Full wwPDB X-ray Structure Validation Report (i)

Aug 21, 2025 – 06:24 PM EDT

PDB ID	:	9D0G / pdb_00009d0g
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with O-cresomycin, mRNA, deacylated A-site tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.50A resolution
Authors	:	Aleksandrova, E.V.; Wu, K.J.Y.; Robinson, P.J.; Benedetto, A.E.; Yu, M.; Tresco, B.I.C.; See, D.N.Y.; Jiang, T.; Ramkissoon, A.; Dunand, C.F.; Svetlov, M.S.; Lee, J.; Myers, A.G.; Polikanov, Y.S.
Deposited on	:	2024-08-07
Resolution	:	2.50 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 (i)) were used in the production of this report:

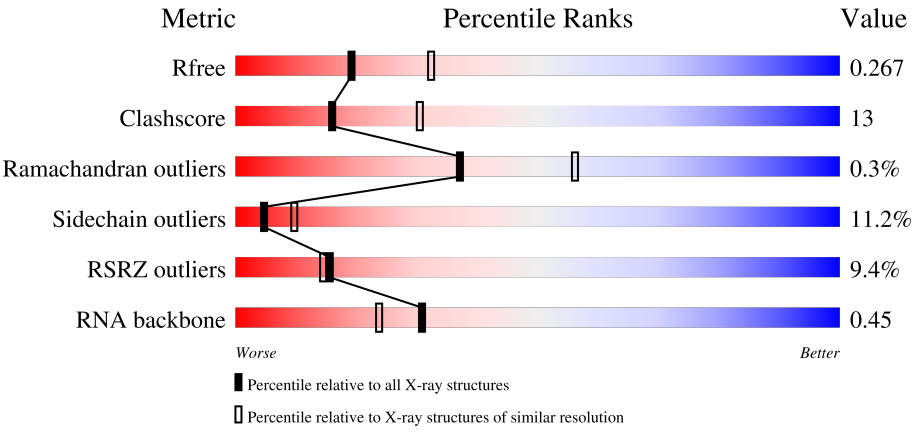
MolProbity	:	4-5-2 with Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

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 2.50 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}	164625	5504 (2.50-2.50)
Clashscore	180529	6282 (2.50-2.50)
Ramachandran outliers	177936	6191 (2.50-2.50)
Sidechain outliers	177891	6193 (2.50-2.50)
RSRZ outliers	164620	5504 (2.50-2.50)
RNA backbone	3690	1181 (2.80-2.20)

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	1A	2915	4% 59% 31% 8% .
1	2A	2915	4% 49% 37% 10% .

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.45.1

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Mol	Chain	Length	Quality of chain
2	1B	121	56% 36% 7%
2	2B	121	2% 34% 52% 13%
3	1D	276	% 74% 24%
3	2D	276	2% 72% 26%
4	1E	206	68% 27%
4	2E	206	4% 67% 29%
5	1F	210	% 70% 22% 5%
5	2F	210	4% 61% 32%
6	1G	182	6% 59% 32% 7%
6	2G	182	21% 40% 43% 16%
7	1H	180	2% 63% 29%
7	2H	180	29% 56% 38%
8	1I	148	5% 53% 34% 11%
8	2I	148	9% 65% 26% 7%
9	1N	140	% 79% 18%
9	2N	140	6% 63% 35%
10	1O	122	73% 25%
10	2O	122	65% 33%
11	1P	150	% 68% 27%
11	2P	150	3% 58% 37%
12	1Q	141	% 78% 22%
12	2Q	141	28% 61% 36%
13	1R	118	65% 32%
13	2R	118	76% 20%
14	1S	112	71% 24%

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Mol	Chain	Length	Quality of chain
14	2S	112	28% 45% 50%
15	1T	146	2% 67% 21% 10%
15	2T	146	3% 60% 27% 10%
16	1U	118	75% 21%
16	2U	118	7% 68% 27%
17	1V	101	% 76% 21%
17	2V	101	7% 72% 24%
18	1W	113	% 81% 18%
18	2W	113	2% 77% 17% 5%
19	1X	96	2% 73% 23%
19	2X	96	6% 67% 29%
20	1Y	110	5% 65% 30%
20	2Y	110	21% 65% 25% 6%
21	1Z	206	9% 47% 23% 25%
21	2Z	206	35% 40% 33% 22%
22	10	85	2% 75% 13% 9%
22	20	85	21% 46% 44% 7%
23	11	98	2% 78% 18%
23	21	98	2% 65% 31%
24	12	72	3% 67% 26%
24	22	72	8% 67% 26%
25	13	60	2% 73% 22%
25	23	60	3% 53% 43%
26	14	71	10% 44% 42% 10%
26	24	71	34% 34% 52% 10%

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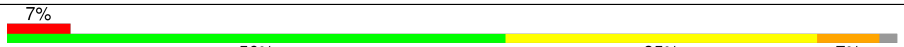
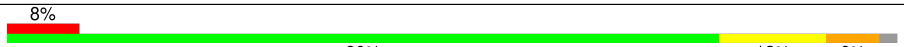
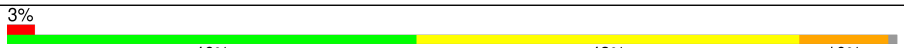
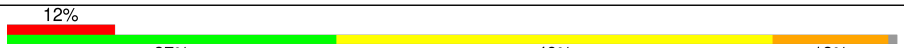
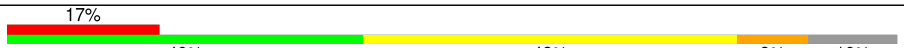
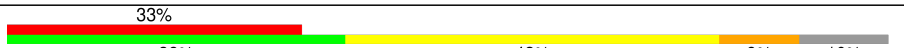
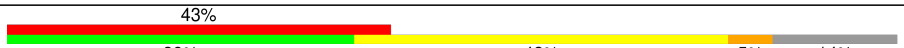
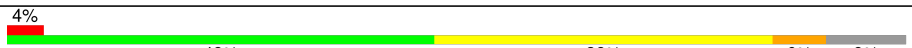
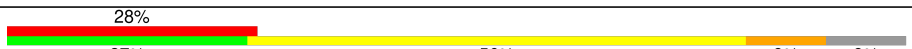
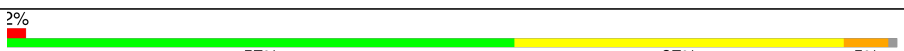
Mol	Chain	Length	Quality of chain
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	

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Mol	Chain	Length	Quality of chain
39	2h	138	14% 56% 38% 6%
40	1i	128	17% 48% 46% 5%
40	2i	128	42% 38% 54% 7%
41	1j	105	30% 53% 38% 8%
41	2j	105	62% 43% 42% 7% 9%
42	1k	129	5% 63% 23% 12%
42	2k	129	16% 56% 30% 12%
43	1l	132	3% 65% 27% 8%
43	2l	132	13% 48% 40% 5% 8%
44	1m	126	9% 56% 37% 5%
44	2m	126	34% 39% 55%
45	1n	61	18% 62% 31% 5%
45	2n	61	79% 51% 41% 7%
46	1o	89	8% 70% 28%
46	2o	89	13% 61% 37%
47	1p	88	16% 48% 35% 9% 7%
47	2p	88	5% 51% 38% 5% 7%
48	1q	105	3% 62% 30% 6%
48	2q	105	10% 53% 40% 6%
49	1r	88	3% 45% 32% 23%
49	2r	88	5% 41% 28% 8% 23%
50	1s	93	11% 47% 37% 5% 11%
50	2s	93	56% 33% 45% 11% 11%
51	1t	106	13% 54% 33% 9%
51	2t	106	6% 58% 30% 9%

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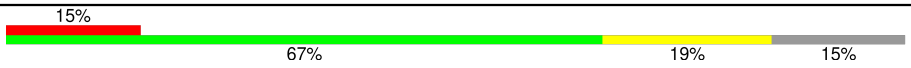
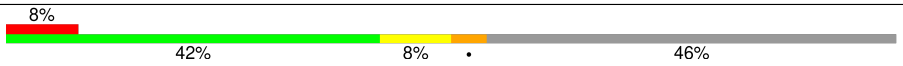
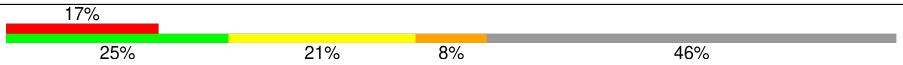
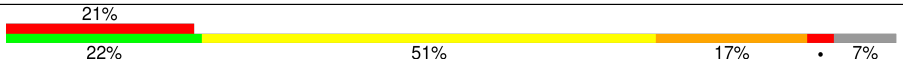
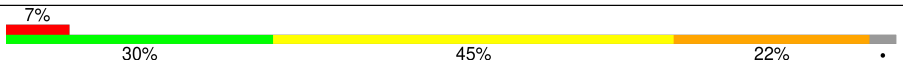
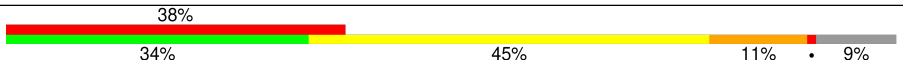
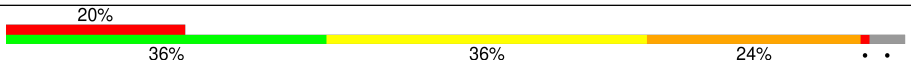
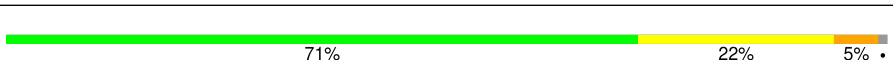
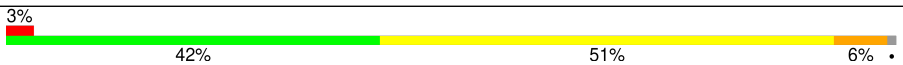
Mol	Chain	Length	Quality of chain
52	1u	27	
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	1y	76	
54	2w	76	
54	2y	76	
55	1x	77	
55	2x	77	

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
56	MG	1U	211	-	-	-	X
56	MG	1a	1642	-	-	-	X
56	MG	2A	3394	-	-	-	X
56	MG	2A	3491	-	-	-	X
60	SF4	2d	302	-	-	X	-

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 300040 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 RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2871	Total	C	N	O	P	0	0	0
			61852	27531	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60322	26848	11284	19390	2800			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2577	1146	476	835	120			
2	2B	120	Total	C	N	O	P	0	0	0
			2575	1146	476	833	120			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1423	913	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1428	913	258	253	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	146	Total	C	N	O	S	0	0	0
			1097	701	191	204	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1064	681	186	196	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0
11	2P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
12	2Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0
13	2R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 873	C 550	N 174	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total 1091	C 680	N 225	O 185	S 1	0	0	0
15	2T	131	Total 1083	C 675	N 224	O 183	S 1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	154	Total	C	N	O	S	0	0	0
			1240	795	222	220	3			
21	2Z	160	Total	C	N	O	S	0	0	0
			1271	814	228	227	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	79	Total	C	N	O	S	0	0	0
			620	383	131	105	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
23	21	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			552	349	99	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1503	Total	C	N	O	P	0	0	0
			32327	14396	5990	10438	1503			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1846	1179	331	331	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1548	973	301	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1655	1038	326	284	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1674	1050	333	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1129	714	213	198	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			810	514	144	149	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1231	766	243	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			983	623	193	167			
40	2i	127	Total	C	N	O	0	0	0
			978	619	190	169			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			709	440	138	131			
41	2j	96	Total	C	N	O	0	0	0
			714	445	138	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			829	516	155	155	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O	0	0	0
			555	355	108	92			
49	2r	68	Total	C	N	O	0	0	0
			555	355	108	92			

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
50	2s	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
51	2t	96	Total	C	N	O	S	0	0	0
			727	446	155	124	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a RNA chain called MF-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
53	2v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			

- Molecule 54 is a RNA chain called A-site and E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	71	Total	C	N	O	P	S	0	0	0
			1530	685	274	498	71	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	69	Total	C	N	O	P	S	0	0	0
			1482	662	267	482	69	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNAmet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			

- Molecule 56 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1108	Total	Mg	0	0
			1108	1108		
56	1B	36	Total	Mg	0	0
			36	36		
56	1D	13	Total	Mg	0	0
			13	13		
56	1E	16	Total	Mg	0	0
			16	16		
56	1F	13	Total	Mg	0	0
			13	13		
56	1G	5	Total	Mg	0	0
			5	5		
56	1I	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1N	5	Total Mg 5 5	0	0
56	1O	6	Total Mg 6 6	0	0
56	1P	6	Total Mg 6 6	0	0
56	1Q	6	Total Mg 6 6	0	0
56	1R	5	Total Mg 5 5	0	0
56	1S	3	Total Mg 3 3	0	0
56	1T	2	Total Mg 2 2	0	0
56	1U	11	Total Mg 11 11	0	0
56	1V	6	Total Mg 6 6	0	0
56	1W	5	Total Mg 5 5	0	0
56	1X	7	Total Mg 7 7	0	0
56	1Y	3	Total Mg 3 3	0	0
56	1Z	4	Total Mg 4 4	0	0
56	10	8	Total Mg 8 8	0	0
56	11	5	Total Mg 5 5	0	0
56	12	2	Total Mg 2 2	0	0
56	13	4	Total Mg 4 4	0	0
56	14	1	Total Mg 1 1	0	0
56	15	6	Total Mg 6 6	0	0
56	16	1	Total Mg 1 1	0	0
56	17	5	Total Mg 5 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	18	8	Total Mg 8 8	0	0
56	19	1	Total Mg 1 1	0	0
56	1a	211	Total Mg 211 211	0	0
56	1b	1	Total Mg 1 1	0	0
56	1d	1	Total Mg 1 1	0	0
56	1e	3	Total Mg 3 3	0	0
56	1f	2	Total Mg 2 2	0	0
56	1h	1	Total Mg 1 1	0	0
56	1k	1	Total Mg 1 1	0	0
56	1l	2	Total Mg 2 2	0	0
56	1m	2	Total Mg 2 2	0	0
56	1n	2	Total Mg 2 2	0	0
56	1t	1	Total Mg 1 1	0	0
56	1v	2	Total Mg 2 2	0	0
56	1w	8	Total Mg 8 8	0	0
56	1x	12	Total Mg 12 12	0	0
56	1y	2	Total Mg 2 2	0	0
56	2A	873	Total Mg 873 873	0	0
56	2B	20	Total Mg 20 20	0	0
56	2D	6	Total Mg 6 6	0	0
56	2E	10	Total Mg 10 10	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2F	6	Total Mg 6 6	0	0
56	2G	1	Total Mg 1 1	0	0
56	2N	1	Total Mg 1 1	0	0
56	2O	1	Total Mg 1 1	0	0
56	2P	2	Total Mg 2 2	0	0
56	2Q	4	Total Mg 4 4	0	0
56	2R	2	Total Mg 2 2	0	0
56	2T	3	Total Mg 3 3	0	0
56	2U	1	Total Mg 1 1	0	0
56	2V	2	Total Mg 2 2	0	0
56	2W	3	Total Mg 3 3	0	0
56	2X	2	Total Mg 2 2	0	0
56	2Z	1	Total Mg 1 1	0	0
56	20	2	Total Mg 2 2	0	0
56	21	3	Total Mg 3 3	0	0
56	23	1	Total Mg 1 1	0	0
56	25	5	Total Mg 5 5	0	0
56	26	1	Total Mg 1 1	0	0
56	27	3	Total Mg 3 3	0	0
56	28	5	Total Mg 5 5	0	0
56	29	1	Total Mg 1 1	0	0

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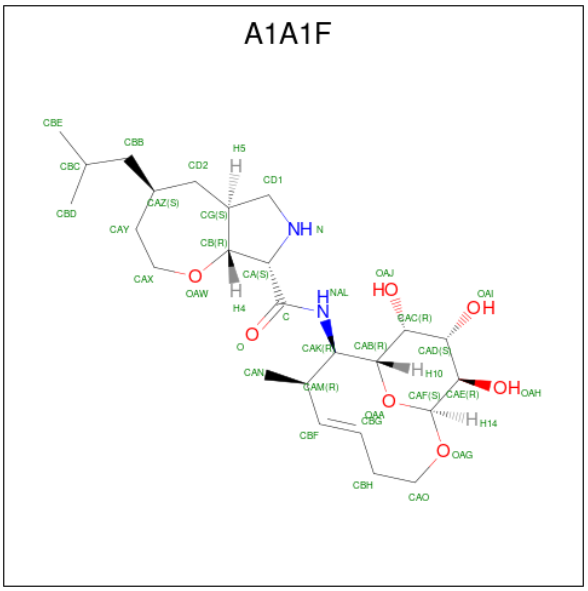
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2a	240	Total Mg 240 240	0	0
56	2d	1	Total Mg 1 1	0	0
56	2e	1	Total Mg 1 1	0	0
56	2f	2	Total Mg 2 2	0	0
56	2g	1	Total Mg 1 1	0	0
56	2j	1	Total Mg 1 1	0	0
56	2l	5	Total Mg 5 5	0	0
56	2q	3	Total Mg 3 3	0	0
56	2r	1	Total Mg 1 1	0	0
56	2t	1	Total Mg 1 1	0	0
56	2v	3	Total Mg 3 3	0	0
56	2w	7	Total Mg 7 7	0	0
56	2x	7	Total Mg 7 7	0	0
56	2y	7	Total Mg 7 7	0	0

- Molecule 57 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1A	1	Total K 1 1	0	0
57	2A	1	Total K 1 1	0	0

- Molecule 58 is (4S,5aS,8S,8aR)-4-(2-methylpropyl)-N-[(1S,5Z,7R,8R,9R,10R,11S,12R)-10,11,12-trihydroxy-7-methyl-2,13-dioxabicyclo[7.3.1]tridec-5-en-8-yl]octahydro-2H-oxepino[2,3-c]pyrrole-8-carboxamide (non-preferred name) (CCD ID: A1A1F) (formula: $C_{25}H_{42}N_2O_7$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total C N O 34 25 2 7	0	0
58	2A	1	Total C N O 34 25 2 7	0	0

- Molecule 59 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1Y	1	Total Zn 1 1	0	0
59	14	1	Total Zn 1 1	0	0
59	15	1	Total Zn 1 1	0	0
59	16	1	Total Zn 1 1	0	0
59	19	1	Total Zn 1 1	0	0
59	1n	1	Total Zn 1 1	0	0
59	2Y	1	Total Zn 1 1	0	0
59	24	1	Total Zn 1 1	0	0
59	25	1	Total Zn 1 1	0	0
59	26	1	Total Zn 1 1	0	0

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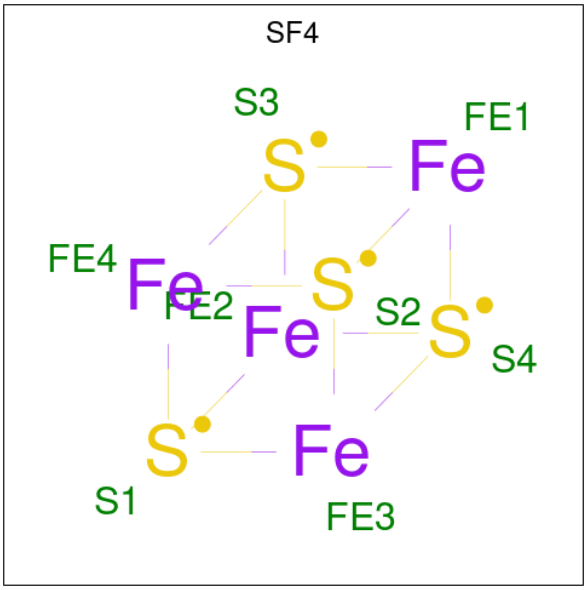
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1d	1	Total Fe S 8 4 4	0	0
60	2d	1	Total Fe S 8 4 4	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	2002	Total O 2002 2002	0	0
61	1B	63	Total O 63 63	0	0
61	1D	28	Total O 28 28	0	0
61	1E	30	Total O 30 30	0	0
61	1F	19	Total O 19 19	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	3	Total O 3 3	0	0
61	1H	2	Total O 2 2	0	0
61	1I	2	Total O 2 2	0	0
61	1N	7	Total O 7 7	0	0
61	1O	7	Total O 7 7	0	0
61	1P	19	Total O 19 19	0	0
61	1Q	9	Total O 9 9	0	0
61	1R	13	Total O 13 13	0	0
61	1S	5	Total O 5 5	0	0
61	1T	8	Total O 8 8	0	0
61	1U	15	Total O 15 15	0	0
61	1V	8	Total O 8 8	0	0
61	1W	7	Total O 7 7	0	0
61	1X	6	Total O 6 6	0	0
61	1Y	2	Total O 2 2	0	0
61	1Z	1	Total O 1 1	0	0
61	10	10	Total O 10 10	0	0
61	11	13	Total O 13 13	0	0
61	12	4	Total O 4 4	0	0
61	13	4	Total O 4 4	0	0
61	14	1	Total O 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	15	6	Total O 6 6	0	0
61	16	2	Total O 2 2	0	0
61	17	11	Total O 11 11	0	0
61	18	10	Total O 10 10	0	0
61	1a	374	Total O 374 374	0	0
61	1b	1	Total O 1 1	0	0
61	1f	1	Total O 1 1	0	0
61	1g	1	Total O 1 1	0	0
61	1i	1	Total O 1 1	0	0
61	1l	8	Total O 8 8	0	0
61	1n	1	Total O 1 1	0	0
61	1o	3	Total O 3 3	0	0
61	1p	1	Total O 1 1	0	0
61	1q	2	Total O 2 2	0	0
61	1u	1	Total O 1 1	0	0
61	1v	4	Total O 4 4	0	0
61	1w	11	Total O 11 11	0	0
61	1x	13	Total O 13 13	0	0
61	1y	2	Total O 2 2	0	0
61	2A	1175	Total O 1175 1175	0	0
61	2B	24	Total O 24 24	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2D	20	Total O 20 20	0	0
61	2E	12	Total O 12 12	0	0
61	2F	13	Total O 13 13	0	0
61	2I	3	Total O 3 3	0	0
61	2N	1	Total O 1 1	0	0
61	2P	13	Total O 13 13	0	0
61	2Q	1	Total O 1 1	0	0
61	2R	4	Total O 4 4	0	0
61	2T	5	Total O 5 5	0	0
61	2U	3	Total O 3 3	0	0
61	2W	2	Total O 2 2	0	0
61	2X	2	Total O 2 2	0	0
61	2Z	1	Total O 1 1	0	0
61	20	4	Total O 4 4	0	0
61	21	11	Total O 11 11	0	0
61	23	2	Total O 2 2	0	0
61	25	1	Total O 1 1	0	0
61	27	4	Total O 4 4	0	0
61	28	3	Total O 3 3	0	0
61	29	1	Total O 1 1	0	0
61	2a	268	Total O 268 268	0	0

Continued on next page...

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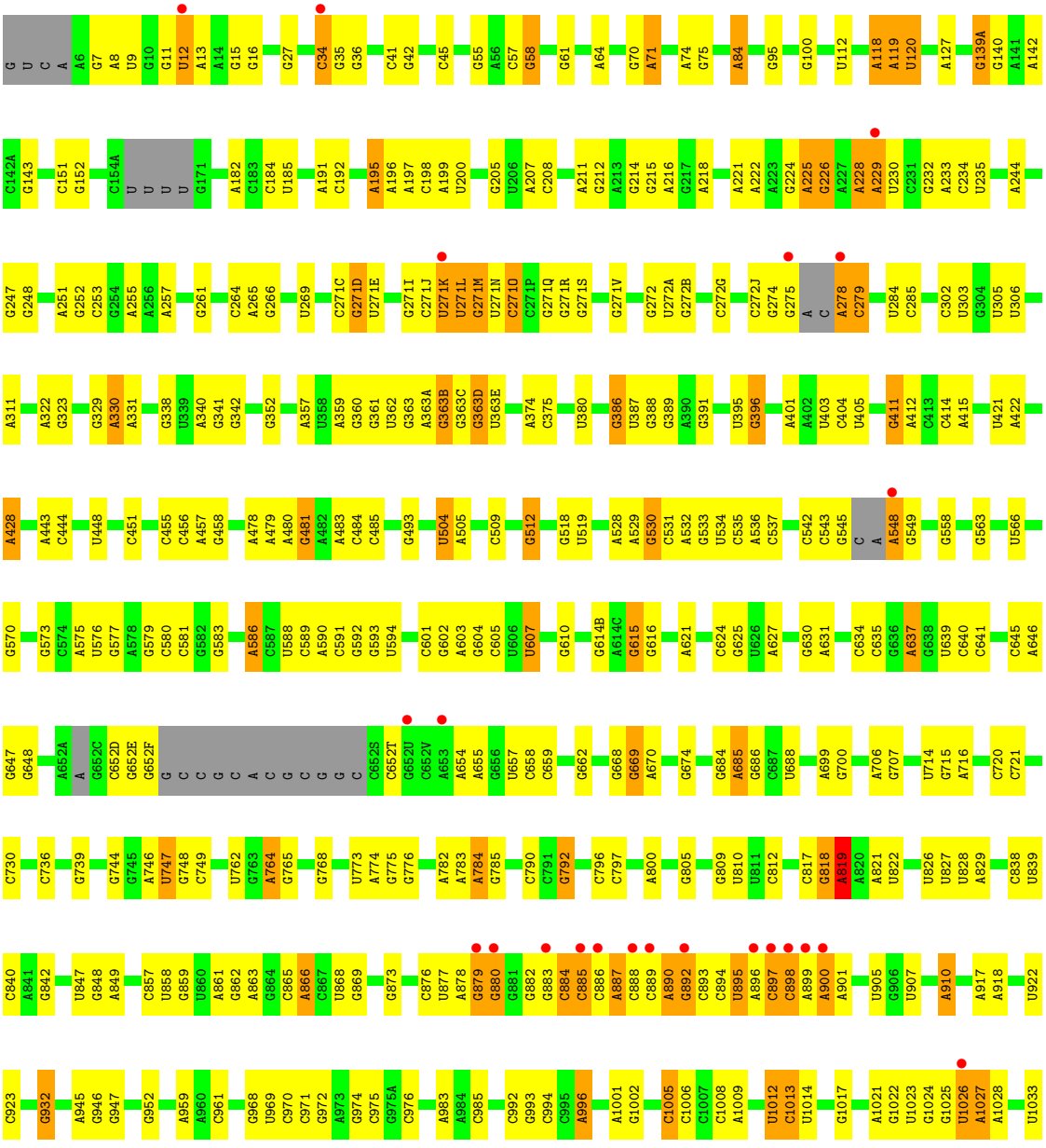
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2c	1	Total O 1 1	0	0
61	2d	1	Total O 1 1	0	0
61	2e	1	Total O 1 1	0	0
61	2j	3	Total O 3 3	0	0
61	2l	6	Total O 6 6	0	0
61	2o	1	Total O 1 1	0	0
61	2p	1	Total O 1 1	0	0
61	2q	1	Total O 1 1	0	0
61	2r	1	Total O 1 1	0	0
61	2t	2	Total O 2 2	0	0
61	2v	2	Total O 2 2	0	0
61	2w	1	Total O 1 1	0	0
61	2x	5	Total O 5 5	0	0
61	2y	7	Total O 7 7	0	0

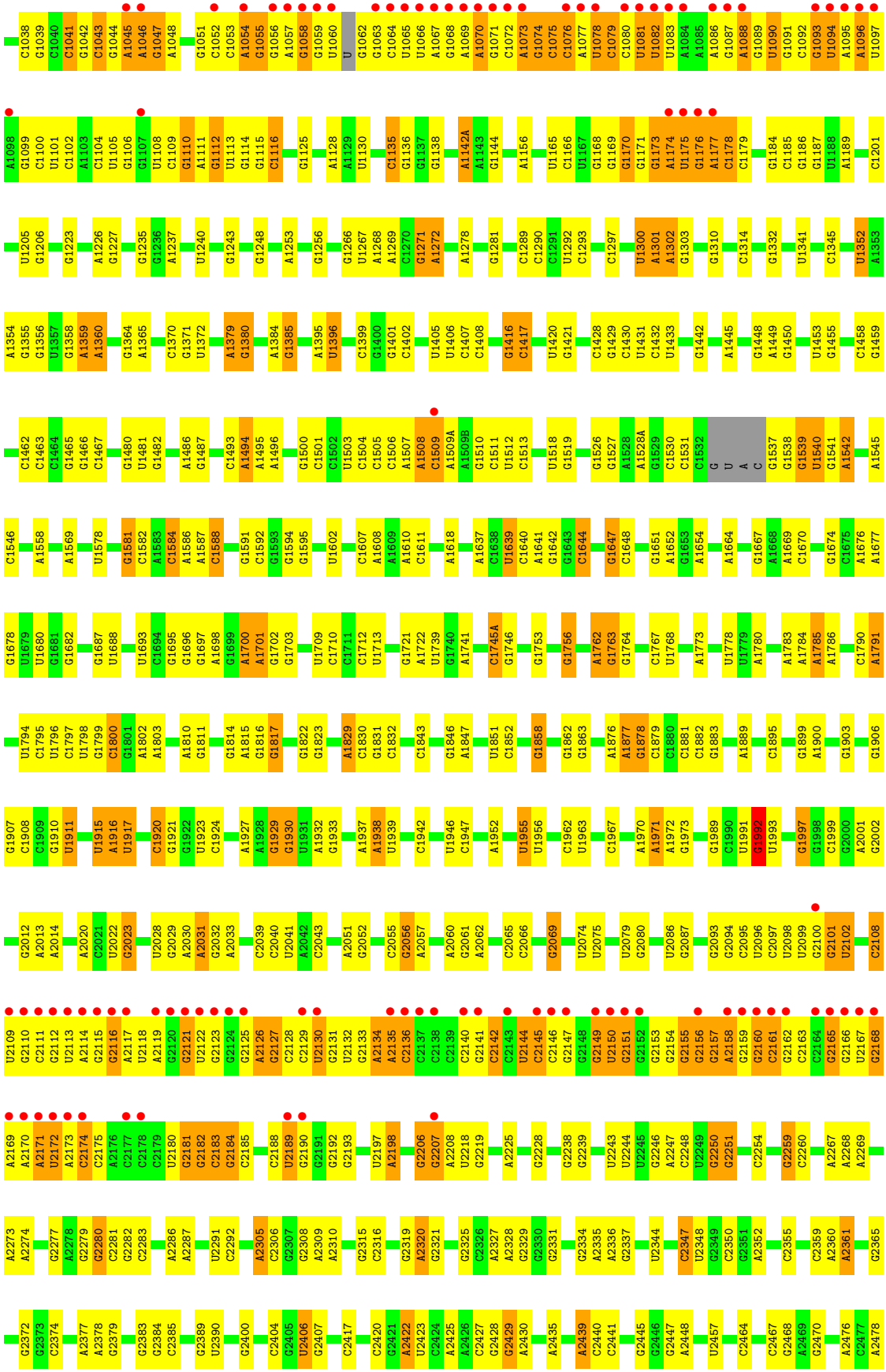
3 Residue-property plots (i)

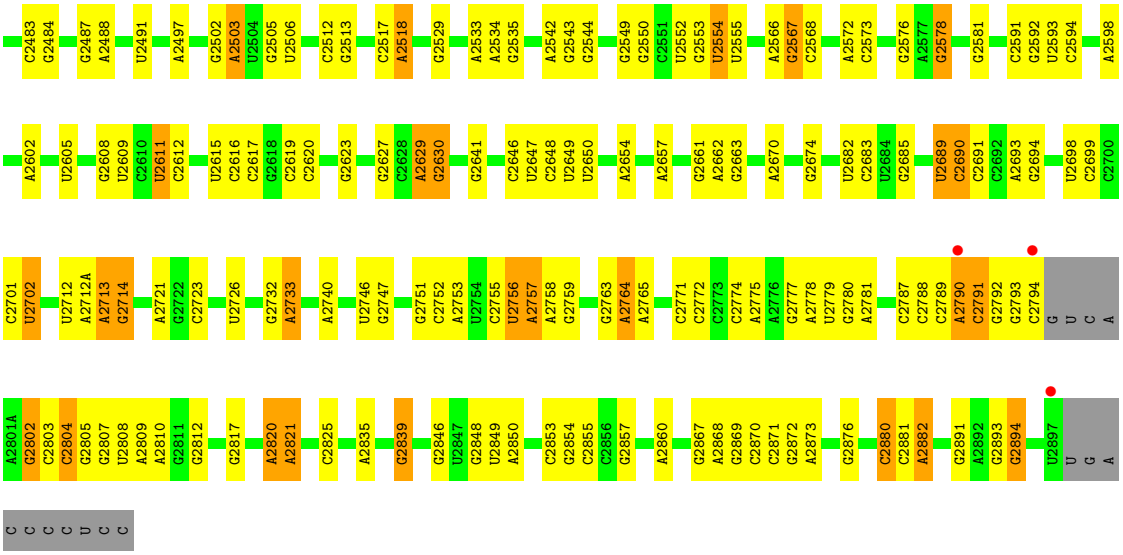
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: 23S Ribosomal RNA

Chain 1A:

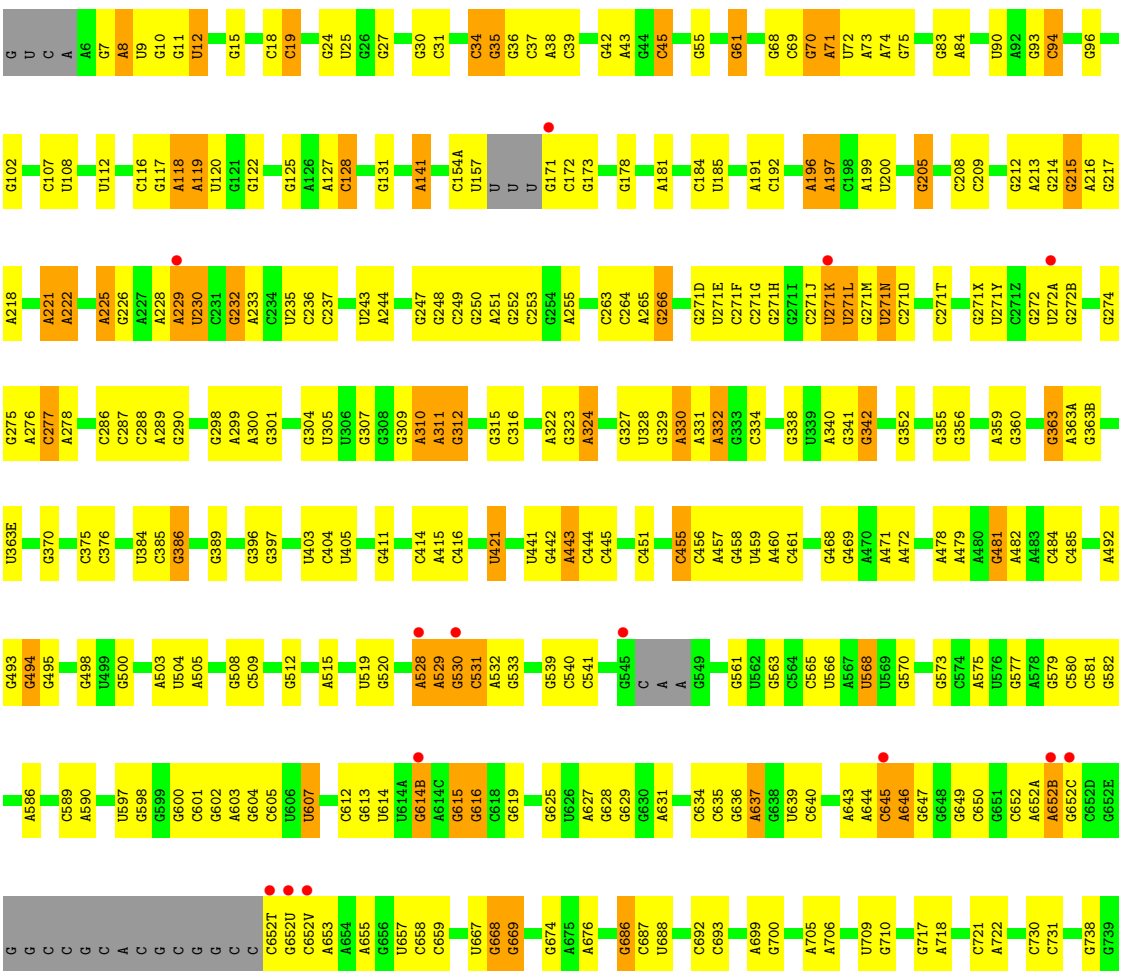


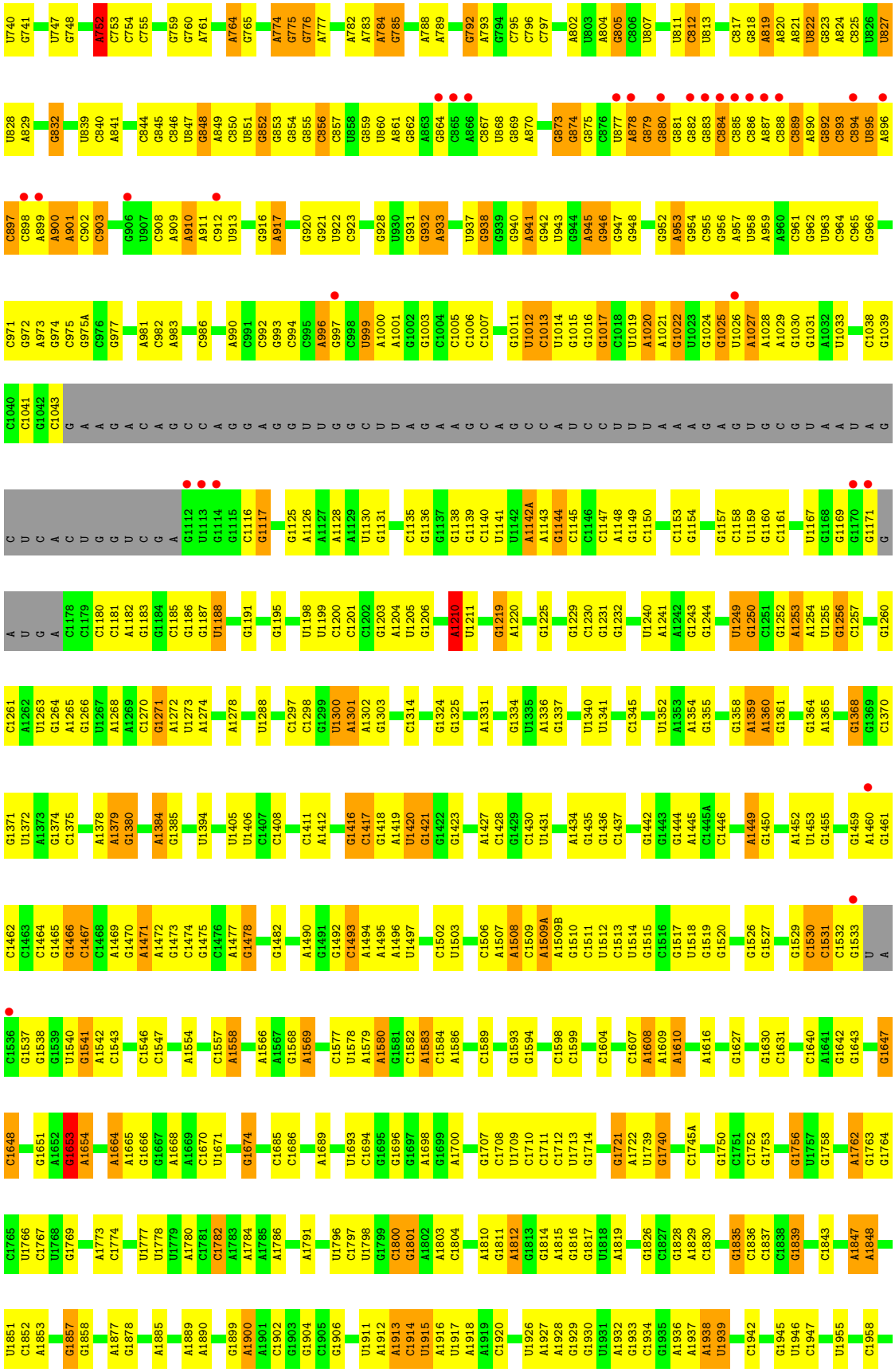


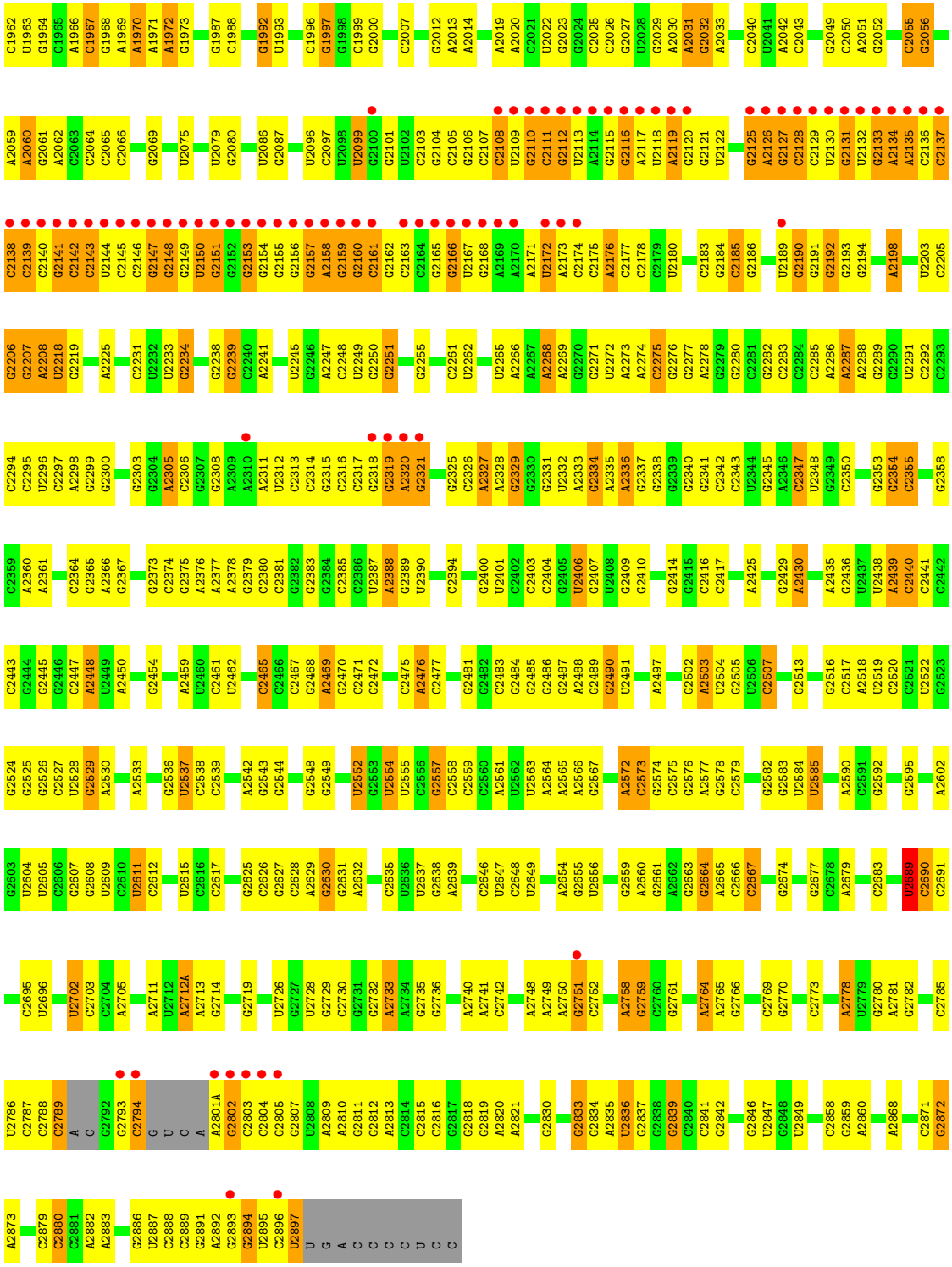


• Molecule 1: 23S Ribosomal RNA

Chain 2A:

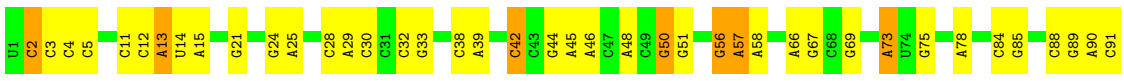


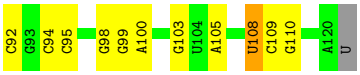




• Molecule 2: 5S Ribosomal RNA

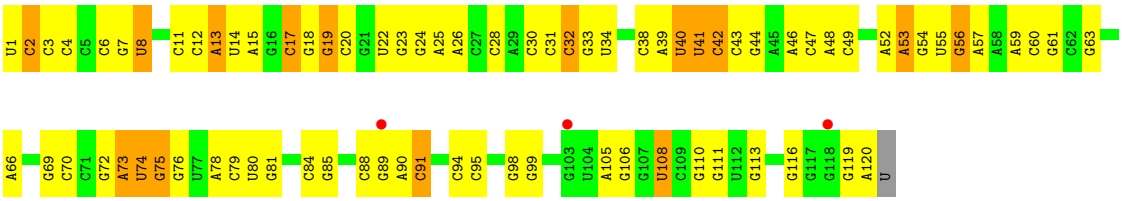
Chain 1B:





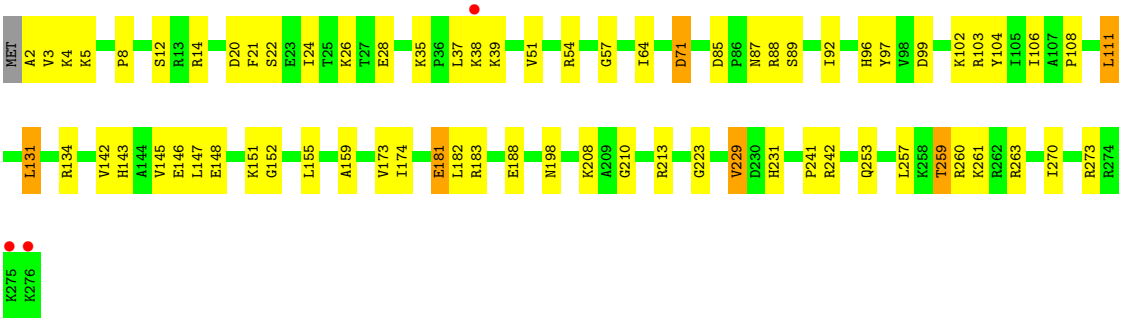
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



• Molecule 3: 50S ribosomal protein L2

Chain 1D:



• Molecule 3: 50S ribosomal protein L2

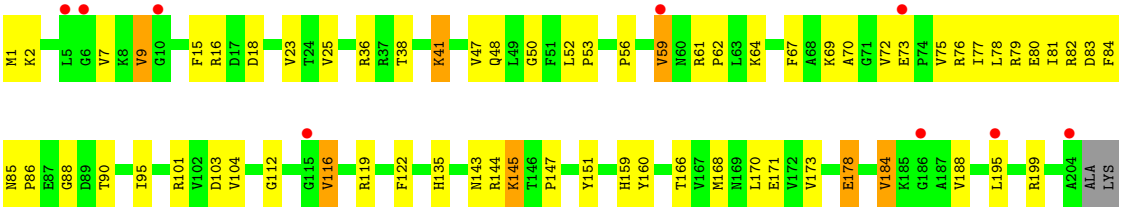
Chain 2D:

• Molecule 4: 50S ribosomal protein L3

Chain 1E:

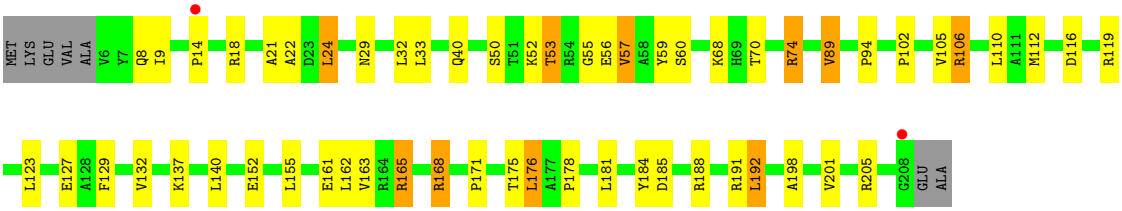
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



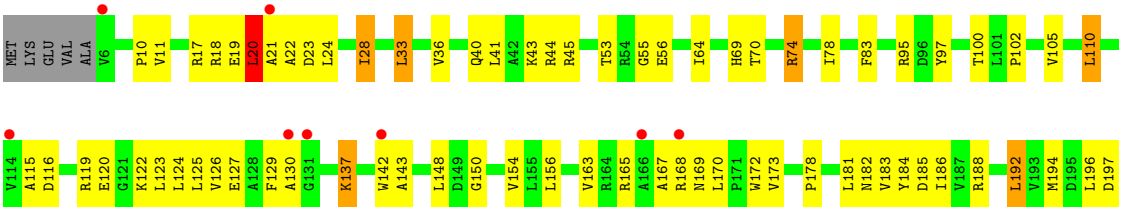
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



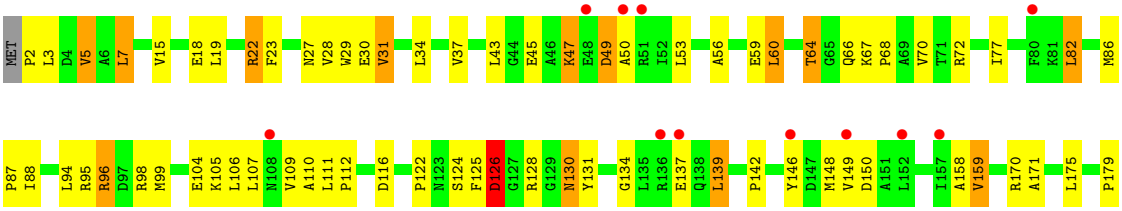
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



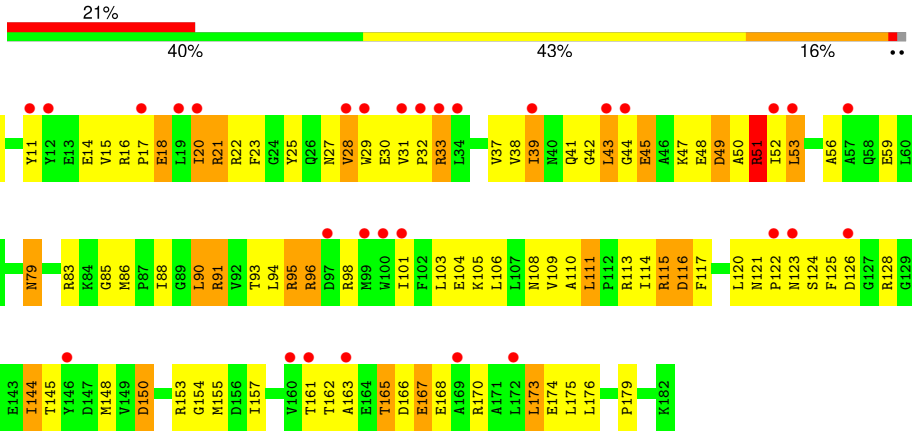
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



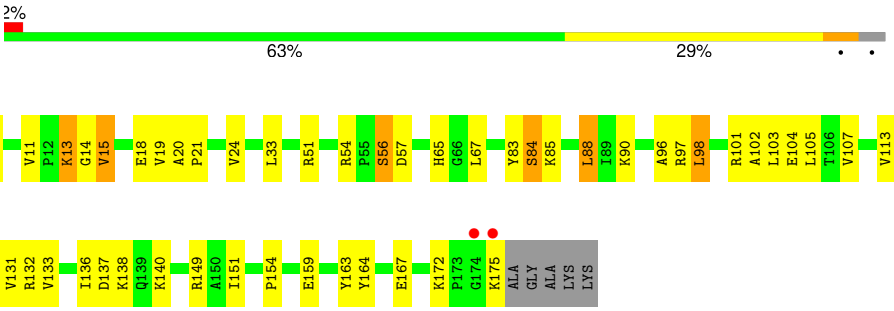
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



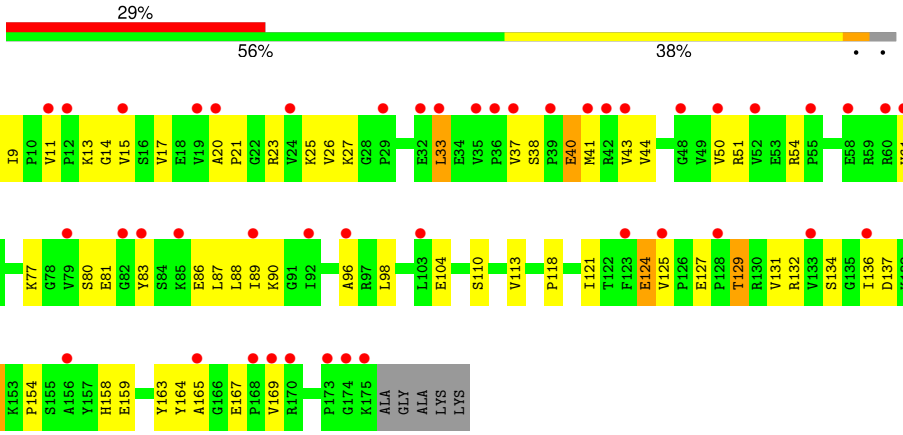
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



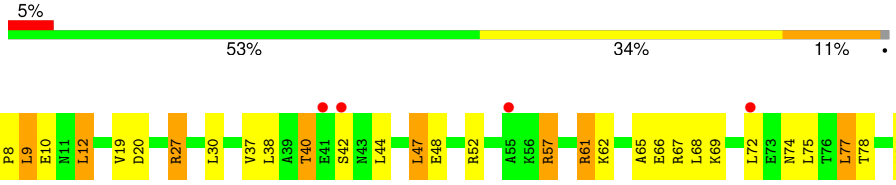
• Molecule 7: 50S ribosomal protein L6

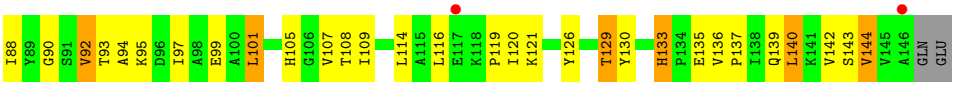
Chain 2H:



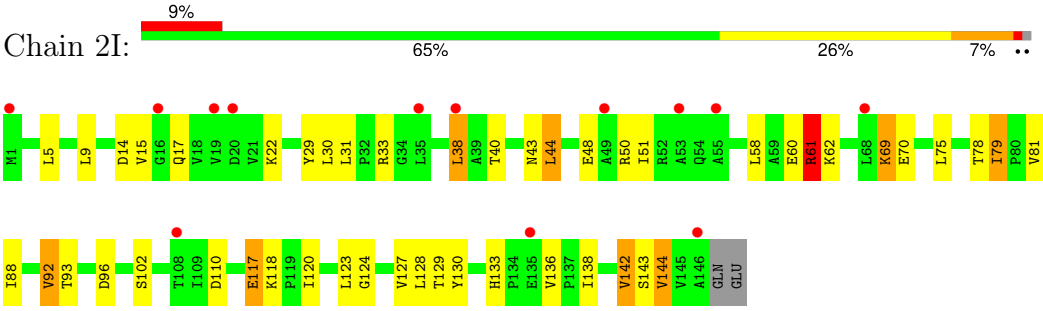
• Molecule 8: 50S ribosomal protein L9

Chain 1I:

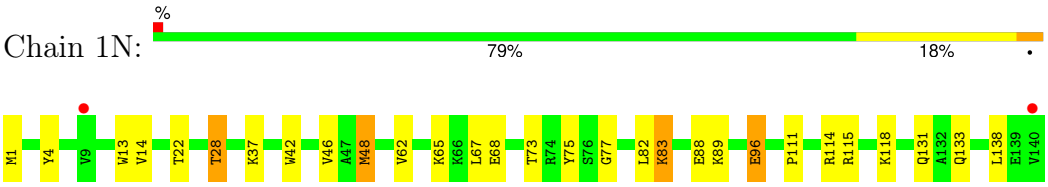




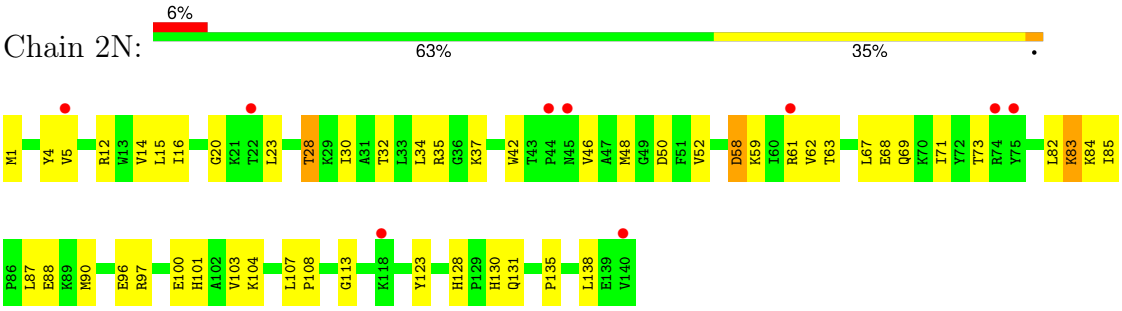
• Molecule 8: 50S ribosomal protein L9



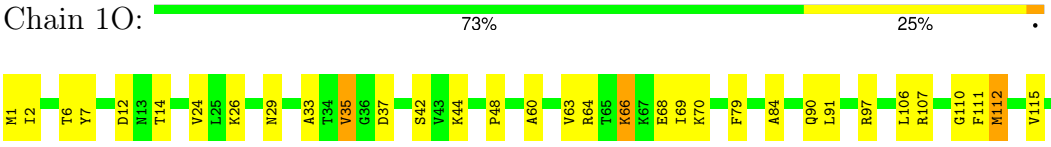
• Molecule 9: 50S ribosomal protein L13



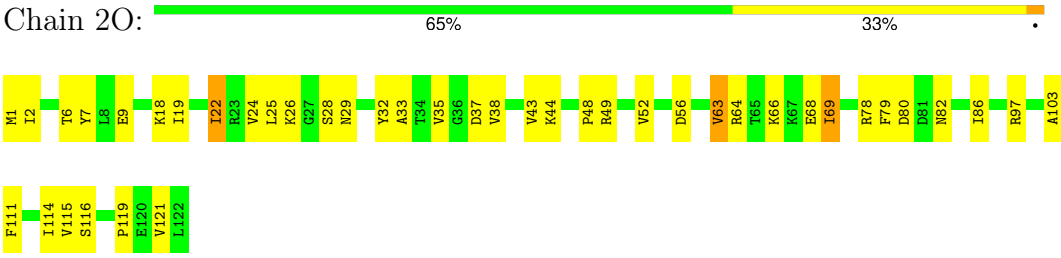
• Molecule 9: 50S ribosomal protein L13



• Molecule 10: 50S ribosomal protein L14

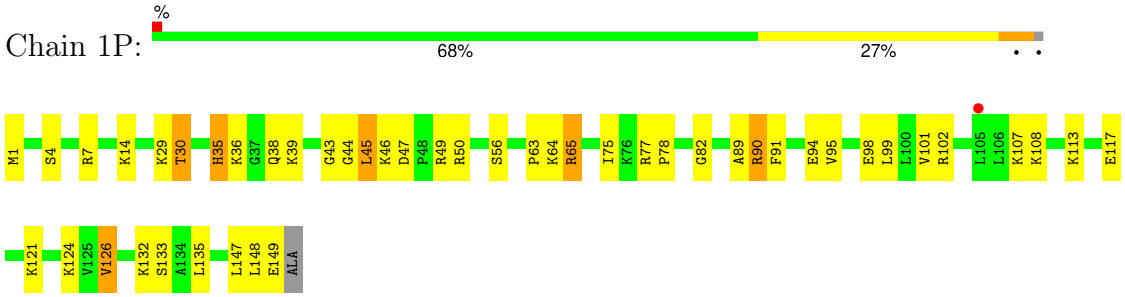


• Molecule 10: 50S ribosomal protein L14



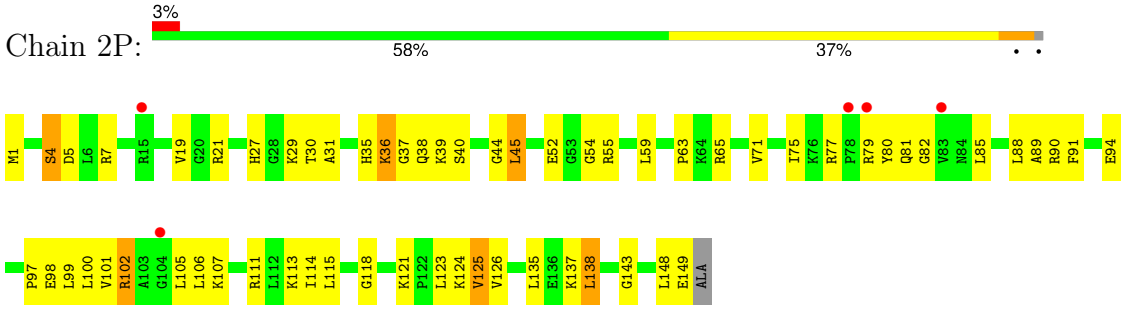
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



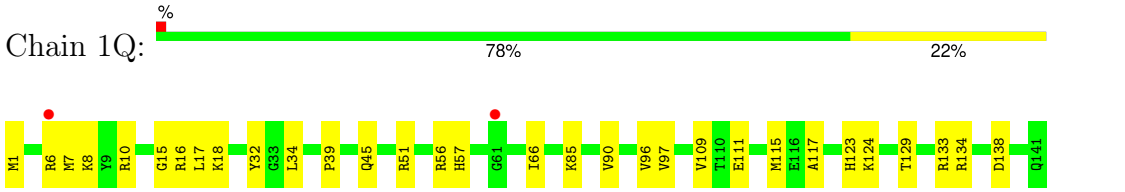
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



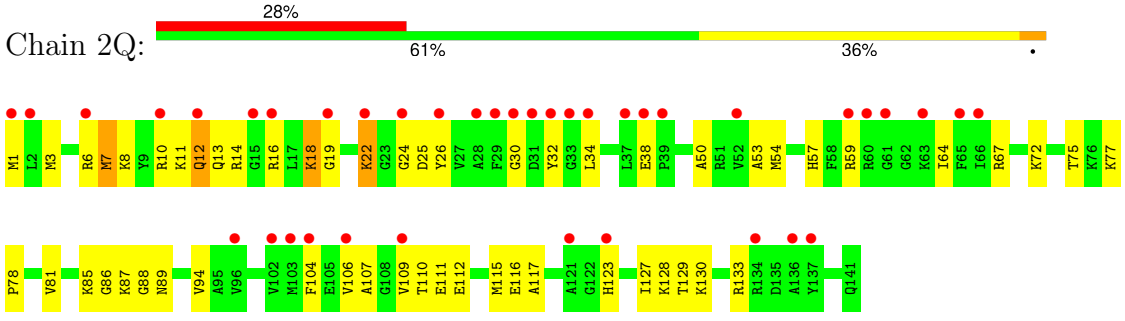
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



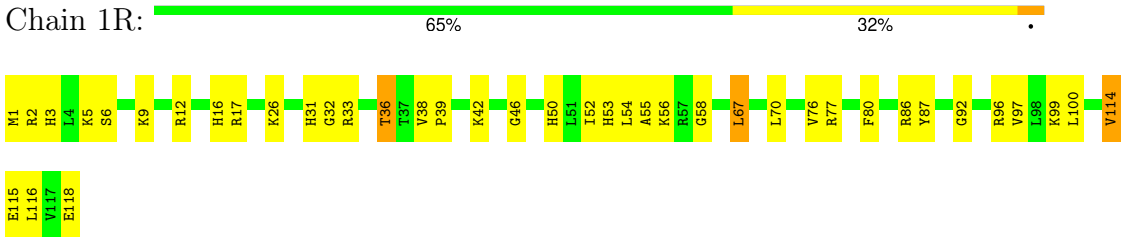
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



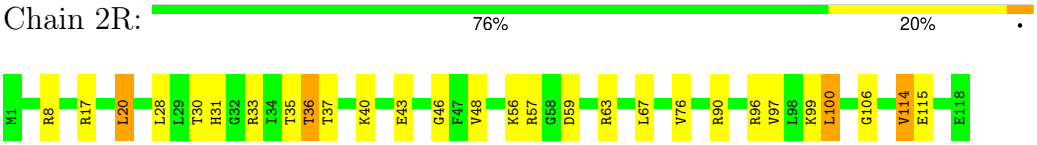
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



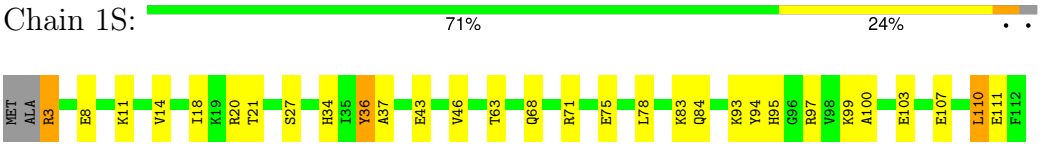
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



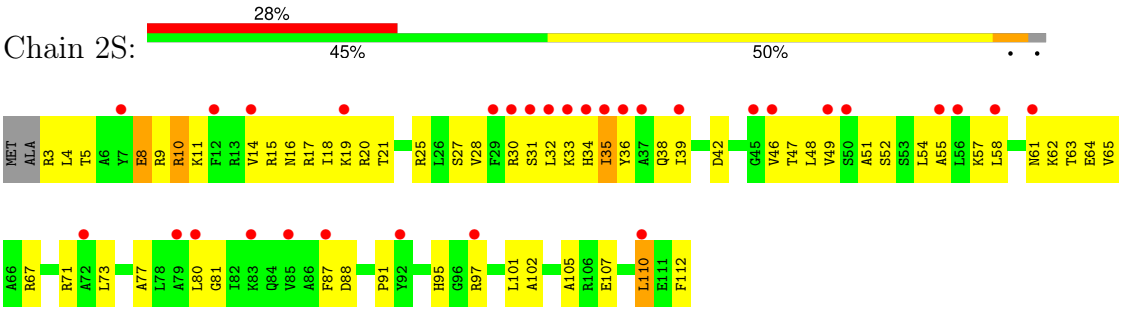
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



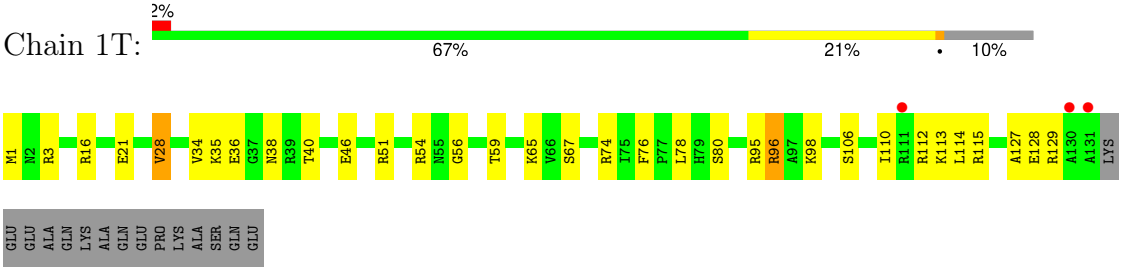
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



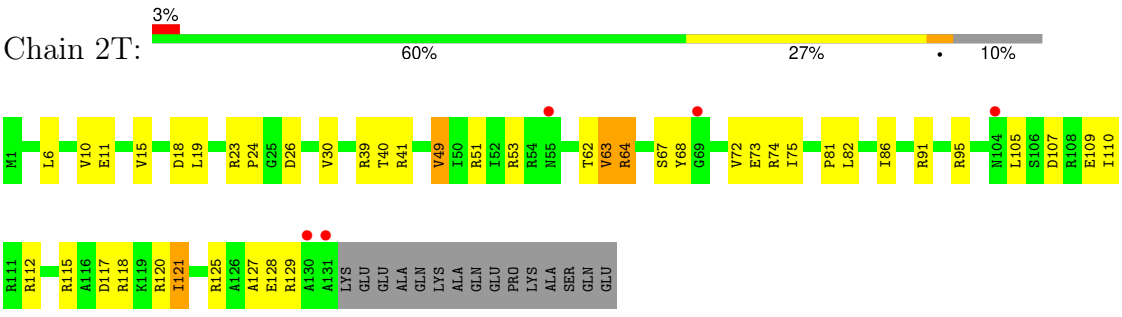
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



• Molecule 15: 50S ribosomal protein L19

Chain 2T:

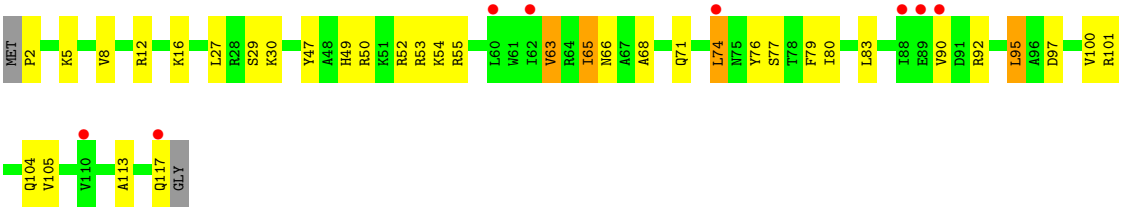


• Molecule 16: 50S ribosomal protein L20

Chain 1U:

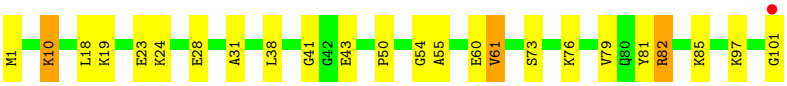
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



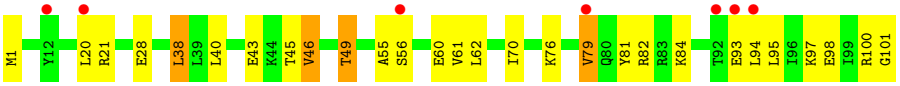
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



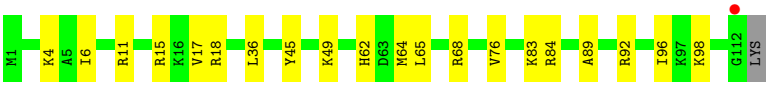
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



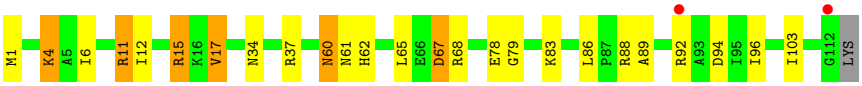
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



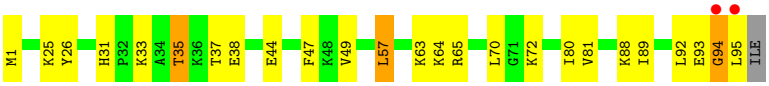
• Molecule 18: 50S ribosomal protein L22

Chain 2W:



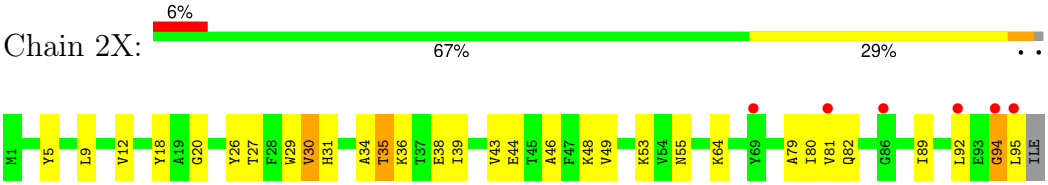
• Molecule 19: 50S ribosomal protein L23

Chain 1X:



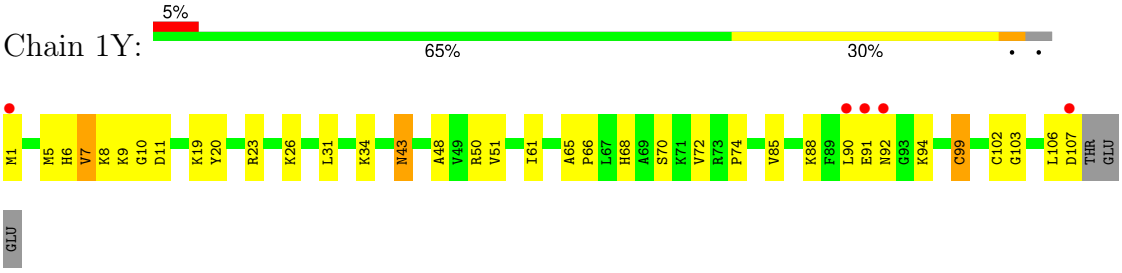
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



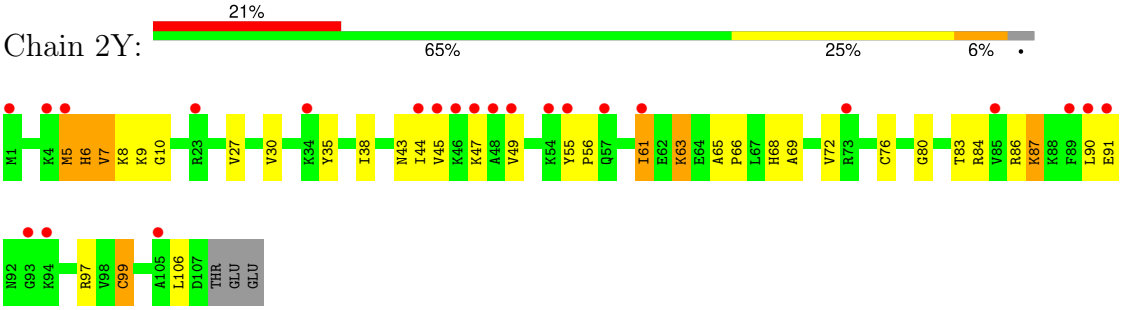
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



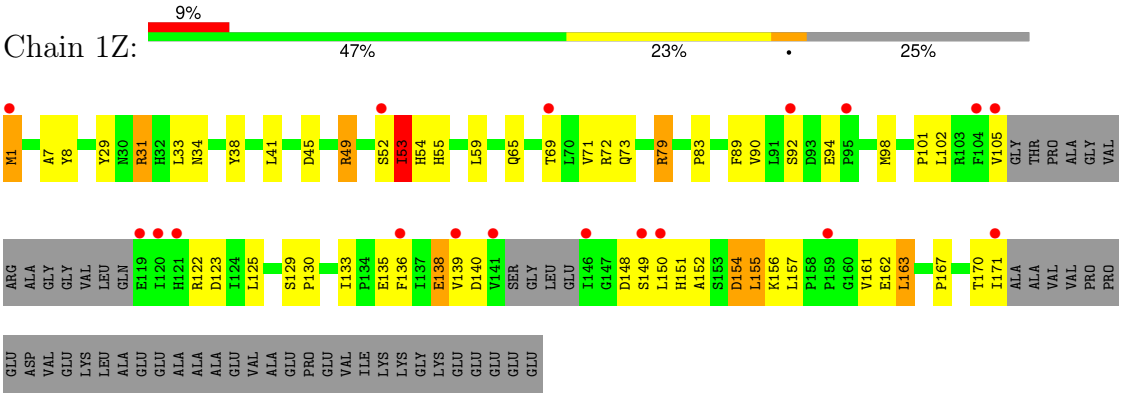
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



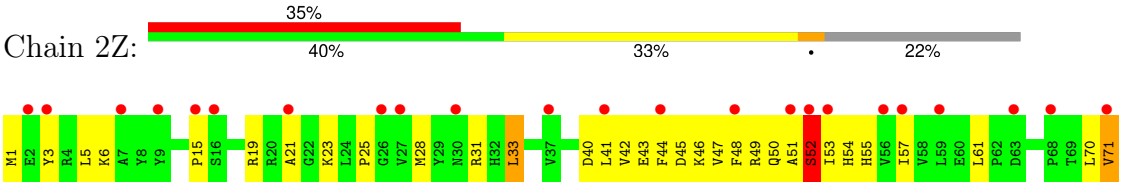
• Molecule 21: 50S ribosomal protein L25

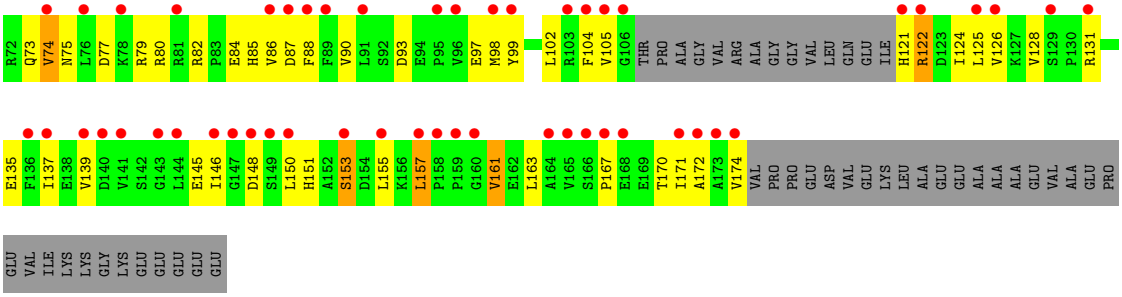
Chain 1Z:



• Molecule 21: 50S ribosomal protein L25

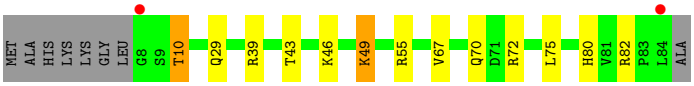
Chain 2Z:





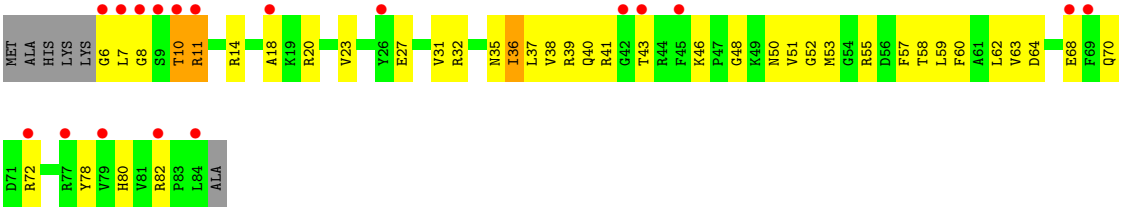
• Molecule 22: 50S ribosomal protein L27

Chain 10:



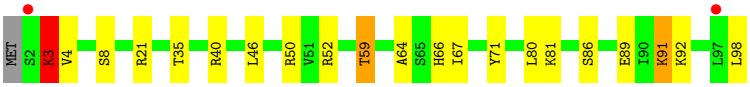
• Molecule 22: 50S ribosomal protein L27

Chain 20:



• Molecule 23: 50S ribosomal protein L28

Chain 11:

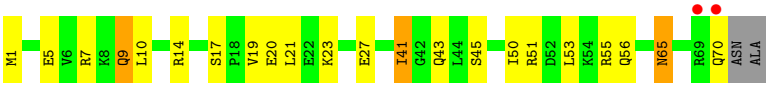


• Molecule 23: 50S ribosomal protein L28

Chain 21:

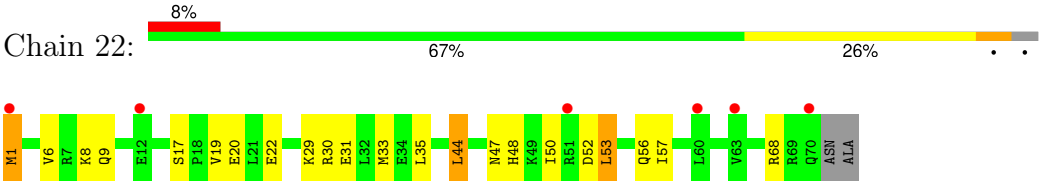
• Molecule 24: 50S ribosomal protein L29

Chain 12:



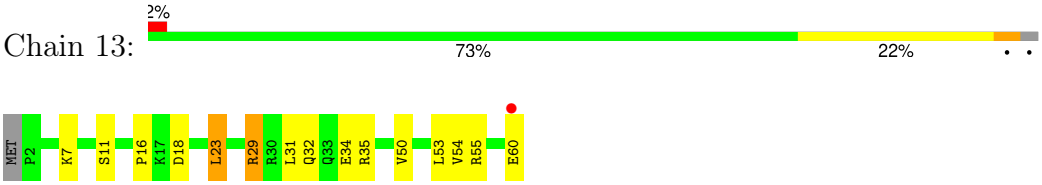
• Molecule 24: 50S ribosomal protein L29

Chain 22:



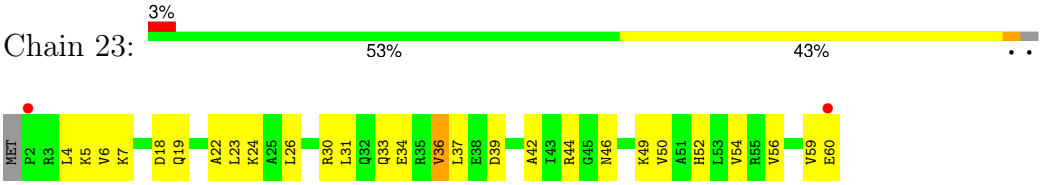
• Molecule 25: 50S ribosomal protein L30

Chain 13:



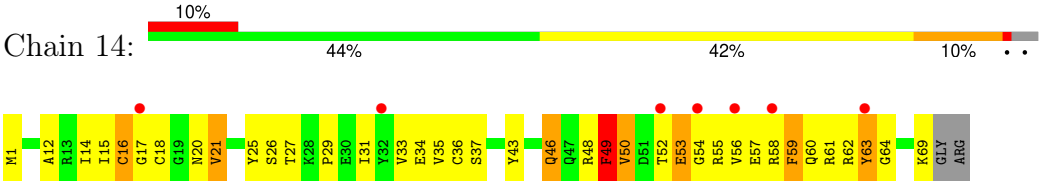
• Molecule 25: 50S ribosomal protein L30

Chain 23:



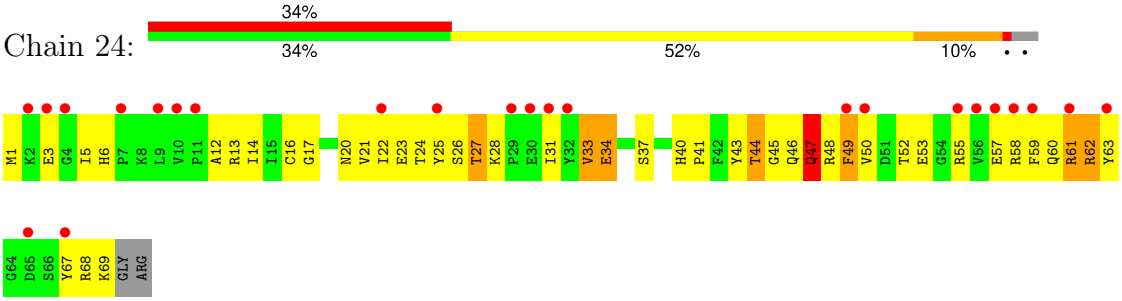
• Molecule 26: 50S ribosomal protein L31

Chain 14:



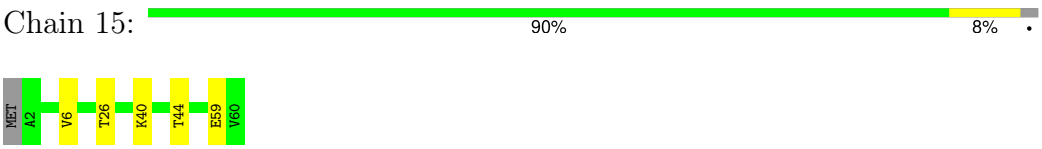
• Molecule 26: 50S ribosomal protein L31

Chain 24:



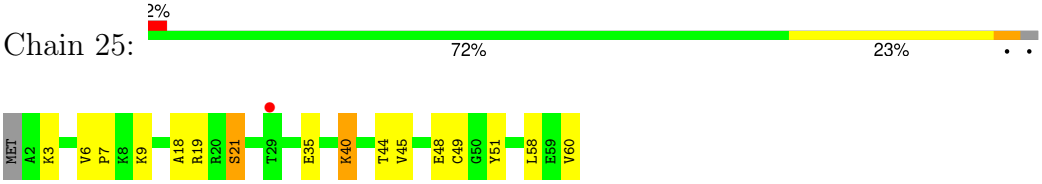
• Molecule 27: 50S ribosomal protein L32

Chain 15:



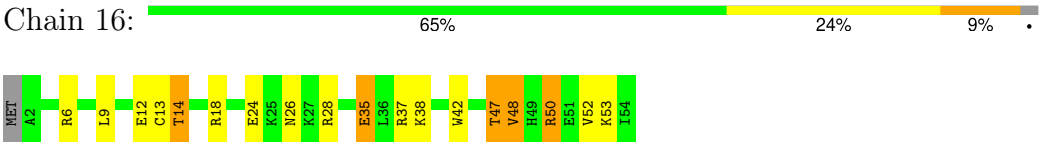
• Molecule 27: 50S ribosomal protein L32

Chain 25:



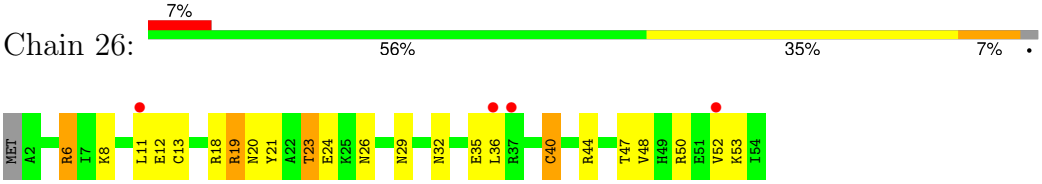
• Molecule 28: 50S ribosomal protein L33

Chain 16:



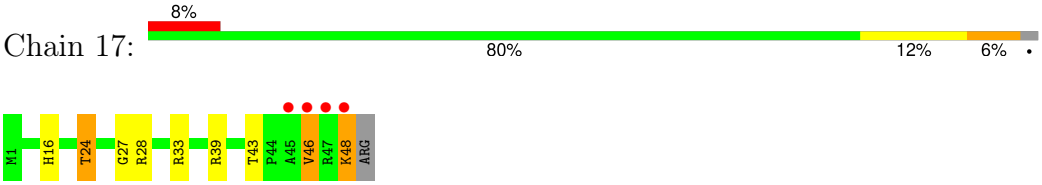
• Molecule 28: 50S ribosomal protein L33

Chain 26:



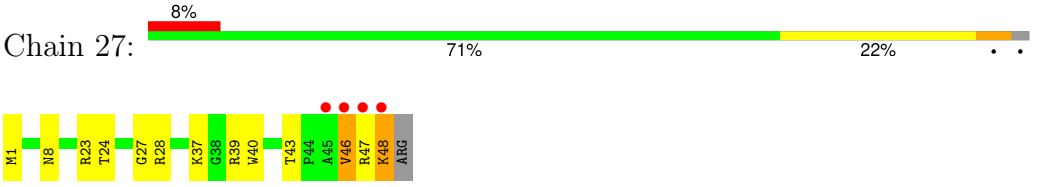
• Molecule 29: 50S ribosomal protein L34

Chain 17:



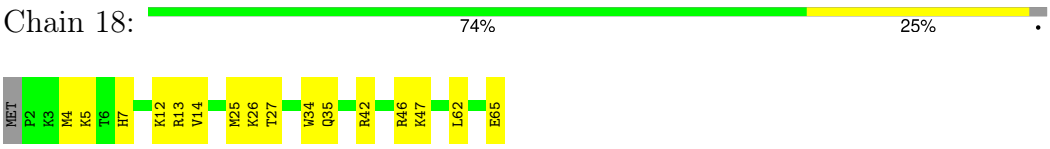
• Molecule 29: 50S ribosomal protein L34

Chain 27:



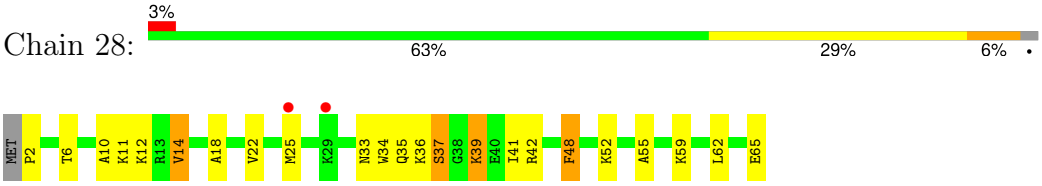
• Molecule 30: 50S ribosomal protein L35

Chain 18:



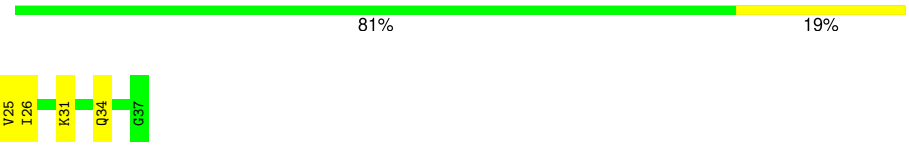
• Molecule 30: 50S ribosomal protein L35

Chain 28:



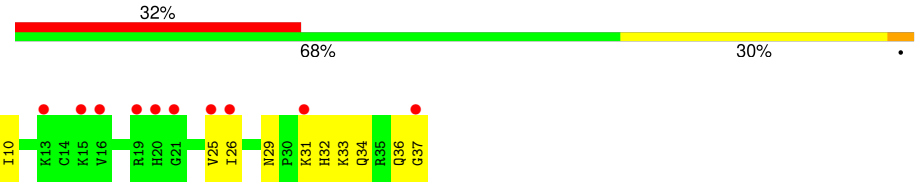
• Molecule 31: 50S ribosomal protein L36

Chain 19:



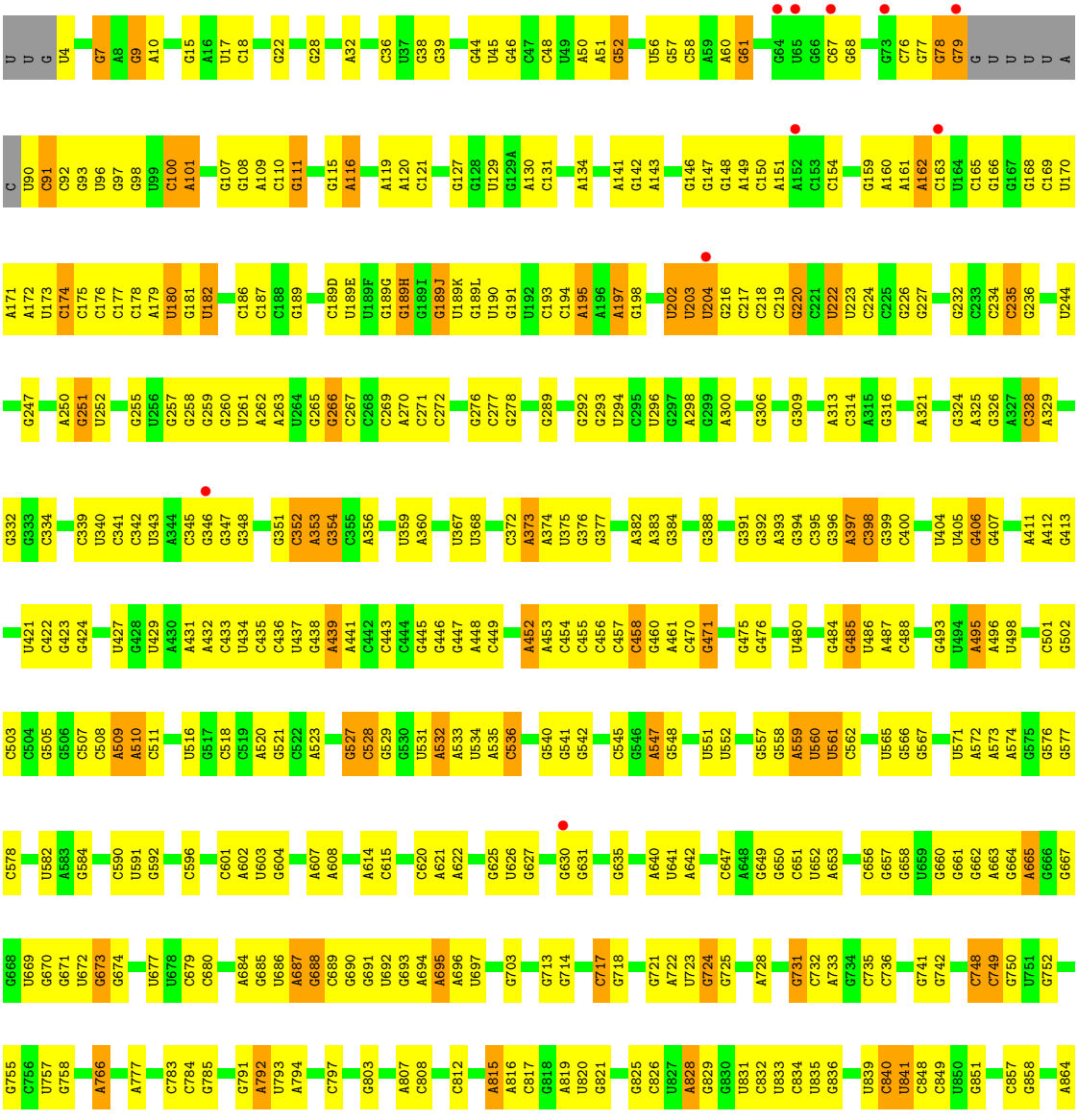
• Molecule 31: 50S ribosomal protein L36

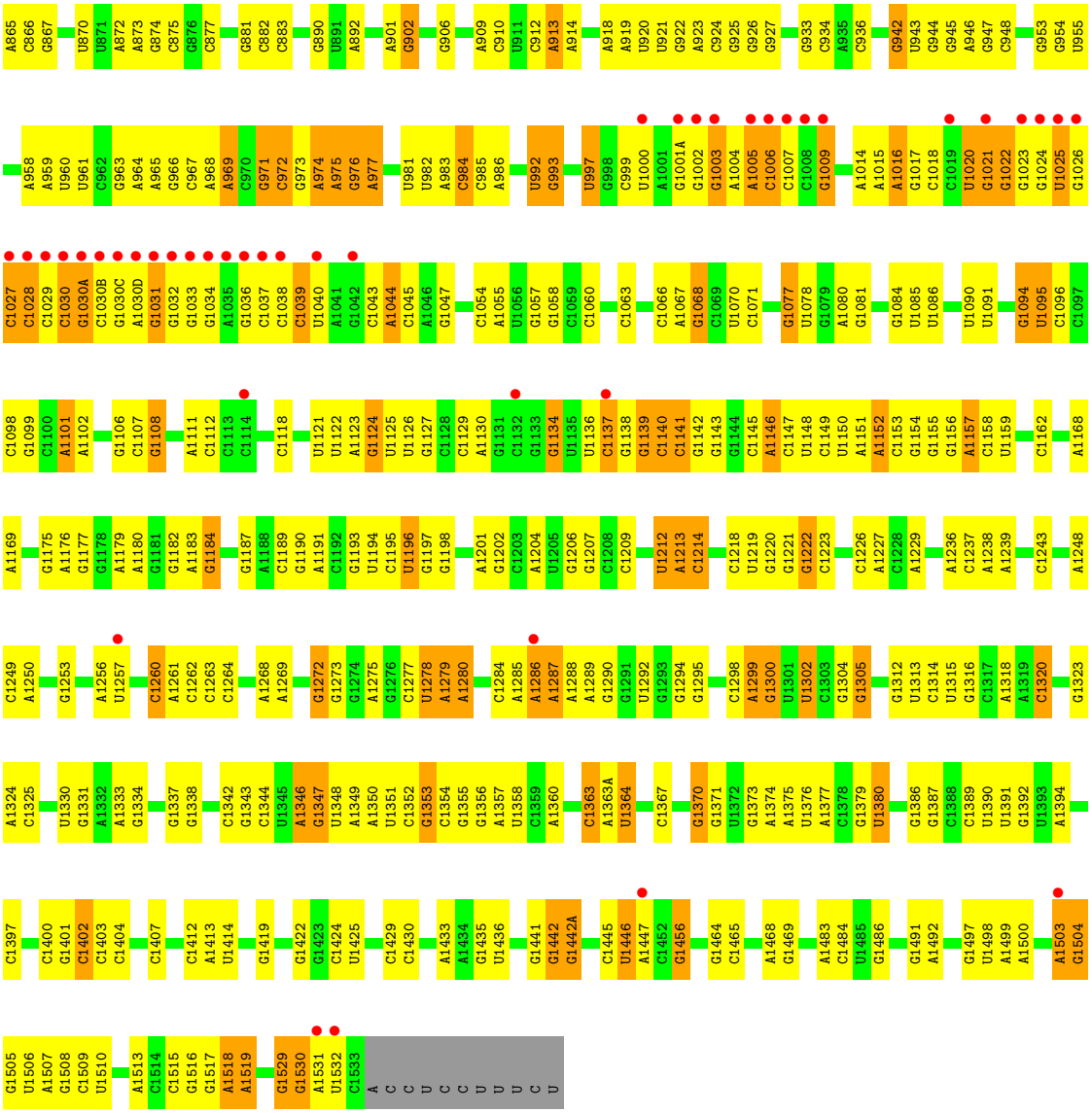
Chain 29:



• Molecule 32: 16S Ribosomal RNA

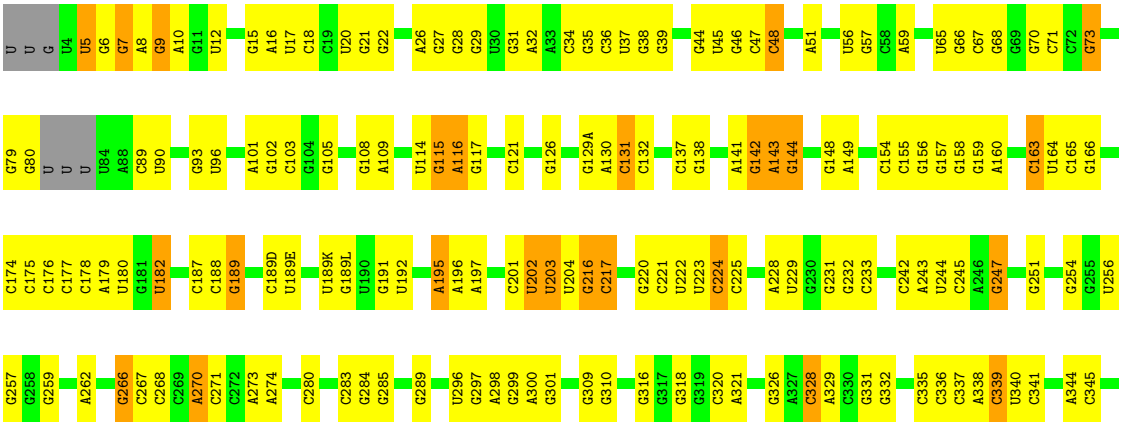
Chain 1a:

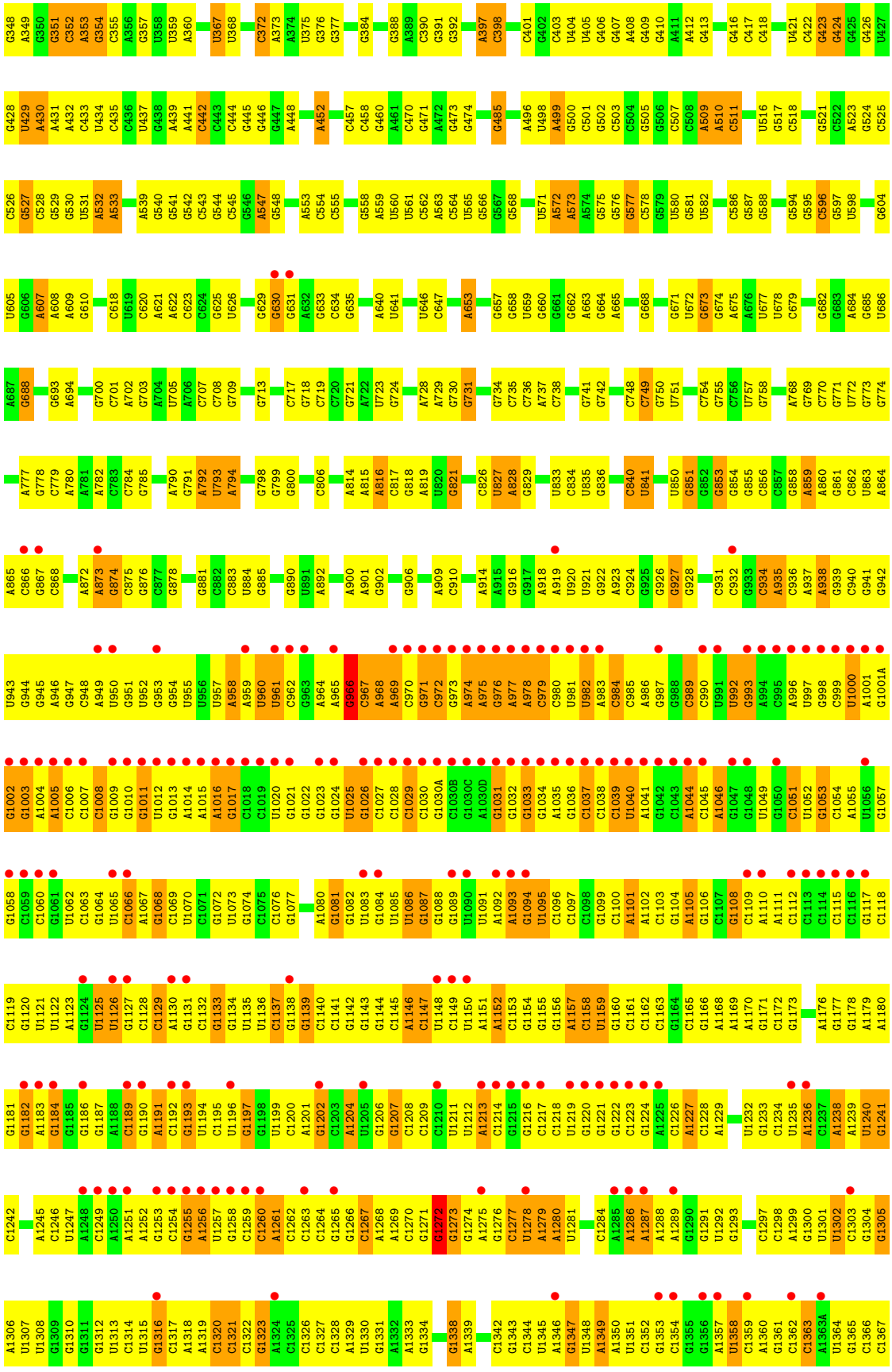


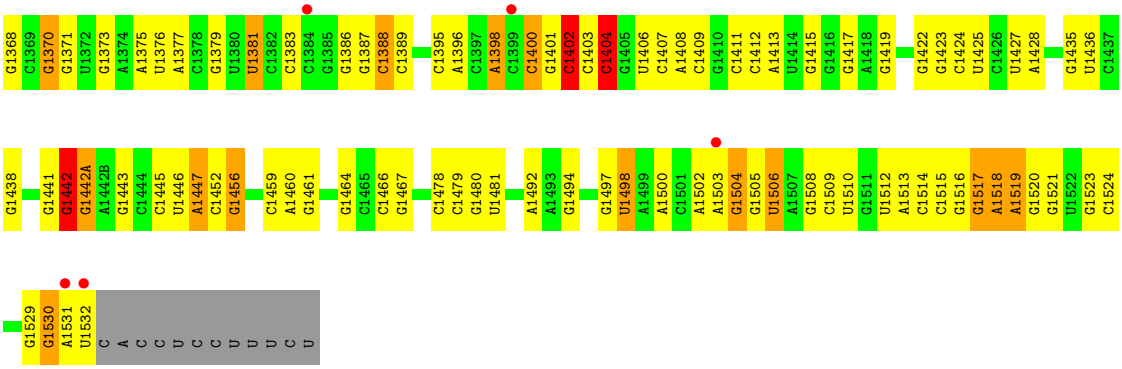


• Molecule 32: 16S Ribosomal RNA

Chain 2a:

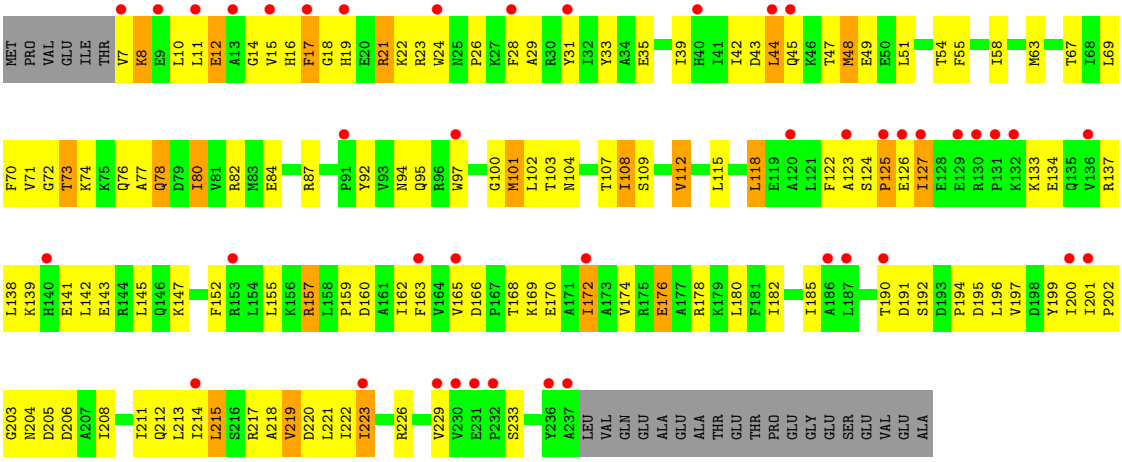






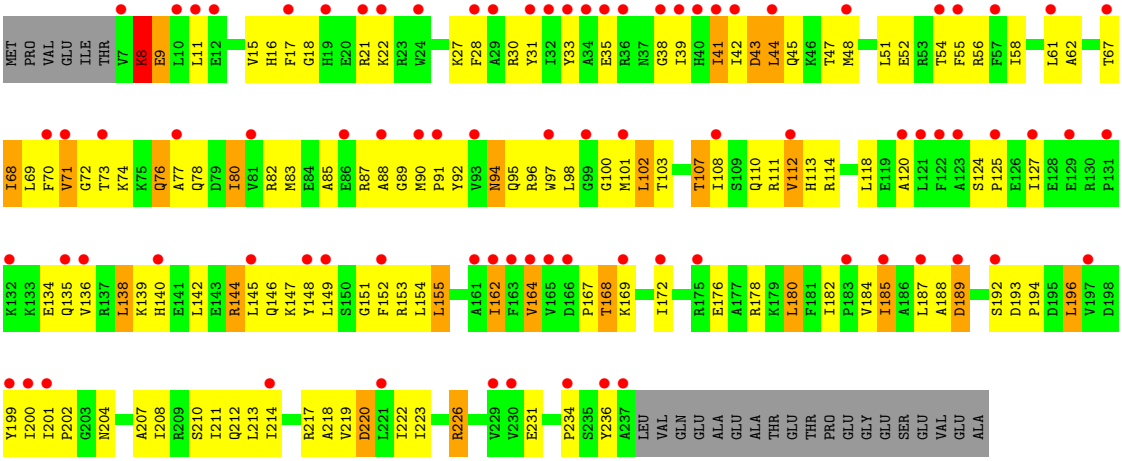
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



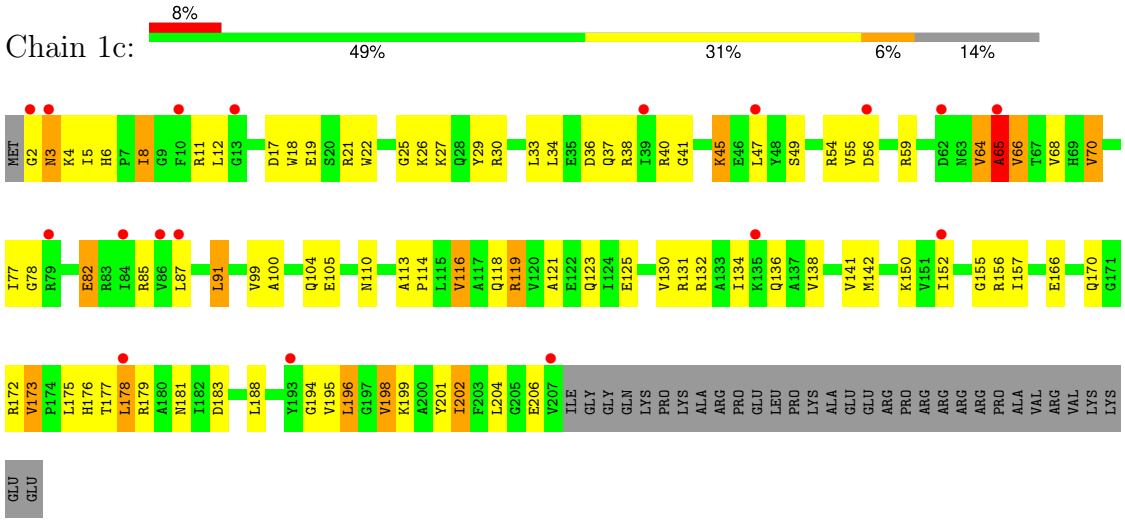
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



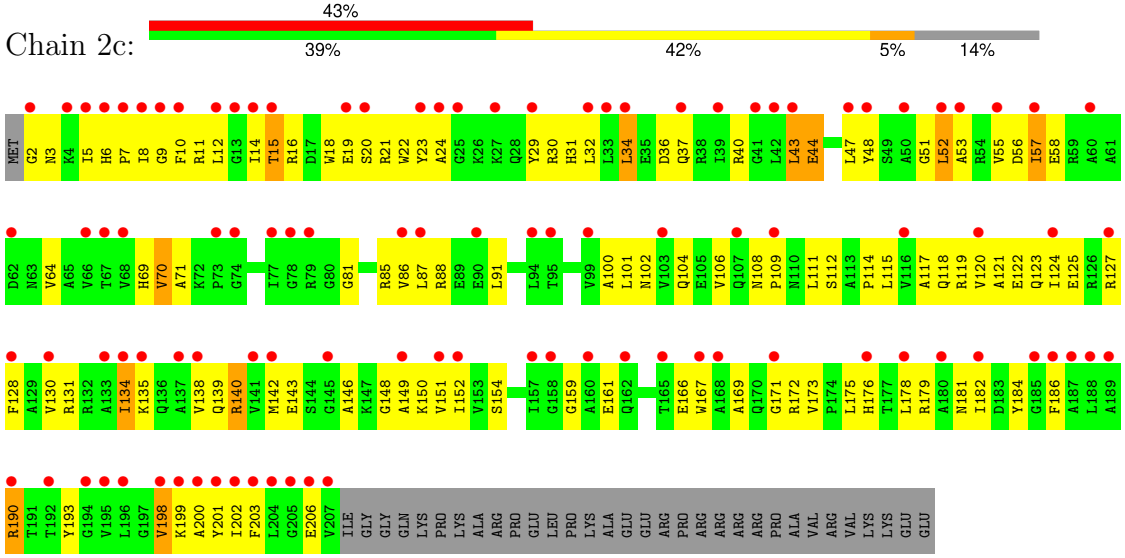
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



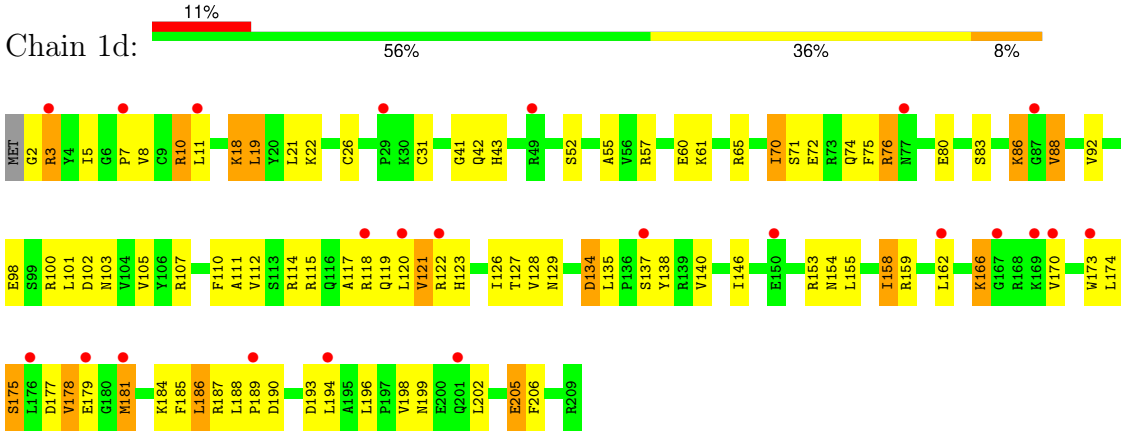
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



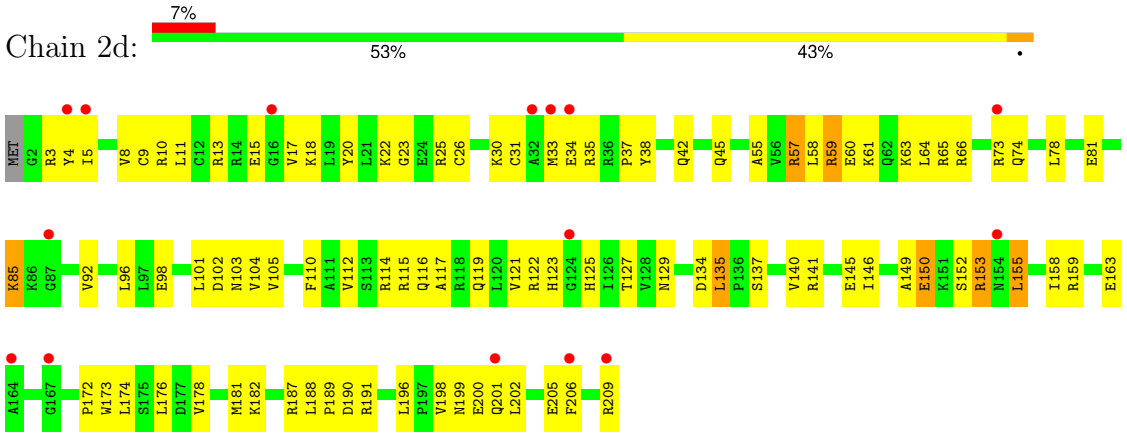
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



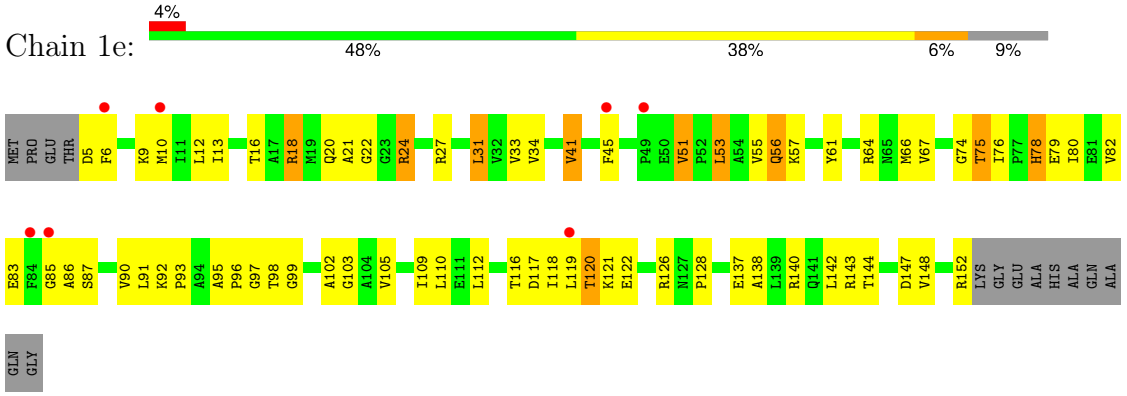
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



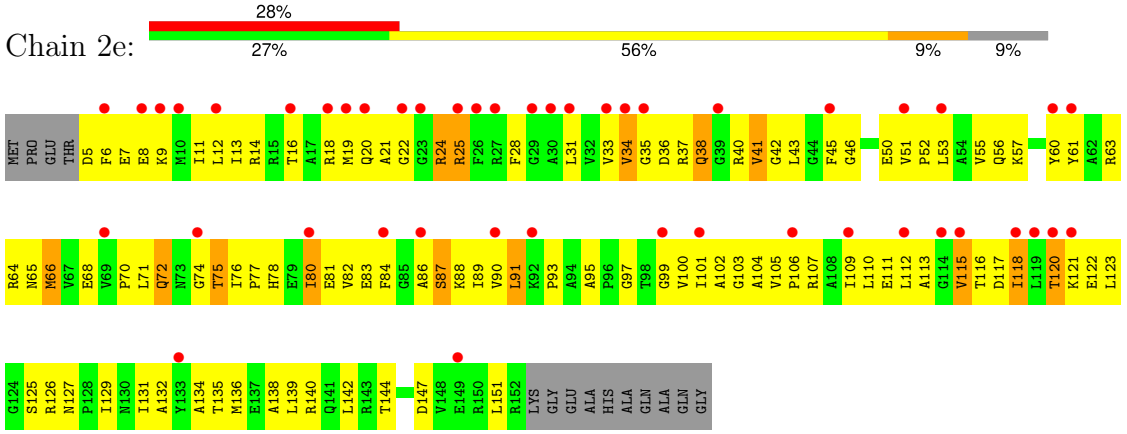
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



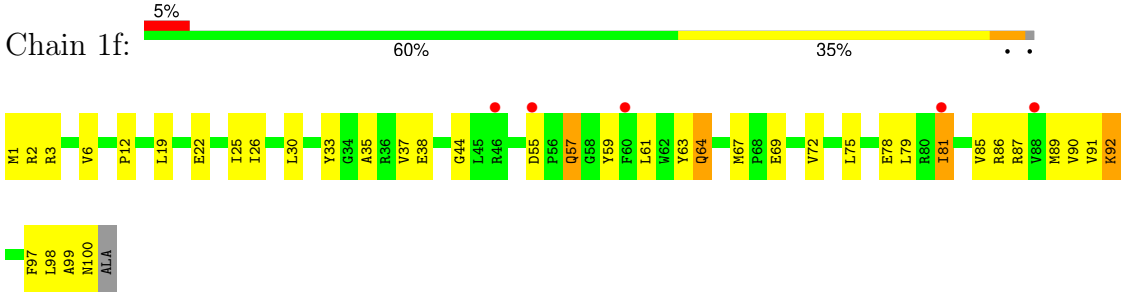
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



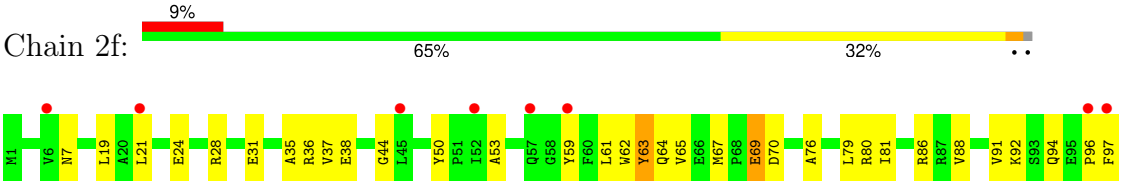
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



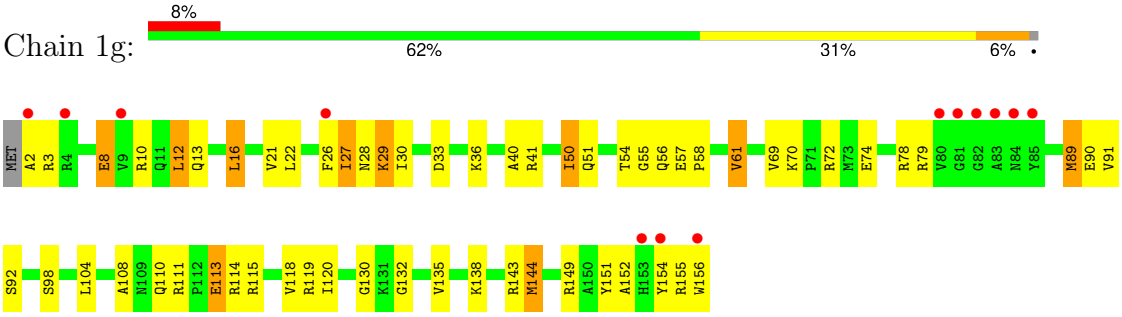
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



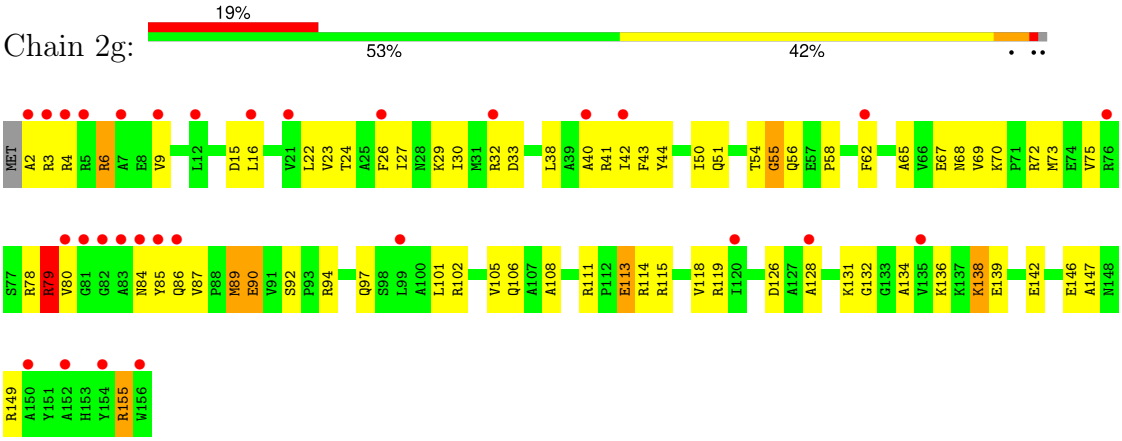
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



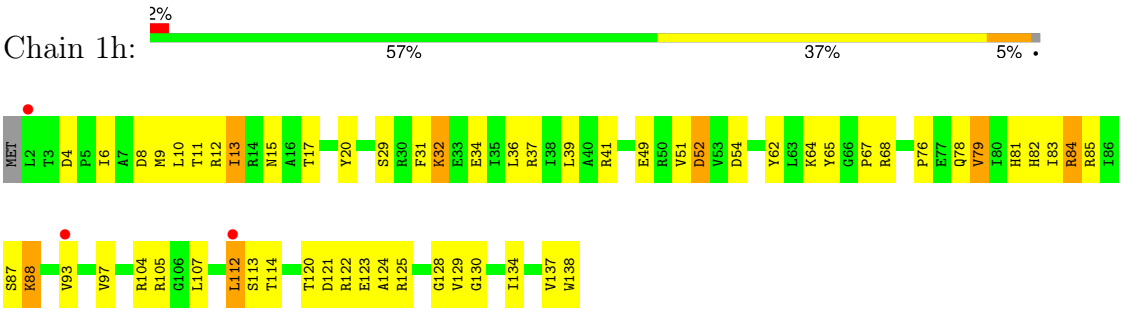
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



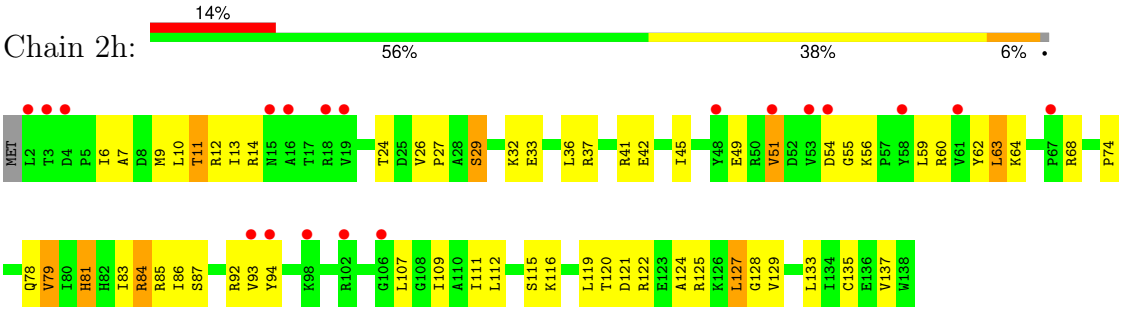
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



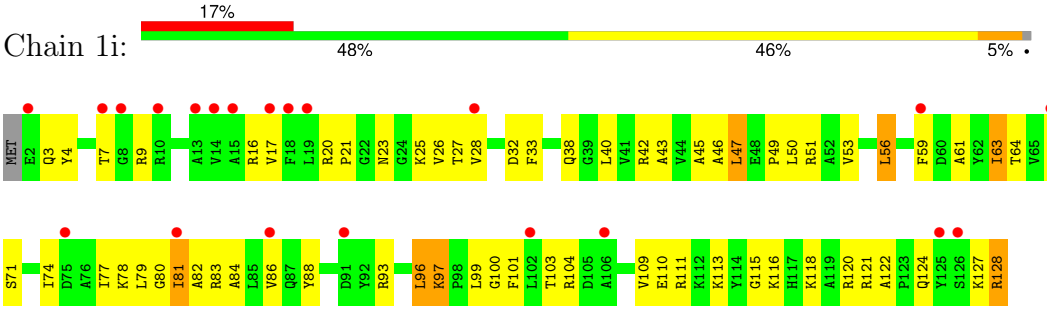
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



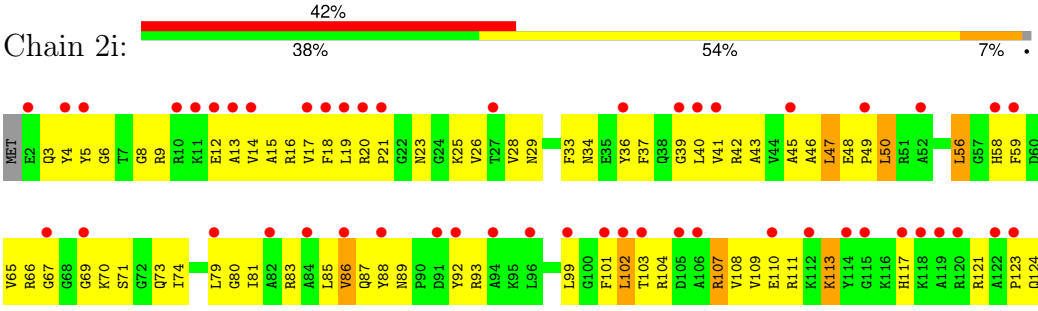
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



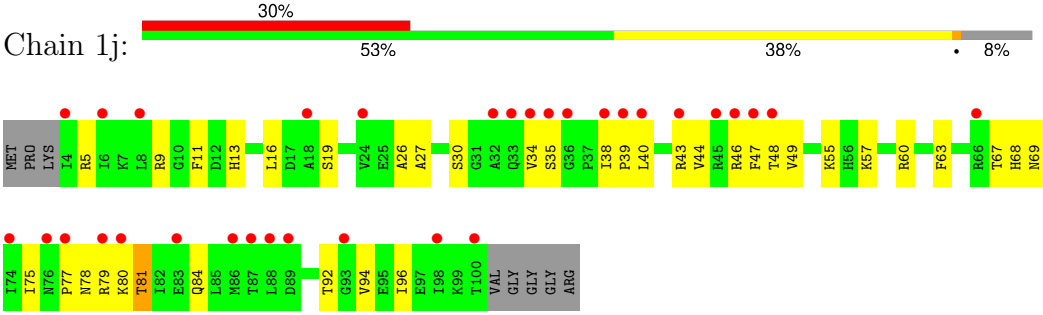
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



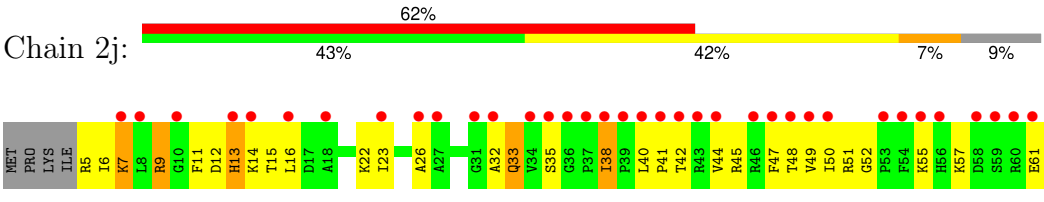
• Molecule 41: 30S ribosomal protein S10

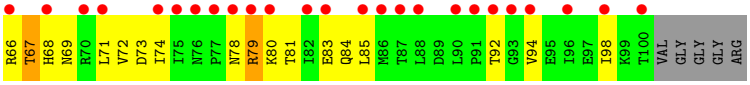
Chain 1j:



• Molecule 41: 30S ribosomal protein S10

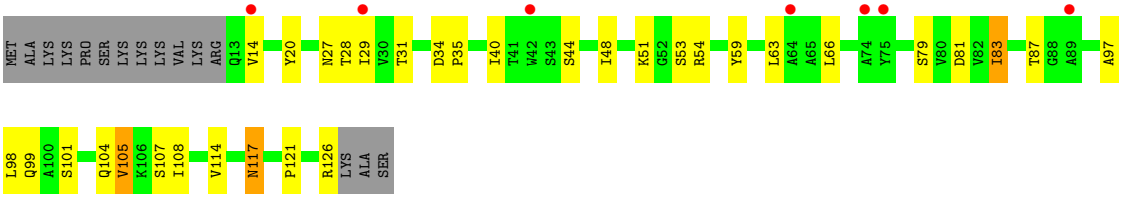
Chain 2j:





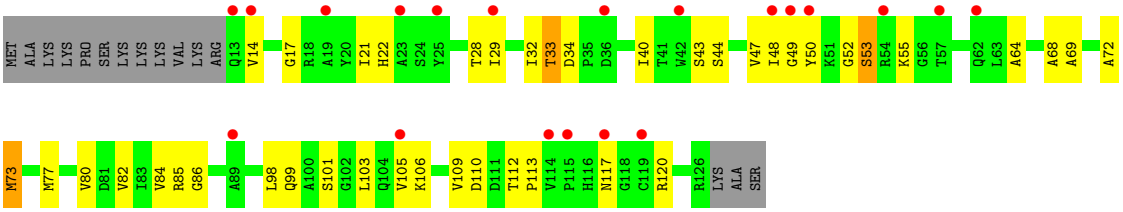
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



