50:YC:445:G:C8	2.45	0.52
50:YC:1292:U:H2'	50:YC:1293:G:C8	2.44	0.52
51:ZC:247:G:H4'	51:ZC:386:G:C5	2.45	0.52
51:ZC:2071:A:H2'	51:ZC:2072:G:C8	2.42	0.52
1:A:227:ASN:HB3	1:A:228:PRO:HD2	1.91	0.52
20:T:31:ARG:HG3	20:T:32:HIS:ND1	2.24	0.52
31:EA:91:SER:HB3	31:EA:191:ARG:HD3	1.92	0.52
39:MA:6:ILE:HA	39:MA:9:LEU:HD12	1.90	0.52
4:ZA:44:GLY:HA3	51:ZC:2311:A:C2	2.42	0.52
9:EB:49:ARG:NH2	50:YC:1423:G:OP1	2.42	0.52
12:HB:104:ARG:NH1	12:HB:107:ASP:OD1	2.43	0.52
29:YB:55:PHE:HD1	29:YB:221:LEU:HG	1.74	0.52
50:UC:93:U:H2'	50:UC:95:G:C8	2.44	0.52
50:UC:626:U:H2'	50:UC:627:G:H8	1.74	0.52
51:ZC:1288:U:H1'	51:ZC:1647:G:N2	2.25	0.52
51:ZC:2857:G:N2	51:ZC:2860:A:OP2	2.40	0.52
2:B:1:MET:O	2:B:84:PHE:HB2	2.09	0.52
28:BA:17:THR:OG1	28:BA:21:LYS:N	2.43	0.52
32:FA:43:LEU:HD11	32:FA:132:ALA:HB1	1.92	0.52
10:FB:88:LEU:HD13	10:FB:100:LEU:HD11	1.92	0.52
12:HB:56:LYS:HA	12:HB:84:ALA:HB1	1.91	0.52
21:QB:20:ARG:NH1	51:ZC:2357:U:OP1	2.43	0.52
30:ZB:191:THR:OG1	30:ZB:194:GLY:O	2.27	0.52
43:MC:6:LEU:HD21	43:MC:73:LEU:HD11	1.92	0.52
50:UC:201:C:N3	50:UC:216:G:N2	2.58	0.52
50:UC:953:G:H5'	50:UC:965:A:H61	1.75	0.52
50:UC:1029:G:N1	50:UC:103(B):G:O6	2.43	0.52
51:VC:1779:U:H5"	51:VC:1780:A:H5"	1.92	0.52
50:YC:491:G:H2'	50:YC:492:G:H8	1.74	0.52
50:YC:603:U:H2'	50:YC:604:G:C8	2.44	0.52
51:ZC:27:G:H22	51:ZC:512:G:H1'	1.74	0.52
51:ZC:2364:C:H2'	51:ZC:2365:G:O4'	2.10	0.52
12:L:5:LYS:NZ	51:VC:2821:A:OP2	2.38	0.52
19:S:81:LYS:HD3	19:S:97:ARG:HB3	1.92	0.52
31:EA:121:VAL:HG22	31:EA:126:ILE:HG13	1.91	0.52
27:WB:9:ARG:NE	27:WB:47:ARG:HB2	2.24	0.52
50:UC:424:G:H2'	50:UC:425:G:H8	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:629:G:H2'	50:UC:630:G:C8	2.44	0.52
50:YC:1484:C:O2'	51:ZC:1960:A:O2'	2.10	0.52
50:YC:1504:G:H4'	50:YC:1505:G:O5'	2.10	0.52
51:ZC:1437:C:H2'	51:ZC:1438:U:C6	2.45	0.52
51:ZC:1590:U:H2'	51:ZC:1591:G:C8	2.45	0.52
51:ZC:1607:C:N4	51:ZC:1622:G:OP2	2.42	0.52
51:ZC:2189:U:H2'	51:ZC:2190:G:C8	2.45	0.52
53:BD:50:U:H3	53:BD:64:G:H1	1.58	0.52
7:G:54:PRO:HD3	7:G:72:PRO:HA	1.92	0.51
10:J:15:ARG:HH12	10:J:17:LYS:HD2	1.75	0.51
18:R:53:LYS:HB3	18:R:82:GLN:HB3	1.93	0.51
31:EA:61:LYS:NZ	50:UC:545:C:OP1	2.36	0.51
40:NA:108:ARG:HH22	50:UC:1228:C:P	2.33	0.51
14:JB:36:GLU:HG2	14:JB:39:ARG:HH21	1.75	0.51
31:AC:102:ASP:OD1	31:AC:103:ASN:N	2.44	0.51
33:CC:45:LEU:HD11	33:CC:57:GLN:HB3	1.92	0.51
51:VC:203:C:H3'	51:VC:204:A:H5"	1.92	0.51
51:VC:2071:A:H2'	51:VC:2072:G:C8	2.43	0.51
50:YC:1172:C:H2'	50:YC:1173:G:H8	1.75	0.51
51:ZC:1600:C:H2'	51:ZC:1601:G:C8	2.45	0.51
53:BD:71:C:H2'	53:BD:72:A:C8	2.45	0.51
2:B:78:LEU:O	2:B:79:ARG:HD2	2.10	0.51
3:C:74:ARG:HD3	51:VC:674:G:H1'	1.93	0.51
7:G:75:SER:HB3	51:VC:1063:G:H5"	1.92	0.51
47:QC:45:GLN:HB2	47:QC:91:LEU:HD13	1.90	0.51
50:UC:629:G:H2'	50:UC:630:G:H8	1.74	0.51
50:YC:201:C:N3	50:YC:216:G:N2	2.57	0.51
50:YC:501:C:H2'	50:YC:502:G:C8	2.45	0.51
51:ZC:861:A:N3	52:AD:79:C:O2'	2.42	0.51
51:ZC:2068:U:N3	51:ZC:2430:A:H2	2.04	0.51
10:J:39:LYS:HG3	51:VC:806:C:OP2	2.10	0.51
41:OA:32:SER:H	50:UC:976:G:P	2.33	0.51
29:YB:10:LEU:HA	29:YB:13:ALA:HB3	1.92	0.51
40:JC:3:ARG:HH21	40:JC:7:VAL:HA	1.75	0.51
45:OC:74:ARG:NH2	45:OC:81:PHE:O	2.44	0.51
50:UC:1029:G:N2	50:UC:103(A):A:OP2	2.43	0.51
51:VC:270(T):G:H2'	51:VC:270(U):G:H8	1.75	0.51
51:VC:1288:U:H1'	51:VC:1647:G:N2	2.25	0.51
51:VC:2137:C:H42	51:VC:2154:G:H1	1.58	0.51
29:CA:55:PHE:HD1	29:CA:221:LEU:HG	1.75	0.51
1:WA:146:GLU:HB2	1:WA:189:CYS:HB3	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:FB:41:ARG:HH12	10:FB:45:LEU:HD22	1.76	0.51
13:IB:15:ARG:O	13:IB:19:LYS:HG2	2.10	0.51
13:IB:106:ARG:NH2	51:ZC:2376:A:N3	2.53	0.51
16:LB:4:ILE:HB	16:LB:39:LEU:HB2	1.91	0.51
20:PB:95:PRO:HB2	20:PB:127:LYS:HE2	1.91	0.51
25:UB:7:PRO:HA	51:ZC:2615:U:C2	2.45	0.51
50:UC:1172:C:H2'	50:UC:1173:G:H8	1.75	0.51
51:VC:1516:U:H2'	51:VC:1517:G:H8	1.74	0.51
51:VC:2646:C:OP2	51:VC:2732:G:O2'	2.21	0.51
50:YC:424:G:H2'	50:YC:425:G:H8	1.75	0.51
51:ZC:2093:G:H2'	51:ZC:2094:G:H8	1.74	0.51
14:N:36:GLU:HG2	14:N:39:ARG:HH21	1.75	0.51
10:FB:12:ALA:O	10:FB:14:LYS:N	2.39	0.51
10:FB:39:LYS:HG3	51:ZC:806:C:OP2	2.11	0.51
22:RB:45:ASN:OD1	51:ZC:2090:G:N2	2.33	0.51
40:JC:49:THR:HG22	40:JC:51:ALA:H	1.74	0.51
51:VC:597:U:H2'	51:VC:598:G:C8	2.45	0.51
51:VC:1590:U:H2'	51:VC:1591:G:C8	2.45	0.51
51:VC:1782:C:H1'	51:VC:2609:U:H5"	1.92	0.51
51:ZC:203:C:H3'	51:ZC:204:A:H5"	1.92	0.51
51:ZC:796:C:H2'	51:ZC:797:C:C6	2.46	0.51
11:K:27:VAL:HG23	20:T:81:ARG:HH22	1.76	0.51
19:S:51:VAL:HG13	19:S:52:SER:H	1.75	0.51
33:GA:45:LEU:HD11	33:GA:57:GLN:HB3	1.92	0.51
46:TA:33:THR:OG1	46:TA:34:TRP:N	2.44	0.51
10:FB:18:ARG:HE	51:ZC:1246:A:P	2.33	0.51
23:SB:48:HIS:CD2	51:ZC:96:G:H4'	2.46	0.51
31:AC:2:GLY:N	50:YC:547:A:OP2	2.43	0.51
44:NC:53:LEU:HD11	44:NC:85:VAL:HG11	1.91	0.51
52:WC:15:A:H5'	52:WC:16:G:C8	2.46	0.51
17:Q:73:ALA:HB3	17:Q:106:ILE:HG12	1.92	0.51
18:R:41:ASN:ND2	51:VC:137(B):G:N3	2.58	0.51
20:T:24:LEU:HD12	20:T:25:PRO:HD2	1.93	0.51
25:Y:7:PRO:HA	51:VC:2615:U:C2	2.46	0.51
40:NA:3:ARG:HH21	40:NA:7:VAL:HA	1.76	0.51
11:GB:67:ARG:NH2	51:ZC:906:G:O2'	2.44	0.51
19:OB:51:VAL:HG13	19:OB:52:SER:H	1.75	0.51
51:VC:2115:G:O2'	51:VC:2171:A:N6	2.44	0.51
51:VC:2364:C:H2'	51:VC:2365:G:O4'	2.10	0.51
52:WC:11:C:O2'	52:WC:12:C:O4'	2.28	0.51
50:YC:235:C:H2'	50:YC:236:G:C8	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:224:G:OP2	51:ZC:408:G:N2	2.42	0.51
51:ZC:382:G:H1	51:ZC:392:C:H42	1.59	0.51
12:L:3:HIS:H	51:VC:1654:A:P	2.33	0.51
41:OA:16:PHE:HD2	41:OA:19:ARG:HE	1.59	0.51
45:SA:50:ILE:HG12	50:UC:719:C:O2	2.11	0.51
27:WB:19:ARG:HB2	51:ZC:125:G:H5"	1.93	0.51
51:VC:733:G:O5'	51:VC:733:G:H8	1.93	0.51
51:VC:1682:G:OP2	51:VC:1699:G:N2	2.44	0.51
53:XC:43:A:H2'	53:XC:44:A:C8	2.46	0.51
53:XC:71:C:H2'	53:XC:72:A:C8	2.45	0.51
50:YC:629:G:H2'	50:YC:630:G:H8	1.74	0.51
51:ZC:324:A:N6	51:ZC:338:G:O2'	2.44	0.51
51:ZC:733:G:H8	51:ZC:733:G:O5'	1.93	0.51
51:ZC:883:G:H2'	51:ZC:884:C:C6	2.46	0.51
51:ZC:2630:G:H1'	51:ZC:2894:G:H1'	1.93	0.51
10:J:147:LEU:HD13	10:J:149:GLU:HA	1.93	0.51
3:YA:182:ASN:O	3:YA:186:ILE:HG12	2.11	0.51
11:GB:10:ARG:HD3	51:ZC:2278:A:OP1	2.11	0.51
17:MB:29:LEU:HD22	17:MB:69:LEU:HD11	1.92	0.51
46:PC:33:THR:OG1	46:PC:34:TRP:N	2.44	0.51
51:VC:2167:U:H2'	51:VC:2168:G:C8	2.46	0.51
53:XC:50:U:H3	53:XC:64:G:H1	1.58	0.51
51:ZC:1657:C:H2'	51:ZC:1658:C:C6	2.46	0.51
2:B:9:VAL:HG22	2:B:25:VAL:HB	1.93	0.51
3:C:184:TYR:O	3:C:188:ARG:HG3	2.10	0.51
9:I:88:ASN:OD1	9:I:89:ASN:N	2.43	0.51
30:DA:163:ALA:HB2	50:UC:1056:U:H5'	1.93	0.51
2:XA:144:ARG:HG2	51:ZC:2575:C:H5'	1.93	0.51
5:AB:3:ARG:HG2	5:AB:6:ARG:HE	1.74	0.51
8:DB:51:THR:HG21	51:ZC:1005:C:O2'	2.10	0.51
15:KB:80:ILE:HG22	51:ZC:1152:C:H5"	1.92	0.51
34:DC:22:LEU:HD21	34:DC:66:VAL:HG11	1.93	0.51
45:OC:50:ILE:HG12	50:YC:719:C:O2	2.11	0.51
50:UC:22:G:H4'	50:UC:885:G:C8	2.46	0.51
50:UC:1504:G:H4'	50:UC:1505:G:O5'	2.11	0.51
51:VC:2634:G:H1	51:VC:2784:C:H42	1.59	0.51
51:ZC:1796:U:H2'	51:ZC:1797:C:H6	1.76	0.51
52:AD:11:C:O2'	52:AD:12:C:O4'	2.28	0.51
1:A:54:ARG:HH22	51:VC:1815:A:P	2.34	0.50
1:A:146:GLU:HB2	1:A:189:CYS:HB3	1.92	0.50
3:C:157:VAL:HB	3:C:194:MET:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:72:PRO:HB2	51:VC:2406:U:C2	2.46	0.50
30:DA:58:GLU:HB2	30:DA:65:ALA:HB3	1.93	0.50
11:GB:27:VAL:HG23	20:PB:81:ARG:HH22	1.76	0.50
50:UC:757:U:H2'	50:UC:758:G:O4'	2.11	0.50
51:VC:247:G:H4'	51:VC:386:G:C5	2.46	0.50
51:VC:883:G:H2'	51:VC:884:C:C6	2.46	0.50
51:ZC:2634:G:H1	51:ZC:2784:C:H42	1.59	0.50
27:AA:9:ARG:HE	27:AA:47:ARG:HB2	1.76	0.50
9:EB:87:ILE:HD12	9:EB:91:LEU:HA	1.93	0.50
17:MB:73:ALA:HB3	17:MB:106:ILE:HG12	1.93	0.50
33:CC:22:GLU:OE1	33:CC:82:ARG:NH2	2.44	0.50
35:EC:10:LEU:HD22	35:EC:83:ILE:HD11	1.93	0.50
46:PC:63:THR:HG23	46:PC:65:ASN:H	1.76	0.50
50:UC:748:C:H4'	50:UC:749:C:O5'	2.09	0.50
51:ZC:1657:C:H2'	51:ZC:1658:C:H6	1.74	0.50
52:AD:15:A:H5'	52:AD:16:G:C8	2.46	0.50
1:A:8:PRO:HB3	1:A:14:ARG:HB3	1.93	0.50
5:E:67:LEU:HD21	51:VC:2758:A:C4	2.46	0.50
11:K:67:ARG:NH2	51:VC:906:G:O2'	2.44	0.50
27:AA:19:ARG:HB2	51:VC:125:G:H5"	1.92	0.50
46:TA:63:THR:HG23	46:TA:65:ASN:H	1.76	0.50
51:ZC:597:U:H2'	51:ZC:598:G:C8	2.46	0.50
51:ZC:1869:G:N2	51:ZC:1872:A:OP2	2.43	0.50
8:H:51:THR:HG21	51:VC:1005:C:O2'	2.11	0.50
29:CA:10:LEU:HA	29:CA:13:ALA:HB3	1.93	0.50
3:YA:157:VAL:HB	3:YA:194:MET:HB3	1.92	0.50
9:EB:120:GLU:OE1	14:JB:67:SER:OG	2.25	0.50
15:KB:92:ARG:O	15:KB:94:ASN:N	2.44	0.50
21:QB:46:LYS:HG2	21:QB:47:PRO:HD2	1.93	0.50
22:RB:19:GLN:NE2	51:ZC:189:G:OP1	2.44	0.50
51:VC:1607:C:N4	51:VC:1622:G:OP2	2.41	0.50
50:YC:1145:C:H4'	50:YC:1146:A:O5'	2.11	0.50
51:ZC:1190:G:H2'	51:ZC:1191:G:H8	1.76	0.50
8:H:63:PRO:O	15:O:64:ARG:HD2	2.11	0.50
23:W:48:HIS:CD2	51:VC:96:G:H4'	2.46	0.50
26:Z:18:ARG:HH21	26:Z:44:ARG:HH11	1.59	0.50
35:IA:114:THR:HG23	35:IA:116:LYS:H	1.76	0.50
39:MA:116:ARG:HB3	39:MA:121:THR:HB	1.93	0.50
45:SA:74:ARG:NH2	45:SA:81:PHE:O	2.44	0.50
2:XA:54:GLN:HE22	2:XA:57:LYS:HE3	1.76	0.50
7:CB:54:PRO:HD3	7:CB:72:PRO:HA	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:JB:107:ASP:HB2	50:YC:1432:G:OP1	2.11	0.50
19:OB:81:LYS:HD3	19:OB:97:ARG:HB3	1.92	0.50
33:CC:9:VAL:HB	33:CC:87:ARG:HB2	1.94	0.50
33:CC:70:ASP:N	33:CC:70:ASP:OD1	2.45	0.50
51:VC:172:C:H2'	51:VC:173:G:C8	2.47	0.50
51:VC:1203:G:N2	51:VC:1243:G:O6	2.45	0.50
50:YC:269:C:H2'	50:YC:270:A:H8	1.77	0.50
50:YC:574:A:HO2'	50:YC:882:C:HO2'	1.53	0.50
50:YC:1247:U:H2'	50:YC:1248:A:H8	1.77	0.50
51:ZC:172:C:H2'	51:ZC:173:G:C8	2.46	0.50
51:ZC:721:C:H2'	51:ZC:722:A:C8	2.46	0.50
51:ZC:1101:U:H2'	51:ZC:1102:C:C6	2.46	0.50
51:ZC:1682:G:OP2	51:ZC:1699:G:N2	2.44	0.50
51:ZC:2547:U:H2'	51:ZC:2548:G:C8	2.47	0.50
9:I:87:ILE:HD12	9:I:91:LEU:HA	1.93	0.50
33:GA:22:GLU:OE1	33:GA:82:ARG:NH2	2.44	0.50
34:HA:22:LEU:HD21	34:HA:66:VAL:HG11	1.93	0.50
43:QA:6:LEU:HD21	43:QA:73:LEU:HD11	1.92	0.50
10:FB:147:LEU:HD13	10:FB:149:GLU:HA	1.94	0.50
11:GB:20:ALA:HA	11:GB:98:LYS:HB3	1.93	0.50
12:HB:3:HIS:H	51:ZC:1654:A:P	2.34	0.50
29:YB:208:ILE:HA	29:YB:211:ILE:HD12	1.92	0.50
32:BC:76:ILE:HG22	32:BC:93:PRO:HB3	1.92	0.50
51:VC:207:A:H2'	51:VC:208:C:O4'	2.11	0.50
51:VC:358:U:H2'	51:VC:359:A:H8	1.76	0.50
51:VC:1657:C:H2'	51:VC:1658:C:H6	1.76	0.50
51:VC:1969:A:HO2'	51:VC:1972:A:HO2'	1.59	0.50
50:YC:953:G:H5'	50:YC:965:A:H61	1.75	0.50
51:ZC:207:A:H2'	51:ZC:208:C:O4'	2.12	0.50
10:J:16:ARG:NH2	10:J:18:ARG:H	2.09	0.50
28:BA:61:LEU:O	28:BA:62:LEU:HB2	2.11	0.50
31:EA:53:ASP:OD1	31:EA:57:ARG:NH1	2.45	0.50
1:WA:54:ARG:HH22	51:ZC:1815:A:P	2.34	0.50
31:AC:25:ARG:NH1	31:AC:30:LYS:O	2.44	0.50
39:IC:116:ARG:HB3	39:IC:121:THR:HB	1.92	0.50
40:JC:33:ALA:O	40:JC:37:THR:OG1	2.20	0.50
50:UC:235:C:H2'	50:UC:236:G:C8	2.46	0.50
50:UC:1145:C:H4'	50:UC:1146:A:O5'	2.11	0.50
51:VC:1101:U:H2'	51:VC:1102:C:C6	2.47	0.50
51:VC:1296:G:OP1	51:VC:2709:G:O2'	2.27	0.50
51:VC:1592:C:H2'	51:VC:1593:G:H8	1.75	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:1600:C:H2'	51:VC:1601:G:C8	2.46	0.50
51:VC:1681:G:H8	51:VC:1681:G:OP2	1.94	0.50
51:VC:1918:A:O2'	51:VC:1920:C:N4	2.45	0.50
51:VC:2584:U:H4'	51:VC:2602:A:H61	1.77	0.50
50:YC:417:C:N4	50:YC:426:G:H1	2.09	0.50
50:YC:757:U:H2'	50:YC:758:G:O4'	2.11	0.50
51:ZC:2115:G:O2'	51:ZC:2171:A:N6	2.44	0.50
18:R:16:LYS:NZ	51:VC:1340:U:OP1	2.45	0.50
30:DA:112:SER:HB3	30:DA:115:LEU:HD12	1.94	0.50
1:WA:16:MET:HB2	1:WA:207:GLY:HA3	1.94	0.50
8:DB:95:TYR:HE2	8:DB:121:VAL:HG12	1.77	0.50
9:EB:22:ILE:H	9:EB:41:ALA:HA	1.77	0.50
12:HB:11:ASN:OD1	12:HB:12:ARG:N	2.45	0.50
17:MB:39:THR:HG22	17:MB:41:LYS:H	1.77	0.50
35:EC:114:THR:HG23	35:EC:116:LYS:H	1.76	0.50
47:QC:74:LYS:NZ	50:YC:133:U:OP1	2.44	0.50
50:UC:498:A:H4'	50:UC:500:G:OP1	2.12	0.50
51:VC:796:C:H2'	51:VC:797:C:C6	2.46	0.50
51:VC:2183:C:H2'	51:VC:2184:G:C8	2.47	0.50
50:YC:592:G:H2'	50:YC:593:G:H8	1.77	0.50
51:ZC:521:G:H2'	51:ZC:522:G:C8	2.46	0.50
51:ZC:1840:G:H1	51:ZC:1902:C:N4	2.08	0.50
51:ZC:2030:A:H5"	51:ZC:2031:A:C8	2.47	0.50
51:ZC:2100:G:H2'	51:ZC:2101:G:H8	1.77	0.50
51:ZC:2777:G:H5"	51:ZC:2778:A:H5'	1.94	0.50
53:BD:43:A:H2'	53:BD:44:A:C8	2.46	0.50
2:B:144:ARG:HG2	51:VC:2575:C:H5'	1.93	0.50
3:C:182:ASN:O	3:C:186:ILE:HG12	2.11	0.50
10:J:18:ARG:HE	51:VC:1246:A:P	2.34	0.50
15:O:92:ARG:O	15:O:94:ASN:N	2.45	0.50
29:CA:59:GLU:HB2	29:CA:221:LEU:HD11	1.94	0.50
30:DA:86:VAL:O	30:DA:90:GLU:HG2	2.12	0.50
31:EA:57:ARG:HB3	31:EA:206:PHE:HB2	1.94	0.50
32:FA:76:ILE:HG22	32:FA:93:PRO:HB3	1.93	0.50
8:DB:63:PRO:O	15:KB:64:ARG:HD2	2.11	0.50
8:DB:77:VAL:HB	8:DB:145:VAL:HG13	1.93	0.50
38:HC:122:LYS:HG3	38:HC:123:LYS:H	1.77	0.50
51:VC:1980:G:O2'	51:VC:1982:C:OP2	2.28	0.50
51:VC:2066:C:N4	51:VC:2067:G:O6	2.45	0.50
50:YC:21:G:N2	50:YC:914:A:H62	2.09	0.50
51:ZC:1538:G:H2'	51:ZC:1539:G:H8	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:2066:C:N4	51:ZC:2067:G:O6	2.45	0.50
3:C:110:LEU:HD22	3:C:206:ILE:HD11	1.94	0.49
3:C:143:ALA:HB1	3:C:148:LEU:HB2	1.93	0.49
7:G:73:PRO:HA	51:VC:1060:U:OP1	2.12	0.49
18:NB:41:ASN:ND2	51:ZC:137(B):G:N3	2.59	0.49
22:RB:27:GLU:HA	22:RB:33:LYS:HA	1.93	0.49
39:IC:115:SER:OG	50:YC:503:C:OP2	2.24	0.49
50:UC:269:C:H2'	50:UC:270:A:H8	1.76	0.49
51:VC:721:C:H2'	51:VC:722:A:C8	2.46	0.49
51:VC:1437:C:H2'	51:VC:1438:U:C6	2.47	0.49
51:VC:1538:G:H2'	51:VC:1539:G:H8	1.76	0.49
53:XC:42:G:H2'	53:XC:43:A:C8	2.47	0.49
51:ZC:2167:U:H2'	51:ZC:2168:G:C8	2.46	0.49
51:ZC:2593:U:H2'	51:ZC:2594:C:C6	2.47	0.49
10:J:29:LYS:O	10:J:33:ARG:HA	2.13	0.49
10:J:49:ARG:HH11	51:VC:666:G:H4'	1.77	0.49
14:N:3:ARG:HB2	14:N:6:LEU:HB3	1.94	0.49
14:N:109:GLU:HA	14:N:112:ARG:HD2	1.94	0.49
17:Q:39:THR:HG22	17:Q:41:LYS:H	1.77	0.49
22:V:27:GLU:HA	22:V:33:LYS:HA	1.93	0.49
30:DA:66:VAL:HB	30:DA:101:LEU:HD23	1.94	0.49
34:HA:113:GLU:HB2	34:HA:119:ARG:HG2	1.94	0.49
1:WA:182:LEU:HB2	1:WA:271:ILE:HG13	1.94	0.49
10:FB:49:ARG:HH11	51:ZC:666:G:H4'	1.77	0.49
11:GB:65:PHE:HB2	11:GB:105:GLU:HB2	1.94	0.49
14:JB:109:GLU:HA	14:JB:112:ARG:HD2	1.94	0.49
15:KB:76:TYR:CZ	15:KB:80:ILE:HG12	2.46	0.49
24:TB:10:LYS:HB2	24:TB:53:LEU:HA	1.94	0.49
26:VB:18:ARG:HH21	26:VB:44:ARG:HH11	1.59	0.49
31:AC:173:TRP:CE2	31:AC:189:PRO:HB3	2.48	0.49
34:DC:102:ARG:O	34:DC:106:GLN:HG2	2.13	0.49
47:QC:50:GLU:HA	47:QC:100:ILE:HD13	1.93	0.49
47:QC:81:LYS:NZ	50:YC:185:A:N3	2.61	0.49
51:VC:2547:U:H2'	51:VC:2548:G:C8	2.47	0.49
51:ZC:2402:C:H5'	51:ZC:2403:C:OP2	2.11	0.49
7:G:77:LEU:HD23	7:G:107:ILE:HG23	1.94	0.49
21:U:46:LYS:HG2	21:U:47:PRO:HD2	1.94	0.49
38:LA:95:ILE:O	38:LA:99:GLN:HG2	2.12	0.49
38:LA:122:LYS:HG3	38:LA:123:LYS:H	1.77	0.49
10:FB:29:LYS:O	10:FB:33:ARG:HA	2.11	0.49
15:KB:4:ALA:HB2	51:ZC:1199:U:H1'	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:1247:U:H2'	50:UC:1248:A:H8	1.77	0.49
51:VC:1608:A:H1'	51:VC:1610:A:OP2	2.12	0.49
51:ZC:2627:G:N2	51:ZC:2777:G:OP2	2.45	0.49
53:BD:42:G:H2'	53:BD:43:A:C8	2.47	0.49
9:I:36:GLY:HA2	9:I:106:LEU:HD23	1.93	0.49
10:J:12:ALA:O	10:J:14:LYS:N	2.38	0.49
16:P:83:ARG:NH1	51:VC:815:C:OP2	2.45	0.49
30:DA:26:LYS:HE2	50:UC:1279:A:H62	1.78	0.49
38:LA:54:ARG:NH2	53:XC:39:C:O2'	2.45	0.49
44:RA:44:ALA:HB1	44:RA:73:VAL:HG22	1.94	0.49
5:AB:67:LEU:HD21	51:ZC:2758:A:C4	2.48	0.49
9:EB:36:GLY:HA2	9:EB:106:LEU:HD23	1.93	0.49
50:UC:1292:U:H2'	50:UC:1293:G:H8	1.77	0.49
51:VC:1406:U:H2'	51:VC:1407:C:C6	2.48	0.49
51:VC:1899:G:O2'	51:VC:1900:A:H5"	2.12	0.49
50:YC:1064:G:H4'	50:YC:1065:U:O5'	2.12	0.49
51:ZC:612:G:O2'	51:ZC:616:A:N1	2.42	0.49
51:ZC:2183:C:H2'	51:ZC:2184:G:C8	2.47	0.49
1:A:61:LEU:O	1:A:63:ARG:NH1	2.35	0.49
9:I:22:ILE:H	9:I:41:ALA:HA	1.77	0.49
40:NA:67:GLU:HG3	40:NA:68:GLY:H	1.76	0.49
3:YA:43:LYS:HA	3:YA:98:SER:HB3	1.94	0.49
30:ZB:112:SER:HB3	30:ZB:115:LEU:HD12	1.94	0.49
40:JC:14:ARG:HD2	40:JC:42:ALA:HA	1.95	0.49
40:JC:67:GLU:HG3	40:JC:68:GLY:H	1.77	0.49
51:VC:2843:G:H1	51:VC:2874:C:N4	2.11	0.49
51:VC:2857:G:N2	51:VC:2860:A:OP2	2.39	0.49
51:ZC:358:U:H2'	51:ZC:359:A:H8	1.76	0.49
51:ZC:1326:U:HO2'	51:ZC:2010:G:HO2'	1.60	0.49
3:C:136:THR:HG21	51:VC:320:A:H2'	1.95	0.49
8:H:77:VAL:HB	8:H:145:VAL:HG13	1.93	0.49
40:NA:87:TYR:N	46:TA:73:GLU:O	2.45	0.49
47:UA:50:GLU:HA	47:UA:100:ILE:HD13	1.94	0.49
2:XA:9:VAL:HG22	2:XA:25:VAL:HB	1.93	0.49
6:BB:39:ALA:HB1	6:BB:44:LEU:HD21	1.94	0.49
7:CB:77:LEU:HD23	7:CB:107:ILE:HG23	1.94	0.49
9:EB:97:ARG:HH12	50:YC:338:A:P	2.36	0.49
12:HB:51:LEU:HD13	12:HB:70:LEU:HD11	1.95	0.49
14:JB:3:ARG:HB2	14:JB:6:LEU:HB3	1.93	0.49
16:LB:83:ARG:NH1	51:ZC:815:C:OP2	2.45	0.49
18:NB:53:LYS:HB3	18:NB:82:GLN:HB3	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:YB:59:GLU:HB2	29:YB:221:LEU:HD11	1.94	0.49
30:ZB:163:ALA:HB2	50:YC:1056:U:H5'	1.93	0.49
40:JC:87:TYR:N	46:PC:73:GLU:O	2.45	0.49
51:VC:2630:G:H1'	51:VC:2894:G:H1'	1.93	0.49
53:XC:67:C:H2'	53:XC:68:C:C6	2.48	0.49
50:YC:1427:U:H2'	50:YC:1428:A:C8	2.48	0.49
51:ZC:1918:A:O2'	51:ZC:1920:C:N4	2.46	0.49
6:F:39:ALA:HB1	6:F:44:LEU:HD21	1.95	0.49
11:K:10:ARG:HD3	51:VC:2278:A:OP1	2.12	0.49
14:N:29:ARG:HB3	14:N:87:ASP:HB2	1.95	0.49
18:R:71:GLY:HA3	51:VC:64:A:H4'	1.94	0.49
25:Y:8:LYS:NZ	51:VC:2056:G:O3'	2.45	0.49
6:BB:79:ILE:HB	6:BB:144:VAL:HA	1.93	0.49
10:FB:16:ARG:NH2	10:FB:18:ARG:H	2.10	0.49
14:JB:29:ARG:HB3	14:JB:87:ASP:HB2	1.93	0.49
30:ZB:86:VAL:O	30:ZB:90:GLU:HG2	2.12	0.49
32:BC:126:ARG:NH2	50:YC:559:A:OP2	2.45	0.49
44:NC:44:ALA:HB1	44:NC:73:VAL:HG22	1.94	0.49
50:UC:417:C:N4	50:UC:426:G:H1	2.09	0.49
51:VC:1113:U:H2'	51:VC:1114:G:C8	2.48	0.49
51:VC:2030:A:H5"	51:VC:2031:A:C8	2.48	0.49
50:YC:22:G:H4'	50:YC:885:G:C8	2.47	0.49
50:YC:1178:G:N2	50:YC:1181:G:OP2	2.46	0.49
51:ZC:2137:C:H42	51:ZC:2154:G:H1	1.59	0.49
51:ZC:2584:U:H4'	51:ZC:2602:A:H61	1.77	0.49
1:A:12:SER:HB2	1:A:208:LYS:HB3	1.95	0.49
3:C:43:LYS:HA	3:C:98:SER:HB3	1.95	0.49
4:D:142:PRO:HB2	49:SC:57:ILE:HD12	1.95	0.49
20:T:61:LEU:HD12	20:T:65:GLN:HB2	1.94	0.49
40:NA:14:ARG:HD2	40:NA:42:ALA:HA	1.95	0.49
47:UA:81:LYS:NZ	50:UC:185:A:N3	2.61	0.49
4:ZA:142:PRO:HB2	49:TC:57:ILE:HD12	1.94	0.49
38:HC:55:LYS:NZ	50:YC:691:G:O6	2.42	0.49
38:HC:95:ILE:O	38:HC:99:GLN:HG2	2.12	0.49
50:UC:592:G:H2'	50:UC:593:G:H8	1.77	0.49
51:VC:27:G:H1'	51:VC:513:A:N6	2.28	0.49
51:VC:270(G):U:H2'	51:VC:270(H):C:C6	2.48	0.49
51:VC:1035:U:H2'	51:VC:1036:G:C8	2.48	0.49
51:VC:1190:G:H2'	51:VC:1191:G:C8	2.47	0.49
51:VC:1657:C:H2'	51:VC:1658:C:C6	2.47	0.49
51:VC:1889:A:H2'	51:VC:1890:A:C8	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:2402:C:H5'	51:VC:2403:C:OP2	2.12	0.49
51:ZC:270(G):U:H2'	51:ZC:270(H):C:C6	2.48	0.49
51:ZC:2109:U:H2'	51:ZC:2110:G:C8	2.47	0.49
51:ZC:2137:C:N4	51:ZC:2154:G:H1	2.11	0.49
11:K:20:ALA:HA	11:K:98:LYS:HB3	1.94	0.49
47:UA:74:LYS:NZ	50:UC:133:U:OP1	2.46	0.49
1:WA:12:SER:HB2	1:WA:208:LYS:HB3	1.94	0.49
3:YA:59:TYR:HD2	3:YA:78:ILE:HB	1.78	0.49
10:FB:72:PRO:HB2	51:ZC:2406:U:C2	2.48	0.49
26:VB:30:THR:O	26:VB:32:ASN:N	2.46	0.49
39:IC:32:ARG:O	39:IC:84:ILE:HG22	2.13	0.49
51:VC:1464:C:H2'	51:VC:1465:G:C8	2.47	0.49
51:VC:1539:G:H2'	51:VC:1540:G:H8	1.78	0.49
51:VC:2137:C:N4	51:VC:2154:G:H1	2.10	0.49
51:VC:2291:U:H2'	51:VC:2292:C:C6	2.48	0.49
51:VC:2398:U:H2'	51:VC:2399:G:C8	2.48	0.49
50:YC:714:G:H2'	50:YC:715:A:C8	2.48	0.49
50:YC:987:G:H2'	50:YC:988:G:C8	2.47	0.49
50:YC:1131:G:H2'	50:YC:1132:C:C6	2.48	0.49
51:ZC:1506:C:H2'	51:ZC:1508:A:C8	2.48	0.49
5:E:113:VAL:HG11	5:E:151:ILE:HD13	1.94	0.49
9:I:64:ARG:HB2	9:I:83:ALA:HB3	1.94	0.49
12:L:21:TYR:HB3	12:L:47:PHE:CD2	2.48	0.49
28:BA:12:LYS:NZ	51:VC:249:C:O2	2.41	0.49
33:GA:9:VAL:HB	33:GA:87:ARG:HB2	1.95	0.49
39:MA:115:SER:OG	50:UC:503:C:OP2	2.22	0.49
3:YA:143:ALA:HB1	3:YA:148:LEU:HB2	1.93	0.49
14:JB:27:THR:HG23	14:JB:89:VAL:HG23	1.95	0.49
14:JB:119:LYS:NZ	51:ZC:2867:G:OP2	2.22	0.49
18:NB:71:GLY:HA3	51:ZC:64:A:H4'	1.95	0.49
20:PB:163:LEU:HD23	20:PB:163:LEU:H	1.78	0.49
51:VC:2100:G:H2'	51:VC:2101:G:H8	1.77	0.49
51:VC:2176:A:H2'	51:VC:2177:C:C6	2.48	0.49
51:ZC:1325:G:OP2	51:ZC:1616:A:H2'	2.13	0.49
51:ZC:1782:C:H1'	51:ZC:2609:U:H5"	1.93	0.49
51:ZC:1980:G:O2'	51:ZC:1982:C:OP2	2.29	0.49
51:ZC:2176:A:H2'	51:ZC:2177:C:C6	2.48	0.49
53:FD:4:G:H2'	53:FD:5:G:H8	1.78	0.49
30:DA:147:LYS:HB2	30:DA:203:PHE:CD2	2.48	0.48
33:GA:70:ASP:N	33:GA:70:ASP:OD1	2.45	0.48
33:GA:87:ARG:CZ	50:UC:673:G:H5"	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:IA:10:LEU:HD22	35:IA:83:ILE:HD11	1.94	0.48
26:VB:46:HIS:CD2	51:ZC:2371:G:O2'	2.63	0.48
34:DC:113:GLU:HB2	34:DC:119:ARG:HG2	1.94	0.48
50:UC:1347:G:O2'	50:UC:1373:G:O6	2.27	0.48
50:UC:1427:U:H2'	50:UC:1428:A:C8	2.47	0.48
51:VC:270(A):A:OP2	51:VC:270(Z):G:N2	2.45	0.48
51:VC:2109:U:H2'	51:VC:2110:G:C8	2.47	0.48
51:VC:2777:G:H5"	51:VC:2778:A:H5'	1.93	0.48
51:ZC:1539:G:H2'	51:ZC:1540:G:H8	1.78	0.48
2:B:54:GLN:HE22	2:B:57:LYS:HE3	1.78	0.48
4:D:15:VAL:HG13	4:D:175:LEU:HB2	1.96	0.48
6:F:79:ILE:HB	6:F:144:VAL:HA	1.93	0.48
11:K:65:PHE:HB2	11:K:105:GLU:HB2	1.94	0.48
16:LB:17:GLY:HA2	16:LB:96:ILE:O	2.13	0.48
20:PB:61:LEU:HD12	20:PB:65:GLN:HB2	1.94	0.48
30:ZB:147:LYS:HB2	30:ZB:203:PHE:CD2	2.48	0.48
50:UC:1178:G:N2	50:UC:1181:G:OP2	2.46	0.48
50:YC:88:C:H2'	50:YC:89:U:C6	2.48	0.48
51:ZC:1953:A:HO2'	51:ZC:2559:C:HO2'	1.59	0.48
14:N:27:THR:HG23	14:N:89:VAL:HG23	1.95	0.48
6:BB:72:LEU:HD11	6:BB:101:LEU:HD21	1.95	0.48
39:IC:88:ARG:NH1	50:YC:525:C:OP1	2.46	0.48
50:UC:987:G:H2'	50:UC:988:G:C8	2.47	0.48
51:ZC:1203:G:N2	51:ZC:1243:G:O6	2.45	0.48
51:ZC:1681:G:OP2	51:ZC:1681:G:H8	1.95	0.48
51:ZC:1899:G:H22	51:ZC:1902:C:H41	1.59	0.48
6:F:72:LEU:HD11	6:F:101:LEU:HD21	1.95	0.48
16:P:17:GLY:HA2	16:P:96:ILE:O	2.13	0.48
20:T:163:LEU:HD23	20:T:163:LEU:H	1.77	0.48
17:MB:88:ARG:H	51:ZC:1614:A:N6	2.11	0.48
22:RB:23:LYS:HB3	22:RB:37:ILE:HG13	1.96	0.48
50:UC:198:G:H1	50:UC:219:C:H42	1.60	0.48
50:UC:1052:U:O2	50:UC:1207:G:N2	2.47	0.48
50:UC:1243:C:H42	50:UC:1294:G:H1	1.61	0.48
51:VC:1869:G:N2	51:VC:1872:A:OP2	2.43	0.48
50:YC:790:A:OP1	53:FD:38:A:O2'	2.31	0.48
51:ZC:486:C:H2'	51:ZC:487:C:C6	2.49	0.48
51:ZC:1035:U:H2'	51:ZC:1036:G:C8	2.48	0.48
51:ZC:2398:U:H2'	51:ZC:2399:G:C8	2.48	0.48
51:ZC:2472:G:O2'	51:ZC:2478:A:N6	2.45	0.48
8:H:127:LYS:HB2	8:H:140:PHE:CE1	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:11:ASN:OD1	12:L:12:ARG:N	2.45	0.48
20:T:53:ILE:HA	20:T:71:VAL:HG23	1.96	0.48
21:U:36:ILE:HD11	51:VC:2364:C:H1'	1.95	0.48
26:Z:35:GLU:HB3	26:Z:51:GLU:HB2	1.96	0.48
36:JA:9:ARG:HB2	36:JA:104:ARG:HD3	1.96	0.48
37:KA:26:ALA:HB1	37:KA:84:GLN:HG2	1.96	0.48
47:UA:22:ARG:HB3	50:UC:323:U:H4'	1.96	0.48
1:WA:158:ALA:O	1:WA:161:THR:OG1	2.20	0.48
4:ZA:62:LEU:HD23	4:ZA:144:ILE:HD13	1.95	0.48
10:FB:114:ILE:H	10:FB:114:ILE:HD12	1.78	0.48
36:FC:9:ARG:HB2	36:FC:104:ARG:HD3	1.95	0.48
51:VC:1022:G:H22	51:VC:114(B):A:H2	1.62	0.48
51:VC:1416:G:H2'	51:VC:1417:C:C6	2.49	0.48
51:ZC:380:U:H2'	51:ZC:381:G:C8	2.48	0.48
51:ZC:1113:U:H2'	51:ZC:1114:G:C8	2.48	0.48
51:ZC:2836:U:H2'	51:ZC:2837:G:C8	2.49	0.48
1:A:182:LEU:HB2	1:A:271:ILE:HG13	1.95	0.48
26:Z:30:THR:O	26:Z:32:ASN:N	2.46	0.48
34:HA:102:ARG:O	34:HA:106:GLN:HG2	2.13	0.48
3:YA:84:VAL:HG21	51:ZC:448:U:H1'	1.96	0.48
5:AB:19:VAL:HA	5:AB:24:VAL:HG12	1.95	0.48
28:XB:61:LEU:O	28:XB:62:LEU:HB2	2.13	0.48
37:GC:26:ALA:HB1	37:GC:84:GLN:HG2	1.95	0.48
50:UC:67:C:H2'	50:UC:68:G:C8	2.49	0.48
51:VC:2103:C:H2'	51:VC:2104:G:C8	2.48	0.48
51:ZC:1889:A:H2'	51:ZC:1890:A:C8	2.49	0.48
4:D:62:LEU:HD23	4:D:144:ILE:HD13	1.95	0.48
4:D:105:LYS:HE2	49:SC:52:SER:HB3	1.95	0.48
10:J:148:LEU:H	10:J:148:LEU:HD22	1.79	0.48
11:K:51:ARG:HA	11:K:54:MET:HE2	1.94	0.48
19:S:88:LYS:HE2	19:S:93:GLY:H	1.79	0.48
31:EA:96:LEU:HD12	31:EA:139:ARG:HH12	1.79	0.48
36:JA:128:ARG:NH1	53:ED:32:C:OP2	2.47	0.48
1:WA:25:THR:HG22	1:WA:82:ILE:H	1.79	0.48
1:WA:244:ARG:HA	1:WA:245:PRO:HA	1.72	0.48
7:CB:115:LEU:HG	51:ZC:1059:G:H1'	1.95	0.48
31:AC:9:CYS:HB2	50:YC:430:A:OP1	2.14	0.48
31:AC:61:LYS:HA	31:AC:203:VAL:HG22	1.96	0.48
39:IC:41:THR:OG1	39:IC:51:LEU:HB2	2.14	0.48
50:UC:714:G:H2'	50:UC:715:A:C8	2.49	0.48
51:VC:382:G:H1	51:VC:392:C:H42	1.59	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:67:C:H2'	50:YC:68:G:C8	2.48	0.48
50:YC:198:G:H1	50:YC:219:C:H42	1.61	0.48
50:YC:1292:U:H2'	50:YC:1293:G:H8	1.77	0.48
51:ZC:185:U:H4'	51:ZC:218:A:H4'	1.96	0.48
51:ZC:783:A:H2'	51:ZC:784:A:H4'	1.96	0.48
51:ZC:1190:G:H2'	51:ZC:1191:G:C8	2.49	0.48
51:ZC:1210:A:H4'	51:ZC:1211:U:O5'	2.13	0.48
51:ZC:1416:G:H2'	51:ZC:1417:C:C6	2.48	0.48
51:ZC:1771:C:O2'	51:ZC:1786:A:O4'	2.30	0.48
51:ZC:1899:G:O2'	51:ZC:1900:A:H5"	2.13	0.48
11:K:22:LYS:O	11:K:22:LYS:HD3	2.14	0.48
15:O:4:ALA:HB2	51:VC:1199:U:H1'	1.95	0.48
31:EA:30:LYS:C	31:EA:32:ALA:H	2.17	0.48
10:FB:58:THR:O	10:FB:60:MET:N	2.47	0.48
30:ZB:26:LYS:HE2	50:YC:1279:A:H62	1.79	0.48
44:NC:54:GLY:O	44:NC:81:ARG:HB2	2.13	0.48
50:UC:1064:G:H4'	50:UC:1065:U:O5'	2.13	0.48
50:UC:1071:C:H42	50:UC:1104:G:H1	1.61	0.48
52:WC:44:G:N3	52:WC:47:C:N4	2.46	0.48
51:ZC:275:G:N2	51:ZC:276:A:N1	2.62	0.48
51:ZC:1022:G:H22	51:ZC:114(B):A:H2	1.62	0.48
51:ZC:2212:A:H1'	51:ZC:2215:G:C4	2.49	0.48
51:ZC:2843:G:H1	51:ZC:2874:C:N4	2.11	0.48
12:L:104:ARG:NH1	12:L:107:ASP:OD1	2.46	0.48
31:EA:22:LYS:HB2	31:EA:26:CYS:SG	2.53	0.48
6:BB:87:LYS:HD3	6:BB:121:LYS:HE3	1.95	0.48
10:FB:45:LEU:HD12	10:FB:46:LYS:H	1.79	0.48
12:HB:6:SER:HB2	51:ZC:2873:A:N3	2.29	0.48
12:HB:21:TYR:HB3	12:HB:47:PHE:CD2	2.49	0.48
18:NB:16:LYS:NZ	51:ZC:1340:U:OP1	2.46	0.48
50:UC:1131:G:H2'	50:UC:1132:C:C6	2.48	0.48
51:VC:1491:G:H2'	51:VC:1492:G:H8	1.79	0.48
50:YC:1052:U:O2	50:YC:1207:G:N2	2.47	0.48
51:ZC:204:A:H8	51:ZC:204:A:OP1	1.96	0.48
51:ZC:2103:C:H2'	51:ZC:2104:G:C8	2.48	0.48
6:F:130:TYR:HD2	6:F:138:ILE:HD12	1.79	0.48
3:YA:102:PRO:HB2	3:YA:105:VAL:HG23	1.96	0.48
4:ZA:105:LYS:HE2	49:TC:52:SER:HB3	1.96	0.48
13:IB:30:ARG:NH1	52:AD:49:C:OP2	2.47	0.48
18:NB:62:LYS:O	18:NB:73:ARG:HB2	2.14	0.48
20:PB:53:ILE:HA	20:PB:71:VAL:HG23	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:PB:77:ASP:HB2	20:PB:84:GLU:HG3	1.96	0.48
31:AC:200:GLU:O	31:AC:204:ILE:HG13	2.13	0.48
37:GC:40:LEU:HB2	37:GC:69:ASN:HB2	1.96	0.48
50:UC:88:C:H2'	50:UC:89:U:C6	2.49	0.48
50:UC:320:C:HO2'	50:UC:1435:G:HO2'	1.60	0.48
50:UC:406:G:H1	50:UC:436:C:H42	1.62	0.48
50:UC:1150:U:O4	50:UC:1151:A:N6	2.47	0.48
50:UC:1356:G:H2'	50:UC:1357:A:C8	2.49	0.48
50:YC:1150:U:O4	50:YC:1151:A:N6	2.47	0.48
50:YC:1356:G:H2'	50:YC:1357:A:C8	2.49	0.48
51:ZC:2448:A:HO2'	51:ZC:2449:U:H5	1.61	0.48
3:C:59:TYR:HD2	3:C:78:ILE:HB	1.78	0.47
10:J:114:ILE:H	10:J:114:ILE:HD12	1.78	0.47
17:Q:88:ARG:H	51:VC:1614:A:N6	2.12	0.47
20:T:126:VAL:HG12	20:T:163:LEU:HA	1.96	0.47
31:EA:129:ASN:N	31:EA:145:GLU:O	2.42	0.47
35:IA:42:GLU:HG3	35:IA:109:ILE:HD12	1.96	0.47
3:YA:110:LEU:HD22	3:YA:206:ILE:HD11	1.96	0.47
8:DB:127:LYS:HB2	8:DB:140:PHE:CE1	2.48	0.47
32:BC:100:VAL:HG22	32:BC:118:ILE:HG22	1.96	0.47
35:EC:42:GLU:HG3	35:EC:109:ILE:HD12	1.96	0.47
51:VC:2111:C:O2'	51:VC:2145:C:O2	2.24	0.47
50:YC:1347:G:O2'	50:YC:1373:G:O6	2.26	0.47
51:ZC:1447:G:H2'	51:ZC:1448:G:C8	2.49	0.47
51:ZC:2052:G:H2'	51:ZC:2053:G:C8	2.48	0.47
51:ZC:2451:A:O2'	53:FD:76:A:H2'	2.13	0.47
21:U:23:VAL:HA	21:U:38:VAL:HG22	1.96	0.47
22:V:19:GLN:NE2	51:VC:189:G:OP1	2.47	0.47
39:MA:41:THR:OG1	39:MA:51:LEU:HB2	2.14	0.47
11:GB:22:LYS:O	11:GB:22:LYS:HD3	2.13	0.47
20:PB:126:VAL:HG12	20:PB:163:LEU:HA	1.96	0.47
47:QC:23:ARG:O	47:QC:27:LYS:N	2.45	0.47
50:UC:17:U:H2'	50:UC:18:C:C6	2.49	0.47
50:UC:21:G:N2	50:UC:914:A:H62	2.09	0.47
51:VC:275:G:N2	51:VC:276:A:N1	2.62	0.47
51:VC:521:G:H2'	51:VC:522:G:C8	2.46	0.47
51:VC:2052:G:H2'	51:VC:2053:G:C8	2.49	0.47
51:ZC:1406:U:H2'	51:ZC:1407:C:C6	2.49	0.47
51:ZC:2086:U:H2'	51:ZC:2087:G:C8	2.49	0.47
51:ZC:2863:C:H2'	51:ZC:2864:G:C8	2.50	0.47
2:B:47:VAL:HG21	2:B:86:PRO:HD2	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:10:LYS:HB2	24:X:53:LEU:HA	1.95	0.47
25:Y:3:LYS:N	25:Y:3:LYS:HD2	2.29	0.47
44:RA:54:GLY:O	44:RA:81:ARG:HB2	2.14	0.47
2:XA:47:VAL:HG21	2:XA:86:PRO:HD2	1.95	0.47
2:XA:54:GLN:HG2	2:XA:76:ARG:HG3	1.97	0.47
8:DB:99:SER:HB3	51:ZC:2641:G:H5"	1.96	0.47
10:FB:16:ARG:NH1	10:FB:18:ARG:HG3	2.30	0.47
19:OB:88:LYS:HE2	19:OB:93:GLY:H	1.79	0.47
27:WB:9:ARG:HE	27:WB:47:ARG:HB2	1.78	0.47
37:GC:91:PRO:HB3	37:GC:94:VAL:HB	1.96	0.47
50:UC:1038:C:H2'	50:UC:1039:C:C6	2.50	0.47
50:UC:1064:G:N2	50:UC:1190:G:H2'	2.29	0.47
51:VC:605:C:H1'	51:VC:657:U:O2'	2.14	0.47
51:VC:1316:U:H2'	51:VC:1317:A:C8	2.50	0.47
51:VC:1506:C:H2'	51:VC:1508:A:C8	2.49	0.47
51:VC:2601:C:O2'	51:VC:2603:G:N7	2.44	0.47
51:VC:2695:C:H2'	51:VC:2696:U:C6	2.49	0.47
50:YC:1305:G:H1'	50:YC:1306:A:N7	2.30	0.47
8:H:99:SER:HB3	51:VC:2641:G:H5"	1.96	0.47
16:P:38:LEU:O	16:P:39:LEU:HD13	2.13	0.47
39:MA:32:ARG:O	39:MA:84:ILE:HG22	2.13	0.47
2:XA:122:PHE:HB3	2:XA:123:ALA:H	1.55	0.47
4:ZA:67:LYS:HA	4:ZA:68:PRO:HD3	1.79	0.47
5:AB:113:VAL:HG11	5:AB:151:ILE:HD13	1.95	0.47
9:EB:64:ARG:HB2	9:EB:83:ALA:HB3	1.95	0.47
10:FB:126:VAL:HG22	10:FB:145:PRO:HG2	1.96	0.47
20:PB:102:LEU:HD11	20:PB:124:ILE:HG13	1.95	0.47
31:AC:4:TYR:O	31:AC:115:ARG:NH1	2.48	0.47
40:JC:92:HIS:HB2	40:JC:93:ARG:CZ	2.44	0.47
44:NC:17:LYS:NZ	50:YC:256:U:OP1	2.42	0.47
51:VC:363(C):G:H2'	51:VC:363(D):G:H8	1.79	0.47
51:VC:2212:A:H1'	51:VC:2215:G:C4	2.49	0.47
51:VC:2593:U:H2'	51:VC:2594:C:C6	2.48	0.47
51:ZC:106:C:O2'	51:ZC:294:A:O2'	2.28	0.47
51:ZC:1849:G:H2'	51:ZC:1850:G:C8	2.47	0.47
53:BD:67:C:H2'	53:BD:68:C:C6	2.48	0.47
5:E:19:VAL:HA	5:E:24:VAL:HG12	1.96	0.47
8:H:95:TYR:HE2	8:H:121:VAL:HG12	1.80	0.47
30:DA:6:HIS:CD2	30:DA:8:ILE:H	2.31	0.47
35:IA:82:HIS:N	35:IA:138:TRP:O	2.46	0.47
2:XA:111:ARG:HB2	2:XA:160:TYR:HB3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:FB:35:HIS:CD2	51:ZC:941:A:H4'	2.50	0.47
16:LB:38:LEU:O	16:LB:39:LEU:HD13	2.14	0.47
26:VB:35:GLU:HB3	26:VB:51:GLU:HB2	1.96	0.47
30:ZB:66:VAL:HB	30:ZB:101:LEU:HD23	1.95	0.47
31:AC:90:GLY:HA3	31:AC:204:ILE:HD11	1.97	0.47
50:UC:376:G:H1	50:UC:387:U:H3	1.62	0.47
50:UC:1163:C:H2'	50:UC:1164:G:C8	2.49	0.47
51:VC:1792:G:O2'	51:VC:1830:C:OP1	2.28	0.47
51:ZC:270(A):A:OP2	51:ZC:270(Z):G:N2	2.45	0.47
51:ZC:605:C:H1'	51:ZC:657:U:O2'	2.15	0.47
51:ZC:1464:C:H2'	51:ZC:1465:G:C8	2.49	0.47
1:A:16:MET:HB2	1:A:207:GLY:HA3	1.95	0.47
26:Z:34:LEU:H	26:Z:34:LEU:HD13	1.80	0.47
40:NA:91:ARG:HH11	46:TA:81:ARG:NH1	2.12	0.47
3:YA:186:ILE:HD12	3:YA:192:LEU:HD11	1.97	0.47
12:HB:8:ARG:HG2	12:HB:10:LEU:HD23	1.96	0.47
50:UC:258:G:H1	50:UC:268:C:H42	1.62	0.47
50:UC:491:G:H2'	50:UC:492:G:C8	2.50	0.47
50:UC:939:G:H1	50:UC:1344:C:H42	1.63	0.47
51:VC:1695:G:H2'	51:VC:1695:G:N3	2.30	0.47
53:XC:62:C:H2'	53:XC:63:G:C8	2.50	0.47
50:YC:1468:A:H2'	50:YC:1469:G:O4'	2.14	0.47
51:ZC:27:G:H1'	51:ZC:513:A:N6	2.29	0.47
51:ZC:2291:U:H2'	51:ZC:2292:C:C6	2.48	0.47
1:A:25:THR:HG22	1:A:82:ILE:H	1.79	0.47
2:B:54:GLN:HG2	2:B:76:ARG:HG3	1.95	0.47
6:F:87:LYS:HD3	6:F:121:LYS:HE3	1.95	0.47
7:G:54:PRO:HD3	7:G:73:PRO:HD3	1.97	0.47
9:I:53:LYS:HD2	9:I:56:ASP:OD1	2.14	0.47
10:J:7:ARG:O	10:J:10:PRO:HD3	2.15	0.47
10:J:23:PRO:HD2	10:J:33:ARG:NH2	2.30	0.47
11:K:43:THR:HA	11:K:94:VAL:HG12	1.96	0.47
12:L:51:LEU:HD13	12:L:70:LEU:HD11	1.96	0.47
15:O:69:CYS:SG	15:O:74:LEU:HG	2.54	0.47
18:R:62:LYS:O	18:R:73:ARG:HB2	2.14	0.47
29:CA:112:VAL:O	29:CA:116:GLU:HG2	2.15	0.47
44:RA:63:ARG:HG2	44:RA:64:PRO:HD2	1.96	0.47
5:AB:159:GLU:HG2	5:AB:169:VAL:HG11	1.97	0.47
10:FB:39:LYS:HG2	51:ZC:807:U:OP2	2.15	0.47
10:FB:127:ALA:O	10:FB:147:LEU:HA	2.14	0.47
29:YB:98:LEU:O	29:YB:101:MET:HG3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:GC:79:ARG:HH11	37:GC:82:ILE:HG13	1.80	0.47
38:HC:29:ILE:HD11	50:YC:706:A:O4'	2.15	0.47
43:MC:34:GLU:OE2	43:MC:55:ARG:HD3	2.15	0.47
50:UC:1468:A:H2'	50:UC:1469:G:O4'	2.14	0.47
51:VC:185:U:H4'	51:VC:218:A:H4'	1.96	0.47
51:VC:1025:G:H8	51:VC:1025:G:OP1	1.98	0.47
51:VC:1307:A:N6	51:VC:1606:G:O2'	2.48	0.47
51:VC:1771:C:O2'	51:VC:1786:A:O4'	2.31	0.47
51:VC:2190:G:H2'	51:VC:2191:G:H8	1.80	0.47
51:VC:2472:G:O2'	51:VC:2478:A:N6	2.45	0.47
50:YC:17:U:H2'	50:YC:18:C:C6	2.50	0.47
50:YC:406:G:H1	50:YC:436:C:H42	1.62	0.47
50:YC:1071:C:H42	50:YC:1104:G:H1	1.61	0.47
50:YC:1151:A:O2'	50:YC:1152:A:O5'	2.32	0.47
50:YC:1243:C:H42	50:YC:1294:G:H1	1.61	0.47
51:ZC:15:G:H1	51:ZC:525:U:H3	1.62	0.47
51:ZC:272:G:H2'	51:ZC:273(A):G:H8	1.79	0.47
51:ZC:736:C:H42	51:ZC:760:G:H1	1.63	0.47
51:ZC:1695:G:H2'	51:ZC:1695:G:N3	2.30	0.47
51:ZC:2190:G:H2'	51:ZC:2191:G:H8	1.80	0.47
52:AD:31:C:O2	52:AD:53:A:N6	2.47	0.47
53:BD:17(A):U:H1'	53:BD:18:G:OP1	2.15	0.47
3:C:48:THR:OG1	51:VC:442:G:N2	2.48	0.47
8:H:117:HIS:HB2	8:H:119:GLU:OE2	2.15	0.47
9:I:105:GLU:OE1	9:I:105:GLU:N	2.48	0.47
12:L:6:SER:HB2	51:VC:2873:A:N3	2.29	0.47
20:T:102:LEU:HD11	20:T:124:ILE:HG13	1.95	0.47
31:EA:8:VAL:HG23	31:EA:22:LYS:HE2	1.97	0.47
9:EB:105:GLU:OE1	9:EB:105:GLU:N	2.48	0.47
10:FB:26:GLY:HA2	10:FB:30:THR:HG23	1.96	0.47
19:OB:19:LYS:H	19:OB:19:LYS:HG2	1.55	0.47
23:SB:53:LEU:O	23:SB:57:ILE:HG13	2.14	0.47
31:AC:39:PRO:HA	31:AC:40:PRO:HD3	1.82	0.47
34:DC:24:THR:HA	34:DC:27:ILE:HG12	1.97	0.47
44:NC:63:ARG:HG2	44:NC:64:PRO:HD2	1.97	0.47
50:UC:328:C:H1'	50:UC:329:A:OP2	2.15	0.47
50:UC:103(C):G:O2'	51:ZC:2116:G:H4'	2.15	0.47
51:VC:27:G:H1'	51:VC:513:A:H62	1.80	0.47
51:VC:662:G:H2'	51:VC:663:G:H8	1.80	0.47
51:VC:1210:A:H4'	51:VC:1211:U:O5'	2.15	0.47
51:VC:1678:G:H8	51:VC:1678:G:O5'	1.98	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:1773:A:H2'	51:VC:1774:C:O4'	2.15	0.47
51:VC:2079:U:O2	51:VC:2242:G:N2	2.47	0.47
51:ZC:550:G:H2'	51:ZC:551:G:H8	1.80	0.47
51:ZC:848:G:H2'	51:ZC:849:A:C8	2.50	0.47
51:ZC:1025:G:H8	51:ZC:1025:G:OP1	1.97	0.47
53:BD:62:C:H2'	53:BD:63:G:C8	2.50	0.47
5:E:126:PRO:HB2	5:E:127:GLU:H	1.55	0.47
12:L:8:ARG:HG2	12:L:10:LEU:HD23	1.97	0.47
19:S:81:LYS:HD2	19:S:96:ILE:HD12	1.97	0.47
20:T:77:ASP:HB2	20:T:84:GLU:HG3	1.96	0.47
29:CA:69:LEU:HB3	29:CA:162:ILE:HG22	1.97	0.47
32:FA:100:VAL:HG22	32:FA:118:ILE:HG22	1.97	0.47
39:MA:51:LEU:HD23	39:MA:51:LEU:H	1.79	0.47
1:WA:145:VAL:HG13	1:WA:191:ALA:HB2	1.97	0.47
1:WA:206:LEU:HB2	51:ZC:1791:A:H4'	1.97	0.47
5:AB:13:LYS:HA	5:AB:14:GLY:HA2	1.52	0.47
10:FB:25:SER:HA	51:ZC:811:U:H2'	1.96	0.47
11:GB:43:THR:HA	11:GB:94:VAL:HG12	1.96	0.47
11:GB:51:ARG:HA	11:GB:54:MET:HE2	1.96	0.47
21:QB:23:VAL:HA	21:QB:38:VAL:HG22	1.97	0.47
21:QB:36:ILE:HD11	51:ZC:2364:C:H1'	1.96	0.47
31:AC:177:ASP:OD2	31:AC:180:GLY:N	2.44	0.47
40:JC:91:ARG:HH11	46:PC:81:ARG:NH1	2.13	0.47
50:UC:21:G:H2'	50:UC:22:G:C8	2.50	0.47
51:VC:49:A:H4'	51:VC:50:U:H5"	1.97	0.47
51:VC:2627:G:N2	51:VC:2777:G:OP2	2.47	0.47
51:VC:2842:G:H2'	51:VC:2843:G:C8	2.50	0.47
51:ZC:305:U:H2'	51:ZC:306:U:C6	2.50	0.47
8:H:112:LYS:O	8:H:116:THR:HG22	2.15	0.47
10:J:39:LYS:HD2	10:J:39:LYS:HA	1.71	0.47
40:NA:92:HIS:HB2	40:NA:93:ARG:CZ	2.44	0.47
1:WA:63:ARG:NH2	51:ZC:1568:G:OP2	2.48	0.47
7:CB:54:PRO:HD3	7:CB:73:PRO:HD3	1.96	0.47
9:EB:53:LYS:HD2	9:EB:56:ASP:OD1	2.15	0.47
10:FB:148:LEU:HD22	10:FB:148:LEU:H	1.80	0.47
14:JB:105:LEU:HD22	14:JB:109:GLU:HG3	1.96	0.47
25:UB:8:LYS:NZ	51:ZC:2056:G:O3'	2.47	0.47
42:LC:78:TYR:O	42:LC:82:ILE:HG22	2.15	0.47
47:QC:22:ARG:HB3	50:YC:323:U:H4'	1.96	0.47
51:VC:59:U:H3	51:VC:68:G:H1	1.63	0.47
51:VC:979:G:H2'	51:VC:982:C:H42	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:980:A:N6	51:VC:981:A:N1	2.63	0.47
50:YC:1525:G:H2'	50:YC:1526:G:H8	1.80	0.47
51:ZC:1042:G:H1	51:ZC:1113:U:H3	1.63	0.47
51:ZC:1307:A:N6	51:ZC:1606:G:O2'	2.48	0.47
51:ZC:2863:C:H2'	51:ZC:2864:G:H8	1.79	0.47
53:BD:17(A):U:HO2'	53:BD:18:G:P	2.37	0.47
10:J:45:LEU:HD12	10:J:46:LYS:H	1.80	0.46
20:T:183:LEU:HA	20:T:186:GLU:HB2	1.97	0.46
21:U:60:PHE:CZ	51:VC:2365:G:H4'	2.50	0.46
35:IA:83:ILE:HB	35:IA:137:VAL:HG13	1.97	0.46
43:QA:12:LYS:HE2	43:QA:13:HIS:CD2	2.50	0.46
8:DB:36:TRP:HA	8:DB:74:PHE:HB2	1.97	0.46
15:KB:92:ARG:HG2	16:LB:11:GLN:HB2	1.96	0.46
25:UB:3:LYS:HD2	25:UB:3:LYS:N	2.30	0.46
29:YB:69:LEU:HB3	29:YB:162:ILE:HG22	1.97	0.46
35:EC:83:ILE:HB	35:EC:137:VAL:HG13	1.98	0.46
40:JC:57:ARG:HD2	49:TC:61:VAL:HG23	1.97	0.46
42:LC:40:SER:O	42:LC:44:LYS:HD2	2.15	0.46
48:RC:17:THR:HG21	50:YC:1325:C:H4'	1.97	0.46
50:UC:791:G:N2	50:UC:1497:G:O3'	2.46	0.46
51:VC:15:G:H1	51:VC:525:U:H3	1.63	0.46
51:VC:127:A:H5"	51:VC:128:C:C6	2.50	0.46
51:VC:783:A:H2'	51:VC:784:A:H4'	1.97	0.46
51:VC:983:A:H5'	51:VC:984:A:OP2	2.14	0.46
51:VC:1325:G:OP2	51:VC:1616:A:H2'	2.14	0.46
51:VC:1796:U:H2'	51:VC:1797:C:H6	1.77	0.46
50:YC:507:C:H3'	50:YC:508:C:H2'	1.97	0.46
51:ZC:1296:G:OP1	51:ZC:2709:G:O2'	2.26	0.46
51:ZC:2695:C:H2'	51:ZC:2696:U:C6	2.50	0.46
53:ED:4:G:H2'	53:ED:5:G:H8	1.79	0.46
1:A:145:VAL:HG13	1:A:191:ALA:HB2	1.97	0.46
10:J:35:HIS:CD2	51:VC:941:A:H4'	2.50	0.46
11:K:34:LEU:HD11	11:K:129:THR:HB	1.97	0.46
14:N:51:ARG:HG2	14:N:98:LYS:HE3	1.97	0.46
21:U:50:ASN:HB3	21:U:63:VAL:HG22	1.96	0.46
36:JA:112:LYS:HA	36:JA:119:ALA:HB2	1.97	0.46
36:JA:116:LYS:HE3	36:JA:122:ALA:HB2	1.97	0.46
4:ZA:15:VAL:HG13	4:ZA:175:LEU:HB2	1.97	0.46
10:FB:16:ARG:C	10:FB:16:ARG:HE	2.18	0.46
14:JB:51:ARG:HG2	14:JB:98:LYS:HE3	1.97	0.46
21:QB:50:ASN:HD22	21:QB:63:VAL:CG2	2.28	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CC:87:ARG:CZ	50:YC:673:G:H5"	2.45	0.46
39:IC:51:LEU:H	39:IC:51:LEU:HD23	1.79	0.46
41:KC:32:SER:H	50:YC:976:G:P	2.35	0.46
45:OC:66:LEU:O	45:OC:70:ILE:HG12	2.15	0.46
50:UC:1525:G:H2'	50:UC:1526:G:H8	1.79	0.46
51:VC:1447:G:H2'	51:VC:1448:G:C8	2.50	0.46
53:XC:17(A):U:H1'	53:XC:18:G:OP1	2.15	0.46
50:YC:376:G:H1	50:YC:387:U:H3	1.62	0.46
51:ZC:983:A:H5'	51:ZC:984:A:OP2	2.14	0.46
51:ZC:2306:C:H5'	51:ZC:2307:G:C8	2.50	0.46
3:C:34:TRP:HB2	10:J:10:PRO:O	2.15	0.46
9:I:105:GLU:O	9:I:109:LYS:HG2	2.16	0.46
10:J:16:ARG:NH1	10:J:18:ARG:HG3	2.30	0.46
10:J:127:ALA:O	10:J:147:LEU:HA	2.16	0.46
21:U:27:GLU:OE2	51:VC:855:G:O2'	2.27	0.46
30:DA:29:TYR:CD2	41:OA:36:PHE:HE1	2.33	0.46
37:KA:40:LEU:HB2	37:KA:69:ASN:HB2	1.96	0.46
43:QA:25:ARG:HH12	50:UC:134:A:N6	2.13	0.46
1:WA:112:GLN:O	1:WA:115:GLN:HB2	2.15	0.46
10:FB:23:PRO:HD2	10:FB:33:ARG:NH2	2.29	0.46
31:AC:3:ARG:NE	31:AC:118:ARG:HD3	2.31	0.46
43:MC:25:ARG:HH12	50:YC:134:A:N6	2.13	0.46
50:UC:1356:G:H2'	50:UC:1357:A:H8	1.80	0.46
51:VC:486:C:H2'	51:VC:487:C:C6	2.51	0.46
51:VC:1266:G:O2'	51:VC:2012:G:O6	2.21	0.46
51:VC:1627:G:H1	51:VC:1639:U:H3	1.64	0.46
50:YC:491:G:H2'	50:YC:492:G:C8	2.50	0.46
50:YC:1105:A:H2'	50:YC:1106:G:C8	2.48	0.46
50:YC:1422:G:H2'	50:YC:1423:G:C8	2.50	0.46
51:ZC:662:G:H2'	51:ZC:663:G:H8	1.81	0.46
51:ZC:2601:C:O2'	51:ZC:2603:G:N7	2.44	0.46
51:ZC:2788:C:O2'	51:ZC:2809:A:N3	2.44	0.46
3:C:57:VAL:HG22	3:C:58:ALA:H	1.80	0.46
6:F:77:LEU:HD11	6:F:101:LEU:HD22	1.98	0.46
10:J:58:THR:O	10:J:60:MET:N	2.47	0.46
12:L:13:HIS:CE1	12:L:15:SER:HB2	2.51	0.46
13:M:30:ARG:NH1	52:WC:49:C:OP2	2.49	0.46
14:N:32:TYR:CZ	14:N:82:LEU:HD22	2.50	0.46
37:KA:80:LYS:NZ	50:YC:1162:C:O2'	2.49	0.46
37:KA:91:PRO:HB3	37:KA:94:VAL:HB	1.96	0.46
46:TA:63:THR:H	46:TA:66:MET:HG3	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:QB:43:THR:H	51:ZC:2331:G:H4'	1.81	0.46
22:RB:41:ARG:HH11	22:RB:43:TYR:HE2	1.63	0.46
40:JC:89:GLY:O	40:JC:93:ARG:NH1	2.49	0.46
51:VC:325:G:H2'	51:VC:326:G:H8	1.80	0.46
51:VC:1831:G:H1	51:VC:1974:C:H42	1.63	0.46
51:VC:2006:C:O2'	51:VC:2823:A:N3	2.48	0.46
51:VC:2836:U:H2'	51:VC:2837:G:C8	2.50	0.46
50:YC:258:G:H1	50:YC:268:C:H42	1.63	0.46
50:YC:1294:G:H2'	50:YC:1295:G:C8	2.51	0.46
51:ZC:59:U:H3	51:ZC:68:G:H1	1.64	0.46
51:ZC:1638:C:H5"	51:ZC:2710:C:O2'	2.15	0.46
51:ZC:1792:G:O2'	51:ZC:1830:C:OP1	2.30	0.46
1:A:63:ARG:NH2	51:VC:1568:G:OP2	2.48	0.46
8:H:36:TRP:HA	8:H:74:PHE:HB2	1.98	0.46
31:EA:65:ARG:HH11	31:EA:72:GLU:HG2	1.81	0.46
42:PA:25:THR:OG1	42:PA:26:GLU:N	2.48	0.46
4:ZA:129:GLY:HA3	4:ZA:163:ALA:HB3	1.98	0.46
9:EB:105:GLU:O	9:EB:109:LYS:HG2	2.16	0.46
21:QB:74:ARG:NH2	52:AD:13:A:O4'	2.48	0.46
26:VB:15:GLU:HG3	26:VB:49:HIS:CE1	2.51	0.46
36:FC:29:ASN:HD21	36:FC:65:VAL:N	2.14	0.46
43:MC:5:ARG:HD2	50:YC:376:G:H5"	1.98	0.46
46:PC:40:ILE:HD13	46:PC:62:ILE:HD11	1.98	0.46
50:UC:1422:G:H2'	50:UC:1423:G:C8	2.50	0.46
51:VC:272:G:H2'	51:VC:273(A):G:H8	1.81	0.46
51:VC:548:A:H2'	51:VC:549:G:O4'	2.16	0.46
51:VC:2564:A:C2	51:VC:2647:U:H4'	2.51	0.46
51:VC:2863:C:H2'	51:VC:2864:G:C8	2.50	0.46
52:WC:95:U:H2'	52:WC:96:G:C8	2.51	0.46
53:XC:42:G:H2'	53:XC:43:A:H8	1.80	0.46
50:YC:1038:C:H2'	50:YC:1039:C:C6	2.50	0.46
50:YC:1412:C:H2'	50:YC:1413:A:C8	2.51	0.46
51:ZC:578:A:OP1	51:ZC:1255:U:O2'	2.29	0.46
51:ZC:2398:U:H2'	51:ZC:2399:G:H8	1.81	0.46
25:Y:41:PRO:HA	25:Y:42:PRO:HD3	1.85	0.46
26:Z:41:PRO:HD2	26:Z:46:HIS:H	1.81	0.46
36:JA:15:ALA:HB2	36:JA:65:VAL:HG23	1.96	0.46
36:JA:17:VAL:HG11	36:JA:81:ILE:HG12	1.98	0.46
42:PA:8:LYS:HE2	42:PA:31:LEU:HD11	1.97	0.46
47:UA:105:SER:HB3	50:UC:191(G):G:C4	2.50	0.46
14:JB:26:ASP:HB2	14:JB:91:ARG:HA	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:JB:41:ARG:HH12	14:JB:42:ILE:HD12	1.81	0.46
37:GC:6:ILE:HD12	37:GC:23:ILE:HD13	1.98	0.46
42:LC:25:THR:OG1	42:LC:26:GLU:N	2.48	0.46
44:NC:16:GLN:NE2	50:YC:273:A:H1'	2.31	0.46
50:UC:974:A:H8	50:UC:974:A:OP1	1.99	0.46
51:VC:305:U:H2'	51:VC:306:U:C6	2.51	0.46
51:VC:380:U:H2'	51:VC:381:G:C8	2.49	0.46
51:VC:1161:C:H2'	51:VC:1162:G:C8	2.51	0.46
51:VC:2330:G:H2'	51:VC:2331:G:O4'	2.16	0.46
51:VC:2602:A:P	53:ED:74:C:H5"	2.56	0.46
51:VC:2842:G:H1	51:VC:2875:C:H42	1.63	0.46
50:YC:328:C:H1'	50:YC:329:A:OP2	2.15	0.46
50:YC:498:A:H4'	50:YC:500:G:OP1	2.12	0.46
51:ZC:979:G:H2'	51:ZC:982:C:H42	1.81	0.46
51:ZC:1019:U:HO2'	51:ZC:1021:A:H2	1.64	0.46
51:ZC:1678:G:H8	51:ZC:1678:G:O5'	1.99	0.46
51:ZC:2343:C:O2'	51:ZC:2373:G:O2'	2.33	0.46
52:AD:95:U:H2'	52:AD:96:G:C8	2.50	0.46
4:D:96:ARG:HD2	4:D:98:ARG:HD3	1.97	0.46
4:D:109:VAL:HG22	49:SC:59:VAL:HG21	1.98	0.46
14:N:41:ARG:HH12	14:N:42:ILE:HD12	1.80	0.46
21:U:43:THR:H	51:VC:2331:G:H4'	1.81	0.46
29:CA:172:ILE:H	29:CA:172:ILE:HG13	1.54	0.46
32:FA:43:LEU:HD12	32:FA:109:ILE:HD11	1.98	0.46
38:LA:29:ILE:HD11	50:UC:706:A:O4'	2.16	0.46
39:MA:83:LEU:HD12	39:MA:100:VAL:HG21	1.97	0.46
40:NA:89:GLY:O	40:NA:93:ARG:NH1	2.48	0.46
4:ZA:109:VAL:HG22	49:TC:59:VAL:HG21	1.98	0.46
7:CB:27:LEU:HB2	7:CB:32:ALA:HB2	1.98	0.46
10:FB:23:PRO:HB2	10:FB:33:ARG:CG	2.43	0.46
14:JB:32:TYR:CZ	14:JB:82:LEU:HD22	2.51	0.46
15:KB:80:ILE:HD12	15:KB:80:ILE:HA	1.78	0.46
26:VB:34:LEU:HD13	26:VB:34:LEU:H	1.80	0.46
32:BC:43:LEU:HD12	32:BC:109:ILE:HD11	1.97	0.46
36:FC:15:ALA:HB2	36:FC:65:VAL:HG23	1.97	0.46
39:IC:52:ARG:HH22	50:YC:522:C:H41	1.64	0.46
42:LC:8:LYS:HE2	42:LC:31:LEU:HD11	1.98	0.46
45:OC:70:ILE:O	45:OC:74:ARG:HG3	2.15	0.46
46:PC:63:THR:H	46:PC:66:MET:HG3	1.80	0.46
51:VC:1348:G:H1	51:VC:1598:C:H42	1.64	0.46
50:YC:21:G:H2'	50:YC:22:G:C8	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:679:C:H42	50:YC:711:G:H1	1.63	0.46
50:YC:728:A:H2'	50:YC:729:A:C8	2.51	0.46
50:YC:859:A:H2'	50:YC:860:A:O4'	2.16	0.46
50:YC:974:A:H8	50:YC:974:A:OP1	1.98	0.46
50:YC:987:G:H1	50:YC:1218:C:H42	1.64	0.46
50:YC:1201:A:H1'	50:YC:1202:G:OP2	2.16	0.46
50:YC:1238:A:C5	50:YC:1303:C:H1'	2.51	0.46
51:ZC:127:A:H5"	51:ZC:128:C:C6	2.50	0.46
51:ZC:1516:U:H2'	51:ZC:1517:G:C8	2.51	0.46
51:ZC:1761:C:H5"	51:ZC:1762:A:C8	2.50	0.46
51:ZC:2564:A:C2	51:ZC:2647:U:H4'	2.51	0.46
