



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 09:41 AM UTC

PDB ID : 9DFC / pdb_00009dfc
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with lasso peptide lariocidin, mRNA, aminoacylated A-site Phe-tRNA^{phe}, aminoacylated P-site fMet-tRNA^{met}, and deacylated E-site tRNA^{phe} at 2.50Å resolution
Authors : Aleksandrova, E.V.; Travin, D.Y.; Jangra, M.; Kaur, M.; Darwish, L.; Koteva, K.; Klepacki, D.; Wang, W.; Tiffany, M.; Sokaribo, A.; Coombes, B.K.; Vazquez-Laslop, N.; Wright, G.D.; Mankin, A.S.; Polikanov, Y.S.
Deposited on : 2024-08-29
Resolution : 2.50 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

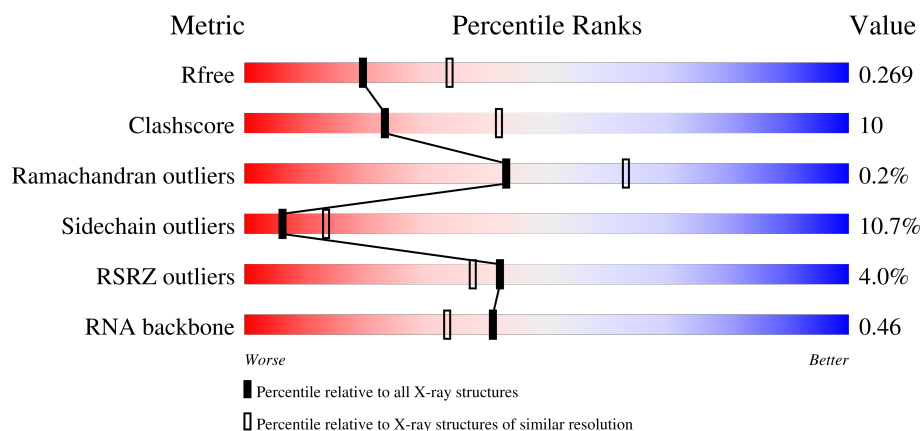
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

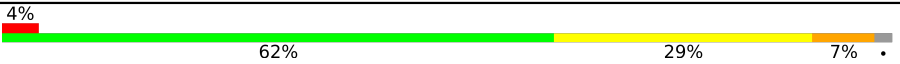
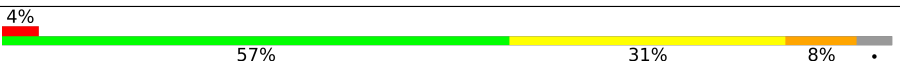
The reported resolution of this entry is 2.50 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	5829 (2.50-2.50)
Clashscore	190562	6492 (2.50-2.50)
Ramachandran outliers	187476	6378 (2.50-2.50)
Sidechain outliers	187428	6380 (2.50-2.50)
RSRZ outliers	180081	5833 (2.50-2.50)
RNA backbone	3983	1003 (2.78-2.22)

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 $\leq 5\%$. 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	
1	2A	2915	

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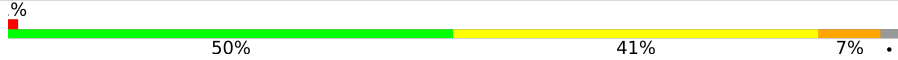
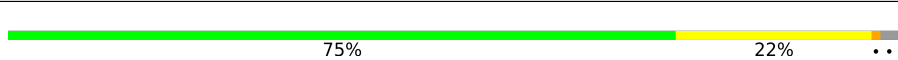
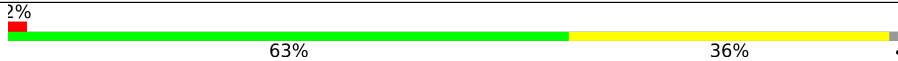
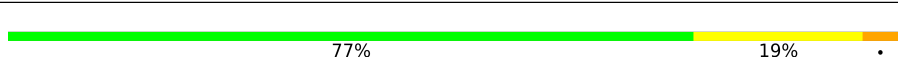
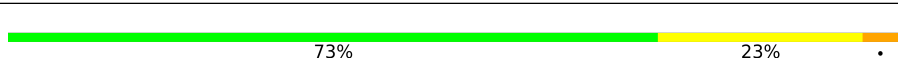
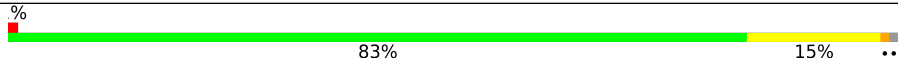
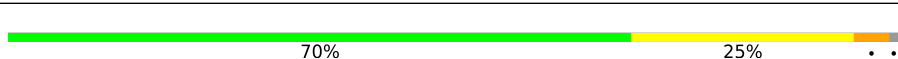
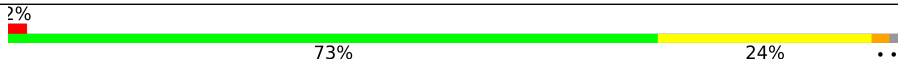
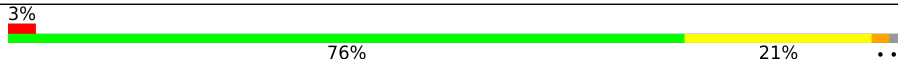
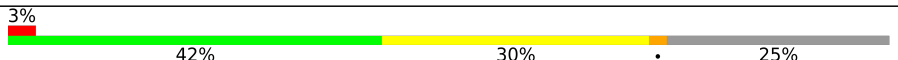
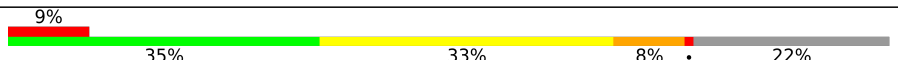
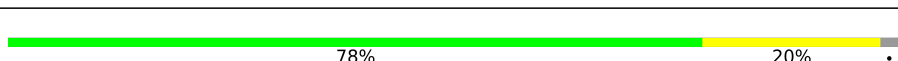
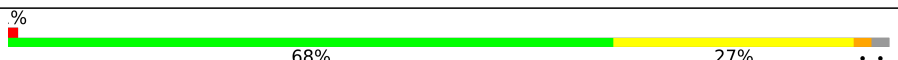
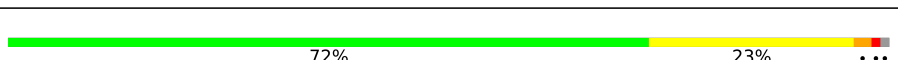
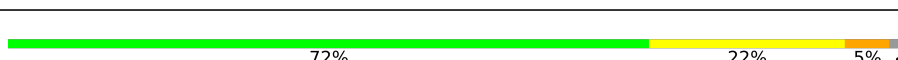
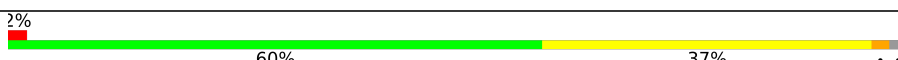
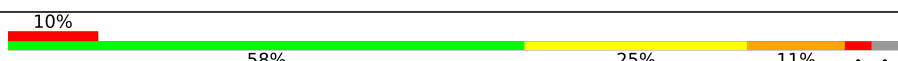
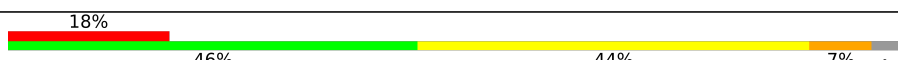
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

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Mol	Chain	Length	Quality of chain
2	1B	121	 60% 34% 6% .
2	2B	121	 46% 43% 10% .
3	1D	276	 75% 21% .
3	2D	276	 77% 21% .
4	1E	206	 69% 27% . .
4	2E	206	 67% 29% . .
5	1F	210	 64% 28% 5% .
5	2F	210	 61% 32% . .
6	1G	182	 65% 29% 5% .
6	2G	182	 52% 37% 10% .
7	1H	180	 62% 31% . .
7	2H	180	 56% 37% . .
8	1I	148	 51% 37% 10% .
8	2I	148	 56% 36% 7% .
9	1N	140	 78% 19% .
9	2N	140	 72% 26% .
10	1O	122	 70% 30% .
10	2O	122	 69% 29% .
11	1P	150	 70% 25% . .
11	2P	150	 71% 26% . .
12	1Q	141	 78% 21% .
12	2Q	141	 67% 30% .
13	1R	118	 80% 16% .
13	2R	118	 73% 25% .
14	1S	112	 75% 21% . .

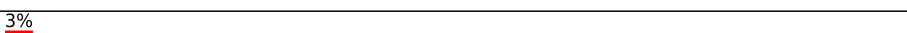
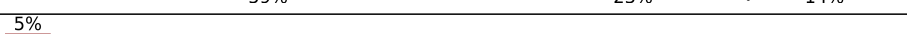
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Mol	Chain	Length	Quality of chain
14	2S	112	
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	

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

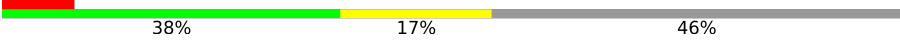
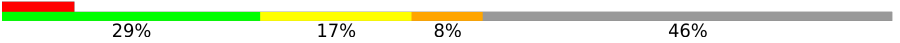
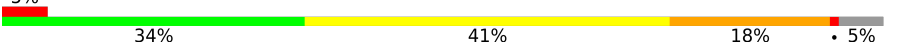
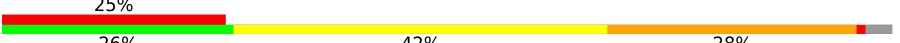
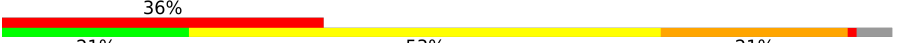
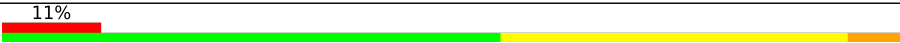
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Mol	Chain	Length	Quality of chain
39	2h	138	
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	

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Mol	Chain	Length	Quality of chain
52	1u	27	
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	2w	76	
55	1x	77	
55	2x	77	
56	1y	76	
56	2y	76	
57	1z	18	
57	2z	18	

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	1A	3418	-	-	-	X
58	MG	1U	211	-	-	-	X
58	MG	2a	1634	-	-	-	X

2 Entry composition

There are 62 unique types of molecules in this entry. The entry contains 300593 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	C	N	O	S	0	0	0
			933	588	171	170	4			

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

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

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

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

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

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

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

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

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

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

- 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	125	Total	C	N	O	S	0	0	0
			979	604	204	169	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-PHE-mRNA.

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

- Molecule 54 is a RNA chain called A-site Aminoacylated Phe-tRNA^{phe}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	75	Total	C	N	O	P	S	0	0	0
			1623	731	289	526	75	2			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1555	699	280	502	72	2			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNA^{met}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			

- Molecule 56 is a RNA chain called E-site Deacylated tRNA^{phe}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
56	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
56	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 57 is a protein called Lasso peptide lariocidin.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
57	1z	18	Total	C	N	O	0	0	0
			132	81	29	22			
57	2z	18	Total	C	N	O	0	0	0
			132	81	29	22			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1108	Total	Mg	0	0
			1108	1108		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1B	39	Total 39	Mg 39	0	0
58	1D	13	Total 13	Mg 13	0	0
58	1E	14	Total 14	Mg 14	0	0
58	1F	12	Total 12	Mg 12	0	0
58	1G	5	Total 5	Mg 5	0	0
58	1I	1	Total 1	Mg 1	0	0
58	1N	5	Total 5	Mg 5	0	0
58	1O	5	Total 5	Mg 5	0	0
58	1P	4	Total 4	Mg 4	0	0
58	1Q	6	Total 6	Mg 6	0	0
58	1R	5	Total 5	Mg 5	0	0
58	1S	3	Total 3	Mg 3	0	0
58	1T	3	Total 3	Mg 3	0	0
58	1U	11	Total 11	Mg 11	0	0
58	1V	9	Total 9	Mg 9	0	0
58	1W	6	Total 6	Mg 6	0	0
58	1X	6	Total 6	Mg 6	0	0
58	1Y	3	Total 3	Mg 3	0	0
58	1Z	3	Total 3	Mg 3	0	0
58	10	10	Total 10	Mg 10	0	0
58	11	6	Total 6	Mg 6	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	12	2	Total 2	Mg 2	0	0
58	13	3	Total 3	Mg 3	0	0
58	14	1	Total 1	Mg 1	0	0
58	15	7	Total 7	Mg 7	0	0
58	16	2	Total 2	Mg 2	0	0
58	17	4	Total 4	Mg 4	0	0
58	18	3	Total 3	Mg 3	0	0
58	19	1	Total 1	Mg 1	0	0
58	1a	216	Total 216	Mg 216	0	0
58	1b	1	Total 1	Mg 1	0	0
58	1d	1	Total 1	Mg 1	0	0
58	1e	2	Total 2	Mg 2	0	0
58	1f	2	Total 2	Mg 2	0	0
58	1h	1	Total 1	Mg 1	0	0
58	1l	2	Total 2	Mg 2	0	0
58	1m	1	Total 1	Mg 1	0	0
58	1n	1	Total 1	Mg 1	0	0
58	1t	1	Total 1	Mg 1	0	0
58	1v	2	Total 2	Mg 2	0	0
58	1w	9	Total 9	Mg 9	0	0
58	1x	13	Total 13	Mg 13	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1y	1	Total 1	Mg 1	0	0
58	1z	1	Total 1	Mg 1	0	0
58	2A	882	Total 882	Mg 882	0	0
58	2B	20	Total 20	Mg 20	0	0
58	2D	7	Total 7	Mg 7	0	0
58	2E	10	Total 10	Mg 10	0	0
58	2F	9	Total 9	Mg 9	0	0
58	2G	1	Total 1	Mg 1	0	0
58	2N	1	Total 1	Mg 1	0	0
58	2O	1	Total 1	Mg 1	0	0
58	2Q	3	Total 3	Mg 3	0	0
58	2R	2	Total 2	Mg 2	0	0
58	2T	4	Total 4	Mg 4	0	0
58	2U	1	Total 1	Mg 1	0	0
58	2V	2	Total 2	Mg 2	0	0
58	2W	1	Total 1	Mg 1	0	0
58	2X	1	Total 1	Mg 1	0	0
58	2Z	1	Total 1	Mg 1	0	0
58	20	3	Total 3	Mg 3	0	0
58	21	1	Total 1	Mg 1	0	0
58	23	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	25	4	Total 4	Mg 4	0	0
58	26	1	Total 1	Mg 1	0	0
58	27	2	Total 2	Mg 2	0	0
58	28	4	Total 4	Mg 4	0	0
58	2a	240	Total 240	Mg 240	0	0
58	2d	2	Total 2	Mg 2	0	0
58	2e	1	Total 1	Mg 1	0	0
58	2f	2	Total 2	Mg 2	0	0
58	2g	1	Total 1	Mg 1	0	0
58	2j	1	Total 1	Mg 1	0	0
58	2l	5	Total 5	Mg 5	0	0
58	2n	1	Total 1	Mg 1	0	0
58	2p	1	Total 1	Mg 1	0	0
58	2q	3	Total 3	Mg 3	0	0
58	2r	1	Total 1	Mg 1	0	0
58	2t	1	Total 1	Mg 1	0	0
58	2v	3	Total 3	Mg 3	0	0
58	2w	12	Total 12	Mg 12	0	0
58	2x	8	Total 8	Mg 8	0	0
58	2y	6	Total 6	Mg 6	0	0

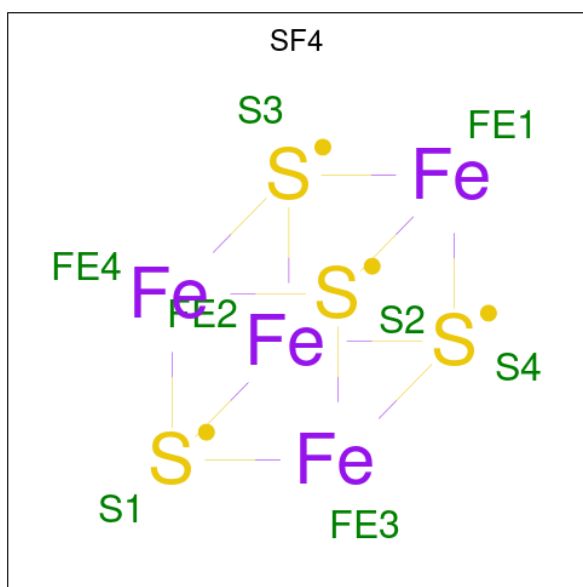
- Molecule 59 is POTASSIUM ION (CCD ID: K) (formula: K).

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: Fe₄S₄).



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

- Molecule 62 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1A	2017	Total	O	0	0
			2017	2017		
62	1B	63	Total	O	0	0
			63	63		
62	1D	28	Total	O	0	0
			28	28		
62	1E	29	Total	O	0	0
			29	29		
62	1F	14	Total	O	0	0
			14	14		
62	1G	2	Total	O	0	0
			2	2		
62	1H	2	Total	O	0	0
			2	2		
62	1I	1	Total	O	0	0
			1	1		
62	1N	6	Total	O	0	0
			6	6		
62	1O	6	Total	O	0	0
			6	6		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1P	20	Total 20	O 20	0	0
62	1Q	7	Total 7	O 7	0	0
62	1R	11	Total 11	O 11	0	0
62	1S	5	Total 5	O 5	0	0
62	1T	9	Total 9	O 9	0	0
62	1U	13	Total 13	O 13	0	0
62	1V	8	Total 8	O 8	0	0
62	1W	6	Total 6	O 6	0	0
62	1X	6	Total 6	O 6	0	0
62	1Y	2	Total 2	O 2	0	0
62	1Z	1	Total 1	O 1	0	0
62	10	11	Total 11	O 11	0	0
62	11	11	Total 11	O 11	0	0
62	12	4	Total 4	O 4	0	0
62	13	5	Total 5	O 5	0	0
62	14	1	Total 1	O 1	0	0
62	15	5	Total 5	O 5	0	0
62	16	4	Total 4	O 4	0	0
62	17	9	Total 9	O 9	0	0
62	18	8	Total 8	O 8	0	0
62	1a	386	Total 386	O 386	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1b	1	Total 1	O 1	0	0
62	1g	1	Total 1	O 1	0	0
62	1i	1	Total 1	O 1	0	0
62	1l	9	Total 9	O 9	0	0
62	1m	1	Total 1	O 1	0	0
62	1n	1	Total 1	O 1	0	0
62	1o	1	Total 1	O 1	0	0
62	1p	1	Total 1	O 1	0	0
62	1q	2	Total 2	O 2	0	0
62	1u	1	Total 1	O 1	0	0
62	1v	5	Total 5	O 5	0	0
62	1w	21	Total 21	O 21	0	0
62	1x	15	Total 15	O 15	0	0
62	1y	1	Total 1	O 1	0	0
62	1z	1	Total 1	O 1	0	0
62	2A	1165	Total 1165	O 1165	0	0
62	2B	22	Total 22	O 22	0	0
62	2D	22	Total 22	O 22	0	0
62	2E	14	Total 14	O 14	0	0
62	2F	13	Total 13	O 13	0	0
62	2I	2	Total 2	O 2	0	0

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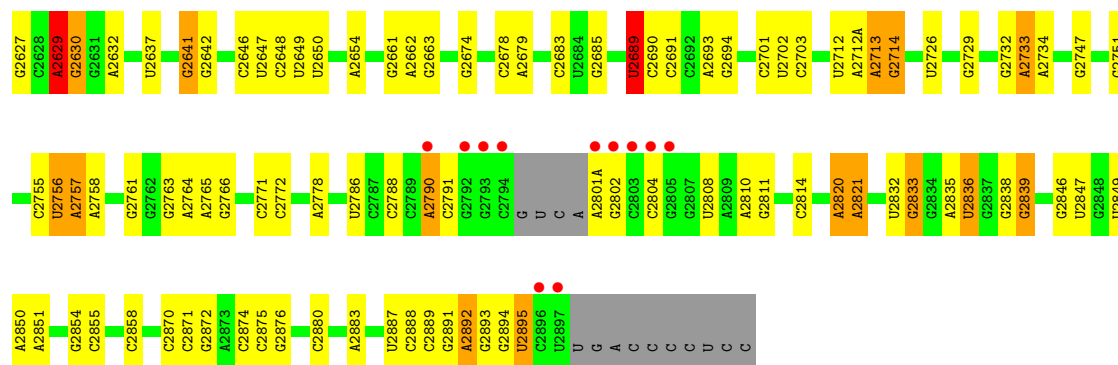
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	2N	1	Total 1	O 1	0	0
62	2O	3	Total 3	O 3	0	0
62	2P	15	Total 15	O 15	0	0
62	2Q	1	Total 1	O 1	0	0
62	2R	4	Total 4	O 4	0	0
62	2T	4	Total 4	O 4	0	0
62	2U	2	Total 2	O 2	0	0
62	2V	1	Total 1	O 1	0	0
62	2X	1	Total 1	O 1	0	0
62	2Y	1	Total 1	O 1	0	0
62	2Z	1	Total 1	O 1	0	0
62	20	3	Total 3	O 3	0	0
62	21	12	Total 12	O 12	0	0
62	23	2	Total 2	O 2	0	0
62	25	1	Total 1	O 1	0	0
62	27	5	Total 5	O 5	0	0
62	28	3	Total 3	O 3	0	0
62	29	1	Total 1	O 1	0	0
62	2a	283	Total 283	O 283	0	0
62	2c	1	Total 1	O 1	0	0
62	2d	2	Total 2	O 2	0	0

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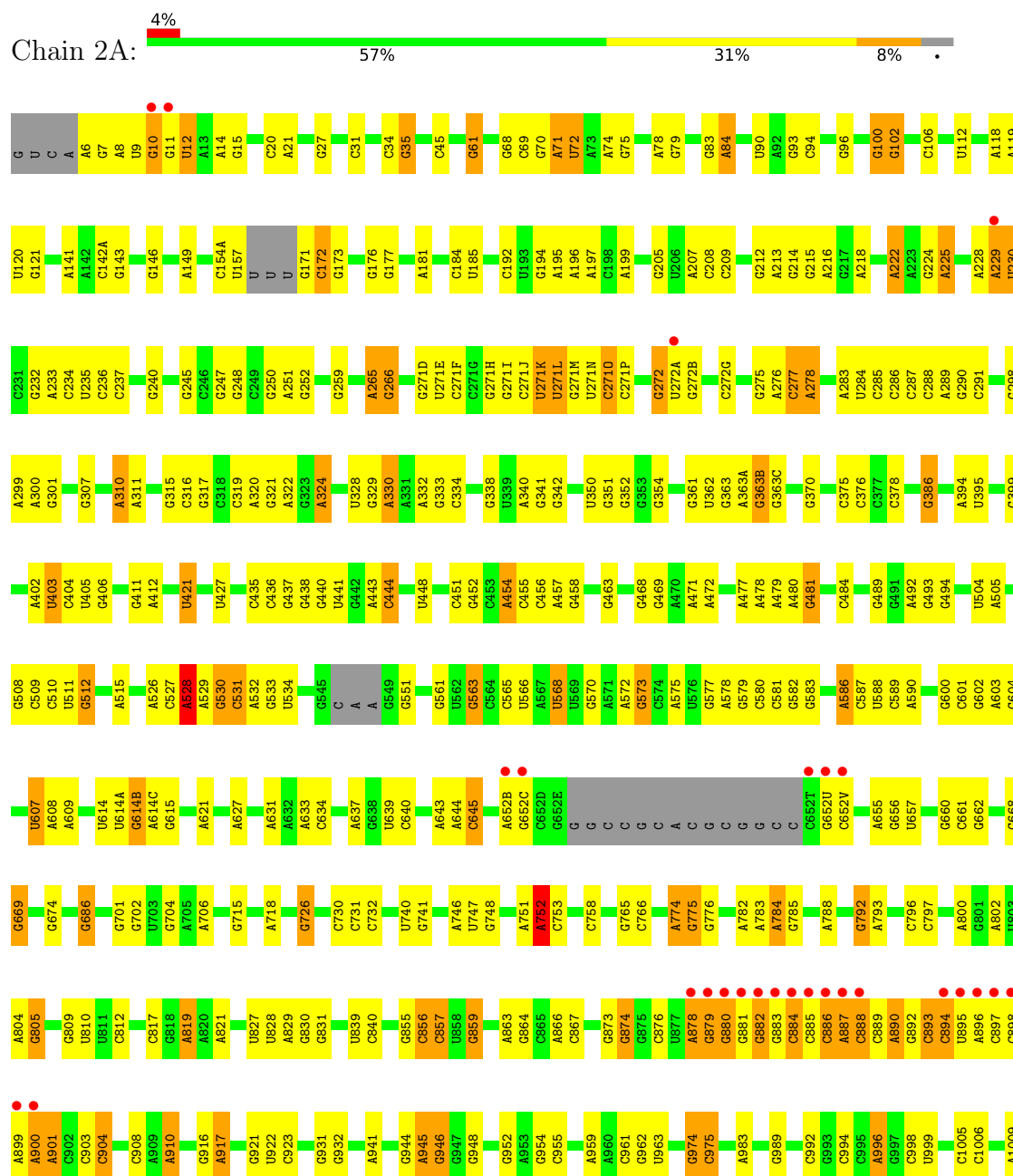
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	2e	1	Total 1	O 1	0	0
62	2g	1	Total 1	O 1	0	0
62	2i	1	Total 1	O 1	0	0
62	2j	3	Total 3	O 3	0	0
62	2l	6	Total 6	O 6	0	0
62	2p	1	Total 1	O 1	0	0
62	2r	1	Total 1	O 1	0	0
62	2t	1	Total 1	O 1	0	0
62	2v	2	Total 2	O 2	0	0
62	2w	7	Total 7	O 7	0	0
62	2x	8	Total 8	O 8	0	0
62	2y	6	Total 6	O 6	0	0

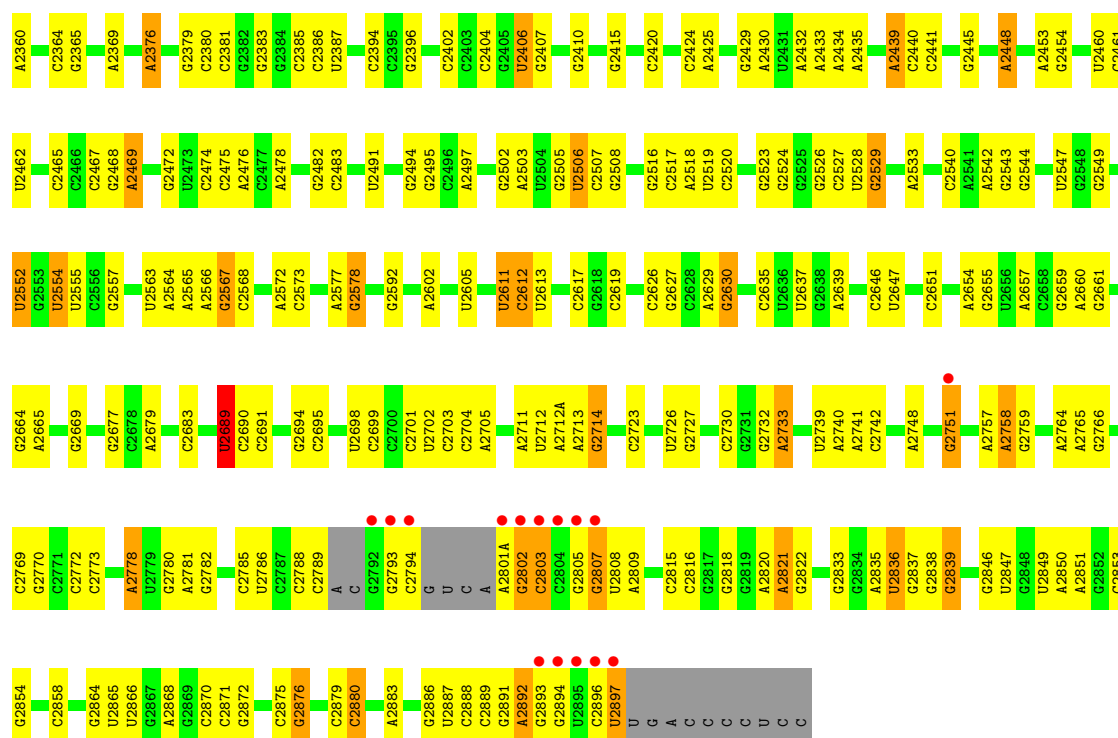
G2529	G2396	C2313	G2192	U2130	A2051	G1930	A1812	G1674	U	G1421	U1300	A1174	A1088
A2533	C2404	G2314	G2196	G2131	G2052	U1931	G1813	U1688	A	A1427	A1301	U1175	G1089
A2534	G2405	G2315	U2197	U2132	A2052	G1932	A1814	A1932	C	C1428	G1302	G1176	U1090
G2535	U2406	G2316	A2198	G2133	G2055	G1933	A1815	U1693	G1537	G1429	A1303	A1177	G1091
G2536	G2407	G2319	G2199	A2135	G2056	A1937	G1816	G1696	U1540	C1430	G1311	C1178	G1092
U2537	G2418	A2320	U2203	C2136	A2060	A1938	G1817	G1697	G1541	U1431	U1312	C1179	G1093
G2538	U2419	G2325	G2205	C2137	G2061	U1939	U1820	A1698	A1542	U1431	U1312	C1180	U1094
G2544	A2422	G2326	G2206	C2138	G2062	C1942	G1823	A1700	C1545	G1442	G1315	C1181	A1095
G2549	U2423	A2327	G2207	C2139	G2065	U1946	G1824	A1700	C1546	A1445	A1321	A1096	U1097
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• Molecule 1: 23S Ribosomal RNA

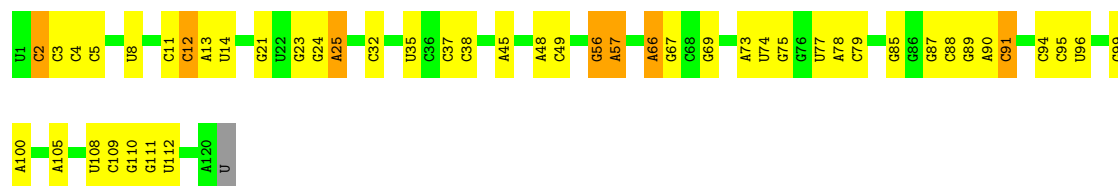


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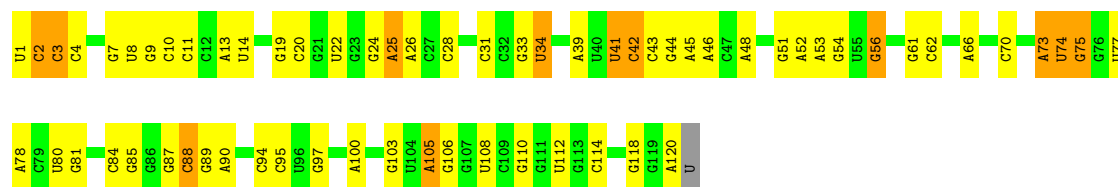
• Molecule 2: 5S Ribosomal RNA

Chain 1B: 60% 34% 6%



• Molecule 2: 5S Ribosomal RNA

Chain 2B: 46% 43% 10%



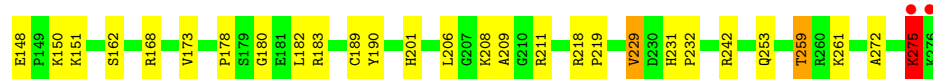
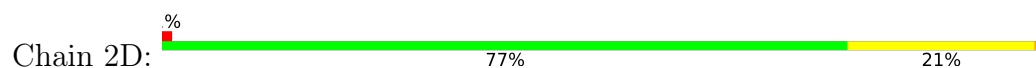
• Molecule 3: 50S ribosomal protein L2

Chain 1D: 75% 21% 4%





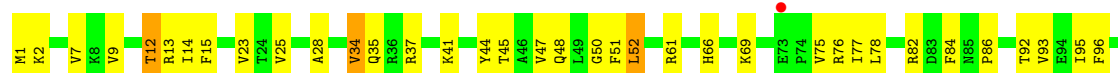
- Molecule 3: 50S ribosomal protein L2



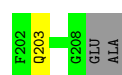
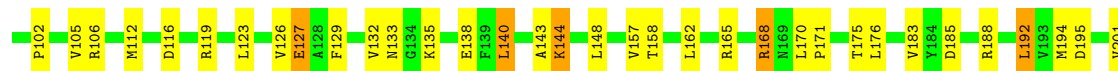
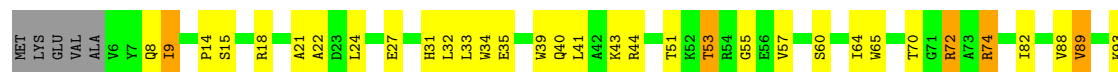
- Molecule 4: 50S ribosomal protein L3



- Molecule 4: 50S ribosomal protein L3

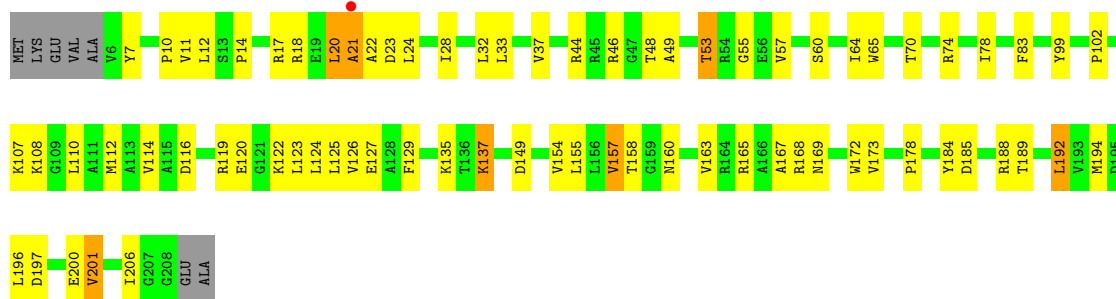


- Molecule 5: 50S ribosomal protein L4



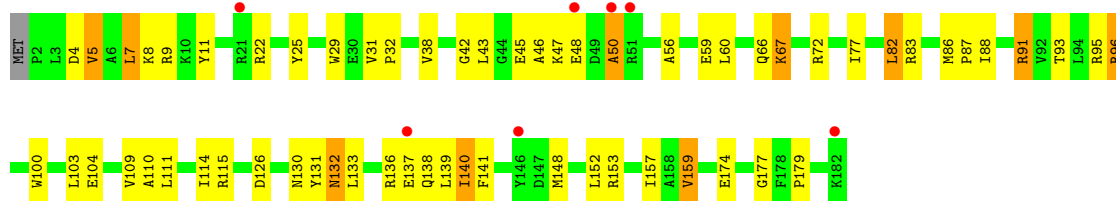
- Molecule 5: 50S ribosomal protein L4

Chain 2F:  61% 32% . .



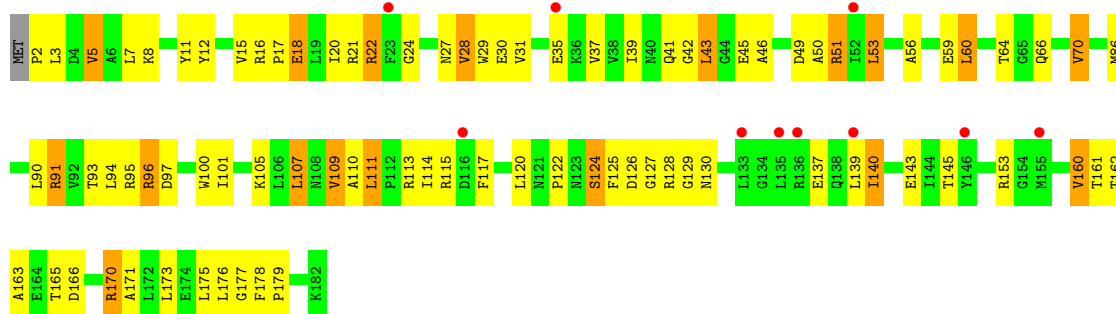
- Molecule 6: 50S ribosomal protein L5

Chain 1G:  4% 65% 29% 5% .



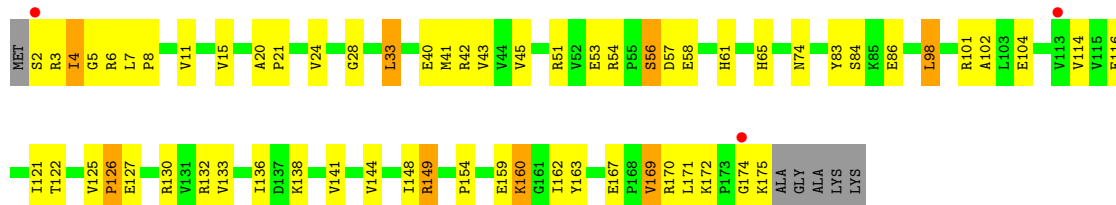
- Molecule 6: 50S ribosomal protein L5

Chain 2G:  5% 52% 37% 10% .

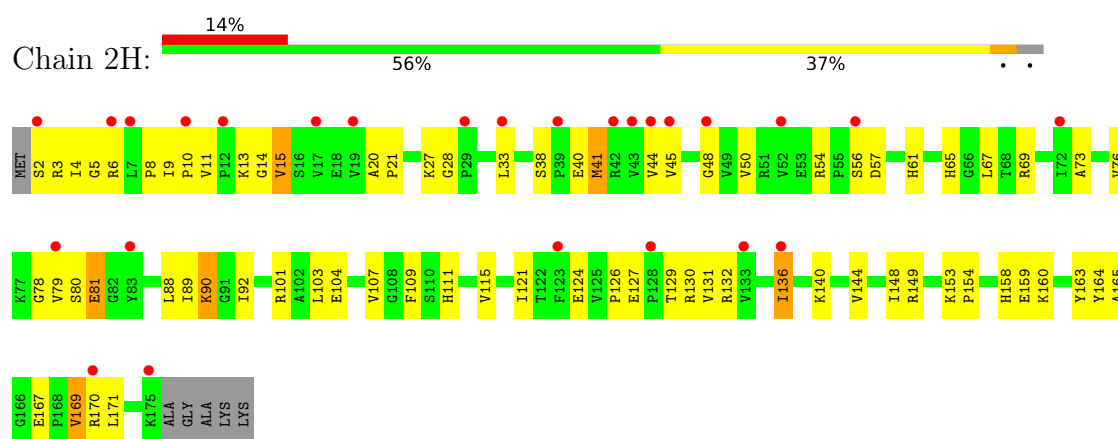


- Molecule 7: 50S ribosomal protein L6

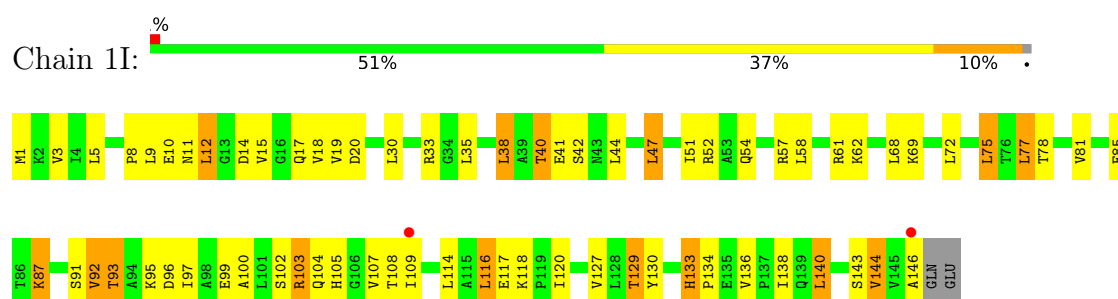
Chain 1H:  2% 62% 31% . .



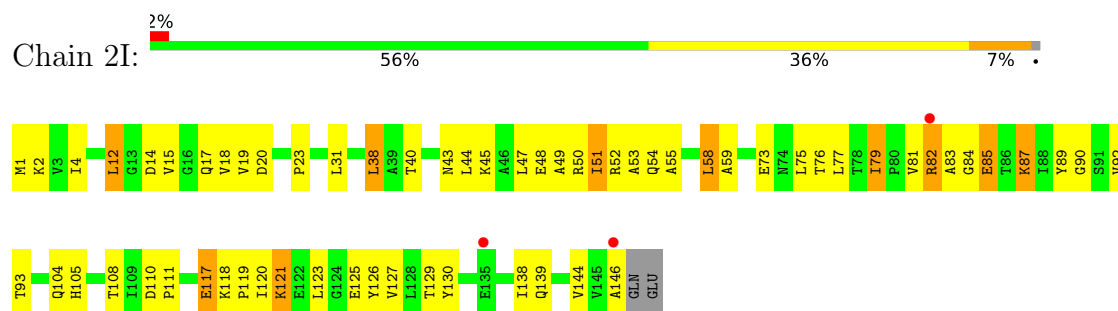
- Molecule 7: 50S ribosomal protein L6



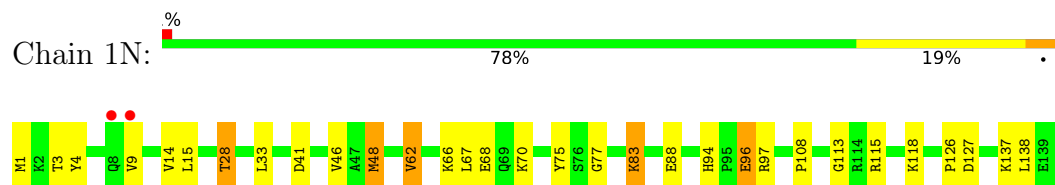
• Molecule 8: 50S ribosomal protein L9



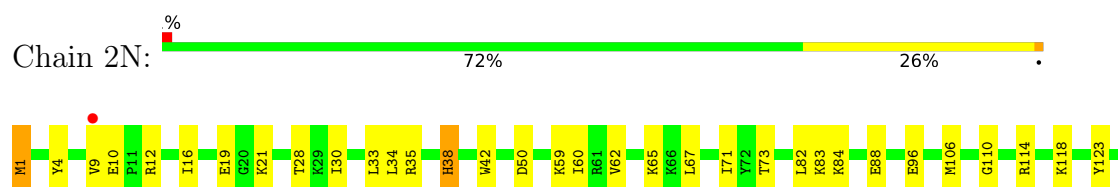
• Molecule 8: 50S ribosomal protein L9



• Molecule 9: 50S ribosomal protein L13

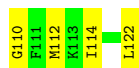


• Molecule 9: 50S ribosomal protein L13

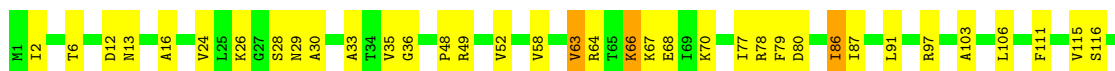




- Molecule 10: 50S ribosomal protein L14



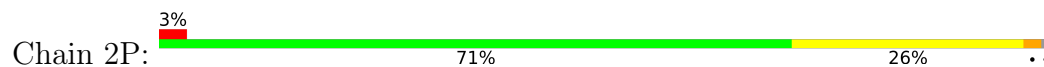
- Molecule 10: 50S ribosomal protein L14



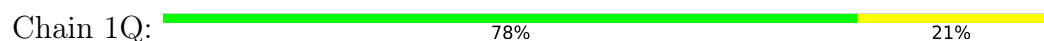
- Molecule 11: 50S ribosomal protein L15



- Molecule 11: 50S ribosomal protein L15



- Molecule 12: 50S ribosomal protein L16

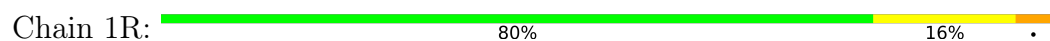




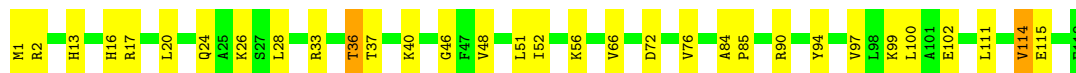
- Molecule 12: 50S ribosomal protein L16



- Molecule 13: 50S ribosomal protein L17



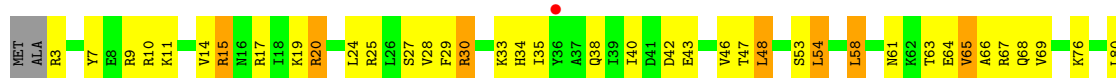
- Molecule 13: 50S ribosomal protein L17



- Molecule 14: 50S ribosomal protein L18

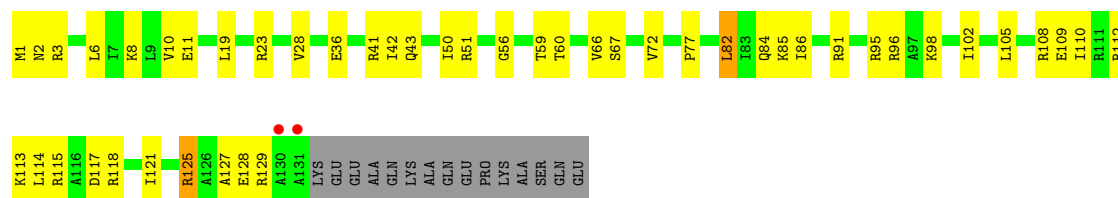


- Molecule 14: 50S ribosomal protein L18

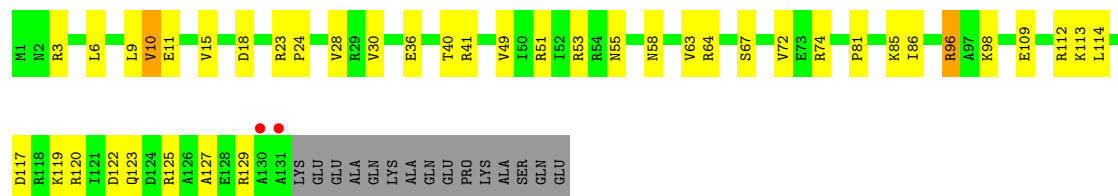


- Molecule 15: 50S ribosomal protein L19

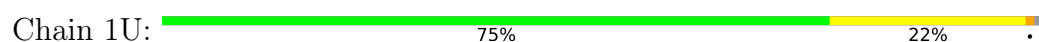




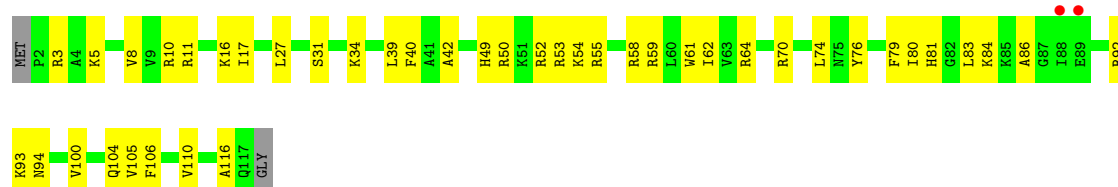
• Molecule 15: 50S ribosomal protein L19



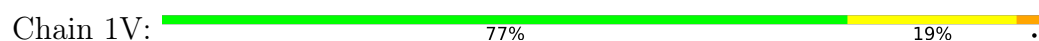
• Molecule 16: 50S ribosomal protein L20



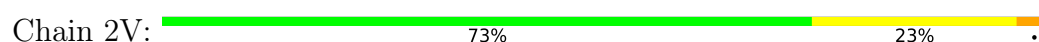
• Molecule 16: 50S ribosomal protein L20



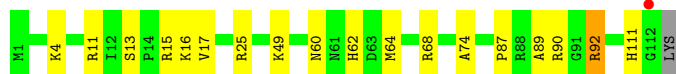
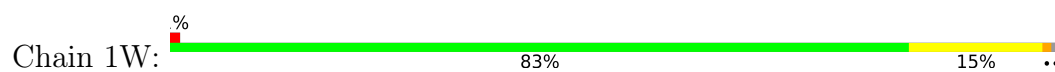
• Molecule 17: 50S ribosomal protein L21



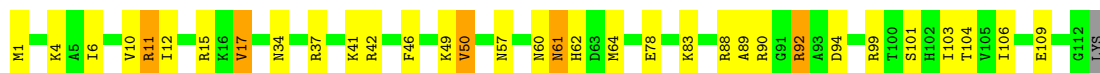
• Molecule 17: 50S ribosomal protein L21



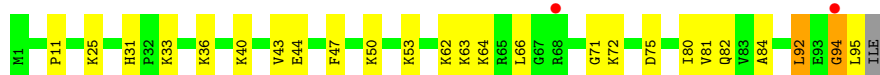
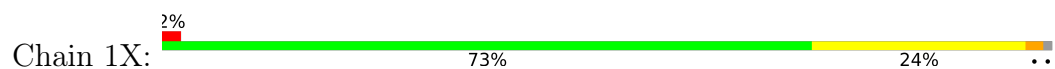
• Molecule 18: 50S ribosomal protein L22



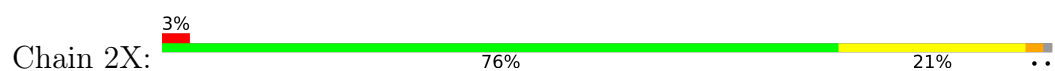
- Molecule 18: 50S ribosomal protein L22



- Molecule 19: 50S ribosomal protein L23



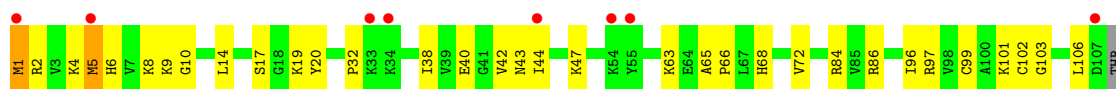
- Molecule 19: 50S ribosomal protein L23



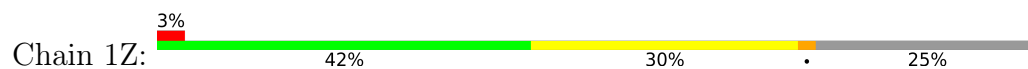
- Molecule 20: 50S ribosomal protein L24

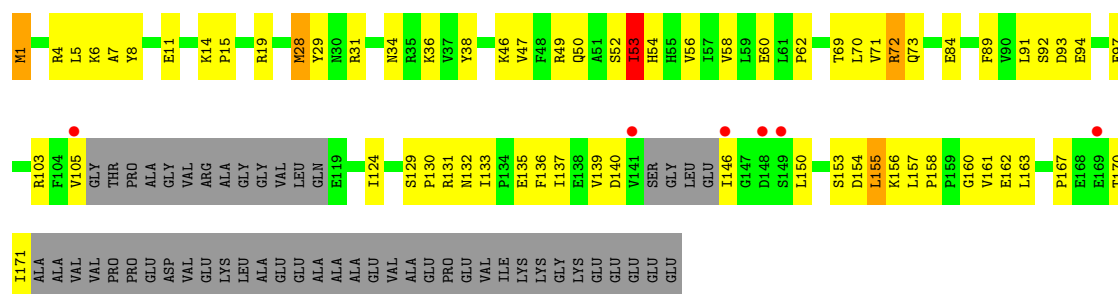


- Molecule 20: 50S ribosomal protein L24

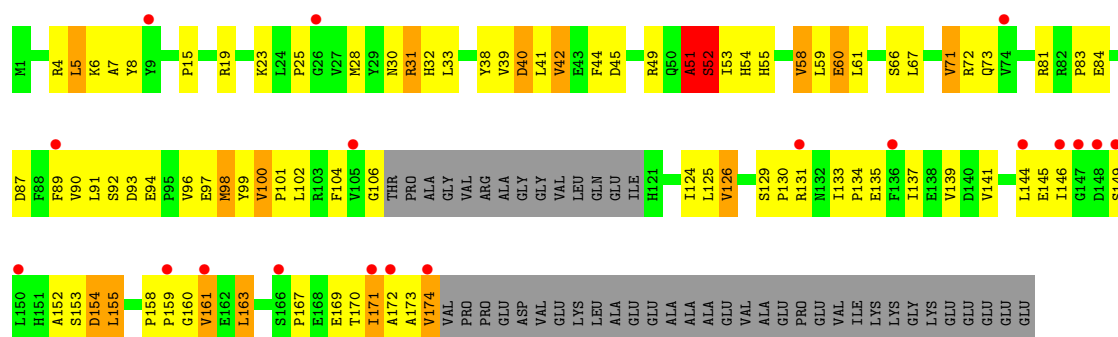


- Molecule 21: 50S ribosomal protein L25

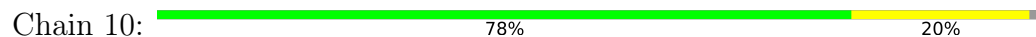




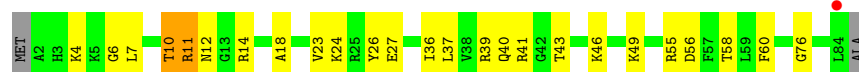
- Molecule 21: 50S ribosomal protein L25



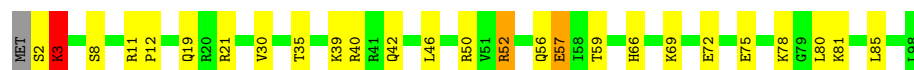
- Molecule 22: 50S ribosomal protein L27



- Molecule 22: 50S ribosomal protein L27



- Molecule 23: 50S ribosomal protein L28

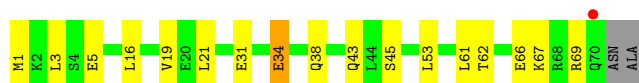
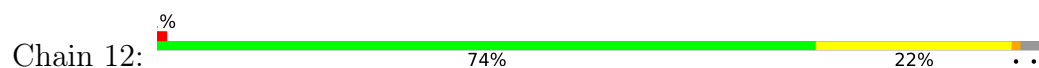


- Molecule 23: 50S ribosomal protein L28

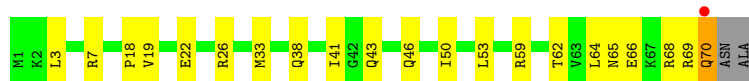




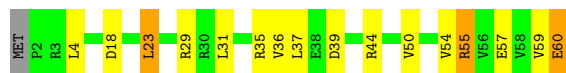
- Molecule 24: 50S ribosomal protein L29



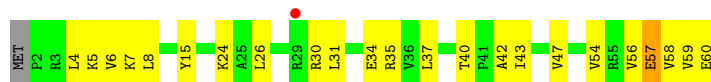
- Molecule 24: 50S ribosomal protein L29



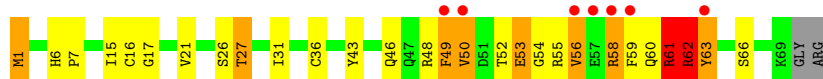
- Molecule 25: 50S ribosomal protein L30



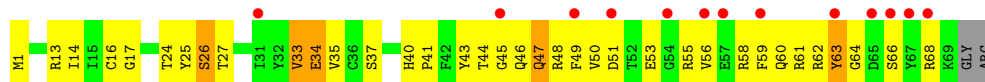
- Molecule 25: 50S ribosomal protein L30



- Molecule 26: 50S ribosomal protein L31

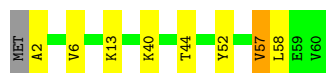


- Molecule 26: 50S ribosomal protein L31



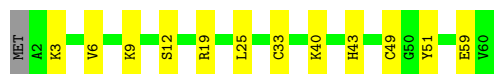
- Molecule 27: 50S ribosomal protein L32

Chain 15:  85% 12% ..



- Molecule 27: 50S ribosomal protein L32

Chain 25:  78% 20% .



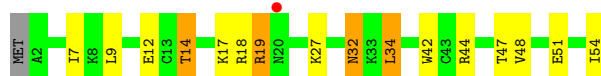
- Molecule 28: 50S ribosomal protein L33

Chain 16:  61% 33% . .



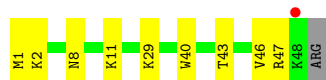
- Molecule 28: 50S ribosomal protein L33

Chain 26:  2% 69% 22% 7% .



- Molecule 29: 50S ribosomal protein L34

Chain 17:  2% 80% 18% .



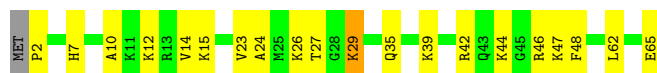
- Molecule 29: 50S ribosomal protein L34

Chain 27:  6% 80% 16% . .



- Molecule 30: 50S ribosomal protein L35

Chain 18:  68% 29% . .



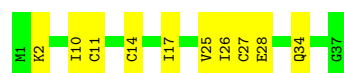
- Molecule 30: 50S ribosomal protein L35

Chain 28:  69% 29% .



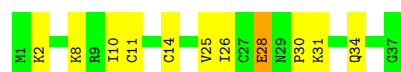
- Molecule 31: 50S ribosomal protein L36

Chain 19:  73% 27%



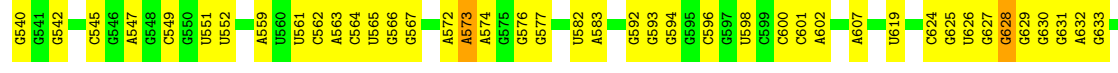
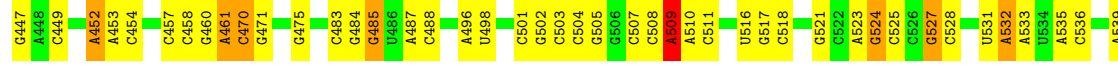
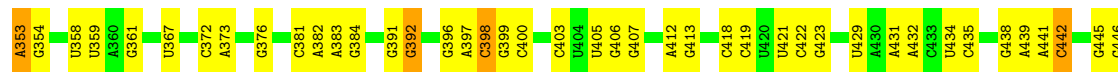
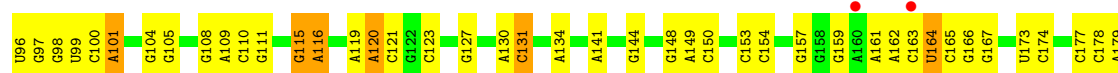
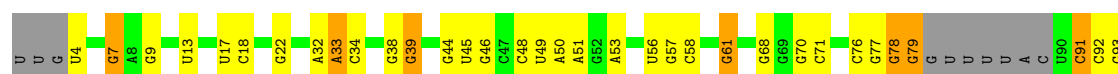
- Molecule 31: 50S ribosomal protein L36

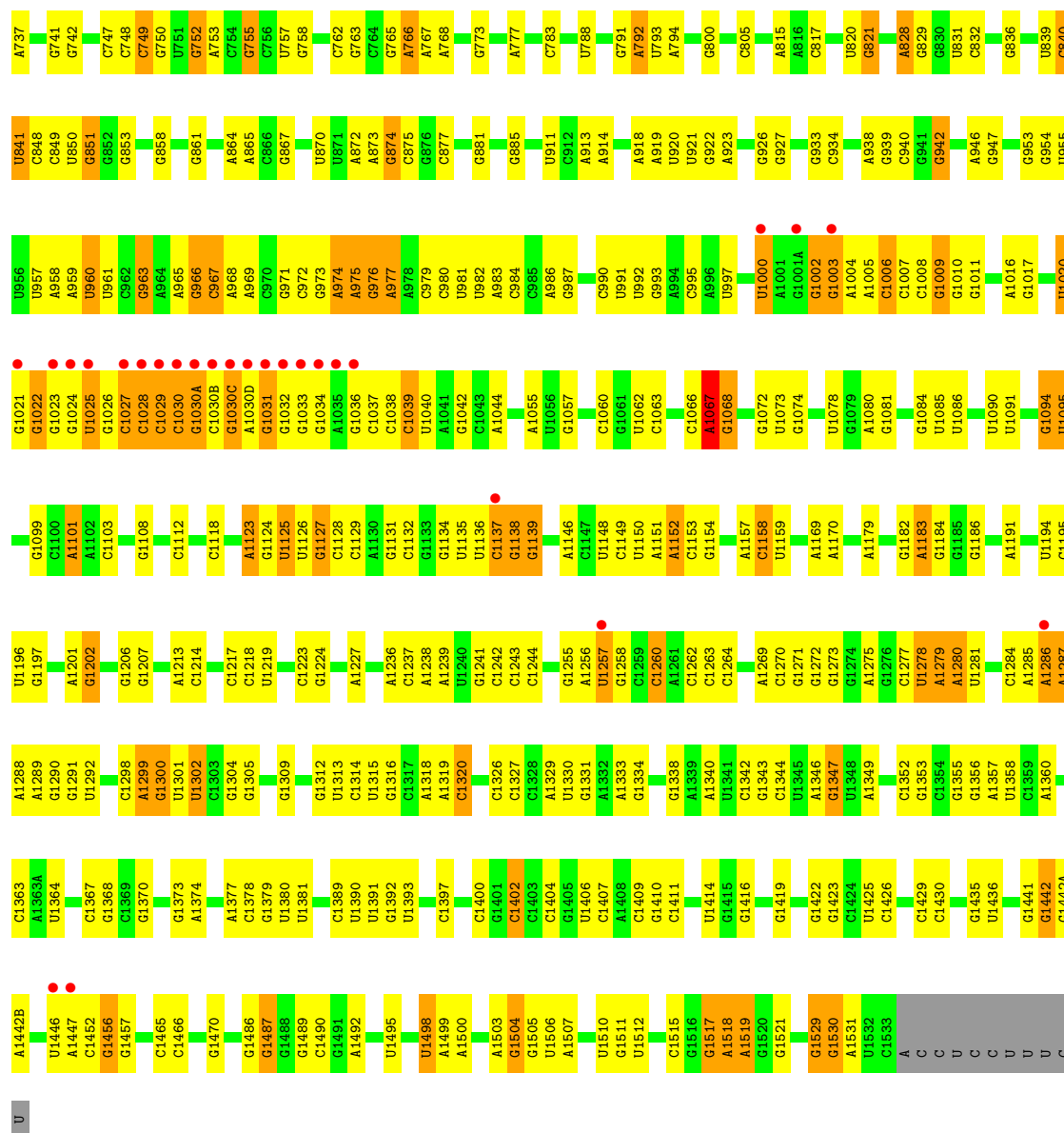
Chain 29:  70% 27% .



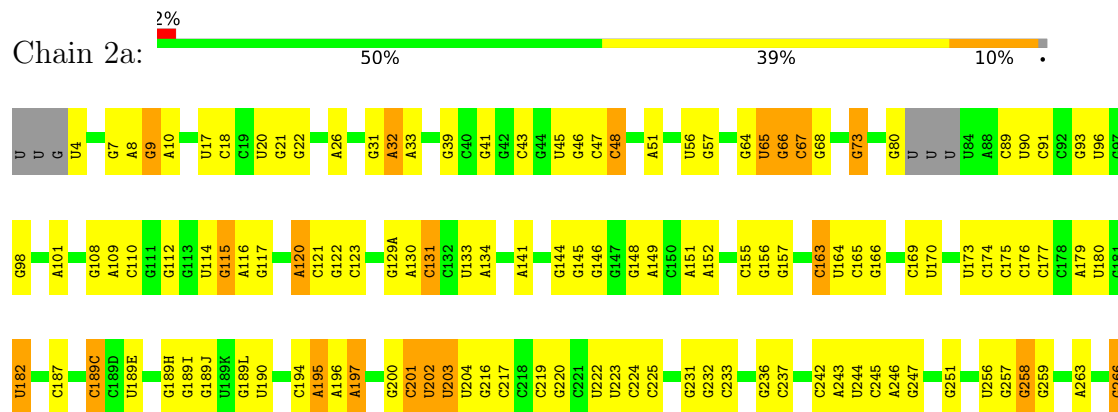
- Molecule 32: 16S Ribosomal RNA

Chain 1a:  2% 52% 39% 8% .

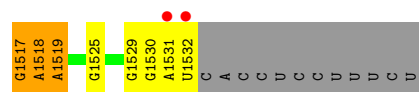




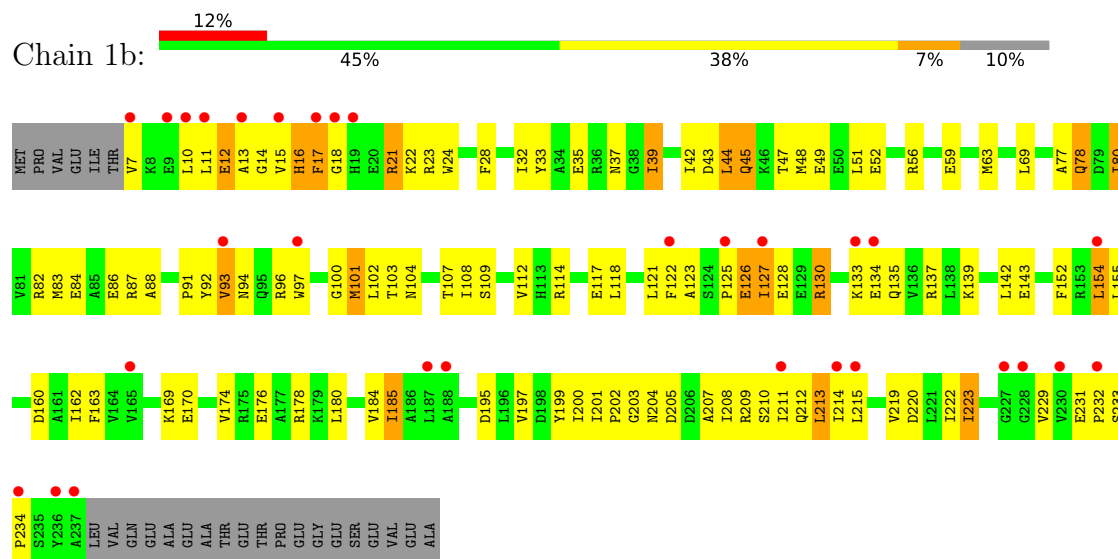
• Molecule 32: 16S Ribosomal RNA



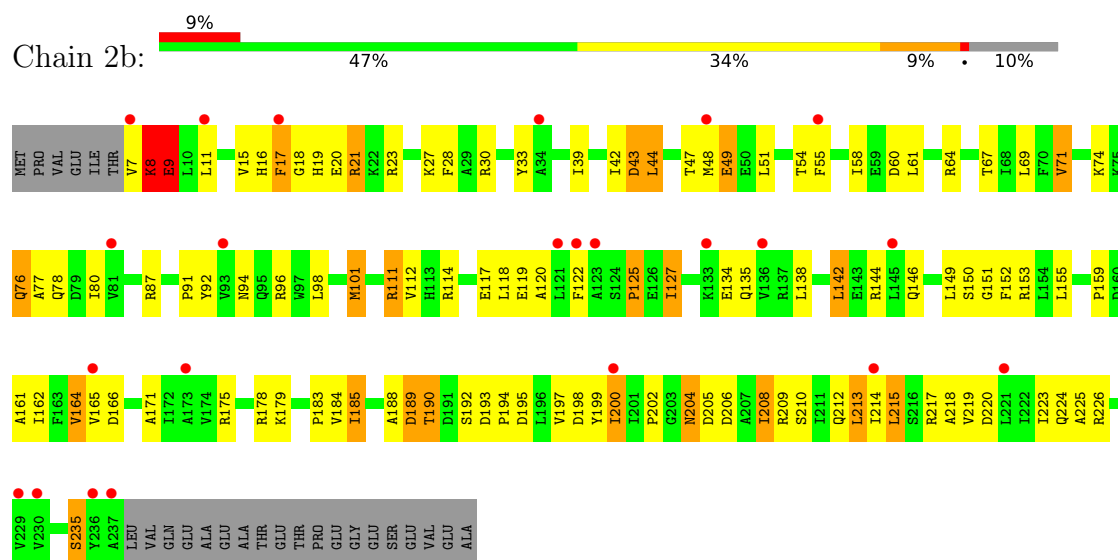
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C1325	C1328	C1329	U1330	G1331	A1332	A1333	G1334	G1338	A1339	A1340	U1341	G1342	G1343	G1344	U1345	A1346	G1347	C1352	G1353	G1354	G1355	G1356	A1357	G1358	C1359	A1360	G1361	C1362	C1363	G1365	C1366	C1367	G1370	G1371	U1372	G1373	A1374	A1375	U1376	A1377	C1378	G1379	G1386	U1390	U1391	C1397	A1398	C1399	C1400	G1401	C1402																																					
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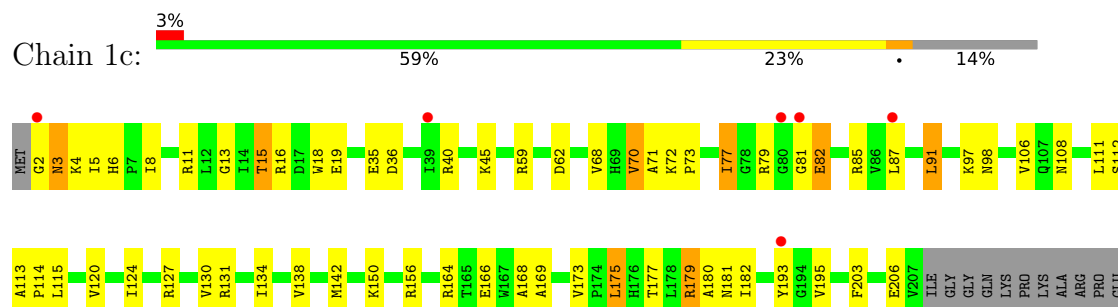
• Molecule 33: 30S ribosomal protein S2



• Molecule 33: 30S ribosomal protein S2

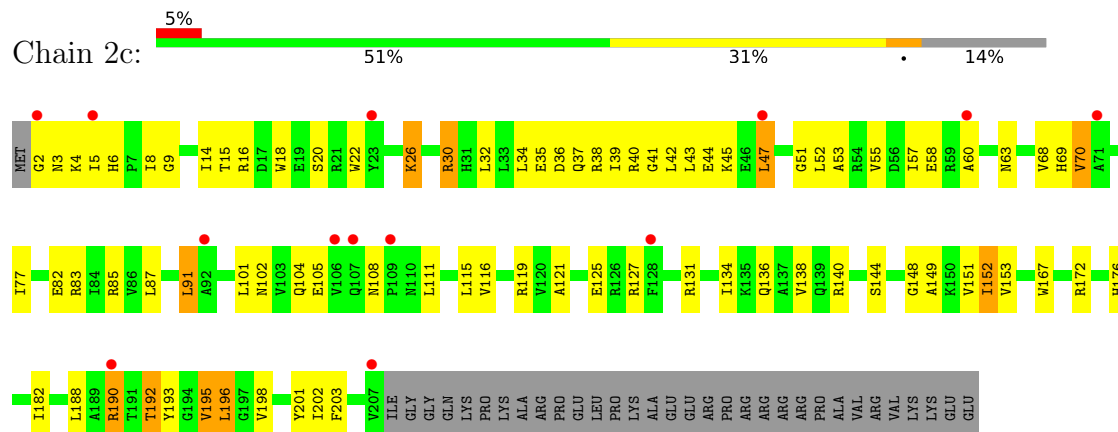


• Molecule 34: 30S ribosomal protein S3

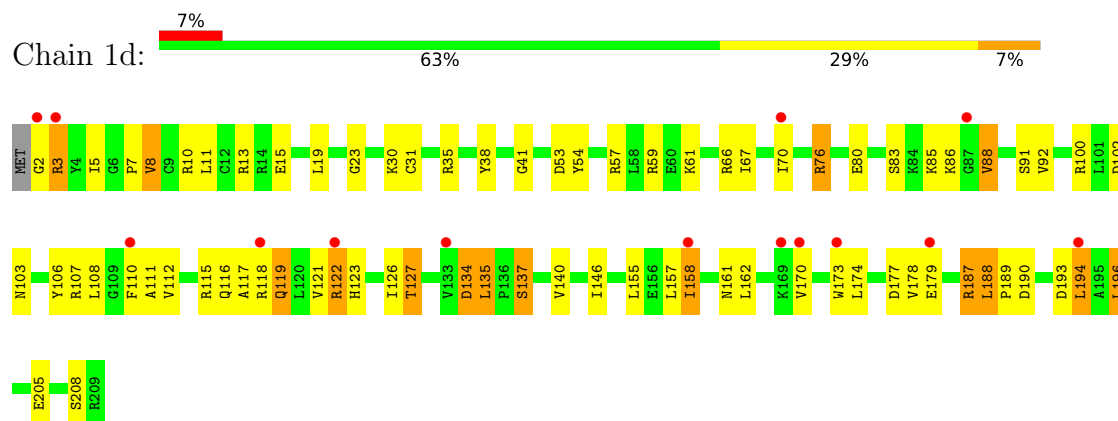


LEU
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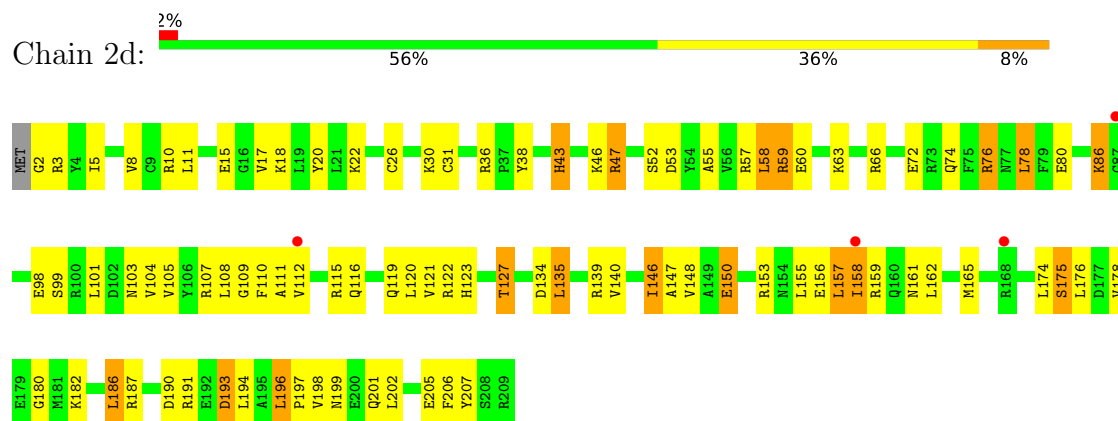
• Molecule 34: 30S ribosomal protein S3



• Molecule 35: 30S ribosomal protein S4

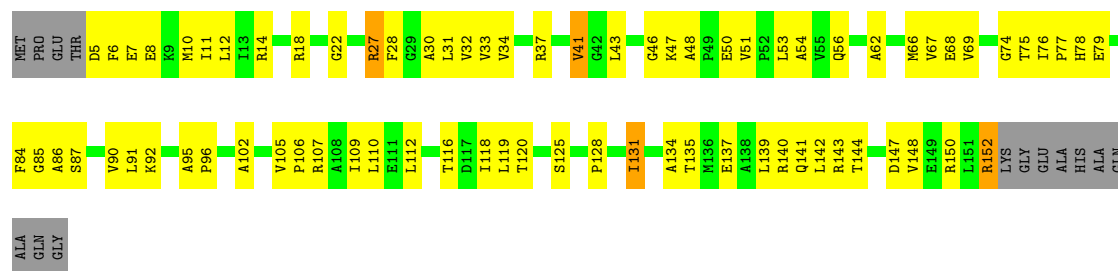


• Molecule 35: 30S ribosomal protein S4

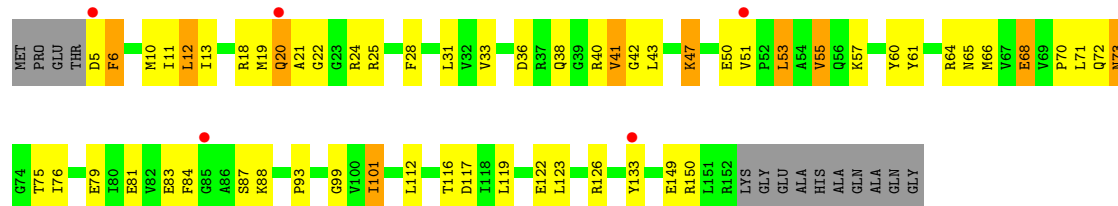


• Molecule 36: 30S ribosomal protein S5

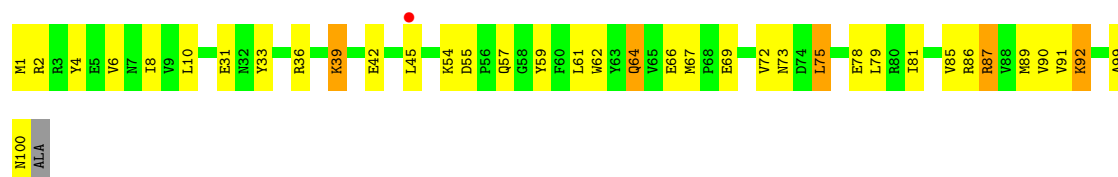




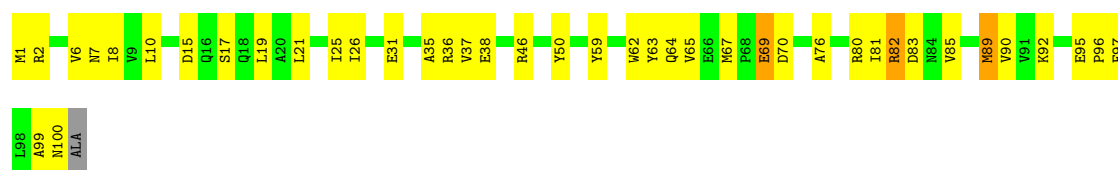
- Molecule 36: 30S ribosomal protein S5



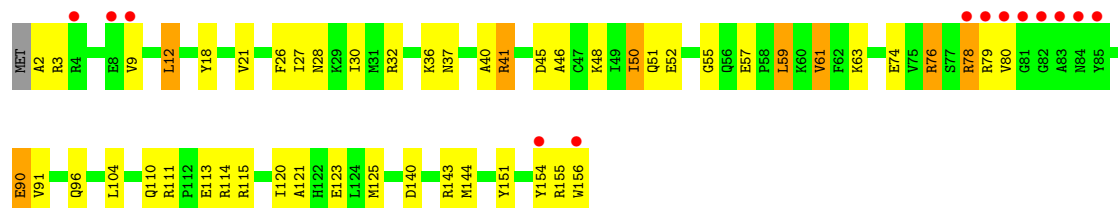
- Molecule 37: 30S ribosomal protein S6



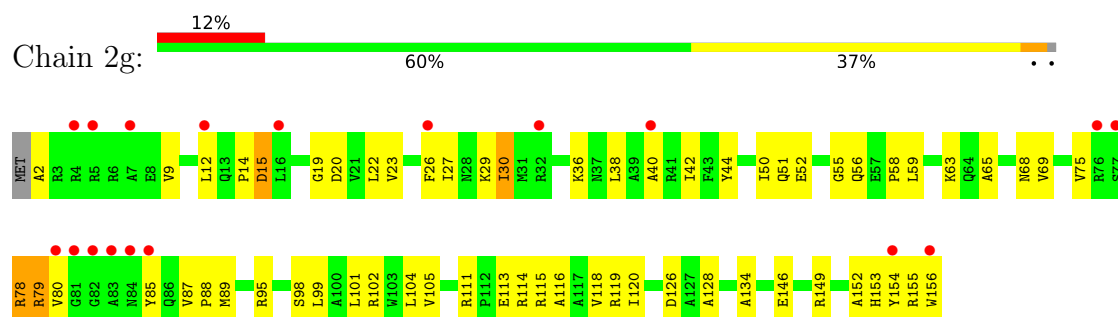
- Molecule 37: 30S ribosomal protein S6



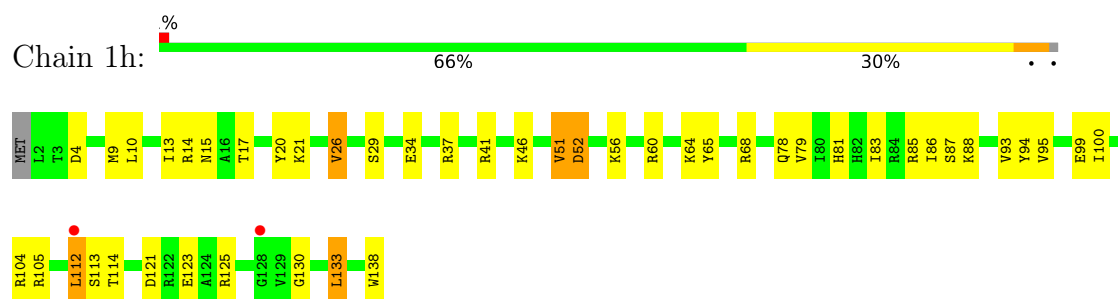
- Molecule 38: 30S ribosomal protein S7



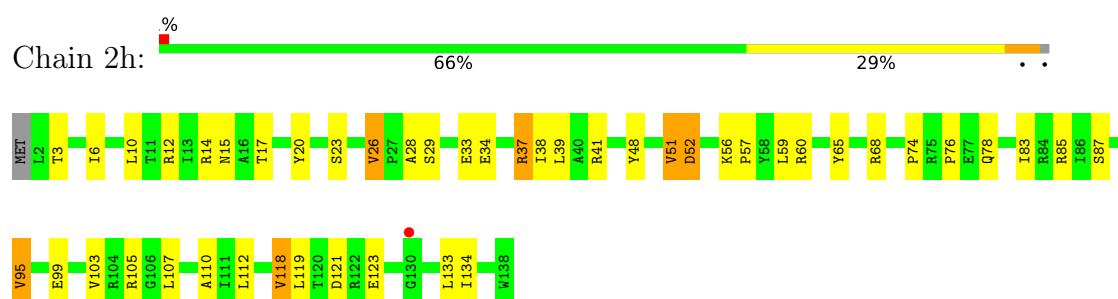
- Molecule 38: 30S ribosomal protein S7



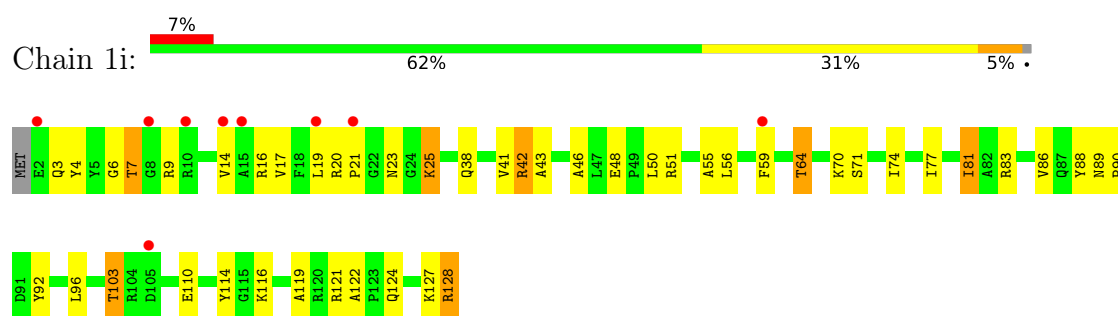
- Molecule 39: 30S ribosomal protein S8



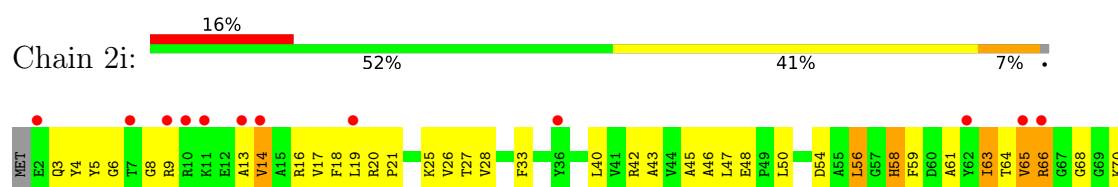
- Molecule 39: 30S ribosomal protein S8

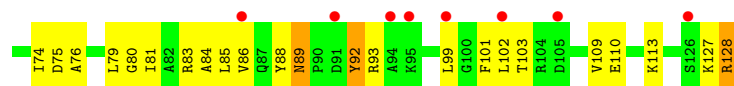


- Molecule 40: 30S ribosomal protein S9

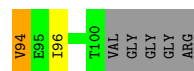


- Molecule 40: 30S ribosomal protein S9

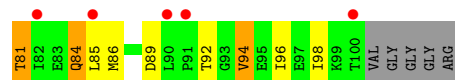
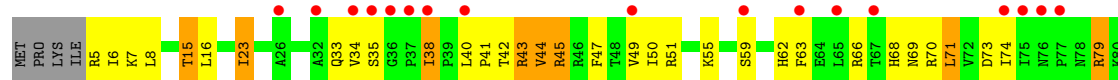