• Molecule 42: 30S ribosomal protein S11

Chain 2k:

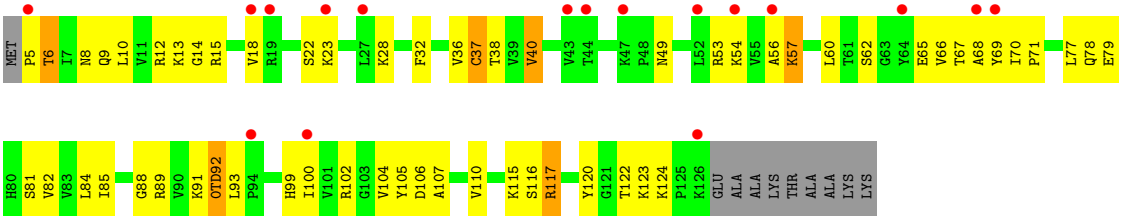


• Molecule 43: 30S ribosomal protein S12

Chain 1l:

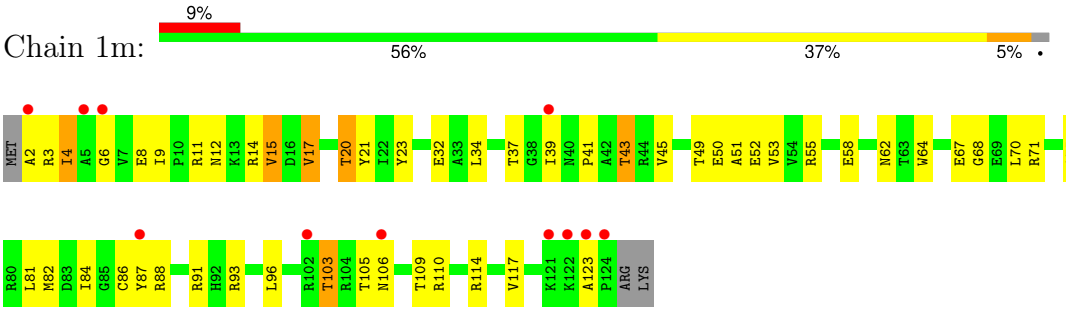
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



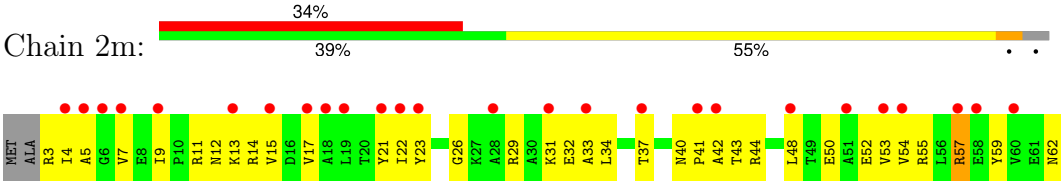
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



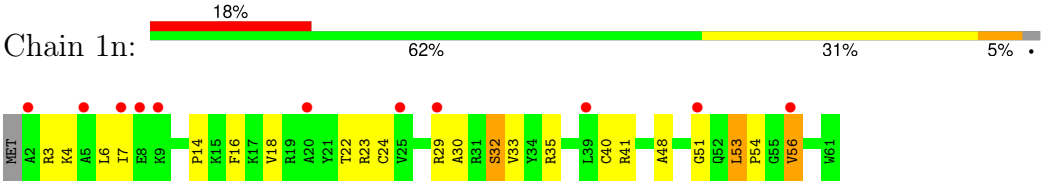
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



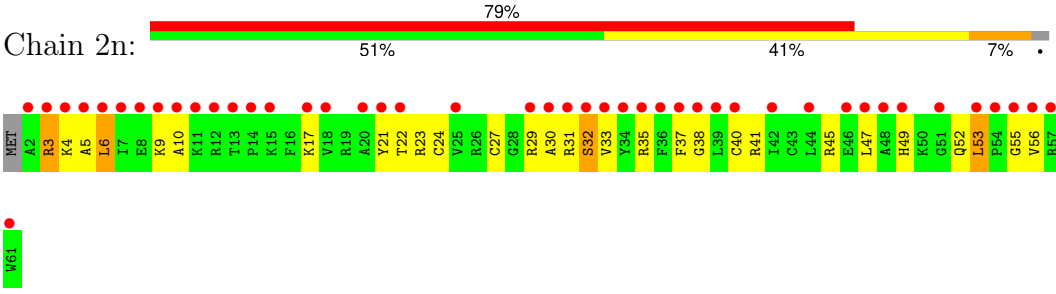
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



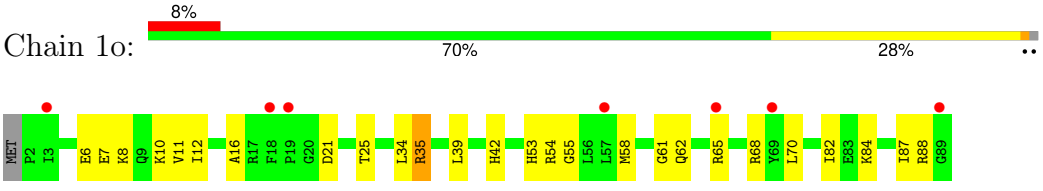
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



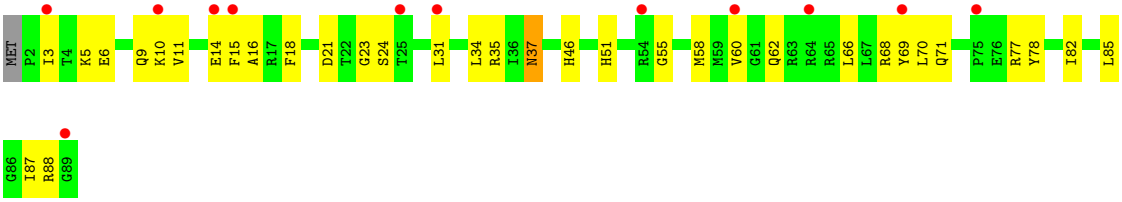
• Molecule 46: 30S ribosomal protein S15

Chain 1o:

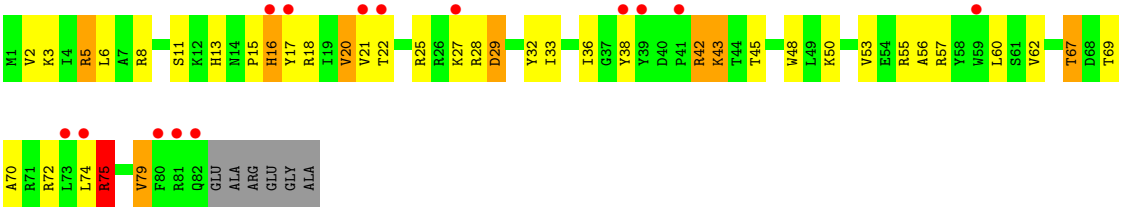


• Molecule 46: 30S ribosomal protein S15

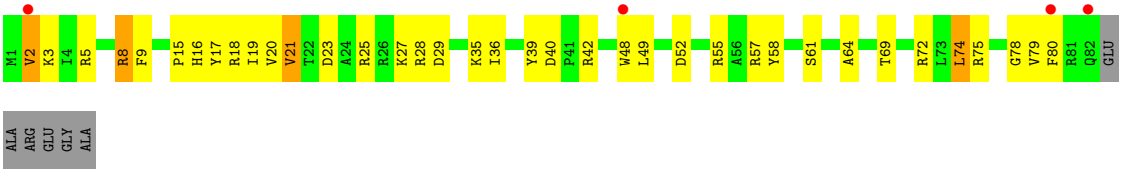
Chain 2o:



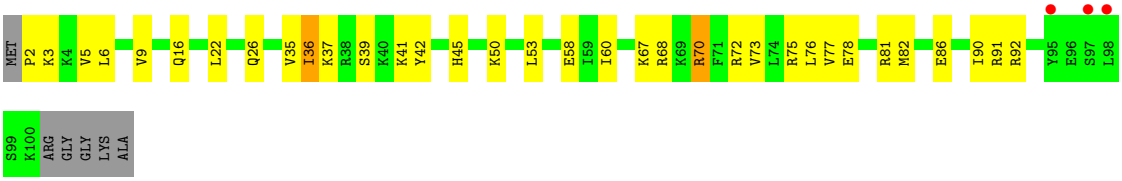
• Molecule 47: 30S ribosomal protein S16



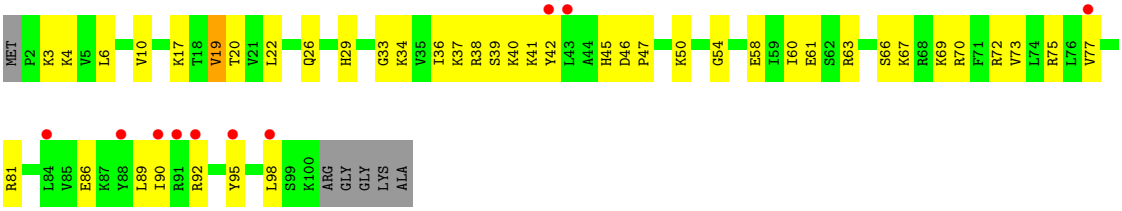
• Molecule 47: 30S ribosomal protein S16



• Molecule 48: 30S ribosomal protein S17

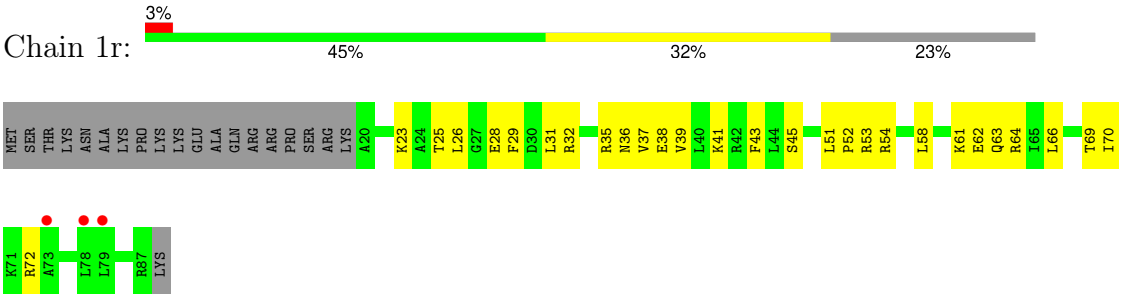


• Molecule 48: 30S ribosomal protein S17



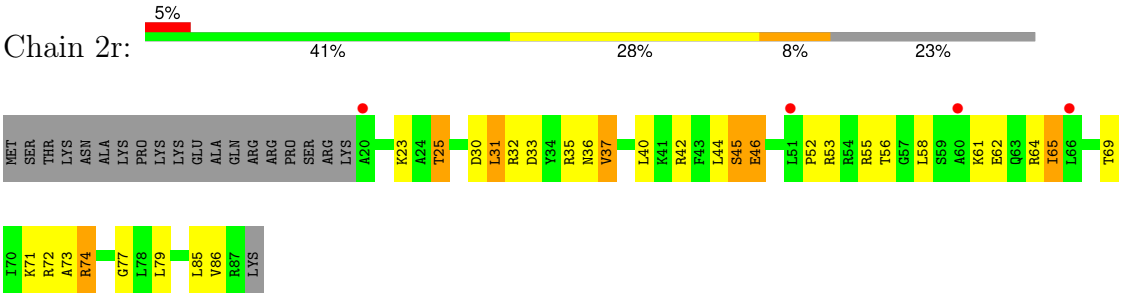
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



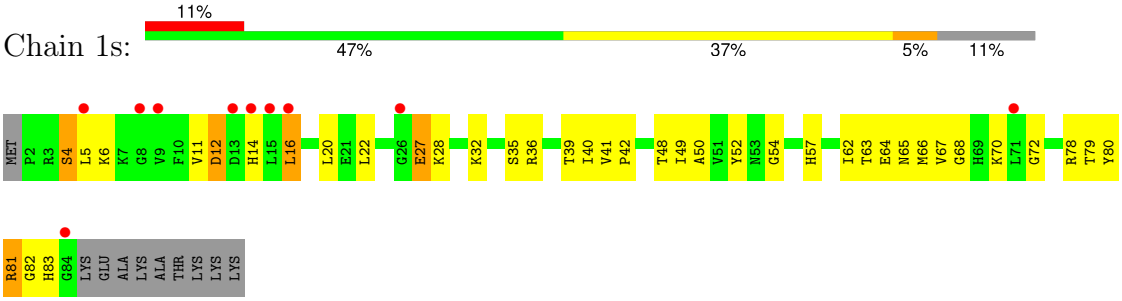
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



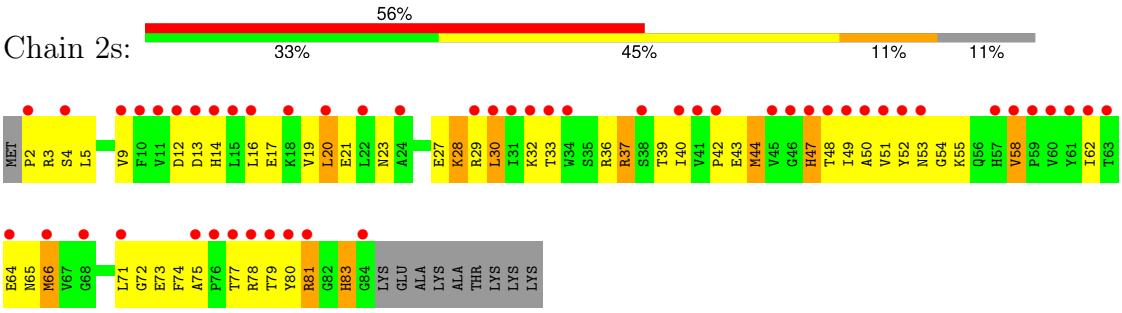
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



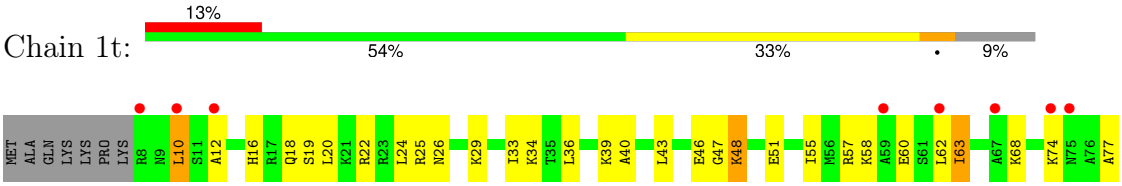
• Molecule 50: 30S ribosomal protein S19

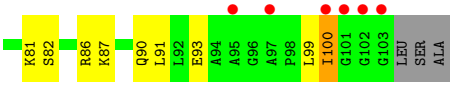
Chain 2s:



• Molecule 51: 30S ribosomal protein S20

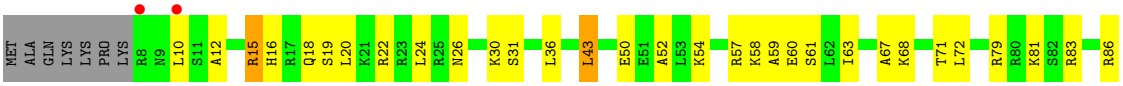
Chain 1t:

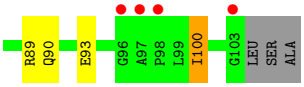




• Molecule 51: 30S ribosomal protein S20

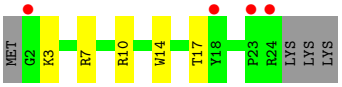
Chain 2t:





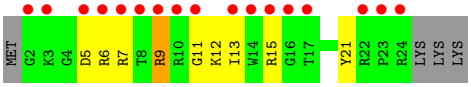
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



• Molecule 52: 30S ribosomal protein Thx

Chain 2u:

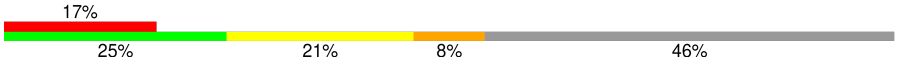


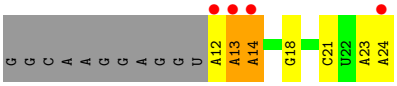
• Molecule 53: MF-mRNA

Chain 1v:

• Molecule 53: MF-mRNA

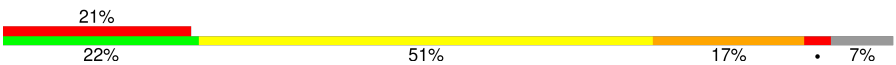
Chain 2v:

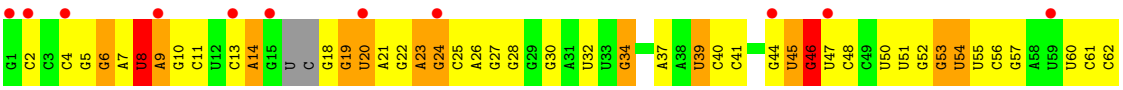


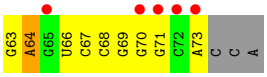


• Molecule 54: A-site and E-site Deacylated tRNAphe

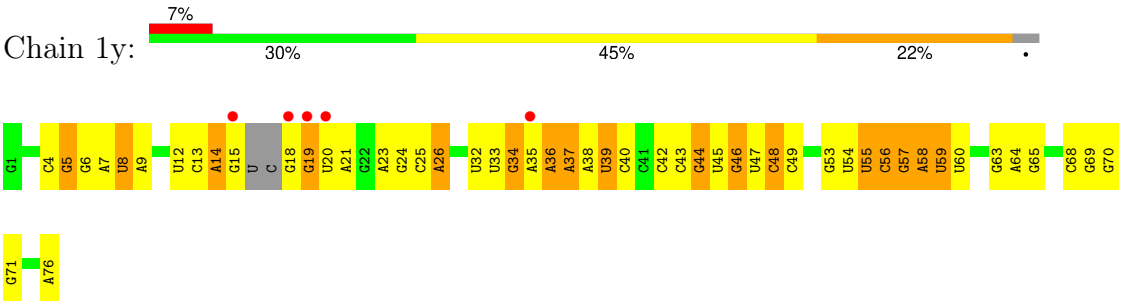
Chain 1w:



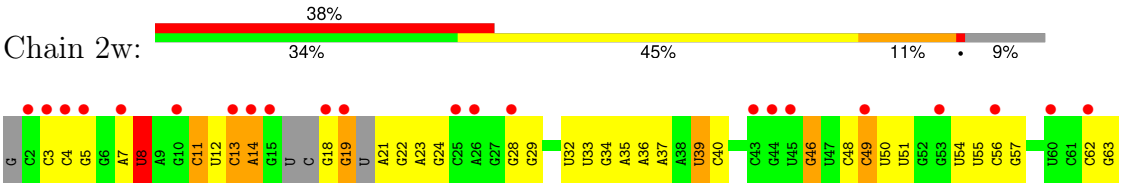


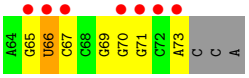


• Molecule 54: A-site and E-site Deacylated tRNAphe

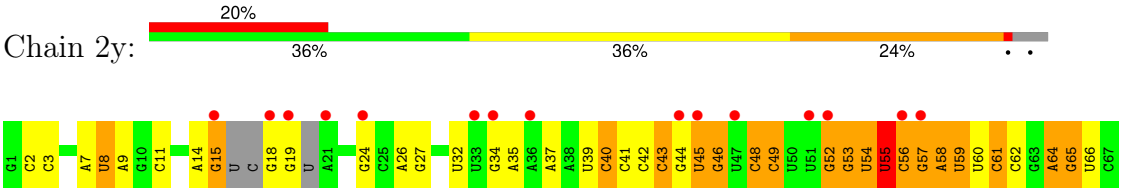


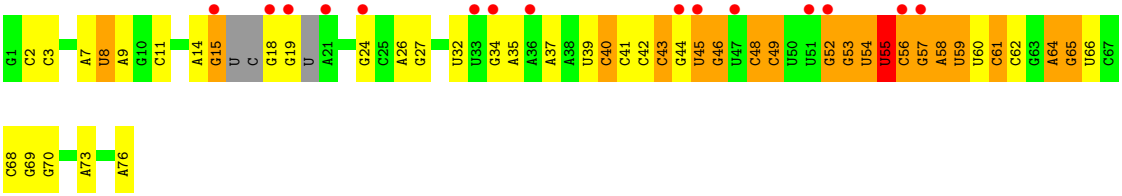
• Molecule 54: A-site and E-site Deacylated tRNAphe



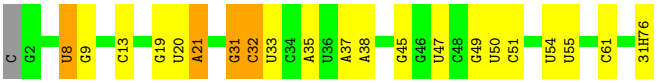


• Molecule 54: A-site and E-site Deacylated tRNAphe

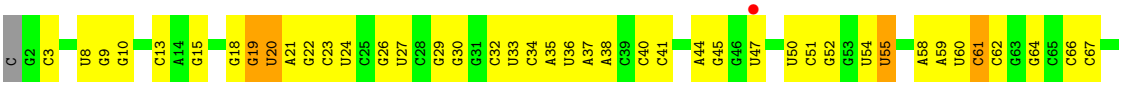




• Molecule 55: P-site Aminoacylated fMet-tRNAmet



• Molecule 55: P-site Aminoacylated fMet-tRNAmet




G70
C75
31H76

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.40Å 449.82Å 621.07Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	147.22 – 2.50 147.22 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.6 (147.22-2.50) 99.6 (147.22-2.50)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.22 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.217 , 0.265 0.219 , 0.267	Depositor DCC
R_{free} test set	99599 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	55.2	Xtriage
Anisotropy	0.213	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 59.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	300040	wwPDB-VP
Average B, all atoms (Å^2)	65.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.57% 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: A1A1F, OMC, 5MU, MIA, 5MC, ZN, MA6, UR3, G7M, 0TD, SF4, 4SU, OMG, 2MG, 31H, 2MA, MG, PSU, 4OC, K, OMU, M2G

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	1A	0.64	0/69011	0.80	18/107720 (0.0%)
1	2A	0.45	1/67295 (0.0%)	0.66	7/105042 (0.0%)
2	1B	0.52	0/2882	0.75	0/4494
2	2B	0.42	0/2879	0.62	0/4487
3	1D	0.61	0/2186	0.80	1/2944 (0.0%)
3	2D	0.47	0/2186	0.68	0/2944
4	1E	0.59	0/1592	0.82	0/2149
4	2E	0.41	0/1592	0.66	0/2149
5	1F	0.59	0/1619	0.80	4/2193 (0.2%)
5	2F	0.43	0/1615	0.66	0/2188
6	1G	0.45	0/1448	0.70	0/1957
6	2G	0.41	0/1453	0.62	0/1963
7	1H	0.47	0/1356	0.67	0/1834
7	2H	0.40	0/1356	0.55	0/1834
8	1I	0.40	0/1112	0.64	0/1514
8	2I	0.37	0/1079	0.60	0/1475
9	1N	0.62	0/1144	0.78	0/1543
9	2N	0.41	0/1144	0.60	0/1543
10	1O	0.58	0/943	0.73	0/1269
10	2O	0.42	0/943	0.63	0/1269
11	1P	0.63	0/1152	0.86	1/1533 (0.1%)
11	2P	0.44	0/1152	0.71	2/1533 (0.1%)
12	1Q	0.60	0/1143	0.77	0/1527
12	2Q	0.41	0/1143	0.64	2/1527 (0.1%)
13	1R	0.68	0/982	0.88	2/1312 (0.2%)
13	2R	0.42	0/982	0.67	0/1312
14	1S	0.52	0/883	0.77	0/1176
14	2S	0.44	0/880	0.62	0/1172
15	1T	0.55	0/1105	0.75	0/1477
15	2T	0.43	0/1097	0.64	0/1468
16	1U	0.65	0/977	0.85	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.42	0/977	0.62	0/1301
17	1V	0.63	0/782	0.85	1/1049 (0.1%)
17	2V	0.39	0/782	0.60	0/1049
18	1W	0.68	0/897	0.81	0/1205
18	2W	0.48	0/897	0.65	0/1205
19	1X	0.61	0/764	0.82	2/1025 (0.2%)
19	2X	0.44	0/764	0.74	2/1025 (0.2%)
20	1Y	0.54	0/819	0.78	0/1095
20	2Y	0.41	0/819	0.65	0/1095
21	1Z	0.49	0/1267	0.75	1/1717 (0.1%)
21	2Z	0.46	0/1299	0.64	0/1763
22	10	0.63	0/616	0.81	0/821
22	20	0.43	0/628	0.62	0/837
23	11	0.57	0/762	0.78	0/1014
23	21	0.50	0/762	0.67	0/1014
24	12	0.56	0/590	0.71	0/781
24	22	0.40	0/590	0.62	0/781
25	13	0.66	0/474	0.81	0/635
25	23	0.39	0/469	0.60	0/630
26	14	0.45	0/565	0.81	0/761
26	24	0.48	0/545	0.73	0/737
27	15	0.63	0/469	0.84	0/635
27	25	0.46	0/469	0.65	0/635
28	16	0.57	0/460	0.83	0/613
28	26	0.42	0/456	0.64	0/608
29	17	0.69	0/426	0.83	0/561
29	27	0.53	0/426	0.72	0/561
30	18	0.62	0/525	0.82	0/691
30	28	0.40	0/525	0.61	0/691
31	19	0.61	0/310	0.76	0/407
31	29	0.39	0/310	0.64	0/407
32	1a	0.43	1/35795 (0.0%)	0.63	2/55864 (0.0%)
32	2a	0.42	0/35886	0.62	2/56005 (0.0%)
33	1b	0.46	0/1881	0.79	3/2542 (0.1%)
33	2b	0.50	0/1860	0.71	0/2518
34	1c	0.42	0/1572	0.68	2/2126 (0.1%)
34	2c	0.48	0/1566	0.66	0/2119
35	1d	0.40	0/1685	0.64	1/2262 (0.0%)
35	2d	0.41	0/1704	0.66	1/2284 (0.0%)
36	1e	0.40	0/1145	0.67	1/1543 (0.1%)
36	2e	0.46	0/1149	0.68	0/1548
37	1f	0.40	0/823	0.58	0/1115
37	2f	0.40	0/829	0.56	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.38	0/1250	0.59	0/1679
38	2g	0.40	0/1254	0.60	0/1683
39	1h	0.39	0/1108	0.65	0/1494
39	2h	0.38	0/1108	0.63	0/1494
40	1i	0.40	0/1002	0.64	0/1346
40	2i	0.46	0/997	0.62	0/1343
41	1j	0.45	0/722	0.62	0/982
41	2j	0.48	0/727	0.67	0/988
42	1k	0.41	0/844	0.68	0/1145
42	2k	0.39	0/848	0.58	0/1149
43	1l	0.43	0/937	0.69	2/1260 (0.2%)
43	2l	0.42	0/937	0.69	0/1260
44	1m	0.41	0/969	0.63	0/1302
44	2m	0.45	0/961	0.68	0/1291
45	1n	0.40	0/501	0.66	0/664
45	2n	0.48	0/501	0.70	0/664
46	1o	0.41	0/739	0.60	0/985
46	2o	0.37	0/739	0.56	0/985
47	1p	0.41	0/697	0.70	1/939 (0.1%)
47	2p	0.40	0/693	0.69	0/935
48	1q	0.40	0/836	0.63	0/1117
48	2q	0.39	0/836	0.59	0/1117
49	1r	0.41	0/560	0.65	0/746
49	2r	0.37	0/560	0.59	0/746
50	1s	0.36	0/667	0.66	0/900
50	2s	0.52	0/661	0.77	0/893
51	1t	0.41	0/730	0.63	0/965
51	2t	0.41	0/729	0.64	0/965
52	1u	0.38	0/203	0.58	0/266
52	2u	0.44	0/203	0.63	0/266
53	1v	0.47	0/310	0.51	0/480
53	2v	0.45	0/310	0.52	0/480
54	1w	0.53	2/1537 (0.1%)	0.60	0/2390
54	1y	0.48	1/1606 (0.1%)	0.57	0/2497
54	2w	0.60	2/1487 (0.1%)	0.58	0/2311
54	2y	0.53	2/1583 (0.1%)	0.56	0/2459
55	1x	0.50	1/1700 (0.1%)	0.68	0/2650
55	2x	0.44	1/1700 (0.1%)	0.61	0/2650
All	All	0.50	11/316422 (0.0%)	0.69	58/473733 (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
4	2E	0	1
5	2F	0	1
6	1G	0	3
6	2G	0	1
8	2I	0	1
11	1P	0	2
12	1Q	0	1
15	2T	0	1
17	1V	0	1
21	1Z	0	2
21	2Z	0	1
26	24	0	1
30	18	0	1
33	1b	0	2
33	2b	0	2
34	1c	0	1
38	2g	0	1
40	1i	0	1
41	2j	0	1
44	1m	0	1
44	2m	0	1
50	1s	0	1
50	2s	0	1
51	1t	0	1
All	All	0	30

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	8	4SU	O3'-P	6.07	1.62	1.56
55	2x	8	4SU	O3'-P	5.93	1.62	1.56
54	2y	46	G7M	O3'-P	5.82	1.62	1.56
54	1y	46	G7M	O3'-P	5.71	1.61	1.56
54	1w	46	G7M	O3'-P	5.60	1.61	1.56
54	2w	46	G7M	O3'-P	5.49	1.61	1.56
54	2w	8	4SU	O3'-P	5.45	1.61	1.56
1	2A	2552	OMU	O3'-P	5.32	1.61	1.56
55	1x	8	4SU	O3'-P	5.29	1.61	1.56
32	1a	1498	UR3	O3'-P	5.27	1.61	1.56
54	1w	8	4SU	O3'-P	5.07	1.61	1.56

All (58) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1992	G	C2'-C3'-O3'	9.85	124.28	109.50
33	1b	123	ALA	N-CA-C	-8.88	102.54	112.57
1	2A	1992	G	C2'-C3'-O3'	8.23	121.85	109.50
1	1A	2689	U	C2'-C3'-O3'	7.80	121.20	109.50
1	1A	819	A	P-O5'-C5'	6.90	131.25	120.90
1	2A	1653	G	P-O3'-C3'	6.79	130.39	120.20
19	2X	94	GLY	CA-C-N	6.47	133.34	121.70
19	2X	94	GLY	C-N-CA	6.47	133.34	121.70
1	1A	1992	G	P-O3'-C3'	6.43	129.85	120.20
17	1V	82	ARG	NE-CZ-NH1	-6.43	115.07	121.50
33	1b	14	GLY	CA-C-N	-6.41	116.61	123.08
33	1b	14	GLY	C-N-CA	-6.41	116.61	123.08
1	1A	1997	G	O5'-P-OP2	-6.28	89.16	108.00
11	2P	71	VAL	N-CA-C	-6.19	102.15	108.96
1	1A	512	G	O4'-C1'-N9	6.01	117.22	108.20
47	1p	75	ARG	N-CA-C	-5.98	104.45	110.97
34	1c	65	ALA	CA-C-N	5.88	132.54	121.97
34	1c	65	ALA	C-N-CA	5.88	132.54	121.97
5	1F	89	VAL	CA-C-N	-5.85	112.80	123.34
5	1F	89	VAL	C-N-CA	-5.85	112.80	123.34
1	1A	2457	U	O5'-P-OP2	-5.83	90.50	108.00
3	1D	229	VAL	CB-CA-C	-5.77	101.83	111.29
36	1e	103	GLY	CA-C-O	-5.72	115.48	122.75
32	1a	266	G	C2'-C3'-O3'	5.71	118.06	109.50
1	1A	1272	A	O5'-P-OP2	-5.63	91.10	108.00
21	1Z	53	ILE	N-CA-C	5.61	121.01	109.34
13	1R	6	SER	CA-C-N	-5.60	110.44	121.41
13	1R	6	SER	C-N-CA	-5.60	110.44	121.41
32	2a	1272	G	N1-C2-N2	-5.53	99.61	116.20
1	1A	1272	A	O5'-P-OP1	5.50	124.51	108.00
11	1P	30	THR	N-CA-C	-5.49	105.37	113.61
1	2A	1653	G	C4'-C3'-O3'	5.48	117.63	109.40
1	2A	2689	U	P-O3'-C3'	5.48	128.43	120.20
11	2P	71	VAL	CB-CA-C	5.48	116.25	110.88
1	1A	1992	G	O3'-P-O5'	5.45	112.17	104.00
35	1d	166	LYS	N-CA-C	-5.45	104.37	111.02
35	2d	200	GLU	N-CA-C	-5.41	106.38	112.87
1	1A	819	A	O5'-C5'-C4'	5.37	119.55	111.50
1	1A	818	G	O3'-P-O5'	5.32	111.98	104.00
1	1A	226	G	O4'-C1'-N9	5.27	116.11	108.20
1	1A	2689	U	C4'-C3'-O3'	5.27	117.30	109.40
1	1A	2598	A	O5'-P-OP1	-5.25	92.24	108.00
1	2A	752	A	C4'-C3'-O3'	5.24	117.26	109.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	2Q	59	ARG	CA-C-N	5.23	131.53	121.54
12	2Q	59	ARG	C-N-CA	5.23	131.53	121.54
1	1A	195	A	P-O3'-C3'	5.17	127.96	120.20
19	1X	94	GLY	CA-C-N	5.17	131.00	121.70
19	1X	94	GLY	C-N-CA	5.17	131.00	121.70
5	1F	52	LYS	CA-C-N	5.14	130.33	120.97
5	1F	52	LYS	C-N-CA	5.14	130.33	120.97
1	2A	1210	A	C4'-C3'-O3'	5.11	117.06	109.40
32	2a	1442	G	P-O3'-C3'	5.08	125.80	119.70
32	1a	748	C	P-O3'-C3'	5.07	127.80	120.20
1	1A	1687	G	OP1-P-O3'	-5.05	92.86	108.00
1	2A	2689	U	C2'-C3'-O3'	5.02	117.03	109.50
1	1A	669	G	OP1-P-OP2	-5.02	104.54	119.60
43	1l	104	VAL	CA-C-N	5.01	131.11	121.54
43	1l	104	VAL	C-N-CA	5.01	131.11	121.54

There are no chirality outliers.

All (30) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
30	18	13	ARG	Peptide
6	1G	126	ASP	Peptide
6	1G	49	ASP	Peptide
6	1G	95	ARG	Peptide
11	1P	35	HIS	Peptide
11	1P	43	GLY	Peptide
12	1Q	15	GLY	Peptide
17	1V	54	GLY	Peptide
21	1Z	136	PHE	Peptide
21	1Z	29	TYR	Peptide
33	1b	126	GLU	Peptide
33	1b	21	ARG	Peptide
34	1c	65	ALA	Peptide
40	1i	53	VAL	Peptide
44	1m	105	THR	Peptide
50	1s	27	GLU	Peptide
51	1t	99	LEU	Peptide
26	24	47	GLN	Peptide
4	2E	151	TYR	Peptide
5	2F	20	LEU	Peptide
6	2G	95	ARG	Peptide
8	2I	61	ARG	Peptide

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Mol	Chain	Res	Type	Group
15	2T	128	GLU	Peptide
21	2Z	52	SER	Peptide
33	2b	231	GLU	Peptide
33	2b	8	LYS	Peptide
38	2g	79	ARG	Peptide
41	2j	79	ARG	Peptide
44	2m	66	LEU	Peptide
50	2s	66	MET	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	1A	61852	0	31195	762	0
1	2A	60322	0	30426	1034	0
2	1B	2577	0	1305	42	0
2	2B	2575	0	1303	76	0
3	1D	2136	0	2218	50	0
3	2D	2136	0	2218	55	0
4	1E	1559	0	1618	43	0
4	2E	1559	0	1618	52	0
5	1F	1584	0	1625	34	0
5	2F	1580	0	1619	62	0
6	1G	1423	0	1436	55	0
6	2G	1428	0	1438	110	0
7	1H	1330	0	1407	36	0
7	2H	1330	0	1407	51	0
8	1I	1097	0	1140	45	0
8	2I	1064	0	1082	31	0
9	1N	1117	0	1184	19	0
9	2N	1117	0	1184	38	0
10	1O	933	0	996	26	0
10	2O	933	0	996	29	0
11	1P	1135	0	1212	41	0
11	2P	1135	0	1212	51	0
12	1Q	1122	0	1179	22	0
12	2Q	1122	0	1179	41	0
13	1R	968	0	1033	35	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
13	2R	968	0	1033	21	0
14	1S	873	0	927	22	0
14	2S	870	0	923	56	0
15	1T	1091	0	1151	18	0
15	2T	1083	0	1136	27	0
16	1U	959	0	1019	16	0
16	2U	959	0	1019	27	0
17	1V	771	0	830	14	0
17	2V	771	0	830	20	0
18	1W	886	0	940	12	0
18	2W	886	0	940	17	0
19	1X	750	0	814	19	0
19	2X	750	0	814	20	0
20	1Y	806	0	881	23	0
20	2Y	806	0	881	22	0
21	1Z	1240	0	1240	36	0
21	2Z	1271	0	1273	74	0
22	10	608	0	622	13	0
22	20	620	0	636	31	0
23	11	755	0	826	12	0
23	21	755	0	826	22	0
24	12	588	0	643	13	0
24	22	588	0	643	16	0
25	13	469	0	518	6	0
25	23	464	0	514	19	0
26	14	552	0	533	35	0
26	24	532	0	503	37	0
27	15	455	0	465	1	0
27	25	455	0	465	10	0
28	16	453	0	473	9	0
28	26	449	0	469	18	0
29	17	418	0	467	7	0
29	27	418	0	467	12	0
30	18	517	0	582	12	0
30	28	517	0	582	18	0
31	19	307	0	335	4	0
31	29	307	0	335	8	0
32	1a	32246	0	16294	622	0
32	2a	32327	0	16337	872	0
33	1b	1846	0	1867	111	0
33	2b	1825	0	1828	117	0
34	1c	1548	0	1535	63	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
34	2c	1542	0	1517	103	0
35	1d	1655	0	1672	76	0
35	2d	1674	0	1714	75	0
36	1e	1129	0	1185	46	0
36	2e	1133	0	1191	75	0
37	1f	810	0	804	30	0
37	2f	816	0	808	28	0
38	1g	1231	0	1238	46	0
38	2g	1235	0	1249	60	0
39	1h	1088	0	1126	43	0
39	2h	1088	0	1126	43	0
40	1i	983	0	986	52	0
40	2i	978	0	966	85	0
41	1j	709	0	650	36	0
41	2j	714	0	672	47	0
42	1k	829	0	825	17	0
42	2k	833	0	836	27	0
43	1l	932	0	981	20	0
43	2l	932	0	981	36	0
44	1m	958	0	1002	33	0
44	2m	950	0	988	66	0
45	1n	492	0	529	20	0
45	2n	492	0	529	36	0
46	1o	728	0	760	19	0
46	2o	728	0	760	24	0
47	1p	681	0	697	34	0
47	2p	677	0	686	32	0
48	1q	823	0	891	25	0
48	2q	823	0	891	29	0
49	1r	555	0	618	21	0
49	2r	555	0	618	31	0
50	1s	652	0	662	36	0
50	2s	646	0	644	47	0
51	1t	728	0	798	29	0
51	2t	727	0	796	26	0
52	1u	199	0	208	3	0
52	2u	199	0	208	6	0
53	1v	277	0	140	5	0
53	2v	277	0	140	6	0
54	1w	1530	0	785	42	0
54	1y	1585	0	803	35	0
54	2w	1482	0	754	26	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	2y	1565	0	794	35	0
55	1x	1635	0	838	10	0
55	2x	1635	0	839	27	0
56	10	8	0	0	0	0
56	11	5	0	0	0	0
56	12	2	0	0	0	0
56	13	4	0	0	0	0
56	14	1	0	0	0	0
56	15	6	0	0	0	0
56	16	1	0	0	0	0
56	17	5	0	0	0	0
56	18	8	0	0	0	0
56	19	1	0	0	0	0
56	1A	1108	0	0	0	0
56	1B	36	0	0	0	0
56	1D	13	0	0	0	0
56	1E	16	0	0	0	0
56	1F	13	0	0	0	0
56	1G	5	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0
56	1O	6	0	0	0	0
56	1P	6	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	5	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	11	0	0	0	0
56	1V	6	0	0	0	0
56	1W	5	0	0	0	0
56	1X	7	0	0	0	0
56	1Y	3	0	0	0	0
56	1Z	4	0	0	0	0
56	1a	211	0	0	0	0
56	1b	1	0	0	0	0
56	1d	1	0	0	0	0
56	1e	3	0	0	0	0
56	1f	2	0	0	0	0
56	1h	1	0	0	0	0
56	1k	1	0	0	0	0
56	1l	2	0	0	0	0
56	1m	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1n	2	0	0	0	0
56	1t	1	0	0	0	0
56	1v	2	0	0	0	0
56	1w	8	0	0	0	0
56	1x	12	0	0	0	0
56	1y	2	0	0	0	0
56	20	2	0	0	0	0
56	21	3	0	0	0	0
56	23	1	0	0	0	0
56	25	5	0	0	0	0
56	26	1	0	0	0	0
56	27	3	0	0	0	0
56	28	5	0	0	0	0
56	29	1	0	0	0	0
56	2A	873	0	0	0	0
56	2B	20	0	0	0	0
56	2D	6	0	0	0	0
56	2E	10	0	0	0	0
56	2F	6	0	0	0	0
56	2G	1	0	0	0	0
56	2N	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	2	0	0	0	0
56	2Q	4	0	0	0	0
56	2R	2	0	0	0	0
56	2T	3	0	0	0	0
56	2U	1	0	0	0	0
56	2V	2	0	0	0	0
56	2W	3	0	0	0	0
56	2X	2	0	0	0	0
56	2Z	1	0	0	0	0
56	2a	240	0	0	0	0
56	2d	1	0	0	0	0
56	2e	1	0	0	0	0
56	2f	2	0	0	0	0
56	2g	1	0	0	0	0
56	2j	1	0	0	0	0
56	2l	5	0	0	0	0
56	2q	3	0	0	0	0
56	2r	1	0	0	0	0
56	2t	1	0	0	0	0
56	2v	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2w	7	0	0	0	0
56	2x	7	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2A	1	0	0	0	0
58	1A	34	0	0	1	0
58	2A	34	0	0	0	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	0	0
60	2d	8	0	0	2	0
61	10	10	0	0	1	0
61	11	13	0	0	0	0
61	12	4	0	0	0	0
61	13	4	0	0	0	0
61	14	1	0	0	0	0
61	15	6	0	0	0	0
61	16	2	0	0	0	0
61	17	11	0	0	1	0
61	18	10	0	0	0	0
61	1A	2002	0	0	78	0
61	1B	63	0	0	5	0
61	1D	28	0	0	0	0
61	1E	30	0	0	3	0
61	1F	19	0	0	0	0
61	1G	3	0	0	3	0
61	1H	2	0	0	0	0
61	1I	2	0	0	0	0
61	1N	7	0	0	0	0
61	1O	7	0	0	0	0
61	1P	19	0	0	1	0
61	1Q	9	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1R	13	0	0	6	0
61	1S	5	0	0	1	0
61	1T	8	0	0	1	0
61	1U	15	0	0	0	0
61	1V	8	0	0	1	0
61	1W	7	0	0	0	0
61	1X	6	0	0	0	0
61	1Y	2	0	0	1	0
61	1Z	1	0	0	0	0
61	1a	374	0	0	24	0
61	1b	1	0	0	0	0
61	1f	1	0	0	0	0
61	1g	1	0	0	0	0
61	1i	1	0	0	0	0
61	1l	8	0	0	0	0
61	1n	1	0	0	0	0
61	1o	3	0	0	0	0
61	1p	1	0	0	0	0
61	1q	2	0	0	0	0
61	1u	1	0	0	0	0
61	1v	4	0	0	0	0
61	1w	11	0	0	0	0
61	1x	13	0	0	0	0
61	1y	2	0	0	0	0
61	20	4	0	0	0	0
61	21	11	0	0	2	0
61	23	2	0	0	0	0
61	25	1	0	0	0	0
61	27	4	0	0	0	0
61	28	3	0	0	0	0
61	29	1	0	0	0	0
61	2A	1175	0	0	92	0
61	2B	24	0	0	1	0
61	2D	20	0	0	0	0
61	2E	12	0	0	0	0
61	2F	13	0	0	0	0
61	2I	3	0	0	0	0
61	2N	1	0	0	0	0
61	2P	13	0	0	5	0
61	2Q	1	0	0	0	0
61	2R	4	0	0	0	0
61	2T	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	2U	3	0	0	0	0
61	2W	2	0	0	0	0
61	2X	2	0	0	0	0
61	2Z	1	0	0	1	0
61	2a	268	0	0	27	0
61	2c	1	0	0	0	0
61	2d	1	0	0	0	0
61	2e	1	0	0	0	0
61	2j	3	0	0	2	0
61	2l	6	0	0	0	0
61	2o	1	0	0	0	0
61	2p	1	0	0	0	0
61	2q	1	0	0	0	0
61	2r	1	0	0	1	0
61	2t	2	0	0	0	0
61	2v	2	0	0	0	0
61	2w	1	0	0	0	0
61	2x	5	0	0	0	0
61	2y	7	0	0	1	0
All	All	300040	0	196551	6188	0

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 13.