1:A:206:LEU:HB2	51:VC:1791:A:H4'	1.97	0.46
9:I:22:ILE:HG23	51:VC:1952:A:C2	2.51	0.46
26:Z:15:GLU:HG3	26:Z:49:HIS:CE1	2.51	0.46
30:DA:47:LEU:HB3	30:DA:52:LEU:HD22	1.98	0.46
32:FA:94:ALA:HB2	32:FA:119:LEU:HD12	1.98	0.46
9:EB:76:ALA:HB3	14:JB:75:ILE:HD13	1.98	0.46
19:OB:14:LEU:HD13	19:OB:24:VAL:HG22	1.98	0.46
37:GC:48:THR:O	41:KC:34:TYR:OH	2.34	0.46
43:MC:12:LYS:HE2	43:MC:13:HIS:CD2	2.51	0.46
49:TC:39:ARG:HA	49:TC:39:ARG:HE	1.81	0.46
50:UC:1294:G:H2'	50:UC:1295:G:C8	2.51	0.46
51:VC:804:A:H2'	51:VC:806:C:C4	2.51	0.46
51:VC:2503:A:O2'	51:VC:2505:G:OP2	2.31	0.46
50:YC:1356:G:H2'	50:YC:1357:A:H8	1.80	0.46
50:YC:1401:G:OP1	54:HD:18:C:O2'	2.23	0.46
51:ZC:272:G:H2'	51:ZC:273(A):G:C8	2.51	0.46
51:ZC:340:A:H2'	51:ZC:341:G:O4'	2.16	0.46
51:ZC:582:G:H2'	51:ZC:583:G:C8	2.50	0.46
51:ZC:1161:C:H2'	51:ZC:1162:G:C8	2.51	0.46
51:ZC:1266:G:O2'	51:ZC:2012:G:O6	2.23	0.46
51:ZC:2842:G:H1	51:ZC:2875:C:H42	1.64	0.46
4:D:16:ARG:HD3	4:D:31:VAL:HG21	1.98	0.46
6:F:130:TYR:HB3	6:F:138:ILE:HB	1.97	0.46
29:CA:98:LEU:O	29:CA:101:MET:HG3	2.15	0.46
31:EA:123:HIS:HD1	50:UC:438:G:H4'	1.81	0.46
37:KA:79:ARG:HH11	37:KA:82:ILE:HG13	1.80	0.46
42:PA:40:SER:O	42:PA:44:LYS:HD2	2.15	0.46
8:DB:112:LYS:O	8:DB:116:THR:HG22	2.15	0.46
8:DB:117:HIS:HB2	8:DB:119:GLU:OE2	2.16	0.46
10:FB:72:PRO:HD3	51:ZC:389:G:H22	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:XB:12:LYS:NZ	51:ZC:249:C:O2	2.39	0.46
30:ZB:22:TRP:HB2	30:ZB:23:TYR:H	1.65	0.46
35:EC:1:MET:SD	35:EC:1:MET:N	2.82	0.46
36:FC:116:LYS:HE3	36:FC:122:ALA:HB2	1.97	0.46
40:JC:82:MET:HB2	40:JC:93:ARG:CZ	2.46	0.46
50:UC:375:U:H3	50:UC:389:A:H61	1.64	0.46
50:UC:507:C:H3'	50:UC:508:C:H2'	1.97	0.46
50:UC:560:U:H4'	50:UC:561:U:O5'	2.15	0.46
51:VC:550:G:H2'	51:VC:551:G:H8	1.80	0.46
51:VC:582:G:H2'	51:VC:583:G:C8	2.51	0.46
51:VC:639:U:H2'	51:VC:640:C:C6	2.51	0.46
51:VC:1113:U:H2'	51:VC:1114:G:H8	1.81	0.46
51:VC:1539:G:H2'	51:VC:1540:G:C8	2.51	0.46
51:VC:2086:U:H2'	51:VC:2087:G:C8	2.51	0.46
51:VC:2306:C:H5'	51:VC:2307:G:C8	2.51	0.46
51:VC:2329:G:H2'	51:VC:2330:G:C8	2.51	0.46
51:VC:2842:G:H2'	51:VC:2843:G:H8	1.80	0.46
51:VC:2853:C:H2'	51:VC:2854:G:H8	1.80	0.46
50:YC:791:G:N2	50:YC:1497:G:O3'	2.46	0.46
50:YC:1163:C:H2'	50:YC:1164:G:C8	2.49	0.46
51:ZC:1523:U:H2'	51:ZC:1524:G:H8	1.81	0.46
51:ZC:1773:A:H2'	51:ZC:1774:C:O4'	2.15	0.46
1:A:183:ARG:NH2	51:VC:1800:C:OP2	2.49	0.46
4:D:96:ARG:HD2	4:D:98:ARG:HH11	1.81	0.46
9:I:76:ALA:HB3	14:N:75:ILE:HD13	1.98	0.46
10:J:72:PRO:HD3	51:VC:389:G:H22	1.81	0.46
10:J:126:VAL:HG22	10:J:145:PRO:HG2	1.97	0.46
20:T:158:PRO:HB2	20:T:161:VAL:HB	1.98	0.46
21:U:74:ARG:NH2	52:WC:13:A:O4'	2.49	0.46
29:CA:217:ARG:HD3	29:CA:217:ARG:HA	1.83	0.46
37:KA:50:ILE:HD11	37:KA:57:LYS:HD3	1.97	0.46
45:SA:66:LEU:O	45:SA:70:ILE:HG12	2.16	0.46
2:XA:165:VAL:HG11	51:ZC:2679:A:H5'	1.98	0.46
3:YA:56:GLU:OE1	3:YA:93:LYS:NZ	2.43	0.46
3:YA:133:ASN:O	3:YA:135:LYS:N	2.49	0.46
12:HB:28:LEU:HD23	12:HB:34:ILE:HG12	1.97	0.46
29:YB:212:GLN:OE1	29:YB:235:SER:OG	2.28	0.46
32:BC:94:ALA:HB2	32:BC:119:LEU:HD12	1.97	0.46
33:CC:69:GLU:HB2	50:YC:738:C:H5"	1.98	0.46
36:FC:17:VAL:HG11	36:FC:81:ILE:HG12	1.98	0.46
36:FC:112:LYS:HA	36:FC:119:ALA:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:SC:39:ARG:HA	49:SC:39:ARG:HE	1.81	0.46
50:UC:304:U:H2'	50:UC:305:G:C8	2.51	0.46
50:UC:1105:A:H2'	50:UC:1106:G:C8	2.48	0.46
50:UC:1238:A:C5	50:UC:1303:C:H1'	2.51	0.46
50:UC:1319:A:O2'	50:UC:1323:G:N7	2.34	0.46
50:UC:1469:G:H2'	50:UC:1470:G:C8	2.51	0.46
51:VC:321:G:N3	51:VC:341:G:H4'	2.31	0.46
51:VC:848:G:H2'	51:VC:849:A:C8	2.51	0.46
50:YC:272:C:H2'	50:YC:273:A:H8	1.81	0.46
50:YC:560:U:H4'	50:YC:561:U:O5'	2.15	0.46
50:YC:1064:G:N2	50:YC:1190:G:H2'	2.30	0.46
51:ZC:27:G:H1'	51:ZC:513:A:H62	1.81	0.46
51:ZC:2110:G:H5"	51:ZC:2111:C:C5	2.50	0.46
51:ZC:2123:G:H2'	51:ZC:2124:G:C8	2.48	0.46
53:BD:21:A:O2'	53:BD:22:G:O5'	2.33	0.46
2:B:111:ARG:HB2	2:B:160:TYR:HB3	1.97	0.45
5:E:13:LYS:HA	5:E:14:GLY:HA2	1.52	0.45
14:N:96:ARG:HH12	51:VC:1754:C:P	2.39	0.45
14:N:105:LEU:HD22	14:N:109:GLU:HG3	1.98	0.45
17:Q:13:SER:HA	17:Q:14:PRO:HD3	1.79	0.45
22:V:41:ARG:HH11	22:V:43:TYR:HE2	1.64	0.45
24:X:8:LEU:HG	24:X:28:LEU:HD23	1.99	0.45
27:AA:5:TRP:NE1	27:AA:7:PRO:HG3	2.31	0.45
36:JA:115:GLY:N	50:UC:1367:C:OP1	2.47	0.45
39:MA:88:ARG:NH1	50:UC:525:C:OP1	2.49	0.45
10:FB:61:ARG:O	51:ZC:2393:A:H4'	2.17	0.45
15:KB:52:ARG:NH2	51:ZC:560:C:H4'	2.30	0.45
23:SB:33:MET:HA	23:SB:36:ARG:HG2	1.98	0.45
29:YB:112:VAL:O	29:YB:116:GLU:HG2	2.15	0.45
48:RC:5:ASP:O	48:RC:11:GLY:HA3	2.16	0.45
50:UC:147:G:H1	50:UC:175:C:N4	2.11	0.45
50:UC:1305:G:H1'	50:UC:1306:A:N7	2.30	0.45
51:VC:704:G:O2'	51:VC:726:G:N2	2.45	0.45
5:E:42:ARG:HB3	5:E:53:GLU:HB2	1.98	0.45
10:J:72:PRO:HB2	51:VC:2406:U:N3	2.30	0.45
12:L:13:HIS:HE1	12:L:15:SER:HB2	1.81	0.45
12:L:70:LEU:H	12:L:70:LEU:HD12	1.80	0.45
14:N:77:PRO:HB2	14:N:80:SER:HB2	1.98	0.45
36:JA:29:ASN:HD21	36:JA:65:VAL:N	2.14	0.45
42:PA:78:TYR:O	42:PA:82:ILE:HG22	2.16	0.45
4:ZA:96:ARG:HD2	4:ZA:98:ARG:HD3	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:BB:130:TYR:HD2	6:BB:138:ILE:HD12	1.82	0.45
10:FB:59:LEU:HA	10:FB:61:ARG:CZ	2.47	0.45
14:JB:96:ARG:HH12	51:ZC:1754:C:P	2.37	0.45
37:GC:32:ALA:HB3	37:GC:76:ASN:HB2	1.99	0.45
46:PC:16:LEU:HA	46:PC:19:VAL:HG12	1.98	0.45
50:UC:405:U:H3'	50:UC:406:G:H5'	1.98	0.45
50:UC:1143:G:H2'	50:UC:1144:G:H8	1.81	0.45
51:VC:204:A:H8	51:VC:204:A:OP1	1.99	0.45
51:VC:848:G:O6	51:VC:929:G:H2'	2.17	0.45
51:VC:1411:C:H2'	51:VC:1412:A:H8	1.82	0.45
51:VC:1417:C:H2'	51:VC:1418:G:O4'	2.17	0.45
51:VC:1689:A:H62	51:VC:1698:A:H2	1.63	0.45
51:VC:2398:U:H2'	51:VC:2399:G:H8	1.81	0.45
51:ZC:78:A:H2'	51:ZC:79:G:H8	1.80	0.45
51:ZC:321:G:N3	51:ZC:341:G:H4'	2.31	0.45
51:ZC:573:G:O2'	51:ZC:574:C:H3'	2.16	0.45
51:ZC:776:G:OP2	51:ZC:776:G:H8	1.99	0.45
51:ZC:1539:G:H2'	51:ZC:1540:G:C8	2.51	0.45
5:E:159:GLU:HG2	5:E:169:VAL:HG11	1.97	0.45
10:J:16:ARG:C	10:J:16:ARG:HE	2.20	0.45
22:V:9:GLY:O	22:V:13:ILE:HG12	2.17	0.45
23:W:53:LEU:O	23:W:57:ILE:HG13	2.15	0.45
28:BA:9:GLY:O	28:BA:13:ARG:HG2	2.15	0.45
31:EA:35:ARG:NH2	50:UC:412:A:N3	2.63	0.45
32:FA:47:LYS:O	32:FA:57:LYS:NZ	2.35	0.45
3:YA:51:THR:HB	3:YA:88:VAL:HG11	1.97	0.45
6:BB:93:THR:HA	6:BB:119:PRO:HB3	1.99	0.45
11:GB:19:GLY:O	11:GB:21:THR:N	2.49	0.45
12:HB:64:ARG:NH2	51:ZC:2851:A:O3'	2.48	0.45
28:XB:27:THR:OG1	51:ZC:2361:A:OP1	2.28	0.45
43:MC:82:GLN:OE1	43:MC:82:GLN:N	2.49	0.45
51:VC:519:U:H2'	51:VC:520:G:C8	2.51	0.45
51:VC:1837:C:O2'	51:VC:1927:A:N3	2.43	0.45
51:ZC:10:G:N2	51:ZC:2895:U:H1'	2.32	0.45
51:ZC:325:G:H2'	51:ZC:326:G:H8	1.81	0.45
51:ZC:639:U:H2'	51:ZC:640:C:C6	2.51	0.45
51:ZC:854:G:H2'	51:ZC:855:G:H8	1.81	0.45
51:ZC:2023:G:H5'	51:ZC:2617:C:H4'	1.98	0.45
51:ZC:2842:G:H2'	51:ZC:2843:G:C8	2.50	0.45
1:A:208:LYS:HB2	51:VC:729:G:C5	2.51	0.45
2:B:165:VAL:HG11	51:VC:2679:A:H5'	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:63:LYS:HD2	20:T:175:VAL:HG21	1.99	0.45
1:WA:77:ALA:HB2	1:WA:97:TYR:CD2	2.52	0.45
10:FB:7:ARG:O	10:FB:10:PRO:HD3	2.16	0.45
11:GB:63:LYS:HD2	20:PB:175:VAL:HG21	1.98	0.45
26:VB:41:PRO:HD2	26:VB:46:HIS:H	1.82	0.45
28:XB:9:GLY:O	28:XB:13:ARG:HG2	2.17	0.45
29:YB:91:PRO:HG3	29:YB:154:LEU:HD21	1.98	0.45
30:ZB:47:LEU:HB3	30:ZB:52:LEU:HD22	1.98	0.45
38:HC:122:LYS:HD2	50:YC:779:C:H5"	1.98	0.45
50:UC:639:G:H2'	50:UC:640:A:H8	1.81	0.45
50:UC:695:A:H2'	50:UC:696:A:C8	2.52	0.45
50:UC:1114:C:H42	50:UC:1186:G:H1	1.64	0.45
51:VC:270(W):G:H2'	51:VC:270(X):G:H8	1.82	0.45
51:VC:356:G:H2'	51:VC:357:A:C8	2.51	0.45
51:VC:602:G:N2	51:VC:655:A:N7	2.64	0.45
51:VC:854:G:H2'	51:VC:855:G:H8	1.81	0.45
51:VC:1638:C:H5"	51:VC:2710:C:O2'	2.16	0.45
51:ZC:2842:G:H2'	51:ZC:2843:G:H8	1.81	0.45
4:D:129:GLY:HA3	4:D:163:ALA:HB3	1.98	0.45
10:J:25:SER:HA	51:VC:811:U:H2'	1.97	0.45
12:L:48:VAL:O	12:L:52:ILE:HG12	2.16	0.45
22:V:51:VAL:HG13	22:V:58:ILE:HG23	1.99	0.45
23:W:47:ASN:HB3	23:W:48:HIS:H	1.53	0.45
30:DA:44:GLU:HA	30:DA:52:LEU:HD23	1.98	0.45
36:JA:127:LYS:NZ	53:ED:33:U:OP2	2.34	0.45
43:QA:34:GLU:OE2	43:QA:55:ARG:HD3	2.16	0.45
43:QA:82:GLN:OE1	43:QA:82:GLN:N	2.49	0.45
2:XA:184:VAL:HB	2:XA:185:LYS:H	1.57	0.45
4:ZA:96:ARG:HD2	4:ZA:98:ARG:HH11	1.81	0.45
20:PB:183:LEU:HA	20:PB:186:GLU:HB2	1.98	0.45
31:AC:196:LEU:HB3	31:AC:198:VAL:HG22	1.98	0.45
41:KC:9:LYS:NZ	50:YC:1217:C:OP1	2.42	0.45
43:MC:28:ARG:HH21	50:YC:390:C:H4'	1.81	0.45
50:UC:558:G:C8	50:UC:559:A:H2'	2.51	0.45
50:UC:668:G:H1	50:UC:738:C:H42	1.65	0.45
50:UC:728:A:H2'	50:UC:729:A:C8	2.51	0.45
51:VC:1761:C:H5"	51:VC:1762:A:C8	2.52	0.45
50:YC:359:U:H2'	50:YC:360:A:H8	1.82	0.45
50:YC:1114:C:H42	50:YC:1186:G:H1	1.65	0.45
51:ZC:49:A:H4'	51:ZC:50:U:H5"	1.98	0.45
51:ZC:270(W):G:H2'	51:ZC:270(X):G:H8	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:413:C:N4	51:ZC:2410:G:H1	2.08	0.45
51:ZC:2853:C:H2'	51:ZC:2854:G:H8	1.80	0.45
3:C:51:THR:HB	3:C:88:VAL:HG11	1.98	0.45
4:D:86:MET:N	4:D:87:PRO:HD3	2.32	0.45
5:E:3:ARG:HH22	5:E:66:GLY:HA3	1.82	0.45
12:L:13:HIS:CE1	12:L:16:HIS:H	2.35	0.45
15:O:102:GLU:HA	15:O:104:GLN:NE2	2.31	0.45
19:S:73:ARG:NE	51:VC:335:C:H4'	2.31	0.45
28:BA:39:LYS:HA	28:BA:42:ARG:HH21	1.82	0.45
31:EA:79:PHE:CZ	31:EA:204:ILE:HA	2.52	0.45
36:JA:4:TYR:CE2	36:JA:88:TYR:HB3	2.51	0.45
40:NA:82:MET:HB2	40:NA:93:ARG:CZ	2.47	0.45
45:SA:70:ILE:O	45:SA:74:ARG:HG3	2.16	0.45
48:VA:5:ASP:O	48:VA:11:GLY:HA3	2.17	0.45
1:WA:25:THR:O	1:WA:27:THR:HG22	2.16	0.45
7:CB:77:LEU:HD22	7:CB:127:ILE:HD12	1.99	0.45
27:WB:34:ARG:NE	27:WB:39:ARG:HD2	2.31	0.45
33:CC:76:ALA:O	33:CC:80:ARG:HG2	2.17	0.45
39:IC:83:LEU:HD12	39:IC:100:VAL:HG21	1.99	0.45
51:VC:1108:U:H2'	51:VC:1109:C:O4'	2.17	0.45
51:VC:1358:G:O2'	51:VC:1359:A:H5"	2.17	0.45
51:VC:2439:A:H5'	51:VC:2439:A:C8	2.51	0.45
51:VC:2601:C:H4'	51:VC:2602:A:OP2	2.17	0.45
51:VC:2863:C:H2'	51:VC:2864:G:H8	1.80	0.45
50:YC:1043:C:H2'	50:YC:1044:A:C8	2.48	0.45
51:ZC:519:U:H2'	51:ZC:520:G:C8	2.52	0.45
51:ZC:1491:G:H2'	51:ZC:1492:G:H8	1.80	0.45
51:ZC:2330:G:H2'	51:ZC:2331:G:O4'	2.17	0.45
3:C:187:VAL:HG13	10:J:6:LEU:HA	1.97	0.45
6:F:93:THR:HA	6:F:119:PRO:HB3	1.98	0.45
8:H:97:ARG:HH21	51:VC:2641:G:P	2.39	0.45
15:O:52:ARG:NH2	51:VC:560:C:H4'	2.30	0.45
22:V:23:LYS:HB3	22:V:37:ILE:HG13	1.97	0.45
29:CA:69:LEU:HD22	29:CA:91:PRO:HB2	1.98	0.45
32:FA:126:ARG:NH2	50:UC:559:A:OP2	2.44	0.45
38:LA:122:LYS:HD2	50:UC:779:C:H5"	1.98	0.45
39:MA:9:LEU:HB3	44:RA:32:TYR:CE1	2.52	0.45
44:RA:17:LYS:NZ	50:UC:256:U:OP1	2.43	0.45
6:BB:130:TYR:HB3	6:BB:138:ILE:HB	1.99	0.45
11:GB:34:LEU:HD11	11:GB:129:THR:HB	1.98	0.45
12:HB:2:ARG:HE	12:HB:2:ARG:N	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:HB:52:ILE:HD13	12:HB:79:LEU:HD21	1.99	0.45
15:KB:69:CYS:SG	15:KB:74:LEU:HG	2.56	0.45
15:KB:102:GLU:HA	15:KB:104:GLN:NE2	2.32	0.45
19:OB:73:ARG:NE	51:ZC:335:C:H4'	2.31	0.45
19:OB:81:LYS:HD2	19:OB:96:ILE:HD12	1.98	0.45
20:PB:74:VAL:HG22	20:PB:86:VAL:HG22	1.99	0.45
22:RB:9:GLY:O	22:RB:13:ILE:HG12	2.17	0.45
27:WB:5:TRP:NE1	27:WB:7:PRO:HG3	2.31	0.45
27:WB:31:LEU:HD13	27:WB:31:LEU:HA	1.79	0.45
40:JC:3:ARG:HB2	49:TC:60:GLU:HG3	1.97	0.45
47:QC:105:SER:HB3	50:YC:191(G):G:C4	2.51	0.45
50:UC:1201:A:H1'	50:UC:1202:G:OP2	2.16	0.45
51:VC:1173:G:H2'	51:VC:1175:U:H5'	1.98	0.45
51:VC:1516:U:H2'	51:VC:1517:G:C8	2.51	0.45
51:VC:2100:G:H2'	51:VC:2101:G:C8	2.52	0.45
50:YC:1498:U:O2'	54:HD:17:U:OP1	2.26	0.45
51:ZC:38:A:H2'	51:ZC:39:C:C6	2.51	0.45
51:ZC:363(C):G:H2'	51:ZC:363(D):G:H8	1.81	0.45
51:ZC:1417:C:H2'	51:ZC:1418:G:O4'	2.16	0.45
51:ZC:1969:A:HO2'	51:ZC:1972:A:HO2'	1.64	0.45
51:ZC:2006:C:O2'	51:ZC:2823:A:N3	2.48	0.45
51:ZC:2299:G:H2'	51:ZC:2300:G:H8	1.81	0.45
51:ZC:2329:G:H2'	51:ZC:2330:G:C8	2.52	0.45
1:A:231:HIS:CD2	1:A:249:PRO:HG3	2.51	0.45
3:C:169:ASN:HB2	51:VC:322:A:OP2	2.16	0.45
23:W:33:MET:HA	23:W:36:ARG:HG2	1.99	0.45
23:W:50:ILE:HD12	23:W:51:ARG:H	1.82	0.45
27:AA:31:LEU:HD13	27:AA:31:LEU:HA	1.81	0.45
29:CA:91:PRO:HG3	29:CA:154:LEU:HD21	1.99	0.45
29:CA:178:ARG:HH21	35:IA:74:PRO:HG3	1.82	0.45
29:CA:212:GLN:OE1	29:CA:235:SER:OG	2.28	0.45
37:KA:22:LYS:HE3	37:KA:22:LYS:HB3	1.85	0.45
38:LA:59:TYR:CZ	38:LA:63:LEU:HD11	2.51	0.45
46:TA:40:ILE:HD13	46:TA:62:ILE:HD11	1.98	0.45
1:WA:62:TYR:HA	1:WA:87:ASN:ND2	2.32	0.45
1:WA:144:ALA:HB3	1:WA:192:THR:HG23	1.99	0.45
6:BB:77:LEU:HD11	6:BB:101:LEU:HD22	1.98	0.45
29:YB:178:ARG:HH21	35:EC:74:PRO:HG3	1.81	0.45
47:QC:61:SER:O	47:QC:65:LYS:HG3	2.17	0.45
50:UC:1452:C:HO2'	50:UC:1453:G:N2	2.15	0.45
51:VC:2023:G:H5'	51:VC:2617:C:H4'	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:405:U:H3'	50:YC:406:G:H5'	1.98	0.45
50:YC:682:G:H2'	50:YC:683:G:C8	2.51	0.45
50:YC:1047:G:HO2'	50:YC:1215:G:HO2'	1.59	0.45
51:ZC:804:A:H2'	51:ZC:806:C:C4	2.51	0.45
51:ZC:2439:A:H5'	51:ZC:2439:A:C8	2.52	0.45
2:B:184:VAL:HB	2:B:185:LYS:H	1.58	0.45
11:K:21:THR:HB	51:VC:863:A:OP1	2.17	0.45
12:L:2:ARG:HE	12:L:2:ARG:N	2.15	0.45
14:N:119:LYS:HD2	51:VC:2864:G:OP1	2.16	0.45
27:AA:34:ARG:NE	27:AA:39:ARG:HD2	2.32	0.45
33:GA:69:GLU:HB2	50:UC:738:C:H5"	1.98	0.45
37:KA:32:ALA:HB3	37:KA:76:ASN:HB2	1.99	0.45
39:MA:91:ASP:HB2	50:UC:523:A:N1	2.32	0.45
46:TA:16:LEU:HA	46:TA:19:VAL:HG12	1.98	0.45
1:WA:151:LYS:HE2	51:ZC:2208:U:H1'	1.99	0.45
4:ZA:86:MET:N	4:ZA:87:PRO:HD3	2.32	0.45
11:GB:21:THR:HB	51:ZC:863:A:OP1	2.16	0.45
14:JB:119:LYS:HD2	51:ZC:2864:G:OP1	2.16	0.45
31:AC:103:ASN:OD1	31:AC:114:ARG:NH2	2.30	0.45
35:EC:82:HIS:N	35:EC:138:TRP:O	2.47	0.45
50:UC:272:C:H2'	50:UC:273:A:H8	1.82	0.45
50:UC:1412:C:H2'	50:UC:1413:A:C8	2.51	0.45
51:VC:10:G:N2	51:VC:2895:U:H1'	2.31	0.45
50:YC:304:U:H2'	50:YC:305:G:C8	2.52	0.45
50:YC:375:U:H3	50:YC:389:A:H61	1.65	0.45
50:YC:939:G:H1	50:YC:1344:C:H42	1.63	0.45
50:YC:1250:A:H2	50:YC:1353:G:H21	1.65	0.45
51:ZC:548:A:H2'	51:ZC:549:G:O4'	2.15	0.45
51:ZC:1173:G:H2'	51:ZC:1175:U:H5'	1.99	0.45
51:ZC:1352:U:O2'	51:ZC:1570:A:N3	2.46	0.45
51:ZC:2661:G:H2'	51:ZC:2662:A:C8	2.52	0.45
10:J:39:LYS:HG2	51:VC:807:U:OP2	2.17	0.45
11:K:116:GLU:O	11:K:120:ILE:HG12	2.17	0.45
15:O:50:ARG:O	15:O:54:LYS:NZ	2.46	0.45
15:O:76:TYR:CE2	51:VC:1153:C:H5'	2.52	0.45
19:S:14:LEU:HD13	19:S:24:VAL:HG22	1.99	0.45
20:T:144:LEU:HD21	20:T:150:LEU:HD21	1.99	0.45
31:EA:142:PRO:HA	31:EA:185:PHE:HD2	1.81	0.45
43:QA:5:ARG:HD2	50:UC:376:G:H5"	1.98	0.45
44:RA:16:GLN:NE2	50:UC:273:A:H1'	2.31	0.45
1:WA:183:ARG:NH2	51:ZC:1800:C:OP2	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:XA:113:PHE:O	51:ZC:1654:A:O2'	2.31	0.45
5:AB:25:LYS:HE2	5:AB:25:LYS:HB3	1.78	0.45
5:AB:44:VAL:HG12	5:AB:46:GLU:HG3	1.99	0.45
7:CB:9:LYS:HB3	51:ZC:1061:U:C5	2.52	0.45
8:DB:75:VAL:HB	8:DB:143:LEU:HD23	1.98	0.45
14:JB:77:PRO:HB2	14:JB:80:SER:HB2	1.99	0.45
19:OB:44:ILE:HG21	51:ZC:480:A:H1'	1.99	0.45
21:QB:60:PHE:CZ	51:ZC:2365:G:H4'	2.52	0.45
25:UB:9:LYS:NZ	51:ZC:2019:A:H62	2.15	0.45
28:XB:7:HIS:HB2	28:XB:60:LEU:HD12	1.99	0.45
30:ZB:44:GLU:HA	30:ZB:52:LEU:HD23	1.98	0.45
43:MC:8:ARG:HB3	43:MC:28:ARG:NH1	2.32	0.45
50:UC:913:A:H4'	50:UC:914:A:O5'	2.18	0.45
51:VC:340:A:H2'	51:VC:341:G:O4'	2.17	0.45
51:VC:690:G:H2'	51:VC:691:C:C6	2.52	0.45
51:VC:1019:U:HO2'	51:VC:1021:A:H2	1.64	0.45
51:VC:1466:G:H2'	51:VC:1547:C:N4	2.32	0.45
53:XC:5:G:O2'	53:XC:6:G:O5'	2.31	0.45
50:YC:558:G:C8	50:YC:559:A:H2'	2.52	0.45
50:YC:639:G:H2'	50:YC:640:A:H8	1.81	0.45
50:YC:668:G:H1	50:YC:738:C:H42	1.65	0.45
50:YC:1218:C:H2'	50:YC:1219:U:C6	2.52	0.45
51:ZC:345:A:N3	51:ZC:347:A:N6	2.65	0.45
51:ZC:1113:U:H2'	51:ZC:1114:G:H8	1.81	0.45
51:ZC:2345:G:H5"	51:ZC:2347:C:O4'	2.17	0.45
1:A:112:GLN:O	1:A:115:GLN:HB2	2.17	0.44
2:B:122:PHE:HB3	2:B:123:ALA:H	1.55	0.44
3:C:133:ASN:O	3:C:135:LYS:N	2.50	0.44
3:C:180:GLY:HA2	51:VC:616:A:C4	2.52	0.44
3:C:186:ILE:HD12	3:C:192:LEU:HD11	1.98	0.44
5:E:88:LEU:HD13	5:E:130:ARG:HG2	2.00	0.44
7:G:27:LEU:HB2	7:G:32:ALA:HB2	1.98	0.44
7:G:77:LEU:HD22	7:G:127:ILE:HD12	1.99	0.44
12:L:28:LEU:HD23	12:L:34:ILE:HG12	1.99	0.44
12:L:52:ILE:HD13	12:L:79:LEU:HD21	1.99	0.44
38:LA:19:ALA:HB3	38:LA:82:VAL:HG23	1.99	0.44
40:NA:116:THR:HA	50:UC:1228:C:H4'	1.99	0.44
45:SA:45:SER:HB3	45:SA:51:LEU:HD21	1.99	0.44
4:ZA:62:LEU:HG	4:ZA:143:GLU:HG3	1.99	0.44
8:DB:148:GLY:HA3	8:DB:149:PRO:O	2.16	0.44
12:HB:48:VAL:O	12:HB:52:ILE:HG12	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:PB:144:LEU:HD21	20:PB:150:LEU:HD21	2.00	0.44
22:RB:40:ARG:NH2	22:RB:42:GLN:HG2	2.32	0.44
24:TB:8:LEU:HG	24:TB:28:LEU:HD23	1.98	0.44
33:CC:97:PHE:CD2	45:OC:31:LEU:HD21	2.50	0.44
51:VC:78:A:H2'	51:VC:79:G:H8	1.81	0.44
51:VC:612:G:O2'	51:VC:616:A:N1	2.42	0.44
51:VC:776:G:H8	51:VC:776:G:OP2	2.01	0.44
51:VC:2804:C:H2'	51:VC:2805:G:C8	2.52	0.44
50:YC:67:C:H2'	50:YC:68:G:H8	1.82	0.44
50:YC:243:A:H4'	50:YC:244:U:O5'	2.17	0.44
50:YC:456:C:H42	50:YC:476:G:H1	1.65	0.44
50:YC:682:G:H2'	50:YC:683:G:H8	1.83	0.44
50:YC:1432:G:O2'	50:YC:1468:A:N6	2.50	0.44
50:YC:1469:G:H2'	50:YC:1470:G:C8	2.52	0.44
50:YC:1501:C:OP2	50:YC:1504:G:O2'	2.22	0.44
51:ZC:1578:U:C2'	51:ZC:1579:A:H5'	2.47	0.44
51:ZC:2804:C:H2'	51:ZC:2805:G:C8	2.52	0.44
1:A:62:TYR:HA	1:A:87:ASN:ND2	2.31	0.44
1:A:144:ALA:HB3	1:A:192:THR:HG23	1.99	0.44
5:E:44:VAL:HG12	5:E:46:GLU:HG3	1.99	0.44
7:G:125:ARG:O	51:VC:1079:C:O2'	2.35	0.44
10:J:59:LEU:HA	10:J:61:ARG:CZ	2.47	0.44
12:L:64:ARG:NH2	51:VC:2851:A:O3'	2.48	0.44
14:N:26:ASP:HB2	14:N:91:ARG:HA	1.98	0.44
14:N:92:GLY:HA2	14:N:116:ALA:HA	1.99	0.44
31:EA:72:GLU:HG3	50:UC:545:C:H5'	1.98	0.44
34:HA:87:VAL:HG22	34:HA:151:TYR:HB3	1.99	0.44
35:IA:102:ARG:H	35:IA:102:ARG:NE	2.04	0.44
37:KA:6:ILE:HD12	37:KA:23:ILE:HD13	1.98	0.44
41:OA:43:CYS:HA	41:OA:46:GLU:HB2	1.99	0.44
1:WA:233:HIS:NE2	1:WA:246:PRO:HA	2.32	0.44
4:ZA:72:ARG:HD3	4:ZA:85:GLY:O	2.17	0.44
7:CB:115:LEU:HD22	7:CB:117:THR:H	1.83	0.44
11:GB:12:GLN:HB3	11:GB:73:PRO:HD2	1.98	0.44
12:HB:70:LEU:HD12	12:HB:70:LEU:H	1.81	0.44
12:HB:99:LYS:HA	12:HB:112:ALA:HA	1.99	0.44
31:AC:63:LYS:HB2	31:AC:63:LYS:HE3	1.74	0.44
35:EC:91:ARG:NE	44:NC:32:TYR:O	2.51	0.44
50:UC:243:A:H4'	50:UC:244:U:O5'	2.16	0.44
50:UC:1218:C:H2'	50:UC:1219:U:C6	2.53	0.44
51:VC:514:A:N3	51:VC:581:C:O2'	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:942:G:O2'	51:VC:1189:A:N3	2.46	0.44
51:VC:2110:G:H5"	51:VC:2111:C:C5	2.50	0.44
50:YC:147:G:H1	50:YC:175:C:N4	2.11	0.44
50:YC:103(C):G:H2'	50:YC:1033:G:C8	2.50	0.44
51:ZC:1316:U:H2'	51:ZC:1317:A:C8	2.51	0.44
1:A:77:ALA:HB2	1:A:97:TYR:CD2	2.51	0.44
3:C:102:PRO:HB2	3:C:105:VAL:HG23	1.99	0.44
8:H:148:GLY:HA3	8:H:149:PRO:O	2.16	0.44
29:CA:135:GLN:O	29:CA:139:LYS:HG2	2.18	0.44
35:IA:1:MET:SD	35:IA:1:MET:N	2.82	0.44
40:NA:39:ILE:HG13	40:NA:56:LEU:HD21	1.99	0.44
44:RA:92:ARG:HD3	44:RA:92:ARG:HA	1.79	0.44
45:SA:86:VAL:HB	45:SA:87:ARG:H	1.62	0.44
3:YA:34:TRP:CE2	10:FB:12:ALA:HB2	2.53	0.44
4:ZA:16:ARG:HD3	4:ZA:31:VAL:HG21	1.98	0.44
8:DB:57:LEU:O	8:DB:72:GLY:HA3	2.17	0.44
9:EB:22:ILE:HG23	51:ZC:1952:A:C2	2.52	0.44
10:FB:101:VAL:HG23	10:FB:106:LEU:HB3	1.99	0.44
17:MB:13:SER:HA	17:MB:14:PRO:HD3	1.79	0.44
29:YB:69:LEU:HD22	29:YB:91:PRO:HB2	1.98	0.44
29:YB:135:GLN:O	29:YB:139:LYS:HG2	2.17	0.44
30:ZB:54:ARG:HB3	30:ZB:69:HIS:ND1	2.32	0.44
44:NC:98:LEU:HD13	50:YC:279:A:C5	2.53	0.44
50:UC:679:C:H42	50:UC:711:G:H1	1.65	0.44
50:UC:1144:G:N2	50:UC:1146:A:H62	2.14	0.44
51:VC:755:C:H2'	51:VC:756:C:C6	2.52	0.44
51:VC:1042:G:H1	51:VC:1113:U:H3	1.64	0.44
51:VC:1332:G:N2	51:VC:1610:A:N7	2.66	0.44
51:VC:1341:U:OP1	51:VC:1397:U:N3	2.45	0.44
51:VC:1409:C:H2'	51:VC:1410:G:C8	2.52	0.44
51:VC:2439:A:H5'	51:VC:2439:A:H8	1.82	0.44
51:VC:2448:A:HO2'	51:VC:2449:U:H5	1.65	0.44
50:YC:574:A:O2'	50:YC:882:C:O2'	2.29	0.44
51:ZC:37:C:H2'	51:ZC:38:A:C8	2.52	0.44
51:ZC:356:G:H2'	51:ZC:357:A:C8	2.52	0.44
51:ZC:1441:G:H2'	51:ZC:1442:G:C8	2.53	0.44
51:ZC:2303:G:H2'	51:ZC:2304:G:O4'	2.18	0.44
51:ZC:2648:C:H2'	51:ZC:2649:U:C6	2.51	0.44
52:AD:75:G:H1	52:AD:102:G:H22	1.66	0.44
53:BD:5:G:O2'	53:BD:6:G:O5'	2.31	0.44
53:BD:42:G:H2'	53:BD:43:A:H8	1.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:57:LEU:HD13	8:H:57:LEU:HA	1.73	0.44
15:O:92:ARG:HG2	16:P:11:GLN:HB2	1.98	0.44
16:P:1:MET:HB3	16:P:42:GLY:HA3	1.99	0.44
19:S:73:ARG:HA	19:S:74:PRO:HD3	1.89	0.44
28:BA:31:HIS:NE2	51:VC:2422:A:N7	2.55	0.44
34:HA:79:ARG:NH2	53:XC:33:U:O3'	2.48	0.44
47:UA:23:ARG:O	47:UA:27:LYS:N	2.45	0.44
8:DB:60:LYS:HB3	8:DB:60:LYS:HE2	1.88	0.44
11:GB:82:ARG:HH22	51:ZC:960:A:H61	1.66	0.44
12:HB:10:LEU:HD13	12:HB:17:ARG:HH21	1.83	0.44
16:LB:1:MET:HB3	16:LB:42:GLY:HA3	1.99	0.44
28:XB:39:LYS:HA	28:XB:42:ARG:HH21	1.83	0.44
36:FC:73:GLN:O	36:FC:77:ILE:HG13	2.17	0.44
39:IC:92:LEU:HA	39:IC:93:PRO:HD3	1.84	0.44
40:JC:3:ARG:HD3	49:TC:60:GLU:OE2	2.16	0.44
46:PC:36:ARG:HH12	46:PC:75:ALA:HB3	1.82	0.44
50:UC:456:C:H42	50:UC:476:G:H1	1.66	0.44
50:UC:615:C:H2'	50:UC:616:G:H8	1.83	0.44
51:VC:806:C:O2	51:VC:2444:G:O2'	2.36	0.44
51:VC:2216:G:H2'	51:VC:2217:G:C8	2.53	0.44
52:WC:22:U:H3	52:WC:61:G:H1	1.66	0.44
50:YC:586:C:H2'	50:YC:587:G:H8	1.83	0.44
50:YC:695:A:H2'	50:YC:696:A:C8	2.52	0.44
50:YC:1391:U:H2'	50:YC:1392:G:C8	2.53	0.44
51:ZC:690:G:H2'	51:ZC:691:C:C6	2.52	0.44
51:ZC:730:C:OP1	51:ZC:1775:U:O2'	2.36	0.44
51:ZC:789:A:O3'	51:ZC:1781:C:N4	2.51	0.44
51:ZC:1000:A:H62	51:ZC:1154:G:H2'	1.83	0.44
51:ZC:1223:G:N2	51:ZC:1226:A:OP2	2.34	0.44
51:ZC:1949:G:H2'	51:ZC:1950:G:C8	2.53	0.44
4:D:47:LYS:NZ	4:D:82:LEU:HD23	2.33	0.44
10:J:26:GLY:HA2	10:J:30:THR:HG23	1.98	0.44
14:N:26:ASP:O	14:N:49:VAL:HG12	2.17	0.44
30:DA:54:ARG:HB3	30:DA:69:HIS:ND1	2.32	0.44
46:TA:36:ARG:HH12	46:TA:75:ALA:HB3	1.82	0.44
1:WA:35:LYS:HB2	1:WA:36:PRO:HD3	1.99	0.44
2:XA:34:VAL:HG12	2:XA:66:HIS:HE2	1.83	0.44
5:AB:3:ARG:HH22	5:AB:66:GLY:HA3	1.83	0.44
6:BB:4:ILE:HB	6:BB:18:VAL:HG22	2.00	0.44
8:DB:48:ARG:H	8:DB:48:ARG:HG2	1.57	0.44
24:TB:23:LEU:HG	24:TB:50:VAL:HG11	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:EC:24:THR:HG22	35:EC:25:ASP:H	1.83	0.44
36:FC:79:LEU:HD23	36:FC:101:PHE:O	2.17	0.44
37:GC:50:ILE:HD11	37:GC:57:LYS:HD3	1.98	0.44
44:NC:5:VAL:HG22	44:NC:60:ILE:HG13	2.00	0.44
47:QC:42:GLN:O	47:QC:46:GLU:HB2	2.18	0.44
51:VC:279:C:N4	51:VC:361:G:H1	2.16	0.44
51:VC:736:C:H42	51:VC:760:G:H1	1.63	0.44
51:VC:1949:G:H2'	51:VC:1950:G:C8	2.53	0.44
51:VC:2211:G:C2'	51:VC:2212:A:H5"	2.48	0.44
51:VC:2327:A:H2'	51:VC:2328:A:C8	2.53	0.44
51:VC:2648:C:H2'	51:VC:2649:U:C6	2.52	0.44
50:YC:1396:A:H4'	50:YC:1397:C:H5"	2.00	0.44
51:ZC:806:C:O2	51:ZC:2444:G:O2'	2.35	0.44
51:ZC:910:A:C6	51:ZC:911:A:C6	3.06	0.44
51:ZC:1332:G:N2	51:ZC:1610:A:C8	2.85	0.44
51:ZC:1403:C:H5"	51:ZC:1471:A:O4'	2.18	0.44
51:ZC:2216:G:H2'	51:ZC:2217:G:C8	2.52	0.44
1:A:70:TRP:CZ2	1:A:150:LYS:HA	2.53	0.44
1:A:108:PRO:HB3	1:A:143:HIS:CE1	2.52	0.44
1:A:233:HIS:NE2	1:A:246:PRO:HA	2.33	0.44
1:A:244:ARG:HA	1:A:245:PRO:HA	1.72	0.44
4:D:62:LEU:HG	4:D:143:GLU:HG3	2.00	0.44
31:EA:7:PRO:O	31:EA:10:ARG:HG2	2.17	0.44
31:EA:13:ARG:HB3	31:EA:38:TYR:O	2.18	0.44
34:HA:24:THR:HA	34:HA:27:ILE:HG12	1.98	0.44
43:QA:8:ARG:HB3	43:QA:28:ARG:NH1	2.32	0.44
46:TA:36:ARG:HD3	50:UC:1220:G:O3'	2.17	0.44
47:UA:61:SER:O	47:UA:65:LYS:HG3	2.18	0.44
4:ZA:96:ARG:O	4:ZA:99:MET:HG2	2.18	0.44
5:AB:88:LEU:HD13	5:AB:130:ARG:HG2	1.99	0.44
8:DB:149:PRO:HB2	8:DB:150:ASP:H	1.60	0.44
10:FB:71:VAL:HG21	51:ZC:390:A:C6	2.53	0.44
10:FB:72:PRO:HB2	51:ZC:2406:U:N3	2.33	0.44
12:HB:13:HIS:CE1	12:HB:16:HIS:H	2.35	0.44
23:SB:47:ASN:HB3	23:SB:48:HIS:H	1.54	0.44
31:AC:162:LEU:HD22	31:AC:178:VAL:HG13	1.98	0.44
38:HC:59:TYR:CZ	38:HC:63:LEU:HD11	2.52	0.44
45:OC:45:SER:HB3	45:OC:51:LEU:HD21	1.99	0.44
50:UC:222:U:H2'	50:UC:223:U:C6	2.53	0.44
50:UC:859:A:H2'	50:UC:860:A:O4'	2.17	0.44
50:UC:1404:C:H2'	50:UC:1405:G:C8	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:1174:A:H3'	51:VC:1175:U:H5"	1.99	0.44
51:VC:1523:U:H2'	51:VC:1524:G:H8	1.82	0.44
51:VC:2645:G:H3'	51:VC:2646:C:C5'	2.48	0.44
50:YC:222:U:H2'	50:YC:223:U:C6	2.53	0.44
50:YC:1404:C:H2'	50:YC:1405:G:C8	2.53	0.44
51:ZC:628:G:H2'	51:ZC:629:G:H8	1.82	0.44
51:ZC:848:G:O6	51:ZC:929:G:H2'	2.17	0.44
51:ZC:980:A:N6	51:ZC:981:A:N1	2.65	0.44
51:ZC:992:C:H2'	51:ZC:993:G:H8	1.83	0.44
51:ZC:2681:C:H6	51:ZC:2683:C:H41	1.65	0.44
11:K:12:GLN:HB3	11:K:73:PRO:HD2	1.99	0.44
33:GA:76:ALA:O	33:GA:80:ARG:HG2	2.17	0.44
41:OA:24:CYS:HB3	41:OA:29:ARG:H	1.83	0.44
42:PA:48:LYS:HB2	50:UC:668:G:H4'	2.00	0.44
43:QA:28:ARG:HH21	50:UC:390:C:H4'	1.82	0.44
47:UA:42:GLN:O	47:UA:46:GLU:HB2	2.17	0.44
1:WA:261:LYS:NZ	1:WA:263:ARG:HG3	2.33	0.44
10:FB:116:GLY:HA2	51:ZC:637:A:O5'	2.18	0.44
11:GB:116:GLU:O	11:GB:120:ILE:HG12	2.17	0.44
16:LB:35:LEU:HB2	16:LB:57:VAL:HG13	2.00	0.44
19:OB:2:ARG:NE	51:ZC:106:C:H1'	2.31	0.44
20:PB:158:PRO:HB2	20:PB:161:VAL:HB	1.99	0.44
22:RB:28:GLY:N	22:RB:32:LYS:O	2.50	0.44
23:SB:50:ILE:HD12	23:SB:51:ARG:H	1.81	0.44
30:ZB:31:HIS:O	30:ZB:35:GLU:HG2	2.17	0.44
32:BC:14:ARG:NH2	50:YC:1080:A:H5'	2.33	0.44
50:UC:825:G:H2'	50:UC:826:C:C6	2.52	0.44
50:UC:1077:G:N2	50:UC:1080:A:OP2	2.40	0.44
51:VC:38:A:H2'	51:VC:39:C:C6	2.52	0.44
51:VC:1116:C:H2'	51:VC:1117:G:H8	1.82	0.44
51:VC:1169:G:H2'	51:VC:1170:G:C8	2.53	0.44
51:VC:1357:U:H2'	51:VC:1358:G:O4'	2.18	0.44
51:VC:2303:G:H2'	51:VC:2304:G:O4'	2.18	0.44
51:VC:2345:G:H5"	51:VC:2347:C:O4'	2.18	0.44
51:VC:2712:U:HO2'	51:VC:712(B):A:P	2.40	0.44
50:YC:743:U:H2'	50:YC:744:C:C6	2.52	0.44
51:ZC:733:G:C6	51:ZC:761:A:N7	2.86	0.44
51:ZC:755:C:H2'	51:ZC:756:C:C6	2.52	0.44
51:ZC:1358:G:O2'	51:ZC:1359:A:H5"	2.18	0.44
51:ZC:1411:C:H2'	51:ZC:1412:A:H8	1.81	0.44
51:ZC:1523:U:H2'	51:ZC:1524:G:C8	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:2211:G:C2'	51:ZC:2212:A:H5"	2.47	0.44
51:ZC:2735:G:H2'	51:ZC:2736:G:H8	1.82	0.44
19:S:88:LYS:HB2	19:S:89:PHE:H	1.49	0.44
29:CA:55:PHE:HA	29:CA:58:ILE:HB	1.99	0.44
32:FA:143:ARG:HD2	35:IA:77:GLU:OE2	2.17	0.44
37:KA:17:ASP:OD2	37:KA:70:ARG:NH2	2.51	0.44
1:WA:70:TRP:CZ2	1:WA:150:LYS:HA	2.53	0.44
3:YA:182:ASN:ND2	3:YA:185:ASP:OD2	2.46	0.44
20:PB:104:PHE:HB3	20:PB:141:VAL:HG11	2.00	0.44
21:QB:50:ASN:HB3	21:QB:63:VAL:HG22	1.99	0.44
22:RB:27:GLU:HB3	22:RB:33:LYS:HG3	1.99	0.44
23:SB:42:GLY:O	23:SB:44:LEU:N	2.51	0.44
29:YB:9:GLU:HB3	29:YB:10:LEU:H	1.64	0.44
36:FC:46:ALA:HB2	36:FC:74:ILE:HG23	2.00	0.44
39:IC:91:ASP:HB2	50:YC:523:A:N1	2.32	0.44
40:JC:116:THR:HA	50:YC:1228:C:H4'	2.00	0.44
41:KC:12:ARG:HB3	41:KC:14:PRO:HD3	1.99	0.44
44:NC:92:ARG:HD3	44:NC:92:ARG:HA	1.79	0.44
50:UC:164:U:H2'	50:UC:165:C:C6	2.52	0.44
51:VC:1547:C:H2'	51:VC:1548:C:C6	2.52	0.44
51:VC:1811:G:H2'	51:VC:1812:A:C8	2.53	0.44
51:VC:2343:C:O2'	51:VC:2373:G:O2'	2.34	0.44
51:VC:2788:C:O2'	51:VC:2809:A:N3	2.44	0.44
50:YC:157:G:H2'	50:YC:158:G:H8	1.83	0.44
50:YC:1118:C:H2'	50:YC:1119:C:C6	2.53	0.44
51:ZC:1116:C:H2'	51:ZC:1117:G:H8	1.82	0.44
51:ZC:1627:G:H1	51:ZC:1639:U:H3	1.64	0.44
51:ZC:1689:A:H62	51:ZC:1698:A:H2	1.64	0.44
51:ZC:2591:C:H2'	51:ZC:2592:G:C8	2.53	0.44
53:ED:21:A:H61	53:ED:46:G:H2'	1.83	0.44
1:A:31:LYS:HD2	1:A:31:LYS:HA	1.68	0.44
3:C:6:MET:HG2	3:C:7:TYR:CD1	2.53	0.44
9:I:26:LYS:HB3	9:I:27:GLY:H	1.54	0.44
10:J:61:ARG:O	51:VC:2393:A:H4'	2.18	0.44
15:O:20:LEU:HB2	15:O:39:LEU:HD11	1.99	0.44
18:R:57:LEU:HD12	18:R:78:LYS:HB3	2.00	0.44
20:T:104:PHE:HB3	20:T:141:VAL:HG11	2.00	0.44
22:V:40:ARG:NH2	22:V:42:GLN:HG2	2.31	0.44
24:X:40:THR:OG1	24:X:43:ILE:HG12	2.18	0.44
36:JA:73:GLN:O	36:JA:77:ILE:HG13	2.17	0.44
46:TA:36:ARG:HA	46:TA:71:LEU:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:WA:63:ARG:HH22	51:ZC:1568:G:P	2.41	0.44
3:YA:57:VAL:HG22	3:YA:58:ALA:H	1.83	0.44
4:ZA:47:LYS:NZ	4:ZA:82:LEU:HD23	2.33	0.44
10:FB:16:ARG:HG2	51:ZC:661:C:H1'	2.00	0.44
10:FB:98:GLU:O	10:FB:101:VAL:HG12	2.18	0.44
14:JB:92:GLY:HA2	14:JB:116:ALA:HA	1.99	0.44
32:BC:143:ARG:HD2	35:EC:77:GLU:OE2	2.18	0.44
38:HC:19:ALA:HB3	38:HC:82:VAL:HG23	1.99	0.44
39:IC:9:LEU:HB3	44:NC:32:TYR:CE1	2.53	0.44
50:UC:743:U:H2'	50:UC:744:C:C6	2.52	0.44
51:VC:789:A:O3'	51:VC:1781:C:N4	2.51	0.44
51:VC:1403:C:H5"	51:VC:1471:A:O4'	2.18	0.44
51:VC:2403:C:H42	51:VC:2414:G:H1	1.65	0.44
51:VC:2735:G:H2'	51:VC:2736:G:H8	1.83	0.44
50:YC:825:G:H2'	50:YC:826:C:C6	2.53	0.44
50:YC:1410:G:H2'	50:YC:1411:C:C6	2.53	0.44
51:ZC:49:A:H5"	51:ZC:51:G:O4'	2.18	0.44
51:ZC:1357:U:H2'	51:ZC:1358:G:O4'	2.17	0.44
51:ZC:2100:G:H2'	51:ZC:2101:G:C8	2.52	0.44
2:B:4:ILE:HG12	2:B:28:ALA:HB1	2.00	0.43
4:D:33:ARG:CZ	4:D:162:THR:HG21	2.48	0.43
5:E:55:PRO:HG2	5:E:61:HIS:ND1	2.33	0.43
15:O:29:SER:OG	15:O:30:LYS:HE3	2.18	0.43
25:Y:9:LYS:NZ	51:VC:2019:A:H62	2.15	0.43
27:AA:24:THR:HG23	27:AA:27:GLY:H	1.83	0.43
28:BA:8:LYS:HE3	51:VC:245:G:O6	2.18	0.43
30:DA:4:LYS:NZ	50:UC:1192:C:OP2	2.51	0.43
30:DA:24:ALA:HB2	30:DA:32:LEU:HD12	2.00	0.43
30:DA:31:HIS:O	30:DA:35:GLU:HG2	2.18	0.43
31:EA:7:PRO:HB2	31:EA:10:ARG:HD2	2.00	0.43
36:JA:79:LEU:HD23	36:JA:101:PHE:O	2.17	0.43
41:OA:18:VAL:HG13	50:UC:1316:G:H4'	2.00	0.43
6:BB:1:MET:HG3	6:BB:23:PRO:HA	1.99	0.43
6:BB:56:LYS:HE3	6:BB:56:LYS:HB3	1.81	0.43
9:EB:26:LYS:HB3	9:EB:27:GLY:H	1.53	0.43
10:FB:58:THR:C	10:FB:60:MET:H	2.22	0.43
15:KB:20:LEU:HB2	15:KB:39:LEU:HD11	2.00	0.43
28:XB:8:LYS:HE3	51:ZC:245:G:O6	2.17	0.43
33:CC:50:TYR:CE1	45:OC:77:GLY:HA2	2.53	0.43
36:FC:50:LEU:HA	36:FC:53:VAL:HG22	2.00	0.43
40:JC:39:ILE:HG13	40:JC:56:LEU:HD21	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:LC:48:LYS:HB2	50:YC:668:G:H4'	2.00	0.43
50:UC:987:G:H1	50:UC:1218:C:H42	1.65	0.43
50:UC:1127:G:N2	50:UC:1147:C:H42	2.16	0.43
50:UC:1432:G:O2'	50:UC:1468:A:N6	2.50	0.43
51:VC:29:U:H2'	51:VC:30:G:C8	2.53	0.43
51:VC:272:G:H2'	51:VC:273(A):G:C8	2.52	0.43
51:VC:1203:G:O6	51:VC:1204:A:N6	2.51	0.43
51:VC:1953:A:HO2'	51:VC:2559:C:HO2'	1.64	0.43
51:VC:2262:U:H2'	51:VC:2263:C:C6	2.53	0.43
50:YC:814:A:H2'	50:YC:816:A:H5"	2.00	0.43
50:YC:913:A:H4'	50:YC:914:A:O5'	2.18	0.43
50:YC:1144:G:N2	50:YC:1146:A:H62	2.14	0.43
51:ZC:1614:A:P	51:ZC:1614:A:H8	2.41	0.43
51:ZC:2305:A:H3'	51:ZC:2306:C:H5"	2.00	0.43
53:FD:4:G:H2'	53:FD:5:G:C8	2.53	0.43
1:A:35:LYS:HB2	1:A:36:PRO:HD3	1.99	0.43
6:F:1:MET:HG3	6:F:23:PRO:HA	1.99	0.43
10:J:64:LYS:NZ	51:VC:631:A:OP1	2.44	0.43
19:S:2:ARG:NE	51:VC:106:C:H1'	2.31	0.43
29:CA:218:ALA:O	29:CA:222:ILE:HG12	2.18	0.43
44:RA:50:LYS:HE2	44:RA:51:TYR:CZ	2.52	0.43
1:WA:231:HIS:CD2	1:WA:249:PRO:HG3	2.53	0.43
3:YA:170:LEU:HD12	3:YA:171:PRO:HD2	2.00	0.43
10:FB:47:ASP:HB3	10:FB:48:PRO:CA	2.49	0.43
12:HB:13:HIS:HE1	12:HB:15:SER:HB2	1.83	0.43
18:NB:57:LEU:HD12	18:NB:78:LYS:HB3	1.99	0.43
31:AC:149:ALA:O	31:AC:153:ARG:HG3	2.18	0.43
32:BC:135:THR:O	32:BC:139:LEU:HG	2.18	0.43
42:LC:50:HIS:O	42:LC:53:HIS:HB3	2.18	0.43
46:PC:27:GLU:OE1	46:PC:27:GLU:N	2.52	0.43
46:PC:36:ARG:HD3	50:YC:1220:G:O3'	2.17	0.43
50:UC:67:C:H2'	50:UC:68:G:H8	1.82	0.43
51:VC:214:G:H1'	51:VC:216:A:O2'	2.18	0.43
51:VC:982:C:H5"	51:VC:983:A:OP2	2.18	0.43
51:VC:1000:A:H62	51:VC:1154:G:H2'	1.83	0.43
51:VC:1578:U:C2'	51:VC:1579:A:H5'	2.47	0.43
51:VC:1840:G:H1	51:VC:1902:C:N4	2.10	0.43
51:VC:2299:G:H2'	51:VC:2300:G:H8	1.83	0.43
51:VC:2591:C:H2'	51:VC:2592:G:C8	2.52	0.43
51:VC:2661:G:H2'	51:VC:2662:A:C8	2.53	0.43
52:WC:75:G:H1	52:WC:102:G:H22	1.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:1169:G:H2'	51:ZC:1170:G:C8	2.54	0.43
51:ZC:2403:C:H42	51:ZC:2414:G:H1	1.66	0.43
51:ZC:2439:A:H5'	51:ZC:2439:A:H8	1.83	0.43
4:D:72:ARG:HD3	4:D:85:GLY:O	2.17	0.43
7:G:57:ILE:HG23	7:G:65:PHE:HB2	2.00	0.43
8:H:117:HIS:HA	8:H:118:PRO:HD3	1.74	0.43
11:K:20:ALA:HB2	11:K:99:PRO:HD2	2.00	0.43
12:L:10:LEU:HD13	12:L:17:ARG:HH21	1.83	0.43
14:N:15:VAL:HG23	14:N:79:HIS:CE1	2.53	0.43
17:Q:14:PRO:HG3	17:Q:101:SER:HB3	2.00	0.43
20:T:74:VAL:HG22	20:T:86:VAL:HG22	2.01	0.43
29:CA:36:ARG:HB2	29:CA:41:ILE:HD11	1.99	0.43
29:CA:90:MET:HA	29:CA:91:PRO:HD3	1.82	0.43
30:DA:130:VAL:O	30:DA:134:ILE:HG13	2.18	0.43
31:EA:50:ARG:HH11	31:EA:51:PRO:HD2	1.83	0.43
33:GA:50:TYR:CE1	45:SA:77:GLY:HA2	2.53	0.43
35:IA:110:ALA:HA	35:IA:136:GLU:HA	2.00	0.43
37:KA:49:VAL:O	37:KA:60:ARG:HB2	2.17	0.43
44:RA:5:VAL:HG22	44:RA:60:ILE:HG13	1.99	0.43
5:AB:55:PRO:HG2	5:AB:61:HIS:ND1	2.33	0.43
22:RB:18:ILE:H	22:RB:18:ILE:HD13	1.84	0.43
29:YB:103:THR:HA	29:YB:180:LEU:HD11	2.00	0.43
40:JC:45:VAL:O	40:JC:48:LEU:HD22	2.18	0.43
42:LC:62:GLN:HA	42:LC:65:ARG:NH1	2.33	0.43
50:UC:155:C:H2'	50:UC:156:G:H8	1.83	0.43
50:UC:1118:C:H2'	50:UC:1119:C:C6	2.53	0.43
50:UC:1396:A:H4'	50:UC:1397:C:H5"	1.99	0.43
51:VC:137(B):G:H2'	51:VC:139:G:N7	2.34	0.43
51:VC:733:G:C6	51:VC:761:A:N7	2.86	0.43
51:VC:1614:A:P	51:VC:1614:A:H8	2.41	0.43
50:YC:736:C:H2'	50:YC:737:A:C8	2.53	0.43
50:YC:1414:U:H2'	50:YC:1415:G:C8	2.53	0.43
51:ZC:29:U:H2'	51:ZC:30:G:C8	2.53	0.43
51:ZC:2262:U:H2'	51:ZC:2263:C:C6	2.53	0.43
51:ZC:2327:A:H2'	51:ZC:2328:A:C8	2.52	0.43
51:ZC:2864:G:H2'	51:ZC:2865:U:C6	2.53	0.43
53:ED:4:G:H2'	53:ED:5:G:C8	2.53	0.43
1:A:25:THR:O	1:A:27:THR:HG22	2.18	0.43
14:N:112:ARG:H	14:N:112:ARG:HG3	1.55	0.43
36:JA:69:GLY:HA3	50:UC:1371:G:O3'	2.18	0.43
39:MA:52:ARG:HH22	50:UC:522:C:H41	1.65	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:NA:27:LYS:HG3	40:NA:31:LYS:HE3	2.00	0.43
41:OA:6:LEU:HD11	50:UC:982:U:H5"	2.00	0.43
42:PA:62:GLN:HA	42:PA:65:ARG:NH1	2.33	0.43
42:PA:64:ARG:HH12	50:UC:582:U:H5"	1.84	0.43
1:WA:31:LYS:HA	1:WA:31:LYS:HD2	1.69	0.43
1:WA:208:LYS:HB2	51:ZC:729:G:C5	2.54	0.43
2:XA:4:ILE:HG12	2:XA:28:ALA:HB1	1.99	0.43
5:AB:42:ARG:HB3	5:AB:53:GLU:HB2	1.99	0.43
9:EB:79:PHE:CD2	14:JB:72:VAL:HG22	2.54	0.43
11:GB:134:ARG:NH1	11:GB:138:ASP:OD1	2.40	0.43
12:HB:13:HIS:CE1	12:HB:15:SER:HB2	2.53	0.43
14:JB:26:ASP:O	14:JB:49:VAL:HG12	2.18	0.43
15:KB:29:SER:OG	15:KB:30:LYS:HE3	2.19	0.43
22:RB:21:ARG:HB3	22:RB:39:LYS:HG2	2.00	0.43
29:YB:55:PHE:HA	29:YB:58:ILE:HB	1.99	0.43
29:YB:218:ALA:O	29:YB:222:ILE:HG12	2.18	0.43
50:UC:359:U:H2'	50:UC:360:A:H8	1.82	0.43
51:VC:363(D):G:H2'	51:VC:363(E):G:C8	2.53	0.43
51:VC:749:C:O2	51:VC:1618:A:H2'	2.18	0.43
51:VC:869:G:N2	51:VC:908:C:O2	2.52	0.43
51:VC:2681:C:H6	51:VC:2683:C:H41	1.67	0.43
50:YC:928:G:H2'	50:YC:929:G:C8	2.53	0.43
51:ZC:279:C:N4	51:ZC:361:G:H1	2.16	0.43
51:ZC:1547:C:H2'	51:ZC:1548:C:C6	2.53	0.43
8:H:75:VAL:HB	8:H:143:LEU:HD23	2.00	0.43
10:J:23:PRO:HB2	10:J:33:ARG:CG	2.45	0.43
10:J:47:ASP:HB3	10:J:48:PRO:CA	2.48	0.43
15:O:104:GLN:HB2	16:P:44:LYS:NZ	2.34	0.43
22:V:21:ARG:HB3	22:V:39:LYS:HG2	2.00	0.43
22:V:28:GLY:N	22:V:32:LYS:O	2.52	0.43
35:IA:105:ARG:HA	35:IA:105:ARG:HD3	1.77	0.43
1:WA:59:LYS:HB3	51:ZC:1568:G:H4'	2.00	0.43
1:WA:106:ILE:H	1:WA:106:ILE:HG13	1.50	0.43
2:XA:23:VAL:HG21	2:XA:183:LEU:HD23	2.00	0.43
3:YA:24:LEU:HA	3:YA:25:PRO:HD2	1.86	0.43
8:DB:97:ARG:HH21	51:ZC:2641:G:P	2.40	0.43
13:IB:66:ALA:HA	13:IB:69:VAL:HG22	2.00	0.43
22:RB:51:VAL:HG13	22:RB:58:ILE:HG23	2.01	0.43
22:RB:83:GLU:OE1	22:RB:84:GLY:N	2.47	0.43
50:UC:682:G:H2'	50:UC:683:G:C8	2.53	0.43
51:VC:573:G:O2'	51:VC:574:C:H3'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:2819:G:H2'	51:VC:2821:A:N7	2.34	0.43
1:A:59:LYS:HB3	51:VC:1568:G:H4'	2.00	0.43
1:A:132:PRO:HD3	1:A:190:TYR:CE2	2.54	0.43
1:A:200:ASP:OD1	1:A:203:ASN:ND2	2.51	0.43
4:D:9:ARG:O	4:D:13:GLU:HG2	2.19	0.43
4:D:77:ILE:HG22	4:D:80:PHE:H	1.83	0.43
6:F:4:ILE:HB	6:F:18:VAL:HG22	2.00	0.43
10:J:71:VAL:HG21	51:VC:390:A:C6	2.53	0.43
12:L:73:VAL:O	12:L:76:VAL:HG22	2.19	0.43
13:M:10:ARG:HG3	13:M:13:ARG:NH2	2.34	0.43
14:N:123:LYS:NZ	51:VC:2867:G:OP2	2.45	0.43
15:O:74:LEU:HD23	15:O:74:LEU:H	1.84	0.43
17:Q:26:GLY:O	17:Q:27:LYS:HD2	2.18	0.43
17:Q:82:LEU:HD12	17:Q:82:LEU:HA	1.86	0.43
19:S:2:ARG:C	19:S:4:LYS:H	2.22	0.43
19:S:44:ILE:HG21	51:VC:480:A:H1'	2.01	0.43
22:V:27:GLU:HB3	22:V:33:LYS:HG3	1.99	0.43
46:TA:64:GLU:OE2	46:TA:65:ASN:ND2	2.51	0.43
1:WA:108:PRO:HB3	1:WA:143:HIS:CE1	2.53	0.43
8:DB:57:LEU:HA	8:DB:57:LEU:HD13	1.73	0.43
18:NB:57:LEU:HD23	51:ZC:1341:U:O4'	2.18	0.43
21:QB:16:SER:HB3	51:ZC:2261:C:C5	2.54	0.43
36:FC:111:ARG:HD2	41:KC:61:TRP:NE1	2.34	0.43
37:GC:17:ASP:OD2	37:GC:70:ARG:NH2	2.52	0.43
42:LC:64:ARG:HH12	50:YC:582:U:H5"	1.83	0.43
46:PC:64:GLU:OE2	46:PC:65:ASN:ND2	2.52	0.43
50:UC:447:G:H1	50:UC:485:G:HO2'	1.61	0.43
50:UC:814:A:H2'	50:UC:816:A:H5"	2.00	0.43
50:UC:1047:G:HO2'	50:UC:1215:G:HO2'	1.64	0.43
51:VC:37:C:H2'	51:VC:38:A:C8	2.52	0.43
51:VC:320:A:H4'	51:VC:322:A:N7	2.33	0.43
51:VC:578:A:OP1	51:VC:1255:U:O2'	2.28	0.43
51:VC:2123:G:H2'	51:VC:2124:G:C8	2.48	0.43
50:YC:615:C:H2'	50:YC:616:G:H8	1.83	0.43
51:ZC:1056:G:H5"	51:ZC:1057:A:O4'	2.19	0.43
51:ZC:1174:A:H3'	51:ZC:1175:U:H5"	1.99	0.43
51:ZC:2320:A:H2'	51:ZC:2320:A:N3	2.33	0.43
4:D:115:ARG:HH22	4:D:136:ARG:N	2.15	0.43
9:I:79:PHE:CD2	14:N:72:VAL:HG22	2.54	0.43
16:P:39:LEU:HA	16:P:47:VAL:HG11	2.01	0.43
18:R:57:LEU:HD23	51:VC:1341:U:O4'	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:FA:45:PHE:CD2	32:FA:47:LYS:HD2	2.54	0.43
33:GA:4:TYR:HD1	33:GA:92:LYS:HA	1.84	0.43
4:ZA:33:ARG:CZ	4:ZA:162:THR:HG21	2.48	0.43
11:GB:20:ALA:HB2	11:GB:99:PRO:HD2	2.01	0.43
12:HB:111:LEU:HD23	12:HB:111:LEU:HA	1.78	0.43
15:KB:74:LEU:HD23	15:KB:74:LEU:H	1.84	0.43
19:OB:8:LYS:NZ	19:OB:8:LYS:H	2.16	0.43
30:ZB:4:LYS:NZ	50:YC:1192:C:OP2	2.52	0.43
32:BC:14:ARG:NH2	50:YC:1079:G:O3'	2.51	0.43
40:JC:27:LYS:HG3	40:JC:31:LYS:HE3	2.00	0.43
50:UC:1250:A:H2	50:UC:1353:G:H21	1.65	0.43
50:UC:1469:G:H2'	50:UC:1470:G:H8	1.83	0.43
51:VC:239:U:H2'	51:VC:240:G:O4'	2.19	0.43
51:VC:534:U:H2'	51:VC:535:C:C6	2.54	0.43
51:VC:628:G:H2'	51:VC:629:G:H8	1.83	0.43
51:VC:834:C:H2'	51:VC:835:A:H8	1.84	0.43
50:YC:79:G:H2'	50:YC:80:G:O4'	2.19	0.43
50:YC:164:U:H2'	50:YC:165:C:C6	2.53	0.43
50:YC:272:C:H2'	50:YC:273:A:C8	2.54	0.43
50:YC:1077:G:N2	50:YC:1080:A:OP2	2.40	0.43
50:YC:1319:A:O2'	50:YC:1323:G:N7	2.34	0.43
51:ZC:363(D):G:H2'	51:ZC:363(E):G:C8	2.53	0.43
51:ZC:817:C:H4'	51:ZC:932:G:C6	2.54	0.43
51:ZC:2645:G:H3'	51:ZC:2646:C:C5'	2.48	0.43
52:AD:22:U:H3	52:AD:61:G:H1	1.66	0.43
1:A:132:PRO:HD3	1:A:190:TYR:CZ	2.54	0.43
2:B:7:VAL:HG13	2:B:27:LEU:HB3	2.01	0.43
4:D:96:ARG:O	4:D:99:MET:HG2	2.19	0.43
10:J:58:THR:C	10:J:60:MET:H	2.22	0.43
11:K:82:ARG:HH22	51:VC:960:A:H61	1.67	0.43
18:R:35:THR:HB	18:R:38:GLU:HG2	1.99	0.43
31:EA:171:GLY:HA3	31:EA:174:LEU:HD12	2.00	0.43
33:GA:97:PHE:CD2	45:SA:31:LEU:HD21	2.50	0.43
36:JA:46:ALA:HB2	36:JA:74:ILE:HG23	2.00	0.43
37:KA:3:LYS:N	37:KA:75:ILE:HA	2.34	0.43
37:KA:75:ILE:H	37:KA:75:ILE:HG13	1.48	0.43
43:QA:27:LYS:HG2	50:UC:111:G:H5"	2.01	0.43
8:DB:90:LEU:H	8:DB:90:LEU:HD12	1.83	0.43
15:KB:25:TRP:O	15:KB:28:ARG:HB3	2.18	0.43
19:OB:26:LYS:HE3	19:OB:26:LYS:HB2	1.89	0.43
28:XB:31:HIS:NE2	51:ZC:2422:A:N7	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BC:76:ILE:HG23	32:BC:78:HIS:H	1.83	0.43
33:CC:4:TYR:HD1	33:CC:92:LYS:HA	1.84	0.43
35:EC:104:ARG:HD3	35:EC:138:TRP:CD2	2.53	0.43
44:NC:63:ARG:NH2	50:YC:189:U:O2	2.52	0.43
51:VC:1278:A:H2'	51:VC:1279:G:H8	1.84	0.43
51:VC:2718:G:O2'	51:VC:2847:U:OP1	2.34	0.43
52:WC:75:G:H1	52:WC:102:G:N2	2.17	0.43
50:YC:1022:G:H2'	50:YC:1023:G:H8	1.83	0.43
51:ZC:137(B):G:H2'	51:ZC:139:G:N7	2.33	0.43
51:ZC:363(G):A:HO2'	51:ZC:364:C:P	2.42	0.43
51:ZC:869:G:H2'	51:ZC:870:A:H8	1.83	0.43
51:ZC:1811:G:H2'	51:ZC:1812:A:C8	2.53	0.43
51:ZC:2601:C:H4'	51:ZC:2602:A:OP2	2.19	0.43
4:D:151:ALA:O	4:D:153:ARG:NH1	2.52	0.43
7:G:120:LEU:HA	7:G:123:ALA:HB3	2.01	0.43
31:EA:109:GLY:HA3	31:EA:165:MET:HG2	2.01	0.43
41:OA:45:ARG:NH2	50:UC:1059:C:O3'	2.52	0.43
2:XA:36:ARG:NH2	2:XA:88:GLY:HA2	2.33	0.43
7:CB:53:VAL:HA	7:CB:54:PRO:HD3	1.82	0.43
7:CB:57:ILE:HD12	7:CB:65:PHE:HD1	1.84	0.43
8:DB:117:HIS:HA	8:DB:118:PRO:HD3	1.74	0.43
13:IB:10:ARG:HG3	13:IB:13:ARG:NH2	2.34	0.43
15:KB:76:TYR:CE2	51:ZC:1153:C:H5'	2.51	0.43
16:LB:39:LEU:HA	16:LB:47:VAL:HG11	2.00	0.43
23:SB:35:LEU:HD12	23:SB:53:LEU:HD12	2.01	0.43
29:YB:36:ARG:HB2	29:YB:41:ILE:HD11	2.00	0.43
31:AC:123:HIS:HB2	31:AC:125:HIS:CD2	2.54	0.43
50:UC:171:A:H2'	50:UC:172:A:C8	2.53	0.43
51:VC:270(S):G:H2'	51:VC:270(T):G:H8	1.84	0.43
51:VC:1478:G:HO2'	51:VC:1558:A:H2	1.65	0.43
51:VC:1514:U:H2'	51:VC:1515:C:C6	2.54	0.43
51:VC:2305:A:H3'	51:VC:2306:C:H5"	2.01	0.43
50:YC:1306:A:N6	50:YC:1331:G:H1'	2.32	0.43
51:ZC:64:A:H2'	51:ZC:65:C:C6	2.54	0.43
51:ZC:1332:G:N2	51:ZC:1610:A:N7	2.66	0.43
1:A:151:LYS:HE2	51:VC:2208:U:H1'	1.99	0.43
2:B:3:GLY:HA2	2:B:198:VAL:O	2.19	0.43
2:B:23:VAL:HG21	2:B:183:LEU:HD23	2.00	0.43
3:C:170:LEU:HD12	3:C:171:PRO:HD2	2.01	0.43
10:J:74:GLU:HB2	51:VC:244:A:H4'	2.01	0.43
10:J:84:ASN:HD21	10:J:117:GLU:HG3	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:V:18:ILE:HD13	22:V:18:ILE:H	1.83	0.43
28:BA:7:HIS:HB2	28:BA:60:LEU:HD12	2.01	0.43
29:CA:235:SER:HA	29:CA:238:LEU:HG	2.01	0.43
30:DA:91:LEU:O	30:DA:95:THR:OG1	2.33	0.43
32:FA:71:LEU:HD21	32:FA:115:VAL:HG22	2.01	0.43
32:FA:127:ASN:HA	32:FA:128:PRO:HD3	1.89	0.43
35:IA:31:PHE:O	35:IA:35:ILE:HG12	2.19	0.43
38:LA:123:LYS:HG2	50:UC:780:A:OP1	2.19	0.43
44:RA:98:LEU:HD13	50:UC:279:A:C5	2.54	0.43
3:YA:53:THR:HG23	3:YA:56:GLU:OE1	2.19	0.43
4:ZA:151:ALA:O	4:ZA:153:ARG:NH1	2.52	0.43
10:FB:84:ASN:HD21	10:FB:117:GLU:HG3	1.84	0.43
11:GB:66:ILE:HG22	11:GB:104:PHE:CE2	2.54	0.43
26:VB:26:ASN:OD1	26:VB:27:LYS:N	2.51	0.43
31:AC:146:ILE:H	31:AC:146:ILE:HD12	1.83	0.43
32:BC:71:LEU:HD21	32:BC:115:VAL:HG22	2.01	0.43
36:FC:4:TYR:CE2	36:FC:88:TYR:HB3	2.53	0.43
46:PC:6:LYS:H	46:PC:6:LYS:HD2	1.84	0.43
50:UC:216:G:H2'	50:UC:217:C:C6	2.54	0.43
50:UC:586:C:H2'	50:UC:587:G:H8	1.83	0.43
50:UC:998(A):G:H2'	50:UC:998(B):C:C6	2.54	0.43
51:VC:49:A:H5"	51:VC:51:G:O4'	2.19	0.43
51:VC:1179:C:H2'	51:VC:1180:C:C6	2.54	0.43
51:VC:1523:U:H2'	51:VC:1524:G:C8	2.53	0.43
51:VC:1811:G:H2'	51:VC:1812:A:H8	1.84	0.43
51:VC:2320:A:H2'	51:VC:2320:A:N3	2.34	0.43
53:XC:21:A:O2'	53:XC:22:G:O5'	2.33	0.43
50:YC:155:C:H2'	50:YC:156:G:H8	1.83	0.43
51:ZC:611:C:H2'	51:ZC:612:G:O4'	2.19	0.43
51:ZC:869:G:N2	51:ZC:908:C:O2	2.51	0.43
51:ZC:1297:C:O2'	51:ZC:1302:A:N1	2.47	0.43
51:ZC:1341:U:OP1	51:ZC:1397:U:N3	2.44	0.43
51:ZC:2529:G:H5"	51:ZC:2530:A:H5"	2.01	0.43
2:B:34:VAL:HG12	2:B:66:HIS:HE2	1.84	0.42
8:H:57:LEU:O	8:H:72:GLY:HA3	2.18	0.42
9:I:3:GLN:HB2	9:I:4:PRO:HD2	2.01	0.42
11:K:66:ILE:HG22	11:K:104:PHE:CE2	2.54	0.42
27:AA:8:ASN:HB3	27:AA:11:LYS:HB3	1.99	0.42
32:FA:48:ALA:HA	32:FA:49:PRO:HD3	1.89	0.42
41:OA:31:ARG:HB2	50:UC:976:G:OP1	2.18	0.42
44:RA:63:ARG:NH2	50:UC:189:U:O2	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:XA:3:GLY:HA2	2:XA:198:VAL:O	2.19	0.42
3:YA:41:LEU:HA	3:YA:44:ARG:HG2	2.01	0.42
3:YA:52:LYS:HA	3:YA:56:GLU:OE1	2.19	0.42
4:ZA:27:ASN:ND2	52:AD:55:U:O3'	2.52	0.42
8:DB:157:ARG:N	8:DB:158:PRO:HD3	2.33	0.42
9:EB:112:MET:HA	9:EB:115:VAL:HG22	2.01	0.42
11:GB:101:ARG:HH22	51:ZC:907:U:H4'	1.83	0.42
18:NB:36:LYS:NZ	18:NB:55:ASN:HA	2.33	0.42
22:RB:11:ARG:HG2	22:RB:61:ARG:O	2.19	0.42
22:RB:35:THR:HB	22:RB:36:GLY:H	1.50	0.42
40:JC:101:GLN:NE2	50:YC:1307:U:OP1	2.47	0.42
50:UC:585:G:H1	50:UC:756:C:H42	1.67	0.42
50:UC:686:U:O2'	50:UC:703:G:N2	2.52	0.42
51:VC:321:G:C2	51:VC:341:G:H4'	2.54	0.42
51:VC:1280:G:H1	51:VC:1290:C:N4	2.17	0.42
50:YC:1469:G:H2'	50:YC:1470:G:H8	1.84	0.42
51:ZC:320:A:H4'	51:ZC:322:A:N7	2.34	0.42
51:ZC:347:A:H2'	51:ZC:348:G:H8	1.84	0.42
51:ZC:1179:C:H2'	51:ZC:1180:C:C6	2.53	0.42