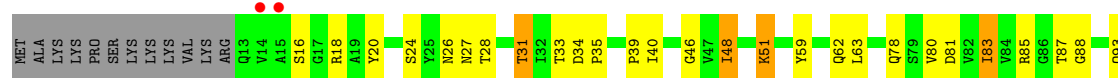
• Molecule 41: 30S ribosomal protein S10



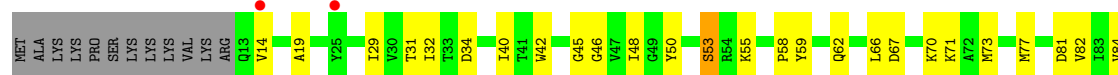
• Molecule 41: 30S ribosomal protein S10



• Molecule 42: 30S ribosomal protein S11

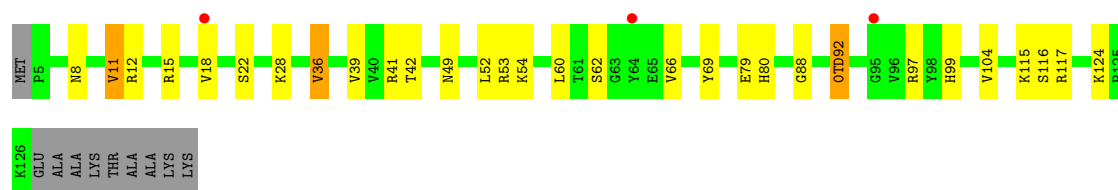


• Molecule 42: 30S ribosomal protein S11

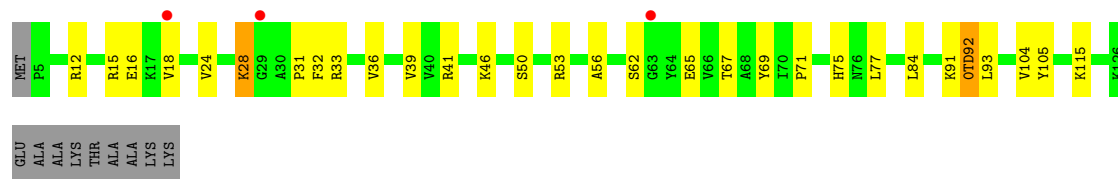


• Molecule 43: 30S ribosomal protein S12

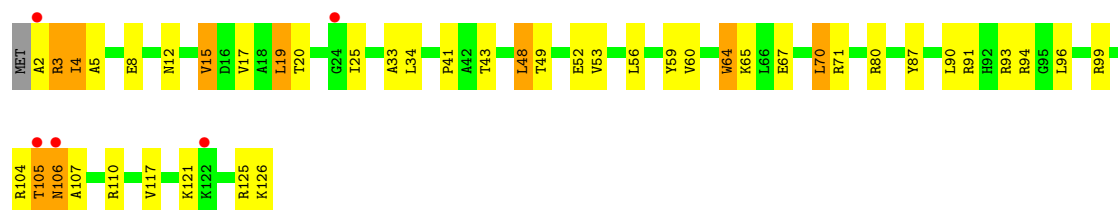




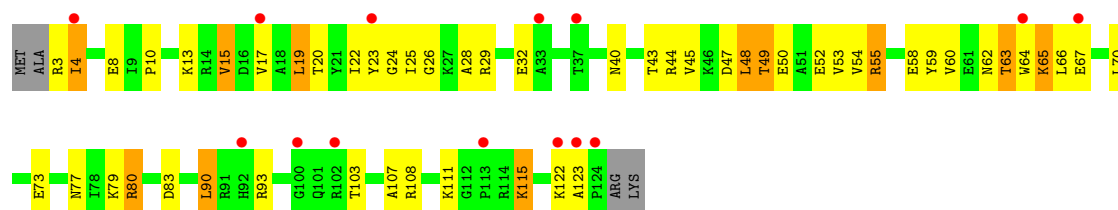
- Molecule 43: 30S ribosomal protein S12



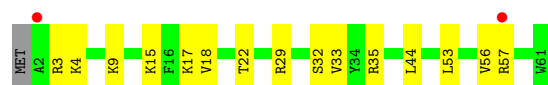
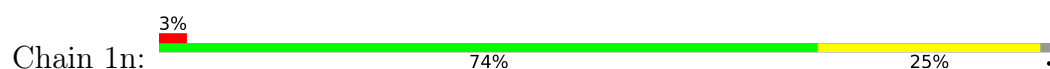
- Molecule 44: 30S ribosomal protein S13



- Molecule 44: 30S ribosomal protein S13

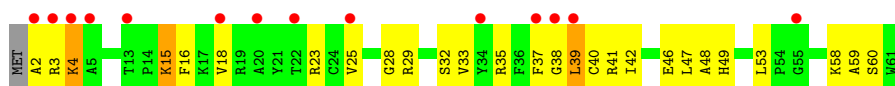


- Molecule 45: 30S ribosomal protein S14 type Z

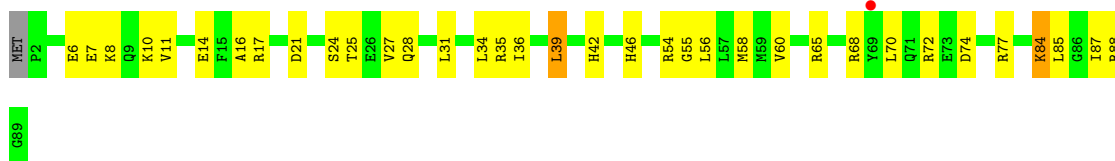


- Molecule 45: 30S ribosomal protein S14 type Z

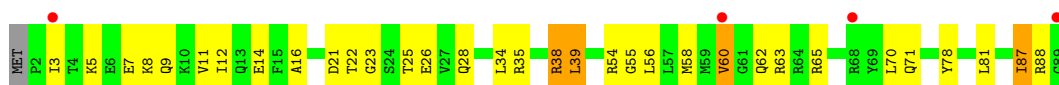




- Molecule 46: 30S ribosomal protein S15



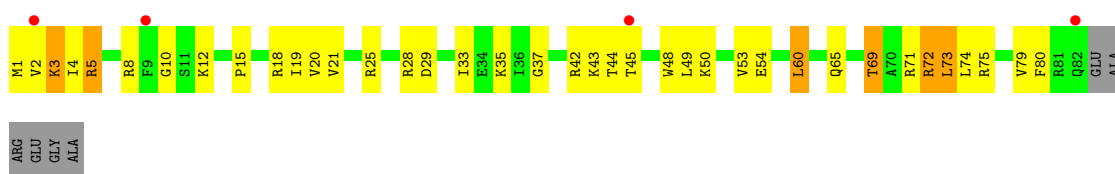
- Molecule 46: 30S ribosomal protein S15



- Molecule 47: 30S ribosomal protein S16



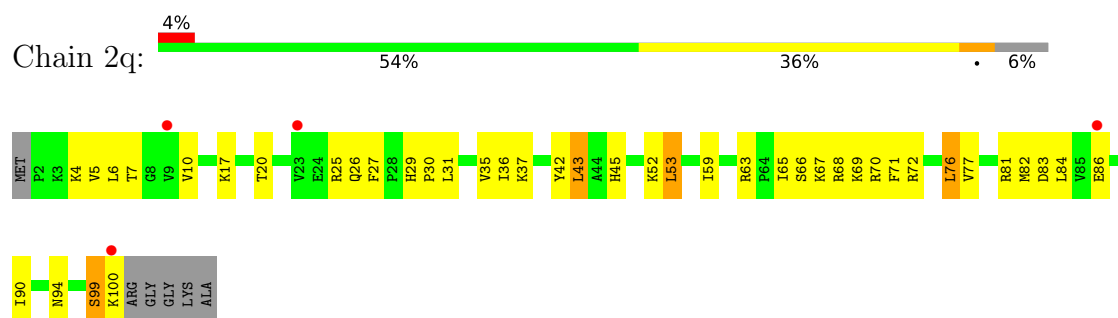
- Molecule 47: 30S ribosomal protein S16



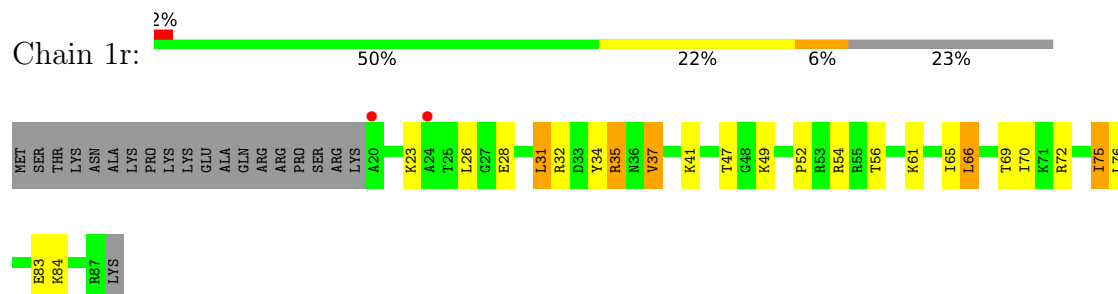
- Molecule 48: 30S ribosomal protein S17



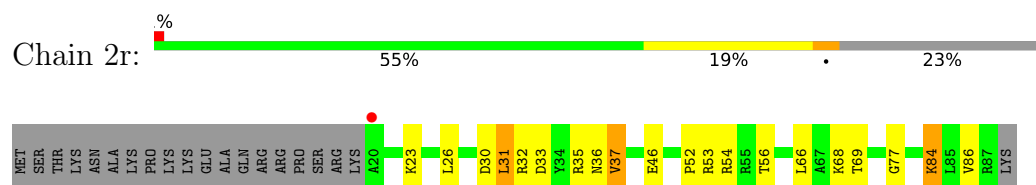
- Molecule 48: 30S ribosomal protein S17



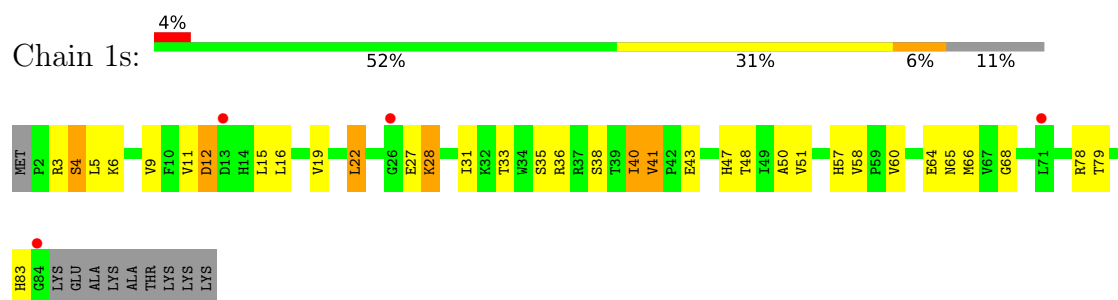
- Molecule 49: 30S ribosomal protein S18



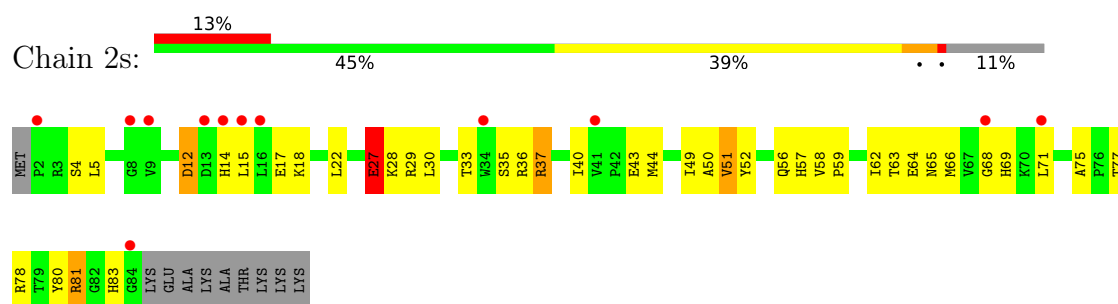
- Molecule 49: 30S ribosomal protein S18



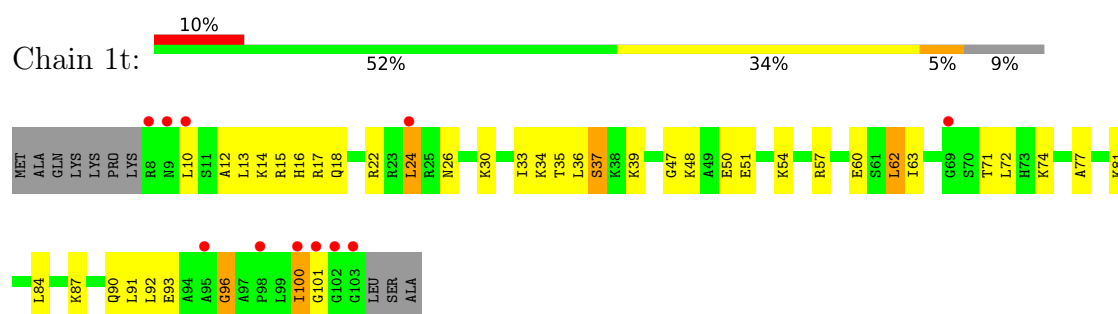
- Molecule 50: 30S ribosomal protein S19



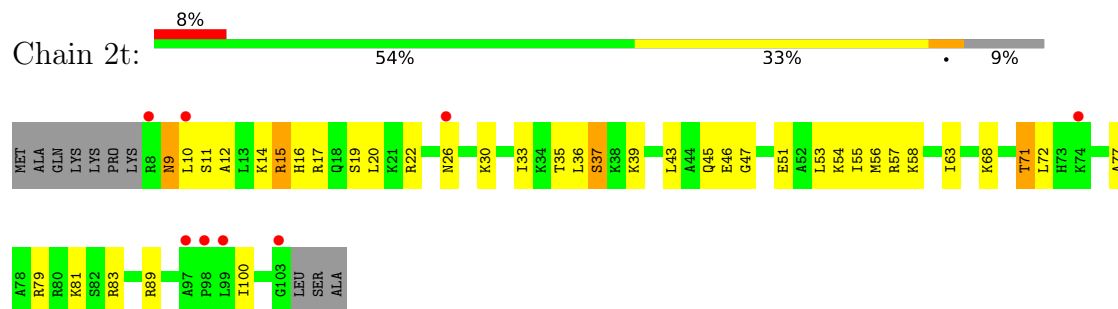
- Molecule 50: 30S ribosomal protein S19



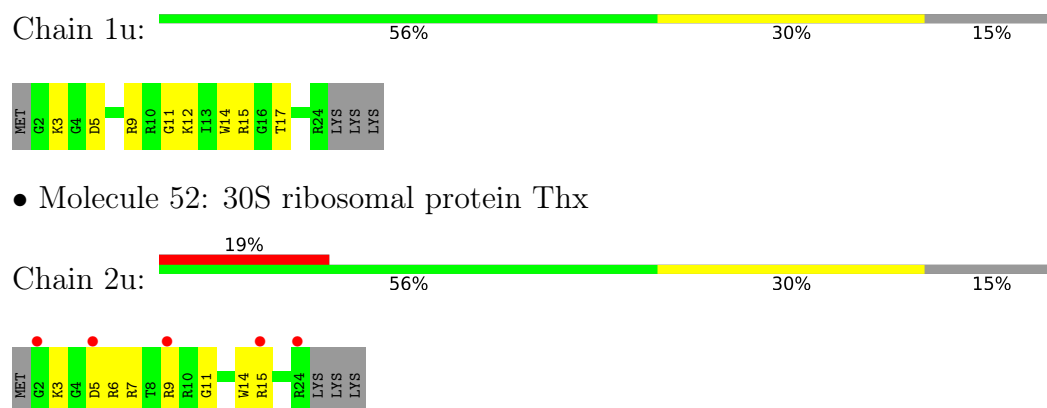
- Molecule 51: 30S ribosomal protein S20



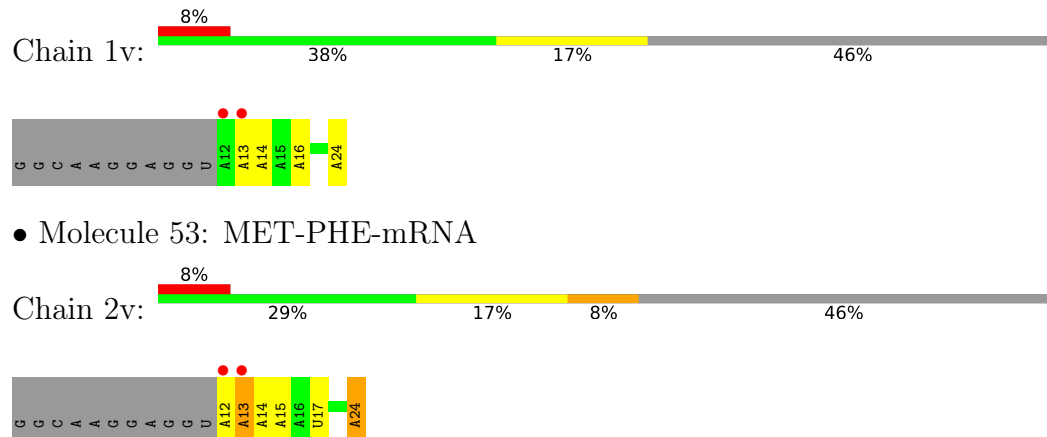
- Molecule 51: 30S ribosomal protein S20



- Molecule 52: 30S ribosomal protein Thx



- Molecule 53: MET-PHE-mRNA



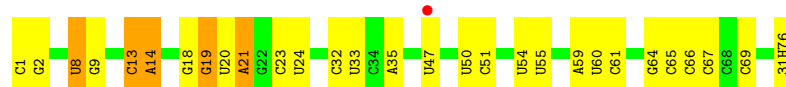
- Molecule 54: A-site Aminoacylated Phe-tRNAphe



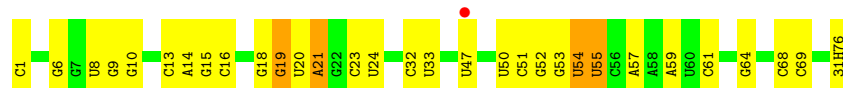
• Molecule 54: A-site Aminoacylated Phe-tRNAphe



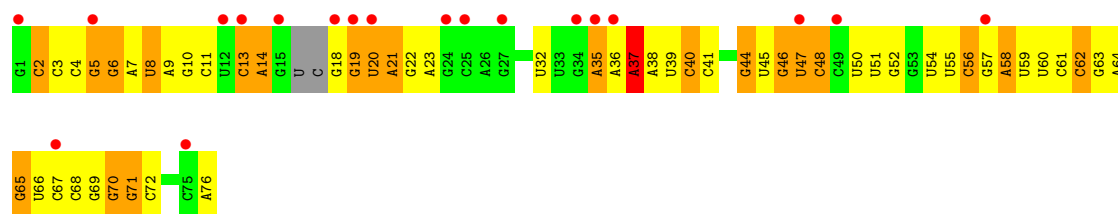
• Molecule 55: P-site Aminoacylated fMet-tRNAmet



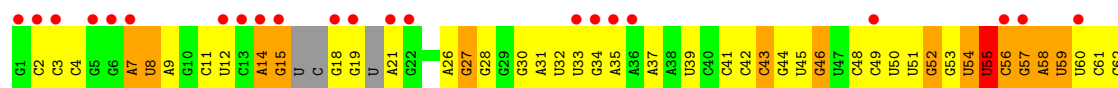
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

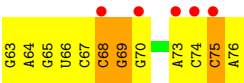


• Molecule 56: E-site Deacylated tRNAphe



• Molecule 56: E-site Deacylated tRNAphe

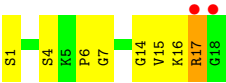




● Molecule 57: Lasso peptide lariocidin



● Molecule 57: Lasso peptide lariocidin



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	210.10Å 451.03Å 622.03Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.62 – 2.50 48.62 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.9 (48.62-2.50) 100.0 (48.62-2.50)	Depositor EDS
R_{merge}	0.33	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.23 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.216 , 0.265 0.224 , 0.269	Depositor DCC
R_{free} test set	100652 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	46.2	Xtriage
Anisotropy	0.125	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 51.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.38$, $\langle L^2 \rangle = 0.20$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	300593	wwPDB-VP
Average B, all atoms (Å ²)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ 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: 5MC, 31H, PSU, OMC, F3N, MIA, SF4, MA6, MG, UR3, 4OC, OMG, ZN, K, M2G, G7M, 4SU, 0TD, OMU, 2MA, 5MU, 2MG

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	0.54	0/69011	0.72	7/107720 (0.0%)
1	2A	0.43	0/67295	0.62	9/105042 (0.0%)
2	1B	0.44	0/2882	0.65	0/4494
2	2B	0.37	0/2879	0.58	0/4487
3	1D	0.53	0/2186	0.75	2/2944 (0.1%)
3	2D	0.46	0/2186	0.68	0/2944
4	1E	0.52	0/1592	0.77	0/2149
4	2E	0.39	0/1592	0.64	0/2149
5	1F	0.52	0/1619	0.75	2/2193 (0.1%)
5	2F	0.41	0/1615	0.63	0/2188
6	1G	0.43	0/1448	0.66	0/1957
6	2G	0.37	0/1453	0.62	0/1963
7	1H	0.45	1/1356 (0.1%)	0.64	0/1834
7	2H	0.36	0/1356	0.51	0/1834
8	1I	0.39	0/1112	0.63	0/1514
8	2I	0.38	0/1079	0.66	0/1475
9	1N	0.52	0/1144	0.71	0/1543
9	2N	0.38	0/1144	0.59	0/1543
10	1O	0.46	0/943	0.66	0/1269
10	2O	0.39	0/943	0.61	0/1269
11	1P	0.49	0/1152	0.83	1/1533 (0.1%)
11	2P	0.41	0/1152	0.66	0/1533
12	1Q	0.50	0/1143	0.70	0/1527
12	2Q	0.41	0/1143	0.63	0/1527
13	1R	0.57	0/982	0.77	0/1312
13	2R	0.40	0/982	0.61	0/1312
14	1S	0.45	0/883	0.69	0/1176
14	2S	0.37	0/880	0.60	0/1172
15	1T	0.46	0/1105	0.68	0/1477
15	2T	0.41	0/1097	0.65	2/1468 (0.1%)
16	1U	0.56	0/977	0.76	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.40	0/977	0.58	0/1301
17	1V	0.52	0/782	0.76	0/1049
17	2V	0.38	0/782	0.56	0/1049
18	1W	0.57	0/897	0.73	0/1205
18	2W	0.45	0/897	0.61	0/1205
19	1X	0.55	0/764	0.75	2/1025 (0.2%)
19	2X	0.41	0/764	0.68	2/1025 (0.2%)
20	1Y	0.45	0/819	0.66	0/1095
20	2Y	0.41	0/819	0.66	0/1095
21	1Z	0.45	0/1267	0.69	1/1717 (0.1%)
21	2Z	0.41	0/1299	0.66	0/1763
22	10	0.53	0/662	0.75	0/881
22	20	0.39	0/662	0.57	0/881
23	11	0.49	0/762	0.66	0/1014
23	21	0.43	0/762	0.63	0/1014
24	12	0.50	0/590	0.62	0/781
24	22	0.36	0/590	0.56	0/781
25	13	0.53	0/474	0.73	0/635
25	23	0.36	0/469	0.62	0/630
26	14	0.47	0/565	0.84	0/761
26	24	0.42	0/545	0.70	0/737
27	15	0.52	0/469	0.72	0/635
27	25	0.46	0/469	0.64	0/635
28	16	0.47	0/460	0.70	0/613
28	26	0.38	0/456	0.64	0/608
29	17	0.61	0/426	0.79	0/561
29	27	0.49	0/426	0.68	0/561
30	18	0.51	0/525	0.75	0/691
30	28	0.43	0/525	0.64	0/691
31	19	0.48	0/310	0.81	0/407
31	29	0.32	0/310	0.60	0/407
32	1a	0.41	0/35795	0.61	4/55864 (0.0%)
32	2a	0.37	1/35886 (0.0%)	0.57	3/56005 (0.0%)
33	1b	0.40	0/1881	0.71	1/2542 (0.0%)
33	2b	0.41	0/1860	0.65	0/2518
34	1c	0.40	0/1572	0.59	0/2126
34	2c	0.39	0/1566	0.57	0/2119
35	1d	0.37	0/1685	0.60	0/2262
35	2d	0.37	0/1704	0.60	0/2284
36	1e	0.40	0/1145	0.65	0/1543
36	2e	0.39	0/1149	0.63	0/1548
37	1f	0.39	0/823	0.59	0/1115
37	2f	0.38	0/829	0.56	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.35	0/1250	0.53	0/1679
38	2g	0.38	0/1254	0.61	0/1683
39	1h	0.37	0/1108	0.56	0/1494
39	2h	0.34	0/1108	0.54	0/1494
40	1i	0.38	0/1002	0.66	0/1346
40	2i	0.39	0/997	0.65	0/1343
41	1j	0.39	0/722	0.60	0/982
41	2j	0.42	0/727	0.65	0/988
42	1k	0.40	0/844	0.62	0/1145
42	2k	0.37	0/848	0.56	0/1149
43	1l	0.43	0/937	0.65	2/1260 (0.2%)
43	2l	0.38	0/937	0.67	0/1260
44	1m	0.43	0/990	0.68	0/1327
44	2m	0.38	0/961	0.67	0/1291
45	1n	0.40	0/501	0.62	0/664
45	2n	0.38	0/501	0.64	0/664
46	1o	0.41	0/739	0.56	0/985
46	2o	0.36	0/739	0.54	0/985
47	1p	0.36	0/697	0.59	0/939
47	2p	0.38	0/693	0.65	0/935
48	1q	0.40	0/836	0.58	0/1117
48	2q	0.38	0/836	0.63	1/1117 (0.1%)
49	1r	0.39	0/560	0.64	0/746
49	2r	0.34	0/560	0.55	0/746
50	1s	0.37	0/667	0.72	0/900
50	2s	0.41	0/661	0.74	2/893 (0.2%)
51	1t	0.38	0/730	0.65	0/965
51	2t	0.44	0/729	0.66	0/965
52	1u	0.38	0/203	0.56	0/266
52	2u	0.40	0/203	0.65	0/266
53	1v	0.48	0/310	0.57	0/480
53	2v	0.43	0/310	0.51	0/480
54	1w	0.47	1/1603 (0.1%)	0.61	1/2492 (0.0%)
54	2w	0.45	1/1531 (0.1%)	0.61	0/2379
55	1x	0.47	0/1723	0.65	0/2684
55	2x	0.41	0/1723	0.58	0/2684
56	1y	0.56	2/1606 (0.1%)	0.55	0/2497
56	2y	0.60	2/1583 (0.1%)	0.57	0/2459
57	1z	0.40	0/133	0.99	0/168
57	2z	0.43	0/133	1.00	2/168 (1.2%)
All	All	0.45	8/316945 (0.0%)	0.65	44/474436 (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
3	2D	0	1
5	2F	0	2
6	1G	0	2
6	2G	0	1
21	1Z	0	1
21	2Z	0	2
23	11	0	1
23	21	0	1
26	14	0	1
26	24	0	1
33	1b	0	3
33	2b	0	1
41	1j	0	2
41	2j	0	1
44	2m	0	1
All	All	0	21

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2y	46	G7M	O3'-P	6.67	1.62	1.56
56	2y	8	4SU	O3'-P	6.19	1.62	1.56
7	1H	126	PRO	C-N	-5.50	1.17	1.33
56	1y	8	4SU	O3'-P	5.38	1.61	1.56
54	2w	46	G7M	O3'-P	5.29	1.61	1.56
56	1y	46	G7M	O3'-P	5.17	1.61	1.56
54	1w	46	G7M	O3'-P	5.10	1.61	1.56
32	2a	1498	UR3	O3'-P	5.03	1.61	1.56

All (44) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
48	2q	65	ILE	N-CA-C	-8.78	104.79	111.90
1	1A	2689	U	P-O3'-C3'	8.48	132.93	120.20
1	1A	1992	G	C2'-C3'-O3'	8.28	121.92	109.50
32	2a	1272	G	N1-C2-N2	-7.95	92.34	116.20
1	2A	1992	G	C2'-C3'-O3'	7.25	120.38	109.50
1	1A	2689	U	C2'-C3'-O3'	7.12	120.19	109.50
33	1b	13	ALA	N-CA-C	-6.74	105.17	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1F	89	VAL	CA-C-N	-6.68	111.31	123.34
5	1F	89	VAL	C-N-CA	-6.68	111.31	123.34
32	1a	266	G	C2'-C3'-O3'	6.34	119.01	109.50
1	1A	1992	G	P-O3'-C3'	6.30	129.64	120.20
19	2X	94	GLY	CA-C-N	6.25	132.96	121.70
19	2X	94	GLY	C-N-CA	6.25	132.96	121.70
32	2a	1272	G	N3-C2-N2	5.89	137.56	119.90
1	2A	2689	U	P-O3'-C3'	5.88	129.02	120.20
1	1A	2689	U	C4'-C3'-O3'	5.75	118.02	109.40
1	2A	528	A	P-O3'-C3'	5.69	128.74	120.20
19	1X	94	GLY	CA-C-N	5.69	131.94	121.70
19	1X	94	GLY	C-N-CA	5.69	131.94	121.70
50	2s	27	GLU	CA-C-N	5.55	131.69	121.70
50	2s	27	GLU	C-N-CA	5.55	131.69	121.70
1	2A	752	A	C2'-C3'-O3'	5.52	117.78	109.50
32	2a	1263	C	N1-C2-O2	5.47	135.32	118.90
3	1D	237	GLU	CA-C-N	-5.44	111.58	121.32
3	1D	237	GLU	C-N-CA	-5.44	111.58	121.32
15	2T	85	LYS	CA-C-N	-5.41	115.64	123.11
15	2T	85	LYS	C-N-CA	-5.41	115.64	123.11
11	1P	18	ARG	NE-CZ-NH1	-5.38	116.12	121.50
1	1A	2689	U	OP2-P-O3'	5.30	123.89	108.00
1	2A	1420	U	P-O3'-C3'	5.27	128.11	120.20
1	2A	528	A	C4'-C3'-O3'	5.27	117.30	109.40
43	1l	104	VAL	CA-C-N	5.23	131.52	121.54
43	1l	104	VAL	C-N-CA	5.23	131.52	121.54
1	1A	2629	A	P-O3'-C3'	5.21	128.01	120.20
57	2z	4	SER	CA-C-N	5.20	134.50	121.80
57	2z	4	SER	C-N-CA	5.20	134.50	121.80
54	1w	75	C	C4'-C3'-O3'	-5.20	105.20	113.00
32	1a	509	A	C2'-C3'-O3'	5.16	121.44	113.70
32	1a	1067	A	C2'-C3'-O3'	5.15	117.22	109.50
1	2A	2689	U	C4'-C3'-O3'	5.14	117.11	109.40
1	2A	1653	G	C2'-C3'-O3'	5.07	117.10	109.50
32	1a	115	G	P-O3'-C3'	5.05	127.78	120.20
21	1Z	53	ILE	N-CA-C	5.05	119.85	109.34
1	2A	1420	U	C4'-C3'-O3'	5.02	116.93	109.40

There are no chirality outliers.

All (21) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
23	11	3	LYS	Peptide
26	14	61	ARG	Peptide
6	1G	50	ALA	Peptide
6	1G	95	ARG	Peptide
21	1Z	29	TYR	Peptide
33	1b	123	ALA	Peptide
33	1b	126	GLU	Peptide
33	1b	21	ARG	Peptide
41	1j	32	ALA	Peptide
41	1j	54	PHE	Peptide
23	21	3	LYS	Peptide
26	24	60	GLN	Peptide
3	2D	275	LYS	Peptide
5	2F	20	LEU	Peptide
5	2F	21	ALA	Peptide
6	2G	95	ARG	Peptide
21	2Z	51	ALA	Peptide
21	2Z	52	SER	Peptide
33	2b	8	LYS	Peptide
41	2j	79	ARG	Peptide
44	2m	65	LYS	Peptide

5.2 Too-close contacts

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	31196	678	0
1	2A	60322	0	30427	769	0
2	1B	2577	0	1305	34	0
2	2B	2575	0	1303	51	0
3	1D	2136	0	2218	49	0
3	2D	2136	0	2218	45	0
4	1E	1559	0	1618	41	0
4	2E	1559	0	1618	49	0
5	1F	1584	0	1625	36	0
5	2F	1580	0	1619	52	0
6	1G	1423	0	1436	42	0
6	2G	1428	0	1438	67	0
7	1H	1330	0	1407	44	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	2H	1330	0	1407	53	0
8	1I	1097	0	1140	48	1
8	2I	1064	0	1082	44	0
9	1N	1117	0	1184	19	0
9	2N	1117	0	1184	25	0
10	1O	933	0	996	27	0
10	2O	933	0	996	24	0
11	1P	1135	0	1212	34	0
11	2P	1135	0	1212	30	0
12	1Q	1122	0	1179	20	0
12	2Q	1122	0	1179	32	0
13	1R	968	0	1033	18	0
13	2R	968	0	1033	22	0
14	1S	873	0	927	23	0
14	2S	870	0	923	44	0
15	1T	1091	0	1151	26	0
15	2T	1083	0	1136	25	0
16	1U	959	0	1019	19	0
16	2U	959	0	1019	29	0
17	1V	771	0	830	14	0
17	2V	771	0	830	20	0
18	1W	886	0	940	10	0
18	2W	886	0	940	23	0
19	1X	750	0	814	21	0
19	2X	750	0	814	18	0
20	1Y	806	0	881	16	0
20	2Y	806	0	881	21	0
21	1Z	1240	0	1240	42	0
21	2Z	1271	0	1273	69	0
22	10	653	0	674	14	0
22	20	653	0	674	25	0
23	11	755	0	826	19	0
23	21	755	0	826	22	0
24	12	588	0	643	7	0
24	22	588	0	643	11	0
25	13	469	0	518	9	0
25	23	464	0	514	19	0
26	14	552	0	533	32	0
26	24	532	0	503	34	0
27	15	455	0	465	4	0
27	25	455	0	465	9	0
28	16	453	0	473	12	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	26	449	0	469	13	0
29	17	418	0	467	6	0
29	27	418	0	467	6	0
30	18	517	0	582	17	0
30	28	517	0	582	12	0
31	19	307	0	335	5	0
31	29	307	0	335	5	0
32	1a	32246	0	16295	478	0
32	2a	32327	0	16337	553	1
33	1b	1846	0	1867	91	0
33	2b	1825	0	1828	80	0
34	1c	1548	0	1535	42	0
34	2c	1542	0	1517	63	0
35	1d	1655	0	1672	54	0
35	2d	1674	0	1714	70	0
36	1e	1129	0	1185	48	0
36	2e	1133	0	1191	50	0
37	1f	810	0	804	25	0
37	2f	816	0	808	25	0
38	1g	1231	0	1238	33	0
38	2g	1235	0	1249	42	0
39	1h	1088	0	1126	36	0
39	2h	1088	0	1126	27	0
40	1i	983	0	986	42	0
40	2i	978	0	966	50	0
41	1j	709	0	650	30	0
41	2j	714	0	672	41	0
42	1k	829	0	825	26	0
42	2k	833	0	836	24	0
43	1l	932	0	981	16	0
43	2l	932	0	980	24	0
44	1m	979	0	1028	34	0
44	2m	950	0	988	44	0
45	1n	492	0	529	12	0
45	2n	492	0	529	20	0
46	1o	728	0	760	23	0
46	2o	728	0	760	24	0
47	1p	681	0	697	19	0
47	2p	677	0	686	24	0
48	1q	823	0	891	19	0
48	2q	823	0	891	21	0
49	1r	555	0	618	22	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	2r	555	0	618	14	0
50	1s	652	0	662	28	0
50	2s	646	0	644	35	0
51	1t	728	0	798	27	0
51	2t	727	0	796	27	0
52	1u	199	0	208	8	0
52	2u	199	0	208	8	0
53	1v	277	0	140	1	0
53	2v	277	0	140	4	0
54	1w	1623	0	839	25	0
54	2w	1555	0	797	23	0
55	1x	1656	0	848	14	0
55	2x	1656	0	849	15	0
56	1y	1585	0	803	43	0
56	2y	1565	0	794	47	0
57	1z	132	0	145	2	0
57	2z	132	0	145	3	0
58	10	10	0	0	0	0
58	11	6	0	0	0	0
58	12	2	0	0	0	0
58	13	3	0	0	0	0
58	14	1	0	0	0	0
58	15	7	0	0	0	0
58	16	2	0	0	0	0
58	17	4	0	0	0	0
58	18	3	0	0	0	0
58	19	1	0	0	0	0
58	1A	1108	0	0	0	0
58	1B	39	0	0	0	0
58	1D	13	0	0	0	0
58	1E	14	0	0	0	0
58	1F	12	0	0	0	0
58	1G	5	0	0	0	0
58	1I	1	0	0	0	0
58	1N	5	0	0	0	0
58	1O	5	0	0	0	0
58	1P	4	0	0	0	0
58	1Q	6	0	0	0	0
58	1R	5	0	0	0	0
58	1S	3	0	0	0	0
58	1T	3	0	0	0	0
58	1U	11	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	1V	9	0	0	0	0
58	1W	6	0	0	0	0
58	1X	6	0	0	0	0
58	1Y	3	0	0	0	0
58	1Z	3	0	0	0	0
58	1a	216	0	0	0	0
58	1b	1	0	0	0	0
58	1d	1	0	0	0	0
58	1e	2	0	0	0	0
58	1f	2	0	0	0	0
58	1h	1	0	0	0	0
58	1l	2	0	0	0	0
58	1m	1	0	0	0	0
58	1n	1	0	0	0	0
58	1t	1	0	0	0	0
58	1v	2	0	0	0	0
58	1w	9	0	0	0	0
58	1x	13	0	0	0	0
58	1y	1	0	0	0	0
58	1z	1	0	0	0	0
58	20	3	0	0	0	0
58	21	1	0	0	0	0
58	23	1	0	0	0	0
58	25	4	0	0	0	0
58	26	1	0	0	0	0
58	27	2	0	0	0	0
58	28	4	0	0	0	0
58	2A	882	0	0	0	0
58	2B	20	0	0	0	0
58	2D	7	0	0	0	0
58	2E	10	0	0	0	0
58	2F	9	0	0	0	0
58	2G	1	0	0	0	0
58	2N	1	0	0	0	0
58	2O	1	0	0	0	0
58	2Q	3	0	0	0	0
58	2R	2	0	0	0	0
58	2T	4	0	0	0	0
58	2U	1	0	0	0	0
58	2V	2	0	0	0	0
58	2W	1	0	0	0	0
58	2X	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2Z	1	0	0	0	0
58	2a	240	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	2j	1	0	0	0	0
58	2l	5	0	0	0	0
58	2n	1	0	0	0	0
58	2p	1	0	0	0	0
58	2q	3	0	0	0	0
58	2r	1	0	0	0	0
58	2t	1	0	0	0	0
58	2v	3	0	0	0	0
58	2w	12	0	0	0	0
58	2x	8	0	0	0	0
58	2y	6	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	11	0	0	0	0
62	11	11	0	0	0	0
62	12	4	0	0	0	0
62	13	5	0	0	0	0
62	14	1	0	0	0	0
62	15	5	0	0	0	0
62	16	4	0	0	0	0
62	17	9	0	0	0	0
62	18	8	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	1A	2017	0	0	76	0
62	1B	63	0	0	4	0
62	1D	28	0	0	1	0
62	1E	29	0	0	2	0
62	1F	14	0	0	2	0
62	1G	2	0	0	0	0
62	1H	2	0	0	0	0
62	1I	1	0	0	1	0
62	1N	6	0	0	0	0
62	1O	6	0	0	0	0
62	1P	20	0	0	0	0
62	1Q	7	0	0	0	0
62	1R	11	0	0	3	0
62	1S	5	0	0	0	0
62	1T	9	0	0	0	0
62	1U	13	0	0	1	0
62	1V	8	0	0	1	0
62	1W	6	0	0	1	0
62	1X	6	0	0	0	0
62	1Y	2	0	0	0	0
62	1Z	1	0	0	0	0
62	1a	386	0	0	30	0
62	1b	1	0	0	0	0
62	1g	1	0	0	0	0
62	1i	1	0	0	0	0
62	1l	9	0	0	1	0
62	1m	1	0	0	0	0
62	1n	1	0	0	0	0
62	1o	1	0	0	0	0
62	1p	1	0	0	0	0
62	1q	2	0	0	0	0
62	1u	1	0	0	1	0
62	1v	5	0	0	0	0
62	1w	21	0	0	0	0
62	1x	15	0	0	0	0
62	1y	1	0	0	0	0
62	1z	1	0	0	0	0
62	20	3	0	0	0	0
62	21	12	0	0	0	0
62	23	2	0	0	0	0
62	25	1	0	0	0	0
62	27	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	28	3	0	0	1	0
62	29	1	0	0	0	0
62	2A	1165	0	0	70	0
62	2B	22	0	0	2	0
62	2D	22	0	0	0	0
62	2E	14	0	0	0	0
62	2F	13	0	0	0	0
62	2I	2	0	0	1	0
62	2N	1	0	0	0	0
62	2O	3	0	0	0	0
62	2P	15	0	0	1	0
62	2Q	1	0	0	0	0
62	2R	4	0	0	0	0
62	2T	4	0	0	0	0
62	2U	2	0	0	0	0
62	2V	1	0	0	0	0
62	2X	1	0	0	0	0
62	2Y	1	0	0	0	0
62	2Z	1	0	0	0	0
62	2a	283	0	0	27	0
62	2c	1	0	0	0	0
62	2d	2	0	0	0	0
62	2e	1	0	0	0	0
62	2g	1	0	0	0	0
62	2i	1	0	0	0	0
62	2j	3	0	0	1	0
62	2l	6	0	0	0	0
62	2p	1	0	0	0	0
62	2r	1	0	0	0	0
62	2t	1	0	0	1	0
62	2v	2	0	0	0	0
62	2w	7	0	0	0	0
62	2x	8	0	0	0	0
62	2y	6	0	0	1	0
All	All	300593	0	197076	4936	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 10.