All (6188) 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)
1:1A:1082:U:H3	1:1A:1086:A:N6	1.35	1.23
1:1A:1054:A:N6	1:1A:1105:U:H3	1.46	1.13
1:2A:2711:A:OP2	61:2A:3901:HOH:O	1.79	1.00
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.44	0.98
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.11	0.97
32:1a:1004:A:N6	32:1a:1037:C:N3	2.14	0.96
32:2a:953:G:H5'	32:2a:965:A:H61	1.30	0.96
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.48	0.95
1:1A:1062:G:H1	1:1A:1077:A:H61	1.09	0.95
1:1A:1082:U:O4	1:1A:1086:A:N1	1.99	0.95
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.01	0.95
1:2A:1670:C:OP1	61:2A:3902:HOH:O	1.85	0.95
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.47	0.95
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	1.98	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1669:A:OP2	61:1A:4203:HOH:O	1.84	0.94
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.32	0.94
1:2A:2714:G:OP2	61:2A:3901:HOH:O	1.84	0.94
29:27:24:THR:HG22	29:27:27:GLY:H	1.31	0.94
1:2A:948:G:OP1	61:2A:3903:HOH:O	1.85	0.93
54:1w:26:A:H61	54:1w:44:G:H1	1.16	0.93
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.02	0.92
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.52	0.92
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.34	0.92
1:2A:2592:G:OP1	61:2A:3904:HOH:O	1.88	0.92
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.35	0.92
1:1A:2100:G:H1	1:1A:2189:U:H3	1.08	0.91
1:2A:2807:G:N1	1:2A:2893:G:O6	2.01	0.91
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.48	0.91
1:1A:2099:U:H3	1:1A:2190:G:H1	1.16	0.91
1:1A:847:U:OP2	61:1A:4205:HOH:O	1.90	0.90
1:1A:2447:G:OP2	61:1A:4204:HOH:O	1.89	0.90
32:2a:673:G:H2'	32:2a:674:G:C8	2.07	0.90
1:2A:2143:C:H42	1:2A:2148:G:H1	1.17	0.89
1:2A:2677:G:N3	61:2A:3916:HOH:O	2.04	0.89
32:2a:598:U:O4	61:2a:1902:HOH:O	1.91	0.89
1:1A:773:U:OP1	61:1A:4206:HOH:O	1.90	0.89
32:1a:812:C:N3	61:1a:1909:HOH:O	2.05	0.88
1:2A:2138:C:H42	1:2A:2153:G:H1	1.21	0.88
1:2A:2430:A:OP2	61:2A:3905:HOH:O	1.91	0.88
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.07	0.88
1:1A:1702:G:N7	61:1A:4217:HOH:O	2.07	0.88
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.07	0.88
1:2A:1204:A:H2	1:2A:1241:A:H62	1.22	0.88
1:2A:2712(A):A:OP2	61:2A:3901:HOH:O	1.92	0.88
32:2a:597:G:OP2	61:2a:1902:HOH:O	1.90	0.87
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.08	0.87
1:1A:1069:A:H5'	1:1A:1070:A:H8	1.39	0.87
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.23	0.87
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.07	0.87
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.23	0.86
1:1A:2427:C:OP1	61:1A:4207:HOH:O	1.92	0.86
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.56	0.86
1:2A:963:U:OP2	61:2A:3903:HOH:O	1.93	0.86
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.09	0.86
32:1a:1505:G:OP2	61:1a:1903:HOH:O	1.93	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2255:G:OP2	61:2A:3906:HOH:O	1.93	0.85
36:2e:75:THR:OG1	36:2e:117:ASP:O	1.94	0.85
2:1B:89:G:OP1	61:1B:301:HOH:O	1.92	0.85
42:2k:73:MET:HA	42:2k:77:MET:H	1.41	0.85
1:1A:1054:A:H61	1:1A:1105:U:H3	0.89	0.85
32:2a:266:G:H5"	32:2a:268:C:H41	1.42	0.85
26:14:16:CYS:SG	26:14:17:GLY:N	2.50	0.85
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.11	0.85
41:2j:50:ILE:O	45:2n:41:ARG:NH1	2.10	0.85
32:2a:1086:U:H3	32:2a:1099:G:H22	1.24	0.85
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.08	0.84
1:1A:1065:U:O2	1:1A:1073:A:N6	2.10	0.84
10:1O:110:GLY:HA2	10:1O:112:MET:HE3	1.59	0.84
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.60	0.84
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.58	0.84
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.60	0.84
32:2a:582:U:OP1	46:2o:68:ARG:NH2	2.10	0.84
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.12	0.84
1:1A:1013:C:OP2	61:1A:4209:HOH:O	1.96	0.84
32:1a:1500:A:OP1	61:1a:1904:HOH:O	1.95	0.84
1:1A:1670:C:OP1	61:1A:4208:HOH:O	1.94	0.83
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.10	0.83
19:2X:35:THR:HG22	19:2X:38:GLU:H	1.43	0.83
32:1a:1086:U:H3	32:1a:1099:G:H22	1.24	0.83
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.60	0.83
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.58	0.83
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.59	0.83
1:2A:1973:G:OP1	61:2A:3907:HOH:O	1.97	0.83
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.22	0.83
1:1A:1060:U:H3	1:1A:1088:A:H8	1.24	0.82
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.11	0.82
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.27	0.82
44:1m:49:THR:HG23	44:1m:52:GLU:H	1.43	0.82
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.11	0.82
46:2o:82:ILE:HD12	46:2o:88:ARG:HG3	1.61	0.82
32:2a:944:G:OP1	61:2a:1904:HOH:O	1.97	0.82
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.13	0.82
1:1A:11:G:H2'	1:1A:12:U:H5"	1.61	0.82
32:1a:1355:G:OP1	61:1a:1905:HOH:O	1.98	0.82
40:2i:3:GLN:HG3	40:2i:20:ARG:HE	1.45	0.82
40:2i:5:TYR:H	40:2i:87:GLN:HE22	1.26	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:405:U:O4	35:1d:2:GLY:N	2.13	0.82
1:2A:880:G:N2	1:2A:898:C:O2	2.11	0.82
1:1A:1607:C:O2	61:1A:4210:HOH:O	1.97	0.81
26:24:16:CYS:HA	26:24:33:VAL:HG12	1.60	0.81
29:17:24:THR:HG22	29:17:27:GLY:H	1.44	0.81
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.12	0.81
54:2w:18:G:O2'	54:2w:57:G:N2	2.13	0.81
2:2B:20:C:N4	2:2B:63:G:O6	2.14	0.81
32:2a:975:A:H4'	32:2a:976:G:H5"	1.61	0.81
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.14	0.81
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.13	0.81
32:2a:662:G:H2'	32:2a:663:A:C8	2.16	0.81
1:1A:1332:G:OP1	61:1A:4211:HOH:O	1.98	0.81
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.13	0.81
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.16	0.81
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.14	0.81
32:1a:975:A:H4'	32:1a:976:G:H5"	1.62	0.81
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.28	0.81
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.14	0.81
21:1Z:1:MET:HG2	21:1Z:55:HIS:ND1	1.96	0.81
47:1p:74:LEU:HD23	47:1p:79:VAL:HG21	1.61	0.81
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.13	0.81
54:2y:18:G:N2	54:2y:55:PSU:HN3	1.79	0.81
38:2g:78:ARG:HH21	38:2g:79:ARG:HE	1.30	0.80
1:1A:826:U:OP1	61:1A:4207:HOH:O	1.98	0.80
2:1B:21:G:N7	61:1B:303:HOH:O	2.14	0.80
34:2c:71:ALA:HA	34:2c:106:VAL:HB	1.64	0.80
1:2A:854:G:O6	61:2A:3908:HOH:O	1.99	0.80
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.13	0.80
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.64	0.80
34:2c:47:LEU:HB2	34:2c:52:LEU:HD22	1.63	0.80
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.63	0.80
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.62	0.80
1:2A:962:G:OP1	61:2A:3903:HOH:O	1.99	0.80
1:1A:1670:C:OP2	61:1A:4203:HOH:O	1.98	0.79
1:2A:2145:C:O2'	1:2A:2147:G:N7	2.14	0.79
32:2a:664:G:H22	32:2a:741:G:H1	1.26	0.79
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.16	0.79
15:1T:65:LYS:HE2	15:1T:67:SER:HB2	1.65	0.79
28:16:13:CYS:SG	28:16:47:THR:HG21	2.22	0.79
32:2a:1064:G:O6	32:2a:1191:A:N6	2.14	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:973:G:OP1	41:1j:57:LYS:NZ	2.16	0.79
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.18	0.79
10:2O:48:PRO:HB3	32:2a:1422:G:H5"	1.64	0.79
32:2a:1218:C:OP1	45:2n:9:LYS:NZ	2.14	0.79
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.46	0.79
1:1A:739:G:OP1	61:1A:4212:HOH:O	2.01	0.79
1:1A:1055:G:H1	1:1A:1104:C:H42	1.30	0.79
32:2a:728:A:H2'	32:2a:729:A:C8	2.18	0.78
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.64	0.78
1:1A:1647:G:OP1	61:1A:4213:HOH:O	2.01	0.78
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.15	0.78
32:2a:596:C:OP2	61:2a:1902:HOH:O	2.01	0.78
35:2d:150:GLU:HA	35:2d:153:ARG:HD2	1.62	0.78
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.66	0.78
32:1a:148:G:H2'	32:1a:149:A:H8	1.48	0.78
32:1a:1198:G:OP1	61:1a:1906:HOH:O	2.01	0.78
33:1b:122:PHE:HE2	33:1b:139:LYS:HB2	1.48	0.78
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.15	0.78
32:2a:1347:G:N2	32:2a:1373:G:H2'	1.98	0.78
54:2y:18:G:N2	54:2y:55:PSU:N3	2.30	0.78
32:1a:78:G:O6	32:1a:92:C:N4	2.17	0.78
20:2Y:47:LYS:HB3	20:2Y:61:ILE:HG22	1.66	0.78
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.19	0.77
8:2I:62:LYS:HB3	8:2I:133:HIS:CE1	2.18	0.77
1:1A:2763:G:OP2	61:1A:4214:HOH:O	2.02	0.77
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.67	0.77
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.48	0.77
1:2A:1169:G:H1	1:2A:1180:C:H42	1.33	0.77
1:1A:2821:A:OP2	61:1R:301:HOH:O	2.02	0.77
32:1a:945:G:OP1	61:1a:1907:HOH:O	2.02	0.77
21:2Z:53:ILE:HA	21:2Z:71:VAL:HG23	1.65	0.77
34:2c:88:ARG:HA	34:2c:91:LEU:HD13	1.66	0.77
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.18	0.77
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.18	0.77
44:2m:78:ILE:HA	44:2m:81:LEU:HD12	1.66	0.77
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.18	0.77
32:1a:664:G:H22	32:1a:741:G:H1	1.31	0.77
32:2a:17:U:H2'	32:2a:18:C:C6	2.19	0.77
40:2i:28:VAL:HG12	40:2i:63:ILE:HB	1.66	0.77
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.49	0.77
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.02	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:662:G:H2'	32:2a:663:A:H8	1.49	0.77
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.18	0.77
1:2A:2142:C:N4	1:2A:2148:G:O6	2.17	0.77
32:2a:148:G:H2'	32:2a:149:A:H8	1.50	0.76
32:1a:892:A:OP2	61:1a:1908:HOH:O	2.03	0.76
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.66	0.76
11:2P:118:GLY:O	11:2P:137:LYS:NZ	2.18	0.76
54:1w:60:U:H5"	54:1w:61:C:H5	1.50	0.76
1:2A:883:G:N1	1:2A:894:C:O2	2.18	0.76
1:2A:1021:A:H62	1:2A:1141:U:H3	1.34	0.76
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.18	0.76
1:2A:811:U:O4	61:2A:3910:HOH:O	2.02	0.76
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.66	0.76
1:2A:2759:G:OP2	61:2A:3915:HOH:O	2.03	0.76
2:2B:41:U:H5	6:2G:70:VAL:H	1.34	0.76
32:2a:446:G:O6	61:2a:1905:HOH:O	2.03	0.76
2:1B:58:A:OP2	61:1B:302:HOH:O	2.03	0.76
1:2A:323:G:HO2'	1:2A:1205:U:H3	1.33	0.76
1:2A:1812:A:OP2	61:2A:3909:HOH:O	2.01	0.76
6:1G:72:ARG:HH12	6:1G:87:PRO:HG3	1.49	0.76
34:2c:7:PRO:O	34:2c:11:ARG:NH1	2.19	0.76
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.19	0.75
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.68	0.75
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.49	0.75
1:2A:1271:G:OP2	61:2A:3914:HOH:O	2.03	0.75
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.50	0.75
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.68	0.75
51:2t:50:GLU:O	51:2t:100:ILE:HD11	1.86	0.75
32:1a:1377:A:HO2'	38:1g:2:ALA:N	1.84	0.75
1:2A:570:G:O6	61:2A:3913:HOH:O	2.03	0.75
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.68	0.75
32:2a:437:U:H5'	35:2d:155:LEU:HD21	1.66	0.75
54:2y:26:A:N1	54:2y:44:G:O6	2.18	0.75
32:1a:1027:C:C2	32:1a:1034:G:N2	2.53	0.75
1:2A:307:G:OP2	61:2A:3912:HOH:O	2.03	0.75
1:2A:878:A:N6	1:2A:899:A:O2'	2.20	0.75
2:2B:76:G:N7	61:2B:301:HOH:O	2.19	0.75
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.50	0.75
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.68	0.75
44:1m:11:ARG:HG3	44:1m:12:ASN:HD22	1.50	0.75
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.49	0.75
38:2g:111:ARG:NH1	38:2g:113:GLU:OE2	2.19	0.75
4:1E:29:GLY:HA3	61:1E:401:HOH:O	1.87	0.75
54:1w:26:A:N6	54:1w:44:G:H1	1.85	0.75
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.20	0.75
32:1a:1499:A:OP2	61:1a:1903:HOH:O	2.05	0.75
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.68	0.75
1:2A:2524:G:O6	61:2A:3917:HOH:O	2.05	0.75
1:2A:2659:G:P	7:2H:158:HIS:HE2	2.09	0.75
32:2a:984:C:H2'	32:2a:985:C:H6	1.52	0.75
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.67	0.75
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.69	0.75
1:2A:2127:G:N1	1:2A:2161:C:C4	2.55	0.75
41:2j:40:LEU:HD12	41:2j:69:ASN:HD22	1.50	0.75
32:1a:1346:A:H5"	40:1i:120:ARG:HH12	1.51	0.74
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.03	0.74
34:1c:131:ARG:HA	34:1c:134:ILE:HD12	1.68	0.74
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.51	0.74
2:2B:28:C:N4	2:2B:56:G:O6	2.14	0.74
1:1A:1017:G:N7	61:1A:4237:HOH:O	2.19	0.74
1:1A:1602:U:O4	61:1A:4215:HOH:O	2.03	0.74
1:2A:1647:G:OP1	61:2A:3914:HOH:O	2.04	0.74
1:2A:1434:A:H61	1:2A:1558:A:H62	1.35	0.74
15:2T:39:ARG:NH2	32:2a:345:C:OP2	2.20	0.74
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.68	0.74
6:1G:45:GLU:OE2	61:1G:301:HOH:O	2.06	0.74
11:1P:29:LYS:HD3	11:1P:30:THR:HG23	1.69	0.74
32:1a:1337:G:N7	61:1a:1919:HOH:O	2.20	0.74
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.69	0.74
21:2Z:105:VAL:N	21:2Z:139:VAL:O	2.20	0.74
1:1A:1453:U:OP1	13:1R:77:ARG:NH1	2.19	0.74
32:1a:165:C:H2'	32:1a:166:G:H8	1.51	0.74
1:2A:1689:A:H62	1:2A:1698:A:H2	1.33	0.74
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.34	0.74
30:28:33:ASN:HA	30:28:36:LYS:HD2	1.70	0.74
11:1P:90:ARG:HG2	11:1P:90:ARG:HH11	1.52	0.74
1:2A:2143:C:N4	1:2A:2148:G:H1	1.85	0.74
32:2a:157:G:H1	32:2a:164:U:H3	1.32	0.74
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.21	0.74
1:2A:2049:G:OP2	61:2A:3918:HOH:O	2.05	0.74
32:2a:1053:G:N2	32:2a:1058:G:O6	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:878:A:H61	1:2A:899:A:H1'	1.53	0.74
35:2d:119:GLN:HG2	35:2d:123:HIS:CD2	2.23	0.74
32:1a:1025:U:O2	32:1a:1036:G:O6	2.05	0.73
1:2A:1025:G:O2'	61:2A:3911:HOH:O	2.02	0.73
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.20	0.73
6:2G:3:LEU:O	6:2G:8:LYS:NZ	2.16	0.73
44:2m:84:ILE:HG13	44:2m:86:CYS:H	1.53	0.73
1:1A:1184:G:H5'	25:13:29:ARG:HH12	1.51	0.73
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.21	0.73
1:1A:2428:G:OP1	61:1A:4207:HOH:O	2.05	0.73
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.88	0.73
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.03	0.73
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.53	0.73
1:2A:822:U:OP2	61:2A:3921:HOH:O	2.06	0.73
1:2A:1253:A:OP1	61:2A:3920:HOH:O	2.06	0.73
1:2A:1693:U:H1'	3:2D:14:ARG:HH21	1.52	0.73
1:2A:1926:U:O2'	1:2A:1928:A:N7	2.20	0.73
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.70	0.73
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.21	0.73
1:2A:789:A:N7	61:2A:3951:HOH:O	2.20	0.73
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.21	0.73
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.70	0.73
33:1b:95:GLN:NE2	33:1b:147:LYS:O	2.22	0.73
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.21	0.73
1:2A:1604:C:OP2	61:2A:3919:HOH:O	2.06	0.73
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.53	0.73
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.70	0.73
1:2A:125:G:O2'	29:27:48:LYS:NZ	2.21	0.73
1:2A:2127:G:C6	1:2A:2161:C:N4	2.56	0.73
1:2A:2268:A:OP1	61:2A:3922:HOH:O	2.07	0.73
18:2W:12:ILE:HD13	18:2W:17:VAL:HG13	1.69	0.73
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.53	0.73
44:2m:34:LEU:HD13	44:2m:41:PRO:HB3	1.68	0.73
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.70	0.73
1:1A:2168:G:N1	1:1A:2171:A:N7	2.37	0.72
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.71	0.72
1:2A:921:G:O6	61:2A:3923:HOH:O	2.07	0.72
32:2a:677:U:H3	32:2a:713:G:H22	1.36	0.72
1:1A:1058:G:N2	1:1A:1081:U:O2	2.22	0.72
44:1m:58:GLU:O	44:1m:62:ASN:ND2	2.21	0.72
1:2A:1568:G:N7	61:2A:3955:HOH:O	2.21	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.37	0.72
1:2A:2646:C:N4	1:2A:2674:G:O6	2.14	0.72
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.54	0.72
36:2e:100:VAL:O	36:2e:107:ARG:NH2	2.21	0.72
4:1E:110:GLY:O	61:1R:301:HOH:O	2.06	0.72
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.08	0.72
32:2a:565:U:OP2	32:2a:566:G:O2'	2.08	0.72
32:2a:1051:C:H2'	32:2a:1052:U:H6	1.55	0.72
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.22	0.72
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.55	0.72
32:1a:533:A:OP1	61:1a:1910:HOH:O	2.07	0.72
33:1b:21:ARG:HB3	33:1b:39:ILE:HG12	1.72	0.72
1:2A:1830:C:OP2	61:2A:3924:HOH:O	2.08	0.72
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.23	0.72
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.71	0.72
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.05	0.72
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.54	0.72
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.23	0.72
39:1h:17:THR:O	39:1h:78:GLN:NE2	2.22	0.72
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.18	0.72
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.36	0.72
1:1A:1082:U:N3	1:1A:1086:A:N6	2.08	0.71
1:1A:2807:G:N1	1:1A:2893:G:O6	2.16	0.71
1:2A:1278:A:OP1	13:2R:36:THR:HG23	1.89	0.71
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.71	0.71
1:1A:120:U:OP2	61:1A:4220:HOH:O	2.09	0.71
28:16:6:ARG:HD3	28:16:24:GLU:OE2	1.90	0.71
32:2a:972:C:O2'	41:2j:55:LYS:O	2.08	0.71
32:2a:1004:A:N6	32:2a:1037:C:O2	2.18	0.71
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.72	0.71
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.35	0.71
40:2i:47:LEU:HB3	40:2i:50:LEU:HD21	1.72	0.71
1:1A:2550:G:OP1	61:1A:4203:HOH:O	2.08	0.71
32:1a:1136:U:H5"	32:1a:1137:C:N3	2.04	0.71
1:2A:1569:A:H5'	3:2D:61:LEU:HD21	1.71	0.71
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.64	0.71
1:2A:851:U:H5'	25:23:49:LYS:HD2	1.72	0.71
1:2A:2143:C:H2'	1:2A:2144:U:O4'	1.90	0.71
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.04	0.71
44:2m:82:MET:HE3	44:2m:93:ARG:HB3	1.70	0.71
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.71	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.23	0.71
1:2A:531:C:OP1	1:2A:561:G:N1	2.24	0.71
7:1H:90:LYS:HD2	7:1H:159:GLU:HG2	1.73	0.71
9:2N:123:TYR:HH	9:2N:130:HIS:HE2	1.34	0.71
32:2a:771:G:N7	61:2a:1922:HOH:O	2.24	0.71
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.73	0.71
1:1A:1494:A:OP1	61:1A:4219:HOH:O	2.08	0.71
36:2e:139:LEU:HA	36:2e:142:LEU:HD12	1.73	0.71
35:1d:187:ARG:NH2	35:1d:193:ASP:OD1	2.24	0.71
1:2A:977:G:N2	1:2A:986:C:O2	2.17	0.71
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.25	0.71
1:2A:2135:A:C8	1:2A:2136:C:H5	2.08	0.70
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.73	0.70
1:1A:387:U:O4	61:1A:4216:HOH:O	2.06	0.70
32:1a:324:G:N7	61:1a:1923:HOH:O	2.23	0.70
26:24:13:ARG:HD3	26:24:23:GLU:HG2	1.73	0.70
53:2v:23:A:H4'	53:2v:24:A:H5'	1.71	0.70
1:2A:2320:A:H1'	1:2A:2321:G:N2	2.07	0.70
33:2b:134:GLU:O	33:2b:138:LEU:HG	1.91	0.70
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.73	0.70
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.14	0.70
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.25	0.70
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.72	0.70
39:1h:83:ILE:HG13	39:1h:137:VAL:HG22	1.73	0.70
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.26	0.70
33:2b:80:ILE:HD12	33:2b:208:ILE:HG23	1.72	0.70
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.24	0.70
13:2R:67:LEU:HD13	13:2R:76:VAL:HG21	1.72	0.70
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.56	0.70
32:1a:692:U:O2'	32:1a:694:A:N7	2.23	0.70
32:1a:1009:G:O6	32:1a:1020:U:O2	2.08	0.70
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.24	0.70
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.25	0.70
32:2a:1347:G:H5"	40:2i:107:ARG:HB3	1.73	0.70
32:2a:148:G:H2'	32:2a:149:A:C8	2.26	0.70
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.08	0.70
34:2c:71:ALA:HB1	34:2c:109:PRO:HB3	1.73	0.70
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.89	0.70
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.74	0.70
6:2G:121:ASN:HD21	6:2G:123:ASN:HB2	1.55	0.70
32:2a:942:G:N2	40:2i:124:GLN:OE1	2.23	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.73	0.70
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.27	0.69
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.24	0.69
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.25	0.69
22:20:38:VAL:HG12	22:20:40:GLN:HG2	1.74	0.69
32:2a:1328:C:O2'	44:2m:29:ARG:NE	2.23	0.69
33:2b:8:LYS:HA	33:2b:217:ARG:HD3	1.74	0.69
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.57	0.69
33:1b:42:ILE:HD12	33:1b:203:GLY:HA2	1.74	0.69
1:2A:131:G:OP1	61:2A:3925:HOH:O	2.10	0.69
32:2a:554:C:O2'	61:2a:1907:HOH:O	2.09	0.69
1:1A:1014:U:OP2	61:1A:4209:HOH:O	2.10	0.69
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.73	0.69
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.58	0.69
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.25	0.69
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.73	0.69
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.25	0.69
49:1r:38:GLU:HA	49:1r:41:LYS:HD3	1.74	0.69
6:2G:49:ASP:C	6:2G:51:ARG:H	2.00	0.69
12:2Q:85:LYS:HD3	22:20:7:LEU:HB2	1.75	0.69
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.73	0.69
4:1E:119:ARG:HD3	4:1E:160:TYR:HB2	1.74	0.69
1:2A:1970:A:OP1	61:2A:3928:HOH:O	2.10	0.69
14:2S:10:ARG:NH2	14:2S:91:PRO:O	2.22	0.69
36:2e:11:ILE:HD11	36:2e:33:VAL:HG12	1.74	0.69
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.75	0.69
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.74	0.69
32:1a:953:G:H5'	32:1a:965:A:H61	1.57	0.69
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.24	0.69
1:2A:958:U:OP2	12:2Q:14:ARG:NE	2.25	0.69
32:2a:840:C:H5"	32:2a:841:U:H5	1.58	0.69
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.55	0.69
41:1j:81:THR:HA	41:1j:84:GLN:HB3	1.74	0.69
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.73	0.69
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.56	0.69
1:2A:2522:U:OP2	61:2A:3927:HOH:O	2.10	0.69
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.73	0.69
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.57	0.69
33:2b:223:ILE:HA	33:2b:226:ARG:HD3	1.75	0.69
44:2m:3:ARG:HH12	44:2m:11:ARG:HH21	1.41	0.69
49:2r:58:LEU:HD22	49:2r:62:GLU:HB3	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.25	0.69
33:1b:100:GLY:O	33:1b:104:ASN:N	2.26	0.69
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.57	0.69
33:2b:114:ARG:O	33:2b:118:LEU:N	2.15	0.69
1:1A:2306:C:O2	61:1G:301:HOH:O	2.11	0.69
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.75	0.69
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.26	0.69
33:1b:12:GLU:O	33:1b:15:VAL:HG22	1.93	0.69
41:2j:5:ARG:N	61:2j:302:HOH:O	2.26	0.69
1:1A:1095:A:H62	1:1A:1097:U:H3	1.40	0.68
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.26	0.68
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.27	0.68
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.73	0.68
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.22	0.68
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.27	0.68
32:1a:28:G:O2'	32:1a:296:U:OP1	2.08	0.68
32:2a:782:A:OP1	61:2a:1908:HOH:O	2.10	0.68
1:2A:2138:C:N4	1:2A:2153:G:H1	1.89	0.68
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.58	0.68
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.75	0.68
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.76	0.68
34:1c:104:GLN:HE21	34:1c:105:GLU:H	1.40	0.68
1:2A:2595:G:N7	61:2A:3979:HOH:O	2.26	0.68
7:2H:8:PRO:HB3	7:2H:51:ARG:HG2	1.75	0.68
41:2j:35:SER:HB3	41:2j:73:ASP:HB2	1.74	0.68
1:1A:1024:G:OP2	61:1A:4218:HOH:O	2.12	0.68
23:11:59:THR:O	23:11:91:LYS:NZ	2.25	0.68
1:2A:1627:G:OP1	61:2A:3932:HOH:O	2.11	0.68
1:2A:2705:A:OP2	61:2A:3930:HOH:O	2.11	0.68
36:2e:144:THR:H	36:2e:147:ASP:HB2	1.57	0.68
1:2A:2781:A:H5"	1:2A:2782:G:H5'	1.75	0.68
33:2b:58:ILE:O	33:2b:62:ALA:N	2.24	0.68
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.76	0.68
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.76	0.68
1:2A:900:A:H2'	1:2A:901:A:H8	1.58	0.68
1:2A:1902:C:OP2	61:2A:3929:HOH:O	2.10	0.68
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.76	0.68
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.29	0.68
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.76	0.68
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.59	0.68
32:1a:392:G:OP1	47:1p:8:ARG:NH2	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:968:G:N7	61:1A:4265:HOH:O	2.26	0.67
1:1A:2136:C:N3	1:1A:2155:G:N2	2.42	0.67
1:1A:2429:G:OP1	61:1A:4207:HOH:O	2.12	0.67
1:2A:1714:G:H1	1:2A:1745(A):C:H42	1.42	0.67
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.93	0.67
32:2a:372:C:O2	61:2a:1906:HOH:O	2.09	0.67
32:2a:1029:C:N4	32:2a:1031:G:O6	2.27	0.67
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.24	0.67
1:1A:2228:G:OP1	3:1D:261:LYS:NZ	2.26	0.67
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.29	0.67
35:1d:107:ARG:HH22	35:1d:194:LEU:HD22	1.60	0.67
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.12	0.67
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.75	0.67
21:2Z:75:ASN:N	21:2Z:85:HIS:O	2.24	0.67
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.59	0.67
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.25	0.67
36:1e:98:THR:HG22	36:1e:99:GLY:H	1.59	0.67
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.58	0.67
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.29	0.67
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.74	0.67
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.26	0.67
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.27	0.67
1:2A:2332:U:O4	61:2A:3931:HOH:O	2.11	0.67
25:23:59:VAL:HG12	25:23:60:GLU:H	1.58	0.67
32:2a:316:G:OP2	32:2a:351:G:O2'	2.12	0.67
39:2h:86:ILE:HG21	39:2h:133:LEU:HD22	1.76	0.67
35:1d:57:ARG:HD3	35:1d:205:GLU:HB3	1.77	0.67
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.76	0.67
1:2A:2042:A:OP1	61:2A:3934:HOH:O	2.13	0.67
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.28	0.67
32:2a:1347:G:C8	40:2i:107:ARG:HB2	2.30	0.67
1:2A:832:G:H5'	11:2P:45:LEU:HD11	1.77	0.67
1:2A:890:A:H2'	1:2A:892:G:H8	1.60	0.67
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.76	0.67
32:2a:1085:U:H3'	32:2a:1086:U:H6	1.57	0.67
32:2a:1345:U:OP2	61:2a:1909:HOH:O	2.12	0.67
1:1A:422:A:OP2	61:1A:4225:HOH:O	2.13	0.67
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.76	0.67
33:1b:15:VAL:HG21	33:1b:213:LEU:HD23	1.75	0.67
48:1q:26:GLN:HG2	48:1q:37:LYS:HG2	1.75	0.67
1:2A:1934:C:N4	1:2A:1964:G:O6	2.16	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:78:ARG:NH2	38:2g:79:ARG:HE	1.93	0.67
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.09	0.67
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.77	0.67
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.26	0.67
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.76	0.67
32:1a:1036:G:H5"	32:1a:1037:C:C5	2.30	0.67
41:1j:16:LEU:HD22	41:1j:68:HIS:HB2	1.77	0.67
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.76	0.67
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.76	0.67
32:2a:48:C:OP1	61:2a:1910:HOH:O	2.13	0.67
32:2a:256:U:OP1	48:2q:17:LYS:NZ	2.26	0.67
32:2a:719:C:H42	49:2r:71:LYS:HE2	1.57	0.67
54:2w:23:A:H2'	54:2w:24:G:C8	2.30	0.67
21:2Z:74:VAL:HB	21:2Z:86:VAL:HG23	1.76	0.67
32:2a:15:G:H2'	32:2a:16:A:H8	1.60	0.67
32:2a:254:G:OP1	48:2q:66:SER:OG	2.12	0.67
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.75	0.66
20:1Y:43:ASN:ND2	20:1Y:65:ALA:HB3	2.10	0.66
32:1a:1004:A:H5"	32:1a:1024:G:H22	1.60	0.66
1:2A:2135:A:OP1	1:2A:2160:G:H1'	1.94	0.66
5:2F:130:ALA:H	5:2F:142:TRP:CD1	2.13	0.66
11:2P:36:LYS:O	61:2P:301:HOH:O	2.12	0.66
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	1.77	0.66
20:2Y:6:HIS:H	20:2Y:6:HIS:CD2	2.14	0.66
21:2Z:150:LEU:H	21:2Z:171:ILE:HD11	1.59	0.66
32:2a:353:A:N7	61:2a:1932:HOH:O	2.28	0.66
32:2a:829:G:N7	61:2a:1935:HOH:O	2.28	0.66
1:1A:579:G:H2'	1:1A:580:C:C6	2.30	0.66
1:1A:668:G:N7	61:1A:4272:HOH:O	2.28	0.66
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.11	0.66
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.77	0.66
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.26	0.66
40:2i:85:LEU:HD12	40:2i:92:TYR:CE2	2.30	0.66
41:2j:32:ALA:HB1	41:2j:33:GLN:HG2	1.77	0.66
1:1A:271(V):G:O6	61:1A:4222:HOH:O	2.12	0.66
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.30	0.66
5:2F:20:LEU:HD23	5:2F:21:ALA:H	1.58	0.66
7:2H:33:LEU:HD21	7:2H:136:ILE:HG13	1.76	0.66
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.60	0.66
48:2q:22:LEU:HD13	48:2q:41:LYS:HG2	1.76	0.66
1:1A:897:C:H1'	54:1w:56:C:H5	1.59	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:56:LEU:H	40:1i:56:LEU:HD12	1.60	0.66
1:2A:1024:G:OP2	61:2A:3911:HOH:O	2.13	0.66
1:1A:1227:G:OP1	61:1A:4224:HOH:O	2.13	0.66
1:1A:2274:A:OP2	61:1A:4223:HOH:O	2.12	0.66
32:1a:116:A:OP1	61:1a:1913:HOH:O	2.13	0.66
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.60	0.66
32:2a:142:G:H2'	32:2a:143:A:C8	2.30	0.66
40:2i:5:TYR:H	40:2i:87:GLN:NE2	1.93	0.66
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.31	0.66
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.78	0.66
1:1A:338:G:OP2	61:1A:4226:HOH:O	2.14	0.66
22:10:46:LYS:NZ	22:10:75:LEU:O	2.26	0.66
1:2A:796:C:H2'	1:2A:797:C:C6	2.30	0.66
32:2a:922:G:N3	32:2a:1398:A:H2	1.94	0.66
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.60	0.66
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.77	0.66
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.78	0.66
32:1a:1302:U:OP2	44:1m:21:TYR:OH	2.12	0.66
1:2A:1017:G:N7	61:2A:3992:HOH:O	2.28	0.66
17:2V:40:LEU:HB2	17:2V:46:VAL:HG23	1.78	0.66
6:1G:72:ARG:NH1	6:1G:87:PRO:HG3	2.09	0.66
21:1Z:150:LEU:HD11	21:1Z:154:ASP:HB2	1.77	0.66
1:2A:184:C:H2'	1:2A:185:U:C6	2.31	0.66
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	1.78	0.66
35:2d:104:VAL:HG11	35:2d:140:VAL:HG21	1.76	0.66
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.31	0.66
14:1S:84:GLN:HA	14:1S:111:GLU:HB2	1.76	0.66
32:1a:574:A:OP2	61:1a:1912:HOH:O	2.13	0.66
32:1a:642:A:N3	39:1h:113:SER:OG	2.29	0.66
32:1a:1149:C:H2'	32:1a:1150:U:H6	1.61	0.66
32:1a:1346:A:H5"	40:1i:120:ARG:NH1	2.10	0.66
1:2A:253:C:O2'	61:2A:3937:HOH:O	2.14	0.66
1:2A:819:A:OP2	1:2A:1187:G:N2	2.24	0.66
8:2I:78:THR:HG22	8:2I:143:SER:HB3	1.78	0.66
42:2k:73:MET:HG2	42:2k:103:LEU:HD21	1.78	0.66
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.28	0.65
26:14:46:GLN:O	26:14:48:ARG:N	2.28	0.65
32:1a:1212:U:H5"	32:1a:1213:A:H5'	1.78	0.65
32:1a:1503:A:N3	53:1v:13:A:N6	2.44	0.65
1:2A:2206:G:H5"	1:2A:2207:G:N7	2.11	0.65
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.61	0.65
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	1.97	0.65
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.79	0.65
32:1a:1239:A:H62	32:1a:1299:A:H62	1.44	0.65
1:2A:1648:C:OP1	61:2A:3914:HOH:O	2.13	0.65
33:2b:218:ALA:O	33:2b:222:ILE:HG23	1.96	0.65
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.31	0.65
1:1A:1026:U:OP1	61:1A:4218:HOH:O	2.12	0.65
32:1a:1129:C:O2	32:1a:1130:A:N6	2.26	0.65
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.30	0.65
1:2A:184:C:H2'	1:2A:185:U:H6	1.61	0.65
2:2B:75:G:H22	21:2Z:73:GLN:NE2	1.94	0.65
24:22:35:LEU:HD12	24:22:53:LEU:HD12	1.77	0.65
32:2a:828:A:H2'	32:2a:829:G:O4'	1.97	0.65
32:2a:949:A:H1'	32:2a:1364:U:H3	1.61	0.65
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.15	0.65
1:2A:731:C:OP1	61:2A:3936:HOH:O	2.14	0.65
1:2A:827:U:OP1	61:2A:3905:HOH:O	2.14	0.65
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.79	0.65
8:2I:79:ILE:N	8:2I:143:SER:O	2.25	0.65
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.60	0.65
35:2d:187:ARG:HH12	35:2d:190:ASP:H	1.44	0.65
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	1.97	0.65
36:1e:33:VAL:HG13	36:1e:112:LEU:HD22	1.77	0.65
32:2a:572:A:OP1	61:2a:1912:HOH:O	2.14	0.65
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.62	0.65
32:1a:1516:G:OP2	61:1a:1914:HOH:O	2.14	0.65
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.77	0.65
5:1F:32:LEU:HD11	5:1F:105:VAL:HG13	1.78	0.65
32:2a:1347:G:H8	40:2i:107:ARG:HB2	1.61	0.65
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.78	0.65
2:2B:13:A:N1	2:2B:69:G:O2'	2.29	0.65
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.60	0.65
1:1A:1356:G:OP2	61:1A:4227:HOH:O	2.14	0.65
7:1H:113:VAL:HG11	7:1H:151:ILE:HD13	1.79	0.65
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.12	0.65
1:1A:630:G:OP1	30:18:47:LYS:NZ	2.28	0.65
1:2A:2136:C:N4	1:2A:2155:G:H1	1.95	0.65
32:2a:117:G:OP2	61:2a:1914:HOH:O	2.14	0.65
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.30	0.64
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:805:G:OP1	61:2A:3939:HOH:O	2.15	0.64
44:2m:31:LYS:HA	44:2m:34:LEU:HD12	1.78	0.64
36:1e:92:LYS:HB3	36:1e:119:LEU:HB2	1.78	0.64
1:2A:2112:G:C2	1:2A:2113:U:H1'	2.32	0.64
11:2P:54:GLY:O	61:2P:302:HOH:O	2.14	0.64
12:2Q:57:HIS:HD2	12:2Q:117:ALA:HB2	1.63	0.64
32:2a:1239:A:H62	32:2a:1299:A:N6	1.94	0.64
1:1A:2794:C:H42	1:1A:2802:G:H22	1.44	0.64
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.09	0.64
1:2A:946:G:OP1	61:2A:3935:HOH:O	2.13	0.64
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.31	0.64
33:2b:21:ARG:HA	33:2b:39:ILE:HG23	1.79	0.64
34:2c:6:HIS:HB3	45:2n:49:HIS:CD2	2.32	0.64
43:2l:117:ARG:NE	43:2l:123:LYS:O	2.23	0.64
54:2y:7:A:N6	54:2y:65:G:H1	1.95	0.64
61:1A:4968:HOH:O	30:18:42:ARG:HD2	1.98	0.64
8:1I:109:ILE:HD12	8:1I:130:TYR:CE2	2.32	0.64
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.12	0.64
33:1b:95:GLN:HE22	33:1b:147:LYS:HG2	1.62	0.64
1:2A:2134:A:N6	1:2A:2157:G:H4'	2.12	0.64
32:2a:1359:C:OP1	45:2n:22:THR:OG1	2.14	0.64
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.63	0.64
36:2e:87:SER:HB3	36:2e:125:SER:O	1.98	0.64
1:1A:9:U:H3	1:1A:2629:A:H2	1.45	0.64
1:1A:2136:C:N4	1:1A:2155:G:N1	2.46	0.64
1:1A:2254:C:OP2	61:1A:4229:HOH:O	2.15	0.64
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.98	0.64
34:1c:59:ARG:HG2	34:1c:64:VAL:HB	1.79	0.64
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.16	0.64
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.30	0.64
4:2E:2:LYS:NZ	4:2E:95:ILE:O	2.28	0.64
44:2m:105:THR:HG22	44:2m:106:ASN:H	1.62	0.64
1:1A:882:G:H1	1:1A:894:C:H42	1.46	0.64
32:1a:1136:U:H5"	32:1a:1137:C:C2	2.33	0.64
33:1b:103:THR:HG23	33:1b:176:GLU:HB3	1.79	0.64
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.32	0.64
32:2a:953:G:H5'	32:2a:965:A:N6	2.08	0.64
32:1a:375:U:OP1	47:1p:69:THR:OG1	2.12	0.64
35:1d:107:ARG:NH2	35:1d:194:LEU:HD22	2.12	0.64
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.79	0.64
1:2A:568:U:O4	61:2A:3926:HOH:O	2.10	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.18	0.64
9:2N:97:ARG:HA	9:2N:100:GLU:HB2	1.80	0.64
21:2Z:102:LEU:HD23	21:2Z:139:VAL:HG21	1.80	0.64
32:2a:1101:A:C8	33:2b:172:ILE:HD13	2.33	0.64
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.31	0.64
35:2d:117:ALA:O	35:2d:121:VAL:HG23	1.98	0.64
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.62	0.64
36:1e:51:VAL:O	36:1e:55:VAL:HG23	1.98	0.64
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.80	0.64
11:2P:35:HIS:O	61:2P:301:HOH:O	2.15	0.64
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.78	0.64
1:2A:217:G:OP2	61:2A:3938:HOH:O	2.15	0.64
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.88	0.64
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.33	0.64
32:1a:1469:G:N7	61:1a:1932:HOH:O	2.30	0.64
37:1f:91:VAL:HG11	49:1r:72:ARG:NH1	2.13	0.64
1:2A:922:U:H2'	1:2A:923:C:C6	2.33	0.64
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.33	0.64
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.30	0.64
39:2h:6:ILE:O	39:2h:10:LEU:HG	1.97	0.64
54:2y:26:A:N1	54:2y:44:G:C6	2.66	0.64
32:2a:1169:A:H2'	32:2a:1170:A:C8	2.33	0.63
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.27	0.63
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.80	0.63
1:1A:1054:A:N6	1:1A:1105:U:N3	2.24	0.63
1:1A:1066:U:H2'	1:1A:1068:G:OP2	1.98	0.63
32:1a:867:G:O2'	32:1a:873:A:N1	2.28	0.63
32:1a:974:A:OP2	45:1n:29:ARG:NH2	2.28	0.63
33:1b:82:ARG:HD2	33:1b:92:TYR:OH	1.98	0.63
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.33	0.63
1:2A:1762:A:N1	61:2A:4012:HOH:O	2.30	0.63
32:2a:126:G:O6	61:2a:1911:HOH:O	2.13	0.63
34:2c:151:VAL:HG23	34:2c:199:LYS:O	1.99	0.63
36:2e:33:VAL:HG13	36:2e:112:LEU:HD22	1.80	0.63
1:1A:1048:A:OP2	1:1A:1109:C:N4	2.30	0.63
1:1A:1053:C:H42	1:1A:1106:G:H1	1.46	0.63
1:1A:2142:C:N3	1:1A:2149:G:O6	2.32	0.63
1:2A:322:A:H5'	1:2A:340:A:H1'	1.80	0.63
6:2G:83:ARG:H	6:2G:86:MET:HE3	1.63	0.63
16:2U:29:SER:OG	16:2U:30:LYS:NZ	2.24	0.63
18:2W:17:VAL:HG11	18:2W:103:ILE:HD11	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:44:THR:O	26:24:46:GLN:N	2.29	0.63
32:2a:920:U:H2'	32:2a:921:U:C6	2.33	0.63
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.31	0.63
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.80	0.63
48:2q:45:HIS:CD2	48:2q:47:PRO:HG3	2.33	0.63
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.80	0.63
54:1w:20:U:OP2	54:1w:20:U:H4'	1.99	0.63
1:2A:2060:A:N3	61:2A:4002:HOH:O	2.30	0.63
1:2A:2161:C:H2'	1:2A:2162:G:O4'	1.98	0.63
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD21	1.81	0.63
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.33	0.63
33:2b:74:LYS:O	33:2b:78:GLN:HG2	1.99	0.63
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	1.96	0.63
46:2o:55:GLY:HA2	46:2o:58:MET:HE2	1.81	0.63
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.13	0.63
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.34	0.63
1:1A:2029:G:O6	61:1A:4228:HOH:O	2.15	0.63
1:1A:2759:G:N7	61:1A:4282:HOH:O	2.31	0.63
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.13	0.63
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.17	0.63
32:1a:382:A:H2'	32:1a:383:A:C8	2.34	0.63
32:2a:1321:C:O2'	50:2s:77:THR:HG21	1.99	0.63
34:2c:117:ALA:HB2	34:2c:200:ALA:HB2	1.79	0.63
38:2g:16:LEU:HD22	40:2i:45:ALA:HB2	1.81	0.63
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.63	0.63
2:1B:33:G:H5'	6:1G:2:PRO:HD3	1.80	0.63
22:10:10:THR:HA	61:10:204:HOH:O	1.99	0.63
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.33	0.63
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.34	0.63
21:2Z:73:GLN:O	21:2Z:87:ASP:N	2.26	0.63
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.32	0.63
32:2a:736:C:OP1	49:2r:72:ARG:NH2	2.31	0.63
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.34	0.63
1:1A:1359:A:N6	1:1A:1372:U:H3	1.96	0.63
3:1D:147:LEU:HD22	3:1D:155:LEU:HD11	1.81	0.63
6:1G:77:ILE:HD12	6:1G:82:LEU:HD12	1.79	0.63
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.22	0.63
21:1Z:1:MET:HE1	21:1Z:133:ILE:HG22	1.80	0.63
32:1a:236:G:H5"	48:1q:42:TYR:OH	1.99	0.63
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.81	0.63
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:33:LYS:HB3	14:2S:34:HIS:CD2	2.34	0.63
32:2a:15:G:H2'	32:2a:16:A:C8	2.33	0.63
32:2a:1216:G:H5"	45:2n:5:ALA:HB2	1.79	0.63
40:2i:85:LEU:HD12	40:2i:92:TYR:HE2	1.64	0.63
1:1A:71:A:N7	19:1X:31:HIS:HE1	1.97	0.63
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.81	0.63
32:1a:79:G:O6	32:1a:90:U:O2	2.16	0.63
32:1a:356:A:N3	32:1a:368:U:O2'	2.32	0.63
1:2A:1968:G:OP1	61:2A:3904:HOH:O	2.15	0.63
1:2A:2238:G:H5"	61:2A:3969:HOH:O	1.99	0.63
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.30	0.63
32:2a:417:C:H2'	32:2a:418:C:H6	1.62	0.63
32:2a:742:G:P	46:2o:35:ARG:HH22	2.21	0.63
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.79	0.63
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.31	0.63
1:1A:1429:G:O2'	1:1A:1430:C:H5'	1.98	0.63
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.34	0.63
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	1.80	0.63
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.64	0.63
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.81	0.63
1:2A:1359:A:H2	1:2A:1372:U:O4	1.82	0.63
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.17	0.63
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.17	0.63
1:2A:2579:C:OP1	61:2A:3940:HOH:O	2.15	0.63
1:2A:2646:C:H2'	1:2A:2647:U:O4'	1.99	0.63
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.27	0.63
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.98	0.63
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.33	0.63
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.33	0.63
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.12	0.63
39:2h:26:VAL:HG23	39:2h:59:LEU:HB2	1.80	0.63
8:1I:101:LEU:HD12	8:1I:107:VAL:HB	1.81	0.62
32:2a:951:G:N3	32:2a:970:C:O2'	2.30	0.62
11:1P:99:LEU:HD12	11:1P:102:ARG:HH11	1.65	0.62
26:14:15:ILE:HG13	26:14:21:VAL:HG22	1.80	0.62
33:1b:178:ARG:HH22	39:1h:68:ARG:HH12	1.45	0.62
37:1f:100:ASN:C	49:1r:28:GLU:HG3	2.23	0.62
42:1k:121:PRO:HG2	42:1k:126:ARG:HG2	1.81	0.62
32:2a:9:G:H2'	32:2a:10:A:C8	2.34	0.62
39:2h:33:GLU:O	39:2h:36:LEU:N	2.33	0.62
50:2s:51:VAL:O	50:2s:58:VAL:N	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:483:A:OP1	20:1Y:50:ARG:NH2	2.30	0.62
1:1A:878:A:H61	1:1A:899:A:C2'	2.13	0.62
1:1A:1062:G:H1	1:1A:1077:A:N6	1.90	0.62
4:1E:47:VAL:HG22	4:1E:84:PHE:O	1.98	0.62
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.80	0.62
32:1a:222:U:H2'	32:1a:223:U:C6	2.35	0.62
32:1a:456:C:H2'	32:1a:457:C:H6	1.64	0.62
35:1d:98:GLU:HG3	35:1d:189:PRO:HG2	1.81	0.62
1:2A:2303:G:O2'	6:2G:132:ASN:ND2	2.29	0.62
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.33	0.62
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.80	0.62
6:2G:27:ASN:HB3	6:2G:30:GLU:HB2	1.81	0.62
32:1a:1095:U:OP1	32:1a:1108:G:N1	2.29	0.62
55:1x:50:U:H2'	55:1x:51:C:C6	2.33	0.62
26:24:46:GLN:HE21	26:24:48:ARG:HD3	1.64	0.62
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.82	0.62
1:2A:804:A:OP1	61:2A:3939:HOH:O	2.16	0.62
8:2I:40:THR:O	8:2I:44:LEU:HB2	1.99	0.62
32:2a:224:C:H2'	32:2a:225:C:H6	1.62	0.62
32:2a:828:A:N6	32:2a:858:G:O2'	2.30	0.62
32:2a:1101:A:H8	33:2b:172:ILE:HD13	1.64	0.62
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.80	0.62
1:1A:2853:C:H2'	1:1A:2854:G:C8	2.34	0.62
8:1I:48:GLU:HB3	8:1I:52:ARG:HH12	1.63	0.62
32:1a:258:G:H2'	32:1a:259:G:H8	1.65	0.62
1:2A:1664:A:H2	10:2O:1:MET:HE1	1.65	0.62
21:2Z:15:PRO:O	21:2Z:19:ARG:HG3	2.00	0.62
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.33	0.62
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.35	0.62
32:1a:974:A:H8	32:1a:974:A:OP1	1.83	0.62
32:1a:1223:C:OP2	50:1s:78:ARG:NH2	2.33	0.62
33:1b:78:GLN:HA	33:1b:78:GLN:HE21	1.62	0.62
43:1l:7:ILE:O	43:1l:11:VAL:HG23	1.99	0.62
50:1s:36:ARG:HB3	50:1s:72:GLY:HA3	1.82	0.62
51:1t:36:LEU:HD12	51:1t:62:LEU:HD12	1.81	0.62
14:2S:25:ARG:NH1	14:2S:42:ASP:OD2	2.31	0.62
32:2a:9:G:H2'	32:2a:10:A:H8	1.64	0.62
32:2a:862:C:H1'	32:2a:874:G:H5"	1.81	0.62
1:1A:1062:G:N2	1:1A:1077:A:N1	2.38	0.62
32:1a:946:A:H2'	32:1a:947:G:C8	2.34	0.62
10:2O:1:MET:HE3	10:2O:32:TYR:CE1	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:5:LEU:HD13	21:2Z:47:VAL:HG21	1.80	0.62
32:2a:310:G:OP2	47:2p:27:LYS:NZ	2.31	0.62
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.33	0.62
32:2a:523:A:H61	43:2l:92:0TD:CG	2.12	0.62
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.18	0.62
3:1D:134:ARG:NH1	3:1D:188:GLU:OE2	2.28	0.62
39:1h:81:HIS:N	39:1h:138:TRP:O	2.32	0.62
1:2A:122:G:N3	61:2A:4015:HOH:O	2.31	0.62
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	2.00	0.62
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.81	0.62
18:2W:60:ASN:C	18:2W:60:ASN:HD22	2.08	0.62
32:2a:814:A:H2'	32:2a:816:A:H5'	1.81	0.62
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.32	0.62
36:2e:8:GLU:HG2	36:2e:34:VAL:HG23	1.82	0.62
36:2e:71:LEU:O	36:2e:72:GLN:NE2	2.31	0.62
40:2i:111:ARG:HG3	40:2i:113:LYS:HE2	1.80	0.62
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.14	0.62
33:1b:134:GLU:O	33:1b:138:LEU:HG	2.00	0.62
1:2A:2127:G:C2	1:2A:2161:C:N3	2.68	0.62
11:2P:121:LYS:HE2	11:2P:123:LEU:HD11	1.82	0.62
32:2a:974:A:O4'	45:2n:31:ARG:HD3	2.00	0.62
34:2c:182:ILE:HG22	34:2c:203:PHE:CD1	2.35	0.62
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.35	0.62
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.00	0.61
1:2A:881:G:C2	1:2A:882:G:H1'	2.34	0.61
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.35	0.61
32:2a:444:C:H2'	32:2a:445:G:H8	1.65	0.61
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.64	0.61
41:2j:78:ASN:O	41:2j:80:LYS:N	2.33	0.61
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.35	0.61
1:1A:2820:A:OP2	13:1R:2:ARG:NH2	2.33	0.61
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.82	0.61
32:1a:1239:A:H62	32:1a:1299:A:N6	1.98	0.61
33:1b:133:LYS:NZ	33:1b:137:ARG:HE	1.97	0.61
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.35	0.61
4:2E:48:GLN:HA	4:2E:80:GLU:HA	1.82	0.61
36:2e:78:HIS:CD2	36:2e:142:LEU:HD23	2.35	0.61
39:2h:24:THR:HG22	39:2h:63:LEU:HD11	1.82	0.61
41:2j:65:LEU:HD13	45:2n:56:VAL:HG22	1.82	0.61
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.65	0.61
1:2A:2375:G:O2'	1:2A:2377:A:N7	2.31	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2439:A:H5'	1:2A:2439:A:C8	2.35	0.61
1:2A:2816:C:O3'	13:2R:99:LYS:NZ	2.33	0.61
32:2a:1014:A:H4'	50:2s:14:HIS:CE1	2.35	0.61
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.33	0.61
32:1a:165:C:H2'	32:1a:166:G:C8	2.34	0.61
32:1a:783:C:OP1	32:1a:1515:C:O2'	2.17	0.61
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.80	0.61
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.64	0.61
6:2G:120:LEU:N	6:2G:179:PRO:O	2.33	0.61
32:2a:646:U:H2'	32:2a:647:C:C6	2.35	0.61
32:2a:1272:G:N2	32:2a:1273:G:C5	2.68	0.61
54:2y:44:G:H2'	54:2y:45:U:H5'	1.82	0.61
1:1A:1173:G:N2	1:1A:1177:A:OP2	2.30	0.61
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.33	0.61
44:1m:3:ARG:HD2	44:1m:9:ILE:HG12	1.82	0.61
1:2A:271(L):U:H5"	8:2I:50:ARG:NH2	2.15	0.61
1:2A:484:C:H2'	1:2A:485:C:H6	1.64	0.61
1:2A:667:U:O2	30:28:2:PRO:HD2	2.00	0.61
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.32	0.61
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.14	0.61
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.65	0.61
1:1A:1058:G:H1	1:1A:1080:C:H42	1.49	0.61
32:1a:179:A:H2'	32:1a:180:U:C6	2.36	0.61
34:1c:21:ARG:NH1	34:1c:56:ASP:OD2	2.33	0.61
38:1g:51:GLN:O	38:1g:55:GLY:HA2	2.00	0.61
40:1i:3:GLN:HG2	40:1i:20:ARG:HE	1.63	0.61
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.16	0.61
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.35	0.61
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.82	0.61
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.82	0.61
32:2a:1014:A:H2'	32:2a:1015:A:C8	2.35	0.61
32:2a:1066:C:H2'	32:2a:1067:A:C8	2.36	0.61
32:2a:1272:G:N2	32:2a:1273:G:N7	2.48	0.61
1:1A:2114:A:H2	1:1A:2168:G:H1'	1.65	0.61
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	1.82	0.61
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.26	0.61
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.34	0.61
31:29:29:ASN:HD22	31:29:32:HIS:CE1	2.19	0.61
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.36	0.61
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.82	0.61
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.17	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.33	0.61
1:2A:981:A:OP2	1:2A:982:C:N4	2.32	0.61
21:2Z:53:ILE:HD11	21:2Z:99:TYR:HB2	1.82	0.61
32:2a:701:C:O2	32:2a:703:G:N1	2.34	0.61
32:2a:1273:G:H5'	32:2a:1274:G:OP2	2.00	0.61
33:2b:54:THR:HG22	33:2b:199:TYR:HB3	1.83	0.61
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.81	0.61
44:2m:94:ARG:HH21	50:2s:81:ARG:HA	1.65	0.61
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.36	0.61
1:1A:2503:2MA:H8	58:1A:4110:A1A1F:O	2.01	0.61
32:1a:625:G:H2'	32:1a:626:U:C6	2.36	0.61
32:1a:1530:G:OP1	61:1a:1915:HOH:O	2.16	0.61
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.83	0.61
1:2A:1300:U:H4'	1:2A:1301:A:H5"	1.83	0.61
4:2E:101:ARG:NH2	4:2E:171:GLU:HB2	2.16	0.61
7:2H:17:VAL:HG22	7:2H:26:VAL:HG22	1.82	0.61
32:2a:67:C:H2'	32:2a:68:G:C8	2.35	0.61
32:2a:376:G:H5"	47:2p:5:ARG:HB2	1.83	0.61
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.36	0.61
48:2q:41:LYS:HZ3	48:2q:92:ARG:HH21	1.49	0.61
1:1A:1359:A:H61	1:1A:1372:U:H3	1.47	0.61
32:1a:169:C:H2'	32:1a:170:U:H6	1.66	0.61
1:2A:2127:G:N2	1:2A:2161:C:C2	2.69	0.61
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.83	0.61
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD21	1.82	0.61
26:24:14:ILE:HB	26:24:22:ILE:HD13	1.83	0.61
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.36	0.61
39:2h:51:VAL:HG11	39:2h:60:ARG:HH11	1.65	0.61
8:1I:48:GLU:HB3	8:1I:52:ARG:NH1	2.16	0.60
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.41	0.60
32:1a:345:C:H5'	32:1a:346:G:C5	2.35	0.60
4:2E:56:PRO:HA	4:2E:59:VAL:HG23	1.83	0.60
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.82	0.60
26:24:34:GLU:CB	44:2m:57:ARG:HH21	2.14	0.60
49:2r:25:THR:HG21	49:2r:42:ARG:HH12	1.66	0.60
4:1E:180:ASN:OD1	61:1E:401:HOH:O	2.16	0.60
32:1a:186:C:H2'	32:1a:187:C:C6	2.36	0.60
1:2A:579:G:H2'	1:2A:580:C:C6	2.36	0.60
6:2G:18:GLU:HG2	6:2G:21:ARG:HH22	1.67	0.60
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.66	0.60
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.36	0.60
34:2c:127:ARG:HH12	34:2c:190:ARG:HH22	1.48	0.60
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.83	0.60
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.16	0.60
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.81	0.60
1:2A:2126:A:N6	1:2A:2163:C:O4'	2.34	0.60
8:2I:69:LYS:HB2	8:2I:138:ILE:HG12	1.82	0.60
25:23:18:ASP:OD1	25:23:18:ASP:N	2.34	0.60
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.16	0.60
32:2a:876:G:O5'	39:2h:14:ARG:NH1	2.33	0.60
32:2a:979:C:OP2	32:2a:980:C:N4	2.29	0.60
32:2a:1327:C:OP2	52:2u:12:LYS:NZ	2.32	0.60
44:2m:40:ASN:HD22	44:2m:41:PRO:HD2	1.65	0.60
47:2p:25:ARG:HH11	47:2p:25:ARG:HG3	1.66	0.60
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.33	0.60
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.34	0.60
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.36	0.60
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.36	0.60
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.01	0.60
41:2j:81:THR:O	41:2j:84:GLN:N	2.30	0.60
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.37	0.60
32:1a:672:U:O2'	32:1a:673:G:O5'	2.19	0.60
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.37	0.60
2:2B:74:U:H2'	2:2B:75:G:H5"	1.84	0.60
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.84	0.60
9:2N:73:THR:HB	9:2N:82:LEU:HD11	1.83	0.60
17:2V:49:THR:O	17:2V:49:THR:OG1	2.19	0.60
32:2a:142:G:H2'	32:2a:143:A:H8	1.66	0.60
32:2a:685:G:C2	32:2a:686:U:C4	2.89	0.60
32:2a:984:C:H2'	32:2a:985:C:C6	2.35	0.60
32:2a:1297:C:O2'	38:2g:114:ARG:NH1	2.34	0.60
32:2a:1442:G:O2'	32:2a:1442(A):G:H5'	2.00	0.60
33:2b:222:ILE:HG13	33:2b:223:ILE:N	2.16	0.60
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.36	0.60
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.83	0.60
1:2A:880:G:C2	1:2A:881:G:C8	2.89	0.60
32:2a:417:C:H2'	32:2a:418:C:C6	2.36	0.60
32:2a:428:G:OP2	35:2d:10:ARG:NH1	2.35	0.60
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.48	0.60
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.01	0.60
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:744:G:OP1	61:1A:4231:HOH:O	2.16	0.60
1:1A:1055:G:H1	1:1A:1104:C:N4	1.99	0.60
1:1A:1495:A:H2'	1:1A:1496:A:C8	2.37	0.60
1:1A:1678:G:H5"	1:1A:1678:G:N3	2.16	0.60
1:1A:2331:G:O2'	22:10:43:THR:HG22	2.01	0.60
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.01	0.60
11:1P:35:HIS:O	61:1P:301:HOH:O	2.17	0.60
54:1w:66:U:H2'	54:1w:67:C:C6	2.37	0.60
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.34	0.60
15:2T:91:ARG:HB2	15:2T:121:ILE:HG13	1.83	0.60
32:2a:297:G:N2	32:2a:300:A:OP2	2.34	0.60
32:2a:509:A:N3	32:2a:543:C:O2'	2.31	0.60
32:2a:1271:G:N2	32:2a:1272:G:N7	2.50	0.60
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.17	0.60
36:2e:100:VAL:HG13	36:2e:118:ILE:HG22	1.83	0.60
37:2f:97:PHE:CD2	49:2r:65:ILE:HD12	2.37	0.60
47:2p:15:PRO:O	47:2p:16:HIS:ND1	2.35	0.60
1:1A:1973:G:OP1	61:1A:4233:HOH:O	2.17	0.60
14:1S:43:GLU:OE2	22:10:49:LYS:NZ	2.34	0.60
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.35	0.60
38:1g:28:ASN:HD21	38:1g:36:LYS:NZ	2.00	0.60
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.36	0.60
32:2a:588:G:OP2	61:2a:1917:HOH:O	2.16	0.60
32:2a:735:C:H2'	32:2a:736:C:H6	1.65	0.60
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	1.84	0.60
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.31	0.60
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.01	0.60
1:1A:1053:C:N4	1:1A:1106:G:H1	1.99	0.60
1:1A:2790:A:H5"	1:1A:2791:C:H5"	1.83	0.60
32:1a:731:G:OP1	32:1a:766:A:H1'	2.02	0.60
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.35	0.60
47:1p:70:ALA:O	47:1p:74:LEU:HD12	2.02	0.60
1:2A:2111:C:N4	1:2A:2144:U:O2'	2.35	0.60
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.57	0.60
1:1A:1176:G:H21	1:1A:1178:C:P	2.25	0.60
20:1Y:11:ASP:HA	20:1Y:26:LYS:HZ2	1.67	0.60
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.01	0.60
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.37	0.60
1:2A:2306:C:N4	6:2G:42:GLY:O	2.35	0.60
32:2a:1053:G:N7	32:2a:1200:C:H5'	2.17	0.60
33:2b:16:HIS:O	33:2b:18:GLY:N	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:78:HIS:HB3	39:2h:107:LEU:HD12	1.83	0.60
36:2e:89:ILE:HG12	36:2e:135:THR:HG22	1.84	0.60
44:2m:54:VAL:HA	44:2m:57:ARG:HH11	1.67	0.60
1:1A:576:U:H2'	1:1A:577:G:C8	2.37	0.59
1:2A:1452:A:OP2	61:2A:3941:HOH:O	2.16	0.59
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	1.84	0.59
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.02	0.59
13:2R:57:ARG:NE	13:2R:59:ASP:OD1	2.28	0.59
32:1a:169:C:H2'	32:1a:170:U:C6	2.38	0.59
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.49	0.59
21:2Z:44:PHE:O	21:2Z:48:PHE:N	2.33	0.59
34:2c:142:MET:HA	34:2c:146:ALA:HB3	1.84	0.59
38:2g:108:ALA:HA	38:2g:111:ARG:HD2	1.85	0.59
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.38	0.59
55:2x:40:C:H2'	55:2x:41:C:H6	1.68	0.59
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.84	0.59
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.67	0.59
32:1a:67:C:H2'	32:1a:68:G:C8	2.37	0.59
54:1w:51:U:H2'	54:1w:52:G:C8	2.38	0.59
1:2A:692:C:O2'	3:2D:38:LYS:NZ	2.36	0.59
1:2A:956:G:H2'	1:2A:957:A:H2'	1.84	0.59
2:2B:22:U:H3	2:2B:61:G:H1	1.49	0.59
8:2I:60:GLU:CB	8:2I:61:ARG:HH21	2.14	0.59
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.02	0.59
28:26:44:ARG:HG2	28:26:44:ARG:HH11	1.68	0.59
32:2a:458:C:H2'	32:2a:460:G:O4'	2.02	0.59
32:2a:1148:U:H1'	40:2i:66:ARG:HH11	1.67	0.59
32:2a:1359:C:H1'	32:2a:1362:C:H41	1.67	0.59
1:1A:1271:G:OP2	61:1A:4213:HOH:O	2.16	0.59
1:1A:1946:U:H2'	1:1A:1947:C:C6	2.38	0.59
8:1I:129:THR:HG22	8:1I:139:GLN:HE22	1.67	0.59
32:1a:353:A:H5'	32:1a:353:A:H8	1.67	0.59
33:1b:74:LYS:HD2	33:1b:166:ASP:HB2	1.84	0.59
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.84	0.59
51:1t:29:LYS:O	51:1t:33:ILE:HG13	2.02	0.59
1:2A:484:C:H2'	1:2A:485:C:C6	2.37	0.59
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.84	0.59
14:2S:67:ARG:NH1	14:2S:107:GLU:OE2	2.34	0.59
41:2j:6:ILE:HB	41:2j:72:VAL:HB	1.85	0.59
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.83	0.59
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:55:G:O2'	1:1A:127:A:N1	2.33	0.59
1:1A:1069:A:H5'	1:1A:1070:A:C8	2.30	0.59
4:1E:12:THR:HG22	4:1E:13:ARG:N	2.18	0.59
35:1d:166:LYS:NZ	35:1d:179:GLU:OE2	2.28	0.59
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.67	0.59
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.36	0.59
1:2A:2052:G:H4'	4:2E:143:ASN:O	2.02	0.59
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	1.84	0.59
25:23:30:ARG:HB2	25:23:33:GLN:HB2	1.83	0.59
32:2a:1315:U:H2'	32:2a:1316:G:O4'	2.03	0.59
35:2d:4:TYR:O	35:2d:115:ARG:NH1	2.34	0.59
37:2f:35:ALA:HA	37:2f:67:MET:HB3	1.84	0.59
1:1A:2136:C:N3	1:1A:2155:G:C2	2.71	0.59
32:1a:1086:U:H3	32:1a:1099:G:N2	1.97	0.59
36:1e:90:VAL:O	36:1e:120:THR:HA	2.03	0.59
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.35	0.59
9:2N:104:LYS:HA	9:2N:107:LEU:HD12	1.85	0.59
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.18	0.59
43:2l:88:GLY:O	43:2l:99:HIS:HD2	1.84	0.59
32:1a:507:C:OP2	32:1a:508:C:O2'	2.20	0.59
32:1a:625:G:H2'	32:1a:626:U:H6	1.67	0.59
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.38	0.59
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.38	0.59
37:1f:38:GLU:HB2	37:1f:64:GLN:HG2	1.85	0.59
1:2A:861:A:N3	2:2B:79:C:O2'	2.35	0.59
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	1.86	0.59
9:2N:67:LEU:O	9:2N:88:GLU:HG3	2.01	0.59
32:2a:130:A:O2'	32:2a:131:C:O5'	2.21	0.59
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.02	0.59
34:2c:112:SER:HB3	34:2c:115:LEU:HD22	1.83	0.59
1:1A:1039:G:H1	1:1A:1116:C:H42	1.49	0.59
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.38	0.59
6:1G:67:LYS:HE3	6:1G:68:PRO:O	2.03	0.59
25:13:16:PRO:HB2	25:13:18:ASP:OD1	2.02	0.59
32:1a:60:A:H4'	32:1a:61:G:H5'	1.85	0.59
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.30	0.59
34:1c:155:GLY:HA3	34:1c:196:LEU:HD22	1.85	0.59
32:2a:20:U:H2'	32:2a:21:G:O4'	2.03	0.59
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.27	0.59
32:2a:1381:U:H1'	38:2g:79:ARG:CD	2.33	0.59
36:2e:74:GLY:HA3	36:2e:116:THR:HG22	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.84	0.59
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.68	0.59
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.36	0.59
2:1B:66:A:H61	2:1B:108:U:H2'	1.68	0.59
32:1a:129:U:H5'	48:1q:3:LYS:NZ	2.18	0.59
32:1a:1348:U:H4'	40:1i:120:ARG:HD2	1.83	0.59
38:1g:132:GLY:O	38:1g:135:VAL:HG12	2.02	0.59
40:1i:96:LEU:HD22	40:1i:101:PHE:HD2	1.66	0.59
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.29	0.59
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.37	0.59
2:2B:24:G:N7	2:2B:56:G:H2'	2.18	0.59
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.83	0.59
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.85	0.59
32:2a:939:G:H5'	38:2g:102:ARG:CZ	2.32	0.59
32:2a:954:G:H2'	32:2a:955:U:C6	2.38	0.59
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.18	0.59
38:2g:54:THR:O	38:2g:56:GLN:N	2.33	0.59
1:1A:1637:A:OP1	61:1A:4232:HOH:O	2.16	0.59
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.03	0.59
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.84	0.59
1:2A:36:G:OP1	61:2A:3943:HOH:O	2.17	0.59
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.36	0.59
32:2a:174:C:H2'	32:2a:175:C:H6	1.68	0.59
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.03	0.59
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	2.01	0.59
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.58
42:1k:99:GLN:HG2	42:1k:105:VAL:HG11	1.84	0.58
1:2A:528:A:O2'	1:2A:529:A:H5'	2.02	0.58
21:2Z:74:VAL:HA	21:2Z:86:VAL:HA	1.84	0.58
26:24:16:CYS:SG	26:24:17:GLY:N	2.76	0.58
32:2a:352:C:O2'	32:2a:354:G:OP1	2.15	0.58
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.38	0.58
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.38	0.58
32:2a:1081:G:H5"	36:2e:18:ARG:HD3	1.85	0.58
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.03	0.58
40:2i:9:ARG:HG2	40:2i:14:VAL:HG12	1.85	0.58
46:2o:6:GLU:OE1	46:2o:6:GLU:N	2.34	0.58
1:1A:1508:A:O2'	1:1A:1509:C:H5"	2.04	0.58
1:1A:2154:G:C2	1:1A:2155:G:H1'	2.39	0.58
32:1a:453:A:C5	32:1a:454:C:C4	2.91	0.58
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:133:LYS:HZ2	33:1b:137:ARG:HE	1.51	0.58
39:1h:87:SER:HA	39:1h:93:VAL:HG23	1.83	0.58
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.38	0.58
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.03	0.58
41:2j:44:VAL:HG22	41:2j:66:ARG:HG2	1.85	0.58
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	1.84	0.58
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.86	0.58
32:1a:1414:U:H3	32:1a:1486:G:H1	1.48	0.58
1:2A:222:A:H3'	1:2A:421:U:H5'	1.85	0.58
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.18	0.58
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.21	0.58
12:2Q:26:TYR:O	12:2Q:67:ARG:NH1	2.36	0.58
26:24:12:ALA:HB3	26:24:26:SER:HB3	1.84	0.58
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.04	0.58
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.84	0.58
1:1A:278:A:H2'	1:1A:279:C:C6	2.39	0.58
1:1A:2361:A:OP1	30:18:27:THR:OG1	2.11	0.58
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.39	0.58
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.11	0.58
32:1a:232:G:H1'	32:1a:262:A:N1	2.17	0.58
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.37	0.58
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.38	0.58
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.03	0.58
33:1b:12:GLU:HB2	33:1b:213:LEU:HD21	1.84	0.58
39:1h:81:HIS:ND1	39:1h:138:TRP:OXT	2.35	0.58
41:1j:78:ASN:O	41:1j:80:LYS:N	2.36	0.58
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.68	0.58
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.85	0.58
30:28:48:PHE:H	30:28:48:PHE:HD2	1.50	0.58
31:29:10:ILE:HD12	31:29:32:HIS:CD2	2.37	0.58
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.19	0.58
1:1A:897:C:N3	1:1A:898:C:N4	2.50	0.58
32:1a:376:G:H5"	47:1p:5:ARG:HB3	1.84	0.58
37:1f:61:LEU:HB3	37:1f:63:TYR:HE2	1.69	0.58
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.29	0.58
1:2A:323:G:O2'	1:2A:1205:U:N3	2.30	0.58
1:2A:792:G:O6	61:2A:3933:HOH:O	2.12	0.58
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.38	0.58
1:2A:1811:G:H3'	61:2A:3909:HOH:O	2.02	0.58
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.85	0.58
6:2G:170:ARG:NH1	6:2G:174:GLU:OE2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:43:ASN:ND2	23:21:75:GLU:OE2	2.36	0.58
34:2c:119:ARG:HE	34:2c:140:ARG:CZ	2.16	0.58
39:2h:84:ARG:HH12	39:2h:86:ILE:HD11	1.69	0.58
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.38	0.58
1:1A:483:A:H5"	20:1Y:50:ARG:HE	1.68	0.58
50:1s:27:GLU:N	50:1s:27:GLU:OE1	2.36	0.58
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.39	0.58
1:2A:1183:G:H5"	25:23:30:ARG:NH2	2.18	0.58
11:2P:37:GLY:O	11:2P:40:SER:OG	2.21	0.58
21:2Z:102:LEU:HB3	21:2Z:104:PHE:CE2	2.39	0.58
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.25	0.58
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.39	0.58
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.39	0.58
44:2m:94:ARG:NH2	50:2s:81:ARG:HA	2.17	0.58
55:2x:50:U:H2'	55:2x:51:C:C6	2.39	0.58
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.39	0.58
1:1A:1062:G:O5'	1:1A:1070:A:O2'	2.15	0.58
17:1V:38:LEU:HD23	17:1V:50:PRO:O	2.03	0.58
32:1a:677:U:H3	32:1a:713:G:H22	1.52	0.58
45:1n:24:CYS:SG	45:1n:40:CYS:N	2.70	0.58
1:2A:2287:A:C8	1:2A:2289:G:C8	2.92	0.58
1:2A:2448:A:N6	61:2A:4018:HOH:O	2.32	0.58
7:2H:6:ARG:HH22	7:2H:54:ARG:HH22	1.52	0.58
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.86	0.58
54:2w:23:A:H2'	54:2w:24:G:H8	1.67	0.58
32:1a:560:U:O2'	32:1a:561:U:OP2	2.19	0.58
32:1a:975:A:H4'	32:1a:976:G:C5'	2.34	0.58
1:2A:1843:C:H5'	3:2D:253:GLN:OE1	2.03	0.58
1:2A:2280:G:O2'	1:2A:2388:A:N1	2.29	0.58
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.67	0.58
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.03	0.58
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.86	0.58
32:2a:662:G:O2'	32:2a:836:G:OP1	2.22	0.58
44:2m:29:ARG:HB3	44:2m:64:TRP:CZ3	2.38	0.58
49:2r:31:LEU:HD23	49:2r:31:LEU:H	1.68	0.58
54:2y:15:G:H22	54:2y:48:C:H42	1.52	0.58
1:1A:2128:C:N3	1:1A:2160:G:N2	2.50	0.58
26:14:26:SER:OG	26:14:27:THR:N	2.36	0.58
32:1a:195:A:OP1	51:1t:68:LYS:NZ	2.30	0.58
45:1n:3:ARG:HD2	45:1n:7:ILE:HD11	1.86	0.58
1:2A:2468:G:O2'	1:2A:2481:G:N2	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2849:U:O4	15:2T:23:ARG:NH2	2.33	0.58
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.85	0.58
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.86	0.58
32:2a:328:C:H4'	32:2a:329:A:H5'	1.84	0.58
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.38	0.58
32:2a:1446:U:O4	61:2a:1915:HOH:O	2.14	0.58
37:2f:91:VAL:HG11	49:2r:72:ARG:HH12	1.67	0.58
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.39	0.58
1:1A:2576:G:N7	61:1A:4291:HOH:O	2.33	0.58
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.03	0.58
33:1b:21:ARG:O	33:1b:23:ARG:HG2	2.03	0.58
1:2A:1159:U:H2'	1:2A:1160:G:H8	1.68	0.58
26:24:34:GLU:HB3	44:2m:57:ARG:HH21	1.68	0.58
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.86	0.58
37:2f:69:GLU:CD	37:2f:69:GLU:H	2.10	0.58
1:1A:842:G:N7	61:1A:4290:HOH:O	2.32	0.57
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.87	0.57
11:2P:5:ASP:HA	11:2P:7:ARG:HH11	1.69	0.57
40:2i:3:GLN:HG3	40:2i:20:ARG:NE	2.16	0.57
44:2m:3:ARG:N	44:2m:7:VAL:O	2.37	0.57
54:2y:8:4SU:H1'	54:2y:48:C:H1'	1.85	0.57
1:1A:195:A:OP1	11:1P:46:LYS:NZ	2.37	0.57
1:1A:530:G:N1	1:1A:2023:G:OP1	2.31	0.57
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.26	0.57
8:1I:57:ARG:HB3	8:1I:57:ARG:CZ	2.34	0.57
32:1a:50:A:N1	32:1a:360:A:O2'	2.36	0.57
32:1a:176:C:H2'	32:1a:177:C:H6	1.70	0.57
32:1a:963:G:H5'	61:1a:2070:HOH:O	2.04	0.57
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.36	0.57
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.04	0.57
54:2y:9:A:O2'	54:2y:11:C:N4	2.35	0.57
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.86	0.57
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.40	0.57
44:1m:82:MET:O	44:1m:93:ARG:NH2	2.37	0.57
49:1r:43:PHE:C	49:1r:51:LEU:HD12	2.30	0.57
2:2B:14:U:OP2	2:2B:70:C:O2'	2.17	0.57
2:2B:75:G:O2'	21:2Z:85:HIS:NE2	2.21	0.57
22:20:70:GLN:HG2	22:20:72:ARG:HG3	1.85	0.57
32:2a:448:A:P	32:2a:485:G:H22	2.27	0.57
33:2b:178:ARG:HH22	39:2h:68:ARG:NH2	2.02	0.57
38:2g:89:MET:HE3	38:2g:155:ARG:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.12	0.57
1:1A:1006:C:C2	1:1A:1138:G:N2	2.73	0.57
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.40	0.57
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.87	0.57
14:1S:71:ARG:HD3	14:1S:107:GLU:OE2	2.04	0.57
32:1a:110:C:H2'	32:1a:111:G:O4'	2.03	0.57
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.40	0.57
1:2A:236:C:H2'	1:2A:237:C:C6	2.39	0.57
1:2A:2751:G:H5'	7:2H:2:SER:HA	1.86	0.57
7:2H:3:ARG:HH21	7:2H:65:HIS:HB3	1.69	0.57
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.86	0.57
32:2a:141:A:H1'	32:2a:182:U:O2	2.04	0.57
32:2a:977:A:O2'	32:2a:981:U:N3	2.37	0.57
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.39	0.57
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.21	0.57
32:2a:1314:C:N4	50:2s:2:PRO:O	2.30	0.57
32:2a:1512:U:H2'	32:2a:1513:A:H8	1.68	0.57
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.86	0.57
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	1.86	0.57
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.04	0.57
1:2A:2819:G:N7	61:2A:4023:HOH:O	2.32	0.57
29:27:24:THR:HG22	29:27:27:GLY:N	2.11	0.57
32:2a:1087:G:H2'	32:2a:1088:G:H8	1.69	0.57
33:2b:135:GLN:O	33:2b:139:LYS:HB2	2.05	0.57
44:2m:122:LYS:HG3	44:2m:123:ALA:H	1.68	0.57
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.86	0.57
1:1A:1023:U:OP2	61:1A:4218:HOH:O	2.18	0.57
1:1A:1173:G:H22	1:1A:1177:A:P	2.27	0.57
13:1R:50:HIS:ND1	61:1R:302:HOH:O	2.32	0.57
32:1a:142:G:H2'	32:1a:143:A:H8	1.69	0.57
32:1a:820:U:H4'	32:1a:821:G:OP2	2.04	0.57
32:1a:1112:C:H1'	34:1c:179:ARG:HH11	1.69	0.57
32:1a:1367:C:H5'	41:1j:60:ARG:NH1	2.18	0.57
1:2A:639:U:H2'	1:2A:640:C:C6	2.40	0.57
2:2B:94:C:H2'	2:2B:95:C:H6	1.69	0.57
26:24:50:VAL:HG11	44:2m:64:TRP:O	2.05	0.57
32:2a:948:C:OP2	44:2m:106:ASN:HB2	2.04	0.57
34:2c:47:LEU:O	34:2c:51:GLY:N	2.38	0.57
1:1A:2080:G:OP1	23:11:35:THR:HG21	2.05	0.57
5:1F:14:PRO:HD2	5:1F:127:GLU:OE1	2.05	0.57
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:501:C:H2'	32:1a:502:G:C8	2.40	0.57
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.40	0.57
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.03	0.57
33:1b:80:ILE:HD12	33:1b:212:GLN:HA	1.86	0.57
1:2A:330:A:H2	1:2A:1210:A:HO2'	1.53	0.57
1:2A:902:C:H2'	1:2A:903:C:C6	2.39	0.57
1:2A:2317:C:N4	1:2A:2318:G:O6	2.38	0.57
6:2G:61:ALA:HA	6:2G:66:GLN:O	2.05	0.57
34:2c:8:ILE:HG23	34:2c:16:ARG:HG2	1.87	0.57
34:2c:127:ARG:HH12	34:2c:190:ARG:NH2	2.03	0.57
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.22	0.57
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.39	0.57
40:1i:127:LYS:O	40:1i:128:ARG:HB3	2.05	0.57
1:2A:247:G:H4'	1:2A:386:G:C5	2.40	0.57
1:2A:2116:G:N1	1:2A:2162:G:OP1	2.37	0.57
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.86	0.57
6:2G:63:ILE:HD13	6:2G:141:PHE:CD2	2.39	0.57
21:2Z:1:MET:O	21:2Z:55:HIS:ND1	2.37	0.57
32:2a:798:G:O6	61:2a:1916:HOH:O	2.15	0.57
32:2a:1154:G:H2'	32:2a:1155:G:H8	1.70	0.57
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.70	0.57
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.87	0.57
51:2t:67:ALA:HA	51:2t:72:LEU:O	2.05	0.57
4:1E:77:ILE:HD12	4:1E:195:LEU:HD13	1.85	0.57
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.70	0.57
1:2A:900:A:H2'	1:2A:901:A:C8	2.38	0.57
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.86	0.57
21:2Z:150:LEU:O	21:2Z:171:ILE:HG12	2.05	0.57
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.40	0.57
32:2a:1307:U:H2'	32:2a:1308:U:C6	2.39	0.57
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.87	0.57
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.40	0.57
32:2a:1263:C:N3	32:2a:1272:G:O6	2.38	0.57
36:2e:71:LEU:C	36:2e:72:GLN:HE21	2.13	0.57
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.34	0.57
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.05	0.56
32:1a:67:C:H4'	32:1a:172:A:O4'	2.05	0.56
1:2A:2131:G:N7	1:2A:2133:G:C2	2.73	0.56
1:2A:2207:G:H3'	1:2A:2208:A:H5"	1.87	0.56
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.38	0.56
6:2G:44:GLY:N	6:2G:88:ILE:O	2.34	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:10:ARG:HH11	12:2Q:11:LYS:HE2	1.70	0.56
32:2a:573:A:N3	32:2a:883:C:O2'	2.37	0.56
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.05	0.56
35:2d:112:VAL:HG22	35:2d:116:GLN:HE22	1.69	0.56
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.40	0.56
1:1A:2128:C:N4	1:1A:2160:G:N1	2.53	0.56
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.87	0.56
32:1a:1095:U:P	32:1a:1108:G:H1	2.27	0.56
33:1b:16:HIS:CD2	33:1b:17:PHE:N	2.73	0.56
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.40	0.56
1:2A:615:G:OP1	5:2F:40:GLN:NE2	2.35	0.56
1:2A:2032:G:OP2	1:2A:2454:G:O2'	2.18	0.56
1:2A:2099:U:H3	1:2A:2190:G:H1	1.52	0.56
1:2A:2121:G:H1	1:2A:2177:C:H42	1.53	0.56
1:2A:2788:C:N3	1:2A:2789:C:N4	2.53	0.56
1:2A:2802:G:H2'	1:2A:2803:C:O4'	2.05	0.56
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.20	0.56
22:20:37:LEU:HG	22:20:60:PHE:HA	1.87	0.56
32:2a:966:M2G:HM23	32:2a:967:5MC:H1'	1.86	0.56
32:2a:1040:U:H2'	32:2a:1041:A:H8	1.69	0.56
34:2c:69:HIS:HA	34:2c:104:GLN:HB3	1.86	0.56
42:2k:85:ARG:HD3	42:2k:113:PRO:HD3	1.87	0.56
1:1A:1314:C:OP1	61:1A:4211:HOH:O	2.18	0.56
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.20	0.56
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.38	0.56
32:1a:1191:A:H5"	34:1c:4:LYS:NZ	2.21	0.56
32:1a:1304:G:OP2	61:1a:1916:HOH:O	2.18	0.56
32:1a:1376:U:OP1	38:1g:98:SER:OG	2.21	0.56
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.06	0.56
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.86	0.56
54:1w:11:C:O5'	54:1w:11:C:H6	1.88	0.56
54:1w:51:U:H2'	54:1w:52:G:H8	1.70	0.56
54:1y:48:C:C2	54:1y:59:U:H1'	2.39	0.56
1:2A:30:G:H2'	1:2A:31:C:C6	2.40	0.56
1:2A:342:G:O6	61:2A:3944:HOH:O	2.17	0.56
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.20	0.56
7:2H:54:ARG:HG2	7:2H:65:HIS:CE1	2.40	0.56
32:2a:22:G:H4'	32:2a:885:G:C8	2.39	0.56
32:2a:1186:G:H4'	40:2i:110:GLU:OE2	2.05	0.56
32:2a:1271:G:C2	32:2a:1272:G:N7	2.74	0.56
32:2a:1441:G:H1'	32:2a:1461:G:N2	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.20	0.56
33:2b:47:THR:HA	33:2b:202:PRO:HG2	1.86	0.56
34:2c:125:GLU:HB2	34:2c:190:ARG:HE	1.71	0.56
36:2e:33:VAL:HG21	36:2e:109:ILE:HA	1.86	0.56
36:2e:52:PRO:O	36:2e:56:GLN:HG3	2.04	0.56
42:2k:110:ASP:HB3	49:2r:85:LEU:HB3	1.86	0.56
49:2r:33:ASP:O	49:2r:40:LEU:HD11	2.05	0.56
50:2s:17:GLU:O	50:2s:21:GLU:N	2.37	0.56
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.41	0.56
1:1A:2150:U:H2'	1:1A:2151:G:C8	2.40	0.56
1:1A:2789:C:O2	1:1A:2894:G:N1	2.30	0.56
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.71	0.56
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.04	0.56
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.37	0.56
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.05	0.56
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.41	0.56
1:2A:2448:A:OP1	61:2A:3913:HOH:O	2.18	0.56
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.40	0.56
17:2V:40:LEU:HD11	17:2V:101:GLY:HA3	1.88	0.56
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.39	0.56
32:2a:337:C:H2'	32:2a:338:A:C8	2.40	0.56
32:2a:545:C:OP2	35:2d:65:ARG:NH2	2.39	0.56
33:2b:16:HIS:CB	33:2b:210:SER:HB2	2.34	0.56
54:2y:44:G:C2'	54:2y:45:U:H5'	2.36	0.56
1:1A:279:C:H42	1:1A:361:G:H1	1.53	0.56
1:1A:1237:A:OP1	61:1A:4234:HOH:O	2.17	0.56
1:2A:1180:C:H2'	1:2A:1181:C:C6	2.40	0.56
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.41	0.56
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.19	0.56
21:2Z:171:ILE:HG13	21:2Z:172:ALA:H	1.70	0.56
32:2a:986:A:H1'	50:2s:55:LYS:HA	1.87	0.56
42:2k:98:LEU:O	42:2k:101:SER:OG	2.18	0.56
50:2s:17:GLU:HG2	50:2s:20:LEU:HD22	1.87	0.56
54:2w:18:G:HO2'	54:2w:57:G:H22	1.51	0.56
1:1A:184:C:H2'	1:1A:185:U:C6	2.40	0.56
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.04	0.56
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.41	0.56
1:1A:2180:U:H2'	1:1A:2181:G:O4'	2.06	0.56
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.71	0.56
34:1c:18:TRP:H	34:1c:18:TRP:HE3	1.53	0.56
35:1d:88:VAL:HA	36:1e:97:GLY:HA2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.06	0.56
54:1w:18:G:N2	54:1w:57:G:H2'	2.20	0.56
2:2B:53:A:H8	2:2B:53:A:O5'	1.88	0.56
32:2a:533:A:OP1	61:2a:1918:HOH:O	2.17	0.56
40:2i:3:GLN:HE21	40:2i:20:ARG:NH2	2.04	0.56
1:1A:271(I):G:N7	1:1A:271(J):C:N4	2.53	0.56
32:1a:881:G:P	43:1l:12:ARG:HH22	2.29	0.56
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.36	0.56
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.29	0.56
32:2a:10:A:HO2'	32:2a:507:C:HO2'	1.54	0.56
32:2a:620:C:C2	35:2d:135:LEU:HG	2.40	0.56
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.06	0.56
32:2a:1168:A:C6	32:2a:1169:A:C6	2.94	0.56
36:2e:126:ARG:HH11	36:2e:126:ARG:HG2	1.71	0.56
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.20	0.56
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	1.88	0.56
1:1A:118:A:C8	1:1A:119:A:C8	2.93	0.56
1:1A:810:U:C4	11:1P:29:LYS:O	2.58	0.56
1:1A:890:A:H2'	1:1A:892:G:O4'	2.06	0.56
10:1O:48:PRO:CB	32:1a:1422:G:H5"	2.35	0.56
13:1R:2:ARG:HG2	13:1R:2:ARG:O	2.05	0.56
32:1a:96:U:H2'	32:1a:97:G:C8	2.41	0.56
42:1k:66:LEU:HG	42:1k:97:ALA:HB1	1.87	0.56
51:1t:36:LEU:HD13	51:1t:58:LYS:HG3	1.88	0.56
54:1y:19:G:O4'	54:1y:57:G:N1	2.35	0.56
1:2A:884:C:H3'	1:2A:885:C:C6	2.40	0.56
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.40	0.56
2:2B:1:U:O2'	2:2B:2:C:O5'	2.22	0.56
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.46	0.56
14:2S:35:ILE:HG12	14:2S:101:LEU:HD12	1.87	0.56
15:2T:39:ARG:HH21	15:2T:41:ARG:HD3	1.69	0.56
16:2U:97:ASP:OD1	16:2U:101:ARG:HD2	2.05	0.56
32:2a:936:C:H2'	32:2a:937:A:O4'	2.06	0.56
32:2a:940:C:H2'	32:2a:941:G:C8	2.41	0.56
32:2a:1305:G:C2	32:2a:1331:G:N3	2.74	0.56
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.41	0.56
40:2i:5:TYR:N	40:2i:87:GLN:HE22	2.02	0.56
1:1A:878:A:N6	1:1A:899:A:O2'	2.38	0.56
1:1A:1069:A:H4'	1:1A:1070:A:H5"	1.88	0.56
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.40	0.56
1:1A:1359:A:N1	1:1A:1372:U:C4	2.73	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:13:A:N1	2:1B:69:G:O2'	2.33	0.56
7:1H:54:ARG:NH2	7:1H:57:ASP:OD2	2.27	0.56
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.20	0.56
40:1i:93:ARG:HH11	40:1i:97:LYS:HD2	1.71	0.56
1:2A:298:G:H5"	1:2A:299:A:OP1	2.06	0.56
1:2A:441:U:H2'	1:2A:442:G:C8	2.41	0.56
1:2A:981:A:N1	1:2A:2027:G:O2'	2.35	0.56
1:2A:1180:C:H2'	1:2A:1181:C:H6	1.70	0.56
1:2A:2590:A:O3'	3:2D:239:ARG:NH2	2.39	0.56
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.87	0.56
28:26:11:LEU:HB2	28:26:21:TYR:HB2	1.86	0.56
32:2a:532:A:N6	32:2a:1206:G:O2'	2.39	0.56
32:2a:728:A:H2'	32:2a:729:A:H8	1.70	0.56
32:2a:778:G:H21	42:2k:120:ARG:HB3	1.69	0.56
33:2b:91:PRO:HG3	33:2b:154:LEU:HB3	1.88	0.56
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.06	0.56
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.71	0.56
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.06	0.56
5:1F:29:ASN:H	5:1F:112:MET:CE	2.19	0.56
7:1H:164:TYR:HB2	7:1H:167:GLU:HB2	1.87	0.56
32:1a:176:C:H2'	32:1a:177:C:C6	2.41	0.56
32:1a:202:U:H3'	32:1a:203:U:C5	2.40	0.56
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.88	0.56
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.87	0.56
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.41	0.56
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.41	0.56
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.87	0.56
32:2a:1089:G:H1	32:2a:1096:C:H42	1.54	0.56
32:2a:1121:U:C4	32:2a:1122:U:C4	2.93	0.56
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.86	0.56
1:1A:1069:A:O4'	1:1A:1096:A:O2'	2.24	0.55
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.29	0.55
26:14:55:ARG:N	26:14:56:VAL:HA	2.21	0.55
37:1f:99:ALA:HB3	49:1r:29:PHE:CE1	2.41	0.55
45:1n:23:ARG:CZ	45:1n:30:ALA:HB2	2.35	0.55
1:2A:2064:C:H2'	1:2A:2065:C:C6	2.41	0.55
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.24	0.55
1:2A:2524:G:N7	61:2A:4029:HOH:O	2.33	0.55
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.38	0.55
20:2Y:97:ARG:HB2	20:2Y:106:LEU:HB2	1.87	0.55
32:2a:203:U:H2'	32:2a:203:U:OP2	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:587:G:N2	32:2a:754:C:OP2	2.36	0.55
32:2a:671:G:H2'	32:2a:672:U:O4'	2.06	0.55
33:2b:83:MET:SD	33:2b:234:PRO:HG2	2.46	0.55
33:2b:168:THR:OG1	33:2b:192:SER:OG	2.17	0.55
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.88	0.55
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.87	0.55
41:2j:6:ILE:HG23	41:2j:98:ILE:HG12	1.88	0.55
1:1A:1096:A:N6	1:1A:1097:U:O2	2.38	0.55
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.41	0.55
32:1a:1320:C:OP1	50:1s:70:LYS:NZ	2.38	0.55
38:1g:27:ILE:HD13	38:1g:40:ALA:HA	1.88	0.55
39:1h:124:ALA:O	39:1h:128:GLY:N	2.39	0.55
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.41	0.55
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.40	0.55
13:2R:63:ARG:O	13:2R:67:LEU:HB2	2.07	0.55
32:2a:1350:A:C2	32:2a:1351:U:C2	2.94	0.55
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.32	0.55
54:2y:64:A:H2'	54:2y:65:G:H5'	1.89	0.55
1:1A:2153:G:H2'	1:1A:2154:G:C8	2.42	0.55
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.22	0.55
15:1T:127:ALA:C	15:1T:129:ARG:H	2.15	0.55
17:1V:82:ARG:NE	61:1V:301:HOH:O	2.34	0.55
32:1a:741:G:H2'	32:1a:742:G:O4'	2.06	0.55
32:1a:1330:U:H2'	32:1a:1331:G:H5'	1.89	0.55
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.38	0.55
1:2A:10:G:O2'	1:2A:2801(A):A:N7	2.32	0.55
1:2A:579:G:H2'	1:2A:580:C:H6	1.70	0.55
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.41	0.55
1:2A:1916:A:N1	32:2a:1408:A:O2'	2.36	0.55
7:2H:140:LYS:O	7:2H:144:VAL:HG23	2.05	0.55
32:2a:989:C:H2'	32:2a:990:C:C6	2.42	0.55
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.06	0.55
32:2a:1239:A:H4'	32:2a:1240:U:H5"	1.88	0.55
54:2y:65:G:H2'	54:2y:66:U:C6	2.41	0.55
1:1A:218:A:C2	1:1A:235:U:H4'	2.41	0.55
1:1A:1042:G:H2'	1:1A:1043:C:O4'	2.06	0.55
1:1A:1300:U:H4'	1:1A:1301:A:H5"	1.88	0.55
2:1B:88:C:H2'	2:1B:89:G:O4'	2.06	0.55
32:1a:172:A:N6	32:1a:174:C:O2	2.39	0.55
38:1g:152:ALA:O	38:1g:155:ARG:N	2.38	0.55
1:2A:752:A:H3'	29:27:1:MET:HE1	1.86	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2143:C:N3	1:2A:2148:G:N2	2.45	0.55
1:2A:2785:C:OP1	4:2E:41:LYS:HE3	2.05	0.55
32:2a:960:U:H4'	32:2a:961:U:H5"	1.88	0.55
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.39	0.55
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.41	0.55
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.35	0.55
33:2b:162:ILE:HG13	33:2b:184:VAL:HG12	1.88	0.55
36:2e:43:LEU:O	36:2e:65:ASN:ND2	2.33	0.55
48:2q:54:GLY:O	48:2q:81:ARG:N	2.37	0.55
1:1A:602:G:O2'	1:1A:655:A:N6	2.39	0.55
1:1A:747:U:O2	1:1A:2014:A:H1'	2.05	0.55
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.41	0.55
32:1a:79:G:N2	32:1a:90:U:O2'	2.39	0.55
33:1b:45:GLN:O	33:1b:49:GLU:HG3	2.06	0.55
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.40	0.55
41:1j:38:ILE:HG13	41:1j:71:LEU:HB3	1.89	0.55
44:1m:67:GLU:HG3	44:1m:71:ARG:NH2	2.21	0.55
1:2A:11:G:C2'	1:2A:12:U:H5'	2.36	0.55
1:2A:868:U:N3	1:2A:869:G:N7	2.54	0.55
6:2G:41:GLN:HB3	6:2G:43:LEU:HD22	1.87	0.55
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.21	0.55
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.40	0.55
28:26:13:CYS:SG	28:26:47:THR:HG21	2.46	0.55
32:2a:1151:A:HO2'	32:2a:1152:A:H8	1.54	0.55
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.46	0.55
36:2e:77:PRO:HD2	36:2e:142:LEU:HD22	1.87	0.55
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.06	0.55
13:1R:2:ARG:HA	13:1R:5:LYS:HD2	1.86	0.55
17:1V:10:LYS:NZ	17:1V:23:GLU:OE2	2.33	0.55
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.41	0.55
24:12:10:LEU:O	24:12:14:ARG:HG3	2.06	0.55
32:1a:1047:G:H5"	45:1n:4:LYS:HE3	1.88	0.55
33:1b:139:LYS:O	33:1b:143:GLU:HG3	2.06	0.55
1:2A:271(L):U:H5"	8:2I:50:ARG:CZ	2.35	0.55
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.31	0.55
1:2A:1857:G:O6	1:2A:1858:G:N1	2.39	0.55
6:2G:167:GLU:HA	6:2G:170:ARG:HB3	1.88	0.55
32:2a:377:G:OP1	47:2p:3:LYS:NZ	2.25	0.55
32:2a:586:C:O2'	32:2a:878:G:H4'	2.07	0.55
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.42	0.55
32:2a:1227:A:C8	50:2s:83:HIS:HB3	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1279:A:OP2	41:2j:9:ARG:NH2	2.40	0.55
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	1.89	0.55
1:1A:637:A:H2'	11:1P:117:GLU:OE1	2.07	0.55
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.33	0.55
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.22	0.55
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.89	0.55
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.89	0.55
1:2A:107:C:H2'	1:2A:108:U:H6	1.71	0.55
1:2A:852:G:H2'	1:2A:853:G:H8	1.71	0.55
1:2A:1003:G:N2	1:2A:1153:C:C2	2.75	0.55
22:20:32:ARG:H	22:20:35:ASN:ND2	2.04	0.55
32:2a:340:U:H2'	32:2a:341:C:C6	2.41	0.55
32:2a:1261:A:H5"	32:2a:1262:C:OP2	2.07	0.55
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.42	0.55
1:1A:882:G:H4'	54:1w:19:G:C6	2.42	0.55
1:1A:894:C:H2'	1:1A:895:U:O4'	2.07	0.55
26:14:50:VAL:HG11	44:1m:64:TRP:C	2.32	0.55
34:1c:87:LEU:O	34:1c:91:LEU:HB2	2.06	0.55
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.07	0.55
38:1g:78:ARG:HG3	38:1g:156:TRP:CZ3	2.42	0.55
39:1h:29:SER:OG	39:1h:32:LYS:HG2	2.06	0.55
42:1k:98:LEU:O	42:1k:101:SER:OG	2.24	0.55
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.42	0.55
1:2A:817:C:C2	1:2A:818:G:C8	2.94	0.55
1:2A:1384:A:N3	1:2A:1405:U:H1'	2.22	0.55
1:2A:2065:C:H4'	1:2A:2251:OMG:HM22	1.87	0.55
1:2A:2160:G:H3'	1:2A:2161:C:H5"	1.87	0.55
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.25	0.55
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.42	0.55
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.42	0.55
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.06	0.55
32:1a:45:U:H2'	32:1a:46:G:C8	2.42	0.55
32:1a:277:C:P	48:1q:68:ARG:HH12	2.30	0.55
36:1e:18:ARG:HD3	36:1e:27:ARG:HH12	1.71	0.55
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.41	0.55
6:2G:33:ARG:O	6:2G:161:THR:HG23	2.07	0.55
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.36	0.55
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.89	0.55
32:2a:1256:A:H61	32:2a:1278:U:H1'	1.72	0.55
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.55	0.55
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:84:LEU:HB2	43:2l:105:TYR:HE2	1.72	0.55
48:2q:26:GLN:HG2	48:2q:37:LYS:HG2	1.89	0.55
54:2y:55:PSU:HN1	54:2y:57:G:H5'	1.72	0.55
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.89	0.55
1:1A:2336:A:H61	22:10:43:THR:CG2	2.20	0.55
32:1a:501:C:H2'	32:1a:502:G:H8	1.71	0.55
32:1a:933:G:O6	38:1g:3:ARG:NH2	2.39	0.55
32:1a:977:A:H1'	32:1a:982:U:O4	2.07	0.55
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.42	0.55
42:1k:107:SER:O	42:1k:108:ILE:HG13	2.07	0.55
54:1y:63:G:H2'	54:1y:64:A:O4'	2.07	0.55
1:2A:197:A:O2'	61:2A:3946:HOH:O	2.18	0.55
1:2A:884:C:H3'	1:2A:885:C:H6	1.71	0.55
1:2A:1411:C:H2'	1:2A:1412:A:H8	1.71	0.55
23:21:81:LYS:HE3	61:21:206:HOH:O	2.07	0.55
32:2a:179:A:H2'	32:2a:180:U:C6	2.42	0.55
32:2a:1068:G:N7	32:2a:1094:G:C8	2.75	0.55
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.22	0.55
32:2a:1417:G:O6	61:2a:1913:HOH:O	2.14	0.55
33:2b:101:MET:HA	33:2b:108:ILE:HD12	1.89	0.55
34:2c:119:ARG:O	34:2c:123:GLN:HB2	2.07	0.55
37:2f:76:ALA:HB1	37:2f:80:ARG:HH22	1.73	0.55
7:1H:149:ARG:HH12	7:1H:167:GLU:CD	2.15	0.54
32:1a:803:G:OP1	61:1a:1917:HOH:O	2.18	0.54
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.41	0.54
32:1a:1288:A:N3	32:1a:1352:C:O2'	2.38	0.54
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.39	0.54
54:1w:24:G:H5'	54:1w:25:C:OP2	2.07	0.54
1:2A:793:A:O2'	61:2A:3947:HOH:O	2.18	0.54
1:2A:909:A:C6	1:2A:912:C:C2	2.96	0.54
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.08	0.54
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.07	0.54
22:20:52:GLY:O	22:20:59:LEU:HA	2.07	0.54
26:24:41:PRO:HG3	26:24:49:PHE:CZ	2.42	0.54
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.22	0.54
32:2a:243:A:H4'	32:2a:244:U:H5"	1.89	0.54
54:2y:34:G:H2'	54:2y:35:A:C8	2.42	0.54
35:1d:194:LEU:HD23	35:1d:196:LEU:HG	1.88	0.54
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.88	0.54
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.41	0.54
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1233:G:H2'	32:2a:1234:C:C6	2.43	0.54
32:2a:1264:C:N4	32:2a:1265:G:O6	2.39	0.54
37:2f:96:PRO:HB3	49:2r:30:ASP:OD2	2.07	0.54
38:2g:15:ASP:OD2	38:2g:44:TYR:OH	2.23	0.54
39:2h:78:GLN:O	39:2h:81:HIS:NE2	2.40	0.54
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.07	0.54
1:1A:625:G:O6	11:1P:107:LYS:NZ	2.40	0.54
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.40	0.54
7:1H:101:ARG:HH22	7:1H:122:THR:HA	1.73	0.54
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.88	0.54
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.90	0.54
32:1a:445:G:H2'	32:1a:446:G:O4'	2.07	0.54
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.11	0.54
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.22	0.54
1:2A:2299:G:N1	1:2A:2318:G:N7	2.55	0.54
5:2F:11:VAL:HG22	5:2F:125:LEU:HB2	1.89	0.54
20:2Y:43:ASN:CG	20:2Y:65:ALA:HB3	2.32	0.54
32:2a:73:G:H1	32:2a:96:U:H3	1.55	0.54
32:2a:1045:C:H2'	32:2a:1046:A:O4'	2.07	0.54
32:2a:1112:C:N3	34:2c:178:LEU:HD12	2.21	0.54
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.25	0.54
32:2a:1176:A:H2'	32:2a:1177:G:O4'	2.07	0.54
33:2b:47:THR:HG23	33:2b:202:PRO:HG2	1.89	0.54
41:2j:13:HIS:CG	41:2j:14:LYS:N	2.75	0.54
44:2m:50:GLU:O	44:2m:53:VAL:HG22	2.07	0.54
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.07	0.54
50:2s:53:ASN:OD1	50:2s:54:GLY:N	2.40	0.54
51:2t:16:HIS:O	51:2t:19:SER:OG	2.15	0.54
1:1A:2094:G:O2'	1:1A:2095:C:H5'	2.07	0.54
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.22	0.54
1:1A:2384:G:OP2	22:10:55:ARG:NH2	2.30	0.54
3:1D:21:PHE:HB3	3:1D:24:ILE:HD12	1.88	0.54
26:14:53:GLU:HB2	26:14:55:ARG:O	2.07	0.54
32:1a:7:G:H5'	32:1a:298:A:O4'	2.06	0.54
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.06	0.54
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.90	0.54
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.07	0.54
1:2A:1607:C:H4'	1:2A:1608:A:O5'	2.07	0.54
1:2A:2136:C:H42	1:2A:2155:G:H1	1.55	0.54
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.07	0.54
32:2a:7:G:H21	36:2e:121:LYS:HG2	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:56:U:H2'	32:2a:57:G:C8	2.42	0.54
32:2a:1091:U:H2'	32:2a:1093:A:OP2	2.07	0.54
35:2d:9:CYS:O	35:2d:13:ARG:HG3	2.08	0.54
35:2d:199:ASN:C	35:2d:201:GLN:H	2.14	0.54
1:1A:1240:U:H3'	61:1A:5299:HOH:O	2.06	0.54
24:12:9:GLN:HE22	24:12:56:GLN:HG2	1.72	0.54
32:1a:920:U:H2'	32:1a:921:U:C6	2.42	0.54
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	1.88	0.54
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	1.90	0.54
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.71	0.54
1:2A:455:C:N3	1:2A:472:A:H2'	2.22	0.54
1:2A:1493:C:N4	1:2A:2206:G:O2'	2.35	0.54
32:2a:952:U:H2'	32:2a:953:G:H8	1.72	0.54
32:2a:1155:G:H2'	32:2a:1156:G:C8	2.43	0.54
33:2b:87:ARG:NH2	33:2b:220:ASP:OD1	2.35	0.54
38:2g:67:GLU:HA	38:2g:70:LYS:HD2	1.88	0.54
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	1.90	0.54
5:1F:53:THR:HB	5:1F:56:GLU:OE1	2.07	0.54
32:1a:17:U:H2'	32:1a:18:C:C6	2.42	0.54
33:1b:24:TRP:CZ3	33:1b:26:PRO:HA	2.43	0.54
39:1h:11:THR:HG22	39:1h:15:ASN:ND2	2.23	0.54
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.35	0.54
1:2A:2646:C:N3	1:2A:2674:G:N1	2.40	0.54
1:2A:2786:U:OP1	4:2E:69:LYS:HD2	2.07	0.54
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.90	0.54
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.23	0.54
32:2a:524:G:H2'	32:2a:525:C:C6	2.43	0.54
32:2a:693:G:H2'	32:2a:694:A:C8	2.43	0.54
32:2a:779:C:H2'	32:2a:780:A:O4'	2.08	0.54
32:2a:1165:C:H2'	32:2a:1166:G:O4'	2.06	0.54
33:2b:178:ARG:NH2	39:2h:74:PRO:HB3	2.23	0.54
35:2d:104:VAL:HG21	35:2d:146:ILE:HD13	1.89	0.54
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.72	0.54
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.42	0.54
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.08	0.54
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.08	0.54
32:1a:433:C:H2'	32:1a:434:U:C6	2.43	0.54
35:1d:18:LYS:NZ	35:1d:26:CYS:O	2.33	0.54
40:1i:23:ASN:HB2	40:1i:25:LYS:HZ2	1.72	0.54
1:2A:1243:G:O2'	11:2P:4:SER:O	2.18	0.54
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.32	0.54
14:2S:4:LEU:HD22	14:2S:8:GLU:HB2	1.90	0.54
14:2S:62:LYS:HA	14:2S:65:VAL:HG22	1.90	0.54
24:22:17:SER:N	24:22:20:GLU:OE1	2.28	0.54
32:2a:434:U:H2'	32:2a:435:C:C6	2.43	0.54
32:2a:881:G:P	43:2l:12:ARG:HH22	2.29	0.54
32:2a:983:A:H3'	32:2a:983:A:N3	2.23	0.54
32:2a:1323:G:H4'	32:2a:1363:C:N3	2.21	0.54
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	1.88	0.54
1:1A:484:C:H2'	1:1A:485:C:C6	2.43	0.54
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.07	0.54
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.40	0.54
26:14:55:ARG:H	26:14:56:VAL:HA	1.71	0.54
50:1s:12:ASP:OD2	50:1s:35:SER:OG	2.19	0.54
1:2A:236:C:H2'	1:2A:237:C:H6	1.73	0.54
1:2A:893:C:H2'	1:2A:894:C:C5	2.43	0.54
1:2A:2394:C:N3	54:2y:76:A:O2'	2.39	0.54
5:2F:156:LEU:HD21	5:2F:163:VAL:HG12	1.89	0.54
12:2Q:57:HIS:CD2	12:2Q:117:ALA:HB2	2.42	0.54
21:2Z:145:GLU:HB3	21:2Z:148:ASP:OD2	2.08	0.54
32:2a:21:G:H2'	32:2a:22:G:C8	2.42	0.54
32:2a:818:G:N2	32:2a:873:A:OP1	2.41	0.54
32:2a:1187:G:H4'	40:2i:111:ARG:HH11	1.72	0.54
41:2j:74:ILE:HG22	61:2j:302:HOH:O	2.07	0.54
55:2x:10:G:N2	55:2x:26:G:H1'	2.23	0.54
1:2A:2811:G:N2	1:2A:2891:G:H1'	2.22	0.54
15:2T:23:ARG:HD3	15:2T:120:ARG:NH1	2.23	0.54
20:2Y:6:HIS:H	20:2Y:6:HIS:HD2	1.56	0.54
32:2a:404:U:H5'	35:2d:122:ARG:HE	1.72	0.54
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.40	0.54
36:2e:88:LYS:HB3	36:2e:123:LEU:HB2	1.90	0.54
51:2t:79:ARG:HD2	51:2t:83:ARG:HH21	1.72	0.54
1:1A:1094:U:H2'	1:1A:1095:A:C8	2.43	0.54
1:1A:2820:A:P	13:1R:2:ARG:HH22	2.30	0.54
8:1I:5:LEU:HD11	8:1I:19:VAL:HG22	1.90	0.54
8:1I:62:LYS:HG3	8:1I:133:HIS:HE1	1.72	0.54
32:1a:433:C:H2'	32:1a:434:U:H6	1.72	0.54
32:1a:456:C:H2'	32:1a:457:C:C6	2.42	0.54
33:1b:166:ASP:HB3	33:1b:169:LYS:HB3	1.89	0.54
35:1d:100:ARG:HG2	35:1d:102:ASP:OD1	2.08	0.54
1:2A:1934:C:N3	1:2A:1964:G:N1	2.39	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:135:LEU:HD12	6:2G:155:MET:HE3	1.90	0.54
32:2a:1052:U:O2'	32:2a:1055:A:OP2	2.17	0.54
37:2f:79:LEU:HB2	37:2f:88:VAL:HG21	1.90	0.54
1:1A:253:C:OP2	30:18:5:LYS:NZ	2.39	0.53
1:1A:880:G:H1	1:1A:898:C:N4	2.06	0.53
1:1A:2128:C:N4	1:1A:2160:G:H1	2.06	0.53
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.41	0.53
1:1A:2518:A:OP1	61:1A:4235:HOH:O	2.18	0.53
38:1g:16:LEU:HD21	40:1i:42:ARG:HG3	1.90	0.53
1:2A:61:G:H5'	24:22:50:ILE:HG21	1.90	0.53
1:2A:414:C:H2'	1:2A:415:A:C8	2.43	0.53
1:2A:965:C:HO2'	1:2A:2272:U:HO2'	1.52	0.53
4:2E:103:ASP:OD2	4:2E:168:MET:HE2	2.08	0.53
5:2F:36:VAL:O	5:2F:40:GLN:HG3	2.08	0.53
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.42	0.53
32:2a:553:A:H2'	32:2a:554:C:C6	2.43	0.53
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.43	0.53
32:2a:1291:G:H4'	40:2i:39:GLY:HA3	1.89	0.53
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.08	0.53
33:2b:167:PRO:HG2	33:2b:192:SER:HB3	1.90	0.53
47:2p:19:ILE:HG22	47:2p:36:ILE:HG13	1.91	0.53
54:2y:18:G:O6	54:2y:56:C:N4	2.40	0.53
1:1A:272:G:N7	1:1A:421:U:H2'	2.22	0.53
1:1A:1058:G:H1	1:1A:1080:C:N4	2.06	0.53
1:1A:1359:A:C2	1:1A:1372:U:O4	2.61	0.53
32:1a:1284:C:H3'	32:1a:1285:A:H8	1.73	0.53
32:1a:1302:U:H5	44:1m:17:VAL:HG21	1.73	0.53
37:1f:19:LEU:HD11	37:1f:59:TYR:CE1	2.43	0.53
49:1r:52:PRO:HG2	49:1r:54:ARG:NH1	2.23	0.53
1:2A:307:G:N1	1:2A:310:A:OP2	2.37	0.53
1:2A:1839:G:C8	1:2A:1927:A:H1'	2.42	0.53
2:2B:39:A:O2'	2:2B:40:U:H5'	2.07	0.53
32:2a:719:C:N4	49:2r:71:LYS:HE2	2.23	0.53
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.31	0.53
43:2l:56:ALA:O	43:2l:68:ALA:N	2.30	0.53
44:2m:78:ILE:HG23	44:2m:92:HIS:ND1	2.23	0.53
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.56	0.53
1:1A:1364:G:N7	23:11:3:LYS:HE2	2.23	0.53
1:1A:2751:G:C5	7:1H:2:SER:N	2.76	0.53
2:1B:28:C:OP1	14:1S:36:TYR:OH	2.22	0.53
32:1a:345:C:H5'	32:1a:346:G:C4	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:757:U:H2'	32:1a:758:G:O4'	2.08	0.53
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.43	0.53
1:2A:288:C:H2'	1:2A:289:A:H8	1.72	0.53
1:2A:1446:C:H42	1:2A:1465:G:H1	1.55	0.53
1:2A:2165:G:H2'	1:2A:2166:G:H5"	1.89	0.53
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	1.91	0.53
32:2a:280:C:N3	48:2q:39:SER:N	2.55	0.53
32:2a:1017:G:H8	32:2a:1017:G:OP2	1.90	0.53
33:2b:100:GLY:N	33:2b:176:GLU:OE2	2.30	0.53
36:2e:83:GLU:HB3	36:2e:88:LYS:HG3	1.91	0.53
38:2g:75:VAL:HA	38:2g:87:VAL:O	2.09	0.53
1:1A:1041:C:H42	1:1A:1114:G:H1	1.55	0.53
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.73	0.53
32:1a:260:G:H2'	32:1a:261:U:C6	2.44	0.53
32:1a:748:C:H4'	32:1a:749:C:O5'	2.07	0.53
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.09	0.53
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.41	0.53
38:1g:130:GLY:O	38:1g:135:VAL:HG11	2.08	0.53
1:2A:1782:C:O2	1:2A:2608:G:O2'	2.23	0.53
32:2a:909:A:H2'	32:2a:910:C:O4'	2.09	0.53
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.73	0.53
42:2k:43:SER:OG	42:2k:44:SER:N	2.41	0.53
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.09	0.53
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.88	0.53
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.23	0.53
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.08	0.53
32:1a:865:A:H2	32:1a:918:A:H4'	1.73	0.53
32:1a:1118:C:OP1	40:1i:104:ARG:NH1	2.40	0.53
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.07	0.53
33:1b:16:HIS:CB	33:1b:204:ASN:HB3	2.39	0.53
34:1c:157:ILE:HD13	34:1c:166:GLU:HB2	1.91	0.53
37:1f:22:GLU:O	37:1f:26:ILE:HG13	2.09	0.53
1:2A:315:G:H2'	1:2A:316:C:C6	2.43	0.53
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.74	0.53
1:2A:2138:C:H2'	1:2A:2139:C:O4'	2.08	0.53
2:2B:57:A:N3	6:2G:29:TRP:HB3	2.23	0.53
7:2H:125:VAL:HG22	7:2H:131:VAL:HG22	1.89	0.53
32:2a:44:G:O6	61:2a:1919:HOH:O	2.17	0.53
32:2a:1353:G:C2	32:2a:1370:G:C2	2.97	0.53
32:2a:1523:G:H2'	32:2a:1524:C:C6	2.44	0.53
33:2b:88:ALA:HA	33:2b:223:ILE:HD11	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.56	0.53
42:2k:48:ILE:O	42:2k:50:TYR:N	2.42	0.53
32:1a:130:A:N3	32:1a:263:A:O2'	2.39	0.53
32:1a:828:A:H2'	32:1a:829:G:O4'	2.09	0.53
32:1a:964:A:N3	32:1a:969:A:O2'	2.36	0.53
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.09	0.53
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.08	0.53
33:1b:21:ARG:HA	33:1b:39:ILE:HA	1.90	0.53
34:1c:104:GLN:NE2	34:1c:105:GLU:H	2.06	0.53
1:2A:7:G:H2'	1:2A:8:A:C8	2.44	0.53
1:2A:500:G:N1	1:2A:503:A:OP2	2.42	0.53
1:2A:1371:G:O6	61:2A:3942:HOH:O	2.17	0.53
7:2H:6:ARG:HH22	7:2H:54:ARG:NH2	2.06	0.53
8:2I:29:TYR:CD2	8:2I:30:LEU:HD23	2.43	0.53
32:2a:1402:4OC:H6	32:2a:1402:4OC:O5'	2.09	0.53
33:2b:69:LEU:HD12	33:2b:70:PHE:H	1.74	0.53
45:2n:29:ARG:HG2	45:2n:31:ARG:O	2.08	0.53
55:2x:58:A:H4'	55:2x:59:A:OP1	2.07	0.53
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.44	0.53
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.90	0.53
21:1Z:1:MET:HE2	21:1Z:135:GLU:HG3	1.91	0.53
32:1a:532:A:N6	32:1a:1206:G:O2'	2.41	0.53
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.92	0.53
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.41	0.53
1:2A:882:G:H1	1:2A:894:C:H42	1.55	0.53
1:2A:900:A:O2'	1:2A:901:A:OP1	2.27	0.53
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.38	0.53
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.39	0.53
9:2N:97:ARG:O	9:2N:101:HIS:N	2.29	0.53
11:2P:99:LEU:O	11:2P:102:ARG:HG3	2.09	0.53
16:2U:79:PHE:CZ	16:2U:83:LEU:HD11	2.43	0.53
34:2c:10:PHE:O	34:2c:178:LEU:HD23	2.09	0.53
39:2h:116:LYS:HG3	39:2h:129:VAL:HG11	1.90	0.53
1:1A:493:G:O6	61:1A:4230:HOH:O	2.15	0.53
1:1A:762:U:H5"	61:1A:5335:HOH:O	2.08	0.53
1:1A:1074:G:C2	1:1A:1075:C:H1'	2.43	0.53
1:1A:2791:C:H2'	1:1A:2792:G:H8	1.74	0.53
6:1G:27:ASN:HB3	6:1G:30:GLU:HG3	1.89	0.53
7:1H:149:ARG:NH1	7:1H:167:GLU:OE1	2.38	0.53
8:1I:95:LYS:HE3	8:1I:99:GLU:HG3	1.90	0.53
12:1Q:134:ARG:HA	12:1Q:138:ASP:OD2	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:262:A:H2'	32:1a:263:A:C8	2.43	0.53
32:1a:1070:U:OP1	36:1e:18:ARG:NH2	2.38	0.53
35:1d:178:VAL:O	35:1d:179:GLU:HB2	2.07	0.53
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.89	0.53
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.91	0.53
1:2A:973:A:OP2	61:2A:3926:HOH:O	2.19	0.53
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.44	0.53
1:2A:2103:C:H2'	1:2A:2104:G:C8	2.44	0.53
1:2A:2507:C:H5"	1:2A:2573:C:N4	2.23	0.53
5:2F:28:ILE:HD13	5:2F:116:ASP:HB2	1.90	0.53
9:2N:73:THR:HA	9:2N:83:LYS:O	2.09	0.53
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.90	0.53
32:2a:407:G:H2'	32:2a:408:A:H8	1.74	0.53
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.91	0.53
32:2a:975:A:N1	41:2j:48:THR:HB	2.22	0.53
33:2b:91:PRO:HA	33:2b:151:GLY:O	2.09	0.53
34:2c:71:ALA:CA	34:2c:106:VAL:HB	2.38	0.53
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.08	0.53
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.27	0.53
7:1H:33:LEU:HD21	7:1H:136:ILE:HG13	1.91	0.53
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.90	0.53
23:11:50:ARG:HG2	23:11:59:THR:CG2	2.38	0.53
31:19:2:LYS:NZ	31:19:31:LYS:O	2.30	0.53
32:1a:975:A:O2'	45:1n:32:SER:OG	2.20	0.53
33:1b:122:PHE:CE2	33:1b:139:LYS:HB2	2.38	0.53
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.23	0.53
1:2A:289:A:H2'	1:2A:290:G:O4'	2.09	0.53
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.09	0.53
1:2A:1777:U:O2'	1:2A:1778:U:H5'	2.07	0.53
1:2A:2129:C:N4	1:2A:2159:G:H1	2.07	0.53
4:2E:15:PHE:CD1	15:2T:81:PRO:HD2	2.44	0.53
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.74	0.53
12:2Q:54:MET:HE1	12:2Q:104:PHE:HB3	1.91	0.53
32:2a:353:A:H5'	32:2a:353:A:H8	1.73	0.53
33:2b:82:ARG:HB2	33:2b:92:TYR:CZ	2.44	0.53
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.44	0.53
41:2j:38:ILE:HG13	41:2j:71:LEU:HD23	1.91	0.53
47:2p:58:TYR:O	47:2p:61:SER:N	2.42	0.53
54:2w:8:4SU:HN3	54:2w:14:A:H62	1.56	0.53
26:14:63:TYR:N	26:14:63:TYR:HD1	2.07	0.53
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.75	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1006:C:C2	1:2A:1138:G:N2	2.77	0.53
2:2B:52:A:C6	14:2S:33:LYS:HE3	2.44	0.53
12:2Q:85:LYS:HD3	22:20:7:LEU:CB	2.39	0.53
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.42	0.53
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.74	0.53
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.44	0.52
32:1a:841:U:OP2	32:1a:841:U:H6	1.93	0.52
32:1a:1139:G:H4'	32:1a:1140:C:O5'	2.09	0.52
32:1a:1292:U:OP2	38:1g:41:ARG:NH2	2.41	0.52
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.44	0.52
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.74	0.52
54:1w:56:C:H2'	54:1w:57:G:O4'	2.09	0.52
1:2A:196:A:N3	1:2A:196:A:H2'	2.23	0.52
1:2A:657:U:H2'	1:2A:658:C:C6	2.44	0.52
1:2A:2812:G:H2'	1:2A:2813:A:C8	2.44	0.52
3:2D:142:VAL:HG22	3:2D:192:THR:O	2.09	0.52
32:2a:528:C:H5'	32:2a:529:G:OP2	2.08	0.52
34:2c:29:TYR:HE1	41:2j:11:PHE:HE2	1.56	0.52
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.90	0.52
40:2i:17:VAL:HG11	40:2i:81:ILE:HA	1.91	0.52
1:1A:1876:A:H2'	1:1A:1877:A:H8	1.74	0.52
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.91	0.52
32:1a:1111:A:N1	34:1c:177:THR:OG1	2.35	0.52
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.10	0.52
34:1c:113:ALA:N	34:1c:183:ASP:OD2	2.38	0.52
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.56	0.52
1:2A:894:C:O2'	1:2A:895:U:H5"	2.08	0.52
1:2A:1116:C:H2'	1:2A:1117:G:H8	1.71	0.52
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.45	0.52
3:2D:159:ALA:HB1	3:2D:198:ASN:HB3	1.91	0.52
6:2G:11:TYR:HA	6:2G:15:VAL:HB	1.91	0.52
32:2a:337:C:H2'	32:2a:338:A:H8	1.74	0.52
32:2a:375:U:OP1	47:2p:69:THR:OG1	2.15	0.52
32:2a:401:C:OP2	35:2d:73:ARG:NH1	2.41	0.52
32:2a:982:U:H5"	45:2n:6:LEU:HD21	1.91	0.52
32:2a:1073:U:H2'	32:2a:1074:G:C8	2.44	0.52
35:2d:64:LEU:HD13	35:2d:198:VAL:HG21	1.90	0.52
54:2w:33:U:N3	54:2w:36:A:OP2	2.39	0.52
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.09	0.52
18:1W:83:LYS:O	18:1W:84:ARG:HD3	2.09	0.52
26:14:63:TYR:N	26:14:63:TYR:CD1	2.76	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.24	0.52
1:2A:963:U:H1'	1:2A:2250:G:O6	2.10	0.52
1:2A:1181:C:H2'	1:2A:1182:A:H8	1.73	0.52
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.45	0.52
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.25	0.52
1:2A:2659:G:OP1	7:2H:158:HIS:NE2	2.40	0.52
2:2B:13:A:H5"	2:2B:15:A:C6	2.44	0.52
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.75	0.52
24:22:22:GLU:OE2	24:22:68:ARG:NH2	2.41	0.52
26:24:12:ALA:CB	26:24:26:SER:HB3	2.39	0.52
29:27:24:THR:O	29:27:28:ARG:HG3	2.08	0.52
32:2a:529:G:O6	43:2l:49:ASN:HA	2.09	0.52
32:2a:841:U:H6	32:2a:841:U:P	2.32	0.52
32:2a:865:A:N3	32:2a:918:A:O2'	2.36	0.52
35:2d:74:GLN:O	35:2d:78:LEU:HD13	2.10	0.52
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.74	0.52
1:1A:2470:G:OP1	12:1Q:56:ARG:NH2	2.43	0.52
11:1P:77:ARG:HB2	11:1P:78:PRO:HD2	1.90	0.52
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.10	0.52
32:1a:180:U:O2'	32:1a:181:G:H5'	2.09	0.52
32:1a:265:G:O2'	48:1q:67:LYS:N	2.41	0.52
32:1a:269:C:H2'	32:1a:270:A:C8	2.44	0.52
32:1a:458:C:H2'	32:1a:460:G:O4'	2.09	0.52
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.92	0.52
40:1i:28:VAL:HA	40:1i:63:ILE:O	2.10	0.52
1:2A:93:G:H2'	1:2A:94:C:C6	2.43	0.52
1:2A:992:C:OP1	16:2U:47:TYR:OH	2.21	0.52
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.35	0.52
32:2a:735:C:H2'	32:2a:736:C:C6	2.44	0.52
32:2a:859:A:H2'	32:2a:860:A:O4'	2.10	0.52
32:2a:1212:U:H5'	32:2a:1213:A:C8	2.45	0.52
33:2b:73:THR:HA	33:2b:94:ASN:O	2.10	0.52
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.45	0.52
1:1A:1526:G:C6	1:1A:1527:G:C2	2.98	0.52
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.44	0.52
26:14:63:TYR:HD1	26:14:63:TYR:H	1.57	0.52
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.45	0.52
35:1d:76:ARG:NE	35:1d:80:GLU:OE2	2.34	0.52
1:2A:263:C:H2'	1:2A:264:C:O4'	2.10	0.52
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.30	0.52
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:76:LYS:HD2	17:2V:81:TYR:CD2	2.45	0.52
21:2Z:40:ASP:OD2	21:2Z:43:GLU:N	2.18	0.52
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.09	0.52
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.74	0.52
32:2a:1313:U:P	50:2s:5:LEU:HD12	2.49	0.52
36:2e:36:ASP:O	36:2e:38:GLN:N	2.36	0.52
1:1A:12:U:O2	1:1A:12:U:H2'	2.10	0.52
1:1A:590:A:H2'	1:1A:591:C:O4'	2.10	0.52
1:1A:2344:U:OP1	28:16:37:ARG:NH1	2.43	0.52
6:1G:3:LEU:HD12	6:1G:5:VAL:HG12	1.90	0.52
14:1S:3:ARG:NH1	61:1S:301:HOH:O	2.42	0.52
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.91	0.52
38:1g:89:MET:HE3	38:1g:155:ARG:HB2	1.91	0.52
1:2A:492:A:H2'	1:2A:493:G:O4'	2.10	0.52
1:2A:920:G:H2'	1:2A:921:G:H8	1.74	0.52
1:2A:2489:G:O2'	1:2A:2490:G:H5'	2.10	0.52
12:2Q:77:LYS:NZ	12:2Q:86:GLY:O	2.41	0.52
32:2a:707:C:O2'	32:2a:708:C:H5'	2.09	0.52
35:2d:159:ARG:O	35:2d:163:GLU:N	2.38	0.52
36:2e:106:PRO:HB3	36:2e:135:THR:HG21	1.91	0.52
42:2k:43:SER:HB3	42:2k:68:ALA:HB2	1.92	0.52
50:2s:66:MET:HE3	50:2s:74:PHE:CE1	2.44	0.52
1:1A:796:C:H2'	1:1A:797:C:C6	2.44	0.52
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.24	0.52
1:1A:1095:A:C8	1:1A:1096:A:C8	2.97	0.52
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.10	0.52
1:1A:2319:G:H1	14:1S:3:ARG:HD3	1.74	0.52
33:1b:223:ILE:HA	33:1b:226:ARG:HG2	1.91	0.52
1:2A:908:C:OP1	12:2Q:22:LYS:HE2	2.08	0.52
1:2A:1204:A:H61	1:2A:1240:U:H2'	1.74	0.52
1:2A:1496:A:N3	1:2A:1577:C:O2'	2.38	0.52
1:2A:2663:G:H3'	1:2A:2664:G:H8	1.73	0.52
6:2G:33:ARG:NH2	6:2G:162:THR:HG21	2.25	0.52
22:20:70:GLN:NE2	22:20:72:ARG:HD2	2.24	0.52
30:28:6:THR:HG21	30:28:11:LYS:HD2	1.90	0.52
32:2a:222:U:H2'	32:2a:223:U:C6	2.44	0.52
32:2a:1122:U:N3	32:2a:1123:A:N7	2.58	0.52
33:2b:80:ILE:HD11	33:2b:212:GLN:HB2	1.91	0.52
36:2e:99:GLY:O	36:2e:117:ASP:HA	2.10	0.52
41:2j:22:LYS:O	41:2j:26:ALA:N	2.34	0.52
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.22	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2390:U:P	30:18:35:GLN:HE22	2.33	0.52
4:1E:101:ARG:HD2	4:1E:169:ASN:OD1	2.10	0.52
7:1H:3:ARG:HG3	7:1H:4:ILE:N	2.23	0.52
8:1I:114:LEU:HD13	8:1I:130:TYR:HB2	1.92	0.52
20:1Y:7:VAL:HG23	20:1Y:74:PRO:HD3	1.91	0.52
32:1a:250:A:H4'	32:1a:251:G:O5'	2.09	0.52
32:1a:909:A:H2'	32:1a:910:C:O4'	2.10	0.52
33:1b:19:HIS:NE2	33:1b:206:ASP:OD2	2.42	0.52
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.42	0.52
54:1w:5:G:H2'	54:1w:6:G:C8	2.45	0.52
1:2A:1721:G:H2'	1:2A:1740:G:O6	2.09	0.52
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	1.91	0.52
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.45	0.52
11:2P:19:VAL:HB	11:2P:31:ALA:HA	1.92	0.52
11:2P:94:GLU:HG3	11:2P:124:LYS:HE3	1.92	0.52
12:2Q:75:THR:HA	12:2Q:89:ASN:O	2.10	0.52
32:2a:909:A:H2	32:2a:1413:A:N3	2.08	0.52
32:2a:1070:U:OP1	36:2e:25:ARG:HD2	2.09	0.52
33:2b:180:LEU:O	33:2b:182:ILE:N	2.43	0.52
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.58	0.52
41:2j:47:PHE:N	41:2j:63:PHE:O	2.37	0.52
7:1H:8:PRO:HB3	7:1H:51:ARG:HG2	1.91	0.52
32:1a:300:A:H1'	32:1a:565:U:O2	2.10	0.52
32:1a:1402:4OC:O5'	32:1a:1402:4OC:H6	2.09	0.52
33:1b:8:LYS:O	33:1b:217:ARG:NH1	2.42	0.52
33:1b:180:LEU:O	33:1b:182:ILE:HG13	2.09	0.52
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	1.92	0.52
39:1h:64:LYS:HG2	39:1h:79:VAL:HG21	1.91	0.52
1:2A:1359:A:C2	1:2A:1372:U:O4	2.63	0.52
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.10	0.52
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.09	0.52
9:2N:42:TRP:CE3	16:2U:63:VAL:HG11	2.45	0.52
22:20:11:ARG:O	22:20:14:ARG:NH1	2.43	0.52
32:2a:541:G:N2	32:2a:542:G:H1'	2.25	0.52
32:2a:1060:C:H5'	45:2n:45:ARG:HH12	1.74	0.52
32:2a:1316:G:H2'	32:2a:1318:A:OP2	2.09	0.52
1:1A:1205:U:H4'	1:1A:1206:G:OP2	2.09	0.52
9:1N:115:ARG:HA	9:1N:118:LYS:HD2	1.92	0.52
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.08	0.52
24:12:23:LYS:O	24:12:27:GLU:HG3	2.10	0.52
27:15:40:LYS:NZ	27:15:44:THR:O	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:396:G:O2'	32:1a:398:C:OP1	2.15	0.52
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.45	0.52
33:1b:18:GLY:CA	33:1b:42:ILE:HG13	2.39	0.52
1:2A:840:C:H2'	1:2A:841:A:C8	2.45	0.52
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.27	0.52
1:2A:2882:A:H5'	13:2R:96:ARG:HB2	1.92	0.52
5:2F:165:ARG:HG2	5:2F:168:ARG:NH2	2.25	0.52
6:2G:38:VAL:HG12	6:2G:93:THR:HG23	1.91	0.52
18:2W:34:ASN:OD1	18:2W:37:ARG:NH2	2.42	0.52
32:2a:959:A:O2'	32:2a:961:U:H5'	2.10	0.52
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.74	0.52
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.90	0.52
32:1a:404:U:H2'	32:1a:405:U:C6	2.45	0.51
32:1a:662:G:H2'	32:1a:663:A:C8	2.45	0.51
33:1b:170:GLU:O	33:1b:174:VAL:HG23	2.10	0.51
41:1j:26:ALA:HB1	41:1j:84:GLN:OE1	2.10	0.51
51:1t:90:GLN:O	51:1t:93:GLU:HB2	2.10	0.51
1:2A:848:G:H2'	1:2A:849:A:C8	2.45	0.51
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.45	0.51
1:2A:2803:C:H2'	1:2A:2804:C:C6	2.45	0.51
6:2G:122:PRO:O	6:2G:125:PHE:HD2	1.94	0.51
12:2Q:38:GLU:OE2	12:2Q:128:LYS:N	2.37	0.51
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG13	1.92	0.51
22:20:36:ILE:HD13	22:20:58:THR:HG21	1.91	0.51
32:2a:45:U:H2'	32:2a:46:G:C8	2.45	0.51
32:2a:163:C:H2'	32:2a:164:U:C6	2.45	0.51
32:2a:1343:G:H1'	40:2i:121:ARG:NH1	2.26	0.51
32:2a:1515:C:H2'	32:2a:1516:G:H8	1.75	0.51
41:2j:49:VAL:HG12	41:2j:61:GLU:O	2.10	0.51
1:1A:84:A:H5"	20:1Y:8:LYS:HE3	1.91	0.51
1:1A:100:G:H21	24:12:7:ARG:HH12	1.57	0.51
1:1A:264:C:O2'	1:1A:265:A:H2'	2.10	0.51
1:1A:271(D):G:H2'	1:1A:271(E):U:O4'	2.10	0.51
1:1A:518:G:H2'	1:1A:519:U:C6	2.46	0.51
1:1A:1462:C:H2'	1:1A:1463:C:O4'	2.11	0.51
1:1A:2751:G:H4'	7:1H:4:ILE:HD11	1.92	0.51
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.44	0.51
28:16:35:GLU:CD	28:16:50:ARG:HH12	2.17	0.51
32:1a:60:A:N1	32:1a:107:G:O2'	2.41	0.51
32:1a:257:G:C6	32:1a:258:G:C5	2.98	0.51
32:1a:270:A:H2'	32:1a:271:C:C6	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.75	0.51
33:1b:76:GLN:HG2	33:1b:206:ASP:O	2.10	0.51
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.91	0.51
34:1c:181:ASN:ND2	34:1c:204:LEU:HB2	2.26	0.51
54:1y:26:A:N6	54:1y:44:G:N1	2.56	0.51
1:2A:994:C:O2'	1:2A:996:A:OP1	2.27	0.51
1:2A:2830:G:O2'	1:2A:2883:A:N1	2.40	0.51
6:2G:43:LEU:C	6:2G:45:GLU:H	2.18	0.51
7:2H:20:ALA:HB3	7:2H:23:ARG:HG3	1.91	0.51
25:23:7:LYS:HE3	25:23:34:GLU:HG3	1.92	0.51
32:2a:114:U:O2'	32:2a:115:G:H5'	2.10	0.51
32:2a:341:C:O2	32:2a:348:G:N2	2.38	0.51
32:2a:357:G:OP1	32:2a:367:U:H5"	2.10	0.51
32:2a:1328:C:O3'	44:2m:29:ARG:HG3	2.11	0.51
33:2b:112:VAL:HG23	33:2b:149:LEU:HD23	1.92	0.51
38:2g:78:ARG:HH21	38:2g:79:ARG:NE	2.05	0.51
40:2i:8:GLY:O	40:2i:15:ALA:N	2.25	0.51
1:1A:2774:C:H2'	1:1A:2775:A:O4'	2.10	0.51
8:1I:94:ALA:H	8:1I:116:LEU:HD22	1.75	0.51
32:1a:92:C:H2'	32:1a:93:G:C8	2.45	0.51
32:1a:341:C:H2'	32:1a:342:C:C6	2.46	0.51
32:1a:460:G:N2	32:1a:471:G:OP2	2.36	0.51
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.45	0.51
34:1c:130:VAL:HG12	34:1c:134:ILE:HD11	1.92	0.51
54:1y:4:C:H2'	54:1y:5:G:O4'	2.10	0.51
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.45	0.51
1:2A:2131:G:C8	1:2A:2133:G:C2	2.98	0.51
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.45	0.51
2:2B:75:G:HO2'	21:2Z:85:HIS:CD2	2.22	0.51
14:2S:11:LYS:HG3	14:2S:91:PRO:HB3	1.92	0.51
32:2a:196:A:OP1	51:2t:68:LYS:NZ	2.41	0.51
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.75	0.51
32:2a:1316:G:N2	32:2a:1318:A:H3'	2.25	0.51
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.25	0.51
37:2f:61:LEU:HB3	37:2f:63:TYR:HE2	1.76	0.51
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.42	0.51
51:2t:79:ARG:O	51:2t:83:ARG:HG3	2.10	0.51
1:1A:548:A:H61	17:1V:18:LEU:HA	1.73	0.51
1:1A:624:C:O2'	1:1A:657:U:OP1	2.23	0.51
1:1A:1062:G:P	1:1A:1070:A:H1'	2.51	0.51
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:17:LEU:HD21	12:1Q:96:VAL:HG13	1.92	0.51
13:1R:86:ARG:HD2	61:1R:311:HOH:O	2.10	0.51
18:1W:84:ARG:O	18:1W:96:ILE:N	2.44	0.51
22:10:29:GLN:O	22:10:67:VAL:HG23	2.10	0.51
32:1a:487:A:H2'	32:1a:488:C:O4'	2.10	0.51
32:1a:1342:C:H1'	40:1i:124:GLN:HE21	1.74	0.51
33:1b:84:GLU:O	33:1b:219:VAL:HG21	2.10	0.51
47:1p:38:TYR:CZ	47:1p:50:LYS:HB2	2.45	0.51
1:2A:307:G:H21	1:2A:330:A:H62	1.58	0.51
1:2A:855:G:C5	1:2A:856:C:C4	2.98	0.51
1:2A:931:G:O2'	25:23:24:LYS:HD3	2.10	0.51
1:2A:1125:G:H5'	31:29:37:GLY:HA2	1.92	0.51
1:2A:1411:C:H2'	1:2A:1412:A:C8	2.45	0.51
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.25	0.51
2:2B:2:C:H2'	2:2B:3:C:H6	1.75	0.51
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.92	0.51
32:2a:924:C:O2'	32:2a:1502:A:N1	2.42	0.51
32:2a:934:C:O2'	32:2a:1344:C:OP2	2.22	0.51
36:2e:34:VAL:O	36:2e:42:GLY:N	2.40	0.51
39:2h:111:ILE:HD12	39:2h:135:CYS:SG	2.50	0.51
39:2h:116:LYS:HD2	39:2h:127:LEU:HD22	1.91	0.51
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.46	0.51
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.11	0.51
24:12:17:SER:OG	24:12:20:GLU:HG3	2.11	0.51
32:1a:717:C:H6	32:1a:717:C:H5"	1.75	0.51
32:1a:1004:A:N6	32:1a:1036:G:N2	2.59	0.51
51:1t:57:ARG:HH12	51:1t:100:ILE:CD1	2.23	0.51
1:2A:996:A:N6	1:2A:1160:G:C6	2.78	0.51
1:2A:1420:U:O5'	1:2A:1420:U:H6	1.94	0.51
1:2A:1857:G:C6	1:2A:1858:G:N1	2.79	0.51
1:2A:2340:G:H2'	1:2A:2341:G:H8	1.74	0.51
7:2H:38:SER:HB3	7:2H:41:MET:HG2	1.91	0.51
32:2a:429:U:O3'	35:2d:22:LYS:NZ	2.43	0.51
33:2b:55:PHE:HE1	33:2b:218:ALA:HA	1.75	0.51
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.93	0.51
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.11	0.51
32:1a:262:A:C6	32:1a:263:A:C6	2.99	0.51
32:1a:316:G:OP2	32:1a:351:G:O2'	2.24	0.51
32:1a:1206:G:O4'	34:1c:194:GLY:HA2	2.10	0.51
33:1b:219:VAL:HA	33:1b:222:ILE:HG13	1.92	0.51
1:2A:359:A:H2'	1:2A:360:G:O4'	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:912:C:C2	1:2A:913:U:C5	2.98	0.51
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.45	0.51
1:2A:2137:C:N4	1:2A:2155:G:O6	2.44	0.51
6:2G:41:GLN:O	6:2G:43:LEU:N	2.44	0.51
20:2Y:43:ASN:HD22	20:2Y:43:ASN:C	2.16	0.51
23:21:5:CYS:SG	23:21:8:SER:OG	2.69	0.51
25:23:22:ALA:O	25:23:26:LEU:HG	2.10	0.51
32:2a:630:G:H2'	32:2a:631:G:H8	1.75	0.51
32:2a:730:G:O6	46:2o:51:HIS:NE2	2.40	0.51
32:2a:983:A:H2'	32:2a:1201:A:N6	2.25	0.51
32:2a:1400:5MC:H5'	53:2v:18:G:C6	2.46	0.51
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.41	0.51
1:1A:2615:U:H2'	1:1A:2616:C:H6	1.76	0.51
13:1R:118:GLU:H	13:1R:118:GLU:CD	2.19	0.51
32:1a:79:G:O6	32:1a:90:U:C2	2.64	0.51
1:2A:740:U:H2'	1:2A:741:G:C8	2.46	0.51
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.93	0.51
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.26	0.51
61:2A:4515:HOH:O	11:2P:44:GLY:HA2	2.11	0.51
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.37	0.51
8:2I:14:ASP:O	8:2I:17:GLN:HB3	2.11	0.51
10:2O:66:LYS:HA	10:2O:79:PHE:O	2.11	0.51
21:2Z:6:LYS:HE2	21:2Z:43:GLU:OE1	2.10	0.51
23:21:52:ARG:HA	23:21:56:GLN:O	2.11	0.51
32:2a:707:C:H2'	32:2a:708:C:C6	2.46	0.51
32:2a:972:C:H4'	41:2j:57:LYS:HB2	1.90	0.51
1:1A:1009:A:OP2	9:1N:37:LYS:NZ	2.34	0.51
1:1A:1057:A:C8	1:1A:1086:A:C8	2.99	0.51
1:1A:1843:C:H5'	3:1D:253:GLN:OE1	2.11	0.51
1:1A:2803:C:H2'	1:1A:2804:C:H6	1.76	0.51
32:1a:448:A:OP2	32:1a:485:G:N1	2.30	0.51
1:2A:212:G:H2'	1:2A:213:A:O4'	2.10	0.51
1:2A:2125:G:N3	1:2A:2173:A:N6	2.57	0.51
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.25	0.51
1:2A:2484:G:C2	1:2A:2485:G:C8	2.99	0.51
1:2A:2689:U:P	1:2A:2719:G:H22	2.34	0.51
6:2G:11:TYR:OH	6:2G:16:ARG:HD3	2.11	0.51
27:25:40:LYS:NZ	27:25:44:THR:O	2.44	0.51
32:2a:1178:G:OP1	40:2i:93:ARG:NE	2.43	0.51
32:2a:1478:C:H2'	32:2a:1479:C:H6	1.76	0.51
36:2e:19:MET:SD	36:2e:24:ARG:HB3	2.51	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:29:ASN:OD1	40:2i:65:VAL:N	2.35	0.51
42:2k:48:ILE:H	42:2k:48:ILE:HD12	1.76	0.51
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.50	0.51
1:1A:1667:G:O2'	1:1A:1991:U:O4	2.22	0.51
1:1A:1693:U:H1'	3:1D:14:ARG:HH21	1.75	0.51
4:1E:70:ALA:O	4:1E:72:VAL:HG13	2.10	0.51
32:1a:129:U:H5'	48:1q:3:LYS:HZ3	1.76	0.51
32:1a:448:A:C4	32:1a:487:A:C2	2.99	0.51
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.11	0.51
54:1y:56:C:H2'	54:1y:57:G:O4'	2.11	0.51
1:2A:200:U:O2	1:2A:386:G:N2	2.44	0.51
1:2A:208:C:H2'	1:2A:209:C:C6	2.46	0.51
1:2A:311:A:C6	1:2A:328:U:C4	2.98	0.51
1:2A:332:A:O2'	1:2A:334:C:OP2	2.24	0.51
1:2A:825:C:O2	11:2P:55:ARG:NH1	2.44	0.51
1:2A:856:C:O4'	22:20:27:GLU:HB3	2.11	0.51
1:2A:890:A:H2'	1:2A:892:G:C8	2.41	0.51
9:2N:69:GLN:O	9:2N:71:ILE:HG13	2.11	0.51
11:2P:90:ARG:HD2	11:2P:91:PHE:CZ	2.45	0.51
11:2P:99:LEU:HD12	11:2P:102:ARG:HD2	1.93	0.51
35:2d:101:LEU:O	35:2d:104:VAL:HG22	2.11	0.51
55:2x:27:U:O2	55:2x:44:A:H2	1.94	0.51
1:1A:504:U:H2'	61:1A:5739:HOH:O	2.11	0.51
1:1A:1062:G:C8	1:1A:1088:A:H2'	2.46	0.51
1:1A:1104:C:H2'	1:1A:1105:U:O4'	2.10	0.51
1:1A:1712:C:H2'	1:1A:1713:U:O4'	2.11	0.51
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.26	0.51
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.11	0.51
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	2.09	0.51
47:1p:72:ARG:HA	47:1p:75:ARG:HB2	1.93	0.51
1:2A:602:G:O2'	1:2A:655:A:N6	2.44	0.51
1:2A:855:G:H2'	1:2A:856:C:C6	2.46	0.51
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.11	0.51
1:2A:2135:A:C8	1:2A:2136:C:C5	2.94	0.51
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.46	0.51
6:2G:50:ALA:C	6:2G:52:ILE:H	2.16	0.51
6:2G:52:ILE:C	6:2G:53:LEU:HD23	2.36	0.51
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.45	0.51
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.11	0.51
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.10	0.51
1:1A:1080:C:H2'	1:1A:1081:U:O4'	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.93	0.50
7:1H:7:LEU:HD12	7:1H:8:PRO:HD2	1.93	0.50
8:1I:81:VAL:HG21	8:1I:88:ILE:HG12	1.92	0.50
12:1Q:10:ARG:NH1	12:1Q:90:VAL:H	2.09	0.50
14:1S:68:GLN:NE2	14:1S:71:ARG:HH21	2.09	0.50
32:1a:1298:C:H4'	32:1a:1299:A:C4	2.47	0.50
33:1b:102:LEU:HB3	33:1b:180:LEU:HD12	1.93	0.50
42:1k:99:GLN:CG	42:1k:105:VAL:HG11	2.41	0.50
54:1y:58:A:C2	54:1y:60:U:H2'	2.45	0.50
1:2A:72:U:OP1	61:2A:3950:HOH:O	2.20	0.50
1:2A:1915:5MU:O4	32:2a:1409:C:H4'	2.11	0.50
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.46	0.50
1:2A:2203:U:O2'	1:2A:2205:C:H5'	2.12	0.50
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.45	0.50
7:2H:86:GLU:OE2	7:2H:132:ARG:NH2	2.39	0.50
21:2Z:52:SER:CB	21:2Z:54:HIS:H	2.24	0.50
32:2a:452:A:H4'	47:2p:72:ARG:HH21	1.76	0.50
32:2a:1010:G:H2'	32:2a:1011:G:C8	2.45	0.50
34:2c:124:ILE:HG21	34:2c:130:VAL:HG13	1.92	0.50
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.11	0.50
35:2d:38:TYR:CE1	35:2d:45:GLN:HG3	2.45	0.50
35:2d:92:VAL:O	35:2d:96:LEU:HD13	2.11	0.50
49:2r:44:LEU:HD12	49:2r:79:LEU:HD22	1.92	0.50
1:1A:1352:U:OP2	61:1A:4239:HOH:O	2.19	0.50
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.26	0.50
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.76	0.50
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.46	0.50
11:1P:39:LYS:O	11:1P:39:LYS:HG2	2.10	0.50
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.92	0.50
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.09	0.50
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.95	0.50
35:1d:128:VAL:HG12	35:1d:129:ASN:ND2	2.26	0.50
37:1f:69:GLU:H	37:1f:69:GLU:CD	2.18	0.50
43:1l:60:LEU:HD11	43:1l:66:VAL:HG22	1.93	0.50
50:1s:27:GLU:HG2	50:1s:28:LYS:HG2	1.93	0.50
1:2A:600:G:N2	1:2A:605:C:O3'	2.44	0.50
1:2A:1354:A:H2'	1:2A:1355:G:O4'	2.11	0.50
17:2V:56:SER:HB3	17:2V:100:ARG:HB2	1.92	0.50
21:2Z:53:ILE:HA	21:2Z:71:VAL:CG2	2.39	0.50
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.51	0.50
34:2c:70:VAL:HG23	34:2c:104:GLN:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:179:ARG:HH12	34:2c:206:GLU:CD	2.18	0.50
38:2g:113:GLU:CG	38:2g:119:ARG:HG2	2.41	0.50
54:2y:40:C:H2'	54:2y:41:C:H6	1.77	0.50
1:1A:2153:G:H2'	1:1A:2154:G:H8	1.75	0.50
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.75	0.50
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.11	0.50
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.94	0.50
36:1e:78:HIS:HE1	36:1e:142:LEU:HA	1.77	0.50
37:1f:35:ALA:HA	37:1f:67:MET:HB3	1.94	0.50
1:2A:897:C:O4'	54:2w:56:C:H5	1.94	0.50
1:2A:945:A:C4	1:2A:2448:A:C2	2.99	0.50
1:2A:1467:C:C5	1:2A:1546:C:H2'	2.46	0.50
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.76	0.50
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.24	0.50
2:2B:3:C:H2'	2:2B:4:C:C6	2.46	0.50
6:2G:5:VAL:HG13	6:2G:8:LYS:HE2	1.92	0.50
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.27	0.50
7:2H:40:GLU:OE1	7:2H:61:HIS:NE2	2.45	0.50
32:2a:216:G:H2'	32:2a:217:C:C6	2.46	0.50
33:2b:185:ILE:CB	33:2b:199:TYR:HB2	2.31	0.50
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	1.93	0.50
37:2f:24:GLU:HG3	37:2f:28:ARG:NH1	2.25	0.50
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.41	0.50
1:1A:2794:C:H42	1:1A:2802:G:N2	2.09	0.50
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.46	0.50
10:1O:26:LYS:NZ	10:1O:37:ASP:OD2	2.39	0.50
13:1R:31:HIS:HD2	61:1R:313:HOH:O	1.94	0.50
14:1S:63:THR:HG23	14:1S:100:ALA:HB2	1.94	0.50
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.93	0.50
33:1b:42:ILE:HG21	33:1b:202:PRO:O	2.12	0.50
54:1y:58:A:H4'	54:1y:59:U:OP1	2.12	0.50
1:2A:687:C:H2'	1:2A:688:U:O4'	2.11	0.50
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.46	0.50
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.46	0.50
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.37	0.50
9:2N:73:THR:HG22	9:2N:84:LYS:HG2	1.92	0.50
12:2Q:19:GLY:HA2	21:2Z:79:ARG:HH12	1.77	0.50
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.10	0.50
14:2S:77:ALA:O	14:2S:81:GLY:N	2.44	0.50
21:2Z:93:ASP:HA	21:2Z:131:ARG:HH22	1.76	0.50
23:21:32:LYS:O	61:21:201:HOH:O	2.20	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:137:C:H2'	32:2a:138:G:H8	1.75	0.50
32:2a:1229:A:OP2	44:2m:114:ARG:HD3	2.11	0.50
32:2a:1456:G:N2	51:2t:43:LEU:HD11	2.27	0.50
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.46	0.50
49:2r:35:ARG:O	49:2r:37:VAL:N	2.44	0.50
2:1B:100:A:N3	61:1B:306:HOH:O	2.35	0.50
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.12	0.50
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.46	0.50
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.93	0.50
36:1e:78:HIS:CE1	36:1e:142:LEU:HD23	2.47	0.50
40:1i:45:ALA:O	40:1i:78:LYS:HG3	2.11	0.50
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.47	0.50
1:2A:1714:G:H1	1:2A:1745(A):C:N4	2.08	0.50
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.76	0.50
1:2A:2489:G:C2'	1:2A:2490:G:H5'	2.41	0.50
2:2B:54:G:N2	6:2G:29:TRP:HE1	2.03	0.50
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.12	0.50
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.11	0.50
1:1A:2206:G:H5"	1:1A:2207:G:C5	2.47	0.50
1:1A:2581:G:H2'	1:1A:2581:G:N3	2.25	0.50
12:1Q:39:PRO:HA	12:1Q:97:VAL:O	2.11	0.50
32:1a:865:A:H5'	32:1a:1078:U:O4	2.11	0.50
32:1a:1095:U:H2'	32:1a:1096:C:C6	2.47	0.50
32:1a:1239:A:C4	32:1a:1298:C:N4	2.80	0.50
32:1a:1386:G:N7	61:1a:1943:HOH:O	2.35	0.50
1:2A:117:G:OP2	1:2A:119:A:O2'	2.23	0.50
1:2A:2025:C:H2'	1:2A:2026:C:C6	2.47	0.50
1:2A:2271:G:C5	1:2A:2272:U:C5	2.99	0.50
1:2A:2342:C:O2'	1:2A:2374:C:OP1	2.28	0.50
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.45	0.50
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.45	0.50
20:2Y:9:LYS:HB2	20:2Y:30:VAL:HG23	1.93	0.50
30:28:55:ALA:O	30:28:59:LYS:HG3	2.10	0.50
32:2a:1379:G:O6	38:2g:2:ALA:HB3	2.11	0.50
32:2a:1395:C:H3'	61:2a:1945:HOH:O	2.11	0.50
33:2b:15:VAL:HG22	33:2b:213:LEU:HD13	1.93	0.50
33:2b:78:GLN:O	33:2b:94:ASN:ND2	2.44	0.50
33:2b:100:GLY:HA2	33:2b:103:THR:OG1	2.12	0.50
33:2b:222:ILE:HG13	33:2b:223:ILE:HG13	1.93	0.50
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.93	0.50
1:1A:558:G:OP1	9:1N:111:PRO:HD2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:185:ASP:OD1	5:1F:188:ARG:NH1	2.33	0.50
6:1G:107:LEU:HA	6:1G:111:LEU:HD12	1.94	0.50
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.27	0.50
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.11	0.50
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.45	0.50
32:1a:219:C:H2'	32:1a:220:G:O4'	2.11	0.50
32:1a:972:C:O2'	41:1j:55:LYS:O	2.30	0.50
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.44	0.50
32:1a:1503:A:H8	32:1a:1503:A:OP1	1.94	0.50
34:1c:199:LYS:HB3	34:1c:201:TYR:HE2	1.76	0.50
35:1d:100:ARG:HD2	35:1d:137:SER:HA	1.94	0.50
39:1h:6:ILE:HD11	39:1h:31:PHE:HD2	1.76	0.50
1:2A:375:C:H2'	1:2A:376:C:C6	2.47	0.50
1:2A:2297:C:H2'	1:2A:2298:A:H8	1.77	0.50
6:2G:41:GLN:HE22	6:2G:153:ARG:HB3	1.76	0.50
8:2I:117:GLU:OE1	8:2I:118:LYS:N	2.32	0.50
32:2a:79:G:H1	32:2a:90:U:H3	1.58	0.50
32:2a:741:G:H2'	32:2a:742:G:O4'	2.12	0.50
32:2a:840:C:OP2	32:2a:840:C:H6	1.95	0.50
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.93	0.50
54:2y:52:G:H5'	54:2y:53:G:OP2	2.11	0.50
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.92	0.50
1:1A:2422:A:O4'	54:1y:76:A:N6	2.44	0.50
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.43	0.50
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.92	0.50
6:1G:146:TYR:O	6:1G:149:VAL:HG12	2.11	0.50
24:12:41:ILE:HG13	24:12:43:GLN:CG	2.41	0.50
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.37	0.50
33:1b:21:ARG:O	33:1b:23:ARG:N	2.45	0.50
33:1b:48:MET:HG3	33:1b:51:LEU:HD12	1.94	0.50
34:1c:132:ARG:HG2	34:1c:136:GLN:NE2	2.27	0.50
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.11	0.50
42:1k:34:ASP:HB2	42:1k:35:PRO:HD2	1.94	0.50
1:2A:322:A:C5	1:2A:340:A:C2	3.00	0.50
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.44	0.50
2:2B:42:C:O2'	6:2G:66:GLN:HG2	2.11	0.50
8:2I:79:ILE:O	8:2I:144:VAL:HA	2.12	0.50
32:2a:884:U:H4'	32:2a:885:G:H5"	1.93	0.50
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.12	0.50
32:2a:1002:G:C6	32:2a:1003:G:H8	2.29	0.50
32:2a:1321:C:H2'	32:2a:1322:C:C5	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1505:G:H4'	32:2a:1506:U:H5"	1.94	0.50
33:2b:8:LYS:HE3	33:2b:8:LYS:H	1.76	0.50
34:2c:6:HIS:CG	45:2n:49:HIS:HB3	2.47	0.50
34:2c:16:ARG:NH1	34:2c:181:ASN:OD1	2.45	0.50
37:2f:97:PHE:O	49:2r:31:LEU:HD23	2.10	0.50
38:2g:115:ARG:O	38:2g:118:VAL:HG22	2.12	0.50
40:2i:4:TYR:O	40:2i:19:LEU:N	2.30	0.50
40:2i:5:TYR:HD1	40:2i:18:PHE:HE1	1.59	0.50
1:1A:359:A:H2'	1:1A:360:G:O4'	2.12	0.50
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.11	0.50
1:1A:1745(A):C:H5"	1:1A:1746:G:OP2	2.11	0.50
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.31	0.50
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.12	0.50
32:1a:626:U:H2'	32:1a:627:G:H8	1.77	0.50
32:1a:1149:C:P	40:1i:9:ARG:HH21	2.35	0.50
33:1b:155:LEU:HD21	33:1b:159:PRO:HD3	1.94	0.50
35:1d:61:LYS:NZ	35:1d:72:GLU:OE1	2.45	0.50
1:2A:1434:A:H61	1:2A:1558:A:N6	2.07	0.50
1:2A:2127:G:C2	1:2A:2161:C:C4	3.00	0.50
16:2U:65:ILE:HD11	16:2U:95:LEU:HB3	1.93	0.50
21:2Z:47:VAL:O	21:2Z:50:GLN:NE2	2.44	0.50
21:2Z:77:ASP:OD2	21:2Z:80:ARG:N	2.45	0.50
32:2a:629:G:H2'	32:2a:630:G:O4'	2.12	0.50
39:2h:121:ASP:HB2	39:2h:125:ARG:NH2	2.27	0.50
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.12	0.50
47:2p:75:ARG:HB2	47:2p:80:PHE:CE2	2.47	0.50
54:2w:34:G:H8	54:2w:34:G:OP1	1.94	0.50
1:1A:15:G:O2'	1:1A:16:G:H5'	2.11	0.49
1:1A:504:U:O2'	61:1A:4240:HOH:O	2.20	0.49
1:1A:1064:C:H1'	1:1A:1076:C:H5	1.77	0.49
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.27	0.49
1:1A:2544:G:H1'	1:1A:2646:C:H4'	1.94	0.49
2:1B:66:A:H61	2:1B:109:C:H5'	1.77	0.49
7:1H:88:LEU:HD23	7:1H:130:ARG:HG2	1.94	0.49
10:1O:64:ARG:HD2	10:1O:79:PHE:CD1	2.46	0.49
32:1a:159:G:H2'	32:1a:161:A:OP2	2.12	0.49
32:1a:1220:G:N2	50:1s:54:GLY:O	2.42	0.49
34:1c:12:LEU:HD11	45:1n:51:GLY:HA2	1.94	0.49
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.94	0.49
38:1g:28:ASN:HD21	38:1g:36:LYS:HZ1	1.60	0.49
47:1p:13:HIS:C	47:1p:15:PRO:HD3	2.36	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2794:C:N4	1:2A:2802:G:O6	2.45	0.49
3:2D:132:PRO:HG3	3:2D:190:TYR:CE2	2.47	0.49
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	1.94	0.49
6:2G:144:ILE:HA	6:2G:148:MET:HE1	1.93	0.49
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.36	0.49
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.26	0.49
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.93	0.49
32:2a:921:U:O2	36:2e:19:MET:HB2	2.12	0.49
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.44	0.49
35:2d:81:GLU:O	35:2d:85:LYS:HB2	2.12	0.49
47:2p:74:LEU:O	47:2p:79:VAL:HG23	2.12	0.49
54:2y:15:G:N2	54:2y:48:C:H42	2.09	0.49
1:1A:1359:A:N1	1:1A:1372:U:O4	2.45	0.49
1:1A:1877:A:H5"	1:1A:1878:G:OP2	2.12	0.49
1:1A:2593:U:H2'	1:1A:2594:C:C6	2.47	0.49
20:1Y:106:LEU:O	20:1Y:107:ASP:HB2	2.13	0.49
32:1a:1055:A:C5	32:1a:1206:G:C2	3.00	0.49
35:1d:162:LEU:CD1	35:1d:181:MET:HG2	2.42	0.49
1:2A:171:G:H2'	1:2A:172:C:C6	2.46	0.49
1:2A:776:G:H4'	1:2A:777:A:O5'	2.11	0.49
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.26	0.49
1:2A:2141:G:C2	1:2A:2142:C:H1'	2.47	0.49
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.47	0.49
32:2a:202:U:H3'	32:2a:203:U:C5	2.47	0.49
34:2c:43:LEU:HD13	34:2c:52:LEU:HD21	1.94	0.49
44:2m:63:THR:HG22	44:2m:64:TRP:CD1	2.46	0.49
1:1A:234:C:H2'	1:1A:235:U:H6	1.77	0.49
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.41	0.49
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.45	0.49
1:1A:2790:A:H5"	1:1A:2791:C:C5'	2.42	0.49
32:1a:376:G:P	47:1p:67:THR:HG21	2.52	0.49
32:1a:1014:A:H4'	50:1s:14:HIS:NE2	2.27	0.49
32:1a:1025:U:O2	32:1a:1036:G:C6	2.65	0.49
32:1a:1503:A:N1	53:1v:12:A:H2	2.11	0.49
35:1d:60:GLU:OE1	35:1d:199:ASN:N	2.44	0.49
1:2A:2136:C:O2'	1:2A:2137:C:H6	1.95	0.49
1:2A:2400:G:H2'	1:2A:2401:U:C6	2.47	0.49
2:2B:52:A:N6	14:2S:33:LYS:HG3	2.27	0.49
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.48	0.49
11:2P:88:LEU:HD11	11:2P:114:ILE:HD12	1.95	0.49
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:68:ARG:HD3	26:24:69:LYS:H	1.76	0.49
32:2a:1055:A:N7	32:2a:1200:C:N4	2.61	0.49
33:2b:149:LEU:HA	33:2b:152:PHE:HB3	1.95	0.49
35:2d:199:ASN:C	35:2d:201:GLN:N	2.68	0.49
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.94	0.49
54:2y:7:A:H61	54:2y:65:G:H1	1.59	0.49
1:1A:247:G:H4'	1:1A:386:G:C5	2.48	0.49
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.12	0.49
5:1F:8:GLN:HE22	5:1F:21:ALA:HB2	1.76	0.49
20:1Y:11:ASP:HA	20:1Y:26:LYS:NZ	2.26	0.49
26:14:58:ARG:HB3	50:1s:67:VAL:HG12	1.93	0.49
32:1a:244:U:O2	61:1a:1918:HOH:O	2.19	0.49
32:1a:626:U:C2	32:1a:627:G:C8	2.99	0.49
32:1a:1085:U:C2	32:1a:1094:G:O6	2.66	0.49
32:1a:1445:C:H2'	32:1a:1446:U:O4'	2.12	0.49
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.94	0.49
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.47	0.49
1:2A:1013:C:H2'	1:2A:1014:U:H6	1.77	0.49
1:2A:2702:U:H4'	1:2A:2703:C:OP1	2.12	0.49
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.38	0.49
18:2W:67:ASP:OD1	18:2W:67:ASP:N	2.45	0.49
19:2X:26:TYR:HB2	19:2X:81:VAL:HG23	1.94	0.49
19:2X:44:GLU:O	19:2X:48:LYS:N	2.45	0.49
21:2Z:128:VAL:HG22	21:2Z:161:VAL:HA	1.93	0.49
32:2a:155:C:H2'	32:2a:156:G:O4'	2.13	0.49
32:2a:530:G:O6	53:2v:21:C:H1'	2.12	0.49
32:2a:964:A:N3	32:2a:969:A:O2'	2.39	0.49
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.26	0.49
54:2w:34:G:H2'	54:2w:35:A:C8	2.48	0.49
1:1A:542:C:O2'	1:1A:543:C:H5'	2.13	0.49
12:1Q:10:ARG:HH12	12:1Q:90:VAL:H	1.59	0.49
13:1R:52:ILE:HD11	13:1R:116:LEU:HD22	1.95	0.49
21:1Z:155:LEU:HD12	21:1Z:156:LYS:H	1.77	0.49
32:1a:673:G:H2'	32:1a:674:G:C8	2.46	0.49
32:1a:1136:U:H5"	32:1a:1137:C:C4	2.47	0.49
35:1d:190:ASP:N	35:1d:193:ASP:OD1	2.40	0.49
44:1m:75:ALA:O	44:1m:79:LYS:HB2	2.12	0.49
55:1x:8:4SU:O2	55:1x:21:A:H2	1.95	0.49
1:2A:298:G:O6	61:2A:3945:HOH:O	2.18	0.49
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.45	0.49
1:2A:468:G:N7	29:27:39:ARG:NH2	2.57	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:568:U:H5'	1:2A:945:A:N1	2.26	0.49
2:2B:44:G:OP1	6:2G:98:ARG:NH2	2.45	0.49
21:2Z:6:LYS:HE2	21:2Z:43:GLU:CD	2.37	0.49
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.30	0.49
41:2j:35:SER:CB	41:2j:73:ASP:HB2	2.41	0.49
1:1A:185:U:H4'	1:1A:218:A:H4'	1.95	0.49
1:1A:226:G:H21	1:1A:228:A:H62	1.61	0.49
1:1A:479:A:N3	1:1A:481:G:H5"	2.28	0.49
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.13	0.49
1:1A:1292:U:H2'	1:1A:1293:C:H6	1.75	0.49
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.46	0.49
4:1E:119:ARG:HG2	4:1E:120:TRP:CD1	2.47	0.49
6:1G:124:SER:HB2	6:1G:131:TYR:CE1	2.48	0.49
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.47	0.49
32:1a:679:C:H2'	32:1a:680:C:H6	1.78	0.49
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.12	0.49
33:1b:82:ARG:HD2	33:1b:92:TYR:CZ	2.48	0.49
39:1h:9:MET:SD	39:1h:32:LYS:HB3	2.53	0.49
1:2A:271(D):G:H2'	1:2A:271(E):U:H6	1.77	0.49
1:2A:324:A:N6	1:2A:338:G:O2'	2.44	0.49
1:2A:495:G:N3	18:2W:61:ASN:ND2	2.61	0.49
1:2A:1540:U:O2'	1:2A:1541:G:H5'	2.12	0.49
1:2A:2332:U:O2'	1:2A:2335:A:N3	2.40	0.49
6:2G:18:GLU:HG2	6:2G:21:ARG:NH2	2.27	0.49
7:2H:3:ARG:HG2	7:2H:6:ARG:HB2	1.94	0.49
9:2N:68:GLU:HG2	9:2N:88:GLU:OE2	2.12	0.49
32:2a:397:A:H3'	32:2a:397:A:N3	2.27	0.49
32:2a:992:U:H3	32:2a:1044:A:H62	1.60	0.49
32:2a:1026:G:H1	32:2a:1036:G:N2	2.09	0.49
35:2d:17:VAL:HG11	35:2d:63:LYS:HD3	1.93	0.49
35:2d:199:ASN:O	35:2d:201:GLN:N	2.45	0.49
37:2f:91:VAL:HG12	37:2f:92:LYS:O	2.13	0.49
38:2g:102:ARG:O	38:2g:106:GLN:HG3	2.13	0.49
40:2i:5:TYR:CD1	40:2i:18:PHE:HE1	2.30	0.49
1:1A:838:C:O2'	1:1A:839:U:H5'	2.13	0.49
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.65	0.49
1:1A:2794:C:N4	1:1A:2802:G:H22	2.10	0.49
2:1B:92:C:H5"	21:1Z:79:ARG:NH1	2.27	0.49
7:1H:103:LEU:HD21	7:1H:131:VAL:HG11	1.93	0.49
8:1I:101:LEU:HD21	8:1I:140:LEU:HD11	1.94	0.49
26:14:34:GLU:HG2	26:14:35:VAL:HG12	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1025:U:C2	32:1a:1036:G:O6	2.65	0.49
32:1a:1044:A:C5	32:1a:1045:C:H1'	2.47	0.49
33:1b:100:GLY:HA2	33:1b:103:THR:OG1	2.12	0.49
36:1e:85:GLY:C	36:1e:87:SER:H	2.21	0.49
38:1g:151:TYR:HB3	38:1g:154:TYR:HD2	1.78	0.49
47:1p:53:VAL:HG13	47:1p:79:VAL:HG13	1.95	0.49
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.93	0.49
1:2A:709:U:H2'	1:2A:710:G:C8	2.48	0.49
1:2A:869:G:C4	1:2A:870:A:C8	3.00	0.49
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.27	0.49
1:2A:1913:A:N7	32:2a:1494:G:H4'	2.27	0.49
4:2E:52:LEU:O	4:2E:76:ARG:HG3	2.12	0.49
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	1.94	0.49
16:2U:74:LEU:H	16:2U:74:LEU:HD12	1.77	0.49
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.93	0.49
32:2a:404:U:H2'	32:2a:405:U:C6	2.48	0.49
32:2a:678:U:H2'	32:2a:679:C:C6	2.47	0.49
33:2b:88:ALA:CB	33:2b:222:ILE:HD11	2.43	0.49
35:2d:8:VAL:HB	35:2d:115:ARG:HH22	1.78	0.49
55:2x:23:C:H2'	55:2x:24:U:C6	2.47	0.49
1:1A:720:C:H2'	1:1A:721:C:H6	1.77	0.49
1:1A:1168:G:H2'	1:1A:1169:G:O4'	2.13	0.49
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.12	0.49
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.13	0.49
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	1.94	0.49
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.95	0.49
15:1T:113:LYS:O	15:1T:114:LEU:HD23	2.12	0.49
26:14:59:PHE:HD2	50:1s:64:GLU:HB3	1.77	0.49
32:1a:399:G:H2'	32:1a:400:C:C6	2.48	0.49
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.27	0.49
32:1a:509:A:C8	32:1a:509:A:H3'	2.47	0.49
32:1a:657:G:H2'	32:1a:658:G:H8	1.78	0.49
32:1a:912:C:O2'	32:1a:913:A:H5'	2.13	0.49
32:1a:1054:C:C4	32:1a:1196:U:H5	2.30	0.49
32:1a:1152:A:H5'	41:1j:13:HIS:CG	2.47	0.49
34:1c:119:ARG:O	34:1c:123:GLN:HG3	2.12	0.49
35:1d:155:LEU:HD12	35:1d:155:LEU:HA	1.69	0.49
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.13	0.49
54:1w:23:A:H3'	54:1w:24:G:H8	1.77	0.49
1:2A:312:G:H4'	1:2A:331:A:N3	2.28	0.49
1:2A:601:C:O2	1:2A:605:C:H4'	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2749:A:H1'	7:2H:63:SER:OG	2.13	0.49
6:2G:50:ALA:O	6:2G:52:ILE:N	2.44	0.49
32:2a:457:C:H2'	32:2a:458:C:H6	1.77	0.49
32:2a:1360:A:OP2	45:2n:35:ARG:NH2	2.46	0.49
36:2e:34:VAL:N	36:2e:42:GLY:O	2.45	0.49
38:2g:38:LEU:O	38:2g:42:ILE:HG13	2.13	0.49
47:2p:75:ARG:O	47:2p:78:GLY:N	2.37	0.49
1:1A:271(Q):G:H2'	1:1A:271(R):G:C8	2.47	0.49
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.12	0.49
1:1A:882:G:H1	1:1A:894:C:N4	2.08	0.49
1:1A:1176:G:OP2	1:1A:1176:G:H4'	2.13	0.49
1:1A:2712:U:O2'	1:1A:2713:A:H5'	2.13	0.49
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.13	0.49
4:1E:4:ILE:HD13	4:1E:28:ALA:HB1	1.95	0.49
11:1P:64:LYS:HE3	30:18:12:LYS:HD3	1.94	0.49
21:1Z:150:LEU:HD12	21:1Z:151:HIS:H	1.78	0.49
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.95	0.49
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.28	0.49
32:1a:1349:A:C2	32:1a:1374:A:C4	3.01	0.49
44:1m:81:LEU:HD22	44:1m:88:ARG:HB2	1.94	0.49
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.94	0.49
54:1y:26:A:N6	54:1y:44:G:H1	2.10	0.49
26:24:61:ARG:HA	26:24:61:ARG:HH11	1.78	0.49
32:2a:59:A:H3'	32:2a:331:G:H22	1.78	0.49
32:2a:160:A:H1'	32:2a:344:A:C5	2.47	0.49
32:2a:1067:A:O2'	32:2a:1068:G:OP2	2.25	0.49
32:2a:1194:U:H4'	36:2e:22:GLY:CA	2.42	0.49
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.48	0.49
38:2g:73:MET:HE3	38:2g:90:GLU:HG3	1.94	0.49
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.46	0.49
40:2i:86:VAL:HA	40:2i:89:ASN:O	2.13	0.49
54:2w:11:C:H2'	54:2w:12:U:H6	1.78	0.49
1:1A:536:A:H2'	1:1A:537:C:C6	2.48	0.49
1:1A:662:G:H5'	11:1P:14:LYS:O	2.13	0.49
1:1A:1170:G:H8	1:1A:1170:G:H5"	1.77	0.49
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.76	0.49
2:1B:42:C:OP1	6:1G:67:LYS:HE2	2.13	0.49
32:1a:679:C:H2'	32:1a:680:C:C6	2.48	0.49
32:1a:1226:C:H4'	50:1s:80:TYR:OH	2.13	0.49
33:1b:118:LEU:HD13	33:1b:142:LEU:HD12	1.95	0.49
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.13	0.49
40:1i:49:PRO:HG2	40:1i:81:ILE:HG23	1.95	0.49
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.48	0.49
1:2A:286:C:H2'	1:2A:287:C:C6	2.48	0.49
1:2A:718:A:H8	1:2A:718:A:O5'	1.95	0.49
1:2A:1341:U:OP2	1:2A:1394:U:O2'	2.26	0.49
5:2F:40:GLN:HE22	5:2F:182:ASN:HB2	1.77	0.49
13:2R:20:LEU:HD11	13:2R:40:LYS:HD3	1.95	0.49
22:20:50:ASN:C	22:20:62:LEU:HD12	2.38	0.49
25:23:39:ASP:OD1	25:23:44:ARG:NH1	2.43	0.49
32:2a:34:C:H2'	32:2a:35:G:C8	2.48	0.49
32:2a:137:C:H2'	32:2a:138:G:C8	2.48	0.49
32:2a:144:G:H1	32:2a:178:C:H42	1.59	0.49
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.48	0.49
32:2a:1502:A:C8	32:2a:1505:G:N2	2.81	0.49
44:2m:90:LEU:HA	44:2m:93:ARG:HE	1.78	0.49
1:1A:2066:C:H5"	61:1A:5453:HOH:O	2.13	0.48
1:1A:2168:G:N1	1:1A:2171:A:C8	2.80	0.48
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.48	0.48
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.28	0.48
1:1A:2853:C:H2'	1:1A:2854:G:H8	1.74	0.48
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.13	0.48
21:1Z:163:LEU:HD22	21:1Z:167:PRO:HG3	1.96	0.48
32:1a:56:U:H2'	32:1a:57:G:C8	2.48	0.48
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.13	0.48
33:1b:69:LEU:HD12	33:1b:70:PHE:N	2.28	0.48
35:1d:52:SER:H	35:1d:55:ALA:HB3	1.77	0.48
36:1e:80:ILE:HD13	36:1e:138:ALA:O	2.13	0.48
36:1e:98:THR:HG22	36:1e:99:GLY:N	2.27	0.48
36:1e:152:ARG:HA	39:1h:64:LYS:HZ3	1.77	0.48
38:1g:108:ALA:HA	38:1g:111:ARG:HG3	1.95	0.48
1:2A:340:A:H2'	1:2A:341:G:O4'	2.12	0.48
1:2A:479:A:N3	1:2A:481:G:H5"	2.28	0.48
6:2G:120:LEU:HB3	6:2G:131:TYR:OH	2.13	0.48
11:2P:38:GLN:HG2	11:2P:45:LEU:H	1.78	0.48
32:2a:943:U:H1'	40:2i:124:GLN:HE22	1.78	0.48
33:2b:107:THR:O	33:2b:110:GLN:HB3	2.13	0.48
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.78	0.48
42:2k:86:GLY:H	42:2k:112:THR:HG23	1.78	0.48
49:2r:25:THR:CG2	49:2r:42:ARG:HH12	2.26	0.48
1:1A:305:U:H2'	1:1A:306:U:C6	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:458:G:O2'	29:17:39:ARG:HD3	2.12	0.48
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.12	0.48
1:1A:887:A:H2	1:1A:889:C:H3'	1.78	0.48
1:1A:1062:G:C5'	1:1A:1070:A:HO2'	2.26	0.48
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.13	0.48
1:1A:2111:C:N4	1:1A:2144:U:O2'	2.46	0.48
61:1A:4719:HOH:O	11:1P:44:GLY:HA2	2.12	0.48
17:1V:1:MET:HE2	17:1V:43:GLU:H	1.78	0.48
32:1a:38:G:H22	32:1a:397:A:H5"	1.78	0.48
32:1a:382:A:H2'	32:1a:383:A:H8	1.77	0.48
32:1a:449:C:O2	47:1p:42:ARG:NH1	2.45	0.48
34:1c:47:LEU:HD23	34:1c:70:VAL:HG21	1.95	0.48
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.13	0.48
39:1h:20:TYR:CE1	39:1h:76:PRO:HG2	2.48	0.48
48:1q:45:HIS:O	48:1q:73:VAL:HG23	2.12	0.48
50:1s:22:LEU:O	50:1s:27:GLU:N	2.46	0.48
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.94	0.48
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.30	0.48
1:2A:2104:G:C2	1:2A:2186:G:C2	3.01	0.48
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.11	0.48
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.48	0.48
16:2U:90:VAL:HG22	17:2V:38:LEU:HD22	1.95	0.48
25:23:4:LEU:N	25:23:37:LEU:O	2.42	0.48
26:24:34:GLU:OE1	44:2m:3:ARG:HA	2.13	0.48
27:25:48:GLU:O	27:25:60:VAL:HG11	2.13	0.48
32:2a:224:C:H2'	32:2a:225:C:C6	2.46	0.48
32:2a:473:G:H2'	32:2a:474:G:H8	1.77	0.48
32:2a:1227:A:OP2	44:2m:111:LYS:HD3	2.13	0.48
35:2d:4:TYR:O	35:2d:4:TYR:CG	2.66	0.48
35:2d:149:ALA:HB3	35:2d:152:SER:HB2	1.94	0.48
45:2n:32:SER:O	45:2n:40:CYS:HA	2.13	0.48
46:2o:15:PHE:CZ	46:2o:85:LEU:HD21	2.49	0.48
2:1B:33:G:C2	2:1B:50:G:C2	3.01	0.48
4:1E:52:LEU:O	4:1E:76:ARG:N	2.46	0.48
6:1G:116:ASP:OD2	44:1m:68:GLY:HA3	2.13	0.48
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.48	0.48
10:1O:91:LEU:HD23	10:1O:111:PHE:CZ	2.48	0.48
32:1a:250:A:H5'	32:1a:252:U:O4'	2.12	0.48
32:1a:435:C:H2'	32:1a:436:C:H6	1.78	0.48
32:1a:690:G:C6	32:1a:691:G:C6	3.02	0.48
32:1a:831:U:H2'	32:1a:832:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:865:A:C2	32:1a:918:A:H4'	2.47	0.48
32:1a:1054:C:C4	54:1w:34:G:H1'	2.48	0.48
34:1c:132:ARG:HE	34:1c:136:GLN:HE22	1.60	0.48
35:1d:158:ILE:HD12	35:1d:159:ARG:HG2	1.95	0.48
1:2A:597:U:H2'	1:2A:598:G:C8	2.48	0.48
1:2A:1019:U:H3	1:2A:1142(A):A:N6	2.03	0.48
1:2A:2273:A:O2'	1:2A:2274:A:H5'	2.13	0.48
1:2A:2282:G:H4'	1:2A:2389:G:O2'	2.13	0.48
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.28	0.48
1:2A:2343:C:O3'	1:2A:2373:G:H4'	2.13	0.48
2:2B:42:C:O2	6:2G:93:THR:N	2.40	0.48
2:2B:76:G:O3'	21:2Z:19:ARG:NH2	2.44	0.48
4:2E:48:GLN:HE21	4:2E:78:LEU:HD12	1.77	0.48
19:2X:12:VAL:HG21	19:2X:27:THR:HG22	1.95	0.48
21:2Z:73:GLN:HB3	21:2Z:87:ASP:CG	2.39	0.48
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.13	0.48
32:2a:634:C:O2'	32:2a:635:G:H5'	2.13	0.48
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.78	0.48
34:2c:71:ALA:CB	34:2c:109:PRO:HB3	2.42	0.48
34:2c:199:LYS:HB3	34:2c:201:TYR:CE2	2.48	0.48
35:2d:196:LEU:HB3	35:2d:198:VAL:HG22	1.94	0.48
36:2e:14:ARG:HG3	36:2e:16:THR:HG23	1.95	0.48
43:2l:8:ASN:HB2	48:2q:34:LYS:HZ2	1.78	0.48
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.43	0.48
53:2v:12:A:N3	53:2v:12:A:H2'	2.28	0.48
54:2w:14:A:H61	54:2w:21:A:H2	1.60	0.48
1:1A:570:G:H2'	1:1A:2030:A:N7	2.28	0.48
1:1A:616:G:OP2	5:1F:106:ARG:NH2	2.41	0.48
1:1A:1027:A:C2	1:1A:2488:A:H5'	2.48	0.48
1:1A:1537:G:H8	1:1A:1537:G:O5'	1.95	0.48
1:1A:1858:G:N2	1:1A:1883:G:H2'	2.29	0.48
3:1D:96:HIS:CD2	3:1D:102:LYS:HD3	2.48	0.48
19:1X:57:LEU:N	19:1X:57:LEU:HD23	2.29	0.48
32:1a:582:U:OP1	46:1o:68:ARG:NH2	2.46	0.48
32:1a:687:A:N3	32:1a:688:G:H1'	2.29	0.48
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.45	0.48
32:1a:1263:C:H2'	32:1a:1264:C:H6	1.79	0.48
32:1a:1446:U:O2'	32:1a:1447:A:C8	2.66	0.48
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	1.96	0.48
1:2A:141:A:H8	1:2A:1408:C:O2'	1.97	0.48
1:2A:185:U:H4'	1:2A:218:A:H4'	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:855:G:C6	1:2A:856:C:N4	2.81	0.48
1:2A:1999:C:H2'	1:2A:2000:G:O4'	2.14	0.48
4:2E:104:VAL:HG11	4:2E:188:VAL:HG13	1.96	0.48
4:2E:143:ASN:HB2	4:2E:147:PRO:HD2	1.96	0.48
6:2G:23:PHE:HB2	6:2G:25:TYR:CZ	2.48	0.48
25:23:4:LEU:O	25:23:36:VAL:HA	2.13	0.48
32:2a:273:A:N6	32:2a:274:A:C6	2.81	0.48
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.76	0.48
38:2g:27:ILE:HD13	38:2g:40:ALA:HA	1.95	0.48
40:2i:4:TYR:HB2	40:2i:19:LEU:O	2.13	0.48
45:2n:52:GLN:O	45:2n:53:LEU:HD23	2.13	0.48
54:2y:7:A:O2'	54:2y:49:C:O4'	2.32	0.48
1:1A:862:G:O2'	2:1B:78:A:N3	2.44	0.48
1:1A:897:C:H5"	1:1A:897:C:H6	1.78	0.48
1:1A:1538:G:O2'	1:1A:1539:G:H5'	2.12	0.48
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.62	0.48
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.48	0.48
12:1Q:16:ARG:HG3	12:1Q:17:LEU:H	1.77	0.48
36:1e:99:GLY:O	36:1e:117:ASP:HA	2.12	0.48
37:1f:92:LYS:HZ3	37:1f:92:LYS:HB2	1.78	0.48
39:1h:87:SER:HB2	39:1h:93:VAL:H	1.78	0.48
40:1i:33:PHE:CZ	40:1i:47:LEU:HD21	2.49	0.48
47:1p:56:ALA:O	47:1p:60:LEU:HB2	2.13	0.48
1:2A:855:G:C6	1:2A:856:C:C4	3.02	0.48
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.14	0.48
1:2A:2871:C:N4	61:2A:4102:HOH:O	2.46	0.48
11:2P:138:LEU:HD12	11:2P:143:GLY:HA3	1.93	0.48
27:25:45:VAL:HG11	27:25:58:LEU:HD22	1.94	0.48
32:2a:1037:C:H2'	32:2a:1038:C:C6	2.48	0.48
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.48	0.48
32:2a:1178:G:N2	32:2a:1180:A:H3'	2.27	0.48
33:2b:110:GLN:O	33:2b:110:GLN:HG2	2.12	0.48
35:2d:103:ASN:OD1	35:2d:114:ARG:NE	2.43	0.48
36:2e:6:PHE:HD2	36:2e:63:ARG:NH1	2.11	0.48
39:2h:9:MET:HE1	39:2h:32:LYS:HA	1.94	0.48
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.12	0.48
1:1A:1379:A:H8	1:1A:1379:A:O5'	1.96	0.48
1:1A:1881:C:H2'	1:1A:1882:C:H6	1.79	0.48
1:1A:2127:G:C6	1:1A:2162:G:C6	3.02	0.48
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.96	0.48
13:1R:96:ARG:HG2	13:1R:115:GLU:HG2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:160:A:H2'	32:1a:161:A:O4'	2.14	0.48
32:1a:437:U:H5"	35:1d:155:LEU:HD21	1.95	0.48
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.32	0.48
34:1c:121:ALA:HB2	34:1c:198:VAL:HG21	1.95	0.48
41:1j:75:ILE:O	41:1j:77:PRO:HD3	2.13	0.48
1:2A:458:G:O2'	1:2A:469:G:O6	2.21	0.48
1:2A:861:A:C2	1:2A:917:A:C4	3.01	0.48
1:2A:862:G:O2'	2:2B:78:A:N3	2.46	0.48
1:2A:940:G:N3	1:2A:1191:G:H4'	2.29	0.48
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.28	0.48
2:2B:13:A:H2'	2:2B:70:C:O2'	2.14	0.48
11:2P:52:GLU:OE1	11:2P:55:ARG:NE	2.40	0.48
22:20:46:LYS:HD2	22:20:78:TYR:CZ	2.48	0.48
32:2a:509:A:H5"	35:2d:55:ALA:HB2	1.94	0.48
32:2a:674:G:H2'	32:2a:675:A:H8	1.77	0.48
32:2a:694:A:H5"	42:2k:53:SER:OG	2.13	0.48
32:2a:794:A:OP1	61:2a:1908:HOH:O	2.20	0.48
32:2a:799:G:O6	32:2a:800:G:C2	2.66	0.48
32:2a:920:U:H2'	32:2a:921:U:H6	1.76	0.48
32:2a:1321:C:H2'	32:2a:1322:C:H5	1.78	0.48
34:2c:152:ILE:HD11	34:2c:199:LYS:NZ	2.29	0.48
2:1B:90:A:C5	2:1B:91:C:H1'	2.48	0.48
3:1D:108:PRO:HG2	3:1D:111:LEU:HD13	1.96	0.48
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.95	0.48
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.48	0.48
25:13:50:VAL:HB	25:13:53:LEU:HD12	1.96	0.48
33:1b:28:PHE:CD2	33:1b:190:THR:HA	2.48	0.48
35:1d:173:TRP:CE2	35:1d:189:PRO:HG3	2.49	0.48
37:1f:61:LEU:HB3	37:1f:63:TYR:CE2	2.48	0.48
40:1i:4:TYR:CD1	40:1i:88:TYR:HA	2.48	0.48
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.44	0.48
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.28	0.48
1:2A:1502:C:H2'	1:2A:1503:U:C6	2.48	0.48
1:2A:1966:A:H4'	1:2A:1967:C:OP1	2.13	0.48
1:2A:2218:U:H4'	1:2A:2219:G:OP2	2.14	0.48
5:2F:170:LEU:HD22	5:2F:172:TRP:HE1	1.79	0.48
6:2G:17:PRO:HA	6:2G:20:ILE:HD12	1.95	0.48
6:2G:124:SER:O	6:2G:124:SER:OG	2.28	0.48
25:23:46:ASN:O	25:23:50:VAL:HG22	2.13	0.48
32:2a:1306:A:H2'	32:2a:1307:U:O4'	2.14	0.48
32:2a:1508:G:H2'	32:2a:1509:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:112:VAL:HG12	33:2b:113:HIS:HD2	1.79	0.48
34:2c:69:HIS:CD2	34:2c:104:GLN:HG2	2.49	0.48
34:2c:111:LEU:HD21	34:2c:146:ALA:HB2	1.95	0.48
39:2h:27:PRO:O	39:2h:32:LYS:HE3	2.14	0.48
43:2l:37:CYS:SG	43:2l:81:SER:HB2	2.53	0.48
45:2n:23:ARG:CZ	45:2n:30:ALA:HB2	2.43	0.48
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.14	0.48
55:2x:19:G:H4'	55:2x:20:U:OP2	2.14	0.48
1:1A:1644:C:H6	1:1A:1644:C:H5"	1.78	0.48
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.48	0.48
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.49	0.48
1:1A:2839:G:H5'	13:1R:46:GLY:CA	2.43	0.48
6:1G:82:LEU:HD21	6:1G:88:ILE:HG21	1.96	0.48
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.14	0.48
15:1T:98:LYS:NZ	61:1T:301:HOH:O	2.11	0.48
32:1a:848:C:H2'	32:1a:849:C:H6	1.77	0.48
32:1a:986:A:N3	50:1s:52:TYR:OH	2.40	0.48
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.46	0.48
33:1b:16:HIS:CD2	33:1b:17:PHE:H	2.32	0.48