51:ZC:1278:A:H2'	51:ZC:1279:G:H8	1.84	0.42
51:ZC:1292:U:H2'	51:ZC:1293:C:C6	2.54	0.42
51:ZC:2299:G:H2'	51:ZC:2300:G:C8	2.54	0.42
1:A:222:ARG:HG3	51:VC:1789:A:OP1	2.19	0.42
3:C:45:ARG:HG3	51:VC:443:A:N7	2.35	0.42
5:E:116:GLU:HA	5:E:117:PRO:HD3	1.90	0.42
8:H:149:PRO:HB2	8:H:150:ASP:H	1.61	0.42
8:H:157:ARG:N	8:H:158:PRO:HD3	2.34	0.42
10:J:85:LEU:HA	10:J:88:LEU:HB3	2.02	0.42
22:V:13:ILE:HG13	22:V:14:VAL:N	2.31	0.42
22:V:21:ARG:O	51:VC:380:U:H4'	2.19	0.42
27:AA:48:LYS:HE3	51:VC:1311:G:O6	2.19	0.42
40:NA:94:ARG:HD3	40:NA:96:LEU:HD11	2.02	0.42
46:TA:27:GLU:OE1	46:TA:27:GLU:N	2.52	0.42
1:WA:202:LYS:HD2	51:ZC:1820:U:N3	2.34	0.42
13:IB:4:LEU:HD22	13:IB:8:GLU:OE1	2.19	0.42
20:PB:107:THR:HA	20:PB:108:PRO:HD3	1.83	0.42
27:WB:14:LYS:NZ	51:ZC:771:G:OP1	2.44	0.42
27:WB:48:LYS:HE3	51:ZC:1311:G:O6	2.19	0.42
31:AC:192:GLU:OE2	31:AC:192:GLU:N	2.52	0.42
34:DC:87:VAL:HG22	34:DC:151:TYR:HB3	1.99	0.42
46:PC:36:ARG:HA	46:PC:71:LEU:HB2	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:24:U:H2'	50:UC:25:C:C6	2.54	0.42
50:UC:107:G:OP1	50:UC:325:A:N6	2.52	0.42
50:UC:157:G:H2'	50:UC:158:G:H8	1.83	0.42
50:UC:1431:C:H2'	50:UC:1432:G:O4'	2.19	0.42
50:UC:1475:G:H4'	51:VC:1689:A:H4'	2.01	0.42
51:VC:869:G:H2'	51:VC:870:A:H8	1.84	0.42
51:VC:1056:G:H5"	51:VC:1057:A:O4'	2.18	0.42
51:VC:1985:G:H2'	51:VC:1986:A:H8	1.84	0.42
50:YC:216:G:H2'	50:YC:217:C:C6	2.53	0.42
50:YC:406:G:H2'	50:YC:407:G:C8	2.54	0.42
50:YC:841:U:O2'	50:YC:842:C:H5"	2.19	0.42
50:YC:998(A):G:H2'	50:YC:998(B):C:C6	2.54	0.42
50:YC:1127:G:N2	50:YC:1147:C:H42	2.16	0.42
50:YC:1431:C:H2'	50:YC:1432:G:O4'	2.18	0.42
51:ZC:834:C:H2'	51:ZC:835:A:H8	1.84	0.42
51:ZC:982:C:H5"	51:ZC:983:A:OP2	2.18	0.42
51:ZC:1348:G:H1	51:ZC:1598:C:H42	1.65	0.42
51:ZC:1569:A:H2'	51:ZC:1570:A:C8	2.54	0.42
51:ZC:1625:C:H2'	51:ZC:1626:G:O4'	2.20	0.42
51:ZC:1851:U:H4'	53:BD:71:C:H4'	2.01	0.42
52:AD:75:G:H1	52:AD:102:G:N2	2.17	0.42
1:A:233:HIS:O	1:A:235:GLY:N	2.45	0.42
10:J:59:LEU:HD12	10:J:61:ARG:NH1	2.34	0.42
14:N:22:PHE:N	14:N:22:PHE:CD2	2.88	0.42
18:R:36:LYS:NZ	18:R:55:ASN:HA	2.34	0.42
18:R:57:LEU:CD1	18:R:78:LYS:HB3	2.49	0.42
30:DA:76:VAL:HG23	30:DA:77:ILE:HG13	2.01	0.42
38:LA:48:ILE:HD11	38:LA:64:ALA:HA	2.00	0.42
1:WA:132:PRO:HD3	1:WA:190:TYR:CZ	2.54	0.42
2:XA:152:LYS:HE2	2:XA:152:LYS:HB3	1.87	0.42
8:DB:95:TYR:CE2	8:DB:121:VAL:HG12	2.54	0.42
9:EB:3:GLN:HB2	9:EB:4:PRO:HD2	2.01	0.42
15:KB:104:GLN:HB2	16:LB:44:LYS:NZ	2.34	0.42
27:WB:8:ASN:HB3	27:WB:11:LYS:HB3	2.01	0.42
29:YB:235:SER:HA	29:YB:238:LEU:HG	2.00	0.42
31:AC:120:LEU:HD23	31:AC:120:LEU:HA	1.90	0.42
31:AC:174:LEU:HD23	31:AC:185:PHE:HA	2.01	0.42
35:EC:110:ALA:HA	35:EC:136:GLU:HA	2.00	0.42
50:UC:224:C:H2'	50:UC:225:C:C6	2.55	0.42
50:UC:841:U:O2'	50:UC:842:C:H5"	2.19	0.42
51:VC:464:U:H2'	51:VC:465:G:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:910:A:C6	51:VC:911:A:C6	3.08	0.42
51:VC:1759:A:H1'	51:VC:2711:A:C2	2.55	0.42
51:VC:2531:A:H61	51:VC:2662:A:H61	1.67	0.42
51:VC:2864:G:H2'	51:VC:2865:U:C6	2.54	0.42
53:XC:29:G:H2'	53:XC:30:G:H8	1.84	0.42
50:YC:24:U:H2'	50:YC:25:C:C6	2.54	0.42
50:YC:171:A:H2'	50:YC:172:A:C8	2.54	0.42
50:YC:1009:G:H2'	50:YC:1010:G:C8	2.54	0.42
50:YC:1422:G:H2'	50:YC:1423:G:H8	1.84	0.42
51:ZC:775:G:H21	51:ZC:793:A:H1'	1.85	0.42
51:ZC:1263:U:C4	51:ZC:1264:G:C6	3.08	0.42
51:ZC:1759:A:H1'	51:ZC:2711:A:C2	2.53	0.42
51:ZC:2503:A:O2'	51:ZC:2505:G:OP2	2.31	0.42
53:FD:21:A:H61	53:FD:46:G:H2'	1.82	0.42
9:I:1:MET:HB2	9:I:32:TYR:HB3	2.00	0.42
10:J:16:ARG:HG2	51:VC:661:C:H1'	2.02	0.42
10:J:57:THR:HG22	10:J:58:THR:H	1.84	0.42
10:J:116:GLY:HA2	51:VC:637:A:O5'	2.19	0.42
15:O:25:TRP:O	15:O:28:ARG:HB3	2.19	0.42
26:Z:26:ASN:OD1	26:Z:27:LYS:N	2.52	0.42
28:BA:39:LYS:HA	28:BA:42:ARG:NH2	2.34	0.42
39:MA:123:LYS:HA	39:MA:124:PRO:HD3	1.86	0.42
46:TA:6:LYS:H	46:TA:6:LYS:HD2	1.84	0.42
10:FB:59:LEU:HD12	10:FB:61:ARG:NH1	2.33	0.42
10:FB:85:LEU:HA	10:FB:88:LEU:HB3	2.01	0.42
26:VB:18:ARG:NH2	26:VB:44:ARG:HD3	2.34	0.42
30:ZB:24:ALA:HB2	30:ZB:32:LEU:HD12	2.00	0.42
34:DC:23:VAL:O	34:DC:27:ILE:HG12	2.20	0.42
34:DC:53:LYS:HA	34:DC:53:LYS:HD3	1.86	0.42
34:DC:111:ARG:HB3	34:DC:113:GLU:HG2	2.02	0.42
38:HC:48:ILE:HD11	38:HC:64:ALA:HA	2.01	0.42
42:LC:31:LEU:HD21	50:YC:658:G:OP1	2.19	0.42
50:UC:37:U:H2'	50:UC:38:G:C8	2.54	0.42
50:UC:79:G:H2'	50:UC:80:G:O4'	2.20	0.42
50:UC:978:A:O2'	50:UC:1322:C:N3	2.50	0.42
51:VC:528:A:N1	51:VC:2042:A:H2'	2.34	0.42
51:VC:1292:U:H2'	51:VC:1293:C:C6	2.54	0.42
50:YC:37:U:H2'	50:YC:38:G:C8	2.54	0.42
50:YC:1143:G:H2'	50:YC:1144:G:H8	1.81	0.42
50:YC:1236:A:H4'	50:YC:1304:G:H4'	2.02	0.42
50:YC:1281:U:H5'	50:YC:1282:C:C5	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:528:A:N1	51:ZC:2042:A:H2'	2.35	0.42
51:ZC:603:A:N6	51:ZC:655:A:H1'	2.35	0.42
51:ZC:1409:C:H2'	51:ZC:1410:G:C8	2.54	0.42
53:BD:29:G:H2'	53:BD:30:G:H8	1.84	0.42
1:A:106:ILE:H	1:A:106:ILE:HG13	1.49	0.42
2:B:131:ALA:C	2:B:133:LYS:H	2.23	0.42
6:F:56:LYS:HE3	6:F:56:LYS:HB3	1.82	0.42
7:G:9:LYS:HB3	51:VC:1061:U:C5	2.54	0.42
9:I:12:ASP:OD1	9:I:14:THR:OG1	2.36	0.42
13:M:25:ARG:NH1	13:M:42:ASP:OD1	2.53	0.42
17:Q:38:TYR:CE1	25:Y:41:PRO:HD3	2.55	0.42
24:X:10:LYS:HB3	24:X:10:LYS:HE2	1.83	0.42
26:Z:18:ARG:NH2	26:Z:44:ARG:HD3	2.34	0.42
35:IA:24:THR:HG22	35:IA:25:ASP:H	1.83	0.42
35:IA:104:ARG:HD3	35:IA:138:TRP:CD2	2.53	0.42
40:NA:45:VAL:O	40:NA:48:LEU:HD22	2.19	0.42
12:HB:73:VAL:O	12:HB:76:VAL:HG22	2.19	0.42
14:JB:22:PHE:CD2	14:JB:22:PHE:N	2.88	0.42
18:NB:57:LEU:CD1	18:NB:78:LYS:HB3	2.49	0.42
23:SB:55:ARG:HE	51:ZC:75:G:H4'	1.84	0.42
29:YB:79:ASP:HA	29:YB:82:ARG:HB2	2.01	0.42
30:ZB:130:VAL:O	30:ZB:134:ILE:HG13	2.19	0.42
31:AC:20:TYR:CD2	31:AC:26:CYS:HB3	2.54	0.42
35:EC:51:VAL:HG21	35:EC:60:ARG:HG2	2.01	0.42
37:GC:49:VAL:O	37:GC:60:ARG:HB2	2.18	0.42
45:OC:75:ILE:HD11	50:YC:735:C:H1'	2.01	0.42
50:UC:736:C:H2'	50:UC:737:A:C8	2.54	0.42
50:UC:908:A:H2'	50:UC:909:A:C8	2.55	0.42
50:UC:1009:G:H2'	50:UC:1010:G:C8	2.54	0.42
51:VC:528:A:C2	51:VC:2042:A:H2'	2.55	0.42
51:VC:817:C:H4'	51:VC:932:G:C6	2.55	0.42
51:VC:2096:U:H2'	51:VC:2097:C:C6	2.55	0.42
51:VC:2112:G:O6	53:XC:19:G:N1	2.52	0.42
51:VC:2556:C:H2'	51:VC:2557:G:O4'	2.20	0.42
51:VC:2795:G:H1'	51:VC:2802:G:H1	1.84	0.42
51:ZC:528:A:C2	51:ZC:2042:A:H2'	2.55	0.42
51:ZC:1495:A:H3'	51:ZC:1496:A:C2	2.54	0.42
51:ZC:1811:G:H2'	51:ZC:1812:A:H8	1.85	0.42
51:ZC:1939:U:OP1	51:ZC:2604:U:O2'	2.36	0.42
51:ZC:2328:A:H2'	51:ZC:2329:G:C8	2.55	0.42
1:A:63:ARG:HH22	51:VC:1568:G:P	2.42	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:253:GLN:HB2	1:A:257:LEU:HD12	2.02	0.42
3:C:52:LYS:HA	3:C:56:GLU:OE1	2.19	0.42
3:C:56:GLU:OE1	3:C:93:LYS:NZ	2.43	0.42
6:F:95:LYS:HA	6:F:111:PRO:HB3	2.01	0.42
7:G:90:LYS:HE2	7:G:93:ARG:HD3	2.02	0.42
10:J:101:VAL:HG23	10:J:106:LEU:HB3	2.00	0.42
11:K:19:GLY:O	11:K:21:THR:N	2.48	0.42
23:W:46:GLN:H	23:W:49:LYS:HE2	1.83	0.42
32:FA:76:ILE:HG23	32:FA:78:HIS:H	1.84	0.42
32:FA:135:THR:O	32:FA:139:LEU:HG	2.19	0.42
35:IA:51:VAL:HG21	35:IA:60:ARG:HG2	2.02	0.42
1:WA:200:ASP:OD1	1:WA:203:ASN:ND2	2.52	0.42
2:XA:7:VAL:HG13	2:XA:27:LEU:HB3	2.01	0.42
6:BB:72:LEU:HD13	6:BB:72:LEU:HA	1.89	0.42
7:CB:72:PRO:O	7:CB:111:LYS:NZ	2.52	0.42
13:IB:25:ARG:NH1	13:IB:42:ASP:OD1	2.52	0.42
13:IB:30:ARG:HH22	52:AD:48:A:P	2.43	0.42
14:JB:15:VAL:HG23	14:JB:79:HIS:CE1	2.54	0.42
17:MB:6:ILE:HG12	17:MB:104:THR:HG23	2.01	0.42
18:NB:35:THR:HB	18:NB:38:GLU:HG2	2.01	0.42
32:BC:127:ASN:HA	32:BC:128:PRO:HD3	1.90	0.42
32:BC:145:LYS:O	32:BC:149:GLU:HG2	2.20	0.42
33:CC:10:LEU:HD13	33:CC:61:LEU:HD13	2.02	0.42
38:HC:123:LYS:HG2	50:YC:780:A:OP1	2.20	0.42
41:KC:21:TYR:HE2	41:KC:23:ARG:HH21	1.68	0.42
43:MC:27:LYS:HG2	50:YC:111:G:H5"	2.01	0.42
49:TC:60:GLU:H	49:TC:60:GLU:CD	2.23	0.42
50:UC:272:C:H2'	50:UC:273:A:C8	2.54	0.42
50:UC:709:G:H2'	50:UC:710:G:H8	1.85	0.42
51:VC:992:C:H2'	51:VC:993:G:H8	1.84	0.42
51:VC:1542:G:OP2	51:VC:1543:A:H5'	2.20	0.42
50:YC:585:G:H1	50:YC:756:C:H42	1.67	0.42
51:ZC:239:U:H2'	51:ZC:240:G:O4'	2.19	0.42
51:ZC:857:C:N4	51:ZC:858:U:O4	2.53	0.42
51:ZC:2115:G:H1'	51:ZC:2171:A:N1	2.35	0.42
51:ZC:2556:C:H2'	51:ZC:2557:G:O4'	2.19	0.42
12:L:99:LYS:HA	12:L:112:ALA:HA	2.00	0.42
17:Q:13:SER:HB3	17:Q:16:LYS:HD2	2.02	0.42
23:W:50:ILE:H	23:W:50:ILE:HG13	1.53	0.42
29:CA:79:ASP:HA	29:CA:82:ARG:HB2	2.02	0.42
4:ZA:77:ILE:HG22	4:ZA:80:PHE:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AB:88:LEU:HD23	5:AB:165:ALA:HA	2.01	0.42
10:FB:115:LEU:HB2	51:ZC:637:A:OP2	2.20	0.42
12:HB:4:LEU:HD22	12:HB:4:LEU:HA	1.90	0.42
17:MB:26:GLY:O	17:MB:27:LYS:HD2	2.20	0.42
17:MB:62:HIS:O	17:MB:64:MET:N	2.53	0.42
20:PB:44:PHE:O	20:PB:48:PHE:HB2	2.20	0.42
24:TB:40:THR:OG1	24:TB:43:ILE:HG12	2.20	0.42
37:GC:3:LYS:N	37:GC:75:ILE:HA	2.34	0.42
50:UC:986:A:H2'	50:UC:987:G:C8	2.55	0.42
50:UC:1410:G:H2'	50:UC:1411:C:C6	2.55	0.42
51:VC:27:G:N2	51:VC:512:G:H1'	2.35	0.42
51:VC:1495:A:H3'	51:VC:1496:A:C2	2.55	0.42
51:VC:1772:G:H5"	51:VC:1773:A:OP2	2.20	0.42
51:VC:1899:G:H22	51:VC:1902:C:N4	2.18	0.42
51:VC:2114:A:H3'	51:VC:2115:G:C8	2.55	0.42
51:VC:2153:G:H2'	51:VC:2154:G:H8	1.85	0.42
50:YC:224:C:H2'	50:YC:225:C:C6	2.55	0.42
51:ZC:270(T):G:H2'	51:ZC:270(U):G:C8	2.54	0.42
51:ZC:938:G:H2'	51:ZC:939:G:H8	1.85	0.42
51:ZC:1003:G:O2'	51:ZC:1010:A:N1	2.47	0.42
51:ZC:1478:G:HO2'	51:ZC:1558:A:H2	1.67	0.42
51:ZC:1746:G:H2'	51:ZC:1747:G:C8	2.55	0.42
52:AD:3:C:H2'	52:AD:4:C:C6	2.55	0.42
2:B:131:ALA:HB2	51:VC:2579:C:O2'	2.20	0.42
7:G:122:ALA:HB1	51:VC:1081:U:H5'	2.02	0.42
17:Q:25:ARG:NH2	17:Q:74:ALA:O	2.45	0.42
17:Q:62:HIS:O	17:Q:64:MET:N	2.52	0.42
23:W:25:VAL:O	23:W:29:LYS:HG2	2.20	0.42
32:FA:137:GLU:O	32:FA:141:GLN:NE2	2.53	0.42
33:GA:17:SER:O	33:GA:21:LEU:HB2	2.20	0.42
34:HA:23:VAL:O	34:HA:27:ILE:HG12	2.19	0.42
35:IA:33:GLU:OE1	35:IA:50:ARG:NE	2.48	0.42
35:IA:91:ARG:NE	44:RA:32:TYR:O	2.51	0.42
10:FB:62:LEU:HB3	51:ZC:2393:A:H5"	2.01	0.42
10:FB:74:GLU:HB2	51:ZC:244:A:H4'	2.01	0.42
29:YB:111:ARG:NH1	50:YC:1104:G:H4'	2.35	0.42
30:ZB:76:VAL:HG23	30:ZB:77:ILE:HG13	2.01	0.42
31:AC:171:GLY:HA2	31:AC:173:TRP:CZ3	2.55	0.42
35:EC:33:GLU:OE1	35:EC:50:ARG:NE	2.48	0.42
36:FC:69:GLY:HA3	50:YC:1371:G:O3'	2.19	0.42
40:JC:19:LEU:HB3	40:JC:25:ILE:HG21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PC:78:ARG:NH1	50:YC:1223:C:OP1	2.52	0.42
50:UC:928:G:H2'	50:UC:929:G:C8	2.54	0.42
50:UC:1022:G:H2'	50:UC:1023:G:H8	1.84	0.42
50:UC:1151:A:O2'	50:UC:1152:A:O5'	2.33	0.42
50:UC:1281:U:H5'	50:UC:1282:C:C5	2.55	0.42
50:UC:1297:C:H1'	50:UC:1298:C:H5	1.85	0.42
51:VC:345:A:N3	51:VC:347:A:N6	2.67	0.42
51:VC:512:G:H4'	51:VC:513:A:O5'	2.20	0.42
51:VC:611:C:H2'	51:VC:612:G:O4'	2.19	0.42
51:VC:662:G:H2'	51:VC:663:G:C8	2.55	0.42
51:VC:854:G:H2'	51:VC:855:G:C8	2.55	0.42
51:VC:1288:U:H1'	51:VC:1647:G:H22	1.85	0.42
51:VC:1386:C:H2'	51:VC:1387:C:C6	2.54	0.42
51:VC:1441:G:H2'	51:VC:1442:G:C8	2.54	0.42
50:YC:54:C:H41	50:YC:352:C:H2'	1.85	0.42
50:YC:686:U:O2'	50:YC:703:G:N2	2.52	0.42
50:YC:1253:G:H1	50:YC:1284:C:H42	1.68	0.42
50:YC:1287:A:H2'	50:YC:1288:A:C8	2.55	0.42
51:ZC:363(G):A:H1'	51:ZC:364:C:OP2	2.20	0.42
51:ZC:747:U:O2	51:ZC:2014:A:H1'	2.20	0.42
51:ZC:1203:G:O6	51:ZC:1204:A:N6	2.53	0.42
51:ZC:1466:G:H2'	51:ZC:1547:C:N4	2.34	0.42
51:ZC:2514:U:H2'	51:ZC:2515:C:C6	2.55	0.42
1:A:261:LYS:NZ	1:A:263:ARG:HG3	2.35	0.42
7:G:115:LEU:HD22	7:G:117:THR:H	1.83	0.42
10:J:98:GLU:O	10:J:101:VAL:HG12	2.20	0.42
11:K:101:ARG:HH22	51:VC:907:U:H4'	1.84	0.42
17:Q:18:ARG:NH1	17:Q:76:VAL:O	2.51	0.42
17:Q:51:LEU:HD23	17:Q:105:VAL:HG11	2.02	0.42
20:T:97:GLU:HB3	20:T:125:LEU:HD21	2.01	0.42
23:W:35:LEU:HD12	23:W:53:LEU:HD12	2.01	0.42
29:CA:103:THR:HA	29:CA:180:LEU:HD11	2.00	0.42
42:PA:31:LEU:HD21	50:UC:658:G:OP1	2.19	0.42
1:WA:9:TYR:CD2	1:WA:10:THR:HG22	2.55	0.42
1:WA:31:LYS:HD3	1:WA:94:LEU:HD11	2.02	0.42
9:EB:17:ARG:HD3	9:EB:17:ARG:HA	1.78	0.42
12:HB:5:LYS:NZ	51:ZC:2821:A:OP2	2.37	0.42
14:JB:54:ARG:HA	14:JB:59:THR:OG1	2.20	0.42
19:OB:2:ARG:C	19:OB:4:LYS:H	2.23	0.42
21:QB:50:ASN:OD1	21:QB:50:ASN:N	2.52	0.42
31:AC:201:GLN:HA	31:AC:204:ILE:HD12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BC:110:LEU:HD13	32:BC:118:ILE:HG21	2.02	0.42
38:HC:27:ASN:OD1	38:HC:28:THR:N	2.53	0.42
50:UC:1236:A:H4'	50:UC:1304:G:H4'	2.02	0.42
53:XC:21:A:HO2'	53:XC:22:G:P	2.43	0.42
51:ZC:234:C:H2'	51:ZC:235:U:H6	1.84	0.42
51:ZC:310:A:O2'	51:ZC:311:A:H2'	2.20	0.42
51:ZC:601:C:O2'	51:ZC:605:C:H5"	2.20	0.42
51:ZC:1280:G:H1	51:ZC:1290:C:N4	2.17	0.42
51:ZC:1386:C:H2'	51:ZC:1387:C:C6	2.54	0.42
51:ZC:1831:G:H1	51:ZC:1974:C:H42	1.66	0.42
51:ZC:2096:U:H2'	51:ZC:2097:C:C6	2.55	0.42
51:ZC:2111:C:O2'	51:ZC:2145:C:O2	2.23	0.42
51:ZC:2847:U:O4	51:ZC:2848:G:N1	2.53	0.42
2:B:187:ALA:HB2	51:VC:2729:G:H1'	2.01	0.42
15:O:81:HIS:O	15:O:85:LYS:HB2	2.19	0.42
29:CA:133:LYS:O	29:CA:137:ARG:HG2	2.20	0.42
32:FA:145:LYS:O	32:FA:149:GLU:HG2	2.19	0.42
2:XA:187:ALA:HB2	51:ZC:2729:G:H1'	2.02	0.42
6:BB:22:LYS:HA	6:BB:23:PRO:HD3	1.93	0.42
7:CB:57:ILE:HG23	7:CB:65:PHE:HB2	2.01	0.42
9:EB:1:MET:HB2	9:EB:32:TYR:HB3	2.01	0.42
12:HB:90:ARG:O	12:HB:94:TYR:HE2	2.03	0.42
25:UB:41:PRO:HG2	25:UB:44:THR:OG1	2.20	0.42
29:YB:133:LYS:O	29:YB:137:ARG:HG2	2.20	0.42
50:UC:413:G:H21	50:UC:428:G:H1'	1.84	0.42
50:UC:582:U:H2'	50:UC:583:A:C8	2.55	0.42
50:UC:682:G:H2'	50:UC:683:G:H8	1.84	0.42
50:UC:1279:A:O2'	50:UC:1281:U:OP2	2.28	0.42
51:VC:64:A:H2'	51:VC:65:C:C6	2.55	0.42
51:VC:1019:U:H2'	51:VC:1021:A:H2	1.85	0.42
51:VC:1263:U:C4	51:VC:1264:G:C6	3.08	0.42
51:VC:1511:A:H2'	51:VC:1512:G:O4'	2.20	0.42
51:VC:2529:G:H5"	51:VC:2530:A:H5"	2.01	0.42
50:YC:574:A:N3	50:YC:883:C:H1'	2.35	0.42
50:YC:1007:C:H2'	50:YC:1008:C:C6	2.55	0.42
51:ZC:793:A:OP2	51:ZC:2071:A:O2'	2.37	0.42
51:ZC:882:G:H2'	51:ZC:883:G:C8	2.55	0.42
51:ZC:1331:A:H2'	51:ZC:1332:G:H5"	2.02	0.42
51:ZC:1514:U:H2'	51:ZC:1515:C:C6	2.54	0.42
51:ZC:1985:G:H2'	51:ZC:1986:A:H8	1.85	0.42
51:ZC:2211:G:H2'	51:ZC:2212:A:H5"	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:ZC:2809:A:OP2	51:ZC:2891:G:N1	2.48	0.42
6:F:69:LYS:O	6:F:73:GLU:HB2	2.20	0.41
7:G:57:ILE:HD12	7:G:65:PHE:HD1	1.84	0.41
8:H:42:GLU:HG2	8:H:82:LYS:HG3	2.02	0.41
28:BA:32:LEU:HG	28:BA:36:LYS:HD2	2.02	0.41
33:GA:23:LYS:O	33:GA:27:GLN:HG2	2.19	0.41
38:LA:27:ASN:OD1	38:LA:28:THR:N	2.53	0.41
39:MA:92:LEU:HA	39:MA:93:PRO:HD3	1.85	0.41
40:NA:19:LEU:HD23	40:NA:30:ALA:HA	2.02	0.41
46:TA:21:GLU:HG3	46:TA:22:LEU:HD22	2.02	0.41
4:ZA:60:LEU:HG	4:ZA:90:LEU:HD12	2.02	0.41
10:FB:75:ILE:H	10:FB:75:ILE:HG13	1.55	0.41
22:RB:13:ILE:HG13	22:RB:14:VAL:N	2.31	0.41
33:CC:17:SER:O	33:CC:21:LEU:HB2	2.20	0.41
50:UC:406:G:H2'	50:UC:407:G:C8	2.54	0.41
50:UC:1000:A:H2'	50:UC:1001:G:C8	2.55	0.41
50:UC:1255:G:H1	50:UC:1282:C:H42	1.67	0.41
50:UC:1441:G:H5"	50:UC:1442:G:O4'	2.20	0.41
51:VC:817:C:O2'	51:VC:839:U:H5"	2.20	0.41
51:VC:1175:U:H2'	51:VC:1176:G:N7	2.34	0.41
51:VC:2294:C:H2'	51:VC:2295:C:C6	2.55	0.41
51:VC:2595:G:N2	51:VC:2597:G:H3'	2.35	0.41
51:VC:2809:A:OP2	51:VC:2891:G:N1	2.48	0.41
50:YC:1000:A:H2'	50:YC:1001:G:C8	2.55	0.41
50:YC:1255:G:H1	50:YC:1282:C:H42	1.67	0.41
50:YC:1485:U:H2'	50:YC:1486:G:C8	2.55	0.41
51:ZC:270(S):G:H2'	51:ZC:270(T):G:H8	1.85	0.41
51:ZC:360:G:H2'	51:ZC:361:G:C8	2.55	0.41
51:ZC:464:U:H2'	51:ZC:465:G:O4'	2.20	0.41
51:ZC:631:A:H2'	51:ZC:632:A:O4'	2.20	0.41
51:ZC:1542:G:OP2	51:ZC:1543:A:H5'	2.20	0.41
51:ZC:1790:C:H2'	51:ZC:1791:A:C5	2.55	0.41
1:A:9:TYR:CD2	1:A:10:THR:HG22	2.55	0.41
1:A:202:LYS:HD2	51:VC:1820:U:N3	2.35	0.41
3:C:45:ARG:NH2	51:VC:443:A:H2'	2.34	0.41
13:M:66:ALA:HA	13:M:69:VAL:HG22	2.00	0.41
17:Q:65:LEU:HD12	17:Q:68:ARG:HE	1.85	0.41
21:U:34:GLY:HA2	21:U:61:ALA:O	2.20	0.41
46:TA:54:GLY:HA2	50:UC:1220:G:H21	1.85	0.41
1:WA:49:ILE:HG13	51:ZC:779:U:OP1	2.20	0.41
1:WA:132:PRO:HD3	1:WA:190:TYR:CE2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:XA:131:ALA:C	2:XA:133:LYS:H	2.24	0.41
19:OB:73:ARG:HA	19:OB:74:PRO:HD3	1.90	0.41
25:UB:51:TYR:HD2	25:UB:51:TYR:HA	1.74	0.41
29:YB:209:ARG:HH11	29:YB:239:VAL:HG11	1.85	0.41
35:EC:31:PHE:O	35:EC:35:ILE:HG12	2.20	0.41
37:GC:22:LYS:HB3	37:GC:22:LYS:HE3	1.86	0.41
38:HC:123:LYS:HE3	38:HC:123:LYS:HB3	1.92	0.41
40:JC:94:ARG:HH22	46:PC:80:TYR:HE2	1.67	0.41
42:LC:45:VAL:HG23	42:LC:46:HIS:ND1	2.35	0.41
46:PC:22:LEU:HD13	46:PC:22:LEU:HA	1.94	0.41
46:PC:54:GLY:HA2	50:YC:1220:G:H21	1.85	0.41
50:UC:54:C:H41	50:UC:352:C:H2'	1.85	0.41
50:UC:106:C:H2'	50:UC:107:G:H8	1.85	0.41
50:UC:1287:A:H2'	50:UC:1288:A:C8	2.55	0.41
51:VC:1774:C:H4'	51:VC:1979:C:O2	2.20	0.41
51:VC:2455:G:H2'	51:VC:2456:C:C6	2.55	0.41
51:VC:2514:U:H2'	51:VC:2515:C:C6	2.56	0.41
50:YC:6:G:O2'	50:YC:7:G:H5"	2.21	0.41
50:YC:908:A:H2'	50:YC:909:A:C8	2.55	0.41
50:YC:958:A:N3	50:YC:985:C:O2'	2.47	0.41
50:YC:1441:G:H5"	50:YC:1442:G:O4'	2.20	0.41
51:ZC:704:G:O2'	51:ZC:726:G:N2	2.47	0.41
51:ZC:1656:C:H42	51:ZC:2004:G:H1	1.68	0.41
51:ZC:2114:A:H3'	51:ZC:2115:G:C8	2.55	0.41
51:ZC:2123:G:N2	51:ZC:2175:C:O2	2.53	0.41
51:ZC:2153:G:H2'	51:ZC:2154:G:H8	1.84	0.41
51:ZC:2307:G:O2'	51:ZC:2311:A:N7	2.53	0.41
51:ZC:2595:G:N2	51:ZC:2597:G:H3'	2.35	0.41
51:ZC:2795:G:H1'	51:ZC:2802:G:H1	1.84	0.41
2:B:11:MET:HB2	2:B:23:VAL:O	2.20	0.41
8:H:135:LEU:HD22	51:VC:558:G:H5"	2.03	0.41
11:K:72:LYS:HA	11:K:73:PRO:HD3	1.92	0.41
12:L:87:TYR:OH	12:L:117:VAL:O	2.31	0.41
15:O:92:ARG:HH11	51:VC:996:A:H4'	1.86	0.41
15:O:92:ARG:HB2	51:VC:996:A:O3'	2.19	0.41
20:T:44:PHE:O	20:T:48:PHE:HB2	2.20	0.41
34:HA:111:ARG:HB3	34:HA:113:GLU:HG2	2.02	0.41
39:MA:43:THR:HA	39:MA:44:PRO:HD3	1.90	0.41
40:NA:19:LEU:HB3	40:NA:25:ILE:HG21	2.01	0.41
42:PA:39:LEU:HD22	42:PA:39:LEU:HA	1.90	0.41
7:CB:120:LEU:HA	7:CB:123:ALA:HB3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:FB:64:LYS:NZ	51:ZC:631:A:OP1	2.41	0.41
10:FB:117:GLU:HB2	10:FB:118:GLY:H	1.68	0.41
15:KB:81:HIS:O	15:KB:85:LYS:HB2	2.20	0.41
17:MB:80:PRO:HD3	51:ZC:25:U:H5"	2.00	0.41
23:SB:21:LEU:HD23	23:SB:21:LEU:HA	1.87	0.41
29:YB:60:ASP:O	29:YB:64:ARG:HG2	2.21	0.41
48:RC:24:ARG:HG3	48:RC:25:LYS:H	1.85	0.41
50:UC:19:C:H2'	50:UC:20:U:C6	2.56	0.41
50:UC:1414:U:O2	50:UC:1487:G:N2	2.54	0.41
51:VC:48:G:H2'	51:VC:49:A:H2	1.85	0.41
51:VC:310:A:O2'	51:VC:311:A:H2'	2.20	0.41
51:VC:324:A:H2'	51:VC:325:G:O4'	2.20	0.41
51:VC:360:G:H2'	51:VC:361:G:C8	2.55	0.41
51:VC:589:C:H2'	51:VC:590:A:C8	2.55	0.41
51:VC:775:G:H21	51:VC:793:A:H1'	1.84	0.41
51:VC:2572:A:H5"	51:VC:2574:G:H4'	2.02	0.41
51:VC:2799:A:H2'	51:VC:2801:A:C8	2.55	0.41
52:WC:3:C:H2'	52:WC:4:C:C6	2.55	0.41
50:YC:986:A:H2'	50:YC:987:G:C8	2.55	0.41
50:YC:1109:C:H2'	50:YC:1110:A:O4'	2.20	0.41
51:ZC:214:G:H1'	51:ZC:216:A:O2'	2.19	0.41
51:ZC:321:G:C2	51:ZC:341:G:H4'	2.55	0.41
51:ZC:2211:G:H3'	51:ZC:2211:G:N3	2.35	0.41
51:ZC:2531:A:H61	51:ZC:2662:A:H61	1.68	0.41
52:AD:89(A):G:H2'	52:AD:89(B):A:H8	1.85	0.41
53:BD:29:G:H2'	53:BD:30:G:C8	2.56	0.41
4:D:60:LEU:HG	4:D:90:LEU:HD12	2.02	0.41
5:E:92:ILE:HD12	5:E:92:ILE:H	1.86	0.41
7:G:11:GLN:HG3	51:VC:1061:U:C4	2.55	0.41
29:CA:209:ARG:HH11	29:CA:239:VAL:HG11	1.85	0.41
31:EA:22:LYS:HB3	31:EA:25:ARG:HB3	2.02	0.41
31:EA:173:TRP:CZ3	31:EA:193:ASP:HB3	2.56	0.41
37:KA:33:GLN:H	37:KA:33:GLN:HG3	1.71	0.41
4:ZA:64:THR:HG23	4:ZA:66:GLN:H	1.85	0.41
8:DB:66:THR:HB	8:DB:69:VAL:HG12	2.03	0.41
10:FB:49:ARG:HH21	28:XB:60:LEU:HD13	1.85	0.41
10:FB:50:ARG:HH11	28:XB:7:HIS:CD2	2.33	0.41
10:FB:114:ILE:HD13	10:FB:130:PHE:CE1	2.56	0.41
22:RB:90:ILE:HD13	22:RB:90:ILE:HA	1.87	0.41
28:XB:39:LYS:HA	28:XB:42:ARG:NH2	2.35	0.41
33:CC:23:LYS:O	33:CC:27:GLN:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DC:65:ALA:O	34:DC:69:VAL:HG23	2.21	0.41
37:GC:7:LYS:HD3	37:GC:71:LEU:HD13	2.03	0.41
51:VC:847:U:O2'	51:VC:848:G:O5'	2.37	0.41
51:VC:1426:G:O2'	51:VC:1572:A:N6	2.54	0.41
51:VC:1569:A:H2'	51:VC:1570:A:C8	2.55	0.41
51:VC:2692:C:O2	51:VC:2847:U:O2'	2.32	0.41
50:YC:19:C:H2'	50:YC:20:U:C6	2.55	0.41
50:YC:107:G:OP1	50:YC:325:A:N6	2.52	0.41
50:YC:229:U:H2'	50:YC:230:G:C8	2.56	0.41
50:YC:1297:C:H1'	50:YC:1298:C:H5	1.85	0.41
51:ZC:270(S):G:H2'	51:ZC:270(T):G:C8	2.56	0.41
51:ZC:997:G:N2	51:ZC:1158:C:O2	2.45	0.41
51:ZC:1270:C:H5"	51:ZC:1271:G:O5'	2.21	0.41
51:ZC:1971:A:H5'	51:ZC:1972:A:H5"	2.02	0.41
53:ED:50:U:H3	53:ED:64:G:H1	1.68	0.41
3:C:111:ALA:HB2	3:C:206:ILE:HD13	2.03	0.41
9:I:112:MET:HA	9:I:115:VAL:HG22	2.01	0.41
10:J:62:LEU:HB3	51:VC:2393:A:H5"	2.02	0.41
13:M:30:ARG:HH22	52:WC:48:A:P	2.43	0.41
14:N:22:PHE:N	14:N:22:PHE:HD2	2.18	0.41
16:P:12:TYR:CE2	16:P:22:VAL:HG13	2.56	0.41
29:CA:46:LYS:HD2	29:CA:46:LYS:HA	1.93	0.41
29:CA:74:LYS:HE2	29:CA:206:ASP:OD1	2.21	0.41
31:EA:53:ASP:OD2	32:FA:107:ARG:HD2	2.21	0.41
31:EA:119:GLN:OE1	50:UC:406:G:O2'	2.20	0.41
36:JA:50:LEU:HA	36:JA:53:VAL:HG22	2.01	0.41
46:TA:78:ARG:NH1	50:UC:1223:C:OP1	2.52	0.41
48:VA:24:ARG:HG3	48:VA:25:LYS:H	1.84	0.41
1:WA:233:HIS:O	1:WA:235:GLY:N	2.44	0.41
3:YA:6:MET:HG2	3:YA:7:TYR:CD1	2.53	0.41
5:AB:24:VAL:HG11	5:AB:43:VAL:HG11	2.03	0.41
6:BB:69:LYS:O	6:BB:73:GLU:HB2	2.21	0.41
10:FB:112:LEU:HD23	10:FB:113:LYS:N	2.35	0.41
15:KB:65:ILE:HG12	15:KB:96:ALA:HB3	2.02	0.41
15:KB:92:ARG:HB2	51:ZC:996:A:O3'	2.21	0.41
17:MB:14:PRO:HG3	17:MB:101:SER:HB3	2.02	0.41
17:MB:25:ARG:NH2	17:MB:74:ALA:O	2.45	0.41
21:QB:34:GLY:HA2	21:QB:61:ALA:O	2.20	0.41
23:SB:25:VAL:O	23:SB:29:LYS:HG2	2.21	0.41
29:YB:19:HIS:CD2	29:YB:20:GLU:HG2	2.56	0.41
30:ZB:178:LEU:HD13	30:ZB:178:LEU:HA	1.95	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:AC:173:TRP:CD2	31:AC:189:PRO:HB3	2.56	0.41
32:BC:137:GLU:HG2	32:BC:140:ARG:HH12	1.86	0.41
35:EC:20:TYR:CE1	35:EC:76:PRO:HG2	2.56	0.41
38:HC:50:TYR:HD2	38:HC:54:ARG:HB3	1.85	0.41
40:JC:2:ALA:C	40:JC:9:ILE:HG23	2.41	0.41
41:KC:21:TYR:CE1	50:YC:981:U:H5'	2.55	0.41
42:LC:8:LYS:O	42:LC:12:ILE:HG13	2.20	0.41
42:LC:26:GLU:HB3	42:LC:81:LEU:HD22	2.02	0.41
50:UC:6:G:O2'	50:UC:7:G:H5"	2.21	0.41
50:UC:936:C:H2'	50:UC:937:A:O4'	2.20	0.41
50:UC:1043:C:H2'	50:UC:1044:A:C8	2.48	0.41
51:VC:234:C:H2'	51:VC:235:U:H6	1.85	0.41
51:VC:270(S):G:H2'	51:VC:270(T):G:C8	2.55	0.41
51:VC:844:C:H3'	51:VC:845:G:N2	2.35	0.41
51:VC:938:G:H2'	51:VC:939:G:H8	1.84	0.41
51:VC:1492:G:H1	51:VC:1498:C:H42	1.67	0.41
51:VC:1656:C:H42	51:VC:2004:G:H1	1.68	0.41
51:VC:1851:U:H3	51:VC:1891:G:H1	1.68	0.41
51:VC:2115:G:H1'	51:VC:2171:A:N1	2.35	0.41
51:VC:2376:A:H2'	51:VC:2377:A:O4'	2.21	0.41
51:VC:2531:A:N3	51:VC:2658:C:O2'	2.47	0.41
52:WC:91:C:H2'	52:WC:92:G:H8	1.86	0.41
50:YC:1505:G:H5"	50:YC:1506:U:OP1	2.20	0.41
51:ZC:602:G:N2	51:ZC:655:A:N7	2.67	0.41
51:ZC:817:C:O2'	51:ZC:839:U:H5"	2.20	0.41
51:ZC:1108:U:H2'	51:ZC:1109:C:O4'	2.21	0.41
51:ZC:1175:U:H2'	51:ZC:1176:G:N7	2.35	0.41
51:ZC:2294:C:H2'	51:ZC:2295:C:C6	2.55	0.41
51:ZC:2468:G:H21	51:ZC:2483:C:H41	1.68	0.41
4:D:37:VAL:O	4:D:94:LEU:HD23	2.20	0.41
19:S:27:VAL:HA	19:S:39:VAL:HG13	2.02	0.41
38:LA:120:ARG:NH1	50:UC:779:C:O2'	2.53	0.41
39:MA:7:ASN:OD1	44:RA:34:LYS:HE2	2.20	0.41
42:PA:8:LYS:O	42:PA:12:ILE:HG13	2.21	0.41
1:WA:259:THR:HG1	51:ZC:1797:C:HO2'	1.51	0.41
2:XA:131:ALA:HB2	51:ZC:2579:C:O2'	2.20	0.41
6:BB:110:ASP:HA	6:BB:111:PRO:HD2	1.95	0.41
10:FB:57:THR:HG22	10:FB:58:THR:H	1.85	0.41
23:SB:10:LEU:HD22	23:SB:21:LEU:HD21	2.03	0.41
40:JC:94:ARG:HD3	40:JC:96:LEU:HD11	2.02	0.41
50:UC:574:A:N3	50:UC:883:C:H1'	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:1101:A:H1'	50:UC:1102:A:OP2	2.21	0.41
50:UC:1253:G:H1	50:UC:1284:C:H42	1.68	0.41
50:UC:1414:U:H2'	50:UC:1415:G:C8	2.54	0.41
50:UC:1422:G:H2'	50:UC:1423:G:H8	1.84	0.41
51:VC:722:A:H2'	51:VC:723:G:O4'	2.20	0.41
51:VC:793:A:OP2	51:VC:2071:A:O2'	2.39	0.41
51:VC:857:C:N4	51:VC:858:U:O4	2.53	0.41
51:VC:2328:A:H2'	51:VC:2329:G:C8	2.55	0.41
51:VC:2840:C:H42	51:VC:2877:G:H1	1.69	0.41
50:YC:106:C:H2'	50:YC:107:G:H8	1.86	0.41
50:YC:335:C:H2'	50:YC:336:C:C6	2.56	0.41
50:YC:928:G:H2'	50:YC:929:G:H8	1.86	0.41
51:ZC:147:U:H2'	51:ZC:148:C:C6	2.56	0.41
51:ZC:565:C:H2'	51:ZC:566:U:O4'	2.21	0.41
51:ZC:1529:A:H62	51:ZC:1542:G:N2	2.19	0.41
51:ZC:1578:U:H2'	51:ZC:1579:A:H5'	2.03	0.41
51:ZC:2455:G:H2'	51:ZC:2456:C:C6	2.56	0.41
51:ZC:2660:A:H2'	51:ZC:2661:G:O4'	2.20	0.41
2:B:38:THR:O	2:B:42:ASP:HB2	2.21	0.41
2:B:131:ALA:HB2	51:VC:2579:C:O3'	2.21	0.41
5:E:24:VAL:HG11	5:E:43:VAL:HG11	2.02	0.41
7:G:72:PRO:O	7:G:111:LYS:NZ	2.54	0.41
14:N:28:VAL:HA	14:N:89:VAL:HG22	2.02	0.41
14:N:54:ARG:HA	14:N:59:THR:OG1	2.21	0.41
15:O:77:SER:HA	51:VC:1152:C:H4'	2.02	0.41
16:P:35:LEU:HB2	16:P:57:VAL:HG13	2.01	0.41
18:R:9:LEU:O	23:W:36:ARG:HD3	2.21	0.41
30:DA:26:LYS:HE2	50:UC:1279:A:N6	2.36	0.41
38:LA:50:TYR:HD2	38:LA:54:ARG:HB3	1.85	0.41
40:NA:94:ARG:HH22	46:TA:80:TYR:HE2	1.67	0.41
1:WA:222:ARG:HD2	51:ZC:1827:C:OP2	2.21	0.41
1:WA:253:GLN:HB2	1:WA:257:LEU:HD12	2.02	0.41
3:YA:170:LEU:HD12	3:YA:170:LEU:HA	1.90	0.41
7:CB:100:THR:HG22	7:CB:139:VAL:HG23	2.03	0.41
16:LB:99:ILE:O	16:LB:101:GLY:N	2.53	0.41
41:KC:29:ARG:HB3	41:KC:40:CYS:HB3	2.02	0.41
50:UC:229:U:H2'	50:UC:230:G:C8	2.55	0.41
50:UC:1007:C:H2'	50:UC:1008:C:C6	2.55	0.41
50:UC:1022:G:H2'	50:UC:1023:G:C8	2.56	0.41
50:UC:1485:U:H2'	50:UC:1486:G:C8	2.56	0.41
50:UC:1505:G:H5"	50:UC:1506:U:OP1	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:32:C:N4	51:VC:33:U:O4	2.54	0.41
51:VC:307:G:H21	51:VC:330:A:H62	1.68	0.41
51:VC:325:G:H2'	51:VC:326:G:C8	2.56	0.41
51:VC:1746:G:H2'	51:VC:1747:G:C8	2.55	0.41
51:VC:1754:C:H2'	51:VC:1755:A:O4'	2.21	0.41
51:VC:2468:G:H21	51:VC:2483:C:H41	1.68	0.41
51:VC:2847:U:O4	51:VC:2848:G:N1	2.54	0.41
50:YC:586:C:H2'	50:YC:587:G:C8	2.55	0.41
50:YC:639:G:H2'	50:YC:640:A:C8	2.56	0.41
50:YC:709:G:H2'	50:YC:710:G:H8	1.85	0.41
50:YC:1101:A:H1'	50:YC:1102:A:OP2	2.20	0.41
51:ZC:1313:U:H4'	51:ZC:1332:G:H4'	2.03	0.41
51:ZC:1331:A:O2'	51:ZC:1332:G:C8	2.72	0.41
51:ZC:2629:A:O2'	51:ZC:2895:U:O4	2.39	0.41
51:ZC:2722:G:H5"	51:ZC:2820:A:C2	2.56	0.41
2:B:94:GLU:H	2:B:94:GLU:HG2	1.65	0.41
3:C:131:GLY:HA2	3:C:138:GLU:HB3	2.03	0.41
7:G:80:LYS:HE2	7:G:80:LYS:HB3	1.93	0.41
9:I:68:GLU:HA	9:I:78:ARG:HB3	2.03	0.41
10:J:71:VAL:HB	10:J:72:PRO:HD3	2.03	0.41
10:J:133:SER:OG	51:VC:637:A:OP1	2.16	0.41
17:Q:80:PRO:HD3	51:VC:25:U:H5"	2.02	0.41
20:T:6:LYS:HA	20:T:6:LYS:HD2	1.94	0.41
24:X:23:LEU:HG	24:X:50:VAL:HG11	2.02	0.41
2:XA:11:MET:HB2	2:XA:23:VAL:O	2.21	0.41
6:BB:95:LYS:HA	6:BB:111:PRO:HB3	2.03	0.41
12:HB:96:ARG:NH1	12:HB:115:GLU:OE1	2.54	0.41
13:IB:67:ARG:NH1	13:IB:103:GLU:OE1	2.47	0.41
15:KB:61:TRP:O	15:KB:65:ILE:HG13	2.21	0.41
32:BC:45:PHE:CD2	32:BC:47:LYS:HD2	2.55	0.41
35:EC:56:LYS:HA	35:EC:57:PRO:HD3	1.92	0.41
38:HC:120:ARG:NH1	50:YC:779:C:O2'	2.52	0.41
43:MC:40:ASP:HA	43:MC:41:PRO:HD2	1.94	0.41
49:SC:60:GLU:H	49:SC:60:GLU:CD	2.24	0.41
50:UC:926:G:C6	50:UC:1505:G:C6	3.09	0.41
51:VC:347:A:H2'	51:VC:348:G:H8	1.86	0.41
51:VC:601:C:O2'	51:VC:605:C:H5"	2.20	0.41
51:VC:603:A:N6	51:VC:655:A:H1'	2.35	0.41
51:VC:149(B):A:C2	51:VC:1449:G:H1'	2.56	0.41
51:VC:1849:G:H2'	51:VC:1850:G:C8	2.48	0.41
51:VC:2079:U:H2'	51:VC:2080:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:424:G:H2'	50:YC:425:G:C8	2.55	0.41
50:YC:978:A:O2'	50:YC:1322:C:N3	2.51	0.41
51:ZC:48:G:H2'	51:ZC:49:A:H2	1.85	0.41
51:ZC:270(V):C:H2'	51:ZC:270(W):G:C8	2.55	0.41
51:ZC:356:G:H2'	51:ZC:357:A:H8	1.85	0.41
51:ZC:536:A:H2'	51:ZC:537:C:C6	2.56	0.41
51:ZC:722:A:H2'	51:ZC:723:G:O4'	2.21	0.41
51:ZC:1039:G:H2'	51:ZC:1040:C:C6	2.56	0.41
51:ZC:1837:C:O2'	51:ZC:1927:A:N3	2.44	0.41
51:ZC:2079:U:H2'	51:ZC:2080:G:O4'	2.21	0.41
51:ZC:2819:G:H2'	51:ZC:2821:A:N7	2.34	0.41
1:A:49:ILE:HG13	51:VC:779:U:OP1	2.20	0.41
1:A:54:ARG:NH2	51:VC:1814:G:O3'	2.51	0.41
2:B:101:ARG:HA	2:B:171:GLU:HA	2.03	0.41
3:C:84:VAL:HG21	51:VC:448:U:H1'	2.02	0.41
5:E:88:LEU:HD23	5:E:165:ALA:HA	2.02	0.41
7:G:8:VAL:HG13	7:G:57:ILE:HB	2.02	0.41
7:G:133:SER:HB3	51:VC:1062:G:H21	1.86	0.41
8:H:51:THR:HG23	51:VC:1006:C:O4'	2.21	0.41
8:H:90:LEU:HD12	8:H:90:LEU:H	1.85	0.41
10:J:39:LYS:HG3	51:VC:806:C:P	2.60	0.41
10:J:117:GLU:HB2	10:J:118:GLY:H	1.68	0.41
12:L:17:ARG:NH1	51:VC:2690:C:OP2	2.54	0.41
13:M:68:GLN:HG2	13:M:71:ARG:HH12	1.86	0.41
15:O:61:TRP:O	15:O:65:ILE:HG13	2.20	0.41
15:O:101:ARG:H	15:O:101:ARG:HG3	1.56	0.41
16:P:99:ILE:O	16:P:101:GLY:N	2.54	0.41
20:T:107:THR:HA	20:T:108:PRO:HD3	1.83	0.41
23:W:28:LYS:HG3	23:W:60:LEU:HD22	2.03	0.41
23:W:55:ARG:HE	51:VC:75:G:H4'	1.84	0.41
29:CA:166:ASP:HA	29:CA:167:PRO:HD2	1.95	0.41
34:HA:5:ARG:HD2	34:HA:5:ARG:HA	1.95	0.41
37:KA:7:LYS:HD3	37:KA:71:LEU:HD13	2.03	0.41
38:LA:98:LEU:HA	38:LA:101:SER:HB3	2.03	0.41
45:SA:75:ILE:HD11	50:UC:735:C:H1'	2.02	0.41
1:WA:222:ARG:HG3	51:ZC:1789:A:OP1	2.21	0.41
3:YA:107:LYS:HD3	3:YA:206:ILE:HG23	2.03	0.41
5:AB:117:PRO:HA	5:AB:118:PRO:HD3	1.91	0.41
6:BB:126:TYR:O	6:BB:142:VAL:HG22	2.21	0.41
8:DB:42:GLU:HG2	8:DB:82:LYS:HG3	2.03	0.41
8:DB:160:LYS:HD3	8:DB:161:LEU:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:FB:39:LYS:HA	10:FB:39:LYS:HD2	1.70	0.41
12:HB:104:ARG:HD2	12:HB:111:LEU:HD21	2.02	0.41
16:LB:12:TYR:CE2	16:LB:22:VAL:HG13	2.56	0.41
17:MB:78:GLU:OE2	17:MB:99:ARG:HD3	2.20	0.41
20:PB:48:PHE:CE2	20:PB:71:VAL:HG11	2.56	0.41
20:PB:97:GLU:HB3	20:PB:125:LEU:HD21	2.01	0.41
22:RB:8:SER:HB2	22:RB:10:LYS:HE2	2.03	0.41
23:SB:24:LEU:HD13	23:SB:60:LEU:HD21	2.02	0.41
31:AC:24:GLU:N	50:YC:409:G:OP1	2.54	0.41
39:IC:27:LYS:HE3	39:IC:27:LYS:HB3	1.91	0.41
40:JC:19:LEU:HD23	40:JC:30:ALA:HA	2.03	0.41
50:UC:646:U:H2'	50:UC:647:C:C6	2.56	0.41
50:UC:1109:C:H2'	50:UC:1110:A:O4'	2.20	0.41
51:VC:247:G:H4'	51:VC:386:G:C6	2.56	0.41
51:VC:363(G):A:H1'	51:VC:364:C:OP2	2.21	0.41
51:VC:540:G:H2'	51:VC:541:C:C6	2.55	0.41
51:VC:882:G:H2'	51:VC:883:G:C8	2.56	0.41
51:VC:1223:G:N2	51:VC:1226:A:OP2	2.35	0.41
51:VC:1971:A:H5'	51:VC:1972:A:H5"	2.03	0.41
51:VC:2033:A:H1'	51:VC:2035:G:OP2	2.21	0.41
51:VC:2112:G:H8	51:VC:2112:G:OP2	2.04	0.41
50:YC:413:G:H21	50:YC:428:G:H1'	1.85	0.41
50:YC:646:U:H2'	50:YC:647:C:C6	2.56	0.41
50:YC:1101:A:H4'	50:YC:1102:A:O5'	2.21	0.41
51:ZC:32:C:N4	51:ZC:33:U:O4	2.54	0.41
51:ZC:78:A:H2'	51:ZC:79:G:C8	2.56	0.41
51:ZC:247:G:H4'	51:ZC:386:G:C6	2.56	0.41
51:ZC:388:G:C4	51:ZC:390:A:C6	3.09	0.41
51:ZC:512:G:H4'	51:ZC:513:A:O5'	2.21	0.41
51:ZC:534:U:H2'	51:ZC:535:C:C6	2.55	0.41
51:ZC:628:G:H2'	51:ZC:629:G:C8	2.55	0.41
51:ZC:662:G:H2'	51:ZC:663:G:C8	2.55	0.41
51:ZC:787:U:H5"	51:ZC:788:A:H5'	2.03	0.41
51:ZC:1511:A:H2'	51:ZC:1512:G:O4'	2.21	0.41
51:ZC:1851:U:H3	51:ZC:1891:G:H1	1.68	0.41
51:ZC:1899:G:H22	51:ZC:1902:C:N4	2.19	0.41
51:ZC:2572:A:H5"	51:ZC:2574:G:H4'	2.03	0.41
51:ZC:2738:A:H2	51:ZC:2766:G:H22	1.69	0.41
53:ED:28:C:H2'	53:ED:29:G:H8	1.86	0.41
53:FD:50:U:H3	53:FD:64:G:H1	1.68	0.41
1:A:14:ARG:NH2	51:VC:1693:U:O2'	2.46	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:36:LYS:HB3	4:D:160:VAL:HB	2.03	0.41
8:H:101:TYR:HA	8:H:102:PRO:HD3	1.95	0.41
13:M:67:ARG:NH1	13:M:103:GLU:OE1	2.47	0.41
15:O:65:ILE:HG12	15:O:96:ALA:HB3	2.03	0.41
15:O:75:ASN:ND2	51:VC:1011:G:H4'	2.36	0.41
20:T:157:LEU:HA	20:T:158:PRO:HD3	1.80	0.41
21:U:16:SER:HB3	51:VC:2261:C:C5	2.56	0.41
31:EA:173:TRP:CD2	31:EA:189:PRO:HB3	2.56	0.41
33:GA:46:ARG:HB2	33:GA:60:PHE:CE1	2.56	0.41
34:HA:26:PHE:HB2	34:HA:101:LEU:HD22	2.03	0.41
35:IA:6:ILE:O	35:IA:10:LEU:HG	2.21	0.41
36:JA:48:GLU:N	36:JA:49:PRO:HD2	2.36	0.41
42:PA:26:GLU:HB3	42:PA:81:LEU:HD22	2.03	0.41
3:YA:150:GLY:HA2	3:YA:172:TRP:CD2	2.56	0.41
4:ZA:128:ARG:HE	4:ZA:129:GLY:N	2.15	0.41
4:ZA:140:ILE:H	4:ZA:140:ILE:HG13	1.60	0.41
9:EB:70:LYS:HE3	9:EB:70:LYS:HB3	1.94	0.41
11:GB:71:ASP:OD1	11:GB:71:ASP:N	2.54	0.41
14:JB:41:ARG:NH2	50:YC:346:G:OP1	2.46	0.41
29:YB:48:MET:HA	29:YB:51:LEU:HD12	2.03	0.41
31:AC:31:CYS:C	31:AC:33:MET:H	2.24	0.41
34:DC:73:MET:HA	34:DC:91:VAL:HG23	2.03	0.41
47:QC:22:ARG:HG2	50:YC:323:U:O3'	2.21	0.41
50:UC:199:G:H2'	50:UC:200:G:C8	2.56	0.41
50:UC:584:G:H2'	50:UC:585:G:C8	2.56	0.41
50:UC:1000:A:H2'	50:UC:1001:G:H8	1.86	0.41
50:UC:1101:A:H4'	50:UC:1102:A:O5'	2.21	0.41
50:UC:1182:G:H4'	50:UC:1183:A:H5"	2.03	0.41
51:VC:270(T):G:H2'	51:VC:270(U):G:C8	2.55	0.41
51:VC:686:G:N2	51:VC:788:A:H61	2.19	0.41
51:VC:721:C:H2'	51:VC:722:A:H8	1.85	0.41
51:VC:1060:U:H4'	51:VC:1061:U:O5'	2.21	0.41
51:VC:1116:C:H2'	51:VC:1117:G:C8	2.56	0.41
51:VC:1423:G:H2'	51:VC:1424:G:H8	1.86	0.41
51:VC:2123:G:N2	51:VC:2175:C:O2	2.54	0.41
51:VC:2722:G:H5"	51:VC:2820:A:C2	2.56	0.41
50:YC:115:G:H4'	50:YC:116:A:O5'	2.21	0.41
50:YC:509:A:O2'	50:YC:510:A:N7	2.52	0.41
50:YC:936:C:H2'	50:YC:937:A:O4'	2.21	0.41
50:YC:1132:C:H2'	50:YC:1133:G:C8	2.56	0.41
50:YC:1386:G:H2'	50:YC:1387:G:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:YC:1414:U:H2'	50:YC:1415:G:H8	1.85	0.41
51:ZC:1019:U:H2'	51:ZC:1021:A:H2	1.85	0.41
51:ZC:1116:C:H2'	51:ZC:1117:G:C8	2.56	0.41
51:ZC:1411:C:H42	51:ZC:1591:G:H1	1.69	0.41
51:ZC:149(B):A:C2	51:ZC:1449:G:H1'	2.56	0.41
51:ZC:2033:A:H1'	51:ZC:2035:G:OP2	2.21	0.41
51:ZC:2799:A:H2'	51:ZC:2801:A:C8	2.55	0.41
53:BD:58:A:H1'	53:BD:60:U:C5	2.56	0.41
2:B:77:ILE:HD13	2:B:195:LEU:HD13	2.03	0.40
4:D:27:ASN:ND2	52:WC:55:U:O3'	2.53	0.40
7:G:54:PRO:HG2	51:VC:1060:U:OP2	2.20	0.40
9:I:19:ILE:O	9:I:19:ILE:HG12	2.20	0.40
12:L:4:LEU:HD22	12:L:4:LEU:HA	1.90	0.40
23:W:21:LEU:HD23	23:W:21:LEU:HA	1.89	0.40
25:Y:41:PRO:HG2	25:Y:44:THR:OG1	2.21	0.40
29:CA:178:ARG:HA	29:CA:178:ARG:HD3	1.82	0.40
30:DA:86:VAL:HA	30:DA:89:GLU:HB3	2.04	0.40
31:EA:70:ILE:HD12	31:EA:70:ILE:HA	1.96	0.40
32:FA:110:LEU:HD13	32:FA:118:ILE:HG21	2.03	0.40
34:HA:65:ALA:O	34:HA:69:VAL:HG23	2.21	0.40
40:NA:108:ARG:NH2	40:NA:114:ARG:HG2	2.36	0.40
43:QA:33:ILE:HD13	43:QA:33:ILE:HA	1.89	0.40
45:SA:87:ARG:HB3	45:SA:87:ARG:CZ	2.51	0.40
1:WA:183:ARG:HG2	1:WA:184:LYS:N	2.36	0.40
1:WA:253:GLN:OE1	51:ZC:1843:C:H5'	2.22	0.40
6:BB:120:ILE:HG22	6:BB:122:GLU:H	1.86	0.40
10:FB:39:LYS:HG3	51:ZC:806:C:P	2.61	0.40
14:JB:22:PHE:N	14:JB:22:PHE:HD2	2.18	0.40
14:JB:56:GLY:N	51:ZC:2845:G:OP1	2.54	0.40
15:KB:57:PHE:HB3	15:KB:61:TRP:CZ2	2.56	0.40
19:OB:27:VAL:HA	19:OB:39:VAL:HG13	2.03	0.40
21:QB:12:ASN:O	21:QB:14:ARG:N	2.55	0.40
23:SB:46:GLN:H	23:SB:49:LYS:HE2	1.85	0.40
34:DC:77:SER:HB3	34:DC:84:ASN:ND2	2.36	0.40
39:IC:7:ASN:OD1	44:NC:34:LYS:HE2	2.20	0.40
41:KC:3:ARG:HD2	50:YC:1203:C:OP1	2.20	0.40
42:LC:62:GLN:NE2	42:LC:65:ARG:HH12	2.20	0.40
50:UC:792:A:H4'	50:UC:793:U:H5"	2.03	0.40
50:UC:1386:G:H2'	50:UC:1387:G:H8	1.85	0.40
51:VC:27:G:C2	51:VC:512:G:N3	2.89	0.40
51:VC:270(V):C:H2'	51:VC:270(W):G:C8	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:388:G:C4	51:VC:390:A:C6	3.09	0.40
51:VC:1039:G:H2'	51:VC:1040:C:C6	2.57	0.40
51:VC:1162:G:H2'	51:VC:1163:G:H8	1.86	0.40
51:VC:1308:A:H2'	51:VC:1309:G:O4'	2.21	0.40
51:VC:1529:A:H62	51:VC:1542:G:N2	2.19	0.40
51:VC:2211:G:H2'	51:VC:2212:A:H5"	2.02	0.40
51:VC:2299:G:H2'	51:VC:2300:G:C8	2.56	0.40
51:VC:2738:A:H2	51:VC:2766:G:H22	1.68	0.40
50:YC:582:U:H2'	50:YC:583:A:C8	2.56	0.40
50:YC:689:C:H2'	50:YC:690:G:O4'	2.21	0.40
51:ZC:296:C:H2'	51:ZC:297:C:H6	1.86	0.40
51:ZC:1206:G:C2	51:ZC:1207:C:C2	3.09	0.40
51:ZC:1495:A:N3	51:ZC:1495:A:H2'	2.35	0.40
51:ZC:2540:C:H2'	51:ZC:2541:A:O4'	2.21	0.40
51:ZC:2584:U:H4'	51:ZC:2602:A:N6	2.36	0.40
52:AD:91:C:H2'	52:AD:92:G:H8	1.86	0.40
3:C:24:LEU:HA	3:C:25:PRO:HD2	1.85	0.40
3:C:41:LEU:HA	3:C:44:ARG:HG2	2.02	0.40
4:D:16:ARG:O	4:D:20:ILE:HG13	2.20	0.40
4:D:64:THR:HG23	4:D:66:GLN:H	1.86	0.40
4:D:115:ARG:H	4:D:115:ARG:HG3	1.54	0.40
10:J:18:ARG:NH1	10:J:18:ARG:HB3	2.36	0.40
12:L:96:ARG:NH1	12:L:115:GLU:OE1	2.54	0.40
19:S:8:LYS:H	19:S:8:LYS:NZ	2.18	0.40
19:S:40:GLU:HA	19:S:64:GLU:HG2	2.03	0.40
19:S:45:VAL:HG13	19:S:60:PHE:HB3	2.04	0.40
31:EA:62:GLN:O	31:EA:66:ARG:HD3	2.21	0.40
34:HA:73:MET:HA	34:HA:91:VAL:HG23	2.02	0.40
1:WA:30:GLU:O	1:WA:32:SER:N	2.54	0.40
2:XA:101:ARG:HA	2:XA:171:GLU:HA	2.03	0.40
7:CB:8:VAL:HG13	7:CB:57:ILE:HB	2.02	0.40
9:EB:68:GLU:HA	9:EB:78:ARG:HB3	2.02	0.40
10:FB:18:ARG:HB3	10:FB:18:ARG:NH1	2.36	0.40
29:YB:74:LYS:HE2	29:YB:206:ASP:OD1	2.21	0.40
41:KC:24:CYS:HB3	41:KC:29:ARG:N	2.35	0.40
44:NC:50:LYS:HE2	44:NC:51:TYR:CZ	2.54	0.40
46:PC:21:GLU:HG3	46:PC:22:LEU:HD22	2.03	0.40
50:UC:563:A:H61	50:UC:884:U:H3	1.69	0.40
50:UC:586:C:H2'	50:UC:587:G:C8	2.55	0.40
50:UC:833:U:H2'	50:UC:834:C:C6	2.56	0.40
51:VC:78:A:H2'	51:VC:79:G:C8	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:VC:356:G:H2'	51:VC:357:A:H8	1.86	0.40
51:VC:628:G:H2'	51:VC:629:G:C8	2.56	0.40
51:VC:1332:G:N2	51:VC:1610:A:C8	2.85	0.40
51:VC:1766:U:H2'	51:VC:1767:C:H6	1.86	0.40
51:VC:2660:A:H2'	51:VC:2661:G:O4'	2.20	0.40
53:XC:29:G:H2'	53:XC:30:G:C8	2.56	0.40
50:YC:265:G:H2'	50:YC:266:G:H5"	2.03	0.40
50:YC:397:A:H5'	50:YC:398:C:OP1	2.22	0.40
50:YC:833:U:H2'	50:YC:834:C:C6	2.56	0.40
50:YC:1010:G:H2'	50:YC:1011:G:C8	2.56	0.40
50:YC:1137:C:H4'	50:YC:1138:G:C2	2.56	0.40
51:ZC:335:C:H2'	51:ZC:336:C:C6	2.56	0.40
51:ZC:535:C:H42	51:ZC:558:G:H1	1.69	0.40
51:ZC:1772:G:H5"	51:ZC:1773:A:OP2	2.20	0.40
51:ZC:2840:C:H42	51:ZC:2877:G:H1	1.69	0.40
1:A:30:GLU:O	1:A:32:SER:N	2.54	0.40
1:A:31:LYS:HD3	1:A:94:LEU:HD11	2.02	0.40
3:C:107:LYS:HD3	3:C:206:ILE:HG23	2.03	0.40
3:C:150:GLY:HA2	3:C:172:TRP:CD2	2.56	0.40
10:J:114:ILE:HD13	10:J:130:PHE:CE1	2.56	0.40
10:J:115:LEU:HB2	51:VC:637:A:OP2	2.22	0.40
13:M:4:LEU:HD22	13:M:8:GLU:OE1	2.20	0.40
15:O:88:ILE:HG22	16:P:47:VAL:HG23	2.03	0.40
29:CA:19:HIS:CD2	29:CA:20:GLU:HG2	2.57	0.40
39:MA:6:ILE:H	39:MA:6:ILE:HG13	1.52	0.40
39:MA:57:VAL:O	39:MA:64:GLU:HA	2.20	0.40
3:YA:190:GLU:H	3:YA:190:GLU:HG3	1.73	0.40
4:ZA:9:ARG:O	4:ZA:13:GLU:HG2	2.20	0.40
7:CB:66:THR:HG22	7:CB:68:VAL:HG22	2.04	0.40
7:CB:91:PRO:HG2	51:ZC:1076:C:O2'	2.22	0.40
9:EB:19:ILE:O	9:EB:19:ILE:HG12	2.20	0.40
11:GB:62:GLY:HA3	11:GB:107:ALA:O	2.22	0.40
13:IB:57:LYS:HE3	13:IB:57:LYS:HB2	1.86	0.40
15:KB:101:ARG:H	15:KB:101:ARG:HG3	1.54	0.40
19:OB:71:LYS:HE2	51:ZC:329:G:OP2	2.21	0.40
31:AC:10:ARG:HB2	31:AC:40:PRO:HG2	2.03	0.40
38:HC:98:LEU:HA	38:HC:101:SER:HB3	2.03	0.40
43:MC:10:GLY:HA2	50:YC:624:C:H4'	2.04	0.40
50:UC:301:G:H2'	50:UC:302:G:C8	2.56	0.40
50:UC:337:C:H2'	50:UC:338:A:C8	2.56	0.40
50:UC:397:A:H5'	50:UC:398:C:OP1	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:UC:955:U:H3	50:UC:1225:A:H61	1.69	0.40
50:UC:1137:C:H4'	50:UC:1138:G:C2	2.56	0.40
50:UC:1359:C:C1'	50:UC:136(A):C:H41	2.33	0.40
51:VC:535:C:H42	51:VC:558:G:H1	1.69	0.40
51:VC:1419:A:H62	51:VC:1578:U:H3	1.70	0.40
51:VC:1625:C:H2'	51:VC:1626:G:O4'	2.21	0.40
51:VC:1790:C:H2'	51:VC:1791:A:C5	2.56	0.40
51:VC:2168:G:N1	51:VC:2171:A:OP2	2.55	0.40
51:VC:2627:G:O2'	51:VC:2781:A:N1	2.43	0.40
51:VC:2795:G:H1'	51:VC:2802:G:N1	2.36	0.40
53:XC:58:A:H1'	53:XC:60:U:C5	2.56	0.40
50:YC:976:G:H8	50:YC:1358:U:H2'	1.86	0.40
50:YC:1418:A:H2	51:ZC:1948:G:N3	2.19	0.40
51:ZC:27:G:C2	51:ZC:512:G:N3	2.89	0.40
51:ZC:749:C:O2	51:ZC:1618:A:H2'	2.22	0.40
51:ZC:844:C:H3'	51:ZC:845:G:N2	2.36	0.40
51:ZC:854:G:H2'	51:ZC:855:G:C8	2.56	0.40
51:ZC:2168:G:N1	51:ZC:2171:A:OP2	2.55	0.40
51:ZC:2795:G:H1'	51:ZC:2802:G:N1	2.36	0.40
1:A:154:LYS:HE2	1:A:154:LYS:HB3	1.93	0.40
1:A:160:GLY:HA3	51:VC:1820:U:C4	2.56	0.40
3:C:40:GLN:NE2	3:C:182:ASN:HB2	2.36	0.40
3:C:101:LEU:HA	3:C:102:PRO:HD3	1.95	0.40
6:F:120:ILE:HG22	6:F:122:GLU:H	1.87	0.40
11:K:71:ASP:N	11:K:71:ASP:OD1	2.54	0.40
15:O:10:ARG:HD2	51:VC:583:G:OP2	2.21	0.40
20:T:151:HIS:HA	20:T:170:THR:HA	2.02	0.40
22:V:37:ILE:HG12	22:V:38:SER:N	2.37	0.40
29:CA:60:ASP:O	29:CA:64:ARG:HG2	2.22	0.40
34:HA:84:ASN:OD1	34:HA:85:TYR:N	2.54	0.40
47:UA:22:ARG:HG2	50:UC:323:U:O3'	2.22	0.40
47:UA:57:ARG:HD2	47:UA:102:GLY:HA2	2.04	0.40
2:XA:41:LYS:O	51:ZC:2784:C:H4'	2.21	0.40
3:YA:40:GLN:HE22	3:YA:182:ASN:HB2	1.87	0.40
3:YA:111:ALA:HB2	3:YA:206:ILE:HD13	2.03	0.40
5:AB:126:PRO:HB2	5:AB:127:GLU:H	1.55	0.40
10:FB:18:ARG:HG2	51:ZC:661:C:H4'	2.04	0.40
15:KB:75:ASN:ND2	51:ZC:1011:G:H4'	2.36	0.40
17:MB:38:TYR:CE1	25:UB:41:PRO:HD3	2.55	0.40
19:OB:88:LYS:HB2	19:OB:89:PHE:H	1.49	0.40
20:PB:100:VAL:HA	20:PB:101:PRO:HD3	1.94	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:XB:41:ILE:H	28:XB:41:ILE:HG13	1.74	0.40
34:DC:95:ARG:HH12	50:YC:938:A:H4'	1.87	0.40
43:MC:28:ARG:NH1	43:MC:29:ASP:OD1	2.54	0.40
50:UC:1465:C:H2'	50:UC:1466:C:O4'	2.22	0.40
51:VC:465:G:H21	51:VC:684:G:H1'	1.87	0.40
51:VC:732:C:H2'	51:VC:733:G:O4'	2.21	0.40
51:VC:787:U:H5"	51:VC:788:A:H5'	2.02	0.40
51:VC:874:G:H2'	51:VC:875:G:C8	2.56	0.40
51:VC:2060:A:O4'	51:VC:2502:G:H1'	2.22	0.40
51:VC:2065:C:H1'	51:VC:2449:U:O2	2.21	0.40
51:VC:2211:G:H3'	51:VC:2211:G:N3	2.36	0.40
51:VC:2366:A:H2'	51:VC:2367:G:O4'	2.22	0.40
50:YC:301:G:H2'	50:YC:302:G:C8	2.57	0.40
50:YC:1034:G:H2'	50:YC:1035:A:H8	1.86	0.40
50:YC:1372:U:H2'	50:YC:1373:G:O4'	2.21	0.40
50:YC:1493:A:N6	51:ZC:1913:A:H1'	2.36	0.40
51:ZC:360:G:H2'	51:ZC:361:G:H8	1.87	0.40
51:ZC:1766:U:H2'	51:ZC:1767:C:H6	1.87	0.40
51:ZC:2056:G:H2'	51:ZC:2056:G:N3	2.37	0.40
51:ZC:2301:C:H2'	51:ZC:2302:G:H8	1.86	0.40
1:A:8:PRO:O	51:VC:1695:G:H8	2.05	0.40
2:B:16:ARG:O	2:B:18:ASP:N	2.55	0.40
9:I:17:ARG:HA	9:I:17:ARG:HD3	1.79	0.40
10:J:112:LEU:HD23	10:J:113:LYS:N	2.36	0.40
11:K:115:MET:O	11:K:119:ARG:HB2	2.21	0.40
12:L:16:HIS:ND1	51:VC:1275:A:C4	2.90	0.40
12:L:90:ARG:O	12:L:94:TYR:HE2	2.04	0.40
13:M:25:ARG:HG2	13:M:88:ASP:HB2	2.04	0.40
21:U:12:ASN:O	21:U:14:ARG:N	2.54	0.40
37:KA:54:PHE:HD1	37:KA:54:PHE:HA	1.78	0.40
3:YA:40:GLN:NE2	3:YA:182:ASN:HB2	2.37	0.40
3:YA:131:GLY:HA2	3:YA:138:GLU:HB3	2.02	0.40
4:ZA:80:PHE:HD1	4:ZA:80:PHE:HA	1.78	0.40
4:ZA:115:ARG:H	4:ZA:115:ARG:HG3	1.53	0.40
10:FB:106:LEU:HD22	10:FB:106:LEU:HA	1.96	0.40
11:GB:45:GLN:H	11:GB:45:GLN:HG2	1.64	0.40
14:JB:28:VAL:HA	14:JB:89:VAL:HG22	2.02	0.40
17:MB:13:SER:HB3	17:MB:16:LYS:HD2	2.03	0.40
18:NB:9:LEU:O	23:SB:36:ARG:HD3	2.21	0.40
27:WB:24:THR:HG23	27:WB:27:GLY:H	1.85	0.40
29:YB:178:ARG:NH2	29:YB:196:LEU:O	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:ZB:164:ARG:NH1	30:ZB:166:GLU:OE1	2.54	0.40
36:FC:48:GLU:N	36:FC:49:PRO:HD2	2.36	0.40
37:GC:33:GLN:H	37:GC:33:GLN:HG3	1.72	0.40
44:NC:9:VAL:HG22	44:NC:56:VAL:HG22	2.04	0.40
50:UC:115:G:H4'	50:UC:116:A:O5'	2.21	0.40
50:UC:689:C:H2'	50:UC:690:G:O4'	2.21	0.40
50:UC:928:G:H2'	50:UC:929:G:H8	1.86	0.40
50:UC:1067:A:N1	50:UC:1108:G:O2'	2.47	0.40
50:UC:1128:C:N4	50:UC:1143:G:H22	2.19	0.40
50:UC:1443:G:O6	51:VC:2863:C:H5"	2.21	0.40
51:VC:119:A:H4'	51:VC:120:U:H5'	2.03	0.40
51:VC:283:A:C2	51:VC:427:U:H1'	2.57	0.40
51:VC:310:A:C6	51:VC:312:G:C4	3.09	0.40
51:VC:2728:U:H2'	51:VC:2729:G:C8	2.57	0.40
50:YC:160:A:H1'	50:YC:344:A:C5	2.57	0.40
50:YC:162:A:C5	50:YC:163:C:H1'	2.57	0.40
50:YC:1182:G:H4'	50:YC:1183:A:H5"	2.03	0.40
50:YC:1376:U:H2'	50:YC:1377:A:H8	1.86	0.40
51:ZC:117:G:C6	51:ZC:119:A:C6	3.10	0.40
51:ZC:401:A:H2'	51:ZC:402:A:O4'	2.21	0.40
51:ZC:540:G:H2'	51:ZC:541:C:C6	2.56	0.40
51:ZC:589:C:H2'	51:ZC:590:A:C8	2.57	0.40
51:ZC:742:G:H2'	51:ZC:743:G:H8	1.86	0.40
51:ZC:785:G:C6	51:ZC:786:C:C4	3.09	0.40
51:ZC:1127:A:H2'	51:ZC:1128:A:H5"	2.04	0.40
51:ZC:2011:U:H2'	51:ZC:2012:G:O4'	2.22	0.40
51:ZC:2637:U:C4	51:ZC:2638:G:C6	3.09	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:126:PRO:O	50:YC:86:U:O2'[2_455]	2.11	0.09

