Full wwPDB X-ray Structure Validation Report (i)

Jun 17, 2025 – 07:33 PM EDT

PDB ID	:	9O3J / pdb_00009o3j
Title	:	Crystal structure of the wild-type drug-free Thermus thermophilus 70S ribosome in complex with mRNA, aminoacylated A-site Lys-tRNAlys, P-site fM RC-peptidyl-tRNAmet, and deacylated E-site tRNAlys at 2.60A resolution
Authors	:	Syroegin, E.A.; Aleksandrova, E.V.; Kruglov, A.A.; Paranjpe, M.N.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on	:	2025-04-07
Resolution	:	2.60 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:

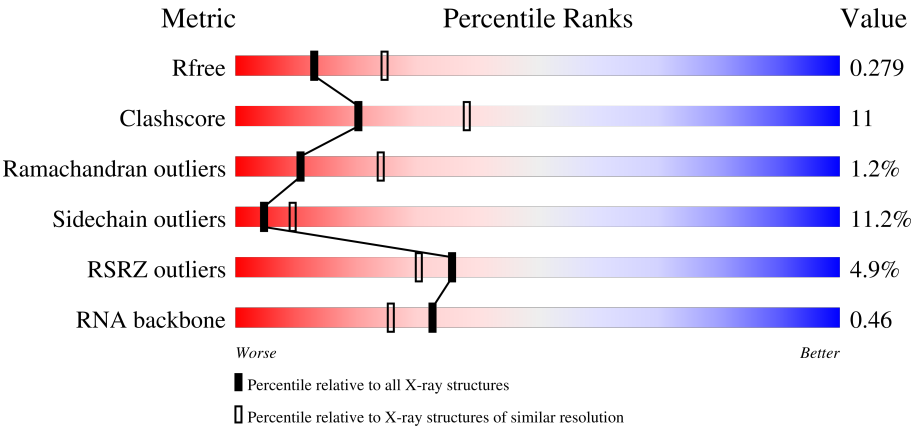
MolProbity	:	4-5-2 with Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.44

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 2.60 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	3775 (2.60-2.60)
Clashscore	180529	4181 (2.60-2.60)
Ramachandran outliers	177936	4129 (2.60-2.60)
Sidechain outliers	177891	4129 (2.60-2.60)
RSRZ outliers	164620	3775 (2.60-2.60)
RNA backbone	3690	1025 (2.88-2.32)

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	3% 59% 31% 8% •
1	2A	2915	3% 52% 37% 8% •
2	1B	121	% 59% 37% • •

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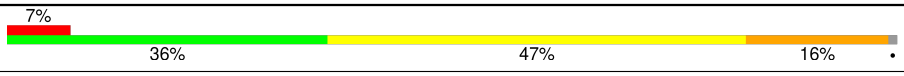
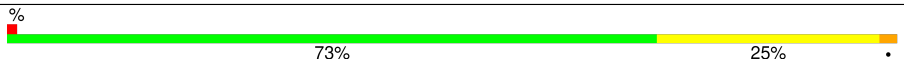
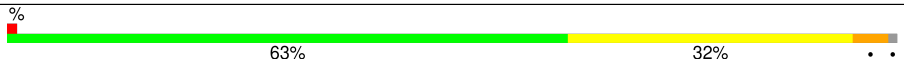
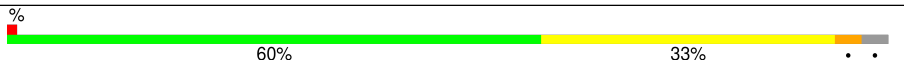
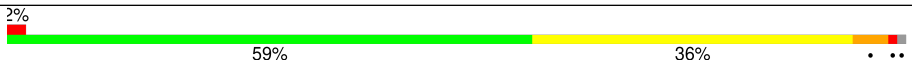
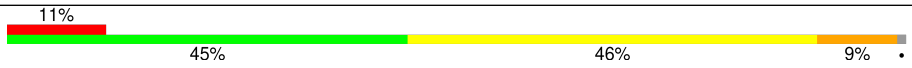
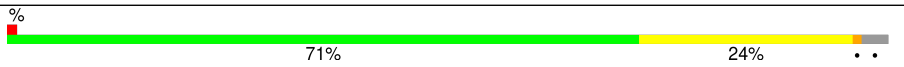
Mol	Chain	Length	Quality of chain
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
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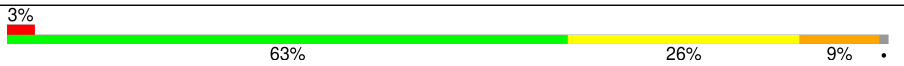
8	1I	148	
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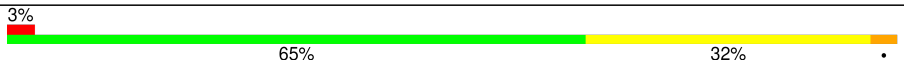
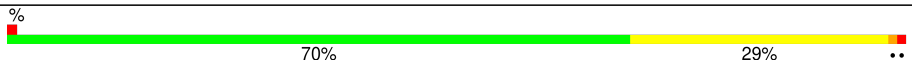
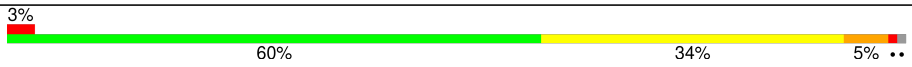
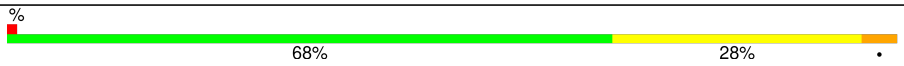
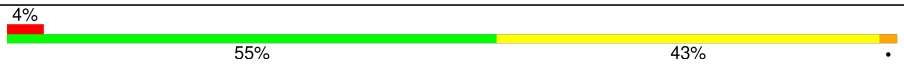
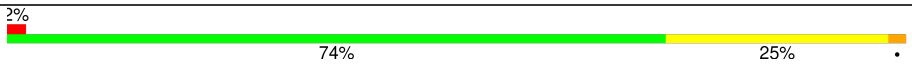
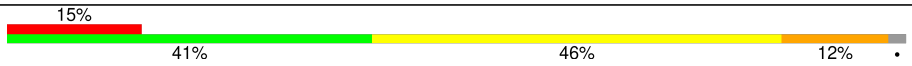
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	

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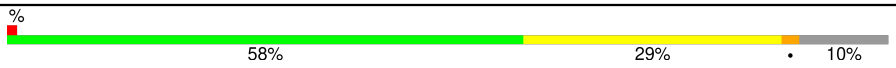
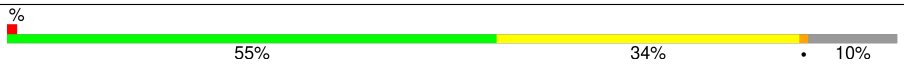
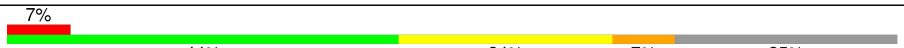
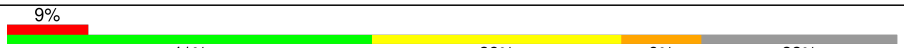
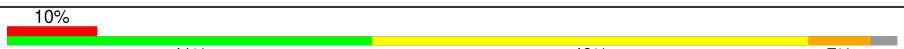
Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	

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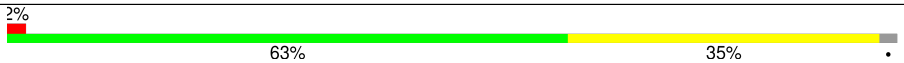
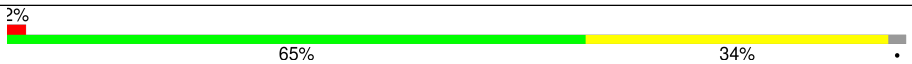
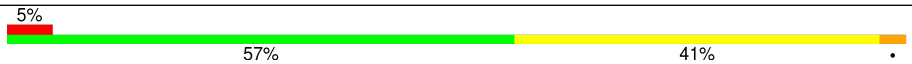
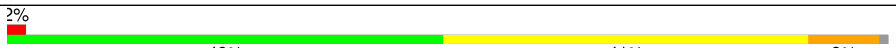
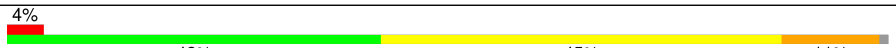
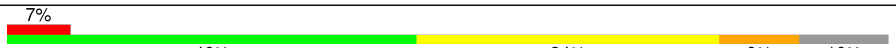
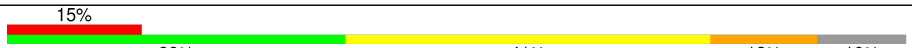
Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
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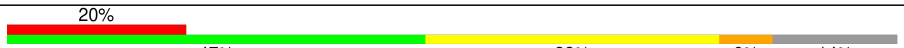
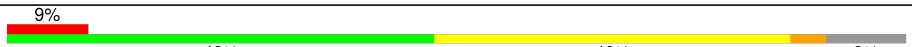
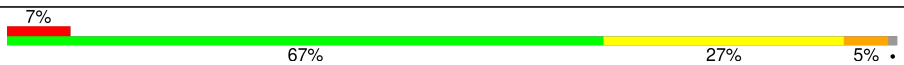
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

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Mol	Chain	Length	Quality of chain
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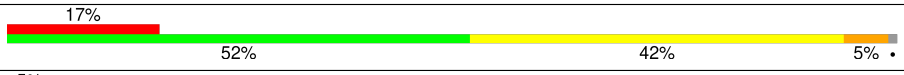
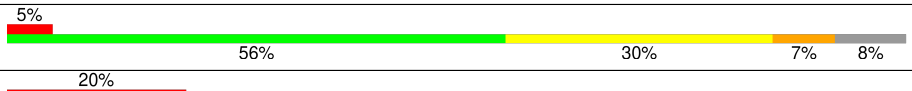
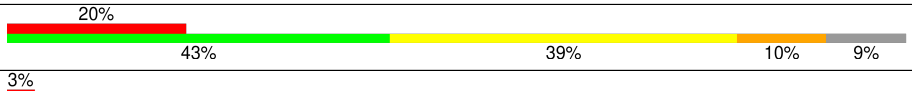
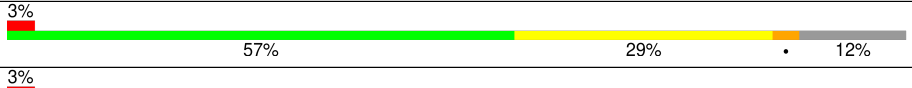
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
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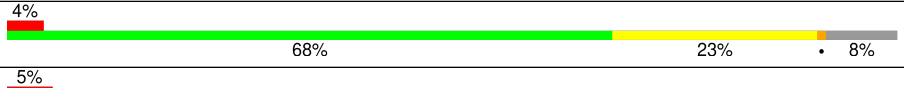
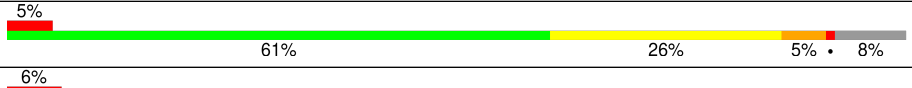
43	1l	132	
43	2l	132	
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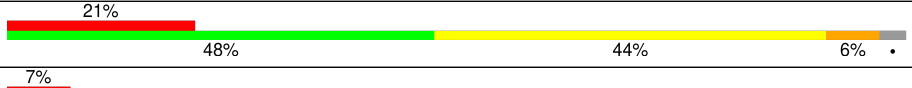
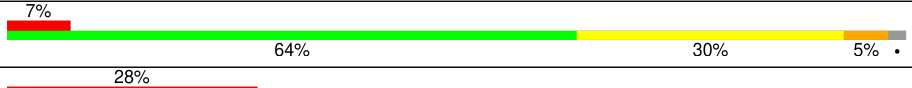
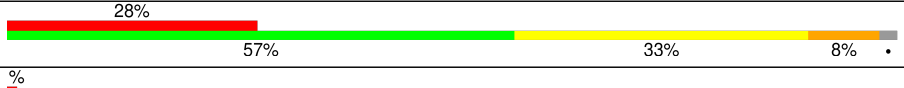
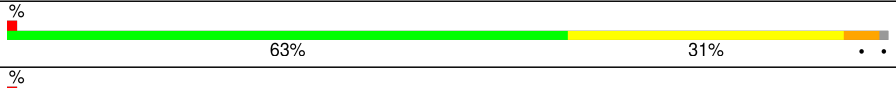
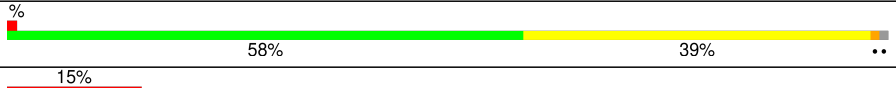
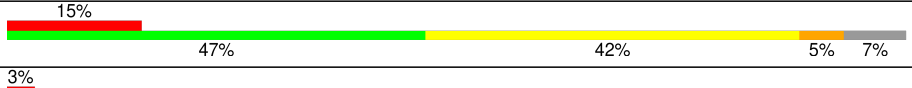
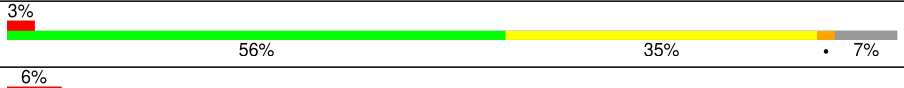
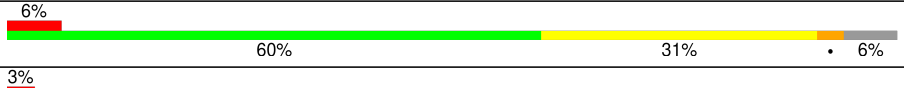
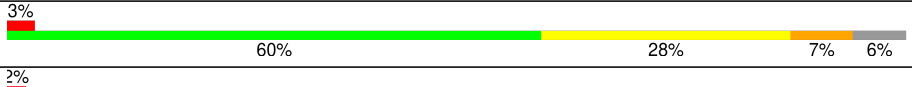
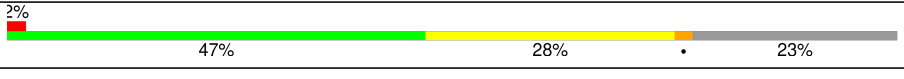
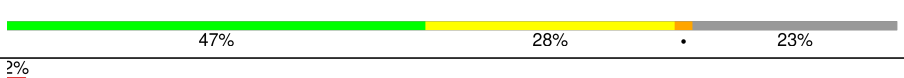
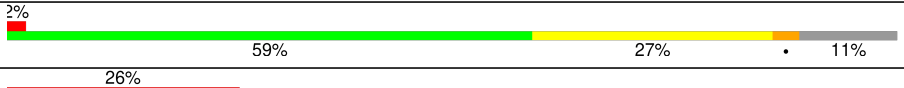
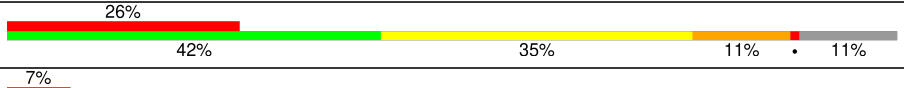
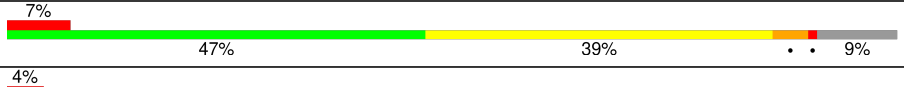
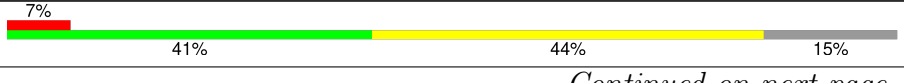
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	

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Mol	Chain	Length	Quality of chain
52	2u	27	41% 33% 44% 7% 15%
53	1v	24	21% 29% 21% 46%
53	2v	24	17% 17% 29% 8% 46%
54	1w	76	25% 24% 50% 22%
54	2w	76	42% 18% 37% 41%
55	1x	77	3% 51% 40% 9%
55	2x	77	9% 35% 49% 16%
56	1z	3	33% 67%
56	2z	3	67% 33%
57	1y	76	26% 18% 43% 36%
57	2y	76	29% 16% 49% 29%

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
58	MG	1U	208	-	-	-	X

2 Entry composition (i)

There are 62 unique types of molecules in this entry. The entry contains 299808 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	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	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 MET-LYS-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			283	128	59	83	13			
53	2v	13	Total	C	N	O	P	0	0	0
			283	128	59	83	13			

- Molecule 54 is a RNA chain called A-site Aminoacyl-tRNA Lys-tRNAlys.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1599	718	282	524	74	1			
54	2w	74	Total	C	N	O	P	S	0	0	0
			1599	718	282	524	74	1			

- Molecule 55 is a RNA chain called P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			

- Molecule 56 is a protein called P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	1z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			
56	2z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			

- Molecule 57 is a RNA chain called E-site Deacylated tRNAlys.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
57	1y	74	Total	C	N	O	P	S	0	0	0
			1577	705	277	520	74	1			
57	2y	74	Total	C	N	O	P	S	0	0	0
			1577	705	277	520	74	1			

- Molecule 58 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1096	Total	Mg	0	0
			1096	1096		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	37	Total Mg 37 37	0	0
58	1D	13	Total Mg 13 13	0	0
58	1E	16	Total Mg 16 16	0	0
58	1F	13	Total Mg 13 13	0	0
58	1G	5	Total Mg 5 5	0	0
58	1H	1	Total Mg 1 1	0	0
58	1I	1	Total Mg 1 1	0	0
58	1N	5	Total Mg 5 5	0	0
58	1O	4	Total Mg 4 4	0	0
58	1P	6	Total Mg 6 6	0	0
58	1Q	7	Total Mg 7 7	0	0
58	1R	4	Total Mg 4 4	0	0
58	1S	3	Total Mg 3 3	0	0
58	1T	2	Total Mg 2 2	0	0
58	1U	9	Total Mg 9 9	0	0
58	1V	9	Total Mg 9 9	0	0
58	1W	7	Total Mg 7 7	0	0
58	1X	5	Total Mg 5 5	0	0
58	1Y	3	Total Mg 3 3	0	0
58	1Z	2	Total Mg 2 2	0	0
58	10	9	Total Mg 9 9	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	11	5	Total Mg 5 5	0	0
58	12	2	Total Mg 2 2	0	0
58	13	5	Total Mg 5 5	0	0
58	14	1	Total Mg 1 1	0	0
58	15	6	Total Mg 6 6	0	0
58	16	2	Total Mg 2 2	0	0
58	17	6	Total Mg 6 6	0	0
58	18	9	Total Mg 9 9	0	0
58	1a	210	Total Mg 210 210	0	0
58	1b	1	Total Mg 1 1	0	0
58	1d	1	Total Mg 1 1	0	0
58	1e	2	Total Mg 2 2	0	0
58	1f	1	Total Mg 1 1	0	0
58	1k	1	Total Mg 1 1	0	0
58	1l	2	Total Mg 2 2	0	0
58	1m	1	Total Mg 1 1	0	0
58	1n	2	Total Mg 2 2	0	0
58	1p	1	Total Mg 1 1	0	0
58	1t	1	Total Mg 1 1	0	0
58	1v	1	Total Mg 1 1	0	0
58	1w	3	Total Mg 3 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1x	11	Total Mg 11 11	0	0
58	2A	863	Total Mg 863 863	0	0
58	2B	20	Total Mg 20 20	0	0
58	2D	7	Total Mg 7 7	0	0
58	2E	7	Total Mg 7 7	0	0
58	2F	7	Total Mg 7 7	0	0
58	2G	1	Total Mg 1 1	0	0
58	2O	2	Total Mg 2 2	0	0
58	2P	3	Total Mg 3 3	0	0
58	2Q	2	Total Mg 2 2	0	0
58	2R	2	Total Mg 2 2	0	0
58	2T	3	Total Mg 3 3	0	0
58	2U	2	Total Mg 2 2	0	0
58	2V	2	Total Mg 2 2	0	0
58	2W	2	Total Mg 2 2	0	0
58	2X	1	Total Mg 1 1	0	0
58	2Y	1	Total Mg 1 1	0	0
58	2Z	1	Total Mg 1 1	0	0
58	20	4	Total Mg 4 4	0	0
58	23	4	Total Mg 4 4	0	0
58	25	5	Total Mg 5 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	27	3	Total Mg 3 3	0	0
58	28	1	Total Mg 1 1	0	0
58	2a	230	Total Mg 230 230	0	0
58	2d	2	Total Mg 2 2	0	0
58	2e	1	Total Mg 1 1	0	0
58	2f	2	Total Mg 2 2	0	0
58	2g	1	Total Mg 1 1	0	0
58	2i	1	Total Mg 1 1	0	0
58	2j	1	Total Mg 1 1	0	0
58	2k	1	Total Mg 1 1	0	0
58	2l	4	Total Mg 4 4	0	0
58	2n	1	Total Mg 1 1	0	0
58	2q	2	Total Mg 2 2	0	0
58	2r	1	Total Mg 1 1	0	0
58	2t	1	Total Mg 1 1	0	0
58	2v	4	Total Mg 4 4	0	0
58	2w	1	Total Mg 1 1	0	0
58	2x	6	Total Mg 6 6	0	0
58	2y	1	Total Mg 1 1	0	0

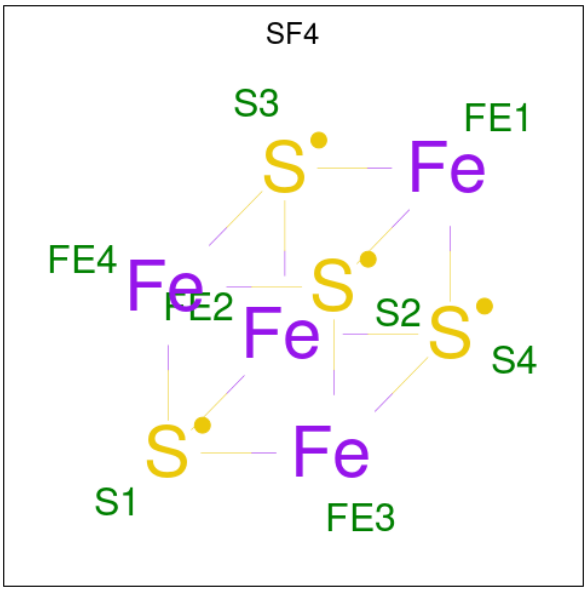
- Molecule 59 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total K 1 1	0	0
59	2A	1	Total K 1 1	0	0

- Molecule 60 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0
60	2Y	1	Total Zn 1 1	0	0
60	24	1	Total Zn 1 1	0	0
60	25	1	Total Zn 1 1	0	0
60	26	1	Total Zn 1 1	0	0
60	29	1	Total Zn 1 1	0	0
60	2n	1	Total Zn 1 1	0	0

- Molecule 61 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1d	1	Total Fe S 8 4 4	0	0
61	2d	1	Total Fe S 8 4 4	0	0

- Molecule 62 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1A	1886	Total O 1886 1886	0	0
62	1B	61	Total O 61 61	0	0
62	1D	28	Total O 28 28	0	0
62	1E	29	Total O 29 29	0	0
62	1F	15	Total O 15 15	0	0
62	1G	3	Total O 3 3	0	0
62	1H	2	Total O 2 2	0	0
62	1I	1	Total O 1 1	0	0
62	1N	4	Total O 4 4	0	0
62	1O	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1P	23	Total O 23 23	0	0
62	1Q	8	Total O 8 8	0	0
62	1R	16	Total O 16 16	0	0
62	1S	5	Total O 5 5	0	0
62	1T	8	Total O 8 8	0	0
62	1U	10	Total O 10 10	0	0
62	1V	11	Total O 11 11	0	0
62	1W	6	Total O 6 6	0	0
62	1X	7	Total O 7 7	0	0
62	1Y	1	Total O 1 1	0	0
62	1Z	1	Total O 1 1	0	0
62	10	10	Total O 10 10	0	0
62	11	12	Total O 12 12	0	0
62	12	3	Total O 3 3	0	0
62	13	4	Total O 4 4	0	0
62	14	1	Total O 1 1	0	0
62	15	7	Total O 7 7	0	0
62	16	2	Total O 2 2	0	0
62	17	11	Total O 11 11	0	0
62	18	11	Total O 11 11	0	0
62	1a	308	Total O 308 308	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1b	1	Total O 1 1	0	0
62	1e	1	Total O 1 1	0	0
62	1f	1	Total O 1 1	0	0
62	1i	1	Total O 1 1	0	0
62	1l	7	Total O 7 7	0	0
62	1m	2	Total O 2 2	0	0
62	1o	1	Total O 1 1	0	0
62	1q	2	Total O 2 2	0	0
62	1u	1	Total O 1 1	0	0
62	1v	5	Total O 5 5	0	0
62	1w	8	Total O 8 8	0	0
62	1x	6	Total O 6 6	0	0
62	1z	1	Total O 1 1	0	0
62	1y	1	Total O 1 1	0	0
62	2A	1000	Total O 1000 1000	0	0
62	2B	22	Total O 22 22	0	0
62	2D	24	Total O 24 24	0	0
62	2E	9	Total O 9 9	0	0
62	2F	15	Total O 15 15	0	0
62	2N	1	Total O 1 1	0	0
62	2O	2	Total O 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2P	11	Total O 11 11	0	0
62	2Q	1	Total O 1 1	0	0
62	2R	3	Total O 3 3	0	0
62	2T	5	Total O 5 5	0	0
62	2U	3	Total O 3 3	0	0
62	2W	3	Total O 3 3	0	0
62	2X	4	Total O 4 4	0	0
62	2Y	1	Total O 1 1	0	0
62	2Z	1	Total O 1 1	0	0
62	20	5	Total O 5 5	0	0
62	21	13	Total O 13 13	0	0
62	25	2	Total O 2 2	0	0
62	27	1	Total O 1 1	0	0
62	28	3	Total O 3 3	0	0
62	29	1	Total O 1 1	0	0
62	2a	198	Total O 198 198	0	0
62	2d	1	Total O 1 1	0	0
62	2e	1	Total O 1 1	0	0
62	2j	1	Total O 1 1	0	0
62	2l	4	Total O 4 4	0	0
62	2p	2	Total O 2 2	0	0

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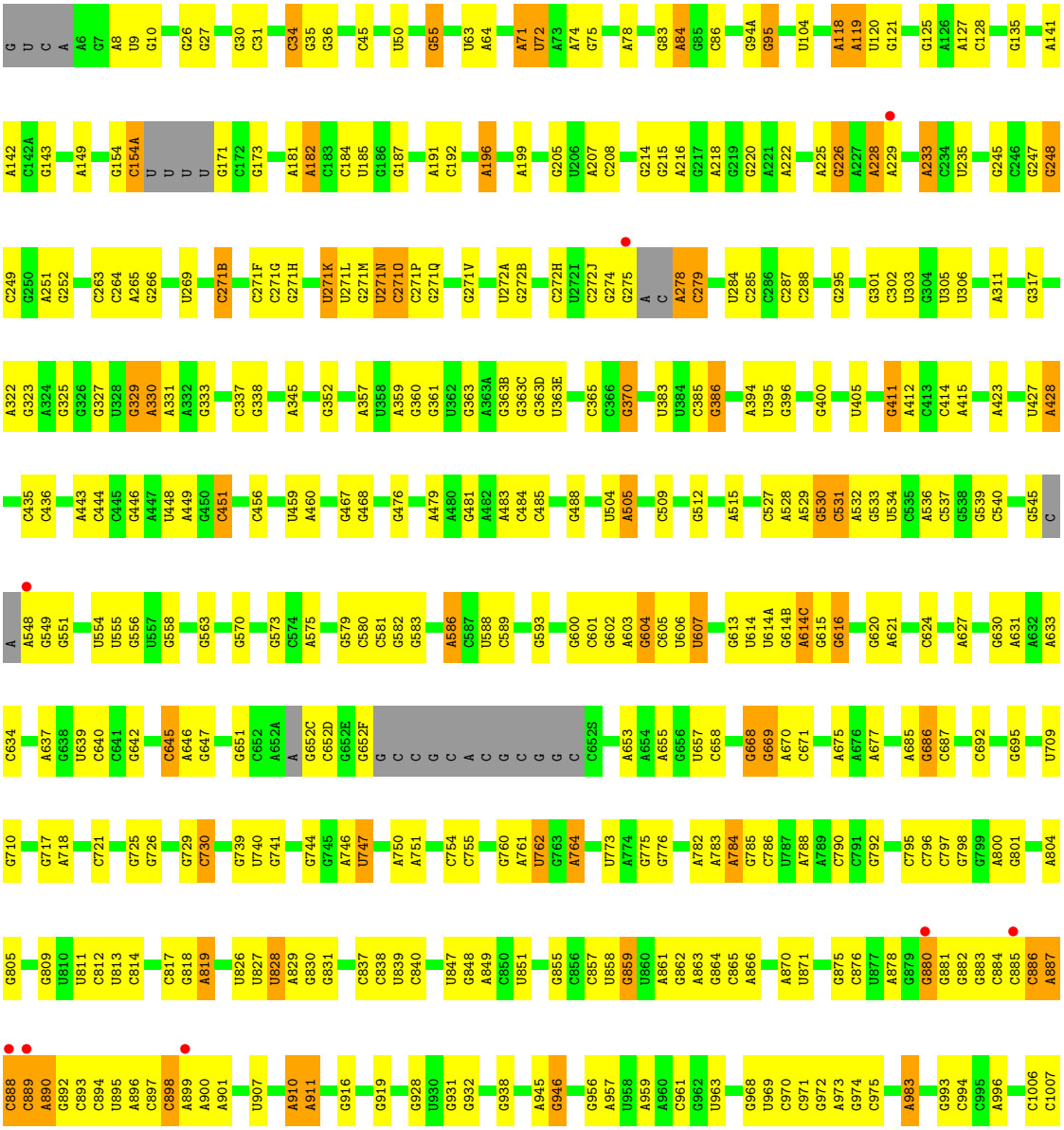
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2r	1	Total O 1 1	0	0
62	2t	1	Total O 1 1	0	0
62	2v	2	Total O 2 2	0	0
62	2w	3	Total O 3 3	0	0
62	2x	5	Total O 5 5	0	0

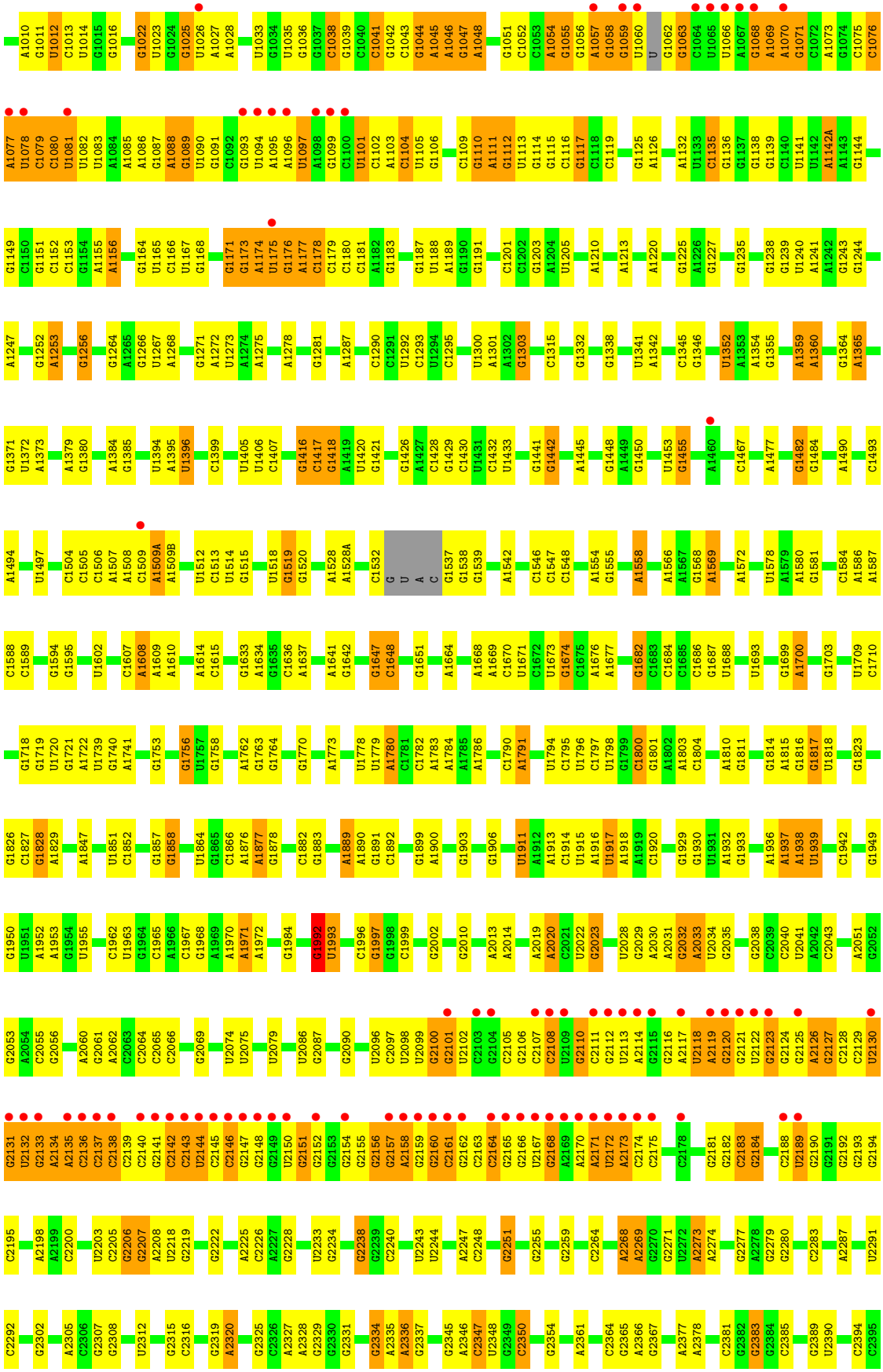
3 Residue-property plots (i)

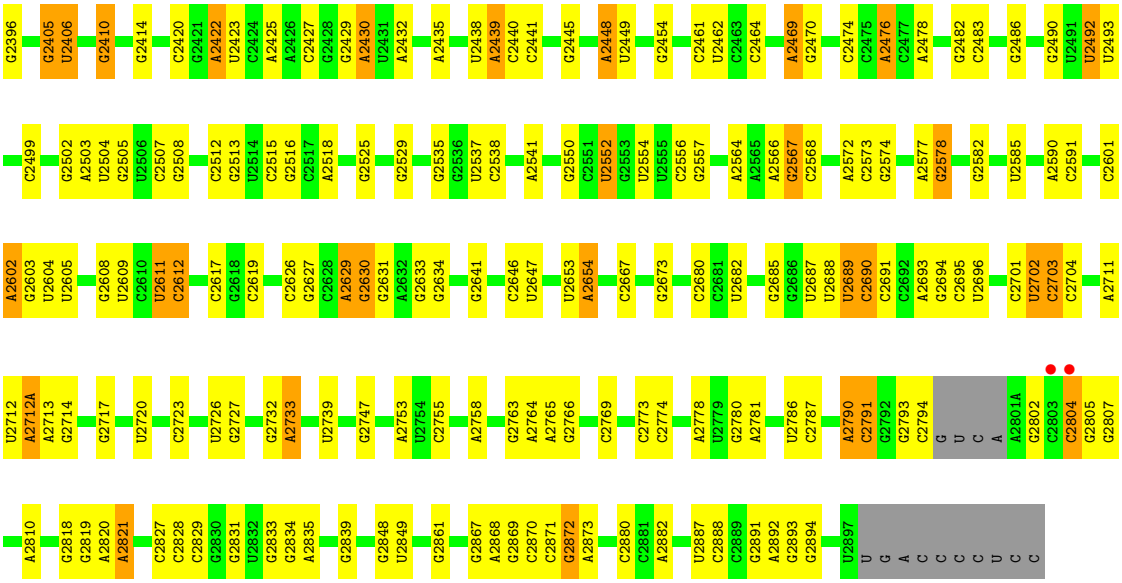
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

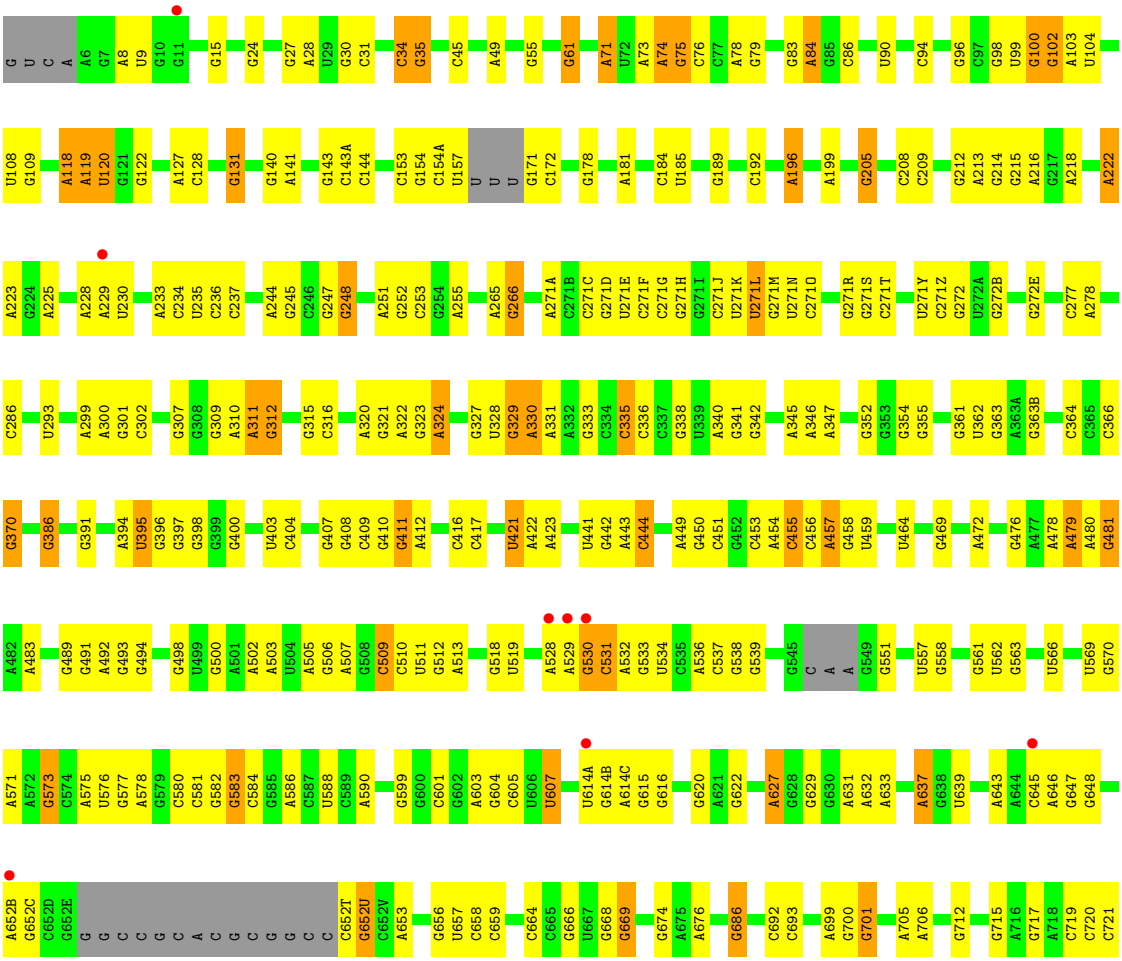


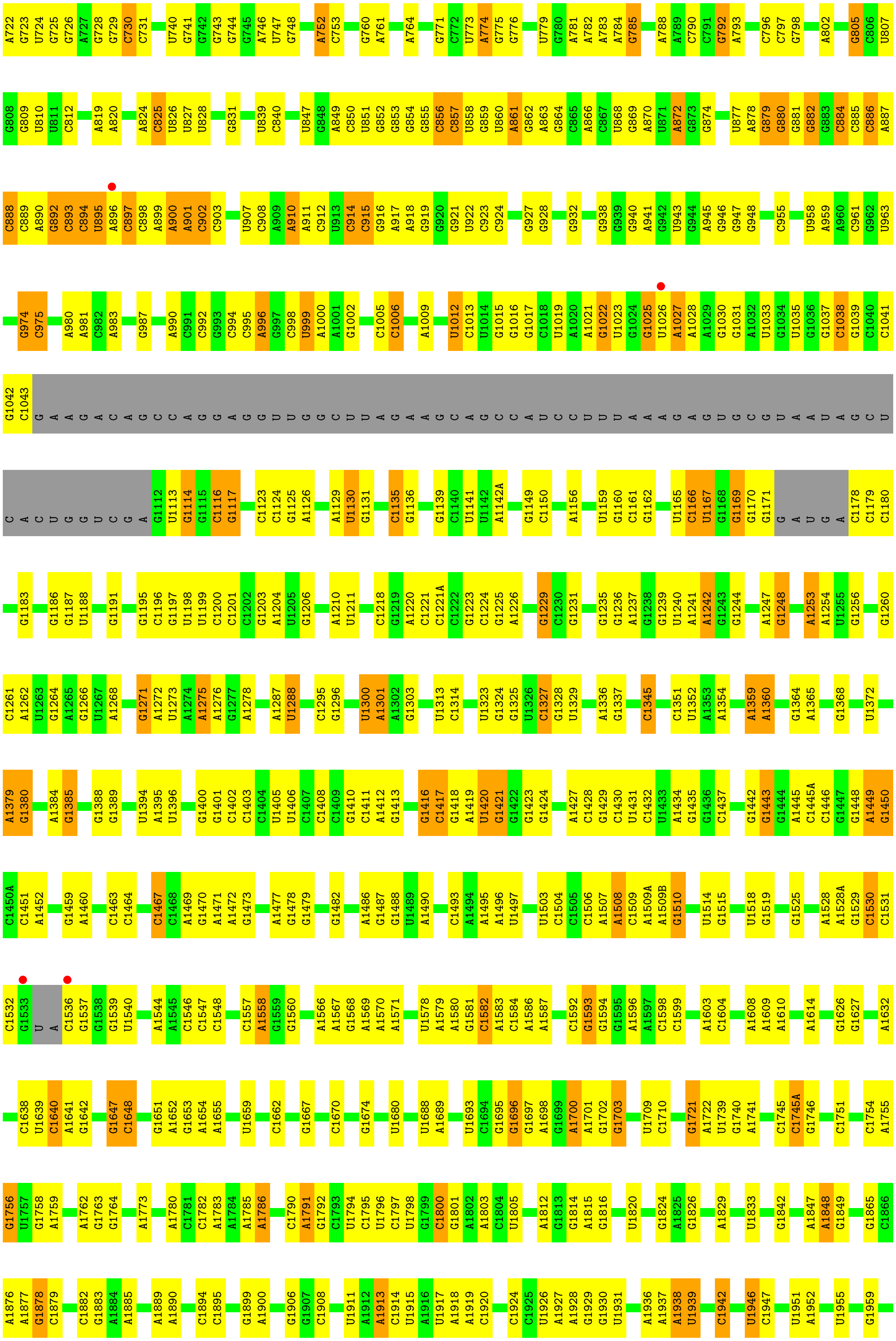

A1010 G1011 U1012 C1013 U1014 G1015 G1016 G1022 U1023 G1024 G1025 U1026 A1027 A1028 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 C1041 G1042 C1043 G1044 A1045 A1046 G1047 A1048 G1051 C1052 C1053 A1054 G1055 G1056 A1057 G1058 G1059 U1060 U G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076
A1077 U1078 C1079 C1080 U1081 U1082 U1083 A1084 A1085 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 C1100 U1101 C1102 A1103 C1104 U1105 G1106 C1109 G1110 A1111 G1112 U1113 G1114 G1115 C1116 G1117 C1118 C1119 G1125 A1126 A1132 U1133 C1135 G1136 G1137 G1138 G1139 C1140 U1141 U1142 A1142A A1143 G1144
G1149 C1150 G1151 C1152 C1153 G1154 A1155 A1156 G1164 U1165 C1166 U1167 G1168 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 C1181 A1182 G1183 G1187 U1188 A1189 G1190 G1191 C1201 C1202 G1203 A1204 U1205 A1210 A1213 A1220 G1225 A1226 G1227 G1235 G1238 G1239 U1240 A1241 A1242 G1243 G1244
A1247 G1252 A1253 G1256 G1264 A1265 G1266 U1267 A1268 G1271 A1272 U1273 A1274 A1275 A1278 G1281 A1287 C1290 G1291 U1292 C1293 U1294 C1295 U1300 A1301 A1302 G1303 C1315 G1332 G1338 U1341 A1342 C1345 G1346 U1352 A1353 A1354 G1355 A1359 A1360 G1364 A1365
G1371 U1372 A1373 A1379 G1380 A1384 G1385 U1394 A1395 U1396 C1399 U1405 U1406 C1407 G1416 C1417 G1418 A1419 U1420 G1421 G1426 A1427 C1428 G1429 C1430 U1431 C1432 U1433 G1441 G1442 A1445 G1448 A1449 G1450 U1453 G1455 A1460 C1467 A1477 G1482 G1484 A1490 C1493
A1494 U1497 C1504 C1505 C1506 A1507 A1508 C1509 A1509A A1509B U1512 C1513 U1514 G1515 U1518 G1519 G1520 A1528 A1528A C1532 G U A C G1537 G1538 G1539 A1542 C1546 C1547 C1548 A1554 G1555 A1558 A1566 A1567 G1568 A1569 A1572 U1578 A1579 A1580 G1581 C1584 A1586 A1587
C1588 C1589 G1594 G1595 U1602 C1607 A1608 A1609 A1610 A1614 C1615 G1633 A1634 G1635 C1636 A1637 A1641 G1642 G1647 C1648 G1651 A1664 A1668 A1669 C1670 U1671 C1672 U1673 G1674 C1675 A1676 A1677 G1682 C1683 C1684 C1685 C1686 G1687 U1688 U1693 G1699 A1700 G1703 U1709 C1710
G1718 G1719 U1720 G1721 A1722 U1739 G1740 A1741 G1753 G1756 U1757 G1758 A1762 G1763 G1764 G1770 A1773 U1778 U1779 A1780 C1781 C1782 A1783 A1784 A1785 A1786 C1790 A1791 U1794 C1795 U1796 C1797 U1798 G1799 C1800 G1801 A1802 A1803 C1804 A1810 G1811 G1814 A1815 G1816 G1817 U1818 G1823
G1826 C1827 G1828 A1829 A1847 U1851 C1852 G1857 G1858 U1864 G1865 C1866 A1876 A1877 G1878 C1882 G1883 A1889 A1890 G1891 C1892 G1899 A1900 G1903 G1906 U1911 A1912 A1913 C1914 U1915 A1916 U1917 A1918 A1919 C1920 G1929 G1930 U1931 A1932 G1933 A1936 A1937 A1938 U1939 C1942 G1949
G1950 U1951 A1952 A1953 G1954 U1955 C1962 U1963 G1964 C1965 A1966 C1967 G1968 A1969 A1970 A1971 A1972 G1984 G1992 U1993 C1996 G1997 G1998 C1999 G2002 G2010 A2013 A2014 A2019 A2020 C2021 U2022 G2023 U2028 G2029 A2030 A2031 G2032 A2033 U2034 G2035 G2038 C2039 C2040 U2041 A2042 C2043 A2051 G2052
G2053 A2054 C2055 G2056 A2060 G2061 A2062 C2063 C2064 C2065 C2066 G2069 U2074 U2075 U2079 U2086 G2087 G2090 U2096 C2097 U2098 U2099 G2100 G2101 U2102 C2103 G2104 C2105 G2106 C2107 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116 A2117 U2118 A2119 G2120 G2121 U2122 G2123 G2124 G2125 A2126 G2127 C2128 C2129 U2130
G2131 U2132 G2133 A2134 A2135 C2136 C2137 C2138 C2139 C2140 G2141 C2142 C2143 U2144 C2145 C2146 G2147 C2148 G2149 U2150 G2151 G2152 G2153 G2154 G2155 G2156 G2157 A2158 G2159 G2160 C2161 G2162 C2163 C2164 C2165 G2166 C2167 C2168 A2169 A2170 A2171 U2172 A2173 C2174 C2175 C2178 G2181 G2182 C2183 G2184 C2188 U2189 G2190 G2191 G2192 G2193 G2194
C2195 A2198 A2199 C2200 U2203 C2205 G2206 G2207 A2208 U2218 G2219 G2222 A2225 C2226 A2227 G2228 U2233 G2234 G2238 G2239 C2240 U2243 U2244 A2247 C2248 G2251 G2255 G2259 C2264 A2268 A2269 G2270 G2271 U2272 A2273 A2274 G2277 A2278 G2279 G2280 C2283 A2287 U2291
C2292 G2302 A2305 C2306 G2307 G2308 U2312 G2315 C2316 G2319 A2320 G2325 C2326 A2327 A2328 G2329 G2330 G2331 G2334 A2335 A2336 G2337 G2345 A2346 C2347 U2348 G2349 C2350 G2354 A2361 C2364 G2365 A2366 G2367 A2377 A2378 C2381 G2382 G2383 G2384 C2385 G2389 U2390 C2394 C2395



• Molecule 1: 23S Ribosomal RNA

Chain 2A:




A722 G723 U724 G725 G726 A727 G728 G729 C730 C731 U740 G741 G742 G743 G744 G745 A746 U747 G748 A752 C753 G760 A761 A764 G771 C772 U773 A774 G775 G776 U779 G780 A781 A782 A783 A784 G785 A788 A789 C790 C791 G792 A793 C796 C797 G798 A802 G805 C806 U807
G808 G809 U810 U811 C812 A819 A820 A824 C825 U826 U827 U828 G831 U839 C840 U847 G848 A849 C850 U851 G852 G853 G854 G855 C856 C857 U858 G859 U860 A861 G862 A863 G864 C865 A866 C867 U868 G869 A870 U871 A872 G873 G874 U877 A878 G879 G880 G881 G882 G883 C884 C885 C886 A887
C888 C889 A890 G892 C893 C894 U895 A896 C897 C898 A899 A900 A901 C902 C903 U907 C908 A909 A910 A911 C912 U913 C914 C915 G916 A917 A918 G919 G920 G921 U922 C923 C924 G927 G928 G932 G938 G939 G940 A941 G942 U943 G944 A945 G946 G947 G948 C955 U958 A959 A960 C961 G962 U963
G974 C975 A980 A981 C982 A983 G987 A990 C991 C992 G993 C994 C995 A996 G997 C998 U999 A1000 A1001 G1002 C1005 C1006 A1009 U1012 C1013 U1014 G1015 G1016 G1017 C1018 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 A1027 A1028 A1029 G1030 C1031 A1032 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 C1041
G1042 C1043 G A A G A C A G C C A G G A G G U U G G C U U A G A A G C A G C C A U C C U U U A A A G A G U G C G U A A U A G C U
C A C U G G U C G A G1112 U1113 G1114 G1115 C1116 G1117 C1123 C1124 G1125 A1126 A1129 U1130 G1131 C1135 G1136 G1139 C1140 U1141 U1142 A1142A G1149 C1150 A1156 U1159 G1160 C1161 G1162 U1165 C1166 U1167 G1168 G1169 G1170 G1171 G A U G A C1178 C1179 C1180
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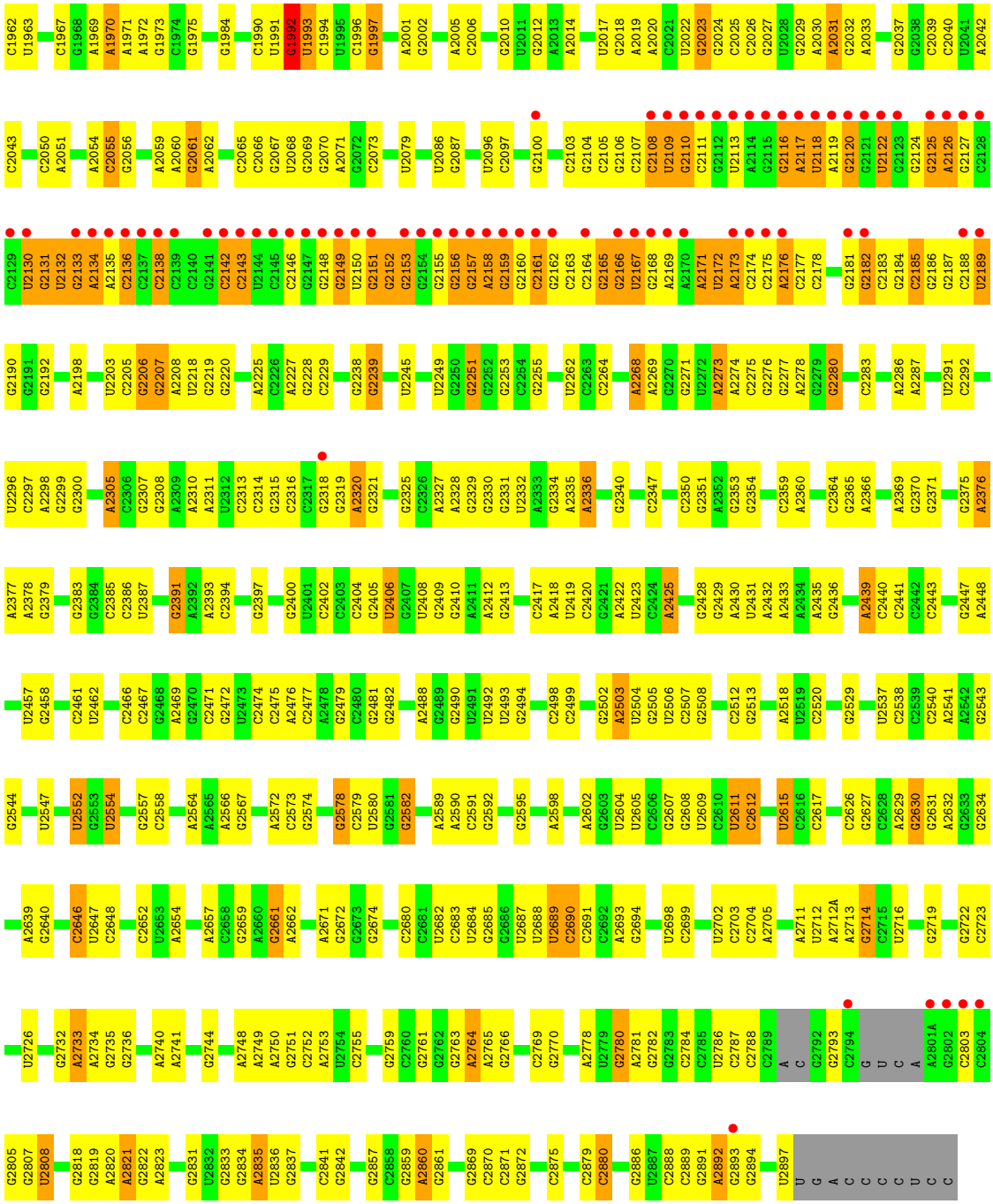
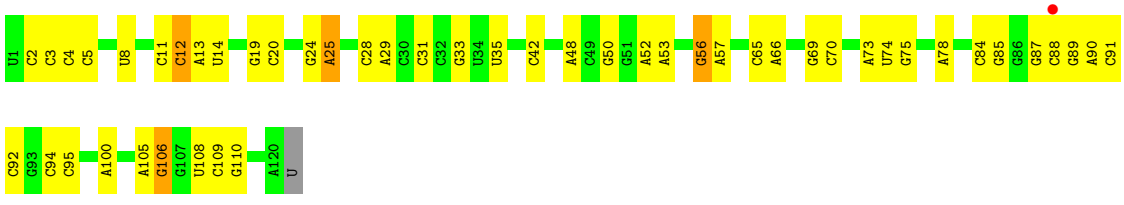


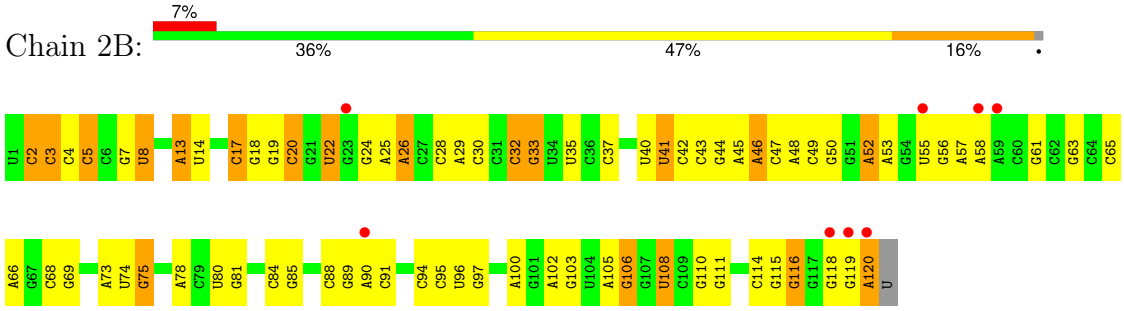
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



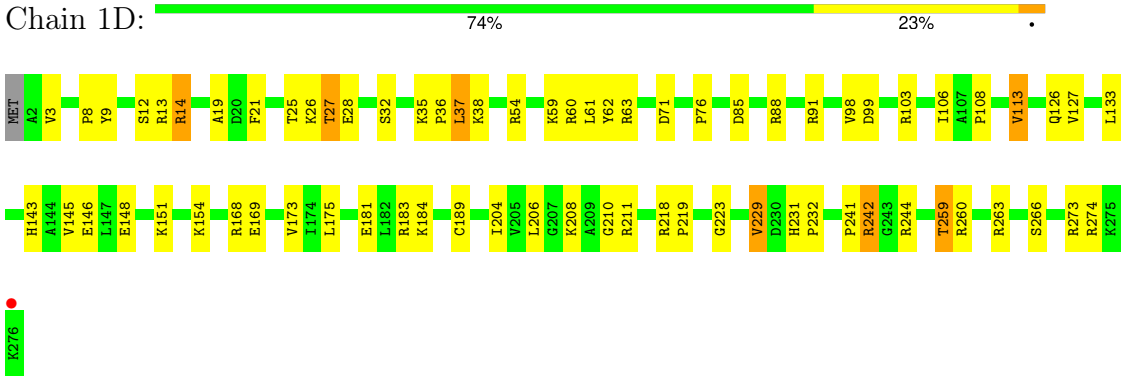
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



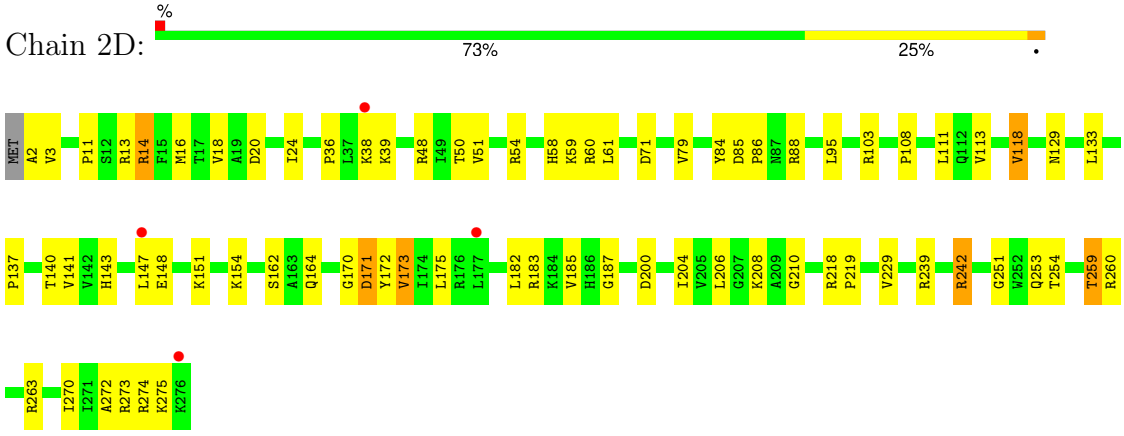
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



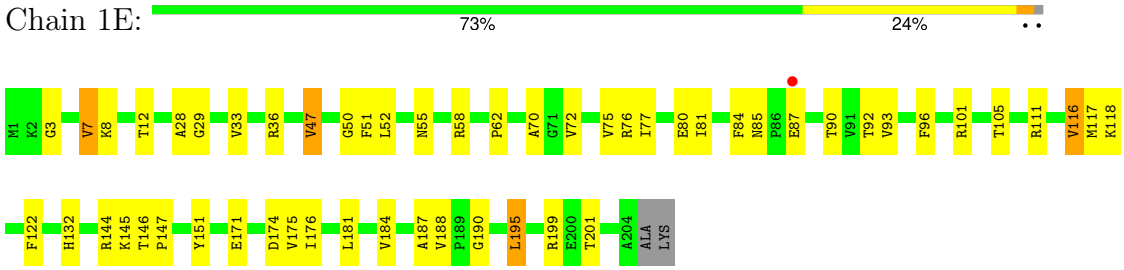
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



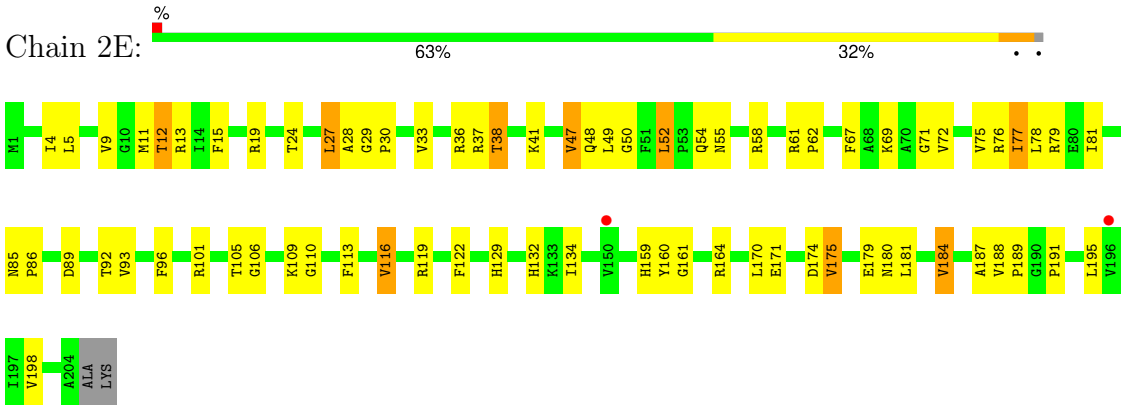
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



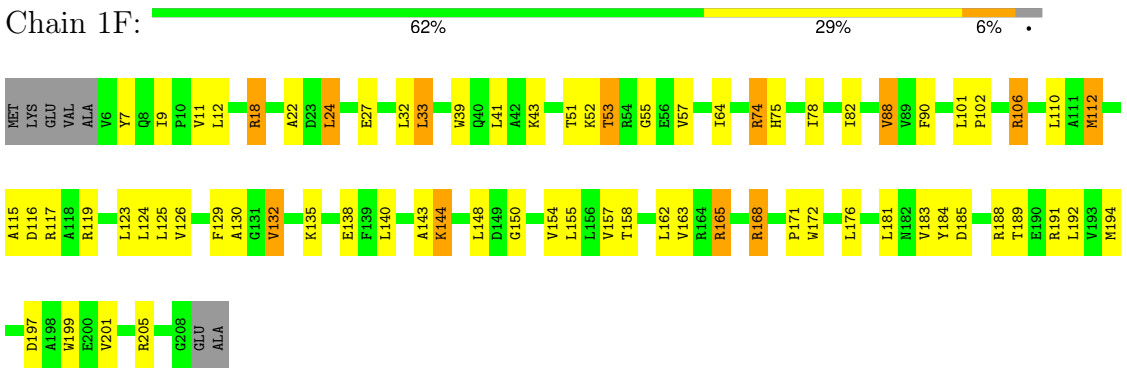
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



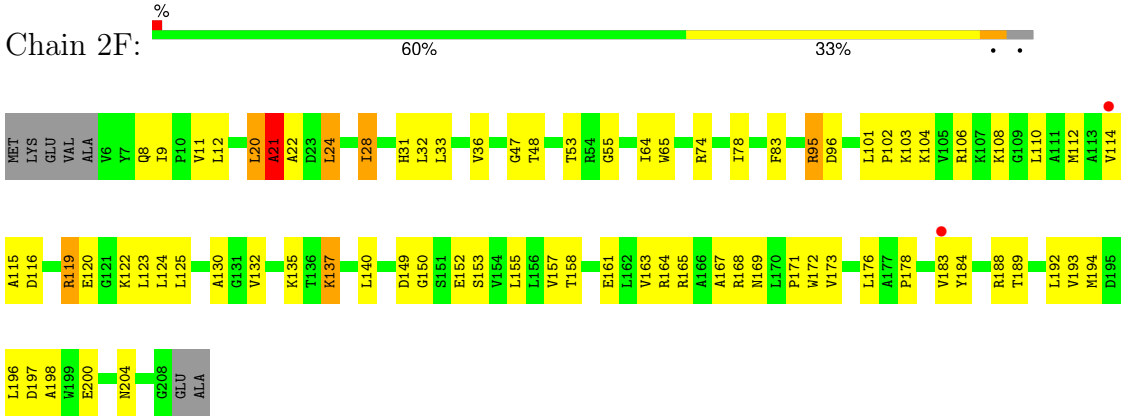
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



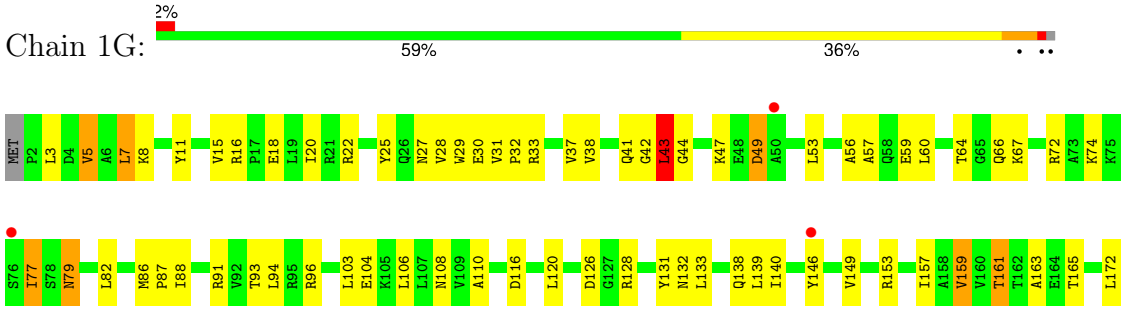
• Molecule 5: 50S ribosomal protein L4

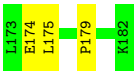
Chain 2F:



• Molecule 6: 50S ribosomal protein L5

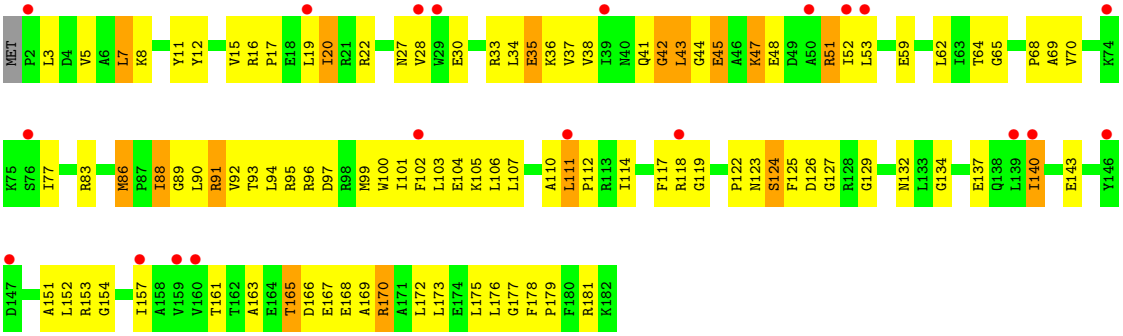
Chain 1G:





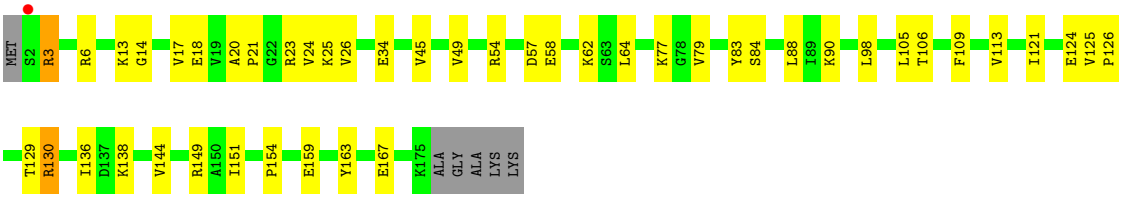
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



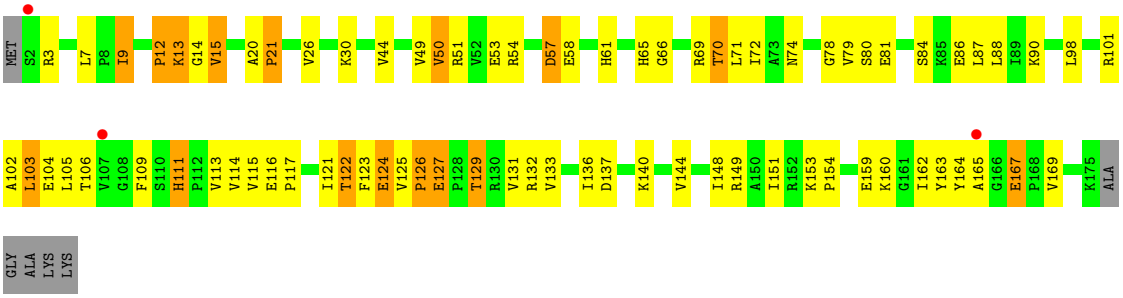
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



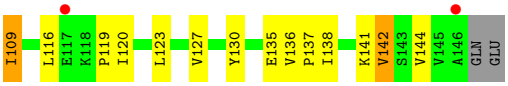
• Molecule 7: 50S ribosomal protein L6

Chain 2H:

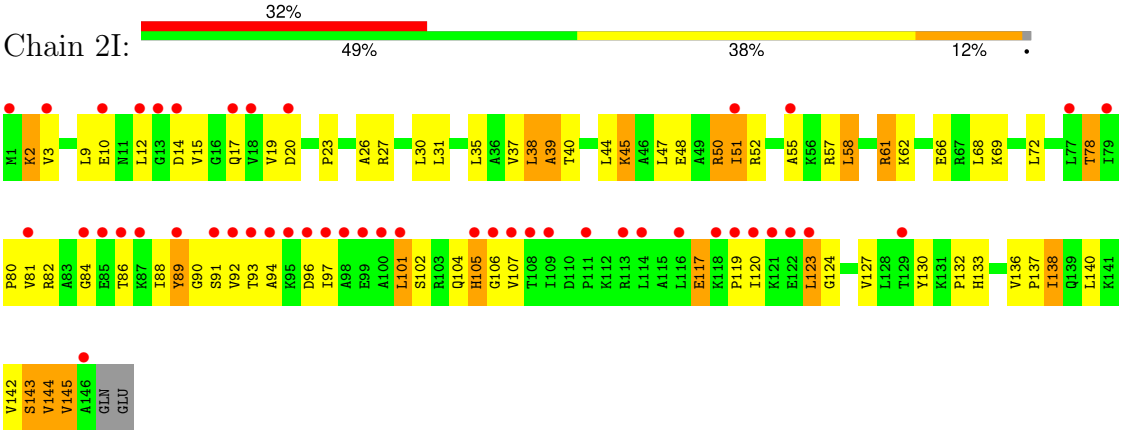


• Molecule 8: 50S ribosomal protein L9

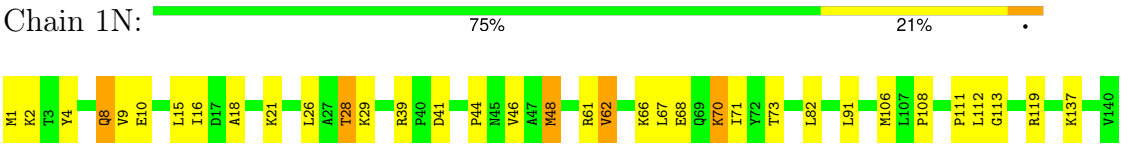
Chain 1I:



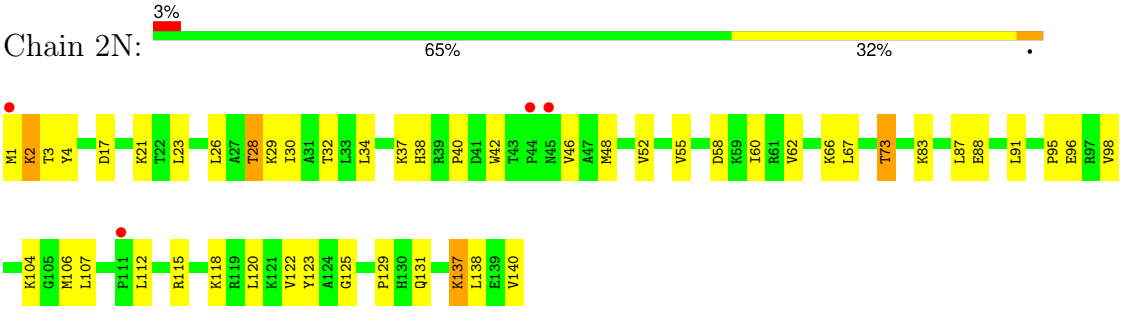
• Molecule 8: 50S ribosomal protein L9



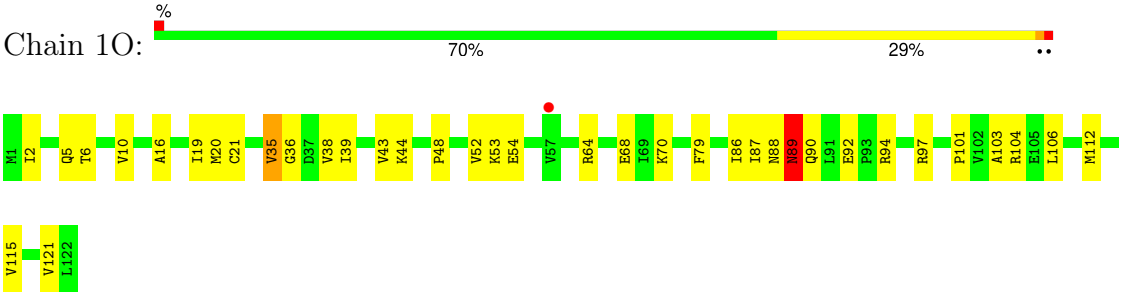
• Molecule 9: 50S ribosomal protein L13



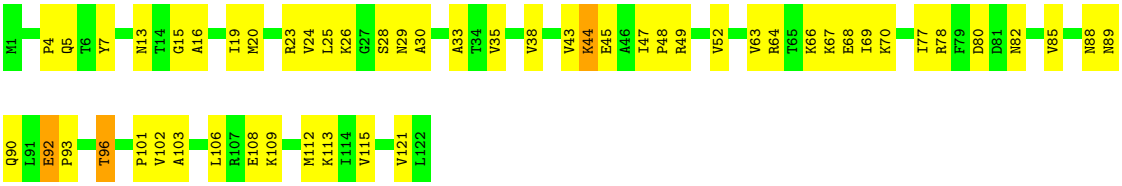
• Molecule 9: 50S ribosomal protein L13



• Molecule 10: 50S ribosomal protein L14

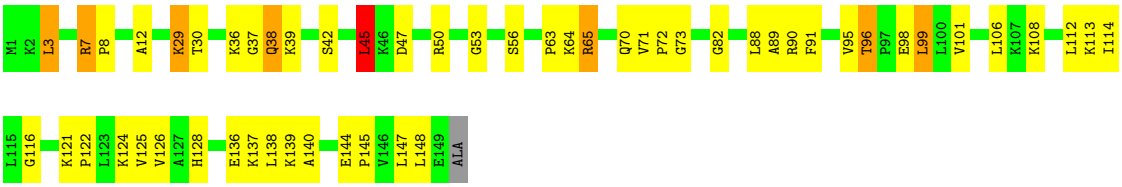


• Molecule 10: 50S ribosomal protein L14



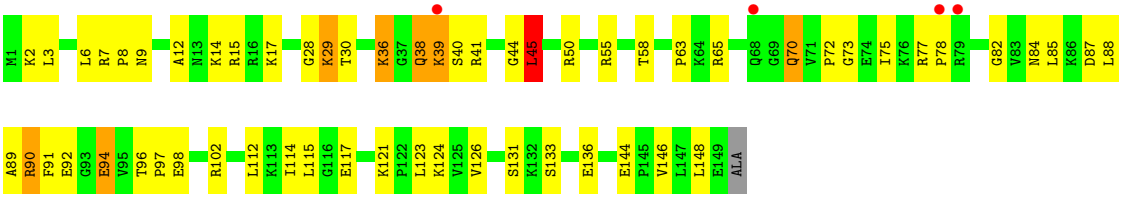
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



• Molecule 11: 50S ribosomal protein L15

Chain 2P:

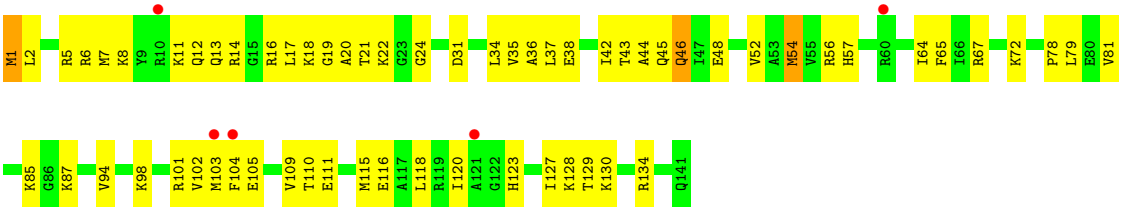


• Molecule 12: 50S ribosomal protein L16

Chain 1Q:

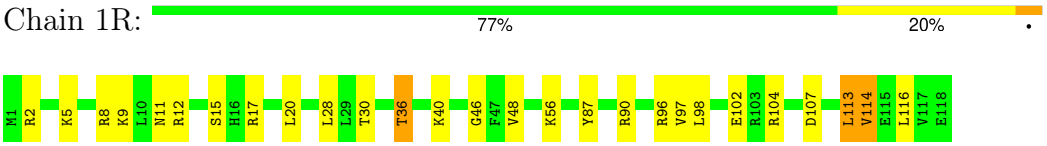
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



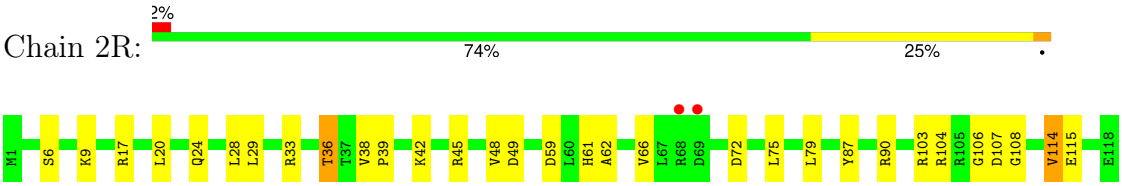
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



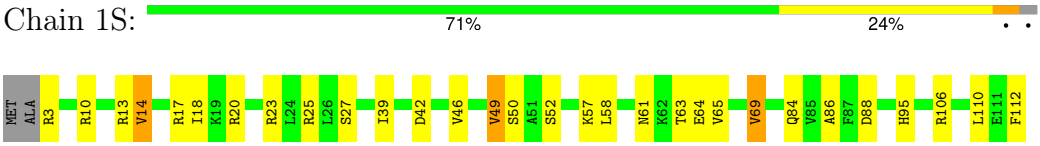
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



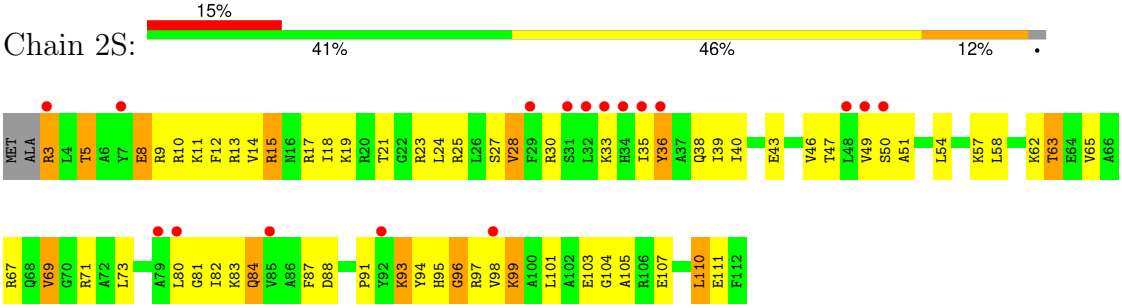
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



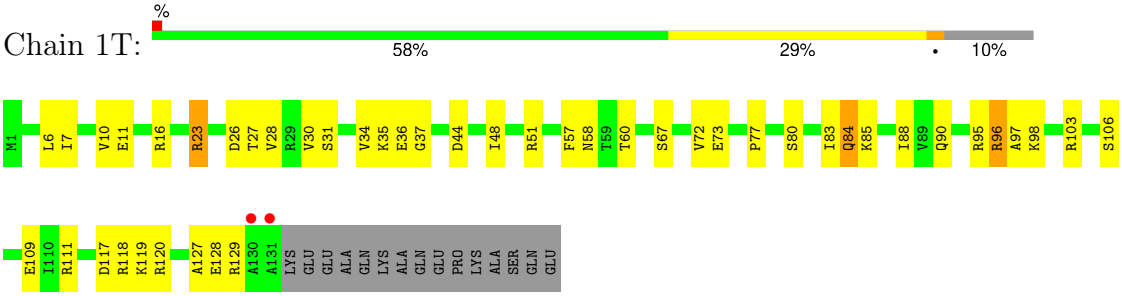
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



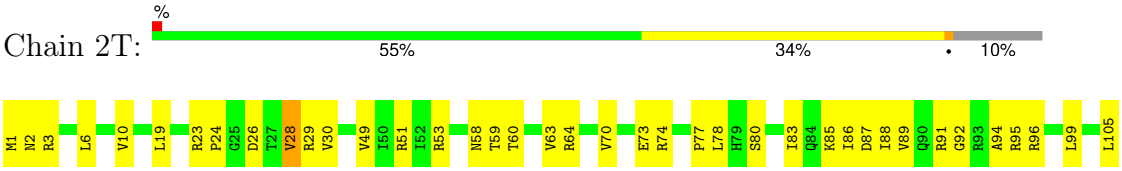
• Molecule 15: 50S ribosomal protein L19

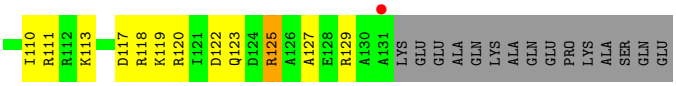
Chain 1T:



• Molecule 15: 50S ribosomal protein L19

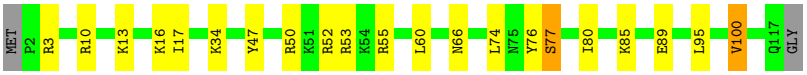
Chain 2T:





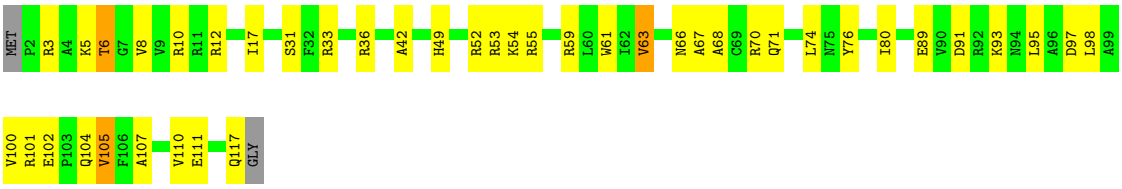
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



• Molecule 16: 50S ribosomal protein L20

Chain 2U:

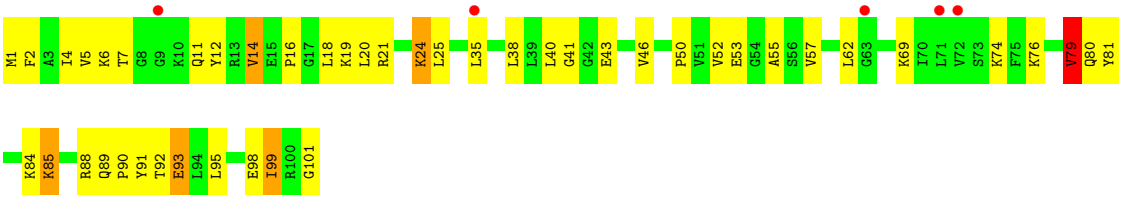


• Molecule 17: 50S ribosomal protein L21

Chain 1V:

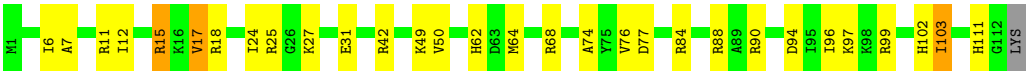
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



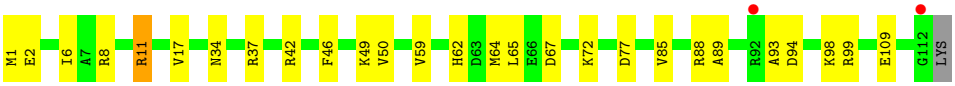
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



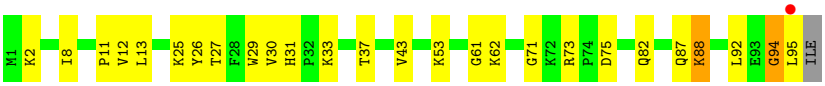
• Molecule 18: 50S ribosomal protein L22

Chain 2W:



• Molecule 19: 50S ribosomal protein L23

Chain 1X:



• Molecule 19: 50S ribosomal protein L23

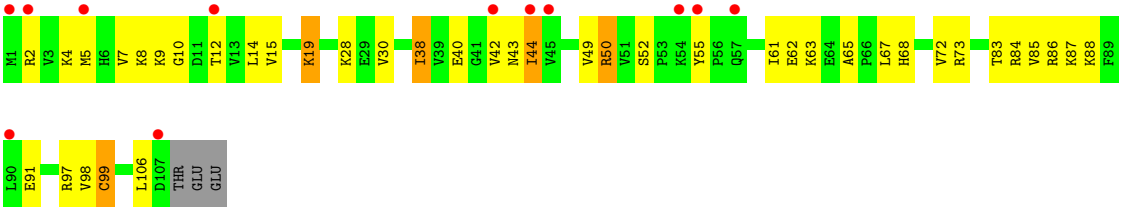
Chain 2X:

• Molecule 20: 50S ribosomal protein L24

Chain 1Y:

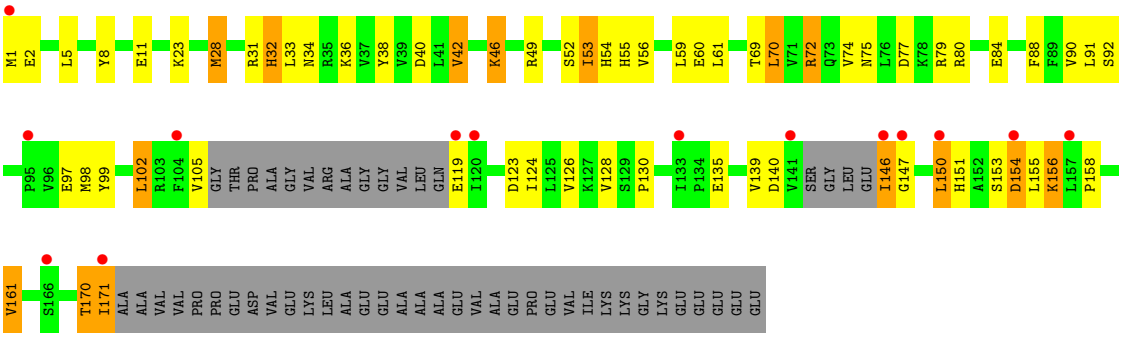
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



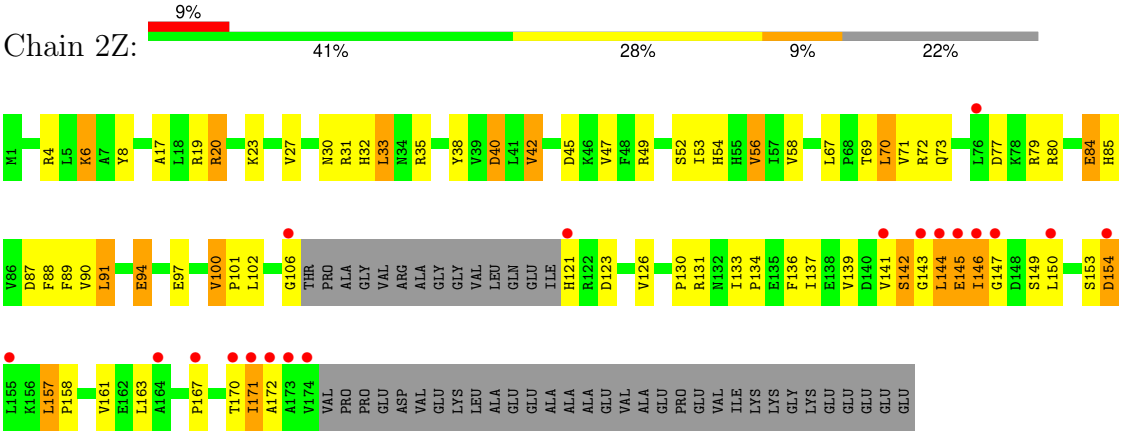
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



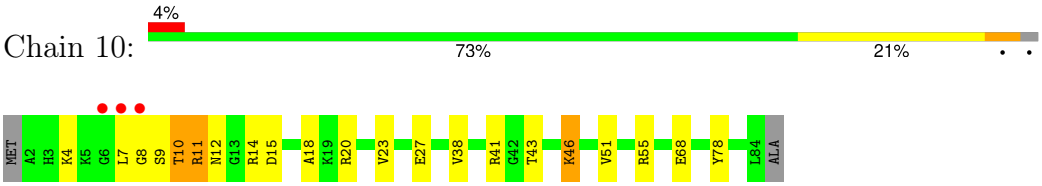
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



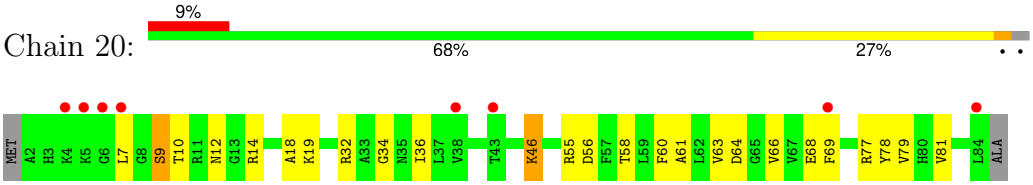
• Molecule 22: 50S ribosomal protein L27

Chain 10:



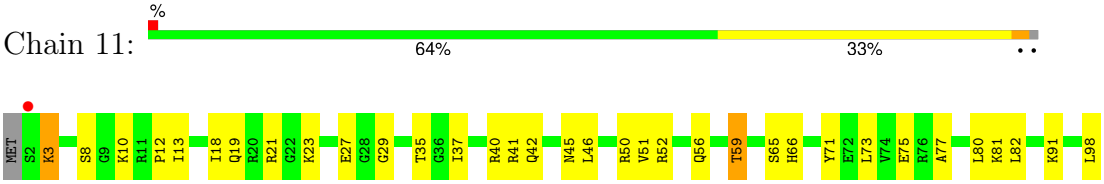
• Molecule 22: 50S ribosomal protein L27

Chain 20:



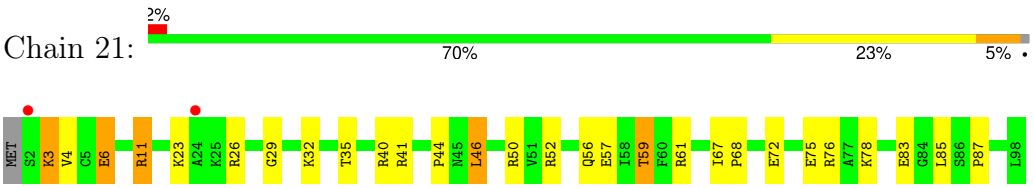
• Molecule 23: 50S ribosomal protein L28

Chain 11:



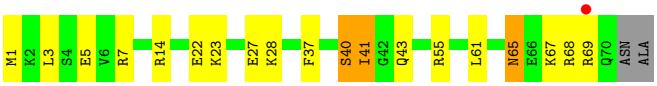
• Molecule 23: 50S ribosomal protein L28

Chain 21:



• Molecule 24: 50S ribosomal protein L29

Chain 12:

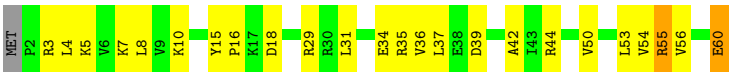


• Molecule 24: 50S ribosomal protein L29

Chain 22:

• Molecule 25: 50S ribosomal protein L30

Chain 13:

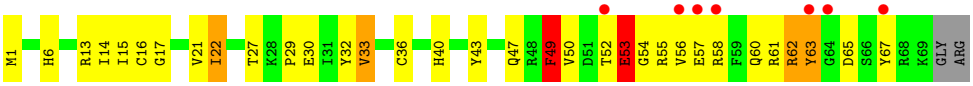


• Molecule 25: 50S ribosomal protein L30

Chain 23:

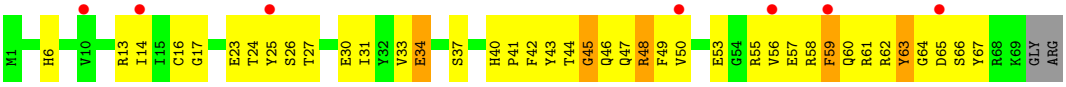
• Molecule 26: 50S ribosomal protein L31

Chain 14:



• Molecule 26: 50S ribosomal protein L31

Chain 24:

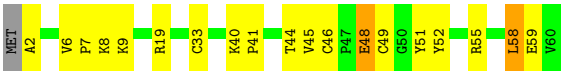


• Molecule 27: 50S ribosomal protein L32

Chain 15:

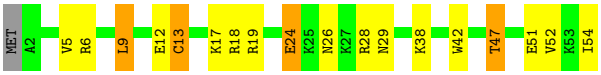
• Molecule 27: 50S ribosomal protein L32

Chain 25:



• Molecule 28: 50S ribosomal protein L33

Chain 16:

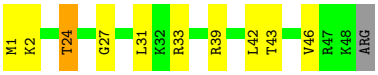


• Molecule 28: 50S ribosomal protein L33

Chain 26:

• Molecule 29: 50S ribosomal protein L34

Chain 17:

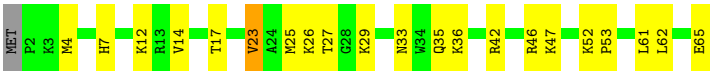


• Molecule 29: 50S ribosomal protein L34

Chain 27:

• Molecule 30: 50S ribosomal protein L35

Chain 18:

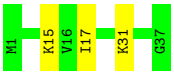


• Molecule 30: 50S ribosomal protein L35

Chain 28:

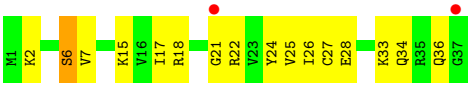
• Molecule 31: 50S ribosomal protein L36

Chain 19:



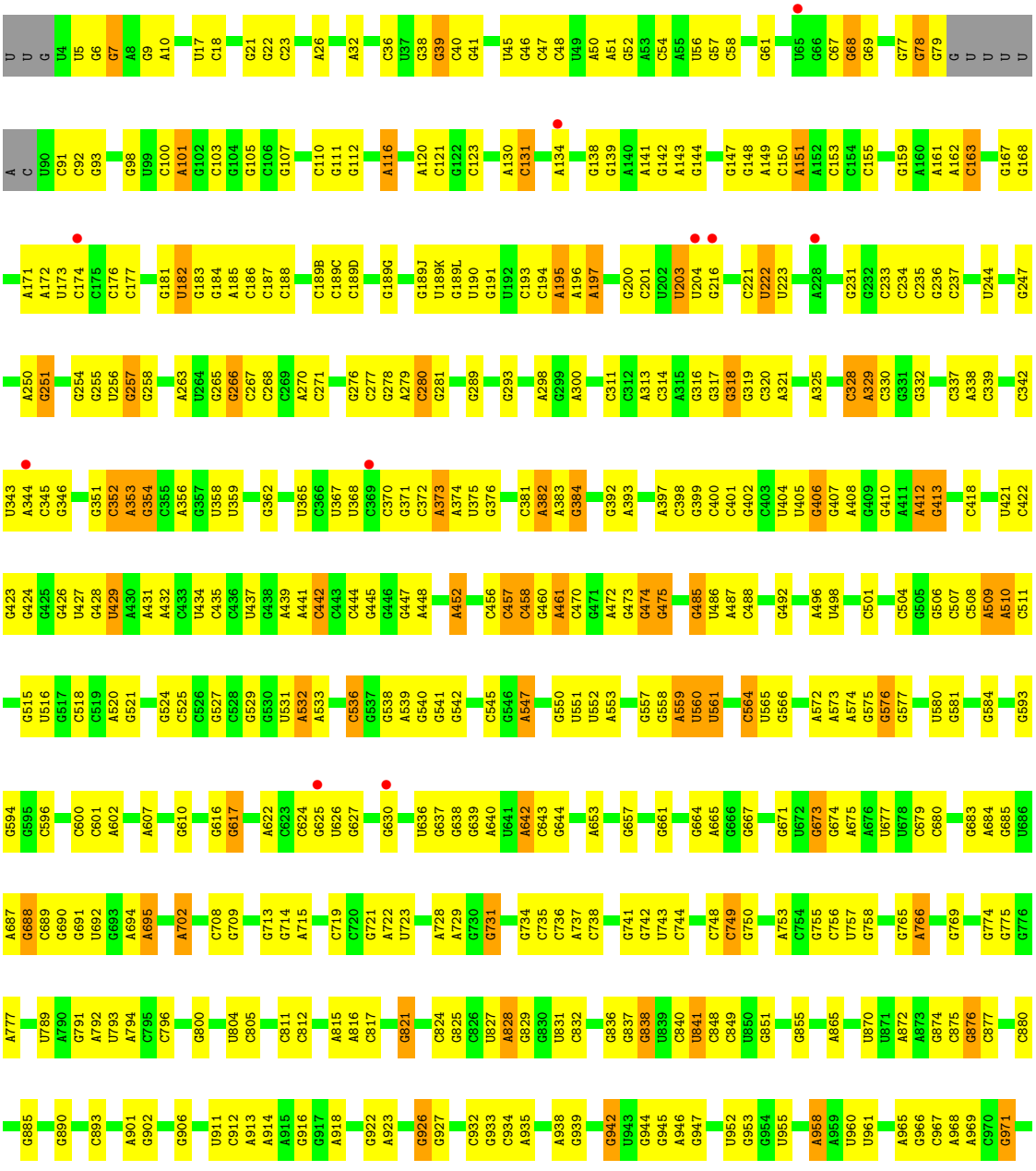
• Molecule 31: 50S ribosomal protein L36

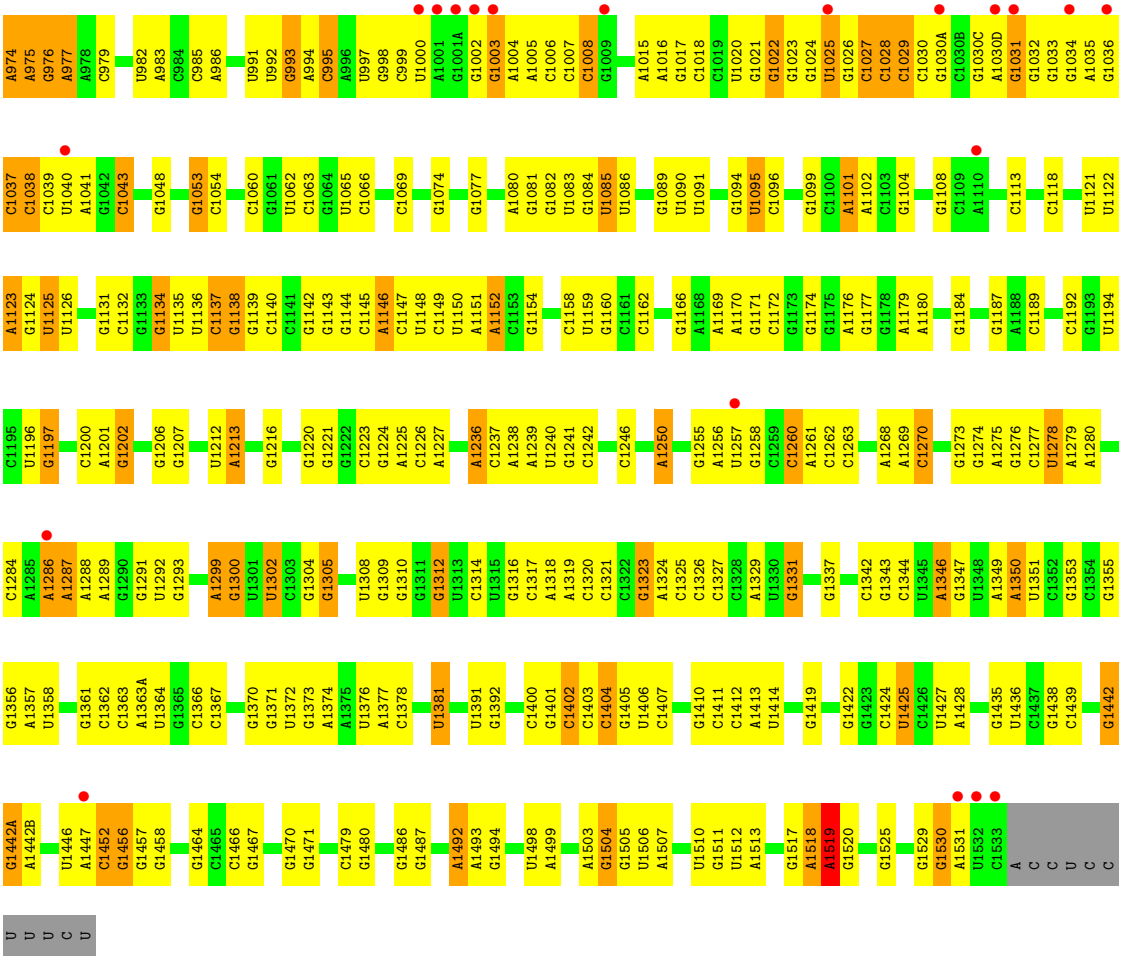
Chain 29:



• Molecule 32: 16S Ribosomal RNA

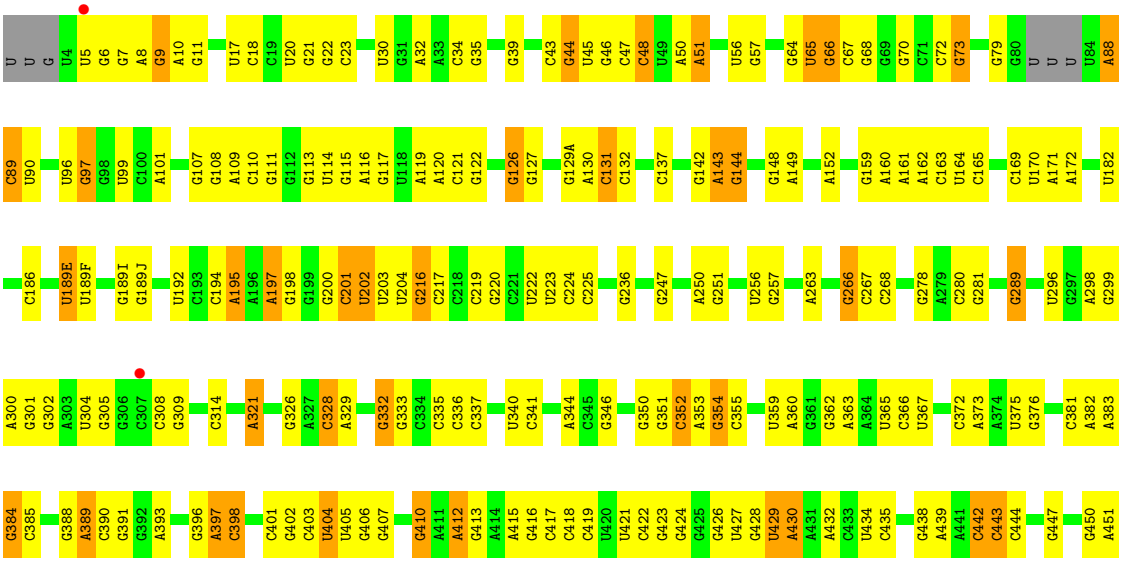
Chain 1a:

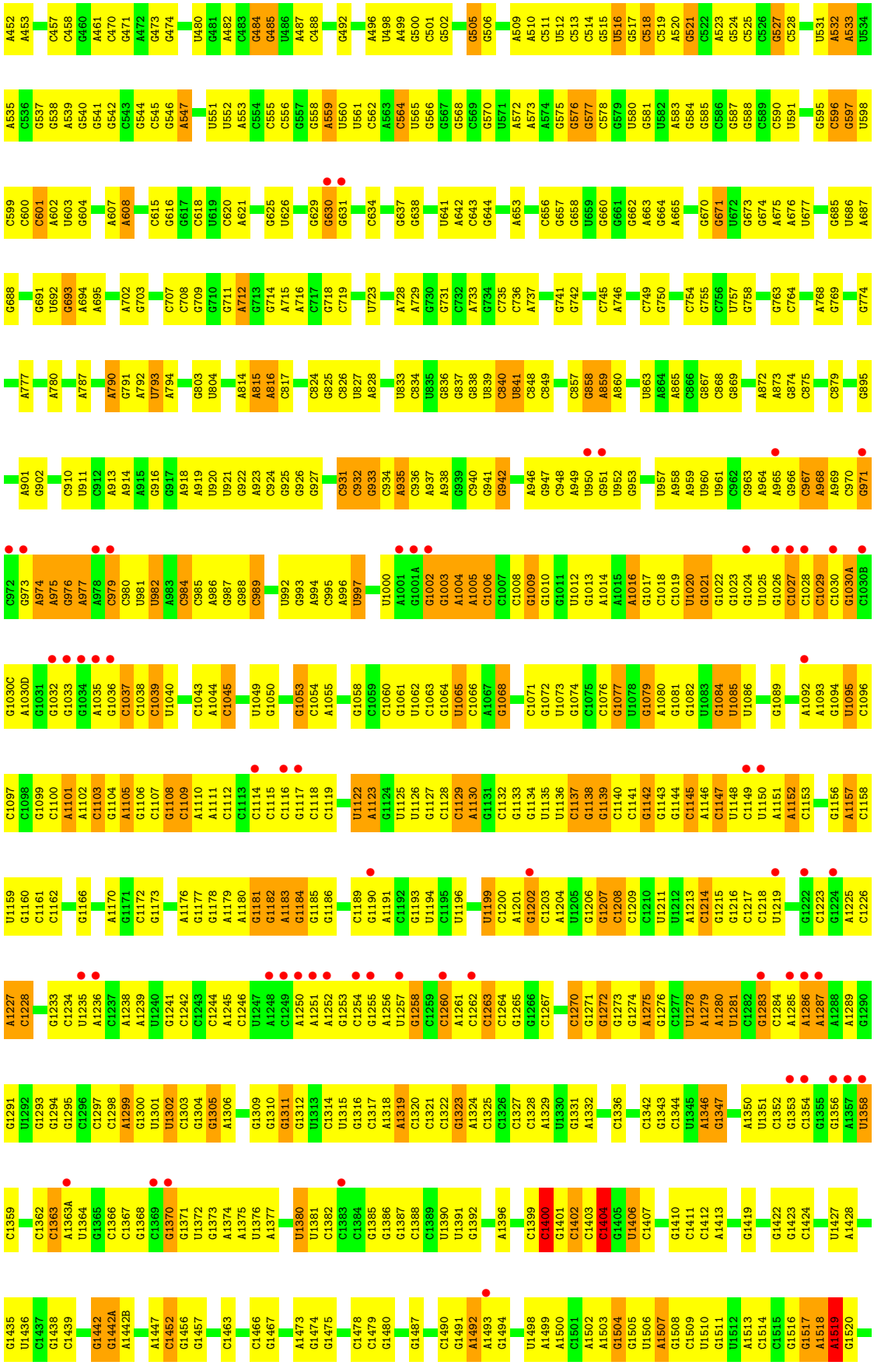




• Molecule 32: 16S Ribosomal RNA

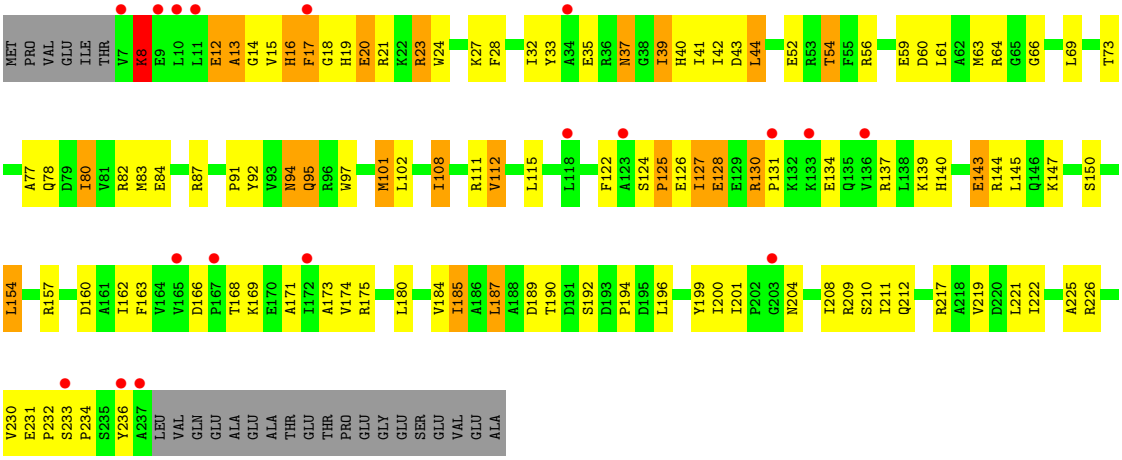
Chain 2a:





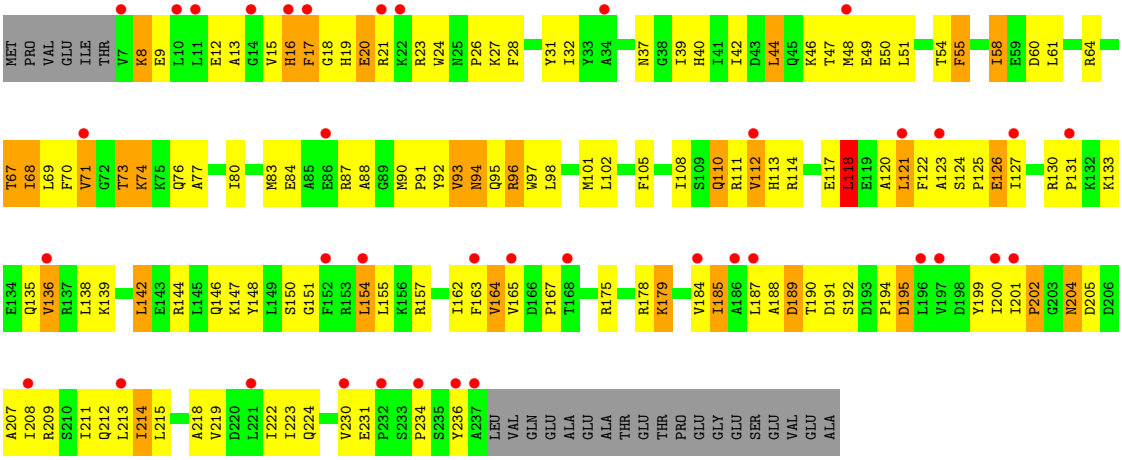
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



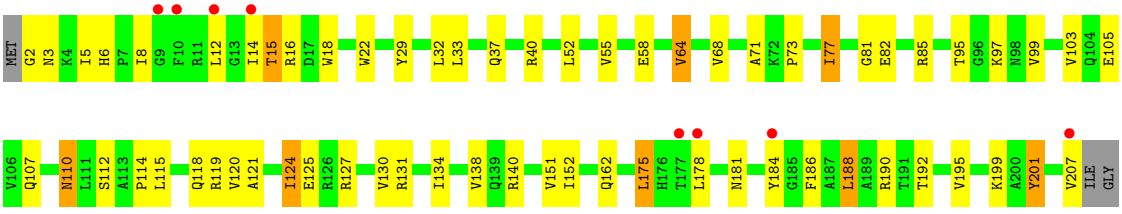
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



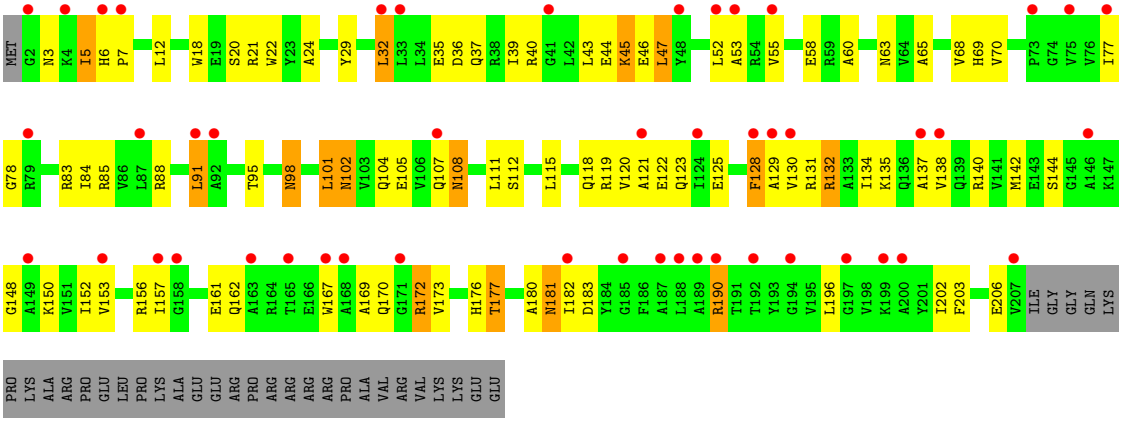
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