33:1b:166:ASP:O	33:1b:170:GLU:N	2.47	0.48
34:1c:22:TRP:CE2	45:1n:54:PRO:HG2	2.49	0.48
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.46	0.48
51:1t:43:LEU:HA	51:1t:46:GLU:HB2	1.94	0.48
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.12	0.48
1:2A:2273:A:H2'	1:2A:2274:A:H8	1.76	0.48
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.49	0.48
1:2A:2561:A:H4'	10:2O:22:ILE:HD11	1.96	0.48
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.48	0.48
6:2G:83:ARG:O	6:2G:86:MET:HG3	2.14	0.48
7:2H:137:ASP:OD1	7:2H:139:GLN:N	2.47	0.48
10:2O:97:ARG:HD3	32:2a:339:C:OP1	2.13	0.48
32:2a:772:U:H2'	32:2a:773:G:O4'	2.13	0.48
32:2a:946:A:O2'	32:2a:1333:A:N3	2.44	0.48
32:2a:977:A:HO2'	32:2a:981:U:H3	1.61	0.48
32:2a:1104:G:C2'	32:2a:1105:A:H5'	2.44	0.48
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.41	0.48
41:2j:12:ASP:HB3	41:2j:15:THR:HG23	1.95	0.48
43:2l:6:THR:HG23	43:2l:9:GLN:OE1	2.13	0.48
50:2s:33:THR:HG21	50:2s:49:ILE:HD11	1.96	0.48
1:1A:139(A):G:O2'	1:1A:140:G:H5'	2.14	0.48
1:1A:284:U:H2'	1:1A:285:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:800:A:H8	1:1A:800:A:OP1	1.97	0.48
10:1O:1:MET:HE2	10:1O:1:MET:HB3	1.74	0.48
19:1X:92:LEU:O	19:1X:94:GLY:N	2.46	0.48
32:1a:235:C:H5"	48:1q:70:ARG:HG3	1.96	0.48
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.60	0.48
37:1f:99:ALA:O	49:1r:28:GLU:HA	2.14	0.48
41:1j:40:LEU:HB2	41:1j:69:ASN:CB	2.41	0.48
1:2A:570:G:H2'	1:2A:2030:A:C5	2.49	0.48
1:2A:868:U:C2	1:2A:869:G:C8	3.01	0.48
1:2A:1969:A:O2'	1:2A:1972:A:N3	2.47	0.48
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.14	0.48
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.49	0.48
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.49	0.48
4:2E:50:GLY:HA2	4:2E:77:ILE:O	2.14	0.48
5:2F:102:PRO:HB2	5:2F:105:VAL:HG23	1.95	0.48
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.49	0.48
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.14	0.48
19:2X:5:TYR:CZ	24:22:30:ARG:HB2	2.49	0.48
22:20:68:GLU:HB2	22:20:82:ARG:HH21	1.79	0.48
32:2a:1272:G:N2	32:2a:1273:G:C8	2.80	0.48
34:2c:8:ILE:C	34:2c:10:PHE:H	2.21	0.48
34:2c:53:ALA:HB2	34:2c:115:LEU:HD11	1.95	0.48
50:2s:36:ARG:HD2	50:2s:52:TYR:O	2.13	0.48
1:1A:251:A:C5	1:1A:252:G:H1'	2.48	0.48
1:1A:1505:C:H2'	1:1A:1506:C:C6	2.49	0.48
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.96	0.48
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.96	0.48
29:17:33:ARG:NH2	61:17:201:HOH:O	2.47	0.48
32:1a:958:A:C6	32:1a:959:A:N1	2.82	0.48
34:1c:150:LYS:HD3	34:1c:152:ILE:HD11	1.96	0.48
36:1e:121:LYS:HG3	36:1e:122:GLU:O	2.14	0.48
36:1e:148:VAL:HG11	39:1h:107:LEU:HD22	1.96	0.48
37:1f:12:PRO:HG3	37:1f:57:GLN:O	2.13	0.48
47:1p:29:ASP:OD1	47:1p:29:ASP:N	2.47	0.48
1:2A:817:C:O2'	1:2A:839:U:H5"	2.13	0.48
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.14	0.48
1:2A:1899:G:O2'	1:2A:1900:A:OP2	2.23	0.48
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.77	0.48
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.14	0.48
4:2E:178:GLU:CD	4:2E:178:GLU:H	2.20	0.48
6:2G:18:GLU:O	6:2G:22:ARG:HB2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:129:THR:HA	8:2I:138:ILE:O	2.14	0.48
10:2O:9:GLU:OE2	10:2O:18:LYS:HD3	2.13	0.48
32:2a:434:U:H2'	32:2a:435:C:H6	1.79	0.48
33:2b:27:LYS:HB2	33:2b:194:PRO:HD2	1.96	0.48
35:2d:31:CYS:O	35:2d:35:ARG:HG3	2.14	0.48
49:2r:32:ARG:NE	61:2r:201:HOH:O	2.47	0.48
1:1A:971:C:H2'	1:1A:972:G:O4'	2.13	0.47
1:1A:1268:A:C2	1:1A:2013:A:C4	3.02	0.47
1:1A:1971:A:OP1	61:1A:4241:HOH:O	2.20	0.47
1:1A:2002:G:H1'	61:1A:4765:HOH:O	2.14	0.47
2:1B:11:C:OP2	22:10:72:ARG:NH2	2.34	0.47
3:1D:183:ARG:HG3	3:1D:270:ILE:HD13	1.96	0.47
7:1H:84:SER:HA	7:1H:133:VAL:O	2.14	0.47
14:1S:3:ARG:HD3	14:1S:3:ARG:HA	1.64	0.47
17:1V:31:ALA:O	17:1V:61:VAL:HG12	2.13	0.47
25:13:7:LYS:HE3	25:13:32:GLN:HE21	1.79	0.47
32:1a:175:C:H5'	51:1t:25:ARG:NH1	2.29	0.47
32:1a:179:A:H2'	32:1a:180:U:H6	1.78	0.47
32:1a:193:C:H2'	32:1a:194:C:C6	2.49	0.47
32:1a:447:G:H2'	32:1a:485:G:N2	2.29	0.47
32:1a:591:U:H2'	32:1a:592:G:C8	2.49	0.47
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.96	0.47
46:1o:6:GLU:OE1	46:1o:6:GLU:N	2.47	0.47
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.14	0.47
51:1t:63:ILE:HG22	51:1t:77:ALA:HB1	1.95	0.47
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.14	0.47
1:2A:414:C:H2'	1:2A:415:A:H8	1.79	0.47
1:2A:668:G:H5'	1:2A:669:G:OP2	2.14	0.47
1:2A:795:C:H2'	1:2A:796:C:C6	2.49	0.47
1:2A:839:U:H2'	1:2A:840:C:C6	2.49	0.47
1:2A:854:G:H2'	1:2A:855:G:C8	2.49	0.47
1:2A:873:G:H5'	1:2A:874:G:OP2	2.14	0.47
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.14	0.47
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.79	0.47
3:2D:134:ARG:HG3	3:2D:135:PHE:CD1	2.49	0.47
5:2F:40:GLN:NE2	5:2F:182:ASN:HB2	2.29	0.47
8:2I:62:LYS:HB3	8:2I:133:HIS:HE1	1.74	0.47
28:26:52:VAL:HG22	28:26:53:LYS:N	2.29	0.47
32:2a:109:A:H2'	32:2a:326:G:N2	2.29	0.47
32:2a:1256:A:H61	32:2a:1278:U:C1'	2.27	0.47
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1308:U:H5”	44:2m:98:VAL:HG21	1.96	0.47
33:2b:95:GLN:HG2	33:2b:147:LYS:HE2	1.95	0.47
39:2h:124:ALA:O	39:2h:128:GLY:N	2.47	0.47
40:2i:17:VAL:HG21	40:2i:81:ILE:HG13	1.95	0.47
40:2i:89:ASN:O	40:2i:92:TYR:HB2	2.14	0.47
45:2n:6:LEU:HD12	45:2n:9:LYS:HD2	1.95	0.47
54:2y:8:4SU:H6	54:2y:8:4SU:O5’	2.14	0.47
1:1A:639:U:H2’	1:1A:640:C:C6	2.49	0.47
1:1A:1268:A:H2’	1:1A:1269:A:O4’	2.14	0.47
1:1A:2069:G:OP2	61:1A:4242:HOH:O	2.20	0.47
3:1D:223:GLY:HA3	3:1D:231:HIS:CE1	2.49	0.47
15:1T:16:ARG:NH1	15:1T:80:SER:O	2.44	0.47
32:1a:161:A:H2’	32:1a:162:A:O4’	2.14	0.47
32:1a:189(K):U:H2’	32:1a:189(L):G:C8	2.48	0.47
32:1a:578:C:O2’	32:1a:728:A:N3	2.47	0.47
32:1a:607:A:H2’	32:1a:608:A:O4’	2.14	0.47
32:1a:1005:A:H1’	32:1a:1036:G:O6	2.14	0.47
32:1a:1054:C:C4	32:1a:1196:U:C5	3.02	0.47
32:1a:1070:U:H2’	32:1a:1071:C:C6	2.49	0.47
32:1a:1370:G:C2	32:1a:1371:G:C8	3.02	0.47
33:1b:44:LEU:HA	33:1b:47:THR:OG1	2.14	0.47
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.14	0.47
40:1i:40:LEU:HD11	40:1i:70:LYS:HD2	1.96	0.47
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.29	0.47
1:2A:1664:A:C2	10:2O:1:MET:HE1	2.47	0.47
1:2A:1665:A:H2’	1:2A:1666:G:O4’	2.13	0.47
1:2A:1932:A:H2’	1:2A:1933:G:O4’	2.14	0.47
1:2A:2896:C:H2’	1:2A:2897:U:C6	2.49	0.47
32:2a:270:A:H2’	32:2a:271:C:C6	2.48	0.47
32:2a:502:G:H2’	32:2a:503:C:O4’	2.15	0.47
36:2e:90:VAL:O	36:2e:91:LEU:HD13	2.13	0.47
36:2e:95:ALA:O	36:2e:97:GLY:N	2.48	0.47
1:1A:1045:A:C8	1:1A:1047:G:N2	2.82	0.47
1:1A:2029:G:H2’	1:1A:2031:A:OP1	2.15	0.47
2:1B:75:G:H22	21:1Z:73:GLN:NE2	2.12	0.47
32:1a:523:A:C2	43:1l:92:0TD:H5	2.49	0.47
32:1a:971:G:N1	32:1a:1363(A):A:OP2	2.39	0.47
32:1a:1148:U:O4’	40:1i:16:ARG:HD2	2.14	0.47
54:1y:19:G:H4’	54:1y:57:G:H22	1.80	0.47
1:2A:272:G:H4’	1:2A:272(A):U:C5’	2.44	0.47
1:2A:459:U:H5”	29:27:40:TRP:CD2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:699:A:H2'	1:2A:700:G:O4'	2.14	0.47
1:2A:860:U:C2	1:2A:2268:A:C8	3.02	0.47
1:2A:1531:C:H5"	1:2A:1532:C:OP2	2.13	0.47
1:2A:2139:C:H2'	1:2A:2140:C:C6	2.48	0.47
1:2A:2438:U:O2'	1:2A:2440:C:OP1	2.28	0.47
2:2B:75:G:H1	21:2Z:73:GLN:NE2	2.12	0.47
5:2F:178:PRO:HB3	5:2F:198:ALA:HA	1.97	0.47
20:2Y:87:LYS:HD3	20:2Y:87:LYS:N	2.29	0.47
32:2a:404:U:H5'	35:2d:122:ARG:NE	2.29	0.47
32:2a:923:A:OP1	36:2e:21:ALA:HB2	2.13	0.47
32:2a:1370:G:N7	40:2i:109:VAL:HG11	2.29	0.47
33:2b:89:GLY:O	33:2b:154:LEU:HD21	2.14	0.47
35:2d:20:TYR:CD1	35:2d:26:CYS:HB3	2.49	0.47
35:2d:25:ARG:CZ	35:2d:30:LYS:HB3	2.43	0.47
41:2j:52:GLY:O	45:2n:41:ARG:NH1	2.36	0.47
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.13	0.47
43:2l:117:ARG:HB3	43:2l:122:THR:O	2.14	0.47
44:2m:79:LYS:HG2	44:2m:83:ASP:OD2	2.14	0.47
55:2x:29:G:C6	55:2x:30:G:N7	2.82	0.47
1:1A:234:C:H2'	1:1A:235:U:C6	2.50	0.47
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.79	0.47
1:1A:1223:G:N2	1:1A:1226:A:OP2	2.37	0.47
1:1A:2128:C:O5'	1:1A:2128:C:H6	1.97	0.47
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.62	0.47
3:1D:131:LEU:N	3:1D:131:LEU:HD12	2.30	0.47
10:1O:107:ARG:CZ	15:1T:36:GLU:HG2	2.44	0.47
21:1Z:138:GLU:H	21:1Z:156:LYS:HE2	1.80	0.47
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD11	1.96	0.47
26:14:12:ALA:HA	26:14:29:PRO:O	2.13	0.47
26:14:58:ARG:HE	50:1s:68:GLY:HA3	1.79	0.47
32:1a:78:G:H8	32:1a:78:G:OP2	1.97	0.47
32:1a:202:U:H3'	32:1a:203:U:C6	2.49	0.47
32:1a:391:G:C6	32:1a:392:G:C5	3.02	0.47
32:1a:975:A:H5'	32:1a:975:A:H8	1.79	0.47
32:1a:977:A:O2'	32:1a:981:U:N3	2.47	0.47
32:1a:1279:A:H5"	32:1a:1280:A:OP1	2.15	0.47
32:1a:1360:A:H8	32:1a:1360:A:OP1	1.97	0.47
33:1b:33:TYR:HB2	33:1b:43:ASP:CB	2.43	0.47
34:1c:30:ARG:NH1	45:1n:35:ARG:O	2.47	0.47
35:1d:107:ARG:HH22	35:1d:194:LEU:CD2	2.27	0.47
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:1o:7:GLU:O	46:1o:11:VAL:HG23	2.14	0.47
1:2A:191:A:H2'	1:2A:192:C:C6	2.48	0.47
1:2A:645:C:H5"	1:2A:646:A:OP2	2.14	0.47
1:2A:721:C:H2'	1:2A:722:A:C8	2.50	0.47
1:2A:764:A:H5'	3:2D:210:GLY:CA	2.45	0.47
1:2A:829:A:N7	1:2A:2247:A:O2'	2.45	0.47
1:2A:2577:A:H5"	1:2A:2578:G:H5'	1.96	0.47
1:2A:2655:G:N2	1:2A:2665:A:OP2	2.46	0.47
2:2B:17:C:H2'	2:2B:18:G:O4'	2.14	0.47
6:2G:38:VAL:HG12	6:2G:93:THR:HA	1.97	0.47
14:2S:34:HIS:CE1	14:2S:54:LEU:HD13	2.50	0.47
18:2W:65:LEU:HD12	18:2W:68:ARG:HE	1.78	0.47
27:25:35:GLU:HG2	27:25:51:TYR:CD1	2.49	0.47
32:2a:836:G:C6	32:2a:851:G:C6	3.02	0.47
32:2a:952:U:H4'	32:2a:964:A:H61	1.79	0.47
32:2a:1015:A:N6	32:2a:1016:A:C6	2.82	0.47
32:2a:1095:U:H2'	32:2a:1096:C:H6	1.78	0.47
32:2a:1154:G:H2'	32:2a:1155:G:C8	2.47	0.47
32:2a:1342:C:H1'	40:2i:124:GLN:OE1	2.15	0.47
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.49	0.47
36:2e:76:ILE:HG23	36:2e:115:VAL:HG21	1.96	0.47
1:1A:884:C:N3	1:1A:885:C:O2'	2.45	0.47
1:1A:2136:C:C2	1:1A:2155:G:N2	2.82	0.47
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.50	0.47
1:1A:2817:G:OP1	13:1R:99:LYS:NZ	2.37	0.47
3:1D:35:LYS:HE2	3:1D:64:ILE:HG12	1.96	0.47
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.48	0.47
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.12	0.47
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.97	0.47
32:1a:406:G:H5"	35:1d:5:ILE:HD13	1.96	0.47
32:1a:735:C:H2'	32:1a:736:C:H6	1.79	0.47
32:1a:992:U:H5"	32:1a:993:G:C8	2.50	0.47
38:1g:115:ARG:HG3	38:1g:118:VAL:HG23	1.96	0.47
1:2A:1141:U:OP2	9:2N:63:THR:OG1	2.16	0.47
1:2A:1334:G:O6	61:2A:3948:HOH:O	2.19	0.47
1:2A:2295:C:O2	1:2A:2338:G:C2	2.67	0.47
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.22	0.47
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.13	0.47
14:2S:51:ALA:HB3	14:2S:73:LEU:HB2	1.96	0.47
32:2a:977:A:C2	32:2a:1224:G:C5	3.02	0.47
32:2a:1133:G:H2'	32:2a:1134:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1189:C:OP1	34:2c:5:ILE:HD12	2.14	0.47
32:2a:1360:A:H8	32:2a:1360:A:OP1	1.98	0.47
33:2b:207:ALA:O	33:2b:210:SER:N	2.48	0.47
34:2c:101:LEU:HD12	34:2c:102:ASN:N	2.30	0.47
34:2c:173:VAL:HG12	34:2c:175:LEU:HD12	1.95	0.47
41:2j:45:ARG:HG2	41:2j:47:PHE:CZ	2.49	0.47
1:1A:861:A:C2	1:1A:917:A:C4	3.01	0.47
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.78	0.47
1:1A:2184:G:H2'	1:1A:2185:C:O4'	2.15	0.47
1:1A:2615:U:H2'	1:1A:2616:C:C6	2.49	0.47
61:1A:6001:HOH:O	9:1N:28:THR:HG23	2.14	0.47
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.49	0.47
33:1b:97:TRP:CZ2	33:1b:102:LEU:HD13	2.49	0.47
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.78	0.47
33:1b:205:ASP:O	33:1b:211:ILE:HD11	2.13	0.47
36:1e:31:LEU:HD23	36:1e:45:PHE:CD1	2.50	0.47
36:1e:85:GLY:O	36:1e:87:SER:N	2.47	0.47
1:2A:251:A:C5	1:2A:252:G:H1'	2.49	0.47
1:2A:747:U:O2	1:2A:2014:A:H1'	2.14	0.47
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.14	0.47
1:2A:2472:G:H1	1:2A:2477:C:P	2.36	0.47
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.44	0.47
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.48	0.47
8:2I:81:VAL:HG21	8:2I:88:ILE:HG12	1.96	0.47
12:2Q:7:MET:HE2	12:2Q:7:MET:HB3	1.68	0.47
13:2R:28:LEU:HD23	13:2R:48:VAL:HG11	1.97	0.47
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HD13	1.97	0.47
26:24:45:GLY:C	26:24:47:GLN:H	2.22	0.47
32:2a:29:G:H5'	32:2a:296:U:OP1	2.13	0.47
32:2a:1004:A:N3	32:2a:1038:C:C2	2.82	0.47
32:2a:1005:A:H5"	32:2a:1006:C:C5	2.50	0.47
32:2a:1177:G:H3'	32:2a:1178:G:H8	1.80	0.47
32:2a:1251:A:H2'	32:2a:1252:A:H8	1.76	0.47
32:2a:1298:C:H2'	38:2g:114:ARG:NH2	2.30	0.47
32:2a:1302:U:OP2	44:2m:21:TYR:OH	2.27	0.47
32:2a:1358:U:OP2	32:2a:1359:C:H5	1.97	0.47
36:2e:136:MET:O	36:2e:140:ARG:HB2	2.15	0.47
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.95	0.47
40:2i:5:TYR:HD1	40:2i:18:PHE:CE1	2.33	0.47
40:2i:37:PHE:HB3	40:2i:43:ALA:HB2	1.95	0.47
44:2m:40:ASN:ND2	44:2m:41:PRO:HD2	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:2o:71:GLN:HB2	46:2o:78:TYR:CD1	2.49	0.47
48:2q:19:VAL:HG22	48:2q:46:ASP:HB2	1.96	0.47
1:1A:192:C:OP1	61:1A:4244:HOH:O	2.20	0.47
1:1A:483:A:H5"	20:1Y:50:ARG:NE	2.30	0.47
1:1A:586:A:N1	1:1A:809:G:O2'	2.43	0.47
1:1A:1341:U:O2	19:1X:80:ILE:HD13	2.14	0.47
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.15	0.47
1:1A:1486:A:H2'	1:1A:1487:G:C8	2.50	0.47
1:1A:1799:G:H4'	1:1A:1800:C:O5'	2.15	0.47
1:1A:1952:A:OP1	10:1O:44:LYS:NZ	2.34	0.47
1:1A:2576:G:H1'	61:1A:4709:HOH:O	2.14	0.47
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.14	0.47
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.15	0.47
26:14:63:TYR:N	26:14:64:GLY:HA2	2.29	0.47
32:1a:171:A:H2'	32:1a:172:A:C8	2.49	0.47
32:1a:189:G:C4	32:1a:189(L):G:N2	2.82	0.47
32:1a:406:G:C5'	35:1d:5:ILE:HD13	2.45	0.47
32:1a:848:C:H2'	32:1a:849:C:C6	2.49	0.47
32:1a:1289:A:H2'	32:1a:1290:G:H5'	1.97	0.47
35:1d:86:LYS:HD2	35:1d:86:LYS:HA	1.58	0.47
39:1h:49:GLU:HG2	39:1h:62:TYR:HE2	1.79	0.47
48:1q:5:VAL:O	48:1q:6:LEU:HD23	2.14	0.47
1:2A:107:C:H2'	1:2A:108:U:C6	2.50	0.47
1:2A:686:G:N2	1:2A:788:A:H61	2.13	0.47
1:2A:910:A:N1	1:2A:2277:G:H1'	2.29	0.47
1:2A:1027:A:C6	1:2A:1126:A:C4	3.03	0.47
1:2A:1475:G:C2	1:2A:1517:G:C2	3.03	0.47
1:2A:1857:G:C6	1:2A:1858:G:C2	3.03	0.47
1:2A:2637:U:H5"	4:2E:82:ARG:NH1	2.29	0.47
1:2A:2639:A:C2	1:2A:2778:A:C8	3.03	0.47
3:2D:246:PRO:O	3:2D:254:THR:HG22	2.15	0.47
6:2G:49:ASP:N	6:2G:49:ASP:OD1	2.48	0.47
6:2G:103:LEU:HA	6:2G:106:LEU:HB3	1.97	0.47
18:2W:1:MET:HE3	18:2W:62:HIS:HB3	1.94	0.47
18:2W:4:LYS:HD2	18:2W:6:ILE:HD11	1.95	0.47
19:2X:26:TYR:CE2	19:2X:89:ILE:HG13	2.50	0.47
24:22:44:LEU:HD23	24:22:47:ASN:HA	1.95	0.47
25:23:39:ASP:OD2	25:23:44:ARG:NH1	2.47	0.47
26:24:60:GLN:O	26:24:62:ARG:NH1	2.48	0.47
30:28:62:LEU:HB3	30:28:65:GLU:HG2	1.96	0.47
32:2a:422:C:O4'	32:2a:423:G:N1	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:445:G:H2'	32:2a:446:G:H8	1.79	0.47
32:2a:554:C:H2'	32:2a:555:C:C6	2.50	0.47
32:2a:872:A:O2'	32:2a:873:A:H3'	2.14	0.47
32:2a:1049:U:H1'	32:2a:1201:A:N7	2.30	0.47
32:2a:1108:G:O6	61:2a:1920:HOH:O	2.20	0.47
32:2a:1216:G:H5"	45:2n:5:ALA:CB	2.43	0.47
32:2a:1396:A:O4'	32:2a:1398:A:H1'	2.15	0.47
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.29	0.47
33:2b:97:TRP:HE1	33:2b:172:ILE:HG22	1.79	0.47
36:2e:76:ILE:O	36:2e:93:PRO:HB3	2.15	0.47
40:2i:79:LEU:HG	40:2i:83:ARG:HD2	1.97	0.47
44:2m:14:ARG:CZ	44:2m:42:ALA:HA	2.44	0.47
47:2p:28:ARG:HG2	47:2p:28:ARG:HH11	1.80	0.47
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.48	0.47
1:1A:634:C:H2'	1:1A:635:C:C6	2.49	0.47
1:1A:684:G:OP1	29:17:16:HIS:ND1	2.44	0.47
1:1A:1639:U:O2'	1:1A:1640:C:H5'	2.15	0.47
1:1A:1929:G:H4'	1:1A:1930:G:OP1	2.14	0.47
1:1A:2791:C:C5	1:1A:2893:G:C4	3.03	0.47
2:1B:2:C:H2'	2:1B:3:C:H6	1.80	0.47
4:1E:37:ARG:HA	4:1E:42:ASP:OD2	2.15	0.47
6:1G:7:LEU:HD12	6:1G:104:GLU:HA	1.97	0.47
32:1a:328:C:H4'	32:1a:329:A:H5'	1.97	0.47
32:1a:343:U:O2'	32:1a:346:G:O6	2.30	0.47
32:1a:834:C:H2'	32:1a:835:U:C6	2.50	0.47
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.15	0.47
55:1x:31:G:C8	55:1x:32:5MC:HM53	2.50	0.47
1:2A:205:G:O6	23:21:39:LYS:NZ	2.39	0.47
1:2A:2516:G:C6	1:2A:2517:C:C4	3.03	0.47
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.96	0.47
3:2D:168:ARG:HG2	3:2D:173:VAL:HG12	1.96	0.47
5:2F:33:LEU:HD13	5:2F:33:LEU:HA	1.54	0.47
9:2N:85:ILE:HG21	9:2N:90:MET:HE2	1.97	0.47
11:2P:125:VAL:HG21	11:2P:138:LEU:HD21	1.96	0.47
14:2S:67:ARG:HD3	14:2S:71:ARG:HH11	1.80	0.47
21:2Z:150:LEU:C	21:2Z:171:ILE:HG12	2.40	0.47
26:24:28:LYS:CB	26:24:31:ILE:HD11	2.45	0.47
32:2a:114:U:H2'	32:2a:115:G:C8	2.49	0.47
32:2a:754:C:H1'	46:2o:69:TYR:CD2	2.50	0.47
32:2a:867:G:O2'	32:2a:868:C:H5'	2.15	0.47
32:2a:1010:G:N1	32:2a:1020:U:H1'	2.28	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:211:ILE:O	33:2b:214:ILE:HG13	2.15	0.47
35:2d:8:VAL:O	35:2d:11:LEU:HB2	2.14	0.47
38:2g:101:LEU:O	38:2g:105:VAL:HG23	2.15	0.47
46:2o:37:ASN:OD1	46:2o:37:ASN:N	2.48	0.47
1:1A:566:U:OP1	11:1P:29:LYS:HE3	2.15	0.47
1:1A:624:C:H6	1:1A:624:C:O5'	1.98	0.47
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.30	0.47
1:1A:1093:G:O6	1:1A:1094:U:C4	2.68	0.47
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.15	0.47
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.48	0.47
1:1A:2250:G:OP1	12:1Q:85:LYS:NZ	2.41	0.47
1:1A:2791:C:H2'	1:1A:2792:G:C8	2.50	0.47
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.50	0.47
8:1I:129:THR:CG2	8:1I:139:GLN:HE22	2.28	0.47
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.15	0.47
26:14:16:CYS:HB2	26:14:36:CYS:HB3	1.96	0.47
32:1a:748:C:O5'	32:1a:748:C:H6	1.98	0.47
32:1a:953:G:H5'	32:1a:965:A:N6	2.29	0.47
33:1b:55:PHE:HB3	33:1b:221:LEU:HD22	1.97	0.47
34:1c:131:ARG:NH1	34:1c:166:GLU:HG3	2.28	0.47
35:1d:8:VAL:O	35:1d:11:LEU:HB2	2.15	0.47
35:1d:103:ASN:O	35:1d:107:ARG:HG2	2.14	0.47
37:1f:79:LEU:O	37:1f:85:VAL:HG11	2.15	0.47
38:1g:115:ARG:HG3	38:1g:118:VAL:CG2	2.44	0.47
41:1j:49:VAL:HG21	45:1n:41:ARG:O	2.15	0.47
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.15	0.47
54:1y:42:C:H2'	54:1y:43:C:H6	1.80	0.47
1:2A:530:G:O4'	1:2A:530:G:N3	2.45	0.47
1:2A:975(A):G:C2	1:2A:990:A:C8	3.02	0.47
1:2A:1015:G:O2'	1:2A:1016:G:H5'	2.15	0.47
1:2A:1225:G:O3'	17:2V:84:LYS:HD3	2.15	0.47
1:2A:1249:U:O2'	1:2A:1250:G:O5'	2.30	0.47
1:2A:1526:G:C6	1:2A:1527:G:C2	3.03	0.47
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.15	0.47
1:2A:1913:A:H4'	1:2A:1914:C:O5'	2.13	0.47
2:2B:55:U:H1'	6:2G:29:TRP:CD1	2.50	0.47
7:2H:87:LEU:N	7:2H:131:VAL:O	2.44	0.47
7:2H:149:ARG:NH1	7:2H:167:GLU:OE2	2.47	0.47
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.29	0.47
13:2R:36:THR:HG22	13:2R:37:THR:H	1.79	0.47
19:2X:30:VAL:HG21	19:2X:39:ILE:HD11	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:102:LEU:HD23	21:2Z:104:PHE:HE2	1.80	0.47
32:2a:547:A:H4'	32:2a:548:G:O5'	2.15	0.47
32:2a:561:U:O2'	32:2a:562:C:OP2	2.31	0.47
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.33	0.47
32:2a:748:C:H4'	32:2a:749:C:O5'	2.15	0.47
32:2a:1315:U:O2'	32:2a:1360:A:N3	2.36	0.47
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.97	0.47
44:2m:5:ALA:HB3	44:2m:22:ILE:HD13	1.96	0.47
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.79	0.47
1:1A:226:G:N2	1:1A:228:A:H62	2.12	0.47
1:1A:922:U:H2'	1:1A:923:C:C6	2.50	0.47
1:1A:2721:A:H5"	61:1A:4264:HOH:O	2.14	0.47
26:14:33:VAL:HG12	26:14:35:VAL:H	1.80	0.47
32:1a:313:A:H2'	32:1a:314:C:C6	2.50	0.47
32:1a:374:A:C6	32:1a:375:U:C4	3.03	0.47
32:1a:953:G:H2'	32:1a:954:G:O4'	2.14	0.47
32:1a:1239:A:N6	32:1a:1299:A:H62	2.13	0.47
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.97	0.47
32:1a:1503:A:C2	53:1v:12:A:H2	2.33	0.47
34:1c:113:ALA:HB2	34:1c:202:ILE:HG13	1.96	0.47
35:1d:114:ARG:O	35:1d:118:ARG:N	2.41	0.47
35:1d:194:LEU:HD12	35:1d:194:LEU:HA	1.47	0.47
36:1e:137:GLU:HG3	36:1e:137:GLU:O	2.12	0.47
43:1l:56:ALA:HB2	43:1l:70:ILE:HD11	1.97	0.47
46:1o:82:ILE:HD12	46:1o:88:ARG:HG3	1.97	0.47
47:1p:18:ARG:NH1	47:1p:32:TYR:OH	2.48	0.47
1:2A:952:G:OP1	12:2Q:16:ARG:NH2	2.48	0.47
1:2A:1265:A:OP1	61:2A:3952:HOH:O	2.20	0.47
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.15	0.47
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.14	0.47
12:2Q:30:GLY:HA2	12:2Q:107:ALA:HB2	1.97	0.47
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.95	0.47
20:2Y:5:MET:HB2	20:2Y:5:MET:HE2	1.46	0.47
28:26:8:LYS:HD3	30:28:34:TRP:CD2	2.50	0.47
32:2a:622:A:C8	32:2a:623:C:C5	3.03	0.47
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.30	0.47
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.98	0.47
32:2a:1240:U:C4	38:2g:30:ILE:HG23	2.49	0.47
33:2b:47:THR:HA	33:2b:202:PRO:CG	2.45	0.47
44:2m:33:ALA:HA	44:2m:59:TYR:CE2	2.49	0.47
48:2q:41:LYS:NZ	48:2q:92:ARG:HH21	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:58:A:H4'	54:2y:59:U:OP1	2.15	0.47
1:1A:2319:G:H22	14:1S:3:ARG:NE	2.13	0.46
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.80	0.46
19:1X:44:GLU:HG2	19:1X:49:VAL:O	2.15	0.46
32:1a:571:U:OP1	32:1a:819:A:O2'	2.19	0.46
32:1a:665:A:C2	32:1a:733:A:C8	3.03	0.46
35:1d:118:ARG:O	35:1d:121:VAL:N	2.47	0.46
36:1e:102:ALA:HB2	36:1e:120:THR:HG21	1.96	0.46
38:1g:152:ALA:O	38:1g:155:ARG:HB3	2.15	0.46
54:1y:43:C:H2'	54:1y:44:G:C1'	2.45	0.46
54:1y:44:G:H8	54:1y:44:G:OP2	1.97	0.46
21:2Z:71:VAL:HA	21:2Z:87:ASP:O	2.15	0.46
23:21:67:ILE:N	23:21:68:PRO:HD2	2.30	0.46
29:27:46:VAL:O	29:27:48:LYS:HD2	2.15	0.46
32:2a:523:A:N1	43:2l:92:0TD:H6	2.30	0.46
32:2a:977:A:H2	32:2a:1224:G:C6	2.33	0.46
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.50	0.46
32:2a:1308:U:H5"	44:2m:98:VAL:CG2	2.45	0.46
32:2a:1323:G:H4'	32:2a:1363:C:C2	2.50	0.46
35:2d:121:VAL:O	35:2d:134:ASP:HA	2.15	0.46
43:2l:38:THR:O	43:2l:79:GLU:HG3	2.14	0.46
54:2w:34:G:H2'	54:2w:35:A:H8	1.80	0.46
1:1A:7:G:H2'	1:1A:8:A:O4'	2.15	0.46
1:1A:330:A:HO2'	1:1A:331:A:H8	1.62	0.46
1:1A:2136:C:N4	1:1A:2155:G:H1	2.11	0.46
2:1B:2:C:H2'	2:1B:3:C:C6	2.50	0.46
4:1E:7:VAL:HG23	4:1E:51:PHE:CE2	2.50	0.46
4:1E:177:PRO:HD2	4:1E:178:GLU:OE2	2.15	0.46
29:17:24:THR:HG22	29:17:27:GLY:N	2.22	0.46
32:1a:718:G:H5'	42:1k:117:ASN:HB2	1.97	0.46
32:1a:1054:C:C5	54:1w:34:G:H1'	2.50	0.46
32:1a:1146:A:H2'	32:1a:1147:C:O4'	2.14	0.46
32:1a:1367:C:O2'	41:1j:48:THR:HG21	2.15	0.46
32:1a:1442:G:O2'	32:1a:1442(A):G:H5'	2.15	0.46
38:1g:8:GLU:H	38:1g:8:GLU:HG2	1.54	0.46
43:1l:70:ILE:HG12	43:1l:100:ILE:HD12	1.98	0.46
43:1l:112:ASP:O	43:1l:114:LYS:HE2	2.14	0.46
48:1q:76:LEU:HD12	48:1q:77:VAL:N	2.30	0.46
1:2A:977:G:N3	1:2A:1001:A:H2	2.13	0.46
1:2A:1016:G:H2'	1:2A:1017:G:H8	1.80	0.46
1:2A:1160:G:C6	1:2A:1161:C:C4	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1436:G:H1'	1:2A:1477:A:O2'	2.16	0.46
1:2A:1599:C:OP1	19:2X:36:LYS:HG3	2.15	0.46
1:2A:2128:C:H6	1:2A:2128:C:O5'	1.97	0.46
1:2A:2565:A:N6	10:2O:28:SER:OG	2.49	0.46
1:2A:2815:C:H2'	1:2A:2816:C:H6	1.80	0.46
2:2B:42:C:C4	2:2B:43:C:C4	3.03	0.46
5:2F:41:LEU:HD21	5:2F:184:TYR:CE1	2.50	0.46
5:2F:123:LEU:HD12	5:2F:124:LEU:N	2.30	0.46
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.97	0.46
6:2G:56:ALA:HA	6:2G:59:GLU:HG2	1.96	0.46
6:2G:110:ALA:HA	6:2G:140:ILE:O	2.14	0.46
32:2a:473:G:C2	32:2a:474:G:C5	3.02	0.46
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.30	0.46
32:2a:1263:C:C4	32:2a:1272:G:O6	2.67	0.46
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.50	0.46
33:2b:47:THR:O	33:2b:51:LEU:N	2.45	0.46
33:2b:58:ILE:HG21	33:2b:222:ILE:HG22	1.96	0.46
36:2e:91:LEU:HD12	36:2e:91:LEU:HA	1.79	0.46
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.29	0.46
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.97	0.46
44:2m:92:HIS:HA	44:2m:110:ARG:NH2	2.31	0.46
45:2n:21:TYR:HD1	45:2n:22:THR:O	1.98	0.46
49:2r:53:ARG:HA	49:2r:56:THR:HG1	1.80	0.46
1:1A:534:U:H2'	1:1A:535:C:C6	2.50	0.46
1:1A:715:G:H2'	1:1A:716:A:O4'	2.16	0.46
1:1A:884:C:N4	1:1A:885:C:O2	2.49	0.46
1:1A:1538:G:C2'	1:1A:1539:G:H5'	2.46	0.46
1:1A:1920:OMC:HM22	1:1A:1921:G:O4'	2.16	0.46
26:14:57:GLU:HA	26:14:58:ARG:HA	1.55	0.46
32:1a:375:U:C4	32:1a:376:G:N7	2.83	0.46
32:1a:453:A:C6	32:1a:454:C:C4	3.04	0.46
32:1a:520:A:N1	32:1a:536:C:H1'	2.31	0.46
32:1a:874:G:H2'	32:1a:875:C:H6	1.81	0.46
33:1b:125:PRO:HB2	33:1b:127:ILE:C	2.39	0.46
33:1b:223:ILE:H	33:1b:223:ILE:HG12	1.41	0.46
47:1p:21:VAL:HG13	47:1p:33:ILE:HB	1.98	0.46
48:1q:86:GLU:O	48:1q:90:ILE:HG12	2.15	0.46
1:2A:539:G:C6	1:2A:540:C:C4	3.04	0.46
1:2A:635:C:H2'	1:2A:636:G:O4'	2.14	0.46
1:2A:1007:C:OP1	9:2N:37:LYS:NZ	2.45	0.46
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:31:C:H4'	6:2G:29:TRP:HZ2	1.77	0.46
11:2P:148:LEU:HD23	11:2P:148:LEU:H	1.79	0.46
26:24:67:TYR:HD2	50:2s:9:VAL:HB	1.80	0.46
32:2a:620:C:H2'	32:2a:621:A:O4'	2.15	0.46
32:2a:890:G:O2'	32:2a:906:G:O6	2.22	0.46
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.49	0.46
32:2a:1288:A:H2	32:2a:1352:C:O2	1.98	0.46
32:2a:1370:G:C8	40:2i:109:VAL:HG11	2.50	0.46
32:2a:1524:C:OP1	42:2k:120:ARG:NH1	2.46	0.46
46:2o:87:ILE:O	46:2o:88:ARG:HB2	2.15	0.46
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.50	0.46
1:1A:1430:C:H2'	1:1A:1431:U:C6	2.50	0.46
1:1A:1955:U:O2'	1:1A:1956:U:H5'	2.15	0.46
4:1E:12:THR:CG2	4:1E:13:ARG:N	2.79	0.46
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.80	0.46
7:1H:124:GLU:HG2	7:1H:132:ARG:HB3	1.96	0.46
16:1U:79:PHE:CE2	16:1U:83:LEU:HD11	2.51	0.46
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	1.97	0.46
32:1a:177:C:O2'	32:1a:178:C:H5'	2.15	0.46
32:1a:352:C:O2'	32:1a:354:G:OP1	2.33	0.46
32:1a:438:G:N1	32:1a:495:A:OP2	2.38	0.46
32:1a:590:C:O2'	32:1a:591:U:H5'	2.15	0.46
32:1a:626:U:N3	32:1a:627:G:N7	2.64	0.46
32:1a:1030:C:N4	32:1a:1030(A):G:N3	2.63	0.46
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.50	0.46
32:1a:1505:G:O2'	53:1v:13:A:O2'	2.33	0.46
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	1.96	0.46
35:1d:65:ARG:HG3	35:1d:75:PHE:CD1	2.50	0.46
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.50	0.46
38:1g:149:ARG:HD3	42:1k:59:TYR:CZ	2.50	0.46
39:1h:20:TYR:HA	39:1h:65:TYR:CE1	2.51	0.46
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.98	0.46
54:1y:13:C:H2'	54:1y:14:A:H5"	1.96	0.46
1:2A:232:G:H8	1:2A:232:G:OP2	1.97	0.46
1:2A:869:G:H5'	12:2Q:6:ARG:HH22	1.80	0.46
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.80	0.46
1:2A:1219:G:H1	1:2A:1230:C:H42	1.63	0.46
1:2A:1268:A:C2	1:2A:2013:A:C4	3.03	0.46
1:2A:1464:C:C2	1:2A:1465:G:C8	3.04	0.46
1:2A:1507:A:O2'	1:2A:1508:A:C8	2.68	0.46
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.16	0.46
2:2B:22:U:H2'	2:2B:23:G:C8	2.50	0.46
2:2B:66:A:N6	2:2B:108:U:H3'	2.30	0.46
2:2B:73:A:C4	2:2B:105:A:C2	3.03	0.46
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.64	0.46
2:2B:94:C:H2'	2:2B:95:C:C6	2.48	0.46
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.15	0.46
5:2F:192:LEU:HD22	5:2F:194:MET:HG3	1.97	0.46
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.14	0.46
14:2S:31:SER:HG	14:2S:34:HIS:H	1.63	0.46
21:2Z:6:LYS:HE3	21:2Z:40:ASP:HB3	1.96	0.46
32:2a:685:G:N1	32:2a:686:U:O4	2.48	0.46
32:2a:922:G:C6	32:2a:923:A:C6	3.04	0.46
32:2a:1060:C:H4'	41:2j:51:ARG:HB3	1.96	0.46
34:2c:81:GLY:O	34:2c:85:ARG:HG2	2.15	0.46
35:2d:61:LYS:HE3	35:2d:61:LYS:HB3	1.66	0.46
44:2m:26:GLY:H	44:2m:29:ARG:HB2	1.79	0.46
55:2x:66:C:H2'	55:2x:67:C:O4'	2.15	0.46
1:1A:897:C:C4	1:1A:898:C:N4	2.84	0.46
1:1A:1092:C:H2'	1:1A:1093:G:H5'	1.97	0.46
1:1A:1185:C:H5"	1:1A:1186:G:OP1	2.16	0.46
1:1A:1500:G:H2'	1:1A:1501:C:C6	2.50	0.46
1:1A:1540:U:C2'	1:1A:1541:G:H5'	2.45	0.46
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.16	0.46
3:1D:97:TYR:HB3	3:1D:99:ASP:HB2	1.97	0.46
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.61	0.46
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.48	0.46
21:1Z:33:LEU:HD11	21:1Z:90:VAL:HG21	1.96	0.46
32:1a:127:G:HO2'	48:1q:2:PRO:N	2.14	0.46
32:1a:190:U:H2'	32:1a:191:G:H8	1.80	0.46
32:1a:826:C:H4'	39:1h:12:ARG:HG2	1.96	0.46
32:1a:857:C:H2'	32:1a:858:G:O4'	2.16	0.46
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.46	0.46
54:1w:9:A:O2'	54:1w:10:G:N7	2.48	0.46
54:1y:7:A:O2'	54:1y:49:C:OP2	2.16	0.46
1:2A:25:U:H5'	18:2W:79:GLY:HA2	1.98	0.46
1:2A:30:G:C5	1:2A:31:C:C4	3.03	0.46
1:2A:878:A:N1	1:2A:879:G:H8	2.13	0.46
1:2A:947:G:N2	1:2A:971:C:C2	2.84	0.46
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.98	0.46
7:2H:149:ARG:HD2	7:2H:164:TYR:CE2	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:3:MET:HE3	12:2Q:3:MET:HB2	1.60	0.46
14:2S:11:LYS:HE3	14:2S:15:ARG:HH12	1.80	0.46
32:2a:93:G:O2'	32:2a:96:U:H5'	2.16	0.46
32:2a:1395:C:H5'	32:2a:1402:4OC:O2'	2.16	0.46
33:2b:88:ALA:HB1	33:2b:222:ILE:HD11	1.97	0.46
33:2b:144:ARG:NH2	33:2b:148:TYR:OH	2.49	0.46
35:2d:15:GLU:HB3	35:2d:63:LYS:HG3	1.97	0.46
35:2d:33:MET:O	35:2d:37:PRO:HB3	2.15	0.46
35:2d:104:VAL:HG21	35:2d:140:VAL:HG11	1.98	0.46
52:2u:11:GLY:O	52:2u:15:ARG:HG3	2.15	0.46
55:2x:37:A:H2'	55:2x:38:A:O4'	2.15	0.46
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.29	0.46
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.42	0.46
3:1D:159:ALA:HB1	3:1D:198:ASN:O	2.15	0.46
4:1E:10:GLY:HA2	4:1E:192:ASN:OD1	2.16	0.46
6:1G:64:THR:HB	6:1G:94:LEU:HD21	1.97	0.46
21:1Z:101:PRO:HA	21:1Z:123:ASP:HB3	1.98	0.46
21:1Z:138:GLU:H	21:1Z:156:LYS:HZ1	1.63	0.46
32:1a:684:A:C6	32:1a:685:G:C6	3.04	0.46
32:1a:1209:C:O2'	32:1a:1214:C:N4	2.46	0.46
33:1b:72:GLY:HA2	33:1b:165:VAL:HG12	1.98	0.46
38:1g:12:LEU:HD12	38:1g:12:LEU:H	1.79	0.46
41:1j:38:ILE:CG1	41:1j:71:LEU:HB3	2.45	0.46
1:2A:706:A:OP1	3:2D:7:LYS:NZ	2.49	0.46
1:2A:2497:A:H5"	61:2A:4425:HOH:O	2.14	0.46
11:2P:81:GLN:NE2	11:2P:105:LEU:O	2.44	0.46
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.16	0.46
12:2Q:85:LYS:HG2	22:20:8:GLY:O	2.16	0.46
13:2R:100:LEU:HD13	13:2R:100:LEU:HA	1.65	0.46
20:2Y:7:VAL:CG1	20:2Y:27:VAL:HG21	2.45	0.46
23:21:83:GLU:OE1	23:21:83:GLU:N	2.47	0.46
32:2a:38:G:H4'	32:2a:547:A:N6	2.31	0.46
32:2a:228:A:H2'	32:2a:229:U:O4'	2.16	0.46
32:2a:560:U:H5'	32:2a:566:G:N2	2.30	0.46
32:2a:834:C:C4	32:2a:835:U:C5	3.04	0.46
32:2a:1239:A:H62	32:2a:1299:A:H62	1.62	0.46
32:2a:1523:G:H2'	32:2a:1524:C:H6	1.79	0.46
34:2c:159:GLY:HA2	34:2c:193:TYR:CE1	2.51	0.46
40:2i:9:ARG:CG	40:2i:14:VAL:HG12	2.45	0.46
54:2w:28:G:H2'	54:2w:29:G:O4'	2.15	0.46
54:2w:65:G:C6	54:2w:66:U:C4	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:143:G:O2'	19:1X:35:THR:HG21	2.15	0.46
1:1A:699:A:H2'	1:1A:700:G:O4'	2.16	0.46
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.35	0.46
1:1A:2857:G:N2	1:1A:2860:A:OP2	2.41	0.46
2:1B:11:C:H3'	2:1B:12:C:C6	2.50	0.46
3:1D:71:ASP:CB	3:1D:103:ARG:HH12	2.29	0.46
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.81	0.46
28:16:14:THR:HB	28:16:48:VAL:O	2.16	0.46
32:1a:189(D):C:O2	32:1a:189(H):G:C6	2.69	0.46
32:1a:292:G:N7	32:1a:293:G:H1'	2.31	0.46
32:1a:560:U:H5'	32:1a:566:G:N2	2.31	0.46
32:1a:565:U:H3'	32:1a:566:G:H2'	1.98	0.46
32:1a:1342:C:O2'	40:1i:124:GLN:HG3	2.15	0.46
33:1b:67:THR:OG1	33:1b:157:ARG:NH2	2.49	0.46
34:1c:18:TRP:O	34:1c:54:ARG:NH2	2.48	0.46
40:1i:93:ARG:NH1	40:1i:97:LYS:HD2	2.30	0.46
1:2A:70:G:H5"	1:2A:112:U:O2	2.15	0.46
1:2A:116:C:H2'	1:2A:117:G:O4'	2.15	0.46
1:2A:646:A:H2'	1:2A:647:G:O4'	2.15	0.46
1:2A:1031:G:N3	31:29:36:GLN:NE2	2.64	0.46
1:2A:1261:C:OP2	18:2W:83:LYS:NZ	2.38	0.46
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	1.97	0.46
1:2A:2119:A:C2	1:2A:2171:A:H5'	2.51	0.46
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.48	0.46
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.50	0.46
6:2G:7:LEU:HD22	6:2G:104:GLU:N	2.31	0.46
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.81	0.46
11:2P:99:LEU:HD12	11:2P:102:ARG:HH11	1.80	0.46
14:2S:5:THR:OG1	14:2S:8:GLU:HG3	2.16	0.46
26:24:53:GLU:C	26:24:55:ARG:H	2.23	0.46
32:2a:390:C:H2'	32:2a:391:G:C8	2.51	0.46
32:2a:403:C:OP1	35:2d:137:SER:OG	2.34	0.46
32:2a:457:C:H2'	32:2a:458:C:C6	2.51	0.46
32:2a:826:C:H2'	32:2a:827:U:C6	2.51	0.46
32:2a:940:C:H2'	32:2a:941:G:H8	1.81	0.46
32:2a:1106:G:H4'	34:2c:171:GLY:O	2.15	0.46
32:2a:1261:A:H3'	32:2a:1262:C:C6	2.51	0.46
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.31	0.46
32:2a:1364:U:O2'	32:2a:1365:G:H5'	2.15	0.46
38:2g:78:ARG:HG2	38:2g:79:ARG:H	1.81	0.46
39:2h:41:ARG:HH21	39:2h:120:THR:HG21	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:69:GLY:O	40:2i:73:GLN:HG3	2.16	0.46
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.97	0.46
55:2x:27:U:O2	55:2x:44:A:C2	2.68	0.46
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.48	0.46
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.16	0.46
6:1G:98:ARG:CZ	26:14:1:MET:HE3	2.46	0.46
8:1I:4:ILE:HG21	8:1I:47:LEU:HG	1.98	0.46
8:1I:129:THR:HG22	8:1I:139:GLN:NE2	2.30	0.46
10:1O:107:ARG:NH2	15:1T:36:GLU:HG2	2.30	0.46
32:1a:119:A:H4'	32:1a:120:A:C8	2.50	0.46
32:1a:127:G:OP1	32:1a:635:G:H1'	2.15	0.46
32:1a:1433:A:C4	32:1a:1468:A:C2	3.04	0.46
34:1c:130:VAL:HG21	34:1c:157:ILE:HG23	1.97	0.46
41:1j:16:LEU:CD2	41:1j:70:ARG:HG2	2.45	0.46
49:1r:38:GLU:OE1	49:1r:41:LYS:NZ	2.36	0.46
54:1w:18:G:H4'	54:1w:60:U:C6	2.51	0.46
1:2A:18:C:H2'	1:2A:19:C:C6	2.51	0.46
1:2A:443:A:C5	5:2F:45:ARG:HD2	2.51	0.46
1:2A:839:U:H1'	1:2A:1191:G:H1'	1.97	0.46
1:2A:1510:G:H2'	1:2A:1511:C:C6	2.50	0.46
1:2A:1709:U:H2'	1:2A:1710:C:C6	2.51	0.46
1:2A:2472:G:N1	1:2A:2477:C:OP1	2.41	0.46
2:2B:6:C:C2	2:2B:116:G:N2	2.84	0.46
3:2D:83:GLU:OE1	3:2D:104:TYR:OH	2.20	0.46
6:2G:39:ILE:HG23	6:2G:157:ILE:HG13	1.98	0.46
10:2O:7:TYR:CZ	10:2O:44:LYS:HG3	2.51	0.46
10:2O:79:PHE:CD1	15:2T:72:VAL:HG22	2.51	0.46
32:2a:935:A:O2'	32:2a:1383:C:N3	2.45	0.46
32:2a:1015:A:O5'	32:2a:1015:A:H8	1.99	0.46
32:2a:1099:G:C6	32:2a:1100:C:C4	3.04	0.46
32:2a:1360:A:H2'	32:2a:1361:G:O4'	2.15	0.46
32:2a:1503:A:H2	53:2v:13:A:N7	2.14	0.46
33:2b:103:THR:HA	33:2b:180:LEU:HD11	1.98	0.46
37:2f:44:GLY:HA2	37:2f:59:TYR:CZ	2.50	0.46
37:2f:96:PRO:HB3	49:2r:30:ASP:CG	2.41	0.46
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.16	0.46
1:1A:528:A:O2'	1:1A:529:A:H5'	2.16	0.46
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.80	0.46
1:1A:1797:C:H4'	3:1D:257:LEU:O	2.15	0.46
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.51	0.46
1:1A:2804:C:H2'	1:1A:2805:G:O4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:49:ASP:OD1	6:1G:49:ASP:N	2.46	0.46
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.98	0.46
10:1O:12:ASP:CG	10:1O:14:THR:HG23	2.40	0.46
26:14:61:ARG:NH1	50:1s:42:PRO:HD3	2.31	0.46
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.49	0.46
33:1b:168:THR:HG21	33:1b:192:SER:HA	1.98	0.46
41:1j:81:THR:O	41:1j:84:GLN:N	2.49	0.46
1:2A:229:A:O5'	1:2A:230:U:H5'	2.16	0.46
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.16	0.46
1:2A:2740:A:C6	1:2A:2764:A:C8	3.03	0.46
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.16	0.46
4:2E:80:GLU:O	4:2E:81:ILE:HD13	2.16	0.46
6:2G:15:VAL:HG13	6:2G:175:LEU:HD23	1.97	0.46
11:2P:55:ARG:HA	61:2P:302:HOH:O	2.16	0.46
22:20:6:GLY:C	22:20:7:LEU:HD23	2.40	0.46
32:2a:12:U:H4'	32:2a:526:C:O2'	2.16	0.46
32:2a:1007:C:C4	32:2a:1008:C:C5	3.04	0.46
32:2a:1055:A:N6	32:2a:1206:G:C5	2.83	0.46
32:2a:1193:G:C6	32:2a:1194:U:C5	3.04	0.46
32:2a:1217:C:H2'	32:2a:1218:C:C6	2.50	0.46
32:2a:1222:G:C6	32:2a:1223:C:C4	3.03	0.46
32:2a:1304:G:C5	32:2a:1305:G:C6	3.04	0.46
32:2a:1375:A:C6	32:2a:1376:U:C4	3.04	0.46
36:2e:7:GLU:OE2	36:2e:37:ARG:NH2	2.28	0.46
48:2q:10:VAL:HA	48:2q:20:THR:O	2.16	0.46
50:2s:44:MET:O	50:2s:47:HIS:HB2	2.16	0.46
1:1A:1310:G:H1'	1:1A:1611:C:H5'	1.98	0.46
1:1A:2126:A:H4'	1:1A:2127:G:OP1	2.15	0.46
6:1G:109:VAL:C	6:1G:112:PRO:HD2	2.42	0.46
11:1P:39:LYS:HB2	11:1P:45:LEU:HD22	1.98	0.46
32:1a:9:G:H2'	32:1a:10:A:H8	1.81	0.46
32:1a:270:A:H2'	32:1a:271:C:H6	1.80	0.46
32:1a:692:U:H5'	32:1a:797:C:H5'	1.98	0.46
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.98	0.46
35:1d:22:LYS:HB2	35:1d:26:CYS:SG	2.56	0.46
40:1i:23:ASN:HB2	40:1i:25:LYS:NZ	2.31	0.46
51:1t:86:ARG:HB3	51:1t:90:GLN:NE2	2.31	0.46
1:2A:649:G:C5	1:2A:650:C:C4	3.04	0.46
1:2A:784:A:C8	1:2A:792:G:C5	3.04	0.46
1:2A:1853:A:N3	1:2A:2233:U:O2'	2.45	0.46
1:2A:2635:C:H5"	4:2E:78:LEU:O	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:52:ILE:O	6:2G:53:LEU:HD23	2.16	0.46
11:2P:45:LEU:HD12	11:2P:45:LEU:HA	1.54	0.46
17:2V:1:MET:HE2	17:2V:43:GLU:HB2	1.96	0.46
30:28:39:LYS:HA	30:28:42:ARG:NH1	2.31	0.46
32:2a:423:G:H3'	32:2a:423:G:N3	2.30	0.46
32:2a:431:A:H2'	32:2a:432:A:H8	1.81	0.46
32:2a:540:G:C4	32:2a:541:G:C8	3.04	0.46
32:2a:708:C:H2'	32:2a:709:G:H8	1.81	0.46
32:2a:1117:G:N2	32:2a:1180:A:O2'	2.48	0.46
32:2a:1443:G:N2	32:2a:1460:A:H1'	2.31	0.46
33:2b:28:PHE:CD2	33:2b:31:TYR:HB2	2.52	0.46
36:2e:111:GLU:C	36:2e:113:ALA:H	2.24	0.46
38:2g:15:ASP:HB3	38:2g:24:THR:HG23	1.98	0.46
53:2v:14:A:C2	54:2y:34:G:C2	3.04	0.46
1:1A:207:A:H2'	1:1A:208:C:O4'	2.16	0.45
9:1N:67:LEU:C	9:1N:88:GLU:HG3	2.40	0.45
14:1S:27:SER:O	14:1S:37:ALA:HA	2.16	0.45
32:1a:434:U:H2'	32:1a:435:C:C6	2.51	0.45
32:1a:872:A:C8	32:1a:874:G:C8	3.04	0.45
32:1a:1015:A:N3	32:1a:1218:C:O2'	2.45	0.45
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.17	0.45
45:1n:53:LEU:HD13	45:1n:56:VAL:HG21	1.98	0.45
1:2A:363:G:H2'	1:2A:363(A):A:C8	2.51	0.45
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.16	0.45
1:2A:910:A:H2'	1:2A:911:A:C8	2.51	0.45
1:2A:1642:G:H2'	1:2A:1643:G:O4'	2.17	0.45
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.80	0.45
1:2A:2075:U:OP1	3:2D:244:ARG:NH2	2.49	0.45
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.16	0.45
1:2A:2336:A:H61	22:20:43:THR:CG2	2.29	0.45
1:2A:2572:A:OP1	1:2A:2574:G:O2'	2.33	0.45
2:2B:46:A:H2'	2:2B:47:C:C6	2.50	0.45
4:2E:59:VAL:O	4:2E:64:LYS:HE3	2.17	0.45
4:2E:79:ARG:HG2	4:2E:79:ARG:HH11	1.81	0.45
6:2G:43:LEU:HD12	6:2G:45:GLU:HG3	1.98	0.45
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.80	0.45
14:2S:48:LEU:HD12	14:2S:48:LEU:HA	1.74	0.45
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.39	0.45
20:2Y:55:TYR:N	20:2Y:56:PRO:HD3	2.32	0.45
32:2a:977:A:O2'	32:2a:980:C:N4	2.48	0.45
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1298:C:P	38:2g:114:ARG:HH22	2.38	0.45
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.50	0.45
36:2e:5:ASP:O	36:2e:36:ASP:HB3	2.17	0.45
38:2g:113:GLU:HB2	38:2g:118:VAL:CG2	2.46	0.45
40:2i:23:ASN:OD1	40:2i:25:LYS:HD3	2.16	0.45
54:2y:9:A:C2'	54:2y:11:C:H41	2.29	0.45
1:1A:34:C:H5"	1:1A:35:G:OP2	2.15	0.45
1:1A:302:C:H2'	1:1A:303:U:H6	1.82	0.45
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.15	0.45
1:1A:2355:C:H1'	22:10:39:ARG:HH21	1.81	0.45
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.16	0.45
1:1A:2553:G:H2'	1:1A:2554:U:O4'	2.17	0.45
5:1F:155:LEU:HD11	5:1F:176:LEU:HD12	1.98	0.45
26:14:59:PHE:CE2	50:1s:64:GLU:HB3	2.50	0.45
32:1a:815:A:N7	32:1a:1509:C:O2'	2.42	0.45
32:1a:1177:G:H8	32:1a:1177:G:O5'	1.99	0.45
33:1b:69:LEU:HD12	33:1b:70:PHE:H	1.81	0.45
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.51	0.45
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.17	0.45
47:1p:60:LEU:HD12	47:1p:60:LEU:HA	1.75	0.45
1:2A:38:A:H2'	1:2A:39:C:C6	2.52	0.45
1:2A:118:A:N3	1:2A:178:G:H1'	2.31	0.45
1:2A:471:A:H2'	1:2A:472:A:O4'	2.16	0.45
1:2A:2538:C:H2'	1:2A:2539:C:H6	1.81	0.45
1:2A:2584:U:H2'	1:2A:2585:U:C6	2.52	0.45
15:2T:63:VAL:O	15:2T:73:GLU:HA	2.15	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.43	0.45
28:26:53:LYS:NZ	61:2y:201:HOH:O	2.45	0.45
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.97	0.45
32:2a:664:G:N2	32:2a:741:G:H1	2.02	0.45
32:2a:784:C:H2'	32:2a:785:G:C8	2.50	0.45
32:2a:1207:2MG:O2'	32:2a:1208:C:H5'	2.17	0.45
32:2a:1227:A:OP1	50:2s:80:TYR:OH	2.25	0.45
32:2a:1515:C:H2'	32:2a:1516:G:C8	2.51	0.45
33:2b:33:TYR:HD1	33:2b:43:ASP:HB2	1.80	0.45
35:2d:31:CYS:HB2	60:2d:302:SF4:S3	2.56	0.45
41:2j:81:THR:C	41:2j:83:GLU:N	2.74	0.45
48:2q:37:LYS:O	48:2q:38:ARG:NH2	2.45	0.45
1:1A:819:A:C4	1:1A:1189:A:C2	3.03	0.45
1:1A:969:U:H6	1:1A:969:U:O5'	2.00	0.45
1:1A:2417:C:OP1	11:1P:65:ARG:NH2	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:6:LEU:HD11	8:1I:37:VAL:HG23	1.99	0.45
8:1I:66:GLU:HA	8:1I:69:LYS:HB3	1.98	0.45
32:1a:1162:C:N3	32:1a:1175:G:C2	2.83	0.45
34:1c:65:ALA:O	34:1c:66:VAL:HG13	2.16	0.45
37:1f:44:GLY:HA2	37:1f:59:TYR:CD2	2.51	0.45
50:1s:52:TYR:HB2	50:1s:57:HIS:CE1	2.52	0.45
1:2A:55:G:O2'	1:2A:127:A:N1	2.48	0.45
1:2A:68:G:H2'	1:2A:69:C:O4'	2.15	0.45
1:2A:249:C:O2	30:28:12:LYS:NZ	2.38	0.45
1:2A:397:G:N7	61:2A:4039:HOH:O	2.36	0.45
1:2A:754:C:H2'	1:2A:755:C:C6	2.51	0.45
1:2A:812:C:H2'	1:2A:813:U:H6	1.82	0.45
1:2A:994:C:H3'	16:2U:54:LYS:HE3	1.97	0.45
1:2A:1016:G:H2'	1:2A:1017:G:C8	2.51	0.45
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.30	0.45
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.51	0.45
1:2A:2582:G:C2	1:2A:2583:G:C8	3.05	0.45
1:2A:2773:C:OP1	4:2E:166:THR:OG1	2.33	0.45
2:2B:19:G:H2'	2:2B:20:C:O4'	2.15	0.45
3:2D:177:LEU:HD23	3:2D:177:LEU:HA	1.69	0.45
8:2I:85:GLU:O	8:2I:85:GLU:HG2	2.16	0.45
11:2P:59:LEU:HD11	30:28:10:ALA:HA	1.98	0.45
13:2R:36:THR:HG21	13:2R:40:LYS:HD2	1.98	0.45
32:2a:730:G:C5	32:2a:731:G:H1'	2.51	0.45
32:2a:1104:G:O2'	32:2a:1105:A:H5'	2.17	0.45
32:2a:1267:C:H5"	32:2a:1268:A:OP2	2.16	0.45
38:2g:113:GLU:HB2	38:2g:118:VAL:HG23	1.98	0.45
39:2h:87:SER:HA	39:2h:93:VAL:HG23	1.97	0.45
44:2m:14:ARG:HB2	44:2m:17:VAL:HG22	1.98	0.45
54:2y:14:A:H3'	54:2y:15:G:C8	2.51	0.45
1:1A:657:U:H2'	1:1A:658:C:C6	2.51	0.45
1:1A:1058:G:N2	1:1A:1080:C:N3	2.61	0.45
2:1B:94:C:H2'	2:1B:95:C:C6	2.52	0.45
7:1H:96:ALA:HB2	7:1H:105:LEU:HD23	1.98	0.45
17:1V:1:MET:HA	17:1V:41:GLY:O	2.17	0.45
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.67	0.45
32:1a:38:G:C2	32:1a:397:A:C2	3.04	0.45
32:1a:79:G:C6	32:1a:90:U:O2	2.70	0.45
32:1a:394:G:H2'	32:1a:395:C:C6	2.51	0.45
33:1b:73:THR:HA	33:1b:78:GLN:HE22	1.82	0.45
34:1c:87:LEU:O	34:1c:91:LEU:N	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:100:GLY:O	40:1i:103:THR:HG22	2.16	0.45
1:2A:30:G:H2'	1:2A:31:C:H6	1.81	0.45
1:2A:565:C:H2'	1:2A:566:U:O4'	2.16	0.45
1:2A:676:A:H1'	1:2A:2443:C:H1'	1.98	0.45
1:2A:912:C:N3	1:2A:913:U:C5	2.84	0.45
1:2A:1297:C:H2'	1:2A:1298:C:H6	1.81	0.45
1:2A:2184:G:O2'	1:2A:2185:C:H5'	2.16	0.45
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.51	0.45
5:2F:170:LEU:HD22	5:2F:172:TRP:NE1	2.31	0.45
8:2I:29:TYR:HD2	8:2I:30:LEU:HD23	1.80	0.45
10:2O:111:PHE:HB3	10:2O:114:ILE:HD12	1.97	0.45
15:2T:109:GLU:HG2	15:2T:112:ARG:HH22	1.82	0.45
21:2Z:126:VAL:HB	21:2Z:161:VAL:HG23	1.98	0.45
27:25:18:ALA:O	27:25:21:SER:HB3	2.16	0.45
32:2a:625:G:H2'	32:2a:626:U:C6	2.52	0.45
32:2a:950:U:O4	44:2m:105:THR:HG21	2.16	0.45
32:2a:1131:G:H2'	32:2a:1132:C:C6	2.52	0.45
35:2d:102:ASP:HA	35:2d:121:VAL:HG21	1.99	0.45
36:2e:107:ARG:O	36:2e:110:LEU:N	2.48	0.45
37:2f:99:ALA:HB1	49:2r:23:LYS:NZ	2.32	0.45
40:2i:16:ARG:O	40:2i:63:ILE:HA	2.17	0.45
43:2l:104:VAL:HG12	43:2l:105:TYR:CD2	2.51	0.45
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.99	0.45
54:2y:18:G:O6	54:2y:56:C:C4	2.70	0.45
1:1A:868:U:C4	1:1A:869:G:N7	2.84	0.45
1:1A:1693:U:H1'	3:1D:14:ARG:NH2	2.32	0.45
1:1A:1862:G:O2'	1:1A:1863:G:H5'	2.16	0.45
1:1A:2123:G:H1	1:1A:2175:C:H42	1.64	0.45
1:1A:2305:A:H5"	6:1G:134:GLY:HA3	1.98	0.45
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	1.98	0.45
14:1S:99:LYS:O	14:1S:103:GLU:HG3	2.17	0.45
16:1U:69:CYS:HB3	16:1U:74:LEU:HD13	1.99	0.45
17:1V:24:LYS:HE3	17:1V:24:LYS:HB3	1.76	0.45
32:1a:100:C:H2'	32:1a:101:A:C8	2.52	0.45
32:1a:375:U:C2	32:1a:376:G:C8	3.05	0.45
32:1a:626:U:H2'	32:1a:627:G:C8	2.51	0.45
32:1a:670:G:H2'	32:1a:671:G:O4'	2.16	0.45
38:1g:144:MET:HB3	38:1g:144:MET:HE2	1.66	0.45
43:1l:82:VAL:O	43:1l:106:ASP:HB2	2.17	0.45
1:2A:829:A:N7	1:2A:2248:C:H5'	2.31	0.45
1:2A:972:G:OP2	1:2A:973:A:O2'	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1473:G:C6	1:2A:1474:C:C4	3.05	0.45
1:2A:1512:U:H2'	1:2A:1513:C:C6	2.51	0.45
1:2A:2305:A:H2'	1:2A:2306:C:O4'	2.17	0.45
1:2A:2787:C:H2'	1:2A:2788:C:H6	1.82	0.45
2:2B:30:C:OP2	14:2S:32:LEU:HD11	2.17	0.45
4:2E:135:HIS:H	4:2E:135:HIS:CD2	2.35	0.45
6:2G:44:GLY:HA2	6:2G:88:ILE:CG2	2.45	0.45
12:2Q:22:LYS:HE2	12:2Q:22:LYS:HB3	1.59	0.45
30:28:34:TRP:CG	30:28:35:GLN:N	2.84	0.45
32:2a:202:U:H3'	32:2a:203:U:C6	2.51	0.45
32:2a:1013:G:H2'	32:2a:1015:A:OP2	2.17	0.45
32:2a:1258:G:O2'	32:2a:1259:C:H5'	2.16	0.45
32:2a:1279:A:H5"	32:2a:1280:A:OP1	2.16	0.45
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.17	0.45
33:2b:76:GLN:NE2	33:2b:76:GLN:H	2.14	0.45
36:2e:53:LEU:O	36:2e:56:GLN:HB2	2.16	0.45
47:2p:3:LYS:O	47:2p:21:VAL:HA	2.16	0.45
1:1A:839:U:H2'	1:1A:840:C:C6	2.52	0.45
1:1A:899:A:H2'	1:1A:899:A:N3	2.32	0.45
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.51	0.45
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.52	0.45
1:1A:2282:G:H4'	1:1A:2389:G:O2'	2.16	0.45
2:1B:78:A:C2	2:1B:100:A:C4	3.04	0.45
4:1E:56:PRO:HA	4:1E:59:VAL:HG23	1.97	0.45
32:1a:271:C:H2'	32:1a:272:C:C6	2.52	0.45
32:1a:640:A:C5	32:1a:641:U:C4	3.05	0.45
33:1b:168:THR:CG2	33:1b:192:SER:HA	2.47	0.45
34:1c:33:LEU:O	34:1c:37:GLN:HG2	2.16	0.45
34:1c:41:GLY:O	34:1c:45:LYS:HB2	2.16	0.45
36:1e:66:MET:HE3	36:1e:66:MET:HB3	1.76	0.45
37:1f:78:GLU:HA	37:1f:81:ILE:HG13	1.97	0.45
38:1g:29:LYS:HA	38:1g:29:LYS:HD2	1.50	0.45
46:1o:87:ILE:HG22	46:1o:88:ARG:N	2.25	0.45
1:2A:8:A:H2'	1:2A:9:U:H6	1.82	0.45
1:2A:27:G:N2	1:2A:512:G:H1'	2.31	0.45
1:2A:271(H):G:H4'	23:21:81:LYS:HG3	1.98	0.45
1:2A:658:C:H2'	1:2A:659:C:C6	2.52	0.45
1:2A:699:A:H4'	1:2A:1554:A:N6	2.32	0.45
1:2A:860:U:O2'	1:2A:861:A:H5'	2.15	0.45
1:2A:1159:U:H2'	1:2A:1160:G:C8	2.51	0.45
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2728:U:H2'	1:2A:2729:G:C8	2.52	0.45
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	1.99	0.45
12:2Q:34:LEU:HD11	12:2Q:129:THR:HB	1.99	0.45
17:2V:20:LEU:HD12	17:2V:21:ARG:N	2.32	0.45
22:20:18:ALA:HB3	22:20:20:ARG:NH1	2.32	0.45
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.51	0.45
32:2a:793:U:O2	32:2a:1516:G:H4'	2.16	0.45
32:2a:1320:C:H1'	50:2s:73:GLU:HB2	1.99	0.45
33:2b:35:GLU:HG2	33:2b:38:GLY:HA2	1.97	0.45
34:2c:199:LYS:HB3	34:2c:201:TYR:HE2	1.81	0.45
36:2e:84:PHE:O	36:2e:86:ALA:N	2.49	0.45
37:2f:53:ALA:HB3	37:2f:86:ARG:NH1	2.32	0.45
38:2g:131:LYS:HB3	38:2g:131:LYS:HE2	1.61	0.45
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.98	0.45
46:2o:14:GLU:HA	46:2o:14:GLU:OE1	2.16	0.45
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.81	0.45
1:1A:548:A:N6	17:1V:19:LYS:H	2.14	0.45
1:1A:714:U:O2'	1:1A:716:A:N7	2.34	0.45
1:1A:1142(A):A:C4	1:1A:1144:G:N7	2.84	0.45
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.17	0.45
19:1X:63:LYS:O	19:1X:64:LYS:HD3	2.16	0.45
33:1b:211:ILE:O	33:1b:215:LEU:HB2	2.17	0.45
1:2A:478:A:N1	1:2A:500:G:H4'	2.32	0.45
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.32	0.45
1:2A:581:C:H2'	1:2A:582:G:C8	2.52	0.45
1:2A:898:C:N4	1:2A:899:A:C6	2.85	0.45
1:2A:1181:C:H2'	1:2A:1182:A:C8	2.51	0.45
1:2A:1336:A:H2'	1:2A:1337:G:H8	1.81	0.45
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.32	0.45
1:2A:2055:C:H5'	1:2A:2056:G:O5'	2.16	0.45
1:2A:2409:G:C6	1:2A:2410:G:C5	3.05	0.45
1:2A:2548:G:H2'	1:2A:2549:G:O4'	2.17	0.45
1:2A:2607:G:O6	61:2A:3956:HOH:O	2.21	0.45
5:2F:137:LYS:HB3	5:2F:137:LYS:HE2	1.46	0.45
6:2G:111:LEU:HD23	6:2G:117:PHE:HZ	1.81	0.45
7:2H:89:ILE:HD12	7:2H:96:ALA:HB2	1.98	0.45
14:2S:30:ARG:HG3	14:2S:35:ILE:HD12	1.98	0.45
24:22:1:MET:HE2	24:22:6:VAL:HG22	1.99	0.45
24:22:35:LEU:CD1	24:22:53:LEU:HD12	2.47	0.45
32:2a:37:U:H2'	32:2a:38:G:O4'	2.17	0.45
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1120:G:C6	32:2a:1121:U:C4	3.05	0.45
32:2a:1148:U:O4'	40:2i:16:ARG:NH2	2.49	0.45
32:2a:1256:A:N1	32:2a:1278:U:H1'	2.32	0.45
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.17	0.45
33:2b:142:LEU:HD21	33:2b:146:GLN:NE2	2.31	0.45
34:2c:30:ARG:HH21	45:2n:38:GLY:HA3	1.82	0.45
37:2f:53:ALA:HB3	37:2f:86:ARG:CZ	2.46	0.45
39:2h:85:ARG:NH1	39:2h:87:SER:O	2.50	0.45
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.49	0.45
50:2s:30:LEU:HA	50:2s:48:THR:O	2.17	0.45
52:2u:9:ARG:O	52:2u:13:ILE:HG13	2.16	0.45
1:1A:647:G:H8	1:1A:647:G:O5'	1.99	0.45
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.51	0.45
2:1B:14:U:O2	2:1B:108:U:H4'	2.16	0.45
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.41	0.45
21:1Z:102:LEU:HG	21:1Z:123:ASP:HA	1.99	0.45
32:1a:278:G:OP2	48:1q:41:LYS:HE2	2.17	0.45
32:1a:591:U:H2'	32:1a:592:G:H8	1.80	0.45
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.52	0.45
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.37	0.45
32:1a:1268:A:H2'	32:1a:1269:A:C8	2.52	0.45
33:1b:55:PHE:HD1	33:1b:221:LEU:HD22	1.81	0.45
37:1f:3:ARG:NE	37:1f:38:GLU:OE2	2.50	0.45
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.32	0.45
38:1g:89:MET:CE	38:1g:155:ARG:HB2	2.46	0.45
44:1m:37:THR:OG1	44:1m:39:ILE:HD12	2.17	0.45
1:2A:515:A:H1'	1:2A:581:C:H1'	1.99	0.45
1:2A:649:G:C6	1:2A:650:C:C4	3.05	0.45
1:2A:879:G:H2'	1:2A:879:G:N3	2.32	0.45
1:2A:1029:A:N1	1:2A:2465:C:O2'	2.44	0.45
1:2A:2134:A:H1'	1:2A:2158:A:C6	2.52	0.45
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.17	0.45
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.52	0.45
1:2A:2858:C:O5'	1:2A:2858:C:H6	2.00	0.45
1:2A:2893:G:H5"	1:2A:2894:G:O4'	2.16	0.45
9:2N:30:ILE:O	9:2N:34:LEU:HG	2.17	0.45
10:2O:25:LEU:HB2	10:2O:38:VAL:O	2.17	0.45
32:2a:1024:G:N2	32:2a:1025:U:C5	2.85	0.45
32:2a:1103:C:P	33:2b:96:ARG:HH22	2.40	0.45
32:2a:1166:G:C2	32:2a:1171:G:C6	3.05	0.45
32:2a:1226:C:N4	44:2m:104:ARG:HD2	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1305:G:C4	32:2a:1331:G:N2	2.85	0.45
32:2a:1349:A:H2'	32:2a:1350:A:H8	1.81	0.45
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.15	0.45
33:2b:113:HIS:CD2	33:2b:113:HIS:N	2.85	0.45
36:2e:127:ASN:O	36:2e:131:ILE:HG12	2.17	0.45
40:2i:13:ALA:HA	40:2i:67:GLY:O	2.17	0.45
47:2p:8:ARG:HG3	47:2p:17:TYR:CE1	2.51	0.45
1:1A:374:A:C2	1:1A:401:A:C4	3.04	0.45
1:1A:1025:G:O2'	61:1A:4218:HOH:O	2.08	0.45
1:1A:1510:G:H2'	1:1A:1511:C:C6	2.52	0.45
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.17	0.45
1:1A:2101:G:H1	1:1A:2188:C:H42	1.65	0.45
1:1A:2572:A:C8	4:1E:144:ARG:HD3	2.52	0.45
61:1A:5047:HOH:O	5:1F:74:ARG:HG3	2.16	0.45
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.99	0.45
13:1R:38:VAL:HG12	13:1R:42:LYS:HE3	1.98	0.45
13:1R:56:LYS:HE3	13:1R:87:TYR:O	2.17	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.63	0.45
32:1a:161:A:H2'	32:1a:162:A:C8	2.52	0.45
32:1a:339:C:H2'	32:1a:340:U:C6	2.51	0.45
32:1a:486:U:H2'	32:1a:487:A:H8	1.81	0.45
32:1a:603:U:H2'	32:1a:604:G:C8	2.52	0.45
32:1a:684:A:N6	32:1a:685:G:C6	2.85	0.45
32:1a:685:G:O2'	32:1a:686:U:H5'	2.17	0.45
32:1a:1106:G:C6	32:1a:1107:C:C4	3.05	0.45
32:1a:1278:U:H5'	32:1a:1279:A:O4'	2.17	0.45
51:1t:40:ALA:HB2	51:1t:55:ILE:HG22	1.99	0.45
1:2A:37:C:H4'	1:2A:451:C:OP1	2.16	0.45
1:2A:993:G:C6	1:2A:994:C:C4	3.05	0.45
1:2A:1419:A:C8	1:2A:1421:G:C6	3.05	0.45
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.52	0.45
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.50	0.45
2:2B:105:A:H5'	2:2B:106:G:OP2	2.17	0.45
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.60	0.45
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.17	0.45
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.16	0.45
21:2Z:25:PRO:O	21:2Z:85:HIS:HA	2.17	0.45
26:24:20:ASN:HD22	26:24:21:VAL:N	2.15	0.45
26:24:61:ARG:HG2	50:2s:42:PRO:HG3	1.98	0.45
32:2a:157:G:H2'	32:2a:158:G:H8	1.81	0.45
32:2a:355:C:O2'	32:2a:388:G:N3	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:684:A:H2'	32:2a:685:G:C8	2.52	0.45
32:2a:986:A:H2'	32:2a:987:G:O4'	2.17	0.45
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.17	0.45
32:2a:1292:U:C2	32:2a:1293:G:C8	3.05	0.45
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.82	0.45
45:2n:24:CYS:HB2	45:2n:40:CYS:HB3	1.98	0.45
51:2t:54:LYS:HA	51:2t:57:ARG:NH2	2.32	0.45
1:1A:27:G:C2	1:1A:512:G:N3	2.85	0.45
1:1A:140:G:N3	1:1A:142:A:N6	2.56	0.45
1:1A:428:A:H8	1:1A:428:A:OP2	2.00	0.45
2:1B:39:A:O2'	2:1B:46:A:N1	2.46	0.45
6:1G:131:TYR:HB3	6:1G:159:VAL:CG1	2.47	0.45
11:1P:45:LEU:HD12	11:1P:45:LEU:HA	1.77	0.45
21:1Z:138:GLU:H	21:1Z:156:LYS:CE	2.30	0.45
32:1a:660:G:H2'	32:1a:661:G:O4'	2.17	0.45
32:1a:983:A:H5'	32:1a:984:C:OP2	2.17	0.45
32:1a:1187:G:H4'	40:1i:111:ARG:HH11	1.81	0.45
40:1i:99:LEU:HD12	40:1i:99:LEU:H	1.81	0.45
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.99	0.45
54:1w:52:G:H2'	54:1w:53:G:O4'	2.17	0.45
1:2A:1452:A:O2'	1:2A:1453:U:H2'	2.17	0.45
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.81	0.45
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.17	0.45
6:2G:25:TYR:HD1	6:2G:30:GLU:OE2	1.99	0.45
9:2N:123:TYR:HH	9:2N:130:HIS:CD2	2.35	0.45
32:2a:554:C:H2'	32:2a:555:C:H6	1.82	0.45
32:2a:784:C:H2'	32:2a:785:G:H8	1.82	0.45
32:2a:866:C:O2'	32:2a:919:A:OP1	2.21	0.45
32:2a:1158:C:C2	32:2a:1160:G:C8	3.05	0.45
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.51	0.45
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.52	0.45
41:2j:6:ILE:HG12	41:2j:98:ILE:HD13	1.99	0.45
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.17	0.44
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.32	0.44
1:1A:1910:G:O2'	1:1A:1911:PSU:H5"	2.17	0.44
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.52	0.44
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.99	0.44
2:1B:66:A:N6	2:1B:108:U:H2'	2.31	0.44
5:1F:24:LEU:HD12	5:1F:24:LEU:HA	1.83	0.44
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.81	0.44
11:1P:94:GLU:OE2	11:1P:124:LYS:HE3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.47	0.44
32:1a:527:G7M:O2'	32:1a:535:A:N1	2.37	0.44
32:1a:1243:C:C2	32:1a:1295:G:N2	2.85	0.44
35:1d:158:ILE:HD12	35:1d:159:ARG:N	2.31	0.44
36:1e:5:ASP:CG	36:1e:6:PHE:H	2.25	0.44
1:2A:117:G:C6	1:2A:119:A:C6	3.05	0.44
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.16	0.44
1:2A:1027:A:N6	1:2A:1126:A:C4	2.86	0.44
1:2A:1144:G:C5	1:2A:1145:C:C5	3.05	0.44
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.53	0.44
1:2A:1462:C:H4'	1:2A:2703:C:H5'	1.98	0.44
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.52	0.44
1:2A:2265:U:OP2	1:2A:2266:A:O2'	2.31	0.44
1:2A:2439:A:H5'	1:2A:2439:A:H8	1.81	0.44
1:2A:2627:G:N3	1:2A:2781:A:H2	2.14	0.44
1:2A:2788:C:O2'	1:2A:2809:A:N3	2.47	0.44
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.98	0.44
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.17	0.44
9:2N:35:ARG:O	9:2N:42:TRP:NE1	2.49	0.44
32:2a:284:G:H2'	32:2a:285:G:H8	1.81	0.44
32:2a:397:A:H5'	32:2a:398:C:OP1	2.17	0.44
32:2a:580:U:H2'	32:2a:581:G:O4'	2.16	0.44
32:2a:1111:A:C5	32:2a:1112:C:C5	3.05	0.44
32:2a:1291:G:C6	32:2a:1292:U:C4	3.04	0.44
34:2c:48:TYR:OH	34:2c:118:GLN:HB3	2.18	0.44
34:2c:120:VAL:HA	34:2c:123:GLN:HB2	1.99	0.44
36:2e:129:ILE:O	36:2e:132:ALA:HB3	2.17	0.44
40:2i:33:PHE:HD2	40:2i:34:ASN:OD1	2.00	0.44
1:1A:41:C:H2'	1:1A:42:G:O4'	2.16	0.44
1:1A:2028:U:H2'	1:1A:2029:G:O4'	2.17	0.44
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	2.00	0.44
8:1I:121:LYS:HE3	8:1I:121:LYS:HB3	1.68	0.44
33:1b:220:ASP:HA	33:1b:223:ILE:HD11	2.00	0.44
41:1j:80:LYS:O	41:1j:84:GLN:HB2	2.16	0.44
42:1k:79:SER:HA	42:1k:104:GLN:HB3	1.98	0.44
44:1m:3:ARG:HG3	44:1m:4:ILE:HG22	1.98	0.44
45:1n:53:LEU:HB3	45:1n:56:VAL:CG2	2.47	0.44
1:2A:482:A:H1'	1:2A:498:G:N2	2.32	0.44
1:2A:868:U:N3	1:2A:869:G:C5	2.85	0.44
1:2A:1016:G:C6	1:2A:1147:C:N3	2.85	0.44
1:2A:1169:G:N2	1:2A:1181:C:N3	2.64	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.52	0.44
1:2A:2335:A:C8	1:2A:2337:G:C5	3.05	0.44
1:2A:2628:C:H1'	1:2A:2781:A:H2'	1.99	0.44
1:2A:2752:C:OP2	7:2H:4:ILE:HD11	2.17	0.44
6:2G:101:ILE:O	6:2G:104:GLU:HB3	2.16	0.44
20:2Y:38:ILE:HG12	20:2Y:66:PRO:HG3	1.98	0.44
23:21:93:GLU:O	23:21:96:LYS:N	2.47	0.44
32:2a:553:A:H2'	32:2a:554:C:H6	1.82	0.44
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.52	0.44
32:2a:1338:G:H2'	32:2a:1339:A:C8	2.52	0.44
34:2c:37:GLN:O	34:2c:40:ARG:N	2.49	0.44
34:2c:172:ARG:HE	34:2c:203:PHE:HE2	1.65	0.44
40:2i:9:ARG:HA	40:2i:13:ALA:O	2.17	0.44
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.16	0.44
44:2m:48:LEU:HD23	44:2m:48:LEU:HA	1.77	0.44
47:2p:25:ARG:HG3	47:2p:25:ARG:NH1	2.31	0.44
51:2t:24:LEU:HD23	51:2t:24:LEU:HA	1.86	0.44
1:1A:1584:C:O2'	1:1A:1586:A:H5'	2.17	0.44
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.52	0.44
1:1A:2464:C:H1'	61:1A:5410:HOH:O	2.17	0.44
1:1A:2712:U:H2'	1:1A:2714:G:H5"	1.99	0.44
8:1I:78:THR:HG22	8:1I:143:SER:OG	2.18	0.44
32:1a:614:A:C2	32:1a:615:C:C2	3.05	0.44
32:1a:1343:G:H4'	40:1i:122:ALA:HB3	1.99	0.44
32:1a:1433:A:C6	32:1a:1468:A:C4	3.05	0.44
33:1b:125:PRO:C	33:1b:127:ILE:N	2.75	0.44
47:1p:5:ARG:NH2	47:1p:28:ARG:HA	2.33	0.44
49:1r:36:ASN:OD1	49:1r:39:VAL:HG23	2.17	0.44
54:1w:5:G:H2'	54:1w:6:G:H8	1.81	0.44
1:2A:275:G:C2	1:2A:276:A:C4	3.05	0.44
1:2A:458:G:C8	29:27:37:LYS:HG2	2.52	0.44
1:2A:1260:G:C6	1:2A:1261:C:C4	3.05	0.44
14:2S:33:LYS:HB3	14:2S:34:HIS:HD2	1.79	0.44
26:24:13:ARG:HA	26:24:22:ILE:O	2.17	0.44
32:2a:108:G:N1	51:2t:15:ARG:HG2	2.33	0.44
32:2a:359:U:H2'	32:2a:360:A:C8	2.52	0.44
32:2a:1217:C:H2'	32:2a:1218:C:H6	1.81	0.44
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.52	0.44
34:2c:135:LYS:O	34:2c:139:GLN:HB2	2.17	0.44
36:2e:35:GLY:HA3	36:2e:40:ARG:O	2.17	0.44
39:2h:41:ARG:NH2	39:2h:42:GLU:OE2	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.52	0.44
1:1A:211:A:H2'	1:1A:212:G:O4'	2.17	0.44
1:1A:244:A:C2	1:1A:255:A:C4	3.06	0.44
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.17	0.44
1:1A:2097:C:H2'	1:1A:2098:U:C6	2.51	0.44
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.50	0.44
1:1A:2752:C:O5'	1:1A:2752:C:H6	2.00	0.44
3:1D:92:ILE:HD12	3:1D:104:TYR:CD1	2.52	0.44
4:1E:7:VAL:HG23	4:1E:51:PHE:HE2	1.81	0.44
19:1X:26:TYR:CE2	19:1X:89:ILE:HG13	2.53	0.44
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.52	0.44
29:17:24:THR:O	29:17:28:ARG:HG3	2.18	0.44
32:1a:831:U:H2'	32:1a:832:C:H6	1.82	0.44
39:1h:67:PRO:O	39:1h:76:PRO:HB3	2.18	0.44
44:1m:2:ALA:HB1	44:1m:6:GLY:HA2	2.00	0.44
1:2A:1653:G:H4'	1:2A:1654:A:O5'	2.17	0.44
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.83	0.44
1:2A:2286:A:OP1	28:26:29:ASN:ND2	2.51	0.44
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.82	0.44
1:2A:2528:U:O2'	1:2A:2530:A:OP1	2.27	0.44
1:2A:2679:A:C2	1:2A:2729:G:C2	3.05	0.44
21:2Z:98:MET:O	21:2Z:125:LEU:HA	2.17	0.44
24:22:9:GLN:OE1	24:22:56:GLN:HG2	2.17	0.44
32:2a:28:G:C6	32:2a:29:G:C5	3.06	0.44
32:2a:416:G:C5	32:2a:417:C:C4	3.05	0.44
32:2a:954:G:H2'	32:2a:955:U:H6	1.83	0.44
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.18	0.44
32:2a:1191:A:H8	32:2a:1191:A:O5'	2.00	0.44
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.53	0.44
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	2.00	0.44
39:2h:55:GLY:O	39:2h:56:LYS:HD3	2.17	0.44
54:2w:51:U:H3	54:2w:63:G:H1	1.64	0.44
1:1A:9:U:N3	1:1A:2629:A:H2	2.14	0.44
1:1A:57:C:H2'	1:1A:58:G:O4'	2.18	0.44
1:1A:228:A:H8	1:1A:229:A:H5'	1.83	0.44
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.33	0.44
1:1A:1669:A:H5"	1:1A:2550:G:OP1	2.18	0.44
1:1A:2052:G:H4'	4:1E:143:ASN:O	2.18	0.44
1:1A:2115:G:H2'	1:1A:2116:G:H5"	2.00	0.44
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.65	0.44
5:1F:178:PRO:HB3	5:1F:198:ALA:HB1	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:73:THR:HA	9:1N:83:LYS:O	2.17	0.44
20:1Y:34:LYS:NZ	61:1Y:301:HOH:O	2.20	0.44
32:1a:656:C:H4'	46:1o:62:GLN:HE22	1.82	0.44
32:1a:690:G:H2'	32:1a:691:G:O4'	2.16	0.44
35:1d:101:LEU:HD23	35:1d:101:LEU:C	2.43	0.44
37:1f:55:ASP:HB2	37:1f:86:ARG:HH12	1.82	0.44
41:1j:30:SER:HB3	41:1j:81:THR:HG23	1.99	0.44
50:1s:63:THR:OG1	50:1s:65:ASN:OD1	2.33	0.44
54:1y:19:G:H5"	54:1y:60:U:O4	2.18	0.44
1:2A:72:U:OP2	24:22:29:LYS:NZ	2.44	0.44
1:2A:2833:G:H4'	1:2A:2834:G:OP2	2.18	0.44
1:2A:2859:G:H2'	1:2A:2860:A:C8	2.52	0.44
4:2E:112:GLY:O	4:2E:159:HIS:HA	2.17	0.44
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.30	0.44
6:2G:14:GLU:O	6:2G:17:PRO:HD2	2.17	0.44
6:2G:49:ASP:O	6:2G:51:ARG:N	2.51	0.44
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.17	0.44
6:2G:150:ASP:OD1	6:2G:150:ASP:N	2.51	0.44
7:2H:25:LYS:HG2	7:2H:27:LYS:HG3	1.98	0.44
8:2I:124:GLY:N	8:2I:144:VAL:HG23	2.26	0.44
21:2Z:52:SER:HB3	21:2Z:54:HIS:H	1.81	0.44
21:2Z:153:SER:HB2	21:2Z:167:PRO:O	2.18	0.44
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.52	0.44
32:2a:165:C:H2'	32:2a:166:G:H8	1.83	0.44
32:2a:232:G:H2'	32:2a:233:C:O4'	2.17	0.44
32:2a:1055:A:H62	32:2a:1200:C:N4	2.15	0.44
32:2a:1253:G:H2'	32:2a:1254:C:C6	2.53	0.44
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.51	0.44
32:2a:1456:G:H22	51:2t:43:LEU:HD11	1.82	0.44
34:2c:122:GLU:O	34:2c:125:GLU:HG2	2.18	0.44
34:2c:152:ILE:HG22	34:2c:167:TRP:HB2	1.98	0.44
38:2g:97:GLN:O	38:2g:101:LEU:HG	2.18	0.44
39:2h:10:LEU:HD22	39:2h:83:ILE:HD11	1.99	0.44
41:2j:67:THR:O	41:2j:67:THR:OG1	2.30	0.44
55:2x:15:G:H2'	55:2x:59:A:N1	2.32	0.44
54:2y:61:C:H2'	54:2y:62:C:C6	2.52	0.44
1:1A:900:A:O2'	1:1A:901:A:H5'	2.18	0.44
1:1A:1495:A:O2'	1:1A:1496:A:H5'	2.18	0.44
4:1E:48:GLN:NE2	4:1E:66:HIS:NE2	2.65	0.44
8:1I:65:ALA:CB	8:1I:136:VAL:HG11	2.47	0.44
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:69:LYS:HD2	26:14:69:LYS:HA	1.85	0.44
32:1a:839:U:H3'	32:1a:840:C:H5'	2.00	0.44
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.52	0.44
32:1a:1027:C:C4	32:1a:1034:G:N1	2.86	0.44
33:1b:15:VAL:HG23	33:1b:16:HIS:N	2.33	0.44
39:1h:124:ALA:HB1	39:1h:129:VAL:O	2.18	0.44
42:1k:20:TYR:CE1	42:1k:83:ILE:HD12	2.52	0.44
43:1l:47:LYS:NZ	53:1v:21:C:OP1	2.42	0.44
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.99	0.44
54:1y:33:U:H2'	54:1y:34:G:H5"	2.00	0.44
1:2A:141:A:C8	1:2A:1408:C:O2'	2.69	0.44
1:2A:271(X):G:C2	1:2A:271(Y):U:O4	2.71	0.44
1:2A:932:G:H4'	1:2A:933:A:O5'	2.18	0.44
1:2A:946:G:OP1	61:2A:3957:HOH:O	2.21	0.44
1:2A:1007:C:OP1	9:2N:35:ARG:NH1	2.49	0.44
1:2A:1766:U:H2'	1:2A:1767:C:H6	1.83	0.44
1:2A:2239:G:P	3:2D:244:ARG:HH12	2.41	0.44
1:2A:2321:G:H22	1:2A:2333:A:N6	2.15	0.44
1:2A:2533:A:O2'	1:2A:2664:G:H5"	2.18	0.44
1:2A:2638:G:OP1	4:2E:82:ARG:NH2	2.43	0.44
1:2A:2888:C:H2'	1:2A:2889:C:H6	1.82	0.44
3:2D:73:VAL:HG13	3:2D:120:GLY:HA3	1.99	0.44
5:2F:95:ARG:NH1	5:2F:97:TYR:OH	2.50	0.44
12:2Q:32:TYR:OH	12:2Q:111:GLU:HB2	2.18	0.44
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.51	0.44
25:23:5:LYS:O	25:23:56:VAL:HA	2.18	0.44
32:2a:935:A:N6	38:2g:3:ARG:HG3	2.33	0.44
32:2a:957:U:H2'	32:2a:958:A:H5"	1.99	0.44
32:2a:1083:U:C5	32:2a:1084:G:C6	3.05	0.44
32:2a:1105:A:N3	32:2a:1106:G:C8	2.86	0.44
32:2a:1277:C:O2'	32:2a:1279:A:C8	2.68	0.44
32:2a:1388:C:H2'	32:2a:1389:C:H6	1.82	0.44
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.83	0.44
34:2c:85:ARG:HG3	34:2c:86:VAL:N	2.32	0.44
49:2r:52:PRO:O	49:2r:56:THR:HG23	2.18	0.44
1:1A:821:A:H5'	1:1A:822:U:C6	2.52	0.44
1:1A:897:C:C1'	54:1w:56:C:H5	2.26	0.44
1:1A:1500:G:H2'	1:1A:1501:C:H6	1.81	0.44
1:1A:1693:U:O2'	1:1A:1695:G:O6	2.30	0.44
1:1A:2169:A:H2'	1:1A:2170:A:C8	2.52	0.44
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:60:LEU:HD12	6:1G:60:LEU:HA	1.84	0.44
6:1G:66:GLN:OE1	6:1G:98:ARG:NE	2.48	0.44
32:1a:150:C:C2	32:1a:151:A:C8	3.06	0.44
32:1a:431:A:H2'	32:1a:432:A:O4'	2.18	0.44
32:1a:872:A:C4	32:1a:874:G:N7	2.85	0.44
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.18	0.44
32:1a:1221:G:C2'	32:1a:1222:G:H5'	2.47	0.44
32:1a:1229:A:OP2	44:1m:114:ARG:HD3	2.18	0.44
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.44	0.44
32:1a:1509:C:H2'	32:1a:1510:U:O4'	2.18	0.44
33:1b:95:GLN:HE22	33:1b:147:LYS:CG	2.27	0.44
40:1i:3:GLN:NE2	40:1i:20:ARG:HH21	2.15	0.44
40:1i:80:GLY:O	40:1i:84:ALA:N	2.42	0.44
41:1j:9:ARG:HG2	41:1j:69:ASN:OD1	2.18	0.44
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.17	0.44
54:1y:24:G:H2'	54:1y:25:C:C6	2.53	0.44
1:2A:288:C:H2'	1:2A:289:A:C8	2.51	0.44
1:2A:330:A:HO2'	1:2A:331:A:H8	1.66	0.44
1:2A:403:U:H4'	1:2A:404:C:H5'	2.00	0.44
1:2A:619:G:H8	1:2A:619:G:O5'	2.01	0.44
1:2A:674:G:C1'	5:2F:74:ARG:HD3	2.43	0.44
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.53	0.44
1:2A:2127:G:C2	1:2A:2128:C:C5	3.05	0.44
1:2A:2141:G:H2'	1:2A:2142:C:O4'	2.17	0.44
1:2A:2625:G:H2'	1:2A:2626:C:O4'	2.18	0.44
1:2A:2648:C:H2'	1:2A:2649:U:C6	2.53	0.44
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.18	0.44
2:2B:24:G:H4'	2:2B:25:A:C8	2.53	0.44
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	2.00	0.44
11:2P:125:VAL:CG2	11:2P:138:LEU:HD21	2.47	0.44
12:2Q:18:LYS:HE2	12:2Q:18:LYS:HB2	1.58	0.44
14:2S:11:LYS:HE3	14:2S:15:ARG:NH1	2.33	0.44
14:2S:34:HIS:O	14:2S:97:ARG:NH2	2.49	0.44
32:2a:407:G:H2'	32:2a:408:A:C8	2.51	0.44
32:2a:575:G:O2'	32:2a:821:G:H5'	2.18	0.44
32:2a:653:A:H5"	32:2a:653:A:N3	2.33	0.44
32:2a:794:A:H4'	32:2a:1521:G:O2'	2.18	0.44
32:2a:945:G:C2	32:2a:946:A:C8	3.06	0.44
34:2c:131:ARG:NH2	34:2c:135:LYS:HE3	2.33	0.44
35:2d:61:LYS:HE2	35:2d:206:PHE:CE2	2.52	0.44
38:2g:79:ARG:NH1	38:2g:80:VAL:HG22	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:47:PHE:CE1	45:2n:37:PHE:HE2	2.36	0.44
1:1A:884:C:C4	1:1A:885:C:H1'	2.52	0.44
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.49	0.44
1:1A:1480:G:C6	1:1A:1481:U:N3	2.86	0.44
1:1A:1802:A:N1	1:1A:1822:G:H1'	2.33	0.44
2:1B:32:C:C2	2:1B:51:G:N2	2.86	0.44
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.69	0.44
32:1a:502:G:H2'	32:1a:503:C:O4'	2.18	0.44
32:1a:621:A:H2'	32:1a:622:A:C8	2.53	0.44
32:1a:881:G:H2'	32:1a:882:C:O4'	2.18	0.44
32:1a:1330:U:C2'	32:1a:1331:G:H5'	2.47	0.44
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.31	0.44
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.52	0.44
34:1c:188:LEU:HD12	34:1c:196:LEU:O	2.17	0.44
54:1w:18:G:O2'	54:1w:57:G:N2	2.28	0.44
1:2A:370:G:OP2	61:2A:3954:HOH:O	2.21	0.44
1:2A:1630:G:H2'	1:2A:1631:C:C6	2.53	0.44
1:2A:2127:G:N1	1:2A:2161:C:N4	2.64	0.44
1:2A:2136:C:HO2'	1:2A:2137:C:H6	1.65	0.44
1:2A:2345:G:N3	1:2A:2381:C:H2'	2.33	0.44
2:2B:90:A:N7	2:2B:91:C:H1'	2.33	0.44
6:2G:20:ILE:HA	6:2G:25:TYR:HD2	1.83	0.44
10:2O:24:VAL:HG22	10:2O:33:ALA:HB2	2.00	0.44
19:2X:9:LEU:HB2	19:2X:29:TRP:O	2.18	0.44
32:2a:56:U:H2'	32:2a:57:G:H8	1.83	0.44
32:2a:409:G:H2'	32:2a:410:G:O4'	2.17	0.44
32:2a:423:G:N2	32:2a:424:G:C8	2.85	0.44
32:2a:790:A:H61	32:2a:1498:UR3:P	2.40	0.44
32:2a:862:C:H2'	32:2a:863:U:H6	1.82	0.44
32:2a:1004:A:N1	32:2a:1037:C:C2	2.86	0.44
32:2a:1134:G:C6	32:2a:1135:U:C2	3.06	0.44
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.99	0.44
32:2a:1153:C:C4	32:2a:1154:G:N7	2.85	0.44
32:2a:1239:A:O2'	32:2a:1298:C:N4	2.42	0.44
36:2e:74:GLY:O	36:2e:116:THR:N	2.38	0.44
39:2h:29:SER:O	39:2h:32:LYS:N	2.50	0.44
39:2h:36:LEU:HD12	39:2h:59:LEU:HD13	2.00	0.44
40:2i:17:VAL:CG2	40:2i:81:ILE:HG13	2.47	0.44
1:1A:278:A:O2'	1:1A:279:C:OP1	2.25	0.44
1:1A:706:A:H2'	1:1A:707:G:O4'	2.18	0.44
1:1A:1480:G:C6	1:1A:1481:U:C4	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1581:G:H2'	1:1A:1582:C:O4'	2.18	0.44
1:1A:1762:A:H2'	61:1A:5544:HOH:O	2.16	0.44
1:1A:1862:G:C2	1:1A:1881:C:C2	3.06	0.44
6:1G:49:ASP:O	6:1G:50:ALA:HB2	2.18	0.44
8:1I:8:PRO:O	8:1I:9:LEU:HG	2.18	0.44
12:1Q:34:LEU:HD11	12:1Q:129:THR:HB	1.98	0.44
18:1W:36:LEU:HA	18:1W:36:LEU:HD23	1.80	0.44
20:1Y:68:HIS:ND1	20:1Y:70:SER:OG	2.50	0.44
32:1a:376:G:O2'	32:1a:377:G:H5'	2.17	0.44
32:1a:601:C:H2'	32:1a:602:A:C8	2.53	0.44
32:1a:922:G:C6	32:1a:923:A:C6	3.06	0.44
32:1a:1121:U:H2'	32:1a:1122:U:H6	1.81	0.44
33:1b:42:ILE:CD1	33:1b:203:GLY:HA2	2.45	0.44
33:1b:54:THR:HG21	33:1b:201:ILE:HD11	1.99	0.44
38:1g:50:ILE:CD1	38:1g:61:VAL:HG11	2.48	0.44
38:1g:111:ARG:NE	38:1g:113:GLU:OE2	2.37	0.44
1:2A:625:G:O6	11:2P:107:LYS:NZ	2.49	0.44
1:2A:943:U:OP2	61:2A:3958:HOH:O	2.21	0.44
1:2A:1159:U:O2'	1:2A:1160:G:H5'	2.17	0.44
1:2A:1472:A:H2'	1:2A:1473:G:O4'	2.17	0.44
1:2A:1537:G:H2'	1:2A:1538:G:H8	1.82	0.44
1:2A:1913:A:C8	32:2a:1494:G:H4'	2.53	0.44
1:2A:2314:C:H5'	6:2G:38:VAL:HG21	2.00	0.44
1:2A:2576:G:H1'	61:2A:4063:HOH:O	2.16	0.44
1:2A:2615:U:C2	27:25:7:PRO:HA	2.53	0.44
1:2A:2887:U:H2'	1:2A:2888:C:H6	1.83	0.44
9:2N:34:LEU:HD23	9:2N:34:LEU:HA	1.79	0.44
21:2Z:99:TYR:CZ	21:2Z:125:LEU:HD12	2.52	0.44
23:21:18:ILE:HG12	23:21:37:ILE:HG23	2.00	0.44
26:24:24:THR:OG1	26:24:25:TYR:N	2.49	0.44
32:2a:232:G:H1'	32:2a:262:A:N1	2.32	0.44
32:2a:429:U:H1'	32:2a:430:A:H5"	1.99	0.44
32:2a:938:A:C6	32:2a:939:G:C5	3.06	0.44
32:2a:949:A:OP1	44:2m:101:GLN:HB3	2.18	0.44
32:2a:967:5MC:H2'	32:2a:968:A:N7	2.33	0.44
34:2c:184:TYR:CD1	34:2c:201:TYR:CE1	3.05	0.44
38:2g:113:GLU:HG3	38:2g:119:ARG:HG2	2.00	0.44
41:2j:51:ARG:O	45:2n:45:ARG:NH1	2.50	0.44
51:2t:43:LEU:O	51:2t:52:ALA:HB2	2.17	0.44
55:2x:36:U:H2'	55:2x:37:A:O4'	2.17	0.44
1:1A:284:U:H2'	1:1A:285:C:H6	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.52	0.43
1:1A:478:A:C6	1:1A:480:A:C6	3.06	0.43
1:1A:900:A:H2'	1:1A:901:A:H8	1.83	0.43
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.53	0.43
1:1A:2309:A:N6	1:1A:2310:A:C6	2.86	0.43
61:1A:4787:HOH:O	5:1F:68:LYS:HE2	2.18	0.43
3:1D:2:ALA:O	3:1D:20:ASP:HB3	2.18	0.43
7:1H:7:LEU:HD12	7:1H:8:PRO:CD	2.48	0.43
8:1I:61:ARG:HA	8:1I:61:ARG:HD3	1.65	0.43
13:1R:54:LEU:HD23	13:1R:54:LEU:HA	1.89	0.43
32:1a:234:C:H5"	48:1q:70:ARG:HH21	1.82	0.43
32:1a:509:A:C6	32:1a:510:A:N1	2.86	0.43
32:1a:657:G:C2	32:1a:658:G:C8	3.06	0.43
32:1a:721:G:H4'	32:1a:722:A:O4'	2.18	0.43
32:1a:924:C:H2'	32:1a:925:G:C8	2.52	0.43
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	2.00	0.43
32:1a:1182:G:H4'	32:1a:1183:A:H5"	1.99	0.43
32:1a:1379:G:O2'	32:1a:1380:U:H5'	2.17	0.43
41:1j:47:PHE:N	41:1j:63:PHE:O	2.46	0.43
44:1m:50:GLU:HA	44:1m:53:VAL:HB	2.00	0.43
46:1o:25:THR:OG1	46:1o:70:LEU:HD22	2.18	0.43
1:2A:1477:A:C2	1:2A:1515:G:C2	3.05	0.43
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.53	0.43
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.50	0.43
1:2A:1786:A:C4	1:2A:1938:A:C6	3.06	0.43
1:2A:1945:G:H2'	1:2A:1946:U:H6	1.82	0.43
1:2A:2366:A:H2'	1:2A:2367:G:O4'	2.19	0.43
1:2A:2525:G:N2	1:2A:2539:C:C2	2.86	0.43
1:2A:2563:U:O2	1:2A:2565:A:C8	2.70	0.43
3:2D:8:PRO:HB3	3:2D:14:ARG:HG3	1.99	0.43
3:2D:213:ARG:HD2	3:2D:217:ARG:O	2.18	0.43
21:2Z:45:ASP:O	21:2Z:49:ARG:HG3	2.18	0.43
23:21:73:LEU:HD23	23:21:73:LEU:HA	1.81	0.43
26:24:44:THR:OG1	26:24:45:GLY:N	2.51	0.43
30:28:14:VAL:HG13	30:28:22:VAL:HG13	2.00	0.43
32:2a:416:G:H2'	32:2a:417:C:C6	2.53	0.43
32:2a:685:G:N2	32:2a:686:U:C4	2.86	0.43
32:2a:707:C:H2'	32:2a:708:C:H6	1.81	0.43
32:2a:976:G:C8	32:2a:1358:U:C2	3.06	0.43
32:2a:1232:U:OP1	40:2i:124:GLN:HG2	2.18	0.43
32:2a:1288:A:H2'	32:2a:1289:A:O4'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:41:ILE:HG13	33:2b:41:ILE:O	2.18	0.43
33:2b:61:LEU:HD11	33:2b:68:ILE:HG13	2.00	0.43
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.53	0.43
44:2m:52:GLU:HG2	44:2m:55:ARG:NH2	2.33	0.43
44:2m:92:HIS:O	44:2m:95:GLY:N	2.42	0.43
54:2w:66:U:O4	54:2w:67:C:N4	2.51	0.43
55:2x:40:C:H2'	55:2x:41:C:C6	2.50	0.43
1:1A:1039:G:H1	1:1A:1116:C:N4	2.14	0.43
1:1A:2156:G:OP2	1:1A:2156:G:H8	2.01	0.43
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.43	0.43
8:1I:93:THR:O	8:1I:97:ILE:HG13	2.18	0.43
16:1U:104:GLN:HE21	16:1U:105:VAL:HG23	1.83	0.43
25:13:11:SER:HA	25:13:31:LEU:HD21	2.00	0.43
32:1a:44:G:C2	32:1a:45:U:H1'	2.53	0.43
32:1a:194:C:H2'	32:1a:195:A:H5"	2.00	0.43
32:1a:437:U:O2'	35:1d:123:HIS:CD2	2.72	0.43
32:1a:713:G:H2'	32:1a:714:G:C8	2.53	0.43
32:1a:983:A:H3'	32:1a:983:A:N3	2.33	0.43
32:1a:1002:G:N7	32:1a:1003:G:H1'	2.33	0.43
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.19	0.43
32:1a:1389:C:H2'	32:1a:1390:U:O4'	2.18	0.43
33:1b:17:PHE:HA	33:1b:44:LEU:HD21	1.99	0.43
33:1b:54:THR:O	33:1b:58:ILE:HG13	2.18	0.43
34:1c:29:TYR:OH	45:1n:54:PRO:O	2.31	0.43
34:1c:40:ARG:HG2	34:1c:55:VAL:HG11	2.00	0.43
37:1f:2:ARG:HD2	37:1f:69:GLU:HB3	2.00	0.43
37:1f:98:LEU:HD23	49:1r:29:PHE:C	2.43	0.43
38:1g:13:GLN:HE21	38:1g:13:GLN:HA	1.83	0.43
44:1m:49:THR:HG22	44:1m:52:GLU:OE1	2.18	0.43
47:1p:53:VAL:O	47:1p:57:ARG:HB2	2.18	0.43
54:1w:18:G:H4'	54:1w:60:U:C5	2.53	0.43
54:1y:18:G:O2'	54:1y:57:G:O6	2.27	0.43
1:2A:34:C:O2'	1:2A:35:G:OP1	2.25	0.43
1:2A:647:G:H8	1:2A:647:G:O5'	2.00	0.43
1:2A:811:U:H2'	11:2P:21:ARG:HA	2.00	0.43
1:2A:1270:C:H5"	1:2A:1271:G:O5'	2.18	0.43
3:2D:222:ARG:NH1	3:2D:224:ALA:HB3	2.33	0.43
6:2G:14:GLU:C	6:2G:17:PRO:HD2	2.43	0.43
6:2G:115:ARG:HD3	6:2G:115:ARG:HA	1.69	0.43
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	2.00	0.43
17:2V:94:LEU:HD23	17:2V:94:LEU:HA	1.73	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:3:LYS:HB3	23:21:4:VAL:H	1.53	0.43
26:24:62:ARG:H	26:24:62:ARG:HG2	1.56	0.43
32:2a:164:U:H2'	32:2a:165:C:C6	2.54	0.43
32:2a:335:C:H2'	32:2a:336:C:C6	2.53	0.43
32:2a:659:U:C4	32:2a:660:G:N7	2.86	0.43
32:2a:840:C:H4'	32:2a:841:U:OP1	2.17	0.43
32:2a:1000:U:H2'	32:2a:1001:A:C8	2.53	0.43
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.19	0.43
32:2a:1273:G:N7	32:2a:1274:G:C5	2.86	0.43
32:2a:1517:G:H2'	32:2a:1518:MA6:C8	2.47	0.43
32:2a:1520:G:OP2	32:2a:1520:G:H8	2.01	0.43
33:2b:180:LEU:O	33:2b:182:ILE:HG13	2.18	0.43
36:2e:76:ILE:HD12	36:2e:78:HIS:O	2.17	0.43
39:2h:26:VAL:CG2	39:2h:59:LEU:HB2	2.47	0.43
42:2k:84:VAL:HG22	42:2k:109:VAL:O	2.17	0.43
47:2p:75:ARG:HB2	47:2p:80:PHE:HE2	1.83	0.43
49:2r:44:LEU:CD1	49:2r:79:LEU:HD22	2.47	0.43
1:1A:764:A:H5'	3:1D:210:GLY:CA	2.49	0.43
1:1A:2169:A:H2'	1:1A:2170:A:H8	1.82	0.43
1:1A:2723:C:OP1	13:1R:3:HIS:ND1	2.51	0.43
2:1B:24:G:N7	2:1B:56:G:H2'	2.33	0.43
6:1G:56:ALA:HA	6:1G:59:GLU:HG2	2.00	0.43
6:1G:137:GLU:HB3	6:1G:139:LEU:HD12	1.99	0.43
8:1I:78:THR:HA	8:1I:143:SER:OG	2.18	0.43
11:1P:38:GLN:HG2	11:1P:45:LEU:H	1.83	0.43
13:1R:2:ARG:HD2	61:1R:306:HOH:O	2.17	0.43
16:1U:74:LEU:HD12	16:1U:74:LEU:H	1.83	0.43
21:1Z:59:LEU:HD23	21:1Z:59:LEU:HA	1.79	0.43
32:1a:664:G:OP1	49:1r:64:ARG:NE	2.38	0.43
33:1b:172:ILE:H	33:1b:172:ILE:HG13	1.61	0.43
37:1f:97:PHE:O	49:1r:31:LEU:HD23	2.18	0.43
43:1l:56:ALA:HB3	43:1l:100:ILE:HD11	1.99	0.43
54:1w:39:PSU:H2'	54:1w:40:C:C6	2.53	0.43
1:2A:271(F):C:H2'	1:2A:271(G):C:O4'	2.19	0.43
1:2A:415:A:H2'	1:2A:416:C:O4'	2.18	0.43
1:2A:1011:G:OP1	16:2U:77:SER:OG	2.24	0.43
1:2A:1257:C:H4'	5:2F:83:PHE:CE1	2.53	0.43
1:2A:1360:A:H5"	1:2A:1361:G:OP2	2.18	0.43
1:2A:2118:U:N3	1:2A:2149:G:H1'	2.34	0.43
1:2A:2404:C:N4	1:2A:2414:G:C6	2.87	0.43
3:2D:3:VAL:HG22	3:2D:17:THR:HB	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:23:ASP:O	5:2F:24:LEU:HD23	2.18	0.43
6:2G:108:ASN:HA	26:24:37:SER:HB2	2.00	0.43
14:2S:19:LYS:C	14:2S:21:THR:H	2.25	0.43
14:2S:62:LYS:HB3	14:2S:97:ARG:NE	2.33	0.43
15:2T:62:THR:HG23	15:2T:75:ILE:HG12	1.99	0.43
32:2a:188:C:H2'	32:2a:189:G:O4'	2.19	0.43
32:2a:201:C:H5'	32:2a:202:U:OP2	2.16	0.43
32:2a:668:G:O2'	46:2o:46:HIS:HB3	2.17	0.43
32:2a:1163:C:H42	32:2a:1173:G:H1	1.66	0.43
32:2a:1323:G:O2'	32:2a:1362:C:O2'	2.33	0.43
32:2a:1388:C:H2'	32:2a:1389:C:C6	2.53	0.43
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.99	0.43
33:2b:153:ARG:HE	33:2b:153:ARG:HB2	1.57	0.43
35:2d:105:VAL:HG13	35:2d:110:PHE:HB2	2.00	0.43
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	2.00	0.43
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	2.00	0.43
36:2e:80:ILE:HG21	36:2e:138:ALA:HB1	2.00	0.43
41:2j:32:ALA:HB1	41:2j:33:GLN:HA	2.00	0.43
43:2l:6:THR:HG23	43:2l:9:GLN:CD	2.43	0.43
46:2o:62:GLN:O	46:2o:66:LEU:HG	2.18	0.43
48:2q:40:LYS:HD3	48:2q:42:TYR:OH	2.18	0.43
1:1A:878:A:C6	1:1A:900:A:C5	3.07	0.43
1:1A:1072:C:H5"	1:1A:1073:A:OP1	2.18	0.43
1:1A:1594:G:H2'	1:1A:1595:G:O4'	2.18	0.43
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.18	0.43
1:1A:1992:G:OP2	61:1A:4247:HOH:O	2.21	0.43
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.34	0.43
32:1a:1098:C:C2	32:1a:1099:G:C8	3.06	0.43
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.54	0.43
35:1d:71:SER:OG	35:1d:74:GLN:HB2	2.19	0.43
37:1f:44:GLY:HA2	37:1f:59:TYR:CG	2.53	0.43
43:1l:42:THR:HA	43:1l:53:ARG:O	2.18	0.43
44:1m:15:VAL:HG22	44:1m:43:THR:O	2.18	0.43
46:1o:39:LEU:HD12	46:1o:42:HIS:HB3	2.00	0.43
46:1o:84:LYS:O	46:1o:84:LYS:HE2	2.18	0.43
49:1r:53:ARG:HG3	49:1r:63:GLN:HE21	1.82	0.43
1:2A:24:G:O2'	18:2W:78:GLU:O	2.26	0.43
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.84	0.43
1:2A:889:C:O2'	1:2A:890:A:OP2	2.33	0.43
1:2A:928:G:H8	1:2A:928:G:O5'	2.00	0.43
1:2A:1157:G:C6	1:2A:1158:C:C4	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1340:U:H4'	1:2A:1341:U:OP2	2.19	0.43
1:2A:1466:G:O3'	1:2A:1546:C:O2'	2.36	0.43
1:2A:1693:U:H4'	1:2A:1694:C:OP2	2.17	0.43
2:2B:48:A:H2'	2:2B:49:C:C6	2.53	0.43
7:2H:80:SER:OG	7:2H:81:GLU:N	2.49	0.43
8:2I:110:ASP:N	8:2I:130:TYR:OH	2.28	0.43
16:2U:27:LEU:HA	16:2U:27:LEU:HD23	1.77	0.43
23:21:8:SER:HB3	23:21:66:HIS:CD2	2.54	0.43
32:2a:737:A:H2'	32:2a:738:C:C6	2.53	0.43
32:2a:791:G:C6	32:2a:792:A:N7	2.85	0.43
32:2a:858:G:H8	32:2a:858:G:OP2	2.01	0.43
32:2a:1148:U:H1'	40:2i:66:ARG:NH1	2.33	0.43
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.53	0.43
36:2e:41:VAL:O	36:2e:66:MET:HA	2.18	0.43
36:2e:83:GLU:HA	36:2e:88:LYS:HA	2.00	0.43
1:1A:271(K):U:H4'	1:1A:271(L):U:OP2	2.15	0.43
1:1A:1005:C:O2'	9:1N:28:THR:HG21	2.18	0.43
1:1A:1047:G:H5"	1:1A:1047:G:H8	1.83	0.43
1:1A:1355:G:C6	1:1A:1356:G:C5	3.07	0.43
1:1A:1401:G:H2'	1:1A:1402:C:O4'	2.18	0.43
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.18	0.43
1:1A:2512:C:H5"	1:1A:2513:G:OP2	2.19	0.43
6:1G:171:ALA:O	6:1G:175:LEU:HG	2.18	0.43
14:1S:71:ARG:HH11	14:1S:107:GLU:CD	2.27	0.43
26:14:14:ILE:HA	26:14:31:ILE:O	2.19	0.43
32:1a:109:A:C6	32:1a:326:G:C6	3.07	0.43
32:1a:146:G:C2	32:1a:147:G:C4	3.07	0.43
32:1a:216:G:H2'	32:1a:217:C:C6	2.54	0.43
32:1a:309:G:O2'	32:1a:607:A:N1	2.50	0.43
32:1a:397:A:N7	32:1a:548:G:C8	2.86	0.43
32:1a:651:C:O2'	32:1a:652:U:H5'	2.19	0.43
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.18	0.43
32:1a:1314:C:H2'	32:1a:1315:U:C6	2.53	0.43
32:1a:1456:G:H22	51:1t:51:GLU:CD	2.26	0.43
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.48	0.43
1:2A:920:G:C5	1:2A:921:G:N7	2.87	0.43
1:2A:1495:A:H2'	1:2A:1496:A:H8	1.79	0.43
1:2A:1937:A:O2'	1:2A:1939:5MU:OP2	2.25	0.43
1:2A:1987:G:H2'	1:2A:1988:C:H6	1.83	0.43
1:2A:2315:G:H2'	1:2A:2316:C:H6	1.83	0.43
3:2D:158:ALA:O	3:2D:161:THR:OG1	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.26	0.43
16:2U:113:ALA:O	16:2U:117:GLN:HG2	2.18	0.43
32:2a:410:G:H21	32:2a:432:A:H62	1.66	0.43
32:2a:728:A:C2	32:2a:729:A:C5	3.07	0.43
32:2a:1126:U:O4	41:2j:7:LYS:HD3	2.18	0.43
32:2a:1192:C:N4	32:2a:1193:G:C4	2.86	0.43
32:2a:1327:C:H2'	32:2a:1328:C:H6	1.82	0.43
32:2a:1403:C:H1'	32:2a:1500:A:N1	2.33	0.43
33:2b:155:LEU:HD23	33:2b:155:LEU:HA	1.66	0.43
34:2c:138:VAL:HG13	34:2c:149:ALA:HB3	1.99	0.43
43:2l:92:0TD:O	43:2l:93:LEU:HD23	2.18	0.43
47:2p:23:ASP:OD1	47:2p:25:ARG:NH1	2.51	0.43
1:1A:484:C:H2'	1:1A:485:C:H6	1.83	0.43
1:1A:593:G:C6	1:1A:594:U:C4	3.07	0.43
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.34	0.43
1:1A:1075:C:O2	1:1A:1076:C:H2'	2.19	0.43
1:1A:2117:A:O2'	1:1A:2118:U:H5"	2.17	0.43
1:1A:2662:A:H2'	1:1A:2663:G:O4'	2.18	0.43
1:1A:2780:G:OP1	61:1A:4246:HOH:O	2.21	0.43
12:1Q:16:ARG:HG2	12:1Q:18:LYS:HE2	2.00	0.43
12:1Q:85:LYS:N	12:1Q:85:LYS:HD2	2.33	0.43
15:1T:96:ARG:CZ	15:1T:96:ARG:HB3	2.45	0.43
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.33	0.43
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.54	0.43
32:1a:1277:C:HO2'	32:1a:1279:A:H1'	1.84	0.43
35:1d:154:ASN:HA	35:1d:159:ARG:NH2	2.34	0.43
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.83	0.43
36:1e:137:GLU:OE1	36:1e:140:ARG:HD2	2.17	0.43
40:1i:118:LYS:HB2	40:1i:121:ARG:HB3	1.99	0.43
48:1q:45:HIS:HB3	48:1q:72:ARG:HG2	2.00	0.43
54:1w:60:U:H5"	54:1w:61:C:C5	2.40	0.43
1:2A:225:A:N6	1:2A:226:G:C2	2.87	0.43
1:2A:540:C:H2'	1:2A:541:C:H6	1.83	0.43
1:2A:652(U):G:H2'	1:2A:652(V):C:C6	2.53	0.43
1:2A:864:G:N2	1:2A:913:U:C2	2.86	0.43
1:2A:1324:G:C2	1:2A:1331:A:C2	3.07	0.43
1:2A:1341:U:O2	19:2X:80:ILE:HD13	2.19	0.43
1:2A:1707:G:H2'	1:2A:1708:C:C6	2.54	0.43
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.53	0.43
1:2A:2255:G:O2'	55:2x:3:C:H5'	2.19	0.43
7:2H:80:SER:OG	7:2H:81:GLU:OE2	2.37	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:1:MET:HB2	11:2P:1:MET:HE3	1.73	0.43
19:2X:31:HIS:HB3	19:2X:34:ALA:HB2	2.01	0.43
32:2a:300:A:H1'	32:2a:565:U:O2	2.19	0.43
32:2a:853:G:C2	32:2a:854:G:C8	3.06	0.43
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.81	0.43
32:2a:1137:C:O2	32:2a:1138:G:N2	2.50	0.43
32:2a:1223:C:OP2	32:2a:1224:G:H2'	2.18	0.43
32:2a:1326:C:H2'	32:2a:1327:C:C6	2.54	0.43
32:2a:1333:A:H3'	32:2a:1334:G:H8	1.83	0.43
32:2a:1351:U:H4'	38:2g:33:ASP:OD1	2.19	0.43
33:2b:167:PRO:HD3	33:2b:187:LEU:O	2.18	0.43
35:2d:129:ASN:OD1	35:2d:145:GLU:N	2.51	0.43
36:2e:131:ILE:O	36:2e:135:THR:HG23	2.18	0.43
40:2i:3:GLN:CG	40:2i:20:ARG:HE	2.25	0.43
41:2j:9:ARG:NH2	41:2j:69:ASN:HD21	2.17	0.43
1:1A:817:C:H4'	1:1A:932:G:C5	2.54	0.43
1:1A:862:G:H2'	1:1A:863:A:O4'	2.19	0.43
1:1A:879:G:N2	1:1A:880:G:C2	2.87	0.43
1:1A:893:C:H2'	1:1A:894:C:C6	2.54	0.43
1:1A:992:C:OP1	16:1U:47:TYR:OH	2.35	0.43
1:1A:2623:G:HO2'	1:1A:2825:C:HO2'	1.66	0.43
2:1B:73:A:C4	2:1B:105:A:C2	3.07	0.43
4:1E:116:VAL:HG13	4:1E:122:PHE:CD2	2.54	0.43
4:1E:116:VAL:HG21	4:1E:138:PRO:HB3	2.01	0.43
6:1G:37:VAL:HA	6:1G:158:ALA:O	2.19	0.43
14:1S:20:ARG:HD2	14:1S:20:ARG:HA	1.83	0.43
19:1X:47:PHE:O	19:1X:49:VAL:HG13	2.19	0.43
24:12:65:ASN:HD22	24:12:65:ASN:HA	1.50	0.43
32:1a:373:A:O2'	32:1a:374:A:H5'	2.18	0.43
32:1a:901:A:O2'	32:1a:1513:A:OP1	2.31	0.43
32:1a:1068:G:H8	32:1a:1068:G:OP2	2.02	0.43
32:1a:1323:G:H4'	32:1a:1363:C:N3	2.33	0.43
34:1c:175:LEU:HD21	34:1c:201:TYR:CE1	2.54	0.43
1:2A:493:G:H2'	1:2A:494:G:O4'	2.19	0.43
1:2A:953:A:C2	1:2A:954:G:C8	3.06	0.43
1:2A:957:A:N1	1:2A:2459:A:C8	2.87	0.43
1:2A:993:G:OP1	16:2U:50:ARG:NH2	2.52	0.43
1:2A:1005:C:C2	1:2A:1143:A:C5	3.07	0.43
1:2A:1668:A:O2'	1:2A:1674:G:N7	2.42	0.43
1:2A:1810:A:H2'	1:2A:1811:G:O4'	2.18	0.43
1:2A:1912:A:C8	1:2A:1918:A:C2	3.07	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.35	0.43
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.46	0.43
4:2E:23:VAL:HA	4:2E:184:VAL:O	2.19	0.43
5:2F:184:TYR:CD2	5:2F:188:ARG:HD2	2.54	0.43
32:2a:299:G:H2'	32:2a:300:A:C8	2.53	0.43
32:2a:633:G:C6	32:2a:634:C:C4	3.07	0.43
32:2a:861:G:C5	32:2a:862:C:C5	3.06	0.43
32:2a:1072:G:H2'	32:2a:1073:U:O4'	2.19	0.43
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.19	0.43
32:2a:1459:C:OP1	51:2t:31:SER:OG	2.35	0.43
40:2i:48:GLU:N	40:2i:49:PRO:CD	2.82	0.43
45:2n:3:ARG:NH2	45:2n:3:ARG:HA	2.33	0.43
1:1A:647:G:H2'	1:1A:648:G:O4'	2.18	0.43
1:1A:976:C:H5'	1:1A:1156:A:N6	2.34	0.43
1:1A:1078:U:H5'	1:1A:1079:C:OP1	2.18	0.43
1:1A:1431:U:H2'	1:1A:1432:C:C6	2.54	0.43
1:1A:1512:U:H2'	1:1A:1513:C:C6	2.53	0.43
1:1A:1815:A:H8	1:1A:1815:A:OP1	2.01	0.43
1:1A:2101:G:H2'	1:1A:2102:U:H6	1.83	0.43
1:1A:2171:A:HO2'	1:1A:2172:U:H6	1.65	0.43
4:1E:27:LEU:HD22	15:1T:1:MET:HE3	2.01	0.43
12:1Q:45:GLN:OE1	12:1Q:45:GLN:N	2.43	0.43
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	2.00	0.43
16:1U:19:LYS:O	16:1U:22:LYS:HG3	2.19	0.43
32:1a:141:A:H1'	32:1a:182:U:O2	2.18	0.43
32:1a:528:C:H6	32:1a:528:C:H5"	1.84	0.43
32:1a:540:G:H2'	32:1a:541:G:O4'	2.19	0.43
32:1a:674:G:N2	32:1a:717:C:O2	2.51	0.43
33:1b:10:LEU:HA	33:1b:48:MET:HE1	2.01	0.43
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.77	0.43
34:1c:77:ILE:HG13	34:1c:78:GLY:H	1.84	0.43
35:1d:196:LEU:O	35:1d:198:VAL:N	2.49	0.43
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.99	0.43
47:1p:5:ARG:HE	47:1p:5:ARG:HB2	1.68	0.43
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.54	0.43
1:2A:229:A:H5'	1:2A:230:U:OP1	2.17	0.43
1:2A:847:U:H5'	1:2A:848:G:OP2	2.18	0.43
1:2A:854:G:C2	1:2A:855:G:C5	3.07	0.43
1:2A:937:U:H2'	1:2A:938:G:O4'	2.19	0.43
1:2A:1167:U:H6	1:2A:1167:U:H5"	1.83	0.43
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1913:A:H4'	1:2A:1914:C:H5"	2.00	0.43
1:2A:2171:A:C4	1:2A:2172:U:C4	3.07	0.43
1:2A:2286:A:C8	1:2A:2287:A:C6	3.07	0.43
2:2B:25:A:H2'	2:2B:26:A:C8	2.54	0.43
4:2E:59:VAL:HG11	4:2E:67:PHE:HE2	1.84	0.43
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	2.00	0.43
6:2G:70:VAL:HA	6:2G:90:LEU:HD12	2.01	0.43
7:2H:98:LEU:HD11	7:2H:124:GLU:HA	2.00	0.43
13:2R:8:ARG:HH11	13:2R:43:GLU:HG2	1.82	0.43
14:2S:67:ARG:HD3	14:2S:71:ARG:NH1	2.33	0.43
15:2T:19:LEU:HD22	15:2T:86:ILE:HD12	2.00	0.43
21:2Z:46:LYS:HE2	21:2Z:46:LYS:HB2	1.78	0.43
31:29:7:VAL:HA	31:29:34:GLN:OE1	2.19	0.43
32:2a:221:C:H2'	32:2a:222:U:H6	1.84	0.43
32:2a:320:C:O2'	32:2a:1435:G:H1'	2.19	0.43
32:2a:404:U:O2'	32:2a:405:U:H5'	2.19	0.43
32:2a:577:G:H2'	32:2a:578:C:H6	1.83	0.43
32:2a:682:G:N2	32:2a:709:G:C4	2.87	0.43
32:2a:717:C:O2'	32:2a:734:G:O4'	2.24	0.43
32:2a:1194:U:H2'	32:2a:1195:C:H6	1.83	0.43
32:2a:1360:A:H8	32:2a:1360:A:P	2.42	0.43
43:2l:69:TYR:CE2	43:2l:71:PRO:HA	2.54	0.43
47:2p:48:TRP:CE3	47:2p:49:LEU:HB2	2.54	0.43
55:2x:34:C:C2	55:2x:35:A:C8	3.07	0.43
1:1A:198:C:H5'	1:1A:2244:U:OP1	2.18	0.43
1:1A:580:C:H2'	1:1A:581:C:C6	2.53	0.43
1:1A:878:A:N6	1:1A:900:A:C8	2.87	0.43
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.26	0.43
1:1A:1449:A:C4	1:1A:1528(A):A:C2	3.07	0.43
1:1A:1486:A:H2'	1:1A:1487:G:H8	1.84	0.43
1:1A:2111:C:N3	1:1A:2145:C:O2'	2.48	0.43
1:1A:2420:C:O5'	1:1A:2420:C:H6	2.02	0.43
1:1A:2593:U:H2'	1:1A:2594:C:H6	1.83	0.43
5:1F:50:SER:HB2	5:1F:94:PRO:HD3	2.00	0.43
6:1G:105:LYS:O	6:1G:109:VAL:HG22	2.19	0.43
17:1V:55:ALA:CA	17:1V:101:GLY:HA2	2.44	0.43
20:1Y:92:ASN:CG	20:1Y:94:LYS:HG3	2.43	0.43
32:1a:649:G:H2'	32:1a:650:G:H8	1.84	0.43
32:1a:688:G:H2'	32:1a:689:C:H6	1.84	0.43
32:1a:890:G:O2'	32:1a:906:G:O6	2.20	0.43
32:1a:1150:U:O2	41:1j:39:PRO:HG2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1305:G:O2'	32:1a:1331:G:N2	2.52	0.43
35:1d:102:ASP:OD1	35:1d:102:ASP:N	2.51	0.43
36:1e:53:LEU:O	36:1e:56:GLN:N	2.51	0.43
44:1m:11:ARG:O	44:1m:12:ASN:HB2	2.19	0.43
50:1s:36:ARG:HB3	50:1s:72:GLY:CA	2.47	0.43
51:1t:16:HIS:O	51:1t:19:SER:OG	2.30	0.43
54:1y:12:U:H2'	54:1y:13:C:O4'	2.18	0.43
1:2A:760:G:H2'	1:2A:761:A:O4'	2.18	0.43
1:2A:823:G:O2'	1:2A:824:A:H5'	2.18	0.43
1:2A:1159:U:C2	1:2A:1160:G:C8	3.07	0.43
1:2A:2245:U:O2'	1:2A:2436:G:OP2	2.30	0.43
1:2A:2483:C:H2'	1:2A:2484:G:O4'	2.19	0.43
1:2A:2748:A:H5'	7:2H:4:ILE:CD1	2.46	0.43
5:2F:18:ARG:O	5:2F:19:GLU:HG2	2.19	0.43
6:2G:43:LEU:O	6:2G:45:GLU:HG2	2.18	0.43
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	2.00	0.43
10:2O:49:ARG:HH12	32:2a:1423:G:P	2.41	0.43
11:2P:114:ILE:O	11:2P:115:LEU:HD23	2.18	0.43
12:2Q:57:HIS:NE2	12:2Q:116:GLU:HB3	2.34	0.43
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.53	0.43
32:2a:189(K):U:H2'	32:2a:189(L):G:C8	2.54	0.43
32:2a:939:G:N2	32:2a:940:C:C2	2.87	0.43
32:2a:1103:C:C2	32:2a:1104:G:C8	3.06	0.43
34:2c:9:GLY:N	45:2n:49:HIS:O	2.52	0.43
34:2c:120:VAL:HG11	34:2c:134:ILE:CD1	2.48	0.43
38:2g:6:ARG:H	38:2g:6:ARG:HG3	1.50	0.43
48:2q:86:GLU:O	48:2q:90:ILE:HG12	2.19	0.43
51:2t:36:LEU:CD1	51:2t:58:LYS:HG3	2.49	0.43
1:1A:685:A:H1'	1:1A:688:U:O4	2.18	0.43
1:1A:1784:A:H4'	1:1A:1785:A:H5"	2.01	0.43
1:1A:1846:G:N2	1:1A:1895:C:C2	2.86	0.43
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.54	0.43
32:1a:159:G:N2	32:1a:162:A:OP2	2.52	0.43
32:1a:404:U:H2'	32:1a:405:U:H6	1.83	0.43
32:1a:1325:C:H4'	52:1u:17:THR:HG21	2.01	0.43
35:1d:19:LEU:HB2	35:1d:21:LEU:HD11	2.01	0.43
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	2.00	0.43
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.19	0.43
1:2A:774:A:H2'	1:2A:774:A:N3	2.34	0.43
1:2A:884:C:N4	1:2A:893:C:O2	2.46	0.43
1:2A:1510:G:O5'	1:2A:1510:G:H8	2.02	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:130:ALA:H	5:2F:142:TRP:HD1	1.63	0.43
6:2G:20:ILE:H	6:2G:20:ILE:HG13	1.56	0.43
7:2H:125:VAL:HG13	7:2H:127:GLU:O	2.19	0.43
8:2I:69:LYS:HG3	8:2I:70:GLU:N	2.34	0.43
13:2R:33:ARG:HH21	13:2R:115:GLU:CD	2.26	0.43
22:20:53:MET:HG3	22:20:59:LEU:CD2	2.49	0.43
32:2a:70:G:H2'	32:2a:71:C:C6	2.54	0.43
32:2a:256:U:H2'	32:2a:257:G:C8	2.54	0.43
32:2a:391:G:C6	32:2a:392:G:C5	3.07	0.43
32:2a:951:G:C6	32:2a:952:U:C4	3.07	0.43
32:2a:957:U:H4'	50:2s:79:THR:HG23	1.99	0.43
32:2a:1057:G:C4	32:2a:1204:A:C2	3.07	0.43
32:2a:1057:G:H5"	34:2c:154:SER:O	2.19	0.43
32:2a:1206:G:C5	32:2a:1207:2MG:C5	3.07	0.43
32:2a:1278:U:H5'	32:2a:1279:A:C5'	2.49	0.43
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.19	0.43
48:2q:29:HIS:HB3	48:2q:33:GLY:H	1.84	0.43
48:2q:45:HIS:O	48:2q:73:VAL:HG23	2.18	0.43
50:2s:28:LYS:CB	50:2s:29:ARG:HA	2.49	0.43
1:1A:969:U:H2'	1:1A:970:C:C6	2.54	0.42
1:1A:1045:A:O2'	1:1A:1047:G:C4	2.58	0.42
1:1A:1053:C:N3	1:1A:1106:G:N2	2.65	0.42
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.54	0.42
1:1A:1243:G:H4'	11:1P:7:ARG:HH22	1.84	0.42
1:1A:1591:G:C6	1:1A:1592:C:C4	3.07	0.42
1:1A:2160:G:C6	1:1A:2161:C:N4	2.87	0.42
1:1A:2174:C:H6	1:1A:2174:C:OP2	2.01	0.42
1:1A:2542:A:H4'	1:1A:2543:G:C8	2.54	0.42
1:1A:2854:G:H2'	1:1A:2855:C:C6	2.53	0.42
61:1A:4397:HOH:O	3:1D:14:ARG:HD2	2.19	0.42
2:1B:4:C:H2'	2:1B:5:C:O4'	2.18	0.42
2:1B:29:A:H2'	2:1B:30:C:O4'	2.19	0.42
2:1B:99:G:OP2	61:1B:304:HOH:O	2.22	0.42
21:1Z:98:MET:O	21:1Z:125:LEU:HD12	2.19	0.42
26:14:50:VAL:HG13	44:1m:62:ASN:O	2.19	0.42
32:1a:179:A:C5	32:1a:180:U:C4	3.07	0.42
32:1a:453:A:C6	32:1a:454:C:N3	2.87	0.42
32:1a:567:G:H1'	61:1a:1998:HOH:O	2.19	0.42
32:1a:1352:C:H2'	32:1a:1353:G:C8	2.54	0.42
34:1c:178:LEU:HD13	34:1c:178:LEU:HA	1.79	0.42
40:1i:82:ALA:O	40:1i:86:VAL:HG22	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.84	0.42
46:1o:8:LYS:O	46:1o:12:ILE:HG13	2.19	0.42
47:1p:36:ILE:HD12	47:1p:56:ALA:HB2	2.01	0.42
49:1r:66:LEU:O	49:1r:70:ILE:HG13	2.19	0.42
54:1y:57:G:H2'	54:1y:58:A:H5'	2.01	0.42
1:2A:265:A:C8	1:2A:266:G:H1'	2.54	0.42
1:2A:460:A:H2'	1:2A:461:C:O4'	2.19	0.42
1:2A:783:A:O2'	1:2A:785:G:OP1	2.27	0.42
1:2A:807:U:O2'	1:2A:2060:A:N1	2.47	0.42
1:2A:851:U:O2'	25:23:42:ALA:O	2.34	0.42
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.19	0.42
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.83	0.42
1:2A:2126:A:H4'	1:2A:2127:G:OP2	2.19	0.42
1:2A:2416:C:O2'	1:2A:2417:C:H5'	2.19	0.42
1:2A:2572:A:O2'	1:2A:2575:C:OP1	2.29	0.42
6:2G:125:PHE:HB3	6:2G:166:ASP:OD2	2.19	0.42
6:2G:161:THR:HG22	6:2G:163:ALA:N	2.34	0.42
6:2G:173:LEU:HD13	6:2G:173:LEU:HA	1.88	0.42
12:2Q:16:ARG:HG2	12:2Q:18:LYS:NZ	2.33	0.42
13:2R:30:THR:HG22	13:2R:31:HIS:CD2	2.54	0.42
14:2S:52:SER:HB2	14:2S:55:ALA:CB	2.49	0.42
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	2.00	0.42
32:2a:247:G:OP1	32:2a:247:G:H4'	2.19	0.42
32:2a:309:G:H1'	32:2a:608:A:C2	2.54	0.42
32:2a:737:A:H2'	32:2a:738:C:H6	1.84	0.42
32:2a:751:U:H4'	46:2o:24:SER:HA	2.00	0.42
32:2a:814:A:N7	32:2a:816:A:C4	2.87	0.42
32:2a:952:U:H2'	32:2a:953:G:C8	2.53	0.42
32:2a:1223:C:P	50:2s:78:ARG:HH21	2.42	0.42
33:2b:15:VAL:CG2	33:2b:213:LEU:HD13	2.49	0.42
33:2b:80:ILE:O	33:2b:80:ILE:HG12	2.19	0.42
35:2d:153:ARG:HG2	35:2d:181:MET:SD	2.59	0.42
55:2x:29:G:C4	55:2x:30:G:C8	3.07	0.42
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.54	0.42
1:1A:819:A:H5"	1:1A:819:A:H8	1.82	0.42
1:1A:996:A:H4'	16:1U:91:ASP:OD2	2.19	0.42
1:1A:1080:C:H2'	1:1A:1081:U:C1'	2.49	0.42
1:1A:1946:U:H2'	1:1A:1947:C:H6	1.79	0.42
6:1G:3:LEU:HD13	26:14:25:TYR:CZ	2.53	0.42
13:1R:38:VAL:HB	13:1R:39:PRO:HD3	2.01	0.42
17:1V:60:GLU:HB2	17:1V:97:LYS:HE2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:1Y:1:MET:HE2	20:1Y:1:MET:HB3	1.85	0.42
32:1a:194:C:C2'	32:1a:195:A:H5"	2.49	0.42
32:1a:791:G:C2'	32:1a:792:A:H5'	2.49	0.42
32:1a:985:C:H2'	32:1a:986:A:C8	2.54	0.42
32:1a:1375:A:C6	32:1a:1376:U:N3	2.88	0.42
32:1a:1532:U:O5'	32:1a:1532:U:H6	2.02	0.42
34:1c:142:MET:HG3	34:1c:170:GLN:HB3	2.00	0.42
40:1i:79:LEU:HG	40:1i:83:ARG:HD2	2.02	0.42
50:1s:22:LEU:HB3	50:1s:27:GLU:CB	2.44	0.42
51:1t:46:GLU:HB3	51:1t:48:LYS:HG3	2.01	0.42
1:2A:821:A:N1	61:2A:4048:HOH:O	2.37	0.42
1:2A:941:A:H2'	1:2A:942:G:C8	2.53	0.42
1:2A:1185:C:H5"	1:2A:1186:G:OP1	2.19	0.42
1:2A:1766:U:H2'	1:2A:1767:C:C6	2.54	0.42
1:2A:1851:U:H2'	1:2A:1852:C:O4'	2.19	0.42
1:2A:2107:C:H5"	1:2A:2108:C:OP2	2.18	0.42
1:2A:2467:C:H4'	12:2Q:123:HIS:CG	2.53	0.42
6:2G:41:GLN:HE21	6:2G:153:ARG:HB3	1.81	0.42
6:2G:95:ARG:O	6:2G:96:ARG:C	2.62	0.42
15:2T:127:ALA:C	15:2T:129:ARG:H	2.27	0.42
32:2a:604:G:C5	32:2a:605:U:C5	3.07	0.42
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.54	0.42
32:2a:1014:A:H5"	50:2s:14:HIS:CG	2.55	0.42
32:2a:1060:C:H41	34:2c:2:GLY:HA3	1.84	0.42
32:2a:1195:C:N3	32:2a:1197:G:C8	2.87	0.42
35:2d:187:ARG:NH1	35:2d:190:ASP:H	2.14	0.42
40:2i:88:TYR:CD2	40:2i:89:ASN:HB2	2.54	0.42
48:2q:95:TYR:HA	48:2q:98:LEU:HD13	1.99	0.42
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.82	0.42
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.20	0.42
1:1A:1408:C:C2	1:1A:1595:G:N2	2.87	0.42
1:1A:1767:C:O2'	1:1A:1768:U:H5'	2.19	0.42
1:1A:2320:A:H2'	1:1A:2320:A:N3	2.35	0.42
1:1A:2483:C:H2'	1:1A:2484:G:O4'	2.19	0.42
2:1B:90:A:N7	2:1B:91:C:H1'	2.35	0.42
5:1F:74:ARG:HG3	5:1F:74:ARG:H	1.65	0.42
6:1G:47:LYS:O	6:1G:86:MET:HE2	2.18	0.42
7:1H:88:LEU:HD23	7:1H:130:ARG:CG	2.50	0.42
10:1O:91:LEU:HD23	10:1O:111:PHE:CE1	2.54	0.42
19:1X:1:MET:HE3	19:1X:1:MET:HB2	1.87	0.42
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.16	0.42
32:1a:439:A:C8	32:1a:441:A:C8	3.07	0.42
32:1a:1346:A:H61	32:1a:1374:A:H3'	1.83	0.42
36:1e:83:GLU:HA	36:1e:87:SER:O	2.19	0.42
42:1k:29:ILE:HG23	42:1k:44:SER:HB3	2.01	0.42
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.34	0.42
47:1p:15:PRO:HD2	47:1p:42:ARG:HD3	2.00	0.42
54:1w:25:C:C2	54:1w:26:A:C8	3.07	0.42
1:2A:83:G:H1	1:2A:102:G:HO2'	1.67	0.42
1:2A:127:A:H5"	1:2A:128:C:C6	2.54	0.42
1:2A:1364:G:P	23:21:3:LYS:HG3	2.58	0.42
1:2A:1368:G:OP1	29:27:28:ARG:NH2	2.52	0.42
1:2A:1651:G:N2	1:2A:2007:C:C2	2.88	0.42
1:2A:2109:U:H3	1:2A:2180:U:H3	1.67	0.42
1:2A:2198:A:OP1	8:2I:33:ARG:NH2	2.53	0.42
1:2A:2377:A:O2'	14:2S:112:PHE:O	2.31	0.42
1:2A:2470:G:C2	1:2A:2471:C:C6	3.07	0.42
1:2A:2503:2MA:H4'	1:2A:2504:U:OP1	2.19	0.42
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.82	0.42
1:2A:2741:A:H2'	1:2A:2742:C:O4'	2.20	0.42
1:2A:2886:G:H2'	1:2A:2887:U:H6	1.83	0.42
2:2B:55:U:O2'	6:2G:27:ASN:ND2	2.50	0.42
3:2D:127:VAL:HA	3:2D:193:VAL:HG12	2.01	0.42
4:2E:144:ARG:HG2	4:2E:145:LYS:H	1.83	0.42
19:2X:5:TYR:HD1	24:22:33:MET:HE2	1.84	0.42
21:2Z:19:ARG:HH11	21:2Z:25:PRO:HD2	1.84	0.42
32:2a:8:A:C6	35:2d:209:ARG:HB2	2.53	0.42
32:2a:561:U:HO2'	32:2a:562:C:P	2.42	0.42
32:2a:828:A:H5"	32:2a:859:A:N1	2.34	0.42
32:2a:1080:A:H5"	32:2a:1081:G:OP2	2.18	0.42
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.84	0.42
32:2a:1145:C:H4'	32:2a:1146:A:H5'	2.01	0.42
32:2a:1159:U:O4'	32:2a:1182:G:N2	2.52	0.42
32:2a:1298:C:H4'	32:2a:1299:A:C4	2.55	0.42
34:2c:18:TRP:HB2	34:2c:21:ARG:HG2	2.00	0.42
36:2e:28:PHE:CD2	36:2e:28:PHE:N	2.86	0.42
36:2e:45:PHE:HD1	36:2e:46:GLY:N	2.18	0.42
40:2i:58:HIS:CD2	40:2i:58:HIS:N	2.88	0.42
1:1A:848:G:H2'	1:1A:849:A:C8	2.54	0.42
3:1D:37:LEU:HD13	3:1D:87:ASN:ND2	2.34	0.42
4:1E:31:CYS:HA	4:1E:32:PRO:HD2	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:63:PRO:HD3	30:18:27:THR:HG22	2.01	0.42
21:1Z:31:ARG:NE	21:1Z:94:GLU:OE2	2.51	0.42
32:1a:454:C:H3'	32:1a:455:C:C6	2.54	0.42
32:1a:551:U:H2'	32:1a:552:U:C6	2.53	0.42
32:1a:1070:U:H2'	32:1a:1071:C:H6	1.85	0.42
32:1a:1508:G:H2'	32:1a:1509:C:O4'	2.20	0.42
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	2.01	0.42
34:1c:34:LEU:HG	34:1c:38:ARG:HD2	1.99	0.42
38:1g:13:GLN:HA	38:1g:13:GLN:NE2	2.34	0.42
47:1p:55:ARG:C	47:1p:57:ARG:N	2.76	0.42
48:1q:76:LEU:HD12	48:1q:77:VAL:H	1.85	0.42
1:2A:71:A:H5"	1:2A:73:A:C8	2.54	0.42
1:2A:276:A:H5"	1:2A:277:C:H5'	2.01	0.42
1:2A:613:G:H2'	1:2A:614:U:O2	2.19	0.42
1:2A:854:G:H2'	1:2A:855:G:H8	1.84	0.42
1:2A:2138:C:N3	1:2A:2153:G:N2	2.60	0.42
1:2A:2667:C:N3	7:2H:110:SER:OG	2.48	0.42
6:2G:64:THR:HB	6:2G:94:LEU:HD21	2.00	0.42
10:2O:26:LYS:HD3	10:2O:37:ASP:OD1	2.19	0.42
10:2O:29:ASN:OD1	10:2O:29:ASN:N	2.53	0.42
11:2P:19:VAL:HG12	11:2P:27:HIS:HB3	2.01	0.42
14:2S:27:SER:HB3	14:2S:88:ASP:OD2	2.18	0.42
22:20:23:VAL:HG22	22:20:38:VAL:HG22	2.00	0.42
28:26:23:THR:OG1	28:26:24:GLU:N	2.49	0.42
28:26:40:CYS:O	28:26:44:ARG:N	2.49	0.42
32:2a:509:A:O2'	32:2a:510:A:OP1	2.30	0.42
32:2a:630:G:H2'	32:2a:631:G:C8	2.54	0.42
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.54	0.42
32:2a:1480:G:H2'	32:2a:1481:U:C6	2.54	0.42
33:2b:85:ALA:O	33:2b:89:GLY:N	2.52	0.42
33:2b:111:ARG:HD3	33:2b:111:ARG:HA	1.85	0.42
39:2h:92:ARG:HA	39:2h:92:ARG:HD3	1.86	0.42
41:2j:42:THR:HB	41:2j:68:HIS:HA	2.00	0.42
1:1A:225:A:O2'	1:1A:257:A:H4'	2.19	0.42
1:1A:228:A:H2'	1:1A:230:U:O4'	2.19	0.42
1:1A:857:C:N4	1:1A:858:U:O4	2.53	0.42
1:1A:1676:A:H2'	1:1A:1677:A:O4'	2.19	0.42
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.34	0.42
1:1A:2197:U:H1'	1:1A:2198:A:C8	2.55	0.42
1:1A:2674:G:H5"	10:1O:26:LYS:HE3	2.01	0.42
1:1A:2756:U:H1'	1:1A:2757:A:H5"	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:210:GLY:O	3:1D:213:ARG:HB2	2.19	0.42
10:1O:60:ALA:HB1	10:1O:84:ALA:HB1	2.02	0.42
10:1O:111:PHE:O	10:1O:115:VAL:HG23	2.19	0.42
32:1a:983:A:H2	32:1a:984:C:C6	2.37	0.42
32:1a:1464:G:H2'	32:1a:1465:C:C6	2.55	0.42
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.88	0.42
33:1b:24:TRP:HZ3	33:1b:29:ALA:HB2	1.83	0.42
33:1b:78:GLN:NE2	33:1b:94:ASN:O	2.53	0.42
51:1t:10:LEU:HB3	51:1t:12:ALA:N	2.26	0.42
54:1y:55:PSU:C4	54:1y:57:G:H5'	2.54	0.42
54:1y:55:PSU:N3	54:1y:57:G:H5'	2.34	0.42
1:2A:909:A:C5	1:2A:912:C:C4	3.07	0.42
1:2A:1804:C:O5'	1:2A:1804:C:H6	2.02	0.42
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.43	0.42
1:2A:2066:C:H5"	61:2A:4766:HOH:O	2.18	0.42
1:2A:2110:G:H3'	1:2A:2111:C:C5'	2.43	0.42
1:2A:2465:C:O2	1:2A:2486:G:C2	2.72	0.42
1:2A:2563:U:O2	1:2A:2565:A:H8	2.01	0.42
3:2D:80:ALA:HB2	3:2D:96:HIS:CG	2.55	0.42
3:2D:133:LEU:HA	3:2D:136:ILE:HD12	2.00	0.42
5:2F:126:VAL:HG21	5:2F:129:PHE:CZ	2.54	0.42
14:2S:11:LYS:O	14:2S:15:ARG:HG3	2.20	0.42
21:2Z:21:ALA:O	21:2Z:23:LYS:HG2	2.19	0.42
21:2Z:151:HIS:HD2	21:2Z:170:THR:HA	1.85	0.42
32:2a:571:U:O4	32:2a:864:A:N6	2.52	0.42
32:2a:909:A:N3	32:2a:1413:A:O2'	2.43	0.42
32:2a:1014:A:H4'	50:2s:14:HIS:ND1	2.34	0.42
32:2a:1096:C:O2'	32:2a:1097:C:H5'	2.20	0.42
33:2b:54:THR:HG21	33:2b:201:ILE:HG13	2.01	0.42
34:2c:118:GLN:HA	34:2c:121:ALA:HB3	2.01	0.42
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.52	0.42
37:2f:36:ARG:NH2	37:2f:38:GLU:OE2	2.50	0.42
38:2g:78:ARG:O	38:2g:84:ASN:HA	2.19	0.42
39:2h:41:ARG:NH2	39:2h:120:THR:HG21	2.34	0.42
49:2r:53:ARG:C	49:2r:55:ARG:N	2.77	0.42
49:2r:61:LYS:O	49:2r:65:ILE:HG13	2.19	0.42
54:2w:7:A:O2'	54:2w:49:C:O4'	2.30	0.42
1:1A:414:C:H2'	1:1A:415:A:C8	2.54	0.42
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.54	0.42
1:1A:2780:G:OP1	9:1N:118:LYS:HE2	2.20	0.42
4:1E:121:ASN:ND2	61:1E:404:HOH:O	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:15:VAL:HG13	6:1G:175:LEU:HB2	2.00	0.42
6:1G:82:LEU:HD23	6:1G:82:LEU:HA	1.75	0.42
8:1I:87:LYS:H	8:1I:87:LYS:HG3	1.67	0.42
10:1O:66:LYS:HA	10:1O:79:PHE:O	2.18	0.42
21:1Z:45:ASP:OD1	21:1Z:49:ARG:NE	2.43	0.42
32:1a:421:U:O2'	32:1a:423:G:N7	2.52	0.42
32:1a:438:G:O2'	32:1a:493:G:C2	2.71	0.42
32:1a:620:C:H2'	32:1a:621:A:O4'	2.19	0.42
32:1a:667:G:OP1	32:1a:732:C:O2'	2.26	0.42
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.18	0.42
35:1d:70:ILE:HD11	35:1d:74:GLN:HB3	2.02	0.42
41:1j:5:ARG:HH21	41:1j:73:ASP:CG	2.26	0.42
44:1m:84:ILE:HG13	44:1m:86:CYS:H	1.85	0.42
1:2A:844:C:C5	1:2A:845:G:C6	3.07	0.42
1:2A:883:G:N2	1:2A:894:C:O2	2.52	0.42
1:2A:897:C:O4'	54:2w:56:C:C5	2.72	0.42
1:2A:957:A:C6	1:2A:2459:A:C8	3.07	0.42
1:2A:1147:C:H2'	1:2A:1148:A:H8	1.84	0.42
1:2A:1444:G:O6	1:2A:1466:G:C6	2.73	0.42
1:2A:1798:U:C5'	3:2D:259:THR:HG22	2.31	0.42
1:2A:2297:C:C2	1:2A:2298:A:C8	3.07	0.42
1:2A:2336:A:H61	22:20:43:THR:HG22	1.85	0.42
1:2A:2347:C:H2'	1:2A:2348:U:C6	2.54	0.42
1:2A:2390:U:P	30:28:35:GLN:HE22	2.42	0.42
1:2A:2577:A:OP1	61:2A:3960:HOH:O	2.22	0.42
61:2A:4081:HOH:O	55:2x:75:C:H5'	2.19	0.42
3:2D:38:LYS:HA	3:2D:38:LYS:HD2	1.97	0.42
4:2E:53:PRO:HA	4:2E:75:VAL:HA	2.01	0.42
7:2H:44:VAL:CG2	7:2H:51:ARG:HB2	2.50	0.42
10:2O:69:ILE:H	10:2O:69:ILE:HG13	1.62	0.42
11:2P:113:LYS:HG2	11:2P:115:LEU:HD21	2.02	0.42
15:2T:26:ASP:OD1	15:2T:91:ARG:HA	2.18	0.42
30:28:37:SER:OG	30:28:39:LYS:N	2.52	0.42
32:2a:328:C:H4'	32:2a:329:A:C5'	2.48	0.42
32:2a:431:A:H2'	32:2a:432:A:C8	2.55	0.42
32:2a:562:C:H4'	32:2a:563:A:O5'	2.20	0.42
32:2a:718:G:H5'	42:2k:117:ASN:CG	2.43	0.42
32:2a:736:C:H2'	32:2a:737:A:C8	2.54	0.42
32:2a:1026:G:H3'	32:2a:1026:G:N3	2.34	0.42
32:2a:1053:G:C2	32:2a:1199:U:C4	3.08	0.42
32:2a:1169:A:C6	32:2a:1170:A:C6	3.06	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1239:A:H4'	32:2a:1240:U:C5'	2.49	0.42
32:2a:1246:C:H2'	32:2a:1247:U:H6	1.85	0.42
32:2a:1249:C:H4'	40:2i:36:TYR:OH	2.19	0.42
34:2c:120:VAL:O	34:2c:124:ILE:HG23	2.20	0.42
44:2m:11:ARG:HB3	44:2m:12:ASN:ND2	2.35	0.42
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.53	0.42
48:2q:29:HIS:HB3	48:2q:33:GLY:N	2.34	0.42
51:2t:20:LEU:HD23	51:2t:20:LEU:HA	1.86	0.42
1:1A:588:U:H2'	1:1A:589:C:H6	1.84	0.42
1:1A:900:A:H2'	1:1A:901:A:O4'	2.19	0.42
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.19	0.42
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.20	0.42
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.20	0.42
1:1A:1355:G:H2'	1:1A:1356:G:O4'	2.19	0.42
1:1A:2712:U:OP1	1:1A:2714:G:H4'	2.19	0.42
4:1E:52:LEU:HB2	4:1E:76:ARG:HB2	2.01	0.42
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.16	0.42
12:1Q:17:LEU:HD23	12:1Q:17:LEU:HA	1.68	0.42
12:1Q:111:GLU:O	12:1Q:115:MET:HG2	2.20	0.42
15:1T:74:ARG:HG2	15:1T:76:PHE:CZ	2.55	0.42
18:1W:84:ARG:HG3	18:1W:98:LYS:HD2	2.02	0.42
20:1Y:6:HIS:CD2	20:1Y:6:HIS:N	2.86	0.42
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.70	0.42
32:1a:724:G:C2	32:1a:725:G:C8	3.08	0.42
32:1a:784:C:H2'	32:1a:785:G:O4'	2.20	0.42
32:1a:1248:A:C6	32:1a:1249:C:C4	3.07	0.42
32:1a:1379:G:C4	32:1a:1380:U:C5	3.08	0.42
32:1a:1530:G:OP1	32:1a:1530:G:H4'	2.19	0.42
35:1d:175:SER:HB3	35:1d:184:LYS:HB2	2.01	0.42
38:1g:50:ILE:HG22	38:1g:58:PRO:HG3	2.00	0.42
39:1h:121:ASP:OD1	39:1h:121:ASP:N	2.53	0.42
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	2.02	0.42
54:1y:43:C:H2'	54:1y:44:G:H1'	2.02	0.42
1:2A:243:U:O2'	1:2A:244:A:H5'	2.20	0.42
1:2A:287:C:H2'	1:2A:288:C:H6	1.83	0.42
1:2A:304:G:H2'	1:2A:305:U:C6	2.54	0.42
1:2A:307:G:N2	1:2A:309:G:H3'	2.34	0.42
1:2A:964:C:O2'	1:2A:2273:A:H1'	2.20	0.42
1:2A:1685:C:H2'	1:2A:1686:C:H6	1.85	0.42
1:2A:2639:A:O3'	9:2N:97:ARG:NH2	2.50	0.42
11:2P:90:ARG:HG2	11:2P:90:ARG:HH11	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:76:LYS:HD2	17:2V:81:TYR:CE2	2.54	0.42
21:2Z:77:ASP:CG	21:2Z:80:ARG:HH11	2.26	0.42
22:20:53:MET:HG2	22:20:57:PHE:HA	2.01	0.42
32:2a:604:G:C6	32:2a:605:U:C4	3.07	0.42
32:2a:750:G:O3'	46:2o:18:PHE:HZ	2.01	0.42
32:2a:1139:G:N2	32:2a:1142:G:O6	2.50	0.42
32:2a:1141:C:H2'	32:2a:1142:G:O4'	2.19	0.42
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.53	0.42
32:2a:1218:C:H2'	32:2a:1219:U:H6	1.83	0.42
32:2a:1278:U:H5'	32:2a:1279:A:H5'	2.02	0.42
36:2e:75:THR:HA	36:2e:115:VAL:HG22	2.01	0.42
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.34	0.42
39:2h:84:ARG:HB3	39:2h:84:ARG:HH11	1.85	0.42
41:2j:23:ILE:HD13	41:2j:23:ILE:HA	1.86	0.42
44:2m:123:ALA:HB2	54:2w:39:PSU:H1'	2.01	0.42
51:2t:86:ARG:O	51:2t:90:GLN:HG3	2.19	0.42
1:1A:1001:A:H2'	1:1A:1002:G:O4'	2.20	0.42
1:1A:2246:G:H2'	1:1A:2247:A:C8	2.55	0.42
1:1A:2517:C:H6	1:1A:2517:C:H2'	1.68	0.42
1:1A:2779:U:H5'	1:1A:2781:A:O4'	2.20	0.42
5:1F:152:GLU:OE1	5:1F:191:ARG:HD2	2.20	0.42
6:1G:125:PHE:O	61:1G:302:HOH:O	2.22	0.42
9:1N:42:TRP:CE3	16:1U:63:VAL:HG11	2.54	0.42
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.51	0.42
32:1a:198:G:C6	32:1a:220:G:C2	3.08	0.42
32:1a:875:C:H1'	39:1h:15:ASN:OD1	2.19	0.42
32:1a:919:A:O2'	32:1a:920:U:H5'	2.20	0.42
32:1a:1001(A):G:C2	32:1a:1002:G:H1'	2.55	0.42
32:1a:1102:A:H5"	32:1a:1102:A:H8	1.84	0.42
33:1b:55:PHE:CE1	33:1b:218:ALA:HA	2.55	0.42
33:1b:141:GLU:HG2	33:1b:145:LEU:HD12	2.01	0.42
33:1b:168:THR:HG21	33:1b:191:ASP:O	2.20	0.42
36:1e:110:LEU:HD13	36:1e:118:ILE:HD13	2.02	0.42
37:1f:30:LEU:O	37:1f:35:ALA:HB3	2.19	0.42
38:1g:151:TYR:OH	42:1k:54:ARG:NH1	2.53	0.42
39:1h:36:LEU:HA	39:1h:39:LEU:HD12	2.02	0.42
1:2A:30:G:C6	1:2A:31:C:C4	3.08	0.42
1:2A:35:G:H2'	1:2A:36:G:O4'	2.20	0.42
1:2A:244:A:C2	1:2A:255:A:C4	3.08	0.42
1:2A:705:A:H1'	3:2D:9:TYR:CE2	2.54	0.42
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1752:C:H2'	1:2A:1753:G:C8	2.54	0.42
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.85	0.42
4:2E:18:ASP:HB3	15:2T:82:LEU:HD21	2.02	0.42
4:2E:47:VAL:HG22	4:2E:84:PHE:HB3	2.01	0.42
5:2F:10:PRO:HB3	5:2F:17:ARG:NH1	2.34	0.42
11:2P:27:HIS:NE2	61:2P:303:HOH:O	2.37	0.42
16:2U:16:LYS:HB3	16:2U:16:LYS:HE2	1.78	0.42
16:2U:68:ALA:O	16:2U:71:GLN:HB2	2.20	0.42
19:2X:18:TYR:C	19:2X:20:GLY:H	2.28	0.42
26:24:3:GLU:H	26:24:3:GLU:HG2	1.70	0.42
32:2a:102:G:C5	32:2a:103:C:C5	3.08	0.42
32:2a:116:A:H8	32:2a:116:A:O5'	2.02	0.42
32:2a:539:A:H2'	32:2a:540:G:C8	2.54	0.42
32:2a:568:G:O6	43:2l:5:PRO:HD3	2.20	0.42
32:2a:688:G:C6	32:2a:700:G:C2	3.07	0.42
32:2a:855:G:C2	32:2a:856:C:C2	3.08	0.42
32:2a:1206:G:C6	32:2a:1207:2MG:C5	3.07	0.42
32:2a:1347:G:O2'	32:2a:1348:U:OP2	2.37	0.42
32:2a:1400:5MC:N4	55:2x:34:C:H1'	2.34	0.42
32:2a:1500:A:H5"	32:2a:1508:G:H5"	2.01	0.42
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.84	0.42
33:2b:69:LEU:HB3	33:2b:162:ILE:CG2	2.48	0.42
33:2b:193:ASP:OD2	33:2b:196:LEU:HD13	2.20	0.42
37:2f:19:LEU:HD23	37:2f:19:LEU:O	2.19	0.42
37:2f:61:LEU:HD22	37:2f:63:TYR:CZ	2.55	0.42
47:2p:39:TYR:HA	47:2p:48:TRP:O	2.19	0.42
49:2r:74:ARG:H	49:2r:74:ARG:HG3	1.67	0.42
54:2y:40:C:H2'	54:2y:41:C:C6	2.53	0.42
54:2y:42:C:H2'	54:2y:43:C:H6	1.84	0.42
1:1A:748:G:C8	18:1W:89:ALA:HB1	2.55	0.42
1:1A:1056:G:H5"	1:1A:1057:A:C4'	2.49	0.42
1:1A:1235:G:H5"	61:1A:4463:HOH:O	2.19	0.42
1:1A:1371:G:O6	61:1A:4249:HOH:O	2.22	0.42
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.53	0.42
1:1A:1923:U:H2'	1:1A:1924:C:C6	2.55	0.42
1:1A:1989:G:O6	61:1A:4245:HOH:O	2.21	0.42
1:1A:2280:G:C2'	1:1A:2281:C:H5'	2.50	0.42
1:1A:2846:G:P	15:1T:54:ARG:HB2	2.60	0.42
6:1G:122:PRO:HG3	6:1G:182:LYS:H	1.83	0.42
8:1I:90:GLY:O	8:1I:121:LYS:HD2	2.19	0.42
10:1O:35:VAL:HG21	10:1O:69:ILE:HD13	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:1W:65:LEU:HD12	18:1W:68:ARG:HH21	1.85	0.42
24:12:51:ARG:HD3	24:12:55:ARG:CZ	2.50	0.42
32:1a:107:G:H2'	32:1a:108:G:O4'	2.20	0.42
32:1a:269:C:H2'	32:1a:270:A:H8	1.84	0.42
32:1a:485:G:O2'	32:1a:486:U:OP2	2.36	0.42
32:1a:657:G:C2	32:1a:750:G:C5	3.08	0.42
32:1a:1226:C:H2'	44:1m:103:THR:HB	2.01	0.42
33:1b:48:MET:HA	33:1b:51:LEU:HD12	2.02	0.42
33:1b:115:LEU:HB2	33:1b:145:LEU:HD22	2.02	0.42
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.49	0.42
36:1e:24:ARG:H	36:1e:24:ARG:HG2	1.72	0.42
51:1t:100:ILE:H	51:1t:100:ILE:HG12	1.58	0.42
54:1w:4:C:H2'	54:1w:5:G:H8	1.85	0.42
54:1w:26:A:N1	54:1w:44:G:N2	2.61	0.42
1:2A:18:C:H2'	1:2A:19:C:H6	1.84	0.42
1:2A:208:C:H2'	1:2A:209:C:H6	1.83	0.42
1:2A:307:G:O2'	1:2A:309:G:N7	2.50	0.42
1:2A:1301:A:O2'	1:2A:1302:A:H3'	2.19	0.42
1:2A:1835:G:H5"	1:2A:1836:C:OP2	2.20	0.42
1:2A:1889:A:N1	1:2A:2234:G:H1'	2.34	0.42
1:2A:2353:G:H2'	1:2A:2354:G:O4'	2.19	0.42
1:2A:2837:G:N7	61:2A:4049:HOH:O	2.37	0.42
2:2B:38:C:O4'	14:2S:95:HIS:NE2	2.49	0.42
2:2B:90:A:C5	2:2B:91:C:H1'	2.54	0.42
2:2B:98:G:H3'	2:2B:99:G:H8	1.84	0.42
5:2F:53:THR:HG22	5:2F:56:GLU:CG	2.50	0.42
14:2S:5:THR:O	14:2S:8:GLU:N	2.52	0.42
29:27:47:ARG:O	29:27:48:LYS:HB2	2.19	0.42
32:2a:774:G:N2	32:2a:806:C:C2	2.88	0.42
32:2a:1125:U:H6	32:2a:1126:U:O2'	2.03	0.42
32:2a:1145:C:H4'	32:2a:1146:A:H8	1.85	0.42
32:2a:1376:U:OP1	38:2g:94:ARG:NH1	2.48	0.42
34:2c:64:VAL:O	34:2c:100:ALA:HB3	2.20	0.42
38:2g:138:LYS:O	38:2g:142:GLU:HG3	2.20	0.42
45:2n:6:LEU:O	45:2n:10:ALA:N	2.50	0.42
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	2.02	0.42
55:2x:61:C:H2'	55:2x:62:C:H6	1.84	0.42
1:1A:151:C:H2'	1:1A:152:G:H8	1.84	0.42
1:1A:1458:C:H4'	1:1A:1459:G:O5'	2.20	0.42
1:1A:1924:C:H4'	55:1x:13:C:O2'	2.20	0.42
1:1A:2097:C:H2'	1:1A:2098:U:H6	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2135:A:N3	1:1A:2135:A:H2'	2.35	0.42
1:1A:2171:A:O2'	1:1A:2172:U:H5"	2.20	0.42
1:1A:2619:C:O2'	1:1A:2620:C:H5'	2.20	0.42
2:1B:92:C:OP1	21:1Z:79:ARG:NH1	2.53	0.42
3:1D:181:GLU:OE2	3:1D:270:ILE:HD12	2.20	0.42
4:1E:1:MET:HB3	4:1E:83:ASP:O	2.20	0.42
11:1P:126:VAL:HG12	11:1P:148:LEU:CD2	2.40	0.42
32:1a:821:G:H4'	61:1a:2121:HOH:O	2.20	0.42
32:1a:1057:G:C6	32:1a:1058:G:C4	3.08	0.42
32:1a:1157:A:C6	32:1a:1180:A:C6	3.07	0.42
34:1c:64:VAL:O	34:1c:99:VAL:HA	2.19	0.42
34:1c:110:ASN:O	34:1c:141:VAL:HG22	2.19	0.42
36:1e:93:PRO:HG2	39:1h:105:ARG:NE	2.34	0.42
38:1g:144:MET:HE3	54:1y:40:C:O2'	2.20	0.42
40:1i:21:PRO:HA	40:1i:59:PHE:HA	2.02	0.42
44:1m:96:LEU:C	44:1m:110:ARG:HG2	2.45	0.42
45:1n:48:ALA:HA	45:1n:53:LEU:HB2	2.02	0.42
48:1q:26:GLN:HA	48:1q:36:ILE:O	2.20	0.42
54:1w:4:C:H2'	54:1w:5:G:C8	2.55	0.42
55:1x:37:A:C4	55:1x:38:A:C8	3.08	0.42
1:2A:643:A:C8	28:26:44:ARG:NH1	2.87	0.42
1:2A:1946:U:C2	1:2A:1947:C:C5	3.08	0.42
1:2A:2080:G:N2	1:2A:2241:A:C4	2.88	0.42
1:2A:2231:C:OP1	23:21:42:GLN:HA	2.20	0.42
1:2A:2516:G:O6	1:2A:2517:C:N4	2.53	0.42
1:2A:2637:U:H5"	4:2E:82:ARG:HH12	1.85	0.42
2:2B:38:C:C1'	14:2S:95:HIS:HE2	2.32	0.42
3:2D:6:PHE:HE2	3:2D:18:VAL:HG13	1.84	0.42
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.85	0.42
4:2E:69:LYS:O	4:2E:69:LYS:HG2	2.20	0.42
9:2N:4:TYR:HB2	16:2U:101:ARG:NH1	2.35	0.42
11:2P:52:GLU:OE1	11:2P:55:ARG:NH2	2.50	0.42
18:2W:86:LEU:HD22	18:2W:96:ILE:HD11	2.01	0.42
19:2X:55:ASN:O	19:2X:79:ALA:HA	2.19	0.42
32:2a:157:G:H2'	32:2a:158:G:C8	2.55	0.42
32:2a:540:G:H2'	32:2a:541:G:O4'	2.20	0.42
32:2a:757:U:H2'	32:2a:758:G:O4'	2.20	0.42
32:2a:967:5MC:H3'	32:2a:968:A:H2'	2.02	0.42
32:2a:1039:C:N4	32:2a:1040:U:C2	2.87	0.42
32:2a:1141:C:C4	32:2a:1142:G:N7	2.88	0.42
32:2a:1320:C:H1'	50:2s:73:GLU:CB	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1478:C:H2'	32:2a:1479:C:C6	2.53	0.42
35:2d:18:LYS:HD3	35:2d:20:TYR:OH	2.20	0.42
35:2d:23:GLY:O	35:2d:26:CYS:HB2	2.20	0.42
36:2e:60:TYR:O	36:2e:64:ARG:HG3	2.20	0.42
40:2i:117:HIS:CE1	40:2i:123:PRO:HB3	2.54	0.42
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.03	0.41
1:1A:1530:C:H2'	1:1A:1531:C:C6	2.55	0.41
1:1A:2627:G:N2	1:1A:2777:G:OP2	2.49	0.41
2:1B:38:C:H2'	2:1B:39:A:C8	2.55	0.41
8:1I:116:LEU:HD21	8:1I:119:PRO:HA	2.02	0.41
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.45	0.41
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	2.01	0.41
11:1P:1:MET:HB2	11:1P:1:MET:HE3	1.75	0.41
11:1P:132:LYS:HE2	11:1P:132:LYS:HB2	1.88	0.41
21:1Z:41:LEU:HD11	21:1Z:83:PRO:HG2	2.02	0.41
26:14:49:PHE:HB3	26:14:50:VAL:H	1.58	0.41
32:1a:187:C:H5'	51:1t:82:SER:HA	2.01	0.41
32:1a:198:G:C5	32:1a:220:G:C2	3.08	0.41
32:1a:271:C:H2'	32:1a:272:C:H6	1.84	0.41
32:1a:377:G:OP1	47:1p:3:LYS:HD3	2.19	0.41
32:1a:475:G:O2'	32:1a:476:G:H5'	2.20	0.41
32:1a:669:U:C2	32:1a:670:G:C8	3.08	0.41
32:1a:1157:A:H4'	32:1a:1158:C:O4'	2.20	0.41
32:1a:1190:G:H4'	34:1c:176:HIS:CE1	2.55	0.41
32:1a:1386:G:H2'	32:1a:1387:G:H8	1.85	0.41
32:1a:1456:G:H1'	51:1t:39:LYS:NZ	2.35	0.41
32:1a:1483:A:H2'	32:1a:1484:C:O4'	2.20	0.41
33:1b:28:PHE:HD1	33:1b:194:PRO:HG3	1.84	0.41
39:1h:84:ARG:HB3	39:1h:84:ARG:HH11	1.85	0.41
39:1h:87:SER:HB2	39:1h:93:VAL:HB	2.01	0.41
1:2A:1012:U:H5	9:2N:28:THR:HG21	1.84	0.41
1:2A:1016:G:C4	1:2A:1017:G:C8	3.08	0.41
1:2A:1021:A:N6	1:2A:1141:U:H3	2.10	0.41
1:2A:1434:A:O2'	1:2A:1435:G:H5'	2.19	0.41
1:2A:2274:A:C5	1:2A:2276:G:C8	3.07	0.41
1:2A:2331:G:C6	1:2A:2332:U:C4	3.08	0.41
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.20	0.41
2:2B:106:G:OP1	21:2Z:31:ARG:HG2	2.20	0.41
5:2F:181:LEU:HG	5:2F:186:ILE:HD11	2.02	0.41
16:2U:52:ARG:HA	16:2U:55:ARG:HD3	2.02	0.41
21:2Z:70:LEU:HA	21:2Z:70:LEU:HD12	1.64	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:44:LEU:CD2	24:22:47:ASN:HA	2.50	0.41
25:23:19:GLN:OE1	25:23:52:HIS:NE2	2.46	0.41
28:26:35:GLU:HG2	28:26:50:ARG:HD3	2.02	0.41
32:2a:158:G:H2'	32:2a:159:G:H8	1.85	0.41
32:2a:341:C:O5'	32:2a:341:C:H6	2.03	0.41
32:2a:392:G:N7	61:2a:1944:HOH:O	2.36	0.41
32:2a:541:G:H2'	32:2a:542:G:O4'	2.20	0.41
32:2a:1160:G:C6	32:2a:1181:G:C6	3.08	0.41
32:2a:1202:G:C1'	45:2n:29:ARG:HH11	2.33	0.41
32:2a:1519:MA6:C8	32:2a:1520:G:H1'	2.50	0.41
48:2q:3:LYS:HB3	48:2q:61:GLU:HB3	2.02	0.41
1:1A:322:A:H5'	1:1A:340:A:H1'	2.01	0.41
1:1A:654:A:OP2	61:1A:4248:HOH:O	2.22	0.41
1:1A:865:C:H4'	1:1A:866:A:N7	2.35	0.41
1:1A:876:C:H2'	1:1A:877:U:O4'	2.20	0.41
1:1A:1506:C:C2	1:1A:1507:A:C8	3.08	0.41
1:1A:1651:G:C6	1:1A:1652:A:C5	3.08	0.41
1:1A:2157:G:H4'	1:1A:2158:A:OP1	2.20	0.41
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.55	0.41
1:1A:2701:C:H2'	1:1A:2702:U:H2'	2.01	0.41
1:1A:2740:A:C6	1:1A:2764:A:C8	3.08	0.41
16:1U:28:ARG:HG2	16:1U:38:THR:OG1	2.20	0.41
23:11:86:SER:HG	23:11:89:GLU:H	1.66	0.41
32:1a:663:A:H2'	32:1a:664:G:O4'	2.20	0.41
32:1a:943:U:H2'	32:1a:944:G:H5'	2.01	0.41
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.55	0.41
33:1b:63:MET:HE3	33:1b:63:MET:HB2	1.72	0.41
33:1b:163:PHE:HA	33:1b:185:ILE:HG13	2.02	0.41
38:1g:22:LEU:HD12	38:1g:22:LEU:HA	1.76	0.41
38:1g:54:THR:O	38:1g:56:GLN:N	2.51	0.41
38:1g:70:LYS:O	38:1g:138:LYS:HE3	2.21	0.41
42:1k:59:TYR:CZ	42:1k:63:LEU:HD11	2.55	0.41
46:1o:55:GLY:HA2	46:1o:58:MET:CE	2.50	0.41
48:1q:81:ARG:HD2	48:1q:81:ARG:HA	1.90	0.41
54:1w:2:C:O5'	54:1w:2:C:H6	2.03	0.41
1:2A:731:C:H5"	61:2A:3936:HOH:O	2.19	0.41
1:2A:820:A:H1'	1:2A:943:U:H1'	2.01	0.41
1:2A:1252:G:H4'	61:2A:3920:HOH:O	2.21	0.41
1:2A:1263:U:C4	1:2A:1264:G:C6	3.07	0.41
1:2A:2129:C:N4	1:2A:2159:G:N1	2.68	0.41
1:2A:2319:G:C6	1:2A:2320:A:N6	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2740:A:H2'	1:2A:2741:A:C8	2.55	0.41
1:2A:2812:G:H2'	1:2A:2813:A:H8	1.84	0.41
2:2B:1:U:H2'	2:2B:2:C:C6	2.55	0.41
2:2B:2:C:H2'	2:2B:3:C:C6	2.53	0.41
3:2D:66:ASP:OD2	3:2D:103:ARG:HD3	2.19	0.41
6:2G:73:ALA:HB3	6:2G:85:GLY:H	1.85	0.41
6:2G:165:THR:HG23	6:2G:168:GLU:OE2	2.20	0.41
8:2I:48:GLU:HA	8:2I:51:ILE:HG22	2.02	0.41
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.85	0.41
9:2N:15:LEU:O	9:2N:16:ILE:HG13	2.20	0.41
14:2S:35:ILE:HG12	14:2S:101:LEU:CD1	2.47	0.41
20:2Y:76:CYS:O	20:2Y:80:GLY:N	2.51	0.41
23:21:82:LEU:HA	23:21:85:LEU:HD13	2.02	0.41
28:26:12:GLU:HA	28:26:18:ARG:O	2.20	0.41
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.56	0.41
32:2a:1076:C:C2	32:2a:1082:G:N2	2.88	0.41
32:2a:1121:U:H2'	32:2a:1122:U:O4'	2.19	0.41
32:2a:1191:A:OP2	34:2c:3:ASN:ND2	2.50	0.41
33:2b:112:VAL:HG12	33:2b:113:HIS:CD2	2.55	0.41
34:2c:20:SER:HA	34:2c:57:ILE:HB	2.03	0.41
40:2i:23:ASN:CG	40:2i:25:LYS:HD3	2.45	0.41
47:2p:8:ARG:HG2	47:2p:9:PHE:O	2.19	0.41
50:2s:49:ILE:HG12	50:2s:50:ALA:N	2.34	0.41
50:2s:72:GLY:HA2	50:2s:75:ALA:HB3	2.02	0.41
1:1A:784:A:C8	1:1A:792:G:C5	3.08	0.41
1:1A:1465:G:C6	1:1A:1466:G:C5	3.08	0.41
1:1A:2171:A:H1'	1:1A:2172:U:O4'	2.20	0.41
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.20	0.41
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.70	0.41
2:1B:57:A:H1'	6:1G:29:TRP:HB2	2.02	0.41
4:1E:24:THR:HG21	4:1E:188:VAL:HB	2.02	0.41
4:1E:111:ARG:HA	13:1R:1:MET:SD	2.61	0.41
9:1N:111:PRO:HA	9:1N:114:ARG:NH1	2.36	0.41
11:1P:39:LYS:CG	11:1P:45:LEU:HD22	2.51	0.41
16:1U:8:VAL:O	16:1U:12:ARG:HG3	2.19	0.41
23:11:98:LEU:HA	23:11:98:LEU:HD23	1.78	0.41
32:1a:258:G:H2'	32:1a:259:G:C8	2.50	0.41
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.19	0.41
32:1a:557:G:C6	32:1a:558:G:C6	3.08	0.41
32:1a:825:G:O2'	39:1h:8:ASP:OD1	2.26	0.41
32:1a:864:A:H2'	32:1a:865:A:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1350:A:O2'	38:1g:33:ASP:OD1	2.36	0.41
33:1b:101:MET:HG2	33:1b:152:PHE:CZ	2.56	0.41
54:1w:27:G:H2'	54:1w:28:G:C8	2.56	0.41
54:1y:68:C:C2	54:1y:69:G:C8	3.08	0.41
1:2A:218:A:C2	1:2A:235:U:H4'	2.54	0.41
1:2A:612:C:C2	1:2A:616:G:N2	2.88	0.41
2:2B:32:C:H2'	2:2B:33:G:O4'	2.20	0.41
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.38	0.41
9:2N:67:LEU:C	9:2N:88:GLU:HG3	2.45	0.41
14:2S:61:ASN:O	14:2S:65:VAL:HG13	2.20	0.41
14:2S:105:ALA:O	14:2S:110:LEU:HB2	2.21	0.41
21:2Z:99:TYR:CE2	21:2Z:125:LEU:HD12	2.56	0.41
24:22:31:GLU:HB3	24:22:53:LEU:HD11	2.01	0.41
26:24:50:VAL:HG11	44:2m:64:TRP:C	2.44	0.41
28:26:26:ASN:O	28:26:29:ASN:N	2.53	0.41
32:2a:132:C:H5'	32:2a:262:A:O2'	2.20	0.41
32:2a:499:A:H4'	32:2a:500:G:OP1	2.19	0.41
32:2a:640:A:N6	32:2a:641:U:O4	2.53	0.41
32:2a:1005:A:H1'	32:2a:1025:U:N3	2.36	0.41
32:2a:1063:C:H3'	32:2a:1064:G:H2'	2.02	0.41
32:2a:1154:G:C4	32:2a:1155:G:C8	3.09	0.41
32:2a:1438:G:N2	32:2a:1464:G:C4	2.89	0.41
34:2c:9:GLY:HA3	45:2n:49:HIS:CD2	2.54	0.41
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.55	0.41
34:2c:15:THR:HB	34:2c:181:ASN:HB2	2.02	0.41
34:2c:182:ILE:HD13	34:2c:182:ILE:HG21	1.83	0.41
35:2d:191:ARG:HD2	35:2d:191:ARG:HA	1.76	0.41
42:2k:21:ILE:HD12	42:2k:84:VAL:HG12	2.02	0.41
42:2k:33:THR:HA	42:2k:40:ILE:HG12	2.02	0.41
42:2k:80:VAL:C	42:2k:106:LYS:HE2	2.45	0.41
54:2y:34:G:H2'	54:2y:35:A:H8	1.84	0.41
1:1A:271(M):G:C8	1:1A:271(O):C:C5	3.08	0.41
1:1A:279:C:N4	1:1A:361:G:H1	2.16	0.41
1:1A:1688:U:H1'	1:1A:1701:A:C6	2.55	0.41
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.31	0.41
1:1A:2543:G:H21	1:1A:2646:C:H5"	1.86	0.41
1:1A:2839:G:N2	1:1A:2880:C:C2	2.88	0.41
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	2.02	0.41
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	2.01	0.41
26:14:61:ARG:O	26:14:62:ARG:C	2.64	0.41
32:1a:437:U:C4	32:1a:438:G:C6	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:695:A:OP2	42:1k:53:SER:N	2.46	0.41
32:1a:997:U:H3	32:1a:1044:A:H61	1.68	0.41
32:1a:1030(B):C:O2	32:1a:1030(B):C:H2'	2.21	0.41
32:1a:1250:A:H61	32:1a:1354:C:H1'	1.84	0.41
32:1a:1260:C:O5'	32:1a:1284:C:H4'	2.20	0.41
33:1b:112:VAL:HA	33:1b:115:LEU:HB3	2.01	0.41
34:1c:173:VAL:HG12	34:1c:175:LEU:CD1	2.50	0.41
35:1d:61:LYS:HD3	35:1d:206:PHE:CE2	2.55	0.41
39:1h:114:THR:HG22	39:1h:130:GLY:O	2.20	0.41
45:1n:14:PRO:HG2	45:1n:16:PHE:O	2.20	0.41
55:1x:45:G:H8	55:1x:45:G:O5'	2.03	0.41
1:2A:221:A:C8	1:2A:266:G:C6	3.09	0.41
1:2A:628:G:H2'	1:2A:629:G:C8	2.56	0.41
1:2A:952:G:C6	1:2A:966:G:C6	3.09	0.41
1:2A:1204:A:H5'	1:2A:1206:G:H1'	2.03	0.41
1:2A:1274:A:N3	1:2A:1297:C:H1'	2.35	0.41
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.55	0.41
1:2A:1815:A:H8	1:2A:1815:A:OP1	2.03	0.41
1:2A:2314:C:C5'	6:2G:38:VAL:HG21	2.51	0.41
1:2A:2611:U:H3'	1:2A:2611:U:OP2	2.20	0.41
1:2A:2666:C:O2	7:2H:152:ARG:NH1	2.49	0.41
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.55	0.41
1:2A:2896:C:H2'	1:2A:2897:U:C5	2.55	0.41
2:2B:23:G:C2	2:2B:24:G:O6	2.74	0.41
6:2G:41:GLN:HG2	6:2G:154:GLY:O	2.20	0.41
10:2O:63:VAL:HG23	10:2O:64:ARG:HG3	2.02	0.41
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	2.03	0.41
12:2Q:50:ALA:O	12:2Q:53:ALA:HB3	2.20	0.41
26:24:14:ILE:O	26:24:21:VAL:HA	2.18	0.41
29:27:8:ASN:OD1	29:27:8:ASN:C	2.63	0.41
32:2a:36:C:OP1	43:2l:123:LYS:NZ	2.41	0.41
32:2a:501:C:OP2	43:2l:124:LYS:NZ	2.42	0.41
32:2a:594:G:H2'	32:2a:595:G:O4'	2.20	0.41
32:2a:688:G:C5	32:2a:700:G:C2	3.08	0.41
32:2a:1125:U:OP1	41:2j:35:SER:OG	2.38	0.41
32:2a:1150:U:H2'	32:2a:1151:A:H5'	2.02	0.41
32:2a:1318:A:H1'	50:2s:37:ARG:NE	2.33	0.41
33:2b:118:LEU:HG	33:2b:142:LEU:HB2	2.02	0.41
34:2c:154:SER:O	34:2c:154:SER:OG	2.33	0.41
38:2g:29:LYS:HB2	38:2g:105:VAL:HG21	2.03	0.41
38:2g:56:GLN:O	38:2g:58:PRO:HD3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:2x:76:31H:HE3	55:2x:76:31H:HB2	1.81	0.41
54:2y:8:4SU:H2'	54:2y:46:G7M:H22	1.85	0.41
1:1A:70:G:H5"	1:1A:112:U:O2	2.20	0.41
1:1A:191:A:H2'	1:1A:192:C:C6	2.55	0.41
1:1A:340:A:H2'	1:1A:341:G:O4'	2.21	0.41
1:1A:715:G:O6	46:1o:53:HIS:NE2	2.51	0.41
1:1A:829:A:N7	1:1A:2248:C:H5'	2.35	0.41
1:1A:873:G:N2	1:1A:905:U:C2	2.89	0.41
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.85	0.41
1:1A:2880:C:H1'	13:1R:92:GLY:O	2.20	0.41
2:1B:38:C:H2'	2:1B:39:A:H8	1.86	0.41
6:1G:7:LEU:HD12	6:1G:104:GLU:CA	2.50	0.41
6:1G:53:LEU:HD11	6:1G:87:PRO:HB2	2.03	0.41
7:1H:83:TYR:CE2	7:1H:138:LYS:HB2	2.56	0.41
8:1I:92:VAL:CG1	8:1I:120:ILE:HB	2.50	0.41
11:1P:47:ASP:OD2	11:1P:49:ARG:NH2	2.50	0.41
12:1Q:18:LYS:HE3	12:1Q:18:LYS:HB2	1.84	0.41
13:1R:58:GLY:HA2	13:1R:80:PHE:CE2	2.56	0.41
32:1a:50:A:H1'	32:1a:52:G:C8	2.56	0.41
32:1a:57:G:H2'	32:1a:58:C:C6	2.55	0.41
32:1a:165:C:O2'	32:1a:166:G:H5'	2.20	0.41
32:1a:376:G:H4'	47:1p:5:ARG:NH2	2.35	0.41
32:1a:528:C:H41	43:1l:49:ASN:CG	2.29	0.41
32:1a:1346:A:C4	38:1g:10:ARG:NH2	2.88	0.41
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.19	0.41
35:1d:42:GLN:HG2	35:1d:43:HIS:CD2	2.56	0.41
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.53	0.41
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	2.01	0.41
54:1y:5:G:H1'	54:1y:69:G:N2	2.36	0.41
54:1y:8:4SU:C4'	54:1y:48:C:H4'	2.49	0.41
1:2A:265:A:H1'	1:2A:266:G:O4'	2.21	0.41
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.20	0.41
1:2A:628:G:H5"	30:28:18:ALA:HB2	2.03	0.41
1:2A:1416:G:C4	1:2A:1417:C:C5	3.09	0.41
1:2A:1777:U:H2'	1:2A:1778:U:C6	2.55	0.41
1:2A:2133:G:HO2'	1:2A:2157:G:N2	2.17	0.41
1:2A:2406:U:H6	1:2A:2406:U:H2'	1.67	0.41
1:2A:2632:A:O2'	1:2A:2811:G:O2'	2.21	0.41
2:2B:52:A:H62	14:2S:33:LYS:HG3	1.84	0.41
4:2E:2:LYS:HB2	4:2E:95:ILE:HD12	2.03	0.41
5:2F:115:ALA:O	5:2F:119:ARG:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:8:PRO:CB	7:2H:51:ARG:HG2	2.47	0.41
25:23:24:LYS:HE3	25:23:24:LYS:HB2	1.80	0.41
26:24:47:GLN:O	26:24:48:ARG:C	2.64	0.41
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.20	0.41
32:2a:309:G:O2'	32:2a:607:A:N1	2.53	0.41
32:2a:953:G:N7	44:2m:104:ARG:NH2	2.68	0.41
32:2a:975:A:C4'	32:2a:976:G:H5"	2.42	0.41
32:2a:1054:C:C4	54:2w:34:G:H1'	2.55	0.41
32:2a:1055:A:C5	32:2a:1206:G:C2	3.09	0.41
32:2a:1381:U:H1'	38:2g:79:ARG:HD2	2.02	0.41
40:2i:18:PHE:CD2	40:2i:62:TYR:HD2	2.36	0.41
42:2k:69:ALA:O	42:2k:73:MET:HG3	2.21	0.41
51:2t:18:GLN:O	51:2t:22:ARG:HG3	2.21	0.41
54:2w:7:A:H3'	54:2w:8:4SU:H5"	2.03	0.41
1:1A:11:G:H2'	1:1A:12:U:C5'	2.40	0.41
1:1A:271(M):G:O2'	1:1A:271(N):U:H5"	2.21	0.41
1:1A:302:C:H2'	1:1A:303:U:C6	2.56	0.41
1:1A:641:C:O2'	1:1A:2350:C:OP1	2.31	0.41
1:1A:819:A:N3	1:1A:1189:A:C2	2.88	0.41
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.21	0.41
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.55	0.41
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.20	0.41
1:1A:2121:G:H2'	1:1A:2122:U:C6	2.55	0.41
1:1A:2328:A:H2'	1:1A:2329:G:H8	1.85	0.41
1:1A:2335:A:C8	1:1A:2337:G:C5	3.09	0.41
1:1A:2592:G:C6	1:1A:2593:U:C4	3.08	0.41
10:1O:29:ASN:OD1	10:1O:29:ASN:N	2.54	0.41
13:1R:96:ARG:O	13:1R:114:VAL:HA	2.21	0.41
21:1Z:69:THR:HA	21:1Z:89:PHE:O	2.21	0.41
24:12:1:MET:HE3	24:12:5:GLU:HB3	2.03	0.41
30:18:26:LYS:HA	30:18:26:LYS:HD3	1.88	0.41
34:1c:82:GLU:HG3	34:1c:85:ARG:NH1	2.35	0.41
34:1c:157:ILE:CD1	34:1c:166:GLU:HB2	2.49	0.41
36:1e:33:VAL:HG21	36:1e:109:ILE:HA	2.02	0.41
38:1g:69:VAL:O	38:1g:69:VAL:HG12	2.21	0.41
41:1j:70:ARG:HA	41:1j:70:ARG:HD3	1.88	0.41
51:1t:20:LEU:HD23	51:1t:20:LEU:HA	1.79	0.41
54:1y:18:G:C2	54:1y:58:A:C5	3.09	0.41
1:2A:304:G:H2'	1:2A:305:U:H6	1.86	0.41
1:2A:519:U:H2'	1:2A:520:G:C8	2.56	0.41
1:2A:659:C:H4'	5:2F:100:THR:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:869:G:O3'	12:2Q:6:ARG:NH2	2.53	0.41
1:2A:1031:G:H21	31:29:36:GLN:HE22	1.67	0.41
1:2A:1199:U:H2'	1:2A:1200:C:C6	2.55	0.41
1:2A:2147:G:C2	1:2A:2148:G:H1'	2.55	0.41
1:2A:2153:G:H2'	1:2A:2154:G:C8	2.56	0.41
1:2A:2660:A:C6	1:2A:2661:G:C6	3.09	0.41
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	2.02	0.41
4:2E:16:ARG:NH1	4:2E:173:VAL:HG13	2.36	0.41
6:2G:31:VAL:HG13	6:2G:32:PRO:O	2.21	0.41
32:2a:109:A:H2'	32:2a:326:G:H21	1.84	0.41
32:2a:245:C:O2	32:2a:283:C:N3	2.54	0.41
32:2a:437:U:O2'	35:2d:125:HIS:HE1	2.03	0.41
32:2a:1016:A:N6	32:2a:1017:G:C2	2.88	0.41
32:2a:1029:C:H1'	32:2a:1033:G:N2	2.35	0.41
32:2a:1122:U:C4	32:2a:1123:A:N7	2.88	0.41
32:2a:1212:U:H5"	32:2a:1213:A:O5'	2.20	0.41
32:2a:1220:G:O3'	50:2s:36:ARG:HD3	2.21	0.41
32:2a:1381:U:H1'	38:2g:79:ARG:HD3	2.03	0.41
33:2b:178:ARG:HH22	39:2h:68:ARG:NH1	2.16	0.41
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.85	0.41
34:2c:186:PHE:HD1	34:2c:198:VAL:O	2.03	0.41
37:2f:7:ASN:O	37:2f:88:VAL:HA	2.20	0.41
37:2f:44:GLY:HA2	37:2f:59:TYR:CE1	2.54	0.41
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	2.03	0.41
43:2l:56:ALA:O	43:2l:67:THR:HA	2.20	0.41
47:2p:52:ASP:CG	47:2p:55:ARG:HG2	2.46	0.41
51:2t:59:ALA:O	51:2t:63:ILE:HG13	2.20	0.41
51:2t:60:GLU:HG3	51:2t:81:LYS:HD2	2.03	0.41
1:1A:388:G:O2'	1:1A:389:G:N7	2.35	0.41
1:1A:395:U:O2'	1:1A:396:G:N7	2.47	0.41
1:1A:749:C:C5	1:1A:1618:A:C6	3.08	0.41
1:1A:768:G:O2'	1:1A:1379:A:N1	2.50	0.41
1:1A:818:G:H4'	1:1A:838:C:O3'	2.20	0.41
1:1A:1090:U:C4	1:1A:1091:G:N7	2.88	0.41
1:1A:2096:U:H3	1:1A:2193:G:H1	1.69	0.41
1:1A:2808:U:O2'	1:1A:2809:A:H5'	2.20	0.41
8:1I:67:ARG:O	8:1I:68:LEU:HD23	2.21	0.41
19:1X:65:ARG:HH11	19:1X:70:LEU:HD21	1.85	0.41
20:1Y:6:HIS:H	20:1Y:6:HIS:HD2	1.62	0.41
32:1a:78:G:C6	32:1a:91:C:N4	2.89	0.41
32:1a:373:A:H2'	32:1a:374:A:H8	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:574:A:N3	32:1a:883:C:H1'	2.35	0.41
32:1a:696:A:H2'	32:1a:697:U:O4'	2.20	0.41
32:1a:807:A:H2'	32:1a:808:C:C6	2.56	0.41
32:1a:866:C:C4	32:1a:867:G:H1'	2.56	0.41
32:1a:971:G:O6	32:1a:1364:U:O2'	2.37	0.41
33:1b:12:GLU:O	33:1b:15:VAL:N	2.53	0.41
33:1b:125:PRO:C	33:1b:127:ILE:H	2.28	0.41
35:1d:174:LEU:O	35:1d:186:LEU:HD11	2.21	0.41
38:1g:50:ILE:HD12	38:1g:61:VAL:HG11	2.02	0.41
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	2.02	0.41
54:1w:54:5MU:O5'	54:1w:54:5MU:H6	2.03	0.41
1:2A:300:A:OP2	20:2Y:86:ARG:NH1	2.52	0.41
1:2A:322:A:H5'	1:2A:340:A:C1'	2.47	0.41
1:2A:355:G:N1	1:2A:356:G:C5	2.89	0.41
1:2A:589:C:H2'	1:2A:590:A:C8	2.56	0.41
1:2A:738:G:C2	1:2A:759:G:C5	3.09	0.41
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.51	0.41
1:2A:2340:G:H2'	1:2A:2341:G:C8	2.54	0.41
4:2E:36:ARG:NH2	4:2E:88:GLY:O	2.53	0.41
5:2F:64:ILE:CG2	5:2F:78:ILE:HG23	2.49	0.41
6:2G:28:VAL:O	6:2G:31:VAL:HG12	2.20	0.41
6:2G:38:VAL:CG1	6:2G:93:THR:HG23	2.51	0.41
12:2Q:130:LYS:HE2	12:2Q:130:LYS:HB3	1.81	0.41
20:2Y:35:TYR:CE2	20:2Y:69:ALA:HB3	2.56	0.41
32:2a:242:C:H2'	32:2a:243:A:H5'	2.02	0.41
32:2a:422:C:H5'	32:2a:423:G:C5	2.56	0.41
32:2a:441:A:H3'	32:2a:442:C:C6	2.56	0.41
32:2a:768:A:H4'	32:2a:1523:G:N2	2.36	0.41
32:2a:927:G:H2'	32:2a:928:G:O4'	2.20	0.41
32:2a:932:C:O3'	38:2g:4:ARG:NE	2.54	0.41
32:2a:1069:C:O2'	32:2a:1192:C:H1'	2.21	0.41
32:2a:1304:G:C6	32:2a:1305:G:N1	2.89	0.41
34:2c:152:ILE:HG22	34:2c:167:TRP:CB	2.50	0.41
35:2d:57:ARG:NE	35:2d:205:GLU:OE2	2.54	0.41
40:2i:16:ARG:HE	40:2i:16:ARG:HB2	1.70	0.41
41:2j:9:ARG:O	41:2j:16:LEU:HD21	2.20	0.41
43:2l:10:LEU:O	43:2l:14:GLY:N	2.43	0.41
48:2q:66:SER:OG	48:2q:69:LYS:HB2	2.21	0.41
49:2r:45:SER:OG	49:2r:46:GLU:N	2.54	0.41
55:2x:59:A:H2'	55:2x:60:U:H5'	2.02	0.41
1:1A:151:C:H2'	1:1A:152:G:C8	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:783:A:N3	1:1A:783:A:H2'	2.36	0.41
1:1A:897:C:H1'	54:1w:56:C:C5	2.47	0.41
1:1A:910:A:N1	1:1A:2277:G:H1'	2.36	0.41
1:1A:947:G:OP2	61:1A:4250:HOH:O	2.22	0.41
1:1A:1092:C:C2'	1:1A:1093:G:H5'	2.50	0.41
1:1A:1907:G:H2'	1:1A:1908:C:C6	2.55	0.41
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.56	0.41
1:1A:2228:G:OP1	3:1D:263:ARG:NH2	2.54	0.41
1:1A:2336:A:H61	22:10:43:THR:HG22	1.84	0.41
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.21	0.41
1:1A:2869:G:H2'	1:1A:2870:C:C6	2.56	0.41
3:1D:85:ASP:HB2	3:1D:92:ILE:HG12	2.02	0.41
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.65	0.41
7:1H:56:SER:OG	7:1H:57:ASP:N	2.54	0.41
10:1O:7:TYR:OH	10:1O:44:LYS:HG3	2.20	0.41
12:1Q:56:ARG:HE	12:1Q:56:ARG:HB3	1.68	0.41
12:1Q:57:HIS:HD2	12:1Q:117:ALA:HB2	1.85	0.41
32:1a:293:G:C5	32:1a:294:U:C5	3.09	0.41
32:1a:833:U:H2'	32:1a:834:C:H6	1.85	0.41
32:1a:986:A:H1'	50:1s:54:GLY:O	2.20	0.41
32:1a:1067:A:H8	32:1a:1067:A:O5'	2.03	0.41
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.83	0.41
32:1a:1155:G:H2'	32:1a:1156:G:O4'	2.21	0.41
32:1a:1183:A:O2'	32:1a:1184:G:H5"	2.21	0.41
32:1a:1261:A:C8	32:1a:1262:C:C5	3.09	0.41
32:1a:1350:A:C6	32:1a:1351:U:N3	2.89	0.41
34:1c:104:GLN:HE21	34:1c:105:GLU:N	2.14	0.41
39:1h:120:THR:H	39:1h:123:GLU:HB2	1.86	0.41
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.55	0.41
1:2A:637:A:C6	1:2A:652:C:H4'	2.56	0.41
1:2A:775:G:O3'	61:2A:3963:HOH:O	2.22	0.41
1:2A:850:C:O3'	25:23:49:LYS:HE2	2.21	0.41
1:2A:861:A:N6	1:2A:916:G:O2'	2.53	0.41
1:2A:878:A:N1	1:2A:879:G:C8	2.88	0.41
1:2A:2136:C:N4	1:2A:2155:G:N1	2.66	0.41
1:2A:2274:A:O2'	1:2A:2276:G:OP1	2.23	0.41
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.56	0.41
1:2A:2786:U:O2'	1:2A:2787:C:H5'	2.21	0.41
6:2G:18:GLU:HB3	6:2G:175:LEU:HD21	2.03	0.41
7:2H:88:LEU:CD1	7:2H:165:ALA:HA	2.43	0.41
8:2I:87:LYS:C	8:2I:87:LYS:HE3	2.45	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:128:LEU:HD12	8:2I:142:VAL:HG21	2.03	0.41
9:2N:20:GLY:N	9:2N:59:LYS:O	2.44	0.41
10:2O:43:VAL:HG23	10:2O:56:ASP:O	2.21	0.41
12:2Q:54:MET:HB2	12:2Q:64:ILE:CD1	2.50	0.41
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.36	0.41
21:2Z:3:TYR:O	21:2Z:57:ILE:HA	2.20	0.41
28:26:35:GLU:O	28:26:36:LEU:HD23	2.21	0.41
32:2a:26:A:N6	32:2a:558:G:O2'	2.48	0.41
32:2a:872:A:O3'	32:2a:873:A:H2'	2.21	0.41
32:2a:978:A:O2'	32:2a:1322:C:N3	2.44	0.41
32:2a:1316:G:H22	32:2a:1319:A:C5'	2.34	0.41
33:2b:30:ARG:HG3	33:2b:31:TYR:N	2.36	0.41
34:2c:112:SER:OG	34:2c:114:PRO:HD2	2.21	0.41
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	2.03	0.41
39:2h:12:ARG:CD	39:2h:26:VAL:HG12	2.51	0.41
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	2.03	0.41
41:2j:9:ARG:HH22	41:2j:69:ASN:HD21	1.68	0.41
42:2k:52:GLY:H	42:2k:55:LYS:NZ	2.19	0.41
43:2l:82:VAL:O	43:2l:106:ASP:HB2	2.20	0.41
55:2x:50:U:H3	55:2x:64:G:H1	1.67	0.41
54:2y:45:U:H6	54:2y:45:U:OP2	2.02	0.41
1:1A:261:G:O2'	1:1A:610:G:O2'	2.22	0.41
1:1A:362:U:H6	1:1A:362:U:H2'	1.49	0.41
1:1A:391:G:H1'	1:1A:411:G:O4'	2.20	0.41
1:1A:601:C:O2'	1:1A:605:C:OP1	2.37	0.41
1:1A:923:C:O5'	1:1A:923:C:H6	2.03	0.41
1:1A:1416:G:O2'	1:1A:1417:C:OP2	2.30	0.41
1:1A:1680:U:O2	1:1A:1763:G:H3'	2.20	0.41
1:1A:1783:A:H5'	1:1A:2608:G:H4'	2.03	0.41
1:1A:2056:G:C2	1:1A:2057:A:C8	3.09	0.41
1:1A:2141:G:C6	1:1A:2142:C:C2	3.08	0.41
1:1A:2259:G:H1'	1:1A:2427:C:C2	2.56	0.41
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.61	0.41
1:1A:2497:A:H5"	61:1A:4680:HOH:O	2.20	0.41
1:1A:2542:A:H4'	1:1A:2543:G:H8	1.86	0.41
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.56	0.41
2:1B:89:G:H8	2:1B:89:G:OP2	2.04	0.41
5:1F:9:ILE:HD12	5:1F:22:ALA:CB	2.50	0.41
6:1G:19:LEU:HD23	6:1G:23:PHE:HE2	1.85	0.41
6:1G:34:LEU:HD23	6:1G:34:LEU:HA	1.82	0.41
6:1G:56:ALA:O	6:1G:59:GLU:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:30:LEU:HA	8:1I:30:LEU:HD23	1.73	0.41
13:1R:32:GLY:O	13:1R:115:GLU:HA	2.20	0.41
13:1R:33:ARG:NH2	13:1R:115:GLU:OE1	2.48	0.41
15:1T:28:VAL:O	15:1T:46:GLU:HA	2.21	0.41
15:1T:35:LYS:HG3	15:1T:40:THR:HG22	2.03	0.41
19:1X:35:THR:HG23	19:1X:37:THR:N	2.36	0.41
20:1Y:19:LYS:HE2	20:1Y:19:LYS:HB3	1.81	0.41
24:12:21:LEU:HD23	24:12:21:LEU:HA	1.84	0.41
32:1a:175:C:H2'	32:1a:176:C:C6	2.56	0.41
32:1a:189(J):G:C6	32:1a:189(K):U:C4	3.09	0.41
32:1a:1168:A:C6	32:1a:1169:A:C6	3.09	0.41
32:1a:1189:C:OP1	34:1c:5:ILE:HD12	2.19	0.41
32:1a:1401:G:N7	61:1a:1945:HOH:O	2.37	0.41
33:1b:163:PHE:HD1	33:1b:185:ILE:CG1	2.33	0.41
34:1c:114:PRO:O	34:1c:118:GLN:NE2	2.54	0.41
35:1d:121:VAL:O	35:1d:134:ASP:HA	2.21	0.41
35:1d:153:ARG:O	35:1d:181:MET:HE1	2.21	0.41
35:1d:173:TRP:CZ3	35:1d:174:LEU:HD11	2.56	0.41
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.85	0.41
39:1h:4:ASP:CG	39:1h:85:ARG:HH21	2.28	0.41
39:1h:112:LEU:HA	39:1h:134:ILE:HG12	2.03	0.41
40:1i:42:ARG:NH2	40:1i:71:SER:OG	2.54	0.41
40:1i:50:LEU:CD2	40:1i:81:ILE:HD11	2.51	0.41
50:1s:20:LEU:H	50:1s:20:LEU:HG	1.63	0.41
51:1t:82:SER:O	51:1t:86:ARG:HG3	2.20	0.41
54:1w:14:A:C6	54:1w:22:G:C4	3.09	0.41
54:1w:25:C:C4	54:1w:26:A:N7	2.89	0.41
54:1w:45:U:H5'	54:1w:46:G7M:OP2	2.21	0.41
54:1w:63:G:H2'	54:1w:64:A:O4'	2.21	0.41
54:1y:19:G:C4'	54:1y:57:G:H22	2.34	0.41
1:2A:42:G:H2'	1:2A:43:A:O4'	2.20	0.41
1:2A:271(N):U:H2'	1:2A:271(N):U:OP1	2.20	0.41
1:2A:644:A:H4'	1:2A:645:C:C4	2.56	0.41
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.55	0.41
1:2A:996:A:C2	1:2A:997:G:C8	3.09	0.41
1:2A:1140:C:OP1	9:2N:23:LEU:HB3	2.21	0.41
1:2A:1231:G:H2'	1:2A:1232:G:C8	2.55	0.41
1:2A:1470:G:H5"	1:2A:1471:A:OP1	2.21	0.41
1:2A:1540:U:C2'	1:2A:1541:G:H5'	2.51	0.41
1:2A:1707:G:C5	1:2A:1756:G:C6	3.09	0.41
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2099:U:O2	1:2A:2099:U:H2'	2.20	0.41
1:2A:2261:C:C2	1:2A:2280:G:N2	2.88	0.41
1:2A:2271:G:C6	1:2A:2272:U:C4	3.09	0.41
1:2A:2274:A:C6	1:2A:2276:G:C8	3.09	0.41
1:2A:2355:C:H1'	22:20:39:ARG:HH21	1.85	0.41
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.56	0.41
1:2A:2471:C:N4	1:2A:2476:A:O2'	2.43	0.41
1:2A:2655:G:H1'	1:2A:2656:U:H5	1.86	0.41
1:2A:2730:C:H4'	4:2E:168:MET:O	2.21	0.41
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.53	0.41
4:2E:70:ALA:O	4:2E:72:VAL:HG22	2.21	0.41
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.47	0.41
7:2H:127:GLU:C	7:2H:129:THR:H	2.28	0.41
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	2.03	0.41
11:2P:101:VAL:HA	11:2P:106:LEU:O	2.21	0.41
21:2Z:28:MET:HA	21:2Z:88:PHE:O	2.21	0.41
21:2Z:146:ILE:HG23	21:2Z:174:VAL:O	2.21	0.41
22:20:48:GLY:HA3	22:20:80:HIS:ND1	2.36	0.41
26:24:57:GLU:CB	26:24:58:ARG:HA	2.51	0.41
28:26:12:GLU:OE1	28:26:19:ARG:NH1	2.54	0.41
32:2a:16:A:N3	32:2a:1080:A:O2'	2.46	0.41
32:2a:191:G:C6	32:2a:192:U:C4	3.09	0.41
32:2a:432:A:C8	32:2a:433:C:C5	3.09	0.41
32:2a:568:G:N2	32:2a:883:C:C2	2.89	0.41
32:2a:770:C:H5"	61:2a:1934:HOH:O	2.21	0.41
32:2a:863:U:H2'	32:2a:865:A:OP2	2.21	0.41
32:2a:1126:U:C6	32:2a:1281:U:C5	3.09	0.41
32:2a:1144:G:N2	32:2a:1146:A:H62	2.19	0.41
32:2a:1183:A:H3'	32:2a:1184:G:C5'	2.50	0.41
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.54	0.41
32:2a:1263:C:O2	32:2a:1273:G:C2	2.73	0.41
32:2a:1266:G:N2	32:2a:1268:A:H3'	2.35	0.41
32:2a:1299:A:O2'	32:2a:1300:G:H4'	2.21	0.41
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	2.02	0.41
32:2a:1321:C:C2	32:2a:1322:C:C5	3.09	0.41
33:2b:72:GLY:O	33:2b:94:ASN:HA	2.21	0.41
34:2c:56:ASP:O	34:2c:57:ILE:HG12	2.20	0.41
34:2c:131:ARG:HD3	34:2c:166:GLU:CD	2.45	0.41
37:2f:61:LEU:HB3	37:2f:63:TYR:CE2	2.56	0.41
39:2h:49:GLU:HG2	39:2h:62:TYR:HE2	1.86	0.41
42:2k:17:GLY:O	42:2k:80:VAL:HA	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.85	0.41
54:2w:19:G:N2	54:2w:57:G:H1'	2.35	0.41
55:2x:44:A:H2'	55:2x:45:G:O4'	2.21	0.41
54:2y:65:G:C2	54:2y:66:U:C4	3.09	0.41
1:1A:2130:U:H3'	1:1A:2130:U:C6	2.56	0.41
1:1A:2134:A:H2'	1:1A:2135:A:N7	2.36	0.41
2:1B:103:G:H21	21:1Z:73:GLN:NE2	2.18	0.41
3:1D:4:LYS:HG2	3:1D:5:LYS:N	2.36	0.41
3:1D:182:LEU:HD23	3:1D:182:LEU:HA	1.86	0.41
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.21	0.41
7:1H:19:VAL:HA	7:1H:24:VAL:HG12	2.03	0.41
7:1H:121:ILE:HD13	7:1H:121:ILE:HA	1.92	0.41
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.21	0.41
18:1W:45:TYR:CZ	18:1W:49:LYS:HE3	2.56	0.41
21:1Z:52:SER:C	21:1Z:54:HIS:N	2.76	0.41
32:1a:173:U:C2	32:1a:197:A:N1	2.89	0.41
32:1a:204:U:H4'	32:1a:216:G:H5"	2.02	0.41
32:1a:405:U:OP2	35:1d:3:ARG:NH2	2.54	0.41
32:1a:452:A:H4'	47:1p:72:ARG:NH2	2.35	0.41
32:1a:901:A:C5	32:1a:902:G:H1'	2.56	0.41
32:1a:1140:C:H2'	32:1a:1141:C:C6	2.56	0.41
33:1b:77:ALA:HB2	33:1b:211:ILE:HG21	2.03	0.41
33:1b:101:MET:HA	33:1b:108:ILE:HD12	2.03	0.41
37:1f:91:VAL:HG11	49:1r:72:ARG:HH12	1.85	0.41
41:1j:49:VAL:CG2	45:1n:41:ARG:HB2	2.41	0.41
44:1m:91:ARG:HA	44:1m:91:ARG:HD2	1.88	0.41
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	2.02	0.41
50:1s:39:THR:HG22	50:1s:40:ILE:N	2.35	0.41
54:1w:13:C:H2'	54:1w:14:A:H5"	2.03	0.41
1:2A:68:G:H2'	1:2A:69:C:C6	2.56	0.41
1:2A:900:A:C2'	1:2A:901:A:H8	2.28	0.41
1:2A:1005:C:C2	1:2A:1143:A:C6	3.09	0.41
1:2A:1417:C:H2'	1:2A:1418:G:O4'	2.21	0.41
1:2A:1670:C:C5	1:2A:1671:U:C4	3.08	0.41
1:2A:2735:G:H2'	1:2A:2736:G:H8	1.86	0.41
1:2A:2750:A:H1'	1:2A:2752:C:N4	2.36	0.41
6:2G:37:VAL:O	6:2G:94:LEU:N	2.52	0.41
7:2H:164:TYR:HB2	7:2H:167:GLU:HB2	2.03	0.41
8:2I:93:THR:N	8:2I:96:ASP:HB2	2.36	0.41
10:2O:2:ILE:HD11	10:2O:82:ASN:HB3	2.03	0.41
10:2O:119:PRO:HB2	15:2T:68:TYR:CZ	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:6:HIS:CD2	20:2Y:6:HIS:N	2.84	0.41
26:24:26:SER:OG	26:24:27:THR:N	2.54	0.41
32:2a:5:U:H6	32:2a:5:U:H2'	1.68	0.41
32:2a:974:A:OP2	45:2n:29:ARG:NH2	2.43	0.41
32:2a:1207:2MG:C5	32:2a:1208:C:C5	3.09	0.41
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.56	0.41
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.21	0.41
32:2a:1509:C:H2'	32:2a:1510:U:O4'	2.21	0.41
33:2b:44:LEU:HA	33:2b:47:THR:OG1	2.21	0.41
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.21	0.41
42:2k:32:ILE:HD13	42:2k:72:ALA:HB2	2.03	0.41
47:2p:40:ASP:O	47:2p:48:TRP:HB2	2.21	0.41
51:2t:26:ASN:O	51:2t:30:LYS:HG3	2.21	0.41
55:2x:22:G:H2'	55:2x:23:C:H6	1.86	0.41
1:1A:224:G:H2'	1:1A:225:A:O4'	2.20	0.40
1:1A:361:G:C6	1:1A:362:U:O4	2.74	0.40
1:1A:1267:U:OP2	1:1A:2012:G:N1	2.41	0.40
1:1A:1297:C:O2'	1:1A:1302:A:N1	2.46	0.40
1:1A:1545:A:H2'	1:1A:1546:C:O4'	2.21	0.40
1:1A:2291:U:O2'	1:1A:2374:C:O2	2.39	0.40
1:1A:2881:C:H2'	1:1A:2882:A:O4'	2.21	0.40
4:1E:96:PHE:O	4:1E:175:VAL:HG21	2.21	0.40
6:1G:28:VAL:O	6:1G:31:VAL:HG13	2.21	0.40
6:1G:96:ARG:H	6:1G:96:ARG:HG3	1.57	0.40
11:1P:7:ARG:HH21	11:1P:7:ARG:HD3	1.74	0.40
13:1R:53:HIS:O	13:1R:56:LYS:HB2	2.21	0.40
19:1X:35:THR:HG22	19:1X:38:GLU:H	1.87	0.40
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.20	0.40
32:1a:542:G:H5'	35:1d:41:GLY:HA3	2.02	0.40
32:1a:688:G:H2'	32:1a:689:C:C6	2.56	0.40
32:1a:1014:A:H2'	32:1a:1015:A:C8	2.56	0.40
32:1a:1313:U:OP2	50:1s:5:LEU:HG	2.21	0.40
33:1b:24:TRP:H	33:1b:24:TRP:HD1	1.68	0.40
33:1b:77:ALA:HA	33:1b:80:ILE:HG23	2.02	0.40
34:1c:65:ALA:HA	34:1c:100:ALA:H	1.86	0.40
36:1e:75:THR:HG23	36:1e:76:ILE:N	2.35	0.40
46:1o:65:ARG:O	46:1o:68:ARG:HB3	2.21	0.40
1:2A:27:G:C2	1:2A:512:G:N3	2.89	0.40
1:2A:272:G:H4'	1:2A:272(A):U:H5"	2.02	0.40
1:2A:1255:U:O5'	1:2A:1256:G:H5"	2.21	0.40
1:2A:1419:A:O2'	1:2A:1421:G:N7	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1582:C:H2'	1:2A:1583:A:H8	1.86	0.40
1:2A:1857:G:O2'	1:2A:1885:A:N6	2.50	0.40
1:2A:2029:G:H2'	1:2A:2031:A:OP1	2.21	0.40
1:2A:2261:C:O2'	1:2A:2262:U:H5'	2.21	0.40
1:2A:2277:G:OP2	22:20:10:THR:HG21	2.20	0.40
1:2A:2365:G:P	22:20:55:ARG:HG2	2.62	0.40
1:2A:2519:U:C6	1:2A:2542:A:N6	2.89	0.40
2:2B:7:G:H2'	2:2B:8:U:O4'	2.22	0.40
9:2N:67:LEU:HA	9:2N:87:LEU:HD23	2.02	0.40
11:2P:80:TYR:HA	11:2P:111:ARG:O	2.21	0.40
19:2X:64:LYS:HA	19:2X:64:LYS:HD3	1.88	0.40
21:2Z:102:LEU:HB3	21:2Z:104:PHE:HE2	1.84	0.40
32:2a:445:G:H2'	32:2a:446:G:C8	2.55	0.40
32:2a:565:U:C4	32:2a:566:G:C5	3.08	0.40
32:2a:658:G:OP1	46:2o:31:LEU:HD13	2.21	0.40
32:2a:728:A:N1	32:2a:729:A:C6	2.89	0.40
32:2a:872:A:C4	32:2a:874:G:N7	2.89	0.40
32:2a:900:A:H2'	32:2a:901:A:C8	2.57	0.40
32:2a:957:U:H2'	32:2a:958:A:H3'	2.03	0.40
32:2a:1240:U:O4	38:2g:30:ILE:HG23	2.21	0.40
33:2b:35:GLU:HA	33:2b:39:ILE:O	2.21	0.40
33:2b:178:ARG:NH2	39:2h:68:ARG:HH12	2.18	0.40
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.21	0.40
35:2d:4:TYR:O	35:2d:4:TYR:CD2	2.74	0.40
35:2d:173:TRP:HB2	35:2d:187:ARG:O	2.22	0.40
38:2g:72:ARG:HH11	38:2g:72:ARG:HG3	1.85	0.40
40:2i:8:GLY:HA2	40:2i:79:LEU:HB3	2.01	0.40
43:2l:22:SER:OG	43:2l:23:LYS:N	2.53	0.40
44:2m:72:ALA:O	44:2m:75:ALA:HB3	2.21	0.40
1:1A:858:U:O2	1:1A:2268:A:H2'	2.20	0.40
1:1A:1093:G:N2	1:1A:1097:U:C6	2.89	0.40
1:1A:1358:G:OP2	61:1A:4243:HOH:O	2.20	0.40
2:1B:66:A:H61	2:1B:109:C:C5'	2.34	0.40
13:1R:55:ALA:HA	13:1R:80:PHE:CZ	2.55	0.40
15:1T:106:SER:O	15:1T:110:ILE:HG13	2.20	0.40
18:1W:18:ARG:HG3	18:1W:76:VAL:HB	2.02	0.40
29:17:46:VAL:HG22	29:17:48:LYS:HE2	2.02	0.40
32:1a:154:C:N3	32:1a:168:G:C2	2.88	0.40
32:1a:226:G:H2'	32:1a:227:G:O4'	2.21	0.40
32:1a:528:C:H5'	32:1a:529:G:OP2	2.21	0.40
32:1a:865:A:H5'	32:1a:1078:U:C4	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1084:G:C5	32:1a:1085:U:C4	3.09	0.40
32:1a:1179:A:O3'	40:1i:103:THR:OG1	2.32	0.40
32:1a:1316:G:N2	32:1a:1318:A:H3'	2.36	0.40
34:1c:25:GLY:O	34:1c:27:LYS:N	2.54	0.40
35:1d:155:LEU:H	35:1d:158:ILE:HD11	1.86	0.40
36:1e:144:THR:O	36:1e:148:VAL:HG13	2.21	0.40
38:1g:72:ARG:H	38:1g:72:ARG:HD3	1.87	0.40
40:1i:9:ARG:O	40:1i:104:ARG:HG3	2.22	0.40
44:1m:51:ALA:O	44:1m:55:ARG:HB2	2.21	0.40
1:2A:384:U:H2'	1:2A:385:C:H6	1.85	0.40
1:2A:652(A):A:H3'	1:2A:652(B):A:H5"	2.02	0.40
1:2A:1022:G:C6	1:2A:1140:C:C4	3.09	0.40
1:2A:1358:G:OP2	61:2A:3964:HOH:O	2.22	0.40
1:2A:2526:G:C5	1:2A:2527:C:C5	3.09	0.40
2:2B:59:A:H2'	2:2B:60:C:O4'	2.21	0.40
2:2B:72:G:O2'	2:2B:105:A:N6	2.54	0.40
5:2F:125:LEU:HD23	5:2F:125:LEU:HA	1.89	0.40
5:2F:196:LEU:HD23	5:2F:196:LEU:HA	1.92	0.40
9:2N:103:VAL:O	9:2N:107:LEU:HG	2.20	0.40
14:2S:16:ASN:HA	14:2S:19:LYS:HG3	2.03	0.40
14:2S:71:ARG:HD2	14:2S:71:ARG:HH11	1.77	0.40
32:2a:154:C:O2'	32:2a:155:C:H5'	2.21	0.40
32:2a:540:G:C6	32:2a:541:G:C5	3.09	0.40
32:2a:1084:G:C5	32:2a:1085:U:C4	3.09	0.40
32:2a:1316:G:H22	32:2a:1319:A:H5'	1.85	0.40
36:2e:89:ILE:HD12	36:2e:121:LYS:O	2.22	0.40
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	2.01	0.40
36:2e:131:ILE:HA	36:2e:134:ALA:HB3	2.02	0.40
47:2p:2:VAL:O	47:2p:64:ALA:HA	2.22	0.40
47:2p:28:ARG:NH1	47:2p:29:ASP:OD2	2.55	0.40
50:2s:17:GLU:HA	50:2s:20:LEU:HB3	2.04	0.40
54:2w:8:4SU:S4	54:2w:14:A:N7	2.94	0.40
1:1A:403:U:H4'	1:1A:404:C:H5'	2.03	0.40
1:1A:658:C:H2'	1:1A:659:C:C6	2.56	0.40
1:1A:1831:G:H2'	1:1A:1832:C:C6	2.56	0.40
1:1A:1916:A:H2'	1:1A:1917:PSU:H6	1.87	0.40
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.56	0.40
1:1A:2647:U:H2'	1:1A:2648:C:C6	2.56	0.40
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.85	0.40
1:1A:2849:U:N3	1:1A:2867:G:O4'	2.53	0.40
1:1A:2850:A:N7	1:1A:2868:A:O2'	2.48	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:57:VAL:HG13	5:1F:59:TYR:CD2	2.57	0.40
6:1G:99:MET:HE2	6:1G:99:MET:HB3	1.83	0.40
7:1H:140:LYS:HB2	7:1H:140:LYS:HE3	1.89	0.40
11:1P:135:LEU:HD23	11:1P:135:LEU:HA	1.67	0.40
18:1W:18:ARG:HH11	18:1W:18:ARG:HD2	1.70	0.40
21:1Z:1:MET:HB3	21:1Z:55:HIS:HB3	2.02	0.40
22:10:43:THR:O	22:10:43:THR:HG23	2.21	0.40
24:12:41:ILE:H	24:12:41:ILE:HG12	1.62	0.40
32:1a:161:A:N1	32:1a:347:G:O2'	2.54	0.40
32:1a:198:G:C6	32:1a:220:G:N3	2.89	0.40
32:1a:359:U:H2'	32:1a:360:A:C8	2.56	0.40
32:1a:505:G:H5'	32:1a:534:U:H2'	2.03	0.40
32:1a:523:A:N1	43:1l:92:0TD:H5	2.36	0.40
32:1a:722:A:N6	32:1a:724:G:C2	2.89	0.40
32:1a:1003:G:C4	32:1a:1004:A:H2	2.38	0.40
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.20	0.40
35:1d:185:PHE:HZ	35:1d:188:LEU:HD23	1.87	0.40
35:1d:187:ARG:NH1	35:1d:190:ASP:OD1	2.44	0.40
43:1l:54:LYS:N	43:1l:54:LYS:HD2	2.36	0.40
43:1l:88:GLY:O	43:1l:99:HIS:CD2	2.74	0.40
48:1q:58:GLU:OE1	48:1q:75:ARG:NE	2.54	0.40
54:1w:30:G:C2	54:1w:41:C:C2	3.10	0.40
1:2A:900:A:HO2'	1:2A:901:A:P	2.44	0.40
1:2A:921:G:H4'	1:2A:2269:A:C5	2.57	0.40
1:2A:1529:G:C5	1:2A:1530:C:C4	3.10	0.40
1:2A:1750:G:N3	1:2A:2860:A:H2	2.19	0.40
1:2A:2175:C:O5'	1:2A:2175:C:H6	2.03	0.40
1:2A:2469:A:H3'	1:2A:2470:G:H8	1.86	0.40
1:2A:2729:G:H2'	1:2A:2730:C:C6	2.56	0.40
1:2A:2872:G:O2'	1:2A:2873:A:H5'	2.21	0.40
1:2A:2886:G:H2'	1:2A:2887:U:C6	2.56	0.40
2:2B:11:C:H3'	2:2B:12:C:H6	1.86	0.40
2:2B:11:C:H3'	2:2B:12:C:C6	2.56	0.40
2:2B:43:C:H5"	26:24:1:MET:HG2	2.03	0.40
2:2B:80:U:H2'	2:2B:81:G:N7	2.37	0.40
11:2P:135:LEU:HD23	11:2P:135:LEU:HA	1.92	0.40
16:2U:104:GLN:CD	16:2U:105:VAL:HG23	2.46	0.40
22:20:31:VAL:HB	22:20:35:ASN:HB2	2.03	0.40
32:2a:176:C:H2'	32:2a:177:C:C6	2.57	0.40
32:2a:452:A:H4'	47:2p:72:ARG:NH2	2.36	0.40
32:2a:510:A:H5"	32:2a:511:C:P	2.61	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:575:G:C6	32:2a:821:G:N7	2.90	0.40
32:2a:874:G:O2'	32:2a:875:C:H5'	2.21	0.40
32:2a:1228:C:C4	32:2a:1229:A:N7	2.89	0.40
32:2a:1229:A:OP1	44:2m:116:THR:OG1	2.39	0.40
32:2a:1381:U:O2	32:2a:1381:U:H2'	2.20	0.40
34:2c:23:TYR:CG	34:2c:24:ALA:N	2.89	0.40
34:2c:31:HIS:HA	34:2c:34:LEU:HB3	2.04	0.40
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.56	0.40
36:2e:103:GLY:O	36:2e:104:ALA:C	2.63	0.40
38:2g:38:LEU:HA	38:2g:41:ARG:HB3	2.03	0.40
38:2g:147:ALA:C	38:2g:149:ARG:H	2.28	0.40
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.21	0.40
43:2l:57:LYS:HA	43:2l:67:THR:HA	2.04	0.40
45:2n:47:LEU:HB3	45:2n:52:GLN:HB2	2.03	0.40
50:2s:13:ASP:HA	50:2s:16:LEU:HB3	2.02	0.40
50:2s:39:THR:HG22	50:2s:40:ILE:O	2.22	0.40
55:2x:55:PSU:N3	55:2x:58:A:OP2	2.38	0.40
1:1A:483:A:O4'	20:1Y:48:ALA:HB1	2.22	0.40
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.57	0.40
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.56	0.40
1:1A:1829:A:H2'	1:1A:1830:C:H5'	2.04	0.40
1:1A:2032:G:H1'	4:1E:145:LYS:HD3	2.04	0.40
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.57	0.40
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.87	0.40
1:1A:2321:G:N3	1:1A:2321:G:H2'	2.36	0.40
6:1G:18:GLU:OE2	6:1G:22:ARG:NH1	2.43	0.40
9:1N:131:GLN:H	9:1N:131:GLN:HG2	1.56	0.40
10:1O:70:LYS:HB3	10:1O:70:LYS:HE2	1.91	0.40
19:1X:35:THR:HG23	19:1X:37:THR:H	1.86	0.40
25:13:23:LEU:HD13	25:13:50:VAL:HG21	2.03	0.40
32:1a:198:G:N7	32:1a:220:G:N2	2.70	0.40
32:1a:392:G:H2'	32:1a:393:A:H8	1.86	0.40
32:1a:749:C:H2'	32:1a:750:G:H8	1.86	0.40
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.22	0.40
32:1a:1004:A:H5"	32:1a:1025:U:C5	2.56	0.40
32:1a:1152:A:C5	32:1a:1153:C:C5	3.09	0.40
38:1g:58:PRO:O	38:1g:61:VAL:N	2.49	0.40
55:1x:33:U:O2'	55:1x:35:A:N7	2.42	0.40
1:2A:45:C:OP2	1:2A:215:G:H5'	2.22	0.40
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.54	0.40
1:2A:1418:G:H8	1:2A:1418:G:O5'	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.42	0.40
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.37	0.40
1:2A:2137:C:N3	1:2A:2155:G:C6	2.89	0.40
1:2A:2183:C:C2	1:2A:2184:G:C8	3.10	0.40
1:2A:2536:G:H2'	1:2A:2537:U:O4'	2.21	0.40
2:2B:28:C:N3	2:2B:56:G:N1	2.45	0.40
7:2H:9:ILE:N	7:2H:50:VAL:O	2.38	0.40
14:2S:20:ARG:HA	14:2S:20:ARG:HD2	1.77	0.40
15:2T:105:LEU:HB3	15:2T:110:ILE:HG13	2.04	0.40
18:2W:11:ARG:HD2	18:2W:11:ARG:HA	1.85	0.40
21:2Z:55:HIS:CE1	61:2Z:401:HOH:O	2.74	0.40
22:20:51:VAL:N	22:20:62:LEU:HD12	2.36	0.40
28:26:6:ARG:NE	28:26:24:GLU:OE2	2.49	0.40
32:2a:27:G:H8	32:2a:27:G:O5'	2.04	0.40
32:2a:542:G:P	35:2d:10:ARG:HH22	2.40	0.40
32:2a:973:G:H3'	32:2a:974:A:H5"	2.04	0.40
32:2a:993:G:N3	32:2a:993:G:H2'	2.37	0.40
32:2a:1157:A:C8	32:2a:1181:G:C6	3.10	0.40
32:2a:1238:A:H2	32:2a:1241:G:N3	2.19	0.40
32:2a:1251:A:H5"	40:2i:12:GLU:OE1	2.21	0.40
34:2c:18:TRP:CD1	45:2n:55:GLY:H	2.39	0.40
34:2c:101:LEU:HD12	34:2c:102:ASN:H	1.86	0.40
34:2c:124:ILE:CG2	34:2c:130:VAL:HG13	2.52	0.40
34:2c:184:TYR:CD1	34:2c:201:TYR:CZ	3.10	0.40
43:2l:53:ARG:HB3	43:2l:69:TYR:HE1	1.87	0.40
48:2q:89:LEU:HA	48:2q:89:LEU:HD23	1.63	0.40
1:1A:879:G:H8	1:1A:879:G:O5'	2.05	0.40
1:1A:918:A:H5"	2:1B:98:G:O2'	2.22	0.40
1:1A:1753:G:N1	1:1A:1756:G:OP2	2.52	0.40
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.87	0.40
5:1F:110:LEU:HD11	5:1F:181:LEU:HG	2.03	0.40
32:1a:189:G:C6	32:1a:189(L):G:N1	2.90	0.40
32:1a:325:A:H2'	32:1a:326:G:O4'	2.21	0.40
32:1a:545:C:H5'	35:1d:72:GLU:HG2	2.04	0.40
32:1a:947:G:C6	32:1a:948:C:C4	3.09	0.40
32:1a:985:C:H2'	32:1a:986:A:H8	1.85	0.40
40:1i:115:GLY:O	40:1i:116:LYS:HD3	2.21	0.40
50:1s:16:LEU:O	50:1s:20:LEU:HG	2.22	0.40
54:1y:19:G:N2	54:1y:56:C:N3	2.70	0.40
1:2A:839:U:H2'	1:2A:840:C:H6	1.86	0.40
1:2A:1270:C:H4'	1:2A:1325:G:N7	2.37	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1796:U:H4'	3:2D:256:GLY:N	2.36	0.40
1:2A:2050:C:H2'	1:2A:2051:A:O4'	2.22	0.40
1:2A:2365:G:H4'	22:20:60:PHE:CZ	2.56	0.40
1:2A:2895:U:H2'	1:2A:2896:C:O4'	2.20	0.40
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	2.02	0.40
7:2H:68:THR:O	7:2H:71:LEU:N	2.54	0.40
7:2H:77:LYS:HE3	7:2H:83:TYR:HE1	1.87	0.40
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	2.03	0.40
21:2Z:102:LEU:HB2	21:2Z:122:ARG:O	2.22	0.40
32:2a:195:A:C6	32:2a:196:A:N1	2.90	0.40
32:2a:609:A:C5	32:2a:610:G:C8	3.09	0.40
32:2a:1072:G:H21	33:2b:107:THR:HG21	1.86	0.40
32:2a:1207:2MG:C6	32:2a:1208:C:C4	3.10	0.40
32:2a:1424:C:H2'	32:2a:1425:U:H6	1.86	0.40
32:2a:1519:MA6:H3'	32:2a:1520:G:O4'	2.21	0.40
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	2.03	0.40
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	2.02	0.40
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.35	0.40
35:2d:31:CYS:CB	60:2d:302:SF4:S3	3.09	0.40
35:2d:152:SER:O	35:2d:158:ILE:HD12	2.21	0.40
38:2g:16:LEU:CD1	40:2i:42:ARG:HA	2.52	0.40
40:2i:102:LEU:HD12	40:2i:103:THR:H	1.86	0.40
46:2o:70:LEU:HD11	46:2o:77:ARG:HB2	2.04	0.40
48:2q:40:LYS:HD3	48:2q:42:TYR:CZ	2.56	0.40