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 X-ray entries followed by that with respect to entries

of similar resolution.

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	A	269/271 (99%)	227 (84%)	31 (12%)	11 (4%)	3	25
1	WA	269/271 (99%)	228 (85%)	30 (11%)	11 (4%)	3	25
2	B	202/206 (98%)	173 (86%)	20 (10%)	9 (4%)	2	22
2	XA	202/206 (98%)	173 (86%)	20 (10%)	9 (4%)	2	22
3	C	200/205 (98%)	174 (87%)	19 (10%)	7 (4%)	3	29
3	YA	200/205 (98%)	174 (87%)	19 (10%)	7 (4%)	3	29
4	D	179/182 (98%)	148 (83%)	26 (14%)	5 (3%)	5	33
4	ZA	179/182 (98%)	148 (83%)	26 (14%)	5 (3%)	5	33
5	AB	172/180 (96%)	161 (94%)	10 (6%)	1 (1%)	25	63
5	E	172/180 (96%)	161 (94%)	9 (5%)	2 (1%)	13	50
6	BB	143/148 (97%)	127 (89%)	14 (10%)	2 (1%)	11	47
6	F	143/148 (97%)	127 (89%)	14 (10%)	2 (1%)	11	47
7	CB	145/147 (99%)	113 (78%)	22 (15%)	10 (7%)	1	14
7	G	145/147 (99%)	113 (78%)	22 (15%)	10 (7%)	1	14
8	DB	135/140 (96%)	112 (83%)	20 (15%)	3 (2%)	6	38
8	H	135/140 (96%)	112 (83%)	20 (15%)	3 (2%)	6	38
9	EB	120/122 (98%)	104 (87%)	14 (12%)	2 (2%)	9	43
9	I	120/122 (98%)	104 (87%)	13 (11%)	3 (2%)	5	35
10	FB	144/150 (96%)	93 (65%)	34 (24%)	17 (12%)	0	5
10	J	144/150 (96%)	94 (65%)	34 (24%)	16 (11%)	0	6
11	GB	132/141 (94%)	99 (75%)	24 (18%)	9 (7%)	1	14
11	K	132/141 (94%)	99 (75%)	23 (17%)	10 (8%)	1	12
12	HB	115/118 (98%)	94 (82%)	17 (15%)	4 (4%)	3	29
12	L	115/118 (98%)	95 (83%)	16 (14%)	4 (4%)	3	29
13	IB	108/112 (96%)	99 (92%)	9 (8%)	0	100	100
13	M	108/112 (96%)	99 (92%)	9 (8%)	0	100	100
14	JB	135/146 (92%)	109 (81%)	20 (15%)	6 (4%)	2	23
14	N	135/146 (92%)	109 (81%)	20 (15%)	6 (4%)	2	23
15	KB	115/118 (98%)	105 (91%)	7 (6%)	3 (3%)	5	34

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
15	O	115/118 (98%)	105 (91%)	8 (7%)	2 (2%)	9	43
16	LB	99/101 (98%)	76 (77%)	18 (18%)	5 (5%)	2	20
16	P	99/101 (98%)	77 (78%)	17 (17%)	5 (5%)	2	20
17	MB	110/113 (97%)	100 (91%)	8 (7%)	2 (2%)	8	42
17	Q	110/113 (97%)	100 (91%)	9 (8%)	1 (1%)	17	56
18	NB	90/96 (94%)	82 (91%)	8 (9%)	0	100	100
18	R	90/96 (94%)	82 (91%)	8 (9%)	0	100	100
19	OB	98/110 (89%)	69 (70%)	17 (17%)	12 (12%)	0	5
19	S	98/110 (89%)	69 (70%)	17 (17%)	12 (12%)	0	5
20	PB	185/206 (90%)	159 (86%)	21 (11%)	5 (3%)	5	34
20	T	185/206 (90%)	159 (86%)	21 (11%)	5 (3%)	5	34
21	QB	74/85 (87%)	63 (85%)	8 (11%)	3 (4%)	3	25
21	U	74/85 (87%)	63 (85%)	8 (11%)	3 (4%)	3	25
22	RB	86/98 (88%)	62 (72%)	16 (19%)	8 (9%)	0	8
22	V	86/98 (88%)	63 (73%)	15 (17%)	8 (9%)	0	8
23	SB	60/72 (83%)	50 (83%)	7 (12%)	3 (5%)	2	20
23	W	60/72 (83%)	50 (83%)	7 (12%)	3 (5%)	2	20
24	TB	57/60 (95%)	54 (95%)	2 (4%)	1 (2%)	8	42
24	X	57/60 (95%)	54 (95%)	2 (4%)	1 (2%)	8	42
25	UB	50/60 (83%)	45 (90%)	3 (6%)	2 (4%)	3	26
25	Y	50/60 (83%)	45 (90%)	3 (6%)	2 (4%)	3	26
26	VB	42/54 (78%)	31 (74%)	7 (17%)	4 (10%)	0	8
26	Z	42/54 (78%)	31 (74%)	7 (17%)	4 (10%)	0	8
27	AA	46/49 (94%)	42 (91%)	4 (9%)	0	100	100
27	WB	46/49 (94%)	42 (91%)	4 (9%)	0	100	100
28	BA	61/65 (94%)	47 (77%)	6 (10%)	8 (13%)	0	4
28	XB	61/65 (94%)	47 (77%)	6 (10%)	8 (13%)	0	4
29	CA	232/256 (91%)	195 (84%)	27 (12%)	10 (4%)	2	23
29	YB	232/256 (91%)	195 (84%)	27 (12%)	10 (4%)	2	23
30	DA	204/239 (85%)	172 (84%)	21 (10%)	11 (5%)	2	19
30	ZB	204/239 (85%)	171 (84%)	22 (11%)	11 (5%)	2	19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
31	AC	206/209 (99%)	185 (90%)	17 (8%)	4 (2%)	8	41
31	EA	206/209 (99%)	182 (88%)	17 (8%)	7 (3%)	3	30
32	BC	149/162 (92%)	130 (87%)	16 (11%)	3 (2%)	7	40
32	FA	149/162 (92%)	130 (87%)	16 (11%)	3 (2%)	7	40
33	CC	99/101 (98%)	88 (89%)	9 (9%)	2 (2%)	7	40
33	GA	99/101 (98%)	88 (89%)	9 (9%)	2 (2%)	7	40
34	DC	153/156 (98%)	142 (93%)	9 (6%)	2 (1%)	12	48
34	HA	153/156 (98%)	142 (93%)	10 (6%)	1 (1%)	22	61
35	EC	136/138 (99%)	121 (89%)	13 (10%)	2 (2%)	10	46
35	IA	136/138 (99%)	122 (90%)	12 (9%)	2 (2%)	10	46
36	FC	125/128 (98%)	102 (82%)	20 (16%)	3 (2%)	6	36
36	JA	125/128 (98%)	102 (82%)	20 (16%)	3 (2%)	6	36
37	GC	96/105 (91%)	78 (81%)	15 (16%)	3 (3%)	4	32
37	KA	96/105 (91%)	78 (81%)	15 (16%)	3 (3%)	4	32
38	HC	112/129 (87%)	98 (88%)	8 (7%)	6 (5%)	2	19
38	LA	112/129 (87%)	98 (88%)	8 (7%)	6 (5%)	2	19
39	IC	120/132 (91%)	106 (88%)	12 (10%)	2 (2%)	9	43
39	MA	120/132 (91%)	106 (88%)	12 (10%)	2 (2%)	9	43
40	JC	115/126 (91%)	105 (91%)	9 (8%)	1 (1%)	17	56
40	NA	115/126 (91%)	105 (91%)	9 (8%)	1 (1%)	17	56
41	KC	58/61 (95%)	46 (79%)	12 (21%)	0	100	100
41	OA	58/61 (95%)	49 (84%)	4 (7%)	5 (9%)	1	9
42	LC	86/89 (97%)	80 (93%)	4 (5%)	2 (2%)	6	37
42	PA	86/89 (97%)	80 (93%)	4 (5%)	2 (2%)	6	37
43	MC	81/88 (92%)	75 (93%)	6 (7%)	0	100	100
43	QA	81/88 (92%)	75 (93%)	6 (7%)	0	100	100
44	NC	97/105 (92%)	84 (87%)	13 (13%)	0	100	100
44	RA	97/105 (92%)	84 (87%)	13 (13%)	0	100	100
45	OC	68/88 (77%)	58 (85%)	8 (12%)	2 (3%)	4	33
45	SA	68/88 (77%)	59 (87%)	7 (10%)	2 (3%)	4	33
46	PC	76/93 (82%)	58 (76%)	14 (18%)	4 (5%)	2	19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
46	TA	76/93 (82%)	58 (76%)	13 (17%)	5 (7%)	1 15
47	QC	97/106 (92%)	82 (84%)	10 (10%)	5 (5%)	2 19
47	UA	97/106 (92%)	82 (84%)	8 (8%)	7 (7%)	1 13
48	RC	22/27 (82%)	17 (77%)	5 (23%)	0	100 100
48	VA	22/27 (82%)	17 (77%)	5 (23%)	0	100 100
49	SC	28/71 (39%)	20 (71%)	4 (14%)	4 (14%)	0 3
49	TC	28/71 (39%)	20 (71%)	4 (14%)	4 (14%)	0 3
All	All	11464/12328 (93%)	9726 (85%)	1312 (11%)	426 (4%)	3 28

All (426) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	17	ASP
2	B	129	HIS
3	C	73	ALA
4	D	84	LYS
8	H	149	PRO
9	I	26	LYS
10	J	19	VAL
10	J	65	ARG
12	L	57	ARG
17	Q	63	ASP
19	S	3	VAL
19	S	77	PRO
22	V	16	ASN
22	V	83	GLU
22	V	87	PRO
23	W	48	HIS
25	Y	4	HIS
28	BA	62	LEU
30	DA	14	ILE
30	DA	15	THR
46	TA	27	GLU
47	UA	71	THR
2	XA	17	ASP
2	XA	129	HIS
3	YA	73	ALA
4	ZA	84	LYS
8	DB	149	PRO
9	EB	26	LYS

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Mol	Chain	Res	Type
10	FB	19	VAL
10	FB	65	ARG
12	HB	57	ARG
17	MB	63	ASP
19	OB	3	VAL
19	OB	77	PRO
22	RB	16	ASN
22	RB	83	GLU
22	RB	87	PRO
23	SB	48	HIS
25	UB	4	HIS
28	XB	62	LEU
30	ZB	14	ILE
30	ZB	15	THR
46	PC	27	GLU
47	QC	71	THR
1	A	56	GLY
2	B	122	PHE
2	B	144	ARG
3	C	23	ASP
5	E	126	PRO
7	G	118	THR
7	G	142	PRO
8	H	70	ALA
10	J	16	ARG
10	J	31	ALA
10	J	49	ARG
10	J	52	GLU
10	J	59	LEU
10	J	106	LEU
10	J	117	GLU
10	J	149	GLU
14	N	4	GLY
14	N	107	ASP
14	N	115	ARG
15	O	93	LYS
15	O	100	VAL
16	P	80	GLN
16	P	100	ARG
19	S	56	PRO
19	S	88	LYS
21	U	13	GLY

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Mol	Chain	Res	Type
23	W	44	LEU
25	Y	35	GLU
26	Z	31	PRO
26	Z	46	HIS
31	EA	171	GLY
38	LA	106	LYS
38	LA	118	GLY
38	LA	122	LYS
40	NA	117	VAL
45	SA	86	VAL
1	WA	56	GLY
2	XA	122	PHE
2	XA	144	ARG
3	YA	23	ASP
5	AB	126	PRO
7	CB	118	THR
7	CB	142	PRO
8	DB	70	ALA
10	FB	13	ASN
10	FB	16	ARG
10	FB	31	ALA
10	FB	49	ARG
10	FB	52	GLU
10	FB	59	LEU
10	FB	106	LEU
10	FB	117	GLU
10	FB	149	GLU
14	JB	4	GLY
14	JB	107	ASP
14	JB	115	ARG
15	KB	93	LYS
15	KB	100	VAL
16	LB	80	GLN
16	LB	100	ARG
19	OB	56	PRO
19	OB	88	LYS
21	QB	13	GLY
23	SB	44	LEU
25	UB	35	GLU
26	VB	31	PRO
26	VB	46	HIS
31	AC	186	LEU

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Mol	Chain	Res	Type
38	HC	106	LYS
38	HC	118	GLY
38	HC	122	LYS
40	JC	117	VAL
45	OC	86	VAL
1	A	33	LEU
1	A	35	LYS
1	A	69	ARG
1	A	146	GLU
1	A	236	GLY
1	A	256	GLY
2	B	52	LEU
2	B	89	ASP
3	C	48	THR
3	C	134	GLY
6	F	134	PRO
6	F	135	GLU
7	G	34	ILE
10	J	13	ASN
10	J	17	LYS
10	J	33	ARG
10	J	47	ASP
11	K	8	LYS
11	K	18	LYS
11	K	62	GLY
11	K	136	ALA
12	L	107	ASP
14	N	82	LEU
16	P	44	LYS
19	S	17	SER
19	S	39	VAL
19	S	78	ALA
20	T	80	ARG
20	T	142	SER
21	U	41	ARG
23	W	43	GLN
28	BA	3	LYS
28	BA	30	ARG
28	BA	35	GLN
28	BA	51	ALA
29	CA	9	GLU
29	CA	14	GLY

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Mol	Chain	Res	Type
29	CA	88	ALA
29	CA	129	GLU
30	DA	4	LYS
30	DA	47	LEU
30	DA	181	ASN
31	EA	208	SER
32	FA	6	PHE
34	HA	7	ALA
36	JA	100	GLY
37	KA	91	PRO
37	KA	92	THR
38	LA	117	ASN
42	PA	23	GLY
42	PA	88	ARG
46	TA	5	LEU
46	TA	28	LYS
47	UA	96	GLY
47	UA	97	ALA
1	WA	33	LEU
1	WA	35	LYS
1	WA	69	ARG
1	WA	146	GLU
1	WA	236	GLY
1	WA	256	GLY
2	XA	52	LEU
2	XA	89	ASP
3	YA	48	THR
3	YA	134	GLY
6	BB	134	PRO
6	BB	135	GLU
7	CB	34	ILE
10	FB	17	LYS
10	FB	33	ARG
10	FB	47	ASP
11	GB	8	LYS
11	GB	18	LYS
11	GB	62	GLY
11	GB	136	ALA
12	HB	107	ASP
14	JB	82	LEU
16	LB	44	LYS
19	OB	17	SER

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Mol	Chain	Res	Type
19	OB	39	VAL
19	OB	78	ALA
20	PB	80	ARG
20	PB	142	SER
21	QB	41	ARG
23	SB	43	GLN
28	XB	30	ARG
28	XB	35	GLN
28	XB	51	ALA
29	YB	9	GLU
29	YB	14	GLY
29	YB	88	ALA
29	YB	129	GLU
30	ZB	4	LYS
30	ZB	47	LEU
30	ZB	181	ASN
32	BC	6	PHE
34	DC	7	ALA
36	FC	100	GLY
37	GC	91	PRO
37	GC	92	THR
38	HC	117	ASN
42	LC	23	GLY
42	LC	88	ARG
46	PC	5	LEU
46	PC	28	LYS
47	QC	96	GLY
47	QC	97	ALA
1	A	31	LYS
1	A	244	ARG
4	D	14	GLU
4	D	177	GLY
7	G	112	MET
7	G	141	ALA
7	G	145	LYS
8	H	152	PRO
11	K	133	ARG
19	S	10	GLY
20	T	79	ARG
20	T	146	ILE
21	U	12	ASN
22	V	12	PRO

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Mol	Chain	Res	Type
22	V	28	GLY
22	V	31	GLY
26	Z	51	GLU
28	BA	20	GLY
30	DA	27	LYS
32	FA	38	GLN
33	GA	39	LYS
36	JA	127	LYS
37	KA	60	ARG
38	LA	90	GLY
41	OA	3	ARG
41	OA	26	ARG
41	OA	27	CYS
46	TA	8	GLY
47	UA	95	ALA
1	WA	31	LYS
1	WA	244	ARG
3	YA	72	ARG
4	ZA	14	GLU
4	ZA	177	GLY
7	CB	112	MET
7	CB	141	ALA
7	CB	145	LYS
8	DB	152	PRO
11	GB	133	ARG
19	OB	10	GLY
20	PB	79	ARG
20	PB	146	ILE
21	QB	12	ASN
22	RB	12	PRO
22	RB	31	GLY
26	VB	51	GLU
28	XB	3	LYS
28	XB	20	GLY
30	ZB	27	LYS
31	AC	168	ARG
31	AC	208	SER
32	BC	38	GLN
33	CC	39	LYS
36	FC	127	LYS
38	HC	90	GLY
46	PC	8	GLY

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Mol	Chain	Res	Type
47	QC	95	ALA
49	SC	54	LYS
49	SC	56	GLU
49	TC	54	LYS
49	TC	56	GLU
2	B	134	ILE
3	C	72	ARG
4	D	87	PRO
4	D	96	ARG
7	G	92	GLY
9	I	29	ASN
9	I	94	ARG
11	K	20	ALA
11	K	81	VAL
12	L	6	SER
14	N	55	ASN
16	P	54	GLY
22	V	10	LYS
22	V	53	VAL
26	Z	18	ARG
28	BA	34	TRP
29	CA	82	ARG
30	DA	53	ALA
30	DA	60	ALA
30	DA	79	ARG
31	EA	18	LYS
32	FA	39	GLY
38	LA	12	ARG
39	MA	45	LYS
41	OA	9	LYS
45	SA	47	THR
47	UA	98	PRO
2	XA	134	ILE
3	YA	66	PRO
4	ZA	87	PRO
4	ZA	96	ARG
7	CB	92	GLY
9	EB	94	ARG
11	GB	20	ALA
11	GB	81	VAL
12	HB	6	SER
14	JB	55	ASN

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Mol	Chain	Res	Type
14	JB	124	ASP
16	LB	54	GLY
17	MB	11	ARG
22	RB	10	LYS
22	RB	28	GLY
22	RB	53	VAL
26	VB	18	ARG
28	XB	34	TRP
29	YB	82	ARG
29	YB	235	SER
30	ZB	60	ALA
30	ZB	79	ARG
32	BC	39	GLY
37	GC	60	ARG
38	HC	12	ARG
39	IC	45	LYS
45	OC	47	THR
49	SC	61	VAL
49	TC	61	VAL
2	B	59	VAL
3	C	66	PRO
11	K	21	THR
11	K	57	HIS
14	N	124	ASP
19	S	96	ILE
19	S	99	CYS
29	CA	228	GLY
29	CA	235	SER
31	EA	23	GLY
35	IA	51	VAL
35	IA	73	ASP
39	MA	26	LEU
46	TA	80	TYR
47	UA	50	GLU
10	FB	56	SER
11	GB	21	THR
19	OB	96	ILE
19	OB	99	CYS
29	YB	228	GLY
30	ZB	53	ALA
30	ZB	81	GLY
35	EC	73	ASP

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Mol	Chain	Res	Type
39	IC	26	LEU
47	QC	98	PRO
1	A	234	GLY
7	G	31	GLY
11	K	15	GLY
19	S	41	GLY
30	DA	81	GLY
1	WA	234	GLY
2	XA	59	VAL
7	CB	31	GLY
11	GB	15	GLY
31	AC	171	GLY
35	EC	51	VAL
2	B	184	VAL
16	P	50	PRO
28	BA	49	VAL
29	CA	130	ARG
31	EA	7	PRO
41	OA	28	GLY
2	XA	184	VAL
16	LB	50	PRO
19	OB	41	GLY
28	XB	49	VAL
29	YB	130	ARG
3	C	24	LEU
7	G	19	PRO
10	J	146	VAL
19	S	49	VAL
30	DA	80	GLY
31	EA	167	GLY
33	GA	96	PRO
47	UA	101	GLY
7	CB	19	PRO
19	OB	49	VAL
30	ZB	80	GLY
33	CC	96	PRO
1	A	79	VAL
10	J	93	GLY
20	T	147	GLY
29	CA	18	GLY
29	CA	72	GLY
31	EA	5	ILE

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Mol	Chain	Res	Type
3	YA	24	LEU
10	FB	93	GLY
10	FB	146	VAL
12	HB	58	GLY
20	PB	147	GLY
24	TB	50	VAL
29	YB	18	GLY
29	YB	72	GLY
49	SC	47	VAL
49	TC	47	VAL
5	E	21	PRO
7	G	5	VAL
12	L	58	GLY
24	X	50	VAL
36	JA	22	GLY
1	WA	79	VAL
7	CB	5	VAL
15	KB	90	VAL
34	DC	82	GLY
36	FC	22	GLY

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	A	213/213 (100%)	192 (90%)	21 (10%)	8 34
1	WA	213/213 (100%)	192 (90%)	21 (10%)	8 34
2	B	165/166 (99%)	145 (88%)	20 (12%)	5 26
2	XA	165/166 (99%)	144 (87%)	21 (13%)	4 24
3	C	161/162 (99%)	145 (90%)	16 (10%)	8 34
3	YA	161/162 (99%)	145 (90%)	16 (10%)	8 34
4	D	155/156 (99%)	133 (86%)	22 (14%)	3 21
4	ZA	155/156 (99%)	133 (86%)	22 (14%)	3 21

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	AB	144/148 (97%)	137 (95%)	7 (5%)	25	58
5	E	144/148 (97%)	137 (95%)	7 (5%)	25	58
6	BB	122/124 (98%)	106 (87%)	16 (13%)	4	23
6	F	122/124 (98%)	106 (87%)	16 (13%)	4	23
7	CB	111/111 (100%)	96 (86%)	15 (14%)	4	23
7	G	111/111 (100%)	96 (86%)	15 (14%)	4	23
8	DB	116/119 (98%)	101 (87%)	15 (13%)	4	24
8	H	116/119 (98%)	101 (87%)	15 (13%)	4	24
9	EB	100/100 (100%)	93 (93%)	7 (7%)	15	48
9	I	100/100 (100%)	93 (93%)	7 (7%)	15	48
10	FB	112/116 (97%)	89 (80%)	23 (20%)	1	7
10	J	112/116 (97%)	89 (80%)	23 (20%)	1	7
11	GB	105/111 (95%)	91 (87%)	14 (13%)	4	23
11	K	105/111 (95%)	91 (87%)	14 (13%)	4	23
12	HB	100/101 (99%)	90 (90%)	10 (10%)	7	34
12	L	100/101 (99%)	90 (90%)	10 (10%)	7	34
13	IB	87/88 (99%)	85 (98%)	2 (2%)	50	75
13	M	87/88 (99%)	85 (98%)	2 (2%)	50	75
14	JB	121/128 (94%)	109 (90%)	12 (10%)	8	34
14	N	121/128 (94%)	109 (90%)	12 (10%)	8	34
15	KB	93/94 (99%)	85 (91%)	8 (9%)	10	41
15	O	93/94 (99%)	85 (91%)	8 (9%)	10	41
16	LB	82/82 (100%)	73 (89%)	9 (11%)	6	31
16	P	82/82 (100%)	72 (88%)	10 (12%)	5	26
17	MB	91/92 (99%)	84 (92%)	7 (8%)	13	44
17	Q	91/92 (99%)	83 (91%)	8 (9%)	10	40
18	NB	74/78 (95%)	68 (92%)	6 (8%)	11	42
18	R	74/78 (95%)	68 (92%)	6 (8%)	11	42
19	OB	84/91 (92%)	78 (93%)	6 (7%)	14	47
19	S	84/91 (92%)	78 (93%)	6 (7%)	14	47
20	PB	162/179 (90%)	151 (93%)	11 (7%)	16	49

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
20	T	162/179 (90%)	151 (93%)	11 (7%)	16	49
21	QB	61/67 (91%)	50 (82%)	11 (18%)	1	10
21	U	61/67 (91%)	51 (84%)	10 (16%)	2	15
22	RB	73/83 (88%)	66 (90%)	7 (10%)	8	36
22	V	73/83 (88%)	66 (90%)	7 (10%)	8	36
23	SB	58/67 (87%)	47 (81%)	11 (19%)	1	9
23	W	58/67 (87%)	47 (81%)	11 (19%)	1	9
24	TB	51/52 (98%)	47 (92%)	4 (8%)	12	43
24	X	51/52 (98%)	47 (92%)	4 (8%)	12	43
25	UB	45/52 (86%)	42 (93%)	3 (7%)	16	49
25	Y	45/52 (86%)	42 (93%)	3 (7%)	16	49
26	VB	43/52 (83%)	36 (84%)	7 (16%)	2	15
26	Z	43/52 (83%)	36 (84%)	7 (16%)	2	15
27	AA	41/42 (98%)	38 (93%)	3 (7%)	14	46
27	WB	41/42 (98%)	38 (93%)	3 (7%)	14	46
28	BA	53/55 (96%)	47 (89%)	6 (11%)	6	29
28	XB	53/55 (96%)	47 (89%)	6 (11%)	6	29
29	CA	202/220 (92%)	188 (93%)	14 (7%)	15	48
29	YB	202/220 (92%)	188 (93%)	14 (7%)	15	48
30	DA	160/188 (85%)	151 (94%)	9 (6%)	21	55
30	ZB	160/188 (85%)	149 (93%)	11 (7%)	15	48
31	AC	180/181 (99%)	166 (92%)	14 (8%)	12	43
31	EA	180/181 (99%)	164 (91%)	16 (9%)	9	39
32	BC	116/123 (94%)	106 (91%)	10 (9%)	10	41
32	FA	116/123 (94%)	106 (91%)	10 (9%)	10	41
33	CC	90/90 (100%)	86 (96%)	4 (4%)	28	62
33	GA	90/90 (100%)	86 (96%)	4 (4%)	28	62
34	DC	126/127 (99%)	120 (95%)	6 (5%)	25	59
34	HA	126/127 (99%)	120 (95%)	6 (5%)	25	59
35	EC	119/119 (100%)	112 (94%)	7 (6%)	19	54
35	IA	119/119 (100%)	112 (94%)	7 (6%)	19	54

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
36	FC	98/99 (99%)	86 (88%)	12 (12%)	5	26
36	JA	98/99 (99%)	86 (88%)	12 (12%)	5	26
37	GC	88/92 (96%)	76 (86%)	12 (14%)	3	22
37	KA	88/92 (96%)	76 (86%)	12 (14%)	3	22
38	HC	86/99 (87%)	76 (88%)	10 (12%)	5	29
38	LA	86/99 (87%)	76 (88%)	10 (12%)	5	29
39	IC	103/109 (94%)	95 (92%)	8 (8%)	12	43
39	MA	103/109 (94%)	95 (92%)	8 (8%)	12	43
40	JC	94/101 (93%)	83 (88%)	11 (12%)	5	28
40	NA	94/101 (93%)	83 (88%)	11 (12%)	5	28
41	KC	49/50 (98%)	48 (98%)	1 (2%)	55	78
41	OA	49/50 (98%)	46 (94%)	3 (6%)	18	52
42	LC	79/80 (99%)	70 (89%)	9 (11%)	5	29
42	PA	79/80 (99%)	70 (89%)	9 (11%)	5	29
43	MC	72/74 (97%)	67 (93%)	5 (7%)	15	48
43	QA	72/74 (97%)	67 (93%)	5 (7%)	15	48
44	NC	94/97 (97%)	85 (90%)	9 (10%)	8	36
44	RA	94/97 (97%)	85 (90%)	9 (10%)	8	36
45	OC	61/77 (79%)	55 (90%)	6 (10%)	8	35
45	SA	61/77 (79%)	55 (90%)	6 (10%)	8	35
46	PC	69/80 (86%)	62 (90%)	7 (10%)	7	34
46	TA	69/80 (86%)	62 (90%)	7 (10%)	7	34
47	QC	76/82 (93%)	72 (95%)	4 (5%)	22	57
47	UA	76/82 (93%)	72 (95%)	4 (5%)	22	57
48	RC	19/22 (86%)	18 (95%)	1 (5%)	22	57
48	VA	19/22 (86%)	18 (95%)	1 (5%)	22	57
49	SC	27/63 (43%)	26 (96%)	1 (4%)	34	65
49	TC	27/63 (43%)	26 (96%)	1 (4%)	34	65
All	All	9662/10204 (95%)	8736 (90%)	926 (10%)	8	36

All (926) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5	LYS
1	A	10	THR
1	A	27	THR
1	A	40	THR
1	A	61	LEU
1	A	94	LEU
1	A	95	LEU
1	A	106	ILE
1	A	150	LYS
1	A	154	LYS
1	A	166	GLN
1	A	192	THR
1	A	193	VAL
1	A	200	ASP
1	A	211	ARG
1	A	229	VAL
1	A	237	GLU
1	A	254	THR
1	A	255	LYS
1	A	268	ARG
1	A	271	ILE
2	B	7	VAL
2	B	9	VAL
2	B	17	ASP
2	B	40	GLU
2	B	41	LYS
2	B	54	GLN
2	B	55	ASN
2	B	57	LYS
2	B	79	ARG
2	B	92	THR
2	B	94	GLU
2	B	111	ARG
2	B	119	ARG
2	B	132	HIS
2	B	160	TYR
2	B	175	VAL
2	B	181	LEU
2	B	184	VAL
2	B	195	LEU
2	B	203	LYS
3	C	9	ILE
3	C	13	SER

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Mol	Chain	Res	Type
3	C	20	LEU
3	C	28	ILE
3	C	51	THR
3	C	65	TRP
3	C	67	GLN
3	C	69	HIS
3	C	78	ILE
3	C	132	VAL
3	C	145	GLU
3	C	169	ASN
3	C	174	VAL
3	C	175	THR
3	C	202	PHE
3	C	206	ILE
4	D	4	ASP
4	D	7	LEU
4	D	33	ARG
4	D	34	LEU
4	D	43	LEU
4	D	47	LYS
4	D	49	ASP
4	D	71	THR
4	D	80	PHE
4	D	86	MET
4	D	88	ILE
4	D	90	LEU
4	D	97	ASP
4	D	98	ARG
4	D	115	ARG
4	D	128	ARG
4	D	139	LEU
4	D	143	GLU
4	D	145	THR
4	D	148	MET
4	D	150	ASP
4	D	155	MET
5	E	24	VAL
5	E	41	MET
5	E	45	VAL
5	E	47	GLU
5	E	59	ARG
5	E	69	ARG

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Mol	Chain	Res	Type
5	E	139	GLN
6	F	1	MET
6	F	2	LYS
6	F	4	ILE
6	F	5	LEU
6	F	6	LEU
6	F	52	ARG
6	F	56	LYS
6	F	67	ARG
6	F	72	LEU
6	F	73	GLU
6	F	87	LYS
6	F	109	ILE
6	F	118	LYS
6	F	139	GLN
6	F	141	LYS
6	F	145	VAL
7	G	2	LYS
7	G	4	VAL
7	G	5	VAL
7	G	12	LEU
7	G	22	PRO
7	G	42	ASN
7	G	65	PHE
7	G	69	THR
7	G	93	ARG
7	G	101	TRP
7	G	102	GLU
7	G	115	LEU
7	G	125	ARG
7	G	136	VAL
7	G	139	VAL
8	H	56	LEU
8	H	57	LEU
8	H	71	MET
8	H	91	GLU
8	H	94	ILE
8	H	110	LEU
8	H	111	GLU
8	H	117	HIS
8	H	119	GLU
8	H	124	HIS

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Mol	Chain	Res	Type
8	H	132	LYS
8	H	135	LEU
8	H	142	ARG
8	H	154	GLN
8	H	160	LYS
9	I	19	ILE
9	I	24	VAL
9	I	39	ILE
9	I	53	LYS
9	I	77	ILE
9	I	99	PHE
9	I	114	ILE
10	J	6	LEU
10	J	16	ARG
10	J	18	ARG
10	J	19	VAL
10	J	32	THR
10	J	42	SER
10	J	50	ARG
10	J	51	PHE
10	J	52	GLU
10	J	57	THR
10	J	61	ARG
10	J	62	LEU
10	J	67	MET
10	J	75	ILE
10	J	86	LYS
10	J	101	VAL
10	J	105	LEU
10	J	106	LEU
10	J	115	LEU
10	J	135	LEU
10	J	139	LYS
10	J	147	LEU
10	J	148	LEU
11	K	9	TYR
11	K	10	ARG
11	K	17	LEU
11	K	22	LYS
11	K	29	PHE
11	K	35	VAL
11	K	45	GLN

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Mol	Chain	Res	Type
11	K	54	MET
11	K	56	ARG
11	K	74	TYR
11	K	96	VAL
11	K	131	ILE
11	K	133	ARG
11	K	135	ASP
12	L	2	ARG
12	L	4	LEU
12	L	12	ARG
12	L	28	LEU
12	L	47	PHE
12	L	60	LEU
12	L	67	LEU
12	L	75	LEU
12	L	79	LEU
12	L	99	LYS
13	M	3	ARG
13	M	57	LYS
14	N	9	LEU
14	N	17	THR
14	N	18	ASP
14	N	22	PHE
14	N	23	ARG
14	N	50	ILE
14	N	58	ASN
14	N	99	LEU
14	N	102	ILE
14	N	112	ARG
14	N	115	ARG
14	N	124	ASP
15	O	8	VAL
15	O	79	PHE
15	O	80	ILE
15	O	88	ILE
15	O	92	ARG
15	O	97	ASP
15	O	101	ARG
15	O	104	GLN
16	P	7	THR
16	P	13	ARG
16	P	18	LEU

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Mol	Chain	Res	Type
16	P	33	VAL
16	P	37	VAL
16	P	61	VAL
16	P	66	ARG
16	P	72	VAL
16	P	80	GLN
16	P	99	ILE
17	Q	11	ARG
17	Q	17	VAL
17	Q	52	GLU
17	Q	82	LEU
17	Q	100	THR
17	Q	107	LEU
17	Q	110	LYS
17	Q	111	HIS
18	R	6	ASP
18	R	28	PHE
18	R	31	HIS
18	R	65	ARG
18	R	66	LEU
18	R	68	ARG
19	S	4	LYS
19	S	6	HIS
19	S	8	LYS
19	S	13	VAL
19	S	75	ILE
19	S	97	ARG
20	T	5	LEU
20	T	35	ARG
20	T	48	PHE
20	T	53	ILE
20	T	71	VAL
20	T	76	LEU
20	T	118	GLN
20	T	141	VAL
20	T	145	GLU
20	T	154	ASP
20	T	162	GLU
21	U	11	LYS
21	U	14	ARG
21	U	21	LEU
21	U	25	ARG

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Mol	Chain	Res	Type
21	U	31	VAL
21	U	32	ARG
21	U	43	THR
21	U	64	ASP
21	U	80	HIS
21	U	84	LEU
22	V	13	ILE
22	V	18	ILE
22	V	40	ARG
22	V	41	ARG
22	V	58	ILE
22	V	75	GLU
22	V	80	LEU
23	W	5	GLU
23	W	9	GLN
23	W	11	GLU
23	W	24	LEU
23	W	30	ARG
23	W	47	ASN
23	W	48	HIS
23	W	49	LYS
23	W	50	ILE
23	W	53	LEU
23	W	60	LEU
24	X	6	VAL
24	X	8	LEU
24	X	37	LEU
24	X	58	VAL
25	Y	26	THR
25	Y	46	CYS
25	Y	51	TYR
26	Z	11	LEU
26	Z	19	ARG
26	Z	29	ASN
26	Z	34	LEU
26	Z	36	LEU
26	Z	47	THR
26	Z	48	VAL
27	AA	4	THR
27	AA	31	LEU
27	AA	46	VAL
28	BA	14	VAL

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Mol	Chain	Res	Type
28	BA	30	ARG
28	BA	48	PHE
28	BA	52	LYS
28	BA	57	ARG
28	BA	64	TYR
29	CA	17	PHE
29	CA	69	LEU
29	CA	96	ARG
29	CA	97	TRP
29	CA	108	ILE
29	CA	145	LEU
29	CA	153	ARG
29	CA	154	LEU
29	CA	158	LEU
29	CA	163	PHE
29	CA	178	ARG
29	CA	193	ASP
29	CA	212	GLN
29	CA	221	LEU
30	DA	5	ILE
30	DA	16	ARG
30	DA	29	TYR
30	DA	79	ARG
30	DA	91	LEU
30	DA	104	GLN
30	DA	107	GLN
30	DA	165	THR
30	DA	196	LEU
31	EA	4	TYR
31	EA	8	VAL
31	EA	9	CYS
31	EA	15	GLU
31	EA	21	LEU
31	EA	34	GLU
31	EA	66	ARG
31	EA	84	LYS
31	EA	94	LEU
31	EA	96	LEU
31	EA	122	ARG
31	EA	127	THR
31	EA	135	LEU
31	EA	141	ARG

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Mol	Chain	Res	Type
31	EA	166	LYS
31	EA	182	LYS
32	FA	5	ASP
32	FA	12	LEU
32	FA	31	LEU
32	FA	47	LYS
32	FA	53	LEU
32	FA	68	GLU
32	FA	76	ILE
32	FA	79	GLU
32	FA	90	VAL
32	FA	137	GLU
33	GA	14	LEU
33	GA	21	LEU
33	GA	37	VAL
33	GA	70	ASP
34	HA	28	ASN
34	HA	63	LYS
34	HA	80	VAL
34	HA	110	GLN
34	HA	118	VAL
34	HA	146	GLU
35	IA	1	MET
35	IA	24	THR
35	IA	51	VAL
35	IA	73	ASP
35	IA	102	ARG
35	IA	119	LEU
35	IA	136	GLU
36	JA	10	ARG
36	JA	14	VAL
36	JA	32	ASP
36	JA	65	VAL
36	JA	79	LEU
36	JA	86	VAL
36	JA	95	LYS
36	JA	104	ARG
36	JA	105	ASP
36	JA	114	TYR
36	JA	121	ARG
36	JA	125	TYR
37	KA	16	LEU

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Mol	Chain	Res	Type
37	KA	22	LYS
37	KA	48	THR
37	KA	49	VAL
37	KA	54	PHE
37	KA	55	LYS
37	KA	57	LYS
37	KA	74	ILE
37	KA	75	ILE
37	KA	84	GLN
37	KA	92	THR
37	KA	96	ILE
38	LA	18	ARG
38	LA	29	ILE
38	LA	32	ILE
38	LA	36	ASP
38	LA	41	THR
38	LA	57	THR
38	LA	80	VAL
38	LA	82	VAL
38	LA	87	THR
38	LA	92	GLU
39	MA	6	ILE
39	MA	7	ASN
39	MA	17	VAL
39	MA	19	LYS
39	MA	26	LEU
39	MA	40	ARG
39	MA	51	LEU
39	MA	65	VAL
40	NA	7	VAL
40	NA	19	LEU
40	NA	48	LEU
40	NA	64	TRP
40	NA	71	ARG
40	NA	87	TYR
40	NA	93	ARG
40	NA	105	THR
40	NA	108	ARG
40	NA	115	LYS
40	NA	116	THR
41	OA	6	LEU
41	OA	8	GLU

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Mol	Chain	Res	Type
41	OA	18	VAL
42	PA	4	THR
42	PA	5	LYS
42	PA	25	THR
42	PA	26	GLU
42	PA	39	LEU
42	PA	44	LYS
42	PA	65	ARG
42	PA	84	LYS
42	PA	87	ILE
43	QA	22	THR
43	QA	45	THR
43	QA	55	ARG
43	QA	67	THR
43	QA	69	THR
44	RA	6	LEU
44	RA	9	VAL
44	RA	38	ARG
44	RA	52	LYS
44	RA	70	ARG
44	RA	73	VAL
44	RA	81	ARG
44	RA	96	GLN
44	RA	100	LYS
45	SA	38	GLU
45	SA	47	THR
45	SA	76	LEU
45	SA	84	LYS
45	SA	87	ARG
45	SA	88	LYS
46	TA	6	LYS
46	TA	7	LYS
46	TA	9	VAL
46	TA	13	ASP
46	TA	29	ARG
46	TA	39	THR
46	TA	66	MET
47	UA	13	LEU
47	UA	62	LEU
47	UA	73	HIS
47	UA	86	ARG
48	VA	5	ASP

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Mol	Chain	Res	Type
1	WA	5	LYS
1	WA	10	THR
1	WA	27	THR
1	WA	40	THR
1	WA	61	LEU
1	WA	94	LEU
1	WA	95	LEU
1	WA	106	ILE
1	WA	150	LYS
1	WA	154	LYS
1	WA	166	GLN
1	WA	192	THR
1	WA	193	VAL
1	WA	200	ASP
1	WA	211	ARG
1	WA	229	VAL
1	WA	237	GLU
1	WA	254	THR
1	WA	255	LYS
1	WA	268	ARG
1	WA	271	ILE
2	XA	7	VAL
2	XA	9	VAL
2	XA	17	ASP
2	XA	40	GLU
2	XA	41	LYS
2	XA	54	GLN
2	XA	55	ASN
2	XA	57	LYS
2	XA	79	ARG
2	XA	92	THR
2	XA	94	GLU
2	XA	111	ARG
2	XA	119	ARG
2	XA	132	HIS
2	XA	160	TYR
2	XA	175	VAL
2	XA	181	LEU
2	XA	184	VAL
2	XA	195	LEU
2	XA	202	LYS
2	XA	203	LYS

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Mol	Chain	Res	Type
3	YA	9	ILE
3	YA	13	SER
3	YA	20	LEU
3	YA	28	ILE
3	YA	51	THR
3	YA	65	TRP
3	YA	67	GLN
3	YA	69	HIS
3	YA	78	ILE
3	YA	132	VAL
3	YA	145	GLU
3	YA	169	ASN
3	YA	174	VAL
3	YA	175	THR
3	YA	202	PHE
3	YA	206	ILE
4	ZA	4	ASP
4	ZA	7	LEU
4	ZA	33	ARG
4	ZA	34	LEU
4	ZA	43	LEU
4	ZA	47	LYS
4	ZA	49	ASP
4	ZA	71	THR
4	ZA	80	PHE
4	ZA	86	MET
4	ZA	88	ILE
4	ZA	90	LEU
4	ZA	97	ASP
4	ZA	98	ARG
4	ZA	115	ARG
4	ZA	128	ARG
4	ZA	139	LEU
4	ZA	143	GLU
4	ZA	145	THR
4	ZA	148	MET
4	ZA	150	ASP
4	ZA	155	MET
5	AB	24	VAL
5	AB	41	MET
5	AB	45	VAL
5	AB	47	GLU

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Mol	Chain	Res	Type
5	AB	59	ARG
5	AB	69	ARG
5	AB	139	GLN
6	BB	1	MET
6	BB	2	LYS
6	BB	4	ILE
6	BB	5	LEU
6	BB	6	LEU
6	BB	52	ARG
6	BB	56	LYS
6	BB	67	ARG
6	BB	72	LEU
6	BB	73	GLU
6	BB	87	LYS
6	BB	109	ILE
6	BB	118	LYS
6	BB	139	GLN
6	BB	141	LYS
6	BB	145	VAL
7	CB	2	LYS
7	CB	4	VAL
7	CB	5	VAL
7	CB	12	LEU
7	CB	22	PRO
7	CB	42	ASN
7	CB	65	PHE
7	CB	69	THR
7	CB	93	ARG
7	CB	101	TRP
7	CB	102	GLU
7	CB	115	LEU
7	CB	125	ARG
7	CB	136	VAL
7	CB	139	VAL
8	DB	56	LEU
8	DB	57	LEU
8	DB	71	MET
8	DB	91	GLU
8	DB	94	ILE
8	DB	110	LEU
8	DB	111	GLU
8	DB	117	HIS

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Mol	Chain	Res	Type
8	DB	119	GLU
8	DB	124	HIS
8	DB	132	LYS
8	DB	135	LEU
8	DB	142	ARG
8	DB	154	GLN
8	DB	160	LYS
9	EB	19	ILE
9	EB	24	VAL
9	EB	39	ILE
9	EB	53	LYS
9	EB	77	ILE
9	EB	99	PHE
9	EB	114	ILE
10	FB	6	LEU
10	FB	16	ARG
10	FB	18	ARG
10	FB	19	VAL
10	FB	32	THR
10	FB	42	SER
10	FB	50	ARG
10	FB	51	PHE
10	FB	52	GLU
10	FB	57	THR
10	FB	61	ARG
10	FB	62	LEU
10	FB	67	MET
10	FB	75	ILE
10	FB	86	LYS
10	FB	101	VAL
10	FB	105	LEU
10	FB	106	LEU
10	FB	115	LEU
10	FB	135	LEU
10	FB	139	LYS
10	FB	147	LEU
10	FB	148	LEU
11	GB	9	TYR
11	GB	10	ARG
11	GB	17	LEU
11	GB	22	LYS
11	GB	29	PHE

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Mol	Chain	Res	Type
11	GB	35	VAL
11	GB	45	GLN
11	GB	54	MET
11	GB	56	ARG
11	GB	74	TYR
11	GB	96	VAL
11	GB	131	ILE
11	GB	133	ARG
11	GB	135	ASP
12	HB	2	ARG
12	HB	4	LEU
12	HB	12	ARG
12	HB	28	LEU
12	HB	47	PHE
12	HB	60	LEU
12	HB	67	LEU
12	HB	75	LEU
12	HB	79	LEU
12	HB	99	LYS
13	IB	3	ARG
13	IB	57	LYS
14	JB	9	LEU
14	JB	17	THR
14	JB	18	ASP
14	JB	22	PHE
14	JB	23	ARG
14	JB	50	ILE
14	JB	58	ASN
14	JB	99	LEU
14	JB	102	ILE
14	JB	112	ARG
14	JB	115	ARG
14	JB	124	ASP
15	KB	8	VAL
15	KB	79	PHE
15	KB	80	ILE
15	KB	88	ILE
15	KB	92	ARG
15	KB	97	ASP
15	KB	101	ARG
15	KB	104	GLN
16	LB	7	THR

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Mol	Chain	Res	Type
16	LB	13	ARG
16	LB	18	LEU
16	LB	33	VAL
16	LB	37	VAL
16	LB	61	VAL
16	LB	66	ARG
16	LB	80	GLN
16	LB	99	ILE
17	MB	11	ARG
17	MB	52	GLU
17	MB	82	LEU
17	MB	100	THR
17	MB	107	LEU
17	MB	110	LYS
17	MB	111	HIS
18	NB	6	ASP
18	NB	28	PHE
18	NB	31	HIS
18	NB	65	ARG
18	NB	66	LEU
18	NB	68	ARG
19	OB	4	LYS
19	OB	6	HIS
19	OB	8	LYS
19	OB	13	VAL
19	OB	75	ILE
19	OB	97	ARG
20	PB	5	LEU
20	PB	35	ARG
20	PB	48	PHE
20	PB	53	ILE
20	PB	71	VAL
20	PB	76	LEU
20	PB	118	GLN
20	PB	141	VAL
20	PB	145	GLU
20	PB	154	ASP
20	PB	162	GLU
21	QB	11	LYS
21	QB	14	ARG
21	QB	21	LEU
21	QB	25	ARG

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Mol	Chain	Res	Type
21	QB	31	VAL
21	QB	32	ARG
21	QB	43	THR
21	QB	50	ASN
21	QB	64	ASP
21	QB	80	HIS
21	QB	84	LEU
22	RB	13	ILE
22	RB	18	ILE
22	RB	40	ARG
22	RB	41	ARG
22	RB	58	ILE
22	RB	75	GLU
22	RB	80	LEU
23	SB	5	GLU
23	SB	9	GLN
23	SB	11	GLU
23	SB	24	LEU
23	SB	30	ARG
23	SB	47	ASN
23	SB	48	HIS
23	SB	49	LYS
23	SB	50	ILE
23	SB	53	LEU
23	SB	60	LEU
24	TB	6	VAL
24	TB	8	LEU
24	TB	37	LEU
24	TB	58	VAL
25	UB	26	THR
25	UB	46	CYS
25	UB	51	TYR
26	VB	11	LEU
26	VB	19	ARG
26	VB	29	ASN
26	VB	34	LEU
26	VB	36	LEU
26	VB	47	THR
26	VB	48	VAL
27	WB	4	THR
27	WB	31	LEU
27	WB	46	VAL

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Mol	Chain	Res	Type
28	XB	14	VAL
28	XB	30	ARG
28	XB	48	PHE
28	XB	52	LYS
28	XB	57	ARG
28	XB	64	TYR
29	YB	17	PHE
29	YB	69	LEU
29	YB	96	ARG
29	YB	97	TRP
29	YB	108	ILE
29	YB	145	LEU
29	YB	153	ARG
29	YB	154	LEU
29	YB	158	LEU
29	YB	163	PHE
29	YB	178	ARG
29	YB	193	ASP
29	YB	212	GLN
29	YB	221	LEU
30	ZB	5	ILE
30	ZB	16	ARG
30	ZB	29	TYR
30	ZB	79	ARG
30	ZB	91	LEU
30	ZB	104	GLN
30	ZB	107	GLN
30	ZB	164	ARG
30	ZB	165	THR
30	ZB	191	THR
30	ZB	196	LEU
31	AC	9	CYS
31	AC	15	GLU
31	AC	21	LEU
31	AC	47	ARG
31	AC	72	GLU
31	AC	73	ARG
31	AC	84	LYS
31	AC	96	LEU
31	AC	107	ARG
31	AC	122	ARG
31	AC	127	THR

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Mol	Chain	Res	Type
31	AC	131	ARG
31	AC	166	LYS
31	AC	207	TYR
32	BC	5	ASP
32	BC	12	LEU
32	BC	31	LEU
32	BC	47	LYS
32	BC	53	LEU
32	BC	68	GLU
32	BC	76	ILE
32	BC	79	GLU
32	BC	90	VAL
32	BC	137	GLU
33	CC	14	LEU
33	CC	21	LEU
33	CC	37	VAL
33	CC	70	ASP
34	DC	28	ASN
34	DC	63	LYS
34	DC	80	VAL
34	DC	110	GLN
34	DC	118	VAL
34	DC	146	GLU
35	EC	1	MET
35	EC	24	THR
35	EC	51	VAL
35	EC	73	ASP
35	EC	102	ARG
35	EC	119	LEU
35	EC	136	GLU
36	FC	10	ARG
36	FC	14	VAL
36	FC	32	ASP
36	FC	65	VAL
36	FC	79	LEU
36	FC	86	VAL
36	FC	95	LYS
36	FC	104	ARG
36	FC	105	ASP
36	FC	114	TYR
36	FC	121	ARG
36	FC	125	TYR

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Mol	Chain	Res	Type
37	GC	16	LEU
37	GC	22	LYS
37	GC	48	THR
37	GC	49	VAL
37	GC	54	PHE
37	GC	55	LYS
37	GC	57	LYS
37	GC	74	ILE
37	GC	75	ILE
37	GC	84	GLN
37	GC	92	THR
37	GC	96	ILE
38	HC	18	ARG
38	HC	29	ILE
38	HC	32	ILE
38	HC	36	ASP
38	HC	41	THR
38	HC	57	THR
38	HC	80	VAL
38	HC	82	VAL
38	HC	87	THR
38	HC	92	GLU
39	IC	6	ILE
39	IC	7	ASN
39	IC	17	VAL
39	IC	19	LYS
39	IC	26	LEU
39	IC	40	ARG
39	IC	51	LEU
39	IC	65	VAL
40	JC	7	VAL
40	JC	19	LEU
40	JC	48	LEU
40	JC	64	TRP
40	JC	71	ARG
40	JC	87	TYR
40	JC	93	ARG
40	JC	105	THR
40	JC	108	ARG
40	JC	115	LYS
40	JC	116	THR
41	KC	6	LEU

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Mol	Chain	Res	Type
42	LC	4	THR
42	LC	5	LYS
42	LC	25	THR
42	LC	26	GLU
42	LC	39	LEU
42	LC	44	LYS
42	LC	65	ARG
42	LC	84	LYS
42	LC	87	ILE
43	MC	22	THR
43	MC	45	THR
43	MC	55	ARG
43	MC	67	THR
43	MC	69	THR
44	NC	6	LEU
44	NC	9	VAL
44	NC	38	ARG
44	NC	52	LYS
44	NC	70	ARG
44	NC	73	VAL
44	NC	81	ARG
44	NC	96	GLN
44	NC	100	LYS
45	OC	38	GLU
45	OC	47	THR
45	OC	76	LEU
45	OC	84	LYS
45	OC	87	ARG
45	OC	88	LYS
46	PC	6	LYS
46	PC	7	LYS
46	PC	9	VAL
46	PC	13	ASP
46	PC	29	ARG
46	PC	39	THR
46	PC	66	MET
47	QC	13	LEU
47	QC	62	LEU
47	QC	73	HIS
47	QC	86	ARG
48	RC	5	ASP
49	SC	48	ILE

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Mol	Chain	Res	Type
49	TC	48	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (32) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	112	GLN
1	A	115	GLN
1	A	227	ASN
2	B	54	GLN
9	I	5	GLN
12	L	13	HIS
14	N	79	HIS
21	U	12	ASN
22	V	19	GLN
26	Z	46	HIS
30	DA	6	HIS
36	JA	29	ASN
39	MA	98	HIS
42	PA	62	GLN
1	WA	112	GLN
1	WA	115	GLN
1	WA	227	ASN
2	XA	54	GLN
3	YA	31	HIS
9	EB	5	GLN
12	HB	13	HIS
14	JB	79	HIS
21	QB	12	ASN
22	RB	19	GLN
26	VB	46	HIS
30	ZB	6	HIS
31	AC	77	ASN
31	AC	123	HIS
36	FC	29	ASN
39	IC	98	HIS
42	LC	53	HIS
42	LC	62	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
50	UC	1503/1509 (99%)	205 (13%)	15 (0%)
50	YC	1503/1509 (99%)	205 (13%)	15 (0%)
51	VC	2878/2893 (99%)	449 (15%)	18 (0%)
51	ZC	2878/2893 (99%)	448 (15%)	17 (0%)
52	AD	118/121 (97%)	11 (9%)	0
52	WC	118/121 (97%)	11 (9%)	0
53	BD	76/77 (98%)	12 (15%)	3 (3%)
53	ED	76/77 (98%)	8 (10%)	0
53	FD	76/77 (98%)	8 (10%)	0
53	XC	76/77 (98%)	11 (14%)	3 (3%)
54	GD	7/27 (25%)	1 (14%)	0
54	HD	7/27 (25%)	1 (14%)	0
All	All	9316/9408 (99%)	1370 (14%)	71 (0%)

All (1370) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
50	UC	6	G
50	UC	8	A
50	UC	9	G
50	UC	32	A
50	UC	39	G
50	UC	47	C
50	UC	48	C
50	UC	51	A
50	UC	88	C
50	UC	109	A
50	UC	116	A
50	UC	120	A
50	UC	121	C
50	UC	131	C
50	UC	144	G
50	UC	169	C
50	UC	174	C
50	UC	181	G
50	UC	182	U
50	UC	188	U
50	UC	195	A
50	UC	197	A
50	UC	210	U
50	UC	220	G
50	UC	244	U
50	UC	247	G

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Mol	Chain	Res	Type
50	UC	251	G
50	UC	267	C
50	UC	281	G
50	UC	289	G
50	UC	315	A
50	UC	321	A
50	UC	328	C
50	UC	329	A
50	UC	332	G
50	UC	345	C
50	UC	346	G
50	UC	347	G
50	UC	352	C
50	UC	353	A
50	UC	354	G
50	UC	367	U
50	UC	372	C
50	UC	384	G
50	UC	389	A
50	UC	397	A
50	UC	398	C
50	UC	406	G
50	UC	412	A
50	UC	414	A
50	UC	422	C
50	UC	423	G
50	UC	424	G
50	UC	429	U
50	UC	452	A
50	UC	453	A
50	UC	465	A
50	UC	496	A
50	UC	497	U
50	UC	500	G
50	UC	508	C
50	UC	509	A
50	UC	510	A
50	UC	511	C
50	UC	518	C
50	UC	527	G
50	UC	530	G
50	UC	531	U

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Mol	Chain	Res	Type
50	UC	532	A
50	UC	533	A
50	UC	547	A
50	UC	559	A
50	UC	561	U
50	UC	572	A
50	UC	573	A
50	UC	576	G
50	UC	577	G
50	UC	607	A
50	UC	653	A
50	UC	665	A
50	UC	688	G
50	UC	722	A
50	UC	749	C
50	UC	755	G
50	UC	774	G
50	UC	777	A
50	UC	792	A
50	UC	793	U
50	UC	794	A
50	UC	815	A
50	UC	817	C
50	UC	819	A
50	UC	828	A
50	UC	841	U
50	UC	842	C
50	UC	843	U
50	UC	848	C
50	UC	853	G
50	UC	859	A
50	UC	872	A
50	UC	873	A
50	UC	902	G
50	UC	905	U
50	UC	914	A
50	UC	927	G
50	UC	934	C
50	UC	935	A
50	UC	941	G
50	UC	960	U
50	UC	961	U

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Mol	Chain	Res	Type
50	UC	969	A
50	UC	971	G
50	UC	974	A
50	UC	976	G
50	UC	977	A
50	UC	978	A
50	UC	979	C
50	UC	991	U
50	UC	992	U
50	UC	993	G
50	UC	994	A
50	UC	1004	A
50	UC	1045	C
50	UC	1054	C
50	UC	1055	A
50	UC	1065	U
50	UC	1081	G
50	UC	1094	G
50	UC	1095	U
50	UC	1101	A
50	UC	1102	A
50	UC	1104	G
50	UC	1118	C
50	UC	1126	U
50	UC	1129	C
50	UC	1130	A
50	UC	1137	C
50	UC	1138	G
50	UC	1139	G
50	UC	1140	C
50	UC	1146	A
50	UC	1147	C
50	UC	1152	A
50	UC	1159	U
50	UC	1171	G
50	UC	1184	G
50	UC	1190	G
50	UC	1193	G
50	UC	1196	U
50	UC	1197	G
50	UC	1200	C
50	UC	1201	A

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Mol	Chain	Res	Type
50	UC	1202	G
50	UC	1212	U
50	UC	1213	A
50	UC	1225	A
50	UC	1233	G
50	UC	1238	A
50	UC	1256	A
50	UC	1257	U
50	UC	1258	G
50	UC	1260	C
50	UC	1270	C
50	UC	1278	U
50	UC	1280	A
50	UC	1281	U
50	UC	1287	A
50	UC	1289	A
50	UC	1300	G
50	UC	1301	U
50	UC	1302	U
50	UC	1305	G
50	UC	1317	C
50	UC	1319	A
50	UC	1320	C
50	UC	1331	G
50	UC	1340	A
50	UC	1346	A
50	UC	1347	G
50	UC	136(B)	C
50	UC	1363	A
50	UC	1364	U
50	UC	1378	C
50	UC	1398	A
50	UC	1419	G
50	UC	1442	G
50	UC	1443	G
50	UC	1446	A
50	UC	1447	G
50	UC	1451	A
50	UC	1452	C
50	UC	1453	G
50	UC	1487	G
50	UC	1492	A

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Mol	Chain	Res	Type
50	UC	1493	A
50	UC	1502	A
50	UC	1503	A
50	UC	1504	G
50	UC	1505	G
50	UC	1506	U
50	UC	1507	A
50	UC	1517	G
50	UC	1520	G
50	UC	1529	G
50	UC	1530	G
51	VC	26	G
51	VC	34	C
51	VC	46	C
51	VC	49	A
51	VC	55	G
51	VC	64	A
51	VC	71	A
51	VC	74	A
51	VC	75	G
51	VC	84	A
51	VC	99	U
51	VC	101	G
51	VC	102	G
51	VC	118	A
51	VC	119	A
51	VC	120	U
51	VC	138	G
51	VC	139	G
51	VC	140	A
51	VC	162	U
51	VC	181	A
51	VC	196	A
51	VC	197	A
51	VC	199	A
51	VC	204	A
51	VC	205	G
51	VC	214	G
51	VC	216	A
51	VC	221	A
51	VC	222	A
51	VC	225	A

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Mol	Chain	Res	Type
51	VC	228	A
51	VC	229	A
51	VC	230	U
51	VC	233	A
51	VC	245	G
51	VC	248	G
51	VC	252	G
51	VC	266	G
51	VC	267	C
51	VC	270(M)	U
51	VC	270(N)	U
51	VC	270(Q)	C
51	VC	270(R)	C
51	VC	271(C)	G
51	VC	271(D)	U
51	VC	271	G
51	VC	274	G
51	VC	275	G
51	VC	278	A
51	VC	279	C
51	VC	302	C
51	VC	310	A
51	VC	322	A
51	VC	323	G
51	VC	324	A
51	VC	329	G
51	VC	330	A
51	VC	352	G
51	VC	353	G
51	VC	364	C
51	VC	372	G
51	VC	386	G
51	VC	387	U
51	VC	396	G
51	VC	411	G
51	VC	412	A
51	VC	444	C
51	VC	448	U
51	VC	449	A
51	VC	456	C
51	VC	470	A
51	VC	475	U

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Mol	Chain	Res	Type
51	VC	480	A
51	VC	481	G
51	VC	491	G
51	VC	505	A
51	VC	508	G
51	VC	509	C
51	VC	513	A
51	VC	518	G
51	VC	528	A
51	VC	530	G
51	VC	531	C
51	VC	532	A
51	VC	546	C
51	VC	563	G
51	VC	572	A
51	VC	573	G
51	VC	575	A
51	VC	595	C
51	VC	599	G
51	VC	603	A
51	VC	609(B)	G
51	VC	614	U
51	VC	615	G
51	VC	616	A
51	VC	617	G
51	VC	618(B)	C
51	VC	620	G
51	VC	621	A
51	VC	627	A
51	VC	637	A
51	VC	645	C
51	VC	646	A
51	VC	653	C
51	VC	654	U
51	VC	655	A
51	VC	664	C
51	VC	668	G
51	VC	670	A
51	VC	686	G
51	VC	730	C
51	VC	738	G
51	VC	748	G

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Mol	Chain	Res	Type
51	VC	776	G
51	VC	782	A
51	VC	784	A
51	VC	785	G
51	VC	789	A
51	VC	792	G
51	VC	805	G
51	VC	812	C
51	VC	819	A
51	VC	827	U
51	VC	828	U
51	VC	832	G
51	VC	846	C
51	VC	847	U
51	VC	848	G
51	VC	859	G
51	VC	886	C
51	VC	888	C
51	VC	890	A
51	VC	896	A
51	VC	897	C
51	VC	910	A
51	VC	915	C
51	VC	917	A
51	VC	919	G
51	VC	932	G
51	VC	941	A
51	VC	946	G
51	VC	959	A
51	VC	961	C
51	VC	974(A)	G
51	VC	974(B)	C
51	VC	975	G
51	VC	983	A
51	VC	996	A
51	VC	999	U
51	VC	1003	G
51	VC	1009	A
51	VC	1011	G
51	VC	1012	U
51	VC	1013	C
51	VC	1022	G

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Mol	Chain	Res	Type
51	VC	1023	U
51	VC	1025	G
51	VC	1026	U
51	VC	1033	U
51	VC	1047	G
51	VC	1048	A
51	VC	1061	U
51	VC	1070	A
51	VC	1072	C
51	VC	1073	A
51	VC	1079	C
51	VC	1080	C
51	VC	1088	A
51	VC	1100	C
51	VC	1112	G
51	VC	1129	A
51	VC	1130	U
51	VC	1132	A
51	VC	1135	C
51	VC	1136	G
51	VC	1139	G
51	VC	114(B)	A
51	VC	1143	A
51	VC	1151	G
51	VC	1155	A
51	VC	1174	A
51	VC	1175	U
51	VC	1195	G
51	VC	1204	A
51	VC	1205	U
51	VC	1210	A
51	VC	1211	U
51	VC	1221	C
51	VC	1227	G
51	VC	1252	G
51	VC	1253	A
51	VC	1256	G
51	VC	1271	G
51	VC	1272	A
51	VC	1275	A
51	VC	1300	U
51	VC	1301	A

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Mol	Chain	Res	Type
51	VC	1302	A
51	VC	1313	U
51	VC	1314	C
51	VC	1329	U
51	VC	1332	G
51	VC	1341	U
51	VC	1349	A
51	VC	1352	U
51	VC	1359	A
51	VC	1360	A
51	VC	1365	A
51	VC	1378	A
51	VC	1380	G
51	VC	1384	A
51	VC	1385	G
51	VC	1386	C
51	VC	1395	A
51	VC	1396	U
51	VC	1397	U
51	VC	1416	G
51	VC	1427	A
51	VC	1428	C
51	VC	144(B)	A
51	VC	1453	A
51	VC	1454	U
51	VC	1455	G
51	VC	1459	G
51	VC	1460	A
51	VC	1467	C
51	VC	1478	G
51	VC	1483	G
51	VC	1493	C
51	VC	1494	A
51	VC	1495	A
51	VC	1497	U
51	VC	1498	C
51	VC	1510	A
51	VC	1534	G
51	VC	1535	U
51	VC	1538	G
51	VC	1540	G
51	VC	1542	G

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Mol	Chain	Res	Type
51	VC	1543	A
51	VC	1545	A
51	VC	1558	A
51	VC	1559	G
51	VC	1566	A
51	VC	1569	A
51	VC	1578	U
51	VC	1579	A
51	VC	1585	C
51	VC	1598	C
51	VC	1603	A
51	VC	1608	A
51	VC	1617	C
51	VC	1618	A
51	VC	1631	A
51	VC	1646	C
51	VC	1647	G
51	VC	1648	C
51	VC	1651	G
51	VC	1674	G
51	VC	1695	G
51	VC	1696	G
51	VC	1703	G
51	VC	1732	A
51	VC	1756	G
51	VC	1762	A
51	VC	1763	G
51	VC	1764	G
51	VC	1772	G
51	VC	1773	A
51	VC	1781	C
51	VC	1784	A
51	VC	1787	A
51	VC	1791	A
51	VC	1800	C
51	VC	1801	G
51	VC	1816	G
51	VC	1829	A
51	VC	1847	A
51	VC	1848	A
51	VC	1878	G
51	VC	1903	G

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Mol	Chain	Res	Type
51	VC	1905	C
51	VC	1906	G
51	VC	1913	A
51	VC	1914	C
51	VC	1929	G
51	VC	1930	G
51	VC	1936	A
51	VC	1939	U
51	VC	1940	U
51	VC	1955	U
51	VC	1963	U
51	VC	1964	G
51	VC	1966	A
51	VC	1967	C
51	VC	1970	A
51	VC	1971	A
51	VC	1972	A
51	VC	1982	C
51	VC	1991	U
51	VC	1992	G
51	VC	1993	U
51	VC	1997	G
51	VC	2023	G
51	VC	2027	G
51	VC	2031	A
51	VC	2032	G
51	VC	2033	A
51	VC	2036	C
51	VC	2043	C
51	VC	2046	G
51	VC	2052	G
51	VC	2055	C
51	VC	2056	G
51	VC	2060	A
51	VC	2061	G
51	VC	2069	G
51	VC	2093	G
51	VC	2111	C
51	VC	2112	G
51	VC	2117	A
51	VC	2119	A
51	VC	2120	G

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Mol	Chain	Res	Type
51	VC	2131	G
51	VC	2133	G
51	VC	2147	G
51	VC	2171	A
51	VC	2173	A
51	VC	2198	A
51	VC	2210	G
51	VC	2211	G
51	VC	2212	A
51	VC	2213	U
51	VC	2215	G
51	VC	2226	C
51	VC	2238	G
51	VC	2239	G
51	VC	2275	C
51	VC	2276	G
51	VC	2278	A
51	VC	2283	C
51	VC	2287	A
51	VC	2288	A
51	VC	2289	G
51	VC	2304	G
51	VC	2305	A
51	VC	2306	C
51	VC	2307	G
51	VC	2308	G
51	VC	2319	G
51	VC	2320	A
51	VC	2321	G
51	VC	2325	G
51	VC	2327	A
51	VC	2334	G
51	VC	2336	A
51	VC	2345	G
51	VC	2346	A
51	VC	2347	C
51	VC	2350	C
51	VC	2358	G
51	VC	2372	G
51	VC	2379	G
51	VC	2383	G
51	VC	2385	C

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Mol	Chain	Res	Type
51	VC	2392	A
51	VC	2402	C
51	VC	2410	G
51	VC	2422	A
51	VC	2423	U
51	VC	2424	C
51	VC	2425	A
51	VC	2428	G
51	VC	2429	G
51	VC	2430	A
51	VC	2434	A
51	VC	2436	G
51	VC	2439	A
51	VC	2441	C
51	VC	2448	A
51	VC	2468	G
51	VC	2469	A
51	VC	2476	A
51	VC	2477	C
51	VC	2478	A
51	VC	2491	U
51	VC	2502	G
51	VC	2505	G
51	VC	2518	A
51	VC	2520	C
51	VC	2529	G
51	VC	2542	A
51	VC	2543	G
51	VC	2554	U
51	VC	2566	A
51	VC	2567	G
51	VC	2572	A
51	VC	2573	C
51	VC	2574	G
51	VC	2577	A
51	VC	2578	G
51	VC	2602	A
51	VC	2603	G
51	VC	2609	U
51	VC	2610	C
51	VC	2611	U
51	VC	2612	C

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Mol	Chain	Res	Type
51	VC	2615	U
51	VC	2621	A
51	VC	2630	G
51	VC	2636	U
51	VC	2646	C
51	VC	2665	A
51	VC	2682	U
51	VC	2689	U
51	VC	2690	C
51	VC	2691	C
51	VC	2702	U
51	VC	2703	C
51	VC	712(B)	A
51	VC	2713	A
51	VC	2726	U
51	VC	2733	A
51	VC	2748	A
51	VC	2757	A
51	VC	2764	A
51	VC	2765	A
51	VC	2766	G
51	VC	2769	C
51	VC	2778	A
51	VC	2779	U
51	VC	2780	G
51	VC	2781	A
51	VC	2790	A
51	VC	2791	C
51	VC	2792	G
51	VC	2797	U
51	VC	2801	A
51	VC	2820	A
51	VC	2821	A
51	VC	2833	G
51	VC	2835	A
51	VC	2849	U
51	VC	2872	G
51	VC	2873	A
51	VC	2886	G
51	VC	2894	G
52	WC	13	A
52	WC	15	A

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Mol	Chain	Res	Type
52	WC	16	G
52	WC	24	G
52	WC	30	C
52	WC	41	U
52	WC	44	G
52	WC	52	A
52	WC	73	A
52	WC	105	G
52	WC	109	G
53	XC	6	G
53	XC	9	G
53	XC	10	G
53	XC	17	C
53	XC	17(A)	U
53	XC	18	G
53	XC	19	G
53	XC	20	U
53	XC	22	G
53	XC	47	U
53	XC	48	C
50	YC	6	G
50	YC	8	A
50	YC	9	G
50	YC	32	A
50	YC	39	G
50	YC	47	C
50	YC	48	C
50	YC	51	A
50	YC	88	C
50	YC	109	A
50	YC	116	A
50	YC	120	A
50	YC	121	C
50	YC	131	C
50	YC	144	G
50	YC	169	C
50	YC	174	C
50	YC	181	G
50	YC	182	U
50	YC	188	U
50	YC	195	A
50	YC	197	A

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Mol	Chain	Res	Type
50	YC	210	U
50	YC	220	G
50	YC	244	U
50	YC	247	G
50	YC	251	G
50	YC	267	C
50	YC	281	G
50	YC	289	G
50	YC	315	A
50	YC	321	A
50	YC	328	C
50	YC	329	A
50	YC	332	G
50	YC	345	C
50	YC	346	G
50	YC	347	G
50	YC	352	C
50	YC	353	A
50	YC	354	G
50	YC	367	U
50	YC	372	C
50	YC	384	G
50	YC	389	A
50	YC	397	A
50	YC	398	C
50	YC	406	G
50	YC	412	A
50	YC	414	A
50	YC	422	C
50	YC	423	G
50	YC	424	G
50	YC	429	U
50	YC	452	A
50	YC	453	A
50	YC	465	A
50	YC	496	A
50	YC	497	U
50	YC	500	G
50	YC	508	C
50	YC	509	A
50	YC	510	A
50	YC	511	C

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Mol	Chain	Res	Type
50	YC	518	C
50	YC	527	G
50	YC	530	G
50	YC	531	U
50	YC	532	A
50	YC	533	A
50	YC	547	A
50	YC	559	A
50	YC	561	U
50	YC	572	A
50	YC	573	A
50	YC	576	G
50	YC	577	G
50	YC	607	A
50	YC	653	A
50	YC	665	A
50	YC	688	G
50	YC	722	A
50	YC	749	C
50	YC	755	G
50	YC	774	G
50	YC	777	A
50	YC	792	A
50	YC	793	U
50	YC	794	A
50	YC	815	A
50	YC	817	C
50	YC	819	A
50	YC	828	A
50	YC	841	U
50	YC	842	C
50	YC	843	U
50	YC	848	C
50	YC	853	G
50	YC	859	A
50	YC	872	A
50	YC	873	A
50	YC	902	G
50	YC	905	U
50	YC	914	A
50	YC	927	G
50	YC	934	C

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Mol	Chain	Res	Type
50	YC	935	A
50	YC	941	G
50	YC	960	U
50	YC	961	U
50	YC	969	A
50	YC	971	G
50	YC	974	A
50	YC	976	G
50	YC	977	A
50	YC	978	A
50	YC	979	C
50	YC	991	U
50	YC	992	U
50	YC	993	G
50	YC	994	A
50	YC	1004	A
50	YC	1045	C
50	YC	1054	C
50	YC	1055	A
50	YC	1065	U
50	YC	1081	G
50	YC	1094	G
50	YC	1095	U
50	YC	1101	A
50	YC	1102	A
50	YC	1104	G
50	YC	1118	C
50	YC	1126	U
50	YC	1129	C
50	YC	1130	A
50	YC	1137	C
50	YC	1138	G
50	YC	1139	G
50	YC	1140	C
50	YC	1146	A
50	YC	1147	C
50	YC	1152	A
50	YC	1159	U
50	YC	1171	G
50	YC	1184	G
50	YC	1190	G
50	YC	1193	G

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Mol	Chain	Res	Type
50	YC	1196	U
50	YC	1197	G
50	YC	1200	C
50	YC	1201	A
50	YC	1202	G
50	YC	1212	U
50	YC	1213	A
50	YC	1225	A
50	YC	1233	G
50	YC	1238	A
50	YC	1256	A
50	YC	1257	U
50	YC	1258	G
50	YC	1260	C
50	YC	1270	C
50	YC	1278	U
50	YC	1280	A
50	YC	1281	U
50	YC	1287	A
50	YC	1289	A
50	YC	1300	G
50	YC	1301	U
50	YC	1302	U
50	YC	1305	G
50	YC	1317	C
50	YC	1319	A
50	YC	1320	C
50	YC	1331	G
50	YC	1340	A
50	YC	1346	A
50	YC	1347	G
50	YC	136(B)	C
50	YC	1363	A
50	YC	1364	U
50	YC	1378	C
50	YC	1398	A
50	YC	1419	G
50	YC	1442	G
50	YC	1443	G
50	YC	1446	A
50	YC	1447	G
50	YC	1451	A

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Mol	Chain	Res	Type
50	YC	1452	C
50	YC	1453	G
50	YC	1487	G
50	YC	1492	A
50	YC	1493	A
50	YC	1502	A
50	YC	1503	A
50	YC	1504	G
50	YC	1505	G
50	YC	1506	U
50	YC	1507	A
50	YC	1517	G
50	YC	1520	G
50	YC	1529	G
50	YC	1530	G
51	ZC	26	G
51	ZC	34	C
51	ZC	46	C
51	ZC	49	A
51	ZC	55	G
51	ZC	64	A
51	ZC	71	A
51	ZC	74	A
51	ZC	75	G
51	ZC	84	A
51	ZC	99	U
51	ZC	101	G
51	ZC	102	G
51	ZC	118	A
51	ZC	119	A
51	ZC	120	U
51	ZC	138	G
51	ZC	139	G
51	ZC	140	A
51	ZC	162	U
51	ZC	181	A
51	ZC	196	A
51	ZC	197	A
51	ZC	199	A
51	ZC	201	C
51	ZC	204	A
51	ZC	205	G

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Mol	Chain	Res	Type
51	ZC	214	G
51	ZC	216	A
51	ZC	221	A
51	ZC	222	A
51	ZC	225	A
51	ZC	228	A
51	ZC	229	A
51	ZC	230	U
51	ZC	233	A
51	ZC	245	G
51	ZC	248	G
51	ZC	252	G
51	ZC	266	G
51	ZC	267	C
51	ZC	270(M)	U
51	ZC	270(N)	U
51	ZC	270(Q)	C
51	ZC	270(R)	C
51	ZC	271(C)	G
51	ZC	271(D)	U
51	ZC	271	G
51	ZC	274	G
51	ZC	275	G
51	ZC	278	A
51	ZC	279	C
51	ZC	302	C
51	ZC	310	A
51	ZC	322	A
51	ZC	323	G
51	ZC	324	A
51	ZC	329	G
51	ZC	330	A
51	ZC	352	G
51	ZC	353	G
51	ZC	364	C
51	ZC	372	G
51	ZC	386	G
51	ZC	387	U
51	ZC	396	G
51	ZC	411	G
51	ZC	412	A
51	ZC	444	C

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Mol	Chain	Res	Type
51	ZC	448	U
51	ZC	449	A
51	ZC	456	C
51	ZC	470	A
51	ZC	475	U
51	ZC	480	A
51	ZC	481	G
51	ZC	491	G
51	ZC	505	A
51	ZC	508	G
51	ZC	509	C
51	ZC	513	A
51	ZC	518	G
51	ZC	528	A
51	ZC	530	G
51	ZC	531	C
51	ZC	532	A
51	ZC	546	C
51	ZC	563	G
51	ZC	572	A
51	ZC	573	G
51	ZC	575	A
51	ZC	595	C
51	ZC	599	G
51	ZC	603	A
51	ZC	609(B)	G
51	ZC	614	U
51	ZC	615	G
51	ZC	616	A
51	ZC	617	G
51	ZC	618(B)	C
51	ZC	620	G
51	ZC	621	A
51	ZC	627	A
51	ZC	637	A
51	ZC	645	C
51	ZC	646	A
51	ZC	653	C
51	ZC	654	U
51	ZC	655	A
51	ZC	664	C
51	ZC	668	G