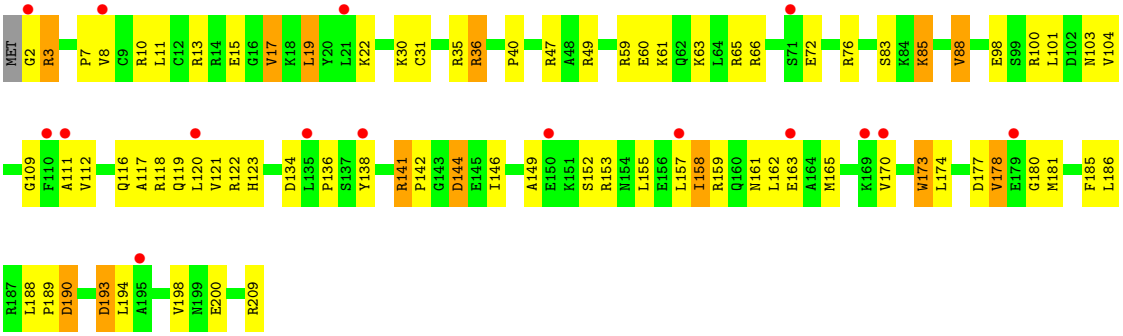
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



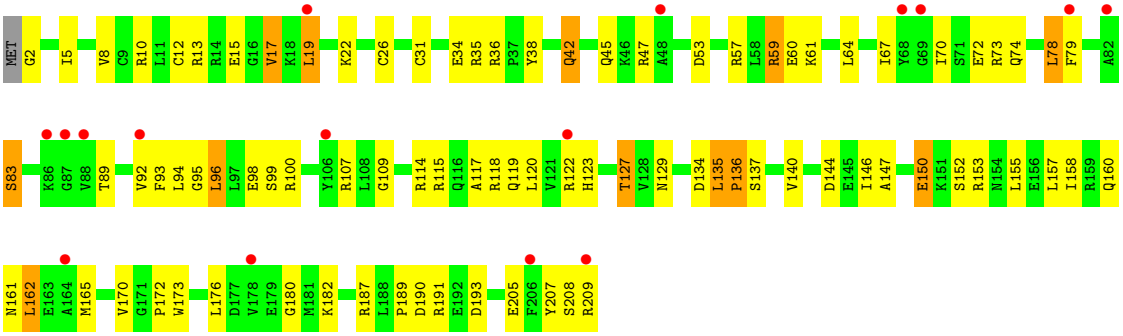
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



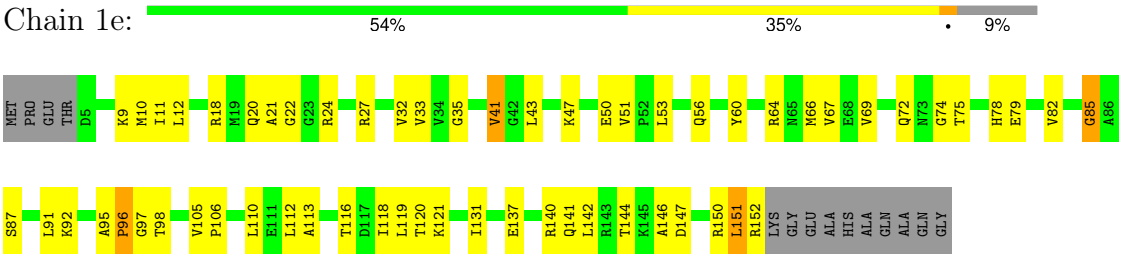
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



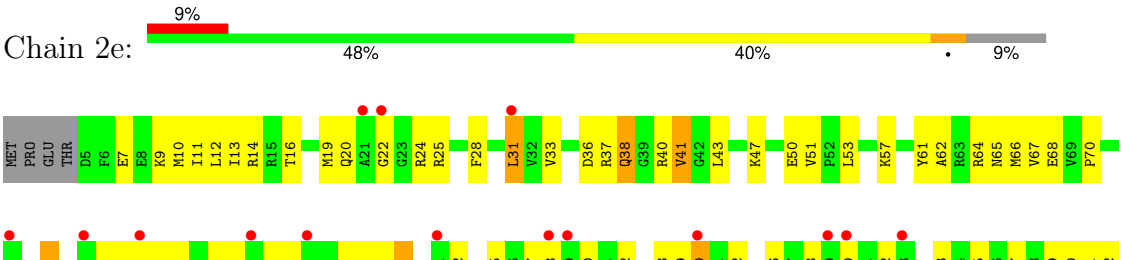
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



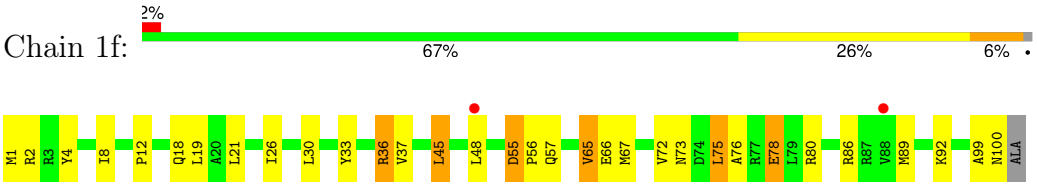
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



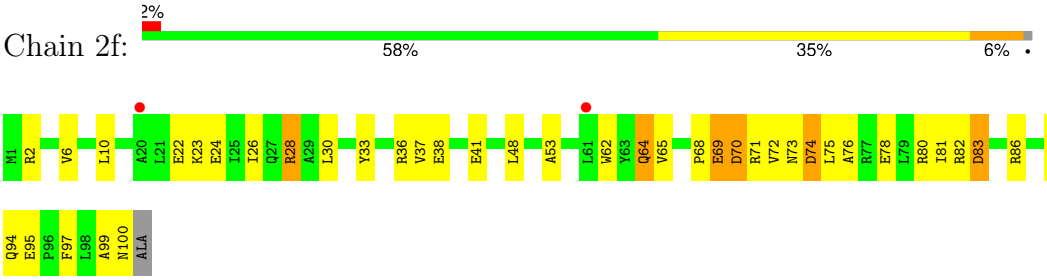
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



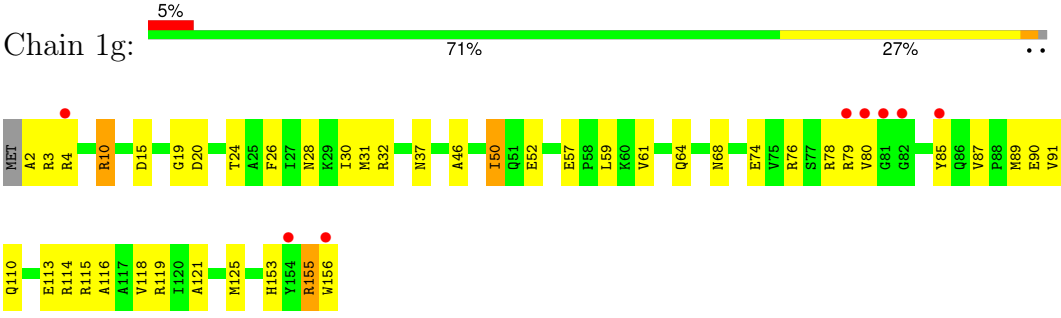
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



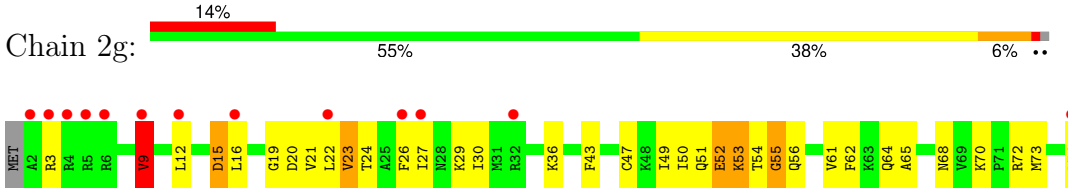
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



• Molecule 38: 30S ribosomal protein S7

Chain 2g:



• Molecule 39: 30S ribosomal protein S8

Chain 1h:

• Molecule 39: 30S ribosomal protein S8

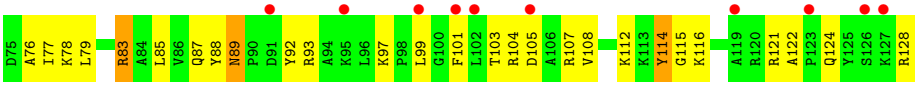
Chain 2h:

• Molecule 40: 30S ribosomal protein S9

Chain 1i:

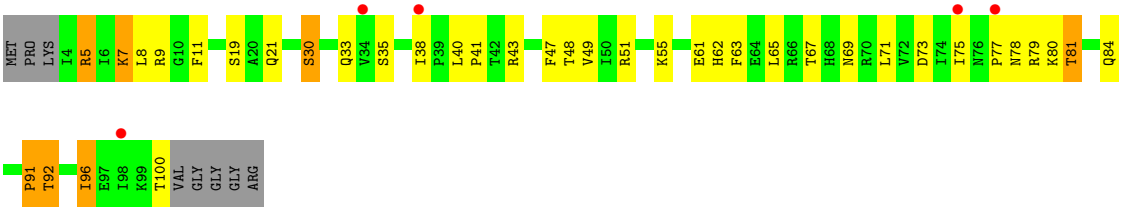
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



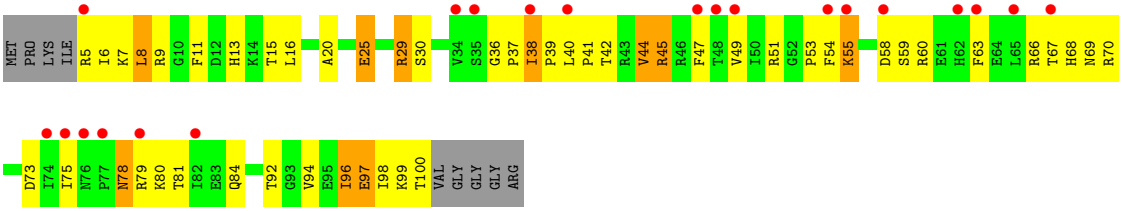
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



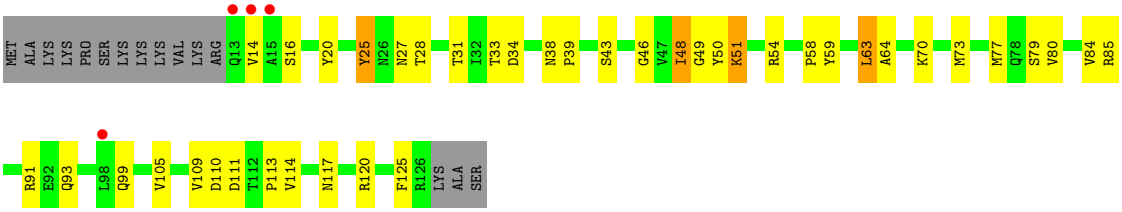
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



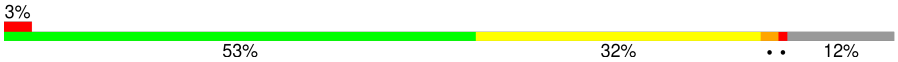
• Molecule 42: 30S ribosomal protein S11

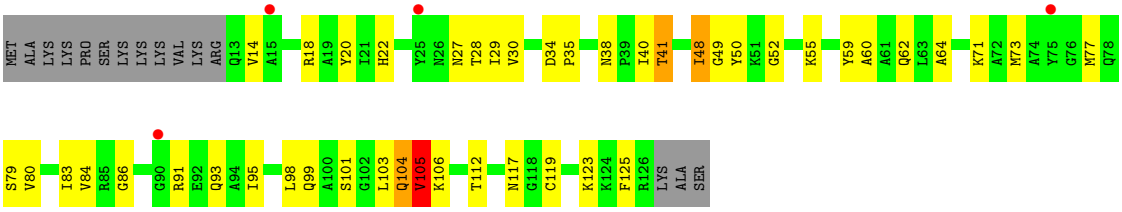
Chain 1k:



• Molecule 42: 30S ribosomal protein S11

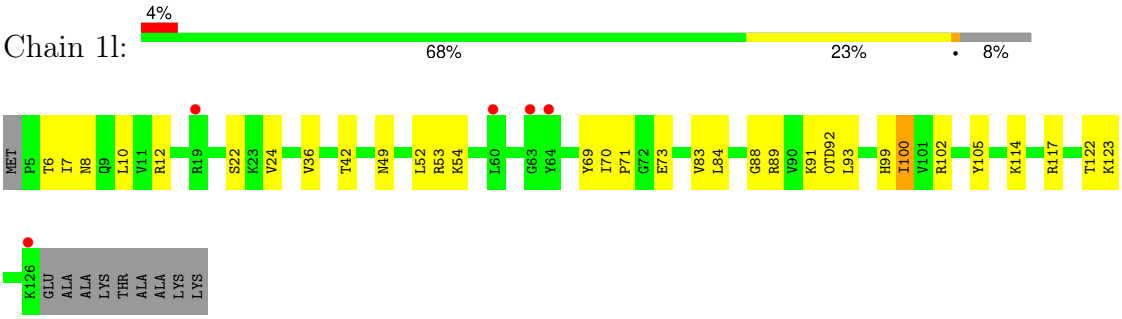
Chain 2k:





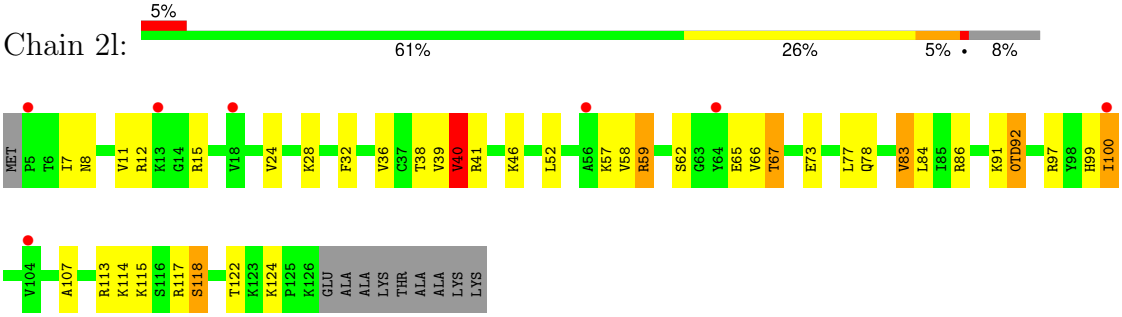
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



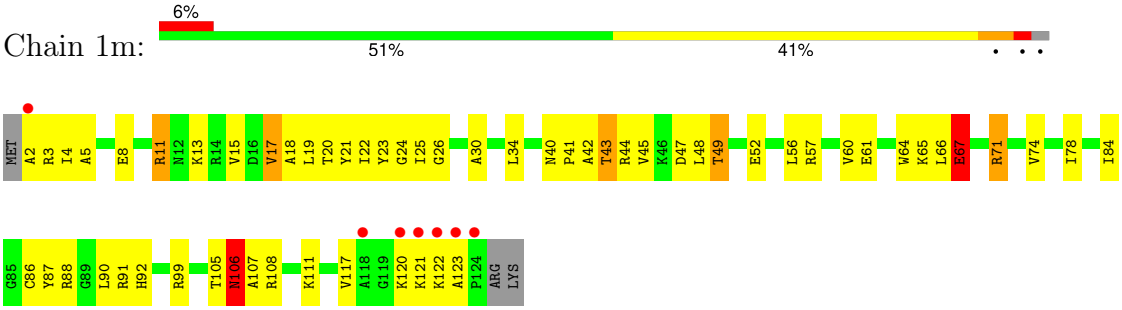
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



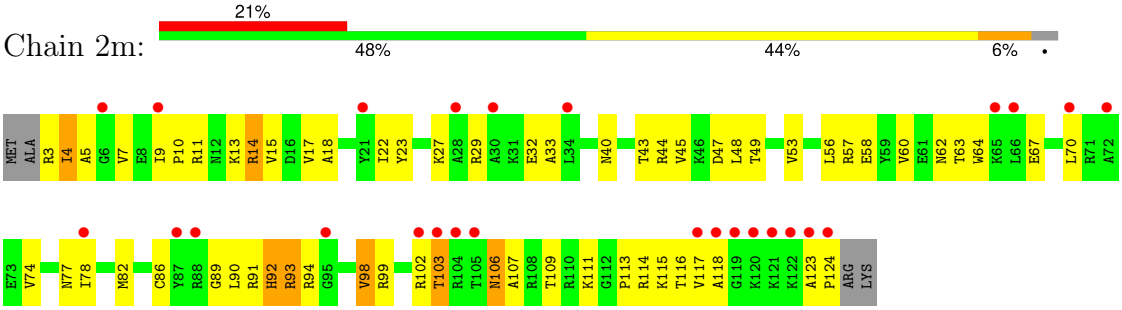
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



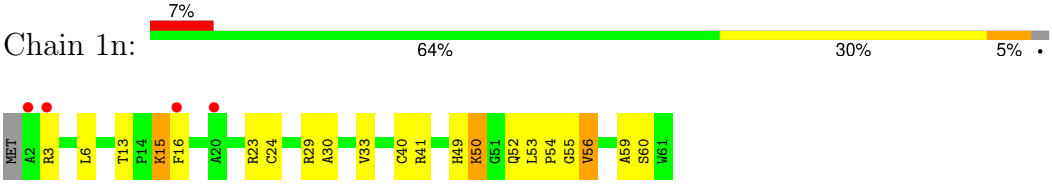
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



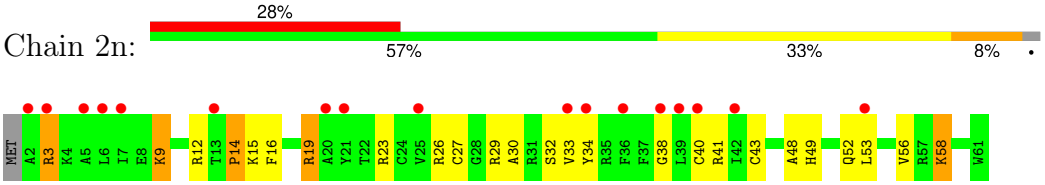
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



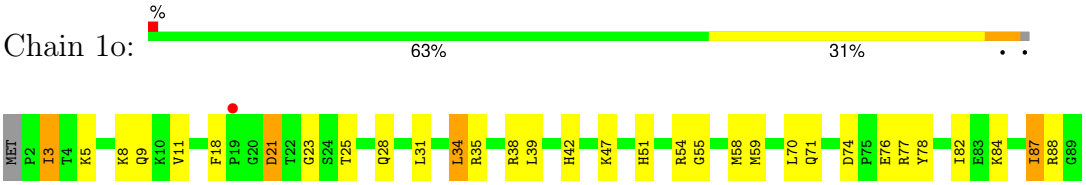
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



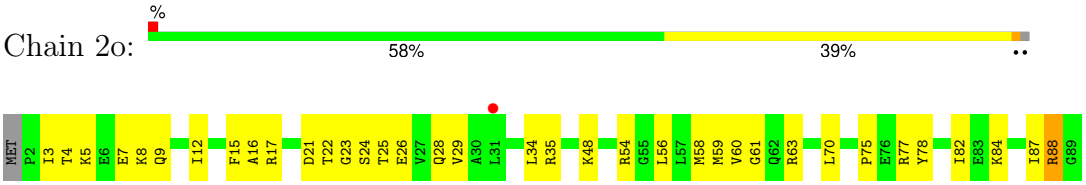
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



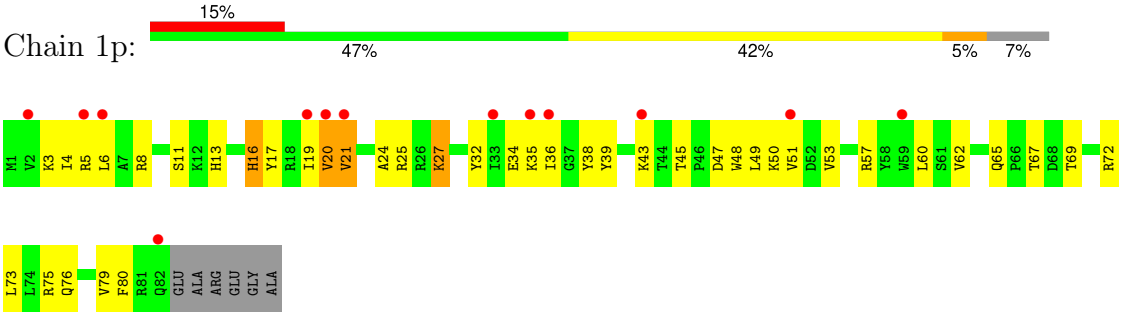
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



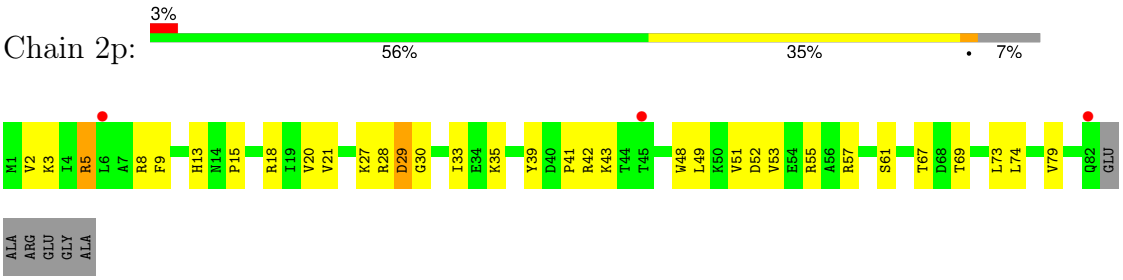
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



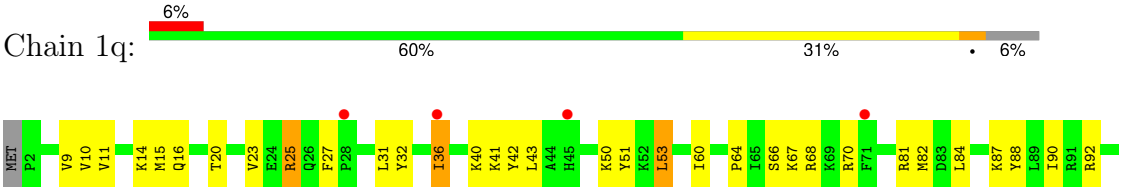
• Molecule 47: 30S ribosomal protein S16

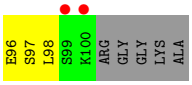
Chain 2p:



• Molecule 48: 30S ribosomal protein S17

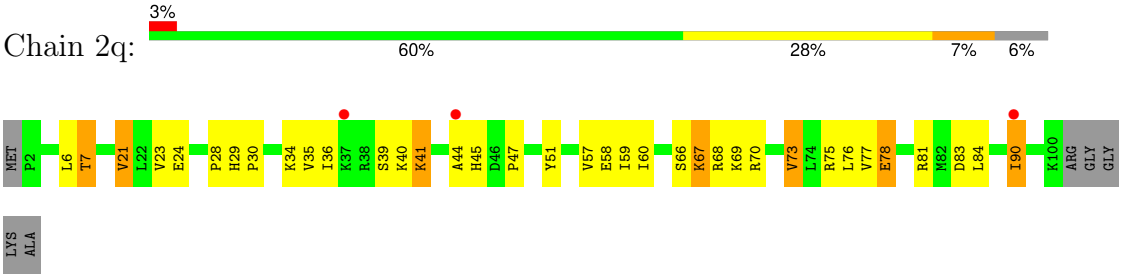
Chain 1q:





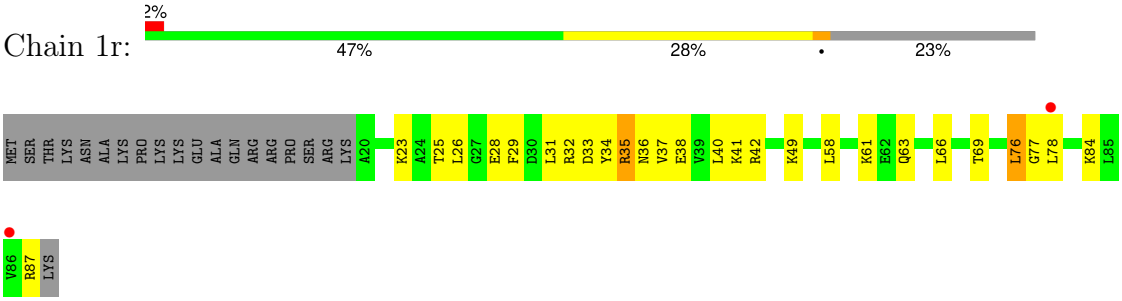
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



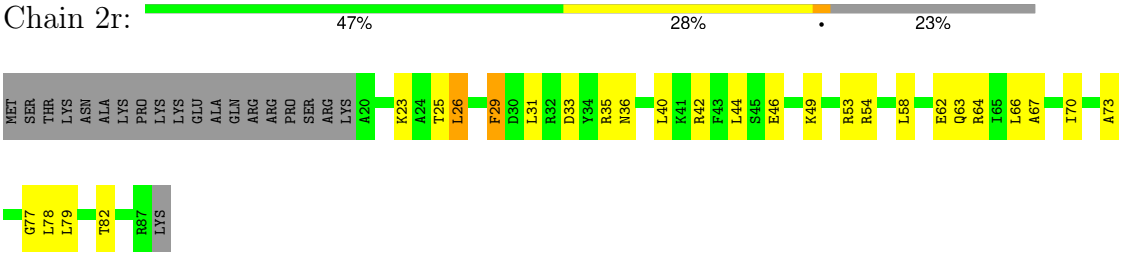
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



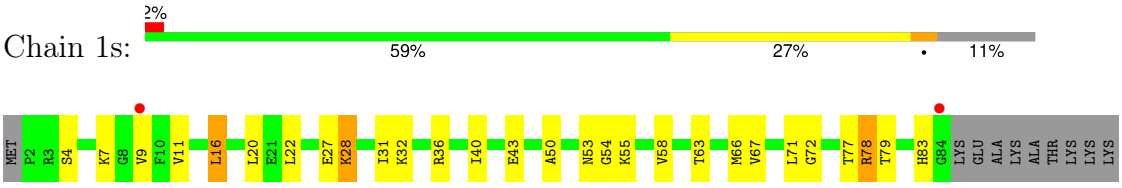
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



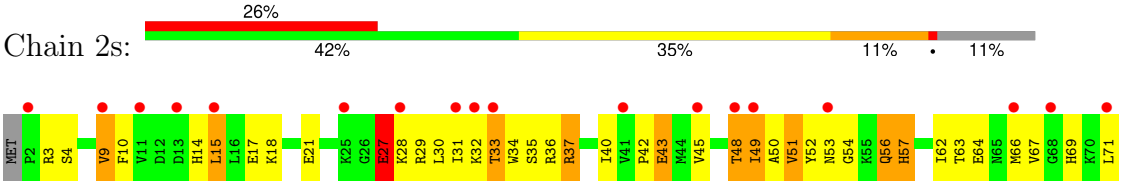
• Molecule 50: 30S ribosomal protein S19

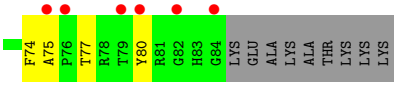
Chain 1s:



• Molecule 50: 30S ribosomal protein S19

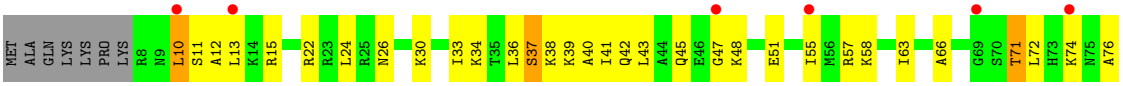
Chain 2s:

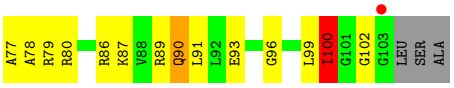




• Molecule 51: 30S ribosomal protein S20

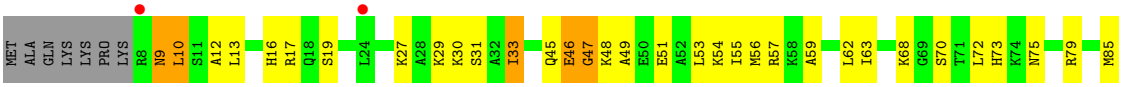
Chain 1t:

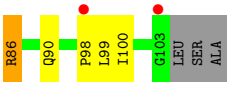




• Molecule 51: 30S ribosomal protein S20

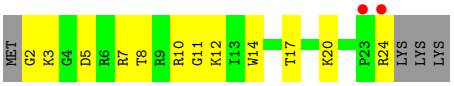
Chain 2t:





• Molecule 52: 30S ribosomal protein Thx

Chain 1u:

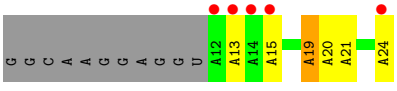


• Molecule 52: 30S ribosomal protein Thx

Chain 2u:

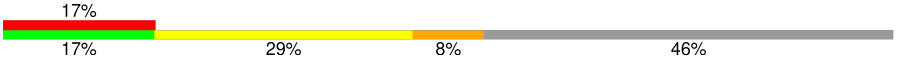
• Molecule 53: MET-LYS-mRNA

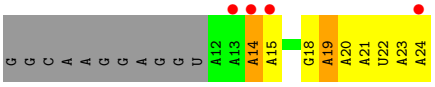
Chain 1v:



• Molecule 53: MET-LYS-mRNA

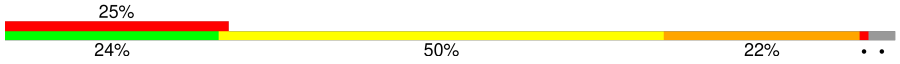
Chain 2v:

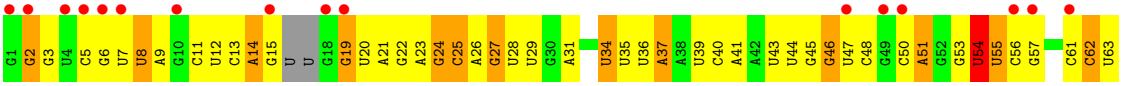


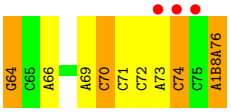


• Molecule 54: A-site Aminoacyl-tRNA Lys-tRNAlys

Chain 1w:

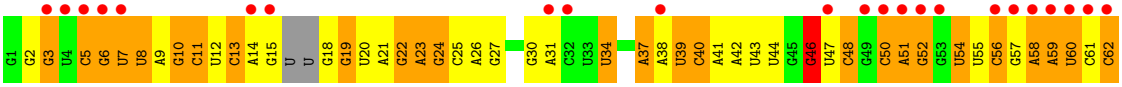


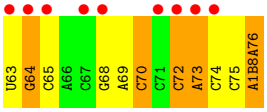




• Molecule 54: A-site Aminoacyl-tRNA Lys-tRNAlys

Chain 2w:



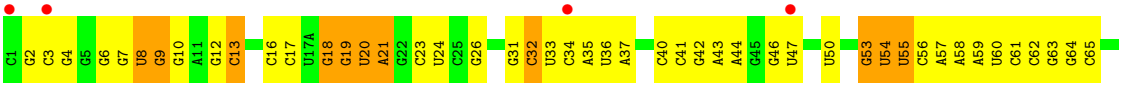


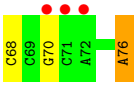
• Molecule 55: P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part

Chain 1x:

• Molecule 55: P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part

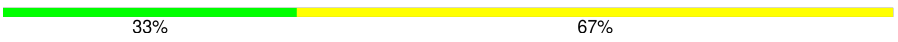
Chain 2x:





• Molecule 56: P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part

Chain 1z:

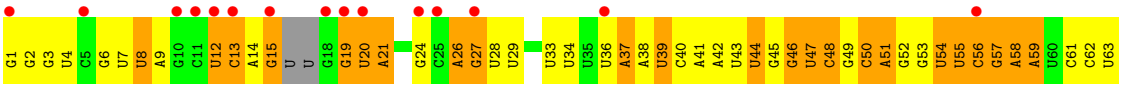


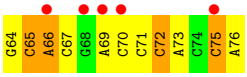
• Molecule 56: P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part

Chain 2z:

• Molecule 57: E-site Deacylated tRNAlys

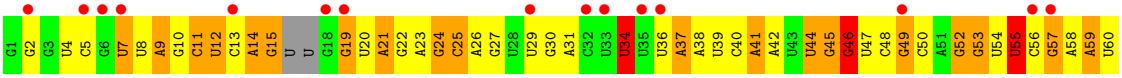
Chain 1y:

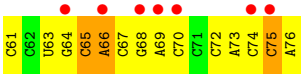




• Molecule 57: E-site Deacylated tRNAlys

Chain 2y:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	208.56Å 449.05Å 616.38Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	123.94 – 2.60 123.94 – 2.60	Depositor EDS
% Data completeness (in resolution range)	99.9 (123.94-2.60) 99.9 (123.94-2.60)	Depositor EDS
R_{merge}	0.22	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.18 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.17.1	Depositor
R, R_{free}	0.229 , 0.278 0.232 , 0.279	Depositor DCC
R_{free} test set	87814 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	55.2	Xtriage
Anisotropy	0.197	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.31 , 55.2	EDS
L-test for twinning[2]	$< \|L\| > = 0.36$, $< L^2 > = 0.19$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	299808	wwPDB-VP
Average B, all atoms (Å^2)	59.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.59% 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: OMC, 2MG, U8U, OMG, UR3, 2MA, M2G, K, 5MU, 4OC, 0TD, A1B8A, 8AN, SF4, 5MC, ZN, OMU, MA6, 4SU, FME, MG, T6A, PSU, G7M

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	0.29	1/69011 (0.0%)	0.47	1/107720 (0.0%)
1	2A	0.22	1/67295 (0.0%)	0.41	1/105042 (0.0%)
2	1B	0.24	0/2882	0.42	0/4494
2	2B	0.19	0/2879	0.37	0/4487
3	1D	0.29	0/2186	0.51	0/2944
3	2D	0.23	0/2186	0.47	0/2944
4	1E	0.26	0/1592	0.54	0/2149
4	2E	0.21	0/1592	0.45	0/2149
5	1F	0.25	0/1619	0.48	0/2193
5	2F	0.22	0/1615	0.47	3/2188 (0.1%)
6	1G	0.22	0/1448	0.47	1/1957 (0.1%)
6	2G	0.23	0/1453	0.50	1/1963 (0.1%)
7	1H	0.23	0/1356	0.43	0/1834
7	2H	0.19	0/1356	0.40	0/1834
8	1I	0.18	0/1112	0.42	0/1514
8	2I	0.22	0/1079	0.48	0/1475
9	1N	0.25	0/1144	0.49	0/1543
9	2N	0.20	0/1144	0.40	0/1543
10	1O	0.28	0/943	0.49	0/1269
10	2O	0.22	0/943	0.50	0/1269
11	1P	0.26	0/1152	0.50	0/1533
11	2P	0.21	0/1152	0.48	0/1533
12	1Q	0.28	0/1143	0.49	0/1527
12	2Q	0.22	0/1143	0.47	0/1527
13	1R	0.27	0/982	0.50	0/1312
13	2R	0.22	0/982	0.46	0/1312
14	1S	0.21	0/883	0.48	0/1176
14	2S	0.21	0/880	0.46	0/1172
15	1T	0.25	0/1105	0.48	0/1477
15	2T	0.22	0/1097	0.48	0/1468
16	1U	0.28	0/977	0.48	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.19	0/977	0.41	0/1301
17	1V	0.26	0/782	0.47	0/1049
17	2V	0.18	0/782	0.39	0/1049
18	1W	0.27	0/897	0.45	0/1205
18	2W	0.21	0/897	0.44	0/1205
19	1X	0.26	0/764	0.55	2/1025 (0.2%)
19	2X	0.23	0/764	0.61	2/1025 (0.2%)
20	1Y	0.23	0/819	0.44	0/1095
20	2Y	0.20	0/819	0.47	1/1095 (0.1%)
21	1Z	0.23	0/1267	0.48	0/1717
21	2Z	0.22	0/1299	0.42	0/1763
22	10	0.27	0/662	0.52	0/881
22	20	0.23	0/662	0.53	0/881
23	11	0.27	0/762	0.46	0/1014
23	21	0.21	0/762	0.41	0/1014
24	12	0.23	0/590	0.43	0/781
24	22	0.22	0/590	0.42	0/781
25	13	0.26	0/474	0.45	0/635
25	23	0.18	0/469	0.39	0/630
26	14	0.25	0/565	0.58	1/761 (0.1%)
26	24	0.28	0/545	0.56	0/737
27	15	0.27	0/469	0.47	0/635
27	25	0.23	0/469	0.48	0/635
28	16	0.29	0/460	0.50	0/613
28	26	0.21	0/456	0.45	0/608
29	17	0.33	0/426	0.56	0/561
29	27	0.25	0/426	0.51	0/561
30	18	0.28	0/525	0.52	0/691
30	28	0.21	0/525	0.42	0/691
31	19	0.27	0/310	0.56	0/407
31	29	0.20	0/310	0.42	0/407
32	1a	0.20	0/35795	0.39	0/55864
32	2a	0.19	0/35886	0.38	1/56005 (0.0%)
33	1b	0.21	0/1881	0.47	0/2542
33	2b	0.26	0/1860	0.52	0/2518
34	1c	0.18	0/1572	0.39	0/2126
34	2c	0.23	0/1566	0.51	1/2119 (0.0%)
35	1d	0.20	0/1685	0.45	0/2262
35	2d	0.21	0/1704	0.46	0/2284
36	1e	0.22	0/1145	0.47	0/1543
36	2e	0.21	0/1149	0.48	0/1548
37	1f	0.18	0/823	0.39	0/1115
37	2f	0.20	0/829	0.43	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.20	0/1250	0.42	0/1679
38	2g	0.20	0/1254	0.41	0/1683
39	1h	0.19	0/1108	0.41	0/1494
39	2h	0.19	0/1108	0.43	0/1494
40	1i	0.21	0/1002	0.49	0/1346
40	2i	0.23	0/997	0.55	0/1343
41	1j	0.22	0/722	0.47	0/982
41	2j	0.21	0/727	0.46	0/988
42	1k	0.23	0/844	0.43	0/1145
42	2k	0.20	0/848	0.41	0/1149
43	1l	0.20	0/937	0.42	0/1260
43	2l	0.20	0/937	0.45	0/1260
44	1m	0.21	0/969	0.51	0/1302
44	2m	0.21	0/961	0.45	0/1291
45	1n	0.19	0/501	0.41	0/664
45	2n	0.20	0/501	0.45	0/664
46	1o	0.19	0/739	0.43	0/985
46	2o	0.18	0/739	0.40	0/985
47	1p	0.20	0/697	0.45	0/939
47	2p	0.19	0/693	0.49	0/935
48	1q	0.20	0/836	0.42	0/1117
48	2q	0.21	0/836	0.46	0/1117
49	1r	0.20	0/560	0.45	0/746
49	2r	0.19	0/560	0.47	0/746
50	1s	0.19	0/667	0.50	0/900
50	2s	0.24	0/661	0.58	2/893 (0.2%)
51	1t	0.21	0/730	0.48	0/965
51	2t	0.21	0/729	0.48	0/965
52	1u	0.19	0/203	0.43	0/266
52	2u	0.36	0/203	0.58	0/266
53	1v	0.23	0/319	0.40	0/495
53	2v	0.21	0/319	0.44	0/495
54	1w	0.32	2/1593 (0.1%)	0.39	0/2474
54	2w	0.36	2/1593 (0.1%)	0.52	0/2474
55	1x	0.27	0/1723	0.41	0/2684
55	2x	0.25	0/1723	0.40	0/2684
56	1z	0.54	0/16	0.89	0/19
56	2z	0.57	0/16	0.63	0/19
57	1y	0.31	1/1618 (0.1%)	0.45	0/2513
57	2y	0.35	2/1618 (0.1%)	0.53	0/2513
All	All	0.24	9/316807 (0.0%)	0.44	17/474290 (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
12	1Q	0	1
26	24	0	1
33	1b	0	1
33	2b	0	1
51	1t	0	1
All	All	0	5

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	46	G7M	O3'-P	6.04	1.62	1.56
54	2w	46	G7M	O3'-P	5.90	1.62	1.56
57	2y	46	G7M	O3'-P	5.57	1.61	1.56
1	1A	2552	OMU	O3'-P	5.55	1.61	1.56
54	2w	37	T6A	O3'-P	5.41	1.61	1.56
57	2y	37	T6A	O3'-P	5.35	1.61	1.56
57	1y	46	G7M	O3'-P	5.25	1.61	1.56
54	1w	37	T6A	O3'-P	5.15	1.61	1.56
1	2A	2552	OMU	O3'-P	5.03	1.61	1.56

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	2X	94	GLY	CA-C-N	8.05	136.18	121.70
19	2X	94	GLY	C-N-CA	8.05	136.18	121.70
34	2c	84	ILE	N-CA-C	-6.13	105.04	113.00
6	1G	96	ARG	CB-CA-C	-5.96	109.69	116.54
1	1A	1992	G	C2'-C3'-O3'	5.83	118.25	109.50
20	2Y	91	GLU	N-CA-C	-5.53	104.67	111.75
19	1X	94	GLY	CA-C-N	5.29	131.23	121.70
19	1X	94	GLY	C-N-CA	5.29	131.23	121.70
5	2F	21	ALA	CA-C-N	5.26	131.17	121.70
5	2F	21	ALA	C-N-CA	5.26	131.17	121.70
26	14	60	GLN	N-CA-C	-5.22	107.44	112.97
32	2a	1263	C	N1-C2-O2	5.17	134.42	118.90
5	2F	65	TRP	N-CA-C	5.03	112.55	108.07
6	2G	65	GLY	N-CA-C	-5.01	104.73	113.76
50	2s	27	GLU	CA-C-N	5.01	130.72	121.70
50	2s	27	GLU	C-N-CA	5.01	130.72	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1992	G	C2'-C3'-O3'	5.01	117.01	109.50

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	1Q	15	GLY	Peptide
33	1b	130	ARG	Peptide
51	1t	99	LEU	Peptide
26	24	59	PHE	Peptide
33	2b	118	LEU	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	31192	762	0
1	2A	60322	0	30422	849	0
2	1B	2577	0	1304	30	0
2	2B	2575	0	1303	61	0
3	1D	2136	0	2218	54	0
3	2D	2136	0	2218	55	0
4	1E	1559	0	1618	32	0
4	2E	1559	0	1618	49	0
5	1F	1584	0	1625	50	0
5	2F	1580	0	1619	55	0
6	1G	1423	0	1436	47	0
6	2G	1428	0	1438	73	0
7	1H	1330	0	1407	20	0
7	2H	1330	0	1407	48	0
8	1I	1097	0	1140	38	0
8	2I	1064	0	1082	55	0
9	1N	1117	0	1184	23	0
9	2N	1117	0	1184	33	0
10	1O	933	0	996	25	0
10	2O	933	0	996	33	0
11	1P	1135	0	1212	40	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	2P	1135	0	1212	44	0
12	1Q	1122	0	1179	30	0
12	2Q	1122	0	1179	47	0
13	1R	968	0	1033	16	0
13	2R	968	0	1033	20	0
14	1S	873	0	927	19	0
14	2S	870	0	923	54	0
15	1T	1091	0	1151	30	0
15	2T	1083	0	1136	38	0
16	1U	959	0	1019	20	0
16	2U	959	0	1019	30	0
17	1V	771	0	830	16	0
17	2V	771	0	830	29	0
18	1W	886	0	940	18	0
18	2W	886	0	940	15	0
19	1X	750	0	814	19	0
19	2X	750	0	813	23	0
20	1Y	806	0	881	22	0
20	2Y	806	0	881	23	0
21	1Z	1240	0	1240	38	0
21	2Z	1271	0	1273	56	0
22	10	653	0	674	21	0
22	20	653	0	674	18	0
23	11	755	0	826	24	0
23	21	755	0	825	20	0
24	12	588	0	643	9	0
24	22	588	0	643	22	0
25	13	469	0	518	18	0
25	23	464	0	514	13	0
26	14	552	0	533	21	0
26	24	532	0	503	32	0
27	15	455	0	465	4	0
27	25	455	0	465	11	0
28	16	453	0	473	10	0
28	26	449	0	469	16	0
29	17	418	0	467	6	0
29	27	418	0	467	11	0
30	18	517	0	582	14	0
30	28	517	0	582	14	0
31	19	307	0	335	2	0
31	29	307	0	335	13	0
32	1a	32246	0	16293	497	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
32	2a	32327	0	16338	653	0
33	1b	1846	0	1867	68	0
33	2b	1825	0	1828	93	0
34	1c	1548	0	1535	43	0
34	2c	1542	0	1517	69	0
35	1d	1655	0	1672	56	0
35	2d	1674	0	1714	63	0
36	1e	1129	0	1185	43	0
36	2e	1133	0	1191	48	0
37	1f	810	0	804	22	0
37	2f	816	0	808	27	0
38	1g	1231	0	1238	31	0
38	2g	1235	0	1249	47	0
39	1h	1088	0	1126	31	0
39	2h	1088	0	1126	28	0
40	1i	983	0	986	41	0
40	2i	978	0	966	53	0
41	1j	709	0	650	31	0
41	2j	714	0	672	39	0
42	1k	829	0	825	23	0
42	2k	833	0	834	26	0
43	1l	932	0	981	21	0
43	2l	932	0	981	32	0
44	1m	958	0	1002	40	0
44	2m	950	0	988	46	0
45	1n	492	0	529	21	0
45	2n	492	0	529	25	0
46	1o	728	0	760	21	0
46	2o	728	0	760	22	0
47	1p	681	0	697	33	0
47	2p	677	0	686	22	0
48	1q	823	0	891	24	0
48	2q	823	0	891	26	0
49	1r	555	0	618	20	0
49	2r	555	0	618	19	0
50	1s	652	0	662	21	0
50	2s	646	0	644	38	0
51	1t	728	0	798	29	0
51	2t	727	0	796	26	0
52	1u	199	0	208	9	0
52	2u	199	0	208	11	0
53	1v	283	0	142	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
53	2v	283	0	141	7	0
54	1w	1599	0	801	35	0
54	2w	1599	0	801	65	0
55	1x	1646	0	839	22	0
55	2x	1646	0	839	33	0
56	1z	27	0	28	1	0
56	2z	27	0	28	1	0
57	1y	1577	0	799	42	0
57	2y	1577	0	798	47	0
58	10	9	0	0	0	0
58	11	5	0	0	0	0
58	12	2	0	0	0	0
58	13	5	0	0	0	0
58	14	1	0	0	0	0
58	15	6	0	0	0	0
58	16	2	0	0	0	0
58	17	6	0	0	0	0
58	18	9	0	0	0	0
58	1A	1096	0	0	0	0
58	1B	37	0	0	0	0
58	1D	13	0	0	0	0
58	1E	16	0	0	0	0
58	1F	13	0	0	0	0
58	1G	5	0	0	0	0
58	1H	1	0	0	0	0
58	1I	1	0	0	0	0
58	1N	5	0	0	0	0
58	1O	4	0	0	0	0
58	1P	6	0	0	0	0
58	1Q	7	0	0	0	0
58	1R	4	0	0	0	0
58	1S	3	0	0	0	0
58	1T	2	0	0	0	0
58	1U	9	0	0	0	0
58	1V	9	0	0	0	0
58	1W	7	0	0	0	0
58	1X	5	0	0	0	0
58	1Y	3	0	0	0	0
58	1Z	2	0	0	0	0
58	1a	210	0	0	0	0
58	1b	1	0	0	0	0
58	1d	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	1e	2	0	0	0	0
58	1f	1	0	0	0	0
58	1k	1	0	0	0	0
58	1l	2	0	0	0	0
58	1m	1	0	0	0	0
58	1n	2	0	0	0	0
58	1p	1	0	0	0	0
58	1t	1	0	0	0	0
58	1v	1	0	0	0	0
58	1w	3	0	0	0	0
58	1x	11	0	0	0	0
58	20	4	0	0	0	0
58	23	4	0	0	0	0
58	25	5	0	0	0	0
58	27	3	0	0	0	0
58	28	1	0	0	0	0
58	2A	863	0	0	0	0
58	2B	20	0	0	0	0
58	2D	7	0	0	0	0
58	2E	7	0	0	0	0
58	2F	7	0	0	0	0
58	2G	1	0	0	0	0
58	2O	2	0	0	0	0
58	2P	3	0	0	0	0
58	2Q	2	0	0	0	0
58	2R	2	0	0	0	0
58	2T	3	0	0	0	0
58	2U	2	0	0	0	0
58	2V	2	0	0	0	0
58	2W	2	0	0	0	0
58	2X	1	0	0	0	0
58	2Y	1	0	0	0	0
58	2Z	1	0	0	0	0
58	2a	230	0	0	0	0
58	2d	2	0	0	0	0
58	2e	1	0	0	0	0
58	2f	2	0	0	0	0
58	2g	1	0	0	0	0
58	2i	1	0	0	0	0
58	2j	1	0	0	0	0
58	2k	1	0	0	0	0
58	2l	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2n	1	0	0	0	0
58	2q	2	0	0	0	0
58	2r	1	0	0	0	0
58	2t	1	0	0	0	0
58	2v	4	0	0	0	0
58	2w	1	0	0	0	0
58	2x	6	0	0	0	0
58	2y	1	0	0	0	0
59	1A	1	0	0	0	0
59	2A	1	0	0	0	0
60	14	1	0	0	0	0
60	15	1	0	0	0	0
60	16	1	0	0	0	0
60	19	1	0	0	0	0
60	1Y	1	0	0	0	0
60	1n	1	0	0	0	0
60	24	1	0	0	0	0
60	25	1	0	0	0	0
60	26	1	0	0	0	0
60	29	1	0	0	0	0
60	2Y	1	0	0	0	0
60	2n	1	0	0	0	0
61	1d	8	0	0	0	0
61	2d	8	0	0	0	0
62	10	10	0	0	1	0
62	11	12	0	0	0	0
62	12	3	0	0	0	0
62	13	4	0	0	0	0
62	14	1	0	0	0	0
62	15	7	0	0	0	0
62	16	2	0	0	0	0
62	17	11	0	0	1	0
62	18	11	0	0	1	0
62	1A	1886	0	0	92	0
62	1B	61	0	0	1	0
62	1D	28	0	0	2	0
62	1E	29	0	0	2	0
62	1F	15	0	0	1	0
62	1G	3	0	0	0	0
62	1H	2	0	0	0	0
62	1I	1	0	0	0	0
62	1N	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	1O	4	0	0	0	0
62	1P	23	0	0	1	0
62	1Q	8	0	0	0	0
62	1R	16	0	0	2	0
62	1S	5	0	0	0	0
62	1T	8	0	0	0	0
62	1U	10	0	0	0	0
62	1V	11	0	0	1	0
62	1W	6	0	0	1	0
62	1X	7	0	0	0	0
62	1Y	1	0	0	0	0
62	1Z	1	0	0	0	0
62	1a	308	0	0	25	0
62	1b	1	0	0	0	0
62	1e	1	0	0	0	0
62	1f	1	0	0	0	0
62	1i	1	0	0	0	0
62	1l	7	0	0	0	0
62	1m	2	0	0	0	0
62	1o	1	0	0	0	0
62	1q	2	0	0	0	0
62	1u	1	0	0	0	0
62	1v	5	0	0	0	0
62	1w	8	0	0	1	0
62	1x	6	0	0	0	0
62	1y	1	0	0	0	0
62	1z	1	0	0	1	0
62	20	5	0	0	0	0
62	21	13	0	0	1	0
62	25	2	0	0	1	0
62	27	1	0	0	0	0
62	28	3	0	0	0	0
62	29	1	0	0	0	0
62	2A	1000	0	0	92	0
62	2B	22	0	0	3	0
62	2D	24	0	0	1	0
62	2E	9	0	0	1	0
62	2F	15	0	0	0	0
62	2N	1	0	0	0	0
62	2O	2	0	0	0	0
62	2P	11	0	0	1	0
62	2Q	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	2R	3	0	0	0	0
62	2T	5	0	0	0	0
62	2U	3	0	0	2	0
62	2W	3	0	0	0	0
62	2X	4	0	0	0	0
62	2Y	1	0	0	0	0
62	2Z	1	0	0	0	0
62	2a	198	0	0	20	0
62	2d	1	0	0	0	0
62	2e	1	0	0	0	0
62	2j	1	0	0	0	0
62	2l	4	0	0	1	0
62	2p	2	0	0	0	0
62	2r	1	0	0	0	0
62	2t	1	0	0	0	0
62	2v	2	0	0	0	0
62	2w	3	0	0	0	0
62	2x	5	0	0	0	0
All	All	299808	0	196752	5317	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 11.