There are no symmetry-related clashes.

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	
3	1D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	2D	273/276 (99%)	255 (93%)	18 (7%)	0	100	100
4	1E	202/206 (98%)	191 (95%)	10 (5%)	1 (0%)	25	44
4	2E	202/206 (98%)	192 (95%)	10 (5%)	0	100	100
5	1F	201/210 (96%)	196 (98%)	5 (2%)	0	100	100
5	2F	201/210 (96%)	186 (92%)	15 (8%)	0	100	100
6	1G	179/182 (98%)	167 (93%)	11 (6%)	1 (1%)	22	39
6	2G	179/182 (98%)	153 (86%)	24 (13%)	2 (1%)	12	23
7	1H	172/180 (96%)	162 (94%)	10 (6%)	0	100	100
7	2H	172/180 (96%)	156 (91%)	16 (9%)	0	100	100
8	1I	144/148 (97%)	125 (87%)	19 (13%)	0	100	100
8	2I	144/148 (97%)	126 (88%)	18 (12%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	125 (91%)	13 (9%)	0	100	100
10	1O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
10	2O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
11	1P	147/150 (98%)	135 (92%)	11 (8%)	1 (1%)	19	35
11	2P	147/150 (98%)	126 (86%)	20 (14%)	1 (1%)	19	35
12	1Q	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
12	2Q	139/141 (99%)	125 (90%)	14 (10%)	0	100	100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	106 (91%)	10 (9%)	0	100	100
14	1S	108/112 (96%)	100 (93%)	7 (6%)	1 (1%)	14	28
14	2S	108/112 (96%)	97 (90%)	11 (10%)	0	100	100
15	1T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
15	2T	129/146 (88%)	124 (96%)	5 (4%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	96 (97%)	3 (3%)	0	100	100
17	2V	99/101 (98%)	90 (91%)	9 (9%)	0	100	100
18	1W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
19	1X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	12 23
19	2X	93/96 (97%)	86 (92%)	7 (8%)	0	100 100
20	1Y	105/110 (96%)	96 (91%)	9 (9%)	0	100 100
20	2Y	105/110 (96%)	102 (97%)	3 (3%)	0	100 100
21	1Z	148/206 (72%)	132 (89%)	15 (10%)	1 (1%)	19 35
21	2Z	156/206 (76%)	127 (81%)	27 (17%)	2 (1%)	10 19
22	10	75/85 (88%)	73 (97%)	2 (3%)	0	100 100
22	20	77/85 (91%)	74 (96%)	3 (4%)	0	100 100
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	12 23
23	21	95/98 (97%)	90 (95%)	5 (5%)	0	100 100
24	12	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
24	22	68/72 (94%)	65 (96%)	3 (4%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100 100
26	14	67/71 (94%)	53 (79%)	12 (18%)	2 (3%)	3 5
26	24	67/71 (94%)	54 (81%)	12 (18%)	1 (2%)	8 16
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	57 (100%)	0	0	100 100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
30	28	62/65 (95%)	58 (94%)	4 (6%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	31 (89%)	4 (11%)	0	100 100
33	1b	229/256 (90%)	187 (82%)	38 (17%)	4 (2%)	7 14
33	2b	229/256 (90%)	179 (78%)	48 (21%)	2 (1%)	14 28
34	1c	204/239 (85%)	179 (88%)	22 (11%)	3 (2%)	8 16
34	2c	204/239 (85%)	159 (78%)	45 (22%)	0	100 100
35	1d	206/209 (99%)	180 (87%)	26 (13%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	2d	206/209 (99%)	190 (92%)	16 (8%)	0	100	100
36	1e	146/162 (90%)	127 (87%)	18 (12%)	1 (1%)	19	35
36	2e	146/162 (90%)	122 (84%)	24 (16%)	0	100	100
37	1f	98/101 (97%)	92 (94%)	6 (6%)	0	100	100
37	2f	98/101 (97%)	92 (94%)	6 (6%)	0	100	100
38	1g	153/156 (98%)	139 (91%)	14 (9%)	0	100	100
38	2g	153/156 (98%)	136 (89%)	16 (10%)	1 (1%)	19	35
39	1h	135/138 (98%)	123 (91%)	12 (9%)	0	100	100
39	2h	135/138 (98%)	123 (91%)	12 (9%)	0	100	100
40	1i	125/128 (98%)	110 (88%)	15 (12%)	0	100	100
40	2i	125/128 (98%)	106 (85%)	19 (15%)	0	100	100
41	1j	95/105 (90%)	84 (88%)	10 (10%)	1 (1%)	12	23
41	2j	94/105 (90%)	78 (83%)	15 (16%)	1 (1%)	12	23
42	1k	112/129 (87%)	102 (91%)	10 (9%)	0	100	100
42	2k	112/129 (87%)	98 (88%)	13 (12%)	1 (1%)	14	28
43	1l	119/132 (90%)	109 (92%)	10 (8%)	0	100	100
43	2l	119/132 (90%)	107 (90%)	11 (9%)	1 (1%)	16	31
44	1m	121/126 (96%)	105 (87%)	16 (13%)	0	100	100
44	2m	120/126 (95%)	100 (83%)	20 (17%)	0	100	100
45	1n	58/61 (95%)	46 (79%)	12 (21%)	0	100	100
45	2n	58/61 (95%)	48 (83%)	10 (17%)	0	100	100
46	1o	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
46	2o	86/89 (97%)	78 (91%)	8 (9%)	0	100	100
47	1p	80/88 (91%)	69 (86%)	11 (14%)	0	100	100
47	2p	80/88 (91%)	72 (90%)	8 (10%)	0	100	100
48	1q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
48	2q	97/105 (92%)	87 (90%)	10 (10%)	0	100	100
49	1r	66/88 (75%)	56 (85%)	10 (15%)	0	100	100
49	2r	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
50	1s	81/93 (87%)	69 (85%)	11 (14%)	1 (1%)	11	21
50	2s	81/93 (87%)	68 (84%)	12 (15%)	1 (1%)	11	21

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	1t	94/106 (89%)	79 (84%)	15 (16%)	0	100	100
51	2t	94/106 (89%)	83 (88%)	11 (12%)	0	100	100
52	1u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
All	All	11360/12128 (94%)	10287 (91%)	1041 (9%)	32 (0%)	37	56

All (32) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	36	LYS
21	1Z	53	ILE
33	1b	17	PHE
34	1c	66	VAL
41	1j	79	ARG
21	2Z	52	SER
33	2b	9	GLU
33	2b	17	PHE
41	2j	79	ARG
6	1G	96	ARG
33	1b	22	LYS
11	2P	36	LYS
21	2Z	51	ALA
23	11	3	LYS
26	14	49	PHE
33	1b	125	PRO
34	1c	156	ARG
50	1s	81	ARG
6	2G	96	ARG
26	24	47	GLN
43	2l	91	LYS
50	2s	81	ARG
4	1E	52	LEU
14	1S	94	TYR
33	1b	31	TYR
34	1c	65	ALA
36	1e	86	ALA
6	2G	51	ARG
19	1X	93	GLU
26	14	54	GLY
38	2g	55	GLY
42	2k	49	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
3	1D	215/218 (99%)	199 (93%)	16 (7%)	11 23
3	2D	215/218 (99%)	204 (95%)	11 (5%)	20 40
4	1E	164/166 (99%)	155 (94%)	9 (6%)	18 37
4	2E	164/166 (99%)	152 (93%)	12 (7%)	11 24
5	1F	160/166 (96%)	138 (86%)	22 (14%)	3 5
5	2F	159/166 (96%)	148 (93%)	11 (7%)	13 26
6	1G	143/156 (92%)	126 (88%)	17 (12%)	4 8
6	2G	143/156 (92%)	111 (78%)	32 (22%)	1 1
7	1H	144/148 (97%)	128 (89%)	16 (11%)	5 10
7	2H	144/148 (97%)	129 (90%)	15 (10%)	5 12
8	1I	113/124 (91%)	90 (80%)	23 (20%)	1 2
8	2I	105/124 (85%)	83 (79%)	22 (21%)	1 1
9	1N	118/119 (99%)	106 (90%)	12 (10%)	6 12
9	2N	118/119 (99%)	107 (91%)	11 (9%)	7 15
10	1O	100/100 (100%)	95 (95%)	5 (5%)	20 41
10	2O	100/100 (100%)	93 (93%)	7 (7%)	12 26
11	1P	115/116 (99%)	104 (90%)	11 (10%)	7 14
11	2P	115/116 (99%)	102 (89%)	13 (11%)	4 9
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	18 37
12	2Q	111/111 (100%)	99 (89%)	12 (11%)	5 11
13	1R	101/101 (100%)	97 (96%)	4 (4%)	27 51
13	2R	101/101 (100%)	96 (95%)	5 (5%)	20 41
14	1S	86/88 (98%)	76 (88%)	10 (12%)	4 9
14	2S	85/88 (97%)	71 (84%)	14 (16%)	2 3
15	1T	115/127 (91%)	107 (93%)	8 (7%)	12 26
15	2T	113/127 (89%)	102 (90%)	11 (10%)	6 14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
16	1U	93/94 (99%)	85 (91%)	8 (9%)	8 18
16	2U	93/94 (99%)	88 (95%)	5 (5%)	18 37
17	1V	80/82 (98%)	74 (92%)	6 (8%)	11 23
17	2V	80/82 (98%)	70 (88%)	10 (12%)	3 7
18	1W	90/92 (98%)	87 (97%)	3 (3%)	33 59
18	2W	90/92 (98%)	83 (92%)	7 (8%)	10 21
19	1X	77/78 (99%)	72 (94%)	5 (6%)	14 29
19	2X	77/78 (99%)	73 (95%)	4 (5%)	19 39
20	1Y	85/91 (93%)	72 (85%)	13 (15%)	2 4
20	2Y	85/91 (93%)	73 (86%)	12 (14%)	3 5
21	1Z	135/179 (75%)	116 (86%)	19 (14%)	3 5
21	2Z	137/179 (76%)	126 (92%)	11 (8%)	10 20
22	10	61/67 (91%)	58 (95%)	3 (5%)	21 42
22	20	62/67 (92%)	57 (92%)	5 (8%)	9 20
23	11	80/83 (96%)	71 (89%)	9 (11%)	4 9
23	21	80/83 (96%)	72 (90%)	8 (10%)	6 13
24	12	65/67 (97%)	58 (89%)	7 (11%)	5 11
24	22	65/67 (97%)	59 (91%)	6 (9%)	7 15
25	13	51/52 (98%)	44 (86%)	7 (14%)	3 6
25	23	50/52 (96%)	46 (92%)	4 (8%)	10 20
26	14	59/63 (94%)	49 (83%)	10 (17%)	1 3
26	24	53/63 (84%)	42 (79%)	11 (21%)	1 1
27	15	50/52 (96%)	47 (94%)	3 (6%)	16 33
27	25	50/52 (96%)	47 (94%)	3 (6%)	16 33
28	16	51/52 (98%)	44 (86%)	7 (14%)	3 6
28	26	50/52 (96%)	43 (86%)	7 (14%)	3 5
29	17	41/42 (98%)	37 (90%)	4 (10%)	6 13
29	27	41/42 (98%)	37 (90%)	4 (10%)	6 13
30	18	54/55 (98%)	50 (93%)	4 (7%)	11 23
30	28	54/55 (98%)	49 (91%)	5 (9%)	7 15
31	19	34/34 (100%)	34 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
31	29	34/34 (100%)	30 (88%)	4 (12%)	4 9
33	1b	192/220 (87%)	162 (84%)	30 (16%)	2 4
33	2b	187/220 (85%)	150 (80%)	37 (20%)	1 2
34	1c	142/188 (76%)	119 (84%)	23 (16%)	2 3
34	2c	140/188 (74%)	122 (87%)	18 (13%)	3 7
35	1d	169/181 (93%)	141 (83%)	28 (17%)	2 3
35	2d	173/181 (96%)	157 (91%)	16 (9%)	7 15
36	1e	113/123 (92%)	94 (83%)	19 (17%)	1 3
36	2e	114/123 (93%)	92 (81%)	22 (19%)	1 2
37	1f	84/90 (93%)	75 (89%)	9 (11%)	5 11
37	2f	85/90 (94%)	78 (92%)	7 (8%)	9 19
38	1g	119/127 (94%)	99 (83%)	20 (17%)	1 3
38	2g	120/127 (94%)	106 (88%)	14 (12%)	4 9
39	1h	114/119 (96%)	102 (90%)	12 (10%)	5 11
39	2h	114/119 (96%)	96 (84%)	18 (16%)	2 4
40	1i	90/99 (91%)	76 (84%)	14 (16%)	2 4
40	2i	89/99 (90%)	75 (84%)	14 (16%)	2 4
41	1j	66/92 (72%)	56 (85%)	10 (15%)	2 4
41	2j	69/92 (75%)	61 (88%)	8 (12%)	4 9
42	1k	82/99 (83%)	72 (88%)	10 (12%)	4 8
42	2k	83/99 (84%)	77 (93%)	6 (7%)	12 24
43	1l	96/108 (89%)	87 (91%)	9 (9%)	7 15
43	2l	96/108 (89%)	79 (82%)	17 (18%)	1 2
44	1m	93/101 (92%)	80 (86%)	13 (14%)	3 5
44	2m	92/101 (91%)	81 (88%)	11 (12%)	4 8
45	1n	49/50 (98%)	42 (86%)	7 (14%)	2 5
45	2n	49/50 (98%)	42 (86%)	7 (14%)	2 5
46	1o	78/80 (98%)	75 (96%)	3 (4%)	28 53
46	2o	78/80 (98%)	74 (95%)	4 (5%)	20 40
47	1p	69/74 (93%)	54 (78%)	15 (22%)	1 1
47	2p	68/74 (92%)	62 (91%)	6 (9%)	8 17

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
48	1q	94/97 (97%)	87 (93%)	7 (7%)	11 23
48	2q	94/97 (97%)	88 (94%)	6 (6%)	14 30
49	1r	59/77 (77%)	54 (92%)	5 (8%)	8 18
49	2r	59/77 (77%)	51 (86%)	8 (14%)	3 6
50	1s	69/80 (86%)	60 (87%)	9 (13%)	3 6
50	2s	67/80 (84%)	54 (81%)	13 (19%)	1 2
51	1t	70/82 (85%)	64 (91%)	6 (9%)	8 18
51	2t	70/82 (85%)	64 (91%)	6 (9%)	8 18
52	1u	18/22 (82%)	17 (94%)	1 (6%)	17 36
52	2u	18/22 (82%)	16 (89%)	2 (11%)	5 10
All	All	9296/10064 (92%)	8257 (89%)	1039 (11%)	5 10

All (1039) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	22	SER
3	1D	38	LYS
3	1D	71	ASP
3	1D	89	SER
3	1D	106	ILE
3	1D	111	LEU
3	1D	131	LEU
3	1D	142	VAL
3	1D	173	VAL
3	1D	174	ILE
3	1D	181	GLU
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	1	MET
4	1E	9	VAL
4	1E	47	VAL
4	1E	59	VAL
4	1E	73	GLU
4	1E	116	VAL
4	1E	119	ARG

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Mol	Chain	Res	Type
4	1E	184	VAL
4	1E	185	LYS
5	1F	18	ARG
5	1F	24	LEU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	70	THR
5	1F	74	ARG
5	1F	89	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	137	LYS
5	1F	140	LEU
5	1F	161	GLU
5	1F	162	LEU
5	1F	165	ARG
5	1F	168	ARG
5	1F	175	THR
5	1F	176	LEU
5	1F	192	LEU
5	1F	201	VAL
5	1F	205	ARG
6	1G	5	VAL
6	1G	7	LEU
6	1G	22	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	47	LYS
6	1G	60	LEU
6	1G	64	THR
6	1G	70	VAL
6	1G	82	LEU
6	1G	126	ASP
6	1G	130	ASN
6	1G	139	LEU
6	1G	148	MET
6	1G	150	ASP
6	1G	159	VAL
6	1G	181	ARG
7	1H	13	LYS

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Mol	Chain	Res	Type
7	1H	15	VAL
7	1H	18	GLU
7	1H	56	SER
7	1H	67	LEU
7	1H	84	SER
7	1H	88	LEU
7	1H	98	LEU
7	1H	107	VAL
7	1H	116	GLU
7	1H	122	THR
7	1H	124	GLU
7	1H	127	GLU
7	1H	129	THR
7	1H	172	LYS
7	1H	175	LYS
8	1I	4	ILE
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	20	ASP
8	1I	27	ARG
8	1I	40	THR
8	1I	42	SER
8	1I	47	LEU
8	1I	57	ARG
8	1I	61	ARG
8	1I	74	ASN
8	1I	77	LEU
8	1I	85	GLU
8	1I	86	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	108	THR
8	1I	129	THR
8	1I	133	HIS
8	1I	140	LEU
8	1I	144	VAL
9	1N	1	MET
9	1N	14	VAL
9	1N	22	THR
9	1N	28	THR

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Mol	Chain	Res	Type
9	1N	48	MET
9	1N	62	VAL
9	1N	65	LYS
9	1N	68	GLU
9	1N	83	LYS
9	1N	89	LYS
9	1N	96	GLU
9	1N	138	LEU
10	1O	35	VAL
10	1O	42	SER
10	1O	66	LYS
10	1O	90	GLN
10	1O	112	MET
11	1P	4	SER
11	1P	45	LEU
11	1P	56	SER
11	1P	65	ARG
11	1P	75	ILE
11	1P	90	ARG
11	1P	95	VAL
11	1P	126	VAL
11	1P	133	SER
11	1P	147	LEU
11	1P	149	GLU
12	1Q	1	MET
12	1Q	6	ARG
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	109	VAL
12	1Q	133	ARG
13	1R	36	THR
13	1R	67	LEU
13	1R	100	LEU
13	1R	114	VAL
14	1S	3	ARG
14	1S	8	GLU
14	1S	11	LYS
14	1S	21	THR
14	1S	36	TYR
14	1S	46	VAL
14	1S	75	GLU
14	1S	78	LEU

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Mol	Chain	Res	Type
14	1S	83	LYS
14	1S	110	LEU
15	1T	21	GLU
15	1T	28	VAL
15	1T	34	VAL
15	1T	38	ASN
15	1T	51	ARG
15	1T	78	LEU
15	1T	96	ARG
15	1T	128	GLU
16	1U	5	LYS
16	1U	13	LYS
16	1U	17	ILE
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
16	1U	100	VAL
16	1U	110	VAL
17	1V	10	LYS
17	1V	28	GLU
17	1V	61	VAL
17	1V	73	SER
17	1V	79	VAL
17	1V	85	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	92	ARG
19	1X	35	THR
19	1X	57	LEU
19	1X	72	LYS
19	1X	81	VAL
19	1X	88	LYS
20	1Y	5	MET
20	1Y	7	VAL
20	1Y	23	ARG
20	1Y	31	LEU
20	1Y	43	ASN
20	1Y	61	ILE
20	1Y	66	PRO
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	88	LYS

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Mol	Chain	Res	Type
20	1Y	90	LEU
20	1Y	91	GLU
20	1Y	99	CYS
21	1Z	1	MET
21	1Z	31	ARG
21	1Z	49	ARG
21	1Z	65	GLN
21	1Z	79	ARG
21	1Z	122	ARG
21	1Z	129	SER
21	1Z	138	GLU
21	1Z	140	ASP
21	1Z	148	ASP
21	1Z	149	SER
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	157	LEU
21	1Z	161	VAL
21	1Z	162	GLU
21	1Z	163	LEU
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	49	LYS
22	10	82	ARG
23	11	3	LYS
23	11	4	VAL
23	11	40	ARG
23	11	46	LEU
23	11	59	THR
23	11	80	LEU
23	11	81	LYS
23	11	91	LYS
23	11	92	LYS
24	12	9	GLN
24	12	19	VAL
24	12	41	ILE
24	12	45	SER
24	12	50	ILE
24	12	65	ASN
24	12	70	GLN
25	13	23	LEU

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Mol	Chain	Res	Type
25	13	29	ARG
25	13	34	GLU
25	13	35	ARG
25	13	54	VAL
25	13	55	ARG
25	13	60	GLU
26	14	16	CYS
26	14	21	VAL
26	14	37	SER
26	14	46	GLN
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	53	GLU
26	14	59	PHE
26	14	63	TYR
27	15	6	VAL
27	15	26	THR
27	15	59	GLU
28	16	9	LEU
28	16	14	THR
28	16	35	GLU
28	16	47	THR
28	16	48	VAL
28	16	50	ARG
28	16	53	LYS
29	17	24	THR
29	17	43	THR
29	17	46	VAL
29	17	48	LYS
30	18	4	MET
30	18	14	VAL
30	18	34	TRP
30	18	46	ARG
33	1b	7	VAL
33	1b	8	LYS
33	1b	11	LEU
33	1b	12	GLU
33	1b	35	GLU
33	1b	44	LEU
33	1b	48	MET
33	1b	71	VAL

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Mol	Chain	Res	Type
33	1b	73	THR
33	1b	78	GLN
33	1b	80	ILE
33	1b	101	MET
33	1b	107	THR
33	1b	108	ILE
33	1b	112	VAL
33	1b	118	LEU
33	1b	124	SER
33	1b	127	ILE
33	1b	157	ARG
33	1b	160	ASP
33	1b	172	ILE
33	1b	176	GLU
33	1b	197	VAL
33	1b	200	ILE
33	1b	208	ILE
33	1b	215	LEU
33	1b	219	VAL
33	1b	223	ILE
33	1b	229	VAL
33	1b	233	SER
34	1c	3	ASN
34	1c	8	ILE
34	1c	17	ASP
34	1c	26	LYS
34	1c	36	ASP
34	1c	45	LYS
34	1c	49	SER
34	1c	64	VAL
34	1c	68	VAL
34	1c	70	VAL
34	1c	82	GLU
34	1c	91	LEU
34	1c	116	VAL
34	1c	119	ARG
34	1c	138	VAL
34	1c	172	ARG
34	1c	173	VAL
34	1c	178	LEU
34	1c	195	VAL
34	1c	196	LEU

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Mol	Chain	Res	Type
34	1c	198	VAL
34	1c	202	ILE
34	1c	206	GLU
35	1d	3	ARG
35	1d	10	ARG
35	1d	18	LYS
35	1d	19	LEU
35	1d	31	CYS
35	1d	70	ILE
35	1d	76	ARG
35	1d	83	SER
35	1d	86	LYS
35	1d	88	VAL
35	1d	112	VAL
35	1d	121	VAL
35	1d	122	ARG
35	1d	126	ILE
35	1d	127	THR
35	1d	134	ASP
35	1d	135	LEU
35	1d	140	VAL
35	1d	146	ILE
35	1d	158	ILE
35	1d	170	VAL
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	181	MET
35	1d	186	LEU
35	1d	202	LEU
35	1d	205	GLU
36	1e	9	LYS
36	1e	10	MET
36	1e	12	LEU
36	1e	13	ILE
36	1e	16	THR
36	1e	18	ARG
36	1e	24	ARG
36	1e	31	LEU
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU

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Mol	Chain	Res	Type
36	1e	56	GLN
36	1e	64	ARG
36	1e	75	THR
36	1e	78	HIS
36	1e	79	GLU
36	1e	82	VAL
36	1e	91	LEU
36	1e	120	THR
37	1f	1	MET
37	1f	25	ILE
37	1f	37	VAL
37	1f	57	GLN
37	1f	64	GLN
37	1f	72	VAL
37	1f	75	LEU
37	1f	81	ILE
37	1f	92	LYS
38	1g	8	GLU
38	1g	12	LEU
38	1g	16	LEU
38	1g	21	VAL
38	1g	27	ILE
38	1g	29	LYS
38	1g	50	ILE
38	1g	57	GLU
38	1g	61	VAL
38	1g	79	ARG
38	1g	89	MET
38	1g	90	GLU
38	1g	92	SER
38	1g	104	LEU
38	1g	110	GLN
38	1g	113	GLU
38	1g	114	ARG
38	1g	120	ILE
38	1g	143	ARG
38	1g	144	MET
39	1h	10	LEU
39	1h	13	ILE
39	1h	32	LYS
39	1h	52	ASP
39	1h	54	ASP

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Mol	Chain	Res	Type
39	1h	79	VAL
39	1h	82	HIS
39	1h	84	ARG
39	1h	88	LYS
39	1h	97	VAL
39	1h	112	LEU
39	1h	122	ARG
40	1i	7	THR
40	1i	27	THR
40	1i	38	GLN
40	1i	47	LEU
40	1i	51	ARG
40	1i	56	LEU
40	1i	63	ILE
40	1i	64	THR
40	1i	66	ARG
40	1i	81	ILE
40	1i	96	LEU
40	1i	97	LYS
40	1i	109	VAL
40	1i	128	ARG
41	1j	19	SER
41	1j	34	VAL
41	1j	43	ARG
41	1j	44	VAL
41	1j	46	ARG
41	1j	72	VAL
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
41	1j	96	ILE
42	1k	14	VAL
42	1k	31	THR
42	1k	48	ILE
42	1k	51	LYS
42	1k	81	ASP
42	1k	83	ILE
42	1k	87	THR
42	1k	105	VAL
42	1k	114	VAL
42	1k	117	ASN
43	1l	18	VAL

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Mol	Chain	Res	Type
43	1l	33	ARG
43	1l	36	VAL
43	1l	46	LYS
43	1l	62	SER
43	1l	89	ARG
43	1l	93	LEU
43	1l	118	SER
43	1l	123	LYS
44	1m	4	ILE
44	1m	14	ARG
44	1m	15	VAL
44	1m	17	VAL
44	1m	20	THR
44	1m	32	GLU
44	1m	43	THR
44	1m	45	VAL
44	1m	70	LEU
44	1m	103	THR
44	1m	106	ASN
44	1m	109	THR
44	1m	117	VAL
45	1n	6	LEU
45	1n	18	VAL
45	1n	22	THR
45	1n	32	SER
45	1n	33	VAL
45	1n	53	LEU
45	1n	56	VAL
46	1o	10	LYS
46	1o	34	LEU
46	1o	35	ARG
47	1p	2	VAL
47	1p	5	ARG
47	1p	11	SER
47	1p	16	HIS
47	1p	20	VAL
47	1p	22	THR
47	1p	27	LYS
47	1p	29	ASP
47	1p	42	ARG
47	1p	43	LYS
47	1p	45	THR

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Mol	Chain	Res	Type
47	1p	62	VAL
47	1p	67	THR
47	1p	75	ARG
47	1p	79	VAL
48	1q	9	VAL
48	1q	35	VAL
48	1q	36	ILE
48	1q	50	LYS
48	1q	60	ILE
48	1q	70	ARG
48	1q	78	GLU
49	1r	25	THR
49	1r	26	LEU
49	1r	35	ARG
49	1r	37	VAL
49	1r	45	SER
50	1s	4	SER
50	1s	6	LYS
50	1s	12	ASP
50	1s	16	LEU
50	1s	41	VAL
50	1s	48	THR
50	1s	66	MET
50	1s	79	THR
50	1s	81	ARG
51	1t	10	LEU
51	1t	24	LEU
51	1t	34	LYS
51	1t	48	LYS
51	1t	63	ILE
51	1t	100	ILE
52	1u	7	ARG
3	2D	99	ASP
3	2D	113	VAL
3	2D	142	VAL
3	2D	155	LEU
3	2D	162	SER
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	260	ARG
3	2D	270	ILE

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Mol	Chain	Res	Type
3	2D	271	ILE
4	2E	7	VAL
4	2E	9	VAL
4	2E	38	THR
4	2E	41	LYS
4	2E	59	VAL
4	2E	73	GLU
4	2E	90	THR
4	2E	116	VAL
4	2E	145	LYS
4	2E	178	GLU
4	2E	184	VAL
4	2E	195	LEU
5	2F	20	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	43	LYS
5	2F	70	THR
5	2F	74	ARG
5	2F	110	LEU
5	2F	137	LYS
5	2F	154	VAL
5	2F	183	VAL
5	2F	192	LEU
6	2G	3	LEU
6	2G	5	VAL
6	2G	7	LEU
6	2G	18	GLU
6	2G	20	ILE
6	2G	21	ARG
6	2G	28	VAL
6	2G	33	ARG
6	2G	39	ILE
6	2G	43	LEU
6	2G	45	GLU
6	2G	49	ASP
6	2G	51	ARG
6	2G	53	LEU
6	2G	79	ASN
6	2G	90	LEU
6	2G	91	ARG
6	2G	105	LYS

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Mol	Chain	Res	Type
6	2G	109	VAL
6	2G	111	LEU
6	2G	115	ARG
6	2G	116	ASP
6	2G	130	ASN
6	2G	133	LEU
6	2G	135	LEU
6	2G	140	ILE
6	2G	144	ILE
6	2G	145	THR
6	2G	150	ASP
6	2G	165	THR
6	2G	167	GLU
6	2G	173	LEU
7	2H	2	SER
7	2H	15	VAL
7	2H	33	LEU
7	2H	37	VAL
7	2H	40	GLU
7	2H	43	VAL
7	2H	62	LYS
7	2H	90	LYS
7	2H	104	GLU
7	2H	113	VAL
7	2H	124	GLU
7	2H	129	THR
7	2H	134	SER
7	2H	141	VAL
7	2H	152	ARG
8	2I	5	LEU
8	2I	9	LEU
8	2I	15	VAL
8	2I	22	LYS
8	2I	31	LEU
8	2I	38	LEU
8	2I	44	LEU
8	2I	58	LEU
8	2I	61	ARG
8	2I	69	LYS
8	2I	75	LEU
8	2I	79	ILE
8	2I	85	GLU

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Mol	Chain	Res	Type
8	2I	87	LYS
8	2I	92	VAL
8	2I	102	SER
8	2I	117	GLU
8	2I	123	LEU
8	2I	127	VAL
8	2I	136	VAL
8	2I	142	VAL
8	2I	144	VAL
9	2N	1	MET
9	2N	5	VAL
9	2N	14	VAL
9	2N	28	THR
9	2N	32	THR
9	2N	46	VAL
9	2N	58	ASP
9	2N	61	ARG
9	2N	62	VAL
9	2N	83	LYS
9	2N	138	LEU
10	2O	22	ILE
10	2O	52	VAL
10	2O	63	VAL
10	2O	69	ILE
10	2O	86	ILE
10	2O	108	GLU
10	2O	116	SER
11	2P	4	SER
11	2P	29	LYS
11	2P	30	THR
11	2P	45	LEU
11	2P	75	ILE
11	2P	77	ARG
11	2P	79	ARG
11	2P	98	GLU
11	2P	100	LEU
11	2P	102	ARG
11	2P	125	VAL
11	2P	138	LEU
11	2P	149	GLU
12	2Q	1	MET
12	2Q	7	MET

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Mol	Chain	Res	Type
12	2Q	12	GLN
12	2Q	18	LYS
12	2Q	22	LYS
12	2Q	25	ASP
12	2Q	94	VAL
12	2Q	106	VAL
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	112	GLU
12	2Q	127	ILE
13	2R	20	LEU
13	2R	35	THR
13	2R	36	THR
13	2R	100	LEU
13	2R	114	VAL
14	2S	8	GLU
14	2S	10	ARG
14	2S	28	VAL
14	2S	35	ILE
14	2S	36	TYR
14	2S	39	ILE
14	2S	46	VAL
14	2S	49	VAL
14	2S	57	LYS
14	2S	58	LEU
14	2S	63	THR
14	2S	64	GLU
14	2S	80	LEU
14	2S	110	LEU
15	2T	40	THR
15	2T	49	VAL
15	2T	51	ARG
15	2T	63	VAL
15	2T	64	ARG
15	2T	67	SER
15	2T	74	ARG
15	2T	107	ASP
15	2T	115	ARG
15	2T	121	ILE
15	2T	125	ARG
16	2U	5	LYS
16	2U	63	VAL

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Mol	Chain	Res	Type
16	2U	65	ILE
16	2U	74	LEU
16	2U	95	LEU
17	2V	28	GLU
17	2V	38	LEU
17	2V	45	THR
17	2V	46	VAL
17	2V	49	THR
17	2V	61	VAL
17	2V	70	ILE
17	2V	79	VAL
17	2V	82	ARG
17	2V	98	GLU
18	2W	4	LYS
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	60	ASN
18	2W	67	ASP
18	2W	92	ARG
19	2X	30	VAL
19	2X	35	THR
19	2X	49	VAL
19	2X	92	LEU
20	2Y	5	MET
20	2Y	6	HIS
20	2Y	7	VAL
20	2Y	45	VAL
20	2Y	49	VAL
20	2Y	61	ILE
20	2Y	63	LYS
20	2Y	72	VAL
20	2Y	87	LYS
20	2Y	90	LEU
20	2Y	91	GLU
20	2Y	99	CYS
21	2Z	33	LEU
21	2Z	41	LEU
21	2Z	42	VAL
21	2Z	71	VAL
21	2Z	74	VAL
21	2Z	122	ARG

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Mol	Chain	Res	Type
21	2Z	137	ILE
21	2Z	153	SER
21	2Z	155	LEU
21	2Z	157	LEU
21	2Z	161	VAL
22	20	10	THR
22	20	11	ARG
22	20	36	ILE
22	20	63	VAL
22	20	64	ASP
23	21	35	THR
23	21	37	ILE
23	21	40	ARG
23	21	46	LEU
23	21	76	ARG
23	21	78	LYS
23	21	80	LEU
23	21	81	LYS
24	22	1	MET
24	22	8	LYS
24	22	19	VAL
24	22	44	LEU
24	22	52	ASP
24	22	53	LEU
25	23	23	LEU
25	23	31	LEU
25	23	36	VAL
25	23	54	VAL
26	24	5	ILE
26	24	27	THR
26	24	33	VAL
26	24	34	GLU
26	24	44	THR
26	24	49	PHE
26	24	52	THR
26	24	59	PHE
26	24	61	ARG
26	24	62	ARG
26	24	63	TYR
27	25	6	VAL
27	25	21	SER
27	25	40	LYS

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Mol	Chain	Res	Type
28	26	6	ARG
28	26	19	ARG
28	26	20	ASN
28	26	23	THR
28	26	32	ASN
28	26	40	CYS
28	26	48	VAL
29	27	23	ARG
29	27	43	THR
29	27	46	VAL
29	27	48	LYS
30	28	14	VAL
30	28	37	SER
30	28	39	LYS
30	28	41	ILE
30	28	48	PHE
31	29	7	VAL
31	29	9	ARG
31	29	26	ILE
31	29	33	LYS
33	2b	8	LYS
33	2b	9	GLU
33	2b	11	LEU
33	2b	22	LYS
33	2b	41	ILE
33	2b	43	ASP
33	2b	44	LEU
33	2b	45	GLN
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	76	GLN
33	2b	80	ILE
33	2b	90	MET
33	2b	94	ASN
33	2b	102	LEU
33	2b	107	THR
33	2b	112	VAL
33	2b	124	SER
33	2b	127	ILE
33	2b	136	VAL
33	2b	138	LEU

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Mol	Chain	Res	Type
33	2b	140	HIS
33	2b	144	ARG
33	2b	145	LEU
33	2b	155	LEU
33	2b	162	ILE
33	2b	164	VAL
33	2b	168	THR
33	2b	169	LYS
33	2b	180	LEU
33	2b	185	ILE
33	2b	189	ASP
33	2b	196	LEU
33	2b	220	ASP
33	2b	226	ARG
33	2b	236	TYR
34	2c	14	ILE
34	2c	15	THR
34	2c	19	GLU
34	2c	34	LEU
34	2c	43	LEU
34	2c	44	GLU
34	2c	52	LEU
34	2c	55	VAL
34	2c	57	ILE
34	2c	70	VAL
34	2c	87	LEU
34	2c	134	ILE
34	2c	140	ARG
34	2c	143	GLU
34	2c	161	GLU
34	2c	190	ARG
34	2c	198	VAL
34	2c	202	ILE
35	2d	3	ARG
35	2d	5	ILE
35	2d	34	GLU
35	2d	42	GLN
35	2d	57	ARG
35	2d	58	LEU
35	2d	59	ARG
35	2d	85	LYS
35	2d	127	THR

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Mol	Chain	Res	Type
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	153	ARG
35	2d	155	LEU
35	2d	178	VAL
35	2d	188	LEU
36	2e	9	LYS
36	2e	12	LEU
36	2e	13	ILE
36	2e	24	ARG
36	2e	25	ARG
36	2e	34	VAL
36	2e	38	GLN
36	2e	41	VAL
36	2e	51	VAL
36	2e	55	VAL
36	2e	66	MET
36	2e	72	GLN
36	2e	75	THR
36	2e	80	ILE
36	2e	81	GLU
36	2e	82	VAL
36	2e	87	SER
36	2e	91	LEU
36	2e	115	VAL
36	2e	118	ILE
36	2e	120	THR
36	2e	151	LEU
37	2f	21	LEU
37	2f	31	GLU
37	2f	37	VAL
37	2f	63	TYR
37	2f	65	VAL
37	2f	69	GLU
37	2f	94	GLN
38	2g	6	ARG
38	2g	9	VAL
38	2g	32	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	86	GLN