All (4936) 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	1.34	1.23
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.43	1.01
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.43	1.00
1:2A:1604:C:OP2	62:2A:3903:HOH:O	1.77	0.98
1:1A:1082:U:O4	1:1A:1086:A:N1	1.97	0.98
32:1a:1004:A:N6	32:1a:1037:C:N3	2.12	0.98
1:1A:1058:G:H1	1:1A:1080:C:H42	0.98	0.97
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.26	0.97
56:2y:15:G:N2	56:2y:48:C:H42	1.61	0.97
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.00	0.96
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.07	0.96
32:1a:1505:G:OP2	62:1a:1903:HOH:O	1.83	0.95
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.32	0.95
32:1a:1499:A:OP2	62:1a:1903:HOH:O	1.84	0.95
32:2a:1086:U:H3	32:2a:1099:G:H22	1.16	0.94
32:2a:157:G:H1	32:2a:164:U:H3	1.14	0.94
1:2A:2298:A:H62	1:2A:2318:G:H8	1.12	0.94
1:1A:2100:G:H1	1:1A:2189:U:H3	1.13	0.93
1:2A:1019:U:HO2'	1:2A:1021:A:H2	0.98	0.93
1:1A:2099:U:H3	1:1A:2190:G:H1	1.04	0.93
1:1A:1058:G:H1	1:1A:1080:C:N4	1.68	0.92
56:2y:15:G:H22	56:2y:48:C:H42	1.13	0.92
1:1A:1054:A:H61	1:1A:1105:U:H3	0.98	0.92
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.06	0.91
1:2A:1204:A:H2	1:2A:1241:A:H62	1.17	0.91
1:2A:2100:G:H1	1:2A:2189:U:H3	1.18	0.91
1:1A:1054:A:N6	1:1A:1105:U:H3	1.68	0.90
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.50	0.90
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.04	0.89
1:2A:1359:A:N1	1:2A:1372:U:N3	2.20	0.89
1:1A:880:G:N2	1:1A:898:C:O2	2.04	0.89
1:1A:2427:C:OP1	62:1A:4203:HOH:O	1.89	0.89
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.54	0.89
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.53	0.88
1:1A:1603:A:OP1	62:1A:4204:HOH:O	1.91	0.88
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.07	0.88
1:2A:1021:A:H62	1:2A:1141:U:H3	1.20	0.88
32:1a:1373:G:H5''	38:1g:36:LYS:HE2	1.56	0.88
56:2y:15:G:H22	56:2y:48:C:N4	1.72	0.87
1:2A:1254:A:OP2	62:2A:3904:HOH:O	1.89	0.87
1:2A:2137:C:N4	1:2A:2154:G:H1	1.73	0.87
56:2y:14:A:H61	56:2y:21:A:H2	1.21	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2136:C:N3	1:1A:2155:G:N2	2.24	0.86
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.11	0.86
1:1A:1431:U:O4	62:1A:4205:HOH:O	1.91	0.86
32:1a:1027:C:C2	32:1a:1034:G:N2	2.43	0.85
34:2c:34:LEU:HD11	34:2c:38:ARG:HH21	1.42	0.85
1:1A:868:U:O2'	12:1Q:8:LYS:NZ	2.09	0.85
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.57	0.85
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.59	0.85
1:1A:1203:G:O6	62:1A:4206:HOH:O	1.93	0.85
1:1A:1082:U:N3	1:1A:1086:A:N6	2.07	0.84
1:1A:668:G:OP2	62:1A:4208:HOH:O	1.95	0.84
32:1a:664:G:H22	32:1a:741:G:H1	1.25	0.84
54:1w:75:C:O3'	54:1w:76:F3N:P	2.35	0.84
32:2a:664:G:H22	32:2a:741:G:H1	1.23	0.84
41:2j:44:VAL:HG13	41:2j:66:ARG:HG2	1.60	0.84
1:1A:2136:C:N4	1:1A:2155:G:N1	2.26	0.84
32:1a:449:C:N4	32:1a:484:G:O6	2.11	0.83
32:2a:117:G:OP2	62:2a:1903:HOH:O	1.95	0.83
32:2a:596:C:OP2	62:2a:1902:HOH:O	1.95	0.83
1:2A:963:U:OP2	62:2A:3905:HOH:O	1.95	0.83
32:2a:1030(A):G:O2'	32:2a:1030(C):G:N7	2.11	0.83
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.12	0.83
1:2A:1812:A:OP2	62:2A:3906:HOH:O	1.95	0.83
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.12	0.82
25:13:55:ARG:HH22	25:13:57:GLU:HB2	1.42	0.82
32:1a:677:U:H3	32:1a:713:G:H22	1.27	0.82
1:1A:2550:G:OP1	62:1A:4207:HOH:O	1.95	0.82
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.11	0.82
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.59	0.82
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.61	0.82
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.11	0.82
1:2A:1023:U:OP2	62:2A:3907:HOH:O	1.96	0.82
1:1A:11:G:H2'	1:1A:12:U:H5'	1.62	0.82
1:1A:826:U:OP1	62:1A:4203:HOH:O	1.98	0.82
32:1a:159:G:N2	32:1a:162:A:OP2	2.12	0.82
26:24:58:ARG:HD2	50:2s:68:GLY:H	1.44	0.82
1:1A:1014:U:OP2	62:1A:4210:HOH:O	1.98	0.82
1:2A:146:G:O6	62:2A:3909:HOH:O	1.98	0.82
7:1H:3:ARG:HG2	7:1H:6:ARG:HG3	1.61	0.81
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.15	0.81
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:1y:19:G:N2	56:1y:56:C:N3	2.28	0.81
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.45	0.81
1:2A:1647:G:OP1	62:2A:3908:HOH:O	1.97	0.81
7:2H:149:ARG:NH1	7:2H:167:GLU:OE2	2.13	0.81
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.13	0.81
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.62	0.81
1:1A:248:G:OP1	62:1A:4209:HOH:O	1.98	0.81
1:1A:1023:U:OP2	62:1A:4213:HOH:O	1.99	0.81
32:1a:376:G:H5''	47:1p:5:ARG:HG2	1.62	0.81
32:1a:505:G:N7	62:1a:1912:HOH:O	2.14	0.81
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.62	0.81
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.62	0.81
56:2y:15:G:N1	56:2y:48:C:N3	2.27	0.81
1:1A:2821:A:OP2	62:1R:301:HOH:O	1.99	0.81
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.63	0.81
1:2A:948:G:OP1	62:2A:3905:HOH:O	2.00	0.80
1:2A:2298:A:N6	1:2A:2318:G:H8	1.79	0.80
32:2a:1029:C:N4	32:2a:1032:G:N1	2.29	0.80
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.62	0.80
32:2a:1029:C:C4	32:2a:1032:G:N1	2.49	0.80
1:1A:2136:C:N3	1:1A:2155:G:C2	2.49	0.80
1:2A:1568:G:N7	62:2A:3931:HOH:O	2.15	0.80
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.64	0.80
1:1A:2306:C:O2	62:1A:4212:HOH:O	1.99	0.80
35:1d:107:ARG:HH21	35:1d:194:LEU:HD21	1.47	0.80
1:2A:2808:U:O2	1:2A:2892:A:N6	2.14	0.80
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.15	0.80
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.26	0.80
1:2A:1648:C:OP1	62:2A:3908:HOH:O	1.99	0.80
41:2j:40:LEU:HB2	41:2j:69:ASN:HB2	1.64	0.80
26:14:16:CYS:SG	26:14:17:GLY:N	2.54	0.80
1:2A:1395:A:OP1	62:2A:3903:HOH:O	1.98	0.80
56:2y:9:A:O2'	56:2y:11:C:N4	2.11	0.80
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.47	0.80
32:1a:1500:A:OP1	62:1a:1904:HOH:O	2.00	0.79
50:1s:12:ASP:OD2	50:1s:35:SER:OG	2.00	0.79
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.64	0.79
1:1A:2128:C:H42	1:1A:2160:G:H1	1.26	0.79
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.63	0.79
1:2A:1830:C:OP2	62:2A:3911:HOH:O	2.01	0.79
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.00	0.79
54:1w:47:U:H5''	54:1w:48:C:H5'	1.64	0.79
1:2A:1603:A:OP1	62:2A:3903:HOH:O	2.00	0.79
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.63	0.79
1:2A:2137:C:H42	1:2A:2154:G:H1	1.30	0.79
21:2Z:31:ARG:HH11	21:2Z:94:GLU:HG2	1.48	0.79
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.15	0.79
9:2N:123:TYR:HH	9:2N:130:HIS:HE2	1.20	0.79
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.13	0.79
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.64	0.78
1:1A:1890:A:OP2	62:1A:4211:HOH:O	1.98	0.78
32:1a:1224:G:OP1	62:1a:1905:HOH:O	2.01	0.78
32:1a:975:A:H4'	32:1a:976:G:H5''	1.65	0.78
28:26:12:GLU:OE1	28:26:19:ARG:NH1	2.17	0.78
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.01	0.78
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.46	0.78
32:2a:1272:G:N2	32:2a:1273:G:C5	2.52	0.78
1:2A:2759:G:OP2	62:2A:3912:HOH:O	2.02	0.78
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.17	0.78
1:2A:1378:A:O2'	1:2A:1380:G:N7	2.16	0.77
32:2a:1095:U:OP2	62:2a:1904:HOH:O	2.01	0.77
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.66	0.77
1:1A:2808:U:O2	1:1A:2892:A:N6	2.18	0.77
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.15	0.77
1:2A:1670:C:OP1	62:2A:3910:HOH:O	2.02	0.77
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.48	0.77
32:2a:1029:C:N3	32:2a:1032:G:N2	2.32	0.77
1:1A:2128:C:N4	1:1A:2160:G:H1	1.82	0.77
1:2A:1671:U:OP2	62:2A:3910:HOH:O	2.00	0.77
32:2a:266:G:H5''	32:2a:268:C:H41	1.47	0.77
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.66	0.77
1:1A:2702:U:OP2	62:1A:4216:HOH:O	2.02	0.77
1:2A:900:A:H2'	1:2A:901:A:H8	1.50	0.77
37:2f:95:GLU:O	49:2r:32:ARG:NH1	2.18	0.77
1:1A:592:G:O6	62:1A:4214:HOH:O	2.02	0.77
21:1Z:93:ASP:HB3	21:1Z:131:ARG:HH22	1.50	0.77
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.67	0.77
1:1A:1647:G:OP1	62:1A:4217:HOH:O	2.03	0.76
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.18	0.76
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.21	0.76
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.20	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.49	0.76
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.17	0.76
2:1B:66:A:H61	2:1B:109:C:H5'	1.50	0.76
33:2b:54:THR:HG22	33:2b:199:TYR:HB3	1.67	0.76
1:1A:1452:A:OP2	62:1A:4215:HOH:O	2.02	0.76
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.67	0.76
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.21	0.76
32:2a:598:U:O4	62:2a:1902:HOH:O	2.04	0.76
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.19	0.76
1:1A:2642:G:OP2	9:1N:83:LYS:NZ	2.19	0.76
1:1A:1648:C:OP1	62:1A:4217:HOH:O	2.03	0.76
1:1A:2874:C:OP1	62:1A:4219:HOH:O	2.04	0.76
40:1i:16:ARG:HB2	40:1i:64:THR:HG22	1.66	0.76
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.67	0.76
1:2A:568:U:O4	62:2A:3913:HOH:O	2.02	0.76
32:1a:1414:U:O4	62:1a:1906:HOH:O	2.03	0.76
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.21	0.76
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.19	0.75
1:2A:106:C:H1'	20:2Y:1:MET:HE2	1.66	0.75
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.51	0.75
21:2Z:93:ASP:HA	21:2Z:131:ARG:HH12	1.51	0.75
32:2a:1373:G:H5''	38:2g:36:LYS:HE3	1.67	0.75
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.19	0.75
2:2B:54:G:OP2	62:2B:301:HOH:O	2.04	0.75
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	1.69	0.75
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.52	0.75
32:2a:1272:G:N2	32:2a:1273:G:N7	2.32	0.75
33:1b:128:GLU:HG3	33:1b:135:GLN:HE22	1.50	0.75
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.68	0.75
1:2A:1689:A:H62	1:2A:1698:A:H2	1.34	0.75
33:2b:189:ASP:N	33:2b:189:ASP:OD1	2.16	0.75
33:1b:21:ARG:H	33:1b:39:ILE:HG13	1.51	0.75
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.20	0.75
15:2T:55:ASN:HB3	15:2T:58:ASN:HB2	1.69	0.75
33:2b:15:VAL:HG12	33:2b:209:ARG:HB3	1.68	0.75
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.20	0.75
2:2B:28:C:N4	2:2B:56:G:O6	2.17	0.75
19:2X:31:HIS:HD2	19:2X:33:LYS:H	1.35	0.75
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.02	0.75
34:2c:41:GLY:O	34:2c:45:LYS:NZ	2.20	0.75
18:1W:92:ARG:NH1	62:1W:301:HOH:O	2.18	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2592:G:OP1	62:2A:3915:HOH:O	2.05	0.74
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.21	0.74
54:2w:13:C:O2'	54:2w:14:A:O5'	2.04	0.74
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.18	0.74
32:2a:1204:A:OP2	62:2a:1905:HOH:O	2.06	0.74
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	1.68	0.74
1:1A:1633:G:O6	62:1A:4220:HOH:O	2.05	0.74
36:1e:77:PRO:HD2	36:1e:142:LEU:HD13	1.67	0.74
17:1V:98:GLU:OE2	17:1V:100:ARG:NH1	2.21	0.74
44:1m:67:GLU:HG3	44:1m:71:ARG:HH21	1.52	0.74
1:2A:2751:G:H8	7:2H:2:SER:HA	1.51	0.74
35:2d:175:SER:HB3	35:2d:186:LEU:HD21	1.69	0.74
1:1A:1332:G:OP1	62:1A:4218:HOH:O	2.04	0.74
1:2A:271(L):U:H5'	8:2I:50:ARG:HH11	1.51	0.74
25:23:40:THR:HG22	25:23:42:ALA:H	1.53	0.74
32:1a:574:A:OP2	62:1a:1907:HOH:O	2.06	0.74
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.21	0.74
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.68	0.74
32:2a:504:C:OP1	62:2a:1906:HOH:O	2.06	0.74
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.21	0.74
32:1a:573:A:OP2	62:1a:1907:HOH:O	2.05	0.74
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.36	0.74
34:2c:101:LEU:HD22	34:2c:102:ASN:H	1.53	0.74
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.70	0.73
56:2y:51:U:H3	56:2y:63:G:H1	1.35	0.73
1:1A:2228:G:O6	62:1A:4224:HOH:O	2.07	0.73
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.88	0.73
1:2A:921:G:O6	62:2A:3914:HOH:O	2.05	0.73
39:2h:51:VAL:HG21	39:2h:60:ARG:HH11	1.51	0.73
1:1A:1058:G:N2	1:1A:1080:C:N3	2.33	0.73
40:1i:16:ARG:HH11	40:1i:64:THR:HG21	1.53	0.73
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.69	0.73
10:1O:110:GLY:HA2	10:1O:112:MET:HE2	1.69	0.73
22:10:10:THR:HG22	22:10:12:ASN:H	1.54	0.73
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.22	0.73
36:2e:20:GLN:NE2	36:2e:21:ALA:O	2.21	0.73
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.22	0.73
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.69	0.73
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.70	0.73
32:2a:375:U:O4	62:2a:1907:HOH:O	2.07	0.73
21:2Z:7:ALA:HB2	21:2Z:59:LEU:HB3	1.71	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1280:A:H5'	41:2j:40:LEU:HD22	1.71	0.73
6:1G:83:ARG:O	6:1G:86:MET:HG3	1.89	0.73
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.53	0.72
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.53	0.72
32:2a:1159:U:O4	62:2a:1908:HOH:O	2.07	0.72
8:1I:95:LYS:NZ	8:1I:99:GLU:OE2	2.22	0.72
32:1a:53:A:OP2	62:1a:1908:HOH:O	2.06	0.72
1:2A:321:G:OP1	5:2F:135:LYS:NZ	2.23	0.72
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.70	0.72
32:1a:1036:G:H5''	32:1a:1037:C:C5	2.24	0.72
33:1b:42:ILE:HD12	33:1b:203:GLY:HA2	1.70	0.72
52:1u:5:ASP:OD1	62:1u:101:HOH:O	2.08	0.72
1:1A:1036:G:O6	62:1A:4221:HOH:O	2.05	0.72
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.24	0.72
1:2A:1203:G:O6	62:2A:3917:HOH:O	2.07	0.72
4:1E:110:GLY:O	62:1R:301:HOH:O	2.05	0.72
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.70	0.72
1:2A:1634:A:OP1	62:2A:3916:HOH:O	2.07	0.72
1:2A:1938:A:OP2	62:2A:3918:HOH:O	2.07	0.72
32:2a:273:A:N7	62:2a:1920:HOH:O	2.23	0.72
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.25	0.71
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.71	0.71
32:1a:1030(C):G:N7	32:1a:1031:G:N2	2.38	0.71
38:1g:27:ILE:HD13	38:1g:40:ALA:HA	1.72	0.71
1:2A:819:A:OP2	1:2A:1187:G:N2	2.19	0.71
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.72	0.71
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.23	0.71
1:1A:2276:G:N7	62:1A:4256:HOH:O	2.23	0.71
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.23	0.71
1:2A:2308:G:O6	1:2A:2311:A:N6	2.18	0.71
1:1A:1669:A:OP2	62:1A:4207:HOH:O	2.08	0.71
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.55	0.71
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.54	0.71
1:2A:2171:A:N3	1:2A:2172:U:N3	2.37	0.71
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.71	0.71
1:1A:1948:G:O6	62:1A:4223:HOH:O	2.06	0.71
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.72	0.71
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.55	0.71
42:1k:104:GLN:O	42:1k:104:GLN:HG3	1.90	0.71
1:2A:2677:G:N3	62:2A:3948:HOH:O	2.22	0.71
32:2a:1149:C:H2'	32:2a:1150:U:C6	2.26	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.26	0.71
34:2c:14:ILE:HG22	34:2c:15:THR:HG23	1.70	0.71
8:2I:75:LEU:HD22	8:2I:105:HIS:HD2	1.55	0.71
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.73	0.71
32:2a:560:U:H5'	32:2a:566:G:N2	2.06	0.71
32:2a:565:U:OP2	32:2a:566:G:O2'	2.08	0.71
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.72	0.71
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.73	0.71
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.54	0.71
1:2A:570:G:O6	62:2A:3920:HOH:O	2.08	0.70
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.73	0.70
14:2S:58:LEU:HD13	14:2S:65:VAL:HB	1.73	0.70
1:2A:271(L):U:O2	62:2A:3921:HOH:O	2.09	0.70
44:2m:40:ASN:HD22	44:2m:43:THR:HG23	1.56	0.70
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.21	0.70
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.25	0.70
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.73	0.70
1:2A:2136:C:N4	1:2A:2155:G:H1	1.90	0.70
1:2A:2138:C:H42	1:2A:2153:G:H1	1.39	0.70
1:2A:72:U:OP1	62:2A:3919:HOH:O	2.08	0.70
8:2I:117:GLU:OE1	8:2I:118:LYS:N	2.24	0.70
32:2a:372:C:O2	62:2a:1907:HOH:O	2.08	0.70
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.74	0.70
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.06	0.70
56:2y:18:G:O6	56:2y:56:C:N4	2.25	0.70
1:1A:110:G:N7	62:1A:4267:HOH:O	2.24	0.70
1:2A:805:G:OP1	62:2A:3922:HOH:O	2.10	0.70
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.72	0.70
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.74	0.70
1:1A:1359:A:H2	1:1A:1372:U:O4	1.74	0.70
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.57	0.70
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.25	0.70
1:2A:946:G:OP1	62:2A:3923:HOH:O	2.10	0.70
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.91	0.70
32:2a:434:U:H2'	32:2a:435:C:H6	1.56	0.70
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.23	0.69
11:2P:121:LYS:HB3	11:2P:123:LEU:HD13	1.73	0.69
33:1b:82:ARG:NH1	33:1b:86:GLU:OE2	2.25	0.69
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.74	0.69
32:2a:1271:G:C2	32:2a:1272:G:N7	2.60	0.69
1:1A:642:G:OP1	62:1A:4225:HOH:O	2.09	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1060:U:H3	1:1A:1088:A:H8	1.38	0.69
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.26	0.69
1:2A:370:G:N7	62:2A:3957:HOH:O	2.24	0.69
1:1A:582:G:OP2	62:1A:4229:HOH:O	2.11	0.69
1:2A:1278:A:OP1	13:2R:36:THR:HG23	1.92	0.69
41:2j:33:GLN:HG2	41:2j:34:VAL:H	1.58	0.69
1:1A:528:A:O2'	1:1A:529:A:H5'	1.93	0.69
1:1A:2428:G:OP1	62:1A:4203:HOH:O	2.11	0.69
1:2A:1192:G:OP2	11:2P:17:LYS:NZ	2.26	0.69
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.17	0.69
21:2Z:153:SER:HB3	21:2Z:167:PRO:HB3	1.74	0.69
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.25	0.69
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.25	0.69
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.27	0.69
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.57	0.69
32:1a:1304:G:OP2	62:1a:1910:HOH:O	2.11	0.69
1:2A:1024:G:OP2	62:2A:3907:HOH:O	2.08	0.69
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.74	0.69
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.75	0.69
12:2Q:85:LYS:HE2	22:20:7:LEU:HD12	1.75	0.69
1:1A:1418:G:OP2	62:1A:4226:HOH:O	2.10	0.69
7:1H:41:MET:HE1	7:1H:54:ARG:HB3	1.75	0.69
1:2A:752:A:H3'	29:27:1:MET:HE1	1.73	0.69
1:1A:602:G:O2'	1:1A:655:A:N6	2.26	0.69
12:2Q:110:THR:HG22	12:2Q:112:GLU:H	1.58	0.69
1:1A:1055:G:H1	1:1A:1104:C:H42	1.41	0.68
5:1F:185:ASP:OD1	5:1F:188:ARG:NH1	2.25	0.68
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.75	0.68
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.11	0.68
1:2A:2816:C:O3'	13:2R:99:LYS:NZ	2.25	0.68
56:2y:8:4SU:C2	56:2y:14:A:H62	2.06	0.68
32:1a:1030:C:N4	32:1a:1030(A):G:N3	2.41	0.68
32:2a:289:G:OP2	62:2a:1903:HOH:O	2.10	0.68
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.25	0.68
32:2a:662:G:O2'	32:2a:836:G:OP1	2.11	0.68
1:2A:751:A:H5'	18:2W:90:ARG:HA	1.75	0.68
32:2a:1004:A:H61	32:2a:1037:C:H1'	1.58	0.68
1:1A:1364:G:OP2	23:11:3:LYS:HG3	1.94	0.68
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.24	0.68
21:2Z:54:HIS:HD2	21:2Z:101:PRO:HG3	1.55	0.68
35:2d:47:ARG:HB2	35:2d:47:ARG:HH11	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:744:G:OP1	62:1A:4230:HOH:O	2.11	0.68
46:1o:17:ARG:HH11	46:1o:17:ARG:HG3	1.58	0.68
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.76	0.68
32:2a:448:A:P	32:2a:485:G:H22	2.17	0.68
32:2a:1090:U:N3	32:2a:1095:U:O4	2.19	0.68
11:1P:95:VAL:HG13	11:1P:125:VAL:HG12	1.75	0.68
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.17	0.68
51:1t:33:ILE:O	51:1t:37:SER:OG	2.11	0.68
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.76	0.68
10:2O:77:ILE:HD12	15:2T:74:ARG:HD2	1.76	0.68
17:2V:1:MET:HB3	17:2V:99:ILE:HD12	1.74	0.68
32:2a:457:C:H2'	32:2a:458:C:H6	1.59	0.68
56:2y:9:A:H4'	56:2y:46:G7M:H5'	1.74	0.68
32:1a:783:C:OP1	32:1a:1515:C:O2'	2.11	0.68
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.08	0.68
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.74	0.68
32:2a:1004:A:N6	32:2a:1037:C:O2	2.26	0.68
6:1G:114:ILE:HG13	6:1G:140:ILE:HG12	1.75	0.68
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.28	0.68
35:2d:150:GLU:HA	35:2d:153:ARG:HD2	1.76	0.68
12:1Q:89:ASN:HB2	55:1x:1:C:N3	2.09	0.67
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.29	0.67
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.75	0.67
1:2A:307:G:N1	1:2A:310:A:OP2	2.27	0.67
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.41	0.67
28:26:32:ASN:OD1	28:26:32:ASN:N	2.27	0.67
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.09	0.67
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.27	0.67
1:1A:1356:G:OP2	62:1A:4227:HOH:O	2.10	0.67
1:2A:1039:G:O6	1:2A:1116:C:N4	2.20	0.67
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	1.94	0.67
32:2a:653:A:OP1	39:2h:56:LYS:NZ	2.23	0.67
32:2a:1016:A:H2'	32:2a:1017:G:O4'	1.94	0.67
33:2b:111:ARG:HH11	33:2b:111:ARG:HA	1.59	0.67
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.59	0.67
1:2A:2228:G:OP1	3:2D:261:LYS:NZ	2.27	0.67
32:2a:1174:G:N7	62:2a:1908:HOH:O	2.26	0.67
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.30	0.67
24:12:38:GLN:HG3	24:12:43:GLN:HB2	1.77	0.67
32:1a:92:C:H2'	32:1a:93:G:C8	2.30	0.67
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.02	0.67
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.76	0.67
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.75	0.67
33:2b:74:LYS:O	33:2b:78:GLN:HG2	1.94	0.67
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.94	0.67
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.77	0.67
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.75	0.67
42:1k:99:GLN:HG3	42:1k:105:VAL:HG21	1.77	0.67
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.77	0.67
32:2a:903:G:OP1	62:2a:1909:HOH:O	2.11	0.67
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.77	0.67
1:2A:2127:G:C6	1:2A:2161:C:N4	2.63	0.67
1:2A:2127:G:N1	1:2A:2161:C:N4	2.43	0.67
36:2e:40:ARG:HH11	36:2e:68:GLU:HA	1.60	0.67
1:1A:1024:G:OP2	62:1A:4213:HOH:O	2.13	0.67
19:2X:60:ARG:HH22	29:27:47:ARG:HH12	1.42	0.67
6:1G:114:ILE:HA	6:1G:140:ILE:HD11	1.77	0.66
32:1a:535:A:OP1	62:1a:1911:HOH:O	2.11	0.66
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.75	0.66
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.83	0.66
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.09	0.66
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.58	0.66
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.77	0.66
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.27	0.66
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.28	0.66
1:2A:962:G:OP1	62:2A:3905:HOH:O	2.12	0.66
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.28	0.66
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.60	0.66
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.76	0.66
32:2a:165:C:H2'	32:2a:166:G:H8	1.60	0.66
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.60	0.66
36:1e:84:PHE:HB2	36:1e:134:ALA:HB2	1.77	0.66
44:1m:67:GLU:HG3	44:1m:71:ARG:NH2	2.11	0.66
1:2A:2136:C:H42	1:2A:2155:G:H1	1.41	0.66
32:1a:691:G:OP2	42:1k:26:ASN:ND2	2.24	0.66
44:1m:80:ARG:NH1	50:1s:65:ASN:O	2.29	0.66
1:2A:441:U:O2	5:2F:46:ARG:NH2	2.25	0.66
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.61	0.66
1:1A:2295:C:OP1	14:1S:10:ARG:NH1	2.29	0.66
1:2A:1271:G:OP2	62:2A:3908:HOH:O	2.14	0.66
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:271(E):U:O4	62:1A:4228:HOH:O	2.11	0.66
35:1d:100:ARG:NH2	35:1d:102:ASP:OD2	2.29	0.66
32:2a:448:A:OP2	32:2a:485:G:N2	2.27	0.66
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.11	0.66
32:1a:509:A:H5'	35:1d:54:TYR:HD2	1.61	0.66
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.77	0.66
1:2A:84:A:H5''	20:2Y:8:LYS:HE3	1.77	0.66
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.77	0.66
1:1A:1039:G:H1	1:1A:1116:C:H42	1.43	0.65
1:1A:1062:G:H2'	1:1A:1063:G:H8	1.58	0.65
32:1a:1086:U:H3	32:1a:1099:G:H22	1.44	0.65
1:2A:2448:A:OP1	62:2A:3920:HOH:O	2.13	0.65
8:2I:82:ARG:HG3	8:2I:89:TYR:CD2	2.30	0.65
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.10	0.65
1:2A:378:C:N4	62:2A:3977:HOH:O	2.28	0.65
1:2A:563:G:OP2	62:2A:3927:HOH:O	2.14	0.65
32:2a:975:A:H5'	32:2a:975:A:H8	1.61	0.65
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.29	0.65
1:1A:1013:C:OP2	62:1A:4210:HOH:O	2.13	0.65
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.27	0.65
1:2A:2133:G:HO2'	1:2A:2157:G:N2	1.94	0.65
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.29	0.65
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.29	0.65
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.31	0.65
8:2I:82:ARG:HG3	8:2I:89:TYR:HD2	1.60	0.65
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.30	0.65
62:2a:1974:HOH:O	45:2n:3:ARG:HG2	1.96	0.65
42:2k:19:ALA:HB3	42:2k:82:VAL:HG22	1.77	0.65
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.79	0.65
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.29	0.65
39:1h:95:VAL:HB	39:1h:99:GLU:HB2	1.78	0.65
1:2A:1452:A:OP2	62:2A:3929:HOH:O	2.14	0.65
1:2A:2238:G:OP2	62:2A:3926:HOH:O	2.13	0.65
6:1G:77:ILE:HD12	6:1G:82:LEU:HD12	1.79	0.65
32:1a:78:G:O6	32:1a:92:C:N4	2.29	0.65
32:1a:1057:G:OP2	62:1a:1913:HOH:O	2.15	0.65
1:2A:1951:U:O4	62:2A:3925:HOH:O	2.12	0.65
32:2a:1442:G:O2'	32:2a:1442(A):G:H5'	1.97	0.65
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HE2	1.78	0.65
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.29	0.65
1:2A:1131:G:O6	1:2A:2040:C:H1'	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.14	0.65
32:2a:1506:U:OP1	62:2a:1911:HOH:O	2.14	0.65
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.79	0.65
32:1a:1292:U:OP2	38:1g:41:ARG:NH2	2.29	0.65
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.77	0.65
1:2A:2063:C:OP1	62:2A:3932:HOH:O	2.15	0.65
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.32	0.65
25:23:59:VAL:HG12	25:23:60:GLU:H	1.60	0.65
36:2e:36:ASP:O	36:2e:38:GLN:N	2.30	0.65
56:2y:9:A:H5'	56:2y:46:G7M:N3	2.12	0.65
1:1A:1803:A:O2'	3:1D:259:THR:HG21	1.96	0.65
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.31	0.65
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.62	0.65
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.12	0.65
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.32	0.65
32:1a:1416:G:N7	62:1a:1933:HOH:O	2.29	0.64
45:2n:23:ARG:NH1	45:2n:28:GLY:O	2.30	0.64
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.80	0.64
1:1A:847:U:OP2	62:1A:4236:HOH:O	2.15	0.64
1:1A:1096:A:N6	1:1A:1097:U:O2	2.30	0.64
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.31	0.64
1:1A:2763:G:OP2	62:1A:4231:HOH:O	2.13	0.64
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.45	0.64
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.32	0.64
33:1b:59:GLU:HG2	33:1b:63:MET:HE2	1.80	0.64
56:1y:5:G:H1'	56:1y:69:G:N2	2.11	0.64
56:1y:8:4SU:H4'	56:1y:48:C:H4'	1.78	0.64
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.27	0.64
37:2f:8:ILE:HD13	37:2f:26:ILE:HD13	1.78	0.64
1:1A:1395:A:OP1	62:1A:4204:HOH:O	2.15	0.64
2:1B:21:G:N7	62:1B:304:HOH:O	2.30	0.64
7:1H:86:GLU:OE2	7:1H:132:ARG:NH1	2.29	0.64
6:2G:35:GLU:HB3	6:2G:160:VAL:HG12	1.79	0.64
1:1A:72:U:H5'	24:12:61:LEU:HD12	1.78	0.64
1:2A:568:U:H5'	1:2A:945:A:N1	2.13	0.64
1:2A:2154:G:N7	1:2A:2156:G:N2	2.46	0.64
32:2a:457:C:H2'	32:2a:458:C:C6	2.32	0.64
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.14	0.64
2:2B:22:U:H3	2:2B:61:G:H1	1.44	0.64
32:2a:1149:C:H2'	32:2a:1150:U:H6	1.62	0.64
56:2y:42:C:H2'	56:2y:43:C:H6	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:29:LYS:HD3	11:2P:30:THR:HG23	1.80	0.64
32:2a:297:G:N2	32:2a:300:A:OP2	2.31	0.64
37:2f:1:MET:N	37:2f:69:GLU:OE2	2.31	0.64
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.33	0.64
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.27	0.64
56:1y:56:C:H2'	56:1y:57:G:H8	1.62	0.64
56:1y:71:G:H2'	56:1y:72:C:H6	1.61	0.64
32:2a:1271:G:N1	32:2a:1272:G:N7	2.45	0.64
1:2A:1604:C:OP1	62:2A:3933:HOH:O	2.15	0.64
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.80	0.64
10:2O:2:ILE:HB	10:2O:33:ALA:HB3	1.79	0.64
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.32	0.64
32:1a:116:A:OP1	62:1a:1915:HOH:O	2.16	0.64
1:2A:2155:G:N7	1:2A:2156:G:H1'	2.13	0.64
1:2A:2169:A:H2'	1:2A:2170:A:C8	2.34	0.64
9:2N:1:MET:HE1	16:2U:94:ASN:ND2	2.13	0.64
32:2a:148:G:H2'	32:2a:149:A:H8	1.62	0.64
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	1.80	0.64
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.80	0.64
1:1A:1622:G:OP2	62:1A:4233:HOH:O	2.15	0.63
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.33	0.63
35:1d:76:ARG:NH1	35:1d:80:GLU:OE2	2.30	0.63
46:1o:84:LYS:O	46:1o:84:LYS:NZ	2.25	0.63
1:1A:1315:C:OP2	62:1A:4218:HOH:O	2.15	0.63
32:1a:504:C:OP1	62:1a:1914:HOH:O	2.15	0.63
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.81	0.63
1:2A:307:G:H21	1:2A:330:A:H62	1.43	0.63
9:2N:110:GLY:O	9:2N:114:ARG:HG3	1.98	0.63
1:1A:2337:G:OP1	62:1A:4235:HOH:O	2.15	0.63
34:1c:79:ARG:O	34:1c:82:GLU:HB2	1.99	0.63
30:28:62:LEU:HB3	30:28:65:GLU:HG2	1.80	0.63
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.79	0.63
51:2t:22:ARG:NH2	62:2t:301:HOH:O	2.31	0.63
1:1A:592:G:N7	62:1A:4296:HOH:O	2.31	0.63
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.30	0.63
48:2q:26:GLN:HG2	48:2q:37:LYS:HG2	1.80	0.63
1:1A:192:C:OP1	62:1A:4237:HOH:O	2.15	0.63
26:14:55:ARG:N	26:14:56:VAL:HA	2.13	0.63
33:1b:126:GLU:O	33:1b:127:ILE:HG12	1.98	0.63
1:2A:463:G:OP2	62:2A:3934:HOH:O	2.16	0.63
1:2A:1025:G:O2'	62:2A:3907:HOH:O	2.06	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:10:PRO:HB2	44:2m:13:LYS:HE2	1.81	0.63
1:1A:526:A:OP1	62:1A:4234:HOH:O	2.15	0.63
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.64	0.63
26:14:46:GLN:O	26:14:48:ARG:N	2.32	0.63
14:2S:84:GLN:H	14:2S:111:GLU:HB2	1.63	0.63
32:2a:460:G:N2	32:2a:471:G:N7	2.47	0.63
32:2a:1137:C:O2	32:2a:1138:G:N2	2.32	0.63
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.31	0.63
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.14	0.63
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.63	0.63
26:24:16:CYS:HA	26:24:33:VAL:HG12	1.80	0.63
32:2a:196:A:OP1	51:2t:68:LYS:NZ	2.28	0.63
33:2b:60:ASP:O	33:2b:64:ARG:HG2	1.99	0.63
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.80	0.63
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	1.98	0.63
32:2a:710:G:O6	62:2a:1913:HOH:O	2.16	0.63
32:2a:1183:A:OP2	62:2a:1914:HOH:O	2.16	0.63
26:14:58:ARG:O	26:14:61:ARG:N	2.32	0.63
33:1b:139:LYS:O	33:1b:143:GLU:HG3	1.99	0.63
6:2G:105:LYS:NZ	6:2G:143:GLU:OE2	2.32	0.63
7:2H:41:MET:HE1	7:2H:54:ARG:HB3	1.80	0.63
40:2i:28:VAL:HG12	40:2i:63:ILE:HB	1.81	0.63
36:2e:43:LEU:O	36:2e:65:ASN:ND2	2.32	0.62
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.34	0.62
12:1Q:103:MET:HE1	12:1Q:125:LEU:HD13	1.79	0.62
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.32	0.62
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.14	0.62
32:2a:316:G:OP2	32:2a:351:G:O2'	2.15	0.62
38:2g:27:ILE:HG21	38:2g:40:ALA:HA	1.81	0.62
54:2w:72:C:H2'	54:2w:73:A:C8	2.34	0.62
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.34	0.62
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.82	0.62
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.34	0.62
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.32	0.62
33:2b:87:ARG:NH2	33:2b:220:ASP:OD1	2.22	0.62
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	1.80	0.62
15:1T:127:ALA:C	15:1T:129:ARG:H	2.07	0.62
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.32	0.62
32:1a:382:A:H2'	32:1a:383:A:C8	2.35	0.62
32:1a:975:A:H5'	32:1a:975:A:H8	1.64	0.62
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:109:SER:O	33:1b:112:VAL:HG22	1.99	0.62
35:1d:106:TYR:HA	35:1d:111:ALA:HB3	1.80	0.62
17:2V:40:LEU:HB2	17:2V:46:VAL:HG23	1.80	0.62
32:2a:484:G:N3	62:2a:1931:HOH:O	2.31	0.62
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.35	0.62
32:1a:684:A:N6	62:1a:1939:HOH:O	2.33	0.62
32:1a:877:C:H5''	39:1h:88:LYS:HD3	1.80	0.62
32:1a:1239:A:H62	32:1a:1299:A:H62	1.46	0.62
12:2Q:89:ASN:HB2	55:2x:1:C:C4	2.35	0.62
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.35	0.62
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.65	0.62
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.32	0.62
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.28	0.62
32:2a:973:G:H3'	32:2a:974:A:H5''	1.81	0.62
1:1A:1937:A:H1'	1:1A:1939:5MU:H72	1.82	0.62
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.82	0.62
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.33	0.62
32:1a:1108:G:O6	62:1a:1909:HOH:O	2.11	0.62
32:1a:1352:C:OP1	52:1u:3:LYS:NZ	2.31	0.62
1:2A:2495:G:H5''	12:2Q:82:ARG:HG2	1.80	0.62
5:2F:116:ASP:OD1	5:2F:119:ARG:NH2	2.33	0.62
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	1.82	0.62
6:2G:171:ALA:O	6:2G:175:LEU:HG	1.99	0.62
38:2g:78:ARG:HG3	38:2g:156:TRP:HZ3	1.65	0.62
54:2w:72:C:H2'	54:2w:73:A:N7	2.14	0.62
2:1B:99:G:OP2	62:1B:301:HOH:O	2.16	0.62
7:1H:7:LEU:HD12	7:1H:8:PRO:HD2	1.82	0.62
32:1a:953:G:H5'	32:1a:965:A:H61	1.64	0.62
32:1a:1409:C:N4	62:1a:1938:HOH:O	2.33	0.62
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.65	0.62
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.35	0.62
32:2a:134:A:H61	47:2p:25:ARG:HH12	1.48	0.62
37:2f:76:ALA:HB1	37:2f:80:ARG:NH2	2.14	0.62
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.64	0.62
32:1a:123:C:OP1	32:1a:311:C:O2'	2.17	0.62
32:1a:539:A:OP2	43:1l:115:LYS:NZ	2.33	0.62
50:1s:31:ILE:O	50:1s:50:ALA:N	2.27	0.62
54:1w:2:C:H2'	54:1w:3:C:H6	1.64	0.62
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.17	0.62
5:1F:143:ALA:HB1	5:1F:148:LEU:HB2	1.81	0.62
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:12:GLN:NE2	12:1Q:73:PRO:HD2	2.14	0.62
32:2a:975:A:H4'	32:2a:976:G:H5''	1.81	0.62
47:2p:72:ARG:HG3	47:2p:73:LEU:N	2.15	0.62
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.14	0.61
11:1P:64:LYS:HE3	30:18:12:LYS:HD3	1.81	0.61
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.32	0.61
5:2F:32:LEU:HD22	5:2F:112:MET:HE2	1.81	0.61
15:2T:119:LYS:HG2	15:2T:123:GLN:HE21	1.65	0.61
21:2Z:152:ALA:HB2	21:2Z:169:GLU:HB3	1.82	0.61
32:1a:911:U:OP2	43:1l:97:ARG:NH1	2.33	0.61
13:2R:51:LEU:HD22	13:2R:66:VAL:HG13	1.81	0.61
40:2i:86:VAL:HG11	40:2i:93:ARG:HE	1.64	0.61
44:2m:52:GLU:HA	44:2m:55:ARG:HH21	1.64	0.61
6:1G:7:LEU:N	6:1G:104:GLU:OE1	2.25	0.61
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	1.82	0.61
32:1a:1355:G:H2'	32:1a:1356:G:H8	1.64	0.61
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.81	0.61
32:2a:1259:C:O2'	32:2a:1283:G:N2	2.31	0.61
39:2h:6:ILE:O	39:2h:10:LEU:HG	2.01	0.61
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.82	0.61
32:1a:507:C:OP2	32:1a:508:C:O2'	2.16	0.61
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.18	0.61
36:1e:7:GLU:OE2	36:1e:37:ARG:NH2	2.33	0.61
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.64	0.61
1:2A:340:A:H2'	1:2A:341:G:O4'	1.99	0.61
1:2A:731:C:OP1	62:2A:3935:HOH:O	2.16	0.61
1:2A:1294:U:O2'	13:2R:26:LYS:NZ	2.28	0.61
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.33	0.61
32:2a:688:G:O2'	32:2a:704:A:N1	2.31	0.61
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.34	0.61
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.35	0.61
10:1O:68:GLU:HB3	10:1O:78:ARG:HB2	1.80	0.61
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.34	0.61
1:2A:2849:U:O4	15:2T:23:ARG:NH2	2.32	0.61
14:2S:67:ARG:HH12	14:2S:103:GLU:HB3	1.63	0.61
26:24:40:HIS:HB3	26:24:43:TYR:HB2	1.82	0.61
34:2c:5:ILE:HD12	41:2j:51:ARG:HH22	1.65	0.61
33:1b:12:GLU:HB2	33:1b:213:LEU:HD21	1.83	0.61
2:2B:41:U:H5	6:2G:70:VAL:H	1.48	0.61
14:2S:25:ARG:NH1	14:2S:42:ASP:OD2	2.33	0.61
32:2a:651:C:N4	32:2a:753:A:OP2	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:516:C:OP1	27:15:13:LYS:NZ	2.32	0.61
1:1A:2422:A:O4'	56:1y:76:A:N6	2.33	0.61
1:2A:922:U:H2'	1:2A:923:C:C6	2.35	0.61
2:2B:34:U:OP1	6:2G:2:PRO:HG3	1.98	0.61
32:2a:64:G:H4'	32:2a:65:U:H3'	1.83	0.61
32:2a:157:G:N2	32:2a:164:U:O2	2.27	0.61
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.15	0.61
1:1A:1359:A:C2	1:1A:1372:U:O4	2.54	0.61
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.82	0.61
22:10:24:LYS:O	22:10:25:ARG:NH1	2.34	0.61
38:1g:78:ARG:HG3	38:1g:156:TRP:CZ3	2.35	0.61
1:2A:245:G:O6	30:28:8:LYS:NZ	2.33	0.61
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.48	0.61
4:2E:77:ILE:HD13	4:2E:195:LEU:HD22	1.83	0.61
7:2H:3:ARG:HH11	7:2H:4:ILE:H	1.49	0.61
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.83	0.61
1:1A:2165:G:H1	1:1A:2171:A:H2'	1.65	0.61
32:2a:353:A:OP1	62:2a:1916:HOH:O	2.16	0.61
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.64	0.61
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.00	0.61
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.83	0.61
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	1.82	0.61
42:2k:31:THR:HG23	42:2k:42:TRP:HB3	1.81	0.61
42:2k:67:ASP:HA	42:2k:70:LYS:HD2	1.83	0.61
50:2s:27:GLU:HB2	50:2s:28:LYS:HD3	1.82	0.61
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.49	0.60
32:1a:216:G:H2'	32:1a:217:C:C6	2.35	0.60
1:2A:1324:G:N7	62:2A:3993:HOH:O	2.31	0.60
1:2A:1449:A:HO2'	1:2A:1529:G:H21	1.47	0.60
9:2N:35:ARG:O	9:2N:42:TRP:NE1	2.32	0.60
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.66	0.60
32:2a:1417:G:O6	62:2a:1910:HOH:O	2.12	0.60
1:1A:279:C:H42	1:1A:361:G:H1	1.49	0.60
1:1A:299:A:OP2	62:1A:4238:HOH:O	2.16	0.60
1:1A:2061:G:OP2	62:1A:4239:HOH:O	2.16	0.60
7:1H:40:GLU:OE2	7:1H:61:HIS:NE2	2.33	0.60
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.15	0.60
1:2A:900:A:H2'	1:2A:901:A:C8	2.35	0.60
6:2G:120:LEU:N	6:2G:179:PRO:O	2.29	0.60
32:2a:770:C:OP1	62:2a:1915:HOH:O	2.16	0.60
1:1A:2136:C:C2	1:1A:2155:G:N2	2.69	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.16	0.60
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.82	0.60
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.83	0.60
1:2A:2306:C:N4	6:2G:42:GLY:O	2.35	0.60
34:2c:47:LEU:HD12	34:2c:68:VAL:HG11	1.83	0.60
35:2d:15:GLU:OE2	35:2d:59:ARG:NH1	2.33	0.60
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.33	0.60
1:1A:135:G:N7	62:1A:4295:HOH:O	2.30	0.60
1:1A:1938:A:OP2	62:1A:4240:HOH:O	2.17	0.60
32:1a:1291:G:O2'	40:1i:38:GLN:OE1	2.18	0.60
1:2A:579:G:H2'	1:2A:580:C:C6	2.37	0.60
1:2A:998:C:N4	62:2A:3998:HOH:O	2.33	0.60
11:2P:124:LYS:HG3	11:2P:144:GLU:HB3	1.83	0.60
32:2a:1062:U:H2'	32:2a:1063:C:C5	2.36	0.60
56:2y:66:U:H2'	56:2y:67:C:O4'	2.01	0.60
1:2A:375:C:H2'	1:2A:376:C:C6	2.36	0.60
1:2A:881:G:C2	1:2A:882:G:H1'	2.37	0.60
7:2H:101:ARG:NH2	7:2H:121:ILE:O	2.33	0.60
32:2a:473:G:H2'	32:2a:474:G:H8	1.67	0.60
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.37	0.60
40:2i:80:GLY:HA2	40:2i:83:ARG:HB2	1.82	0.60
1:1A:588:U:H2'	1:1A:589:C:C6	2.37	0.60
1:2A:287:C:H2'	1:2A:288:C:H6	1.65	0.60
21:2Z:4:ARG:NE	21:2Z:60:GLU:OE2	2.29	0.60
26:24:46:GLN:C	26:24:48:ARG:H	2.09	0.60
28:26:18:ARG:HD2	28:26:42:TRP:CE2	2.36	0.60
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.36	0.60
26:14:58:ARG:HB3	26:14:58:ARG:HH11	1.65	0.60
33:1b:128:GLU:HG3	33:1b:135:GLN:NE2	2.17	0.60
1:2A:1171:G:H22	1:2A:1178:C:N4	1.99	0.60
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.67	0.60
26:24:41:PRO:HG3	26:24:49:PHE:CE1	2.37	0.60
26:24:48:ARG:NH1	26:24:51:ASP:O	2.34	0.60
32:2a:148:G:H2'	32:2a:149:A:C8	2.37	0.60
33:2b:16:HIS:O	33:2b:18:GLY:N	2.34	0.60
1:1A:1338:G:O6	19:1X:62:LYS:NZ	2.31	0.60
32:1a:222:U:H2'	32:1a:223:U:C6	2.37	0.60
32:1a:627:G:O2'	32:1a:628:G:H5'	2.02	0.60
33:1b:80:ILE:HD12	33:1b:212:GLN:HA	1.83	0.60
42:1k:96:ARG:HH11	42:1k:96:ARG:HB2	1.67	0.60
49:1r:47:THR:O	49:1r:83:GLU:N	2.33	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.84	0.60
32:2a:533:A:O2'	32:2a:535:A:OP2	2.20	0.60
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.66	0.60
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.37	0.60
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.19	0.60
8:1I:109:ILE:HD12	8:1I:130:TYR:CE2	2.37	0.60
21:1Z:155:LEU:HD12	21:1Z:156:LYS:H	1.67	0.60
32:1a:324:G:N7	62:1a:1934:HOH:O	2.31	0.60
32:1a:1182:G:H4'	32:1a:1183:A:H5''	1.84	0.60
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.33	0.60
1:2A:1815:A:H8	1:2A:1815:A:OP1	1.84	0.60
1:2A:2394:C:N3	56:2y:76:A:O2'	2.33	0.60
1:1A:662:G:H5''	11:1P:16:ARG:HG3	1.83	0.60
1:1A:2306:C:N4	6:1G:42:GLY:O	2.24	0.60
1:1A:2313:C:H4'	6:1G:91:ARG:HG3	1.83	0.60
18:1W:13:SER:HB3	18:1W:16:LYS:HD2	1.82	0.60
5:2F:108:LYS:O	5:2F:112:MET:HG3	2.02	0.60
32:2a:434:U:H2'	32:2a:435:C:C6	2.37	0.60
48:2q:27:PHE:CE1	48:2q:36:ILE:HD11	2.36	0.60
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.02	0.59
1:1A:2319:G:H1	14:1S:3:ARG:HD3	1.66	0.59
32:1a:202:U:H3'	32:1a:203:U:C6	2.37	0.59
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	1.84	0.59
18:2W:11:ARG:NH1	18:2W:99:ARG:O	2.35	0.59
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.35	0.59
32:2a:1003:G:N2	32:2a:1025:U:O4	2.35	0.59
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.17	0.59
1:1A:1582:C:O2'	1:1A:1586:A:N3	2.34	0.59
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.37	0.59
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.15	0.59
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.83	0.59
51:1t:37:SER:HB3	51:1t:84:LEU:HD22	1.83	0.59
1:2A:332:A:O2'	1:2A:334:C:OP2	2.16	0.59
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.82	0.59
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.84	0.59
1:1A:710:G:H2'	1:1A:711:G:H8	1.67	0.59
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.02	0.59
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.01	0.59
42:2k:81:ASP:OD1	42:2k:107:SER:OG	2.16	0.59
1:1A:886:C:H3'	1:1A:887:A:H5''	1.85	0.59
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.18	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	1.85	0.59
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.84	0.59
32:1a:1027:C:N4	32:1a:1034:G:H1	2.00	0.59
1:2A:1721:G:H8	1:2A:1741:A:H62	1.50	0.59
1:2A:2524:G:O6	62:2A:3928:HOH:O	2.14	0.59
30:28:30:ARG:O	62:28:201:HOH:O	2.17	0.59
34:2c:119:ARG:HE	34:2c:140:ARG:NH2	1.99	0.59
32:1a:1080:A:H5'	36:1e:14:ARG:HH21	1.66	0.59
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.02	0.59
1:2A:2184:G:H2'	1:2A:2185:C:H6	1.67	0.59
26:24:53:GLU:HG2	26:24:55:ARG:H	1.67	0.59
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.84	0.59
39:2h:41:ARG:NH2	39:2h:123:GLU:OE2	2.36	0.59
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.35	0.59
11:1P:121:LYS:HB3	11:1P:123:LEU:HD13	1.85	0.59
32:1a:1521:G:N3	62:1a:1936:HOH:O	2.32	0.59
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.66	0.59
32:2a:1226:C:H2'	44:2m:103:THR:HB	1.83	0.59
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.17	0.59
1:1A:2429:G:OP1	62:1A:4203:HOH:O	2.16	0.59
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.83	0.59
32:1a:673:G:H2'	32:1a:674:G:C8	2.37	0.59
56:1y:19:G:N1	56:1y:56:C:N4	2.50	0.59
32:2a:194:C:H2'	32:2a:195:A:H5''	1.85	0.59
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.38	0.59
37:2f:97:PHE:O	49:2r:31:LEU:HD12	2.02	0.59
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.83	0.59
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.38	0.59
21:2Z:15:PRO:HB2	21:2Z:19:ARG:NH2	2.18	0.59
33:2b:74:LYS:HD2	33:2b:166:ASP:HB2	1.83	0.59
33:2b:76:GLN:HB2	33:2b:208:ILE:CG1	2.33	0.59
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.03	0.59
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.68	0.59
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.85	0.59
41:2j:35:SER:HB3	41:2j:73:ASP:HB2	1.85	0.59
7:1H:149:ARG:NH1	7:1H:167:GLU:OE2	2.36	0.59
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.21	0.59
36:1e:92:LYS:HD2	36:1e:119:LEU:HD12	1.85	0.59
1:2A:300:A:P	20:2Y:86:ARG:HH12	2.26	0.59
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	1.84	0.59
32:2a:130:A:O2'	32:2a:131:C:O5'	2.19	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1135:U:H4'	32:2a:1136:U:H5	1.68	0.59
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.67	0.59
32:1a:1313:U:OP2	50:1s:5:LEU:HG	2.02	0.59
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.19	0.59
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.49	0.59
1:2A:706:A:OP1	3:2D:7:LYS:NZ	2.36	0.59
1:2A:2299:G:H2'	1:2A:2300:G:C8	2.38	0.59
5:2F:46:ARG:HB3	5:2F:48:THR:HG23	1.85	0.59
5:2F:155:LEU:HB2	5:2F:189:THR:HG21	1.85	0.59
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.83	0.59
21:2Z:93:ASP:HA	21:2Z:131:ARG:NH1	2.17	0.59
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.17	0.59
1:1A:1062:G:H22	1:1A:1077:A:H61	1.51	0.58
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.85	0.58
32:1a:700:G:N7	62:1a:1935:HOH:O	2.32	0.58
35:1d:187:ARG:HH11	35:1d:187:ARG:HB2	1.66	0.58
21:2Z:102:LEU:HB3	21:2Z:104:PHE:HE2	1.68	0.58
32:2a:673:G:H2'	32:2a:674:G:C8	2.37	0.58
36:2e:40:ARG:NH1	36:2e:68:GLU:HA	2.18	0.58
1:1A:548:A:H61	17:1V:18:LEU:HA	1.67	0.58
1:1A:1693:U:H1'	3:1D:14:ARG:HH21	1.68	0.58
1:1A:2674:G:H5''	10:1O:26:LYS:HE3	1.84	0.58
32:1a:421:U:O4	34:1c:127:ARG:NH2	2.32	0.58
32:1a:1278:U:H5'	32:1a:1279:A:O4'	2.03	0.58
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.33	0.58
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.18	0.58
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.36	0.58
34:2c:127:ARG:NH2	34:2c:192:THR:OG1	2.36	0.58
35:2d:158:ILE:HG22	35:2d:162:LEU:HD11	1.84	0.58
33:1b:122:PHE:HE2	33:1b:139:LYS:HB2	1.68	0.58
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.02	0.58
13:2R:36:THR:HG22	13:2R:37:THR:H	1.69	0.58
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.66	0.58
40:2i:56:LEU:HD12	40:2i:58:HIS:HE1	1.69	0.58
1:1A:1266:G:O2'	1:1A:2012:G:O6	2.21	0.58
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.04	0.58
54:1w:46:G7M:O2'	54:1w:47:U:H5'	2.03	0.58
1:2A:284:U:H2'	1:2A:285:C:C6	2.38	0.58
36:2e:20:GLN:OE1	36:2e:25:ARG:NH1	2.36	0.58
51:2t:33:ILE:O	51:2t:37:SER:OG	2.21	0.58
1:1A:271(W):G:O6	62:1A:4232:HOH:O	2.14	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.38	0.58
32:1a:1218:C:OP2	45:1n:9:LYS:NZ	2.28	0.58
54:1w:15:G:H2'	54:1w:16:U:C5	2.39	0.58
1:2A:10:G:O2'	1:2A:2801(A):A:N7	2.29	0.58
32:2a:421:U:H5''	32:2a:422:C:H5	1.69	0.58
56:2y:46:G7M:O2'	56:2y:48:C:OP2	2.20	0.58
5:1F:8:GLN:NE2	5:1F:21:ALA:HB2	2.19	0.58
44:1m:105:THR:O	44:1m:105:THR:OG1	2.18	0.58
15:2T:109:GLU:HA	15:2T:112:ARG:NH2	2.19	0.58
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.39	0.58
5:1F:32:LEU:HD11	5:1F:105:VAL:HG13	1.84	0.58
32:1a:757:U:H2'	32:1a:758:G:O4'	2.02	0.58
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.22	0.58
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.68	0.58
1:2A:212:G:H2'	1:2A:213:A:O4'	2.03	0.58
28:26:14:THR:OG1	28:26:48:VAL:O	2.20	0.58
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.86	0.58
34:2c:18:TRP:HE3	34:2c:18:TRP:H	1.51	0.58
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	1.85	0.58
42:2k:87:THR:O	42:2k:87:THR:OG1	2.21	0.58
1:1A:1062:G:H22	1:1A:1077:A:N6	2.01	0.58
1:1A:2117:A:H61	1:1A:2172:U:H3	1.51	0.58
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.33	0.58
21:1Z:130:PRO:HA	21:1Z:133:ILE:HD11	1.86	0.58
32:1a:1402:4OC:O5'	32:1a:1402:4OC:H6	2.04	0.58
38:1g:51:GLN:O	38:1g:55:GLY:HA2	2.04	0.58
51:1t:30:LYS:O	51:1t:34:LYS:HG3	2.04	0.58
1:2A:880:G:H2'	1:2A:881:G:H8	1.69	0.58
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.38	0.58
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.36	0.58
32:2a:222:U:H2'	32:2a:223:U:C6	2.39	0.58
32:2a:924:C:O2'	32:2a:1502:A:N1	2.35	0.58
2:1B:23:G:O6	62:1B:302:HOH:O	2.17	0.58
26:14:58:ARG:HD3	50:1s:68:GLY:H	1.68	0.58
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.68	0.58
41:1j:42:THR:HG23	41:1j:68:HIS:HA	1.86	0.58
48:1q:43:LEU:HD12	48:1q:68:ARG:HB3	1.85	0.58
1:2A:492:A:H2'	1:2A:493:G:O4'	2.03	0.58
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.36	0.58
32:2a:17:U:H2'	32:2a:18:C:C6	2.39	0.58
38:2g:59:LEU:O	38:2g:63:LYS:HB2	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:26:VAL:HG23	39:2h:59:LEU:HB2	1.86	0.58
40:2i:16:ARG:HB2	40:2i:64:THR:CG2	2.34	0.58
32:1a:447:G:H2'	32:1a:485:G:N2	2.19	0.58
32:1a:1152:A:H5'	41:1j:13:HIS:ND1	2.19	0.58
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.38	0.58
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	1.86	0.58
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.17	0.58
6:2G:91:ARG:HB3	6:2G:91:ARG:CZ	2.34	0.58
9:2N:73:THR:HB	9:2N:82:LEU:HD11	1.86	0.58
32:2a:564:C:C2	48:2q:31:LEU:HD11	2.39	0.58
34:2c:43:LEU:HD21	34:2c:91:LEU:HD21	1.86	0.58
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.39	0.57
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.52	0.57
35:1d:134:ASP:N	35:1d:134:ASP:OD1	2.36	0.57
56:1y:47:U:H2'	56:1y:50:U:OP1	2.03	0.57
1:2A:277:C:H4'	1:2A:278:A:OP2	2.03	0.57
1:2A:1012:U:O4	9:2N:28:THR:HG21	2.03	0.57
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.39	0.57
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.04	0.57
1:2A:2785:C:OP1	4:2E:41:LYS:HE3	2.04	0.57
11:2P:81:GLN:NE2	11:2P:106:LEU:HA	2.19	0.57
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.27	0.57
32:2a:1155:G:H2'	32:2a:1156:G:C8	2.39	0.57
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.04	0.57
34:2c:47:LEU:HB2	34:2c:52:LEU:HD22	1.86	0.57
43:2l:53:ARG:HD2	43:2l:93:LEU:HD11	1.86	0.57
1:1A:2156:G:OP2	1:1A:2156:G:H8	1.87	0.57
35:1d:173:TRP:CZ3	35:1d:174:LEU:HG	2.40	0.57
36:1e:33:VAL:HG22	36:1e:112:LEU:HD12	1.86	0.57
1:2A:2137:C:N3	1:2A:2154:G:N2	2.49	0.57
3:2D:168:ARG:HG2	3:2D:173:VAL:HG12	1.84	0.57
32:2a:407:G:H5''	35:2d:115:ARG:HB3	1.86	0.57
35:2d:193:ASP:OD1	35:2d:193:ASP:N	2.32	0.57
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.68	0.57
56:1y:71:G:H2'	56:1y:72:C:C6	2.40	0.57
1:2A:272(G):C:H42	1:2A:363(C):G:H1	1.51	0.57
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.69	0.57
32:2a:677:U:H3	32:2a:713:G:H22	1.52	0.57
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.34	0.57
37:2f:99:ALA:HB1	49:2r:23:LYS:NZ	2.19	0.57
56:2y:42:C:H2'	56:2y:43:C:C6	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.86	0.57
32:1a:70:G:H1	32:1a:99:U:H3	1.53	0.57
32:1a:877:C:OP1	39:1h:88:LYS:HE2	2.04	0.57
32:1a:1123:A:O2'	41:1j:37:PRO:O	2.21	0.57
54:1w:2:C:H2'	54:1w:3:C:C6	2.40	0.57
55:1x:19:G:H4'	55:1x:20:U:OP2	2.05	0.57
1:2A:1283:G:O2'	1:2A:1285:G:N7	2.33	0.57
1:2A:1823:G:OP1	3:2D:54:ARG:NH1	2.36	0.57
62:2A:4425:HOH:O	56:2y:4:C:H4'	2.03	0.57
35:2d:8:VAL:HA	35:2d:11:LEU:HD13	1.86	0.57
1:1A:444:C:H5''	62:1A:5090:HOH:O	2.05	0.57
1:1A:1170:G:H8	1:1A:1170:G:H5''	1.70	0.57
12:1Q:89:ASN:HB2	55:1x:1:C:C4	2.38	0.57
32:1a:165:C:H2'	32:1a:166:G:H8	1.68	0.57
1:2A:1114:G:H2'	1:2A:1115:G:H8	1.69	0.57
1:2A:2127:G:N2	1:2A:2161:C:N3	2.52	0.57
17:2V:38:LEU:HD23	17:2V:50:PRO:O	2.04	0.57
32:2a:458:C:H2'	32:2a:460:G:O4'	2.04	0.57
35:2d:20:TYR:HD1	35:2d:26:CYS:HB3	1.70	0.57
36:2e:12:LEU:HD23	36:2e:31:LEU:HB2	1.85	0.57
37:2f:76:ALA:HB1	37:2f:80:ARG:HH22	1.70	0.57
1:1A:1495:A:OP2	62:1A:4242:HOH:O	2.18	0.57
1:1A:2206:G:H8	1:1A:2207:G:N7	2.02	0.57
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.86	0.57
1:2A:2523:G:O6	62:2A:3930:HOH:O	2.14	0.57
6:2G:115:ARG:NH1	6:2G:137:GLU:OE2	2.37	0.57
12:2Q:82:ARG:NH2	22:20:4:LYS:HG3	2.20	0.57
22:20:46:LYS:HE3	22:20:76:GLY:HA3	1.86	0.57
32:2a:1095:U:H5''	32:2a:1109:C:O2	2.03	0.57
33:2b:8:LYS:HA	33:2b:217:ARG:NH1	2.20	0.57
38:2g:29:LYS:HB2	38:2g:105:VAL:HG21	1.86	0.57
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.85	0.57
1:1A:2161:C:O2'	1:1A:2162:G:H5''	2.04	0.57
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.19	0.57
14:1S:68:GLN:HE22	14:1S:71:ARG:HH21	1.51	0.57
32:1a:1495:U:OP1	62:1a:1916:HOH:O	2.17	0.57
34:1c:81:GLY:O	34:1c:85:ARG:HB2	2.04	0.57
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.86	0.57
52:1u:14:TRP:HE3	52:1u:15:ARG:HG2	1.70	0.57
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.86	0.57
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.01	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.86	0.57
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.37	0.57
32:2a:1029:C:N4	32:2a:1032:G:C6	2.72	0.57
32:2a:1135:U:H2'	32:2a:1137:C:C4	2.40	0.57
32:1a:1239:A:H62	32:1a:1299:A:N6	2.03	0.57
33:1b:97:TRP:CZ2	33:1b:102:LEU:HD13	2.40	0.57
51:1t:92:LEU:O	51:1t:96:GLY:HA2	2.04	0.57
56:1y:19:G:C2	56:1y:56:C:N3	2.73	0.57
1:2A:839:U:H2'	1:2A:840:C:C6	2.38	0.57
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.70	0.57
21:2Z:53:ILE:HG22	21:2Z:71:VAL:HG23	1.87	0.57
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.19	0.57
35:2d:43:HIS:HB3	35:2d:46:LYS:HD2	1.85	0.57
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.05	0.57
32:1a:1334:G:OP2	62:1a:1917:HOH:O	2.18	0.57
51:1t:14:LYS:HG3	51:1t:17:ARG:HH21	1.69	0.57
1:2A:20:C:H2'	1:2A:21:A:H8	1.69	0.57
20:2Y:6:HIS:H	20:2Y:6:HIS:CD2	2.23	0.57
32:2a:45:U:H2'	32:2a:46:G:C8	2.40	0.57
32:2a:174:C:H2'	32:2a:175:C:H6	1.68	0.57
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.05	0.57
3:1D:85:ASP:HB2	3:1D:92:ILE:HG12	1.86	0.57
32:1a:149:A:H2'	32:1a:150:C:C6	2.40	0.57
36:1e:102:ALA:O	36:1e:107:ARG:NH2	2.37	0.57
42:1k:51:LYS:HE2	42:1k:51:LYS:HA	1.87	0.57
55:1x:59:A:H2'	55:1x:60:U:H5'	1.87	0.57
1:2A:2506:U:H1'	54:2w:76:F3N:HD2	1.86	0.57
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.40	0.57
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.85	0.57
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.05	0.57
32:2a:1446:U:O4	62:2a:1912:HOH:O	2.15	0.57
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.19	0.57
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.04	0.57
52:2u:3:LYS:HB3	52:2u:14:TRP:CD1	2.40	0.57
4:1E:29:GLY:H	4:1E:180:ASN:HB3	1.70	0.56
26:14:59:PHE:O	26:14:62:ARG:HD3	2.05	0.56
32:1a:957:U:H3	32:1a:960:U:H5''	1.70	0.56
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.40	0.56
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.20	0.56
33:2b:178:ARG:NH1	33:2b:198:ASP:OD1	2.35	0.56
42:2k:85:ARG:HG2	42:2k:111:ASP:O	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1041:C:H42	1:1A:1114:G:H1	1.52	0.56
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.40	0.56
1:1A:2439:A:H5'	1:1A:2439:A:H8	1.70	0.56
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.05	0.56
2:1B:74:U:H2'	2:1B:75:G:O4'	2.05	0.56
32:1a:628:G:H2'	32:1a:629:G:C8	2.40	0.56
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.33	0.56
56:1y:19:G:H4'	56:1y:57:G:H22	1.70	0.56
1:2A:793:A:O2'	62:2A:3936:HOH:O	2.17	0.56
1:2A:2114:A:H2	1:2A:2171:A:H61	1.51	0.56
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.05	0.56
4:2E:48:GLN:HE21	4:2E:78:LEU:HG	1.70	0.56
21:2Z:52:SER:CB	21:2Z:54:HIS:H	2.18	0.56
21:2Z:52:SER:HB3	21:2Z:54:HIS:H	1.70	0.56
35:2d:108:LEU:HD21	35:2d:174:LEU:HB3	1.86	0.56
1:1A:184:C:H2'	1:1A:185:U:C6	2.41	0.56
19:1X:40:LYS:O	19:1X:44:GLU:HG3	2.05	0.56
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.78	0.56
32:1a:149:A:H2'	32:1a:150:C:H6	1.71	0.56
32:1a:601:C:H2'	32:1a:602:A:H8	1.70	0.56
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.39	0.56
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.70	0.56
39:1h:4:ASP:OD2	39:1h:85:ARG:NE	2.30	0.56
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.70	0.56
1:2A:1654:A:OP1	13:2R:1:MET:N	2.33	0.56
1:2A:1754:C:OP1	15:2T:96:ARG:NH1	2.38	0.56
6:2G:109:VAL:HG21	26:24:14:ILE:HD13	1.86	0.56
10:2O:16:ALA:HB2	10:2O:52:VAL:HG21	1.87	0.56
18:2W:57:ASN:HA	18:2W:61:ASN:HD22	1.70	0.56
32:2a:646:U:H2'	32:2a:647:C:H6	1.71	0.56
32:2a:946:A:H2'	32:2a:947:G:C8	2.41	0.56
43:2l:53:ARG:HG3	43:2l:93:LEU:HD21	1.87	0.56
44:2m:13:LYS:O	44:2m:45:VAL:N	2.24	0.56
1:1A:800:A:H8	1:1A:800:A:OP1	1.88	0.56
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	1.87	0.56
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.32	0.56
26:14:63:TYR:N	26:14:63:TYR:CD1	2.71	0.56
32:1a:1298:C:C5	38:1g:114:ARG:HD3	2.39	0.56
37:1f:36:ARG:NH1	37:1f:66:GLU:OE2	2.38	0.56
1:2A:1354:A:H5''	3:2D:38:LYS:HD3	1.87	0.56
16:2U:8:VAL:HG23	16:2U:11:ARG:NH2	2.21	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1271:G:C2	32:2a:1272:G:C8	2.93	0.56
42:2k:73:MET:HA	42:2k:77:MET:H	1.71	0.56
32:1a:127:G:HO2'	48:1q:2:PRO:N	2.03	0.56
33:1b:154:LEU:HD12	33:1b:154:LEU:H	1.69	0.56
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.87	0.56
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.06	0.56
11:2P:90:ARG:CZ	11:2P:90:ARG:HB2	2.36	0.56
14:2S:24:LEU:HB2	14:2S:85:VAL:HG23	1.87	0.56
24:22:70:GLN:OE1	24:22:70:GLN:N	2.37	0.56
32:2a:1085:U:H3'	32:2a:1086:U:C5	2.40	0.56
32:2a:1087:G:N2	32:2a:1099:G:H1'	2.21	0.56
51:2t:26:ASN:OD1	51:2t:71:THR:OG1	2.15	0.56
1:1A:1064:C:H1'	1:1A:1076:C:H5	1.69	0.56
32:1a:56:U:H2'	32:1a:57:G:C8	2.40	0.56
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.88	0.56
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.38	0.56
1:2A:686:G:C2	29:27:11:LYS:HE3	2.41	0.56
2:2B:66:A:N6	2:2B:108:U:H3'	2.21	0.56
32:2a:532:A:N6	32:2a:1206:G:O2'	2.38	0.56
1:1A:1058:G:N2	1:1A:1081:U:O2	2.39	0.56
32:1a:17:U:H2'	32:1a:18:C:C6	2.41	0.56
32:1a:258:G:H2'	32:1a:259:G:H8	1.71	0.56
32:1a:933:G:O6	38:1g:3:ARG:NH2	2.39	0.56
32:1a:1025:U:C2	32:1a:1036:G:O6	2.59	0.56
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.40	0.56
35:1d:57:ARG:HD3	35:1d:205:GLU:HB3	1.87	0.56
37:1f:45:LEU:HD12	37:1f:59:TYR:HD1	1.70	0.56
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.88	0.56
36:1e:85:GLY:C	36:1e:87:SER:H	2.14	0.56
41:1j:78:ASN:O	41:1j:80:LYS:N	2.39	0.56
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	1.88	0.56
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.41	0.56
32:2a:921:U:O2	36:2e:19:MET:HB2	2.05	0.56
32:2a:1068:G:H8	32:2a:1068:G:OP2	1.88	0.56
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.06	0.56
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.40	0.56
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.36	0.56
1:1A:2136:C:N4	1:1A:2155:G:H1	2.01	0.56
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.39	0.56
32:1a:1470:G:N7	62:1a:1937:HOH:O	2.33	0.56
1:2A:1365:A:O2'	23:21:11:ARG:NH1	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:39:ILE:HG21	6:2G:60:LEU:HD21	1.87	0.56
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.06	0.56
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.70	0.56
12:1Q:110:THR:HB	12:1Q:113:GLN:HB2	1.86	0.56
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.41	0.56
32:1a:865:A:H2	32:1a:918:A:H4'	1.70	0.56
34:1c:77:ILE:HG22	34:1c:81:GLY:H	1.70	0.56
1:2A:884:C:H3'	1:2A:885:C:C6	2.41	0.56
8:2I:82:ARG:NH2	8:2I:90:GLY:H	2.04	0.56
23:21:50:ARG:HG2	23:21:59:THR:CG2	2.35	0.56
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.05	0.56
33:2b:197:VAL:HB	33:2b:200:ILE:HG13	1.86	0.56
36:2e:24:ARG:NH1	53:2v:24:A:OP2	2.39	0.56
44:2m:80:ARG:HH22	50:2s:69:HIS:CE1	2.24	0.56
56:2y:75:C:HO2'	56:2y:76:A:H8	1.54	0.56
1:1A:271(H):G:H4'	23:11:81:LYS:HG2	1.88	0.55
1:1A:536:A:H2'	1:1A:537:C:C6	2.41	0.55
32:1a:551:U:H2'	32:1a:552:U:C6	2.41	0.55
38:2g:153:HIS:ND1	42:2k:58:PRO:HD2	2.21	0.55
56:2y:61:C:H2'	56:2y:62:C:C6	2.41	0.55
1:1A:1670:C:OP2	62:1A:4207:HOH:O	2.18	0.55
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.21	0.55
3:1D:71:ASP:HB2	3:1D:103:ARG:HH12	1.71	0.55
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.06	0.55
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.71	0.55
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.22	0.55
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.06	0.55
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.41	0.55
37:2f:46:ARG:HH22	49:2r:37:VAL:HG11	1.70	0.55
50:2s:15:LEU:HD12	50:2s:18:LYS:HD2	1.89	0.55
11:1P:29:LYS:O	11:1P:29:LYS:HG2	2.06	0.55
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.06	0.55
33:1b:52:GLU:HG2	33:1b:56:ARG:HH21	1.71	0.55
1:2A:715:G:O4'	46:2o:60:VAL:HG11	2.06	0.55
1:2A:2469:A:O3'	12:2Q:56:ARG:NH1	2.39	0.55
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.40	0.55
5:2F:14:PRO:HD2	5:2F:127:GLU:OE1	2.06	0.55
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	1.88	0.55
11:2P:59:LEU:HD11	30:28:10:ALA:HA	1.88	0.55
32:2a:841:U:H6	32:2a:841:U:P	2.29	0.55
33:2b:213:LEU:O	33:2b:217:ARG:HG2	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:48:ILE:O	42:2k:50:TYR:N	2.37	0.55
42:2k:98:LEU:O	42:2k:101:SER:OG	2.16	0.55
44:2m:25:ILE:HD11	44:2m:60:VAL:HG11	1.87	0.55
56:2y:30:G:H2'	56:2y:31:A:H8	1.71	0.55
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.06	0.55
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.24	0.55
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.07	0.55
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.88	0.55
6:1G:110:ALA:HB1	6:1G:140:ILE:HG23	1.87	0.55
7:1H:3:ARG:HG3	7:1H:4:ILE:N	2.22	0.55
35:1d:13:ARG:HB3	35:1d:38:TYR:O	2.06	0.55
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.39	0.55
1:2A:2114:A:H2	1:2A:2171:A:N6	2.05	0.55
1:2A:2163:C:OP1	1:2A:2165:G:N2	2.40	0.55
1:2A:2892:A:H2'	1:2A:2893:G:H5'	1.87	0.55
10:2O:58:VAL:HG21	10:2O:86:ILE:HG12	1.89	0.55
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.89	0.55
38:2g:152:ALA:O	38:2g:155:ARG:HD3	2.07	0.55
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.72	0.55
48:2q:53:LEU:HD23	48:2q:82:MET:HE1	1.87	0.55
1:1A:1991:U:H2'	1:1A:1992:G:H5''	1.89	0.55
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.06	0.55
32:1a:353:A:H5'	32:1a:353:A:H8	1.71	0.55
35:1d:30:LYS:HA	35:1d:35:ARG:NH1	2.22	0.55
1:2A:2127:G:C2	1:2A:2161:C:N3	2.75	0.55
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.35	0.55
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.89	0.55
32:2a:1036:G:H5''	32:2a:1037:C:OP2	2.07	0.55
1:1A:530:G:N1	1:1A:2023:G:OP1	2.30	0.55
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.06	0.55
16:2U:50:ARG:HH22	17:2V:72:VAL:HG13	1.72	0.55
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.39	0.55
28:26:34:LEU:HB2	28:26:51:GLU:HB2	1.88	0.55
32:2a:451:A:N6	32:2a:480:U:H2'	2.21	0.55
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.40	0.55
55:2x:15:G:H2'	55:2x:59:A:N1	2.21	0.55
1:1A:839:U:H2'	1:1A:840:C:C6	2.42	0.55
1:1A:1078:U:H5'	1:1A:1079:C:OP1	2.07	0.55
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	1.88	0.55
2:1B:2:C:H2'	2:1B:3:C:C6	2.42	0.55
32:1a:664:G:N2	32:1a:741:G:H1	2.01	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.71	0.55
1:2A:885:C:H2'	1:2A:886:C:H4'	1.88	0.55
1:2A:890:A:H2'	1:2A:892:G:H8	1.71	0.55
1:2A:894:C:O2'	1:2A:895:U:H5''	2.07	0.55
1:2A:1171:G:H22	1:2A:1178:C:H42	1.54	0.55
1:2A:2177:C:H2'	1:2A:2178:C:O4'	2.07	0.55
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.42	0.55
4:2E:141:ILE:HD12	4:2E:150:VAL:HG21	1.88	0.55
26:24:58:ARG:HD2	50:2s:68:GLY:N	2.17	0.55
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.22	0.55
32:2a:1145:C:H4'	32:2a:1146:A:H8	1.71	0.55
33:2b:33:TYR:HB2	33:2b:43:ASP:HB2	1.89	0.55
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.42	0.55
1:1A:1669:A:H5''	1:1A:2550:G:OP1	2.07	0.55
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.42	0.55
32:1a:1269:A:H2	32:1a:1312:G:N3	2.04	0.55
33:1b:91:PRO:HG3	33:1b:154:LEU:HB2	1.89	0.55
1:2A:184:C:H2'	1:2A:185:U:C6	2.41	0.55
1:2A:1314:C:H6	1:2A:1314:C:H5'	1.72	0.55
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.22	0.55
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.06	0.55
32:2a:316:G:H4'	62:2a:2008:HOH:O	2.06	0.55
32:2a:659:U:OP2	46:2o:8:LYS:NZ	2.28	0.55
37:2f:36:ARG:NH2	37:2f:38:GLU:OE2	2.39	0.55
55:2x:53:G:H3'	55:2x:54:5MU:H73	1.89	0.55
1:1A:1139:G:OP2	9:1N:70:LYS:NZ	2.32	0.55
1:1A:1235:G:H5''	62:1A:4696:HOH:O	2.07	0.55
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.07	0.55
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.89	0.55
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.05	0.55
41:1j:81:THR:HG22	41:1j:85:LEU:HG	1.88	0.55
1:2A:1179:C:H2'	1:2A:1180:C:H6	1.72	0.55
9:2N:123:TYR:HH	9:2N:130:HIS:CD2	2.25	0.55
32:2a:26:A:N6	32:2a:558:G:O2'	2.40	0.55
32:2a:922:G:N3	32:2a:1398:A:H2	2.04	0.55
32:2a:1321:C:O2	50:2s:36:ARG:NH2	2.40	0.55
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.39	0.55
33:2b:98:LEU:HD13	33:2b:101:MET:HE3	1.88	0.55
40:2i:4:TYR:O	40:2i:19:LEU:N	2.33	0.55
1:1A:11:G:C2'	1:1A:12:U:H5'	2.35	0.55
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.08	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2153:G:H2'	1:1A:2154:G:C8	2.42	0.55
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.24	0.55
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.22	0.55
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.42	0.55
4:2E:34:VAL:HG11	4:2E:78:LEU:HD11	1.88	0.55
11:2P:121:LYS:O	11:2P:123:LEU:N	2.40	0.55
13:2R:33:ARG:NH2	13:2R:115:GLU:OE1	2.40	0.55
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.39	0.55
33:2b:21:ARG:HA	33:2b:39:ILE:HG13	1.89	0.55
1:1A:1175:U:OP1	1:1A:1177:A:N6	2.40	0.54
7:1H:33:LEU:HD21	7:1H:136:ILE:HG13	1.89	0.54
32:1a:153:C:H2'	32:1a:154:C:C6	2.42	0.54
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.23	0.54
39:1h:100:ILE:HD13	39:1h:112:LEU:HD21	1.89	0.54
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.07	0.54
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.07	0.54
18:2W:57:ASN:HA	18:2W:61:ASN:ND2	2.22	0.54
21:2Z:31:ARG:HG3	21:2Z:32:HIS:CD2	2.42	0.54
32:2a:1360:A:H8	32:2a:1360:A:OP1	1.90	0.54
35:2d:57:ARG:HB3	35:2d:206:PHE:HB2	1.89	0.54
35:2d:119:GLN:HG3	35:2d:123:HIS:HD2	1.69	0.54
1:1A:1140:C:OP2	9:1N:66:LYS:NZ	2.35	0.54
32:1a:977:A:H1'	32:1a:982:U:O4	2.07	0.54
33:1b:231:GLU:HB3	33:1b:232:PRO:HD3	1.89	0.54
38:1g:18:TYR:HB3	38:1g:59:LEU:HD13	1.89	0.54
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.89	0.54
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.43	0.54
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.22	0.54
32:2a:646:U:H2'	32:2a:647:C:C6	2.42	0.54
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.89	0.54
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.43	0.54
1:1A:710:G:H2'	1:1A:711:G:C8	2.42	0.54
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.41	0.54
1:1A:2892:A:N6	1:1A:2893:G:C6	2.75	0.54
7:1H:101:ARG:NH2	7:1H:122:THR:HA	2.21	0.54
8:1I:14:ASP:OD1	8:1I:15:VAL:N	2.40	0.54
21:1Z:93:ASP:CB	21:1Z:131:ARG:HH22	2.20	0.54
21:1Z:136:PHE:O	21:1Z:137:ILE:HG13	2.08	0.54
33:1b:44:LEU:HA	33:1b:47:THR:OG1	2.07	0.54
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.07	0.54
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.89	0.54
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.70	0.54
32:2a:964:A:N3	32:2a:969:A:O2'	2.37	0.54
1:1A:264:C:O2'	1:1A:265:A:H2'	2.06	0.54
1:1A:1062:G:H1	1:1A:1077:A:H61	1.56	0.54
1:1A:1827:C:C2'	1:1A:1828:G:H5'	2.37	0.54
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.41	0.54
32:1a:148:G:H2'	32:1a:149:A:C8	2.42	0.54
32:1a:157:G:H1	32:1a:164:U:H3	1.55	0.54
32:1a:966:M2G:HM11	40:1i:127:LYS:HE2	1.89	0.54
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.05	0.54
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.07	0.54
54:1w:1:G:H2'	54:1w:2:C:C6	2.42	0.54
1:2A:910:A:N1	1:2A:2277:G:H1'	2.22	0.54
32:2a:441:A:H3'	32:2a:442:C:C6	2.43	0.54
34:2c:149:ALA:HA	34:2c:201:TYR:O	2.07	0.54
1:1A:1815:A:H8	1:1A:1815:A:OP1	1.91	0.54
32:1a:1302:U:C5	44:1m:17:VAL:HG21	2.43	0.54
56:1y:40:C:H2'	56:1y:41:C:H6	1.73	0.54
1:2A:176:G:O2'	1:2A:177:G:H5'	2.07	0.54
1:2A:1340:U:OP1	19:2X:16:LYS:NZ	2.33	0.54
1:2A:1353:A:H2'	1:2A:1354:A:C8	2.41	0.54
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.34	0.54
18:2W:17:VAL:HG11	18:2W:103:ILE:HD11	1.90	0.54
26:24:53:GLU:C	26:24:55:ARG:H	2.16	0.54
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.20	0.54
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.06	0.54
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.40	0.54
1:1A:436:C:H2'	1:1A:437:G:C8	2.43	0.54
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	1.89	0.54
8:1I:5:LEU:HD11	8:1I:19:VAL:HG22	1.90	0.54
21:1Z:163:LEU:HD23	21:1Z:167:PRO:HG3	1.90	0.54
32:1a:1425:U:H2'	32:1a:1426:C:C6	2.43	0.54
1:2A:639:U:H2'	1:2A:640:C:C6	2.43	0.54
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.43	0.54
1:2A:2853:C:H2'	1:2A:2854:G:H8	1.73	0.54
2:2B:9:G:H1	2:2B:112:U:H3	1.56	0.54
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.89	0.54
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.41	0.54
32:2a:757:U:H2'	32:2a:758:G:O4'	2.08	0.54
35:2d:191:ARG:NH1	35:2d:191:ARG:O	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.08	0.54
50:2s:12:ASP:OD1	50:2s:37:ARG:NH1	2.41	0.54
54:2w:51:U:H2'	54:2w:52:G:C8	2.43	0.54
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.08	0.54
4:1E:77:ILE:HD12	4:1E:195:LEU:HD13	1.89	0.54
7:1H:101:ARG:HH21	7:1H:122:THR:HA	1.73	0.54
32:1a:1136:U:H5''	32:1a:1137:C:N4	2.22	0.54
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.91	0.54
1:2A:2138:C:N4	1:2A:2153:G:H1	2.04	0.54
1:2A:2619:C:H4'	4:2E:151:TYR:O	2.07	0.54
3:2D:231:HIS:ND1	3:2D:232:PRO:HD2	2.23	0.54
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.40	0.54
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.39	0.54
35:2d:196:LEU:O	35:2d:198:VAL:N	2.40	0.54
44:2m:15:VAL:O	44:2m:19:LEU:HD22	2.08	0.54
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.72	0.54
1:1A:1851:U:H4'	56:1y:71:G:H4'	1.90	0.54
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.41	0.54
50:1s:27:GLU:HG2	50:1s:28:LYS:HG2	1.90	0.54
1:2A:900:A:O2'	1:2A:901:A:OP1	2.23	0.54
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.90	0.54
6:2G:109:VAL:HG11	26:24:14:ILE:HG21	1.88	0.54
9:2N:67:LEU:C	9:2N:88:GLU:HG3	2.32	0.54
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.41	0.54
33:2b:19:HIS:CE1	33:2b:206:ASP:HB2	2.43	0.54
34:2c:20:SER:HA	34:2c:57:ILE:O	2.07	0.54
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.42	0.54
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.43	0.54
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.25	0.54
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.72	0.54
36:1e:18:ARG:HD3	36:1e:27:ARG:HH12	1.73	0.54
1:2A:1629:U:OP1	62:2A:3939:HOH:O	2.19	0.54
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.43	0.54
1:2A:2853:C:H2'	1:2A:2854:G:C8	2.42	0.54
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.05	0.54
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.90	0.54
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.41	0.54
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.90	0.54
33:2b:223:ILE:HA	33:2b:226:ARG:HD3	1.90	0.54
34:2c:8:ILE:HG23	34:2c:16:ARG:HG2	1.88	0.54
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:745:G:O6	62:1A:4243:HOH:O	2.18	0.54
6:1G:111:LEU:HA	6:1G:114:ILE:HD12	1.90	0.54
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.71	0.54
1:2A:2711:A:OP2	62:2A:3938:HOH:O	2.19	0.54
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.23	0.54
21:2Z:124:ILE:HG13	21:2Z:125:LEU:O	2.08	0.54
32:2a:67:C:H2'	32:2a:68:G:C8	2.43	0.54
32:2a:573:A:N3	32:2a:883:C:O2'	2.36	0.54
32:2a:1005:A:H5''	32:2a:1006:C:H5	1.72	0.54
1:1A:526:A:H5''	1:1A:527:C:OP1	2.08	0.53
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.39	0.53
32:1a:243:A:H4'	32:1a:244:U:H5''	1.89	0.53
32:1a:861:G:HO2'	32:1a:874:G:HO2'	1.56	0.53
32:1a:1298:C:C4	38:1g:114:ARG:HD3	2.43	0.53
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.43	0.53
40:1i:86:VAL:HG13	40:1i:90:PRO:HA	1.91	0.53
1:2A:775:G:O3'	62:2A:3940:HOH:O	2.19	0.53
1:2A:2168:G:H8	1:2A:2170:A:N7	2.04	0.53
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.38	0.53
21:2Z:30:ASN:HA	21:2Z:89:PHE:HE1	1.72	0.53
32:2a:995:C:O2	45:2n:4:LYS:NZ	2.39	0.53
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.90	0.53
1:1A:247:G:H4'	1:1A:386:G:C5	2.43	0.53
1:1A:1005:C:H5''	62:1A:4683:HOH:O	2.08	0.53
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.07	0.53
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.43	0.53
4:1E:103:ASP:OD2	4:1E:168:MET:HE3	2.08	0.53
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.43	0.53
54:1w:16:U:OP2	54:1w:16:U:H6	1.90	0.53
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.43	0.53
12:2Q:78:PRO:HD3	55:2x:1:C:N3	2.23	0.53
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.23	0.53
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.08	0.53
41:2j:8:LEU:HD23	41:2j:8:LEU:H	1.73	0.53
1:1A:187:G:OP2	62:1A:4245:HOH:O	2.18	0.53
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.23	0.53
6:1G:131:TYR:HE2	6:1G:133:LEU:HD23	1.73	0.53
6:1G:179:PRO:HG3	26:14:43:TYR:CZ	2.42	0.53
12:1Q:7:MET:HE1	12:1Q:93:TYR:HE1	1.74	0.53
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.89	0.53
26:14:15:ILE:HG13	26:14:21:VAL:HG22	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:202:U:H3'	32:1a:203:U:H6	1.71	0.53
32:1a:841:U:C4	32:1a:848:C:H1'	2.43	0.53
32:1a:983:A:H5'	32:1a:984:C:OP2	2.08	0.53
33:1b:114:ARG:NH1	33:1b:117:GLU:OE1	2.41	0.53
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.27	0.53
1:2A:2660:A:H2'	1:2A:2661:G:O4'	2.09	0.53
10:2O:49:ARG:HH12	32:2a:1423:G:P	2.31	0.53
29:27:24:THR:HB	29:27:27:GLY:H	1.72	0.53
32:2a:509:A:N3	32:2a:543:C:O2'	2.36	0.53
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.72	0.53
1:1A:2612:C:OP2	27:15:2:ALA:N	2.42	0.53
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.22	0.53
9:1N:14:VAL:HG11	9:1N:138:LEU:HD12	1.91	0.53
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.44	0.53
32:1a:110:C:O2'	47:1p:25:ARG:O	2.25	0.53
33:1b:17:PHE:HA	33:1b:44:LEU:HD21	1.90	0.53
33:1b:21:ARG:O	33:1b:23:ARG:N	2.42	0.53
33:1b:24:TRP:H	33:1b:24:TRP:HD1	1.56	0.53
38:1g:76:ARG:HD3	38:1g:156:TRP:HZ2	1.72	0.53
1:2A:2319:G:N2	14:2S:3:ARG:HH11	1.91	0.53
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.89	0.53
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.44	0.53
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.09	0.53
32:2a:1274:G:N2	32:2a:1275:A:N7	2.55	0.53
1:1A:897:C:H2'	1:1A:898:C:C6	2.43	0.53
1:1A:1812:A:O2'	3:1D:45:ASN:N	2.41	0.53
1:1A:2228:G:OP1	3:1D:261:LYS:NZ	2.38	0.53
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.09	0.53
2:1B:57:A:H1'	6:1G:29:TRP:HB2	1.91	0.53
32:1a:96:U:H2'	32:1a:97:G:C8	2.44	0.53
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.43	0.53
33:1b:92:TYR:HE1	33:1b:94:ASN:HB2	1.72	0.53
33:1b:127:ILE:HG13	33:1b:130:ARG:CZ	2.38	0.53
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.74	0.53
54:1w:75:C:HO3'	54:1w:76:F3N:P	2.26	0.53
1:2A:1607:C:H4'	1:2A:1608:A:O5'	2.08	0.53
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.44	0.53
1:2A:1803:A:HO2'	3:2D:259:THR:HG21	1.72	0.53
8:2I:84:GLY:O	8:2I:85:GLU:HB3	2.09	0.53
21:2Z:23:LYS:HB3	21:2Z:38:TYR:CD1	2.43	0.53
32:2a:56:U:H2'	32:2a:57:G:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:909:A:H2'	32:2a:910:C:O4'	2.08	0.53
32:2a:1402:4OC:HM43	32:2a:1403:C:C2	2.43	0.53
33:2b:47:THR:HA	33:2b:202:PRO:HG2	1.90	0.53
35:2d:10:ARG:HG3	35:2d:11:LEU:HD12	1.90	0.53
36:2e:83:GLU:HG2	36:2e:88:LYS:HB2	1.91	0.53
39:2h:17:THR:O	39:2h:78:GLN:NE2	2.24	0.53
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.09	0.53
23:11:2:SER:HB3	23:11:46:LEU:HD12	1.91	0.53
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.72	0.53
42:1k:16:SER:O	42:1k:35:PRO:HD3	2.08	0.53
44:1m:104:ARG:HG2	44:1m:105:THR:HG22	1.90	0.53
1:2A:324:A:N6	1:2A:338:G:O2'	2.42	0.53
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.27	0.53
1:2A:829:A:N7	1:2A:2247:A:O2'	2.42	0.53
12:2Q:1:MET:HG2	12:2Q:44:ALA:HB1	1.89	0.53
32:2a:509:A:H5''	35:2d:55:ALA:HB2	1.91	0.53
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.41	0.53
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.08	0.53
38:2g:79:ARG:NH1	38:2g:80:VAL:HG22	2.24	0.53
22:10:43:THR:O	22:10:43:THR:HG23	2.09	0.53
30:18:23:VAL:HG22	30:18:47:LYS:HB3	1.91	0.53
32:1a:110:C:H2'	32:1a:111:G:O4'	2.08	0.53
34:1c:73:PRO:O	34:1c:77:ILE:HG13	2.08	0.53
40:1i:6:GLY:O	40:1i:17:VAL:HG12	2.09	0.53
1:2A:1495:A:H2'	1:2A:1496:A:H8	1.73	0.53
21:2Z:145:GLU:O	21:2Z:173:ALA:HB1	2.08	0.53
33:2b:28:PHE:CD2	33:2b:190:THR:HA	2.44	0.53
44:2m:24:GLY:HA3	44:2m:66:LEU:HD23	1.90	0.53
1:1A:1877:A:H5''	1:1A:1878:G:OP2	2.09	0.53
7:1H:83:TYR:CE2	7:1H:138:LYS:HB2	2.44	0.53
28:16:15:GLU:OE2	28:16:47:THR:HG23	2.08	0.53
33:1b:174:VAL:O	33:1b:178:ARG:HG2	2.09	0.53
39:1h:51:VAL:HG11	39:1h:60:ARG:NH1	2.24	0.53
1:2A:1434:A:H61	1:2A:1558:A:H62	1.56	0.53
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.23	0.53
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.24	0.53
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.43	0.53
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.44	0.53
7:2H:33:LEU:HD21	7:2H:136:ILE:HB	1.91	0.53
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.74	0.53
21:2Z:102:LEU:HB3	21:2Z:104:PHE:CE2	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:954:G:H2'	32:2a:955:U:O4'	2.09	0.53
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.90	0.53
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	1.91	0.53
1:1A:2576:G:H1'	62:1A:5260:HOH:O	2.09	0.53
7:1H:170:ARG:O	7:1H:171:LEU:HD23	2.09	0.53
22:10:10:THR:HG22	22:10:12:ASN:N	2.21	0.53
32:1a:1377:A:HO2'	38:1g:2:ALA:N	2.05	0.53
54:1w:4:C:H2'	54:1w:5:G:H8	1.73	0.53
1:2A:236:C:H2'	1:2A:237:C:H6	1.74	0.53
1:2A:652(U):G:H2'	1:2A:652(V):C:C6	2.43	0.53
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.36	0.53
2:2B:48:A:OP1	14:2S:30:ARG:NH2	2.42	0.53
3:2D:66:ASP:OD2	3:2D:103:ARG:NH1	2.42	0.53
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.44	0.53
16:2U:76:TYR:CE2	16:2U:80:ILE:HG13	2.43	0.53
26:24:44:THR:C	26:24:46:GLN:H	2.16	0.53
32:2a:1104:G:H4'	33:2b:111:ARG:NH2	2.24	0.53
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.44	0.53
57:2z:7:GLY:HA2	57:2z:14:GLY:HA2	1.91	0.53
1:1A:2478:A:OP2	31:19:2:LYS:NZ	2.37	0.53
8:1I:100:ALA:HA	8:1I:103:ARG:HH11	1.74	0.53
8:1I:117:GLU:HG3	8:1I:118:LYS:H	1.74	0.53
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.91	0.53
38:1g:18:TYR:CD1	38:1g:59:LEU:HB2	2.44	0.53
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.90	0.53
43:1l:79:GLU:HG2	43:1l:80:HIS:CD2	2.44	0.53
1:2A:1773:A:H5''	62:2A:4593:HOH:O	2.09	0.53
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.09	0.53
3:2D:24:ILE:HD11	3:2D:84:TYR:HB2	1.91	0.53
6:2G:5:VAL:HG22	6:2G:8:LYS:HB2	1.91	0.53
6:2G:124:SER:O	6:2G:124:SER:OG	2.26	0.53
21:2Z:6:LYS:HE3	21:2Z:8:TYR:HE2	1.74	0.53
36:2e:41:VAL:O	36:2e:66:MET:HA	2.09	0.53
1:1A:2144:U:H3'	1:1A:2146:C:N4	2.24	0.52
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.42	0.52
7:1H:6:ARG:HH12	7:1H:54:ARG:HH22	1.57	0.52
12:1Q:110:THR:HG22	12:1Q:112:GLU:N	2.23	0.52
21:1Z:1:MET:SD	21:1Z:135:GLU:HG3	2.49	0.52
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.90	0.52
32:1a:958:A:C6	32:1a:959:A:N1	2.78	0.52
34:1c:13:GLY:HA3	45:1n:57:ARG:HH21	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:644:A:H4'	1:2A:645:C:C4	2.44	0.52
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.45	0.52
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.73	0.52
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.45	0.52
1:2A:2577:A:H5''	1:2A:2578:G:H5'	1.91	0.52
6:2G:5:VAL:HG22	6:2G:8:LYS:H	1.75	0.52
42:2k:45:GLY:O	42:2k:50:TYR:HB2	2.09	0.52
1:1A:956:G:H5''	12:1Q:77:LYS:HD2	1.91	0.52
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.44	0.52
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.44	0.52
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.75	0.52
34:1c:203:PHE:HZ	34:1c:206:GLU:HG2	1.74	0.52
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.09	0.52
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.23	0.52
1:2A:1839:G:C8	1:2A:1927:A:H1'	2.43	0.52
1:2A:2193:G:H2'	1:2A:2194:G:H8	1.72	0.52
32:2a:155:C:H2'	32:2a:156:G:O4'	2.09	0.52
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.89	0.52
32:2a:955:U:O2'	50:2s:83:HIS:HD2	1.91	0.52
32:2a:985:C:OP1	57:2z:17:ARG:HD3	2.09	0.52
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.90	0.52
32:2a:1250:A:H4'	40:2i:68:GLY:N	2.23	0.52
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.91	0.52
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.44	0.52
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.90	0.52
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.91	0.52
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.36	0.52
1:1A:752:A:H3'	29:17:1:MET:HE1	1.91	0.52
32:1a:108:G:C6	51:1t:15:ARG:HD2	2.43	0.52
32:1a:690:G:C6	32:1a:691:G:C6	2.97	0.52
33:1b:152:PHE:CE1	33:1b:155:LEU:HD23	2.44	0.52
56:1y:18:G:O2'	56:1y:57:G:O6	2.26	0.52
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.92	0.52
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.08	0.52
32:2a:1030(A):G:N1	32:2a:1030(D):A:OP2	2.41	0.52
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.09	0.52
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	1.91	0.52
39:2h:20:TYR:HA	39:2h:65:TYR:CZ	2.44	0.52
32:1a:405:U:H3'	32:1a:406:G:H5'	1.92	0.52
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.43	0.52
1:2A:644:A:H4'	1:2A:645:C:N4	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1138:G:N3	9:2N:106:MET:HE2	2.24	0.52
1:2A:2141:G:H2'	1:2A:2142:C:O4'	2.10	0.52
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.74	0.52
2:2B:78:A:C2	2:2B:100:A:C4	2.97	0.52
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.90	0.52
18:2W:4:LYS:HB2	18:2W:106:ILE:HD13	1.90	0.52
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD11	1.92	0.52
32:2a:112:G:HO2'	32:2a:354:G:HO2'	1.57	0.52
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.06	0.52
32:2a:527:G7M:HN72	43:2l:92:0TD:H3	1.91	0.52
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.32	0.52
32:2a:921:U:O2'	36:2e:19:MET:O	2.27	0.52
32:2a:1025:U:H3	32:2a:1036:G:H1	1.56	0.52
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.73	0.52
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.25	0.52
47:2p:3:LYS:O	47:2p:21:VAL:HA	2.10	0.52
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.43	0.52
1:1A:1371:G:O6	62:1A:4241:HOH:O	2.18	0.52
1:1A:1607:C:O2	62:1A:4244:HOH:O	2.18	0.52
5:1F:39:TRP:CZ2	5:1F:43:LYS:HE2	2.44	0.52
25:13:35:ARG:HE	25:13:37:LEU:HD21	1.74	0.52
32:1a:13:U:O2'	62:1a:1918:HOH:O	2.19	0.52
32:1a:828:A:H2'	32:1a:829:G:O4'	2.10	0.52
35:1d:102:ASP:OD1	35:1d:103:ASN:N	2.42	0.52
1:2A:1384:A:N3	1:2A:1405:U:H1'	2.23	0.52
1:2A:2024:G:H2'	1:2A:2025:C:C6	2.45	0.52
1:2A:2126:A:N3	1:2A:2127:G:H1'	2.24	0.52
32:2a:996:A:N1	32:2a:1045:C:O2'	2.33	0.52
32:2a:1184:G:H2'	32:2a:1185:G:C8	2.44	0.52
1:1A:2751:G:C4	7:1H:2:SER:HA	2.44	0.52
35:1d:11:LEU:HG	35:1d:66:ARG:HD3	1.92	0.52
1:2A:887:A:H4'	1:2A:888:C:C5	2.43	0.52
1:2A:1114:G:H2'	1:2A:1115:G:C8	2.45	0.52
1:2A:1155:A:OP1	16:2U:55:ARG:HG2	2.09	0.52
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.74	0.52
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.45	0.52
6:2G:41:GLN:O	6:2G:43:LEU:HD22	2.09	0.52
7:2H:8:PRO:O	7:2H:10:PRO:HD3	2.09	0.52
7:2H:56:SER:OG	7:2H:57:ASP:N	2.41	0.52
10:2O:29:ASN:N	10:2O:29:ASN:OD1	2.42	0.52
11:2P:91:PHE:O	11:2P:123:LEU:HD21	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1239:A:H62	32:2a:1299:A:N6	2.07	0.52
32:2a:1255:G:N7	41:2j:43:ARG:NH2	2.55	0.52
32:2a:1457:G:H5''	51:2t:35:THR:HG21	1.92	0.52
36:2e:60:TYR:OH	36:2e:64:ARG:NH1	2.42	0.52
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.10	0.52
1:1A:2128:C:O2'	1:1A:2174:C:H4'	2.10	0.52
16:1U:105:VAL:HG22	17:1V:45:THR:HG22	1.92	0.52
32:1a:45:U:H2'	32:1a:46:G:C8	2.45	0.52
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.92	0.52
36:1e:148:VAL:O	36:1e:152:ARG:HG3	2.09	0.52
1:2A:286:C:H2'	1:2A:287:C:C6	2.44	0.52
1:2A:375:C:H2'	1:2A:376:C:H6	1.73	0.52
7:2H:9:ILE:HB	7:2H:50:VAL:HB	1.92	0.52
33:2b:195:ASP:O	39:2h:68:ARG:NH2	2.43	0.52
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.91	0.52
1:1A:185:U:H4'	1:1A:218:A:H4'	1.92	0.52
1:1A:2190:G:H2'	1:1A:2191:G:O4'	2.10	0.52
2:1B:96:U:OP1	21:1Z:14:LYS:NZ	2.42	0.52
4:1E:29:GLY:HA3	62:1E:404:HOH:O	2.09	0.52
14:1S:68:GLN:NE2	14:1S:71:ARG:HH21	2.08	0.52
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.91	0.52
26:14:55:ARG:H	26:14:56:VAL:HA	1.73	0.52
32:1a:767:A:H2'	32:1a:768:A:O4'	2.10	0.52
40:1i:50:LEU:HB2	40:1i:55:ALA:HB3	1.91	0.52
42:1k:24:SER:O	42:1k:88:GLY:HA3	2.09	0.52
54:1w:4:C:O2'	54:1w:5:G:H5'	2.09	0.52
1:2A:287:C:H2'	1:2A:288:C:C6	2.44	0.52
1:2A:1131:G:HO2'	1:2A:2025:C:HO2'	1.56	0.52
1:2A:2135:A:C8	1:2A:2136:C:H5	2.28	0.52
7:2H:11:VAL:HG12	7:2H:15:VAL:HG23	1.90	0.52
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.39	0.52
32:2a:429:U:OP2	35:2d:36:ARG:NH2	2.43	0.52
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.44	0.52
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.24	0.52
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.10	0.52
47:2p:49:LEU:HD22	47:2p:73:LEU:HG	1.90	0.52
1:1A:579:G:H2'	1:1A:580:C:C6	2.45	0.52
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.45	0.52
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.45	0.52
1:1A:2756:U:H1'	1:1A:2757:A:H5''	1.92	0.52
8:1I:107:VAL:HG12	8:1I:109:ILE:HG12	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:250:A:H4'	32:1a:251:G:O5'	2.08	0.52
32:1a:715:A:OP1	32:1a:805:C:O2'	2.19	0.52
39:1h:81:HIS:N	39:1h:138:TRP:O	2.43	0.52
1:2A:880:G:N2	1:2A:898:C:O2	2.38	0.52
1:2A:1179:C:H2'	1:2A:1180:C:C6	2.45	0.52
1:2A:2294:C:P	14:2S:89:ARG:HH22	2.33	0.52
2:2B:3:C:H2'	2:2B:4:C:C6	2.45	0.52
6:2G:27:ASN:HB3	6:2G:30:GLU:HB2	1.92	0.52
7:2H:126:PRO:HG2	7:2H:130:ARG:NH1	2.25	0.52
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	1.92	0.52
10:2O:111:PHE:O	10:2O:115:VAL:HG23	2.10	0.52
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.43	0.52
32:2a:1065:U:O2'	32:2a:1066:C:OP2	2.26	0.52
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.93	0.52
41:2j:5:ARG:HA	41:2j:73:ASP:OD1	2.09	0.52
1:1A:152:G:H2'	1:1A:153:C:C6	2.45	0.52
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.90	0.52
6:1G:11:TYR:OH	6:1G:32:PRO:O	2.18	0.52
8:1I:109:ILE:HD12	8:1I:130:TYR:HE2	1.74	0.52
19:1X:11:PRO:HB3	19:1X:92:LEU:HD11	1.92	0.52
21:1Z:4:ARG:NE	21:1Z:60:GLU:OE2	2.36	0.52
32:1a:342:C:H2'	32:1a:343:U:O4'	2.09	0.52
32:1a:627:G:O6	62:1a:1919:HOH:O	2.19	0.52
34:1c:71:ALA:O	34:1c:73:PRO:HD3	2.10	0.52
36:1e:135:THR:O	36:1e:139:LEU:HG	2.10	0.52
48:1q:78:GLU:HG2	48:1q:81:ARG:HG2	1.92	0.52
56:1y:5:G:C2	56:1y:69:G:C4	2.98	0.52
1:2A:300:A:OP2	20:2Y:86:ARG:NH1	2.43	0.52
1:2A:526:A:H5''	1:2A:527:C:OP1	2.10	0.52
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.09	0.52
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.45	0.52
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.25	0.52
1:2A:2207:G:H3'	1:2A:2208:A:H5''	1.91	0.52
5:2F:178:PRO:HB2	5:2F:201:VAL:HG11	1.92	0.52
6:2G:110:ALA:HB1	6:2G:140:ILE:HG23	1.92	0.52
20:2Y:19:LYS:HE2	20:2Y:20:TYR:CE2	2.45	0.52
32:2a:90:U:H2'	32:2a:91:C:H6	1.74	0.52
32:2a:664:G:N2	32:2a:741:G:H1	2.02	0.52
32:2a:779:C:H2'	32:2a:780:A:O4'	2.10	0.52
32:2a:841:U:C5	32:2a:848:C:H1'	2.45	0.52
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:104:GLN:HG3	34:2c:105:GLU:N	2.25	0.52
2:1B:75:G:H22	21:1Z:73:GLN:NE2	2.07	0.51
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.08	0.51
8:1I:81:VAL:O	8:1I:146:ALA:HA	2.11	0.51
32:1a:1191:A:OP1	34:1c:4:LYS:NZ	2.37	0.51
32:1a:1326:C:H2'	32:1a:1327:C:C6	2.45	0.51
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.42	0.51
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.45	0.51
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.91	0.51
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.92	0.51
1:2A:141:A:H8	1:2A:1408:C:O2'	1.93	0.51
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.10	0.51
1:2A:2807:G:C2	1:2A:2893:G:O6	2.62	0.51
32:2a:1318:A:O2'	50:2s:37:ARG:HD3	2.10	0.51
33:2b:119:GLU:HG3	33:2b:142:LEU:HD11	1.91	0.51
34:2c:30:ARG:HH21	45:2n:38:GLY:HA2	1.75	0.51
35:2d:101:LEU:O	35:2d:104:VAL:HG22	2.10	0.51
37:2f:82:ARG:HB2	37:2f:85:VAL:HG23	1.91	0.51
54:2w:18:G:H4'	54:2w:60:U:C5	2.45	0.51
1:1A:436:C:H2'	1:1A:437:G:H8	1.75	0.51
1:1A:484:C:H2'	1:1A:485:C:C6	2.45	0.51
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.43	0.51
3:1D:148:GLU:OE1	3:1D:151:LYS:NZ	2.35	0.51
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.10	0.51
32:1a:973:G:H3'	32:1a:974:A:H5''	1.92	0.51
40:1i:9:ARG:HG2	40:1i:14:VAL:HG12	1.90	0.51
1:2A:8:A:H2'	1:2A:9:U:C6	2.44	0.51
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.10	0.51
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.10	0.51
2:2B:2:C:H2'	2:2B:3:C:H6	1.74	0.51
22:20:36:ILE:HD12	22:20:58:THR:HG21	1.92	0.51
32:2a:141:A:O2'	32:2a:182:U:H1'	2.11	0.51
32:2a:657:G:H1'	32:2a:750:G:N2	2.26	0.51
32:2a:975:A:H5'	32:2a:975:A:C8	2.45	0.51
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.44	0.51
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.93	0.51
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	1.91	0.51
48:2q:76:LEU:HD12	48:2q:77:VAL:H	1.74	0.51
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.25	0.51
20:1Y:17:SER:OG	20:1Y:71:LYS:NZ	2.38	0.51
32:1a:179:A:H2'	32:1a:180:U:C6	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:90:VAL:O	36:1e:120:THR:HA	2.09	0.51
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.11	0.51
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.46	0.51
1:2A:2052:G:H4'	4:2E:143:ASN:O	2.10	0.51
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.44	0.51
9:2N:12:ARG:HH21	9:2N:38:HIS:HE2	1.58	0.51
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	1.92	0.51
32:2a:1178:G:N2	32:2a:1180:A:H3'	2.26	0.51
36:2e:5:ASP:CG	36:2e:6:PHE:H	2.17	0.51
49:2r:84:LYS:N	49:2r:84:LYS:HD2	2.25	0.51
51:2t:43:LEU:O	51:2t:47:GLY:HA2	2.10	0.51
1:1A:811:U:H2'	11:1P:21:ARG:HA	1.91	0.51
1:1A:1176:G:H1'	1:1A:1177:A:H5''	1.91	0.51
11:1P:91:PHE:CD1	11:1P:99:LEU:HD21	2.45	0.51
28:16:19:ARG:NH1	28:16:52:VAL:HG21	2.26	0.51
32:1a:4:U:C4	39:1h:105:ARG:HD3	2.45	0.51
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.40	0.51
39:1h:51:VAL:HG11	39:1h:60:ARG:HH12	1.76	0.51
1:2A:300:A:N1	1:2A:333:G:O2'	2.40	0.51
1:2A:2096:U:H2'	1:2A:2097:C:H6	1.75	0.51
9:2N:21:LYS:HE3	9:2N:140:VAL:HG23	1.91	0.51
23:21:50:ARG:HD2	23:21:57:GLU:OE2	2.09	0.51
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.46	0.51
34:2c:111:LEU:HD11	34:2c:144:SER:O	2.11	0.51
35:2d:121:VAL:O	35:2d:134:ASP:HA	2.10	0.51
44:2m:40:ASN:ND2	44:2m:43:THR:HG23	2.23	0.51
52:2u:6:ARG:HG2	52:2u:15:ARG:HD2	1.92	0.51
1:1A:2356:C:H2'	1:1A:2357:U:O4'	2.09	0.51
6:1G:56:ALA:HA	6:1G:59:GLU:HG2	1.92	0.51
32:1a:403:C:H4'	35:1d:122:ARG:HH21	1.75	0.51
33:1b:220:ASP:HA	33:1b:223:ILE:HD11	1.93	0.51
1:2A:878:A:N6	1:2A:899:A:O2'	2.44	0.51
1:2A:1248:G:C5	16:2U:3:ARG:HB2	2.46	0.51
1:2A:1253:A:OP1	62:2A:3937:HOH:O	2.18	0.51
1:2A:2064:C:OP2	62:2A:3932:HOH:O	2.19	0.51
8:2I:50:ARG:HA	8:2I:53:ALA:HB3	1.93	0.51
16:2U:79:PHE:CZ	16:2U:83:LEU:HD11	2.46	0.51
21:2Z:104:PHE:HA	21:2Z:139:VAL:HB	1.92	0.51
32:2a:1104:G:H4'	33:2b:111:ARG:HH21	1.75	0.51
32:2a:1121:U:H2'	32:2a:1122:U:O4'	2.10	0.51
34:2c:119:ARG:HH21	34:2c:140:ARG:CZ	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:84:PHE:CE2	36:2e:133:TYR:HD2	2.28	0.51
1:1A:208:C:H2'	1:1A:209:C:C6	2.45	0.51
1:1A:782:A:N1	62:1A:4310:HOH:O	2.34	0.51
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.45	0.51
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.46	0.51
2:1B:77:U:H4'	21:1Z:84:GLU:OE1	2.11	0.51
15:1T:91:ARG:HB3	15:1T:117:ASP:HB3	1.93	0.51
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.92	0.51
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.10	0.51
44:1m:49:THR:OG1	44:1m:52:GLU:HG3	2.11	0.51
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.10	0.51
2:2B:94:C:H2'	2:2B:95:C:C6	2.46	0.51
4:2E:48:GLN:NE2	4:2E:78:LEU:HG	2.25	0.51
6:2G:111:LEU:HD21	6:2G:120:LEU:HD21	1.91	0.51
15:2T:127:ALA:C	15:2T:129:ARG:H	2.17	0.51
21:2Z:158:PRO:O	21:2Z:161:VAL:HG12	2.10	0.51
32:2a:141:A:H1'	32:2a:182:U:O2	2.11	0.51
32:2a:920:U:H2'	32:2a:921:U:H6	1.75	0.51
32:2a:1264:C:C4	32:2a:1272:G:O6	2.64	0.51
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.75	0.51
44:2m:25:ILE:HG13	44:2m:66:LEU:HD21	1.93	0.51
1:1A:284:U:H2'	1:1A:285:C:C6	2.45	0.51
1:1A:1062:G:N2	1:1A:1077:A:H61	2.08	0.51
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.45	0.51
2:1B:14:U:O2	2:1B:108:U:H4'	2.10	0.51
10:1O:59:LYS:NZ	10:1O:89:ASN:OD1	2.44	0.51
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.12	0.51
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.07	0.51
32:1a:642:A:N3	39:1h:113:SER:OG	2.43	0.51
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.91	0.51
54:1w:19:G:H4'	54:1w:20:U:OP1	2.10	0.51
1:2A:222:A:H5''	1:2A:421:U:OP1	2.11	0.51
1:2A:234:C:H2'	1:2A:235:U:C6	2.45	0.51
1:2A:402:A:H2'	1:2A:403:U:H5'	1.93	0.51
1:2A:530:G:O4'	1:2A:530:G:N3	2.44	0.51
1:2A:800:A:H8	1:2A:800:A:OP1	1.93	0.51
1:2A:2125:G:H2'	1:2A:2126:A:C8	2.45	0.51
2:2B:103:G:H21	21:2Z:73:GLN:HE22	1.59	0.51
19:2X:11:PRO:HB3	19:2X:92:LEU:HD11	1.91	0.51
32:2a:825:G:H2'	32:2a:826:C:H6	1.75	0.51
33:2b:17:PHE:HA	33:2b:44:LEU:HD21	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.75	0.51
38:2g:42:ILE:HD13	38:2g:116:ALA:HB3	1.90	0.51
40:2i:33:PHE:HE2	40:2i:43:ALA:HB1	1.76	0.51
44:2m:122:LYS:HG3	44:2m:123:ALA:H	1.75	0.51
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.92	0.51
1:1A:886:C:H5'	1:1A:887:A:OP2	2.11	0.51
1:1A:1095:A:C8	1:1A:1096:A:C8	2.98	0.51
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.75	0.51
49:1r:65:ILE:O	49:1r:69:THR:HG23	2.11	0.51
51:1t:36:LEU:HA	51:1t:39:LYS:HB3	1.93	0.51
1:2A:747:U:O2	1:2A:2014:A:H1'	2.10	0.51
1:2A:975:C:OP1	62:2A:3942:HOH:O	2.20	0.51
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.46	0.51
1:2A:2207:G:H2'	1:2A:2208:A:H2	1.75	0.51
13:2R:13:HIS:CE1	13:2R:16:HIS:HB2	2.45	0.51
22:20:37:LEU:HG	22:20:60:PHE:HA	1.93	0.51
28:26:7:ILE:HD13	28:26:27:LYS:HB3	1.92	0.51
32:2a:1070:U:H2'	32:2a:1071:C:H6	1.76	0.51
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.46	0.51
41:2j:74:ILE:HG22	62:2j:302:HOH:O	2.10	0.51
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.43	0.51
1:1A:1644:C:H6	1:1A:1644:C:H5''	1.76	0.51
3:1D:147:LEU:HD22	3:1D:155:LEU:HD11	1.92	0.51
32:1a:341:C:H2'	32:1a:342:C:C6	2.46	0.51
32:1a:711:G:H2'	32:1a:712:A:C8	2.46	0.51
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.93	0.51
47:1p:4:ILE:HG12	47:1p:21:VAL:HG22	1.93	0.51
1:2A:2243:U:H2'	1:2A:2244:U:C6	2.46	0.51
2:2B:14:U:OP2	2:2B:70:C:O2'	2.26	0.51
14:2S:7:TYR:CE2	14:2S:11:LYS:HD2	2.46	0.51
32:2a:982:U:O2	32:2a:1222:G:N1	2.33	0.51
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.92	0.51
39:2h:95:VAL:HB	39:2h:99:GLU:HB2	1.92	0.51
50:2s:33:THR:HG21	50:2s:49:ILE:HD11	1.93	0.51
53:2v:12:A:N3	53:2v:12:A:H2'	2.26	0.51
1:1A:2467:C:OP2	62:1A:4246:HOH:O	2.19	0.51
27:15:40:LYS:HE3	27:15:44:THR:O	2.11	0.51
32:1a:200:G:H2'	32:1a:201:C:C6	2.46	0.51
36:1e:85:GLY:O	36:1e:87:SER:N	2.44	0.51
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.92	0.51
56:1y:20:U:H1'	56:1y:21:A:H4'	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:93:G:H2'	1:2A:94:C:C6	2.46	0.51
1:2A:857:C:H1'	22:20:26:TYR:HE1	1.75	0.51
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.75	0.51
1:2A:2891:G:O5'	1:2A:2891:G:H8	1.94	0.51
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.93	0.51
14:2S:10:ARG:O	14:2S:14:VAL:HG23	2.11	0.51
31:29:2:LYS:HE2	31:29:31:LYS:O	2.11	0.51
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.46	0.51
35:2d:111:ALA:HB1	35:2d:116:GLN:HB3	1.93	0.51
39:2h:14:ARG:NH2	39:2h:83:ILE:O	2.31	0.51
44:2m:70:LEU:O	44:2m:73:GLU:N	2.44	0.51
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.75	0.50
1:1A:1354:A:H5''	3:1D:38:LYS:HD3	1.93	0.50
1:1A:1420:U:O2'	1:1A:1421:G:OP1	2.23	0.50
1:1A:2130:U:O5'	1:1A:2130:U:H6	1.93	0.50
2:1B:25:A:OP2	62:1B:303:HOH:O	2.19	0.50
32:1a:161:A:H2'	32:1a:162:A:C8	2.46	0.50
32:1a:711:G:H2'	32:1a:712:A:H8	1.76	0.50
33:1b:101:MET:HG2	33:1b:152:PHE:CE1	2.46	0.50
42:1k:18:ARG:NH2	42:1k:35:PRO:O	2.40	0.50
1:2A:2533:A:OP1	1:2A:2665:A:O2'	2.27	0.50
19:2X:92:LEU:O	19:2X:94:GLY:N	2.44	0.50
25:23:5:LYS:HE3	25:23:34:GLU:OE2	2.12	0.50
26:24:45:GLY:C	26:24:47:GLN:H	2.18	0.50
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.92	0.50
32:2a:1070:U:H2'	32:2a:1071:C:C6	2.46	0.50
38:2g:78:ARG:HH21	38:2g:79:ARG:HE	1.59	0.50
40:2i:14:VAL:O	40:2i:65:VAL:HA	2.11	0.50
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.92	0.50
1:1A:1416:G:HO2'	1:1A:1417:C:H5	1.59	0.50
1:1A:2334:G:O6	22:10:74:ARG:NH1	2.35	0.50
1:1A:2786:U:OP1	4:1E:69:LYS:HD2	2.10	0.50
1:1A:2889:C:H2'	1:1A:2891:G:O4'	2.11	0.50
62:1A:4592:HOH:O	13:1R:15:SER:HB3	2.11	0.50
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.10	0.50
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.92	0.50
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.43	0.50
17:1V:1:MET:HE2	17:1V:43:GLU:H	1.74	0.50
33:1b:37:ASN:C	33:1b:39:ILE:H	2.17	0.50
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.44	0.50
44:1m:87:TYR:HA	44:1m:90:LEU:HD12	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.93	0.50
56:1y:56:C:C2	56:1y:57:G:C8	3.00	0.50
32:2a:396:G:O2'	32:2a:398:C:OP1	2.23	0.50
32:2a:475:G:N2	32:2a:476:G:H1'	2.26	0.50
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.46	0.50
36:2e:28:PHE:O	36:2e:47:LYS:HA	2.12	0.50
54:2w:21:A:O2'	54:2w:22:G:OP1	2.29	0.50
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.46	0.50
6:1G:72:ARG:NH1	6:1G:87:PRO:HG3	2.26	0.50
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.10	0.50
17:1V:1:MET:HE3	17:1V:43:GLU:HB2	1.93	0.50
1:2A:856:C:O4'	22:20:27:GLU:HB3	2.11	0.50
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.28	0.50
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.26	0.50
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.93	0.50
1:2A:2439:A:H5'	1:2A:2439:A:C8	2.46	0.50
1:2A:2453:A:N7	62:2A:4003:HOH:O	2.34	0.50
8:2I:75:LEU:HD13	8:2I:105:HIS:CD2	2.46	0.50
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.11	0.50
32:2a:1207:2MG:H2'	32:2a:1208:C:H6	1.75	0.50
48:2q:76:LEU:HD12	48:2q:77:VAL:N	2.26	0.50
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.11	0.50
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.11	0.50
32:1a:316:G:OP2	32:1a:351:G:O2'	2.29	0.50
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.10	0.50
41:1j:16:LEU:HD12	41:1j:94:VAL:HG22	1.94	0.50
44:1m:2:ALA:N	44:1m:8:GLU:OE1	2.44	0.50
1:2A:236:C:H2'	1:2A:237:C:C6	2.46	0.50
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.47	0.50
1:2A:2127:G:N1	1:2A:2161:C:C4	2.79	0.50
5:2F:107:LYS:HG3	5:2F:206:ILE:HA	1.92	0.50
32:2a:1139:G:N2	32:2a:1142:G:O6	2.35	0.50
32:2a:1280:A:O2'	32:2a:1281:U:H5'	2.11	0.50
33:2b:149:LEU:HD22	33:2b:152:PHE:CD2	2.46	0.50
38:2g:22:LEU:HD11	38:2g:101:LEU:HD21	1.93	0.50
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.93	0.50
1:1A:2319:G:H22	14:1S:3:ARG:HE	1.58	0.50
1:1A:2871:C:N3	62:1A:4311:HOH:O	2.34	0.50
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.46	0.50
23:11:3:LYS:O	23:11:12:PRO:HD3	2.11	0.50
34:1c:179:ARG:HG3	34:1c:206:GLU:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:1f:69:GLU:OE1	37:1f:69:GLU:N	2.38	0.50
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.11	0.50
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.46	0.50
1:2A:2751:G:C8	7:2H:2:SER:HA	2.39	0.50
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.28	0.50
7:2H:144:VAL:O	7:2H:148:ILE:HG12	2.12	0.50
21:2Z:92:SER:O	21:2Z:130:PRO:HG3	2.10	0.50
32:2a:405:U:O4	35:2d:2:GLY:N	2.45	0.50
32:2a:1026:G:O6	32:2a:1036:G:N2	2.45	0.50
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.46	0.50
33:2b:155:LEU:HD21	33:2b:159:PRO:HG3	1.94	0.50
1:1A:1171:G:N7	1:1A:1173:G:N7	2.59	0.50
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.47	0.50
4:1E:72:VAL:HG12	4:1E:73:GLU:O	2.11	0.50
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.18	0.50
21:1Z:6:LYS:HD3	21:1Z:8:TYR:OH	2.11	0.50
32:1a:399:G:H2'	32:1a:400:C:C6	2.47	0.50
32:1a:1003:G:C4	32:1a:1004:A:H2	2.30	0.50
32:1a:1186:G:H4'	40:1i:110:GLU:OE2	2.12	0.50
32:1a:1260:C:O5'	32:1a:1284:C:H4'	2.11	0.50
34:1c:82:GLU:HG3	34:1c:85:ARG:NH1	2.26	0.50
1:2A:83:G:N1	1:2A:102:G:O2'	2.36	0.50
1:2A:2577:A:OP2	27:25:3:LYS:NZ	2.43	0.50
25:23:6:VAL:HA	25:23:56:VAL:HG12	1.94	0.50
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.45	0.50
32:2a:1265:G:C2	32:2a:1271:G:C2	3.00	0.50
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.93	0.50
35:2d:158:ILE:O	35:2d:162:LEU:HD12	2.10	0.50
44:2m:48:LEU:HD23	44:2m:53:VAL:HG12	1.93	0.50
49:2r:84:LYS:HD2	49:2r:84:LYS:H	1.77	0.50
54:2w:48:C:OP1	54:2w:48:C:H2'	2.12	0.50
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.46	0.50
1:1A:2712:U:H2'	1:1A:2714:G:H5''	1.94	0.50
2:1B:66:A:N6	2:1B:109:C:H5'	2.24	0.50
32:1a:166:G:H2'	32:1a:167:G:H8	1.77	0.50
32:1a:243:A:C2	32:1a:246:A:C8	2.99	0.50
32:1a:262:A:C6	32:1a:263:A:C6	2.99	0.50
36:1e:86:ALA:O	36:1e:125:SER:N	2.44	0.50
38:1g:12:LEU:HD12	38:1g:12:LEU:H	1.77	0.50
49:1r:37:VAL:O	49:1r:41:LYS:HG2	2.10	0.50
7:2H:115:VAL:HG11	7:2H:148:ILE:CD1	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.43	0.50
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.76	0.50
32:2a:1245:A:H2'	32:2a:1246:C:C6	2.47	0.50
32:2a:1456:G:N2	51:2t:51:GLU:OE2	2.43	0.50
35:2d:109:GLY:HA3	35:2d:165:MET:HE3	1.92	0.50
40:2i:3:GLN:HE21	40:2i:20:ARG:CZ	2.25	0.50
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.47	0.50
1:1A:763:G:OP1	62:1A:4248:HOH:O	2.20	0.50
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.94	0.50
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.47	0.50
1:1A:1252:G:N1	16:1U:37:GLU:OE2	2.32	0.50
1:1A:2141:G:C4	1:1A:2142:C:H1'	2.46	0.50
32:1a:501:C:H2'	32:1a:502:G:H8	1.77	0.50
32:1a:1380:U:C4	38:1g:3:ARG:HG2	2.47	0.50
32:1a:1498:UR3:OP2	53:1v:16:A:O2'	2.25	0.50
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	1.94	0.50
41:1j:16:LEU:HD23	41:1j:70:ARG:HG2	1.94	0.50
56:1y:19:G:C6	56:1y:56:C:N4	2.80	0.50
1:2A:1540:U:O2'	1:2A:1541:G:H5'	2.12	0.50
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.39	0.50
21:2Z:54:HIS:CD2	21:2Z:101:PRO:HG3	2.43	0.50
32:2a:20:U:H2'	32:2a:21:G:O4'	2.10	0.50
1:1A:700:G:O2'	1:1A:1632:A:N3	2.38	0.50
1:1A:892:G:C2'	1:1A:893:C:H5'	2.42	0.50
1:1A:1054:A:OP1	1:1A:1054:A:H4'	2.12	0.50
7:1H:8:PRO:HB3	7:1H:51:ARG:HG2	1.94	0.50
7:1H:41:MET:HE2	7:1H:65:HIS:HA	1.93	0.50
32:1a:1343:G:H1'	40:1i:121:ARG:NH1	2.27	0.50
34:1c:112:SER:HB3	34:1c:115:LEU:HD12	1.93	0.50
40:1i:110:GLU:HG2	40:1i:119:ALA:HB1	1.94	0.50
1:2A:1169:G:N2	1:2A:1181:C:N3	2.60	0.50
1:2A:1448:G:H2'	1:2A:1449:A:C8	2.47	0.50
1:2A:1709:U:H2'	1:2A:1710:C:C6	2.47	0.50
23:21:53:VAL:HG22	23:21:74:VAL:HG13	1.94	0.50
26:24:46:GLN:C	26:24:48:ARG:N	2.70	0.50
32:2a:56:U:H2'	32:2a:57:G:H8	1.77	0.50
32:2a:1039:C:C2	32:2a:1040:U:H1'	2.47	0.50
39:2h:85:ARG:NH1	39:2h:87:SER:O	2.45	0.50
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.11	0.50
50:2s:51:VAL:O	50:2s:58:VAL:N	2.44	0.50
54:2w:5:G:C2	54:2w:69:G:C2	3.00	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:2z:6:PRO:O	57:2z:15:VAL:HG22	2.12	0.50
33:1b:102:LEU:HB3	33:1b:180:LEU:HD12	1.94	0.49
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.45	0.49
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.11	0.49
2:2B:75:G:H5''	2:2B:75:G:H8	1.77	0.49
2:2B:118:G:OP2	62:2B:302:HOH:O	2.20	0.49
3:2D:123:ALA:HB3	3:2D:131:LEU:HG	1.94	0.49
6:2G:41:GLN:HG3	6:2G:60:LEU:HD11	1.93	0.49
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	1.93	0.49
7:2H:90:LYS:HD2	7:2H:159:GLU:CG	2.41	0.49
19:2X:2:LYS:NZ	19:2X:38:GLU:OE2	2.37	0.49
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.11	0.49
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.12	0.49
33:2b:142:LEU:HD21	33:2b:146:GLN:NE2	2.26	0.49
40:2i:14:VAL:HG23	40:2i:66:ARG:HG2	1.94	0.49
1:1A:695:G:OP1	1:1A:1380:G:O2'	2.28	0.49
1:1A:1268:A:C2	1:1A:2013:A:C4	3.00	0.49
1:1A:2418:A:OP2	30:18:29:LYS:NZ	2.39	0.49
4:1E:60:ASN:O	4:1E:64:LYS:HG3	2.12	0.49
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.48	0.49
15:1T:118:ARG:HA	15:1T:121:ILE:HD12	1.94	0.49
26:14:16:CYS:HB2	26:14:36:CYS:HB3	1.94	0.49
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.93	0.49
35:1d:30:LYS:HA	35:1d:35:ARG:HH11	1.77	0.49
1:2A:1359:A:C2	1:2A:1372:U:O4	2.64	0.49
1:2A:1777:U:O2'	1:2A:1778:U:H5'	2.12	0.49
6:2G:127:GLY:HA2	6:2G:166:ASP:OD1	2.12	0.49
7:2H:124:GLU:O	7:2H:132:ARG:N	2.43	0.49
8:2I:75:LEU:HD22	8:2I:105:HIS:CD2	2.43	0.49
32:2a:432:A:H3'	32:2a:433:C:H6	1.77	0.49
32:2a:809:G:N7	62:2a:1934:HOH:O	2.35	0.49
32:2a:1176:A:H2'	32:2a:1177:G:H8	1.76	0.49
35:2d:157:LEU:HG	35:2d:161:ASN:ND2	2.27	0.49
35:2d:158:ILE:HG22	35:2d:162:LEU:CD1	2.41	0.49
36:2e:73:ASN:HD22	36:2e:73:ASN:N	2.09	0.49
38:2g:15:ASP:OD2	38:2g:44:TYR:OH	2.28	0.49
41:2j:16:LEU:HD13	41:2j:70:ARG:HG2	1.92	0.49
55:2x:20:U:H4'	55:2x:21:A:OP2	2.12	0.49
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.38	0.49
1:1A:2126:A:C5	1:1A:2163:C:H1'	2.47	0.49
1:1A:2632:A:O2'	1:1A:2811:G:O2'	2.19	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.94	0.49
6:1G:5:VAL:HG22	6:1G:8:LYS:HB2	1.92	0.49
9:1N:126:PRO:HG2	9:1N:127:ASP:OD1	2.11	0.49
15:1T:41:ARG:NH2	15:1T:43:GLN:HE21	2.10	0.49
32:1a:396:G:O2'	32:1a:398:C:OP1	2.16	0.49
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.94	0.49
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.93	0.49
1:2A:921:G:H2'	1:2A:922:U:C6	2.47	0.49
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.47	0.49
7:2H:3:ARG:NH1	7:2H:5:GLY:H	2.11	0.49
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.94	0.49
14:2S:3:ARG:NH1	14:2S:3:ARG:HA	2.27	0.49
32:2a:243:A:H4'	32:2a:244:U:H5''	1.94	0.49
32:2a:922:G:C6	32:2a:923:A:C6	3.00	0.49
32:2a:952:U:H2'	32:2a:953:G:H8	1.76	0.49
35:2d:57:ARG:NH1	35:2d:205:GLU:HB3	2.28	0.49
41:2j:8:LEU:HB3	41:2j:96:ILE:HG23	1.94	0.49
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.93	0.49
24:12:1:MET:HE3	24:12:5:GLU:HB3	1.94	0.49
32:1a:148:G:H2'	32:1a:149:A:H8	1.78	0.49
32:1a:542:G:H5'	35:1d:41:GLY:HA3	1.93	0.49
1:2A:2114:A:H62	1:2A:2115:G:H21	1.59	0.49
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.92	0.49
2:2B:10:C:O2'	2:2B:11:C:H5'	2.12	0.49
2:2B:42:C:O2	6:2G:93:THR:N	2.35	0.49
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.11	0.49
12:2Q:32:TYR:OH	12:2Q:111:GLU:OE2	2.29	0.49
32:2a:540:G:C6	32:2a:541:G:C5	3.01	0.49
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.47	0.49
33:2b:150:SER:O	33:2b:153:ARG:HG2	2.12	0.49
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.12	0.49
47:2p:43:LYS:HG2	47:2p:48:TRP:CD1	2.47	0.49
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.34	0.49
1:1A:2052:G:H4'	4:1E:143:ASN:O	2.12	0.49
32:1a:100:C:H2'	32:1a:101:A:C8	2.47	0.49
56:1y:37:MIA:H2'	56:1y:38:A:C8	2.47	0.49
1:2A:299:A:N1	1:2A:322:A:O2'	2.36	0.49
1:2A:878:A:H61	1:2A:899:A:H1'	1.78	0.49
1:2A:2287:A:O2'	1:2A:2289:G:N7	2.44	0.49
2:2B:94:C:H2'	2:2B:95:C:H6	1.76	0.49
3:2D:25:THR:HG21	3:2D:113:VAL:HG21	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:4:LEU:N	25:23:37:LEU:O	2.42	0.49
34:2c:136:GLN:O	34:2c:140:ARG:HG3	2.12	0.49
54:2w:18:G:HO2'	54:2w:57:G:H22	1.60	0.49
56:2y:3:C:H2'	56:2y:4:C:C6	2.47	0.49
1:1A:2136:C:N4	1:1A:2155:G:C6	2.75	0.49
6:1G:140:ILE:HG22	6:1G:141:PHE:CD2	2.48	0.49
9:1N:115:ARG:HA	9:1N:118:LYS:HD2	1.95	0.49
11:1P:59:LEU:HD11	30:18:10:ALA:HA	1.95	0.49
21:1Z:7:ALA:O	21:1Z:62:PRO:HD3	2.12	0.49
27:15:52:TYR:HB3	27:15:57:VAL:HG21	1.93	0.49
28:16:18:ARG:HD3	28:16:42:TRP:NE1	2.28	0.49
32:1a:261:U:H2'	32:1a:263:A:OP2	2.12	0.49
32:1a:652:U:O4	32:1a:752:G:O2'	2.30	0.49
32:1a:1095:U:P	32:1a:1108:G:H1	2.36	0.49
50:1s:15:LEU:HD22	50:1s:33:THR:HG21	1.95	0.49
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.48	0.49
1:2A:1006:C:C2	1:2A:1138:G:N2	2.80	0.49
1:2A:1116:C:H2'	1:2A:1117:G:H8	1.77	0.49
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.45	0.49
2:2B:2:C:H2'	2:2B:3:C:C6	2.48	0.49
32:2a:900:A:H2'	32:2a:901:A:C8	2.47	0.49
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.75	0.49
33:2b:15:VAL:HG21	33:2b:213:LEU:HD13	1.95	0.49
48:2q:10:VAL:HA	48:2q:20:THR:O	2.13	0.49
1:1A:1176:G:H21	1:1A:1178:C:P	2.35	0.49
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.78	0.49
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.12	0.49
8:1I:10:GLU:O	8:1I:12:LEU:N	2.46	0.49
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.47	0.49
39:1h:64:LYS:HB3	39:1h:79:VAL:HG21	1.93	0.49
39:1h:112:LEU:HB3	39:1h:133:LEU:HA	1.95	0.49
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.93	0.49
49:1r:52:PRO:O	49:1r:56:THR:HG23	2.12	0.49
56:1y:68:C:C2	56:1y:69:G:C8	3.01	0.49
1:2A:298:G:H5''	1:2A:299:A:OP1	2.13	0.49
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.94	0.49
5:2F:10:PRO:HB3	5:2F:17:ARG:HH11	1.76	0.49
30:28:8:LYS:HB3	30:28:12:LYS:HE3	1.93	0.49
32:2a:441:A:H3'	32:2a:442:C:H6	1.77	0.49
32:2a:1278:U:H5'	32:2a:1279:A:OP1	2.12	0.49
33:2b:161:ALA:HA	33:2b:183:PRO:HD2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.94	0.49
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.94	0.49
1:1A:1359:A:N3	1:1A:1359:A:H5'	2.27	0.49
1:1A:1827:C:H2'	1:1A:1828:G:H5'	1.94	0.49
1:1A:2165:G:H2'	1:1A:2166:G:C5	2.48	0.49
6:1G:46:ALA:HB1	6:1G:50:ALA:O	2.13	0.49
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.48	0.49
32:1a:1025:U:O2	32:1a:1036:G:O6	2.31	0.49
33:1b:88:ALA:HB2	33:1b:219:VAL:HG13	1.94	0.49
33:1b:170:GLU:O	33:1b:174:VAL:HG23	2.13	0.49
34:1c:134:ILE:HG22	34:1c:168:ALA:HB3	1.94	0.49
35:1d:23:GLY:HA3	35:1d:112:VAL:HG12	1.93	0.49
54:1w:7:A:O2'	54:1w:49:C:OP2	2.26	0.49
1:2A:863:A:C2	1:2A:864:G:C4	3.01	0.49
1:2A:916:G:O2'	1:2A:917:A:O4'	2.28	0.49
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.48	0.49
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.40	0.49
5:2F:123:LEU:HD12	5:2F:124:LEU:H	1.78	0.49
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD11	1.94	0.49
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.48	0.49
32:2a:792:A:H4'	32:2a:793:U:H5''	1.94	0.49
32:2a:1379:G:O6	38:2g:2:ALA:HB3	2.12	0.49
32:2a:1504:G:OP1	32:2a:1507:A:H4'	2.13	0.49
48:2q:59:ILE:HD12	48:2q:71:PHE:CD2	2.47	0.49
1:1A:388:G:O2'	1:1A:389:G:N7	2.45	0.49
1:1A:1388:G:O2'	1:1A:1389:G:H5'	2.13	0.49
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.12	0.49
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.47	0.49
4:1E:56:PRO:HA	4:1E:59:VAL:HG23	1.94	0.49
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.62	0.49
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.27	0.49
30:18:42:ARG:HD2	62:18:201:HOH:O	2.13	0.49
32:1a:104:G:C2	32:1a:105:G:C8	3.00	0.49
32:1a:418:C:H2'	32:1a:419:C:C6	2.48	0.49
32:1a:1112:C:H1'	34:1c:179:ARG:NH1	2.28	0.49
33:1b:77:ALA:HB2	33:1b:211:ILE:HG21	1.95	0.49
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.48	0.49
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.61	0.49
36:1e:131:ILE:HD13	36:1e:131:ILE:HA	1.67	0.49
46:1o:68:ARG:HG2	46:1o:72:ARG:HH22	1.78	0.49
1:2A:1171:G:H8	1:2A:1171:G:O5'	1.96	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.13	0.49
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.95	0.49
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.13	0.49
1:2A:2131:G:C8	1:2A:2133:G:C2	3.01	0.49
4:2E:144:ARG:HG2	4:2E:145:LYS:H	1.78	0.49
6:2G:28:VAL:O	6:2G:31:VAL:HG12	2.13	0.49
32:2a:420:U:O2'	32:2a:423:G:O6	2.28	0.49
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.47	0.49
33:2b:76:GLN:HB2	33:2b:208:ILE:HG13	1.95	0.49
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.13	0.49
1:1A:570:G:H2'	1:1A:2030:A:N7	2.27	0.49
1:1A:1102:C:H2'	1:1A:1103:A:H8	1.77	0.49
1:1A:2243:U:OP1	62:1A:4237:HOH:O	2.20	0.49
1:1A:2600:A:H2'	1:1A:2601:C:C6	2.48	0.49
7:1H:3:ARG:NH1	7:1H:4:ILE:H	2.11	0.49
7:1H:11:VAL:HG13	7:1H:15:VAL:HG23	1.95	0.49
32:1a:381:C:H2'	32:1a:382:A:O4'	2.13	0.49
32:1a:1004:A:N6	32:1a:1036:G:N2	2.61	0.49
39:1h:51:VAL:HG21	39:1h:60:ARG:HH11	1.77	0.49
43:1l:8:ASN:O	43:1l:11:VAL:HG12	2.12	0.49
47:1p:56:ALA:HB1	47:1p:74:LEU:CD2	2.43	0.49
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.48	0.49
1:2A:643:A:C8	28:26:44:ARG:NH1	2.81	0.49
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.31	0.49
16:2U:81:HIS:HD2	16:2U:84:LYS:HE2	1.77	0.49
32:2a:7:G:H5'	32:2a:298:A:O4'	2.13	0.49
32:2a:1086:U:H3	32:2a:1099:G:N2	1.97	0.49
32:2a:1141:C:C2	32:2a:1142:G:C8	3.01	0.49
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.39	0.49
32:2a:1525:G:OP1	42:2k:120:ARG:NH2	2.46	0.49
1:1A:1187:G:H5''	17:1V:81:TYR:CE1	2.48	0.48
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.48	0.48
7:1H:51:ARG:NH2	7:1H:53:GLU:OE2	2.45	0.48
1:2A:7:G:H2'	1:2A:8:A:C8	2.48	0.48
1:2A:71:A:H4'	1:2A:72:U:H5''	1.94	0.48
1:2A:247:G:H4'	1:2A:386:G:C5	2.48	0.48
1:2A:2406:U:C4	11:2P:72:PRO:HD2	2.48	0.48
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.46	0.48
9:2N:67:LEU:O	9:2N:88:GLU:HG3	2.13	0.48
11:2P:81:GLN:HE22	11:2P:106:LEU:HA	1.78	0.48
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:114:U:O2'	32:2a:115:G:H5'	2.13	0.48
32:2a:944:G:OP1	62:2a:1917:HOH:O	2.20	0.48
32:2a:1168:A:C6	32:2a:1169:A:C6	3.01	0.48
34:2c:35:GLU:O	34:2c:39:ILE:HG13	2.13	0.48
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.94	0.48
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.48	0.48
37:2f:2:ARG:NE	37:2f:69:GLU:HG2	2.28	0.48
6:1G:126:ASP:HB2	6:1G:130:ASN:O	2.14	0.48
15:1T:102:ILE:HA	15:1T:105:LEU:HD12	1.95	0.48
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.11	0.48
32:1a:358:U:H2'	32:1a:359:U:C6	2.48	0.48
32:1a:598:U:H4'	39:1h:94:TYR:CD2	2.48	0.48
32:1a:625:G:H2'	32:1a:626:U:C6	2.48	0.48
32:1a:1367:C:H5'	41:1j:60:ARG:NH1	2.27	0.48
33:1b:78:GLN:HA	33:1b:78:GLN:HE21	1.78	0.48
44:1m:20:THR:HA	44:1m:25:ILE:O	2.13	0.48
1:2A:275:G:H2'	1:2A:276:A:O4'	2.12	0.48
1:2A:686:G:N2	1:2A:788:A:H61	2.11	0.48
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.28	0.48
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.12	0.48
21:2Z:39:VAL:HG21	21:2Z:44:PHE:HB2	1.93	0.48
32:2a:1060:C:H41	34:2c:2:GLY:HA3	1.78	0.48
37:2f:10:LEU:HB2	37:2f:59:TYR:HB3	1.95	0.48
39:2h:20:TYR:CE1	39:2h:76:PRO:HG2	2.48	0.48
41:2j:62:HIS:HB3	45:2n:59:ALA:HB3	1.95	0.48
56:2y:55:PSU:C2	56:2y:57:G:H5'	2.48	0.48
1:1A:576:U:H2'	1:1A:577:G:C8	2.48	0.48
1:1A:1328:G:O2'	1:1A:1329:U:H2'	2.13	0.48
1:1A:1767:C:O2'	1:1A:1768:U:H5'	2.12	0.48
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.48	0.48
4:1E:9:VAL:HG22	4:1E:25:VAL:O	2.12	0.48
9:1N:94:HIS:HB3	9:1N:97:ARG:HG3	1.94	0.48
26:14:26:SER:OG	26:14:27:THR:N	2.46	0.48
28:16:18:ARG:HD3	28:16:42:TRP:CE2	2.48	0.48
32:1a:219:C:H2'	32:1a:220:G:O4'	2.13	0.48
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.27	0.48
10:2O:24:VAL:HG22	10:2O:33:ALA:HB2	1.95	0.48
32:2a:687:A:H4'	32:2a:688:G:O5'	2.13	0.48
32:2a:983:A:H3'	32:2a:983:A:N3	2.29	0.48
34:2c:121:ALA:O	34:2c:125:GLU:HG2	2.14	0.48
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	2.11	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:59:U:C4	54:2w:60:U:C4	3.01	0.48
1:1A:375:C:H2'	1:1A:376:C:C6	2.49	0.48
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.41	0.48
6:1G:174:GLU:O	6:1G:177:GLY:N	2.47	0.48
13:1R:103:ARG:HD3	13:1R:108:GLY:O	2.13	0.48
28:16:43:CYS:O	28:16:45:LYS:HG2	2.14	0.48
32:1a:57:G:H2'	32:1a:58:C:C6	2.48	0.48
1:2A:1472:A:H2'	1:2A:1473:G:O4'	2.13	0.48
1:2A:2741:A:H2'	1:2A:2742:C:O4'	2.14	0.48
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	1.94	0.48
28:26:14:THR:OG1	28:26:48:VAL:HG13	2.12	0.48
30:28:26:LYS:HG2	30:28:46:ARG:O	2.14	0.48
34:2c:9:GLY:HA3	45:2n:49:HIS:HD2	1.78	0.48
36:2e:11:ILE:HG21	36:2e:31:LEU:HD23	1.96	0.48
42:2k:19:ALA:HA	42:2k:32:ILE:HD13	1.95	0.48
50:2s:50:ALA:HA	50:2s:59:PRO:HA	1.96	0.48
1:1A:556:G:H2'	1:1A:557:U:C6	2.48	0.48
1:1A:1055:G:H1	1:1A:1104:C:N4	2.08	0.48
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.23	0.48
19:1X:50:LYS:HB3	19:1X:84:ALA:HB2	1.95	0.48
19:1X:63:LYS:O	19:1X:64:LYS:HD3	2.13	0.48
24:12:31:GLU:HA	24:12:34:GLU:HG3	1.95	0.48
26:14:54:GLY:N	26:14:55:ARG:HA	2.28	0.48
32:1a:501:C:H2'	32:1a:502:G:C8	2.48	0.48
32:1a:626:U:C2	32:1a:627:G:C8	3.02	0.48
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	1.95	0.48
1:2A:586:A:N1	1:2A:809:G:O2'	2.43	0.48
1:2A:857:C:H1'	22:20:26:TYR:CE1	2.48	0.48
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.46	0.48
6:2G:7:LEU:CD2	6:2G:100:TRP:HE3	2.27	0.48
25:23:40:THR:HG22	25:23:42:ALA:N	2.25	0.48
32:2a:202:U:H3'	32:2a:203:U:C6	2.49	0.48
32:2a:619:U:N3	35:2d:134:ASP:OD1	2.42	0.48
32:2a:1193:G:O2'	36:2e:25:ARG:NH2	2.46	0.48
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.48	0.48
32:2a:1195:C:H5''	32:2a:1196:U:OP2	2.14	0.48
34:2c:121:ALA:HB1	34:2c:188:LEU:O	2.14	0.48
35:2d:17:VAL:HG21	35:2d:63:LYS:HD3	1.96	0.48
46:2o:60:VAL:HG12	46:2o:63:ARG:HH21	1.78	0.48
1:1A:969:U:H2'	1:1A:970:C:C6	2.48	0.48
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.66	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.96	0.48
17:1V:38:LEU:HD23	17:1V:50:PRO:O	2.13	0.48
21:1Z:69:THR:HA	21:1Z:89:PHE:O	2.14	0.48
22:10:6:GLY:O	22:10:7:LEU:HD23	2.13	0.48
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.49	0.48
38:1g:76:ARG:HD3	38:1g:156:TRP:CZ2	2.48	0.48
3:2D:141:VAL:HG13	3:2D:162:SER:HB2	1.95	0.48
8:2I:90:GLY:O	8:2I:121:LYS:HE3	2.13	0.48
22:20:56:ASP:OD1	22:20:58:THR:OG1	2.31	0.48
32:2a:109:A:H2'	32:2a:326:G:N2	2.28	0.48
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.31	0.48
36:2e:76:ILE:O	36:2e:93:PRO:HB3	2.13	0.48
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.49	0.48
1:1A:271(F):C:H2'	1:1A:271(G):C:H6	1.78	0.48
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.49	0.48
2:1B:2:C:H2'	2:1B:3:C:H6	1.79	0.48
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.95	0.48
8:1I:69:LYS:HA	8:1I:138:ILE:HG12	1.95	0.48
37:1f:39:LYS:HE3	37:1f:39:LYS:HB3	1.67	0.48
48:1q:69:LYS:O	48:1q:70:ARG:HD3	2.14	0.48
54:1w:18:G:H4'	54:1w:60:U:C5	2.49	0.48
1:2A:361:G:O2'	1:2A:362:U:H5'	2.13	0.48
1:2A:1359:A:H2	1:2A:1372:U:O4	1.97	0.48
1:2A:2114:A:N3	1:2A:2168:G:H1'	2.29	0.48
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.79	0.48
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.58	0.48
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.48	0.48
4:2E:119:ARG:HG2	4:2E:120:TRP:NE1	2.28	0.48
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.28	0.48
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.94	0.48
32:2a:620:C:C2	35:2d:135:LEU:HG	2.48	0.48
32:2a:1002:G:C2	32:2a:1039:C:N4	2.82	0.48
35:2d:17:VAL:HG11	35:2d:197:PRO:HG3	1.96	0.48
55:2x:50:U:H3	55:2x:64:G:H1	1.60	0.48
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.49	0.48
1:1A:2262:U:OP1	1:1A:2387:U:O2'	2.27	0.48
16:1U:81:HIS:CE1	16:1U:85:LYS:HD2	2.49	0.48
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.96	0.48
33:1b:28:PHE:O	33:1b:32:ILE:HG13	2.14	0.48
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.94	0.48
1:2A:448:U:O4	1:2A:583:G:H1'	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1031:G:H5''	31:29:8:LYS:HE3	1.95	0.48
1:2A:2281:C:O2'	1:2A:2282:G:H5'	2.14	0.48
1:2A:2807:G:N2	1:2A:2808:U:H1'	2.29	0.48
6:2G:17:PRO:O	6:2G:21:ARG:HG2	2.14	0.48
12:2Q:63:LYS:HG2	12:2Q:65:PHE:CE2	2.48	0.48
17:2V:27:ALA:HB3	17:2V:61:VAL:HG21	1.96	0.48
21:2Z:58:VAL:HA	21:2Z:67:LEU:O	2.13	0.48
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.48	0.48
47:2p:19:ILE:N	47:2p:37:GLY:O	2.47	0.48
4:1E:52:LEU:O	4:1E:76:ARG:N	2.42	0.48
32:1a:954:G:H2'	32:1a:955:U:O4'	2.14	0.48
32:1a:963:G:H5'	62:1a:1985:HOH:O	2.12	0.48
32:1a:1060:C:H5''	41:1j:51:ARG:HG2	1.96	0.48
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.14	0.48
42:1k:81:ASP:OD1	42:1k:107:SER:HB3	2.13	0.48
44:1m:15:VAL:HG11	44:1m:48:LEU:HD11	1.96	0.48