All (5317) 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	1.22	1.38
54:2w:51:A:N6	54:2w:63:U:H3	1.37	1.22
54:2w:51:A:N6	54:2w:63:U:N3	1.94	1.14
1:1A:1082:U:O4	1:1A:1086:A:N1	1.87	1.06
10:2O:48:PRO:HB3	32:2a:1422:G:H5”	1.44	0.99
32:1a:1004:A:N6	32:1a:1037:C:N3	2.14	0.96
32:2a:1133:G:H1	32:2a:1141:C:H42	1.11	0.95
34:2c:156:ARG:HH21	34:2c:161:GLU:HA	1.32	0.94
1:1A:2427:C:OP1	62:1A:4102:HOH:O	1.85	0.93
1:2A:2162:G:H4’	1:2A:2172:U:H2’	1.51	0.93
57:2y:10:G:H1	57:2y:25:C:H42	1.16	0.92
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.15	0.91
1:2A:2138:C:H42	1:2A:2153:G:H1	1.12	0.91
1:2A:1798:U:H5’	3:2D:259:THR:HG22	1.52	0.90
33:2b:54:THR:HG22	33:2b:199:TYR:HB3	1.55	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:9:VAL:HG23	38:2g:94:ARG:HH21	1.36	0.89
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.55	0.88
44:2m:123:ALA:HB3	54:2w:39:PSU:H4'	1.54	0.88
57:2y:22:G:N7	57:2y:46:G7M:N2	2.21	0.88
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.22	0.87
1:1A:2499:C:OP1	62:1A:4103:HOH:O	1.91	0.86
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.09	0.85
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.58	0.85
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.57	0.85
53:2v:14:A:N6	57:2y:34:U8U:S2	2.50	0.85
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.59	0.85
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.09	0.84
1:1A:1057:A:H61	1:1A:1081:U:H3	1.26	0.84
54:2w:51:A:N1	54:2w:63:U:O4	2.11	0.84
8:2I:69:LYS:HD2	8:2I:138:ILE:HG12	1.59	0.84
32:2a:1316:G:H22	32:2a:1319:A:H5"	1.42	0.84
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.58	0.84
1:2A:2138:C:N4	1:2A:2153:G:H1	1.75	0.83
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.60	0.83
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.11	0.83
15:1T:77:PRO:HG2	15:1T:80:SER:HB2	1.59	0.83
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.43	0.82
1:2A:1204:A:H2	1:2A:1241:A:H62	1.25	0.82
1:1A:249:C:O2'	11:1P:64:LYS:NZ	2.13	0.82
1:1A:1670:C:OP2	62:1A:4105:HOH:O	1.98	0.82
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.60	0.82
26:24:53:GLU:HG2	26:24:55:ARG:H	1.45	0.82
20:1Y:43:ASN:HD22	20:1Y:65:ALA:HB3	1.44	0.82
1:1A:1673:U:OP1	62:1A:4104:HOH:O	1.97	0.81
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.45	0.81
48:2q:57:VAL:HG12	48:2q:76:LEU:HA	1.63	0.81
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.63	0.81
53:1v:21:A:N1	54:1w:34:U8U:O4	2.13	0.81
32:2a:662:G:O2'	32:2a:836:G:OP1	1.99	0.80
1:1A:1041:C:H42	1:1A:1114:G:H1	1.28	0.80
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.60	0.80
1:2A:1546:C:H5'	1:2A:1547:C:H5'	1.62	0.80
32:1a:975:A:H4'	32:1a:976:G:H5"	1.64	0.80
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.64	0.80
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.15	0.80
1:2A:1648:C:OP1	62:2A:3904:HOH:O	2.00	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1952:A:OP1	10:2O:44:LYS:NZ	2.14	0.80
32:1a:501:C:OP1	43:1l:117:ARG:NH2	2.15	0.79
1:1A:1062:G:H22	1:1A:1077:A:H61	1.31	0.79
32:2a:1004:A:H5"	32:2a:1024:G:H22	1.46	0.79
1:2A:1689:A:H62	1:2A:1698:A:H2	1.28	0.79
33:2b:91:PRO:HG3	33:2b:154:LEU:HB2	1.62	0.79
23:11:77:ALA:HB1	23:11:82:LEU:HD11	1.65	0.79
29:17:24:THR:HG22	29:17:27:GLY:H	1.46	0.79
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.16	0.79
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.16	0.79
1:1A:1602:U:O4	62:1A:4106:HOH:O	1.99	0.79
22:20:10:THR:HG22	22:20:12:ASN:H	1.48	0.79
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.15	0.79
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.48	0.78
1:1A:826:U:OP1	62:1A:4102:HOH:O	2.00	0.78
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.65	0.78
32:1a:536:C:OP2	62:1a:4801:HOH:O	2.00	0.78
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.48	0.78
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.64	0.78
50:2s:33:THR:H	50:2s:57:HIS:HE1	1.32	0.78
1:1A:2550:G:OP1	62:1A:4105:HOH:O	2.01	0.78
1:1A:1669:A:OP2	62:1A:4105:HOH:O	2.01	0.78
32:1a:1086:U:H3	32:1a:1099:G:H22	1.30	0.78
32:1a:1377:A:HO2'	38:1g:2:ALA:N	1.81	0.78
1:1A:2140:C:H2'	1:1A:2141:G:H8	1.47	0.78
1:1A:2448:A:OP1	62:1A:4103:HOH:O	2.02	0.78
1:2A:1938:A:OP2	62:2A:3905:HOH:O	2.02	0.78
1:1A:761:A:N7	62:1A:4145:HOH:O	2.17	0.78
8:2I:78:THR:HG23	8:2I:143:SER:HB2	1.65	0.78
32:2a:1396:A:OP2	62:2a:1902:HOH:O	2.01	0.78
1:1A:2135:A:H61	1:1A:2156:G:H4'	1.47	0.77
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.66	0.77
32:1a:343:U:O2'	32:1a:346:G:O6	2.03	0.77
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.47	0.77
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.66	0.77
1:2A:2439:A:N6	55:2x:76:8AN:O1P	2.17	0.77
8:2I:94:ALA:HA	8:2I:97:ILE:HB	1.67	0.77
15:1T:84:GLN:HG3	15:1T:85:LYS:HG3	1.67	0.77
32:2a:1133:G:H1	32:2a:1141:C:N4	1.83	0.77
1:2A:805:G:OP1	62:2A:3906:HOH:O	2.02	0.77
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.66	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1371:G:O6	62:1A:4107:HOH:O	2.01	0.77
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.18	0.76
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.67	0.76
32:1a:1414:U:H3	32:1a:1486:G:H1	1.31	0.76
7:2H:9:ILE:HB	7:2H:50:VAL:HG13	1.65	0.76
18:2W:34:ASN:OD1	18:2W:37:ARG:NH1	2.19	0.76
26:14:55:ARG:H	26:14:56:VAL:HA	1.51	0.76
1:1A:1014:U:OP2	62:1A:4108:HOH:O	2.03	0.76
26:14:16:CYS:SG	26:14:17:GLY:N	2.52	0.76
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.68	0.76
32:1a:664:G:H22	32:1a:741:G:H1	1.32	0.76
32:2a:1267:C:O2	52:2u:20:LYS:NZ	2.18	0.76
1:1A:135:G:N7	62:1A:4146:HOH:O	2.17	0.76
32:2a:1080:A:H5'	36:2e:14:ARG:HH21	1.52	0.75
32:2a:1082:G:N7	62:2a:1911:HOH:O	2.19	0.75
32:2a:1089:G:H1	32:2a:1096:C:H42	1.33	0.75
56:1z:2:ARG:NH2	62:1z:101:HOH:O	2.20	0.75
1:2A:450:G:O6	62:2A:3909:HOH:O	2.03	0.75
1:2A:2504:U:OP2	62:2A:3907:HOH:O	2.03	0.75
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.22	0.75
32:2a:895:G:N7	62:2a:1912:HOH:O	2.20	0.75
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.69	0.75
1:2A:1604:C:OP1	62:2A:3908:HOH:O	2.03	0.75
1:1A:2136:C:N3	1:1A:2155:G:C2	2.55	0.75
1:1A:1342:A:OP2	62:1A:4106:HOH:O	2.03	0.74
1:1A:2821:A:OP2	62:1R:301:HOH:O	2.04	0.74
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.04	0.74
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.21	0.74
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.20	0.74
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.69	0.74
32:2a:126:G:HO2'	32:2a:634:C:HO2'	1.30	0.74
1:1A:1007:C:OP2	62:1A:4109:HOH:O	2.04	0.74
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.68	0.74
32:2a:299:G:O6	62:2a:1903:HOH:O	2.04	0.74
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.68	0.74
12:2Q:1:MET:SD	12:2Q:1:MET:N	2.60	0.74
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.05	0.74
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.21	0.74
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.69	0.74
1:2A:570:G:O6	62:2A:3910:HOH:O	2.05	0.74
54:2w:50:C:H2'	54:2w:51:A:H5"	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:505:A:OP2	62:1A:4110:HOH:O	2.04	0.74
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.53	0.74
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.70	0.74
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.52	0.74
1:2A:1696:G:N7	62:2A:3968:HOH:O	2.20	0.73
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.69	0.73
1:1A:527:C:OP1	62:1A:4111:HOH:O	2.05	0.73
51:1t:33:ILE:O	51:1t:37:SER:OG	2.06	0.73
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.21	0.73
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.70	0.73
32:1a:159:G:O2'	32:1a:161:A:N7	2.20	0.73
22:10:9:SER:O	62:10:201:HOH:O	2.06	0.73
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.20	0.73
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.21	0.73
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.71	0.73
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.21	0.73
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.21	0.73
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.69	0.73
1:1A:2038:G:O6	62:1A:4113:HOH:O	2.06	0.73
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.69	0.73
1:1A:2128:C:N4	1:1A:2160:G:H1	1.87	0.73
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.21	0.73
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.07	0.73
32:2a:974:A:OP2	45:2n:29:ARG:NH2	2.22	0.73
1:1A:1253:A:OP1	62:1A:4112:HOH:O	2.06	0.73
1:1A:1937:A:H1'	1:1A:1939:5MU:H72	1.69	0.73
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.54	0.73
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.21	0.73
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.22	0.73
1:2A:792:G:O6	62:2A:3916:HOH:O	2.07	0.72
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.22	0.72
8:2I:93:THR:HG22	8:2I:119:PRO:HA	1.71	0.72
32:2a:839:U:H3'	32:2a:840:C:H5'	1.70	0.72
1:1A:1332:G:OP1	62:1A:4114:HOH:O	2.07	0.72
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.71	0.72
1:2A:731:C:OP2	62:2A:3911:HOH:O	2.06	0.72
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.36	0.72
28:26:23:THR:OG1	28:26:24:GLU:N	2.12	0.72
40:2i:5:TYR:O	40:2i:87:GLN:NE2	2.22	0.72
32:1a:1505:G:OP2	62:1a:4802:HOH:O	2.07	0.72
49:1r:38:GLU:HA	49:1r:41:LYS:HE3	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:948:G:OP1	62:2A:3913:HOH:O	2.06	0.72
1:2A:975:C:OP1	62:2A:3915:HOH:O	2.07	0.72
35:2d:109:GLY:HA3	35:2d:165:MET:HG3	1.72	0.72
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.07	0.72
11:1P:42:SER:O	62:1P:301:HOH:O	2.06	0.72
33:1b:91:PRO:HG3	33:1b:154:LEU:HB3	1.71	0.72
1:2A:2127:G:N2	1:2A:2173:A:O2'	2.15	0.72
32:2a:826:C:O2	39:2h:15:ASN:ND2	2.23	0.72
33:2b:88:ALA:HA	33:2b:223:ILE:HD11	1.71	0.72
1:1A:1647:G:OP1	62:1A:4115:HOH:O	2.07	0.72
26:14:13:ARG:HB3	26:14:30:GLU:HG2	1.71	0.72
34:1c:55:VAL:HG22	34:1c:68:VAL:HG22	1.72	0.72
1:2A:449:A:OP2	62:2A:3912:HOH:O	2.06	0.72
1:2A:2239:G:OP2	62:2A:3914:HOH:O	2.06	0.72
32:2a:73:G:H1	32:2a:96:U:H3	1.36	0.72
53:1v:20:A:H61	54:1w:35:U:H3	1.34	0.72
18:1W:12:ILE:HD13	18:1W:17:VAL:HG13	1.70	0.72
34:2c:88:ARG:HA	34:2c:91:LEU:HD13	1.72	0.72
34:2c:118:GLN:HA	34:2c:121:ALA:HB3	1.72	0.72
57:2y:12:U:H3	57:2y:23:A:H61	1.37	0.72
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.21	0.72
3:1D:168:ARG:HG2	3:1D:173:VAL:HG12	1.71	0.71
1:2A:2166:G:H3'	1:2A:2167:U:H5"	1.72	0.71
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.38	0.71
57:2y:10:G:H1	57:2y:25:C:N4	1.87	0.71
1:1A:1783:A:N7	62:1A:4172:HOH:O	2.23	0.71
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.25	0.71
1:2A:2592:G:OP1	62:2A:3918:HOH:O	2.08	0.71
1:2A:2595:G:N7	62:2A:3987:HOH:O	2.23	0.71
1:2A:1394:U:OP1	62:2A:3908:HOH:O	2.08	0.71
12:2Q:31:ASP:OD1	12:2Q:134:ARG:NH1	2.23	0.71
26:14:55:ARG:N	26:14:56:VAL:HA	2.06	0.71
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.72	0.71
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.56	0.71
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.36	0.71
1:2A:1627:G:OP1	62:2A:3920:HOH:O	2.09	0.71
1:2A:271(L):U:OP1	8:2I:50:ARG:NH1	2.24	0.71
13:2R:103:ARG:NH1	13:2R:108:GLY:O	2.23	0.71
44:2m:91:ARG:HB2	44:2m:98:VAL:HG13	1.71	0.71
1:1A:2128:C:N3	1:1A:2160:G:N2	2.36	0.71
1:2A:2104:G:H1	1:2A:2185:C:H42	1.36	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.06	0.71
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	1.73	0.71
1:1A:2222:G:OP2	62:1A:4117:HOH:O	2.08	0.71
27:25:40:LYS:NZ	27:25:44:THR:O	2.22	0.71
32:2a:1347:G:HO2'	32:2a:1373:G:H1	1.38	0.71
1:1A:365:C:OP2	62:1A:4116:HOH:O	2.07	0.71
32:2a:538:G:H5"	43:2l:114:LYS:HB2	1.71	0.71
34:2c:125:GLU:O	34:2c:190:ARG:NH2	2.24	0.71
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.73	0.71
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.72	0.71
1:2A:2819:G:N7	62:2A:3984:HOH:O	2.23	0.70
1:1A:2128:C:N4	1:1A:2160:G:N1	2.38	0.70
28:16:9:LEU:HD13	28:16:51:GLU:HG3	1.73	0.70
32:1a:1499:A:OP2	62:1a:4802:HOH:O	2.08	0.70
32:2a:289:G:OP2	62:2a:1904:HOH:O	2.10	0.70
39:1h:12:ARG:NH1	39:1h:25:ASP:O	2.25	0.70
1:2A:1937:A:H1'	1:2A:1939:5MU:H72	1.72	0.70
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.24	0.70
32:1a:56:U:H2'	32:1a:57:G:C8	2.27	0.70
6:1G:15:VAL:HG22	6:1G:175:LEU:HB3	1.72	0.70
57:1y:26:A:H61	57:1y:44:U:H3	1.38	0.70
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.17	0.70
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.08	0.70
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.73	0.70
1:1A:740:U:OP2	62:1A:4118:HOH:O	2.09	0.70
1:2A:2615:U:OP1	62:2A:3917:HOH:O	2.07	0.70
36:1e:91:LEU:HB3	36:1e:118:ILE:HD11	1.74	0.70
1:2A:1237:A:OP1	62:2A:3921:HOH:O	2.09	0.70
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.24	0.70
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.74	0.70
32:2a:1264:C:H42	32:2a:1271:G:H1	1.39	0.70
40:2i:121:ARG:NH1	40:2i:122:ALA:O	2.25	0.70
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.27	0.69
21:1Z:151:HIS:HA	21:1Z:171:ILE:HG23	1.72	0.69
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.25	0.69
32:1a:1224:G:OP1	62:1a:4805:HOH:O	2.10	0.69
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.26	0.69
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.73	0.69
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.74	0.69
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.27	0.69
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:695:A:H5'	57:2y:38:A:H4'	1.73	0.69
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.74	0.69
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.57	0.69
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.74	0.69
38:2g:126:ASP:O	38:2g:130:GLY:N	2.25	0.69
41:2j:44:VAL:HG22	41:2j:66:ARG:HG2	1.73	0.69
1:1A:602:G:O2'	1:1A:655:A:N6	2.25	0.69
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.25	0.69
1:2A:810:U:OP1	62:2A:3924:HOH:O	2.10	0.69
6:2G:59:GLU:OE1	6:2G:153:ARG:NH2	2.25	0.69
11:2P:39:LYS:HG3	11:2P:45:LEU:HD22	1.73	0.69
30:28:56:GLU:HA	30:28:59:LYS:HE3	1.75	0.69
37:2f:99:ALA:HB3	49:2r:29:PHE:HE1	1.55	0.69
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.23	0.69
1:2A:1973:G:OP1	62:2A:3919:HOH:O	2.08	0.69
1:2A:2589:A:OP1	62:2A:3922:HOH:O	2.09	0.69
7:2H:105:LEU:HB2	7:2H:113:VAL:HB	1.75	0.69
1:1A:1664:A:OP1	62:1A:4121:HOH:O	2.10	0.69
1:1A:2136:C:C2	1:1A:2155:G:N2	2.61	0.69
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.75	0.69
1:2A:245:G:O6	30:28:8:LYS:NZ	2.25	0.69
11:2P:36:LYS:O	62:2P:301:HOH:O	2.11	0.69
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.25	0.69
1:1A:2763:G:OP2	62:1A:4120:HOH:O	2.10	0.69
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.26	0.69
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.56	0.69
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.26	0.69
37:2f:6:VAL:HG13	37:2f:90:VAL:HG22	1.74	0.69
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.25	0.69
1:1A:1890:A:OP2	62:1A:4126:HOH:O	2.11	0.69
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.75	0.69
32:1a:945:G:OP1	62:1a:4803:HOH:O	2.09	0.69
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.75	0.69
1:2A:1603:A:OP1	62:2A:3923:HOH:O	2.10	0.69
1:2A:2062:A:OP1	62:2A:3927:HOH:O	2.11	0.69
34:2c:58:GLU:HB2	34:2c:65:ALA:HB3	1.74	0.69
2:1B:42:C:OP1	6:1G:67:LYS:NZ	2.26	0.68
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.25	0.68
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.11	0.68
19:2X:72:LYS:NZ	19:2X:75:ASP:OD1	2.26	0.68
1:1A:1054:A:H61	1:1A:1105:U:H3	1.41	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.25	0.68
21:1Z:156:LYS:HG2	21:1Z:158:PRO:HD3	1.75	0.68
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.11	0.68
32:2a:64:G:H4'	32:2a:65:U:H3'	1.76	0.68
1:1A:1267:U:OP1	62:1A:4124:HOH:O	2.11	0.68
1:1A:2130:U:O2'	1:1A:2158:A:N1	2.25	0.68
3:1D:37:LEU:HD12	3:1D:62:TYR:HB2	1.73	0.68
27:25:41:PRO:O	27:25:44:THR:OG1	2.12	0.68
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.24	0.68
5:1F:11:VAL:HB	5:1F:18:ARG:HB2	1.75	0.68
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.25	0.68
1:2A:2130:U:O2	1:2A:2134:A:O2'	2.11	0.68
8:2I:78:THR:O	8:2I:104:GLN:NE2	2.27	0.68
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.66	0.68
1:2A:2857:G:N7	62:2A:4009:HOH:O	2.26	0.68
1:1A:1968:G:OP1	62:1A:4125:HOH:O	2.11	0.68
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.59	0.68
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.27	0.68
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.39	0.68
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.76	0.68
32:2a:9:G:H2'	32:2a:10:A:H8	1.59	0.68
32:2a:673:G:H2'	32:2a:674:G:C8	2.28	0.68
32:2a:1346:A:H61	32:2a:1374:A:H3'	1.58	0.68
32:2a:1367:C:OP2	40:2i:112:LYS:NZ	2.27	0.68
33:2b:15:VAL:HG13	33:2b:209:ARG:HB3	1.76	0.68
32:1a:1197:G:OP2	62:1a:4806:HOH:O	2.11	0.68
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.26	0.68
21:2Z:27:VAL:HG12	21:2Z:85:HIS:HE1	1.58	0.68
32:2a:113:G:H1'	32:2a:354:G:H5'	1.75	0.68
1:2A:958:U:O2	2:2B:90:A:O2'	2.12	0.68
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.76	0.68
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.18	0.68
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.27	0.68
1:1A:817:C:OP1	62:1A:4122:HOH:O	2.10	0.68
32:1a:376:G:H5"	47:1p:5:ARG:HG2	1.76	0.68
1:2A:854:G:H2'	1:2A:855:G:H8	1.59	0.68
1:2A:1352:U:OP1	62:2A:3926:HOH:O	2.11	0.68
1:1A:762:U:OP1	62:1A:4127:HOH:O	2.11	0.68
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.42	0.68
1:2A:643:A:N1	1:2A:2369:A:O2'	2.26	0.68
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:773:U:OP1	62:1A:4128:HOH:O	2.12	0.67
32:1a:421:U:O4	34:1c:127:ARG:NH2	2.27	0.67
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.58	0.67
40:1i:53:VAL:O	40:1i:55:ALA:N	2.28	0.67
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.24	0.67
1:2A:648:G:O2'	1:2A:2351:G:OP1	2.10	0.67
1:2A:1313:U:OP1	62:2A:3928:HOH:O	2.12	0.67
4:2E:76:ARG:NH1	62:2E:401:HOH:O	2.27	0.67
32:2a:558:G:OP1	62:2a:1903:HOH:O	2.12	0.67
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.29	0.67
1:1A:739:G:OP1	62:1A:4123:HOH:O	2.10	0.67
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.76	0.67
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.27	0.67
32:2a:663:A:O3'	49:2r:64:ARG:NH2	2.27	0.67
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.76	0.67
1:1A:1055:G:H1	1:1A:1104:C:H42	1.41	0.67
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.77	0.67
1:1A:2136:C:N3	1:1A:2155:G:N2	2.42	0.67
20:2Y:43:ASN:HB2	20:2Y:67:LEU:HD21	1.74	0.67
1:1A:2602:A:OP1	62:1A:4130:HOH:O	2.13	0.67
55:1x:33:U:O2'	55:1x:35:A:N7	2.23	0.67
1:2A:2431:U:OP1	62:2A:3930:HOH:O	2.12	0.67
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.76	0.67
30:28:32:LEU:O	30:28:36:LYS:NZ	2.27	0.67
32:2a:901:A:O2'	32:2a:1513:A:OP1	2.12	0.67
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.77	0.67
5:1F:32:LEU:HB3	5:1F:112:MET:HE1	1.75	0.67
12:1Q:12:GLN:HE21	12:1Q:73:PRO:HD2	1.59	0.67
51:2t:27:LYS:HA	51:2t:30:LYS:HE2	1.75	0.67
1:2A:34:C:N4	1:2A:454:A:O2'	2.28	0.67
1:2A:1159:U:H2'	1:2A:1160:G:H8	1.60	0.67
6:2G:112:PRO:HG3	26:24:43:TYR:HE1	1.59	0.67
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.59	0.67
1:2A:2042:A:OP1	62:2A:3935:HOH:O	2.13	0.67
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.75	0.67
32:1a:45:U:O4	62:1a:4804:HOH:O	2.09	0.67
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.77	0.67
1:2A:880:G:N1	1:2A:898:C:O2	2.28	0.67
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.28	0.67
1:2A:2639:A:OP2	62:2A:3931:HOH:O	2.12	0.67
1:2A:2782:G:OP2	62:2A:3933:HOH:O	2.13	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.27	0.67
32:2a:407:G:H5”	35:2d:115:ARG:HB3	1.76	0.67
32:1a:515:G:N7	62:1a:4831:HOH:O	2.26	0.67
39:1h:73:ASP:OD1	39:1h:75:ARG:NE	2.27	0.67
1:2A:1300:U:H4’	1:2A:1301:A:H5”	1.76	0.67
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.17	0.67
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.77	0.67
45:2n:12:ARG:HH21	45:2n:14:PRO:HA	1.60	0.67
1:2A:1791:A:OP2	62:2A:3937:HOH:O	2.14	0.66
1:2A:1970:A:OP1	62:2A:3925:HOH:O	2.11	0.66
1:2A:2499:C:OP2	62:2A:3932:HOH:O	2.13	0.66
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.75	0.66
1:1A:1016:G:N7	62:1A:4193:HOH:O	2.27	0.66
1:1A:2206:G:H5”	1:1A:2207:G:C5	2.30	0.66
32:2a:957:U:O2’	32:2a:959:A:N7	2.23	0.66
38:2g:64:GLN:O	38:2g:68:ASN:ND2	2.27	0.66
1:1A:1183:G:O2’	25:13:29:ARG:NH2	2.27	0.66
1:1A:2364:C:OP1	22:10:55:ARG:NH1	2.29	0.66
32:1a:1035:A:N3	32:1a:1036:G:N2	2.41	0.66
33:1b:83:MET:HG2	33:1b:234:PRO:HG3	1.77	0.66
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.75	0.66
44:1m:122:LYS:HG3	44:1m:123:ALA:H	1.58	0.66
17:1V:78:LYS:O	62:1V:301:HOH:O	2.14	0.66
18:1W:18:ARG:HG2	18:1W:76:VAL:HB	1.77	0.66
1:2A:1507:A:O2’	1:2A:1508:A:O5’	2.13	0.66
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.13	0.66
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.58	0.66
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.29	0.66
32:2a:986:A:N3	50:2s:52:TYR:OH	2.26	0.66
54:2w:23:A:H3’	54:2w:24:G:C8	2.31	0.66
1:1A:1453:U:O2’	1:1A:1455:G:N7	2.27	0.66
1:1A:1671:U:O4	62:1A:4105:HOH:O	2.09	0.66
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.29	0.66
42:1k:16:SER:HB2	42:1k:79:SER:HB3	1.77	0.66
1:2A:860:U:H1’	1:2A:2268:A:H5’	1.78	0.66
1:2A:963:U:OP2	62:2A:3913:HOH:O	2.13	0.66
11:2P:94:GLU:HG3	11:2P:124:LYS:HE3	1.78	0.66
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.28	0.66
1:1A:2774:C:OP2	62:1A:4132:HOH:O	2.14	0.66
1:2A:943:U:OP2	62:2A:3934:HOH:O	2.13	0.66
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG2	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1490:C:H2'	32:2a:1491:G:O4'	1.95	0.66
44:2m:10:PRO:HD2	44:2m:18:ALA:HB1	1.76	0.66
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.60	0.66
1:1A:1315:C:OP2	62:1A:4114:HOH:O	2.12	0.66
4:1E:29:GLY:HA3	62:1E:403:HOH:O	1.96	0.66
6:1G:82:LEU:HD11	6:1G:88:ILE:HG21	1.76	0.66
22:10:10:THR:HG22	22:10:12:ASN:H	1.60	0.66
32:1a:1220:G:N2	50:1s:54:GLY:O	2.26	0.66
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.78	0.66
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.28	0.66
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.27	0.66
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.78	0.66
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.77	0.66
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.29	0.66
34:1c:162:GLN:NE2	53:1v:24:A:O2'	2.29	0.66
1:2A:370:G:OP1	1:2A:403:U:N3	2.23	0.66
1:2A:397:G:N7	62:2A:4026:HOH:O	2.29	0.66
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.28	0.66
8:2I:101:LEU:HD13	8:2I:107:VAL:HB	1.77	0.66
41:2j:25:GLU:OE2	41:2j:29:ARG:NH2	2.28	0.66
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.29	0.66
32:1a:1118:C:OP1	40:1i:104:ARG:NH1	2.29	0.66
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.77	0.66
7:2H:51:ARG:NH1	7:2H:53:GLU:OE2	2.23	0.66
34:2c:152:ILE:HG22	34:2c:167:TRP:HB3	1.78	0.66
1:1A:1352:U:OP1	62:1A:4129:HOH:O	2.12	0.65
1:2A:1031:G:H21	31:29:36:GLN:HE22	1.40	0.65
14:2S:39:ILE:HB	14:2S:49:VAL:HB	1.77	0.65
32:2a:484:G:O2'	62:2a:1906:HOH:O	2.14	0.65
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.78	0.65
57:2y:4:U:H2'	57:2y:5:C:H5'	1.78	0.65
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.61	0.65
42:2k:86:GLY:O	42:2k:91:ARG:NH1	2.30	0.65
1:1A:2136:C:N4	1:1A:2155:G:N1	2.44	0.65
6:1G:66:GLN:NE2	6:1G:93:THR:O	2.28	0.65
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.11	0.65
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.21	0.65
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.78	0.65
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.62	0.65
1:1A:1069:A:H4'	1:1A:1070:A:H5"	1.79	0.65
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.78	0.65
1:2A:987:G:O2'	1:2A:1000:A:N3	2.29	0.65
57:2y:26:A:N6	57:2y:45:G:O6	2.30	0.65
1:1A:279:C:H42	1:1A:361:G:H1	1.44	0.65
1:1A:2691:C:OP2	62:1A:4134:HOH:O	2.14	0.65
23:11:18:ILE:HG12	23:11:37:ILE:HG12	1.79	0.65
28:16:6:ARG:NH1	28:16:24:GLU:OE2	2.28	0.65
32:1a:557:G:OP1	62:1a:4808:HOH:O	2.14	0.65
32:1a:636:U:H2'	32:1a:637:G:H8	1.61	0.65
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.79	0.65
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.77	0.65
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.11	0.65
6:2G:83:ARG:N	6:2G:86:MET:SD	2.67	0.65
1:1A:2099:U:H3	1:1A:2190:G:H1	1.44	0.65
1:1A:2406:U:O4	11:1P:70:GLN:NE2	2.30	0.65
32:2a:501:C:H2'	32:2a:502:G:H8	1.61	0.65
32:2a:501:C:H2'	32:2a:502:G:C8	2.32	0.65
1:1A:400:G:N7	62:1A:4198:HOH:O	2.28	0.65
1:1A:1770:G:OP1	62:1A:4137:HOH:O	2.14	0.65
6:1G:5:VAL:HG13	6:1G:8:LYS:HE2	1.78	0.65
32:1a:1166:G:N2	32:1a:1170:A:OP2	2.29	0.65
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.31	0.65
32:2a:1010:G:C2	32:2a:1020:U:H1'	2.32	0.65
32:2a:1359:C:O2'	32:2a:1362:C:N4	2.30	0.65
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.43	0.65
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.79	0.65
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.60	0.65
1:1A:671:C:N4	62:1A:4211:HOH:O	2.29	0.65
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.45	0.65
2:1B:25:A:OP1	62:1B:301:HOH:O	2.14	0.65
32:2a:222:U:H2'	32:2a:223:U:C6	2.32	0.65
32:2a:532:A:H2	34:2c:156:ARG:HH22	1.44	0.65
1:1A:428:A:OP1	62:1A:4133:HOH:O	2.14	0.65
1:1A:1818:U:O4	3:1D:154:LYS:NZ	2.29	0.65
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.61	0.65
32:1a:412:A:OP2	35:1d:35:ARG:NH2	2.30	0.65
1:2A:1452:A:OP2	62:2A:3936:HOH:O	2.13	0.65
6:2G:96:ARG:H	6:2G:99:MET:HE2	1.62	0.65
7:2H:3:ARG:HH22	7:2H:65:HIS:HB3	1.62	0.65
12:2Q:1:MET:HB2	12:2Q:44:ALA:HB1	1.79	0.65
41:2j:8:LEU:HB3	41:2j:96:ILE:HG23	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:21:VAL:HG21	48:2q:59:ILE:HG21	1.79	0.65
5:1F:101:LEU:O	5:1F:106:ARG:NH1	2.29	0.65
7:1H:121:ILE:HG13	7:1H:144:VAL:HG21	1.79	0.65
54:1w:27:G:H1	54:1w:43:U:H3	1.45	0.65
1:1A:2612:C:OP2	27:15:2:ALA:N	2.28	0.64
28:16:13:CYS:SG	28:16:47:THR:HG21	2.36	0.64
35:2d:15:GLU:OE2	35:2d:59:ARG:NH1	2.30	0.64
1:2A:890:A:H2'	1:2A:892:G:H8	1.62	0.64
21:2Z:153:SER:HB2	21:2Z:167:PRO:HB3	1.79	0.64
33:2b:91:PRO:HG2	33:2b:155:LEU:HB2	1.80	0.64
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.29	0.64
24:12:14:ARG:O	24:12:67:LYS:NZ	2.27	0.64
1:2A:994:C:O2'	1:2A:996:A:OP1	2.15	0.64
1:2A:1568:G:N7	62:2A:4030:HOH:O	2.30	0.64
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.77	0.64
50:2s:53:ASN:ND2	50:2s:56:GLN:O	2.31	0.64
32:1a:1030(D):A:H3'	32:1a:1031:G:H4'	1.78	0.64
57:1y:4:U:H3	57:1y:69:A:H61	1.44	0.64
6:2G:165:THR:HG23	6:2G:168:GLU:HG3	1.79	0.64
7:2H:101:ARG:HH22	7:2H:122:THR:HA	1.63	0.64
32:2a:545:C:OP1	35:2d:61:LYS:NZ	2.29	0.64
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.78	0.64
35:1d:122:ARG:NH1	35:1d:134:ASP:O	2.31	0.64
1:2A:335:C:H5"	20:2Y:84:ARG:HD3	1.80	0.64
34:1c:8:ILE:HD13	34:1c:184:TYR:HB3	1.79	0.64
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.33	0.64
35:2d:57:ARG:NH1	35:2d:205:GLU:OE2	2.30	0.64
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.61	0.64
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.31	0.64
32:1a:673:G:H2'	32:1a:674:G:C8	2.31	0.64
32:2a:501:C:OP2	43:2l:124:LYS:NZ	2.26	0.64
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.63	0.64
32:1a:1372:U:OP1	40:1i:72:GLY:N	2.29	0.64
32:2a:11:G:H1	32:2a:23:C:H42	1.46	0.64
1:1A:1057:A:N6	1:1A:1081:U:H3	1.94	0.64
1:2A:1323:U:OP1	18:2W:98:LYS:NZ	2.24	0.64
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.27	0.64
54:2w:51:A:N6	54:2w:63:U:C2	2.66	0.64
1:1A:801:G:O6	62:1A:4138:HOH:O	2.15	0.64
1:1A:968:G:O6	62:1A:4119:HOH:O	2.09	0.64
1:1A:1119:C:N4	62:1A:4242:HOH:O	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2541:A:N7	62:1A:4217:HOH:O	2.29	0.64
1:2A:307:G:N7	62:2A:4036:HOH:O	2.30	0.64
4:2E:29:GLY:H	4:2E:180:ASN:HB3	1.63	0.64
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.31	0.64
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.33	0.64
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.31	0.64
1:1A:1235:G:OP1	62:1A:4110:HOH:O	2.15	0.63
32:1a:116:A:H61	32:1a:313:A:H1'	1.63	0.63
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.78	0.63
36:1e:41:VAL:HG23	36:1e:67:VAL:HG12	1.80	0.63
1:2A:1169:G:H22	1:2A:1180:C:H42	1.45	0.63
6:2G:166:ASP:O	6:2G:170:ARG:N	2.29	0.63
32:2a:1271:G:N2	32:2a:1272:G:N7	2.47	0.63
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.34	0.63
40:2i:5:TYR:HE1	40:2i:16:ARG:HB3	1.63	0.63
40:2i:23:ASN:ND2	40:2i:25:LYS:HE2	2.13	0.63
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.79	0.63
15:1T:117:ASP:OD2	15:1T:120:ARG:NE	2.31	0.63
1:2A:578:A:OP2	62:2A:3939:HOH:O	2.16	0.63
32:2a:397:A:N7	32:2a:547:A:O2'	2.28	0.63
32:1a:601:C:H2'	32:1a:602:A:H8	1.63	0.63
32:2a:1193:G:O2'	36:2e:25:ARG:NH2	2.32	0.63
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.81	0.63
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.81	0.63
32:1a:429:U:O2'	35:1d:22:LYS:NZ	2.31	0.63
1:2A:300:A:OP2	20:2Y:86:ARG:NH1	2.32	0.63
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.31	0.63
57:2y:9:A:N3	57:2y:45:G:N2	2.46	0.63
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.80	0.63
32:1a:532:A:N6	32:1a:1206:G:O2'	2.32	0.63
35:1d:88:VAL:HA	36:1e:97:GLY:HA3	1.80	0.63
46:1o:23:GLY:O	46:1o:28:GLN:NE2	2.29	0.63
8:2I:81:VAL:HG21	8:2I:88:ILE:HG12	1.80	0.63
32:2a:539:A:H2'	32:2a:540:G:C8	2.34	0.63
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.79	0.63
10:1O:88:ASN:ND2	10:1O:90:GLN:OE1	2.32	0.63
12:1Q:78:PRO:HD3	55:1x:1:C:N3	2.13	0.63
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.80	0.63
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.80	0.63
38:1g:78:ARG:HG3	38:1g:79:ARG:H	1.62	0.63
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:165:THR:OG1	6:2G:167:GLU:OE1	2.13	0.63
1:2A:607:U:OP1	5:2F:102:PRO:HA	1.98	0.63
1:2A:879:G:H3'	1:2A:880:G:H8	1.62	0.63
27:25:45:VAL:HG11	27:25:58:LEU:HD13	1.81	0.63
32:2a:201:C:H42	32:2a:216:G:H1	1.45	0.63
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.63	0.63
37:2f:41:GLU:OE1	49:2r:35:ARG:NH2	2.32	0.63
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.81	0.63
49:2r:25:THR:O	49:2r:42:ARG:NH2	2.31	0.63
1:1A:329:G:OP1	62:1A:4139:HOH:O	2.15	0.63
1:1A:1482:G:H2'	1:1A:1484:G:H8	1.64	0.63
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.28	0.63
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.47	0.63
43:1l:70:ILE:HG12	43:1l:100:ILE:HD13	1.81	0.63
1:2A:192:C:O2'	1:2A:802:A:N3	2.32	0.63
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.32	0.63
2:2B:103:G:H21	21:2Z:73:GLN:HE22	1.46	0.63
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.79	0.63
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.26	0.63
32:2a:521:G:H4'	43:2l:73:GLU:HG2	1.81	0.63
32:2a:921:U:O2'	36:2e:19:MET:O	2.11	0.63
1:1A:1225:G:H4'	17:1V:84:LYS:HG2	1.79	0.63
1:1A:1762:A:H2'	62:1A:5553:HOH:O	1.98	0.63
32:2a:117:G:OP2	62:2a:1904:HOH:O	2.16	0.63
34:2c:137:ALA:HA	34:2c:140:ARG:HH11	1.63	0.63
37:2f:68:PRO:HB2	37:2f:71:ARG:HG3	1.79	0.63
44:2m:90:LEU:HD21	44:2m:94:ARG:HH11	1.63	0.63
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.14	0.62
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.14	0.62
1:2A:2117:A:N6	1:2A:2166:G:H1	1.97	0.62
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.81	0.62
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.64	0.62
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.34	0.62
38:2g:133:GLY:O	38:2g:137:LYS:N	2.28	0.62
32:1a:702:A:OP2	62:1a:4809:HOH:O	2.16	0.62
32:1a:942:G:H21	40:1i:124:GLN:NE2	1.96	0.62
19:2X:94:GLY:CA	19:2X:95:LEU:HB2	2.28	0.62
1:2A:637:A:H5"	11:2P:117:GLU:HB2	1.82	0.62
1:2A:1324:G:N7	62:2A:4038:HOH:O	2.30	0.62
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.79	0.62
32:2a:1479:C:H2'	32:2a:1480:G:H8	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:27:LYS:HB3	33:2b:194:PRO:HD2	1.79	0.62
28:16:28:ARG:NH1	28:16:29:ASN:OD1	2.32	0.62
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.81	0.62
1:2A:1021:A:H62	1:2A:1141:U:H3	1.46	0.62
26:24:44:THR:O	26:24:46:GLN:N	2.33	0.62
31:29:15:LYS:HD3	31:29:26:ILE:HD11	1.81	0.62
32:2a:1209:C:O2'	32:2a:1214:C:N4	2.31	0.62
32:2a:1263:C:N3	32:2a:1272:G:O6	2.32	0.62
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.34	0.62
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.81	0.62
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.82	0.62
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.81	0.62
42:2k:48:ILE:O	42:2k:50:TYR:N	2.32	0.62
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.35	0.62
1:1A:2133:G:H1	1:1A:2157:G:H1'	1.64	0.62
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.64	0.62
4:1E:77:ILE:HD13	4:1E:195:LEU:HD13	1.81	0.62
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.31	0.62
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.65	0.62
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.35	0.62
6:2G:19:LEU:HA	6:2G:22:ARG:HB3	1.81	0.62
32:2a:48:C:OP2	62:2a:1907:HOH:O	2.15	0.62
32:2a:1182:G:H4'	32:2a:1183:A:H5"	1.81	0.62
57:2y:21:A:H1'	57:2y:48:C:C4	2.35	0.62
1:1A:588:U:H2'	1:1A:589:C:C6	2.34	0.62
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.34	0.62
54:1w:40:C:H2'	54:1w:41:A:H8	1.65	0.62
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.35	0.62
32:2a:1053:G:N7	32:2a:1200:C:H5"	2.15	0.62
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.63	0.62
5:1F:12:LEU:HD12	5:1F:124:LEU:HD21	1.82	0.62
16:1U:47:TYR:HA	16:1U:50:ARG:NH2	2.14	0.62
1:2A:1268:A:OP2	62:2A:3942:HOH:O	2.16	0.62
1:2A:2131:G:N2	1:2A:2158:A:H62	1.97	0.62
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.26	0.62
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.82	0.62
17:2V:76:LYS:HB2	17:2V:81:TYR:HD2	1.65	0.62
36:2e:143:ARG:HB3	36:2e:147:ASP:HB2	1.81	0.62
54:2w:11:C:H42	54:2w:24:G:H1	1.47	0.62
1:2A:2136:C:N3	1:2A:2155:G:N2	2.47	0.62
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.65	0.62
1:1A:2849:U:O4	15:1T:23:ARG:NH2	2.30	0.61
32:1a:444:C:H2'	32:1a:445:G:H8	1.65	0.61
32:1a:624:C:H2'	32:1a:625:G:H8	1.63	0.61
1:2A:1927:A:H2'	1:2A:1928:A:C8	2.35	0.61
1:2A:2130:U:H3	1:2A:2159:G:H1	1.46	0.61
1:2A:2659:G:O2'	1:2A:2661:G:N7	2.29	0.61
6:2G:38:VAL:HG22	6:2G:93:THR:HG23	1.81	0.61
12:2Q:85:LYS:HG2	22:20:7:LEU:HB3	1.80	0.61
32:2a:1130:A:H5"	40:2i:18:PHE:CE2	2.35	0.61
34:2c:129:ALA:HB3	34:2c:132:ARG:HD2	1.82	0.61
54:2w:54:5MU:O2	54:2w:58:A:N7	2.33	0.61
17:1V:1:MET:HB3	17:1V:99:ILE:HD12	1.83	0.61
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.64	0.61
32:1a:107:G:N7	51:1t:15:ARG:NH2	2.48	0.61
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.32	0.61
36:1e:18:ARG:HH11	36:1e:27:ARG:HH12	1.48	0.61
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.83	0.61
32:2a:505:G:H2'	32:2a:506:G:H8	1.65	0.61
32:2a:1263:C:C4	32:2a:1272:G:O6	2.52	0.61
41:2j:8:LEU:HD11	41:2j:20:ALA:HB2	1.81	0.61
42:2k:62:GLN:OE1	42:2k:93:GLN:NE2	2.32	0.61
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.99	0.61
40:1i:52:ALA:HB2	40:1i:99:LEU:HD12	1.81	0.61
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.82	0.61
3:2D:171:ASP:OD1	3:2D:171:ASP:N	2.32	0.61
32:2a:376:G:H5"	47:2p:5:ARG:HB2	1.81	0.61
32:2a:975:A:H4'	32:2a:976:G:H5"	1.82	0.61
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	1.82	0.61
38:2g:72:ARG:NH2	38:2g:142:GLU:OE2	2.32	0.61
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.99	0.61
11:1P:116:GLY:O	11:1P:137:LYS:NZ	2.32	0.61
1:2A:2010:G:H5"	18:2W:42:ARG:HB2	1.81	0.61
6:2G:42:GLY:HA2	6:2G:89:GLY:HA3	1.81	0.61
12:2Q:54:MET:HE1	12:2Q:104:PHE:HB3	1.82	0.61
33:2b:212:GLN:NE2	33:2b:234:PRO:O	2.33	0.61
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.81	0.61
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.36	0.61
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.14	0.61
5:1F:129:PHE:HB3	5:1F:132:VAL:HG13	1.81	0.61
30:18:23:VAL:HG13	30:18:47:LYS:HB3	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:141:A:H1'	32:1a:182:U:C2	2.36	0.61
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.23	0.61
32:2a:588:G:OP2	62:2a:1909:HOH:O	2.16	0.61
1:1A:1171:G:OP2	1:1A:1174:A:N6	2.34	0.61
32:2a:56:U:H2'	32:2a:57:G:C8	2.35	0.61
39:2h:64:LYS:HD2	39:2h:79:VAL:HG11	1.82	0.61
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.32	0.61
15:2T:85:LYS:NZ	15:2T:87:ASP:OD2	2.28	0.61
32:2a:1244:C:H42	32:2a:1293:G:H1	1.49	0.61
57:2y:19:G:H5'	57:2y:57:G:H1	1.66	0.61
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.25	0.61
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.81	0.61
1:2A:947:G:H2'	1:2A:948:G:C8	2.35	0.61
5:2F:155:LEU:HD23	5:2F:192:LEU:HD13	1.82	0.61
12:2Q:20:ALA:HB2	21:2Z:79:ARG:HG3	1.82	0.61
13:2R:33:ARG:NH2	13:2R:115:GLU:OE1	2.31	0.61
24:22:41:ILE:HG13	24:22:43:GLN:HG2	1.82	0.61
38:2g:144:MET:HG3	57:2y:41:A:H1'	1.81	0.61
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.81	0.61
32:2a:576:G:OP1	62:2a:1908:HOH:O	2.16	0.61
32:2a:1275:A:H3'	32:2a:1276:G:H8	1.66	0.61
1:1A:154(A):C:H42	1:1A:171:G:H1	1.48	0.60
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.35	0.60
32:1a:1054:C:OP2	62:1a:4806:HOH:O	2.16	0.60
54:1w:63:U:H2'	54:1w:64:G:C8	2.36	0.60
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.36	0.60
1:2A:2741:A:OP1	31:29:22:ARG:NH2	2.28	0.60
17:2V:40:LEU:HB2	17:2V:46:VAL:HG12	1.83	0.60
26:24:24:THR:OG1	26:24:25:TYR:N	2.31	0.60
55:2x:53:G:H3'	55:2x:54:5MU:H73	1.82	0.60
57:2y:48:C:H2'	57:2y:59:A:H1'	1.83	0.60
1:1A:1082:U:N3	1:1A:1086:A:N6	2.07	0.60
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.36	0.60
32:1a:1273:G:H3'	32:1a:1274:G:H8	1.65	0.60
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.66	0.60
1:1A:2507:C:O2'	54:1w:74:C:N4	2.34	0.60
1:1A:2702:U:OP2	62:1A:4142:HOH:O	2.17	0.60
32:1a:731:G:H5'	32:1a:766:A:H4'	1.84	0.60
32:1a:1132:C:H42	32:1a:1142:G:H1	1.47	0.60
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.17	0.60
3:2D:133:LEU:HB3	3:2D:173:VAL:HG11	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.83	0.60
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.33	0.60
32:2a:1106:G:H5"	34:2c:172:ARG:HB3	1.83	0.60
33:2b:80:ILE:HG21	33:2b:211:ILE:HG21	1.83	0.60
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.32	0.60
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.84	0.60
1:2A:582:G:OP2	62:2A:3941:HOH:O	2.16	0.60
32:2a:737:A:H4'	37:2f:72:VAL:HG11	1.83	0.60
57:2y:30:G:H2'	57:2y:31:A:H8	1.65	0.60
32:1a:584:G:O6	62:1a:4807:HOH:O	2.14	0.60
1:2A:577:G:O6	62:2A:3938:HOH:O	2.14	0.60
27:25:2:ALA:N	62:25:201:HOH:O	2.33	0.60
32:1a:352:C:O2'	32:1a:354:G:OP1	2.18	0.60
32:1a:472:A:OP2	47:1p:75:ARG:NH2	2.34	0.60
18:2W:11:ARG:NH1	18:2W:99:ARG:O	2.35	0.60
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.84	0.60
32:2a:1089:G:H1	32:2a:1096:C:N4	1.99	0.60
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.02	0.60
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.84	0.60
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.18	0.60
32:1a:176:C:H2'	32:1a:177:C:H6	1.67	0.60
32:1a:1025:U:O2	32:1a:1036:G:O6	2.19	0.60
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.35	0.60
1:2A:2831:G:OP1	4:2E:58:ARG:NH2	2.33	0.60
5:2F:24:LEU:HD21	5:2F:114:VAL:HG12	1.84	0.60
26:24:37:SER:HA	26:24:43:TYR:HD1	1.65	0.60
45:2n:29:ARG:HD3	45:2n:40:CYS:HB2	1.83	0.60
1:1A:71:A:N7	19:1X:31:HIS:HE1	1.99	0.60
1:1A:1686:C:H2'	1:1A:1687:G:O4'	2.01	0.60
1:1A:2226:C:OP2	62:1A:4140:HOH:O	2.16	0.60
8:1I:48:GLU:O	8:1I:52:ARG:NH2	2.34	0.60
32:1a:266:G:H5"	32:1a:268:C:H41	1.66	0.60
1:2A:882:G:H22	1:2A:894:C:H42	1.47	0.60
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.34	0.60
32:2a:707:C:H2'	32:2a:708:C:H6	1.67	0.60
54:2w:3:G:H1	54:2w:70:C:H42	1.48	0.60
14:1S:39:ILE:HB	14:1S:49:VAL:HG13	1.82	0.60
32:1a:110:C:O2'	47:1p:25:ARG:O	2.17	0.60
1:2A:571:A:N6	1:2A:2499:C:O3'	2.35	0.60
2:2B:3:C:H2'	2:2B:4:C:C6	2.37	0.60
5:2F:103:LYS:HA	5:2F:106:ARG:HD3	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:62:LEU:HB3	6:2G:143:GLU:HB3	1.82	0.60
32:2a:580:U:H5"	46:2o:58:MET:HG2	1.82	0.60
37:2f:83:ASP:N	37:2f:83:ASP:OD1	2.34	0.60
42:2k:18:ARG:HD2	42:2k:83:ILE:HD11	1.83	0.60
50:2s:49:ILE:HD13	50:2s:51:VAL:HG22	1.83	0.60
54:2w:51:A:H5'	54:2w:52:G:OP2	2.02	0.60
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.02	0.60
1:1A:1062:G:P	1:1A:1070:A:H1'	2.42	0.60
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.37	0.60
13:2R:87:TYR:HB3	13:2R:90:ARG:HB3	1.84	0.60
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.84	0.60
32:2a:533:A:O2'	32:2a:535:A:OP2	2.18	0.60
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.37	0.59
15:1T:127:ALA:C	15:1T:129:ARG:H	2.09	0.59
33:1b:143:GLU:O	33:1b:147:LYS:N	2.34	0.59
49:1r:58:LEU:HD12	49:1r:66:LEU:HD22	1.84	0.59
1:2A:2165:G:H1	1:2A:2171:A:H8	1.49	0.59
2:2B:106:G:OP1	21:2Z:31:ARG:HB3	2.01	0.59
4:2E:54:GLN:OE1	4:2E:55:ASN:N	2.34	0.59
32:2a:814:A:H2'	32:2a:816:A:H5"	1.84	0.59
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.02	0.59
34:2c:20:SER:OG	34:2c:40:ARG:NH1	2.29	0.59
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	1.83	0.59
41:2j:7:LYS:HG3	41:2j:70:ARG:O	2.02	0.59
37:1f:67:MET:HE1	37:1f:75:LEU:HD12	1.83	0.59
1:2A:2404:C:O3'	11:2P:77:ARG:NH2	2.35	0.59
1:2A:2818:G:OP2	13:2R:42:LYS:NZ	2.29	0.59
2:2B:37:C:O2	14:2S:95:HIS:NE2	2.35	0.59
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.16	0.59
21:2Z:6:LYS:HE3	21:2Z:8:TYR:HE2	1.65	0.59
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.34	0.59
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.37	0.59
38:1g:64:GLN:HE21	38:1g:68:ASN:HD21	1.49	0.59
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.84	0.59
32:2a:1084:G:H3'	32:2a:1085:U:H2'	1.84	0.59
39:2h:20:TYR:HE2	39:2h:75:ARG:HD2	1.68	0.59
1:1A:687:C:H5"	29:17:2:LYS:HE2	1.84	0.59
1:2A:2138:C:N3	1:2A:2153:G:N2	2.41	0.59
33:2b:70:PHE:HE2	33:2b:90:MET:HB2	1.65	0.59
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.30	0.59
32:1a:56:U:H2'	32:1a:57:G:H8	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:427:U:OP1	35:1d:13:ARG:NH1	2.35	0.59
32:1a:444:C:H2'	32:1a:445:G:C8	2.37	0.59
32:1a:953:G:H5'	32:1a:965:A:H61	1.67	0.59
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.36	0.59
53:1v:19:A:H62	54:1w:37:T6A:H152	1.67	0.59
1:2A:459:U:H5"	29:27:40:TRP:CD2	2.38	0.59
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.37	0.59
32:2a:643:C:H2'	32:2a:644:G:H8	1.67	0.59
26:14:14:ILE:HB	26:14:22:ILE:HD12	1.84	0.59
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.84	0.59
40:1i:17:VAL:HG11	40:1i:81:ILE:HA	1.85	0.59
1:2A:309:G:N3	1:2A:329:G:O2'	2.36	0.59
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.33	0.59
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.16	0.59
32:2a:1063:C:H3'	32:2a:1064:G:H2'	1.85	0.59
32:2a:1122:U:N3	32:2a:1123:A:N7	2.51	0.59
1:1A:956:G:H2'	1:1A:957:A:H2'	1.84	0.59
1:1A:2131:G:H5'	1:1A:2133:G:C8	2.37	0.59
1:1A:2350:C:OP2	62:1A:4143:HOH:O	2.17	0.59
2:1B:24:G:N7	2:1B:56:G:H2'	2.17	0.59
21:1Z:151:HIS:CD2	21:1Z:170:THR:HA	2.37	0.59
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.32	0.59
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.67	0.59
1:2A:307:G:N1	1:2A:310:A:OP2	2.35	0.59
1:2A:1639:U:H2'	1:2A:1640:C:H5"	1.85	0.59
15:2T:111:ARG:NH1	32:2a:1463:C:OP1	2.36	0.59
54:2w:51:A:C8	54:2w:64:G:H2'	2.38	0.59
1:1A:751:A:H5'	18:1W:90:ARG:HA	1.84	0.59
1:1A:1359:A:H2	1:1A:1372:U:O4	1.85	0.59
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.38	0.59
4:1E:176:ILE:HB	4:1E:181:LEU:HB2	1.83	0.59
12:1Q:76:LYS:HB3	12:1Q:91:GLU:HG3	1.83	0.59
34:1c:40:ARG:NH1	45:1n:52:GLN:OE1	2.35	0.59
2:2B:102:A:OP2	62:2B:302:HOH:O	2.16	0.59
6:2G:119:GLY:HA3	6:2G:181:ARG:HB2	1.83	0.59
32:2a:838:G:H1	32:2a:848:C:H42	1.50	0.59
38:2g:144:MET:HE1	57:2y:31:A:H1'	1.82	0.59
38:2g:150:ALA:HA	42:2k:59:TYR:HB3	1.84	0.59
54:2w:15:G:N2	54:2w:59:A:N3	2.50	0.59
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.37	0.59
1:1A:2552:OMU:OP2	62:1A:4104:HOH:O	2.16	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.68	0.59
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.85	0.59
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.28	0.59
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.38	0.59
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.85	0.59
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.85	0.59
1:2A:1423:G:H2'	1:2A:1424:G:H8	1.68	0.59
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.68	0.59
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.84	0.59
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.37	0.59
32:2a:735:C:H2'	32:2a:736:C:H6	1.68	0.59
32:2a:920:U:H2'	32:2a:921:U:C6	2.38	0.59
15:1T:16:ARG:NH1	15:1T:83:ILE:O	2.24	0.59
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.68	0.59
57:1y:63:U:H2'	57:1y:64:G:C8	2.38	0.59
1:2A:122:G:N3	62:2A:4041:HOH:O	2.31	0.59
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.02	0.59
10:2O:13:ASN:HD21	10:2O:96:THR:HB	1.68	0.59
11:2P:87:ASP:O	11:2P:90:ARG:NH1	2.36	0.59
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.84	0.59
32:2a:707:C:H2'	32:2a:708:C:C6	2.38	0.59
32:2a:984:C:H2'	32:2a:985:C:H6	1.68	0.59
1:1A:2131:G:H5"	1:1A:2132:U:H3'	1.84	0.58
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.85	0.58
20:1Y:83:THR:HG21	20:1Y:99:CYS:HB2	1.85	0.58
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.16	0.58
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.84	0.58
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.84	0.58
8:1I:103:ARG:HG2	8:1I:104:GLN:HG3	1.84	0.58
32:1a:7:G:H2'	36:1e:119:LEU:HD22	1.86	0.58
32:1a:684:A:N6	62:1a:4848:HOH:O	2.35	0.58
41:1j:30:SER:O	41:1j:30:SER:OG	2.21	0.58
44:1m:107:ALA:HB3	44:1m:111:LYS:HD3	1.83	0.58
1:2A:744:G:OP1	4:2E:132:HIS:ND1	2.33	0.58
2:2B:103:G:O6	62:2B:301:HOH:O	2.12	0.58
14:2S:18:ILE:O	14:2S:21:THR:OG1	2.20	0.58
29:27:24:THR:HG23	29:27:27:GLY:H	1.68	0.58
40:2i:9:ARG:O	40:2i:104:ARG:HG3	2.04	0.58
1:1A:1056:G:H5"	1:1A:1057:A:H5'	1.85	0.58
1:1A:1062:G:H22	1:1A:1077:A:N6	1.99	0.58
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.39	0.58
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.84	0.58
18:1W:77:ASP:OD1	62:1W:301:HOH:O	2.17	0.58
26:14:15:ILE:HG12	26:14:21:VAL:HG22	1.84	0.58
32:1a:993:G:H2'	32:1a:995:C:H41	1.68	0.58
32:1a:1327:C:OP2	52:1u:12:LYS:NZ	2.36	0.58
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.38	0.58
6:2G:64:THR:HG22	6:2G:94:LEU:HD11	1.83	0.58
49:2r:66:LEU:O	49:2r:70:ILE:HG13	2.03	0.58
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.32	0.58
1:1A:2633:G:H2'	1:1A:2634:G:O4'	2.04	0.58
6:1G:18:GLU:HG2	6:1G:175:LEU:HD21	1.83	0.58
32:1a:167:G:H2'	32:1a:168:G:C8	2.37	0.58
32:1a:601:C:H2'	32:1a:602:A:C8	2.38	0.58
32:1a:674:G:H2'	32:1a:675:A:H8	1.68	0.58
36:1e:18:ARG:NH1	36:1e:27:ARG:HH12	2.02	0.58
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	1.85	0.58
1:2A:1751:C:HO2'	1:2A:2861:G:HO2'	1.48	0.58
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.69	0.58
2:2B:50:G:OP1	14:2S:63:THR:N	2.36	0.58
7:2H:154:PRO:HB3	7:2H:163:TYR:CZ	2.38	0.58
32:2a:56:U:H2'	32:2a:57:G:H8	1.68	0.58
32:2a:936:C:H2'	32:2a:937:A:O4'	2.03	0.58
1:1A:2096:U:H3	1:1A:2193:G:H1	1.49	0.58
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.39	0.58
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.39	0.58
39:1h:6:ILE:HD12	39:1h:35:ILE:HD12	1.85	0.58
1:2A:1325:G:OP1	1:2A:1647:G:O2'	2.18	0.58
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.21	0.58
7:2H:103:LEU:HG	7:2H:115:VAL:HB	1.85	0.58
21:2Z:79:ARG:HD2	21:2Z:80:ARG:HH12	1.67	0.58
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.52	0.58
1:1A:1054:A:N6	1:1A:1105:U:H3	2.02	0.58
1:2A:321:G:OP1	5:2F:135:LYS:NZ	2.28	0.58
1:2A:2171:A:N3	1:2A:2172:U:N3	2.52	0.58
3:2D:118:VAL:N	3:2D:129:ASN:OD1	2.36	0.58
32:2a:148:G:H2'	32:2a:149:A:C8	2.38	0.58
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.38	0.58
36:2e:7:GLU:OE1	36:2e:37:ARG:NH2	2.32	0.58
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.03	0.58
1:1A:2727:G:O2'	10:1O:70:LYS:NZ	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1R:20:LEU:HD21	13:1R:40:LYS:HD3	1.86	0.58
26:14:15:ILE:O	26:14:33:VAL:N	2.26	0.58
32:1a:877:C:H5"	39:1h:88:LYS:HD3	1.86	0.58
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.19	0.58
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.85	0.58
7:2H:164:TYR:HB2	7:2H:167:GLU:HB2	1.85	0.58
8:2I:69:LYS:HG3	8:2I:138:ILE:HG23	1.86	0.58
14:2S:99:LYS:NZ	14:2S:103:GLU:OE2	2.36	0.58
32:2a:9:G:H2'	32:2a:10:A:C8	2.37	0.58
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.37	0.58
1:1A:1166:C:O2'	62:1A:4141:HOH:O	2.16	0.58
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.84	0.58
32:1a:92:C:H2'	32:1a:93:G:C8	2.39	0.58
32:1a:636:U:H2'	32:1a:637:G:C8	2.39	0.58
54:1w:76:A1B8A:N	55:1x:76:8AN:O2'	2.37	0.58
57:1y:2:G:H2'	57:1y:3:G:C8	2.39	0.58
9:2N:138:LEU:HB3	9:2N:140:VAL:HG13	1.86	0.58
32:2a:1058:G:H1	32:2a:1199:U:H3	1.50	0.58
54:2w:12:U:H3	54:2w:23:A:H61	1.50	0.58
1:1A:1568:G:H5'	3:1D:60:ARG:HA	1.86	0.58
1:1A:1800:C:OP2	3:1D:183:ARG:NH2	2.37	0.58
32:1a:426:G:OP1	35:1d:36:ARG:NH1	2.37	0.58
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.39	0.58
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.37	0.58
32:1a:159:G:N2	32:1a:162:A:OP2	2.36	0.58
35:1d:112:VAL:H	35:1d:116:GLN:HE21	1.51	0.58
1:2A:582:G:H2'	1:2A:583:G:C8	2.38	0.58
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.69	0.58
1:2A:2498:C:OP2	62:2A:3932:HOH:O	2.16	0.58
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.39	0.58
6:2G:112:PRO:HG3	26:24:43:TYR:CE1	2.38	0.58
8:2I:2:LYS:HA	8:2I:20:ASP:HA	1.85	0.58
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.85	0.58
32:2a:427:U:H3'	32:2a:428:G:H2'	1.85	0.58
35:2d:187:ARG:NH2	35:2d:193:ASP:OD1	2.37	0.58
2:1B:92:C:OP1	21:1Z:79:ARG:NH1	2.36	0.57
5:2F:178:PRO:HB3	5:2F:198:ALA:HA	1.86	0.57
6:2G:106:LEU:HG	6:2G:111:LEU:HD12	1.85	0.57
32:2a:67:C:H2'	32:2a:68:G:C8	2.39	0.57
32:2a:1095:U:H2'	32:2a:1096:C:O4'	2.04	0.57
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2002:G:OP2	13:1R:9:LYS:NZ	2.36	0.57
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.38	0.57
18:1W:24:ILE:HA	18:1W:27:LYS:HG3	1.85	0.57
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.87	0.57
57:1y:20:U:O3'	57:1y:21:A:H4'	2.03	0.57
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.86	0.57
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.33	0.57
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.21	0.57
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.37	0.57
10:1O:115:VAL:HG13	10:1O:121:VAL:HG21	1.86	0.57
12:1Q:10:ARG:NH1	12:1Q:90:VAL:H	2.03	0.57
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.38	0.57
32:1a:1309:G:N7	44:1m:99:ARG:NH2	2.49	0.57
1:2A:746:A:HO2'	1:2A:2611:U:HO2'	1.53	0.57
1:2A:918:A:N3	2:2B:80:U:O2'	2.36	0.57
32:2a:524:G:H2'	32:2a:525:C:C6	2.38	0.57
32:2a:565:U:OP2	32:2a:566:G:O2'	2.22	0.57
32:2a:964:A:O2'	41:2j:55:LYS:NZ	2.37	0.57
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.39	0.57
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.86	0.57
34:2c:162:GLN:NE2	53:2v:24:A:O2'	2.37	0.57
1:1A:2508:G:H5'	54:1w:74:C:H42	1.68	0.57
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.86	0.57
1:2A:366:C:OP2	1:2A:403:U:O2'	2.17	0.57
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.85	0.57
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.85	0.57
26:24:58:ARG:HH21	50:2s:69:HIS:CE1	2.22	0.57
32:2a:7:G:H2'	36:2e:119:LEU:HD22	1.85	0.57
32:2a:942:G:N2	40:2i:124:GLN:OE1	2.33	0.57
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.85	0.57
1:1A:677:A:OP1	62:1A:4144:HOH:O	2.17	0.57
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.69	0.57
32:1a:1039:C:H2'	32:1a:1040:U:H6	1.69	0.57
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	1.86	0.57
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.87	0.57
1:2A:300:A:P	20:2Y:86:ARG:HH12	2.27	0.57
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.22	0.57
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.40	0.57
7:2H:124:GLU:HG2	7:2H:132:ARG:HB3	1.85	0.57
34:2c:46:GLU:CD	34:2c:46:GLU:H	2.12	0.57
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:60:GLU:OE2	35:1d:63:LYS:NZ	2.31	0.57
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.87	0.57
43:1l:52:LEU:O	43:1l:54:LYS:NZ	2.24	0.57
1:2A:1670:C:O2	4:2E:129:HIS:NE2	2.36	0.57
1:1A:800:A:H8	1:1A:800:A:OP1	1.88	0.57
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.40	0.57
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.38	0.57
32:1a:626:U:H2'	32:1a:627:G:C8	2.39	0.57
32:1a:1355:G:H2'	32:1a:1356:G:H8	1.70	0.57
33:1b:101:MET:HG3	33:1b:108:ILE:HD12	1.86	0.57
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.39	0.57
1:2A:2126:A:N3	1:2A:2127:G:H1'	2.20	0.57
1:2A:2268:A:OP1	62:2A:3944:HOH:O	2.17	0.57
54:2w:63:U:H2'	54:2w:64:G:H8	1.70	0.57
1:1A:1087:G:H1	1:1A:1102:C:H42	1.51	0.57
6:1G:49:ASP:OD1	6:1G:49:ASP:N	2.35	0.57
32:1a:40:C:H2'	32:1a:41:G:C8	2.39	0.57
57:1y:28:U:H3	57:1y:42:A:H61	1.51	0.57
2:2B:17:C:H2'	2:2B:18:G:O4'	2.04	0.57
2:2B:114:C:H2'	2:2B:115:G:C8	2.40	0.57
14:2S:10:ARG:NH2	14:2S:91:PRO:O	2.36	0.57
17:2V:62:LEU:HB2	17:2V:93:GLU:HG2	1.87	0.57
32:2a:148:G:H2'	32:2a:149:A:H8	1.68	0.57
32:2a:457:C:H2'	32:2a:458:C:C6	2.39	0.57
32:2a:1203:C:H2'	32:2a:1204:A:H8	1.70	0.57
50:2s:18:LYS:HD3	50:2s:31:ILE:HG21	1.86	0.57
1:1A:642:G:OP2	62:1A:4147:HOH:O	2.18	0.57
1:1A:2090:G:N2	23:11:45:ASN:OD1	2.30	0.57
11:1P:89:ALA:O	11:1P:121:LYS:NZ	2.33	0.57
18:1W:27:LYS:HD2	18:1W:31:GLU:HG2	1.87	0.57
32:1a:21:G:H2'	32:1a:22:G:C8	2.40	0.57
32:1a:1278:U:H5'	32:1a:1279:A:O4'	2.04	0.57
33:2b:97:TRP:HH2	33:2b:102:LEU:HG	1.69	0.57
39:2h:86:ILE:HD12	39:2h:133:LEU:HD22	1.87	0.57
50:2s:51:VAL:HB	50:2s:75:ALA:HB2	1.86	0.57
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.40	0.57
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.70	0.57
1:1A:1828:G:H8	1:1A:1828:G:OP2	1.88	0.57
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.39	0.57
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.40	0.57
2:1B:14:U:OP2	2:1B:70:C:O2'	2.22	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:1p:3:LYS:HG3	47:1p:24:ALA:HB2	1.87	0.57
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.21	0.57
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.40	0.57
12:2Q:65:PHE:HB2	12:2Q:105:GLU:HB2	1.87	0.57
32:2a:171:A:H2'	32:2a:172:A:C8	2.40	0.57
32:2a:1065:U:H3	32:2a:1109:C:H5"	1.69	0.57
36:2e:152:ARG:HB3	39:2h:43:GLY:HA3	1.87	0.57
37:2f:24:GLU:O	37:2f:28:ARG:N	2.29	0.57
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.87	0.57
1:1A:55:G:O2'	1:1A:127:A:N1	2.32	0.56
5:1F:9:ILE:HD13	5:1F:22:ALA:HB3	1.86	0.56
10:1O:38:VAL:HG13	10:1O:87:ILE:HD11	1.86	0.56
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.86	0.56
1:2A:1271:G:OP2	62:2A:3904:HOH:O	2.18	0.56
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.04	0.56
1:2A:2674:G:O2'	10:2O:29:ASN:OD1	2.20	0.56
2:2B:32:C:H2'	2:2B:33:G:O4'	2.05	0.56
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.88	0.56
26:24:14:ILE:HG13	26:24:31:ILE:HB	1.86	0.56
43:2l:11:VAL:HG11	48:2q:36:ILE:HG21	1.85	0.56
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.38	0.56
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.20	0.56
32:1a:1291:G:OP1	38:1g:37:ASN:ND2	2.36	0.56
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.19	0.56
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.87	0.56
57:1y:52:G:H1	57:1y:62:C:H42	1.53	0.56
1:2A:120:U:OP2	62:2A:3949:HOH:O	2.18	0.56
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.86	0.56
32:2a:692:U:O2'	32:2a:694:A:N7	2.34	0.56
32:2a:920:U:H2'	32:2a:921:U:H6	1.70	0.56
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.87	0.56
55:2x:43:A:H2'	55:2x:44:A:C8	2.39	0.56
1:1A:1188:U:H4'	17:1V:79:VAL:HG22	1.87	0.56
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.40	0.56
6:1G:27:ASN:HB3	6:1G:30:GLU:HG3	1.87	0.56
6:1G:53:LEU:O	6:1G:57:ALA:N	2.36	0.56
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.05	0.56
32:1a:1166:G:O2'	32:1a:1169:A:N7	2.36	0.56
1:2A:458:G:O2'	1:2A:469:G:O6	2.18	0.56
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.21	0.56
1:2A:744:G:OP1	62:2A:3946:HOH:O	2.17	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.39	0.56
8:2I:40:THR:O	8:2I:44:LEU:HB2	2.05	0.56
48:2q:57:VAL:HA	48:2q:77:VAL:HG23	1.86	0.56
1:1A:248:G:OP1	62:1A:4148:HOH:O	2.18	0.56
1:1A:2126:A:H62	1:1A:2163:C:H4'	1.70	0.56
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.40	0.56
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.86	0.56
26:14:58:ARG:O	26:14:61:ARG:HG2	2.06	0.56
32:1a:974:A:OP1	45:1n:29:ARG:NH2	2.38	0.56
40:1i:26:VAL:HG12	40:1i:61:ALA:HB3	1.86	0.56
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.41	0.56
1:2A:71:A:H5"	1:2A:73:A:C8	2.40	0.56
1:2A:740:U:OP1	62:2A:3945:HOH:O	2.17	0.56
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.40	0.56
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.41	0.56
1:2A:2143:C:H42	1:2A:2148:G:H1	1.53	0.56
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.40	0.56
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.70	0.56
1:2A:2590:A:H5"	3:2D:239:ARG:HG3	1.88	0.56
8:2I:26:ALA:HA	8:2I:30:LEU:HB2	1.85	0.56
12:2Q:85:LYS:HB2	22:20:7:LEU:HD12	1.88	0.56
15:2T:119:LYS:HG2	15:2T:123:GLN:HE21	1.70	0.56
17:2V:1:MET:HE2	17:2V:43:GLU:HB2	1.86	0.56
26:24:61:ARG:HG2	50:2s:42:PRO:HG2	1.86	0.56
32:2a:662:G:H2'	32:2a:663:A:C8	2.39	0.56
33:2b:80:ILE:HG13	33:2b:215:LEU:HD12	1.86	0.56
38:2g:70:LYS:HG2	38:2g:96:GLN:HB3	1.88	0.56
39:2h:119:LEU:HB3	39:2h:123:GLU:HB3	1.88	0.56
45:2n:16:PHE:HD2	45:2n:19:ARG:HD2	1.71	0.56
1:1A:882:G:H4'	54:1w:19:G:O6	2.05	0.56
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.20	0.56
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.27	0.56
3:1D:274:ARG:NH1	62:1D:402:HOH:O	2.38	0.56
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.30	0.56
23:11:65:SER:OG	23:11:66:HIS:ND1	2.32	0.56
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.40	0.56
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.87	0.56
10:2O:88:ASN:ND2	10:2O:90:GLN:OE1	2.38	0.56
32:2a:333:G:H4'	51:2t:16:HIS:CE1	2.40	0.56
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.88	0.56
3:1D:25:THR:HG21	3:1D:113:VAL:HG21	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:206:LEU:HD22	3:1D:211:ARG:HG2	1.86	0.56
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.07	0.56
32:1a:1493:A:O2'	53:1v:19:A:O2'	2.22	0.56
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.38	0.56
5:2F:28:ILE:HG22	5:2F:112:MET:HB3	1.88	0.56
32:2a:708:C:H2'	32:2a:709:G:H8	1.70	0.56
32:2a:1183:A:O2'	32:2a:1185:G:OP2	2.23	0.56
32:2a:1239:A:H62	32:2a:1299:A:N6	2.02	0.56
40:2i:8:GLY:HA2	40:2i:79:LEU:HD23	1.88	0.56
57:2y:12:U:H3	57:2y:23:A:N6	2.03	0.56
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.21	0.56
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.39	0.56
1:1A:2130:U:O2'	1:1A:2131:G:N2	2.39	0.56
2:1B:57:A:H1'	6:1G:29:TRP:HB2	1.87	0.56
32:1a:123:C:OP1	32:1a:311:C:O2'	2.22	0.56
32:1a:373:A:H2'	32:1a:374:A:H8	1.71	0.56
32:1a:1150:U:H4'	41:1j:41:PRO:HG3	1.87	0.56
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.41	0.56
35:1d:65:ARG:NH1	35:1d:72:GLU:OE1	2.36	0.56
44:1m:49:THR:HB	44:1m:52:GLU:H	1.71	0.56
54:1w:11:C:H42	54:1w:24:G:H1	1.53	0.56
1:2A:247:G:H4'	1:2A:386:G:C5	2.40	0.56
1:2A:657:U:H2'	1:2A:658:C:C6	2.41	0.56
5:2F:122:LYS:NZ	5:2F:152:GLU:OE2	2.29	0.56
38:2g:133:GLY:HA2	38:2g:136:LYS:HB2	1.87	0.56
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.29	0.56
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.06	0.56
1:2A:2781:A:H5"	1:2A:2782:G:H5'	1.88	0.56
2:2B:24:G:N3	2:2B:26:A:N6	2.54	0.56
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.87	0.56
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.41	0.56
20:2Y:44:ILE:HG22	20:2Y:62:GLU:HB3	1.88	0.56
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.27	0.56
32:2a:72:C:H2'	32:2a:73:G:C8	2.41	0.56
32:2a:1014:A:H1'	50:2s:34:TRP:HB2	1.88	0.56
38:2g:152:ALA:O	38:2g:155:ARG:NH1	2.38	0.56
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.06	0.56
32:1a:45:U:H2'	32:1a:46:G:C8	2.41	0.56
32:1a:1367:C:H4'	41:1j:48:THR:HG21	1.88	0.56
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.38	0.56
1:2A:722:A:H2'	1:2A:723:G:C8	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:825:C:O2	11:2P:55:ARG:NH1	2.36	0.56
6:2G:5:VAL:HG23	6:2G:7:LEU:H	1.70	0.56
6:2G:165:THR:OG1	6:2G:166:ASP:N	2.37	0.56
8:2I:55:ALA:HA	8:2I:58:LEU:HB3	1.88	0.56
32:2a:109:A:H5'	32:2a:110:C:C5	2.40	0.56
32:2a:1271:G:C2	32:2a:1272:G:N7	2.74	0.56
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	1.87	0.56
1:1A:910:A:C5	12:1Q:13:GLN:HG3	2.41	0.56
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.87	0.56
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.87	0.56
1:2A:947:G:H2'	1:2A:948:G:H8	1.70	0.56
1:2A:2447:G:OP2	62:2A:3950:HOH:O	2.18	0.56
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.97	0.56
10:2O:4:PRO:O	10:2O:5:GLN:HB2	2.05	0.56
35:2d:122:ARG:NH1	35:2d:134:ASP:O	2.35	0.56
50:2s:15:LEU:HD12	50:2s:18:LYS:HD2	1.89	0.56
1:1A:919:G:N2	1:1A:2269:A:OP2	2.38	0.55
7:1H:25:LYS:HG3	7:1H:34:GLU:HG2	1.88	0.55
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.39	0.55
32:1a:186:C:H2'	32:1a:187:C:C6	2.41	0.55
32:1a:576:G:O6	32:1a:880:C:O2'	2.19	0.55
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.89	0.55
1:2A:959:A:N3	1:2A:2457:U:O2'	2.39	0.55
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.05	0.55
32:2a:921:U:O2	36:2e:19:MET:HB2	2.05	0.55
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.38	0.55
32:2a:1316:G:N2	32:2a:1319:A:H5"	2.18	0.55
33:2b:12:GLU:HA	33:2b:213:LEU:HD11	1.88	0.55
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.39	0.55
40:2i:8:GLY:O	40:2i:15:ALA:N	2.39	0.55
46:2o:82:ILE:HG22	46:2o:87:ILE:HB	1.88	0.55
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	1.88	0.55
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.40	0.55
32:1a:1015:A:H2'	32:1a:1016:A:C8	2.41	0.55
33:1b:94:ASN:HB3	33:1b:95:GLN:HG2	1.88	0.55
40:1i:4:TYR:CG	40:1i:88:TYR:HB2	2.41	0.55
1:2A:2065:C:H2'	1:2A:2066:C:H6	1.70	0.55
1:2A:2104:G:H1	1:2A:2185:C:N4	2.04	0.55
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.32	0.55
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.14	0.55
32:2a:17:U:H2'	32:2a:18:C:C6	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:6:ILE:HG12	41:2j:98:ILE:HG22	1.88	0.55
42:2k:14:VAL:HG11	42:2k:35:PRO:HD3	1.88	0.55
1:1A:184:C:H2'	1:1A:185:U:C6	2.41	0.55
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.41	0.55
35:1d:178:VAL:C	35:1d:180:GLY:H	2.15	0.55
43:1l:7:ILE:HD13	43:1l:10:LEU:HD12	1.88	0.55
1:2A:2685:G:O6	62:2A:3940:HOH:O	2.16	0.55
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.99	0.55
2:2B:24:G:H4'	2:2B:25:A:C8	2.42	0.55
32:2a:7:G:H5'	32:2a:298:A:O4'	2.06	0.55
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.40	0.55
32:2a:618:C:N4	32:2a:621:A:N7	2.54	0.55
33:2b:95:GLN:HB3	33:2b:148:TYR:CD1	2.41	0.55
39:2h:91:ARG:HB2	43:2l:7:ILE:HG21	1.89	0.55
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.18	0.55
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.41	0.55
1:1A:2131:G:N2	1:1A:2158:A:N1	2.54	0.55
3:1D:61:LEU:O	3:1D:63:ARG:NH1	2.39	0.55
5:1F:75:HIS:ND1	62:1F:402:HOH:O	2.33	0.55
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	1.89	0.55
15:1T:111:ARG:NH2	32:1a:1464:G:OP2	2.40	0.55
39:1h:9:MET:HG3	39:1h:26:VAL:HG21	1.87	0.55
1:2A:307:G:H21	1:2A:330:A:H62	1.55	0.55
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.88	0.55
32:2a:412:A:O4'	35:2d:35:ARG:NH2	2.39	0.55
32:2a:427:U:OP2	35:2d:36:ARG:NH2	2.38	0.55
33:2b:71:VAL:HA	33:2b:93:VAL:HG23	1.87	0.55
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.38	0.55
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.40	0.55
39:1h:82:HIS:CE1	39:1h:84:ARG:HB2	2.41	0.55
32:2a:450:G:H4'	47:2p:41:PRO:HB2	1.87	0.55
32:2a:537:G:H5"	43:2l:113:ARG:NH1	2.22	0.55
32:2a:1029:C:C4	32:2a:1032:G:N1	2.73	0.55
32:2a:1297:C:OP2	44:2m:44:ARG:NH2	2.36	0.55
45:2n:16:PHE:HB2	45:2n:19:ARG:HG3	1.87	0.55
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.07	0.55
8:1I:101:LEU:HD22	8:1I:107:VAL:HB	1.89	0.55
10:1O:21:CYS:HB2	10:1O:39:ILE:HD13	1.89	0.55
25:13:3:ARG:NH2	25:13:60:GLU:OE1	2.40	0.55
32:1a:401:C:H2'	32:1a:402:G:C8	2.42	0.55
32:1a:674:G:H2'	32:1a:675:A:C8	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.40	0.55
40:1i:127:LYS:NZ	55:1x:34:C:OP2	2.38	0.55
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.89	0.55
57:1y:47:U:H2'	57:1y:50:C:OP1	2.07	0.55
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.42	0.55
1:2A:2682:U:O2'	15:2T:58:ASN:ND2	2.39	0.55
11:2P:77:ARG:HB2	11:2P:78:PRO:HD2	1.89	0.55
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.40	0.55
1:1A:811:U:OP1	62:1A:4150:HOH:O	2.18	0.55
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.07	0.55
32:1a:270:A:H2'	32:1a:271:C:C6	2.42	0.55
32:1a:661:G:N7	62:1a:4844:HOH:O	2.33	0.55
32:1a:865:A:H2	32:1a:918:A:H4'	1.71	0.55
34:1c:95:THR:C	34:1c:97:LYS:H	2.15	0.55
34:1c:186:PHE:HE2	34:1c:188:LEU:HB2	1.70	0.55
1:2A:2017:U:OP2	62:2A:3948:HOH:O	2.18	0.55
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.42	0.55
2:2B:41:U:H5	6:2G:70:VAL:H	1.53	0.55
32:2a:537:G:H5"	43:2l:113:ARG:HH12	1.71	0.55
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.34	0.55
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.88	0.55
32:2a:587:G:N2	32:2a:754:C:OP2	2.36	0.55
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.42	0.55
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.87	0.55
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.71	0.55
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.22	0.55
1:1A:829:A:N7	1:1A:2248:C:H5'	2.21	0.55
1:1A:1023:U:OP2	62:1A:4135:HOH:O	2.18	0.55
1:1A:1779:U:H2'	62:1A:4172:HOH:O	2.06	0.55
20:1Y:82:PRO:O	20:1Y:101:LYS:NZ	2.31	0.55
21:1Z:55:HIS:HE1	21:1Z:135:GLU:HG3	1.72	0.55
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.42	0.55
1:2A:1200:C:H5'	62:2A:3992:HOH:O	2.06	0.55
1:2A:1226:A:OP1	17:2V:84:LYS:NZ	2.29	0.55
1:2A:1416:G:O2'	1:2A:1417:C:OP2	2.20	0.55
1:2A:2683:C:O2	10:2O:70:LYS:NZ	2.25	0.55
14:2S:80:LEU:O	14:2S:82:ILE:N	2.40	0.55
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.42	0.55
1:1A:639:U:H2'	1:1A:640:C:C6	2.42	0.55
1:1A:1827:C:C2'	1:1A:1828:G:H5'	2.37	0.55
32:1a:22:G:H4'	32:1a:885:G:C8	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:8:LYS:O	33:1b:217:ARG:NH1	2.39	0.55
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.06	0.55
1:2A:1364:G:P	23:21:3:LYS:HG3	2.47	0.55
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.41	0.55
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.40	0.55
57:2y:14:A:H2'	57:2y:15:G:C8	2.42	0.55
1:1A:1038:C:H42	1:1A:1117:G:H1	1.55	0.55
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.05	0.55
1:1A:2630:G:H2'	1:1A:2631:G:C8	2.41	0.55
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.88	0.55
1:2A:340:A:H2'	1:2A:341:G:O4'	2.07	0.55
1:2A:911:A:N6	12:2Q:11:LYS:O	2.38	0.55
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.42	0.55
62:2A:4691:HOH:O	11:2P:44:GLY:HA2	2.07	0.55
2:2B:66:A:N6	2:2B:108:U:H3'	2.22	0.55
18:2W:2:GLU:OE2	18:2W:72:LYS:NZ	2.27	0.55
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.89	0.55
32:2a:630:G:H2'	32:2a:631:G:H8	1.72	0.55
32:2a:1239:A:H62	32:2a:1299:A:H62	1.54	0.55
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.40	0.55
50:2s:33:THR:N	50:2s:57:HIS:HE1	2.02	0.55
54:2w:18:G:O2'	54:2w:57:G:N2	2.40	0.55
1:1A:1056:G:H21	1:1A:1103:A:H62	1.54	0.54
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.39	0.54
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.39	0.54
30:18:26:LYS:HG2	30:18:46:ARG:O	2.07	0.54
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.07	0.54
32:2a:1180:A:OP1	40:2i:103:THR:OG1	2.25	0.54
44:2m:3:ARG:N	44:2m:7:VAL:O	2.41	0.54
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.40	0.54
1:1A:249:C:O2	30:18:12:LYS:NZ	2.37	0.54
1:1A:642:G:N2	1:1A:645:C:OP2	2.33	0.54
1:1A:1648:C:OP1	62:1A:4115:HOH:O	2.18	0.54
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.22	0.54
1:1A:2264:C:N4	22:10:15:ASP:OD2	2.39	0.54
32:1a:26:A:O2'	35:1d:209:ARG:NH2	2.41	0.54
32:1a:510:A:OP2	35:1d:49:ARG:NH1	2.39	0.54
32:1a:1053:G:N7	32:1a:1200:C:H5"	2.22	0.54
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.89	0.54
54:1w:8:U:H2'	54:1w:13:C:N4	2.22	0.54
57:1y:38:A:H2'	57:1y:39:PSU:O4'	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.05	0.54
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.42	0.54
1:2A:2066:C:OP1	62:2A:3954:HOH:O	2.19	0.54
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.07	0.54
8:2I:88:ILE:HG22	8:2I:90:GLY:H	1.71	0.54
10:2O:77:ILE:HD12	15:2T:74:ARG:HD2	1.89	0.54
32:2a:601:C:H2'	32:2a:602:A:C8	2.42	0.54
32:2a:953:G:H5'	32:2a:965:A:H61	1.70	0.54
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.89	0.54
42:2k:98:LEU:O	42:2k:101:SER:OG	2.22	0.54
55:2x:23:C:H2'	55:2x:24:U:C6	2.42	0.54
1:1A:2105:C:H2'	1:1A:2106:G:H8	1.72	0.54
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.43	0.54
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.89	0.54
7:2H:149:ARG:HA	7:2H:162:ILE:HG21	1.89	0.54
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.42	0.54
33:2b:187:LEU:HD13	33:2b:214:ILE:HG21	1.89	0.54
54:2w:11:C:H2'	54:2w:12:U:C6	2.42	0.54
55:2x:7:G:H5"	55:2x:8:4SU:H5	1.89	0.54
1:1A:414:C:H2'	1:1A:415:A:C8	2.42	0.54
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.89	0.54
3:1D:71:ASP:HB2	3:1D:103:ARG:HH12	1.72	0.54
9:1N:21:LYS:HD2	9:1N:26:LEU:HD13	1.90	0.54
29:17:33:ARG:NH2	62:17:201:HOH:O	2.40	0.54
32:1a:7:G:H5'	32:1a:298:A:O4'	2.07	0.54
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.06	0.54
32:1a:437:U:H5'	35:1d:155:LEU:HD11	1.89	0.54
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.72	0.54
52:1u:3:LYS:HB3	52:1u:14:TRP:CG	2.42	0.54
8:2I:92:VAL:HG13	8:2I:96:ASP:HB3	1.89	0.54
20:2Y:28:LYS:N	20:2Y:38:ILE:O	2.40	0.54
34:2c:47:LEU:HB3	34:2c:52:LEU:HB2	1.89	0.54
34:2c:137:ALA:HA	34:2c:140:ARG:NH1	2.22	0.54
37:2f:99:ALA:HB3	49:2r:29:PHE:CE1	2.40	0.54
3:1D:145:VAL:HG11	3:1D:175:LEU:HD11	1.89	0.54
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.72	0.54
32:1a:714:G:H2'	32:1a:715:A:C8	2.42	0.54
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.90	0.54
44:1m:4:ILE:HD12	44:1m:57:ARG:HA	1.89	0.54
1:2A:253:C:OP2	30:28:5:LYS:NZ	2.31	0.54
1:2A:668:G:H5'	1:2A:669:G:OP2	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.42	0.54
1:2A:2353:G:H5"	22:20:32:ARG:HH11	1.72	0.54
1:2A:2482:G:O2'	54:2w:64:G:H4'	2.07	0.54
16:2U:102:GLU:HB3	16:2U:104:GLN:HE22	1.72	0.54
32:2a:429:U:OP1	35:2d:13:ARG:NH1	2.40	0.54
32:2a:598:U:O4	62:2a:1905:HOH:O	2.12	0.54
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.40	0.54
32:2a:1104:G:H4'	33:2b:111:ARG:HE	1.73	0.54
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.42	0.54
44:2m:113:PRO:O	44:2m:115:LYS:NZ	2.41	0.54
1:1A:580:C:H2'	1:1A:581:C:C6	2.43	0.54
32:1a:404:U:OP1	35:1d:118:ARG:NH1	2.40	0.54
32:1a:485:G:O2'	32:1a:486:U:OP2	2.26	0.54
32:1a:625:G:H4'	47:1p:16:HIS:CG	2.42	0.54
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.89	0.54
1:2A:398:G:O6	62:2A:3952:HOH:O	2.18	0.54
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.43	0.54
14:2S:11:LYS:O	14:2S:15:ARG:HB2	2.08	0.54
32:2a:35:G:O2'	43:2l:118:SER:O	2.26	0.54
32:2a:1004:A:N3	32:2a:1038:C:C2	2.75	0.54
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.40	0.54
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.07	0.54
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.17	0.54
1:1A:818:G:H5'	1:1A:839:U:OP1	2.07	0.54
6:1G:53:LEU:HD11	6:1G:87:PRO:HB2	1.89	0.54
7:1H:17:VAL:HG13	7:1H:26:VAL:HG22	1.88	0.54
12:1Q:10:ARG:HH12	12:1Q:90:VAL:H	1.54	0.54
1:2A:84:A:N1	1:2A:98:G:O2'	2.35	0.54
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.41	0.54
14:2S:95:HIS:CG	14:2S:96:GLY:H	2.25	0.54
25:23:59:VAL:HG12	25:23:60:GLU:H	1.72	0.54
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.42	0.54
1:1A:2108:C:H42	1:1A:2181:G:H1	1.54	0.54
23:11:73:LEU:HD11	23:11:98:LEU:HD21	1.90	0.54
33:1b:140:HIS:CE1	33:1b:144:ARG:HD2	2.43	0.54
41:1j:7:LYS:HZ1	41:1j:9:ARG:HH22	1.55	0.54
1:2A:879:G:H3'	1:2A:880:G:C8	2.41	0.54
1:2A:1423:G:H2'	1:2A:1424:G:C8	2.41	0.54
2:2B:42:C:C4	2:2B:43:C:C4	2.96	0.54
32:2a:997:U:H3	32:2a:1044:A:H61	1.56	0.54
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.40	0.54
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.89	0.54
32:1a:1144:G:N2	32:1a:1146:A:H62	2.06	0.54
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.43	0.54
3:2D:137:PRO:O	3:2D:140:THR:OG1	2.16	0.54
16:2U:98:LEU:HD22	16:2U:105:VAL:HG11	1.89	0.54
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.26	0.54
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.07	0.54
34:2c:190:ARG:NE	34:2c:190:ARG:O	2.41	0.54
44:2m:78:ILE:HG12	44:2m:92:HIS:CE1	2.42	0.54
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.43	0.54
11:1P:95:VAL:HB	11:1P:125:VAL:HG12	1.88	0.54
32:1a:150:C:H2'	32:1a:151:A:C8	2.43	0.54
32:1a:574:A:OP2	62:1a:4811:HOH:O	2.18	0.54
32:1a:848:C:H2'	32:1a:849:C:C6	2.43	0.54
33:1b:84:GLU:HA	33:1b:87:ARG:HD3	1.90	0.54
51:1t:89:ARG:O	51:1t:93:GLU:HG2	2.07	0.54
1:2A:1824:G:N3	3:2D:254:THR:OG1	2.40	0.54
1:2A:2552:OMU:H6	1:2A:2552:OMU:O5'	2.08	0.54
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.43	0.54
21:2Z:30:ASN:HA	21:2Z:89:PHE:HE1	1.72	0.54
21:2Z:91:LEU:HD22	21:2Z:91:LEU:H	1.73	0.54
32:2a:417:C:H2'	32:2a:418:C:H6	1.73	0.54
37:2f:74:ASP:N	37:2f:74:ASP:OD1	2.40	0.54
40:2i:78:LYS:HE2	40:2i:101:PHE:CE1	2.42	0.54
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	1.90	0.53
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.21	0.53
54:1w:40:C:H2'	54:1w:41:A:C8	2.43	0.53
1:2A:2286:A:OP1	28:26:29:ASN:ND2	2.41	0.53
2:2B:105:A:H5'	2:2B:106:G:OP2	2.08	0.53
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.08	0.53
6:2G:44:GLY:N	6:2G:88:ILE:O	2.41	0.53
32:2a:1079:G:O3'	36:2e:14:ARG:NH2	2.42	0.53
32:2a:1227:A:OP1	50:2s:80:TYR:OH	2.22	0.53
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.19	0.53
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.73	0.53
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	1.90	0.53
32:1a:401:C:H2'	32:1a:402:G:H8	1.73	0.53
34:1c:18:TRP:H	34:1c:18:TRP:HE3	1.56	0.53
19:2X:60:ARG:HH21	29:27:47:ARG:HH21	1.57	0.53
21:2Z:72:ARG:NH2	21:2Z:97:GLU:HB2	2.20	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:714:G:H2'	32:2a:715:A:C8	2.43	0.53
32:2a:736:C:H2'	32:2a:737:A:C8	2.43	0.53
39:2h:32:LYS:HA	39:2h:35:ILE:HD12	1.90	0.53
57:2y:48:C:H5'	57:2y:49:G:OP1	2.09	0.53
1:1A:847:U:OP2	62:1A:4149:HOH:O	2.18	0.53
1:1A:2867:G:OP2	15:1T:119:LYS:NZ	2.30	0.53
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.42	0.53
32:1a:708:C:H2'	32:1a:709:G:H8	1.74	0.53
1:2A:302:C:OP2	20:2Y:73:ARG:NH1	2.41	0.53
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.24	0.53
1:2A:863:A:H2'	1:2A:864:G:C8	2.44	0.53
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.41	0.53
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.44	0.53
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.43	0.53
32:1a:112:G:OP2	47:1p:27:LYS:NZ	2.41	0.53
32:1a:800:G:O6	62:1a:4812:HOH:O	2.19	0.53
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.08	0.53
1:2A:251:A:C5	1:2A:252:G:H1'	2.43	0.53
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.06	0.53
7:2H:127:GLU:C	7:2H:129:THR:H	2.17	0.53
32:2a:664:G:H22	32:2a:741:G:H1	1.57	0.53
34:2c:156:ARG:H	34:2c:196:LEU:HD22	1.73	0.53
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.90	0.53
8:1I:116:LEU:HD21	8:1I:119:PRO:HA	1.89	0.53
14:1S:23:ARG:HB2	14:1S:86:ALA:HB2	1.91	0.53
32:1a:68:G:H2'	32:1a:69:G:O4'	2.09	0.53
32:1a:130:A:O2'	32:1a:131:C:O5'	2.23	0.53
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.41	0.53
33:1b:17:PHE:HB3	33:1b:44:LEU:HD11	1.89	0.53
36:1e:96:PRO:O	36:1e:98:THR:N	2.40	0.53
45:1n:24:CYS:HB2	45:1n:40:CYS:HB3	1.90	0.53
57:1y:71:C:H2'	57:1y:72:C:C6	2.42	0.53
1:2A:1031:G:N2	31:29:36:GLN:HE22	2.06	0.53
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.40	0.53
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.91	0.53
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	1.91	0.53
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.91	0.53
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.90	0.53
54:2w:7:U:H3'	54:2w:8:U:C5'	2.39	0.53
1:1A:271(B):C:H42	1:1A:271(V):G:H1	1.56	0.53
1:1A:859:G:O2'	1:1A:916:G:O6	2.26	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:880:G:H2'	1:1A:881:G:C8	2.43	0.53
32:1a:358:U:H2'	32:1a:359:U:H6	1.74	0.53
32:1a:721:G:H4'	32:1a:722:A:O4'	2.09	0.53
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.89	0.53
32:1a:1136:U:H5"	32:1a:1137:C:C2	2.44	0.53
32:1a:1346:A:O2'	38:1g:10:ARG:NH2	2.41	0.53
36:1e:137:GLU:HA	36:1e:140:ARG:HH11	1.73	0.53
45:1n:33:VAL:HA	45:1n:40:CYS:HA	1.91	0.53
47:1p:4:ILE:HG12	47:1p:21:VAL:HG13	1.91	0.53
1:2A:84:A:H5"	20:2Y:8:LYS:HE3	1.91	0.53
1:2A:1009:A:OP2	9:2N:37:LYS:NZ	2.34	0.53
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.44	0.53
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.44	0.53
1:2A:1951:U:OP1	62:2A:3956:HOH:O	2.19	0.53
1:2A:2572:A:OP1	1:2A:2574:G:O2'	2.20	0.53
32:2a:953:G:H5'	32:2a:965:A:N6	2.24	0.53
32:2a:1108:G:O6	62:2a:1910:HOH:O	2.17	0.53
34:2c:107:GLN:O	34:2c:108:ASN:HB2	2.07	0.53
1:1A:226:G:H21	1:1A:228:A:H62	1.56	0.53
7:1H:149:ARG:HH12	7:1H:167:GLU:CD	2.15	0.53
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.91	0.53
32:1a:1030(D):A:C3'	32:1a:1031:G:H4'	2.38	0.53
32:1a:1511:G:H2'	32:1a:1512:U:O4'	2.09	0.53
33:1b:60:ASP:HA	33:1b:63:MET:HE3	1.91	0.53
33:1b:125:PRO:HB2	33:1b:128:GLU:H	1.73	0.53
37:1f:48:LEU:N	37:1f:56:PRO:O	2.39	0.53
44:1m:67:GLU:HG3	44:1m:71:ARG:HH21	1.74	0.53
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.90	0.53
1:2A:489:G:N7	18:2W:49:LYS:NZ	2.57	0.53
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.44	0.53
1:2A:1697:G:OP2	1:2A:1698:A:O2'	2.18	0.53
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.74	0.53
32:2a:109:A:H5'	32:2a:110:C:H5	1.74	0.53
33:2b:8:LYS:HZ3	33:2b:51:LEU:HD13	1.72	0.53
36:2e:78:HIS:HA	39:2h:105:ARG:HG3	1.89	0.53
41:2j:13:HIS:HB3	41:2j:68:HIS:CE1	2.44	0.53
1:1A:1045:A:H8	1:1A:1111:A:C6	2.27	0.53
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.44	0.53
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.37	0.53
6:1G:11:TYR:HA	6:1G:15:VAL:HB	1.91	0.53
6:1G:77:ILE:HG13	6:1G:82:LEU:HD23	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:89:ASN:H	10:1O:89:ASN:ND2	2.06	0.53
32:1a:40:C:H2'	32:1a:41:G:H8	1.74	0.53
32:1a:946:A:H2'	32:1a:947:G:C8	2.44	0.53
37:1f:99:ALA:HB1	49:1r:23:LYS:HZ2	1.73	0.53
42:1k:59:TYR:CE2	42:1k:63:LEU:HD11	2.43	0.53
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.42	0.53
1:2A:692:C:O2'	3:2D:38:LYS:NZ	2.42	0.53
1:2A:882:G:H22	1:2A:894:C:N4	2.06	0.53
1:2A:894:C:O2'	1:2A:895:U:H5"	2.08	0.53
32:2a:417:C:H2'	32:2a:418:C:C6	2.44	0.53
32:2a:542:G:P	35:2d:10:ARG:HH22	2.31	0.53
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.44	0.53
32:2a:1500:A:H5"	32:2a:1508:G:H5"	1.91	0.53
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.44	0.53
54:2w:26:A:H2'	54:2w:27:G:C8	2.43	0.53
1:1A:588:U:O4	1:1A:670:A:H1'	2.09	0.53
1:1A:1168:G:H1	1:1A:1181:C:H42	1.57	0.53
21:1Z:102:LEU:HD11	21:1Z:124:ILE:HB	1.91	0.53
32:1a:971:G:N2	32:1a:1363(A):A:OP2	2.38	0.53
32:1a:1035:A:H2'	32:1a:1036:G:H21	1.73	0.53
34:1c:71:ALA:O	34:1c:73:PRO:HD3	2.09	0.53
36:1e:35:GLY:HA3	36:1e:112:LEU:HB3	1.90	0.53
41:1j:49:VAL:HG11	45:1n:41:ARG:O	2.08	0.53
50:1s:27:GLU:HB2	50:1s:28:LYS:HB3	1.90	0.53
57:1y:4:U:H3	57:1y:69:A:N6	2.05	0.53
1:2A:731:C:OP1	62:2A:3957:HOH:O	2.19	0.53
1:2A:764:A:H5"	3:2D:210:GLY:HA2	1.89	0.53
1:2A:854:G:H2'	1:2A:855:G:C8	2.41	0.53
21:2Z:79:ARG:HB2	21:2Z:80:ARG:NH1	2.24	0.53
26:24:34:GLU:HB3	44:2m:57:ARG:HH21	1.74	0.53
32:2a:523:A:H61	43:2l:92:0TD:CG	2.22	0.53
32:2a:1139:G:N2	32:2a:1142:G:O6	2.36	0.53
32:2a:1295:G:O2'	44:2m:14:ARG:NH2	2.42	0.53
35:2d:36:ARG:HD2	35:2d:38:TYR:OH	2.09	0.53
39:2h:17:THR:HA	39:2h:65:TYR:HE1	1.74	0.53
51:2t:73:HIS:CE1	51:2t:75:ASN:HD22	2.27	0.53
57:2y:11:C:H42	57:2y:24:G:H1	1.57	0.53
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.08	0.53
1:1A:946:G:OP1	62:1A:4156:HOH:O	2.19	0.53
1:1A:1338:G:N7	19:1X:62:LYS:NZ	2.48	0.53
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.09	0.53
26:14:53:GLU:OE2	44:1m:65:LYS:NZ	2.42	0.53
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.07	0.53
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.91	0.53
42:1k:99:GLN:HG2	42:1k:105:VAL:HG21	1.90	0.53
44:1m:120:LYS:HG2	44:1m:121:LYS:H	1.74	0.53
54:1w:34:U8U:O4	54:1w:34:U8U:N	2.42	0.53
1:2A:761:A:OP1	62:2A:3911:HOH:O	2.19	0.53
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.38	0.53
11:2P:84:ASN:OD1	11:2P:117:GLU:N	2.41	0.53
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.09	0.53
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.27	0.53
32:2a:867:G:O2'	32:2a:873:A:N1	2.33	0.53
32:2a:986:A:H1'	50:2s:54:GLY:O	2.09	0.53
33:2b:15:VAL:HG22	33:2b:209:ARG:HD2	1.91	0.53
43:2l:7:ILE:HG22	48:2q:34:LYS:HD2	1.91	0.53
1:1A:8:A:H2'	1:1A:9:U:C6	2.44	0.52
1:1A:580:C:H2'	1:1A:581:C:H6	1.74	0.52
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.44	0.52
1:1A:1634:A:OP2	62:1A:4153:HOH:O	2.19	0.52
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.74	0.52
51:1t:66:ALA:HB1	51:1t:71:THR:HG22	1.91	0.52
1:2A:646:A:H2'	1:2A:647:G:O4'	2.09	0.52
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.42	0.52
1:2A:1253:A:OP1	62:2A:3958:HOH:O	2.19	0.52
1:2A:2131:G:H8	1:2A:2133:G:N3	2.07	0.52
5:2F:31:HIS:HB2	11:2P:9:ASN:OD1	2.09	0.52
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	1.90	0.52
21:2Z:17:ALA:HA	21:2Z:20:ARG:HH11	1.73	0.52
28:26:34:LEU:HB2	28:26:51:GLU:HB2	1.90	0.52
32:2a:537:G:H2'	32:2a:538:G:C8	2.45	0.52
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.44	0.52
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.42	0.52
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.33	0.52
44:2m:4:ILE:HD13	44:2m:22:ILE:HG13	1.91	0.52
54:2w:76:A1B8A:N	55:2x:76:8AN:O2'	2.42	0.52
32:1a:184:G:O2'	51:1t:74:LYS:NZ	2.42	0.52
32:1a:405:U:O4	35:1d:2:GLY:N	2.41	0.52
32:1a:757:U:H2'	32:1a:758:G:O4'	2.09	0.52
32:1a:828:A:H2'	32:1a:829:G:O4'	2.08	0.52
1:2A:1959:G:N7	62:2A:4064:HOH:O	2.34	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2068:U:OP2	62:2A:3960:HOH:O	2.19	0.52
2:2B:94:C:H2'	2:2B:95:C:C6	2.45	0.52
7:2H:103:LEU:HD23	7:2H:123:PHE:CD2	2.44	0.52
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	1.90	0.52
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.73	0.52
32:2a:837:G:H2'	32:2a:838:G:C8	2.44	0.52
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.44	0.52
32:2a:1261:A:H5'	32:2a:1283:G:O3'	2.10	0.52
33:2b:114:ARG:O	33:2b:118:LEU:HB2	2.10	0.52
35:2d:100:ARG:NH2	35:2d:136:PRO:O	2.42	0.52
55:2x:64:G:H2'	55:2x:65:C:C6	2.44	0.52
1:1A:910:A:N3	1:1A:2264:C:O2'	2.39	0.52
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.74	0.52
1:1A:2023:G:H4'	1:1A:2617:C:O3'	2.10	0.52
2:2B:114:C:H4'	14:2S:46:VAL:HG13	1.91	0.52
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.90	0.52
32:2a:1264:C:N4	32:2a:1271:G:H1	2.06	0.52
32:2a:1353:G:H2'	32:2a:1354:C:C6	2.45	0.52
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.24	0.52
35:2d:114:ARG:O	35:2d:118:ARG:N	2.36	0.52
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.91	0.52
42:2k:22:HIS:HD2	42:2k:29:ILE:HD12	1.73	0.52
1:1A:1173:G:N2	1:1A:1177:A:H2'	2.24	0.52
1:1A:1183:G:H4'	25:13:29:ARG:HH12	1.74	0.52
1:1A:2492:U:H2'	1:1A:2493:U:H6	1.75	0.52
22:10:23:VAL:HG22	22:10:38:VAL:HG22	1.91	0.52
32:1a:279:A:H4'	32:1a:280:C:H5"	1.90	0.52
32:1a:316:G:OP2	32:1a:351:G:O2'	2.24	0.52
32:1a:412:A:H4'	32:1a:413:G:H5'	1.91	0.52
32:1a:565:U:H3'	32:1a:566:G:H2'	1.90	0.52
33:1b:125:PRO:O	33:1b:127:ILE:N	2.43	0.52
35:1d:155:LEU:HB3	35:1d:158:ILE:HD11	1.91	0.52
36:1e:137:GLU:HG3	36:1e:141:GLN:HE21	1.75	0.52
38:1g:46:ALA:HB1	38:1g:121:ALA:HB2	1.91	0.52
57:1y:8:U:H4'	57:1y:48:C:H4'	1.92	0.52
1:2A:1710:C:H5'	1:2A:2859:G:H1'	1.92	0.52
1:2A:1721:G:H8	1:2A:1741:A:H62	1.57	0.52
21:2Z:70:LEU:HB2	21:2Z:91:LEU:HD11	1.91	0.52
32:2a:600:C:H2'	32:2a:601:C:C6	2.45	0.52
43:2l:59:ARG:HA	43:2l:65:GLU:HA	1.92	0.52
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:664:G:N2	32:1a:741:G:H1	2.04	0.52
32:1a:1048:G:OP1	45:1n:3:ARG:HB3	2.10	0.52
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	1.90	0.52
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.08	0.52
6:2G:41:GLN:O	6:2G:43:LEU:N	2.43	0.52
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.75	0.52
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.44	0.52
44:2m:82:MET:HE2	44:2m:92:HIS:HB3	1.92	0.52
50:2s:32:LYS:HD2	50:2s:34:TRP:CH2	2.44	0.52
55:2x:50:U:H3	55:2x:64:G:H1	1.57	0.52
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.10	0.52
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.25	0.52
1:1A:2422:A:O4'	57:1y:76:A:N6	2.43	0.52
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.42	0.52
32:1a:533:A:OP1	62:1a:4814:HOH:O	2.19	0.52
32:1a:719:C:H1'	49:1r:49:LYS:HB3	1.91	0.52
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.09	0.52
1:2A:222:A:H3'	1:2A:421:U:H5'	1.90	0.52
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.28	0.52
1:2A:2205:C:H1'	1:2A:2220:G:N2	2.25	0.52
5:2F:155:LEU:HB2	5:2F:189:THR:HG21	1.92	0.52
6:2G:41:GLN:HG2	6:2G:154:GLY:O	2.10	0.52
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.10	0.52
17:2V:25:LEU:N	17:2V:92:THR:OG1	2.37	0.52
32:2a:643:C:H2'	32:2a:644:G:C8	2.43	0.52
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.90	0.52
32:2a:1004:A:N6	32:2a:1037:C:O2	2.27	0.52
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.43	0.52
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.45	0.52
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.91	0.52
37:2f:2:ARG:NE	37:2f:69:GLU:HG2	2.25	0.52
1:1A:531:C:H1'	62:1A:4770:HOH:O	2.09	0.52
1:1A:2200:C:OP2	23:11:50:ARG:NH2	2.39	0.52
1:1A:2504:U:OP2	62:1A:4152:HOH:O	2.19	0.52
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.43	0.52
35:1d:149:ALA:HB3	35:1d:152:SER:HB2	1.91	0.52
1:2A:1529:G:O6	1:2A:1530:C:N4	2.43	0.52
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.45	0.52
6:2G:68:PRO:HA	6:2G:92:VAL:HB	1.92	0.52
8:2I:3:VAL:HA	8:2I:39:ALA:H	1.73	0.52
32:2a:642:A:N3	39:2h:113:SER:OG	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:838:G:H1	32:2a:848:C:N4	2.08	0.52
36:2e:20:GLN:OE1	36:2e:25:ARG:NH1	2.43	0.52
43:2l:41:ARG:HH12	43:2l:57:LYS:HZ1	1.58	0.52
1:1A:886:C:OP1	1:1A:886:C:H4'	2.09	0.52
1:1A:1268:A:C2	1:1A:2013:A:C4	2.98	0.52
1:1A:2482:G:H4'	54:1w:64:G:O2'	2.09	0.52
3:1D:27:THR:O	3:1D:27:THR:OG1	2.27	0.52
11:1P:71:VAL:HG22	11:1P:72:PRO:HA	1.90	0.52
32:1a:677:U:H3	32:1a:713:G:H22	1.58	0.52
44:1m:25:ILE:HD11	44:1m:60:VAL:HG13	1.91	0.52
53:1v:20:A:N6	54:1w:35:U:H3	2.03	0.52
1:2A:208:C:H2'	1:2A:209:C:H6	1.75	0.52
1:2A:1754:C:H5	15:2T:96:ARG:HH21	1.55	0.52
1:2A:2122:U:H3	1:2A:2176:A:H61	1.58	0.52
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.10	0.52
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.10	0.52
25:23:40:THR:HG22	25:23:42:ALA:H	1.74	0.52
32:2a:34:C:H2'	32:2a:35:G:C8	2.45	0.52
32:2a:487:A:H2'	32:2a:488:C:O4'	2.10	0.52
32:2a:551:U:H2'	32:2a:552:U:C6	2.44	0.52
32:2a:938:A:N3	32:2a:1376:U:O2'	2.38	0.52
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.10	0.52
1:1A:536:A:H2'	1:1A:537:C:C6	2.45	0.52
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.45	0.52
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.92	0.52
32:1a:6:G:H2'	36:1e:119:LEU:HD11	1.91	0.52
32:1a:1304:G:OP2	62:1a:4813:HOH:O	2.19	0.52
54:1w:28:U:H2'	54:1w:29:U:C6	2.45	0.52
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.10	0.52
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.91	0.52
20:2Y:15:VAL:HG21	20:2Y:42:VAL:HG11	1.91	0.52
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.42	0.52
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.43	0.52
3:1D:260:ARG:NH2	3:1D:266:SER:OG	2.41	0.52
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.11	0.52
30:18:42:ARG:NH1	62:18:201:HOH:O	2.24	0.52
32:1a:975:A:H5'	32:1a:975:A:H8	1.75	0.52
37:1f:33:TYR:OH	37:1f:78:GLU:OE1	2.23	0.52
1:2A:910:A:OP1	62:2A:3961:HOH:O	2.19	0.52
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.24	0.52
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.45	0.52
15:2T:127:ALA:C	15:2T:129:ARG:H	2.18	0.52
16:2U:49:HIS:HD2	16:2U:52:ARG:HD3	1.75	0.52
32:2a:996:A:N1	32:2a:1045:C:O2'	2.41	0.52
32:2a:1049:U:OP1	45:2n:3:ARG:HB2	2.09	0.52
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.27	0.52
32:2a:1479:C:H2'	32:2a:1480:G:C8	2.45	0.52
35:2d:150:GLU:HA	35:2d:153:ARG:HG3	1.92	0.52
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.40	0.52
41:2j:63:PHE:HE1	45:2n:58:LYS:HG3	1.75	0.52
54:2w:51:A:N7	54:2w:64:G:H2'	2.25	0.52
54:2w:63:U:H2'	54:2w:64:G:C8	2.44	0.52
1:1A:2100:G:H1	1:1A:2189:U:H3	1.58	0.51
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.91	0.51
6:1G:25:TYR:CZ	6:1G:32:PRO:HD3	2.45	0.51
32:1a:235:C:H2'	32:1a:236:G:H8	1.74	0.51
32:1a:431:A:H2'	32:1a:432:A:O4'	2.10	0.51
32:1a:691:G:H2'	32:1a:692:U:C6	2.44	0.51
32:1a:1027:C:C2	32:1a:1034:G:N2	2.79	0.51
57:1y:65:C:H2'	57:1y:66:A:H8	1.75	0.51
1:2A:781:A:OP1	62:2A:3955:HOH:O	2.19	0.51
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.44	0.51
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.10	0.51
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.43	0.51
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.07	0.51
2:2B:118:G:OP2	62:2B:303:HOH:O	2.19	0.51
6:2G:103:LEU:O	6:2G:107:LEU:HG	2.10	0.51
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.91	0.51
21:2Z:101:PRO:HA	21:2Z:123:ASP:HA	1.92	0.51
32:2a:1274:G:N2	32:2a:1275:A:N7	2.48	0.51
55:2x:33:U:N3	55:2x:36:U:OP2	2.40	0.51
57:2y:29:U:H3	57:2y:41:A:H61	1.58	0.51
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.75	0.51
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.46	0.51
10:1O:64:ARG:HD2	10:1O:79:PHE:CD1	2.44	0.51
32:1a:1025:U:C2	32:1a:1036:G:O6	2.64	0.51
32:1a:1302:U:OP1	44:1m:13:LYS:NZ	2.37	0.51
37:1f:26:ILE:O	37:1f:30:LEU:HG	2.10	0.51
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.92	0.51
1:2A:370:G:N7	62:2A:4067:HOH:O	2.34	0.51
7:2H:54:ARG:NH2	7:2H:57:ASP:OD2	2.38	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:43:THR:HA	12:2Q:94:VAL:HG12	1.92	0.51
14:2S:93:LYS:NZ	14:2S:93:LYS:HB2	2.26	0.51
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.75	0.51
32:2a:559:A:H4'	32:2a:560:U:H3'	1.91	0.51
32:2a:1002:G:C6	32:2a:1003:G:H8	2.28	0.51
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.25	0.51
33:2b:142:LEU:HD11	33:2b:146:GLN:HE21	1.74	0.51
44:2m:107:ALA:HB3	44:2m:111:LYS:HE3	1.92	0.51
46:2o:17:ARG:HD3	46:2o:77:ARG:HH21	1.74	0.51
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.18	0.51
51:2t:16:HIS:O	51:2t:19:SER:OG	2.23	0.51
1:1A:2161:C:O2'	1:1A:2162:G:H8	1.93	0.51
1:1A:2470:G:O6	1:1A:2476:A:O2'	2.26	0.51
5:1F:192:LEU:HG	5:1F:194:MET:HE2	1.92	0.51
13:1R:2:ARG:HA	13:1R:5:LYS:HD2	1.92	0.51
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.28	0.51
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.27	0.51
36:1e:33:VAL:HG13	36:1e:112:LEU:HD12	1.92	0.51
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.43	0.51
44:1m:19:LEU:HD11	44:1m:56:LEU:HD21	1.93	0.51
1:2A:1242:A:N1	11:2P:2:LYS:NZ	2.55	0.51
1:2A:2117:A:H61	1:2A:2166:G:H1	1.55	0.51
1:2A:2823:A:OP1	4:2E:113:PHE:HB2	2.10	0.51
12:2Q:16:ARG:HG2	12:2Q:18:LYS:HE2	1.91	0.51
14:2S:69:VAL:HG13	14:2S:101:LEU:HD12	1.91	0.51
21:2Z:23:LYS:HB3	21:2Z:38:TYR:CD1	2.45	0.51
32:2a:735:C:H2'	32:2a:736:C:C6	2.44	0.51
32:2a:1226:C:H6	44:2m:103:THR:HB	1.74	0.51
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.92	0.51
1:1A:428:A:H8	1:1A:428:A:OP2	1.93	0.51
1:1A:1075:C:H2'	1:1A:1076:C:H2'	1.91	0.51
1:1A:2028:U:H2'	1:1A:2029:G:O4'	2.10	0.51
1:2A:872:A:OP1	12:2Q:5:ARG:NH2	2.43	0.51
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.75	0.51
6:2G:51:ARG:HD2	6:2G:52:ILE:H	1.75	0.51
6:2G:95:ARG:HG2	6:2G:96:ARG:HG3	1.93	0.51
9:2N:21:LYS:NZ	9:2N:140:VAL:OXT	2.40	0.51
32:2a:355:C:H1'	32:2a:388:G:H1'	1.92	0.51
32:2a:473:G:H2'	32:2a:474:G:H8	1.75	0.51
32:2a:718:G:H5'	42:2k:117:ASN:OD1	2.10	0.51
41:2j:51:ARG:N	41:2j:59:SER:O	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:271(N):U:O2'	1:1A:271(O):C:H5'	2.10	0.51
1:1A:857:C:N4	1:1A:858:U:O4	2.44	0.51
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.45	0.51
5:1F:9:ILE:HG21	5:1F:125:LEU:HG	1.91	0.51
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.40	0.51
11:1P:126:VAL:HG12	11:1P:148:LEU:HD13	1.93	0.51
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.09	0.51
32:1a:256:U:H2'	32:1a:257:G:O4'	2.11	0.51
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.46	0.51
33:1b:19:HIS:HA	33:1b:39:ILE:HG23	1.92	0.51
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.42	0.51
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.08	0.51
47:1p:39:TYR:CD1	47:1p:49:LEU:HD23	2.45	0.51
57:1y:12:U:H2'	57:1y:13:C:O4'	2.11	0.51
1:2A:1434:A:H61	1:2A:1558:A:H62	1.59	0.51
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.74	0.51
8:2I:104:GLN:HG2	8:2I:105:HIS:CE1	2.45	0.51
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.11	0.51
32:2a:266:G:H2'	32:2a:266:G:N3	2.26	0.51
32:2a:1095:U:OP1	32:2a:1108:G:N2	2.41	0.51
34:2c:63:ASN:HB2	34:2c:98:ASN:HB2	1.93	0.51
38:2g:12:LEU:H	38:2g:12:LEU:HD12	1.76	0.51
42:2k:34:ASP:OD2	42:2k:38:ASN:HB2	2.10	0.51
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.76	0.51
1:1A:72:U:OP1	62:1A:4157:HOH:O	2.19	0.51
1:1A:709:U:H2'	1:1A:710:G:C8	2.45	0.51
1:1A:1364:G:P	23:11:3:LYS:HG3	2.51	0.51
1:1A:2667:C:H1'	7:1H:109:PHE:CD1	2.45	0.51
11:1P:96:THR:HG23	11:1P:99:LEU:HB3	1.93	0.51
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.91	0.51
57:1y:36:U:C2	57:1y:37:T6A:H1'	2.45	0.51
1:2A:729:G:C8	3:2D:208:LYS:HD2	2.46	0.51
1:2A:1019:U:OP1	1:2A:1035:U:O2'	2.29	0.51
1:2A:1218:C:H42	1:2A:1231:G:H1	1.59	0.51
1:2A:1262:A:OP1	18:2W:99:ARG:NH1	2.42	0.51
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.75	0.51
1:2A:2134:A:N6	1:2A:2157:G:O3'	2.43	0.51
3:2D:60:ARG:HD3	3:2D:86:PRO:HB2	1.93	0.51
21:2Z:30:ASN:HB3	21:2Z:90:VAL:HB	1.93	0.51
32:2a:532:A:N1	34:2c:156:ARG:NH1	2.50	0.51
32:2a:728:A:OP1	46:2o:54:ARG:NH1	2.42	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:30:SER:O	41:2j:81:THR:OG1	2.19	0.51
1:1A:606:U:H4'	1:1A:658:C:H4'	1.91	0.51
1:1A:740:U:H2'	1:1A:741:G:C8	2.45	0.51
1:1A:1253:A:OP1	62:1A:4151:HOH:O	2.19	0.51
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.43	0.51
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.93	0.51
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.11	0.51
32:1a:580:U:H2'	32:1a:581:G:O4'	2.10	0.51
32:1a:624:C:H2'	32:1a:625:G:C8	2.45	0.51
35:1d:159:ARG:O	35:1d:163:GLU:HG3	2.09	0.51
1:2A:184:C:H2'	1:2A:185:U:C6	2.45	0.51
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	1.92	0.51
4:2E:33:VAL:HG12	4:2E:89:ASP:O	2.10	0.51
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.93	0.51
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	2.07	0.51
35:2d:129:ASN:HD21	35:2d:144:ASP:HA	1.76	0.51
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.76	0.51
12:1Q:54:MET:HE3	12:1Q:64:ILE:HG12	1.92	0.51
13:1R:12:ARG:O	13:1R:17:ARG:NH1	2.44	0.51
14:1S:65:VAL:O	14:1S:69:VAL:HG12	2.11	0.51
32:1a:185:A:H2'	32:1a:186:C:C6	2.46	0.51
1:2A:492:A:H2'	1:2A:493:G:O4'	2.11	0.51
1:2A:538:G:H2'	1:2A:539:G:H8	1.75	0.51
1:2A:955:C:OP2	12:2Q:14:ARG:HG3	2.10	0.51
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.56	0.51
20:2Y:9:LYS:NZ	20:2Y:28:LYS:O	2.43	0.51
32:2a:89:C:H2'	32:2a:90:U:O4'	2.10	0.51
32:2a:1272:G:N2	32:2a:1273:G:C5	2.78	0.51
33:2b:50:GLU:O	33:2b:54:THR:OG1	2.28	0.51
47:2p:57:ARG:O	47:2p:61:SER:HB3	2.11	0.51
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.11	0.51
1:1A:1095:A:H2'	1:1A:1096:A:H8	1.76	0.51
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.21	0.51
8:1I:37:VAL:HG13	8:1I:38:LEU:HD23	1.92	0.51
9:1N:39:ARG:NH2	9:1N:41:ASP:OD2	2.44	0.51
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.79	0.51
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.91	0.51
42:1k:59:TYR:CZ	42:1k:63:LEU:HD21	2.46	0.51
42:1k:110:ASP:HB2	49:1r:87:ARG:HH12	1.76	0.51
54:1w:25:C:H2'	54:1w:26:A:O4'	2.11	0.51
1:2A:1756:G:H4'	1:2A:1758:G:O4'	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.46	0.51
1:2A:2238:G:H5"	62:2A:4534:HOH:O	2.10	0.51
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.91	0.51
26:24:64:GLY:C	26:24:66:SER:H	2.19	0.51
32:2a:8:A:N6	35:2d:205:GLU:O	2.42	0.51
32:2a:224:C:H2'	32:2a:225:C:H6	1.75	0.51
32:2a:512:U:O2'	35:2d:42:GLN:NE2	2.35	0.51
32:2a:537:G:H2'	32:2a:538:G:H8	1.76	0.51
32:2a:826:C:H42	32:2a:874:G:H1	1.59	0.51
32:2a:833:U:H2'	32:2a:834:C:C6	2.46	0.51
32:2a:931:C:H42	32:2a:1386:G:H1	1.57	0.51
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.11	0.51
32:2a:1107:C:H5"	34:2c:173:VAL:O	2.11	0.51
32:2a:1346:A:N1	32:2a:1374:A:H5"	2.25	0.51
34:2c:172:ARG:NH2	34:2c:206:GLU:OE1	2.44	0.51
1:1A:2126:A:N6	1:1A:2162:G:O2'	2.44	0.51
10:1O:88:ASN:O	10:1O:90:GLN:N	2.44	0.51
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.11	0.51
22:10:11:ARG:O	22:10:14:ARG:NH1	2.30	0.51
34:1c:110:ASN:N	34:1c:110:ASN:OD1	2.43	0.51
36:1e:137:GLU:HG3	36:1e:141:GLN:NE2	2.26	0.51
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.46	0.51
1:2A:902:C:H2'	1:2A:903:C:H6	1.76	0.51
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.25	0.51
12:2Q:43:THR:OG1	12:2Q:46:GLN:NE2	2.44	0.51
32:2a:352:C:O2'	32:2a:354:G:OP1	2.29	0.51
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.91	0.51
36:2e:41:VAL:O	36:2e:66:MET:HA	2.09	0.51
40:2i:57:GLY:C	40:2i:59:PHE:H	2.19	0.51
1:1A:302:C:P	20:1Y:73:ARG:HH22	2.34	0.50
1:1A:446:G:OP1	16:1U:3:ARG:NH1	2.43	0.50
2:1B:13:A:N1	2:1B:69:G:O2'	2.37	0.50
32:1a:193:C:H2'	32:1a:194:C:C6	2.45	0.50
32:1a:487:A:H2'	32:1a:488:C:O4'	2.12	0.50
47:1p:38:TYR:O	47:1p:49:LEU:HD22	2.11	0.50
1:2A:2100:G:H1	1:2A:2189:U:H3	1.58	0.50
1:2A:2134:A:H61	1:2A:2158:A:P	2.34	0.50
1:2A:2418:A:P	30:28:29:LYS:HZ1	2.34	0.50
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.92	0.50
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.93	0.50
21:2Z:157:LEU:HD11	21:2Z:163:LEU:HD13	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:25:33:CYS:HB2	27:25:40:LYS:HD3	1.93	0.50
32:2a:547:A:OP2	35:2d:2:GLY:N	2.44	0.50
32:2a:757:U:H2'	32:2a:758:G:O4'	2.11	0.50
33:2b:70:PHE:CE2	33:2b:90:MET:HB2	2.45	0.50
33:2b:133:LYS:HA	33:2b:136:VAL:HB	1.93	0.50
42:2k:73:MET:HG2	42:2k:103:LEU:HD21	1.94	0.50
1:1A:899:A:HO2'	1:1A:900:A:H8	1.59	0.50
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.93	0.50
38:1g:76:ARG:HD2	38:1g:89:MET:HB2	1.94	0.50
54:1w:55:PSU:O2'	54:1w:57:G:N7	2.38	0.50
57:1y:55:PSU:C4	57:1y:57:G:H5'	2.46	0.50
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.11	0.50
1:2A:518:G:O2'	62:2A:3951:HOH:O	2.18	0.50
1:2A:884:C:H3'	1:2A:885:C:H6	1.76	0.50
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.93	0.50
1:2A:1782:C:O2	1:2A:2608:G:O2'	2.28	0.50
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.59	0.50
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.46	0.50
1:2A:2821:A:H2'	1:2A:2822:G:C8	2.46	0.50
2:2B:95:C:H2'	2:2B:96:U:C6	2.46	0.50
6:2G:35:GLU:HG2	6:2G:36:LYS:HG2	1.93	0.50
15:2T:29:ARG:HB3	15:2T:87:ASP:HB2	1.92	0.50
21:2Z:6:LYS:HE3	21:2Z:8:TYR:CE2	2.44	0.50
32:2a:266:G:O3'	48:2q:67:LYS:HB2	2.11	0.50
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.46	0.50
33:2b:51:LEU:O	33:2b:55:PHE:HB2	2.11	0.50
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.10	0.50
5:1F:148:LEU:HD22	5:1F:154:VAL:HG21	1.92	0.50
7:1H:90:LYS:HE3	7:1H:159:GLU:HG2	1.93	0.50
32:1a:6:G:H1	36:1e:98:THR:HG21	1.75	0.50
32:1a:520:A:N1	32:1a:536:C:H1'	2.25	0.50
32:1a:1289:A:OP1	52:1u:10:ARG:NH2	2.44	0.50
1:2A:852:G:H2'	1:2A:853:G:C8	2.45	0.50
6:2G:122:PRO:O	6:2G:125:PHE:HD2	1.94	0.50
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.93	0.50
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.47	0.50
10:2O:66:LYS:N	10:2O:82:ASN:OD1	2.37	0.50
28:26:35:GLU:HG3	28:26:50:ARG:HD3	1.93	0.50
32:2a:354:G:N2	32:2a:388:G:O2'	2.37	0.50
32:2a:918:A:H2'	32:2a:919:A:C8	2.46	0.50
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:13:ALA:C	33:2b:15:VAL:H	2.19	0.50
37:2f:30:LEU:HA	37:2f:75:LEU:HD11	1.93	0.50
37:2f:33:TYR:HE2	37:2f:78:GLU:HG2	1.76	0.50
1:1A:1993:U:OP2	62:1A:4155:HOH:O	2.19	0.50
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.44	0.50
22:10:43:THR:O	22:10:43:THR:HG23	2.12	0.50
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.27	0.50
32:1a:1187:G:N3	45:1n:60:SER:OG	2.44	0.50
34:1c:14:ILE:HD12	34:1c:178:LEU:HD22	1.93	0.50
1:2A:322:A:P	5:2F:169:ASN:HB2	2.51	0.50
1:2A:856:C:O2'	1:2A:857:C:OP1	2.28	0.50
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.42	0.50
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.46	0.50
1:2A:1509(B):A:H3'	1:2A:1510:G:H8	1.76	0.50
1:2A:2203:U:H2'	1:2A:2205:C:H6	1.75	0.50
6:2G:152:LEU:H	6:2G:152:LEU:HD12	1.77	0.50
7:2H:121:ILE:HG13	7:2H:144:VAL:HG21	1.92	0.50
15:2T:19:LEU:HD13	15:2T:86:ILE:HD12	1.93	0.50
17:2V:76:LYS:HB2	17:2V:81:TYR:CD2	2.46	0.50
32:2a:596:C:H2'	32:2a:597:G:H8	1.76	0.50
32:2a:946:A:H2'	32:2a:947:G:C8	2.47	0.50
32:2a:1320:C:H2'	32:2a:1321:C:O4'	2.12	0.50
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.93	0.50
1:1A:880:G:H2'	1:1A:881:G:H8	1.75	0.50
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.47	0.50
32:1a:399:G:H2'	32:1a:400:C:C6	2.46	0.50
1:2A:1991:U:H2'	1:2A:1992:G:H5"	1.93	0.50
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.12	0.50
7:2H:98:LEU:HA	7:2H:103:LEU:HA	1.94	0.50
15:2T:88:ILE:HG21	15:2T:91:ARG:NE	2.26	0.50
26:24:46:GLN:NE2	26:24:48:ARG:HD2	2.26	0.50
32:2a:328:C:H4'	32:2a:329:A:H5'	1.93	0.50
32:2a:438:G:H4'	35:2d:123:HIS:ND1	2.26	0.50
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.46	0.50
33:2b:92:TYR:N	33:2b:151:GLY:O	2.24	0.50
40:2i:4:TYR:O	40:2i:19:LEU:N	2.35	0.50
42:2k:123:LYS:C	42:2k:125:PHE:H	2.19	0.50
52:2u:3:LYS:HB3	52:2u:14:TRP:CG	2.47	0.50
57:2y:10:G:O6	57:2y:45:G:C2	2.65	0.50
1:1A:668:G:N7	62:1A:4273:HOH:O	2.34	0.50
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:189(B):C:H2'	32:1a:189(C):C:C6	2.46	0.50
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.93	0.50
32:1a:1314:C:H5	50:1s:4:SER:HB2	1.75	0.50
33:1b:12:GLU:C	33:1b:14:GLY:H	2.19	0.50
35:1d:111:ALA:HA	35:1d:161:ASN:HD22	1.77	0.50
44:1m:74:VAL:O	44:1m:78:ILE:HG13	2.12	0.50
1:2A:75:G:H4'	24:22:55:ARG:NH1	2.26	0.50
1:2A:752:A:P	29:27:3:ARG:HH22	2.35	0.50
1:2A:796:C:H2'	1:2A:797:C:C6	2.47	0.50
1:2A:1166:C:H2'	1:2A:1167:U:C6	2.46	0.50
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.46	0.50
1:2A:2061:G:H5"	1:2A:2503:2MA:C2	2.42	0.50
1:2A:2136:C:N4	1:2A:2155:G:N1	2.60	0.50
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.94	0.50
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.44	0.50
32:2a:824:C:H2'	32:2a:825:G:C8	2.46	0.50
32:2a:1118:C:N3	32:2a:1156:G:N2	2.60	0.50
32:2a:1294:G:H2'	32:2a:1295:G:C8	2.47	0.50
41:2j:5:ARG:N	41:2j:99:LYS:O	2.44	0.50
45:2n:29:ARG:HD3	45:2n:40:CYS:CB	2.41	0.50
1:1A:862:G:N2	62:1A:4373:HOH:O	2.44	0.50
1:1A:2255:G:O2'	55:1x:3:C:H5'	2.11	0.50
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.27	0.50
1:1A:2630:G:H21	1:1A:2892:A:H1'	1.77	0.50
8:1I:38:LEU:HD21	23:11:75:GLU:CD	2.36	0.50
21:1Z:59:LEU:HD11	21:1Z:88:PHE:CD2	2.46	0.50
32:1a:418:C:H1'	32:1a:540:G:O2'	2.12	0.50
32:1a:1040:U:H2'	32:1a:1041:A:H8	1.75	0.50
1:2A:998:C:H2'	1:2A:999:U:O4'	2.11	0.50
1:2A:1336:A:H2'	1:2A:1337:G:H8	1.77	0.50
1:2A:2400:G:H4'	28:26:18:ARG:HG2	1.94	0.50
1:2A:2557:G:H2'	1:2A:2558:C:H6	1.76	0.50
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.93	0.50
17:2V:5:VAL:HG13	17:2V:14:VAL:HG21	1.94	0.50
24:22:8:LYS:O	24:22:12:GLU:HG2	2.12	0.50
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.94	0.50
32:2a:1018:C:H2'	32:2a:1019:C:O4'	2.11	0.50
32:2a:1079:G:OP2	32:2a:1079:G:H8	1.95	0.50
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.76	0.50
32:2a:1399:C:H4'	32:2a:1400:5MC:H5"	1.94	0.50
36:2e:145:LYS:O	36:2e:149:GLU:N	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:72:C:H2'	54:2w:73:A:H5"	1.94	0.50
57:2y:63:U:H2'	57:2y:64:G:C8	2.47	0.50
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.46	0.50
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.46	0.50
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.93	0.50
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.94	0.50
11:1P:88:LEU:HD11	11:1P:114:ILE:HD12	1.94	0.50
34:1c:5:ILE:HG12	34:1c:6:HIS:H	1.77	0.50
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.93	0.50
50:1s:31:ILE:O	50:1s:50:ALA:N	2.29	0.50
1:2A:1894:C:H2'	1:2A:1895:C:C6	2.47	0.50
1:2A:2239:G:H5'	3:2D:251:GLY:HA3	1.93	0.50
2:2B:2:C:H2'	2:2B:3:C:H6	1.76	0.50
7:2H:98:LEU:HD23	7:2H:103:LEU:HB3	1.94	0.50
26:24:46:GLN:C	26:24:48:ARG:H	2.19	0.50
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.47	0.50
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.47	0.50
40:2i:63:ILE:HD13	40:2i:77:ILE:HG23	1.93	0.50
1:1A:337:C:H2'	1:1A:338:G:O4'	2.12	0.50
1:1A:1047:G:H2'	1:1A:1110:G:H1	1.76	0.50
1:1A:2585:U:O4	54:1w:76:A1B8A:O2'	2.30	0.50
5:1F:24:LEU:HB3	5:1F:115:ALA:HB2	1.92	0.50
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.20	0.50
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.41	0.50
32:1a:789:U:O2'	32:1a:791:G:N7	2.40	0.50
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.60	0.50
54:1w:3:G:H1	54:1w:70:C:H42	1.60	0.50
1:2A:441:U:H2'	1:2A:442:G:C8	2.47	0.50
1:2A:1651:G:H2'	1:2A:1652:A:O4'	2.12	0.50
1:2A:2305:A:H5"	6:2G:134:GLY:HA3	1.93	0.50
7:2H:137:ASP:HB3	7:2H:140:LYS:HB3	1.94	0.50
12:2Q:19:GLY:HA2	21:2Z:79:ARG:NH1	2.27	0.50
14:2S:51:ALA:HB3	14:2S:73:LEU:HD12	1.94	0.50
21:2Z:150:LEU:O	21:2Z:171:ILE:HG13	2.11	0.50
21:2Z:154:ASP:OD1	21:2Z:154:ASP:N	2.29	0.50
32:2a:948:C:H2'	32:2a:949:A:H8	1.77	0.50
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.12	0.50
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.94	0.50
33:2b:28:PHE:CD2	33:2b:190:THR:HA	2.47	0.50
40:2i:7:THR:O	40:2i:83:ARG:NH1	2.36	0.50
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:2x:58:A:H4'	55:2x:59:A:OP1	2.10	0.50
1:1A:196:A:H2'	1:1A:196:A:N3	2.27	0.49
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.47	0.49
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.94	0.49
14:1S:10:ARG:HG3	14:1S:13:ARG:HH12	1.77	0.49
32:1a:690:G:O6	42:1k:51:LYS:NZ	2.45	0.49
32:1a:1080:A:OP1	36:1e:47:LYS:HE2	2.12	0.49
41:1j:33:GLN:O	41:1j:75:ILE:N	2.38	0.49
42:1k:91:ARG:NH1	42:1k:110:ASP:OD1	2.45	0.49
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.76	0.49
49:1r:25:THR:O	49:1r:42:ARG:NH2	2.45	0.49
1:2A:915:C:H3'	1:2A:916:G:H8	1.76	0.49
1:2A:1130:U:O2	1:2A:2025:C:H5"	2.12	0.49
1:2A:2780:G:OP2	9:2N:118:LYS:HD3	2.12	0.49
6:2G:68:PRO:HB2	6:2G:90:LEU:HB3	1.94	0.49
6:2G:69:ALA:HB3	6:2G:91:ARG:HH21	1.76	0.49
7:2H:66:GLY:O	7:2H:70:THR:OG1	2.26	0.49
32:2a:660:G:H1	32:2a:745:C:H42	1.60	0.49
32:2a:1017:G:H2'	32:2a:1018:C:C6	2.47	0.49
32:2a:1029:C:N3	32:2a:1032:G:N2	2.60	0.49
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.27	0.49
36:2e:19:MET:SD	36:2e:24:ARG:HG3	2.52	0.49
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.39	0.49
1:1A:451:C:OP1	5:1F:52:LYS:NZ	2.42	0.49
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.12	0.49
10:1O:88:ASN:C	10:1O:90:GLN:H	2.20	0.49
32:1a:103:C:O2'	32:1a:172:A:N1	2.39	0.49
32:1a:167:G:H2'	32:1a:168:G:H8	1.77	0.49
34:1c:22:TRP:CE2	45:1n:54:PRO:HG2	2.47	0.49
34:1c:120:VAL:O	34:1c:124:ILE:HG12	2.12	0.49
41:1j:81:THR:HG22	41:1j:84:GLN:HB3	1.93	0.49
46:1o:82:ILE:HD12	46:1o:88:ARG:HB2	1.93	0.49
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.26	0.49
1:2A:921:G:H4'	1:2A:2269:A:C5	2.47	0.49
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.47	0.49
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.40	0.49
3:2D:253:GLN:HG3	62:2D:418:HOH:O	2.11	0.49
6:2G:91:ARG:HB3	6:2G:91:ARG:CZ	2.42	0.49
9:2N:91:LEU:HA	9:2N:95:PRO:HA	1.94	0.49
32:2a:236:G:OP1	48:2q:40:LYS:NZ	2.44	0.49
32:2a:1122:U:O2'	32:2a:1123:A:H5'	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.27	0.49
35:2d:94:LEU:O	35:2d:98:GLU:N	2.44	0.49
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.12	0.49
8:1I:40:THR:O	8:1I:44:LEU:HB2	2.12	0.49
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.48	0.49
11:1P:124:LYS:HA	11:1P:144:GLU:HB3	1.94	0.49
12:1Q:54:MET:HG2	12:1Q:117:ALA:HB1	1.93	0.49
25:13:8:LEU:HG	25:13:31:LEU:HD23	1.94	0.49
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.48	0.49
1:2A:442:G:N2	5:2F:48:THR:HB	2.27	0.49
1:2A:902:C:H2'	1:2A:903:C:C6	2.47	0.49
1:2A:1394:U:C4	1:2A:1395:A:C5	3.00	0.49
9:2N:58:ASP:N	9:2N:58:ASP:OD1	2.45	0.49
23:21:44:PRO:HB2	23:21:46:LEU:HD12	1.94	0.49
26:24:37:SER:HA	26:24:43:TYR:CD1	2.46	0.49
32:2a:397:A:H3'	32:2a:397:A:N3	2.28	0.49
32:2a:625:G:H2'	32:2a:626:U:C6	2.48	0.49
32:2a:685:G:N1	32:2a:686:U:O4	2.45	0.49
32:2a:865:A:H2	32:2a:918:A:H4'	1.76	0.49
32:2a:1278:U:H5'	32:2a:1279:A:OP1	2.11	0.49
41:2j:40:LEU:HD12	41:2j:69:ASN:HB3	1.94	0.49
42:2k:50:TYR:CD2	42:2k:60:ALA:HB2	2.47	0.49
51:2t:33:ILE:HG12	51:2t:63:ILE:HG12	1.94	0.49
57:2y:74:C:H2'	57:2y:75:C:C6	2.47	0.49
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.12	0.49
1:1A:530:G:H4'	1:1A:531:C:OP1	2.11	0.49
1:1A:1011:G:OP2	16:1U:66:ASN:ND2	2.38	0.49
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.94	0.49
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.48	0.49
32:1a:1329:A:H5"	44:1m:26:GLY:H	1.76	0.49
37:1f:8:ILE:HD13	37:1f:26:ILE:HD13	1.94	0.49
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.43	0.49
46:1o:87:ILE:HG22	46:1o:88:ARG:N	2.27	0.49
1:2A:458:G:O2'	29:27:39:ARG:HD3	2.12	0.49
1:2A:861:A:N6	1:2A:916:G:O2'	2.46	0.49
1:2A:884:C:H3'	1:2A:885:C:C6	2.47	0.49
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.48	0.49
7:2H:74:ASN:O	7:2H:78:GLY:N	2.44	0.49
23:21:83:GLU:OE1	23:21:83:GLU:N	2.45	0.49
27:25:8:LYS:HG3	27:25:9:LYS:HG2	1.94	0.49
32:2a:107:G:H2'	32:2a:108:G:O4'	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:186:C:O2'	51:2t:85:MET:SD	2.57	0.49
32:2a:335:C:H2'	32:2a:336:C:C6	2.47	0.49
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.45	0.49
37:2f:97:PHE:HE2	49:2r:62:GLU:HG2	1.76	0.49
54:2w:63:U:C2'	54:2w:64:G:H5'	2.42	0.49
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.41	0.49
7:1H:3:ARG:HG2	7:1H:6:ARG:HG3	1.95	0.49
10:1O:36:GLY:HA2	10:1O:106:LEU:HD23	1.95	0.49
32:1a:977:A:O2'	32:1a:979:C:OP2	2.30	0.49
35:1d:98:GLU:O	35:1d:103:ASN:ND2	2.45	0.49
45:1n:50:LYS:HD3	45:1n:52:GLN:HE21	1.77	0.49
57:1y:75:C:H5"	57:1y:76:A:H5'	1.95	0.49
1:2A:30:G:H2'	1:2A:31:C:C6	2.47	0.49
1:2A:361:G:O2'	1:2A:362:U:H5'	2.13	0.49
1:2A:1592:C:H2'	1:2A:1593:G:C8	2.47	0.49
1:2A:2151:G:C2	1:2A:2152:G:H1'	2.47	0.49
24:22:35:LEU:HD11	24:22:49:LYS:HE2	1.95	0.49
25:23:6:VAL:HG12	25:23:28:LEU:HD11	1.93	0.49
32:2a:742:G:P	46:2o:35:ARG:HH22	2.35	0.49
32:2a:979:C:H2'	32:2a:980:C:O4'	2.12	0.49
32:2a:1225:A:OP1	44:2m:103:THR:OG1	2.26	0.49
34:2c:122:GLU:HA	34:2c:125:GLU:OE2	2.12	0.49
36:2e:53:LEU:HD12	36:2e:53:LEU:H	1.77	0.49
1:1A:1062:G:N2	1:1A:1077:A:H61	2.05	0.49
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.12	0.49
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.77	0.49
5:1F:7:TYR:CD2	5:1F:24:LEU:HB2	2.48	0.49
5:1F:129:PHE:HB3	5:1F:132:VAL:CG1	2.43	0.49
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	1.93	0.49
32:1a:171:A:H2'	32:1a:172:A:C8	2.47	0.49
32:1a:442:C:H42	32:1a:492:G:H1	1.59	0.49
32:1a:456:C:H2'	32:1a:457:C:H6	1.77	0.49
33:1b:97:TRP:CH2	33:1b:173:ALA:HA	2.48	0.49
36:1e:27:ARG:NH1	36:1e:27:ARG:HB2	2.27	0.49
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.94	0.49
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.95	0.49
1:2A:271(G):C:H2'	1:2A:271(H):G:C8	2.46	0.49
32:2a:1095:U:P	32:2a:1108:G:H1	2.34	0.49
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.78	0.49
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.13	0.49
36:2e:36:ASP:O	36:2e:38:GLN:N	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.95	0.49
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.76	0.49
1:1A:121:G:H4'	1:1A:149:A:H5'	1.93	0.49
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.43	0.49
1:1A:1827:C:H2'	1:1A:1828:G:H5'	1.95	0.49
32:1a:328:C:H4'	32:1a:329:A:H5"	1.94	0.49
32:1a:765:G:C6	32:1a:812:C:C2	3.00	0.49
32:1a:911:U:H2'	32:1a:912:C:C6	2.46	0.49
33:1b:52:GLU:OE2	33:1b:56:ARG:NH2	2.46	0.49
33:1b:166:ASP:OD2	33:1b:169:LYS:HB2	2.12	0.49
39:1h:28:ALA:HA	39:1h:59:LEU:HG	1.95	0.49
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.94	0.49
46:1o:71:GLN:HB2	46:1o:78:TYR:CD1	2.48	0.49
51:1t:30:LYS:HB3	51:1t:34:LYS:HE3	1.94	0.49
1:2A:315:G:H2'	1:2A:316:C:C6	2.47	0.49
1:2A:469:G:O6	29:27:37:LYS:NZ	2.43	0.49
1:2A:881:G:N2	54:2w:56:C:N3	2.60	0.49
7:2H:87:LEU:HB2	7:2H:131:VAL:HB	1.95	0.49
8:2I:132:PRO:HD2	8:2I:136:VAL:O	2.12	0.49
16:2U:89:GLU:O	17:2V:11:GLN:NE2	2.45	0.49
32:2a:976:G:N2	32:2a:1363:C:OP2	2.44	0.49
32:2a:1318:A:H5"	50:2s:3:ARG:NH2	2.28	0.49
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.52	0.49
36:2e:84:PHE:HD2	36:2e:130:ASN:HA	1.78	0.49
1:1A:910:A:N1	1:1A:2277:G:H1'	2.28	0.49
1:1A:1095:A:H62	1:1A:1097:U:H3	1.61	0.49
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.12	0.49
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.13	0.49
1:1A:2712:U:O2'	1:1A:2712(A):A:OP2	2.28	0.49
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.13	0.49
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.95	0.49
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.13	0.49
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.47	0.49
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.95	0.49
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.78	0.49
44:1m:87:TYR:HA	44:1m:90:LEU:HD12	1.94	0.49
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.47	0.49
1:2A:234:C:H2'	1:2A:235:U:C6	2.47	0.49
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.47	0.49
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.78	0.49
1:2A:2110:G:C2	1:2A:2120:G:H1'	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2397:G:N2	1:2A:2420:C:H1'	2.27	0.49
2:2B:49:C:OP1	14:2S:97:ARG:HB2	2.12	0.49
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.43	0.49
21:2Z:31:ARG:HD2	21:2Z:94:GLU:CD	2.38	0.49
32:2a:34:C:H2'	32:2a:35:G:H8	1.78	0.49
33:2b:24:TRP:CE2	33:2b:26:PRO:HG3	2.48	0.49
35:2d:64:LEU:HA	35:2d:67:ILE:HD12	1.95	0.49
39:2h:26:VAL:HG13	39:2h:32:LYS:HZ3	1.78	0.49
43:2l:83:VAL:HG21	43:2l:100:ILE:HG12	1.94	0.49
45:2n:3:ARG:C	45:2n:3:ARG:HD3	2.37	0.49
1:1A:251:A:C5	1:1A:252:G:H1'	2.48	0.49
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.45	0.49
1:1A:890:A:H2'	1:1A:892:G:O4'	2.13	0.49
1:1A:1056:G:N2	1:1A:1103:A:H62	2.11	0.49
1:1A:1416:G:HO2'	1:1A:1417:C:H5	1.60	0.49
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.48	0.49
13:1R:56:LYS:NZ	13:1R:90:ARG:O	2.45	0.49
36:1e:151:LEU:HD21	39:1h:77:GLU:HG2	1.94	0.49
1:2A:826:U:H5"	1:2A:2428:G:O3'	2.13	0.49
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.11	0.49
4:2E:52:LEU:O	4:2E:76:ARG:N	2.38	0.49
8:2I:9:LEU:HD21	8:2I:35:LEU:HD13	1.95	0.49
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.94	0.49
22:20:56:ASP:OD1	22:20:58:THR:OG1	2.26	0.49
23:21:46:LEU:HD23	23:21:61:ARG:HB3	1.95	0.49
32:2a:381:C:H2'	32:2a:382:A:O4'	2.13	0.49
32:2a:416:G:H1	32:2a:427:U:H3	1.60	0.49
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.95	0.49
47:2p:51:VAL:HG11	47:2p:74:LEU:HD22	1.94	0.49
1:1A:582:G:H2'	1:1A:583:G:C8	2.48	0.49
1:1A:1784:A:OP2	62:1A:4118:HOH:O	2.20	0.49
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.13	0.49
10:1O:10:VAL:HG11	10:1O:16:ALA:HB3	1.94	0.49
21:1Z:70:LEU:HG	21:1Z:91:LEU:HD11	1.95	0.49
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.46	0.49
25:13:5:LYS:NZ	25:13:55:ARG:HH12	2.11	0.49
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.48	0.49
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.48	0.49
32:1a:1456:G:C5	51:1t:55:ILE:HD11	2.48	0.49
44:1m:2:ALA:N	44:1m:8:GLU:OE1	2.46	0.49
55:1x:23:C:H2'	55:1x:24:U:C6	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:746:A:H2'	1:2A:2612:C:H5"	1.94	0.49
1:2A:895:U:H2'	1:2A:897:C:OP2	2.13	0.49
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.47	0.49
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.47	0.49
7:2H:12:PRO:HD2	7:2H:15:VAL:HG21	1.94	0.49
32:2a:143:A:O3'	32:2a:144:G:H8	1.96	0.49
32:2a:940:C:H2'	32:2a:941:G:C8	2.48	0.49
32:2a:950:U:OP2	44:2m:102:ARG:HD3	2.13	0.49
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.94	0.49
41:2j:36:GLY:O	41:2j:38:ILE:HD12	2.13	0.49
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.13	0.49
1:1A:34:C:H5"	1:1A:35:G:OP2	2.13	0.48
1:1A:813:U:H2'	1:1A:814:C:C6	2.48	0.48
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.48	0.48
7:1H:57:ASP:O	7:1H:62:LYS:HD2	2.13	0.48
23:11:59:THR:O	23:11:91:LYS:NZ	2.33	0.48
32:1a:401:C:H1'	32:1a:622:A:H1'	1.95	0.48
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.46	0.48
33:1b:80:ILE:O	33:1b:84:GLU:HG2	2.13	0.48
37:1f:1:MET:HE3	37:1f:66:GLU:HG2	1.95	0.48
47:1p:48:TRP:HH2	47:1p:76:GLN:HE22	1.61	0.48
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.48	0.48
3:2D:171:ASP:O	3:2D:187:GLY:N	2.40	0.48
9:2N:91:LEU:HG	9:2N:98:VAL:HG21	1.94	0.48
32:2a:1074:G:OP2	36:2e:61:TYR:OH	2.28	0.48
32:2a:1133:G:N2	32:2a:1141:C:N3	2.56	0.48
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.30	0.48
32:2a:1298:C:H2'	38:2g:114:ARG:NH2	2.28	0.48
34:2c:101:LEU:HD13	34:2c:102:ASN:H	1.77	0.48
40:2i:57:GLY:O	40:2i:59:PHE:N	2.46	0.48
55:2x:40:C:H2'	55:2x:41:C:H6	1.78	0.48
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.12	0.48
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.13	0.48
1:1A:2163:C:OP1	1:1A:2171:A:O2'	2.31	0.48
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.95	0.48
32:1a:804:U:H5"	32:1a:805:C:OP2	2.14	0.48
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.47	0.48
32:1a:1143:G:H2'	32:1a:1144:G:C8	2.48	0.48
34:1c:199:LYS:HB3	34:1c:201:TYR:HE2	1.78	0.48
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.12	0.48
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:175:LEU:HD12	3:2D:185:VAL:HG21	1.95	0.48
7:2H:116:GLU:HG3	7:2H:117:PRO:HD2	1.94	0.48
26:24:67:TYR:CD2	50:2s:9:VAL:HB	2.48	0.48
32:2a:336:C:H2'	32:2a:337:C:C6	2.48	0.48
32:2a:1342:C:H2'	32:2a:1343:G:C8	2.48	0.48
33:2b:73:THR:O	33:2b:73:THR:OG1	2.27	0.48
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	1.95	0.48
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.45	0.48
48:2q:78:GLU:HG2	48:2q:81:ARG:HG2	1.94	0.48
1:1A:795:C:H2'	1:1A:796:C:C6	2.49	0.48
1:1A:1058:G:N2	1:1A:1080:C:N3	2.58	0.48
3:1D:232:PRO:O	62:1D:401:HOH:O	2.20	0.48
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.13	0.48
32:1a:337:C:H2'	32:1a:338:A:C8	2.48	0.48
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.14	0.48
43:1l:117:ARG:HB3	43:1l:122:THR:HB	1.94	0.48
51:1t:45:GLN:HB2	51:1t:91:LEU:HD13	1.94	0.48
1:2A:323:G:C8	5:2F:171:PRO:HG3	2.48	0.48
5:2F:9:ILE:HD13	5:2F:123:LEU:HD23	1.96	0.48
8:2I:105:HIS:HB2	8:2I:107:VAL:CG2	2.44	0.48
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.14	0.48
16:2U:107:ALA:O	16:2U:111:GLU:HG2	2.13	0.48
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.28	0.48
32:2a:88:A:H5"	32:2a:89:C:C6	2.48	0.48
32:2a:1304:G:C6	32:2a:1305:G:N1	2.81	0.48
34:2c:148:GLY:HA3	34:2c:203:PHE:HB3	1.95	0.48
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.30	0.48
36:2e:83:GLU:HB3	36:2e:88:LYS:HG3	1.95	0.48
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.12	0.48
40:2i:23:ASN:OD1	40:2i:25:LYS:HG2	2.14	0.48
50:2s:66:MET:HB2	50:2s:74:PHE:CZ	2.48	0.48
1:1A:187:G:OP2	62:1A:4160:HOH:O	2.20	0.48
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.13	0.48
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.46	0.48
6:1G:44:GLY:O	6:1G:47:LYS:HE2	2.13	0.48
9:1N:16:ILE:HG21	9:1N:26:LEU:HD11	1.94	0.48
26:14:62:ARG:C	26:14:63:TYR:CG	2.91	0.48
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.48	0.48
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.28	0.48
51:1t:86:ARG:O	51:1t:90:GLN:NE2	2.46	0.48
1:2A:479:A:H4'	1:2A:480:A:OP1	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.48	0.48
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.47	0.48
14:2S:11:LYS:HG3	14:2S:91:PRO:HD3	1.95	0.48
17:2V:21:ARG:NH2	17:2V:91:TYR:OH	2.47	0.48
32:2a:715:A:H2'	32:2a:716:A:C8	2.48	0.48
32:2a:815:A:N7	32:2a:1509:C:O2'	2.43	0.48
32:2a:1309:G:OP2	44:2m:99:ARG:NH2	2.37	0.48
44:2m:29:ARG:HD3	44:2m:64:TRP:CD2	2.49	0.48
55:2x:61:C:H2'	55:2x:62:C:C6	2.48	0.48
1:1A:226:G:N2	1:1A:228:A:H62	2.11	0.48
1:1A:1490:A:O2'	3:1D:99:ASP:OD1	2.31	0.48
1:1A:1514:U:O2'	1:1A:1558:A:OP2	2.19	0.48
1:1A:1720:U:H2'	1:1A:1721:G:O4'	2.12	0.48
1:1A:2786:U:O2'	4:1E:62:PRO:O	2.27	0.48
5:1F:154:VAL:HG22	5:1F:191:ARG:HB2	1.96	0.48
21:1Z:77:ASP:OD2	21:1Z:80:ARG:NH1	2.47	0.48
32:1a:222:U:H2'	32:1a:223:U:C6	2.49	0.48
32:1a:383:A:C5	32:1a:384:G:H1'	2.49	0.48
32:1a:392:G:H2'	32:1a:393:A:C8	2.48	0.48
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.95	0.48
34:1c:64:VAL:HG13	34:1c:99:VAL:HA	1.95	0.48
36:1e:152:ARG:HB3	39:1h:43:GLY:HA3	1.95	0.48
51:1t:43:LEU:HD13	51:1t:51:GLU:HG2	1.96	0.48
1:2A:320:A:O2'	1:2A:322:A:OP2	2.31	0.48
1:2A:994:C:H3'	16:2U:54:LYS:HE3	1.94	0.48
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.49	0.48
1:2A:1598:C:H2'	1:2A:1599:C:C6	2.48	0.48
1:2A:2318:G:H2'	1:2A:2318:G:N3	2.29	0.48
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.13	0.48
2:2B:2:C:H2'	2:2B:3:C:C6	2.48	0.48
4:2E:9:VAL:HG13	15:2T:3:ARG:HG2	1.95	0.48
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.77	0.48
16:2U:49:HIS:CD2	16:2U:52:ARG:HD3	2.49	0.48
17:2V:4:ILE:HA	17:2V:12:TYR:O	2.14	0.48
26:24:26:SER:OG	26:24:27:THR:N	2.47	0.48
32:2a:607:A:H2'	32:2a:608:A:O4'	2.13	0.48
32:2a:1029:C:N4	32:2a:1032:G:N1	2.61	0.48
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.49	0.48
1:1A:570:G:H2'	1:1A:2030:A:C5	2.49	0.48
1:1A:651:G:OP1	30:18:17:THR:OG1	2.25	0.48
1:1A:796:C:H2'	1:1A:797:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:862:G:H2'	1:1A:863:A:O4'	2.14	0.48
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.14	0.48
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.14	0.48
32:1a:434:U:H2'	32:1a:435:C:C6	2.47	0.48
36:1e:27:ARG:HB2	36:1e:27:ARG:HH11	1.78	0.48
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.79	0.48
1:2A:601:C:O2'	1:2A:605:C:H5"	2.12	0.48
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.13	0.48
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.96	0.48
1:2A:2705:A:OP2	62:2A:3964:HOH:O	2.20	0.48
7:2H:102:ALA:HA	7:2H:117:PRO:HD3	1.95	0.48
14:2S:95:HIS:O	14:2S:99:LYS:HB3	2.14	0.48
32:2a:109:A:C6	32:2a:326:G:C6	3.01	0.48
32:2a:419:C:OP1	32:2a:513:C:O2'	2.30	0.48
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.14	0.48
36:2e:95:ALA:O	36:2e:97:GLY:N	2.47	0.48
50:2s:17:GLU:O	50:2s:21:GLU:N	2.35	0.48
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.46	0.48
54:2w:48:C:N3	54:2w:59:A:H1'	2.29	0.48
1:1A:83:G:OP1	20:1Y:95:LYS:NZ	2.44	0.48
1:1A:323:G:H1'	1:1A:1205:U:O2	2.14	0.48
1:1A:855:G:O2'	22:10:27:GLU:OE2	2.22	0.48
1:1A:2590:A:H2'	1:1A:2591:C:C6	2.48	0.48
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.39	0.48
32:1a:728:A:H2'	32:1a:729:A:C8	2.48	0.48
1:2A:212:G:H2'	1:2A:213:A:O4'	2.13	0.48
1:2A:1385:G:O2'	1:2A:1396:U:O2	2.29	0.48
1:2A:1755:A:OP2	15:2T:113:LYS:NZ	2.44	0.48
4:2E:49:LEU:N	4:2E:79:ARG:O	2.35	0.48
10:2O:25:LEU:HD12	10:2O:38:VAL:HG12	1.95	0.48
11:2P:97:PRO:HG3	11:2P:112:LEU:HD23	1.96	0.48
32:2a:131:C:H2'	32:2a:132:C:C6	2.49	0.48
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.48	0.48
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.49	0.48
38:2g:50:ILE:HD12	38:2g:61:VAL:HB	1.96	0.48
53:2v:21:A:N1	54:2w:34:U8U:O4	2.47	0.48
1:1A:882:G:H1	1:1A:894:C:H42	1.62	0.48
1:1A:1482:G:H2'	1:1A:1484:G:C8	2.46	0.48
1:1A:2112:G:H1'	57:1y:19:G:O2'	2.14	0.48
1:1A:2140:C:H2'	1:1A:2141:G:C8	2.37	0.48
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:10:A:HO2'	32:1a:507:C:HO2'	1.60	0.48
54:1w:2:G:H2'	54:1w:3:G:C8	2.48	0.48
1:2A:764:A:H5"	3:2D:210:GLY:CA	2.44	0.48
1:2A:1754:C:N3	1:2A:2716:U:O2'	2.46	0.48
7:2H:124:GLU:HG3	7:2H:126:PRO:HD3	1.96	0.48
21:2Z:142:SER:HB3	21:2Z:143:GLY:H	1.54	0.48
23:21:4:VAL:HG21	23:21:11:ARG:HH21	1.78	0.48
32:2a:1385:G:H2'	32:2a:1386:G:C8	2.49	0.48
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.96	0.48
1:1A:383:U:H2'	1:1A:385:C:H5	1.79	0.48
1:1A:530:G:OP2	62:1A:4158:HOH:O	2.20	0.48
1:1A:2439:A:N6	55:1x:76:8AN:O1P	2.47	0.48
10:1O:112:MET:SD	10:1O:112:MET:N	2.80	0.48
20:1Y:97:ARG:HH11	20:1Y:107:ASP:C	2.22	0.48
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.96	0.48
34:1c:131:ARG:HH21	36:1e:50:GLU:HG3	1.79	0.48
34:1c:134:ILE:HG23	34:1c:151:VAL:HB	1.96	0.48
1:2A:271(R):G:OP1	23:21:76:ARG:NE	2.44	0.48
1:2A:996:A:H4'	16:2U:91:ASP:OD2	2.13	0.48
2:2B:22:U:H3	2:2B:61:G:H1	1.61	0.48
2:2B:90:A:N7	2:2B:91:C:H1'	2.29	0.48
32:2a:114:U:H2'	32:2a:115:G:C8	2.49	0.48
32:2a:309:G:O2'	32:2a:607:A:N1	2.44	0.48
32:2a:620:C:C2	35:2d:135:LEU:HG	2.49	0.48
32:2a:859:A:H2'	32:2a:860:A:O4'	2.14	0.48
32:2a:1071:C:H42	32:2a:1104:G:H1	1.62	0.48
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.28	0.48
35:2d:17:VAL:HG12	35:2d:19:LEU:HD13	1.95	0.48
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.14	0.48
38:2g:115:ARG:O	38:2g:119:ARG:HG3	2.14	0.48
43:2l:32:PHE:CE1	43:2l:86:ARG:HB3	2.48	0.48
47:2p:39:TYR:CG	47:2p:73:LEU:HD21	2.49	0.48
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.45	0.48
1:1A:900:A:H2'	1:1A:901:A:O4'	2.14	0.48
2:1B:78:A:C2	2:1B:100:A:C4	3.02	0.48
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	1.96	0.48
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.95	0.48
8:1I:38:LEU:HD11	23:11:75:GLU:HG3	1.96	0.48
32:1a:600:C:H2'	32:1a:601:C:C6	2.49	0.48
32:1a:982:U:H5"	45:1n:6:LEU:HD11	1.94	0.48
32:1a:1239:A:H62	32:1a:1299:A:H62	1.62	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:33:LEU:O	34:1c:37:GLN:HG2	2.14	0.48
37:1f:48:LEU:HD22	49:1r:77:GLY:HA3	1.96	0.48
41:1j:5:ARG:HB2	41:1j:73:ASP:OD1	2.14	0.48
49:1r:31:LEU:HD23	49:1r:31:LEU:H	1.78	0.48
1:2A:131:G:OP1	62:2A:3962:HOH:O	2.19	0.48
1:2A:153:C:H2'	1:2A:154:G:O4'	2.13	0.48
1:2A:686:G:N2	1:2A:788:A:H61	2.11	0.48
1:2A:1662:C:O2'	1:2A:2687:U:OP1	2.30	0.48
1:2A:2657:A:O3'	7:2H:160:LYS:NZ	2.47	0.48
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.14	0.48
5:2F:32:LEU:O	5:2F:36:VAL:HG23	2.14	0.48
6:2G:15:VAL:HG21	6:2G:176:LEU:HD23	1.94	0.48
6:2G:64:THR:HG21	6:2G:92:VAL:HG11	1.95	0.48
16:2U:97:ASP:OD1	16:2U:101:ARG:HD2	2.14	0.48
23:21:52:ARG:HG3	23:21:56:GLN:O	2.13	0.48
27:25:52:TYR:O	27:25:55:ARG:HG2	2.14	0.48
32:2a:46:G:O2'	32:2a:365:U:H1'	2.14	0.48
32:2a:130:A:N3	32:2a:263:A:O2'	2.39	0.48
32:2a:519:C:H2'	32:2a:520:A:O4'	2.13	0.48
32:2a:1114:C:H42	32:2a:1186:G:H1	1.62	0.48
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.95	0.48
34:2c:130:VAL:HB	34:2c:157:ILE:HG23	1.96	0.48
44:2m:14:ARG:HA	44:2m:44:ARG:HA	1.95	0.48
54:2w:18:G:HO2'	54:2w:57:G:N2	2.12	0.48
1:1A:686:G:N2	1:1A:788:A:H61	2.12	0.47
1:1A:848:G:O6	1:1A:928:G:H2'	2.14	0.47
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.46	0.47
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.48	0.47
1:1A:2464:C:H1'	62:1A:5432:HOH:O	2.13	0.47
9:1N:44:PRO:HD3	16:1U:60:LEU:HD13	1.95	0.47
10:1O:43:VAL:HG12	10:1O:54:GLU:HA	1.95	0.47
14:1S:106:ARG:HE	14:1S:112:PHE:C	2.22	0.47
16:1U:85:LYS:HB3	16:1U:85:LYS:HE2	1.61	0.47
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.70	0.47
21:1Z:126:VAL:HG11	21:1Z:161:VAL:HB	1.96	0.47
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.48	0.47
32:1a:1361:G:H2'	32:1a:1362:C:O4'	2.14	0.47
36:1e:60:TYR:HE1	36:1e:64:ARG:HE	1.61	0.47
39:1h:9:MET:SD	39:1h:26:VAL:HG11	2.53	0.47
39:1h:21:LYS:O	39:1h:63:LEU:HD12	2.13	0.47
1:2A:892:G:H3'	1:2A:893:C:H5"	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:14:U:O3'	2:2B:108:U:O2'	2.28	0.47
6:2G:151:ALA:HB3	6:2G:153:ARG:NH1	2.29	0.47
6:2G:173:LEU:O	6:2G:178:PHE:N	2.47	0.47
15:2T:23:ARG:HD3	15:2T:120:ARG:CZ	2.45	0.47
32:2a:596:C:H2'	32:2a:597:G:C8	2.49	0.47
32:2a:865:A:C2	32:2a:918:A:H4'	2.49	0.47
32:2a:952:U:H2'	32:2a:953:G:C8	2.49	0.47
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.48	0.47
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.48	0.47
33:2b:16:HIS:HE1	33:2b:42:ILE:HD12	1.78	0.47
36:2e:105:VAL:HG21	36:2e:128:PRO:HB3	1.96	0.47
1:1A:2682:U:O2'	15:1T:58:ASN:ND2	2.48	0.47
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.58	0.47
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.96	0.47
32:1a:1261:A:H3'	32:1a:1262:C:C6	2.49	0.47
33:1b:189:ASP:HB3	33:1b:204:ASN:HA	1.95	0.47
35:1d:109:GLY:HA3	35:1d:165:MET:SD	2.54	0.47
39:1h:64:LYS:HD2	39:1h:79:VAL:HG21	1.95	0.47
49:1r:35:ARG:HA	49:1r:78:LEU:HD13	1.96	0.47
52:1u:3:LYS:HD3	52:1u:14:TRP:CD1	2.49	0.47
55:1x:23:C:H2'	55:1x:24:U:H6	1.79	0.47
1:2A:658:C:H2'	1:2A:659:C:C6	2.49	0.47
5:2F:124:LEU:HB3	5:2F:193:VAL:HG22	1.95	0.47
7:2H:26:VAL:O	7:2H:79:VAL:HG11	2.14	0.47
11:2P:70:GLN:N	11:2P:70:GLN:HE21	2.12	0.47
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HB	1.96	0.47
14:2S:67:ARG:HD3	14:2S:71:ARG:HH11	1.79	0.47
32:2a:685:G:C2	32:2a:686:U:C4	3.02	0.47
32:2a:923:A:N6	32:2a:1392:G:O6	2.47	0.47
32:2a:1004:A:N1	32:2a:1037:C:C2	2.82	0.47
32:2a:1194:U:H4'	36:2e:22:GLY:HA2	1.96	0.47
33:2b:175:ARG:HH12	33:2b:179:LYS:HD2	1.79	0.47
48:2q:23:VAL:HG21	48:2q:59:ILE:HD11	1.96	0.47
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.49	0.47
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.37	0.47
5:1F:51:THR:HB	5:1F:88:VAL:HG11	1.97	0.47
6:1G:138:GLN:NE2	6:1G:153:ARG:HH21	2.12	0.47
11:1P:8:PRO:HB2	11:1P:12:ALA:HB3	1.96	0.47
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.49	0.47
32:1a:111:G:H5"	47:1p:27:LYS:HB3	1.97	0.47
32:1a:1004:A:H5'	32:1a:1024:G:N2	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1270:C:OP2	52:1u:24:ARG:NH2	2.47	0.47
32:1a:1325:C:H2'	32:1a:1326:C:C6	2.49	0.47
32:1a:1525:G:OP1	42:1k:120:ARG:NH2	2.47	0.47
43:1l:89:ARG:CZ	43:1l:91:LYS:HA	2.44	0.47
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.95	0.47
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.38	0.47
1:2A:940:G:N3	1:2A:1191:G:H4'	2.29	0.47
1:2A:2375:G:N2	1:2A:2378:A:OP2	2.42	0.47
1:2A:2503:2MA:OP2	62:2A:3966:HOH:O	2.20	0.47
32:2a:675:A:H2'	32:2a:676:A:O4'	2.14	0.47
32:2a:1079:G:H2'	32:2a:1080:A:C8	2.48	0.47
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.49	0.47
32:2a:1406:U:O2	32:2a:1517:G:N2	2.46	0.47
33:2b:98:LEU:HD23	33:2b:108:ILE:HD12	1.96	0.47
36:2e:102:ALA:O	36:2e:107:ARG:NH2	2.47	0.47
53:2v:23:A:H4'	53:2v:24:A:H5'	1.96	0.47
1:1A:881:G:C2	1:1A:882:G:H1'	2.49	0.47
1:1A:1055:G:H1	1:1A:1104:C:N4	2.09	0.47
1:1A:2144:U:H3'	1:1A:2146:C:N4	2.28	0.47
25:13:4:LEU:O	25:13:36:VAL:HA	2.14	0.47
32:1a:553:A:H5"	43:1l:24:VAL:HG21	1.96	0.47
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.15	0.47
32:1a:1377:A:O2'	38:1g:2:ALA:N	2.47	0.47
33:1b:59:GLU:HB2	33:1b:221:LEU:HD21	1.96	0.47
54:1w:50:C:H2'	54:1w:51:A:C8	2.49	0.47
1:2A:1745:C:H2'	1:2A:1745(A):C:O4'	2.14	0.47
1:2A:1894:C:H2'	1:2A:1895:C:H6	1.79	0.47
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.13	0.47
1:2A:2162:G:O2'	1:2A:2172:U:H5'	2.15	0.47
2:2B:56:G:H4'	2:2B:57:A:C8	2.49	0.47
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.78	0.47
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.96	0.47
14:2S:94:TYR:CZ	14:2S:99:LYS:HB2	2.49	0.47
32:2a:728:A:H2'	32:2a:729:A:C8	2.49	0.47
33:2b:84:GLU:OE1	33:2b:87:ARG:NH1	2.44	0.47
38:2g:70:LYS:C	38:2g:138:LYS:HD2	2.40	0.47
39:2h:116:LYS:HD2	39:2h:129:VAL:HG11	1.96	0.47
55:2x:19:G:H3'	55:2x:20:U:H6	1.78	0.47
1:1A:86:C:H4'	1:1A:104:U:H1'	1.97	0.47
1:1A:717:G:H2'	1:1A:718:A:O4'	2.14	0.47
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1055:G:H2'	1:1A:1056:G:O4'	2.15	0.47
1:1A:1082:U:C4	1:1A:1086:A:N1	2.77	0.47
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.14	0.47
1:1A:1668:A:O2'	1:1A:1674:G:N7	2.36	0.47
1:1A:2469:A:O2'	12:1Q:56:ARG:HD3	2.15	0.47
1:1A:2829:C:H5"	4:1E:76:ARG:NH2	2.30	0.47
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.49	0.47
1:1A:2887:U:H2'	1:1A:2888:C:H6	1.79	0.47
7:1H:105:LEU:HD12	7:1H:151:ILE:HD12	1.95	0.47
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.49	0.47
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	1.96	0.47
18:1W:6:ILE:HA	18:1W:103:ILE:O	2.14	0.47
26:14:54:GLY:N	26:14:55:ARG:HA	2.28	0.47
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.49	0.47
32:1a:750:G:O2'	46:1o:21:ASP:OD1	2.33	0.47
1:2A:320:A:H4'	1:2A:322:A:N7	2.29	0.47
1:2A:656:G:H2'	1:2A:657:U:O4'	2.15	0.47
1:2A:779:U:O4	62:2A:3965:HOH:O	2.20	0.47
1:2A:2831:G:OP1	1:2A:2834:G:H4'	2.15	0.47
7:2H:30:LYS:HE3	7:2H:81:GLU:O	2.15	0.47
7:2H:98:LEU:HD11	7:2H:125:VAL:H	1.79	0.47
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.15	0.47
19:2X:1:MET:H3	24:22:29:LYS:HE3	1.79	0.47
23:21:32:LYS:O	62:21:101:HOH:O	2.19	0.47
32:2a:45:U:H2'	32:2a:46:G:C8	2.50	0.47
32:2a:404:U:H2'	32:2a:405:U:H6	1.78	0.47
32:2a:473:G:H2'	32:2a:474:G:C8	2.49	0.47
32:2a:942:G:C2	32:2a:1342:C:C2	3.02	0.47
32:2a:976:G:P	45:2n:32:SER:H	2.38	0.47
34:2c:77:ILE:HG13	34:2c:78:GLY:H	1.79	0.47
39:2h:54:ASP:HB3	39:2h:56:LYS:HD2	1.96	0.47
1:1A:893:C:H2'	1:1A:894:C:C6	2.50	0.47
1:1A:1139:G:OP2	9:1N:70:LYS:NZ	2.48	0.47
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.15	0.47
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.50	0.47
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.95	0.47
20:1Y:107:ASP:OD1	20:1Y:107:ASP:N	2.47	0.47
32:1a:872:A:C8	32:1a:874:G:C8	3.02	0.47
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.28	0.47
32:1a:1250:A:O3'	40:1i:67:GLY:HA2	2.15	0.47
32:1a:1457:G:H2'	32:1a:1458:G:H8	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:101:LEU:HD12	35:1d:138:TYR:HB3	1.96	0.47
38:1g:15:ASP:O	38:1g:19:GLY:HA2	2.14	0.47
38:1g:79:ARG:CZ	38:1g:80:VAL:HG22	2.45	0.47
46:1o:3:ILE:HG12	46:1o:38:ARG:HD2	1.97	0.47
50:1s:20:LEU:HD23	50:1s:20:LEU:HA	1.78	0.47
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.15	0.47
57:1y:52:G:H1	57:1y:62:C:N4	2.12	0.47
3:2D:36:PRO:HA	3:2D:61:LEU:HD23	1.97	0.47
4:2E:4:ILE:HD13	4:2E:28:ALA:HB1	1.96	0.47
6:2G:8:LYS:HD3	6:2G:100:TRP:CD1	2.49	0.47
14:2S:15:ARG:HH21	14:2S:88:ASP:CG	2.23	0.47
14:2S:23:ARG:HG3	14:2S:24:LEU:N	2.29	0.47
17:2V:6:LYS:HB2	17:2V:38:LEU:HD11	1.95	0.47
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.96	0.47
31:29:17:ILE:HG13	31:29:24:TYR:HB2	1.94	0.47
32:2a:302:G:N3	32:2a:556:C:H4'	2.30	0.47
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.83	0.47
43:2l:38:THR:OG1	43:2l:57:LYS:O	2.30	0.47
44:2m:40:ASN:HD22	44:2m:43:THR:HG23	1.80	0.47
44:2m:49:THR:O	44:2m:53:VAL:HG13	2.14	0.47
54:2w:43:U:H2'	54:2w:44:U:C6	2.49	0.47
1:1A:616:G:H5'	5:1F:205:ARG:HD3	1.97	0.47
1:1A:848:G:H2'	1:1A:849:A:C8	2.50	0.47
1:1A:1041:C:N4	1:1A:1114:G:H1	2.05	0.47
1:1A:1060:U:N3	1:1A:1088:A:C8	2.80	0.47
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.28	0.47
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.50	0.47
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.15	0.47
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.49	0.47
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.97	0.47
21:1Z:155:LEU:HD23	21:1Z:155:LEU:HA	1.73	0.47
32:1a:461:A:O2'	32:1a:470:C:H5'	2.14	0.47
32:1a:626:U:H2'	32:1a:627:G:H8	1.78	0.47
32:1a:811:C:O2'	32:1a:901:A:N1	2.44	0.47
33:1b:115:LEU:HD13	33:1b:145:LEU:HB3	1.94	0.47
40:1i:27:THR:HG23	40:1i:62:TYR:HA	1.97	0.47
48:1q:10:VAL:HA	48:1q:20:THR:O	2.13	0.47
48:1q:41:LYS:HD3	48:1q:88:TYR:CE1	2.50	0.47
53:1v:21:A:H2	54:1w:34:U8U:HN3	1.63	0.47
1:2A:442:G:H21	5:2F:48:THR:HB	1.79	0.47
1:2A:566:U:P	17:2V:80:GLN:HE21	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:743:G:O2'	1:2A:1659:U:OP1	2.30	0.47
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.50	0.47
1:2A:864:G:OP2	12:2Q:22:LYS:HE3	2.13	0.47
1:2A:900:A:H3'	1:2A:901:A:H8	1.80	0.47
1:2A:921:G:C6	1:2A:922:U:C4	3.03	0.47
1:2A:1919:A:O3'	32:2a:1517:G:H1'	2.14	0.47
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.28	0.47
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.14	0.47
7:2H:54:ARG:HG2	7:2H:65:HIS:CE1	2.50	0.47
7:2H:86:GLU:HA	7:2H:131:VAL:O	2.15	0.47
8:2I:123:LEU:HD12	8:2I:144:VAL:HB	1.97	0.47
9:2N:26:LEU:HG	9:2N:30:ILE:HD11	1.96	0.47
10:2O:80:ASP:CG	15:2T:64:ARG:HH22	2.22	0.47
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.95	0.47
25:23:8:LEU:O	25:23:32:GLN:N	2.40	0.47
32:2a:429:U:H1'	32:2a:430:A:H5"	1.96	0.47
32:2a:585:G:O2'	32:2a:879:C:OP1	2.26	0.47
32:2a:1366:C:H2'	32:2a:1367:C:H6	1.80	0.47
35:2d:83:SER:HA	35:2d:89:THR:OG1	2.15	0.47
35:2d:135:LEU:C	35:2d:137:SER:H	2.23	0.47
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.35	0.47
36:2e:11:ILE:HD11	36:2e:108:ALA:HB3	1.96	0.47
38:2g:90:GLU:OE1	38:2g:90:GLU:N	2.48	0.47
40:2i:93:ARG:O	40:2i:97:LYS:N	2.46	0.47
44:2m:123:ALA:HB1	44:2m:124:PRO:HD2	1.95	0.47
55:2x:17:C:OP2	55:2x:18:G:H5"	2.14	0.47
57:2y:7:U:H2'	57:2y:49:G:C8	2.50	0.47
57:2y:37:T6A:H2'	57:2y:38:A:O4'	2.15	0.47
57:2y:45:G:N3	57:2y:45:G:H2'	2.29	0.47
1:1A:1372:U:H2'	1:1A:1373:A:O4'	2.15	0.47
1:1A:1537:G:H2'	1:1A:1538:G:H8	1.79	0.47
1:1A:2601:C:H2'	1:1A:2603:G:C8	2.50	0.47
2:1B:4:C:H2'	2:1B:5:C:C6	2.50	0.47
5:1F:132:VAL:HG22	5:1F:163:VAL:HG22	1.97	0.47
8:1I:82:ARG:HE	8:1I:82:ARG:HB3	1.43	0.47
15:1T:106:SER:N	15:1T:109:GLU:OE1	2.40	0.47
19:1X:12:VAL:HG21	19:1X:27:THR:HG22	1.96	0.47
19:1X:61:GLY:HA3	19:1X:73:ARG:O	2.15	0.47
35:1d:17:VAL:HG12	35:1d:19:LEU:HD13	1.97	0.47
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.97	0.47
39:1h:10:LEU:HB3	39:1h:83:ILE:HG12	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:35:SER:N	41:1j:73:ASP:O	2.36	0.47
1:2A:479:A:N3	1:2A:481:G:H5"	2.30	0.47
1:2A:518:G:H2'	1:2A:519:U:C6	2.50	0.47
1:2A:590:A:N6	1:2A:666:G:O6	2.48	0.47
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.50	0.47
1:2A:2359:C:H2'	1:2A:2360:A:O4'	2.14	0.47
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.15	0.47
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.80	0.47
14:2S:30:ARG:HG3	14:2S:97:ARG:NH2	2.30	0.47
23:21:50:ARG:HG2	23:21:59:THR:HG23	1.95	0.47
28:26:12:GLU:OE1	28:26:19:ARG:NH1	2.48	0.47
32:2a:384:G:H2'	32:2a:385:C:C6	2.49	0.47
32:2a:637:G:H2'	32:2a:638:G:C8	2.50	0.47
33:2b:32:ILE:HD13	33:2b:40:HIS:HB3	1.97	0.47
1:1A:528:A:O2'	1:1A:529:A:H5'	2.15	0.47
1:1A:2145:C:O2'	1:1A:2147:G:N7	2.48	0.47
5:1F:117:ARG:NH2	5:1F:189:THR:O	2.47	0.47
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.15	0.47
22:10:18:ALA:HB3	22:10:20:ARG:NH1	2.30	0.47
32:1a:893:C:O2	62:1a:4810:HOH:O	2.16	0.47
32:1a:1038:C:H2'	32:1a:1039:C:C6	2.48	0.47
32:1a:1189:C:H5"	34:1c:5:ILE:HD12	1.96	0.47
38:1g:50:ILE:HD11	38:1g:125:MET:HG3	1.97	0.47
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.30	0.47
40:1i:79:LEU:O	40:1i:83:ARG:HG3	2.15	0.47
1:2A:345:A:N3	1:2A:347:A:N6	2.63	0.47
1:2A:599:G:H4'	5:2F:31:HIS:HD2	1.78	0.47
1:2A:881:G:N1	1:2A:882:G:H1'	2.30	0.47
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.49	0.47
1:2A:2131:G:H22	1:2A:2158:A:H62	1.63	0.47
1:2A:2166:G:H3'	1:2A:2167:U:C5'	2.43	0.47
4:2E:109:LYS:HE2	4:2E:191:PRO:HB3	1.96	0.47
6:2G:118:ARG:O	6:2G:181:ARG:HB2	2.14	0.47
8:2I:102:SER:O	8:2I:106:GLY:HA2	2.15	0.47
11:2P:38:GLN:C	11:2P:40:SER:H	2.21	0.47
26:24:58:ARG:O	26:24:61:ARG:HB2	2.15	0.47
28:26:34:LEU:H	28:26:51:GLU:HB3	1.80	0.47
32:2a:971:G:H1	32:2a:1363(A):A:H5'	1.79	0.47
32:2a:987:G:H2'	32:2a:988:G:H8	1.79	0.47
38:2g:68:ASN:ND2	38:2g:128:ALA:HA	2.25	0.47
50:2s:51:VAL:O	50:2s:57:HIS:HA	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:13:C:O2'	54:2w:14:A:H5"	2.15	0.47
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.48	0.47
1:1A:2139:C:H42	1:1A:2152:G:H1	1.63	0.47
4:1E:28:ALA:HB3	4:1E:93:VAL:CG1	2.44	0.47
15:1T:31:SER:OG	15:1T:44:ASP:OD1	2.30	0.47
35:1d:122:ARG:HD2	35:1d:122:ARG:HA	1.59	0.47
48:1q:27:PHE:CE1	48:1q:36:ILE:HD11	2.49	0.47
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.50	0.47
4:2E:48:GLN:NE2	4:2E:78:LEU:HD13	2.30	0.47
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.97	0.47
6:2G:69:ALA:HB3	6:2G:91:ARG:NH2	2.30	0.47
21:2Z:31:ARG:HG3	21:2Z:32:HIS:CD2	2.50	0.47
32:2a:601:C:H2'	32:2a:602:A:H8	1.80	0.47
32:2a:662:G:H2'	32:2a:663:A:H8	1.77	0.47
32:2a:792:A:H4'	32:2a:793:U:H5"	1.95	0.47
32:2a:858:G:O6	32:2a:869:G:H3'	2.15	0.47
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.50	0.47
32:2a:1068:G:N2	32:2a:1191:A:N3	2.59	0.47
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.50	0.47
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.30	0.47
46:2o:29:VAL:HG13	46:2o:63:ARG:HG3	1.96	0.47
53:2v:19:A:N7	54:2w:37:T6A:H152	2.29	0.47
54:2w:23:A:H3'	54:2w:24:G:H8	1.77	0.47
54:2w:51:A:N1	54:2w:63:U:C4	2.81	0.47
54:2w:63:U:C2	54:2w:64:G:N7	2.83	0.47
1:1A:252:G:P	11:1P:50:ARG:HH12	2.38	0.46
1:1A:295:G:O5'	20:1Y:1:MET:HE3	2.16	0.46
1:1A:305:U:H2'	1:1A:306:U:C6	2.49	0.46
1:1A:1025:G:O2'	62:1A:4135:HOH:O	2.14	0.46
1:1A:1027:A:N3	62:1A:4286:HOH:O	2.36	0.46
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.47	0.46
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.50	0.46
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	1.97	0.46
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.96	0.46
21:1Z:40:ASP:OD2	21:1Z:42:VAL:HG13	2.15	0.46
29:17:31:LEU:HD22	29:17:42:LEU:HB3	1.96	0.46
32:1a:413:G:N2	32:1a:428:G:H1'	2.30	0.46
32:1a:474:G:H5'	32:1a:475:G:OP2	2.15	0.46
32:1a:865:A:C2	32:1a:918:A:H4'	2.49	0.46
32:1a:1260:C:O5'	32:1a:1284:C:H4'	2.15	0.46
32:1a:1325:C:H2'	32:1a:1326:C:H6	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:86:C:H4'	1:2A:104:U:H1'	1.96	0.46
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.51	0.46
1:2A:1913:A:H61	32:2a:1493:A:H2'	1.79	0.46
1:2A:2130:U:H2'	1:2A:2158:A:N6	2.30	0.46
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.80	0.46
4:2E:4:ILE:HG22	4:2E:198:VAL:HB	1.97	0.46
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.15	0.46
6:2G:37:VAL:HG21	6:2G:103:LEU:HD21	1.96	0.46
6:2G:123:ASN:C	6:2G:125:PHE:H	2.23	0.46
28:26:13:CYS:O	28:26:17:LYS:N	2.45	0.46
32:2a:224:C:H2'	32:2a:225:C:C6	2.49	0.46
32:2a:390:C:H4'	47:2p:28:ARG:HH21	1.80	0.46
32:2a:552:U:H5'	43:2l:86:ARG:HE	1.78	0.46
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.50	0.46
34:2c:22:TRP:HZ3	34:2c:24:ALA:HB2	1.79	0.46
39:2h:9:MET:HB2	39:2h:32:LYS:HZ3	1.81	0.46
54:2w:63:U:H2'	54:2w:64:G:H5'	1.96	0.46
1:1A:488:G:O2'	18:1W:49:LYS:NZ	2.33	0.46
1:1A:604:G:OP2	11:1P:90:ARG:NH2	2.48	0.46
1:1A:657:U:H2'	1:1A:658:C:H6	1.80	0.46
1:1A:786:C:H5"	1:1A:1780:A:N7	2.30	0.46
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.50	0.46
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.97	0.46
2:1B:88:C:H2'	2:1B:89:G:O4'	2.15	0.46
7:1H:105:LEU:HD23	7:1H:105:LEU:HA	1.78	0.46
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.95	0.46
21:1Z:52:SER:O	21:1Z:52:SER:OG	2.30	0.46
32:1a:472:A:H5"	47:1p:80:PHE:HB3	1.97	0.46
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.49	0.46
41:1j:38:ILE:CG1	41:1j:71:LEU:HB3	2.45	0.46
1:2A:74:A:H4'	1:2A:75:G:O5'	2.15	0.46
1:2A:981:A:N1	1:2A:2027:G:O2'	2.43	0.46
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.64	0.46
1:2A:1805:U:O2	3:2D:50:THR:HB	2.15	0.46
3:2D:2:ALA:N	3:2D:200:ASP:OD2	2.48	0.46
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.98	0.46
23:21:56:GLN:OE1	23:21:87:PRO:HG3	2.15	0.46
32:2a:442:C:H42	32:2a:492:G:H1	1.63	0.46
32:2a:577:G:H2'	32:2a:578:C:H6	1.80	0.46
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.47	0.46
32:2a:1260:C:P	32:2a:1284:C:H4'	2.55	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.97	0.46
35:2d:180:GLY:O	35:2d:182:LYS:HG3	2.14	0.46
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.14	0.46
55:2x:9:G:N2	55:2x:46:G:OP2	2.48	0.46
55:2x:23:C:H2'	55:2x:24:U:H6	1.80	0.46
1:1A:668:G:H5'	1:1A:669:G:OP2	2.15	0.46
1:1A:1227:G:OP1	16:1U:13:LYS:NZ	2.48	0.46
1:1A:1426:G:O2'	1:1A:1572:A:N6	2.48	0.46
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.50	0.46
1:1A:2336:A:H61	22:10:43:THR:CG2	2.28	0.46
5:1F:126:VAL:HG21	5:1F:129:PHE:CZ	2.50	0.46
24:12:41:ILE:HD12	24:12:43:GLN:HG3	1.97	0.46
32:1a:250:A:H4'	32:1a:251:G:O5'	2.14	0.46
32:1a:539:A:H2'	32:1a:540:G:H8	1.80	0.46
32:1a:1007:C:N3	32:1a:1022:G:O6	2.47	0.46
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.80	0.46
32:1a:1320:C:H2'	32:1a:1321:C:O4'	2.15	0.46
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.50	0.46
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.48	0.46
54:1w:5:C:H2'	54:1w:6:G:C8	2.50	0.46
57:1y:51:A:C6	57:1y:52:G:C6	3.02	0.46
1:2A:409:C:H2'	1:2A:410:G:C8	2.50	0.46
1:2A:584:C:OP2	16:2U:6:THR:OG1	2.28	0.46
1:2A:1287:A:C5	1:2A:1288:U:C4	3.03	0.46
1:2A:1449:A:N6	1:2A:1450:G:N3	2.63	0.46
8:2I:140:LEU:O	8:2I:142:VAL:HG23	2.15	0.46
9:2N:96:GLU:H	9:2N:96:GLU:CD	2.22	0.46
11:2P:98:GLU:OE2	11:2P:102:ARG:NH1	2.49	0.46
32:2a:390:C:H2'	32:2a:391:G:C8	2.49	0.46
32:2a:768:A:OP2	62:2a:1914:HOH:O	2.20	0.46
32:2a:1203:C:H2'	32:2a:1204:A:C8	2.48	0.46
34:2c:6:HIS:HD2	34:2c:7:PRO:HD2	1.81	0.46
41:2j:49:VAL:O	41:2j:60:ARG:HA	2.15	0.46
49:2r:36:ASN:O	49:2r:40:LEU:HG	2.15	0.46
51:2t:29:LYS:O	51:2t:33:ILE:HD12	2.16	0.46
1:1A:27:G:N2	1:1A:512:G:H1'	2.30	0.46
1:1A:303:U:O4	62:1A:4159:HOH:O	2.20	0.46
1:1A:359:A:H2'	1:1A:360:G:O4'	2.15	0.46
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.50	0.46
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.15	0.46
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:127:ALA:C	15:1T:129:ARG:N	2.72	0.46
32:1a:78:G:H8	32:1a:78:G:OP2	1.97	0.46
32:1a:447:G:O6	32:1a:485:G:O2'	2.32	0.46
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.15	0.46
32:1a:1240:U:O2'	38:1g:32:ARG:NH1	2.49	0.46
32:1a:1457:G:H2'	32:1a:1458:G:C8	2.50	0.46
32:1a:1479:C:H2'	32:1a:1480:G:C8	2.50	0.46
33:1b:185:ILE:O	33:1b:185:ILE:HG12	2.15	0.46
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.97	0.46
41:1j:47:PHE:HB2	41:1j:63:PHE:HB2	1.98	0.46
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	1.98	0.46
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.16	0.46
1:2A:27:G:N2	1:2A:512:G:H1'	2.30	0.46
1:2A:108:U:H2'	1:2A:109:G:C8	2.51	0.46
1:2A:272(E):G:C2	1:2A:364:C:C2	3.03	0.46
1:2A:311:A:C6	1:2A:328:U:C4	3.04	0.46
1:2A:1186:G:H2'	1:2A:1187:G:O4'	2.15	0.46
2:2B:5:C:H42	2:2B:116:G:H1	1.62	0.46
4:2E:19:ARG:HB3	4:2E:19:ARG:HH11	1.81	0.46
5:2F:47:GLY:HA3	5:2F:95:ARG:O	2.15	0.46
14:2S:105:ALA:O	14:2S:110:LEU:HB2	2.15	0.46
32:2a:691:G:H2'	32:2a:692:U:C6	2.50	0.46
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.50	0.46
32:2a:1148:U:H5'	40:2i:16:ARG:HD2	1.97	0.46
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.51	0.46
32:2a:1373:G:H5"	38:2g:36:LYS:HB2	1.96	0.46
34:2c:111:LEU:HD21	34:2c:144:SER:O	2.16	0.46
45:2n:34:TYR:O	45:2n:38:GLY:N	2.47	0.46
55:2x:3:C:H42	55:2x:70:G:H1	1.63	0.46
1:1A:265:A:N1	1:1A:427:U:O2'	2.43	0.46
1:1A:839:U:H1'	1:1A:1191:G:H1'	1.98	0.46
1:1A:875:G:H2'	1:1A:876:C:O4'	2.15	0.46
1:1A:2134:A:N7	1:1A:2156:G:O2'	2.48	0.46
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.50	0.46
13:1R:87:TYR:OH	13:1R:116:LEU:HB3	2.16	0.46
14:1S:61:ASN:HB3	14:1S:64:GLU:HB2	1.98	0.46
32:1a:381:C:H2'	32:1a:382:A:O4'	2.15	0.46
50:1s:53:ASN:HB2	50:1s:77:THR:HA	1.98	0.46
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.81	0.46
1:2A:2684:U:OP1	15:2T:53:ARG:HD3	2.15	0.46
4:2E:27:LEU:HD22	15:2T:1:MET:SD	2.56	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:8:GLN:HA	5:2F:20:LEU:O	2.15	0.46
10:2O:63:VAL:HG11	10:2O:85:VAL:HG23	1.97	0.46
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.96	0.46
32:2a:1380:U:C4	38:2g:3:ARG:HG2	2.50	0.46
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.15	0.46
54:2w:21:A:N6	54:2w:46:G7M:O2'	2.49	0.46
1:1A:247:G:H4'	1:1A:386:G:C5	2.50	0.46
1:1A:411:G:H3'	62:1A:4416:HOH:O	2.15	0.46
1:1A:570:G:H2'	1:1A:2030:A:N7	2.31	0.46
1:1A:657:U:H2'	1:1A:658:C:C6	2.51	0.46
32:1a:266:G:H2'	32:1a:266:G:N3	2.30	0.46
32:1a:539:A:H2'	32:1a:540:G:C8	2.51	0.46
32:1a:683:G:H2'	32:1a:684:A:C8	2.51	0.46
57:1y:55:PSU:N3	57:1y:57:G:H5'	2.30	0.46
1:2A:699:A:H2'	1:2A:700:G:O4'	2.16	0.46
1:2A:1754:C:H5	15:2T:96:ARG:NH2	2.14	0.46
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.51	0.46
2:2B:7:G:H2'	2:2B:8:U:O4'	2.16	0.46
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.97	0.46
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.50	0.46
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.34	0.46
11:2P:90:ARG:H	11:2P:90:ARG:HG3	1.45	0.46
33:2b:195:ASP:OD1	33:2b:195:ASP:N	2.47	0.46
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.51	0.46
41:2j:47:PHE:N	41:2j:63:PHE:O	2.30	0.46
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.15	0.46
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.51	0.46
1:1A:2189:U:H2'	1:1A:2190:G:C8	2.51	0.46
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	1.97	0.46
18:1W:7:ALA:HB2	18:1W:50:VAL:HG22	1.98	0.46
20:1Y:68:HIS:ND1	20:1Y:70:SER:HB2	2.31	0.46
23:11:19:GLN:O	23:11:35:THR:HG22	2.16	0.46
26:14:15:ILE:HD12	26:14:32:TYR:CE1	2.51	0.46
32:1a:358:U:H2'	32:1a:359:U:C6	2.49	0.46
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.31	0.46
32:1a:1308:U:H2'	32:1a:1309:G:C8	2.51	0.46
1:2A:127:A:H5"	1:2A:128:C:C6	2.51	0.46
1:2A:1503:U:H2'	1:2A:1504:C:C6	2.51	0.46
1:2A:2332:U:O2'	1:2A:2335:A:N3	2.46	0.46
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.49	0.46
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:116:ASP:O	5:2F:120:GLU:HG2	2.16	0.46
9:2N:120:LEU:HD12	9:2N:120:LEU:HA	1.81	0.46
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.31	0.46
13:2R:9:LYS:O	13:2R:17:ARG:HD3	2.15	0.46
17:2V:7:THR:HB	17:2V:35:LEU:HD22	1.98	0.46
32:2a:937:A:OP2	62:2a:1915:HOH:O	2.21	0.46
32:2a:994:A:C5	32:2a:1216:G:H4'	2.51	0.46
33:2b:150:SER:OG	33:2b:151:GLY:N	2.49	0.46
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.42	0.46
34:2c:156:ARG:NH2	34:2c:161:GLU:HA	2.15	0.46
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.51	0.46
55:2x:64:G:H2'	55:2x:65:C:H6	1.80	0.46
1:1A:484:C:H2'	1:1A:485:C:C6	2.51	0.46
1:1A:586:A:N1	1:1A:809:G:O2'	2.43	0.46
1:1A:1936:A:OP1	1:1A:1937:A:H5'	2.16	0.46
1:1A:2106:G:H2'	1:1A:2107:C:O4'	2.15	0.46
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.15	0.46
15:1T:7:ILE:HG22	15:1T:11:GLU:OE1	2.15	0.46
25:13:5:LYS:HZ2	25:13:55:ARG:HH12	1.63	0.46
32:1a:330:C:O2	62:1a:4815:HOH:O	2.20	0.46
32:1a:1004:A:H5'	32:1a:1024:G:H22	1.81	0.46
32:1a:1310:G:OP2	44:1m:88:ARG:NH2	2.47	0.46
32:1a:1316:G:N2	32:1a:1318:A:H3'	2.31	0.46
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.51	0.46
41:1j:61:GLU:OE2	45:1n:49:HIS:NE2	2.46	0.46
1:2A:35:G:H1'	1:2A:454:A:C4	2.51	0.46
1:2A:171:G:H2'	1:2A:172:C:C6	2.50	0.46
1:2A:774:A:H2'	1:2A:774:A:N3	2.30	0.46
1:2A:908:C:OP1	12:2Q:22:LYS:HB2	2.16	0.46
1:2A:1655:A:N6	1:2A:2005:A:O2'	2.49	0.46
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.81	0.46
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.54	0.46
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.97	0.46
8:2I:26:ALA:O	8:2I:31:LEU:HB2	2.16	0.46
8:2I:88:ILE:HD12	8:2I:120:ILE:O	2.16	0.46
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.98	0.46
32:2a:520:A:OP1	43:2l:52:LEU:HB2	2.15	0.46
32:2a:629:G:H2'	32:2a:630:G:O4'	2.16	0.46
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.15	0.46
34:2c:112:SER:OG	34:2c:115:LEU:HB2	2.15	0.46
37:2f:10:LEU:HD11	37:2f:26:ILE:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:78:ARG:HG3	38:2g:156:TRP:CZ3	2.50	0.46
45:2n:23:ARG:HH12	45:2n:30:ALA:HB2	1.80	0.46
57:2y:7:U:O4	57:2y:65:C:N4	2.48	0.46
1:1A:620:G:N3	1:1A:620:G:H5'	2.31	0.46
1:1A:1058:G:N2	1:1A:1081:U:O2	2.49	0.46
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.16	0.46
1:1A:2319:G:H22	14:1S:3:ARG:CZ	2.29	0.46
1:1A:2390:U:P	30:18:35:GLN:HE22	2.39	0.46
3:1D:106:ILE:O	3:1D:108:PRO:HD3	2.16	0.46
32:1a:17:U:H2'	32:1a:18:C:C6	2.51	0.46
32:1a:279:A:N6	48:1q:98:LEU:O	2.48	0.46
32:1a:509:A:O2'	32:1a:510:A:OP1	2.32	0.46
32:1a:1276:G:H2'	32:1a:1277:C:O4'	2.16	0.46
37:1f:99:ALA:HB3	49:1r:29:PHE:CE1	2.51	0.46
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.16	0.46
57:1y:72:C:H2'	57:1y:73:A:C8	2.51	0.46
9:2N:40:PRO:HB3	16:2U:68:ALA:HB2	1.98	0.46
10:2O:7:TYR:CE2	10:2O:20:MET:HB2	2.51	0.46
11:2P:14:LYS:HG2	11:2P:15:ARG:H	1.81	0.46
11:2P:70:GLN:HE21	11:2P:70:GLN:H	1.62	0.46
11:2P:90:ARG:HD2	11:2P:91:PHE:CE2	2.50	0.46
32:2a:1127:G:N2	32:2a:1147:C:H41	2.14	0.46
32:2a:1310:G:H2'	32:2a:1311:G:O4'	2.16	0.46
47:2p:27:LYS:HG3	47:2p:30:GLY:HA3	1.98	0.46
1:1A:870:A:H2'	1:1A:871:U:O4'	2.16	0.46
1:1A:1058:G:N1	1:1A:1080:C:N4	2.62	0.46
1:1A:1779:U:OP2	62:1A:4165:HOH:O	2.21	0.46
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.16	0.46
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.81	0.46
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.98	0.46
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.15	0.46
22:10:46:LYS:HB2	22:10:78:TYR:CE1	2.51	0.46
32:1a:293:G:H5'	32:1a:610:G:C2	2.50	0.46
32:1a:1069:C:O2'	32:1a:1192:C:H1'	2.16	0.46
32:1a:1085:U:H5"	32:1a:1086:U:H5	1.81	0.46
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.31	0.46
33:1b:28:PHE:CD1	33:1b:190:THR:HA	2.51	0.46
34:1c:114:PRO:O	34:1c:118:GLN:NE2	2.49	0.46
43:1l:8:ASN:O	43:1l:12:ARG:HG3	2.15	0.46
1:2A:74:A:H5'	24:22:55:ARG:HH12	1.80	0.46
1:2A:118:A:C8	1:2A:119:A:C8	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:400:G:O6	62:2A:3953:HOH:O	2.18	0.46
1:2A:700:G:H2'	1:2A:701:G:O4'	2.16	0.46
1:2A:995:C:O2	9:2N:3:THR:OG1	2.27	0.46
1:2A:1463:C:H2'	1:2A:1464:C:C6	2.51	0.46
1:2A:1882:C:H2'	1:2A:1883:G:O4'	2.16	0.46
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.51	0.46
1:2A:2206:G:H5"	1:2A:2207:G:N7	2.30	0.46
17:2V:62:LEU:HD21	17:2V:95:LEU:HB2	1.97	0.46
19:2X:14:SER:C	19:2X:16:LYS:H	2.22	0.46
22:20:36:ILE:HD13	22:20:60:PHE:HB3	1.98	0.46
22:20:66:VAL:O	22:20:81:VAL:HA	2.16	0.46
30:28:26:LYS:HB2	30:28:44:LYS:O	2.15	0.46
32:2a:5:U:H5'	32:2a:6:G:C5	2.51	0.46
32:2a:70:G:H1	32:2a:99:U:H3	1.64	0.46
32:2a:989:C:H1'	32:2a:1016:A:H2	1.80	0.46
32:2a:1123:A:N3	41:2j:39:PRO:HD2	2.31	0.46
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.51	0.46
42:2k:84:VAL:HG21	42:2k:95:ILE:HD11	1.97	0.46
43:2l:28:LYS:HG3	43:2l:62:SER:HB2	1.98	0.46
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.16	0.45
2:1B:84:C:OP1	25:13:15:TYR:OH	2.28	0.45
6:1G:161:THR:HG21	6:1G:172:LEU:HD23	1.96	0.45
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.61	0.45
15:1T:73:GLU:OE2	15:1T:103:ARG:NE	2.45	0.45
16:1U:16:LYS:HE2	16:1U:16:LYS:HB3	1.65	0.45
23:11:8:SER:OG	23:11:10:LYS:HG3	2.16	0.45
32:1a:190:U:H2'	32:1a:191:G:H8	1.81	0.45
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.16	0.45
32:1a:551:U:H2'	32:1a:552:U:C6	2.51	0.45
32:1a:998:G:H1	32:1a:1043:C:H42	1.62	0.45
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.16	0.45
33:1b:163:PHE:HA	33:1b:185:ILE:HG12	1.96	0.45
34:1c:52:LEU:HD21	34:1c:55:VAL:HG23	1.98	0.45
51:1t:11:SER:O	51:1t:11:SER:OG	2.32	0.45
57:1y:3:G:N2	57:1y:71:C:H1'	2.30	0.45
1:2A:208:C:H2'	1:2A:209:C:C6	2.52	0.45
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.15	0.45
1:2A:1359:A:H2'	1:2A:1360:A:H5'	1.98	0.45
1:2A:1876:A:H2'	1:2A:1877:A:C8	2.51	0.45
16:2U:10:ARG:NH2	62:2U:301:HOH:O	2.49	0.45
30:28:34:TRP:CG	30:28:35:GLN:N	2.84	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:14:VAL:O	42:2k:77:MET:HA	2.16	0.45
55:2x:16:C:H4'	55:2x:60:U:H1'	1.99	0.45
1:1A:880:G:H1	1:1A:898:C:H42	1.64	0.45
1:1A:973:A:H5'	1:1A:1188:U:H1'	1.98	0.45
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.50	0.45
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	1.98	0.45
12:1Q:82:ARG:NH2	22:10:4:LYS:HG3	2.32	0.45
32:1a:540:G:H2'	32:1a:541:G:O4'	2.15	0.45
32:1a:1095:U:P	32:1a:1108:G:H1	2.39	0.45
32:1a:1236:A:OP1	52:1u:2:GLY:HA3	2.16	0.45
43:1l:42:THR:HA	43:1l:53:ARG:O	2.16	0.45
44:1m:105:THR:HG22	44:1m:106:ASN:H	1.80	0.45
57:1y:2:G:H2'	57:1y:3:G:H8	1.80	0.45
1:2A:851:U:O2'	25:23:42:ALA:O	2.30	0.45
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.51	0.45
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.78	0.45
1:2A:2125:G:N3	1:2A:2173:A:N6	2.64	0.45
13:2R:33:ARG:HA	13:2R:114:VAL:O	2.16	0.45
17:2V:1:MET:HB3	17:2V:99:ILE:HD12	1.97	0.45
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.81	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.55	0.45
20:2Y:52:SER:OG	20:2Y:55:TYR:HB2	2.15	0.45
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.28	0.45
32:2a:304:U:H2'	32:2a:305:G:C8	2.51	0.45
32:2a:407:G:O4'	35:2d:119:GLN:NE2	2.50	0.45
32:2a:1111:A:N1	34:2c:177:THR:OG1	2.41	0.45
32:2a:1134:G:N1	32:2a:1135:U:H1'	2.30	0.45
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.15	0.45
40:2i:128:ARG:NH2	55:2x:32:5MC:H3'	2.32	0.45
41:2j:53:PRO:HA	45:2n:41:ARG:HH12	1.81	0.45
43:2l:58:VAL:N	43:2l:66:VAL:O	2.49	0.45
1:1A:330:A:N7	1:1A:1210:A:O2'	2.33	0.45
1:1A:593:G:H4'	30:18:4:MET:HE2	1.97	0.45
1:1A:2136:C:C4	1:1A:2155:G:N1	2.84	0.45
1:1A:2165:G:N1	1:1A:2171:A:H8	2.15	0.45
11:1P:121:LYS:HB3	11:1P:121:LYS:HE2	1.81	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.63	0.45
25:13:5:LYS:NZ	25:13:34:GLU:OE1	2.49	0.45
32:1a:448:A:OP2	32:1a:485:G:N1	2.45	0.45
55:1x:68:C:H2'	55:1x:69:C:C6	2.51	0.45
1:2A:868:U:O2'	12:2Q:8:LYS:HE3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.15	0.45
1:2A:2286:A:H2	28:26:25:LYS:HA	1.80	0.45
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.52	0.45
1:2A:2370:G:C6	1:2A:2371:G:C6	3.04	0.45
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.36	0.45
9:2N:123:TYR:CZ	9:2N:129:PRO:HD2	2.51	0.45
13:2R:72:ASP:HB3	13:2R:75:LEU:HB3	1.98	0.45
19:2X:1:MET:N	24:22:29:LYS:HE3	2.31	0.45
32:2a:110:C:H2'	32:2a:111:G:O4'	2.15	0.45
32:2a:792:A:H4'	32:2a:793:U:C5'	2.46	0.45
32:2a:1107:C:C4	32:2a:1108:G:C8	3.04	0.45
32:2a:1263:C:H3'	32:2a:1263:C:H6	1.82	0.45
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.98	0.45
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.98	0.45
42:2k:79:SER:HA	42:2k:104:GLN:HB3	1.98	0.45
49:2r:26:LEU:HD22	49:2r:29:PHE:HD2	1.82	0.45
55:2x:9:G:H21	55:2x:46:G:P	2.40	0.45
57:2y:10:G:N2	57:2y:26:A:H1'	2.31	0.45
1:1A:263:C:H2'	1:1A:264:C:O4'	2.17	0.45
5:1F:155:LEU:HD11	5:1F:176:LEU:HD12	1.99	0.45
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.99	0.45
10:1O:86:ILE:HG22	10:1O:94:ARG:HD3	1.97	0.45
32:1a:524:G:H2'	32:1a:525:C:C6	2.51	0.45
32:1a:576:G:OP2	62:1a:4816:HOH:O	2.21	0.45
32:1a:688:G:H5'	42:1k:46:GLY:C	2.41	0.45
32:1a:938:A:C6	32:1a:939:G:C5	3.04	0.45
1:2A:1123:C:H1'	31:29:18:ARG:HH22	1.82	0.45
1:2A:1224:C:O2'	17:2V:85:LYS:HA	2.16	0.45
1:2A:2647:U:H2'	1:2A:2648:C:C6	2.52	0.45
3:2D:16:MET:HG3	3:2D:206:LEU:O	2.17	0.45
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.81	0.45
12:2Q:38:GLU:OE2	12:2Q:128:LYS:HG3	2.17	0.45
14:2S:38:GLN:HB3	14:2S:40:ILE:HD11	1.97	0.45
15:2T:64:ARG:HH11	15:2T:73:GLU:HG3	1.81	0.45
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.51	0.45
31:29:2:LYS:HB2	31:29:34:GLN:HG2	1.99	0.45
32:2a:513:C:H2'	32:2a:514:C:C6	2.52	0.45
32:2a:1184:G:H2'	32:2a:1185:G:C8	2.52	0.45
33:2b:44:LEU:H	33:2b:44:LEU:HD12	1.81	0.45
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.99	0.45
39:2h:116:LYS:HE2	39:2h:127:LEU:HD12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:9:ARG:O	41:2j:16:LEU:HD21	2.17	0.45
42:2k:86:GLY:H	42:2k:112:THR:HG1	1.63	0.45
57:2y:10:G:N2	57:2y:25:C:N3	2.58	0.45
57:2y:55:PSU:N3	57:2y:57:G:H5'	2.31	0.45
1:1A:1441:G:H2'	1:1A:1442:G:H8	1.82	0.45
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.31	0.45
1:1A:2819:G:OP1	62:1A:4164:HOH:O	2.21	0.45
5:1F:64:ILE:HG21	5:1F:78:ILE:HG23	1.98	0.45
9:1N:61:ARG:HD3	9:1N:61:ARG:HA	1.84	0.45
32:1a:244:U:O2	62:1a:4810:HOH:O	2.19	0.45
32:1a:756:C:H2'	32:1a:757:U:O4'	2.17	0.45
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.63	0.45
33:1b:131:PRO:HB2	33:1b:134:GLU:H	1.81	0.45
33:1b:187:LEU:HD12	33:1b:201:ILE:O	2.17	0.45
37:1f:2:ARG:HB2	37:1f:4:TYR:CZ	2.51	0.45
37:1f:76:ALA:O	37:1f:80:ARG:HG3	2.16	0.45
39:1h:81:HIS:N	39:1h:138:TRP:O	2.48	0.45
50:1s:20:LEU:HD21	50:1s:43:GLU:HG2	1.98	0.45
1:2A:103:A:H5'	24:22:3:LEU:HD21	1.98	0.45
1:2A:265:A:H1'	1:2A:266:G:O4'	2.16	0.45
1:2A:797:C:H2'	1:2A:798:G:O4'	2.17	0.45
1:2A:870:A:OP1	12:2Q:6:ARG:NE	2.49	0.45
1:2A:897:C:H2'	1:2A:898:C:O4'	2.17	0.45
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.32	0.45
1:2A:1800:C:OP1	3:2D:260:ARG:NH2	2.49	0.45
1:2A:2109:U:H2'	1:2A:2110:G:H5'	1.98	0.45
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.15	0.45
1:2A:2807:G:H1	1:2A:2892:A:H62	1.64	0.45
2:2B:115:G:O2'	14:2S:50:SER:HB2	2.16	0.45
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.97	0.45
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.99	0.45
32:2a:7:G:O2'	36:2e:120:THR:O	2.35	0.45
32:2a:194:C:H2'	32:2a:195:A:H5"	1.99	0.45
32:2a:670:G:H2'	32:2a:671:G:O4'	2.17	0.45
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.52	0.45
51:2t:53:LEU:HD11	51:2t:98:PRO:HB2	1.99	0.45
54:2w:5:C:H2'	54:2w:6:G:C8	2.51	0.45
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.16	0.45
1:1A:2207:G:H4'	1:1A:2208:A:OP2	2.17	0.45
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.17	0.45
2:1B:11:C:H3'	2:1B:12:C:C6	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:138:LEU:C	11:1P:140:ALA:H	2.25	0.45
21:1Z:5:LEU:O	21:1Z:59:LEU:HA	2.17	0.45
32:1a:138:G:H2'	32:1a:139:G:C8	2.52	0.45
32:1a:392:G:H2'	32:1a:393:A:H8	1.81	0.45
32:1a:642:A:N3	39:1h:113:SER:OG	2.37	0.45
32:1a:743:U:H2'	32:1a:744:C:C6	2.52	0.45
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.81	0.45
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.49	0.45
41:1j:78:ASN:O	41:1j:80:LYS:N	2.50	0.45
49:1r:76:LEU:HD13	49:1r:76:LEU:HA	1.79	0.45
57:1y:19:G:N2	57:1y:56:C:N3	2.65	0.45
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.31	0.45
1:2A:2055:C:N3	62:2A:4072:HOH:O	2.36	0.45
1:2A:2391:G:O6	1:2A:2425:A:H8	2.00	0.45
1:2A:2689:U:P	1:2A:2719:G:H22	2.40	0.45
2:2B:40:U:H1'	2:2B:45:A:H61	1.81	0.45
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.99	0.45
5:2F:137:LYS:HB3	5:2F:137:LYS:HE2	1.47	0.45
6:2G:16:ARG:O	6:2G:20:ILE:HB	2.16	0.45
8:2I:88:ILE:HG13	8:2I:123:LEU:HB2	1.99	0.45
11:2P:70:GLN:O	11:2P:73:GLY:N	2.43	0.45
19:2X:31:HIS:CD2	19:2X:33:LYS:HB2	2.51	0.45
32:2a:505:G:H2'	32:2a:506:G:C8	2.49	0.45
32:2a:516:PSU:O2'	32:2a:519:C:N3	2.49	0.45
32:2a:984:C:H2'	32:2a:985:C:C6	2.50	0.45
32:2a:1099:G:H2'	32:2a:1100:C:O4'	2.16	0.45
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.47	0.45
39:2h:109:ILE:HD11	39:2h:111:ILE:HG13	1.99	0.45
48:2q:24:GLU:HA	48:2q:39:SER:HA	1.99	0.45
54:2w:7:U:H3'	54:2w:8:U:H5'	1.98	0.45
1:1A:278:A:H2'	1:1A:279:C:C6	2.51	0.45
1:1A:685:A:OP1	1:1A:686:G:N2	2.49	0.45
1:1A:1045:A:H8	1:1A:1111:A:N6	2.15	0.45
1:1A:1103:A:H2'	1:1A:1104:C:O4'	2.17	0.45
1:1A:1569:A:O4'	3:1D:59:LYS:NZ	2.45	0.45
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.77	0.45
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.35	0.45
7:1H:105:LEU:N	7:1H:113:VAL:O	2.41	0.45
8:1I:86:THR:O	8:1I:123:LEU:HB2	2.16	0.45
32:1a:880:C:OP2	43:1l:6:THR:OG1	2.32	0.45
32:1a:1289:A:N1	32:1a:1371:G:O2'	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.52	0.45
35:1d:3:ARG:HH11	35:1d:118:ARG:NH1	2.14	0.45
35:1d:149:ALA:O	35:1d:153:ARG:N	2.49	0.45
46:1o:8:LYS:HE3	46:1o:31:LEU:HD22	1.99	0.45
46:1o:18:PHE:CZ	46:1o:21:ASP:HB2	2.52	0.45
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.52	0.45
1:2A:576:U:O4	62:2A:3963:HOH:O	2.20	0.45
1:2A:740:U:H2'	1:2A:741:G:C8	2.52	0.45
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.12	0.45
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.35	0.45
1:2A:2755:C:OP1	62:2A:3967:HOH:O	2.20	0.45
8:2I:104:GLN:HG2	8:2I:105:HIS:ND1	2.32	0.45
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.39	0.45
17:2V:18:LEU:HD12	17:2V:19:LYS:H	1.82	0.45
23:21:50:ARG:HD2	23:21:57:GLU:OE2	2.16	0.45
32:2a:625:G:OP1	47:2p:9:PHE:HB3	2.17	0.45
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.17	0.45
32:2a:997:U:H3	32:2a:1044:A:N6	2.15	0.45
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.52	0.45
46:2o:87:ILE:O	46:2o:88:ARG:HB3	2.16	0.45
48:2q:7:THR:O	48:2q:23:VAL:HG13	2.17	0.45
55:2x:21:A:H61	55:2x:46:G:H2'	1.81	0.45
1:1A:414:C:H2'	1:1A:415:A:H8	1.79	0.45
1:1A:581:C:H2'	1:1A:582:G:C8	2.51	0.45
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.82	0.45
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.52	0.45
1:1A:2066:C:H5"	62:1A:5334:HOH:O	2.17	0.45
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.82	0.45
17:1V:24:LYS:HE2	17:1V:24:LYS:HB3	1.82	0.45
26:14:61:ARG:HD3	50:1s:67:VAL:HG12	1.98	0.45
32:1a:1212:U:H5"	32:1a:1213:A:O5'	2.16	0.45
32:1a:1372:U:H2'	32:1a:1373:G:O4'	2.17	0.45
33:1b:171:ALA:HA	33:1b:174:VAL:HB	1.99	0.45
34:1c:134:ILE:O	34:1c:138:VAL:HG23	2.16	0.45
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.37	0.45
48:1q:87:LYS:HD3	48:1q:87:LYS:HA	1.82	0.45
57:1y:37:T6A:H2'	57:1y:38:A:C8	2.52	0.45
1:2A:500:G:N1	1:2A:503:A:OP2	2.50	0.45
1:2A:839:U:H2'	1:2A:840:C:C6	2.51	0.45
1:2A:1449:A:N6	1:2A:1450:G:C2	2.84	0.45
5:2F:78:ILE:HA	5:2F:83:PHE:CD2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:7:LEU:HB3	7:2H:69:ARG:NH2	2.32	0.45
8:2I:26:ALA:HB1	8:2I:31:LEU:HD13	1.99	0.45
9:2N:55:VAL:HB	9:2N:125:GLY:O	2.17	0.45
19:2X:26:TYR:O	19:2X:81:VAL:HG23	2.16	0.45
24:22:35:LEU:HD13	24:22:44:LEU:HD21	1.97	0.45
32:2a:296:U:O2'	32:2a:556:C:O2	2.32	0.45
32:2a:473:G:C2	32:2a:474:G:C5	3.05	0.45
32:2a:603:U:H2'	32:2a:604:G:H8	1.82	0.45
32:2a:840:C:H4'	32:2a:841:U:OP1	2.16	0.45
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.81	0.45
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.99	0.45
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.82	0.45
33:2b:131:PRO:O	33:2b:135:GLN:HG3	2.17	0.45
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.82	0.45
34:2c:39:ILE:HG22	34:2c:43:LEU:HG	1.98	0.45
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.82	0.45
48:2q:81:ARG:NH2	48:2q:83:ASP:OD2	2.49	0.45
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.99	0.45
1:1A:837:C:N4	62:1A:4212:HOH:O	2.29	0.45
1:1A:1345:C:H2'	1:1A:1346:G:H8	1.81	0.45
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.24	0.45
1:1A:2033:A:O2'	1:1A:2035:G:OP2	2.32	0.45
1:1A:2827:C:H2'	1:1A:2828:C:C6	2.52	0.45
2:1B:48:A:H4'	14:1S:95:HIS:HD2	1.82	0.45
2:1B:50:G:OP1	14:1S:63:THR:N	2.47	0.45
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.17	0.45
12:1Q:7:MET:HE2	12:1Q:7:MET:HB3	1.64	0.45
13:1R:11:ASN:ND2	62:1R:306:HOH:O	2.50	0.45
23:11:52:ARG:HA	23:11:56:GLN:O	2.17	0.45
32:1a:100:C:H2'	32:1a:101:A:C8	2.51	0.45
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.16	0.45
38:1g:78:ARG:NH1	38:1g:156:TRP:HE3	2.15	0.45
40:1i:34:ASN:HD22	40:1i:34:ASN:N	2.15	0.45
54:1w:76:A1B8A:OP1	62:1w:201:HOH:O	2.21	0.45
57:1y:48:C:N4	57:1y:59:A:O4'	2.50	0.45
1:2A:881:G:C6	1:2A:882:G:H1'	2.52	0.45
1:2A:2412:A:H2'	1:2A:2413:G:O4'	2.17	0.45
1:2A:2507:C:H4'	54:2w:75:C:O2'	2.17	0.45
1:2A:2722:G:H2'	1:2A:2723:C:C6	2.52	0.45
1:2A:2735:G:H2'	1:2A:2736:G:H8	1.81	0.45
1:2A:2786:U:O2'	4:2E:62:PRO:O	2.33	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2823:A:OP1	4:2E:159:HIS:NE2	2.50	0.45
5:2F:32:LEU:HB3	5:2F:112:MET:HE1	1.98	0.45
6:2G:86:MET:H	6:2G:86:MET:HG3	1.55	0.45
22:20:46:LYS:HG2	22:20:77:ARG:O	2.17	0.45
31:29:27:CYS:SG	31:29:28:GLU:N	2.89	0.45
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.82	0.45
36:2e:40:ARG:CZ	36:2e:68:GLU:HA	2.46	0.45
36:2e:84:PHE:O	36:2e:86:ALA:N	2.45	0.45
52:2u:6:ARG:HD3	52:2u:15:ARG:HE	1.81	0.45
1:1A:630:G:N2	1:1A:633:A:OP2	2.43	0.45
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.32	0.45
1:1A:1179:C:H2'	1:1A:1180:C:H6	1.81	0.45
4:1E:70:ALA:HB3	4:1E:72:VAL:HG22	1.99	0.45
6:1G:5:VAL:HG22	6:1G:8:LYS:H	1.82	0.45
15:1T:84:GLN:CG	15:1T:85:LYS:HG3	2.43	0.45
21:1Z:150:LEU:HD12	21:1Z:154:ASP:HB2	1.99	0.45
21:1Z:158:PRO:O	21:1Z:161:VAL:HG22	2.16	0.45
32:1a:161:A:H2'	32:1a:162:A:C8	2.52	0.45
32:1a:189(C):C:H2'	32:1a:189(D):C:O4'	2.17	0.45
32:1a:841:U:C4	32:1a:848:C:H1'	2.52	0.45
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.65	0.45
35:1d:190:ASP:H	35:1d:193:ASP:HB2	1.82	0.45
43:1l:84:LEU:HB2	43:1l:105:TYR:CE2	2.52	0.45
47:1p:20:VAL:HG23	47:1p:35:LYS:HA	1.99	0.45
48:1q:15:MET:HE1	48:1q:43:LEU:HD22	1.98	0.45
1:2A:99:U:H4'	1:2A:100:G:H5'	1.98	0.45
1:2A:265:A:C8	1:2A:266:G:H1'	2.52	0.45
1:2A:391:G:O2'	1:2A:410:G:OP1	2.22	0.45
1:2A:394:A:C2'	1:2A:395:U:H5'	2.47	0.45
1:2A:511:U:H4'	1:2A:1235:G:H4'	1.98	0.45
1:2A:898:C:H2'	1:2A:899:A:O4'	2.17	0.45
1:2A:923:C:H2'	1:2A:924:C:C6	2.52	0.45
1:2A:1614:A:C2	18:2W:93:ALA:HB2	2.51	0.45
1:2A:2466:C:H5"	31:29:6:SER:HB3	1.99	0.45
1:2A:2869:G:H2'	1:2A:2870:C:O4'	2.17	0.45
1:2A:2892:A:H2'	1:2A:2893:G:H5'	1.98	0.45
11:2P:82:GLY:HA3	11:2P:115:LEU:HD11	1.99	0.45
12:2Q:45:GLN:OE1	12:2Q:45:GLN:N	2.48	0.45
28:26:10:LEU:HD23	28:26:22:ALA:HB2	1.99	0.45
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.31	0.45
32:2a:1363(A):A:H4'	32:2a:1364:U:H2'	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1478:C:H2'	32:2a:1479:C:C6	2.52	0.45
32:2a:1492:A:H2'	32:2a:1493:A:C8	2.52	0.45
35:2d:191:ARG:NH1	35:2d:191:ARG:O	2.50	0.45
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.82	0.45
40:2i:17:VAL:HA	40:2i:63:ILE:HG12	1.99	0.45
1:1A:730:C:H5'	62:1A:4281:HOH:O	2.16	0.44
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.33	0.44
1:1A:1633:G:O6	62:1A:4131:HOH:O	2.13	0.44
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.49	0.44
1:1A:2208:A:N7	62:1A:4290:HOH:O	2.36	0.44
1:1A:2320:A:H2'	1:1A:2320:A:N3	2.32	0.44
4:1E:96:PHE:O	4:1E:175:VAL:HG21	2.17	0.44
5:1F:110:LEU:HD11	5:1F:181:LEU:HG	1.99	0.44
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.46	0.44
32:1a:679:C:H2'	32:1a:680:C:C6	2.53	0.44
32:1a:1239:A:H62	32:1a:1299:A:N6	2.15	0.44
32:1a:1240:U:OP1	38:1g:119:ARG:NH2	2.48	0.44
32:1a:1273:G:H3'	32:1a:1274:G:C8	2.48	0.44
54:1w:61:C:H3'	54:1w:62:C:H5"	1.99	0.44
1:2A:196:A:N3	1:2A:196:A:H2'	2.33	0.44
1:2A:509:C:OP1	62:2A:3972:HOH:O	2.21	0.44
1:2A:705:A:H2'	1:2A:706:A:O4'	2.16	0.44
1:2A:721:C:H2'	1:2A:722:A:C8	2.52	0.44
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.53	0.44
1:2A:1156:A:OP1	16:2U:55:ARG:HD2	2.17	0.44
1:2A:2386:C:H2'	1:2A:2387:U:C6	2.52	0.44
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.42	0.44
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.99	0.44
28:26:5:VAL:HG21	28:26:28:ARG:HB2	1.98	0.44
32:2a:161:A:H2'	32:2a:162:A:C8	2.52	0.44
32:2a:308:C:H2'	32:2a:309:G:C8	2.52	0.44
32:2a:308:C:H2'	32:2a:309:G:H8	1.81	0.44
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.52	0.44
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.99	0.44
35:2d:155:LEU:HD23	35:2d:155:LEU:HA	1.78	0.44
38:2g:54:THR:O	38:2g:56:GLN:N	2.43	0.44
54:2w:3:G:H1	54:2w:70:C:N4	2.15	0.44
54:2w:10:G:C2	54:2w:26:A:H1'	2.51	0.44
54:2w:18:G:H4'	54:2w:60:U:C5	2.51	0.44
1:1A:27:G:C2	1:1A:512:G:N3	2.85	0.44
1:1A:94(A):G:H2'	1:1A:95:G:O4'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:127:A:H5"	1:1A:128:C:C6	2.52	0.44
1:1A:207:A:H2'	1:1A:208:C:O4'	2.15	0.44
1:1A:744:G:OP1	4:1E:132:HIS:ND1	2.40	0.44
1:1A:1006:C:C2	1:1A:1138:G:N2	2.85	0.44
1:1A:1753:G:N1	1:1A:1756:G:OP2	2.45	0.44
1:1A:2703:C:H2'	1:1A:2704:C:H6	1.82	0.44
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.18	0.44
6:1G:132:ASN:HA	6:1G:157:ILE:O	2.17	0.44
12:1Q:109:VAL:HG13	12:1Q:110:THR:O	2.16	0.44
20:1Y:43:ASN:HB2	20:1Y:67:LEU:HD21	1.99	0.44
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.35	0.44
32:1a:1452:C:H4'	32:1a:1457:G:C8	2.52	0.44
40:1i:8:GLY:HA3	40:1i:76:ALA:O	2.17	0.44
48:1q:81:ARG:HH21	48:1q:84:LEU:HD21	1.81	0.44
1:2A:140:G:N2	1:2A:1596:A:H4'	2.32	0.44
1:2A:620:G:H8	1:2A:622:G:O6	2.01	0.44
1:2A:910:A:N1	1:2A:2277:G:H1'	2.31	0.44
9:2N:17:ASP:HB2	9:2N:137:LYS:HE3	2.00	0.44
9:2N:26:LEU:O	9:2N:30:ILE:HG13	2.17	0.44
25:23:46:ASN:O	25:23:50:VAL:HG22	2.16	0.44
28:26:13:CYS:SG	28:26:47:THR:HG21	2.58	0.44
32:2a:403:C:H2'	32:2a:404:U:C6	2.52	0.44
32:2a:551:U:H2'	32:2a:552:U:H6	1.82	0.44
34:2c:101:LEU:HD13	34:2c:102:ASN:N	2.33	0.44
36:2e:62:ALA:C	36:2e:64:ARG:H	2.25	0.44
44:2m:3:ARG:HH22	44:2m:11:ARG:HG3	1.81	0.44
46:2o:59:MET:HE3	46:2o:59:MET:HB2	1.79	0.44
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.33	0.44
1:1A:888:C:H2'	1:1A:889:C:C5	2.52	0.44
1:1A:1058:G:H1	1:1A:1080:C:N4	2.16	0.44
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.16	0.44
1:1A:1594:G:H2'	1:1A:1595:G:O4'	2.17	0.44
1:1A:1889:A:H2'	1:1A:1890:A:C8	2.53	0.44
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.17	0.44
1:1A:2134:A:N6	1:1A:2157:G:OP1	2.51	0.44
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.32	0.44
1:1A:2653:U:H5"	1:1A:2654:A:OP2	2.18	0.44
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.98	0.44
32:1a:684:A:H2'	32:1a:685:G:O4'	2.18	0.44
32:1a:824:C:H2'	32:1a:825:G:C8	2.52	0.44
32:1a:1146:A:H2'	32:1a:1147:C:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:20:TYR:HB2	42:1k:31:THR:HG23	1.98	0.44
57:1y:1:G:H2'	57:1y:2:G:C8	2.52	0.44
1:2A:583:G:N7	62:2A:4075:HOH:O	2.36	0.44
1:2A:824:A:H2'	1:2A:825:C:O4'	2.17	0.44
1:2A:1418:G:H8	1:2A:1418:G:O5'	2.00	0.44
1:2A:1599:C:OP1	62:2A:3969:HOH:O	2.20	0.44
1:2A:1786:A:C4	1:2A:1938:A:C6	3.06	0.44
1:2A:2151:G:N2	1:2A:2152:G:H1'	2.32	0.44
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.31	0.44
1:2A:2245:U:O2'	1:2A:2436:G:OP2	2.32	0.44
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.82	0.44
7:2H:109:PHE:C	7:2H:111:HIS:H	2.23	0.44
8:2I:61:ARG:HA	8:2I:61:ARG:HD3	1.48	0.44
8:2I:80:PRO:HA	8:2I:145:VAL:HG13	1.98	0.44
10:2O:67:LYS:NZ	10:2O:68:GLU:OE2	2.37	0.44
32:2a:780:A:H1'	32:2a:803:G:N2	2.33	0.44
32:2a:933:G:N2	32:2a:935:A:O4'	2.50	0.44
32:2a:1289:A:P	52:2u:9:ARG:HH22	2.39	0.44
34:2c:119:ARG:HE	34:2c:140:ARG:CZ	2.30	0.44
35:2d:78:LEU:HB3	35:2d:93:PHE:HE1	1.83	0.44
1:1A:971:C:H2'	1:1A:972:G:O4'	2.18	0.44
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.98	0.44
1:1A:1477:A:C2	1:1A:1515:G:C2	3.05	0.44
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.51	0.44
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.32	0.44
1:1A:2108:C:N4	1:1A:2181:G:H1	2.15	0.44
1:1A:2111:C:O2	1:1A:2118:U:H5'	2.17	0.44
5:1F:197:ASP:O	5:1F:201:VAL:HG23	2.17	0.44
7:1H:126:PRO:HG2	7:1H:130:ARG:HH21	1.82	0.44
9:1N:66:LYS:O	9:1N:70:LYS:HB3	2.17	0.44
28:16:17:LYS:HB3	28:16:17:LYS:HE3	1.72	0.44
32:1a:7:G:H21	36:1e:121:LYS:HG2	1.82	0.44
32:1a:1131:G:P	40:1i:20:ARG:HH22	2.40	0.44
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.53	0.44
36:1e:41:VAL:O	36:1e:66:MET:HA	2.17	0.44
40:1i:33:PHE:CZ	40:1i:47:LEU:HD11	2.53	0.44
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.52	0.44
51:1t:37:SER:O	51:1t:41:ILE:HG13	2.18	0.44
54:1w:35:U:H2'	54:1w:36:U:O4'	2.17	0.44
1:2A:108:U:OP1	1:2A:293:U:O2'	2.36	0.44
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2181:G:H2'	1:2A:2182:G:O4'	2.18	0.44
8:2I:124:GLY:O	8:2I:144:VAL:HG23	2.18	0.44
15:2T:127:ALA:C	15:2T:129:ARG:N	2.75	0.44
32:2a:401:C:H2'	32:2a:402:G:C8	2.53	0.44
32:2a:664:G:P	49:2r:64:ARG:HH21	2.40	0.44
32:2a:711:G:O2'	32:2a:712:A:H5'	2.17	0.44
32:2a:1010:G:N1	32:2a:1020:U:H1'	2.32	0.44
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.17	0.44
32:2a:1516:G:N1	32:2a:1519:MA6:OP2	2.51	0.44
33:2b:165:VAL:O	33:2b:187:LEU:HB3	2.16	0.44
33:2b:219:VAL:HA	33:2b:222:ILE:CG1	2.45	0.44
34:2c:183:ASP:N	34:2c:202:ILE:O	2.49	0.44
35:2d:92:VAL:O	35:2d:96:LEU:HD22	2.18	0.44
40:2i:40:LEU:HB3	40:2i:43:ALA:HB2	1.98	0.44
48:2q:28:PRO:HA	48:2q:35:VAL:HA	1.99	0.44
48:2q:44:ALA:HB1	48:2q:73:VAL:HG22	1.99	0.44
1:1A:84:A:H5"	20:1Y:8:LYS:HG2	2.00	0.44
1:1A:181:A:H2'	1:1A:182:A:C8	2.53	0.44
1:1A:971:C:O2'	1:1A:983:A:N3	2.43	0.44
1:1A:2619:C:H4'	4:1E:151:TYR:O	2.17	0.44
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	1.99	0.44
19:1X:12:VAL:HG22	19:1X:29:TRP:CE2	2.53	0.44
32:1a:203:U:O2	32:1a:216:G:N2	2.51	0.44
32:1a:985:C:H2'	32:1a:986:A:C8	2.53	0.44
33:1b:222:ILE:O	33:1b:226:ARG:HG2	2.18	0.44
38:1g:113:GLU:HG2	38:1g:118:VAL:HG12	2.00	0.44
40:1i:4:TYR:O	40:1i:84:ALA:HB1	2.18	0.44
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.46	0.44
57:1y:27:G:H1	57:1y:43:U:H3	1.65	0.44
1:2A:783:A:O2'	1:2A:785:G:OP1	2.32	0.44
1:2A:918:A:O2'	2:2B:97:G:N2	2.41	0.44
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.52	0.44
1:2A:2393:A:H5"	11:2P:63:PRO:HB3	2.00	0.44
11:2P:8:PRO:HB2	11:2P:12:ALA:HB3	1.99	0.44
20:2Y:2:ARG:NH1	20:2Y:4:LYS:HA	2.33	0.44
20:2Y:43:ASN:ND2	20:2Y:65:ALA:HB3	2.33	0.44
32:2a:736:C:H2'	32:2a:737:A:H8	1.81	0.44
32:2a:875:C:O2'	39:2h:14:ARG:HD2	2.17	0.44
33:2b:67:THR:O	33:2b:68:ILE:HG13	2.17	0.44
39:2h:11:THR:HG23	39:2h:14:ARG:NH1	2.32	0.44
55:2x:31:G:H5'	55:2x:32:5MC:OP2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:443:A:N6	5:1F:41:LEU:O	2.46	0.44
1:1A:2848:G:C8	15:1T:97:ALA:HB2	2.52	0.44
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.18	0.44
1:1A:2882:A:H5'	13:1R:96:ARG:HB2	2.00	0.44
2:1B:28:C:H2'	2:1B:29:A:O4'	2.18	0.44
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.16	0.44
6:1G:5:VAL:HG23	6:1G:104:GLU:OE1	2.17	0.44
12:1Q:137:TYR:O	12:1Q:141:GLN:HG2	2.17	0.44
14:1S:25:ARG:O	14:1S:39:ILE:HA	2.18	0.44
32:1a:277:C:OP2	48:1q:41:LYS:NZ	2.49	0.44
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.33	0.44
42:1k:84:VAL:CG1	42:1k:91:ARG:HD2	2.48	0.44
1:2A:61:G:OP1	24:22:51:ARG:NH2	2.33	0.44
1:2A:411:G:OP2	1:2A:2406:U:O2'	2.35	0.44
1:2A:489:G:H2'	1:2A:491:G:O4'	2.17	0.44
1:2A:839:U:H2'	1:2A:840:C:H6	1.83	0.44
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.35	0.44
1:2A:2227:A:H5"	3:2D:263:ARG:NH1	2.33	0.44
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.44	0.44
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.63	0.44
7:2H:80:SER:OG	7:2H:81:GLU:OE1	2.17	0.44
15:2T:59:THR:HG23	15:2T:78:LEU:HB3	2.00	0.44
26:24:61:ARG:HH21	50:2s:9:VAL:HG21	1.82	0.44
32:2a:64:G:C4'	32:2a:65:U:H3'	2.45	0.44
32:2a:96:U:H2'	32:2a:97:G:C8	2.52	0.44
32:2a:595:G:H1'	32:2a:596:C:H5	1.82	0.44
32:2a:693:G:H2'	32:2a:694:A:C8	2.53	0.44
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.28	0.44
33:2b:117:GLU:OE2	33:2b:121:LEU:HD12	2.18	0.44
40:2i:105:ASP:HB2	40:2i:107:ARG:HG3	2.00	0.44
41:2j:78:ASN:O	41:2j:80:LYS:N	2.51	0.44
48:2q:76:LEU:HD12	48:2q:77:VAL:H	1.81	0.44
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.43	0.44
1:1A:747:U:O2	1:1A:2014:A:H1'	2.18	0.44
1:1A:2127:G:N2	1:1A:2173:A:H1'	2.32	0.44
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.53	0.44
1:1A:2790:A:H5"	1:1A:2791:C:H5"	1.98	0.44
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.98	0.44
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.53	0.44
15:1T:11:GLU:OE2	15:1T:57:PHE:HB3	2.17	0.44
32:1a:263:A:OP1	51:1t:79:ARG:HD3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:944:G:O6	32:1a:1337:G:H8	2.01	0.44
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.17	0.44
45:1n:53:LEU:O	45:1n:56:VAL:HG23	2.17	0.44
47:1p:53:VAL:O	47:1p:57:ARG:HG2	2.17	0.44
54:1w:15:G:N2	54:1w:21:A:N3	2.66	0.44
1:2A:218:A:C2	1:2A:235:U:H4'	2.52	0.44
1:2A:536:A:H2'	1:2A:537:C:C6	2.53	0.44
1:2A:724:U:H2'	1:2A:725:G:O4'	2.18	0.44
1:2A:1479:G:H5"	1:2A:1560:G:H4'	2.00	0.44
1:2A:1783:A:H5'	1:2A:2608:G:H4'	2.00	0.44
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.32	0.44
5:2F:176:LEU:HD23	5:2F:176:LEU:HA	1.79	0.44
9:2N:32:THR:HG23	9:2N:37:LYS:HB2	1.99	0.44
14:2S:5:THR:H	14:2S:8:GLU:HG3	1.81	0.44
32:2a:863:U:H2'	32:2a:865:A:OP2	2.18	0.44
32:2a:925:G:H1'	32:2a:1502:A:C4	2.53	0.44
32:2a:1122:U:C2	32:2a:1123:A:N7	2.85	0.44
40:2i:88:TYR:HD2	40:2i:89:ASN:HB2	1.81	0.44
48:2q:66:SER:HB3	48:2q:69:LYS:HB2	1.99	0.44
1:1A:1171:G:N3	1:1A:1171:G:H2'	2.32	0.44
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.53	0.44
1:1A:1826:G:H4'	3:1D:242:ARG:CZ	2.48	0.44
1:1A:2804:C:H2'	1:1A:2805:G:H8	1.83	0.44
5:1F:39:TRP:O	5:1F:43:LYS:HG2	2.17	0.44
8:1I:72:LEU:HA	8:1I:75:LEU:HD11	1.99	0.44
12:1Q:89:ASN:HB2	55:1x:1:C:N3	2.32	0.44
16:1U:89:GLU:HG3	17:1V:50:PRO:HB3	1.99	0.44
18:1W:97:LYS:HE2	18:1W:99:ARG:NH2	2.33	0.44
26:14:57:GLU:HB3	26:14:58:ARG:HD2	1.98	0.44
32:1a:1121:U:H2'	32:1a:1122:U:C6	2.53	0.44
35:1d:144:ASP:OD1	35:1d:144:ASP:N	2.51	0.44
36:1e:69:VAL:HG11	36:1e:113:ALA:HB1	1.99	0.44
38:1g:15:ASP:HB3	38:1g:24:THR:HG23	2.00	0.44
40:1i:17:VAL:HG23	40:1i:63:ILE:HG23	2.00	0.44
47:1p:49:LEU:HD11	47:1p:51:VAL:HG23	1.99	0.44
1:2A:534:U:H5'	16:2U:42:ALA:HB1	2.00	0.44
1:2A:918:A:C5	1:2A:919:G:H1'	2.53	0.44
1:2A:927:G:H2'	1:2A:928:G:O4'	2.16	0.44
1:2A:1388:G:H2'	1:2A:1389:G:H8	1.83	0.44
1:2A:1443:G:H1	1:2A:1548:C:H42	1.66	0.44
1:2A:2006:C:H6	1:2A:2006:C:O5'	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2492:U:H2'	1:2A:2493:U:C6	2.53	0.44
2:2B:103:G:N2	21:2Z:73:GLN:HE22	2.13	0.44
4:2E:77:ILE:HD13	4:2E:195:LEU:HD22	2.00	0.44
21:2Z:56:VAL:HA	21:2Z:70:LEU:CD2	2.48	0.44
21:2Z:102:LEU:HD23	21:2Z:139:VAL:HG21	2.00	0.44
26:24:46:GLN:C	26:24:48:ARG:N	2.76	0.44
32:2a:404:U:H2'	32:2a:405:U:C6	2.52	0.44
32:2a:555:C:H2'	32:2a:556:C:C6	2.53	0.44
32:2a:1005:A:H5"	32:2a:1006:C:C5	2.52	0.44
32:2a:1077:G:N2	32:2a:1079:G:H3'	2.33	0.44
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.83	0.44
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.17	0.44
34:2c:24:ALA:HB3	34:2c:29:TYR:CD1	2.53	0.44
35:2d:122:ARG:HA	35:2d:122:ARG:HD2	1.50	0.44
40:2i:19:LEU:HD23	40:2i:19:LEU:HA	1.87	0.44
46:2o:75:PRO:HA	46:2o:78:TYR:HB3	2.00	0.44
50:2s:35:SER:O	50:2s:71:LEU:HD12	2.18	0.44
1:1A:400:G:O6	62:1A:4166:HOH:O	2.21	0.44
1:1A:1179:C:H2'	1:1A:1180:C:C6	2.52	0.44
1:1A:1203:G:H5'	11:1P:3:LEU:HD13	2.00	0.44
1:1A:2111:C:C2	1:1A:2118:U:H5'	2.53	0.44
1:1A:2336:A:H61	22:10:43:THR:HG22	1.83	0.44
6:1G:7:LEU:HD23	6:1G:7:LEU:HA	1.84	0.44
6:1G:72:ARG:HA	6:1G:86:MET:O	2.18	0.44
12:1Q:16:ARG:HB3	12:1Q:18:LYS:HE2	2.00	0.44
15:1T:51:ARG:HD2	15:1T:98:LYS:HD2	2.00	0.44
19:1X:31:HIS:CD2	19:1X:33:LYS:HB2	2.53	0.44
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.18	0.44
32:1a:375:U:OP1	47:1p:69:THR:OG1	2.20	0.44
32:1a:1113:C:H1'	34:1c:178:LEU:HD13	2.00	0.44
33:1b:112:VAL:O	33:1b:115:LEU:HB3	2.18	0.44
37:1f:36:ARG:CZ	37:1f:36:ARG:HB3	2.48	0.44
44:1m:45:VAL:C	44:1m:47:ASP:H	2.24	0.44
48:1q:43:LEU:HB2	48:1q:68:ARG:O	2.17	0.44
54:1w:13:C:H2'	54:1w:14:A:H5"	1.99	0.44
1:2A:557:U:H2'	1:2A:558:G:H8	1.83	0.44
1:2A:1431:U:H2'	1:2A:1432:C:C6	2.52	0.44
1:2A:2126:A:N6	1:2A:2163:C:O4'	2.51	0.44
4:2E:24:THR:HB	4:2E:184:VAL:HG12	2.00	0.44
6:2G:99:MET:O	6:2G:103:LEU:HG	2.17	0.44
9:2N:115:ARG:HA	9:2N:118:LYS:HE2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:42:LYS:HB3	13:2R:45:ARG:HH21	1.83	0.44
32:2a:6:G:N2	36:2e:98:THR:HG23	2.33	0.44
32:2a:434:U:H2'	32:2a:435:C:C6	2.53	0.44
32:2a:833:U:H2'	32:2a:834:C:H6	1.83	0.44
32:2a:1002:G:H1	32:2a:1038:C:H42	1.66	0.44
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.32	0.44
37:2f:69:GLU:O	37:2f:72:VAL:HG23	2.18	0.44
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.52	0.44
44:2m:56:LEU:O	44:2m:60:VAL:HG23	2.18	0.44
54:2w:11:C:N4	54:2w:24:G:H1	2.13	0.44
54:2w:23:A:H5'	54:2w:24:G:OP2	2.18	0.44
1:1A:284:U:H2'	1:1A:285:C:H6	1.82	0.43
1:1A:795:C:H2'	1:1A:796:C:H6	1.82	0.43
1:1A:1062:G:N3	1:1A:1088:A:C8	2.86	0.43
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.55	0.43
6:1G:37:VAL:HG21	6:1G:103:LEU:HD21	2.00	0.43
6:1G:41:GLN:O	6:1G:43:LEU:N	2.50	0.43
19:1X:13:LEU:HD11	24:12:40:SER:OG	2.18	0.43
32:1a:233:C:H2'	32:1a:234:C:H6	1.83	0.43
32:1a:458:C:H2'	32:1a:460:G:O4'	2.18	0.43
32:1a:529:G:O6	43:1l:49:ASN:HA	2.17	0.43
34:1c:6:HIS:CD2	34:1c:8:ILE:HB	2.53	0.43
54:1w:28:U:H2'	54:1w:29:U:H6	1.81	0.43
1:2A:271(S):G:C6	1:2A:271(T):C:C4	3.06	0.43
1:2A:478:A:N1	1:2A:500:G:H4'	2.32	0.43
1:2A:493:G:H2'	1:2A:494:G:O4'	2.18	0.43
1:2A:1196:C:H2'	1:2A:1197:G:C8	2.53	0.43
1:2A:2103:C:H1'	1:2A:2187:G:N2	2.33	0.43
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.53	0.43
1:2A:2639:A:H2'	1:2A:2640:G:O4'	2.17	0.43
1:2A:2741:A:N6	1:2A:2763:G:O2'	2.47	0.43
1:2A:2871:C:N4	62:2A:4098:HOH:O	2.41	0.43
7:2H:9:ILE:HD12	7:2H:72:ILE:HG22	2.00	0.43
8:2I:66:GLU:CD	8:2I:69:LYS:HB3	2.43	0.43
8:2I:82:ARG:C	8:2I:89:TYR:HB2	2.43	0.43
8:2I:101:LEU:O	8:2I:107:VAL:N	2.42	0.43
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.58	0.43
20:2Y:28:LYS:NZ	20:2Y:40:GLU:HG3	2.33	0.43
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.18	0.43
29:27:9:ARG:NH1	29:27:47:ARG:HD3	2.33	0.43
32:2a:447:G:H2'	32:2a:485:G:N2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:625:G:H2'	32:2a:626:U:H6	1.83	0.43
32:2a:1115:C:H2'	32:2a:1116:C:C6	2.53	0.43
32:2a:1244:C:N4	32:2a:1293:G:H1	2.15	0.43
32:2a:1265:G:C4	32:2a:1271:G:N2	2.86	0.43
33:2b:46:LYS:O	33:2b:50:GLU:HB2	2.18	0.43
40:2i:8:GLY:HA3	40:2i:76:ALA:O	2.18	0.43
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.53	0.43
1:1A:435:C:H2'	1:1A:436:C:H5'	2.00	0.43
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.19	0.43
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.53	0.43
1:1A:2203:U:O2'	1:1A:2205:C:H5'	2.18	0.43
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.18	0.43
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.47	0.43
4:1E:101:ARG:NH2	4:1E:171:GLU:HB2	2.33	0.43
20:1Y:20:TYR:CG	20:1Y:42:VAL:HG13	2.53	0.43
25:13:7:LYS:HB2	25:13:34:GLU:HG2	1.99	0.43
32:1a:575:G:O2'	32:1a:821:G:H5'	2.18	0.43
32:1a:958:A:C2	50:1s:55:LYS:HB2	2.54	0.43
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.82	0.43
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.53	0.43
33:1b:27:LYS:HB2	33:1b:194:PRO:HD2	2.00	0.43
1:2A:885:C:H2'	1:2A:886:C:O4'	2.19	0.43
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.33	0.43
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.18	0.43
1:2A:2674:G:H5"	10:2O:26:LYS:HE3	1.99	0.43
1:2A:2748:A:H2'	1:2A:2749:A:O4'	2.19	0.43
2:2B:19:G:H2'	2:2B:20:C:O4'	2.18	0.43
3:2D:170:GLY:C	3:2D:172:TYR:H	2.26	0.43
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	2.01	0.43
21:2Z:53:ILE:HG22	21:2Z:71:VAL:O	2.18	0.43
21:2Z:79:ARG:HD2	21:2Z:80:ARG:NH1	2.31	0.43
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.33	0.43
32:2a:396:G:O2'	32:2a:398:C:OP1	2.32	0.43
32:2a:988:G:C2	32:2a:989:C:C2	3.06	0.43
32:2a:1060:C:H2'	32:2a:1061:G:H8	1.82	0.43
32:2a:1104:G:H4'	33:2b:111:ARG:NE	2.33	0.43
33:2b:112:VAL:HG12	33:2b:113:HIS:ND1	2.32	0.43
36:2e:43:LEU:H	36:2e:65:ASN:HB3	1.82	0.43
37:2f:64:GLN:HE21	37:2f:64:GLN:HB3	1.59	0.43
50:2s:27:GLU:H	50:2s:27:GLU:HG3	1.37	0.43
57:2y:65:C:C2	57:2y:66:A:N6	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:191:A:H2'	1:1A:192:C:C6	2.53	0.43
1:1A:394:A:C6	1:1A:395:U:C4	3.06	0.43
1:1A:2420:C:H5'	28:16:54:ILE:HD11	1.99	0.43
1:1A:2577:A:O4'	27:15:3:LYS:HB2	2.18	0.43
3:1D:126:GLN:HE21	3:1D:127:VAL:H	1.66	0.43
7:1H:98:LEU:HG	7:1H:125:VAL:HG23	1.99	0.43
17:1V:71:LEU:HD23	17:1V:71:LEU:HA	1.80	0.43
32:1a:186:C:H5'	51:1t:78:ALA:HB1	2.01	0.43
32:1a:300:A:O2'	32:1a:564:C:N3	2.44	0.43
32:1a:735:C:H2'	32:1a:736:C:H6	1.84	0.43
32:1a:811:C:N4	62:1a:4859:HOH:O	2.50	0.43
32:1a:1176:A:C6	32:1a:1177:G:C6	3.06	0.43
33:1b:28:PHE:HD2	33:1b:28:PHE:O	2.01	0.43
34:1c:29:TYR:OH	45:1n:54:PRO:O	2.30	0.43
34:1c:73:PRO:HB3	34:1c:103:VAL:HG11	1.99	0.43
35:1d:104:VAL:HG11	35:1d:146:ILE:HD13	2.01	0.43
40:1i:127:LYS:O	40:1i:128:ARG:HG2	2.18	0.43
51:1t:34:LYS:HG2	51:1t:80:ARG:HH22	1.84	0.43
1:2A:171:G:H2'	1:2A:172:C:H6	1.84	0.43
1:2A:271(C):C:H2'	1:2A:271(D):G:O4'	2.19	0.43
1:2A:712:G:H1	1:2A:719:C:H42	1.66	0.43
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.52	0.43
1:2A:1803:A:HO2'	3:2D:259:THR:HG21	1.83	0.43
1:2A:1865:G:N2	1:2A:1877:A:OP2	2.43	0.43
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.98	0.43
1:2A:2103:C:H1'	1:2A:2187:G:C2	2.52	0.43
1:2A:2255:G:OP2	62:2A:3974:HOH:O	2.21	0.43
8:2I:84:GLY:C	8:2I:86:THR:H	2.26	0.43
10:2O:63:VAL:HG12	10:2O:106:LEU:HD11	2.01	0.43
11:2P:89:ALA:O	11:2P:121:LYS:NZ	2.40	0.43
18:2W:6:ILE:HG22	18:2W:8:ARG:HG3	1.99	0.43
19:2X:2:LYS:HA	19:2X:2:LYS:HD2	1.74	0.43
21:2Z:171:ILE:HG13	21:2Z:171:ILE:H	1.53	0.43
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.51	0.43
32:2a:615:C:H2'	32:2a:616:G:O4'	2.18	0.43
32:2a:868:C:H2'	32:2a:869:G:O4'	2.18	0.43
32:2a:1151:A:O2'	32:2a:1152:A:H8	2.01	0.43
32:2a:1367:C:OP1	40:2i:115:GLY:N	2.41	0.43
34:2c:134:ILE:O	34:2c:137:ALA:N	2.52	0.43
45:2n:23:ARG:NH1	45:2n:30:ALA:HB2	2.33	0.43
51:2t:49:ALA:HB1	51:2t:98:PRO:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:8:U:H2'	54:2w:13:C:N4	2.34	0.43
1:1A:1104:C:H2'	1:1A:1105:U:C6	2.53	0.43
1:1A:1345:C:H2'	1:1A:1346:G:C8	2.54	0.43
1:1A:1882:C:H2'	1:1A:1883:G:O4'	2.19	0.43
3:1D:133:LEU:HB3	3:1D:173:VAL:HG21	2.00	0.43
7:1H:6:ARG:HH22	7:1H:54:ARG:HH22	1.67	0.43
11:1P:50:ARG:HG3	30:18:61:LEU:HD21	2.00	0.43
15:1T:27:THR:HB	15:1T:90:GLN:HB3	2.00	0.43
23:11:23:LYS:HB3	23:11:29:GLY:HA3	2.00	0.43
32:1a:57:G:H2'	32:1a:58:C:C6	2.53	0.43
32:1a:353:A:N7	62:1a:4850:HOH:O	2.36	0.43
32:1a:558:G:OP2	32:1a:559:A:O2'	2.29	0.43
32:1a:1104:G:O5'	33:1b:111:ARG:HD2	2.19	0.43
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.36	0.43
38:1g:28:ASN:HA	38:1g:31:MET:HE2	1.99	0.43
40:1i:53:VAL:HG11	40:1i:92:TYR:CE1	2.54	0.43
41:1j:5:ARG:HH21	41:1j:73:ASP:CG	2.22	0.43
49:1r:32:ARG:O	49:1r:34:TYR:N	2.51	0.43
51:1t:36:LEU:HD13	51:1t:58:LYS:HG3	2.00	0.43
51:1t:57:ARG:NH1	51:1t:100:ILE:HD12	2.30	0.43
1:2A:9:U:OP1	9:2N:115:ARG:NH2	2.51	0.43
1:2A:910:A:C6	1:2A:911:A:C6	3.07	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:H6	1.83	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:C6	2.53	0.43
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.53	0.43
1:2A:2837:G:H21	13:2R:45:ARG:NH1	2.17	0.43
9:2N:28:THR:HG22	9:2N:29:LYS:N	2.33	0.43
14:2S:25:ARG:HB3	14:2S:40:ILE:HB	2.01	0.43
16:2U:66:ASN:OD1	16:2U:70:ARG:NE	2.51	0.43
23:21:32:LYS:HE3	23:21:32:LYS:HB3	1.83	0.43
30:28:30:ARG:HD3	30:28:30:ARG:HA	1.79	0.43
32:2a:119:A:H4'	32:2a:120:A:C8	2.54	0.43
32:2a:564:C:O2'	39:2h:91:ARG:NH1	2.43	0.43
32:2a:963:G:N3	41:2j:54:PHE:HZ	2.16	0.43
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.54	0.43
36:2e:40:ARG:HD3	36:2e:67:VAL:O	2.18	0.43
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.83	0.43
1:1A:287:C:H2'	1:1A:288:C:C6	2.53	0.43
1:1A:459:U:H2'	1:1A:460:A:C8	2.54	0.43
1:1A:695:G:OP1	1:1A:1380:G:O2'	2.35	0.43
1:1A:839:U:H2'	1:1A:840:C:C6	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1637:A:H4'	1:1A:2711:A:O2'	2.18	0.43
1:1A:2335:A:C8	1:1A:2337:G:C5	3.07	0.43
1:1A:2629:A:H1'	1:1A:2630:G:C5'	2.49	0.43
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.51	0.43
15:1T:51:ARG:HG3	15:1T:98:LYS:HE3	1.99	0.43
32:1a:162:A:N7	32:1a:163:C:H1'	2.33	0.43
32:1a:188:C:H1'	51:1t:89:ARG:HH11	1.82	0.43
32:1a:313:A:H2'	32:1a:314:C:C6	2.53	0.43
38:1g:153:HIS:C	38:1g:155:ARG:H	2.26	0.43
44:1m:2:ALA:N	44:1m:8:GLU:HB2	2.34	0.43
1:2A:108:U:H2'	1:2A:109:G:H8	1.83	0.43
1:2A:586:A:N1	1:2A:809:G:O2'	2.31	0.43
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.33	0.43
1:2A:2335:A:O2'	1:2A:2336:A:H5"	2.19	0.43
5:2F:12:LEU:HG	5:2F:124:LEU:HD11	2.00	0.43
9:2N:38:HIS:O	16:2U:67:ALA:HB1	2.19	0.43
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.49	0.43
12:2Q:48:GLU:O	12:2Q:52:VAL:HG23	2.19	0.43
28:26:9:LEU:HA	28:26:54:ILE:HB	2.00	0.43
29:27:26:GLY:O	29:27:30:VAL:HG23	2.19	0.43
32:2a:20:U:H2'	32:2a:21:G:O4'	2.18	0.43
32:2a:482:A:OP2	62:2a:1906:HOH:O	2.21	0.43
32:2a:514:C:H2'	32:2a:515:G:H8	1.84	0.43
32:2a:973:G:H3'	32:2a:974:A:H5"	2.00	0.43
32:2a:1200:C:OP1	32:2a:1201:A:O2'	2.19	0.43
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	2.01	0.43
38:2g:78:ARG:HB2	38:2g:87:VAL:HG21	2.00	0.43
50:2s:30:LEU:HA	50:2s:48:THR:O	2.17	0.43
1:1A:652(C):G:N2	1:1A:653:A:H1'	2.34	0.43
1:1A:1406:U:H2'	1:1A:1407:C:H6	1.80	0.43
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.18	0.43
1:1A:2345:G:N3	1:1A:2381:C:H2'	2.33	0.43
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.54	0.43
1:1A:2680:C:H1'	4:1E:187:ALA:HB1	1.99	0.43
5:1F:74:ARG:H	5:1F:74:ARG:HG3	1.41	0.43
32:1a:504:C:OP1	62:1a:4818:HOH:O	2.21	0.43
32:1a:994:A:C5	32:1a:1216:G:H4'	2.53	0.43
32:1a:1033:G:H3'	32:1a:1034:G:C8	2.53	0.43
32:1a:1187:G:H5"	40:1i:113:LYS:HD3	2.00	0.43
34:1c:124:ILE:HG12	34:1c:124:ILE:H	1.56	0.43
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:70:LYS:HA	42:1k:73:MET:HE2	2.00	0.43
1:2A:83:G:O2'	1:2A:102:G:N2	2.51	0.43
1:2A:857:C:H5"	22:20:77:ARG:NH2	2.34	0.43
1:2A:1908:C:O2	55:2x:12:G:H4'	2.18	0.43
1:2A:2136:C:C4	1:2A:2155:G:N1	2.86	0.43
1:2A:2471:C:H42	1:2A:2479:G:H1	1.65	0.43
1:2A:2680:C:H1'	4:2E:187:ALA:HB1	2.00	0.43
1:2A:2712:U:H2'	1:2A:2714:G:H5"	2.00	0.43
14:2S:36:TYR:OH	14:2S:54:LEU:HD22	2.19	0.43
14:2S:104:GLY:HA2	14:2S:107:GLU:HB2	2.00	0.43
32:2a:952:U:H2'	32:2a:953:G:H8	1.83	0.43
32:2a:1172:C:H2'	32:2a:1173:G:C8	2.53	0.43
32:2a:1423:G:H2'	32:2a:1424:C:H6	1.82	0.43
33:2b:55:PHE:CZ	33:2b:218:ALA:HA	2.53	0.43
33:2b:77:ALA:O	33:2b:94:ASN:ND2	2.51	0.43
33:2b:95:GLN:NE2	33:2b:147:LYS:HE2	2.34	0.43
34:2c:45:LYS:H	34:2c:45:LYS:HG2	1.50	0.43
34:2c:120:VAL:HA	34:2c:123:GLN:HB2	2.00	0.43
34:2c:148:GLY:CA	34:2c:203:PHE:HB3	2.49	0.43
34:2c:180:ALA:O	34:2c:181:ASN:C	2.61	0.43
35:2d:38:TYR:CE1	35:2d:45:GLN:HG3	2.53	0.43
39:2h:51:VAL:HG11	39:2h:60:ARG:CZ	2.48	0.43
53:2v:19:A:H2'	53:2v:20:A:H8	1.83	0.43
54:2w:63:U:H3'	54:2w:63:U:O2	2.19	0.43
1:1A:26:G:C6	1:1A:27:G:N1	2.86	0.43
1:1A:271(G):C:H2'	1:1A:271(H):G:H8	1.83	0.43
1:1A:428:A:OP2	1:1A:428:A:C8	2.72	0.43
1:1A:858:U:O2	1:1A:2268:A:H2'	2.19	0.43
1:1A:1174:A:H1'	1:1A:1175:U:H5"	1.99	0.43
1:1A:2124:G:H3'	1:1A:2125:G:H8	1.83	0.43
62:1A:4504:HOH:O	22:10:41:ARG:HA	2.19	0.43
3:1D:206:LEU:HD23	3:1D:206:LEU:HA	1.75	0.43
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.87	0.43
8:1I:109:ILE:HA	8:1I:109:ILE:HD13	1.79	0.43
11:1P:71:VAL:CG2	11:1P:72:PRO:HA	2.48	0.43
12:1Q:50:ALA:O	12:1Q:54:MET:HE2	2.19	0.43
18:1W:77:ASP:HB2	18:1W:102:HIS:HB2	2.01	0.43
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	2.01	0.43
21:1Z:99:TYR:HA	21:1Z:124:ILE:O	2.19	0.43
25:13:10:LYS:HB3	25:13:53:LEU:HA	1.99	0.43
32:1a:148:G:H2'	32:1a:149:A:C8	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1108:G:OP1	34:1c:175:LEU:HB2	2.19	0.43
33:1b:8:LYS:H	33:1b:8:LYS:HD3	1.84	0.43
35:1d:173:TRP:CE3	35:1d:189:PRO:HG3	2.54	0.43
37:1f:2:ARG:HB2	37:1f:4:TYR:CE2	2.53	0.43
38:1g:79:ARG:HD2	38:1g:80:VAL:N	2.34	0.43
46:1o:39:LEU:HA	46:1o:42:HIS:HB3	2.01	0.43
54:1w:63:U:H2'	54:1w:64:G:H8	1.80	0.43
1:2A:248:G:C2	1:2A:2431:U:H4'	2.54	0.43
1:2A:286:C:H42	1:2A:355:G:H1	1.66	0.43
1:2A:312:G:H4'	1:2A:331:A:N3	2.33	0.43
1:2A:1183:G:H5"	25:23:30:ARG:NH2	2.34	0.43
1:2A:1379:A:O5'	1:2A:1379:A:H8	2.01	0.43
1:2A:1420:U:HO2'	1:2A:1421:G:P	2.36	0.43
1:2A:1448:G:H1'	1:2A:1528:A:N1	2.34	0.43
1:2A:2406:U:C4	11:2P:72:PRO:HD2	2.53	0.43
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.54	0.43
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.54	0.43
3:2D:11:PRO:O	3:2D:14:ARG:HG3	2.19	0.43
7:2H:127:GLU:C	7:2H:129:THR:N	2.77	0.43
8:2I:47:LEU:O	8:2I:51:ILE:HB	2.19	0.43
9:2N:32:THR:CG2	9:2N:37:LYS:HB2	2.49	0.43
9:2N:34:LEU:HD11	9:2N:120:LEU:HD13	2.01	0.43
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	2.00	0.43
12:2Q:116:GLU:O	12:2Q:120:ILE:HG13	2.18	0.43
31:29:18:ARG:NH1	31:29:21:GLY:O	2.52	0.43
32:2a:516:PSU:O2	62:2a:1913:HOH:O	2.20	0.43
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.34	0.43
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.51	0.43
37:2f:2:ARG:HE	37:2f:69:GLU:HG2	1.83	0.43
39:2h:97:VAL:HG13	39:2h:98:LYS:HG3	2.00	0.43
40:2i:54:ASP:C	40:2i:56:LEU:H	2.27	0.43
43:2l:77:LEU:HD23	43:2l:77:LEU:HA	1.83	0.43
46:2o:4:THR:OG1	46:2o:7:GLU:HG3	2.19	0.43
46:2o:8:LYS:O	46:2o:12:ILE:HG13	2.18	0.43
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.79	0.43
54:2w:26:A:H2'	54:2w:27:G:H8	1.81	0.43
55:2x:10:G:N2	55:2x:26:G:H1'	2.34	0.43
55:2x:55:PSU:N3	55:2x:58:A:OP2	2.42	0.43
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.35	0.43
1:1A:2172:U:H3'	1:1A:2173:A:C5'	2.47	0.43
1:1A:2469:A:C2	1:1A:2470:G:H1'	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:254:G:O2'	48:1q:16:GLN:O	2.36	0.43
32:1a:265:G:H5'	48:1q:64:PRO:O	2.19	0.43
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.35	0.43
32:1a:1008:C:N3	32:1a:1021:G:O6	2.52	0.43
32:1a:1212:U:H4'	32:1a:1213:A:C8	2.54	0.43
33:1b:102:LEU:HB3	33:1b:180:LEU:CD1	2.49	0.43
41:1j:38:ILE:HG12	41:1j:71:LEU:HB3	1.99	0.43
44:1m:40:ASN:HD21	44:1m:42:ALA:HB3	1.83	0.43
1:2A:141:A:C8	1:2A:1408:C:O2'	2.69	0.43
1:2A:443:A:H5"	1:2A:444:C:OP1	2.18	0.43
1:2A:464:U:H4'	29:27:5:TRP:CZ3	2.54	0.43
1:2A:747:U:O2	1:2A:2014:A:H1'	2.18	0.43
1:2A:1388:G:H4'	1:2A:1525:G:O2'	2.18	0.43
1:2A:2249:U:N3	1:2A:2253:G:OP2	2.44	0.43
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.18	0.43
1:2A:2432:A:H5"	62:2A:4533:HOH:O	2.18	0.43
2:2B:46:A:H2'	2:2B:47:C:C6	2.54	0.43
6:2G:11:TYR:HE1	6:2G:172:LEU:HD11	1.83	0.43
6:2G:96:ARG:O	6:2G:100:TRP:CD1	2.72	0.43
10:2O:64:ARG:NH1	10:2O:101:PRO:O	2.45	0.43
26:24:62:ARG:HB2	26:24:63:TYR:CZ	2.54	0.43
26:24:67:TYR:OH	50:2s:43:GLU:OE1	2.27	0.43
29:27:5:TRP:CD1	29:27:7:PRO:HD3	2.54	0.43
32:2a:971:G:OP1	32:2a:971:G:H3'	2.19	0.43
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.19	0.43
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.83	0.43
44:2m:40:ASN:ND2	44:2m:43:THR:HG23	2.34	0.43
47:2p:55:ARG:HA	47:2p:55:ARG:HH11	1.83	0.43
54:2w:41:A:H2'	54:2w:42:A:O4'	2.18	0.43
1:1A:786:C:H5"	1:1A:1780:A:C8	2.53	0.43
1:1A:1252:G:C2	1:1A:1253:A:C2	3.07	0.43
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.01	0.43
2:1B:33:G:C2	2:1B:50:G:C2	3.07	0.43
3:1D:19:ALA:HB3	3:1D:21:PHE:CE1	2.54	0.43
4:1E:101:ARG:HB2	4:1E:201:THR:HG21	2.01	0.43
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.84	0.43
6:1G:146:TYR:HD2	6:1G:146:TYR:O	2.02	0.43
8:1I:9:LEU:HD12	8:1I:12:LEU:HD12	2.00	0.43
14:1S:58:LEU:HD23	14:1S:58:LEU:HA	1.78	0.43
16:1U:52:ARG:HE	16:1U:52:ARG:HB3	1.75	0.43
32:1a:196:A:H5"	32:1a:197:A:OP1	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:270:A:H2'	32:1a:271:C:H6	1.83	0.43
32:1a:393:A:OP1	47:1p:13:HIS:HE1	2.02	0.43
32:1a:1292:U:H2'	32:1a:1293:G:C8	2.54	0.43
33:1b:20:GLU:HG2	33:1b:23:ARG:NH1	2.34	0.43
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.83	0.43
47:1p:48:TRP:CE3	47:1p:49:LEU:HB2	2.54	0.43
1:2A:324:A:N6	1:2A:338:G:O2'	2.51	0.43
1:2A:531:C:OP1	1:2A:561:G:N1	2.49	0.43
1:2A:1006:C:O2'	9:2N:106:MET:HB3	2.18	0.43
1:2A:1351:C:O2'	1:2A:1571:A:N3	2.50	0.43
1:2A:2711:A:OP2	62:2A:3975:HOH:O	2.21	0.43
3:2D:58:HIS:ND1	3:2D:59:LYS:O	2.41	0.43
6:2G:7:LEU:HD11	6:2G:107:LEU:HD12	2.01	0.43
6:2G:129:GLY:O	6:2G:161:THR:HB	2.18	0.43
13:2R:62:ALA:O	13:2R:66:VAL:HG23	2.19	0.43
21:2Z:30:ASN:HA	21:2Z:89:PHE:CE1	2.52	0.43
23:21:6:GLU:HB2	23:21:61:ARG:O	2.19	0.43
26:24:13:ARG:HG2	26:24:23:GLU:HA	2.01	0.43
32:2a:1254:C:O4'	32:2a:1356:G:H5"	2.18	0.43
32:2a:1507:A:H61	32:2a:1528:U:H3	1.67	0.43
33:2b:97:TRP:CH2	33:2b:102:LEU:HG	2.52	0.43
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.84	0.43
34:2c:83:ARG:C	34:2c:85:ARG:N	2.77	0.43
55:2x:36:U:H2'	55:2x:37:A:O4'	2.19	0.43
1:1A:271(K):U:H5	8:1I:46:ALA:HB1	1.84	0.43
1:1A:271(K):U:C5	8:1I:46:ALA:HB1	2.54	0.43
1:1A:301:G:C6	1:1A:317:G:C6	3.07	0.43
1:1A:624:C:H6	1:1A:624:C:O5'	2.02	0.43
1:1A:1087:G:H1	1:1A:1102:C:N4	2.16	0.43
1:1A:1614:A:P	1:1A:1614:A:H8	2.42	0.43
3:1D:9:TYR:CE1	3:1D:13:ARG:HG3	2.54	0.43
6:1G:56:ALA:HA	6:1G:59:GLU:CD	2.44	0.43
6:1G:64:THR:HB	6:1G:94:LEU:HD11	2.00	0.43
9:1N:18:ALA:HA	9:1N:21:LYS:HG3	2.01	0.43
11:1P:37:GLY:C	11:1P:38:GLN:O	2.61	0.43
21:1Z:23:LYS:HD2	21:1Z:40:ASP:HA	2.00	0.43
21:1Z:69:THR:HG22	21:1Z:90:VAL:HA	2.00	0.43
21:1Z:99:TYR:HB3	21:1Z:123:ASP:HB2	2.00	0.43
32:1a:221:C:H2'	32:1a:222:U:H6	1.83	0.43
32:1a:1132:C:N4	32:1a:1142:G:H1	2.15	0.43
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:18:ALA:HA	44:1m:21:TYR:HD2	1.84	0.43
44:1m:24:GLY:HA3	44:1m:66:LEU:HD22	2.00	0.43
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.54	0.43
1:2A:1926:U:O2'	1:2A:1928:A:N7	2.45	0.43
1:2A:2582:G:OP2	62:2A:3976:HOH:O	2.21	0.43
1:2A:2835:A:N6	1:2A:2879:C:OP2	2.46	0.43
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.18	0.43
6:2G:33:ARG:O	6:2G:34:LEU:HD23	2.18	0.43
7:2H:58:GLU:HG2	7:2H:61:HIS:H	1.84	0.43
7:2H:149:ARG:HD2	7:2H:164:TYR:CZ	2.54	0.43
8:2I:38:LEU:HD11	23:21:75:GLU:HG3	2.00	0.43
14:2S:13:ARG:HG3	14:2S:14:VAL:N	2.32	0.43
17:2V:12:TYR:CD1	17:2V:20:LEU:HD21	2.54	0.43
24:22:30:ARG:O	24:22:34:GLU:HG3	2.19	0.43
26:24:45:GLY:C	26:24:47:GLN:H	2.27	0.43
32:2a:266:G:H5"	32:2a:268:C:H41	1.83	0.43
32:2a:443:C:H2'	32:2a:444:C:H6	1.84	0.43
35:2d:74:GLN:O	35:2d:78:LEU:HB2	2.18	0.43
45:2n:12:ARG:NH2	45:2n:14:PRO:HA	2.31	0.43
47:2p:3:LYS:HD3	47:2p:3:LYS:HA	1.81	0.43
51:2t:86:ARG:O	51:2t:90:GLN:HB2	2.18	0.43
54:2w:13:C:O2'	54:2w:14:A:H8	2.00	0.43
54:2w:19:G:H1	54:2w:56:C:H42	1.67	0.43
54:2w:62:C:H2'	54:2w:63:U:O4'	2.19	0.43
1:1A:468:G:N7	29:17:39:ARG:NH2	2.60	0.42
1:1A:828:U:H4'	1:1A:831:G:N1	2.33	0.42
1:1A:1095:A:C8	1:1A:1096:A:N7	2.87	0.42
1:1A:1857:G:C6	1:1A:1858:G:C6	3.07	0.42
1:1A:1949:G:C6	1:1A:1950:G:C6	3.06	0.42
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.82	0.42
4:1E:174:ASP:OD1	4:1E:175:VAL:N	2.52	0.42
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	2.01	0.42
8:1I:76:THR:O	8:1I:76:THR:OG1	2.33	0.42
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	1.99	0.42
25:13:35:ARG:HE	25:13:37:LEU:HD21	1.84	0.42
32:1a:134:A:H1'	32:1a:325:A:C5	2.53	0.42
32:1a:942:G:C2	32:1a:1342:C:C2	3.07	0.42
32:1a:971:G:H22	32:1a:1363(A):A:P	2.40	0.42
32:1a:1220:G:H2'	32:1a:1221:G:O4'	2.19	0.42
32:1a:1326:C:OP1	52:1u:17:THR:OG1	2.22	0.42
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:174:VAL:HG13	33:1b:184:VAL:HG11	2.01	0.42
33:1b:230:VAL:HG12	33:1b:232:PRO:HD2	2.01	0.42
34:1c:8:ILE:HG13	34:1c:16:ARG:NE	2.34	0.42
35:1d:142:PRO:HA	35:1d:185:PHE:HD2	1.84	0.42
35:1d:173:TRP:O	35:1d:186:LEU:HB2	2.19	0.42
42:1k:34:ASP:OD1	42:1k:38:ASN:N	2.47	0.42
42:1k:54:ARG:H	42:1k:54:ARG:HG3	1.68	0.42
43:1l:7:ILE:HD13	43:1l:7:ILE:HA	1.87	0.42
50:1s:50:ALA:HA	50:1s:58:VAL:O	2.19	0.42
54:1w:54:5MU:H2'	54:1w:55:PSU:O4'	2.18	0.42
1:2A:55:G:O2'	1:2A:127:A:N1	2.37	0.42
1:2A:506:G:O3'	1:2A:507:A:H8	2.02	0.42
1:2A:1570:A:H5'	3:2D:36:PRO:HD3	2.00	0.42
1:2A:2026:C:H42	1:2A:2037:G:H1	1.65	0.42
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.33	0.42
3:2D:273:ARG:HG2	3:2D:274:ARG:H	1.83	0.42
6:2G:102:PHE:O	6:2G:106:LEU:HB2	2.19	0.42
8:2I:14:ASP:N	8:2I:17:GLN:OE1	2.32	0.42
10:2O:112:MET:HA	10:2O:115:VAL:HB	2.00	0.42
32:2a:46:G:H2'	32:2a:366:C:C5	2.54	0.42
32:2a:256:U:H2'	32:2a:257:G:C8	2.54	0.42
32:2a:321:A:H2	32:2a:332:G:H22	1.67	0.42
32:2a:552:U:C5'	43:2l:86:ARG:HE	2.32	0.42
32:2a:922:G:C2	32:2a:923:A:C4	3.07	0.42
32:2a:977:A:O2'	32:2a:981:U:N3	2.51	0.42
32:2a:1061:G:H5'	41:2j:59:SER:HB3	1.99	0.42
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.47	0.42
33:2b:37:ASN:C	33:2b:39:ILE:H	2.26	0.42
35:2d:114:ARG:HA	35:2d:117:ALA:HB3	2.01	0.42
46:2o:15:PHE:CZ	46:2o:84:LYS:HD2	2.54	0.42
54:2w:51:A:H3'	54:2w:64:G:H21	1.83	0.42
55:2x:18:G:C2	55:2x:58:A:C5	3.07	0.42
1:1A:363(C):G:H2'	1:1A:363(D):G:H8	1.83	0.42
1:1A:764:A:H5"	3:1D:210:GLY:CA	2.49	0.42
1:1A:1010:A:N3	1:1A:1153:C:H1'	2.34	0.42
1:1A:1079:C:C4	1:1A:1088:A:N3	2.88	0.42
1:1A:1138:G:N3	9:1N:106:MET:HE2	2.34	0.42
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.54	0.42
1:1A:2136:C:N4	1:1A:2155:G:C6	2.88	0.42
1:1A:2271:G:H5"	22:10:20:ARG:NH1	2.34	0.42
1:1A:2773:C:H2'	1:1A:2774:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.80	0.42
9:1N:15:LEU:HB3	9:1N:137:LYS:HA	2.01	0.42
12:1Q:1:MET:HE3	12:1Q:1:MET:HB2	1.86	0.42
12:1Q:89:ASN:HB2	55:1x:1:C:C4	2.54	0.42
17:1V:4:ILE:HA	17:1V:12:TYR:O	2.19	0.42
26:14:57:GLU:OE1	26:14:58:ARG:NH1	2.52	0.42
32:1a:737:A:H2'	32:1a:738:C:C6	2.54	0.42
32:1a:831:U:H2'	32:1a:832:C:C6	2.54	0.42
32:1a:1171:G:H2'	32:1a:1172:C:C6	2.54	0.42
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	2.02	0.42
33:1b:78:GLN:OE1	33:1b:94:ASN:ND2	2.52	0.42
36:1e:9:LYS:HD3	36:1e:10:MET:N	2.33	0.42
41:1j:65:LEU:HD12	45:1n:55:GLY:O	2.19	0.42
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.82	0.42
1:2A:510:C:H2'	1:2A:511:U:O4'	2.20	0.42
1:2A:580:C:H2'	1:2A:581:C:C6	2.54	0.42
1:2A:2432:A:C6	1:2A:2433:A:C6	3.07	0.42
2:2B:13:A:N1	2:2B:69:G:O2'	2.52	0.42
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.66	0.42
5:2F:150:GLY:HA2	5:2F:172:TRP:CE3	2.54	0.42
10:2O:92:GLU:H	10:2O:92:GLU:HG3	1.51	0.42
15:2T:28:VAL:HG13	15:2T:86:ILE:HG23	2.01	0.42
32:2a:169:C:H2'	32:2a:170:U:O4'	2.19	0.42
32:2a:826:C:H2'	32:2a:827:U:C6	2.54	0.42
32:2a:848:C:H2'	32:2a:849:C:O4'	2.19	0.42
32:2a:1217:C:H2'	32:2a:1218:C:O4'	2.19	0.42
35:2d:152:SER:O	35:2d:155:LEU:HB2	2.18	0.42
54:2w:12:U:H3	54:2w:23:A:N6	2.14	0.42
57:2y:11:C:N4	57:2y:24:G:H1	2.16	0.42
1:1A:558:G:OP1	9:1N:111:PRO:HD2	2.19	0.42
1:1A:692:C:O2'	3:1D:38:LYS:NZ	2.52	0.42
1:1A:887:A:H1'	1:1A:889:C:OP1	2.19	0.42
1:1A:1365:A:OP2	23:11:3:LYS:HG2	2.19	0.42
1:1A:1952:A:C6	1:1A:1953:A:N1	2.88	0.42
2:1B:2:C:H2'	2:1B:3:C:C6	2.55	0.42
6:1G:27:ASN:OD1	6:1G:28:VAL:N	2.52	0.42
7:1H:64:LEU:HD23	7:1H:64:LEU:HA	1.81	0.42
12:1Q:54:MET:HE3	12:1Q:54:MET:HB2	1.85	0.42
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.55	0.42
23:11:12:PRO:HB2	23:11:41:ARG:NH2	2.35	0.42
32:1a:162:A:H3'	32:1a:163:C:C5'	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:437:U:O2'	35:1d:123:HIS:HD2	2.01	0.42
32:1a:643:C:H2'	32:1a:644:G:H8	1.83	0.42
32:1a:692:U:O2'	32:1a:694:A:N7	2.33	0.42
32:1a:982:U:H4'	32:1a:983:A:O5'	2.20	0.42
32:1a:993:G:C2'	32:1a:995:C:H41	2.32	0.42
32:1a:1122:U:H2'	32:1a:1123:A:O4'	2.20	0.42
32:1a:1466:C:H2'	32:1a:1467:G:O4'	2.19	0.42
40:1i:86:VAL:C	40:1i:88:TYR:H	2.28	0.42
55:1x:15:G:H21	55:1x:21:A:H1'	1.85	0.42
1:2A:30:G:C6	1:2A:31:C:C4	3.08	0.42
1:2A:118:A:N3	1:2A:178:G:H1'	2.35	0.42
1:2A:455:C:N3	1:2A:472:A:H2'	2.34	0.42
1:2A:632:A:H2'	1:2A:633:A:C8	2.54	0.42
1:2A:877:U:H3	1:2A:899:A:H2	1.66	0.42
1:2A:1178:C:H2'	1:2A:1179:C:C6	2.53	0.42
1:2A:2050:C:N4	1:2A:2051:A:C6	2.87	0.42
1:2A:2280:G:O6	22:20:14:ARG:HD2	2.18	0.42
2:2B:48:A:OP2	14:2S:30:ARG:NH2	2.52	0.42
7:2H:121:ILE:HG21	7:2H:144:VAL:HG11	2.01	0.42
8:2I:38:LEU:O	8:2I:40:THR:N	2.52	0.42
8:2I:45:LYS:HB2	8:2I:45:LYS:HE2	1.66	0.42
15:2T:125:ARG:HE	15:2T:125:ARG:HB3	1.47	0.42
16:2U:10:ARG:NH1	62:2U:302:HOH:O	2.53	0.42
32:2a:677:U:H1'	42:2k:119:CYS:SG	2.59	0.42
32:2a:1216:G:H2'	32:2a:1217:C:C6	2.54	0.42
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	2.01	0.42
33:2b:110:GLN:HG2	33:2b:111:ARG:NH1	2.33	0.42
34:2c:98:ASN:HD22	34:2c:98:ASN:H	1.67	0.42
36:2e:43:LEU:HD21	36:2e:132:ALA:HB1	2.00	0.42
57:2y:9:A:C2	57:2y:45:G:N2	2.87	0.42
1:1A:1011:G:OP1	16:1U:77:SER:OG	2.37	0.42
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.19	0.42
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.18	0.42
2:1B:66:A:H61	2:1B:108:U:H2'	1.83	0.42
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.55	0.42
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	2.00	0.42
16:1U:34:LYS:HA	16:1U:34:LYS:HD2	1.68	0.42
25:13:16:PRO:HB2	25:13:18:ASP:OD1	2.19	0.42
32:1a:23:C:OP2	32:1a:561:U:N3	2.37	0.42
32:1a:538:G:H5"	43:1l:114:LYS:HB2	2.01	0.42
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:926:G:C6	32:1a:1505:G:C6	3.06	0.42
32:1a:1158:C:O2'	32:1a:1160:G:OP1	2.31	0.42
32:1a:1318:A:OP1	50:1s:7:LYS:NZ	2.28	0.42
32:1a:1349:A:C2	32:1a:1374:A:C4	3.08	0.42
41:1j:7:LYS:HG3	41:1j:71:LEU:HD13	2.00	0.42
55:1x:47:U:H5'	55:1x:48:C:H5'	2.02	0.42
1:2A:271(Y):U:O3'	1:2A:271(Z):C:H6	2.02	0.42
1:2A:1260:G:C6	1:2A:1261:C:C4	3.07	0.42
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.34	0.42
1:2A:1275:A:N1	1:2A:1295:C:O2'	2.39	0.42
1:2A:1942:5MC:H4'	54:2w:72:C:OP2	2.19	0.42
1:2A:2299:G:H2'	1:2A:2300:G:C8	2.55	0.42
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.53	0.42
4:2E:11:MET:HE2	4:2E:11:MET:HB3	1.96	0.42
5:2F:101:LEU:HD12	5:2F:102:PRO:HD2	2.00	0.42
11:2P:124:LYS:HA	11:2P:144:GLU:O	2.19	0.42
12:2Q:72:LYS:HB3	12:2Q:94:VAL:HG23	2.01	0.42
13:2R:59:ASP:OD2	13:2R:61:HIS:HB3	2.20	0.42
16:2U:61:TRP:CZ2	16:2U:93:LYS:HG3	2.54	0.42
32:2a:982:U:N3	32:2a:1223:C:N3	2.66	0.42
32:2a:1258:G:H8	32:2a:1258:G:OP2	2.02	0.42
41:2j:15:THR:HB	41:2j:94:VAL:HG23	2.01	0.42
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	2.02	0.42
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.20	0.42
54:2w:50:C:N3	54:2w:64:G:O6	2.52	0.42
1:1A:184:C:H2'	1:1A:185:U:H6	1.83	0.42
1:1A:1239:G:H2'	1:1A:1240:U:O4'	2.19	0.42
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.20	0.42
1:1A:1512:U:H2'	1:1A:1513:C:C6	2.54	0.42
1:1A:1803:A:C8	1:1A:1804:C:C5	3.08	0.42
1:1A:1916:A:H2'	1:1A:1917:PSU:H6	1.85	0.42
1:1A:2136:C:N4	1:1A:2155:G:H1	2.16	0.42
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.19	0.42
2:1B:74:U:H2'	2:1B:75:G:O4'	2.20	0.42
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	2.00	0.42
3:1D:76:PRO:O	3:1D:98:VAL:HG22	2.19	0.42
3:1D:223:GLY:HA3	3:1D:231:HIS:CE1	2.55	0.42
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.54	0.42
17:1V:34:GLU:HB3	17:1V:56:SER:HB2	2.00	0.42
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.55	0.42
24:12:3:LEU:O	24:12:7:ARG:HG3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:50:VAL:HB	25:13:53:LEU:HD12	2.01	0.42
32:1a:737:A:H5"	37:1f:92:LYS:HG3	2.01	0.42
32:1a:1518:MA6:H93	32:1a:1519:MA6:C9	2.49	0.42
34:1c:119:ARG:HG2	34:1c:140:ARG:NH2	2.35	0.42
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.20	0.42
36:1e:146:ALA:O	36:1e:150:ARG:HB2	2.19	0.42
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	2.01	0.42
44:1m:84:ILE:HB	50:1s:66:MET:HE2	2.01	0.42
47:1p:3:LYS:HE3	47:1p:65:GLN:HB2	2.02	0.42
1:2A:700:G:O2'	1:2A:1632:A:N3	2.49	0.42
1:2A:730:C:H2'	1:2A:731:C:H6	1.84	0.42
1:2A:1419:A:H5'	1:2A:1579:A:H61	1.83	0.42
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.19	0.42
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.20	0.42
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.66	0.42
2:2B:40:U:O2'	2:2B:41:U:H5'	2.19	0.42
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.19	0.42
5:2F:24:LEU:HD12	5:2F:24:LEU:HA	1.90	0.42
10:2O:48:PRO:HB2	10:2O:49:ARG:CZ	2.49	0.42
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.19	0.42
21:2Z:27:VAL:HG12	21:2Z:85:HIS:CE1	2.47	0.42
32:2a:200:G:H1	32:2a:217:C:H42	1.68	0.42
32:2a:300:A:H2'	32:2a:301:G:O4'	2.19	0.42
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.84	0.42
32:2a:1376:U:C2	32:2a:1377:A:N7	2.87	0.42
33:2b:98:LEU:HB3	33:2b:101:MET:HG3	2.00	0.42
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.32	0.42
42:2k:41:THR:HG21	42:2k:71:LYS:C	2.45	0.42
44:2m:117:VAL:HG22	44:2m:118:ALA:H	1.85	0.42
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	2.00	0.42
48:2q:6:LEU:O	48:2q:58:GLU:HA	2.19	0.42
49:2r:67:ALA:HA	49:2r:70:ILE:HD12	2.00	0.42
1:1A:8:A:H2'	1:1A:9:U:H6	1.83	0.42
1:1A:72:U:H5'	24:12:61:LEU:HD12	2.00	0.42
1:1A:579:G:H2'	1:1A:580:C:C6	2.55	0.42
1:1A:1176:G:H4'	1:1A:1177:A:OP1	2.19	0.42
1:1A:1341:U:OP2	1:1A:1394:U:O2'	2.36	0.42
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.69	0.42
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.55	0.42
1:1A:2142:C:OP1	1:1A:2142:C:H4'	2.19	0.42
1:1A:2193:G:H2'	1:1A:2194:G:H8	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:18:62:LEU:HB3	30:18:65:GLU:HG3	2.00	0.42
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.66	0.42
32:1a:181:G:H4'	32:1a:182:U:H5'	2.00	0.42
32:1a:735:C:H2'	32:1a:736:C:C6	2.54	0.42
32:1a:1089:G:H1	32:1a:1096:C:H42	1.67	0.42
39:1h:77:GLU:HG3	39:1h:78:GLN:N	2.34	0.42
39:1h:134:ILE:HD13	39:1h:134:ILE:HA	1.79	0.42
54:1w:11:C:N4	54:1w:24:G:H1	2.18	0.42
55:1x:37:A:H2'	55:1x:38:A:O4'	2.19	0.42
1:2A:793:A:OP2	1:2A:2071:A:O2'	2.30	0.42
1:2A:910:A:H2	1:2A:2264:C:O2	2.01	0.42
1:2A:1178:C:H2'	1:2A:1179:C:H6	1.84	0.42
1:2A:1530:C:H6	1:2A:1530:C:H2'	1.71	0.42
1:2A:1599:C:OP1	19:2X:36:LYS:HG3	2.20	0.42
1:2A:2118:U:C4	1:2A:2149:G:H1'	2.55	0.42
1:2A:2615:U:C2	27:25:7:PRO:HA	2.54	0.42
4:2E:38:THR:HG23	4:2E:41:LYS:HB3	2.02	0.42
5:2F:115:ALA:O	5:2F:119:ARG:HB2	2.20	0.42
6:2G:179:PRO:HB2	26:24:42:PHE:CE2	2.55	0.42
16:2U:104:GLN:HE21	16:2U:105:VAL:HG23	1.84	0.42
24:22:33:MET:O	24:22:36:ARG:HB2	2.19	0.42
26:24:16:CYS:SG	26:24:17:GLY:N	2.93	0.42
32:2a:1009:G:H2'	32:2a:1010:G:H5'	2.01	0.42
37:2f:53:ALA:HB3	37:2f:86:ARG:CZ	2.50	0.42
40:2i:70:LYS:O	40:2i:74:ILE:N	2.53	0.42
48:2q:29:HIS:CG	48:2q:30:PRO:HD2	2.54	0.42
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.19	0.42
1:1A:2053:G:OP1	4:1E:144:ARG:HG3	2.20	0.42
1:1A:2161:C:O2'	1:1A:2162:G:H5"	2.19	0.42
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.53	0.42
1:1A:2405:G:O2'	1:1A:2406:U:OP1	2.29	0.42
3:1D:38:LYS:HA	3:1D:38:LYS:HD2	1.94	0.42
11:1P:112:LEU:O	11:1P:128:HIS:HB2	2.20	0.42
12:1Q:59:ARG:C	12:1Q:61:GLY:H	2.25	0.42
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.35	0.42
21:1Z:75:ASN:O	21:1Z:84:GLU:HG2	2.19	0.42
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.20	0.42
32:1a:130:A:HO2'	32:1a:131:C:P	2.40	0.42
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.40	0.42
32:1a:955:U:O2'	50:1s:83:HIS:HD2	2.02	0.42
36:1e:72:GLN:O	36:1e:75:THR:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:78:HIS:CE1	36:1e:142:LEU:HA	2.55	0.42
36:1e:85:GLY:C	36:1e:87:SER:H	2.27	0.42
39:1h:103:VAL:HG23	39:1h:110:ALA:HB2	2.01	0.42
48:1q:25:ARG:HB2	48:1q:25:ARG:HH11	1.84	0.42
48:1q:50:LYS:HE2	48:1q:51:TYR:CZ	2.54	0.42
51:1t:63:ILE:HG22	51:1t:77:ALA:HB1	2.01	0.42
53:1v:21:A:N1	54:1w:34:U8U:C4	2.82	0.42
57:1y:36:U:C4	57:1y:37:T6A:C4	3.07	0.42
1:2A:557:U:H2'	1:2A:558:G:C8	2.55	0.42
1:2A:892:G:H3'	1:2A:893:C:C5'	2.49	0.42
1:2A:980:A:N3	1:2A:2037:G:O2'	2.53	0.42
1:2A:1022:G:N7	9:2N:66:LYS:HE2	2.35	0.42
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.20	0.42
1:2A:1472:A:H2'	1:2A:1473:G:O4'	2.19	0.42
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.19	0.42
1:2A:1785:A:N6	62:2A:4126:HOH:O	2.52	0.42
1:2A:2671:A:H2'	1:2A:2672:G:O4'	2.18	0.42
1:2A:2784:C:H1'	4:2E:37:ARG:NH1	2.31	0.42
2:2B:44:G:N3	2:2B:47:C:N4	2.63	0.42
2:2B:114:C:H2'	2:2B:115:G:H8	1.84	0.42
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	2.01	0.42
9:2N:42:TRP:CE3	16:2U:63:VAL:HG11	2.55	0.42
14:2S:27:SER:HA	14:2S:88:ASP:HB3	2.01	0.42
21:2Z:77:ASP:CG	21:2Z:80:ARG:HH11	2.26	0.42
22:20:46:LYS:HB2	22:20:78:TYR:CE1	2.54	0.42
32:2a:359:U:H2'	32:2a:360:A:C8	2.54	0.42
32:2a:403:C:N4	62:2a:1929:HOH:O	2.51	0.42
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.55	0.42
36:2e:9:LYS:HD3	36:2e:9:LYS:HA	1.84	0.42
38:2g:16:LEU:HD22	40:2i:41:VAL:O	2.20	0.42
42:2k:52:GLY:N	42:2k:55:LYS:HE2	2.34	0.42
51:2t:68:LYS:HB3	51:2t:68:LYS:HE2	1.81	0.42
1:1A:2032:G:OP2	1:1A:2454:G:O2'	2.29	0.42
1:1A:2142:C:H2'	1:1A:2143:C:C6	2.54	0.42
4:1E:7:VAL:HG23	4:1E:51:PHE:HE2	1.85	0.42
5:1F:144:LYS:HE3	5:1F:144:LYS:HB3	1.85	0.42
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	2.02	0.42
26:14:49:PHE:HB3	26:14:50:VAL:H	1.45	0.42
32:1a:356:A:N3	32:1a:368:U:O2'	2.47	0.42
32:1a:890:G:O2'	32:1a:906:G:O6	2.35	0.42
32:1a:1312:G:N2	32:1a:1326:C:C2	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.37	0.42
38:1g:78:ARG:HD3	38:1g:156:TRP:CZ3	2.54	0.42
42:1k:111:ASP:OD1	49:1r:84:LYS:HE3	2.20	0.42
44:1m:44:ARG:HD3	44:1m:44:ARG:HA	1.88	0.42
49:1r:38:GLU:O	49:1r:41:LYS:HG2	2.19	0.42
57:1y:28:U:H3	57:1y:42:A:N6	2.16	0.42
1:2A:569:U:C4	1:2A:570:G:C6	3.08	0.42
1:2A:907:U:O2'	12:2Q:101:ARG:NH2	2.43	0.42
1:2A:1221(A):C:C2	1:2A:1229:G:C2	3.07	0.42
1:2A:2286:A:P	28:26:29:ASN:HD22	2.43	0.42
1:2A:2740:A:C6	1:2A:2764:A:C8	3.08	0.42
2:2B:119:G:H3'	2:2B:120:A:C8	2.55	0.42
5:2F:161:GLU:O	5:2F:165:ARG:HG3	2.19	0.42
25:23:31:LEU:C	25:23:33:GLN:H	2.27	0.42
32:2a:23:C:OP2	32:2a:561:U:N3	2.48	0.42
32:2a:280:C:N3	48:2q:39:SER:OG	2.51	0.42
32:2a:804:U:OP1	62:2a:1916:HOH:O	2.22	0.42
32:2a:1206:G:H2'	32:2a:1207:2MG:O4'	2.19	0.42
32:2a:1225:A:H2'	32:2a:1226:C:C5	2.55	0.42
32:2a:1373:G:H5"	38:2g:36:LYS:CB	2.50	0.42
45:2n:23:ARG:HA	45:2n:29:ARG:O	2.20	0.42
51:2t:54:LYS:HB3	51:2t:54:LYS:HE2	1.79	0.42
57:2y:48:C:C5	57:2y:59:A:H5"	2.55	0.42
1:1A:818:G:H4'	1:1A:838:C:O3'	2.20	0.42
1:1A:1537:G:H2'	1:1A:1538:G:C8	2.55	0.42
1:1A:1558:A:O2'	62:1A:4167:HOH:O	2.22	0.42
1:1A:1651:G:N7	13:1R:11:ASN:ND2	2.68	0.42
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.19	0.42
1:1A:2556:C:H2'	1:1A:2557:G:O4'	2.20	0.42
1:1A:2567:G:H2'	1:1A:2568:C:H6	1.82	0.42
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.19	0.42
2:1B:108:U:H2'	2:1B:109:C:H5"	2.01	0.42
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.85	0.42
10:1O:79:PHE:CD1	15:1T:72:VAL:HG22	2.55	0.42
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HB2	2.02	0.42
32:1a:370:C:H2'	32:1a:371:G:C8	2.55	0.42
32:1a:837:G:H2'	32:1a:838:G:O4'	2.20	0.42
32:1a:922:G:H2'	32:1a:923:A:C8	2.55	0.42
33:1b:37:ASN:C	33:1b:39:ILE:H	2.28	0.42
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	2.02	0.42
37:1f:18:GLN:HA	37:1f:21:LEU:HG	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:79:LEU:HD22	40:1i:104:ARG:HB2	2.02	0.42
42:1k:43:SER:HB3	42:1k:64:ALA:O	2.20	0.42
44:1m:67:GLU:O	44:1m:71:ARG:HB2	2.19	0.42
47:1p:57:ARG:HE	47:1p:79:VAL:HG13	1.85	0.42
50:1s:40:ILE:HB	50:1s:67:VAL:O	2.20	0.42
51:1t:40:ALA:HB2	51:1t:55:ILE:HG22	2.02	0.42
1:2A:252:G:OP1	11:2P:50:ARG:NH1	2.43	0.42
1:2A:453:C:O2	1:2A:457:A:O2'	2.38	0.42
1:2A:728:G:H5"	3:2D:13:ARG:NH2	2.34	0.42
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.51	0.42
1:2A:1401:G:H2'	1:2A:1402:C:O4'	2.19	0.42
2:2B:43:C:C4	2:2B:45:A:C6	3.08	0.42
2:2B:119:G:H5'	2:2B:120:A:OP2	2.20	0.42
3:2D:79:VAL:HA	3:2D:95:LEU:HD23	2.01	0.42
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	2.01	0.42
6:2G:124:SER:OG	6:2G:132:ASN:O	2.37	0.42
8:2I:2:LYS:HB3	8:2I:2:LYS:HE2	1.86	0.42
9:2N:104:LYS:HA	9:2N:107:LEU:HG	2.01	0.42
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.72	0.42
15:2T:26:ASP:HA	15:2T:92:GLY:H	1.84	0.42
15:2T:83:ILE:HD13	15:2T:86:ILE:HD11	2.00	0.42
32:2a:197:A:H4'	32:2a:198:G:O5'	2.20	0.42
32:2a:691:G:H2'	32:2a:692:U:H6	1.85	0.42
32:2a:693:G:C6	32:2a:694:A:C6	3.08	0.42
32:2a:947:G:H1	32:2a:1234:C:H42	1.67	0.42
32:2a:1061:G:C5'	41:2j:59:SER:HB3	2.50	0.42
32:2a:1122:U:C2	32:2a:1123:A:C8	3.07	0.42
32:2a:1144:G:C6	32:2a:1145:C:N4	2.88	0.42
32:2a:1157:A:H61	32:2a:1178:G:N2	2.17	0.42
32:2a:1272:G:N2	32:2a:1273:G:N7	2.68	0.42
32:2a:1359:C:H1'	32:2a:1362:C:H41	1.85	0.42
32:2a:1372:U:H2'	32:2a:1373:G:O4'	2.19	0.42
33:2b:28:PHE:CG	33:2b:190:THR:HA	2.54	0.42
36:2e:28:PHE:O	36:2e:47:LYS:HA	2.20	0.42
54:2w:19:G:N2	54:2w:56:C:N3	2.64	0.42
1:1A:218:A:C2	1:1A:235:U:H4'	2.55	0.42
1:1A:476:G:N1	1:1A:479:A:OP2	2.53	0.42
1:1A:2165:G:N2	1:1A:2171:A:O2'	2.53	0.42
8:1I:38:LEU:HD23	8:1I:38:LEU:N	2.34	0.42
8:1I:84:GLY:O	8:1I:86:THR:N	2.52	0.42
19:1X:8:ILE:HD13	19:1X:30:VAL:HG12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:638:G:C2	32:1a:639:G:C4	3.08	0.42
32:1a:1060:C:H5"	41:1j:51:ARG:HG2	2.01	0.42
32:1a:1082:G:H2'	32:1a:1083:U:O4'	2.20	0.42
33:1b:168:THR:OG1	33:1b:192:SER:HA	2.20	0.42
35:1d:118:ARG:HG3	35:1d:136:PRO:HB3	2.02	0.42
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.63	0.42
1:2A:31:C:H5"	1:2A:1239:G:OP1	2.20	0.42
1:2A:76:C:O2'	24:22:59:ARG:HA	2.19	0.42
1:2A:236:C:H2'	1:2A:237:C:C6	2.55	0.42
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.55	0.42
1:2A:1345:C:OP2	62:2A:3978:HOH:O	2.22	0.42
1:2A:1487:G:H2'	1:2A:1488:G:O4'	2.19	0.42
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.20	0.42
1:2A:1638:C:H2'	1:2A:1639:U:O4'	2.20	0.42
1:2A:1759:A:H1'	1:2A:2711:A:C2	2.55	0.42
1:2A:1990:C:H2'	1:2A:1991:U:O4'	2.20	0.42
3:2D:24:ILE:CD1	3:2D:84:TYR:HB2	2.50	0.42
8:2I:57:ARG:O	8:2I:61:ARG:NH1	2.53	0.42
8:2I:80:PRO:CA	8:2I:145:VAL:HG13	2.50	0.42
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.19	0.42
10:2O:93:PRO:HD2	10:2O:113:LYS:HG2	2.02	0.42
22:20:69:PHE:CE2	22:20:79:VAL:HG22	2.55	0.42
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.55	0.42
32:2a:587:G:OP1	39:2h:89:PRO:HB3	2.20	0.42
32:2a:949:A:O2'	32:2a:971:G:O6	2.25	0.42
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.37	0.42
34:2c:98:ASN:H	34:2c:98:ASN:ND2	2.17	0.42
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.20	0.42
44:2m:13:LYS:O	44:2m:45:VAL:N	2.48	0.42
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	2.02	0.42
57:2y:15:G:N1	57:2y:48:C:N3	2.67	0.42
57:2y:67:C:H2'	57:2y:68:G:C8	2.55	0.42
1:1A:467:G:HO2'	1:1A:796:C:HO2'	1.63	0.41
1:1A:530:G:N1	1:1A:2023:G:OP1	2.38	0.41
1:1A:819:A:C4	1:1A:1189:A:C2	3.07	0.41
1:1A:1068:G:H5"	1:1A:1069:A:OP2	2.20	0.41
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.20	0.41
1:1A:1303:G:H1'	1:1A:1641:A:N1	2.35	0.41
1:1A:1676:A:H2'	1:1A:1677:A:O4'	2.20	0.41
1:1A:2086:U:H2'	1:1A:2087:G:H8	1.84	0.41
1:1A:2118:U:H5	1:1A:2148:G:N3	2.17	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.55	0.41
2:1B:14:U:O2	2:1B:108:U:H4'	2.20	0.41
4:1E:47:VAL:HG22	4:1E:84:PHE:O	2.20	0.41
4:1E:190:GLY:HA3	62:1E:417:HOH:O	2.20	0.41
15:1T:118:ARG:HG2	32:1a:1442(A):G:C8	2.55	0.41
23:11:73:LEU:HD23	23:11:73:LEU:HA	1.84	0.41
32:1a:38:G:O2'	32:1a:39:G:H5"	2.20	0.41
32:1a:67:C:H4'	32:1a:172:A:H1'	2.01	0.41
32:1a:236:G:H5"	48:1q:42:TYR:OH	2.20	0.41
32:1a:441:A:H3'	32:1a:442:C:C6	2.55	0.41
32:1a:616:G:C2'	32:1a:617:G:H5'	2.50	0.41
32:1a:952:U:H2'	32:1a:953:G:C8	2.55	0.41
32:1a:1492:A:H2'	32:1a:1493:A:C8	2.54	0.41
33:1b:19:HIS:HA	33:1b:39:ILE:CG2	2.50	0.41
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	2.02	0.41
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.55	0.41
40:1i:56:LEU:HD23	40:1i:56:LEU:H	1.85	0.41
43:1l:89:ARG:HE	43:1l:89:ARG:HB2	1.68	0.41
55:1x:63:G:H2'	55:1x:64:G:H8	1.84	0.41
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.19	0.41
1:2A:1248:G:C2	16:2U:3:ARG:HD2	2.55	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.73	0.41
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.33	0.41
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.20	0.41
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.55	0.41
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.44	0.41
4:2E:30:PRO:HB3	4:2E:92:THR:HG22	2.02	0.41
17:2V:89:GLN:HA	17:2V:90:PRO:HD3	1.92	0.41
19:2X:31:HIS:HA	19:2X:32:PRO:HD3	1.94	0.41
21:2Z:19:ARG:HD3	21:2Z:84:GLU:HA	2.02	0.41
27:25:46:CYS:SG	27:25:48:GLU:HG2	2.60	0.41
32:2a:340:U:H2'	32:2a:341:C:C6	2.55	0.41
32:2a:1134:G:C2	32:2a:1141:C:C2	3.08	0.41
32:2a:1325:C:H5"	52:2u:17:THR:HG21	2.02	0.41
32:2a:1422:G:H2'	32:2a:1423:G:H8	1.85	0.41
34:2c:39:ILE:H	34:2c:39:ILE:HG13	1.70	0.41
35:2d:170:VAL:HG11	35:2d:176:LEU:HD22	2.01	0.41
40:2i:114:TYR:C	40:2i:116:LYS:H	2.27	0.41
46:2o:24:SER:O	46:2o:28:GLN:HG3	2.20	0.41
49:2r:53:ARG:HE	49:2r:53:ARG:HB3	1.58	0.41
49:2r:58:LEU:HB2	49:2r:63:GLN:NE2	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:51:GLU:O	51:2t:55:ILE:HG12	2.20	0.41
1:1A:555:U:O2'	1:1A:556:G:N7	2.47	0.41
1:1A:604:G:P	11:1P:90:ARG:HH21	2.42	0.41
1:1A:725:G:C6	1:1A:726:G:N1	2.88	0.41
1:1A:878:A:H61	1:1A:899:A:H1'	1.85	0.41
1:1A:1101:U:H2'	1:1A:1102:C:O4'	2.20	0.41
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	2.01	0.41
2:1B:31:C:H4'	6:1G:29:TRP:HH2	1.82	0.41
2:1B:90:A:N7	2:1B:91:C:H1'	2.35	0.41
8:1I:101:LEU:HD23	8:1I:105:HIS:HB2	2.02	0.41
17:1V:22:VAL:HG23	17:1V:23:GLU:O	2.20	0.41
19:1X:11:PRO:HD3	24:12:37:PHE:CE1	2.55	0.41
21:1Z:31:ARG:HB2	21:1Z:32:HIS:CE1	2.55	0.41
21:1Z:54:HIS:HB2	21:1Z:55:HIS:CD2	2.55	0.41
25:13:31:LEU:HD23	25:13:31:LEU:HA	1.92	0.41
29:17:33:ARG:HH11	29:17:33:ARG:HD2	1.74	0.41
32:1a:1084:G:C5	32:1a:1085:U:C4	3.09	0.41
32:1a:1438:G:H2'	32:1a:1439:C:C6	2.56	0.41
32:1a:1470:G:H2'	32:1a:1471:G:O4'	2.20	0.41
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.19	0.41
41:1j:40:LEU:HD12	41:1j:69:ASN:HB3	2.02	0.41
45:1n:15:LYS:HB3	45:1n:16:PHE:CE2	2.55	0.41
55:1x:19:G:H5"	55:1x:60:U:O4	2.20	0.41
1:2A:24:G:O2'	18:2W:77:ASP:HB3	2.20	0.41
1:2A:144:C:H5'	19:2X:2:LYS:HG2	2.00	0.41
1:2A:476:G:H4'	1:2A:502:A:N1	2.35	0.41
1:2A:1169:G:H22	1:2A:1180:C:N4	2.17	0.41
1:2A:1223:G:N2	1:2A:1225:G:H3'	2.35	0.41
1:2A:1580:A:H3'	1:2A:1581:G:C8	2.55	0.41
1:2A:1688:U:H2'	1:2A:1698:A:N6	2.35	0.41
1:2A:2262:U:P	22:20:19:LYS:HE2	2.60	0.41
1:2A:2394:C:N3	57:2y:76:A:O2'	2.37	0.41
1:2A:2579:C:H2'	1:2A:2580:U:O4'	2.20	0.41
7:2H:71:LEU:HD23	7:2H:74:ASN:HD22	1.84	0.41
7:2H:149:ARG:HD2	7:2H:164:TYR:CE2	2.55	0.41
32:2a:1244:C:H2'	32:2a:1245:A:O4'	2.19	0.41
32:2a:1353:G:C2	32:2a:1370:G:C2	3.07	0.41
34:2c:5:ILE:HD12	34:2c:6:HIS:H	1.86	0.41
35:2d:95:GLY:O	35:2d:99:SER:N	2.42	0.41
37:2f:22:GLU:OE1	37:2f:82:ARG:HD3	2.20	0.41
41:2j:92:THR:C	41:2j:94:VAL:H	2.28	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:117:ARG:HB3	43:2l:122:THR:O	2.19	0.41
48:2q:51:TYR:CD1	48:2q:57:VAL:HG11	2.55	0.41
54:2w:22:G:N2	54:2w:23:A:C4	2.88	0.41
54:2w:56:C:H5"	54:2w:57:G:OP2	2.20	0.41
1:1A:271(F):C:H2'	1:1A:271(G):C:O4'	2.19	0.41
1:1A:797:C:H2'	1:1A:798:G:O4'	2.20	0.41
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.20	0.41
1:1A:1058:G:H4'	1:1A:1058:G:OP1	2.20	0.41
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.52	0.41
1:1A:1287:A:O4'	13:1R:104:ARG:HD3	2.20	0.41
1:1A:1359:A:H2'	1:1A:1360:A:H5'	2.02	0.41
19:1X:26:TYR:HB3	19:1X:92:LEU:HD22	2.02	0.41
33:1b:97:TRP:CZ2	33:1b:173:ALA:HA	2.56	0.41
35:1d:141:ARG:HD3	35:1d:142:PRO:HD2	2.01	0.41
40:1i:99:LEU:HD23	40:1i:99:LEU:HA	1.85	0.41
51:1t:72:LEU:HD22	51:1t:76:ALA:HB1	2.02	0.41
1:2A:601:C:O2	1:2A:605:C:H4'	2.21	0.41
1:2A:828:U:H4'	1:2A:831:G:N1	2.35	0.41
1:2A:850:C:H5"	25:23:18:ASP:HB2	2.02	0.41
1:2A:1503:U:H2'	1:2A:1504:C:H6	1.84	0.41
1:2A:2330:G:H2'	1:2A:2331:G:O4'	2.19	0.41
2:2B:50:G:P	14:2S:62:LYS:HB2	2.60	0.41
6:2G:123:ASN:OD1	6:2G:123:ASN:N	2.54	0.41
6:2G:166:ASP:HA	6:2G:169:ALA:HB3	2.02	0.41
9:2N:96:GLU:HB2	9:2N:122:VAL:HG12	2.02	0.41
11:2P:126:VAL:HA	11:2P:146:VAL:HB	2.03	0.41
14:2S:3:ARG:HD2	14:2S:3:ARG:HA	1.94	0.41
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.20	0.41
32:2a:382:A:H2'	32:2a:383:A:C8	2.55	0.41
32:2a:492:G:N7	62:2a:1935:HOH:O	2.37	0.41
32:2a:1263:C:C2	32:2a:1272:G:O6	2.73	0.41
32:2a:1270:C:OP2	52:2u:24:ARG:NH2	2.52	0.41
35:2d:13:ARG:HB3	35:2d:38:TYR:O	2.20	0.41
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.55	0.41
40:2i:114:TYR:CD2	41:2j:60:ARG:HB2	2.55	0.41
44:2m:5:ALA:HB3	44:2m:22:ILE:HD12	2.02	0.41
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.34	0.41
48:2q:90:ILE:HD13	48:2q:90:ILE:HA	1.85	0.41
52:2u:5:ASP:C	52:2u:11:GLY:HA3	2.45	0.41
1:1A:1547:C:H2'	1:1A:1548:C:C6	2.55	0.41
1:1A:1668:A:H4'	1:1A:1669:A:O5'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2168:G:N2	1:1A:2171:A:N7	2.68	0.41
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.20	0.41
1:1A:2720:U:C4	1:1A:2872:G:C6	3.09	0.41
5:1F:22:ALA:HB1	5:1F:199:TRP:HZ2	1.85	0.41
6:1G:120:LEU:N	6:1G:179:PRO:O	2.52	0.41
15:1T:35:LYS:HB3	15:1T:35:LYS:HE2	1.92	0.41
17:1V:57:VAL:HG11	17:1V:96:ILE:HD12	2.02	0.41
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.32	0.41
43:1l:53:ARG:HD2	43:1l:93:LEU:HD11	2.03	0.41
46:1o:5:LYS:O	46:1o:9:GLN:HG2	2.20	0.41
1:2A:299:A:N1	1:2A:322:A:O2'	2.45	0.41
1:2A:581:C:OP2	16:2U:33:ARG:HD3	2.20	0.41
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.20	0.41
1:2A:1536:C:H1'	1:2A:1537:G:C8	2.55	0.41
1:2A:1918:A:O2'	1:2A:1920:OMC:N4	2.54	0.41
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	2.01	0.41
6:2G:110:ALA:HA	6:2G:140:ILE:O	2.20	0.41
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.85	0.41
21:2Z:130:PRO:HA	21:2Z:133:ILE:HD11	2.02	0.41
32:2a:321:A:N7	32:2a:328:C:O2'	2.46	0.41
32:2a:375:U:OP1	47:2p:69:THR:OG1	2.23	0.41
32:2a:540:G:H2'	32:2a:541:G:O4'	2.20	0.41
32:2a:932:C:N4	32:2a:933:G:O6	2.53	0.41
32:2a:1004:A:N6	32:2a:1036:G:C5	2.88	0.41
32:2a:1101:A:H62	33:2b:175:ARG:NH2	2.18	0.41
32:2a:1123:A:H4'	41:2j:37:PRO:HD2	2.01	0.41
33:2b:167:PRO:HD3	33:2b:187:LEU:O	2.20	0.41
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.35	0.41
34:2c:118:GLN:HA	34:2c:121:ALA:CB	2.46	0.41
38:2g:26:PHE:CE2	38:2g:30:ILE:HD11	2.55	0.41
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.55	0.41
57:2y:66:A:H2'	57:2y:67:C:O4'	2.20	0.41
1:1A:271(H):G:H4'	23:11:81:LYS:HG2	2.02	0.41
1:1A:327:G:N2	20:1Y:70:SER:OG	2.48	0.41
1:1A:370:G:O5'	1:1A:423:A:N6	2.54	0.41
1:1A:828:U:C5	1:1A:2247:A:H4'	2.55	0.41
1:1A:2101:G:H2'	1:1A:2102:U:H6	1.85	0.41
1:1A:2515:C:O2'	1:1A:2516:G:H5'	2.20	0.41
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.55	0.41
7:1H:83:TYR:CE2	7:1H:138:LYS:HB2	2.56	0.41
10:1O:64:ARG:HD3	10:1O:101:PRO:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:54:HIS:O	21:1Z:98:MET:HE1	2.20	0.41
26:14:29:PRO:O	26:14:30:GLU:HG3	2.21	0.41
32:1a:50:A:H1'	32:1a:52:G:C8	2.56	0.41
32:1a:317:G:C6	32:1a:318:G:C5	3.09	0.41
32:1a:640:A:O2'	39:1h:115:SER:O	2.30	0.41
32:1a:1162:C:H42	32:1a:1174:G:H1	1.67	0.41
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.55	0.41
35:1d:11:LEU:HD23	35:1d:66:ARG:HB3	2.02	0.41
37:1f:12:PRO:HG3	37:1f:57:GLN:O	2.20	0.41
38:1g:78:ARG:HD2	38:1g:78:ARG:HA	1.89	0.41
49:1r:26:LEU:HB3	49:1r:29:PHE:HE2	1.85	0.41
57:1y:8:U:C4	57:1y:13:C:C4	3.08	0.41
57:1y:15:G:H2'	57:1y:59:A:C2	2.55	0.41
57:1y:53:G:H2'	57:1y:54:5MU:C6	2.55	0.41
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.20	0.41
1:2A:530:G:C5	1:2A:2022:U:H5"	2.55	0.41
1:2A:879:G:N3	1:2A:879:G:H2'	2.36	0.41
1:2A:1113:U:H2'	1:2A:1114:G:O4'	2.21	0.41
1:2A:1693:U:H1'	3:2D:14:ARG:NH2	2.36	0.41
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.21	0.41
1:2A:1993:U:H2'	1:2A:1994:C:O4'	2.20	0.41
1:2A:2185:C:H2'	1:2A:2186:G:O4'	2.20	0.41
1:2A:2319:G:H4'	1:2A:2320:A:OP1	2.21	0.41
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.84	0.41
2:2B:68:C:H2'	2:2B:69:G:H8	1.86	0.41
10:2O:16:ALA:HB2	10:2O:52:VAL:HG21	2.02	0.41
14:2S:25:ARG:O	14:2S:39:ILE:HA	2.20	0.41
17:2V:24:LYS:HA	17:2V:92:THR:OG1	2.21	0.41
19:2X:11:PRO:HD3	24:22:37:PHE:CD2	2.55	0.41
19:2X:14:SER:C	19:2X:16:LYS:N	2.78	0.41
22:20:34:GLY:N	22:20:61:ALA:O	2.42	0.41
23:21:67:ILE:N	23:21:68:PRO:HD2	2.36	0.41
32:2a:120:A:C6	32:2a:122:G:C2	3.08	0.41
32:2a:570:G:O6	32:2a:865:A:N6	2.53	0.41
32:2a:581:G:OP1	46:2o:61:GLY:HA3	2.20	0.41
32:2a:826:C:N4	32:2a:874:G:H1	2.19	0.41
32:2a:1138:G:C6	32:2a:1140:C:H1'	2.56	0.41
32:2a:1141:C:H2'	32:2a:1142:G:O4'	2.19	0.41
32:2a:1176:A:H2'	32:2a:1177:G:H8	1.80	0.41
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.34	0.41
40:2i:40:LEU:HD13	40:2i:74:ILE:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	2.01	0.41
1:1A:284:U:H2'	1:1A:285:C:C6	2.56	0.41
1:1A:582:G:H2'	1:1A:583:G:H8	1.85	0.41
1:1A:750:A:OP1	1:1A:1615:C:N4	2.48	0.41
1:1A:760:G:H2'	1:1A:761:A:O4'	2.20	0.41
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.20	0.41
1:1A:1504:C:H2'	1:1A:1505:C:C6	2.56	0.41
1:1A:1682:G:OP1	1:1A:1699:G:N1	2.54	0.41
1:1A:2366:A:H2'	1:1A:2367:G:O4'	2.20	0.41
1:1A:2438:U:O2'	1:1A:2440:C:OP1	2.34	0.41
1:1A:2478:A:H5'	31:19:31:LYS:HD3	2.01	0.41
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.86	0.41
32:1a:692:U:H1'	32:1a:695:A:N7	2.35	0.41
32:1a:1135:U:O2'	32:1a:1138:G:O6	2.25	0.41
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.44	0.41
32:1a:1226:C:O2'	44:1m:111:LYS:NZ	2.54	0.41
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.56	0.41
1:2A:328:U:H4'	20:2Y:68:HIS:CG	2.55	0.41
1:2A:760:G:H2'	1:2A:761:A:O4'	2.20	0.41
1:2A:1123:C:H1'	31:29:18:ARG:NH2	2.36	0.41
1:2A:1401:G:C6	1:2A:1402:C:C4	3.09	0.41
1:2A:1751:C:O2'	1:2A:2861:G:O2'	2.25	0.41
1:2A:1790:C:H5"	1:2A:1791:A:OP1	2.19	0.41
1:2A:1842:G:O2'	3:2D:253:GLN:OE1	2.34	0.41
1:2A:2320:A:H1'	1:2A:2321:G:N1	2.35	0.41
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.35	0.41
13:2R:104:ARG:HB3	13:2R:107:ASP:OD1	2.20	0.41
23:21:72:GLU:O	23:21:76:ARG:HG2	2.20	0.41
25:23:4:LEU:O	25:23:36:VAL:HA	2.21	0.41
26:24:14:ILE:HA	26:24:31:ILE:O	2.20	0.41
32:2a:152:A:N6	32:2a:170:U:C2	2.89	0.41
32:2a:192:U:H4'	51:2t:57:ARG:HD2	2.01	0.41
32:2a:1206:G:C6	32:2a:1207:2MG:C5	3.09	0.41
35:2d:158:ILE:O	35:2d:162:LEU:N	2.46	0.41
45:2n:9:LYS:HD2	45:2n:12:ARG:HH12	1.86	0.41
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.21	0.41
54:2w:51:A:H5'	54:2w:64:G:N2	2.35	0.41
1:1A:271(P):C:H2'	1:1A:271(Q):G:O4'	2.21	0.41
1:1A:515:A:H1'	1:1A:581:C:H1'	2.03	0.41
1:1A:614:U:H2'	1:1A:614(A):U:O4'	2.20	0.41
1:1A:675:A:C8	1:1A:804:A:C6	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1027:A:C6	1:1A:1126:A:C4	3.09	0.41
1:1A:1142(A):A:C8	1:1A:1144:G:C8	3.09	0.41
1:1A:2010:G:H5"	18:1W:42:ARG:HB2	2.03	0.41
1:1A:2019:A:N6	1:1A:2020:A:C5	2.89	0.41
1:1A:2119:A:H4'	1:1A:2120:G:OP1	2.20	0.41
1:1A:2717:G:H1'	15:1T:96:ARG:HH21	1.86	0.41
5:1F:143:ALA:HB1	5:1F:148:LEU:HB2	2.03	0.41
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.56	0.41
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.20	0.41
21:1Z:46:LYS:HE3	21:1Z:46:LYS:HB2	1.76	0.41
23:11:23:LYS:HD3	23:11:27:GLU:HB2	2.02	0.41
32:1a:456:C:H2'	32:1a:457:C:C6	2.55	0.41
32:1a:593:G:H2'	32:1a:594:G:O4'	2.21	0.41
32:1a:600:C:H42	32:1a:638:G:H1	1.69	0.41
36:1e:24:ARG:H	36:1e:24:ARG:HG2	1.57	0.41
36:1e:43:LEU:HD12	36:1e:43:LEU:HA	1.90	0.41
37:1f:36:ARG:HB2	37:1f:66:GLU:O	2.20	0.41
38:1g:76:ARG:HD3	38:1g:156:TRP:CZ2	2.56	0.41
1:2A:28:A:H1'	1:2A:513:A:C2	2.56	0.41
1:2A:407:G:H2'	1:2A:408:G:C8	2.55	0.41
1:2A:820:A:H1'	1:2A:943:U:H1'	2.02	0.41
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.03	0.41
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.45	0.41
1:2A:1328:G:O2'	1:2A:1329:U:H2'	2.20	0.41
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.43	0.41
2:2B:28:C:H2'	2:2B:29:A:O4'	2.21	0.41
4:2E:67:PHE:O	4:2E:71:GLY:N	2.53	0.41
5:2F:119:ARG:NH1	5:2F:119:ARG:HB3	2.36	0.41
5:2F:132:VAL:HG11	5:2F:163:VAL:HA	2.02	0.41
8:2I:130:TYR:CE2	8:2I:132:PRO:HB3	2.56	0.41
22:20:9:SER:OG	22:20:10:THR:N	2.52	0.41
24:22:63:VAL:O	24:22:67:LYS:HG2	2.20	0.41
26:24:30:GLU:C	26:24:31:ILE:HG13	2.46	0.41
32:2a:11:G:H1	32:2a:23:C:N4	2.14	0.41
32:2a:114:U:O2'	32:2a:115:G:H5'	2.21	0.41
32:2a:201:C:H5'	32:2a:202:U:OP2	2.21	0.41
32:2a:451:A:C6	32:2a:480:U:H2'	2.56	0.41
32:2a:598:U:H2'	32:2a:599:C:C6	2.55	0.41
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.53	0.41
32:2a:1203:C:OP1	45:2n:3:ARG:NE	2.52	0.41
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:100:ASN:HD21	49:2r:23:LYS:CG	2.33	0.41
43:2l:113:ARG:NH2	62:2l:301:HOH:O	2.53	0.41
44:2m:82:MET:HA	44:2m:89:GLY:HA3	2.02	0.41
47:2p:8:ARG:HH21	47:2p:15:PRO:HG3	1.86	0.41
57:2y:44:U:C2	57:2y:45:G:N7	2.88	0.41
1:1A:600:G:H2'	1:1A:601:C:O4'	2.20	0.41
1:1A:2319:G:C2	14:1S:3:ARG:HA	2.56	0.41
1:1A:2394:C:H5"	11:1P:64:LYS:HD2	2.03	0.41
8:1I:101:LEU:O	8:1I:106:GLY:N	2.54	0.41
18:1W:84:ARG:O	18:1W:96:ILE:N	2.53	0.41
20:1Y:7:VAL:HG21	20:1Y:72:VAL:CG1	2.50	0.41
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	2.02	0.41
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.20	0.41
22:10:8:GLY:HA2	55:1x:2:G:H4'	2.02	0.41
32:1a:559:A:H4'	32:1a:560:U:H3'	2.02	0.41
32:1a:657:G:H4'	46:1o:28:GLN:HG2	2.03	0.41
32:1a:1151:A:O2'	32:1a:1152:A:O5'	2.35	0.41
33:1b:32:ILE:HG21	33:1b:40:HIS:HD2	1.84	0.41
39:1h:116:LYS:HD3	39:1h:127:LEU:HD12	2.03	0.41
44:1m:30:ALA:O	44:1m:34:LEU:HG	2.21	0.41
48:1q:31:LEU:HD23	48:1q:32:TYR:CZ	2.56	0.41
1:2A:1191:G:OP1	11:2P:17:LYS:NZ	2.51	0.41
1:2A:1647:G:P	1:2A:1647:G:H3'	2.60	0.41
1:2A:1791:A:H3'	1:2A:1792:G:H8	1.85	0.41
1:2A:2108:C:O2	1:2A:2182:G:N2	2.54	0.41
1:2A:2405:G:H5'	11:2P:75:ILE:HD13	2.02	0.41
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.20	0.41
12:2Q:79:LEU:HD23	12:2Q:79:LEU:HA	1.86	0.41
14:2S:28:VAL:HG21	14:2S:101:LEU:HD22	2.01	0.41
17:2V:69:LYS:HA	17:2V:88:ARG:HG2	2.03	0.41
23:21:3:LYS:H	23:21:61:ARG:HH12	1.69	0.41
32:2a:51:A:N1	32:2a:314:C:O2'	2.50	0.41
32:2a:164:U:H2'	32:2a:165:C:C6	2.56	0.41
32:2a:518:C:H4'	32:2a:519:C:H5"	2.02	0.41
32:2a:553:A:H5"	43:2l:24:VAL:HG21	2.02	0.41
32:2a:1027:C:H3'	32:2a:1028:C:C6	2.56	0.41
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.21	0.41
32:2a:1314:C:H2'	32:2a:1315:U:C6	2.55	0.41
32:2a:1342:C:H2'	32:2a:1343:G:H8	1.84	0.41
33:2b:155:LEU:HG	33:2b:157:ARG:O	2.21	0.41
36:2e:57:LYS:HE3	36:2e:57:LYS:HB2	1.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	2.03	0.41
44:2m:70:LEU:O	44:2m:74:VAL:HG23	2.21	0.41
50:2s:37:ARG:H	50:2s:37:ARG:HG3	1.75	0.41
54:2w:40:C:H2'	54:2w:41:A:C8	2.55	0.41
57:2y:15:G:N2	57:2y:48:C:H42	2.19	0.41
1:1A:35:G:H2'	1:1A:36:G:O4'	2.21	0.41
1:1A:536:A:H5'	16:1U:53:ARG:HD3	2.02	0.41
1:1A:554:U:C4	1:1A:555:U:C4	3.08	0.41
1:1A:581:C:H2'	1:1A:582:G:H8	1.86	0.41
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.20	0.41
1:1A:647:G:O5'	1:1A:647:G:H8	2.04	0.41
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.56	0.41
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.21	0.41
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.04	0.41
1:1A:1275:A:N1	1:1A:1295:C:O2'	2.53	0.41
1:1A:1992:G:H5"	1:1A:1993:U:H5	1.85	0.41
1:1A:2138:C:C2	1:1A:2154:G:C2	3.09	0.41
1:1A:2164:C:OP2	1:1A:2165:G:N2	2.54	0.41
1:1A:2302:G:C2	1:1A:2315:G:C2	3.09	0.41
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.20	0.41
6:1G:33:ARG:O	6:1G:161:THR:HG22	2.20	0.41
6:1G:56:ALA:HB2	6:1G:153:ARG:NH1	2.36	0.41
7:1H:26:VAL:HG12	7:1H:79:VAL:HG21	2.02	0.41
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	2.03	0.41
10:1O:90:GLN:C	10:1O:92:GLU:H	2.28	0.41
18:1W:88:ARG:NH1	18:1W:94:ASP:OD2	2.54	0.41
19:1X:88:LYS:HB3	19:1X:88:LYS:HE3	1.77	0.41
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.54	0.41
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.86	0.41
32:1a:189(K):U:H2'	32:1a:189(L):G:H8	1.85	0.41
32:1a:203:U:OP2	32:1a:203:U:H2'	2.21	0.41
32:1a:472:A:H2'	32:1a:473:G:O4'	2.20	0.41
32:1a:774:G:H2'	32:1a:775:G:O4'	2.21	0.41
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.20	0.41
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.50	0.41
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.54	0.41
32:1a:1179:A:H2'	32:1a:1180:A:O4'	2.20	0.41
32:1a:1309:G:OP1	44:1m:92:HIS:HE1	2.03	0.41
32:1a:1404:5MC:H2'	32:1a:1405:G:C8	2.56	0.41
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.21	0.41
33:1b:41:ILE:HD13	33:1b:41:ILE:HA	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:61:LEU:HD23	33:1b:66:GLY:HA3	2.03	0.41
33:1b:122:PHE:CE2	33:1b:139:LYS:HD2	2.56	0.41
35:1d:13:ARG:NH2	35:1d:40:PRO:HA	2.36	0.41
35:1d:101:LEU:HD22	35:1d:121:VAL:HG21	2.03	0.41
36:1e:131:ILE:HD13	36:1e:131:ILE:HA	1.82	0.41
37:1f:55:ASP:HB2	37:1f:86:ARG:HH12	1.85	0.41
40:1i:19:LEU:HD21	40:1i:81:ILE:HG13	2.03	0.41
41:1j:19:SER:OG	41:1j:91:PRO:HD2	2.20	0.41
47:1p:6:LEU:HD11	47:1p:73:LEU:HD12	2.02	0.41
55:1x:73:A:H5"	55:1x:74:C:H5'	2.02	0.41
57:1y:7:U:O2'	57:1y:8:U:H5'	2.21	0.41
1:2A:307:G:H21	1:2A:330:A:N6	2.19	0.41
1:2A:416:C:H2'	1:2A:417:C:C6	2.56	0.41
1:2A:422:A:H2'	1:2A:423:A:C8	2.55	0.41
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.56	0.41
1:2A:676:A:H1'	1:2A:2443:C:H1'	2.02	0.41
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.20	0.41
1:2A:1586:A:H2'	1:2A:1587:A:O4'	2.21	0.41
1:2A:2024:G:H2'	1:2A:2025:C:H6	1.85	0.41
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.56	0.41
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.55	0.41
1:2A:2759:G:OP2	62:2A:3979:HOH:O	2.22	0.41
1:2A:2808:U:H5"	1:2A:2891:G:O6	2.20	0.41
1:2A:2837:G:H21	13:2R:45:ARG:HH12	1.68	0.41
2:2B:80:U:H2'	2:2B:81:G:C8	2.56	0.41
4:2E:105:THR:HG21	4:2E:164:ARG:CZ	2.51	0.41
4:2E:170:LEU:HB3	4:2E:184:VAL:HG22	2.02	0.41
6:2G:12:TYR:O	6:2G:17:PRO:HD3	2.20	0.41
6:2G:107:LEU:HD13	6:2G:177:GLY:O	2.21	0.41
6:2G:111:LEU:HD22	6:2G:179:PRO:HD2	2.03	0.41
7:2H:123:PHE:CD1	7:2H:133:VAL:HG12	2.56	0.41
8:2I:50:ARG:HE	8:2I:50:ARG:HB2	1.44	0.41
10:2O:64:ARG:CZ	15:2T:70:VAL:HG21	2.51	0.41
12:2Q:18:LYS:HE3	12:2Q:18:LYS:HB2	1.94	0.41
12:2Q:34:LEU:HD11	12:2Q:129:THR:HB	2.02	0.41
12:2Q:54:MET:HB2	12:2Q:64:ILE:CD1	2.51	0.41
26:24:61:ARG:HG2	50:2s:42:PRO:CG	2.50	0.41
32:2a:8:A:N7	35:2d:208:SER:OG	2.51	0.41
32:2a:499:A:H4'	32:2a:500:G:OP1	2.21	0.41
32:2a:1103:C:C4	32:2a:1104:G:N7	2.89	0.41
32:2a:1294:G:H2'	32:2a:1295:G:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1318:A:H5'	50:2s:10:PHE:CE1	2.56	0.41
32:2a:1375:A:O2'	38:2g:29:LYS:NZ	2.51	0.41
32:2a:1401:G:H2'	32:2a:1402:4OC:O4'	2.21	0.41
32:2a:1452:C:H5'	32:2a:1457:G:H1'	2.01	0.41
33:2b:207:ALA:O	33:2b:211:ILE:HG13	2.21	0.41
34:2c:53:ALA:HB3	34:2c:69:HIS:HB2	2.03	0.41
35:2d:95:GLY:HA2	35:2d:98:GLU:HB2	2.03	0.41
35:2d:150:GLU:HB3	35:2d:153:ARG:HE	1.86	0.41
36:2e:92:LYS:N	36:2e:119:LEU:O	2.53	0.41
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.56	0.41
38:2g:78:ARG:HG3	38:2g:156:TRP:CE3	2.56	0.41
40:2i:63:ILE:HG21	40:2i:77:ILE:HG12	2.03	0.41
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.78	0.41
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.21	0.41
54:2w:50:C:H2'	54:2w:50:C:O2	2.21	0.41
55:2x:34:C:C2	55:2x:35:A:C8	3.09	0.41
57:2y:26:A:C6	57:2y:45:G:O6	2.74	0.41
57:2y:65:C:H2'	57:2y:66:A:N7	2.36	0.41
1:1A:30:G:C5	1:1A:31:C:C4	3.09	0.41
1:1A:588:U:H1'	5:1F:90:PHE:CG	2.56	0.41
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.56	0.41
1:1A:1151:G:H2'	1:1A:1152:C:O4'	2.21	0.41
1:1A:1911:PSU:O2	1:1A:1918:A:H2'	2.21	0.41
1:1A:2019:A:O4'	16:1U:34:LYS:HE2	2.20	0.41
1:1A:2146:C:O2	1:1A:2147:G:N1	2.54	0.41
1:1A:2389:G:H5"	1:1A:2390:U:O4'	2.21	0.41
9:1N:28:THR:HG22	9:1N:29:LYS:N	2.35	0.41
11:1P:29:LYS:HG2	11:1P:30:THR:HG23	2.03	0.41
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	2.02	0.41
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.21	0.41
32:1a:142:G:O2'	32:1a:195:A:N6	2.54	0.41
32:1a:362:G:N1	32:1a:365:U:OP2	2.54	0.41
32:1a:507:C:OP2	32:1a:508:C:O2'	2.28	0.41
32:1a:1288:A:N1	32:1a:1371:G:H1'	2.36	0.41
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.54	0.41
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.85	0.41
35:1d:63:LYS:HB2	35:1d:63:LYS:HE3	1.85	0.41
40:1i:5:TYR:OH	40:1i:16:ARG:HG2	2.21	0.41
50:1s:71:LEU:HD23	50:1s:71:LEU:HA	1.85	0.41
57:1y:53:G:H2'	57:1y:54:5MU:H6	1.85	0.41
1:2A:143:G:C2	1:2A:143(A):C:C2	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:223:A:N1	1:2A:407:G:O2'	2.45	0.41
1:2A:627:A:N7	11:2P:84:ASN:ND2	2.68	0.41
1:2A:693:C:OP1	3:2D:39:LYS:HE3	2.20	0.41
1:2A:1359:A:H2	1:2A:1372:U:O4	2.03	0.41
1:2A:2030:A:H4'	1:2A:2031:A:C8	2.56	0.41
1:2A:2054:A:OP1	1:2A:2055:C:O2'	2.27	0.41
1:2A:2353:G:H5"	22:20:32:ARG:NH1	2.35	0.41
1:2A:2376:A:N1	14:2S:87:PHE:HB3	2.36	0.41
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.40	0.41
13:2R:29:LEU:HD22	13:2R:79:LEU:HD13	2.01	0.41
16:2U:52:ARG:HG2	16:2U:55:ARG:NH1	2.36	0.41
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	2.02	0.41
21:2Z:35:ARG:HD2	21:2Z:35:ARG:HA	1.76	0.41
30:28:23:VAL:HG22	30:28:47:LYS:HB3	2.02	0.41
32:2a:630:G:H2'	32:2a:631:G:C8	2.55	0.41
32:2a:1347:G:H22	32:2a:1374:A:P	2.44	0.41
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.56	0.41
32:2a:1502:A:C8	32:2a:1505:G:N2	2.89	0.41
33:2b:144:ARG:NH2	33:2b:148:TYR:OH	2.54	0.41
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.48	0.41
37:2f:36:ARG:NH2	37:2f:38:GLU:OE2	2.54	0.41
40:2i:38:GLN:HG2	40:2i:39:GLY:N	2.36	0.41
41:2j:96:ILE:HG22	41:2j:97:GLU:H	1.86	0.41
49:2r:66:LEU:HG	49:2r:70:ILE:HD11	2.03	0.41
57:2y:52:G:H2'	57:2y:53:G:O4'	2.21	0.41
1:1A:969:U:H2'	1:1A:970:C:C6	2.56	0.40
1:1A:1028:A:N3	1:1A:2486:G:O2'	2.49	0.40
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.20	0.40
1:1A:1528:A:H2'	1:1A:1528(A):A:C8	2.56	0.40
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.37	0.40
1:1A:1913:A:H4'	1:1A:1914:C:H5"	2.03	0.40
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.70	0.40
2:1B:19:G:H2'	2:1B:20:C:O4'	2.21	0.40
8:1I:76:THR:HG22	8:1I:141:LYS:HE2	2.02	0.40
26:14:16:CYS:HB2	26:14:36:CYS:HB3	2.02	0.40
26:14:40:HIS:HB3	26:14:43:TYR:HB2	2.03	0.40
32:1a:748:C:H4'	32:1a:749:C:O5'	2.21	0.40
32:1a:1261:A:H3'	32:1a:1262:C:H6	1.85	0.40
32:1a:1317:C:H2'	32:1a:1318:A:O4'	2.21	0.40
33:1b:27:LYS:O	33:1b:194:PRO:HG2	2.21	0.40
36:1e:67:VAL:HG23	36:1e:140:ARG:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:53:VAL:HB	39:1h:58:TYR:CD2	2.56	0.40
42:1k:48:ILE:O	42:1k:50:TYR:N	2.54	0.40
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.36	0.40
55:1x:61:C:H2'	55:1x:62:C:C6	2.57	0.40
57:1y:57:G:C2'	57:1y:58:A:H5'	2.52	0.40
1:2A:244:A:C2	1:2A:255:A:C4	3.09	0.40
1:2A:773:U:O2'	3:2D:48:ARG:HD3	2.21	0.40
1:2A:2110:G:OP2	1:2A:2110:G:H2'	2.20	0.40
1:2A:2116:G:H2'	1:2A:2117:A:C2	2.55	0.40
1:2A:2274:A:C5	1:2A:2276:G:C8	3.09	0.40
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.56	0.40
3:2D:141:VAL:HG22	3:2D:164:GLN:HE21	1.85	0.40
4:2E:106:GLY:HA3	4:2E:189:PRO:HB2	2.02	0.40
5:2F:11:VAL:HG22	5:2F:125:LEU:HD13	2.03	0.40
5:2F:120:GLU:CD	5:2F:122:LYS:HG3	2.46	0.40
5:2F:200:GLU:O	5:2F:204:ASN:HB2	2.21	0.40
8:2I:101:LEU:HB2	8:2I:107:VAL:HB	2.02	0.40
9:2N:73:THR:HA	9:2N:83:LYS:O	2.21	0.40
14:2S:65:VAL:O	14:2S:69:VAL:HG12	2.20	0.40
14:2S:84:GLN:H	14:2S:111:GLU:HB2	1.86	0.40
20:2Y:19:LYS:HB2	20:2Y:19:LYS:HE3	1.86	0.40
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.21	0.40
32:2a:160:A:H2'	32:2a:161:A:C8	2.55	0.40
32:2a:362:G:N2	32:2a:365:U:OP2	2.53	0.40
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.21	0.40
32:2a:814:A:N7	32:2a:816:A:C4	2.89	0.40
32:2a:1038:C:O2'	32:2a:1039:C:H5'	2.21	0.40
33:2b:130:ARG:HA	33:2b:130:ARG:HD3	1.84	0.40
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	2.02	0.40
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.61	0.40
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.50	0.40
1:1A:143:G:H1'	19:1X:37:THR:HG21	2.02	0.40
1:1A:754:C:H2'	1:1A:755:C:H6	1.86	0.40
1:1A:2206:G:H5"	1:1A:2207:G:N7	2.35	0.40
1:1A:2259:G:C8	1:1A:2427:C:C4	3.09	0.40
5:1F:33:LEU:HD22	5:1F:112:MET:HE3	2.04	0.40
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	2.03	0.40
9:1N:91:LEU:HD23	9:1N:91:LEU:HA	1.97	0.40
24:12:23:LYS:O	24:12:27:GLU:HG3	2.22	0.40
30:18:52:LYS:N	30:18:53:PRO:HD2	2.37	0.40
32:1a:278:G:OP2	48:1q:41:LYS:HE2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:407:G:H2'	32:1a:408:A:C8	2.55	0.40
32:1a:741:G:H5"	46:1o:59:MET:HE1	2.03	0.40
32:1a:875:C:C4	32:1a:876:G:N7	2.89	0.40
32:1a:952:U:H2'	32:1a:953:G:H8	1.85	0.40
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.85	0.40
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.56	0.40
32:1a:1308:U:H2'	32:1a:1309:G:H8	1.87	0.40
33:1b:59:GLU:HG3	33:1b:225:ALA:HB2	2.04	0.40
33:1b:171:ALA:O	33:1b:175:ARG:HB2	2.20	0.40
47:1p:34:GLU:HG2	47:1p:35:LYS:N	2.35	0.40
48:1q:90:ILE:HD13	48:1q:90:ILE:HA	1.84	0.40
49:1r:26:LEU:HB3	49:1r:29:PHE:CE2	2.56	0.40
50:1s:36:ARG:NH2	50:1s:72:GLY:O	2.54	0.40
1:2A:189:G:H2'	1:2A:205:G:N2	2.37	0.40
1:2A:720:C:H2'	1:2A:721:C:C6	2.55	0.40
1:2A:1124:C:H2'	1:2A:1125:G:O4'	2.21	0.40
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.56	0.40
1:2A:1709:U:H4'	1:2A:2860:A:O4'	2.21	0.40
1:2A:2073:C:O2'	1:2A:2598:A:O2'	2.34	0.40
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.56	0.40
2:2B:78:A:C2	2:2B:100:A:C4	3.09	0.40
4:2E:179:GLU:HB2	4:2E:181:LEU:HG	2.04	0.40
8:2I:23:PRO:HB3	8:2I:27:ARG:NH2	2.36	0.40
10:2O:102:VAL:HB	10:2O:106:LEU:HD12	2.03	0.40
12:2Q:57:HIS:NE2	12:2Q:116:GLU:HG2	2.36	0.40
15:2T:94:ALA:HB1	15:2T:99:LEU:HD21	2.02	0.40
19:2X:95:LEU:HD23	19:2X:95:LEU:HA	1.90	0.40
26:24:57:GLU:HA	26:24:58:ARG:HA	1.83	0.40
32:2a:219:C:C4	32:2a:220:G:C8	3.09	0.40
32:2a:1250:A:H2	32:2a:1353:G:H21	1.69	0.40
32:2a:1306:A:H1'	32:2a:1332:A:C2	2.56	0.40
32:2a:1390:U:H2'	32:2a:1391:U:C6	2.56	0.40
32:2a:1473:A:H2'	32:2a:1474:G:O4'	2.21	0.40
34:2c:18:TRP:HB2	34:2c:21:ARG:HG2	2.02	0.40
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.53	0.40
41:2j:78:ASN:O	41:2j:81:THR:N	2.44	0.40
42:2k:117:ASN:N	42:2k:117:ASN:HD22	2.18	0.40
44:2m:3:ARG:NH2	44:2m:11:ARG:HG3	2.37	0.40
47:2p:43:LYS:HA	47:2p:48:TRP:HB3	2.03	0.40
48:2q:81:ARG:HA	48:2q:81:ARG:HD2	1.78	0.40
51:2t:13:LEU:O	51:2t:17:ARG:HG2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:46:GLU:H	51:2t:46:GLU:HG3	1.51	0.40
57:2y:10:G:O6	57:2y:45:G:N1	2.54	0.40
1:1A:709:U:H2'	1:1A:710:G:H8	1.86	0.40
1:1A:831:G:N2	11:1P:53:GLY:O	2.54	0.40
1:1A:851:U:O2'	25:13:42:ALA:O	2.39	0.40
1:1A:861:A:H2'	1:1A:862:G:O4'	2.21	0.40
1:1A:1038:C:N4	1:1A:1117:G:H1	2.17	0.40
1:1A:1066:U:H2'	1:1A:1068:G:OP2	2.21	0.40
1:1A:2194:G:H2'	1:1A:2195:C:O4'	2.21	0.40
1:1A:2346:A:H5'	1:1A:2383:G:O4'	2.21	0.40
4:1E:55:ASN:O	4:1E:58:ARG:N	2.54	0.40
4:1E:146:THR:HA	4:1E:147:PRO:HA	1.96	0.40
22:10:11:ARG:H	22:10:11:ARG:HG2	1.55	0.40
33:1b:13:ALA:HB2	33:1b:44:LEU:HD13	2.03	0.40
33:1b:15:VAL:HB	33:1b:209:ARG:HG3	2.02	0.40
34:1c:6:HIS:HD2	34:1c:8:ILE:N	2.13	0.40
35:1d:85:LYS:HD3	35:1d:85:LYS:HA	1.80	0.40
38:1g:79:ARG:HD2	38:1g:79:ARG:C	2.46	0.40
42:1k:58:PRO:O	42:1k:93:GLN:HG2	2.22	0.40
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.45	0.40
57:1y:19:G:C4'	57:1y:57:G:H22	2.34	0.40
57:1y:37:T6A:C6	57:1y:38:A:C6	3.09	0.40
1:2A:361:G:N1	1:2A:362:U:C4	2.90	0.40
1:2A:573:G:O6	1:2A:2029:G:H2'	2.21	0.40
1:2A:629:G:N3	1:2A:639:U:O2'	2.50	0.40
1:2A:849:A:H2'	1:2A:850:C:O4'	2.22	0.40
1:2A:856:C:HO2'	1:2A:857:C:P	2.43	0.40
1:2A:862:G:H2'	1:2A:863:A:O4'	2.22	0.40
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.56	0.40
1:2A:1301:A:H2	1:2A:1626:G:N3	2.19	0.40
1:2A:1324:G:O6	62:2A:3970:HOH:O	2.21	0.40
1:2A:1467:C:C5	1:2A:1546:C:H2'	2.57	0.40
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.21	0.40
1:2A:1878:G:H2'	1:2A:1879:C:C6	2.56	0.40
1:2A:2059:A:C8	1:2A:2503:2MA:HM22	2.57	0.40
1:2A:2158:A:O2'	1:2A:2159:G:OP2	2.38	0.40
1:2A:2406:U:H6	1:2A:2406:U:H2'	1.72	0.40
1:2A:2591:C:H2'	1:2A:2592:G:C8	2.56	0.40
4:2E:15:PHE:CZ	15:2T:80:SER:HA	2.56	0.40
8:2I:130:TYR:N	8:2I:138:ILE:O	2.47	0.40
14:2S:24:LEU:HD23	14:2S:24:LEU:HA	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:2:PHE:CE2	17:2V:41:GLY:HA3	2.56	0.40
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.20	0.40
21:2Z:142:SER:C	21:2Z:144:LEU:H	2.28	0.40
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.61	0.40
30:28:26:LYS:HD2	30:28:48:PHE:CD2	2.57	0.40
32:2a:66:G:H8	32:2a:66:G:OP1	2.04	0.40
32:2a:336:C:H2'	32:2a:337:C:H6	1.84	0.40
32:2a:354:G:O2'	32:2a:389:A:OP1	2.37	0.40
32:2a:410:G:H21	32:2a:432:A:H62	1.70	0.40
32:2a:824:C:H2'	32:2a:825:G:H8	1.83	0.40
32:2a:910:C:H2'	32:2a:911:U:O4'	2.21	0.40
32:2a:974:A:P	45:2n:41:ARG:HH21	2.44	0.40
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.36	0.40
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.47	0.40
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.21	0.40
33:2b:16:HIS:O	33:2b:18:GLY:N	2.55	0.40
37:2f:48:LEU:HD22	49:2r:77:GLY:HA3	2.04	0.40
38:2g:78:ARG:HH12	38:2g:156:TRP:HB3	1.86	0.40
39:2h:20:TYR:HD1	39:2h:65:TYR:CD1	2.40	0.40
40:2i:7:THR:HG22	40:2i:83:ARG:NH1	2.37	0.40
40:2i:9:ARG:HA	40:2i:13:ALA:O	2.21	0.40
44:2m:33:ALA:HB2	44:2m:64:TRP:CZ3	2.56	0.40
51:2t:9:ASN:HB2	51:2t:10:LEU:H	1.74	0.40
56:2z:1:FME:HB3	56:2z:1:FME:HE2	1.59	0.40
57:2y:41:A:N6	57:2y:42:A:N1	2.70	0.40
1:1A:185:U:H4'	1:1A:218:A:H4'	2.03	0.40
1:1A:710:G:H1	1:1A:721:C:H42	1.69	0.40
1:1A:754:C:H2'	1:1A:755:C:C6	2.57	0.40
1:1A:864:G:O2'	1:1A:865:C:H5'	2.21	0.40
1:1A:1006:C:O2'	9:1N:106:MET:HB3	2.22	0.40
1:1A:1891:G:C6	1:1A:1892:C:C4	3.09	0.40
1:1A:2053:G:C2	1:1A:2617:C:C2	3.10	0.40
1:1A:2689:U:H4'	1:1A:2690:C:H5'	2.03	0.40
1:1A:2848:G:H1'	1:1A:2867:G:N2	2.37	0.40
2:1B:94:C:H2'	2:1B:95:C:H6	1.86	0.40
4:1E:117:MET:HE2	4:1E:117:MET:HB3	1.92	0.40
4:1E:181:LEU:HD21	15:1T:6:LEU:HD22	2.03	0.40
9:1N:8:GLN:HE21	9:1N:8:GLN:HB3	1.74	0.40
10:1O:19:ILE:HG22	10:1O:43:VAL:HG22	2.03	0.40
13:1R:2:ARG:NH1	13:1R:5:LYS:O	2.55	0.40
32:1a:150:C:H2'	32:1a:151:A:H8	1.83	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:319:G:H2'	32:1a:320:C:O4'	2.22	0.40
32:1a:736:C:H4'	37:1f:89:MET:HE3	2.02	0.40
32:1a:1350:A:C6	32:1a:1351:U:C4	3.10	0.40
38:1g:76:ARG:O	38:1g:87:VAL:HG12	2.21	0.40
44:1m:5:ALA:HA	44:1m:61:GLU:OE2	2.22	0.40
44:1m:20:THR:C	44:1m:22:ILE:H	2.29	0.40
45:1n:6:LEU:HD23	45:1n:6:LEU:HA	1.91	0.40
51:1t:22:ARG:C	51:1t:26:ASN:HD22	2.26	0.40
1:2A:30:G:C5	1:2A:31:C:C4	3.09	0.40
1:2A:974:G:C6	1:2A:1186:G:C6	3.10	0.40
1:2A:1009:A:O4'	16:2U:59:ARG:HD2	2.21	0.40
1:2A:1354:A:H4'	3:2D:38:LYS:NZ	2.36	0.40
1:2A:1509(B):A:H3'	1:2A:1510:G:C8	2.57	0.40
1:2A:2018:G:H2'	1:2A:2019:A:O4'	2.21	0.40
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.84	0.40
1:2A:2228:G:C5	1:2A:2229:C:C4	3.09	0.40
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.56	0.40
1:2A:2750:A:OP1	1:2A:2750:A:H8	2.04	0.40
5:2F:196:LEU:HD23	5:2F:196:LEU:HA	1.90	0.40
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	2.04	0.40
13:2R:38:VAL:HB	13:2R:39:PRO:HD3	2.03	0.40
15:2T:122:ASP:O	15:2T:125:ARG:HG2	2.22	0.40
26:24:34:GLU:H	26:24:34:GLU:HG2	1.73	0.40
32:2a:43:C:H2'	32:2a:44:G:O4'	2.22	0.40
32:2a:393:A:OP1	47:2p:13:HIS:HE1	2.05	0.40
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.54	0.40
32:2a:590:C:H2'	32:2a:591:U:C6	2.57	0.40
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.89	0.40
32:2a:1097:C:H1'	32:2a:1170:A:H1'	2.03	0.40
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.22	0.40
32:2a:1275:A:H3'	32:2a:1276:G:C8	2.50	0.40
32:2a:1342:C:H1'	40:2i:124:GLN:OE1	2.21	0.40
32:2a:1350:A:C6	32:2a:1351:U:C4	3.09	0.40
32:2a:1491:G:H5"	32:2a:1492:A:OP1	2.21	0.40
33:2b:16:HIS:HB2	33:2b:204:ASN:CB	2.52	0.40
33:2b:118:LEU:HD22	33:2b:122:PHE:HB2	2.03	0.40
35:2d:79:PHE:O	35:2d:83:SER:OG	2.40	0.40
38:2g:76:ARG:HG3	38:2g:156:TRP:HH2	1.86	0.40
40:2i:11:LYS:HA	40:2i:108:VAL:HG12	2.02	0.40
42:2k:20:TYR:CZ	42:2k:83:ILE:HD13	2.56	0.40
44:2m:17:VAL:HG12	44:2m:27:LYS:NZ	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:59:ALA:O	51:2t:63:ILE:HG13	2.21	0.40
54:2w:8:U:H2'	54:2w:9:A:H5"	2.03	0.40
54:2w:38:A:H2'	54:2w:39:PSU:O4'	2.21	0.40
55:2x:16:C:H5'	55:2x:59:A:N1	2.37	0.40
57:2y:55:PSU:C2	57:2y:57:G:H5'	2.57	0.40
1:1A:118:A:H3'	1:1A:119:A:H5"	2.03	0.40
1:1A:141:A:C6	1:1A:142:A:N1	2.90	0.40
1:1A:220:G:O2'	1:1A:233:A:N3	2.47	0.40
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.21	0.40
1:1A:539:G:H2'	1:1A:540:C:C6	2.57	0.40
1:1A:604:G:C6	1:1A:605:C:C4	3.09	0.40
1:1A:1814:G:C6	1:1A:1815:A:C6	3.09	0.40
1:1A:2702:U:H4'	1:1A:2703:C:OP1	2.20	0.40
2:1B:31:C:O2'	2:1B:53:A:N1	2.53	0.40
9:1N:67:LEU:HD23	9:1N:67:LEU:HA	1.97	0.40
11:1P:101:VAL:HG23	11:1P:106:LEU:O	2.21	0.40
15:1T:23:ARG:N	15:1T:26:ASP:OD2	2.43	0.40
25:13:5:LYS:HG3	25:13:36:VAL:HG22	2.03	0.40
32:1a:221:C:H2'	32:1a:222:U:C6	2.55	0.40
32:1a:932:C:O3'	38:1g:4:ARG:NH2	2.55	0.40
32:1a:1179:A:H4'	40:1i:103:THR:HA	2.04	0.40
32:1a:1366:C:H2'	32:1a:1367:C:H6	1.86	0.40
35:1d:178:VAL:C	35:1d:180:GLY:N	2.80	0.40
42:1k:33:THR:HA	42:1k:39:PRO:HA	2.04	0.40
47:1p:49:LEU:HD13	47:1p:50:LYS:N	2.37	0.40
57:1y:20:U:H6	57:1y:20:U:H2'	1.67	0.40
57:1y:49:G:C2	57:1y:66:A:C4	3.09	0.40
1:2A:483:A:H5"	20:2Y:50:ARG:HG2	2.03	0.40
1:2A:723:G:H2'	1:2A:724:U:O4'	2.21	0.40
1:2A:864:G:H1'	1:2A:914:C:N4	2.37	0.40
1:2A:1848:A:C4	1:2A:1849:G:C8	3.09	0.40
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.21	0.40
4:2E:110:GLY:HA2	4:2E:161:GLY:HA3	2.04	0.40
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.22	0.40
6:2G:176:LEU:HD23	6:2G:176:LEU:HA	1.87	0.40
8:2I:38:LEU:HD13	8:2I:40:THR:HG23	2.03	0.40
8:2I:48:GLU:HG3	8:2I:52:ARG:HH11	1.86	0.40
21:2Z:52:SER:C	21:2Z:54:HIS:H	2.29	0.40
21:2Z:69:THR:HB	21:2Z:88:PHE:HB3	2.03	0.40
32:2a:451:A:N1	32:2a:480:U:H2'	2.36	0.40
32:2a:583:A:H2'	32:2a:584:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:658:G:O4'	46:2o:22:THR:HB	2.21	0.40
32:2a:790:A:H2'	32:2a:791:G:C8	2.56	0.40
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.55	0.40
32:2a:1226:C:C6	44:2m:103:THR:HB	2.55	0.40
33:2b:19:HIS:CG	33:2b:20:GLU:H	2.39	0.40
33:2b:42:ILE:HG21	33:2b:202:PRO:O	2.22	0.40
33:2b:111:ARG:HA	33:2b:111:ARG:HD3	1.85	0.40
33:2b:126:GLU:N	33:2b:126:GLU:CD	2.80	0.40
36:2e:89:ILE:HD12	36:2e:89:ILE:HA	1.90	0.40
38:2g:49:ILE:O	38:2g:53:LYS:HG3	2.22	0.40
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	2.04	0.40
54:2w:51:A:H3'	54:2w:64:G:N2	2.35	0.40
57:2y:9:A:C4	57:2y:45:G:N2	2.89	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%)	257 (94%)	16 (6%)	0	100 100
3	2D	273/276 (99%)	246 (90%)	26 (10%)	1 (0%)	30 52
4	1E	202/206 (98%)	189 (94%)	12 (6%)	1 (0%)	25 47
4	2E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	25 47
5	1F	201/210 (96%)	193 (96%)	7 (4%)	1 (0%)	25 47
5	2F	201/210 (96%)	187 (93%)	12 (6%)	2 (1%)	13 29
6	1G	179/182 (98%)	165 (92%)	11 (6%)	3 (2%)	7 16
6	2G	179/182 (98%)	146 (82%)	29 (16%)	4 (2%)	5 10
7	1H	172/180 (96%)	156 (91%)	15 (9%)	1 (1%)	22 43
7	2H	172/180 (96%)	153 (89%)	16 (9%)	3 (2%)	7 16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
8	1I	144/148 (97%)	125 (87%)	19 (13%)	0	100 100
8	2I	144/148 (97%)	119 (83%)	20 (14%)	5 (4%)	3 4
9	1N	138/140 (99%)	132 (96%)	5 (4%)	1 (1%)	19 38
9	2N	138/140 (99%)	130 (94%)	7 (5%)	1 (1%)	19 38
10	1O	120/122 (98%)	109 (91%)	9 (8%)	2 (2%)	7 16
10	2O	120/122 (98%)	107 (89%)	13 (11%)	0	100 100
11	1P	147/150 (98%)	131 (89%)	10 (7%)	6 (4%)	2 3
11	2P	147/150 (98%)	126 (86%)	17 (12%)	4 (3%)	4 7
12	1Q	139/141 (99%)	129 (93%)	9 (6%)	1 (1%)	19 38
12	2Q	139/141 (99%)	125 (90%)	14 (10%)	0	100 100
13	1R	116/118 (98%)	112 (97%)	3 (3%)	1 (1%)	14 31
13	2R	116/118 (98%)	107 (92%)	9 (8%)	0	100 100
14	1S	108/112 (96%)	102 (94%)	6 (6%)	0	100 100
14	2S	108/112 (96%)	96 (89%)	9 (8%)	3 (3%)	4 7
15	1T	129/146 (88%)	120 (93%)	8 (6%)	1 (1%)	16 34
15	2T	129/146 (88%)	120 (93%)	9 (7%)	0	100 100
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	112 (98%)	2 (2%)	0	100 100
17	1V	99/101 (98%)	95 (96%)	2 (2%)	2 (2%)	6 12
17	2V	99/101 (98%)	93 (94%)	4 (4%)	2 (2%)	6 12
18	1W	110/113 (97%)	106 (96%)	4 (4%)	0	100 100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100 100
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	12 26
19	2X	93/96 (97%)	83 (89%)	9 (10%)	1 (1%)	12 26
20	1Y	105/110 (96%)	97 (92%)	8 (8%)	0	100 100
20	2Y	105/110 (96%)	99 (94%)	6 (6%)	0	100 100
21	1Z	148/206 (72%)	126 (85%)	21 (14%)	1 (1%)	19 38
21	2Z	156/206 (76%)	125 (80%)	27 (17%)	4 (3%)	4 7
22	10	81/85 (95%)	77 (95%)	4 (5%)	0	100 100
22	20	81/85 (95%)	73 (90%)	8 (10%)	0	100 100
23	11	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	12 26