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Mol	Chain	Res	Type
38	2g	89	MET
38	2g	90	GLU
38	2g	92	SER
38	2g	113	GLU
38	2g	126	ASP
38	2g	138	LYS
38	2g	139	GLU
38	2g	155	ARG
39	2h	11	THR
39	2h	13	ILE
39	2h	29	SER
39	2h	37	ARG
39	2h	45	ILE
39	2h	51	VAL
39	2h	54	ASP
39	2h	63	LEU
39	2h	79	VAL
39	2h	81	HIS
39	2h	84	ARG
39	2h	109	ILE
39	2h	112	LEU
39	2h	115	SER
39	2h	119	LEU
39	2h	122	ARG
39	2h	127	LEU
39	2h	137	VAL
40	2i	40	LEU
40	2i	41	VAL
40	2i	47	LEU
40	2i	50	LEU
40	2i	56	LEU
40	2i	63	ILE
40	2i	64	THR
40	2i	71	SER
40	2i	86	VAL
40	2i	102	LEU
40	2i	107	ARG
40	2i	108	VAL
40	2i	113	LYS
40	2i	128	ARG
41	2j	7	LYS
41	2j	9	ARG

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Mol	Chain	Res	Type
41	2j	13	HIS
41	2j	33	GLN
41	2j	38	ILE
41	2j	67	THR
41	2j	85	LEU
41	2j	94	VAL
42	2k	14	VAL
42	2k	28	THR
42	2k	33	THR
42	2k	53	SER
42	2k	73	MET
42	2k	82	VAL
43	2l	6	THR
43	2l	13	LYS
43	2l	18	VAL
43	2l	28	LYS
43	2l	36	VAL
43	2l	37	CYS
43	2l	40	VAL
43	2l	54	LYS
43	2l	57	LYS
43	2l	60	LEU
43	2l	62	SER
43	2l	65	GLU
43	2l	66	VAL
43	2l	85	ILE
43	2l	89	ARG
43	2l	116	SER
43	2l	117	ARG
44	2m	15	VAL
44	2m	32	GLU
44	2m	57	ARG
44	2m	62	ASN
44	2m	66	LEU
44	2m	80	ARG
44	2m	98	VAL
44	2m	103	THR
44	2m	106	ASN
44	2m	108	ARG
44	2m	117	VAL
45	2n	3	ARG
45	2n	4	LYS

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Mol	Chain	Res	Type
45	2n	6	LEU
45	2n	17	LYS
45	2n	32	SER
45	2n	33	VAL
45	2n	53	LEU
46	2o	3	ILE
46	2o	10	LYS
46	2o	37	ASN
46	2o	60	VAL
47	2p	2	VAL
47	2p	8	ARG
47	2p	20	VAL
47	2p	21	VAL
47	2p	57	ARG
47	2p	74	LEU
48	2q	19	VAL
48	2q	36	ILE
48	2q	50	LYS
48	2q	60	ILE
48	2q	63	ARG
48	2q	77	VAL
49	2r	25	THR
49	2r	31	LEU
49	2r	37	VAL
49	2r	45	SER
49	2r	46	GLU
49	2r	65	ILE
49	2r	74	ARG
49	2r	86	VAL
50	2s	4	SER
50	2s	12	ASP
50	2s	20	LEU
50	2s	27	GLU
50	2s	28	LYS
50	2s	30	LEU
50	2s	37	ARG
50	2s	43	GLU
50	2s	44	MET
50	2s	47	HIS
50	2s	58	VAL
50	2s	71	LEU
50	2s	83	HIS

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Mol	Chain	Res	Type
51	2t	15	ARG
51	2t	43	LEU
51	2t	61	SER
51	2t	71	THR
51	2t	93	GLU
51	2t	100	ILE
52	2u	6	ARG
52	2u	9	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (158) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN
4	1E	48	GLN
4	1E	55	ASN
4	1E	121	ASN
4	1E	143	ASN
5	1F	8	GLN
6	1G	26	GLN
7	1H	147	ASN
8	1I	74	ASN
8	1I	133	HIS
8	1I	139	GLN
12	1Q	12	GLN
12	1Q	57	HIS
12	1Q	123	HIS
13	1R	50	HIS
13	1R	71	GLN
14	1S	68	GLN
15	1T	84	GLN
15	1T	90	GLN
16	1U	94	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	73	GLN
24	12	9	GLN
24	12	65	ASN
25	13	32	GLN
30	18	35	GLN
33	1b	37	ASN

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Mol	Chain	Res	Type
33	1b	45	GLN
33	1b	78	GLN
33	1b	95	GLN
34	1c	6	HIS
34	1c	28	GLN
34	1c	37	GLN
34	1c	98	ASN
34	1c	104	GLN
34	1c	136	GLN
34	1c	162	GLN
34	1c	181	ASN
35	1d	45	GLN
35	1d	116	GLN
35	1d	123	HIS
36	1e	20	GLN
36	1e	38	GLN
36	1e	78	HIS
36	1e	141	GLN
37	1f	32	ASN
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	97	GLN
38	1g	122	HIS
38	1g	148	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS
42	1k	93	GLN
42	1k	104	GLN
43	1l	99	HIS
44	1m	12	ASN
46	1o	46	HIS
46	1o	50	HIS
47	1p	13	HIS
47	1p	16	HIS
49	1r	63	GLN
50	1s	23	ASN

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Mol	Chain	Res	Type
50	1s	83	HIS
51	1t	73	HIS
51	1t	75	ASN
51	1t	90	GLN
3	2D	126	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	75	HIS
6	2G	26	GLN
6	2G	40	ASN
6	2G	41	GLN
6	2G	66	GLN
6	2G	121	ASN
6	2G	132	ASN
7	2H	139	GLN
8	2I	133	HIS
9	2N	94	HIS
10	2O	5	GLN
10	2O	90	GLN
12	2Q	12	GLN
12	2Q	123	HIS
13	2R	13	HIS
13	2R	71	GLN
14	2S	38	GLN
15	2T	58	ASN
15	2T	84	GLN
16	2U	72	HIS
16	2U	94	ASN
17	2V	80	GLN
18	2W	60	ASN
19	2X	31	HIS
19	2X	82	GLN
20	2Y	6	HIS
20	2Y	43	ASN
21	2Z	34	ASN
21	2Z	65	GLN
21	2Z	73	GLN
24	22	9	GLN
26	24	20	ASN
26	24	46	GLN
26	24	60	GLN
28	26	20	ASN

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Mol	Chain	Res	Type
31	29	20	HIS
33	2b	40	HIS
33	2b	76	GLN
33	2b	94	ASN
33	2b	113	HIS
33	2b	135	GLN
33	2b	146	GLN
35	2d	43	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
36	2e	73	ASN
36	2e	78	HIS
36	2e	127	ASN
36	2e	130	ASN
37	2f	100	ASN
39	2h	82	HIS
40	2i	3	GLN
40	2i	58	HIS
40	2i	87	GLN
40	2i	89	ASN
40	2i	117	HIS
41	2j	21	GLN
41	2j	56	HIS
41	2j	69	ASN
42	2k	38	ASN
42	2k	117	ASN
43	2l	99	HIS
44	2m	12	ASN
44	2m	40	ASN
44	2m	77	ASN
45	2n	49	HIS
47	2p	13	HIS
49	2r	63	GLN
50	2s	23	ASN
50	2s	47	HIS
50	2s	57	HIS
50	2s	65	ASN
50	2s	83	HIS
51	2t	16	HIS

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Mol	Chain	Res	Type
51	2t	45	GLN
51	2t	75	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	463 (16%)	38 (1%)
1	2A	2791/2915 (95%)	499 (17%)	36 (1%)
2	1B	119/121 (98%)	17 (14%)	0
2	2B	118/121 (97%)	26 (22%)	0
32	1a	1497/1521 (98%)	256 (17%)	0
32	2a	1501/1521 (98%)	300 (19%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	2 (16%)	0
54	1w	69/76 (90%)	24 (34%)	0
54	1y	72/76 (94%)	26 (36%)	0
54	2w	66/76 (86%)	19 (28%)	0
54	2y	70/76 (92%)	27 (38%)	0
55	1x	74/77 (96%)	8 (10%)	0
55	2x	74/77 (96%)	9 (12%)	0
All	All	9339/9620 (97%)	1677 (17%)	74 (0%)

All (1677) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	36	G
1	1A	45	C
1	1A	58	G
1	1A	61	G
1	1A	64	A
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U

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Mol	Chain	Res	Type
1	1A	139(A)	G
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	200	U
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	232	G
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(C)	C
1	1A	271(D)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	342	G
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	363(D)	G
1	1A	363(E)	U
1	1A	375	C
1	1A	380	U

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Mol	Chain	Res	Type
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	455	C
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	670	A

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Mol	Chain	Res	Type
1	1A	686	G
1	1A	730	C
1	1A	736	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	880	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	890	A
1	1A	892	G
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G

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Mol	Chain	Res	Type
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	985	C
1	1A	996	A
1	1A	1005	C
1	1A	1008	C
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1041	C
1	1A	1043	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1063	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1093	G
1	1A	1094	U

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Mol	Chain	Res	Type
1	1A	1096	A
1	1A	1099	G
1	1A	1100	C
1	1A	1101	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1128	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1248	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1281	G
1	1A	1289	C
1	1A	1290	C
1	1A	1300	U
1	1A	1301	A
1	1A	1302	A
1	1A	1303	G
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G

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Mol	Chain	Res	Type
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1539	G
1	1A	1540	U
1	1A	1542	A
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1588	C
1	1A	1608	A
1	1A	1610	A
1	1A	1639	U
1	1A	1644	C
1	1A	1647	G
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1682	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1745(A)	C

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Mol	Chain	Res	Type
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1785	A
1	1A	1791	A
1	1A	1800	C
1	1A	1816	G
1	1A	1817	G
1	1A	1829	A
1	1A	1847	A
1	1A	1858	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1915	5MU
1	1A	1916	A
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
1	1A	2039	C
1	1A	2043	C
1	1A	2055	C

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Mol	Chain	Res	Type
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2093	G
1	1A	2101	G
1	1A	2102	U
1	1A	2108	C
1	1A	2110	G
1	1A	2112	G
1	1A	2113	U
1	1A	2116	G
1	1A	2119	A
1	1A	2121	G
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2142	C
1	1A	2144	U
1	1A	2145	C
1	1A	2146	C
1	1A	2149	G
1	1A	2150	U
1	1A	2151	G
1	1A	2155	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2160	G
1	1A	2161	C
1	1A	2165	G
1	1A	2166	G

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Mol	Chain	Res	Type
1	1A	2167	U
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2181	G
1	1A	2182	G
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2259	G
1	1A	2260	C
1	1A	2267	A
1	1A	2269	A
1	1A	2273	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2347	C
1	1A	2361	A
1	1A	2372	G
1	1A	2379	G
1	1A	2383	G
1	1A	2385	C
1	1A	2400	G
1	1A	2406	U
1	1A	2407	G

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Mol	Chain	Res	Type
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2440	C
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2487	G
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2555	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2578	G
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2641	G
1	1A	2654	A
1	1A	2657	A
1	1A	2670	A
1	1A	2682	U
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C

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Mol	Chain	Res	Type
1	1A	2702	U
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2802	G
1	1A	2804	C
1	1A	2812	G
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2873	A
1	1A	2876	G
1	1A	2880	C
1	1A	2882	A
1	1A	2894	G
2	1B	2	C
2	1B	13	A
2	1B	15	A
2	1B	25	A
2	1B	42	C
2	1B	44	G
2	1B	45	A
2	1B	48	A
2	1B	50	G
2	1B	56	G
2	1B	57	A
2	1B	67	G
2	1B	73	A
2	1B	84	C
2	1B	85	G

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Mol	Chain	Res	Type
2	1B	108	U
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	15	G
32	1a	22	G
32	1a	32	A
32	1a	36	C
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	76	C
32	1a	77	G
32	1a	78	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	100	C
32	1a	101	A
32	1a	111	G
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	162	A
32	1a	163	C
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(E)	U
32	1a	189(G)	G
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	218	C
32	1a	220	G

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Mol	Chain	Res	Type
32	1a	222	U
32	1a	235	C
32	1a	247	G
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	306	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	334	C
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	388	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	411	A
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	424	G
32	1a	427	U
32	1a	429	U
32	1a	439	A
32	1a	443	C
32	1a	452	A
32	1a	458	C
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	480	U
32	1a	484	G
32	1a	485	G
32	1a	495	A

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Mol	Chain	Res	Type
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	521	G
32	1a	528	C
32	1a	531	U
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	559	A
32	1a	560	U
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	630	G
32	1a	631	G
32	1a	647	C
32	1a	653	A
32	1a	665	A
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	703	G
32	1a	717	C
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	749	C
32	1a	752	G
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U

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Mol	Chain	Res	Type
32	1a	794	A
32	1a	815	A
32	1a	816	A
32	1a	817	C
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	870	U
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	936	C
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	984	C
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	999	C
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1016	A
32	1a	1020	U
32	1a	1021	G
32	1a	1022	G
32	1a	1023	G

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Mol	Chain	Res	Type
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1063	C
32	1a	1068	G
32	1a	1077	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G
32	1a	1123	A
32	1a	1124	G
32	1a	1127	G
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1141	C
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G
32	1a	1157	A
32	1a	1159	U
32	1a	1184	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1204	A
32	1a	1212	U
32	1a	1213	A

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Mol	Chain	Res	Type
32	1a	1214	C
32	1a	1222	G
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1260	C
32	1a	1272	G
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1294	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1312	G
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1380	U
32	1a	1394	A
32	1a	1397	C
32	1a	1419	G
32	1a	1441	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1456	G
32	1a	1491	G
32	1a	1492	A
32	1a	1497	G

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Mol	Chain	Res	Type
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	9	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	34	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	53	G
54	1w	62	C
54	1w	64	A
54	1w	68	C
54	1w	69	G
54	1w	70	G
54	1w	71	G
54	1w	73	A
55	1x	9	G
55	1x	19	G
55	1x	20	U
55	1x	21	A
55	1x	31	G
55	1x	47	U
55	1x	49	G
55	1x	61	C
54	1y	5	G
54	1y	6	G
54	1y	9	A

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Mol	Chain	Res	Type
54	1y	14	A
54	1y	15	G
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	23	A
54	1y	26	A
54	1y	34	G
54	1y	35	A
54	1y	36	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	53	G
54	1y	56	C
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	65	G
54	1y	70	G
54	1y	71	G
1	2A	8	A
1	2A	12	U
1	2A	15	G
1	2A	19	C
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	61	G
1	2A	70	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	128	C

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Mol	Chain	Res	Type
1	2A	141	A
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	250	G
1	2A	266	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G
1	2A	274	G
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	312	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	332	A
1	2A	342	G
1	2A	352	G

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Mol	Chain	Res	Type
1	2A	363	G
1	2A	363(B)	G
1	2A	363(E)	U
1	2A	386	G
1	2A	389	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	421	U
1	2A	443	A
1	2A	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A

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Mol	Chain	Res	Type
1	2A	652(C)	G
1	2A	653	A
1	2A	668	G
1	2A	669	G
1	2A	686	G
1	2A	693	C
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	802	A
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	822	U
1	2A	827	U
1	2A	828	U
1	2A	832	G
1	2A	846	C
1	2A	848	G
1	2A	852	G
1	2A	857	C
1	2A	859	G
1	2A	867	C
1	2A	873	G
1	2A	874	G
1	2A	875	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A

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Mol	Chain	Res	Type
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	903	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	933	A
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1117	G
1	2A	1128	A

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Mol	Chain	Res	Type
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1144	G
1	2A	1171	G
1	2A	1188	U
1	2A	1195	G
1	2A	1210	A
1	2A	1211	U
1	2A	1219	G
1	2A	1220	A
1	2A	1229	G
1	2A	1244	G
1	2A	1250	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1378	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1416	G
1	2A	1417	C
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C

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Mol	Chain	Res	Type
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1460	A
1	2A	1461	G
1	2A	1466	G
1	2A	1467	C
1	2A	1471	A
1	2A	1478	G
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1520	G
1	2A	1531	C
1	2A	1533	G
1	2A	1541	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1589	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1616	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C

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Mol	Chain	Res	Type
1	2A	1653	G
1	2A	1654	A
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1756	G
1	2A	1758	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1774	C
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1819	A
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1857	G
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1904	G
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A

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Mol	Chain	Res	Type
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2099	U
1	2A	2101	G
1	2A	2108	C
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A

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Mol	Chain	Res	Type
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2141	G
1	2A	2142	C
1	2A	2143	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2174	C
1	2A	2176	A
1	2A	2178	C
1	2A	2185	C
1	2A	2189	U
1	2A	2190	G
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2234	G
1	2A	2239	G
1	2A	2249	U
1	2A	2268	A
1	2A	2275	C
1	2A	2278	A
1	2A	2283	C
1	2A	2287	A

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Mol	Chain	Res	Type
1	2A	2288	A
1	2A	2294	C
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2325	G
1	2A	2326	C
1	2A	2327	A
1	2A	2329	G
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2355	C
1	2A	2358	G
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2403	C
1	2A	2406	U
1	2A	2407	G
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2465	C
1	2A	2469	A
1	2A	2476	A
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U

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Mol	Chain	Res	Type
1	2A	2502	G
1	2A	2505	G
1	2A	2507	C
1	2A	2513	G
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2537	U
1	2A	2554	U
1	2A	2555	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2572	A
1	2A	2573	C
1	2A	2585	U
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2664	G
1	2A	2667	C
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2726	U
1	2A	2733	A
1	2A	2751	G
1	2A	2758	A
1	2A	2759	G
1	2A	2761	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2780	G

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Mol	Chain	Res	Type
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2810	A
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G
1	2A	2879	C
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	19	G
2	2B	32	C
2	2B	34	U
2	2B	40	U
2	2B	41	U
2	2B	42	C
2	2B	53	A
2	2B	56	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	84	C
2	2B	85	G
2	2B	88	C
2	2B	89	G
2	2B	91	C
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	113	G

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Mol	Chain	Res	Type
2	2B	119	G
2	2B	120	A
32	2a	5	U
32	2a	6	G
32	2a	7	G
32	2a	9	G
32	2a	31	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	65	U
32	2a	66	G
32	2a	73	G
32	2a	80	G
32	2a	89	C
32	2a	101	A
32	2a	105	G
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	143	A
32	2a	144	G
32	2a	163	C
32	2a	182	U
32	2a	189	G
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	220	G
32	2a	224	C
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	266	G

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Mol	Chain	Res	Type
32	2a	267	C
32	2a	270	A
32	2a	289	G
32	2a	298	A
32	2a	301	G
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	339	C
32	2a	349	A
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	368	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	470	C
32	2a	471	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	499	A
32	2a	505	G
32	2a	509	A
32	2a	510	A

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Mol	Chain	Res	Type
32	2a	511	C
32	2a	517	G
32	2a	518	C
32	2a	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	607	A
32	2a	618	C
32	2a	630	G
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	673	G
32	2a	688	G
32	2a	702	A
32	2a	705	U
32	2a	721	G
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	816	A
32	2a	817	C
32	2a	819	A
32	2a	821	G
32	2a	827	U

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Mol	Chain	Res	Type
32	2a	828	A
32	2a	833	U
32	2a	840	C
32	2a	841	U
32	2a	850	U
32	2a	851	G
32	2a	853	G
32	2a	859	A
32	2a	873	A
32	2a	874	G
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	935	A
32	2a	938	A
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	962	C
32	2a	966	M2G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	979	C
32	2a	982	U
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	996	A
32	2a	997	U
32	2a	998	G

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Mol	Chain	Res	Type
32	2a	999	C
32	2a	1000	U
32	2a	1001(A)	G
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1008	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1017	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1033	G
32	2a	1035	A
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1044	A
32	2a	1046	A
32	2a	1051	C
32	2a	1053	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1081	G
32	2a	1086	U
32	2a	1087	G
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U

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Mol	Chain	Res	Type
32	2a	1101	A
32	2a	1105	A
32	2a	1108	G
32	2a	1115	C
32	2a	1125	U
32	2a	1126	U
32	2a	1127	G
32	2a	1129	C
32	2a	1130	A
32	2a	1133	G
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1172	C
32	2a	1182	G
32	2a	1184	G
32	2a	1189	C
32	2a	1191	A
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1204	A
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C

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Mol	Chain	Res	Type
32	2a	1261	A
32	2a	1267	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1275	A
32	2a	1276	G
32	2a	1277	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1286	A
32	2a	1287	A
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1316	G
32	2a	1320	C
32	2a	1321	C
32	2a	1323	G
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1349	A
32	2a	1357	A
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1381	U
32	2a	1388	C
32	2a	1398	A
32	2a	1402	4OC
32	2a	1404	5MC
32	2a	1406	U
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A

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Mol	Chain	Res	Type
32	2a	1497	G
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	14	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	8	4SU
54	2w	11	C
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	46	G7M
54	2w	48	C
54	2w	49	C
54	2w	50	U
54	2w	62	C
54	2w	66	U
54	2w	69	G
54	2w	70	G
54	2w	71	G
54	2w	73	A
55	2x	9	G
55	2x	13	C
55	2x	18	G
55	2x	19	G
55	2x	20	U
55	2x	21	A
55	2x	47	U
55	2x	52	G
55	2x	61	C
54	2y	2	C
54	2y	3	C
54	2y	15	G
54	2y	19	G

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Mol	Chain	Res	Type
54	2y	24	G
54	2y	27	G
54	2y	40	C
54	2y	43	C
54	2y	45	U
54	2y	48	C
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	54	5MU
54	2y	55	PSU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	60	U
54	2y	61	C
54	2y	64	A
54	2y	65	G
54	2y	68	C
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (74) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	119	A
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	573	G
1	1A	669	G
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	974	G

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Mol	Chain	Res	Type
1	1A	1067	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1301	A
1	1A	1379	A
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1762	A
1	1A	1992	G
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2250	G
1	1A	2286	A
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2611	U
1	1A	2689	U
1	1A	2756	U
1	2A	34	C
1	2A	196	A
1	2A	215	G
1	2A	228	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A
1	2A	528	A
1	2A	752	A
1	2A	764	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	1026	U
1	2A	1210	A

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Mol	Chain	Res	Type
1	2A	1249	U
1	2A	1378	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1493	C
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2406	U
1	2A	2439	A
1	2A	2689	U
1	2A	2726	U

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

86 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	OMC	1A	1920	1	19,22,23	0.82	1 (5%)	25,31,34	0.98	1 (4%)
54	5MU	2y	54	54	19,22,23	1.52	4 (21%)	27,32,35	2.24	9 (33%)
55	5MC	1x	32	56,55	19,22,23	1.71	2 (10%)	26,32,35	1.56	5 (19%)
55	31H	1x	76	56,55	27,34,35	0.91	1 (3%)	22,47,50	2.97	5 (22%)
32	4OC	1a	1402	32	20,23,24	0.82	0	25,32,35	1.12	3 (12%)
1	PSU	2A	1917	1	18,21,22	1.36	1 (5%)	21,30,33	1.76	3 (14%)
1	5MU	2A	1915	1	19,22,23	1.53	5 (26%)	27,32,35	2.23	5 (18%)
32	5MC	1a	1404	32	19,22,23	1.64	3 (15%)	26,32,35	1.42	4 (15%)
55	4SU	1x	8	55	18,21,22	2.46	5 (27%)	25,30,33	2.22	7 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
55	5MU	2x	54	55	19,22,23	1.50	5 (26%)	27,32,35	2.09	8 (29%)
1	PSU	1A	1911	1	18,21,22	1.52	3 (16%)	21,30,33	1.93	5 (23%)
32	5MC	1a	1407	32	19,22,23	1.64	3 (15%)	26,32,35	1.32	3 (11%)
32	PSU	2a	516	32	18,21,22	1.27	1 (5%)	21,30,33	1.96	4 (19%)
54	4SU	1w	8	54	18,21,22	1.62	5 (27%)	25,30,33	1.98	6 (24%)
54	MIA	1w	37	54	24,31,32	2.20	3 (12%)	22,44,47	2.92	5 (22%)
32	MA6	1a	1518	32	19,26,27	1.02	1 (5%)	18,38,41	1.90	4 (22%)
55	5MU	1x	54	56,55	19,22,23	1.52	5 (26%)	27,32,35	1.85	6 (22%)
54	PSU	2w	32	54	18,21,22	1.37	3 (16%)	21,30,33	1.85	4 (19%)
54	PSU	2w	39	54	18,21,22	1.36	2 (11%)	21,30,33	2.09	5 (23%)
32	5MC	2a	1407	56,32	19,22,23	1.37	3 (15%)	26,32,35	1.43	4 (15%)
32	5MC	1a	967	32	19,22,23	1.83	2 (10%)	26,32,35	1.24	3 (11%)
54	4SU	1y	8	54	18,21,22	1.59	4 (22%)	25,30,33	1.65	5 (20%)
1	5MU	2A	1939	56,1	19,22,23	1.42	4 (21%)	27,32,35	2.65	6 (22%)
32	MA6	2a	1519	32	19,26,27	1.04	2 (10%)	18,38,41	2.17	3 (16%)
32	G7M	1a	527	32	20,26,27	1.22	2 (10%)	16,39,42	0.56	0
54	MIA	2y	37	54	17,24,32	1.03	1 (5%)	16,35,47	1.55	2 (12%)
1	OMC	2A	1920	1	19,22,23	0.80	1 (5%)	25,31,34	0.92	0
54	PSU	1y	39	54	18,21,22	1.47	2 (11%)	21,30,33	1.80	5 (23%)
54	PSU	1w	55	54	18,21,22	1.43	2 (11%)	21,30,33	2.08	4 (19%)
54	G7M	2w	46	54	20,26,27	1.31	1 (5%)	16,39,42	0.79	0
54	G7M	1y	46	54	20,26,27	1.34	1 (5%)	16,39,42	0.64	0
1	2MA	2A	2503	56,1	18,25,26	0.77	0	20,37,40	2.10	7 (35%)
54	PSU	1w	39	54	18,21,22	1.39	2 (11%)	21,30,33	1.69	3 (14%)
54	4SU	2y	8	54	18,21,22	1.67	4 (22%)	25,30,33	2.41	6 (24%)
1	OMU	2A	2552	56,1	19,22,23	1.19	4 (21%)	25,31,34	1.92	5 (20%)
32	2MG	1a	1207	56,32	18,26,27	0.95	1 (5%)	16,38,41	1.50	3 (18%)
54	PSU	2y	55	54	18,21,22	1.42	2 (11%)	21,30,33	1.87	5 (23%)
1	5MU	1A	1939	56,1	19,22,23	1.66	4 (21%)	27,32,35	2.66	7 (25%)
32	MA6	2a	1518	32	19,26,27	1.03	2 (10%)	18,38,41	1.75	4 (22%)
55	31H	2x	76	56,55	27,34,35	1.22	3 (11%)	22,47,50	3.36	5 (22%)
32	UR3	1a	1498	32	19,22,23	1.01	2 (10%)	26,32,35	1.80	6 (23%)
54	4SU	2w	8	54	18,21,22	1.49	3 (16%)	25,30,33	2.28	5 (20%)
55	4SU	2x	8	55	18,21,22	1.94	6 (33%)	25,30,33	1.54	5 (20%)
54	MIA	1y	37	54	17,24,32	1.06	1 (5%)	16,35,47	1.57	2 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	M2G	1a	966	32	20,27,28	1.54	3 (15%)	19,40,43	1.17	2 (10%)
32	M2G	2a	966	32	20,27,28	1.37	2 (10%)	19,40,43	1.31	3 (15%)
1	5MC	1A	1942	1	19,22,23	1.19	3 (15%)	26,32,35	1.67	5 (19%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	1.90	3 (14%)
1	5MC	2A	1942	1	19,22,23	1.51	3 (15%)	26,32,35	1.10	2 (7%)
54	MIA	2w	37	54	19,27,32	1.69	5 (26%)	18,39,47	1.46	4 (22%)
1	5MC	2A	1962	56,1	19,22,23	1.38	3 (15%)	26,32,35	1.37	4 (15%)
1	PSU	1A	2605	56,1	18,21,22	1.52	3 (16%)	21,30,33	2.25	5 (23%)
54	PSU	1y	55	54	18,21,22	1.41	2 (11%)	21,30,33	1.98	3 (14%)
1	OMG	1A	2251	56,1,55	19,26,27	1.17	1 (5%)	21,38,41	0.99	3 (14%)
54	G7M	2y	46	54	20,26,27	1.45	1 (5%)	16,39,42	0.80	1 (6%)
54	5MU	1y	54	54	19,22,23	1.61	5 (26%)	27,32,35	1.68	7 (25%)
1	OMG	2A	2251	56,1,55	19,26,27	1.10	1 (5%)	21,38,41	1.18	3 (14%)
32	G7M	2a	527	56,32	20,26,27	1.29	2 (10%)	16,39,42	0.69	0
32	MA6	1a	1519	32	19,26,27	1.07	1 (5%)	18,38,41	2.04	3 (16%)
32	5MC	1a	1400	32	19,22,23	1.77	3 (15%)	26,32,35	1.18	2 (7%)
1	2MA	1A	2503	56,1	18,25,26	0.92	0	20,37,40	1.91	5 (25%)
32	PSU	1a	516	56,32	18,21,22	1.51	3 (16%)	21,30,33	1.83	4 (19%)
32	5MC	2a	1404	32	19,22,23	1.95	3 (15%)	26,32,35	1.48	4 (15%)
54	PSU	2w	55	54	18,21,22	1.56	2 (11%)	21,30,33	2.06	4 (19%)
32	5MC	2a	1400	32	19,22,23	1.77	3 (15%)	26,32,35	1.40	4 (15%)
55	PSU	1x	55	55	18,21,22	1.31	2 (11%)	21,30,33	1.89	4 (19%)
55	PSU	2x	55	55	18,21,22	1.44	2 (11%)	21,30,33	1.98	5 (23%)
54	5MU	2w	54	54	19,22,23	1.36	4 (21%)	27,32,35	1.70	5 (18%)
32	5MC	2a	967	32	19,22,23	1.97	2 (10%)	26,32,35	1.18	4 (15%)
54	PSU	1y	32	54	18,21,22	1.56	2 (11%)	21,30,33	1.97	4 (19%)
55	5MC	2x	32	55	19,22,23	1.67	2 (10%)	26,32,35	1.30	3 (11%)
32	2MG	2a	1207	56,32	18,26,27	0.95	2 (11%)	16,38,41	1.26	2 (12%)
32	4OC	2a	1402	56,32	20,23,24	0.83	0	25,32,35	1.00	2 (8%)
32	UR3	2a	1498	56,32	19,22,23	1.13	2 (10%)	26,32,35	1.82	4 (15%)
43	0TD	2l	92	43	8,9,10	4.59	2 (25%)	6,11,13	1.13	0
54	PSU	2y	39	54	18,21,22	1.29	1 (5%)	21,30,33	1.96	3 (14%)
1	PSU	2A	2605	1	18,21,22	1.27	2 (11%)	21,30,33	2.48	5 (23%)
1	OMU	1A	2552	56,1	19,22,23	1.28	4 (21%)	25,31,34	2.63	7 (28%)
54	PSU	2y	32	54	18,21,22	1.45	2 (11%)	21,30,33	1.92	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
43	0TD	1l	92	43	8,9,10	4.23	3 (37%)	6,11,13	8.05	2 (33%)
54	5MU	1w	54	54	19,22,23	1.38	5 (26%)	27,32,35	1.95	6 (22%)
1	5MU	1A	1915	1	19,22,23	1.63	4 (21%)	27,32,35	2.16	7 (25%)
54	PSU	1w	32	54	18,21,22	1.30	2 (11%)	21,30,33	1.90	3 (14%)
1	PSU	1A	1917	1	18,21,22	1.35	2 (11%)	21,30,33	1.94	3 (14%)
54	G7M	1w	46	54	20,26,27	1.32	1 (5%)	16,39,42	0.93	1 (6%)
1	5MC	1A	1962	56,1	19,22,23	1.60	2 (10%)	26,32,35	1.43	2 (7%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
55	5MC	1x	32	56,55	-	0/7/25/26	0/2/2/2
55	31H	1x	76	56,55	-	6/18/40/41	0/3/3/3
32	4OC	1a	1402	32	-	1/9/29/30	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	4/11/33/34	0/3/3/3
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
55	5MU	1x	54	56,55	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	56,32	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	56,1	-	1/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
32	G7M	1a	527	32	-	2/3/25/26	0/3/3/3
54	MIA	2y	37	54	-	1/3/25/34	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	3/3/25/26	0/3/3/3
54	G7M	1y	46	54	-	1/3/25/26	0/3/3/3
1	2MA	2A	2503	56,1	-	2/3/25/26	0/3/3/3
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	56,1	-	0/9/27/28	0/2/2/2
32	2MG	1a	1207	56,32	-	2/5/27/28	0/3/3/3
54	PSU	2y	55	54	-	4/7/25/26	0/2/2/2
1	5MU	1A	1939	56,1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
55	31H	2x	76	56,55	-	4/18/40/41	0/3/3/3
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	2/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	1/7/25/26	0/2/2/2
54	MIA	1y	37	54	-	1/3/25/34	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/7/29/34	0/3/3/3
1	5MC	2A	1962	56,1	-	2/7/25/26	0/2/2/2
1	PSU	1A	2605	56,1	-	0/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	1/7/25/26	0/2/2/2
1	OMG	1A	2251	56,1,55	-	1/5/27/28	0/3/3/3
54	G7M	2y	46	54	-	0/3/25/26	0/3/3/3
54	5MU	1y	54	54	-	1/7/25/26	0/2/2/2
1	OMG	2A	2251	56,1,55	-	0/5/27/28	0/3/3/3
32	G7M	2a	527	56,32	-	3/3/25/26	0/3/3/3
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	56,1	-	0/3/25/26	0/3/3/3
32	PSU	1a	516	56,32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	1/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	1/7/25/26	0/2/2/2
32	2MG	2a	1207	56,32	-	2/5/27/28	0/3/3/3
32	4OC	2a	1402	56,32	-	2/9/29/30	0/2/2/2
32	UR3	2a	1498	56,32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	56,1	-	0/9/27/28	0/2/2/2
54	PSU	2y	32	54	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	5MC	1A	1962	56,1	-	0/7/25/26	0/2/2/2

All (211) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.42	1.69	1.82
43	1l	92	0TD	CB-SB	-11.04	1.71	1.82
32	2a	967	5MC	C5-C4	7.54	1.49	1.44
32	2a	1404	5MC	C5-C4	7.36	1.49	1.44
54	1w	37	MIA	C2-S10	-7.23	1.69	1.75
32	1a	967	5MC	C5-C4	6.77	1.49	1.44
32	2a	1400	5MC	C5-C4	6.63	1.49	1.44
54	1w	37	MIA	C13-C14	6.63	1.52	1.32
55	1x	8	4SU	C4-N3	-6.42	1.31	1.37
32	1a	1400	5MC	C5-C4	6.38	1.48	1.44
55	1x	32	5MC	C5-C4	6.17	1.48	1.44
32	1a	1407	5MC	C5-C4	5.90	1.48	1.44
32	1a	1404	5MC	C5-C4	5.76	1.48	1.44
55	2x	32	5MC	C5-C4	5.65	1.48	1.44
1	1A	1962	5MC	C5-C4	5.55	1.48	1.44
54	1y	32	PSU	C6-C5	5.33	1.41	1.35
55	1x	8	4SU	C2-N3	-5.26	1.28	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1942	5MC	C5-C4	5.18	1.48	1.44
54	2w	55	PSU	C6-C5	5.09	1.40	1.35
54	2w	37	MIA	C2-S10	-4.91	1.71	1.75
54	2y	32	PSU	C6-C5	4.80	1.40	1.35
54	2y	8	4SU	C4-S4	-4.75	1.60	1.68
32	1a	966	M2G	C2-N3	4.63	1.37	1.30
54	1y	39	PSU	C6-C5	4.62	1.40	1.35
55	2x	55	PSU	C6-C5	4.51	1.40	1.35
54	1w	55	PSU	C6-C5	4.47	1.40	1.35
1	2A	1962	5MC	C5-C4	4.43	1.47	1.44
55	2x	8	4SU	C4-N3	-4.42	1.33	1.37
54	2y	46	G7M	C5-C4	4.37	1.47	1.39
54	1w	8	4SU	C4-S4	-4.35	1.61	1.68
54	1y	46	G7M	C5-C4	4.32	1.47	1.39
54	1y	55	PSU	C6-C5	4.31	1.40	1.35
32	1a	516	PSU	C6-C5	4.30	1.40	1.35
55	1x	8	4SU	C4-S4	-4.26	1.61	1.68
32	2a	966	M2G	C2-N3	4.21	1.36	1.30
32	2a	1407	5MC	C5-C4	4.17	1.47	1.44
54	1w	46	G7M	C5-C4	4.15	1.47	1.39
1	1A	1915	5MU	C2-N1	4.13	1.44	1.38
1	2A	1911	PSU	C6-C5	4.13	1.39	1.35
54	2w	46	G7M	C5-C4	4.12	1.47	1.39
1	1A	2251	OMG	C6-N1	-4.07	1.31	1.37
1	1A	1911	PSU	C6-C5	4.04	1.39	1.35
1	2A	1917	PSU	C6-C5	3.99	1.39	1.35
54	2w	8	4SU	C4-S4	-3.99	1.61	1.68
54	2w	39	PSU	C6-C5	3.92	1.39	1.35
54	2w	32	PSU	C6-C5	3.90	1.39	1.35
54	1y	8	4SU	C4-S4	-3.89	1.61	1.68
55	2x	8	4SU	C4-S4	-3.88	1.61	1.68
54	2y	55	PSU	C6-C5	3.86	1.39	1.35
54	2y	54	5MU	C2-N1	3.85	1.44	1.38
54	1w	32	PSU	C6-C5	3.82	1.39	1.35
54	1w	39	PSU	C6-C5	3.80	1.39	1.35
54	2y	39	PSU	C6-C5	3.79	1.39	1.35
32	2a	516	PSU	C6-C5	3.79	1.39	1.35
55	2x	8	4SU	C2-N3	-3.58	1.31	1.38
32	2a	527	G7M	C5-C4	3.55	1.46	1.39
32	1a	527	G7M	C5-C4	3.52	1.46	1.39
1	1A	1962	5MC	C6-C5	3.44	1.40	1.34
1	2A	1915	5MU	C6-C5	3.44	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	8	4SU	C5-C4	-3.38	1.38	1.42
32	2a	1404	5MC	C6-C5	3.37	1.40	1.34
1	1A	1939	5MU	C2-N3	-3.37	1.32	1.38
1	1A	1917	PSU	C6-C5	3.27	1.38	1.35
1	1A	1939	5MU	C4-N3	-3.27	1.32	1.38
55	1x	54	5MU	C6-C5	3.26	1.39	1.34
32	1a	966	M2G	C2-N2	3.24	1.41	1.35
1	1A	1939	5MU	C6-N1	-3.22	1.32	1.38
55	2x	76	31H	C5-N7	-3.19	1.28	1.39
55	2x	32	5MC	C6-C5	3.17	1.39	1.34
1	1A	2605	PSU	C4-N3	-3.16	1.32	1.38
55	1x	32	5MC	C6-C5	3.16	1.39	1.34
1	1A	1942	5MC	C5-C4	3.14	1.46	1.44
54	1w	8	4SU	C2-N1	3.14	1.43	1.38
1	1A	1939	5MU	C6-C5	3.12	1.39	1.34
1	2A	1915	5MU	C2-N1	3.11	1.43	1.38
1	1A	1915	5MU	C6-C5	3.10	1.39	1.34
55	2x	54	5MU	C6-C5	3.10	1.39	1.34
55	2x	54	5MU	C4-C5	3.09	1.49	1.44
1	1A	2552	OMU	C5-C4	-3.09	1.37	1.43
54	1y	54	5MU	C4-C5	3.06	1.49	1.44
32	1a	967	5MC	C6-C5	3.05	1.39	1.34
55	1x	54	5MU	C4-N3	-3.04	1.33	1.38
54	2w	37	MIA	C6-C5	3.03	1.49	1.44
55	2x	76	31H	C4-N3	-3.01	1.31	1.35
32	1a	1400	5MC	C6-C5	3.00	1.39	1.34
54	1y	54	5MU	C6-C5	2.99	1.39	1.34
54	1y	8	4SU	C4-N3	-2.99	1.34	1.37
32	2a	966	M2G	C2-N2	2.98	1.40	1.35
54	2y	8	4SU	C2-N1	2.98	1.43	1.38
32	1a	1404	5MC	C6-N1	-2.98	1.32	1.38
1	2A	1939	5MU	C6-C5	2.95	1.39	1.34
1	2A	2605	PSU	C4-N3	-2.92	1.33	1.38
32	2a	1407	5MC	C6-C5	2.90	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.86	1.33	1.38
55	1x	55	PSU	C6-C5	2.85	1.38	1.35
1	1A	1911	PSU	C4-N3	-2.85	1.33	1.38
54	2y	54	5MU	C6-C5	2.84	1.39	1.34
1	1A	2605	PSU	C6-C5	2.81	1.38	1.35
32	1a	966	M2G	C6-N1	-2.80	1.33	1.37
54	1y	54	5MU	C2-N1	2.79	1.42	1.38
1	1A	2605	PSU	C2-N1	-2.79	1.33	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	8	4SU	C2-N1	2.78	1.42	1.38
32	2a	967	5MC	C6-C5	2.76	1.39	1.34
43	2l	92	0TD	CB-CA	2.75	1.55	1.54
54	2y	54	5MU	C4-C5	2.75	1.49	1.44
54	2w	54	5MU	C6-C5	2.70	1.39	1.34
54	2y	37	MIA	C2-N3	2.68	1.36	1.32
1	1A	1942	5MC	C6-N1	-2.67	1.33	1.38
54	1y	54	5MU	C4-N3	-2.67	1.33	1.38
55	2x	54	5MU	C4-N3	-2.66	1.33	1.38
54	1y	37	MIA	C2-N3	2.65	1.36	1.32
1	2A	1942	5MC	C6-C5	2.65	1.38	1.34
1	2A	1962	5MC	C6-N1	-2.64	1.33	1.38
1	1A	2552	OMU	C4-N3	-2.63	1.34	1.38
1	2A	1915	5MU	C4-C5	2.61	1.49	1.44
32	1a	1519	MA6	C6-C5	-2.60	1.40	1.44
1	2A	2552	OMU	C4-N3	-2.59	1.34	1.38
1	1A	1915	5MU	C4-C5	2.58	1.49	1.44
54	2y	55	PSU	C4-N3	-2.57	1.34	1.38
54	2w	37	MIA	C6-N1	2.57	1.36	1.33
54	1w	54	5MU	C6-C5	2.57	1.38	1.34
32	1a	1407	5MC	C6-N1	-2.57	1.33	1.38
32	2a	1498	UR3	C2-N1	2.54	1.42	1.38
54	1w	37	MIA	C6-C5	2.54	1.48	1.44
54	2w	54	5MU	C4-C5	2.53	1.48	1.44
32	2a	527	G7M	C6-N1	-2.50	1.34	1.37
54	1w	54	5MU	C4-C5	2.49	1.48	1.44
54	1w	54	5MU	C4-N3	-2.46	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.46	1.34	1.38
32	1a	1518	MA6	C6-C5	-2.46	1.41	1.44
1	2A	1939	5MU	C6-N1	-2.45	1.33	1.38
32	1a	1498	UR3	C6-C5	2.45	1.40	1.35
1	2A	2251	OMG	C6-N1	-2.44	1.34	1.37
55	1x	76	31H	C6-C5	-2.42	1.34	1.43
1	2A	1911	PSU	C4-N3	-2.42	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.41	1.33	1.38
55	1x	55	PSU	C4-N3	-2.41	1.34	1.38
55	1x	54	5MU	C2-N3	-2.41	1.33	1.38
54	1w	39	PSU	C4-N3	-2.40	1.34	1.38
43	1l	92	0TD	CSB-SB	-2.40	1.75	1.79
55	2x	8	4SU	C5-C4	-2.40	1.39	1.42
54	1y	39	PSU	C4-N3	-2.40	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.39	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1519	MA6	C6-C5	-2.38	1.41	1.44
32	1a	1404	5MC	C6-C5	2.38	1.38	1.34
32	2a	1518	MA6	C6-C5	-2.35	1.41	1.44
1	2A	1942	5MC	C6-N1	-2.34	1.34	1.38
54	1y	32	PSU	C4-C5	2.34	1.50	1.44
55	2x	54	5MU	C2-N3	-2.34	1.33	1.38
54	2w	37	MIA	C2-N3	2.32	1.37	1.34
32	1a	516	PSU	C4-N3	-2.32	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.31	1.34	1.38
54	2w	54	5MU	C2-N1	2.31	1.42	1.38
54	1w	54	5MU	C2-N1	2.31	1.42	1.38
55	2x	8	4SU	C6-C5	2.31	1.40	1.35
1	2A	1915	5MU	C4-N3	-2.31	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.30	1.34	1.38
1	1A	1942	5MC	C6-C5	2.30	1.38	1.34
32	1a	1498	UR3	C2-N1	2.29	1.41	1.38
43	1l	92	0TD	CB-CA	2.29	1.55	1.54
54	1w	32	PSU	C4-N3	-2.28	1.34	1.38
54	1w	8	4SU	O2-C2	2.26	1.27	1.23
32	1a	1400	5MC	C6-N1	-2.26	1.34	1.38
1	1A	1915	5MU	C4-N3	-2.26	1.34	1.38
54	2w	55	PSU	C4-C5	2.25	1.50	1.44
54	1w	55	PSU	C4-N3	-2.24	1.34	1.38
54	1y	8	4SU	C5-C4	-2.24	1.39	1.42
32	2a	1400	5MC	C6-C5	2.24	1.38	1.34
54	2w	32	PSU	C4-C5	2.24	1.50	1.44
55	1x	54	5MU	C4-C5	2.23	1.48	1.44
54	1y	8	4SU	C6-C5	2.22	1.40	1.35
54	2w	8	4SU	C6-C5	2.19	1.40	1.35
32	1a	516	PSU	C2-N3	-2.19	1.33	1.37
54	2y	8	4SU	C5-C4	-2.19	1.39	1.42
32	1a	1407	5MC	C6-C5	2.18	1.38	1.34
32	2a	1404	5MC	C6-N1	-2.17	1.34	1.38
54	2w	39	PSU	C4-N3	-2.17	1.34	1.38
55	2x	8	4SU	C2-N1	2.17	1.41	1.38
1	2A	2552	OMU	C6-C5	2.14	1.40	1.35
32	2a	1207	2MG	C6-N1	-2.14	1.34	1.37
32	1a	1207	2MG	C6-N1	-2.13	1.34	1.37
1	2A	2552	OMU	C5-C4	-2.13	1.39	1.43
55	1x	8	4SU	C6-C5	2.12	1.40	1.35
54	1w	8	4SU	C5-C4	-2.12	1.40	1.42
1	2A	2605	PSU	C2-N3	-2.12	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2x	76	31H	C2-N3	2.12	1.35	1.32
54	2y	54	5MU	C4-N3	-2.11	1.34	1.38
54	1w	54	5MU	C2-N3	-2.11	1.34	1.38
54	2w	32	PSU	C4-N3	-2.11	1.34	1.38
54	1w	8	4SU	C6-C5	2.10	1.40	1.35
55	1x	54	5MU	C2-N1	2.10	1.41	1.38
55	2x	54	5MU	C2-N1	2.10	1.41	1.38
54	2w	54	5MU	C4-N3	-2.08	1.34	1.38
1	2A	1920	OMC	C6-C5	2.08	1.39	1.35
32	2a	1498	UR3	C6-C5	2.08	1.39	1.35
32	1a	527	G7M	C6-N1	-2.08	1.34	1.37
1	1A	1911	PSU	O4'-C1'	-2.08	1.41	1.43
54	1y	55	PSU	C4-N3	-2.07	1.35	1.38
54	1y	54	5MU	C2-N3	-2.07	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.07	1.34	1.38
32	2a	1519	MA6	C6-N1	2.07	1.35	1.32
32	2a	1518	MA6	C6-N1	2.05	1.35	1.32
54	2y	8	4SU	O2-C2	2.05	1.26	1.23
1	1A	2552	OMU	C6-N1	-2.04	1.33	1.38
1	1A	1920	OMC	C5-C4	-2.04	1.38	1.42
54	2w	37	MIA	C2-N1	2.02	1.37	1.34
1	2A	1962	5MC	C6-C5	2.02	1.37	1.34
1	2A	1915	5MU	C2-N3	-2.02	1.34	1.38
55	2x	55	PSU	C4-N3	-2.02	1.35	1.38
54	2y	32	PSU	C4-C5	2.01	1.49	1.44
32	2a	1207	2MG	C5-C4	2.00	1.48	1.43

All (334) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-19.51	67.30	102.36
54	1w	37	MIA	C12-C13-C14	-10.89	107.47	127.01
55	2x	76	31H	C4'-O4'-C1'	-9.65	101.08	109.92
55	2x	76	31H	O4'-C1'-N9	-9.46	96.20	108.75
55	1x	76	31H	O4'-C1'-N9	-7.50	98.80	108.75
54	2w	8	4SU	C4-N3-C2	-7.14	120.47	127.31
1	2A	2503	2MA	C2-N3-C4	7.14	121.22	115.46
1	1A	2552	OMU	C4-N3-C2	-7.00	117.93	126.61
32	2a	1498	UR3	C4-N3-C2	-6.77	119.13	124.58
1	1A	1939	5MU	C5-C6-N1	-6.62	116.12	123.31
54	1w	55	PSU	N1-C2-N3	6.54	122.07	115.17
54	2y	8	4SU	C4-N3-C2	-6.44	121.14	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1y	55	PSU	N1-C2-N3	6.41	121.93	115.17
1	2A	1939	5MU	C4-N3-C2	-6.40	118.95	127.34
54	2w	39	PSU	N1-C2-N3	6.37	121.89	115.17
1	1A	1939	5MU	C5-C4-N3	6.34	120.83	115.32
55	1x	76	31H	C4'-O4'-C1'	-6.29	104.17	109.92
55	1x	76	31H	N3-C2-N1	-6.28	120.15	128.67
32	2a	1519	MA6	N3-C2-N1	-6.24	120.20	128.67
1	1A	1939	5MU	C4-N3-C2	-6.23	119.17	127.34
1	2A	2605	PSU	N1-C2-N3	6.20	121.71	115.17
55	2x	76	31H	N3-C2-N1	-6.20	120.26	128.67
1	2A	1939	5MU	O4-C4-C5	-6.18	117.85	124.92
55	2x	55	PSU	N1-C2-N3	6.18	121.68	115.17
54	2w	55	PSU	N1-C2-N3	6.09	121.59	115.17
1	1A	1911	PSU	N1-C2-N3	5.99	121.48	115.17
1	1A	2605	PSU	N1-C2-N3	5.95	121.44	115.17
54	2y	8	4SU	C5-C4-N3	5.93	120.27	114.75
1	1A	1917	PSU	N1-C2-N3	5.91	121.40	115.17
1	2A	1911	PSU	N1-C2-N3	5.91	121.40	115.17
54	2y	32	PSU	N1-C2-N3	5.90	121.39	115.17
54	1w	32	PSU	N1-C2-N3	5.87	121.36	115.17
55	1x	76	31H	CA-N-CN	-5.86	113.81	122.82
32	1a	1498	UR3	C4-N3-C2	-5.86	119.87	124.58
1	2A	1939	5MU	N3-C2-N1	5.82	122.47	114.89
1	2A	1939	5MU	C5-C4-N3	5.80	120.37	115.32
54	2y	55	PSU	N1-C2-N3	5.80	121.28	115.17
54	2y	39	PSU	N1-C2-N3	5.78	121.26	115.17
1	2A	2605	PSU	C4-N3-C2	-5.72	118.49	126.37
1	2A	1915	5MU	C5-C4-N3	5.70	120.28	115.32
1	1A	2503	2MA	C2-N3-C4	5.70	120.06	115.46
55	1x	55	PSU	N1-C2-N3	5.70	121.18	115.17
54	2y	54	5MU	C5-C4-N3	5.65	120.23	115.32
1	1A	1915	5MU	N3-C2-N1	5.63	122.22	114.89
32	2a	516	PSU	N1-C2-N3	5.61	121.08	115.17
54	1y	39	PSU	N1-C2-N3	5.59	121.06	115.17
54	2w	32	PSU	N1-C2-N3	5.54	121.01	115.17
55	1x	32	5MC	C5-C6-N1	-5.44	117.40	123.31
54	1w	39	PSU	N1-C2-N3	5.43	120.89	115.17
32	1a	1519	MA6	C2-N1-C6	5.33	122.07	116.84
1	2A	1917	PSU	N1-C2-N3	5.30	120.75	115.17
54	2y	8	4SU	C5-C4-S4	-5.28	118.27	124.31
32	1a	1519	MA6	N3-C2-N1	-5.27	121.51	128.67
32	2a	1519	MA6	C2-N1-C6	5.27	122.01	116.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	8	4SU	C4-N3-C2	-5.26	122.27	127.31
1	2A	1915	5MU	C4-N3-C2	-5.23	120.49	127.34
1	2A	1915	5MU	O4-C4-C5	-5.17	119.00	124.92
54	1y	32	PSU	N1-C2-N3	5.16	120.61	115.17
1	1A	2552	OMU	N3-C2-N1	5.13	121.57	114.89
55	2x	54	5MU	N3-C2-N1	5.11	121.54	114.89
1	1A	2552	OMU	O4-C4-C5	-5.05	116.44	125.16
55	2x	54	5MU	C4-N3-C2	-5.04	120.73	127.34
55	1x	8	4SU	O2-C2-N1	5.03	129.34	122.80
32	2a	1518	MA6	N3-C2-N1	-5.01	121.87	128.67
1	1A	1942	5MC	C5-C6-N1	-5.00	117.88	123.31
54	2y	54	5MU	C4-N3-C2	-5.00	120.78	127.34
54	1w	8	4SU	C5-C4-N3	4.99	119.39	114.75
1	1A	2552	OMU	O2-C2-N1	-4.98	116.31	122.80
55	1x	8	4SU	C6-C5-C4	-4.98	115.64	119.95
54	2w	8	4SU	C5-C4-N3	4.96	119.37	114.75
1	1A	1915	5MU	C4-N3-C2	-4.92	120.89	127.34
54	2y	37	MIA	N3-C2-N1	-4.84	122.11	128.67
54	1y	37	MIA	N3-C2-N1	-4.83	122.12	128.67
32	1a	1498	UR3	C6-N1-C2	-4.79	117.89	121.80
55	1x	8	4SU	S4-C4-N3	-4.76	115.22	120.20
54	2w	8	4SU	N3-C2-N1	4.75	121.08	114.89
32	1a	1404	5MC	C5-C6-N1	-4.75	118.16	123.31
54	2y	54	5MU	O4-C4-C5	-4.72	119.52	124.92
32	1a	516	PSU	C6-C5-C4	-4.71	114.99	118.17
1	1A	1939	5MU	N3-C2-N1	4.71	121.02	114.89
54	1w	54	5MU	C4-N3-C2	-4.70	121.18	127.34
1	2A	2552	OMU	O2-C2-N1	-4.69	116.69	122.80
1	1A	2605	PSU	C4-N3-C2	-4.67	119.94	126.37
54	1w	54	5MU	N3-C2-N1	4.66	120.96	114.89
54	1w	54	5MU	C5-C4-N3	4.65	119.36	115.32
1	2A	1915	5MU	N3-C2-N1	4.59	120.87	114.89
32	1a	1518	MA6	N3-C2-N1	-4.58	122.46	128.67
1	2A	1939	5MU	C5-C6-N1	-4.54	118.39	123.31
54	1y	32	PSU	C6-C5-C4	-4.53	115.12	118.17
32	1a	516	PSU	N1-C2-N3	4.52	119.94	115.17
54	1w	37	MIA	C16-C14-C13	-4.51	109.13	122.66
54	1y	8	4SU	C4-N3-C2	-4.49	123.01	127.31
54	2w	39	PSU	C4-N3-C2	-4.46	120.23	126.37
1	1A	2552	OMU	C5-C4-N3	4.45	121.03	114.80
32	2a	1404	5MC	C5-C6-N1	-4.39	118.55	123.31
55	2x	54	5MU	C5-C6-N1	-4.38	118.55	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1915	5MU	O4-C4-C5	-4.37	119.92	124.92
1	2A	2552	OMU	C4-N3-C2	-4.32	121.24	126.61
55	1x	54	5MU	N3-C2-N1	4.30	120.49	114.89
1	1A	1939	5MU	O4-C4-C5	-4.30	120.00	124.92
54	2y	39	PSU	C4-N3-C2	-4.26	120.50	126.37
54	1w	37	MIA	C15-C14-C13	-4.25	109.89	122.66
55	2x	54	5MU	C5-C4-N3	4.22	118.99	115.32
54	1w	8	4SU	C5-C4-S4	-4.21	119.49	124.31
32	2a	1407	5MC	C5-C4-N3	-4.17	117.48	121.75
32	1a	1518	MA6	C2-N1-C6	4.15	120.91	116.84
54	2y	54	5MU	N3-C2-N1	4.14	120.28	114.89
55	2x	55	PSU	C4-N3-C2	-4.10	120.72	126.37
54	1w	55	PSU	C4-N3-C2	-4.09	120.74	126.37
55	1x	54	5MU	C5-C6-N1	-4.08	118.88	123.31
32	2a	516	PSU	C4-N3-C2	-4.05	120.79	126.37
1	2A	1911	PSU	C4-N3-C2	-4.03	120.83	126.37
1	2A	2605	PSU	O2-C2-N1	-4.02	118.65	122.79
32	2a	1518	MA6	C2-N1-C6	4.01	120.77	116.84
1	2A	1939	5MU	O2-C2-N1	-3.98	117.62	122.80
54	1w	32	PSU	C4-N3-C2	-3.95	120.92	126.37
54	2w	55	PSU	O2-C2-N1	-3.94	118.72	122.79
1	2A	2552	OMU	N3-C2-N1	3.93	120.00	114.89
55	1x	54	5MU	C4-N3-C2	-3.92	122.21	127.34
55	1x	55	PSU	C4-N3-C2	-3.91	120.99	126.37
54	1y	8	4SU	N3-C2-N1	3.88	119.95	114.89
32	1a	1400	5MC	C5-C6-N1	-3.88	119.10	123.31
1	1A	2605	PSU	O2-C2-N1	-3.88	118.79	122.79
54	2w	54	5MU	N3-C2-N1	3.86	119.92	114.89
1	1A	1962	5MC	O2-C2-N3	-3.86	116.24	122.33
1	1A	1917	PSU	C4-N3-C2	-3.86	121.05	126.37
1	2A	2605	PSU	C5-C6-N1	-3.85	116.80	122.14
54	1y	32	PSU	O2-C2-N1	-3.82	118.85	122.79
54	2y	8	4SU	N3-C2-N1	3.80	119.83	114.89
55	1x	8	4SU	C4-N3-C2	3.79	130.95	127.31
32	2a	967	5MC	C5-C6-N1	-3.76	119.23	123.31
1	2A	2552	OMU	C5-C4-N3	3.75	120.05	114.80
54	2w	32	PSU	C4-N3-C2	-3.74	121.22	126.37
1	2A	1962	5MC	C5-C6-N1	-3.74	119.25	123.31
32	2a	516	PSU	O2-C2-N1	-3.73	118.94	122.79
55	1x	54	5MU	C5-C4-N3	3.72	118.56	115.32
54	1y	55	PSU	C4-N3-C2	-3.66	121.33	126.37
1	1A	1911	PSU	C4-N3-C2	-3.66	121.33	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1915	5MU	C5-C4-N3	3.62	118.47	115.32
54	2w	54	5MU	O4-C4-C5	-3.61	120.79	124.92
32	1a	967	5MC	C5-C6-N1	-3.61	119.39	123.31
54	1y	54	5MU	C5M-C5-C4	3.61	122.64	118.78
1	2A	1942	5MC	C5-C6-N1	-3.60	119.40	123.31
1	2A	1915	5MU	C5-C6-N1	-3.59	119.41	123.31
32	1a	1407	5MC	C5-C6-N1	-3.59	119.42	123.31
54	1y	54	5MU	N3-C2-N1	3.58	119.56	114.89
1	1A	1962	5MC	C5-C4-N3	-3.58	118.08	121.75
55	2x	8	4SU	O2-C2-N1	3.55	127.41	122.80
54	2y	32	PSU	C4-N3-C2	-3.51	121.53	126.37
55	2x	32	5MC	C5-C4-N3	-3.51	118.16	121.75
54	1y	8	4SU	C5-C4-N3	3.50	118.00	114.75
54	2w	55	PSU	C4-N3-C2	-3.47	121.60	126.37
55	2x	32	5MC	C5-C6-N1	-3.46	119.55	123.31
54	1w	54	5MU	O4-C4-C5	-3.46	120.96	124.92
32	1a	1207	2MG	C8-N7-C5	3.45	108.42	102.55
1	2A	2251	OMG	C8-N7-C5	3.44	108.40	102.55
1	1A	1917	PSU	O2-C2-N1	-3.44	119.24	122.79
54	2y	55	PSU	C4-N3-C2	-3.42	121.65	126.37
55	2x	8	4SU	C1'-N1-C2	3.41	123.71	117.59
1	2A	1917	PSU	O2-C2-N1	-3.38	119.30	122.79
55	1x	32	5MC	C5-C4-N3	-3.37	118.30	121.75
54	2y	39	PSU	O2-C2-N1	-3.35	119.33	122.79
55	2x	8	4SU	O2-C2-N3	-3.35	115.31	121.49
54	2w	54	5MU	C4-N3-C2	-3.35	122.95	127.34
54	2w	39	PSU	O2-C2-N1	-3.34	119.34	122.79
54	2w	8	4SU	C5-C4-S4	-3.33	120.50	124.31
32	2a	1400	5MC	C5-C6-N1	-3.33	119.70	123.31
1	2A	1917	PSU	C4-N3-C2	-3.32	121.80	126.37
54	1y	55	PSU	O2-C2-N1	-3.32	119.36	122.79
54	1y	39	PSU	C4-N3-C2	-3.32	121.80	126.37
32	1a	1518	MA6	C1'-N9-C4	-3.32	120.81	126.64
32	2a	1404	5MC	C5-C4-N3	-3.31	118.36	121.75
32	1a	1407	5MC	CM5-C5-C6	-3.31	118.37	122.85
32	1a	1404	5MC	C5-C4-N3	-3.30	118.37	121.75
32	1a	1207	2MG	N1-C2-N2	3.28	119.91	116.56
32	1a	1519	MA6	C4-C5-N7	-3.25	105.91	109.34
54	2w	32	PSU	O2-C2-N1	-3.24	119.44	122.79
1	1A	1915	5MU	C6-N1-C2	-3.24	118.08	121.30
32	1a	516	PSU	C4-N3-C2	-3.23	121.92	126.37
1	1A	2503	2MA	C4-C5-N7	-3.22	105.94	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	76	31H	C4-C5-N7	3.21	112.73	109.34
1	1A	2605	PSU	O4-C4-C5	-3.21	116.03	124.01
32	2a	1400	5MC	O2-C2-N3	-3.20	117.29	122.33
32	2a	1498	UR3	C6-N1-C2	-3.19	119.19	121.80
54	1w	8	4SU	N3-C2-N1	3.19	119.04	114.89
1	1A	1942	5MC	N4-C4-N3	3.18	124.27	118.51
55	1x	8	4SU	C5-C4-S4	3.18	127.94	124.31
32	2a	966	M2G	C8-N7-C5	3.16	107.93	102.55
54	2w	54	5MU	C5-C4-N3	3.14	118.06	115.32
32	1a	966	M2G	C8-N7-C5	3.14	107.89	102.55
54	1w	55	PSU	O2-C2-N1	-3.14	119.56	122.79
54	2y	32	PSU	O2-C2-N1	-3.14	119.56	122.79
54	2y	54	5MU	C5-C6-N1	-3.12	119.92	123.31
32	2a	1498	UR3	C3U-N3-C4	3.09	122.15	117.87
54	2w	37	MIA	C12-N6-C6	-3.09	119.99	122.85
32	1a	967	5MC	C5-C4-N3	-3.09	118.59	121.75
55	1x	76	31H	OCN-CN-N	-3.08	117.37	125.32
54	1y	32	PSU	C4-N3-C2	-3.07	122.14	126.37
1	1A	1942	5MC	C5-C4-N3	-3.05	118.62	121.75
1	1A	1942	5MC	C5-C4-N4	-3.05	117.10	121.39
1	2A	2503	2MA	O4'-C1'-N9	-3.04	104.71	108.75
54	2w	55	PSU	C6-C5-C4	-3.03	116.13	118.17
32	2a	1400	5MC	C1'-N1-C6	-3.02	116.17	121.15
32	1a	1207	2MG	N2-C2-N3	-3.00	116.69	120.51
54	1w	37	MIA	C2-N1-C6	2.97	122.71	117.42
54	1y	54	5MU	C5-C4-N3	2.97	117.90	115.32
54	2y	55	PSU	O2-C2-N1	-2.97	119.73	122.79
1	2A	2605	PSU	O4-C4-C5	-2.97	116.64	124.01
1	2A	1962	5MC	C5-C4-N4	-2.95	117.24	121.39
55	1x	8	4SU	O2-C2-N3	-2.94	116.06	121.49
1	1A	2552	OMU	C5-C6-N1	-2.91	117.11	121.84
54	1y	37	MIA	C4-C5-N7	-2.90	106.27	109.34
54	2w	54	5MU	C5M-C5-C4	2.90	121.88	118.78
1	2A	1942	5MC	C5-C4-N3	-2.87	118.81	121.75
54	1w	39	PSU	O2-C2-N1	-2.87	119.83	122.79
32	2a	1519	MA6	C4-C5-N7	-2.87	106.31	109.34
32	2a	1207	2MG	C8-N7-C5	2.87	107.43	102.55
54	1y	54	5MU	C4-N3-C2	-2.85	123.61	127.34
54	2w	37	MIA	C2-N1-C6	2.83	122.46	117.42
32	1a	1404	5MC	CM5-C5-C6	-2.81	119.04	122.85
54	1y	8	4SU	O2-C2-N1	-2.81	119.14	122.80
32	1a	1402	4OC	C6-C5-C4	2.79	120.36	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1404	5MC	N1-C2-N3	2.79	123.64	118.80
54	2w	8	4SU	O2-C2-N1	-2.78	119.18	122.80
32	1a	1518	MA6	C4-C5-N7	-2.76	106.42	109.34
54	1w	37	MIA	N3-C2-N1	-2.74	122.02	127.03
54	1w	54	5MU	C5-C6-N1	-2.74	120.34	123.31
1	1A	1939	5MU	O2-C2-N1	-2.73	119.24	122.80
54	1w	46	G7M	O6-C6-N1	2.72	123.85	120.62
54	1y	54	5MU	C1'-N1-C2	2.72	122.48	117.59
1	2A	1962	5MC	N4-C4-N3	2.71	123.41	118.51
54	1w	39	PSU	C4-N3-C2	-2.70	122.65	126.37
54	2y	37	MIA	C4-C5-N7	-2.69	106.49	109.34
32	2a	1407	5MC	C5-C6-N1	-2.69	120.39	123.31
54	2y	54	5MU	C1'-N1-C6	-2.68	116.74	121.15
1	1A	1939	5MU	C6-N1-C2	2.67	123.96	121.30
32	2a	1404	5MC	CM5-C5-C6	-2.66	119.26	122.85
54	2y	54	5MU	C1'-N1-C2	2.63	122.32	117.59
54	1w	8	4SU	C1'-N1-C2	2.63	122.32	117.59
1	1A	2503	2MA	CM2-C2-N1	2.62	121.05	117.13
55	2x	55	PSU	C5-C6-N1	-2.61	118.52	122.14
54	2w	37	MIA	N3-C2-N1	-2.60	122.26	127.03
32	2a	1498	UR3	C5-C4-N3	2.59	118.45	115.04
55	1x	54	5MU	O2-C2-N1	-2.58	119.44	122.80
55	1x	54	5MU	O4-C4-C5	-2.57	121.97	124.92
32	2a	1518	MA6	C4-C5-N7	-2.57	106.62	109.34
54	2w	39	PSU	C5-C6-N1	-2.57	118.57	122.14
55	2x	54	5MU	O4-C4-C5	-2.57	121.98	124.92
55	1x	32	5MC	O2-C2-N3	-2.55	118.31	122.33
1	2A	1911	PSU	O2-C2-N1	-2.55	120.16	122.79
32	1a	1402	4OC	C5-C6-N1	-2.53	117.73	121.84
54	2w	37	MIA	C4-C5-N7	-2.52	106.68	109.34
54	2y	8	4SU	O2-C2-N1	-2.49	119.56	122.80
54	1w	32	PSU	O2-C2-N1	-2.49	120.22	122.79
32	1a	1498	UR3	O2-C2-N3	-2.48	117.90	121.33
1	1A	2251	OMG	C8-N7-C5	2.48	106.78	102.55
54	1y	39	PSU	C6-C5-C4	-2.48	116.50	118.17
32	2a	1407	5MC	O2-C2-N3	-2.48	118.42	122.33
32	1a	966	M2G	C5-C6-N1	2.47	118.77	114.07
1	1A	1942	5MC	N1-C2-N3	2.45	123.05	118.80
1	1A	1920	OMC	O2-C2-N3	-2.45	118.47	122.33
32	2a	1407	5MC	N4-C4-N3	2.44	122.93	118.51
55	2x	32	5MC	O2-C2-N3	-2.44	118.48	122.33
32	1a	1407	5MC	C5-C4-N3	-2.43	119.27	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1207	2MG	C5-C6-N1	2.43	118.70	114.07
55	2x	8	4SU	C6-N1-C2	-2.42	118.05	121.00
1	1A	2503	2MA	C5-C6-N1	-2.41	117.99	120.84
55	2x	55	PSU	O2-C2-N3	-2.40	117.60	121.86
1	1A	1915	5MU	O2-C2-N3	-2.38	117.09	121.49
32	2a	966	M2G	O6-C6-C5	-2.38	119.60	124.32
55	1x	55	PSU	O2-C2-N1	-2.37	120.34	122.79
32	2a	967	5MC	O2-C2-N3	-2.37	118.59	122.33
54	1w	54	5MU	O2-C2-N1	-2.36	119.72	122.80
1	1A	2503	2MA	N6-C6-N1	2.34	123.41	117.11
32	1a	1498	UR3	C5-C4-N3	2.34	118.12	115.04
1	2A	1962	5MC	C5-C4-N3	-2.34	119.35	121.75
54	2y	54	5MU	C5M-C5-C4	2.33	121.27	118.78
32	1a	1400	5MC	C5-C4-N3	-2.33	119.37	121.75
1	1A	1911	PSU	C6-C5-C4	-2.33	116.60	118.17
1	2A	2503	2MA	N6-C6-N1	2.31	123.33	117.11
1	2A	2552	OMU	O4-C4-C5	-2.31	121.18	125.16
32	2a	1402	4OC	C6-C5-C4	2.28	119.75	117.00
1	2A	2503	2MA	C5-C6-N6	-2.28	116.84	120.31
55	2x	54	5MU	C5M-C5-C4	2.28	121.22	118.78
54	1y	54	5MU	C1'-N1-C6	-2.28	117.40	121.15
55	1x	55	PSU	C5-C6-N1	-2.27	118.99	122.14
1	1A	1915	5MU	C1'-N1-C2	2.27	121.67	117.59
32	2a	516	PSU	O4'-C1'-C2'	2.27	108.29	105.15
55	2x	54	5MU	O2-C2-N1	-2.26	119.85	122.80
32	1a	967	5MC	CM5-C5-C6	-2.26	119.79	122.85
32	2a	1402	4OC	CM4-N4-C4	-2.24	118.07	122.45
55	1x	8	4SU	C5-C4-N3	2.24	116.83	114.75
1	1A	1911	PSU	O2-C2-N1	-2.24	120.48	122.79
32	2a	1400	5MC	CM5-C5-C6	-2.23	119.83	122.85
1	1A	2552	OMU	O4-C4-N3	2.22	122.49	119.27
54	2y	32	PSU	C6-C5-C4	-2.21	116.68	118.17
54	2y	55	PSU	O4'-C1'-C2'	2.20	108.20	105.15
32	2a	1518	MA6	C10-N6-C6	2.19	125.45	119.40
55	1x	32	5MC	N1-C2-N3	2.18	122.59	118.80
32	1a	1402	4OC	C2'-C1'-N1	-2.17	110.12	114.24
54	2y	8	4SU	C6-N1-C2	-2.17	118.35	121.00
32	2a	967	5MC	C5-C4-N3	-2.16	119.55	121.75
1	1A	1911	PSU	O2-C2-N3	-2.16	118.03	121.86
32	2a	967	5MC	CM5-C5-C6	-2.15	119.94	122.85
1	2A	2503	2MA	C2-N1-C6	2.15	121.40	118.10
32	2a	966	M2G	C5-C6-N1	2.15	118.16	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1498	UR3	C1'-N1-C2	2.14	120.55	117.04
1	1A	2605	PSU	C5-C6-N1	-2.13	119.19	122.14
54	2y	46	G7M	O4'-C1'-N9	-2.12	105.93	108.75
32	1a	1498	UR3	C3U-N3-C4	2.11	120.80	117.87
54	1y	54	5MU	C5M-C5-C6	-2.11	119.99	122.85
1	2A	2503	2MA	CM2-C2-N3	2.11	120.28	117.13
54	1y	8	4SU	C6-N1-C2	-2.10	118.44	121.00
1	2A	2251	OMG	C5-C6-N1	2.10	118.07	114.07
55	2x	54	5MU	C5M-C5-C6	-2.09	120.02	122.85
1	1A	2251	OMG	O6-C6-C5	-2.08	120.19	124.32
54	2y	54	5MU	O2-C2-N3	-2.08	117.66	121.49
55	2x	76	31H	OCN-CN-N	-2.07	119.98	125.32
1	2A	2251	OMG	CM2-O2'-C2'	-2.06	109.17	114.47
1	1A	2251	OMG	C5-C6-N1	2.05	117.98	114.07
43	1l	92	0TD	OD2-CG-CB	2.05	117.58	113.15
55	2x	8	4SU	C5-C4-N3	2.04	116.65	114.75
55	1x	32	5MC	CM5-C5-C4	-2.04	117.15	120.51
54	1y	39	PSU	O2-C2-N3	-2.04	118.23	121.86
54	2y	55	PSU	C6-C5-C4	-2.04	116.80	118.17
1	2A	2503	2MA	N3-C2-N1	-2.04	122.20	125.77
54	2w	39	PSU	O4'-C1'-C2'	2.04	107.97	105.15
54	1y	39	PSU	O2-C2-N1	-2.02	120.70	122.79
32	1a	1404	5MC	N1-C2-N3	2.02	122.31	118.80
32	1a	516	PSU	O4'-C1'-C2'	2.02	107.94	105.15
54	1w	55	PSU	C5-C6-N1	-2.01	119.34	122.14
54	2w	32	PSU	C6-C5-C4	-2.01	116.82	118.17
55	2x	55	PSU	O2-C2-N1	-2.01	120.71	122.79
54	1w	8	4SU	C6-N1-C2	-2.00	118.56	121.00

There are no chirality outliers.

All (74) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	2251	OMG	C1'-C2'-O2'-CM2
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	31H	CB-CA-N-CN
55	1x	76	31H	N-CA-CB-CG

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Mol	Chain	Res	Type	Atoms
54	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2y	54	5MU	C3'-C4'-C5'-O5'
54	2y	54	5MU	O4'-C4'-C5'-O5'
55	1x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
1	1A	1915	5MU	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2y	55	PSU	C3'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
1	1A	1915	5MU	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
55	1x	76	31H	C-CA-CB-CG
1	2A	2503	2MA	C3'-C4'-C5'-O5'
32	2a	967	5MC	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	1915	5MU	C3'-C4'-C5'-O5'
32	1a	967	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
54	1y	54	5MU	O4'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
55	1x	76	31H	C4'-C5'-O5'-P
54	2w	46	G7M	C4'-C5'-O5'-P

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Mol	Chain	Res	Type	Atoms
55	2x	76	31H	C4'-C5'-O5'-P
54	1y	55	PSU	O4'-C1'-C5-C4
54	1w	37	MIA	N1-C6-N6-C12
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
32	1a	1519	MA6	C4'-C5'-O5'-P
1	2A	1939	5MU	O4'-C4'-C5'-O5'
54	2w	8	4SU	C3'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C1'-C5-C6
54	2w	46	G7M	C3'-C4'-C5'-O5'
1	2A	1962	5MC	O4'-C1'-N1-C6
54	2y	55	PSU	C2'-C1'-C5-C6
1	1A	1920	OMC	C2'-C1'-N1-C2
54	2w	8	4SU	O4'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
54	2y	37	MIA	C3'-C4'-C5'-O5'
54	2y	54	5MU	C2'-C1'-N1-C2
54	1w	37	MIA	C5-C6-N6-C12
32	2a	527	G7M	C4'-C5'-O5'-P
55	2x	8	4SU	C2'-C1'-N1-C2
55	2x	32	5MC	C2'-C1'-N1-C2
54	1y	37	MIA	C3'-C4'-C5'-O5'

There are no ring outliers.

42 monomers are involved in 75 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	1A	1920	OMC	1	0
55	1x	32	5MC	1	0
32	1a	1402	4OC	2	0
1	2A	1915	5MU	1	0
55	1x	8	4SU	2	0
1	1A	1911	PSU	1	0
54	1w	8	4SU	1	0
32	1a	1518	MA6	2	0
54	2w	39	PSU	3	0
54	1y	8	4SU	2	0
1	2A	1939	5MU	2	0
32	2a	1519	MA6	4	0
32	1a	527	G7M	1	0
54	1y	39	PSU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	2A	2503	2MA	1	0
54	1w	39	PSU	2	0
54	2y	8	4SU	3	0
1	2A	2552	OMU	1	0
54	2y	55	PSU	4	0
32	2a	1518	MA6	5	0
55	2x	76	31H	1	0
54	2w	8	4SU	4	0
54	1y	37	MIA	1	0
32	2a	966	M2G	1	0
54	1y	55	PSU	2	0
1	1A	2251	OMG	1	0
54	2y	46	G7M	1	0
1	2A	2251	OMG	1	0
32	1a	1519	MA6	1	0
1	1A	2503	2MA	1	0
32	2a	1404	5MC	1	0
32	2a	1400	5MC	2	0
55	2x	55	PSU	1	0
32	2a	967	5MC	4	0
32	2a	1207	2MG	5	0
32	2a	1402	4OC	4	0
32	2a	1498	UR3	1	0
43	2l	92	0TD	3	0
43	1l	92	0TD	2	0
54	1w	54	5MU	1	0
1	1A	1917	PSU	1	0
54	1w	46	G7M	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2810 ligands modelled in this entry, 2806 are monoatomic - leaving 4 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
60	SF4	2d	302	35	0,12,12	-	-	-		
60	SF4	1d	302	35	0,12,12	-	-	-		
58	A1A1F	1A	4110	56	34,37,37	1.74	9 (26%)	33,53,53	1.29	5 (15%)
58	A1A1F	2A	3875	-	34,37,37	1.33	2 (5%)	33,53,53	1.22	3 (9%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
60	SF4	2d	302	35	-	-	0/6/5/5
60	SF4	1d	302	35	-	-	0/6/5/5
58	A1A1F	1A	4110	56	-	3/28/71/71	0/3/4/4
58	A1A1F	2A	3875	-	-	3/28/71/71	0/3/4/4

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	1A	4110	A1A1F	CAM-CBF	-4.66	1.40	1.51
58	2A	3875	A1A1F	CAM-CBF	-4.63	1.40	1.51
58	1A	4110	A1A1F	CD2-CAZ	-3.40	1.50	1.53
58	1A	4110	A1A1F	CAF-CAE	-3.12	1.43	1.52
58	1A	4110	A1A1F	CD2-CG	2.63	1.58	1.53
58	1A	4110	A1A1F	OAG-CAF	2.47	1.44	1.40
58	1A	4110	A1A1F	CAY-CAZ	2.40	1.57	1.53
58	2A	3875	A1A1F	CAB-CAK	-2.35	1.50	1.53
58	1A	4110	A1A1F	CAC-CAB	-2.26	1.46	1.52
58	1A	4110	A1A1F	CBB-CAZ	2.17	1.56	1.53
58	1A	4110	A1A1F	OAA-CAB	2.13	1.47	1.44

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	1A	4110	A1A1F	CBC-CBB-CAZ	-3.69	109.53	116.68
58	2A	3875	A1A1F	CD2-CAZ-CAY	-3.52	108.53	113.78
58	1A	4110	A1A1F	OAA-CAF-CAE	-2.94	104.33	110.37
58	1A	4110	A1A1F	OAG-CAF-CAE	2.76	112.47	108.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	2A	3875	A1A1F	OAG-CAF-CAE	2.76	112.47	108.27
58	1A	4110	A1A1F	CAD-CAC-CAB	-2.32	104.41	109.68
58	1A	4110	A1A1F	OAI-CAD-CAE	-2.21	105.16	110.38
58	2A	3875	A1A1F	CAD-CAC-CAB	-2.16	104.78	109.68

There are no chirality outliers.

All (6) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
58	1A	4110	A1A1F	CBH-CAO-OAG-CAF
58	2A	3875	A1A1F	CBH-CAO-OAG-CAF
58	1A	4110	A1A1F	O-C-CA-CB
58	2A	3875	A1A1F	O-C-CA-CB
58	1A	4110	A1A1F	NAL-C-CA-CB
58	2A	3875	A1A1F	NAL-C-CA-CB

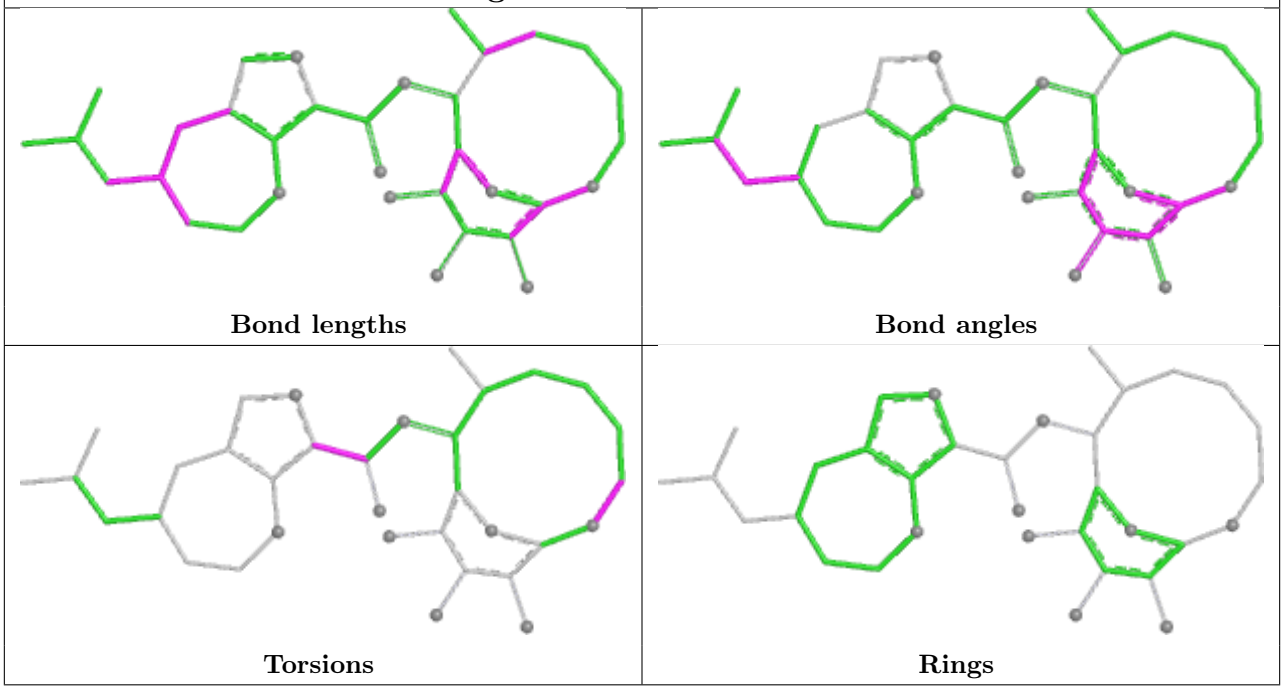
There are no ring outliers.

2 monomers are involved in 3 short contacts:

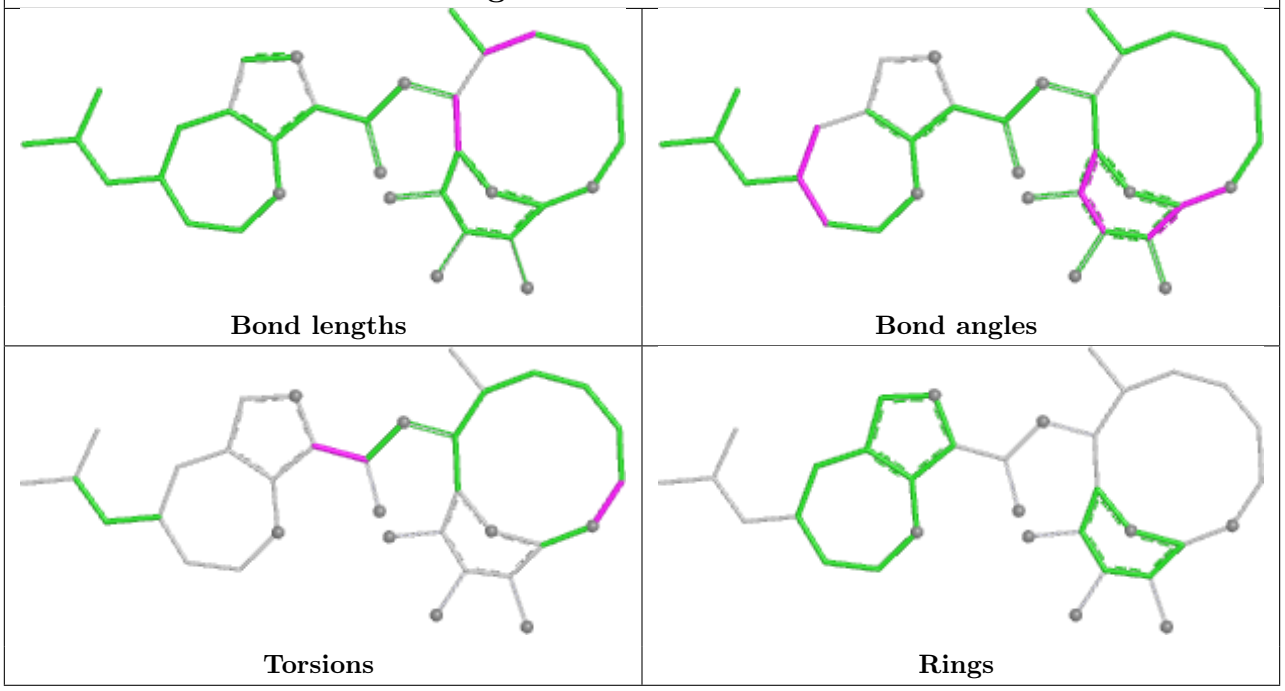
Mol	Chain	Res	Type	Clashes	Symm-Clashes
60	2d	302	SF4	2	0
58	1A	4110	A1A1F	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand A1A1F 1A 4110



Ligand A1A1F 2A 3875



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
17	1V	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1V	34:GLU	C	35:LEU	N	1.19

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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, 95^{th} 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	1A	2860/2915 (98%)	-0.52	124 (4%) 40 37	23, 40, 94, 106	0
1	2A	2789/2915 (95%)	0.12	121 (4%) 40 37	41, 65, 94, 105	0
2	1B	120/121 (99%)	-0.35	0 100 100	32, 54, 68, 89	0
2	2B	120/121 (99%)	1.00	3 (2%) 58 55	68, 84, 90, 97	0
3	1D	275/276 (99%)	-0.16	3 (1%) 77 74	22, 41, 54, 83	0
3	2D	275/276 (99%)	0.38	5 (1%) 67 64	39, 58, 69, 85	0
4	1E	204/206 (99%)	-0.27	1 (0%) 87 85	22, 43, 61, 75	0
4	2E	204/206 (99%)	0.54	9 (4%) 39 36	45, 66, 77, 87	0
5	1F	203/210 (96%)	-0.15	2 (0%) 79 76	24, 46, 71, 87	0
5	2F	203/210 (96%)	0.57	8 (3%) 44 40	43, 72, 82, 86	0
6	1G	181/182 (99%)	0.55	11 (6%) 28 26	43, 63, 76, 87	0
6	2G	181/182 (99%)	1.45	38 (20%) 3 3	72, 83, 89, 94	0
7	1H	174/180 (96%)	0.20	3 (1%) 69 65	44, 57, 69, 73	0
7	2H	174/180 (96%)	1.64	53 (30%) 1 1	77, 86, 94, 97	0
8	1I	146/148 (98%)	0.82	7 (4%) 36 34	51, 76, 84, 87	0
8	2I	146/148 (98%)	0.92	13 (8%) 17 16	56, 76, 84, 88	0
9	1N	140/140 (100%)	-0.14	2 (1%) 73 70	27, 41, 61, 73	0
9	2N	140/140 (100%)	0.98	9 (6%) 27 25	56, 72, 83, 91	0
10	1O	122/122 (100%)	0.01	0 100 100	32, 45, 62, 68	0
10	2O	122/122 (100%)	0.52	0 100 100	55, 65, 76, 80	0
11	1P	149/150 (99%)	-0.01	1 (0%) 84 81	23, 50, 71, 79	0
11	2P	149/150 (99%)	0.80	5 (3%) 48 45	48, 71, 86, 92	0
12	1Q	141/141 (100%)	-0.06	2 (1%) 73 70	32, 44, 60, 75	0
12	2Q	141/141 (100%)	1.56	39 (27%) 2 2	61, 76, 84, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.29	0 100 100	28, 38, 49, 58	0
13	2R	118/118 (100%)	0.07	0 100 100	47, 58, 69, 75	0
14	1S	110/112 (98%)	0.18	0 100 100	40, 54, 66, 71	0
14	2S	110/112 (98%)	1.59	31 (28%) 1 2	67, 79, 85, 90	0
15	1T	131/146 (89%)	0.11	3 (2%) 61 58	38, 49, 69, 75	0
15	2T	131/146 (89%)	0.63	5 (3%) 44 41	57, 67, 77, 83	0
16	1U	116/118 (98%)	-0.52	0 100 100	24, 33, 49, 71	0
16	2U	116/118 (98%)	0.80	8 (6%) 24 22	51, 71, 81, 86	0
17	1V	101/101 (100%)	-0.28	1 (0%) 79 76	24, 41, 58, 70	0
17	2V	101/101 (100%)	1.00	7 (6%) 24 22	48, 78, 84, 90	0
18	1W	112/113 (99%)	-0.42	1 (0%) 81 78	25, 34, 55, 79	0
18	2W	112/113 (99%)	0.33	2 (1%) 67 64	45, 57, 72, 89	0
19	1X	95/96 (98%)	0.01	2 (2%) 63 60	32, 42, 65, 81	0
19	2X	95/96 (98%)	0.84	6 (6%) 27 25	49, 64, 77, 86	0
20	1Y	107/110 (97%)	0.46	5 (4%) 37 34	43, 54, 72, 80	0
20	2Y	107/110 (97%)	1.44	23 (21%) 3 3	63, 77, 85, 94	0
21	1Z	154/206 (74%)	0.74	18 (11%) 10 10	42, 66, 85, 88	0
21	2Z	160/206 (77%)	2.06	73 (45%) 1 1	75, 85, 91, 93	0
22	10	77/85 (90%)	0.03	2 (2%) 57 54	31, 41, 58, 64	0
22	20	79/85 (92%)	1.45	18 (22%) 2 3	60, 72, 79, 83	0
23	11	97/98 (98%)	0.16	2 (2%) 63 60	31, 48, 71, 78	0
23	21	97/98 (98%)	0.52	2 (2%) 63 60	46, 60, 76, 81	0
24	12	70/72 (97%)	0.28	2 (2%) 54 50	39, 54, 64, 75	0
24	22	70/72 (97%)	0.84	6 (8%) 18 17	62, 73, 79, 86	0
25	13	59/60 (98%)	-0.16	1 (1%) 69 65	27, 38, 63, 80	0
25	23	59/60 (98%)	0.88	2 (3%) 48 45	64, 72, 82, 85	0
26	14	69/71 (97%)	0.81	7 (10%) 14 13	61, 78, 88, 94	0
26	24	69/71 (97%)	1.74	24 (34%) 1 1	80, 88, 94, 102	0
27	15	59/60 (98%)	-0.43	0 100 100	24, 35, 51, 61	0
27	25	59/60 (98%)	0.27	1 (1%) 69 65	44, 58, 68, 82	0
28	16	53/54 (98%)	-0.12	0 100 100	36, 47, 61, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.84	4 (7%) 22 20	59, 68, 76, 80	0
29	17	48/49 (97%)	-0.08	4 (8%) 19 18	26, 32, 62, 70	0
29	27	48/49 (97%)	0.44	4 (8%) 19 18	41, 47, 72, 75	0
30	18	64/65 (98%)	-0.35	0 100 100	30, 38, 44, 57	0
30	28	64/65 (98%)	0.78	2 (3%) 51 48	55, 63, 71, 77	0
31	19	37/37 (100%)	0.11	0 100 100	36, 43, 62, 67	0
31	29	37/37 (100%)	1.68	12 (32%) 1 1	67, 76, 84, 87	0
32	1a	1488/1521 (97%)	0.33	52 (3%) 47 44	41, 73, 95, 108	0
32	2a	1491/1521 (98%)	0.87	184 (12%) 9 9	56, 80, 97, 108	0
33	1b	231/256 (90%)	1.28	43 (18%) 4 4	68, 80, 89, 93	0
33	2b	231/256 (90%)	1.73	85 (36%) 1 1	76, 87, 91, 93	0
34	1c	206/239 (86%)	1.04	18 (8%) 17 16	68, 78, 86, 90	0
34	2c	206/239 (86%)	2.08	102 (49%) 0 0	76, 86, 90, 95	0
35	1d	208/209 (99%)	1.11	23 (11%) 12 11	61, 76, 83, 89	0
35	2d	208/209 (99%)	0.77	15 (7%) 23 21	63, 72, 79, 84	0
36	1e	148/162 (91%)	0.71	7 (4%) 37 34	57, 70, 78, 82	0
36	2e	148/162 (91%)	1.53	46 (31%) 1 1	69, 80, 86, 90	0
37	1f	100/101 (99%)	0.83	5 (5%) 35 32	62, 72, 80, 82	0
37	2f	100/101 (99%)	1.01	9 (9%) 17 15	67, 77, 83, 84	0
38	1g	155/156 (99%)	0.70	13 (8%) 18 17	63, 74, 85, 88	0
38	2g	155/156 (99%)	1.42	30 (19%) 4 4	73, 83, 88, 95	0
39	1h	137/138 (99%)	0.71	3 (2%) 62 59	60, 71, 77, 79	0
39	2h	137/138 (99%)	1.35	19 (13%) 7 7	72, 81, 86, 90	0
40	1i	127/128 (99%)	1.28	22 (17%) 5 5	64, 81, 86, 89	0
40	2i	127/128 (99%)	1.82	54 (42%) 1 1	74, 87, 92, 93	0
41	1j	97/105 (92%)	1.75	32 (32%) 1 1	66, 82, 88, 90	0
41	2j	96/105 (91%)	2.46	65 (67%) 0 0	82, 88, 93, 95	0
42	1k	114/129 (88%)	0.68	7 (6%) 28 26	51, 68, 80, 83	0
42	2k	114/129 (88%)	1.17	20 (17%) 5 5	63, 77, 86, 88	0
43	1l	121/132 (91%)	0.50	4 (3%) 49 46	48, 64, 74, 82	0
43	2l	121/132 (91%)	1.20	17 (14%) 7 7	63, 76, 82, 90	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	0.92	11 (8%) 17 16	60, 74, 80, 84	0
44	2m	122/126 (96%)	1.73	43 (35%) 1 1	76, 85, 89, 91	0
45	1n	60/61 (98%)	1.42	11 (18%) 4 4	68, 76, 82, 89	0
45	2n	60/61 (98%)	3.17	48 (80%) 0 0	81, 88, 92, 94	0
46	1o	88/89 (98%)	0.63	7 (7%) 20 19	53, 70, 77, 80	0
46	2o	88/89 (98%)	1.21	12 (13%) 8 7	66, 78, 85, 90	0
47	1p	82/88 (93%)	1.21	14 (17%) 5 5	63, 75, 82, 85	0
47	2p	82/88 (93%)	0.91	4 (4%) 36 33	61, 70, 78, 82	0
48	1q	99/105 (94%)	0.80	3 (3%) 52 49	57, 70, 79, 80	0
48	2q	99/105 (94%)	1.06	10 (10%) 14 13	66, 77, 84, 87	0
49	1r	68/88 (77%)	0.53	3 (4%) 39 36	59, 69, 77, 80	0
49	2r	68/88 (77%)	1.03	4 (5%) 29 27	70, 77, 84, 85	0
50	1s	83/93 (89%)	0.96	10 (12%) 10 9	71, 78, 83, 87	0
50	2s	83/93 (89%)	2.23	52 (62%) 0 0	80, 89, 94, 97	0
51	1t	96/106 (90%)	1.02	14 (14%) 7 7	65, 74, 81, 83	0
51	2t	96/106 (90%)	0.93	6 (6%) 27 25	63, 74, 83, 87	0
52	1u	23/27 (85%)	1.32	4 (17%) 5 5	67, 73, 77, 79	0
52	2u	23/27 (85%)	2.78	17 (73%) 0 0	80, 85, 90, 91	0
53	1v	13/24 (54%)	0.88	2 (15%) 6 6	55, 74, 90, 97	0
53	2v	13/24 (54%)	1.63	4 (30%) 1 1	77, 87, 98, 101	0
54	1w	64/76 (84%)	1.56	16 (25%) 2 2	72, 95, 101, 105	0
54	1y	67/76 (88%)	0.92	5 (7%) 22 20	43, 92, 99, 104	0
54	2w	62/76 (81%)	2.01	29 (46%) 0 1	84, 100, 104, 108	0
54	2y	66/76 (86%)	1.44	15 (22%) 3 3	62, 99, 103, 104	0
55	1x	71/77 (92%)	0.04	0 100 100	33, 65, 83, 89	0
55	2x	71/77 (92%)	0.76	2 (2%) 55 51	57, 85, 93, 102	0
All	All	20857/21748 (95%)	0.50	1958 (9%) 15 14	22, 69, 91, 108	0

All (1958) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
45	2n	2	ALA	8.3
45	2n	34	TYR	7.3

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Mol	Chain	Res	Type	RSRZ
45	2n	38	GLY	7.1
54	1w	73	A	6.8
1	1A	2115	G	6.2
45	1n	2	ALA	6.2
34	2c	8	ILE	6.0
45	2n	39	LEU	5.9
21	2Z	173	ALA	5.8
44	2m	102	ARG	5.7
21	2Z	174	VAL	5.7
23	21	2	SER	5.6
48	1q	98	LEU	5.5
45	2n	25	VAL	5.4
21	2Z	146	ILE	5.3
21	2Z	172	ALA	5.3
41	2j	65	LEU	5.3
21	1Z	146	ILE	5.2
34	1c	2	GLY	5.2
38	2g	5	ARG	5.1
32	2a	1033	G	5.1
45	2n	7	ILE	5.0
40	2i	82	ALA	5.0
44	2m	123	ALA	4.9
38	2g	82	GLY	4.9
38	1g	80	VAL	4.8
1	2A	2113	U	4.8
41	2j	47	PHE	4.8
45	2n	6	LEU	4.8
3	2D	275	LYS	4.8
1	1A	1081	U	4.8
51	1t	103	GLY	4.7
31	29	37	GLY	4.7
45	2n	13	THR	4.7
44	1m	2	ALA	4.7
34	2c	52	LEU	4.6
44	1m	124	PRO	4.6
41	2j	40	LEU	4.6
52	2u	11	GLY	4.6
1	2A	2111	C	4.6
1	1A	2119	A	4.6
21	2Z	141	VAL	4.6
41	2j	10	GLY	4.6
32	2a	1149	C	4.6

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Mol	Chain	Res	Type	RSRZ
6	2G	20	ILE	4.5
21	2Z	164	ALA	4.5
34	2c	2	GLY	4.5
50	2s	76	PRO	4.5
3	1D	276	LYS	4.5
1	2A	2112	G	4.5
32	2a	1030	C	4.5
45	2n	3	ARG	4.5
38	2g	84	ASN	4.4
29	27	45	ALA	4.4
32	2a	1030(B)	C	4.4
33	2b	22	LYS	4.4
45	2n	18	VAL	4.3
20	2Y	1	MET	4.3
32	2a	1034	G	4.3
45	2n	37	PHE	4.3
1	1A	2110	G	4.3
1	2A	2155	G	4.3
34	2c	188	LEU	4.3
41	2j	41	PRO	4.3
40	1i	2	GLU	4.3
41	2j	63	PHE	4.3
45	2n	36	PHE	4.3
32	2a	1001(A)	G	4.2
54	1w	71	G	4.2
47	2p	82	GLN	4.2
1	2A	1536	C	4.2
54	2w	73	A	4.2
41	2j	32	ALA	4.2
54	1w	1	G	4.2
54	1w	72	C	4.2
19	2X	92	LEU	4.2
41	2j	37	PRO	4.2
34	2c	198	VAL	4.2
1	2A	2146	C	4.2
7	2H	175	LYS	4.2
1	2A	652(B)	A	4.2
1	1A	2112	G	4.1
32	2a	1030(A)	G	4.1
34	2c	189	ALA	4.1
1	1A	2111	C	4.1
32	1a	1027	C	4.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1018	C	4.1
52	2u	24	ARG	4.1
52	2u	14	TRP	4.1
12	2Q	121	ALA	4.1
33	2b	237	ALA	4.1
1	1A	1096	A	4.1
52	2u	13	ILE	4.1
34	1c	65	ALA	4.1
8	2I	146	ALA	4.1
34	2c	201	TYR	4.0
33	1b	229	VAL	4.0
51	2t	97	ALA	4.0
12	2Q	33	GLY	4.0
35	1d	167	GLY	4.0
51	2t	103	GLY	4.0
12	2Q	22	LYS	4.0
32	2a	1002	G	4.0
1	1A	2113	U	4.0
52	2u	5	ASP	4.0
7	2H	52	VAL	4.0
15	2T	131	ALA	4.0
52	2u	6	ARG	4.0
1	1A	2145	C	4.0
41	2j	59	SER	4.0
36	2e	22	GLY	3.9
52	2u	23	PRO	3.9
12	2Q	104	PHE	3.9
39	2h	53	VAL	3.9
44	2m	53	VAL	3.9
19	1X	95	LEU	3.9
41	2j	71	LEU	3.9
42	2k	89	ALA	3.9
45	2n	11	LYS	3.9
7	1H	2	SER	3.9
26	24	32	TYR	3.9
45	2n	58	LYS	3.9
1	1A	1057	A	3.8
32	2a	1116	C	3.8
21	2Z	150	LEU	3.8
41	2j	44	VAL	3.8
34	2c	24	ALA	3.8
34	2c	149	ALA	3.8

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Mol	Chain	Res	Type	RSRZ
41	1j	76	ASN	3.8
44	2m	7	VAL	3.8
1	1A	1058	G	3.8
1	2A	2125	G	3.8
1	2A	2138	C	3.8
42	2k	50	TYR	3.8
26	24	56	VAL	3.8
7	2H	174	GLY	3.8
41	1j	77	PRO	3.8
45	2n	30	ALA	3.8
32	2a	1224	G	3.8
29	17	48	LYS	3.8
34	2c	128	PHE	3.8
40	2i	2	GLU	3.8
1	2A	2126	A	3.8
3	2D	276	LYS	3.8
1	1A	1176	G	3.8
1	2A	2110	G	3.8
7	2H	128	PRO	3.7
34	2c	55	VAL	3.7
21	2Z	21	ALA	3.7
33	2b	34	ALA	3.7
44	2m	4	ILE	3.7
1	2A	2154	G	3.7
22	10	8	GLY	3.7
4	2E	204	ALA	3.7
22	20	68	GLU	3.7
52	2u	15	ARG	3.7
32	2a	1219	U	3.7
50	2s	2	PRO	3.7
51	2t	98	PRO	3.7
32	2a	973	G	3.7
41	2j	55	LYS	3.7
7	2H	6	ARG	3.7
21	2Z	149	SER	3.7
40	2i	102	LEU	3.7
14	2S	29	PHE	3.7
32	1a	1025	U	3.7
44	2m	31	LYS	3.7
34	2c	9	GLY	3.7
50	2s	9	VAL	3.7
33	2b	161	ALA	3.7

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Mol	Chain	Res	Type	RSRZ
38	2g	2	ALA	3.7
7	2H	60	ARG	3.7
1	2A	652(U)	G	3.7
21	2Z	171	ILE	3.7
33	1b	172	ILE	3.7
33	2b	163	PHE	3.6
33	2b	7	VAL	3.6
33	2b	165	VAL	3.6
44	2m	6	GLY	3.6
45	2n	33	VAL	3.6
50	2s	79	THR	3.6
32	1a	1035	A	3.6
32	2a	1223	C	3.6
1	1A	1068	G	3.6
32	2a	1032	G	3.6
33	2b	121	LEU	3.6
7	2H	2	SER	3.6
6	2G	142	PRO	3.6
44	2m	124	PRO	3.6
1	1A	1078	U	3.6
21	1Z	141	VAL	3.6
32	1a	1532	U	3.6
1	1A	1069	A	3.6
14	2S	35	ILE	3.6
32	2a	962	C	3.6
3	2D	38	LYS	3.6
41	1j	32	ALA	3.6
26	24	25	TYR	3.6
38	1g	85	TYR	3.6
50	2s	80	TYR	3.6
33	1b	127	ILE	3.6
21	2Z	136	PHE	3.6
1	2A	2115	G	3.6
54	2w	71	G	3.6
29	27	46	VAL	3.6
34	2c	207	VAL	3.6
33	1b	120	ALA	3.6
38	2g	83	ALA	3.6
40	2i	91	ASP	3.6
29	27	48	LYS	3.5
1	1A	2117	A	3.5
1	2A	896	A	3.5

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Mol	Chain	Res	Type	RSRZ
32	2a	983	A	3.5
1	2A	2128	C	3.5
39	1h	93	VAL	3.5
32	2a	1036	G	3.5
33	2b	101	MET	3.5
34	2c	182	ILE	3.5
41	2j	82	ILE	3.5
1	1A	1094	U	3.5
6	2G	2	PRO	3.5
1	2A	2117	A	3.5
32	1a	1030(D)	A	3.5
32	2a	1001	A	3.5
45	2n	32	SER	3.5
38	2g	80	VAL	3.5
50	2s	78	ARG	3.5
12	2Q	15	GLY	3.5
34	2c	158	GLY	3.5
34	2c	77	ILE	3.5
35	2d	5	ILE	3.5
44	2m	121	LYS	3.5
45	2n	44	LEU	3.5
1	1A	2109	U	3.5
9	2N	44	PRO	3.5
11	2P	15	ARG	3.5
41	2j	91	PRO	3.5
51	2t	8	ARG	3.5
32	2a	1117	G	3.5
1	1A	1095	A	3.5
1	1A	2114	A	3.5
36	2e	109	ILE	3.5
41	1j	4	ILE	3.5
1	1A	1064	C	3.4
33	2b	236	TYR	3.4
42	2k	25	TYR	3.4
45	2n	54	PRO	3.4
52	2u	16	GLY	3.4
42	2k	14	VAL	3.4
38	1g	2	ALA	3.4
40	2i	84	ALA	3.4
45	2n	22	THR	3.4
50	2s	77	THR	3.4
1	2A	2134	A	3.4

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Mol	Chain	Res	Type	RSRZ
50	2s	71	LEU	3.4
35	1d	118	ARG	3.4
20	2Y	55	TYR	3.4
34	2c	41	GLY	3.4
7	2H	43	VAL	3.4
9	2N	140	VAL	3.4
52	1u	24	ARG	3.4
45	2n	14	PRO	3.4
54	2w	72	C	3.4
21	2Z	88	PHE	3.4
32	2a	1150	U	3.4
45	2n	55	GLY	3.4
50	2s	45	VAL	3.4
20	2Y	44	ILE	3.4
38	2g	7	ALA	3.4
44	1m	5	ALA	3.4
1	2A	883	G	3.4
1	2A	2133	G	3.4
1	2A	2147	G	3.4
1	2A	2166	G	3.4
32	1a	1026	G	3.4
32	2a	1035	A	3.4
34	2c	62	ASP	3.4
6	2G	12	TYR	3.4
54	2w	3	C	3.4
40	2i	122	ALA	3.3
44	2m	28	ALA	3.3
45	2n	10	ALA	3.3
14	2S	32	LEU	3.3
21	2Z	144	LEU	3.3
22	10	84	LEU	3.3
33	2b	21	ARG	3.3
1	2A	2802	G	3.3
54	1w	65	G	3.3
1	1A	899	A	3.3
1	1A	2170	A	3.3
34	2c	29	TYR	3.3
40	2i	36	TYR	3.3
40	2i	125	TYR	3.3
21	1Z	136	PHE	3.3
33	2b	97	TRP	3.3
33	1b	140	HIS	3.3

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Mol	Chain	Res	Type	RSRZ
1	2A	2145	C	3.3
50	1s	9	VAL	3.3
39	2h	2	LEU	3.3
40	2i	96	LEU	3.3
49	2r	66	LEU	3.3
52	1u	23	PRO	3.3
1	1A	548	A	3.3
32	1a	1531	A	3.3
6	2G	52	ILE	3.3
34	2c	14	ILE	3.3
34	2c	57	ILE	3.3
44	2m	54	VAL	3.3
50	2s	38	SER	3.3
20	2Y	94	LYS	3.3
20	2Y	5	MET	3.3
25	23	2	PRO	3.3
26	24	65	ASP	3.3
21	2Z	106	GLY	3.3
43	2l	69	TYR	3.3
41	2j	74	ILE	3.3
21	2Z	71	VAL	3.3
45	2n	35	ARG	3.3
46	2o	60	VAL	3.3
1	2A	2165	G	3.3
32	1a	1023	G	3.3
21	2Z	51	ALA	3.3
33	2b	29	ALA	3.3
45	2n	4	LYS	3.3
50	2s	4	SER	3.3
1	2A	2174	C	3.3
32	2a	1043	C	3.3
54	2w	13	C	3.3
39	2h	4	ASP	3.3
39	2h	98	LYS	3.2
40	2i	11	LYS	3.2
43	2l	18	VAL	3.2
32	2a	1503	A	3.2
1	2A	2127	G	3.2
21	2Z	95	PRO	3.2
32	2a	1235	U	3.2
33	1b	125	PRO	3.2
54	2w	65	G	3.2

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Mol	Chain	Res	Type	RSRZ
1	1A	885	C	3.2
54	2w	4	C	3.2
50	2s	14	HIS	3.2
45	2n	31	ARG	3.2
21	1Z	120	ILE	3.2
33	2b	148	TYR	3.2
41	2j	96	ILE	3.2
14	2S	110	LEU	3.2
21	2Z	96	VAL	3.2
21	2Z	125	LEU	3.2
35	1d	170	VAL	3.2
41	2j	88	LEU	3.2
45	2n	53	LEU	3.2
15	1T	131	ALA	3.2
40	1i	126	SER	3.2
53	2v	12	A	3.2
32	1a	1036	G	3.2
29	27	47	ARG	3.2
4	2E	186	GLY	3.2
52	2u	2	GLY	3.2
33	2b	200	ILE	3.2
42	2k	48	ILE	3.2
34	2c	32	LEU	3.2
22	20	26	TYR	3.2
33	2b	71	VAL	3.2
33	2b	123	ALA	3.2
1	2A	2167	U	3.2
41	2j	79	ARG	3.2
1	1A	2116	G	3.2
1	2A	2159	G	3.2
32	2a	976	G	3.2
50	2s	13	ASP	3.2
54	2w	15	G	3.2
1	1A	2138	C	3.2
5	2F	131	GLY	3.2
50	2s	22	LEU	3.2
34	1c	207	VAL	3.2
38	2g	9	VAL	3.2
34	2c	48	TYR	3.2
7	2H	173	PRO	3.2
50	2s	59	PRO	3.2
41	2j	13	HIS	3.2

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Mol	Chain	Res	Type	RSRZ
30	28	29	LYS	3.2
50	2s	32	LYS	3.2
32	2a	994	A	3.2
32	2a	1092	A	3.2
26	24	59	PHE	3.2
12	2Q	61	GLY	3.1
19	1X	94	GLY	3.1
38	2g	81	GLY	3.1
50	2s	84	GLY	3.1
1	1A	2151	G	3.1
1	1A	2190	G	3.1
32	1a	1029	C	3.1
32	1a	1030	C	3.1
32	1a	1030(A)	G	3.1
32	1a	1033	G	3.1
32	2a	1021	G	3.1
12	2Q	109	VAL	3.1
34	2c	195	VAL	3.1
26	24	29	PRO	3.1
44	2m	5	ALA	3.1
12	2Q	38	GLU	3.1
35	1d	179	GLU	3.1
7	2H	170	ARG	3.1
34	2c	205	GLY	3.1
1	2A	2169	A	3.1
22	20	84	LEU	3.1
33	1b	11	LEU	3.1
33	2b	11	LEU	3.1
34	2c	157	ILE	3.1
41	1j	40	LEU	3.1
41	2j	90	LEU	3.1
34	2c	130	VAL	3.1
34	2c	138	VAL	3.1
33	1b	131	PRO	3.1
40	1i	15	ALA	3.1
44	1m	123	ALA	3.1
1	1A	888	C	3.1
1	1A	1059	G	3.1
32	2a	1115	C	3.1
21	2Z	121	HIS	3.1
43	2l	126	LYS	3.1
22	20	8	GLY	3.1

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Mol	Chain	Res	Type	RSRZ
33	2b	17	PHE	3.1
37	1f	81	ILE	3.1
40	2i	19	LEU	3.1
44	2m	100	GLY	3.1
7	2H	39	PRO	3.1
32	2a	975	A	3.1
32	2a	1030(D)	A	3.1
15	1T	130	ALA	3.1
33	1b	123	ALA	3.1
33	2b	77	ALA	3.1
33	2b	31	TYR	3.1
33	2b	33	TYR	3.1
35	1d	169	LYS	3.1
1	2A	885	C	3.1
1	2A	2139	C	3.1
32	2a	1039	C	3.1
1	2A	2116	G	3.1
21	2Z	166	SER	3.1
32	1a	1003	G	3.1
32	1a	1032	G	3.1
32	1a	1034	G	3.1
40	2i	126	SER	3.1
20	1Y	1	MET	3.1
21	2Z	155	LEU	3.1
33	1b	200	ILE	3.1
33	2b	39	ILE	3.1
34	2c	5	ILE	3.1
46	2o	89	GLY	3.1
32	2a	1126	U	3.1
50	2s	11	VAL	3.1
41	2j	76	ASN	3.1
41	2j	78	ASN	3.1
1	1A	1077	A	3.1
1	2A	2114	A	3.1
32	1a	1447	A	3.1
34	2c	15	THR	3.1
33	1b	19	HIS	3.1
38	2g	85	TYR	3.1
1	2A	2803	C	3.1
32	2a	1027	C	3.1
1	1A	2121	G	3.0
21	2Z	76	LEU	3.0

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Mol	Chain	Res	Type	RSRZ
32	1a	1031	G	3.0
33	2b	41	ILE	3.0
33	2b	122	PHE	3.0
41	2j	8	LEU	3.0
12	2Q	106	VAL	3.0
32	2a	1020	U	3.0
36	2e	51	VAL	3.0
55	2x	47	U	3.0
7	2H	96	ALA	3.0
7	2H	156	ALA	3.0
20	2Y	46	LYS	3.0
49	1r	73	ALA	3.0
38	2g	154	TYR	3.0
39	1h	2	LEU	3.0
50	1s	71	LEU	3.0
4	2E	10	GLY	3.0
32	2a	1038	C	3.0
20	2Y	61	ILE	3.0
33	2b	201	ILE	3.0
34	2c	152	ILE	3.0
33	2b	189	ASP	3.0
7	2H	35	VAL	3.0
12	2Q	102	VAL	3.0
21	2Z	78	LYS	3.0
34	2c	68	VAL	3.0
40	2i	14	VAL	3.0
12	2Q	60	ARG	3.0
15	2T	130	ALA	3.0
34	2c	37	GLN	3.0
32	2a	1531	A	3.0
51	1t	10	LEU	3.0
22	20	6	GLY	3.0
34	2c	78	GLY	3.0
1	1A	2164	C	3.0
1	2A	2136	C	3.0
32	1a	1028	C	3.0
43	2l	54	LYS	3.0
14	2S	46	VAL	3.0
20	1Y	91	GLU	3.0
20	2Y	45	VAL	3.0
50	2s	81	ARG	3.0
32	2a	993	G	3.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1216	G	3.0
32	2a	1253	G	3.0
1	1A	2189	U	3.0
16	2U	117	GLN	3.0
24	12	70	GLN	3.0
32	2a	1257	U	3.0
20	1Y	90	LEU	3.0
26	24	9	LEU	3.0
21	2Z	147	GLY	3.0
32	2a	974	A	3.0
32	2a	1357	A	3.0
33	1b	17	PHE	3.0
34	1c	39	ILE	3.0
34	2c	124	ILE	3.0
40	1i	67	GLY	3.0
44	1m	122	LYS	3.0
33	2b	234	PRO	3.0
33	1b	9	GLU	3.0
41	1j	46	ARG	3.0
41	2j	61	GLU	3.0
7	2H	79	VAL	3.0
44	1m	102	ARG	3.0
51	1t	8	ARG	3.0
32	1a	1008	C	3.0
32	2a	995	C	3.0
32	2a	1114	C	3.0
27	25	29	THR	3.0
47	1p	22	THR	3.0
32	1a	1257	U	3.0
32	2a	1222	G	3.0
44	2m	90	LEU	2.9
33	2b	42	ILE	2.9
34	2c	194	GLY	2.9
36	2e	35	GLY	2.9
51	1t	100	ILE	2.9
26	24	49	PHE	2.9
1	1A	1046	A	2.9
1	2A	2173	A	2.9
32	2a	1004	A	2.9
41	2j	66	ARG	2.9
45	2n	8	GLU	2.9
42	2k	105	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
6	1G	50	ALA	2.9
33	1b	237	ALA	2.9
40	2i	13	ALA	2.9
32	2a	1214	C	2.9
32	2a	961	U	2.9
54	1y	20	U	2.9
35	1d	120	LEU	2.9
1	1A	2159	G	2.9
1	1A	2165	G	2.9
14	2S	92	TYR	2.9
32	2a	1048	G	2.9
7	2H	136	ILE	2.9
39	2h	67	PRO	2.9
9	2N	61	ARG	2.9
12	1Q	6	ARG	2.9
38	2g	4	ARG	2.9
50	2s	29	ARG	2.9
1	2A	899	A	2.9
24	22	63	VAL	2.9
32	2a	1286	A	2.9
33	2b	93	VAL	2.9
38	2g	150	ALA	2.9
40	1i	106	ALA	2.9
45	2n	59	ALA	2.9
34	2c	192	THR	2.9
1	1A	34	C	2.9
32	2a	1019	C	2.9
54	2w	2	C	2.9
26	24	2	LYS	2.9
34	2c	204	LEU	2.9
15	2T	69	GLY	2.9
23	11	2	SER	2.9
33	1b	31	TYR	2.9
34	1c	84	ILE	2.9
48	2q	95	TYR	2.9
50	2s	61	TYR	2.9
7	2H	12	PRO	2.9
22	20	11	ARG	2.9
45	2n	12	ARG	2.9
1	1A	2160	G	2.9
1	2A	2157	G	2.9
17	2V	93	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
32	2a	630	G	2.9
33	1b	129	GLU	2.9
54	2w	5	G	2.9
21	2Z	86	VAL	2.9
33	1b	136	VAL	2.9
36	2e	33	VAL	2.9
36	2e	30	ALA	2.9
38	1g	83	ALA	2.9
45	1n	5	ALA	2.9
32	2a	969	A	2.9
34	2c	47	LEU	2.9
34	2c	94	LEU	2.9
37	2f	21	LEU	2.9
44	2m	70	LEU	2.9
32	2a	1007	C	2.9
50	2s	62	ILE	2.9
38	1g	82	GLY	2.9
41	2j	31	GLY	2.9
7	2H	55	PRO	2.9
25	23	60	GLU	2.9
7	2H	19	VAL	2.9
31	29	16	VAL	2.9
1	2A	2153	G	2.9
32	2a	1131	G	2.9
14	2S	79	ALA	2.9
29	17	45	ALA	2.9
33	1b	186	ALA	2.9
34	2c	137	ALA	2.9
34	2c	168	ALA	2.9
45	2n	48	ALA	2.9
1	1A	1070	A	2.8
1	1A	2169	A	2.8
1	2A	2135	A	2.8
17	2V	94	LEU	2.8
34	1c	87	LEU	2.8
34	2c	34	LEU	2.8
40	1i	19	LEU	2.8
53	2v	24	A	2.8
1	1A	2150	U	2.8
22	20	42	GLY	2.8
6	2G	122	PRO	2.8
32	2a	982	U	2.8

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Mol	Chain	Res	Type	RSRZ
50	1s	84	GLY	2.8
1	2A	2108	C	2.8
1	2A	2137	C	2.8
21	1Z	149	SER	2.8
41	2j	77	PRO	2.8
26	24	63	TYR	2.8
36	2e	133	TYR	2.8
6	2G	28	VAL	2.8
33	2b	230	VAL	2.8
20	2Y	48	ALA	2.8
20	2Y	105	ALA	2.8
34	2c	50	ALA	2.8
41	2j	26	ALA	2.8
44	2m	42	ALA	2.8
1	1A	2120	G	2.8
1	2A	1533	G	2.8
32	1a	1009	G	2.8
32	2a	1202	G	2.8
32	2a	1220	G	2.8
50	2s	53	ASN	2.8
40	1i	102	LEU	2.8
32	1a	1005	A	2.8
32	2a	977	A	2.8
36	2e	80	ILE	2.8
41	1j	66	ARG	2.8
7	2H	168	PRO	2.8
35	1d	7	PRO	2.8
36	2e	106	PRO	2.8
42	2k	49	GLY	2.8
21	1Z	104	PHE	2.8
21	2Z	48	PHE	2.8
1	1A	1097	U	2.8
26	24	30	GLU	2.8
54	2w	45	U	2.8
54	2w	66	U	2.8
12	2Q	26	TYR	2.8
39	2h	48	TYR	2.8
39	2h	94	TYR	2.8
43	1l	64	TYR	2.8
1	2A	2164	C	2.8
32	2a	1028	C	2.8
32	2a	1037	C	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	1112	C	2.8
7	2H	169	VAL	2.8
41	2j	27	ALA	2.8
36	1e	119	LEU	2.8
45	2n	61	TRP	2.8
44	2m	104	ARG	2.8
1	1A	2123	G	2.8
1	1A	2207	G	2.8
26	24	31	ILE	2.8
32	1a	1024	G	2.8
21	2Z	68	PRO	2.8
50	2s	46	GLY	2.8
1	1A	1086	A	2.8
32	2a	1183	A	2.8
54	2w	7	A	2.8
1	2A	2144	U	2.8
34	2c	23	TYR	2.8
40	2i	114	TYR	2.8
38	2g	135	VAL	2.8
41	2j	49	VAL	2.8
44	2m	98	VAL	2.8
40	2i	105	ASP	2.8
41	1j	18	ALA	2.8
50	2s	75	ALA	2.8
34	2c	79	ARG	2.8
16	2U	88	ILE	2.8
41	1j	86	MET	2.8
21	2Z	158	PRO	2.8
33	2b	99	GLY	2.8
41	1j	36	GLY	2.8
12	2Q	65	PHE	2.8
20	2Y	89	PHE	2.8
40	2i	18	PHE	2.8
40	2i	101	PHE	2.8
47	1p	80	PHE	2.8
32	2a	963	G	2.8
32	2a	1031	G	2.8
1	2A	2119	A	2.8
20	2Y	47	LYS	2.8
32	2a	1251	A	2.8
34	2c	4	LYS	2.8
47	1p	82	GLN	2.8

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Mol	Chain	Res	Type	RSRZ
53	2v	13	A	2.8
1	2A	2130	U	2.8
26	14	32	TYR	2.8
32	2a	1196	U	2.8
42	1k	75	TYR	2.8
7	2H	37	VAL	2.8
21	2Z	165	VAL	2.8
6	2G	4	ASP	2.7
8	1I	72	LEU	2.7
36	2e	12	LEU	2.7
32	2a	1260	C	2.7
38	1g	4	ARG	2.7
39	2h	18	ARG	2.7
54	1w	2	C	2.7
24	22	1	MET	2.7
40	2i	117	HIS	2.7
41	1j	6	ILE	2.7
12	2Q	24	GLY	2.7
40	2i	69	GLY	2.7
41	2j	36	GLY	2.7
21	1Z	52	SER	2.7
1	1A	1088	A	2.7
1	1A	2125	G	2.7
1	1A	2135	A	2.7
1	1A	2152	G	2.7
32	2a	1017	G	2.7
32	2a	1050	G	2.7
43	2l	64	TYR	2.7
54	2w	44	G	2.7
1	1A	1065	U	2.7
1	1A	2122	U	2.7
6	1G	149	VAL	2.7
9	1N	9	VAL	2.7
21	1Z	105	VAL	2.7
39	2h	51	VAL	2.7
6	2G	7	LEU	2.7
34	2c	180	ALA	2.7
40	2i	79	LEU	2.7
46	1o	57	LEU	2.7
12	2Q	10	ARG	2.7
35	2d	73	ARG	2.7
41	1j	45	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
50	1s	13	ASP	2.7
12	2Q	103	MET	2.7
33	2b	67	THR	2.7
36	1e	10	MET	2.7
50	2s	33	THR	2.7
14	2S	61	ASN	2.7
1	2A	652(V)	C	2.7
6	2G	32	PRO	2.7
6	2G	100	TRP	2.7
33	1b	214	ILE	2.7
41	2j	23	ILE	2.7
43	2l	94	PRO	2.7
47	1p	41	PRO	2.7
9	2N	118	LYS	2.7
36	2e	23	GLY	2.7
40	2i	39	GLY	2.7
41	2j	80	LYS	2.7
45	2n	15	LYS	2.7
36	2e	45	PHE	2.7
38	2g	26	PHE	2.7
16	2U	90	VAL	2.7
33	1b	15	VAL	2.7
37	2f	59	TYR	2.7
7	2H	103	LEU	2.7
8	2I	68	LEU	2.7
1	2A	1026	U	2.7
6	1G	51	ARG	2.7
21	2Z	7	ALA	2.7
34	2c	87	LEU	2.7
34	2c	133	ALA	2.7
34	2c	178	LEU	2.7
34	2c	187	ALA	2.7
50	2s	15	LEU	2.7
51	1t	95	ALA	2.7
1	1A	1087	G	2.7
32	1a	1001(A)	G	2.7
32	1a	1021	G	2.7
32	2a	1030(C)	G	2.7
34	2c	95	THR	2.7
34	2c	176	HIS	2.7
33	1b	232	PRO	2.7
33	2b	185	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
40	2i	49	PRO	2.7
41	1j	98	ILE	2.7
45	1n	7	ILE	2.7
46	2o	3	ILE	2.7
45	2n	9	LYS	2.7
4	2E	73	GLU	2.7
6	2G	29	TRP	2.7
19	2X	94	GLY	2.7
21	2Z	26	GLY	2.7
41	2j	83	GLU	2.7
1	1A	889	C	2.7
1	1A	1052	C	2.7
1	1A	1080	C	2.7
1	2A	2140	C	2.7
32	2a	990	C	2.7
54	2w	62	C	2.7
11	2P	83	VAL	2.7
33	2b	229	VAL	2.7
44	2m	15	VAL	2.7
12	2Q	37	LEU	2.7
14	2S	58	LEU	2.7
38	2g	16	LEU	2.7
44	2m	48	LEU	2.7
33	2b	48	MET	2.7
40	1i	13	ALA	2.7
40	1i	125	TYR	2.7
50	2s	52	TYR	2.7
21	2Z	87	ASP	2.7
1	1A	2173	A	2.7
32	2a	1016	A	2.7
32	2a	1044	A	2.7
32	2a	1130	A	2.7
33	2b	140	HIS	2.7
14	2S	33	LYS	2.7
44	2m	122	LYS	2.7
1	2A	2151	G	2.7
32	2a	1026	G	2.7
32	2a	1356	G	2.7
54	1y	19	G	2.7
12	2Q	30	GLY	2.7
41	1j	33	GLN	2.7
1	1A	2137	C	2.7