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.28	0.48
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.49	0.48
1:2A:2355:C:H4'	22:20:24:LYS:HG3	1.95	0.48
1:2A:2639:A:C2	1:2A:2778:A:C8	3.02	0.48
5:2F:7:TYR:O	5:2F:22:ALA:N	2.40	0.48
23:21:56:GLN:HE21	23:21:87:PRO:HD3	1.79	0.48
25:23:5:LYS:HB3	25:23:57:GLU:HG2	1.96	0.48
32:2a:436:C:H2'	32:2a:437:U:H6	1.78	0.48
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.48	0.48
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.95	0.48
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.14	0.48
38:2g:78:ARG:HE	38:2g:79:ARG:HG3	1.79	0.48
38:2g:88:PRO:HG3	38:2g:149:ARG:HA	1.96	0.48
56:2y:18:G:H22	56:2y:55:PSU:HN3	1.62	0.48
1:1A:295:G:H4'	20:1Y:1:MET:HE3	1.95	0.48
1:1A:1058:G:N1	1:1A:1080:C:N4	2.35	0.48
1:1A:1495:A:OP2	62:1A:4249:HOH:O	2.20	0.48
1:1A:2162:G:H1'	1:1A:2173:A:H1'	1.96	0.48
14:1S:76:LYS:O	14:1S:79:ALA:HB3	2.14	0.48
32:1a:78:G:O2'	32:1a:79:G:H8	1.97	0.48
32:1a:165:C:H2'	32:1a:166:G:C8	2.47	0.48
33:1b:48:MET:HA	33:1b:51:LEU:HB2	1.96	0.48
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.49	0.48
38:1g:50:ILE:HD11	38:1g:125:MET:HG2	1.95	0.48
56:1y:62:C:H2'	56:1y:63:G:H8	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.48	0.48
1:2A:2519:U:C6	1:2A:2542:A:N6	2.81	0.48
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.96	0.48
4:2E:9:VAL:HG23	4:2E:25:VAL:HB	1.96	0.48
9:2N:30:ILE:HA	9:2N:33:LEU:HD12	1.96	0.48
32:2a:109:A:C6	32:2a:326:G:C6	3.01	0.48
32:2a:730:G:C5	32:2a:731:G:H1'	2.48	0.48
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.14	0.48
47:2p:3:LYS:NZ	47:2p:65:GLN:O	2.45	0.48
50:2s:52:TYR:HB2	50:2s:57:HIS:CE1	2.48	0.48
51:2t:63:ILE:HG21	51:2t:81:LYS:HG3	1.96	0.48
1:1A:305:U:H2'	1:1A:306:U:C6	2.49	0.47
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.29	0.47
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.13	0.47
1:1A:1064:C:N3	1:1A:1074:G:O6	2.47	0.47
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.14	0.47
23:11:50:ARG:NH1	23:11:57:GLU:OE2	2.35	0.47
32:1a:441:A:H3'	32:1a:442:C:H6	1.78	0.47
32:1a:624:C:O3'	47:1p:10:GLY:HA2	2.14	0.47
32:1a:1288:A:H2'	32:1a:1289:A:C8	2.49	0.47
33:1b:163:PHE:HE2	33:1b:215:LEU:HD11	1.78	0.47
37:1f:75:LEU:HD22	37:1f:79:LEU:HG	1.96	0.47
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.97	0.47
54:1w:1:G:C2	54:1w:2:C:C2	3.02	0.47
54:1w:75:C:C3'	54:1w:76:F3N:P	3.02	0.47
1:2A:1333:C:OP2	62:2A:3941:HOH:O	2.19	0.47
6:2G:97:ASP:O	6:2G:101:ILE:HG13	2.14	0.47
28:26:14:THR:O	28:26:17:LYS:NZ	2.47	0.47
32:2a:174:C:H2'	32:2a:175:C:C6	2.49	0.47
32:2a:1055:A:N6	32:2a:1206:G:C5	2.82	0.47
32:2a:1238:A:H2	32:2a:1241:G:N3	2.12	0.47
32:2a:1260:C:H4'	32:2a:1283:G:O2'	2.14	0.47
33:2b:224:GLN:HE21	33:2b:225:ALA:HB2	1.78	0.47
37:2f:25:ILE:HD13	37:2f:82:ARG:HD3	1.96	0.47
50:2s:14:HIS:O	50:2s:18:LYS:HG3	2.13	0.47
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.44	0.47
1:1A:139(A):G:H2'	1:1A:140:G:C8	2.49	0.47
1:1A:1784:A:H4'	1:1A:1785:A:O5'	2.14	0.47
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.48	0.47
3:1D:92:ILE:HD12	3:1D:104:TYR:CD1	2.49	0.47
8:1I:72:LEU:HD12	8:1I:138:ILE:HG21	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:95:VAL:CG1	11:1P:125:VAL:HG12	2.44	0.47
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.96	0.47
24:12:16:LEU:O	24:12:67:LYS:NZ	2.46	0.47
32:1a:736:C:H2'	32:1a:737:A:C8	2.48	0.47
32:1a:872:A:C4	32:1a:874:G:N7	2.82	0.47
32:1a:977:A:O2'	32:1a:981:U:N3	2.43	0.47
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.96	0.47
1:2A:11:G:C2'	1:2A:12:U:H5'	2.44	0.47
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.50	0.47
8:2I:48:GLU:HG3	8:2I:52:ARG:NH1	2.29	0.47
10:2O:36:GLY:HA2	10:2O:106:LEU:HD23	1.96	0.47
13:2R:28:LEU:HD23	13:2R:48:VAL:HG11	1.96	0.47
18:2W:12:ILE:HG13	18:2W:42:ARG:HH11	1.79	0.47
40:2i:89:ASN:O	40:2i:92:TYR:HB2	2.14	0.47
41:2j:6:ILE:HG12	41:2j:98:ILE:HG22	1.96	0.47
1:1A:228:A:H8	1:1A:229:A:H5'	1.79	0.47
1:1A:747:U:O2	1:1A:2014:A:H1'	2.13	0.47
4:1E:7:VAL:HG23	4:1E:51:PHE:HE2	1.77	0.47
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.29	0.47
7:1H:7:LEU:HD12	7:1H:8:PRO:CD	2.44	0.47
32:1a:232:G:H1'	32:1a:262:A:N1	2.29	0.47
32:1a:358:U:H2'	32:1a:359:U:H6	1.78	0.47
32:1a:453:A:C5	32:1a:454:C:C4	3.02	0.47
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.15	0.47
32:1a:1239:A:C4	32:1a:1298:C:N4	2.82	0.47
37:1f:89:MET:HE3	37:1f:91:VAL:HG21	1.97	0.47
41:1j:31:GLY:HA3	41:1j:32:ALA:HA	1.53	0.47
43:1l:42:THR:HG22	43:1l:54:LYS:HD2	1.95	0.47
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.79	0.47
1:2A:70:G:H5''	1:2A:112:U:O2	2.15	0.47
1:2A:660:G:H5'	5:2F:99:TYR:CD1	2.49	0.47
1:2A:2875:C:OP1	15:2T:3:ARG:NH2	2.47	0.47
5:2F:10:PRO:HB3	5:2F:17:ARG:NH1	2.29	0.47
6:2G:53:LEU:HA	6:2G:53:LEU:HD13	1.67	0.47
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.48	0.47
32:2a:675:A:H1'	42:2k:116:HIS:CD2	2.49	0.47
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.50	0.47
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.13	0.47
33:2b:20:GLU:HB2	33:2b:190:THR:HG23	1.96	0.47
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.96	0.47
34:2c:37:GLN:O	34:2c:40:ARG:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.32	0.47
1:1A:1512:U:O2'	1:1A:1513:C:H5'	2.14	0.47
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.79	0.47
4:1E:2:LYS:HB2	4:1E:95:ILE:HD12	1.96	0.47
5:1F:126:VAL:HG21	5:1F:129:PHE:CZ	2.50	0.47
32:1a:865:A:C2	32:1a:918:A:H4'	2.48	0.47
33:1b:174:VAL:HG13	33:1b:184:VAL:HG11	1.96	0.47
33:1b:197:VAL:HB	33:1b:200:ILE:HG13	1.95	0.47
35:1d:53:ASP:O	35:1d:57:ARG:HG3	2.15	0.47
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.14	0.47
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.14	0.47
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.14	0.47
1:2A:2651:C:H42	1:2A:2669:G:H1	1.63	0.47
1:2A:2850:A:H2'	1:2A:2851:A:C8	2.48	0.47
4:2E:2:LYS:HB2	4:2E:95:ILE:HD12	1.97	0.47
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.14	0.47
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.96	0.47
10:2O:13:ASN:ND2	10:2O:97:ARG:HB2	2.29	0.47
32:2a:397:A:H5'	32:2a:398:C:OP1	2.14	0.47
32:2a:1151:A:C5'	41:2j:41:PRO:HA	2.44	0.47
33:2b:224:GLN:NE2	33:2b:225:ALA:HB2	2.29	0.47
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.15	0.47
1:1A:2115:G:C2	1:1A:2117:A:N7	2.83	0.47
1:1A:2126:A:N7	1:1A:2163:C:H1'	2.30	0.47
1:1A:2155:G:C2	1:1A:2156:G:O4'	2.68	0.47
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.44	0.47
1:1A:2390:U:P	30:18:35:GLN:HE22	2.37	0.47
5:1F:9:ILE:HD13	5:1F:22:ALA:HB3	1.95	0.47
8:1I:93:THR:O	8:1I:96:ASP:HB2	2.14	0.47
32:1a:626:U:H2'	32:1a:627:G:H8	1.80	0.47
32:1a:1157:A:H4'	32:1a:1158:C:O5'	2.14	0.47
32:1a:1217:C:H5''	45:1n:9:LYS:HE3	1.96	0.47
33:1b:83:MET:CB	33:1b:234:PRO:HG3	2.44	0.47
35:1d:108:LEU:HD23	35:1d:110:PHE:CZ	2.50	0.47
1:2A:6:A:N3	9:2N:133:GLN:NE2	2.62	0.47
1:2A:796:C:H2'	1:2A:797:C:C6	2.49	0.47
1:2A:931:G:HO2'	25:23:24:LYS:HZ3	1.54	0.47
1:2A:2051:A:H4'	4:2E:141:ILE:HG12	1.97	0.47
1:2A:2219:G:H8	1:2A:2219:G:O5'	1.97	0.47
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.12	0.47
18:2W:41:LYS:HE3	27:25:25:LEU:HD11	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:18:PRO:O	24:22:22:GLU:HG3	2.15	0.47
32:2a:1390:U:H2'	32:2a:1391:U:C6	2.50	0.47
39:2h:38:ILE:HD11	39:2h:118:VAL:O	2.14	0.47
40:2i:85:LEU:O	40:2i:88:TYR:HB3	2.15	0.47
41:2j:5:ARG:O	41:2j:98:ILE:HA	2.15	0.47
1:1A:657:U:H2'	1:1A:658:C:H6	1.80	0.47
1:1A:880:G:H2'	1:1A:881:G:H8	1.79	0.47
1:1A:1526:G:C6	1:1A:1527:G:C2	3.03	0.47
5:1F:14:PRO:HD2	5:1F:127:GLU:OE1	2.15	0.47
32:1a:453:A:C6	32:1a:454:C:C4	3.03	0.47
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.97	0.47
32:1a:1030(B):C:O2	32:1a:1030(C):G:H5'	2.14	0.47
32:1a:1264:C:H42	32:1a:1271:G:H1	1.62	0.47
32:1a:1280:A:O2'	32:1a:1281:U:H5'	2.14	0.47
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.49	0.47
33:1b:21:ARG:N	33:1b:39:ILE:HG13	2.25	0.47
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.14	0.47
46:1o:8:LYS:HE3	46:1o:31:LEU:HD22	1.97	0.47
47:1p:43:LYS:HB3	47:1p:48:TRP:CD1	2.50	0.47
1:2A:1180:C:H2'	1:2A:1181:C:C6	2.50	0.47
1:2A:2115:G:O2'	1:2A:2117:A:N7	2.45	0.47
1:2A:2772:C:H2'	1:2A:2773:C:C6	2.50	0.47
1:2A:2888:C:H2'	1:2A:2889:C:H6	1.80	0.47
5:2F:23:ASP:O	5:2F:24:LEU:HD23	2.15	0.47
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.15	0.47
13:2R:17:ARG:O	13:2R:20:LEU:HB3	2.14	0.47
15:2T:113:LYS:O	15:2T:114:LEU:HD23	2.14	0.47
28:26:7:ILE:HG21	28:26:27:LYS:HD3	1.96	0.47
30:28:52:LYS:HG2	30:28:56:GLU:OE2	2.15	0.47
32:2a:352:C:O2'	32:2a:354:G:OP1	2.30	0.47
32:2a:580:U:H5''	46:2o:58:MET:HG2	1.97	0.47
33:2b:171:ALA:O	33:2b:175:ARG:N	2.36	0.47
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.96	0.47
33:2b:200:ILE:H	33:2b:200:ILE:HD12	1.79	0.47
35:2d:18:LYS:HE2	35:2d:31:CYS:SG	2.55	0.47
36:2e:10:MET:HE2	36:2e:55:VAL:HG21	1.96	0.47
36:2e:11:ILE:HB	36:2e:31:LEU:HB3	1.97	0.47
36:2e:71:LEU:O	36:2e:72:GLN:NE2	2.47	0.47
39:2h:51:VAL:HG21	39:2h:60:ARG:NH1	2.25	0.47
43:2l:75:HIS:CE1	43:2l:77:LEU:HB2	2.50	0.47
44:2m:20:THR:C	44:2m:22:ILE:H	2.21	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:35:SER:O	50:2s:71:LEU:HD12	2.15	0.47
1:1A:1171:G:OP2	1:1A:1174:A:N6	2.47	0.47
8:1I:47:LEU:HD13	8:1I:51:ILE:HD11	1.95	0.47
8:1I:62:LYS:HE3	8:1I:136:VAL:HG23	1.95	0.47
11:1P:90:ARG:HH21	11:1P:105:LEU:HD11	1.80	0.47
19:1X:25:LYS:HA	19:1X:81:VAL:O	2.15	0.47
23:11:52:ARG:HA	23:11:56:GLN:O	2.14	0.47
32:1a:532:A:N6	32:1a:1206:G:O2'	2.48	0.47
32:1a:946:A:H2'	32:1a:947:G:C8	2.50	0.47
32:1a:966:M2G:HM13	32:1a:967:5MC:H1'	1.97	0.47
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.49	0.47
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.50	0.47
32:1a:1330:U:H2'	32:1a:1331:G:H5'	1.96	0.47
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.49	0.47
33:1b:233:SER:HB3	33:1b:234:PRO:HD2	1.97	0.47
35:1d:107:ARG:NH2	35:1d:194:LEU:HD21	2.23	0.47
37:1f:39:LYS:HE3	37:1f:62:TRP:HZ3	1.80	0.47
40:1i:3:GLN:HG2	40:1i:20:ARG:NE	2.30	0.47
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.79	0.47
44:1m:19:LEU:HD21	44:1m:56:LEU:HD21	1.97	0.47
1:2A:288:C:H2'	1:2A:289:A:C8	2.49	0.47
1:2A:477:A:H2'	1:2A:478:A:C8	2.49	0.47
1:2A:479:A:H4'	1:2A:480:A:OP1	2.14	0.47
1:2A:2166:G:C8	1:2A:2167:U:H5''	2.50	0.47
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.15	0.47
4:2E:112:GLY:O	4:2E:159:HIS:HA	2.15	0.47
5:2F:64:ILE:HD12	5:2F:65:TRP:CE3	2.50	0.47
5:2F:108:LYS:HB2	5:2F:108:LYS:HE2	1.73	0.47
7:2H:5:GLY:HA2	7:2H:69:ARG:HB2	1.95	0.47
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.49	0.47
8:2I:58:LEU:HG	8:2I:59:ALA:N	2.29	0.47
10:2O:12:ASP:C	10:2O:12:ASP:OD1	2.58	0.47
12:2Q:138:ASP:OD1	21:2Z:81:ARG:NH1	2.47	0.47
17:2V:29:PRO:HA	17:2V:61:VAL:HG12	1.96	0.47
18:2W:1:MET:HE3	18:2W:62:HIS:HB3	1.96	0.47
32:2a:256:U:P	48:2q:17:LYS:HZ2	2.38	0.47
32:2a:273:A:N6	32:2a:274:A:C6	2.82	0.47
32:2a:363:A:C5	43:2l:31:PRO:HD2	2.50	0.47
32:2a:1066:C:O2'	32:2a:1067:A:H5'	2.14	0.47
32:2a:1186:G:H4'	40:2i:110:GLU:OE2	2.14	0.47
32:2a:1227:A:OP1	50:2s:80:TYR:OH	2.33	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.15	0.47
32:2a:1265:G:C4	32:2a:1271:G:N2	2.82	0.47
32:2a:1426:C:H2'	32:2a:1427:U:H6	1.80	0.47
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.30	0.47
33:2b:44:LEU:HA	33:2b:47:THR:OG1	2.15	0.47
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.80	0.47
35:2d:156:GLU:CD	35:2d:159:ARG:HH21	2.23	0.47
38:2g:116:ALA:O	38:2g:120:ILE:HG13	2.15	0.47
41:2j:49:VAL:HG21	45:2n:41:ARG:O	2.14	0.47
47:2p:37:GLY:HA3	47:2p:50:LYS:O	2.14	0.47
56:2y:14:A:N6	56:2y:21:A:H2	2.01	0.47
56:2y:48:C:H5	56:2y:59:U:OP1	1.97	0.47
1:1A:190:A:OP2	23:11:39:LYS:HE3	2.15	0.47
1:1A:1257:C:H2'	1:1A:1258:C:C6	2.50	0.47
32:1a:800:G:O6	62:1a:1920:HOH:O	2.20	0.47
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.50	0.47
32:1a:1457:G:H5''	51:1t:35:THR:HG21	1.97	0.47
38:1g:111:ARG:HD2	38:1g:123:GLU:HB2	1.97	0.47
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.15	0.47
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.97	0.47
21:2Z:45:ASP:CG	21:2Z:49:ARG:HE	2.23	0.47
25:23:4:LEU:HA	25:23:4:LEU:HD23	1.61	0.47
32:2a:151:A:H2'	32:2a:152:A:O4'	2.14	0.47
32:2a:1129:C:H1'	32:2a:1130:A:N7	2.30	0.47
32:2a:1468:A:H8	32:2a:1468:A:O5'	1.98	0.47
55:2x:19:G:H4'	55:2x:20:U:OP2	2.15	0.47
1:1A:7:G:H2'	1:1A:8:A:O4'	2.15	0.47
1:1A:749:C:H4'	1:1A:1271:G:N3	2.30	0.47
1:1A:898:C:N4	1:1A:899:A:H62	2.13	0.47
1:1A:1825:A:OP1	3:1D:249:PRO:HD3	2.14	0.47
1:1A:2126:A:N6	1:1A:2162:G:O2'	2.46	0.47
1:1A:2345:G:N3	1:1A:2381:C:H2'	2.30	0.47
5:1F:89:VAL:O	62:1F:402:HOH:O	2.20	0.47
6:1G:5:VAL:HG21	6:1G:100:TRP:HB3	1.97	0.47
10:1O:17:ARG:HB2	10:1O:45:GLU:HG2	1.96	0.47
15:1T:1:MET:HE2	15:1T:3:ARG:HG3	1.97	0.47
19:1X:72:LYS:NZ	19:1X:75:ASP:OD2	2.36	0.47
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.48	0.47
32:1a:922:G:C6	32:1a:923:A:C6	3.03	0.47
32:1a:1392:G:O2'	32:1a:1393:U:H5'	2.15	0.47
48:1q:45:HIS:CD2	48:1q:47:PRO:HG3	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1w:4:C:C2'	54:1w:5:G:H5'	2.45	0.47
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.49	0.47
1:2A:718:A:H8	1:2A:718:A:O5'	1.98	0.47
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.15	0.47
9:2N:19:GLU:OE2	9:2N:59:LYS:HD3	2.14	0.47
23:21:67:ILE:N	23:21:68:PRO:HD2	2.30	0.47
26:24:24:THR:OG1	26:24:25:TYR:N	2.48	0.47
26:24:62:ARG:HB2	26:24:63:TYR:CZ	2.50	0.47
32:2a:581:G:O2'	32:2a:582:U:H5'	2.14	0.47
32:2a:1060:C:N4	34:2c:2:GLY:HA3	2.30	0.47
32:2a:1259:C:HO2'	32:2a:1283:G:N2	2.12	0.47
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.79	0.47
54:2w:64:A:C2'	54:2w:65:G:H5'	2.45	0.47
1:1A:2106:G:O5'	1:1A:2106:G:H8	1.98	0.47
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.80	0.47
5:1F:41:LEU:O	5:1F:44:ARG:HG2	2.15	0.47
7:1H:126:PRO:HD2	7:1H:130:ARG:O	2.15	0.47
7:1H:174:GLY:O	7:1H:175:LYS:HG3	2.14	0.47
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.97	0.47
32:1a:820:U:H4'	32:1a:821:G:OP2	2.15	0.47
33:1b:15:VAL:HG13	33:1b:209:ARG:CG	2.44	0.47
34:1c:62:ASP:HA	34:1c:97:LYS:HG2	1.97	0.47
41:1j:38:ILE:HD11	41:1j:71:LEU:HB3	1.97	0.47
41:1j:49:VAL:HG21	45:1n:44:LEU:HD22	1.96	0.47
48:1q:67:LYS:HA	48:1q:70:ARG:NH1	2.24	0.47
1:2A:994:C:O2'	1:2A:996:A:OP1	2.29	0.47
1:2A:1997:G:H5''	4:2E:117:MET:HE2	1.97	0.47
1:2A:2137:C:N4	1:2A:2154:G:N1	2.53	0.47
1:2A:2659:G:OP1	7:2H:158:HIS:NE2	2.48	0.47
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.48	0.47
21:2Z:15:PRO:HB3	21:2Z:25:PRO:HG2	1.97	0.47
21:2Z:72:ARG:NH2	21:2Z:97:GLU:HB2	2.29	0.47
32:2a:203:U:H2'	32:2a:203:U:OP2	2.14	0.47
32:2a:692:U:O2'	32:2a:694:A:N7	2.43	0.47
32:2a:1298:C:H4'	32:2a:1299:A:C4	2.49	0.47
40:2i:4:TYR:HE1	40:2i:88:TYR:HA	1.78	0.47
1:1A:880:G:H2'	1:1A:881:G:C8	2.50	0.46
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.78	0.46
4:1E:101:ARG:HD2	4:1E:169:ASN:OD1	2.15	0.46
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.97	0.46
8:1I:58:LEU:O	8:1I:61:ARG:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:138:LEU:HD12	11:1P:143:GLY:HA3	1.98	0.46
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.51	0.46
32:1a:460:G:N2	32:1a:471:G:N7	2.63	0.46
32:1a:839:U:H3'	32:1a:840:C:H6	1.81	0.46
32:1a:920:U:H2'	32:1a:921:U:C6	2.49	0.46
32:1a:1169:A:C6	32:1a:1170:A:C6	3.04	0.46
33:1b:154:LEU:H	33:1b:154:LEU:CD1	2.28	0.46
41:1j:75:ILE:O	41:1j:77:PRO:HD3	2.14	0.46
50:1s:41:VAL:HG13	50:1s:43:GLU:H	1.79	0.46
1:2A:656:G:H2'	1:2A:657:U:O4'	2.15	0.46
1:2A:1813:G:H4'	3:2D:43:ARG:O	2.14	0.46
1:2A:2838:G:N7	62:2A:4011:HOH:O	2.35	0.46
8:2I:83:ALA:CB	8:2I:123:LEU:HD11	2.45	0.46
26:24:62:ARG:HB2	26:24:63:TYR:CE2	2.50	0.46
32:2a:362:G:N1	32:2a:365:U:OP2	2.47	0.46
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.96	0.46
36:2e:36:ASP:OD1	36:2e:38:GLN:HB2	2.15	0.46
46:2o:7:GLU:OE1	46:2o:38:ARG:NH2	2.47	0.46
56:2y:74:C:H2'	56:2y:75:C:H6	1.80	0.46
1:1A:249:C:O2	30:18:12:LYS:NZ	2.29	0.46
1:1A:657:U:H2'	1:1A:658:C:C6	2.50	0.46
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.50	0.46
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.48	0.46
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.97	0.46
32:1a:1009:G:N2	32:1a:1010:G:H1'	2.30	0.46
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.16	0.46
57:1z:7:GLY:HA2	57:1z:14:GLY:HA2	1.97	0.46
1:2A:885:C:H2'	1:2A:886:C:C4'	2.45	0.46
1:2A:1203:G:O2'	1:2A:1242:A:N6	2.42	0.46
1:2A:1204:A:H61	1:2A:1240:U:H2'	1.79	0.46
1:2A:1283:G:H2'	1:2A:1285:G:OP2	2.15	0.46
1:2A:2206:G:H8	1:2A:2207:G:N7	2.12	0.46
12:2Q:57:HIS:HD2	12:2Q:117:ALA:HB2	1.80	0.46
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.15	0.46
32:2a:1018:C:H2'	32:2a:1019:C:O4'	2.14	0.46
33:2b:48:MET:SD	33:2b:49:GLU:N	2.88	0.46
33:2b:114:ARG:O	33:2b:118:LEU:N	2.44	0.46
33:2b:178:ARG:NH2	39:2h:74:PRO:HB3	2.31	0.46
48:2q:29:HIS:CG	48:2q:30:PRO:HD2	2.50	0.46
1:1A:1644:C:H5''	1:1A:1644:C:C6	2.49	0.46
2:1B:94:C:H2'	2:1B:95:C:H6	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:64:ILE:HD12	5:1F:65:TRP:CZ3	2.50	0.46
8:1I:78:THR:HA	8:1I:143:SER:OG	2.15	0.46
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.50	0.46
32:1a:1009:G:O6	32:1a:1020:U:O2	2.34	0.46
32:1a:1257:U:O4	45:1n:17:LYS:HD2	2.15	0.46
34:1c:131:ARG:HD2	34:1c:166:GLU:HG2	1.96	0.46
35:1d:8:VAL:O	35:1d:11:LEU:HB2	2.16	0.46
38:1g:48:LYS:O	38:1g:52:GLU:HG3	2.15	0.46
39:1h:17:THR:C	39:1h:78:GLN:HE22	2.24	0.46
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.50	0.46
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.42	0.46
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.50	0.46
1:2A:608:A:H2'	1:2A:609:A:C8	2.50	0.46
1:2A:804:A:OP1	62:2A:3922:HOH:O	2.20	0.46
1:2A:1027:A:C6	1:2A:1126:A:C4	3.04	0.46
1:2A:2780:G:OP2	9:2N:118:LYS:HD3	2.15	0.46
1:2A:2786:U:OP1	4:2E:69:LYS:HD2	2.16	0.46
17:2V:10:LYS:NZ	17:2V:23:GLU:OE2	2.48	0.46
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.77	0.46
21:2Z:73:GLN:HB3	21:2Z:87:ASP:OD1	2.16	0.46
35:2d:112:VAL:HG13	35:2d:161:ASN:OD1	2.15	0.46
38:2g:79:ARG:NH2	38:2g:80:VAL:HA	2.30	0.46
55:2x:52:G:H2'	55:2x:53:G:O4'	2.14	0.46
1:1A:796:C:H2'	1:1A:797:C:C6	2.49	0.46
1:1A:1176:G:OP2	1:1A:1176:G:H4'	2.14	0.46
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.98	0.46
8:1I:77:LEU:HA	8:1I:77:LEU:HD23	1.73	0.46
10:1O:2:ILE:HB	10:1O:33:ALA:HB3	1.97	0.46
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.98	0.46
32:1a:345:C:H5'	32:1a:346:G:C5	2.51	0.46
32:1a:600:C:H2'	32:1a:601:C:C6	2.50	0.46
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.80	0.46
33:1b:104:ASN:O	33:1b:108:ILE:HD12	2.15	0.46
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.15	0.46
1:2A:531:C:OP1	1:2A:561:G:N1	2.46	0.46
1:2A:587:C:O2	11:2P:33:ARG:NH2	2.38	0.46
1:2A:831:G:N7	62:2A:4016:HOH:O	2.36	0.46
2:2B:39:A:O2'	2:2B:46:A:N1	2.43	0.46
3:2D:24:ILE:CD1	3:2D:84:TYR:HB2	2.45	0.46
32:2a:43:C:OP2	47:2p:12:LYS:NZ	2.39	0.46
32:2a:236:G:H5''	48:2q:42:TYR:OH	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:325:A:H2'	32:2a:326:G:O4'	2.15	0.46
32:2a:1004:A:N3	32:2a:1038:C:C2	2.84	0.46
32:2a:1151:A:H5''	41:2j:41:PRO:HA	1.98	0.46
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.50	0.46
35:2d:150:GLU:H	35:2d:150:GLU:CD	2.22	0.46
37:2f:19:LEU:HD11	37:2f:59:TYR:CD2	2.50	0.46
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.81	0.46
39:2h:51:VAL:HG12	39:2h:52:ASP:H	1.79	0.46
1:1A:748:G:C8	18:1W:89:ALA:HB1	2.49	0.46
5:1F:32:LEU:HB3	5:1F:112:MET:HE1	1.96	0.46
8:1I:105:HIS:C	8:1I:107:VAL:H	2.24	0.46
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.31	0.46
23:11:11:ARG:HG3	23:11:12:PRO:HD2	1.96	0.46
26:14:53:GLU:O	26:14:56:VAL:HG13	2.14	0.46
32:1a:1030(C):G:C8	32:1a:1030(D):A:N7	2.84	0.46
34:1c:108:ASN:HB3	34:1c:111:LEU:HD12	1.97	0.46
35:1d:108:LEU:HD12	35:1d:174:LEU:HD13	1.98	0.46
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.30	0.46
42:1k:48:ILE:O	42:1k:48:ILE:HG12	2.15	0.46
54:1w:37:MIA:H121	54:1w:37:MIA:H162	1.66	0.46
1:2A:882:G:H1	1:2A:894:C:H42	1.62	0.46
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.51	0.46
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.15	0.46
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.50	0.46
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.30	0.46
7:2H:3:ARG:HG2	7:2H:6:ARG:HD2	1.96	0.46
7:2H:140:LYS:HE3	7:2H:140:LYS:HB2	1.72	0.46
8:2I:120:ILE:HD13	8:2I:126:TYR:CE2	2.50	0.46
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.49	0.46
14:2S:34:HIS:ND1	14:2S:54:LEU:HB2	2.30	0.46
14:2S:95:HIS:C	14:2S:99:LYS:HB3	2.40	0.46
32:2a:520:A:N1	32:2a:536:C:H1'	2.29	0.46
32:2a:1152:A:H2'	32:2a:1153:C:C6	2.50	0.46
32:2a:1216:G:OP1	45:2n:2:ALA:HA	2.14	0.46
32:2a:1225:A:H2'	32:2a:1226:C:C5	2.50	0.46
32:2a:1225:A:OP1	44:2m:103:THR:OG1	2.34	0.46
32:2a:1255:G:H5''	34:2c:26:LYS:HE2	1.98	0.46
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.50	0.46
33:2b:55:PHE:HE1	33:2b:218:ALA:HA	1.81	0.46
41:2j:7:LYS:HD3	41:2j:71:LEU:HD12	1.98	0.46
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.81	0.46
32:1a:865:A:H5'	32:1a:1078:U:O4	2.15	0.46
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.37	0.46
43:1l:60:LEU:HD11	43:1l:66:VAL:HG22	1.97	0.46
1:2A:265:A:C8	1:2A:266:G:H1'	2.50	0.46
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.32	0.46
1:2A:1710:C:H4'	1:2A:2858:C:O2	2.16	0.46
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.15	0.46
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.96	0.46
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.98	0.46
7:2H:80:SER:OG	7:2H:81:GLU:N	2.48	0.46
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.97	0.46
32:2a:165:C:H2'	32:2a:166:G:C8	2.46	0.46
32:2a:874:G:O2'	32:2a:875:C:H5'	2.16	0.46
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.44	0.46
32:2a:1133:G:C4	32:2a:1134:G:C8	3.03	0.46
37:2f:35:ALA:HA	37:2f:67:MET:HB3	1.98	0.46
44:2m:90:LEU:HA	44:2m:93:ARG:HE	1.81	0.46
50:2s:40:ILE:HA	50:2s:44:MET:SD	2.56	0.46
56:2y:15:G:O6	56:2y:48:C:O2	2.33	0.46
1:1A:708:C:H2'	1:1A:709:U:H6	1.80	0.46
1:1A:888:C:C5'	44:1m:93:ARG:HG2	2.46	0.46
1:1A:1071:G:OP1	1:1A:1071:G:H3'	2.16	0.46
1:1A:1599:C:OP1	19:1X:36:LYS:HG3	2.16	0.46
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.16	0.46
1:1A:2124:G:C6	1:1A:2125:G:C2	3.04	0.46
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.97	0.46
11:1P:39:LYS:HB2	11:1P:45:LEU:CD1	2.44	0.46
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	1.96	0.46
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.44	0.46
32:1a:841:U:P	32:1a:841:U:H6	2.39	0.46
32:1a:986:A:H2'	32:1a:987:G:O4'	2.16	0.46
32:1a:1068:G:N7	32:1a:1094:G:H2'	2.30	0.46
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.45	0.46
36:1e:10:MET:H	36:1e:10:MET:HG2	1.40	0.46
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.49	0.46
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.50	0.46
2:2B:24:G:N7	2:2B:56:G:H2'	2.30	0.46
7:2H:73:ALA:O	7:2H:76:VAL:HG22	2.16	0.46
7:2H:76:VAL:HA	7:2H:79:VAL:HG22	1.98	0.46
8:2I:51:ILE:HD12	8:2I:51:ILE:HA	1.85	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.31	0.46
24:22:64:LEU:O	24:22:68:ARG:HG3	2.16	0.46
26:24:64:GLY:C	26:24:66:SER:H	2.23	0.46
32:2a:73:G:H1	32:2a:96:U:H3	1.63	0.46
32:2a:499:A:H4'	32:2a:500:G:OP1	2.16	0.46
32:2a:614:A:C6	32:2a:615:C:C4	3.04	0.46
34:2c:134:ILE:HD11	34:2c:153:VAL:HG23	1.98	0.46
1:1A:708:C:H2'	1:1A:709:U:C6	2.50	0.46
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.51	0.46
1:1A:1224:C:H2'	1:1A:1225:G:O4'	2.16	0.46
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.48	0.46
2:1B:78:A:C2	2:1B:100:A:C4	3.03	0.46
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.15	0.46
10:1O:19:ILE:HD11	10:1O:84:ALA:HB3	1.98	0.46
16:1U:104:GLN:HE21	16:1U:105:VAL:HG23	1.81	0.46
20:1Y:46:LYS:HB2	20:1Y:46:LYS:HE3	1.79	0.46
25:13:59:VAL:O	25:13:60:GLU:HG2	2.16	0.46
32:1a:841:U:H6	32:1a:841:U:OP2	1.98	0.46
32:1a:850:U:H2'	32:1a:851:G:H5''	1.97	0.46
32:1a:864:A:H2'	32:1a:865:A:C8	2.51	0.46
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.51	0.46
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.16	0.46
32:1a:1364:U:C6	52:1u:14:TRP:HH2	2.34	0.46
32:1a:1511:G:H2'	32:1a:1512:U:O4'	2.15	0.46
40:1i:16:ARG:NH1	40:1i:64:THR:HG21	2.27	0.46
44:1m:4:ILE:HD11	44:1m:60:VAL:HG11	1.98	0.46
56:1y:21:A:H2'	56:1y:22:G:H8	1.81	0.46
56:1y:51:U:H3	56:1y:63:G:H1	1.64	0.46
56:1y:57:G:H2'	56:1y:57:G:N3	2.30	0.46
1:2A:31:C:H5''	1:2A:1239:G:OP1	2.15	0.46
1:2A:565:C:H2'	1:2A:566:U:O4'	2.15	0.46
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.98	0.46
1:2A:2168:G:C8	1:2A:2170:A:N7	2.83	0.46
4:2E:15:PHE:CD1	15:2T:81:PRO:HD2	2.51	0.46
4:2E:47:VAL:HG11	4:2E:86:PRO:CD	2.45	0.46
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.98	0.46
24:22:62:THR:O	24:22:66:GLU:HG3	2.15	0.46
32:2a:257:G:H2'	32:2a:258:G:O4'	2.16	0.46
32:2a:881:G:P	43:2l:12:ARG:HH22	2.39	0.46
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.30	0.46
35:2d:76:ARG:O	35:2d:80:GLU:HG2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.16	0.46
1:1A:1071:G:H4'	1:1A:1089:G:OP2	2.16	0.46
1:1A:1161:C:O2'	17:1V:8:GLY:HA2	2.16	0.46
1:1A:2319:G:OP1	1:1A:2319:G:H3'	2.16	0.46
1:1A:2572:A:C8	4:1E:144:ARG:HD3	2.51	0.46
2:1B:24:G:N7	2:1B:56:G:H2'	2.30	0.46
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.16	0.46
13:1R:109:ALA:O	13:1R:111:LEU:HD22	2.16	0.46
15:1T:6:LEU:O	15:1T:10:VAL:HG23	2.16	0.46
15:1T:113:LYS:C	15:1T:114:LEU:HD23	2.40	0.46
16:1U:34:LYS:HA	16:1U:34:LYS:HD2	1.78	0.46
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.99	0.46
38:1g:78:ARG:HG3	38:1g:156:TRP:HZ3	1.78	0.46
47:1p:56:ALA:HB1	47:1p:74:LEU:HD23	1.98	0.46
48:1q:7:THR:HG23	48:1q:58:GLU:HG2	1.97	0.46
54:1w:65:G:H2'	54:1w:66:U:C6	2.51	0.46
1:2A:602:G:O2'	1:2A:655:A:N6	2.49	0.46
1:2A:1009:A:N3	1:2A:1153:C:O2'	2.48	0.46
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.16	0.46
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.80	0.46
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.51	0.46
1:2A:2850:A:OP2	1:2A:2866:U:H5	1.99	0.46
6:2G:66:GLN:HG3	26:24:1:MET:HE2	1.98	0.46
8:2I:92:VAL:CG1	8:2I:120:ILE:HB	2.44	0.46
11:2P:119:GLU:OE2	11:2P:119:GLU:HA	2.16	0.46
14:2S:48:LEU:HD23	14:2S:82:ILE:HD11	1.97	0.46
25:23:7:LYS:HG3	25:23:34:GLU:HG2	1.98	0.46
32:2a:48:C:H5''	32:2a:365:U:O4	2.16	0.46
32:2a:685:G:C2	32:2a:686:U:C4	3.04	0.46
32:2a:1272:G:N2	32:2a:1273:G:C8	2.83	0.46
43:2l:69:TYR:CE2	43:2l:71:PRO:HA	2.51	0.46
43:2l:104:VAL:HG12	43:2l:105:TYR:CD2	2.51	0.46
48:2q:83:ASP:OD1	48:2q:84:LEU:HG	2.16	0.46
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.15	0.46
1:1A:717:G:H2'	1:1A:718:A:O4'	2.16	0.46
1:1A:1041:C:N4	1:1A:1114:G:H1	2.14	0.46
1:1A:2079:U:O3'	23:11:35:THR:OG1	2.34	0.46
32:1a:38:G:O2'	32:1a:39:G:H5''	2.16	0.46
32:1a:867:G:O2'	32:1a:873:A:N1	2.43	0.46
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.16	0.46
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:10:LEU:HG	33:1b:48:MET:HE1	1.97	0.46
34:1c:138:VAL:O	34:1c:142:MET:HG2	2.16	0.46
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.97	0.46
46:1o:6:GLU:O	46:1o:10:LYS:HD2	2.16	0.46
56:1y:57:G:H2'	56:1y:58:A:H5''	1.98	0.46
1:2A:1027:A:N6	1:2A:1126:A:C4	2.84	0.46
1:2A:1830:C:H2'	1:2A:1831:G:H8	1.80	0.46
1:2A:2252:G:H2'	1:2A:2253:G:O4'	2.16	0.46
1:2A:2563:U:O2	1:2A:2565:A:H8	1.99	0.46
1:2A:2657:A:O2'	7:2H:160:LYS:NZ	2.49	0.46
2:2B:1:U:H2'	2:2B:2:C:C6	2.51	0.46
2:2B:9:G:OP1	14:2S:15:ARG:HD3	2.15	0.46
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.81	0.46
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.31	0.46
7:2H:124:GLU:OE1	7:2H:132:ARG:HG2	2.16	0.46
12:2Q:103:MET:HE1	12:2Q:125:LEU:HD13	1.97	0.46
26:24:26:SER:OG	26:24:27:THR:N	2.48	0.46
32:2a:8:A:N6	35:2d:57:ARG:HH12	2.14	0.46
32:2a:189(H):G:H8	32:2a:189(H):G:O5'	1.98	0.46
32:2a:1133:G:H2'	32:2a:1134:G:C8	2.52	0.46
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.51	0.46
32:2a:1181:G:O2'	32:2a:1182:G:C5	2.66	0.46
32:2a:1274:G:N2	32:2a:1275:A:H62	2.14	0.46
34:2c:195:VAL:C	34:2c:196:LEU:HD23	2.41	0.46
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.80	0.46
41:2j:85:LEU:HD12	41:2j:86:MET:N	2.31	0.46
44:2m:65:LYS:HB2	44:2m:65:LYS:HE3	1.68	0.46
51:2t:14:LYS:HA	51:2t:17:ARG:CZ	2.45	0.46
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.14	0.45
1:1A:1078:U:O2'	1:1A:1088:A:H2	1.99	0.45
1:1A:1858:G:N2	1:1A:1883:G:H2'	2.31	0.45
1:1A:2447:G:N2	1:1A:2450:A:OP2	2.48	0.45
1:1A:2875:C:O2'	15:1T:2:ASN:OD1	2.30	0.45
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.49	0.45
8:1I:3:VAL:O	8:1I:18:VAL:HA	2.16	0.45
21:1Z:93:ASP:HA	21:1Z:131:ARG:HH12	1.81	0.45
28:16:35:GLU:OE2	28:16:50:ARG:NH1	2.49	0.45
28:16:44:ARG:HG2	28:16:44:ARG:HH11	1.81	0.45
32:1a:204:U:P	32:1a:204:U:H3'	2.56	0.45
43:1I:117:ARG:NH2	43:1I:124:LYS:HB2	2.31	0.45
1:2A:954:G:C6	1:2A:955:C:C4	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.51	0.45
1:2A:1614:A:N6	18:2W:92:ARG:O	2.47	0.45
6:2G:173:LEU:HD22	6:2G:178:PHE:CZ	2.51	0.45
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.47	0.45
7:2H:15:VAL:HG12	7:2H:28:GLY:HA3	1.97	0.45
12:2Q:2:LEU:HD13	12:2Q:69:PHE:CD1	2.51	0.45
16:2U:8:VAL:HG23	16:2U:11:ARG:HH21	1.80	0.45
23:21:83:GLU:OE1	23:21:83:GLU:N	2.50	0.45
32:2a:110:C:O2'	47:2p:25:ARG:O	2.32	0.45
37:2f:15:ASP:OD1	37:2f:17:SER:HB2	2.16	0.45
43:2l:39:VAL:HG11	43:2l:41:ARG:NH1	2.31	0.45
1:1A:192:C:H2'	1:1A:193:U:H5'	1.97	0.45
1:1A:1920:OMC:HM22	1:1A:1921:G:O4'	2.16	0.45
1:1A:2854:G:H2'	1:1A:2855:C:C6	2.51	0.45
4:1E:101:ARG:HA	4:1E:170:LEU:O	2.16	0.45
5:1F:72:ARG:HG3	62:1F:412:HOH:O	2.15	0.45
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.28	0.45
32:1a:431:A:H2'	32:1a:432:A:O4'	2.16	0.45
32:1a:748:C:H4'	32:1a:749:C:O5'	2.17	0.45
33:1b:133:LYS:O	33:1b:137:ARG:HG3	2.16	0.45
1:2A:489:G:N7	18:2W:49:LYS:NZ	2.64	0.45
1:2A:931:G:O2'	25:23:24:LYS:NZ	2.25	0.45
1:2A:1341:U:OP2	1:2A:1394:U:O2'	2.22	0.45
1:2A:1591:G:H2'	1:2A:1592:C:C6	2.50	0.45
1:2A:1970:A:H4'	1:2A:1971:A:OP1	2.16	0.45
4:2E:111:ARG:HG2	4:2E:118:LYS:HD3	1.98	0.45
32:2a:32:A:H2'	32:2a:33:A:C8	2.52	0.45
32:2a:432:A:H3'	32:2a:433:C:C6	2.51	0.45
34:2c:69:HIS:CD2	34:2c:104:GLN:HG2	2.52	0.45
34:2c:138:VAL:HG23	34:2c:151:VAL:HG23	1.98	0.45
35:2d:150:GLU:CD	35:2d:150:GLU:N	2.74	0.45
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.39	0.45
44:2m:59:TYR:O	44:2m:63:THR:OG1	2.34	0.45
46:2o:71:GLN:HB2	46:2o:78:TYR:CD1	2.52	0.45
50:2s:36:ARG:NH1	50:2s:75:ALA:O	2.49	0.45
6:1G:115:ARG:CZ	6:1G:115:ARG:HB3	2.46	0.45
10:1O:7:TYR:CZ	10:1O:44:LYS:HG3	2.52	0.45
10:1O:49:ARG:NH1	32:1a:1423:G:OP1	2.23	0.45
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.97	0.45
14:1S:41:ASP:O	14:1S:45:GLY:N	2.49	0.45
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:18:26:LYS:HD2	30:18:48:PHE:CD2	2.51	0.45
32:1a:445:G:H2'	32:1a:446:G:O4'	2.17	0.45
32:1a:458:C:H2'	32:1a:460:G:O4'	2.17	0.45
32:1a:972:C:O2'	41:1j:55:LYS:O	2.33	0.45
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.16	0.45
40:1i:19:LEU:HD21	40:1i:81:ILE:HG13	1.97	0.45
44:1m:33:ALA:HA	44:1m:59:TYR:CE2	2.51	0.45
51:1t:54:LYS:HG3	51:1t:57:ARG:NH2	2.31	0.45
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.50	0.45
1:2A:2021:C:OP1	27:25:12:SER:OG	2.29	0.45
2:2B:80:U:O2'	2:2B:81:G:H8	1.99	0.45
5:2F:64:ILE:HD12	5:2F:65:TRP:CZ3	2.51	0.45
10:2O:120:GLU:CD	10:2O:122:LEU:HD21	2.41	0.45
19:2X:27:THR:HA	19:2X:79:ALA:O	2.16	0.45
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HG13	1.98	0.45
25:23:8:LEU:HD23	25:23:30:ARG:O	2.16	0.45
32:2a:923:A:OP1	36:2e:21:ALA:HB2	2.16	0.45
32:2a:1124:G:N7	32:2a:1145:C:O2'	2.50	0.45
33:2b:212:GLN:NE2	33:2b:235:SER:HA	2.32	0.45
38:2g:14:PRO:HB3	38:2g:19:GLY:O	2.16	0.45
38:2g:38:LEU:O	38:2g:42:ILE:HG13	2.16	0.45
43:2l:104:VAL:HG12	43:2l:105:TYR:CG	2.51	0.45
45:2n:42:ILE:O	45:2n:46:GLU:HG3	2.16	0.45
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.98	0.45
50:2s:77:THR:HG23	50:2s:78:ARG:HG3	1.98	0.45
1:1A:9:U:O4	1:1A:2629:A:H2	1.99	0.45
1:1A:459:U:H5''	29:17:40:TRP:CD2	2.51	0.45
1:1A:1094:U:H3	1:1A:1096:A:H3'	1.81	0.45
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.96	0.45
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.51	0.45
15:1T:19:LEU:HD22	15:1T:86:ILE:HD12	1.98	0.45
20:1Y:28:LYS:NZ	20:1Y:64:GLU:OE1	2.48	0.45
32:1a:79:G:H1'	32:1a:91:C:O2	2.17	0.45
32:1a:734:G:H21	49:1r:75:ILE:HD11	1.81	0.45
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.16	0.45
33:1b:169:LYS:O	33:1b:169:LYS:HD3	2.16	0.45
42:1k:104:GLN:O	42:1k:104:GLN:CG	2.63	0.45
48:1q:26:GLN:HG2	48:1q:37:LYS:HG2	1.98	0.45
1:2A:855:G:H2'	1:2A:856:C:C6	2.51	0.45
1:2A:955:C:H5''	12:2Q:87:LYS:HD2	1.99	0.45
1:2A:1021:A:N6	1:2A:1141:U:H3	2.01	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.17	0.45
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.17	0.45
6:2G:12:TYR:HA	6:2G:16:ARG:HG2	1.97	0.45
9:2N:30:ILE:HG22	9:2N:34:LEU:HD11	1.99	0.45
10:2O:63:VAL:HG23	10:2O:64:ARG:HG3	1.98	0.45
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.17	0.45
32:2a:391:G:C6	32:2a:392:G:C5	3.04	0.45
32:2a:818:G:O2'	32:2a:819:A:H5'	2.17	0.45
32:2a:920:U:H2'	32:2a:921:U:C6	2.51	0.45
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.50	0.45
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.81	0.45
1:1A:1179:C:O2'	1:1A:1180:C:H5'	2.17	0.45
1:1A:2641:G:H5''	1:1A:2641:G:H8	1.82	0.45
1:1A:2808:U:H5''	1:1A:2891:G:O6	2.17	0.45
2:1B:48:A:H2'	2:1B:49:C:C6	2.52	0.45
4:1E:7:VAL:HG23	4:1E:51:PHE:CE2	2.52	0.45
7:1H:133:VAL:HG12	7:1H:141:VAL:HG13	1.97	0.45
8:1I:127:VAL:HA	8:1I:140:LEU:O	2.15	0.45
23:11:69:LYS:HE2	23:11:72:GLU:OE1	2.16	0.45
32:1a:391:G:C6	32:1a:392:G:C5	3.05	0.45
32:1a:987:G:N2	32:1a:1219:U:C2	2.85	0.45
35:1d:116:GLN:HE22	35:1d:161:ASN:HD21	1.63	0.45
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.16	0.45
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.98	0.45
1:2A:2136:C:HO2'	1:2A:2137:C:H6	1.64	0.45
4:2E:45:THR:O	4:2E:82:ARG:HD2	2.17	0.45
5:2F:33:LEU:HG	5:2F:112:MET:HE3	1.97	0.45
6:2G:107:LEU:HD13	6:2G:177:GLY:O	2.17	0.45
32:2a:242:C:H2'	32:2a:243:A:H5'	1.99	0.45
32:2a:562:C:O2'	43:2l:16:GLU:O	2.29	0.45
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.51	0.45
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.16	0.45
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.16	0.45
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	1.97	0.45
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.52	0.45
1:1A:2836:U:C4	1:1A:2883:A:N6	2.85	0.45
2:1B:111:G:H2'	2:1B:112:U:O4'	2.15	0.45
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.97	0.45
6:1G:60:LEU:HA	6:1G:60:LEU:HD12	1.62	0.45
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.52	0.45
11:1P:46:LYS:HE3	11:1P:46:LYS:HB3	1.72	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:87:PHE:HB2	14:1S:112:PHE:CD1	2.52	0.45
30:18:24:ALA:O	30:18:47:LYS:HA	2.17	0.45
32:1a:7:G:H5'	32:1a:298:A:O4'	2.17	0.45
32:1a:406:G:N2	35:1d:119:GLN:OE1	2.45	0.45
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.52	0.45
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.32	0.45
40:1i:4:TYR:CZ	40:1i:88:TYR:HD1	2.35	0.45
51:1t:63:ILE:HG22	51:1t:77:ALA:HB1	1.99	0.45
1:2A:286:C:H2'	1:2A:287:C:H6	1.80	0.45
1:2A:1314:C:H5'	1:2A:1314:C:C6	2.52	0.45
13:2R:72:ASP:O	13:2R:76:VAL:HG23	2.16	0.45
34:2c:53:ALA:HB2	34:2c:115:LEU:HD21	1.97	0.45
36:2e:71:LEU:C	36:2e:72:GLN:HE21	2.25	0.45
36:2e:116:THR:HG23	36:2e:117:ASP:OD2	2.17	0.45
40:2i:58:HIS:ND1	40:2i:58:HIS:N	2.60	0.45
44:2m:10:PRO:HB2	44:2m:13:LYS:CE	2.46	0.45
56:2y:33:U:O5'	56:2y:33:U:H6	2.00	0.45
1:1A:504:U:H5''	1:1A:505:A:OP1	2.17	0.45
1:1A:879:G:C8	1:1A:879:G:OP2	2.70	0.45
1:1A:890:A:C6	1:1A:892:G:H1'	2.52	0.45
1:1A:1056:G:H5''	1:1A:1057:A:C4'	2.46	0.45
1:1A:1062:G:P	1:1A:1070:A:H1'	2.55	0.45
1:1A:1408:C:C2	1:1A:1595:G:N2	2.85	0.45
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.81	0.45
1:1A:1925:C:O2'	1:1A:1926:U:H5'	2.16	0.45
1:1A:2319:G:H22	14:1S:3:ARG:HB2	1.82	0.45
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.98	0.45
3:1D:130:ALA:C	3:1D:131:LEU:HD12	2.41	0.45
12:1Q:16:ARG:O	12:1Q:17:LEU:HD23	2.17	0.45
15:1T:41:ARG:HH21	15:1T:43:GLN:HE21	1.64	0.45
19:1X:43:VAL:HG13	19:1X:47:PHE:HD2	1.81	0.45
32:1a:258:G:H2'	32:1a:259:G:C8	2.51	0.45
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.98	0.45
35:1d:23:GLY:HA3	35:1d:112:VAL:CG1	2.47	0.45
41:1j:50:ILE:HA	41:1j:60:ARG:HD3	1.99	0.45
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.99	0.45
1:2A:438:G:H2'	1:2A:440:G:H8	1.82	0.45
1:2A:583:G:OP2	16:2U:10:ARG:HD2	2.17	0.45
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	1.98	0.45
22:20:10:THR:HG22	22:20:12:ASN:HB2	1.99	0.45
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.41	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1210:C:H2'	32:2a:1211:U:H5''	1.99	0.45
32:2a:1249:C:O4'	40:2i:70:LYS:HE2	2.17	0.45
34:2c:47:LEU:CD1	34:2c:68:VAL:HG11	2.45	0.45
35:2d:11:LEU:HD23	35:2d:66:ARG:HG2	1.99	0.45
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.16	0.45
1:1A:518:G:H2'	1:1A:519:U:C6	2.52	0.45
1:1A:1975:G:H2'	1:1A:1976:U:O4'	2.16	0.45
1:1A:2142:C:N3	1:1A:2149:G:O6	2.49	0.45
3:1D:181:GLU:CD	3:1D:270:ILE:HD12	2.42	0.45
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.52	0.45
32:1a:382:A:H2'	32:1a:383:A:H8	1.79	0.45
32:1a:684:A:H1'	42:1k:39:PRO:HD2	1.99	0.45
32:1a:688:G:H5'	42:1k:46:GLY:C	2.42	0.45
32:1a:848:C:H2'	32:1a:849:C:C6	2.51	0.45
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.17	0.45
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.52	0.45
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.44	0.45
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.52	0.45
1:2A:363:G:H2'	1:2A:363(A):A:C8	2.51	0.45
1:2A:2099:U:H3	1:2A:2190:G:H1	1.65	0.45
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.34	0.45
1:2A:2497:A:H5''	62:2A:4083:HOH:O	2.16	0.45
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.97	0.45
5:2F:33:LEU:O	5:2F:37:VAL:HG23	2.17	0.45
5:2F:137:LYS:HE2	5:2F:137:LYS:HB3	1.43	0.45
9:2N:123:TYR:CZ	9:2N:129:PRO:HD2	2.52	0.45
11:2P:20:GLY:O	11:2P:21:ARG:HD3	2.16	0.45
32:2a:22:G:H4'	32:2a:885:G:C8	2.52	0.45
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.17	0.45
32:2a:1170:A:H8	32:2a:1170:A:O5'	1.99	0.45
32:2a:1298:C:N4	38:2g:114:ARG:HB3	2.32	0.45
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.82	0.45
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.16	0.45
1:1A:1420:U:HO2'	1:1A:1421:G:P	2.37	0.45
1:1A:2019:A:O4'	16:1U:34:LYS:HE2	2.17	0.45
1:1A:2111:C:O2	1:1A:2118:U:H5'	2.17	0.45
1:1A:2156:G:OP2	1:1A:2156:G:C8	2.68	0.45
1:1A:2390:U:O2'	1:1A:2391:G:H5'	2.17	0.45
1:1A:2689:U:H5'	1:1A:2689:U:O2	2.17	0.45
21:1Z:139:VAL:HG22	21:1Z:155:LEU:HD11	1.99	0.45
32:1a:119:A:H4'	32:1a:120:A:C8	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:185:A:H2'	32:1a:186:C:C6	2.52	0.45
32:1a:333:G:H4'	51:1t:16:HIS:CE1	2.51	0.45
32:1a:539:A:H2'	32:1a:540:G:C8	2.52	0.45
32:1a:658:G:C2	32:1a:749:C:N3	2.85	0.45
32:1a:791:G:H2'	32:1a:792:A:H5'	1.99	0.45
34:1c:70:VAL:O	34:1c:106:VAL:HG13	2.17	0.45
37:1f:89:MET:HE2	49:1r:76:LEU:HD11	1.98	0.45
37:1f:91:VAL:HG11	49:1r:72:ARG:NH1	2.32	0.45
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.25	0.45
1:2A:945:A:C4	1:2A:2448:A:C2	3.04	0.45
3:2D:133:LEU:HD12	3:2D:189:CYS:HB2	1.98	0.45
6:2G:20:ILE:O	6:2G:24:GLY:HA2	2.17	0.45
14:2S:106:ARG:HE	14:2S:112:PHE:C	2.24	0.45
32:2a:622:A:C8	32:2a:623:C:C6	3.05	0.45
32:2a:1263:C:H2'	32:2a:1264:C:C6	2.52	0.45
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.51	0.45
36:2e:101:ILE:HG13	36:2e:119:LEU:HD23	1.98	0.45
37:2f:6:VAL:HG22	37:2f:90:VAL:HG13	1.98	0.45
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.18	0.45
1:1A:414:C:H2'	1:1A:415:A:C8	2.51	0.45
1:1A:1017:G:N7	62:1A:4318:HOH:O	2.36	0.45
1:1A:2170:A:H8	1:1A:2170:A:O5'	1.99	0.45
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.99	0.45
6:1G:132:ASN:HA	6:1G:157:ILE:O	2.17	0.45
22:10:62:LEU:HD23	22:10:62:LEU:HA	1.70	0.45
26:14:58:ARG:HD2	44:1m:80:ARG:HH12	1.82	0.45
32:1a:254:G:H21	48:1q:16:GLN:NE2	2.14	0.45
32:1a:975:A:H5'	32:1a:975:A:C8	2.48	0.45
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.32	0.45
40:1i:4:TYR:CG	40:1i:88:TYR:HB2	2.52	0.45
46:1o:24:SER:O	46:1o:28:GLN:HG3	2.17	0.45
56:1y:56:C:H2'	56:1y:57:G:C8	2.47	0.45
1:2A:704:G:H1'	1:2A:726:G:N2	2.32	0.45
1:2A:746:A:H2'	1:2A:2612:C:H5''	1.99	0.45
13:2R:16:HIS:O	13:2R:17:ARG:C	2.60	0.45
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.50	0.45
33:2b:118:LEU:HD11	33:2b:138:LEU:HB3	1.99	0.45
1:1A:415:A:H2'	1:1A:416:C:C6	2.52	0.44
1:1A:668:G:N7	62:1A:4321:HOH:O	2.36	0.44
1:1A:910:A:N1	1:1A:2277:G:H1'	2.32	0.44
1:1A:1175:U:H4'	1:1A:1176:G:OP1	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1796:U:H2'	1:1A:1797:C:H6	1.80	0.44
1:1A:2078:C:C4	1:1A:2079:U:C4	3.04	0.44
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.52	0.44
3:1D:33:LEU:HA	3:1D:33:LEU:HD23	1.74	0.44
3:1D:70:TRP:CE2	3:1D:150:LYS:HD3	2.53	0.44
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	1.98	0.44
9:1N:33:LEU:HD23	9:1N:33:LEU:HA	1.53	0.44
32:1a:840:C:H4'	32:1a:841:U:OP1	2.16	0.44
32:1a:918:A:H2'	32:1a:919:A:O4'	2.17	0.44
56:1y:13:C:H2'	56:1y:14:A:H5''	1.98	0.44
1:2A:328:U:H4'	20:2Y:68:HIS:CG	2.51	0.44
1:2A:1790:C:O2'	3:2D:209:ALA:HB2	2.16	0.44
1:2A:2275:C:H5'	1:2A:2275:C:C6	2.51	0.44
1:2A:2277:G:OP2	22:20:10:THR:HG21	2.17	0.44
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.48	0.44
11:2P:87:ASP:O	11:2P:90:ARG:NH2	2.49	0.44
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.46	0.44
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.90	0.44
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.52	0.44
32:2a:1286:A:N7	32:2a:1287:A:H4'	2.30	0.44
35:2d:58:LEU:HD23	35:2d:58:LEU:HA	1.84	0.44
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.81	0.44
56:2y:59:U:H3'	56:2y:60:U:O2	2.17	0.44
1:1A:802:A:OP1	62:1A:4250:HOH:O	2.21	0.44
1:1A:919:G:N2	1:1A:2269:A:OP2	2.50	0.44
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.99	0.44
1:1A:1075:C:H2'	1:1A:1076:C:H2'	1.98	0.44
1:1A:1786:A:C4	1:1A:1938:A:C6	3.05	0.44
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.17	0.44
1:1A:2573:C:H3'	62:1A:4396:HOH:O	2.16	0.44
6:1G:45:GLU:H	6:1G:45:GLU:CD	2.25	0.44
21:1Z:36:LYS:HB2	21:1Z:36:LYS:HE3	1.61	0.44
35:1d:116:GLN:NE2	35:1d:161:ASN:HD21	2.15	0.44
36:1e:144:THR:O	36:1e:148:VAL:HG13	2.18	0.44
45:1n:3:ARG:HD3	45:1n:3:ARG:HA	1.66	0.44
49:1r:34:TYR:CE1	49:1r:35:ARG:HD2	2.52	0.44
51:1t:50:GLU:HG3	51:1t:100:ILE:HG23	1.98	0.44
56:1y:6:G:C6	56:1y:7:A:C6	3.05	0.44
56:1y:19:G:N2	56:1y:56:C:C2	2.85	0.44
1:2A:573:G:OP1	62:2A:3944:HOH:O	2.21	0.44
1:2A:859:G:N2	1:2A:917:A:OP2	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.49	0.44
2:2B:84:C:OP1	25:23:15:TYR:OH	2.26	0.44
3:2D:180:GLY:HA3	3:2D:275:LYS:HG3	1.97	0.44
26:24:61:ARG:O	26:24:61:ARG:HD3	2.16	0.44
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.52	0.44
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.57	0.44
43:2l:39:VAL:HG11	43:2l:41:ARG:HH11	1.82	0.44
46:2o:55:GLY:HA2	46:2o:58:MET:HE3	2.00	0.44
55:2x:50:U:H2'	55:2x:51:C:C6	2.53	0.44
1:1A:810:U:C4	11:1P:29:LYS:O	2.71	0.44
1:1A:1805:U:O2	3:1D:50:THR:HB	2.17	0.44
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.40	0.44
1:1A:1919:A:O3'	32:1a:1517:G:H1'	2.17	0.44
4:1E:52:LEU:HA	4:1E:53:PRO:HD2	1.76	0.44
13:1R:4:LEU:HD23	13:1R:4:LEU:HA	1.74	0.44
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.32	0.44
29:17:8:ASN:HB3	29:17:11:LYS:HB3	1.99	0.44
32:1a:189:G:C4	32:1a:189(L):G:N2	2.85	0.44
32:1a:690:G:H2'	32:1a:691:G:O4'	2.16	0.44
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.99	0.44
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.49	0.44
33:1b:45:GLN:O	33:1b:49:GLU:HG3	2.17	0.44
46:1o:42:HIS:CE1	46:1o:46:HIS:CD2	3.05	0.44
1:2A:821:A:N1	62:2A:4018:HOH:O	2.36	0.44
1:2A:900:A:C2'	1:2A:901:A:H8	2.26	0.44
1:2A:1349:A:OP1	62:2A:3945:HOH:O	2.21	0.44
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.18	0.44
1:2A:2024:G:H2'	1:2A:2025:C:H6	1.82	0.44
7:2H:160:LYS:N	7:2H:163:TYR:OH	2.51	0.44
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.48	0.44
15:2T:51:ARG:HG3	15:2T:98:LYS:HD2	2.00	0.44
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.35	0.44
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.17	0.44
32:2a:1121:U:C4	32:2a:1122:U:C4	3.06	0.44
40:2i:80:GLY:O	40:2i:84:ALA:N	2.50	0.44
43:2l:33:ARG:HD2	43:2l:33:ARG:HA	1.89	0.44
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.83	0.44
1:1A:1614:A:N1	18:1W:87:PRO:HB3	2.31	0.44
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.53	0.44
7:1H:160:LYS:HB2	7:1H:160:LYS:HE3	1.81	0.44
8:1I:116:LEU:HD11	8:1I:120:ILE:HG13	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:133:HIS:HA	62:1I:301:HOH:O	2.18	0.44
23:11:19:GLN:O	23:11:35:THR:HG22	2.16	0.44
32:1a:44:G:N7	62:1a:1946:HOH:O	2.36	0.44
32:1a:593:G:H2'	32:1a:594:G:O4'	2.18	0.44
32:1a:662:G:H2'	32:1a:663:A:C8	2.52	0.44
32:1a:1202:G:O2'	45:1n:29:ARG:HG3	2.17	0.44
32:1a:1389:C:H2'	32:1a:1390:U:O4'	2.17	0.44
33:1b:21:ARG:O	33:1b:23:ARG:HG2	2.18	0.44
50:1s:22:LEU:C	50:1s:27:GLU:HB3	2.43	0.44
55:1x:50:U:H2'	55:1x:51:C:C6	2.53	0.44
1:2A:272(G):C:N4	1:2A:363(C):G:H1	2.14	0.44
1:2A:952:G:OP1	12:2Q:16:ARG:NH2	2.51	0.44
1:2A:1160:G:N2	17:2V:10:LYS:HE2	2.33	0.44
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.52	0.44
1:2A:1537:G:H2'	1:2A:1538:G:H8	1.81	0.44
1:2A:1802:A:N1	1:2A:1822:G:H1'	2.33	0.44
1:2A:2055:C:H5'	1:2A:2056:G:O5'	2.18	0.44
1:2A:2127:G:N2	1:2A:2161:C:C2	2.85	0.44
1:2A:2189:U:H5'	1:2A:2190:G:OP2	2.17	0.44
1:2A:2482:G:O2'	54:2w:64:A:O2'	2.32	0.44
2:2B:24:G:H4'	2:2B:25:A:C8	2.52	0.44
4:2E:178:GLU:H	4:2E:178:GLU:CD	2.26	0.44
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.44	0.44
9:2N:73:THR:HA	9:2N:83:LYS:O	2.18	0.44
15:2T:125:ARG:HH11	32:2a:1442(B):A:H4'	1.82	0.44
19:2X:55:ASN:O	19:2X:79:ALA:HA	2.18	0.44
23:21:73:LEU:HD23	23:21:73:LEU:HA	1.68	0.44
23:21:98:LEU:HD23	23:21:98:LEU:HA	1.83	0.44
32:2a:1106:G:H5''	34:2c:172:ARG:HB3	2.00	0.44
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.82	0.44
32:2a:1338:G:C6	32:2a:1339:A:C6	3.06	0.44
32:2a:1426:C:H2'	32:2a:1427:U:C6	2.52	0.44
33:2b:8:LYS:O	33:2b:9:GLU:HB2	2.17	0.44
38:2g:78:ARG:HE	38:2g:79:ARG:NE	2.14	0.44
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.99	0.44
40:2i:79:LEU:HG	40:2i:83:ARG:HD2	1.98	0.44
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.50	0.44
1:1A:1093:G:H8	1:1A:1093:G:OP2	2.01	0.44
1:1A:1292:U:H2'	1:1A:1293:C:H6	1.81	0.44
1:1A:1776:G:H5''	1:1A:1776:G:C8	2.52	0.44
1:1A:2839:G:H5'	13:1R:46:GLY:CA	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:72:ARG:HE	5:1F:72:ARG:HB3	1.63	0.44
17:1V:82:ARG:NH1	62:1V:301:HOH:O	2.33	0.44
23:11:75:GLU:O	23:11:78:LYS:N	2.35	0.44
32:1a:601:C:H2'	32:1a:602:A:C8	2.51	0.44
34:1c:164:ARG:HB2	34:1c:164:ARG:HH11	1.83	0.44
36:1e:48:ALA:HB3	36:1e:54:ALA:HB2	1.98	0.44
36:1e:106:PRO:O	36:1e:110:LEU:HG	2.18	0.44
1:2A:1790:C:H2'	1:2A:1791:A:C5	2.52	0.44
6:2G:7:LEU:HD23	6:2G:100:TRP:HE3	1.82	0.44
14:2S:30:ARG:HE	14:2S:98:VAL:HG23	1.82	0.44
16:2U:16:LYS:HE2	16:2U:16:LYS:HB3	1.81	0.44
17:2V:40:LEU:HB2	17:2V:46:VAL:CG2	2.46	0.44
20:2Y:40:GLU:O	20:2Y:42:VAL:HG23	2.18	0.44
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG22	2.00	0.44
32:2a:179:A:C2	32:2a:180:U:C2	3.06	0.44
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.53	0.44
32:2a:1360:A:H2'	32:2a:1361:G:O4'	2.18	0.44
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.52	0.44
33:2b:213:LEU:HD23	33:2b:214:ILE:HG12	2.00	0.44
36:2e:36:ASP:C	36:2e:38:GLN:H	2.20	0.44
46:2o:8:LYS:O	46:2o:12:ILE:HG13	2.18	0.44
54:2w:33:U:N3	54:2w:36:A:OP2	2.45	0.44
56:2y:67:C:H2'	56:2y:68:C:O4'	2.17	0.44
1:1A:489:G:N7	18:1W:49:LYS:NZ	2.65	0.44
1:1A:1530:C:H2'	1:1A:1531:C:C6	2.52	0.44
1:1A:2311:A:N1	6:1G:47:LYS:HE2	2.33	0.44
1:1A:2464:C:H1'	62:1A:5389:HOH:O	2.18	0.44
7:1H:149:ARG:HA	7:1H:162:ILE:HG21	2.00	0.44
32:1a:461:A:O2'	32:1a:470:C:H5'	2.18	0.44
32:1a:524:G:H2'	32:1a:525:C:C6	2.51	0.44
32:1a:995:C:O2	45:1n:4:LYS:NZ	2.51	0.44
32:1a:1456:G:N1	51:1t:51:GLU:OE2	2.48	0.44
44:1m:15:VAL:CG1	44:1m:48:LEU:HD11	2.47	0.44
47:1p:22:THR:HA	47:1p:33:ILE:HD12	2.00	0.44
1:2A:68:G:H2'	1:2A:69:C:C6	2.53	0.44
1:2A:171:G:H2'	1:2A:172:C:C6	2.52	0.44
1:2A:444:C:H4'	5:2F:49:ALA:HB2	2.00	0.44
1:2A:1906:G:OP2	1:2A:1929:G:O2'	2.36	0.44
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.33	0.44
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.52	0.44
1:2A:2336:A:H61	22:20:43:THR:CG2	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.52	0.44
1:2A:2875:C:H2'	1:2A:2876:G:O4'	2.18	0.44
4:2E:35:GLN:OE1	4:2E:66:HIS:HE1	2.00	0.44
4:2E:52:LEU:O	4:2E:76:ARG:HG3	2.17	0.44
26:24:53:GLU:HG2	26:24:55:ARG:N	2.33	0.44
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.52	0.44
34:2c:108:ASN:HB3	34:2c:111:LEU:HD12	1.99	0.44
40:2i:5:TYR:OH	40:2i:16:ARG:HG2	2.17	0.44
1:1A:229:A:OP1	1:1A:229:A:C8	2.71	0.44
1:1A:1925:C:C2'	1:1A:1926:U:H5'	2.47	0.44
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.52	0.44
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.52	0.44
17:1V:19:LYS:HA	17:1V:94:LEU:O	2.18	0.44
26:14:49:PHE:HD1	26:14:49:PHE:HA	1.75	0.44
32:1a:487:A:H2'	32:1a:488:C:O4'	2.18	0.44
32:1a:523:A:C2	43:1l:92:0TD:H5	2.52	0.44
32:1a:872:A:C8	32:1a:874:G:C8	3.05	0.44
32:1a:1326:C:H2'	32:1a:1327:C:H6	1.80	0.44
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.33	0.44
40:1i:7:THR:O	40:1i:83:ARG:NH1	2.47	0.44
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.99	0.44
44:1m:96:LEU:C	44:1m:110:ARG:HG2	2.43	0.44
54:1w:4:C:H2'	54:1w:5:G:C8	2.52	0.44
56:1y:67:C:H2'	56:1y:68:C:C6	2.53	0.44
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.52	0.44
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.53	0.44
1:2A:2136:C:O2'	1:2A:2137:C:H6	2.01	0.44
1:2A:2257:U:H2'	1:2A:2258:C:C6	2.53	0.44
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.61	0.44
18:2W:34:ASN:OD1	18:2W:37:ARG:NH2	2.49	0.44
32:2a:547:A:H4'	32:2a:548:G:O5'	2.18	0.44
32:2a:586:C:H42	32:2a:755:G:H1	1.66	0.44
32:2a:942:G:C2	32:2a:1342:C:C2	3.06	0.44
32:2a:1157:A:C2	32:2a:1180:A:H2'	2.52	0.44
32:2a:1288:A:H5''	52:2u:9:ARG:NH2	2.32	0.44
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.52	0.44
51:2t:16:HIS:O	51:2t:19:SER:OG	2.33	0.44
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.17	0.44
1:1A:2350:C:H2'	1:1A:2351:G:O4'	2.18	0.44
3:1D:183:ARG:HH21	3:1D:266:SER:HB2	1.83	0.44
32:1a:653:A:OP1	39:1h:56:LYS:NZ	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:831:U:H2'	32:1a:832:C:H6	1.82	0.44
32:1a:839:U:H3'	32:1a:840:C:C6	2.52	0.44
33:1b:127:ILE:HG13	33:1b:130:ARG:NH1	2.32	0.44
37:1f:10:LEU:HD23	37:1f:61:LEU:HD13	2.00	0.44
37:1f:39:LYS:HB2	37:1f:64:GLN:HB3	2.00	0.44
38:1g:28:ASN:HD21	38:1g:36:LYS:NZ	2.15	0.44
54:1w:11:C:H2'	54:1w:12:U:H6	1.83	0.44
1:2A:8:A:H2'	1:2A:9:U:H6	1.83	0.44
1:2A:471:A:H2'	1:2A:472:A:O4'	2.17	0.44
1:2A:614:U:H5'	1:2A:614(C):A:N6	2.32	0.44
1:2A:661:C:H2'	1:2A:662:G:C8	2.52	0.44
1:2A:830:G:H4'	1:2A:831:G:OP2	2.18	0.44
1:2A:1945:G:C6	1:2A:1946:U:C4	3.06	0.44
1:2A:2128:C:H6	1:2A:2128:C:O5'	2.00	0.44
1:2A:2864:G:C6	1:2A:2865:U:N3	2.86	0.44
5:2F:12:LEU:HD12	5:2F:124:LEU:HD21	2.00	0.44
5:2F:123:LEU:HD12	5:2F:124:LEU:N	2.33	0.44
6:2G:43:LEU:HA	6:2G:43:LEU:HD13	1.74	0.44
22:20:6:GLY:O	22:20:7:LEU:HD23	2.18	0.44
32:2a:473:G:H2'	32:2a:474:G:C8	2.51	0.44
32:2a:1153:C:C4	32:2a:1154:G:N7	2.85	0.44
41:2j:15:THR:OG1	41:2j:94:VAL:HG22	2.18	0.44
45:2n:39:LEU:HD11	45:2n:47:LEU:HD12	1.99	0.44
1:1A:945:A:C4	1:1A:2448:A:C2	3.06	0.44
1:1A:1598:C:H2'	1:1A:1599:C:H6	1.83	0.44
1:1A:2396:G:H1'	23:11:30:VAL:HG12	2.00	0.44
8:1I:103:ARG:HG2	8:1I:104:GLN:N	2.33	0.44
12:1Q:84:GLY:O	12:1Q:85:LYS:HB2	2.16	0.44
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.76	0.44
25:13:23:LEU:HD13	25:13:50:VAL:HG11	1.99	0.44
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.98	0.44
32:1a:179:A:H2'	32:1a:180:U:H6	1.83	0.44
33:1b:185:ILE:HG22	33:1b:199:TYR:CD2	2.51	0.44
34:1c:124:ILE:HG21	34:1c:130:VAL:HG13	2.00	0.44
46:1o:85:LEU:HD23	46:1o:85:LEU:HA	1.86	0.44
1:2A:307:G:H21	1:2A:330:A:N6	2.13	0.44
1:2A:1401:G:H2'	1:2A:1402:C:O4'	2.18	0.44
1:2A:1530:C:O2'	1:2A:1531:C:O5'	2.33	0.44
1:2A:1999:C:H2'	1:2A:2000:G:O4'	2.16	0.44
8:2I:129:THR:HG22	8:2I:139:GLN:HG3	2.00	0.44
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:41:ILE:HG13	24:22:43:GLN:HG2	2.00	0.44
28:26:14:THR:HG1	28:26:48:VAL:HG13	1.82	0.44
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.18	0.44
32:2a:692:U:H2'	32:2a:694:A:OP2	2.18	0.44
32:2a:1029:C:OP1	32:2a:1029:C:H4'	2.18	0.44
32:2a:1142:G:C8	32:2a:1143:G:C8	3.05	0.44
32:2a:1206:G:C6	32:2a:1207:2MG:C5	3.06	0.44
32:2a:1456:G:O2'	51:2t:39:LYS:HE3	2.16	0.44
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.82	0.44
34:2c:152:ILE:HG22	34:2c:167:TRP:HB2	2.00	0.44
40:2i:43:ALA:HA	40:2i:74:ILE:HD13	2.00	0.44
50:2s:27:GLU:HB2	50:2s:28:LYS:HA	2.00	0.44
1:1A:620:G:N3	1:1A:620:G:H5'	2.32	0.43
1:1A:2846:G:H2'	1:1A:2847:U:O4'	2.18	0.43
6:1G:4:ASP:OD2	6:1G:9:ARG:NH1	2.51	0.43
7:1H:121:ILE:HG13	7:1H:144:VAL:HG21	2.00	0.43
10:1O:68:GLU:CB	10:1O:78:ARG:HB2	2.46	0.43
28:16:6:ARG:HD3	28:16:24:GLU:OE2	2.18	0.43
32:1a:166:G:H2'	32:1a:167:G:C8	2.53	0.43
33:1b:97:TRP:HZ3	33:1b:176:GLU:OE2	2.00	0.43
36:1e:11:ILE:HG22	36:1e:12:LEU:HB2	1.98	0.43
42:1k:104:GLN:O	42:1k:105:VAL:C	2.61	0.43
50:1s:48:THR:HA	50:1s:60:VAL:O	2.18	0.43
51:1t:33:ILE:HG12	51:1t:62:LEU:HB3	2.00	0.43
55:1x:66:C:H2'	55:1x:67:C:O4'	2.18	0.43
1:2A:68:G:H2'	1:2A:69:C:H6	1.83	0.43
1:2A:207:A:H2'	1:2A:208:C:O4'	2.18	0.43
1:2A:272:G:H4'	1:2A:272(A):U:C5'	2.48	0.43
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.35	0.43
1:2A:2029:G:H2'	1:2A:2031:A:OP1	2.18	0.43
1:2A:2335:A:C8	1:2A:2337:G:C5	3.06	0.43
4:2E:37:ARG:HG3	4:2E:44:TYR:CZ	2.53	0.43
5:2F:124:LEU:HG	5:2F:125:LEU:N	2.33	0.43
7:2H:38:SER:HB3	7:2H:41:MET:HG2	1.99	0.43
7:2H:170:ARG:O	7:2H:171:LEU:HD23	2.17	0.43
9:2N:71:ILE:HG21	9:2N:84:LYS:HB3	2.00	0.43
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.17	0.43
18:2W:10:VAL:O	18:2W:12:ILE:N	2.46	0.43
21:2Z:92:SER:HB2	21:2Z:94:GLU:OE1	2.18	0.43
32:2a:299:G:H2'	32:2a:300:A:C8	2.53	0.43
32:2a:1077:G:H5'	32:2a:1078:U:OP2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1298:C:C4	38:2g:114:ARG:HD3	2.53	0.43
35:2d:146:ILE:HD12	35:2d:146:ILE:H	1.81	0.43
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.98	0.43
40:2i:9:ARG:HA	40:2i:13:ALA:O	2.17	0.43
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.99	0.43
1:1A:271(D):G:H2'	1:1A:271(E):U:C6	2.52	0.43
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.53	0.43
1:1A:667:U:O2	30:18:2:PRO:HD2	2.17	0.43
1:1A:1006:C:C2	1:1A:1138:G:N2	2.86	0.43
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.01	0.43
1:1A:2136:C:C4	1:1A:2155:G:N1	2.84	0.43
3:1D:6:PHE:HE2	3:1D:18:VAL:HG13	1.83	0.43
12:1Q:10:ARG:HH11	12:1Q:11:LYS:HE2	1.83	0.43
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	2.00	0.43
26:14:63:TYR:H	26:14:63:TYR:HD1	1.66	0.43
32:1a:119:A:C5	32:1a:240:C:C4	3.06	0.43
32:1a:441:A:H3'	32:1a:442:C:C6	2.53	0.43
32:1a:938:A:C6	32:1a:939:G:C5	3.06	0.43
32:1a:1084:G:C5	32:1a:1085:U:C4	3.05	0.43
33:1b:83:MET:HG3	33:1b:234:PRO:HG3	2.00	0.43
34:1c:15:THR:HG21	34:1c:181:ASN:HA	2.00	0.43
39:1h:87:SER:HB2	39:1h:93:VAL:HB	1.99	0.43
50:1s:40:ILE:HD12	50:1s:66:MET:O	2.17	0.43
1:2A:194:G:H2'	1:2A:195:A:O4'	2.18	0.43
1:2A:974:G:C4	1:2A:989:G:C2	3.06	0.43
1:2A:1163:G:OP1	17:2V:24:LYS:NZ	2.47	0.43
1:2A:1843:C:H5'	3:2D:253:GLN:OE1	2.18	0.43
19:2X:12:VAL:HG21	19:2X:27:THR:HG22	2.00	0.43
30:28:6:THR:HG22	30:28:63:PRO:HD2	2.00	0.43
32:2a:152:A:N6	32:2a:170:U:O2	2.51	0.43
32:2a:302:G:N3	32:2a:556:C:H4'	2.34	0.43
32:2a:826:C:H4'	39:2h:12:ARG:HG2	2.00	0.43
32:2a:1264:C:N4	32:2a:1272:G:O6	2.50	0.43
32:2a:1287:A:N6	32:2a:1371:G:O4'	2.45	0.43
33:2b:118:LEU:O	33:2b:122:PHE:HB3	2.18	0.43
34:2c:60:ALA:HB3	34:2c:63:ASN:HD21	1.83	0.43
35:2d:99:SER:HB3	35:2d:139:ARG:HG3	1.99	0.43
40:2i:8:GLY:HA3	40:2i:76:ALA:O	2.18	0.43
40:2i:127:LYS:O	40:2i:128:ARG:HG2	2.17	0.43
56:2y:18:G:N2	56:2y:55:PSU:HN3	2.15	0.43
56:2y:50:U:H2'	56:2y:51:U:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.17	0.43
1:1A:857:C:N4	1:1A:858:U:O4	2.52	0.43
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.18	0.43
1:1A:945:A:C2	1:1A:2448:A:C4	3.07	0.43
1:1A:1581:G:C5	1:1A:1582:C:C4	3.07	0.43
1:1A:2094:G:O2'	1:1A:2095:C:H5'	2.18	0.43
1:1A:2115:G:N2	1:1A:2117:A:N7	2.66	0.43
1:1A:2302:G:C2	1:1A:2315:G:C2	3.06	0.43
7:1H:15:VAL:HG12	7:1H:28:GLY:HA3	1.99	0.43
19:1X:80:ILE:HD12	19:1X:80:ILE:N	2.33	0.43
32:1a:173:U:C2	32:1a:197:A:N1	2.86	0.43
32:1a:343:U:O2'	32:1a:346:G:O6	2.30	0.43
32:1a:632:A:H2'	32:1a:633:G:O4'	2.18	0.43
32:1a:736:C:H2'	32:1a:737:A:H8	1.83	0.43
32:1a:1127:G:H2'	32:1a:1128:C:H6	1.83	0.43
33:1b:163:PHE:HA	33:1b:185:ILE:O	2.16	0.43
35:1d:67:ILE:HD13	35:1d:196:LEU:HD23	1.99	0.43
35:1d:155:LEU:HD12	35:1d:155:LEU:HA	1.57	0.43
36:1e:137:GLU:O	36:1e:141:GLN:HG3	2.18	0.43
51:1t:90:GLN:O	51:1t:93:GLU:HB2	2.17	0.43
57:1z:1:SER:HB3	57:1z:10:LYS:HG3	2.00	0.43
1:2A:350:U:H2'	1:2A:351:G:O4'	2.18	0.43
1:2A:394:A:C6	1:2A:395:U:C4	3.06	0.43
1:2A:1263:U:C4	1:2A:1264:G:C6	3.06	0.43
1:2A:2703:C:H2'	1:2A:2704:C:H6	1.82	0.43
2:2B:33:G:C6	2:2B:34:U:C4	3.07	0.43
5:2F:160:ASN:ND2	5:2F:163:VAL:HG23	2.33	0.43
6:2G:129:GLY:O	6:2G:161:THR:HB	2.17	0.43
14:2S:20:ARG:HD2	14:2S:20:ARG:HA	1.81	0.43
32:2a:461:A:O2'	32:2a:470:C:H5'	2.18	0.43
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.52	0.43
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.17	0.43
32:2a:1244:C:C2	32:2a:1294:G:N2	2.86	0.43
32:2a:1288:A:H5''	52:2u:9:ARG:HH22	1.83	0.43
34:2c:51:GLY:O	34:2c:70:VAL:HG12	2.19	0.43
35:2d:105:VAL:HG13	35:2d:110:PHE:HB2	1.99	0.43
56:2y:7:A:H5'	62:2y:204:HOH:O	2.19	0.43
56:2y:68:C:C4	56:2y:69:G:C8	3.06	0.43
56:2y:74:C:H2'	56:2y:75:C:C6	2.53	0.43
1:1A:1230:C:H2'	1:1A:1231:G:C8	2.53	0.43
1:1A:1312:U:OP2	19:1X:63:LYS:HE2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1364:G:P	23:11:3:LYS:HG3	2.58	0.43
1:1A:2619:C:O2'	1:1A:2620:C:H5'	2.18	0.43
5:1F:140:LEU:HD21	5:1F:170:LEU:HD21	2.00	0.43
10:1O:87:ILE:HD12	10:1O:91:LEU:HA	2.00	0.43
21:1Z:103:ARG:O	21:1Z:139:VAL:N	2.51	0.43
26:14:53:GLU:HB2	26:14:55:ARG:O	2.18	0.43
32:1a:70:G:H2'	32:1a:71:C:O4'	2.18	0.43
32:1a:528:C:H41	43:1l:49:ASN:CG	2.26	0.43
32:1a:755:G:OP2	46:1o:65:ARG:HD2	2.18	0.43
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.99	0.43
37:1f:42:GLU:OE2	37:1f:59:TYR:OH	2.19	0.43
41:1j:55:LYS:O	41:1j:55:LYS:HG2	2.16	0.43
42:1k:78:GLN:O	42:1k:104:GLN:HB3	2.18	0.43
42:1k:85:ARG:NH2	42:1k:111:ASP:OD2	2.51	0.43
42:1k:96:ARG:HH11	42:1k:96:ARG:CB	2.30	0.43
1:2A:11:G:H2'	1:2A:12:U:H5'	2.00	0.43
1:2A:644:A:C2	1:2A:2369:A:H1'	2.54	0.43
1:2A:774:A:H2'	1:2A:774:A:N3	2.33	0.43
1:2A:1410:G:N2	1:2A:1593:G:C4	2.86	0.43
1:2A:1889:A:N1	1:2A:2234:G:H1'	2.33	0.43
1:2A:2355:C:H1'	22:20:39:ARG:HH21	1.83	0.43
1:2A:2689:U:O2	1:2A:2689:U:H2'	2.17	0.43
15:2T:36:GLU:OE2	15:2T:41:ARG:NH2	2.49	0.43
17:2V:24:LYS:HB3	17:2V:24:LYS:HE2	1.49	0.43
21:2Z:53:ILE:CD1	21:2Z:99:TYR:HB2	2.48	0.43
26:24:46:GLN:HG2	26:24:48:ARG:H	1.83	0.43
32:2a:200:G:H2'	32:2a:201:C:O4'	2.18	0.43
32:2a:224:C:H2'	32:2a:225:C:H6	1.83	0.43
32:2a:232:G:H2'	32:2a:233:C:O4'	2.19	0.43
32:2a:502:G:H2'	32:2a:503:C:O4'	2.19	0.43
33:2b:27:LYS:HD2	33:2b:193:ASP:OD1	2.17	0.43
35:2d:112:VAL:HG22	35:2d:116:GLN:HE22	1.83	0.43
45:2n:58:LYS:HB3	45:2n:58:LYS:HE3	1.85	0.43
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.54	0.43
1:1A:685:A:H1'	1:1A:688:U:O4	2.18	0.43
1:1A:723:G:H2'	1:1A:724:U:O4'	2.19	0.43
1:1A:995:C:O2	9:1N:3:THR:OG1	2.35	0.43
1:1A:1297:C:O2'	1:1A:1302:A:N1	2.46	0.43
15:1T:51:ARG:HG3	15:1T:98:LYS:HD2	1.99	0.43
32:1a:737:A:OP1	37:1f:92:LYS:HB2	2.18	0.43
32:1a:979:C:H2'	32:1a:980:C:H5'	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	2.00	0.43
38:1g:50:ILE:HG13	38:1g:61:VAL:HG11	2.00	0.43
40:1i:23:ASN:HB2	40:1i:25:LYS:HZ3	1.82	0.43
40:1i:56:LEU:H	40:1i:56:LEU:HD12	1.84	0.43
46:1o:17:ARG:HG3	46:1o:17:ARG:NH1	2.30	0.43
47:1p:4:ILE:HB	47:1p:66:PRO:HA	2.00	0.43
50:1s:15:LEU:O	50:1s:19:VAL:HG23	2.19	0.43
52:1u:12:LYS:HB3	52:1u:17:THR:O	2.18	0.43
1:2A:184:C:H2'	1:2A:185:U:H6	1.81	0.43
1:2A:458:G:O2'	1:2A:469:G:O6	2.29	0.43
1:2A:821:A:H2'	1:2A:946:G:H5''	1.99	0.43
1:2A:1159:U:O2'	1:2A:1160:G:H5'	2.18	0.43
1:2A:2116:G:N7	1:2A:2166:G:N2	2.67	0.43
1:2A:2420:C:H5'	28:26:54:ILE:HD11	1.99	0.43
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.18	0.43
4:2E:7:VAL:HG23	4:2E:51:PHE:HE2	1.83	0.43
6:2G:15:VAL:HG13	6:2G:175:LEU:HD12	2.01	0.43
6:2G:105:LYS:O	6:2G:109:VAL:HG23	2.19	0.43
8:2I:14:ASP:O	8:2I:17:GLN:HB2	2.18	0.43
8:2I:79:ILE:HD12	8:2I:92:VAL:HG21	2.00	0.43
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	2.00	0.43
11:2P:135:LEU:HD23	11:2P:135:LEU:HA	1.64	0.43
12:2Q:15:GLY:H	12:2Q:41:TRP:HZ2	1.65	0.43
14:2S:61:ASN:O	14:2S:65:VAL:HG13	2.19	0.43
16:2U:27:LEU:HB3	16:2U:31:SER:HB3	2.00	0.43
32:2a:1141:C:H2'	32:2a:1142:G:O4'	2.18	0.43
32:2a:1147:C:O2'	40:2i:16:ARG:NE	2.52	0.43
1:1A:361:G:C6	1:1A:362:U:O4	2.72	0.43
1:1A:1491:G:O2'	3:1D:101:GLU:HB2	2.17	0.43
1:1A:1820:U:C2	3:1D:202:LYS:HD3	2.53	0.43
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.18	0.43
1:1A:2072:G:H2'	1:1A:2073:C:O4'	2.19	0.43
1:1A:2099:U:O2	1:1A:2190:G:N2	2.42	0.43
1:1A:2302:G:N2	1:1A:2315:G:C4	2.86	0.43
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.54	0.43
2:1B:12:C:O2'	22:10:74:ARG:HB3	2.18	0.43
9:1N:138:LEU:HD23	9:1N:138:LEU:HA	1.79	0.43
10:1O:68:GLU:H	10:1O:68:GLU:CD	2.25	0.43
26:14:58:ARG:HB3	26:14:58:ARG:NH1	2.29	0.43
32:1a:78:G:C6	32:1a:91:C:N4	2.87	0.43
32:1a:159:G:O2'	32:1a:161:A:N7	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:256:U:H2'	32:1a:257:G:O4'	2.18	0.43
32:1a:434:U:H2'	32:1a:435:C:O4'	2.19	0.43
32:1a:679:C:H2'	32:1a:680:C:C6	2.53	0.43
32:1a:749:C:H2'	32:1a:750:G:H8	1.84	0.43
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.17	0.43
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.53	0.43
32:1a:1486:G:H2'	32:1a:1487:G:O4'	2.19	0.43
36:1e:85:GLY:C	36:1e:87:SER:N	2.76	0.43
39:1h:114:THR:HG22	39:1h:130:GLY:O	2.19	0.43
45:1n:53:LEU:HB3	45:1n:56:VAL:HG21	1.99	0.43
1:2A:61:G:H5'	24:22:50:ILE:HG21	2.00	0.43
1:2A:288:C:H2'	1:2A:289:A:H8	1.84	0.43
1:2A:817:C:O2'	1:2A:839:U:H5''	2.18	0.43
1:2A:879:G:C6	1:2A:880:G:C2	3.07	0.43
1:2A:1283:G:N2	1:2A:1285:G:H3'	2.33	0.43
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.19	0.43
2:2B:44:G:C2	2:2B:48:A:C2	3.07	0.43
6:2G:56:ALA:HA	6:2G:59:GLU:HG2	2.00	0.43
6:2G:122:PRO:HB3	6:2G:170:ARG:HH21	1.84	0.43
10:2O:87:ILE:HD12	10:2O:91:LEU:HA	1.99	0.43
18:2W:12:ILE:HG13	18:2W:42:ARG:NH1	2.33	0.43
22:20:43:THR:HG23	22:20:43:THR:O	2.18	0.43
32:2a:658:G:O4'	46:2o:22:THR:HB	2.19	0.43
32:2a:1284:C:H3'	32:2a:1285:A:C8	2.53	0.43
35:2d:86:LYS:H	35:2d:86:LYS:HD2	1.83	0.43
36:2e:60:TYR:O	36:2e:64:ARG:HG3	2.19	0.43
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.59	0.43
40:2i:40:LEU:HD23	40:2i:40:LEU:HA	1.81	0.43
40:2i:59:PHE:HZ	40:2i:88:TYR:CE1	2.37	0.43
44:2m:107:ALA:HB3	44:2m:111:LYS:HE3	1.99	0.43
54:2w:73:A:H3'	54:2w:73:A:OP2	2.18	0.43
56:2y:30:G:C4	56:2y:31:A:C8	3.07	0.43
1:1A:234:C:H2'	1:1A:235:U:H6	1.84	0.43
1:1A:862:G:H2'	1:1A:863:A:O4'	2.19	0.43
1:1A:887:A:C2	1:1A:890:A:C8	3.06	0.43
1:1A:958:U:H4'	62:1A:4437:HOH:O	2.17	0.43
1:1A:2101:G:H1	1:1A:2188:C:H42	1.66	0.43
1:1A:2348:U:O4	1:1A:2382:G:N1	2.51	0.43
1:1A:2364:C:H4'	22:10:56:ASP:OD1	2.19	0.43
16:1U:12:ARG:HD2	62:1U:308:HOH:O	2.18	0.43
26:14:53:GLU:HB2	26:14:55:ARG:C	2.43	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:18:26:LYS:HG2	30:18:46:ARG:O	2.18	0.43
32:1a:109:A:H2'	32:1a:326:G:N2	2.34	0.43
32:1a:299:G:O5'	32:1a:299:G:H8	2.01	0.43
32:1a:1118:C:H1'	32:1a:1179:A:C5	2.53	0.43
32:1a:1489:G:H2'	32:1a:1490:C:O4'	2.18	0.43
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.41	0.43
35:1d:194:LEU:HA	35:1d:194:LEU:HD13	1.70	0.43
38:1g:46:ALA:HB1	38:1g:121:ALA:HB2	1.99	0.43
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.85	0.43
56:1y:35:A:OP2	56:1y:35:A:H8	2.02	0.43
1:2A:319:C:H2'	1:2A:320:A:C8	2.54	0.43
1:2A:668:G:H5'	1:2A:669:G:OP2	2.19	0.43
1:2A:876:C:O5'	1:2A:876:C:H6	2.02	0.43
1:2A:1968:G:H5''	62:2A:4421:HOH:O	2.17	0.43
1:2A:2118:U:N3	1:2A:2149:G:H1'	2.34	0.43
1:2A:2143:C:H42	1:2A:2148:G:H1	1.66	0.43
1:2A:2886:G:H2'	1:2A:2887:U:H6	1.84	0.43
3:2D:182:LEU:HD23	3:2D:182:LEU:HA	1.75	0.43
11:2P:19:VAL:HG12	11:2P:27:HIS:HB3	2.00	0.43
13:2R:24:GLN:HE22	13:2R:40:LYS:HB3	1.83	0.43
20:2Y:5:MET:HE2	20:2Y:5:MET:HB2	1.68	0.43
28:26:47:THR:HG22	28:26:48:VAL:N	2.34	0.43
32:2a:736:C:H2'	32:2a:737:A:C8	2.54	0.43
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.84	0.43
32:2a:1325:C:OP1	52:2u:15:ARG:NH1	2.52	0.43
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	2.00	0.43
33:2b:215:LEU:O	33:2b:219:VAL:HG23	2.18	0.43
36:2e:72:GLN:O	36:2e:75:THR:HG22	2.19	0.43
48:2q:82:MET:O	48:2q:86:GLU:HG2	2.19	0.43
1:1A:1094:U:H1'	1:1A:1097:U:C4	2.54	0.43
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.19	0.43
1:1A:2196:C:OP2	62:1A:4251:HOH:O	2.21	0.43
1:1A:2291:U:O2'	1:1A:2374:C:O2	2.36	0.43
1:1A:2572:A:O5'	1:1A:2574:G:H4'	2.19	0.43
2:1B:90:A:C5	2:1B:91:C:H1'	2.54	0.43
4:1E:69:LYS:HG2	4:1E:69:LYS:O	2.19	0.43
5:1F:34:TRP:NE1	11:1P:8:PRO:HD3	2.34	0.43
32:1a:153:C:H2'	32:1a:154:C:H6	1.84	0.43
32:1a:831:U:H2'	32:1a:832:C:C6	2.54	0.43
32:1a:1465:C:H2'	32:1a:1466:C:O4'	2.17	0.43
35:1d:188:LEU:HA	35:1d:189:PRO:HD3	1.87	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:66:MET:HE3	36:1e:66:MET:HB3	1.92	0.43
38:1g:151:TYR:HB3	38:1g:154:TYR:HD2	1.84	0.43
55:1x:23:C:H2'	55:1x:24:U:C6	2.54	0.43
56:1y:2:C:H2'	56:1y:3:C:C6	2.53	0.43
1:2A:1509(A):A:N6	1:2A:1509(B):A:N1	2.67	0.43
1:2A:1574:C:H2'	1:2A:1575:C:H6	1.84	0.43
1:2A:2080:G:OP1	23:21:35:THR:HG21	2.19	0.43
1:2A:2234:G:H2'	1:2A:2235:G:O4'	2.18	0.43
1:2A:2304:G:OP1	6:2G:124:SER:HB2	2.19	0.43
4:2E:1:MET:O	4:2E:84:PHE:HB2	2.19	0.43
8:2I:81:VAL:O	8:2I:146:ALA:HA	2.19	0.43
16:2U:86:ALA:HB2	16:2U:116:ALA:HB2	2.01	0.43
21:2Z:146:ILE:HG23	21:2Z:174:VAL:O	2.19	0.43
32:2a:163:C:H2'	32:2a:164:U:C6	2.54	0.43
32:2a:828:A:H5''	32:2a:859:A:C2	2.54	0.43
32:2a:986:A:H2'	32:2a:987:G:O4'	2.19	0.43
36:2e:99:GLY:HA2	36:2e:116:THR:O	2.19	0.43
37:2f:7:ASN:HB2	37:2f:89:MET:HB3	1.99	0.43
47:2p:60:LEU:HD13	47:2p:60:LEU:HA	1.83	0.43
56:2y:26:A:N1	56:2y:44:G:C6	2.87	0.43
1:1A:207:A:H2'	1:1A:208:C:O4'	2.18	0.43
1:1A:2102:U:H3	1:1A:2187:G:H1	1.66	0.43
2:1B:4:C:H2'	2:1B:5:C:O4'	2.19	0.43
13:1R:96:ARG:HD2	13:1R:115:GLU:OE2	2.19	0.43
15:1T:8:LYS:HE3	15:1T:8:LYS:HB3	1.83	0.43
26:14:7:PRO:HB2	26:14:27:THR:CG2	2.49	0.43
43:1l:52:LEU:HD23	43:1l:52:LEU:HA	1.78	0.43
46:1o:55:GLY:HA2	46:1o:58:MET:CE	2.44	0.43
55:1x:20:U:H4'	55:1x:21:A:OP2	2.18	0.43
56:1y:4:C:H1'	56:1y:70:G:N2	2.33	0.43
1:2A:908:C:OP1	12:2Q:22:LYS:HB3	2.18	0.43
1:2A:1432:C:H2'	1:2A:1433:U:O4'	2.18	0.43
1:2A:1574:C:H2'	1:2A:1575:C:C6	2.54	0.43
1:2A:1589:C:H2'	1:2A:1590:U:H6	1.83	0.43
1:2A:1647:G:H3'	1:2A:1647:G:OP2	2.18	0.43
1:2A:1840:G:C6	1:2A:1841:U:C4	3.06	0.43
1:2A:2572:A:C8	4:2E:144:ARG:HD3	2.53	0.43
2:2B:42:C:O2'	6:2G:66:GLN:HG2	2.19	0.43
6:2G:16:ARG:HB2	6:2G:17:PRO:HD3	2.01	0.43
6:2G:18:GLU:O	6:2G:22:ARG:HB2	2.19	0.43
7:2H:78:GLY:O	7:2H:136:ILE:HG22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	2.01	0.43
18:2W:6:ILE:HG12	18:2W:104:THR:HG23	2.01	0.43
19:2X:2:LYS:HD2	19:2X:2:LYS:HA	1.75	0.43
20:2Y:6:HIS:H	20:2Y:6:HIS:HD2	1.67	0.43
21:2Z:30:ASN:HA	21:2Z:89:PHE:CE1	2.52	0.43
21:2Z:149:SER:OG	21:2Z:170:THR:HG23	2.19	0.43
21:2Z:152:ALA:O	21:2Z:155:LEU:HD22	2.19	0.43
22:20:36:ILE:HD12	22:20:58:THR:CG2	2.49	0.43
25:23:26:LEU:O	25:23:35:ARG:HD3	2.19	0.43
32:2a:841:U:H6	32:2a:841:U:OP2	2.02	0.43
32:2a:1101:A:H62	33:2b:175:ARG:HH21	1.66	0.43
34:2c:16:ARG:HD2	34:2c:16:ARG:HA	1.87	0.43
34:2c:42:LEU:O	34:2c:43:LEU:HD23	2.18	0.43
35:2d:57:ARG:H	35:2d:57:ARG:HG2	1.59	0.43
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	2.00	0.43
36:2e:6:PHE:HD1	36:2e:6:PHE:HA	1.71	0.43
37:2f:96:PRO:HB3	49:2r:30:ASP:CG	2.44	0.43
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.19	0.43
51:2t:16:HIS:CE1	51:2t:20:LEU:HD11	2.53	0.43
51:2t:36:LEU:CD1	51:2t:58:LYS:HG3	2.49	0.43
1:1A:402:A:O2'	1:1A:403:U:H5'	2.18	0.43
1:1A:485:C:O2'	1:1A:486:C:H5'	2.18	0.43
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.19	0.43
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.51	0.43
1:1A:1924:C:H4'	55:1x:13:C:O2'	2.18	0.43
1:1A:2246:G:H2'	1:1A:2247:A:C8	2.54	0.43
1:1A:2319:G:N2	14:1S:3:ARG:HE	2.16	0.43
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.19	0.43
1:1A:2615:U:H2'	1:1A:2616:C:H6	1.84	0.43
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.54	0.43
2:1B:88:C:H2'	2:1B:89:G:O4'	2.19	0.43
3:1D:183:ARG:HG3	3:1D:270:ILE:HD13	2.01	0.43
4:1E:101:ARG:NH2	4:1E:171:GLU:HB2	2.34	0.43
7:1H:56:SER:OG	7:1H:57:ASP:N	2.50	0.43
8:1I:10:GLU:O	8:1I:11:ASN:C	2.62	0.43
10:1O:17:ARG:C	10:1O:18:LYS:HG2	2.44	0.43
13:1R:86:ARG:NH1	62:1R:303:HOH:O	2.52	0.43
32:1a:254:G:OP1	48:1q:67:LYS:O	2.36	0.43
32:1a:509:A:C8	32:1a:509:A:H3'	2.53	0.43
32:1a:719:C:O2'	49:1r:49:LYS:HB3	2.19	0.43
32:1a:741:G:H2'	32:1a:742:G:O4'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1024:G:O2'	32:1a:1025:U:H5''	2.19	0.43
32:1a:1320:C:O2	50:1s:36:ARG:NH2	2.51	0.43
32:1a:1368:G:OP1	40:1i:114:TYR:N	2.52	0.43
35:1d:107:ARG:HG3	35:1d:173:TRP:HH2	1.83	0.43
36:1e:102:ALA:HB2	36:1e:120:THR:HG21	2.01	0.43
50:1s:28:LYS:HD3	50:1s:47:HIS:CD2	2.54	0.43
56:1y:18:G:H4'	56:1y:19:G:OP1	2.19	0.43
1:2A:250:G:H2'	1:2A:251:A:C8	2.54	0.43
1:2A:259:G:O2'	1:2A:621:A:O2'	2.31	0.43
1:2A:452:G:N7	62:2A:4021:HOH:O	2.37	0.43
1:2A:1529:G:C6	1:2A:1530:C:N4	2.87	0.43
1:2A:2376:A:N6	14:2S:89:ARG:HD3	2.34	0.43
2:2B:14:U:H1'	2:2B:108:U:O2'	2.19	0.43
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.65	0.43
4:2E:104:VAL:HG11	4:2E:188:VAL:HG13	2.00	0.43
8:2I:104:GLN:HG2	8:2I:105:HIS:CE1	2.54	0.43
32:2a:90:U:H2'	32:2a:91:C:C6	2.52	0.43
32:2a:202:U:H3'	32:2a:203:U:C5	2.54	0.43
32:2a:328:C:H4'	32:2a:329:A:H5'	2.01	0.43
32:2a:976:G:C8	32:2a:1358:U:C2	3.06	0.43
41:2j:16:LEU:HD23	41:2j:16:LEU:HA	1.71	0.43
44:2m:50:GLU:HA	44:2m:53:VAL:HG22	2.01	0.43
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.19	0.43
1:1A:706:A:H2'	1:1A:707:G:O4'	2.19	0.42
1:1A:829:A:N7	1:1A:2248:C:H5'	2.33	0.42
1:1A:1095:A:N7	1:1A:1096:A:N7	2.67	0.42
10:1O:63:VAL:HG12	10:1O:106:LEU:HD21	2.00	0.42
19:1X:92:LEU:O	19:1X:94:GLY:N	2.52	0.42
32:1a:116:A:H61	32:1a:313:A:H1'	1.83	0.42
32:1a:966:M2G:CM1	40:1i:127:LYS:HE2	2.49	0.42
32:1a:1072:G:H2'	32:1a:1073:U:C6	2.53	0.42
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.19	0.42
34:1c:71:ALA:HA	34:1c:106:VAL:CG2	2.49	0.42
38:1g:37:ASN:O	38:1g:41:ARG:HD2	2.18	0.42
48:1q:31:LEU:HD23	48:1q:32:TYR:CZ	2.53	0.42
1:2A:572:A:OP2	17:2V:78:LYS:NZ	2.49	0.42
1:2A:884:C:H2'	1:2A:885:C:O4'	2.19	0.42
1:2A:1425:G:C6	1:2A:1426:G:C6	3.06	0.42
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.54	0.42
1:2A:2102:U:H2'	1:2A:2103:C:C6	2.54	0.42
1:2A:2836:U:C4	1:2A:2883:A:N6	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:110:LEU:O	5:2F:114:VAL:HG23	2.19	0.42
13:2R:84:ALA:HB3	13:2R:85:PRO:HD3	1.99	0.42
16:2U:58:ARG:O	16:2U:58:ARG:HG3	2.19	0.42
20:2Y:38:ILE:HD13	20:2Y:66:PRO:HA	2.01	0.42
20:2Y:43:ASN:ND2	20:2Y:65:ALA:HB3	2.34	0.42
21:2Z:98:MET:HE3	21:2Z:98:MET:HB2	1.81	0.42
32:2a:266:G:O3'	48:2q:67:LYS:HB2	2.18	0.42
32:2a:974:A:H8	32:2a:974:A:OP1	2.02	0.42
32:2a:1263:C:N3	32:2a:1272:G:O6	2.52	0.42
34:2c:83:ARG:C	34:2c:85:ARG:H	2.27	0.42
38:2g:78:ARG:NE	38:2g:79:ARG:HG3	2.34	0.42
41:2j:49:VAL:CG2	45:2n:41:ARG:HB2	2.48	0.42
44:2m:13:LYS:C	44:2m:44:ARG:HD2	2.44	0.42
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.19	0.42
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.85	0.42
1:1A:1311:G:H2'	29:17:47:ARG:NH2	2.34	0.42
1:1A:1394:U:H6	1:1A:1394:U:H3'	1.83	0.42
1:1A:1833:U:O2'	1:1A:1969:A:N1	2.46	0.42
1:1A:2137:C:H2'	1:1A:2138:C:H6	1.83	0.42
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.19	0.42
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	2.01	0.42
5:1F:31:HIS:NE2	5:1F:35:GLU:OE2	2.51	0.42
11:1P:134:ALA:O	11:1P:138:LEU:HB3	2.19	0.42
32:1a:875:C:O2'	39:1h:14:ARG:HD2	2.19	0.42
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.18	0.42
32:1a:1342:C:O2'	40:1i:124:GLN:HG3	2.18	0.42
33:1b:52:GLU:HG2	33:1b:56:ARG:NH2	2.32	0.42
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	2.00	0.42
42:1k:87:THR:O	42:1k:87:THR:OG1	2.34	0.42
54:1w:18:G:H21	54:1w:58:A:H5'	1.84	0.42
1:2A:438:G:H2'	1:2A:440:G:C8	2.55	0.42
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.54	0.42
1:2A:1185:C:H5''	1:2A:1186:G:OP1	2.19	0.42
1:2A:1261:C:OP2	18:2W:83:LYS:NZ	2.39	0.42
1:2A:1386:C:H2'	1:2A:1387:C:C6	2.54	0.42
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.19	0.42
1:2A:1820:U:O2	3:2D:201:HIS:HB3	2.19	0.42
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.50	0.42
1:2A:2386:C:H2'	1:2A:2387:U:C6	2.54	0.42
2:2B:114:C:O2'	14:2S:46:VAL:HG13	2.19	0.42
5:2F:53:THR:CG2	5:2F:55:GLY:H	2.25	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:110:ASP:HA	8:2I:111:PRO:HD2	1.94	0.42
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.22	0.42
14:2S:93:LYS:HE2	14:2S:93:LYS:HB2	1.67	0.42
23:21:56:GLN:NE2	23:21:87:PRO:HD3	2.34	0.42
32:2a:165:C:C2	32:2a:166:G:C8	3.08	0.42
32:2a:421:U:H5''	32:2a:422:C:C5	2.53	0.42
32:2a:1001(A):G:C4	32:2a:1002:G:H1'	2.54	0.42
32:2a:1122:U:C4	32:2a:1123:A:N7	2.87	0.42
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.31	0.42
32:2a:1367:C:O2'	41:2j:62:HIS:HE1	2.02	0.42
40:2i:5:TYR:CG	40:2i:6:GLY:N	2.87	0.42
40:2i:42:ARG:NH2	40:2i:42:ARG:HB3	2.34	0.42
50:2s:63:THR:OG1	50:2s:66:MET:HG2	2.18	0.42
51:2t:26:ASN:O	51:2t:30:LYS:HE2	2.19	0.42
51:2t:72:LEU:HD23	51:2t:77:ALA:HB2	2.01	0.42
1:1A:188:G:C6	1:1A:189:G:C4	3.07	0.42
1:1A:754:C:H2'	1:1A:755:C:C6	2.54	0.42
1:1A:1056:G:H5''	1:1A:1057:A:O4'	2.19	0.42
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.66	0.42
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	2.00	0.42
7:1H:144:VAL:O	7:1H:148:ILE:HG12	2.19	0.42
8:1I:130:TYR:O	8:1I:138:ILE:N	2.51	0.42
32:1a:829:G:C6	32:1a:858:G:N2	2.87	0.42
36:1e:8:GLU:HG2	36:1e:32:VAL:HG11	2.01	0.42
41:1j:38:ILE:CG1	41:1j:71:LEU:HB3	2.49	0.42
49:1r:84:LYS:N	49:1r:84:LYS:HD2	2.33	0.42
50:1s:27:GLU:HG3	50:1s:47:HIS:NE2	2.34	0.42
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.51	0.42
1:2A:570:G:H2'	1:2A:2030:A:C5	2.54	0.42
1:2A:2130:U:O2'	1:2A:2133:G:H4'	2.18	0.42
4:2E:181:LEU:HD11	15:2T:6:LEU:HD22	2.01	0.42
8:2I:1:MET:HE3	8:2I:23:PRO:HG3	2.00	0.42
14:2S:66:ALA:O	14:2S:69:VAL:HG12	2.19	0.42
18:2W:11:ARG:HA	18:2W:11:ARG:HD2	1.86	0.42
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.56	0.42
20:2Y:38:ILE:HD11	20:2Y:66:PRO:HG3	2.01	0.42
21:2Z:58:VAL:HG21	21:2Z:66:SER:HB3	2.00	0.42
21:2Z:152:ALA:HB1	21:2Z:163:LEU:HD11	2.02	0.42
21:2Z:159:PRO:HA	21:2Z:160:GLY:HA2	1.45	0.42
26:24:34:GLU:HG2	26:24:35:VAL:HG12	2.01	0.42
32:2a:1291:G:C6	32:2a:1292:U:C4	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1503:A:H2	53:2v:13:A:N7	2.17	0.42
35:2d:110:PHE:CE2	35:2d:148:VAL:HG23	2.55	0.42
35:2d:199:ASN:O	35:2d:201:GLN:N	2.52	0.42
41:2j:47:PHE:CE1	45:2n:37:PHE:HE2	2.36	0.42
42:2k:92:GLU:O	42:2k:96:ARG:HG2	2.18	0.42
1:1A:286:C:H2'	1:1A:287:C:H6	1.85	0.42
1:1A:292:C:H2'	1:1A:293:U:H6	1.85	0.42
1:1A:302:C:OP1	20:1Y:101:LYS:NZ	2.53	0.42
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.55	0.42
1:1A:2466:C:C2	1:1A:2485:G:C2	3.07	0.42
4:1E:79:ARG:HD3	4:1E:79:ARG:HA	1.83	0.42
7:1H:104:GLU:HG3	7:1H:114:VAL:HG12	2.01	0.42
24:12:62:THR:O	24:12:66:GLU:HG3	2.20	0.42
32:1a:198:G:C5	32:1a:220:G:C2	3.08	0.42
32:1a:551:U:H2'	32:1a:552:U:H6	1.82	0.42
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.40	0.42
33:1b:207:ALA:HB3	33:1b:210:SER:HB2	2.01	0.42
35:1d:162:LEU:HB3	35:1d:178:VAL:HG13	2.00	0.42
36:1e:76:ILE:HD12	36:1e:78:HIS:O	2.19	0.42
36:1e:152:ARG:HA	39:1h:64:LYS:NZ	2.34	0.42
37:1f:8:ILE:HG22	37:1f:10:LEU:HD22	2.00	0.42
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.32	0.42
56:1y:19:G:H4'	56:1y:57:G:N2	2.34	0.42
1:2A:290:G:H2'	1:2A:291:C:C6	2.55	0.42
1:2A:1272:A:H3'	1:2A:1273:U:H5''	2.02	0.42
1:2A:1466:G:O2'	1:2A:1546:C:O2'	2.21	0.42
1:2A:1473:G:C6	1:2A:1474:C:C4	3.07	0.42
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.55	0.42
1:2A:2847:U:OP1	15:2T:98:LYS:NZ	2.52	0.42
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.54	0.42
7:2H:89:ILE:H	7:2H:89:ILE:HD12	1.85	0.42
23:21:7:ILE:HG21	23:21:69:LYS:HB3	2.01	0.42
25:23:5:LYS:HE2	25:23:57:GLU:OE2	2.20	0.42
26:24:50:VAL:HG22	44:2m:62:ASN:O	2.19	0.42
32:2a:353:A:H5'	32:2a:353:A:H8	1.83	0.42
32:2a:1125:U:OP1	41:2j:35:SER:OG	2.28	0.42
32:2a:1265:G:C6	32:2a:1266:G:C5	3.08	0.42
32:2a:1342:C:O2'	32:2a:1343:G:H5'	2.20	0.42
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	2.01	0.42
1:1A:375:C:H2'	1:1A:376:C:H6	1.84	0.42
1:1A:783:A:N3	1:1A:783:A:H2'	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.03	0.42
1:1A:1721:G:H8	1:1A:1721:G:O5'	2.02	0.42
1:1A:2144:U:O2	1:1A:2148:G:C2	2.73	0.42
1:1A:2319:G:H22	14:1S:3:ARG:NE	2.17	0.42
1:1A:2832:U:H4'	1:1A:2833:G:H5''	2.01	0.42
3:1D:206:LEU:HA	3:1D:206:LEU:HD23	1.55	0.42
5:1F:34:TRP:CE2	11:1P:8:PRO:HD3	2.55	0.42
6:1G:138:GLN:HB3	6:1G:153:ARG:O	2.19	0.42
7:1H:159:GLU:HG3	7:1H:169:VAL:HG11	2.00	0.42
14:1S:58:LEU:HD23	14:1S:58:LEU:HA	1.89	0.42
32:1a:22:G:H4'	32:1a:885:G:C8	2.54	0.42
32:1a:1103:C:OP1	33:1b:96:ARG:NH1	2.51	0.42
32:1a:1137:C:H5''	32:1a:1138:G:OP1	2.19	0.42
34:1c:91:LEU:HD12	34:1c:91:LEU:HA	1.81	0.42
54:1w:21:A:N6	54:1w:46:G7M:C4	2.82	0.42
1:2A:10:G:H1'	1:2A:2801(A):A:H62	1.85	0.42
1:2A:2142:C:N4	1:2A:2148:G:O6	2.53	0.42
1:2A:2627:G:O2'	1:2A:2781:A:N1	2.49	0.42
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	2.02	0.42
1:2A:2886:G:H2'	1:2A:2887:U:C6	2.54	0.42
2:2B:77:U:OP1	21:2Z:19:ARG:NH2	2.53	0.42
8:2I:31:LEU:HD21	8:2I:38:LEU:HG	2.02	0.42
8:2I:130:TYR:N	8:2I:138:ILE:O	2.47	0.42
32:2a:114:U:H2'	32:2a:115:G:C8	2.55	0.42
32:2a:774:G:N2	32:2a:806:C:C2	2.87	0.42
32:2a:1006:C:H2'	32:2a:1007:C:O4'	2.19	0.42
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.79	0.42
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.83	0.42
34:2c:188:LEU:HD12	34:2c:188:LEU:HA	1.86	0.42
38:2g:78:ARG:HB2	38:2g:87:VAL:HG21	2.01	0.42
40:2i:17:VAL:HG21	40:2i:81:ILE:N	2.34	0.42
43:2l:56:ALA:O	43:2l:67:THR:HA	2.20	0.42
44:2m:3:ARG:HB3	44:2m:4:ILE:H	1.76	0.42
44:2m:26:GLY:C	44:2m:28:ALA:N	2.77	0.42
44:2m:66:LEU:HB3	44:2m:67:GLU:H	1.57	0.42
50:2s:81:ARG:HE	50:2s:81:ARG:HB3	1.60	0.42
2:1B:11:C:OP2	22:10:72:ARG:NH2	2.37	0.42
5:1F:158:THR:OG1	5:1F:195:ASP:OD2	2.20	0.42
10:1O:122:LEU:HD13	15:1T:72:VAL:HG11	2.01	0.42
15:1T:105:LEU:HB2	15:1T:110:ILE:HG13	2.00	0.42
19:1X:66:LEU:HD12	19:1X:66:LEU:HA	1.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:189(D):C:H2'	32:1a:189(E):U:O4'	2.20	0.42
32:1a:502:G:H2'	32:1a:503:C:O4'	2.20	0.42
32:1a:636:U:H2'	32:1a:637:G:H8	1.84	0.42
32:1a:688:G:H2'	32:1a:689:C:H6	1.85	0.42
32:1a:721:G:H4'	32:1a:722:A:O4'	2.19	0.42
32:1a:872:A:C5	32:1a:874:G:C8	3.07	0.42
32:1a:976:G:OP1	45:1n:32:SER:N	2.49	0.42
32:1a:1030(B):C:OP1	32:1a:1030(C):G:N2	2.53	0.42
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.47	0.42
32:1a:1329:A:H2'	32:1a:1330:U:O4'	2.20	0.42
33:1b:207:ALA:HB3	33:1b:210:SER:CB	2.49	0.42
37:1f:99:ALA:HB1	49:1r:23:LYS:HZ1	1.83	0.42
44:1m:49:THR:O	44:1m:53:VAL:HG23	2.20	0.42
56:1y:62:C:H2'	56:1y:63:G:C8	2.54	0.42
1:2A:565:C:OP1	17:2V:82:ARG:NH2	2.50	0.42
1:2A:704:G:N3	1:2A:726:G:C2	2.88	0.42
1:2A:1029:A:N1	1:2A:2465:C:O2'	2.44	0.42
1:2A:1149:G:C2	1:2A:1150:C:C4	3.08	0.42
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	2.01	0.42
1:2A:1359:A:C2	1:2A:1360:A:C8	3.07	0.42
1:2A:1780:A:N6	62:2A:4122:HOH:O	2.51	0.42
1:2A:2135:A:H2'	1:2A:2136:C:C5	2.55	0.42
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.55	0.42
1:2A:2683:C:H4'	4:2E:13:ARG:NH2	2.35	0.42
2:2B:105:A:H5'	2:2B:106:G:OP2	2.19	0.42
3:2D:8:PRO:HB3	3:2D:14:ARG:HG2	2.00	0.42
4:2E:92:THR:O	4:2E:95:ILE:HG23	2.19	0.42
6:2G:111:LEU:HD23	6:2G:117:PHE:HZ	1.84	0.42
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.19	0.42
7:2H:149:ARG:HH12	7:2H:154:PRO:HG2	1.85	0.42
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.26	0.42
32:2a:293:G:C6	32:2a:294:U:C4	3.07	0.42
32:2a:1143:G:H2'	32:2a:1144:G:H8	1.85	0.42
32:2a:1272:G:C2	32:2a:1273:G:C8	3.08	0.42
32:2a:1330:U:H2'	32:2a:1331:G:H5'	2.01	0.42
35:2d:112:VAL:HG22	35:2d:116:GLN:NE2	2.35	0.42
43:2l:28:LYS:HB3	43:2l:28:LYS:HE2	1.91	0.42
43:2l:75:HIS:ND1	43:2l:77:LEU:HB2	2.35	0.42
44:2m:79:LYS:NZ	44:2m:83:ASP:OD2	2.51	0.42
1:1A:152:G:H2'	1:1A:153:C:H6	1.83	0.42
1:1A:539:G:H2'	1:1A:540:C:C6	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1039:G:C2'	1:1A:1040:C:H5'	2.49	0.42
1:1A:1394:U:H2'	1:1A:1395:A:O4'	2.19	0.42
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.49	0.42
1:1A:2418:A:H2'	1:1A:2419:U:C6	2.55	0.42
1:1A:2506:U:C2	1:1A:2585:U:O4	2.73	0.42
1:1A:2712:U:O2'	1:1A:2713:A:H5'	2.20	0.42
6:1G:77:ILE:N	6:1G:82:LEU:O	2.46	0.42
8:1I:134:PRO:C	8:1I:136:VAL:H	2.27	0.42
17:1V:16:PRO:HA	17:1V:96:ILE:HG22	2.00	0.42
21:1Z:146:ILE:O	21:1Z:146:ILE:HG22	2.19	0.42
32:1a:130:A:O2'	32:1a:131:C:O5'	2.36	0.42
32:1a:565:U:OP2	32:1a:566:G:O2'	2.34	0.42
32:1a:627:G:C2'	32:1a:628:G:H5'	2.49	0.42
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.19	0.42
32:1a:1030(C):G:H2'	32:1a:1030(D):A:H8	1.83	0.42
32:1a:1055:A:H2'	34:1c:156:ARG:HD2	2.01	0.42
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.19	0.42
33:1b:114:ARG:NH2	33:1b:118:LEU:HD21	2.34	0.42
36:1e:41:VAL:O	36:1e:66:MET:HA	2.18	0.42
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	2.02	0.42
39:1h:46:LYS:HG3	39:1h:64:LYS:HG3	2.02	0.42
47:1p:56:ALA:O	47:1p:60:LEU:HB2	2.18	0.42
56:1y:10:G:H2'	56:1y:11:C:C6	2.54	0.42
1:2A:857:C:H4'	22:20:23:VAL:HG21	2.01	0.42
1:2A:1357:U:H2'	1:2A:1358:G:O4'	2.19	0.42
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.54	0.42
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.51	0.42
4:2E:69:LYS:O	4:2E:69:LYS:HG2	2.19	0.42
8:2I:50:ARG:O	8:2I:54:GLN:HB2	2.20	0.42
8:2I:55:ALA:HB2	62:2I:202:HOH:O	2.20	0.42
14:2S:3:ARG:HH11	14:2S:3:ARG:HA	1.85	0.42
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.55	0.42
32:2a:447:G:O6	32:2a:485:G:O2'	2.26	0.42
32:2a:1110:A:N6	32:2a:1111:A:C6	2.87	0.42
33:2b:127:ILE:HD11	33:2b:135:GLN:HG2	2.01	0.42
36:2e:79:GLU:OE1	36:2e:79:GLU:N	2.37	0.42
41:2j:47:PHE:N	41:2j:63:PHE:O	2.33	0.42
45:2n:32:SER:O	45:2n:40:CYS:HA	2.19	0.42
1:1A:218:A:C2	1:1A:235:U:H4'	2.55	0.42
1:1A:286:C:H2'	1:1A:287:C:C6	2.55	0.42
1:1A:376:C:H2'	1:1A:377:C:C6	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:784:A:C5	3:1D:229:VAL:HG21	2.55	0.42
1:1A:1180:C:H2'	1:1A:1181:C:C6	2.54	0.42
1:1A:1420:U:H2'	1:1A:1420:U:O2	2.19	0.42
1:1A:1808:U:O5'	1:1A:1808:U:H6	2.03	0.42
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.20	0.42
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	2.00	0.42
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.19	0.42
1:1A:2678:C:H2'	1:1A:2679:A:O4'	2.19	0.42
4:1E:12:THR:HG22	4:1E:13:ARG:N	2.30	0.42
7:1H:24:VAL:HG11	7:1H:43:VAL:HG11	2.01	0.42
16:1U:8:VAL:HG23	16:1U:11:ARG:HH21	1.84	0.42
25:13:39:ASP:OD1	25:13:44:ARG:HD2	2.20	0.42
32:1a:190:U:C5	32:1a:191:G:N7	2.88	0.42
32:1a:881:G:P	43:1l:12:ARG:HH22	2.42	0.42
32:1a:1000:U:H6	32:1a:1000:U:H5''	1.85	0.42
32:1a:1378:C:C5	32:1a:1379:G:C8	3.08	0.42
37:1f:2:ARG:HB2	37:1f:4:TYR:CE2	2.55	0.42
37:1f:10:LEU:HD13	37:1f:85:VAL:HA	2.02	0.42
1:2A:93:G:H2'	1:2A:94:C:H6	1.83	0.42
1:2A:218:A:C2	1:2A:235:U:H4'	2.54	0.42
1:2A:621:A:OP2	11:2P:108:LYS:NZ	2.40	0.42
1:2A:758:C:O2	1:2A:1981:A:H2	2.02	0.42
1:2A:1183:G:H5''	25:23:30:ARG:HH21	1.85	0.42
1:2A:1325:G:OP2	1:2A:1616:A:O2'	2.24	0.42
1:2A:2166:G:O6	1:2A:2171:A:N6	2.53	0.42
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.83	0.42
1:2A:2432:A:C6	1:2A:2433:A:C6	3.07	0.42
1:2A:2701:C:H2'	1:2A:2702:U:H2'	2.01	0.42
6:2G:125:PHE:HB3	6:2G:166:ASP:OD2	2.19	0.42
15:2T:122:ASP:HA	15:2T:125:ARG:HG2	2.01	0.42
32:2a:4:U:O4	39:2h:105:ARG:HD3	2.20	0.42
32:2a:93:G:C6	32:2a:96:U:C4	3.08	0.42
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.54	0.42
32:2a:1035:A:H2'	32:2a:1036:G:H8	1.84	0.42
33:2b:189:ASP:CG	33:2b:205:ASP:H	2.27	0.42
40:2i:14:VAL:HG23	40:2i:66:ARG:O	2.20	0.42
40:2i:19:LEU:HB3	40:2i:59:PHE:CD1	2.54	0.42
41:2j:8:LEU:HA	41:2j:96:ILE:HA	2.02	0.42
42:2k:91:ARG:HE	42:2k:91:ARG:HB3	1.64	0.42
44:2m:49:THR:OG1	44:2m:52:GLU:HG3	2.19	0.42
44:2m:50:GLU:O	44:2m:54:VAL:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:54:LYS:HG3	51:2t:57:ARG:NH2	2.35	0.42
1:1A:363(A):A:H2'	1:1A:363(B):G:H8	1.82	0.42
1:1A:586:A:N1	1:1A:809:G:O2'	2.46	0.42
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.20	0.42
1:1A:1946:U:H2'	1:1A:1947:C:C6	2.54	0.42
1:1A:2168:G:N1	1:1A:2171:A:C8	2.83	0.42
1:1A:2203:U:O4'	3:1D:151:LYS:HE2	2.19	0.42
1:1A:2557:G:H2'	1:1A:2558:C:C6	2.54	0.42
1:1A:2820:A:O2'	1:1A:2821:A:OP1	2.32	0.42
1:1A:2849:U:P	15:1T:95:ARG:HH12	2.42	0.42
1:1A:2850:A:C2	1:1A:2851:A:C4	3.07	0.42
2:1B:90:A:N7	2:1B:91:C:H1'	2.35	0.42
2:1B:94:C:H2'	2:1B:95:C:C6	2.54	0.42
4:1E:48:GLN:NE2	4:1E:78:LEU:HG	2.35	0.42
8:1I:33:ARG:C	8:1I:35:LEU:N	2.78	0.42
8:1I:100:ALA:HA	8:1I:103:ARG:NH1	2.35	0.42
20:1Y:13:VAL:HB	20:1Y:72:VAL:HG13	2.01	0.42
32:1a:405:U:O4	35:1d:2:GLY:N	2.53	0.42
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.55	0.42
32:1a:1179:A:O3'	40:1i:103:THR:HB	2.20	0.42
34:1c:36:ASP:O	34:1c:40:ARG:HG3	2.19	0.42
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	2.01	0.42
1:2A:307:G:H22	1:2A:310:A:P	2.42	0.42
1:2A:403:U:H4'	1:2A:404:C:H5'	2.02	0.42
1:2A:903:C:O2'	1:2A:904:C:H5'	2.20	0.42
1:2A:1314:C:C2	1:2A:1339:G:N2	2.88	0.42
1:2A:1436:G:O2'	1:2A:1477:A:H4'	2.20	0.42
1:2A:1488:G:C6	1:2A:1489:U:C4	3.08	0.42
1:2A:1527:G:H5''	1:2A:1528:A:OP1	2.19	0.42
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	2.02	0.42
1:2A:2815:C:HO2'	27:25:43:HIS:HD1	1.68	0.42
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.20	0.42
6:2G:105:LYS:HZ3	26:24:26:SER:HA	1.85	0.42
8:2I:129:THR:HA	8:2I:138:ILE:O	2.20	0.42
17:2V:62:LEU:HD21	17:2V:95:LEU:HB2	2.02	0.42
20:2Y:5:MET:HE1	20:2Y:32:PRO:HA	2.01	0.42
32:2a:283:C:H2'	32:2a:284:G:O4'	2.20	0.42
32:2a:864:A:C6	32:2a:865:A:C6	3.07	0.42
32:2a:948:C:OP2	44:2m:108:ARG:HB2	2.19	0.42
32:2a:1027:C:C2	32:2a:1034:G:N1	2.88	0.42
32:2a:1157:A:C8	32:2a:1181:G:C6	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.20	0.42
41:2j:50:ILE:HB	45:2n:41:ARG:NH1	2.35	0.42
1:1A:729:G:N7	3:1D:210:GLY:N	2.62	0.42
1:1A:774:A:N3	1:1A:774:A:H2'	2.35	0.42
1:1A:1174:A:H4'	1:1A:1177:A:H61	1.83	0.42
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.20	0.42
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.19	0.42
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.55	0.42
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.55	0.42
2:1B:13:A:N1	2:1B:69:G:O2'	2.47	0.42
6:1G:25:TYR:CZ	6:1G:32:PRO:HD3	2.55	0.42
9:1N:41:ASP:O	9:1N:48:MET:HE1	2.20	0.42
13:1R:10:LEU:HA	13:1R:10:LEU:HD23	1.78	0.42
14:1S:11:LYS:HD3	14:1S:91:PRO:HD3	2.02	0.42
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.20	0.42
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.53	0.42
26:14:50:VAL:HG11	44:1m:64:TRP:C	2.45	0.42
31:19:11:CYS:O	31:19:14:CYS:HB2	2.20	0.42
32:1a:651:C:H2'	32:1a:652:U:C6	2.55	0.42
32:1a:1108:G:OP1	34:1c:175:LEU:HB2	2.19	0.42
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.68	0.42
32:1a:1441:G:H5''	32:1a:1442:G:O5'	2.20	0.42
33:1b:21:ARG:HA	33:1b:39:ILE:HA	2.01	0.42
34:1c:120:VAL:O	34:1c:124:ILE:HG12	2.20	0.42
35:1d:3:ARG:HD3	35:1d:118:ARG:HD2	2.00	0.42
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.20	0.42
40:1i:23:ASN:HB2	40:1i:25:LYS:NZ	2.35	0.42
46:1o:7:GLU:O	46:1o:11:VAL:HG23	2.19	0.42
1:2A:631:A:N3	1:2A:2415:G:O2'	2.47	0.42
1:2A:2387:U:H4'	22:20:41:ARG:NH2	2.35	0.42
1:2A:2802:G:N3	1:2A:2803:C:H1'	2.35	0.42
2:2B:48:A:H4'	14:2S:95:HIS:CD2	2.53	0.42
3:2D:122:ASP:O	3:2D:123:ALA:C	2.63	0.42
16:2U:61:TRP:CZ2	16:2U:93:LYS:HG3	2.55	0.42
32:2a:9:G:H2'	32:2a:10:A:C8	2.55	0.42
32:2a:384:G:H2'	32:2a:385:C:C6	2.55	0.42
32:2a:461:A:N7	32:2a:471:G:C6	2.88	0.42
32:2a:826:C:O2	39:2h:15:ASN:ND2	2.52	0.42
32:2a:865:A:H5'	32:2a:1078:U:C5	2.55	0.42
32:2a:945:G:C2	32:2a:946:A:C8	3.08	0.42
32:2a:1092:A:H2'	32:2a:1093:A:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1432:G:H8	32:2a:1432:G:O5'	2.03	0.42
36:2e:66:MET:HE2	36:2e:66:MET:N	2.35	0.42
38:2g:56:GLN:O	38:2g:58:PRO:HD3	2.20	0.42
44:2m:60:VAL:HG13	44:2m:64:TRP:HE3	1.83	0.42
1:1A:234:C:H2'	1:1A:235:U:C6	2.55	0.41
1:1A:311:A:C6	1:1A:328:U:C4	3.08	0.41
1:1A:362:U:H6	1:1A:362:U:H2'	1.60	0.41
1:1A:548:A:H1'	1:1A:549:G:OP1	2.20	0.41
1:1A:2283:C:H2'	1:1A:2284:C:O4'	2.19	0.41
6:1G:137:GLU:HG2	6:1G:152:LEU:HD22	2.00	0.41
15:1T:125:ARG:CZ	15:1T:125:ARG:HB2	2.50	0.41
16:1U:28:ARG:NH1	16:1U:38:THR:OG1	2.47	0.41
25:13:4:LEU:O	25:13:36:VAL:HA	2.20	0.41
28:16:9:LEU:HD13	28:16:51:GLU:HB2	2.01	0.41
32:1a:977:A:O2'	32:1a:979:C:OP2	2.38	0.41
32:1a:1030(C):G:H8	32:1a:1030(D):A:N7	2.18	0.41
32:1a:1136:U:H5''	32:1a:1137:C:N3	2.35	0.41
38:1g:50:ILE:CD1	38:1g:61:VAL:HG11	2.49	0.41
44:1m:121:LYS:HE2	44:1m:121:LYS:HB2	1.57	0.41
48:1q:5:VAL:HA	48:1q:59:ILE:O	2.20	0.41
51:1t:71:THR:O	51:1t:72:LEU:HD23	2.20	0.41
56:1y:44:G:H8	56:1y:44:G:OP2	2.02	0.41
1:2A:208:C:H2'	1:2A:209:C:C6	2.55	0.41
1:2A:1657:C:H2'	1:2A:1658:C:C6	2.55	0.41
1:2A:2345:G:N3	1:2A:2381:C:H2'	2.35	0.41
1:2A:2528:U:O2'	1:2A:2529:G:H3'	2.20	0.41
6:2G:46:ALA:HB2	6:2G:53:LEU:HD23	2.02	0.41
7:2H:6:ARG:HH12	7:2H:54:ARG:HH22	1.68	0.41
7:2H:89:ILE:HD11	7:2H:131:VAL:HG23	2.02	0.41
16:2U:79:PHE:CE2	16:2U:83:LEU:HD11	2.55	0.41
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.20	0.41
21:2Z:130:PRO:HA	21:2Z:133:ILE:HG13	2.02	0.41
26:24:50:VAL:HG11	44:2m:64:TRP:HA	2.02	0.41
32:2a:391:G:C5	32:2a:392:G:C8	3.08	0.41
32:2a:991:U:C5	32:2a:1212:U:H1'	2.55	0.41
32:2a:1005:A:H3'	32:2a:1006:C:H6	1.82	0.41
33:2b:80:ILE:HD11	33:2b:212:GLN:CA	2.50	0.41
33:2b:178:ARG:HH21	39:2h:74:PRO:HB3	1.85	0.41
38:2g:69:VAL:HG21	38:2g:104:LEU:HD21	2.02	0.41
41:2j:42:THR:HG23	41:2j:68:HIS:HA	2.02	0.41
50:2s:56:GLN:OE1	50:2s:56:GLN:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:53:LEU:HD23	51:2t:53:LEU:HA	1.83	0.41
1:1A:385:C:O2	11:1P:71:VAL:HG21	2.20	0.41
1:1A:590:A:H2'	1:1A:591:C:O4'	2.21	0.41
1:1A:1462:C:H2'	1:1A:1463:C:O4'	2.20	0.41
1:1A:2544:G:H1'	1:1A:2646:C:H4'	2.01	0.41
2:1B:87:G:N2	2:1B:90:A:OP2	2.44	0.41
4:1E:10:GLY:HA2	4:1E:192:ASN:OD1	2.20	0.41
7:1H:74:ASN:ND2	7:1H:138:LYS:HD3	2.35	0.41
8:1I:93:THR:HG23	8:1I:96:ASP:OD2	2.20	0.41
10:1O:98:VAL:HG21	10:1O:114:ILE:HG23	2.02	0.41
21:1Z:158:PRO:O	21:1Z:161:VAL:HG22	2.20	0.41
25:13:55:ARG:HE	25:13:55:ARG:HB3	1.78	0.41
30:18:15:LYS:HB3	30:18:23:VAL:HG12	2.02	0.41
32:1a:619:U:C2	35:1d:135:LEU:HD22	2.56	0.41
32:1a:747:C:H3'	32:1a:748:C:C6	2.54	0.41
32:1a:1002:G:N7	32:1a:1003:G:H1'	2.35	0.41
32:1a:1292:U:H5'	40:1i:38:GLN:OE1	2.20	0.41
33:1b:37:ASN:C	33:1b:39:ILE:N	2.77	0.41
37:1f:100:ASN:HB2	49:1r:28:GLU:CA	2.42	0.41
40:1i:3:GLN:HE21	40:1i:20:ARG:NH2	2.17	0.41
46:1o:36:ILE:HG23	46:1o:56:LEU:HD11	2.02	0.41
51:1t:13:LEU:O	51:1t:17:ARG:HG3	2.20	0.41
55:1x:64:G:H2'	55:1x:65:C:H6	1.85	0.41
56:1y:67:C:H2'	56:1y:68:C:H6	1.85	0.41
1:2A:2340:G:O2'	1:2A:2341:G:H5'	2.20	0.41
1:2A:2406:U:H6	1:2A:2406:U:H2'	1.60	0.41
1:2A:2454:G:O6	62:2A:3946:HOH:O	2.21	0.41
7:2H:124:GLU:HB2	7:2H:132:ARG:HB3	2.03	0.41
12:2Q:41:TRP:HB3	12:2Q:94:VAL:HG21	2.01	0.41
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.36	0.41
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.85	0.41
32:2a:1224:G:OP1	62:2a:1918:HOH:O	2.22	0.41
33:2b:8:LYS:N	33:2b:9:GLU:OE1	2.51	0.41
35:2d:98:GLU:HG3	35:2d:194:LEU:HD21	2.02	0.41
41:2j:50:ILE:HA	41:2j:59:SER:O	2.21	0.41
42:2k:53:SER:O	42:2k:55:LYS:N	2.53	0.41
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.79	0.41
54:2w:29:G:H2'	54:2w:30:G:H8	1.85	0.41
55:2x:16:C:H5'	55:2x:59:A:N1	2.36	0.41
1:1A:478:A:C6	1:1A:480:A:C6	3.08	0.41
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1183:G:H4'	25:13:29:ARG:HH12	1.84	0.41
1:1A:1368:G:C2	1:1A:1369:G:C8	3.08	0.41
1:1A:2130:U:H2'	1:1A:2158:A:N1	2.34	0.41
1:1A:2315:G:H2'	1:1A:2316:C:H6	1.84	0.41
1:1A:2335:A:OP2	14:1S:13:ARG:HG3	2.20	0.41
4:1E:6:GLY:HA2	4:1E:28:ALA:HA	2.01	0.41
6:1G:72:ARG:HH12	6:1G:87:PRO:HG3	1.83	0.41
8:1I:8:PRO:O	8:1I:9:LEU:HG	2.20	0.41
8:1I:109:ILE:HD13	8:1I:109:ILE:HA	1.84	0.41
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	2.02	0.41
11:1P:6:LEU:HD23	11:1P:6:LEU:HA	1.86	0.41
15:1T:41:ARG:O	15:1T:42:ILE:HD13	2.20	0.41
16:1U:105:VAL:HG22	17:1V:45:THR:CG2	2.49	0.41
21:1Z:139:VAL:HG12	21:1Z:140:ASP:H	1.85	0.41
32:1a:202:U:H3'	32:1a:203:U:C5	2.54	0.41
32:1a:232:G:H2'	32:1a:233:C:H6	1.85	0.41
35:1d:85:LYS:HE2	35:1d:86:LYS:HG3	2.01	0.41
36:1e:11:ILE:HD13	36:1e:105:VAL:HG13	2.02	0.41
36:1e:12:LEU:O	36:1e:30:ALA:HA	2.21	0.41
38:1g:91:VAL:HB	38:1g:96:GLN:HG2	2.02	0.41
39:1h:20:TYR:HA	39:1h:65:TYR:CZ	2.55	0.41
49:1r:34:TYR:HE1	49:1r:35:ARG:HD2	1.85	0.41
1:2A:468:G:H5''	5:2F:60:SER:HB2	2.02	0.41
1:2A:886:C:H2'	1:2A:887:A:O4'	2.20	0.41
1:2A:2757:A:N1	7:2H:67:LEU:HD22	2.35	0.41
1:2A:2807:G:C2	1:2A:2808:U:H1'	2.55	0.41
1:2A:2850:A:H2'	1:2A:2851:A:H8	1.84	0.41
2:2B:43:C:H5''	26:24:1:MET:HG2	2.02	0.41
4:2E:12:THR:HG21	15:2T:11:GLU:OE2	2.19	0.41
32:2a:527:G7M:CN7	43:2l:92:0TD:H3	2.50	0.41
32:2a:622:A:H2'	32:2a:623:C:H5'	2.02	0.41
32:2a:1194:U:H4'	36:2e:22:GLY:HA2	2.02	0.41
35:2d:5:ILE:O	35:2d:5:ILE:HG12	2.20	0.41
35:2d:155:LEU:HD23	35:2d:155:LEU:HA	1.76	0.41
38:2g:111:ARG:NH2	38:2g:126:ASP:OD2	2.53	0.41
46:2o:26:GLU:HG3	46:2o:81:LEU:HD13	2.02	0.41
49:2r:35:ARG:O	49:2r:37:VAL:N	2.51	0.41
54:2w:34:G:H2'	54:2w:35:A:C8	2.55	0.41
1:1A:239:U:O2'	1:1A:240:G:H5'	2.19	0.41
1:1A:634:C:H2'	1:1A:635:C:C6	2.55	0.41
1:1A:849:A:C8	1:1A:850:C:C5	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:877:U:H3	1:1A:899:A:H2	1.64	0.41
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.55	0.41
1:1A:2162:G:C1'	1:1A:2173:A:H1'	2.50	0.41
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.85	0.41
5:1F:144:LYS:HE3	5:1F:144:LYS:HB3	1.64	0.41
7:1H:84:SER:HA	7:1H:133:VAL:O	2.21	0.41
10:1O:66:LYS:HA	10:1O:79:PHE:O	2.21	0.41
20:1Y:8:LYS:HD3	20:1Y:97:ARG:NH1	2.35	0.41
26:14:62:ARG:O	26:14:63:TYR:C	2.63	0.41
28:16:44:ARG:HG2	28:16:44:ARG:NH1	2.35	0.41
32:1a:564:C:H5'	48:1q:32:TYR:CE1	2.55	0.41
32:1a:990:C:O2'	32:1a:991:U:H5'	2.21	0.41
32:1a:1152:A:H2'	32:1a:1153:C:H6	1.85	0.41
32:1a:1318:A:H5''	50:1s:3:ARG:HH12	1.86	0.41
33:1b:18:GLY:CA	33:1b:42:ILE:HG13	2.49	0.41
35:1d:155:LEU:H	35:1d:158:ILE:HD11	1.85	0.41
40:1i:3:GLN:HE21	40:1i:20:ARG:CZ	2.34	0.41
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.44	0.41
1:2A:35:G:H1'	1:2A:454:A:C4	2.55	0.41
1:2A:252:G:P	11:2P:50:ARG:HH12	2.42	0.41
1:2A:484:C:H6	1:2A:484:C:O5'	2.03	0.41
1:2A:566:U:P	17:2V:80:GLN:HE21	2.44	0.41
1:2A:600:G:H2'	1:2A:601:C:C6	2.56	0.41
1:2A:883:G:N1	1:2A:893:C:O2'	2.48	0.41
1:2A:1213:A:N3	1:2A:1238:G:O2'	2.46	0.41
1:2A:1665:A:H4'	10:2O:67:LYS:HB2	2.02	0.41
1:2A:2206:G:H5''	1:2A:2207:G:C5	2.55	0.41
1:2A:2730:C:H4'	4:2E:168:MET:O	2.20	0.41
2:2B:48:A:P	14:2S:30:ARG:HH22	2.43	0.41
16:2U:34:LYS:HA	16:2U:34:LYS:HD2	1.89	0.41
22:20:10:THR:CG2	22:20:12:ASN:HB2	2.51	0.41
32:2a:827:U:C2	32:2a:874:G:N2	2.88	0.41
32:2a:1024:G:N2	32:2a:1025:U:C5	2.88	0.41
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.55	0.41
32:2a:1273:G:N7	32:2a:1274:G:C5	2.88	0.41
32:2a:1502:A:C8	32:2a:1505:G:N2	2.88	0.41
34:2c:134:ILE:HD11	34:2c:153:VAL:CG2	2.51	0.41
36:2e:99:GLY:O	36:2e:117:ASP:HA	2.20	0.41
40:2i:33:PHE:CE2	40:2i:43:ALA:HB1	2.55	0.41
45:2n:15:LYS:HB3	45:2n:16:PHE:CD2	2.55	0.41
47:2p:75:ARG:HB2	47:2p:80:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:27:GLU:H	50:2s:27:GLU:HG2	1.41	0.41
56:2y:57:G:C2	56:2y:58:A:H5'	2.55	0.41
56:2y:57:G:N3	56:2y:58:A:H5'	2.35	0.41
1:1A:980:A:C4	1:1A:1136:G:O4'	2.74	0.41
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.56	0.41
1:1A:1545:A:H2'	1:1A:1546:C:O4'	2.20	0.41
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.21	0.41
3:1D:237:GLU:OE2	62:1D:401:HOH:O	2.22	0.41
4:1E:12:THR:HG21	15:1T:11:GLU:HG2	2.01	0.41
8:1I:114:LEU:HD12	8:1I:129:THR:O	2.20	0.41
11:1P:1:MET:HB2	11:1P:1:MET:HE2	1.57	0.41
12:1Q:57:HIS:HD2	12:1Q:117:ALA:HB2	1.85	0.41
16:1U:39:LEU:HD23	16:1U:39:LEU:HA	1.92	0.41
21:1Z:52:SER:C	21:1Z:54:HIS:N	2.73	0.41
26:14:61:ARG:NH2	50:1s:9:VAL:HG11	2.35	0.41
32:1a:189(D):C:C4	32:1a:189(E):U:C4	3.09	0.41
32:1a:640:A:C5	32:1a:641:U:C4	3.09	0.41
32:1a:1299:A:O2'	32:1a:1301:U:O4'	2.33	0.41
32:1a:1302:U:H5	44:1m:17:VAL:HG21	1.83	0.41
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.55	0.41
34:1c:113:ALA:HB3	34:1c:114:PRO:HD3	2.03	0.41
36:1e:34:VAL:HG12	36:1e:62:ALA:HB1	2.02	0.41
42:1k:20:TYR:HB2	42:1k:31:THR:HG23	2.01	0.41
42:1k:34:ASP:HB2	42:1k:35:PRO:HD2	2.02	0.41
51:1t:24:LEU:HA	51:1t:24:LEU:HD13	1.81	0.41
56:1y:19:G:H5''	56:1y:60:U:O4	2.20	0.41
1:2A:121:G:H4'	1:2A:149:A:H5'	2.02	0.41
1:2A:224:G:H2'	1:2A:225:A:O4'	2.21	0.41
1:2A:534:U:H5'	16:2U:42:ALA:HB1	2.02	0.41
1:2A:1400:G:H2'	1:2A:1401:G:H8	1.86	0.41
1:2A:2134:A:N6	1:2A:2157:G:H4'	2.11	0.41
8:2I:47:LEU:O	8:2I:51:ILE:HB	2.21	0.41
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	2.03	0.41
23:21:19:GLN:HB2	23:21:35:THR:HG23	2.02	0.41
24:22:38:GLN:HG3	24:22:43:GLN:HB2	2.02	0.41
32:2a:245:C:O2'	32:2a:246:A:H5'	2.20	0.41
32:2a:1188:A:H8	32:2a:1188:A:O5'	2.03	0.41
32:2a:1329:A:OP2	52:2u:7:ARG:NH2	2.50	0.41
42:2k:86:GLY:H	42:2k:112:THR:HG23	1.85	0.41
55:2x:6:G:C2	55:2x:68:C:C2	3.09	0.41
1:1A:244:A:H2'	1:1A:245:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1174:A:HI'	1:1A:1175:U:O5'	2.20	0.41
1:1A:2136:C:C4	1:1A:2155:G:C2	3.07	0.41
3:1D:25:THR:HG21	3:1D:113:VAL:HG21	2.02	0.41
3:1D:182:LEU:HA	3:1D:182:LEU:HD23	1.83	0.41
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.53	0.41
8:1I:14:ASP:O	8:1I:17:GLN:HB3	2.20	0.41
8:1I:54:GLN:HG3	8:1I:57:ARG:NH2	2.35	0.41
22:10:10:THR:CG2	22:10:12:ASN:HB2	2.51	0.41
32:1a:49:U:C2	32:1a:361:G:N2	2.88	0.41
32:1a:194:C:C2'	32:1a:195:A:H5''	2.51	0.41
32:1a:791:G:C2'	32:1a:792:A:H5'	2.50	0.41
33:1b:80:ILE:HD11	33:1b:215:LEU:HB2	2.02	0.41
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.56	0.41
54:1w:74:C:H2'	54:1w:75:C:H5'	2.02	0.41
56:1y:19:G:C5'	56:1y:57:G:H1	2.34	0.41
1:2A:884:C:H3'	1:2A:885:C:H6	1.85	0.41
1:2A:1210:A:C2	1:2A:1237:A:C6	3.08	0.41
2:2B:7:G:H5'	14:2S:29:PHE:CE2	2.54	0.41
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	2.02	0.41
4:2E:181:LEU:HD23	4:2E:181:LEU:HA	1.75	0.41
5:2F:20:LEU:HD12	5:2F:20:LEU:HA	1.74	0.41
6:2G:50:ALA:O	6:2G:51:ARG:C	2.63	0.41
16:2U:58:ARG:HA	16:2U:61:TRP:CE3	2.56	0.41
16:2U:106:PHE:O	16:2U:110:VAL:HG23	2.21	0.41
32:2a:66:G:H8	32:2a:66:G:OP1	2.04	0.41
32:2a:688:G:H5'	42:2k:46:GLY:C	2.45	0.41
32:2a:694:A:H5''	42:2k:53:SER:OG	2.21	0.41
32:2a:971:G:C8	32:2a:1365:G:H4'	2.56	0.41
32:2a:986:A:H2'	32:2a:987:G:C8	2.56	0.41
32:2a:1085:U:H3'	32:2a:1086:U:H5	1.83	0.41
32:2a:1346:A:H61	32:2a:1374:A:H3'	1.86	0.41
38:2g:29:LYS:HE2	38:2g:102:ARG:HG3	2.03	0.41
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.86	0.41
39:2h:103:VAL:HG21	39:2h:110:ALA:HB2	2.02	0.41
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	2.03	0.41
47:2p:71:ARG:HG3	47:2p:80:PHE:CE2	2.56	0.41
54:2w:8:4SU:C2	54:2w:15:G:O6	2.69	0.41
56:2y:8:4SU:O2	56:2y:8:4SU:H2'	2.20	0.41
56:2y:14:A:H2'	56:2y:15:G:C8	2.55	0.41
1:1A:883:G:O2'	1:1A:884:C:H5	2.03	0.41
1:1A:2838:G:C6	1:1A:2839:G:C5	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:77:U:O2'	2:1B:78:A:H5'	2.21	0.41
12:1Q:17:LEU:HD23	12:1Q:17:LEU:HA	1.70	0.41
13:1R:55:ALA:HA	13:1R:80:PHE:CZ	2.56	0.41
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.32	0.41
21:1Z:91:LEU:HD23	21:1Z:91:LEU:HA	1.72	0.41
24:12:21:LEU:HD23	24:12:21:LEU:HA	1.95	0.41
31:19:27:CYS:SG	31:19:28:GLU:N	2.94	0.41
32:1a:626:U:H2'	32:1a:627:G:C8	2.54	0.41
32:1a:765:G:H5''	32:1a:766:A:OP1	2.20	0.41
32:1a:1007:C:H6	32:1a:1007:C:O5'	2.03	0.41
32:1a:1285:A:O2'	32:1a:1286:A:OP2	2.31	0.41
33:1b:44:LEU:O	33:1b:47:THR:HB	2.20	0.41
33:1b:103:THR:HA	33:1b:180:LEU:HD11	2.02	0.41
34:1c:16:ARG:HE	34:1c:16:ARG:HB3	1.61	0.41
35:1d:100:ARG:HG2	35:1d:137:SER:HA	2.02	0.41
36:1e:43:LEU:HD12	36:1e:43:LEU:HA	1.88	0.41
39:1h:9:MET:HB2	39:1h:26:VAL:HG11	2.02	0.41
40:1i:116:LYS:HD2	40:1i:122:ALA:HA	2.03	0.41
50:1s:22:LEU:HB3	50:1s:27:GLU:CB	2.51	0.41
1:2A:259:G:HO2'	1:2A:621:A:HO2'	1.64	0.41
1:2A:276:A:H5''	1:2A:277:C:H5'	2.03	0.41
1:2A:315:G:H2'	1:2A:316:C:C6	2.56	0.41
1:2A:578:A:H5'	1:2A:1254:A:OP1	2.20	0.41
1:2A:740:U:H2'	1:2A:741:G:C8	2.56	0.41
1:2A:2317:C:C2'	1:2A:2318:G:H5'	2.51	0.41
8:2I:2:LYS:HA	8:2I:19:VAL:O	2.21	0.41
8:2I:104:GLN:HG2	8:2I:105:HIS:ND1	2.35	0.41
12:2Q:137:TYR:CE1	21:2Z:83:PRO:HG3	2.56	0.41
21:2Z:144:LEU:HG	21:2Z:145:GLU:H	1.86	0.41
23:21:4:VAL:HG21	23:21:11:ARG:NH2	2.35	0.41
31:29:11:CYS:N	31:29:14:CYS:SG	2.86	0.41
32:2a:343:U:O2'	32:2a:344:A:H8	2.04	0.41
32:2a:377:G:OP1	47:2p:3:LYS:HE3	2.21	0.41
32:2a:745:C:H2'	32:2a:746:A:C8	2.55	0.41
32:2a:952:U:H2'	32:2a:953:G:C8	2.54	0.41
34:2c:38:ARG:HE	34:2c:38:ARG:HB2	1.69	0.41
56:2y:52:G:H8	56:2y:52:G:OP2	2.03	0.41
1:1A:655:A:H2'	1:1A:656:G:O4'	2.20	0.41
1:1A:1448:G:H1'	1:1A:1528:A:N1	2.35	0.41
3:1D:205:VAL:O	3:1D:206:LEU:C	2.64	0.41
4:1E:176:ILE:HB	4:1E:181:LEU:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:83:TYR:CD2	7:1H:138:LYS:HB2	2.56	0.41
8:1I:1:MET:O	8:1I:20:ASP:HA	2.21	0.41
10:1O:70:LYS:HB3	10:1O:70:LYS:HE2	1.92	0.41
11:1P:125:VAL:HG23	11:1P:125:VAL:O	2.21	0.41
16:1U:79:PHE:CZ	16:1U:83:LEU:HD11	2.56	0.41
21:1Z:163:LEU:HD12	21:1Z:163:LEU:HA	1.90	0.41
30:18:23:VAL:CG2	30:18:47:LYS:HB3	2.51	0.41
32:1a:280:C:H4'	32:1a:281:G:OP2	2.20	0.41
32:1a:1349:A:C2	32:1a:1374:A:C4	3.09	0.41
36:1e:91:LEU:HB3	36:1e:118:ILE:HD11	2.03	0.41
37:1f:1:MET:HA	37:1f:67:MET:O	2.20	0.41
41:1j:11:PHE:HA	41:1j:66:ARG:O	2.21	0.41
44:1m:70:LEU:HA	44:1m:70:LEU:HD23	1.71	0.41
48:1q:26:GLN:CG	48:1q:37:LYS:HG2	2.50	0.41
50:1s:51:VAL:O	50:1s:58:VAL:N	2.53	0.41
1:2A:810:U:C5	11:2P:29:LYS:O	2.74	0.41
1:2A:1509(A):A:N6	1:2A:1509(B):A:C6	2.89	0.41
1:2A:2319:G:H22	14:2S:3:ARG:HA	1.86	0.41
1:2A:2516:G:C6	1:2A:2517:C:C4	3.09	0.41
1:2A:2655:G:O2'	1:2A:2664:G:O6	2.31	0.41
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.21	0.41
2:2B:88:C:H2'	2:2B:89:G:O4'	2.21	0.41
7:2H:109:PHE:C	7:2H:111:HIS:H	2.29	0.41
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.21	0.41
21:2Z:104:PHE:CD2	21:2Z:139:VAL:HG11	2.56	0.41
32:2a:1013:G:O2'	32:2a:1015:A:N7	2.42	0.41
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.86	0.41
62:2a:2002:HOH:O	48:2q:99:SER:HB3	2.20	0.41
41:2j:81:THR:O	41:2j:84:GLN:N	2.54	0.41
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.20	0.41
51:2t:10:LEU:HD12	51:2t:11:SER:H	1.85	0.41
51:2t:56:MET:HE2	51:2t:56:MET:HB3	1.82	0.41
1:1A:26:G:H1'	1:1A:515:A:H61	1.86	0.41
1:1A:271(D):G:H2'	1:1A:271(E):U:H6	1.85	0.41
1:1A:396:G:H1'	23:11:42:GLN:HB3	2.03	0.41
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.20	0.41
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.48	0.41
1:1A:1074:G:C2	1:1A:1075:C:H1'	2.56	0.41
1:1A:1173:G:H22	1:1A:1177:A:P	2.43	0.41
1:1A:2128:C:N3	1:1A:2160:G:N2	2.54	0.41
1:1A:2145:C:O2'	1:1A:2147:G:N7	2.52	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2164:C:H2'	1:1A:2165:G:H5'	2.01	0.41
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.35	0.41
1:1A:2362:G:OP1	30:18:44:LYS:NZ	2.48	0.41
2:1B:37:C:H2'	2:1B:38:C:O4'	2.21	0.41
4:1E:93:VAL:HG22	62:1E:404:HOH:O	2.20	0.41
6:1G:47:LYS:CG	6:1G:48:GLU:H	2.34	0.41
12:1Q:115:MET:HE3	12:1Q:115:MET:HB3	1.68	0.41
15:1T:112:ARG:HG3	15:1T:115:ARG:HH21	1.86	0.41
17:1V:81:TYR:C	17:1V:82:ARG:HD2	2.46	0.41
21:1Z:5:LEU:HD13	21:1Z:47:VAL:HG21	2.02	0.41
21:1Z:72:ARG:HA	21:1Z:72:ARG:HD3	1.79	0.41
32:1a:270:A:H2'	32:1a:271:C:C6	2.56	0.41
32:1a:567:G:H1'	62:1a:1991:HOH:O	2.21	0.41
32:1a:692:U:O2'	32:1a:694:A:N7	2.37	0.41
32:1a:875:C:H1'	39:1h:15:ASN:OD1	2.21	0.41
32:1a:958:A:C5	32:1a:959:A:C6	3.08	0.41
32:1a:1131:G:H5'	40:1i:3:GLN:HE22	1.86	0.41
32:1a:1243:C:H2'	32:1a:1244:C:C6	2.55	0.41
33:1b:15:VAL:HG13	33:1b:209:ARG:HG2	2.03	0.41
33:1b:100:GLY:O	33:1b:104:ASN:N	2.48	0.41
34:1c:177:THR:HG22	34:1c:180:ALA:H	1.86	0.41
35:1d:126:ILE:HG22	35:1d:127:THR:N	2.36	0.41
38:1g:26:PHE:CD2	38:1g:30:ILE:HD11	2.56	0.41
38:1g:144:MET:HE2	38:1g:144:MET:HB3	1.90	0.41
41:1j:78:ASN:C	41:1j:80:LYS:H	2.29	0.41
42:1k:20:TYR:CE1	42:1k:83:ILE:HD12	2.56	0.41
44:1m:125:ARG:H	44:1m:125:ARG:HG2	1.65	0.41
49:1r:66:LEU:HD11	49:1r:70:ILE:HD11	2.03	0.41
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.21	0.41
56:1y:36:A:H2'	56:1y:37:MIA:O4'	2.21	0.41
1:2A:142(A):C:H2'	1:2A:143:G:O4'	2.21	0.41
1:2A:192:C:O2'	1:2A:802:A:N3	2.44	0.41
1:2A:240:G:H8	1:2A:240:G:O5'	2.04	0.41
1:2A:271(D):G:H2'	1:2A:271(E):U:H6	1.85	0.41
1:2A:510:C:H2'	1:2A:511:U:O4'	2.21	0.41
1:2A:580:C:H2'	1:2A:581:C:C6	2.56	0.41
1:2A:614:U:H2'	1:2A:614(A):U:O4'	2.21	0.41
1:2A:765:G:H2'	1:2A:766:C:C6	2.56	0.41
1:2A:784:A:C8	1:2A:792:G:C5	3.09	0.41
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.46	0.41
1:2A:2065:C:H4'	1:2A:2251:OMG:HM22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2144:U:H1'	1:2A:2148:G:N2	2.36	0.41
1:2A:2629:A:H1'	1:2A:2630:G:H5''	2.03	0.41
1:2A:2635:C:H5''	4:2E:78:LEU:O	2.20	0.41
6:2G:110:ALA:HB1	6:2G:140:ILE:CG2	2.49	0.41
7:2H:101:ARG:HE	7:2H:101:ARG:HB3	1.67	0.41
10:2O:66:LYS:HA	10:2O:79:PHE:O	2.19	0.41
11:2P:54:GLY:O	62:2P:201:HOH:O	2.22	0.41
13:2R:52:ILE:HD12	13:2R:94:TYR:HB2	2.03	0.41
14:2S:25:ARG:HB3	14:2S:40:ILE:HB	2.03	0.41
16:2U:39:LEU:O	16:2U:40:PHE:C	2.64	0.41
16:2U:104:GLN:HG2	16:2U:105:VAL:N	2.35	0.41
19:2X:53:LYS:HB3	19:2X:82:GLN:CB	2.43	0.41
19:2X:60:ARG:NH2	29:27:47:ARG:HH12	2.15	0.41
20:2Y:2:ARG:NH2	20:2Y:4:LYS:HD3	2.35	0.41
25:23:6:VAL:HG22	25:23:56:VAL:HG12	2.03	0.41
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.61	0.41
32:2a:173:U:H5''	32:2a:197:A:O4'	2.21	0.41
32:2a:176:C:H2'	32:2a:177:C:H6	1.86	0.41
32:2a:189(C):C:C2	32:2a:189(I):G:N2	2.89	0.41
32:2a:657:G:H4'	46:2o:28:GLN:HG2	2.02	0.41
32:2a:850:U:H2'	32:2a:851:G:H5''	2.02	0.41
32:2a:1272:G:H5'	32:2a:1273:G:OP2	2.21	0.41
33:2b:74:LYS:HB3	33:2b:74:LYS:HE2	1.69	0.41
35:2d:74:GLN:O	35:2d:78:LEU:HD12	2.21	0.41
36:2e:123:LEU:HD23	36:2e:123:LEU:HA	1.83	0.41
38:2g:95:ARG:HG2	38:2g:99:LEU:HD11	2.03	0.41
39:2h:20:TYR:CD1	39:2h:65:TYR:CD1	3.08	0.41
39:2h:33:GLU:HG2	39:2h:48:TYR:CE1	2.56	0.41
40:2i:20:ARG:HA	40:2i:21:PRO:HD3	1.91	0.41
42:2k:67:ASP:OD2	42:2k:71:LYS:HE3	2.21	0.41
43:2l:53:ARG:HB3	43:2l:69:TYR:HE1	1.86	0.41
48:2q:81:ARG:NH2	48:2q:84:LEU:HD21	2.36	0.41
56:2y:63:G:H2'	56:2y:64:A:C8	2.55	0.41
1:1A:890:A:C5	1:1A:892:G:H1'	2.56	0.41
1:1A:1064:C:H2'	1:1A:1065:U:H5'	2.03	0.41
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.21	0.41
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.31	0.41
1:1A:1829:A:H2'	1:1A:1830:C:H5'	2.02	0.41
1:1A:2629:A:H1'	1:1A:2630:G:O5'	2.21	0.41
62:1A:5362:HOH:O	19:1X:80:ILE:HG21	2.21	0.41
8:1I:30:LEU:HD23	8:1I:30:LEU:HA	1.77	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:38:LEU:H	8:1I:38:LEU:CD2	2.30	0.41
10:1O:12:ASP:CG	10:1O:14:THR:HG23	2.45	0.41
12:1Q:130:LYS:HE3	12:1Q:130:LYS:HB3	1.83	0.41
13:1R:87:TYR:OH	13:1R:117:VAL:O	2.24	0.41
20:1Y:55:TYR:CE1	20:1Y:61:ILE:HG21	2.56	0.41
21:1Z:4:ARG:HG2	21:1Z:58:VAL:HB	2.01	0.41
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.35	0.41
32:1a:1304:G:C6	32:1a:1305:G:N1	2.88	0.41
36:1e:46:GLY:O	36:1e:54:ALA:HB1	2.21	0.41
42:1k:103:LEU:HD23	42:1k:103:LEU:HA	1.93	0.41
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	2.20	0.41
1:2A:436:C:H2'	1:2A:437:G:H8	1.86	0.41
1:2A:528:A:N1	1:2A:2042:A:H2'	2.37	0.41
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.40	0.41
1:2A:1417:C:H2'	1:2A:1418:G:O4'	2.20	0.41
1:2A:2526:G:C6	1:2A:2527:C:C4	3.09	0.41
1:2A:2809:A:N6	1:2A:2892:A:O4'	2.54	0.41
2:2B:87:G:N2	2:2B:90:A:OP2	2.49	0.41
3:2D:35:LYS:HB2	3:2D:36:PRO:HD2	2.03	0.41
8:2I:45:LYS:O	8:2I:49:ALA:N	2.49	0.41
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.86	0.41
22:20:11:ARG:O	22:20:14:ARG:NH2	2.53	0.41
25:23:43:ILE:O	25:23:47:VAL:HG23	2.20	0.41
30:28:60:LEU:HD23	30:28:60:LEU:HA	1.73	0.41
31:29:28:GLU:O	31:29:30:PRO:HD3	2.21	0.41
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.52	0.41
32:2a:1254:C:O4'	32:2a:1356:G:H5''	2.20	0.41
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	2.02	0.41
42:2k:67:ASP:O	42:2k:71:LYS:HG3	2.21	0.41
48:2q:68:ARG:H	48:2q:70:ARG:NH1	2.19	0.41
53:2v:14:A:N6	53:2v:15:A:C6	2.89	0.41
56:2y:48:C:C4	56:2y:59:U:C6	3.09	0.41
1:1A:355:G:O2'	1:1A:356:G:H5'	2.21	0.40
1:1A:652(D):C:H42	1:1A:652(U):G:H1	1.69	0.40
1:1A:1038:C:H5''	1:1A:1038:C:H6	1.86	0.40
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.21	0.40
1:1A:1153:C:H2'	1:1A:1154:G:O4'	2.20	0.40
1:1A:1234:U:H2'	1:1A:1235:G:O4'	2.21	0.40
1:1A:1264:G:C6	1:1A:1265:A:N6	2.89	0.40
1:1A:2679:A:C2	1:1A:2729:G:C2	3.10	0.40
1:1A:2751:G:C5	7:1H:2:SER:N	2.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.85	0.40
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	2.04	0.40
11:1P:138:LEU:HD21	11:1P:145:PRO:HB3	2.03	0.40
22:10:32:ARG:H	22:10:35:ASN:ND2	2.19	0.40
32:1a:434:U:H2'	32:1a:435:C:C6	2.57	0.40
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.22	0.40
32:1a:1241:G:H2'	32:1a:1242:C:H6	1.86	0.40
33:1b:205:ASP:O	33:1b:211:ILE:HD11	2.21	0.40
39:1h:17:THR:O	39:1h:78:GLN:NE2	2.43	0.40
41:1j:5:ARG:CZ	41:1j:71:LEU:HD21	2.52	0.40
56:1y:64:A:H2'	56:1y:65:G:C8	2.56	0.40
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.56	0.40
1:2A:480:A:P	20:2Y:47:LYS:HZ3	2.42	0.40
1:2A:702:G:C2	1:2A:731:C:C2	3.09	0.40
1:2A:897:C:O5'	1:2A:897:C:C6	2.74	0.40
1:2A:1580:A:H3'	1:2A:1581:G:C8	2.56	0.40
1:2A:1580:A:H5'	1:2A:1581:G:OP2	2.21	0.40
1:2A:1673:U:OP1	62:2A:3943:HOH:O	2.21	0.40
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.22	0.40
7:2H:11:VAL:CG2	7:2H:50:VAL:HG23	2.51	0.40
8:2I:1:MET:HE3	8:2I:1:MET:HB2	1.96	0.40
8:2I:87:LYS:HE3	8:2I:87:LYS:HB3	1.25	0.40
16:2U:83:LEU:HA	16:2U:83:LEU:HD23	1.82	0.40
32:2a:526:C:OP2	43:2l:91:LYS:HE3	2.21	0.40
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.21	0.40
32:2a:1027:C:O2	32:2a:1035:A:O2'	2.38	0.40
35:2d:47:ARG:HB2	35:2d:47:ARG:NH1	2.31	0.40
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	2.02	0.40
50:2s:15:LEU:HA	50:2s:18:LYS:HG3	2.03	0.40
54:2w:24:G:C6	54:2w:25:C:C4	3.09	0.40
55:2x:18:G:O2'	55:2x:19:G:H5'	2.21	0.40
1:1A:6:A:H8	1:1A:6:A:O5'	2.03	0.40
1:1A:112:U:H2'	1:1A:113:G:O4'	2.21	0.40
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.40	0.40
1:1A:817:C:H4'	1:1A:932:G:C5	2.56	0.40
1:1A:1054:A:N6	1:1A:1055:G:C6	2.89	0.40
1:1A:1064:C:H1'	1:1A:1076:C:C5	2.54	0.40
1:1A:2648:C:O2'	1:1A:2649:U:H5'	2.21	0.40
7:1H:6:ARG:HH12	7:1H:54:ARG:NH2	2.18	0.40
8:1I:33:ARG:C	8:1I:35:LEU:H	2.29	0.40
11:1P:101:VAL:HA	11:1P:106:LEU:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:317:G:C6	32:1a:318:G:C5	3.10	0.40
32:1a:939:G:H2'	32:1a:940:C:C6	2.56	0.40
32:1a:1406:U:O2	32:1a:1517:G:N2	2.52	0.40
33:1b:47:THR:HA	33:1b:202:PRO:HG2	2.02	0.40
35:1d:146:ILE:H	35:1d:146:ILE:HD12	1.87	0.40
36:1e:68:GLU:HG3	36:1e:69:VAL:N	2.36	0.40
43:1l:36:VAL:HG21	62:1l:309:HOH:O	2.22	0.40
1:2A:27:G:C2	1:2A:512:G:N3	2.89	0.40
1:2A:229:A:H5'	1:2A:230:U:OP1	2.21	0.40
1:2A:1798:U:H5'	3:2D:259:THR:CG2	2.31	0.40
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.51	0.40
1:2A:2166:G:H8	1:2A:2167:U:H5''	1.86	0.40
1:2A:2516:G:O6	1:2A:2517:C:N4	2.54	0.40
1:2A:2694:G:O2'	1:2A:2695:C:H5'	2.21	0.40
2:2B:61:G:C6	2:2B:62:C:C4	3.09	0.40
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	2.03	0.40
3:2D:77:ALA:HA	3:2D:97:TYR:HA	2.02	0.40
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	2.03	0.40
8:2I:82:ARG:CG	8:2I:89:TYR:HD2	2.31	0.40
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG2	2.57	0.40
23:21:3:LYS:O	23:21:12:PRO:HD3	2.22	0.40
26:24:44:THR:OG1	26:24:45:GLY:N	2.53	0.40
26:24:53:GLU:C	26:24:55:ARG:N	2.78	0.40
32:2a:714:G:H2'	32:2a:715:A:C8	2.56	0.40
32:2a:838:G:O2'	32:2a:839:U:H2'	2.21	0.40
32:2a:972:C:O2'	41:2j:55:LYS:O	2.39	0.40
32:2a:1029:C:C2	32:2a:1032:G:N2	2.73	0.40
32:2a:1508:G:H2'	32:2a:1509:C:C6	2.56	0.40
33:2b:175:ARG:HH12	33:2b:179:LYS:NZ	2.19	0.40
35:2d:180:GLY:HA3	35:2d:182:LYS:HE3	2.02	0.40
40:2i:47:LEU:HB3	40:2i:50:LEU:HD21	2.02	0.40
41:2j:23:ILE:HA	41:2j:23:ILE:HD13	1.73	0.40
48:2q:43:LEU:HB3	48:2q:69:LYS:HG3	2.03	0.40
56:2y:15:G:N2	56:2y:48:C:N4	2.39	0.40
1:1A:687:C:H5''	29:17:2:LYS:HE2	2.03	0.40
1:1A:957:A:N1	1:1A:2458:G:H4'	2.36	0.40
1:1A:1047:G:O2'	1:1A:1048:A:O5'	2.40	0.40
1:1A:1243:G:H4'	11:1P:7:ARG:NH2	2.37	0.40
1:1A:1311:G:H2'	29:17:47:ARG:HH22	1.86	0.40
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.20	0.40
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2144:U:H1'	1:1A:2148:G:H22	1.86	0.40
1:1A:2171:A:O2'	1:1A:2172:U:H5''	2.21	0.40
1:1A:2376:A:H2'	1:1A:2377:A:O4'	2.20	0.40
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.21	0.40
4:1E:51:PHE:CD2	4:1E:52:LEU:HG	2.56	0.40
5:1F:51:THR:O	5:1F:93:LYS:HE2	2.21	0.40
6:1G:5:VAL:CG2	6:1G:8:LYS:H	2.34	0.40
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.43	0.40
13:1R:100:LEU:HD12	13:1R:100:LEU:HA	1.91	0.40
13:1R:111:LEU:HD13	13:1R:111:LEU:HA	1.83	0.40
21:1Z:4:ARG:HH21	21:1Z:60:GLU:HG2	1.87	0.40
32:1a:33:A:H2'	32:1a:34:C:C6	2.56	0.40
32:1a:418:C:H2'	32:1a:419:C:H6	1.85	0.40
32:1a:582:U:C2	32:1a:583:A:C8	3.09	0.40
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.21	0.40
33:1b:12:GLU:C	33:1b:14:GLY:N	2.79	0.40
34:1c:18:TRP:H	34:1c:18:TRP:HE3	1.68	0.40
36:1e:28:PHE:O	36:1e:47:LYS:HA	2.21	0.40
42:1k:62:GLN:HB2	42:1k:93:GLN:HG3	2.03	0.40
44:1m:106:ASN:HB3	44:1m:107:ALA:H	1.76	0.40
48:1q:4:LYS:HE2	48:1q:6:LEU:HD21	2.02	0.40
49:1r:31:LEU:O	49:1r:69:THR:HG21	2.22	0.40
1:2A:582:G:H2'	1:2A:583:G:C8	2.56	0.40
1:2A:589:C:H2'	1:2A:590:A:C8	2.57	0.40
1:2A:614(B):G:N2	5:2F:44:ARG:O	2.47	0.40
1:2A:633:A:H4'	1:2A:2404:C:H5''	2.03	0.40
1:2A:1475:G:C2	1:2A:1517:G:C2	3.10	0.40
1:2A:1819:A:H2'	3:2D:178:PRO:HB2	2.01	0.40
1:2A:2359:C:H2'	1:2A:2360:A:O4'	2.20	0.40
1:2A:2821:A:C2	1:2A:2822:G:C4	3.10	0.40
2:2B:19:G:H2'	2:2B:20:C:O4'	2.22	0.40
2:2B:25:A:H2'	2:2B:26:A:C8	2.56	0.40
2:2B:73:A:C6	2:2B:74:U:C2	3.09	0.40
7:2H:15:VAL:HG12	7:2H:28:GLY:CA	2.51	0.40
8:2I:73:GLU:HG3	8:2I:138:ILE:HG23	2.03	0.40
30:28:23:VAL:HG22	30:28:47:LYS:HB3	2.02	0.40
32:2a:120:A:C6	32:2a:122:G:C2	3.09	0.40
32:2a:123:C:OP1	32:2a:312:C:H5'	2.21	0.40
32:2a:189(L):G:H2'	32:2a:190:U:C6	2.57	0.40
32:2a:540:G:C4	32:2a:541:G:C8	3.09	0.40
32:2a:620:C:H2'	32:2a:621:A:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1328:C:O2'	44:2m:29:ARG:NH2	2.46	0.40
37:2f:7:ASN:OD1	37:2f:62:TRP:HD1	2.05	0.40
40:2i:14:VAL:CG2	40:2i:66:ARG:HG2	2.51	0.40
45:2n:25:VAL:HG22	45:2n:38:GLY:O	2.22	0.40
46:2o:39:LEU:HB3	46:2o:56:LEU:HD13	2.01	0.40
55:2x:23:C:H2'	55:2x:24:U:C6	2.56	0.40
56:2y:27:G:H2'	56:2y:28:G:C8	2.56	0.40
1:1A:485:C:C2'	1:1A:486:C:H5'	2.52	0.40
1:1A:565:C:H4'	62:1A:4650:HOH:O	2.20	0.40
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.21	0.40
1:1A:1176:G:C2	1:1A:1178:C:OP2	2.74	0.40
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.58	0.40
3:1D:106:ILE:HD13	3:1D:106:ILE:HG21	1.80	0.40
5:1F:93:LYS:HD3	5:1F:93:LYS:HA	1.85	0.40
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.21	0.40
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.86	0.40
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.56	0.40
40:1i:23:ASN:HD22	40:1i:25:LYS:HE2	1.87	0.40
48:1q:48:GLU:O	48:1q:49:GLU:C	2.64	0.40
55:1x:13:C:H2'	55:1x:14:A:H5''	2.03	0.40
1:2A:265:A:N6	1:2A:427:U:O2'	2.50	0.40
1:2A:363(A):A:H2'	1:2A:363(B):G:C8	2.57	0.40
1:2A:479:A:N3	1:2A:481:G:H5''	2.36	0.40
1:2A:515:A:H1'	1:2A:581:C:H1'	2.04	0.40
1:2A:530:G:C5	1:2A:2022:U:H5''	2.56	0.40
1:2A:1171:G:OP2	1:2A:1171:G:C8	2.74	0.40
1:2A:2064:C:H2'	1:2A:2065:C:C6	2.57	0.40
1:2A:2156:G:H5''	1:2A:2157:G:OP2	2.20	0.40
1:2A:2712:U:H2'	1:2A:2714:G:H5''	2.03	0.40
5:2F:18:ARG:HH12	5:2F:127:GLU:CD	2.27	0.40
6:2G:16:ARG:HH21	6:2G:31:VAL:HG11	1.85	0.40
6:2G:96:ARG:H	6:2G:96:ARG:HG3	1.40	0.40
7:2H:3:ARG:HA	7:2H:3:ARG:HD2	1.84	0.40
7:2H:149:ARG:HD3	7:2H:164:TYR:CE2	2.56	0.40
8:2I:38:LEU:HB2	8:2I:40:THR:HG23	2.04	0.40
26:24:44:THR:C	26:24:46:GLN:N	2.80	0.40
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.56	0.40
34:2c:3:ASN:OD1	34:2c:3:ASN:N	2.53	0.40
36:2e:53:LEU:O	36:2e:57:LYS:HB2	2.22	0.40
42:2k:59:TYR:O	42:2k:62:GLN:HB3	2.21	0.40
54:2w:23:A:H2'	54:2w:24:G:C8	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:2y:58:A:H1'	56:2y:60:U:N3	2.36	0.40
1:1A:247:G:H4'	1:1A:386:G:C6	2.56	0.40
1:1A:862:G:H5'	2:1B:79:C:H4'	2.03	0.40
1:1A:980:A:C6	1:1A:981:A:N1	2.89	0.40
1:1A:1075:C:H42	1:1A:1077:A:N6	2.20	0.40
1:1A:2111:C:N3	1:1A:2145:C:O2'	2.54	0.40
1:1A:2184:G:C6	1:1A:2185:C:C4	3.09	0.40
2:1B:48:A:H4'	14:1S:95:HIS:HD2	1.87	0.40
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	2.03	0.40
7:1H:56:SER:OG	7:1H:58:GLU:HG2	2.22	0.40
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.20	0.40
13:1R:33:ARG:HA	13:1R:114:VAL:O	2.21	0.40
14:1S:3:ARG:HA	14:1S:3:ARG:HD3	1.77	0.40
21:1Z:15:PRO:HB2	21:1Z:19:ARG:HH12	1.87	0.40
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.20	0.40
21:1Z:52:SER:O	21:1Z:52:SER:OG	2.29	0.40
21:1Z:103:ARG:O	21:1Z:139:VAL:HG23	2.22	0.40
26:14:48:ARG:HD3	26:14:48:ARG:HA	1.86	0.40
26:14:50:VAL:HG11	44:1m:65:LYS:N	2.37	0.40
32:1a:61:G:OP2	51:1t:10:LEU:HD21	2.22	0.40
32:1a:177:C:H2'	32:1a:178:C:H6	1.86	0.40
32:1a:300:A:H2'	32:1a:301:G:O4'	2.22	0.40
32:1a:762:C:H2'	32:1a:763:G:H8	1.85	0.40
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.53	0.40
32:1a:1278:U:H5''	32:1a:1279:A:H5'	2.03	0.40
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.55	0.40
42:1k:59:TYR:CZ	42:1k:63:LEU:HD11	2.56	0.40
47:1p:19:ILE:HB	47:1p:37:GLY:O	2.22	0.40
49:1r:66:LEU:O	49:1r:70:ILE:HG13	2.22	0.40
51:1t:100:ILE:HG13	51:1t:101:GLY:H	1.87	0.40
52:1u:3:LYS:HD3	52:1u:14:TRP:CD1	2.57	0.40
1:2A:468:G:N7	29:27:39:ARG:NH2	2.63	0.40
1:2A:600:G:O3'	5:2F:108:LYS:HE3	2.21	0.40
1:2A:601:C:O5'	1:2A:601:C:H6	2.05	0.40
1:2A:874:G:N2	1:2A:904:C:C2	2.90	0.40
1:2A:1653:G:H3'	13:2R:2:ARG:HD3	2.03	0.40
1:2A:2129:C:N4	1:2A:2159:G:H1	2.19	0.40
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.22	0.40
1:2A:2540:C:O2'	1:2A:2740:A:N3	2.42	0.40
3:2D:4:LYS:HB3	3:2D:18:VAL:HG23	2.04	0.40
4:2E:23:VAL:HA	4:2E:184:VAL:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:185:ASP:O	5:2F:189:THR:HG23	2.21	0.40
9:2N:4:TYR:O	16:2U:64:ARG:NH2	2.44	0.40
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.79	0.40
21:2Z:51:ALA:O	21:2Z:55:HIS:HD2	2.05	0.40
26:24:16:CYS:SG	26:24:17:GLY:N	2.95	0.40
27:25:33:CYS:HB2	27:25:40:LYS:HD3	2.03	0.40
32:2a:9:G:C2	32:2a:10:A:C4	3.10	0.40
32:2a:219:C:H2'	32:2a:220:G:O4'	2.21	0.40
32:2a:237:C:H5''	48:2q:25:ARG:CZ	2.51	0.40
32:2a:510:A:H5''	32:2a:511:C:P	2.61	0.40
32:2a:624:C:H4'	47:2p:10:GLY:O	2.22	0.40
32:2a:1058:G:H2'	32:2a:1059:C:C6	2.57	0.40
32:2a:1060:C:C5	34:2c:2:GLY:HA3	2.57	0.40
34:2c:55:VAL:O	34:2c:55:VAL:HG13	2.22	0.40
46:2o:3:ILE:HA	46:2o:7:GLU:OE1	2.21	0.40