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	12 26
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	64 (94%)	4 (6%)	0	100 100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100 100
26	14	67/71 (94%)	54 (81%)	9 (13%)	4 (6%)	1 1
26	24	67/71 (94%)	47 (70%)	17 (25%)	3 (4%)	2 2
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	43 (84%)	8 (16%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100 100
31	19	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	195 (85%)	23 (10%)	11 (5%)	2 2
33	2b	229/256 (90%)	182 (80%)	37 (16%)	10 (4%)	2 2
34	1c	204/239 (85%)	180 (88%)	21 (10%)	3 (2%)	8 18
34	2c	204/239 (85%)	160 (78%)	37 (18%)	7 (3%)	3 5
35	1d	206/209 (99%)	191 (93%)	14 (7%)	1 (0%)	25 47
35	2d	206/209 (99%)	186 (90%)	19 (9%)	1 (0%)	25 47
36	1e	146/162 (90%)	128 (88%)	16 (11%)	2 (1%)	9 19
36	2e	146/162 (90%)	124 (85%)	19 (13%)	3 (2%)	5 11
37	1f	98/101 (97%)	93 (95%)	4 (4%)	1 (1%)	13 29
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
38	1g	153/156 (98%)	136 (89%)	16 (10%)	1 (1%)	19 38
38	2g	153/156 (98%)	135 (88%)	14 (9%)	4 (3%)	4 7
39	1h	135/138 (98%)	126 (93%)	9 (7%)	0	100 100
39	2h	135/138 (98%)	123 (91%)	12 (9%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
40	1i	125/128 (98%)	109 (87%)	15 (12%)	1 (1%)	16 34
40	2i	125/128 (98%)	107 (86%)	16 (13%)	2 (2%)	8 17
41	1j	95/105 (90%)	77 (81%)	13 (14%)	5 (5%)	1 1
41	2j	94/105 (90%)	76 (81%)	15 (16%)	3 (3%)	3 5
42	1k	112/129 (87%)	98 (88%)	12 (11%)	2 (2%)	7 14
42	2k	112/129 (87%)	96 (86%)	12 (11%)	4 (4%)	3 4
43	1l	119/132 (90%)	109 (92%)	10 (8%)	0	100 100
43	2l	119/132 (90%)	101 (85%)	16 (13%)	2 (2%)	7 16
44	1m	121/126 (96%)	106 (88%)	13 (11%)	2 (2%)	7 16
44	2m	120/126 (95%)	101 (84%)	18 (15%)	1 (1%)	16 34
45	1n	58/61 (95%)	53 (91%)	5 (9%)	0	100 100
45	2n	58/61 (95%)	50 (86%)	7 (12%)	1 (2%)	7 16
46	1o	86/89 (97%)	76 (88%)	10 (12%)	0	100 100
46	2o	86/89 (97%)	80 (93%)	5 (6%)	1 (1%)	11 24
47	1p	80/88 (91%)	69 (86%)	11 (14%)	0	100 100
47	2p	80/88 (91%)	70 (88%)	9 (11%)	1 (1%)	10 21
48	1q	97/105 (92%)	93 (96%)	4 (4%)	0	100 100
48	2q	97/105 (92%)	84 (87%)	12 (12%)	1 (1%)	13 29
49	1r	66/88 (75%)	58 (88%)	7 (11%)	1 (2%)	8 18
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
50	1s	81/93 (87%)	70 (86%)	11 (14%)	0	100 100
50	2s	81/93 (87%)	67 (83%)	13 (16%)	1 (1%)	11 24
51	1t	94/106 (89%)	82 (87%)	9 (10%)	3 (3%)	3 5
51	2t	94/106 (89%)	84 (89%)	8 (8%)	2 (2%)	5 11
52	1u	21/27 (78%)	18 (86%)	3 (14%)	0	100 100
52	2u	21/27 (78%)	18 (86%)	1 (5%)	2 (10%)	0 0
56	1z	1/3 (33%)	0	1 (100%)	0	100 100
56	2z	1/3 (33%)	0	1 (100%)	0	100 100
All	All	11372/12134 (94%)	10242 (90%)	989 (9%)	141 (1%)	11 24