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Mol	Chain	Res	Type
51	ZC	670	A
51	ZC	686	G
51	ZC	730	C
51	ZC	738	G
51	ZC	748	G
51	ZC	776	G
51	ZC	782	A
51	ZC	784	A
51	ZC	785	G
51	ZC	789	A
51	ZC	792	G
51	ZC	805	G
51	ZC	812	C
51	ZC	819	A
51	ZC	827	U
51	ZC	828	U
51	ZC	832	G
51	ZC	846	C
51	ZC	847	U
51	ZC	848	G
51	ZC	859	G
51	ZC	886	C
51	ZC	888	C
51	ZC	890	A
51	ZC	896	A
51	ZC	897	C
51	ZC	910	A
51	ZC	915	C
51	ZC	917	A
51	ZC	919	G
51	ZC	932	G
51	ZC	941	A
51	ZC	946	G
51	ZC	959	A
51	ZC	961	C
51	ZC	974(A)	G
51	ZC	974(B)	C
51	ZC	975	G
51	ZC	983	A
51	ZC	996	A
51	ZC	999	U
51	ZC	1003	G

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Mol	Chain	Res	Type
51	ZC	1009	A
51	ZC	1011	G
51	ZC	1012	U
51	ZC	1013	C
51	ZC	1022	G
51	ZC	1023	U
51	ZC	1025	G
51	ZC	1026	U
51	ZC	1033	U
51	ZC	1047	G
51	ZC	1048	A
51	ZC	1061	U
51	ZC	1070	A
51	ZC	1072	C
51	ZC	1073	A
51	ZC	1079	C
51	ZC	1080	C
51	ZC	1088	A
51	ZC	1100	C
51	ZC	1112	G
51	ZC	1129	A
51	ZC	1130	U
51	ZC	1132	A
51	ZC	1135	C
51	ZC	1136	G
51	ZC	1139	G
51	ZC	114(B)	A
51	ZC	1143	A
51	ZC	1151	G
51	ZC	1155	A
51	ZC	1174	A
51	ZC	1175	U
51	ZC	1195	G
51	ZC	1204	A
51	ZC	1205	U
51	ZC	1210	A
51	ZC	1211	U
51	ZC	1221	C
51	ZC	1227	G
51	ZC	1252	G
51	ZC	1253	A
51	ZC	1256	G

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Mol	Chain	Res	Type
51	ZC	1271	G
51	ZC	1272	A
51	ZC	1275	A
51	ZC	1300	U
51	ZC	1301	A
51	ZC	1302	A
51	ZC	1313	U
51	ZC	1314	C
51	ZC	1329	U
51	ZC	1332	G
51	ZC	1341	U
51	ZC	1349	A
51	ZC	1352	U
51	ZC	1359	A
51	ZC	1360	A
51	ZC	1365	A
51	ZC	1378	A
51	ZC	1380	G
51	ZC	1384	A
51	ZC	1385	G
51	ZC	1386	C
51	ZC	1395	A
51	ZC	1396	U
51	ZC	1397	U
51	ZC	1416	G
51	ZC	1427	A
51	ZC	1428	C
51	ZC	144(B)	A
51	ZC	1453	A
51	ZC	1454	U
51	ZC	1455	G
51	ZC	1459	G
51	ZC	1460	A
51	ZC	1467	C
51	ZC	1478	G
51	ZC	1483	G
51	ZC	1493	C
51	ZC	1494	A
51	ZC	1495	A
51	ZC	1497	U
51	ZC	1498	C
51	ZC	1510	A

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Mol	Chain	Res	Type
51	ZC	1534	G
51	ZC	1535	U
51	ZC	1538	G
51	ZC	1540	G
51	ZC	1542	G
51	ZC	1543	A
51	ZC	1545	A
51	ZC	1558	A
51	ZC	1559	G
51	ZC	1566	A
51	ZC	1569	A
51	ZC	1578	U
51	ZC	1579	A
51	ZC	1585	C
51	ZC	1598	C
51	ZC	1603	A
51	ZC	1608	A
51	ZC	1617	C
51	ZC	1618	A
51	ZC	1631	A
51	ZC	1646	C
51	ZC	1647	G
51	ZC	1648	C
51	ZC	1651	G
51	ZC	1674	G
51	ZC	1695	G
51	ZC	1696	G
51	ZC	1703	G
51	ZC	1732	A
51	ZC	1756	G
51	ZC	1762	A
51	ZC	1763	G
51	ZC	1764	G
51	ZC	1772	G
51	ZC	1773	A
51	ZC	1781	C
51	ZC	1784	A
51	ZC	1787	A
51	ZC	1791	A
51	ZC	1800	C
51	ZC	1801	G
51	ZC	1816	G

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Mol	Chain	Res	Type
51	ZC	1829	A
51	ZC	1847	A
51	ZC	1848	A
51	ZC	1878	G
51	ZC	1903	G
51	ZC	1905	C
51	ZC	1906	G
51	ZC	1913	A
51	ZC	1914	C
51	ZC	1929	G
51	ZC	1930	G
51	ZC	1936	A
51	ZC	1939	U
51	ZC	1940	U
51	ZC	1955	U
51	ZC	1963	U
51	ZC	1964	G
51	ZC	1966	A
51	ZC	1967	C
51	ZC	1970	A
51	ZC	1971	A
51	ZC	1972	A
51	ZC	1982	C
51	ZC	1991	U
51	ZC	1992	G
51	ZC	1993	U
51	ZC	1997	G
51	ZC	2023	G
51	ZC	2027	G
51	ZC	2031	A
51	ZC	2032	G
51	ZC	2033	A
51	ZC	2036	C
51	ZC	2043	C
51	ZC	2046	G
51	ZC	2052	G
51	ZC	2055	C
51	ZC	2056	G
51	ZC	2060	A
51	ZC	2061	G
51	ZC	2069	G
51	ZC	2093	G

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Mol	Chain	Res	Type
51	ZC	2111	C
51	ZC	2112	G
51	ZC	2117	A
51	ZC	2119	A
51	ZC	2120	G
51	ZC	2131	G
51	ZC	2133	G
51	ZC	2147	G
51	ZC	2171	A
51	ZC	2173	A
51	ZC	2198	A
51	ZC	2210	G
51	ZC	2211	G
51	ZC	2212	A
51	ZC	2213	U
51	ZC	2215	G
51	ZC	2226	C
51	ZC	2238	G
51	ZC	2239	G
51	ZC	2275	C
51	ZC	2276	G
51	ZC	2278	A
51	ZC	2283	C
51	ZC	2287	A
51	ZC	2289	G
51	ZC	2304	G
51	ZC	2305	A
51	ZC	2306	C
51	ZC	2307	G
51	ZC	2308	G
51	ZC	2319	G
51	ZC	2320	A
51	ZC	2321	G
51	ZC	2325	G
51	ZC	2327	A
51	ZC	2334	G
51	ZC	2336	A
51	ZC	2345	G
51	ZC	2346	A
51	ZC	2347	C
51	ZC	2350	C
51	ZC	2372	G

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Mol	Chain	Res	Type
51	ZC	2379	G
51	ZC	2383	G
51	ZC	2385	C
51	ZC	2392	A
51	ZC	2402	C
51	ZC	2410	G
51	ZC	2422	A
51	ZC	2423	U
51	ZC	2424	C
51	ZC	2425	A
51	ZC	2428	G
51	ZC	2429	G
51	ZC	2430	A
51	ZC	2434	A
51	ZC	2436	G
51	ZC	2439	A
51	ZC	2441	C
51	ZC	2448	A
51	ZC	2468	G
51	ZC	2469	A
51	ZC	2476	A
51	ZC	2477	C
51	ZC	2478	A
51	ZC	2491	U
51	ZC	2502	G
51	ZC	2505	G
51	ZC	2518	A
51	ZC	2520	C
51	ZC	2529	G
51	ZC	2542	A
51	ZC	2543	G
51	ZC	2554	U
51	ZC	2566	A
51	ZC	2567	G
51	ZC	2572	A
51	ZC	2573	C
51	ZC	2574	G
51	ZC	2577	A
51	ZC	2578	G
51	ZC	2602	A
51	ZC	2603	G
51	ZC	2609	U

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Mol	Chain	Res	Type
51	ZC	2610	C
51	ZC	2611	U
51	ZC	2612	C
51	ZC	2615	U
51	ZC	2621	A
51	ZC	2630	G
51	ZC	2636	U
51	ZC	2646	C
51	ZC	2665	A
51	ZC	2682	U
51	ZC	2689	U
51	ZC	2690	C
51	ZC	2691	C
51	ZC	2702	U
51	ZC	2703	C
51	ZC	712(B)	A
51	ZC	2713	A
51	ZC	2726	U
51	ZC	2733	A
51	ZC	2748	A
51	ZC	2757	A
51	ZC	2764	A
51	ZC	2765	A
51	ZC	2766	G
51	ZC	2769	C
51	ZC	2778	A
51	ZC	2779	U
51	ZC	2780	G
51	ZC	2781	A
51	ZC	2790	A
51	ZC	2791	C
51	ZC	2792	G
51	ZC	2797	U
51	ZC	2801	A
51	ZC	2820	A
51	ZC	2821	A
51	ZC	2833	G
51	ZC	2835	A
51	ZC	2849	U
51	ZC	2872	G
51	ZC	2873	A
51	ZC	2886	G

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Mol	Chain	Res	Type
51	ZC	2894	G
52	AD	13	A
52	AD	15	A
52	AD	16	G
52	AD	24	G
52	AD	30	C
52	AD	41	U
52	AD	44	G
52	AD	52	A
52	AD	73	A
52	AD	105	G
52	AD	109	G
53	BD	6	G
53	BD	9	G
53	BD	10	G
53	BD	17	C
53	BD	17(A)	U
53	BD	18	G
53	BD	19	G
53	BD	20	U
53	BD	22	G
53	BD	47	U
53	BD	48	C
53	BD	49	G
53	ED	8	U
53	ED	9	G
53	ED	18	G
53	ED	19	G
53	ED	20	U
53	ED	31	G
53	ED	47	U
53	ED	48	C
53	FD	8	U
53	FD	9	G
53	FD	18	G
53	FD	19	G
53	FD	20	U
53	FD	31	G
53	FD	47	U
53	FD	48	C
54	GD	16	A
54	HD	16	A

All (71) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
50	UC	115	G
50	UC	243	A
50	UC	266	G
50	UC	328	C
50	UC	498	A
50	UC	509	A
50	UC	560	U
50	UC	687	A
50	UC	748	C
50	UC	913	A
50	UC	1064	G
50	UC	1101	A
50	UC	1145	C
50	UC	1201	A
50	UC	1504	G
51	VC	271(C)	G
51	VC	278	A
51	VC	363(G)	A
51	VC	474	G
51	VC	479	A
51	VC	512	G
51	VC	775	G
51	VC	784	A
51	VC	1022	G
51	VC	1210	A
51	VC	1300	U
51	VC	1379	A
51	VC	1558	A
51	VC	1695	G
51	VC	1935	G
51	VC	2225	A
51	VC	2756	U
51	VC	2791	C
53	XC	17(A)	U
53	XC	21	A
53	XC	48	C
50	YC	115	G
50	YC	243	A
50	YC	266	G
50	YC	328	C
50	YC	498	A
50	YC	509	A

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Mol	Chain	Res	Type
50	YC	560	U
50	YC	687	A
50	YC	748	C
50	YC	913	A
50	YC	1064	G
50	YC	1101	A
50	YC	1145	C
50	YC	1201	A
50	YC	1504	G
51	ZC	271(C)	G
51	ZC	278	A
51	ZC	363(G)	A
51	ZC	474	G
51	ZC	479	A
51	ZC	512	G
51	ZC	775	G
51	ZC	784	A
51	ZC	1022	G
51	ZC	1210	A
51	ZC	1300	U
51	ZC	1379	A
51	ZC	1558	A
51	ZC	1695	G
51	ZC	2225	A
51	ZC	2756	U
51	ZC	2791	C
53	BD	17(A)	U
53	BD	21	A
53	BD	48	C

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)

Of 2222 ligands modelled in this entry, 2222 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
51	ZC	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	ZC	1142:C	O3'	114(B):A	P	1.75

6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	271/271 (100%)	0.29	12 (4%)	34	22	77, 103, 124, 137	0
1	WA	271/271 (100%)	0.65	24 (8%)	9	5	65, 91, 109, 116	0
2	B	204/206 (99%)	1.39	59 (28%)	0	0	89, 129, 158, 168	0
2	XA	204/206 (99%)	0.55	11 (5%)	25	16	78, 109, 136, 144	0
3	C	202/205 (98%)	0.02	2 (0%)	82	71	80, 116, 144, 151	0
3	YA	202/205 (98%)	0.50	12 (5%)	22	13	66, 100, 127, 140	0
4	D	181/182 (99%)	0.90	41 (22%)	0	0	174, 191, 207, 214	0
4	ZA	181/182 (99%)	1.00	35 (19%)	1	0	144, 163, 186, 199	0
5	AB	174/180 (96%)	0.77	34 (19%)	1	0	113, 134, 153, 164	0
5	E	174/180 (96%)	2.33	86 (49%)	0	0	198, 228, 258, 267	0
6	BB	145/148 (97%)	0.77	22 (15%)	2	1	101, 174, 197, 202	0
6	F	145/148 (97%)	0.96	35 (24%)	0	0	128, 191, 205, 209	0
7	CB	147/147 (100%)	3.99	107 (72%)	0	0	303, 345, 363, 370	0
7	G	147/147 (100%)	4.40	114 (77%)	0	0	327, 363, 391, 395	0
8	DB	137/140 (97%)	0.68	9 (6%)	18	11	89, 108, 131, 136	0
8	H	137/140 (97%)	0.70	16 (11%)	4	3	111, 132, 150, 154	0
9	EB	122/122 (100%)	0.76	11 (9%)	9	5	86, 105, 120, 131	0
9	I	122/122 (100%)	0.59	16 (13%)	3	2	97, 117, 131, 135	0
10	FB	146/150 (97%)	0.58	19 (13%)	3	2	72, 119, 149, 159	0
10	J	146/150 (97%)	1.18	32 (21%)	0	0	92, 141, 171, 179	0
11	GB	134/141 (95%)	2.71	80 (59%)	0	0	126, 143, 167, 205	0
11	K	134/141 (95%)	2.30	60 (44%)	0	0	134, 163, 188, 227	0
12	HB	117/118 (99%)	1.68	41 (35%)	0	0	81, 100, 124, 130	0
12	L	117/118 (99%)	1.77	51 (43%)	0	0	96, 115, 132, 140	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
13	IB	110/112 (98%)	1.32	32 (29%)	0	0	135, 150, 160, 170	0
13	M	110/112 (98%)	1.87	45 (40%)	0	0	157, 177, 190, 195	0
14	JB	137/146 (93%)	0.57	19 (13%)	2	2	104, 124, 183, 205	0
14	N	137/146 (93%)	0.40	14 (10%)	6	4	118, 134, 176, 189	0
15	KB	117/118 (99%)	0.19	2 (1%)	70	56	75, 95, 118, 126	0
15	O	117/118 (99%)	1.02	29 (24%)	0	0	94, 121, 150, 164	0
16	LB	101/101 (100%)	0.49	5 (4%)	28	18	79, 119, 140, 154	0
16	P	101/101 (100%)	-0.16	1 (0%)	82	71	96, 137, 157, 170	0
17	MB	112/113 (99%)	0.38	3 (2%)	54	38	72, 87, 126, 157	0
17	Q	112/113 (99%)	0.40	5 (4%)	33	21	85, 98, 133, 160	0
18	NB	92/96 (95%)	0.72	8 (8%)	10	6	78, 91, 116, 126	0
18	R	92/96 (95%)	0.66	10 (10%)	5	3	107, 118, 137, 142	0
19	OB	100/110 (90%)	1.30	29 (29%)	0	0	94, 108, 172, 189	0
19	S	100/110 (90%)	2.50	52 (52%)	0	0	109, 127, 180, 189	0
20	PB	187/206 (90%)	0.19	16 (8%)	10	6	133, 167, 208, 246	0
20	T	187/206 (90%)	1.13	48 (25%)	0	0	157, 196, 230, 264	0
21	QB	76/85 (89%)	1.70	32 (42%)	0	0	100, 108, 134, 147	0
21	U	76/85 (89%)	1.33	21 (27%)	0	0	122, 135, 155, 182	0
22	RB	88/98 (89%)	0.70	5 (5%)	23	14	80, 103, 135, 148	0
22	V	88/98 (89%)	0.68	8 (9%)	9	5	93, 116, 154, 164	0
23	SB	62/72 (86%)	0.25	5 (8%)	12	7	87, 107, 126, 135	0
23	W	62/72 (86%)	0.99	13 (20%)	1	0	120, 138, 156, 172	0
24	TB	59/60 (98%)	0.36	3 (5%)	28	18	90, 108, 140, 148	0
24	X	59/60 (98%)	1.72	24 (40%)	0	0	106, 123, 144, 154	0
25	UB	52/60 (86%)	0.30	2 (3%)	40	27	77, 98, 141, 152	0
25	Y	52/60 (86%)	0.23	2 (3%)	40	27	91, 117, 148, 156	0
26	VB	44/54 (81%)	5.99	41 (93%)	0	0	245, 251, 259, 267	0
26	Z	44/54 (81%)	4.65	38 (86%)	0	0	238, 256, 273, 278	0
27	AA	48/49 (97%)	0.20	2 (4%)	36	24	80, 86, 105, 120	0
27	WB	48/49 (97%)	0.06	3 (6%)	20	12	68, 72, 91, 103	0
28	BA	63/65 (96%)	2.37	37 (58%)	0	0	102, 115, 155, 169	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
28	XB	63/65 (96%)	2.22	33 (52%)	0	0	92, 102, 143, 159	0
29	CA	234/256 (91%)	0.93	46 (19%)	1	0	163, 189, 211, 222	0
29	YB	234/256 (91%)	1.05	47 (20%)	1	0	186, 215, 233, 245	0
30	DA	206/239 (86%)	0.08	11 (5%)	26	17	162, 177, 204, 208	0
30	ZB	206/239 (86%)	0.36	26 (12%)	3	3	174, 199, 226, 235	0
31	AC	208/209 (99%)	1.26	55 (26%)	0	0	165, 187, 203, 211	0
31	EA	208/209 (99%)	1.23	56 (26%)	0	0	130, 146, 157, 167	0
32	BC	151/162 (93%)	0.32	9 (5%)	21	13	151, 172, 185, 197	0
32	FA	151/162 (93%)	0.27	10 (6%)	18	11	127, 144, 158, 185	0
33	CC	101/101 (100%)	-0.11	1 (0%)	82	71	141, 153, 167, 190	0
33	GA	101/101 (100%)	0.45	13 (12%)	3	2	144, 159, 172, 186	0
34	DC	155/156 (99%)	0.28	18 (11%)	4	3	174, 190, 201, 204	0
34	HA	155/156 (99%)	0.46	17 (10%)	5	3	167, 179, 192, 199	0
35	EC	138/138 (100%)	1.19	28 (20%)	1	0	149, 174, 191, 195	0
35	IA	138/138 (100%)	0.90	23 (16%)	1	1	126, 150, 168, 172	0
36	FC	127/128 (99%)	2.95	79 (62%)	0	0	167, 221, 232, 239	0
36	JA	127/128 (99%)	2.84	76 (59%)	0	0	165, 212, 230, 235	0
37	GC	98/105 (93%)	2.83	63 (64%)	0	0	184, 239, 262, 265	0
37	KA	98/105 (93%)	1.10	27 (27%)	0	0	178, 206, 216, 220	0
38	HC	114/129 (88%)	0.17	10 (8%)	10	6	127, 148, 161, 168	0
38	LA	114/129 (88%)	0.85	17 (14%)	2	1	124, 146, 157, 168	0
39	IC	122/132 (92%)	1.42	39 (31%)	0	0	134, 150, 167, 178	0
39	MA	122/132 (92%)	1.43	39 (31%)	0	0	119, 133, 142, 165	0
40	JC	117/126 (92%)	1.18	27 (23%)	0	0	163, 202, 219, 224	0
40	NA	117/126 (92%)	1.34	32 (27%)	0	0	175, 213, 231, 234	0
41	KC	60/61 (98%)	1.92	26 (43%)	0	0	182, 196, 206, 211	0
41	OA	60/61 (98%)	3.14	32 (53%)	0	0	173, 184, 204, 207	0
42	LC	88/89 (98%)	1.05	16 (18%)	1	0	124, 150, 169, 176	0
42	PA	88/89 (98%)	1.17	17 (19%)	1	0	125, 143, 159, 165	0
43	MC	83/88 (94%)	3.85	62 (74%)	0	0	174, 199, 220, 244	0
43	QA	83/88 (94%)	2.02	41 (49%)	0	0	128, 136, 157, 186	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	NC	99/105 (94%)	0.59	6 (6%) 21 12	124, 150, 162, 168	0
44	RA	99/105 (94%)	1.02	18 (18%) 1 0	115, 130, 137, 143	0
45	OC	70/88 (79%)	0.13	2 (2%) 51 35	146, 161, 181, 183	0
45	SA	70/88 (79%)	1.02	11 (15%) 2 1	142, 159, 180, 183	0
46	PC	78/93 (83%)	2.19	40 (51%) 0 0	188, 203, 212, 213	0
46	TA	78/93 (83%)	2.70	41 (52%) 0 0	197, 218, 226, 228	0
47	QC	99/106 (93%)	2.10	43 (43%) 0 0	167, 185, 204, 207	0
47	UA	99/106 (93%)	1.52	29 (29%) 0 0	128, 144, 164, 166	0
48	RC	24/27 (88%)	5.45	23 (95%) 0 0	191, 201, 218, 233	0
48	VA	24/27 (88%)	5.64	23 (95%) 0 0	191, 197, 210, 222	0
49	SC	30/71 (42%)	2.00	13 (43%) 0 0	228, 232, 244, 245	0
49	TC	30/71 (42%)	2.98	20 (66%) 0 0	260, 274, 286, 287	0
50	UC	1504/1509 (99%)	0.30	85 (5%) 23 14	95, 145, 230, 315	0
50	YC	1504/1509 (99%)	0.59	178 (11%) 4 3	101, 175, 259, 344	0
51	VC	2879/2893 (99%)	0.39	186 (6%) 18 11	76, 116, 271, 416	0
51	ZC	2879/2893 (99%)	0.36	189 (6%) 18 11	57, 98, 250, 374	0
52	AD	119/121 (98%)	-0.22	2 (1%) 70 56	111, 143, 163, 192	0
52	WC	119/121 (98%)	-0.00	4 (3%) 45 31	124, 181, 214, 219	0
53	BD	77/77 (100%)	1.17	16 (20%) 1 0	232, 277, 322, 329	0
53	ED	77/77 (100%)	0.14	5 (6%) 18 11	147, 184, 203, 257	0
53	FD	77/77 (100%)	-0.07	2 (2%) 56 40	143, 173, 192, 240	0
53	XC	77/77 (100%)	0.88	15 (19%) 1 0	207, 268, 290, 301	0
54	GD	8/27 (29%)	4.04	5 (62%) 0 0	138, 198, 252, 253	0
54	HD	8/27 (29%)	4.23	5 (62%) 0 0	144, 202, 243, 244	0
All	All	20988/21736 (96%)	0.82	3440 (16%) 1 1	57, 140, 248, 416	0

All (3440) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
7	CB	17	ALA	24.1
7	G	1	MET	22.9
19	S	52	SER	19.3
7	CB	147	ALA	18.8
7	CB	16	LYS	16.7

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Mol	Chain	Res	Type	RSRZ
26	VB	51	GLU	16.5
26	Z	26	ASN	16.0
7	CB	18	THR	15.4
51	VC	1087	G	15.0
5	E	169	VAL	14.8
51	VC	1067	A	14.7
51	ZC	1077	A	14.1
51	ZC	1078	U	14.0
53	BD	34	C	13.9
50	UC	84	U	13.8
48	RC	17	THR	13.6
51	ZC	1087	G	13.6
53	BD	35	A	13.4
7	G	17	ALA	13.3
43	MC	1	MET	13.3
10	J	150	ALA	13.1
7	G	2	LYS	12.9
26	VB	20	ASN	12.9
48	RC	18	TYR	12.9
53	BD	36	U	12.6
7	G	82	ALA	12.5
43	MC	30	GLY	12.5
26	VB	21	TYR	12.0
48	VA	18	TYR	12.0
51	ZC	2145	C	11.6
48	VA	24	ARG	11.5
7	G	77	LEU	11.5
26	VB	26	ASN	11.5
7	G	100	THR	11.5
26	VB	12	GLU	11.4
51	ZC	1092	C	11.4
51	ZC	1067	A	11.3
7	CB	146	ASP	11.3
7	CB	66	THR	11.2
51	ZC	1091	G	11.2
7	G	99	ILE	11.2
46	PC	81	ARG	11.1
26	VB	19	ARG	11.1
7	G	18	THR	11.1
26	Z	13	CYS	11.0
7	CB	33	ASN	11.0
7	CB	2	LYS	11.0

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Mol	Chain	Res	Type	RSRZ
51	VC	2798	C	10.9
51	VC	1075	C	10.9
51	ZC	1090	U	10.8
41	OA	2	ALA	10.7
7	G	78	ILE	10.7
26	VB	52	VAL	10.7
51	VC	1066	U	10.7
48	VA	17	THR	10.7
7	CB	145	LYS	10.6
11	K	33	GLY	10.4
53	XC	34	C	10.4
46	TA	81	ARG	10.4
51	VC	1089	G	10.4
53	XC	75	C	10.3
7	G	135	GLY	10.3
48	RC	2	GLY	10.3
7	CB	121	GLU	10.2
7	CB	1	MET	10.2
7	CB	3	LYS	10.1
54	HD	13	A	10.1
46	TA	35	SER	10.0
51	VC	1078	U	10.0
7	G	76	TYR	9.9
51	ZC	1093	G	9.9
51	VC	1093	G	9.9
7	G	72	PRO	9.9
37	GC	61	GLU	9.8
26	VB	32	ASN	9.8
50	UC	81	G	9.7
51	VC	1080	C	9.7
43	MC	36	ILE	9.6
7	CB	92	GLY	9.6
26	VB	35	GLU	9.6
51	VC	2135	A	9.6
26	VB	24	GLU	9.5
48	VA	23	PRO	9.5
51	ZC	1089	G	9.5
4	D	2	PRO	9.4
36	FC	8	GLY	9.4
19	S	45	VAL	9.4
51	ZC	1072	C	9.3
2	B	186	GLY	9.3

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Mol	Chain	Res	Type	RSRZ
19	OB	51	VAL	9.2
5	E	159	GLU	9.1
43	MC	29	ASP	9.1
51	VC	2799	A	9.1
36	FC	7	THR	9.1
50	UC	973	G	9.1
26	VB	14	THR	9.1
5	E	161	GLY	9.0
51	ZC	2798	C	9.0
51	VC	1090	U	9.0
48	VA	21	TYR	8.9
36	FC	9	ARG	8.9
36	FC	66	ARG	8.9
47	QC	9	ASN	8.9
46	TA	75	ALA	8.8
26	VB	13	CYS	8.8
51	ZC	2135	A	8.7
43	MC	34	GLU	8.7
19	S	51	VAL	8.7
26	VB	11	LEU	8.6
41	OA	19	ARG	8.6
48	VA	2	GLY	8.6
51	VC	1074	G	8.6
7	G	79	ARG	8.5
51	VC	1065	U	8.5
36	FC	120	ARG	8.4
7	G	141	ALA	8.4
51	VC	1102	C	8.4
51	VC	1088	A	8.4
26	VB	9	LEU	8.4
51	ZC	1080	C	8.3
36	JA	10	ARG	8.3
7	G	74	ALA	8.3
43	MC	8	ARG	8.3
41	OA	12	ARG	8.2
51	ZC	1088	A	8.2
51	ZC	1079	C	8.2
51	VC	2801	A	8.2
11	K	105	GLU	8.2
7	G	83	GLY	8.2
51	VC	2145	C	8.2
51	VC	1072	C	8.1

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Mol	Chain	Res	Type	RSRZ
7	G	62	ASP	8.1
7	G	75	SER	8.1
11	K	31	ASP	8.1
51	ZC	2138	C	8.1
41	KC	2	ALA	8.0
48	RC	25	LYS	8.0
41	OA	21	TYR	8.0
5	E	171	LEU	8.0
48	RC	24	ARG	8.0
11	GB	24	GLY	8.0
43	QA	1	MET	8.0
26	VB	34	LEU	8.0
40	JC	5	ALA	8.0
51	ZC	1073	A	8.0
26	Z	45	LYS	8.0
36	FC	107	ARG	7.9
36	FC	106	ALA	7.9
51	VC	1079	C	7.9
7	G	86	LYS	7.9
51	VC	1086	A	7.9
26	Z	49	HIS	7.9
7	CB	15	GLY	7.8
7	G	85	GLU	7.8
36	JA	105	ASP	7.7
5	E	162	ILE	7.7
19	S	62	GLU	7.7
26	Z	51	GLU	7.7
51	ZC	2799	A	7.7
7	G	136	VAL	7.7
41	OA	8	GLU	7.7
49	TC	43	GLY	7.6
41	OA	14	PRO	7.6
54	HD	14	A	7.6
53	XC	36	U	7.6
7	G	43	ALA	7.5
19	OB	52	SER	7.5
51	VC	1103	A	7.5
51	VC	1077	A	7.5
31	AC	2	GLY	7.5
35	IA	1	MET	7.5
7	G	128	ALA	7.5
51	VC	1058	G	7.4

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Mol	Chain	Res	Type	RSRZ
51	VC	2137	C	7.4
51	VC	1081	U	7.4
48	VA	22	ARG	7.3
54	GD	14	A	7.3
4	ZA	2	PRO	7.3
43	QA	29	ASP	7.3
36	FC	111	ARG	7.3
49	TC	44	CYS	7.2
43	MC	22	THR	7.2
36	JA	15	ALA	7.2
31	AC	3	ARG	7.2
11	GB	92	GLY	7.2
7	G	69	THR	7.2
50	UC	82	U	7.2
26	VB	10	LEU	7.2
5	E	170	ARG	7.2
7	G	81	ALA	7.2
10	J	110	TYR	7.2
36	FC	105	ASP	7.2
51	ZC	1074	G	7.2
40	JC	4	ILE	7.2
36	JA	63	ILE	7.2
48	RC	16	GLY	7.1
36	FC	43	ALA	7.1
26	Z	35	GLU	7.1
7	G	142	PRO	7.1
51	VC	2116	G	7.1
46	TA	77	THR	7.1
53	BD	37	A	7.1
43	MC	32	TYR	7.1
51	VC	2318	G	7.1
11	K	32	PHE	7.1
7	G	102	GLU	7.1
50	UC	974	A	7.1
46	TA	74	PHE	7.1
51	VC	2169	A	7.0
51	VC	2334	G	7.0
7	CB	125	ARG	7.0
26	Z	42	TRP	7.0
53	XC	74	C	7.0
11	GB	91	GLU	7.0
51	VC	2110	G	7.0

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Mol	Chain	Res	Type	RSRZ
43	MC	7	ALA	7.0
29	YB	133	LYS	7.0
51	VC	2136	C	7.0
51	VC	2797	U	7.0
6	F	117	GLU	7.0
47	QC	70	SER	6.9
50	UC	85	U	6.9
53	BD	17(A)	U	6.9
35	EC	25	ASP	6.9
47	QC	18	GLN	6.9
51	VC	2897	U	6.9
50	YC	135	C	6.9
26	VB	22	ALA	6.8
36	FC	65	VAL	6.8
51	VC	1104	C	6.8
46	TA	37	ARG	6.8
5	E	155	SER	6.8
51	ZC	2797	U	6.8
7	CB	19	PRO	6.8
36	JA	106	ALA	6.8
26	VB	49	HIS	6.8
31	AC	135	LEU	6.8
36	JA	26	VAL	6.8
43	MC	31	LYS	6.8
11	GB	33	GLY	6.8
36	JA	14	VAL	6.8
26	Z	14	THR	6.8
26	VB	25	LYS	6.8
13	M	87	PHE	6.8
7	G	96	VAL	6.7
37	GC	47	PHE	6.7
11	K	38	GLU	6.7
54	HD	15	A	6.7
5	E	107	VAL	6.7
51	ZC	2165	G	6.7
5	E	43	VAL	6.7
26	Z	28	ARG	6.7
43	MC	17	TYR	6.7
4	ZA	34	LEU	6.7
7	CB	64	SER	6.7
36	JA	13	ALA	6.7
36	FC	93	ARG	6.7

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Mol	Chain	Res	Type	RSRZ
36	FC	119	ALA	6.7
26	VB	36	LEU	6.7
13	M	13	ARG	6.7
11	K	135	ASP	6.6
7	CB	34	ILE	6.6
36	JA	64	THR	6.6
40	JC	87	TYR	6.6
47	QC	16	HIS	6.6
5	E	173	PRO	6.6
51	ZC	2803	C	6.6
37	GC	9	ARG	6.6
19	OB	53	PRO	6.6
43	MC	35	LYS	6.6
46	TA	69	HIS	6.6
46	PC	42	PRO	6.6
47	QC	15	ARG	6.6
36	JA	33	PHE	6.6
36	FC	108	VAL	6.6
50	YC	1253	G	6.6
41	OA	22	THR	6.6
43	MC	4	ILE	6.5
26	Z	41	PRO	6.5
31	AC	4	TYR	6.5
46	TA	33	THR	6.5
47	UA	65	LYS	6.5
46	TA	40	ILE	6.5
37	GC	64	GLU	6.5
36	JA	65	VAL	6.5
26	Z	32	ASN	6.5
14	N	1	MET	6.5
37	KA	59	SER	6.5
12	L	69	ASP	6.5
47	UA	69	GLY	6.5
7	CB	142	PRO	6.5
12	HB	69	ASP	6.4
41	OA	3	ARG	6.4
50	YC	1352	C	6.4
50	YC	1353	G	6.4
36	JA	37	PHE	6.4
35	IA	54	ASP	6.4
21	U	76	GLY	6.4
28	XB	64	TYR	6.4

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Mol	Chain	Res	Type	RSRZ
31	EA	134	ASP	6.4
36	JA	12	GLU	6.4
54	GD	13	A	6.4
7	CB	113	PRO	6.4
36	JA	66	ARG	6.4
41	OA	30	ALA	6.4
48	RC	10	ARG	6.4
11	K	39	PRO	6.3
37	GC	62	HIS	6.3
51	ZC	2160	G	6.3
51	ZC	1076	C	6.3
13	M	10	ARG	6.3
5	E	41	MET	6.3
34	HA	16	LEU	6.3
43	MC	9	PHE	6.3
7	CB	82	ALA	6.3
29	YB	102	LEU	6.3
41	KC	60	SER	6.3
46	TA	80	TYR	6.3
5	AB	159	GLU	6.3
7	CB	83	GLY	6.3
11	GB	10	ARG	6.3
28	XB	46	ARG	6.3
43	MC	3	LYS	6.3
49	TC	50	THR	6.3
7	G	138	VAL	6.3
41	OA	7	ILE	6.3
41	OA	4	LYS	6.2
54	GD	20	A	6.2
7	G	66	THR	6.2
51	ZC	2116	G	6.2
29	YB	101	MET	6.2
11	GB	32	PHE	6.2
7	CB	32	ALA	6.2
11	GB	105	GLU	6.2
47	QC	14	LYS	6.2
29	CA	119	GLU	6.2
31	EA	102	ASP	6.2
51	ZC	2137	C	6.2
51	ZC	2146	C	6.2
50	YC	975	A	6.2
50	YC	1030	C	6.2

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Mol	Chain	Res	Type	RSRZ
44	NC	8	GLY	6.2
51	VC	1063	G	6.2
7	G	101	TRP	6.2
7	G	89	HIS	6.2
5	AB	157	TYR	6.1
7	G	131	ALA	6.1
46	TA	12	ASP	6.1
20	T	163	LEU	6.1
46	TA	38	SER	6.1
29	CA	118	LEU	6.1
48	RC	23	PRO	6.1
7	G	44	ALA	6.1
37	GC	70	ARG	6.1
43	QA	17	TYR	6.1
46	TA	39	THR	6.1
43	MC	65	GLN	6.1
51	VC	2113	U	6.1
11	GB	132	VAL	6.1
36	FC	110	GLU	6.1
51	ZC	2143	C	6.1
19	S	46	LYS	6.1
19	S	44	ILE	6.1
19	S	47	LYS	6.1
7	G	34	ILE	6.0
47	UA	70	SER	6.0
19	S	53	PRO	6.0
51	VC	1084	A	6.0
43	MC	37	GLY	6.0
36	FC	46	ALA	6.0
13	M	112	PHE	6.0
49	SC	51	TYR	6.0
43	MC	2	VAL	6.0
36	FC	36	TYR	6.0
20	T	171	ILE	6.0
48	VA	25	LYS	6.0
28	BA	54	GLU	6.0
49	TC	49	GLU	6.0
50	YC	1286	A	6.0
53	ED	75	C	6.0
46	PC	69	HIS	6.0
26	VB	50	ARG	6.0
5	AB	160	LYS	6.0

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Mol	Chain	Res	Type	RSRZ
37	GC	63	PHE	6.0
19	S	43	ASN	6.0
36	JA	42	ARG	6.0
5	E	163	TYR	5.9
7	G	95	LYS	5.9
10	J	149	GLU	5.9
28	BA	23	VAL	5.9
46	TA	70	LYS	5.9
37	GC	59	SER	5.9
48	RC	22	ARG	5.9
50	YC	63	C	5.9
13	M	3	ARG	5.9
7	G	33	ASN	5.9
12	L	71	GLN	5.9
11	K	114	ALA	5.9
41	KC	61	TRP	5.9
43	MC	28	ARG	5.9
41	OA	33	VAL	5.9
51	ZC	1068	G	5.9
7	G	14	ALA	5.9
41	OA	29	ARG	5.8
20	T	165	VAL	5.8
37	GC	39	PRO	5.8
12	HB	84	ALA	5.8
45	SA	31	LEU	5.8
19	S	6	HIS	5.8
40	NA	87	TYR	5.8
36	JA	61	ALA	5.8
5	AB	172	LYS	5.8
28	XB	29	LYS	5.8
30	ZB	169	ALA	5.8
37	GC	72	VAL	5.8
11	K	40	ALA	5.8
20	T	169	GLU	5.8
11	GB	12	GLN	5.8
7	G	51	ALA	5.8
41	OA	5	ALA	5.8
7	G	3	LYS	5.8
13	M	9	ARG	5.8
53	BD	76	A	5.8
11	K	91	GLU	5.7
7	G	13	PRO	5.7

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Mol	Chain	Res	Type	RSRZ
6	BB	94	ALA	5.7
26	Z	12	GLU	5.7
5	E	167	GLU	5.7
13	M	30	ARG	5.7
39	IC	55	ALA	5.7
53	ED	76	A	5.7
51	ZC	2795	G	5.7
12	L	8	ARG	5.7
50	YC	1368	G	5.7
7	CB	36	GLU	5.7
5	E	55	PRO	5.7
36	FC	117	HIS	5.6
46	TA	68	GLY	5.6
28	BA	29	LYS	5.6
11	K	34	LEU	5.6
51	VC	2146	C	5.6
5	E	168	PRO	5.6
39	MA	91	ASP	5.6
31	AC	70	ILE	5.6
42	LC	17	ARG	5.6
37	GC	35	SER	5.6
7	CB	144	VAL	5.6
51	VC	1101	U	5.6
48	VA	10	ARG	5.6
36	JA	29	ASN	5.6
50	UC	134	A	5.6
7	CB	78	ILE	5.6
37	GC	74	ILE	5.6
51	VC	2164	C	5.6
29	YB	132	LYS	5.6
19	S	60	PHE	5.6
37	GC	37	PRO	5.6
6	F	72	LEU	5.5
51	ZC	2801	A	5.5
7	CB	31	GLY	5.5
36	FC	12	GLU	5.5
50	YC	1249	C	5.5
50	YC	134	A	5.5
46	TA	32	LYS	5.5
50	YC	136	C	5.5
5	E	111	HIS	5.5
51	VC	1082	U	5.5

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Mol	Chain	Res	Type	RSRZ
37	GC	48	THR	5.5
40	NA	94	ARG	5.5
7	G	80	LYS	5.5
6	F	68	LEU	5.5
7	G	16	LYS	5.5
7	CB	97	GLY	5.5
37	GC	71	LEU	5.5
43	MC	23	ASP	5.5
7	CB	84	LEU	5.5
47	UA	68	LYS	5.5
2	B	204	ALA	5.5
7	CB	35	MET	5.4
35	IA	25	ASP	5.4
26	Z	31	PRO	5.4
51	VC	2165	G	5.4
51	ZC	2334	G	5.4
11	K	104	PHE	5.4
47	QC	71	THR	5.4
31	AC	5	ILE	5.4
50	YC	378	G	5.4
46	TA	11	VAL	5.4
36	JA	9	ARG	5.4
46	PC	12	ASP	5.4
31	EA	3	ARG	5.4
39	IC	29	ALA	5.4
35	EC	24	THR	5.4
34	HA	11	GLN	5.4
43	MC	16	HIS	5.4
31	AC	23	GLY	5.4
26	Z	29	ASN	5.3
19	S	58	GLY	5.3
36	FC	17	VAL	5.3
53	XC	37	A	5.3
7	CB	65	PHE	5.3
30	ZB	166	GLU	5.3
5	AB	156	ALA	5.3
37	GC	6	ILE	5.3
37	GC	46	ARG	5.3
36	JA	36	TYR	5.3
7	CB	128	ALA	5.3
11	GB	40	ALA	5.3
37	GC	8	LEU	5.3

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Mol	Chain	Res	Type	RSRZ
46	TA	36	ARG	5.3
6	BB	108	THR	5.3
7	CB	105	LEU	5.3
19	S	2	ARG	5.3
19	S	50	ARG	5.3
51	ZC	1535	U	5.3
53	XC	17(A)	U	5.3
51	ZC	2139	C	5.3
43	MC	13	HIS	5.3
26	VB	31	PRO	5.3
22	RB	27	GLU	5.3
38	LA	12	ARG	5.3
43	MC	18	ARG	5.3
13	IB	110	LEU	5.3
26	Z	52	VAL	5.3
50	YC	1117	G	5.3
7	G	104	VAL	5.3
24	X	1	MET	5.3
7	CB	61	ALA	5.3
36	JA	11	LYS	5.3
12	HB	70	LEU	5.3
19	S	3	VAL	5.3
26	Z	40	CYS	5.3
41	OA	6	LEU	5.3
46	PC	4	SER	5.3
11	GB	9	TYR	5.3
51	ZC	1094	U	5.3
11	K	115	MET	5.3
11	GB	38	GLU	5.3
41	OA	10	ALA	5.2
6	F	85	GLU	5.2
5	E	103	LEU	5.2
46	TA	49	ILE	5.2
36	JA	45	ALA	5.2
11	K	132	VAL	5.2
40	NA	91	ARG	5.2
40	NA	96	LEU	5.2
43	QA	18	ARG	5.2
35	EC	1	MET	5.2
51	VC	1076	C	5.2
29	YB	27	LYS	5.2
49	TC	42	CYS	5.2

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Mol	Chain	Res	Type	RSRZ
11	K	37	LEU	5.2
35	EC	3	THR	5.2
42	PA	2	PRO	5.2
5	E	112	PRO	5.2
5	AB	174	GLY	5.2
29	YB	71	VAL	5.2
46	TA	41	VAL	5.2
51	ZC	1103	A	5.2
28	BA	64	TYR	5.2
7	G	61	ALA	5.2
37	GC	60	ARG	5.2
48	VA	14	TRP	5.2
23	W	3	LEU	5.2
43	QA	2	VAL	5.1
14	JB	1	MET	5.1
36	FC	104	ARG	5.1
2	B	187	ALA	5.1
7	G	32	ALA	5.1
7	G	108	ALA	5.1
50	YC	84	U	5.1
20	T	135	GLU	5.1
19	OB	50	ARG	5.1
7	G	71	THR	5.1
51	VC	1091	G	5.1
45	SA	32	ARG	5.1
7	CB	12	LEU	5.1
43	MC	59	TRP	5.1
9	I	1	MET	5.1
5	E	151	ILE	5.1
4	D	34	LEU	5.1
41	OA	23	ARG	5.1
31	AC	102	ASP	5.1
51	VC	1383	C	5.1
7	G	73	PRO	5.1
13	M	58	LEU	5.1
38	LA	11	LYS	5.1
7	CB	141	ALA	5.1
37	KA	54	PHE	5.1
51	VC	2168	G	5.1
5	E	156	ALA	5.1
5	AB	161	GLY	5.1
28	XB	32	LEU	5.1

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Mol	Chain	Res	Type	RSRZ
24	X	7	LYS	5.1
7	CB	46	ALA	5.1
11	K	24	GLY	5.1
19	S	41	GLY	5.0
36	JA	34	ASN	5.0
11	GB	70	PRO	5.0
37	GC	73	ASP	5.0
36	FC	33	PHE	5.0
19	S	5	MET	5.0
43	QA	30	GLY	5.0
31	EA	4	TYR	5.0
11	GB	104	PHE	5.0
46	TA	78	ARG	5.0
51	VC	2802	G	5.0
51	ZC	615	G	5.0
51	ZC	2166	G	5.0
43	MC	67	THR	5.0
5	E	105	LEU	5.0
20	T	152	ALA	5.0
43	QA	23	ASP	5.0
7	G	118	THR	5.0
48	VA	9	ARG	5.0
5	E	154	PRO	5.0
29	CA	122	PHE	5.0
36	JA	75	ASP	5.0
7	CB	120	LEU	5.0
10	J	128	HIS	5.0
12	L	70	LEU	5.0
35	IA	2	LEU	5.0
11	K	36	ALA	5.0
12	L	72	ASP	5.0
48	RC	4	GLY	5.0
47	QC	17	ARG	5.0
36	FC	102	LEU	5.0
31	AC	110	PHE	5.0
11	GB	71	ASP	5.0
50	YC	1029	G	5.0
36	JA	46	ALA	5.0
13	M	35	ILE	4.9
53	BD	75	C	4.9
43	QA	59	TRP	4.9
51	ZC	2140	C	4.9

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Mol	Chain	Res	Type	RSRZ
7	CB	47	ASN	4.9
26	Z	47	THR	4.9
23	SB	14	ARG	4.9
47	QC	66	ALA	4.9
5	E	90	LYS	4.9
7	G	65	PHE	4.9
34	DC	79	ARG	4.9
7	G	91	PRO	4.9
29	YB	97	TRP	4.9
51	VC	1094	U	4.9
51	ZC	888	C	4.9
13	IB	37	ALA	4.9
7	G	84	LEU	4.9
36	JA	19	LEU	4.9
39	MA	70	PRO	4.9
4	ZA	33	ARG	4.9
46	TA	71	LEU	4.9
5	E	164	TYR	4.9
10	J	78	PRO	4.9
46	PC	5	LEU	4.9
26	VB	37	ARG	4.9
48	RC	15	ARG	4.9
51	ZC	2136	C	4.9
51	ZC	1536	A	4.9
5	E	53	GLU	4.9
10	J	77	ARG	4.9
41	OA	34	TYR	4.9
2	B	27	LEU	4.9
7	G	42	ASN	4.9
40	NA	97	PRO	4.9
50	UC	135	C	4.9
5	AB	162	ILE	4.9
39	IC	101	ARG	4.8
51	ZC	2125	G	4.8
37	KA	61	GLU	4.8
51	VC	1085	A	4.8
35	EC	54	ASP	4.8
50	UC	87	A	4.8
51	ZC	2167	U	4.8
40	NA	4	ILE	4.8
7	G	134	MET	4.8
39	MA	85	ARG	4.8

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Mol	Chain	Res	Type	RSRZ
11	GB	107	ALA	4.8
7	CB	13	PRO	4.8
48	RC	6	ARG	4.8
36	JA	28	VAL	4.8
37	KA	48	THR	4.8
46	TA	67	VAL	4.8
7	G	139	VAL	4.8
21	U	43	THR	4.8
28	BA	22	VAL	4.8
36	FC	109	VAL	4.8
47	QC	10	LEU	4.8
36	FC	123	PRO	4.8
11	GB	41	TRP	4.8
36	FC	121	ARG	4.8
38	HC	117	ASN	4.8
11	K	106	VAL	4.8
5	E	160	LYS	4.8
10	J	148	LEU	4.8
24	X	34	GLU	4.8
53	XC	76	A	4.8
12	L	59	ASP	4.8
36	FC	11	LYS	4.8
2	B	10	GLY	4.8
47	UA	66	ALA	4.8
31	EA	70	ILE	4.8
6	F	131	LYS	4.8
37	GC	96	ILE	4.7
44	NC	26	GLN	4.7
4	ZA	13	GLU	4.7
38	HC	12	ARG	4.7
46	PC	41	VAL	4.7
43	MC	33	ILE	4.7
21	U	40	GLN	4.7
7	CB	80	LYS	4.7
5	E	174	GLY	4.7
2	B	28	ALA	4.7
11	GB	21	THR	4.7
41	OA	18	VAL	4.7
11	K	133	ARG	4.7
11	GB	103	MET	4.7
19	OB	35	TYR	4.7
12	HB	8	ARG	4.7

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Mol	Chain	Res	Type	RSRZ
47	UA	67	ALA	4.7
5	AB	155	SER	4.7
37	KA	58	ASP	4.7
7	G	19	PRO	4.7
2	B	22	PRO	4.7
50	YC	1354	C	4.7
7	CB	87	GLY	4.7
38	LA	87	THR	4.7
51	ZC	2113	U	4.7
51	ZC	2805	G	4.7
6	F	112	LYS	4.7
13	M	37	ALA	4.7
36	JA	27	THR	4.7
50	YC	1348	U	4.7
51	VC	2138	C	4.7
26	Z	25	LYS	4.7
41	OA	11	LYS	4.7
19	S	65	ALA	4.7
36	JA	32	ASP	4.7
13	M	8	GLU	4.6
36	FC	14	VAL	4.6
28	XB	47	LYS	4.6
7	CB	89	HIS	4.6
36	FC	103	THR	4.6
50	YC	325	A	4.6
7	G	98	ARG	4.6
12	L	68	ARG	4.6
50	UC	230	G	4.6
5	E	19	VAL	4.6
12	HB	68	ARG	4.6
47	QC	67	ALA	4.6
51	ZC	1104	C	4.6
50	YC	107	G	4.6
43	MC	5	ARG	4.6
51	VC	1092	C	4.6
5	E	94	TYR	4.6
19	S	35	TYR	4.6
47	QC	12	ALA	4.6
19	S	38	ILE	4.6
29	CA	101	MET	4.6
24	X	10	LYS	4.6
6	BB	98	ALA	4.6

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Mol	Chain	Res	Type	RSRZ
46	TA	31	ILE	4.6
7	CB	124	ALA	4.6
51	VC	2333	A	4.6
7	G	88	ALA	4.6
7	G	140	GLY	4.5
2	B	5	LEU	4.5
13	IB	112	PHE	4.5
29	YB	122	PHE	4.5
35	EC	9	MET	4.5
40	NA	92	HIS	4.5
40	JC	98	VAL	4.5
47	QC	63	ILE	4.5
48	VA	16	GLY	4.5
5	AB	152	ARG	4.5
7	CB	67	PHE	4.5
29	YB	148	TYR	4.5
43	MC	66	PRO	4.5
5	E	88	LEU	4.5
13	M	88	ASP	4.5
7	G	137	GLU	4.5
26	Z	48	VAL	4.5
50	YC	1289	A	4.5
48	VA	7	ARG	4.5
43	MC	14	ASN	4.5
12	L	65	LEU	4.5
47	QC	64	ASP	4.5
51	VC	2173	A	4.5
12	L	63	ARG	4.5
51	ZC	1081	U	4.5
54	GD	15	A	4.5
43	MC	19	ILE	4.5
12	L	64	ARG	4.5
19	S	17	SER	4.5
50	YC	1257	U	4.5
51	VC	2112	G	4.5
51	ZC	2168	G	4.5
6	F	121	LYS	4.5
49	SC	44	CYS	4.5
53	XC	35	A	4.5
19	S	4	LYS	4.5
45	SA	62	GLU	4.5
50	YC	110	C	4.5

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Mol	Chain	Res	Type	RSRZ
29	YB	96	ARG	4.5
31	AC	134	ASP	4.5
6	F	111	PRO	4.5
10	J	76	LYS	4.5
47	QC	79	ARG	4.5
7	G	45	THR	4.5
11	GB	106	VAL	4.5
12	HB	80	PHE	4.5
51	ZC	2896	C	4.5
5	E	42	ARG	4.4
51	VC	2319	G	4.4
7	CB	85	GLU	4.4
7	G	127	ILE	4.4
2	B	8	LYS	4.4
11	K	99	PRO	4.4
51	ZC	2164	C	4.4
7	G	111	LYS	4.4
5	E	133	VAL	4.4
19	S	42	VAL	4.4
44	RA	7	THR	4.4
13	IB	10	ARG	4.4
50	UC	1317	C	4.4
7	CB	38	VAL	4.4
47	QC	56	MET	4.4
7	CB	140	GLY	4.4
37	GC	38	ILE	4.4
7	CB	4	VAL	4.4
50	YC	1248	A	4.4
36	FC	128	ARG	4.4
38	HC	121	PRO	4.4
47	QC	19	SER	4.4
53	FD	75	C	4.4
41	OA	17	LYS	4.4
36	JA	82	ALA	4.4
35	IA	3	THR	4.4
43	QA	25	ARG	4.4
11	GB	130	LYS	4.4
13	M	12	PHE	4.4
21	U	47	PRO	4.4
11	GB	73	PRO	4.4
19	S	67	LEU	4.4
26	Z	20	ASN	4.4

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Mol	Chain	Res	Type	RSRZ
50	UC	1531	A	4.4
50	YC	380	G	4.4
37	GC	49	VAL	4.4
51	VC	1083	U	4.4
7	CB	62	ASP	4.4
28	BA	28	GLY	4.4
46	PC	71	LEU	4.4
8	H	67	PRO	4.4
53	BD	74	C	4.4
13	IB	13	ARG	4.4
37	GC	45	ARG	4.4
41	KC	41	ARG	4.4
41	KC	37	PHE	4.4
36	JA	62	TYR	4.4
51	ZC	2169	A	4.4
18	R	56	THR	4.4
29	YB	73	THR	4.4
47	QC	59	ALA	4.4
13	M	95	HIS	4.4
11	K	122	GLY	4.4
7	CB	81	ALA	4.3
21	U	74	ARG	4.3
46	PC	70	LYS	4.3
30	ZB	12	LEU	4.3
50	YC	1287	A	4.3
5	AB	107	VAL	4.3
20	T	81	ARG	4.3
36	JA	119	ALA	4.3
50	YC	379	C	4.3
51	VC	1064	C	4.3
12	HB	71	GLN	4.3
26	Z	34	LEU	4.3
51	ZC	2159	G	4.3
21	QB	42	GLY	4.3
40	NA	102	ARG	4.3
7	CB	50	ASP	4.3
7	G	109	LYS	4.3
47	UA	18	GLN	4.3
50	UC	403	C	4.3
7	CB	100	THR	4.3
36	JA	107	ARG	4.3
36	FC	116	LYS	4.3

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Mol	Chain	Res	Type	RSRZ
46	TA	13	ASP	4.3
13	IB	4	LEU	4.3
51	VC	2324	C	4.3
19	OB	68	HIS	4.3
36	FC	71	SER	4.3
51	VC	1071	G	4.3
51	VC	1396	U	4.3
7	CB	63	ARG	4.3
50	YC	998(B)	C	4.3
19	S	39	VAL	4.3
28	XB	28	GLY	4.3
49	TC	45	GLY	4.3
26	Z	39	TYR	4.3
7	G	106	GLU	4.3
42	LC	15	PHE	4.3
39	IC	32	ARG	4.3
19	S	29	GLU	4.3
37	GC	33	GLN	4.3
39	IC	31	PHE	4.3
31	EA	103	ASN	4.3
36	JA	7	THR	4.3
47	QC	8	ARG	4.3
21	QB	78	TYR	4.3
4	D	32	PRO	4.3
7	G	41	PHE	4.3
36	FC	94	ALA	4.3
51	ZC	2115	G	4.3
31	EA	137	SER	4.3
50	UC	133	U	4.3
50	UC	1257	U	4.3
2	B	25	VAL	4.3
46	PC	40	ILE	4.3
50	UC	1492	A	4.3
29	CA	121	LEU	4.3
41	KC	59	ALA	4.3
50	YC	1371	G	4.3
7	G	37	PHE	4.3
37	KA	73	ASP	4.3
11	K	10	ARG	4.3
16	LB	53	GLU	4.3
21	QB	40	GLN	4.3
53	FD	76	A	4.3

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Mol	Chain	Res	Type	RSRZ
11	GB	99	PRO	4.3
48	RC	14	TRP	4.3
29	CA	133	LYS	4.3
44	RA	58	GLU	4.2
7	CB	37	PHE	4.2
4	ZA	176	LEU	4.2
2	B	9	VAL	4.2
7	CB	20	ALA	4.2
33	GA	101	ALA	4.2
37	GC	94	VAL	4.2
7	G	130	SER	4.2
20	T	80	ARG	4.2
34	DC	81	GLY	4.2
51	ZC	1835	G	4.2
26	Z	38	LYS	4.2
30	ZB	165	THR	4.2
10	FB	63	PRO	4.2
20	PB	175	VAL	4.2
40	NA	98	VAL	4.2
39	MA	84	ILE	4.2
29	CA	152	PHE	4.2
7	G	125	ARG	4.2
36	FC	64	THR	4.2
40	JC	57	ARG	4.2
43	QA	8	ARG	4.2
51	ZC	1969	A	4.2
7	CB	133	SER	4.2
46	PC	13	ASP	4.2
50	YC	1369	C	4.2
12	HB	64	ARG	4.2
40	NA	99	ARG	4.2
28	XB	44	LYS	4.2
11	K	123	HIS	4.2
31	AC	24	GLU	4.2
5	E	152	ARG	4.2
43	MC	26	ARG	4.2
40	NA	95	GLY	4.2
51	ZC	34	C	4.2
43	MC	6	LEU	4.2
5	E	113	VAL	4.2
11	K	92	GLY	4.2
35	EC	132	GLU	4.2

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Mol	Chain	Res	Type	RSRZ
51	VC	2147	G	4.2
11	GB	8	LYS	4.2
7	G	97	GLY	4.2
11	K	137	TYR	4.2
20	T	173	ALA	4.2
29	CA	115	LEU	4.2
43	MC	21	VAL	4.2
11	GB	11	LYS	4.2
49	SC	37	PRO	4.2
11	GB	129	THR	4.2
29	CA	214	ILE	4.2
46	TA	51	VAL	4.2
43	QA	31	LYS	4.1
9	EB	1	MET	4.1
21	QB	39	ARG	4.1
51	ZC	2142	C	4.1
49	TC	51	TYR	4.1
37	KA	5	ARG	4.1
48	VA	6	ARG	4.1
34	HA	85	TYR	4.1
51	ZC	2180	U	4.1
7	CB	104	VAL	4.1
12	L	17	ARG	4.1
37	GC	5	ARG	4.1
2	B	29	GLY	4.1
39	IC	113	LYS	4.1
5	AB	171	LEU	4.1
11	K	129	THR	4.1
26	VB	48	VAL	4.1
28	BA	15	LYS	4.1
21	QB	76	GLY	4.1
36	FC	37	PHE	4.1
4	ZA	39	ILE	4.1
5	E	87	LEU	4.1
11	K	100	GLY	4.1
11	K	90	VAL	4.1
39	IC	67	ALA	4.1
46	TA	76	PRO	4.1
47	QC	60	GLU	4.1
41	OA	9	LYS	4.1
51	ZC	1095	A	4.1
43	QA	11	SER	4.1

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Mol	Chain	Res	Type	RSRZ
4	D	178	PHE	4.1
11	GB	89	ASN	4.1
7	G	143	GLU	4.1
13	IB	87	PHE	4.1
37	GC	44	VAL	4.1
53	XC	56	C	4.1
6	BB	140	LEU	4.1
5	E	108	GLY	4.1
38	HC	118	GLY	4.1
47	UA	64	ASP	4.1
51	VC	2335	A	4.1
40	JC	2	ALA	4.1
51	ZC	2804	C	4.1
34	HA	8	GLU	4.1
6	BB	106	GLY	4.1
20	T	137	ILE	4.0
42	PA	3	ILE	4.0
50	YC	136(A)	C	4.0
7	CB	114	ASP	4.0
5	E	51	ARG	4.0
5	E	115	VAL	4.0
39	MA	83	LEU	4.0
48	RC	19	GLY	4.0
13	M	86	ALA	4.0
36	JA	43	ALA	4.0
51	ZC	12	U	4.0
5	E	52	VAL	4.0
11	GB	72	LYS	4.0
41	KC	58	LYS	4.0
5	E	110	SER	4.0
43	MC	41	PRO	4.0
7	G	117	THR	4.0
21	U	75	LEU	4.0
35	EC	2	LEU	4.0
43	MC	25	ARG	4.0
46	PC	49	ILE	4.0
20	T	150	LEU	4.0
26	Z	37	ARG	4.0
29	YB	144	ARG	4.0
11	GB	30	GLY	4.0
47	UA	72	LEU	4.0
50	YC	221	C	4.0

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Mol	Chain	Res	Type	RSRZ
29	YB	98	LEU	4.0
50	UC	1286	A	4.0
50	YC	653	A	4.0
13	M	60	GLY	4.0
43	MC	39	TYR	4.0
36	JA	17	VAL	4.0
5	E	18	GLU	4.0
41	OA	32	SER	4.0
49	TC	60	GLU	4.0
2	B	13	ARG	4.0
43	MC	20	VAL	4.0
31	AC	7	PRO	4.0
3	C	207	GLY	4.0
51	ZC	2477	C	4.0
53	BD	17	C	4.0
10	J	65	ARG	4.0
20	PB	81	ARG	4.0
31	EA	115	ARG	4.0
12	HB	83	ILE	4.0
26	VB	23	THR	4.0
29	YB	135	GLN	4.0
39	IC	111	ASP	4.0
51	ZC	2134	A	4.0
29	CA	112	VAL	4.0
5	AB	158	HIS	4.0
29	YB	141	GLU	4.0
36	JA	38	GLN	4.0
4	D	146	TYR	4.0
11	GB	19	GLY	4.0
4	ZA	90	LEU	4.0
21	QB	41	ARG	4.0
39	MA	49	SER	4.0
21	QB	46	LYS	4.0
51	ZC	1933	G	3.9
4	D	85	GLY	3.9
11	K	21	THR	3.9
41	OA	15	LYS	3.9
48	RC	3	LYS	3.9
17	Q	1	MET	3.9
29	CA	202	PRO	3.9
50	YC	1370	G	3.9
51	VC	2125	G	3.9

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Mol	Chain	Res	Type	RSRZ
51	ZC	2335	A	3.9
6	F	86	THR	3.9
43	MC	24	ALA	3.9
19	S	37	VAL	3.9
12	L	9	LYS	3.9
43	MC	12	LYS	3.9
50	YC	322	C	3.9
7	G	132	ARG	3.9
19	S	64	GLU	3.9
28	XB	30	ARG	3.9
46	PC	39	THR	3.9
47	QC	11	SER	3.9
47	QC	72	LEU	3.9
42	PA	62	GLN	3.9
11	GB	133	ARG	3.9
12	HB	63	ARG	3.9
36	FC	113	LYS	3.9
10	FB	7	ARG	3.9
41	KC	57	ARG	3.9
50	UC	994	A	3.9
11	GB	69	PHE	3.9
20	T	118	GLN	3.9
50	UC	1030	C	3.9
17	Q	2	GLU	3.9
6	BB	88	ILE	3.9
36	JA	81	ILE	3.9
7	CB	110	GLN	3.9
11	GB	97	VAL	3.9
31	EA	2	GLY	3.9
24	X	8	LEU	3.9
34	HA	36	LYS	3.9
11	GB	93	TYR	3.9
34	DC	82	GLY	3.9
11	K	107	ALA	3.9
43	QA	22	THR	3.9
13	M	89	ARG	3.9
2	B	24	THR	3.9
23	W	27	GLU	3.9
36	JA	71	SER	3.9
36	FC	82	ALA	3.9
10	FB	65	ARG	3.9
47	QC	80	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
37	KA	55	LYS	3.9
43	MC	27	LYS	3.9
50	YC	85	U	3.9
20	PB	80	ARG	3.9
11	K	19	GLY	3.9
50	YC	111	G	3.9
11	K	97	VAL	3.9
13	M	4	LEU	3.9
20	T	172	ALA	3.9
37	GC	66	ARG	3.8
7	G	133	SER	3.8
36	JA	72	GLY	3.8
48	RC	11	GLY	3.8
31	AC	108	LEU	3.8
28	XB	33	ASN	3.8
49	SC	38	ALA	3.8
46	TA	73	GLU	3.8
7	CB	68	VAL	3.8
39	IC	30	PRO	3.8
14	JB	115	ARG	3.8
20	T	162	GLU	3.8
5	E	131	VAL	3.8
31	EA	139	ARG	3.8
41	OA	20	ALA	3.8
51	VC	2160	G	3.8
5	E	123	PHE	3.8
26	Z	24	GLU	3.8
40	JC	16	ASP	3.8
7	CB	30	HIS	3.8
13	M	28	VAL	3.8
29	YB	118	LEU	3.8
39	IC	108	GLY	3.8
31	EA	110	PHE	3.8
7	CB	45	THR	3.8
50	UC	132	C	3.8
40	JC	8	GLU	3.8
5	E	101	ARG	3.8
41	KC	16	PHE	3.8
22	V	27	GLU	3.8
11	GB	25	ASP	3.8
51	ZC	2144	U	3.8
36	FC	10	ARG	3.8

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Mol	Chain	Res	Type	RSRZ
40	NA	88	ARG	3.8
40	JC	88	ARG	3.8
51	VC	2143	C	3.8
51	VC	1059	G	3.8
51	ZC	2112	G	3.8
51	VC	229	A	3.8
20	T	79	ARG	3.8
41	OA	16	PHE	3.8
20	T	168	GLU	3.8
13	M	59	LYS	3.8
29	CA	137	ARG	3.8
30	DA	155	GLY	3.8
46	PC	68	GLY	3.8
47	QC	23	ARG	3.8
20	T	170	THR	3.8
7	G	30	HIS	3.8
7	G	46	ALA	3.8
15	O	55	ARG	3.8
51	VC	1073	A	3.8
51	VC	1573	G	3.8
51	VC	1930	G	3.8
12	HB	17	ARG	3.8
13	M	15	ARG	3.8
31	EA	118	ARG	3.8
41	KC	34	TYR	3.8
31	AC	126	ILE	3.8
34	DC	20	ASP	3.8
51	VC	2166	G	3.8
51	VC	2317	C	3.8
21	QB	53	MET	3.8
37	GC	65	LEU	3.8
8	DB	123	GLU	3.8
51	ZC	2802	G	3.7
29	CA	71	VAL	3.7
36	FC	114	TYR	3.7
46	TA	52	TYR	3.7
51	VC	2896	C	3.7
30	ZB	168	ALA	3.7
43	QA	28	ARG	3.7
14	JB	2	ASN	3.7
2	B	7	VAL	3.7
10	FB	64	LYS	3.7

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Mol	Chain	Res	Type	RSRZ
11	K	130	LYS	3.7
34	DC	36	LYS	3.7
39	IC	27	LYS	3.7
21	U	77	ARG	3.7
39	MA	98	HIS	3.7
50	YC	385	C	3.7
51	ZC	2174	C	3.7
4	ZA	137	GLU	3.7
35	EC	61	VAL	3.7
39	MA	27	LYS	3.7
47	UA	71	THR	3.7
11	GB	135	ASP	3.7
36	FC	13	ALA	3.7
39	IC	70	PRO	3.7
43	QA	56	ALA	3.7
21	U	78	TYR	3.7
48	VA	20	LYS	3.7
11	GB	39	PRO	3.7
37	GC	11	PHE	3.7
5	AB	90	LYS	3.7
11	K	118	LEU	3.7
10	J	67	MET	3.7
39	IC	122	LYS	3.7
11	GB	17	LEU	3.7
12	HB	72	ASP	3.7
34	DC	33	ASP	3.7
43	QA	65	GLN	3.7
48	VA	13	ILE	3.7
7	CB	14	ALA	3.7
42	PA	59	MET	3.7
48	VA	12	LYS	3.7
31	EA	138	TYR	3.7
34	DC	32	ARG	3.7
49	TC	46	ASN	3.7
37	GC	23	ILE	3.7
5	E	172	LYS	3.7
12	L	22	ARG	3.7
41	OA	36	PHE	3.7
11	GB	68	ILE	3.7
42	PA	25	THR	3.7
40	NA	27	LYS	3.7
7	CB	60	TYR	3.7

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Mol	Chain	Res	Type	RSRZ
11	GB	74	TYR	3.7
13	IB	7	TYR	3.7
50	UC	136	C	3.7
39	IC	112	ARG	3.7
40	NA	93	ARG	3.7
39	IC	28	GLY	3.7
41	KC	36	PHE	3.7
2	B	188	VAL	3.7
36	JA	111	ARG	3.7
46	PC	48	THR	3.7
44	RA	24	GLU	3.7
51	ZC	1075	C	3.7
50	UC	1318	A	3.7
51	VC	2795	G	3.7
7	CB	77	LEU	3.7
7	G	15	GLY	3.6
34	DC	35	LYS	3.6
38	LA	119	CYS	3.6
30	ZB	153	VAL	3.6
36	JA	128	ARG	3.6
50	YC	136(B)	C	3.6
51	VC	2162	G	3.6
41	KC	14	PRO	3.6
46	PC	78	ARG	3.6
28	XB	43	GLN	3.6
4	ZA	160	VAL	3.6
50	YC	1366	C	3.6
51	ZC	1932	A	3.6
51	ZC	2161	C	3.6
7	CB	101	TRP	3.6
11	GB	20	ALA	3.6
28	BA	32	LEU	3.6
13	M	17	ARG	3.6
51	ZC	2120	G	3.6
7	G	52	ILE	3.6
26	VB	30	THR	3.6
29	CA	102	LEU	3.6
36	JA	41	VAL	3.6
20	PB	176	PRO	3.6
43	QA	36	ILE	3.6
50	YC	61	G	3.6
7	G	144	VAL	3.6

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Mol	Chain	Res	Type	RSRZ
11	GB	34	LEU	3.6
31	AC	18	LYS	3.6
46	TA	53	ASN	3.6
21	U	45	PHE	3.6
2	B	23	VAL	3.6
36	FC	112	LYS	3.6
13	M	110	LEU	3.6
37	GC	58	ASP	3.6
2	B	14	ILE	3.6
4	D	74	LYS	3.6
23	W	15	LYS	3.6
23	SB	12	GLU	3.6
26	VB	27	LYS	3.6
50	YC	1112	C	3.6
11	GB	36	ALA	3.6
31	EA	66	ARG	3.6
11	K	98	LYS	3.6
24	X	6	VAL	3.6
13	M	7	TYR	3.6
40	NA	100	GLY	3.6
50	YC	60	A	3.6
10	FB	70	GLN	3.6
39	MA	54	VAL	3.6
4	ZA	7	LEU	3.6
10	J	50	ARG	3.6
51	ZC	2162	G	3.6
5	E	92	ILE	3.6
8	H	68	ASN	3.6
10	J	75	ILE	3.6
51	VC	2336	A	3.6
51	ZC	1086	A	3.6
12	L	67	LEU	3.6
42	LC	48	LYS	3.6
43	MC	71	ARG	3.6
50	YC	65	U	3.6
54	GD	19	U	3.6
26	Z	43	CYS	3.6
29	YB	152	PHE	3.6
38	HC	120	ARG	3.5
38	HC	122	LYS	3.5
50	YC	104	G	3.5
6	BB	120	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
36	FC	74	ILE	3.5
3	YA	156	LEU	3.5
36	FC	79	LEU	3.5
48	VA	8	THR	3.5
28	XB	11	LYS	3.5
11	K	131	ILE	3.5
12	HB	66	VAL	3.5
39	MA	99	ILE	3.5
7	CB	76	TYR	3.5
36	FC	75	ASP	3.5
50	YC	1367	C	3.5
11	GB	90	VAL	3.5
40	JC	10	PRO	3.5
4	D	13	GLU	3.5
19	OB	17	SER	3.5
6	BB	107	ILE	3.5
34	DC	39	ALA	3.5
36	FC	92	TYR	3.5
7	CB	96	VAL	3.5
9	EB	25	LEU	3.5
31	EA	135	LEU	3.5
7	CB	91	PRO	3.5
13	IB	28	VAL	3.5
26	Z	16	CYS	3.5
49	TC	61	VAL	3.5
50	YC	389	A	3.5
50	YC	1344	C	3.5
6	F	16	GLY	3.5
51	VC	1068	G	3.5
31	AC	104	VAL	3.5
39	MA	92	LEU	3.5
1	WA	35	LYS	3.5
13	IB	59	LYS	3.5
11	K	112	GLU	3.5
7	G	47	ASN	3.5
38	LA	13	GLN	3.5
53	XC	17	C	3.5
5	E	157	TYR	3.5
24	X	27	GLY	3.5
41	KC	38	GLY	3.5
15	O	29	SER	3.5
28	BA	8	LYS	3.5

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Mol	Chain	Res	Type	RSRZ
20	T	98	MET	3.5
51	VC	2174	C	3.5
48	VA	5	ASP	3.5
4	D	76	SER	3.5
2	B	31	CYS	3.5
17	MB	112	GLY	3.5
51	VC	2123	G	3.5
11	GB	13	GLN	3.5
47	QC	84	LEU	3.5
50	UC	975	A	3.5
12	HB	87	TYR	3.5
50	YC	795	C	3.5
40	NA	60	VAL	3.5
50	UC	1224	G	3.5
14	N	100	TYR	3.5
50	YC	209	U	3.5
11	K	68	ILE	3.5
11	GB	131	ILE	3.5
31	EA	97	LEU	3.5
45	SA	61	LYS	3.5
47	QC	104	LEU	3.5
15	O	56	ASP	3.5
31	EA	93	PHE	3.5
12	L	75	LEU	3.5
37	KA	60	ARG	3.5
19	S	66	PRO	3.5
50	UC	723	U	3.5
29	CA	146	GLN	3.5
50	YC	324	G	3.5
51	VC	1382	G	3.5
29	CA	148	TYR	3.5
37	KA	49	VAL	3.5
12	L	57	ARG	3.4
31	EA	96	LEU	3.4
40	NA	63	THR	3.4
28	BA	36	LYS	3.4
2	B	26	ILE	3.4
7	CB	127	ILE	3.4
24	X	29	ARG	3.4
30	ZB	179	ARG	3.4
50	YC	105	G	3.4
20	T	154	ASP	3.4

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Mol	Chain	Res	Type	RSRZ
21	QB	75	LEU	3.4
31	AC	122	ARG	3.4
36	JA	35	GLU	3.4
28	BA	57	ARG	3.4
48	VA	15	ARG	3.4
20	T	149	SER	3.4
6	BB	95	LYS	3.4
50	YC	1252	A	3.4
4	D	21	ARG	3.4
19	OB	59	GLY	3.4
36	JA	56	LEU	3.4
39	MA	124	PRO	3.4
36	JA	77	ILE	3.4
10	J	126	VAL	3.4
36	FC	122	ALA	3.4
6	F	140	LEU	3.4
20	T	43	GLU	3.4
31	AC	146	ILE	3.4
36	FC	124	GLN	3.4
50	UC	983	A	3.4
51	ZC	2478	A	3.4
51	VC	2297	C	3.4
51	ZC	2793	G	3.4
6	F	1	MET	3.4
4	D	87	PRO	3.4
49	TC	40	ILE	3.4
5	AB	169	VAL	3.4
12	L	54	LEU	3.4
14	JB	106	SER	3.4
39	MA	67	ALA	3.4
46	PC	75	ALA	3.4
12	L	74	LYS	3.4
11	K	20	ALA	3.4
20	T	103	ARG	3.4
20	PB	180	VAL	3.4
47	UA	26	ASN	3.4
2	B	4	ILE	3.4
12	L	21	TYR	3.4
20	T	166	SER	3.4
31	EA	69	GLY	3.4
7	CB	108	ALA	3.4
50	UC	228	A	3.4

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Mol	Chain	Res	Type	RSRZ
50	UC	977	A	3.4
21	QB	36	ILE	3.4
50	YC	1066	C	3.4
50	UC	1347	G	3.4
29	YB	159	PRO	3.4
31	EA	197	PRO	3.4
11	GB	100	GLY	3.4
19	S	61	ILE	3.4
10	J	79	ARG	3.4
10	J	81	GLN	3.4
31	AC	133	VAL	3.4
39	IC	109	VAL	3.4
51	ZC	2794	C	3.4
6	F	84	GLY	3.4
7	G	145	LYS	3.4
7	CB	71	THR	3.4
12	L	76	VAL	3.4
30	ZB	10	PHE	3.4
36	JA	76	ALA	3.4
13	M	92	TYR	3.4
31	EA	5	ILE	3.4
50	UC	86	U	3.4
7	CB	138	VAL	3.4
24	X	55	ARG	3.4
26	Z	30	THR	3.4
51	ZC	2322	A	3.4
47	QC	22	ARG	3.4
48	RC	9	ARG	3.4
6	F	83	ALA	3.4
19	S	48	ALA	3.4
15	O	59	ARG	3.4
27	WB	47	ARG	3.4
14	N	98	LYS	3.4
10	J	69	GLY	3.4
34	DC	80	VAL	3.4
36	JA	120	ARG	3.4
2	B	2	LYS	3.3
23	W	28	LYS	3.3
34	DC	16	LEU	3.3
51	ZC	2152	G	3.3
12	L	61	HIS	3.3
22	V	36	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
31	EA	144	ASP	3.3
42	LC	21	ASP	3.3
46	TA	34	TRP	3.3
51	ZC	2141	G	3.3
51	ZC	2147	G	3.3
7	G	87	GLY	3.3
14	N	51	ARG	3.3
30	DA	166	GLU	3.3
31	EA	112	VAL	3.3
34	HA	10	ARG	3.3
37	GC	36	GLY	3.3
46	TA	4	SER	3.3
2	B	32	PRO	3.3
10	J	68	GLN	3.3
10	FB	71	VAL	3.3
31	AC	105	VAL	3.3
37	GC	67	THR	3.3
50	UC	982	U	3.3
14	N	7	ILE	3.3
23	W	55	ARG	3.3
40	NA	118	ALA	3.3
5	E	109	PHE	3.3
51	ZC	1938	A	3.3
19	OB	62	GLU	3.3
43	MC	42	ARG	3.3
11	GB	37	LEU	3.3
46	PC	76	PRO	3.3
13	M	16	ASN	3.3
19	S	36	ALA	3.3
2	B	11	MET	3.3
53	XC	1	C	3.3
50	YC	999	U	3.3
51	VC	1454	U	3.3
2	B	184	VAL	3.3
4	ZA	36	LYS	3.3
39	MA	50	ALA	3.3
43	QA	32	TYR	3.3
46	TA	57	HIS	3.3
35	EC	111	ILE	3.3
50	UC	744	C	3.3
4	D	3	LEU	3.3
47	QC	26	ASN	3.3

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Mol	Chain	Res	Type	RSRZ
31	AC	115	ARG	3.3
4	D	39	ILE	3.3
14	N	2	ASN	3.3
50	YC	64	G	3.3
51	VC	2702	U	3.3
51	ZC	1071	G	3.3
16	LB	36	PRO	3.3
50	YC	1314	C	3.3
51	VC	2804	C	3.3
7	G	27	LEU	3.3
13	IB	5	THR	3.3
26	Z	36	LEU	3.3
5	E	149	ARG	3.3
40	NA	111	LYS	3.3
11	GB	65	PHE	3.3
31	EA	68	TYR	3.3
53	XC	20	U	3.3
20	PB	178	GLU	3.3
36	FC	42	ARG	3.3
43	MC	55	ARG	3.3
53	ED	70	G	3.3
2	B	197	ILE	3.3
26	VB	42	TRP	3.3
11	GB	31	ASP	3.3
31	EA	136	PRO	3.3
2	XA	5	LEU	3.3
11	K	30	GLY	3.3
19	OB	19	LYS	3.3
26	VB	44	ARG	3.3
29	YB	164	VAL	3.3
31	AC	112	VAL	3.3
37	KA	98	ILE	3.3
40	JC	60	VAL	3.3
13	IB	58	LEU	3.3
33	GA	94	GLN	3.3
11	GB	85	LYS	3.3
51	ZC	463	G	3.3
30	ZB	177	THR	3.3
12	HB	44	LEU	3.2
28	BA	60	LEU	3.2
26	Z	44	ARG	3.2
42	PA	88	ARG	3.2