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:87:LYS:NZ	32:2a:358:U:O3'[3_654]	2.17	0.03

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100
3	2D	273/276 (99%)	254 (93%)	19 (7%)	0	100	100
4	1E	202/206 (98%)	187 (93%)	15 (7%)	0	100	100
4	2E	202/206 (98%)	191 (95%)	10 (5%)	1 (0%)	24	43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	1F	201/210 (96%)	195 (97%)	6 (3%)	0	100	100
5	2F	201/210 (96%)	188 (94%)	13 (6%)	0	100	100
6	1G	179/182 (98%)	164 (92%)	14 (8%)	1 (1%)	21	38
6	2G	179/182 (98%)	154 (86%)	24 (13%)	1 (1%)	21	38
7	1H	172/180 (96%)	163 (95%)	9 (5%)	0	100	100
7	2H	172/180 (96%)	153 (89%)	18 (10%)	1 (1%)	21	38
8	1I	144/148 (97%)	122 (85%)	22 (15%)	0	100	100
8	2I	144/148 (97%)	125 (87%)	19 (13%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	126 (91%)	12 (9%)	0	100	100
10	1O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
10	2O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
11	1P	147/150 (98%)	137 (93%)	10 (7%)	0	100	100
11	2P	147/150 (98%)	134 (91%)	13 (9%)	0	100	100
12	1Q	139/141 (99%)	132 (95%)	7 (5%)	0	100	100
12	2Q	139/141 (99%)	126 (91%)	13 (9%)	0	100	100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	109 (94%)	7 (6%)	0	100	100
14	1S	108/112 (96%)	104 (96%)	4 (4%)	0	100	100
14	2S	108/112 (96%)	98 (91%)	10 (9%)	0	100	100
15	1T	129/146 (88%)	119 (92%)	10 (8%)	0	100	100
15	2T	129/146 (88%)	124 (96%)	5 (4%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	92 (93%)	7 (7%)	0	100	100
17	2V	99/101 (98%)	90 (91%)	9 (9%)	0	100	100
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
19	1X	93/96 (97%)	90 (97%)	3 (3%)	0	100	100
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
20	1Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	2Y	105/110 (96%)	95 (90%)	10 (10%)	0	100	100
21	1Z	148/206 (72%)	129 (87%)	18 (12%)	1 (1%)	18	34
21	2Z	156/206 (76%)	133 (85%)	21 (14%)	2 (1%)	9	18
22	10	81/85 (95%)	77 (95%)	4 (5%)	0	100	100
22	20	81/85 (95%)	81 (100%)	0	0	100	100
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	11	22
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	11	22
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	68 (100%)	0	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
26	14	67/71 (94%)	51 (76%)	14 (21%)	2 (3%)	3	5
26	24	67/71 (94%)	50 (75%)	16 (24%)	1 (2%)	8	16
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
28	16	51/54 (94%)	47 (92%)	4 (8%)	0	100	100
28	26	51/54 (94%)	51 (100%)	0	0	100	100
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	46 (100%)	0	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	60 (97%)	2 (3%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
33	1b	229/256 (90%)	192 (84%)	34 (15%)	3 (1%)	9	18
33	2b	229/256 (90%)	190 (83%)	36 (16%)	3 (1%)	9	18
34	1c	204/239 (85%)	189 (93%)	15 (7%)	0	100	100
34	2c	204/239 (85%)	175 (86%)	29 (14%)	0	100	100
35	1d	206/209 (99%)	185 (90%)	21 (10%)	0	100	100
35	2d	206/209 (99%)	188 (91%)	18 (9%)	0	100	100
36	1e	146/162 (90%)	132 (90%)	14 (10%)	0	100	100
36	2e	146/162 (90%)	137 (94%)	9 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
37	1f	98/101 (97%)	96 (98%)	2 (2%)	0	100	100
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
38	1g	153/156 (98%)	139 (91%)	14 (9%)	0	100	100
38	2g	153/156 (98%)	138 (90%)	15 (10%)	0	100	100
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100	100
39	2h	135/138 (98%)	128 (95%)	7 (5%)	0	100	100
40	1i	125/128 (98%)	109 (87%)	16 (13%)	0	100	100
40	2i	125/128 (98%)	102 (82%)	23 (18%)	0	100	100
41	1j	95/105 (90%)	85 (90%)	9 (10%)	1 (1%)	11	22
41	2j	94/105 (90%)	84 (89%)	9 (10%)	1 (1%)	11	22
42	1k	112/129 (87%)	101 (90%)	10 (9%)	1 (1%)	14	27
42	2k	112/129 (87%)	99 (88%)	13 (12%)	0	100	100
43	1l	119/132 (90%)	110 (92%)	9 (8%)	0	100	100
43	2l	119/132 (90%)	111 (93%)	8 (7%)	0	100	100
44	1m	123/126 (98%)	107 (87%)	15 (12%)	1 (1%)	16	31
44	2m	120/126 (95%)	107 (89%)	13 (11%)	0	100	100
45	1n	58/61 (95%)	54 (93%)	4 (7%)	0	100	100
45	2n	58/61 (95%)	50 (86%)	8 (14%)	0	100	100
46	1o	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
46	2o	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
47	1p	80/88 (91%)	75 (94%)	5 (6%)	0	100	100
47	2p	80/88 (91%)	72 (90%)	8 (10%)	0	100	100
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100	100
48	2q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
49	1r	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
49	2r	66/88 (75%)	62 (94%)	4 (6%)	0	100	100
50	1s	81/93 (87%)	69 (85%)	12 (15%)	0	100	100
50	2s	81/93 (87%)	70 (86%)	10 (12%)	1 (1%)	10	20
51	1t	94/106 (89%)	80 (85%)	13 (14%)	1 (1%)	11	22
51	2t	94/106 (89%)	83 (88%)	11 (12%)	0	100	100
52	1u	21/27 (78%)	19 (90%)	2 (10%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
57	1z	16/18 (89%)	12 (75%)	3 (19%)	1 (6%)	1	1
57	2z	16/18 (89%)	11 (69%)	5 (31%)	0	100	100
All	All	11404/12164 (94%)	10474 (92%)	905 (8%)	25 (0%)	43	63