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Mol	Chain	Res	Type	RSRZ
1	1A	2161	C	2.7
54	2w	56	C	2.7
9	2N	5	VAL	2.6
14	2S	30	ARG	2.6
17	2V	20	LEU	2.6
21	2Z	27	VAL	2.6
21	2Z	122	ARG	2.6
21	1Z	1	MET	2.6
26	24	10	VAL	2.6
34	2c	151	VAL	2.6
38	2g	76	ARG	2.6
41	1j	8	LEU	2.6
41	1j	34	VAL	2.6
48	2q	84	LEU	2.6
50	2s	30	LEU	2.6
51	2t	10	LEU	2.6
31	29	13	LYS	2.6
34	2c	199	LYS	2.6
45	2n	17	LYS	2.6
1	1A	1026	U	2.6
17	2V	92	THR	2.6
39	2h	3	THR	2.6
33	2b	127	ILE	2.6
33	2b	162	ILE	2.6
42	1k	29	ILE	2.6
1	1A	1084	A	2.6
21	2Z	168	GLU	2.6
25	13	60	GLU	2.6
54	2w	26	A	2.6
4	2E	115	GLY	2.6
19	2X	86	GLY	2.6
36	1e	85	GLY	2.6
41	2j	93	GLY	2.6
1	1A	2162	G	2.6
1	2A	2156	G	2.6
32	1a	630	G	2.6
32	2a	1023	G	2.6
32	2a	1215	G	2.6
4	2E	195	LEU	2.6
54	2y	56	C	2.6
7	2H	15	VAL	2.6
14	2S	14	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
22	20	79	VAL	2.6
33	1b	230	VAL	2.6
34	2c	116	VAL	2.6
36	2e	90	VAL	2.6
7	2H	145	ALA	2.6
14	2S	37	ALA	2.6
50	2s	18	LYS	2.6
39	2h	58	TYR	2.6
45	2n	21	TYR	2.6
33	2b	214	ILE	2.6
34	2c	202	ILE	2.6
35	1d	29	PRO	2.6
41	2j	87	THR	2.6
45	2n	40	CYS	2.6
7	2H	72	ILE	2.6
7	2H	92	ILE	2.6
50	2s	63	THR	2.6
1	2A	2118	U	2.6
6	1G	137	GLU	2.6
15	2T	104	ASN	2.6
20	2Y	91	GLU	2.6
32	2a	1040	U	2.6
33	2b	86	GLU	2.6
36	2e	8	GLU	2.6
38	1g	84	ASN	2.6
11	2P	104	GLY	2.6
32	2a	1285	A	2.6
41	2j	54	PHE	2.6
53	1v	13	A	2.6
54	2y	21	A	2.6
33	1b	24	TRP	2.6
42	1k	42	TRP	2.6
46	1o	65	ARG	2.6
46	2o	54	ARG	2.6
46	2o	64	ARG	2.6
48	2q	91	ARG	2.6
1	2A	882	G	2.6
1	2A	2148	G	2.6
1	2A	2160	G	2.6
1	2A	2168	G	2.6
6	2G	19	LEU	2.6
12	2Q	2	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1182	G	2.6
32	2a	1258	G	2.6
44	2m	19	LEU	2.6
49	1r	78	LEU	2.6
50	2s	20	LEU	2.6
54	2w	19	G	2.6
34	2c	103	VAL	2.6
40	2i	41	VAL	2.6
50	2s	41	VAL	2.6
7	1H	175	LYS	2.6
8	1I	87	LYS	2.6
33	2b	132	LYS	2.6
33	2b	169	LYS	2.6
51	1t	74	LYS	2.6
1	1A	2143	C	2.6
1	2A	652(T)	C	2.6
6	2G	163	ALA	2.6
32	2a	1217	C	2.6
33	2b	40	HIS	2.6
43	2l	68	ALA	2.6
34	2c	7	PRO	2.6
40	2i	4	TYR	2.6
40	1i	91	ASP	2.6
41	2j	39	PRO	2.6
50	2s	42	PRO	2.6
41	1j	48	THR	2.6
41	2j	50	ILE	2.6
34	2c	19	GLU	2.6
1	1A	1082	U	2.6
33	2b	70	PHE	2.6
37	2f	97	PHE	2.6
21	2Z	81	ARG	2.6
40	2i	20	ARG	2.6
1	1A	1067	A	2.6
1	2A	528	A	2.6
32	2a	949	A	2.6
33	1b	97	TRP	2.6
41	2j	86	MET	2.6
21	2Z	41	LEU	2.6
28	26	11	LEU	2.6
20	2Y	49	VAL	2.6
14	2S	34	HIS	2.6

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Mol	Chain	Res	Type	RSRZ
31	29	20	HIS	2.6
33	2b	19	HIS	2.6
1	1A	880	G	2.6
1	2A	1114	G	2.6
32	2a	1013	G	2.6
34	2c	60	ALA	2.6
34	2c	200	ALA	2.6
39	2h	16	ALA	2.6
54	1w	70	G	2.6
54	2y	19	G	2.6
21	1Z	95	PRO	2.6
1	1A	2146	C	2.6
1	1A	2178	C	2.6
7	2H	58	GLU	2.6
8	2I	20	ASP	2.6
34	2c	67	THR	2.6
46	2o	14	GLU	2.6
26	14	17	GLY	2.6
39	2h	15	ASN	2.6
39	2h	106	GLY	2.6
1	1A	2130	U	2.6
26	24	58	ARG	2.6
40	1i	10	ARG	2.6
40	2i	120	ARG	2.6
52	2u	9	ARG	2.6
23	21	81	LYS	2.5
33	2b	44	LEU	2.5
39	1h	112	LEU	2.5
50	2s	16	LEU	2.5
1	1A	1073	A	2.5
32	1a	1503	A	2.5
32	2a	965	A	2.5
32	2a	1289	A	2.5
31	29	25	VAL	2.5
34	2c	6	HIS	2.5
36	2e	34	VAL	2.5
50	2s	58	VAL	2.5
41	2j	35	SER	2.5
12	2Q	136	ALA	2.5
34	2c	53	ALA	2.5
7	2H	36	PRO	2.5
12	2Q	66	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
21	2Z	137	ILE	2.5
40	2i	103	THR	2.5
40	2i	110	GLU	2.5
41	2j	75	ILE	2.5
1	1A	2141	G	2.5
2	2B	89	G	2.5
21	2Z	140	ASP	2.5
32	1a	79	G	2.5
32	2a	1221	G	2.5
41	2j	42	THR	2.5
54	2y	44	G	2.5
42	2k	62	GLN	2.5
1	1A	897	C	2.5
1	1A	2174	C	2.5
1	2A	2129	C	2.5
12	2Q	19	GLY	2.5
15	2T	55	ASN	2.5
21	2Z	160	GLY	2.5
34	2c	145	GLY	2.5
36	2e	74	GLY	2.5
12	2Q	1	MET	2.5
12	2Q	29	PHE	2.5
35	1d	181	MET	2.5
41	1j	47	PHE	2.5
1	2A	2132	U	2.5
32	2a	1532	U	2.5
6	2G	139	LEU	2.5
34	2c	167	TRP	2.5
38	1g	153	HIS	2.5
6	2G	31	VAL	2.5
21	2Z	126	VAL	2.5
26	14	56	VAL	2.5
33	1b	165	VAL	2.5
36	2e	115	VAL	2.5
40	2i	17	VAL	2.5
44	2m	60	VAL	2.5
34	2c	160	ALA	2.5
36	2e	86	ALA	2.5
40	2i	94	ALA	2.5
54	2w	14	A	2.5
24	22	12	GLU	2.5
26	24	22	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
33	1b	201	ILE	2.5
14	2S	7	TYR	2.5
36	2e	60	TYR	2.5
38	1g	81	GLY	2.5
40	2i	5	TYR	2.5
12	2Q	6	ARG	2.5
33	2b	36	ARG	2.5
40	2i	128	ARG	2.5
45	2n	29	ARG	2.5
1	1A	879	G	2.5
1	1A	1056	G	2.5
1	1A	2149	G	2.5
32	2a	1047	G	2.5
40	1i	59	PHE	2.5
54	1w	15	G	2.5
54	2w	18	G	2.5
54	2y	15	G	2.5
1	2A	2896	C	2.5
32	2a	1263	C	2.5
54	1w	4	C	2.5
14	2S	80	LEU	2.5
22	20	7	LEU	2.5
40	2i	99	LEU	2.5
41	2j	85	LEU	2.5
1	1A	1060	U	2.5
1	1A	1066	U	2.5
54	2w	60	U	2.5
7	2H	24	VAL	2.5
28	26	52	VAL	2.5
38	1g	156	TRP	2.5
38	2g	21	VAL	2.5
40	1i	86	VAL	2.5
43	1l	18	VAL	2.5
14	2S	50	SER	2.5
21	1Z	92	SER	2.5
21	2Z	16	SER	2.5
26	24	7	PRO	2.5
33	2b	183	PRO	2.5
40	2i	106	ALA	2.5
16	2U	89	GLU	2.5
21	2Z	53	ILE	2.5
33	1b	223	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
48	2q	90	ILE	2.5
1	1A	1045	A	2.5
32	2a	1093	A	2.5
41	2j	100	THR	2.5
52	2u	17	THR	2.5
21	2Z	143	GLY	2.5
26	14	54	GLY	2.5
34	2c	171	GLY	2.5
35	1d	122	ARG	2.5
9	2N	45	ASN	2.5
38	1g	154	TYR	2.5
47	1p	39	TYR	2.5
33	1b	28	PHE	2.5
7	2H	7	LEU	2.5
1	1A	2136	C	2.5
1	2A	2149	G	2.5
32	2a	1003	G	2.5
32	2a	1190	G	2.5
32	2a	1205	U	2.5
14	2S	49	VAL	2.5
14	2S	85	VAL	2.5
33	2b	136	VAL	2.5
40	2i	21	PRO	2.5
36	2e	101	ILE	2.5
36	2e	118	ILE	2.5
42	2k	13	GLN	2.5
44	2m	101	GLN	2.5
34	1c	135	LYS	2.5
34	2c	165	THR	2.5
41	1j	100	THR	2.5
1	1A	2158	A	2.5
7	2H	82	GLY	2.5
44	1m	121	LYS	2.5
32	2a	919	A	2.5
32	2a	1250	A	2.5
9	2N	75	TYR	2.5
46	2o	69	TYR	2.5
22	20	45	PHE	2.5
46	2o	15	PHE	2.5
50	2s	10	PHE	2.5
14	2S	56	LEU	2.4
12	2Q	123	HIS	2.4

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Mol	Chain	Res	Type	RSRZ
1	1A	271(K)	U	2.4
1	1A	1509	C	2.4
1	1A	2100	G	2.4
1	1A	2147	G	2.4
1	2A	171	G	2.4
1	2A	652(C)	G	2.4
1	2A	1113	U	2.4
32	1a	67	C	2.4
32	2a	1029	C	2.4
32	2a	1354	C	2.4
33	2b	112	VAL	2.4
34	2c	99	VAL	2.4
1	2A	2805	G	2.4
21	2Z	167	PRO	2.4
32	2a	631	G	2.4
5	2F	166	ALA	2.4
16	2U	62	ILE	2.4
41	1j	38	ILE	2.4
44	2m	78	ILE	2.4
50	2s	31	ILE	2.4
22	20	77	ARG	2.4
52	2u	10	ARG	2.4
41	2j	48	THR	2.4
14	2S	45	GLY	2.4
26	24	4	GLY	2.4
35	2d	87	GLY	2.4
36	2e	39	GLY	2.4
44	1m	6	GLY	2.4
51	2t	96	GLY	2.4
33	1b	163	PHE	2.4
35	2d	154	ASN	2.4
6	2G	146	TYR	2.4
21	2Z	157	LEU	2.4
26	14	63	TYR	2.4
32	2a	1225	A	2.4
35	2d	206	PHE	2.4
36	2e	31	LEU	2.4
46	1o	18	PHE	2.4
51	1t	62	LEU	2.4
54	1y	35	A	2.4
50	2s	57	HIS	2.4
21	1Z	139	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	74	VAL	2.4
1	1A	12	U	2.4
21	2Z	2	GLU	2.4
22	20	18	ALA	2.4
35	2d	32	ALA	2.4
41	2j	64	GLU	2.4
45	1n	8	GLU	2.4
45	1n	20	ALA	2.4
50	2s	24	ALA	2.4
54	1w	59	U	2.4
1	2A	865	C	2.4
3	1D	275	LYS	2.4
6	1G	157	ILE	2.4
6	1G	136	ARG	2.4
14	2S	19	LYS	2.4
20	2Y	4	LYS	2.4
20	2Y	54	LYS	2.4
32	2a	1359	C	2.4
37	2f	52	ILE	2.4
38	2g	120	ILE	2.4
50	2s	40	ILE	2.4
34	1c	79	ARG	2.4
38	2g	3	ARG	2.4
43	2l	19	ARG	2.4
45	1n	29	ARG	2.4
1	1A	2166	G	2.4
1	2A	614(B)	G	2.4
32	2a	953	G	2.4
32	2a	998	G	2.4
32	2a	1010	G	2.4
54	1y	15	G	2.4
54	1y	18	G	2.4
22	20	43	THR	2.4
40	2i	67	GLY	2.4
46	1o	89	GLY	2.4
34	1c	56	ASP	2.4
42	2k	36	ASP	2.4
6	2G	132	ASN	2.4
36	2e	53	LEU	2.4
36	2e	112	LEU	2.4
45	2n	47	LEU	2.4
19	2X	69	TYR	2.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	99	TYR	2.4
41	2j	56	HIS	2.4
45	2n	49	HIS	2.4
1	1A	896	A	2.4
1	2A	866	A	2.4
1	2A	2170	A	2.4
5	2F	6	VAL	2.4
7	2H	50	VAL	2.4
20	2Y	85	VAL	2.4
21	2Z	56	VAL	2.4
33	2b	164	VAL	2.4
40	1i	14	VAL	2.4
41	1j	24	VAL	2.4
41	2j	34	VAL	2.4
45	2n	5	ALA	2.4
45	2n	46	GLU	2.4
12	2Q	59	ARG	2.4
21	2Z	131	ARG	2.4
33	2b	135	GLN	2.4
35	2d	209	ARG	2.4
36	2e	27	ARG	2.4
41	2j	98	ILE	2.4
45	2n	57	ARG	2.4
32	1a	204	U	2.4
32	2a	1000	U	2.4
1	1A	886	C	2.4
1	2A	884	C	2.4
6	2G	44	GLY	2.4
34	2c	185	GLY	2.4
36	2e	16	THR	2.4
40	1i	8	GLY	2.4
52	2u	8	THR	2.4
1	1A	2168	G	2.4
1	2A	2751	G	2.4
1	2A	2793	G	2.4
6	2G	53	LEU	2.4
6	2G	126	ASP	2.4
6	2G	172	LEU	2.4
32	1a	1030(C)	G	2.4
32	2a	1061	G	2.4
32	2a	1138	G	2.4
33	2b	145	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
33	2b	221	LEU	2.4
34	1c	47	LEU	2.4
41	2j	58	ASP	2.4
47	1p	74	LEU	2.4
50	2s	12	ASP	2.4
54	2y	18	G	2.4
22	20	69	PHE	2.4
1	1A	1054	A	2.4
1	1A	2171	A	2.4
1	2A	2310	A	2.4
32	1a	1286	A	2.4
35	1d	189	PRO	2.4
42	2k	115	PRO	2.4
3	2D	18	VAL	2.4
6	2G	160	VAL	2.4
7	2H	133	VAL	2.4
35	2d	33	MET	2.4
5	2F	168	ARG	2.4
9	2N	74	ARG	2.4
20	2Y	73	ARG	2.4
34	2c	206	GLU	2.4
41	2j	70	ARG	2.4
12	2Q	28	ALA	2.4
34	2c	107	GLN	2.4
40	2i	45	ALA	2.4
42	2k	19	ALA	2.4
44	2m	33	ALA	2.4
1	2A	2172	U	2.4
33	2b	38	GLY	2.4
34	2c	74	GLY	2.4
38	2g	156	TRP	2.4
50	2s	48	THR	2.4
1	1A	2129	C	2.3
7	2H	61	HIS	2.3
32	2a	866	C	2.3
32	2a	980	C	2.3
32	2a	999	C	2.3
32	2a	1210	C	2.3
47	1p	73	LEU	2.3
33	2b	152	PHE	2.3
20	1Y	92	ASN	2.3
42	2k	117	ASN	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1009	G	2.3
32	2a	1084	G	2.3
32	2a	1184	G	2.3
54	2w	70	G	2.3
26	24	67	TYR	2.3
36	2e	61	TYR	2.3
40	2i	92	TYR	2.3
21	1Z	159	PRO	2.3
21	2Z	139	VAL	2.3
22	20	72	ARG	2.3
36	2e	149	GLU	2.3
41	1j	43	ARG	2.3
1	1A	1098	A	2.3
1	1A	1174	A	2.3
1	2A	229	A	2.3
1	2A	878	A	2.3
6	2G	39	ILE	2.3
14	2S	72	ALA	2.3
38	2g	128	ALA	2.3
34	2c	20	SER	2.3
1	1A	1175	U	2.3
1	2A	2109	U	2.3
4	2E	6	GLY	2.3
12	1Q	61	GLY	2.3
34	2c	25	GLY	2.3
22	20	10	THR	2.3
54	2y	51	U	2.3
49	2r	51	LEU	2.3
50	1s	16	LEU	2.3
21	2Z	104	PHE	2.3
37	1f	55	ASP	2.3
1	1A	1076	C	2.3
1	1A	2794	C	2.3
32	2a	1066	C	2.3
32	2a	1362	C	2.3
36	2e	92	LYS	2.3
21	2Z	98	MET	2.3
34	2c	142	MET	2.3
6	2G	17	PRO	2.3
47	1p	38	TYR	2.3
40	2i	10	ARG	2.3
32	2a	1011	G	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1124	G	2.3
5	2F	114	VAL	2.3
26	24	50	VAL	2.3
26	24	57	GLU	2.3
55	2x	70	G	2.3
34	2c	141	VAL	2.3
36	2e	69	VAL	2.3
40	1i	17	VAL	2.3
44	2m	17	VAL	2.3
5	2F	130	ALA	2.3
8	1I	146	ALA	2.3
33	2b	108	ILE	2.3
34	2c	39	ILE	2.3
42	2k	23	ALA	2.3
50	2s	49	ILE	2.3
32	2a	1324	A	2.3
7	1H	174	GLY	2.3
17	1V	101	GLY	2.3
34	2c	13	GLY	2.3
41	1j	93	GLY	2.3
6	1G	152	LEU	2.3
6	2G	161	THR	2.3
20	2Y	90	LEU	2.3
23	11	97	LEU	2.3
35	1d	194	LEU	2.3
41	2j	68	HIS	2.3
44	2m	37	THR	2.3
1	2A	2150	U	2.3
32	2a	981	U	2.3
36	1e	6	PHE	2.3
38	1g	26	PHE	2.3
31	29	15	LYS	2.3
36	2e	9	LYS	2.3
1	1A	898	C	2.3
1	1A	2177	C	2.3
1	2A	2143	C	2.3
5	1F	14	PRO	2.3
26	24	55	ARG	2.3
14	2S	36	TYR	2.3
32	2a	1006	C	2.3
32	2a	1189	C	2.3
32	2a	1399	C	2.3

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Mol	Chain	Res	Type	RSRZ
34	2c	109	PRO	2.3
34	2c	127	ARG	2.3
41	1j	39	PRO	2.3
21	1Z	119	GLU	2.3
33	1b	236	TYR	2.3
33	2b	35	GLU	2.3
41	1j	83	GLU	2.3
47	1p	17	TYR	2.3
4	2E	59	VAL	2.3
38	2g	86	GLN	2.3
40	2i	86	VAL	2.3
14	2S	39	ILE	2.3
41	2j	38	ILE	2.3
44	2m	9	ILE	2.3
44	2m	18	ALA	2.3
1	1A	1063	G	2.3
1	1A	1093	G	2.3
1	1A	2156	G	2.3
1	2A	2141	G	2.3
32	2a	1042	G	2.3
32	2a	1094	G	2.3
54	2y	57	G	2.3
21	2Z	129	SER	2.3
33	2b	61	LEU	2.3
33	2b	192	SER	2.3
34	2c	33	LEU	2.3
34	2c	196	LEU	2.3
35	1d	137	SER	2.3
38	2g	12	LEU	2.3
41	1j	88	LEU	2.3
51	1t	101	GLY	2.3
32	2a	1014	A	2.3
32	2a	1213	A	2.3
41	2j	92	THR	2.3
53	2v	14	A	2.3
12	2Q	63	LYS	2.3
33	1b	132	LYS	2.3
1	2A	2189	U	2.3
37	1f	60	PHE	2.3
40	2i	59	PHE	2.3
12	2Q	31	ASP	2.3
39	2h	54	ASP	2.3

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Mol	Chain	Res	Type	RSRZ
47	1p	59	TRP	2.3
44	1m	106	ASN	2.3
38	2g	32	ARG	2.3
42	2k	54	ARG	2.3
46	1o	19	PRO	2.3
33	1b	126	GLU	2.3
50	2s	64	GLU	2.3
1	2A	886	C	2.3
1	2A	2142	C	2.3
6	2G	101	ILE	2.3
33	1b	7	VAL	2.3
33	2b	197	VAL	2.3
38	1g	9	VAL	2.3
41	1j	74	ILE	2.3
54	2w	49	C	2.3
4	1E	204	ALA	2.3
49	2r	60	ALA	2.3
8	2I	16	GLY	2.2
8	2I	35	LEU	2.2
36	2e	29	GLY	2.2
50	1s	26	GLY	2.2
1	2A	530	G	2.2
1	2A	2321	G	2.2
14	2S	83	LYS	2.2
32	2a	971	G	2.2
43	2l	23	LYS	2.2
48	1q	97	SER	2.2
34	2c	10	PHE	2.2
36	2e	10	MET	2.2
40	1i	18	PHE	2.2
47	2p	80	PHE	2.2
1	1A	653	A	2.2
1	1A	1177	A	2.2
32	2a	1256	A	2.2
1	1A	2897	U	2.2
5	2F	142	TRP	2.2
32	1a	1040	U	2.2
48	2q	92	ARG	2.2
54	1w	20	U	2.2
54	1w	47	U	2.2
54	2y	45	U	2.2
33	1b	91	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
40	2i	123	PRO	2.2
44	2m	113	PRO	2.2
40	2i	12	GLU	2.2
21	2Z	3	TYR	2.2
33	2b	32	ILE	2.2
33	2b	172	ILE	2.2
34	1c	86	VAL	2.2
37	2f	6	VAL	2.2
47	2p	2	VAL	2.2
33	2b	88	ALA	2.2
40	2i	119	ALA	2.2
1	2A	888	C	2.2
1	2A	2163	C	2.2
1	2A	2804	C	2.2
32	1a	1007	C	2.2
32	1a	1030(B)	C	2.2
32	1a	1137	C	2.2
54	2w	67	C	2.2
6	2G	3	LEU	2.2
6	2G	34	LEU	2.2
34	2c	42	LEU	2.2
40	2i	40	LEU	2.2
20	2Y	34	LYS	2.2
31	29	31	LYS	2.2
43	1l	63	GLY	2.2
45	1n	9	LYS	2.2
50	2s	68	GLY	2.2
21	2Z	153	SER	2.2
46	2o	25	THR	2.2
36	2e	19	MET	2.2
14	2S	87	PHE	2.2
34	1c	10	PHE	2.2
31	29	19	ARG	2.2
36	2e	18	ARG	2.2
1	2A	1112	G	2.2
1	2A	2131	G	2.2
32	2a	1255	G	2.2
54	2y	52	G	2.2
6	2G	123	ASN	2.2
32	1a	152	A	2.2
32	2a	991	U	2.2
32	2a	997	U	2.2

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Mol	Chain	Res	Type	RSRZ
32	2a	1015	A	2.2
32	2a	1236	A	2.2
34	2c	73	PRO	2.2
35	1d	77	ASN	2.2
47	2p	48	TRP	2.2
50	2s	34	TRP	2.2
51	1t	75	ASN	2.2
54	2y	33	U	2.2
54	2y	36	A	2.2
8	1I	117	GLU	2.2
33	2b	129	GLU	2.2
35	1d	150	GLU	2.2
35	2d	34	GLU	2.2
7	2H	125	VAL	2.2
21	2Z	105	VAL	2.2
39	2h	19	VAL	2.2
42	2k	114	VAL	2.2
43	2l	100	ILE	2.2
46	1o	3	ILE	2.2
5	2F	21	ALA	2.2
7	2H	83	TYR	2.2
12	2Q	137	TYR	2.2
44	2m	51	ALA	2.2
6	2G	43	LEU	2.2
7	2H	64	LEU	2.2
19	2X	95	LEU	2.2
24	22	60	LEU	2.2
34	2c	12	LEU	2.2
43	2l	27	LEU	2.2
44	2m	96	LEU	2.2
52	2u	3	LYS	2.2
18	1W	112	GLY	2.2
31	29	21	GLY	2.2
35	1d	87	GLY	2.2
1	2A	912	C	2.2
32	1a	1037	C	2.2
32	2a	1249	C	2.2
33	2b	90	MET	2.2
41	1j	87	THR	2.2
44	2m	103	THR	2.2
7	2H	123	PHE	2.2
12	2Q	16	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
14	2S	12	PHE	2.2
15	1T	111	ARG	2.2
29	17	47	ARG	2.2
33	2b	175	ARG	2.2
21	2Z	148	ASP	2.2
46	2o	75	PRO	2.2
6	1G	48	GLU	2.2
1	1A	1071	G	2.2
1	2A	880	G	2.2
32	2a	1024	G	2.2
32	2a	1090	U	2.2
1	2A	887	A	2.2
32	2a	1353	G	2.2
32	2a	1363(A)	A	2.2
54	2y	34	G	2.2
7	2H	11	VAL	2.2
7	2H	151	ILE	2.2
21	2Z	57	ILE	2.2
45	2n	56	VAL	2.2
3	1D	38	LYS	2.2
33	1b	40	HIS	2.2
40	2i	52	ALA	2.2
40	2i	118	LYS	2.2
43	1l	126	LYS	2.2
51	1t	67	ALA	2.2
7	2H	33	LEU	2.2
28	26	36	LEU	2.2
34	2c	43	LEU	2.2
50	1s	15	LEU	2.2
36	2e	114	GLY	2.2
26	24	61	ARG	2.2
35	1d	3	ARG	2.2
36	2e	25	ARG	2.2
40	1i	7	THR	2.2
41	2j	60	ARG	2.2
14	2S	31	SER	2.2
42	2k	119	CYS	2.2
32	1a	1006	C	2.2
32	1a	1132	C	2.2
32	2a	1254	C	2.2
34	2c	203	PHE	2.2
44	2m	41	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
6	2G	97	ASP	2.2
8	2I	135	GLU	2.2
21	2Z	63	ASP	2.2
34	2c	162	GLN	2.2
1	1A	2172	U	2.2
6	2G	74	LYS	2.2
16	2U	110	VAL	2.2
17	2V	79	VAL	2.2
29	17	46	VAL	2.2
32	1a	1000	U	2.2
32	2a	1148	U	2.2
34	2c	66	VAL	2.2
39	2h	61	VAL	2.2
41	2j	7	LYS	2.2
42	1k	14	VAL	2.2
44	2m	117	VAL	2.2
1	1A	275	G	2.2
1	1A	652(U)	G	2.2
1	2A	864	G	2.2
1	2A	1171	G	2.2
1	2A	2120	G	2.2
1	2A	2801(A)	A	2.2
21	1Z	121	HIS	2.2
32	1a	1002	G	2.2
32	2a	1058	G	2.2
32	2a	1127	G	2.2
32	2a	1265	G	2.2
32	2a	1287	A	2.2
38	2g	40	ALA	2.2
41	2j	62	HIS	2.2
42	1k	89	ALA	2.2
6	1G	146	TYR	2.1
7	2H	71	LEU	2.1
21	2Z	9	TYR	2.1
33	1b	44	LEU	2.1
36	2e	119	LEU	2.1
48	2q	42	TYR	2.1
48	2q	43	LEU	2.1
49	1r	79	LEU	2.1
5	1F	208	GLY	2.1
20	2Y	93	GLY	2.1
35	2d	124	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
51	1t	102	GLY	2.1
18	2W	92	ARG	2.1
20	2Y	23	ARG	2.1
34	2c	190	ARG	2.1
41	2j	43	ARG	2.1
42	2k	57	THR	2.1
43	2l	44	THR	2.1
8	1I	42	SER	2.1
33	2b	55	PHE	2.1
36	1e	45	PHE	2.1
41	1j	35	SER	2.1
36	1e	49	PRO	2.1
1	1A	1072	C	2.1
1	1A	2140	C	2.1
7	2H	32	GLU	2.1
26	24	3	GLU	2.1
32	1a	1114	C	2.1
32	2a	932	C	2.1
32	2a	970	C	2.1
32	2a	1045	C	2.1
32	2a	1303	C	2.1
54	2w	25	C	2.1
7	2H	89	ILE	2.1
34	2c	135	LYS	2.1
12	2Q	52	VAL	2.1
12	2Q	96	VAL	2.1
21	2Z	37	VAL	2.1
33	2b	81	VAL	2.1
34	2c	120	VAL	2.1
37	1f	88	VAL	2.1
39	2h	93	VAL	2.1
42	2k	42	TRP	2.1
50	2s	60	VAL	2.1
1	1A	2167	U	2.1
8	2I	49	ALA	2.1
6	2G	99	MET	2.1
7	2H	41	MET	2.1
16	2U	60	LEU	2.1
16	2U	74	LEU	2.1
38	2g	152	ALA	2.1
45	1n	39	LEU	2.1
46	2o	31	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
48	2q	98	LEU	2.1
50	2s	50	ALA	2.1
1	1A	2790	A	2.1
1	2A	1460	A	2.1
1	2A	2158	A	2.1
7	2H	42	ARG	2.1
7	2H	48	GLY	2.1
32	2a	978	A	2.1
32	2a	1041	A	2.1
32	2a	1248	A	2.1
45	2n	51	GLY	2.1
46	1o	69	TYR	2.1
48	1q	95	TYR	2.1
50	1s	8	GLY	2.1
52	1u	18	TYR	2.1
33	1b	130	ARG	2.1
39	2h	102	ARG	2.1
44	2m	57	ARG	2.1
1	2A	997	G	2.1
1	2A	1170	G	2.1
1	2A	2893	G	2.1
32	1a	346	G	2.1
32	2a	1186	G	2.1
54	1w	24	G	2.1
9	2N	22	THR	2.1
6	1G	80	PHE	2.1
21	2Z	44	PHE	2.1
12	2Q	39	PRO	2.1
22	20	9	SER	2.1
24	22	70	GLN	2.1
34	2c	27	LYS	2.1
40	1i	75	ASP	2.1
43	2l	47	LYS	2.1
44	2m	13	LYS	2.1
1	2A	2161	C	2.1
32	2a	1059	C	2.1
32	2a	1060	C	2.1
40	1i	81	ILE	2.1
40	2i	58	HIS	2.1
9	1N	140	VAL	2.1
34	2c	86	VAL	2.1
41	2j	94	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
48	2q	77	VAL	2.1
6	2G	57	ALA	2.1
6	2G	169	ALA	2.1
7	2H	67	LEU	2.1
8	1I	55	ALA	2.1
8	2I	55	ALA	2.1
12	2Q	34	LEU	2.1
14	2S	55	ALA	2.1
31	29	5	ALA	2.1
33	1b	13	ALA	2.1
33	2b	149	LEU	2.1
41	2j	18	ALA	2.1
43	2l	52	LEU	2.1
43	2l	56	ALA	2.1
44	2m	72	ALA	2.1
45	2n	20	ALA	2.1
51	1t	97	ALA	2.1
14	2S	97	ARG	2.1
32	2a	950	U	2.1
41	1j	79	ARG	2.1
41	2j	46	ARG	2.1
52	2u	22	ARG	2.1
54	2y	47	U	2.1
35	2d	16	GLY	2.1
35	2d	167	GLY	2.1
36	2e	99	GLY	2.1
1	1A	278	A	2.1
1	1A	900	A	2.1
1	2A	2320	A	2.1
32	2a	959	A	2.1
32	2a	1110	A	2.1
32	2a	1275	A	2.1
53	1v	24	A	2.1
26	14	52	THR	2.1
7	2H	29	PRO	2.1
26	24	11	PRO	2.1
33	2b	28	PHE	2.1
33	2b	131	PRO	2.1
36	1e	84	PHE	2.1
36	2e	6	PHE	2.1
1	2A	545	G	2.1
1	2A	2319	G	2.1

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Mol	Chain	Res	Type	RSRZ
2	2B	103	G	2.1
17	2V	56	SER	2.1
31	29	6	SER	2.1
32	1a	64	G	2.1
32	1a	73	G	2.1
32	2a	867	G	2.1
32	2a	1089	G	2.1
54	2w	53	G	2.1
8	1I	41	GLU	2.1
12	2Q	12	GLN	2.1
33	1b	45	GLN	2.1
35	2d	201	GLN	2.1
36	2e	20	GLN	2.1
37	2f	57	GLN	2.1
40	2i	112	LYS	2.1
47	1p	27	LYS	2.1
21	2Z	30	ASN	2.1
31	29	26	ILE	2.1
34	1c	152	ILE	2.1
34	2c	134	ILE	2.1
44	2m	22	ILE	2.1
50	1s	14	HIS	2.1
19	2X	81	VAL	2.1
30	28	25	MET	2.1
45	1n	25	VAL	2.1
50	2s	51	VAL	2.1
50	2s	66	MET	2.1
8	2I	38	LEU	2.1
21	1Z	150	LEU	2.1
21	2Z	59	LEU	2.1
33	1b	187	LEU	2.1
34	1c	178	LEU	2.1
37	2f	45	LEU	2.1
1	2A	894	C	2.1
7	2H	165	ALA	2.1
32	2a	979	C	2.1
32	2a	1113	C	2.1
12	2Q	134	ARG	2.1
21	2Z	103	ARG	2.1
35	2d	164	ALA	2.1
42	1k	64	ALA	2.1
49	2r	20	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
51	1t	12	ALA	2.1
1	1A	1083	U	2.1
1	2A	272(A)	U	2.1
32	1a	65	U	2.1
32	2a	1012	U	2.1
32	2a	1056	U	2.1
40	2i	115	GLY	2.1
45	1n	51	GLY	2.1
6	2G	11	TYR	2.1
17	2V	12	TYR	2.1
35	2d	4	TYR	2.1
48	2q	88	TYR	2.1
11	2P	78	PRO	2.1
21	2Z	15	PRO	2.1
21	2Z	89	PHE	2.1
21	2Z	159	PRO	2.1
33	2b	54	THR	2.1
33	2b	91	PRO	2.1
33	2b	125	PRO	2.1
40	2i	27	THR	2.1
7	2H	85	LYS	2.1
32	2a	996	A	2.1
32	2a	1005	A	2.1
32	2a	1346	A	2.1
33	2b	12	GLU	2.1
41	1j	80	LYS	2.1
46	2o	10	LYS	2.1
1	1A	883	G	2.1
1	1A	1107	G	2.1
1	2A	2100	G	2.1
1	2A	2152	G	2.1
1	2A	2318	G	2.1
2	2B	118	G	2.1
32	1a	1042	G	2.1
32	2a	987	G	2.1
32	2a	1193	G	2.1
32	2a	1316	G	2.1
54	1w	44	G	2.1
54	2w	10	G	2.1
33	2b	166	ASP	2.1
42	2k	29	ILE	2.1
44	1m	39	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
4	2E	5	LEU	2.0
33	2b	10	LEU	2.0
33	2b	187	LEU	2.0
35	1d	162	LEU	2.0
35	1d	176	LEU	2.0
38	2g	99	LEU	2.0
40	1i	28	VAL	2.0
41	2j	16	LEU	2.0
43	2l	43	VAL	2.0
6	2G	33	ARG	2.0
11	2P	79	ARG	2.0
22	20	82	ARG	2.0
28	26	37	ARG	2.0
33	2b	120	ALA	2.0
37	2f	99	ALA	2.0
42	1k	74	ALA	2.0
33	2b	24	TRP	2.0
1	2A	645	C	2.0
1	2A	898	C	2.0
1	2A	2794	C	2.0
32	2a	972	C	2.0
32	2a	1109	C	2.0
32	2a	1192	C	2.0
32	2a	1384	C	2.0
34	1c	13	GLY	2.0
54	1w	13	C	2.0
54	2w	43	C	2.0
1	2A	877	U	2.0
32	2a	1065	U	2.0
32	2a	1083	U	2.0
12	2Q	32	TYR	2.0
33	2b	199	TYR	2.0
43	2l	5	PRO	2.0
44	2m	21	TYR	2.0
21	1Z	69	THR	2.0
33	2b	57	PHE	2.0
36	2e	26	PHE	2.0
36	2e	84	PHE	2.0
36	2e	120	THR	2.0
36	2e	121	LYS	2.0
38	2g	62	PHE	2.0
35	1d	201	GLN	2.0

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Mol	Chain	Res	Type	RSRZ
21	2Z	52	SER	2.0
45	2n	60	SER	2.0
1	1A	229	A	2.0
32	2a	873	A	2.0
47	1p	16	HIS	2.0
54	1w	9	A	2.0
8	2I	1	MET	2.0
38	2g	42	ILE	2.0
20	1Y	107	ASP	2.0
34	1c	3	ASN	2.0
34	1c	62	ASP	2.0
41	1j	89	ASP	2.0
11	1P	105	LEU	2.0
21	2Z	91	LEU	2.0
3	2D	51	VAL	2.0
8	2I	19	VAL	2.0
24	22	51	ARG	2.0
35	1d	11	LEU	2.0
50	1s	5	LEU	2.0
45	1n	56	VAL	2.0
47	1p	21	VAL	2.0
1	1A	892	G	2.0
1	1A	2124	G	2.0
1	2A	906	G	2.0
54	2w	28	G	2.0
54	2y	24	G	2.0
7	2H	20	ALA	2.0
8	2I	53	ALA	2.0
51	1t	59	ALA	2.0
18	2W	112	GLY	2.0
52	1u	2	GLY	2.0
35	1d	173	TRP	2.0
41	2j	14	LYS	2.0
1	2A	271(K)	U	2.0
32	1a	163	C	2.0
32	1a	1019	C	2.0
32	1a	1038	C	2.0
32	2a	1259	C	2.0
37	2f	96	PRO	2.0
41	2j	53	PRO	2.0
8	2I	108	THR	2.0
32	2a	1278	U	2.0

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Mol	Chain	Res	Type	RSRZ
33	1b	190	THR	2.0
33	1b	231	GLU	2.0
33	2b	73	THR	2.0
34	1c	193	TYR	2.0
34	2c	90	GLU	2.0
34	2c	186	PHE	2.0
40	2i	88	TYR	2.0
44	1m	87	TYR	2.0
44	2m	23	TYR	2.0
20	2Y	57	GLN	2.0
44	2m	58	GLU	2.0
50	2s	47	HIS	2.0
21	1Z	171	ILE	2.0
40	2i	63	ILE	2.0
45	2n	42	ILE	2.0
6	1G	108	ASN	2.0
24	12	69	ARG	2.0
26	14	58	ARG	2.0
33	1b	153	ARG	2.0
35	1d	49	ARG	2.0
37	1f	46	ARG	2.0
40	1i	66	ARG	2.0
47	1p	81	ARG	2.0
52	2u	7	ARG	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (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, 95^{th} 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
54	G7M	2w	46	24/25	0.46	0.17	87,99,104,114	0
54	PSU	2y	55	20/21	0.48	0.16	94,100,112,112	0
54	G7M	1w	46	24/25	0.51	0.17	90,96,109,126	0
54	4SU	2w	8	20/21	0.58	0.17	93,101,113,121	0
54	5MU	2y	54	21/22	0.59	0.18	90,98,105,120	0
54	G7M	2y	46	24/25	0.60	0.16	88,95,102,119	0
54	5MU	2w	54	21/22	0.62	0.16	86,91,99,102	0
54	G7M	1y	46	24/25	0.62	0.15	87,95,104,112	0
54	PSU	2y	32	20/21	0.63	0.16	86,91,100,106	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	PSU	2w	55	20/21	0.65	0.15	93,97,107,111	0
54	5MU	1y	54	21/22	0.65	0.14	89,93,101,112	0
54	MIA	2y	37	22/30	0.65	0.15	82,90,98,109	0
54	4SU	2y	8	20/21	0.67	0.14	93,97,109,117	0
54	4SU	1y	8	20/21	0.73	0.12	90,93,102,111	0
54	PSU	1y	55	20/21	0.73	0.13	91,96,105,109	0
54	4SU	1w	8	20/21	0.78	0.13	87,94,103,106	0
55	PSU	2x	55	20/21	0.79	0.13	75,85,93,94	0
32	2MG	2a	1207	24/25	0.82	0.13	86,91,96,101	0
54	PSU	1y	32	20/21	0.82	0.13	85,89,92,94	0
54	PSU	1w	55	20/21	0.82	0.11	83,90,97,97	0
55	4SU	2x	8	20/21	0.83	0.13	89,91,95,98	0
54	PSU	2y	39	20/21	0.84	0.13	85,90,99,105	0
55	5MU	2x	54	21/22	0.85	0.13	81,86,91,99	0
54	MIA	1y	37	22/30	0.85	0.12	79,84,90,96	0
32	PSU	2a	516	20/21	0.85	0.13	74,84,88,90	0
54	PSU	2w	32	20/21	0.86	0.11	82,89,99,103	0
1	5MU	2A	1915	21/22	0.86	0.12	75,80,84,88	0
54	PSU	1y	39	20/21	0.88	0.10	80,85,91,92	0
54	MIA	2w	37	25/30	0.88	0.11	74,83,91,103	0
54	PSU	1w	32	20/21	0.88	0.14	75,81,86,92	0
32	M2G	2a	966	25/26	0.89	0.16	70,76,88,92	0
1	PSU	2A	1917	20/21	0.89	0.11	61,77,81,82	0
55	5MC	2x	32	21/22	0.90	0.13	76,81,84,89	0
32	4OC	2a	1402	22/23	0.90	0.15	63,74,79,82	0
32	5MC	2a	967	21/22	0.90	0.12	73,76,83,93	0
32	G7M	2a	527	24/25	0.90	0.14	68,76,81,83	0
32	5MC	2a	1400	21/22	0.90	0.15	79,83,87,94	0
54	5MU	1w	54	21/22	0.91	0.10	69,81,87,90	0
1	PSU	2A	1911	20/21	0.91	0.10	61,71,76,79	0
32	5MC	2a	1404	21/22	0.91	0.12	59,67,72,73	0
55	PSU	1x	55	20/21	0.91	0.10	60,69,78,86	0
32	MA6	2a	1518	24/25	0.92	0.14	65,76,81,82	0
54	PSU	2w	39	20/21	0.92	0.09	78,87,91,93	0
55	5MU	1x	54	21/22	0.92	0.10	65,70,74,77	0
32	UR3	2a	1498	21/22	0.92	0.14	62,66,72,73	0
54	PSU	1w	39	20/21	0.93	0.10	70,77,81,83	0
1	OMC	2A	1920	21/22	0.93	0.11	64,71,74,80	0
32	2MG	1a	1207	24/25	0.93	0.10	74,79,83,83	0
54	MIA	1w	37	29/30	0.93	0.12	62,72,77,78	0
32	MA6	2a	1519	24/25	0.93	0.14	63,74,79,82	0
43	0TD	2l	92	10/11	0.93	0.10	73,77,82,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	PSU	1a	516	20/21	0.94	0.10	64,70,75,75	0
32	5MC	1a	967	21/22	0.94	0.10	55,60,69,71	0
1	5MC	2A	1942	21/22	0.94	0.12	57,65,68,69	0
1	5MU	1A	1915	21/22	0.94	0.10	50,62,65,67	0
55	5MC	1x	32	21/22	0.94	0.11	59,64,69,78	0
32	5MC	2a	1407	21/22	0.94	0.11	60,65,73,76	0
43	0TD	1l	92	10/11	0.94	0.09	58,64,69,80	0
32	G7M	1a	527	24/25	0.95	0.09	51,61,67,68	0
55	31H	2x	76	32/33	0.95	0.10	51,57,66,86	0
32	M2G	1a	966	25/26	0.95	0.11	52,60,65,70	0
55	4SU	1x	8	20/21	0.96	0.08	51,67,71,72	0
1	5MU	2A	1939	21/22	0.96	0.08	40,47,52,59	0
1	PSU	1A	1917	20/21	0.96	0.07	52,60,64,64	0
1	OMG	2A	2251	24/25	0.96	0.09	45,51,56,60	0
32	4OC	1a	1402	22/23	0.97	0.08	49,52,56,58	0
1	2MA	2A	2503	23/24	0.97	0.08	39,45,49,50	0
1	OMU	2A	2552	21/22	0.97	0.09	45,54,59,65	0
1	PSU	2A	2605	20/21	0.97	0.08	37,46,52,57	0
32	5MC	1a	1404	21/22	0.97	0.07	41,47,53,54	0
55	31H	1x	76	32/33	0.97	0.09	24,32,41,64	10
32	5MC	1a	1407	21/22	0.97	0.09	41,49,51,52	0
32	MA6	1a	1519	24/25	0.97	0.10	43,48,53,56	0
1	5MC	1A	1942	21/22	0.97	0.09	34,41,47,48	0
1	PSU	1A	1911	20/21	0.97	0.07	37,51,61,62	0
32	5MC	1a	1400	21/22	0.97	0.09	52,60,64,66	0
1	5MC	2A	1962	21/22	0.97	0.08	35,54,62,66	0
1	OMG	1A	2251	24/25	0.98	0.05	25,28,30,32	0
1	OMU	1A	2552	21/22	0.98	0.06	29,33,39,41	0
1	PSU	1A	2605	20/21	0.98	0.07	26,29,35,37	0
1	5MU	1A	1939	21/22	0.98	0.07	25,33,36,37	0
1	OMC	1A	1920	21/22	0.98	0.08	44,50,55,57	0
1	5MC	1A	1962	21/22	0.98	0.07	35,40,45,48	0
32	UR3	1a	1498	21/22	0.98	0.07	42,48,52,55	0
32	MA6	1a	1518	24/25	0.98	0.08	35,46,49,50	0
1	2MA	1A	2503	23/24	0.99	0.05	20,25,28,29	0