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Mol	Chain	Res	Type	RSRZ
47	UA	81	LYS	3.2
29	CA	141	GLU	3.2
50	YC	1317	C	3.2
41	OA	31	ARG	3.2
5	E	86	GLU	3.2
37	GC	98	ILE	3.2
53	BD	20	U	3.2
3	YA	44	ARG	3.2
29	CA	157	ARG	3.2
7	G	121	GLU	3.2
37	GC	24	VAL	3.2
46	PC	74	PHE	3.2
51	VC	1574	C	3.2
51	VC	2161	C	3.2
12	L	19	ALA	3.2
12	HB	21	TYR	3.2
31	EA	73	ARG	3.2
31	EA	114	ARG	3.2
42	LC	69	TYR	3.2
50	YC	285	G	3.2
7	CB	109	LYS	3.2
20	T	102	LEU	3.2
26	Z	11	LEU	3.2
50	UC	325	A	3.2
18	R	79	ALA	3.2
29	CA	120	ALA	3.2
43	QA	7	ALA	3.2
7	G	126	MET	3.2
10	FB	73	GLY	3.2
11	GB	101	ARG	3.2
24	X	28	LEU	3.2
49	TC	64	LYS	3.2
21	QB	12	ASN	3.2
34	DC	34	GLY	3.2
36	JA	115	GLY	3.2
4	D	88	ILE	3.2
51	VC	2167	U	3.2
43	MC	76	GLN	3.2
51	ZC	11	G	3.2
51	ZC	1968	G	3.2
5	AB	115	VAL	3.2
29	YB	163	PHE	3.2

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Mol	Chain	Res	Type	RSRZ
31	EA	109	GLY	3.2
31	AC	69	GLY	3.2
35	IA	53	VAL	3.2
49	TC	59	VAL	3.2
50	YC	1285	A	3.2
41	KC	32	SER	3.2
40	NA	101	GLN	3.2
50	YC	589	C	3.2
21	U	53	MET	3.2
35	EC	131	GLY	3.2
2	B	58	ARG	3.2
2	B	182	LEU	3.2
30	DA	3	ASN	3.2
40	NA	110	ARG	3.2
50	YC	284	G	3.2
51	ZC	2117	A	3.2
53	BD	38	A	3.2
54	HD	20	A	3.2
44	NC	9	VAL	3.2
48	RC	12	LYS	3.2
15	O	52	ARG	3.2
31	AC	15	GLU	3.2
36	FC	29	ASN	3.2
49	SC	65	CYS	3.2
19	OB	66	PRO	3.2
43	MC	15	PRO	3.2
11	GB	94	VAL	3.2
31	AC	8	VAL	3.2
5	E	148	ILE	3.2
19	OB	2	ARG	3.2
31	EA	98	GLU	3.2
28	BA	11	LYS	3.2
28	XB	8	LYS	3.2
8	H	59	GLY	3.2
9	EB	64	ARG	3.2
12	L	60	LEU	3.2
14	JB	112	ARG	3.2
11	K	29	PHE	3.2
11	K	65	PHE	3.2
6	BB	119	PRO	3.2
6	F	4	ILE	3.2
7	G	129	GLY	3.2

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Mol	Chain	Res	Type	RSRZ
31	EA	145	GLU	3.2
51	ZC	1614	A	3.2
51	ZC	2110	G	3.2
5	E	17	VAL	3.2
36	JA	18	PHE	3.2
38	HC	13	GLN	3.2
43	MC	64	ALA	3.2
51	VC	2163	C	3.2
19	S	22	GLY	3.2
36	JA	79	LEU	3.2
28	XB	54	GLU	3.2
41	OA	13	THR	3.2
4	ZA	74	LYS	3.2
5	E	24	VAL	3.2
5	E	45	VAL	3.2
20	T	174	VAL	3.2
39	MA	88	ARG	3.1
53	XC	73	A	3.1
7	CB	129	GLY	3.1
13	IB	60	GLY	3.1
35	IA	111	ILE	3.1
36	FC	77	ILE	3.1
26	Z	46	HIS	3.1
26	Z	22	ALA	3.1
29	YB	146	GLN	3.1
7	G	146	ASP	3.1
7	CB	119	ASP	3.1
11	GB	35	VAL	3.1
11	GB	96	VAL	3.1
21	U	79	VAL	3.1
47	UA	73	HIS	3.1
50	UC	229	U	3.1
51	VC	1932	A	3.1
7	G	122	ALA	3.1
12	HB	65	LEU	3.1
43	MC	40	ASP	3.1
30	ZB	207	VAL	3.1
31	AC	114	ARG	3.1
20	PB	118	GLN	3.1
50	UC	1049	U	3.1
9	EB	12	ASP	3.1
12	L	66	VAL	3.1

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Mol	Chain	Res	Type	RSRZ
32	BC	25	ARG	3.1
6	F	120	ILE	3.1
39	MA	87	GLY	3.1
50	YC	1476	G	3.1
51	ZC	2178	C	3.1
12	L	24	GLN	3.1
28	XB	23	VAL	3.1
43	QA	9	PHE	3.1
50	YC	793	U	3.1
50	YC	1065	U	3.1
11	GB	95	ALA	3.1
14	N	97	ALA	3.1
37	KA	65	LEU	3.1
36	FC	67	GLY	3.1
45	SA	88	LYS	3.1
7	G	36	GLU	3.1
11	GB	83	MET	3.1
51	VC	2321	G	3.1
53	BD	33	U	3.1
28	BA	46	ARG	3.1
12	L	25	ALA	3.1
48	VA	19	GLY	3.1
8	H	30	LYS	3.1
50	YC	1184	G	3.1
5	AB	123	PHE	3.1
20	T	136	PHE	3.1
36	JA	101	PHE	3.1
28	BA	31	HIS	3.1
40	NA	64	TRP	3.1
50	YC	1357	A	3.1
51	VC	1095	A	3.1
7	CB	95	LYS	3.1
7	CB	94	GLU	3.1
29	CA	116	GLU	3.1
35	EC	4	ASP	3.1
51	ZC	1066	U	3.1
31	EA	125	HIS	3.1
40	JC	19	LEU	3.1
50	YC	220	G	3.1
50	YC	567	G	3.1
51	VC	1299	G	3.1
26	Z	21	TYR	3.1

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Mol	Chain	Res	Type	RSRZ
39	IC	97	TYR	3.1
46	TA	50	ALA	3.1
19	OB	64	GLU	3.1
2	B	185	LYS	3.1
26	Z	9	LEU	3.1
10	J	145	PRO	3.1
50	UC	998(B)	C	3.1
32	FA	24	ARG	3.1
39	IC	100	VAL	3.1
7	CB	143	GLU	3.1
10	J	74	GLU	3.1
12	HB	67	LEU	3.1
12	HB	47	PHE	3.1
13	IB	38	GLN	3.1
50	YC	933	G	3.1
4	ZA	161	THR	3.1
8	H	58	ARG	3.1
12	HB	85	PRO	3.1
46	PC	59	PRO	3.1
19	S	63	LYS	3.1
20	T	119	GLU	3.1
26	VB	33	LYS	3.1
50	YC	404	U	3.1
20	T	140	ASP	3.1
20	T	108	PRO	3.1
28	BA	7	HIS	3.1
32	BC	22	GLY	3.1
7	CB	69	THR	3.1
19	OB	43	ASN	3.1
39	IC	123	LYS	3.1
14	JB	92	GLY	3.0
48	RC	8	THR	3.0
15	O	21	ALA	3.0
43	MC	51	VAL	3.0
29	YB	72	GLY	3.0
31	EA	183	GLY	3.0
15	O	49	HIS	3.0
50	YC	792	A	3.0
51	VC	2114	A	3.0
50	YC	405	U	3.0
51	VC	615	G	3.0
5	E	9	ILE	3.0

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Mol	Chain	Res	Type	RSRZ
7	G	64	SER	3.0
13	M	39	ILE	3.0
22	V	61	ARG	3.0
31	EA	126	ILE	3.0
30	ZB	149	ALA	3.0
21	QB	47	PRO	3.0
40	NA	117	VAL	3.0
31	AC	6	GLY	3.0
13	IB	9	ARG	3.0
21	QB	23	VAL	3.0
28	XB	7	HIS	3.0
37	KA	56	HIS	3.0
50	YC	245	C	3.0
7	CB	42	ASN	3.0
37	GC	69	ASN	3.0
7	G	63	ARG	3.0
33	GA	97	PHE	3.0
12	HB	9	LYS	3.0
30	ZB	4	LYS	3.0
48	RC	5	ASP	3.0
21	U	42	GLY	3.0
40	JC	56	LEU	3.0
50	UC	402	G	3.0
2	B	104	VAL	3.0
37	GC	57	LYS	3.0
50	YC	283	C	3.0
50	YC	1359	C	3.0
51	VC	1556	C	3.0
30	ZB	159	GLY	3.0
11	K	35	VAL	3.0
23	SB	11	GLU	3.0
40	JC	65	LYS	3.0
47	QC	103	GLY	3.0
4	ZA	115	ARG	3.0
47	UA	80	ARG	3.0
50	YC	248	C	3.0
10	FB	67	MET	3.0
36	JA	74	ILE	3.0
46	PC	60	VAL	3.0
46	PC	73	GLU	3.0
29	CA	149	LEU	3.0
28	BA	39	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
12	L	14	SER	3.0
33	GA	6	VAL	3.0
4	D	29	TRP	3.0
5	AB	163	TYR	3.0
47	UA	75	ASN	3.0
51	VC	2115	G	3.0
51	ZC	411	G	3.0
10	J	108	LYS	3.0
43	QA	35	LYS	3.0
20	T	133	ILE	3.0
22	RB	32	LYS	3.0
48	VA	3	LYS	3.0
37	GC	95	GLU	3.0
50	UC	110	C	3.0
2	B	203	LYS	3.0
4	D	84	LYS	3.0
10	J	7	ARG	3.0
27	AA	48	LYS	3.0
30	ZB	164	ARG	3.0
4	D	35	GLU	3.0
51	VC	1572	A	3.0
51	ZC	2336	A	3.0
24	TB	8	LEU	3.0
45	OC	31	LEU	3.0
39	MA	97	TYR	3.0
46	PC	38	SER	3.0
48	RC	21	TYR	3.0
36	FC	44	VAL	3.0
38	LA	121	PRO	3.0
5	E	104	GLU	3.0
26	VB	15	GLU	3.0
21	QB	25	ARG	3.0
29	CA	132	LYS	3.0
39	MA	55	ALA	3.0
41	OA	37	PHE	3.0
41	KC	19	ARG	3.0
50	YC	108	G	3.0
50	YC	1356	G	3.0
37	GC	34	VAL	3.0
37	GC	53	PRO	3.0
31	AC	68	TYR	3.0
51	ZC	1082	U	3.0

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Mol	Chain	Res	Type	RSRZ
42	PA	52	SER	2.9
6	BB	109	ILE	2.9
31	EA	15	GLU	2.9
31	AC	200	GLU	2.9
7	CB	27	LEU	2.9
10	J	111	ARG	2.9
5	E	150	ALA	2.9
7	CB	44	ALA	2.9
50	YC	794	A	2.9
51	VC	2170	A	2.9
6	F	97	ILE	2.9
4	ZA	19	LEU	2.9
17	Q	72	LYS	2.9
31	EA	107	ARG	2.9
1	A	153	ALA	2.9
49	SC	46	ASN	2.9
10	FB	62	LEU	2.9
50	UC	262	A	2.9
50	UC	1001	G	2.9
51	VC	2602	A	2.9
51	ZC	2119	A	2.9
40	NA	112	GLY	2.9
50	UC	404	U	2.9
51	VC	2144	U	2.9
43	MC	48	TRP	2.9
2	B	30	PRO	2.9
6	F	132	PRO	2.9
13	M	52	SER	2.9
30	ZB	161	GLU	2.9
41	KC	35	ARG	2.9
50	UC	401	C	2.9
5	E	106	THR	2.9
5	E	91	GLY	2.9
11	GB	98	LYS	2.9
19	S	34	LYS	2.9
26	Z	33	LYS	2.9
5	AB	61	HIS	2.9
28	XB	25	MET	2.9
28	XB	62	LEU	2.9
50	YC	66	G	2.9
28	XB	22	VAL	2.9
5	E	145	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
5	E	165	ALA	2.9
7	G	40	ALA	2.9
7	CB	122	ALA	2.9
8	H	66	THR	2.9
29	CA	139	LYS	2.9
39	IC	107	ALA	2.9
7	G	110	GLN	2.9
12	HB	2	ARG	2.9
3	YA	194	MET	2.9
4	D	168	GLU	2.9
51	ZC	1836	C	2.9
53	ED	69	C	2.9
24	X	2	PRO	2.9
36	FC	55	ALA	2.9
50	YC	1250	A	2.9
1	WA	36	PRO	2.9
50	UC	1214	C	2.9
50	YC	1426	C	2.9
52	WC	12	C	2.9
13	IB	29	PHE	2.9
29	CA	128	GLU	2.9
31	AC	93	PHE	2.9
37	KA	64	GLU	2.9
51	VC	1105	U	2.9
4	D	75	LYS	2.9
5	E	158	HIS	2.9
7	G	60	TYR	2.9
19	S	20	TYR	2.9
28	BA	12	LYS	2.9
40	JC	97	PRO	2.9
12	L	62	ALA	2.9
32	FA	13	ILE	2.9
36	JA	83	ARG	2.9
51	ZC	2181	G	2.9
1	WA	34	VAL	2.9
13	IB	11	LYS	2.9
50	YC	1113	C	2.9
51	VC	2477	C	2.9
7	G	50	ASP	2.9
12	HB	29	LEU	2.9
28	XB	10	ALA	2.9
36	JA	117	HIS	2.9

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Mol	Chain	Res	Type	RSRZ
29	YB	170	GLU	2.9
31	EA	74	GLN	2.9
31	AC	17	VAL	2.9
50	YC	1288	A	2.9
36	JA	67	GLY	2.9
37	KA	71	LEU	2.9
50	YC	906	G	2.9
21	U	46	LYS	2.9
49	SC	50	THR	2.9
37	KA	45	ARG	2.9
12	L	80	PHE	2.9
13	M	73	LEU	2.9
29	CA	140	HIS	2.9
37	KA	63	PHE	2.9
50	UC	622	A	2.9
11	K	41	TRP	2.9
11	GB	127	ILE	2.9
24	X	53	LEU	2.9
35	IA	135	CYS	2.9
51	ZC	1062	G	2.9
5	AB	111	HIS	2.9
19	S	30	VAL	2.9
28	XB	34	TRP	2.9
37	GC	25	GLU	2.9
43	MC	68	ASP	2.9
15	O	24	TYR	2.9
45	OC	54	ARG	2.9
47	QC	20	LEU	2.9
51	VC	2134	A	2.9
28	BA	24	ALA	2.9
40	NA	30	ALA	2.9
7	G	38	VAL	2.9
21	QB	74	ARG	2.9
1	WA	104	TYR	2.9
50	YC	249	U	2.9
50	YC	381	C	2.9
51	VC	1062	G	2.9
51	VC	2872	G	2.9
51	VC	2895	U	2.9
4	D	64	THR	2.8
51	ZC	222	A	2.8
28	BA	47	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
21	QB	51	VAL	2.8
6	F	134	PRO	2.8
51	ZC	1105	U	2.8
7	CB	132	ARG	2.8
22	V	20	ARG	2.8
31	AC	65	ARG	2.8
46	PC	37	ARG	2.8
51	ZC	2163	C	2.8
50	YC	412	A	2.8
7	CB	102	GLU	2.8
46	TA	15	LEU	2.8
46	PC	18	LYS	2.8
50	UC	1348	U	2.8
51	VC	2180	U	2.8
51	ZC	2296	U	2.8
7	CB	139	VAL	2.8
11	GB	102	VAL	2.8
50	YC	934	C	2.8
51	VC	2803	C	2.8
50	YC	377	G	2.8
51	VC	2121	G	2.8
31	EA	198	VAL	2.8
40	JC	92	HIS	2.8
51	ZC	276	A	2.8
51	ZC	789	A	2.8
14	JB	114	LEU	2.8
19	S	8	LYS	2.8
28	BA	53	PRO	2.8
29	YB	131	PRO	2.8
37	KA	99	LYS	2.8
2	B	88	GLY	2.8
7	CB	51	ALA	2.8
11	GB	51	ARG	2.8
30	ZB	160	ALA	2.8
36	JA	126	SER	2.8
44	RA	8	GLY	2.8
6	F	5	LEU	2.8
7	CB	112	MET	2.8
17	Q	4	LYS	2.8
21	QB	15	ASP	2.8
35	IA	56	LYS	2.8
47	QC	68	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
50	UC	1002	G	2.8
50	YC	1224	G	2.8
1	WA	128	GLY	2.8
29	CA	165	VAL	2.8
40	JC	118	ALA	2.8
6	F	2	LYS	2.8
12	L	18	LEU	2.8
15	O	109	LEU	2.8
47	UA	9	ASN	2.8
50	UC	1249	C	2.8
28	XB	45	GLY	2.8
11	K	111	GLU	2.8
12	L	44	LEU	2.8
49	TC	54	LYS	2.8
12	L	47	PHE	2.8
50	YC	223	U	2.8
15	O	48	ALA	2.8
8	H	31	GLN	2.8
19	S	31	LEU	2.8
21	QB	57	PHE	2.8
29	CA	144	ARG	2.8
5	E	100	GLY	2.8
9	I	37	ASP	2.8
50	YC	1351	U	2.8
51	VC	2327	A	2.8
44	RA	74	LEU	2.8
50	UC	1031	G	2.8
50	YC	1316	G	2.8
1	WA	244	ARG	2.8
9	I	63	VAL	2.8
19	S	68	HIS	2.8
26	Z	50	ARG	2.8
29	YB	157	ARG	2.8
1	WA	39	LYS	2.8
5	E	82	GLY	2.8
19	S	19	LYS	2.8
30	ZB	13	GLY	2.8
51	VC	2870	C	2.8
13	IB	43	GLU	2.8
19	S	49	VAL	2.8
38	LA	82	VAL	2.8
50	YC	208	U	2.8

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Mol	Chain	Res	Type	RSRZ
50	YC	561	U	2.8
44	RA	44	ALA	2.8
10	FB	72	PRO	2.8
13	IB	42	ASP	2.8
29	CA	163	PHE	2.8
30	ZB	178	LEU	2.8
35	IA	4	ASP	2.8
40	NA	56	LEU	2.8
50	YC	546	G	2.8
51	ZC	1613	G	2.8
20	T	107	THR	2.8
49	SC	42	CYS	2.8
9	I	28	SER	2.8
50	UC	1007	C	2.8
51	VC	2178	C	2.8
50	UC	999	U	2.8
42	PA	63	ARG	2.8
43	QA	26	ARG	2.8
51	ZC	2170	A	2.8
51	ZC	2333	A	2.8
4	D	93	THR	2.8
23	SB	15	LYS	2.8
41	KC	21	TYR	2.8
46	TA	56	GLN	2.8
12	L	51	LEU	2.8
20	T	104	PHE	2.8
49	SC	43	GLY	2.8
50	YC	1002	G	2.8
51	VC	2120	G	2.8
2	B	21	VAL	2.8
15	O	50	ARG	2.8
31	EA	122	ARG	2.8
41	OA	35	ARG	2.8
44	NC	10	VAL	2.8
8	H	60	LYS	2.8
8	DB	95	TYR	2.8
18	R	77	LYS	2.8
36	FC	95	LYS	2.8
11	GB	45	GLN	2.8
51	ZC	403	U	2.8
51	ZC	2118	U	2.8
11	GB	75	THR	2.8

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Mol	Chain	Res	Type	RSRZ
19	S	18	GLY	2.8
4	ZA	88	ILE	2.7
5	AB	173	PRO	2.7
9	EB	24	VAL	2.7
11	K	94	VAL	2.7
20	T	167	PRO	2.7
25	Y	31	VAL	2.7
31	AC	107	ARG	2.7
36	FC	86	VAL	2.7
38	LA	50	TYR	2.7
4	D	173	LEU	2.7
13	IB	86	ALA	2.7
33	GA	99	ALA	2.7
11	GB	47	ILE	2.7
31	EA	148	VAL	2.7
32	BC	24	ARG	2.7
36	FC	118	LYS	2.7
41	KC	31	ARG	2.7
51	ZC	462	C	2.7
36	JA	3	GLN	2.7
39	IC	120	GLY	2.7
1	WA	31	LYS	2.7
4	D	16	ARG	2.7
14	N	73	GLU	2.7
26	VB	29	ASN	2.7
37	GC	19	SER	2.7
39	MA	4	PRO	2.7
47	QC	73	HIS	2.7
6	BB	89	TYR	2.7
50	YC	102	G	2.7
7	CB	55	VAL	2.7
50	UC	131	C	2.7
50	UC	1320	C	2.7
50	YC	403	C	2.7
51	ZC	2129	C	2.7
9	I	2	ILE	2.7
49	TC	41	ILE	2.7
39	MA	66	THR	2.7
10	J	72	PRO	2.7
11	K	103	MET	2.7
47	QC	75	ASN	2.7
20	PB	163	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
11	K	95	ALA	2.7
29	CA	96	ARG	2.7
40	JC	94	ARG	2.7
43	MC	62	VAL	2.7
47	QC	21	LYS	2.7
50	YC	788	U	2.7
29	YB	143	GLU	2.7
2	B	170	LEU	2.7
11	K	89	ASN	2.7
36	FC	18	PHE	2.7
51	VC	2337	G	2.7
51	ZC	508	G	2.7
4	ZA	38	VAL	2.7
29	YB	147	LYS	2.7
31	AC	148	VAL	2.7
36	JA	108	VAL	2.7
51	ZC	2602	A	2.7
2	B	74	PRO	2.7
13	M	11	LYS	2.7
24	X	52	HIS	2.7
40	NA	116	THR	2.7
50	YC	133	U	2.7
10	J	106	LEU	2.7
31	AC	75	PHE	2.7
50	YC	332	G	2.7
50	YC	848	C	2.7
50	YC	103(C)	G	2.7
10	J	107	LYS	2.7
26	VB	16	CYS	2.7
31	AC	37	PRO	2.7
35	EC	5	PRO	2.7
42	LC	16	ALA	2.7
51	ZC	1963	U	2.7
14	N	54	ARG	2.7
26	VB	28	ARG	2.7
31	AC	101	LEU	2.7
40	JC	96	LEU	2.7
2	B	196	VAL	2.7
7	G	31	GLY	2.7
7	CB	88	ALA	2.7
18	R	55	ASN	2.7
29	YB	115	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
30	ZB	196	LEU	2.7
51	ZC	1573	G	2.7
31	AC	118	ARG	2.7
34	DC	4	ARG	2.7
7	G	119	ASP	2.7
12	HB	81	ASP	2.7
19	S	59	GLY	2.7
39	MA	94	GLY	2.7
39	IC	66	THR	2.7
10	FB	74	GLU	2.7
18	R	28	PHE	2.7
20	T	97	GLU	2.7
32	FA	155	GLU	2.7
39	MA	46	LYS	2.7
24	X	56	VAL	2.7
46	PC	67	VAL	2.7
47	QC	55	ILE	2.7
53	BD	16	C	2.7
5	AB	2	SER	2.7
6	BB	80	PRO	2.7
31	AC	137	SER	2.7
5	E	153	LYS	2.7
19	S	91	GLU	2.7
36	FC	50	LEU	2.7
50	YC	39	G	2.7
50	YC	1347	G	2.7
4	D	25	TYR	2.7
45	SA	34	TYR	2.7
11	K	71	ASP	2.7
37	GC	17	ASP	2.7
13	IB	15	ARG	2.7
39	MA	52	ARG	2.7
39	IC	121	THR	2.7
41	KC	15	LYS	2.7
46	PC	35	SER	2.7
2	B	75	VAL	2.7
50	YC	972	C	2.7
51	ZC	1967	C	2.7
19	OB	44	ILE	2.7
40	NA	2	ALA	2.7
50	YC	1358	U	2.7
31	EA	185	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
47	QC	24	LEU	2.7
51	ZC	2127	G	2.7
8	H	32	VAL	2.7
20	T	121	HIS	2.7
31	AC	111	ALA	2.7
35	EC	134	ILE	2.7
18	NB	62	LYS	2.7
10	FB	50	ARG	2.7
21	QB	59	LEU	2.7
43	QA	41	PRO	2.7
51	VC	34	C	2.7
9	I	62	VAL	2.7
50	YC	82	U	2.7
36	FC	115	GLY	2.7
46	TA	72	GLY	2.7
31	EA	108	LEU	2.6
13	IB	27	SER	2.6
29	CA	124	SER	2.6
12	HB	95	THR	2.6
37	GC	55	LYS	2.6
44	RA	59	ILE	2.6
50	YC	323	U	2.6
50	YC	748	C	2.6
51	ZC	2111	C	2.6
4	D	155	MET	2.6
49	TC	58	TYR	2.6
5	E	56	SER	2.6
12	HB	24	GLN	2.6
7	CB	93	ARG	2.6
51	VC	975	G	2.6
51	VC	1296	G	2.6
51	ZC	577	G	2.6
46	PC	15	LEU	2.6
46	PC	16	LEU	2.6
5	AB	164	TYR	2.6
5	AB	170	ARG	2.6
13	M	97	ARG	2.6
23	SB	16	LEU	2.6
24	X	35	ARG	2.6
35	EC	59	LEU	2.6
36	JA	121	ARG	2.6
37	KA	47	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
29	YB	140	HIS	2.6
43	QA	16	HIS	2.6
3	YA	193	VAL	2.6
4	ZA	37	VAL	2.6
6	BB	79	ILE	2.6
28	BA	21	LYS	2.6
28	XB	21	LYS	2.6
35	EC	21	LYS	2.6
36	JA	114	TYR	2.6
5	E	64	LEU	2.6
10	J	70	GLN	2.6
14	JB	64	ARG	2.6
12	L	50	HIS	2.6
51	ZC	576	U	2.6
26	VB	39	TYR	2.6
51	VC	2701	C	2.6
11	K	78	PRO	2.6
36	JA	49	PRO	2.6
49	TC	37	PRO	2.6
32	FA	46	GLY	2.6
51	ZC	1084	A	2.6
29	CA	134	GLU	2.6
40	JC	63	THR	2.6
4	D	33	ARG	2.6
14	JB	91	ARG	2.6
40	NA	29	ARG	2.6
50	UC	619	U	2.6
47	UA	104	LEU	2.6
4	ZA	41	GLN	2.6
24	X	9	VAL	2.6
24	X	32	GLN	2.6
11	GB	54	MET	2.6
31	EA	100	ARG	2.6
33	CC	101	ALA	2.6
35	IA	59	LEU	2.6
47	UA	28	ALA	2.6
2	XA	54	GLN	2.6
12	L	73	VAL	2.6
21	QB	24	LYS	2.6
27	WB	48	LYS	2.6
31	EA	133	VAL	2.6
5	E	40	GLU	2.6

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Mol	Chain	Res	Type	RSRZ
35	EC	60	ARG	2.6
39	IC	63	TYR	2.6
15	O	60	LEU	2.6
50	YC	390	C	2.6
7	CB	103	GLN	2.6
19	OB	63	LYS	2.6
44	RA	60	ILE	2.6
49	SC	52	SER	2.6
19	OB	67	LEU	2.6
4	ZA	87	PRO	2.6
19	S	69	ALA	2.6
21	QB	77	ARG	2.6
42	PA	26	GLU	2.6
51	VC	530	G	2.6
51	ZC	1102	C	2.6
51	ZC	1537	C	2.6
19	OB	58	GLY	2.6
41	KC	56	VAL	2.6
29	YB	134	GLU	2.6
2	B	1	MET	2.6
30	ZB	167	TRP	2.6
37	KA	50	ILE	2.6
7	CB	5	VAL	2.6
11	K	11	LYS	2.6
12	HB	76	VAL	2.6
21	U	41	ARG	2.6
39	MA	93	PRO	2.6
51	ZC	446	G	2.6
51	ZC	468	G	2.6
7	G	35	MET	2.6
51	ZC	751	A	2.6
4	ZA	159	VAL	2.6
11	GB	86	GLY	2.6
39	MA	71	GLY	2.6
46	TA	58	VAL	2.6
14	JB	11	GLU	2.6
4	ZA	100	TRP	2.6
43	MC	58	TYR	2.6
2	XA	50	GLY	2.6
31	EA	104	VAL	2.6
22	RB	20	ARG	2.6
24	X	11	SER	2.6

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Mol	Chain	Res	Type	RSRZ
2	B	189	PRO	2.6
4	D	97	ASP	2.6
50	UC	103(C)	G	2.6
50	YC	21	G	2.6
50	YC	723	U	2.6
50	YC	103(B)	G	2.6
21	QB	62	LEU	2.6
11	K	27	VAL	2.6
15	O	117	GLN	2.6
39	MA	22	LYS	2.6
46	PC	11	VAL	2.6
13	M	96	GLY	2.6
20	PB	112	ARG	2.6
21	U	72	ARG	2.6
1	A	67	PHE	2.6
46	TA	10	PHE	2.6
10	FB	14	LYS	2.5
12	L	23	ASN	2.5
20	T	28	MET	2.5
44	NC	7	THR	2.5
43	MC	70	ALA	2.5
50	YC	239	U	2.5
51	VC	1905	C	2.5
51	ZC	1974	C	2.5
7	G	67	PHE	2.5
51	VC	2126	A	2.5
50	YC	1064	G	2.5
31	EA	67	ILE	2.5
31	AC	67	ILE	2.5
36	JA	113	LYS	2.5
37	GC	4	ILE	2.5
42	LC	81	LEU	2.5
49	SC	40	ILE	2.5
5	AB	168	PRO	2.5
21	U	12	ASN	2.5
21	U	80	HIS	2.5
35	IA	89	PRO	2.5
36	FC	41	VAL	2.5
2	XA	204	ALA	2.5
4	ZA	85	GLY	2.5
28	BA	20	GLY	2.5
2	B	183	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
41	KC	39	LEU	2.5
31	EA	105	VAL	2.5
35	EC	129	VAL	2.5
47	UA	98	PRO	2.5
13	M	42	ASP	2.5
21	QB	22	GLY	2.5
24	X	33	GLN	2.5
29	YB	29	ALA	2.5
31	AC	66	ARG	2.5
34	HA	39	ALA	2.5
47	UA	77	ALA	2.5
7	G	12	LEU	2.5
14	N	78	LEU	2.5
26	VB	17	LYS	2.5
50	YC	755	G	2.5
51	ZC	798	G	2.5
12	HB	48	VAL	2.5
16	P	73	SER	2.5
39	MA	68	TYR	2.5
38	LA	124	LYS	2.5
50	UC	1498	U	2.5
51	ZC	1255	U	2.5
50	YC	243	A	2.5
50	YC	796	C	2.5
50	YC	1515	C	2.5
53	XC	16	C	2.5
31	EA	111	ALA	2.5
8	DB	139	LEU	2.5
43	QA	68	ASP	2.5
2	XA	75	VAL	2.5
43	QA	21	VAL	2.5
10	J	49	ARG	2.5
12	HB	45	ARG	2.5
35	IA	110	ALA	2.5
37	GC	54	PHE	2.5
50	YC	553	A	2.5
50	YC	1254	C	2.5
5	E	4	ILE	2.5
42	LC	87	ILE	2.5
44	RA	45	HIS	2.5
51	VC	1275	A	2.5
24	X	15	TYR	2.5

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Mol	Chain	Res	Type	RSRZ
43	QA	39	TYR	2.5
46	PC	80	TYR	2.5
21	QB	69	PHE	2.5
47	QC	52	ALA	2.5
51	ZC	245	G	2.5
51	ZC	2319	G	2.5
50	YC	843	U	2.5
51	ZC	958	U	2.5
28	XB	13	ARG	2.5
43	MC	50	LYS	2.5
47	QC	65	LYS	2.5
10	J	73	GLY	2.5
51	VC	2322	A	2.5
13	M	53	SER	2.5
9	EB	114	ILE	2.5
39	IC	91	ASP	2.5
3	YA	207	GLY	2.5
34	HA	81	GLY	2.5
50	UC	1202	G	2.5
50	YC	1187	G	2.5
5	AB	105	LEU	2.5
43	QA	24	ALA	2.5
12	L	48	VAL	2.5
20	T	101	PRO	2.5
29	YB	93	VAL	2.5
37	KA	72	VAL	2.5
36	FC	78	LYS	2.5
50	YC	1395	C	2.5
9	I	27	GLY	2.5
12	HB	79	LEU	2.5
14	JB	104	ASN	2.5
29	CA	72	GLY	2.5
47	UA	85	MET	2.5
4	D	38	VAL	2.5
18	NB	73	ARG	2.5
36	FC	98	PRO	2.5
43	QA	42	ARG	2.5
50	YC	560	U	2.5
29	CA	143	GLU	2.5
36	JA	48	GLU	2.5
12	L	13	HIS	2.5
42	LC	42	HIS	2.5

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Mol	Chain	Res	Type	RSRZ
51	ZC	1647	G	2.5
2	B	59	VAL	2.5
11	GB	42	ILE	2.5
24	X	39	ASP	2.5
13	M	5	THR	2.5
28	BA	14	VAL	2.5
29	CA	136	VAL	2.5
8	DB	93	LYS	2.5
38	HC	115	PRO	2.5
43	MC	11	SER	2.5
50	YC	1251	A	2.5
13	M	36	TYR	2.5
31	EA	42	GLN	2.5
37	GC	97	GLU	2.5
39	IC	26	LEU	2.5
5	E	50	VAL	2.5
19	OB	3	VAL	2.5
27	WB	46	VAL	2.5
37	GC	20	ALA	2.5
9	I	26	LYS	2.5
13	M	91	PRO	2.5
31	AC	136	PRO	2.5
50	YC	38	G	2.5
51	VC	232	G	2.5
51	ZC	2321	G	2.5
18	NB	57	LEU	2.5
15	O	28	ARG	2.5
29	CA	130	ARG	2.5
47	UA	25	ARG	2.5
51	ZC	1617	C	2.5
52	AD	89(B)	A	2.5
29	CA	156	LYS	2.5
38	LA	123	LYS	2.5
2	B	12	THR	2.5
35	IA	24	THR	2.5
50	UC	1364	U	2.5
5	AB	154	PRO	2.5
31	AC	119	GLN	2.5
7	CB	126	MET	2.5
1	A	244	ARG	2.5
8	H	70	ALA	2.5
21	U	39	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
2	B	200	GLU	2.4
36	FC	5	TYR	2.4
42	LC	49	ASP	2.4
29	CA	98	LEU	2.4
51	VC	2690	C	2.4
5	E	141	VAL	2.4
7	CB	79	ARG	2.4
21	QB	72	ARG	2.4
29	CA	114	ARG	2.4
32	BC	76	ILE	2.4
46	PC	46	GLY	2.4
51	ZC	2897	U	2.4
29	YB	28	PHE	2.4
5	AB	103	LEU	2.4
34	HA	101	LEU	2.4
41	KC	6	LEU	2.4
2	B	193	GLY	2.4
5	E	85	LYS	2.4
21	QB	52	GLY	2.4
37	GC	51	ARG	2.4
39	IC	50	ALA	2.4
50	UC	231	G	2.4
50	UC	654	G	2.4
50	UC	1424	C	2.4
50	UC	1470	G	2.4
50	YC	132	C	2.4
50	YC	250	A	2.4
50	YC	1034	G	2.4
51	ZC	1930	G	2.4
3	YA	155	LEU	2.4
9	I	21	CYS	2.4
51	ZC	1931	U	2.4
51	ZC	2059	A	2.4
51	ZC	2173	A	2.4
2	B	167	VAL	2.4
19	S	71	LYS	2.4
28	BA	16	ILE	2.4
28	BA	25	MET	2.4
37	GC	21	GLN	2.4
38	LA	91	ARG	2.4
13	M	102	ALA	2.4
28	BA	27	THR	2.4

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Mol	Chain	Res	Type	RSRZ
44	RA	71	PHE	2.4
29	CA	215	LEU	2.4
30	DA	196	LEU	2.4
31	AC	154	ASN	2.4
46	PC	53	ASN	2.4
50	UC	1033	G	2.4
50	YC	564	C	2.4
50	YC	1424	C	2.4
51	VC	2325	G	2.4
51	ZC	1555	G	2.4
29	CA	147	LYS	2.4
36	FC	56	LEU	2.4
36	FC	73	GLN	2.4
48	VA	11	GLY	2.4
2	B	73	GLU	2.4
4	ZA	35	GLU	2.4
10	FB	18	ARG	2.4
39	MA	45	LYS	2.4
44	RA	19	VAL	2.4
51	VC	1931	U	2.4
37	GC	75	ILE	2.4
50	UC	1493	A	2.4
50	YC	1349	A	2.4
50	YC	1477	C	2.4
51	VC	2402	C	2.4
20	PB	177	PRO	2.4
28	XB	2	PRO	2.4
51	VC	2805	G	2.4
3	YA	46	ARG	2.4
38	HC	123	LYS	2.4
43	MC	73	LEU	2.4
7	G	113	PRO	2.4
50	YC	1308	U	2.4
6	F	38	LEU	2.4
34	HA	35	LYS	2.4
20	T	161	VAL	2.4
31	AC	121	VAL	2.4
36	FC	126	SER	2.4
50	UC	1346	A	2.4
50	YC	219	C	2.4
51	VC	282	A	2.4
29	YB	172	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
30	DA	157	ILE	2.4
37	GC	26	ALA	2.4
51	ZC	1271	G	2.4
5	E	44	VAL	2.4
11	GB	26	TYR	2.4
35	EC	52	ASP	2.4
49	TC	48	ILE	2.4
54	HD	17	U	2.4
5	E	102	ALA	2.4
8	H	142	ARG	2.4
28	BA	35	GLN	2.4
45	SA	22	VAL	2.4
50	UC	879	C	2.4
50	UC	1226	C	2.4
50	YC	784	C	2.4
12	L	43	GLU	2.4
13	IB	82	ILE	2.4
13	IB	111	GLU	2.4
38	LA	88	GLY	2.4
43	QA	27	LYS	2.4
51	VC	1552	G	2.4
53	XC	19	G	2.4
12	HB	86	ARG	2.4
29	YB	130	ARG	2.4
5	AB	112	PRO	2.4
15	KB	2	PRO	2.4
20	T	83	PRO	2.4
30	ZB	152	ILE	2.4
5	E	93	GLY	2.4
26	Z	27	LYS	2.4
39	IC	71	GLY	2.4
12	L	2	ARG	2.4
36	FC	45	ALA	2.4
43	QA	64	ALA	2.4
46	PC	29	ARG	2.4
50	YC	106	C	2.4
7	CB	53	VAL	2.4
39	MA	82	VAL	2.4
19	S	40	GLU	2.4
29	YB	31	TYR	2.4
7	G	90	LYS	2.4
50	YC	466	G	2.4

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Mol	Chain	Res	Type	RSRZ
50	YC	1475	G	2.4
19	OB	36	ALA	2.4
22	RB	26	ARG	2.4
36	JA	44	VAL	2.4
1	A	253	GLN	2.4
6	F	118	LYS	2.4
50	YC	103	C	2.4
50	YC	382	A	2.4
51	VC	1614	A	2.4
51	ZC	2126	A	2.4
52	WC	30	C	2.4
53	BD	73	A	2.4
35	IA	90	GLY	2.4
6	F	36	ALA	2.4
33	GA	98	LEU	2.4
36	JA	104	ARG	2.4
37	GC	43	ARG	2.4
9	I	34	THR	2.4
20	PB	179	ASP	2.4
43	MC	47	ASP	2.4
11	GB	29	PHE	2.4
11	GB	58	PHE	2.4
50	UC	1034	G	2.4
51	VC	2159	G	2.4
1	WA	69	ARG	2.4
21	U	48	GLY	2.4
41	OA	41	ARG	2.4
11	GB	28	ALA	2.4
51	ZC	2058	A	2.4
39	MA	63	TYR	2.4
39	IC	69	ILE	2.3
50	UC	962	C	2.4
50	YC	366	C	2.4
50	YC	401	C	2.4
51	VC	267	C	2.4
52	WC	31	C	2.4
36	JA	6	GLY	2.3
40	JC	91	ARG	2.3
15	O	72	HIS	2.3
29	YB	142	LEU	2.3
38	HC	119	CYS	2.3
40	JC	17	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
41	KC	49	HIS	2.3
50	YC	5	U	2.3
51	ZC	270(M)	U	2.3
6	BB	91	SER	2.3
6	F	96	ASP	2.3
10	J	80	TYR	2.3
50	UC	1530	G	2.3
50	YC	306	G	2.3
51	VC	2323	G	2.3
10	FB	15	ARG	2.3
18	R	76	ARG	2.3
6	F	92	VAL	2.3
6	BB	90	GLY	2.3
18	R	57	LEU	2.3
5	E	146	ALA	2.3
19	S	72	VAL	2.3
23	W	60	LEU	2.3
37	KA	62	HIS	2.3
50	UC	1357	A	2.3
51	VC	1460	A	2.3
28	XB	26	LYS	2.3
51	ZC	797	C	2.3
14	JB	93	ARG	2.3
5	E	166	GLY	2.3
7	CB	135	GLY	2.3
28	BA	9	GLY	2.3
29	CA	97	TRP	2.3
4	D	171	ALA	2.3
29	YB	81	VAL	2.3
36	FC	85	LEU	2.3
30	ZB	180	ALA	2.3
34	HA	37	ASN	2.3
40	JC	27	LYS	2.3
6	F	109	ILE	2.3
50	YC	1031	G	2.3
40	JC	7	VAL	2.3
43	QA	60	LEU	2.3
51	VC	1641	A	2.3
52	AD	52	A	2.3
21	QB	58	THR	2.3
24	X	54	VAL	2.3
21	U	44	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
12	L	79	LEU	2.3
8	DB	113	MET	2.3
20	PB	107	THR	2.3
21	QB	19	LYS	2.3
35	IA	27	PRO	2.3
43	QA	19	ILE	2.3
47	QC	83	ARG	2.3
51	VC	2171	A	2.3
6	F	128	LEU	2.3
12	HB	75	LEU	2.3
30	ZB	3	ASN	2.3
51	VC	2172	U	2.3
36	JA	47	LEU	2.3
47	QC	13	LEU	2.3
51	ZC	2179	C	2.3
12	L	58	GLY	2.3
13	M	84	GLN	2.3
19	S	32	PRO	2.3
28	BA	43	GLN	2.3
46	PC	44	MET	2.3
11	K	93	TYR	2.3
35	EC	80	ILE	2.3
3	YA	154	VAL	2.3
11	K	116	GLU	2.3
32	FA	79	GLU	2.3
35	IA	36	LEU	2.3
40	JC	15	VAL	2.3
42	PA	43	LEU	2.3
23	W	29	LYS	2.3
44	RA	4	LYS	2.3
17	Q	73	ALA	2.3
31	EA	75	PHE	2.3
50	YC	1451	A	2.3
51	VC	1033	U	2.3
51	VC	2119	A	2.3
51	VC	2124	G	2.3
51	VC	2709	G	2.3
51	ZC	2503	A	2.3
37	GC	89	ASP	2.3
51	ZC	246	C	2.3
12	L	10	LEU	2.3
31	AC	11	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
44	RA	6	LEU	2.3
49	TC	47	VAL	2.3
43	QA	61	SER	2.3
1	WA	105	ILE	2.3
4	D	77	ILE	2.3
4	D	19	LEU	2.3
6	BB	130	TYR	2.3
13	IB	88	ASP	2.3
5	E	116	GLU	2.3
12	L	29	LEU	2.3
20	T	5	LEU	2.3
20	T	155	LEU	2.3
39	IC	118	LYS	2.3
11	GB	23	GLY	2.3
21	U	52	GLY	2.3
51	ZC	2114	A	2.3
9	I	30	ALA	2.3
37	GC	28	ARG	2.3
40	JC	110	ARG	2.3
50	UC	754	C	2.3
50	YC	783	C	2.3
2	XA	77	ILE	2.3
13	IB	52	SER	2.3
31	EA	152	SER	2.3
51	VC	247	G	2.3
51	ZC	1620	G	2.3
31	AC	64	LEU	2.3
47	QC	48	LYS	2.3
30	DA	2	GLY	2.3
8	H	137	ARG	2.3
31	EA	209	ARG	2.3
34	HA	78	ARG	2.3
39	MA	31	PHE	2.3
50	YC	1372	U	2.3
1	WA	246	PRO	2.3
14	N	8	LYS	2.3
15	O	51	LYS	2.3
34	DC	11	GLN	2.3
50	YC	1280	A	2.3
2	B	50	GLY	2.3
7	CB	58	THR	2.3
50	YC	620	C	2.3

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Mol	Chain	Res	Type	RSRZ
51	VC	749	C	2.3
51	VC	1386	C	2.3
1	A	247	ALA	2.3
30	DA	156	ARG	2.3
50	YC	1365	G	2.3
51	ZC	1973	G	2.3
5	E	89	ILE	2.3
3	YA	192	LEU	2.3
4	ZA	92	VAL	2.3
7	G	103	GLN	2.3
19	OB	31	LEU	2.3
36	FC	19	LEU	2.3
50	YC	1315	U	2.3
51	ZC	1065	U	2.3
4	D	96	ARG	2.3
10	J	47	ASP	2.3
36	JA	68	GLY	2.3
48	RC	7	ARG	2.3
12	L	52	ILE	2.3
15	O	17	ILE	2.3
19	OB	71	LYS	2.3
39	IC	83	LEU	2.3
51	VC	1156	A	2.3
7	G	53	VAL	2.3
10	FB	68	GLN	2.3
19	OB	72	VAL	2.3
30	ZB	201	TYR	2.3
31	AC	74	GLN	2.3
50	UC	1367	C	2.3
51	VC	273(G)	C	2.3
51	VC	790	C	2.3
51	VC	1295	C	2.3
2	B	51	PHE	2.3
13	M	111	GLU	2.3
13	IB	3	ARG	2.3
42	PA	65	ARG	2.3
51	ZC	2807	G	2.3
12	HB	49	ASP	2.3
34	HA	12	LEU	2.3
35	EC	133	LEU	2.3
47	QC	27	LYS	2.3
5	E	61	HIS	2.3

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Mol	Chain	Res	Type	RSRZ
5	E	114	VAL	2.3
12	HB	3	HIS	2.3
19	OB	55	TYR	2.3
1	WA	67	PHE	2.3
37	KA	66	ARG	2.3
1	A	26	LYS	2.3
7	G	107	ILE	2.3
14	N	52	ILE	2.3
46	PC	9	VAL	2.3
51	VC	2295	C	2.3
4	D	137	GLU	2.2
4	ZA	32	PRO	2.2
9	I	3	GLN	2.2
23	W	31	GLU	2.2
51	VC	2211	G	2.2
21	QB	50	ASN	2.2
33	GA	100	ASN	2.2
2	B	3	GLY	2.2
18	NB	33	LYS	2.2
39	MA	118	LYS	2.2
28	XB	24	ALA	2.2
53	ED	71	C	2.2
39	IC	23	VAL	2.2
33	GA	36	ARG	2.2
36	FC	125	TYR	2.2
5	E	47	GLU	2.2
37	GC	22	LYS	2.2
50	YC	1355	G	2.2
51	VC	1933	G	2.2
51	ZC	2445	G	2.2
18	R	34	ALA	2.2
28	BA	2	PRO	2.2
29	CA	142	LEU	2.2
29	YB	125	PRO	2.2
29	YB	149	LEU	2.2
30	ZB	151	VAL	2.2
43	QA	62	VAL	2.2
14	JB	61	PHE	2.2
30	DA	164	ARG	2.2
34	HA	151	TYR	2.2
39	IC	88	ARG	2.2
1	A	102	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
5	AB	153	LYS	2.2
15	O	84	LYS	2.2
19	OB	34	LYS	2.2
22	V	10	LYS	2.2
29	YB	139	LYS	2.2
50	UC	1223	C	2.2
50	YC	1158	C	2.2
51	VC	1387	C	2.2
35	EC	10	LEU	2.2
37	GC	77	PRO	2.2
47	UA	76	ALA	2.2
47	UA	100	ILE	2.2
11	GB	18	LYS	2.2
44	NC	37	LYS	2.2
50	YC	1033	G	2.2
51	VC	1555	G	2.2
14	JB	109	GLU	2.2
2	B	54	GLN	2.2
2	XA	34	VAL	2.2
5	AB	151	ILE	2.2
6	BB	105	HIS	2.2
39	MA	100	VAL	2.2
51	ZC	1460	A	2.2
16	LB	98	GLU	2.2
44	RA	61	GLU	2.2
4	D	31	VAL	2.2
15	O	80	ILE	2.2
39	MA	69	ILE	2.2
7	CB	41	PHE	2.2
41	KC	22	THR	2.2
34	HA	156	TRP	2.2
46	TA	42	PRO	2.2
4	ZA	11	TYR	2.2
51	VC	2869	G	2.2
1	A	83	GLU	2.2
5	E	144	VAL	2.2
8	DB	122	LEU	2.2
12	L	20	LEU	2.2
13	M	70	GLY	2.2
23	W	24	LEU	2.2
29	CA	145	LEU	2.2
8	H	71	MET	2.2

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Mol	Chain	Res	Type	RSRZ
4	D	23	PHE	2.2
13	IB	20	ARG	2.2
22	V	47	GLN	2.2
36	FC	15	ALA	2.2
51	VC	1516	U	2.2
51	VC	2296	U	2.2
7	G	22	PRO	2.2
7	G	54	PRO	2.2
26	VB	41	PRO	2.2
30	DA	193	TYR	2.2
30	ZB	150	LYS	2.2
45	SA	71	LYS	2.2
50	YC	1259	C	2.2
51	ZC	683	C	2.2
31	AC	155	LEU	2.2
34	HA	9	VAL	2.2
35	IA	97	VAL	2.2
49	SC	56	GLU	2.2
5	AB	42	ARG	2.2
15	O	35	ALA	2.2
24	TB	19	GLN	2.2
29	YB	95	GLN	2.2
38	LA	120	ARG	2.2
45	SA	29	PHE	2.2
45	SA	43	PHE	2.2
4	D	4	ASP	2.2
31	AC	197	PRO	2.2
50	UC	103(B)	G	2.2
51	VC	1440	G	2.2
12	L	114	VAL	2.2
36	JA	102	LEU	2.2
44	RA	78	GLU	2.2
50	UC	400	C	2.2
51	ZC	796	C	2.2
28	XB	12	LYS	2.2
36	JA	127	LYS	2.2
39	MA	48	ASN	2.2
2	B	49	LEU	2.2
15	O	8	VAL	2.2
29	YB	187	LEU	2.2
35	IA	26	VAL	2.2
36	FC	28	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
36	FC	99	LEU	2.2
43	QA	52	ASP	2.2
46	PC	43	GLU	2.2
47	QC	69	GLY	2.2
7	G	48	MET	2.2
34	DC	62	PHE	2.2
50	YC	62	U	2.2
51	ZC	1454	U	2.2
21	QB	70	GLN	2.2
22	V	19	GLN	2.2
50	YC	281	G	2.2
24	X	12	PRO	2.2
28	XB	63	PRO	2.2
32	BC	91	LEU	2.2
39	MA	30	PRO	2.2
50	YC	1149	C	2.2
51	VC	795	C	2.2
2	B	96	PHE	2.2
7	G	49	GLY	2.2
42	PA	87	ILE	2.2
8	H	74	PHE	2.2
14	N	57	PHE	2.2
12	HB	94	TYR	2.2
2	B	195	LEU	2.2
12	HB	51	LEU	2.2
14	JB	51	ARG	2.2
20	T	128	VAL	2.2
23	W	16	LEU	2.2
51	ZC	1420	U	2.2
14	N	61	PHE	2.2
18	R	3	THR	2.2
22	V	11	ARG	2.2
27	AA	47	ARG	2.2
32	FA	25	ARG	2.2
32	FA	28	PHE	2.2
33	GA	7	ASN	2.2
42	LC	52	SER	2.2
2	B	78	LEU	2.2
4	ZA	3	LEU	2.2
34	DC	22	LEU	2.2
36	JA	2	GLU	2.2
37	GC	29	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
42	LC	85	LEU	2.2
5	AB	89	ILE	2.2
7	CB	106	GLU	2.2
11	K	127	ILE	2.2
43	MC	52	ASP	2.2
7	G	29	GLN	2.2
8	DB	110	LEU	2.2
9	EB	3	GLN	2.2
15	O	20	LEU	2.2
18	NB	39	ILE	2.2
28	XB	15	LYS	2.2
31	EA	65	ARG	2.2
32	FA	29	GLY	2.2
47	UA	55	ILE	2.2
33	GA	89	MET	2.2
50	YC	1258	G	2.2
51	ZC	226	G	2.2
42	PA	32	LEU	2.2
47	UA	54	LYS	2.2
35	IA	55	GLY	2.1
50	YC	12	U	2.2
20	PB	187	ALA	2.1
4	ZA	15	VAL	2.1
7	G	105	LEU	2.1
9	I	70	LYS	2.1
18	R	6	ASP	2.1
35	IA	52	ASP	2.1
39	IC	54	VAL	2.1
50	YC	1188	A	2.1
51	VC	1439	A	2.1
51	ZC	1057	A	2.1
26	VB	43	CYS	2.1
1	A	30	GLU	2.1
31	EA	146	ILE	2.1
34	HA	13	GLN	2.1
35	EC	55	GLY	2.1
42	LC	26	GLU	2.1
51	VC	1624	G	2.1
13	M	69	VAL	2.1
15	O	39	LEU	2.1
19	OB	8	LYS	2.1
21	QB	26	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
36	FC	47	LEU	2.1
4	D	14	GLU	2.1
6	F	122	GLU	2.1
29	CA	12	GLU	2.1
36	FC	48	GLU	2.1
37	GC	10	GLY	2.1
43	MC	54	GLU	2.1
3	YA	146	ALA	2.1
7	CB	40	ALA	2.1
12	L	101	ALA	2.1
29	CA	218	ALA	2.1
51	VC	751	A	2.1
51	VC	789	A	2.1
51	ZC	2530	A	2.1
1	A	34	VAL	2.1
2	XA	76	ARG	2.1
9	EB	10	VAL	2.1
11	GB	27	VAL	2.1
25	Y	30	LEU	2.1
28	BA	13	ARG	2.1
2	XA	42	ASP	2.1
4	ZA	93	THR	2.1
6	F	93	THR	2.1
12	HB	52	ILE	2.1
51	VC	2139	C	2.1
12	HB	23	ASN	2.1
38	LA	111	ASP	2.1
43	QA	63	GLY	2.1
51	VC	1835	G	2.1
51	ZC	389	G	2.1
51	ZC	682	G	2.1
51	ZC	748	G	2.1
20	PB	182	LYS	2.1
36	JA	55	ALA	2.1
1	WA	61	LEU	2.1
2	XA	104	VAL	2.1
25	UB	25	LEU	2.1
31	EA	157	LEU	2.1
2	B	77	ILE	2.1
10	J	51	PHE	2.1
33	GA	63	TYR	2.1
42	LC	20	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
1	WA	94	LEU	2.1
7	G	112	MET	2.1
48	RC	20	LYS	2.1
13	M	101	LEU	2.1
23	W	21	LEU	2.1
28	XB	57	ARG	2.1
41	KC	29	ARG	2.1
43	MC	79	VAL	2.1
44	RA	5	VAL	2.1
49	TC	38	ALA	2.1
50	UC	242	C	2.1
50	UC	980	C	2.1
51	ZC	1258	C	2.1
52	WC	88	C	2.1
9	I	32	TYR	2.1
15	O	47	TYR	2.1
7	CB	99	ILE	2.1
1	A	35	LYS	2.1
12	L	26	LYS	2.1
12	HB	93	GLY	2.1
42	PA	6	GLU	2.1
39	MA	90	LYS	2.1
9	I	83	ALA	2.1
11	GB	56	ARG	2.1
18	NB	83	VAL	2.1
32	FA	19	MET	2.1
36	FC	53	VAL	2.1
39	MA	23	VAL	2.1
20	T	99	TYR	2.1
31	AC	138	TYR	2.1
37	GC	50	ILE	2.1
51	ZC	244	A	2.1
1	WA	38	LYS	2.1
3	C	190	GLU	2.1
15	O	37	GLU	2.1
43	QA	3	LYS	2.1
8	DB	145	VAL	2.1
12	L	36	THR	2.1
19	OB	6	HIS	2.1
28	BA	42	ARG	2.1
49	SC	39	ARG	2.1
51	VC	679	C	2.1

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Mol	Chain	Res	Type	RSRZ
51	VC	2179	C	2.1
51	ZC	679	C	2.1
42	PA	58	MET	2.1
45	SA	66	LEU	2.1
50	UC	285	G	2.1
51	VC	1099	G	2.1
1	WA	28	GLU	2.1
5	E	175	LYS	2.1
14	JB	113	LYS	2.1
7	CB	98	ARG	2.1
15	O	23	GLY	2.1
15	O	25	TRP	2.1
20	T	138	GLU	2.1
44	RA	3	LYS	2.1
5	E	96	ALA	2.1
10	J	127	ALA	2.1
39	IC	92	LEU	2.1
51	VC	2320	A	2.1
15	O	40	PHE	2.1
26	VB	47	THR	2.1
37	KA	67	THR	2.1
46	PC	10	PHE	2.1
35	EC	6	ILE	2.1
19	S	33	LYS	2.1
51	VC	2871	C	2.1
4	ZA	21	ARG	2.1
6	BB	142	VAL	2.1
20	PB	174	VAL	2.1
21	QB	79	VAL	2.1
2	B	168	MET	2.1
4	D	86	MET	2.1
9	EB	122	LEU	2.1
11	K	136	ALA	2.1
11	GB	117	ALA	2.1
31	AC	140	VAL	2.1
12	HB	61	HIS	2.1
2	B	103	ASP	2.1
11	K	64	ILE	2.1
50	YC	333	G	2.1
50	YC	1361	G	2.1
51	VC	1929	G	2.1
11	GB	81	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
29	CA	153	ARG	2.1
36	JA	110	GLU	2.1
37	KA	69	ASN	2.1
40	NA	32	GLU	2.1
28	XB	48	PHE	2.1
46	TA	66	MET	2.1
6	BB	97	ILE	2.1
18	NB	31	HIS	2.1
20	T	23	LYS	2.1
23	W	56	GLN	2.1
36	JA	73	GLN	2.1
39	IC	125	LYS	2.1
46	PC	61	TYR	2.1
50	UC	972	C	2.1
50	UC	1267	C	2.1
51	ZC	385	C	2.1
3	YA	191	ARG	2.1
8	DB	68	ASN	2.1
14	JB	25	GLY	2.1
28	XB	14	VAL	2.1
36	FC	6	GLY	2.1
4	ZA	23	PHE	2.1
6	F	115	ALA	2.1
11	K	128	LYS	2.1
17	MB	75	TYR	2.1
35	IA	35	ILE	2.1
51	VC	468	G	2.1
51	VC	1559	G	2.1
51	VC	2149	G	2.1
51	ZC	2061	G	2.1
51	ZC	2529	G	2.1
53	BD	18	G	2.1
1	WA	83	GLU	2.1
3	YA	164	ARG	2.1
32	FA	100	VAL	2.1
35	EC	22	GLU	2.1
36	FC	96	LEU	2.1
37	KA	53	PRO	2.1
38	LA	54	ARG	2.1
51	VC	1971	A	2.1
51	ZC	1937	A	2.1
51	ZC	1966	A	2.1