All (25) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
21	1Z	53	ILE
57	1z	4	SER
21	2Z	52	SER
33	2b	9	GLU
33	2b	17	PHE
23	11	3	LYS
41	1j	79	ARG
44	1m	106	ASN
21	2Z	51	ALA
41	2j	79	ARG
33	1b	17	PHE
23	21	3	LYS
6	1G	96	ARG
26	14	62	ARG
33	1b	22	LYS
26	24	47	GLN
50	2s	81	ARG
33	2b	21	ARG
26	14	61	ARG
6	2G	96	ARG
4	2E	52	LEU
42	1k	105	VAL
51	1t	96	GLY
7	2H	48	GLY
33	1b	125	PRO

5.3.2 Protein sidechains ⓘ

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%)	197 (92%)	18 (8%)	10	22
3	2D	215/218 (99%)	206 (96%)	9 (4%)	26	52
4	1E	164/166 (99%)	153 (93%)	11 (7%)	15	31
4	2E	164/166 (99%)	158 (96%)	6 (4%)	30	57
5	1F	160/166 (96%)	132 (82%)	28 (18%)	2	3
5	2F	159/166 (96%)	143 (90%)	16 (10%)	7	15
6	1G	143/156 (92%)	126 (88%)	17 (12%)	5	11
6	2G	143/156 (92%)	118 (82%)	25 (18%)	2	3
7	1H	144/148 (97%)	131 (91%)	13 (9%)	9	19
7	2H	144/148 (97%)	127 (88%)	17 (12%)	5	11
8	1I	113/124 (91%)	89 (79%)	24 (21%)	1	2
8	2I	105/124 (85%)	85 (81%)	20 (19%)	1	3
9	1N	118/119 (99%)	108 (92%)	10 (8%)	10	22
9	2N	118/119 (99%)	109 (92%)	9 (8%)	12	26
10	1O	100/100 (100%)	98 (98%)	2 (2%)	48	75
10	2O	100/100 (100%)	95 (95%)	5 (5%)	22	44
11	1P	115/116 (99%)	103 (90%)	12 (10%)	7	14
11	2P	115/116 (99%)	103 (90%)	12 (10%)	7	14
12	1Q	111/111 (100%)	106 (96%)	5 (4%)	24	49
12	2Q	111/111 (100%)	103 (93%)	8 (7%)	13	28
13	1R	101/101 (100%)	96 (95%)	5 (5%)	22	44
13	2R	101/101 (100%)	96 (95%)	5 (5%)	22	44
14	1S	86/88 (98%)	78 (91%)	8 (9%)	8	18
14	2S	85/88 (97%)	66 (78%)	19 (22%)	1	2
15	1T	115/127 (91%)	103 (90%)	12 (10%)	7	14
15	2T	113/127 (89%)	105 (93%)	8 (7%)	13	29
16	1U	93/94 (99%)	85 (91%)	8 (9%)	10	21
16	2U	93/94 (99%)	86 (92%)	7 (8%)	12	26
17	1V	80/82 (98%)	69 (86%)	11 (14%)	3	7
17	2V	80/82 (98%)	72 (90%)	8 (10%)	7	15
18	1W	90/92 (98%)	84 (93%)	6 (7%)	15	31

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	2W	90/92 (98%)	82 (91%)	8 (9%)	9	20
19	1X	77/78 (99%)	76 (99%)	1 (1%)	61	82
19	2X	77/78 (99%)	72 (94%)	5 (6%)	15	32
20	1Y	85/91 (93%)	72 (85%)	13 (15%)	3	5
20	2Y	85/91 (93%)	75 (88%)	10 (12%)	5	11
21	1Z	135/179 (75%)	115 (85%)	20 (15%)	3	6
21	2Z	137/179 (76%)	114 (83%)	23 (17%)	2	4
22	10	65/67 (97%)	63 (97%)	2 (3%)	35	62
22	20	65/67 (97%)	61 (94%)	4 (6%)	16	34
23	11	80/83 (96%)	75 (94%)	5 (6%)	16	34
23	21	80/83 (96%)	72 (90%)	8 (10%)	7	15
24	12	65/67 (97%)	59 (91%)	6 (9%)	8	19
24	22	65/67 (97%)	59 (91%)	6 (9%)	8	19
25	13	51/52 (98%)	45 (88%)	6 (12%)	5	11
25	23	50/52 (96%)	46 (92%)	4 (8%)	11	24
26	14	59/63 (94%)	47 (80%)	12 (20%)	1	2
26	24	53/63 (84%)	44 (83%)	9 (17%)	2	4
27	15	50/52 (96%)	47 (94%)	3 (6%)	17	36
27	25	50/52 (96%)	48 (96%)	2 (4%)	28	54
28	16	51/52 (98%)	47 (92%)	4 (8%)	11	24
28	26	50/52 (96%)	45 (90%)	5 (10%)	7	15
29	17	41/42 (98%)	38 (93%)	3 (7%)	13	27
29	27	41/42 (98%)	37 (90%)	4 (10%)	7	16
30	18	54/55 (98%)	51 (94%)	3 (6%)	19	39
30	28	54/55 (98%)	52 (96%)	2 (4%)	30	57
31	19	34/34 (100%)	33 (97%)	1 (3%)	37	65
31	29	34/34 (100%)	31 (91%)	3 (9%)	9	20
33	1b	192/220 (87%)	167 (87%)	25 (13%)	4	8
33	2b	187/220 (85%)	156 (83%)	31 (17%)	2	4
34	1c	142/188 (76%)	124 (87%)	18 (13%)	4	9
34	2c	140/188 (74%)	123 (88%)	17 (12%)	5	10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	1d	169/181 (93%)	140 (83%)	29 (17%)	2	4
35	2d	173/181 (96%)	151 (87%)	22 (13%)	4	9
36	1e	113/123 (92%)	101 (89%)	12 (11%)	6	14
36	2e	114/123 (93%)	97 (85%)	17 (15%)	3	6
37	1f	84/90 (93%)	72 (86%)	12 (14%)	3	6
37	2f	85/90 (94%)	75 (88%)	10 (12%)	5	11
38	1g	119/127 (94%)	96 (81%)	23 (19%)	1	2
38	2g	120/127 (94%)	108 (90%)	12 (10%)	7	15
39	1h	114/119 (96%)	108 (95%)	6 (5%)	20	42
39	2h	114/119 (96%)	100 (88%)	14 (12%)	4	10
40	1i	90/99 (91%)	79 (88%)	11 (12%)	5	10
40	2i	89/99 (90%)	72 (81%)	17 (19%)	1	3
41	1j	66/92 (72%)	61 (92%)	5 (8%)	12	26
41	2j	69/92 (75%)	58 (84%)	11 (16%)	2	5
42	1k	82/99 (83%)	71 (87%)	11 (13%)	4	8
42	2k	83/99 (84%)	75 (90%)	8 (10%)	8	17
43	1l	96/108 (89%)	89 (93%)	7 (7%)	13	27
43	2l	96/108 (89%)	89 (93%)	7 (7%)	13	27
44	1m	95/101 (94%)	82 (86%)	13 (14%)	3	7
44	2m	92/101 (91%)	78 (85%)	14 (15%)	3	5
45	1n	49/50 (98%)	45 (92%)	4 (8%)	10	23
45	2n	49/50 (98%)	42 (86%)	7 (14%)	3	6
46	1o	78/80 (98%)	74 (95%)	4 (5%)	21	43
46	2o	78/80 (98%)	72 (92%)	6 (8%)	12	25
47	1p	69/74 (93%)	61 (88%)	8 (12%)	5	11
47	2p	68/74 (92%)	53 (78%)	15 (22%)	1	2
48	1q	94/97 (97%)	84 (89%)	10 (11%)	6	14
48	2q	94/97 (97%)	80 (85%)	14 (15%)	3	6
49	1r	59/77 (77%)	53 (90%)	6 (10%)	7	15
49	2r	59/77 (77%)	51 (86%)	8 (14%)	3	8
50	1s	69/80 (86%)	60 (87%)	9 (13%)	4	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
50	2s	67/80 (84%)	60 (90%)	7 (10%)	7	14
51	1t	70/82 (85%)	66 (94%)	4 (6%)	18	39
51	2t	70/82 (85%)	63 (90%)	7 (10%)	7	15
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19	39
52	2u	18/22 (82%)	18 (100%)	0	100	100
57	1z	13/13 (100%)	11 (85%)	2 (15%)	2	5
57	2z	13/13 (100%)	10 (77%)	3 (23%)	1	1
All	All	9331/10090 (92%)	8328 (89%)	1003 (11%)	6	13

All (1003) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	5	LYS
3	1D	7	LYS
3	1D	30	GLU
3	1D	32	SER
3	1D	38	LYS
3	1D	88	ARG
3	1D	106	ILE
3	1D	126	GLN
3	1D	131	LEU
3	1D	141	VAL
3	1D	155	LEU
3	1D	204	ILE
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	1	MET
4	1E	12	THR
4	1E	14	ILE
4	1E	34	VAL
4	1E	47	VAL
4	1E	59	VAL
4	1E	77	ILE
4	1E	78	LEU
4	1E	116	VAL
4	1E	145	LYS

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Mol	Chain	Res	Type
4	1E	188	VAL
5	1F	9	ILE
5	1F	15	SER
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	60	SER
5	1F	70	THR
5	1F	72	ARG
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	127	GLU
5	1F	132	VAL
5	1F	133	ASN
5	1F	140	LEU
5	1F	144	LYS
5	1F	162	LEU
5	1F	165	ARG
5	1F	168	ARG
5	1F	175	THR
5	1F	176	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
5	1F	203	GLN
6	1G	5	VAL
6	1G	7	LEU
6	1G	22	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	67	LYS
6	1G	82	LEU
6	1G	91	ARG
6	1G	96	ARG
6	1G	103	LEU
6	1G	109	VAL
6	1G	132	ASN
6	1G	136	ARG

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Mol	Chain	Res	Type
6	1G	139	LEU
6	1G	140	ILE
6	1G	148	MET
6	1G	159	VAL
7	1H	4	ILE
7	1H	33	LEU
7	1H	42	ARG
7	1H	45	VAL
7	1H	56	SER
7	1H	98	LEU
7	1H	116	GLU
7	1H	125	VAL
7	1H	127	GLU
7	1H	149	ARG
7	1H	160	LYS
7	1H	169	VAL
7	1H	172	LYS
8	1I	12	LEU
8	1I	38	LEU
8	1I	40	THR
8	1I	41	GLU
8	1I	42	SER
8	1I	47	LEU
8	1I	52	ARG
8	1I	68	LEU
8	1I	75	LEU
8	1I	77	LEU
8	1I	85	GLU
8	1I	87	LYS
8	1I	91	SER
8	1I	92	VAL
8	1I	93	THR
8	1I	97	ILE
8	1I	102	SER
8	1I	103	ARG
8	1I	108	THR
8	1I	116	LEU
8	1I	129	THR
8	1I	133	HIS
8	1I	140	LEU
8	1I	144	VAL
9	1N	1	MET

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Mol	Chain	Res	Type
9	1N	9	VAL
9	1N	15	LEU
9	1N	28	THR
9	1N	48	MET
9	1N	62	VAL
9	1N	68	GLU
9	1N	83	LYS
9	1N	96	GLU
9	1N	137	LYS
10	1O	77	ILE
10	1O	106	LEU
11	1P	32	THR
11	1P	45	LEU
11	1P	79	ARG
11	1P	95	VAL
11	1P	99	LEU
11	1P	100	LEU
11	1P	102	ARG
11	1P	105	LEU
11	1P	126	VAL
11	1P	133	SER
11	1P	135	LEU
11	1P	138	LEU
12	1Q	7	MET
12	1Q	56	ARG
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	130	LYS
13	1R	15	SER
13	1R	36	THR
13	1R	100	LEU
13	1R	111	LEU
13	1R	114	VAL
14	1S	13	ARG
14	1S	25	ARG
14	1S	44	LYS
14	1S	68	GLN
14	1S	69	VAL
14	1S	73	LEU
14	1S	85	VAL
14	1S	110	LEU
15	1T	23	ARG

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Mol	Chain	Res	Type
15	1T	28	VAL
15	1T	36	GLU
15	1T	50	ILE
15	1T	66	VAL
15	1T	67	SER
15	1T	82	LEU
15	1T	84	GLN
15	1T	85	LYS
15	1T	96	ARG
15	1T	125	ARG
15	1T	128	GLU
16	1U	8	VAL
16	1U	9	VAL
16	1U	17	ILE
16	1U	27	LEU
16	1U	31	SER
16	1U	74	LEU
16	1U	95	LEU
16	1U	110	VAL
17	1V	1	MET
17	1V	6	LYS
17	1V	18	LEU
17	1V	20	LEU
17	1V	28	GLU
17	1V	38	LEU
17	1V	56	SER
17	1V	79	VAL
17	1V	85	LYS
17	1V	95	LEU
17	1V	100	ARG
18	1W	4	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	60	ASN
18	1W	90	ARG
18	1W	92	ARG
19	1X	92	LEU
20	1Y	1	MET
20	1Y	5	MET
20	1Y	7	VAL
20	1Y	8	LYS
20	1Y	17	SER

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Mol	Chain	Res	Type
20	1Y	31	LEU
20	1Y	38	ILE
20	1Y	47	LYS
20	1Y	50	ARG
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	1	MET
21	1Z	28	MET
21	1Z	31	ARG
21	1Z	46	LYS
21	1Z	49	ARG
21	1Z	50	GLN
21	1Z	56	VAL
21	1Z	70	LEU
21	1Z	72	ARG
21	1Z	94	GLU
21	1Z	124	ILE
21	1Z	129	SER
21	1Z	150	LEU
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	157	LEU
21	1Z	162	GLU
21	1Z	170	THR
21	1Z	171	ILE
22	10	49	LYS
22	10	81	VAL
23	11	40	ARG
23	11	52	ARG
23	11	57	GLU
23	11	80	LEU
23	11	85	LEU
24	12	3	LEU
24	12	19	VAL
24	12	34	GLU
24	12	45	SER
24	12	53	LEU
24	12	69	ARG
25	13	18	ASP

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Mol	Chain	Res	Type
25	13	23	LEU
25	13	31	LEU
25	13	54	VAL
25	13	55	ARG
25	13	60	GLU
26	14	1	MET
26	14	27	THR
26	14	31	ILE
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	53	GLU
26	14	56	VAL
26	14	58	ARG
26	14	62	ARG
26	14	63	TYR
26	14	66	SER
27	15	6	VAL
27	15	57	VAL
27	15	58	LEU
28	16	9	LEU
28	16	14	THR
28	16	28	ARG
28	16	48	VAL
29	17	29	LYS
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	29	LYS
30	18	39	LYS
31	19	10	ILE
33	1b	7	VAL
33	1b	11	LEU
33	1b	12	GLU
33	1b	16	HIS
33	1b	35	GLU
33	1b	39	ILE
33	1b	44	LEU
33	1b	45	GLN
33	1b	78	GLN
33	1b	80	ILE
33	1b	93	VAL

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Mol	Chain	Res	Type
33	1b	101	MET
33	1b	107	THR
33	1b	121	LEU
33	1b	127	ILE
33	1b	130	ARG
33	1b	142	LEU
33	1b	154	LEU
33	1b	160	ASP
33	1b	185	ILE
33	1b	208	ILE
33	1b	213	LEU
33	1b	222	ILE
33	1b	223	ILE
33	1b	229	VAL
34	1c	3	ASN
34	1c	5	ILE
34	1c	15	THR
34	1c	45	LYS
34	1c	68	VAL
34	1c	70	VAL
34	1c	72	LYS
34	1c	77	ILE
34	1c	82	GLU
34	1c	87	LEU
34	1c	91	LEU
34	1c	98	ASN
34	1c	173	VAL
34	1c	175	LEU
34	1c	179	ARG
34	1c	182	ILE
34	1c	193	TYR
34	1c	195	VAL
35	1d	3	ARG
35	1d	5	ILE
35	1d	8	VAL
35	1d	19	LEU
35	1d	31	CYS
35	1d	59	ARG
35	1d	70	ILE
35	1d	76	ARG
35	1d	83	SER
35	1d	88	VAL

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Mol	Chain	Res	Type
35	1d	91	SER
35	1d	119	GLN
35	1d	122	ARG
35	1d	127	THR
35	1d	134	ASP
35	1d	135	LEU
35	1d	137	SER
35	1d	140	VAL
35	1d	157	LEU
35	1d	158	ILE
35	1d	170	VAL
35	1d	177	ASP
35	1d	187	ARG
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP
35	1d	194	LEU
35	1d	196	LEU
35	1d	208	SER
36	1e	5	ASP
36	1e	27	ARG
36	1e	41	VAL
36	1e	51	VAL
36	1e	56	GLN
36	1e	75	THR
36	1e	79	GLU
36	1e	109	ILE
36	1e	131	ILE
36	1e	140	ARG
36	1e	150	ARG
36	1e	152	ARG
37	1f	31	GLU
37	1f	39	LYS
37	1f	54	LYS
37	1f	55	ASP
37	1f	57	GLN
37	1f	64	GLN
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	81	ILE
37	1f	87	ARG

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Mol	Chain	Res	Type
37	1f	92	LYS
38	1g	9	VAL
38	1g	12	LEU
38	1g	21	VAL
38	1g	32	ARG
38	1g	41	ARG
38	1g	45	ASP
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	63	LYS
38	1g	76	ARG
38	1g	78	ARG
38	1g	80	VAL
38	1g	90	GLU
38	1g	104	LEU
38	1g	110	GLN
38	1g	113	GLU
38	1g	115	ARG
38	1g	120	ILE
38	1g	140	ASP
38	1g	143	ARG
38	1g	155	ARG
39	1h	26	VAL
39	1h	29	SER
39	1h	51	VAL
39	1h	52	ASP
39	1h	112	LEU
39	1h	133	LEU
40	1i	7	THR
40	1i	25	LYS
40	1i	41	VAL
40	1i	42	ARG
40	1i	64	THR
40	1i	81	ILE
40	1i	89	ASN
40	1i	92	TYR
40	1i	96	LEU
40	1i	103	THR
40	1i	128	ARG
41	1j	8	LEU

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Mol	Chain	Res	Type
41	1j	42	THR
41	1j	46	ARG
41	1j	81	THR
41	1j	94	VAL
42	1k	31	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	51	LYS
42	1k	80	VAL
42	1k	83	ILE
42	1k	96	ARG
42	1k	104	GLN
42	1k	107	SER
42	1k	117	ASN
42	1k	120	ARG
43	1l	11	VAL
43	1l	18	VAL
43	1l	22	SER
43	1l	28	LYS
43	1l	36	VAL
43	1l	62	SER
43	1l	116	SER
44	1m	3	ARG
44	1m	4	ILE
44	1m	12	ASN
44	1m	15	VAL
44	1m	19	LEU
44	1m	43	THR
44	1m	48	LEU
44	1m	64	TRP
44	1m	70	LEU
44	1m	94	ARG
44	1m	105	THR
44	1m	117	VAL
44	1m	126	LYS
45	1n	15	LYS
45	1n	18	VAL
45	1n	22	THR
45	1n	33	VAL
46	1o	14	GLU
46	1o	27	VAL
46	1o	39	LEU

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Mol	Chain	Res	Type
46	1o	84	LYS
47	1p	20	VAL
47	1p	27	LYS
47	1p	42	ARG
47	1p	43	LYS
47	1p	45	THR
47	1p	62	VAL
47	1p	67	THR
47	1p	75	ARG
48	1q	5	VAL
48	1q	35	VAL
48	1q	52	LYS
48	1q	60	ILE
48	1q	63	ARG
48	1q	85	VAL
48	1q	89	LEU
48	1q	90	ILE
48	1q	93	GLN
48	1q	100	LYS
49	1r	26	LEU
49	1r	31	LEU
49	1r	35	ARG
49	1r	37	VAL
49	1r	66	LEU
49	1r	75	ILE
50	1s	4	SER
50	1s	6	LYS
50	1s	12	ASP
50	1s	22	LEU
50	1s	28	LYS
50	1s	38	SER
50	1s	40	ILE
50	1s	41	VAL
50	1s	79	THR
51	1t	24	LEU
51	1t	37	SER
51	1t	62	LEU
51	1t	100	ILE
52	1u	9	ARG
57	1z	3	LYS
57	1z	17	ARG
3	2D	38	LYS

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Mol	Chain	Res	Type
3	2D	39	LYS
3	2D	89	SER
3	2D	99	ASP
3	2D	142	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	275	LYS
4	2E	12	THR
4	2E	14	ILE
4	2E	34	VAL
4	2E	116	VAL
4	2E	145	LYS
4	2E	175	VAL
5	2F	11	VAL
5	2F	28	ILE
5	2F	53	THR
5	2F	57	VAL
5	2F	70	THR
5	2F	126	VAL
5	2F	137	LYS
5	2F	149	ASP
5	2F	154	VAL
5	2F	157	VAL
5	2F	158	THR
5	2F	165	ARG
5	2F	168	ARG
5	2F	192	LEU
5	2F	196	LEU
5	2F	201	VAL
6	2G	3	LEU
6	2G	5	VAL
6	2G	18	GLU
6	2G	22	ARG
6	2G	28	VAL
6	2G	37	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	49	ASP
6	2G	51	ARG
6	2G	53	LEU
6	2G	60	LEU

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Mol	Chain	Res	Type
6	2G	70	VAL
6	2G	86	MET
6	2G	91	ARG
6	2G	107	LEU
6	2G	109	VAL
6	2G	111	LEU
6	2G	124	SER
6	2G	140	ILE
6	2G	145	THR
6	2G	160	VAL
6	2G	162	THR
6	2G	165	THR
6	2G	170	ARG
7	2H	15	VAL
7	2H	27	LYS
7	2H	40	GLU
7	2H	41	MET
7	2H	44	VAL
7	2H	45	VAL
7	2H	81	GLU
7	2H	90	LYS
7	2H	92	ILE
7	2H	103	LEU
7	2H	104	GLU
7	2H	107	VAL
7	2H	127	GLU
7	2H	129	THR
7	2H	136	ILE
7	2H	153	LYS
7	2H	169	VAL
8	2I	12	LEU
8	2I	15	VAL
8	2I	20	ASP
8	2I	38	LEU
8	2I	43	ASN
8	2I	44	LEU
8	2I	51	ILE
8	2I	58	LEU
8	2I	76	THR
8	2I	77	LEU
8	2I	79	ILE
8	2I	82	ARG

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Mol	Chain	Res	Type
8	2I	85	GLU
8	2I	87	LYS
8	2I	108	THR
8	2I	117	GLU
8	2I	121	LYS
8	2I	125	GLU
8	2I	127	VAL
8	2I	144	VAL
9	2N	1	MET
9	2N	9	VAL
9	2N	10	GLU
9	2N	16	ILE
9	2N	38	HIS
9	2N	60	ILE
9	2N	62	VAL
9	2N	65	LYS
9	2N	96	GLU
10	2O	28	SER
10	2O	63	VAL
10	2O	66	LYS
10	2O	86	ILE
10	2O	116	SER
11	2P	15	ARG
11	2P	29	LYS
11	2P	35	HIS
11	2P	36	LYS
11	2P	45	LEU
11	2P	70	GLN
11	2P	90	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	100	LEU
11	2P	132	LYS
11	2P	133	SER
12	2Q	7	MET
12	2Q	12	GLN
12	2Q	22	LYS
12	2Q	56	ARG
12	2Q	63	LYS
12	2Q	75	THR
12	2Q	77	LYS
12	2Q	94	VAL

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Mol	Chain	Res	Type
13	2R	36	THR
13	2R	100	LEU
13	2R	102	GLU
13	2R	111	LEU
13	2R	114	VAL
14	2S	15	ARG
14	2S	20	ARG
14	2S	28	VAL
14	2S	30	ARG
14	2S	35	ILE
14	2S	43	GLU
14	2S	48	LEU
14	2S	53	SER
14	2S	54	LEU
14	2S	58	LEU
14	2S	63	THR
14	2S	64	GLU
14	2S	65	VAL
14	2S	68	GLN
14	2S	76	LYS
14	2S	80	LEU
14	2S	83	LYS
14	2S	103	GLU
14	2S	110	LEU
15	2T	9	LEU
15	2T	10	VAL
15	2T	28	VAL
15	2T	40	THR
15	2T	63	VAL
15	2T	67	SER
15	2T	72	VAL
15	2T	96	ARG
16	2U	5	LYS
16	2U	17	ILE
16	2U	54	LYS
16	2U	59	ARG
16	2U	62	ILE
16	2U	70	ARG
16	2U	74	LEU
17	2V	1	MET
17	2V	7	THR
17	2V	28	GLU

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Mol	Chain	Res	Type
17	2V	38	LEU
17	2V	46	VAL
17	2V	57	VAL
17	2V	73	SER
17	2V	79	VAL
18	2W	11	ARG
18	2W	17	VAL
18	2W	50	VAL
18	2W	60	ASN
18	2W	61	ASN
18	2W	78	GLU
18	2W	92	ARG
18	2W	101	SER
19	2X	9	LEU
19	2X	45	THR
19	2X	72	LYS
19	2X	81	VAL
19	2X	92	LEU
20	2Y	1	MET
20	2Y	5	MET
20	2Y	14	LEU
20	2Y	17	SER
20	2Y	72	VAL
20	2Y	96	ILE
20	2Y	97	ARG
20	2Y	99	CYS
20	2Y	101	LYS
20	2Y	106	LEU
21	2Z	5	LEU
21	2Z	31	ARG
21	2Z	33	LEU
21	2Z	40	ASP
21	2Z	41	LEU
21	2Z	42	VAL
21	2Z	58	VAL
21	2Z	60	GLU
21	2Z	71	VAL
21	2Z	90	VAL
21	2Z	91	LEU
21	2Z	96	VAL
21	2Z	98	MET
21	2Z	100	VAL

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Mol	Chain	Res	Type
21	2Z	126	VAL
21	2Z	129	SER
21	2Z	137	ILE
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	161	VAL
21	2Z	163	LEU
21	2Z	171	ILE
21	2Z	174	VAL
22	20	10	THR
22	20	11	ARG
22	20	40	GLN
22	20	49	LYS
23	21	11	ARG
23	21	27	GLU
23	21	40	ARG
23	21	59	THR
23	21	69	LYS
23	21	80	LEU
23	21	85	LEU
23	21	94	LEU
24	22	3	LEU
24	22	19	VAL
24	22	46	GLN
24	22	53	LEU
24	22	59	ARG
24	22	70	GLN
25	23	31	LEU
25	23	54	VAL
25	23	57	GLU
25	23	58	VAL
26	24	13	ARG
26	24	26	SER
26	24	33	VAL
26	24	34	GLU
26	24	37	SER
26	24	56	VAL
26	24	59	PHE
26	24	63	TYR
26	24	68	ARG
27	25	6	VAL
27	25	59	GLU