6.3 Carbohydrates (i)

There are no oligosaccharides 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, 95^{th} 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
56	MG	1B	229	1/1	0.32	0.29	96,96,96,96	0
56	MG	1w	102	1/1	0.51	0.23	93,93,93,93	0
56	MG	2w	105	1/1	0.52	0.13	94,94,94,94	0
56	MG	2a	1750	1/1	0.53	0.20	85,85,85,85	0
56	MG	1A	4097	1/1	0.55	0.25	87,87,87,87	0
56	MG	2a	1731	1/1	0.56	0.22	96,96,96,96	0
56	MG	2w	107	1/1	0.56	0.35	88,88,88,88	0
56	MG	2w	102	1/1	0.57	0.14	96,96,96,96	0
56	MG	2A	3298	1/1	0.58	0.26	88,88,88,88	0
56	MG	2A	3652	1/1	0.60	0.24	86,86,86,86	0
56	MG	2A	3284	1/1	0.60	0.24	87,87,87,87	0
56	MG	2A	3293	1/1	0.61	0.18	84,84,84,84	0
56	MG	1a	1713	1/1	0.62	0.34	81,81,81,81	0
56	MG	2A	3346	1/1	0.62	0.25	82,82,82,82	0
56	MG	1A	4013	1/1	0.63	0.22	82,82,82,82	0
56	MG	1a	1754	1/1	0.63	0.16	83,83,83,83	0
56	MG	2A	3801	1/1	0.63	0.20	88,88,88,88	0
56	MG	2A	3858	1/1	0.63	0.18	83,83,83,83	0
56	MG	2a	1658	1/1	0.63	0.27	81,81,81,81	0
56	MG	2A	3250	1/1	0.64	0.25	94,94,94,94	0
56	MG	2A	3212	1/1	0.64	0.18	74,74,74,74	0
56	MG	1w	105	1/1	0.65	0.24	92,92,92,92	0
56	MG	2A	3269	1/1	0.65	0.17	88,88,88,88	0
56	MG	1A	4043	1/1	0.65	0.14	67,67,67,67	0
56	MG	2a	1657	1/1	0.65	0.29	81,81,81,81	0
56	MG	2A	3455	1/1	0.65	0.33	88,88,88,88	0
56	MG	2A	3354	1/1	0.66	0.24	85,85,85,85	0
56	MG	1A	3799	1/1	0.66	0.32	90,90,90,90	0
56	MG	2A	3640	1/1	0.66	0.26	72,72,72,72	0
56	MG	1V	206	1/1	0.66	0.22	65,65,65,65	0
56	MG	2a	1811	1/1	0.66	0.20	90,90,90,90	0
56	MG	2A	3337	1/1	0.66	0.23	80,80,80,80	0
56	MG	1a	1788	1/1	0.66	0.12	73,73,73,73	0
56	MG	2a	1604	1/1	0.66	0.15	88,88,88,88	0
56	MG	2A	3602	1/1	0.67	0.23	83,83,83,83	0
56	MG	2l	202	1/1	0.67	0.26	88,88,88,88	0
56	MG	2A	3841	1/1	0.67	0.19	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1U	211	1/1	0.67	0.48	65,65,65,65	0
56	MG	2A	3194	1/1	0.67	0.18	91,91,91,91	0
56	MG	1A	4099	1/1	0.68	0.23	62,62,62,62	0
56	MG	1B	221	1/1	0.68	0.23	72,72,72,72	0
56	MG	2A	3394	1/1	0.68	0.43	82,82,82,82	0
56	MG	1a	1715	1/1	0.68	0.23	68,68,68,68	0
56	MG	2A	3471	1/1	0.68	0.19	81,81,81,81	0
56	MG	2A	3866	1/1	0.68	0.19	86,86,86,86	0
56	MG	2A	3551	1/1	0.68	0.20	83,83,83,83	0
56	MG	1a	1738	1/1	0.68	0.25	93,93,93,93	0
56	MG	2A	3277	1/1	0.69	0.20	79,79,79,79	0
56	MG	2A	3744	1/1	0.69	0.25	76,76,76,76	0
56	MG	2y	105	1/1	0.69	0.19	96,96,96,96	0
56	MG	2A	3321	1/1	0.70	0.18	78,78,78,78	0
56	MG	20	101	1/1	0.70	0.27	83,83,83,83	0
56	MG	2A	3209	1/1	0.70	0.22	81,81,81,81	0
56	MG	1w	104	1/1	0.70	0.11	74,74,74,74	0
56	MG	2a	1815	1/1	0.70	0.16	88,88,88,88	0
56	MG	2A	3241	1/1	0.71	0.37	68,68,68,68	0
56	MG	1A	3991	1/1	0.71	0.16	71,71,71,71	0
56	MG	2A	3663	1/1	0.71	0.19	72,72,72,72	0
56	MG	2a	1659	1/1	0.72	0.18	83,83,83,83	0
56	MG	2w	101	1/1	0.72	0.22	88,88,88,88	0
56	MG	2A	3249	1/1	0.72	0.36	90,90,90,90	0
56	MG	2A	3391	1/1	0.72	0.15	74,74,74,74	0
56	MG	1A	3560	1/1	0.72	0.21	77,77,77,77	0
56	MG	2y	101	1/1	0.72	0.17	91,91,91,91	0
56	MG	2B	220	1/1	0.72	0.28	82,82,82,82	0
56	MG	2a	1617	1/1	0.73	0.24	82,82,82,82	0
56	MG	2A	3066	1/1	0.73	0.28	74,74,74,74	0
56	MG	1a	1808	1/1	0.73	0.21	89,89,89,89	0
56	MG	2A	3306	1/1	0.73	0.26	75,75,75,75	0
56	MG	2a	1727	1/1	0.73	0.32	84,84,84,84	0
56	MG	1a	1685	1/1	0.73	0.18	74,74,74,74	0
56	MG	1A	4026	1/1	0.73	0.15	67,67,67,67	0
56	MG	1A	3818	1/1	0.73	0.21	53,53,53,53	0
56	MG	1a	1712	1/1	0.74	0.26	84,84,84,84	0
56	MG	2a	1700	1/1	0.74	0.33	76,76,76,76	0
56	MG	2a	1708	1/1	0.74	0.24	78,78,78,78	0
56	MG	2a	1724	1/1	0.74	0.34	88,88,88,88	0
56	MG	2A	3399	1/1	0.74	0.11	82,82,82,82	0
56	MG	2A	3315	1/1	0.74	0.23	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3466	1/1	0.74	0.14	76,76,76,76	0
56	MG	2A	3273	1/1	0.74	0.36	74,74,74,74	0
56	MG	1A	3852	1/1	0.74	0.13	68,68,68,68	0
56	MG	2G	201	1/1	0.74	0.26	76,76,76,76	0
56	MG	1Z	3702	1/1	0.74	0.13	78,78,78,78	0
56	MG	2A	3351	1/1	0.74	0.29	86,86,86,86	0
56	MG	2A	3176	1/1	0.74	0.33	81,81,81,81	0
56	MG	2a	1637	1/1	0.74	0.30	86,86,86,86	0
56	MG	1A	3267	1/1	0.74	0.33	79,79,79,79	0
56	MG	2A	3697	1/1	0.74	0.22	82,82,82,82	0
56	MG	2y	106	1/1	0.74	0.32	84,84,84,84	0
56	MG	1A	3811	1/1	0.75	0.16	60,60,60,60	0
56	MG	2a	1749	1/1	0.75	0.27	79,79,79,79	0
56	MG	1a	1743	1/1	0.75	0.22	73,73,73,73	0
56	MG	2A	3669	1/1	0.75	0.23	71,71,71,71	0
56	MG	2A	3681	1/1	0.75	0.21	67,67,67,67	0
56	MG	1w	106	1/1	0.75	0.12	96,96,96,96	0
56	MG	2A	3054	1/1	0.75	0.24	70,70,70,70	0
56	MG	1a	1642	1/1	0.75	0.47	88,88,88,88	0
56	MG	2A	3287	1/1	0.75	0.16	79,79,79,79	0
56	MG	2A	3290	1/1	0.75	0.39	83,83,83,83	0
56	MG	2A	3127	1/1	0.75	0.23	82,82,82,82	0
56	MG	2B	202	1/1	0.75	0.19	74,74,74,74	0
56	MG	2A	3371	1/1	0.75	0.18	91,91,91,91	0
56	MG	2A	3733	1/1	0.76	0.21	74,74,74,74	0
56	MG	1A	4038	1/1	0.76	0.13	41,41,41,41	0
56	MG	1A	3854	1/1	0.76	0.23	62,62,62,62	0
56	MG	2A	3332	1/1	0.76	0.34	82,82,82,82	0
56	MG	2A	3413	1/1	0.76	0.23	71,71,71,71	0
56	MG	1A	3457	1/1	0.76	0.29	85,85,85,85	0
56	MG	2a	1646	1/1	0.76	0.37	82,82,82,82	0
56	MG	2A	3699	1/1	0.76	0.15	80,80,80,80	0
56	MG	2B	208	1/1	0.76	0.26	75,75,75,75	0
56	MG	1A	3635	1/1	0.77	0.25	63,63,63,63	0
56	MG	1A	3690	1/1	0.77	0.22	72,72,72,72	0
56	MG	1A	3743	1/1	0.77	0.18	61,61,61,61	0
56	MG	1A	4079	1/1	0.77	0.13	59,59,59,59	0
56	MG	1a	1716	1/1	0.77	0.25	67,67,67,67	0
56	MG	1A	3531	1/1	0.77	0.20	87,87,87,87	0
56	MG	1A	3298	1/1	0.77	0.17	57,57,57,57	0
56	MG	2A	3863	1/1	0.77	0.22	79,79,79,79	0
56	MG	2A	3475	1/1	0.77	0.26	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3869	1/1	0.77	0.18	70,70,70,70	0
56	MG	2A	3496	1/1	0.77	0.18	75,75,75,75	0
56	MG	1a	1646	1/1	0.77	0.35	78,78,78,78	0
56	MG	2A	3263	1/1	0.77	0.17	81,81,81,81	0
56	MG	2E	308	1/1	0.77	0.24	79,79,79,79	0
56	MG	2A	3616	1/1	0.77	0.19	77,77,77,77	0
56	MG	2A	3075	1/1	0.77	0.20	82,82,82,82	0
56	MG	2A	3090	1/1	0.77	0.20	78,78,78,78	0
56	MG	2A	3091	1/1	0.77	0.18	75,75,75,75	0
56	MG	2A	3357	1/1	0.77	0.17	76,76,76,76	0
56	MG	2A	3122	1/1	0.77	0.24	77,77,77,77	0
56	MG	2y	107	1/1	0.77	0.26	88,88,88,88	0
56	MG	2A	3666	1/1	0.78	0.18	77,77,77,77	0
56	MG	1A	3694	1/1	0.78	0.18	68,68,68,68	0
56	MG	2a	1711	1/1	0.78	0.24	91,91,91,91	0
56	MG	2a	1718	1/1	0.78	0.37	80,80,80,80	0
56	MG	1B	233	1/1	0.78	0.17	61,61,61,61	0
56	MG	2a	1725	1/1	0.78	0.27	75,75,75,75	0
56	MG	1A	4098	1/1	0.78	0.21	69,69,69,69	0
56	MG	1a	1761	1/1	0.78	0.21	79,79,79,79	0
56	MG	2a	1733	1/1	0.78	0.28	81,81,81,81	0
56	MG	2A	3727	1/1	0.78	0.21	76,76,76,76	0
56	MG	2A	3529	1/1	0.78	0.12	63,63,63,63	0
56	MG	2a	1808	1/1	0.78	0.24	74,74,74,74	0
56	MG	1A	3982	1/1	0.78	0.17	83,83,83,83	0
56	MG	2A	3753	1/1	0.78	0.21	62,62,62,62	0
56	MG	2a	1825	1/1	0.78	0.26	82,82,82,82	0
56	MG	2a	1621	1/1	0.78	0.25	79,79,79,79	0
56	MG	2a	1624	1/1	0.78	0.16	88,88,88,88	0
56	MG	2a	1629	1/1	0.78	0.26	80,80,80,80	0
56	MG	2a	1632	1/1	0.78	0.29	78,78,78,78	0
56	MG	1A	4086	1/1	0.78	0.16	62,62,62,62	0
56	MG	2A	3102	1/1	0.78	0.35	90,90,90,90	0
56	MG	14	101	1/1	0.78	0.13	86,86,86,86	0
56	MG	1a	1632	1/1	0.78	0.20	71,71,71,71	0
56	MG	1a	1721	1/1	0.78	0.34	78,78,78,78	0
56	MG	2A	3262	1/1	0.79	0.30	80,80,80,80	0
56	MG	2A	3314	1/1	0.79	0.17	78,78,78,78	0
56	MG	1A	3756	1/1	0.79	0.16	51,51,51,51	0
56	MG	2A	3406	1/1	0.79	0.20	79,79,79,79	0
56	MG	2A	3409	1/1	0.79	0.14	73,73,73,73	0
56	MG	2A	3172	1/1	0.79	0.27	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3445	1/1	0.79	0.38	70,70,70,70	0
56	MG	28	101	1/1	0.79	0.33	86,86,86,86	0
56	MG	1A	3304	1/1	0.79	0.32	70,70,70,70	0
56	MG	2a	1616	1/1	0.79	0.17	74,74,74,74	0
56	MG	2a	1759	1/1	0.79	0.11	86,86,86,86	0
56	MG	1A	3498	1/1	0.79	0.23	73,73,73,73	0
56	MG	1A	3388	1/1	0.79	0.17	75,75,75,75	0
56	MG	1A	3732	1/1	0.79	0.20	57,57,57,57	0
56	MG	2A	3491	1/1	0.79	0.43	72,72,72,72	0
56	MG	2A	3353	1/1	0.79	0.17	72,72,72,72	0
56	MG	2A	3501	1/1	0.79	0.24	72,72,72,72	0
56	MG	2A	3823	1/1	0.79	0.12	78,78,78,78	0
56	MG	2w	103	1/1	0.79	0.13	85,85,85,85	0
56	MG	1A	3436	1/1	0.79	0.21	67,67,67,67	0
56	MG	1a	1637	1/1	0.79	0.25	79,79,79,79	0
56	MG	2A	3576	1/1	0.79	0.15	68,68,68,68	0
56	MG	2a	1670	1/1	0.79	0.28	76,76,76,76	0
56	MG	2a	1685	1/1	0.79	0.26	79,79,79,79	0
56	MG	1A	4067	1/1	0.79	0.23	41,41,41,41	0
56	MG	1a	1735	1/1	0.80	0.16	75,75,75,75	0
56	MG	2a	1666	1/1	0.80	0.15	82,82,82,82	0
56	MG	2A	3272	1/1	0.80	0.18	73,73,73,73	0
56	MG	2A	3154	1/1	0.80	0.20	87,87,87,87	0
56	MG	2A	3166	1/1	0.80	0.42	79,79,79,79	0
56	MG	2A	3537	1/1	0.80	0.18	74,74,74,74	0
56	MG	1A	3938	1/1	0.80	0.13	50,50,50,50	0
56	MG	2a	1717	1/1	0.80	0.38	82,82,82,82	0
56	MG	2A	3554	1/1	0.80	0.21	57,57,57,57	0
56	MG	2A	3868	1/1	0.80	0.23	66,66,66,66	0
56	MG	1x	111	1/1	0.80	0.18	72,72,72,72	0
56	MG	2A	3873	1/1	0.80	0.20	70,70,70,70	0
56	MG	2A	3389	1/1	0.80	0.23	79,79,79,79	0
56	MG	2A	3051	1/1	0.80	0.21	75,75,75,75	0
56	MG	1a	1682	1/1	0.80	0.25	81,81,81,81	0
56	MG	1A	3416	1/1	0.80	0.17	76,76,76,76	0
56	MG	2A	3222	1/1	0.80	0.20	69,69,69,69	0
56	MG	2a	1786	1/1	0.80	0.20	69,69,69,69	0
56	MG	2A	3664	1/1	0.80	0.21	78,78,78,78	0
56	MG	1A	3356	1/1	0.80	0.19	71,71,71,71	0
56	MG	2A	3668	1/1	0.80	0.14	75,75,75,75	0
56	MG	2a	1823	1/1	0.80	0.21	72,72,72,72	0
56	MG	1a	1611	1/1	0.80	0.29	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2f	202	1/1	0.80	0.17	87,87,87,87	0
56	MG	1A	4008	1/1	0.80	0.32	39,39,39,39	0
56	MG	2a	1619	1/1	0.80	0.15	74,74,74,74	0
56	MG	1A	3062	1/1	0.80	0.21	59,59,59,59	0
56	MG	2A	3333	1/1	0.80	0.23	62,62,62,62	0
56	MG	2A	3703	1/1	0.80	0.19	78,78,78,78	0
56	MG	2A	3713	1/1	0.80	0.15	66,66,66,66	0
56	MG	1A	3717	1/1	0.80	0.17	49,49,49,49	0
56	MG	2A	3341	1/1	0.80	0.32	81,81,81,81	0
56	MG	2A	3484	1/1	0.80	0.18	72,72,72,72	0
56	MG	2A	3751	1/1	0.80	0.15	64,64,64,64	0
56	MG	2A	3452	1/1	0.81	0.18	66,66,66,66	0
56	MG	2A	3192	1/1	0.81	0.17	81,81,81,81	0
56	MG	2a	1757	1/1	0.81	0.14	77,77,77,77	0
56	MG	1A	3210	1/1	0.81	0.16	58,58,58,58	0
56	MG	2A	3204	1/1	0.81	0.25	77,77,77,77	0
56	MG	2a	1796	1/1	0.81	0.26	83,83,83,83	0
56	MG	2a	1800	1/1	0.81	0.53	83,83,83,83	0
56	MG	1a	1640	1/1	0.81	0.28	71,71,71,71	0
56	MG	2A	3355	1/1	0.81	0.16	69,69,69,69	0
56	MG	1A	3517	1/1	0.81	0.23	61,61,61,61	0
56	MG	1A	4037	1/1	0.81	0.19	61,61,61,61	0
56	MG	2A	3384	1/1	0.81	0.23	78,78,78,78	0
56	MG	1a	1662	1/1	0.81	0.20	72,72,72,72	0
56	MG	1a	1669	1/1	0.81	0.29	68,68,68,68	0
56	MG	1a	1680	1/1	0.81	0.26	76,76,76,76	0
56	MG	2A	3398	1/1	0.81	0.17	69,69,69,69	0
56	MG	2A	3146	1/1	0.81	0.32	79,79,79,79	0
56	MG	2w	104	1/1	0.81	0.19	83,83,83,83	0
56	MG	2A	3577	1/1	0.81	0.26	80,80,80,80	0
56	MG	2w	106	1/1	0.81	0.14	94,94,94,94	0
56	MG	1A	3272	1/1	0.81	0.19	66,66,66,66	0
56	MG	1a	1748	1/1	0.81	0.20	84,84,84,84	0
56	MG	2y	102	1/1	0.81	0.16	86,86,86,86	0
56	MG	2y	103	1/1	0.81	0.10	84,84,84,84	0
56	MG	2y	104	1/1	0.81	0.10	85,85,85,85	0
56	MG	1A	3250	1/1	0.81	0.23	81,81,81,81	0
56	MG	2A	3059	1/1	0.81	0.17	70,70,70,70	0
56	MG	2a	1737	1/1	0.81	0.32	74,74,74,74	0
56	MG	1a	1676	1/1	0.82	0.30	79,79,79,79	0
56	MG	2A	3206	1/1	0.82	0.17	77,77,77,77	0
56	MG	2A	3343	1/1	0.82	0.16	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3862	1/1	0.82	0.17	77,77,77,77	0
56	MG	1E	310	1/1	0.82	0.19	70,70,70,70	0
56	MG	1A	3869	1/1	0.82	0.16	54,54,54,54	0
56	MG	2a	1660	1/1	0.82	0.21	93,93,93,93	0
56	MG	2A	3228	1/1	0.82	0.17	64,64,64,64	0
56	MG	2a	1669	1/1	0.82	0.15	87,87,87,87	0
56	MG	1a	1699	1/1	0.82	0.37	81,81,81,81	0
56	MG	2a	1672	1/1	0.82	0.19	80,80,80,80	0
56	MG	2A	3247	1/1	0.82	0.26	62,62,62,62	0
56	MG	2a	1689	1/1	0.82	0.17	80,80,80,80	0
56	MG	2A	3358	1/1	0.82	0.25	70,70,70,70	0
56	MG	2a	1702	1/1	0.82	0.34	81,81,81,81	0
56	MG	1A	3024	1/1	0.82	0.13	61,61,61,61	0
56	MG	2A	3373	1/1	0.82	0.26	80,80,80,80	0
56	MG	1W	205	1/1	0.82	0.23	44,44,44,44	0
56	MG	2A	3388	1/1	0.82	0.19	79,79,79,79	0
56	MG	2A	3254	1/1	0.82	0.26	71,71,71,71	0
56	MG	2A	3261	1/1	0.82	0.30	72,72,72,72	0
56	MG	2A	3065	1/1	0.82	0.18	83,83,83,83	0
56	MG	1A	4075	1/1	0.82	0.11	38,38,38,38	0
56	MG	2A	3265	1/1	0.82	0.29	80,80,80,80	0
56	MG	2A	3405	1/1	0.82	0.13	74,74,74,74	0
56	MG	1A	3480	1/1	0.82	0.17	64,64,64,64	0
56	MG	2A	3829	1/1	0.82	0.16	48,48,48,48	0
56	MG	2A	3836	1/1	0.82	0.14	72,72,72,72	0
56	MG	1A	3095	1/1	0.82	0.34	71,71,71,71	0
56	MG	2A	3844	1/1	0.82	0.16	68,68,68,68	0
56	MG	2A	3852	1/1	0.82	0.17	65,65,65,65	0
56	MG	1a	1630	1/1	0.82	0.15	73,73,73,73	0
56	MG	2A	3441	1/1	0.82	0.31	71,71,71,71	0
56	MG	1A	3101	1/1	0.82	0.16	70,70,70,70	0
56	MG	2A	3103	1/1	0.82	0.21	66,66,66,66	0
56	MG	2A	3106	1/1	0.82	0.24	87,87,87,87	0
56	MG	2A	3463	1/1	0.82	0.12	68,68,68,68	0
56	MG	1A	3847	1/1	0.82	0.18	53,53,53,53	0
56	MG	2A	3291	1/1	0.82	0.26	74,74,74,74	0
56	MG	1A	3165	1/1	0.82	0.25	68,68,68,68	0
56	MG	2A	3294	1/1	0.82	0.20	68,68,68,68	0
56	MG	1A	4100	1/1	0.82	0.12	69,69,69,69	0
56	MG	2A	3301	1/1	0.82	0.22	82,82,82,82	0
56	MG	26	101	1/1	0.82	0.25	73,73,73,73	0
56	MG	1A	4033	1/1	0.82	0.13	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1661	1/1	0.82	0.22	67,67,67,67	0
56	MG	1B	228	1/1	0.82	0.15	70,70,70,70	0
56	MG	2A	3317	1/1	0.82	0.20	74,74,74,74	0
56	MG	1f	202	1/1	0.82	0.25	82,82,82,82	0
56	MG	1n	101	1/1	0.82	0.21	68,68,68,68	0
56	MG	1A	3198	1/1	0.82	0.21	58,58,58,58	0
56	MG	2a	1628	1/1	0.82	0.12	80,80,80,80	0
56	MG	2A	3596	1/1	0.82	0.21	70,70,70,70	0
56	MG	2A	3153	1/1	0.83	0.25	68,68,68,68	0
56	MG	2A	3765	1/1	0.83	0.24	53,53,53,53	0
56	MG	2A	3352	1/1	0.83	0.13	66,66,66,66	0
56	MG	2A	3810	1/1	0.83	0.10	90,90,90,90	0
56	MG	1a	1625	1/1	0.83	0.14	64,64,64,64	0
56	MG	1A	3258	1/1	0.83	0.11	63,63,63,63	0
56	MG	1x	105	1/1	0.83	0.21	75,75,75,75	0
56	MG	1A	3414	1/1	0.83	0.21	42,42,42,42	0
56	MG	2a	1704	1/1	0.83	0.19	84,84,84,84	0
56	MG	2A	3520	1/1	0.83	0.23	78,78,78,78	0
56	MG	2A	3521	1/1	0.83	0.13	56,56,56,56	0
56	MG	1A	3499	1/1	0.83	0.39	68,68,68,68	0
56	MG	1A	3353	1/1	0.83	0.21	65,65,65,65	0
56	MG	2a	1722	1/1	0.83	0.30	83,83,83,83	0
56	MG	2A	3544	1/1	0.83	0.19	60,60,60,60	0
56	MG	2A	3199	1/1	0.83	0.20	64,64,64,64	0
56	MG	2a	1726	1/1	0.83	0.42	80,80,80,80	0
56	MG	2A	3379	1/1	0.83	0.26	75,75,75,75	0
56	MG	2A	3058	1/1	0.83	0.34	75,75,75,75	0
56	MG	1A	3420	1/1	0.83	0.33	80,80,80,80	0
56	MG	2a	1736	1/1	0.83	0.21	85,85,85,85	0
56	MG	2A	3063	1/1	0.83	0.21	66,66,66,66	0
56	MG	2a	1741	1/1	0.83	0.25	69,69,69,69	0
56	MG	2B	217	1/1	0.83	0.14	72,72,72,72	0
56	MG	1A	4046	1/1	0.83	0.16	48,48,48,48	0
56	MG	2A	3607	1/1	0.83	0.16	71,71,71,71	0
56	MG	2A	3219	1/1	0.83	0.19	75,75,75,75	0
56	MG	2a	1763	1/1	0.83	0.10	96,96,96,96	0
56	MG	1A	4065	1/1	0.83	0.15	58,58,58,58	0
56	MG	1G	203	1/1	0.83	0.13	82,82,82,82	0
56	MG	1O	206	1/1	0.83	0.29	66,66,66,66	0
56	MG	28	105	1/1	0.83	0.30	70,70,70,70	0
56	MG	2A	3316	1/1	0.83	0.12	70,70,70,70	0
56	MG	2a	1607	1/1	0.83	0.29	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3407	1/1	0.83	0.12	70,70,70,70	0
56	MG	1A	3545	1/1	0.83	0.24	55,55,55,55	0
56	MG	1A	3962	1/1	0.83	0.19	61,61,61,61	0
56	MG	2A	3676	1/1	0.83	0.15	69,69,69,69	0
56	MG	2t	201	1/1	0.83	0.21	63,63,63,63	0
56	MG	2A	3425	1/1	0.83	0.31	66,66,66,66	0
56	MG	2a	1627	1/1	0.83	0.11	77,77,77,77	0
56	MG	2A	3440	1/1	0.83	0.39	73,73,73,73	0
56	MG	1A	3208	1/1	0.83	0.17	62,62,62,62	0
56	MG	2A	3252	1/1	0.83	0.27	90,90,90,90	0
56	MG	2a	1634	1/1	0.83	0.18	87,87,87,87	0
56	MG	2a	1635	1/1	0.83	0.18	85,85,85,85	0
56	MG	2x	101	1/1	0.83	0.12	74,74,74,74	0
56	MG	1A	3357	1/1	0.83	0.14	58,58,58,58	0
56	MG	2A	3717	1/1	0.83	0.14	57,57,57,57	0
56	MG	1w	101	1/1	0.83	0.12	73,73,73,73	0
56	MG	1A	3648	1/1	0.83	0.14	60,60,60,60	0
56	MG	1A	3841	1/1	0.83	0.24	68,68,68,68	0
56	MG	2A	3470	1/1	0.83	0.13	65,65,65,65	0
56	MG	2a	1663	1/1	0.83	0.29	69,69,69,69	0
56	MG	2A	3182	1/1	0.84	0.12	61,61,61,61	0
56	MG	2A	3737	1/1	0.84	0.19	67,67,67,67	0
56	MG	1w	107	1/1	0.84	0.22	78,78,78,78	0
56	MG	2a	1662	1/1	0.84	0.17	80,80,80,80	0
56	MG	2A	3453	1/1	0.84	0.28	67,67,67,67	0
56	MG	1A	3855	1/1	0.84	0.12	58,58,58,58	0
56	MG	2A	3759	1/1	0.84	0.20	70,70,70,70	0
56	MG	1x	110	1/1	0.84	0.18	82,82,82,82	0
56	MG	2A	3785	1/1	0.84	0.14	77,77,77,77	0
56	MG	2a	1676	1/1	0.84	0.14	69,69,69,69	0
56	MG	1A	3522	1/1	0.84	0.22	67,67,67,67	0
56	MG	2A	3469	1/1	0.84	0.33	76,76,76,76	0
56	MG	2A	3008	1/1	0.84	0.14	58,58,58,58	0
56	MG	1A	3472	1/1	0.84	0.14	67,67,67,67	0
56	MG	1A	3916	1/1	0.84	0.12	51,51,51,51	0
56	MG	2A	3339	1/1	0.84	0.19	75,75,75,75	0
56	MG	1a	1606	1/1	0.84	0.10	77,77,77,77	0
56	MG	1A	3932	1/1	0.84	0.11	64,64,64,64	0
56	MG	1A	3731	1/1	0.84	0.20	69,69,69,69	0
56	MG	2A	3512	1/1	0.84	0.29	64,64,64,64	0
56	MG	2A	3064	1/1	0.84	0.19	78,78,78,78	0
56	MG	1A	3538	1/1	0.84	0.18	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1742	1/1	0.84	0.19	77,77,77,77	0
56	MG	2A	3068	1/1	0.84	0.35	80,80,80,80	0
56	MG	2B	201	1/1	0.84	0.23	86,86,86,86	0
56	MG	2A	3074	1/1	0.84	0.14	69,69,69,69	0
56	MG	2B	206	1/1	0.84	0.24	74,74,74,74	0
56	MG	1A	3542	1/1	0.84	0.16	77,77,77,77	0
56	MG	2B	213	1/1	0.84	0.30	77,77,77,77	0
56	MG	2a	1742	1/1	0.84	0.19	80,80,80,80	0
56	MG	2a	1747	1/1	0.84	0.38	69,69,69,69	0
56	MG	1A	3316	1/1	0.84	0.32	63,63,63,63	0
56	MG	1A	4001	1/1	0.84	0.15	70,70,70,70	0
56	MG	2A	3092	1/1	0.84	0.29	73,73,73,73	0
56	MG	1A	3482	1/1	0.84	0.22	72,72,72,72	0
56	MG	2V	201	1/1	0.84	0.39	59,59,59,59	0
56	MG	1A	3590	1/1	0.84	0.13	61,61,61,61	0
56	MG	2a	1795	1/1	0.84	0.21	65,65,65,65	0
56	MG	25	105	1/1	0.84	0.18	81,81,81,81	0
56	MG	2A	3385	1/1	0.84	0.30	78,78,78,78	0
56	MG	2a	1805	1/1	0.84	0.28	76,76,76,76	0
56	MG	2a	1806	1/1	0.84	0.17	72,72,72,72	0
56	MG	2A	3611	1/1	0.84	0.14	60,60,60,60	0
56	MG	2a	1809	1/1	0.84	0.20	78,78,78,78	0
56	MG	1a	1659	1/1	0.84	0.21	82,82,82,82	0
56	MG	2A	3108	1/1	0.84	0.41	61,61,61,61	0
56	MG	2A	3111	1/1	0.84	0.36	77,77,77,77	0
56	MG	2a	1612	1/1	0.84	0.22	80,80,80,80	0
56	MG	1A	4020	1/1	0.84	0.09	56,56,56,56	0
56	MG	1l	202	1/1	0.84	0.14	71,71,71,71	0
56	MG	2a	1618	1/1	0.84	0.20	76,76,76,76	0
56	MG	2v	101	1/1	0.84	0.13	81,81,81,81	0
56	MG	2v	102	1/1	0.84	0.24	80,80,80,80	0
56	MG	2A	3289	1/1	0.84	0.16	79,79,79,79	0
56	MG	2A	3135	1/1	0.84	0.27	63,63,63,63	0
56	MG	1A	3597	1/1	0.84	0.13	54,54,54,54	0
56	MG	2a	1626	1/1	0.84	0.20	68,68,68,68	0
56	MG	1A	3259	1/1	0.84	0.11	83,83,83,83	0
56	MG	1E	311	1/1	0.84	0.16	79,79,79,79	0
56	MG	1A	3379	1/1	0.84	0.22	69,69,69,69	0
56	MG	2a	1630	1/1	0.84	0.18	74,74,74,74	0
56	MG	1A	3671	1/1	0.84	0.12	54,54,54,54	0
56	MG	2A	3439	1/1	0.84	0.30	75,75,75,75	0
56	MG	1A	3463	1/1	0.84	0.20	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3309	1/1	0.84	0.32	79,79,79,79	0
56	MG	2a	1642	1/1	0.84	0.25	72,72,72,72	0
56	MG	2A	3442	1/1	0.84	0.27	68,68,68,68	0
56	MG	2A	3729	1/1	0.84	0.21	83,83,83,83	0
56	MG	1A	4012	1/1	0.85	0.09	79,79,79,79	0
56	MG	1A	3430	1/1	0.85	0.29	64,64,64,64	0
56	MG	2A	3142	1/1	0.85	0.20	66,66,66,66	0
56	MG	2A	3325	1/1	0.85	0.21	76,76,76,76	0
56	MG	2A	3558	1/1	0.85	0.13	74,74,74,74	0
56	MG	2A	3794	1/1	0.85	0.18	59,59,59,59	0
56	MG	2A	3258	1/1	0.85	0.12	57,57,57,57	0
56	MG	10	102	1/1	0.85	0.25	66,66,66,66	0
56	MG	2A	3336	1/1	0.85	0.20	77,77,77,77	0
56	MG	1A	3561	1/1	0.85	0.20	78,78,78,78	0
56	MG	1a	1604	1/1	0.85	0.13	72,72,72,72	0
56	MG	1A	3342	1/1	0.85	0.11	59,59,59,59	0
56	MG	1A	3735	1/1	0.85	0.18	54,54,54,54	0
56	MG	2A	3270	1/1	0.85	0.12	62,62,62,62	0
56	MG	2a	1771	1/1	0.85	0.09	81,81,81,81	0
56	MG	1A	3446	1/1	0.85	0.15	68,68,68,68	0
56	MG	1A	3345	1/1	0.85	0.11	59,59,59,59	0
56	MG	1A	3391	1/1	0.85	0.16	55,55,55,55	0
56	MG	2a	1797	1/1	0.85	0.16	81,81,81,81	0
56	MG	2a	1643	1/1	0.85	0.25	77,77,77,77	0
56	MG	1A	3809	1/1	0.85	0.12	63,63,63,63	0
56	MG	2a	1650	1/1	0.85	0.32	73,73,73,73	0
56	MG	2a	1653	1/1	0.85	0.29	78,78,78,78	0
56	MG	1A	3050	1/1	0.85	0.35	46,46,46,46	0
56	MG	1x	101	1/1	0.85	0.20	68,68,68,68	0
56	MG	2a	1814	1/1	0.85	0.28	65,65,65,65	0
56	MG	1A	3103	1/1	0.85	0.23	73,73,73,73	0
56	MG	2a	1818	1/1	0.85	0.31	73,73,73,73	0
56	MG	2A	3367	1/1	0.85	0.09	82,82,82,82	0
56	MG	2A	3695	1/1	0.85	0.18	66,66,66,66	0
56	MG	1A	3823	1/1	0.85	0.18	60,60,60,60	0
56	MG	2j	201	1/1	0.85	0.17	80,80,80,80	0
56	MG	2B	209	1/1	0.85	0.24	75,75,75,75	0
56	MG	2l	203	1/1	0.85	0.22	80,80,80,80	0
56	MG	1T	201	1/1	0.85	0.16	68,68,68,68	0
56	MG	2B	214	1/1	0.85	0.17	76,76,76,76	0
56	MG	2a	1671	1/1	0.85	0.26	61,61,61,61	0
56	MG	2A	3377	1/1	0.85	0.25	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3140	1/1	0.85	0.22	49,49,49,49	0
56	MG	2E	305	1/1	0.85	0.25	77,77,77,77	0
56	MG	2A	3715	1/1	0.85	0.16	70,70,70,70	0
56	MG	2a	1699	1/1	0.85	0.22	83,83,83,83	0
56	MG	2F	304	1/1	0.85	0.15	69,69,69,69	0
56	MG	2A	3110	1/1	0.85	0.19	86,86,86,86	0
56	MG	2A	3723	1/1	0.85	0.17	61,61,61,61	0
56	MG	2A	3023	1/1	0.85	0.18	75,75,75,75	0
56	MG	2A	3234	1/1	0.85	0.24	65,65,65,65	0
56	MG	2A	3113	1/1	0.85	0.20	68,68,68,68	0
56	MG	2A	3115	1/1	0.85	0.24	73,73,73,73	0
56	MG	2A	3738	1/1	0.85	0.18	66,66,66,66	0
56	MG	1A	3708	1/1	0.85	0.14	53,53,53,53	0
56	MG	2A	3745	1/1	0.85	0.12	82,82,82,82	0
56	MG	2A	3845	1/1	0.86	0.18	79,79,79,79	0
56	MG	2A	3280	1/1	0.86	0.27	74,74,74,74	0
56	MG	2A	3282	1/1	0.86	0.21	67,67,67,67	0
56	MG	1e	201	1/1	0.86	0.39	74,74,74,74	0
56	MG	1e	202	1/1	0.86	0.12	66,66,66,66	0
56	MG	2a	1693	1/1	0.86	0.26	73,73,73,73	0
56	MG	1A	4072	1/1	0.86	0.10	43,43,43,43	0
56	MG	1A	4073	1/1	0.86	0.12	59,59,59,59	0
56	MG	2A	3872	1/1	0.86	0.09	60,60,60,60	0
56	MG	2a	1703	1/1	0.86	0.14	79,79,79,79	0
56	MG	1A	3843	1/1	0.86	0.14	44,44,44,44	0
56	MG	2A	3292	1/1	0.86	0.27	70,70,70,70	0
56	MG	2A	3202	1/1	0.86	0.18	62,62,62,62	0
56	MG	2B	204	1/1	0.86	0.19	81,81,81,81	0
56	MG	2B	205	1/1	0.86	0.25	73,73,73,73	0
56	MG	2A	3203	1/1	0.86	0.36	72,72,72,72	0
56	MG	2A	3637	1/1	0.86	0.23	79,79,79,79	0
56	MG	1A	3845	1/1	0.86	0.12	57,57,57,57	0
56	MG	1A	3418	1/1	0.86	0.18	61,61,61,61	0
56	MG	2A	3653	1/1	0.86	0.19	61,61,61,61	0
56	MG	2A	3659	1/1	0.86	0.12	71,71,71,71	0
56	MG	1A	4095	1/1	0.86	0.16	70,70,70,70	0
56	MG	2A	3097	1/1	0.86	0.24	72,72,72,72	0
56	MG	2A	3665	1/1	0.86	0.16	75,75,75,75	0
56	MG	2a	1738	1/1	0.86	0.36	67,67,67,67	0
56	MG	2a	1740	1/1	0.86	0.28	71,71,71,71	0
56	MG	2A	3214	1/1	0.86	0.32	76,76,76,76	0
56	MG	2A	3411	1/1	0.86	0.11	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2P	201	1/1	0.86	0.16	75,75,75,75	0
56	MG	2A	3098	1/1	0.86	0.21	79,79,79,79	0
56	MG	2Z	301	1/1	0.86	0.27	73,73,73,73	0
56	MG	2A	3220	1/1	0.86	0.23	69,69,69,69	0
56	MG	21	101	1/1	0.86	0.14	78,78,78,78	0
56	MG	2A	3427	1/1	0.86	0.33	64,64,64,64	0
56	MG	1A	3658	1/1	0.86	0.15	71,71,71,71	0
56	MG	1A	3484	1/1	0.86	0.37	59,59,59,59	0
56	MG	1A	3765	1/1	0.86	0.22	58,58,58,58	0
56	MG	2A	3331	1/1	0.86	0.23	78,78,78,78	0
56	MG	2A	3711	1/1	0.86	0.12	57,57,57,57	0
56	MG	2a	1798	1/1	0.86	0.19	80,80,80,80	0
56	MG	2a	1609	1/1	0.86	0.35	73,73,73,73	0
56	MG	1A	3494	1/1	0.86	0.17	58,58,58,58	0
56	MG	2A	3447	1/1	0.86	0.11	55,55,55,55	0
56	MG	1B	212	1/1	0.86	0.30	69,69,69,69	0
56	MG	1A	3063	1/1	0.86	0.40	72,72,72,72	0
56	MG	1a	1626	1/1	0.86	0.29	70,70,70,70	0
56	MG	2A	3457	1/1	0.86	0.29	68,68,68,68	0
56	MG	1y	102	1/1	0.86	0.08	84,84,84,84	0
56	MG	2A	3340	1/1	0.86	0.32	84,84,84,84	0
56	MG	2a	1822	1/1	0.86	0.12	73,73,73,73	0
56	MG	1A	3458	1/1	0.86	0.32	69,69,69,69	0
56	MG	2A	3342	1/1	0.86	0.28	84,84,84,84	0
56	MG	2A	3257	1/1	0.86	0.28	74,74,74,74	0
56	MG	2A	3747	1/1	0.86	0.17	48,48,48,48	0
56	MG	2A	3474	1/1	0.86	0.11	62,62,62,62	0
56	MG	1A	3422	1/1	0.86	0.14	67,67,67,67	0
56	MG	2A	3132	1/1	0.86	0.16	75,75,75,75	0
56	MG	2A	3032	1/1	0.86	0.14	70,70,70,70	0
56	MG	2a	1638	1/1	0.86	0.27	70,70,70,70	0
56	MG	1B	232	1/1	0.86	0.15	57,57,57,57	0
56	MG	2A	3792	1/1	0.86	0.11	68,68,68,68	0
56	MG	1A	3081	1/1	0.86	0.19	73,73,73,73	0
56	MG	2A	3797	1/1	0.86	0.11	70,70,70,70	0
56	MG	2A	3507	1/1	0.86	0.26	65,65,65,65	0
56	MG	2A	3802	1/1	0.86	0.14	76,76,76,76	0
56	MG	2A	3805	1/1	0.86	0.14	58,58,58,58	0
56	MG	1A	3835	1/1	0.86	0.11	53,53,53,53	0
56	MG	2A	3813	1/1	0.86	0.12	53,53,53,53	0
56	MG	1A	3968	1/1	0.86	0.09	54,54,54,54	0
56	MG	2A	3161	1/1	0.86	0.14	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3300	1/1	0.86	0.19	61,61,61,61	0
56	MG	2a	1668	1/1	0.86	0.18	73,73,73,73	0
56	MG	1O	201	1/1	0.86	0.16	72,72,72,72	0
56	MG	2A	3372	1/1	0.86	0.21	57,57,57,57	0
56	MG	2a	1661	1/1	0.87	0.14	82,82,82,82	0
56	MG	1A	3475	1/1	0.87	0.10	51,51,51,51	0
56	MG	1x	109	1/1	0.87	0.22	76,76,76,76	0
56	MG	2A	3478	1/1	0.87	0.20	70,70,70,70	0
56	MG	2a	1667	1/1	0.87	0.21	88,88,88,88	0
56	MG	2A	3327	1/1	0.87	0.16	63,63,63,63	0
56	MG	2A	3487	1/1	0.87	0.19	65,65,65,65	0
56	MG	2A	3828	1/1	0.87	0.16	71,71,71,71	0
56	MG	1A	3526	1/1	0.87	0.19	61,61,61,61	0
56	MG	1A	3476	1/1	0.87	0.10	52,52,52,52	0
56	MG	2A	3498	1/1	0.87	0.12	63,63,63,63	0
56	MG	1a	1668	1/1	0.87	0.20	67,67,67,67	0
56	MG	1A	3478	1/1	0.87	0.12	67,67,67,67	0
56	MG	2A	3201	1/1	0.87	0.24	73,73,73,73	0
56	MG	2A	3855	1/1	0.87	0.13	68,68,68,68	0
56	MG	1A	3266	1/1	0.87	0.15	67,67,67,67	0
56	MG	2A	3028	1/1	0.87	0.32	64,64,64,64	0
56	MG	1A	3719	1/1	0.87	0.10	58,58,58,58	0
56	MG	2A	3034	1/1	0.87	0.09	54,54,54,54	0
56	MG	2a	1705	1/1	0.87	0.32	73,73,73,73	0
56	MG	2a	1706	1/1	0.87	0.20	65,65,65,65	0
56	MG	1A	3848	1/1	0.87	0.14	52,52,52,52	0
56	MG	2a	1710	1/1	0.87	0.17	74,74,74,74	0
56	MG	1a	1684	1/1	0.87	0.22	74,74,74,74	0
56	MG	2a	1714	1/1	0.87	0.13	71,71,71,71	0
56	MG	1A	3729	1/1	0.87	0.13	51,51,51,51	0
56	MG	1a	1687	1/1	0.87	0.27	74,74,74,74	0
56	MG	2a	1720	1/1	0.87	0.18	78,78,78,78	0
56	MG	2A	3570	1/1	0.87	0.14	68,68,68,68	0
56	MG	2a	1723	1/1	0.87	0.20	89,89,89,89	0
56	MG	1I	201	1/1	0.87	0.15	74,74,74,74	0
56	MG	1N	202	1/1	0.87	0.10	52,52,52,52	0
56	MG	1A	3438	1/1	0.87	0.16	59,59,59,59	0
56	MG	2B	207	1/1	0.87	0.16	75,75,75,75	0
56	MG	1A	3378	1/1	0.87	0.42	63,63,63,63	0
56	MG	1A	3856	1/1	0.87	0.11	67,67,67,67	0
56	MG	1A	4048	1/1	0.87	0.14	60,60,60,60	0
56	MG	1A	4059	1/1	0.87	0.12	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3624	1/1	0.87	0.17	69,69,69,69	0
56	MG	2A	3085	1/1	0.87	0.14	60,60,60,60	0
56	MG	2D	305	1/1	0.87	0.35	65,65,65,65	0
56	MG	1A	3349	1/1	0.87	0.24	60,60,60,60	0
56	MG	2a	1743	1/1	0.87	0.17	76,76,76,76	0
56	MG	2a	1745	1/1	0.87	0.28	80,80,80,80	0
56	MG	1A	3335	1/1	0.87	0.11	63,63,63,63	0
56	MG	2F	303	1/1	0.87	0.13	59,59,59,59	0
56	MG	1A	3900	1/1	0.87	0.11	40,40,40,40	0
56	MG	1A	3913	1/1	0.87	0.18	57,57,57,57	0
56	MG	19	101	1/1	0.87	0.22	63,63,63,63	0
56	MG	2R	201	1/1	0.87	0.25	66,66,66,66	0
56	MG	2R	202	1/1	0.87	0.14	63,63,63,63	0
56	MG	2A	3099	1/1	0.87	0.18	66,66,66,66	0
56	MG	1a	1603	1/1	0.87	0.16	74,74,74,74	0
56	MG	1A	3255	1/1	0.87	0.14	65,65,65,65	0
56	MG	1a	1605	1/1	0.87	0.14	71,71,71,71	0
56	MG	1d	301	1/1	0.87	0.38	70,70,70,70	0
56	MG	2a	1799	1/1	0.87	0.24	81,81,81,81	0
56	MG	1A	3609	1/1	0.87	0.19	54,54,54,54	0
56	MG	1A	3788	1/1	0.87	0.12	42,42,42,42	0
56	MG	2A	3685	1/1	0.87	0.18	67,67,67,67	0
56	MG	2A	3688	1/1	0.87	0.29	73,73,73,73	0
56	MG	2A	3274	1/1	0.87	0.11	59,59,59,59	0
56	MG	1a	1616	1/1	0.87	0.12	83,83,83,83	0
56	MG	1l	201	1/1	0.87	0.11	91,91,91,91	0
56	MG	1A	3501	1/1	0.87	0.22	55,55,55,55	0
56	MG	2A	3126	1/1	0.87	0.09	59,59,59,59	0
56	MG	2a	1821	1/1	0.87	0.12	71,71,71,71	0
56	MG	2A	3418	1/1	0.87	0.25	57,57,57,57	0
56	MG	2A	3419	1/1	0.87	0.23	53,53,53,53	0
56	MG	1A	3511	1/1	0.87	0.25	77,77,77,77	0
56	MG	2A	3129	1/1	0.87	0.27	72,72,72,72	0
56	MG	2a	1625	1/1	0.87	0.16	77,77,77,77	0
56	MG	2A	3431	1/1	0.87	0.14	70,70,70,70	0
56	MG	2A	3435	1/1	0.87	0.29	70,70,70,70	0
56	MG	1v	101	1/1	0.87	0.25	76,76,76,76	0
56	MG	1A	3652	1/1	0.87	0.17	73,73,73,73	0
56	MG	2A	3137	1/1	0.87	0.18	62,62,62,62	0
56	MG	1A	3983	1/1	0.87	0.20	75,75,75,75	0
56	MG	2a	1633	1/1	0.87	0.38	78,78,78,78	0
56	MG	2A	3143	1/1	0.87	0.20	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3297	1/1	0.87	0.27	81,81,81,81	0
56	MG	1A	3986	1/1	0.87	0.12	69,69,69,69	0
56	MG	2A	3300	1/1	0.87	0.37	62,62,62,62	0
56	MG	2A	3756	1/1	0.87	0.14	67,67,67,67	0
56	MG	2A	3758	1/1	0.87	0.19	75,75,75,75	0
56	MG	2x	106	1/1	0.87	0.14	65,65,65,65	0
56	MG	2A	3152	1/1	0.87	0.24	68,68,68,68	0
56	MG	1B	207	1/1	0.87	0.26	76,76,76,76	0
56	MG	1A	3408	1/1	0.87	0.14	64,64,64,64	0
56	MG	1B	215	1/1	0.87	0.12	56,56,56,56	0
56	MG	2A	3164	1/1	0.87	0.17	64,64,64,64	0
56	MG	1a	1649	1/1	0.87	0.25	67,67,67,67	0
56	MG	2A	3167	1/1	0.87	0.23	69,69,69,69	0
56	MG	1A	3836	1/1	0.88	0.18	59,59,59,59	0
56	MG	2A	3803	1/1	0.88	0.10	73,73,73,73	0
56	MG	2A	3804	1/1	0.88	0.09	70,70,70,70	0
56	MG	1A	4077	1/1	0.88	0.08	50,50,50,50	0
56	MG	1A	3427	1/1	0.88	0.20	64,64,64,64	0
56	MG	2A	3350	1/1	0.88	0.09	70,70,70,70	0
56	MG	2A	3817	1/1	0.88	0.14	55,55,55,55	0
56	MG	1a	1681	1/1	0.88	0.19	69,69,69,69	0
56	MG	2A	3826	1/1	0.88	0.14	56,56,56,56	0
56	MG	1A	4085	1/1	0.88	0.15	66,66,66,66	0
56	MG	1Y	201	1/1	0.88	0.11	65,65,65,65	0
56	MG	2a	1679	1/1	0.88	0.29	80,80,80,80	0
56	MG	2a	1682	1/1	0.88	0.18	74,74,74,74	0
56	MG	2A	3116	1/1	0.88	0.47	80,80,80,80	0
56	MG	1A	3562	1/1	0.88	0.22	70,70,70,70	0
56	MG	2a	1690	1/1	0.88	0.21	77,77,77,77	0
56	MG	2a	1692	1/1	0.88	0.20	66,66,66,66	0
56	MG	1A	4093	1/1	0.88	0.24	68,68,68,68	0
56	MG	10	107	1/1	0.88	0.17	70,70,70,70	0
56	MG	2A	3847	1/1	0.88	0.11	63,63,63,63	0
56	MG	2A	3532	1/1	0.88	0.25	67,67,67,67	0
56	MG	2A	3854	1/1	0.88	0.11	47,47,47,47	0
56	MG	1a	1708	1/1	0.88	0.13	77,77,77,77	0
56	MG	1A	3724	1/1	0.88	0.12	57,57,57,57	0
56	MG	2A	3268	1/1	0.88	0.21	74,74,74,74	0
56	MG	2a	1707	1/1	0.88	0.26	72,72,72,72	0
56	MG	2A	3001	1/1	0.88	0.56	76,76,76,76	0
56	MG	2A	3376	1/1	0.88	0.45	77,77,77,77	0
56	MG	2A	3003	1/1	0.88	0.40	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3005	1/1	0.88	0.42	81,81,81,81	0
56	MG	1A	3182	1/1	0.88	0.28	61,61,61,61	0
56	MG	2A	3594	1/1	0.88	0.11	63,63,63,63	0
56	MG	1A	3596	1/1	0.88	0.16	47,47,47,47	0
56	MG	2a	1721	1/1	0.88	0.19	76,76,76,76	0
56	MG	2A	3600	1/1	0.88	0.18	65,65,65,65	0
56	MG	2A	3275	1/1	0.88	0.11	68,68,68,68	0
56	MG	1A	3512	1/1	0.88	0.11	51,51,51,51	0
56	MG	2A	3390	1/1	0.88	0.19	72,72,72,72	0
56	MG	1A	3434	1/1	0.88	0.13	61,61,61,61	0
56	MG	2A	3393	1/1	0.88	0.21	64,64,64,64	0
56	MG	2a	1728	1/1	0.88	0.15	75,75,75,75	0
56	MG	2B	211	1/1	0.88	0.20	65,65,65,65	0
56	MG	1A	3610	1/1	0.88	0.12	56,56,56,56	0
56	MG	2A	3041	1/1	0.88	0.26	68,68,68,68	0
56	MG	2A	3648	1/1	0.88	0.26	64,64,64,64	0
56	MG	2A	3286	1/1	0.88	0.26	82,82,82,82	0
56	MG	2a	1739	1/1	0.88	0.31	68,68,68,68	0
56	MG	2A	3401	1/1	0.88	0.12	82,82,82,82	0
56	MG	2E	302	1/1	0.88	0.17	66,66,66,66	0
56	MG	2A	3657	1/1	0.88	0.20	74,74,74,74	0
56	MG	2A	3163	1/1	0.88	0.33	78,78,78,78	0
56	MG	2a	1744	1/1	0.88	0.36	59,59,59,59	0
56	MG	1A	3754	1/1	0.88	0.31	65,65,65,65	0
56	MG	1A	3297	1/1	0.88	0.11	43,43,43,43	0
56	MG	1A	3241	1/1	0.88	0.13	52,52,52,52	0
56	MG	2A	3410	1/1	0.88	0.22	70,70,70,70	0
56	MG	1a	1744	1/1	0.88	0.12	79,79,79,79	0
56	MG	1A	3885	1/1	0.88	0.16	54,54,54,54	0
56	MG	2A	3416	1/1	0.88	0.25	64,64,64,64	0
56	MG	2A	3180	1/1	0.88	0.17	65,65,65,65	0
56	MG	2a	1777	1/1	0.88	0.18	81,81,81,81	0
56	MG	1A	3372	1/1	0.88	0.28	49,49,49,49	0
56	MG	1A	4045	1/1	0.88	0.12	59,59,59,59	0
56	MG	2A	3193	1/1	0.88	0.27	74,74,74,74	0
56	MG	1a	1782	1/1	0.88	0.15	62,62,62,62	0
56	MG	27	103	1/1	0.88	0.13	59,59,59,59	0
56	MG	2A	3433	1/1	0.88	0.26	63,63,63,63	0
56	MG	2A	3434	1/1	0.88	0.36	79,79,79,79	0
56	MG	2a	1601	1/1	0.88	0.13	72,72,72,72	0
56	MG	2A	3704	1/1	0.88	0.18	61,61,61,61	0
56	MG	1A	3002	1/1	0.88	0.19	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1608	1/1	0.88	0.17	72,72,72,72	0
56	MG	2A	3438	1/1	0.88	0.18	61,61,61,61	0
56	MG	1B	234	1/1	0.88	0.12	71,71,71,71	0
56	MG	2A	3311	1/1	0.88	0.11	81,81,81,81	0
56	MG	2a	1816	1/1	0.88	0.14	80,80,80,80	0
56	MG	2a	1817	1/1	0.88	0.25	61,61,61,61	0
56	MG	1A	3348	1/1	0.88	0.15	69,69,69,69	0
56	MG	2a	1820	1/1	0.88	0.28	68,68,68,68	0
56	MG	1A	4050	1/1	0.88	0.12	52,52,52,52	0
56	MG	2A	3728	1/1	0.88	0.17	61,61,61,61	0
56	MG	2A	3444	1/1	0.88	0.18	80,80,80,80	0
56	MG	2a	1622	1/1	0.88	0.18	78,78,78,78	0
56	MG	2a	1836	1/1	0.88	0.34	74,74,74,74	0
56	MG	2A	3088	1/1	0.88	0.17	68,68,68,68	0
56	MG	2A	3736	1/1	0.88	0.11	72,72,72,72	0
56	MG	1A	3687	1/1	0.88	0.14	52,52,52,52	0
56	MG	2A	3320	1/1	0.88	0.20	72,72,72,72	0
56	MG	2l	205	1/1	0.88	0.14	80,80,80,80	0
56	MG	2r	101	1/1	0.88	0.12	77,77,77,77	0
56	MG	2A	3740	1/1	0.88	0.12	74,74,74,74	0
56	MG	2A	3741	1/1	0.88	0.11	74,74,74,74	0
56	MG	1a	1650	1/1	0.88	0.22	73,73,73,73	0
56	MG	2A	3211	1/1	0.88	0.10	63,63,63,63	0
56	MG	1A	3020	1/1	0.88	0.18	50,50,50,50	0
56	MG	2A	3458	1/1	0.88	0.16	58,58,58,58	0
56	MG	2A	3462	1/1	0.88	0.21	68,68,68,68	0
56	MG	1A	3547	1/1	0.88	0.25	52,52,52,52	0
56	MG	2A	3464	1/1	0.88	0.36	59,59,59,59	0
56	MG	1A	3965	1/1	0.88	0.14	56,56,56,56	0
56	MG	2A	3761	1/1	0.88	0.24	73,73,73,73	0
56	MG	2a	1645	1/1	0.88	0.31	66,66,66,66	0
56	MG	1t	201	1/1	0.88	0.24	69,69,69,69	0
56	MG	2A	3101	1/1	0.88	0.29	74,74,74,74	0
56	MG	2A	3791	1/1	0.88	0.11	68,68,68,68	0
56	MG	2A	3225	1/1	0.88	0.15	57,57,57,57	0
56	MG	1a	1667	1/1	0.88	0.16	71,71,71,71	0
56	MG	2A	3230	1/1	0.88	0.40	59,59,59,59	0
56	MG	1A	3470	1/1	0.88	0.18	66,66,66,66	0
56	MG	2A	3790	1/1	0.89	0.12	80,80,80,80	0
56	MG	1A	3235	1/1	0.89	0.12	50,50,50,50	0
56	MG	1A	3440	1/1	0.89	0.13	61,61,61,61	0
56	MG	2A	3173	1/1	0.89	0.23	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3174	1/1	0.89	0.23	82,82,82,82	0
56	MG	2A	3319	1/1	0.89	0.13	75,75,75,75	0
56	MG	2A	3175	1/1	0.89	0.22	60,60,60,60	0
56	MG	1a	1658	1/1	0.89	0.25	76,76,76,76	0
56	MG	1B	217	1/1	0.89	0.10	56,56,56,56	0
56	MG	1a	1660	1/1	0.89	0.13	72,72,72,72	0
56	MG	2A	3481	1/1	0.89	0.20	60,60,60,60	0
56	MG	2A	3329	1/1	0.89	0.38	72,72,72,72	0
56	MG	2A	3485	1/1	0.89	0.13	51,51,51,51	0
56	MG	2A	3190	1/1	0.89	0.11	79,79,79,79	0
56	MG	2A	3489	1/1	0.89	0.10	63,63,63,63	0
56	MG	1A	3618	1/1	0.89	0.12	61,61,61,61	0
56	MG	1A	3401	1/1	0.89	0.29	71,71,71,71	0
56	MG	2A	3832	1/1	0.89	0.12	69,69,69,69	0
56	MG	1A	3817	1/1	0.89	0.20	68,68,68,68	0
56	MG	1A	3513	1/1	0.89	0.14	60,60,60,60	0
56	MG	2a	1695	1/1	0.89	0.28	73,73,73,73	0
56	MG	2a	1696	1/1	0.89	0.13	74,74,74,74	0
56	MG	1A	3268	1/1	0.89	0.10	55,55,55,55	0
56	MG	2A	3029	1/1	0.89	0.11	72,72,72,72	0
56	MG	2A	3518	1/1	0.89	0.16	83,83,83,83	0
56	MG	1a	1673	1/1	0.89	0.18	62,62,62,62	0
56	MG	1A	3411	1/1	0.89	0.17	61,61,61,61	0
56	MG	2A	3039	1/1	0.89	0.23	71,71,71,71	0
56	MG	1D	311	1/1	0.89	0.31	68,68,68,68	0
56	MG	2A	3862	1/1	0.89	0.10	58,58,58,58	0
56	MG	1D	313	1/1	0.89	0.17	44,44,44,44	0
56	MG	2a	1709	1/1	0.89	0.17	63,63,63,63	0
56	MG	2A	3864	1/1	0.89	0.15	66,66,66,66	0
56	MG	1E	308	1/1	0.89	0.21	58,58,58,58	0
56	MG	2a	1712	1/1	0.89	0.26	78,78,78,78	0
56	MG	2A	3867	1/1	0.89	0.20	63,63,63,63	0
56	MG	2a	1715	1/1	0.89	0.11	76,76,76,76	0
56	MG	2A	3056	1/1	0.89	0.18	67,67,67,67	0
56	MG	1A	3308	1/1	0.89	0.11	44,44,44,44	0
56	MG	1A	4024	1/1	0.89	0.14	50,50,50,50	0
56	MG	2A	3559	1/1	0.89	0.11	65,65,65,65	0
56	MG	1F	313	1/1	0.89	0.19	60,60,60,60	0
56	MG	1a	1691	1/1	0.89	0.31	61,61,61,61	0
56	MG	1a	1696	1/1	0.89	0.33	63,63,63,63	0
56	MG	1A	3415	1/1	0.89	0.21	61,61,61,61	0
56	MG	2A	3368	1/1	0.89	0.32	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3370	1/1	0.89	0.11	77,77,77,77	0
56	MG	2A	3232	1/1	0.89	0.21	76,76,76,76	0
56	MG	1G	205	1/1	0.89	0.15	66,66,66,66	0
56	MG	1A	3532	1/1	0.89	0.16	79,79,79,79	0
56	MG	2B	212	1/1	0.89	0.17	75,75,75,75	0
56	MG	2A	3242	1/1	0.89	0.14	70,70,70,70	0
56	MG	2A	3244	1/1	0.89	0.30	80,80,80,80	0
56	MG	2B	215	1/1	0.89	0.21	70,70,70,70	0
56	MG	1A	3534	1/1	0.89	0.10	60,60,60,60	0
56	MG	1A	3313	1/1	0.89	0.28	55,55,55,55	0
56	MG	1A	4041	1/1	0.89	0.41	67,67,67,67	0
56	MG	2A	3651	1/1	0.89	0.14	88,88,88,88	0
56	MG	1R	205	1/1	0.89	0.19	49,49,49,49	0
56	MG	2E	307	1/1	0.89	0.14	71,71,71,71	0
56	MG	1a	1723	1/1	0.89	0.18	74,74,74,74	0
56	MG	2A	3655	1/1	0.89	0.11	67,67,67,67	0
56	MG	2A	3255	1/1	0.89	0.19	66,66,66,66	0
56	MG	2a	1754	1/1	0.89	0.10	93,93,93,93	0
56	MG	1A	3417	1/1	0.89	0.17	57,57,57,57	0
56	MG	1A	3090	1/1	0.89	0.13	56,56,56,56	0
56	MG	2A	3259	1/1	0.89	0.16	69,69,69,69	0
56	MG	1A	3363	1/1	0.89	0.25	79,79,79,79	0
56	MG	2a	1776	1/1	0.89	0.09	89,89,89,89	0
56	MG	1A	3554	1/1	0.89	0.16	58,58,58,58	0
56	MG	2A	3400	1/1	0.89	0.12	68,68,68,68	0
56	MG	2a	1794	1/1	0.89	0.11	82,82,82,82	0
56	MG	1A	3371	1/1	0.89	0.11	63,63,63,63	0
56	MG	2A	3673	1/1	0.89	0.09	54,54,54,54	0
56	MG	1A	3328	1/1	0.89	0.27	65,65,65,65	0
56	MG	1A	3734	1/1	0.89	0.16	64,64,64,64	0
56	MG	2A	3684	1/1	0.89	0.23	75,75,75,75	0
56	MG	1A	3873	1/1	0.89	0.12	49,49,49,49	0
56	MG	2a	1804	1/1	0.89	0.25	76,76,76,76	0
56	MG	1a	1781	1/1	0.89	0.10	74,74,74,74	0
56	MG	1A	4070	1/1	0.89	0.06	27,27,27,27	0
56	MG	2a	1603	1/1	0.89	0.11	83,83,83,83	0
56	MG	18	108	1/1	0.89	0.17	64,64,64,64	0
56	MG	2a	1810	1/1	0.89	0.24	80,80,80,80	0
56	MG	1a	1796	1/1	0.89	0.13	88,88,88,88	0
56	MG	1a	1797	1/1	0.89	0.15	69,69,69,69	0
56	MG	1A	3877	1/1	0.89	0.09	45,45,45,45	0
56	MG	2a	1611	1/1	0.89	0.30	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3705	1/1	0.89	0.34	74,74,74,74	0
56	MG	2A	3278	1/1	0.89	0.26	73,73,73,73	0
56	MG	2A	3423	1/1	0.89	0.39	70,70,70,70	0
56	MG	1a	1602	1/1	0.89	0.28	68,68,68,68	0
56	MG	2A	3426	1/1	0.89	0.21	68,68,68,68	0
56	MG	1A	3429	1/1	0.89	0.14	52,52,52,52	0
56	MG	1A	3886	1/1	0.89	0.14	39,39,39,39	0
56	MG	1A	3742	1/1	0.89	0.12	66,66,66,66	0
56	MG	2a	1838	1/1	0.89	0.14	62,62,62,62	0
56	MG	2a	1839	1/1	0.89	0.20	72,72,72,72	0
56	MG	2d	301	1/1	0.89	0.26	65,65,65,65	0
56	MG	1A	3905	1/1	0.89	0.14	53,53,53,53	0
56	MG	2g	201	1/1	0.89	0.19	71,71,71,71	0
56	MG	2A	3133	1/1	0.89	0.15	82,82,82,82	0
56	MG	1A	3274	1/1	0.89	0.36	72,72,72,72	0
56	MG	1A	3915	1/1	0.89	0.19	65,65,65,65	0
56	MG	1a	1618	1/1	0.89	0.12	69,69,69,69	0
56	MG	2q	202	1/1	0.89	0.17	83,83,83,83	0
56	MG	1A	4090	1/1	0.89	0.16	52,52,52,52	0
56	MG	1A	3746	1/1	0.89	0.07	47,47,47,47	0
56	MG	2A	3743	1/1	0.89	0.14	71,71,71,71	0
56	MG	2A	3295	1/1	0.89	0.30	78,78,78,78	0
56	MG	1a	1628	1/1	0.89	0.18	69,69,69,69	0
56	MG	1A	3751	1/1	0.89	0.12	36,36,36,36	0
56	MG	2A	3748	1/1	0.89	0.12	69,69,69,69	0
56	MG	2a	1640	1/1	0.89	0.28	66,66,66,66	0
56	MG	2A	3449	1/1	0.89	0.25	74,74,74,74	0
56	MG	2A	3451	1/1	0.89	0.20	62,62,62,62	0
56	MG	2a	1644	1/1	0.89	0.16	73,73,73,73	0
56	MG	1A	3592	1/1	0.89	0.35	69,69,69,69	0
56	MG	1A	3227	1/1	0.89	0.12	48,48,48,48	0
56	MG	2a	1647	1/1	0.89	0.21	64,64,64,64	0
56	MG	2A	3305	1/1	0.89	0.14	70,70,70,70	0
56	MG	2a	1651	1/1	0.89	0.17	67,67,67,67	0
56	MG	1A	3764	1/1	0.89	0.09	56,56,56,56	0
56	MG	2a	1656	1/1	0.89	0.13	77,77,77,77	0
56	MG	1A	3253	1/1	0.89	0.11	60,60,60,60	0
56	MG	1A	3971	1/1	0.89	0.09	57,57,57,57	0
57	K	1A	3575	1/1	0.89	0.25	73,73,73,73	0
56	MG	1A	3089	1/1	0.90	0.13	38,38,38,38	0
56	MG	1N	205	1/1	0.90	0.29	54,54,54,54	0
56	MG	2A	3414	1/1	0.90	0.25	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3415	1/1	0.90	0.23	52,52,52,52	0
56	MG	1a	1709	1/1	0.90	0.14	62,62,62,62	0
56	MG	2A	3264	1/1	0.90	0.16	60,60,60,60	0
56	MG	2a	1655	1/1	0.90	0.16	75,75,75,75	0
56	MG	1A	3110	1/1	0.90	0.33	37,37,37,37	0
56	MG	2A	3267	1/1	0.90	0.21	73,73,73,73	0
56	MG	2A	3089	1/1	0.90	0.23	76,76,76,76	0
56	MG	1A	3837	1/1	0.90	0.16	48,48,48,48	0
56	MG	1A	3118	1/1	0.90	0.09	42,42,42,42	0
56	MG	2A	3271	1/1	0.90	0.24	73,73,73,73	0
56	MG	1S	203	1/1	0.90	0.08	67,67,67,67	0
56	MG	1A	3629	1/1	0.90	0.13	69,69,69,69	0
56	MG	1a	1722	1/1	0.90	0.17	71,71,71,71	0
56	MG	2A	3755	1/1	0.90	0.23	67,67,67,67	0
56	MG	2A	3437	1/1	0.90	0.28	63,63,63,63	0
56	MG	1A	3633	1/1	0.90	0.11	51,51,51,51	0
56	MG	1A	3125	1/1	0.90	0.19	58,58,58,58	0
56	MG	1A	3352	1/1	0.90	0.17	45,45,45,45	0
56	MG	1A	3075	1/1	0.90	0.41	74,74,74,74	0
56	MG	2A	3784	1/1	0.90	0.12	70,70,70,70	0
56	MG	1Z	3700	1/1	0.90	0.10	61,61,61,61	0
56	MG	1A	4052	1/1	0.90	0.14	39,39,39,39	0
56	MG	2a	1683	1/1	0.90	0.22	63,63,63,63	0
56	MG	1A	3510	1/1	0.90	0.10	45,45,45,45	0
56	MG	10	105	1/1	0.90	0.20	65,65,65,65	0
56	MG	2A	3448	1/1	0.90	0.41	65,65,65,65	0
56	MG	1A	4061	1/1	0.90	0.06	21,21,21,21	0
56	MG	10	108	1/1	0.90	0.09	55,55,55,55	0
56	MG	1A	3661	1/1	0.90	0.11	45,45,45,45	0
56	MG	2A	3118	1/1	0.90	0.16	59,59,59,59	0
56	MG	16	101	1/1	0.90	0.09	62,62,62,62	0
56	MG	1a	1795	1/1	0.90	0.09	87,87,87,87	0
56	MG	18	104	1/1	0.90	0.25	51,51,51,51	0
56	MG	2A	3296	1/1	0.90	0.28	67,67,67,67	0
56	MG	1A	3153	1/1	0.90	0.14	52,52,52,52	0
56	MG	1a	1805	1/1	0.90	0.09	65,65,65,65	0
56	MG	2A	3465	1/1	0.90	0.50	59,59,59,59	0
56	MG	1a	1807	1/1	0.90	0.16	70,70,70,70	0
56	MG	1A	3303	1/1	0.90	0.33	60,60,60,60	0
56	MG	2A	3302	1/1	0.90	0.21	71,71,71,71	0
56	MG	2A	3304	1/1	0.90	0.16	61,61,61,61	0
56	MG	2A	3837	1/1	0.90	0.10	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1811	1/1	0.90	0.12	67,67,67,67	0
56	MG	2A	3140	1/1	0.90	0.12	71,71,71,71	0
56	MG	1b	301	1/1	0.90	0.17	79,79,79,79	0
56	MG	2A	3479	1/1	0.90	0.17	71,71,71,71	0
56	MG	1A	3358	1/1	0.90	0.10	45,45,45,45	0
56	MG	2a	1719	1/1	0.90	0.15	76,76,76,76	0
56	MG	1A	3158	1/1	0.90	0.11	43,43,43,43	0
56	MG	2A	3147	1/1	0.90	0.19	60,60,60,60	0
56	MG	2A	3148	1/1	0.90	0.23	64,64,64,64	0
56	MG	1A	3367	1/1	0.90	0.22	52,52,52,52	0
56	MG	1A	3368	1/1	0.90	0.12	56,56,56,56	0
56	MG	1A	3370	1/1	0.90	0.17	52,52,52,52	0
56	MG	1A	3720	1/1	0.90	0.25	60,60,60,60	0
56	MG	2A	3323	1/1	0.90	0.16	69,69,69,69	0
56	MG	1A	3025	1/1	0.90	0.20	46,46,46,46	0
56	MG	1A	3442	1/1	0.90	0.14	48,48,48,48	0
56	MG	1A	3535	1/1	0.90	0.10	73,73,73,73	0
56	MG	1A	3169	1/1	0.90	0.18	40,40,40,40	0
56	MG	2A	3874	1/1	0.90	0.15	97,97,97,97	0
56	MG	1A	3918	1/1	0.90	0.13	55,55,55,55	0
56	MG	1w	103	1/1	0.90	0.15	86,86,86,86	0
56	MG	2B	203	1/1	0.90	0.24	81,81,81,81	0
56	MG	1A	3925	1/1	0.90	0.13	37,37,37,37	0
56	MG	2A	3533	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3450	1/1	0.90	0.17	46,46,46,46	0
56	MG	1A	3096	1/1	0.90	0.09	68,68,68,68	0
56	MG	1A	4104	1/1	0.90	0.10	59,59,59,59	0
56	MG	2a	1746	1/1	0.90	0.15	70,70,70,70	0
56	MG	1A	3940	1/1	0.90	0.10	64,64,64,64	0
56	MG	1x	104	1/1	0.90	0.17	76,76,76,76	0
56	MG	1A	3957	1/1	0.90	0.09	79,79,79,79	0
56	MG	2A	3567	1/1	0.90	0.18	64,64,64,64	0
56	MG	1x	108	1/1	0.90	0.20	71,71,71,71	0
56	MG	2A	3349	1/1	0.90	0.31	68,68,68,68	0
56	MG	2a	1762	1/1	0.90	0.14	84,84,84,84	0
56	MG	2B	216	1/1	0.90	0.18	83,83,83,83	0
56	MG	1B	214	1/1	0.90	0.11	57,57,57,57	0
56	MG	2a	1774	1/1	0.90	0.09	97,97,97,97	0
56	MG	2B	219	1/1	0.90	0.19	78,78,78,78	0
56	MG	2A	3585	1/1	0.90	0.18	73,73,73,73	0
56	MG	2A	3588	1/1	0.90	0.09	61,61,61,61	0
56	MG	2a	1789	1/1	0.90	0.25	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1792	1/1	0.90	0.22	83,83,83,83	0
56	MG	2E	301	1/1	0.90	0.20	68,68,68,68	0
56	MG	1A	3318	1/1	0.90	0.23	61,61,61,61	0
56	MG	2A	3595	1/1	0.90	0.19	74,74,74,74	0
56	MG	1a	1657	1/1	0.90	0.31	73,73,73,73	0
56	MG	1x	112	1/1	0.90	0.21	67,67,67,67	0
56	MG	2F	302	1/1	0.90	0.22	69,69,69,69	0
56	MG	2A	3601	1/1	0.90	0.15	66,66,66,66	0
56	MG	2a	1801	1/1	0.90	0.12	75,75,75,75	0
56	MG	1A	3963	1/1	0.90	0.15	57,57,57,57	0
56	MG	1A	3549	1/1	0.90	0.25	62,62,62,62	0
56	MG	2A	3356	1/1	0.90	0.08	63,63,63,63	0
56	MG	2a	1807	1/1	0.90	0.14	67,67,67,67	0
56	MG	2A	3612	1/1	0.90	0.14	52,52,52,52	0
56	MG	2A	3205	1/1	0.90	0.16	83,83,83,83	0
56	MG	1A	3197	1/1	0.90	0.19	43,43,43,43	0
56	MG	2W	201	1/1	0.90	0.23	72,72,72,72	0
56	MG	2a	1813	1/1	0.90	0.18	70,70,70,70	0
56	MG	2A	3625	1/1	0.90	0.22	50,50,50,50	0
56	MG	2A	3360	1/1	0.90	0.19	69,69,69,69	0
56	MG	2A	3364	1/1	0.90	0.29	74,74,74,74	0
56	MG	2A	3642	1/1	0.90	0.20	72,72,72,72	0
56	MG	2A	3647	1/1	0.90	0.17	62,62,62,62	0
56	MG	2A	3207	1/1	0.90	0.14	66,66,66,66	0
56	MG	2A	3649	1/1	0.90	0.30	75,75,75,75	0
56	MG	1A	3970	1/1	0.90	0.11	55,55,55,55	0
56	MG	1B	230	1/1	0.90	0.09	69,69,69,69	0
56	MG	1A	3469	1/1	0.90	0.12	69,69,69,69	0
56	MG	2a	1827	1/1	0.90	0.12	86,86,86,86	0
56	MG	2a	1828	1/1	0.90	0.26	71,71,71,71	0
56	MG	2a	1834	1/1	0.90	0.18	58,58,58,58	0
56	MG	1A	3329	1/1	0.90	0.22	53,53,53,53	0
56	MG	2a	1605	1/1	0.90	0.17	67,67,67,67	0
56	MG	1A	3396	1/1	0.90	0.14	60,60,60,60	0
56	MG	2A	3375	1/1	0.90	0.25	86,86,86,86	0
56	MG	1A	3568	1/1	0.90	0.16	42,42,42,42	0
56	MG	2a	1610	1/1	0.90	0.27	73,73,73,73	0
56	MG	1A	3574	1/1	0.90	0.27	59,59,59,59	0
56	MG	2l	201	1/1	0.90	0.16	79,79,79,79	0
56	MG	1A	3398	1/1	0.90	0.26	49,49,49,49	0
56	MG	2a	1613	1/1	0.90	0.38	82,82,82,82	0
56	MG	2A	3381	1/1	0.90	0.10	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3382	1/1	0.90	0.23	54,54,54,54	0
56	MG	1A	3085	1/1	0.90	0.11	41,41,41,41	0
56	MG	2A	3042	1/1	0.90	0.37	64,64,64,64	0
56	MG	2A	3045	1/1	0.90	0.13	69,69,69,69	0
56	MG	2A	3050	1/1	0.90	0.20	51,51,51,51	0
56	MG	1A	3336	1/1	0.90	0.24	61,61,61,61	0
56	MG	2A	3052	1/1	0.90	0.10	58,58,58,58	0
56	MG	1a	1683	1/1	0.90	0.30	73,73,73,73	0
56	MG	1F	309	1/1	0.90	0.10	51,51,51,51	0
56	MG	2A	3057	1/1	0.90	0.23	74,74,74,74	0
56	MG	1A	3339	1/1	0.90	0.28	63,63,63,63	0
56	MG	1A	3598	1/1	0.90	0.17	72,72,72,72	0
56	MG	2A	3253	1/1	0.90	0.14	78,78,78,78	0
56	MG	2A	3402	1/1	0.90	0.12	76,76,76,76	0
56	MG	1a	1688	1/1	0.90	0.36	72,72,72,72	0
56	MG	1A	3600	1/1	0.90	0.28	59,59,59,59	0
56	MG	1a	1692	1/1	0.90	0.26	60,60,60,60	0
56	MG	2A	3408	1/1	0.90	0.08	62,62,62,62	0
56	MG	2A	3718	1/1	0.90	0.16	68,68,68,68	0
56	MG	1a	1695	1/1	0.90	0.31	60,60,60,60	0
56	MG	2A	3724	1/1	0.90	0.09	60,60,60,60	0
56	MG	1A	3603	1/1	0.90	0.18	63,63,63,63	0
56	MG	2A	3047	1/1	0.91	0.21	60,60,60,60	0
56	MG	2A	3798	1/1	0.91	0.11	71,71,71,71	0
56	MG	1A	3524	1/1	0.91	0.39	47,47,47,47	0
56	MG	2A	3486	1/1	0.91	0.13	68,68,68,68	0
56	MG	1A	3973	1/1	0.91	0.11	46,46,46,46	0
56	MG	2A	3488	1/1	0.91	0.09	64,64,64,64	0
56	MG	1A	3164	1/1	0.91	0.26	60,60,60,60	0
56	MG	2a	1681	1/1	0.91	0.27	70,70,70,70	0
56	MG	1B	202	1/1	0.91	0.25	61,61,61,61	0
56	MG	2A	3492	1/1	0.91	0.24	69,69,69,69	0
56	MG	2a	1684	1/1	0.91	0.23	66,66,66,66	0
56	MG	1A	3529	1/1	0.91	0.27	68,68,68,68	0
56	MG	2A	3819	1/1	0.91	0.11	60,60,60,60	0
56	MG	1a	1724	1/1	0.91	0.13	60,60,60,60	0
56	MG	1a	1727	1/1	0.91	0.15	63,63,63,63	0
56	MG	1a	1601	1/1	0.91	0.35	70,70,70,70	0
56	MG	2A	3508	1/1	0.91	0.18	79,79,79,79	0
56	MG	2A	3830	1/1	0.91	0.14	72,72,72,72	0
56	MG	2A	3218	1/1	0.91	0.14	65,65,65,65	0
56	MG	1a	1736	1/1	0.91	0.18	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1701	1/1	0.91	0.17	61,61,61,61	0
56	MG	1B	208	1/1	0.91	0.32	70,70,70,70	0
56	MG	2A	3221	1/1	0.91	0.21	75,75,75,75	0
56	MG	2A	3843	1/1	0.91	0.13	48,48,48,48	0
56	MG	1B	211	1/1	0.91	0.10	53,53,53,53	0
56	MG	1A	3651	1/1	0.91	0.17	50,50,50,50	0
56	MG	1A	3466	1/1	0.91	0.24	71,71,71,71	0
56	MG	2A	3851	1/1	0.91	0.09	73,73,73,73	0
56	MG	1A	3468	1/1	0.91	0.15	63,63,63,63	0
56	MG	2A	3231	1/1	0.91	0.24	56,56,56,56	0
56	MG	1A	3533	1/1	0.91	0.21	78,78,78,78	0
56	MG	2A	3363	1/1	0.91	0.14	72,72,72,72	0
56	MG	2a	1713	1/1	0.91	0.09	89,89,89,89	0
56	MG	2A	3083	1/1	0.91	0.29	65,65,65,65	0
56	MG	2A	3238	1/1	0.91	0.29	61,61,61,61	0
56	MG	1B	218	1/1	0.91	0.20	55,55,55,55	0
56	MG	2A	3369	1/1	0.91	0.16	61,61,61,61	0
56	MG	1a	1763	1/1	0.91	0.09	70,70,70,70	0
56	MG	2A	3243	1/1	0.91	0.13	65,65,65,65	0
56	MG	1a	1772	1/1	0.91	0.08	77,77,77,77	0
56	MG	2A	3246	1/1	0.91	0.25	78,78,78,78	0
56	MG	1B	220	1/1	0.91	0.07	49,49,49,49	0
56	MG	1a	1621	1/1	0.91	0.14	62,62,62,62	0
56	MG	1A	3338	1/1	0.91	0.21	60,60,60,60	0
56	MG	2A	3598	1/1	0.91	0.18	80,80,80,80	0
56	MG	2A	3599	1/1	0.91	0.14	74,74,74,74	0
56	MG	2A	3096	1/1	0.91	0.10	49,49,49,49	0
56	MG	1A	3205	1/1	0.91	0.08	55,55,55,55	0
56	MG	1a	1627	1/1	0.91	0.19	68,68,68,68	0
56	MG	2a	1734	1/1	0.91	0.16	68,68,68,68	0
56	MG	2A	3603	1/1	0.91	0.14	64,64,64,64	0
56	MG	1A	4014	1/1	0.91	0.12	47,47,47,47	0
56	MG	2A	3608	1/1	0.91	0.15	73,73,73,73	0
56	MG	1A	3106	1/1	0.91	0.30	48,48,48,48	0
56	MG	1A	3474	1/1	0.91	0.25	56,56,56,56	0
56	MG	1A	3344	1/1	0.91	0.23	64,64,64,64	0
56	MG	2A	3618	1/1	0.91	0.17	72,72,72,72	0
56	MG	2A	3260	1/1	0.91	0.12	69,69,69,69	0
56	MG	2A	3105	1/1	0.91	0.12	67,67,67,67	0
56	MG	2A	3626	1/1	0.91	0.13	73,73,73,73	0
56	MG	2A	3392	1/1	0.91	0.15	72,72,72,72	0
56	MG	1A	4031	1/1	0.91	0.07	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1748	1/1	0.91	0.20	70,70,70,70	0
56	MG	1A	3145	1/1	0.91	0.20	42,42,42,42	0
56	MG	2A	3643	1/1	0.91	0.14	51,51,51,51	0
56	MG	2A	3644	1/1	0.91	0.08	57,57,57,57	0
56	MG	2A	3645	1/1	0.91	0.14	76,76,76,76	0
56	MG	2A	3397	1/1	0.91	0.23	52,52,52,52	0
56	MG	1A	3211	1/1	0.91	0.21	76,76,76,76	0
56	MG	2F	301	1/1	0.91	0.11	73,73,73,73	0
56	MG	2a	1767	1/1	0.91	0.12	74,74,74,74	0
56	MG	1a	1648	1/1	0.91	0.12	61,61,61,61	0
56	MG	1E	301	1/1	0.91	0.18	34,34,34,34	0
56	MG	2A	3114	1/1	0.91	0.13	71,71,71,71	0
56	MG	1E	303	1/1	0.91	0.23	56,56,56,56	0
56	MG	2a	1785	1/1	0.91	0.15	64,64,64,64	0
56	MG	2A	3403	1/1	0.91	0.10	67,67,67,67	0
56	MG	1h	201	1/1	0.91	0.08	74,74,74,74	0
56	MG	1a	1651	1/1	0.91	0.19	72,72,72,72	0
56	MG	2A	3119	1/1	0.91	0.17	74,74,74,74	0
56	MG	1A	3479	1/1	0.91	0.16	69,69,69,69	0
56	MG	1A	3217	1/1	0.91	0.09	53,53,53,53	0
56	MG	1n	102	1/1	0.91	0.22	62,62,62,62	0
56	MG	1A	3868	1/1	0.91	0.22	35,35,35,35	0
56	MG	1A	3026	1/1	0.91	0.12	56,56,56,56	0
56	MG	1A	3186	1/1	0.91	0.13	49,49,49,49	0
56	MG	1A	3876	1/1	0.91	0.14	59,59,59,59	0
56	MG	2a	1803	1/1	0.91	0.14	71,71,71,71	0
56	MG	2A	3677	1/1	0.91	0.25	71,71,71,71	0
56	MG	1a	1663	1/1	0.91	0.13	70,70,70,70	0
56	MG	2A	3682	1/1	0.91	0.10	47,47,47,47	0
56	MG	2A	3417	1/1	0.91	0.26	65,65,65,65	0
56	MG	2A	3285	1/1	0.91	0.12	77,77,77,77	0
56	MG	1A	3491	1/1	0.91	0.15	53,53,53,53	0
56	MG	1A	3189	1/1	0.91	0.14	46,46,46,46	0
56	MG	1A	3399	1/1	0.91	0.12	61,61,61,61	0
56	MG	1A	3281	1/1	0.91	0.17	42,42,42,42	0
56	MG	1a	1675	1/1	0.91	0.37	82,82,82,82	0
56	MG	2A	3429	1/1	0.91	0.32	71,71,71,71	0
56	MG	1A	3402	1/1	0.91	0.14	67,67,67,67	0
56	MG	1A	3330	1/1	0.91	0.16	61,61,61,61	0
56	MG	2a	1615	1/1	0.91	0.30	71,71,71,71	0
56	MG	2A	3712	1/1	0.91	0.13	63,63,63,63	0
56	MG	1Q	206	1/1	0.91	0.16	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3748	1/1	0.91	0.09	55,55,55,55	0
56	MG	2A	3159	1/1	0.91	0.19	69,69,69,69	0
56	MG	2a	1824	1/1	0.91	0.09	80,80,80,80	0
56	MG	1S	201	1/1	0.91	0.22	53,53,53,53	0
56	MG	1A	3447	1/1	0.91	0.22	46,46,46,46	0
56	MG	2A	3299	1/1	0.91	0.11	56,56,56,56	0
56	MG	1A	3362	1/1	0.91	0.14	65,65,65,65	0
56	MG	1a	1686	1/1	0.91	0.31	65,65,65,65	0
56	MG	2A	3443	1/1	0.91	0.20	60,60,60,60	0
56	MG	2A	3730	1/1	0.91	0.08	57,57,57,57	0
56	MG	2a	1840	1/1	0.91	0.21	72,72,72,72	0
56	MG	1T	202	1/1	0.91	0.17	55,55,55,55	0
56	MG	2e	201	1/1	0.91	0.09	77,77,77,77	0
56	MG	1A	3413	1/1	0.91	0.11	43,43,43,43	0
56	MG	1A	3516	1/1	0.91	0.14	58,58,58,58	0
56	MG	1A	3136	1/1	0.91	0.13	52,52,52,52	0
56	MG	2A	3308	1/1	0.91	0.34	67,67,67,67	0
56	MG	2A	3011	1/1	0.91	0.12	64,64,64,64	0
56	MG	2a	1636	1/1	0.91	0.10	88,88,88,88	0
56	MG	2A	3310	1/1	0.91	0.23	74,74,74,74	0
56	MG	1A	3766	1/1	0.91	0.11	53,53,53,53	0
56	MG	2A	3177	1/1	0.91	0.11	70,70,70,70	0
56	MG	2A	3746	1/1	0.91	0.12	64,64,64,64	0
56	MG	1A	3775	1/1	0.91	0.14	38,38,38,38	0
56	MG	2A	3181	1/1	0.91	0.19	61,61,61,61	0
56	MG	1a	1698	1/1	0.91	0.27	58,58,58,58	0
56	MG	1A	3521	1/1	0.91	0.12	61,61,61,61	0
56	MG	2A	3191	1/1	0.91	0.14	69,69,69,69	0
56	MG	1A	3619	1/1	0.91	0.09	29,29,29,29	0
56	MG	1A	3801	1/1	0.91	0.16	61,61,61,61	0
56	MG	1a	1710	1/1	0.91	0.09	54,54,54,54	0
56	MG	2A	3326	1/1	0.91	0.23	63,63,63,63	0
56	MG	2A	3196	1/1	0.91	0.14	58,58,58,58	0
56	MG	2x	102	1/1	0.91	0.28	77,77,77,77	0
56	MG	2A	3780	1/1	0.91	0.08	77,77,77,77	0
56	MG	2A	3197	1/1	0.91	0.21	66,66,66,66	0
56	MG	1A	3621	1/1	0.91	0.09	40,40,40,40	0
56	MG	2A	3788	1/1	0.91	0.12	73,73,73,73	0
56	MG	2A	3043	1/1	0.91	0.21	74,74,74,74	0
56	MG	1A	3461	1/1	0.91	0.15	53,53,53,53	0
56	MG	2A	3335	1/1	0.91	0.12	70,70,70,70	0
56	MG	2A	3482	1/1	0.91	0.14	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3796	1/1	0.91	0.10	63,63,63,63	0
56	MG	1A	3497	1/1	0.92	0.10	62,62,62,62	0
56	MG	2a	1639	1/1	0.92	0.32	64,64,64,64	0
56	MG	1A	3758	1/1	0.92	0.09	40,40,40,40	0
56	MG	2A	3424	1/1	0.92	0.21	47,47,47,47	0
56	MG	2A	3060	1/1	0.92	0.14	56,56,56,56	0
56	MG	2A	3062	1/1	0.92	0.08	58,58,58,58	0
56	MG	1B	235	1/1	0.92	0.08	49,49,49,49	0
56	MG	2A	3428	1/1	0.92	0.53	74,74,74,74	0
56	MG	1A	3594	1/1	0.92	0.09	43,43,43,43	0
56	MG	2a	1649	1/1	0.92	0.31	76,76,76,76	0
56	MG	1D	312	1/1	0.92	0.14	40,40,40,40	0
56	MG	1A	3387	1/1	0.92	0.20	42,42,42,42	0
56	MG	1A	3976	1/1	0.92	0.07	49,49,49,49	0
56	MG	1a	1690	1/1	0.92	0.25	64,64,64,64	0
56	MG	2A	3436	1/1	0.92	0.26	69,69,69,69	0
56	MG	2A	3742	1/1	0.92	0.32	61,61,61,61	0
56	MG	1A	3977	1/1	0.92	0.20	62,62,62,62	0
56	MG	1A	3173	1/1	0.92	0.10	43,43,43,43	0
56	MG	1a	1694	1/1	0.92	0.38	62,62,62,62	0
56	MG	1A	3444	1/1	0.92	0.21	57,57,57,57	0
56	MG	1A	3985	1/1	0.92	0.08	70,70,70,70	0
56	MG	1E	314	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3780	1/1	0.92	0.10	71,71,71,71	0
56	MG	1a	1701	1/1	0.92	0.42	75,75,75,75	0
56	MG	1a	1702	1/1	0.92	0.23	63,63,63,63	0
56	MG	2A	3446	1/1	0.92	0.16	52,52,52,52	0
56	MG	1a	1705	1/1	0.92	0.25	66,66,66,66	0
56	MG	1a	1707	1/1	0.92	0.11	67,67,67,67	0
56	MG	1A	3989	1/1	0.92	0.10	72,72,72,72	0
56	MG	2a	1674	1/1	0.92	0.31	71,71,71,71	0
56	MG	1A	3784	1/1	0.92	0.12	67,67,67,67	0
56	MG	2A	3770	1/1	0.92	0.12	65,65,65,65	0
56	MG	2A	3776	1/1	0.92	0.13	71,71,71,71	0
56	MG	1A	4000	1/1	0.92	0.11	46,46,46,46	0
56	MG	2A	3782	1/1	0.92	0.08	45,45,45,45	0
56	MG	1A	3115	1/1	0.92	0.13	39,39,39,39	0
56	MG	1A	3792	1/1	0.92	0.07	76,76,76,76	0
56	MG	2a	1688	1/1	0.92	0.24	62,62,62,62	0
56	MG	1A	3602	1/1	0.92	0.27	65,65,65,65	0
56	MG	1A	3294	1/1	0.92	0.17	61,61,61,61	0
56	MG	2a	1691	1/1	0.92	0.22	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3109	1/1	0.92	0.12	49,49,49,49	0
56	MG	1A	3604	1/1	0.92	0.22	56,56,56,56	0
56	MG	1A	3810	1/1	0.92	0.11	53,53,53,53	0
56	MG	1A	3606	1/1	0.92	0.18	61,61,61,61	0
56	MG	2a	1698	1/1	0.92	0.25	67,67,67,67	0
56	MG	1A	3237	1/1	0.92	0.30	49,49,49,49	0
56	MG	1S	202	1/1	0.92	0.16	56,56,56,56	0
56	MG	1A	4027	1/1	0.92	0.10	67,67,67,67	0
56	MG	1A	4030	1/1	0.92	0.13	74,74,74,74	0
56	MG	2A	3472	1/1	0.92	0.22	58,58,58,58	0
56	MG	1A	3456	1/1	0.92	0.21	43,43,43,43	0
56	MG	1A	3346	1/1	0.92	0.22	45,45,45,45	0
56	MG	1A	3831	1/1	0.92	0.10	37,37,37,37	0
56	MG	1A	3238	1/1	0.92	0.11	63,63,63,63	0
56	MG	2A	3816	1/1	0.92	0.10	61,61,61,61	0
56	MG	2A	3128	1/1	0.92	0.13	65,65,65,65	0
56	MG	1a	1745	1/1	0.92	0.09	66,66,66,66	0
56	MG	1A	3620	1/1	0.92	0.12	52,52,52,52	0
56	MG	1a	1753	1/1	0.92	0.15	73,73,73,73	0
56	MG	1A	3519	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3313	1/1	0.92	0.16	81,81,81,81	0
56	MG	2A	3136	1/1	0.92	0.10	58,58,58,58	0
56	MG	1a	1757	1/1	0.92	0.24	72,72,72,72	0
56	MG	1a	1758	1/1	0.92	0.10	74,74,74,74	0
56	MG	1Z	3701	1/1	0.92	0.15	66,66,66,66	0
56	MG	2A	3495	1/1	0.92	0.20	50,50,50,50	0
56	MG	1A	3838	1/1	0.92	0.24	48,48,48,48	0
56	MG	1A	3184	1/1	0.92	0.11	65,65,65,65	0
56	MG	1a	1773	1/1	0.92	0.10	70,70,70,70	0
56	MG	2A	3504	1/1	0.92	0.10	60,60,60,60	0
56	MG	2A	3850	1/1	0.92	0.22	68,68,68,68	0
56	MG	2A	3505	1/1	0.92	0.12	64,64,64,64	0
56	MG	10	103	1/1	0.92	0.08	47,47,47,47	0
56	MG	1A	3630	1/1	0.92	0.09	35,35,35,35	0
56	MG	2a	1730	1/1	0.92	0.20	75,75,75,75	0
56	MG	1A	3243	1/1	0.92	0.12	39,39,39,39	0
56	MG	1A	3149	1/1	0.92	0.15	45,45,45,45	0
56	MG	2A	3861	1/1	0.92	0.15	70,70,70,70	0
56	MG	2A	3157	1/1	0.92	0.18	59,59,59,59	0
56	MG	2A	3330	1/1	0.92	0.10	60,60,60,60	0
56	MG	11	105	1/1	0.92	0.11	56,56,56,56	0
56	MG	2A	3530	1/1	0.92	0.09	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	13	104	1/1	0.92	0.11	57,57,57,57	0
56	MG	2A	3162	1/1	0.92	0.14	76,76,76,76	0
56	MG	1A	4057	1/1	0.92	0.08	58,58,58,58	0
56	MG	15	102	1/1	0.92	0.20	42,42,42,42	0
56	MG	1A	3305	1/1	0.92	0.14	51,51,51,51	0
56	MG	1A	3850	1/1	0.92	0.25	60,60,60,60	0
56	MG	18	105	1/1	0.92	0.25	68,68,68,68	0
56	MG	1A	3064	1/1	0.92	0.26	56,56,56,56	0
56	MG	2A	3561	1/1	0.92	0.14	62,62,62,62	0
56	MG	1A	3059	1/1	0.92	0.10	47,47,47,47	0
56	MG	1A	4068	1/1	0.92	0.13	56,56,56,56	0
56	MG	1A	3131	1/1	0.92	0.11	72,72,72,72	0
56	MG	2A	3347	1/1	0.92	0.26	64,64,64,64	0
56	MG	2A	3348	1/1	0.92	0.15	67,67,67,67	0
56	MG	1A	3019	1/1	0.92	0.19	51,51,51,51	0
56	MG	2B	210	1/1	0.92	0.15	73,73,73,73	0
56	MG	2a	1766	1/1	0.92	0.11	83,83,83,83	0
56	MG	2A	3179	1/1	0.92	0.12	51,51,51,51	0
56	MG	1A	3858	1/1	0.92	0.11	58,58,58,58	0
56	MG	2a	1772	1/1	0.92	0.08	79,79,79,79	0
56	MG	1A	3262	1/1	0.92	0.09	37,37,37,37	0
56	MG	1A	3866	1/1	0.92	0.09	48,48,48,48	0
56	MG	1a	1608	1/1	0.92	0.23	70,70,70,70	0
56	MG	2a	1778	1/1	0.92	0.09	73,73,73,73	0
56	MG	2a	1779	1/1	0.92	0.10	81,81,81,81	0
56	MG	1A	3867	1/1	0.92	0.13	55,55,55,55	0
56	MG	1a	1614	1/1	0.92	0.11	71,71,71,71	0
56	MG	2a	1787	1/1	0.92	0.12	71,71,71,71	0
56	MG	1A	4081	1/1	0.92	0.13	68,68,68,68	0
56	MG	1A	3263	1/1	0.92	0.18	53,53,53,53	0
56	MG	2D	304	1/1	0.92	0.29	46,46,46,46	0
56	MG	2A	3359	1/1	0.92	0.25	67,67,67,67	0
56	MG	1A	3536	1/1	0.92	0.10	63,63,63,63	0
56	MG	2A	3362	1/1	0.92	0.13	67,67,67,67	0
56	MG	1A	3477	1/1	0.92	0.09	59,59,59,59	0
56	MG	1A	4091	1/1	0.92	0.14	48,48,48,48	0
56	MG	2A	3617	1/1	0.92	0.13	61,61,61,61	0
56	MG	2A	3200	1/1	0.92	0.43	64,64,64,64	0
56	MG	2A	3622	1/1	0.92	0.18	58,58,58,58	0
56	MG	1A	3539	1/1	0.92	0.22	41,41,41,41	0
56	MG	1A	4094	1/1	0.92	0.14	43,43,43,43	0
56	MG	1a	1629	1/1	0.92	0.22	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3166	1/1	0.92	0.17	39,39,39,39	0
56	MG	2Q	201	1/1	0.92	0.14	74,74,74,74	0
56	MG	1A	3879	1/1	0.92	0.09	37,37,37,37	0
56	MG	1a	1634	1/1	0.92	0.15	72,72,72,72	0
56	MG	2T	201	1/1	0.92	0.11	64,64,64,64	0
56	MG	2T	202	1/1	0.92	0.17	74,74,74,74	0
56	MG	2T	203	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3544	1/1	0.92	0.21	53,53,53,53	0
56	MG	2A	3208	1/1	0.92	0.11	50,50,50,50	0
56	MG	2W	203	1/1	0.92	0.11	60,60,60,60	0
56	MG	1A	3333	1/1	0.92	0.27	55,55,55,55	0
56	MG	1a	1641	1/1	0.92	0.13	63,63,63,63	0
56	MG	1A	3721	1/1	0.92	0.08	71,71,71,71	0
56	MG	21	103	1/1	0.92	0.15	60,60,60,60	0
56	MG	23	101	1/1	0.92	0.11	62,62,62,62	0
56	MG	25	103	1/1	0.92	0.18	62,62,62,62	0
56	MG	1a	1644	1/1	0.92	0.21	75,75,75,75	0
56	MG	1A	4101	1/1	0.92	0.10	57,57,57,57	0
56	MG	27	102	1/1	0.92	0.22	69,69,69,69	0
56	MG	2a	1830	1/1	0.92	0.11	71,71,71,71	0
56	MG	2a	1831	1/1	0.92	0.29	77,77,77,77	0
56	MG	1A	3167	1/1	0.92	0.28	42,42,42,42	0
56	MG	2a	1835	1/1	0.92	0.26	68,68,68,68	0
56	MG	1A	4105	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	3909	1/1	0.92	0.08	57,57,57,57	0
56	MG	29	101	1/1	0.92	0.25	77,77,77,77	0
56	MG	1A	3377	1/1	0.92	0.15	57,57,57,57	0
56	MG	2A	3016	1/1	0.92	0.18	76,76,76,76	0
56	MG	2A	3226	1/1	0.92	0.11	68,68,68,68	0
56	MG	2f	201	1/1	0.92	0.11	60,60,60,60	0
56	MG	2A	3022	1/1	0.92	0.16	55,55,55,55	0
56	MG	1a	1655	1/1	0.92	0.10	60,60,60,60	0
56	MG	2A	3395	1/1	0.92	0.07	72,72,72,72	0
56	MG	2A	3024	1/1	0.92	0.15	65,65,65,65	0
56	MG	1A	3552	1/1	0.92	0.22	52,52,52,52	0
56	MG	2A	3233	1/1	0.92	0.12	62,62,62,62	0
56	MG	2A	3675	1/1	0.92	0.13	76,76,76,76	0
56	MG	1B	210	1/1	0.92	0.12	51,51,51,51	0
56	MG	1A	3483	1/1	0.92	0.13	58,58,58,58	0
56	MG	2A	3680	1/1	0.92	0.17	70,70,70,70	0
56	MG	1A	3733	1/1	0.92	0.15	69,69,69,69	0
56	MG	1B	213	1/1	0.92	0.28	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3404	1/1	0.92	0.10	67,67,67,67	0
56	MG	1A	3022	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3489	1/1	0.92	0.15	44,44,44,44	0
56	MG	2a	1623	1/1	0.92	0.08	62,62,62,62	0
56	MG	1A	3170	1/1	0.92	0.20	61,61,61,61	0
56	MG	2A	3696	1/1	0.92	0.08	62,62,62,62	0
56	MG	1A	3493	1/1	0.92	0.13	57,57,57,57	0
56	MG	2A	3248	1/1	0.92	0.12	74,74,74,74	0
56	MG	1A	3948	1/1	0.92	0.10	64,64,64,64	0
56	MG	1A	3953	1/1	0.92	0.13	70,70,70,70	0
56	MG	1A	3380	1/1	0.92	0.31	49,49,49,49	0
56	MG	2a	1631	1/1	0.92	0.12	60,60,60,60	0
56	MG	1A	3576	1/1	0.92	0.12	57,57,57,57	0
56	MG	2A	3053	1/1	0.92	0.13	75,75,75,75	0
56	MG	1a	1679	1/1	0.92	0.14	51,51,51,51	0
56	MG	2A	3714	1/1	0.92	0.11	61,61,61,61	0
56	MG	1A	3589	1/1	0.92	0.18	27,27,27,27	0
56	MG	1A	3496	1/1	0.92	0.11	55,55,55,55	0
56	MG	1A	3289	1/1	0.93	0.16	56,56,56,56	0
56	MG	1A	3291	1/1	0.93	0.09	57,57,57,57	0
56	MG	1x	103	1/1	0.93	0.11	58,58,58,58	0
56	MG	1A	4103	1/1	0.93	0.16	55,55,55,55	0
56	MG	1A	3454	1/1	0.93	0.15	35,35,35,35	0
56	MG	1x	107	1/1	0.93	0.22	70,70,70,70	0
56	MG	1A	3455	1/1	0.93	0.10	59,59,59,59	0
56	MG	1A	4108	1/1	0.93	0.25	63,63,63,63	0
56	MG	1a	1638	1/1	0.93	0.13	53,53,53,53	0
56	MG	1B	201	1/1	0.93	0.17	60,60,60,60	0
56	MG	1A	3216	1/1	0.93	0.07	51,51,51,51	0
56	MG	1B	203	1/1	0.93	0.08	43,43,43,43	0
56	MG	1a	1643	1/1	0.93	0.28	78,78,78,78	0
56	MG	1A	3927	1/1	0.93	0.20	60,60,60,60	0
56	MG	1A	3929	1/1	0.93	0.12	64,64,64,64	0
56	MG	2A	3007	1/1	0.93	0.11	61,61,61,61	0
56	MG	2A	3709	1/1	0.93	0.10	42,42,42,42	0
56	MG	1B	209	1/1	0.93	0.11	50,50,50,50	0
56	MG	2a	1641	1/1	0.93	0.13	91,91,91,91	0
56	MG	1A	3055	1/1	0.93	0.11	51,51,51,51	0
56	MG	1A	3122	1/1	0.93	0.09	37,37,37,37	0
56	MG	2A	3018	1/1	0.93	0.07	58,58,58,58	0
56	MG	2A	3019	1/1	0.93	0.10	42,42,42,42	0
56	MG	2A	3020	1/1	0.93	0.13	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3299	1/1	0.93	0.35	70,70,70,70	0
56	MG	2A	3719	1/1	0.93	0.10	74,74,74,74	0
56	MG	1A	3945	1/1	0.93	0.13	58,58,58,58	0
56	MG	2A	3240	1/1	0.93	0.15	69,69,69,69	0
56	MG	1A	3546	1/1	0.93	0.17	42,42,42,42	0
56	MG	1A	3741	1/1	0.93	0.11	66,66,66,66	0
56	MG	1A	3229	1/1	0.93	0.14	63,63,63,63	0
56	MG	2A	3420	1/1	0.93	0.12	62,62,62,62	0
56	MG	2A	3731	1/1	0.93	0.09	64,64,64,64	0
56	MG	2A	3421	1/1	0.93	0.24	53,53,53,53	0
56	MG	2A	3734	1/1	0.93	0.11	60,60,60,60	0
56	MG	1A	3233	1/1	0.93	0.11	51,51,51,51	0
56	MG	1A	3467	1/1	0.93	0.20	45,45,45,45	0
56	MG	1A	3964	1/1	0.93	0.10	56,56,56,56	0
56	MG	2a	1665	1/1	0.93	0.07	68,68,68,68	0
56	MG	1B	222	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	3124	1/1	0.93	0.25	54,54,54,54	0
56	MG	1A	3555	1/1	0.93	0.19	59,59,59,59	0
56	MG	2A	3251	1/1	0.93	0.10	73,73,73,73	0
56	MG	2A	3044	1/1	0.93	0.16	62,62,62,62	0
56	MG	2A	3432	1/1	0.93	0.28	69,69,69,69	0
56	MG	1A	3556	1/1	0.93	0.10	54,54,54,54	0
56	MG	2A	3046	1/1	0.93	0.12	67,67,67,67	0
56	MG	2a	1675	1/1	0.93	0.23	67,67,67,67	0
56	MG	1a	1672	1/1	0.93	0.13	60,60,60,60	0
56	MG	2a	1678	1/1	0.93	0.13	61,61,61,61	0
56	MG	2A	3256	1/1	0.93	0.11	71,71,71,71	0
56	MG	1A	3558	1/1	0.93	0.10	53,53,53,53	0
56	MG	2A	3754	1/1	0.93	0.13	72,72,72,72	0
56	MG	1a	1674	1/1	0.93	0.24	61,61,61,61	0
56	MG	1A	3972	1/1	0.93	0.11	54,54,54,54	0
56	MG	1A	3559	1/1	0.93	0.12	65,65,65,65	0
56	MG	1a	1678	1/1	0.93	0.33	67,67,67,67	0
56	MG	2A	3760	1/1	0.93	0.15	61,61,61,61	0
56	MG	2A	3055	1/1	0.93	0.19	69,69,69,69	0
56	MG	1A	3036	1/1	0.93	0.10	41,41,41,41	0
56	MG	2A	3766	1/1	0.93	0.09	64,64,64,64	0
56	MG	1D	309	1/1	0.93	0.14	53,53,53,53	0
56	MG	2A	3775	1/1	0.93	0.08	76,76,76,76	0
56	MG	1A	3171	1/1	0.93	0.13	56,56,56,56	0
56	MG	2a	1697	1/1	0.93	0.12	67,67,67,67	0
56	MG	1A	3979	1/1	0.93	0.12	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3383	1/1	0.93	0.09	43,43,43,43	0
56	MG	2A	3783	1/1	0.93	0.09	71,71,71,71	0
56	MG	1A	3565	1/1	0.93	0.17	59,59,59,59	0
56	MG	1A	3384	1/1	0.93	0.10	55,55,55,55	0
56	MG	1E	304	1/1	0.93	0.21	42,42,42,42	0
56	MG	2A	3789	1/1	0.93	0.16	66,66,66,66	0
56	MG	1A	3385	1/1	0.93	0.15	49,49,49,49	0
56	MG	1A	3172	1/1	0.93	0.17	57,57,57,57	0
56	MG	1A	3128	1/1	0.93	0.28	38,38,38,38	0
56	MG	2A	3456	1/1	0.93	0.31	60,60,60,60	0
56	MG	2A	3795	1/1	0.93	0.13	65,65,65,65	0
56	MG	1A	3998	1/1	0.93	0.07	35,35,35,35	0
56	MG	1A	3317	1/1	0.93	0.22	55,55,55,55	0
56	MG	2A	3459	1/1	0.93	0.09	52,52,52,52	0
56	MG	2A	3461	1/1	0.93	0.33	53,53,53,53	0
56	MG	1F	310	1/1	0.93	0.08	50,50,50,50	0
56	MG	2A	3279	1/1	0.93	0.27	58,58,58,58	0
56	MG	1A	3246	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3281	1/1	0.93	0.14	56,56,56,56	0
56	MG	1G	202	1/1	0.93	0.09	53,53,53,53	0
56	MG	1A	4005	1/1	0.93	0.11	56,56,56,56	0
56	MG	1A	4006	1/1	0.93	0.12	33,33,33,33	0
56	MG	1a	1700	1/1	0.93	0.18	68,68,68,68	0
56	MG	1A	3247	1/1	0.93	0.14	56,56,56,56	0
56	MG	2A	3288	1/1	0.93	0.13	67,67,67,67	0
56	MG	2A	3094	1/1	0.93	0.20	66,66,66,66	0
56	MG	2A	3827	1/1	0.93	0.08	80,80,80,80	0
56	MG	2A	3477	1/1	0.93	0.28	72,72,72,72	0
56	MG	1A	4011	1/1	0.93	0.09	68,68,68,68	0
56	MG	1A	3249	1/1	0.93	0.22	57,57,57,57	0
56	MG	1A	3181	1/1	0.93	0.08	45,45,45,45	0
56	MG	2a	1732	1/1	0.93	0.19	76,76,76,76	0
56	MG	2A	3835	1/1	0.93	0.11	82,82,82,82	0
56	MG	1O	204	1/1	0.93	0.10	52,52,52,52	0
56	MG	2a	1735	1/1	0.93	0.19	61,61,61,61	0
56	MG	2A	3483	1/1	0.93	0.20	76,76,76,76	0
56	MG	2A	3100	1/1	0.93	0.10	61,61,61,61	0
56	MG	2A	3842	1/1	0.93	0.10	73,73,73,73	0
56	MG	1O	205	1/1	0.93	0.09	63,63,63,63	0
56	MG	1A	3816	1/1	0.93	0.28	29,29,29,29	0
56	MG	1a	1711	1/1	0.93	0.23	66,66,66,66	0
56	MG	1A	3331	1/1	0.93	0.26	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3486	1/1	0.93	0.10	50,50,50,50	0
56	MG	2A	3490	1/1	0.93	0.17	69,69,69,69	0
56	MG	1A	3819	1/1	0.93	0.07	39,39,39,39	0
56	MG	1A	3403	1/1	0.93	0.22	41,41,41,41	0
56	MG	2A	3493	1/1	0.93	0.19	71,71,71,71	0
56	MG	1A	3040	1/1	0.93	0.21	62,62,62,62	0
56	MG	1A	3832	1/1	0.93	0.09	36,36,36,36	0
56	MG	1A	3041	1/1	0.93	0.09	41,41,41,41	0
56	MG	2A	3500	1/1	0.93	0.25	73,73,73,73	0
56	MG	1U	202	1/1	0.93	0.28	42,42,42,42	0
56	MG	1U	205	1/1	0.93	0.18	46,46,46,46	0
56	MG	1A	3257	1/1	0.93	0.14	33,33,33,33	0
56	MG	1V	205	1/1	0.93	0.10	53,53,53,53	0
56	MG	1A	3608	1/1	0.93	0.14	56,56,56,56	0
56	MG	2A	3312	1/1	0.93	0.07	67,67,67,67	0
56	MG	2a	1768	1/1	0.93	0.08	56,56,56,56	0
56	MG	2A	3121	1/1	0.93	0.11	48,48,48,48	0
56	MG	1W	202	1/1	0.93	0.07	43,43,43,43	0
56	MG	2a	1773	1/1	0.93	0.07	69,69,69,69	0
56	MG	2A	3125	1/1	0.93	0.11	57,57,57,57	0
56	MG	1A	3337	1/1	0.93	0.16	55,55,55,55	0
56	MG	1A	3839	1/1	0.93	0.26	71,71,71,71	0
56	MG	1A	3185	1/1	0.93	0.13	75,75,75,75	0
56	MG	1A	3611	1/1	0.93	0.13	55,55,55,55	0
56	MG	2A	3535	1/1	0.93	0.10	58,58,58,58	0
56	MG	2A	3130	1/1	0.93	0.08	55,55,55,55	0
56	MG	2A	3542	1/1	0.93	0.11	55,55,55,55	0
56	MG	2a	1788	1/1	0.93	0.16	64,64,64,64	0
56	MG	1a	1752	1/1	0.93	0.07	68,68,68,68	0
56	MG	2a	1790	1/1	0.93	0.18	78,78,78,78	0
56	MG	1A	3139	1/1	0.93	0.14	50,50,50,50	0
56	MG	2A	3134	1/1	0.93	0.12	55,55,55,55	0
56	MG	1Z	3703	1/1	0.93	0.22	63,63,63,63	0
56	MG	2A	3328	1/1	0.93	0.17	64,64,64,64	0
56	MG	1A	3341	1/1	0.93	0.22	61,61,61,61	0
56	MG	1A	3260	1/1	0.93	0.27	32,32,32,32	0
56	MG	1a	1759	1/1	0.93	0.16	63,63,63,63	0
56	MG	2A	3571	1/1	0.93	0.10	57,57,57,57	0
56	MG	2B	218	1/1	0.93	0.12	80,80,80,80	0
56	MG	2A	3572	1/1	0.93	0.15	51,51,51,51	0
56	MG	1A	3849	1/1	0.93	0.07	40,40,40,40	0
56	MG	10	106	1/1	0.93	0.11	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3579	1/1	0.93	0.10	68,68,68,68	0
56	MG	2A	3145	1/1	0.93	0.25	55,55,55,55	0
56	MG	2A	3587	1/1	0.93	0.09	71,71,71,71	0
56	MG	2E	303	1/1	0.93	0.27	66,66,66,66	0
56	MG	1a	1764	1/1	0.93	0.20	68,68,68,68	0
56	MG	2A	3592	1/1	0.93	0.09	71,71,71,71	0
56	MG	1A	3504	1/1	0.93	0.17	57,57,57,57	0
56	MG	1A	4060	1/1	0.93	0.17	77,77,77,77	0
56	MG	2A	3149	1/1	0.93	0.20	47,47,47,47	0
56	MG	2A	3151	1/1	0.93	0.15	59,59,59,59	0
56	MG	1a	1778	1/1	0.93	0.15	55,55,55,55	0
56	MG	1a	1779	1/1	0.93	0.09	68,68,68,68	0
56	MG	2a	1819	1/1	0.93	0.18	72,72,72,72	0
56	MG	1A	3625	1/1	0.93	0.06	35,35,35,35	0
56	MG	13	103	1/1	0.93	0.26	59,59,59,59	0
56	MG	2Q	203	1/1	0.93	0.07	63,63,63,63	0
56	MG	1A	4063	1/1	0.93	0.11	56,56,56,56	0
56	MG	1A	4064	1/1	0.93	0.13	46,46,46,46	0
56	MG	1A	3343	1/1	0.93	0.10	50,50,50,50	0
56	MG	2A	3610	1/1	0.93	0.12	38,38,38,38	0
56	MG	15	105	1/1	0.93	0.21	49,49,49,49	0
56	MG	2U	201	1/1	0.93	0.13	61,61,61,61	0
56	MG	1A	3046	1/1	0.93	0.06	33,33,33,33	0
56	MG	2A	3613	1/1	0.93	0.19	54,54,54,54	0
56	MG	1a	1806	1/1	0.93	0.21	59,59,59,59	0
56	MG	1A	3423	1/1	0.93	0.07	51,51,51,51	0
56	MG	2A	3168	1/1	0.93	0.10	49,49,49,49	0
56	MG	2A	3621	1/1	0.93	0.14	59,59,59,59	0
56	MG	21	102	1/1	0.93	0.41	59,59,59,59	0
56	MG	2A	3171	1/1	0.93	0.14	66,66,66,66	0
56	MG	1A	3190	1/1	0.93	0.19	41,41,41,41	0
56	MG	25	101	1/1	0.93	0.21	61,61,61,61	0
56	MG	1A	3004	1/1	0.93	0.08	31,31,31,31	0
56	MG	1A	3105	1/1	0.93	0.21	42,42,42,42	0
56	MG	2A	3633	1/1	0.93	0.08	52,52,52,52	0
56	MG	1A	3432	1/1	0.93	0.09	39,39,39,39	0
56	MG	1A	3051	1/1	0.93	0.15	29,29,29,29	0
56	MG	1A	3350	1/1	0.93	0.32	52,52,52,52	0
56	MG	28	102	1/1	0.93	0.14	63,63,63,63	0
56	MG	1e	203	1/1	0.93	0.21	67,67,67,67	0
56	MG	1A	4080	1/1	0.93	0.07	20,20,20,20	0
56	MG	1A	3437	1/1	0.93	0.25	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3875	1/1	0.93	0.07	30,30,30,30	0
56	MG	2A	3183	1/1	0.93	0.24	62,62,62,62	0
56	MG	2A	3184	1/1	0.93	0.19	64,64,64,64	0
56	MG	2a	1606	1/1	0.93	0.22	70,70,70,70	0
56	MG	1A	3269	1/1	0.93	0.11	55,55,55,55	0
56	MG	1A	3527	1/1	0.93	0.19	38,38,38,38	0
56	MG	1A	3084	1/1	0.93	0.31	46,46,46,46	0
56	MG	1a	1615	1/1	0.93	0.26	67,67,67,67	0
56	MG	1A	3273	1/1	0.93	0.32	58,58,58,58	0
56	MG	1a	1617	1/1	0.93	0.17	64,64,64,64	0
56	MG	1A	3714	1/1	0.93	0.09	35,35,35,35	0
56	MG	2a	1614	1/1	0.93	0.19	68,68,68,68	0
56	MG	2A	3198	1/1	0.93	0.19	72,72,72,72	0
56	MG	2A	3383	1/1	0.93	0.35	62,62,62,62	0
56	MG	1A	3716	1/1	0.93	0.12	36,36,36,36	0
56	MG	1A	3054	1/1	0.93	0.08	52,52,52,52	0
56	MG	1A	3117	1/1	0.93	0.24	44,44,44,44	0
56	MG	2a	1620	1/1	0.93	0.12	81,81,81,81	0
56	MG	2A	3672	1/1	0.93	0.23	44,44,44,44	0
56	MG	1A	3910	1/1	0.93	0.10	58,58,58,58	0
56	MG	2A	3683	1/1	0.94	0.12	59,59,59,59	0
56	MG	1y	101	1/1	0.94	0.16	45,45,45,45	0
56	MG	1A	3553	1/1	0.94	0.18	53,53,53,53	0
56	MG	2A	3686	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3687	1/1	0.94	0.15	81,81,81,81	0
56	MG	1A	3394	1/1	0.94	0.20	30,30,30,30	0
56	MG	2A	3689	1/1	0.94	0.06	72,72,72,72	0
56	MG	1A	3736	1/1	0.94	0.10	47,47,47,47	0
56	MG	2A	3004	1/1	0.94	0.45	67,67,67,67	0
56	MG	1A	3215	1/1	0.94	0.06	42,42,42,42	0
56	MG	2A	3698	1/1	0.94	0.09	80,80,80,80	0
56	MG	2A	3006	1/1	0.94	0.26	63,63,63,63	0
56	MG	2A	3701	1/1	0.94	0.13	67,67,67,67	0
56	MG	1A	3950	1/1	0.94	0.08	28,28,28,28	0
56	MG	1A	3951	1/1	0.94	0.10	35,35,35,35	0
56	MG	2A	3215	1/1	0.94	0.19	59,59,59,59	0
56	MG	2A	3707	1/1	0.94	0.10	60,60,60,60	0
56	MG	2A	3010	1/1	0.94	0.17	63,63,63,63	0
56	MG	2A	3710	1/1	0.94	0.08	39,39,39,39	0
56	MG	1A	3127	1/1	0.94	0.30	39,39,39,39	0
56	MG	1a	1656	1/1	0.94	0.07	56,56,56,56	0
56	MG	2A	3017	1/1	0.94	0.25	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3265	1/1	0.94	0.20	66,66,66,66	0
56	MG	2A	3224	1/1	0.94	0.12	58,58,58,58	0
56	MG	1A	3015	1/1	0.94	0.13	46,46,46,46	0
56	MG	1A	3219	1/1	0.94	0.19	40,40,40,40	0
56	MG	1A	3223	1/1	0.94	0.10	44,44,44,44	0
56	MG	1A	3481	1/1	0.94	0.09	51,51,51,51	0
56	MG	1B	231	1/1	0.94	0.10	46,46,46,46	0
56	MG	2A	3726	1/1	0.94	0.11	60,60,60,60	0
56	MG	2A	3025	1/1	0.94	0.14	71,71,71,71	0
56	MG	1A	3226	1/1	0.94	0.15	55,55,55,55	0
56	MG	1A	3757	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3236	1/1	0.94	0.10	62,62,62,62	0
56	MG	2A	3031	1/1	0.94	0.08	66,66,66,66	0
56	MG	2a	1652	1/1	0.94	0.13	84,84,84,84	0
56	MG	2A	3732	1/1	0.94	0.16	69,69,69,69	0
56	MG	2a	1654	1/1	0.94	0.14	80,80,80,80	0
56	MG	2A	3430	1/1	0.94	0.39	68,68,68,68	0
56	MG	1A	3130	1/1	0.94	0.06	38,38,38,38	0
56	MG	2A	3735	1/1	0.94	0.14	57,57,57,57	0
56	MG	2A	3033	1/1	0.94	0.07	50,50,50,50	0
56	MG	1A	3569	1/1	0.94	0.35	51,51,51,51	0
56	MG	2A	3036	1/1	0.94	0.13	44,44,44,44	0
56	MG	2A	3038	1/1	0.94	0.09	39,39,39,39	0
56	MG	2A	3245	1/1	0.94	0.15	78,78,78,78	0
56	MG	1a	1671	1/1	0.94	0.26	72,72,72,72	0
56	MG	2a	1664	1/1	0.94	0.21	86,86,86,86	0
56	MG	2A	3040	1/1	0.94	0.09	51,51,51,51	0
56	MG	1D	305	1/1	0.94	0.09	47,47,47,47	0
56	MG	1A	3571	1/1	0.94	0.16	39,39,39,39	0
56	MG	1A	3975	1/1	0.94	0.11	47,47,47,47	0
56	MG	1A	3573	1/1	0.94	0.17	58,58,58,58	0
56	MG	1A	3076	1/1	0.94	0.06	35,35,35,35	0
56	MG	2A	3749	1/1	0.94	0.10	63,63,63,63	0
56	MG	1A	3779	1/1	0.94	0.08	20,20,20,20	0
56	MG	1A	3231	1/1	0.94	0.17	34,34,34,34	0
56	MG	2A	3048	1/1	0.94	0.15	58,58,58,58	0
56	MG	1A	3782	1/1	0.94	0.10	28,28,28,28	0
56	MG	1E	305	1/1	0.94	0.17	38,38,38,38	0
56	MG	1A	3579	1/1	0.94	0.11	55,55,55,55	0
56	MG	1A	3584	1/1	0.94	0.32	44,44,44,44	0
56	MG	1A	3791	1/1	0.94	0.12	32,32,32,32	0
56	MG	1A	3586	1/1	0.94	0.11	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3992	1/1	0.94	0.08	57,57,57,57	0
56	MG	1A	3134	1/1	0.94	0.09	55,55,55,55	0
56	MG	2a	1686	1/1	0.94	0.18	74,74,74,74	0
56	MG	2a	1687	1/1	0.94	0.12	66,66,66,66	0
56	MG	1A	3999	1/1	0.94	0.16	58,58,58,58	0
56	MG	2A	3771	1/1	0.94	0.10	60,60,60,60	0
56	MG	2A	3772	1/1	0.94	0.11	69,69,69,69	0
56	MG	2A	3773	1/1	0.94	0.16	74,74,74,74	0
56	MG	1A	3285	1/1	0.94	0.22	37,37,37,37	0
56	MG	2A	3266	1/1	0.94	0.12	59,59,59,59	0
56	MG	2A	3779	1/1	0.94	0.14	67,67,67,67	0
56	MG	1A	3806	1/1	0.94	0.07	20,20,20,20	0
56	MG	2A	3781	1/1	0.94	0.13	67,67,67,67	0
56	MG	1A	3808	1/1	0.94	0.07	44,44,44,44	0
56	MG	1a	1693	1/1	0.94	0.39	61,61,61,61	0
56	MG	1A	3492	1/1	0.94	0.10	53,53,53,53	0
56	MG	1A	3288	1/1	0.94	0.23	50,50,50,50	0
56	MG	1N	204	1/1	0.94	0.20	47,47,47,47	0
56	MG	2A	3067	1/1	0.94	0.18	58,58,58,58	0
56	MG	1a	1697	1/1	0.94	0.30	59,59,59,59	0
56	MG	2A	3069	1/1	0.94	0.16	66,66,66,66	0
56	MG	2A	3276	1/1	0.94	0.20	66,66,66,66	0
56	MG	2A	3073	1/1	0.94	0.09	66,66,66,66	0
56	MG	1A	3595	1/1	0.94	0.12	48,48,48,48	0
56	MG	2A	3476	1/1	0.94	0.12	67,67,67,67	0
56	MG	1A	3347	1/1	0.94	0.16	43,43,43,43	0
56	MG	2A	3076	1/1	0.94	0.12	50,50,50,50	0
56	MG	2A	3800	1/1	0.94	0.09	81,81,81,81	0
56	MG	2A	3077	1/1	0.94	0.24	52,52,52,52	0
56	MG	2A	3081	1/1	0.94	0.11	57,57,57,57	0
56	MG	2A	3283	1/1	0.94	0.12	60,60,60,60	0
56	MG	1A	3419	1/1	0.94	0.15	46,46,46,46	0
56	MG	1A	3234	1/1	0.94	0.18	47,47,47,47	0
56	MG	2A	3808	1/1	0.94	0.13	55,55,55,55	0
56	MG	2A	3086	1/1	0.94	0.13	64,64,64,64	0
56	MG	2A	3087	1/1	0.94	0.12	60,60,60,60	0
56	MG	1A	4018	1/1	0.94	0.08	43,43,43,43	0
56	MG	1a	1703	1/1	0.94	0.20	61,61,61,61	0
56	MG	1a	1704	1/1	0.94	0.28	69,69,69,69	0
56	MG	1P	206	1/1	0.94	0.17	48,48,48,48	0
56	MG	1Q	201	1/1	0.94	0.15	44,44,44,44	0
56	MG	1Q	205	1/1	0.94	0.13	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3095	1/1	0.94	0.12	51,51,51,51	0
56	MG	2a	1729	1/1	0.94	0.18	70,70,70,70	0
56	MG	1A	3421	1/1	0.94	0.15	43,43,43,43	0
56	MG	1R	204	1/1	0.94	0.10	35,35,35,35	0
56	MG	1A	3822	1/1	0.94	0.08	70,70,70,70	0
56	MG	2A	3833	1/1	0.94	0.10	63,63,63,63	0
56	MG	1A	3601	1/1	0.94	0.24	50,50,50,50	0
56	MG	1A	3135	1/1	0.94	0.14	40,40,40,40	0
56	MG	2A	3503	1/1	0.94	0.12	68,68,68,68	0
56	MG	1A	3293	1/1	0.94	0.24	69,69,69,69	0
56	MG	1A	3503	1/1	0.94	0.15	54,54,54,54	0
56	MG	1A	4032	1/1	0.94	0.09	57,57,57,57	0
56	MG	1A	3236	1/1	0.94	0.14	52,52,52,52	0
56	MG	1U	204	1/1	0.94	0.13	49,49,49,49	0
56	MG	1A	4034	1/1	0.94	0.09	53,53,53,53	0
56	MG	1A	3505	1/1	0.94	0.18	60,60,60,60	0
56	MG	1a	1728	1/1	0.94	0.08	60,60,60,60	0
56	MG	2A	3522	1/1	0.94	0.08	72,72,72,72	0
56	MG	2A	3528	1/1	0.94	0.20	69,69,69,69	0
56	MG	1a	1734	1/1	0.94	0.14	60,60,60,60	0
56	MG	1A	3508	1/1	0.94	0.14	38,38,38,38	0
56	MG	2A	3531	1/1	0.94	0.15	76,76,76,76	0
56	MG	1A	3078	1/1	0.94	0.33	52,52,52,52	0
56	MG	1W	201	1/1	0.94	0.26	54,54,54,54	0
56	MG	2a	1756	1/1	0.94	0.07	79,79,79,79	0
56	MG	1a	1739	1/1	0.94	0.13	56,56,56,56	0
56	MG	1A	3080	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	3016	1/1	0.94	0.20	57,57,57,57	0
56	MG	1A	3433	1/1	0.94	0.16	59,59,59,59	0
56	MG	1Y	202	1/1	0.94	0.08	74,74,74,74	0
56	MG	2A	3871	1/1	0.94	0.08	56,56,56,56	0
56	MG	2A	3123	1/1	0.94	0.16	63,63,63,63	0
56	MG	1A	3846	1/1	0.94	0.12	56,56,56,56	0
56	MG	1a	1751	1/1	0.94	0.21	66,66,66,66	0
56	MG	1A	3514	1/1	0.94	0.08	57,57,57,57	0
56	MG	2A	3564	1/1	0.94	0.09	40,40,40,40	0
56	MG	2a	1775	1/1	0.94	0.10	61,61,61,61	0
56	MG	1A	3018	1/1	0.94	0.13	42,42,42,42	0
56	MG	2A	3568	1/1	0.94	0.15	70,70,70,70	0
56	MG	1A	4054	1/1	0.94	0.05	38,38,38,38	0
56	MG	1A	3360	1/1	0.94	0.18	39,39,39,39	0
56	MG	2a	1781	1/1	0.94	0.07	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1784	1/1	0.94	0.12	76,76,76,76	0
56	MG	1A	3626	1/1	0.94	0.08	13,13,13,13	0
56	MG	2A	3575	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3301	1/1	0.94	0.15	59,59,59,59	0
56	MG	1A	3520	1/1	0.94	0.21	48,48,48,48	0
56	MG	1A	3187	1/1	0.94	0.12	50,50,50,50	0
56	MG	1A	3112	1/1	0.94	0.12	43,43,43,43	0
56	MG	1a	1766	1/1	0.94	0.13	67,67,67,67	0
56	MG	2a	1793	1/1	0.94	0.18	68,68,68,68	0
56	MG	2A	3138	1/1	0.94	0.19	52,52,52,52	0
56	MG	1A	3061	1/1	0.94	0.07	32,32,32,32	0
56	MG	1A	3859	1/1	0.94	0.14	44,44,44,44	0
56	MG	1A	3369	1/1	0.94	0.10	57,57,57,57	0
56	MG	2A	3144	1/1	0.94	0.12	46,46,46,46	0
56	MG	1A	3088	1/1	0.94	0.23	42,42,42,42	0
56	MG	1A	3528	1/1	0.94	0.12	59,59,59,59	0
56	MG	2D	301	1/1	0.94	0.12	51,51,51,51	0
56	MG	1A	3312	1/1	0.94	0.18	55,55,55,55	0
56	MG	1A	3252	1/1	0.94	0.20	42,42,42,42	0
56	MG	1A	3871	1/1	0.94	0.08	55,55,55,55	0
56	MG	1A	3872	1/1	0.94	0.09	51,51,51,51	0
56	MG	1A	3674	1/1	0.94	0.10	31,31,31,31	0
56	MG	1a	1802	1/1	0.94	0.09	69,69,69,69	0
56	MG	2E	306	1/1	0.94	0.08	44,44,44,44	0
56	MG	1A	3376	1/1	0.94	0.15	54,54,54,54	0
56	MG	2A	3155	1/1	0.94	0.12	70,70,70,70	0
56	MG	2a	1812	1/1	0.94	0.14	57,57,57,57	0
56	MG	2E	309	1/1	0.94	0.12	51,51,51,51	0
56	MG	2A	3156	1/1	0.94	0.10	59,59,59,59	0
56	MG	1A	3314	1/1	0.94	0.15	62,62,62,62	0
56	MG	2A	3158	1/1	0.94	0.21	45,45,45,45	0
56	MG	1A	3159	1/1	0.94	0.10	56,56,56,56	0
56	MG	1A	3701	1/1	0.94	0.12	69,69,69,69	0
56	MG	2N	201	1/1	0.94	0.06	65,65,65,65	0
56	MG	2O	201	1/1	0.94	0.09	65,65,65,65	0
56	MG	1A	3882	1/1	0.94	0.15	33,33,33,33	0
56	MG	2P	202	1/1	0.94	0.09	57,57,57,57	0
56	MG	1A	4092	1/1	0.94	0.15	49,49,49,49	0
56	MG	1A	3200	1/1	0.94	0.17	47,47,47,47	0
56	MG	1A	3712	1/1	0.94	0.10	50,50,50,50	0
56	MG	1a	1609	1/1	0.94	0.09	62,62,62,62	0
56	MG	2A	3629	1/1	0.94	0.14	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3631	1/1	0.94	0.18	51,51,51,51	0
56	MG	1a	1610	1/1	0.94	0.13	56,56,56,56	0
56	MG	1A	3887	1/1	0.94	0.23	42,42,42,42	0
56	MG	1A	3888	1/1	0.94	0.14	63,63,63,63	0
56	MG	1A	3890	1/1	0.94	0.10	51,51,51,51	0
56	MG	2a	1837	1/1	0.94	0.07	79,79,79,79	0
56	MG	1A	3892	1/1	0.94	0.06	19,19,19,19	0
56	MG	2X	101	1/1	0.94	0.11	72,72,72,72	0
56	MG	1A	3027	1/1	0.94	0.14	79,79,79,79	0
56	MG	1A	3381	1/1	0.94	0.07	47,47,47,47	0
56	MG	20	102	1/1	0.94	0.15	72,72,72,72	0
56	MG	2A	3646	1/1	0.94	0.17	56,56,56,56	0
56	MG	1a	1620	1/1	0.94	0.10	74,74,74,74	0
56	MG	1A	4102	1/1	0.94	0.26	55,55,55,55	0
56	MG	1a	1624	1/1	0.94	0.16	70,70,70,70	0
56	MG	2A	3650	1/1	0.94	0.22	55,55,55,55	0
56	MG	25	102	1/1	0.94	0.13	50,50,50,50	0
56	MG	1A	3906	1/1	0.94	0.15	37,37,37,37	0
56	MG	2l	204	1/1	0.94	0.10	80,80,80,80	0
56	MG	2A	3380	1/1	0.94	0.13	67,67,67,67	0
56	MG	1A	3382	1/1	0.94	0.15	29,29,29,29	0
56	MG	1A	3718	1/1	0.94	0.14	74,74,74,74	0
56	MG	1A	3464	1/1	0.94	0.10	61,61,61,61	0
56	MG	2A	3658	1/1	0.94	0.08	77,77,77,77	0
56	MG	2A	3186	1/1	0.94	0.27	69,69,69,69	0
56	MG	2v	103	1/1	0.94	0.14	76,76,76,76	0
56	MG	28	103	1/1	0.94	0.22	59,59,59,59	0
56	MG	2A	3660	1/1	0.94	0.13	72,72,72,72	0
56	MG	2A	3661	1/1	0.94	0.12	74,74,74,74	0
56	MG	2A	3188	1/1	0.94	0.20	64,64,64,64	0
56	MG	2a	1602	1/1	0.94	0.12	71,71,71,71	0
56	MG	1A	4109	1/1	0.94	0.19	52,52,52,52	0
56	MG	1A	3319	1/1	0.94	0.22	58,58,58,58	0
56	MG	1A	3320	1/1	0.94	0.05	31,31,31,31	0
56	MG	1a	1633	1/1	0.94	0.33	70,70,70,70	0
56	MG	2x	103	1/1	0.94	0.12	76,76,76,76	0
56	MG	2x	104	1/1	0.94	0.19	75,75,75,75	0
56	MG	2x	105	1/1	0.94	0.09	73,73,73,73	0
56	MG	1A	3327	1/1	0.94	0.08	47,47,47,47	0
56	MG	1B	204	1/1	0.94	0.24	60,60,60,60	0
56	MG	1x	106	1/1	0.94	0.15	62,62,62,62	0
56	MG	1A	3029	1/1	0.94	0.10	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1639	1/1	0.94	0.14	68,68,68,68	0
56	MG	1A	3926	1/1	0.94	0.17	38,38,38,38	0
56	MG	1A	3548	1/1	0.94	0.26	53,53,53,53	0
56	MG	1A	3091	1/1	0.94	0.17	46,46,46,46	0
56	MG	1A	3034	1/1	0.94	0.29	39,39,39,39	0
57	K	2A	3467	1/1	0.94	0.14	82,82,82,82	0
56	MG	1A	3891	1/1	0.95	0.07	48,48,48,48	0
56	MG	1A	3583	1/1	0.95	0.18	33,33,33,33	0
56	MG	1A	3894	1/1	0.95	0.12	35,35,35,35	0
56	MG	1w	108	1/1	0.95	0.09	76,76,76,76	0
56	MG	1A	3280	1/1	0.95	0.12	51,51,51,51	0
56	MG	1x	102	1/1	0.95	0.13	62,62,62,62	0
56	MG	1A	4096	1/1	0.95	0.06	42,42,42,42	0
56	MG	1A	3904	1/1	0.95	0.10	72,72,72,72	0
56	MG	1A	3449	1/1	0.95	0.17	50,50,50,50	0
56	MG	1A	3395	1/1	0.95	0.14	25,25,25,25	0
56	MG	1a	1622	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3721	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3907	1/1	0.95	0.11	55,55,55,55	0
56	MG	1A	3451	1/1	0.95	0.15	46,46,46,46	0
56	MG	1A	3100	1/1	0.95	0.10	43,43,43,43	0
56	MG	1A	3744	1/1	0.95	0.08	54,54,54,54	0
56	MG	1A	3515	1/1	0.95	0.10	51,51,51,51	0
56	MG	2A	3213	1/1	0.95	0.08	72,72,72,72	0
56	MG	1A	3283	1/1	0.95	0.14	35,35,35,35	0
56	MG	1A	3114	1/1	0.95	0.14	36,36,36,36	0
56	MG	2A	3216	1/1	0.95	0.25	60,60,60,60	0
56	MG	2A	3217	1/1	0.95	0.17	63,63,63,63	0
56	MG	1a	1631	1/1	0.95	0.19	70,70,70,70	0
56	MG	1A	3322	1/1	0.95	0.22	62,62,62,62	0
56	MG	1A	3359	1/1	0.95	0.18	71,71,71,71	0
56	MG	1A	3459	1/1	0.95	0.12	44,44,44,44	0
56	MG	1A	3460	1/1	0.95	0.07	56,56,56,56	0
56	MG	2A	3223	1/1	0.95	0.21	53,53,53,53	0
56	MG	1A	3759	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	3933	1/1	0.95	0.08	55,55,55,55	0
56	MG	1A	3934	1/1	0.95	0.08	30,30,30,30	0
56	MG	2A	3227	1/1	0.95	0.13	57,57,57,57	0
56	MG	1A	3761	1/1	0.95	0.11	37,37,37,37	0
56	MG	2A	3229	1/1	0.95	0.17	56,56,56,56	0
56	MG	2A	3014	1/1	0.95	0.10	51,51,51,51	0
56	MG	1A	3763	1/1	0.95	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3011	1/1	0.95	0.09	47,47,47,47	0
56	MG	1A	3947	1/1	0.95	0.06	59,59,59,59	0
56	MG	2A	3752	1/1	0.95	0.28	52,52,52,52	0
56	MG	1a	1645	1/1	0.95	0.26	71,71,71,71	0
56	MG	2A	3235	1/1	0.95	0.12	82,82,82,82	0
56	MG	1A	3405	1/1	0.95	0.18	38,38,38,38	0
56	MG	1A	3407	1/1	0.95	0.07	45,45,45,45	0
56	MG	2A	3757	1/1	0.95	0.08	65,65,65,65	0
56	MG	1A	3768	1/1	0.95	0.12	49,49,49,49	0
56	MG	2A	3450	1/1	0.95	0.25	62,62,62,62	0
56	MG	1A	3605	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3954	1/1	0.95	0.09	51,51,51,51	0
56	MG	1a	1652	1/1	0.95	0.06	62,62,62,62	0
56	MG	1B	219	1/1	0.95	0.10	42,42,42,42	0
56	MG	2A	3030	1/1	0.95	0.30	59,59,59,59	0
56	MG	1A	3083	1/1	0.95	0.13	36,36,36,36	0
56	MG	1A	3409	1/1	0.95	0.11	44,44,44,44	0
56	MG	1A	3290	1/1	0.95	0.12	48,48,48,48	0
56	MG	2A	3460	1/1	0.95	0.08	66,66,66,66	0
56	MG	1B	226	1/1	0.95	0.10	45,45,45,45	0
56	MG	2A	3777	1/1	0.95	0.07	64,64,64,64	0
56	MG	1A	3412	1/1	0.95	0.09	46,46,46,46	0
56	MG	1A	3364	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3790	1/1	0.95	0.10	53,53,53,53	0
56	MG	1A	3614	1/1	0.95	0.08	50,50,50,50	0
56	MG	1a	1664	1/1	0.95	0.26	75,75,75,75	0
56	MG	1a	1665	1/1	0.95	0.10	54,54,54,54	0
56	MG	1A	3365	1/1	0.95	0.10	57,57,57,57	0
56	MG	1A	3794	1/1	0.95	0.06	38,38,38,38	0
56	MG	1A	3797	1/1	0.95	0.06	43,43,43,43	0
56	MG	1A	3133	1/1	0.95	0.08	42,42,42,42	0
56	MG	1B	236	1/1	0.95	0.07	44,44,44,44	0
56	MG	1D	303	1/1	0.95	0.12	50,50,50,50	0
56	MG	1A	3035	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	3332	1/1	0.95	0.25	55,55,55,55	0
56	MG	1A	3807	1/1	0.95	0.07	43,43,43,43	0
56	MG	1a	1677	1/1	0.95	0.21	68,68,68,68	0
56	MG	1A	3980	1/1	0.95	0.09	61,61,61,61	0
56	MG	1A	3230	1/1	0.95	0.21	41,41,41,41	0
56	MG	1A	3540	1/1	0.95	0.24	42,42,42,42	0
56	MG	1A	3628	1/1	0.95	0.09	35,35,35,35	0
56	MG	1A	3541	1/1	0.95	0.18	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3988	1/1	0.95	0.09	66,66,66,66	0
56	MG	1A	3812	1/1	0.95	0.05	27,27,27,27	0
56	MG	1A	3990	1/1	0.95	0.11	69,69,69,69	0
56	MG	1A	3119	1/1	0.95	0.20	34,34,34,34	0
56	MG	1A	3543	1/1	0.95	0.20	46,46,46,46	0
56	MG	1E	316	1/1	0.95	0.11	54,54,54,54	0
56	MG	1a	1689	1/1	0.95	0.06	61,61,61,61	0
56	MG	2A	3494	1/1	0.95	0.07	39,39,39,39	0
56	MG	1A	3994	1/1	0.95	0.09	40,40,40,40	0
56	MG	1A	3199	1/1	0.95	0.10	49,49,49,49	0
56	MG	1F	311	1/1	0.95	0.13	37,37,37,37	0
56	MG	2A	3071	1/1	0.95	0.10	71,71,71,71	0
56	MG	2A	3072	1/1	0.95	0.19	58,58,58,58	0
56	MG	1F	312	1/1	0.95	0.10	53,53,53,53	0
56	MG	1A	3639	1/1	0.95	0.06	37,37,37,37	0
56	MG	1A	3820	1/1	0.95	0.13	53,53,53,53	0
56	MG	2A	3506	1/1	0.95	0.13	46,46,46,46	0
56	MG	1A	3640	1/1	0.95	0.05	24,24,24,24	0
56	MG	1A	4002	1/1	0.95	0.10	39,39,39,39	0
56	MG	2A	3511	1/1	0.95	0.07	31,31,31,31	0
56	MG	1A	4003	1/1	0.95	0.13	52,52,52,52	0
56	MG	2A	3516	1/1	0.95	0.11	61,61,61,61	0
56	MG	1A	3641	1/1	0.95	0.06	30,30,30,30	0
56	MG	1A	3824	1/1	0.95	0.10	32,32,32,32	0
56	MG	1A	4007	1/1	0.95	0.09	20,20,20,20	0
56	MG	1A	3826	1/1	0.95	0.30	32,32,32,32	0
56	MG	2A	3525	1/1	0.95	0.08	49,49,49,49	0
56	MG	1O	203	1/1	0.95	0.17	60,60,60,60	0
56	MG	2A	3853	1/1	0.95	0.10	58,58,58,58	0
56	MG	1A	3829	1/1	0.95	0.06	21,21,21,21	0
56	MG	1A	3375	1/1	0.95	0.11	43,43,43,43	0
56	MG	2A	3857	1/1	0.95	0.15	71,71,71,71	0
56	MG	1A	3261	1/1	0.95	0.05	36,36,36,36	0
56	MG	1P	201	1/1	0.95	0.37	37,37,37,37	0
56	MG	2A	3093	1/1	0.95	0.20	51,51,51,51	0
56	MG	1P	203	1/1	0.95	0.23	35,35,35,35	0
56	MG	1P	204	1/1	0.95	0.14	34,34,34,34	0
56	MG	2a	1751	1/1	0.95	0.10	65,65,65,65	0
56	MG	2a	1753	1/1	0.95	0.06	72,72,72,72	0
56	MG	1A	3834	1/1	0.95	0.06	40,40,40,40	0
56	MG	1A	4016	1/1	0.95	0.06	27,27,27,27	0
56	MG	1A	3121	1/1	0.95	0.10	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3653	1/1	0.95	0.15	28,28,28,28	0
56	MG	2a	1760	1/1	0.95	0.15	68,68,68,68	0
56	MG	2A	3557	1/1	0.95	0.15	52,52,52,52	0
56	MG	1R	201	1/1	0.95	0.19	53,53,53,53	0
56	MG	2a	1765	1/1	0.95	0.07	82,82,82,82	0
56	MG	2A	3307	1/1	0.95	0.19	72,72,72,72	0
56	MG	1a	1718	1/1	0.95	0.28	58,58,58,58	0
56	MG	1a	1719	1/1	0.95	0.14	63,63,63,63	0
56	MG	2A	3565	1/1	0.95	0.09	60,60,60,60	0
56	MG	1A	4021	1/1	0.95	0.07	45,45,45,45	0
56	MG	2A	3104	1/1	0.95	0.08	35,35,35,35	0
56	MG	1A	3655	1/1	0.95	0.07	33,33,33,33	0
56	MG	1A	4025	1/1	0.95	0.08	53,53,53,53	0
56	MG	1A	3657	1/1	0.95	0.06	31,31,31,31	0
56	MG	2A	3574	1/1	0.95	0.14	49,49,49,49	0
56	MG	1a	1725	1/1	0.95	0.17	68,68,68,68	0
56	MG	1A	3424	1/1	0.95	0.12	58,58,58,58	0
56	MG	1A	4029	1/1	0.95	0.12	55,55,55,55	0
56	MG	2a	1782	1/1	0.95	0.12	69,69,69,69	0
56	MG	2A	3112	1/1	0.95	0.16	55,55,55,55	0
56	MG	2A	3581	1/1	0.95	0.09	63,63,63,63	0
56	MG	1a	1730	1/1	0.95	0.08	51,51,51,51	0
56	MG	1A	3659	1/1	0.95	0.08	49,49,49,49	0
56	MG	1A	3842	1/1	0.95	0.07	67,67,67,67	0
56	MG	2A	3324	1/1	0.95	0.15	64,64,64,64	0
56	MG	1U	203	1/1	0.95	0.26	34,34,34,34	0
56	MG	2a	1791	1/1	0.95	0.15	70,70,70,70	0
56	MG	1a	1737	1/1	0.95	0.11	70,70,70,70	0
56	MG	1A	3425	1/1	0.95	0.14	50,50,50,50	0
56	MG	2A	3120	1/1	0.95	0.10	50,50,50,50	0
56	MG	1A	3665	1/1	0.95	0.11	54,54,54,54	0
56	MG	1A	3666	1/1	0.95	0.07	38,38,38,38	0
56	MG	1A	4036	1/1	0.95	0.06	49,49,49,49	0
56	MG	2A	3124	1/1	0.95	0.21	68,68,68,68	0
56	MG	1A	3551	1/1	0.95	0.07	29,29,29,29	0
56	MG	2A	3606	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3334	1/1	0.95	0.12	66,66,66,66	0
56	MG	2a	1802	1/1	0.95	0.19	72,72,72,72	0
56	MG	1A	3485	1/1	0.95	0.09	56,56,56,56	0
56	MG	1A	3682	1/1	0.95	0.05	21,21,21,21	0
56	MG	1a	1749	1/1	0.95	0.14	47,47,47,47	0
56	MG	2A	3338	1/1	0.95	0.15	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4042	1/1	0.95	0.06	55,55,55,55	0
56	MG	2A	3615	1/1	0.95	0.12	53,53,53,53	0
56	MG	1X	101	1/1	0.95	0.29	48,48,48,48	0
56	MG	1X	104	1/1	0.95	0.26	50,50,50,50	0
56	MG	1X	105	1/1	0.95	0.08	46,46,46,46	0
56	MG	1A	3426	1/1	0.95	0.09	51,51,51,51	0
56	MG	1A	3688	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	3487	1/1	0.95	0.11	42,42,42,42	0
56	MG	1a	1760	1/1	0.95	0.10	67,67,67,67	0
56	MG	1A	4047	1/1	0.95	0.05	34,34,34,34	0
56	MG	1A	3692	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3006	1/1	0.95	0.10	60,60,60,60	0
56	MG	1A	3697	1/1	0.95	0.10	37,37,37,37	0
56	MG	2A	3636	1/1	0.95	0.13	60,60,60,60	0
56	MG	1a	1768	1/1	0.95	0.06	76,76,76,76	0
56	MG	1a	1769	1/1	0.95	0.09	85,85,85,85	0
56	MG	1A	3698	1/1	0.95	0.13	29,29,29,29	0
56	MG	2V	202	1/1	0.95	0.09	69,69,69,69	0
56	MG	10	104	1/1	0.95	0.12	50,50,50,50	0
56	MG	2a	1826	1/1	0.95	0.11	75,75,75,75	0
56	MG	1a	1776	1/1	0.95	0.08	69,69,69,69	0
56	MG	1a	1777	1/1	0.95	0.08	73,73,73,73	0
56	MG	2a	1829	1/1	0.95	0.14	68,68,68,68	0
56	MG	2A	3150	1/1	0.95	0.09	53,53,53,53	0
56	MG	1A	3428	1/1	0.95	0.07	46,46,46,46	0
56	MG	2a	1832	1/1	0.95	0.24	72,72,72,72	0
56	MG	1A	3863	1/1	0.95	0.07	61,61,61,61	0
56	MG	1A	3706	1/1	0.95	0.12	27,27,27,27	0
56	MG	1A	3557	1/1	0.95	0.28	64,64,64,64	0
56	MG	2A	3365	1/1	0.95	0.14	72,72,72,72	0
56	MG	2A	3366	1/1	0.95	0.12	64,64,64,64	0
56	MG	11	103	1/1	0.95	0.07	44,44,44,44	0
56	MG	1a	1790	1/1	0.95	0.08	81,81,81,81	0
56	MG	1a	1793	1/1	0.95	0.09	78,78,78,78	0
56	MG	11	104	1/1	0.95	0.06	55,55,55,55	0
56	MG	1A	4062	1/1	0.95	0.11	65,65,65,65	0
56	MG	2A	3160	1/1	0.95	0.14	70,70,70,70	0
56	MG	12	101	1/1	0.95	0.08	58,58,58,58	0
56	MG	12	102	1/1	0.95	0.12	48,48,48,48	0
56	MG	1a	1804	1/1	0.95	0.06	58,58,58,58	0
56	MG	1A	3710	1/1	0.95	0.05	29,29,29,29	0
56	MG	2A	3378	1/1	0.95	0.06	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3206	1/1	0.95	0.10	29,29,29,29	0
56	MG	1A	3123	1/1	0.95	0.29	48,48,48,48	0
56	MG	2A	3670	1/1	0.95	0.10	63,63,63,63	0
56	MG	2q	203	1/1	0.95	0.11	71,71,71,71	0
56	MG	15	101	1/1	0.95	0.13	39,39,39,39	0
56	MG	2A	3169	1/1	0.95	0.07	65,65,65,65	0
56	MG	1a	1809	1/1	0.95	0.20	72,72,72,72	0
56	MG	1a	1810	1/1	0.95	0.14	65,65,65,65	0
56	MG	1A	3107	1/1	0.95	0.13	33,33,33,33	0
56	MG	2A	3678	1/1	0.95	0.16	66,66,66,66	0
56	MG	2A	3386	1/1	0.95	0.19	71,71,71,71	0
56	MG	2A	3387	1/1	0.95	0.15	66,66,66,66	0
56	MG	15	104	1/1	0.95	0.13	29,29,29,29	0
56	MG	1A	3239	1/1	0.95	0.24	37,37,37,37	0
56	MG	15	106	1/1	0.95	0.06	56,56,56,56	0
56	MG	1A	3309	1/1	0.95	0.41	62,62,62,62	0
56	MG	1A	3066	1/1	0.95	0.24	63,63,63,63	0
56	MG	1A	3213	1/1	0.95	0.13	46,46,46,46	0
56	MG	1A	3150	1/1	0.95	0.16	32,32,32,32	0
56	MG	1A	3880	1/1	0.95	0.05	41,41,41,41	0
56	MG	2A	3694	1/1	0.95	0.11	54,54,54,54	0
56	MG	1A	3722	1/1	0.95	0.19	55,55,55,55	0
56	MG	1A	3884	1/1	0.95	0.26	40,40,40,40	0
56	MG	1A	3315	1/1	0.95	0.09	50,50,50,50	0
56	MG	1A	4082	1/1	0.95	0.10	47,47,47,47	0
56	MG	1A	3389	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	3126	1/1	0.95	0.34	40,40,40,40	0
56	MG	2A	3702	1/1	0.95	0.06	36,36,36,36	0
56	MG	1A	4088	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3393	1/1	0.95	0.33	32,32,32,32	0
56	MG	1A	3509	1/1	0.95	0.16	48,48,48,48	0
59	ZN	14	102	1/1	0.95	0.13	110,110,110,110	0
59	ZN	24	501	1/1	0.95	0.16	136,136,136,136	0
59	ZN	2n	501	1/1	0.95	0.08	108,108,108,108	0
56	MG	1A	3183	1/1	0.96	0.12	48,48,48,48	0
56	MG	1A	3137	1/1	0.96	0.14	31,31,31,31	0
56	MG	2A	3422	1/1	0.96	0.31	49,49,49,49	0
56	MG	1D	306	1/1	0.96	0.10	38,38,38,38	0
56	MG	1A	3984	1/1	0.96	0.10	45,45,45,45	0
56	MG	1D	310	1/1	0.96	0.11	29,29,29,29	0
56	MG	1A	3821	1/1	0.96	0.06	64,64,64,64	0
56	MG	1A	3410	1/1	0.96	0.07	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3005	1/1	0.96	0.12	45,45,45,45	0
56	MG	1A	3116	1/1	0.96	0.07	47,47,47,47	0
56	MG	1A	3663	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3827	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3292	1/1	0.96	0.15	49,49,49,49	0
56	MG	1A	3142	1/1	0.96	0.06	24,24,24,24	0
56	MG	1E	309	1/1	0.96	0.09	34,34,34,34	0
56	MG	1A	3667	1/1	0.96	0.05	34,34,34,34	0
56	MG	1A	3144	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3237	1/1	0.96	0.14	57,57,57,57	0
56	MG	1a	1670	1/1	0.96	0.18	59,59,59,59	0
56	MG	1E	312	1/1	0.96	0.07	25,25,25,25	0
56	MG	2A	3720	1/1	0.96	0.08	43,43,43,43	0
56	MG	1A	3030	1/1	0.96	0.32	32,32,32,32	0
56	MG	1E	315	1/1	0.96	0.19	41,41,41,41	0
56	MG	1A	3240	1/1	0.96	0.24	38,38,38,38	0
56	MG	1F	302	1/1	0.96	0.19	36,36,36,36	0
56	MG	1A	3191	1/1	0.96	0.28	41,41,41,41	0
56	MG	1A	3193	1/1	0.96	0.12	57,57,57,57	0
56	MG	1A	3244	1/1	0.96	0.21	33,33,33,33	0
56	MG	1A	3361	1/1	0.96	0.09	58,58,58,58	0
56	MG	2a	1648	1/1	0.96	0.17	72,72,72,72	0
56	MG	1A	3069	1/1	0.96	0.17	59,59,59,59	0
56	MG	1A	3092	1/1	0.96	0.14	48,48,48,48	0
56	MG	2A	3049	1/1	0.96	0.12	39,39,39,39	0
56	MG	1A	3151	1/1	0.96	0.15	41,41,41,41	0
56	MG	1G	204	1/1	0.96	0.05	67,67,67,67	0
56	MG	1A	3564	1/1	0.96	0.17	32,32,32,32	0
56	MG	1A	3705	1/1	0.96	0.08	34,34,34,34	0
56	MG	1N	201	1/1	0.96	0.17	48,48,48,48	0
56	MG	2A	3739	1/1	0.96	0.04	76,76,76,76	0
56	MG	1A	3093	1/1	0.96	0.12	59,59,59,59	0
56	MG	1N	203	1/1	0.96	0.07	35,35,35,35	0
56	MG	1A	3495	1/1	0.96	0.10	47,47,47,47	0
56	MG	1A	3366	1/1	0.96	0.09	55,55,55,55	0
56	MG	1A	3570	1/1	0.96	0.18	36,36,36,36	0
56	MG	1O	202	1/1	0.96	0.10	55,55,55,55	0
56	MG	2A	3061	1/1	0.96	0.17	69,69,69,69	0
56	MG	1A	3201	1/1	0.96	0.15	45,45,45,45	0
56	MG	1A	3572	1/1	0.96	0.35	70,70,70,70	0
56	MG	1A	3204	1/1	0.96	0.08	34,34,34,34	0
56	MG	2A	3750	1/1	0.96	0.09	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3254	1/1	0.96	0.16	54,54,54,54	0
56	MG	1A	3500	1/1	0.96	0.15	44,44,44,44	0
56	MG	1A	4028	1/1	0.96	0.06	58,58,58,58	0
56	MG	1A	3861	1/1	0.96	0.09	40,40,40,40	0
56	MG	2a	1673	1/1	0.96	0.07	73,73,73,73	0
56	MG	1A	3156	1/1	0.96	0.17	48,48,48,48	0
56	MG	1A	3580	1/1	0.96	0.23	42,42,42,42	0
56	MG	1A	3865	1/1	0.96	0.07	25,25,25,25	0
56	MG	2a	1677	1/1	0.96	0.18	57,57,57,57	0
56	MG	1A	3502	1/1	0.96	0.05	45,45,45,45	0
56	MG	1A	3431	1/1	0.96	0.21	45,45,45,45	0
56	MG	1R	203	1/1	0.96	0.26	41,41,41,41	0
56	MG	2A	3480	1/1	0.96	0.07	44,44,44,44	0
56	MG	2A	3763	1/1	0.96	0.08	49,49,49,49	0
56	MG	1A	3726	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3073	1/1	0.96	0.16	35,35,35,35	0
56	MG	2A	3767	1/1	0.96	0.20	62,62,62,62	0
56	MG	2A	3768	1/1	0.96	0.07	74,74,74,74	0
56	MG	2A	3769	1/1	0.96	0.10	74,74,74,74	0
56	MG	2A	3078	1/1	0.96	0.09	56,56,56,56	0
56	MG	1A	3587	1/1	0.96	0.17	39,39,39,39	0
56	MG	1A	3207	1/1	0.96	0.12	40,40,40,40	0
56	MG	1A	3506	1/1	0.96	0.17	36,36,36,36	0
56	MG	1A	3874	1/1	0.96	0.20	62,62,62,62	0
56	MG	2a	1694	1/1	0.96	0.18	69,69,69,69	0
56	MG	1A	4044	1/1	0.96	0.11	56,56,56,56	0
56	MG	1A	3507	1/1	0.96	0.15	34,34,34,34	0
56	MG	1A	3053	1/1	0.96	0.08	51,51,51,51	0
56	MG	1a	1717	1/1	0.96	0.36	54,54,54,54	0
56	MG	1A	3097	1/1	0.96	0.17	44,44,44,44	0
56	MG	1A	3738	1/1	0.96	0.06	50,50,50,50	0
56	MG	1U	207	1/1	0.96	0.26	42,42,42,42	0
56	MG	1U	209	1/1	0.96	0.15	35,35,35,35	0
56	MG	1A	4049	1/1	0.96	0.05	53,53,53,53	0
56	MG	2A	3786	1/1	0.96	0.06	46,46,46,46	0
56	MG	2A	3787	1/1	0.96	0.06	65,65,65,65	0
56	MG	1V	203	1/1	0.96	0.21	57,57,57,57	0
56	MG	1A	3023	1/1	0.96	0.05	22,22,22,22	0
56	MG	1a	1726	1/1	0.96	0.07	66,66,66,66	0
56	MG	1A	3881	1/1	0.96	0.11	37,37,37,37	0
56	MG	1A	4053	1/1	0.96	0.07	27,27,27,27	0
56	MG	1a	1729	1/1	0.96	0.09	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3042	1/1	0.96	0.21	37,37,37,37	0
56	MG	1W	203	1/1	0.96	0.22	37,37,37,37	0
56	MG	1A	3439	1/1	0.96	0.06	48,48,48,48	0
56	MG	2A	3509	1/1	0.96	0.11	41,41,41,41	0
56	MG	2a	1716	1/1	0.96	0.11	75,75,75,75	0
56	MG	1A	3599	1/1	0.96	0.23	41,41,41,41	0
56	MG	2A	3303	1/1	0.96	0.11	64,64,64,64	0
56	MG	2A	3515	1/1	0.96	0.10	62,62,62,62	0
56	MG	1X	103	1/1	0.96	0.07	45,45,45,45	0
56	MG	2A	3517	1/1	0.96	0.07	64,64,64,64	0
56	MG	2A	3107	1/1	0.96	0.15	52,52,52,52	0
56	MG	2A	3806	1/1	0.96	0.08	65,65,65,65	0
56	MG	1A	3321	1/1	0.96	0.12	50,50,50,50	0
56	MG	1A	3747	1/1	0.96	0.10	46,46,46,46	0
56	MG	1X	107	1/1	0.96	0.11	61,61,61,61	0
56	MG	2A	3524	1/1	0.96	0.12	65,65,65,65	0
56	MG	1A	3102	1/1	0.96	0.07	52,52,52,52	0
56	MG	2A	3818	1/1	0.96	0.09	51,51,51,51	0
56	MG	2A	3526	1/1	0.96	0.08	48,48,48,48	0
56	MG	2A	3820	1/1	0.96	0.12	54,54,54,54	0
56	MG	1A	3750	1/1	0.96	0.06	21,21,21,21	0
56	MG	1A	3324	1/1	0.96	0.27	36,36,36,36	0
56	MG	1A	3753	1/1	0.96	0.06	20,20,20,20	0
56	MG	1A	4066	1/1	0.96	0.11	37,37,37,37	0
56	MG	1A	3079	1/1	0.96	0.14	43,43,43,43	0
56	MG	10	101	1/1	0.96	0.15	46,46,46,46	0
56	MG	2A	3534	1/1	0.96	0.12	55,55,55,55	0
56	MG	1A	3895	1/1	0.96	0.11	34,34,34,34	0
56	MG	1A	3896	1/1	0.96	0.09	41,41,41,41	0
56	MG	2A	3539	1/1	0.96	0.08	41,41,41,41	0
56	MG	2A	3318	1/1	0.96	0.27	77,77,77,77	0
56	MG	2A	3839	1/1	0.96	0.06	65,65,65,65	0
56	MG	2A	3840	1/1	0.96	0.07	38,38,38,38	0
56	MG	2A	3543	1/1	0.96	0.06	53,53,53,53	0
56	MG	1A	3755	1/1	0.96	0.08	62,62,62,62	0
56	MG	2A	3547	1/1	0.96	0.07	55,55,55,55	0
56	MG	2A	3550	1/1	0.96	0.12	53,53,53,53	0
56	MG	1A	3056	1/1	0.96	0.05	32,32,32,32	0
56	MG	1A	3057	1/1	0.96	0.22	50,50,50,50	0
56	MG	2A	3848	1/1	0.96	0.07	55,55,55,55	0
56	MG	2a	1752	1/1	0.96	0.07	75,75,75,75	0
56	MG	2A	3555	1/1	0.96	0.07	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3220	1/1	0.96	0.12	55,55,55,55	0
56	MG	1A	3222	1/1	0.96	0.17	46,46,46,46	0
56	MG	11	101	1/1	0.96	0.42	45,45,45,45	0
56	MG	2a	1758	1/1	0.96	0.07	75,75,75,75	0
56	MG	1A	3760	1/1	0.96	0.04	42,42,42,42	0
56	MG	1A	3271	1/1	0.96	0.10	47,47,47,47	0
56	MG	2A	3856	1/1	0.96	0.09	70,70,70,70	0
56	MG	1a	1767	1/1	0.96	0.07	71,71,71,71	0
56	MG	2a	1764	1/1	0.96	0.06	71,71,71,71	0
56	MG	1A	3911	1/1	0.96	0.16	47,47,47,47	0
56	MG	2A	3859	1/1	0.96	0.09	70,70,70,70	0
56	MG	2A	3860	1/1	0.96	0.06	60,60,60,60	0
56	MG	1A	4084	1/1	0.96	0.13	57,57,57,57	0
56	MG	2a	1769	1/1	0.96	0.19	62,62,62,62	0
56	MG	1A	3045	1/1	0.96	0.13	40,40,40,40	0
56	MG	13	101	1/1	0.96	0.07	36,36,36,36	0
56	MG	1a	1774	1/1	0.96	0.08	62,62,62,62	0
56	MG	1A	3914	1/1	0.96	0.19	21,21,21,21	0
56	MG	1A	4087	1/1	0.96	0.08	23,23,23,23	0
56	MG	1A	3525	1/1	0.96	0.26	45,45,45,45	0
56	MG	1A	3334	1/1	0.96	0.12	45,45,45,45	0
56	MG	2A	3141	1/1	0.96	0.20	54,54,54,54	0
56	MG	1A	3616	1/1	0.96	0.09	46,46,46,46	0
56	MG	2A	3583	1/1	0.96	0.12	57,57,57,57	0
56	MG	15	103	1/1	0.96	0.28	31,31,31,31	0
56	MG	2a	1783	1/1	0.96	0.11	63,63,63,63	0
56	MG	1a	1784	1/1	0.96	0.06	76,76,76,76	0
56	MG	1A	3921	1/1	0.96	0.24	39,39,39,39	0
56	MG	2A	3589	1/1	0.96	0.19	68,68,68,68	0
56	MG	1A	3924	1/1	0.96	0.08	24,24,24,24	0
56	MG	2A	3593	1/1	0.96	0.20	60,60,60,60	0
56	MG	2A	3344	1/1	0.96	0.08	67,67,67,67	0
56	MG	1a	1791	1/1	0.96	0.06	76,76,76,76	0
56	MG	1A	3767	1/1	0.96	0.07	20,20,20,20	0
56	MG	1A	3392	1/1	0.96	0.09	49,49,49,49	0
56	MG	17	102	1/1	0.96	0.15	34,34,34,34	0
56	MG	17	103	1/1	0.96	0.12	40,40,40,40	0
56	MG	1a	1799	1/1	0.96	0.06	87,87,87,87	0
56	MG	17	104	1/1	0.96	0.11	57,57,57,57	0
56	MG	1a	1803	1/1	0.96	0.11	72,72,72,72	0
56	MG	2A	3605	1/1	0.96	0.12	55,55,55,55	0
56	MG	18	101	1/1	0.96	0.28	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	18	103	1/1	0.96	0.15	42,42,42,42	0
56	MG	1A	3770	1/1	0.96	0.09	24,24,24,24	0
56	MG	2A	3609	1/1	0.96	0.08	41,41,41,41	0
56	MG	1A	3928	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	3771	1/1	0.96	0.06	39,39,39,39	0
56	MG	2D	302	1/1	0.96	0.11	54,54,54,54	0
56	MG	1A	3931	1/1	0.96	0.05	47,47,47,47	0
56	MG	1A	3225	1/1	0.96	0.11	37,37,37,37	0
56	MG	2D	306	1/1	0.96	0.14	65,65,65,65	0
56	MG	2A	3361	1/1	0.96	0.17	67,67,67,67	0
56	MG	1A	3777	1/1	0.96	0.08	34,34,34,34	0
56	MG	1A	3001	1/1	0.96	0.17	45,45,45,45	0
56	MG	2E	304	1/1	0.96	0.26	56,56,56,56	0
56	MG	1A	3935	1/1	0.96	0.08	53,53,53,53	0
56	MG	2A	3619	1/1	0.96	0.09	44,44,44,44	0
56	MG	2A	3165	1/1	0.96	0.18	54,54,54,54	0
56	MG	1A	3937	1/1	0.96	0.06	42,42,42,42	0
56	MG	2A	3623	1/1	0.96	0.09	51,51,51,51	0
56	MG	2E	310	1/1	0.96	0.10	71,71,71,71	0
56	MG	1A	3530	1/1	0.96	0.07	48,48,48,48	0
56	MG	1a	1607	1/1	0.96	0.09	56,56,56,56	0
56	MG	1f	201	1/1	0.96	0.14	60,60,60,60	0
56	MG	2A	3170	1/1	0.96	0.11	67,67,67,67	0
56	MG	2F	306	1/1	0.96	0.14	57,57,57,57	0
56	MG	1A	4107	1/1	0.96	0.07	51,51,51,51	0
56	MG	2A	3632	1/1	0.96	0.19	53,53,53,53	0
56	MG	1A	3275	1/1	0.96	0.08	37,37,37,37	0
56	MG	1k	201	1/1	0.96	0.12	48,48,48,48	0
56	MG	1A	3943	1/1	0.96	0.06	42,42,42,42	0
56	MG	2A	3638	1/1	0.96	0.13	44,44,44,44	0
56	MG	2Q	202	1/1	0.96	0.11	55,55,55,55	0
56	MG	2A	3639	1/1	0.96	0.08	54,54,54,54	0
56	MG	2Q	204	1/1	0.96	0.09	70,70,70,70	0
56	MG	1A	3276	1/1	0.96	0.13	50,50,50,50	0
56	MG	2A	3641	1/1	0.96	0.08	50,50,50,50	0
56	MG	1m	3002	1/1	0.96	0.15	67,67,67,67	0
56	MG	1a	1613	1/1	0.96	0.10	69,69,69,69	0
56	MG	1A	3946	1/1	0.96	0.04	36,36,36,36	0
56	MG	1A	3785	1/1	0.96	0.07	47,47,47,47	0
56	MG	1A	3462	1/1	0.96	0.14	45,45,45,45	0
56	MG	1v	102	1/1	0.96	0.05	63,63,63,63	0
56	MG	1A	3789	1/1	0.96	0.07	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3278	1/1	0.96	0.07	43,43,43,43	0
56	MG	1a	1619	1/1	0.96	0.06	45,45,45,45	0
56	MG	1A	3340	1/1	0.96	0.07	42,42,42,42	0
56	MG	2A	3189	1/1	0.96	0.06	55,55,55,55	0
56	MG	1A	3465	1/1	0.96	0.10	47,47,47,47	0
56	MG	1A	3956	1/1	0.96	0.06	51,51,51,51	0
56	MG	1a	1623	1/1	0.96	0.33	65,65,65,65	0
56	MG	1A	3634	1/1	0.96	0.09	54,54,54,54	0
56	MG	1A	3959	1/1	0.96	0.10	54,54,54,54	0
56	MG	1A	3960	1/1	0.96	0.05	51,51,51,51	0
56	MG	1A	3961	1/1	0.96	0.07	52,52,52,52	0
56	MG	1B	216	1/1	0.96	0.12	54,54,54,54	0
56	MG	2A	3396	1/1	0.96	0.09	73,73,73,73	0
56	MG	1A	3537	1/1	0.96	0.09	53,53,53,53	0
56	MG	27	101	1/1	0.96	0.20	50,50,50,50	0
56	MG	1A	3637	1/1	0.96	0.09	49,49,49,49	0
56	MG	2A	3667	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	3800	1/1	0.96	0.18	53,53,53,53	0
56	MG	1A	3400	1/1	0.96	0.10	58,58,58,58	0
56	MG	1A	3967	1/1	0.96	0.05	36,36,36,36	0
56	MG	28	104	1/1	0.96	0.07	59,59,59,59	0
56	MG	1A	3175	1/1	0.96	0.40	36,36,36,36	0
56	MG	1B	223	1/1	0.96	0.16	57,57,57,57	0
56	MG	1B	224	1/1	0.96	0.07	51,51,51,51	0
56	MG	1B	225	1/1	0.96	0.11	60,60,60,60	0
56	MG	1A	3969	1/1	0.96	0.05	24,24,24,24	0
56	MG	1A	3179	1/1	0.96	0.09	23,23,23,23	0
56	MG	2A	3679	1/1	0.96	0.06	55,55,55,55	0
56	MG	2A	3210	1/1	0.96	0.13	57,57,57,57	0
56	MG	2A	3002	1/1	0.96	0.26	63,63,63,63	0
56	MG	1A	3643	1/1	0.96	0.14	63,63,63,63	0
56	MG	1A	3644	1/1	0.96	0.09	38,38,38,38	0
56	MG	2A	3412	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3646	1/1	0.96	0.08	49,49,49,49	0
56	MG	1A	3647	1/1	0.96	0.10	39,39,39,39	0
56	MG	1A	3047	1/1	0.96	0.07	42,42,42,42	0
56	MG	1a	1647	1/1	0.96	0.07	58,58,58,58	0
56	MG	1A	3284	1/1	0.96	0.36	44,44,44,44	0
56	MG	2A	3691	1/1	0.96	0.10	70,70,70,70	0
56	MG	1A	3406	1/1	0.96	0.28	46,46,46,46	0
56	MG	1A	3049	1/1	0.96	0.04	20,20,20,20	0
56	MG	1A	3550	1/1	0.97	0.27	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3553	1/1	0.97	0.14	42,42,42,42	0
56	MG	1A	3374	1/1	0.97	0.17	53,53,53,53	0
56	MG	1A	3899	1/1	0.97	0.07	23,23,23,23	0
56	MG	1A	3488	1/1	0.97	0.11	50,50,50,50	0
56	MG	1A	3902	1/1	0.97	0.04	28,28,28,28	0
56	MG	1A	3323	1/1	0.97	0.16	36,36,36,36	0
56	MG	2A	3560	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	4051	1/1	0.97	0.12	30,30,30,30	0
56	MG	1A	3772	1/1	0.97	0.05	26,26,26,26	0
56	MG	1A	3774	1/1	0.97	0.08	26,26,26,26	0
56	MG	2A	3566	1/1	0.97	0.08	44,44,44,44	0
56	MG	1A	3490	1/1	0.97	0.21	39,39,39,39	0
56	MG	1a	1666	1/1	0.97	0.05	73,73,73,73	0
56	MG	2A	3569	1/1	0.97	0.08	48,48,48,48	0
56	MG	2A	3178	1/1	0.97	0.13	45,45,45,45	0
56	MG	1A	4055	1/1	0.97	0.05	54,54,54,54	0
56	MG	1A	3776	1/1	0.97	0.09	43,43,43,43	0
56	MG	1A	4058	1/1	0.97	0.06	29,29,29,29	0
56	MG	1A	3163	1/1	0.97	0.26	33,33,33,33	0
56	MG	1A	3778	1/1	0.97	0.07	35,35,35,35	0
56	MG	1Q	204	1/1	0.97	0.12	58,58,58,58	0
56	MG	2A	3578	1/1	0.97	0.07	36,36,36,36	0
56	MG	2a	1680	1/1	0.97	0.10	56,56,56,56	0
56	MG	2A	3807	1/1	0.97	0.05	60,60,60,60	0
56	MG	2A	3185	1/1	0.97	0.07	51,51,51,51	0
56	MG	2A	3809	1/1	0.97	0.09	68,68,68,68	0
56	MG	2A	3580	1/1	0.97	0.14	59,59,59,59	0
56	MG	2A	3811	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3326	1/1	0.97	0.15	45,45,45,45	0
56	MG	2A	3582	1/1	0.97	0.14	64,64,64,64	0
56	MG	2A	3187	1/1	0.97	0.08	61,61,61,61	0
56	MG	1A	3132	1/1	0.97	0.12	42,42,42,42	0
56	MG	1A	3007	1/1	0.97	0.05	34,34,34,34	0
56	MG	1R	202	1/1	0.97	0.21	37,37,37,37	0
56	MG	1A	3277	1/1	0.97	0.13	30,30,30,30	0
56	MG	2A	3825	1/1	0.97	0.06	55,55,55,55	0
56	MG	2A	3374	1/1	0.97	0.15	70,70,70,70	0
56	MG	1A	3094	1/1	0.97	0.07	32,32,32,32	0
56	MG	1A	3435	1/1	0.97	0.10	55,55,55,55	0
56	MG	1A	3656	1/1	0.97	0.04	32,32,32,32	0
56	MG	2A	3012	1/1	0.97	0.06	49,49,49,49	0
56	MG	2A	3831	1/1	0.97	0.06	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3597	1/1	0.97	0.06	43,43,43,43	0
56	MG	2A	3013	1/1	0.97	0.14	55,55,55,55	0
56	MG	1A	3021	1/1	0.97	0.06	30,30,30,30	0
56	MG	2A	3015	1/1	0.97	0.07	54,54,54,54	0
56	MG	1A	3563	1/1	0.97	0.24	41,41,41,41	0
56	MG	1A	3168	1/1	0.97	0.05	32,32,32,32	0
56	MG	1A	3793	1/1	0.97	0.10	57,57,57,57	0
56	MG	1A	4074	1/1	0.97	0.06	41,41,41,41	0
56	MG	1A	3060	1/1	0.97	0.12	54,54,54,54	0
56	MG	1A	3796	1/1	0.97	0.04	38,38,38,38	0
56	MG	1A	3662	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3798	1/1	0.97	0.04	25,25,25,25	0
56	MG	2A	3846	1/1	0.97	0.06	48,48,48,48	0
56	MG	1U	208	1/1	0.97	0.21	36,36,36,36	0
56	MG	2A	3026	1/1	0.97	0.14	49,49,49,49	0
56	MG	2A	3849	1/1	0.97	0.12	45,45,45,45	0
56	MG	1A	3567	1/1	0.97	0.21	33,33,33,33	0
56	MG	1A	3664	1/1	0.97	0.10	54,54,54,54	0
56	MG	2A	3614	1/1	0.97	0.07	56,56,56,56	0
56	MG	1A	3936	1/1	0.97	0.08	44,44,44,44	0
56	MG	1V	204	1/1	0.97	0.09	42,42,42,42	0
56	MG	1A	3242	1/1	0.97	0.10	38,38,38,38	0
56	MG	1A	3802	1/1	0.97	0.10	54,54,54,54	0
56	MG	1A	3017	1/1	0.97	0.09	60,60,60,60	0
56	MG	2A	3035	1/1	0.97	0.06	55,55,55,55	0
56	MG	1A	3941	1/1	0.97	0.05	68,68,68,68	0
56	MG	1A	3441	1/1	0.97	0.19	43,43,43,43	0
56	MG	1A	3669	1/1	0.97	0.07	25,25,25,25	0
56	MG	1A	3287	1/1	0.97	0.28	33,33,33,33	0
56	MG	1X	102	1/1	0.97	0.06	38,38,38,38	0
56	MG	2A	3628	1/1	0.97	0.09	54,54,54,54	0
56	MG	1A	3672	1/1	0.97	0.06	45,45,45,45	0
56	MG	1A	3443	1/1	0.97	0.27	53,53,53,53	0
56	MG	1A	3681	1/1	0.97	0.07	30,30,30,30	0
56	MG	1a	1706	1/1	0.97	0.06	49,49,49,49	0
56	MG	2A	3634	1/1	0.97	0.06	61,61,61,61	0
56	MG	2A	3635	1/1	0.97	0.07	51,51,51,51	0
56	MG	1X	106	1/1	0.97	0.07	40,40,40,40	0
56	MG	1A	3813	1/1	0.97	0.05	27,27,27,27	0
56	MG	1A	3952	1/1	0.97	0.07	57,57,57,57	0
56	MG	1A	3138	1/1	0.97	0.28	31,31,31,31	0
56	MG	1Y	203	1/1	0.97	0.22	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3390	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	3955	1/1	0.97	0.07	46,46,46,46	0
56	MG	1a	1714	1/1	0.97	0.11	45,45,45,45	0
56	MG	1A	3245	1/1	0.97	0.20	40,40,40,40	0
56	MG	1A	3577	1/1	0.97	0.16	37,37,37,37	0
56	MG	1A	3958	1/1	0.97	0.08	60,60,60,60	0
56	MG	1A	3448	1/1	0.97	0.21	37,37,37,37	0
56	MG	2A	3239	1/1	0.97	0.15	55,55,55,55	0
56	MG	1A	3039	1/1	0.97	0.19	34,34,34,34	0
56	MG	1a	1720	1/1	0.97	0.16	57,57,57,57	0
56	MG	1A	3209	1/1	0.97	0.08	33,33,33,33	0
56	MG	1A	3248	1/1	0.97	0.25	65,65,65,65	0
56	MG	1A	3585	1/1	0.97	0.10	50,50,50,50	0
56	MG	2A	3654	1/1	0.97	0.09	63,63,63,63	0
56	MG	1A	3825	1/1	0.97	0.08	54,54,54,54	0
56	MG	2A	3656	1/1	0.97	0.10	69,69,69,69	0
56	MG	1A	3703	1/1	0.97	0.10	46,46,46,46	0
56	MG	1A	3966	1/1	0.97	0.04	52,52,52,52	0
56	MG	11	102	1/1	0.97	0.05	41,41,41,41	0
56	MG	2D	303	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3452	1/1	0.97	0.19	36,36,36,36	0
56	MG	1B	205	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3662	1/1	0.97	0.07	41,41,41,41	0
56	MG	1B	206	1/1	0.97	0.14	54,54,54,54	0
56	MG	2A	3070	1/1	0.97	0.09	38,38,38,38	0
56	MG	1a	1733	1/1	0.97	0.12	47,47,47,47	0
56	MG	1A	3828	1/1	0.97	0.06	36,36,36,36	0
56	MG	1A	3453	1/1	0.97	0.30	43,43,43,43	0
56	MG	1A	3830	1/1	0.97	0.04	36,36,36,36	0
56	MG	13	102	1/1	0.97	0.10	44,44,44,44	0
56	MG	1A	3707	1/1	0.97	0.11	24,24,24,24	0
56	MG	2A	3671	1/1	0.97	0.07	64,64,64,64	0
56	MG	1A	3588	1/1	0.97	0.10	35,35,35,35	0
56	MG	1A	3028	1/1	0.97	0.27	33,33,33,33	0
56	MG	2A	3674	1/1	0.97	0.07	68,68,68,68	0
56	MG	2a	1780	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3079	1/1	0.97	0.10	36,36,36,36	0
56	MG	2A	3080	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3174	1/1	0.97	0.12	35,35,35,35	0
56	MG	2A	3082	1/1	0.97	0.07	61,61,61,61	0
56	MG	1A	3713	1/1	0.97	0.07	33,33,33,33	0
56	MG	2A	3084	1/1	0.97	0.17	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3591	1/1	0.97	0.13	48,48,48,48	0
56	MG	1a	1746	1/1	0.97	0.09	54,54,54,54	0
56	MG	1a	1747	1/1	0.97	0.08	62,62,62,62	0
56	MG	1A	3397	1/1	0.97	0.40	47,47,47,47	0
56	MG	1A	3593	1/1	0.97	0.06	43,43,43,43	0
56	MG	2A	3454	1/1	0.97	0.25	60,60,60,60	0
56	MG	1A	3981	1/1	0.97	0.07	72,72,72,72	0
56	MG	1A	3840	1/1	0.97	0.10	54,54,54,54	0
56	MG	1A	3518	1/1	0.97	0.21	29,29,29,29	0
56	MG	2A	3690	1/1	0.97	0.11	44,44,44,44	0
56	MG	1A	3296	1/1	0.97	0.18	33,33,33,33	0
56	MG	1a	1756	1/1	0.97	0.10	63,63,63,63	0
56	MG	1A	3251	1/1	0.97	0.31	60,60,60,60	0
56	MG	17	105	1/1	0.97	0.09	51,51,51,51	0
56	MG	1A	3141	1/1	0.97	0.11	35,35,35,35	0
56	MG	2W	202	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3214	1/1	0.97	0.15	35,35,35,35	0
56	MG	1A	3523	1/1	0.97	0.16	33,33,33,33	0
56	MG	1a	1762	1/1	0.97	0.06	74,74,74,74	0
56	MG	1A	3725	1/1	0.97	0.12	31,31,31,31	0
56	MG	18	107	1/1	0.97	0.09	43,43,43,43	0
56	MG	1B	227	1/1	0.97	0.05	35,35,35,35	0
56	MG	1A	3177	1/1	0.97	0.10	32,32,32,32	0
56	MG	2A	3706	1/1	0.97	0.06	60,60,60,60	0
56	MG	1A	3727	1/1	0.97	0.12	41,41,41,41	0
56	MG	2A	3473	1/1	0.97	0.11	79,79,79,79	0
56	MG	1A	3728	1/1	0.97	0.06	49,49,49,49	0
56	MG	1a	1770	1/1	0.97	0.07	69,69,69,69	0
56	MG	25	104	1/1	0.97	0.12	62,62,62,62	0
56	MG	1A	3052	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3302	1/1	0.97	0.06	40,40,40,40	0
56	MG	1A	3180	1/1	0.97	0.10	41,41,41,41	0
56	MG	1a	1775	1/1	0.97	0.07	66,66,66,66	0
56	MG	1A	3857	1/1	0.97	0.09	48,48,48,48	0
56	MG	1A	3143	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3355	1/1	0.97	0.08	40,40,40,40	0
56	MG	1D	302	1/1	0.97	0.15	48,48,48,48	0
56	MG	1A	3012	1/1	0.97	0.04	30,30,30,30	0
56	MG	2A	3722	1/1	0.97	0.06	48,48,48,48	0
56	MG	1A	3306	1/1	0.97	0.06	37,37,37,37	0
56	MG	1A	3104	1/1	0.97	0.04	30,30,30,30	0
56	MG	1a	1787	1/1	0.97	0.10	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1D	308	1/1	0.97	0.04	45,45,45,45	0
56	MG	1A	3068	1/1	0.97	0.09	33,33,33,33	0
56	MG	1A	3471	1/1	0.97	0.13	34,34,34,34	0
56	MG	1A	3613	1/1	0.97	0.07	37,37,37,37	0
56	MG	2a	1833	1/1	0.97	0.15	57,57,57,57	0
56	MG	1A	3310	1/1	0.97	0.16	54,54,54,54	0
56	MG	1A	3745	1/1	0.97	0.05	52,52,52,52	0
56	MG	1A	4015	1/1	0.97	0.07	33,33,33,33	0
56	MG	1a	1798	1/1	0.97	0.05	72,72,72,72	0
56	MG	1A	3473	1/1	0.97	0.23	44,44,44,44	0
56	MG	1A	4017	1/1	0.97	0.04	33,33,33,33	0
56	MG	2A	3131	1/1	0.97	0.10	59,59,59,59	0
56	MG	1A	3617	1/1	0.97	0.09	30,30,30,30	0
56	MG	2A	3502	1/1	0.97	0.06	60,60,60,60	0
56	MG	1E	307	1/1	0.97	0.15	40,40,40,40	0
56	MG	1A	3311	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3749	1/1	0.97	0.05	58,58,58,58	0
56	MG	1A	3224	1/1	0.97	0.09	50,50,50,50	0
56	MG	1A	3009	1/1	0.97	0.08	25,25,25,25	0
56	MG	1A	3752	1/1	0.97	0.05	49,49,49,49	0
56	MG	1A	3264	1/1	0.97	0.10	60,60,60,60	0
56	MG	1A	3622	1/1	0.97	0.08	46,46,46,46	0
56	MG	2A	3322	1/1	0.97	0.09	59,59,59,59	0
56	MG	2q	201	1/1	0.97	0.32	65,65,65,65	0
56	MG	1A	3624	1/1	0.97	0.10	27,27,27,27	0
56	MG	1F	301	1/1	0.97	0.13	41,41,41,41	0
56	MG	1A	3072	1/1	0.97	0.10	34,34,34,34	0
56	MG	1a	1635	1/1	0.97	0.15	41,41,41,41	0
56	MG	2A	3519	1/1	0.97	0.08	49,49,49,49	0
56	MG	1a	1636	1/1	0.97	0.24	66,66,66,66	0
56	MG	1F	303	1/1	0.97	0.27	33,33,33,33	0
56	MG	1F	304	1/1	0.97	0.18	35,35,35,35	0
56	MG	1F	305	1/1	0.97	0.10	40,40,40,40	0
56	MG	1F	306	1/1	0.97	0.07	49,49,49,49	0
56	MG	1F	307	1/1	0.97	0.18	28,28,28,28	0
56	MG	2A	3527	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	3152	1/1	0.97	0.10	37,37,37,37	0
56	MG	2A	3762	1/1	0.97	0.13	60,60,60,60	0
56	MG	1m	3001	1/1	0.97	0.12	68,68,68,68	0
56	MG	2A	3764	1/1	0.97	0.10	42,42,42,42	0
56	MG	1A	3228	1/1	0.97	0.10	46,46,46,46	0
56	MG	1A	3109	1/1	0.97	0.21	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3129	1/1	0.97	0.20	53,53,53,53	0
56	MG	1A	3631	1/1	0.97	0.06	39,39,39,39	0
56	MG	2x	107	1/1	0.97	0.10	57,57,57,57	0
56	MG	1G	201	1/1	0.97	0.08	44,44,44,44	0
56	MG	1A	3889	1/1	0.97	0.07	39,39,39,39	0
56	MG	1A	3044	1/1	0.97	0.09	38,38,38,38	0
56	MG	1A	3032	1/1	0.97	0.16	28,28,28,28	0
56	MG	2A	3540	1/1	0.97	0.06	51,51,51,51	0
56	MG	2A	3774	1/1	0.97	0.04	64,64,64,64	0
56	MG	1A	3195	1/1	0.97	0.23	40,40,40,40	0
56	MG	1A	3893	1/1	0.97	0.07	27,27,27,27	0
56	MG	1a	1653	1/1	0.97	0.09	53,53,53,53	0
58	A1A1F	2A	3875	34/34	0.97	0.08	38,45,52,56	0
56	MG	2A	3545	1/1	0.97	0.07	44,44,44,44	0
59	ZN	2Y	501	1/1	0.97	0.05	108,108,108,108	0
56	MG	1a	1654	1/1	0.97	0.06	61,61,61,61	0
56	MG	1A	3373	1/1	0.97	0.17	38,38,38,38	0
56	MG	1A	3111	1/1	0.98	0.28	34,34,34,34	0
56	MG	1a	1771	1/1	0.98	0.05	68,68,68,68	0
56	MG	1A	3908	1/1	0.98	0.06	28,28,28,28	0
56	MG	1A	3607	1/1	0.98	0.14	30,30,30,30	0
56	MG	1A	3160	1/1	0.98	0.18	32,32,32,32	0
56	MG	1V	201	1/1	0.98	0.16	33,33,33,33	0
56	MG	1V	202	1/1	0.98	0.20	35,35,35,35	0
56	MG	1A	3279	1/1	0.98	0.14	42,42,42,42	0
56	MG	1A	3912	1/1	0.98	0.10	43,43,43,43	0
56	MG	1A	3668	1/1	0.98	0.03	23,23,23,23	0
56	MG	1a	1780	1/1	0.98	0.04	81,81,81,81	0
56	MG	2X	102	1/1	0.98	0.07	52,52,52,52	0
56	MG	1A	3161	1/1	0.98	0.12	34,34,34,34	0
56	MG	1A	3670	1/1	0.98	0.06	26,26,26,26	0
56	MG	1A	3162	1/1	0.98	0.21	38,38,38,38	0
56	MG	2A	3778	1/1	0.98	0.04	57,57,57,57	0
56	MG	2A	3468	1/1	0.98	0.12	26,26,26,26	0
56	MG	1A	4022	1/1	0.98	0.04	42,42,42,42	0
56	MG	2A	3627	1/1	0.98	0.05	42,42,42,42	0
56	MG	1W	204	1/1	0.98	0.11	42,42,42,42	0
56	MG	1a	1789	1/1	0.98	0.08	49,49,49,49	0
56	MG	1A	4023	1/1	0.98	0.04	38,38,38,38	0
56	MG	1A	3008	1/1	0.98	0.13	32,32,32,32	0
56	MG	1a	1792	1/1	0.98	0.04	52,52,52,52	0
56	MG	1A	3919	1/1	0.98	0.08	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1794	1/1	0.98	0.04	60,60,60,60	0
56	MG	1A	3920	1/1	0.98	0.10	33,33,33,33	0
56	MG	1A	3218	1/1	0.98	0.18	38,38,38,38	0
56	MG	1A	3833	1/1	0.98	0.05	41,41,41,41	0
56	MG	2A	3345	1/1	0.98	0.05	70,70,70,70	0
56	MG	2A	3793	1/1	0.98	0.08	48,48,48,48	0
56	MG	1A	3675	1/1	0.98	0.05	30,30,30,30	0
56	MG	1A	3676	1/1	0.98	0.06	25,25,25,25	0
56	MG	1A	3677	1/1	0.98	0.06	29,29,29,29	0
56	MG	1A	3678	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3188	1/1	0.98	0.11	34,34,34,34	0
56	MG	2A	3799	1/1	0.98	0.07	57,57,57,57	0
56	MG	1A	3930	1/1	0.98	0.10	50,50,50,50	0
56	MG	1A	4035	1/1	0.98	0.08	37,37,37,37	0
56	MG	1A	3445	1/1	0.98	0.08	55,55,55,55	0
56	MG	1A	3686	1/1	0.98	0.03	30,30,30,30	0
56	MG	1A	3286	1/1	0.98	0.24	39,39,39,39	0
56	MG	1A	3113	1/1	0.98	0.16	42,42,42,42	0
56	MG	1D	301	1/1	0.98	0.12	38,38,38,38	0
56	MG	1A	3689	1/1	0.98	0.06	28,28,28,28	0
56	MG	1A	3844	1/1	0.98	0.04	31,31,31,31	0
56	MG	1D	304	1/1	0.98	0.08	18,18,18,18	0
56	MG	1A	3325	1/1	0.98	0.06	59,59,59,59	0
56	MG	1A	3221	1/1	0.98	0.08	33,33,33,33	0
56	MG	2A	3812	1/1	0.98	0.04	46,46,46,46	0
56	MG	2A	3499	1/1	0.98	0.08	74,74,74,74	0
56	MG	2A	3815	1/1	0.98	0.08	42,42,42,42	0
56	MG	1D	307	1/1	0.98	0.19	45,45,45,45	0
56	MG	1A	3043	1/1	0.98	0.22	37,37,37,37	0
56	MG	1A	3623	1/1	0.98	0.06	44,44,44,44	0
56	MG	1A	3082	1/1	0.98	0.09	43,43,43,43	0
56	MG	1A	3944	1/1	0.98	0.06	34,34,34,34	0
56	MG	2A	3821	1/1	0.98	0.06	50,50,50,50	0
56	MG	1A	3699	1/1	0.98	0.06	20,20,20,20	0
56	MG	1A	3192	1/1	0.98	0.21	39,39,39,39	0
56	MG	1A	3853	1/1	0.98	0.04	61,61,61,61	0
56	MG	1A	3702	1/1	0.98	0.07	36,36,36,36	0
56	MG	1A	3949	1/1	0.98	0.04	46,46,46,46	0
56	MG	2A	3510	1/1	0.98	0.19	50,50,50,50	0
56	MG	1A	3578	1/1	0.98	0.11	28,28,28,28	0
56	MG	1E	306	1/1	0.98	0.08	32,32,32,32	0
56	MG	2A	3513	1/1	0.98	0.17	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4056	1/1	0.98	0.07	47,47,47,47	0
56	MG	1A	3256	1/1	0.98	0.11	47,47,47,47	0
56	MG	1A	3048	1/1	0.98	0.12	34,34,34,34	0
56	MG	1A	3581	1/1	0.98	0.09	38,38,38,38	0
56	MG	2A	3838	1/1	0.98	0.07	65,65,65,65	0
56	MG	1A	3582	1/1	0.98	0.24	40,40,40,40	0
56	MG	1A	3709	1/1	0.98	0.09	34,34,34,34	0
56	MG	1A	3781	1/1	0.98	0.04	15,15,15,15	0
56	MG	17	101	1/1	0.98	0.07	40,40,40,40	0
56	MG	2A	3117	1/1	0.98	0.13	52,52,52,52	0
56	MG	1A	3194	1/1	0.98	0.17	30,30,30,30	0
56	MG	1A	3864	1/1	0.98	0.05	25,25,25,25	0
56	MG	1A	3711	1/1	0.98	0.04	14,14,14,14	0
56	MG	1A	3295	1/1	0.98	0.05	49,49,49,49	0
56	MG	1A	3077	1/1	0.98	0.05	32,32,32,32	0
56	MG	18	102	1/1	0.98	0.16	46,46,46,46	0
56	MG	1A	3196	1/1	0.98	0.26	36,36,36,36	0
56	MG	1A	3715	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	4071	1/1	0.98	0.05	46,46,46,46	0
56	MG	18	106	1/1	0.98	0.10	49,49,49,49	0
56	MG	1A	3870	1/1	0.98	0.11	47,47,47,47	0
56	MG	2A	3692	1/1	0.98	0.05	71,71,71,71	0
56	MG	2A	3693	1/1	0.98	0.13	58,58,58,58	0
56	MG	1F	308	1/1	0.98	0.11	30,30,30,30	0
56	MG	1A	3146	1/1	0.98	0.18	34,34,34,34	0
56	MG	1A	3147	1/1	0.98	0.15	36,36,36,36	0
56	MG	2A	3541	1/1	0.98	0.07	44,44,44,44	0
56	MG	1A	3148	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	4076	1/1	0.98	0.07	17,17,17,17	0
56	MG	2A	3700	1/1	0.98	0.09	73,73,73,73	0
56	MG	1A	3232	1/1	0.98	0.22	32,32,32,32	0
56	MG	2A	3865	1/1	0.98	0.11	48,48,48,48	0
56	MG	1A	4078	1/1	0.98	0.08	34,34,34,34	0
56	MG	2A	3546	1/1	0.98	0.13	49,49,49,49	0
56	MG	1A	3795	1/1	0.98	0.08	46,46,46,46	0
56	MG	1A	3070	1/1	0.98	0.12	31,31,31,31	0
56	MG	1A	3086	1/1	0.98	0.10	34,34,34,34	0
56	MG	2A	3552	1/1	0.98	0.07	57,57,57,57	0
56	MG	2A	3139	1/1	0.98	0.17	48,48,48,48	0
56	MG	1A	3878	1/1	0.98	0.10	39,39,39,39	0
56	MG	1A	3120	1/1	0.98	0.07	40,40,40,40	0
56	MG	2A	3556	1/1	0.98	0.07	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3009	1/1	0.98	0.05	51,51,51,51	0
56	MG	1A	3974	1/1	0.98	0.07	26,26,26,26	0
56	MG	1a	1612	1/1	0.98	0.07	31,31,31,31	0
56	MG	1A	3723	1/1	0.98	0.03	14,14,14,14	0
56	MG	1A	3087	1/1	0.98	0.19	30,30,30,30	0
56	MG	2A	3562	1/1	0.98	0.05	43,43,43,43	0
56	MG	1a	1732	1/1	0.98	0.08	37,37,37,37	0
56	MG	1A	3649	1/1	0.98	0.06	24,24,24,24	0
56	MG	1A	4089	1/1	0.98	0.07	36,36,36,36	0
56	MG	1A	3978	1/1	0.98	0.10	58,58,58,58	0
56	MG	1A	3883	1/1	0.98	0.21	34,34,34,34	0
56	MG	1A	3650	1/1	0.98	0.04	15,15,15,15	0
56	MG	1A	3805	1/1	0.98	0.08	28,28,28,28	0
56	MG	1A	3176	1/1	0.98	0.13	27,27,27,27	0
56	MG	1a	1740	1/1	0.98	0.03	42,42,42,42	0
56	MG	1a	1741	1/1	0.98	0.09	45,45,45,45	0
56	MG	1A	3307	1/1	0.98	0.04	34,34,34,34	0
56	MG	1A	3270	1/1	0.98	0.20	38,38,38,38	0
56	MG	2A	3027	1/1	0.98	0.05	47,47,47,47	0
56	MG	1A	3654	1/1	0.98	0.05	33,33,33,33	0
56	MG	1A	3108	1/1	0.98	0.07	32,32,32,32	0
56	MG	1P	205	1/1	0.98	0.28	31,31,31,31	0
56	MG	1A	3154	1/1	0.98	0.08	31,31,31,31	0
56	MG	1A	3065	1/1	0.98	0.10	35,35,35,35	0
56	MG	1A	3157	1/1	0.98	0.24	41,41,41,41	0
56	MG	2A	3584	1/1	0.98	0.07	51,51,51,51	0
56	MG	1a	1750	1/1	0.98	0.06	53,53,53,53	0
56	MG	2A	3586	1/1	0.98	0.09	64,64,64,64	0
56	MG	1A	3814	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3815	1/1	0.98	0.03	27,27,27,27	0
56	MG	2A	3037	1/1	0.98	0.07	50,50,50,50	0
56	MG	1A	3993	1/1	0.98	0.07	22,22,22,22	0
56	MG	1A	3351	1/1	0.98	0.23	31,31,31,31	0
56	MG	1a	1755	1/1	0.98	0.04	65,65,65,65	0
56	MG	1A	4106	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	3897	1/1	0.98	0.06	51,51,51,51	0
56	MG	1A	3898	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	3737	1/1	0.98	0.05	35,35,35,35	0
56	MG	2F	305	1/1	0.98	0.08	49,49,49,49	0
56	MG	1A	3660	1/1	0.98	0.09	47,47,47,47	0
56	MG	1A	3901	1/1	0.98	0.09	30,30,30,30	0
56	MG	1A	3740	1/1	0.98	0.06	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3903	1/1	0.98	0.08	24,24,24,24	0
56	MG	1A	3098	1/1	0.98	0.05	39,39,39,39	0
56	MG	2A	3604	1/1	0.98	0.06	66,66,66,66	0
58	A1A1F	1A	4110	34/34	0.98	0.06	21,27,30,33	0
56	MG	1a	1765	1/1	0.98	0.06	58,58,58,58	0
56	MG	1A	3212	1/1	0.98	0.05	34,34,34,34	0
59	ZN	1n	103	1/1	0.98	0.04	80,80,80,80	0
56	MG	1A	3354	1/1	0.98	0.17	32,32,32,32	0
56	MG	1A	4010	1/1	0.98	0.04	33,33,33,33	0
59	ZN	29	102	1/1	0.98	0.05	85,85,85,85	0
56	MG	1U	206	1/1	0.98	0.20	41,41,41,41	0
60	SF4	1d	302	8/8	0.98	0.05	72,79,86,88	0
60	SF4	2d	302	8/8	0.98	0.05	67,77,85,88	0
56	MG	2A	3021	1/1	0.99	0.10	32,32,32,32	0
56	MG	1A	3762	1/1	0.99	0.04	28,28,28,28	0
56	MG	1A	3683	1/1	0.99	0.09	25,25,25,25	0
56	MG	1A	3685	1/1	0.99	0.04	27,27,27,27	0
56	MG	1A	3860	1/1	0.99	0.07	19,19,19,19	0
56	MG	1a	1800	1/1	0.99	0.04	53,53,53,53	0
56	MG	1a	1801	1/1	0.99	0.03	69,69,69,69	0
56	MG	1A	3067	1/1	0.99	0.12	37,37,37,37	0
56	MG	1A	3058	1/1	0.99	0.06	27,27,27,27	0
56	MG	2A	3497	1/1	0.99	0.05	70,70,70,70	0
56	MG	1A	3178	1/1	0.99	0.11	34,34,34,34	0
56	MG	1A	3627	1/1	0.99	0.06	37,37,37,37	0
56	MG	1A	3769	1/1	0.99	0.07	48,48,48,48	0
56	MG	1a	1731	1/1	0.99	0.03	35,35,35,35	0
56	MG	1A	3010	1/1	0.99	0.04	35,35,35,35	0
56	MG	2A	3870	1/1	0.99	0.04	51,51,51,51	0
56	MG	2A	3590	1/1	0.99	0.06	43,43,43,43	0
56	MG	2A	3591	1/1	0.99	0.04	49,49,49,49	0
56	MG	1A	3691	1/1	0.99	0.07	25,25,25,25	0
56	MG	1A	3013	1/1	0.99	0.23	27,27,27,27	0
56	MG	1U	201	1/1	0.99	0.13	26,26,26,26	0
56	MG	1A	3773	1/1	0.99	0.03	31,31,31,31	0
56	MG	1E	302	1/1	0.99	0.23	36,36,36,36	0
56	MG	1A	3693	1/1	0.99	0.06	31,31,31,31	0
56	MG	2A	3195	1/1	0.99	0.04	57,57,57,57	0
56	MG	1A	3566	1/1	0.99	0.13	35,35,35,35	0
56	MG	1A	3922	1/1	0.99	0.05	30,30,30,30	0
56	MG	1A	3923	1/1	0.99	0.03	30,30,30,30	0
56	MG	1A	3695	1/1	0.99	0.03	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3696	1/1	0.99	0.07	30,30,30,30	0
56	MG	1U	210	1/1	0.99	0.30	37,37,37,37	0
56	MG	1A	4039	1/1	0.99	0.02	25,25,25,25	0
56	MG	1A	3014	1/1	0.99	0.08	25,25,25,25	0
56	MG	1A	3632	1/1	0.99	0.08	29,29,29,29	0
56	MG	1A	3155	1/1	0.99	0.11	41,41,41,41	0
56	MG	1E	313	1/1	0.99	0.08	24,24,24,24	0
56	MG	1A	3739	1/1	0.99	0.08	31,31,31,31	0
56	MG	2A	3523	1/1	0.99	0.08	35,35,35,35	0
56	MG	1A	3700	1/1	0.99	0.05	26,26,26,26	0
56	MG	1A	3783	1/1	0.99	0.03	40,40,40,40	0
56	MG	1A	3037	1/1	0.99	0.08	25,25,25,25	0
56	MG	1A	3074	1/1	0.99	0.02	13,13,13,13	0
56	MG	1A	3987	1/1	0.99	0.08	62,62,62,62	0
56	MG	1A	3786	1/1	0.99	0.06	31,31,31,31	0
56	MG	2A	3708	1/1	0.99	0.03	39,39,39,39	0
56	MG	1A	3787	1/1	0.99	0.04	25,25,25,25	0
56	MG	1A	3636	1/1	0.99	0.08	27,27,27,27	0
56	MG	2A	3620	1/1	0.99	0.04	42,42,42,42	0
56	MG	1A	3704	1/1	0.99	0.04	35,35,35,35	0
56	MG	1A	3612	1/1	0.99	0.06	30,30,30,30	0
56	MG	1A	3939	1/1	0.99	0.02	13,13,13,13	0
56	MG	1A	3638	1/1	0.99	0.04	29,29,29,29	0
56	MG	2A	3716	1/1	0.99	0.04	59,59,59,59	0
56	MG	2A	3536	1/1	0.99	0.05	44,44,44,44	0
56	MG	1A	3995	1/1	0.99	0.08	42,42,42,42	0
56	MG	2A	3538	1/1	0.99	0.07	62,62,62,62	0
56	MG	1A	3996	1/1	0.99	0.07	26,26,26,26	0
56	MG	2A	3814	1/1	0.99	0.13	44,44,44,44	0
56	MG	1A	3997	1/1	0.99	0.08	31,31,31,31	0
56	MG	2A	3630	1/1	0.99	0.07	41,41,41,41	0
56	MG	1A	3038	1/1	0.99	0.10	36,36,36,36	0
56	MG	1A	3942	1/1	0.99	0.09	38,38,38,38	0
56	MG	2A	3725	1/1	0.99	0.06	46,46,46,46	0
56	MG	1A	3031	1/1	0.99	0.08	30,30,30,30	0
56	MG	2a	1755	1/1	0.99	0.03	78,78,78,78	0
56	MG	1A	3615	1/1	0.99	0.08	36,36,36,36	0
56	MG	2A	3822	1/1	0.99	0.03	43,43,43,43	0
56	MG	1A	3642	1/1	0.99	0.07	24,24,24,24	0
56	MG	2A	3824	1/1	0.99	0.03	57,57,57,57	0
56	MG	1A	3099	1/1	0.99	0.10	21,21,21,21	0
56	MG	2a	1761	1/1	0.99	0.04	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4004	1/1	0.99	0.04	37,37,37,37	0
56	MG	2A	3548	1/1	0.99	0.07	39,39,39,39	0
56	MG	2A	3549	1/1	0.99	0.07	37,37,37,37	0
56	MG	1A	3282	1/1	0.99	0.07	27,27,27,27	0
56	MG	1A	3645	1/1	0.99	0.06	26,26,26,26	0
56	MG	1A	4069	1/1	0.99	0.03	39,39,39,39	0
56	MG	1A	3202	1/1	0.99	0.09	20,20,20,20	0
56	MG	1A	3404	1/1	0.99	0.05	35,35,35,35	0
56	MG	2a	1770	1/1	0.99	0.03	64,64,64,64	0
56	MG	2A	3834	1/1	0.99	0.04	35,35,35,35	0
56	MG	1A	4009	1/1	0.99	0.03	25,25,25,25	0
56	MG	1A	3386	1/1	0.99	0.20	26,26,26,26	0
56	MG	1A	3203	1/1	0.99	0.07	38,38,38,38	0
56	MG	1A	3803	1/1	0.99	0.05	22,22,22,22	0
56	MG	1A	3851	1/1	0.99	0.09	37,37,37,37	0
56	MG	1a	1783	1/1	0.99	0.05	51,51,51,51	0
56	MG	1A	3804	1/1	0.99	0.05	24,24,24,24	0
56	MG	1a	1785	1/1	0.99	0.03	63,63,63,63	0
56	MG	2A	3563	1/1	0.99	0.05	51,51,51,51	0
56	MG	1a	1786	1/1	0.99	0.04	59,59,59,59	0
56	MG	1P	202	1/1	0.99	0.31	33,33,33,33	0
56	MG	1A	3679	1/1	0.99	0.03	41,41,41,41	0
59	ZN	1Y	204	1/1	0.99	0.03	73,73,73,73	0
56	MG	1A	3680	1/1	0.99	0.06	27,27,27,27	0
59	ZN	15	107	1/1	0.99	0.07	50,50,50,50	0
59	ZN	16	102	1/1	0.99	0.03	42,42,42,42	0
56	MG	1A	3003	1/1	0.99	0.05	26,26,26,26	0
56	MG	1A	3033	1/1	0.99	0.30	32,32,32,32	0
56	MG	1A	4019	1/1	0.99	0.04	29,29,29,29	0
59	ZN	25	106	1/1	0.99	0.03	58,58,58,58	0
59	ZN	26	102	1/1	0.99	0.03	64,64,64,64	0
56	MG	1Q	202	1/1	0.99	0.12	29,29,29,29	0
56	MG	1Q	203	1/1	0.99	0.04	39,39,39,39	0
56	MG	2A	3573	1/1	0.99	0.07	48,48,48,48	0
56	MG	1A	4083	1/1	0.99	0.08	41,41,41,41	0
56	MG	1A	3071	1/1	1.00	0.04	13,13,13,13	0
56	MG	1A	3673	1/1	1.00	0.07	40,40,40,40	0
56	MG	1A	3917	1/1	1.00	0.04	32,32,32,32	0
56	MG	1A	3684	1/1	1.00	0.09	31,31,31,31	0
56	MG	1A	3730	1/1	1.00	0.07	26,26,26,26	0
56	MG	1A	4040	1/1	1.00	0.07	51,51,51,51	0
59	ZN	19	102	1/1	1.00	0.03	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3514	1/1	1.00	0.08	49,49,49,49	0

6.5 Other polymers (i)

There are no such residues in this entry.