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Mol	Chain	Res	Type	RSRZ
26	VB	40	CYS	2.1
39	IC	65	VAL	2.1
33	GA	1	MET	2.1
53	BD	1	C	2.1
4	ZA	157	ILE	2.1
20	T	146	ILE	2.1
32	BC	109	ILE	2.1
35	EC	13	ILE	2.1
43	QA	4	ILE	2.1
1	WA	239	ARG	2.1
32	BC	20	GLN	2.1
42	PA	64	ARG	2.1
1	WA	23	GLU	2.1
6	F	12	LEU	2.1
6	F	116	LEU	2.1
18	NB	92	LEU	2.1
23	W	25	VAL	2.1
25	UB	30	LEU	2.1
29	YB	121	LEU	2.1
32	BC	16	THR	2.1
35	EC	36	LEU	2.1
37	KA	37	PRO	2.1
46	PC	19	VAL	2.1
6	F	100	ALA	2.1
9	I	41	ALA	2.1
10	FB	5	ASP	2.1
29	YB	171	ALA	2.1
50	UC	728	A	2.1
50	UC	1000	A	2.1
50	YC	1393	U	2.1
51	VC	1642	G	2.1
51	ZC	614	U	2.1
31	EA	129	ASN	2.1
38	LA	25	TYR	2.1
51	ZC	2070	G	2.1
51	ZC	2446	G	2.1
4	D	26	GLN	2.1
10	FB	21	ARG	2.1
40	JC	99	ARG	2.1
1	A	175	LEU	2.1
1	WA	111	LEU	2.1
11	GB	48	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
13	IB	8	GLU	2.1
20	T	117	LEU	2.1
14	JB	22	PHE	2.1
20	T	134	PRO	2.1
39	IC	72	GLU	2.1
8	H	50	ALA	2.1
4	D	20	ILE	2.1
11	GB	7	MET	2.1
32	BC	120	THR	2.1
11	K	16	ARG	2.1
43	QA	5	ARG	2.1
47	UA	15	ARG	2.1
1	WA	112	GLN	2.1
6	BB	116	LEU	2.1
16	LB	94	LEU	2.1
19	OB	37	VAL	2.1
19	OB	32	PRO	2.0
28	XB	5	LYS	2.0
51	VC	532	A	2.0
51	ZC	764	A	2.0
28	BA	17	THR	2.0
50	UC	281	G	2.0
50	YC	791	G	2.0
8	H	69	VAL	2.0
11	GB	55	VAL	2.0
24	X	31	LEU	2.0
36	JA	31	GLN	2.0
42	PA	56	LEU	2.0
40	NA	65	LYS	2.0
43	QA	34	GLU	2.0
19	S	70	SER	2.0
31	EA	71	SER	2.0
7	CB	118	THR	2.0
12	HB	116	LEU	2.0
13	IB	26	LEU	2.0
2	B	171	GLU	2.0
28	BA	3	LYS	2.0
36	FC	38	GLN	2.0
43	MC	43	LYS	2.0
51	VC	988	A	2.0
51	ZC	1379	A	2.0
7	CB	123	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
12	L	41	ALA	2.0
51	VC	748	G	2.0
51	VC	1687	G	2.0
51	VC	2148	G	2.0
16	LB	16	PRO	2.0
1	WA	97	TYR	2.0
50	YC	1260	C	2.0
50	YC	1342	C	2.0
13	IB	12	PHE	2.0
1	WA	166	GLN	2.0
15	KB	89	GLU	2.0
30	DA	206	GLU	2.0
35	IA	33	GLU	2.0
42	LC	28	GLN	2.0
1	WA	92	ILE	2.0
4	ZA	25	TYR	2.0
6	BB	3	VAL	2.0
39	IC	68	TYR	2.0
41	KC	25	VAL	2.0
34	DC	26	PHE	2.0
38	LA	122	LYS	2.0
47	UA	30	LYS	2.0
17	MB	109	GLU	2.0
24	TB	34	GLU	2.0
28	BA	40	GLU	2.0
47	UA	63	ILE	2.0
50	UC	1326	C	2.0
50	YC	102(C)	C	2.0
51	ZC	442	G	2.0
51	ZC	749	C	2.0
51	ZC	809	G	2.0
10	FB	61	ARG	2.0
13	IB	16	ASN	2.0
14	JB	50	ILE	2.0
31	AC	181	MET	2.0
42	LC	82	ILE	2.0
51	ZC	2128	C	2.0
13	M	29	PHE	2.0
20	PB	104	PHE	2.0
2	XA	48	GLN	2.0
5	E	130	ARG	2.0
5	AB	148	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
13	M	20	ARG	2.0
15	O	36	ARG	2.0
28	BA	6	THR	2.0
33	GA	95	GLU	2.0
39	MA	32	ARG	2.0
50	YC	815	A	2.0
51	VC	1569	A	2.0
26	VB	45	LYS	2.0
37	GC	7	LYS	2.0
43	MC	38	TYR	2.0
50	UC	1020	U	2.0
50	YC	6	G	2.0
50	YC	1186	G	2.0
51	VC	11	G	2.0
51	VC	268	C	2.0
51	ZC	1837	C	2.0
51	ZC	2121	G	2.0
51	ZC	2295	C	2.0
34	DC	5	ARG	2.0
36	JA	20	ARG	2.0
4	D	138	GLN	2.0
4	ZA	97	ASP	2.0
9	EB	86	ILE	2.0
29	YB	162	ILE	2.0
6	F	114	LEU	2.0
29	YB	197	VAL	2.0
35	EC	118	VAL	2.0
44	RA	76	LEU	2.0
9	EB	36	GLY	2.0
22	RB	21	ARG	2.0
30	DA	197	GLY	2.0
31	AC	125	HIS	2.0
40	NA	73	GLU	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3571	1/1	-0.37	0.42	131,131,131,131	0
55	MG	UC	1737	1/1	-0.28	0.66	211,211,211,211	0
55	MG	ZC	3737	1/1	-0.22	0.58	204,204,204,204	0
55	MG	ZC	3680	1/1	-0.19	1.26	123,123,123,123	0
55	MG	YC	1862	1/1	-0.14	1.22	169,169,169,169	0
55	MG	BB	202	1/1	-0.12	0.60	153,153,153,153	0
55	MG	ZC	3705	1/1	-0.09	0.64	225,225,225,225	0
55	MG	ZC	3133	1/1	-0.09	1.04	124,124,124,124	0
55	MG	UC	1667	1/1	-0.07	0.55	145,145,145,145	0
55	MG	UC	1760	1/1	-0.07	1.55	146,146,146,146	0
55	MG	VC	3441	1/1	-0.05	1.10	201,201,201,201	0
55	MG	VC	3579	1/1	-0.04	1.08	105,105,105,105	0
55	MG	ZC	3224	1/1	-0.02	0.37	222,222,222,222	0
55	MG	FC	201	1/1	-0.01	0.57	181,181,181,181	0
55	MG	YC	1676	1/1	0.01	0.39	147,147,147,147	0
55	MG	YC	1627	1/1	0.01	0.49	157,157,157,157	0
55	MG	ED	110	1/1	0.02	1.05	139,139,139,139	0
55	MG	YC	1711	1/1	0.03	0.85	174,174,174,174	0
55	MG	YC	1646	1/1	0.05	0.51	177,177,177,177	0
55	MG	VC	3076	1/1	0.06	0.83	103,103,103,103	0
55	MG	YC	1717	1/1	0.06	0.50	210,210,210,210	0
55	MG	UC	1732	1/1	0.07	0.34	148,148,148,148	0
55	MG	YC	1840	1/1	0.07	0.46	145,145,145,145	0
55	MG	ZC	3420	1/1	0.08	0.53	83,83,83,83	0
55	MG	VC	3596	1/1	0.08	0.49	173,173,173,173	0
55	MG	VC	3474	1/1	0.10	0.59	100,100,100,100	0
55	MG	VC	3055	1/1	0.11	0.75	103,103,103,103	0
55	MG	ZC	3616	1/1	0.11	0.93	90,90,90,90	0
55	MG	RC	101	1/1	0.11	0.51	162,162,162,162	0
55	MG	LC	101	1/1	0.12	0.66	135,135,135,135	0
55	MG	YC	1802	1/1	0.13	0.35	134,134,134,134	0
55	MG	YC	1808	1/1	0.14	0.75	167,167,167,167	0
55	MG	VC	3666	1/1	0.15	0.38	131,131,131,131	0
55	MG	YC	1741	1/1	0.15	0.71	219,219,219,219	0
55	MG	VC	3692	1/1	0.15	0.56	119,119,119,119	0
55	MG	YC	1805	1/1	0.15	0.33	115,115,115,115	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3362	1/1	0.15	0.36	88,88,88,88	0
55	MG	VC	3092	1/1	0.15	0.33	123,123,123,123	0
55	MG	UC	1669	1/1	0.16	0.42	189,189,189,189	0
55	MG	AD	209	1/1	0.17	0.90	115,115,115,115	0
55	MG	ZC	3635	1/1	0.18	0.41	216,216,216,216	0
55	MG	YC	1763	1/1	0.18	0.42	161,161,161,161	0
55	MG	OA	103	1/1	0.18	1.03	169,169,169,169	0
55	MG	FD	108	1/1	0.18	0.44	153,153,153,153	0
55	MG	VC	3548	1/1	0.19	0.55	135,135,135,135	0
55	MG	D	201	1/1	0.19	0.76	178,178,178,178	0
55	MG	FD	114	1/1	0.19	0.50	132,132,132,132	0
55	MG	VC	3317	1/1	0.20	0.41	122,122,122,122	0
55	MG	ZC	3055	1/1	0.20	2.74	89,89,89,89	0
55	MG	UC	1854	1/1	0.21	0.82	146,146,146,146	0
55	MG	VC	3331	1/1	0.21	0.23	134,134,134,134	0
55	MG	ZC	3467	1/1	0.21	0.36	114,114,114,114	0
55	MG	YC	1679	1/1	0.21	0.32	281,281,281,281	0
55	MG	ZC	3718	1/1	0.21	2.49	124,124,124,124	0
55	MG	VC	3253	1/1	0.22	0.66	117,117,117,117	0
55	MG	VC	3066	1/1	0.23	0.79	102,102,102,102	0
55	MG	YC	1652	1/1	0.23	0.78	196,196,196,196	0
55	MG	VC	3599	1/1	0.24	2.56	84,84,84,84	0
55	MG	YC	1677	1/1	0.25	0.99	136,136,136,136	0
55	MG	YC	1829	1/1	0.25	0.61	146,146,146,146	0
55	MG	UC	1657	1/1	0.25	0.86	175,175,175,175	0
55	MG	ZC	3648	1/1	0.25	0.79	116,116,116,116	0
55	MG	UC	1699	1/1	0.25	0.33	197,197,197,197	0
55	MG	VC	3132	1/1	0.25	0.49	181,181,181,181	0
55	MG	YC	1636	1/1	0.26	0.45	174,174,174,174	0
55	MG	ZC	3415	1/1	0.26	0.57	157,157,157,157	0
55	MG	CB	201	1/1	0.27	0.47	222,222,222,222	0
55	MG	UC	1629	1/1	0.27	0.21	134,134,134,134	0
55	MG	YC	1661	1/1	0.28	1.41	142,142,142,142	0
55	MG	J	201	1/1	0.28	0.71	117,117,117,117	0
55	MG	YC	1784	1/1	0.28	0.45	139,139,139,139	0
55	MG	VC	3423	1/1	0.28	0.49	136,136,136,136	0
55	MG	D	202	1/1	0.28	0.34	152,152,152,152	0
55	MG	VC	3096	1/1	0.28	0.95	207,207,207,207	0
55	MG	VC	3489	1/1	0.28	1.01	238,238,238,238	0
55	MG	BD	108	1/1	0.29	0.66	109,109,109,109	0
55	MG	ZC	3260	1/1	0.30	0.84	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3490	1/1	0.30	0.23	100,100,100,100	0
55	MG	VC	3515	1/1	0.30	0.70	134,134,134,134	0
55	MG	YC	1619	1/1	0.30	0.26	186,186,186,186	0
55	MG	VC	3276	1/1	0.30	0.53	138,138,138,138	0
55	MG	UC	1754	1/1	0.31	0.47	275,275,275,275	0
55	MG	UC	1807	1/1	0.32	0.53	113,113,113,113	0
55	MG	AD	205	1/1	0.32	0.88	117,117,117,117	0
55	MG	VC	3505	1/1	0.32	0.42	116,116,116,116	0
55	MG	YC	1642	1/1	0.32	0.28	150,150,150,150	0
55	MG	VC	3440	1/1	0.32	0.29	287,287,287,287	0
55	MG	D	203	1/1	0.32	0.47	188,188,188,188	0
55	MG	VC	3336	1/1	0.32	0.32	119,119,119,119	0
55	MG	YC	1765	1/1	0.33	0.59	108,108,108,108	0
55	MG	VC	3381	1/1	0.33	0.67	130,130,130,130	0
55	MG	VC	3044	1/1	0.33	0.41	243,243,243,243	0
55	MG	VC	3587	1/1	0.33	0.65	92,92,92,92	0
55	MG	ZC	3487	1/1	0.33	0.61	83,83,83,83	0
55	MG	UC	1712	1/1	0.34	0.45	212,212,212,212	0
55	MG	UC	1682	1/1	0.34	1.13	145,145,145,145	0
55	MG	VC	3239	1/1	0.34	0.37	171,171,171,171	0
55	MG	ZC	3349	1/1	0.36	0.21	270,270,270,270	0
55	MG	VC	3141	1/1	0.36	0.35	92,92,92,92	0
55	MG	UC	1665	1/1	0.36	0.19	142,142,142,142	0
55	MG	ZC	3626	1/1	0.36	1.38	110,110,110,110	0
55	MG	VC	3447	1/1	0.37	0.62	121,121,121,121	0
55	MG	YC	1668	1/1	0.37	0.51	143,143,143,143	0
55	MG	ZC	3239	1/1	0.37	0.52	82,82,82,82	0
55	MG	YC	1694	1/1	0.37	0.97	179,179,179,179	0
55	MG	YC	1615	1/1	0.37	1.00	150,150,150,150	0
55	MG	ZC	3769	1/1	0.37	0.78	115,115,115,115	0
55	MG	OA	102	1/1	0.38	0.78	180,180,180,180	0
55	MG	YC	1617	1/1	0.38	0.57	175,175,175,175	0
55	MG	VC	3168	1/1	0.38	0.64	108,108,108,108	0
55	MG	VC	3376	1/1	0.39	0.57	200,200,200,200	0
55	MG	VC	3568	1/1	0.39	0.71	102,102,102,102	0
55	MG	UC	1720	1/1	0.39	0.33	125,125,125,125	0
55	MG	VC	3150	1/1	0.39	1.00	139,139,139,139	0
55	MG	ZC	3519	1/1	0.39	0.34	114,114,114,114	0
55	MG	UC	1681	1/1	0.39	0.11	254,254,254,254	0
55	MG	VC	3360	1/1	0.39	0.56	153,153,153,153	0
55	MG	VC	3220	1/1	0.40	1.31	108,108,108,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1695	1/1	0.40	0.30	197,197,197,197	0
55	MG	FD	110	1/1	0.40	0.67	148,148,148,148	0
55	MG	YC	1630	1/1	0.40	0.64	136,136,136,136	0
55	MG	ED	106	1/1	0.41	0.26	148,148,148,148	0
55	MG	ZC	3113	1/1	0.41	0.57	93,93,93,93	0
55	MG	AD	206	1/1	0.41	0.42	128,128,128,128	0
55	MG	ZC	3365	1/1	0.41	0.52	104,104,104,104	0
55	MG	VC	3387	1/1	0.41	1.15	119,119,119,119	0
55	MG	UC	1718	1/1	0.42	1.77	120,120,120,120	0
55	MG	AD	227	1/1	0.42	0.54	136,136,136,136	0
55	MG	ZC	3527	1/1	0.42	0.88	92,92,92,92	0
55	MG	BC	201	1/1	0.42	2.72	128,128,128,128	0
55	MG	YC	1769	1/1	0.42	0.61	159,159,159,159	0
55	MG	UC	1725	1/1	0.42	0.61	145,145,145,145	0
55	MG	UC	1728	1/1	0.42	0.46	119,119,119,119	0
55	MG	VC	3559	1/1	0.42	0.31	97,97,97,97	0
55	MG	YC	1700	1/1	0.43	0.26	208,208,208,208	0
55	MG	ZC	3089	1/1	0.43	0.73	71,71,71,71	0
55	MG	P	202	1/1	0.43	0.25	131,131,131,131	0
55	MG	ZC	3457	1/1	0.43	0.38	97,97,97,97	0
55	MG	ZC	3706	1/1	0.43	0.86	95,95,95,95	0
55	MG	ZC	3627	1/1	0.43	0.27	92,92,92,92	0
55	MG	YC	1657	1/1	0.44	0.21	179,179,179,179	0
55	MG	ZC	3723	1/1	0.44	0.72	85,85,85,85	0
55	MG	VC	3040	1/1	0.44	0.72	99,99,99,99	0
55	MG	HA	202	1/1	0.44	0.65	171,171,171,171	0
55	MG	UC	1612	1/1	0.44	0.43	114,114,114,114	0
55	MG	VC	3635	1/1	0.44	0.61	108,108,108,108	0
55	MG	VC	3345	1/1	0.44	0.53	111,111,111,111	0
55	MG	YC	1759	1/1	0.45	1.14	141,141,141,141	0
55	MG	YC	1762	1/1	0.45	0.32	192,192,192,192	0
55	MG	YC	1818	1/1	0.45	0.81	122,122,122,122	0
55	MG	VC	3514	1/1	0.45	0.55	138,138,138,138	0
55	MG	ZC	3472	1/1	0.45	0.53	98,98,98,98	0
55	MG	BD	103	1/1	0.45	0.89	218,218,218,218	0
55	MG	VC	3604	1/1	0.45	0.80	125,125,125,125	0
55	MG	VC	3190	1/1	0.45	0.92	159,159,159,159	0
55	MG	VC	3418	1/1	0.45	0.65	91,91,91,91	0
55	MG	VC	3098	1/1	0.45	0.35	114,114,114,114	0
55	MG	ZC	3390	1/1	0.45	0.91	105,105,105,105	0
55	MG	ZC	3613	1/1	0.45	0.69	90,90,90,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	PA	102	1/1	0.46	0.58	118,118,118,118	0
55	MG	YC	1690	1/1	0.46	0.50	215,215,215,215	0
55	MG	YC	1738	1/1	0.46	0.20	144,144,144,144	0
55	MG	UC	1839	1/1	0.46	1.24	130,130,130,130	0
55	MG	VC	3437	1/1	0.46	0.21	199,199,199,199	0
55	MG	ZC	3763	1/1	0.46	0.71	82,82,82,82	0
55	MG	ZC	3218	1/1	0.47	0.61	136,136,136,136	0
55	MG	VC	3153	1/1	0.47	0.54	106,106,106,106	0
55	MG	VC	3261	1/1	0.47	0.66	102,102,102,102	0
55	MG	YC	1685	1/1	0.47	0.37	113,113,113,113	0
55	MG	ZC	3299	1/1	0.47	0.59	90,90,90,90	0
55	MG	ZC	3155	1/1	0.47	0.33	69,69,69,69	0
55	MG	ZC	3728	1/1	0.47	0.46	94,94,94,94	0
55	MG	VC	3539	1/1	0.48	1.26	109,109,109,109	0
55	MG	ZC	3307	1/1	0.48	0.41	117,117,117,117	0
55	MG	UC	1727	1/1	0.48	0.56	164,164,164,164	0
55	MG	VC	3438	1/1	0.48	0.43	112,112,112,112	0
55	MG	ZC	3732	1/1	0.48	0.49	91,91,91,91	0
55	MG	YC	1737	1/1	0.48	0.55	180,180,180,180	0
55	MG	ZC	3748	1/1	0.48	0.98	117,117,117,117	0
55	MG	FD	102	1/1	0.48	0.23	169,169,169,169	0
55	MG	LA	201	1/1	0.48	0.51	142,142,142,142	0
55	MG	VC	3256	1/1	0.48	0.59	101,101,101,101	0
55	MG	VC	3435	1/1	0.48	0.33	105,105,105,105	0
55	MG	UC	1645	1/1	0.49	0.68	116,116,116,116	0
55	MG	VC	3289	1/1	0.49	0.54	224,224,224,224	0
55	MG	VC	3315	1/1	0.49	0.74	119,119,119,119	0
55	MG	ZC	3681	1/1	0.49	0.70	89,89,89,89	0
55	MG	ZC	3692	1/1	0.49	0.28	106,106,106,106	0
55	MG	ZC	3761	1/1	0.49	0.21	197,197,197,197	0
55	MG	ZC	3696	1/1	0.49	0.78	145,145,145,145	0
55	MG	UC	1798	1/1	0.49	1.12	168,168,168,168	0
55	MG	YC	1601	1/1	0.49	0.25	209,209,209,209	0
55	MG	YC	1790	1/1	0.49	0.30	209,209,209,209	0
55	MG	ZC	3679	1/1	0.50	0.76	84,84,84,84	0
55	MG	BA	101	1/1	0.50	1.62	130,130,130,130	0
55	MG	VC	3496	1/1	0.50	1.21	140,140,140,140	0
55	MG	VC	3231	1/1	0.50	1.01	119,119,119,119	0
55	MG	YC	1821	1/1	0.51	0.62	204,204,204,204	0
55	MG	YC	1671	1/1	0.51	0.92	99,99,99,99	0
55	MG	YC	1725	1/1	0.51	0.96	126,126,126,126	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3261	1/1	0.51	1.07	80,80,80,80	0
55	MG	ZC	3264	1/1	0.51	0.83	121,121,121,121	0
55	MG	VC	3402	1/1	0.51	0.58	100,100,100,100	0
55	MG	VC	3366	1/1	0.51	0.56	111,111,111,111	0
55	MG	ZC	3314	1/1	0.51	0.53	97,97,97,97	0
55	MG	VC	3422	1/1	0.52	0.45	112,112,112,112	0
55	MG	ZC	3025	1/1	0.52	0.33	95,95,95,95	0
55	MG	YC	1643	1/1	0.52	0.87	112,112,112,112	0
55	MG	UC	1815	1/1	0.52	0.53	134,134,134,134	0
55	MG	ZC	3630	1/1	0.52	0.52	99,99,99,99	0
55	MG	VC	3707	1/1	0.52	0.50	106,106,106,106	0
55	MG	VC	3160	1/1	0.52	0.36	108,108,108,108	0
55	MG	ZC	3651	1/1	0.52	0.87	104,104,104,104	0
55	MG	UC	1622	1/1	0.52	0.57	121,121,121,121	0
55	MG	YC	1775	1/1	0.52	0.50	132,132,132,132	0
55	MG	YC	1667	1/1	0.52	0.17	149,149,149,149	0
55	MG	YC	1843	1/1	0.52	0.91	138,138,138,138	0
55	MG	VC	3154	1/1	0.53	0.55	81,81,81,81	0
55	MG	ZC	3537	1/1	0.53	0.25	105,105,105,105	0
55	MG	WC	212	1/1	0.53	0.85	118,118,118,118	0
55	MG	XC	101	1/1	0.53	0.44	190,190,190,190	0
55	MG	ZC	3483	1/1	0.53	0.76	96,96,96,96	0
55	MG	YC	1781	1/1	0.53	1.07	146,146,146,146	0
55	MG	UC	1855	1/1	0.53	0.52	121,121,121,121	0
55	MG	ZC	3629	1/1	0.53	0.66	91,91,91,91	0
55	MG	ZC	3498	1/1	0.53	0.34	109,109,109,109	0
55	MG	VC	3255	1/1	0.53	0.45	107,107,107,107	0
55	MG	ZC	3564	1/1	0.54	0.18	105,105,105,105	0
55	MG	YC	1771	1/1	0.54	0.39	229,229,229,229	0
55	MG	VC	3157	1/1	0.54	0.16	125,125,125,125	0
55	MG	VC	3375	1/1	0.54	0.30	125,125,125,125	0
55	MG	AD	215	1/1	0.54	0.55	120,120,120,120	0
55	MG	VC	3311	1/1	0.54	0.64	119,119,119,119	0
55	MG	C	301	1/1	0.54	0.32	118,118,118,118	0
55	MG	YC	1680	1/1	0.54	0.93	148,148,148,148	0
55	MG	VC	3683	1/1	0.54	0.62	84,84,84,84	0
55	MG	ZC	3319	1/1	0.54	0.38	117,117,117,117	0
55	MG	VC	3581	1/1	0.54	0.37	90,90,90,90	0
55	MG	YC	1664	1/1	0.54	0.24	199,199,199,199	0
55	MG	VC	3432	1/1	0.54	0.47	112,112,112,112	0
55	MG	LA	204	1/1	0.54	0.29	123,123,123,123	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1795	1/1	0.55	0.42	97,97,97,97	0
55	MG	ZC	3427	1/1	0.55	0.38	95,95,95,95	0
55	MG	YC	1858	1/1	0.55	0.50	132,132,132,132	0
55	MG	ZC	3654	1/1	0.55	1.12	115,115,115,115	0
55	MG	YC	1746	1/1	0.55	0.72	106,106,106,106	0
55	MG	UC	1758	1/1	0.55	0.65	120,120,120,120	0
55	MG	WC	204	1/1	0.55	0.69	153,153,153,153	0
55	MG	YC	1783	1/1	0.55	0.37	102,102,102,102	0
55	MG	VC	3682	1/1	0.55	0.47	123,123,123,123	0
55	MG	UC	1747	1/1	0.55	0.83	95,95,95,95	0
55	MG	ZC	3416	1/1	0.55	0.56	87,87,87,87	0
55	MG	YC	1614	1/1	0.56	0.58	90,90,90,90	0
55	MG	VC	3450	1/1	0.56	0.54	116,116,116,116	0
55	MG	A	303	1/1	0.56	0.55	101,101,101,101	0
55	MG	ZC	3623	1/1	0.56	0.53	77,77,77,77	0
55	MG	YC	1691	1/1	0.56	0.59	193,193,193,193	0
55	MG	VC	3062	1/1	0.56	1.19	91,91,91,91	0
55	MG	NB	101	1/1	0.56	0.36	76,76,76,76	0
55	MG	VC	3332	1/1	0.56	0.37	121,121,121,121	0
55	MG	VC	3283	1/1	0.56	0.47	104,104,104,104	0
55	MG	UC	1605	1/1	0.56	0.66	132,132,132,132	0
55	MG	VC	3201	1/1	0.56	0.46	139,139,139,139	0
55	MG	YC	1845	1/1	0.56	0.56	127,127,127,127	0
55	MG	ZC	3669	1/1	0.56	0.75	126,126,126,126	0
55	MG	VC	3362	1/1	0.56	0.69	88,88,88,88	0
55	MG	J	202	1/1	0.57	0.68	88,88,88,88	0
55	MG	VC	3446	1/1	0.57	0.67	109,109,109,109	0
55	MG	YC	1625	1/1	0.57	0.91	121,121,121,121	0
55	MG	ZC	3070	1/1	0.57	0.65	91,91,91,91	0
55	MG	ZC	3538	1/1	0.57	0.42	121,121,121,121	0
55	MG	BD	106	1/1	0.57	1.08	192,192,192,192	0
55	MG	ZC	3075	1/1	0.57	0.27	94,94,94,94	0
55	MG	YC	1836	1/1	0.57	0.37	106,106,106,106	0
55	MG	YC	1659	1/1	0.57	0.82	194,194,194,194	0
55	MG	YC	1687	1/1	0.57	0.57	113,113,113,113	0
55	MG	VC	3625	1/1	0.57	0.86	105,105,105,105	0
55	MG	YC	1853	1/1	0.57	0.42	137,137,137,137	0
55	MG	YC	1811	1/1	0.57	0.31	167,167,167,167	0
55	MG	YC	1806	1/1	0.58	0.78	145,145,145,145	0
55	MG	ZC	3360	1/1	0.58	1.09	193,193,193,193	0
55	MG	UC	1846	1/1	0.58	0.24	227,227,227,227	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3731	1/1	0.58	0.26	90,90,90,90	0
55	MG	VC	3221	1/1	0.58	0.47	94,94,94,94	0
55	MG	ZC	3269	1/1	0.58	0.16	112,112,112,112	0
55	MG	ZC	3198	1/1	0.58	0.43	116,116,116,116	0
55	MG	YC	1792	1/1	0.58	0.49	124,124,124,124	0
55	MG	YC	1604	1/1	0.58	0.61	136,136,136,136	0
55	MG	IB	201	1/1	0.58	2.84	140,140,140,140	0
55	MG	ZC	3330	1/1	0.58	1.45	93,93,93,93	0
55	MG	ZC	3638	1/1	0.58	0.50	288,288,288,288	0
55	MG	UC	1779	1/1	0.59	0.47	161,161,161,161	0
55	MG	VC	3603	1/1	0.59	0.44	166,166,166,166	0
55	MG	VC	3204	1/1	0.59	0.96	80,80,80,80	0
55	MG	VC	3210	1/1	0.59	0.32	111,111,111,111	0
55	MG	UC	1617	1/1	0.59	0.81	151,151,151,151	0
55	MG	UC	1693	1/1	0.59	0.50	141,141,141,141	0
55	MG	VC	3466	1/1	0.59	0.71	104,104,104,104	0
55	MG	YC	1766	1/1	0.59	1.63	130,130,130,130	0
55	MG	VC	3570	1/1	0.59	1.02	105,105,105,105	0
55	MG	ED	109	1/1	0.59	0.97	177,177,177,177	0
55	MG	LA	202	1/1	0.59	0.11	130,130,130,130	0
55	MG	UC	1814	1/1	0.59	0.77	107,107,107,107	0
55	MG	DB	201	1/1	0.59	1.60	105,105,105,105	0
55	MG	UC	1767	1/1	0.59	0.57	134,134,134,134	0
55	MG	AD	202	1/1	0.59	0.36	125,125,125,125	0
55	MG	VC	3112	1/1	0.60	0.75	81,81,81,81	0
55	MG	YC	1675	1/1	0.60	0.32	232,232,232,232	0
55	MG	VC	3416	1/1	0.60	0.59	107,107,107,107	0
55	MG	WA	305	1/1	0.60	0.50	86,86,86,86	0
55	MG	VC	3468	1/1	0.60	0.41	131,131,131,131	0
55	MG	ZC	3187	1/1	0.60	0.18	103,103,103,103	0
55	MG	YC	1859	1/1	0.60	0.46	125,125,125,125	0
55	MG	ZC	3741	1/1	0.60	1.16	203,203,203,203	0
55	MG	VC	3361	1/1	0.60	0.86	84,84,84,84	0
55	MG	ZC	3622	1/1	0.60	0.65	105,105,105,105	0
55	MG	YC	1786	1/1	0.60	0.97	85,85,85,85	0
55	MG	ZC	3226	1/1	0.60	0.68	114,114,114,114	0
55	MG	WC	207	1/1	0.60	0.76	164,164,164,164	0
55	MG	VC	3677	1/1	0.60	0.76	111,111,111,111	0
55	MG	ZC	3447	1/1	0.61	1.81	87,87,87,87	0
55	MG	VC	3095	1/1	0.61	0.38	105,105,105,105	0
55	MG	AD	223	1/1	0.61	0.55	151,151,151,151	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3162	1/1	0.61	0.42	97,97,97,97	0
55	MG	UC	1819	1/1	0.61	0.19	142,142,142,142	0
55	MG	ZC	3674	1/1	0.61	0.84	74,74,74,74	0
55	MG	YC	1635	1/1	0.61	0.53	150,150,150,150	0
55	MG	UC	1698	1/1	0.61	0.44	114,114,114,114	0
55	MG	UC	1641	1/1	0.61	0.29	98,98,98,98	0
55	MG	ZC	3183	1/1	0.61	0.26	68,68,68,68	0
55	MG	WC	211	1/1	0.61	0.49	110,110,110,110	0
55	MG	FB	203	1/1	0.61	0.54	99,99,99,99	0
55	MG	YC	1801	1/1	0.61	0.52	148,148,148,148	0
55	MG	ZC	3316	1/1	0.61	1.31	68,68,68,68	0
55	MG	YC	1603	1/1	0.62	0.23	126,126,126,126	0
55	MG	ZC	3038	1/1	0.62	0.60	110,110,110,110	0
55	MG	V	101	1/1	0.62	1.01	90,90,90,90	0
55	MG	VC	3607	1/1	0.62	0.35	137,137,137,137	0
55	MG	UC	1644	1/1	0.62	1.35	112,112,112,112	0
55	MG	VC	3444	1/1	0.62	0.46	113,113,113,113	0
55	MG	ZC	3686	1/1	0.62	0.73	76,76,76,76	0
55	MG	BC	203	1/1	0.62	0.35	115,115,115,115	0
55	MG	ZC	3423	1/1	0.62	0.26	95,95,95,95	0
55	MG	VC	3549	1/1	0.62	0.25	90,90,90,90	0
55	MG	YC	1719	1/1	0.62	0.40	118,118,118,118	0
55	MG	ZC	3163	1/1	0.62	0.43	130,130,130,130	0
55	MG	VC	3280	1/1	0.62	0.61	88,88,88,88	0
55	MG	ZC	3317	1/1	0.62	0.34	126,126,126,126	0
55	MG	UC	1794	1/1	0.62	0.48	105,105,105,105	0
55	MG	YC	1663	1/1	0.62	0.50	118,118,118,118	0
55	MG	ZC	3733	1/1	0.62	0.43	127,127,127,127	0
55	MG	ZC	3489	1/1	0.62	0.16	119,119,119,119	0
55	MG	FD	109	1/1	0.62	0.48	145,145,145,145	0
55	MG	ZC	3347	1/1	0.62	0.57	92,92,92,92	0
55	MG	ZC	3002	1/1	0.62	0.34	82,82,82,82	0
55	MG	UC	1792	1/1	0.63	0.20	151,151,151,151	0
55	MG	VC	3163	1/1	0.63	0.32	99,99,99,99	0
55	MG	YC	1863	1/1	0.63	0.42	128,128,128,128	0
55	MG	YC	1864	1/1	0.63	0.71	105,105,105,105	0
55	MG	YC	1867	1/1	0.63	0.33	198,198,198,198	0
55	MG	YC	1817	1/1	0.63	1.51	143,143,143,143	0
55	MG	YC	1641	1/1	0.63	1.07	118,118,118,118	0
55	MG	ZC	3236	1/1	0.63	0.29	71,71,71,71	0
55	MG	VC	3646	1/1	0.63	0.50	122,122,122,122	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3662	1/1	0.63	0.38	85,85,85,85	0
55	MG	VC	3524	1/1	0.63	0.51	187,187,187,187	0
55	MG	VC	3526	1/1	0.63	0.72	97,97,97,97	0
55	MG	WC	218	1/1	0.63	0.64	136,136,136,136	0
55	MG	YC	1718	1/1	0.63	0.50	156,156,156,156	0
55	MG	ZC	3596	1/1	0.63	0.54	102,102,102,102	0
55	MG	UC	1800	1/1	0.63	0.46	126,126,126,126	0
55	MG	VC	3431	1/1	0.63	0.44	97,97,97,97	0
55	MG	ZC	3108	1/1	0.64	0.34	65,65,65,65	0
55	MG	UC	1664	1/1	0.64	1.23	183,183,183,183	0
55	MG	UC	1723	1/1	0.64	0.28	101,101,101,101	0
55	MG	VC	3213	1/1	0.64	0.57	79,79,79,79	0
55	MG	VC	3134	1/1	0.64	0.44	76,76,76,76	0
55	MG	ZC	3282	1/1	0.64	0.43	82,82,82,82	0
55	MG	C	302	1/1	0.64	0.29	108,108,108,108	0
55	MG	UC	1746	1/1	0.64	0.52	155,155,155,155	0
55	MG	VC	3482	1/1	0.64	0.31	148,148,148,148	0
55	MG	VC	3285	1/1	0.64	0.35	135,135,135,135	0
55	MG	VC	3493	1/1	0.64	0.45	84,84,84,84	0
55	MG	ZC	3717	1/1	0.64	0.17	91,91,91,91	0
55	MG	HA	201	1/1	0.64	0.42	147,147,147,147	0
55	MG	UC	1804	1/1	0.64	0.37	93,93,93,93	0
55	MG	FD	115	1/1	0.64	0.36	150,150,150,150	0
55	MG	YC	1670	1/1	0.65	0.86	132,132,132,132	0
55	MG	YC	1706	1/1	0.65	0.51	122,122,122,122	0
55	MG	VC	3184	1/1	0.65	0.25	109,109,109,109	0
55	MG	ED	105	1/1	0.65	0.79	153,153,153,153	0
55	MG	VC	3479	1/1	0.65	0.19	133,133,133,133	0
55	MG	ZC	3147	1/1	0.65	0.69	85,85,85,85	0
55	MG	YC	1793	1/1	0.65	0.34	141,141,141,141	0
55	MG	UC	1674	1/1	0.65	0.75	110,110,110,110	0
55	MG	FD	105	1/1	0.65	0.36	161,161,161,161	0
55	MG	O	202	1/1	0.65	1.03	113,113,113,113	0
55	MG	ZC	3322	1/1	0.65	0.39	94,94,94,94	0
55	MG	ZC	3503	1/1	0.65	0.88	83,83,83,83	0
55	MG	UC	1816	1/1	0.65	0.35	126,126,126,126	0
55	MG	ZC	3338	1/1	0.65	0.53	85,85,85,85	0
55	MG	YC	1697	1/1	0.66	0.72	143,143,143,143	0
55	MG	EB	203	1/1	0.66	0.33	106,106,106,106	0
55	MG	UC	1613	1/1	0.66	1.39	115,115,115,115	0
55	MG	ZC	3697	1/1	0.66	0.19	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3196	1/1	0.66	0.34	87,87,87,87	0
55	MG	ZC	3215	1/1	0.66	0.46	117,117,117,117	0
55	MG	AD	229	1/1	0.66	0.38	106,106,106,106	0
55	MG	WC	214	1/1	0.66	0.25	166,166,166,166	0
55	MG	VC	3275	1/1	0.66	1.06	91,91,91,91	0
55	MG	ZC	3485	1/1	0.66	0.51	101,101,101,101	0
55	MG	VC	3407	1/1	0.66	0.61	97,97,97,97	0
55	MG	ZC	3233	1/1	0.66	0.25	141,141,141,141	0
55	MG	VC	3675	1/1	0.66	0.82	110,110,110,110	0
55	MG	VC	3592	1/1	0.66	0.37	95,95,95,95	0
55	MG	XA	301	1/1	0.66	1.30	115,115,115,115	0
55	MG	VC	3114	1/1	0.66	0.53	134,134,134,134	0
55	MG	ZC	3384	1/1	0.66	0.74	136,136,136,136	0
55	MG	VC	3369	1/1	0.66	0.30	81,81,81,81	0
55	MG	VC	3705	1/1	0.66	0.29	100,100,100,100	0
55	MG	VC	3491	1/1	0.66	0.29	90,90,90,90	0
55	MG	VC	3015	1/1	0.66	0.69	81,81,81,81	0
55	MG	UC	1647	1/1	0.67	1.04	143,143,143,143	0
55	MG	YC	1752	1/1	0.67	1.25	129,129,129,129	0
55	MG	YC	1757	1/1	0.67	0.51	171,171,171,171	0
55	MG	ZC	3076	1/1	0.67	0.44	105,105,105,105	0
55	MG	ZC	3284	1/1	0.67	0.45	105,105,105,105	0
55	MG	VC	3151	1/1	0.67	0.41	98,98,98,98	0
55	MG	ZC	3304	1/1	0.67	0.32	100,100,100,100	0
55	MG	ZC	3104	1/1	0.67	1.38	67,67,67,67	0
55	MG	EB	202	1/1	0.67	0.68	89,89,89,89	0
55	MG	VC	3263	1/1	0.67	0.92	125,125,125,125	0
55	MG	VC	3641	1/1	0.67	0.41	114,114,114,114	0
55	MG	VC	3420	1/1	0.67	0.56	192,192,192,192	0
55	MG	WC	224	1/1	0.67	0.62	161,161,161,161	0
55	MG	WC	226	1/1	0.67	0.24	175,175,175,175	0
55	MG	VC	3577	1/1	0.67	0.24	135,135,135,135	0
55	MG	VC	3271	1/1	0.67	0.52	101,101,101,101	0
55	MG	UC	1763	1/1	0.67	0.84	159,159,159,159	0
55	MG	VC	3676	1/1	0.67	0.57	127,127,127,127	0
55	MG	HB	201	1/1	0.67	0.51	65,65,65,65	0
55	MG	ED	115	1/1	0.67	1.09	171,171,171,171	0
55	MG	VC	3520	1/1	0.67	1.27	126,126,126,126	0
55	MG	UC	1691	1/1	0.67	0.50	103,103,103,103	0
55	MG	UC	1757	1/1	0.67	0.55	127,127,127,127	0
55	MG	YC	1620	1/1	0.67	0.79	153,153,153,153	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3602	1/1	0.67	1.17	113,113,113,113	0
55	MG	ZC	3254	1/1	0.67	0.30	76,76,76,76	0
55	MG	VC	3398	1/1	0.67	0.22	128,128,128,128	0
55	MG	ZC	3388	1/1	0.68	0.44	97,97,97,97	0
55	MG	ZC	3247	1/1	0.68	0.40	136,136,136,136	0
55	MG	UC	1824	1/1	0.68	0.56	120,120,120,120	0
55	MG	VC	3651	1/1	0.68	0.28	94,94,94,94	0
55	MG	ZC	3624	1/1	0.68	0.40	96,96,96,96	0
55	MG	ZC	3110	1/1	0.68	0.94	99,99,99,99	0
55	MG	WC	205	1/1	0.68	0.78	185,185,185,185	0
55	MG	ZC	3117	1/1	0.68	0.22	87,87,87,87	0
55	MG	ZC	3436	1/1	0.68	0.28	109,109,109,109	0
55	MG	ZC	3132	1/1	0.68	1.13	107,107,107,107	0
55	MG	VC	3004	1/1	0.68	0.32	101,101,101,101	0
55	MG	UC	1625	1/1	0.68	0.88	109,109,109,109	0
55	MG	VC	3067	1/1	0.68	0.20	135,135,135,135	0
55	MG	YC	1816	1/1	0.68	1.00	106,106,106,106	0
55	MG	ZC	3165	1/1	0.68	0.85	85,85,85,85	0
55	MG	YC	1728	1/1	0.68	0.44	179,179,179,179	0
55	MG	WA	302	1/1	0.68	0.49	83,83,83,83	0
55	MG	VC	3117	1/1	0.68	1.00	102,102,102,102	0
55	MG	ZC	3494	1/1	0.68	0.45	65,65,65,65	0
55	MG	ZC	3685	1/1	0.68	0.47	94,94,94,94	0
55	MG	ZC	3053	1/1	0.68	0.44	73,73,73,73	0
55	MG	VC	3228	1/1	0.68	0.65	120,120,120,120	0
55	MG	VC	3533	1/1	0.68	0.40	106,106,106,106	0
55	MG	ZC	3225	1/1	0.68	0.52	79,79,79,79	0
55	MG	AA	101	1/1	0.68	0.36	60,60,60,60	0
55	MG	VC	3590	1/1	0.68	0.46	140,140,140,140	0
55	MG	ZC	3548	1/1	0.68	0.34	86,86,86,86	0
55	MG	YC	1639	1/1	0.68	0.41	176,176,176,176	0
55	MG	ZC	3093	1/1	0.68	0.28	76,76,76,76	0
55	MG	ZC	3577	1/1	0.68	0.75	126,126,126,126	0
55	MG	ZC	3241	1/1	0.68	0.59	89,89,89,89	0
55	MG	YC	1742	1/1	0.69	0.73	106,106,106,106	0
55	MG	UC	1678	1/1	0.69	0.79	106,106,106,106	0
55	MG	ZC	3468	1/1	0.69	0.33	74,74,74,74	0
55	MG	YC	1747	1/1	0.69	0.56	319,319,319,319	0
55	MG	UC	1601	1/1	0.69	0.38	163,163,163,163	0
55	MG	VC	3546	1/1	0.69	0.85	112,112,112,112	0
55	MG	VC	3011	1/1	0.69	0.91	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3368	1/1	0.69	0.46	160,160,160,160	0
55	MG	AD	203	1/1	0.69	0.17	137,137,137,137	0
55	MG	ZC	3335	1/1	0.69	0.62	87,87,87,87	0
55	MG	ZC	3659	1/1	0.69	0.55	99,99,99,99	0
55	MG	ZC	3661	1/1	0.69	0.44	80,80,80,80	0
55	MG	AD	210	1/1	0.69	0.38	112,112,112,112	0
55	MG	AC	302	1/1	0.69	0.92	164,164,164,164	0
55	MG	ZC	3341	1/1	0.69	0.38	110,110,110,110	0
55	MG	ZC	3500	1/1	0.69	0.36	115,115,115,115	0
55	MG	YC	1698	1/1	0.69	0.44	140,140,140,140	0
55	MG	VC	3614	1/1	0.69	0.45	99,99,99,99	0
55	MG	WC	201	1/1	0.69	0.45	178,178,178,178	0
55	MG	YC	1834	1/1	0.69	0.69	160,160,160,160	0
55	MG	ED	101	1/1	0.69	0.28	182,182,182,182	0
55	MG	VC	3498	1/1	0.69	0.82	95,95,95,95	0
55	MG	VC	3031	1/1	0.69	1.27	79,79,79,79	0
55	MG	UC	1832	1/1	0.69	0.44	108,108,108,108	0
55	MG	LA	203	1/1	0.69	0.42	99,99,99,99	0
55	MG	VC	3516	1/1	0.69	0.65	92,92,92,92	0
55	MG	ZC	3711	1/1	0.69	0.26	309,309,309,309	0
55	MG	VC	3383	1/1	0.69	0.44	80,80,80,80	0
55	MG	ZC	3270	1/1	0.69	0.44	87,87,87,87	0
55	MG	UC	1759	1/1	0.69	0.31	162,162,162,162	0
55	MG	VC	3673	1/1	0.69	0.45	82,82,82,82	0
55	MG	UC	1705	1/1	0.69	1.85	110,110,110,110	0
55	MG	YC	1799	1/1	0.69	0.52	182,182,182,182	0
55	MG	VC	3292	1/1	0.70	1.43	93,93,93,93	0
55	MG	VC	3449	1/1	0.70	0.61	90,90,90,90	0
55	MG	YC	1809	1/1	0.70	0.54	174,174,174,174	0
55	MG	ZC	3246	1/1	0.70	0.24	105,105,105,105	0
55	MG	ZC	3342	1/1	0.70	0.28	78,78,78,78	0
55	MG	ZC	3130	1/1	0.70	0.74	84,84,84,84	0
55	MG	YC	1772	1/1	0.70	0.32	131,131,131,131	0
55	MG	VC	3401	1/1	0.70	0.30	114,114,114,114	0
55	MG	VC	3451	1/1	0.70	0.37	90,90,90,90	0
55	MG	VC	3510	1/1	0.70	0.88	77,77,77,77	0
55	MG	YC	1748	1/1	0.70	0.65	160,160,160,160	0
55	MG	ZC	3043	1/1	0.70	0.98	102,102,102,102	0
55	MG	ZC	3180	1/1	0.70	1.06	86,86,86,86	0
55	MG	VC	3265	1/1	0.70	0.87	84,84,84,84	0
55	MG	VC	3350	1/1	0.70	0.52	104,104,104,104	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3199	1/1	0.70	0.76	103,103,103,103	0
55	MG	VC	3379	1/1	0.70	0.38	88,88,88,88	0
55	MG	FD	106	1/1	0.70	0.21	155,155,155,155	0
55	MG	UC	1658	1/1	0.70	0.83	169,169,169,169	0
55	MG	YC	1764	1/1	0.70	0.50	146,146,146,146	0
55	MG	YC	1847	1/1	0.70	0.44	122,122,122,122	0
55	MG	VC	3288	1/1	0.70	0.77	107,107,107,107	0
55	MG	MB	201	1/1	0.70	0.30	84,84,84,84	0
55	MG	VC	3091	1/1	0.71	0.27	107,107,107,107	0
55	MG	UC	1703	1/1	0.71	0.55	136,136,136,136	0
55	MG	YC	1720	1/1	0.71	0.23	165,165,165,165	0
55	MG	YC	1721	1/1	0.71	0.98	145,145,145,145	0
55	MG	UC	1750	1/1	0.71	2.04	100,100,100,100	0
55	MG	AD	204	1/1	0.71	0.55	110,110,110,110	0
55	MG	YC	1726	1/1	0.71	0.77	162,162,162,162	0
55	MG	ZC	3009	1/1	0.71	0.55	72,72,72,72	0
55	MG	ZC	3152	1/1	0.71	0.96	83,83,83,83	0
55	MG	YC	1650	1/1	0.71	0.44	99,99,99,99	0
55	MG	AD	212	1/1	0.71	0.63	118,118,118,118	0
55	MG	ZC	3265	1/1	0.71	0.43	78,78,78,78	0
55	MG	VC	3411	1/1	0.71	0.35	77,77,77,77	0
55	MG	VC	3669	1/1	0.71	0.50	133,133,133,133	0
55	MG	ZC	3401	1/1	0.71	0.64	78,78,78,78	0
55	MG	ZC	3050	1/1	0.71	2.16	82,82,82,82	0
55	MG	VC	3578	1/1	0.71	0.32	72,72,72,72	0
55	MG	ZC	3569	1/1	0.71	0.25	106,106,106,106	0
55	MG	ZC	3184	1/1	0.71	0.27	121,121,121,121	0
55	MG	X	101	1/1	0.71	0.39	91,91,91,91	0
55	MG	ZC	3584	1/1	0.71	0.25	115,115,115,115	0
55	MG	ZC	3593	1/1	0.71	0.25	97,97,97,97	0
55	MG	VC	3609	1/1	0.71	0.48	134,134,134,134	0
55	MG	UC	1802	1/1	0.71	1.28	110,110,110,110	0
55	MG	VC	3166	1/1	0.71	0.64	80,80,80,80	0
55	MG	VC	3630	1/1	0.71	0.42	126,126,126,126	0
55	MG	ZC	3460	1/1	0.71	0.28	117,117,117,117	0
55	MG	UC	1849	1/1	0.71	0.30	149,149,149,149	0
55	MG	XC	105	1/1	0.71	0.82	164,164,164,164	0
55	MG	UC	1643	1/1	0.71	0.48	170,170,170,170	0
55	MG	ZC	3478	1/1	0.71	0.57	88,88,88,88	0
55	MG	ZC	3482	1/1	0.71	0.27	100,100,100,100	0
55	MG	FD	116	1/1	0.71	0.37	136,136,136,136	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3119	1/1	0.72	0.39	92,92,92,92	0
55	MG	VC	3155	1/1	0.72	0.68	102,102,102,102	0
55	MG	VC	3433	1/1	0.72	0.57	114,114,114,114	0
55	MG	ZC	3771	1/1	0.72	1.52	119,119,119,119	0
55	MG	ZC	3346	1/1	0.72	0.35	77,77,77,77	0
55	MG	YC	1665	1/1	0.72	0.60	115,115,115,115	0
55	MG	VC	3506	1/1	0.72	0.71	136,136,136,136	0
55	MG	VC	3464	1/1	0.72	1.24	79,79,79,79	0
55	MG	ZC	3268	1/1	0.72	0.24	104,104,104,104	0
55	MG	AD	207	1/1	0.72	0.58	109,109,109,109	0
55	MG	UC	1730	1/1	0.72	0.21	198,198,198,198	0
55	MG	RA	201	1/1	0.72	0.49	105,105,105,105	0
55	MG	VC	3109	1/1	0.72	0.31	92,92,92,92	0
55	MG	ZC	3283	1/1	0.72	1.23	61,61,61,61	0
55	MG	VC	3144	1/1	0.72	0.34	124,124,124,124	0
55	MG	ZC	3405	1/1	0.72	0.49	81,81,81,81	0
55	MG	ZC	3414	1/1	0.72	0.69	65,65,65,65	0
55	MG	ZC	3545	1/1	0.72	0.45	140,140,140,140	0
55	MG	ZC	3293	1/1	0.72	0.32	92,92,92,92	0
55	MG	ZC	3551	1/1	0.72	0.88	83,83,83,83	0
55	MG	UC	1735	1/1	0.72	1.46	116,116,116,116	0
55	MG	ZC	3565	1/1	0.72	0.37	102,102,102,102	0
55	MG	ZC	3566	1/1	0.72	0.94	75,75,75,75	0
55	MG	VC	3093	1/1	0.72	0.17	152,152,152,152	0
55	MG	ZC	3421	1/1	0.72	0.70	76,76,76,76	0
55	MG	ED	111	1/1	0.72	0.90	170,170,170,170	0
55	MG	ED	114	1/1	0.72	0.43	158,158,158,158	0
55	MG	VC	3291	1/1	0.72	0.97	102,102,102,102	0
55	MG	ZC	3308	1/1	0.72	0.26	78,78,78,78	0
55	MG	ZC	3433	1/1	0.72	0.68	93,93,93,93	0
55	MG	ZC	3115	1/1	0.72	0.32	98,98,98,98	0
55	MG	VC	3537	1/1	0.72	0.63	119,119,119,119	0
55	MG	YC	1686	1/1	0.72	1.01	136,136,136,136	0
55	MG	YC	1733	1/1	0.72	0.44	69,69,69,69	0
55	MG	VC	3652	1/1	0.72	1.26	125,125,125,125	0
55	MG	ZC	3244	1/1	0.72	0.61	74,74,74,74	0
55	MG	UC	1762	1/1	0.72	0.86	105,105,105,105	0
55	MG	ZC	3625	1/1	0.73	1.14	117,117,117,117	0
55	MG	ZC	3750	1/1	0.73	0.47	89,89,89,89	0
55	MG	VC	3125	1/1	0.73	0.31	122,122,122,122	0
55	MG	UC	1615	1/1	0.73	0.22	139,139,139,139	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3765	1/1	0.73	1.55	74,74,74,74	0
55	MG	YC	1693	1/1	0.73	0.27	148,148,148,148	0
55	MG	ZC	3770	1/1	0.73	0.30	92,92,92,92	0
55	MG	VC	3594	1/1	0.73	0.48	85,85,85,85	0
55	MG	YA	305	1/1	0.73	0.32	88,88,88,88	0
55	MG	ZC	3255	1/1	0.73	0.29	77,77,77,77	0
55	MG	ZC	3134	1/1	0.73	0.58	74,74,74,74	0
55	MG	VC	3138	1/1	0.73	0.59	162,162,162,162	0
55	MG	ZC	3652	1/1	0.73	0.23	86,86,86,86	0
55	MG	VC	3270	1/1	0.73	0.32	81,81,81,81	0
55	MG	VC	3480	1/1	0.73	0.20	151,151,151,151	0
55	MG	VC	3036	1/1	0.73	1.21	72,72,72,72	0
55	MG	VC	3488	1/1	0.73	0.42	92,92,92,92	0
55	MG	VC	3333	1/1	0.73	0.52	105,105,105,105	0
55	MG	ZC	3274	1/1	0.73	0.47	94,94,94,94	0
55	MG	ZC	3398	1/1	0.73	1.08	93,93,93,93	0
55	MG	ZC	3399	1/1	0.73	1.22	101,101,101,101	0
55	MG	UC	1719	1/1	0.73	1.24	89,89,89,89	0
55	MG	VC	3165	1/1	0.73	0.70	87,87,87,87	0
55	MG	ZC	3688	1/1	0.73	0.40	90,90,90,90	0
55	MG	ZC	3690	1/1	0.73	0.67	98,98,98,98	0
55	MG	ED	104	1/1	0.73	0.51	159,159,159,159	0
55	MG	ZC	3186	1/1	0.73	0.47	90,90,90,90	0
55	MG	ZC	3288	1/1	0.73	0.93	95,95,95,95	0
55	MG	VC	3145	1/1	0.73	0.48	123,123,123,123	0
55	MG	UC	1606	1/1	0.73	0.90	104,104,104,104	0
55	MG	ZC	3302	1/1	0.73	0.52	69,69,69,69	0
55	MG	VC	3410	1/1	0.73	0.29	117,117,117,117	0
55	MG	ZC	3714	1/1	0.73	0.57	83,83,83,83	0
55	MG	VC	3171	1/1	0.73	0.25	115,115,115,115	0
55	MG	UC	1791	1/1	0.73	0.45	119,119,119,119	0
55	MG	UC	1842	1/1	0.73	0.22	103,103,103,103	0
55	MG	ZC	3443	1/1	0.73	0.64	76,76,76,76	0
55	MG	VC	3194	1/1	0.73	0.36	101,101,101,101	0
55	MG	VC	3588	1/1	0.73	1.02	119,119,119,119	0
55	MG	YC	1849	1/1	0.73	0.44	154,154,154,154	0
55	MG	YC	1791	1/1	0.73	0.29	170,170,170,170	0
55	MG	ZC	3329	1/1	0.73	0.41	90,90,90,90	0
55	MG	VC	3248	1/1	0.74	0.18	128,128,128,128	0
55	MG	ZC	3194	1/1	0.74	0.50	68,68,68,68	0
55	MG	YC	1699	1/1	0.74	0.44	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3334	1/1	0.74	0.25	91,91,91,91	0
55	MG	ZC	3707	1/1	0.74	0.46	63,63,63,63	0
55	MG	VC	3059	1/1	0.74	0.61	98,98,98,98	0
55	MG	YC	1672	1/1	0.74	0.52	137,137,137,137	0
55	MG	VC	3412	1/1	0.74	0.53	98,98,98,98	0
55	MG	BD	102	1/1	0.74	0.71	270,270,270,270	0
55	MG	VC	3120	1/1	0.74	0.47	98,98,98,98	0
55	MG	VC	3478	1/1	0.74	0.48	94,94,94,94	0
55	MG	BD	107	1/1	0.74	0.41	249,249,249,249	0
55	MG	ZC	3502	1/1	0.74	0.32	171,171,171,171	0
55	MG	UC	1651	1/1	0.74	0.44	147,147,147,147	0
55	MG	ZC	3505	1/1	0.74	0.33	68,68,68,68	0
55	MG	ZC	3310	1/1	0.74	0.50	124,124,124,124	0
55	MG	VC	3258	1/1	0.74	0.97	102,102,102,102	0
55	MG	UC	1820	1/1	0.74	0.53	114,114,114,114	0
55	MG	VC	3487	1/1	0.74	0.58	126,126,126,126	0
55	MG	VC	3325	1/1	0.74	0.39	82,82,82,82	0
55	MG	ZC	3136	1/1	0.74	0.19	88,88,88,88	0
55	MG	YC	1689	1/1	0.74	1.63	117,117,117,117	0
55	MG	WC	213	1/1	0.74	0.60	110,110,110,110	0
55	MG	YC	1822	1/1	0.74	0.39	145,145,145,145	0
55	MG	ZC	3045	1/1	0.74	1.50	60,60,60,60	0
55	MG	VC	3048	1/1	0.74	0.96	89,89,89,89	0
55	MG	ZC	3177	1/1	0.74	0.58	95,95,95,95	0
55	MG	WC	217	1/1	0.74	0.45	155,155,155,155	0
55	MG	FD	113	1/1	0.74	0.43	145,145,145,145	0
55	MG	UC	1786	1/1	0.74	0.45	96,96,96,96	0
55	MG	YC	1633	1/1	0.74	1.73	141,141,141,141	0
55	MG	YC	1841	1/1	0.74	0.32	185,185,185,185	0
55	MG	VC	3608	1/1	0.75	0.55	219,219,219,219	0
55	MG	VC	3173	1/1	0.75	0.21	93,93,93,93	0
55	MG	VC	3321	1/1	0.75	0.26	124,124,124,124	0
55	MG	ZC	3262	1/1	0.75	0.56	115,115,115,115	0
55	MG	VC	3624	1/1	0.75	0.24	104,104,104,104	0
55	MG	UC	1684	1/1	0.75	0.44	110,110,110,110	0
55	MG	YC	1651	1/1	0.75	0.15	197,197,197,197	0
55	MG	ZC	3470	1/1	0.75	0.25	89,89,89,89	0
55	MG	AD	225	1/1	0.75	0.58	133,133,133,133	0
55	MG	VC	3448	1/1	0.75	0.60	100,100,100,100	0
55	MG	ZC	3064	1/1	0.75	1.32	81,81,81,81	0
55	MG	YC	1730	1/1	0.75	0.25	225,225,225,225	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1797	1/1	0.75	0.42	130,130,130,130	0
55	MG	VC	3122	1/1	0.75	0.18	82,82,82,82	0
55	MG	VC	3026	1/1	0.75	0.69	97,97,97,97	0
55	MG	YC	1844	1/1	0.75	0.28	133,133,133,133	0
55	MG	YC	1740	1/1	0.75	1.18	146,146,146,146	0
55	MG	ZC	3298	1/1	0.75	0.29	89,89,89,89	0
55	MG	ZC	3729	1/1	0.75	0.35	92,92,92,92	0
55	MG	VC	3127	1/1	0.75	0.63	88,88,88,88	0
55	MG	WC	210	1/1	0.75	0.67	169,169,169,169	0
55	MG	ZC	3632	1/1	0.75	0.25	97,97,97,97	0
55	MG	UC	1835	1/1	0.75	0.41	137,137,137,137	0
55	MG	ZC	3637	1/1	0.75	0.74	93,93,93,93	0
55	MG	VC	3500	1/1	0.75	0.46	134,134,134,134	0
55	MG	PA	101	1/1	0.75	1.09	120,120,120,120	0
55	MG	VC	3553	1/1	0.75	0.36	88,88,88,88	0
55	MG	VC	3439	1/1	0.75	1.24	77,77,77,77	0
55	MG	ZC	3534	1/1	0.75	0.50	82,82,82,82	0
55	MG	YC	1758	1/1	0.75	0.43	127,127,127,127	0
55	MG	ZC	3422	1/1	0.75	0.55	80,80,80,80	0
55	MG	UC	1624	1/1	0.75	0.21	119,119,119,119	0
55	MG	YC	1712	1/1	0.75	0.34	153,153,153,153	0
55	MG	VC	3382	1/1	0.75	0.39	104,104,104,104	0
55	MG	ZC	3554	1/1	0.75	0.45	122,122,122,122	0
55	MG	ZC	3331	1/1	0.76	0.31	71,71,71,71	0
55	MG	ZC	3333	1/1	0.76	0.56	79,79,79,79	0
55	MG	UC	1733	1/1	0.76	0.62	129,129,129,129	0
55	MG	VC	3106	1/1	0.76	0.34	77,77,77,77	0
55	MG	UC	1634	1/1	0.76	0.39	142,142,142,142	0
55	MG	ZC	3452	1/1	0.76	0.17	76,76,76,76	0
55	MG	ZC	3454	1/1	0.76	0.96	83,83,83,83	0
55	MG	UC	1653	1/1	0.76	0.43	204,204,204,204	0
55	MG	UC	1743	1/1	0.76	1.68	129,129,129,129	0
55	MG	VC	3459	1/1	0.76	0.24	146,146,146,146	0
55	MG	ZC	3592	1/1	0.76	0.40	71,71,71,71	0
55	MG	VC	3241	1/1	0.76	0.25	124,124,124,124	0
55	MG	VC	3551	1/1	0.76	0.23	109,109,109,109	0
55	MG	BB	201	1/1	0.76	0.18	143,143,143,143	0
55	MG	ZC	3363	1/1	0.76	0.54	74,74,74,74	0
55	MG	ZC	3229	1/1	0.76	0.30	70,70,70,70	0
55	MG	ZC	3372	1/1	0.76	0.22	132,132,132,132	0
55	MG	ZC	3232	1/1	0.76	0.40	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3486	1/1	0.76	0.18	83,83,83,83	0
55	MG	VC	3672	1/1	0.76	0.36	111,111,111,111	0
55	MG	A	302	1/1	0.76	0.35	81,81,81,81	0
55	MG	ZC	3628	1/1	0.76	0.36	93,93,93,93	0
55	MG	ZC	3392	1/1	0.76	0.26	137,137,137,137	0
55	MG	VC	3053	1/1	0.76	0.55	79,79,79,79	0
55	MG	VC	3374	1/1	0.76	0.13	96,96,96,96	0
55	MG	YC	1673	1/1	0.76	0.21	119,119,119,119	0
55	MG	ZC	3403	1/1	0.76	1.15	76,76,76,76	0
55	MG	UC	1810	1/1	0.76	0.70	104,104,104,104	0
55	MG	ZC	3755	1/1	0.76	0.47	91,91,91,91	0
55	MG	VC	3415	1/1	0.76	0.67	82,82,82,82	0
55	MG	YC	1797	1/1	0.76	0.48	130,130,130,130	0
55	MG	VC	3616	1/1	0.76	0.47	92,92,92,92	0
55	MG	VC	3287	1/1	0.76	1.06	125,125,125,125	0
55	MG	UC	1709	1/1	0.76	0.40	109,109,109,109	0
55	MG	ZC	3078	1/1	0.76	0.20	99,99,99,99	0
55	MG	AD	201	1/1	0.76	0.46	105,105,105,105	0
55	MG	ZC	3079	1/1	0.76	0.51	89,89,89,89	0
55	MG	YC	1789	1/1	0.77	0.13	279,279,279,279	0
55	MG	VC	3082	1/1	0.77	0.34	96,96,96,96	0
55	MG	ZC	3248	1/1	0.77	0.38	94,94,94,94	0
55	MG	VC	3310	1/1	0.77	0.46	132,132,132,132	0
55	MG	VC	3504	1/1	0.77	0.18	202,202,202,202	0
55	MG	ZC	3344	1/1	0.77	0.16	124,124,124,124	0
55	MG	UC	1639	1/1	0.77	0.45	128,128,128,128	0
55	MG	VC	3124	1/1	0.77	0.41	91,91,91,91	0
55	MG	YA	303	1/1	0.77	1.39	67,67,67,67	0
55	MG	ZC	3154	1/1	0.77	0.79	95,95,95,95	0
55	MG	VC	3512	1/1	0.77	0.63	73,73,73,73	0
55	MG	UC	1697	1/1	0.77	0.41	136,136,136,136	0
55	MG	VC	3130	1/1	0.77	0.99	76,76,76,76	0
55	MG	ZC	3371	1/1	0.77	0.45	91,91,91,91	0
55	MG	YC	1649	1/1	0.77	0.95	116,116,116,116	0
55	MG	ZC	3383	1/1	0.77	0.37	110,110,110,110	0
55	MG	ZC	3273	1/1	0.77	0.88	72,72,72,72	0
55	MG	ZC	3668	1/1	0.77	0.35	86,86,86,86	0
55	MG	WC	221	1/1	0.77	0.51	179,179,179,179	0
55	MG	ZC	3389	1/1	0.77	0.54	86,86,86,86	0
55	MG	ZC	3279	1/1	0.77	0.45	121,121,121,121	0
55	MG	UC	1770	1/1	0.77	2.02	130,130,130,130	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3521	1/1	0.77	1.11	109,109,109,109	0
55	MG	ZC	3393	1/1	0.77	0.77	105,105,105,105	0
55	MG	ZC	3394	1/1	0.77	1.40	92,92,92,92	0
55	MG	UC	1773	1/1	0.77	1.03	158,158,158,158	0
55	MG	VC	3054	1/1	0.77	1.30	83,83,83,83	0
55	MG	UC	1857	1/1	0.77	0.39	107,107,107,107	0
55	MG	EA	302	1/1	0.77	0.32	134,134,134,134	0
55	MG	ZC	3197	1/1	0.77	0.47	152,152,152,152	0
55	MG	ZC	3703	1/1	0.77	0.34	90,90,90,90	0
55	MG	VC	3392	1/1	0.77	0.59	85,85,85,85	0
55	MG	VC	3341	1/1	0.77	0.25	131,131,131,131	0
55	MG	UC	1783	1/1	0.77	0.21	242,242,242,242	0
55	MG	VC	3691	1/1	0.77	0.22	95,95,95,95	0
55	MG	ED	113	1/1	0.77	0.52	170,170,170,170	0
55	MG	VC	3347	1/1	0.77	0.56	99,99,99,99	0
55	MG	ZC	3570	1/1	0.77	0.23	78,78,78,78	0
55	MG	FD	101	1/1	0.77	0.35	132,132,132,132	0
55	MG	YC	1838	1/1	0.77	0.18	154,154,154,154	0
55	MG	YC	1669	1/1	0.77	0.34	154,154,154,154	0
55	MG	YC	1773	1/1	0.77	0.16	232,232,232,232	0
55	MG	ZC	3428	1/1	0.77	0.63	91,91,91,91	0
55	MG	VC	3490	1/1	0.77	0.53	101,101,101,101	0
55	MG	ZC	3235	1/1	0.77	0.28	72,72,72,72	0
55	MG	YA	306	1/1	0.77	0.20	94,94,94,94	0
55	MG	YC	1624	1/1	0.77	1.07	138,138,138,138	0
55	MG	WA	304	1/1	0.77	0.52	77,77,77,77	0
55	MG	UC	1809	1/1	0.77	0.40	106,106,106,106	0
55	MG	WC	208	1/1	0.78	0.55	133,133,133,133	0
55	MG	ZC	3355	1/1	0.78	0.36	78,78,78,78	0
55	MG	ZC	3090	1/1	0.78	0.75	70,70,70,70	0
55	MG	ZC	3199	1/1	0.78	0.37	103,103,103,103	0
55	MG	ZC	3466	1/1	0.78	0.85	70,70,70,70	0
55	MG	ZC	3201	1/1	0.78	0.26	88,88,88,88	0
55	MG	VC	3561	1/1	0.78	0.26	92,92,92,92	0
55	MG	VC	3075	1/1	0.78	1.05	149,149,149,149	0
55	MG	AD	224	1/1	0.78	0.27	155,155,155,155	0
55	MG	VC	3236	1/1	0.78	0.56	93,93,93,93	0
55	MG	ZC	3290	1/1	0.78	0.33	102,102,102,102	0
55	MG	YC	1861	1/1	0.78	0.26	136,136,136,136	0
55	MG	ZC	3708	1/1	0.78	0.23	74,74,74,74	0
55	MG	VC	3131	1/1	0.78	0.68	142,142,142,142	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3228	1/1	0.78	0.68	89,89,89,89	0
55	MG	UC	1863	1/1	0.78	0.30	106,106,106,106	0
55	MG	YC	1813	1/1	0.78	0.89	231,231,231,231	0
55	MG	ZC	3118	1/1	0.78	0.21	66,66,66,66	0
55	MG	UC	1607	1/1	0.78	0.33	112,112,112,112	0
55	MG	UC	1706	1/1	0.78	0.27	98,98,98,98	0
55	MG	VC	3584	1/1	0.78	0.38	82,82,82,82	0
55	MG	ZC	3019	1/1	0.78	0.33	57,57,57,57	0
55	MG	JB	201	1/1	0.78	0.32	145,145,145,145	0
55	MG	VC	3164	1/1	0.78	0.49	134,134,134,134	0
55	MG	YC	1828	1/1	0.78	0.35	186,186,186,186	0
55	MG	VC	3633	1/1	0.78	0.48	115,115,115,115	0
55	MG	UC	1787	1/1	0.78	0.31	150,150,150,150	0
55	MG	YC	1704	1/1	0.78	0.69	85,85,85,85	0
55	MG	VC	3027	1/1	0.78	0.56	82,82,82,82	0
55	MG	ZC	3061	1/1	0.78	0.43	103,103,103,103	0
55	MG	UC	1830	1/1	0.78	0.45	118,118,118,118	0
55	MG	ZC	3541	1/1	0.78	0.28	249,249,249,249	0
55	MG	YC	1753	1/1	0.78	0.25	169,169,169,169	0
55	MG	UC	1701	1/1	0.78	0.35	99,99,99,99	0
55	MG	ZC	3343	1/1	0.78	0.31	111,111,111,111	0
55	MG	WA	303	1/1	0.78	0.78	80,80,80,80	0
55	MG	YC	1678	1/1	0.78	1.12	146,146,146,146	0
55	MG	VC	3421	1/1	0.78	0.10	145,145,145,145	0
55	MG	ZC	3326	1/1	0.79	0.34	71,71,71,71	0
55	MG	YC	1750	1/1	0.79	0.80	138,138,138,138	0
55	MG	VC	3238	1/1	0.79	0.20	92,92,92,92	0
55	MG	VC	3078	1/1	0.79	0.35	141,141,141,141	0
55	MG	VC	3585	1/1	0.79	0.48	121,121,121,121	0
55	MG	B	301	1/1	0.79	0.36	96,96,96,96	0
55	MG	VC	3243	1/1	0.79	0.33	75,75,75,75	0
55	MG	VC	3455	1/1	0.79	0.43	93,93,93,93	0
55	MG	ZC	3036	1/1	0.79	0.34	95,95,95,95	0
55	MG	ZC	3439	1/1	0.79	0.32	91,91,91,91	0
55	MG	VC	3043	1/1	0.79	0.48	118,118,118,118	0
55	MG	AD	213	1/1	0.79	0.24	121,121,121,121	0
55	MG	UC	1676	1/1	0.79	0.48	128,128,128,128	0
55	MG	VC	3300	1/1	0.79	1.61	83,83,83,83	0
55	MG	VC	3001	1/1	0.79	0.43	133,133,133,133	0
55	MG	UC	1704	1/1	0.79	0.33	128,128,128,128	0
55	MG	VC	3372	1/1	0.79	0.86	107,107,107,107	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3314	1/1	0.79	0.64	93,93,93,93	0
55	MG	YC	1831	1/1	0.79	0.29	208,208,208,208	0
55	MG	VC	3006	1/1	0.79	0.51	147,147,147,147	0
55	MG	VC	3540	1/1	0.79	0.34	139,139,139,139	0
55	MG	UC	1640	1/1	0.79	0.20	136,136,136,136	0
55	MG	ZC	3617	1/1	0.79	0.26	81,81,81,81	0
55	MG	VC	3486	1/1	0.79	0.31	117,117,117,117	0
55	MG	ZC	3374	1/1	0.79	0.51	88,88,88,88	0
55	MG	ZC	3207	1/1	0.79	0.26	71,71,71,71	0
55	MG	A	305	1/1	0.79	1.45	115,115,115,115	0
55	MG	ZC	3217	1/1	0.79	0.57	86,86,86,86	0
55	MG	VC	3215	1/1	0.79	0.32	168,168,168,168	0
55	MG	VC	3023	1/1	0.79	0.35	118,118,118,118	0
55	MG	UC	1847	1/1	0.79	0.35	157,157,157,157	0
55	MG	YC	1846	1/1	0.79	0.82	100,100,100,100	0
55	MG	ZC	3739	1/1	0.79	0.22	115,115,115,115	0
55	MG	ED	116	1/1	0.79	0.45	167,167,167,167	0
55	MG	VC	3224	1/1	0.79	0.25	129,129,129,129	0
55	MG	VC	3390	1/1	0.79	0.35	116,116,116,116	0
55	MG	YC	1852	1/1	0.79	0.35	111,111,111,111	0
55	MG	EB	201	1/1	0.79	0.21	128,128,128,128	0
55	MG	ZC	3757	1/1	0.79	1.19	81,81,81,81	0
55	MG	ZC	3640	1/1	0.79	0.41	83,83,83,83	0
55	MG	ZC	3762	1/1	0.79	0.45	85,85,85,85	0
55	MG	UC	1825	1/1	0.79	0.59	104,104,104,104	0
55	MG	UC	1637	1/1	0.79	0.58	99,99,99,99	0
55	MG	YC	1800	1/1	0.79	0.71	173,173,173,173	0
55	MG	VC	3344	1/1	0.79	0.51	101,101,101,101	0
55	MG	VC	3419	1/1	0.80	0.32	146,146,146,146	0
55	MG	ZC	3449	1/1	0.80	0.46	92,92,92,92	0
55	MG	UC	1729	1/1	0.80	0.38	92,92,92,92	0
55	MG	YC	1631	1/1	0.80	0.50	96,96,96,96	0
55	MG	YC	1794	1/1	0.80	0.29	192,192,192,192	0
55	MG	ZC	3458	1/1	0.80	0.81	98,98,98,98	0
55	MG	YC	1854	1/1	0.80	0.20	166,166,166,166	0
55	MG	UC	1717	1/1	0.80	0.40	110,110,110,110	0
55	MG	UC	1780	1/1	0.80	0.41	112,112,112,112	0
55	MG	UC	1827	1/1	0.80	0.35	93,93,93,93	0
55	MG	VC	3575	1/1	0.80	0.79	94,94,94,94	0
55	MG	ZC	3251	1/1	0.80	0.21	85,85,85,85	0
55	MG	ZC	3477	1/1	0.80	0.34	85,85,85,85	0
55	MG	VC	3626	1/1	0.80	0.55	110,110,110,110	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1654	1/1	0.80	0.55	117,117,117,117	0
55	MG	VC	3632	1/1	0.80	0.21	121,121,121,121	0
55	MG	ZC	3646	1/1	0.80	0.36	127,127,127,127	0
55	MG	UC	1673	1/1	0.80	0.38	114,114,114,114	0
55	MG	VC	3209	1/1	0.80	1.64	79,79,79,79	0
55	MG	Y	101	1/1	0.80	0.17	124,124,124,124	0
55	MG	ZC	3366	1/1	0.80	0.42	83,83,83,83	0
55	MG	VC	3582	1/1	0.80	0.53	75,75,75,75	0
55	MG	VC	3394	1/1	0.80	0.25	92,92,92,92	0
55	MG	AD	217	1/1	0.80	0.37	106,106,106,106	0
55	MG	AD	222	1/1	0.80	0.34	115,115,115,115	0
55	MG	ZC	3173	1/1	0.80	0.30	75,75,75,75	0
55	MG	UC	1626	1/1	0.80	0.38	129,129,129,129	0
55	MG	VC	3653	1/1	0.80	0.61	116,116,116,116	0
55	MG	VC	3013	1/1	0.80	0.32	86,86,86,86	0
55	MG	AD	228	1/1	0.80	0.41	91,91,91,91	0
55	MG	VC	3216	1/1	0.80	0.19	200,200,200,200	0
55	MG	ZC	3051	1/1	0.80	0.71	79,79,79,79	0
55	MG	YC	1826	1/1	0.80	0.27	146,146,146,146	0
55	MG	ZC	3525	1/1	0.80	0.44	85,85,85,85	0
55	MG	ZC	3188	1/1	0.80	0.76	63,63,63,63	0
55	MG	ZC	3530	1/1	0.80	0.33	87,87,87,87	0
55	MG	ZC	3189	1/1	0.80	0.40	58,58,58,58	0
55	MG	VC	3364	1/1	0.80	0.18	124,124,124,124	0
55	MG	VC	3591	1/1	0.80	0.30	114,114,114,114	0
55	MG	YA	301	1/1	0.80	2.24	64,64,64,64	0
55	MG	VC	3060	1/1	0.80	0.65	71,71,71,71	0
55	MG	ZC	3071	1/1	0.80	0.95	96,96,96,96	0
55	MG	ZC	3204	1/1	0.80	0.18	115,115,115,115	0
55	MG	VC	3543	1/1	0.80	0.32	107,107,107,107	0
55	MG	ZC	3213	1/1	0.80	0.35	92,92,92,92	0
55	MG	YC	1778	1/1	0.80	0.31	238,238,238,238	0
55	MG	UC	1744	1/1	0.80	1.53	130,130,130,130	0
55	MG	UC	1632	1/1	0.80	0.59	118,118,118,118	0
55	MG	UC	1609	1/1	0.80	0.21	144,144,144,144	0
55	MG	ZC	3725	1/1	0.80	0.43	88,88,88,88	0
55	MG	VC	3550	1/1	0.80	0.50	127,127,127,127	0
55	MG	VC	3071	1/1	0.80	1.07	68,68,68,68	0
55	MG	ZC	3578	1/1	0.80	0.24	78,78,78,78	0
55	MG	ZC	3431	1/1	0.80	1.24	130,130,130,130	0
55	MG	ZC	3325	1/1	0.80	0.29	93,93,93,93	0
55	MG	ZC	3098	1/1	0.80	0.48	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3100	1/1	0.80	0.19	105,105,105,105	0
55	MG	VC	3702	1/1	0.80	0.84	95,95,95,95	0
55	MG	IC	201	1/1	0.81	0.31	155,155,155,155	0
55	MG	ZC	3067	1/1	0.81	1.01	67,67,67,67	0
55	MG	VC	3389	1/1	0.81	0.62	83,83,83,83	0
55	MG	ZC	3491	1/1	0.81	0.35	90,90,90,90	0
55	MG	YC	1632	1/1	0.81	1.51	112,112,112,112	0
55	MG	VC	3094	1/1	0.81	0.28	130,130,130,130	0
55	MG	VC	3208	1/1	0.81	0.15	137,137,137,137	0
55	MG	VC	3142	1/1	0.81	0.45	84,84,84,84	0
55	MG	VC	3395	1/1	0.81	0.30	101,101,101,101	0
55	MG	WC	215	1/1	0.81	0.42	180,180,180,180	0
55	MG	ZC	3513	1/1	0.81	1.37	86,86,86,86	0
55	MG	YC	1743	1/1	0.81	0.52	224,224,224,224	0
55	MG	YC	1795	1/1	0.81	1.14	172,172,172,172	0
55	MG	VC	3557	1/1	0.81	0.50	155,155,155,155	0
55	MG	VC	3025	1/1	0.81	0.92	69,69,69,69	0
55	MG	ZC	3673	1/1	0.81	0.35	95,95,95,95	0
55	MG	ZC	3220	1/1	0.81	0.63	73,73,73,73	0
55	MG	UC	1662	1/1	0.81	0.54	92,92,92,92	0
55	MG	YC	1647	1/1	0.81	0.65	161,161,161,161	0
55	MG	VC	3476	1/1	0.81	0.32	75,75,75,75	0
55	MG	UC	1611	1/1	0.81	0.37	113,113,113,113	0
55	MG	OB	201	1/1	0.81	0.65	94,94,94,94	0
55	MG	ZC	3116	1/1	0.81	0.17	80,80,80,80	0
55	MG	VC	3129	1/1	0.81	0.26	79,79,79,79	0
55	MG	VC	3058	1/1	0.81	0.29	105,105,105,105	0
55	MG	YC	1810	1/1	0.81	0.33	126,126,126,126	0
55	MG	VC	3484	1/1	0.81	0.14	136,136,136,136	0
55	MG	ZC	3699	1/1	0.81	0.26	124,124,124,124	0
55	MG	ZC	3008	1/1	0.81	0.16	104,104,104,104	0
55	MG	VC	3700	1/1	0.81	0.30	91,91,91,91	0
55	MG	YC	1815	1/1	0.81	0.49	155,155,155,155	0
55	MG	ZC	3146	1/1	0.81	0.19	125,125,125,125	0
55	MG	ZC	3021	1/1	0.81	0.99	88,88,88,88	0
55	MG	YC	1607	1/1	0.81	0.43	101,101,101,101	0
55	MG	ZC	3580	1/1	0.81	0.12	143,143,143,143	0
55	MG	YC	1610	1/1	0.81	0.50	112,112,112,112	0
55	MG	ZC	3586	1/1	0.81	0.32	67,67,67,67	0
55	MG	VC	3342	1/1	0.81	0.22	109,109,109,109	0
55	MG	ZC	3042	1/1	0.81	0.63	58,58,58,58	0
55	MG	ZC	3354	1/1	0.81	0.74	109,109,109,109	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3527	1/1	0.81	0.95	96,96,96,96	0
55	MG	ZC	3615	1/1	0.81	0.53	176,176,176,176	0
55	MG	ZC	3166	1/1	0.81	0.43	60,60,60,60	0
55	MG	ZC	3169	1/1	0.81	0.60	78,78,78,78	0
55	MG	ZC	3044	1/1	0.81	0.50	70,70,70,70	0
55	MG	VC	3413	1/1	0.81	0.23	121,121,121,121	0
55	MG	UC	1631	1/1	0.81	0.28	105,105,105,105	0
55	MG	ZC	3479	1/1	0.81	0.49	87,87,87,87	0
55	MG	ZC	3749	1/1	0.81	0.45	110,110,110,110	0
55	MG	UC	1623	1/1	0.81	0.34	119,119,119,119	0
55	MG	VC	3159	1/1	0.81	0.40	136,136,136,136	0
55	MG	WC	206	1/1	0.81	0.50	120,120,120,120	0
55	MG	UC	1602	1/1	0.81	0.40	124,124,124,124	0
55	MG	UC	1627	1/1	0.82	0.32	149,149,149,149	0
55	MG	UC	1649	1/1	0.82	0.11	261,261,261,261	0
55	MG	VC	3643	1/1	0.82	0.38	109,109,109,109	0
55	MG	ZC	3276	1/1	0.82	0.68	78,78,78,78	0
55	MG	ZC	3759	1/1	0.82	0.59	140,140,140,140	0
55	MG	VC	3644	1/1	0.82	0.18	167,167,167,167	0
55	MG	YC	1710	1/1	0.82	0.43	185,185,185,185	0
55	MG	ZC	3074	1/1	0.82	0.31	76,76,76,76	0
55	MG	VC	3032	1/1	0.82	0.43	90,90,90,90	0
55	MG	UC	1661	1/1	0.82	0.24	127,127,127,127	0
55	MG	ZC	3495	1/1	0.82	0.39	95,95,95,95	0
55	MG	ZC	3497	1/1	0.82	0.30	102,102,102,102	0
55	MG	ZC	3772	1/1	0.82	0.28	96,96,96,96	0
55	MG	YC	1715	1/1	0.82	0.29	107,107,107,107	0
55	MG	ZC	3291	1/1	0.82	0.34	167,167,167,167	0
55	MG	UC	1858	1/1	0.82	0.35	149,149,149,149	0
55	MG	ZC	3649	1/1	0.82	0.91	90,90,90,90	0
55	MG	VC	3041	1/1	0.82	0.52	86,86,86,86	0
55	MG	VC	3661	1/1	0.82	0.35	73,73,73,73	0
55	MG	ZC	3208	1/1	0.82	0.32	68,68,68,68	0
55	MG	ZC	3515	1/1	0.82	0.43	111,111,111,111	0
55	MG	ZC	3303	1/1	0.82	0.55	101,101,101,101	0
55	MG	YC	1788	1/1	0.82	0.35	126,126,126,126	0
55	MG	ZC	3522	1/1	0.82	0.28	78,78,78,78	0
55	MG	VC	3472	1/1	0.82	0.27	154,154,154,154	0
55	MG	AD	216	1/1	0.82	0.16	134,134,134,134	0
55	MG	YC	1851	1/1	0.82	0.14	183,183,183,183	0
55	MG	AD	219	1/1	0.82	0.86	106,106,106,106	0
55	MG	VC	3267	1/1	0.82	0.31	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	YC	1722	1/1	0.82	0.82	131,131,131,131	0
55	MG	UC	1690	1/1	0.82	0.13	133,133,133,133	0
55	MG	ZC	3684	1/1	0.82	0.39	79,79,79,79	0
55	MG	VC	3428	1/1	0.82	0.38	93,93,93,93	0
55	MG	UC	1603	1/1	0.82	0.29	106,106,106,106	0
55	MG	ZC	3542	1/1	0.82	0.37	114,114,114,114	0
55	MG	VC	3532	1/1	0.82	0.67	66,66,66,66	0
55	MG	VC	3047	1/1	0.82	0.36	78,78,78,78	0
55	MG	BD	105	1/1	0.82	1.52	223,223,223,223	0
55	MG	VC	3481	1/1	0.82	0.38	87,87,87,87	0
55	MG	VC	3678	1/1	0.82	1.01	76,76,76,76	0
55	MG	UC	1785	1/1	0.82	0.20	190,190,190,190	0
55	MG	QB	101	1/1	0.82	0.60	83,83,83,83	0
55	MG	A	304	1/1	0.82	0.22	87,87,87,87	0
55	MG	YC	1623	1/1	0.82	1.70	104,104,104,104	0
55	MG	ZC	3448	1/1	0.82	0.24	98,98,98,98	0
55	MG	ZC	3142	1/1	0.82	0.63	70,70,70,70	0
55	MG	UC	1788	1/1	0.82	0.38	148,148,148,148	0
55	MG	UC	1696	1/1	0.82	0.19	159,159,159,159	0
55	MG	VC	3102	1/1	0.82	0.28	124,124,124,124	0
55	MG	VC	3177	1/1	0.82	0.36	94,94,94,94	0
55	MG	UC	1766	1/1	0.82	0.29	130,130,130,130	0
55	MG	ZC	3462	1/1	0.82	0.36	88,88,88,88	0
55	MG	VC	3189	1/1	0.82	0.68	60,60,60,60	0
55	MG	ZC	3594	1/1	0.82	0.84	94,94,94,94	0
55	MG	VC	3108	1/1	0.82	0.46	125,125,125,125	0
55	MG	VC	3365	1/1	0.82	0.67	101,101,101,101	0
55	MG	UC	1679	1/1	0.82	0.55	131,131,131,131	0
55	MG	VC	3566	1/1	0.82	0.28	96,96,96,96	0
55	MG	VC	3501	1/1	0.82	0.27	122,122,122,122	0
55	MG	FD	111	1/1	0.82	0.47	130,130,130,130	0
55	MG	UC	1818	1/1	0.82	0.30	111,111,111,111	0
55	MG	ZC	3742	1/1	0.82	0.41	72,72,72,72	0
55	MG	ZC	3746	1/1	0.82	0.39	81,81,81,81	0
55	MG	VC	3571	1/1	0.82	0.34	85,85,85,85	0
55	MG	ZC	3417	1/1	0.83	0.64	86,86,86,86	0
55	MG	ZC	3418	1/1	0.83	0.41	115,115,115,115	0
55	MG	YC	1645	1/1	0.83	0.11	184,184,184,184	0
55	MG	ZC	3143	1/1	0.83	0.35	84,84,84,84	0
55	MG	H	201	1/1	0.83	0.43	117,117,117,117	0
55	MG	ZC	3664	1/1	0.83	0.23	142,142,142,142	0
55	MG	ZC	3531	1/1	0.83	1.05	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3198	1/1	0.83	1.08	88,88,88,88	0
55	MG	ZC	3536	1/1	0.83	0.54	116,116,116,116	0
55	MG	ZC	3321	1/1	0.83	0.33	67,67,67,67	0