All (141) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
11	1P	38	GLN
23	11	3	LYS
26	14	49	PHE
36	1e	96	PRO
40	1i	54	ASP
44	1m	67	GLU
6	2G	126	ASP
8	2I	10	GLU
14	2S	81	GLY
33	2b	17	PHE
33	2b	123	ALA
34	2c	108	ASN
36	2e	98	THR
38	2g	80	VAL
48	2q	68	ARG
6	1G	43	LEU
11	1P	29	LYS
15	1T	37	GLY
21	1Z	53	ILE
26	14	47	GLN
26	14	62	ARG
33	1b	17	PHE
33	1b	126	GLU
34	1c	107	GLN
36	1e	85	GLY
38	1g	52	GLU
44	1m	106	ASN
49	1r	33	ASP
51	1t	96	GLY
51	1t	100	ILE
6	2G	42	GLY
6	2G	124	SER
7	2H	126	PRO
8	2I	127	VAL
11	2P	36	LYS
14	2S	96	GLY
17	2V	79	VAL
21	2Z	149	SER
26	24	45	GLY
34	2c	181	ASN
38	2g	9	VAL
38	2g	55	GLY

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Mol	Chain	Res	Type
42	2k	49	GLY
51	2t	47	GLY
10	1O	89	ASN
13	1R	107	ASP
26	14	53	GLU
33	1b	16	HIS
35	1d	173	TRP
37	1f	45	LEU
41	1j	79	ARG
3	2D	275	LYS
5	2F	130	ALA
6	2G	127	GLY
8	2I	39	ALA
8	2I	117	GLU
11	2P	28	GLY
11	2P	38	GLN
33	2b	21	ARG
33	2b	204	ASN
40	2i	56	LEU
41	2j	79	ARG
42	2k	104	GLN
42	2k	106	LYS
46	2o	88	ARG
47	2p	52	ASP
4	1E	52	LEU
10	1O	5	GLN
11	1P	36	LYS
11	1P	45	LEU
11	1P	139	LYS
12	1Q	60	ARG
17	1V	100	ARG
19	1X	2	LYS
33	1b	8	LYS
33	1b	20	GLU
33	1b	124	SER
33	1b	127	ILE
33	1b	130	ARG
34	1c	12	LEU
34	1c	81	GLY
41	1j	30	SER
4	2E	52	LEU
9	2N	2	LYS

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Mol	Chain	Res	Type
14	2S	84	GLN
23	21	3	LYS
33	2b	20	GLU
33	2b	74	LYS
33	2b	105	PHE
34	2c	98	ASN
34	2c	135	LYS
34	2c	177	THR
40	2i	58	HIS
41	2j	75	ILE
41	2j	78	ASN
44	2m	106	ASN
50	2s	9	VAL
51	2t	10	LEU
52	2u	6	ARG
7	1H	3	ARG
17	1V	53	GLU
33	1b	13	ALA
41	1j	55	LYS
42	1k	25	TYR
42	1k	49	GLY
5	2F	21	ALA
19	2X	19	ALA
21	2Z	158	PRO
26	24	60	GLN
26	24	65	ASP
33	2b	154	LEU
34	2c	60	ALA
34	2c	95	THR
36	2e	85	GLY
38	2g	52	GLU
6	1G	42	GLY
6	1G	74	LYS
9	1N	2	LYS
7	2H	21	PRO
11	2P	45	LEU
33	2b	202	PRO
36	2e	96	PRO
43	2l	91	LYS
45	2n	14	PRO
41	1j	77	PRO
7	2H	12	PRO

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Mol	Chain	Res	Type
35	2d	136	PRO
11	1P	122	PRO
51	1t	102	GLY
42	2k	105	VAL
33	1b	231	GLU
41	1j	91	PRO
8	2I	137	PRO
52	2u	23	PRO
21	2Z	147	GLY
43	2l	40	VAL
21	2Z	146	ILE
33	2b	231	GLU
33	1b	125	PRO
17	2V	50	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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%)	202 (94%)	13 (6%)	16 35
3	2D	215/218 (99%)	200 (93%)	15 (7%)	12 27
4	1E	164/166 (99%)	152 (93%)	12 (7%)	11 25
4	2E	164/166 (99%)	151 (92%)	13 (8%)	10 21
5	1F	160/166 (96%)	142 (89%)	18 (11%)	4 9
5	2F	159/166 (96%)	145 (91%)	14 (9%)	8 17
6	1G	143/156 (92%)	123 (86%)	20 (14%)	3 5
6	2G	143/156 (92%)	121 (85%)	22 (15%)	2 4
7	1H	144/148 (97%)	130 (90%)	14 (10%)	6 14
7	2H	144/148 (97%)	123 (85%)	21 (15%)	2 4
8	1I	113/124 (91%)	90 (80%)	23 (20%)	1 1
8	2I	105/124 (85%)	83 (79%)	22 (21%)	1 1
9	1N	118/119 (99%)	106 (90%)	12 (10%)	6 12

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	2N	118/119 (99%)	105 (89%)	13 (11%)	5 10
10	1O	100/100 (100%)	96 (96%)	4 (4%)	27 52
10	2O	100/100 (100%)	91 (91%)	9 (9%)	8 16
11	1P	115/116 (99%)	105 (91%)	10 (9%)	8 17
11	2P	115/116 (99%)	99 (86%)	16 (14%)	3 5
12	1Q	111/111 (100%)	101 (91%)	10 (9%)	8 16
12	2Q	111/111 (100%)	101 (91%)	10 (9%)	8 16
13	1R	101/101 (100%)	94 (93%)	7 (7%)	13 28
13	2R	101/101 (100%)	95 (94%)	6 (6%)	16 35
14	1S	86/88 (98%)	76 (88%)	10 (12%)	4 9
14	2S	85/88 (97%)	67 (79%)	18 (21%)	1 1
15	1T	115/127 (91%)	104 (90%)	11 (10%)	7 14
15	2T	113/127 (89%)	107 (95%)	6 (5%)	19 40
16	1U	93/94 (99%)	88 (95%)	5 (5%)	18 39
16	2U	93/94 (99%)	81 (87%)	12 (13%)	3 6
17	1V	80/82 (98%)	76 (95%)	4 (5%)	20 43
17	2V	80/82 (98%)	70 (88%)	10 (12%)	3 7
18	1W	90/92 (98%)	86 (96%)	4 (4%)	24 48
18	2W	90/92 (98%)	84 (93%)	6 (7%)	13 29
19	1X	77/78 (99%)	73 (95%)	4 (5%)	19 41
19	2X	77/78 (99%)	72 (94%)	5 (6%)	14 31
20	1Y	85/91 (93%)	72 (85%)	13 (15%)	2 4
20	2Y	85/91 (93%)	68 (80%)	17 (20%)	1 2
21	1Z	135/179 (75%)	110 (82%)	25 (18%)	1 2
21	2Z	137/179 (76%)	112 (82%)	25 (18%)	1 2
22	10	65/67 (97%)	62 (95%)	3 (5%)	23 46
22	20	65/67 (97%)	60 (92%)	5 (8%)	10 22
23	11	80/83 (96%)	75 (94%)	5 (6%)	15 32
23	21	80/83 (96%)	71 (89%)	9 (11%)	4 9
24	12	65/67 (97%)	58 (89%)	7 (11%)	5 10
24	22	65/67 (97%)	58 (89%)	7 (11%)	5 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
25	13	51/52 (98%)	47 (92%)	4 (8%)	10 22
25	23	50/52 (96%)	46 (92%)	4 (8%)	10 21
26	14	59/63 (94%)	49 (83%)	10 (17%)	1 3
26	24	53/63 (84%)	45 (85%)	8 (15%)	2 4
27	15	50/52 (96%)	46 (92%)	4 (8%)	10 21
27	25	50/52 (96%)	46 (92%)	4 (8%)	10 21
28	16	51/52 (98%)	45 (88%)	6 (12%)	4 8
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%)	36 (88%)	5 (12%)	4 8
30	18	54/55 (98%)	51 (94%)	3 (6%)	17 38
30	28	54/55 (98%)	51 (94%)	3 (6%)	17 38
31	19	34/34 (100%)	33 (97%)	1 (3%)	37 64
31	29	34/34 (100%)	31 (91%)	3 (9%)	8 17
33	1b	192/220 (87%)	161 (84%)	31 (16%)	2 3
33	2b	187/220 (85%)	146 (78%)	41 (22%)	1 1
34	1c	142/188 (76%)	124 (87%)	18 (13%)	3 7
34	2c	140/188 (74%)	120 (86%)	20 (14%)	2 5
35	1d	169/181 (93%)	142 (84%)	27 (16%)	2 3
35	2d	173/181 (96%)	150 (87%)	23 (13%)	3 6
36	1e	113/123 (92%)	101 (89%)	12 (11%)	5 11
36	2e	114/123 (93%)	100 (88%)	14 (12%)	4 8
37	1f	84/90 (93%)	75 (89%)	9 (11%)	5 11
37	2f	85/90 (94%)	74 (87%)	11 (13%)	3 6
38	1g	119/127 (94%)	106 (89%)	13 (11%)	5 10
38	2g	120/127 (94%)	104 (87%)	16 (13%)	3 6
39	1h	114/119 (96%)	105 (92%)	9 (8%)	10 21
39	2h	114/119 (96%)	100 (88%)	14 (12%)	4 8
40	1i	90/99 (91%)	78 (87%)	12 (13%)	3 6
40	2i	89/99 (90%)	82 (92%)	7 (8%)	10 21
41	1j	66/92 (72%)	59 (89%)	7 (11%)	5 11

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
41	2j	69/92 (75%)	55 (80%)	14 (20%)	1 1
42	1k	82/99 (83%)	71 (87%)	11 (13%)	3 6
42	2k	83/99 (84%)	78 (94%)	5 (6%)	16 35
43	1l	96/108 (89%)	92 (96%)	4 (4%)	25 50
43	2l	96/108 (89%)	86 (90%)	10 (10%)	5 11
44	1m	93/101 (92%)	82 (88%)	11 (12%)	4 8
44	2m	92/101 (91%)	78 (85%)	14 (15%)	2 4
45	1n	49/50 (98%)	45 (92%)	4 (8%)	9 20
45	2n	49/50 (98%)	42 (86%)	7 (14%)	2 5
46	1o	78/80 (98%)	71 (91%)	7 (9%)	8 16
46	2o	78/80 (98%)	73 (94%)	5 (6%)	14 32
47	1p	69/74 (93%)	59 (86%)	10 (14%)	2 4
47	2p	68/74 (92%)	62 (91%)	6 (9%)	8 17
48	1q	94/97 (97%)	84 (89%)	10 (11%)	5 11
48	2q	94/97 (97%)	85 (90%)	9 (10%)	7 14
49	1r	59/77 (77%)	53 (90%)	6 (10%)	6 12
49	2r	59/77 (77%)	51 (86%)	8 (14%)	3 5
50	1s	69/80 (86%)	63 (91%)	6 (9%)	8 17
50	2s	67/80 (84%)	53 (79%)	14 (21%)	1 1
51	1t	70/82 (85%)	61 (87%)	9 (13%)	3 6
51	2t	70/82 (85%)	61 (87%)	9 (13%)	3 6
52	1u	18/22 (82%)	16 (89%)	2 (11%)	5 10
52	2u	18/22 (82%)	17 (94%)	1 (6%)	17 38
56	1z	2/2 (100%)	2 (100%)	0	100 100
56	2z	2/2 (100%)	2 (100%)	0	100 100
All	All	9307/10068 (92%)	8260 (89%)	1047 (11%)	5 9

All (1047) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	14	ARG
3	1D	27	THR

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Mol	Chain	Res	Type
3	1D	32	SER
3	1D	37	LEU
3	1D	91	ARG
3	1D	113	VAL
3	1D	181	GLU
3	1D	204	ILE
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	7	VAL
4	1E	8	LYS
4	1E	12	THR
4	1E	33	VAL
4	1E	47	VAL
4	1E	87	GLU
4	1E	90	THR
4	1E	92	THR
4	1E	116	VAL
4	1E	184	VAL
4	1E	188	VAL
4	1E	195	LEU
5	1F	18	ARG
5	1F	24	LEU
5	1F	27	GLU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	112	MET
5	1F	132	VAL
5	1F	140	LEU
5	1F	144	LYS
5	1F	158	THR
5	1F	162	LEU
5	1F	165	ARG
5	1F	168	ARG
5	1F	183	VAL
6	1G	3	LEU
6	1G	5	VAL

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Mol	Chain	Res	Type
6	1G	7	LEU
6	1G	31	VAL
6	1G	43	LEU
6	1G	49	ASP
6	1G	60	LEU
6	1G	77	ILE
6	1G	79	ASN
6	1G	91	ARG
6	1G	108	ASN
6	1G	116	ASP
6	1G	133	LEU
6	1G	139	LEU
6	1G	140	ILE
6	1G	149	VAL
6	1G	159	VAL
6	1G	161	THR
6	1G	165	THR
6	1G	174	GLU
7	1H	18	GLU
7	1H	23	ARG
7	1H	24	VAL
7	1H	45	VAL
7	1H	49	VAL
7	1H	58	GLU
7	1H	77	LYS
7	1H	84	SER
7	1H	88	LEU
7	1H	106	THR
7	1H	124	GLU
7	1H	129	THR
7	1H	130	ARG
7	1H	136	ILE
8	1I	2	LYS
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	38	LEU
8	1I	40	THR
8	1I	41	GLU
8	1I	47	LEU
8	1I	60	GLU
8	1I	61	ARG

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Mol	Chain	Res	Type
8	1I	74	ASN
8	1I	75	LEU
8	1I	81	VAL
8	1I	82	ARG
8	1I	86	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	102	SER
8	1I	103	ARG
8	1I	109	ILE
8	1I	127	VAL
8	1I	142	VAL
9	1N	1	MET
9	1N	8	GLN
9	1N	9	VAL
9	1N	10	GLU
9	1N	28	THR
9	1N	48	MET
9	1N	62	VAL
9	1N	68	GLU
9	1N	70	LYS
9	1N	71	ILE
9	1N	112	LEU
9	1N	119	ARG
10	1O	35	VAL
10	1O	52	VAL
10	1O	53	LYS
10	1O	89	ASN
11	1P	3	LEU
11	1P	7	ARG
11	1P	45	LEU
11	1P	47	ASP
11	1P	56	SER
11	1P	65	ARG
11	1P	96	THR
11	1P	99	LEU
11	1P	136	GLU
11	1P	147	LEU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	56	ARG

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Mol	Chain	Res	Type
12	1Q	59	ARG
12	1Q	77	LYS
12	1Q	81	VAL
12	1Q	97	VAL
12	1Q	98	LYS
12	1Q	109	VAL
12	1Q	113	GLN
13	1R	8	ARG
13	1R	15	SER
13	1R	30	THR
13	1R	36	THR
13	1R	102	GLU
13	1R	113	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	17	ARG
14	1S	46	VAL
14	1S	49	VAL
14	1S	50	SER
14	1S	52	SER
14	1S	57	LYS
14	1S	69	VAL
14	1S	84	GLN
14	1S	110	LEU
15	1T	10	VAL
15	1T	23	ARG
15	1T	28	VAL
15	1T	30	VAL
15	1T	36	GLU
15	1T	48	ILE
15	1T	67	SER
15	1T	84	GLN
15	1T	88	ILE
15	1T	96	ARG
15	1T	128	GLU
16	1U	17	ILE
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
16	1U	100	VAL
17	1V	46	VAL
17	1V	61	VAL

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Mol	Chain	Res	Type
17	1V	73	SER
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	103	ILE
19	1X	43	VAL
19	1X	75	ASP
19	1X	87	GLN
19	1X	88	LYS
20	1Y	7	VAL
20	1Y	9	LYS
20	1Y	11	ASP
20	1Y	23	ARG
20	1Y	43	ASN
20	1Y	44	ILE
20	1Y	52	SER
20	1Y	70	SER
20	1Y	72	VAL
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
20	1Y	107	ASP
21	1Z	28	MET
21	1Z	32	HIS
21	1Z	33	LEU
21	1Z	42	VAL
21	1Z	46	LYS
21	1Z	49	ARG
21	1Z	53	ILE
21	1Z	56	VAL
21	1Z	60	GLU
21	1Z	61	LEU
21	1Z	70	LEU
21	1Z	72	ARG
21	1Z	74	VAL
21	1Z	102	LEU
21	1Z	119	GLU
21	1Z	128	VAL
21	1Z	140	ASP
21	1Z	146	ILE
21	1Z	150	LEU

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Mol	Chain	Res	Type
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	156	LYS
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	11	ARG
22	10	46	LYS
23	11	40	ARG
23	11	46	LEU
23	11	51	VAL
23	11	59	THR
23	11	80	LEU
24	12	1	MET
24	12	5	GLU
24	12	28	LYS
24	12	40	SER
24	12	41	ILE
24	12	55	ARG
24	12	65	ASN
25	13	54	VAL
25	13	55	ARG
25	13	56	VAL
25	13	60	GLU
26	14	1	MET
26	14	22	ILE
26	14	27	THR
26	14	33	VAL
26	14	49	PHE
26	14	52	THR
26	14	53	GLU
26	14	63	TYR
26	14	65	ASP
26	14	67	TYR
27	15	6	VAL
27	15	26	THR
27	15	40	LYS
27	15	59	GLU
28	16	5	VAL
28	16	9	LEU
28	16	13	CYS

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Mol	Chain	Res	Type
28	16	19	ARG
28	16	24	GLU
28	16	47	THR
29	17	1	MET
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	29	LYS
31	19	17	ILE
33	1b	8	LYS
33	1b	12	GLU
33	1b	21	ARG
33	1b	23	ARG
33	1b	35	GLU
33	1b	37	ASN
33	1b	39	ILE
33	1b	44	LEU
33	1b	54	THR
33	1b	64	ARG
33	1b	73	THR
33	1b	80	ILE
33	1b	94	ASN
33	1b	95	GLN
33	1b	101	MET
33	1b	108	ILE
33	1b	112	VAL
33	1b	128	GLU
33	1b	143	GLU
33	1b	150	SER
33	1b	154	LEU
33	1b	157	ARG
33	1b	160	ASP
33	1b	185	ILE
33	1b	187	LEU
33	1b	196	LEU
33	1b	200	ILE
33	1b	208	ILE
33	1b	212	GLN
33	1b	233	SER
33	1b	236	TYR

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Mol	Chain	Res	Type
34	1c	15	THR
34	1c	32	LEU
34	1c	64	VAL
34	1c	77	ILE
34	1c	82	GLU
34	1c	85	ARG
34	1c	105	GLU
34	1c	110	ASN
34	1c	112	SER
34	1c	115	LEU
34	1c	124	ILE
34	1c	175	LEU
34	1c	188	LEU
34	1c	190	ARG
34	1c	192	THR
34	1c	195	VAL
34	1c	201	TYR
34	1c	207	VAL
35	1d	3	ARG
35	1d	8	VAL
35	1d	17	VAL
35	1d	19	LEU
35	1d	31	CYS
35	1d	36	ARG
35	1d	47	ARG
35	1d	59	ARG
35	1d	76	ARG
35	1d	83	SER
35	1d	85	LYS
35	1d	88	VAL
35	1d	100	ARG
35	1d	120	LEU
35	1d	141	ARG
35	1d	144	ASP
35	1d	157	LEU
35	1d	158	ILE
35	1d	170	VAL
35	1d	177	ASP
35	1d	178	VAL
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP

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Mol	Chain	Res	Type
35	1d	194	LEU
35	1d	198	VAL
35	1d	200	GLU
36	1e	11	ILE
36	1e	12	LEU
36	1e	32	VAL
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	56	GLN
36	1e	79	GLU
36	1e	82	VAL
36	1e	92	LYS
36	1e	120	THR
36	1e	151	LEU
37	1f	19	LEU
37	1f	36	ARG
37	1f	45	LEU
37	1f	55	ASP
37	1f	65	VAL
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	78	GLU
38	1g	10	ARG
38	1g	20	ASP
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	85	TYR
38	1g	90	GLU
38	1g	104	LEU
38	1g	110	GLN
38	1g	114	ARG
38	1g	115	ARG
38	1g	155	ARG
39	1h	21	LYS
39	1h	45	ILE
39	1h	77	GLU
39	1h	84	ARG
39	1h	86	ILE

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Mol	Chain	Res	Type
39	1h	98	LYS
39	1h	99	GLU
39	1h	112	LEU
39	1h	133	LEU
40	1i	3	GLN
40	1i	9	ARG
40	1i	17	VAL
40	1i	25	LYS
40	1i	26	VAL
40	1i	38	GLN
40	1i	41	VAL
40	1i	53	VAL
40	1i	81	ILE
40	1i	99	LEU
40	1i	103	THR
40	1i	128	ARG
41	1j	5	ARG
41	1j	7	LYS
41	1j	21	GLN
41	1j	81	THR
41	1j	92	THR
41	1j	96	ILE
41	1j	100	THR
42	1k	14	VAL
42	1k	25	TYR
42	1k	48	ILE
42	1k	51	LYS
42	1k	63	LEU
42	1k	77	MET
42	1k	80	VAL
42	1k	109	VAL
42	1k	114	VAL
42	1k	117	ASN
42	1k	125	PHE
43	1l	22	SER
43	1l	36	VAL
43	1l	83	VAL
43	1l	100	ILE
44	1m	3	ARG
44	1m	11	ARG
44	1m	17	VAL
44	1m	43	THR

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Mol	Chain	Res	Type
44	1m	49	THR
44	1m	64	TRP
44	1m	67	GLU
44	1m	71	ARG
44	1m	86	CYS
44	1m	106	ASN
44	1m	117	VAL
45	1n	13	THR
45	1n	15	LYS
45	1n	50	LYS
45	1n	56	VAL
46	1o	3	ILE
46	1o	21	ASP
46	1o	34	LEU
46	1o	47	LYS
46	1o	76	GLU
46	1o	84	LYS
46	1o	87	ILE
47	1p	8	ARG
47	1p	11	SER
47	1p	16	HIS
47	1p	20	VAL
47	1p	21	VAL
47	1p	27	LYS
47	1p	45	THR
47	1p	60	LEU
47	1p	62	VAL
47	1p	67	THR
48	1q	9	VAL
48	1q	11	VAL
48	1q	14	LYS
48	1q	23	VAL
48	1q	25	ARG
48	1q	36	ILE
48	1q	53	LEU
48	1q	60	ILE
48	1q	96	GLU
48	1q	97	SER
49	1r	35	ARG
49	1r	36	ASN
49	1r	37	VAL
49	1r	40	LEU

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Mol	Chain	Res	Type
49	1r	63	GLN
49	1r	76	LEU
50	1s	9	VAL
50	1s	16	LEU
50	1s	28	LYS
50	1s	63	THR
50	1s	78	ARG
50	1s	79	THR
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	37	SER
51	1t	38	LYS
51	1t	42	GLN
51	1t	71	THR
51	1t	90	GLN
51	1t	100	ILE
52	1u	8	THR
52	1u	20	LYS
3	2D	3	VAL
3	2D	14	ARG
3	2D	18	VAL
3	2D	113	VAL
3	2D	118	VAL
3	2D	147	LEU
3	2D	154	LYS
3	2D	162	SER
3	2D	171	ASP
3	2D	173	VAL
3	2D	204	ILE
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	270	ILE
4	2E	12	THR
4	2E	27	LEU
4	2E	38	THR
4	2E	47	VAL
4	2E	69	LYS
4	2E	72	VAL
4	2E	77	ILE
4	2E	81	ILE

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Mol	Chain	Res	Type
4	2E	116	VAL
4	2E	134	ILE
4	2E	175	VAL
4	2E	184	VAL
4	2E	188	VAL
5	2F	20	LEU
5	2F	24	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	95	ARG
5	2F	96	ASP
5	2F	108	LYS
5	2F	110	LEU
5	2F	119	ARG
5	2F	137	LYS
5	2F	149	ASP
5	2F	153	SER
5	2F	158	THR
5	2F	183	VAL
6	2G	3	LEU
6	2G	7	LEU
6	2G	20	ILE
6	2G	28	VAL
6	2G	30	GLU
6	2G	35	GLU
6	2G	43	LEU
6	2G	45	GLU
6	2G	47	LYS
6	2G	51	ARG
6	2G	53	LEU
6	2G	77	ILE
6	2G	86	MET
6	2G	88	ILE
6	2G	91	ARG
6	2G	97	ASP
6	2G	111	LEU
6	2G	137	GLU
6	2G	140	ILE
6	2G	157	ILE
6	2G	165	THR
6	2G	170	ARG
7	2H	9	ILE

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Mol	Chain	Res	Type
7	2H	13	LYS
7	2H	15	VAL
7	2H	44	VAL
7	2H	49	VAL
7	2H	50	VAL
7	2H	57	ASP
7	2H	70	THR
7	2H	84	SER
7	2H	103	LEU
7	2H	104	GLU
7	2H	106	THR
7	2H	111	HIS
7	2H	114	VAL
7	2H	122	THR
7	2H	124	GLU
7	2H	127	GLU
7	2H	129	THR
7	2H	136	ILE
7	2H	153	LYS
7	2H	167	GLU
8	2I	2	LYS
8	2I	15	VAL
8	2I	38	LEU
8	2I	45	LYS
8	2I	50	ARG
8	2I	51	ILE
8	2I	58	LEU
8	2I	61	ARG
8	2I	62	LYS
8	2I	68	LEU
8	2I	78	THR
8	2I	89	TYR
8	2I	91	SER
8	2I	101	LEU
8	2I	105	HIS
8	2I	117	GLU
8	2I	123	LEU
8	2I	133	HIS
8	2I	138	ILE
8	2I	143	SER
8	2I	144	VAL
8	2I	145	VAL

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Mol	Chain	Res	Type
9	2N	1	MET
9	2N	2	LYS
9	2N	23	LEU
9	2N	28	THR
9	2N	46	VAL
9	2N	48	MET
9	2N	60	ILE
9	2N	62	VAL
9	2N	73	THR
9	2N	87	LEU
9	2N	112	LEU
9	2N	131	GLN
9	2N	137	LYS
10	2O	28	SER
10	2O	44	LYS
10	2O	45	GLU
10	2O	69	ILE
10	2O	89	ASN
10	2O	92	GLU
10	2O	96	THR
10	2O	108	GLU
10	2O	109	LYS
11	2P	3	LEU
11	2P	7	ARG
11	2P	29	LYS
11	2P	39	LYS
11	2P	45	LEU
11	2P	58	THR
11	2P	70	GLN
11	2P	90	ARG
11	2P	92	GLU
11	2P	94	GLU
11	2P	96	THR
11	2P	114	ILE
11	2P	123	LEU
11	2P	131	SER
11	2P	133	SER
11	2P	136	GLU
12	2Q	1	MET
12	2Q	2	LEU
12	2Q	7	MET
12	2Q	21	THR

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Mol	Chain	Res	Type
12	2Q	42	ILE
12	2Q	46	GLN
12	2Q	54	MET
12	2Q	56	ARG
12	2Q	109	VAL
12	2Q	110	THR
13	2R	6	SER
13	2R	20	LEU
13	2R	24	GLN
13	2R	36	THR
13	2R	49	ASP
13	2R	114	VAL
14	2S	3	ARG
14	2S	5	THR
14	2S	8	GLU
14	2S	12	PHE
14	2S	15	ARG
14	2S	28	VAL
14	2S	35	ILE
14	2S	36	TYR
14	2S	43	GLU
14	2S	57	LYS
14	2S	58	LEU
14	2S	63	THR
14	2S	69	VAL
14	2S	83	LYS
14	2S	93	LYS
14	2S	98	VAL
14	2S	99	LYS
14	2S	110	LEU
15	2T	28	VAL
15	2T	51	ARG
15	2T	63	VAL
15	2T	89	VAL
15	2T	95	ARG
15	2T	125	ARG
16	2U	5	LYS
16	2U	6	THR
16	2U	17	ILE
16	2U	31	SER
16	2U	36	ARG
16	2U	63	VAL

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Mol	Chain	Res	Type
16	2U	71	GLN
16	2U	74	LEU
16	2U	95	LEU
16	2U	105	VAL
16	2U	110	VAL
16	2U	117	GLN
17	2V	14	VAL
17	2V	24	LYS
17	2V	52	VAL
17	2V	53	GLU
17	2V	57	VAL
17	2V	79	VAL
17	2V	85	LYS
17	2V	93	GLU
17	2V	98	GLU
17	2V	99	ILE
18	2W	11	ARG
18	2W	17	VAL
18	2W	59	VAL
18	2W	65	LEU
18	2W	67	ASP
18	2W	85	VAL
19	2X	69	TYR
19	2X	72	LYS
19	2X	75	ASP
19	2X	81	VAL
19	2X	92	LEU
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	12	THR
20	2Y	14	LEU
20	2Y	19	LYS
20	2Y	30	VAL
20	2Y	38	ILE
20	2Y	44	ILE
20	2Y	50	ARG
20	2Y	61	ILE
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	87	LYS
20	2Y	88	LYS
20	2Y	98	VAL

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Mol	Chain	Res	Type
20	2Y	99	CYS
20	2Y	106	LEU
21	2Z	6	LYS
21	2Z	20	ARG
21	2Z	33	LEU
21	2Z	40	ASP
21	2Z	42	VAL
21	2Z	47	VAL
21	2Z	56	VAL
21	2Z	67	LEU
21	2Z	70	LEU
21	2Z	84	GLU
21	2Z	91	LEU
21	2Z	94	GLU
21	2Z	100	VAL
21	2Z	121	HIS
21	2Z	131	ARG
21	2Z	136	PHE
21	2Z	137	ILE
21	2Z	142	SER
21	2Z	144	LEU
21	2Z	145	GLU
21	2Z	154	ASP
21	2Z	157	LEU
21	2Z	161	VAL
21	2Z	170	THR
21	2Z	171	ILE
22	20	9	SER
22	20	46	LYS
22	20	63	VAL
22	20	64	ASP
22	20	68	GLU
23	21	6	GLU
23	21	11	ARG
23	21	26	ARG
23	21	40	ARG
23	21	41	ARG
23	21	46	LEU
23	21	59	THR
23	21	78	LYS
23	21	85	LEU
24	22	19	VAL