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Mol	Chain	Res	Type
28	26	9	LEU
28	26	14	THR
28	26	19	ARG
28	26	32	ASN
28	26	34	LEU
29	27	24	THR
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
30	28	14	VAL
30	28	41	ILE
31	29	10	ILE
31	29	26	ILE
31	29	28	GLU
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	11	LEU
33	2b	23	ARG
33	2b	30	ARG
33	2b	43	ASP
33	2b	44	LEU
33	2b	49	GLU
33	2b	67	THR
33	2b	71	VAL
33	2b	76	GLN
33	2b	94	ASN
33	2b	101	MET
33	2b	111	ARG
33	2b	112	VAL
33	2b	117	GLU
33	2b	125	PRO
33	2b	127	ILE
33	2b	142	LEU
33	2b	164	VAL
33	2b	165	VAL
33	2b	185	ILE
33	2b	189	ASP
33	2b	190	THR
33	2b	200	ILE
33	2b	204	ASN
33	2b	208	ILE

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Mol	Chain	Res	Type
33	2b	213	LEU
33	2b	215	LEU
33	2b	235	SER
34	2c	4	LYS
34	2c	26	LYS
34	2c	30	ARG
34	2c	47	LEU
34	2c	70	VAL
34	2c	77	ILE
34	2c	82	GLU
34	2c	87	LEU
34	2c	91	LEU
34	2c	116	VAL
34	2c	152	ILE
34	2c	190	ARG
34	2c	192	THR
34	2c	195	VAL
34	2c	196	LEU
34	2c	198	VAL
34	2c	202	ILE
35	2d	3	ARG
35	2d	43	HIS
35	2d	47	ARG
35	2d	52	SER
35	2d	53	ASP
35	2d	58	LEU
35	2d	59	ARG
35	2d	76	ARG
35	2d	78	LEU
35	2d	86	LYS
35	2d	107	ARG
35	2d	127	THR
35	2d	135	LEU
35	2d	146	ILE
35	2d	150	GLU
35	2d	157	LEU
35	2d	158	ILE
35	2d	175	SER
35	2d	178	VAL
35	2d	186	LEU
35	2d	193	ASP
35	2d	196	LEU

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Mol	Chain	Res	Type
36	2e	6	PHE
36	2e	12	LEU
36	2e	13	ILE
36	2e	18	ARG
36	2e	20	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	51	VAL
36	2e	53	LEU
36	2e	55	VAL
36	2e	68	GLU
36	2e	73	ASN
36	2e	81	GLU
36	2e	87	SER
36	2e	101	ILE
36	2e	149	GLU
36	2e	150	ARG
37	2f	21	LEU
37	2f	31	GLU
37	2f	37	VAL
37	2f	63	TYR
37	2f	65	VAL
37	2f	69	GLU
37	2f	82	ARG
37	2f	83	ASP
37	2f	89	MET
37	2f	92	LYS
38	2g	9	VAL
38	2g	12	LEU
38	2g	15	ASP
38	2g	30	ILE
38	2g	52	GLU
38	2g	75	VAL
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	98	SER
38	2g	146	GLU
38	2g	154	TYR
39	2h	3	THR
39	2h	23	SER
39	2h	26	VAL

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Mol	Chain	Res	Type
39	2h	29	SER
39	2h	37	ARG
39	2h	39	LEU
39	2h	51	VAL
39	2h	52	ASP
39	2h	95	VAL
39	2h	107	LEU
39	2h	112	LEU
39	2h	118	VAL
39	2h	133	LEU
39	2h	134	ILE
40	2i	14	VAL
40	2i	25	LYS
40	2i	27	THR
40	2i	54	ASP
40	2i	56	LEU
40	2i	58	HIS
40	2i	63	ILE
40	2i	65	VAL
40	2i	66	ARG
40	2i	75	ASP
40	2i	89	ASN
40	2i	92	TYR
40	2i	102	LEU
40	2i	103	THR
40	2i	109	VAL
40	2i	113	LYS
40	2i	128	ARG
41	2j	15	THR
41	2j	23	ILE
41	2j	38	ILE
41	2j	43	ARG
41	2j	44	VAL
41	2j	45	ARG
41	2j	71	LEU
41	2j	81	THR
41	2j	84	GLN
41	2j	89	ASP
41	2j	94	VAL
42	2k	14	VAL
42	2k	29	ILE
42	2k	53	SER

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Mol	Chain	Res	Type
42	2k	66	LEU
42	2k	84	VAL
42	2k	87	THR
42	2k	105	VAL
42	2k	108	ILE
43	2l	18	VAL
43	2l	24	VAL
43	2l	28	LYS
43	2l	36	VAL
43	2l	50	SER
43	2l	62	SER
43	2l	65	GLU
44	2m	4	ILE
44	2m	8	GLU
44	2m	15	VAL
44	2m	17	VAL
44	2m	19	LEU
44	2m	32	GLU
44	2m	47	ASP
44	2m	48	LEU
44	2m	49	THR
44	2m	55	ARG
44	2m	63	THR
44	2m	80	ARG
44	2m	90	LEU
44	2m	115	LYS
45	2n	4	LYS
45	2n	15	LYS
45	2n	18	VAL
45	2n	33	VAL
45	2n	35	ARG
45	2n	39	LEU
45	2n	60	SER
46	2o	14	GLU
46	2o	38	ARG
46	2o	39	LEU
46	2o	60	VAL
46	2o	62	GLN
46	2o	87	ILE
47	2p	1	MET
47	2p	2	VAL
47	2p	3	LYS

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Mol	Chain	Res	Type
47	2p	4	ILE
47	2p	5	ARG
47	2p	8	ARG
47	2p	20	VAL
47	2p	44	THR
47	2p	45	THR
47	2p	54	GLU
47	2p	60	LEU
47	2p	69	THR
47	2p	72	ARG
47	2p	73	LEU
47	2p	74	LEU
48	2q	4	LYS
48	2q	5	VAL
48	2q	6	LEU
48	2q	7	THR
48	2q	35	VAL
48	2q	43	LEU
48	2q	52	LYS
48	2q	53	LEU
48	2q	63	ARG
48	2q	76	LEU
48	2q	90	ILE
48	2q	94	ASN
48	2q	99	SER
48	2q	100	LYS
49	2r	26	LEU
49	2r	31	LEU
49	2r	37	VAL
49	2r	46	GLU
49	2r	66	LEU
49	2r	68	LYS
49	2r	84	LYS
49	2r	86	VAL
50	2s	12	ASP
50	2s	17	GLU
50	2s	22	LEU
50	2s	27	GLU
50	2s	37	ARG
50	2s	43	GLU
50	2s	51	VAL
51	2t	9	ASN

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Mol	Chain	Res	Type
51	2t	15	ARG
51	2t	37	SER
51	2t	45	GLN
51	2t	46	GLU
51	2t	55	ILE
51	2t	71	THR
57	2z	1	SER
57	2z	16	LYS
57	2z	17	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (128) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	126	GLN
3	1D	166	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	133	ASN
5	1F	204	ASN
6	1G	26	GLN
8	1I	133	HIS
11	1P	27	HIS
12	1Q	12	GLN
13	1R	71	GLN
14	1S	68	GLN
15	1T	43	GLN
16	1U	94	ASN
18	1W	111	HIS
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	132	ASN
22	10	35	ASN
24	12	43	GLN
25	13	32	GLN
27	15	4	HIS
30	18	35	GLN
33	1b	78	GLN
33	1b	140	HIS
33	1b	212	GLN
34	1c	6	HIS

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Mol	Chain	Res	Type
34	1c	98	ASN
34	1c	123	GLN
34	1c	162	GLN
34	1c	170	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	201	GLN
36	1e	78	HIS
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	86	GLN
38	1g	106	GLN
40	1i	3	GLN
40	1i	23	ASN
40	1i	31	GLN
40	1i	34	ASN
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS
41	1j	62	HIS
42	1k	93	GLN
43	1l	99	HIS
44	1m	77	ASN
44	1m	92	HIS
46	1o	9	GLN
46	1o	46	HIS
47	1p	13	HIS
48	1q	16	GLN
49	1r	63	GLN
50	1s	47	HIS
50	1s	83	HIS
51	1t	16	HIS
51	1t	90	GLN
3	2D	116	GLN
4	2E	48	GLN
5	2F	133	ASN
8	2I	104	GLN
10	2O	5	GLN

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Mol	Chain	Res	Type
11	2P	70	GLN
12	2Q	12	GLN
12	2Q	123	HIS
13	2R	31	HIS
13	2R	50	HIS
13	2R	71	GLN
14	2S	38	GLN
15	2T	123	GLN
16	2U	81	HIS
16	2U	94	ASN
16	2U	117	GLN
17	2V	80	GLN
19	2X	31	HIS
20	2Y	6	HIS
21	2Z	32	HIS
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	121	HIS
23	21	56	GLN
26	24	40	HIS
33	2b	37	ASN
33	2b	78	GLN
33	2b	95	GLN
33	2b	140	HIS
33	2b	212	GLN
33	2b	224	GLN
34	2c	6	HIS
34	2c	31	HIS
34	2c	37	GLN
34	2c	102	ASN
34	2c	162	GLN
34	2c	170	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	125	HIS
36	2e	72	GLN
36	2e	73	ASN
37	2f	100	ASN
38	2g	68	ASN
38	2g	148	ASN
40	2i	3	GLN
40	2i	31	GLN

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Mol	Chain	Res	Type
41	2j	33	GLN
41	2j	62	HIS
42	2k	38	ASN
42	2k	62	GLN
42	2k	116	HIS
43	2l	99	HIS
45	2n	49	HIS
46	2o	46	HIS
47	2p	13	HIS
49	2r	63	GLN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	45	GLN
51	2t	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	472 (16%)	37 (1%)
1	2A	2791/2915 (95%)	478 (17%)	32 (1%)
2	1B	119/121 (98%)	14 (11%)	0
2	2B	118/121 (97%)	22 (18%)	0
32	1a	1497/1521 (98%)	253 (16%)	0
32	2a	1501/1521 (98%)	279 (18%)	0
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	3 (25%)	0
54	1w	72/76 (94%)	17 (23%)	0
54	2w	68/76 (89%)	23 (33%)	0
55	1x	75/77 (97%)	10 (13%)	0
55	2x	75/77 (97%)	9 (12%)	0
56	1y	72/76 (94%)	28 (38%)	0
56	2y	70/76 (92%)	27 (38%)	0
All	All	9346/9620 (97%)	1638 (17%)	69 (0%)

All (1638) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	11	G
1	1A	34	C
1	1A	45	C

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Mol	Chain	Res	Type
1	1A	58	G
1	1A	61	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	139(A)	G
1	1A	173	G
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(E)	U
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	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	283	A

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Mol	Chain	Res	Type
1	1A	311	A
1	1A	324	A
1	1A	329	G
1	1A	330	A
1	1A	331	A
1	1A	342	G
1	1A	352	G
1	1A	353	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	363(D)	G
1	1A	380	U
1	1A	386	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	429	A
1	1A	444	C
1	1A	448	U
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	512	G
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(A)	U

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Mol	Chain	Res	Type
1	1A	614(B)	G
1	1A	615	G
1	1A	616	G
1	1A	627	A
1	1A	637	A
1	1A	646	A
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	668	G
1	1A	669	G
1	1A	685	A
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	762	U
1	1A	764	A
1	1A	765	G
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	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	877	U
1	1A	879	G
1	1A	880	G
1	1A	881	G
1	1A	882	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	889	C
1	1A	890	A
1	1A	892	G
1	1A	893	C
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	899	A
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	985	C
1	1A	996	A
1	1A	1008	C
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1040	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
1	1A	1057	A
1	1A	1058	G

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Mol	Chain	Res	Type
1	1A	1059	G
1	1A	1063	G
1	1A	1064	C
1	1A	1066	U
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U
1	1A	1096	A
1	1A	1097	U
1	1A	1098	A
1	1A	1101	U
1	1A	1102	C
1	1A	1110	G
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1120	G
1	1A	1131	G
1	1A	1135	C
1	1A	1136	G
1	1A	1151	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A

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Mol	Chain	Res	Type
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1220	A
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1280	G
1	1A	1290	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1321	A
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1407	C
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1429	G
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1459	G
1	1A	1466	G
1	1A	1467	C
1	1A	1473	G
1	1A	1482	G

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Mol	Chain	Res	Type
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1523	U
1	1A	1540	U
1	1A	1542	A
1	1A	1554	A
1	1A	1558	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	1644	C
1	1A	1648	C
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1703	G
1	1A	1745(A)	C
1	1A	1747(A)	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1812	A
1	1A	1816	G
1	1A	1817	G
1	1A	1828	G
1	1A	1829	A
1	1A	1842	G
1	1A	1847	A
1	1A	1877	A

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Mol	Chain	Res	Type
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1926	U
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	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	2039	C
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2096	U
1	1A	2097	C
1	1A	2098	U
1	1A	2108	C
1	1A	2113	U
1	1A	2116	G
1	1A	2118	U
1	1A	2119	A
1	1A	2120	G
1	1A	2121	G
1	1A	2127	G

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Mol	Chain	Res	Type
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2152	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	2162	G
1	1A	2166	G
1	1A	2167	U
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
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	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2267	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C

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Mol	Chain	Res	Type
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2340	G
1	1A	2347	C
1	1A	2361	A
1	1A	2372	G
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2404	C
1	1A	2406	U
1	1A	2407	G
1	1A	2422	A
1	1A	2423	U
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2440	C
1	1A	2441	C
1	1A	2447	G
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A

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Mol	Chain	Res	Type
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2637	U
1	1A	2641	G
1	1A	2654	A
1	1A	2663	G
1	1A	2683	C
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2734	A
1	1A	2757	A
1	1A	2758	A
1	1A	2761	G
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2804	C
1	1A	2814	C
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2836	U
1	1A	2839	G

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Mol	Chain	Res	Type
1	1A	2858	C
1	1A	2872	G
1	1A	2876	G
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	12	C
2	1B	25	A
2	1B	32	C
2	1B	35	U
2	1B	45	A
2	1B	56	G
2	1B	57	A
2	1B	66	A
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	91	C
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	33	A
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	68	G
32	1a	76	C
32	1a	77	G
32	1a	78	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	115	G
32	1a	116	A
32	1a	120	A
32	1a	121	C

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Mol	Chain	Res	Type
32	1a	131	C
32	1a	141	A
32	1a	144	G
32	1a	163	C
32	1a	164	U
32	1a	174	C
32	1a	182	U
32	1a	189(C)	C
32	1a	189(F)	U
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	189(K)	U
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	217	C
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	306	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	344	A
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	392	G
32	1a	397	A

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Mol	Chain	Res	Type
32	1a	398	C
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	483	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	517	G
32	1a	518	C
32	1a	521	G
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	533	A
32	1a	536	C
32	1a	547	A
32	1a	549	C
32	1a	559	A
32	1a	561	U
32	1a	563	A
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	596	C
32	1a	607	A
32	1a	628	G

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Mol	Chain	Res	Type
32	1a	630	G
32	1a	631	G
32	1a	653	A
32	1a	662	G
32	1a	665	A
32	1a	673	G
32	1a	683	G
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	703	G
32	1a	723	U
32	1a	731	G
32	1a	749	C
32	1a	752	G
32	1a	753	A
32	1a	755	G
32	1a	766	A
32	1a	773	G
32	1a	777	A
32	1a	788	U
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	853	G
32	1a	870	U
32	1a	874	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	942	G
32	1a	960	U
32	1a	961	U

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Mol	Chain	Res	Type
32	1a	963	G
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	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
32	1a	1009	G
32	1a	1011	G
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	1039	C
32	1a	1042	G
32	1a	1044	A
32	1a	1067	A
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G

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Mol	Chain	Res	Type
32	1a	1125	U
32	1a	1127	G
32	1a	1132	C
32	1a	1134	G
32	1a	1135	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G
32	1a	1158	C
32	1a	1159	U
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1338	G
32	1a	1340	A

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Mol	Chain	Res	Type
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1370	G
32	1a	1397	C
32	1a	1419	G
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	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	14	A
53	1v	24	A
54	1w	5	G
54	1w	6	G
54	1w	14	A
54	1w	16	U
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	70	G
54	1w	72	C
54	1w	73	A
54	1w	74	C

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Mol	Chain	Res	Type
55	1x	2	G
55	1x	9	G
55	1x	13	C
55	1x	14	A
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	61	C
55	1x	69	C
56	1y	2	C
56	1y	5	G
56	1y	6	G
56	1y	9	A
56	1y	13	C
56	1y	14	A
56	1y	19	G
56	1y	20	U
56	1y	21	A
56	1y	23	A
56	1y	35	A
56	1y	37	MIA
56	1y	40	C
56	1y	44	G
56	1y	45	U
56	1y	46	G7M
56	1y	47	U
56	1y	48	C
56	1y	52	G
56	1y	56	C
56	1y	58	A
56	1y	59	U
56	1y	61	C
56	1y	62	C
56	1y	65	G
56	1y	66	U
56	1y	70	G
56	1y	71	G
1	2A	10	G
1	2A	12	U
1	2A	14	A
1	2A	15	G

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Mol	Chain	Res	Type
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	72	U
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	96	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	154(A)	C
1	2A	157	U
1	2A	172	C
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	265	A
1	2A	266	G
1	2A	271(J)	C
1	2A	271(K)	U

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Mol	Chain	Res	Type
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	283	A
1	2A	310	A
1	2A	311	A
1	2A	317	G
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	342	G
1	2A	352	G
1	2A	354	G
1	2A	363(B)	G
1	2A	386	G
1	2A	399	G
1	2A	403	U
1	2A	405	U
1	2A	406	G
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	435	C
1	2A	444	C
1	2A	451	C
1	2A	454	A
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	512	G
1	2A	528	A

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Mol	Chain	Res	Type
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	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	726	G
1	2A	730	C
1	2A	732	C
1	2A	752	A
1	2A	753	C
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	783	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A

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Mol	Chain	Res	Type
1	2A	827	U
1	2A	828	U
1	2A	856	C
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	867	C
1	2A	873	G
1	2A	874	G
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	882	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G

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Mol	Chain	Res	Type
1	2A	1019	U
1	2A	1022	G
1	2A	1025	G
1	2A	1027	A
1	2A	1033	U
1	2A	1036	G
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1116	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1143	A
1	2A	1155	A
1	2A	1171	G
1	2A	1188	U
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1284	A
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1323	U
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1378	A

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Mol	Chain	Res	Type
1	2A	1379	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
1	2A	1416	G
1	2A	1417	C
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1460	A
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1514	U
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1554	A
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A

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Mol	Chain	Res	Type
1	2A	1609	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1741	A
1	2A	1746	G
1	2A	1756	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1842	G
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
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

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Mol	Chain	Res	Type
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	1984	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2104	G
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2116	G
1	2A	2117	A
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C

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Mol	Chain	Res	Type
1	2A	2145	C
1	2A	2147	G
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2154	G
1	2A	2157	G
1	2A	2158	A
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	2174	C
1	2A	2176	A
1	2A	2177	C
1	2A	2178	C
1	2A	2183	C
1	2A	2186	G
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	2225	A
1	2A	2238	G
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	2305	A

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Mol	Chain	Res	Type
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2327	A
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2355	C
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2396	G
1	2A	2402	C
1	2A	2406	U
1	2A	2407	G
1	2A	2410	G
1	2A	2424	C
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2460	U
1	2A	2468	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U

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Mol	Chain	Res	Type
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2547	U
1	2A	2549	G
1	2A	2554	U
1	2A	2555	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2613	U
1	2A	2630	G
1	2A	2654	A
1	2A	2679	A
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2739	U
1	2A	2751	G
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2818	G
1	2A	2820	A

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Mol	Chain	Res	Type
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G
1	2A	2876	G
1	2A	2879	C
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	8	U
2	2B	13	A
2	2B	25	A
2	2B	31	C
2	2B	34	U
2	2B	41	U
2	2B	42	C
2	2B	45	A
2	2B	51	G
2	2B	53	A
2	2B	56	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	88	C
2	2B	97	G
2	2B	105	A
2	2B	110	G
2	2B	120	A
32	2a	9	G
32	2a	31	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	47	C
32	2a	48	C
32	2a	51	A

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Mol	Chain	Res	Type
32	2a	65	U
32	2a	66	G
32	2a	67	C
32	2a	73	G
32	2a	80	G
32	2a	89	C
32	2a	98	G
32	2a	101	A
32	2a	115	G
32	2a	116	A
32	2a	120	A
32	2a	121	C
32	2a	131	C
32	2a	133	U
32	2a	144	G
32	2a	145	G
32	2a	146	G
32	2a	163	C
32	2a	169	C
32	2a	182	U
32	2a	189(C)	C
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	217	C
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	349	A
32	2a	351	G

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Mol	Chain	Res	Type
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	355	C
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	381	C
32	2a	384	G
32	2a	388	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	457	C
32	2a	470	C
32	2a	471	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	518	C
32	2a	519	C
32	2a	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	558	G
32	2a	559	A

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Mol	Chain	Res	Type
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	596	C
32	2a	602	A
32	2a	627	G
32	2a	630	G
32	2a	650	G
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	673	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	723	U
32	2a	725	G
32	2a	731	G
32	2a	749	C
32	2a	754	C
32	2a	755	G
32	2a	759	A
32	2a	767	A
32	2a	774	G
32	2a	775	G
32	2a	777	A
32	2a	787	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	817	C
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	851	G

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Mol	Chain	Res	Type
32	2a	859	A
32	2a	873	A
32	2a	874	G
32	2a	887	G
32	2a	889	A
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	932	C
32	2a	934	C
32	2a	935	A
32	2a	957	U
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	963	G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1019	C
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G

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Mol	Chain	Res	Type
32	2a	1025	U
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(C)	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1044	A
32	2a	1045	C
32	2a	1046	A
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1086	U
32	2a	1092	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1108	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1148	U
32	2a	1152	A
32	2a	1155	G

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Mol	Chain	Res	Type
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1172	C
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1185	G
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1206	G
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1238	A
32	2a	1240	U
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1270	C
32	2a	1273	G
32	2a	1275	A
32	2a	1277	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1312	G
32	2a	1319	A
32	2a	1320	C
32	2a	1321	C
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G

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Mol	Chain	Res	Type
32	2a	1363	C
32	2a	1370	G
32	2a	1386	G
32	2a	1397	C
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	17	U
53	2v	24	A
54	2w	3	C
54	2w	7	A
54	2w	8	4SU
54	2w	11	C
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	24	G
54	2w	30	G
54	2w	44	G
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	51	U
54	2w	53	G
54	2w	65	G
54	2w	69	G
54	2w	70	G
54	2w	71	G

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Mol	Chain	Res	Type
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	9	G
55	2x	10	G
55	2x	13	C
55	2x	14	A
55	2x	19	G
55	2x	21	A
55	2x	47	U
55	2x	61	C
55	2x	69	C
56	2y	2	C
56	2y	7	A
56	2y	12	U
56	2y	14	A
56	2y	15	G
56	2y	19	G
56	2y	27	G
56	2y	34	G
56	2y	35	A
56	2y	41	C
56	2y	43	C
56	2y	45	U
56	2y	49	C
56	2y	52	G
56	2y	53	G
56	2y	54	5MU
56	2y	55	PSU
56	2y	56	C
56	2y	57	G
56	2y	58	A
56	2y	59	U
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G
56	2y	73	A
56	2y	75	C

All (69) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	249	C
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	776	G
1	1A	827	U
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1128	A
1	1A	1174	A
1	1A	1176	G
1	1A	1301	A
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1618	A
1	1A	1762	A
1	1A	1992	G
1	1A	2134	A
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2439	A
1	1A	2611	U
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	196	A
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A

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Mol	Chain	Res	Type
1	2A	528	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	1142(A)	A
1	2A	1210	A
1	2A	1301	A
1	2A	1378	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1493	C
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1935	G
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2406	U
1	2A	2439	A
1	2A	2689	U

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	5MC	1A	1942	1	19,22,23	1.57	3 (15%)	26,32,35	1.48	4 (15%)
56	4SU	2y	8	56	18,21,22	1.72	5 (27%)	25,30,33	2.10	8 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	5MU	1A	1939	1,58	19,22,23	1.62	6 (31%)	27,32,35	2.36	8 (29%)
56	MIA	1y	37	56	21,24,32	1.74	3 (14%)	30,35,47	2.05	9 (30%)
32	M2G	2a	966	32	24,27,28	1.30	3 (12%)	33,40,43	1.94	6 (18%)
32	G7M	2a	527	58,32	23,26,27	1.37	4 (17%)	34,39,42	1.67	6 (17%)
32	5MC	1a	967	32	19,22,23	1.56	2 (10%)	26,32,35	1.17	1 (3%)
32	G7M	1a	527	32	23,26,27	1.59	4 (17%)	34,39,42	1.55	5 (14%)
1	2MA	2A	2503	1,58	22,25,26	1.52	4 (18%)	32,37,40	2.49	6 (18%)
54	G7M	1w	46	54	23,26,27	1.53	3 (13%)	34,39,42	1.77	4 (11%)
54	4SU	2w	8	54	18,21,22	1.83	3 (16%)	25,30,33	2.34	5 (20%)
1	5MU	1A	1915	1	19,22,23	1.32	4 (21%)	27,32,35	2.40	8 (29%)
54	5MU	1w	54	54	19,22,23	1.54	4 (21%)	27,32,35	1.88	6 (22%)
1	5MC	2A	1942	1	19,22,23	1.48	3 (15%)	26,32,35	1.23	3 (11%)
1	OMC	2A	1920	1	19,22,23	0.85	0	25,31,34	1.09	2 (8%)
32	5MC	2a	1407	58,32	19,22,23	1.57	3 (15%)	26,32,35	1.33	4 (15%)
54	4SU	1w	8	54	18,21,22	2.02	4 (22%)	25,30,33	1.64	6 (24%)
32	MA6	1a	1518	32	23,26,27	0.50	0	33,38,41	2.12	11 (33%)
56	5MU	2y	54	56	19,22,23	1.59	5 (26%)	27,32,35	1.89	5 (18%)
1	OMC	1A	1920	1	19,22,23	0.78	0	25,31,34	0.84	0
1	PSU	2A	1917	1	18,21,22	1.44	2 (11%)	21,30,33	2.13	4 (19%)
54	PSU	2w	32	54	18,21,22	1.41	3 (16%)	21,30,33	2.09	5 (23%)
54	F3N	1w	76	1	33,36,37	1.53	4 (12%)	41,51,54	1.69	7 (17%)
56	PSU	2y	39	56	18,21,22	1.63	3 (16%)	21,30,33	1.45	2 (9%)
32	5MC	2a	967	58,32	19,22,23	1.60	2 (10%)	26,32,35	1.08	2 (7%)
32	MA6	2a	1519	32	23,26,27	0.50	0	33,38,41	2.09	8 (24%)
56	MIA	2y	37	56	21,24,32	1.70	3 (14%)	30,35,47	2.10	8 (26%)
54	PSU	1w	32	54	18,21,22	1.30	2 (11%)	21,30,33	1.99	4 (19%)
54	PSU	2w	39	54	18,21,22	1.42	3 (16%)	21,30,33	1.89	4 (19%)
1	OMU	2A	2552	1	19,22,23	1.06	2 (10%)	25,31,34	1.98	5 (20%)
32	PSU	2a	516	32	18,21,22	1.35	2 (11%)	21,30,33	2.14	4 (19%)
1	5MC	2A	1962	1,58	19,22,23	1.56	3 (15%)	26,32,35	1.16	2 (7%)
32	MA6	1a	1519	32	23,26,27	0.46	0	33,38,41	2.03	10 (30%)
56	PSU	1y	39	56	18,21,22	1.44	1 (5%)	21,30,33	1.88	4 (19%)
32	PSU	1a	516	32	18,21,22	1.42	3 (16%)	21,30,33	2.00	5 (23%)
43	0TD	1l	92	43	8,9,10	4.52	4 (50%)	6,11,13	6.34	3 (50%)
32	2MG	2a	1207	32	23,26,27	1.31	2 (8%)	33,38,41	2.25	9 (27%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	4OC	1a	1402	32	20,23,24	0.77	0	25,32,35	1.05	4 (16%)
55	PSU	1x	55	55	18,21,22	1.44	2 (11%)	21,30,33	1.93	5 (23%)
54	MIA	2w	37	54	24,27,32	1.94	5 (20%)	32,39,47	2.56	12 (37%)
32	UR3	1a	1498	32	19,22,23	0.97	1 (5%)	26,32,35	1.78	3 (11%)
55	31H	2x	76	55,58	31,34,35	1.19	3 (9%)	35,47,50	2.23	14 (40%)
32	MA6	2a	1518	32	23,26,27	0.43	0	33,38,41	2.07	9 (27%)
1	PSU	2A	2605	1	18,21,22	1.26	1 (5%)	21,30,33	2.14	4 (19%)
32	4OC	2a	1402	32	20,23,24	0.86	0	25,32,35	0.89	1 (4%)
32	5MC	2a	1404	32	19,22,23	1.75	3 (15%)	26,32,35	1.25	3 (11%)
1	OMG	2A	2251	55,1,58	23,26,27	1.29	3 (13%)	32,38,41	2.13	7 (21%)
1	PSU	1A	1911	1	18,21,22	1.46	2 (11%)	21,30,33	1.94	5 (23%)
54	5MU	2w	54	54	19,22,23	1.16	2 (10%)	27,32,35	1.90	6 (22%)
55	PSU	2x	55	55	18,21,22	1.45	3 (16%)	21,30,33	2.00	5 (23%)
54	MIA	1w	37	54	28,31,32	2.15	6 (21%)	38,44,47	2.88	13 (34%)
56	4SU	1y	8	56	18,21,22	1.55	4 (22%)	25,30,33	1.28	3 (12%)
1	OMG	1A	2251	55,1,58	23,26,27	1.38	3 (13%)	32,38,41	1.96	7 (21%)
1	PSU	2A	1911	1	18,21,22	1.44	2 (11%)	21,30,33	2.29	3 (14%)
32	UR3	2a	1498	32	19,22,23	1.15	2 (10%)	26,32,35	1.80	4 (15%)
56	PSU	2y	32	56	18,21,22	1.32	2 (11%)	21,30,33	2.05	4 (19%)
1	PSU	1A	1917	1	18,21,22	1.40	2 (11%)	21,30,33	2.11	6 (28%)
54	PSU	1w	55	54	18,21,22	1.38	2 (11%)	21,30,33	2.11	3 (14%)
32	M2G	1a	966	32	24,27,28	1.33	3 (12%)	33,40,43	1.96	6 (18%)
56	5MU	1y	54	56	19,22,23	1.50	5 (26%)	27,32,35	2.02	8 (29%)
56	PSU	1y	55	56	18,21,22	1.40	2 (11%)	21,30,33	2.02	3 (14%)
56	PSU	1y	32	56	18,21,22	1.38	3 (16%)	21,30,33	1.84	4 (19%)
55	5MC	1x	32	55	19,22,23	1.56	3 (15%)	26,32,35	1.44	4 (15%)
32	2MG	1a	1207	32	23,26,27	1.27	3 (13%)	33,38,41	2.15	7 (21%)
56	PSU	2y	55	56	18,21,22	1.46	2 (11%)	21,30,33	2.02	4 (19%)
55	4SU	1x	8	55	18,21,22	2.30	6 (33%)	25,30,33	2.44	6 (24%)
1	PSU	1A	2605	1,58	18,21,22	1.70	4 (22%)	21,30,33	2.08	4 (19%)
56	G7M	1y	46	56	23,26,27	1.42	3 (13%)	34,39,42	1.75	4 (11%)
55	5MU	1x	54	55,58	19,22,23	1.52	4 (21%)	27,32,35	2.08	6 (22%)
1	OMU	1A	2552	1,58	19,22,23	1.17	1 (5%)	25,31,34	1.73	4 (16%)
1	2MA	1A	2503	1,58	22,25,26	1.52	4 (18%)	32,37,40	2.22	7 (21%)
32	5MC	1a	1404	32	19,22,23	1.39	3 (15%)	26,32,35	1.30	4 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	PSU	1w	39	54	18,21,22	1.33	2 (11%)	21,30,33	1.99	4 (19%)
32	5MC	2a	1400	32	19,22,23	1.58	3 (15%)	26,32,35	1.36	3 (11%)
55	5MC	2x	32	55	19,22,23	1.76	3 (15%)	26,32,35	1.42	3 (11%)
43	0TD	2l	92	43	8,9,10	5.05	1 (12%)	6,11,13	5.38	2 (33%)
55	31H	1x	76	55,58	31,34,35	1.34	4 (12%)	35,47,50	2.36	15 (42%)
1	5MU	2A	1915	1	19,22,23	1.48	4 (21%)	27,32,35	2.50	9 (33%)
56	G7M	2y	46	56	23,26,27	1.72	5 (21%)	34,39,42	1.95	4 (11%)
54	PSU	2w	55	54	18,21,22	1.50	2 (11%)	21,30,33	2.23	5 (23%)
55	4SU	2x	8	55	18,21,22	2.06	5 (27%)	25,30,33	1.38	6 (24%)
1	5MC	1A	1962	1,58	19,22,23	1.82	3 (15%)	26,32,35	1.57	7 (26%)
32	5MC	1a	1407	32	19,22,23	1.53	2 (10%)	26,32,35	1.21	3 (11%)
32	5MC	1a	1400	32	19,22,23	1.51	3 (15%)	26,32,35	1.30	3 (11%)
55	5MU	2x	54	55	19,22,23	1.45	5 (26%)	27,32,35	2.21	6 (22%)
54	F3N	2w	76	54,1	33,36,37	1.53	5 (15%)	41,51,54	1.77	9 (21%)
54	G7M	2w	46	54	23,26,27	1.42	4 (17%)	34,39,42	1.64	4 (11%)
1	5MU	2A	1939	1,58	19,22,23	1.31	3 (15%)	27,32,35	2.64	6 (22%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
56	4SU	2y	8	56	-	2/7/25/26	0/2/2/2
1	5MU	1A	1939	1,58	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/7/25/34	0/3/3/3
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
32	G7M	2a	527	58,32	-	3/7/25/26	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32	-	3/7/25/26	0/3/3/3
1	2MA	2A	2503	1,58	-	2/7/25/26	0/3/3/3
54	G7M	1w	46	54	-	2/7/25/26	0/3/3/3
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	5MC	2a	1407	58,32	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
56	5MU	2y	54	56	-	2/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	0/9/27/28	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
54	F3N	1w	76	1	-	2/19/37/38	0/4/4/4
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	58,32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
56	MIA	2y	37	56	-	1/7/25/34	0/3/3/3
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	1	-	0/9/27/28	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1,58	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
32	2MG	2a	1207	32	-	0/9/27/28	0/3/3/3
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
55	31H	2x	76	55,58	-	4/22/40/41	0/3/3/3
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
1	OMG	2A	2251	55,1,58	-	0/9/27/28	0/3/3/3
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	1/15/33/34	0/3/3/3
56	4SU	1y	8	56	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	55,1,58	-	1/9/27/28	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
56	PSU	2y	32	56	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
56	5MU	1y	54	56	-	0/7/25/26	0/2/2/2
56	PSU	1y	55	56	-	1/7/25/26	0/2/2/2
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
56	PSU	2y	55	56	-	2/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	1,58	-	0/7/25/26	0/2/2/2
56	G7M	1y	46	56	-	1/7/25/26	0/3/3/3
55	5MU	1x	54	55,58	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	1,58	-	0/9/27/28	0/2/2/2
1	2MA	1A	2503	1,58	-	1/7/25/26	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	3/7/12/14	-
55	31H	1x	76	55,58	-	4/22/40/41	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
56	G7M	2y	46	56	-	2/7/25/26	0/3/3/3
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1,58	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	54,1	-	2/19/37/38	0/4/4/4
54	G7M	2w	46	54	-	3/7/25/26	0/3/3/3
1	5MU	2A	1939	1,58	-	0/7/25/26	0/2/2/2

All (250) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-13.85	1.68	1.82
43	1l	92	0TD	CB-SB	-11.51	1.70	1.82
1	1A	1962	5MC	C5-C4	6.95	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	37	MIA	C13-C14	6.44	1.51	1.32
55	2x	32	5MC	C5-C4	6.41	1.49	1.44
32	2a	1404	5MC	C5-C4	6.24	1.48	1.44
55	1x	8	4SU	C4-N3	-6.05	1.31	1.37
32	2a	967	5MC	C5-C4	5.98	1.48	1.44
54	1w	37	MIA	C2-S10	-5.91	1.70	1.75
32	1a	967	5MC	C5-C4	5.76	1.48	1.44
32	2a	1400	5MC	C5-C4	5.69	1.48	1.44
56	1y	37	MIA	C5-C4	5.62	1.49	1.39
32	2a	1407	5MC	C5-C4	5.61	1.48	1.44
56	2y	37	MIA	C5-C4	5.54	1.49	1.39
32	1a	1407	5MC	C5-C4	5.53	1.48	1.44
54	2w	37	MIA	C2-S10	-5.38	1.71	1.75
1	2A	1962	5MC	C5-C4	5.35	1.48	1.44
55	1x	32	5MC	C5-C4	5.28	1.48	1.44
1	1A	1942	5MC	C5-C4	5.20	1.48	1.44
56	2y	39	PSU	C6-C5	5.20	1.41	1.35
32	1a	527	G7M	C5-N7	-5.19	1.33	1.39
54	2w	8	4SU	C4-S4	-5.16	1.59	1.68
32	1a	1400	5MC	C5-C4	5.11	1.48	1.44
1	2A	1942	5MC	C5-C4	5.11	1.48	1.44
55	2x	8	4SU	C4-N3	-5.06	1.32	1.37
54	2w	76	F3N	CB-CG	-5.00	1.39	1.51
54	1w	8	4SU	C4-N3	-4.98	1.32	1.37
55	1x	8	4SU	C2-N3	-4.90	1.29	1.38
54	2w	37	MIA	C5-C4	4.82	1.47	1.39
54	1w	8	4SU	C4-S4	-4.72	1.60	1.68
56	1y	39	PSU	C6-C5	4.71	1.40	1.35
54	2w	55	PSU	C6-C5	4.70	1.40	1.35
1	2A	2503	2MA	C5-C4	4.32	1.46	1.39
56	2y	46	G7M	C5-N7	-4.32	1.34	1.39
1	1A	1911	PSU	C6-C5	4.26	1.40	1.35
54	1w	46	G7M	C5-N7	-4.25	1.34	1.39
55	2x	8	4SU	C4-S4	-4.24	1.61	1.68
56	1y	32	PSU	C6-C5	4.23	1.40	1.35
56	1y	55	PSU	C6-C5	4.21	1.40	1.35
54	1w	76	F3N	C5-N7	-4.20	1.31	1.39
54	1w	76	F3N	CB-CG	-4.14	1.41	1.51
56	2y	8	4SU	C4-S4	-4.09	1.61	1.68
56	2y	32	PSU	C6-C5	4.09	1.39	1.35
56	2y	46	G7M	C5-C4	4.06	1.48	1.38
56	2y	55	PSU	C6-C5	4.06	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2x	55	PSU	C6-C5	4.04	1.39	1.35
54	1w	37	MIA	C5-C4	4.04	1.46	1.39
32	2a	516	PSU	C6-C5	4.00	1.39	1.35
54	1w	55	PSU	C6-C5	3.95	1.39	1.35
32	1a	1404	5MC	C5-C4	3.94	1.47	1.44
1	1A	2503	2MA	C5-C4	3.91	1.46	1.39
55	1x	76	31H	C5-N7	-3.90	1.32	1.39
1	1A	1917	PSU	C6-C5	3.90	1.39	1.35
1	2A	1917	PSU	C6-C5	3.89	1.39	1.35
55	2x	76	31H	C5-N7	-3.88	1.32	1.39
56	2y	8	4SU	C2-N1	3.87	1.44	1.38
1	1A	2605	PSU	C6-C5	3.82	1.39	1.35
54	2w	76	F3N	C5-N7	-3.81	1.32	1.39
1	2A	1911	PSU	C6-C5	3.80	1.39	1.35
56	1y	46	G7M	C5-C4	3.78	1.47	1.38
32	1a	516	PSU	C6-C5	3.73	1.39	1.35
55	2x	8	4SU	C2-N3	-3.66	1.31	1.38
54	2w	32	PSU	C6-C5	3.64	1.39	1.35
32	2a	527	G7M	C5-N7	-3.64	1.35	1.39
54	2w	46	G7M	C5-N7	-3.63	1.35	1.39
55	1x	8	4SU	C4-S4	-3.58	1.62	1.68
1	1A	2251	OMG	C6-N1	-3.52	1.32	1.38
54	1w	76	F3N	C5-C4	-3.52	1.32	1.39
56	1y	8	4SU	C4-S4	-3.50	1.62	1.68
54	2w	8	4SU	C5-C4	-3.47	1.38	1.42
54	1w	39	PSU	C6-C5	3.44	1.39	1.35
32	2a	1207	2MG	C5-C4	3.41	1.48	1.38
56	2y	54	5MU	C6-C5	3.41	1.40	1.34
54	1w	46	G7M	C5-C4	3.40	1.46	1.38
54	2w	46	G7M	C5-C4	3.38	1.46	1.38
55	1x	55	PSU	C6-C5	3.37	1.39	1.35
43	1l	92	0TD	CB-CG	3.37	1.57	1.52
54	2w	76	F3N	C5-C4	-3.37	1.33	1.39
55	1x	54	5MU	C6-C5	3.36	1.40	1.34
54	2w	39	PSU	C6-C5	3.30	1.38	1.35
32	1a	527	G7M	C5-C4	3.29	1.46	1.38
56	1y	37	MIA	C5-C6	3.28	1.50	1.41
32	1a	1207	2MG	C5-C4	3.27	1.47	1.38
54	1w	54	5MU	C6-C5	3.27	1.39	1.34
1	1A	2503	2MA	C5-N7	-3.24	1.33	1.39
1	2A	1915	5MU	C2-N1	3.24	1.43	1.38
1	2A	2605	PSU	C6-C5	3.24	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	1y	54	5MU	C4-C5	3.24	1.50	1.44
56	2y	54	5MU	C2-N1	3.23	1.43	1.38
32	2a	527	G7M	C5-C4	3.22	1.46	1.38
32	2a	1404	5MC	C6-C5	3.21	1.39	1.34
55	1x	32	5MC	C6-N1	-3.20	1.32	1.38
1	2A	2251	OMG	C5-C4	3.18	1.47	1.38
55	2x	54	5MU	C6-C5	3.17	1.39	1.34
55	1x	54	5MU	C4-N3	-3.17	1.32	1.38
56	2y	37	MIA	C5-C6	3.15	1.49	1.41
1	1A	1942	5MC	C6-C5	3.11	1.39	1.34
55	1x	8	4SU	C5-C4	-3.11	1.38	1.42
1	2A	1911	PSU	C4-N3	-3.10	1.33	1.38
54	1w	8	4SU	C5-C4	-3.09	1.38	1.42
55	1x	76	31H	C5-C4	-3.07	1.33	1.39
54	1w	32	PSU	C4-N3	-3.04	1.33	1.38
32	1a	966	M2G	C6-N1	-3.04	1.33	1.38
1	1A	1939	5MU	C2-N3	-3.03	1.32	1.38
54	1w	54	5MU	C2-N1	3.03	1.43	1.38
1	2A	1939	5MU	C6-C5	3.02	1.39	1.34
56	1y	54	5MU	C6-C5	3.01	1.39	1.34
1	1A	2605	PSU	C4-N3	-3.01	1.33	1.38
56	1y	8	4SU	C4-N3	-3.01	1.34	1.37
1	1A	1939	5MU	C4-C5	3.01	1.49	1.44
1	2A	2251	OMG	C6-N1	-3.00	1.33	1.38
32	2a	966	M2G	C5-C4	2.99	1.46	1.38
56	1y	46	G7M	C5-N7	-2.98	1.35	1.39
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
55	2x	76	31H	C5-C4	-2.97	1.33	1.39
1	2A	1917	PSU	C4-N3	-2.96	1.33	1.38
32	1a	966	M2G	C2-N2	2.95	1.40	1.35
1	1A	2251	OMG	C5-C4	2.94	1.46	1.38
54	2w	32	PSU	C4-N3	-2.93	1.33	1.38
1	1A	1939	5MU	C2-N1	2.93	1.43	1.38
32	1a	527	G7M	C6-N1	-2.90	1.33	1.38
54	1w	37	MIA	C5-N7	-2.90	1.33	1.39
56	2y	54	5MU	C4-C5	2.89	1.49	1.44
1	1A	2605	PSU	C2-N3	-2.88	1.32	1.37
1	2A	2503	2MA	C5-N7	-2.87	1.33	1.39
32	1a	966	M2G	C5-C4	2.85	1.46	1.38
54	2w	37	MIA	C5-C6	2.79	1.48	1.41
1	2A	1939	5MU	C4-N3	-2.79	1.33	1.38
55	2x	32	5MC	C6-C5	2.77	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C6-C5	2.75	1.39	1.34
1	2A	1942	5MC	C6-C5	2.74	1.39	1.34
1	2A	1915	5MU	C4-C5	2.74	1.49	1.44
54	1w	54	5MU	C2-N3	-2.74	1.33	1.38
32	2a	1498	UR3	C2-N1	2.72	1.42	1.38
32	2a	1207	2MG	C6-N1	-2.72	1.33	1.38
55	2x	76	31H	C5-C6	-2.72	1.33	1.41
43	1l	92	0TD	CB-CA	2.72	1.55	1.54
56	1y	37	MIA	C8-N7	2.70	1.36	1.31
32	1a	1407	5MC	C6-C5	2.70	1.39	1.34
32	1a	1207	2MG	C6-N1	-2.69	1.33	1.38
32	1a	1404	5MC	C6-N1	-2.68	1.33	1.38
54	1w	54	5MU	C4-N3	-2.67	1.33	1.38
54	2w	8	4SU	C4-N3	-2.66	1.34	1.37
32	1a	516	PSU	C4-N3	-2.66	1.33	1.38
1	1A	1911	PSU	C4-N3	-2.65	1.33	1.38
1	1A	1939	5MU	C6-C5	2.65	1.38	1.34
54	2w	37	MIA	C5-N7	-2.63	1.34	1.39
54	2w	39	PSU	C4-N3	-2.62	1.33	1.38
1	2A	1962	5MC	C6-C5	2.61	1.38	1.34
54	1w	8	4SU	C2-N3	-2.61	1.33	1.38
55	2x	54	5MU	C4-C5	2.59	1.49	1.44
1	2A	1962	5MC	C6-N1	-2.59	1.33	1.38
55	2x	8	4SU	C5-C4	-2.58	1.39	1.42
54	1w	37	MIA	C4-N9	-2.57	1.32	1.37
32	1a	1400	5MC	C6-C5	2.57	1.38	1.34
54	1w	39	PSU	C4-N3	-2.57	1.34	1.38
1	1A	2503	2MA	C5-C6	2.56	1.48	1.41
43	1l	92	0TD	CSB-SB	-2.56	1.74	1.79
56	2y	39	PSU	C4-N3	-2.55	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.54	1.33	1.38
32	2a	1400	5MC	C6-N1	-2.53	1.33	1.38
1	1A	2605	PSU	O4'-C1'	-2.53	1.40	1.43
1	1A	1915	5MU	C2-N1	2.51	1.42	1.38
32	2a	966	M2G	C6-N1	-2.51	1.34	1.38
1	2A	2503	2MA	C5-C6	2.50	1.48	1.41
1	1A	1915	5MU	C4-C5	2.50	1.48	1.44
55	1x	55	PSU	C4-N3	-2.50	1.34	1.38
32	2a	966	M2G	C2-N2	2.50	1.39	1.35
1	1A	1917	PSU	C4-N3	-2.49	1.34	1.38
55	2x	54	5MU	C4-N3	-2.48	1.34	1.38
56	2y	46	G7M	C6-N1	-2.47	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2x	32	5MC	C6-N1	-2.47	1.33	1.38
32	2a	1407	5MC	C6-N1	-2.45	1.33	1.38
56	1y	46	G7M	C5-C6	2.45	1.50	1.43
1	1A	1942	5MC	C6-N1	-2.44	1.33	1.38
1	1A	2503	2MA	C8-N7	2.44	1.36	1.31
32	2a	967	5MC	C6-C5	2.44	1.38	1.34
56	1y	8	4SU	C6-C5	2.43	1.40	1.35
55	1x	76	31H	C5-C6	-2.43	1.34	1.41
32	1a	967	5MC	C6-C5	2.43	1.38	1.34
55	2x	54	5MU	C2-N1	2.42	1.42	1.38
1	1A	1939	5MU	C4-N3	-2.41	1.34	1.38
55	1x	54	5MU	C2-N3	-2.39	1.33	1.38
1	1A	1939	5MU	C6-N1	-2.38	1.34	1.38
56	1y	55	PSU	C4-N3	-2.37	1.34	1.38
54	2w	76	F3N	C5-C6	-2.37	1.34	1.41
32	2a	1407	5MC	C6-C5	2.37	1.38	1.34
56	2y	8	4SU	C4-N3	-2.36	1.35	1.37
1	2A	2503	2MA	C8-N7	2.36	1.36	1.31
55	2x	55	PSU	C4-N3	-2.35	1.34	1.38
1	1A	1962	5MC	C6-C5	2.35	1.38	1.34
56	1y	54	5MU	C2-N1	2.34	1.42	1.38
32	1a	1400	5MC	C6-N1	-2.33	1.34	1.38
32	1a	527	G7M	C4-N9	-2.33	1.32	1.38
32	2a	1400	5MC	C6-C5	2.33	1.38	1.34
56	1y	8	4SU	C2-N3	-2.33	1.33	1.38
55	1x	32	5MC	C6-C5	2.31	1.38	1.34
56	2y	8	4SU	O2-C2	2.30	1.27	1.23
55	2x	55	PSU	C4-C5	2.30	1.50	1.44
1	1A	2251	OMG	C5-N7	-2.30	1.34	1.39
54	2w	54	5MU	C4-N3	-2.29	1.34	1.38
55	1x	8	4SU	C6-C5	2.29	1.40	1.35
1	2A	1939	5MU	C6-N1	-2.29	1.34	1.38
56	2y	54	5MU	C4-N3	-2.28	1.34	1.38
56	2y	37	MIA	C8-N7	2.28	1.36	1.31
54	2w	55	PSU	C4-N3	-2.28	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.26	1.34	1.38
54	1w	55	PSU	C4-N3	-2.26	1.34	1.38
54	1w	32	PSU	C2-N1	-2.26	1.33	1.36
54	1w	46	G7M	C6-N1	-2.25	1.34	1.38
55	1x	8	4SU	O2-C2	2.25	1.27	1.23
32	2a	527	G7M	C6-N1	-2.24	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.24	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2552	OMU	C2-N3	-2.23	1.34	1.38
55	2x	8	4SU	C6-C5	2.22	1.40	1.35
55	1x	54	5MU	C4-C5	2.22	1.48	1.44
56	2y	46	G7M	C5-C6	2.21	1.49	1.43
56	2y	39	PSU	O2-C2	2.21	1.28	1.23
54	2w	37	MIA	C8-N7	2.19	1.35	1.31
54	2w	76	F3N	C3'-N3'	2.19	1.49	1.45
56	2y	55	PSU	C4-N3	-2.19	1.34	1.38
32	2a	527	G7M	C5-C6	2.19	1.49	1.43
56	2y	8	4SU	C6-C5	2.18	1.40	1.35
56	2y	46	G7M	C2-N3	2.15	1.38	1.33
54	1w	37	MIA	C8-N7	2.15	1.35	1.31
56	1y	54	5MU	C4-N3	-2.15	1.34	1.38
54	2w	32	PSU	C2-N3	-2.15	1.33	1.37
54	2w	39	PSU	C2-N3	-2.13	1.34	1.37
1	2A	2552	OMU	C6-C5	2.13	1.40	1.35
56	1y	32	PSU	C4-C5	2.12	1.50	1.44
56	2y	54	5MU	C2-N3	-2.12	1.34	1.38
54	1w	76	F3N	C5-C6	-2.11	1.35	1.41
1	1A	2552	OMU	O4-C4	2.10	1.28	1.24
56	1y	54	5MU	C2-N3	-2.09	1.34	1.38
32	1a	1207	2MG	C5-N7	-2.09	1.34	1.39
32	2a	1498	UR3	O2-C2	2.09	1.26	1.22
56	1y	32	PSU	C4-N3	-2.08	1.35	1.38
1	2A	1915	5MU	C6-N1	-2.07	1.34	1.38
32	1a	1498	UR3	C6-C5	2.07	1.39	1.35
1	2A	2251	OMG	C5-N7	-2.06	1.34	1.39
54	2w	46	G7M	C5-C6	2.05	1.48	1.43
54	2w	46	G7M	C4-N9	-2.04	1.32	1.38
56	2y	32	PSU	C4-N3	-2.04	1.35	1.38
1	1A	1915	5MU	C4-N3	-2.04	1.35	1.38
32	2a	516	PSU	C4-C5	2.03	1.49	1.44
55	1x	76	31H	C8-N9	-2.02	1.34	1.37
55	2x	54	5MU	C2-N3	-2.02	1.34	1.38
32	1a	1404	5MC	C6-C5	2.02	1.37	1.34
54	2w	54	5MU	C6-N1	-2.00	1.34	1.38
32	1a	516	PSU	O4'-C1'	-2.00	1.41	1.43

All (474) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	-14.82	75.72	102.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	2l	92	0TD	CSB-SB-CB	-12.88	79.21	102.36
54	1w	37	MIA	C12-C13-C14	-10.75	107.71	127.01
1	2A	2503	2MA	C5-C4-N3	-9.43	117.25	127.18
54	2w	37	MIA	C5-C4-N3	-8.66	118.06	127.18
1	1A	2503	2MA	C5-C4-N3	-8.10	118.64	127.18
1	2A	2503	2MA	N3-C4-N9	7.43	136.41	126.99
32	1a	1498	UR3	C4-N3-C2	-7.22	118.77	124.58
1	2A	1911	PSU	N1-C2-N3	7.19	122.76	115.17
32	2a	1498	UR3	C4-N3-C2	-6.96	118.98	124.58
54	2w	55	PSU	N1-C2-N3	6.85	122.40	115.17
32	2a	1207	2MG	C2-N3-C4	6.75	120.44	112.00
32	1a	1207	2MG	C2-N3-C4	6.73	120.42	112.00
1	2A	2251	OMG	C5-C4-N3	-6.71	117.72	128.39
54	2w	37	MIA	N3-C4-N9	6.68	135.46	126.99
1	2A	1939	5MU	O4-C4-C5	-6.57	117.40	124.92
1	2A	1917	PSU	N1-C2-N3	6.56	122.09	115.17
54	2w	8	4SU	C5-C4-N3	6.53	120.82	114.75
54	2w	32	PSU	N1-C2-N3	6.49	122.02	115.17
1	2A	1939	5MU	C5-C4-N3	6.47	120.94	115.32
54	1w	37	MIA	C5-C4-N3	-6.45	120.39	127.18
56	1y	55	PSU	N1-C2-N3	6.42	121.94	115.17
32	1a	966	M2G	C5-C4-N3	-6.32	118.33	128.39
56	2y	46	G7M	N9-C4-N3	6.31	138.56	125.95
54	2w	8	4SU	C4-N3-C2	-6.29	121.28	127.31
32	2a	966	M2G	C5-C4-N3	-6.27	118.41	128.39
54	1w	55	PSU	N1-C2-N3	6.26	121.77	115.17
55	1x	55	PSU	N1-C2-N3	6.21	121.72	115.17
32	2a	1207	2MG	C5-C4-N3	-6.18	118.55	128.39
1	2A	1939	5MU	C4-N3-C2	-6.13	119.30	127.34
1	1A	2605	PSU	N1-C2-N3	6.12	121.62	115.17
32	2a	516	PSU	N1-C2-N3	6.12	121.62	115.17
56	2y	37	MIA	C5-C4-N3	-6.05	118.39	126.72
56	2y	32	PSU	N1-C2-N3	6.04	121.54	115.17
55	1x	8	4SU	C4-N3-C2	6.01	133.07	127.31
55	1x	76	31H	N1-C2-N3	-5.99	119.51	128.58
32	1a	1207	2MG	C5-C4-N3	-5.93	118.95	128.39
1	1A	1911	PSU	N1-C2-N3	5.91	121.40	115.17
56	2y	55	PSU	N1-C2-N3	5.91	121.40	115.17
54	1w	39	PSU	N1-C2-N3	5.91	121.40	115.17
54	1w	46	G7M	N9-C4-N3	5.90	137.74	125.95
1	1A	2251	OMG	C5-C4-N3	-5.89	119.01	128.39
1	1A	2503	2MA	N3-C4-N9	5.87	134.44	126.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	2y	46	G7M	C5-C4-N3	-5.85	117.09	128.15
32	1a	516	PSU	N1-C2-N3	5.82	121.31	115.17
55	2x	76	31H	N1-C2-N3	-5.81	119.78	128.58
54	2w	39	PSU	N1-C2-N3	5.80	121.28	115.17
1	1A	1939	5MU	C5-C4-N3	5.76	120.33	115.32
55	2x	55	PSU	N1-C2-N3	5.76	121.25	115.17
1	2A	2605	PSU	N1-C2-N3	5.75	121.24	115.17
56	2y	8	4SU	C4-N3-C2	-5.74	121.81	127.31
54	2w	76	F3N	N1-C2-N3	-5.74	119.90	128.58
55	1x	8	4SU	C6-C5-C4	-5.71	115.01	119.95
1	2A	1915	5MU	C4-N3-C2	-5.63	119.95	127.34
54	1w	37	MIA	N3-C4-N9	5.62	134.12	126.99
56	1y	46	G7M	N9-C4-N3	5.61	137.16	125.95
54	1w	76	F3N	N1-C2-N3	-5.58	120.14	128.58
1	2A	1915	5MU	O4-C4-C5	-5.57	118.54	124.92
56	1y	39	PSU	N1-C2-N3	5.56	121.03	115.17
54	2w	8	4SU	C5-C4-S4	-5.56	117.96	124.31
1	2A	1915	5MU	C5-C4-N3	5.53	120.13	115.32
1	1A	1915	5MU	O4-C4-C5	-5.53	118.59	124.92
1	1A	1915	5MU	C4-N3-C2	-5.53	120.09	127.34
55	2x	54	5MU	N3-C2-N1	5.51	122.06	114.89
1	1A	1915	5MU	N3-C2-N1	5.46	122.00	114.89
55	1x	76	31H	C5-C4-N3	-5.44	119.23	126.72
55	1x	8	4SU	O2-C2-N1	5.44	129.87	122.80
1	2A	2251	OMG	N9-C4-N3	5.43	136.80	125.95
1	1A	1917	PSU	N1-C2-N3	5.42	120.88	115.17
1	1A	1939	5MU	C4-N3-C2	-5.37	120.30	127.34
32	1a	1518	MA6	N1-C2-N3	-5.34	120.50	128.58
1	1A	1939	5MU	C5-C6-N1	-5.34	117.52	123.31
56	1y	32	PSU	N1-C2-N3	5.33	120.79	115.17
54	1w	46	G7M	C5-C4-N3	-5.32	118.11	128.15
55	2x	54	5MU	C4-N3-C2	-5.31	120.37	127.34
56	1y	37	MIA	C5-C4-N3	-5.26	119.47	126.72
55	2x	76	31H	C5-C4-N3	-5.20	119.56	126.72
32	2a	527	G7M	N9-C4-N3	5.18	136.32	125.95
56	2y	37	MIA	N3-C4-N9	5.14	135.91	127.17
1	2A	1939	5MU	N3-C2-N1	5.12	121.56	114.89
56	2y	46	G7M	C2-N3-C4	5.12	121.12	112.30
54	1w	55	PSU	O2-C2-N1	-5.04	117.59	122.79
54	2w	76	F3N	C5-C4-N3	-4.98	119.85	126.72
54	1w	54	5MU	C5-C4-N3	4.90	119.58	115.32
32	2a	516	PSU	O2-C2-N1	-4.89	117.75	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	46	G7M	N9-C4-N3	4.88	135.71	125.95
1	2A	1915	5MU	N3-C2-N1	4.85	121.21	114.89
1	2A	2552	OMU	C4-N3-C2	-4.84	120.60	126.61
55	1x	54	5MU	C5-C4-N3	4.84	119.53	115.32
56	2y	54	5MU	C5-C4-N3	4.84	119.53	115.32
32	2a	1518	MA6	N1-C2-N3	-4.81	121.30	128.58
55	2x	32	5MC	C5-C6-N1	-4.80	118.10	123.31
56	1y	54	5MU	N3-C2-N1	4.78	121.11	114.89
1	2A	2251	OMG	C2-N3-C4	4.77	120.52	112.30
56	1y	54	5MU	C4-N3-C2	-4.75	121.11	127.34
54	1w	54	5MU	O4-C4-C5	-4.75	119.48	124.92
55	1x	54	5MU	C4-N3-C2	-4.74	121.12	127.34
56	1y	46	G7M	C5-C4-N3	-4.72	119.22	128.15
32	1a	966	M2G	N9-C4-N3	4.71	135.37	125.95
32	2a	1519	MA6	N1-C2-N3	-4.69	121.48	128.58
56	1y	46	G7M	C2-N3-C4	4.68	120.36	112.30
1	1A	2251	OMG	C2-N3-C4	4.68	120.35	112.30
1	2A	1911	PSU	O2-C2-N1	-4.67	117.97	122.79
32	2a	527	G7M	C5-C4-N3	-4.64	119.38	128.15
32	1a	527	G7M	N9-C4-N3	4.61	135.17	125.95
1	2A	2605	PSU	C4-N3-C2	-4.61	120.02	126.37
55	1x	54	5MU	N3-C2-N1	4.59	120.86	114.89
32	1a	1519	MA6	C5-C4-N3	-4.59	120.40	126.72
32	2a	1519	MA6	C5-C4-N3	-4.57	120.42	126.72
1	2A	1917	PSU	C4-N3-C2	-4.57	120.07	126.37
1	1A	1917	PSU	O2-C2-N1	-4.57	118.08	122.79
1	1A	1915	5MU	C5-C4-N3	4.56	119.29	115.32
1	1A	2251	OMG	N9-C4-N3	4.55	135.05	125.95
54	2w	54	5MU	O4-C4-C5	-4.54	119.72	124.92
54	1w	37	MIA	C15-C14-C13	-4.53	109.05	122.66
1	1A	1942	5MC	C5-C6-N1	-4.53	118.39	123.31
32	2a	1518	MA6	C5-C4-N3	-4.52	120.50	126.72
54	2w	55	PSU	O2-C2-N1	-4.51	118.14	122.79
32	2a	966	M2G	C2-N3-C4	4.50	120.83	112.51
56	2y	8	4SU	C5-C4-N3	4.49	118.93	114.75
54	2w	32	PSU	C4-N3-C2	-4.48	120.20	126.37
55	1x	54	5MU	C5-C6-N1	-4.48	118.45	123.31
1	1A	2552	OMU	O2-C2-N1	-4.45	117.01	122.80
1	2A	2552	OMU	O2-C2-N1	-4.44	117.02	122.80
32	1a	527	G7M	C5-C4-N3	-4.44	119.76	128.15
32	1a	966	M2G	C2-N3-C4	4.43	120.70	112.51
55	2x	55	PSU	C4-N3-C2	-4.42	120.28	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1y	37	MIA	N3-C4-N9	4.41	134.67	127.17
56	2y	32	PSU	C4-N3-C2	-4.41	120.30	126.37
54	1w	46	G7M	C2-N3-C4	4.41	119.89	112.30
54	2w	46	G7M	C5-C4-N3	-4.40	119.83	128.15
32	1a	516	PSU	C4-N3-C2	-4.38	120.34	126.37
55	2x	54	5MU	O4-C4-C5	-4.37	119.92	124.92
32	2a	966	M2G	N9-C4-N3	4.36	134.67	125.95
54	1w	32	PSU	O2-C2-N1	-4.36	118.30	122.79
1	1A	1917	PSU	C4-N3-C2	-4.34	120.39	126.37
56	1y	54	5MU	C5-C4-N3	4.34	119.09	115.32
55	1x	8	4SU	S4-C4-N3	-4.34	115.67	120.20
54	1w	76	F3N	C5-C4-N3	-4.32	120.76	126.72
54	1w	32	PSU	N1-C2-N3	4.32	119.72	115.17
54	2w	46	G7M	C2-N3-C4	4.32	119.74	112.30
32	2a	527	G7M	C2-N3-C4	4.27	119.65	112.30
55	2x	54	5MU	C5-C6-N1	-4.26	118.69	123.31
55	2x	76	31H	C4'-O4'-C1'	-4.26	100.07	109.47
32	1a	967	5MC	C5-C6-N1	-4.23	118.72	123.31
1	2A	2552	OMU	N3-C2-N1	4.22	120.39	114.89
56	2y	54	5MU	C4-N3-C2	-4.22	121.81	127.34
32	2a	1404	5MC	C5-C6-N1	-4.20	118.75	123.31
1	1A	1911	PSU	C4-N3-C2	-4.20	120.58	126.37
32	1a	1518	MA6	C2-N1-C6	4.19	122.07	111.83
1	1A	2552	OMU	N3-C2-N1	4.19	120.34	114.89
32	1a	1518	MA6	N9-C8-N7	-4.19	108.00	113.94
1	1A	2605	PSU	C4-N3-C2	-4.18	120.61	126.37
1	2A	1911	PSU	C4-N3-C2	-4.18	120.61	126.37
54	1w	8	4SU	C5-C4-N3	4.18	118.64	114.75
32	1a	1519	MA6	C4-C5-N7	-4.18	105.81	110.58
32	1a	1519	MA6	N1-C2-N3	-4.16	122.28	128.58
54	2w	37	MIA	C4-C5-N7	-4.14	105.85	110.58
32	1a	1518	MA6	C5-N7-C8	4.13	109.95	103.45
56	1y	37	MIA	N3-C2-N1	-4.13	122.33	128.58
56	2y	54	5MU	N3-C2-N1	4.12	120.25	114.89
54	1w	32	PSU	C4-N3-C2	-4.10	120.72	126.37
56	2y	54	5MU	O4-C4-C5	-4.10	120.23	124.92
55	1x	54	5MU	O4-C4-C5	-4.09	120.24	124.92
32	2a	516	PSU	C4-N3-C2	-4.08	120.76	126.37
55	2x	54	5MU	C5-C4-N3	4.04	118.84	115.32
54	1w	37	MIA	C16-C14-C13	-4.02	110.59	122.66
54	2w	54	5MU	C5-C4-N3	4.00	118.80	115.32
56	2y	8	4SU	N3-C2-N1	4.00	120.09	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	54	5MU	C4-N3-C2	-3.99	122.10	127.34
1	2A	2605	PSU	O2-C2-N1	-3.99	118.68	122.79
32	1a	1207	2MG	N9-C4-N3	3.98	133.91	125.95
32	2a	1207	2MG	C6-C5-N7	3.96	137.50	130.29
32	2a	1400	5MC	C5-C6-N1	-3.95	119.02	123.31
55	1x	32	5MC	C5-C6-N1	-3.95	119.02	123.31
56	1y	39	PSU	C4-N3-C2	-3.94	120.94	126.37
55	1x	32	5MC	C5-C4-N3	-3.94	117.72	121.75
32	1a	1519	MA6	C5-N7-C8	3.93	109.63	103.45
1	1A	1939	5MU	N3-C2-N1	3.92	119.99	114.89
56	2y	55	PSU	O2-C2-N1	-3.91	118.75	122.79
54	1w	8	4SU	C4-N3-C2	-3.91	123.57	127.31
54	2w	39	PSU	C4-N3-C2	-3.89	121.02	126.37
32	2a	1518	MA6	C2-N1-C6	3.87	121.29	111.83
1	2A	2552	OMU	C5-C4-N3	3.87	120.22	114.80
32	2a	1519	MA6	C4-C5-N7	-3.86	106.17	110.58
1	2A	1939	5MU	C5-C6-N1	-3.85	119.13	123.31
1	1A	1915	5MU	O2-C2-N1	-3.83	117.81	122.80
56	1y	37	MIA	C2-N3-C4	3.82	121.17	111.83
32	2a	1518	MA6	C5-N7-C8	3.82	109.46	103.45
32	2a	1518	MA6	C4-C5-N7	-3.82	106.21	110.58
32	2a	1519	MA6	C5-N7-C8	3.82	109.45	103.45
32	2a	1407	5MC	C5-C6-N1	-3.80	119.18	123.31
54	2w	54	5MU	N3-C2-N1	3.80	119.83	114.89
54	2w	55	PSU	C4-N3-C2	-3.77	121.18	126.37
54	1w	39	PSU	C4-N3-C2	-3.76	121.19	126.37
1	1A	1939	5MU	O4-C4-C5	-3.75	120.63	124.92
54	1w	54	5MU	N3-C2-N1	3.74	119.76	114.89
56	2y	55	PSU	C4-N3-C2	-3.73	121.23	126.37
1	2A	1942	5MC	C5-C6-N1	-3.73	119.27	123.31
56	2y	37	MIA	C2-N3-C4	3.72	120.92	111.83
56	1y	55	PSU	C4-N3-C2	-3.72	121.25	126.37
32	1a	1400	5MC	C5-C4-N3	-3.71	117.95	121.75
1	2A	1939	5MU	O2-C2-N1	-3.71	117.97	122.80
54	1w	55	PSU	C4-N3-C2	-3.70	121.27	126.37
1	1A	1962	5MC	O2-C2-N3	-3.70	116.49	122.33
1	1A	1942	5MC	C5-C4-N3	-3.69	117.97	121.75
32	1a	1207	2MG	C6-C5-N7	3.68	136.99	130.29
54	1w	39	PSU	O2-C2-N1	-3.67	119.00	122.79
56	2y	39	PSU	N1-C2-N3	3.67	119.04	115.17
32	1a	1404	5MC	C5-C4-N3	-3.66	118.01	121.75
55	2x	76	31H	N9-C8-N7	-3.64	108.77	113.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	54	5MU	C4-N3-C2	-3.63	122.58	127.34
56	1y	55	PSU	O2-C2-N1	-3.61	119.06	122.79
32	2a	1519	MA6	C2-N1-C6	3.61	120.64	111.83
32	1a	527	G7M	C2-N3-C4	3.60	118.50	112.30
54	1w	37	MIA	C6-C5-N7	3.60	136.35	132.43
1	1A	2552	OMU	C4-N3-C2	-3.60	122.15	126.61
32	1a	1407	5MC	C5-C6-N1	-3.59	119.41	123.31
55	1x	8	4SU	C5-C4-S4	3.58	128.39	124.31
55	1x	55	PSU	C4-N3-C2	-3.56	121.47	126.37
32	2a	1207	2MG	N9-C4-N3	3.56	133.07	125.95
32	2a	1207	2MG	C4-C5-N7	-3.55	105.04	110.67
55	1x	76	31H	C2-N3-C4	3.55	120.50	111.83
32	1a	1519	MA6	C2-N1-C6	3.55	120.49	111.83
32	2a	1519	MA6	C2-N3-C4	3.54	120.49	111.83
55	2x	76	31H	C2-N3-C4	3.53	120.46	111.83
32	2a	1498	UR3	C5-C4-N3	3.52	119.67	115.04
54	1w	37	MIA	C2-N3-C4	3.50	121.47	112.29
56	1y	32	PSU	C4-N3-C2	-3.50	121.54	126.37
43	1l	92	0TD	OD2-CG-CB	3.50	120.72	113.15
1	1A	2251	OMG	C6-C5-N7	3.50	136.65	130.29
32	1a	1400	5MC	C5-C6-N1	-3.49	119.52	123.31
54	1w	37	MIA	C4-N9-C8	3.49	109.41	105.74
56	2y	32	PSU	O2-C2-N1	-3.49	119.19	122.79
32	1a	1518	MA6	C4-C5-N7	-3.48	106.61	110.58
32	2a	1518	MA6	C2-N3-C4	3.47	120.31	111.83
54	1w	8	4SU	N3-C2-N1	3.47	119.41	114.89
1	1A	2605	PSU	C5-C6-N1	-3.47	117.33	122.14
32	2a	966	M2G	C6-C5-N7	3.47	136.60	130.29
54	1w	32	PSU	C6-C5-C4	-3.45	115.85	118.17
56	2y	37	MIA	N3-C2-N1	-3.44	123.37	128.58
54	2w	37	MIA	C2-N3-C4	3.43	121.27	112.29
55	1x	76	31H	CA-N-CN	-3.43	117.55	122.82
56	1y	32	PSU	O2-C2-N1	-3.42	119.26	122.79
1	2A	1917	PSU	O2-C2-N1	-3.41	119.27	122.79
55	1x	76	31H	N9-C8-N7	-3.41	109.10	113.94
32	2a	1207	2MG	N2-C2-N3	-3.39	116.19	120.51
54	2w	76	F3N	N9-C8-N7	-3.39	109.13	113.94
32	1a	1404	5MC	C5-C6-N1	-3.38	119.64	123.31
55	1x	76	31H	O4'-C1'-N9	3.38	114.58	108.09
54	2w	76	F3N	C2-N3-C4	3.38	120.08	111.83
1	1A	2503	2MA	C4-C5-N7	-3.35	106.75	110.58
1	1A	2605	PSU	O2-C2-N3	-3.34	115.93	121.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	37	MIA	N3-C2-N1	-3.34	120.91	127.00
54	2w	37	MIA	C5-N7-C8	3.33	108.69	103.45
32	2a	1518	MA6	N9-C8-N7	-3.31	109.23	113.94
56	2y	37	MIA	C4-C5-N7	-3.31	106.80	110.58
32	2a	1407	5MC	C5-C4-N3	-3.31	118.36	121.75
1	2A	2552	OMU	O4-C4-C5	-3.29	119.49	125.16
32	1a	1519	MA6	N9-C8-N7	-3.28	109.28	113.94
56	1y	37	MIA	C4-C5-N7	-3.28	106.84	110.58
1	2A	1962	5MC	C5-C4-N3	-3.27	118.40	121.75
32	2a	1519	MA6	N9-C8-N7	-3.27	109.30	113.94
1	2A	2503	2MA	N6-C6-N1	3.26	121.42	117.03
32	1a	1519	MA6	C2-N3-C4	3.24	119.75	111.83
1	2A	1915	5MU	C1'-N1-C6	-3.23	115.83	121.15
32	1a	1518	MA6	C2-N3-C4	3.22	119.70	111.83
54	1w	76	F3N	N9-C8-N7	-3.22	109.37	113.94
55	2x	8	4SU	O2-C2-N1	3.22	126.98	122.80
32	2a	967	5MC	C5-C6-N1	-3.21	119.82	123.31
1	2A	1915	5MU	C1'-N1-C2	3.21	123.35	117.59
32	2a	966	M2G	C4-C5-N7	-3.20	105.60	110.67
55	1x	76	31H	OCN-CN-N	-3.20	117.05	125.32
56	2y	8	4SU	C1'-N1-C2	3.20	123.33	117.59
32	1a	966	M2G	C6-C5-N7	3.19	136.10	130.29
1	1A	1962	5MC	CM5-C5-C6	-3.18	118.54	122.85
56	1y	8	4SU	N3-C2-N1	3.17	119.02	114.89
54	2w	8	4SU	N3-C2-N1	3.17	119.02	114.89
54	1w	76	F3N	C2-N3-C4	3.15	119.52	111.83
56	1y	54	5MU	O4-C4-C5	-3.14	121.33	124.92
1	1A	1962	5MC	C5-C6-N1	-3.14	119.91	123.31
56	1y	54	5MU	C5M-C5-C4	3.12	122.11	118.78
32	2a	1404	5MC	C5-C4-N3	-3.11	118.56	121.75
55	2x	54	5MU	O2-C2-N1	-3.10	118.76	122.80
1	2A	1962	5MC	C5-C6-N1	-3.10	119.94	123.31
55	2x	76	31H	C5-N7-C8	3.10	108.32	103.45
55	1x	76	31H	C4'-O4'-C1'	-3.10	102.63	109.47
1	2A	2503	2MA	C4-C5-N7	-3.09	107.05	110.58
32	1a	516	PSU	C5-C6-N1	-3.09	117.85	122.14
56	1y	8	4SU	C4-N3-C2	-3.08	124.36	127.31
56	1y	8	4SU	C5-C4-N3	3.08	117.61	114.75
32	1a	1518	MA6	C5-C4-N3	-3.06	122.50	126.72
32	1a	1498	UR3	C5-C4-N3	3.05	119.06	115.04
55	1x	76	31H	C5-N7-C8	3.05	108.25	103.45
56	2y	54	5MU	C5-C6-N1	-3.05	120.00	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1207	2MG	C4-C5-N7	-3.05	105.84	110.67
56	1y	54	5MU	C5-C6-N1	-3.04	120.01	123.31
55	1x	76	31H	C5-C4-N9	3.04	109.12	105.81
54	2w	54	5MU	C5M-C5-C4	3.03	122.02	118.78
54	1w	54	5MU	C5-C6-N1	-3.02	120.04	123.31
55	2x	76	31H	CA-N-CN	-2.99	118.22	122.82
1	2A	1915	5MU	C5-C6-N1	-2.97	120.08	123.31
54	2w	76	F3N	C5-N7-C8	2.96	108.10	103.45
56	2y	39	PSU	O2-C2-N3	-2.95	116.62	121.86
55	2x	32	5MC	C5-C4-N3	-2.94	118.74	121.75
1	2A	2605	PSU	C6-C5-C4	-2.93	116.19	118.17
55	1x	76	31H	O2'-C2'-C3'	2.93	118.33	111.16
55	2x	8	4SU	C6-C5-C4	-2.91	117.43	119.95
1	2A	1942	5MC	C5-C4-N3	-2.91	118.77	121.75
32	1a	1518	MA6	C4-N9-C8	2.88	108.76	105.74
1	1A	1939	5MU	C1'-N1-C6	-2.87	116.43	121.15
56	1y	37	MIA	C4-N9-C8	2.86	108.75	105.74
1	2A	1915	5MU	C5M-C5-C4	2.85	121.82	118.78
55	1x	54	5MU	O2-C2-N1	-2.83	119.12	122.80
32	1a	966	M2G	C4-C5-N7	-2.81	106.21	110.67
1	2A	2251	OMG	C6-C5-N7	2.81	135.41	130.29
32	2a	1207	2MG	N1-C2-N2	2.80	119.42	116.56
1	1A	2503	2MA	C2-N1-C6	2.80	122.41	118.10
56	2y	55	PSU	C6-C5-C4	-2.79	116.29	118.17
54	2w	76	F3N	C5-C4-N9	2.78	108.84	105.81
32	2a	1407	5MC	O2-C2-N3	-2.76	117.98	122.33
32	2a	1400	5MC	C1'-N1-C6	-2.75	116.62	121.15
54	2w	39	PSU	O2-C2-N1	-2.74	119.96	122.79
55	2x	76	31H	N3-C4-N9	2.74	131.82	127.17
56	2y	8	4SU	C5-C4-S4	-2.73	121.18	124.31
54	2w	32	PSU	O2-C2-N1	-2.73	119.97	122.79
32	2a	1518	MA6	N3-C4-N9	2.73	131.81	127.17
54	1w	76	F3N	C5-N7-C8	2.73	107.73	103.45
54	2w	55	PSU	C6-C5-C4	-2.70	116.35	118.17
32	2a	1402	4OC	CM4-N4-C4	-2.70	117.18	122.45
32	2a	1519	MA6	N3-C4-N9	2.69	131.74	127.17
56	1y	39	PSU	O2-C2-N1	-2.67	120.03	122.79
1	1A	1915	5MU	C5M-C5-C4	2.67	121.63	118.78
55	1x	76	31H	N3-C4-N9	2.63	131.65	127.17
56	1y	46	G7M	O6-C6-C5	-2.63	122.13	128.01
54	2w	37	MIA	C2-N1-C6	2.61	122.50	117.54
1	1A	2503	2MA	C5-N7-C8	2.61	107.56	103.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	37	MIA	C6-C5-N7	2.61	135.27	132.43
54	2w	46	G7M	O6-C6-C5	-2.60	122.20	128.01
56	1y	32	PSU	C6-C5-C4	-2.60	116.42	118.17
56	2y	37	MIA	C5-N7-C8	2.59	107.51	103.45
54	2w	32	PSU	C5-C6-N1	-2.58	118.56	122.14
55	2x	76	31H	C5-C4-N9	2.58	108.62	105.81
56	2y	37	MIA	C4-N9-C8	2.58	108.44	105.74
55	1x	76	31H	C6-C5-C4	2.58	120.69	117.18
55	1x	55	PSU	O2-C2-N1	-2.57	120.14	122.79
32	2a	1400	5MC	O2-C2-N3	-2.57	118.28	122.33
32	1a	527	G7M	O6-C6-C5	-2.56	122.29	128.01
55	2x	55	PSU	O2-C2-N3	-2.56	117.31	121.86
54	1w	37	MIA	C2-N1-C6	2.55	122.38	117.54
55	1x	76	31H	C4-C5-N7	-2.55	107.67	110.58
1	1A	2552	OMU	O4-C4-C5	-2.54	120.78	125.16
1	1A	2251	OMG	C4-C5-N7	-2.54	106.64	110.67
56	1y	37	MIA	C5-N7-C8	2.54	107.44	103.45
54	1w	37	MIA	C4-C5-N7	-2.54	107.68	110.58
1	1A	2503	2MA	N6-C6-N1	2.54	120.45	117.03
32	1a	1519	MA6	C4-C5-C6	2.53	118.53	115.91
54	2w	54	5MU	O2-C2-N1	-2.53	119.50	122.80
54	2w	37	MIA	C4-C5-C6	2.53	118.88	116.78
1	2A	2251	OMG	C4-C5-N7	-2.52	106.67	110.67
55	2x	32	5MC	CM5-C5-C6	-2.52	119.44	122.85
55	2x	8	4SU	S4-C4-N3	-2.52	117.57	120.20
55	1x	76	31H	O4'-C1'-C2'	-2.51	101.25	106.62
1	1A	1962	5MC	C1'-N1-C6	-2.50	117.03	121.15
55	2x	55	PSU	C6-C5-C4	-2.49	116.50	118.17
32	2a	516	PSU	C6-C5-C4	-2.49	116.50	118.17
1	1A	1939	5MU	O2-C2-N3	-2.48	116.91	121.49
1	1A	1917	PSU	C5-C6-N1	-2.48	118.69	122.14
32	1a	1402	4OC	C6-C5-C4	2.48	119.98	117.00
54	1w	46	G7M	O6-C6-C5	-2.47	122.49	128.01
55	2x	76	31H	OCN-CN-N	-2.46	118.96	125.32
32	1a	516	PSU	O2-C2-N3	-2.46	117.49	121.86
1	2A	1917	PSU	C5-C6-N1	-2.45	118.74	122.14
54	1w	37	MIA	N9-C8-N7	-2.44	110.47	113.94
54	1w	8	4SU	C5-C4-S4	-2.44	121.52	124.31
54	1w	76	F3N	C5-C4-N9	2.44	108.47	105.81
54	2w	76	F3N	N3-C4-N9	2.44	131.31	127.17
32	1a	1518	MA6	C4-N9-C1'	-2.43	120.95	126.63
32	1a	1519	MA6	N3-C4-N9	2.43	131.30	127.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1y	37	MIA	C6-C5-N7	2.41	136.74	132.09
1	1A	1942	5MC	O2-C2-N3	-2.41	118.53	122.33
56	1y	37	MIA	C2-N1-C6	2.41	122.68	118.73
54	2w	37	MIA	N3-C2-N1	-2.40	122.62	127.00
55	2x	55	PSU	C5-C6-N1	-2.40	118.81	122.14
32	2a	1407	5MC	CM5-C5-C6	-2.38	119.63	122.85
1	2A	2503	2MA	C5-N7-C8	2.38	107.19	103.45
32	2a	527	G7M	C5-C6-N1	2.37	116.74	111.84
55	1x	55	PSU	C5-C6-N1	-2.37	118.85	122.14
1	1A	1942	5MC	N1-C2-N3	2.36	122.91	118.80
1	1A	1915	5MU	C5-C6-N1	-2.35	120.76	123.31
56	1y	54	5MU	O2-C2-N1	-2.34	119.75	122.80
32	2a	1518	MA6	C4-C5-C6	2.33	118.32	115.91
54	1w	39	PSU	C6-C5-C4	-2.32	116.61	118.17
32	1a	1400	5MC	O2-C2-N3	-2.32	118.68	122.33
55	2x	76	31H	C4-C5-N7	-2.32	107.94	110.58
1	1A	1962	5MC	C5-C4-N3	-2.31	119.38	121.75
1	1A	1962	5MC	N1-C2-N3	2.30	122.80	118.80
1	2A	1920	OMC	CM2-O2'-C2'	-2.30	108.58	114.47
55	1x	32	5MC	N4-C4-N3	2.29	122.66	118.51
55	2x	76	31H	O4'-C1'-C2'	-2.29	101.72	106.62
54	2w	37	MIA	C4-N9-C8	2.29	108.14	105.74
1	1A	2251	OMG	C5-C6-N1	2.28	119.06	113.25
56	1y	39	PSU	C6-C5-C4	-2.28	116.64	118.17
54	2w	37	MIA	C12-N6-C6	-2.28	120.74	122.85
32	1a	1518	MA6	C6-C5-N7	2.27	137.06	133.43
1	1A	1939	5MU	C6-N1-C2	2.27	123.57	121.30
32	1a	1519	MA6	C5-C4-N9	2.27	108.28	105.81
54	2w	76	F3N	C6-C5-C4	2.27	120.27	117.18
56	2y	46	G7M	N2-C2-N3	2.25	124.07	119.67
1	1A	2503	2MA	C6-C5-N7	2.25	136.43	132.09
55	1x	8	4SU	O2-C2-N3	-2.25	117.34	121.49
56	2y	8	4SU	C6-N1-C2	-2.24	118.27	121.00
32	2a	1498	UR3	C3U-N3-C4	2.24	120.97	117.87
32	1a	1207	2MG	N2-C2-N3	-2.24	117.66	120.51
32	1a	527	G7M	C5-C6-N1	2.23	116.46	111.84
1	2A	2251	OMG	CM2-O2'-C2'	-2.23	108.76	114.47
54	1w	37	MIA	C5-N7-C8	2.22	106.95	103.45
32	1a	1498	UR3	C3U-N3-C4	2.22	120.95	117.87
32	2a	527	G7M	CN7-N7-C5	2.20	129.54	126.80
32	1a	1402	4OC	C2'-C1'-N1	-2.20	110.07	114.24
54	1w	8	4SU	C6-N1-C2	-2.20	118.32	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1942	5MC	O2-C2-N3	-2.19	118.88	122.33
32	2a	967	5MC	C5-C4-N3	-2.18	119.52	121.75
32	1a	966	M2G	C8-N7-C5	2.18	108.14	104.26
1	2A	2251	OMG	O6-C6-C5	-2.18	120.79	126.53
54	2w	39	PSU	C5-C6-N1	-2.17	119.12	122.14
54	2w	37	MIA	N9-C8-N7	-2.17	110.85	113.94
55	2x	76	31H	O2'-C2'-C3'	2.17	116.48	111.16
54	2w	32	PSU	O2-C2-N3	-2.17	118.01	121.86
54	2w	55	PSU	C6-N1-C2	-2.17	120.68	122.69
1	1A	1911	PSU	O2-C2-N3	-2.17	118.01	121.86
56	2y	8	4SU	O2-C2-N3	-2.16	117.50	121.49
32	1a	516	PSU	O4'-C1'-C2'	2.16	108.14	105.15
32	2a	1498	UR3	C1'-N1-C2	2.16	120.58	117.04
32	2a	1404	5MC	CM5-C5-C6	-2.16	119.93	122.85
32	2a	1207	2MG	CM2-N2-C2	-2.15	119.04	123.65
32	2a	527	G7M	O6-C6-C5	-2.14	123.23	128.01
56	2y	32	PSU	C5-C6-N1	-2.14	119.17	122.14
55	2x	76	31H	C6-C5-C4	2.14	120.10	117.18
32	1a	1518	MA6	N3-C4-N9	2.14	130.80	127.17
1	1A	1917	PSU	O4-C4-C5	-2.14	118.70	124.01
54	2w	76	F3N	C4-C5-N7	-2.13	108.14	110.58
1	1A	1911	PSU	O2-C2-N1	-2.13	120.59	122.79
32	2a	966	M2G	C8-N7-C5	2.13	108.05	104.26
55	1x	32	5MC	O2-C2-N3	-2.12	118.98	122.33
1	1A	1962	5MC	C1'-N1-C2	2.12	123.13	118.44
32	1a	1404	5MC	CM5-C5-C6	-2.12	119.98	122.85
32	1a	1207	2MG	N1-C2-N2	2.12	118.72	116.56
54	1w	76	F3N	N3-C4-N9	2.12	130.77	127.17
1	1A	1917	PSU	C6-C5-C4	-2.12	116.75	118.17
54	2w	8	4SU	C6-C5-C4	-2.11	118.12	119.95
32	1a	1407	5MC	C5-C4-N3	-2.10	119.60	121.75
55	1x	55	PSU	O2-C2-N3	-2.10	118.14	121.86
32	1a	1404	5MC	C1'-N1-C6	-2.10	117.70	121.15
56	2y	8	4SU	O3'-C3'-C4'	2.10	117.10	111.08
32	1a	1402	4OC	CM4-N4-C4	-2.08	118.38	122.45
43	2l	92	0TD	OD2-CG-CB	2.08	117.65	113.15
56	2y	37	MIA	C2-N1-C6	2.08	122.14	118.73
1	2A	2503	2MA	C4-N9-C8	2.07	107.91	105.74
32	1a	1402	4OC	C5-C6-N1	-2.07	118.48	121.84
32	1a	1407	5MC	N1-C2-N3	2.07	122.39	118.80
32	2a	1207	2MG	C2-N1-C6	-2.06	122.06	124.55
43	1l	92	0TD	OD2-CG-OD1	-2.05	119.43	124.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	8	4SU	C5-C4-N3	2.04	116.65	114.75
1	1A	1915	5MU	C5M-C5-C6	-2.04	120.09	122.85
1	2A	1920	OMC	C2'-C1'-N1	-2.04	110.37	114.24
1	2A	1915	5MU	O2-C2-N3	-2.04	117.73	121.49
56	1y	54	5MU	C5M-C5-C6	-2.04	120.10	122.85
55	2x	8	4SU	C4-N3-C2	2.03	129.26	127.31
1	1A	1911	PSU	C5-C6-N1	-2.01	119.35	122.14
54	1w	8	4SU	O2-C2-N1	-2.01	120.18	122.80
1	1A	2251	OMG	O6-C6-C5	-2.01	121.24	126.53
54	1w	54	5MU	O2-C2-N3	-2.00	117.80	121.49
55	2x	8	4SU	C1'-N1-C2	2.00	121.19	117.59

There are no chirality outliers.