55	MG	ZC	3151	1/1	0.83	0.60	80,80,80,80	0
55	MG	YC	1745	1/1	0.83	0.35	144,144,144,144	0
55	MG	ZC	3238	1/1	0.83	0.38	74,74,74,74	0
55	MG	UC	1833	1/1	0.83	0.49	117,117,117,117	0
55	MG	UC	1675	1/1	0.83	0.32	103,103,103,103	0
55	MG	ZC	3159	1/1	0.83	0.60	103,103,103,103	0
55	MG	YC	1602	1/1	0.83	0.37	157,157,157,157	0
55	MG	VC	3696	1/1	0.83	0.36	126,126,126,126	0
55	MG	VC	3699	1/1	0.83	0.77	107,107,107,107	0
55	MG	ZC	3168	1/1	0.83	0.45	101,101,101,101	0
55	MG	VC	3634	1/1	0.83	0.77	115,115,115,115	0
55	MG	ZC	3172	1/1	0.83	1.18	68,68,68,68	0
55	MG	ZC	3257	1/1	0.83	0.27	104,104,104,104	0
55	MG	VC	3483	1/1	0.83	0.67	181,181,181,181	0
55	MG	VC	3555	1/1	0.83	0.68	82,82,82,82	0
55	MG	UC	1838	1/1	0.83	0.40	150,150,150,150	0
55	MG	ZC	3182	1/1	0.83	0.35	72,72,72,72	0
55	MG	VC	3425	1/1	0.83	0.22	95,95,95,95	0
55	MG	WC	202	1/1	0.83	0.59	129,129,129,129	0
55	MG	UC	1856	1/1	0.83	0.58	102,102,102,102	0
55	MG	VC	3563	1/1	0.83	0.34	89,89,89,89	0
55	MG	ZC	3271	1/1	0.83	0.10	99,99,99,99	0
55	MG	VC	3309	1/1	0.83	0.41	94,94,94,94	0
55	MG	VC	3156	1/1	0.83	0.43	94,94,94,94	0
55	MG	VC	3462	1/1	0.83	0.30	89,89,89,89	0
55	MG	ZC	3484	1/1	0.83	0.41	81,81,81,81	0
55	MG	VC	3606	1/1	0.83	0.49	243,243,243,243	0
55	MG	VC	3240	1/1	0.83	0.41	78,78,78,78	0
55	MG	UC	1782	1/1	0.83	0.27	116,116,116,116	0
55	MG	ZC	3016	1/1	0.83	0.41	71,71,71,71	0
55	MG	VC	3016	1/1	0.83	0.76	95,95,95,95	0
55	MG	ZC	3206	1/1	0.83	0.32	74,74,74,74	0
55	MG	ZC	3020	1/1	0.83	0.31	71,71,71,71	0
55	MG	VC	3357	1/1	0.83	0.45	118,118,118,118	0
55	MG	VC	3674	1/1	0.83	0.54	78,78,78,78	0
55	MG	ZC	3129	1/1	0.83	0.80	43,43,43,43	0
55	MG	ZC	3300	1/1	0.83	0.46	83,83,83,83	0
55	MG	WA	301	1/1	0.83	1.28	78,78,78,78	0
55	MG	VC	3620	1/1	0.83	0.76	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	YC	1833	1/1	0.83	0.34	97,97,97,97	0
55	MG	FD	112	1/1	0.83	0.26	170,170,170,170	0
55	MG	ZC	3643	1/1	0.83	0.45	67,67,67,67	0
55	MG	VC	3126	1/1	0.83	0.82	51,51,51,51	0
55	MG	UC	1708	1/1	0.83	0.39	146,146,146,146	0
55	MG	ZC	3140	1/1	0.83	0.69	76,76,76,76	0
55	MG	YC	1612	1/1	0.84	0.38	110,110,110,110	0
55	MG	VC	3458	1/1	0.84	0.69	80,80,80,80	0
55	MG	ZC	3408	1/1	0.84	0.75	123,123,123,123	0
55	MG	VC	3656	1/1	0.84	0.52	95,95,95,95	0
55	MG	VC	3308	1/1	0.84	1.31	64,64,64,64	0
55	MG	ZC	3704	1/1	0.84	0.23	102,102,102,102	0
55	MG	YC	1618	1/1	0.84	0.39	132,132,132,132	0
55	MG	UC	1836	1/1	0.84	0.17	138,138,138,138	0
55	MG	ZC	3619	1/1	0.84	0.31	70,70,70,70	0
55	MG	AD	220	1/1	0.84	0.66	121,121,121,121	0
55	MG	VC	3663	1/1	0.84	0.48	124,124,124,124	0
55	MG	VC	3434	1/1	0.84	0.63	79,79,79,79	0
55	MG	YC	1770	1/1	0.84	0.24	149,149,149,149	0
55	MG	VC	3535	1/1	0.84	0.69	114,114,114,114	0
55	MG	VC	3133	1/1	0.84	0.44	86,86,86,86	0
55	MG	VC	3110	1/1	0.84	1.09	80,80,80,80	0
55	MG	VC	3580	1/1	0.84	0.38	113,113,113,113	0
55	MG	ZC	3127	1/1	0.84	0.40	73,73,73,73	0
55	MG	VC	3197	1/1	0.84	0.21	144,144,144,144	0
55	MG	UC	1756	1/1	0.84	0.47	112,112,112,112	0
55	MG	ZC	3041	1/1	0.84	0.85	99,99,99,99	0
55	MG	ZC	3528	1/1	0.84	0.34	97,97,97,97	0
55	MG	VC	3223	1/1	0.84	0.47	130,130,130,130	0
55	MG	VC	3627	1/1	0.84	0.43	114,114,114,114	0
55	MG	VC	3503	1/1	0.84	0.60	94,94,94,94	0
55	MG	YC	1638	1/1	0.84	0.34	135,135,135,135	0
55	MG	VC	3319	1/1	0.84	0.40	72,72,72,72	0
55	MG	YC	1682	1/1	0.84	0.94	121,121,121,121	0
55	MG	ZC	3364	1/1	0.84	0.36	86,86,86,86	0
55	MG	ZC	3289	1/1	0.84	0.30	130,130,130,130	0
55	MG	ED	112	1/1	0.84	0.32	156,156,156,156	0
55	MG	YC	1683	1/1	0.84	0.34	155,155,155,155	0
55	MG	VC	3069	1/1	0.84	0.47	86,86,86,86	0
55	MG	ZC	3660	1/1	0.84	0.38	111,111,111,111	0
55	MG	ZC	3060	1/1	0.84	0.41	65,65,65,65	0
55	MG	VC	3322	1/1	0.84	0.27	114,114,114,114	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1772	1/1	0.84	0.22	85,85,85,85	0
55	MG	VC	3118	1/1	0.84	0.86	78,78,78,78	0
55	MG	VC	3262	1/1	0.84	0.18	82,82,82,82	0
55	MG	ZC	3161	1/1	0.84	0.30	96,96,96,96	0
55	MG	UC	1619	1/1	0.84	0.26	127,127,127,127	0
55	MG	VC	3485	1/1	0.84	0.27	107,107,107,107	0
55	MG	YC	1606	1/1	0.84	0.65	131,131,131,131	0
55	MG	ZC	3167	1/1	0.84	0.88	72,72,72,72	0
55	MG	ZC	3395	1/1	0.84	0.13	105,105,105,105	0
55	MG	VC	3161	1/1	0.84	0.41	122,122,122,122	0
55	MG	YA	304	1/1	0.84	0.58	53,53,53,53	0
55	MG	YC	1653	1/1	0.84	1.63	140,140,140,140	0
55	MG	HD	101	1/1	0.84	0.31	156,156,156,156	0
55	MG	VC	3442	1/1	0.85	0.55	105,105,105,105	0
55	MG	ZC	3334	1/1	0.85	0.39	68,68,68,68	0
55	MG	ZC	3162	1/1	0.85	0.29	89,89,89,89	0
55	MG	YC	1850	1/1	0.85	0.33	179,179,179,179	0
55	MG	ZC	3340	1/1	0.85	0.14	91,91,91,91	0
55	MG	VC	3277	1/1	0.85	0.35	75,75,75,75	0
55	MG	ZC	3072	1/1	0.85	1.14	91,91,91,91	0
55	MG	ZC	3598	1/1	0.85	0.31	99,99,99,99	0
55	MG	ZC	3602	1/1	0.85	0.27	95,95,95,95	0
55	MG	ZC	3608	1/1	0.85	0.49	134,134,134,134	0
55	MG	ZC	3758	1/1	0.85	0.61	128,128,128,128	0
55	MG	UC	1610	1/1	0.85	1.13	110,110,110,110	0
55	MG	ZC	3760	1/1	0.85	0.95	117,117,117,117	0
55	MG	VC	3326	1/1	0.85	0.45	152,152,152,152	0
55	MG	UC	1618	1/1	0.85	0.75	102,102,102,102	0
55	MG	ZC	3171	1/1	0.85	0.49	82,82,82,82	0
55	MG	VC	3247	1/1	0.85	0.09	140,140,140,140	0
55	MG	ZC	3621	1/1	0.85	0.58	80,80,80,80	0
55	MG	ZC	3352	1/1	0.85	0.56	84,84,84,84	0
55	MG	ZC	3353	1/1	0.85	0.50	62,62,62,62	0
55	MG	UC	1692	1/1	0.85	0.39	94,94,94,94	0
55	MG	YC	1807	1/1	0.85	0.83	122,122,122,122	0
55	MG	ZC	3359	1/1	0.85	0.27	103,103,103,103	0
55	MG	ZC	3267	1/1	0.85	0.33	71,71,71,71	0
55	MG	YC	1709	1/1	0.85	0.30	109,109,109,109	0
55	MG	BA	102	1/1	0.85	0.33	87,87,87,87	0
55	MG	ZC	3096	1/1	0.85	1.03	93,93,93,93	0
55	MG	VC	3070	1/1	0.85	0.96	68,68,68,68	0
55	MG	AD	208	1/1	0.85	0.24	135,135,135,135	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3380	1/1	0.85	0.86	82,82,82,82	0
55	MG	YC	1868	1/1	0.85	0.34	179,179,179,179	0
55	MG	WB	101	1/1	0.85	0.61	62,62,62,62	0
55	MG	ZC	3373	1/1	0.85	0.38	72,72,72,72	0
55	MG	YC	1716	1/1	0.85	0.11	249,249,249,249	0
55	MG	ZC	3112	1/1	0.85	0.51	87,87,87,87	0
55	MG	VC	3003	1/1	0.85	0.37	96,96,96,96	0
55	MG	ZC	3385	1/1	0.85	0.31	103,103,103,103	0
55	MG	P	201	1/1	0.85	0.23	96,96,96,96	0
55	MG	VC	3465	1/1	0.85	0.69	95,95,95,95	0
55	MG	FA	201	1/1	0.85	0.95	98,98,98,98	0
55	MG	VC	3034	1/1	0.85	0.27	79,79,79,79	0
55	MG	VC	3612	1/1	0.85	0.24	90,90,90,90	0
55	MG	ZC	3507	1/1	0.85	0.19	99,99,99,99	0
55	MG	ZC	3292	1/1	0.85	0.61	64,64,64,64	0
55	MG	ZC	3128	1/1	0.85	0.51	87,87,87,87	0
55	MG	ZC	3294	1/1	0.85	0.34	66,66,66,66	0
55	MG	ZC	3026	1/1	0.85	0.41	98,98,98,98	0
55	MG	VC	3085	1/1	0.85	0.56	77,77,77,77	0
55	MG	ZC	3523	1/1	0.85	0.37	58,58,58,58	0
55	MG	YC	1637	1/1	0.85	0.50	75,75,75,75	0
55	MG	VC	3352	1/1	0.85	0.60	122,122,122,122	0
55	MG	VC	3266	1/1	0.85	0.53	89,89,89,89	0
55	MG	ZC	3410	1/1	0.85	0.11	134,134,134,134	0
55	MG	VC	3089	1/1	0.85	0.26	97,97,97,97	0
55	MG	ZC	3137	1/1	0.85	0.40	83,83,83,83	0
55	MG	VC	3396	1/1	0.85	0.59	112,112,112,112	0
55	MG	VC	3436	1/1	0.85	0.41	111,111,111,111	0
55	MG	UC	1707	1/1	0.85	0.70	116,116,116,116	0
55	MG	UC	1768	1/1	0.85	0.22	116,116,116,116	0
55	MG	ZC	3231	1/1	0.85	0.21	99,99,99,99	0
55	MG	ZC	3543	1/1	0.85	0.59	80,80,80,80	0
55	MG	VC	3693	1/1	0.85	0.95	96,96,96,96	0
55	MG	ZC	3547	1/1	0.85	0.23	126,126,126,126	0
55	MG	VC	3202	1/1	0.85	0.53	80,80,80,80	0
55	MG	ZC	3426	1/1	0.85	0.20	85,85,85,85	0
55	MG	ZC	3552	1/1	0.85	0.26	190,190,190,190	0
55	MG	ZC	3056	1/1	0.85	0.34	104,104,104,104	0
55	MG	ZC	3555	1/1	0.85	0.30	131,131,131,131	0
55	MG	VC	3403	1/1	0.85	0.36	97,97,97,97	0
55	MG	ZC	3430	1/1	0.85	0.32	66,66,66,66	0
55	MG	VC	3061	1/1	0.85	0.58	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3568	1/1	0.85	0.58	70,70,70,70	0
55	MG	ZC	3157	1/1	0.85	0.47	51,51,51,51	0
55	MG	ZC	3434	1/1	0.85	0.47	70,70,70,70	0
55	MG	YC	1796	1/1	0.85	0.20	166,166,166,166	0
55	MG	ZC	3160	1/1	0.85	0.26	75,75,75,75	0
55	MG	ZC	3442	1/1	0.85	0.27	75,75,75,75	0
55	MG	UC	1806	1/1	0.86	0.56	102,102,102,102	0
55	MG	UC	1724	1/1	0.86	0.63	150,150,150,150	0
55	MG	ZC	3620	1/1	0.86	0.40	86,86,86,86	0
55	MG	VC	3497	1/1	0.86	1.44	95,95,95,95	0
55	MG	VC	3278	1/1	0.86	0.53	117,117,117,117	0
55	MG	ZC	3493	1/1	0.86	0.58	87,87,87,87	0
55	MG	YC	1855	1/1	0.86	0.90	124,124,124,124	0
55	MG	YC	1857	1/1	0.86	2.05	111,111,111,111	0
55	MG	VC	3128	1/1	0.86	1.01	71,71,71,71	0
55	MG	VC	3556	1/1	0.86	0.47	129,129,129,129	0
55	MG	ZC	3296	1/1	0.86	0.32	95,95,95,95	0
55	MG	ZC	3501	1/1	0.86	0.27	86,86,86,86	0
55	MG	UC	1829	1/1	0.86	0.75	145,145,145,145	0
55	MG	VC	3685	1/1	0.86	0.67	81,81,81,81	0
55	MG	ZC	3633	1/1	0.86	0.50	92,92,92,92	0
55	MG	ZC	3504	1/1	0.86	0.14	99,99,99,99	0
55	MG	YC	1611	1/1	0.86	0.38	110,110,110,110	0
55	MG	VC	3502	1/1	0.86	0.95	100,100,100,100	0
55	MG	YC	1613	1/1	0.86	1.32	145,145,145,145	0
55	MG	ZC	3209	1/1	0.86	0.46	67,67,67,67	0
55	MG	ZC	3517	1/1	0.86	0.35	120,120,120,120	0
55	MG	VC	3335	1/1	0.86	0.41	115,115,115,115	0
55	MG	ZC	3520	1/1	0.86	0.45	82,82,82,82	0
55	MG	ZC	3001	1/1	0.86	0.27	64,64,64,64	0
55	MG	ZC	3121	1/1	0.86	0.47	89,89,89,89	0
55	MG	VC	3105	1/1	0.86	0.40	102,102,102,102	0
55	MG	ZC	3657	1/1	0.86	0.28	108,108,108,108	0
55	MG	ZC	3524	1/1	0.86	0.87	94,94,94,94	0
55	MG	YC	1739	1/1	0.86	0.18	206,206,206,206	0
55	MG	UC	1793	1/1	0.86	0.39	129,129,129,129	0
55	MG	YA	307	1/1	0.86	0.46	98,98,98,98	0
55	MG	ZC	3131	1/1	0.86	0.43	93,93,93,93	0
55	MG	VC	3050	1/1	0.86	0.40	101,101,101,101	0
55	MG	VC	3249	1/1	0.86	0.42	87,87,87,87	0
55	MG	YC	1744	1/1	0.86	0.28	121,121,121,121	0
55	MG	YC	1622	1/1	0.86	0.36	159,159,159,159	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3631	1/1	0.86	0.53	82,82,82,82	0
55	MG	ZC	3033	1/1	0.86	0.21	80,80,80,80	0
55	MG	UC	1680	1/1	0.86	0.48	107,107,107,107	0
55	MG	VC	3080	1/1	0.86	1.22	64,64,64,64	0
55	MG	YA	308	1/1	0.86	1.28	59,59,59,59	0
55	MG	ZC	3435	1/1	0.86	0.37	71,71,71,71	0
55	MG	VC	3517	1/1	0.86	0.43	75,75,75,75	0
55	MG	ZC	3150	1/1	0.86	0.30	81,81,81,81	0
55	MG	VC	3353	1/1	0.86	0.30	72,72,72,72	0
55	MG	UC	1749	1/1	0.86	0.46	134,134,134,134	0
55	MG	UC	1736	1/1	0.86	1.17	139,139,139,139	0
55	MG	UC	1778	1/1	0.86	0.60	153,153,153,153	0
55	MG	VC	3530	1/1	0.86	0.39	96,96,96,96	0
55	MG	ZC	3052	1/1	0.86	0.53	89,89,89,89	0
55	MG	UC	1803	1/1	0.86	0.49	147,147,147,147	0
55	MG	ZC	3054	1/1	0.86	0.83	103,103,103,103	0
55	MG	VC	3183	1/1	0.86	0.30	93,93,93,93	0
55	MG	VC	3654	1/1	0.86	0.35	98,98,98,98	0
55	MG	J	203	1/1	0.86	0.29	83,83,83,83	0
55	MG	ZC	3465	1/1	0.86	0.37	80,80,80,80	0
55	MG	VC	3185	1/1	0.86	0.28	97,97,97,97	0
55	MG	WC	216	1/1	0.86	0.53	160,160,160,160	0
55	MG	YC	1703	1/1	0.86	0.22	136,136,136,136	0
55	MG	VC	3538	1/1	0.86	0.39	82,82,82,82	0
55	MG	FD	103	1/1	0.86	0.28	155,155,155,155	0
55	MG	VC	3038	1/1	0.86	0.61	115,115,115,115	0
55	MG	WC	220	1/1	0.86	0.24	205,205,205,205	0
55	MG	YC	1648	1/1	0.86	0.83	112,112,112,112	0
55	MG	VC	3008	1/1	0.86	0.46	92,92,92,92	0
55	MG	ZC	3735	1/1	0.86	0.22	85,85,85,85	0
55	MG	ZC	3736	1/1	0.86	1.05	82,82,82,82	0
55	MG	VC	3371	1/1	0.86	0.53	93,93,93,93	0
55	MG	ZC	3738	1/1	0.86	0.32	82,82,82,82	0
55	MG	VC	3235	1/1	0.86	0.39	109,109,109,109	0
55	MG	VC	3492	1/1	0.86	0.37	113,113,113,113	0
55	MG	ZC	3380	1/1	0.86	0.13	108,108,108,108	0
55	MG	ZC	3082	1/1	0.86	0.11	105,105,105,105	0
55	MG	YC	1761	1/1	0.87	0.12	163,163,163,163	0
55	MG	ZC	3768	1/1	0.87	0.46	107,107,107,107	0
55	MG	VC	3211	1/1	0.87	0.28	92,92,92,92	0
55	MG	ZC	3018	1/1	0.87	0.30	86,86,86,86	0
55	MG	VC	3113	1/1	0.87	0.35	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1801	1/1	0.87	0.92	107,107,107,107	0
55	MG	ZC	3773	1/1	0.87	0.30	112,112,112,112	0
55	MG	GB	201	1/1	0.87	0.18	126,126,126,126	0
55	MG	ZC	3665	1/1	0.87	0.94	70,70,70,70	0
55	MG	VC	3017	1/1	0.87	0.65	97,97,97,97	0
55	MG	VC	3576	1/1	0.87	0.98	122,122,122,122	0
55	MG	ZC	3027	1/1	0.87	0.41	94,94,94,94	0
55	MG	YC	1823	1/1	0.87	0.54	102,102,102,102	0
55	MG	UC	1755	1/1	0.87	0.25	129,129,129,129	0
55	MG	ZC	3037	1/1	0.87	1.06	59,59,59,59	0
55	MG	VC	3619	1/1	0.87	0.60	119,119,119,119	0
55	MG	ZC	3575	1/1	0.87	0.46	105,105,105,105	0
55	MG	ZC	3576	1/1	0.87	0.21	84,84,84,84	0
55	MG	VC	3100	1/1	0.87	0.72	71,71,71,71	0
55	MG	VC	3473	1/1	0.87	0.55	125,125,125,125	0
55	MG	ZC	3219	1/1	0.87	0.93	69,69,69,69	0
55	MG	ZC	3582	1/1	0.87	0.26	95,95,95,95	0
55	MG	ZC	3583	1/1	0.87	1.27	92,92,92,92	0
55	MG	YC	1674	1/1	0.87	0.65	138,138,138,138	0
55	MG	YC	1777	1/1	0.87	0.31	97,97,97,97	0
55	MG	ZC	3702	1/1	0.87	0.90	92,92,92,92	0
55	MG	UC	1628	1/1	0.87	0.56	107,107,107,107	0
55	MG	VC	3338	1/1	0.87	0.83	80,80,80,80	0
55	MG	HB	202	1/1	0.87	0.34	82,82,82,82	0
55	MG	VC	3583	1/1	0.87	0.37	130,130,130,130	0
55	MG	YC	1842	1/1	0.87	0.39	140,140,140,140	0
55	MG	ZC	3600	1/1	0.87	1.00	121,121,121,121	0
55	MG	VC	3687	1/1	0.87	0.43	88,88,88,88	0
55	MG	BD	104	1/1	0.87	0.59	253,253,253,253	0
55	MG	YC	1787	1/1	0.87	0.34	198,198,198,198	0
55	MG	ZC	3715	1/1	0.87	0.74	112,112,112,112	0
55	MG	DC	201	1/1	0.87	0.48	175,175,175,175	0
55	MG	YC	1640	1/1	0.87	1.04	155,155,155,155	0
55	MG	VC	3233	1/1	0.87	0.47	165,165,165,165	0
55	MG	ZC	3724	1/1	0.87	0.58	165,165,165,165	0
55	MG	ZC	3063	1/1	0.87	0.47	36,36,36,36	0
55	MG	ZC	3240	1/1	0.87	0.48	63,63,63,63	0
55	MG	UC	1808	1/1	0.87	0.44	126,126,126,126	0
55	MG	VC	3147	1/1	0.87	0.38	129,129,129,129	0
55	MG	ZC	3245	1/1	0.87	0.41	71,71,71,71	0
55	MG	VC	3149	1/1	0.87	0.68	115,115,115,115	0
55	MG	UC	1821	1/1	0.87	0.43	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3051	1/1	0.87	0.19	117,117,117,117	0
55	MG	YC	1608	1/1	0.87	0.20	148,148,148,148	0
55	MG	VC	3355	1/1	0.87	0.21	131,131,131,131	0
55	MG	VC	3595	1/1	0.87	0.22	301,301,301,301	0
55	MG	YC	1696	1/1	0.87	0.37	135,135,135,135	0
55	MG	VC	3152	1/1	0.87	0.23	132,132,132,132	0
55	MG	VC	3242	1/1	0.87	0.27	94,94,94,94	0
55	MG	YC	1803	1/1	0.87	0.30	137,137,137,137	0
55	MG	VC	3601	1/1	0.87	1.24	66,66,66,66	0
55	MG	VC	3521	1/1	0.87	0.81	78,78,78,78	0
55	MG	ZC	3178	1/1	0.87	0.38	103,103,103,103	0
55	MG	YC	1754	1/1	0.87	1.27	112,112,112,112	0
55	MG	UC	1784	1/1	0.87	0.39	138,138,138,138	0
55	MG	YC	1869	1/1	0.87	0.37	157,157,157,157	0
55	MG	ZC	3101	1/1	0.87	0.37	58,58,58,58	0
55	MG	VC	3564	1/1	0.87	0.28	151,151,151,151	0
55	MG	YC	1662	1/1	0.87	0.39	118,118,118,118	0
55	MG	YC	1760	1/1	0.87	0.63	111,111,111,111	0
55	MG	ZC	3506	1/1	0.88	0.35	77,77,77,77	0
55	MG	VC	3073	1/1	0.88	0.67	81,81,81,81	0
55	MG	VC	3536	1/1	0.88	0.21	97,97,97,97	0
55	MG	ZC	3413	1/1	0.88	0.61	89,89,89,89	0
55	MG	VC	3327	1/1	0.88	0.30	93,93,93,93	0
55	MG	ZC	3029	1/1	0.88	0.56	66,66,66,66	0
55	MG	UC	1781	1/1	0.88	0.25	116,116,116,116	0
55	MG	ZC	3311	1/1	0.88	0.86	100,100,100,100	0
55	MG	ZC	3222	1/1	0.88	0.57	69,69,69,69	0
55	MG	ZC	3223	1/1	0.88	0.32	82,82,82,82	0
55	MG	YC	1820	1/1	0.88	0.38	152,152,152,152	0
55	MG	VC	3272	1/1	0.88	0.70	78,78,78,78	0
55	MG	UC	1655	1/1	0.88	0.45	113,113,113,113	0
55	MG	VC	3158	1/1	0.88	0.51	132,132,132,132	0
55	MG	YC	1824	1/1	0.88	0.19	138,138,138,138	0
55	MG	VC	3237	1/1	0.88	0.18	109,109,109,109	0
55	MG	ZC	3532	1/1	0.88	0.41	106,106,106,106	0
55	MG	VC	3388	1/1	0.88	1.02	78,78,78,78	0
55	MG	YC	1767	1/1	0.88	0.54	116,116,116,116	0
55	MG	YC	1707	1/1	0.88	0.23	131,131,131,131	0
55	MG	UC	1638	1/1	0.88	0.20	109,109,109,109	0
55	MG	VC	3279	1/1	0.88	0.32	115,115,115,115	0
55	MG	BC	202	1/1	0.88	1.23	127,127,127,127	0
55	MG	UC	1635	1/1	0.88	0.34	93,93,93,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3440	1/1	0.88	0.52	95,95,95,95	0
55	MG	VC	3084	1/1	0.88	0.51	90,90,90,90	0
55	MG	YC	1605	1/1	0.88	0.20	114,114,114,114	0
55	MG	AD	214	1/1	0.88	0.46	103,103,103,103	0
55	MG	ZC	3445	1/1	0.88	0.54	106,106,106,106	0
55	MG	VC	3139	1/1	0.88	0.75	96,96,96,96	0
55	MG	VC	3346	1/1	0.88	0.27	94,94,94,94	0
55	MG	VC	3610	1/1	0.88	0.19	104,104,104,104	0
55	MG	VC	3206	1/1	0.88	1.08	65,65,65,65	0
55	MG	YC	1785	1/1	0.88	0.25	106,106,106,106	0
55	MG	VC	3244	1/1	0.88	0.57	91,91,91,91	0
55	MG	ZC	3567	1/1	0.88	0.91	86,86,86,86	0
55	MG	ZC	3350	1/1	0.88	0.43	70,70,70,70	0
55	MG	ZC	3459	1/1	0.88	0.38	83,83,83,83	0
55	MG	UC	1745	1/1	0.88	0.23	106,106,106,106	0
55	MG	UC	1702	1/1	0.88	0.25	151,151,151,151	0
55	MG	ZC	3700	1/1	0.88	0.25	179,179,179,179	0
55	MG	ZC	3701	1/1	0.88	0.17	90,90,90,90	0
55	MG	VC	3294	1/1	0.88	0.30	73,73,73,73	0
55	MG	YC	1727	1/1	0.88	1.14	71,71,71,71	0
55	MG	VC	3623	1/1	0.88	0.53	87,87,87,87	0
55	MG	UC	1776	1/1	0.88	0.25	117,117,117,117	0
55	MG	ZC	3174	1/1	0.88	0.81	75,75,75,75	0
55	MG	VC	3005	1/1	0.88	0.70	79,79,79,79	0
55	MG	ED	103	1/1	0.88	0.82	183,183,183,183	0
55	MG	VC	3037	1/1	0.88	0.94	74,74,74,74	0
55	MG	VC	3573	1/1	0.88	0.40	143,143,143,143	0
55	MG	ZC	3713	1/1	0.88	0.14	94,94,94,94	0
55	MG	ZC	3181	1/1	0.88	1.13	61,61,61,61	0
55	MG	ZC	3587	1/1	0.88	0.71	80,80,80,80	0
55	MG	VC	3414	1/1	0.88	0.32	105,105,105,105	0
55	MG	UC	1790	1/1	0.88	0.49	144,144,144,144	0
55	MG	YC	1798	1/1	0.88	0.71	134,134,134,134	0
55	MG	VC	3176	1/1	0.88	0.53	83,83,83,83	0
55	MG	WC	203	1/1	0.88	0.32	162,162,162,162	0
55	MG	VC	3259	1/1	0.88	0.45	113,113,113,113	0
55	MG	YC	1629	1/1	0.88	0.42	152,152,152,152	0
55	MG	UC	1722	1/1	0.88	0.12	107,107,107,107	0
55	MG	ZC	3612	1/1	0.88	0.28	85,85,85,85	0
55	MG	ZC	3196	1/1	0.88	1.06	69,69,69,69	0
55	MG	UC	1630	1/1	0.88	0.36	146,146,146,146	0
55	MG	UC	1711	1/1	0.88	0.18	150,150,150,150	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3642	1/1	0.88	0.46	101,101,101,101	0
55	MG	VC	3320	1/1	0.88	0.29	113,113,113,113	0
55	MG	ZC	3203	1/1	0.88	0.25	84,84,84,84	0
55	MG	UC	1851	1/1	0.88	0.78	113,113,113,113	0
55	MG	VC	3373	1/1	0.88	0.25	101,101,101,101	0
55	MG	VC	3225	1/1	0.88	0.45	78,78,78,78	0
55	MG	YC	1812	1/1	0.88	1.17	179,179,179,179	0
55	MG	UC	1828	1/1	0.88	0.20	199,199,199,199	0
55	MG	ZC	3023	1/1	0.88	0.29	71,71,71,71	0
55	MG	VC	3645	1/1	0.89	0.22	104,104,104,104	0
55	MG	VC	3232	1/1	0.89	0.49	164,164,164,164	0
55	MG	VC	3065	1/1	0.89	0.63	67,67,67,67	0
55	MG	ZC	3475	1/1	0.89	0.28	96,96,96,96	0
55	MG	ZC	3476	1/1	0.89	0.30	74,74,74,74	0
55	MG	VC	3509	1/1	0.89	0.30	118,118,118,118	0
55	MG	VC	3477	1/1	0.89	0.28	93,93,93,93	0
55	MG	ZC	3605	1/1	0.89	0.47	82,82,82,82	0
55	MG	ZC	3263	1/1	0.89	0.15	76,76,76,76	0
55	MG	ZC	3610	1/1	0.89	0.77	96,96,96,96	0
55	MG	YC	1681	1/1	0.89	0.57	193,193,193,193	0
55	MG	ZC	3081	1/1	0.89	0.28	143,143,143,143	0
55	MG	VC	3087	1/1	0.89	0.11	87,87,87,87	0
55	MG	VC	3560	1/1	0.89	0.26	144,144,144,144	0
55	MG	VC	3658	1/1	0.89	0.58	138,138,138,138	0
55	MG	ZC	3091	1/1	0.89	0.53	81,81,81,81	0
55	MG	VC	3659	1/1	0.89	0.53	138,138,138,138	0
55	MG	ZC	3375	1/1	0.89	0.27	101,101,101,101	0
55	MG	ZC	3378	1/1	0.89	0.28	82,82,82,82	0
55	MG	ZC	3492	1/1	0.89	0.44	68,68,68,68	0
55	MG	VC	3172	1/1	0.89	0.19	81,81,81,81	0
55	MG	ZC	3381	1/1	0.89	0.81	83,83,83,83	0
55	MG	ZC	3382	1/1	0.89	0.34	80,80,80,80	0
55	MG	YC	1688	1/1	0.89	0.26	189,189,189,189	0
55	MG	ZC	3275	1/1	0.89	0.13	98,98,98,98	0
55	MG	VC	3605	1/1	0.89	0.43	112,112,112,112	0
55	MG	YC	1751	1/1	0.89	0.25	92,92,92,92	0
55	MG	ZC	3281	1/1	0.89	0.29	71,71,71,71	0
55	MG	ZC	3774	1/1	0.89	0.37	132,132,132,132	0
55	MG	UC	1659	1/1	0.89	0.57	106,106,106,106	0
55	MG	VC	3090	1/1	0.89	0.17	121,121,121,121	0
55	MG	UC	1671	1/1	0.89	0.36	138,138,138,138	0
55	MG	VC	3671	1/1	0.89	0.45	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	UC	1672	1/1	0.89	0.79	108,108,108,108	0
55	MG	WC	223	1/1	0.89	0.29	172,172,172,172	0
55	MG	ZC	3645	1/1	0.89	0.17	98,98,98,98	0
55	MG	ZC	3514	1/1	0.89	0.23	106,106,106,106	0
55	MG	VC	3569	1/1	0.89	0.46	116,116,116,116	0
55	MG	VC	3116	1/1	0.89	0.42	92,92,92,92	0
55	MG	ZC	3518	1/1	0.89	0.34	96,96,96,96	0
55	MG	ZC	3202	1/1	0.89	0.26	64,64,64,64	0
55	MG	VC	3274	1/1	0.89	0.30	100,100,100,100	0
55	MG	ZC	3407	1/1	0.89	0.10	92,92,92,92	0
55	MG	XC	104	1/1	0.89	0.62	251,251,251,251	0
55	MG	ZC	3122	1/1	0.89	1.31	49,49,49,49	0
55	MG	ZC	3125	1/1	0.89	0.36	89,89,89,89	0
55	MG	ZC	3126	1/1	0.89	0.59	66,66,66,66	0
55	MG	YC	1819	1/1	0.89	0.18	160,160,160,160	0
55	MG	ZC	3210	1/1	0.89	0.52	108,108,108,108	0
55	MG	UC	1852	1/1	0.89	0.79	207,207,207,207	0
55	MG	UC	1608	1/1	0.89	0.23	127,127,127,127	0
55	MG	AD	226	1/1	0.89	0.41	157,157,157,157	0
55	MG	VC	3218	1/1	0.89	0.58	99,99,99,99	0
55	MG	ZC	3676	1/1	0.89	0.81	114,114,114,114	0
55	MG	ZC	3533	1/1	0.89	0.14	102,102,102,102	0
55	MG	VC	3680	1/1	0.89	0.60	90,90,90,90	0
55	MG	VC	3531	1/1	0.89	0.56	84,84,84,84	0
55	MG	VC	3386	1/1	0.89	0.23	134,134,134,134	0
55	MG	YC	1827	1/1	0.89	0.67	103,103,103,103	0
55	MG	VC	3453	1/1	0.89	0.40	77,77,77,77	0
55	MG	YA	302	1/1	0.89	0.11	91,91,91,91	0
55	MG	VC	3689	1/1	0.89	0.32	130,130,130,130	0
55	MG	ZC	3691	1/1	0.89	0.70	65,65,65,65	0
55	MG	ZC	3141	1/1	0.89	0.16	100,100,100,100	0
55	MG	ZC	3694	1/1	0.89	0.48	120,120,120,120	0
55	MG	VC	3356	1/1	0.89	0.26	102,102,102,102	0
55	MG	UC	1823	1/1	0.89	0.31	162,162,162,162	0
55	MG	ZC	3328	1/1	0.89	0.18	117,117,117,117	0
55	MG	YC	1835	1/1	0.89	0.34	116,116,116,116	0
55	MG	VC	3495	1/1	0.89	0.49	106,106,106,106	0
55	MG	I	201	1/1	0.89	0.79	80,80,80,80	0
55	MG	YC	1782	1/1	0.89	0.44	130,130,130,130	0
55	MG	UC	1811	1/1	0.89	0.12	131,131,131,131	0
55	MG	ZC	3237	1/1	0.89	0.41	104,104,104,104	0
55	MG	VC	3393	1/1	0.89	0.34	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	YC	1724	1/1	0.89	0.69	161,161,161,161	0
55	MG	UC	1861	1/1	0.89	0.19	113,113,113,113	0
55	MG	ZC	3451	1/1	0.89	0.69	85,85,85,85	0
55	MG	ZC	3712	1/1	0.89	0.56	81,81,81,81	0
55	MG	VC	3638	1/1	0.89	0.36	112,112,112,112	0
55	MG	VC	3226	1/1	0.89	0.17	133,133,133,133	0
55	MG	ZC	3456	1/1	0.89	0.21	77,77,77,77	0
55	MG	VC	3471	1/1	0.89	0.16	142,142,142,142	0
55	MG	UC	1614	1/1	0.89	0.31	130,130,130,130	0
55	MG	ZC	3069	1/1	0.89	0.48	85,85,85,85	0
55	MG	ZC	3348	1/1	0.89	0.24	59,59,59,59	0
55	MG	ZC	3164	1/1	0.89	0.44	73,73,73,73	0
55	MG	ZC	3249	1/1	0.89	0.29	105,105,105,105	0
55	MG	YC	1732	1/1	0.89	1.00	137,137,137,137	0
55	MG	UC	1652	1/1	0.89	0.43	140,140,140,140	0
55	MG	VC	3148	1/1	0.90	0.45	137,137,137,137	0
55	MG	VC	3358	1/1	0.90	0.47	120,120,120,120	0
55	MG	ZC	3337	1/1	0.90	0.32	78,78,78,78	0
55	MG	YC	1609	1/1	0.90	0.41	193,193,193,193	0
55	MG	VC	3260	1/1	0.90	0.99	77,77,77,77	0
55	MG	VC	3460	1/1	0.90	0.59	97,97,97,97	0
55	MG	VC	3508	1/1	0.90	0.21	97,97,97,97	0
55	MG	VC	3686	1/1	0.90	0.42	90,90,90,90	0
55	MG	ZC	3730	1/1	0.90	0.35	71,71,71,71	0
55	MG	ZC	3461	1/1	0.90	0.27	111,111,111,111	0
55	MG	VC	3063	1/1	0.90	0.38	98,98,98,98	0
55	MG	UC	1734	1/1	0.90	0.31	153,153,153,153	0
55	MG	FB	202	1/1	0.90	0.14	118,118,118,118	0
55	MG	VC	3572	1/1	0.90	0.29	131,131,131,131	0
55	MG	YC	1749	1/1	0.90	1.33	164,164,164,164	0
55	MG	UC	1837	1/1	0.90	0.30	115,115,115,115	0
55	MG	VC	3628	1/1	0.90	0.29	63,63,63,63	0
55	MG	UC	1687	1/1	0.90	0.53	107,107,107,107	0
55	MG	ZC	3144	1/1	0.90	0.16	92,92,92,92	0
55	MG	ZC	3040	1/1	0.90	0.43	61,61,61,61	0
55	MG	C	303	1/1	0.90	0.82	68,68,68,68	0
55	MG	VC	3701	1/1	0.90	0.23	102,102,102,102	0
55	MG	VC	3268	1/1	0.90	0.49	96,96,96,96	0
55	MG	ZC	3614	1/1	0.90	0.90	88,88,88,88	0
55	MG	VC	3019	1/1	0.90	0.53	91,91,91,91	0
55	MG	ZC	3252	1/1	0.90	0.58	69,69,69,69	0
55	MG	VC	3099	1/1	0.90	0.66	171,171,171,171	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3047	1/1	0.90	0.40	69,69,69,69	0
55	MG	ZC	3368	1/1	0.90	0.29	76,76,76,76	0
55	MG	ZC	3049	1/1	0.90	0.63	102,102,102,102	0
55	MG	VC	3072	1/1	0.90	0.31	82,82,82,82	0
55	MG	VC	3637	1/1	0.90	0.50	105,105,105,105	0
55	MG	VC	3273	1/1	0.90	0.91	80,80,80,80	0
55	MG	VC	3330	1/1	0.90	0.42	105,105,105,105	0
55	MG	ZC	3376	1/1	0.90	0.42	101,101,101,101	0
55	MG	ZC	3377	1/1	0.90	0.24	58,58,58,58	0
55	MG	VC	3022	1/1	0.90	0.52	91,91,91,91	0
55	MG	YC	1830	1/1	0.90	0.30	105,105,105,105	0
55	MG	VC	3074	1/1	0.90	0.30	104,104,104,104	0
55	MG	ZC	3058	1/1	0.90	0.55	37,37,37,37	0
55	MG	YC	1832	1/1	0.90	0.30	135,135,135,135	0
55	MG	UC	1742	1/1	0.90	0.47	92,92,92,92	0
55	MG	ZC	3636	1/1	0.90	0.18	132,132,132,132	0
55	MG	VC	3586	1/1	0.90	0.26	99,99,99,99	0
55	MG	ZC	3272	1/1	0.90	0.62	66,66,66,66	0
55	MG	YC	1768	1/1	0.90	0.33	168,168,168,168	0
55	MG	UC	1764	1/1	0.90	0.21	151,151,151,151	0
55	MG	ZC	3644	1/1	0.90	0.27	76,76,76,76	0
55	MG	ZC	3510	1/1	0.90	0.77	84,84,84,84	0
55	MG	ZC	3511	1/1	0.90	0.79	78,78,78,78	0
55	MG	ZC	3647	1/1	0.90	0.21	93,93,93,93	0
55	MG	UC	1765	1/1	0.90	0.34	107,107,107,107	0
55	MG	VC	3589	1/1	0.90	0.29	97,97,97,97	0
55	MG	ZC	3176	1/1	0.90	0.43	77,77,77,77	0
55	MG	VC	3136	1/1	0.90	0.30	76,76,76,76	0
55	MG	VC	3207	1/1	0.90	0.37	140,140,140,140	0
55	MG	ZC	3655	1/1	0.90	0.23	70,70,70,70	0
55	MG	ZC	3656	1/1	0.90	0.49	105,105,105,105	0
55	MG	UC	1633	1/1	0.90	0.22	125,125,125,125	0
55	MG	ZC	3400	1/1	0.90	0.28	106,106,106,106	0
55	MG	VC	3657	1/1	0.90	0.36	85,85,85,85	0
55	MG	ZC	3287	1/1	0.90	0.40	85,85,85,85	0
55	MG	VC	3284	1/1	0.90	0.22	113,113,113,113	0
55	MG	YC	1779	1/1	0.90	0.36	180,180,180,180	0
55	MG	VC	3343	1/1	0.90	0.26	115,115,115,115	0
55	MG	YC	1848	1/1	0.90	0.23	153,153,153,153	0
55	MG	ZC	3672	1/1	0.90	0.69	80,80,80,80	0
55	MG	VC	3029	1/1	0.90	0.79	93,93,93,93	0
55	MG	ZC	3083	1/1	0.90	0.48	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3246	1/1	0.90	0.48	106,106,106,106	0
55	MG	ZC	3677	1/1	0.90	0.44	66,66,66,66	0
55	MG	WC	222	1/1	0.90	0.32	157,157,157,157	0
55	MG	UC	1850	1/1	0.90	0.11	156,156,156,156	0
55	MG	UC	1621	1/1	0.90	0.30	120,120,120,120	0
55	MG	ZC	3094	1/1	0.90	0.76	62,62,62,62	0
55	MG	VC	3667	1/1	0.90	0.39	96,96,96,96	0
55	MG	ZC	3097	1/1	0.90	0.44	78,78,78,78	0
55	MG	ED	108	1/1	0.90	0.67	161,161,161,161	0
55	MG	VC	3170	1/1	0.90	0.26	89,89,89,89	0
55	MG	ZC	3689	1/1	0.90	0.28	94,94,94,94	0
55	MG	YC	1723	1/1	0.90	0.23	188,188,188,188	0
55	MG	XC	103	1/1	0.90	0.47	217,217,217,217	0
55	MG	ZC	3544	1/1	0.90	0.35	76,76,76,76	0
55	MG	ZC	3693	1/1	0.90	0.51	80,80,80,80	0
55	MG	ZC	3205	1/1	0.90	0.39	107,107,107,107	0
55	MG	ZC	3103	1/1	0.90	0.25	87,87,87,87	0
55	MG	VC	3670	1/1	0.90	0.86	89,89,89,89	0
55	MG	VC	3351	1/1	0.90	0.27	84,84,84,84	0
55	MG	ZC	3109	1/1	0.90	0.64	61,61,61,61	0
55	MG	B	302	1/1	0.90	0.58	132,132,132,132	0
55	MG	VC	3400	1/1	0.90	0.26	120,120,120,120	0
55	MG	ZC	3563	1/1	0.90	0.17	98,98,98,98	0
55	MG	YC	1729	1/1	0.90	0.07	169,169,169,169	0
55	MG	VC	3007	1/1	0.90	0.23	102,102,102,102	0
55	MG	UC	1853	1/1	0.90	0.74	108,108,108,108	0
55	MG	VC	3175	1/1	0.90	0.88	81,81,81,81	0
55	MG	YC	1871	1/1	0.90	0.26	153,153,153,153	0
55	MG	YC	1735	1/1	0.90	0.54	159,159,159,159	0
55	MG	YC	1736	1/1	0.90	0.44	137,137,137,137	0
55	MG	VC	3454	1/1	0.90	0.17	96,96,96,96	0
55	MG	ZC	3572	1/1	0.90	0.45	73,73,73,73	0
55	MG	VC	3547	1/1	0.91	0.14	89,89,89,89	0
55	MG	UC	1753	1/1	0.91	0.48	94,94,94,94	0
55	MG	ZC	3406	1/1	0.91	0.36	70,70,70,70	0
55	MG	ZC	3065	1/1	0.91	1.45	58,58,58,58	0
55	MG	VC	3135	1/1	0.91	0.21	113,113,113,113	0
55	MG	ZC	3766	1/1	0.91	0.76	82,82,82,82	0
55	MG	YC	1774	1/1	0.91	0.14	143,143,143,143	0
55	MG	ZC	3666	1/1	0.91	0.11	94,94,94,94	0
55	MG	VC	3056	1/1	0.91	0.28	89,89,89,89	0
55	MG	VC	3684	1/1	0.91	0.91	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3670	1/1	0.91	0.46	83,83,83,83	0
55	MG	VC	3299	1/1	0.91	0.39	88,88,88,88	0
55	MG	UC	1741	1/1	0.91	1.42	71,71,71,71	0
55	MG	YC	1780	1/1	0.91	0.17	142,142,142,142	0
55	MG	ZC	3496	1/1	0.91	0.66	93,93,93,93	0
55	MG	VC	3639	1/1	0.91	0.40	116,116,116,116	0
55	MG	ZC	3678	1/1	0.91	0.41	89,89,89,89	0
55	MG	VC	3406	1/1	0.91	0.32	115,115,115,115	0
55	MG	ZC	3499	1/1	0.91	0.23	76,76,76,76	0
55	MG	VC	3212	1/1	0.91	0.41	85,85,85,85	0
55	MG	VC	3511	1/1	0.91	0.75	182,182,182,182	0
55	MG	UC	1710	1/1	0.91	0.88	142,142,142,142	0
55	MG	VC	3039	1/1	0.91	0.21	135,135,135,135	0
55	MG	ZC	3278	1/1	0.91	0.31	160,160,160,160	0
55	MG	ZC	3085	1/1	0.91	0.90	112,112,112,112	0
55	MG	UC	1731	1/1	0.91	0.81	200,200,200,200	0
55	MG	QB	102	1/1	0.91	0.18	92,92,92,92	0
55	MG	ZC	3599	1/1	0.91	0.72	71,71,71,71	0
55	MG	VC	3192	1/1	0.91	0.17	114,114,114,114	0
55	MG	VC	3519	1/1	0.91	0.52	72,72,72,72	0
55	MG	ZC	3603	1/1	0.91	0.23	75,75,75,75	0
55	MG	ZC	3512	1/1	0.91	0.19	84,84,84,84	0
55	MG	ZC	3028	1/1	0.91	0.18	60,60,60,60	0
55	MG	ZC	3609	1/1	0.91	0.25	78,78,78,78	0
55	MG	ZC	3095	1/1	0.91	0.43	52,52,52,52	0
55	MG	L	201	1/1	0.91	0.59	81,81,81,81	0
55	MG	ZC	3516	1/1	0.91	0.41	85,85,85,85	0
55	MG	ZC	3032	1/1	0.91	0.38	91,91,91,91	0
55	MG	ZC	3441	1/1	0.91	0.25	94,94,94,94	0
55	MG	BD	101	1/1	0.91	0.35	244,244,244,244	0
55	MG	ZC	3227	1/1	0.91	0.30	80,80,80,80	0
55	MG	VC	3349	1/1	0.91	0.57	77,77,77,77	0
55	MG	YC	1655	1/1	0.91	0.57	106,106,106,106	0
55	MG	ZC	3710	1/1	0.91	0.38	119,119,119,119	0
55	MG	ZC	3446	1/1	0.91	0.14	121,121,121,121	0
55	MG	UA	202	1/1	0.91	0.47	132,132,132,132	0
55	MG	UC	1683	1/1	0.91	0.47	121,121,121,121	0
55	MG	ZC	3297	1/1	0.91	0.28	100,100,100,100	0
55	MG	FB	204	1/1	0.91	0.47	56,56,56,56	0
55	MG	ZC	3170	1/1	0.91	0.23	82,82,82,82	0
55	MG	UC	1817	1/1	0.91	0.37	156,156,156,156	0
55	MG	VC	3323	1/1	0.91	0.47	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	YC	1616	1/1	0.91	0.89	93,93,93,93	0
55	MG	VC	3200	1/1	0.91	0.77	70,70,70,70	0
55	MG	ZC	3305	1/1	0.91	0.37	71,71,71,71	0
55	MG	ZC	3631	1/1	0.91	0.25	80,80,80,80	0
55	MG	ZC	3535	1/1	0.91	0.25	90,90,90,90	0
55	MG	YC	1713	1/1	0.91	0.13	150,150,150,150	0
55	MG	VC	3665	1/1	0.91	0.94	78,78,78,78	0
55	MG	ZC	3242	1/1	0.91	0.46	90,90,90,90	0
55	MG	VC	3111	1/1	0.91	0.65	60,60,60,60	0
55	MG	ZC	3386	1/1	0.91	0.24	79,79,79,79	0
55	MG	VC	3494	1/1	0.91	0.21	89,89,89,89	0
55	MG	VC	3621	1/1	0.91	0.27	101,101,101,101	0
55	MG	VC	3461	1/1	0.91	0.19	93,93,93,93	0
55	MG	UC	1777	1/1	0.91	0.61	107,107,107,107	0
55	MG	ZC	3320	1/1	0.91	0.26	84,84,84,84	0
55	MG	ZC	3550	1/1	0.91	0.41	86,86,86,86	0
55	MG	VC	3429	1/1	0.91	0.29	117,117,117,117	0
55	MG	VC	3329	1/1	0.91	0.84	68,68,68,68	0
55	MG	UC	1789	1/1	0.91	0.95	88,88,88,88	0
55	MG	ZC	3754	1/1	0.91	1.34	54,54,54,54	0
55	MG	VC	3542	1/1	0.91	0.23	171,171,171,171	0
55	MG	ZC	3556	1/1	0.91	0.57	89,89,89,89	0
55	MG	XA	303	1/1	0.91	0.55	78,78,78,78	0
55	MG	VC	3174	1/1	0.91	0.54	77,77,77,77	0
55	MG	ZC	3230	1/1	0.92	1.27	57,57,57,57	0
55	MG	ZC	3086	1/1	0.92	0.80	124,124,124,124	0
55	MG	ZC	3088	1/1	0.92	0.19	71,71,71,71	0
55	MG	ZC	3306	1/1	0.92	0.51	73,73,73,73	0
55	MG	UC	1686	1/1	0.92	0.28	115,115,115,115	0
55	MG	VC	3137	1/1	0.92	0.18	127,127,127,127	0
55	MG	ZC	3764	1/1	0.92	0.44	105,105,105,105	0
55	MG	ZC	3662	1/1	0.92	0.17	103,103,103,103	0
55	MG	ZC	3022	1/1	0.92	1.28	82,82,82,82	0
55	MG	UC	1604	1/1	0.92	1.29	151,151,151,151	0
55	MG	VC	3234	1/1	0.92	0.30	63,63,63,63	0
55	MG	UC	1831	1/1	0.92	0.16	113,113,113,113	0
55	MG	ZC	3488	1/1	0.92	0.32	126,126,126,126	0
55	MG	VC	3574	1/1	0.92	0.41	126,126,126,126	0
55	MG	YC	1634	1/1	0.92	1.47	132,132,132,132	0
55	MG	VC	3622	1/1	0.92	0.22	102,102,102,102	0
55	MG	UC	1689	1/1	0.92	0.36	153,153,153,153	0
55	MG	UC	1771	1/1	0.92	0.74	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3324	1/1	0.92	0.96	58,58,58,58	0
55	MG	ZC	3581	1/1	0.92	0.19	75,75,75,75	0
55	MG	VC	3203	1/1	0.92	0.22	76,76,76,76	0
55	MG	VC	3405	1/1	0.92	0.21	94,94,94,94	0
55	MG	VC	3167	1/1	0.92	0.23	126,126,126,126	0
55	MG	ZC	3411	1/1	0.92	0.48	95,95,95,95	0
55	MG	ZC	3039	1/1	0.92	0.35	73,73,73,73	0
55	MG	SB	101	1/1	0.92	0.24	60,60,60,60	0
55	MG	AD	211	1/1	0.92	0.66	105,105,105,105	0
55	MG	UC	1666	1/1	0.92	0.40	149,149,149,149	0
55	MG	XC	102	1/1	0.92	0.39	217,217,217,217	0
55	MG	ZC	3114	1/1	0.92	0.13	113,113,113,113	0
55	MG	ZC	3256	1/1	0.92	0.20	78,78,78,78	0
55	MG	VC	3146	1/1	0.92	0.28	79,79,79,79	0
55	MG	UC	1713	1/1	0.92	0.20	109,109,109,109	0
55	MG	ZC	3185	1/1	0.92	0.17	70,70,70,70	0
55	MG	ZC	3508	1/1	0.92	0.32	190,190,190,190	0
55	MG	UC	1716	1/1	0.92	0.28	106,106,106,106	0
55	MG	ZC	3698	1/1	0.92	0.23	76,76,76,76	0
55	MG	VC	3097	1/1	0.92	0.43	79,79,79,79	0
55	MG	ZC	3119	1/1	0.92	0.12	182,182,182,182	0
55	MG	ZC	3120	1/1	0.92	0.62	78,78,78,78	0
55	MG	ZC	3345	1/1	0.92	0.23	71,71,71,71	0
55	MG	ZC	3192	1/1	0.92	0.27	92,92,92,92	0
55	MG	VC	3541	1/1	0.92	0.50	95,95,95,95	0
55	MG	VC	3282	1/1	0.92	0.52	81,81,81,81	0
55	MG	UC	1646	1/1	0.92	0.22	184,184,184,184	0
55	MG	UC	1841	1/1	0.92	0.29	129,129,129,129	0
55	MG	YC	1756	1/1	0.92	0.29	98,98,98,98	0
55	MG	N	201	1/1	0.92	0.09	132,132,132,132	0
55	MG	VC	3251	1/1	0.92	0.31	72,72,72,72	0
55	MG	VC	3697	1/1	0.92	0.68	137,137,137,137	0
55	MG	ZC	3358	1/1	0.92	0.24	91,91,91,91	0
55	MG	YC	1658	1/1	0.92	0.54	87,87,87,87	0
55	MG	VC	3463	1/1	0.92	0.35	94,94,94,94	0
55	MG	VC	3181	1/1	0.92	0.49	75,75,75,75	0
55	MG	YC	1860	1/1	0.92	0.20	104,104,104,104	0
55	MG	ZC	3720	1/1	0.92	0.20	90,90,90,90	0
55	MG	VC	3340	1/1	0.92	0.37	128,128,128,128	0
55	MG	UC	1844	1/1	0.92	0.21	117,117,117,117	0
55	MG	ZC	3138	1/1	0.92	0.21	73,73,73,73	0
55	MG	VC	3597	1/1	0.92	0.28	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3103	1/1	0.92	0.16	85,85,85,85	0
55	MG	YC	1814	1/1	0.92	0.24	224,224,224,224	0
55	MG	ZC	3634	1/1	0.92	0.32	95,95,95,95	0
55	MG	VC	3470	1/1	0.92	0.37	83,83,83,83	0
55	MG	VC	3257	1/1	0.92	0.14	101,101,101,101	0
55	MG	UC	1694	1/1	0.92	0.50	104,104,104,104	0
55	MG	VC	3079	1/1	0.92	0.69	78,78,78,78	0
55	MG	UC	1826	1/1	0.92	0.49	163,163,163,163	0
55	MG	ZC	3642	1/1	0.92	0.19	105,105,105,105	0
55	MG	VC	3562	1/1	0.92	0.50	110,110,110,110	0
55	MG	FD	107	1/1	0.92	0.39	123,123,123,123	0
55	MG	ZC	3379	1/1	0.92	0.15	96,96,96,96	0
55	MG	VC	3307	1/1	0.92	0.51	98,98,98,98	0
55	MG	ZC	3015	1/1	0.92	0.45	77,77,77,77	0
55	MG	ZC	3549	1/1	0.92	0.21	98,98,98,98	0
55	MG	ZC	3469	1/1	0.92	0.59	67,67,67,67	0
55	MG	VC	3035	1/1	0.92	0.81	76,76,76,76	0
55	MG	ZC	3751	1/1	0.92	0.31	78,78,78,78	0
55	MG	UC	1616	1/1	0.92	1.01	87,87,87,87	0
55	MG	ZC	3553	1/1	0.92	0.20	151,151,151,151	0
55	MG	UC	1685	1/1	0.92	0.18	103,103,103,103	0
55	MG	UC	1660	1/1	0.93	0.19	76,76,76,76	0
55	MG	VC	3107	1/1	0.93	0.20	118,118,118,118	0
55	MG	ZC	3216	1/1	0.93	0.27	77,77,77,77	0
55	MG	ZC	3404	1/1	0.93	0.11	118,118,118,118	0
55	MG	YC	1837	1/1	0.93	1.03	145,145,145,145	0
55	MG	VC	3679	1/1	0.93	0.35	73,73,73,73	0
55	MG	VC	3312	1/1	0.93	0.28	105,105,105,105	0
55	MG	VC	3681	1/1	0.93	0.79	89,89,89,89	0
55	MG	ZC	3409	1/1	0.93	0.41	66,66,66,66	0
55	MG	YC	1660	1/1	0.93	0.17	171,171,171,171	0
55	MG	UC	1670	1/1	0.93	0.40	115,115,115,115	0
55	MG	ZC	3312	1/1	0.93	0.36	64,64,64,64	0
55	MG	VC	3057	1/1	0.93	0.54	73,73,73,73	0
55	MG	VC	3316	1/1	0.93	0.26	73,73,73,73	0
55	MG	VC	3187	1/1	0.93	0.08	152,152,152,152	0
55	MG	VC	3318	1/1	0.93	0.15	130,130,130,130	0
55	MG	YC	1666	1/1	0.93	1.00	134,134,134,134	0
55	MG	VC	3217	1/1	0.93	0.81	99,99,99,99	0
55	MG	VC	3534	1/1	0.93	0.29	110,110,110,110	0
55	MG	UC	1774	1/1	0.93	0.43	149,149,149,149	0
55	MG	VC	3359	1/1	0.93	0.21	102,102,102,102	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3424	1/1	0.93	0.29	69,69,69,69	0
55	MG	ZC	3425	1/1	0.93	0.46	71,71,71,71	0
55	MG	ZC	3149	1/1	0.93	0.51	70,70,70,70	0
55	MG	ZC	3234	1/1	0.93	0.25	89,89,89,89	0
55	MG	ZC	3767	1/1	0.93	0.18	85,85,85,85	0
55	MG	QA	101	1/1	0.93	0.44	104,104,104,104	0
55	MG	ZC	3066	1/1	0.93	0.21	48,48,48,48	0
55	MG	VC	3250	1/1	0.93	0.27	77,77,77,77	0
55	MG	UC	1726	1/1	0.93	0.16	111,111,111,111	0
55	MG	UC	1751	1/1	0.93	0.20	129,129,129,129	0
55	MG	VC	3009	1/1	0.93	0.54	70,70,70,70	0
55	MG	UC	1620	1/1	0.93	0.25	158,158,158,158	0
55	MG	VC	3012	1/1	0.93	0.62	107,107,107,107	0
55	MG	UC	1648	1/1	0.93	0.40	97,97,97,97	0
55	MG	VC	3457	1/1	0.93	0.24	101,101,101,101	0
55	MG	O	201	1/1	0.93	0.27	67,67,67,67	0
55	MG	VC	3647	1/1	0.93	0.41	87,87,87,87	0
55	MG	ZC	3080	1/1	0.93	0.24	148,148,148,148	0
55	MG	ZC	3663	1/1	0.93	0.69	81,81,81,81	0
55	MG	YC	1866	1/1	0.93	0.40	112,112,112,112	0
55	MG	UA	201	1/1	0.93	0.33	124,124,124,124	0
55	MG	YC	1626	1/1	0.93	0.62	103,103,103,103	0
55	MG	ZC	3667	1/1	0.93	1.21	81,81,81,81	0
55	MG	YC	1684	1/1	0.93	0.24	127,127,127,127	0
55	MG	UC	1860	1/1	0.93	0.41	97,97,97,97	0
55	MG	UC	1769	1/1	0.93	0.39	119,119,119,119	0
55	MG	VC	3598	1/1	0.93	0.23	84,84,84,84	0
55	MG	ZC	3455	1/1	0.93	0.20	80,80,80,80	0
55	MG	ZC	3003	1/1	0.93	0.58	74,74,74,74	0
55	MG	AD	218	1/1	0.93	0.85	96,96,96,96	0
55	MG	ZC	3006	1/1	0.93	0.22	76,76,76,76	0
55	MG	ZC	3558	1/1	0.93	0.18	168,168,168,168	0
55	MG	ZC	3561	1/1	0.93	0.26	103,103,103,103	0
55	MG	ZC	3175	1/1	0.93	0.66	74,74,74,74	0
55	MG	ZC	3357	1/1	0.93	0.32	86,86,86,86	0
55	MG	ZC	3007	1/1	0.93	0.26	72,72,72,72	0
55	MG	ZC	3683	1/1	0.93	0.29	87,87,87,87	0
55	MG	VC	3655	1/1	0.93	0.32	84,84,84,84	0
55	MG	VC	3021	1/1	0.93	0.65	88,88,88,88	0
55	MG	ZC	3463	1/1	0.93	0.22	103,103,103,103	0
55	MG	AD	230	1/1	0.93	0.59	104,104,104,104	0
55	MG	ZC	3266	1/1	0.93	0.27	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3179	1/1	0.93	0.38	69,69,69,69	0
55	MG	ZC	3010	1/1	0.93	0.30	59,59,59,59	0
55	MG	VC	3295	1/1	0.93	0.63	104,104,104,104	0
55	MG	VC	3296	1/1	0.93	0.30	84,84,84,84	0
55	MG	YC	1755	1/1	0.93	1.28	113,113,113,113	0
55	MG	ZC	3370	1/1	0.93	0.89	64,64,64,64	0
55	MG	ZC	3473	1/1	0.93	0.45	87,87,87,87	0
55	MG	ZC	3474	1/1	0.93	0.15	112,112,112,112	0
55	MG	VC	3297	1/1	0.93	0.47	117,117,117,117	0
55	MG	VC	3558	1/1	0.93	0.16	104,104,104,104	0
55	MG	YC	1695	1/1	0.93	0.42	94,94,94,94	0
55	MG	VC	3507	1/1	0.93	0.27	99,99,99,99	0
55	MG	UC	1862	1/1	0.93	0.31	143,143,143,143	0
55	MG	VC	3424	1/1	0.93	0.20	95,95,95,95	0
55	MG	UC	1721	1/1	0.93	0.42	155,155,155,155	0
55	MG	ZC	3280	1/1	0.93	0.19	60,60,60,60	0
55	MG	VC	3427	1/1	0.93	0.30	75,75,75,75	0
55	MG	VC	3668	1/1	0.93	0.40	109,109,109,109	0
55	MG	VC	3301	1/1	0.93	0.17	134,134,134,134	0
55	MG	VC	3611	1/1	0.93	0.38	111,111,111,111	0
55	MG	VC	3565	1/1	0.93	0.24	76,76,76,76	0
55	MG	ZC	3200	1/1	0.93	0.42	92,92,92,92	0
55	MG	ZC	3034	1/1	0.93	0.28	75,75,75,75	0
55	MG	YC	1708	1/1	0.93	0.18	110,110,110,110	0
55	MG	ZC	3387	1/1	0.93	0.23	89,89,89,89	0
55	MG	VC	3385	1/1	0.93	0.16	113,113,113,113	0
55	MG	VC	3024	1/1	0.93	0.44	91,91,91,91	0
55	MG	ZC	3719	1/1	0.93	0.52	96,96,96,96	0
55	MG	ZC	3611	1/1	0.93	0.23	88,88,88,88	0
55	MG	WC	227	1/1	0.93	0.51	89,89,89,89	0
55	MG	ZC	3123	1/1	0.93	1.42	93,93,93,93	0
55	MG	ZC	3124	1/1	0.93	0.86	77,77,77,77	0
55	MG	VC	3475	1/1	0.93	0.30	117,117,117,117	0
55	MG	Q	201	1/1	0.93	0.21	88,88,88,88	0
55	MG	VC	3002	1/1	0.93	0.21	132,132,132,132	0
55	MG	ZC	3618	1/1	0.93	0.28	65,65,65,65	0
55	MG	ZC	3212	1/1	0.93	0.15	77,77,77,77	0
55	MG	UC	1840	1/1	0.94	0.82	134,134,134,134	0
55	MG	VC	3042	1/1	0.94	0.72	74,74,74,74	0
55	MG	ZC	3084	1/1	0.94	0.30	81,81,81,81	0
55	MG	UC	1738	1/1	0.94	0.37	118,118,118,118	0
55	MG	VC	3445	1/1	0.94	0.45	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3675	1/1	0.94	0.34	96,96,96,96	0
55	MG	ZC	3031	1/1	0.94	0.60	47,47,47,47	0
55	MG	VC	3028	1/1	0.94	0.56	76,76,76,76	0
55	MG	WC	209	1/1	0.94	0.58	182,182,182,182	0
55	MG	ZC	3153	1/1	0.94	0.35	74,74,74,74	0
55	MG	VC	3227	1/1	0.94	0.23	80,80,80,80	0
55	MG	VC	3629	1/1	0.94	0.18	95,95,95,95	0
55	MG	ZC	3682	1/1	0.94	0.20	76,76,76,76	0
55	MG	ZC	3509	1/1	0.94	0.48	77,77,77,77	0
55	MG	ZC	3432	1/1	0.94	0.22	68,68,68,68	0
55	MG	ZC	3156	1/1	0.94	0.20	63,63,63,63	0
55	MG	VC	3081	1/1	0.94	0.76	93,93,93,93	0
55	MG	ZC	3158	1/1	0.94	0.38	68,68,68,68	0
55	MG	VC	3046	1/1	0.94	0.59	101,101,101,101	0
55	MG	UC	1775	1/1	0.94	0.17	88,88,88,88	0
55	MG	VC	3178	1/1	0.94	0.26	91,91,91,91	0
55	MG	VC	3123	1/1	0.94	0.53	76,76,76,76	0
55	MG	UC	1739	1/1	0.94	0.25	111,111,111,111	0
55	MG	VC	3143	1/1	0.94	0.18	98,98,98,98	0
55	MG	UC	1845	1/1	0.94	0.12	124,124,124,124	0
55	MG	VC	3522	1/1	0.94	0.45	94,94,94,94	0
55	MG	ZC	3295	1/1	0.94	0.41	124,124,124,124	0
55	MG	ZC	3106	1/1	0.94	0.18	77,77,77,77	0
55	MG	ZC	3046	1/1	0.94	0.64	97,97,97,97	0
55	MG	VC	3640	1/1	0.94	0.16	141,141,141,141	0
55	MG	VC	3523	1/1	0.94	0.38	99,99,99,99	0
55	MG	VC	3018	1/1	0.94	0.40	116,116,116,116	0
55	MG	ZC	3301	1/1	0.94	0.17	89,89,89,89	0
55	MG	VC	3525	1/1	0.94	0.30	79,79,79,79	0
55	MG	VC	3188	1/1	0.94	0.20	152,152,152,152	0
55	MG	YC	1865	1/1	0.94	0.28	115,115,115,115	0
55	MG	UC	1663	1/1	0.94	0.21	140,140,140,140	0
55	MG	ZC	3709	1/1	0.94	0.48	69,69,69,69	0
55	MG	UC	1688	1/1	0.94	0.12	202,202,202,202	0
55	MG	UC	1859	1/1	0.94	0.27	156,156,156,156	0
55	MG	ZC	3057	1/1	0.94	0.19	115,115,115,115	0
55	MG	ZC	3309	1/1	0.94	0.39	74,74,74,74	0
55	MG	ZC	3464	1/1	0.94	0.11	102,102,102,102	0
55	MG	YC	1776	1/1	0.94	0.94	110,110,110,110	0
55	MG	ZC	3243	1/1	0.94	0.95	68,68,68,68	0
55	MG	VC	3648	1/1	0.94	0.24	116,116,116,116	0
55	MG	ZC	3313	1/1	0.94	0.11	128,128,128,128	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3649	1/1	0.94	0.14	96,96,96,96	0
55	MG	ZC	3062	1/1	0.94	0.34	67,67,67,67	0
55	MG	FB	201	1/1	0.94	0.45	64,64,64,64	0
55	MG	ZC	3318	1/1	0.94	0.11	126,126,126,126	0
55	MG	YC	1644	1/1	0.94	0.12	103,103,103,103	0
55	MG	VC	3694	1/1	0.94	0.18	105,105,105,105	0
55	MG	VC	3397	1/1	0.94	0.37	107,107,107,107	0
55	MG	ED	107	1/1	0.94	0.17	128,128,128,128	0
55	MG	VC	3195	1/1	0.94	0.47	94,94,94,94	0
55	MG	VC	3304	1/1	0.94	0.60	91,91,91,91	0
55	MG	VC	3467	1/1	0.94	0.38	100,100,100,100	0
55	MG	ZC	3557	1/1	0.94	1.07	98,98,98,98	0
55	MG	ZC	3191	1/1	0.94	0.75	53,53,53,53	0
55	MG	VC	3499	1/1	0.94	0.22	111,111,111,111	0
55	MG	ZC	3562	1/1	0.94	0.15	116,116,116,116	0
55	MG	ZC	3258	1/1	0.94	0.33	76,76,76,76	0
55	MG	ZC	3653	1/1	0.94	0.13	84,84,84,84	0
55	MG	VC	3306	1/1	0.94	0.50	67,67,67,67	0
55	MG	ZC	3744	1/1	0.94	0.28	99,99,99,99	0
55	MG	ZC	3073	1/1	0.94	1.04	52,52,52,52	0
55	MG	VC	3245	1/1	0.94	0.20	94,94,94,94	0
55	MG	ZC	3135	1/1	0.94	0.42	77,77,77,77	0
55	MG	UC	1761	1/1	0.94	0.18	113,113,113,113	0
55	MG	ZC	3336	1/1	0.94	0.19	73,73,73,73	0
55	MG	ZC	3752	1/1	0.94	0.19	167,167,167,167	0
55	MG	YC	1654	1/1	0.94	0.24	157,157,157,157	0
55	MG	VC	3339	1/1	0.94	0.17	102,102,102,102	0
55	MG	ZC	3339	1/1	0.94	0.31	90,90,90,90	0
55	MG	UC	1812	1/1	0.94	0.39	114,114,114,114	0
55	MG	YC	1702	1/1	0.94	0.31	164,164,164,164	0
55	MG	VC	3222	1/1	0.94	0.25	94,94,94,94	0
55	MG	ZC	3419	1/1	0.94	0.46	71,71,71,71	0
55	MG	ZC	3579	1/1	0.94	0.20	61,61,61,61	0
55	MG	YC	1621	1/1	0.95	0.30	178,178,178,178	0
55	MG	VC	3180	1/1	0.95	0.16	126,126,126,126	0
55	MG	YC	1714	1/1	0.95	0.14	221,221,221,221	0
55	MG	VC	3324	1/1	0.95	0.26	98,98,98,98	0
55	MG	VC	3513	1/1	0.95	0.23	98,98,98,98	0
55	MG	ZC	3695	1/1	0.95	0.23	70,70,70,70	0
55	MG	VC	3052	1/1	0.95	0.46	83,83,83,83	0
55	MG	VC	3552	1/1	0.95	0.53	139,139,139,139	0
55	MG	VC	3452	1/1	0.95	0.36	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3269	1/1	0.95	0.48	81,81,81,81	0
55	MG	A	301	1/1	0.95	0.35	70,70,70,70	0
55	MG	UC	1714	1/1	0.95	0.27	154,154,154,154	0
55	MG	WC	219	1/1	0.95	0.53	131,131,131,131	0
55	MG	VC	3456	1/1	0.95	0.26	76,76,76,76	0
55	MG	ZC	3559	1/1	0.95	0.23	111,111,111,111	0
55	MG	XA	302	1/1	0.95	0.17	79,79,79,79	0
55	MG	VC	3205	1/1	0.95	0.16	87,87,87,87	0
55	MG	VC	3302	1/1	0.95	0.19	82,82,82,82	0
55	MG	VC	3186	1/1	0.95	0.81	69,69,69,69	0
55	MG	VC	3363	1/1	0.95	0.56	100,100,100,100	0
55	MG	ZC	3639	1/1	0.95	0.25	86,86,86,86	0
55	MG	UC	1834	1/1	0.95	0.47	222,222,222,222	0
55	MG	ZC	3438	1/1	0.95	0.25	85,85,85,85	0
55	MG	YC	1731	1/1	0.95	0.07	170,170,170,170	0
55	MG	VC	3230	1/1	0.95	0.10	134,134,134,134	0
55	MG	ZC	3190	1/1	0.95	1.44	62,62,62,62	0
55	MG	VC	3688	1/1	0.95	0.31	97,97,97,97	0
55	MG	ZC	3253	1/1	0.95	0.90	52,52,52,52	0
55	MG	YC	1734	1/1	0.95	0.40	170,170,170,170	0
55	MG	VC	3528	1/1	0.95	0.19	121,121,121,121	0
55	MG	ZC	3024	1/1	0.95	0.36	59,59,59,59	0
55	MG	VC	3567	1/1	0.95	0.27	152,152,152,152	0
55	MG	ZC	3139	1/1	0.95	0.37	69,69,69,69	0
55	MG	ZC	3727	1/1	0.95	0.84	81,81,81,81	0
55	MG	VC	3529	1/1	0.95	0.17	79,79,79,79	0
55	MG	VC	3169	1/1	0.95	0.58	83,83,83,83	0
55	MG	VC	3254	1/1	0.95	0.35	63,63,63,63	0
55	MG	ZC	3323	1/1	0.95	0.36	64,64,64,64	0
55	MG	ZC	3658	1/1	0.95	0.46	87,87,87,87	0
55	MG	VC	3695	1/1	0.95	0.18	83,83,83,83	0
55	MG	ZC	3734	1/1	0.95	1.14	135,135,135,135	0
55	MG	YC	1692	1/1	0.95	0.72	178,178,178,178	0
55	MG	ZC	3087	1/1	0.95	0.55	83,83,83,83	0
55	MG	ED	102	1/1	0.95	0.21	50,50,50,50	0
55	MG	ZC	3588	1/1	0.95	0.12	89,89,89,89	0
55	MG	ZC	3589	1/1	0.95	0.55	66,66,66,66	0
55	MG	ZC	3591	1/1	0.95	0.17	71,71,71,71	0
55	MG	UC	1700	1/1	0.95	0.31	114,114,114,114	0
55	MG	H	202	1/1	0.95	0.20	89,89,89,89	0
55	MG	ZC	3743	1/1	0.95	0.25	92,92,92,92	0
55	MG	VC	3404	1/1	0.95	0.17	161,161,161,161	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3613	1/1	0.95	0.63	158,158,158,158	0
55	MG	ZC	3747	1/1	0.95	0.25	101,101,101,101	0
55	MG	ZC	3597	1/1	0.95	0.33	77,77,77,77	0
55	MG	VC	3469	1/1	0.95	0.43	84,84,84,84	0
55	MG	VC	3191	1/1	0.95	0.33	107,107,107,107	0
55	MG	UC	1822	1/1	0.95	0.29	96,96,96,96	0
55	MG	VC	3086	1/1	0.95	0.09	116,116,116,116	0
55	MG	YC	1701	1/1	0.95	0.36	137,137,137,137	0
55	MG	VC	3214	1/1	0.95	0.17	76,76,76,76	0
55	MG	ZC	3756	1/1	0.95	0.44	88,88,88,88	0
55	MG	ZC	3099	1/1	0.95	0.36	72,72,72,72	0
55	MG	VC	3049	1/1	0.95	0.34	90,90,90,90	0
55	MG	VC	3664	1/1	0.95	0.13	180,180,180,180	0
55	MG	YC	1705	1/1	0.95	0.61	99,99,99,99	0
55	MG	VC	3101	1/1	0.95	0.61	86,86,86,86	0
55	MG	UC	1650	1/1	0.95	0.35	111,111,111,111	0
55	MG	VC	3020	1/1	0.95	0.45	77,77,77,77	0
55	MG	ZC	3540	1/1	0.95	0.49	93,93,93,93	0
55	MG	VC	3545	1/1	0.95	0.41	88,88,88,88	0
55	MG	VC	3104	1/1	0.95	0.13	142,142,142,142	0
55	MG	ZC	3687	1/1	0.95	0.18	87,87,87,87	0
55	MG	ZC	3111	1/1	0.95	0.22	72,72,72,72	0
55	MG	VC	3293	1/1	0.95	0.17	79,79,79,79	0
56	ZN	OA	101	1/1	0.95	0.22	157,157,157,157	0
55	MG	UC	1636	1/1	0.96	0.50	111,111,111,111	0
55	MG	ZC	3480	1/1	0.96	0.24	64,64,64,64	0
55	MG	VC	3443	1/1	0.96	0.33	116,116,116,116	0
55	MG	ZC	3030	1/1	0.96	0.25	78,78,78,78	0
55	MG	VC	3554	1/1	0.96	0.15	151,151,151,151	0
55	MG	UC	1677	1/1	0.96	0.62	113,113,113,113	0
55	MG	VC	3617	1/1	0.96	0.23	115,115,115,115	0
55	MG	VC	3618	1/1	0.96	0.18	136,136,136,136	0
55	MG	VC	3115	1/1	0.96	0.97	91,91,91,91	0
55	MG	VC	3290	1/1	0.96	0.23	107,107,107,107	0
55	MG	UC	1752	1/1	0.96	0.17	116,116,116,116	0
55	MG	VC	3252	1/1	0.96	0.25	88,88,88,88	0
55	MG	UC	1656	1/1	0.96	0.40	90,90,90,90	0
55	MG	YC	1628	1/1	0.96	0.49	97,97,97,97	0
55	MG	UC	1813	1/1	0.96	0.15	186,186,186,186	0
55	MG	ZC	3195	1/1	0.96	0.17	89,89,89,89	0
55	MG	ZC	3092	1/1	0.96	0.66	64,64,64,64	0
55	MG	ZC	3250	1/1	0.96	0.19	105,105,105,105	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3367	1/1	0.96	0.29	85,85,85,85	0
55	MG	VC	3077	1/1	0.96	0.20	75,75,75,75	0
55	MG	ZC	3369	1/1	0.96	0.56	100,100,100,100	0
55	MG	VC	3064	1/1	0.96	0.28	79,79,79,79	0
55	MG	WC	228	1/1	0.96	0.12	178,178,178,178	0
55	MG	ZC	3721	1/1	0.96	0.57	114,114,114,114	0
55	MG	WC	229	1/1	0.96	0.15	115,115,115,115	0
55	MG	ZC	3650	1/1	0.96	0.07	96,96,96,96	0
55	MG	ZC	3437	1/1	0.96	0.22	99,99,99,99	0
55	MG	VC	3593	1/1	0.96	0.19	109,109,109,109	0
55	MG	VC	3698	1/1	0.96	0.21	81,81,81,81	0
55	MG	VC	3426	1/1	0.96	0.37	104,104,104,104	0
55	MG	VC	3399	1/1	0.96	0.27	109,109,109,109	0
55	MG	ZC	3315	1/1	0.96	0.22	80,80,80,80	0
55	MG	ZC	3259	1/1	0.96	0.18	98,98,98,98	0
55	MG	ZC	3444	1/1	0.96	0.59	102,102,102,102	0
55	MG	VC	3121	1/1	0.96	1.00	106,106,106,106	0
55	MG	VC	3298	1/1	0.96	0.74	60,60,60,60	0
55	MG	ZC	3005	1/1	0.96	0.38	110,110,110,110	0
55	MG	ZC	3105	1/1	0.96	0.71	55,55,55,55	0
55	MG	VC	3430	1/1	0.96	0.16	96,96,96,96	0
55	MG	VC	3706	1/1	0.96	0.24	112,112,112,112	0
55	MG	UC	1805	1/1	0.96	0.29	122,122,122,122	0
55	MG	VC	3600	1/1	0.96	0.43	98,98,98,98	0
55	MG	ZC	3059	1/1	0.96	0.92	79,79,79,79	0
55	MG	VC	3030	1/1	0.96	0.50	90,90,90,90	0
55	MG	ZC	3013	1/1	0.96	0.51	70,70,70,70	0
55	MG	ZC	3014	1/1	0.96	0.26	90,90,90,90	0
55	MG	UC	1740	1/1	0.96	0.21	105,105,105,105	0
55	MG	YC	1839	1/1	0.96	0.26	173,173,173,173	0
55	MG	ZC	3526	1/1	0.96	0.40	53,53,53,53	0
55	MG	ZC	3332	1/1	0.96	0.13	95,95,95,95	0
55	MG	ZC	3221	1/1	0.96	0.36	78,78,78,78	0
55	MG	ZC	3529	1/1	0.96	0.19	124,124,124,124	0
55	MG	ZC	3606	1/1	0.96	0.53	63,63,63,63	0
55	MG	ZC	3607	1/1	0.96	0.23	94,94,94,94	0
55	MG	ZC	3396	1/1	0.96	0.07	114,114,114,114	0
55	MG	ZC	3017	1/1	0.96	0.70	68,68,68,68	0
55	MG	VC	3140	1/1	0.96	0.19	98,98,98,98	0
55	MG	FD	104	1/1	0.96	0.17	167,167,167,167	0
55	MG	VC	3544	1/1	0.96	0.56	81,81,81,81	0
55	MG	ZC	3068	1/1	0.96	0.44	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3303	1/1	0.96	0.38	120,120,120,120	0
55	MG	VC	3328	1/1	0.96	0.29	81,81,81,81	0
55	MG	VC	3281	1/1	0.96	0.17	126,126,126,126	0
55	MG	ZC	3471	1/1	0.96	0.15	92,92,92,92	0
55	MG	YC	1804	1/1	0.96	0.14	177,177,177,177	0
55	MG	WB	102	1/1	0.96	0.17	59,59,59,59	0
55	MG	ZC	3286	1/1	0.96	0.63	87,87,87,87	0
55	MG	UC	1864	1/1	0.96	0.33	138,138,138,138	0
55	MG	VC	3193	1/1	0.96	0.91	80,80,80,80	0
55	MG	UC	1642	1/1	0.96	0.27	123,123,123,123	0
55	MG	ZC	3546	1/1	0.96	0.14	95,95,95,95	0
55	MG	ZC	3412	1/1	0.96	0.57	83,83,83,83	0
56	ZN	AC	301	1/1	0.96	0.38	151,151,151,151	0
56	ZN	KC	101	1/1	0.96	0.15	189,189,189,189	0
55	MG	VC	3660	1/1	0.97	0.32	95,95,95,95	0
55	MG	UC	1843	1/1	0.97	0.14	156,156,156,156	0
55	MG	VC	3286	1/1	0.97	0.19	105,105,105,105	0
55	MG	ZC	3590	1/1	0.97	0.28	63,63,63,63	0
55	MG	WC	225	1/1	0.97	0.30	180,180,180,180	0
55	MG	ZC	3641	1/1	0.97	0.17	69,69,69,69	0
55	MG	VC	3417	1/1	0.97	0.18	101,101,101,101	0
55	MG	VC	3219	1/1	0.97	0.27	128,128,128,128	0
55	MG	ZC	3011	1/1	0.97	0.50	94,94,94,94	0
55	MG	ZC	3595	1/1	0.97	0.15	75,75,75,75	0
55	MG	ZC	3012	1/1	0.97	0.35	53,53,53,53	0
55	MG	UC	1748	1/1	0.97	0.18	162,162,162,162	0
55	MG	ZC	3077	1/1	0.97	0.53	68,68,68,68	0
55	MG	ZC	3211	1/1	0.97	0.59	75,75,75,75	0
55	MG	VC	3088	1/1	0.97	0.37	79,79,79,79	0
55	MG	ZC	3601	1/1	0.97	0.13	104,104,104,104	0
55	MG	VC	3337	1/1	0.97	0.38	77,77,77,77	0
55	MG	ZC	3351	1/1	0.97	0.35	90,90,90,90	0
55	MG	YC	1856	1/1	0.97	0.25	170,170,170,170	0
55	MG	VC	3384	1/1	0.97	0.14	79,79,79,79	0
55	MG	VC	3690	1/1	0.97	0.21	77,77,77,77	0
55	MG	ZC	3285	1/1	0.97	0.18	80,80,80,80	0
55	MG	ZC	3356	1/1	0.97	0.54	50,50,50,50	0
55	MG	ZC	3560	1/1	0.97	0.25	71,71,71,71	0
55	MG	VC	3313	1/1	0.97	0.18	97,97,97,97	0
55	MG	VC	3367	1/1	0.97	0.09	125,125,125,125	0
55	MG	VC	3650	1/1	0.97	0.24	112,112,112,112	0
55	MG	VC	3010	1/1	0.97	0.51	121,121,121,121	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	ZC	3481	1/1	0.97	0.56	67,67,67,67	0
55	MG	ZC	3361	1/1	0.97	0.44	78,78,78,78	0
55	MG	ZC	3716	1/1	0.97	0.26	90,90,90,90	0
55	MG	VC	3354	1/1	0.97	0.55	105,105,105,105	0
55	MG	VC	3370	1/1	0.97	0.17	75,75,75,75	0
55	MG	VC	3518	1/1	0.97	0.40	69,69,69,69	0
55	MG	ZC	3327	1/1	0.97	1.07	50,50,50,50	0
55	MG	YC	1656	1/1	0.97	0.33	206,206,206,206	0
55	MG	ZC	3722	1/1	0.97	0.54	82,82,82,82	0
55	MG	ZC	3671	1/1	0.97	0.15	155,155,155,155	0
55	MG	VC	3182	1/1	0.97	0.59	73,73,73,73	0
55	MG	ZC	3574	1/1	0.97	0.68	61,61,61,61	0
55	MG	ZC	3726	1/1	0.97	0.52	115,115,115,115	0
55	MG	UC	1668	1/1	0.97	0.28	94,94,94,94	0
55	MG	VC	3033	1/1	0.97	0.31	78,78,78,78	0
55	MG	ZC	3450	1/1	0.97	0.79	87,87,87,87	0
55	MG	UC	1715	1/1	0.97	0.49	120,120,120,120	0
55	MG	VC	3264	1/1	0.97	0.21	76,76,76,76	0
55	MG	ZC	3453	1/1	0.97	0.14	91,91,91,91	0
55	MG	VC	3703	1/1	0.97	0.20	87,87,87,87	0
55	MG	VC	3704	1/1	0.97	0.35	100,100,100,100	0
55	MG	ZC	3004	1/1	0.97	0.61	95,95,95,95	0
56	ZN	EA	301	1/1	0.97	0.36	97,97,97,97	0
55	MG	ZC	3539	1/1	0.97	0.23	64,64,64,64	0
55	MG	ZC	3585	1/1	0.97	0.10	116,116,116,116	0
55	MG	ZC	3035	1/1	0.97	0.20	85,85,85,85	0
55	MG	VC	3348	1/1	0.98	0.09	107,107,107,107	0
55	MG	VC	3377	1/1	0.98	0.19	76,76,76,76	0
55	MG	ZC	3745	1/1	0.98	0.13	74,74,74,74	0
55	MG	ZC	3048	1/1	0.98	0.22	69,69,69,69	0
55	MG	VC	3378	1/1	0.98	0.18	125,125,125,125	0
55	MG	ZC	3429	1/1	0.98	0.21	80,80,80,80	0
55	MG	YC	1825	1/1	0.98	0.38	116,116,116,116	0
55	MG	ZC	3145	1/1	0.98	0.20	73,73,73,73	0
55	MG	VC	3408	1/1	0.98	0.35	85,85,85,85	0
55	MG	UC	1799	1/1	0.98	0.30	101,101,101,101	0
55	MG	ZC	3753	1/1	0.98	0.49	88,88,88,88	0
55	MG	ZC	3148	1/1	0.98	0.44	56,56,56,56	0
55	MG	ZC	3391	1/1	0.98	0.24	105,105,105,105	0
55	MG	ZC	3277	1/1	0.98	0.28	86,86,86,86	0
55	MG	UC	1796	1/1	0.98	0.30	109,109,109,109	0
55	MG	VC	3014	1/1	0.98	0.35	96,96,96,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	VC	3391	1/1	0.98	0.48	88,88,88,88	0
55	MG	YC	1870	1/1	0.98	0.13	164,164,164,164	0
55	MG	ZC	3573	1/1	0.98	0.55	85,85,85,85	0
55	MG	VC	3083	1/1	0.98	0.27	65,65,65,65	0
55	MG	VC	3636	1/1	0.98	0.23	97,97,97,97	0
55	MG	VC	3229	1/1	0.98	0.33	55,55,55,55	0
55	MG	VC	3305	1/1	0.98	0.19	88,88,88,88	0
55	MG	ZC	3740	1/1	0.98	0.24	63,63,63,63	0
55	MG	ZC	3402	1/1	0.98	0.40	113,113,113,113	0
55	MG	ZC	3107	1/1	0.98	0.31	65,65,65,65	0
55	MG	AD	221	1/1	0.98	0.11	140,140,140,140	0
55	MG	ZC	3397	1/1	0.99	0.26	73,73,73,73	0
55	MG	VC	3615	1/1	0.99	0.35	88,88,88,88	0
55	MG	ZC	3193	1/1	0.99	0.36	95,95,95,95	0
55	MG	ZC	3102	1/1	0.99	0.29	75,75,75,75	0
55	MG	UC	1848	1/1	0.99	0.13	111,111,111,111	0
55	MG	VC	3045	1/1	0.99	0.10	94,94,94,94	0
55	MG	VC	3179	1/1	0.99	0.27	106,106,106,106	0
55	MG	ZC	3604	1/1	0.99	0.14	82,82,82,82	0
55	MG	ZC	3214	1/1	0.99	0.26	77,77,77,77	0
55	MG	VC	3068	1/1	0.99	0.50	128,128,128,128	0
55	MG	VC	3409	1/1	0.99	0.58	103,103,103,103	0

6.5 Other polymers (i)

There are no such residues in this entry.