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Mol	Chain	Res	Type
24	22	30	ARG
24	22	35	LEU
24	22	46	GLN
24	22	53	LEU
24	22	65	ASN
24	22	70	GLN
25	23	23	LEU
25	23	31	LEU
25	23	56	VAL
25	23	59	VAL
26	24	33	VAL
26	24	34	GLU
26	24	48	ARG
26	24	49	PHE
26	24	50	VAL
26	24	56	VAL
26	24	59	PHE
26	24	63	TYR
27	25	6	VAL
27	25	48	GLU
27	25	58	LEU
27	25	59	GLU
28	26	7	ILE
28	26	19	ARG
28	26	20	ASN
28	26	23	THR
28	26	34	LEU
28	26	45	LYS
28	26	48	VAL
29	27	1	MET
29	27	4	THR
29	27	29	LYS
29	27	41	ARG
29	27	43	THR
30	28	14	VAL
30	28	37	SER
30	28	49	VAL
31	29	6	SER
31	29	7	VAL
31	29	33	LYS
33	2b	8	LYS
33	2b	9	GLU

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Mol	Chain	Res	Type
33	2b	16	HIS
33	2b	23	ARG
33	2b	44	LEU
33	2b	47	THR
33	2b	48	MET
33	2b	49	GLU
33	2b	55	PHE
33	2b	58	ILE
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	73	THR
33	2b	76	GLN
33	2b	83	MET
33	2b	93	VAL
33	2b	94	ASN
33	2b	96	ARG
33	2b	110	GLN
33	2b	112	VAL
33	2b	118	LEU
33	2b	121	LEU
33	2b	126	GLU
33	2b	127	ILE
33	2b	136	VAL
33	2b	138	LEU
33	2b	139	LYS
33	2b	142	LEU
33	2b	163	PHE
33	2b	164	VAL
33	2b	179	LYS
33	2b	185	ILE
33	2b	189	ASP
33	2b	191	ASP
33	2b	195	ASP
33	2b	208	ILE
33	2b	214	ILE
33	2b	224	GLN
33	2b	230	VAL
33	2b	236	TYR
34	2c	5	ILE
34	2c	32	LEU
34	2c	35	GLU

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Mol	Chain	Res	Type
34	2c	45	LYS
34	2c	47	LEU
34	2c	55	VAL
34	2c	68	VAL
34	2c	70	VAL
34	2c	91	LEU
34	2c	101	LEU
34	2c	102	ASN
34	2c	104	GLN
34	2c	105	GLU
34	2c	128	PHE
34	2c	132	ARG
34	2c	138	VAL
34	2c	153	VAL
34	2c	172	ARG
34	2c	182	ILE
34	2c	190	ARG
35	2d	5	ILE
35	2d	8	VAL
35	2d	12	CYS
35	2d	17	VAL
35	2d	19	LEU
35	2d	31	CYS
35	2d	34	GLU
35	2d	42	GLN
35	2d	47	ARG
35	2d	53	ASP
35	2d	59	ARG
35	2d	60	GLU
35	2d	70	ILE
35	2d	78	LEU
35	2d	83	SER
35	2d	96	LEU
35	2d	107	ARG
35	2d	120	LEU
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	160	GLN
35	2d	162	LEU
36	2e	10	MET
36	2e	12	LEU

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Mol	Chain	Res	Type
36	2e	13	ILE
36	2e	16	THR
36	2e	31	LEU
36	2e	38	GLN
36	2e	41	VAL
36	2e	51	VAL
36	2e	78	HIS
36	2e	82	VAL
36	2e	91	LEU
36	2e	120	THR
36	2e	150	ARG
36	2e	151	LEU
37	2f	23	LYS
37	2f	28	ARG
37	2f	64	GLN
37	2f	69	GLU
37	2f	70	ASP
37	2f	74	ASP
37	2f	81	ILE
37	2f	83	ASP
37	2f	92	LYS
37	2f	94	GLN
37	2f	95	GLU
38	2g	9	VAL
38	2g	15	ASP
38	2g	21	VAL
38	2g	23	VAL
38	2g	24	THR
38	2g	47	CYS
38	2g	52	GLU
38	2g	53	LYS
38	2g	73	MET
38	2g	79	ARG
38	2g	94	ARG
38	2g	97	GLN
38	2g	106	GLN
38	2g	114	ARG
38	2g	124	LEU
38	2g	146	GLU
39	2h	8	ASP
39	2h	11	THR
39	2h	26	VAL

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Mol	Chain	Res	Type
39	2h	45	ILE
39	2h	51	VAL
39	2h	52	ASP
39	2h	100	ILE
39	2h	109	ILE
39	2h	112	LEU
39	2h	113	SER
39	2h	115	SER
39	2h	123	GLU
39	2h	133	LEU
39	2h	137	VAL
40	2i	7	THR
40	2i	42	ARG
40	2i	58	HIS
40	2i	65	VAL
40	2i	83	ARG
40	2i	89	ASN
40	2i	114	TYR
41	2j	8	LEU
41	2j	25	GLU
41	2j	29	ARG
41	2j	38	ILE
41	2j	42	THR
41	2j	44	VAL
41	2j	45	ARG
41	2j	55	LYS
41	2j	58	ASP
41	2j	73	ASP
41	2j	84	GLN
41	2j	96	ILE
41	2j	97	GLU
41	2j	100	THR
42	2k	30	VAL
42	2k	41	THR
42	2k	48	ILE
42	2k	80	VAL
42	2k	105	VAL
43	2l	36	VAL
43	2l	39	VAL
43	2l	40	VAL
43	2l	59	ARG
43	2l	67	THR

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Mol	Chain	Res	Type
43	2l	83	VAL
43	2l	97	ARG
43	2l	99	HIS
43	2l	100	ILE
43	2l	118	SER
44	2m	4	ILE
44	2m	14	ARG
44	2m	15	VAL
44	2m	32	GLU
44	2m	47	ASP
44	2m	63	THR
44	2m	86	CYS
44	2m	92	HIS
44	2m	93	ARG
44	2m	98	VAL
44	2m	103	THR
44	2m	106	ASN
44	2m	114	ARG
44	2m	116	THR
45	2n	3	ARG
45	2n	9	LYS
45	2n	15	LYS
45	2n	19	ARG
45	2n	33	VAL
45	2n	56	VAL
45	2n	58	LYS
46	2o	3	ILE
46	2o	26	GLU
46	2o	34	LEU
46	2o	56	LEU
46	2o	60	VAL
47	2p	2	VAL
47	2p	5	ARG
47	2p	20	VAL
47	2p	29	ASP
47	2p	49	LEU
47	2p	67	THR
48	2q	7	THR
48	2q	21	VAL
48	2q	41	LYS
48	2q	60	ILE
48	2q	67	LYS

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Mol	Chain	Res	Type
48	2q	73	VAL
48	2q	78	GLU
48	2q	84	LEU
48	2q	90	ILE
49	2r	26	LEU
49	2r	29	PHE
49	2r	31	LEU
49	2r	44	LEU
49	2r	46	GLU
49	2r	54	ARG
49	2r	78	LEU
49	2r	82	THR
50	2s	14	HIS
50	2s	15	LEU
50	2s	27	GLU
50	2s	33	THR
50	2s	37	ARG
50	2s	43	GLU
50	2s	45	VAL
50	2s	48	THR
50	2s	49	ILE
50	2s	51	VAL
50	2s	56	GLN
50	2s	57	HIS
50	2s	63	THR
50	2s	77	THR
51	2t	9	ASN
51	2t	31	SER
51	2t	33	ILE
51	2t	45	GLN
51	2t	46	GLU
51	2t	56	MET
51	2t	62	LEU
51	2t	70	SER
51	2t	86	ARG
52	2u	20	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (146) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN

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Mol	Chain	Res	Type
3	1D	164	GLN
3	1D	201	HIS
4	1E	121	ASN
5	1F	69	HIS
5	1F	133	ASN
5	1F	203	GLN
6	1G	26	GLN
9	1N	8	GLN
12	1Q	12	GLN
14	1S	84	GLN
14	1S	95	HIS
15	1T	58	ASN
15	1T	84	GLN
16	1U	71	GLN
16	1U	94	ASN
16	1U	117	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	43	ASN
21	1Z	32	HIS
21	1Z	151	HIS
22	10	35	ASN
24	12	38	GLN
25	13	32	GLN
26	14	60	GLN
30	18	35	GLN
33	1b	40	HIS
33	1b	94	ASN
33	1b	110	GLN
33	1b	140	HIS
33	1b	212	GLN
34	1c	6	HIS
34	1c	98	ASN
34	1c	108	ASN
34	1c	118	GLN
34	1c	123	GLN
34	1c	136	GLN
34	1c	162	GLN
35	1d	42	GLN
35	1d	77	ASN
35	1d	116	GLN

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Mol	Chain	Res	Type
35	1d	119	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	160	GLN
35	1d	161	ASN
35	1d	201	GLN
36	1e	78	HIS
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	64	GLN
38	1g	109	ASN
40	1i	34	ASN
40	1i	58	HIS
40	1i	124	GLN
41	1j	56	HIS
42	1k	104	GLN
43	1l	99	HIS
44	1m	77	ASN
44	1m	92	HIS
46	1o	9	GLN
46	1o	62	GLN
46	1o	71	GLN
47	1p	13	HIS
47	1p	76	GLN
48	1q	26	GLN
49	1r	63	GLN
50	1s	14	HIS
50	1s	83	HIS
51	1t	90	GLN
3	2D	164	GLN
4	2E	48	GLN
4	2E	121	ASN
4	2E	192	ASN
5	2F	69	HIS
7	2H	111	HIS
9	2N	56	ASN
9	2N	69	GLN
10	2O	5	GLN
11	2P	70	GLN
12	2Q	12	GLN

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Mol	Chain	Res	Type
12	2Q	46	GLN
12	2Q	57	HIS
12	2Q	123	HIS
13	2R	13	HIS
13	2R	50	HIS
14	2S	38	GLN
14	2S	84	GLN
15	2T	58	ASN
15	2T	90	GLN
15	2T	123	GLN
16	2U	104	GLN
16	2U	117	GLN
18	2W	111	HIS
21	2Z	73	GLN
24	22	38	GLN
24	22	43	GLN
26	24	46	GLN
28	26	20	ASN
31	29	36	GLN
33	2b	19	HIS
33	2b	40	HIS
33	2b	76	GLN
33	2b	95	GLN
33	2b	135	GLN
33	2b	146	GLN
34	2c	98	ASN
34	2c	102	ASN
34	2c	123	GLN
34	2c	162	GLN
35	2d	42	GLN
35	2d	116	GLN
35	2d	119	GLN
35	2d	125	HIS
35	2d	129	ASN
36	2e	130	ASN
37	2f	64	GLN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	68	ASN
38	2g	86	GLN
38	2g	106	GLN

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Mol	Chain	Res	Type
38	2g	148	ASN
40	2i	31	GLN
40	2i	87	GLN
42	2k	22	HIS
42	2k	117	ASN
43	2l	9	GLN
43	2l	99	HIS
44	2m	62	ASN
44	2m	92	HIS
46	2o	9	GLN
47	2p	16	HIS
49	2r	63	GLN
50	2s	47	HIS
50	2s	57	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	42	GLN
51	2t	75	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	494 (17%)	22 (0%)
1	2A	2791/2915 (95%)	522 (18%)	27 (0%)
2	1B	119/121 (98%)	11 (9%)	0
2	2B	118/121 (97%)	33 (27%)	0
32	1a	1497/1521 (98%)	273 (18%)	0
32	2a	1501/1521 (98%)	335 (22%)	0
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	4 (33%)	0
54	1w	71/76 (93%)	32 (45%)	0
54	2w	71/76 (93%)	38 (53%)	0
55	1x	75/77 (97%)	14 (18%)	0
55	2x	75/77 (97%)	15 (20%)	0
57	1y	72/76 (94%)	35 (48%)	0
57	2y	72/76 (94%)	41 (56%)	0
All	All	9350/9620 (97%)	1850 (19%)	49 (0%)

All (1850) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	34	C
1	1A	45	C
1	1A	50	U
1	1A	55	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	78	A
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	125	G
1	1A	154	G
1	1A	154(A)	C
1	1A	173	G
1	1A	182	A
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	225	A
1	1A	226	G
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(B)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G

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Mol	Chain	Res	Type
1	1A	272(H)	C
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	325	G
1	1A	329	G
1	1A	330	A
1	1A	331	A
1	1A	333	G
1	1A	345	A
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	363(E)	U
1	1A	370	G
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	449	A
1	1A	451	C
1	1A	456	C
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	534	U
1	1A	545	G
1	1A	549	G
1	1A	551	G
1	1A	563	G
1	1A	573	G
1	1A	575	A

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Mol	Chain	Res	Type
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	614(C)	A
1	1A	615	G
1	1A	616	G
1	1A	627	A
1	1A	634	C
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(F)	G
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	762	U
1	1A	764	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	783	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	830	G
1	1A	859	G
1	1A	866	A
1	1A	880	G
1	1A	883	G
1	1A	884	C

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Mol	Chain	Res	Type
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	907	U
1	1A	910	A
1	1A	911	A
1	1A	931	G
1	1A	932	G
1	1A	938	G
1	1A	945	A
1	1A	946	G
1	1A	959	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1044	G
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A

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Mol	Chain	Res	Type
1	1A	1055	G
1	1A	1057	A
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G
1	1A	1068	G
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1080	C
1	1A	1081	U
1	1A	1083	U
1	1A	1085	A
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U
1	1A	1097	U
1	1A	1099	G
1	1A	1101	U
1	1A	1104	C
1	1A	1109	C
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1117	G
1	1A	1132	A
1	1A	1135	C
1	1A	1136	G
1	1A	1141	U
1	1A	1149	G
1	1A	1156	A
1	1A	1171	G

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Mol	Chain	Res	Type
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	1220	A
1	1A	1241	A
1	1A	1244	G
1	1A	1247	A
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1281	G
1	1A	1290	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1418	G
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U

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Mol	Chain	Res	Type
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1519	G
1	1A	1520	G
1	1A	1532	C
1	1A	1539	G
1	1A	1546	C
1	1A	1554	A
1	1A	1555	G
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1674	G
1	1A	1682	G
1	1A	1684	C
1	1A	1700	A
1	1A	1703	G
1	1A	1718	G
1	1A	1719	G
1	1A	1722	A
1	1A	1739	U
1	1A	1756	G
1	1A	1758	G
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G

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Mol	Chain	Res	Type
1	1A	1817	G
1	1A	1828	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	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1984	G
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	2032	G
1	1A	2033	A
1	1A	2034	U
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2097	C
1	1A	2098	U
1	1A	2100	G
1	1A	2101	G

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Mol	Chain	Res	Type
1	1A	2108	C
1	1A	2110	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2117	A
1	1A	2118	U
1	1A	2119	A
1	1A	2120	G
1	1A	2121	G
1	1A	2122	U
1	1A	2123	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	2135	A
1	1A	2136	C
1	1A	2137	C
1	1A	2138	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	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	2164	C
1	1A	2166	G
1	1A	2167	U
1	1A	2168	G
1	1A	2170	A
1	1A	2171	A
1	1A	2172	U

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Mol	Chain	Res	Type
1	1A	2173	A
1	1A	2174	C
1	1A	2175	C
1	1A	2182	G
1	1A	2183	C
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	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2240	C
1	1A	2268	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	2307	G
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2354	G
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2405	G
1	1A	2406	U
1	1A	2410	G
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U

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Mol	Chain	Res	Type
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2432	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2469	A
1	1A	2474	C
1	1A	2476	A
1	1A	2490	G
1	1A	2492	U
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2525	G
1	1A	2529	G
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
1	1A	2578	G
1	1A	2582	G
1	1A	2602	A
1	1A	2608	G
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	2673	G
1	1A	2689	U
1	1A	2690	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A

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Mol	Chain	Res	Type
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2739	U
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2769	C
1	1A	2778	A
1	1A	2780	G
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2804	C
1	1A	2807	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2831	G
1	1A	2833	G
1	1A	2834	G
1	1A	2835	A
1	1A	2861	G
1	1A	2872	G
1	1A	2873	A
1	1A	2880	C
1	1A	2894	G
2	1B	12	C
2	1B	25	A
2	1B	35	U
2	1B	52	A
2	1B	56	G
2	1B	65	C
2	1B	73	A
2	1B	85	G
2	1B	87	G
2	1B	106	G
2	1B	110	G

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Mol	Chain	Res	Type
32	1a	5	U
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	54	C
32	1a	61	G
32	1a	68	G
32	1a	77	G
32	1a	78	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	105	G
32	1a	116	A
32	1a	120	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	144	G
32	1a	147	G
32	1a	151	A
32	1a	153	C
32	1a	155	C
32	1a	163	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	183	G
32	1a	189(G)	G
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	200	G
32	1a	201	C
32	1a	203	U
32	1a	204	U
32	1a	222	U

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Mol	Chain	Res	Type
32	1a	231	G
32	1a	237	C
32	1a	247	G
32	1a	251	G
32	1a	257	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	280	C
32	1a	281	G
32	1a	289	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	332	G
32	1a	342	C
32	1a	344	A
32	1a	345	C
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	382	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	458	C
32	1a	461	A

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Mol	Chain	Res	Type
32	1a	474	G
32	1a	475	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	506	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	521	G
32	1a	531	U
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	560	U
32	1a	561	U
32	1a	564	C
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	617	G
32	1a	630	G
32	1a	642	A
32	1a	653	A
32	1a	665	A
32	1a	671	G
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	702	A
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	749	C
32	1a	753	A

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Mol	Chain	Res	Type
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	796	C
32	1a	815	A
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	827	U
32	1a	828	A
32	1a	838	G
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	855	G
32	1a	870	U
32	1a	876	G
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	942	G
32	1a	958	A
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	991	U
32	1a	992	U
32	1a	993	G

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Mol	Chain	Res	Type
32	1a	995	C
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	1008	C
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1037	C
32	1a	1038	C
32	1a	1043	C
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1081	G
32	1a	1085	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1125	U
32	1a	1126	U
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G

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Mol	Chain	Res	Type
32	1a	1159	U
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1213	A
32	1a	1225	A
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1246	C
32	1a	1250	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1263	C
32	1a	1268	A
32	1a	1269	A
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1312	G
32	1a	1319	A
32	1a	1323	G
32	1a	1331	G
32	1a	1346	A
32	1a	1347	G
32	1a	1350	A
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1378	C
32	1a	1381	U

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Mol	Chain	Res	Type
32	1a	1406	U
32	1a	1419	G
32	1a	1425	U
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	15	A
53	1v	19	A
54	1w	2	G
54	1w	7	U
54	1w	8	U
54	1w	9	A
54	1w	12	U
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	22	G
54	1w	23	A
54	1w	24	G
54	1w	25	C
54	1w	27	G
54	1w	31	A
54	1w	44	U
54	1w	45	G
54	1w	46	G7M
54	1w	47	U

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Mol	Chain	Res	Type
54	1w	48	C
54	1w	51	A
54	1w	53	G
54	1w	54	5MU
54	1w	56	C
54	1w	62	C
54	1w	64	G
54	1w	66	A
54	1w	69	A
54	1w	70	C
54	1w	71	C
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	2	G
55	1x	4	G
55	1x	5	G
55	1x	9	G
55	1x	13	C
55	1x	14	A
55	1x	16	C
55	1x	17	C
55	1x	17(A)	U
55	1x	19	G
55	1x	20	U
55	1x	21	A
55	1x	47	U
55	1x	61	C
57	1y	6	G
57	1y	8	U
57	1y	9	A
57	1y	12	U
57	1y	13	C
57	1y	14	A
57	1y	15	G
57	1y	19	G
57	1y	20	U
57	1y	21	A
57	1y	24	G
57	1y	26	A
57	1y	27	G
57	1y	29	U

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Mol	Chain	Res	Type
57	1y	33	U
57	1y	40	C
57	1y	41	A
57	1y	44	U
57	1y	45	G
57	1y	46	G7M
57	1y	47	U
57	1y	48	C
57	1y	50	C
57	1y	51	A
57	1y	56	C
57	1y	57	G
57	1y	58	A
57	1y	59	A
57	1y	61	C
57	1y	65	C
57	1y	66	A
57	1y	67	C
57	1y	70	C
57	1y	72	C
57	1y	75	C
1	2A	8	A
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	49	A
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	79	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	131	G

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Mol	Chain	Res	Type
1	2A	154(A)	C
1	2A	157	U
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	266	G
1	2A	271(A)	A
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	G
1	2A	272(B)	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	333	G
1	2A	335	C
1	2A	336	C
1	2A	342	G
1	2A	346	A
1	2A	352	G
1	2A	354	G
1	2A	363	G

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Mol	Chain	Res	Type
1	2A	363(B)	G
1	2A	370	G
1	2A	386	G
1	2A	395	U
1	2A	396	G
1	2A	404	C
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	444	C
1	2A	451	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	479	A
1	2A	481	G
1	2A	498	G
1	2A	505	A
1	2A	509	C
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	562	U
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	583	G
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	637	A

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Mol	Chain	Res	Type
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	664	C
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	715	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	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	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	825	C
1	2A	827	U
1	2A	847	U
1	2A	857	C
1	2A	858	U
1	2A	859	G
1	2A	861	A
1	2A	866	A
1	2A	869	G
1	2A	872	A
1	2A	874	G
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	882	G

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Mol	Chain	Res	Type
1	2A	884	C
1	2A	886	C
1	2A	887	A
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	902	C
1	2A	910	A
1	2A	914	C
1	2A	915	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	990	A
1	2A	996	A
1	2A	999	U
1	2A	1002	G
1	2A	1005	C
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1023	U
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U

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Mol	Chain	Res	Type
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1042	G
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1126	A
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1166	C
1	2A	1167	U
1	2A	1169	G
1	2A	1170	G
1	2A	1171	G
1	2A	1195	G
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1221	C
1	2A	1229	G
1	2A	1236	G
1	2A	1242	A
1	2A	1244	G
1	2A	1247	A
1	2A	1248	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1276	A
1	2A	1288	U
1	2A	1296	G
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G

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Mol	Chain	Res	Type
1	2A	1314	C
1	2A	1327	C
1	2A	1345	C
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1403	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1435	G
1	2A	1437	C
1	2A	1443	G
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1451	C
1	2A	1459	G
1	2A	1460	A
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1486	A
1	2A	1490	A
1	2A	1493	C
1	2A	1497	U
1	2A	1506	C
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1510	G
1	2A	1528(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1544	A

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Mol	Chain	Res	Type
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1582	C
1	2A	1583	A
1	2A	1584	C
1	2A	1593	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1667	G
1	2A	1674	G
1	2A	1680	U
1	2A	1695	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1745(A)	C
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1786	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G

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Mol	Chain	Res	Type
1	2A	1820	U
1	2A	1829	A
1	2A	1847	A
1	2A	1848	A
1	2A	1878	G
1	2A	1885	A
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1946	U
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	1975	G
1	2A	1984	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	2039	C
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2067	G
1	2A	2069	G
1	2A	2108	C
1	2A	2109	U
1	2A	2110	G

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Mol	Chain	Res	Type
1	2A	2111	C
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2124	G
1	2A	2125	G
1	2A	2126	A
1	2A	2130	U
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2138	C
1	2A	2142	C
1	2A	2143	C
1	2A	2146	C
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2152	G
1	2A	2153	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2171	A
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C

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Mol	Chain	Res	Type
1	2A	2175	C
1	2A	2176	A
1	2A	2178	C
1	2A	2182	G
1	2A	2185	C
1	2A	2188	C
1	2A	2189	U
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	2219	G
1	2A	2225	A
1	2A	2239	G
1	2A	2268	A
1	2A	2273	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2297	C
1	2A	2298	A
1	2A	2305	A
1	2A	2307	G
1	2A	2308	G
1	2A	2310	A
1	2A	2311	A
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2336	A
1	2A	2340	G
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2366	A
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C

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Mol	Chain	Res	Type
1	2A	2391	G
1	2A	2402	C
1	2A	2406	U
1	2A	2410	G
1	2A	2417	C
1	2A	2422	A
1	2A	2423	U
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	2448	A
1	2A	2458	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2477	C
1	2A	2481	G
1	2A	2490	G
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2582	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	G

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Mol	Chain	Res	Type
1	2A	2632	A
1	2A	2634	G
1	2A	2646	C
1	2A	2652	C
1	2A	2654	A
1	2A	2661	G
1	2A	2662	A
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2744	G
1	2A	2751	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
1	2A	2793	G
1	2A	2803	C
1	2A	2808	U
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2860	A
1	2A	2872	G
1	2A	2880	C
1	2A	2886	G
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	5	C

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Mol	Chain	Res	Type
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	20	C
2	2B	22	U
2	2B	26	A
2	2B	30	C
2	2B	32	C
2	2B	33	G
2	2B	35	U
2	2B	41	U
2	2B	46	A
2	2B	52	A
2	2B	53	A
2	2B	58	A
2	2B	63	G
2	2B	65	C
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	106	G
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	116	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	30	U
32	2a	32	A
32	2a	39	G
32	2a	44	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	65	U
32	2a	66	G

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Mol	Chain	Res	Type
32	2a	73	G
32	2a	79	G
32	2a	88	A
32	2a	89	C
32	2a	97	G
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	126	G
32	2a	127	G
32	2a	131	C
32	2a	137	C
32	2a	142	G
32	2a	143	A
32	2a	144	G
32	2a	159	G
32	2a	163	C
32	2a	182	U
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(I)	G
32	2a	189(J)	G
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	247	G
32	2a	250	A
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	281	G
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	344	A
32	2a	346	G
32	2a	350	G

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Mol	Chain	Res	Type
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	363	A
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	389	A
32	2a	397	A
32	2a	398	C
32	2a	404	U
32	2a	406	G
32	2a	410	G
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	422	C
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	443	C
32	2a	452	A
32	2a	453	A
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	517	G
32	2a	518	C

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Mol	Chain	Res	Type
32	2a	521	G
32	2a	527	G7M
32	2a	528	C
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	568	G
32	2a	572	A
32	2a	573	A
32	2a	575	G
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	597	G
32	2a	601	C
32	2a	608	A
32	2a	630	G
32	2a	641	U
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	702	A
32	2a	703	G
32	2a	712	A
32	2a	723	U
32	2a	731	G
32	2a	733	A
32	2a	746	A
32	2a	749	C
32	2a	755	G
32	2a	763	G
32	2a	764	C
32	2a	774	G
32	2a	777	A
32	2a	787	A

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Mol	Chain	Res	Type
32	2a	790	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	816	A
32	2a	817	C
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	857	C
32	2a	858	G
32	2a	859	A
32	2a	872	A
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	924	C
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	932	C
32	2a	933	G
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	970	C
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	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

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Mol	Chain	Res	Type
32	2a	995	C
32	2a	997	U
32	2a	1000	U
32	2a	1002	G
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1008	C
32	2a	1009	G
32	2a	1016	A
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(D)	A
32	2a	1033	G
32	2a	1035	A
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1045	C
32	2a	1050	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1076	C
32	2a	1077	G
32	2a	1079	G
32	2a	1081	G
32	2a	1084	G
32	2a	1085	U

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Mol	Chain	Res	Type
32	2a	1086	U
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1103	C
32	2a	1105	A
32	2a	1108	G
32	2a	1109	C
32	2a	1112	C
32	2a	1117	G
32	2a	1122	U
32	2a	1123	A
32	2a	1125	U
32	2a	1126	U
32	2a	1129	C
32	2a	1130	A
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1142	G
32	2a	1145	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1153	C
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1181	G
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1199	U
32	2a	1202	G
32	2a	1208	C
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C

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Mol	Chain	Res	Type
32	2a	1215	G
32	2a	1227	A
32	2a	1228	C
32	2a	1233	G
32	2a	1236	A
32	2a	1238	A
32	2a	1246	C
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1262	C
32	2a	1270	C
32	2a	1272	G
32	2a	1275	A
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1281	U
32	2a	1283	G
32	2a	1285	A
32	2a	1286	A
32	2a	1287	A
32	2a	1291	G
32	2a	1299	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1311	G
32	2a	1312	G
32	2a	1319	A
32	2a	1322	C
32	2a	1323	G
32	2a	1336	C
32	2a	1346	A
32	2a	1347	G
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1380	U

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Mol	Chain	Res	Type
32	2a	1381	U
32	2a	1382	C
32	2a	1400	5MC
32	2a	1404	5MC
32	2a	1406	U
32	2a	1410	G
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1442(B)	A
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1475	G
32	2a	1487	G
32	2a	1492	A
32	2a	1494	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	14	A
53	2v	15	A
53	2v	19	A
53	2v	22	U
54	2w	2	G
54	2w	3	G
54	2w	5	C
54	2w	6	G
54	2w	7	U
54	2w	8	U
54	2w	10	G
54	2w	11	C
54	2w	13	C

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Mol	Chain	Res	Type
54	2w	19	G
54	2w	20	U
54	2w	22	G
54	2w	23	A
54	2w	24	G
54	2w	25	C
54	2w	30	G
54	2w	31	A
54	2w	40	C
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	50	C
54	2w	51	A
54	2w	52	G
54	2w	56	C
54	2w	58	A
54	2w	59	A
54	2w	60	U
54	2w	61	C
54	2w	62	C
54	2w	64	G
54	2w	65	C
54	2w	68	G
54	2w	69	A
54	2w	70	C
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	2	G
55	2x	4	G
55	2x	6	G
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	42	G
55	2x	47	U
55	2x	53	G
55	2x	56	C

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Mol	Chain	Res	Type
55	2x	63	G
55	2x	68	C
57	2y	2	G
57	2y	7	U
57	2y	8	U
57	2y	9	A
57	2y	11	C
57	2y	12	U
57	2y	13	C
57	2y	14	A
57	2y	15	G
57	2y	19	G
57	2y	20	U
57	2y	21	A
57	2y	24	G
57	2y	25	C
57	2y	27	G
57	2y	34	U8U
57	2y	36	U
57	2y	40	C
57	2y	41	A
57	2y	44	U
57	2y	45	G
57	2y	46	G7M
57	2y	47	U
57	2y	49	G
57	2y	50	C
57	2y	52	G
57	2y	53	G
57	2y	55	PSU
57	2y	56	C
57	2y	57	G
57	2y	58	A
57	2y	59	A
57	2y	60	U
57	2y	61	C
57	2y	65	C
57	2y	66	A
57	2y	69	A
57	2y	70	C
57	2y	72	C
57	2y	73	A

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Mol	Chain	Res	Type
57	2y	75	C

All (49) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	746	A
1	1A	827	U
1	1A	1047	G
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1442	G
1	1A	1508	A
1	1A	1992	G
1	1A	2134	A
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2629	A
1	1A	2689	U
1	2A	196	A
1	2A	228	A
1	2A	229	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	896	A
1	2A	1026	U
1	2A	1210	A

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Mol	Chain	Res	Type
1	2A	1275	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
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	2422	A
1	2A	2689	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	$\#\|Z\| > 2$
32	PSU	1a	516	58,32	18,21,22	1.44	3 (16%)	21,30,33	1.95	5 (23%)
32	4OC	1a	1402	32	20,23,24	0.74	0	25,32,35	0.95	1 (4%)
32	5MC	2a	967	58,32	19,22,23	1.88	3 (15%)	26,32,35	1.17	3 (11%)
32	UR3	2a	1498	32	19,22,23	1.02	2 (10%)	26,32,35	1.73	3 (11%)
1	5MC	2A	1942	1	19,22,23	1.60	3 (15%)	26,32,35	1.10	2 (7%)
57	G7M	2y	46	57	20,26,27	1.37	2 (10%)	16,39,42	0.69	0
57	PSU	1y	39	57	18,21,22	1.34	2 (11%)	21,30,33	2.04	3 (14%)
54	U8U	1w	34	54,53	20,24,25	1.38	2 (10%)	22,34,37	1.34	4 (18%)
54	T6A	2w	37	54,53	26,34,35	0.98	2 (7%)	28,49,52	1.81	5 (17%)
1	OMG	1A	2251	55,58,1	19,26,27	0.94	1 (5%)	21,38,41	1.19	3 (14%)
32	M2G	1a	966	32	20,27,28	1.28	3 (15%)	19,40,43	0.96	1 (5%)
32	4OC	2a	1402	58,32	20,23,24	0.78	0	25,32,35	1.13	3 (12%)
54	5MU	2w	54	54	19,22,23	1.45	5 (26%)	27,32,35	1.67	5 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
55	4SU	2x	8	55	18,21,22	2.25	5 (27%)	25,30,33	1.55	6 (24%)
54	A1B8A	1w	76	54	26,33,34	1.30	4 (15%)	23,46,49	1.50	1 (4%)
1	5MC	1A	1962	58,1	19,22,23	1.79	3 (15%)	26,32,35	1.18	3 (11%)
57	PSU	2y	55	57	18,21,22	1.42	2 (11%)	21,30,33	2.10	3 (14%)
1	PSU	1A	1917	1	18,21,22	1.37	3 (16%)	21,30,33	1.96	4 (19%)
55	PSU	1x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.13	4 (19%)
1	OMU	2A	2552	58,1	19,22,23	1.20	2 (10%)	25,31,34	1.77	5 (20%)
1	OMC	1A	1920	1	19,22,23	0.83	0	25,31,34	1.05	2 (8%)
32	M2G	2a	966	32	20,27,28	1.41	3 (15%)	19,40,43	1.01	1 (5%)
57	G7M	1y	46	57	20,26,27	1.35	2 (10%)	16,39,42	0.64	0
1	5MU	1A	1939	1	19,22,23	1.39	5 (26%)	27,32,35	2.17	7 (25%)
55	4SU	1x	8	55	18,21,22	2.28	5 (27%)	25,30,33	1.53	6 (24%)
32	G7M	2a	527	58,32	20,26,27	1.25	2 (10%)	16,39,42	0.55	0
1	5MU	2A	1939	1	19,22,23	1.40	5 (26%)	27,32,35	2.23	6 (22%)
32	MA6	1a	1519	32	19,26,27	1.05	2 (10%)	18,38,41	1.96	3 (16%)
55	5MU	1x	54	55	19,22,23	1.45	5 (26%)	27,32,35	1.89	6 (22%)
1	OMU	1A	2552	58,1	19,22,23	1.18	3 (15%)	25,31,34	1.85	5 (20%)
57	5MU	1y	54	57	19,22,23	1.36	5 (26%)	27,32,35	2.03	6 (22%)
1	5MC	2A	1962	58,1	19,22,23	1.58	3 (15%)	26,32,35	1.15	3 (11%)
32	5MC	1a	1407	32	19,22,23	1.71	3 (15%)	26,32,35	1.27	3 (11%)
54	A1B8A	2w	76	54	26,33,34	1.22	3 (11%)	23,46,49	1.57	1 (4%)
57	T6A	2y	37	57,32	17,24,35	0.83	1 (5%)	16,35,52	1.25	2 (12%)
32	5MC	2a	1404	32	19,22,23	1.66	3 (15%)	26,32,35	1.12	2 (7%)
57	U8U	1y	34	57	17,21,25	1.59	3 (17%)	21,30,37	1.46	3 (14%)
1	OMC	2A	1920	1	19,22,23	0.78	0	25,31,34	0.75	0
32	5MC	2a	1400	32	19,22,23	1.83	3 (15%)	26,32,35	1.24	4 (15%)
32	MA6	2a	1518	32	19,26,27	1.00	2 (10%)	18,38,41	1.96	3 (16%)
54	5MU	1w	54	54	19,22,23	1.39	5 (26%)	27,32,35	2.11	6 (22%)
56	FME	1z	1	56	8,9,10	1.03	0	8,9,11	1.24	2 (25%)
55	8AN	1x	76	58,55	17,24,25	1.18	2 (11%)	13,35,38	2.95	2 (15%)
54	PSU	2w	55	54	18,21,22	1.36	2 (11%)	21,30,33	1.99	4 (19%)
1	PSU	1A	2605	58,1	18,21,22	1.40	4 (22%)	21,30,33	2.10	3 (14%)
32	PSU	2a	516	58,32	18,21,22	1.41	3 (16%)	21,30,33	2.12	4 (19%)
57	5MU	2y	54	57	19,22,23	1.43	6 (31%)	27,32,35	2.11	6 (22%)
32	2MG	1a	1207	58,32	18,26,27	0.92	1 (5%)	16,38,41	1.46	4 (25%)

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	1.36	4 (21%)	27,32,35	2.17	6 (22%)
54	U8U	2w	34	54,53	20,24,25	1.30	2 (10%)	22,34,37	1.07	2 (9%)
57	PSU	1y	55	57	18,21,22	1.40	2 (11%)	21,30,33	1.95	3 (14%)
32	5MC	1a	967	32	19,22,23	1.51	3 (15%)	26,32,35	1.14	2 (7%)
32	5MC	1a	1404	32	19,22,23	1.77	3 (15%)	26,32,35	1.13	2 (7%)
55	5MC	2x	32	55	19,22,23	1.70	3 (15%)	26,32,35	1.20	3 (11%)
1	2MA	2A	2503	58,1	18,25,26	0.69	0	20,37,40	1.93	3 (15%)
1	2MA	1A	2503	58,1	18,25,26	0.72	0	20,37,40	2.04	4 (20%)
57	T6A	1y	37	57	17,24,35	0.80	1 (5%)	16,35,52	1.30	2 (12%)
1	5MU	2A	1915	1	19,22,23	1.45	5 (26%)	27,32,35	2.07	6 (22%)
32	5MC	2a	1407	32	19,22,23	1.59	3 (15%)	26,32,35	1.24	3 (11%)
55	PSU	2x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.07	4 (19%)
54	PSU	2w	39	54	18,21,22	1.31	2 (11%)	21,30,33	2.26	3 (14%)
1	PSU	1A	1911	1	18,21,22	1.37	2 (11%)	21,30,33	2.00	3 (14%)
55	8AN	2x	76	58,55	17,24,25	1.15	2 (11%)	13,35,38	3.82	3 (23%)
56	FME	2z	1	56	8,9,10	0.99	0	8,9,11	1.04	1 (12%)
1	PSU	2A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	2.01	3 (14%)
32	2MG	2a	1207	32	18,26,27	0.94	1 (5%)	16,38,41	1.46	3 (18%)
57	U8U	2y	34	57,53	17,21,25	1.57	4 (23%)	21,30,37	1.54	3 (14%)
54	PSU	1w	39	54	18,21,22	1.38	2 (11%)	21,30,33	1.91	4 (19%)
1	PSU	2A	2605	1	18,21,22	1.36	2 (11%)	21,30,33	1.85	4 (19%)
32	MA6	1a	1518	32	19,26,27	1.04	2 (10%)	18,38,41	1.88	3 (16%)
43	0TD	1l	92	43	8,9,10	4.39	1 (12%)	6,11,13	4.50	2 (33%)
54	T6A	1w	37	54	26,34,35	1.01	1 (3%)	28,49,52	1.86	4 (14%)
32	G7M	1a	527	58,32	20,26,27	1.13	1 (5%)	16,39,42	0.74	0
54	PSU	1w	55	54	18,21,22	1.39	2 (11%)	21,30,33	1.97	3 (14%)
1	5MU	1A	1915	1	19,22,23	1.37	5 (26%)	27,32,35	2.04	7 (25%)
54	G7M	1w	46	54	20,26,27	1.20	1 (5%)	16,39,42	0.81	0
54	G7M	2w	46	54	20,26,27	1.20	1 (5%)	16,39,42	0.88	0
55	5MC	1x	32	55	19,22,23	1.67	3 (15%)	26,32,35	1.25	3 (11%)
32	UR3	1a	1498	32	19,22,23	1.00	2 (10%)	26,32,35	1.78	4 (15%)
43	0TD	2l	92	43	8,9,10	4.46	1 (12%)	6,11,13	5.24	1 (16%)
32	MA6	2a	1519	32	19,26,27	1.00	2 (10%)	18,38,41	1.91	3 (16%)
1	5MC	1A	1942	1	19,22,23	1.67	3 (15%)	26,32,35	1.29	5 (19%)
1	OMG	2A	2251	55,1	19,26,27	0.89	1 (5%)	21,38,41	1.08	2 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
57	PSU	2y	39	57	18,21,22	1.36	2 (11%)	21,30,33	1.95	4 (19%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	1.98	3 (14%)
32	5MC	1a	1400	32	19,22,23	1.58	3 (15%)	26,32,35	1.13	3 (11%)

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
32	PSU	1a	516	58,32	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
32	5MC	2a	967	58,32	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
57	G7M	2y	46	57	-	2/3/25/26	0/3/3/3
57	PSU	1y	39	57	-	0/7/25/26	0/2/2/2
54	U8U	1w	34	54,53	-	2/10/28/29	0/2/2/2
54	T6A	2w	37	54,53	-	4/19/41/42	0/3/3/3
1	OMG	1A	2251	55,58,1	-	0/5/27/28	0/3/3/3
32	M2G	1a	966	32	-	1/7/29/30	0/3/3/3
32	4OC	2a	1402	58,32	-	3/9/29/30	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	1/7/25/26	0/2/2/2
54	A1B8A	1w	76	54	-	2/16/38/39	0/3/3/3
1	5MC	1A	1962	58,1	-	1/7/25/26	0/2/2/2
57	PSU	2y	55	57	-	2/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	58,1	-	0/9/27/28	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
57	G7M	1y	46	57	-	1/3/25/26	0/3/3/3
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	58,32	-	3/3/25/26	0/3/3/3
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	58,1	-	0/9/27/28	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	5MU	1y	54	57	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	58,1	-	4/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	A1B8A	2w	76	54	-	2/16/38/39	0/3/3/3
57	T6A	2y	37	57,32	-	0/3/25/42	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
57	U8U	1y	34	57	-	0/7/25/29	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	5MC	2a	1400	32	-	4/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
54	5MU	1w	54	54	-	1/7/25/26	0/2/2/2
56	FME	1z	1	56	-	4/7/9/11	-
55	8AN	1x	76	58,55	-	3/3/25/26	0/3/3/3
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	58,1	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	58,32	-	0/7/25/26	0/2/2/2
57	5MU	2y	54	57	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	58,32	-	0/5/27/28	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
54	U8U	2w	34	54,53	-	2/10/28/29	0/2/2/2
57	PSU	1y	55	57	-	1/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	58,1	-	1/3/25/26	0/3/3/3
1	2MA	1A	2503	58,1	-	1/3/25/26	0/3/3/3
57	T6A	1y	37	57	-	1/3/25/42	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
55	8AN	2x	76	58,55	-	0/3/25/26	0/3/3/3
56	FME	2z	1	56	-	2/7/9/11	-
1	PSU	2A	1917	1	-	2/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
57	U8U	2y	34	57,53	-	1/7/25/29	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	0TD	1l	92	43	-	3/7/12/14	-
54	T6A	1w	37	54	-	6/19/41/42	0/3/3/3
32	G7M	1a	527	58,32	-	2/3/25/26	0/3/3/3
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	2/3/25/26	0/3/3/3
54	G7M	2w	46	54	-	1/3/25/26	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	55,1	-	1/5/27/28	0/3/3/3
57	PSU	2y	39	57	-	2/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2

All (208) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.21	1.70	1.82
43	1l	92	0TD	CB-SB	-11.90	1.70	1.82
32	2a	967	5MC	C5-C4	7.05	1.49	1.44
32	2a	1400	5MC	C5-C4	6.88	1.49	1.44
1	1A	1962	5MC	C5-C4	6.79	1.49	1.44
32	1a	1404	5MC	C5-C4	6.54	1.49	1.44
32	1a	1407	5MC	C5-C4	6.25	1.48	1.44
55	2x	32	5MC	C5-C4	6.19	1.48	1.44
55	1x	32	5MC	C5-C4	6.18	1.48	1.44
32	2a	1404	5MC	C5-C4	6.02	1.48	1.44
1	1A	1942	5MC	C5-C4	5.87	1.48	1.44
55	2x	8	4SU	C4-N3	-5.68	1.31	1.37
32	1a	1400	5MC	C5-C4	5.65	1.48	1.44
55	1x	8	4SU	C4-N3	-5.63	1.31	1.37
1	2A	1942	5MC	C5-C4	5.63	1.48	1.44
32	2a	1407	5MC	C5-C4	5.62	1.48	1.44
1	2A	1962	5MC	C5-C4	5.61	1.48	1.44
32	1a	967	5MC	C5-C4	5.38	1.48	1.44
55	2x	8	4SU	C4-S4	-4.60	1.60	1.68
54	1w	34	U8U	C2-S2	-4.60	1.60	1.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	8	4SU	C4-S4	-4.57	1.60	1.68
57	1y	34	U8U	C2-S2	-4.57	1.60	1.67
57	2y	34	U8U	C2-S2	-4.46	1.60	1.67
54	1w	76	A1B8A	O4'-C1'	4.39	1.46	1.40
32	2a	966	M2G	C2-N3	4.30	1.36	1.30
57	2y	46	G7M	C5-C4	4.24	1.47	1.39
54	2w	34	U8U	C2-S2	-4.22	1.61	1.67
54	1w	55	PSU	C6-C5	4.16	1.39	1.35
57	2y	55	PSU	C6-C5	3.99	1.39	1.35
54	2w	55	PSU	C6-C5	3.98	1.39	1.35
57	1y	46	G7M	C5-C4	3.93	1.46	1.39
57	1y	39	PSU	C6-C5	3.89	1.39	1.35
54	2w	76	A1B8A	O4'-C1'	3.89	1.46	1.40
57	1y	55	PSU	C6-C5	3.88	1.39	1.35
57	2y	39	PSU	C6-C5	3.84	1.39	1.35
32	2a	527	G7M	C5-C4	3.83	1.46	1.39
32	1a	516	PSU	C6-C5	3.74	1.39	1.35
54	1w	46	G7M	C5-C4	3.73	1.46	1.39
55	1x	8	4SU	C2-N3	-3.73	1.31	1.38
1	2A	2605	PSU	C6-C5	3.70	1.39	1.35
55	1x	55	PSU	C6-C5	3.69	1.39	1.35
54	1w	39	PSU	C6-C5	3.69	1.39	1.35
55	1x	8	4SU	C5-C4	-3.67	1.38	1.42
1	2A	1917	PSU	C6-C5	3.65	1.39	1.35
32	2a	516	PSU	C6-C5	3.64	1.39	1.35
32	1a	527	G7M	C5-C4	3.64	1.46	1.39
54	2w	46	G7M	C5-C4	3.60	1.46	1.39
32	1a	966	M2G	C2-N3	3.58	1.35	1.30
55	2x	8	4SU	C2-N3	-3.53	1.31	1.38
55	2x	55	PSU	C6-C5	3.51	1.39	1.35
54	2w	39	PSU	C6-C5	3.43	1.39	1.35
1	1A	1917	PSU	C6-C5	3.32	1.39	1.35
55	2x	8	4SU	C5-C4	-3.23	1.38	1.42
1	2A	1911	PSU	C6-C5	3.20	1.38	1.35
1	1A	1911	PSU	C6-C5	3.15	1.38	1.35
32	2a	966	M2G	C2-N2	3.07	1.40	1.35
55	1x	54	5MU	C6-C5	3.06	1.39	1.34
1	2A	1942	5MC	C6-C5	3.03	1.39	1.34
57	2y	54	5MU	C6-C5	3.01	1.39	1.34
54	1w	54	5MU	C6-C5	2.99	1.39	1.34
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.94	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	37	T6A	C6-C5	2.93	1.49	1.44
54	2w	54	5MU	C6-C5	2.91	1.39	1.34
32	1a	1407	5MC	C6-C5	2.87	1.39	1.34
55	2x	54	5MU	C6-C5	2.87	1.39	1.34
32	1a	1404	5MC	C6-C5	2.85	1.39	1.34
55	2x	32	5MC	C6-C5	2.83	1.39	1.34
54	2w	37	T6A	C6-C5	2.82	1.49	1.44
57	1y	34	U8U	C4-N3	-2.82	1.33	1.38
32	2a	967	5MC	C6-C5	2.81	1.39	1.34
32	1a	966	M2G	C2-N2	2.81	1.40	1.35
32	1a	516	PSU	C4-N3	-2.81	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.81	1.33	1.38
32	1a	1400	5MC	C6-C5	2.78	1.39	1.34
1	1A	2605	PSU	C6-C5	2.78	1.38	1.35
57	1y	54	5MU	C6-C5	2.77	1.39	1.34
1	2A	2552	OMU	C4-N3	-2.75	1.33	1.38
32	2a	1407	5MC	C6-C5	2.73	1.39	1.34
55	1x	54	5MU	C4-N3	-2.72	1.33	1.38
1	2A	1915	5MU	C4-C5	2.71	1.49	1.44
1	2A	1939	5MU	C4-N3	-2.71	1.33	1.38
32	2a	1404	5MC	C6-C5	2.71	1.39	1.34
1	1A	1911	PSU	C4-N3	-2.71	1.33	1.38
1	2A	1939	5MU	C6-C5	2.69	1.39	1.34
1	1A	1939	5MU	C2-N3	-2.68	1.33	1.38
1	1A	1915	5MU	C6-C5	2.67	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.65	1.33	1.38
57	2y	54	5MU	C4-C5	2.64	1.49	1.44
1	1A	1942	5MC	C6-C5	2.64	1.38	1.34
54	1w	39	PSU	C4-N3	-2.63	1.33	1.38
57	2y	34	U8U	C5-C4	2.62	1.49	1.43
55	1x	76	8AN	C6-C5	-2.62	1.33	1.43
54	2w	54	5MU	C2-N1	2.60	1.42	1.38
1	1A	1942	5MC	C6-N1	-2.60	1.33	1.38
55	2x	55	PSU	C4-N3	-2.57	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.57	1.34	1.38
57	2y	54	5MU	C4-N3	-2.57	1.34	1.38
32	2a	1400	5MC	C6-C5	2.55	1.38	1.34
54	1w	34	U8U	C4-N3	-2.55	1.34	1.38
55	2x	54	5MU	C4-N3	-2.55	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.53	1.34	1.38
54	1w	54	5MU	C4-N3	-2.53	1.34	1.38
1	1A	1939	5MU	C6-C5	2.52	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	54	5MU	C4-N3	-2.51	1.34	1.38
55	1x	8	4SU	O2-C2	2.51	1.27	1.23
54	2w	76	A1B8A	C6-C5	-2.51	1.34	1.43
32	1a	1518	MA6	C6-C5	-2.50	1.41	1.44
1	1A	1939	5MU	C6-N1	-2.50	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.49	1.34	1.38
54	1w	76	A1B8A	C6-C5	-2.49	1.34	1.43
1	2A	1962	5MC	C6-C5	2.49	1.38	1.34
1	1A	1962	5MC	C6-C5	2.48	1.38	1.34
55	2x	54	5MU	C4-C5	2.48	1.48	1.44
57	2y	34	U8U	C4-N3	-2.47	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.47	1.34	1.37
55	1x	32	5MC	C6-C5	2.47	1.38	1.34
1	2A	2251	OMG	C6-N1	-2.47	1.34	1.37
57	1y	54	5MU	C4-C5	2.46	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.45	1.33	1.38
55	2x	76	8AN	C6-C5	-2.45	1.34	1.43
1	1A	1962	5MC	C6-N1	-2.45	1.33	1.38
1	2A	1917	PSU	C4-N3	-2.44	1.34	1.38
32	1a	1519	MA6	C6-C5	-2.44	1.41	1.44
57	1y	55	PSU	C4-N3	-2.44	1.34	1.38
54	1w	76	A1B8A	C5-N7	-2.43	1.31	1.39
1	2A	1962	5MC	C6-N1	-2.43	1.33	1.38
32	1a	967	5MC	C6-N1	-2.42	1.33	1.38
1	1A	2552	OMU	C4-N3	-2.42	1.34	1.38
57	1y	34	U8U	C5-C4	2.42	1.49	1.43
55	1x	54	5MU	C2-N1	2.42	1.42	1.38
57	2y	55	PSU	C4-N3	-2.41	1.34	1.38
1	1A	2552	OMU	C5-C4	-2.40	1.38	1.43
54	2w	54	5MU	C4-C5	2.39	1.48	1.44
32	1a	967	5MC	C6-C5	2.36	1.38	1.34
57	2y	39	PSU	C4-N3	-2.36	1.34	1.38
1	2A	1939	5MU	C4-C5	2.36	1.48	1.44
32	2a	516	PSU	C4-N3	-2.36	1.34	1.38
1	2A	1915	5MU	C2-N1	2.36	1.42	1.38
1	2A	2605	PSU	C4-N3	-2.36	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.35	1.34	1.38
57	1y	46	G7M	C6-N1	-2.35	1.34	1.37
1	2A	1939	5MU	C6-N1	-2.35	1.34	1.38
32	2a	1518	MA6	C6-C5	-2.34	1.41	1.44
55	1x	54	5MU	C4-C5	2.34	1.48	1.44
1	1A	1939	5MU	C4-C5	2.34	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	32	5MC	C6-N1	-2.34	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.33	1.33	1.38
55	2x	76	8AN	C5-N7	-2.33	1.31	1.39
54	2w	54	5MU	O2-C2	2.31	1.27	1.23
32	1a	1498	UR3	C2-N1	2.29	1.41	1.38
54	2w	76	A1B8A	C5-N7	-2.29	1.31	1.39
1	1A	2251	OMG	C6-N1	-2.29	1.34	1.37
54	2w	55	PSU	C4-N3	-2.28	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.28	1.34	1.38
57	1y	54	5MU	C2-N1	2.28	1.42	1.38
1	1A	1915	5MU	C4-C5	2.27	1.48	1.44
57	2y	46	G7M	C6-N1	-2.27	1.34	1.37
32	2a	1519	MA6	C6-C5	-2.26	1.41	1.44
1	1A	2605	PSU	C2-N1	-2.26	1.33	1.36
54	1w	54	5MU	C2-N1	2.26	1.42	1.38
55	1x	55	PSU	C4-N3	-2.26	1.34	1.38
32	2a	966	M2G	C6-N1	-2.23	1.34	1.37
57	1y	39	PSU	C4-N3	-2.22	1.34	1.38
55	2x	32	5MC	C6-N1	-2.22	1.34	1.38
57	1y	54	5MU	C4-N3	-2.22	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.22	1.34	1.38
32	1a	966	M2G	C6-N1	-2.21	1.34	1.37
32	2a	527	G7M	C6-N1	-2.21	1.34	1.37
1	2A	2552	OMU	C2-N3	-2.21	1.34	1.38
1	1A	1915	5MU	C2-N1	2.20	1.41	1.38
32	1a	1400	5MC	C6-N1	-2.19	1.34	1.38
32	2a	1498	UR3	C2-N1	2.19	1.41	1.38
32	2a	1207	2MG	C6-N1	-2.19	1.34	1.37
32	2a	967	5MC	C6-N1	-2.19	1.34	1.38
55	1x	76	8AN	C5-N7	-2.18	1.32	1.39
1	1A	2552	OMU	C2-N3	-2.18	1.34	1.38
57	2y	54	5MU	C2-N1	2.18	1.41	1.38
32	2a	516	PSU	O4'-C1'	-2.15	1.40	1.43
54	2w	39	PSU	C4-N3	-2.14	1.34	1.38
54	2w	34	U8U	C4-N3	-2.14	1.34	1.38
1	1A	1915	5MU	C6-N1	-2.13	1.34	1.38
54	1w	54	5MU	C4-C5	2.12	1.48	1.44
57	2y	54	5MU	C2-N3	-2.12	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.10	1.34	1.38
55	2x	54	5MU	C2-N3	-2.10	1.34	1.38
57	1y	54	5MU	C6-N1	-2.09	1.34	1.38
32	1a	1519	MA6	C6-N1	2.09	1.35	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	76	A1B8A	C3'-N3'	2.08	1.49	1.45
1	2A	1915	5MU	C6-N1	-2.08	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.08	1.34	1.37
55	1x	54	5MU	C2-N3	-2.08	1.34	1.38
57	1y	37	T6A	C2-N3	2.08	1.35	1.32
55	2x	8	4SU	O2-C2	2.08	1.26	1.23
32	2a	1498	UR3	C6-C5	2.07	1.39	1.35
54	1w	54	5MU	C6-N1	-2.07	1.34	1.38
1	1A	1917	PSU	C2-N3	-2.06	1.34	1.37
32	2a	1518	MA6	C6-N1	2.06	1.35	1.32
32	2a	1519	MA6	C6-N1	2.06	1.35	1.32
57	2y	34	U8U	C6-C5	2.05	1.39	1.35
32	1a	1407	5MC	C6-N1	-2.04	1.34	1.38
32	1a	516	PSU	C2-N3	-2.04	1.34	1.37
32	1a	1518	MA6	C6-N1	2.04	1.35	1.32
57	2y	37	T6A	C2-N3	2.03	1.35	1.32
32	1a	1498	UR3	C6-C5	2.03	1.39	1.35
54	1w	55	PSU	C4-N3	-2.02	1.35	1.38
57	2y	54	5MU	C6-N1	-2.02	1.34	1.38
54	2w	37	T6A	C2-N3	2.01	1.35	1.32

All (272) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	CSB-SB-CB	-12.58	79.76	102.36
43	1l	92	0TD	CSB-SB-CB	-10.57	83.37	102.36
55	2x	76	8AN	O4'-C1'-N9	9.13	120.85	108.75
55	1x	76	8AN	C4'-O4'-C1'	-7.79	102.79	109.92
55	2x	76	8AN	C4'-O4'-C1'	-7.50	103.06	109.92
32	1a	1498	UR3	C4-N3-C2	-7.08	118.89	124.58
54	1w	37	T6A	C2-N1-C6	6.91	121.97	116.60
1	1A	2503	2MA	C2-N3-C4	6.90	121.03	115.46
32	2a	1498	UR3	C4-N3-C2	-6.87	119.05	124.58
1	2A	2503	2MA	C2-N3-C4	6.86	121.00	115.46
54	2w	39	PSU	N1-C2-N3	6.69	122.22	115.17
55	2x	76	8AN	N3-C2-N1	-6.61	119.69	128.67
57	2y	55	PSU	N1-C2-N3	6.55	122.08	115.17
1	1A	2605	PSU	N1-C2-N3	6.52	122.05	115.17
54	2w	37	T6A	C2-N1-C6	6.52	121.66	116.60
54	2w	76	A1B8A	N3-C2-N1	-6.52	119.83	128.67
55	1x	55	PSU	N1-C2-N3	6.50	122.03	115.17
55	1x	76	8AN	N3-C2-N1	-6.47	119.89	128.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	55	PSU	N1-C2-N3	6.44	121.96	115.17
32	2a	516	PSU	N1-C2-N3	6.41	121.93	115.17
1	2A	1917	PSU	N1-C2-N3	6.40	121.92	115.17
54	1w	76	A1B8A	N3-C2-N1	-6.37	120.03	128.67
57	1y	55	PSU	N1-C2-N3	6.34	121.85	115.17
57	1y	39	PSU	N1-C2-N3	6.25	121.76	115.17
54	1w	39	PSU	N1-C2-N3	6.14	121.65	115.17
1	2A	1911	PSU	N1-C2-N3	6.08	121.58	115.17
32	1a	516	PSU	N1-C2-N3	6.08	121.58	115.17
1	1A	1911	PSU	N1-C2-N3	6.05	121.55	115.17
54	1w	55	PSU	N1-C2-N3	6.01	121.50	115.17
54	2w	55	PSU	N1-C2-N3	5.93	121.42	115.17
1	1A	1917	PSU	N1-C2-N3	5.91	121.40	115.17
57	2y	39	PSU	N1-C2-N3	5.74	121.22	115.17
32	2a	1518	MA6	N3-C2-N1	-5.62	121.05	128.67
55	2x	54	5MU	N3-C2-N1	5.55	122.12	114.89
32	2a	1519	MA6	N3-C2-N1	-5.55	121.14	128.67
1	2A	2605	PSU	N1-C2-N3	5.47	120.94	115.17
1	2A	1939	5MU	C4-N3-C2	-5.41	120.25	127.34
32	1a	1519	MA6	N3-C2-N1	-5.38	121.38	128.67
1	2A	1915	5MU	N3-C2-N1	5.33	121.83	114.89
32	1a	1518	MA6	N3-C2-N1	-5.30	121.47	128.67
1	1A	1939	5MU	C4-N3-C2	-5.30	120.39	127.34
57	2y	54	5MU	N3-C2-N1	5.29	121.78	114.89
55	2x	54	5MU	C4-N3-C2	-5.22	120.49	127.34
57	2y	34	U8U	C2-N3-C4	-5.20	120.93	127.33
32	1a	1519	MA6	C2-N1-C6	5.18	121.92	116.84
54	2w	39	PSU	O2-C2-N1	-5.17	117.45	122.79
57	2y	54	5MU	C4-N3-C2	-5.14	120.60	127.34
1	2A	1915	5MU	C4-N3-C2	-5.13	120.61	127.34
1	2A	1939	5MU	N3-C2-N1	5.11	121.54	114.89
54	1w	54	5MU	C4-N3-C2	-5.10	120.65	127.34
32	2a	1518	MA6	C2-N1-C6	5.05	121.79	116.84
1	1A	1915	5MU	N3-C2-N1	5.02	121.42	114.89
54	1w	54	5MU	N3-C2-N1	5.01	121.41	114.89
32	1a	1518	MA6	C2-N1-C6	5.01	121.75	116.84
55	1x	54	5MU	N3-C2-N1	4.98	121.37	114.89
1	1A	1939	5MU	N3-C2-N1	4.97	121.36	114.89
57	1y	34	U8U	C2-N3-C4	-4.95	121.23	127.33
57	1y	54	5MU	C4-N3-C2	-4.86	120.97	127.34
1	1A	1915	5MU	C4-N3-C2	-4.86	120.97	127.34
1	1A	1939	5MU	C5-C4-N3	4.84	119.53	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	54	5MU	O4-C4-C5	-4.62	119.63	124.92
1	1A	2552	OMU	N3-C2-N1	4.62	120.90	114.89
57	1y	54	5MU	N3-C2-N1	4.61	120.90	114.89
1	1A	2552	OMU	C4-N3-C2	-4.61	120.89	126.61
54	2w	39	PSU	C4-N3-C2	-4.61	120.02	126.37
1	2A	2552	OMU	C4-N3-C2	-4.60	120.90	126.61
1	2A	1939	5MU	C5-C6-N1	-4.51	118.41	123.31
1	2A	1939	5MU	C5-C4-N3	4.45	119.19	115.32
1	2A	2552	OMU	N3-C2-N1	4.43	120.66	114.89
54	1w	54	5MU	C5-C4-N3	4.43	119.17	115.32
55	2x	55	PSU	C4-N3-C2	-4.39	120.32	126.37
57	1y	54	5MU	O4-C4-C5	-4.38	119.91	124.92
55	1x	54	5MU	C4-N3-C2	-4.32	121.67	127.34
57	2y	55	PSU	O2-C2-N1	-4.31	118.34	122.79
57	2y	54	5MU	C5-C4-N3	4.31	119.07	115.32
57	1y	54	5MU	C5-C4-N3	4.27	119.04	115.32
1	2A	1939	5MU	O4-C4-C5	-4.25	120.05	124.92
1	1A	2605	PSU	C4-N3-C2	-4.25	120.52	126.37
32	2a	1519	MA6	C2-N1-C6	4.21	120.97	116.84
57	1y	39	PSU	C4-N3-C2	-4.17	120.63	126.37
55	2x	54	5MU	C5-C4-N3	4.16	118.94	115.32
1	2A	1915	5MU	C5-C4-N3	4.13	118.92	115.32
1	1A	1915	5MU	C5-C4-N3	4.09	118.88	115.32
55	1x	55	PSU	C4-N3-C2	-4.09	120.74	126.37
54	1w	55	PSU	O2-C2-N1	-4.08	118.58	122.79
1	1A	1911	PSU	C4-N3-C2	-4.01	120.84	126.37
55	2x	54	5MU	O4-C4-C5	-4.00	120.34	124.92
54	2w	55	PSU	C4-N3-C2	-3.99	120.87	126.37
55	1x	8	4SU	C6-C5-C4	-3.98	116.50	119.95
57	2y	39	PSU	C4-N3-C2	-3.96	120.92	126.37
1	1A	1915	5MU	O4-C4-C5	-3.96	120.39	124.92
1	2A	1917	PSU	C4-N3-C2	-3.95	120.92	126.37
55	1x	55	PSU	O2-C2-N1	-3.95	118.72	122.79
1	1A	2605	PSU	O2-C2-N1	-3.95	118.72	122.79
57	2y	55	PSU	C4-N3-C2	-3.94	120.94	126.37
1	1A	1939	5MU	C5-C6-N1	-3.93	119.04	123.31
1	2A	1911	PSU	C4-N3-C2	-3.93	120.96	126.37
32	2a	516	PSU	O2-C2-N1	-3.90	118.77	122.79
54	2w	54	5MU	C5-C4-N3	3.87	118.68	115.32
1	1A	1917	PSU	C4-N3-C2	-3.86	121.05	126.37
32	2a	516	PSU	C4-N3-C2	-3.85	121.07	126.37
1	1A	1911	PSU	O2-C2-N1	-3.84	118.82	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	516	PSU	C4-N3-C2	-3.84	121.08	126.37
55	1x	32	5MC	C5-C6-N1	-3.83	119.15	123.31
32	2a	967	5MC	C5-C6-N1	-3.82	119.17	123.31
1	2A	1911	PSU	O2-C2-N1	-3.79	118.88	122.79
32	2a	1400	5MC	C5-C6-N1	-3.77	119.22	123.31
54	1w	37	T6A	N3-C2-N1	-3.74	123.60	128.67
54	2w	54	5MU	C4-N3-C2	-3.73	122.44	127.34
1	2A	2605	PSU	C4-N3-C2	-3.71	121.26	126.37
32	1a	1407	5MC	C5-C6-N1	-3.70	119.29	123.31
57	1y	37	T6A	N3-C2-N1	-3.70	123.65	128.67
54	2w	54	5MU	N3-C2-N1	3.67	119.67	114.89
57	2y	54	5MU	O4-C4-C5	-3.65	120.74	124.92
32	2a	1407	5MC	C5-C6-N1	-3.65	119.35	123.31
54	2w	37	T6A	N6-C10-N11	3.64	118.77	113.77
55	2x	54	5MU	O2-C2-N1	-3.63	118.07	122.80
55	1x	54	5MU	C5-C4-N3	3.62	118.47	115.32
54	1w	55	PSU	C4-N3-C2	-3.60	121.41	126.37
32	2a	1404	5MC	C5-C6-N1	-3.60	119.41	123.31
55	1x	54	5MU	O4-C4-C5	-3.59	120.81	124.92
32	1a	1404	5MC	C5-C6-N1	-3.58	119.42	123.31
57	2y	54	5MU	C5-C6-N1	-3.58	119.42	123.31
1	1A	1939	5MU	O4-C4-C5	-3.58	120.82	124.92
57	1y	39	PSU	O2-C2-N1	-3.58	119.10	122.79
57	1y	55	PSU	C4-N3-C2	-3.58	121.44	126.37
54	1w	54	5MU	C5-C6-N1	-3.55	119.46	123.31
1	2A	2552	OMU	C5-C4-N3	3.55	119.77	114.80
54	1w	39	PSU	C4-N3-C2	-3.53	121.51	126.37
1	2A	1915	5MU	O4-C4-C5	-3.53	120.88	124.92
1	2A	1917	PSU	O2-C2-N1	-3.52	119.16	122.79
1	2A	1942	5MC	C5-C6-N1	-3.52	119.49	123.31
54	2w	54	5MU	O4-C4-C5	-3.52	120.89	124.92
55	2x	54	5MU	C5-C6-N1	-3.50	119.52	123.31
1	1A	2552	OMU	C5-C4-N3	3.43	119.60	114.80
1	1A	1917	PSU	O2-C2-N1	-3.43	119.25	122.79
55	2x	8	4SU	C1'-N1-C2	3.39	123.69	117.59
54	1w	34	U8U	O4-C4-C5	-3.38	119.03	124.71
54	2w	34	U8U	C1'-N1-C6	-3.34	115.64	121.15
54	2w	55	PSU	O2-C2-N1	-3.34	119.35	122.79
32	1a	1207	2MG	C8-N7-C5	3.33	108.22	102.55
32	1a	1400	5MC	C5-C6-N1	-3.33	119.69	123.31
1	2A	1915	5MU	C5-C6-N1	-3.32	119.71	123.31
54	2w	37	T6A	N3-C2-N1	-3.30	124.19	128.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	1y	55	PSU	O2-C2-N1	-3.30	119.39	122.79
54	1w	34	U8U	C5-C4-N3	3.29	120.24	115.21
32	1a	1407	5MC	C5-C4-N3	-3.29	118.39	121.75
55	2x	8	4SU	O2-C2-N1	3.27	127.05	122.80
32	1a	967	5MC	C5-C6-N1	-3.25	119.78	123.31
57	2y	37	T6A	N3-C2-N1	-3.21	124.31	128.67
55	1x	8	4SU	O2-C2-N1	3.21	126.97	122.80
32	2a	1498	UR3	C5-C4-N3	3.20	119.25	115.04
54	1w	39	PSU	O2-C2-N1	-3.19	119.50	122.79
32	2a	1519	MA6	C4-C5-N7	-3.16	106.00	109.34
55	1x	32	5MC	C5-C4-N3	-3.16	118.52	121.75
1	2A	1939	5MU	O2-C2-N1	-3.15	118.70	122.80
1	1A	2552	OMU	O4-C4-C5	-3.15	119.74	125.16
57	2y	34	U8U	C5-C4-N3	3.14	119.19	114.80
32	2a	1207	2MG	N1-C2-N2	3.11	119.73	116.56
57	1y	54	5MU	C5-C6-N1	-3.10	119.95	123.31
1	1A	1942	5MC	C5-C6-N1	-3.09	119.96	123.31
32	1a	1498	UR3	C5-C4-N3	3.07	119.08	115.04
57	2y	37	T6A	C4-C5-N7	-3.07	106.09	109.34
55	2x	55	PSU	O2-C2-N1	-3.04	119.66	122.79
57	2y	54	5MU	O2-C2-N1	-3.03	118.85	122.80
1	1A	2552	OMU	O2-C2-N1	-2.99	118.90	122.80
32	2a	1207	2MG	C8-N7-C5	2.96	107.59	102.55
32	2a	1207	2MG	N2-C2-N3	-2.95	116.76	120.51
55	2x	32	5MC	C5-C4-N3	-2.94	118.74	121.75
55	1x	8	4SU	C5-C4-N3	2.94	117.48	114.75
1	1A	1962	5MC	CM5-C5-C6	-2.94	118.88	122.85
1	1A	2251	OMG	C8-N7-C5	2.93	107.54	102.55
54	2w	37	T6A	N6-C6-N1	2.93	122.01	118.71
55	2x	32	5MC	C5-C6-N1	-2.89	120.17	123.31
55	1x	54	5MU	C5-C6-N1	-2.89	120.18	123.31
57	1y	34	U8U	C5-C4-N3	2.89	118.84	114.80
1	2A	1962	5MC	C5-C6-N1	-2.88	120.19	123.31
1	1A	1915	5MU	C5-C6-N1	-2.87	120.20	123.31
54	1w	37	T6A	C4-C5-N7	-2.84	106.33	109.34
32	1a	1519	MA6	C4-C5-N7	-2.83	106.34	109.34
55	2x	8	4SU	C5-C4-N3	2.83	117.38	114.75
1	1A	1962	5MC	C5-C6-N1	-2.82	120.25	123.31
54	1w	54	5MU	O2-C2-N1	-2.81	119.14	122.80
1	2A	2552	OMU	O2-C2-N1	-2.79	119.16	122.80
55	1x	8	4SU	S4-C4-N3	-2.77	117.30	120.20
55	2x	32	5MC	O2-C2-N3	-2.77	117.96	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2605	PSU	O2-C2-N1	-2.74	119.96	122.79
1	2A	1962	5MC	C5-C4-N3	-2.72	118.96	121.75
1	2A	1942	5MC	C5-C4-N3	-2.72	118.97	121.75
32	2a	1407	5MC	C5-C4-N3	-2.71	118.98	121.75
32	2a	966	M2G	C8-N7-C5	2.71	107.16	102.55
32	2a	516	PSU	O4'-C1'-C2'	2.70	108.89	105.15
54	1w	37	T6A	N6-C10-N11	2.70	117.49	113.77
55	2x	8	4SU	C6-C5-C4	-2.70	117.62	119.95
1	1A	1962	5MC	C5-C4-N3	-2.69	119.00	121.75
1	2A	2503	2MA	C4-C5-N7	-2.69	106.50	109.34
1	1A	2503	2MA	C2-N1-C6	2.68	122.22	118.10
1	1A	1942	5MC	C5-C4-N3	-2.67	119.02	121.75
32	1a	1404	5MC	C5-C4-N3	-2.67	119.02	121.75
1	2A	2251	OMG	C8-N7-C5	2.66	107.09	102.55
1	2A	1915	5MU	O2-C2-N1	-2.65	119.35	122.80
32	2a	1400	5MC	C5-C4-N3	-2.64	119.05	121.75
32	1a	966	M2G	C8-N7-C5	2.64	107.04	102.55
32	2a	1404	5MC	C5-C4-N3	-2.64	119.05	121.75
32	2a	1402	4OC	O2-C2-N3	-2.62	118.19	122.33
54	2w	54	5MU	C5-C6-N1	-2.62	120.46	123.31
32	1a	1400	5MC	C5-C4-N3	-2.62	119.07	121.75
32	2a	1518	MA6	C4-C5-N7	-2.62	106.57	109.34
55	2x	8	4SU	S4-C4-N3	-2.61	117.47	120.20
32	2a	967	5MC	C5-C4-N3	-2.60	119.09	121.75
54	2w	37	T6A	C4-C5-N7	-2.60	106.59	109.34
1	1A	1915	5MU	O2-C2-N1	-2.54	119.49	122.80
57	2y	34	U8U	O4-C4-C5	-2.53	120.80	125.16
32	1a	1207	2MG	N1-C2-N2	2.52	119.13	116.56
32	2a	1400	5MC	CM5-C5-C6	-2.51	119.45	122.85
1	1A	1942	5MC	O2-C2-N3	-2.51	118.38	122.33
32	1a	1402	4OC	C6-C5-C4	2.50	120.02	117.00
32	2a	1407	5MC	O2-C2-N3	-2.49	118.40	122.33
55	2x	8	4SU	O2-C2-N3	-2.49	116.89	121.49
55	2x	55	PSU	C5-C6-N1	-2.49	118.69	122.14
1	1A	1917	PSU	C6-C5-C4	-2.48	116.50	118.17
1	2A	2552	OMU	O4-C4-C5	-2.48	120.89	125.16
57	1y	54	5MU	O2-C2-N1	-2.44	119.61	122.80
57	2y	39	PSU	O2-C2-N1	-2.44	120.27	122.79
32	1a	967	5MC	C5-C4-N3	-2.44	119.26	121.75
1	1A	1939	5MU	C5M-C5-C4	2.44	121.38	118.78
1	1A	1920	OMC	O2-C2-N3	-2.44	118.49	122.33
54	1w	34	U8U	C5-C6-N1	-2.43	119.67	122.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1939	5MU	O2-C2-N1	-2.42	119.65	122.80
32	1a	1518	MA6	C4-C5-N7	-2.42	106.78	109.34
32	1a	516	PSU	O2-C2-N1	-2.41	120.30	122.79
32	1a	1207	2MG	N2-C2-N3	-2.40	117.45	120.51
56	2z	1	FME	CA-N-CN	2.40	126.52	122.82
1	1A	2251	OMG	O6-C6-C5	-2.38	119.60	124.32
1	1A	1942	5MC	CM5-C5-C6	-2.35	119.67	122.85
57	1y	34	U8U	O4-C4-C5	-2.35	121.11	125.16
43	1l	92	0TD	OD2-CG-CB	2.35	118.23	113.15
32	2a	1402	4OC	CM4-N4-C4	-2.34	117.89	122.45
54	2w	34	U8U	O4-C4-C5	-2.33	120.78	124.71
32	1a	516	PSU	O4'-C1'-C2'	2.30	108.33	105.15
1	1A	1915	5MU	C5M-C5-C4	2.29	121.22	118.78
55	1x	55	PSU	C5-C6-N1	-2.28	118.97	122.14
1	1A	2503	2MA	N6-C6-N1	2.25	123.17	117.11
1	2A	2605	PSU	C6-C5-C4	-2.25	116.66	118.17
56	1z	1	FME	CB-CA-N	2.25	114.61	110.52
55	1x	8	4SU	C4-N3-C2	2.23	129.45	127.31
1	2A	2503	2MA	C2-N1-C6	2.22	121.51	118.10
57	1y	37	T6A	C4-C5-N7	-2.21	107.00	109.34
55	1x	32	5MC	CM5-C5-C6	-2.19	119.89	122.85
54	1w	34	U8U	C1'-N1-C6	-2.18	117.55	121.15
56	1z	1	FME	CA-N-CN	-2.18	119.47	122.82
32	2a	1402	4OC	C6-C5-C4	2.17	119.61	117.00
32	1a	1207	2MG	C5-C6-N1	2.16	118.19	114.07
1	1A	2251	OMG	C5-C6-N1	2.13	118.12	114.07
32	2a	967	5MC	CM5-C5-C6	-2.12	119.98	122.85
54	2w	55	PSU	C6-C5-C4	-2.11	116.75	118.17
32	1a	516	PSU	O2-C2-N3	-2.11	118.12	121.86
1	1A	2503	2MA	N3-C2-N1	-2.11	122.08	125.77
32	1a	1498	UR3	C6-N1-C2	-2.10	120.08	121.80
1	2A	1962	5MC	C1'-N1-C6	-2.10	117.69	121.15
1	1A	1942	5MC	C1'-N1-C6	-2.08	117.72	121.15
54	1w	39	PSU	O4'-C1'-C2'	2.08	108.03	105.15
32	2a	1400	5MC	O2-C2-N3	-2.08	119.06	122.33
55	1x	8	4SU	C1'-N1-C2	2.07	121.31	117.59
55	1x	54	5MU	O2-C2-N1	-2.07	120.10	122.80
57	2y	39	PSU	C5-C6-N1	-2.06	119.28	122.14
32	2a	1498	UR3	C6-N1-C2	-2.06	120.12	121.80
1	1A	1920	OMC	C1'-N1-C2	2.03	122.93	118.44
32	1a	1400	5MC	O2-C2-N3	-2.02	119.15	122.33
1	2A	2251	OMG	O6-C6-C5	-2.02	120.32	124.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1407	5MC	N1-C2-N3	2.02	122.30	118.80
32	1a	1498	UR3	C3U-N3-C4	2.01	120.66	117.87

There are no chirality outliers.

All (84) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
1	2A	2251	OMG	C1'-C2'-O2'-CM2
32	2a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	1w	34	U8U	N-C-C5-C4
54	1w	34	U8U	N-C-C5-C6
54	2w	34	U8U	N-C-C5-C4
54	1w	37	T6A	O10-C10-N6-C6
54	1w	37	T6A	N11-C10-N6-C6
54	1w	37	T6A	C14-C12-C13-ODA
54	1w	37	T6A	C14-C12-C13-ODB
54	2w	37	T6A	O10-C10-N6-C6
54	2w	37	T6A	N11-C10-N6-C6
54	2w	37	T6A	C13-C12-C14-C15
54	1w	46	G7M	O4'-C4'-C5'-O5'
56	1z	1	FME	O1-CN-N-CA
56	1z	1	FME	N-CA-CB-CG
56	1z	1	FME	C-CA-CB-CG
55	1x	76	8AN	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
54	1w	46	G7M	C3'-C4'-C5'-O5'
54	1w	76	A1B8A	C-CA-CB-CG
54	2w	76	A1B8A	C-CA-CB-CG
56	1z	1	FME	CA-CB-CG-SD
1	2A	1917	PSU	O4'-C4'-C5'-O5'
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
57	2y	46	G7M	O4'-C4'-C5'-O5'
57	2y	55	PSU	C3'-C4'-C5'-O5'
54	2w	37	T6A	C5-C6-N6-C10
32	1a	527	G7M	C3'-C4'-C5'-O5'
55	1x	76	8AN	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	2a	1404	5MC	O4'-C4'-C5'-O5'
57	2y	55	PSU	O4'-C4'-C5'-O5'
56	2z	1	FME	CB-CG-SD-CE
32	1a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
57	2y	46	G7M	C3'-C4'-C5'-O5'
54	1w	76	A1B8A	CA-CB-CG-CD
32	2a	1402	4OC	O4'-C4'-C5'-O5'
57	2y	39	PSU	O4'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
57	2y	39	PSU	C3'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
54	2w	46	G7M	C4'-C5'-O5'-P
32	1a	1400	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
56	2z	1	FME	CA-CB-CG-SD
32	2a	527	G7M	C4'-C5'-O5'-P
55	1x	76	8AN	C4'-C5'-O5'-P
57	1y	55	PSU	O4'-C1'-C5-C4
1	2A	2503	2MA	O4'-C4'-C5'-O5'
57	2y	34	U8U	O4'-C4'-C5'-O5'
1	2A	1962	5MC	O4'-C1'-N1-C6
57	1y	46	G7M	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
1	2A	1917	PSU	C3'-C4'-C5'-O5'
54	1w	54	5MU	C4'-C5'-O5'-P
57	1y	37	T6A	C4'-C5'-O5'-P
54	2w	34	U8U	N-C-C5-C6
32	2a	1519	MA6	C4'-C5'-O5'-P
32	2a	1402	4OC	C2'-C1'-N1-C2
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
54	1w	37	T6A	N11-C12-C13-ODA
54	1w	37	T6A	N11-C12-C13-ODB
32	2a	527	G7M	O4'-C4'-C5'-O5'
1	2A	1962	5MC	O4'-C1'-N1-C2
1	1A	1962	5MC	C2'-C1'-N1-C6
32	2a	1400	5MC	C2'-C1'-N1-C6
1	1A	1920	OMC	C2'-C1'-N1-C2
54	2w	76	A1B8A	N-CA-CB-CG
32	1a	1400	5MC	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	2a	1402	4OC	C3'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	966	M2G	C4'-C5'-O5'-P
1	2A	1962	5MC	C2'-C1'-N1-C2
55	2x	8	4SU	C2'-C1'-N1-C2
32	2a	1400	5MC	O4'-C1'-N1-C6
32	1a	967	5MC	O4'-C4'-C5'-O5'

There are no ring outliers.

51 monomers are involved in 77 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	1402	4OC	2	0
32	2a	967	5MC	1	0
1	2A	1942	5MC	1	0
57	2y	46	G7M	1	0
57	1y	39	PSU	1	0
54	1w	34	U8U	4	0
54	2w	37	T6A	1	0
1	1A	2251	OMG	1	0
32	2a	1402	4OC	3	0
54	2w	54	5MU	1	0
55	2x	8	4SU	1	0
54	1w	76	A1B8A	3	0
57	2y	55	PSU	2	0
1	1A	1917	PSU	1	0
1	2A	2552	OMU	2	0
1	1A	1939	5MU	2	0
55	1x	8	4SU	1	0
1	2A	1939	5MU	2	0
32	1a	1519	MA6	2	0
1	1A	2552	OMU	1	0
57	1y	54	5MU	2	0
54	2w	76	A1B8A	1	0
57	2y	37	T6A	1	0
32	2a	1404	5MC	1	0
1	2A	1920	OMC	1	0
32	2a	1400	5MC	1	0
32	2a	1518	MA6	3	0
54	1w	54	5MU	1	0
55	1x	76	8AN	2	0
32	2a	516	PSU	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
55	2x	54	5MU	1	0
54	2w	34	U8U	1	0
57	1y	55	PSU	2	0
32	1a	1404	5MC	1	0
55	2x	32	5MC	2	0
1	2A	2503	2MA	3	0
57	1y	37	T6A	4	0
55	2x	55	PSU	2	0
54	2w	39	PSU	2	0
1	1A	1911	PSU	1	0
55	2x	76	8AN	2	0
56	2z	1	FME	1	0
32	2a	1207	2MG	2	0
57	2y	34	U8U	1	0
32	1a	1518	MA6	2	0
54	1w	37	T6A	1	0
54	1w	55	PSU	2	0
54	2w	46	G7M	1	0
43	2l	92	0TD	1	0
32	2a	1519	MA6	2	0
1	2A	2251	OMG	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2750 ligands modelled in this entry, 2748 are monoatomic - leaving 2 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	$\#\|Z\| > 2$
61	SF4	1d	302	35	0,12,12	-	-	-		
61	SF4	2d	303	35	0,12,12	-	-	-		

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
61	SF4	1d	302	35	-	-	0/6/5/5
61	SF4	2d	303	35	-	-	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

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%)	-0.58	93 (3%) 49 43	18, 36, 91, 104	0
1	2A	2789/2915 (95%)	-0.04	84 (3%) 52 46	32, 58, 88, 103	0
2	1B	120/121 (99%)	-0.50	1 (0%) 82 79	29, 49, 62, 81	0
2	2B	120/121 (99%)	0.78	8 (6%) 25 20	61, 78, 85, 93	0
3	1D	275/276 (99%)	-0.35	1 (0%) 89 86	19, 37, 50, 71	0
3	2D	275/276 (99%)	0.15	4 (1%) 71 67	30, 50, 63, 80	0
4	1E	204/206 (99%)	-0.27	1 (0%) 87 84	17, 42, 58, 69	0
4	2E	204/206 (99%)	0.16	2 (0%) 79 75	36, 57, 69, 78	0
5	1F	203/210 (96%)	-0.28	0 100 100	18, 43, 66, 78	0
5	2F	203/210 (96%)	0.34	2 (0%) 79 75	37, 66, 77, 82	0
6	1G	181/182 (99%)	0.25	3 (1%) 69 64	39, 57, 70, 80	0
6	2G	181/182 (99%)	1.05	20 (11%) 12 9	64, 77, 82, 92	0
7	1H	174/180 (96%)	0.10	1 (0%) 85 83	38, 51, 64, 68	0
7	2H	174/180 (96%)	0.74	3 (1%) 69 64	67, 77, 84, 87	0
8	1I	146/148 (98%)	0.49	4 (2%) 56 50	44, 70, 79, 82	0
8	2I	146/148 (98%)	1.52	47 (32%) 1 1	52, 79, 87, 92	0
9	1N	140/140 (100%)	-0.21	0 100 100	24, 40, 56, 73	0
9	2N	140/140 (100%)	0.46	4 (2%) 54 48	44, 63, 75, 79	0
10	1O	122/122 (100%)	-0.23	1 (0%) 82 79	26, 41, 57, 63	0
10	2O	122/122 (100%)	0.25	0 100 100	44, 56, 68, 73	0
11	1P	149/150 (99%)	-0.15	0 100 100	20, 45, 64, 73	0
11	2P	149/150 (99%)	0.42	4 (2%) 56 50	38, 66, 77, 85	0
12	1Q	141/141 (100%)	-0.19	2 (1%) 73 68	23, 40, 54, 67	0
12	2Q	141/141 (100%)	0.69	5 (3%) 47 41	49, 64, 73, 80	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.38	0 100 100	26, 35, 46, 55	0
13	2R	118/118 (100%)	0.06	2 (1%) 69 64	38, 52, 60, 66	0
14	1S	110/112 (98%)	-0.10	0 100 100	36, 48, 59, 64	0
14	2S	110/112 (98%)	1.10	17 (15%) 6 5	62, 72, 78, 82	0
15	1T	131/146 (89%)	0.01	2 (1%) 71 67	32, 46, 69, 74	0
15	2T	131/146 (89%)	0.30	1 (0%) 82 79	48, 59, 71, 75	0
16	1U	116/118 (98%)	-0.46	0 100 100	21, 32, 48, 55	0
16	2U	116/118 (98%)	0.20	0 100 100	45, 61, 73, 75	0
17	1V	101/101 (100%)	-0.34	0 100 100	21, 41, 57, 65	0
17	2V	101/101 (100%)	0.58	5 (4%) 35 30	45, 69, 75, 82	0
18	1W	112/113 (99%)	-0.46	0 100 100	24, 33, 51, 73	0
18	2W	112/113 (99%)	0.27	2 (1%) 67 62	35, 52, 64, 84	0
19	1X	95/96 (98%)	-0.28	1 (1%) 77 74	26, 38, 57, 64	0
19	2X	95/96 (98%)	0.37	1 (1%) 77 74	44, 58, 72, 78	0
20	1Y	107/110 (97%)	0.12	0 100 100	35, 49, 65, 76	0
20	2Y	107/110 (97%)	0.93	12 (11%) 11 9	60, 69, 78, 82	0
21	1Z	154/206 (74%)	0.61	14 (9%) 16 13	40, 61, 82, 94	0
21	2Z	160/206 (77%)	1.11	19 (11%) 10 8	64, 77, 86, 94	0
22	10	83/85 (97%)	-0.06	3 (3%) 46 40	27, 38, 62, 69	0
22	20	83/85 (97%)	0.92	8 (9%) 15 12	45, 64, 71, 84	0
23	11	97/98 (98%)	-0.07	1 (1%) 79 75	26, 45, 67, 71	0
23	21	97/98 (98%)	0.22	2 (2%) 63 58	40, 56, 70, 75	0
24	12	70/72 (97%)	-0.06	1 (1%) 73 68	35, 49, 57, 72	0
24	22	70/72 (97%)	0.64	0 100 100	59, 68, 75, 76	0
25	13	59/60 (98%)	-0.37	0 100 100	26, 37, 57, 64	0
25	23	59/60 (98%)	0.34	0 100 100	52, 63, 74, 77	0
26	14	69/71 (97%)	0.62	7 (10%) 14 12	55, 73, 85, 92	0
26	24	69/71 (97%)	1.15	7 (10%) 14 12	71, 82, 89, 94	0
27	15	59/60 (98%)	-0.47	1 (1%) 69 64	20, 33, 53, 66	0
27	25	59/60 (98%)	0.09	0 100 100	38, 51, 63, 77	0
28	16	53/54 (98%)	-0.35	0 100 100	32, 41, 53, 56	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.56	1 (1%) 66 61	52, 62, 67, 73	0
29	17	48/49 (97%)	-0.43	0 100 100	21, 26, 52, 59	0
29	27	48/49 (97%)	-0.06	1 (2%) 63 58	35, 43, 60, 70	0
30	18	64/65 (98%)	-0.25	0 100 100	28, 34, 42, 52	0
30	28	64/65 (98%)	0.56	1 (1%) 70 65	45, 56, 62, 69	0
31	19	37/37 (100%)	-0.34	0 100 100	29, 40, 60, 60	0
31	29	37/37 (100%)	1.01	2 (5%) 32 27	58, 65, 73, 75	0
32	1a	1488/1521 (97%)	0.21	30 (2%) 64 59	33, 66, 88, 100	0
32	2a	1491/1521 (98%)	0.52	64 (4%) 40 34	53, 77, 92, 102	0
33	1b	231/256 (90%)	0.70	18 (7%) 20 17	61, 75, 83, 86	0
33	2b	231/256 (90%)	1.18	38 (16%) 5 4	71, 81, 87, 90	0
34	1c	206/239 (86%)	0.57	8 (3%) 44 38	57, 69, 77, 84	0
34	2c	206/239 (86%)	1.41	48 (23%) 2 2	71, 82, 86, 90	0
35	1d	208/209 (99%)	0.74	16 (7%) 21 17	54, 67, 76, 80	0
35	2d	208/209 (99%)	0.90	16 (7%) 21 17	61, 71, 78, 85	0
36	1e	148/162 (91%)	0.29	0 100 100	52, 62, 69, 79	0
36	2e	148/162 (91%)	1.00	15 (10%) 14 12	65, 75, 81, 88	0
37	1f	100/101 (99%)	0.37	2 (2%) 64 59	55, 65, 73, 76	0
37	2f	100/101 (99%)	0.42	2 (2%) 64 59	61, 71, 77, 79	0
38	1g	155/156 (99%)	0.51	8 (5%) 34 28	58, 69, 82, 87	0
38	2g	155/156 (99%)	1.07	22 (14%) 7 6	70, 78, 84, 87	0
39	1h	137/138 (99%)	0.47	2 (1%) 71 67	56, 65, 73, 76	0
39	2h	137/138 (99%)	1.01	9 (6%) 26 21	66, 74, 79, 83	0
40	1i	127/128 (99%)	0.91	7 (5%) 32 26	57, 73, 79, 82	0
40	2i	127/128 (99%)	1.34	22 (17%) 5 4	71, 80, 86, 88	0
41	1j	97/105 (92%)	0.92	5 (5%) 34 28	57, 74, 82, 85	0
41	2j	96/105 (91%)	1.39	21 (21%) 3 2	67, 81, 87, 89	0
42	1k	114/129 (88%)	0.66	4 (3%) 47 41	44, 66, 77, 82	0
42	2k	114/129 (88%)	0.77	4 (3%) 47 41	60, 73, 79, 82	0
43	1l	121/132 (91%)	0.37	5 (4%) 42 36	45, 58, 66, 72	0
43	2l	121/132 (91%)	0.59	7 (5%) 30 24	55, 69, 75, 82	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	0.62	7 (5%) 30 25	56, 68, 77, 89	0
44	2m	122/126 (96%)	1.49	26 (21%) 3 2	70, 80, 86, 88	0
45	1n	60/61 (98%)	0.78	4 (6%) 25 20	58, 65, 71, 72	0
45	2n	60/61 (98%)	1.58	17 (28%) 1 1	70, 81, 85, 88	0
46	1o	88/89 (98%)	0.49	1 (1%) 77 74	49, 63, 73, 80	0
46	2o	88/89 (98%)	0.62	1 (1%) 77 74	62, 71, 79, 82	0
47	1p	82/88 (93%)	1.09	13 (15%) 6 5	58, 71, 76, 84	0
47	2p	82/88 (93%)	0.57	3 (3%) 45 39	53, 68, 74, 76	0
48	1q	99/105 (94%)	0.71	6 (6%) 28 23	56, 66, 74, 77	0
48	2q	99/105 (94%)	0.73	3 (3%) 52 46	60, 70, 77, 79	0
49	1r	68/88 (77%)	0.38	2 (2%) 54 48	53, 65, 74, 78	0
49	2r	68/88 (77%)	0.42	0 100 100	64, 71, 78, 81	0
50	1s	83/93 (89%)	0.58	2 (2%) 59 54	62, 71, 79, 83	0
50	2s	83/93 (89%)	1.61	24 (28%) 1 1	76, 83, 89, 91	0
51	1t	96/106 (90%)	0.86	7 (7%) 22 18	59, 68, 75, 79	0
51	2t	96/106 (90%)	0.47	4 (4%) 41 35	56, 68, 78, 82	0
52	1u	23/27 (85%)	1.04	2 (8%) 17 14	59, 67, 72, 75	0
52	2u	23/27 (85%)	2.01	11 (47%) 0 0	74, 77, 81, 81	0
53	1v	13/24 (54%)	1.53	5 (38%) 1 1	48, 77, 88, 91	0
53	2v	13/24 (54%)	2.05	4 (30%) 1 1	72, 87, 94, 96	0
54	1w	67/76 (88%)	1.57	19 (28%) 1 1	63, 95, 99, 102	0
54	2w	67/76 (88%)	1.99	32 (47%) 0 0	80, 96, 101, 104	0
55	1x	72/77 (93%)	0.50	2 (2%) 55 49	30, 63, 78, 84	0
55	2x	72/77 (93%)	0.92	7 (9%) 15 12	49, 79, 86, 93	0
56	1z	2/3 (66%)	0.54	0 100 100	39, 39, 39, 40	0
56	2z	2/3 (66%)	0.64	0 100 100	53, 53, 53, 58	0
57	1y	68/76 (89%)	1.64	20 (29%) 1 1	54, 95, 100, 102	0
57	2y	68/76 (89%)	1.74	22 (32%) 1 1	68, 96, 100, 102	0
All	All	20884/21754 (96%)	0.26	1018 (4%) 36 30	17, 63, 87, 104	0

All (1018) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	124	PRO	10.9
45	1n	2	ALA	7.0
44	2m	123	ALA	6.6
44	1m	123	ALA	6.1
21	2Z	174	VAL	5.8
44	2m	102	ARG	5.7
32	1a	1257	U	5.6
44	1m	124	PRO	5.5
21	2Z	173	ALA	5.5
21	2Z	144	LEU	5.4
1	1A	2145	C	5.4
41	2j	47	PHE	5.4
21	1Z	146	ILE	5.3
8	2I	100	ALA	5.2
1	2A	2112	G	5.0
1	2A	2155	G	5.0
23	11	2	SER	5.0
1	2A	2146	C	5.0
45	2n	25	VAL	4.9
22	10	6	GLY	4.9
44	1m	122	LYS	4.8
8	2I	119	PRO	4.8
21	1Z	141	VAL	4.7
45	2n	2	ALA	4.7
1	1A	1094	U	4.7
44	2m	122	LYS	4.7
1	1A	2115	G	4.6
7	1H	2	SER	4.6
1	2A	2115	G	4.5
38	2g	80	VAL	4.4
1	1A	1068	G	4.4
53	2v	24	A	4.3
1	2A	2159	G	4.3
1	2A	2147	G	4.3
32	2a	1257	U	4.3
1	2A	2145	C	4.2
38	1g	81	GLY	4.2
21	2Z	146	ILE	4.2
34	2c	124	ILE	4.2
8	2I	95	LYS	4.2
38	1g	80	VAL	4.2
38	2g	82	GLY	4.2
1	2A	2174	C	4.2

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Mol	Chain	Res	Type	RSRZ
1	2A	2113	U	4.2
6	2G	160	VAL	4.2
32	2a	1251	A	4.2
38	2g	83	ALA	4.1
8	2I	107	VAL	4.1
40	2i	14	VAL	4.1
1	1A	2146	C	4.1
40	1i	19	LEU	4.1
40	1i	2	GLU	4.1
33	2b	165	VAL	4.0
32	2a	1114	C	4.0
55	2x	1	C	4.0
1	2A	2123	G	4.0
32	2a	1224	G	4.0
32	2a	1356	G	4.0
8	2I	146	ALA	4.0
15	1T	131	ALA	4.0
6	2G	102	PHE	4.0
44	2m	121	LYS	4.0
1	1A	2147	G	4.0
54	2w	15	G	4.0
33	1b	7	VAL	3.9
1	2A	2111	C	3.9
1	1A	1095	A	3.9
1	2A	2133	G	3.9
57	2y	33	U	3.9
33	1b	133	LYS	3.9
1	2A	2154	G	3.9
39	2h	131	GLY	3.9
34	2c	189	ALA	3.9
32	2a	1116	C	3.9
52	2u	11	GLY	3.9
22	20	6	GLY	3.8
1	1A	1096	A	3.8
1	1A	2144	U	3.8
33	1b	34	ALA	3.8
33	1b	237	ALA	3.8
1	2A	2160	G	3.8
1	1A	2174	C	3.8
22	10	7	LEU	3.8
45	2n	34	TYR	3.8
22	20	5	LYS	3.8

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Mol	Chain	Res	Type	RSRZ
57	2y	36	U	3.8
1	1A	2114	A	3.8
53	2v	14	A	3.8
34	2c	87	LEU	3.7
1	1A	2113	U	3.7
57	2y	35	U	3.7
1	2A	2158	A	3.7
33	2b	236	TYR	3.7
1	1A	2150	U	3.7
53	2v	13	A	3.7
8	2I	94	ALA	3.7
1	2A	2169	A	3.6
21	1Z	119	GLU	3.6
6	2G	29	TRP	3.6
1	2A	2129	C	3.6
54	1w	73	A	3.6
32	2a	1357	A	3.6
54	2w	32	C	3.6
26	24	65	ASP	3.6
50	2s	15	LEU	3.5
14	2S	33	LYS	3.5
53	1v	24	A	3.5
54	1w	61	C	3.5
1	1A	1064	C	3.5
17	2V	71	LEU	3.5
22	20	7	LEU	3.5
32	2a	1254	C	3.5
32	1a	1001(A)	G	3.5
35	2d	164	ALA	3.5
40	1i	126	SER	3.5
21	2Z	141	VAL	3.5
8	2I	93	THR	3.5
8	2I	123	LEU	3.5
55	1x	1	C	3.5
8	2I	18	VAL	3.5
33	2b	7	VAL	3.5
34	2c	2	GLY	3.5
1	1A	2138	C	3.4
1	2A	2175	C	3.4
54	2w	62	C	3.4
32	2a	1358	U	3.4
21	1Z	104	PHE	3.4

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Mol	Chain	Res	Type	RSRZ
1	2A	2114	A	3.4
20	2Y	1	MET	3.4
22	20	4	LYS	3.4
8	2I	111	PRO	3.4
1	2A	2127	G	3.4
1	1A	1026	U	3.4
1	1A	2122	U	3.4
51	1t	103	GLY	3.4
39	2h	112	LEU	3.4
33	2b	86	GLU	3.4
53	1v	12	A	3.4
1	1A	2111	C	3.4
33	2b	237	ALA	3.4
54	2w	74	C	3.4
1	1A	2112	G	3.4
1	1A	2159	G	3.4
1	2A	2116	G	3.4
38	2g	84	ASN	3.4
33	2b	187	LEU	3.4
1	2A	2144	U	3.3
1	1A	2141	G	3.3
1	2A	2802	G	3.3
32	2a	1036	G	3.3
15	1T	130	ALA	3.3
8	2I	20	ASP	3.3
32	1a	1531	A	3.3
32	2a	1250	A	3.3
1	1A	1065	U	3.3
32	2a	1532	U	3.3
32	2a	1034	G	3.3
21	1Z	150	LEU	3.3
40	2i	102	LEU	3.3
21	2Z	143	GLY	3.3
38	1g	79	ARG	3.3
1	1A	1066	U	3.3
32	1a	204	U	3.3
32	2a	950	U	3.3
1	1A	2143	C	3.3
1	2A	2804	C	3.3
41	2j	75	ILE	3.3
42	2k	90	GLY	3.3
44	2m	119	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1033	G	3.3
53	1v	14	A	3.2
54	2w	31	A	3.2
42	1k	15	ALA	3.2
1	1A	1078	U	3.2
54	1w	7	U	3.2
1	2A	2138	C	3.2
1	2A	2161	C	3.2
31	29	37	GLY	3.2
57	1y	75	C	3.2
8	2I	121	LYS	3.2
17	2V	72	VAL	3.2
1	1A	2169	A	3.2
44	2m	6	GLY	3.2
32	2a	1030(B)	C	3.2
54	2w	5	C	3.2
6	2G	28	VAL	3.2
1	2A	2162	G	3.2
18	2W	112	GLY	3.2
32	2a	1252	A	3.2
1	2A	2136	C	3.2
54	2w	61	C	3.2
52	2u	14	TRP	3.2
36	2e	22	GLY	3.2
1	1A	2121	G	3.1
54	1w	1	G	3.1
41	2j	76	ASN	3.1
1	1A	2170	A	3.1
33	2b	11	LEU	3.1
1	2A	1536	C	3.1
1	2A	2128	C	3.1
1	2A	2803	C	3.1
32	1a	1533	C	3.1
35	1d	2	GLY	3.1
8	2I	96	ASP	3.1
50	2s	49	ILE	3.1
14	2S	80	LEU	3.1
34	2c	137	ALA	3.1
1	1A	2133	G	3.1
32	2a	973	G	3.1
1	1A	2119	A	3.1
52	2u	24	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
1	2A	2143	C	3.1
47	1p	19	ILE	3.1
51	1t	47	GLY	3.1
1	2A	2125	G	3.1
2	2B	23	G	3.1
40	2i	127	LYS	3.1
40	2i	45	ALA	3.1
23	21	2	SER	3.1
8	2I	99	GLU	3.0
35	1d	179	GLU	3.0
1	2A	2170	A	3.0
1	1A	1099	G	3.0
1	1A	2165	G	3.0
32	2a	1202	G	3.0
32	2a	1255	G	3.0
33	2b	136	VAL	3.0
1	1A	2188	C	3.0
32	2a	1149	C	3.0
44	2m	120	LYS	3.0
54	1w	74	C	3.0
45	2n	21	TYR	3.0
14	2S	32	LEU	3.0
36	2e	120	THR	3.0
8	2I	98	ALA	3.0
38	2g	9	VAL	3.0
47	1p	20	VAL	3.0
8	2I	17	GLN	3.0
32	2a	1283	G	3.0
54	1w	49	G	3.0
54	2w	6	G	3.0
1	1A	2164	C	3.0
38	2g	154	TYR	3.0
39	2h	9	MET	3.0
1	1A	2135	A	3.0
1	1A	2131	G	3.0
1	2A	2166	G	3.0
1	2A	2168	G	3.0
38	2g	16	LEU	3.0
54	2w	53	G	3.0
40	2i	10	ARG	3.0
1	1A	2803	C	3.0
32	2a	1369	C	3.0

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Mol	Chain	Res	Type	RSRZ
34	2c	55	VAL	3.0
54	2w	50	C	3.0
20	2Y	54	LYS	3.0
1	1A	2109	U	3.0
34	2c	158	GLY	3.0
50	2s	82	GLY	3.0
48	1q	100	LYS	2.9
1	2A	2110	G	2.9
34	2c	129	ALA	2.9
50	2s	41	VAL	2.9
34	2c	128	PHE	2.9
1	1A	2136	C	2.9
1	1A	2178	C	2.9
8	2I	106	GLY	2.9
33	2b	131	PRO	2.9
54	1w	56	C	2.9
1	2A	2167	U	2.9
8	2I	91	SER	2.9
8	2I	120	ILE	2.9
21	2Z	145	GLU	2.9
34	2c	157	ILE	2.9
34	2c	182	ILE	2.9
38	2g	4	ARG	2.9
44	2m	104	ARG	2.9
14	2S	7	TYR	2.9
1	2A	229	A	2.9
8	2I	118	LYS	2.9
32	2a	1363(A)	A	2.9
34	2c	199	LYS	2.9
34	2c	53	ALA	2.9
34	2c	149	ALA	2.9
35	2d	92	VAL	2.9
49	1r	86	VAL	2.9
34	2c	185	GLY	2.9
51	1t	69	GLY	2.9
45	2n	39	LEU	2.9
1	1A	2142	C	2.9
54	2w	65	C	2.9
32	1a	1532	U	2.9
44	1m	121	LYS	2.9
34	2c	48	TYR	2.9
20	2Y	45	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
1	2A	2117	A	2.9
12	2Q	104	PHE	2.9
52	1u	23	PRO	2.9
8	2I	114	LEU	2.9
21	2Z	150	LEU	2.9
41	2j	40	LEU	2.9
21	1Z	120	ILE	2.9
35	2d	209	ARG	2.9
1	1A	1081	U	2.9
1	2A	2109	U	2.9
38	2g	85	TYR	2.9
42	1k	14	VAL	2.9
50	2s	9	VAL	2.9
21	2Z	172	ALA	2.9
8	2I	1	MET	2.8
1	2A	2118	U	2.8
8	2I	116	LEU	2.8
8	2I	97	ILE	2.8
21	2Z	171	ILE	2.8
41	2j	55	LYS	2.8
8	1I	117	GLU	2.8
8	2I	92	VAL	2.8
42	2k	15	ALA	2.8
6	1G	146	TYR	2.8
40	2i	91	ASP	2.8
20	2Y	5	MET	2.8
35	1d	157	LEU	2.8
30	28	15	LYS	2.8
1	2A	2148	G	2.8
55	2x	70	G	2.8
44	1m	2	ALA	2.8
45	2n	20	ALA	2.8
50	2s	2	PRO	2.8
38	2g	81	GLY	2.8
38	2g	153	HIS	2.8
33	2b	201	ILE	2.8
8	2I	10	GLU	2.8
1	1A	2160	G	2.8
1	1A	2166	G	2.8
1	2A	11	G	2.8
1	2A	2137	C	2.8
1	2A	2142	C	2.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2156	G	2.8
1	2A	2157	G	2.8
57	1y	5	C	2.8
34	2c	168	ALA	2.8
49	1r	78	LEU	2.8
1	2A	2173	A	2.8
54	2w	14	A	2.8
6	2G	118	ARG	2.8
45	2n	42	ILE	2.7
48	1q	36	ILE	2.7
54	2w	47	U	2.7
40	2i	126	SER	2.7
47	1p	2	VAL	2.7
41	2j	77	PRO	2.7
3	1D	276	LYS	2.7
34	2c	52	LEU	2.7
40	2i	5	TYR	2.7
1	2A	530	G	2.7
2	2B	119	G	2.7
12	2Q	60	ARG	2.7
21	1Z	171	ILE	2.7
44	2m	9	ILE	2.7
33	1b	9	GLU	2.7
41	1j	34	VAL	2.7
8	2I	108	THR	2.7
40	2i	123	PRO	2.7
8	2I	77	LEU	2.7
8	2I	84	GLY	2.7
21	2Z	147	GLY	2.7
52	2u	4	GLY	2.7
14	2S	34	HIS	2.7
32	2a	972	C	2.7
1	2A	1533	G	2.7
1	2A	2120	G	2.7
32	2a	951	G	2.7
1	2A	2176	A	2.7
26	24	56	VAL	2.7
43	2l	104	VAL	2.7
53	1v	13	A	2.7
45	2n	5	ALA	2.7
7	2H	2	SER	2.7
21	2Z	155	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
43	1l	63	GLY	2.7
54	2w	60	U	2.7
6	2G	146	TYR	2.7
32	2a	1354	C	2.7
33	2b	163	PHE	2.7
38	2g	2	ALA	2.7
52	2u	23	PRO	2.7
1	1A	2120	G	2.7
1	2A	2141	G	2.7
54	1w	2	G	2.7
57	2y	49	G	2.7
1	1A	2158	A	2.7
1	2A	529	A	2.7
45	1n	3	ARG	2.7
57	1y	66	A	2.7
22	10	8	GLY	2.7
34	2c	41	GLY	2.7
51	1t	55	ILE	2.7
1	1A	2132	U	2.6
26	14	57	GLU	2.6
57	1y	12	U	2.6
26	14	56	VAL	2.6
33	2b	71	VAL	2.6
15	2T	131	ALA	2.6
34	2c	163	ALA	2.6
11	2P	79	ARG	2.6
40	2i	66	ARG	2.6
52	1u	24	ARG	2.6
1	1A	888	C	2.6
1	1A	1100	C	2.6
32	2a	1249	C	2.6
54	2w	72	C	2.6
1	1A	1077	A	2.6
32	2a	1286	A	2.6
53	2v	15	A	2.6
1	1A	880	G	2.6
57	1y	19	G	2.6
1	1A	2130	U	2.6
1	2A	2189	U	2.6
55	2x	47	U	2.6
44	2m	66	LEU	2.6
50	1s	9	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
47	2p	82	GLN	2.6
48	1q	28	PRO	2.6
8	1I	146	ALA	2.6
35	1d	195	ALA	2.6
34	2c	79	ARG	2.6
47	1p	33	ILE	2.6
1	1A	2161	C	2.6
8	2I	89	TYR	2.6
44	1m	120	LYS	2.6
6	2G	139	LEU	2.6
20	2Y	42	VAL	2.6
33	1b	136	VAL	2.6
34	2c	153	VAL	2.6
40	1i	56	LEU	2.6
47	2p	6	LEU	2.6
1	2A	1026	U	2.6
1	2A	2122	U	2.6
22	20	69	PHE	2.6
45	2n	3	ARG	2.6
34	2c	192	THR	2.6
12	2Q	103	MET	2.6
34	2c	188	LEU	2.6
40	2i	56	LEU	2.6
34	2c	92	ALA	2.6
43	1l	19	ARG	2.6
1	2A	2119	A	2.6
1	2A	2134	A	2.6
2	2B	90	A	2.6
32	2a	965	A	2.6
14	2S	35	ILE	2.6
33	2b	14	GLY	2.6
41	1j	75	ILE	2.6
54	1w	47	U	2.6
32	1a	216	G	2.6
54	1w	15	G	2.6
57	2y	19	G	2.6
40	2i	11	LYS	2.5
36	2e	133	TYR	2.5
38	1g	85	TYR	2.5
40	2i	36	TYR	2.5
33	1b	11	LEU	2.5
50	2s	13	ASP	2.5

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Mol	Chain	Res	Type	RSRZ
8	1I	3	VAL	2.5
27	15	60	VAL	2.5
12	2Q	10	ARG	2.5
34	2c	121	ALA	2.5
6	2G	52	ILE	2.5
34	2c	194	GLY	2.5
44	2m	78	ILE	2.5
1	1A	885	C	2.5
51	2t	103	GLY	2.5
57	1y	69	A	2.5
35	1d	150	GLU	2.5
38	2g	156	TRP	2.5
47	1p	59	TRP	2.5
57	1y	36	U	2.5
57	2y	7	U	2.5
1	1A	2148	G	2.5
1	2A	2149	G	2.5
32	1a	1031	G	2.5
20	2Y	55	TYR	2.5
34	2c	91	LEU	2.5
38	1g	154	TYR	2.5
39	2h	2	LEU	2.5
40	2i	99	LEU	2.5
50	2s	76	PRO	2.5
41	2j	63	PHE	2.5
19	2X	91	ALA	2.5
34	2c	187	ALA	2.5
6	2G	140	ILE	2.5
6	2G	74	LYS	2.5
35	2d	86	LYS	2.5
35	1d	163	GLU	2.5
1	1A	2108	C	2.5
54	2w	71	C	2.5
1	2A	2135	A	2.5
57	2y	69	A	2.5
32	1a	1000	U	2.5
45	2n	40	CYS	2.5
11	2P	78	PRO	2.5
26	14	63	TYR	2.5
34	2c	75	VAL	2.5
39	2h	91	ARG	2.5
35	2d	48	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
50	2s	53	ASN	2.5
1	2A	2182	G	2.5
1	2A	2893	G	2.5
32	1a	1003	G	2.5
54	2w	49	G	2.5
57	2y	2	G	2.5
8	2I	51	ILE	2.5
33	1b	172	ILE	2.5
8	2I	13	GLY	2.5
50	1s	84	GLY	2.5
6	1G	76	SER	2.5
33	1b	10	LEU	2.5
21	2Z	167	PRO	2.5
35	2d	122	ARG	2.5
34	2c	130	VAL	2.5
1	1A	1070	A	2.5
1	1A	1098	A	2.5
1	2A	2139	C	2.5
32	1a	1025	U	2.5
54	2w	59	A	2.5
57	2y	70	C	2.5
44	1m	118	ALA	2.5
44	2m	72	ALA	2.5
50	2s	32	LYS	2.5
51	1t	74	LYS	2.5
52	2u	13	ILE	2.5
34	1c	177	THR	2.5
1	1A	2168	G	2.4
32	2a	1190	G	2.4
57	2y	6	G	2.4
57	2y	57	G	2.4
51	1t	13	LEU	2.4
38	2g	32	ARG	2.4
41	2j	5	ARG	2.4
41	2j	79	ARG	2.4
41	2j	49	VAL	2.4
6	2G	50	ALA	2.4
23	21	24	ALA	2.4
35	2d	68	TYR	2.4
26	24	14	ILE	2.4
1	1A	2189	U	2.4
32	1a	1040	U	2.4

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Mol	Chain	Res	Type	RSRZ
1	1A	2103	C	2.4
1	2A	2108	C	2.4
2	2B	120	A	2.4
50	2s	68	GLY	2.4
8	2I	86	THR	2.4
55	2x	71	C	2.4
57	2y	32	C	2.4
57	2y	56	C	2.4
6	2G	19	LEU	2.4
8	2I	101	LEU	2.4
33	2b	234	PRO	2.4
6	2G	76	SER	2.4
1	1A	1093	G	2.4
3	2D	276	LYS	2.4
7	2H	107	VAL	2.4
32	1a	1030(A)	G	2.4
32	1a	1036	G	2.4
32	2a	971	G	2.4
57	1y	27	G	2.4
35	2d	106	TYR	2.4
40	2i	119	ALA	2.4
8	2I	14	ASP	2.4
31	29	21	GLY	2.4
44	2m	95	GLY	2.4
1	1A	2167	U	2.4
1	1A	2171	A	2.4
1	2A	528	A	2.4
1	2A	2801(A)	A	2.4
21	1Z	157	LEU	2.4
35	1d	21	LEU	2.4
55	2x	72	A	2.4
54	1w	50	C	2.4
57	1y	56	C	2.4
52	2u	22	ARG	2.4
29	27	48	LYS	2.4
50	2s	25	LYS	2.4
8	2I	105	HIS	2.4
33	1b	165	VAL	2.4
35	2d	88	VAL	2.4
33	1b	17	PHE	2.4
21	2Z	164	ALA	2.4
33	2b	186	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
41	2j	74	ILE	2.4
26	24	25	TYR	2.4
50	2s	80	TYR	2.4
1	1A	2123	G	2.4
1	1A	2149	G	2.4
1	1A	2154	G	2.4
2	2B	118	G	2.4
32	2a	630	G	2.4
54	1w	19	G	2.4
43	2l	13	LYS	2.4
1	1A	1057	A	2.4
1	2A	2126	A	2.4
32	1a	1001	A	2.4
32	1a	1030(D)	A	2.4
32	2a	1027	C	2.4
57	1y	70	C	2.4
38	2g	27	ILE	2.4
39	2h	94	TYR	2.4
6	2G	147	ASP	2.4
36	2e	130	ASN	2.4
21	2Z	170	THR	2.3
41	2j	48	THR	2.3
34	2c	33	LEU	2.3
14	2S	3	ARG	2.3
21	1Z	1	MET	2.3
33	2b	48	MET	2.3
35	1d	169	LYS	2.3
6	2G	2	PRO	2.3
32	2a	1032	G	2.3
54	2w	3	G	2.3
57	1y	15	G	2.3
36	2e	90	VAL	2.3
38	1g	156	TRP	2.3
14	2S	31	SER	2.3
35	1d	111	ALA	2.3
1	2A	896	A	2.3
32	2a	1285	A	2.3
34	2c	197	GLY	2.3
38	1g	82	GLY	2.3
52	2u	2	GLY	2.3
1	1A	2140	C	2.3
1	2A	2164	C	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	2794	C	2.3
26	14	67	TYR	2.3
32	1a	174	C	2.3
57	1y	25	C	2.3
57	2y	74	C	2.3
8	2I	12	LEU	2.3
19	1X	95	LEU	2.3
34	2c	165	THR	2.3
44	2m	103	THR	2.3
45	2n	6	LEU	2.3
50	2s	79	THR	2.3
51	1t	10	LEU	2.3
8	2I	87	LYS	2.3
18	2W	92	ARG	2.3
47	1p	43	LYS	2.3
9	2N	44	PRO	2.3
14	2S	85	VAL	2.3
14	2S	29	PHE	2.3
45	2n	36	PHE	2.3
33	2b	208	ILE	2.3
1	1A	275	G	2.3
2	2B	55	U	2.3
14	2S	92	TYR	2.3
1	1A	1460	A	2.3
9	2N	45	ASN	2.3
34	1c	178	LEU	2.3
3	2D	38	LYS	2.3
20	2Y	107	ASP	2.3
8	2I	85	GLU	2.3
47	1p	35	LYS	2.3
53	1v	15	A	2.3
33	2b	21	ARG	2.3
2	1B	88	C	2.3
32	2a	1260	C	2.3
51	2t	98	PRO	2.3
54	1w	5	C	2.3
54	1w	75	C	2.3
34	2c	207	VAL	2.3
35	1d	8	VAL	2.3
39	1h	61	VAL	2.3
41	2j	54	PHE	2.3
20	2Y	44	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
8	2I	55	ALA	2.3
34	2c	200	ALA	2.3
36	2e	21	ALA	2.3
36	2e	108	ALA	2.3
37	2f	20	ALA	2.3
45	1n	20	ALA	2.3
26	14	64	GLY	2.3
1	1A	1175	U	2.3
1	2A	614(A)	U	2.3
20	2Y	90	LEU	2.3
32	2a	5	U	2.3
33	2b	213	LEU	2.3
50	2s	71	LEU	2.3
40	2i	95	LYS	2.3
1	1A	2125	G	2.3
1	2A	2318	G	2.3
26	14	52	THR	2.3
32	1a	630	G	2.3
50	2s	48	THR	2.3
51	2t	8	ARG	2.3
57	1y	18	G	2.3
33	1b	167	PRO	2.3
36	2e	93	PRO	2.3
32	1a	1447	A	2.3
32	2a	1035	A	2.3
8	2I	3	VAL	2.3
28	26	5	VAL	2.3
33	2b	112	VAL	2.3
34	1c	207	VAL	2.3
37	1f	88	VAL	2.3
50	2s	45	VAL	2.3
1	1A	2175	C	2.3
6	2G	39	ILE	2.3
32	2a	979	C	2.3
35	2d	206	PHE	2.3
45	2n	7	ILE	2.3
57	1y	13	C	2.3
34	2c	146	ALA	2.3
35	2d	82	ALA	2.3
44	2m	118	ALA	2.3
34	2c	171	GLY	2.3
40	1i	30	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
9	2N	1	MET	2.2
11	2P	39	LYS	2.2
33	2b	22	LYS	2.2
38	2g	12	LEU	2.3
44	2m	65	LYS	2.2
51	2t	24	LEU	2.3
8	2I	113	ARG	2.2
12	1Q	60	ARG	2.2
34	2c	190	ARG	2.2
38	2g	3	ARG	2.2
14	2S	36	TYR	2.2
33	1b	236	TYR	2.2
33	2b	232	PRO	2.2
34	2c	6	HIS	2.2
41	2j	62	HIS	2.2
1	2A	2153	G	2.2
22	20	38	VAL	2.2
33	2b	230	VAL	2.2
35	2d	178	VAL	2.2
45	2n	33	VAL	2.2
33	2b	152	PHE	2.2
40	2i	33	PHE	2.2
1	1A	2117	A	2.2
32	1a	228	A	2.2
32	2a	1287	A	2.2
54	2w	58	A	2.2
50	2s	75	ALA	2.2
17	2V	63	GLY	2.2
43	1l	126	LYS	2.2
21	2Z	76	LEU	2.2
34	1c	12	LEU	2.2
39	1h	2	LEU	2.2
41	2j	65	LEU	2.2
1	1A	1509	C	2.2
54	2w	56	C	2.2
33	1b	233	SER	2.2
8	2I	122	GLU	2.2
22	20	43	THR	2.2
52	2u	8	THR	2.2
39	2h	48	TYR	2.2
5	2F	114	VAL	2.2
6	2G	159	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
10	1O	57	VAL	2.2
32	2a	1219	U	2.2
50	2s	11	VAL	2.2
54	2w	4	U	2.2
6	2G	157	ILE	2.2
33	2b	127	ILE	2.2
35	1d	110	PHE	2.2
41	2j	82	ILE	2.2
3	2D	147	LEU	2.2
14	2S	48	LEU	2.2
33	1b	118	LEU	2.2
35	1d	135	LEU	2.2
45	2n	53	LEU	2.2
1	1A	2101	G	2.2
24	12	69	ARG	2.2
32	2a	1001(A)	G	2.2
32	2a	1222	G	2.2
54	1w	18	G	2.2
57	1y	10	G	2.2
32	1a	1286	A	2.2
54	2w	51	A	2.2
54	2w	73	A	2.2
36	2e	81	GLU	2.2
1	1A	2804	C	2.2
34	1c	184	TYR	2.2
14	2S	98	VAL	2.2
34	2c	107	GLN	2.2
47	1p	21	VAL	2.2
47	1p	51	VAL	2.2
40	1i	113	LYS	2.2
50	2s	28	LYS	2.2
14	2S	79	ALA	2.2
32	2a	1150	U	2.2
32	2a	1235	U	2.2
33	2b	34	ALA	2.2
33	2b	123	ALA	2.2
55	1x	47	U	2.2
57	2y	29	U	2.2
22	20	84	LEU	2.2
33	2b	221	LEU	2.2
52	2u	15	ARG	2.2
4	1E	87	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
33	1b	131	PRO	2.2
44	2m	105	THR	2.2
50	2s	33	THR	2.2
2	2B	59	A	2.2
32	2a	978	A	2.2
1	2A	2151	G	2.2
1	2A	2181	G	2.2
32	1a	1002	G	2.2
32	2a	1117	G	2.2
33	2b	16	HIS	2.2
48	1q	45	HIS	2.2
57	1y	68	G	2.2
21	2Z	154	ASP	2.2
8	2I	81	VAL	2.2
34	1c	14	ILE	2.2
36	2e	129	ILE	2.2
40	2i	18	PHE	2.2
41	1j	38	ILE	2.2
41	1j	98	ILE	2.2
41	2j	38	ILE	2.2
32	2a	307	C	2.2
57	2y	5	C	2.2
6	1G	50	ALA	2.2
33	2b	154	LEU	2.2
34	2c	32	LEU	2.2
43	2l	56	ALA	2.2
12	1Q	61	GLY	2.2
34	1c	9	GLY	2.2
38	1g	4	ARG	2.2
45	2n	38	GLY	2.2
1	2A	2130	U	2.1
1	2A	2150	U	2.1
34	2c	167	TRP	2.1
34	2c	73	PRO	2.1
46	1o	19	PRO	2.1
13	2R	69	ASP	2.1
43	1l	64	TYR	2.1
5	2F	183	VAL	2.1
26	24	59	PHE	2.1
33	2b	17	PHE	2.1
33	2b	197	VAL	2.1
43	2l	100	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
48	1q	71	PHE	2.1
50	2s	31	ILE	2.1
2	2B	58	A	2.1
32	2a	1493	A	2.1
8	1I	12	LEU	2.1
32	2a	1002	G	2.1
33	2b	196	LEU	2.1
38	2g	22	LEU	2.1
42	1k	98	LEU	2.1
54	2w	64	G	2.1
57	2y	64	G	2.1
33	1b	123	ALA	2.1
38	2g	6	ARG	2.1
54	2w	67	C	2.1
57	1y	11	C	2.1
57	2y	13	C	2.1
54	1w	4	U	2.1
54	2w	63	U	2.1
57	1y	20	U	2.1
14	2S	50	SER	2.1
34	2c	4	LYS	2.1
8	2I	79	ILE	2.1
14	2S	49	VAL	2.1
33	2b	184	VAL	2.1
36	2e	84	PHE	2.1
38	2g	26	PHE	2.1
40	1i	91	ASP	2.1
40	2i	105	ASP	2.1
41	2j	58	ASP	2.1
43	2l	18	VAL	2.1
44	2m	21	TYR	2.1
44	2m	87	TYR	2.1
47	1p	36	ILE	2.1
3	2D	177	LEU	2.1
6	2G	111	LEU	2.1
36	2e	31	LEU	2.1
44	2m	34	LEU	2.1
46	2o	31	LEU	2.1
47	1p	6	LEU	2.1
7	2H	165	ALA	2.1
44	2m	28	ALA	2.1
48	2q	44	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
36	2e	74	GLY	2.1
50	2s	84	GLY	2.1
1	2A	2100	G	2.1
9	2N	111	PRO	2.1
32	1a	625	G	2.1
32	1a	1034	G	2.1
32	2a	1370	G	2.1
41	1j	77	PRO	2.1
54	1w	6	G	2.1
54	2w	68	G	2.1
57	2y	18	G	2.1
1	1A	889	C	2.1
32	2a	1383	C	2.1
41	2j	67	THR	2.1
45	2n	13	THR	2.1
57	2y	75	C	2.1
52	2u	3	LYS	2.1
32	1a	65	U	2.1
50	2s	66	MET	2.1
26	24	50	VAL	2.1
36	2e	109	ILE	2.1
41	2j	34	VAL	2.1
42	1k	13	GLN	2.1
35	1d	138	TYR	2.1
6	2G	53	LEU	2.1
33	2b	121	LEU	2.1
35	1d	120	LEU	2.1
20	2Y	2	ARG	2.1
26	14	58	ARG	2.1
38	2g	5	ARG	2.1
47	1p	5	ARG	2.1
21	2Z	106	GLY	2.1
35	2d	69	GLY	2.1
35	2d	87	GLY	2.1
21	1Z	95	PRO	2.1
43	2l	5	PRO	2.1
1	1A	229	A	2.1
1	1A	899	A	2.1
1	1A	2173	A	2.1
21	2Z	121	HIS	2.1
32	1a	344	A	2.1
57	2y	66	A	2.1

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Mol	Chain	Res	Type	RSRZ
8	2I	109	ILE	2.1
21	1Z	166	SER	2.1
34	2c	77	ILE	2.1
35	1d	71	SER	2.1
48	2q	90	ILE	2.1
1	1A	2152	G	2.1
4	2E	150	VAL	2.1
20	2Y	57	GLN	2.1
32	2a	631	G	2.1
32	2a	1024	G	2.1
34	1c	10	PHE	2.1
47	1p	82	GLN	2.1
54	1w	57	G	2.1
54	2w	52	G	2.1
54	2w	57	G	2.1
57	1y	1	G	2.1
57	1y	24	G	2.1
57	2y	68	G	2.1
1	1A	2107	C	2.1
1	2A	645	C	2.1
17	2V	35	LEU	2.1
32	2a	1028	C	2.1
32	2a	1030	C	2.1
32	2a	1262	C	2.1
35	2d	19	LEU	2.1
55	2x	3	C	2.1
55	2x	34	C	2.1
1	1A	1060	U	2.1
54	2w	7	U	2.1
33	1b	203	GLY	2.1
39	2h	101	PRO	2.0
33	2b	168	THR	2.0
47	2p	45	THR	2.0
1	1A	548	A	2.0
1	1A	1067	A	2.0
1	2A	652(B)	A	2.0
11	2P	68	GLN	2.0
26	24	10	VAL	2.0
32	1a	134	A	2.0
32	1a	1110	A	2.0
32	2a	1001	A	2.0
32	2a	1236	A	2.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1248	A	2.0
34	2c	138	VAL	2.0
35	1d	170	VAL	2.0
37	1f	48	LEU	2.0
37	2f	61	LEU	2.0
40	2i	50	LEU	2.0
43	1l	60	LEU	2.0
44	2m	70	LEU	2.0
38	2g	76	ARG	2.0
44	2m	88	ARG	2.0
21	1Z	154	ASP	2.0
43	2l	64	TYR	2.0
1	1A	1059	G	2.0
1	1A	2104	G	2.0
1	1A	2157	G	2.0
1	1A	2162	G	2.0
1	1A	2172	U	2.0
1	2A	2121	G	2.0
17	2V	9	GLY	2.0
21	1Z	147	GLY	2.0
32	1a	1009	G	2.0
32	2a	1026	G	2.0
32	2a	1353	G	2.0
54	1w	10	G	2.0
1	1A	2137	C	2.0
1	2A	2188	C	2.0
32	1a	369	C	2.0
34	2c	7	PRO	2.0
48	2q	37	LYS	2.0
8	2I	129	THR	2.0
20	2Y	12	THR	2.0
21	1Z	133	ILE	2.0
33	2b	200	ILE	2.0
36	2e	101	ILE	2.0
4	2E	196	VAL	2.0
33	2b	10	LEU	2.0
35	2d	79	PHE	2.0
39	2h	95	VAL	2.0
40	2i	101	PHE	2.0
44	2m	117	VAL	2.0
45	1n	16	PHE	2.0
13	2R	68	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
40	2i	9	ARG	2.0
41	2j	35	SER	2.0
48	1q	99	SER	2.0
12	2Q	121	ALA	2.0
32	2a	1092	A	2.0
42	2k	25	TYR	2.0
42	2k	75	TYR	2.0
44	2m	30	ALA	2.0
54	2w	38	A	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	PSU	2w	55	20/21	0.27	0.17	93,100,111,117	0
57	G7M	2y	46	24/25	0.42	0.15	89,98,109,123	0
54	G7M	2w	46	24/25	0.44	0.15	88,97,107,115	0
54	G7M	1w	46	24/25	0.45	0.15	80,94,105,110	0
54	5MU	2w	54	21/22	0.52	0.18	83,96,102,106	0
54	PSU	1w	55	20/21	0.57	0.17	82,96,103,105	0
57	U8U	2y	34	20/24	0.57	0.24	93,100,106,118	0
57	G7M	1y	46	24/25	0.60	0.15	86,93,98,107	0
57	PSU	2y	55	20/21	0.61	0.14	83,95,103,115	0
57	5MU	2y	54	21/22	0.63	0.14	88,95,104,117	0
57	PSU	2y	39	20/21	0.64	0.15	89,92,102,108	0
57	T6A	1y	37	22/33	0.66	0.16	81,91,100,107	0
57	PSU	1y	39	20/21	0.67	0.14	84,92,101,107	0
57	U8U	1y	34	20/24	0.69	0.17	82,92,98,102	0
57	PSU	1y	55	20/21	0.70	0.14	91,94,102,104	0
57	T6A	2y	37	22/33	0.72	0.17	85,93,99,105	0
54	U8U	1w	34	23/24	0.75	0.17	64,83,93,99	0
1	5MU	2A	1915	21/22	0.76	0.18	79,84,89,96	0
54	T6A	2w	37	32/33	0.76	0.17	71,91,100,108	0
54	5MU	1w	54	21/22	0.76	0.13	80,89,93,94	0
57	5MU	1y	54	21/22	0.78	0.12	83,91,96,103	0
54	U8U	2w	34	23/24	0.81	0.16	82,87,92,96	0
54	T6A	1w	37	32/33	0.82	0.14	70,79,82,83	0
32	2MG	2a	1207	24/25	0.83	0.13	78,83,89,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	PSU	2w	39	20/21	0.83	0.16	82,93,96,96	0
32	PSU	2a	516	20/21	0.84	0.12	75,82,90,90	0
54	A1B8A	2w	76	31/32	0.84	0.16	52,68,78,82	0
55	4SU	2x	8	20/21	0.85	0.12	74,78,83,87	0
32	M2G	2a	966	25/26	0.86	0.17	59,70,87,92	0
54	PSU	1w	39	20/21	0.86	0.12	76,82,88,94	0
55	5MU	2x	54	21/22	0.87	0.13	76,79,84,94	0
55	PSU	2x	55	20/21	0.87	0.11	69,76,80,89	0
54	A1B8A	1w	76	31/32	0.87	0.14	36,52,62,70	0
32	5MC	2a	967	21/22	0.87	0.15	66,71,81,83	0
43	0TD	1l	92	10/11	0.88	0.13	48,54,58,66	0
43	0TD	2l	92	10/11	0.90	0.12	68,70,73,87	0
1	PSU	2A	1911	20/21	0.90	0.12	64,70,78,82	0
1	5MU	1A	1915	21/22	0.90	0.10	53,61,69,79	0
32	PSU	1a	516	20/21	0.91	0.09	58,64,70,77	0
1	PSU	2A	1917	20/21	0.91	0.12	62,75,79,81	0
55	5MU	1x	54	21/22	0.92	0.11	60,66,70,74	0
32	2MG	1a	1207	24/25	0.92	0.11	59,68,74,81	0
32	5MC	2a	1400	21/22	0.92	0.15	65,72,76,78	0
56	FME	2z	1	10/11	0.92	0.16	49,55,58,65	0
32	G7M	2a	527	24/25	0.93	0.10	60,68,72,74	0
32	4OC	2a	1402	22/23	0.93	0.11	55,66,69,74	0
55	PSU	1x	55	20/21	0.93	0.09	49,58,67,71	0
1	OMC	2A	1920	21/22	0.94	0.11	57,65,72,74	0
55	5MC	1x	32	21/22	0.94	0.13	48,52,62,62	0
32	5MC	2a	1407	21/22	0.94	0.10	56,61,62,66	0
56	FME	1z	1	10/11	0.94	0.15	37,45,49,51	0
55	4SU	1x	8	20/21	0.94	0.11	59,64,69,73	0
32	UR3	2a	1498	21/22	0.95	0.11	55,60,66,73	0
32	MA6	2a	1518	24/25	0.95	0.11	52,66,70,72	0
1	5MC	2A	1942	21/22	0.95	0.10	46,60,65,69	0
1	5MC	2A	1962	21/22	0.95	0.11	42,52,56,76	0
55	5MC	2x	32	21/22	0.95	0.12	63,72,77,83	0
32	G7M	1a	527	24/25	0.95	0.09	41,47,54,58	0
32	5MC	1a	967	21/22	0.95	0.09	56,61,66,69	0
55	8AN	2x	76	22/23	0.95	0.10	43,52,58,59	0
32	5MC	2a	1404	21/22	0.95	0.10	53,62,64,67	0
1	PSU	1A	1917	20/21	0.95	0.07	46,55,62,62	0
32	M2G	1a	966	25/26	0.96	0.10	44,58,64,67	0
1	OMG	2A	2251	24/25	0.96	0.09	36,41,47,49	0
1	OMU	2A	2552	21/22	0.96	0.09	33,45,50,51	0
1	PSU	2A	2605	20/21	0.96	0.09	31,41,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	5MC	1a	1400	21/22	0.96	0.10	47,50,55,61	0
32	5MC	1a	1404	21/22	0.96	0.09	35,43,48,52	0
32	MA6	1a	1519	24/25	0.96	0.09	36,43,47,50	0
32	MA6	2a	1519	24/25	0.96	0.12	54,65,72,74	0
1	5MC	1A	1942	21/22	0.96	0.09	38,44,50,52	0
32	MA6	1a	1518	24/25	0.97	0.09	34,44,49,50	0
1	5MU	2A	1939	21/22	0.97	0.07	33,40,45,47	0
1	PSU	1A	1911	20/21	0.97	0.08	41,49,54,57	0
55	8AN	1x	76	22/23	0.97	0.08	24,34,42,44	0
32	4OC	1a	1402	22/23	0.97	0.09	43,48,53,57	0
1	2MA	2A	2503	23/24	0.97	0.08	26,37,41,47	0
1	OMC	1A	1920	21/22	0.97	0.07	34,45,50,52	0
32	5MC	1a	1407	21/22	0.97	0.07	33,42,47,48	0
1	PSU	1A	2605	20/21	0.98	0.07	21,28,34,34	0
1	5MU	1A	1939	21/22	0.98	0.05	22,29,31,35	0
1	5MC	1A	1962	21/22	0.98	0.06	22,31,36,45	0
1	OMG	1A	2251	24/25	0.98	0.05	21,26,29,31	0
32	UR3	1a	1498	21/22	0.98	0.07	33,42,44,45	0
1	2MA	1A	2503	23/24	0.98	0.06	16,23,27,27	0
1	OMU	1A	2552	21/22	0.98	0.06	23,28,32,35	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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1798	1/1	0.55	0.17	81,81,81,81	0
58	MG	2A	3385	1/1	0.58	0.16	84,84,84,84	0
58	MG	2a	1756	1/1	0.62	0.18	82,82,82,82	0
58	MG	1B	229	1/1	0.63	0.20	74,74,74,74	0
58	MG	2A	3451	1/1	0.63	0.28	83,83,83,83	0
58	MG	2A	3437	1/1	0.64	0.29	77,77,77,77	0
58	MG	1a	1804	1/1	0.65	0.18	72,72,72,72	0
58	MG	1A	3260	1/1	0.65	0.20	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1738	1/1	0.65	0.21	77,77,77,77	0
58	MG	1B	230	1/1	0.66	0.23	78,78,78,78	0
58	MG	2A	3755	1/1	0.66	0.26	59,59,59,59	0
58	MG	1A	3683	1/1	0.67	0.20	63,63,63,63	0
58	MG	2A	3113	1/1	0.67	0.30	70,70,70,70	0
58	MG	2A	3171	1/1	0.68	0.20	80,80,80,80	0
58	MG	1A	3844	1/1	0.68	0.19	77,77,77,77	0
58	MG	2A	3669	1/1	0.68	0.18	77,77,77,77	0
58	MG	2A	3731	1/1	0.69	0.15	81,81,81,81	0
58	MG	2A	3608	1/1	0.69	0.20	63,63,63,63	0
58	MG	2A	3615	1/1	0.69	0.23	68,68,68,68	0
58	MG	2A	3175	1/1	0.69	0.23	68,68,68,68	0
58	MG	1A	3643	1/1	0.70	0.16	69,69,69,69	0
58	MG	2a	1789	1/1	0.70	0.20	70,70,70,70	0
58	MG	2a	1638	1/1	0.70	0.12	81,81,81,81	0
58	MG	1a	1809	1/1	0.71	0.18	72,72,72,72	0
58	MG	2G	201	1/1	0.71	0.23	75,75,75,75	0
58	MG	2A	3573	1/1	0.71	0.22	69,69,69,69	0
58	MG	1a	1733	1/1	0.72	0.17	85,85,85,85	0
58	MG	2A	3273	1/1	0.72	0.20	71,71,71,71	0
58	MG	2A	3332	1/1	0.73	0.25	72,72,72,72	0
58	MG	2A	3664	1/1	0.73	0.25	69,69,69,69	0
58	MG	1a	1802	1/1	0.73	0.24	81,81,81,81	0
58	MG	2a	1622	1/1	0.73	0.22	83,83,83,83	0
58	MG	2a	1607	1/1	0.74	0.36	67,67,67,67	0
58	MG	2A	3679	1/1	0.74	0.16	72,72,72,72	0
58	MG	2a	1805	1/1	0.74	0.20	68,68,68,68	0
58	MG	2A	3526	1/1	0.75	0.17	66,66,66,66	0
58	MG	2A	3704	1/1	0.75	0.20	69,69,69,69	0
58	MG	2a	1818	1/1	0.75	0.18	79,79,79,79	0
58	MG	2B	214	1/1	0.76	0.18	71,71,71,71	0
58	MG	1a	1731	1/1	0.76	0.18	66,66,66,66	0
58	MG	2a	1601	1/1	0.77	0.19	74,74,74,74	0
58	MG	1A	3772	1/1	0.77	0.14	20,20,20,20	0
58	MG	2A	3192	1/1	0.77	0.20	69,69,69,69	0
58	MG	1A	4083	1/1	0.77	0.16	58,58,58,58	0
58	MG	2a	1725	1/1	0.77	0.27	80,80,80,80	0
58	MG	1a	1760	1/1	0.77	0.12	67,67,67,67	0
58	MG	2A	3335	1/1	0.77	0.21	77,77,77,77	0
58	MG	2A	3833	1/1	0.77	0.20	65,65,65,65	0
58	MG	2A	3355	1/1	0.77	0.18	69,69,69,69	0
58	MG	2a	1812	1/1	0.77	0.18	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1815	1/1	0.77	0.14	76,76,76,76	0
58	MG	1A	4089	1/1	0.77	0.17	45,45,45,45	0
58	MG	1A	3466	1/1	0.78	0.18	62,62,62,62	0
58	MG	1A	3882	1/1	0.78	0.13	23,23,23,23	0
58	MG	1x	109	1/1	0.78	0.34	68,68,68,68	0
58	MG	2A	3327	1/1	0.78	0.16	71,71,71,71	0
58	MG	2A	3508	1/1	0.78	0.12	29,29,29,29	0
58	MG	2A	3690	1/1	0.78	0.12	70,70,70,70	0
58	MG	1A	4082	1/1	0.78	0.14	60,60,60,60	0
58	MG	1A	3267	1/1	0.78	0.20	62,62,62,62	0
58	MG	2a	1821	1/1	0.78	0.24	69,69,69,69	0
58	MG	2R	201	1/1	0.79	0.24	77,77,77,77	0
58	MG	1a	1755	1/1	0.79	0.12	60,60,60,60	0
58	MG	2A	3670	1/1	0.79	0.14	68,68,68,68	0
58	MG	1U	208	1/1	0.79	0.48	67,67,67,67	0
58	MG	1a	1622	1/1	0.79	0.20	66,66,66,66	0
58	MG	2a	1706	1/1	0.79	0.19	77,77,77,77	0
58	MG	1a	1697	1/1	0.79	0.17	66,66,66,66	0
58	MG	2A	3723	1/1	0.79	0.15	68,68,68,68	0
58	MG	1A	3752	1/1	0.79	0.13	65,65,65,65	0
58	MG	2A	3738	1/1	0.79	0.17	46,46,46,46	0
58	MG	1A	3468	1/1	0.79	0.13	56,56,56,56	0
58	MG	2A	3758	1/1	0.79	0.12	67,67,67,67	0
58	MG	1A	3687	1/1	0.79	0.13	64,64,64,64	0
58	MG	2A	3152	1/1	0.79	0.23	60,60,60,60	0
58	MG	2A	3380	1/1	0.79	0.29	76,76,76,76	0
58	MG	2j	201	1/1	0.79	0.20	71,71,71,71	0
58	MG	1A	3960	1/1	0.80	0.15	58,58,58,58	0
58	MG	2a	1655	1/1	0.80	0.17	80,80,80,80	0
58	MG	2A	3418	1/1	0.80	0.32	68,68,68,68	0
58	MG	2A	3653	1/1	0.80	0.14	65,65,65,65	0
58	MG	2A	3432	1/1	0.80	0.23	54,54,54,54	0
58	MG	1A	3957	1/1	0.80	0.10	46,46,46,46	0
58	MG	2A	3205	1/1	0.80	0.11	60,60,60,60	0
58	MG	2a	1800	1/1	0.80	0.17	86,86,86,86	0
58	MG	2A	3483	1/1	0.80	0.31	67,67,67,67	0
58	MG	2P	202	1/1	0.80	0.23	66,66,66,66	0
58	MG	2A	3097	1/1	0.80	0.15	72,72,72,72	0
58	MG	2A	3357	1/1	0.80	0.19	54,54,54,54	0
58	MG	2A	3705	1/1	0.80	0.18	59,59,59,59	0
58	MG	2A	3276	1/1	0.80	0.19	72,72,72,72	0
58	MG	2A	3024	1/1	0.81	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
58	MG	2A	3159	1/1	0.81	0.24	66,66,66,66	0
58	MG	2a	1733	1/1	0.81	0.22	70,70,70,70	0
58	MG	2a	1735	1/1	0.81	0.18	69,69,69,69	0
58	MG	1A	3326	1/1	0.81	0.11	65,65,65,65	0
58	MG	2A	3173	1/1	0.81	0.20	78,78,78,78	0
58	MG	2A	3678	1/1	0.81	0.12	56,56,56,56	0
58	MG	2A	3106	1/1	0.81	0.30	72,72,72,72	0
58	MG	2A	3337	1/1	0.81	0.18	76,76,76,76	0
58	MG	1B	213	1/1	0.81	0.19	67,67,67,67	0
58	MG	2A	3115	1/1	0.81	0.22	62,62,62,62	0
58	MG	2A	3605	1/1	0.81	0.17	75,75,75,75	0
58	MG	2A	3256	1/1	0.81	0.14	58,58,58,58	0
58	MG	2A	3270	1/1	0.81	0.15	78,78,78,78	0
58	MG	2y	101	1/1	0.81	0.33	71,71,71,71	0
58	MG	2A	3773	1/1	0.82	0.10	46,46,46,46	0
58	MG	2A	3817	1/1	0.82	0.17	48,48,48,48	0
58	MG	1A	3878	1/1	0.82	0.12	61,61,61,61	0
58	MG	2B	208	1/1	0.82	0.10	62,62,62,62	0
58	MG	2A	3212	1/1	0.82	0.14	67,67,67,67	0
58	MG	2D	303	1/1	0.82	0.19	64,64,64,64	0
58	MG	2F	307	1/1	0.82	0.11	64,64,64,64	0
58	MG	2A	3502	1/1	0.82	0.16	55,55,55,55	0
58	MG	1B	234	1/1	0.82	0.16	66,66,66,66	0
58	MG	1A	3458	1/1	0.82	0.21	63,63,63,63	0
58	MG	20	104	1/1	0.82	0.11	55,55,55,55	0
58	MG	1A	3893	1/1	0.82	0.17	73,73,73,73	0
58	MG	2A	3600	1/1	0.82	0.17	55,55,55,55	0
58	MG	2A	3051	1/1	0.82	0.27	69,69,69,69	0
58	MG	2A	3291	1/1	0.82	0.14	59,59,59,59	0
58	MG	2A	3325	1/1	0.82	0.23	68,68,68,68	0
58	MG	2a	1704	1/1	0.82	0.14	55,55,55,55	0
58	MG	1a	1636	1/1	0.82	0.28	73,73,73,73	0
58	MG	1a	1683	1/1	0.82	0.28	68,68,68,68	0
58	MG	1A	3294	1/1	0.82	0.20	55,55,55,55	0
58	MG	1A	3707	1/1	0.82	0.11	29,29,29,29	0
58	MG	2A	3350	1/1	0.82	0.14	63,63,63,63	0
58	MG	2a	1757	1/1	0.82	0.09	89,89,89,89	0
58	MG	1A	3749	1/1	0.82	0.14	51,51,51,51	0
58	MG	1a	1737	1/1	0.82	0.24	62,62,62,62	0
58	MG	1A	3251	1/1	0.82	0.14	50,50,50,50	0
58	MG	1A	3536	1/1	0.82	0.12	59,59,59,59	0
58	MG	2A	3390	1/1	0.82	0.19	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1814	1/1	0.82	0.20	63,63,63,63	0
58	MG	2A	3728	1/1	0.82	0.19	56,56,56,56	0
58	MG	1A	3809	1/1	0.82	0.14	51,51,51,51	0
58	MG	2A	3191	1/1	0.82	0.32	69,69,69,69	0
58	MG	1A	3383	1/1	0.82	0.14	61,61,61,61	0
58	MG	2x	103	1/1	0.82	0.19	69,69,69,69	0
58	MG	2A	3444	1/1	0.82	0.12	67,67,67,67	0
58	MG	2A	3300	1/1	0.83	0.22	59,59,59,59	0
58	MG	2A	3472	1/1	0.83	0.10	72,72,72,72	0
58	MG	1A	4019	1/1	0.83	0.15	75,75,75,75	0
58	MG	2a	1641	1/1	0.83	0.28	67,67,67,67	0
58	MG	1A	3801	1/1	0.83	0.14	53,53,53,53	0
58	MG	2a	1681	1/1	0.83	0.24	71,71,71,71	0
58	MG	2a	1700	1/1	0.83	0.13	75,75,75,75	0
58	MG	1w	101	1/1	0.83	0.15	77,77,77,77	0
58	MG	1w	103	1/1	0.83	0.17	87,87,87,87	0
58	MG	2a	1714	1/1	0.83	0.28	67,67,67,67	0
58	MG	2a	1715	1/1	0.83	0.12	63,63,63,63	0
58	MG	1E	314	1/1	0.83	0.30	50,50,50,50	0
58	MG	2A	3023	1/1	0.83	0.20	71,71,71,71	0
58	MG	1A	3329	1/1	0.83	0.13	52,52,52,52	0
58	MG	2A	3782	1/1	0.83	0.14	79,79,79,79	0
58	MG	2A	3044	1/1	0.83	0.20	66,66,66,66	0
58	MG	1A	3923	1/1	0.83	0.13	30,30,30,30	0
58	MG	2A	3646	1/1	0.83	0.13	77,77,77,77	0
58	MG	2A	3384	1/1	0.83	0.15	66,66,66,66	0
58	MG	2B	216	1/1	0.83	0.16	72,72,72,72	0
58	MG	2A	3052	1/1	0.83	0.22	67,67,67,67	0
58	MG	2A	3065	1/1	0.83	0.17	77,77,77,77	0
58	MG	2A	3075	1/1	0.83	0.17	72,72,72,72	0
58	MG	2A	3672	1/1	0.83	0.17	68,68,68,68	0
58	MG	1A	3626	1/1	0.83	0.16	48,48,48,48	0
58	MG	1a	1680	1/1	0.83	0.19	67,67,67,67	0
58	MG	2l	202	1/1	0.83	0.23	68,68,68,68	0
58	MG	2x	102	1/1	0.83	0.18	65,65,65,65	0
58	MG	28	101	1/1	0.83	0.26	64,64,64,64	0
58	MG	1A	3470	1/1	0.83	0.15	60,60,60,60	0
58	MG	20	103	1/1	0.84	0.16	59,59,59,59	0
58	MG	2A	3364	1/1	0.84	0.14	71,71,71,71	0
58	MG	2a	1742	1/1	0.84	0.26	77,77,77,77	0
58	MG	2a	1752	1/1	0.84	0.10	71,71,71,71	0
58	MG	2A	3089	1/1	0.84	0.14	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3457	1/1	0.84	0.17	72,72,72,72	0
58	MG	1x	105	1/1	0.84	0.32	69,69,69,69	0
58	MG	2A	3634	1/1	0.84	0.15	41,41,41,41	0
58	MG	2A	3849	1/1	0.84	0.17	61,61,61,61	0
58	MG	1A	3992	1/1	0.84	0.10	29,29,29,29	0
58	MG	2A	3313	1/1	0.84	0.13	59,59,59,59	0
58	MG	2A	3654	1/1	0.84	0.21	73,73,73,73	0
58	MG	2B	220	1/1	0.84	0.18	76,76,76,76	0
58	MG	2A	3729	1/1	0.84	0.16	66,66,66,66	0
58	MG	1a	1670	1/1	0.84	0.18	55,55,55,55	0
58	MG	2d	302	1/1	0.84	0.14	70,70,70,70	0
58	MG	2A	3197	1/1	0.84	0.16	66,66,66,66	0
58	MG	2k	201	1/1	0.84	0.12	64,64,64,64	0
58	MG	2A	3743	1/1	0.84	0.21	48,48,48,48	0
58	MG	2a	1717	1/1	0.84	0.20	76,76,76,76	0
58	MG	2a	1720	1/1	0.84	0.16	68,68,68,68	0
58	MG	2A	3359	1/1	0.84	0.12	75,75,75,75	0
58	MG	2A	3193	1/1	0.85	0.23	62,62,62,62	0
58	MG	2A	3530	1/1	0.85	0.22	63,63,63,63	0
58	MG	2A	3554	1/1	0.85	0.15	55,55,55,55	0
58	MG	2a	1674	1/1	0.85	0.22	67,67,67,67	0
58	MG	2A	3195	1/1	0.85	0.15	69,69,69,69	0
58	MG	2a	1684	1/1	0.85	0.22	62,62,62,62	0
58	MG	2A	3746	1/1	0.85	0.15	61,61,61,61	0
58	MG	2A	3582	1/1	0.85	0.19	81,81,81,81	0
58	MG	1a	1743	1/1	0.85	0.18	64,64,64,64	0
58	MG	1A	3810	1/1	0.85	0.14	46,46,46,46	0
58	MG	2A	3366	1/1	0.85	0.16	57,57,57,57	0
58	MG	2A	3792	1/1	0.85	0.10	73,73,73,73	0
58	MG	1a	1628	1/1	0.85	0.11	56,56,56,56	0
58	MG	1a	1776	1/1	0.85	0.11	66,66,66,66	0
58	MG	2A	3635	1/1	0.85	0.12	46,46,46,46	0
58	MG	2A	3862	1/1	0.85	0.18	62,62,62,62	0
58	MG	2B	203	1/1	0.85	0.20	63,63,63,63	0
58	MG	2B	204	1/1	0.85	0.16	70,70,70,70	0
58	MG	2B	206	1/1	0.85	0.17	58,58,58,58	0
58	MG	2A	3091	1/1	0.85	0.12	70,70,70,70	0
58	MG	2a	1781	1/1	0.85	0.14	63,63,63,63	0
58	MG	2a	1787	1/1	0.85	0.13	72,72,72,72	0
58	MG	2a	1788	1/1	0.85	0.15	65,65,65,65	0
58	MG	1B	222	1/1	0.85	0.17	58,58,58,58	0
58	MG	2A	3391	1/1	0.85	0.12	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3245	1/1	0.85	0.12	59,59,59,59	0
58	MG	2A	3667	1/1	0.85	0.18	56,56,56,56	0
58	MG	1A	3956	1/1	0.85	0.10	45,45,45,45	0
58	MG	1A	3236	1/1	0.85	0.21	42,42,42,42	0
58	MG	1a	1687	1/1	0.85	0.31	52,52,52,52	0
58	MG	1A	3388	1/1	0.85	0.17	61,61,61,61	0
58	MG	1G	203	1/1	0.85	0.10	68,68,68,68	0
58	MG	1P	206	1/1	0.85	0.24	55,55,55,55	0
58	MG	2A	3482	1/1	0.85	0.17	54,54,54,54	0
58	MG	1A	4094	1/1	0.85	0.17	53,53,53,53	0
58	MG	1W	207	1/1	0.85	0.19	32,32,32,32	0
58	MG	2t	201	1/1	0.85	0.19	48,48,48,48	0
58	MG	2w	101	1/1	0.85	0.27	84,84,84,84	0
58	MG	2a	1608	1/1	0.85	0.35	78,78,78,78	0
58	MG	1a	1739	1/1	0.85	0.15	62,62,62,62	0
58	MG	2a	1633	1/1	0.85	0.21	73,73,73,73	0
58	MG	1a	1768	1/1	0.86	0.14	64,64,64,64	0
58	MG	2A	3264	1/1	0.86	0.19	67,67,67,67	0
58	MG	2a	1630	1/1	0.86	0.17	62,62,62,62	0
58	MG	1A	3946	1/1	0.86	0.19	67,67,67,67	0
58	MG	2A	3434	1/1	0.86	0.20	59,59,59,59	0
58	MG	2A	3701	1/1	0.86	0.11	39,39,39,39	0
58	MG	2A	3703	1/1	0.86	0.17	63,63,63,63	0
58	MG	2A	3272	1/1	0.86	0.17	66,66,66,66	0
58	MG	1A	3191	1/1	0.86	0.18	53,53,53,53	0
58	MG	1A	3595	1/1	0.86	0.10	52,52,52,52	0
58	MG	1A	3833	1/1	0.86	0.13	46,46,46,46	0
58	MG	2a	1702	1/1	0.86	0.16	55,55,55,55	0
58	MG	2A	3292	1/1	0.86	0.30	73,73,73,73	0
58	MG	1b	301	1/1	0.86	0.20	81,81,81,81	0
58	MG	2A	3302	1/1	0.86	0.16	62,62,62,62	0
58	MG	2A	3739	1/1	0.86	0.14	72,72,72,72	0
58	MG	2A	3485	1/1	0.86	0.20	61,61,61,61	0
58	MG	2A	3495	1/1	0.86	0.15	64,64,64,64	0
58	MG	2A	3126	1/1	0.86	0.09	66,66,66,66	0
58	MG	1A	3599	1/1	0.86	0.22	73,73,73,73	0
58	MG	2a	1734	1/1	0.86	0.17	70,70,70,70	0
58	MG	2A	3763	1/1	0.86	0.20	74,74,74,74	0
58	MG	2A	3509	1/1	0.86	0.18	65,65,65,65	0
58	MG	2A	3153	1/1	0.86	0.14	62,62,62,62	0
58	MG	2a	1754	1/1	0.86	0.12	67,67,67,67	0
58	MG	1a	1714	1/1	0.86	0.24	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3541	1/1	0.86	0.09	46,46,46,46	0
58	MG	2a	1766	1/1	0.86	0.17	79,79,79,79	0
58	MG	2A	3165	1/1	0.86	0.08	41,41,41,41	0
58	MG	2A	3561	1/1	0.86	0.09	35,35,35,35	0
58	MG	2A	3859	1/1	0.86	0.33	68,68,68,68	0
58	MG	1a	1730	1/1	0.86	0.11	69,69,69,69	0
58	MG	2A	3348	1/1	0.86	0.17	59,59,59,59	0
58	MG	1A	3864	1/1	0.86	0.13	52,52,52,52	0
58	MG	1A	4061	1/1	0.86	0.14	45,45,45,45	0
58	MG	2a	1806	1/1	0.86	0.25	61,61,61,61	0
58	MG	1A	4078	1/1	0.86	0.12	49,49,49,49	0
58	MG	2A	3613	1/1	0.86	0.18	65,65,65,65	0
58	MG	2A	3358	1/1	0.86	0.11	70,70,70,70	0
58	MG	2A	3029	1/1	0.86	0.20	77,77,77,77	0
58	MG	2A	3362	1/1	0.86	0.17	65,65,65,65	0
58	MG	2a	1829	1/1	0.86	0.21	72,72,72,72	0
58	MG	1A	3610	1/1	0.86	0.12	35,35,35,35	0
58	MG	2A	3649	1/1	0.86	0.14	70,70,70,70	0
58	MG	1A	3621	1/1	0.86	0.12	33,33,33,33	0
58	MG	1A	3502	1/1	0.86	0.13	45,45,45,45	0
58	MG	2n	101	1/1	0.86	0.29	72,72,72,72	0
58	MG	2A	3657	1/1	0.86	0.13	64,64,64,64	0
58	MG	1A	3531	1/1	0.86	0.21	50,50,50,50	0
58	MG	2A	3206	1/1	0.86	0.17	66,66,66,66	0
58	MG	2A	3389	1/1	0.86	0.11	68,68,68,68	0
58	MG	1B	203	1/1	0.86	0.22	49,49,49,49	0
58	MG	1A	3889	1/1	0.87	0.12	34,34,34,34	0
58	MG	2A	3607	1/1	0.87	0.11	31,31,31,31	0
58	MG	2A	3103	1/1	0.87	0.20	58,58,58,58	0
58	MG	2A	3387	1/1	0.87	0.14	57,57,57,57	0
58	MG	1a	1631	1/1	0.87	0.32	59,59,59,59	0
58	MG	2a	1707	1/1	0.87	0.29	69,69,69,69	0
58	MG	2A	3804	1/1	0.87	0.13	55,55,55,55	0
58	MG	1A	3435	1/1	0.87	0.11	59,59,59,59	0
58	MG	1a	1664	1/1	0.87	0.17	59,59,59,59	0
58	MG	2A	3412	1/1	0.87	0.18	54,54,54,54	0
58	MG	1A	4093	1/1	0.87	0.11	69,69,69,69	0
58	MG	1A	3791	1/1	0.87	0.10	31,31,31,31	0
58	MG	2A	3864	1/1	0.87	0.16	64,64,64,64	0
58	MG	1A	3525	1/1	0.87	0.11	52,52,52,52	0
58	MG	1A	3951	1/1	0.87	0.18	65,65,65,65	0
58	MG	2a	1744	1/1	0.87	0.24	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3317	1/1	0.87	0.18	52,52,52,52	0
58	MG	1x	101	1/1	0.87	0.32	62,62,62,62	0
58	MG	2B	210	1/1	0.87	0.14	71,71,71,71	0
58	MG	1a	1690	1/1	0.87	0.23	63,63,63,63	0
58	MG	1A	3244	1/1	0.87	0.13	53,53,53,53	0
58	MG	2A	3334	1/1	0.87	0.25	70,70,70,70	0
58	MG	1A	3646	1/1	0.87	0.11	35,35,35,35	0
58	MG	2D	306	1/1	0.87	0.24	53,53,53,53	0
58	MG	1A	3824	1/1	0.87	0.08	35,35,35,35	0
58	MG	2A	3686	1/1	0.87	0.12	45,45,45,45	0
58	MG	2A	3338	1/1	0.87	0.11	73,73,73,73	0
58	MG	1A	3335	1/1	0.87	0.20	64,64,64,64	0
58	MG	1A	3543	1/1	0.87	0.09	62,62,62,62	0
58	MG	1A	4043	1/1	0.87	0.12	45,45,45,45	0
58	MG	1O	204	1/1	0.87	0.14	71,71,71,71	0
58	MG	2A	3721	1/1	0.87	0.12	69,69,69,69	0
58	MG	2a	1817	1/1	0.87	0.22	73,73,73,73	0
58	MG	1A	3187	1/1	0.87	0.10	52,52,52,52	0
58	MG	2A	3067	1/1	0.87	0.23	58,58,58,58	0
58	MG	1A	4076	1/1	0.87	0.21	47,47,47,47	0
58	MG	2a	1623	1/1	0.87	0.10	59,59,59,59	0
58	MG	2A	3232	1/1	0.87	0.43	54,54,54,54	0
58	MG	2A	3572	1/1	0.87	0.19	55,55,55,55	0
58	MG	2a	1637	1/1	0.87	0.36	67,67,67,67	0
58	MG	1A	3261	1/1	0.87	0.14	52,52,52,52	0
58	MG	2A	3740	1/1	0.87	0.20	60,60,60,60	0
58	MG	2a	1650	1/1	0.87	0.10	57,57,57,57	0
58	MG	2A	3576	1/1	0.87	0.10	55,55,55,55	0
58	MG	2A	3376	1/1	0.87	0.12	61,61,61,61	0
58	MG	2x	106	1/1	0.87	0.11	59,59,59,59	0
58	MG	1A	3472	1/1	0.87	0.31	64,64,64,64	0
58	MG	2B	218	1/1	0.88	0.16	76,76,76,76	0
58	MG	2A	3594	1/1	0.88	0.09	35,35,35,35	0
58	MG	1a	1774	1/1	0.88	0.11	54,54,54,54	0
58	MG	2A	3601	1/1	0.88	0.22	71,71,71,71	0
58	MG	1A	3913	1/1	0.88	0.08	30,30,30,30	0
58	MG	1A	3457	1/1	0.88	0.19	61,61,61,61	0
58	MG	1A	3584	1/1	0.88	0.10	34,34,34,34	0
58	MG	1A	3486	1/1	0.88	0.11	46,46,46,46	0
58	MG	1a	1642	1/1	0.88	0.19	65,65,65,65	0
58	MG	1B	211	1/1	0.88	0.09	44,44,44,44	0
58	MG	2A	3185	1/1	0.88	0.23	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3208	1/1	0.88	0.17	63,63,63,63	0
58	MG	1A	3839	1/1	0.88	0.27	65,65,65,65	0
58	MG	1x	102	1/1	0.88	0.23	65,65,65,65	0
58	MG	1A	3507	1/1	0.88	0.11	59,59,59,59	0
58	MG	2A	3370	1/1	0.88	0.33	62,62,62,62	0
58	MG	2A	3372	1/1	0.88	0.12	67,67,67,67	0
58	MG	1a	1684	1/1	0.88	0.10	62,62,62,62	0
58	MG	2A	3668	1/1	0.88	0.10	57,57,57,57	0
58	MG	2A	3198	1/1	0.88	0.26	64,64,64,64	0
58	MG	1A	3848	1/1	0.88	0.12	61,61,61,61	0
58	MG	2a	1642	1/1	0.88	0.24	69,69,69,69	0
58	MG	1A	3386	1/1	0.88	0.24	27,27,27,27	0
58	MG	2A	3676	1/1	0.88	0.16	59,59,59,59	0
58	MG	2a	1657	1/1	0.88	0.10	61,61,61,61	0
58	MG	2a	1663	1/1	0.88	0.15	84,84,84,84	0
58	MG	1a	1694	1/1	0.88	0.19	49,49,49,49	0
58	MG	2a	1677	1/1	0.88	0.22	63,63,63,63	0
58	MG	2A	3213	1/1	0.88	0.12	53,53,53,53	0
58	MG	2a	1682	1/1	0.88	0.11	75,75,75,75	0
58	MG	1E	311	1/1	0.88	0.08	29,29,29,29	0
58	MG	2A	3687	1/1	0.88	0.14	58,58,58,58	0
58	MG	2a	1701	1/1	0.88	0.17	73,73,73,73	0
58	MG	2A	3237	1/1	0.88	0.19	57,57,57,57	0
58	MG	2A	3395	1/1	0.88	0.11	65,65,65,65	0
58	MG	2A	3404	1/1	0.88	0.20	52,52,52,52	0
58	MG	2A	3243	1/1	0.88	0.14	60,60,60,60	0
58	MG	2a	1708	1/1	0.88	0.14	66,66,66,66	0
58	MG	2A	3247	1/1	0.88	0.12	64,64,64,64	0
58	MG	2A	3422	1/1	0.88	0.32	68,68,68,68	0
58	MG	1E	313	1/1	0.88	0.14	61,61,61,61	0
58	MG	1A	3167	1/1	0.88	0.10	38,38,38,38	0
58	MG	1A	3881	1/1	0.88	0.13	49,49,49,49	0
58	MG	2a	1728	1/1	0.88	0.15	61,61,61,61	0
58	MG	1A	3781	1/1	0.88	0.10	36,36,36,36	0
58	MG	2A	3733	1/1	0.88	0.12	77,77,77,77	0
58	MG	2A	3737	1/1	0.88	0.19	69,69,69,69	0
58	MG	2a	1737	1/1	0.88	0.09	66,66,66,66	0
58	MG	1A	3639	1/1	0.88	0.09	41,41,41,41	0
58	MG	1A	3367	1/1	0.88	0.15	47,47,47,47	0
58	MG	2a	1750	1/1	0.88	0.14	74,74,74,74	0
58	MG	2A	3280	1/1	0.88	0.19	67,67,67,67	0
58	MG	2A	3288	1/1	0.88	0.28	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3897	1/1	0.88	0.10	35,35,35,35	0
58	MG	1Z	301	1/1	0.88	0.09	70,70,70,70	0
58	MG	2a	1761	1/1	0.88	0.21	65,65,65,65	0
58	MG	2A	3757	1/1	0.88	0.14	76,76,76,76	0
58	MG	2A	3295	1/1	0.88	0.09	76,76,76,76	0
58	MG	2a	1784	1/1	0.88	0.16	86,86,86,86	0
58	MG	2A	3297	1/1	0.88	0.16	60,60,60,60	0
58	MG	2A	3098	1/1	0.88	0.14	77,77,77,77	0
58	MG	2A	3775	1/1	0.88	0.10	62,62,62,62	0
58	MG	2a	1794	1/1	0.88	0.20	66,66,66,66	0
58	MG	2A	3776	1/1	0.88	0.12	62,62,62,62	0
58	MG	1a	1747	1/1	0.88	0.07	49,49,49,49	0
58	MG	2a	1801	1/1	0.88	0.19	60,60,60,60	0
58	MG	2a	1802	1/1	0.88	0.26	68,68,68,68	0
58	MG	2A	3783	1/1	0.88	0.11	69,69,69,69	0
58	MG	2A	3510	1/1	0.88	0.10	44,44,44,44	0
58	MG	2A	3522	1/1	0.88	0.10	43,43,43,43	0
58	MG	2A	3809	1/1	0.88	0.09	37,37,37,37	0
58	MG	2A	3304	1/1	0.88	0.12	69,69,69,69	0
58	MG	1Z	302	1/1	0.88	0.13	55,55,55,55	0
58	MG	2A	3846	1/1	0.88	0.11	69,69,69,69	0
58	MG	2A	3540	1/1	0.88	0.12	50,50,50,50	0
58	MG	2a	1825	1/1	0.88	0.30	68,68,68,68	0
58	MG	2a	1826	1/1	0.88	0.14	58,58,58,58	0
58	MG	2A	3852	1/1	0.88	0.14	68,68,68,68	0
58	MG	2A	3110	1/1	0.88	0.08	72,72,72,72	0
58	MG	2A	3860	1/1	0.88	0.22	70,70,70,70	0
58	MG	2A	3324	1/1	0.88	0.12	51,51,51,51	0
58	MG	2l	201	1/1	0.88	0.09	66,66,66,66	0
58	MG	10	105	1/1	0.88	0.13	66,66,66,66	0
58	MG	2A	3564	1/1	0.88	0.16	55,55,55,55	0
58	MG	1a	1761	1/1	0.88	0.11	62,62,62,62	0
58	MG	2A	3329	1/1	0.88	0.25	72,72,72,72	0
58	MG	1a	1602	1/1	0.88	0.32	62,62,62,62	0
58	MG	2A	3578	1/1	0.88	0.19	60,60,60,60	0
58	MG	2x	105	1/1	0.88	0.26	68,68,68,68	0
58	MG	2A	3127	1/1	0.88	0.12	68,68,68,68	0
58	MG	2A	3585	1/1	0.88	0.09	60,60,60,60	0
58	MG	1A	3131	1/1	0.89	0.10	42,42,42,42	0
58	MG	1A	4047	1/1	0.89	0.07	17,17,17,17	0
58	MG	20	102	1/1	0.89	0.26	69,69,69,69	0
58	MG	1a	1677	1/1	0.89	0.21	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3090	1/1	0.89	0.15	49,49,49,49	0
58	MG	1A	3590	1/1	0.89	0.24	59,59,59,59	0
58	MG	2A	3092	1/1	0.89	0.12	57,57,57,57	0
58	MG	1A	3265	1/1	0.89	0.21	66,66,66,66	0
58	MG	2A	3636	1/1	0.89	0.11	49,49,49,49	0
58	MG	2a	1610	1/1	0.89	0.12	59,59,59,59	0
58	MG	2a	1612	1/1	0.89	0.12	64,64,64,64	0
58	MG	2a	1621	1/1	0.89	0.25	69,69,69,69	0
58	MG	2A	3642	1/1	0.89	0.10	51,51,51,51	0
58	MG	1A	3817	1/1	0.89	0.09	52,52,52,52	0
58	MG	2a	1624	1/1	0.89	0.20	56,56,56,56	0
58	MG	2a	1627	1/1	0.89	0.19	66,66,66,66	0
58	MG	1A	3350	1/1	0.89	0.22	59,59,59,59	0
58	MG	1A	3601	1/1	0.89	0.10	47,47,47,47	0
58	MG	1A	3253	1/1	0.89	0.09	44,44,44,44	0
58	MG	1a	1695	1/1	0.89	0.26	60,60,60,60	0
58	MG	2A	3662	1/1	0.89	0.14	64,64,64,64	0
58	MG	1A	3840	1/1	0.89	0.10	47,47,47,47	0
58	MG	2a	1644	1/1	0.89	0.14	56,56,56,56	0
58	MG	1a	1701	1/1	0.89	0.17	54,54,54,54	0
58	MG	2a	1653	1/1	0.89	0.16	63,63,63,63	0
58	MG	1A	3372	1/1	0.89	0.27	50,50,50,50	0
58	MG	2A	3136	1/1	0.89	0.13	52,52,52,52	0
58	MG	2A	3146	1/1	0.89	0.21	66,66,66,66	0
58	MG	2a	1665	1/1	0.89	0.13	63,63,63,63	0
58	MG	1A	3254	1/1	0.89	0.16	62,62,62,62	0
58	MG	1A	3480	1/1	0.89	0.13	51,51,51,51	0
58	MG	2A	3374	1/1	0.89	0.11	59,59,59,59	0
58	MG	1A	3866	1/1	0.89	0.14	52,52,52,52	0
58	MG	1A	3870	1/1	0.89	0.08	38,38,38,38	0
58	MG	1A	3306	1/1	0.89	0.10	52,52,52,52	0
58	MG	2A	3689	1/1	0.89	0.17	63,63,63,63	0
58	MG	1A	3496	1/1	0.89	0.12	53,53,53,53	0
58	MG	1A	3651	1/1	0.89	0.13	55,55,55,55	0
58	MG	1B	235	1/1	0.89	0.11	61,61,61,61	0
58	MG	1a	1754	1/1	0.89	0.12	76,76,76,76	0
58	MG	1E	302	1/1	0.89	0.14	36,36,36,36	0
58	MG	2A	3707	1/1	0.89	0.14	65,65,65,65	0
58	MG	2A	3716	1/1	0.89	0.12	60,60,60,60	0
58	MG	1A	3888	1/1	0.89	0.10	23,23,23,23	0
58	MG	1A	3321	1/1	0.89	0.13	47,47,47,47	0
58	MG	1A	3394	1/1	0.89	0.18	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1773	1/1	0.89	0.10	37,37,37,37	0
58	MG	1A	3518	1/1	0.89	0.09	82,82,82,82	0
58	MG	2A	3423	1/1	0.89	0.23	52,52,52,52	0
58	MG	2A	3425	1/1	0.89	0.18	58,58,58,58	0
58	MG	1G	205	1/1	0.89	0.19	69,69,69,69	0
58	MG	2A	3433	1/1	0.89	0.21	56,56,56,56	0
58	MG	1a	1793	1/1	0.89	0.10	60,60,60,60	0
58	MG	1a	1795	1/1	0.89	0.24	69,69,69,69	0
58	MG	2A	3441	1/1	0.89	0.22	51,51,51,51	0
58	MG	2A	3216	1/1	0.89	0.29	73,73,73,73	0
58	MG	2A	3224	1/1	0.89	0.18	57,57,57,57	0
58	MG	1A	3905	1/1	0.89	0.09	51,51,51,51	0
58	MG	2a	1760	1/1	0.89	0.19	73,73,73,73	0
58	MG	2A	3470	1/1	0.89	0.11	53,53,53,53	0
58	MG	2A	3236	1/1	0.89	0.18	67,67,67,67	0
58	MG	2a	1772	1/1	0.89	0.09	85,85,85,85	0
58	MG	2a	1776	1/1	0.89	0.12	70,70,70,70	0
58	MG	1A	3405	1/1	0.89	0.18	43,43,43,43	0
58	MG	1A	3414	1/1	0.89	0.10	57,57,57,57	0
58	MG	1A	3934	1/1	0.89	0.14	51,51,51,51	0
58	MG	1t	201	1/1	0.89	0.18	57,57,57,57	0
58	MG	2A	3501	1/1	0.89	0.11	46,46,46,46	0
58	MG	2A	3260	1/1	0.89	0.16	56,56,56,56	0
58	MG	1A	3429	1/1	0.89	0.12	46,46,46,46	0
58	MG	1A	3539	1/1	0.89	0.12	59,59,59,59	0
58	MG	2A	3827	1/1	0.89	0.12	68,68,68,68	0
58	MG	1A	3783	1/1	0.89	0.14	54,54,54,54	0
58	MG	2A	3837	1/1	0.89	0.09	51,51,51,51	0
58	MG	2A	3841	1/1	0.89	0.12	54,54,54,54	0
58	MG	1a	1601	1/1	0.89	0.13	61,61,61,61	0
58	MG	1A	3785	1/1	0.89	0.10	62,62,62,62	0
58	MG	1a	1618	1/1	0.89	0.23	55,55,55,55	0
58	MG	2A	3853	1/1	0.89	0.11	51,51,51,51	0
58	MG	2A	3856	1/1	0.89	0.14	73,73,73,73	0
58	MG	1A	3958	1/1	0.89	0.08	23,23,23,23	0
58	MG	2A	3290	1/1	0.89	0.14	55,55,55,55	0
58	MG	1A	3202	1/1	0.89	0.09	47,47,47,47	0
58	MG	1A	3985	1/1	0.89	0.07	24,24,24,24	0
58	MG	2A	3563	1/1	0.89	0.09	40,40,40,40	0
58	MG	1a	1635	1/1	0.89	0.10	50,50,50,50	0
58	MG	1A	3798	1/1	0.89	0.09	20,20,20,20	0
58	MG	1a	1637	1/1	0.89	0.23	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3574	1/1	0.89	0.16	60,60,60,60	0
58	MG	2A	3055	1/1	0.89	0.09	63,63,63,63	0
58	MG	2A	3058	1/1	0.89	0.21	58,58,58,58	0
58	MG	2v	101	1/1	0.89	0.13	63,63,63,63	0
58	MG	2v	102	1/1	0.89	0.18	58,58,58,58	0
58	MG	2v	103	1/1	0.89	0.48	72,72,72,72	0
58	MG	2v	104	1/1	0.89	0.17	67,67,67,67	0
58	MG	2A	3309	1/1	0.89	0.26	56,56,56,56	0
58	MG	2A	3063	1/1	0.89	0.10	46,46,46,46	0
58	MG	1A	3799	1/1	0.89	0.10	39,39,39,39	0
58	MG	2A	3598	1/1	0.89	0.15	57,57,57,57	0
58	MG	2A	3321	1/1	0.89	0.21	61,61,61,61	0
58	MG	2A	3066	1/1	0.89	0.15	52,52,52,52	0
58	MG	1A	3592	1/1	0.90	0.20	63,63,63,63	0
58	MG	1A	3059	1/1	0.90	0.10	36,36,36,36	0
58	MG	1a	1608	1/1	0.90	0.23	64,64,64,64	0
58	MG	1A	3369	1/1	0.90	0.24	53,53,53,53	0
58	MG	2A	3042	1/1	0.90	0.24	61,61,61,61	0
58	MG	2E	303	1/1	0.90	0.08	47,47,47,47	0
58	MG	1A	3971	1/1	0.90	0.11	58,58,58,58	0
58	MG	2A	3046	1/1	0.90	0.14	59,59,59,59	0
58	MG	2O	201	1/1	0.90	0.17	71,71,71,71	0
58	MG	2A	3580	1/1	0.90	0.12	49,49,49,49	0
58	MG	1A	3974	1/1	0.90	0.11	71,71,71,71	0
58	MG	2A	3301	1/1	0.90	0.14	60,60,60,60	0
58	MG	1A	3212	1/1	0.90	0.07	50,50,50,50	0
58	MG	2A	3303	1/1	0.90	0.08	63,63,63,63	0
58	MG	1A	3811	1/1	0.90	0.09	36,36,36,36	0
58	MG	1A	3995	1/1	0.90	0.09	25,25,25,25	0
58	MG	2A	3310	1/1	0.90	0.11	58,58,58,58	0
58	MG	1A	3815	1/1	0.90	0.18	58,58,58,58	0
58	MG	1a	1639	1/1	0.90	0.17	53,53,53,53	0
58	MG	2a	1611	1/1	0.90	0.18	66,66,66,66	0
58	MG	2A	3320	1/1	0.90	0.15	69,69,69,69	0
58	MG	2a	1616	1/1	0.90	0.12	65,65,65,65	0
58	MG	2a	1618	1/1	0.90	0.11	52,52,52,52	0
58	MG	1A	4020	1/1	0.90	0.11	53,53,53,53	0
58	MG	1a	1659	1/1	0.90	0.13	65,65,65,65	0
58	MG	1A	4027	1/1	0.90	0.11	46,46,46,46	0
58	MG	2A	3083	1/1	0.90	0.15	65,65,65,65	0
58	MG	2a	1625	1/1	0.90	0.12	64,64,64,64	0
58	MG	2A	3641	1/1	0.90	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
58	MG	1A	4030	1/1	0.90	0.10	63,63,63,63	0
58	MG	2a	1631	1/1	0.90	0.25	64,64,64,64	0
58	MG	2a	1632	1/1	0.90	0.08	74,74,74,74	0
58	MG	1a	1672	1/1	0.90	0.16	59,59,59,59	0
58	MG	1A	4034	1/1	0.90	0.13	50,50,50,50	0
58	MG	1A	3375	1/1	0.90	0.11	39,39,39,39	0
58	MG	2a	1639	1/1	0.90	0.14	55,55,55,55	0
58	MG	1a	1681	1/1	0.90	0.12	48,48,48,48	0
58	MG	1A	3820	1/1	0.90	0.09	42,42,42,42	0
58	MG	2A	3344	1/1	0.90	0.18	72,72,72,72	0
58	MG	2a	1649	1/1	0.90	0.09	73,73,73,73	0
58	MG	1A	3380	1/1	0.90	0.10	45,45,45,45	0
58	MG	2A	3666	1/1	0.90	0.12	51,51,51,51	0
58	MG	1A	4068	1/1	0.90	0.08	44,44,44,44	0
58	MG	1A	3259	1/1	0.90	0.21	72,72,72,72	0
58	MG	2a	1658	1/1	0.90	0.10	62,62,62,62	0
58	MG	1A	3638	1/1	0.90	0.09	45,45,45,45	0
58	MG	2A	3114	1/1	0.90	0.20	63,63,63,63	0
58	MG	2a	1666	1/1	0.90	0.16	69,69,69,69	0
58	MG	1A	3292	1/1	0.90	0.23	56,56,56,56	0
58	MG	2A	3675	1/1	0.90	0.19	67,67,67,67	0
58	MG	2a	1680	1/1	0.90	0.26	59,59,59,59	0
58	MG	1A	3481	1/1	0.90	0.11	42,42,42,42	0
58	MG	2A	3363	1/1	0.90	0.24	63,63,63,63	0
58	MG	1A	3332	1/1	0.90	0.31	68,68,68,68	0
58	MG	2a	1687	1/1	0.90	0.19	67,67,67,67	0
58	MG	2A	3680	1/1	0.90	0.12	51,51,51,51	0
58	MG	2A	3684	1/1	0.90	0.09	57,57,57,57	0
58	MG	2A	3128	1/1	0.90	0.16	51,51,51,51	0
58	MG	2A	3368	1/1	0.90	0.19	61,61,61,61	0
58	MG	1A	3391	1/1	0.90	0.10	64,64,64,64	0
58	MG	2A	3371	1/1	0.90	0.24	63,63,63,63	0
58	MG	2A	3696	1/1	0.90	0.14	48,48,48,48	0
58	MG	2a	1711	1/1	0.90	0.08	71,71,71,71	0
58	MG	2A	3140	1/1	0.90	0.28	65,65,65,65	0
58	MG	1a	1718	1/1	0.90	0.30	66,66,66,66	0
58	MG	2a	1716	1/1	0.90	0.13	64,64,64,64	0
58	MG	1A	3661	1/1	0.90	0.07	25,25,25,25	0
58	MG	1A	3868	1/1	0.90	0.14	42,42,42,42	0
58	MG	2a	1724	1/1	0.90	0.14	76,76,76,76	0
58	MG	1B	208	1/1	0.90	0.11	63,63,63,63	0
58	MG	2A	3710	1/1	0.90	0.13	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1731	1/1	0.90	0.24	47,47,47,47	0
58	MG	1B	210	1/1	0.90	0.10	50,50,50,50	0
58	MG	2A	3719	1/1	0.90	0.16	67,67,67,67	0
58	MG	2A	3386	1/1	0.90	0.09	52,52,52,52	0
58	MG	2A	3168	1/1	0.90	0.13	61,61,61,61	0
58	MG	2a	1740	1/1	0.90	0.23	52,52,52,52	0
58	MG	2A	3726	1/1	0.90	0.10	49,49,49,49	0
58	MG	1A	3680	1/1	0.90	0.08	43,43,43,43	0
58	MG	2a	1749	1/1	0.90	0.13	71,71,71,71	0
58	MG	1A	3877	1/1	0.90	0.14	28,28,28,28	0
58	MG	1A	3023	1/1	0.90	0.26	51,51,51,51	0
58	MG	2A	3179	1/1	0.90	0.16	68,68,68,68	0
58	MG	2A	3401	1/1	0.90	0.29	58,58,58,58	0
58	MG	1B	225	1/1	0.90	0.09	57,57,57,57	0
58	MG	2A	3187	1/1	0.90	0.19	60,60,60,60	0
58	MG	2A	3190	1/1	0.90	0.33	69,69,69,69	0
58	MG	1A	3403	1/1	0.90	0.14	52,52,52,52	0
58	MG	2A	3745	1/1	0.90	0.23	64,64,64,64	0
58	MG	1A	3692	1/1	0.90	0.08	13,13,13,13	0
58	MG	1A	3404	1/1	0.90	0.13	51,51,51,51	0
58	MG	1A	3715	1/1	0.90	0.16	64,64,64,64	0
58	MG	1D	312	1/1	0.90	0.16	40,40,40,40	0
58	MG	1A	3891	1/1	0.90	0.08	29,29,29,29	0
58	MG	1A	3338	1/1	0.90	0.11	42,42,42,42	0
58	MG	2a	1790	1/1	0.90	0.11	59,59,59,59	0
58	MG	2a	1792	1/1	0.90	0.13	62,62,62,62	0
58	MG	1A	3894	1/1	0.90	0.08	37,37,37,37	0
58	MG	2a	1795	1/1	0.90	0.22	63,63,63,63	0
58	MG	1a	1788	1/1	0.90	0.10	70,70,70,70	0
58	MG	2A	3779	1/1	0.90	0.15	64,64,64,64	0
58	MG	2A	3447	1/1	0.90	0.16	65,65,65,65	0
58	MG	1a	1791	1/1	0.90	0.09	75,75,75,75	0
58	MG	2A	3454	1/1	0.90	0.10	65,65,65,65	0
58	MG	2A	3801	1/1	0.90	0.09	80,80,80,80	0
58	MG	1A	3407	1/1	0.90	0.15	46,46,46,46	0
58	MG	2A	3469	1/1	0.90	0.24	65,65,65,65	0
58	MG	2A	3812	1/1	0.90	0.09	53,53,53,53	0
58	MG	2A	3218	1/1	0.90	0.24	59,59,59,59	0
58	MG	2A	3826	1/1	0.90	0.22	69,69,69,69	0
58	MG	1A	3757	1/1	0.90	0.12	58,58,58,58	0
58	MG	1A	3348	1/1	0.90	0.14	50,50,50,50	0
58	MG	1A	3418	1/1	0.90	0.14	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3484	1/1	0.90	0.14	66,66,66,66	0
58	MG	2A	3845	1/1	0.90	0.10	67,67,67,67	0
58	MG	2e	201	1/1	0.90	0.09	73,73,73,73	0
58	MG	1A	3927	1/1	0.90	0.15	47,47,47,47	0
58	MG	2A	3848	1/1	0.90	0.15	64,64,64,64	0
58	MG	2A	3238	1/1	0.90	0.14	64,64,64,64	0
58	MG	2A	3241	1/1	0.90	0.10	48,48,48,48	0
58	MG	1A	3299	1/1	0.90	0.07	26,26,26,26	0
58	MG	1d	301	1/1	0.90	0.34	62,62,62,62	0
58	MG	2A	3253	1/1	0.90	0.21	73,73,73,73	0
58	MG	2A	3254	1/1	0.90	0.11	62,62,62,62	0
58	MG	1A	3939	1/1	0.90	0.10	26,26,26,26	0
58	MG	1Y	203	1/1	0.90	0.31	49,49,49,49	0
58	MG	1A	3544	1/1	0.90	0.08	62,62,62,62	0
58	MG	1A	3357	1/1	0.90	0.08	55,55,55,55	0
58	MG	1A	3448	1/1	0.90	0.13	61,61,61,61	0
58	MG	2A	3542	1/1	0.90	0.12	38,38,38,38	0
58	MG	1x	104	1/1	0.90	0.23	57,57,57,57	0
58	MG	14	101	1/1	0.90	0.17	69,69,69,69	0
58	MG	2B	209	1/1	0.91	0.10	67,67,67,67	0
58	MG	2A	3007	1/1	0.91	0.21	63,63,63,63	0
58	MG	1A	3393	1/1	0.91	0.25	69,69,69,69	0
58	MG	1A	3760	1/1	0.91	0.08	16,16,16,16	0
58	MG	1A	3887	1/1	0.91	0.07	39,39,39,39	0
58	MG	2B	219	1/1	0.91	0.19	77,77,77,77	0
58	MG	2A	3551	1/1	0.91	0.16	40,40,40,40	0
58	MG	2A	3035	1/1	0.91	0.06	31,31,31,31	0
58	MG	2A	3036	1/1	0.91	0.15	53,53,53,53	0
58	MG	2A	3287	1/1	0.91	0.09	56,56,56,56	0
58	MG	2E	307	1/1	0.91	0.18	63,63,63,63	0
58	MG	2F	303	1/1	0.91	0.07	40,40,40,40	0
58	MG	2F	304	1/1	0.91	0.13	66,66,66,66	0
58	MG	2A	3038	1/1	0.91	0.13	35,35,35,35	0
58	MG	2A	3568	1/1	0.91	0.09	47,47,47,47	0
58	MG	2A	3571	1/1	0.91	0.09	45,45,45,45	0
58	MG	2A	3039	1/1	0.91	0.21	58,58,58,58	0
58	MG	1A	3768	1/1	0.91	0.09	27,27,27,27	0
58	MG	2R	202	1/1	0.91	0.14	62,62,62,62	0
58	MG	2T	3501	1/1	0.91	0.24	65,65,65,65	0
58	MG	2W	201	1/1	0.91	0.18	60,60,60,60	0
58	MG	1A	3051	1/1	0.91	0.11	34,34,34,34	0
58	MG	2A	3045	1/1	0.91	0.08	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1646	1/1	0.91	0.15	68,68,68,68	0
58	MG	27	103	1/1	0.91	0.08	44,44,44,44	0
58	MG	2A	3047	1/1	0.91	0.17	72,72,72,72	0
58	MG	1a	1651	1/1	0.91	0.12	46,46,46,46	0
58	MG	2a	1602	1/1	0.91	0.23	63,63,63,63	0
58	MG	2a	1606	1/1	0.91	0.22	67,67,67,67	0
58	MG	1a	1656	1/1	0.91	0.13	62,62,62,62	0
58	MG	1A	3401	1/1	0.91	0.12	47,47,47,47	0
58	MG	2A	3596	1/1	0.91	0.10	58,58,58,58	0
58	MG	1a	1661	1/1	0.91	0.17	56,56,56,56	0
58	MG	2A	3599	1/1	0.91	0.12	60,60,60,60	0
58	MG	2A	3307	1/1	0.91	0.16	65,65,65,65	0
58	MG	2A	3308	1/1	0.91	0.13	57,57,57,57	0
58	MG	1A	3892	1/1	0.91	0.12	22,22,22,22	0
58	MG	1A	3288	1/1	0.91	0.12	57,57,57,57	0
58	MG	1A	3370	1/1	0.91	0.09	42,42,42,42	0
58	MG	2A	3316	1/1	0.91	0.09	49,49,49,49	0
58	MG	1a	1676	1/1	0.91	0.13	55,55,55,55	0
58	MG	2A	3624	1/1	0.91	0.11	55,55,55,55	0
58	MG	2a	1628	1/1	0.91	0.10	62,62,62,62	0
58	MG	2A	3632	1/1	0.91	0.13	54,54,54,54	0
58	MG	2A	3319	1/1	0.91	0.10	62,62,62,62	0
58	MG	1A	3477	1/1	0.91	0.11	42,42,42,42	0
58	MG	1A	3151	1/1	0.91	0.21	29,29,29,29	0
58	MG	1A	3052	1/1	0.91	0.09	46,46,46,46	0
58	MG	1A	3002	1/1	0.91	0.07	47,47,47,47	0
58	MG	1B	224	1/1	0.91	0.10	50,50,50,50	0
58	MG	1A	3488	1/1	0.91	0.10	40,40,40,40	0
58	MG	2A	3651	1/1	0.91	0.16	66,66,66,66	0
58	MG	2A	3331	1/1	0.91	0.12	59,59,59,59	0
58	MG	2a	1647	1/1	0.91	0.14	61,61,61,61	0
58	MG	1a	1688	1/1	0.91	0.14	51,51,51,51	0
58	MG	1A	3344	1/1	0.91	0.08	38,38,38,38	0
58	MG	2A	3660	1/1	0.91	0.09	66,66,66,66	0
58	MG	2A	3100	1/1	0.91	0.24	44,44,44,44	0
58	MG	2a	1656	1/1	0.91	0.14	85,85,85,85	0
58	MG	2A	3663	1/1	0.91	0.18	56,56,56,56	0
58	MG	2A	3102	1/1	0.91	0.25	67,67,67,67	0
58	MG	2a	1659	1/1	0.91	0.19	60,60,60,60	0
58	MG	2a	1660	1/1	0.91	0.20	78,78,78,78	0
58	MG	1A	3420	1/1	0.91	0.08	40,40,40,40	0
58	MG	1A	3945	1/1	0.91	0.11	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3107	1/1	0.91	0.17	55,55,55,55	0
58	MG	2a	1672	1/1	0.91	0.11	56,56,56,56	0
58	MG	2A	3349	1/1	0.91	0.21	61,61,61,61	0
58	MG	1a	1696	1/1	0.91	0.27	59,59,59,59	0
58	MG	2a	1679	1/1	0.91	0.20	60,60,60,60	0
58	MG	1A	3650	1/1	0.91	0.09	60,60,60,60	0
58	MG	2A	3673	1/1	0.91	0.08	64,64,64,64	0
58	MG	2A	3356	1/1	0.91	0.30	48,48,48,48	0
58	MG	1A	3506	1/1	0.91	0.14	57,57,57,57	0
58	MG	1a	1705	1/1	0.91	0.24	63,63,63,63	0
58	MG	2A	3124	1/1	0.91	0.26	66,66,66,66	0
58	MG	1a	1706	1/1	0.91	0.24	55,55,55,55	0
58	MG	1A	3653	1/1	0.91	0.09	40,40,40,40	0
58	MG	2A	3685	1/1	0.91	0.19	65,65,65,65	0
58	MG	1a	1717	1/1	0.91	0.09	60,60,60,60	0
58	MG	1E	307	1/1	0.91	0.30	59,59,59,59	0
58	MG	1A	3427	1/1	0.91	0.08	56,56,56,56	0
58	MG	1A	3428	1/1	0.91	0.07	53,53,53,53	0
58	MG	2a	1713	1/1	0.91	0.13	55,55,55,55	0
58	MG	2A	3692	1/1	0.91	0.09	67,67,67,67	0
58	MG	1A	3837	1/1	0.91	0.10	52,52,52,52	0
58	MG	1F	313	1/1	0.91	0.15	50,50,50,50	0
58	MG	1A	3838	1/1	0.91	0.17	61,61,61,61	0
58	MG	2a	1718	1/1	0.91	0.13	74,74,74,74	0
58	MG	1A	3061	1/1	0.91	0.21	43,43,43,43	0
58	MG	2A	3377	1/1	0.91	0.15	58,58,58,58	0
58	MG	1A	3977	1/1	0.91	0.08	67,67,67,67	0
58	MG	1A	3978	1/1	0.91	0.09	57,57,57,57	0
58	MG	2a	1729	1/1	0.91	0.17	61,61,61,61	0
58	MG	1S	201	1/1	0.91	0.25	41,41,41,41	0
58	MG	1A	3312	1/1	0.91	0.06	34,34,34,34	0
58	MG	2A	3178	1/1	0.91	0.11	44,44,44,44	0
58	MG	1a	1757	1/1	0.91	0.18	51,51,51,51	0
58	MG	1W	201	1/1	0.91	0.15	49,49,49,49	0
58	MG	1A	3440	1/1	0.91	0.18	46,46,46,46	0
58	MG	2A	3394	1/1	0.91	0.09	60,60,60,60	0
58	MG	1Y	202	1/1	0.91	0.15	66,66,66,66	0
58	MG	2A	3732	1/1	0.91	0.10	58,58,58,58	0
58	MG	1a	1772	1/1	0.91	0.10	66,66,66,66	0
58	MG	2A	3734	1/1	0.91	0.12	53,53,53,53	0
58	MG	2A	3735	1/1	0.91	0.12	54,54,54,54	0
58	MG	1A	3446	1/1	0.91	0.12	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3407	1/1	0.91	0.15	41,41,41,41	0
58	MG	1A	4016	1/1	0.91	0.10	58,58,58,58	0
58	MG	2A	3417	1/1	0.91	0.19	49,49,49,49	0
58	MG	1A	3855	1/1	0.91	0.12	55,55,55,55	0
58	MG	2a	1768	1/1	0.91	0.08	74,74,74,74	0
58	MG	2A	3420	1/1	0.91	0.25	64,64,64,64	0
58	MG	1A	3860	1/1	0.91	0.41	40,40,40,40	0
58	MG	2a	1778	1/1	0.91	0.11	52,52,52,52	0
58	MG	13	101	1/1	0.91	0.12	54,54,54,54	0
58	MG	2A	3756	1/1	0.91	0.10	63,63,63,63	0
58	MG	2A	3200	1/1	0.91	0.10	47,47,47,47	0
58	MG	2A	3428	1/1	0.91	0.20	62,62,62,62	0
58	MG	2A	3431	1/1	0.91	0.20	57,57,57,57	0
58	MG	2A	3204	1/1	0.91	0.12	58,58,58,58	0
58	MG	13	103	1/1	0.91	0.10	44,44,44,44	0
58	MG	1A	3862	1/1	0.91	0.11	52,52,52,52	0
58	MG	1A	3095	1/1	0.91	0.09	66,66,66,66	0
58	MG	1A	3728	1/1	0.91	0.16	56,56,56,56	0
58	MG	2A	3214	1/1	0.91	0.09	64,64,64,64	0
58	MG	2A	3786	1/1	0.91	0.10	55,55,55,55	0
58	MG	1a	1603	1/1	0.91	0.15	64,64,64,64	0
58	MG	2A	3794	1/1	0.91	0.21	67,67,67,67	0
58	MG	1a	1607	1/1	0.91	0.14	56,56,56,56	0
58	MG	2a	1811	1/1	0.91	0.07	70,70,70,70	0
58	MG	2A	3802	1/1	0.91	0.11	52,52,52,52	0
58	MG	1A	3743	1/1	0.91	0.09	19,19,19,19	0
58	MG	2A	3225	1/1	0.91	0.23	55,55,55,55	0
58	MG	2A	3460	1/1	0.91	0.10	71,71,71,71	0
58	MG	2A	3465	1/1	0.91	0.18	59,59,59,59	0
58	MG	2a	1819	1/1	0.91	0.17	55,55,55,55	0
58	MG	1a	1611	1/1	0.91	0.21	63,63,63,63	0
58	MG	1a	1613	1/1	0.91	0.13	61,61,61,61	0
58	MG	2A	3830	1/1	0.91	0.09	49,49,49,49	0
58	MG	1w	102	1/1	0.91	0.09	67,67,67,67	0
58	MG	2A	3481	1/1	0.91	0.23	54,54,54,54	0
58	MG	2A	3840	1/1	0.91	0.08	66,66,66,66	0
58	MG	2g	201	1/1	0.91	0.06	71,71,71,71	0
58	MG	2i	201	1/1	0.91	0.14	71,71,71,71	0
58	MG	1a	1615	1/1	0.91	0.11	60,60,60,60	0
58	MG	1a	1616	1/1	0.91	0.13	66,66,66,66	0
58	MG	1A	3456	1/1	0.91	0.07	45,45,45,45	0
58	MG	2A	3244	1/1	0.91	0.13	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2l	203	1/1	0.91	0.09	62,62,62,62	0
58	MG	1A	3751	1/1	0.91	0.11	35,35,35,35	0
58	MG	2A	3248	1/1	0.91	0.08	53,53,53,53	0
58	MG	2A	3250	1/1	0.91	0.10	50,50,50,50	0
58	MG	2A	3505	1/1	0.91	0.14	69,69,69,69	0
58	MG	1A	4067	1/1	0.91	0.12	55,55,55,55	0
58	MG	1x	106	1/1	0.91	0.20	56,56,56,56	0
58	MG	1A	3392	1/1	0.91	0.17	51,51,51,51	0
58	MG	2A	3513	1/1	0.91	0.14	56,56,56,56	0
58	MG	2A	3514	1/1	0.91	0.11	46,46,46,46	0
58	MG	2A	3519	1/1	0.91	0.13	51,51,51,51	0
58	MG	2A	3258	1/1	0.91	0.15	57,57,57,57	0
58	MG	2A	3005	1/1	0.91	0.24	58,58,58,58	0
58	MG	2F	302	1/1	0.92	0.08	58,58,58,58	0
58	MG	1A	4056	1/1	0.92	0.12	46,46,46,46	0
58	MG	1A	3331	1/1	0.92	0.09	41,41,41,41	0
58	MG	1A	3450	1/1	0.92	0.10	56,56,56,56	0
58	MG	1a	1658	1/1	0.92	0.24	65,65,65,65	0
58	MG	2A	3314	1/1	0.92	0.07	49,49,49,49	0
58	MG	2A	3586	1/1	0.92	0.14	52,52,52,52	0
58	MG	2A	3588	1/1	0.92	0.08	47,47,47,47	0
58	MG	2A	3589	1/1	0.92	0.10	64,64,64,64	0
58	MG	1A	3714	1/1	0.92	0.07	63,63,63,63	0
58	MG	2U	201	1/1	0.92	0.28	50,50,50,50	0
58	MG	1A	4071	1/1	0.92	0.10	44,44,44,44	0
58	MG	1A	3266	1/1	0.92	0.28	52,52,52,52	0
58	MG	1a	1667	1/1	0.92	0.14	48,48,48,48	0
58	MG	1A	3867	1/1	0.92	0.07	39,39,39,39	0
58	MG	25	105	1/1	0.92	0.09	48,48,48,48	0
58	MG	2A	3322	1/1	0.92	0.23	55,55,55,55	0
58	MG	2A	3081	1/1	0.92	0.26	55,55,55,55	0
58	MG	1A	3720	1/1	0.92	0.22	58,58,58,58	0
58	MG	1A	3180	1/1	0.92	0.16	52,52,52,52	0
58	MG	2a	1603	1/1	0.92	0.08	68,68,68,68	0
58	MG	2A	3328	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3546	1/1	0.92	0.38	40,40,40,40	0
58	MG	1A	3555	1/1	0.92	0.21	49,49,49,49	0
58	MG	2a	1609	1/1	0.92	0.17	73,73,73,73	0
58	MG	2A	3625	1/1	0.92	0.19	62,62,62,62	0
58	MG	1A	3569	1/1	0.92	0.14	48,48,48,48	0
58	MG	2A	3333	1/1	0.92	0.12	55,55,55,55	0
58	MG	1A	4097	1/1	0.92	0.17	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3283	1/1	0.92	0.25	45,45,45,45	0
58	MG	2A	3638	1/1	0.92	0.12	57,57,57,57	0
58	MG	1A	3460	1/1	0.92	0.12	59,59,59,59	0
58	MG	1A	3758	1/1	0.92	0.14	47,47,47,47	0
58	MG	2A	3643	1/1	0.92	0.14	54,54,54,54	0
58	MG	1A	3185	1/1	0.92	0.07	37,37,37,37	0
58	MG	2A	3345	1/1	0.92	0.11	53,53,53,53	0
58	MG	2A	3347	1/1	0.92	0.14	61,61,61,61	0
58	MG	2A	3652	1/1	0.92	0.10	75,75,75,75	0
58	MG	1a	1693	1/1	0.92	0.21	55,55,55,55	0
58	MG	1A	3593	1/1	0.92	0.17	48,48,48,48	0
58	MG	1A	3769	1/1	0.92	0.11	36,36,36,36	0
58	MG	2A	3353	1/1	0.92	0.11	61,61,61,61	0
58	MG	1B	223	1/1	0.92	0.16	51,51,51,51	0
58	MG	1A	3114	1/1	0.92	0.06	37,37,37,37	0
58	MG	2a	1640	1/1	0.92	0.15	76,76,76,76	0
58	MG	1a	1699	1/1	0.92	0.10	58,58,58,58	0
58	MG	1A	3776	1/1	0.92	0.08	33,33,33,33	0
58	MG	1A	3895	1/1	0.92	0.17	37,37,37,37	0
58	MG	2A	3361	1/1	0.92	0.14	63,63,63,63	0
58	MG	1A	3777	1/1	0.92	0.07	60,60,60,60	0
58	MG	1a	1713	1/1	0.92	0.23	64,64,64,64	0
58	MG	2A	3129	1/1	0.92	0.10	67,67,67,67	0
58	MG	2A	3132	1/1	0.92	0.08	55,55,55,55	0
58	MG	1B	231	1/1	0.92	0.08	61,61,61,61	0
58	MG	1A	3596	1/1	0.92	0.17	55,55,55,55	0
58	MG	2A	3142	1/1	0.92	0.13	52,52,52,52	0
58	MG	1A	3907	1/1	0.92	0.07	46,46,46,46	0
58	MG	1a	1726	1/1	0.92	0.09	44,44,44,44	0
58	MG	2A	3683	1/1	0.92	0.09	67,67,67,67	0
58	MG	2A	3375	1/1	0.92	0.21	66,66,66,66	0
58	MG	1A	3129	1/1	0.92	0.07	56,56,56,56	0
58	MG	1A	3354	1/1	0.92	0.16	53,53,53,53	0
58	MG	1A	3475	1/1	0.92	0.13	42,42,42,42	0
58	MG	1A	3355	1/1	0.92	0.10	63,63,63,63	0
58	MG	2a	1678	1/1	0.92	0.17	62,62,62,62	0
58	MG	2A	3170	1/1	0.92	0.12	59,59,59,59	0
58	MG	2A	3691	1/1	0.92	0.07	66,66,66,66	0
58	MG	1A	3479	1/1	0.92	0.29	54,54,54,54	0
58	MG	1A	3940	1/1	0.92	0.09	22,22,22,22	0
58	MG	1a	1742	1/1	0.92	0.09	70,70,70,70	0
58	MG	2A	3702	1/1	0.92	0.11	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1693	1/1	0.92	0.20	70,70,70,70	0
58	MG	2a	1698	1/1	0.92	0.30	58,58,58,58	0
58	MG	1A	3942	1/1	0.92	0.14	66,66,66,66	0
58	MG	1A	3072	1/1	0.92	0.06	15,15,15,15	0
58	MG	2A	3393	1/1	0.92	0.12	62,62,62,62	0
58	MG	1A	3411	1/1	0.92	0.12	47,47,47,47	0
58	MG	2A	3709	1/1	0.92	0.14	51,51,51,51	0
58	MG	1A	3640	1/1	0.92	0.11	57,57,57,57	0
58	MG	1A	3641	1/1	0.92	0.06	22,22,22,22	0
58	MG	2a	1709	1/1	0.92	0.07	73,73,73,73	0
58	MG	2a	1710	1/1	0.92	0.12	75,75,75,75	0
58	MG	1A	3813	1/1	0.92	0.07	45,45,45,45	0
58	MG	1S	202	1/1	0.92	0.12	46,46,46,46	0
58	MG	1a	1762	1/1	0.92	0.12	61,61,61,61	0
58	MG	2A	3725	1/1	0.92	0.16	53,53,53,53	0
58	MG	2A	3415	1/1	0.92	0.17	63,63,63,63	0
58	MG	2A	3416	1/1	0.92	0.25	59,59,59,59	0
58	MG	2A	3194	1/1	0.92	0.11	55,55,55,55	0
58	MG	2a	1719	1/1	0.92	0.18	63,63,63,63	0
58	MG	1a	1767	1/1	0.92	0.10	55,55,55,55	0
58	MG	2a	1722	1/1	0.92	0.18	64,64,64,64	0
58	MG	2a	1723	1/1	0.92	0.16	64,64,64,64	0
58	MG	2A	3196	1/1	0.92	0.23	65,65,65,65	0
58	MG	1A	3814	1/1	0.92	0.18	48,48,48,48	0
58	MG	1A	3305	1/1	0.92	0.22	53,53,53,53	0
58	MG	1A	3964	1/1	0.92	0.10	30,30,30,30	0
58	MG	1A	3087	1/1	0.92	0.22	36,36,36,36	0
58	MG	2A	3429	1/1	0.92	0.14	39,39,39,39	0
58	MG	2A	3430	1/1	0.92	0.27	60,60,60,60	0
58	MG	1A	3310	1/1	0.92	0.08	49,49,49,49	0
58	MG	1a	1780	1/1	0.92	0.12	47,47,47,47	0
58	MG	2a	1738	1/1	0.92	0.08	48,48,48,48	0
58	MG	1A	3045	1/1	0.92	0.09	37,37,37,37	0
58	MG	2a	1741	1/1	0.92	0.18	61,61,61,61	0
58	MG	1A	3313	1/1	0.92	0.09	53,53,53,53	0
58	MG	2a	1743	1/1	0.92	0.09	60,60,60,60	0
58	MG	2A	3435	1/1	0.92	0.22	55,55,55,55	0
58	MG	2a	1747	1/1	0.92	0.09	72,72,72,72	0
58	MG	1a	1792	1/1	0.92	0.14	60,60,60,60	0
58	MG	1A	3980	1/1	0.92	0.09	20,20,20,20	0
58	MG	2a	1751	1/1	0.92	0.24	70,70,70,70	0
58	MG	1A	3376	1/1	0.92	0.09	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3676	1/1	0.92	0.12	18,18,18,18	0
58	MG	2A	3765	1/1	0.92	0.14	64,64,64,64	0
58	MG	13	104	1/1	0.92	0.10	28,28,28,28	0
58	MG	2a	1758	1/1	0.92	0.07	65,65,65,65	0
58	MG	1A	3678	1/1	0.92	0.06	21,21,21,21	0
58	MG	16	101	1/1	0.92	0.20	43,43,43,43	0
58	MG	2A	3778	1/1	0.92	0.09	51,51,51,51	0
58	MG	2a	1767	1/1	0.92	0.10	69,69,69,69	0
58	MG	2A	3459	1/1	0.92	0.11	67,67,67,67	0
58	MG	2A	3780	1/1	0.92	0.10	56,56,56,56	0
58	MG	2a	1773	1/1	0.92	0.20	70,70,70,70	0
58	MG	18	109	1/1	0.92	0.12	49,49,49,49	0
58	MG	2A	3464	1/1	0.92	0.22	51,51,51,51	0
58	MG	2A	3785	1/1	0.92	0.10	46,46,46,46	0
58	MG	1f	201	1/1	0.92	0.14	49,49,49,49	0
58	MG	2A	3467	1/1	0.92	0.16	56,56,56,56	0
58	MG	1n	101	1/1	0.92	0.14	57,57,57,57	0
58	MG	2A	3242	1/1	0.92	0.31	51,51,51,51	0
58	MG	1A	3997	1/1	0.92	0.11	65,65,65,65	0
58	MG	2A	3473	1/1	0.92	0.14	57,57,57,57	0
58	MG	1v	101	1/1	0.92	0.20	75,75,75,75	0
58	MG	2A	3811	1/1	0.92	0.11	51,51,51,51	0
58	MG	2a	1797	1/1	0.92	0.14	69,69,69,69	0
58	MG	1A	3998	1/1	0.92	0.11	72,72,72,72	0
58	MG	2A	3814	1/1	0.92	0.08	60,60,60,60	0
58	MG	1A	4011	1/1	0.92	0.12	56,56,56,56	0
58	MG	1A	3168	1/1	0.92	0.17	57,57,57,57	0
58	MG	1A	4018	1/1	0.92	0.10	61,61,61,61	0
58	MG	2A	3486	1/1	0.92	0.09	59,59,59,59	0
58	MG	2a	1810	1/1	0.92	0.11	64,64,64,64	0
58	MG	1A	3262	1/1	0.92	0.18	59,59,59,59	0
58	MG	1A	3847	1/1	0.92	0.09	46,46,46,46	0
58	MG	1A	4021	1/1	0.92	0.10	45,45,45,45	0
58	MG	2A	3504	1/1	0.92	0.15	58,58,58,58	0
58	MG	1A	3685	1/1	0.92	0.08	42,42,42,42	0
58	MG	2A	3263	1/1	0.92	0.21	59,59,59,59	0
58	MG	1A	3854	1/1	0.92	0.14	66,66,66,66	0
58	MG	2A	3001	1/1	0.92	0.28	53,53,53,53	0
58	MG	2A	3271	1/1	0.92	0.10	61,61,61,61	0
58	MG	1a	1620	1/1	0.92	0.16	52,52,52,52	0
58	MG	1A	3241	1/1	0.92	0.19	50,50,50,50	0
58	MG	2A	3013	1/1	0.92	0.08	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3525	1/1	0.92	0.11	68,68,68,68	0
58	MG	1a	1623	1/1	0.92	0.12	47,47,47,47	0
58	MG	1a	1626	1/1	0.92	0.22	64,64,64,64	0
58	MG	2B	202	1/1	0.92	0.07	65,65,65,65	0
58	MG	2A	3534	1/1	0.92	0.09	54,54,54,54	0
58	MG	1a	1627	1/1	0.92	0.19	52,52,52,52	0
58	MG	1A	4035	1/1	0.92	0.07	50,50,50,50	0
58	MG	1a	1630	1/1	0.92	0.20	60,60,60,60	0
58	MG	2A	3547	1/1	0.92	0.08	37,37,37,37	0
58	MG	1A	4039	1/1	0.92	0.10	27,27,27,27	0
58	MG	1a	1632	1/1	0.92	0.22	63,63,63,63	0
58	MG	2A	3041	1/1	0.92	0.23	55,55,55,55	0
58	MG	2B	217	1/1	0.92	0.10	62,62,62,62	0
58	MG	1A	3856	1/1	0.92	0.08	27,27,27,27	0
58	MG	1A	4045	1/1	0.92	0.08	52,52,52,52	0
58	MG	1A	3859	1/1	0.92	0.11	62,62,62,62	0
58	MG	1A	4049	1/1	0.92	0.14	57,57,57,57	0
58	MG	1A	4051	1/1	0.92	0.09	58,58,58,58	0
58	MG	2A	3306	1/1	0.92	0.10	51,51,51,51	0
58	MG	2A	3048	1/1	0.92	0.08	46,46,46,46	0
58	MG	1A	3198	1/1	0.93	0.10	32,32,32,32	0
58	MG	2A	3549	1/1	0.93	0.10	44,44,44,44	0
58	MG	2E	302	1/1	0.93	0.13	58,58,58,58	0
58	MG	1a	1647	1/1	0.93	0.25	54,54,54,54	0
58	MG	2A	3552	1/1	0.93	0.09	41,41,41,41	0
58	MG	2A	3296	1/1	0.93	0.13	56,56,56,56	0
58	MG	1A	4096	1/1	0.93	0.20	56,56,56,56	0
58	MG	2A	3298	1/1	0.93	0.14	51,51,51,51	0
58	MG	1a	1653	1/1	0.93	0.07	46,46,46,46	0
58	MG	1a	1655	1/1	0.93	0.11	60,60,60,60	0
58	MG	2A	3570	1/1	0.93	0.06	41,41,41,41	0
58	MG	2O	202	1/1	0.93	0.10	55,55,55,55	0
58	MG	2P	201	1/1	0.93	0.10	50,50,50,50	0
58	MG	1A	3803	1/1	0.93	0.10	64,64,64,64	0
58	MG	1A	3909	1/1	0.93	0.20	39,39,39,39	0
58	MG	1B	205	1/1	0.93	0.21	61,61,61,61	0
58	MG	1A	3808	1/1	0.93	0.35	28,28,28,28	0
58	MG	1A	3918	1/1	0.93	0.07	58,58,58,58	0
58	MG	2U	202	1/1	0.93	0.09	60,60,60,60	0
58	MG	1A	3300	1/1	0.93	0.11	37,37,37,37	0
58	MG	2Z	301	1/1	0.93	0.13	78,78,78,78	0
58	MG	2A	3054	1/1	0.93	0.27	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1668	1/1	0.93	0.15	51,51,51,51	0
58	MG	2A	3057	1/1	0.93	0.16	72,72,72,72	0
58	MG	25	101	1/1	0.93	0.25	62,62,62,62	0
58	MG	1B	212	1/1	0.93	0.17	64,64,64,64	0
58	MG	2A	3315	1/1	0.93	0.18	54,54,54,54	0
58	MG	2A	3060	1/1	0.93	0.15	55,55,55,55	0
58	MG	1A	3537	1/1	0.93	0.15	52,52,52,52	0
58	MG	1a	1674	1/1	0.93	0.17	56,56,56,56	0
58	MG	1A	3656	1/1	0.93	0.10	39,39,39,39	0
58	MG	1A	3812	1/1	0.93	0.10	42,42,42,42	0
58	MG	2A	3073	1/1	0.93	0.08	43,43,43,43	0
58	MG	2A	3323	1/1	0.93	0.15	57,57,57,57	0
58	MG	2A	3603	1/1	0.93	0.09	57,57,57,57	0
58	MG	2A	3604	1/1	0.93	0.15	60,60,60,60	0
58	MG	1a	1679	1/1	0.93	0.14	59,59,59,59	0
58	MG	2A	3606	1/1	0.93	0.08	23,23,23,23	0
58	MG	2a	1614	1/1	0.93	0.22	74,74,74,74	0
58	MG	2A	3080	1/1	0.93	0.09	40,40,40,40	0
58	MG	1A	3349	1/1	0.93	0.13	52,52,52,52	0
58	MG	1A	3665	1/1	0.93	0.06	35,35,35,35	0
58	MG	1B	226	1/1	0.93	0.07	48,48,48,48	0
58	MG	2A	3616	1/1	0.93	0.09	33,33,33,33	0
58	MG	1A	3667	1/1	0.93	0.08	19,19,19,19	0
58	MG	1A	3540	1/1	0.93	0.14	53,53,53,53	0
58	MG	2A	3631	1/1	0.93	0.08	42,42,42,42	0
58	MG	1A	3301	1/1	0.93	0.31	51,51,51,51	0
58	MG	1a	1689	1/1	0.93	0.30	51,51,51,51	0
58	MG	1B	233	1/1	0.93	0.08	46,46,46,46	0
58	MG	1a	1692	1/1	0.93	0.27	47,47,47,47	0
58	MG	1A	3057	1/1	0.93	0.07	41,41,41,41	0
58	MG	2A	3340	1/1	0.93	0.09	54,54,54,54	0
58	MG	1A	3205	1/1	0.93	0.12	53,53,53,53	0
58	MG	1A	3836	1/1	0.93	0.08	36,36,36,36	0
58	MG	1A	3551	1/1	0.93	0.13	24,24,24,24	0
58	MG	1A	3308	1/1	0.93	0.13	47,47,47,47	0
58	MG	1A	3968	1/1	0.93	0.07	68,68,68,68	0
58	MG	1A	3969	1/1	0.93	0.10	60,60,60,60	0
58	MG	2A	3352	1/1	0.93	0.19	62,62,62,62	0
58	MG	2a	1648	1/1	0.93	0.09	60,60,60,60	0
58	MG	1a	1702	1/1	0.93	0.14	53,53,53,53	0
58	MG	2A	3354	1/1	0.93	0.09	46,46,46,46	0
58	MG	1A	3564	1/1	0.93	0.14	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3125	1/1	0.93	0.14	50,50,50,50	0
58	MG	1E	316	1/1	0.93	0.07	36,36,36,36	0
58	MG	1a	1708	1/1	0.93	0.47	69,69,69,69	0
58	MG	1A	3972	1/1	0.93	0.08	40,40,40,40	0
58	MG	1G	201	1/1	0.93	0.10	41,41,41,41	0
58	MG	2A	3130	1/1	0.93	0.08	47,47,47,47	0
58	MG	2a	1662	1/1	0.93	0.16	69,69,69,69	0
58	MG	1a	1715	1/1	0.93	0.17	53,53,53,53	0
58	MG	2A	3133	1/1	0.93	0.12	80,80,80,80	0
58	MG	2A	3134	1/1	0.93	0.08	40,40,40,40	0
58	MG	2a	1668	1/1	0.93	0.08	67,67,67,67	0
58	MG	2a	1670	1/1	0.93	0.25	66,66,66,66	0
58	MG	2A	3367	1/1	0.93	0.09	54,54,54,54	0
58	MG	1A	3699	1/1	0.93	0.09	36,36,36,36	0
58	MG	2a	1675	1/1	0.93	0.27	63,63,63,63	0
58	MG	2A	3137	1/1	0.93	0.19	58,58,58,58	0
58	MG	1A	3841	1/1	0.93	0.06	38,38,38,38	0
58	MG	1a	1725	1/1	0.93	0.07	46,46,46,46	0
58	MG	1O	201	1/1	0.93	0.08	54,54,54,54	0
58	MG	2A	3147	1/1	0.93	0.12	48,48,48,48	0
58	MG	2A	3148	1/1	0.93	0.23	52,52,52,52	0
58	MG	1A	3360	1/1	0.93	0.10	37,37,37,37	0
58	MG	2a	1685	1/1	0.93	0.29	68,68,68,68	0
58	MG	2A	3378	1/1	0.93	0.16	62,62,62,62	0
58	MG	2a	1688	1/1	0.93	0.13	60,60,60,60	0
58	MG	1A	3712	1/1	0.93	0.13	52,52,52,52	0
58	MG	2a	1694	1/1	0.93	0.20	62,62,62,62	0
58	MG	2A	3381	1/1	0.93	0.07	50,50,50,50	0
58	MG	2A	3156	1/1	0.93	0.21	56,56,56,56	0
58	MG	1Q	207	1/1	0.93	0.09	32,32,32,32	0
58	MG	1R	202	1/1	0.93	0.10	49,49,49,49	0
58	MG	2A	3694	1/1	0.93	0.08	19,19,19,19	0
58	MG	1R	204	1/1	0.93	0.11	44,44,44,44	0
58	MG	2A	3388	1/1	0.93	0.12	68,68,68,68	0
58	MG	1A	3473	1/1	0.93	0.14	46,46,46,46	0
58	MG	1a	1741	1/1	0.93	0.10	61,61,61,61	0
58	MG	2A	3172	1/1	0.93	0.16	56,56,56,56	0
58	MG	2A	3392	1/1	0.93	0.22	68,68,68,68	0
58	MG	1A	3987	1/1	0.93	0.08	40,40,40,40	0
58	MG	1U	204	1/1	0.93	0.25	37,37,37,37	0
58	MG	1A	3586	1/1	0.93	0.06	42,42,42,42	0
58	MG	1V	209	1/1	0.93	0.10	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3073	1/1	0.93	0.26	53,53,53,53	0
58	MG	2A	3720	1/1	0.93	0.12	56,56,56,56	0
58	MG	1A	3724	1/1	0.93	0.11	63,63,63,63	0
58	MG	2A	3411	1/1	0.93	0.12	41,41,41,41	0
58	MG	2a	1721	1/1	0.93	0.17	54,54,54,54	0
58	MG	1A	3727	1/1	0.93	0.07	68,68,68,68	0
58	MG	1A	3170	1/1	0.93	0.19	39,39,39,39	0
58	MG	1A	3416	1/1	0.93	0.18	48,48,48,48	0
58	MG	1A	3863	1/1	0.93	0.10	54,54,54,54	0
58	MG	1A	3213	1/1	0.93	0.13	50,50,50,50	0
58	MG	10	108	1/1	0.93	0.14	52,52,52,52	0
58	MG	2a	1730	1/1	0.93	0.11	66,66,66,66	0
58	MG	11	104	1/1	0.93	0.10	63,63,63,63	0
58	MG	1A	3225	1/1	0.93	0.07	48,48,48,48	0
58	MG	1A	3230	1/1	0.93	0.09	45,45,45,45	0
58	MG	2A	3736	1/1	0.93	0.07	61,61,61,61	0
58	MG	2A	3426	1/1	0.93	0.11	71,71,71,71	0
58	MG	1A	3025	1/1	0.93	0.07	43,43,43,43	0
58	MG	2a	1739	1/1	0.93	0.35	59,59,59,59	0
58	MG	1a	1782	1/1	0.93	0.06	50,50,50,50	0
58	MG	1a	1783	1/1	0.93	0.07	63,63,63,63	0
58	MG	1A	3608	1/1	0.93	0.07	29,29,29,29	0
58	MG	2A	3744	1/1	0.93	0.16	51,51,51,51	0
58	MG	15	106	1/1	0.93	0.09	46,46,46,46	0
58	MG	1A	3872	1/1	0.93	0.27	44,44,44,44	0
58	MG	2A	3753	1/1	0.93	0.10	40,40,40,40	0
58	MG	18	102	1/1	0.93	0.15	37,37,37,37	0
58	MG	18	105	1/1	0.93	0.17	40,40,40,40	0
58	MG	18	106	1/1	0.93	0.14	56,56,56,56	0
58	MG	1A	3875	1/1	0.93	0.28	51,51,51,51	0
58	MG	1a	1808	1/1	0.93	0.20	56,56,56,56	0
58	MG	2A	3227	1/1	0.93	0.14	57,57,57,57	0
58	MG	2A	3770	1/1	0.93	0.13	58,58,58,58	0
58	MG	2a	1759	1/1	0.93	0.08	71,71,71,71	0
58	MG	2A	3231	1/1	0.93	0.17	41,41,41,41	0
58	MG	2A	3774	1/1	0.93	0.13	61,61,61,61	0
58	MG	2a	1765	1/1	0.93	0.06	68,68,68,68	0
58	MG	1A	3182	1/1	0.93	0.09	53,53,53,53	0
58	MG	1A	4040	1/1	0.93	0.06	39,39,39,39	0
58	MG	1A	3617	1/1	0.93	0.12	11,11,11,11	0
58	MG	1A	3620	1/1	0.93	0.09	65,65,65,65	0
58	MG	2A	3240	1/1	0.93	0.09	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1775	1/1	0.93	0.13	61,61,61,61	0
58	MG	1A	3149	1/1	0.93	0.32	34,34,34,34	0
58	MG	2A	3466	1/1	0.93	0.16	50,50,50,50	0
58	MG	1A	3883	1/1	0.93	0.07	28,28,28,28	0
58	MG	1A	3053	1/1	0.93	0.10	42,42,42,42	0
58	MG	2a	1785	1/1	0.93	0.11	65,65,65,65	0
58	MG	2A	3791	1/1	0.93	0.11	71,71,71,71	0
58	MG	1a	1614	1/1	0.93	0.19	54,54,54,54	0
58	MG	2A	3245	1/1	0.93	0.12	50,50,50,50	0
58	MG	2A	3800	1/1	0.93	0.11	60,60,60,60	0
58	MG	1A	4053	1/1	0.93	0.18	36,36,36,36	0
58	MG	2A	3475	1/1	0.93	0.14	60,60,60,60	0
58	MG	1A	3630	1/1	0.93	0.06	28,28,28,28	0
58	MG	2A	3808	1/1	0.93	0.14	35,35,35,35	0
58	MG	1A	3162	1/1	0.93	0.11	47,47,47,47	0
58	MG	2a	1799	1/1	0.93	0.13	71,71,71,71	0
58	MG	2A	3251	1/1	0.93	0.22	62,62,62,62	0
58	MG	1A	4062	1/1	0.93	0.09	23,23,23,23	0
58	MG	1A	3516	1/1	0.93	0.11	49,49,49,49	0
58	MG	2a	1803	1/1	0.93	0.12	53,53,53,53	0
58	MG	1A	3390	1/1	0.93	0.23	36,36,36,36	0
58	MG	2A	3819	1/1	0.93	0.17	63,63,63,63	0
58	MG	2a	1808	1/1	0.93	0.12	74,74,74,74	0
58	MG	2A	3487	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3494	1/1	0.93	0.10	62,62,62,62	0
58	MG	2A	3257	1/1	0.93	0.14	48,48,48,48	0
58	MG	2A	3500	1/1	0.93	0.13	63,63,63,63	0
58	MG	1A	4069	1/1	0.93	0.09	45,45,45,45	0
58	MG	2a	1816	1/1	0.93	0.15	68,68,68,68	0
58	MG	1x	107	1/1	0.93	0.24	67,67,67,67	0
58	MG	2A	3503	1/1	0.93	0.13	40,40,40,40	0
58	MG	1A	3519	1/1	0.93	0.06	50,50,50,50	0
58	MG	1x	110	1/1	0.93	0.21	63,63,63,63	0
58	MG	2A	3507	1/1	0.93	0.18	57,57,57,57	0
58	MG	2A	3268	1/1	0.93	0.20	65,65,65,65	0
58	MG	2a	1828	1/1	0.93	0.11	71,71,71,71	0
58	MG	1A	4073	1/1	0.93	0.08	32,32,32,32	0
58	MG	1A	3793	1/1	0.93	0.10	39,39,39,39	0
58	MG	1A	3523	1/1	0.93	0.22	36,36,36,36	0
58	MG	2f	202	1/1	0.93	0.10	67,67,67,67	0
58	MG	2A	3008	1/1	0.93	0.13	55,55,55,55	0
58	MG	2A	3515	1/1	0.93	0.11	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3518	1/1	0.93	0.08	49,49,49,49	0
58	MG	2A	3275	1/1	0.93	0.24	55,55,55,55	0
58	MG	2A	3520	1/1	0.93	0.10	33,33,33,33	0
58	MG	2A	3521	1/1	0.93	0.13	58,58,58,58	0
58	MG	1A	4081	1/1	0.93	0.09	55,55,55,55	0
58	MG	2A	3524	1/1	0.93	0.08	40,40,40,40	0
58	MG	2q	201	1/1	0.93	0.08	72,72,72,72	0
58	MG	2A	3277	1/1	0.93	0.10	58,58,58,58	0
58	MG	1A	3339	1/1	0.93	0.08	52,52,52,52	0
58	MG	2A	3529	1/1	0.93	0.10	57,57,57,57	0
58	MG	2B	211	1/1	0.93	0.13	57,57,57,57	0
58	MG	2B	213	1/1	0.93	0.20	62,62,62,62	0
58	MG	2A	3286	1/1	0.93	0.08	47,47,47,47	0
58	MG	1A	3898	1/1	0.93	0.07	54,54,54,54	0
58	MG	2A	3537	1/1	0.93	0.08	35,35,35,35	0
58	MG	1A	4084	1/1	0.93	0.17	56,56,56,56	0
58	MG	1A	3902	1/1	0.93	0.13	44,44,44,44	0
58	MG	1A	3903	1/1	0.93	0.22	29,29,29,29	0
59	K	1A	3556	1/1	0.93	0.20	72,72,72,72	0
58	MG	2A	3810	1/1	0.94	0.11	59,59,59,59	0
58	MG	1A	4055	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3829	1/1	0.94	0.09	35,35,35,35	0
58	MG	1A	3597	1/1	0.94	0.15	32,32,32,32	0
58	MG	1a	1669	1/1	0.94	0.18	63,63,63,63	0
58	MG	2A	3424	1/1	0.94	0.28	58,58,58,58	0
58	MG	2A	3820	1/1	0.94	0.13	44,44,44,44	0
58	MG	1A	3433	1/1	0.94	0.14	44,44,44,44	0
58	MG	2A	3131	1/1	0.94	0.09	44,44,44,44	0
58	MG	2A	3427	1/1	0.94	0.15	46,46,46,46	0
58	MG	2A	3831	1/1	0.94	0.08	73,73,73,73	0
58	MG	1a	1671	1/1	0.94	0.26	68,68,68,68	0
58	MG	2A	3835	1/1	0.94	0.08	45,45,45,45	0
58	MG	1A	3064	1/1	0.94	0.11	49,49,49,49	0
58	MG	1A	3605	1/1	0.94	0.07	46,46,46,46	0
58	MG	1a	1675	1/1	0.94	0.16	48,48,48,48	0
58	MG	1A	3606	1/1	0.94	0.12	24,24,24,24	0
58	MG	1A	3439	1/1	0.94	0.20	42,42,42,42	0
58	MG	1A	3242	1/1	0.94	0.06	45,45,45,45	0
58	MG	2A	3145	1/1	0.94	0.16	43,43,43,43	0
58	MG	1A	4074	1/1	0.94	0.12	54,54,54,54	0
58	MG	1A	3441	1/1	0.94	0.12	37,37,37,37	0
58	MG	1A	3445	1/1	0.94	0.06	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3857	1/1	0.94	0.12	53,53,53,53	0
58	MG	1A	4079	1/1	0.94	0.11	55,55,55,55	0
58	MG	2A	3449	1/1	0.94	0.15	50,50,50,50	0
58	MG	2A	3861	1/1	0.94	0.10	54,54,54,54	0
58	MG	1a	1686	1/1	0.94	0.11	38,38,38,38	0
58	MG	2A	3452	1/1	0.94	0.10	48,48,48,48	0
58	MG	2B	201	1/1	0.94	0.13	63,63,63,63	0
58	MG	1A	4080	1/1	0.94	0.16	66,66,66,66	0
58	MG	2A	3456	1/1	0.94	0.45	45,45,45,45	0
58	MG	2A	3157	1/1	0.94	0.14	43,43,43,43	0
58	MG	1A	3243	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3161	1/1	0.94	0.17	68,68,68,68	0
58	MG	2A	3462	1/1	0.94	0.14	71,71,71,71	0
58	MG	2A	3163	1/1	0.94	0.20	66,66,66,66	0
58	MG	1A	3853	1/1	0.94	0.16	45,45,45,45	0
58	MG	2A	3166	1/1	0.94	0.11	51,51,51,51	0
58	MG	2A	3167	1/1	0.94	0.11	47,47,47,47	0
58	MG	2B	215	1/1	0.94	0.12	63,63,63,63	0
58	MG	1A	3624	1/1	0.94	0.09	43,43,43,43	0
58	MG	1a	1691	1/1	0.94	0.23	60,60,60,60	0
58	MG	1A	3337	1/1	0.94	0.07	45,45,45,45	0
58	MG	1A	4086	1/1	0.94	0.16	50,50,50,50	0
58	MG	1A	3157	1/1	0.94	0.06	51,51,51,51	0
58	MG	1A	4092	1/1	0.94	0.15	55,55,55,55	0
58	MG	2A	3176	1/1	0.94	0.12	73,73,73,73	0
58	MG	2D	307	1/1	0.94	0.09	53,53,53,53	0
58	MG	2E	301	1/1	0.94	0.17	63,63,63,63	0
58	MG	1A	3634	1/1	0.94	0.11	46,46,46,46	0
58	MG	1A	3451	1/1	0.94	0.10	50,50,50,50	0
58	MG	2E	306	1/1	0.94	0.07	30,30,30,30	0
58	MG	2A	3181	1/1	0.94	0.11	47,47,47,47	0
58	MG	2F	301	1/1	0.94	0.20	60,60,60,60	0
58	MG	2A	3182	1/1	0.94	0.18	52,52,52,52	0
58	MG	1a	1698	1/1	0.94	0.19	50,50,50,50	0
58	MG	2A	3488	1/1	0.94	0.15	58,58,58,58	0
58	MG	2F	305	1/1	0.94	0.20	47,47,47,47	0
58	MG	2A	3489	1/1	0.94	0.32	57,57,57,57	0
58	MG	1A	3050	1/1	0.94	0.11	38,38,38,38	0
58	MG	1a	1700	1/1	0.94	0.08	54,54,54,54	0
58	MG	2A	3498	1/1	0.94	0.09	63,63,63,63	0
58	MG	1A	3248	1/1	0.94	0.06	54,54,54,54	0
58	MG	1A	3163	1/1	0.94	0.24	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1703	1/1	0.94	0.18	62,62,62,62	0
58	MG	1a	1704	1/1	0.94	0.13	55,55,55,55	0
58	MG	2T	3500	1/1	0.94	0.08	63,63,63,63	0
58	MG	1B	204	1/1	0.94	0.05	35,35,35,35	0
58	MG	1A	3865	1/1	0.94	0.07	23,23,23,23	0
58	MG	1B	206	1/1	0.94	0.06	40,40,40,40	0
58	MG	1a	1710	1/1	0.94	0.12	52,52,52,52	0
58	MG	2Y	201	1/1	0.94	0.18	48,48,48,48	0
58	MG	2A	3199	1/1	0.94	0.21	56,56,56,56	0
58	MG	1a	1711	1/1	0.94	0.12	46,46,46,46	0
58	MG	2A	3201	1/1	0.94	0.28	67,67,67,67	0
58	MG	1A	3164	1/1	0.94	0.13	48,48,48,48	0
58	MG	23	101	1/1	0.94	0.09	46,46,46,46	0
58	MG	1A	3645	1/1	0.94	0.10	28,28,28,28	0
58	MG	1A	3465	1/1	0.94	0.15	49,49,49,49	0
58	MG	1A	3869	1/1	0.94	0.27	32,32,32,32	0
58	MG	1A	3021	1/1	0.94	0.08	39,39,39,39	0
58	MG	1a	1724	1/1	0.94	0.09	58,58,58,58	0
58	MG	1B	215	1/1	0.94	0.10	53,53,53,53	0
58	MG	1A	3871	1/1	0.94	0.23	38,38,38,38	0
58	MG	2a	1605	1/1	0.94	0.14	58,58,58,58	0
58	MG	2A	3220	1/1	0.94	0.13	48,48,48,48	0
58	MG	1A	3352	1/1	0.94	0.16	37,37,37,37	0
58	MG	2A	3528	1/1	0.94	0.18	58,58,58,58	0
58	MG	1A	3258	1/1	0.94	0.20	50,50,50,50	0
58	MG	1A	3654	1/1	0.94	0.11	40,40,40,40	0
58	MG	2A	3531	1/1	0.94	0.14	42,42,42,42	0
58	MG	1a	1734	1/1	0.94	0.16	51,51,51,51	0
58	MG	1A	3081	1/1	0.94	0.16	36,36,36,36	0
58	MG	2A	3539	1/1	0.94	0.12	39,39,39,39	0
58	MG	2a	1617	1/1	0.94	0.16	49,49,49,49	0
58	MG	2A	3235	1/1	0.94	0.10	41,41,41,41	0
58	MG	2a	1619	1/1	0.94	0.06	43,43,43,43	0
58	MG	1A	3001	1/1	0.94	0.06	39,39,39,39	0
58	MG	1A	3663	1/1	0.94	0.05	23,23,23,23	0
58	MG	1a	1740	1/1	0.94	0.09	56,56,56,56	0
58	MG	1A	3358	1/1	0.94	0.08	47,47,47,47	0
58	MG	1A	3094	1/1	0.94	0.10	43,43,43,43	0
58	MG	2a	1626	1/1	0.94	0.09	65,65,65,65	0
58	MG	1A	3670	1/1	0.94	0.08	27,27,27,27	0
58	MG	1A	3673	1/1	0.94	0.07	20,20,20,20	0
58	MG	2a	1629	1/1	0.94	0.12	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3890	1/1	0.94	0.06	25,25,25,25	0
58	MG	1A	3363	1/1	0.94	0.22	42,42,42,42	0
58	MG	2A	3246	1/1	0.94	0.11	62,62,62,62	0
58	MG	2A	3567	1/1	0.94	0.09	64,64,64,64	0
58	MG	2a	1635	1/1	0.94	0.17	53,53,53,53	0
58	MG	2a	1636	1/1	0.94	0.26	59,59,59,59	0
58	MG	1A	3004	1/1	0.94	0.05	24,24,24,24	0
58	MG	1a	1759	1/1	0.94	0.09	56,56,56,56	0
58	MG	2A	3249	1/1	0.94	0.06	63,63,63,63	0
58	MG	1E	310	1/1	0.94	0.10	48,48,48,48	0
58	MG	1A	3101	1/1	0.94	0.09	36,36,36,36	0
58	MG	1A	3483	1/1	0.94	0.14	50,50,50,50	0
58	MG	1a	1763	1/1	0.94	0.09	64,64,64,64	0
58	MG	2A	3255	1/1	0.94	0.07	68,68,68,68	0
58	MG	1A	3104	1/1	0.94	0.11	29,29,29,29	0
58	MG	1A	3487	1/1	0.94	0.08	47,47,47,47	0
58	MG	2A	3583	1/1	0.94	0.06	52,52,52,52	0
58	MG	2a	1651	1/1	0.94	0.05	51,51,51,51	0
58	MG	2a	1652	1/1	0.94	0.27	66,66,66,66	0
58	MG	2A	3584	1/1	0.94	0.08	63,63,63,63	0
58	MG	1a	1769	1/1	0.94	0.12	60,60,60,60	0
58	MG	1F	309	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	3040	1/1	0.94	0.07	30,30,30,30	0
58	MG	1A	3697	1/1	0.94	0.10	41,41,41,41	0
58	MG	2A	3266	1/1	0.94	0.16	54,54,54,54	0
58	MG	1A	3489	1/1	0.94	0.18	47,47,47,47	0
58	MG	2A	3269	1/1	0.94	0.10	62,62,62,62	0
58	MG	1A	3705	1/1	0.94	0.13	37,37,37,37	0
58	MG	2a	1664	1/1	0.94	0.08	62,62,62,62	0
58	MG	1A	3270	1/1	0.94	0.19	39,39,39,39	0
58	MG	1A	3711	1/1	0.94	0.12	56,56,56,56	0
58	MG	1a	1785	1/1	0.94	0.09	63,63,63,63	0
58	MG	1A	3500	1/1	0.94	0.09	58,58,58,58	0
58	MG	1a	1790	1/1	0.94	0.07	73,73,73,73	0
58	MG	2a	1673	1/1	0.94	0.11	66,66,66,66	0
58	MG	1Q	204	1/1	0.94	0.13	60,60,60,60	0
58	MG	1Q	206	1/1	0.94	0.09	51,51,51,51	0
58	MG	2A	3285	1/1	0.94	0.07	61,61,61,61	0
58	MG	2A	3609	1/1	0.94	0.07	50,50,50,50	0
58	MG	2A	3610	1/1	0.94	0.10	43,43,43,43	0
58	MG	1A	3271	1/1	0.94	0.07	46,46,46,46	0
58	MG	1a	1794	1/1	0.94	0.13	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3922	1/1	0.94	0.07	45,45,45,45	0
58	MG	2a	1683	1/1	0.94	0.08	61,61,61,61	0
58	MG	2A	3617	1/1	0.94	0.11	44,44,44,44	0
58	MG	2A	3623	1/1	0.94	0.07	37,37,37,37	0
58	MG	2a	1686	1/1	0.94	0.18	66,66,66,66	0
58	MG	1a	1796	1/1	0.94	0.09	68,68,68,68	0
58	MG	1a	1797	1/1	0.94	0.06	47,47,47,47	0
58	MG	2a	1689	1/1	0.94	0.23	60,60,60,60	0
58	MG	2a	1690	1/1	0.94	0.15	64,64,64,64	0
58	MG	2a	1691	1/1	0.94	0.27	60,60,60,60	0
58	MG	2A	3627	1/1	0.94	0.15	53,53,53,53	0
58	MG	1A	3505	1/1	0.94	0.07	46,46,46,46	0
58	MG	2a	1695	1/1	0.94	0.11	76,76,76,76	0
58	MG	2A	3293	1/1	0.94	0.24	56,56,56,56	0
58	MG	2a	1699	1/1	0.94	0.14	57,57,57,57	0
58	MG	1a	1803	1/1	0.94	0.23	58,58,58,58	0
58	MG	1A	3924	1/1	0.94	0.06	40,40,40,40	0
58	MG	1a	1805	1/1	0.94	0.14	53,53,53,53	0
58	MG	1A	3926	1/1	0.94	0.10	45,45,45,45	0
58	MG	1T	202	1/1	0.94	0.10	41,41,41,41	0
58	MG	1U	203	1/1	0.94	0.07	57,57,57,57	0
58	MG	1A	3379	1/1	0.94	0.20	38,38,38,38	0
58	MG	2A	3644	1/1	0.94	0.24	53,53,53,53	0
58	MG	1e	202	1/1	0.94	0.10	54,54,54,54	0
58	MG	1A	3280	1/1	0.94	0.39	33,33,33,33	0
58	MG	1l	202	1/1	0.94	0.06	55,55,55,55	0
58	MG	1A	3508	1/1	0.94	0.12	63,63,63,63	0
58	MG	1A	3281	1/1	0.94	0.07	42,42,42,42	0
58	MG	1A	3941	1/1	0.94	0.08	51,51,51,51	0
58	MG	1A	3734	1/1	0.94	0.11	61,61,61,61	0
58	MG	2A	3659	1/1	0.94	0.13	50,50,50,50	0
58	MG	2A	3311	1/1	0.94	0.11	62,62,62,62	0
58	MG	2A	3312	1/1	0.94	0.11	68,68,68,68	0
58	MG	1A	3943	1/1	0.94	0.07	51,51,51,51	0
58	MG	1A	3735	1/1	0.94	0.17	57,57,57,57	0
58	MG	1A	3517	1/1	0.94	0.17	60,60,60,60	0
58	MG	1A	3747	1/1	0.94	0.17	62,62,62,62	0
58	MG	10	106	1/1	0.94	0.10	64,64,64,64	0
58	MG	1A	3954	1/1	0.94	0.07	44,44,44,44	0
58	MG	11	101	1/1	0.94	0.30	47,47,47,47	0
58	MG	2A	3671	1/1	0.94	0.10	47,47,47,47	0
58	MG	1A	3955	1/1	0.94	0.05	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1732	1/1	0.94	0.26	59,59,59,59	0
58	MG	1A	3194	1/1	0.94	0.28	36,36,36,36	0
58	MG	1A	3195	1/1	0.94	0.21	47,47,47,47	0
58	MG	1x	111	1/1	0.94	0.21	55,55,55,55	0
58	MG	2a	1736	1/1	0.94	0.26	43,43,43,43	0
58	MG	1A	3115	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	3524	1/1	0.94	0.18	47,47,47,47	0
58	MG	15	103	1/1	0.94	0.17	30,30,30,30	0
58	MG	2A	3681	1/1	0.94	0.06	68,68,68,68	0
58	MG	1A	3962	1/1	0.94	0.07	16,16,16,16	0
58	MG	1A	3119	1/1	0.94	0.08	33,33,33,33	0
58	MG	2A	3014	1/1	0.94	0.08	45,45,45,45	0
58	MG	2A	3016	1/1	0.94	0.10	74,74,74,74	0
58	MG	2a	1745	1/1	0.94	0.09	77,77,77,77	0
58	MG	17	102	1/1	0.94	0.10	45,45,45,45	0
58	MG	18	101	1/1	0.94	0.13	47,47,47,47	0
58	MG	1A	3965	1/1	0.94	0.12	54,54,54,54	0
58	MG	2A	3033	1/1	0.94	0.20	51,51,51,51	0
58	MG	1A	3296	1/1	0.94	0.30	60,60,60,60	0
58	MG	2A	3341	1/1	0.94	0.16	68,68,68,68	0
58	MG	2A	3695	1/1	0.94	0.10	65,65,65,65	0
58	MG	1A	3763	1/1	0.94	0.07	20,20,20,20	0
58	MG	18	108	1/1	0.94	0.12	48,48,48,48	0
58	MG	2A	3346	1/1	0.94	0.07	55,55,55,55	0
58	MG	1A	3970	1/1	0.94	0.09	62,62,62,62	0
58	MG	1A	3767	1/1	0.94	0.08	25,25,25,25	0
58	MG	2a	1762	1/1	0.94	0.07	56,56,56,56	0
58	MG	1A	3532	1/1	0.94	0.19	57,57,57,57	0
58	MG	2A	3706	1/1	0.94	0.13	53,53,53,53	0
58	MG	2A	3043	1/1	0.94	0.14	67,67,67,67	0
58	MG	2A	3351	1/1	0.94	0.17	64,64,64,64	0
58	MG	2a	1770	1/1	0.94	0.07	79,79,79,79	0
58	MG	1A	3120	1/1	0.94	0.10	33,33,33,33	0
58	MG	1a	1604	1/1	0.94	0.13	64,64,64,64	0
58	MG	1A	3207	1/1	0.94	0.10	52,52,52,52	0
58	MG	1A	3774	1/1	0.94	0.09	20,20,20,20	0
58	MG	1A	3397	1/1	0.94	0.20	31,31,31,31	0
58	MG	1A	3981	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3017	1/1	0.94	0.17	34,34,34,34	0
58	MG	1A	3986	1/1	0.94	0.23	41,41,41,41	0
58	MG	2A	3727	1/1	0.94	0.18	48,48,48,48	0
58	MG	1A	3047	1/1	0.94	0.09	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3135	1/1	0.94	0.11	31,31,31,31	0
58	MG	1A	3219	1/1	0.94	0.10	42,42,42,42	0
58	MG	2a	1791	1/1	0.94	0.23	71,71,71,71	0
58	MG	1a	1621	1/1	0.94	0.05	46,46,46,46	0
58	MG	2A	3061	1/1	0.94	0.14	60,60,60,60	0
58	MG	2A	3062	1/1	0.94	0.07	41,41,41,41	0
58	MG	2a	1796	1/1	0.94	0.12	53,53,53,53	0
58	MG	1A	3222	1/1	0.94	0.16	47,47,47,47	0
58	MG	1A	3552	1/1	0.94	0.27	29,29,29,29	0
58	MG	1A	3794	1/1	0.94	0.11	52,52,52,52	0
58	MG	1A	3554	1/1	0.94	0.14	54,54,54,54	0
58	MG	2A	3373	1/1	0.94	0.11	52,52,52,52	0
58	MG	1A	3223	1/1	0.94	0.12	43,43,43,43	0
58	MG	2A	3741	1/1	0.94	0.06	42,42,42,42	0
58	MG	1A	3142	1/1	0.94	0.09	43,43,43,43	0
58	MG	2A	3078	1/1	0.94	0.11	50,50,50,50	0
58	MG	1A	3319	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3571	1/1	0.94	0.07	39,39,39,39	0
58	MG	2A	3748	1/1	0.94	0.08	63,63,63,63	0
58	MG	2A	3751	1/1	0.94	0.07	51,51,51,51	0
58	MG	2A	3379	1/1	0.94	0.20	46,46,46,46	0
58	MG	1A	3582	1/1	0.94	0.12	54,54,54,54	0
58	MG	2A	3085	1/1	0.94	0.14	55,55,55,55	0
58	MG	2A	3383	1/1	0.94	0.28	58,58,58,58	0
58	MG	1A	3583	1/1	0.94	0.08	38,38,38,38	0
58	MG	2A	3762	1/1	0.94	0.08	53,53,53,53	0
58	MG	1A	4032	1/1	0.94	0.09	33,33,33,33	0
58	MG	2a	1822	1/1	0.94	0.23	64,64,64,64	0
58	MG	2a	1824	1/1	0.94	0.16	61,61,61,61	0
58	MG	1A	3227	1/1	0.94	0.11	28,28,28,28	0
58	MG	2A	3768	1/1	0.94	0.07	51,51,51,51	0
58	MG	1A	3585	1/1	0.94	0.12	35,35,35,35	0
58	MG	2A	3093	1/1	0.94	0.06	42,42,42,42	0
58	MG	2d	301	1/1	0.94	0.40	60,60,60,60	0
58	MG	1a	1643	1/1	0.94	0.13	50,50,50,50	0
58	MG	1A	3419	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	3322	1/1	0.94	0.12	56,56,56,56	0
58	MG	1A	4042	1/1	0.94	0.07	37,37,37,37	0
58	MG	1A	3324	1/1	0.94	0.11	45,45,45,45	0
58	MG	2A	3105	1/1	0.94	0.12	54,54,54,54	0
58	MG	2A	3781	1/1	0.94	0.14	74,74,74,74	0
58	MG	1a	1654	1/1	0.94	0.15	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3396	1/1	0.94	0.08	52,52,52,52	0
58	MG	1A	3147	1/1	0.94	0.09	30,30,30,30	0
58	MG	1A	3062	1/1	0.94	0.21	40,40,40,40	0
58	MG	2A	3789	1/1	0.94	0.08	52,52,52,52	0
58	MG	1a	1657	1/1	0.94	0.10	65,65,65,65	0
58	MG	2A	3410	1/1	0.94	0.10	42,42,42,42	0
58	MG	1A	3823	1/1	0.94	0.08	23,23,23,23	0
58	MG	2A	3795	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	3432	1/1	0.94	0.13	39,39,39,39	0
58	MG	2A	3413	1/1	0.94	0.28	52,52,52,52	0
58	MG	2x	101	1/1	0.94	0.08	56,56,56,56	0
58	MG	2A	3414	1/1	0.94	0.14	54,54,54,54	0
58	MG	2A	3119	1/1	0.94	0.18	57,57,57,57	0
58	MG	2A	3806	1/1	0.94	0.07	37,37,37,37	0
58	MG	2A	3807	1/1	0.94	0.08	52,52,52,52	0
58	MG	1A	3827	1/1	0.94	0.08	37,37,37,37	0
58	MG	1a	1663	1/1	0.94	0.11	54,54,54,54	0
58	MG	2A	3446	1/1	0.95	0.28	48,48,48,48	0
58	MG	2A	3828	1/1	0.95	0.07	56,56,56,56	0
58	MG	1B	228	1/1	0.95	0.08	46,46,46,46	0
58	MG	2A	3164	1/1	0.95	0.09	53,53,53,53	0
58	MG	1A	3425	1/1	0.95	0.12	50,50,50,50	0
58	MG	2A	3834	1/1	0.95	0.13	55,55,55,55	0
58	MG	1A	3900	1/1	0.95	0.08	44,44,44,44	0
58	MG	2A	3453	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3158	1/1	0.95	0.12	27,27,27,27	0
58	MG	2A	3455	1/1	0.95	0.17	45,45,45,45	0
58	MG	2A	3843	1/1	0.95	0.09	52,52,52,52	0
58	MG	1a	1707	1/1	0.95	0.18	41,41,41,41	0
58	MG	1A	3713	1/1	0.95	0.14	52,52,52,52	0
58	MG	2A	3847	1/1	0.95	0.06	66,66,66,66	0
58	MG	1A	3272	1/1	0.95	0.26	47,47,47,47	0
58	MG	1A	3274	1/1	0.95	0.09	41,41,41,41	0
58	MG	2A	3851	1/1	0.95	0.10	51,51,51,51	0
58	MG	1A	3542	1/1	0.95	0.09	61,61,61,61	0
58	MG	2A	3174	1/1	0.95	0.13	47,47,47,47	0
58	MG	1A	3346	1/1	0.95	0.07	39,39,39,39	0
58	MG	1E	304	1/1	0.95	0.12	35,35,35,35	0
58	MG	1A	3915	1/1	0.95	0.16	28,28,28,28	0
58	MG	2A	3468	1/1	0.95	0.14	48,48,48,48	0
58	MG	1E	308	1/1	0.95	0.08	40,40,40,40	0
58	MG	1a	1720	1/1	0.95	0.10	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3471	1/1	0.95	0.09	37,37,37,37	0
58	MG	1a	1721	1/1	0.95	0.17	54,54,54,54	0
58	MG	1A	3278	1/1	0.95	0.14	28,28,28,28	0
58	MG	1A	3919	1/1	0.95	0.07	31,31,31,31	0
58	MG	2A	3476	1/1	0.95	0.22	53,53,53,53	0
58	MG	2B	205	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3477	1/1	0.95	0.06	61,61,61,61	0
58	MG	2B	207	1/1	0.95	0.07	62,62,62,62	0
58	MG	2A	3480	1/1	0.95	0.12	37,37,37,37	0
58	MG	1A	3920	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3921	1/1	0.95	0.12	69,69,69,69	0
58	MG	1E	315	1/1	0.95	0.05	45,45,45,45	0
58	MG	2B	212	1/1	0.95	0.25	62,62,62,62	0
58	MG	1a	1732	1/1	0.95	0.08	52,52,52,52	0
58	MG	1A	3545	1/1	0.95	0.18	60,60,60,60	0
58	MG	1F	303	1/1	0.95	0.12	29,29,29,29	0
58	MG	1A	3434	1/1	0.95	0.10	52,52,52,52	0
58	MG	1F	310	1/1	0.95	0.14	47,47,47,47	0
58	MG	1F	311	1/1	0.95	0.17	40,40,40,40	0
58	MG	2A	3493	1/1	0.95	0.18	44,44,44,44	0
58	MG	1A	3016	1/1	0.95	0.14	61,61,61,61	0
58	MG	1A	3736	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3737	1/1	0.95	0.07	64,64,64,64	0
58	MG	1G	204	1/1	0.95	0.12	52,52,52,52	0
58	MG	1A	3111	1/1	0.95	0.17	39,39,39,39	0
58	MG	1a	1749	1/1	0.95	0.14	53,53,53,53	0
58	MG	2A	3207	1/1	0.95	0.08	55,55,55,55	0
58	MG	2E	304	1/1	0.95	0.08	61,61,61,61	0
58	MG	2A	3208	1/1	0.95	0.08	42,42,42,42	0
58	MG	1a	1752	1/1	0.95	0.09	48,48,48,48	0
58	MG	1a	1753	1/1	0.95	0.19	58,58,58,58	0
58	MG	1H	201	1/1	0.95	0.09	36,36,36,36	0
58	MG	2A	3215	1/1	0.95	0.10	67,67,67,67	0
58	MG	1I	201	1/1	0.95	0.08	59,59,59,59	0
58	MG	2A	3217	1/1	0.95	0.14	44,44,44,44	0
58	MG	2F	306	1/1	0.95	0.34	50,50,50,50	0
58	MG	1N	201	1/1	0.95	0.08	39,39,39,39	0
58	MG	2A	3219	1/1	0.95	0.15	46,46,46,46	0
58	MG	2A	3516	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3076	1/1	0.95	0.22	51,51,51,51	0
58	MG	2A	3222	1/1	0.95	0.17	50,50,50,50	0
58	MG	2A	3223	1/1	0.95	0.20	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2Q	201	1/1	0.95	0.08	56,56,56,56	0
58	MG	1O	202	1/1	0.95	0.17	55,55,55,55	0
58	MG	1A	3748	1/1	0.95	0.07	49,49,49,49	0
58	MG	1P	204	1/1	0.95	0.36	57,57,57,57	0
58	MG	2A	3228	1/1	0.95	0.08	53,53,53,53	0
58	MG	2T	3502	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3229	1/1	0.95	0.07	67,67,67,67	0
58	MG	2A	3527	1/1	0.95	0.07	39,39,39,39	0
58	MG	2A	3230	1/1	0.95	0.07	31,31,31,31	0
58	MG	1A	3353	1/1	0.95	0.18	54,54,54,54	0
58	MG	1a	1765	1/1	0.95	0.07	60,60,60,60	0
58	MG	1Q	202	1/1	0.95	0.09	33,33,33,33	0
58	MG	2A	3532	1/1	0.95	0.14	52,52,52,52	0
58	MG	1Q	203	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	3557	1/1	0.95	0.08	41,41,41,41	0
58	MG	2A	3538	1/1	0.95	0.08	49,49,49,49	0
58	MG	25	102	1/1	0.95	0.20	39,39,39,39	0
58	MG	1a	1771	1/1	0.95	0.09	66,66,66,66	0
58	MG	2A	3239	1/1	0.95	0.10	63,63,63,63	0
58	MG	1A	3563	1/1	0.95	0.23	58,58,58,58	0
58	MG	1A	3442	1/1	0.95	0.28	44,44,44,44	0
58	MG	1A	3286	1/1	0.95	0.12	52,52,52,52	0
58	MG	1a	1775	1/1	0.95	0.12	58,58,58,58	0
58	MG	2A	3550	1/1	0.95	0.12	46,46,46,46	0
58	MG	1A	3950	1/1	0.95	0.07	45,45,45,45	0
58	MG	1a	1779	1/1	0.95	0.09	69,69,69,69	0
58	MG	2A	3553	1/1	0.95	0.07	29,29,29,29	0
58	MG	1A	3570	1/1	0.95	0.20	32,32,32,32	0
58	MG	2A	3560	1/1	0.95	0.07	44,44,44,44	0
58	MG	1A	3953	1/1	0.95	0.06	43,43,43,43	0
58	MG	1S	203	1/1	0.95	0.11	61,61,61,61	0
58	MG	1A	3761	1/1	0.95	0.13	45,45,45,45	0
58	MG	2A	3565	1/1	0.95	0.16	54,54,54,54	0
58	MG	2A	3566	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3027	1/1	0.95	0.20	27,27,27,27	0
58	MG	1A	3764	1/1	0.95	0.06	25,25,25,25	0
58	MG	1U	205	1/1	0.95	0.09	31,31,31,31	0
58	MG	1U	206	1/1	0.95	0.32	30,30,30,30	0
58	MG	1A	3573	1/1	0.95	0.14	40,40,40,40	0
58	MG	1V	208	1/1	0.95	0.08	51,51,51,51	0
58	MG	1A	3577	1/1	0.95	0.08	45,45,45,45	0
58	MG	1A	3959	1/1	0.95	0.10	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3577	1/1	0.95	0.10	53,53,53,53	0
58	MG	1W	202	1/1	0.95	0.13	53,53,53,53	0
58	MG	2A	3262	1/1	0.95	0.28	58,58,58,58	0
58	MG	1a	1798	1/1	0.95	0.08	66,66,66,66	0
58	MG	1A	3580	1/1	0.95	0.12	23,23,23,23	0
58	MG	1A	3356	1/1	0.95	0.09	43,43,43,43	0
58	MG	1A	3449	1/1	0.95	0.12	47,47,47,47	0
58	MG	2a	1634	1/1	0.95	0.14	64,64,64,64	0
58	MG	1A	3116	1/1	0.95	0.07	41,41,41,41	0
58	MG	1a	1807	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3967	1/1	0.95	0.07	53,53,53,53	0
58	MG	2A	3591	1/1	0.95	0.13	53,53,53,53	0
58	MG	2A	3592	1/1	0.95	0.14	53,53,53,53	0
58	MG	2A	3593	1/1	0.95	0.10	58,58,58,58	0
58	MG	1A	3085	1/1	0.95	0.14	31,31,31,31	0
58	MG	2A	3595	1/1	0.95	0.14	62,62,62,62	0
58	MG	1A	3453	1/1	0.95	0.09	41,41,41,41	0
58	MG	2a	1646	1/1	0.95	0.08	61,61,61,61	0
58	MG	2A	3597	1/1	0.95	0.13	53,53,53,53	0
58	MG	1A	3588	1/1	0.95	0.12	50,50,50,50	0
58	MG	10	109	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3240	1/1	0.95	0.20	34,34,34,34	0
58	MG	1l	201	1/1	0.95	0.05	76,76,76,76	0
58	MG	2A	3602	1/1	0.95	0.11	54,54,54,54	0
58	MG	2A	3281	1/1	0.95	0.08	47,47,47,47	0
58	MG	2a	1654	1/1	0.95	0.06	58,58,58,58	0
58	MG	2A	3282	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3284	1/1	0.95	0.11	71,71,71,71	0
58	MG	1A	3788	1/1	0.95	0.08	58,58,58,58	0
58	MG	11	105	1/1	0.95	0.07	42,42,42,42	0
58	MG	1n	102	1/1	0.95	0.26	59,59,59,59	0
58	MG	1p	101	1/1	0.95	0.11	51,51,51,51	0
58	MG	2a	1661	1/1	0.95	0.12	70,70,70,70	0
58	MG	2A	3289	1/1	0.95	0.12	58,58,58,58	0
58	MG	2A	3612	1/1	0.95	0.15	37,37,37,37	0
58	MG	1A	3591	1/1	0.95	0.12	53,53,53,53	0
58	MG	13	102	1/1	0.95	0.07	34,34,34,34	0
58	MG	1A	3361	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3297	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3619	1/1	0.95	0.07	40,40,40,40	0
58	MG	2A	3621	1/1	0.95	0.13	38,38,38,38	0
58	MG	2A	3294	1/1	0.95	0.09	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3795	1/1	0.95	0.06	23,23,23,23	0
58	MG	1A	3594	1/1	0.95	0.16	52,52,52,52	0
58	MG	15	105	1/1	0.95	0.16	38,38,38,38	0
58	MG	1A	3982	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3299	1/1	0.95	0.15	48,48,48,48	0
58	MG	1A	3459	1/1	0.95	0.09	31,31,31,31	0
58	MG	1A	3179	1/1	0.95	0.13	23,23,23,23	0
58	MG	1A	3461	1/1	0.95	0.15	37,37,37,37	0
58	MG	1A	3598	1/1	0.95	0.11	37,37,37,37	0
58	MG	2A	3639	1/1	0.95	0.15	54,54,54,54	0
58	MG	1A	3993	1/1	0.95	0.05	16,16,16,16	0
58	MG	1A	3464	1/1	0.95	0.08	54,54,54,54	0
58	MG	18	107	1/1	0.95	0.10	58,58,58,58	0
58	MG	2A	3002	1/1	0.95	0.27	49,49,49,49	0
58	MG	1A	3368	1/1	0.95	0.12	53,53,53,53	0
58	MG	1A	3033	1/1	0.95	0.17	30,30,30,30	0
58	MG	2A	3650	1/1	0.95	0.18	60,60,60,60	0
58	MG	2a	1692	1/1	0.95	0.12	82,82,82,82	0
58	MG	1A	4000	1/1	0.95	0.14	39,39,39,39	0
58	MG	1A	4002	1/1	0.95	0.07	24,24,24,24	0
58	MG	1A	3467	1/1	0.95	0.20	47,47,47,47	0
58	MG	2a	1696	1/1	0.95	0.18	60,60,60,60	0
58	MG	2A	3015	1/1	0.95	0.09	48,48,48,48	0
58	MG	1A	4015	1/1	0.95	0.13	58,58,58,58	0
58	MG	2A	3658	1/1	0.95	0.05	48,48,48,48	0
58	MG	2A	3020	1/1	0.95	0.08	56,56,56,56	0
58	MG	1a	1605	1/1	0.95	0.10	47,47,47,47	0
58	MG	2a	1703	1/1	0.95	0.12	59,59,59,59	0
58	MG	1a	1606	1/1	0.95	0.12	65,65,65,65	0
58	MG	2A	3025	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3026	1/1	0.95	0.16	46,46,46,46	0
58	MG	2A	3028	1/1	0.95	0.13	58,58,58,58	0
58	MG	1A	3181	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3030	1/1	0.95	0.12	44,44,44,44	0
58	MG	1A	3304	1/1	0.95	0.23	56,56,56,56	0
58	MG	1A	3373	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3124	1/1	0.95	0.27	32,32,32,32	0
58	MG	1A	3183	1/1	0.95	0.14	67,67,67,67	0
58	MG	1A	4022	1/1	0.95	0.07	49,49,49,49	0
58	MG	1A	3307	1/1	0.95	0.09	57,57,57,57	0
58	MG	1A	3128	1/1	0.95	0.11	33,33,33,33	0
58	MG	2A	3677	1/1	0.95	0.11	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4031	1/1	0.95	0.12	38,38,38,38	0
58	MG	1A	3826	1/1	0.95	0.06	33,33,33,33	0
58	MG	2A	3336	1/1	0.95	0.17	59,59,59,59	0
58	MG	1A	3309	1/1	0.95	0.13	45,45,45,45	0
58	MG	1A	3828	1/1	0.95	0.12	33,33,33,33	0
58	MG	1a	1624	1/1	0.95	0.27	54,54,54,54	0
58	MG	2a	1726	1/1	0.95	0.25	63,63,63,63	0
58	MG	2a	1727	1/1	0.95	0.17	62,62,62,62	0
58	MG	1A	4036	1/1	0.95	0.06	37,37,37,37	0
58	MG	2A	3342	1/1	0.95	0.11	55,55,55,55	0
58	MG	2A	3343	1/1	0.95	0.20	52,52,52,52	0
58	MG	2A	3688	1/1	0.95	0.06	69,69,69,69	0
58	MG	2A	3050	1/1	0.95	0.11	47,47,47,47	0
58	MG	1A	3632	1/1	0.95	0.06	30,30,30,30	0
58	MG	1A	3088	1/1	0.95	0.09	38,38,38,38	0
58	MG	1A	3835	1/1	0.95	0.09	51,51,51,51	0
58	MG	2A	3693	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3636	1/1	0.95	0.06	20,20,20,20	0
58	MG	1A	3090	1/1	0.95	0.08	39,39,39,39	0
58	MG	1a	1634	1/1	0.95	0.28	74,74,74,74	0
58	MG	2A	3697	1/1	0.95	0.27	61,61,61,61	0
58	MG	2A	3698	1/1	0.95	0.11	55,55,55,55	0
58	MG	2A	3699	1/1	0.95	0.12	44,44,44,44	0
58	MG	1A	3484	1/1	0.95	0.22	52,52,52,52	0
58	MG	1A	4048	1/1	0.95	0.11	53,53,53,53	0
58	MG	1A	3389	1/1	0.95	0.28	46,46,46,46	0
58	MG	2a	1746	1/1	0.95	0.17	63,63,63,63	0
58	MG	1A	4050	1/1	0.95	0.06	39,39,39,39	0
58	MG	1a	1640	1/1	0.95	0.17	56,56,56,56	0
58	MG	1A	3091	1/1	0.95	0.10	36,36,36,36	0
58	MG	1A	3315	1/1	0.95	0.06	26,26,26,26	0
58	MG	2A	3068	1/1	0.95	0.18	52,52,52,52	0
58	MG	2A	3070	1/1	0.95	0.05	34,34,34,34	0
58	MG	2A	3711	1/1	0.95	0.10	54,54,54,54	0
58	MG	2A	3712	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3714	1/1	0.95	0.08	40,40,40,40	0
58	MG	2A	3072	1/1	0.95	0.10	46,46,46,46	0
58	MG	2A	3718	1/1	0.95	0.15	58,58,58,58	0
58	MG	1A	3843	1/1	0.95	0.07	40,40,40,40	0
58	MG	1A	3644	1/1	0.95	0.06	61,61,61,61	0
58	MG	2a	1763	1/1	0.95	0.15	55,55,55,55	0
58	MG	2a	1764	1/1	0.95	0.09	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3076	1/1	0.95	0.10	48,48,48,48	0
58	MG	1a	1650	1/1	0.95	0.10	50,50,50,50	0
58	MG	1A	4058	1/1	0.95	0.09	43,43,43,43	0
58	MG	1a	1652	1/1	0.95	0.19	56,56,56,56	0
58	MG	2a	1769	1/1	0.95	0.07	55,55,55,55	0
58	MG	2A	3082	1/1	0.95	0.07	44,44,44,44	0
58	MG	1A	3256	1/1	0.95	0.07	39,39,39,39	0
58	MG	1A	3495	1/1	0.95	0.23	45,45,45,45	0
58	MG	1A	3648	1/1	0.95	0.06	26,26,26,26	0
58	MG	1A	3649	1/1	0.95	0.05	29,29,29,29	0
58	MG	2a	1777	1/1	0.95	0.14	64,64,64,64	0
58	MG	1A	3137	1/1	0.95	0.33	34,34,34,34	0
58	MG	1A	3499	1/1	0.95	0.13	57,57,57,57	0
58	MG	2a	1783	1/1	0.95	0.19	58,58,58,58	0
58	MG	1A	3858	1/1	0.95	0.10	36,36,36,36	0
58	MG	2A	3094	1/1	0.95	0.14	52,52,52,52	0
58	MG	1A	3092	1/1	0.95	0.10	47,47,47,47	0
58	MG	1A	3006	1/1	0.95	0.11	40,40,40,40	0
58	MG	2A	3099	1/1	0.95	0.11	55,55,55,55	0
58	MG	1A	3861	1/1	0.95	0.06	45,45,45,45	0
58	MG	2A	3101	1/1	0.95	0.23	59,59,59,59	0
58	MG	1a	1665	1/1	0.95	0.21	56,56,56,56	0
58	MG	1A	3399	1/1	0.95	0.13	40,40,40,40	0
58	MG	2A	3104	1/1	0.95	0.10	34,34,34,34	0
58	MG	1A	3657	1/1	0.95	0.06	31,31,31,31	0
58	MG	2A	3747	1/1	0.95	0.10	53,53,53,53	0
58	MG	1A	3148	1/1	0.95	0.18	43,43,43,43	0
58	MG	1A	3327	1/1	0.95	0.23	48,48,48,48	0
58	MG	2A	3108	1/1	0.95	0.11	62,62,62,62	0
58	MG	1A	3664	1/1	0.95	0.09	46,46,46,46	0
58	MG	2A	3111	1/1	0.95	0.12	51,51,51,51	0
58	MG	1A	3328	1/1	0.95	0.21	52,52,52,52	0
58	MG	2a	1804	1/1	0.95	0.24	53,53,53,53	0
58	MG	1a	1673	1/1	0.95	0.14	48,48,48,48	0
58	MG	2A	3760	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3206	1/1	0.95	0.07	33,33,33,33	0
58	MG	2a	1809	1/1	0.95	0.18	63,63,63,63	0
58	MG	2A	3399	1/1	0.95	0.17	39,39,39,39	0
58	MG	2A	3400	1/1	0.95	0.10	39,39,39,39	0
58	MG	1A	4087	1/1	0.95	0.10	47,47,47,47	0
58	MG	2A	3403	1/1	0.95	0.19	49,49,49,49	0
58	MG	2A	3120	1/1	0.95	0.08	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3123	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3409	1/1	0.95	0.09	37,37,37,37	0
58	MG	1A	3024	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	4090	1/1	0.95	0.13	58,58,58,58	0
58	MG	1a	1678	1/1	0.95	0.08	54,54,54,54	0
58	MG	1A	3671	1/1	0.95	0.09	40,40,40,40	0
58	MG	2a	1823	1/1	0.95	0.18	59,59,59,59	0
58	MG	1A	3100	1/1	0.95	0.17	49,49,49,49	0
58	MG	1A	3333	1/1	0.95	0.06	48,48,48,48	0
58	MG	1A	3873	1/1	0.95	0.19	34,34,34,34	0
58	MG	2a	1827	1/1	0.95	0.14	63,63,63,63	0
58	MG	1A	3520	1/1	0.95	0.09	45,45,45,45	0
58	MG	1B	201	1/1	0.95	0.06	42,42,42,42	0
58	MG	2a	1830	1/1	0.95	0.11	65,65,65,65	0
58	MG	1A	3521	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3421	1/1	0.95	0.17	47,47,47,47	0
58	MG	1A	3334	1/1	0.95	0.11	56,56,56,56	0
58	MG	2A	3793	1/1	0.95	0.07	60,60,60,60	0
58	MG	2A	3135	1/1	0.95	0.10	57,57,57,57	0
58	MG	1A	3152	1/1	0.95	0.23	40,40,40,40	0
58	MG	2A	3797	1/1	0.95	0.13	65,65,65,65	0
58	MG	2A	3798	1/1	0.95	0.06	43,43,43,43	0
58	MG	1A	3336	1/1	0.95	0.06	57,57,57,57	0
58	MG	1A	3691	1/1	0.95	0.08	17,17,17,17	0
58	MG	1A	3527	1/1	0.95	0.11	44,44,44,44	0
58	MG	2l	204	1/1	0.95	0.05	61,61,61,61	0
58	MG	2A	3803	1/1	0.95	0.06	41,41,41,41	0
58	MG	1A	3528	1/1	0.95	0.19	49,49,49,49	0
58	MG	2q	202	1/1	0.95	0.09	65,65,65,65	0
58	MG	1A	3698	1/1	0.95	0.06	28,28,28,28	0
58	MG	1A	3529	1/1	0.95	0.21	38,38,38,38	0
58	MG	1A	3700	1/1	0.95	0.07	28,28,28,28	0
58	MG	1B	221	1/1	0.95	0.10	60,60,60,60	0
58	MG	1A	3701	1/1	0.95	0.04	25,25,25,25	0
58	MG	2A	3155	1/1	0.95	0.16	57,57,57,57	0
58	MG	1A	3055	1/1	0.95	0.14	37,37,37,37	0
58	MG	1A	3422	1/1	0.95	0.10	40,40,40,40	0
58	MG	2A	3440	1/1	0.95	0.07	47,47,47,47	0
58	MG	2x	104	1/1	0.95	0.26	55,55,55,55	0
58	MG	1A	3709	1/1	0.95	0.14	37,37,37,37	0
58	MG	2A	3442	1/1	0.95	0.06	54,54,54,54	0
58	MG	2A	3823	1/1	0.95	0.09	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3710	1/1	0.95	0.08	42,42,42,42	0
58	MG	1A	4095	1/1	0.96	0.16	37,37,37,37	0
58	MG	1A	3579	1/1	0.96	0.07	34,34,34,34	0
58	MG	2A	3562	1/1	0.96	0.11	45,45,45,45	0
58	MG	1A	3381	1/1	0.96	0.17	35,35,35,35	0
58	MG	1a	1644	1/1	0.96	0.18	38,38,38,38	0
58	MG	1A	3904	1/1	0.96	0.11	53,53,53,53	0
58	MG	1A	3320	1/1	0.96	0.16	46,46,46,46	0
58	MG	1A	3742	1/1	0.96	0.05	54,54,54,54	0
58	MG	1A	3067	1/1	0.96	0.13	45,45,45,45	0
58	MG	1A	3469	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	3914	1/1	0.96	0.06	27,27,27,27	0
58	MG	1B	209	1/1	0.96	0.13	48,48,48,48	0
58	MG	1A	3138	1/1	0.96	0.10	41,41,41,41	0
58	MG	2A	3049	1/1	0.96	0.12	33,33,33,33	0
58	MG	1A	3916	1/1	0.96	0.11	49,49,49,49	0
58	MG	1A	3917	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3471	1/1	0.96	0.20	51,51,51,51	0
58	MG	2A	3579	1/1	0.96	0.11	55,55,55,55	0
58	MG	2A	3053	1/1	0.96	0.12	66,66,66,66	0
58	MG	2A	3305	1/1	0.96	0.31	60,60,60,60	0
58	MG	1A	3323	1/1	0.96	0.13	51,51,51,51	0
58	MG	1a	1660	1/1	0.96	0.12	67,67,67,67	0
58	MG	2A	3056	1/1	0.96	0.09	48,48,48,48	0
58	MG	1B	219	1/1	0.96	0.09	38,38,38,38	0
58	MG	2P	203	1/1	0.96	0.08	55,55,55,55	0
58	MG	1A	3210	1/1	0.96	0.11	41,41,41,41	0
58	MG	2A	3059	1/1	0.96	0.15	49,49,49,49	0
58	MG	1A	3754	1/1	0.96	0.09	44,44,44,44	0
58	MG	1A	3264	1/1	0.96	0.21	45,45,45,45	0
58	MG	1a	1666	1/1	0.96	0.23	63,63,63,63	0
58	MG	1A	3476	1/1	0.96	0.11	41,41,41,41	0
58	MG	2A	3064	1/1	0.96	0.10	68,68,68,68	0
58	MG	1A	3759	1/1	0.96	0.08	43,43,43,43	0
58	MG	2V	201	1/1	0.96	0.23	52,52,52,52	0
58	MG	2A	3318	1/1	0.96	0.07	51,51,51,51	0
58	MG	1A	3169	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3044	1/1	0.96	0.05	30,30,30,30	0
58	MG	1A	3215	1/1	0.96	0.15	40,40,40,40	0
58	MG	2A	3069	1/1	0.96	0.06	43,43,43,43	0
58	MG	1A	3395	1/1	0.96	0.25	43,43,43,43	0
58	MG	2A	3071	1/1	0.96	0.13	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	23	102	1/1	0.96	0.07	57,57,57,57	0
58	MG	23	103	1/1	0.96	0.08	59,59,59,59	0
58	MG	1A	3482	1/1	0.96	0.09	46,46,46,46	0
58	MG	1A	3330	1/1	0.96	0.13	43,43,43,43	0
58	MG	2A	3074	1/1	0.96	0.10	49,49,49,49	0
58	MG	27	102	1/1	0.96	0.07	53,53,53,53	0
58	MG	1A	3269	1/1	0.96	0.12	44,44,44,44	0
58	MG	2A	3330	1/1	0.96	0.10	43,43,43,43	0
58	MG	1A	3600	1/1	0.96	0.11	37,37,37,37	0
58	MG	1B	236	1/1	0.96	0.10	44,44,44,44	0
58	MG	1D	302	1/1	0.96	0.18	36,36,36,36	0
58	MG	2a	1604	1/1	0.96	0.10	52,52,52,52	0
58	MG	1D	308	1/1	0.96	0.06	37,37,37,37	0
58	MG	1D	310	1/1	0.96	0.27	27,27,27,27	0
58	MG	1D	311	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3216	1/1	0.96	0.10	40,40,40,40	0
58	MG	2A	3618	1/1	0.96	0.15	51,51,51,51	0
58	MG	2A	3086	1/1	0.96	0.07	47,47,47,47	0
58	MG	2A	3620	1/1	0.96	0.11	51,51,51,51	0
58	MG	2A	3087	1/1	0.96	0.06	44,44,44,44	0
58	MG	2a	1613	1/1	0.96	0.10	46,46,46,46	0
58	MG	1E	301	1/1	0.96	0.28	37,37,37,37	0
58	MG	1A	3602	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3949	1/1	0.96	0.06	49,49,49,49	0
58	MG	1E	306	1/1	0.96	0.14	29,29,29,29	0
58	MG	2A	3628	1/1	0.96	0.18	54,54,54,54	0
58	MG	2a	1620	1/1	0.96	0.07	62,62,62,62	0
58	MG	1A	3603	1/1	0.96	0.08	24,24,24,24	0
58	MG	1A	3217	1/1	0.96	0.13	38,38,38,38	0
58	MG	2A	3095	1/1	0.96	0.13	50,50,50,50	0
58	MG	2A	3096	1/1	0.96	0.07	31,31,31,31	0
58	MG	1A	3176	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3220	1/1	0.96	0.07	45,45,45,45	0
58	MG	1A	3786	1/1	0.96	0.08	43,43,43,43	0
58	MG	2A	3640	1/1	0.96	0.10	32,32,32,32	0
58	MG	1A	3609	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3790	1/1	0.96	0.06	34,34,34,34	0
58	MG	1A	3490	1/1	0.96	0.06	47,47,47,47	0
58	MG	1F	301	1/1	0.96	0.15	40,40,40,40	0
58	MG	1A	3792	1/1	0.96	0.09	58,58,58,58	0
58	MG	1F	307	1/1	0.96	0.15	25,25,25,25	0
58	MG	1A	3493	1/1	0.96	0.18	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3619	1/1	0.96	0.07	30,30,30,30	0
58	MG	2A	3360	1/1	0.96	0.10	46,46,46,46	0
58	MG	1A	3963	1/1	0.96	0.08	47,47,47,47	0
58	MG	2A	3109	1/1	0.96	0.16	50,50,50,50	0
58	MG	2A	3655	1/1	0.96	0.10	58,58,58,58	0
58	MG	2A	3656	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3177	1/1	0.96	0.04	22,22,22,22	0
58	MG	2a	1643	1/1	0.96	0.28	63,63,63,63	0
58	MG	1A	3408	1/1	0.96	0.09	46,46,46,46	0
58	MG	2a	1645	1/1	0.96	0.08	66,66,66,66	0
58	MG	1A	3497	1/1	0.96	0.04	28,28,28,28	0
58	MG	1A	3498	1/1	0.96	0.07	39,39,39,39	0
58	MG	1A	3627	1/1	0.96	0.05	21,21,21,21	0
58	MG	2A	3118	1/1	0.96	0.17	48,48,48,48	0
58	MG	1A	3629	1/1	0.96	0.07	31,31,31,31	0
58	MG	1A	3409	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3121	1/1	0.96	0.07	49,49,49,49	0
58	MG	2A	3122	1/1	0.96	0.09	69,69,69,69	0
58	MG	1A	3026	1/1	0.96	0.19	69,69,69,69	0
58	MG	1N	202	1/1	0.96	0.05	35,35,35,35	0
58	MG	1N	204	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3973	1/1	0.96	0.05	59,59,59,59	0
58	MG	1a	1716	1/1	0.96	0.13	67,67,67,67	0
58	MG	2A	3674	1/1	0.96	0.12	53,53,53,53	0
58	MG	1A	3501	1/1	0.96	0.10	46,46,46,46	0
58	MG	1A	3976	1/1	0.96	0.09	58,58,58,58	0
58	MG	2A	3382	1/1	0.96	0.08	59,59,59,59	0
58	MG	1P	202	1/1	0.96	0.17	28,28,28,28	0
58	MG	1A	3412	1/1	0.96	0.15	44,44,44,44	0
58	MG	1A	3413	1/1	0.96	0.05	50,50,50,50	0
58	MG	1A	3015	1/1	0.96	0.10	49,49,49,49	0
58	MG	2a	1667	1/1	0.96	0.12	44,44,44,44	0
58	MG	1A	3415	1/1	0.96	0.33	44,44,44,44	0
58	MG	2a	1669	1/1	0.96	0.07	56,56,56,56	0
58	MG	1a	1727	1/1	0.96	0.11	33,33,33,33	0
58	MG	1a	1729	1/1	0.96	0.08	51,51,51,51	0
58	MG	1A	3079	1/1	0.96	0.07	57,57,57,57	0
58	MG	2A	3138	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3509	1/1	0.96	0.14	37,37,37,37	0
58	MG	1A	3511	1/1	0.96	0.23	26,26,26,26	0
58	MG	2A	3144	1/1	0.96	0.11	47,47,47,47	0
58	MG	1A	3514	1/1	0.96	0.07	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3988	1/1	0.96	0.07	43,43,43,43	0
58	MG	1A	3515	1/1	0.96	0.06	49,49,49,49	0
58	MG	1A	3340	1/1	0.96	0.18	48,48,48,48	0
58	MG	2A	3150	1/1	0.96	0.09	61,61,61,61	0
58	MG	2A	3402	1/1	0.96	0.18	45,45,45,45	0
58	MG	1A	3994	1/1	0.96	0.09	27,27,27,27	0
58	MG	1A	3341	1/1	0.96	0.18	36,36,36,36	0
58	MG	2A	3405	1/1	0.96	0.13	48,48,48,48	0
58	MG	1A	3996	1/1	0.96	0.06	34,34,34,34	0
58	MG	2A	3408	1/1	0.96	0.22	51,51,51,51	0
58	MG	1A	3150	1/1	0.96	0.21	37,37,37,37	0
58	MG	1A	3231	1/1	0.96	0.05	50,50,50,50	0
58	MG	1a	1745	1/1	0.96	0.12	44,44,44,44	0
58	MG	2A	3160	1/1	0.96	0.08	63,63,63,63	0
58	MG	1a	1746	1/1	0.96	0.14	47,47,47,47	0
58	MG	1A	3999	1/1	0.96	0.06	61,61,61,61	0
58	MG	1A	3834	1/1	0.96	0.09	48,48,48,48	0
58	MG	1V	202	1/1	0.96	0.23	28,28,28,28	0
58	MG	1V	206	1/1	0.96	0.17	43,43,43,43	0
58	MG	2A	3713	1/1	0.96	0.15	59,59,59,59	0
58	MG	1A	3347	1/1	0.96	0.08	34,34,34,34	0
58	MG	2A	3419	1/1	0.96	0.22	45,45,45,45	0
58	MG	1A	4004	1/1	0.96	0.06	35,35,35,35	0
58	MG	1a	1756	1/1	0.96	0.05	47,47,47,47	0
58	MG	1A	4005	1/1	0.96	0.07	25,25,25,25	0
58	MG	1a	1758	1/1	0.96	0.12	63,63,63,63	0
58	MG	1A	3426	1/1	0.96	0.17	57,57,57,57	0
58	MG	1A	4012	1/1	0.96	0.15	68,68,68,68	0
58	MG	1X	101	1/1	0.96	0.34	34,34,34,34	0
58	MG	1X	102	1/1	0.96	0.09	39,39,39,39	0
58	MG	1A	3290	1/1	0.96	0.13	36,36,36,36	0
58	MG	1A	3291	1/1	0.96	0.07	37,37,37,37	0
58	MG	2A	3180	1/1	0.96	0.05	59,59,59,59	0
58	MG	1A	4017	1/1	0.96	0.06	51,51,51,51	0
58	MG	1A	3659	1/1	0.96	0.08	28,28,28,28	0
58	MG	2A	3183	1/1	0.96	0.11	57,57,57,57	0
58	MG	10	101	1/1	0.96	0.08	34,34,34,34	0
58	MG	2A	3186	1/1	0.96	0.14	67,67,67,67	0
58	MG	2A	3436	1/1	0.96	0.12	41,41,41,41	0
58	MG	10	102	1/1	0.96	0.10	44,44,44,44	0
58	MG	10	104	1/1	0.96	0.12	36,36,36,36	0
58	MG	1A	3660	1/1	0.96	0.05	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3232	1/1	0.96	0.15	41,41,41,41	0
58	MG	2A	3443	1/1	0.96	0.12	58,58,58,58	0
58	MG	10	107	1/1	0.96	0.07	39,39,39,39	0
58	MG	2A	3445	1/1	0.96	0.11	52,52,52,52	0
58	MG	1A	3526	1/1	0.96	0.16	35,35,35,35	0
58	MG	1a	1777	1/1	0.96	0.10	49,49,49,49	0
58	MG	1a	1778	1/1	0.96	0.06	46,46,46,46	0
58	MG	2A	3750	1/1	0.96	0.08	54,54,54,54	0
58	MG	1A	3430	1/1	0.96	0.05	42,42,42,42	0
58	MG	2A	3752	1/1	0.96	0.12	57,57,57,57	0
58	MG	1A	3846	1/1	0.96	0.11	44,44,44,44	0
58	MG	11	102	1/1	0.96	0.08	43,43,43,43	0
58	MG	11	103	1/1	0.96	0.06	48,48,48,48	0
58	MG	1A	4029	1/1	0.96	0.07	47,47,47,47	0
58	MG	2A	3202	1/1	0.96	0.14	50,50,50,50	0
58	MG	2A	3759	1/1	0.96	0.14	56,56,56,56	0
58	MG	2A	3203	1/1	0.96	0.12	55,55,55,55	0
58	MG	2A	3458	1/1	0.96	0.07	57,57,57,57	0
58	MG	1A	3431	1/1	0.96	0.10	39,39,39,39	0
58	MG	2A	3764	1/1	0.96	0.09	57,57,57,57	0
58	MG	1A	3351	1/1	0.96	0.11	55,55,55,55	0
58	MG	2A	3767	1/1	0.96	0.12	59,59,59,59	0
58	MG	1A	3530	1/1	0.96	0.12	39,39,39,39	0
58	MG	2A	3769	1/1	0.96	0.07	48,48,48,48	0
58	MG	1A	4033	1/1	0.96	0.07	29,29,29,29	0
58	MG	2A	3771	1/1	0.96	0.05	69,69,69,69	0
58	MG	1A	3049	1/1	0.96	0.05	23,23,23,23	0
58	MG	2a	1753	1/1	0.96	0.07	56,56,56,56	0
58	MG	2A	3209	1/1	0.96	0.08	47,47,47,47	0
58	MG	13	105	1/1	0.96	0.05	31,31,31,31	0
58	MG	1A	3238	1/1	0.96	0.10	36,36,36,36	0
58	MG	2A	3777	1/1	0.96	0.06	48,48,48,48	0
58	MG	15	101	1/1	0.96	0.30	35,35,35,35	0
58	MG	15	102	1/1	0.96	0.14	33,33,33,33	0
58	MG	1A	3534	1/1	0.96	0.09	25,25,25,25	0
58	MG	1A	3857	1/1	0.96	0.11	22,22,22,22	0
58	MG	1A	3127	1/1	0.96	0.15	45,45,45,45	0
58	MG	1A	3153	1/1	0.96	0.07	30,30,30,30	0
58	MG	2A	3784	1/1	0.96	0.11	48,48,48,48	0
58	MG	16	102	1/1	0.96	0.06	54,54,54,54	0
58	MG	2A	3221	1/1	0.96	0.20	60,60,60,60	0
58	MG	2A	3787	1/1	0.96	0.10	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3479	1/1	0.96	0.10	43,43,43,43	0
58	MG	2A	3790	1/1	0.96	0.08	58,58,58,58	0
58	MG	2a	1771	1/1	0.96	0.10	63,63,63,63	0
58	MG	1A	3682	1/1	0.96	0.04	27,27,27,27	0
58	MG	17	104	1/1	0.96	0.06	32,32,32,32	0
58	MG	17	105	1/1	0.96	0.07	28,28,28,28	0
58	MG	1a	1810	1/1	0.96	0.14	56,56,56,56	0
58	MG	17	106	1/1	0.96	0.11	54,54,54,54	0
58	MG	2A	3796	1/1	0.96	0.10	52,52,52,52	0
58	MG	2a	1780	1/1	0.96	0.10	56,56,56,56	0
58	MG	1A	3189	1/1	0.96	0.09	35,35,35,35	0
58	MG	2a	1782	1/1	0.96	0.11	56,56,56,56	0
58	MG	1A	3019	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3799	1/1	0.96	0.07	47,47,47,47	0
58	MG	18	103	1/1	0.96	0.07	35,35,35,35	0
58	MG	2a	1786	1/1	0.96	0.08	54,54,54,54	0
58	MG	1A	3541	1/1	0.96	0.06	40,40,40,40	0
58	MG	1A	3690	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3491	1/1	0.96	0.13	49,49,49,49	0
58	MG	1m	3001	1/1	0.96	0.05	59,59,59,59	0
58	MG	1A	3103	1/1	0.96	0.12	28,28,28,28	0
58	MG	1A	3161	1/1	0.96	0.37	35,35,35,35	0
58	MG	2a	1793	1/1	0.96	0.06	65,65,65,65	0
58	MG	1A	3694	1/1	0.96	0.08	69,69,69,69	0
58	MG	2A	3499	1/1	0.96	0.07	63,63,63,63	0
58	MG	1A	3246	1/1	0.96	0.05	46,46,46,46	0
58	MG	1A	3447	1/1	0.96	0.21	35,35,35,35	0
58	MG	1A	3196	1/1	0.96	0.04	30,30,30,30	0
58	MG	1A	3365	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3197	1/1	0.96	0.21	32,32,32,32	0
58	MG	1A	4063	1/1	0.96	0.05	36,36,36,36	0
58	MG	2A	3506	1/1	0.96	0.10	28,28,28,28	0
58	MG	2A	3821	1/1	0.96	0.08	51,51,51,51	0
58	MG	2A	3822	1/1	0.96	0.10	47,47,47,47	0
58	MG	1A	3703	1/1	0.96	0.06	17,17,17,17	0
58	MG	2A	3824	1/1	0.96	0.07	46,46,46,46	0
58	MG	1x	103	1/1	0.96	0.18	53,53,53,53	0
58	MG	1A	3039	1/1	0.96	0.07	49,49,49,49	0
58	MG	1A	3009	1/1	0.96	0.07	28,28,28,28	0
58	MG	2A	3512	1/1	0.96	0.09	64,64,64,64	0
58	MG	1a	1612	1/1	0.96	0.10	26,26,26,26	0
58	MG	2a	1813	1/1	0.96	0.05	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3832	1/1	0.96	0.15	59,59,59,59	0
58	MG	1A	4070	1/1	0.96	0.06	32,32,32,32	0
58	MG	1x	108	1/1	0.96	0.06	26,26,26,26	0
58	MG	1A	3311	1/1	0.96	0.21	44,44,44,44	0
58	MG	1A	3879	1/1	0.96	0.06	25,25,25,25	0
58	MG	2A	3838	1/1	0.96	0.07	40,40,40,40	0
58	MG	2a	1820	1/1	0.96	0.14	61,61,61,61	0
58	MG	1A	3562	1/1	0.96	0.08	57,57,57,57	0
58	MG	1a	1617	1/1	0.96	0.05	52,52,52,52	0
58	MG	2A	3842	1/1	0.96	0.07	46,46,46,46	0
58	MG	1A	3371	1/1	0.96	0.29	47,47,47,47	0
58	MG	2A	3844	1/1	0.96	0.09	45,45,45,45	0
58	MG	1A	3255	1/1	0.96	0.09	22,22,22,22	0
58	MG	2A	3523	1/1	0.96	0.05	47,47,47,47	0
58	MG	2A	3259	1/1	0.96	0.09	53,53,53,53	0
58	MG	2A	3006	1/1	0.96	0.23	55,55,55,55	0
58	MG	1A	3884	1/1	0.96	0.12	30,30,30,30	0
58	MG	1A	3203	1/1	0.96	0.14	21,21,21,21	0
58	MG	2A	3009	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3010	1/1	0.96	0.09	61,61,61,61	0
58	MG	1A	3314	1/1	0.96	0.17	53,53,53,53	0
58	MG	1A	3136	1/1	0.96	0.14	22,22,22,22	0
58	MG	2A	3858	1/1	0.96	0.08	53,53,53,53	0
58	MG	1A	3717	1/1	0.96	0.07	49,49,49,49	0
58	MG	2A	3533	1/1	0.96	0.20	60,60,60,60	0
58	MG	1A	3719	1/1	0.96	0.06	47,47,47,47	0
58	MG	2A	3536	1/1	0.96	0.09	55,55,55,55	0
58	MG	2A	3863	1/1	0.96	0.08	58,58,58,58	0
58	MG	2A	3017	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3018	1/1	0.96	0.17	49,49,49,49	0
58	MG	1A	4085	1/1	0.96	0.11	39,39,39,39	0
58	MG	1A	3572	1/1	0.96	0.05	35,35,35,35	0
58	MG	1A	3316	1/1	0.96	0.21	31,31,31,31	0
58	MG	2A	3278	1/1	0.96	0.08	60,60,60,60	0
58	MG	2A	3543	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3544	1/1	0.96	0.06	37,37,37,37	0
58	MG	1A	4088	1/1	0.96	0.06	47,47,47,47	0
58	MG	1A	3725	1/1	0.96	0.06	33,33,33,33	0
58	MG	1A	3574	1/1	0.96	0.11	40,40,40,40	0
58	MG	1A	3575	1/1	0.96	0.12	45,45,45,45	0
58	MG	1A	3729	1/1	0.96	0.08	63,63,63,63	0
58	MG	2A	3031	1/1	0.96	0.08	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3165	1/1	0.96	0.16	35,35,35,35	0
58	MG	2A	3556	1/1	0.96	0.06	41,41,41,41	0
58	MG	2A	3557	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3558	1/1	0.96	0.08	62,62,62,62	0
59	K	2A	3448	1/1	0.96	0.07	65,65,65,65	0
60	ZN	14	102	1/1	0.96	0.10	112,112,112,112	0
58	MG	1A	3398	1/1	0.97	0.09	31,31,31,31	0
58	MG	1A	3071	1/1	0.97	0.15	28,28,28,28	0
58	MG	1A	3400	1/1	0.97	0.06	36,36,36,36	0
58	MG	1B	207	1/1	0.97	0.15	46,46,46,46	0
58	MG	2A	3326	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3204	1/1	0.97	0.10	27,27,27,27	0
58	MG	1A	3263	1/1	0.97	0.23	46,46,46,46	0
58	MG	2Q	202	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3730	1/1	0.97	0.07	47,47,47,47	0
58	MG	1A	3005	1/1	0.97	0.05	26,26,26,26	0
58	MG	1A	3901	1/1	0.97	0.10	33,33,33,33	0
58	MG	2A	3611	1/1	0.97	0.08	36,36,36,36	0
58	MG	1a	1662	1/1	0.97	0.05	47,47,47,47	0
58	MG	1A	3107	1/1	0.97	0.21	31,31,31,31	0
58	MG	2A	3614	1/1	0.97	0.08	45,45,45,45	0
58	MG	1B	214	1/1	0.97	0.19	51,51,51,51	0
58	MG	2V	202	1/1	0.97	0.05	51,51,51,51	0
58	MG	1A	3406	1/1	0.97	0.09	42,42,42,42	0
58	MG	2X	101	1/1	0.97	0.07	64,64,64,64	0
58	MG	1B	218	1/1	0.97	0.05	40,40,40,40	0
58	MG	1A	3034	1/1	0.97	0.06	45,45,45,45	0
58	MG	20	101	1/1	0.97	0.16	64,64,64,64	0
58	MG	1B	220	1/1	0.97	0.08	31,31,31,31	0
58	MG	2A	3339	1/1	0.97	0.05	51,51,51,51	0
58	MG	2A	3077	1/1	0.97	0.09	37,37,37,37	0
58	MG	2A	3622	1/1	0.97	0.10	51,51,51,51	0
58	MG	1A	3738	1/1	0.97	0.09	58,58,58,58	0
58	MG	2A	3079	1/1	0.97	0.07	24,24,24,24	0
58	MG	1A	3739	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3626	1/1	0.97	0.07	41,41,41,41	0
58	MG	25	103	1/1	0.97	0.08	47,47,47,47	0
58	MG	1A	3908	1/1	0.97	0.10	33,33,33,33	0
58	MG	27	101	1/1	0.97	0.16	51,51,51,51	0
58	MG	1A	3741	1/1	0.97	0.07	47,47,47,47	0
58	MG	2A	3629	1/1	0.97	0.07	37,37,37,37	0
58	MG	1A	3910	1/1	0.97	0.14	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3084	1/1	0.97	0.06	43,43,43,43	0
58	MG	2A	3633	1/1	0.97	0.08	52,52,52,52	0
58	MG	1A	3912	1/1	0.97	0.03	26,26,26,26	0
58	MG	1B	227	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3154	1/1	0.97	0.10	49,49,49,49	0
58	MG	2A	3088	1/1	0.97	0.06	50,50,50,50	0
58	MG	1A	3268	1/1	0.97	0.23	40,40,40,40	0
58	MG	1A	3745	1/1	0.97	0.06	42,42,42,42	0
58	MG	1A	3491	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3492	1/1	0.97	0.10	36,36,36,36	0
58	MG	1A	3209	1/1	0.97	0.06	36,36,36,36	0
58	MG	1a	1682	1/1	0.97	0.05	48,48,48,48	0
58	MG	2A	3645	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3494	1/1	0.97	0.09	45,45,45,45	0
58	MG	2a	1615	1/1	0.97	0.07	67,67,67,67	0
58	MG	1A	3112	1/1	0.97	0.10	32,32,32,32	0
58	MG	1a	1685	1/1	0.97	0.12	55,55,55,55	0
58	MG	1A	3753	1/1	0.97	0.04	38,38,38,38	0
58	MG	1D	303	1/1	0.97	0.14	40,40,40,40	0
58	MG	1A	3113	1/1	0.97	0.08	33,33,33,33	0
58	MG	1D	309	1/1	0.97	0.04	32,32,32,32	0
58	MG	1A	3755	1/1	0.97	0.07	32,32,32,32	0
58	MG	1A	3756	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3925	1/1	0.97	0.07	49,49,49,49	0
58	MG	1D	313	1/1	0.97	0.10	31,31,31,31	0
58	MG	1A	3010	1/1	0.97	0.07	34,34,34,34	0
58	MG	1A	3273	1/1	0.97	0.05	44,44,44,44	0
58	MG	1A	3928	1/1	0.97	0.04	17,17,17,17	0
58	MG	1A	3932	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3933	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3018	1/1	0.97	0.14	39,39,39,39	0
58	MG	1A	3417	1/1	0.97	0.10	37,37,37,37	0
58	MG	1A	3607	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3342	1/1	0.97	0.22	37,37,37,37	0
58	MG	2A	3116	1/1	0.97	0.25	56,56,56,56	0
58	MG	1A	3276	1/1	0.97	0.09	29,29,29,29	0
58	MG	1A	3765	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3766	1/1	0.97	0.07	39,39,39,39	0
58	MG	1A	3503	1/1	0.97	0.05	36,36,36,36	0
58	MG	1F	302	1/1	0.97	0.18	32,32,32,32	0
58	MG	1A	3947	1/1	0.97	0.07	57,57,57,57	0
58	MG	1a	1709	1/1	0.97	0.13	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1F	304	1/1	0.97	0.07	51,51,51,51	0
58	MG	1A	3948	1/1	0.97	0.09	47,47,47,47	0
58	MG	1a	1712	1/1	0.97	0.20	55,55,55,55	0
58	MG	1F	308	1/1	0.97	0.17	29,29,29,29	0
58	MG	2A	3682	1/1	0.97	0.13	35,35,35,35	0
58	MG	1A	3616	1/1	0.97	0.04	36,36,36,36	0
58	MG	1A	3345	1/1	0.97	0.16	33,33,33,33	0
58	MG	1A	3770	1/1	0.97	0.13	25,25,25,25	0
58	MG	1F	312	1/1	0.97	0.05	48,48,48,48	0
58	MG	1A	3952	1/1	0.97	0.07	55,55,55,55	0
58	MG	1a	1719	1/1	0.97	0.10	52,52,52,52	0
58	MG	1A	3771	1/1	0.97	0.05	23,23,23,23	0
58	MG	1G	202	1/1	0.97	0.20	50,50,50,50	0
58	MG	1a	1722	1/1	0.97	0.08	45,45,45,45	0
58	MG	1a	1723	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	3421	1/1	0.97	0.13	42,42,42,42	0
58	MG	1A	3773	1/1	0.97	0.04	45,45,45,45	0
58	MG	2A	3143	1/1	0.97	0.17	41,41,41,41	0
58	MG	1A	3277	1/1	0.97	0.32	44,44,44,44	0
58	MG	1A	3423	1/1	0.97	0.06	42,42,42,42	0
58	MG	1A	3424	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3779	1/1	0.97	0.06	21,21,21,21	0
58	MG	1A	3780	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3510	1/1	0.97	0.29	31,31,31,31	0
58	MG	1A	3782	1/1	0.97	0.06	41,41,41,41	0
58	MG	1A	3041	1/1	0.97	0.16	28,28,28,28	0
58	MG	1a	1735	1/1	0.97	0.10	45,45,45,45	0
58	MG	1O	203	1/1	0.97	0.07	52,52,52,52	0
58	MG	2a	1671	1/1	0.97	0.11	53,53,53,53	0
58	MG	1A	3784	1/1	0.97	0.05	17,17,17,17	0
58	MG	2A	3158	1/1	0.97	0.11	47,47,47,47	0
58	MG	1P	201	1/1	0.97	0.14	23,23,23,23	0
58	MG	1A	3628	1/1	0.97	0.07	53,53,53,53	0
58	MG	2a	1676	1/1	0.97	0.09	51,51,51,51	0
58	MG	1A	3513	1/1	0.97	0.10	24,24,24,24	0
58	MG	1P	205	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3787	1/1	0.97	0.03	23,23,23,23	0
58	MG	2A	3715	1/1	0.97	0.10	50,50,50,50	0
58	MG	1Q	201	1/1	0.97	0.23	32,32,32,32	0
58	MG	1A	3082	1/1	0.97	0.21	32,32,32,32	0
58	MG	1A	3083	1/1	0.97	0.12	35,35,35,35	0
58	MG	1A	3633	1/1	0.97	0.05	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1750	1/1	0.97	0.08	59,59,59,59	0
58	MG	1a	1751	1/1	0.97	0.05	54,54,54,54	0
58	MG	1A	3166	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3122	1/1	0.97	0.12	29,29,29,29	0
58	MG	1A	3637	1/1	0.97	0.07	54,54,54,54	0
58	MG	1A	3287	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3797	1/1	0.97	0.07	16,16,16,16	0
58	MG	1A	3979	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3123	1/1	0.97	0.12	35,35,35,35	0
58	MG	1T	201	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3224	1/1	0.97	0.08	48,48,48,48	0
58	MG	1A	3084	1/1	0.97	0.14	32,32,32,32	0
58	MG	2a	1697	1/1	0.97	0.11	40,40,40,40	0
58	MG	1A	3802	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3184	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3642	1/1	0.97	0.04	15,15,15,15	0
58	MG	1A	3804	1/1	0.97	0.05	23,23,23,23	0
58	MG	1a	1766	1/1	0.97	0.08	66,66,66,66	0
58	MG	2A	3189	1/1	0.97	0.06	63,63,63,63	0
58	MG	1A	3805	1/1	0.97	0.07	22,22,22,22	0
58	MG	1V	201	1/1	0.97	0.17	23,23,23,23	0
58	MG	1A	3226	1/1	0.97	0.11	32,32,32,32	0
58	MG	1A	3125	1/1	0.97	0.15	35,35,35,35	0
58	MG	1A	3438	1/1	0.97	0.14	41,41,41,41	0
58	MG	1A	3229	1/1	0.97	0.08	36,36,36,36	0
58	MG	2A	3749	1/1	0.97	0.05	45,45,45,45	0
58	MG	2a	1712	1/1	0.97	0.14	57,57,57,57	0
58	MG	1A	3171	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3175	1/1	0.97	0.09	29,29,29,29	0
58	MG	1W	203	1/1	0.97	0.09	38,38,38,38	0
58	MG	1W	206	1/1	0.97	0.12	26,26,26,26	0
58	MG	2A	3754	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	3126	1/1	0.97	0.20	32,32,32,32	0
58	MG	2A	3463	1/1	0.97	0.11	62,62,62,62	0
58	MG	1A	3443	1/1	0.97	0.11	28,28,28,28	0
58	MG	1A	3816	1/1	0.97	0.05	24,24,24,24	0
58	MG	1a	1781	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3652	1/1	0.97	0.08	34,34,34,34	0
58	MG	1A	4003	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3818	1/1	0.97	0.30	29,29,29,29	0
58	MG	1a	1786	1/1	0.97	0.10	52,52,52,52	0
58	MG	1A	3444	1/1	0.97	0.08	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3766	1/1	0.97	0.07	40,40,40,40	0
58	MG	1A	4008	1/1	0.97	0.05	37,37,37,37	0
58	MG	2A	3210	1/1	0.97	0.05	48,48,48,48	0
58	MG	2A	3474	1/1	0.97	0.04	45,45,45,45	0
58	MG	2A	3211	1/1	0.97	0.06	48,48,48,48	0
58	MG	1A	4009	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	4010	1/1	0.97	0.04	37,37,37,37	0
58	MG	1A	3822	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3364	1/1	0.97	0.18	32,32,32,32	0
58	MG	1A	4013	1/1	0.97	0.07	66,66,66,66	0
58	MG	1A	3533	1/1	0.97	0.26	39,39,39,39	0
58	MG	1A	3233	1/1	0.97	0.07	62,62,62,62	0
58	MG	1A	3658	1/1	0.97	0.12	55,55,55,55	0
58	MG	1a	1800	1/1	0.97	0.06	60,60,60,60	0
58	MG	1a	1801	1/1	0.97	0.21	48,48,48,48	0
58	MG	1A	3535	1/1	0.97	0.20	41,41,41,41	0
58	MG	1A	3366	1/1	0.97	0.24	37,37,37,37	0
58	MG	1A	3830	1/1	0.97	0.09	29,29,29,29	0
58	MG	1A	3831	1/1	0.97	0.08	48,48,48,48	0
58	MG	2A	3226	1/1	0.97	0.08	42,42,42,42	0
58	MG	2a	1748	1/1	0.97	0.04	58,58,58,58	0
58	MG	12	101	1/1	0.97	0.08	42,42,42,42	0
58	MG	2A	3788	1/1	0.97	0.06	62,62,62,62	0
58	MG	1A	3832	1/1	0.97	0.06	45,45,45,45	0
58	MG	2A	3497	1/1	0.97	0.09	52,52,52,52	0
58	MG	1A	4023	1/1	0.97	0.07	62,62,62,62	0
58	MG	1A	4024	1/1	0.97	0.09	30,30,30,30	0
58	MG	1A	3234	1/1	0.97	0.26	37,37,37,37	0
58	MG	1A	4028	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3233	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3662	1/1	0.97	0.04	22,22,22,22	0
58	MG	1A	3043	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3237	1/1	0.97	0.19	28,28,28,28	0
58	MG	1A	3058	1/1	0.97	0.10	47,47,47,47	0
58	MG	15	104	1/1	0.97	0.27	26,26,26,26	0
58	MG	1A	3014	1/1	0.97	0.11	37,37,37,37	0
58	MG	1A	3668	1/1	0.97	0.05	19,19,19,19	0
58	MG	1A	3455	1/1	0.97	0.19	38,38,38,38	0
58	MG	1A	3130	1/1	0.97	0.13	43,43,43,43	0
58	MG	2A	3805	1/1	0.97	0.10	42,42,42,42	0
58	MG	1A	4038	1/1	0.97	0.08	26,26,26,26	0
58	MG	1A	3842	1/1	0.97	0.11	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3008	1/1	0.97	0.04	30,30,30,30	0
58	MG	1A	3675	1/1	0.97	0.05	17,17,17,17	0
58	MG	2A	3517	1/1	0.97	0.06	53,53,53,53	0
58	MG	2a	1774	1/1	0.97	0.07	64,64,64,64	0
58	MG	1A	3845	1/1	0.97	0.09	47,47,47,47	0
58	MG	1A	4044	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3132	1/1	0.97	0.21	31,31,31,31	0
58	MG	2A	3816	1/1	0.97	0.05	46,46,46,46	0
58	MG	2a	1779	1/1	0.97	0.05	46,46,46,46	0
58	MG	18	104	1/1	0.97	0.14	33,33,33,33	0
58	MG	2A	3252	1/1	0.97	0.12	61,61,61,61	0
58	MG	1A	3547	1/1	0.97	0.07	35,35,35,35	0
58	MG	1A	3548	1/1	0.97	0.05	44,44,44,44	0
58	MG	1A	3849	1/1	0.97	0.13	41,41,41,41	0
58	MG	1A	3851	1/1	0.97	0.17	31,31,31,31	0
58	MG	1A	3852	1/1	0.97	0.06	16,16,16,16	0
58	MG	1A	3681	1/1	0.97	0.10	44,44,44,44	0
58	MG	1A	3550	1/1	0.97	0.18	33,33,33,33	0
58	MG	1A	3134	1/1	0.97	0.08	27,27,27,27	0
58	MG	1A	3046	1/1	0.97	0.13	28,28,28,28	0
58	MG	2A	3003	1/1	0.97	0.28	55,55,55,55	0
58	MG	2A	3004	1/1	0.97	0.26	44,44,44,44	0
58	MG	2A	3265	1/1	0.97	0.14	47,47,47,47	0
58	MG	2A	3535	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	4059	1/1	0.97	0.09	15,15,15,15	0
58	MG	2A	3836	1/1	0.97	0.09	44,44,44,44	0
58	MG	2A	3267	1/1	0.97	0.07	50,50,50,50	0
58	MG	1A	3686	1/1	0.97	0.05	29,29,29,29	0
58	MG	2A	3839	1/1	0.97	0.07	42,42,42,42	0
58	MG	1A	3553	1/1	0.97	0.14	34,34,34,34	0
58	MG	1A	3689	1/1	0.97	0.04	22,22,22,22	0
58	MG	1a	1609	1/1	0.97	0.07	54,54,54,54	0
58	MG	1a	1610	1/1	0.97	0.19	48,48,48,48	0
58	MG	2A	3011	1/1	0.97	0.11	53,53,53,53	0
58	MG	2A	3274	1/1	0.97	0.08	62,62,62,62	0
58	MG	2A	3545	1/1	0.97	0.04	44,44,44,44	0
58	MG	2a	1807	1/1	0.97	0.20	51,51,51,51	0
58	MG	2A	3012	1/1	0.97	0.04	37,37,37,37	0
58	MG	1A	4066	1/1	0.97	0.12	47,47,47,47	0
58	MG	1A	3188	1/1	0.97	0.11	39,39,39,39	0
58	MG	1A	3463	1/1	0.97	0.12	40,40,40,40	0
58	MG	2A	3279	1/1	0.97	0.09	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3247	1/1	0.97	0.19	36,36,36,36	0
58	MG	1A	3693	1/1	0.97	0.04	26,26,26,26	0
58	MG	2A	3555	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3559	1/1	0.97	0.14	26,26,26,26	0
58	MG	2A	3019	1/1	0.97	0.08	38,38,38,38	0
58	MG	1A	4072	1/1	0.97	0.08	38,38,38,38	0
58	MG	2A	3559	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3560	1/1	0.97	0.06	22,22,22,22	0
58	MG	1a	1619	1/1	0.97	0.05	57,57,57,57	0
58	MG	1A	3063	1/1	0.97	0.09	35,35,35,35	0
58	MG	1A	3384	1/1	0.97	0.26	43,43,43,43	0
58	MG	2A	3027	1/1	0.97	0.05	47,47,47,47	0
58	MG	1A	4077	1/1	0.97	0.13	44,44,44,44	0
58	MG	1A	3318	1/1	0.97	0.09	31,31,31,31	0
58	MG	1A	3566	1/1	0.97	0.26	36,36,36,36	0
58	MG	1a	1625	1/1	0.97	0.12	58,58,58,58	0
58	MG	2A	3569	1/1	0.97	0.10	43,43,43,43	0
58	MG	2A	3032	1/1	0.97	0.05	51,51,51,51	0
58	MG	1A	3028	1/1	0.97	0.12	34,34,34,34	0
58	MG	1A	3193	1/1	0.97	0.11	25,25,25,25	0
58	MG	1A	3706	1/1	0.97	0.04	25,25,25,25	0
58	MG	2f	201	1/1	0.97	0.09	49,49,49,49	0
58	MG	1a	1629	1/1	0.97	0.18	43,43,43,43	0
58	MG	2A	3575	1/1	0.97	0.04	27,27,27,27	0
58	MG	1A	3065	1/1	0.97	0.08	29,29,29,29	0
58	MG	2A	3040	1/1	0.97	0.17	51,51,51,51	0
58	MG	1A	3099	1/1	0.97	0.04	38,38,38,38	0
58	MG	1A	3145	1/1	0.97	0.10	27,27,27,27	0
58	MG	1A	3031	1/1	0.97	0.11	23,23,23,23	0
58	MG	1A	3474	1/1	0.97	0.10	41,41,41,41	0
58	MG	1A	3880	1/1	0.97	0.05	55,55,55,55	0
58	MG	2D	301	1/1	0.97	0.06	39,39,39,39	0
58	MG	2D	302	1/1	0.97	0.22	43,43,43,43	0
58	MG	1A	3576	1/1	0.97	0.09	36,36,36,36	0
58	MG	2r	101	1/1	0.97	0.12	50,50,50,50	0
58	MG	2D	304	1/1	0.97	0.07	34,34,34,34	0
58	MG	1a	1638	1/1	0.97	0.15	57,57,57,57	0
58	MG	1A	3325	1/1	0.97	0.14	30,30,30,30	0
58	MG	1A	4091	1/1	0.97	0.06	47,47,47,47	0
58	MG	1a	1641	1/1	0.97	0.10	70,70,70,70	0
58	MG	2A	3590	1/1	0.97	0.06	47,47,47,47	0
58	MG	1A	3578	1/1	0.97	0.12	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3069	1/1	0.97	0.07	16,16,16,16	0
58	MG	1A	3886	1/1	0.97	0.07	48,48,48,48	0
58	MG	1a	1645	1/1	0.97	0.12	44,44,44,44	0
58	MG	1A	3718	1/1	0.97	0.06	36,36,36,36	0
58	MG	1A	3102	1/1	0.97	0.13	42,42,42,42	0
58	MG	1a	1649	1/1	0.97	0.09	43,43,43,43	0
58	MG	1A	3478	1/1	0.97	0.05	60,60,60,60	0
58	MG	1A	3722	1/1	0.97	0.06	32,32,32,32	0
58	MG	1A	3723	1/1	0.97	0.05	22,22,22,22	0
60	ZN	24	501	1/1	0.97	0.12	124,124,124,124	0
61	SF4	2d	303	8/8	0.97	0.05	77,84,90,103	0
58	MG	1A	3695	1/1	0.98	0.07	23,23,23,23	0
58	MG	1A	3587	1/1	0.98	0.21	29,29,29,29	0
58	MG	2A	3112	1/1	0.98	0.10	45,45,45,45	0
58	MG	1B	202	1/1	0.98	0.13	43,43,43,43	0
58	MG	1a	1764	1/1	0.98	0.05	57,57,57,57	0
58	MG	1A	3174	1/1	0.98	0.10	24,24,24,24	0
58	MG	17	103	1/1	0.98	0.13	25,25,25,25	0
58	MG	2A	3117	1/1	0.98	0.26	62,62,62,62	0
58	MG	1A	3819	1/1	0.98	0.03	21,21,21,21	0
58	MG	1A	3589	1/1	0.98	0.09	40,40,40,40	0
58	MG	1A	3821	1/1	0.98	0.03	21,21,21,21	0
58	MG	1A	3105	1/1	0.98	0.07	28,28,28,28	0
58	MG	1A	3106	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3702	1/1	0.98	0.06	28,28,28,28	0
58	MG	1A	3825	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3020	1/1	0.98	0.04	21,21,21,21	0
58	MG	1A	3704	1/1	0.98	0.04	15,15,15,15	0
58	MG	2A	3761	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3108	1/1	0.98	0.15	34,34,34,34	0
58	MG	1A	3504	1/1	0.98	0.07	32,32,32,32	0
58	MG	1A	3110	1/1	0.98	0.04	35,35,35,35	0
58	MG	1B	217	1/1	0.98	0.09	45,45,45,45	0
58	MG	1A	3961	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3708	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3293	1/1	0.98	0.07	54,54,54,54	0
58	MG	1a	1784	1/1	0.98	0.06	41,41,41,41	0
58	MG	2A	3546	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3139	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3772	1/1	0.98	0.06	56,56,56,56	0
58	MG	2A	3548	1/1	0.98	0.11	36,36,36,36	0
58	MG	1A	3359	1/1	0.98	0.07	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3966	1/1	0.98	0.06	41,41,41,41	0
58	MG	1a	1789	1/1	0.98	0.04	52,52,52,52	0
58	MG	2A	3139	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3140	1/1	0.98	0.06	29,29,29,29	0
58	MG	2A	3141	1/1	0.98	0.12	40,40,40,40	0
58	MG	1A	3235	1/1	0.98	0.15	23,23,23,23	0
58	MG	1A	3362	1/1	0.98	0.11	46,46,46,46	0
58	MG	1A	3512	1/1	0.98	0.23	25,25,25,25	0
58	MG	1A	3716	1/1	0.98	0.03	12,12,12,12	0
58	MG	1A	3141	1/1	0.98	0.09	17,17,17,17	0
58	MG	1A	3604	1/1	0.98	0.09	43,43,43,43	0
58	MG	1A	3007	1/1	0.98	0.10	35,35,35,35	0
58	MG	1B	232	1/1	0.98	0.04	46,46,46,46	0
58	MG	1a	1799	1/1	0.98	0.09	51,51,51,51	0
58	MG	1A	3436	1/1	0.98	0.08	42,42,42,42	0
58	MG	2A	3154	1/1	0.98	0.11	41,41,41,41	0
58	MG	1A	3437	1/1	0.98	0.20	33,33,33,33	0
58	MG	1A	3143	1/1	0.98	0.09	54,54,54,54	0
58	MG	1A	3303	1/1	0.98	0.04	29,29,29,29	0
58	MG	1B	237	1/1	0.98	0.03	27,27,27,27	0
58	MG	1D	301	1/1	0.98	0.19	42,42,42,42	0
58	MG	1a	1806	1/1	0.98	0.10	56,56,56,56	0
58	MG	1A	3239	1/1	0.98	0.20	33,33,33,33	0
58	MG	2A	3162	1/1	0.98	0.15	39,39,39,39	0
58	MG	1A	3726	1/1	0.98	0.13	56,56,56,56	0
58	MG	1D	305	1/1	0.98	0.08	33,33,33,33	0
58	MG	1D	306	1/1	0.98	0.14	35,35,35,35	0
58	MG	1A	3611	1/1	0.98	0.09	47,47,47,47	0
58	MG	1A	3983	1/1	0.98	0.04	18,18,18,18	0
58	MG	1e	201	1/1	0.98	0.03	49,49,49,49	0
58	MG	2A	3169	1/1	0.98	0.08	54,54,54,54	0
58	MG	2A	3581	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3984	1/1	0.98	0.06	28,28,28,28	0
58	MG	2A	3369	1/1	0.98	0.15	40,40,40,40	0
58	MG	1A	3850	1/1	0.98	0.07	49,49,49,49	0
58	MG	1k	201	1/1	0.98	0.13	45,45,45,45	0
58	MG	1A	3612	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	3613	1/1	0.98	0.08	36,36,36,36	0
58	MG	1A	3615	1/1	0.98	0.06	19,19,19,19	0
58	MG	2a	1705	1/1	0.98	0.10	60,60,60,60	0
58	MG	1A	3989	1/1	0.98	0.04	40,40,40,40	0
58	MG	2A	3177	1/1	0.98	0.08	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3818	1/1	0.98	0.10	69,69,69,69	0
58	MG	1E	303	1/1	0.98	0.15	44,44,44,44	0
58	MG	1A	3991	1/1	0.98	0.05	33,33,33,33	0
58	MG	1E	305	1/1	0.98	0.07	28,28,28,28	0
58	MG	1A	3731	1/1	0.98	0.04	37,37,37,37	0
58	MG	1A	3732	1/1	0.98	0.03	27,27,27,27	0
58	MG	1A	3733	1/1	0.98	0.05	20,20,20,20	0
58	MG	1E	309	1/1	0.98	0.09	49,49,49,49	0
58	MG	1A	3144	1/1	0.98	0.10	35,35,35,35	0
58	MG	1A	3054	1/1	0.98	0.09	29,29,29,29	0
58	MG	2A	3829	1/1	0.98	0.04	66,66,66,66	0
58	MG	1A	3522	1/1	0.98	0.04	35,35,35,35	0
58	MG	2A	3188	1/1	0.98	0.07	46,46,46,46	0
58	MG	1A	3190	1/1	0.98	0.21	31,31,31,31	0
58	MG	1A	3146	1/1	0.98	0.12	26,26,26,26	0
58	MG	1A	3622	1/1	0.98	0.08	24,24,24,24	0
58	MG	1A	3740	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3192	1/1	0.98	0.21	29,29,29,29	0
58	MG	1A	3086	1/1	0.98	0.18	25,25,25,25	0
58	MG	1A	3374	1/1	0.98	0.09	36,36,36,36	0
58	MG	1F	305	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	4006	1/1	0.98	0.03	38,38,38,38	0
58	MG	2A	3397	1/1	0.98	0.15	42,42,42,42	0
58	MG	2A	3398	1/1	0.98	0.11	48,48,48,48	0
58	MG	1A	4007	1/1	0.98	0.04	44,44,44,44	0
58	MG	1A	3068	1/1	0.98	0.10	31,31,31,31	0
58	MG	1A	3035	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3377	1/1	0.98	0.07	41,41,41,41	0
58	MG	1A	3631	1/1	0.98	0.04	16,16,16,16	0
58	MG	1A	3378	1/1	0.98	0.13	24,24,24,24	0
58	MG	1A	3452	1/1	0.98	0.05	45,45,45,45	0
58	MG	2A	3850	1/1	0.98	0.09	53,53,53,53	0
58	MG	2A	3406	1/1	0.98	0.19	38,38,38,38	0
58	MG	1A	4014	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	3089	1/1	0.98	0.07	32,32,32,32	0
58	MG	2A	3855	1/1	0.98	0.04	64,64,64,64	0
58	MG	1A	3874	1/1	0.98	0.23	29,29,29,29	0
58	MG	1A	3454	1/1	0.98	0.17	50,50,50,50	0
58	MG	1A	3876	1/1	0.98	0.12	29,29,29,29	0
58	MG	1A	3249	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3250	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3382	1/1	0.98	0.04	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3630	1/1	0.98	0.07	46,46,46,46	0
58	MG	1N	203	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3538	1/1	0.98	0.14	37,37,37,37	0
58	MG	1N	205	1/1	0.98	0.04	36,36,36,36	0
58	MG	1A	3117	1/1	0.98	0.11	23,23,23,23	0
58	MG	2a	1755	1/1	0.98	0.04	64,64,64,64	0
58	MG	2A	3021	1/1	0.98	0.06	30,30,30,30	0
58	MG	2A	3022	1/1	0.98	0.09	42,42,42,42	0
58	MG	2A	3637	1/1	0.98	0.06	36,36,36,36	0
58	MG	1A	3317	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3385	1/1	0.98	0.30	25,25,25,25	0
58	MG	1A	3118	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3885	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3387	1/1	0.98	0.16	21,21,21,21	0
58	MG	1P	203	1/1	0.98	0.17	32,32,32,32	0
58	MG	1A	3199	1/1	0.98	0.10	23,23,23,23	0
58	MG	1A	3647	1/1	0.98	0.06	27,27,27,27	0
58	MG	1A	3201	1/1	0.98	0.12	31,31,31,31	0
58	MG	2A	3647	1/1	0.98	0.15	55,55,55,55	0
58	MG	2A	3648	1/1	0.98	0.12	63,63,63,63	0
58	MG	1A	3037	1/1	0.98	0.09	34,34,34,34	0
58	MG	1A	3257	1/1	0.98	0.11	38,38,38,38	0
58	MG	2A	3034	1/1	0.98	0.06	49,49,49,49	0
58	MG	1A	3038	1/1	0.98	0.21	31,31,31,31	0
58	MG	1A	4037	1/1	0.98	0.10	26,26,26,26	0
58	MG	2A	3037	1/1	0.98	0.15	44,44,44,44	0
58	MG	2A	3234	1/1	0.98	0.27	37,37,37,37	0
58	MG	1Q	205	1/1	0.98	0.04	45,45,45,45	0
58	MG	2D	305	1/1	0.98	0.24	39,39,39,39	0
58	MG	2A	3438	1/1	0.98	0.16	46,46,46,46	0
58	MG	2A	3439	1/1	0.98	0.23	53,53,53,53	0
58	MG	1A	3155	1/1	0.98	0.13	27,27,27,27	0
58	MG	1A	3156	1/1	0.98	0.04	30,30,30,30	0
58	MG	2A	3661	1/1	0.98	0.08	38,38,38,38	0
58	MG	1R	201	1/1	0.98	0.08	30,30,30,30	0
58	MG	2E	305	1/1	0.98	0.08	35,35,35,35	0
58	MG	1A	3121	1/1	0.98	0.16	29,29,29,29	0
58	MG	1A	4041	1/1	0.98	0.09	36,36,36,36	0
58	MG	2A	3665	1/1	0.98	0.17	41,41,41,41	0
58	MG	1A	3896	1/1	0.98	0.06	41,41,41,41	0
58	MG	1A	3396	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3775	1/1	0.98	0.06	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3899	1/1	0.98	0.08	49,49,49,49	0
58	MG	1A	4046	1/1	0.98	0.06	42,42,42,42	0
58	MG	1U	201	1/1	0.98	0.10	30,30,30,30	0
58	MG	1A	3048	1/1	0.98	0.08	25,25,25,25	0
58	MG	1A	3159	1/1	0.98	0.09	25,25,25,25	0
58	MG	1A	3778	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3074	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3558	1/1	0.98	0.06	28,28,28,28	0
58	MG	1U	209	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	4052	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3060	1/1	0.98	0.10	49,49,49,49	0
58	MG	2A	3461	1/1	0.98	0.08	51,51,51,51	0
58	MG	1V	204	1/1	0.98	0.19	30,30,30,30	0
58	MG	1V	205	1/1	0.98	0.18	29,29,29,29	0
58	MG	1A	3906	1/1	0.98	0.07	36,36,36,36	0
58	MG	1V	207	1/1	0.98	0.03	36,36,36,36	0
58	MG	1A	3211	1/1	0.98	0.15	33,33,33,33	0
58	MG	1A	4057	1/1	0.98	0.03	43,43,43,43	0
58	MG	2A	3261	1/1	0.98	0.05	53,53,53,53	0
58	MG	1A	3402	1/1	0.98	0.07	39,39,39,39	0
58	MG	1A	3096	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3097	1/1	0.98	0.07	33,33,33,33	0
58	MG	1W	204	1/1	0.98	0.09	30,30,30,30	0
58	MG	1W	205	1/1	0.98	0.10	32,32,32,32	0
58	MG	1A	3565	1/1	0.98	0.27	38,38,38,38	0
58	MG	1A	3214	1/1	0.98	0.12	34,34,34,34	0
58	MG	1A	3669	1/1	0.98	0.04	18,18,18,18	0
58	MG	1A	3789	1/1	0.98	0.04	45,45,45,45	0
58	MG	2A	3478	1/1	0.98	0.06	48,48,48,48	0
58	MG	1X	103	1/1	0.98	0.23	43,43,43,43	0
58	MG	1X	104	1/1	0.98	0.10	33,33,33,33	0
58	MG	23	104	1/1	0.98	0.07	49,49,49,49	0
58	MG	1X	105	1/1	0.98	0.04	47,47,47,47	0
58	MG	1Y	201	1/1	0.98	0.05	41,41,41,41	0
58	MG	1A	3568	1/1	0.98	0.18	35,35,35,35	0
58	MG	1a	1728	1/1	0.98	0.05	38,38,38,38	0
58	MG	1A	3077	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	3078	1/1	0.98	0.10	26,26,26,26	0
58	MG	1A	3674	1/1	0.98	0.08	24,24,24,24	0
58	MG	1A	3029	1/1	0.98	0.14	22,22,22,22	0
58	MG	1A	3485	1/1	0.98	0.07	36,36,36,36	0
58	MG	2A	3490	1/1	0.98	0.14	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	10	103	1/1	0.98	0.05	35,35,35,35	0
58	MG	2A	3283	1/1	0.98	0.25	52,52,52,52	0
58	MG	1A	3218	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	4075	1/1	0.98	0.13	46,46,46,46	0
58	MG	1A	3410	1/1	0.98	0.06	32,32,32,32	0
58	MG	2A	3717	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3080	1/1	0.98	0.17	29,29,29,29	0
58	MG	1A	3275	1/1	0.98	0.13	21,21,21,21	0
58	MG	1A	3012	1/1	0.98	0.14	30,30,30,30	0
58	MG	1A	3684	1/1	0.98	0.05	22,22,22,22	0
58	MG	2A	3722	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3221	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3724	1/1	0.98	0.10	50,50,50,50	0
58	MG	1a	1744	1/1	0.98	0.14	38,38,38,38	0
58	MG	1A	3929	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3930	1/1	0.98	0.04	58,58,58,58	0
58	MG	1A	3931	1/1	0.98	0.05	29,29,29,29	0
58	MG	1a	1748	1/1	0.98	0.10	61,61,61,61	0
58	MG	2A	3730	1/1	0.98	0.04	61,61,61,61	0
58	MG	1A	3032	1/1	0.98	0.25	29,29,29,29	0
58	MG	1A	3133	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3688	1/1	0.98	0.05	26,26,26,26	0
58	MG	1A	3937	1/1	0.98	0.11	46,46,46,46	0
58	MG	1A	3938	1/1	0.98	0.03	36,36,36,36	0
58	MG	1A	3581	1/1	0.98	0.03	37,37,37,37	0
58	MG	1A	3172	1/1	0.98	0.13	40,40,40,40	0
58	MG	1A	3282	1/1	0.98	0.12	39,39,39,39	0
58	MG	1A	3173	1/1	0.98	0.22	31,31,31,31	0
58	MG	1A	3284	1/1	0.98	0.05	50,50,50,50	0
58	MG	1A	3944	1/1	0.98	0.07	40,40,40,40	0
60	ZN	2Y	202	1/1	0.98	0.04	96,96,96,96	0
58	MG	2A	3742	1/1	0.98	0.04	49,49,49,49	0
60	ZN	25	106	1/1	0.98	0.03	67,67,67,67	0
60	ZN	29	501	1/1	0.98	0.04	62,62,62,62	0
60	ZN	2n	102	1/1	0.98	0.05	92,92,92,92	0
61	SF4	1d	302	8/8	0.98	0.06	62,67,71,80	0
58	MG	1A	3285	1/1	0.98	0.23	46,46,46,46	0
58	MG	2A	3365	1/1	0.99	0.08	37,37,37,37	0
58	MG	1A	3066	1/1	0.99	0.02	27,27,27,27	0
58	MG	1A	3696	1/1	0.99	0.03	37,37,37,37	0
58	MG	1A	3036	1/1	0.99	0.10	24,24,24,24	0
58	MG	1A	3623	1/1	0.99	0.05	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3561	1/1	0.99	0.23	30,30,30,30	0
58	MG	1A	3625	1/1	0.99	0.07	51,51,51,51	0
58	MG	2A	3450	1/1	0.99	0.15	26,26,26,26	0
58	MG	1F	306	1/1	0.99	0.06	42,42,42,42	0
58	MG	1A	3935	1/1	0.99	0.06	45,45,45,45	0
58	MG	1A	3936	1/1	0.99	0.03	40,40,40,40	0
58	MG	1A	3990	1/1	0.99	0.05	44,44,44,44	0
58	MG	1A	3022	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3252	1/1	0.99	0.04	26,26,26,26	0
58	MG	2A	3149	1/1	0.99	0.06	36,36,36,36	0
58	MG	1A	3744	1/1	0.99	0.07	20,20,20,20	0
58	MG	2A	3151	1/1	0.99	0.04	37,37,37,37	0
58	MG	1A	3298	1/1	0.99	0.09	23,23,23,23	0
58	MG	1B	216	1/1	0.99	0.04	43,43,43,43	0
58	MG	2A	3708	1/1	0.99	0.03	49,49,49,49	0
58	MG	1A	3746	1/1	0.99	0.03	11,11,11,11	0
58	MG	1A	3160	1/1	0.99	0.05	24,24,24,24	0
58	MG	1A	4054	1/1	0.99	0.06	22,22,22,22	0
58	MG	1a	1770	1/1	0.99	0.03	39,39,39,39	0
58	MG	1A	3013	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3666	1/1	0.99	0.03	36,36,36,36	0
58	MG	1A	3750	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3796	1/1	0.99	0.09	21,21,21,21	0
58	MG	1A	4001	1/1	0.99	0.03	30,30,30,30	0
58	MG	1A	3567	1/1	0.99	0.19	39,39,39,39	0
58	MG	1A	3070	1/1	0.99	0.05	28,28,28,28	0
58	MG	1A	3302	1/1	0.99	0.04	32,32,32,32	0
58	MG	1a	1633	1/1	0.99	0.11	28,28,28,28	0
58	MG	1A	4064	1/1	0.99	0.04	31,31,31,31	0
58	MG	1A	3800	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3178	1/1	0.99	0.09	33,33,33,33	0
58	MG	1A	3635	1/1	0.99	0.05	27,27,27,27	0
58	MG	1A	3672	1/1	0.99	0.06	30,30,30,30	0
58	MG	1A	3093	1/1	0.99	0.06	17,17,17,17	0
58	MG	1A	3279	1/1	0.99	0.12	28,28,28,28	0
58	MG	1A	3806	1/1	0.99	0.03	32,32,32,32	0
58	MG	2A	3813	1/1	0.99	0.06	32,32,32,32	0
58	MG	12	102	1/1	0.99	0.06	39,39,39,39	0
58	MG	2A	3815	1/1	0.99	0.04	43,43,43,43	0
58	MG	1A	3807	1/1	0.99	0.04	26,26,26,26	0
58	MG	1A	3011	1/1	0.99	0.04	26,26,26,26	0
58	MG	1A	3462	1/1	0.99	0.10	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3677	1/1	0.99	0.04	27,27,27,27	0
58	MG	1A	3762	1/1	0.99	0.07	35,35,35,35	0
58	MG	1a	1648	1/1	0.99	0.03	49,49,49,49	0
58	MG	1D	304	1/1	0.99	0.04	19,19,19,19	0
58	MG	1A	3003	1/1	0.99	0.06	23,23,23,23	0
58	MG	2A	3492	1/1	0.99	0.11	25,25,25,25	0
58	MG	2A	3825	1/1	0.99	0.07	20,20,20,20	0
58	MG	1A	3911	1/1	0.99	0.03	23,23,23,23	0
58	MG	1D	307	1/1	0.99	0.12	28,28,28,28	0
58	MG	1A	3679	1/1	0.99	0.02	27,27,27,27	0
58	MG	2A	3496	1/1	0.99	0.03	61,61,61,61	0
58	MG	1A	3200	1/1	0.99	0.03	30,30,30,30	0
58	MG	1R	203	1/1	0.99	0.12	34,34,34,34	0
58	MG	1A	3721	1/1	0.99	0.04	40,40,40,40	0
58	MG	1A	3109	1/1	0.99	0.13	28,28,28,28	0
58	MG	17	101	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3030	1/1	0.99	0.14	23,23,23,23	0
58	MG	1A	3184	1/1	0.99	0.04	35,35,35,35	0
58	MG	2W	202	1/1	0.99	0.15	37,37,37,37	0
58	MG	1A	4025	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	4026	1/1	0.99	0.03	41,41,41,41	0
58	MG	2A	3587	1/1	0.99	0.04	35,35,35,35	0
58	MG	1A	3549	1/1	0.99	0.17	36,36,36,36	0
58	MG	1a	1736	1/1	0.99	0.08	41,41,41,41	0
58	MG	1U	202	1/1	0.99	0.15	36,36,36,36	0
58	MG	1A	3056	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3186	1/1	0.99	0.11	34,34,34,34	0
58	MG	2A	3511	1/1	0.99	0.07	38,38,38,38	0
58	MG	1A	3098	1/1	0.99	0.11	16,16,16,16	0
58	MG	1A	3614	1/1	0.99	0.05	34,34,34,34	0
58	MG	1U	207	1/1	0.99	0.13	26,26,26,26	0
58	MG	1A	3975	1/1	0.99	0.03	49,49,49,49	0
58	MG	1A	3289	1/1	0.99	0.09	24,24,24,24	0
58	MG	25	104	1/1	0.99	0.05	52,52,52,52	0
60	ZN	1Y	204	1/1	0.99	0.03	70,70,70,70	0
58	MG	1A	3075	1/1	0.99	0.02	33,33,33,33	0
60	ZN	19	501	1/1	0.99	0.11	60,60,60,60	0
60	ZN	1n	103	1/1	0.99	0.02	65,65,65,65	0
58	MG	1A	3042	1/1	0.99	0.20	33,33,33,33	0
58	MG	1V	203	1/1	0.99	0.04	34,34,34,34	0
58	MG	2A	3854	1/1	0.99	0.13	39,39,39,39	0
60	ZN	26	501	1/1	0.99	0.05	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1E	312	1/1	0.99	0.11	21,21,21,21	0
58	MG	1A	3343	1/1	0.99	0.11	34,34,34,34	0
58	MG	1A	3228	1/1	0.99	0.15	33,33,33,33	0
58	MG	1A	3655	1/1	0.99	0.06	30,30,30,30	0
58	MG	1a	1787	1/1	1.00	0.02	47,47,47,47	0
58	MG	1A	4065	1/1	1.00	0.04	22,22,22,22	0
58	MG	1A	3295	1/1	1.00	0.02	28,28,28,28	0
58	MG	1A	4060	1/1	1.00	0.04	21,21,21,21	0
60	ZN	15	107	1/1	1.00	0.01	38,38,38,38	0
60	ZN	16	103	1/1	1.00	0.02	39,39,39,39	0
58	MG	1A	3618	1/1	1.00	0.05	31,31,31,31	0
58	MG	2A	3700	1/1	1.00	0.06	26,26,26,26	0

6.5 Other polymers (i)

There are no such residues in this entry.