All (58) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	2251	OMG	C1'-C2'-O2'-CM2
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C16
54	1w	76	F3N	C3'-C4'-C5'-O5'
54	1w	76	F3N	O4'-C4'-C5'-O5'
55	1x	76	31H	C3'-C4'-C5'-O5'
56	1y	46	G7M	C4'-C5'-O5'-P
43	2l	92	0TD	CG-CB-SB-CSB
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2w	46	G7M	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
56	2y	54	5MU	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
56	2y	54	5MU	C3'-C4'-C5'-O5'
54	1w	46	G7M	O4'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
54	1w	46	G7M	C3'-C4'-C5'-O5'
56	2y	46	G7M	O4'-C1'-N9-C4
55	1x	76	31H	CB-CG-SD-CE
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2w	76	F3N	N-CA-CB-CG
1	2A	2503	2MA	C3'-C4'-C5'-O5'
56	2y	46	G7M	O4'-C1'-N9-C8
56	2y	55	PSU	C3'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
55	1x	76	31H	C4'-C5'-O5'-P
56	1y	55	PSU	O4'-C1'-C5-C4
56	2y	55	PSU	O4'-C1'-C5-C4
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
32	2a	527	G7M	C4'-C5'-O5'-P
56	2y	8	4SU	C2'-C1'-N1-C2
32	1a	527	G7M	C4'-C5'-O5'-P
54	2w	46	G7M	C4'-C5'-O5'-P
43	2l	92	0TD	CA-CB-SB-CSB
54	2w	76	F3N	C-CA-CB-CG
56	2y	8	4SU	C2'-C1'-N1-C6
56	2y	37	MIA	C3'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
55	2x	76	31H	C4'-C5'-O5'-P

There are no ring outliers.

34 monomers are involved in 48 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	2y	8	4SU	2	0
1	1A	1939	5MU	1	0
56	1y	37	MIA	2	0
32	2a	527	G7M	2	0
32	1a	967	5MC	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	46	G7M	2	0
54	2w	8	4SU	2	0
54	1w	8	4SU	1	0
32	1a	1518	MA6	1	0
1	1A	1920	OMC	1	0
54	1w	76	F3N	3	0
32	2a	1519	MA6	2	0
54	2w	39	PSU	2	0
1	2A	2552	OMU	1	0
32	1a	1519	MA6	1	0
43	1l	92	0TD	1	0
32	2a	1207	2MG	2	0
32	1a	1402	4OC	1	0
32	1a	1498	UR3	1	0
32	2a	1518	MA6	3	0
32	2a	1402	4OC	2	0
32	2a	1404	5MC	1	0
1	2A	2251	OMG	1	0
55	2x	55	PSU	1	0
54	1w	37	MIA	1	0
56	1y	8	4SU	1	0
1	1A	2251	OMG	1	0
32	1a	966	M2G	3	0
56	2y	55	PSU	3	0
55	1x	8	4SU	1	0
43	2l	92	0TD	2	0
56	2y	46	G7M	3	0
55	2x	54	5MU	1	0
54	2w	76	F3N	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2820 ligands modelled in this entry, 2818 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	2d	303	35	0,12,12	-	-	-		
61	SF4	1d	302	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	2d	303	35	-	-	0/6/5/5
61	SF4	1d	302	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 ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
54	1w	1
7	1H	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1w	75:C	O3'	76:F3N	P	2.35

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1H	126:PRO	C	127:GLU	N	1.17

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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1A	2860/2915 (98%)	-0.72	131 (4%) 37 33	16, 32, 85, 95	0
1	2A	2789/2915 (95%)	-0.31	124 (4%) 39 34	28, 49, 84, 96	0
2	1B	120/121 (99%)	-0.61	0 100 100	26, 44, 58, 81	0
2	2B	120/121 (99%)	0.09	0 100 100	51, 63, 71, 83	0
3	1D	275/276 (99%)	-0.38	2 (0%) 84 81	16, 33, 47, 73	0
3	2D	275/276 (99%)	-0.05	3 (1%) 78 75	28, 44, 55, 76	0
4	1E	204/206 (99%)	-0.32	1 (0%) 87 85	15, 37, 56, 69	0
4	2E	204/206 (99%)	0.26	2 (0%) 79 76	30, 53, 65, 76	0
5	1F	203/210 (96%)	-0.21	0 100 100	17, 37, 61, 72	0
5	2F	203/210 (96%)	0.28	1 (0%) 87 85	31, 58, 68, 75	0
6	1G	181/182 (99%)	0.32	7 (3%) 43 38	36, 50, 65, 76	0
6	2G	181/182 (99%)	0.90	10 (5%) 30 27	53, 65, 73, 82	0
7	1H	174/180 (96%)	0.23	3 (1%) 69 65	36, 49, 62, 66	0
7	2H	174/180 (96%)	1.28	26 (14%) 5 4	61, 73, 80, 84	0
8	1I	146/148 (98%)	0.59	2 (1%) 73 70	43, 62, 73, 76	0
8	2I	146/148 (98%)	0.70	3 (2%) 63 59	48, 64, 72, 77	0
9	1N	140/140 (100%)	-0.25	2 (1%) 73 70	23, 35, 53, 64	0
9	2N	140/140 (100%)	0.49	2 (1%) 73 70	41, 56, 71, 78	0
10	1O	122/122 (100%)	-0.26	2 (1%) 70 67	24, 37, 54, 59	0
10	2O	122/122 (100%)	0.20	0 100 100	39, 52, 63, 67	0
11	1P	149/150 (99%)	-0.07	2 (1%) 75 71	18, 42, 62, 68	0
11	2P	149/150 (99%)	0.43	5 (3%) 48 43	33, 57, 71, 78	0
12	1Q	141/141 (100%)	-0.16	0 100 100	23, 36, 50, 63	0
12	2Q	141/141 (100%)	0.53	7 (4%) 34 30	40, 56, 66, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.37	0 100 100	22, 30, 46, 49	0
13	2R	118/118 (100%)	0.15	0 100 100	38, 47, 57, 64	0
14	1S	110/112 (98%)	-0.07	0 100 100	33, 44, 56, 60	0
14	2S	110/112 (98%)	0.66	1 (0%) 81 78	50, 60, 68, 73	0
15	1T	131/146 (89%)	-0.00	2 (1%) 72 68	31, 41, 61, 72	0
15	2T	131/146 (89%)	0.28	2 (1%) 72 68	45, 54, 65, 69	0
16	1U	116/118 (98%)	-0.59	0 100 100	16, 26, 40, 54	0
16	2U	116/118 (98%)	0.36	2 (1%) 69 65	34, 52, 65, 69	0
17	1V	101/101 (100%)	-0.50	0 100 100	18, 31, 50, 59	0
17	2V	101/101 (100%)	0.51	0 100 100	39, 60, 70, 78	0
18	1W	112/113 (99%)	-0.53	1 (0%) 81 78	17, 27, 45, 75	0
18	2W	112/113 (99%)	0.10	0 100 100	34, 44, 58, 83	0
19	1X	95/96 (98%)	-0.14	2 (2%) 63 59	22, 35, 56, 73	0
19	2X	95/96 (98%)	0.33	3 (3%) 50 46	41, 52, 66, 75	0
20	1Y	107/110 (97%)	0.04	0 100 100	30, 45, 58, 69	0
20	2Y	107/110 (97%)	0.89	8 (7%) 20 18	51, 61, 71, 79	0
21	1Z	154/206 (74%)	0.57	6 (3%) 43 38	32, 56, 71, 81	0
21	2Z	160/206 (77%)	1.16	19 (11%) 9 7	55, 70, 79, 81	0
22	10	83/85 (97%)	-0.30	0 100 100	18, 33, 44, 56	0
22	20	83/85 (97%)	0.38	1 (1%) 76 73	38, 51, 61, 66	0
23	11	97/98 (98%)	-0.00	0 100 100	24, 43, 63, 72	0
23	21	97/98 (98%)	0.27	2 (2%) 63 59	33, 50, 64, 69	0
24	12	70/72 (97%)	0.06	1 (1%) 73 70	29, 43, 56, 67	0
24	22	70/72 (97%)	0.52	1 (1%) 73 70	48, 59, 67, 74	0
25	13	59/60 (98%)	-0.35	0 100 100	21, 30, 54, 66	0
25	23	59/60 (98%)	0.38	1 (1%) 69 65	48, 55, 68, 76	0
26	14	69/71 (97%)	0.78	7 (10%) 12 10	46, 65, 76, 79	0
26	24	69/71 (97%)	1.23	13 (18%) 3 2	59, 73, 81, 82	0
27	15	59/60 (98%)	-0.59	0 100 100	17, 27, 45, 48	0
27	25	59/60 (98%)	-0.03	0 100 100	29, 43, 61, 69	0
28	16	53/54 (98%)	-0.28	0 100 100	32, 40, 54, 59	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.24	1 (1%) 66 62	44, 52, 60, 64	0
29	17	48/49 (97%)	-0.55	1 (2%) 63 59	17, 24, 44, 55	0
29	27	48/49 (97%)	-0.05	3 (6%) 26 23	29, 35, 58, 63	0
30	18	64/65 (98%)	-0.35	0 100 100	24, 30, 36, 55	0
30	28	64/65 (98%)	0.15	0 100 100	41, 46, 52, 59	0
31	19	37/37 (100%)	-0.30	0 100 100	24, 33, 48, 56	0
31	29	37/37 (100%)	0.63	0 100 100	49, 57, 67, 73	0
32	1a	1488/1521 (97%)	-0.07	31 (2%) 63 59	31, 56, 82, 97	0
32	2a	1491/1521 (98%)	0.12	35 (2%) 61 57	42, 63, 82, 96	0
33	1b	231/256 (90%)	1.06	30 (12%) 7 6	53, 67, 76, 82	0
33	2b	231/256 (90%)	1.11	23 (9%) 12 10	59, 71, 78, 84	0
34	1c	206/239 (86%)	0.65	6 (2%) 53 49	50, 61, 72, 81	0
34	2c	206/239 (86%)	1.02	13 (6%) 26 23	61, 70, 77, 81	0
35	1d	208/209 (99%)	0.78	14 (6%) 24 21	48, 60, 69, 74	0
35	2d	208/209 (99%)	0.62	4 (1%) 66 62	51, 61, 68, 73	0
36	1e	148/162 (91%)	0.33	0 100 100	44, 56, 65, 70	0
36	2e	148/162 (91%)	0.68	5 (3%) 48 43	53, 64, 71, 79	0
37	1f	100/101 (99%)	0.51	1 (1%) 79 76	47, 58, 67, 69	0
37	2f	100/101 (99%)	0.40	0 100 100	51, 59, 66, 73	0
38	1g	155/156 (99%)	0.68	13 (8%) 17 15	51, 60, 74, 81	0
38	2g	155/156 (99%)	0.96	18 (11%) 9 8	58, 67, 75, 79	0
39	1h	137/138 (99%)	0.44	2 (1%) 72 68	46, 57, 65, 69	0
39	2h	137/138 (99%)	0.73	1 (0%) 84 81	56, 64, 70, 74	0
40	1i	127/128 (99%)	0.97	9 (7%) 22 19	41, 65, 72, 74	0
40	2i	127/128 (99%)	1.29	20 (15%) 5 4	57, 72, 77, 80	0
41	1j	97/105 (92%)	1.05	9 (9%) 14 12	49, 66, 75, 77	0
41	2j	96/105 (91%)	1.36	22 (22%) 2 1	59, 73, 79, 81	0
42	1k	114/129 (88%)	0.34	2 (1%) 67 64	37, 57, 67, 76	0
42	2k	114/129 (88%)	0.69	3 (2%) 57 52	48, 62, 71, 73	0
43	1l	121/132 (91%)	0.17	3 (2%) 58 54	39, 45, 56, 67	0
43	2l	121/132 (91%)	0.41	3 (2%) 58 54	47, 54, 64, 72	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	125/126 (99%)	0.55	5 (4%) 42 38	44, 57, 64, 72	0
44	2m	122/126 (96%)	1.17	14 (11%) 9 8	55, 67, 72, 74	0
45	1n	60/61 (98%)	0.62	2 (3%) 49 45	50, 57, 63, 68	0
45	2n	60/61 (98%)	1.51	14 (23%) 2 1	62, 69, 72, 73	0
46	1o	88/89 (98%)	0.42	1 (1%) 78 75	41, 55, 64, 72	0
46	2o	88/89 (98%)	0.58	4 (4%) 38 33	49, 60, 70, 73	0
47	1p	82/88 (93%)	0.88	4 (4%) 35 31	47, 62, 68, 73	0
47	2p	82/88 (93%)	0.70	4 (4%) 35 31	51, 59, 68, 69	0
48	1q	99/105 (94%)	0.64	1 (1%) 79 76	48, 58, 66, 71	0
48	2q	99/105 (94%)	0.78	4 (4%) 42 38	50, 61, 71, 78	0
49	1r	68/88 (77%)	0.40	2 (2%) 53 49	47, 57, 68, 70	0
49	2r	68/88 (77%)	0.30	1 (1%) 72 68	53, 60, 68, 74	0
50	1s	83/93 (89%)	0.64	4 (4%) 35 31	48, 59, 66, 73	0
50	2s	83/93 (89%)	1.28	12 (14%) 6 5	60, 69, 75, 81	0
51	1t	96/106 (90%)	0.96	11 (11%) 9 8	53, 61, 69, 74	0
51	2t	96/106 (90%)	0.83	8 (8%) 17 15	51, 60, 70, 75	0
52	1u	23/27 (85%)	1.05	0 100 100	53, 57, 61, 62	0
52	2u	23/27 (85%)	1.59	5 (21%) 2 2	61, 67, 71, 74	0
53	1v	13/24 (54%)	0.41	2 (15%) 5 4	38, 45, 83, 90	0
53	2v	13/24 (54%)	0.76	2 (15%) 5 4	52, 58, 84, 93	0
54	1w	67/76 (88%)	0.20	3 (4%) 38 33	26, 66, 82, 86	0
54	2w	64/76 (84%)	0.53	4 (6%) 26 23	39, 76, 85, 89	0
55	1x	72/77 (93%)	-0.25	1 (1%) 73 70	21, 53, 69, 83	0
55	2x	72/77 (93%)	-0.07	1 (1%) 73 70	36, 63, 76, 90	0
56	1y	67/76 (88%)	1.69	19 (28%) 1 1	55, 87, 91, 92	0
56	2y	66/76 (86%)	1.76	27 (40%) 0 0	60, 89, 92, 94	0
57	1z	18/18 (100%)	0.70	1 (5%) 30 26	48, 54, 65, 65	0
57	2z	18/18 (100%)	1.15	2 (11%) 10 8	62, 65, 72, 86	0
All	All	20912/21784 (95%)	0.11	837 (4%) 42 38	15, 55, 77, 97	0

All (837) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	2802	G	7.0
45	1n	2	ALA	6.5
1	2A	2113	U	6.3
38	1g	80	VAL	5.5
21	1Z	141	VAL	5.4
45	2n	2	ALA	5.1
1	1A	884	C	5.0
1	2A	883	G	4.8
1	1A	2170	A	4.8
38	1g	79	ARG	4.8
26	14	56	VAL	4.8
44	2m	124	PRO	4.7
38	1g	81	GLY	4.7
32	2a	1030(B)	C	4.7
1	2A	2174	C	4.7
1	1A	2113	U	4.6
1	1A	2130	U	4.6
1	2A	2111	C	4.5
1	1A	885	C	4.5
3	1D	276	LYS	4.5
1	2A	2145	C	4.5
3	2D	276	LYS	4.5
1	2A	2128	C	4.5
33	1b	237	ALA	4.5
7	1H	2	SER	4.4
7	2H	6	ARG	4.4
42	2k	25	TYR	4.4
1	2A	2803	C	4.4
1	1A	1096	A	4.4
4	2E	204	ALA	4.4
1	2A	2896	C	4.3
1	2A	2112	G	4.3
1	2A	896	A	4.2
1	2A	2155	G	4.2
33	2b	237	ALA	4.2
1	1A	2115	G	4.2
1	1A	2133	G	4.2
32	1a	1030(A)	G	4.2
1	1A	2114	A	4.1
1	1A	2117	A	4.1
1	2A	2160	G	4.1
56	1y	15	G	4.1
34	2c	2	GLY	4.1

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Mol	Chain	Res	Type	RSRZ
1	1A	2174	C	4.1
26	24	65	ASP	4.1
21	2Z	146	ILE	4.1
1	1A	2112	G	4.1
1	1A	2793	G	4.1
40	2i	102	LEU	4.1
1	2A	2114	A	4.1
38	2g	154	TYR	4.0
7	2H	2	SER	4.0
1	1A	2111	C	4.0
1	2A	2117	A	4.0
1	2A	888	C	4.0
1	2A	652(U)	G	3.9
32	2a	1030(A)	G	3.9
1	1A	2145	C	3.9
7	2H	7	LEU	3.9
1	1A	2173	A	3.9
34	2c	47	LEU	3.9
51	1t	103	GLY	3.9
1	2A	2173	A	3.9
56	2y	36	A	3.9
1	1A	1064	C	3.9
1	1A	2129	C	3.9
54	2w	73	A	3.9
1	1A	888	C	3.8
1	1A	2803	C	3.8
1	1A	2135	A	3.8
1	1A	2143	C	3.8
1	2A	2115	G	3.8
34	1c	81	GLY	3.8
1	2A	2119	A	3.8
57	2z	18	GLY	3.8
1	1A	2159	G	3.8
1	1A	2169	A	3.7
1	1A	1176	G	3.7
1	1A	2131	G	3.7
1	2A	2116	G	3.7
41	2j	74	ILE	3.7
38	2g	80	VAL	3.6
1	2A	885	C	3.6
33	2b	236	TYR	3.6
1	1A	1057	A	3.6

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Mol	Chain	Res	Type	RSRZ
26	24	49	PHE	3.6
32	2a	1030	C	3.6
1	1A	2119	A	3.6
50	2s	2	PRO	3.6
1	2A	2126	A	3.6
15	1T	131	ALA	3.6
38	1g	83	ALA	3.6
41	1j	36	GLY	3.6
1	1A	897	C	3.5
1	2A	2894	G	3.5
21	2Z	172	ALA	3.5
35	1d	194	LEU	3.5
1	1A	886	C	3.5
54	2w	72	C	3.5
1	2A	2893	G	3.5
1	2A	884	C	3.5
40	1i	8	GLY	3.5
1	1A	1073	A	3.5
1	1A	2160	G	3.5
1	2A	2125	G	3.5
1	2A	2127	G	3.5
42	1k	14	VAL	3.5
1	1A	2128	C	3.5
38	2g	83	ALA	3.5
1	2A	2134	A	3.4
1	2A	2169	A	3.4
1	1A	1059	G	3.4
21	2Z	144	LEU	3.4
1	1A	2136	C	3.4
1	1A	2161	C	3.4
23	21	2	SER	3.4
1	1A	2168	G	3.4
51	1t	10	LEU	3.4
1	2A	2146	C	3.4
1	2A	2170	A	3.4
38	1g	82	GLY	3.4
32	1a	1031	G	3.4
1	1A	2138	C	3.4
1	2A	2147	G	3.3
47	2p	82	GLN	3.3
38	1g	156	TRP	3.3
21	1Z	146	ILE	3.3

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Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	3.3
1	2A	2149	G	3.3
1	2A	2159	G	3.3
38	2g	84	ASN	3.3
1	2A	1536	C	3.3
1	2A	2175	C	3.3
32	1a	1030(B)	C	3.3
40	1i	2	GLU	3.3
1	1A	896	A	3.3
1	1A	2801(A)	A	3.3
54	1w	73	A	3.3
38	2g	85	TYR	3.3
1	1A	879	G	3.3
1	2A	2133	G	3.3
1	2A	2805	G	3.3
1	1A	2189	U	3.3
32	1a	1030(C)	G	3.3
1	1A	898	C	3.3
1	2A	2108	C	3.3
1	2A	2804	C	3.3
57	1z	4	SER	3.2
1	1A	1095	A	3.2
1	1A	2171	A	3.2
1	1A	1081	U	3.2
32	2a	1257	U	3.2
41	1j	77	PRO	3.2
1	1A	2141	G	3.2
1	2A	882	G	3.2
1	2A	2100	G	3.2
15	1T	130	ALA	3.2
40	1i	15	ALA	3.2
44	1m	2	ALA	3.2
33	2b	121	LEU	3.2
54	1w	16	U	3.2
21	2Z	174	VAL	3.2
7	1H	174	GLY	3.2
1	1A	2802	G	3.2
33	1b	11	LEU	3.2
32	1a	1003	G	3.2
32	2a	1032	G	3.2
41	2j	37	PRO	3.2
44	2m	122	LYS	3.2

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Mol	Chain	Res	Type	RSRZ
53	2v	12	A	3.2
1	2A	2167	U	3.2
49	1r	20	ALA	3.1
33	2b	17	PHE	3.1
1	1A	1058	G	3.1
1	1A	2805	G	3.1
32	2a	1002	G	3.1
19	2X	94	GLY	3.1
56	1y	35	A	3.1
38	2g	156	TRP	3.1
46	2o	89	GLY	3.1
1	2A	2148	G	3.1
1	2A	2156	G	3.1
32	2a	1033	G	3.1
1	1A	2150	U	3.1
19	2X	91	ALA	3.1
36	2e	20	GLN	3.1
33	1b	187	LEU	3.1
1	1A	2108	C	3.1
40	2i	14	VAL	3.1
1	1A	2110	G	3.1
1	1A	2165	G	3.1
1	2A	2135	A	3.1
20	2Y	1	MET	3.1
1	2A	652(T)	C	3.1
54	2w	2	C	3.1
6	1G	146	TYR	3.0
20	2Y	55	TYR	3.0
38	1g	85	TYR	3.0
1	1A	2172	U	3.0
1	1A	2897	U	3.0
1	1A	2792	G	3.0
1	2A	2154	G	3.0
26	24	66	SER	3.0
35	1d	169	LYS	3.0
1	2A	2129	C	3.0
41	2j	32	ALA	3.0
1	2A	2801(A)	A	3.0
1	2A	2897	U	3.0
26	24	51	ASP	3.0
35	1d	110	PHE	3.0
50	2s	13	ASP	3.0

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Mol	Chain	Res	Type	RSRZ
1	1A	2125	G	3.0
1	2A	2793	G	3.0
52	2u	24	ARG	3.0
40	2i	11	LYS	3.0
7	2H	17	VAL	3.0
8	1I	146	ALA	3.0
1	1A	2175	C	3.0
1	1A	2804	C	3.0
1	1A	2121	G	3.0
38	1g	84	ASN	3.0
50	1s	84	GLY	3.0
48	2q	9	VAL	3.0
26	14	63	TYR	3.0
26	24	63	TYR	3.0
1	1A	2146	C	3.0
1	2A	886	C	3.0
1	1A	1066	U	3.0
54	1w	20	U	3.0
9	2N	9	VAL	2.9
16	2U	88	ILE	2.9
1	1A	2120	G	2.9
1	2A	2110	G	2.9
32	1a	1036	G	2.9
34	1c	87	LEU	2.9
1	1A	2142	C	2.9
1	1A	1065	U	2.9
32	1a	204	U	2.9
50	2s	68	GLY	2.9
50	2s	84	GLY	2.9
1	2A	2104	G	2.9
1	2A	2123	G	2.9
50	1s	13	ASP	2.9
1	1A	1078	U	2.9
1	1A	2109	U	2.9
1	2A	895	U	2.9
1	2A	2130	U	2.9
32	2a	1149	C	2.9
33	1b	227	GLY	2.9
42	2k	117	ASN	2.9
51	1t	69	GLY	2.9
1	1A	1054	A	2.9
7	2H	136	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
38	2g	40	ALA	2.9
45	2n	20	ALA	2.9
6	2G	133	LEU	2.9
1	1A	1068	G	2.9
1	1A	2116	G	2.9
1	2A	2807	G	2.9
33	1b	17	PHE	2.9
32	2a	1038	C	2.9
35	1d	158	ILE	2.9
35	2d	158	ILE	2.9
7	2H	52	VAL	2.9
25	23	29	ARG	2.9
33	2b	165	VAL	2.9
34	2c	207	VAL	2.9
38	2g	7	ALA	2.9
41	1j	32	ALA	2.9
44	2m	113	PRO	2.9
21	2Z	136	PHE	2.9
20	2Y	54	LYS	2.8
26	24	31	ILE	2.8
1	1A	2132	U	2.8
7	2H	19	VAL	2.8
32	2a	1027	C	2.8
33	1b	188	ALA	2.8
44	2m	33	ALA	2.8
33	1b	9	GLU	2.8
11	2P	79	ARG	2.8
34	1c	2	GLY	2.8
46	2o	68	ARG	2.8
1	1A	2162	G	2.8
1	1A	2190	G	2.8
1	2A	11	G	2.8
1	2A	2121	G	2.8
1	2A	2190	G	2.8
56	1y	34	G	2.8
1	1A	2107	C	2.8
1	2A	2161	C	2.8
53	1v	12	A	2.8
41	1j	74	ILE	2.8
21	2Z	149	SER	2.8
1	1A	2149	G	2.8
1	2A	2168	G	2.8

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Mol	Chain	Res	Type	RSRZ
1	1A	2167	U	2.8
32	1a	1257	U	2.8
15	2T	131	ALA	2.8
33	1b	10	LEU	2.8
1	1A	2178	C	2.8
1	1A	2896	C	2.8
1	2A	2136	C	2.8
1	2A	2143	C	2.8
32	1a	1029	C	2.8
26	14	57	GLU	2.8
33	1b	97	TRP	2.8
33	1b	127	ILE	2.8
41	2j	38	ILE	2.8
1	2A	2109	U	2.8
38	2g	16	LEU	2.8
56	1y	18	G	2.8
56	2y	15	G	2.8
1	1A	889	C	2.8
1	1A	2794	C	2.8
38	2g	82	GLY	2.7
33	2b	145	LEU	2.7
8	2I	146	ALA	2.7
1	1A	9	U	2.7
7	2H	175	LYS	2.7
56	2y	33	U	2.7
8	2I	82	ARG	2.7
32	2a	1030(C)	G	2.7
56	2y	1	G	2.7
56	2y	19	G	2.7
32	1a	1035	A	2.7
32	2a	1035	A	2.7
41	2j	36	GLY	2.7
41	1j	4	ILE	2.7
6	2G	146	TYR	2.7
56	1y	20	U	2.7
40	2i	91	ASP	2.7
1	1A	882	G	2.7
1	2A	2120	G	2.7
32	2a	1036	G	2.7
51	1t	101	GLY	2.7
56	2y	57	G	2.7
1	1A	887	A	2.7

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Mol	Chain	Res	Type	RSRZ
1	1A	2140	C	2.7
1	2A	2164	C	2.7
26	14	59	PHE	2.7
21	2Z	171	ILE	2.7
32	1a	1030	C	2.7
7	2H	29	PRO	2.7
44	1m	122	LYS	2.7
34	2c	107	GLN	2.7
1	2A	2150	U	2.7
6	2G	52	ILE	2.7
33	1b	125	PRO	2.7
1	1A	883	G	2.7
1	1A	2127	G	2.7
1	2A	2101	G	2.7
1	2A	2162	G	2.7
1	1A	1075	C	2.7
1	2A	2139	C	2.7
32	1a	1028	C	2.7
32	2a	1039	C	2.7
56	2y	14	A	2.7
33	1b	93	VAL	2.7
29	27	45	ALA	2.7
33	1b	19	HIS	2.7
19	1X	94	GLY	2.6
50	2s	8	GLY	2.6
52	2u	2	GLY	2.6
38	2g	26	PHE	2.6
41	2j	75	ILE	2.6
1	2A	887	A	2.6
22	20	84	LEU	2.6
51	2t	99	LEU	2.6
1	2A	652(C)	G	2.6
1	2A	2165	G	2.6
56	2y	18	G	2.6
44	2m	100	GLY	2.6
34	2c	5	ILE	2.6
47	2p	9	PHE	2.6
19	1X	68	ARG	2.6
40	2i	10	ARG	2.6
45	2n	3	ARG	2.6
4	2E	73	GLU	2.6
21	1Z	105	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
33	2b	230	VAL	2.6
1	2A	652(B)	A	2.6
32	1a	1286	A	2.6
38	2g	77	SER	2.6
41	2j	35	SER	2.6
53	1v	13	A	2.6
1	2A	1533	G	2.6
1	2A	2151	G	2.6
29	27	48	LYS	2.6
51	2t	74	LYS	2.6
6	2G	116	ASP	2.6
45	2n	55	GLY	2.6
51	2t	103	GLY	2.6
6	1G	21	ARG	2.6
55	2x	47	U	2.6
33	1b	154	LEU	2.6
35	1d	179	GLU	2.6
33	1b	165	VAL	2.6
33	2b	7	VAL	2.6
35	1d	133	VAL	2.6
40	2i	65	VAL	2.6
1	2A	1847	A	2.6
1	1A	2164	C	2.6
1	2A	2138	C	2.6
1	2A	2792	G	2.6
32	2a	1026	G	2.6
11	2P	109	GLY	2.6
38	2g	32	ARG	2.6
1	2A	2118	U	2.6
32	1a	1025	U	2.6
7	2H	33	LEU	2.6
19	2X	95	LEU	2.6
26	24	56	VAL	2.6
33	1b	15	VAL	2.6
3	2D	275	LYS	2.6
1	2A	229	A	2.6
1	2A	894	C	2.5
35	1d	118	ARG	2.5
7	2H	128	PRO	2.5
45	2n	38	GLY	2.5
50	1s	26	GLY	2.5
1	1A	2152	G	2.5

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Mol	Chain	Res	Type	RSRZ
1	1A	2156	G	2.5
1	2A	2124	G	2.5
32	1a	1001(A)	G	2.5
32	1a	1024	G	2.5
32	2a	1031	G	2.5
56	1y	19	G	2.5
33	2b	11	LEU	2.5
55	1x	47	U	2.5
41	2j	34	VAL	2.5
33	2b	34	ALA	2.5
51	2t	8	ARG	2.5
1	2A	878	A	2.5
45	2n	34	TYR	2.5
56	1y	36	A	2.5
1	2A	652(V)	C	2.5
1	2A	897	C	2.5
43	1l	95	GLY	2.5
1	1A	1063	G	2.5
32	2a	1532	U	2.5
34	2c	106	VAL	2.5
36	2e	5	ASP	2.5
1	2A	898	C	2.5
50	2s	16	LEU	2.5
1	1A	1060	U	2.5
1	2A	2895	U	2.5
7	2H	43	VAL	2.5
33	1b	7	VAL	2.5
48	2q	23	VAL	2.5
50	2s	14	HIS	2.5
1	1A	2151	G	2.5
1	2A	2131	G	2.5
1	2A	2182	G	2.5
6	1G	51	ARG	2.5
26	14	58	ARG	2.5
35	1d	3	ARG	2.5
44	2m	37	THR	2.5
7	2H	72	ILE	2.5
32	1a	344	A	2.5
6	1G	182	LYS	2.5
33	2b	221	LEU	2.5
40	2i	99	LEU	2.5
41	2j	85	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
1	1A	1076	C	2.5
1	1A	1094	U	2.5
1	2A	2132	U	2.5
11	2P	77	ARG	2.5
38	2g	4	ARG	2.5
40	1i	10	ARG	2.5
33	2b	123	ALA	2.5
41	1j	86	MET	2.5
45	2n	13	THR	2.5
54	2w	19	G	2.5
56	1y	57	G	2.5
56	2y	34	G	2.5
7	2H	48	GLY	2.4
21	2Z	147	GLY	2.4
38	2g	81	GLY	2.4
20	2Y	33	LYS	2.4
20	2Y	107	ASP	2.4
1	1A	278	A	2.4
32	1a	1030(D)	A	2.4
44	2m	102	ARG	2.4
1	2A	2107	C	2.4
26	14	50	VAL	2.4
33	2b	229	VAL	2.4
40	2i	86	VAL	2.4
51	1t	95	ALA	2.4
32	2a	1034	G	2.4
21	1Z	148	ASP	2.4
33	2b	200	ILE	2.4
41	2j	65	LEU	2.4
45	2n	39	LEU	2.4
50	2s	71	LEU	2.4
26	24	68	ARG	2.4
1	1A	229	A	2.4
1	1A	1098	A	2.4
1	1A	2790	A	2.4
56	2y	35	A	2.4
7	2H	45	VAL	2.4
7	2H	133	VAL	2.4
50	2s	41	VAL	2.4
1	2A	2142	C	2.4
1	2A	2794	C	2.4
56	2y	75	C	2.4

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Mol	Chain	Res	Type	RSRZ
1	1A	271(K)	U	2.4
1	2A	1026	U	2.4
1	2A	2172	U	2.4
43	2l	63	GLY	2.4
8	1I	109	ILE	2.4
1	1A	2166	G	2.4
1	2A	1170	G	2.4
41	1j	33	GLN	2.4
40	2i	9	ARG	2.4
33	1b	236	TYR	2.4
26	14	49	PHE	2.4
45	2n	18	VAL	2.4
1	2A	899	A	2.4
32	2a	1531	A	2.4
32	1a	1027	C	2.4
41	2j	77	PRO	2.4
56	2y	6	G	2.4
21	2Z	105	VAL	2.4
40	1i	14	VAL	2.4
3	2D	38	LYS	2.4
12	2Q	28	ALA	2.4
21	2Z	166	SER	2.3
1	1A	1175	U	2.3
1	2A	2144	U	2.3
32	1a	1446	U	2.3
21	2Z	26	GLY	2.3
51	1t	8	ARG	2.3
6	2G	139	LEU	2.3
14	2S	36	TYR	2.3
33	1b	122	PHE	2.3
34	2c	23	TYR	2.3
41	2j	63	PHE	2.3
45	2n	37	PHE	2.3
3	1D	38	LYS	2.3
45	2n	25	VAL	2.3
1	1A	1091	G	2.3
1	1A	2147	G	2.3
1	1A	2154	G	2.3
56	1y	24	G	2.3
16	2U	89	GLU	2.3
40	2i	2	GLU	2.3
42	1k	15	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
1	1A	890	A	2.3
1	1A	899	A	2.3
1	2A	2158	A	2.3
1	2A	2171	A	2.3
32	2a	1030(D)	A	2.3
26	24	54	GLY	2.3
40	2i	66	ARG	2.3
57	2z	17	ARG	2.3
32	1a	1000	U	2.3
50	2s	15	LEU	2.3
1	1A	1072	C	2.3
56	1y	75	C	2.3
56	2y	56	C	2.3
45	2n	4	LYS	2.3
35	1d	170	VAL	2.3
43	1l	64	TYR	2.3
21	1Z	169	GLU	2.3
28	26	20	ASN	2.3
40	2i	13	ALA	2.3
40	2i	94	ALA	2.3
45	2n	5	ALA	2.3
1	2A	881	G	2.3
1	2A	1171	G	2.3
32	1a	630	G	2.3
32	1a	1023	G	2.3
32	1a	1032	G	2.3
44	1m	105	THR	2.3
1	2A	2176	A	2.3
33	1b	18	GLY	2.3
20	2Y	44	ILE	2.3
21	2Z	150	LEU	2.3
1	1A	1097	U	2.3
12	2Q	104	PHE	2.3
35	2d	112	VAL	2.3
38	1g	9	VAL	2.3
44	2m	23	TYR	2.3
21	2Z	159	PRO	2.3
38	2g	5	ARG	2.3
35	1d	2	GLY	2.3
1	1A	2155	G	2.3
1	2A	2153	G	2.3
21	1Z	149	SER	2.3

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Mol	Chain	Res	Type	RSRZ
41	2j	59	SER	2.3
39	1h	112	LEU	2.3
51	2t	10	LEU	2.3
56	1y	1	G	2.3
1	1A	2134	A	2.3
47	1p	1	MET	2.3
53	2v	13	A	2.3
56	2y	21	A	2.3
12	2Q	22	LYS	2.3
21	2Z	148	ASP	2.3
29	17	48	LYS	2.3
40	1i	105	ASP	2.3
52	2u	5	ASP	2.3
1	2A	2137	C	2.3
12	2Q	102	VAL	2.3
33	2b	93	VAL	2.3
44	2m	17	VAL	2.3
47	2p	2	VAL	2.3
4	1E	204	ALA	2.2
41	2j	26	ALA	2.2
40	2i	7	THR	2.2
41	2j	100	THR	2.2
45	2n	22	THR	2.2
47	2p	45	THR	2.2
51	1t	102	GLY	2.2
6	2G	155	MET	2.2
33	2b	48	MET	2.2
37	1f	45	LEU	2.2
40	1i	19	LEU	2.2
40	2i	19	LEU	2.2
50	1s	71	LEU	2.2
32	1a	1447	A	2.2
32	2a	1447	A	2.2
1	1A	2100	G	2.2
1	1A	2124	G	2.2
1	2A	879	G	2.2
32	2a	630	G	2.2
1	1A	2118	U	2.2
32	2a	1040	U	2.2
7	2H	123	PHE	2.2
21	2Z	89	PHE	2.2
26	24	59	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	55	PHE	2.2
32	2a	1018	C	2.2
36	2e	51	VAL	2.2
51	2t	98	PRO	2.2
56	2y	2	C	2.2
56	2y	68	C	2.2
11	2P	110	TYR	2.2
20	2Y	5	MET	2.2
39	2h	130	GLY	2.2
40	2i	95	LYS	2.2
33	2b	214	ILE	2.2
1	1A	880	G	2.2
1	2A	2157	G	2.2
32	2a	1001(A)	G	2.2
34	2c	190	ARG	2.2
56	2y	5	G	2.2
7	1H	113	VAL	2.2
21	2Z	74	VAL	2.2
43	1l	18	VAL	2.2
32	2a	1037	C	2.2
7	2H	83	TYR	2.2
9	1N	8	GLN	2.2
40	2i	36	TYR	2.2
38	2g	12	LEU	2.2
41	1j	75	ILE	2.2
46	2o	3	ILE	2.2
40	2i	105	ASP	2.2
35	1d	173	TRP	2.2
52	2u	9	ARG	2.2
1	1A	12	U	2.2
1	2A	1508	A	2.2
56	1y	47	U	2.2
29	27	46	VAL	2.2
42	2k	14	VAL	2.2
1	1A	1093	G	2.2
1	1A	1099	G	2.2
1	2A	10	G	2.2
32	2a	1117	G	2.2
56	1y	5	G	2.2
34	2c	60	ALA	2.2
34	2c	71	ALA	2.2
12	2Q	33	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
32	1a	1137	C	2.2
32	2a	1007	C	2.2
36	2e	85	GLY	2.2
56	1y	13	C	2.2
6	2G	35	GLU	2.2
33	1b	134	GLU	2.2
38	1g	8	GLU	2.2
38	1g	4	ARG	2.2
7	2H	10	PRO	2.2
1	1A	1088	A	2.1
1	1A	2144	U	2.2
33	2b	122	PHE	2.2
1	1A	2158	A	2.1
9	1N	9	VAL	2.1
32	1a	160	A	2.1
33	1b	230	VAL	2.1
46	2o	60	VAL	2.1
56	1y	12	U	2.2
51	2t	97	ALA	2.1
26	24	45	GLY	2.1
32	1a	1033	G	2.1
56	1y	27	G	2.1
10	1O	47	ILE	2.1
36	2e	133	TYR	2.1
44	2m	4	ILE	2.1
51	1t	100	ILE	2.1
1	2A	2105	C	2.1
1	2A	2188	C	2.1
32	2a	1006	C	2.1
56	1y	25	C	2.1
56	1y	67	C	2.1
6	2G	136	ARG	2.1
7	2H	42	ARG	2.1
26	24	57	GLU	2.1
7	2H	56	SER	2.1
38	2g	76	ARG	2.1
7	2H	39	PRO	2.1
33	1b	234	PRO	2.1
51	1t	98	PRO	2.1
47	1p	80	PHE	2.1
7	2H	79	VAL	2.1
9	2N	140	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
43	2l	18	VAL	2.1
1	1A	1082	U	2.1
1	1A	1069	A	2.1
49	2r	20	ALA	2.1
56	2y	73	A	2.1
41	2j	76	ASN	2.1
48	1q	98	LEU	2.1
51	1t	24	LEU	2.1
1	1A	1062	G	2.1
1	2A	2751	G	2.1
6	1G	48	GLU	2.1
38	1g	78	ARG	2.1
56	2y	49	C	2.1
33	2b	133	LYS	2.1
34	2c	109	PRO	2.1
24	12	70	GLN	2.1
50	2s	9	VAL	2.1
6	1G	50	ALA	2.1
15	2T	130	ALA	2.1
51	1t	9	ASN	2.1
51	2t	26	ASN	2.1
32	2a	1005	A	2.1
47	1p	6	LEU	2.1
8	2I	135	GLU	2.1
34	1c	39	ILE	2.1
21	2Z	9	TYR	2.1
40	2i	62	TYR	2.1
46	1o	69	TYR	2.1
33	1b	133	LYS	2.1
48	2q	100	LYS	2.1
1	2A	880	G	2.1
1	2A	2318	G	2.1
56	2y	22	G	2.1
32	1a	163	C	2.1
32	2a	1029	C	2.1
33	1b	232	PRO	2.1
41	2j	91	PRO	2.1
56	1y	49	C	2.1
56	2y	13	C	2.1
56	2y	74	C	2.1
6	2G	23	PHE	2.1
34	2c	128	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
41	2j	49	VAL	2.1
33	2b	173	ALA	2.1
49	1r	24	ALA	2.1
1	2A	272(A)	U	2.1
11	1P	90	ARG	2.1
32	2a	1150	U	2.1
33	1b	228	GLY	2.1
35	2d	168	ARG	2.1
41	2j	40	LEU	2.1
39	1h	128	GLY	2.1
43	2l	29	GLY	2.1
44	1m	24	GLY	2.1
44	2m	67	GLU	2.1
1	1A	1174	A	2.1
33	1b	211	ILE	2.1
41	2j	82	ILE	2.1
20	2Y	34	LYS	2.1
38	1g	154	TYR	2.1
7	2H	12	PRO	2.1
1	1A	2123	G	2.0
24	22	70	GLN	2.0
32	1a	1021	G	2.0
32	1a	1034	G	2.0
32	2a	1003	G	2.0
32	2a	1124	G	2.0
56	2y	3	C	2.1
11	2P	91	PHE	2.0
40	1i	59	PHE	2.0
5	2F	21	ALA	2.0
7	2H	170	ARG	2.0
12	2Q	10	ARG	2.0
21	2Z	131	ARG	2.0
33	1b	13	ALA	2.0
35	1d	122	ARG	2.0
45	1n	57	ARG	2.0
33	1b	215	LEU	2.0
6	1G	137	GLU	2.0
18	1W	112	GLY	2.0
35	1d	87	GLY	2.0
35	2d	87	GLY	2.0
48	2q	86	GLU	2.0
1	2A	2189	U	2.0

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Mol	Chain	Res	Type	RSRZ
41	2j	67	THR	2.0
56	2y	60	U	2.0
33	1b	214	ILE	2.0
1	1A	1077	A	2.0
26	24	67	TYR	2.0
34	1c	193	TYR	2.0
44	2m	92	HIS	2.0
7	2H	44	VAL	2.0
21	2Z	161	VAL	2.0
32	2a	470	C	2.0
33	2b	81	VAL	2.0
33	2b	136	VAL	2.0
52	2u	15	ARG	2.0
1	1A	1087	G	2.0
1	2A	2141	G	2.0
1	2A	2166	G	2.0
34	2c	92	ALA	2.0
56	2y	70	G	2.0
6	2G	135	LEU	2.0
10	1O	91	LEU	2.0
41	2j	90	LEU	2.0
23	21	28	GLY	2.0
34	1c	80	GLY	2.0
41	1j	76	ASN	2.0
44	1m	106	ASN	2.0
35	1d	70	ILE	2.0
47	1p	19	ILE	2.0
44	2m	64	TRP	2.0
50	2s	34	TRP	2.0
56	2y	12	U	2.0
1	1A	548	A	2.0
1	1A	1070	A	2.0
1	2A	900	A	2.0
11	1P	87	ASP	2.0
12	2Q	135	ASP	2.0
40	1i	21	PRO	2.0
56	2y	7	A	2.0
40	2i	126	SER	2.0

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

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
56	G7M	2y	46	24/25	0.48	0.17	80,89,94,111	0
56	4SU	2y	8	20/21	0.50	0.18	85,93,100,111	0
56	5MU	2y	54	21/22	0.55	0.16	70,84,93,107	0
56	4SU	1y	8	20/21	0.56	0.16	82,87,93,106	0
56	G7M	1y	46	24/25	0.57	0.17	77,89,95,101	0
56	PSU	1y	55	20/21	0.58	0.15	84,87,95,109	0
56	5MU	1y	54	21/22	0.64	0.14	79,84,91,101	0
56	PSU	2y	39	20/21	0.64	0.17	74,83,95,105	0
56	MIA	1y	37	22/30	0.67	0.17	77,84,91,100	0
56	PSU	2y	55	20/21	0.69	0.13	76,85,93,93	0
56	MIA	2y	37	22/30	0.73	0.17	71,86,101,112	0
54	G7M	1w	46	24/25	0.74	0.14	64,72,88,102	0
56	PSU	2y	32	20/21	0.77	0.13	75,84,91,98	0
56	PSU	1y	32	20/21	0.79	0.14	76,83,88,98	0
54	G7M	2w	46	24/25	0.80	0.12	73,78,90,103	0
56	PSU	1y	39	20/21	0.82	0.12	72,80,85,88	0
54	PSU	2w	55	20/21	0.88	0.12	68,73,80,81	0
54	4SU	2w	8	20/21	0.88	0.12	68,75,81,89	0
55	5MU	2x	54	21/22	0.91	0.12	64,68,71,72	0
55	5MU	1x	54	21/22	0.91	0.11	53,59,62,67	0
1	5MU	2A	1915	21/22	0.92	0.10	50,53,57,60	0
32	2MG	2a	1207	24/25	0.92	0.09	64,69,73,74	0
43	0TD	2l	92	10/11	0.92	0.13	52,55,63,64	0
55	4SU	2x	8	20/21	0.92	0.12	59,71,76,77	0
55	PSU	2x	55	20/21	0.93	0.09	60,65,70,72	0
43	0TD	1l	92	10/11	0.93	0.12	42,46,49,58	0
55	PSU	1x	55	20/21	0.93	0.08	46,52,63,65	0
54	5MU	2w	54	21/22	0.93	0.10	61,66,71,75	0
32	G7M	2a	527	24/25	0.94	0.10	52,57,64,65	0
54	4SU	1w	8	20/21	0.94	0.09	54,64,70,70	0
32	5MC	2a	1400	21/22	0.94	0.11	54,57,64,69	0
54	PSU	1w	55	20/21	0.94	0.09	43,59,67,68	0
55	5MC	2x	32	21/22	0.94	0.11	55,60,63,64	0
32	PSU	2a	516	20/21	0.94	0.09	54,59,64,65	0
54	PSU	2w	32	20/21	0.94	0.10	58,63,68,69	0
32	M2G	2a	966	25/26	0.95	0.11	50,59,66,74	0
32	5MC	2a	967	21/22	0.95	0.10	53,60,63,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
1	PSU	2A	1917	20/21	0.95	0.09	44,53,61,61	0
54	MIA	2w	37	25/30	0.95	0.09	46,57,61,63	0
1	5MC	2A	1942	21/22	0.95	0.09	43,49,57,62	0
32	4OC	2a	1402	22/23	0.95	0.10	44,50,53,56	0
32	2MG	1a	1207	24/25	0.96	0.07	48,54,57,58	0
1	5MU	1A	1915	21/22	0.96	0.09	39,47,49,51	0
1	PSU	1A	1917	20/21	0.96	0.08	36,43,48,50	0
54	PSU	1w	32	20/21	0.96	0.09	38,45,53,58	0
1	5MC	1A	1942	21/22	0.96	0.08	26,33,39,40	0
54	5MU	1w	54	21/22	0.96	0.07	35,47,51,53	0
32	G7M	1a	527	24/25	0.96	0.09	36,41,45,48	0
55	4SU	1x	8	20/21	0.96	0.08	44,51,57,59	0
32	MA6	2a	1519	24/25	0.96	0.09	45,50,53,56	0
1	PSU	2A	1911	20/21	0.96	0.07	41,50,54,61	0
55	5MC	1x	32	21/22	0.96	0.08	43,45,49,53	0
32	M2G	1a	966	25/26	0.96	0.09	40,45,48,51	0
1	OMC	2A	1920	21/22	0.96	0.08	44,49,53,55	0
54	PSU	2w	39	20/21	0.96	0.09	45,57,63,67	0
1	OMU	2A	2552	21/22	0.97	0.07	32,41,44,46	0
1	PSU	2A	2605	20/21	0.97	0.06	30,34,40,40	0
32	4OC	1a	1402	22/23	0.97	0.07	35,39,41,43	0
32	5MC	1a	1404	21/22	0.97	0.07	27,33,37,38	0
1	PSU	1A	1911	20/21	0.97	0.07	35,41,47,47	0
54	F3N	2w	76	33/34	0.97	0.08	27,34,37,38	0
1	5MC	1A	1962	21/22	0.97	0.06	24,31,35,39	0
32	5MC	1a	967	21/22	0.97	0.08	41,46,53,54	0
55	31H	1x	76	32/33	0.97	0.07	14,19,26,33	10
54	PSU	1w	39	20/21	0.97	0.07	34,43,50,53	0
55	31H	2x	76	32/33	0.97	0.08	28,36,42,43	0
32	5MC	2a	1407	21/22	0.97	0.07	40,45,49,52	0
32	UR3	2a	1498	21/22	0.97	0.09	38,47,51,55	0
32	MA6	2a	1518	24/25	0.97	0.07	45,48,51,52	0
32	PSU	1a	516	20/21	0.97	0.07	33,47,51,55	0
1	5MU	2A	1939	21/22	0.97	0.07	30,34,39,40	0
32	5MC	1a	1400	21/22	0.97	0.08	34,42,49,51	0
1	5MC	2A	1962	21/22	0.97	0.07	37,40,47,55	0
32	MA6	1a	1519	24/25	0.98	0.07	27,35,39,41	0
1	PSU	1A	2605	20/21	0.98	0.05	18,22,24,27	0
54	F3N	1w	76	33/34	0.98	0.07	14,19,23,24	0
1	OMC	1A	1920	21/22	0.98	0.06	33,40,44,46	0
1	5MU	1A	1939	21/22	0.98	0.06	20,26,30,32	0
54	MIA	1w	37	29/30	0.98	0.08	29,41,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
1	OMG	2A	2251	24/25	0.98	0.07	31,34,38,41	0
32	5MC	2a	1404	21/22	0.98	0.07	36,44,48,50	0
1	2MA	2A	2503	23/24	0.98	0.07	28,33,37,44	0
32	5MC	1a	1407	21/22	0.98	0.07	29,35,40,41	0
32	MA6	1a	1518	24/25	0.98	0.06	25,34,37,38	0
32	UR3	1a	1498	21/22	0.99	0.05	26,35,36,42	0
1	2MA	1A	2503	23/24	0.99	0.05	11,18,22,23	0
1	OMU	1A	2552	21/22	0.99	0.06	19,25,29,31	0
1	OMG	1A	2251	24/25	0.99	0.04	18,21,23,24	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($\text{\AA}^2$)	Q<0.9
58	MG	2a	1634	1/1	0.23	0.51	93,93,93,93	0
58	MG	2A	3209	1/1	0.44	0.23	86,86,86,86	0
58	MG	10	108	1/1	0.54	0.32	60,60,60,60	0
58	MG	2a	1791	1/1	0.57	0.25	68,68,68,68	0
58	MG	2y	104	1/1	0.59	0.21	82,82,82,82	0
58	MG	2A	3756	1/1	0.60	0.24	61,61,61,61	0
58	MG	2A	3364	1/1	0.61	0.33	83,83,83,83	0
58	MG	1B	232	1/1	0.62	0.22	85,85,85,85	0
58	MG	2A	3272	1/1	0.63	0.21	74,74,74,74	0
58	MG	2a	1747	1/1	0.66	0.15	80,80,80,80	0
58	MG	20	102	1/1	0.66	0.33	67,67,67,67	0
58	MG	1A	3571	1/1	0.66	0.25	73,73,73,73	0
58	MG	1A	3795	1/1	0.67	0.21	79,79,79,79	0
58	MG	1A	3480	1/1	0.67	0.23	64,64,64,64	0
58	MG	2B	214	1/1	0.68	0.17	72,72,72,72	0
58	MG	1A	4103	1/1	0.68	0.20	60,60,60,60	0
58	MG	2v	102	1/1	0.69	0.29	76,76,76,76	0
58	MG	1h	201	1/1	0.69	0.14	68,68,68,68	0
58	MG	2A	3345	1/1	0.70	0.24	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3334	1/1	0.70	0.32	74,74,74,74	0
58	MG	1A	4100	1/1	0.71	0.18	66,66,66,66	0
58	MG	2A	3813	1/1	0.72	0.20	62,62,62,62	0
58	MG	2A	3253	1/1	0.72	0.18	70,70,70,70	0
58	MG	2A	3586	1/1	0.72	0.17	75,75,75,75	0
58	MG	2w	103	1/1	0.72	0.17	75,75,75,75	0
58	MG	1A	4090	1/1	0.72	0.26	46,46,46,46	0
58	MG	2A	3675	1/1	0.73	0.19	63,63,63,63	0
58	MG	2I	101	1/1	0.73	0.19	73,73,73,73	0
58	MG	1A	3418	1/1	0.73	0.41	82,82,82,82	0
58	MG	2B	220	1/1	0.73	0.26	69,69,69,69	0
58	MG	2A	3342	1/1	0.74	0.28	75,75,75,75	0
58	MG	2a	1802	1/1	0.74	0.33	76,76,76,76	0
58	MG	2a	1822	1/1	0.74	0.20	63,63,63,63	0
58	MG	2A	3705	1/1	0.74	0.14	64,64,64,64	0
58	MG	1B	231	1/1	0.74	0.17	70,70,70,70	0
58	MG	2E	301	1/1	0.74	0.21	62,62,62,62	0
58	MG	1A	4038	1/1	0.75	0.17	57,57,57,57	0
58	MG	2A	3625	1/1	0.75	0.18	66,66,66,66	0
58	MG	1a	1696	1/1	0.75	0.21	69,69,69,69	0
58	MG	2a	1820	1/1	0.75	0.19	57,57,57,57	0
58	MG	1A	3373	1/1	0.75	0.30	54,54,54,54	0
58	MG	2A	3749	1/1	0.75	0.14	49,49,49,49	0
58	MG	2A	3299	1/1	0.75	0.14	71,71,71,71	0
58	MG	2A	3803	1/1	0.75	0.14	60,60,60,60	0
58	MG	2a	1706	1/1	0.76	0.17	66,66,66,66	0
58	MG	1U	211	1/1	0.76	0.66	81,81,81,81	0
58	MG	1B	203	1/1	0.76	0.31	62,62,62,62	0
58	MG	1A	3885	1/1	0.76	0.20	73,73,73,73	0
58	MG	1A	3988	1/1	0.76	0.14	62,62,62,62	0
58	MG	2A	3370	1/1	0.76	0.15	78,78,78,78	0
58	MG	2A	3373	1/1	0.76	0.15	66,66,66,66	0
58	MG	2a	1633	1/1	0.76	0.20	83,83,83,83	0
58	MG	2A	3395	1/1	0.76	0.20	63,63,63,63	0
58	MG	2a	1813	1/1	0.77	0.20	61,61,61,61	0
58	MG	1A	3520	1/1	0.77	0.15	55,55,55,55	0
58	MG	1A	3235	1/1	0.77	0.27	74,74,74,74	0
58	MG	2A	3064	1/1	0.77	0.15	65,65,65,65	0
58	MG	2A	3869	1/1	0.77	0.13	60,60,60,60	0
58	MG	2A	3193	1/1	0.77	0.17	71,71,71,71	0
58	MG	1A	4096	1/1	0.78	0.20	63,63,63,63	0
58	MG	2A	3469	1/1	0.78	0.24	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3353	1/1	0.78	0.25	62,62,62,62	0
58	MG	2a	1628	1/1	0.78	0.30	76,76,76,76	0
58	MG	2A	3328	1/1	0.78	0.15	55,55,55,55	0
58	MG	2A	3096	1/1	0.78	0.23	65,65,65,65	0
58	MG	2A	3690	1/1	0.78	0.13	66,66,66,66	0
58	MG	1A	3852	1/1	0.78	0.14	61,61,61,61	0
58	MG	2A	3400	1/1	0.79	0.14	72,72,72,72	0
58	MG	1A	3807	1/1	0.79	0.13	49,49,49,49	0
58	MG	2A	3835	1/1	0.79	0.09	69,69,69,69	0
58	MG	2A	3473	1/1	0.79	0.15	68,68,68,68	0
58	MG	1A	4082	1/1	0.79	0.21	63,63,63,63	0
58	MG	2A	3291	1/1	0.79	0.13	68,68,68,68	0
58	MG	1a	1629	1/1	0.79	0.16	58,58,58,58	0
58	MG	1A	3540	1/1	0.79	0.14	66,66,66,66	0
58	MG	1a	1739	1/1	0.79	0.19	65,65,65,65	0
58	MG	2w	101	1/1	0.79	0.22	68,68,68,68	0
58	MG	2A	3337	1/1	0.79	0.16	71,71,71,71	0
58	MG	2w	105	1/1	0.79	0.20	79,79,79,79	0
58	MG	2A	3398	1/1	0.79	0.14	60,60,60,60	0
58	MG	2A	3477	1/1	0.80	0.13	75,75,75,75	0
58	MG	2A	3537	1/1	0.80	0.13	55,55,55,55	0
58	MG	1A	3959	1/1	0.80	0.26	76,76,76,76	0
58	MG	2a	1742	1/1	0.80	0.15	63,63,63,63	0
58	MG	1A	3714	1/1	0.80	0.16	43,43,43,43	0
58	MG	2A	3881	1/1	0.80	0.19	65,65,65,65	0
58	MG	1A	3998	1/1	0.80	0.14	59,59,59,59	0
58	MG	1A	4023	1/1	0.80	0.12	60,60,60,60	0
58	MG	1A	4032	1/1	0.80	0.17	47,47,47,47	0
58	MG	1A	3753	1/1	0.80	0.16	63,63,63,63	0
58	MG	1A	3572	1/1	0.80	0.18	61,61,61,61	0
58	MG	2a	1604	1/1	0.80	0.13	62,62,62,62	0
58	MG	2a	1606	1/1	0.80	0.27	66,66,66,66	0
58	MG	2a	1607	1/1	0.80	0.29	67,67,67,67	0
58	MG	2A	3797	1/1	0.80	0.16	55,55,55,55	0
58	MG	1A	4097	1/1	0.81	0.14	75,75,75,75	0
58	MG	2a	1679	1/1	0.81	0.31	64,64,64,64	0
58	MG	2A	3630	1/1	0.81	0.18	60,60,60,60	0
58	MG	2A	3397	1/1	0.81	0.26	69,69,69,69	0
58	MG	2A	3685	1/1	0.81	0.18	57,57,57,57	0
58	MG	1a	1780	1/1	0.81	0.13	49,49,49,49	0
58	MG	2A	3704	1/1	0.81	0.19	58,58,58,58	0
58	MG	1a	1808	1/1	0.81	0.19	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3728	1/1	0.81	0.13	64,64,64,64	0
58	MG	2A	3268	1/1	0.81	0.31	65,65,65,65	0
58	MG	1A	3850	1/1	0.81	0.17	45,45,45,45	0
58	MG	1a	1724	1/1	0.81	0.17	60,60,60,60	0
58	MG	2a	1623	1/1	0.81	0.13	55,55,55,55	0
58	MG	1a	1733	1/1	0.81	0.13	53,53,53,53	0
58	MG	2A	3101	1/1	0.81	0.21	72,72,72,72	0
58	MG	2A	3699	1/1	0.82	0.12	73,73,73,73	0
58	MG	2A	3314	1/1	0.82	0.13	60,60,60,60	0
58	MG	2a	1609	1/1	0.82	0.19	59,59,59,59	0
58	MG	1A	3793	1/1	0.82	0.08	41,41,41,41	0
58	MG	2A	3721	1/1	0.82	0.23	64,64,64,64	0
58	MG	2A	3404	1/1	0.82	0.18	67,67,67,67	0
58	MG	2A	3411	1/1	0.82	0.14	63,63,63,63	0
58	MG	2A	3455	1/1	0.82	0.23	68,68,68,68	0
58	MG	1A	3429	1/1	0.82	0.11	54,54,54,54	0
58	MG	1A	3589	1/1	0.82	0.12	68,68,68,68	0
58	MG	2A	3255	1/1	0.82	0.22	73,73,73,73	0
58	MG	2A	3257	1/1	0.82	0.16	58,58,58,58	0
58	MG	2A	3560	1/1	0.82	0.14	61,61,61,61	0
58	MG	2A	3871	1/1	0.82	0.13	65,65,65,65	0
58	MG	1a	1671	1/1	0.82	0.21	63,63,63,63	0
58	MG	2A	3601	1/1	0.82	0.14	66,66,66,66	0
58	MG	1a	1690	1/1	0.82	0.31	59,59,59,59	0
58	MG	2A	3274	1/1	0.82	0.19	64,64,64,64	0
58	MG	2A	3289	1/1	0.82	0.12	67,67,67,67	0
58	MG	2A	3175	1/1	0.82	0.31	70,70,70,70	0
58	MG	2A	3192	1/1	0.82	0.28	67,67,67,67	0
58	MG	1a	1749	1/1	0.83	0.12	55,55,55,55	0
58	MG	2a	1610	1/1	0.83	0.17	66,66,66,66	0
58	MG	2A	3741	1/1	0.83	0.14	54,54,54,54	0
58	MG	1A	4099	1/1	0.83	0.17	59,59,59,59	0
58	MG	1A	3028	1/1	0.83	0.11	70,70,70,70	0
58	MG	1a	1719	1/1	0.83	0.33	72,72,72,72	0
58	MG	2a	1668	1/1	0.83	0.19	55,55,55,55	0
58	MG	2A	3607	1/1	0.83	0.13	72,72,72,72	0
58	MG	2A	3612	1/1	0.83	0.20	68,68,68,68	0
58	MG	2a	1727	1/1	0.83	0.14	54,54,54,54	0
58	MG	1l	202	1/1	0.83	0.10	56,56,56,56	0
58	MG	1x	113	1/1	0.83	0.17	58,58,58,58	0
58	MG	2A	3652	1/1	0.83	0.21	56,56,56,56	0
58	MG	2A	3668	1/1	0.83	0.13	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3991	1/1	0.83	0.09	26,26,26,26	0
58	MG	2A	3406	1/1	0.83	0.11	62,62,62,62	0
58	MG	1a	1668	1/1	0.83	0.26	62,62,62,62	0
58	MG	1E	311	1/1	0.83	0.14	55,55,55,55	0
58	MG	2A	3110	1/1	0.83	0.27	60,60,60,60	0
58	MG	2A	3361	1/1	0.83	0.15	62,62,62,62	0
58	MG	2A	3713	1/1	0.83	0.22	64,64,64,64	0
58	MG	2x	101	1/1	0.83	0.22	52,52,52,52	0
58	MG	2A	3281	1/1	0.83	0.17	54,54,54,54	0
58	MG	2A	3380	1/1	0.84	0.10	49,49,49,49	0
58	MG	2A	3393	1/1	0.84	0.20	63,63,63,63	0
58	MG	2A	3745	1/1	0.84	0.11	59,59,59,59	0
58	MG	1A	3615	1/1	0.84	0.12	59,59,59,59	0
58	MG	2a	1627	1/1	0.84	0.17	68,68,68,68	0
58	MG	2A	3330	1/1	0.84	0.25	62,62,62,62	0
58	MG	2A	3759	1/1	0.84	0.14	37,37,37,37	0
58	MG	1a	1788	1/1	0.84	0.11	74,74,74,74	0
58	MG	2a	1658	1/1	0.84	0.33	71,71,71,71	0
58	MG	2a	1664	1/1	0.84	0.25	62,62,62,62	0
58	MG	2A	3798	1/1	0.84	0.09	45,45,45,45	0
58	MG	1A	3485	1/1	0.84	0.17	47,47,47,47	0
58	MG	2A	3338	1/1	0.84	0.14	72,72,72,72	0
58	MG	2a	1710	1/1	0.84	0.21	64,64,64,64	0
58	MG	2A	3405	1/1	0.84	0.15	61,61,61,61	0
58	MG	2A	3849	1/1	0.84	0.12	64,64,64,64	0
58	MG	2A	3136	1/1	0.84	0.35	68,68,68,68	0
58	MG	2a	1778	1/1	0.84	0.12	69,69,69,69	0
58	MG	1a	1657	1/1	0.84	0.20	62,62,62,62	0
58	MG	2A	3874	1/1	0.84	0.17	65,65,65,65	0
58	MG	2a	1808	1/1	0.84	0.18	66,66,66,66	0
58	MG	2a	1811	1/1	0.84	0.20	49,49,49,49	0
58	MG	2A	3448	1/1	0.84	0.34	60,60,60,60	0
58	MG	1A	3479	1/1	0.84	0.31	62,62,62,62	0
58	MG	1A	3942	1/1	0.84	0.15	60,60,60,60	0
58	MG	2v	101	1/1	0.84	0.17	62,62,62,62	0
58	MG	1A	4003	1/1	0.84	0.14	37,37,37,37	0
58	MG	2E	304	1/1	0.84	0.31	58,58,58,58	0
58	MG	2A	3250	1/1	0.84	0.16	64,64,64,64	0
58	MG	2A	3707	1/1	0.84	0.13	66,66,66,66	0
58	MG	2A	3499	1/1	0.84	0.17	59,59,59,59	0
58	MG	2A	3090	1/1	0.84	0.14	70,70,70,70	0
58	MG	2y	105	1/1	0.84	0.31	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3190	1/1	0.85	0.17	64,64,64,64	0
58	MG	2A	3191	1/1	0.85	0.14	61,61,61,61	0
58	MG	1A	3344	1/1	0.85	0.21	51,51,51,51	0
58	MG	2a	1645	1/1	0.85	0.36	69,69,69,69	0
58	MG	2A	3347	1/1	0.85	0.14	71,71,71,71	0
58	MG	1A	3211	1/1	0.85	0.12	62,62,62,62	0
58	MG	1A	3261	1/1	0.85	0.08	64,64,64,64	0
58	MG	2A	3220	1/1	0.85	0.10	54,54,54,54	0
58	MG	2a	1704	1/1	0.85	0.28	56,56,56,56	0
58	MG	1A	3504	1/1	0.85	0.22	74,74,74,74	0
58	MG	1A	3844	1/1	0.85	0.15	56,56,56,56	0
58	MG	1v	101	1/1	0.85	0.22	69,69,69,69	0
58	MG	2A	3391	1/1	0.85	0.20	63,63,63,63	0
58	MG	1A	3515	1/1	0.85	0.22	62,62,62,62	0
58	MG	2a	1777	1/1	0.85	0.13	58,58,58,58	0
58	MG	2B	204	1/1	0.85	0.20	71,71,71,71	0
58	MG	2A	3041	1/1	0.85	0.25	55,55,55,55	0
58	MG	2a	1795	1/1	0.85	0.16	65,65,65,65	0
58	MG	2A	3057	1/1	0.85	0.17	61,61,61,61	0
58	MG	2A	3058	1/1	0.85	0.31	71,71,71,71	0
58	MG	1A	4009	1/1	0.85	0.09	61,61,61,61	0
58	MG	2A	3073	1/1	0.85	0.11	46,46,46,46	0
58	MG	2a	1818	1/1	0.85	0.16	61,61,61,61	0
58	MG	1A	3648	1/1	0.85	0.14	55,55,55,55	0
58	MG	2a	1603	1/1	0.85	0.14	64,64,64,64	0
58	MG	2j	201	1/1	0.85	0.14	63,63,63,63	0
58	MG	1A	3299	1/1	0.85	0.31	69,69,69,69	0
58	MG	1a	1732	1/1	0.85	0.11	60,60,60,60	0
58	MG	2A	3445	1/1	0.85	0.26	61,61,61,61	0
58	MG	1A	3913	1/1	0.85	0.09	40,40,40,40	0
58	MG	1A	4043	1/1	0.85	0.17	46,46,46,46	0
58	MG	2a	1616	1/1	0.85	0.27	65,65,65,65	0
58	MG	2A	3165	1/1	0.85	0.36	70,70,70,70	0
58	MG	1A	4073	1/1	0.85	0.14	47,47,47,47	0
58	MG	2A	3358	1/1	0.86	0.23	56,56,56,56	0
58	MG	2E	309	1/1	0.86	0.12	45,45,45,45	0
58	MG	2F	306	1/1	0.86	0.10	49,49,49,49	0
58	MG	1d	301	1/1	0.86	0.25	55,55,55,55	0
58	MG	2A	3223	1/1	0.86	0.29	63,63,63,63	0
58	MG	2A	3249	1/1	0.86	0.13	68,68,68,68	0
58	MG	1A	3858	1/1	0.86	0.19	74,74,74,74	0
58	MG	2A	3653	1/1	0.86	0.10	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1661	1/1	0.86	0.13	60,60,60,60	0
58	MG	2A	3390	1/1	0.86	0.17	67,67,67,67	0
58	MG	2A	3679	1/1	0.86	0.17	56,56,56,56	0
58	MG	2a	1615	1/1	0.86	0.29	64,64,64,64	0
58	MG	1A	3417	1/1	0.86	0.16	55,55,55,55	0
58	MG	1A	3687	1/1	0.86	0.19	60,60,60,60	0
58	MG	1a	1673	1/1	0.86	0.29	65,65,65,65	0
58	MG	1A	3838	1/1	0.86	0.11	62,62,62,62	0
58	MG	1A	3953	1/1	0.86	0.12	69,69,69,69	0
58	MG	1A	3440	1/1	0.86	0.12	40,40,40,40	0
58	MG	1A	4042	1/1	0.86	0.16	47,47,47,47	0
58	MG	1a	1731	1/1	0.86	0.15	47,47,47,47	0
58	MG	1B	217	1/1	0.86	0.13	58,58,58,58	0
58	MG	2A	3739	1/1	0.86	0.18	64,64,64,64	0
58	MG	2A	3409	1/1	0.86	0.10	62,62,62,62	0
58	MG	2A	3306	1/1	0.86	0.11	56,56,56,56	0
58	MG	2A	3746	1/1	0.86	0.12	40,40,40,40	0
58	MG	2A	3433	1/1	0.86	0.28	55,55,55,55	0
58	MG	2A	3754	1/1	0.86	0.17	71,71,71,71	0
58	MG	2a	1728	1/1	0.86	0.11	50,50,50,50	0
58	MG	1A	3986	1/1	0.86	0.16	60,60,60,60	0
58	MG	2A	3318	1/1	0.86	0.12	53,53,53,53	0
58	MG	2A	3779	1/1	0.86	0.16	67,67,67,67	0
58	MG	2A	3794	1/1	0.86	0.09	35,35,35,35	0
58	MG	2a	1781	1/1	0.86	0.14	59,59,59,59	0
58	MG	1A	4046	1/1	0.86	0.09	50,50,50,50	0
58	MG	1A	4047	1/1	0.86	0.10	41,41,41,41	0
58	MG	1a	1750	1/1	0.86	0.22	62,62,62,62	0
58	MG	1a	1777	1/1	0.86	0.10	56,56,56,56	0
58	MG	2A	3815	1/1	0.86	0.11	68,68,68,68	0
58	MG	2A	3480	1/1	0.86	0.18	56,56,56,56	0
58	MG	2A	3842	1/1	0.86	0.11	58,58,58,58	0
58	MG	2A	3481	1/1	0.86	0.33	65,65,65,65	0
58	MG	2A	3497	1/1	0.86	0.20	73,73,73,73	0
58	MG	1A	4063	1/1	0.86	0.13	38,38,38,38	0
58	MG	1A	3269	1/1	0.86	0.09	43,43,43,43	0
58	MG	2A	3553	1/1	0.86	0.13	39,39,39,39	0
58	MG	1a	1795	1/1	0.86	0.10	59,59,59,59	0
58	MG	2A	3563	1/1	0.86	0.22	48,48,48,48	0
58	MG	2w	104	1/1	0.86	0.11	68,68,68,68	0
58	MG	2B	218	1/1	0.86	0.19	74,74,74,74	0
58	MG	1a	1805	1/1	0.86	0.22	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2y	103	1/1	0.86	0.18	70,70,70,70	0
58	MG	1A	3547	1/1	0.86	0.28	57,57,57,57	0
58	MG	2E	303	1/1	0.86	0.12	52,52,52,52	0
58	MG	17	104	1/1	0.87	0.11	54,54,54,54	0
58	MG	1A	3404	1/1	0.87	0.12	68,68,68,68	0
58	MG	2A	3626	1/1	0.87	0.17	49,49,49,49	0
58	MG	2A	3195	1/1	0.87	0.19	49,49,49,49	0
58	MG	2A	3651	1/1	0.87	0.12	58,58,58,58	0
58	MG	1A	3929	1/1	0.87	0.14	59,59,59,59	0
58	MG	2A	3215	1/1	0.87	0.15	71,71,71,71	0
58	MG	1A	4034	1/1	0.87	0.14	44,44,44,44	0
58	MG	2A	3374	1/1	0.87	0.18	70,70,70,70	0
58	MG	2A	3678	1/1	0.87	0.16	53,53,53,53	0
58	MG	1A	3805	1/1	0.87	0.11	52,52,52,52	0
58	MG	2A	3228	1/1	0.87	0.22	59,59,59,59	0
58	MG	2A	3243	1/1	0.87	0.13	55,55,55,55	0
58	MG	2a	1620	1/1	0.87	0.13	59,59,59,59	0
58	MG	1a	1670	1/1	0.87	0.13	49,49,49,49	0
58	MG	2A	3394	1/1	0.87	0.09	59,59,59,59	0
58	MG	1A	3546	1/1	0.87	0.26	60,60,60,60	0
58	MG	2A	3396	1/1	0.87	0.24	50,50,50,50	0
58	MG	2A	3709	1/1	0.87	0.18	64,64,64,64	0
58	MG	2a	1636	1/1	0.87	0.12	63,63,63,63	0
58	MG	2A	3251	1/1	0.87	0.29	66,66,66,66	0
58	MG	2a	1651	1/1	0.87	0.19	69,69,69,69	0
58	MG	2a	1652	1/1	0.87	0.26	65,65,65,65	0
58	MG	2a	1654	1/1	0.87	0.22	59,59,59,59	0
58	MG	2a	1657	1/1	0.87	0.33	72,72,72,72	0
58	MG	1A	3662	1/1	0.87	0.12	39,39,39,39	0
58	MG	2A	3725	1/1	0.87	0.10	53,53,53,53	0
58	MG	1a	1674	1/1	0.87	0.10	50,50,50,50	0
58	MG	1a	1675	1/1	0.87	0.21	60,60,60,60	0
58	MG	2a	1698	1/1	0.87	0.17	56,56,56,56	0
58	MG	1y	101	1/1	0.87	0.10	71,71,71,71	0
58	MG	2A	3023	1/1	0.87	0.25	57,57,57,57	0
58	MG	2A	3273	1/1	0.87	0.19	63,63,63,63	0
58	MG	2a	1721	1/1	0.87	0.12	62,62,62,62	0
58	MG	1a	1681	1/1	0.87	0.23	62,62,62,62	0
58	MG	1a	1686	1/1	0.87	0.20	57,57,57,57	0
58	MG	2A	3435	1/1	0.87	0.20	52,52,52,52	0
58	MG	1B	208	1/1	0.87	0.10	55,55,55,55	0
58	MG	1B	209	1/1	0.87	0.10	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3449	1/1	0.87	0.14	57,57,57,57	0
58	MG	1B	215	1/1	0.87	0.19	65,65,65,65	0
58	MG	2a	1786	1/1	0.87	0.21	54,54,54,54	0
58	MG	1A	3671	1/1	0.87	0.09	32,32,32,32	0
58	MG	1B	225	1/1	0.87	0.13	46,46,46,46	0
58	MG	2A	3811	1/1	0.87	0.16	63,63,63,63	0
58	MG	2A	3812	1/1	0.87	0.10	72,72,72,72	0
58	MG	2a	1810	1/1	0.87	0.13	63,63,63,63	0
58	MG	1A	3416	1/1	0.87	0.21	46,46,46,46	0
58	MG	2A	3325	1/1	0.87	0.14	66,66,66,66	0
58	MG	1A	3275	1/1	0.87	0.11	51,51,51,51	0
58	MG	2A	3841	1/1	0.87	0.11	29,29,29,29	0
58	MG	2A	3494	1/1	0.87	0.16	58,58,58,58	0
58	MG	2a	1825	1/1	0.87	0.31	70,70,70,70	0
58	MG	2A	3112	1/1	0.87	0.16	49,49,49,49	0
58	MG	1a	1735	1/1	0.87	0.17	67,67,67,67	0
58	MG	2A	3528	1/1	0.87	0.15	63,63,63,63	0
58	MG	1A	3249	1/1	0.87	0.17	52,52,52,52	0
58	MG	1G	203	1/1	0.87	0.13	60,60,60,60	0
58	MG	2A	3340	1/1	0.87	0.13	58,58,58,58	0
58	MG	2A	3185	1/1	0.87	0.28	63,63,63,63	0
58	MG	2A	3579	1/1	0.87	0.15	62,62,62,62	0
58	MG	1A	3529	1/1	0.87	0.24	65,65,65,65	0
58	MG	1A	3908	1/1	0.87	0.17	54,54,54,54	0
58	MG	2A	3350	1/1	0.87	0.12	63,63,63,63	0
58	MG	2A	3661	1/1	0.88	0.15	65,65,65,65	0
58	MG	1A	3696	1/1	0.88	0.10	24,24,24,24	0
58	MG	2A	3672	1/1	0.88	0.13	54,54,54,54	0
58	MG	2A	3050	1/1	0.88	0.12	57,57,57,57	0
58	MG	1A	4027	1/1	0.88	0.08	57,57,57,57	0
58	MG	1A	3106	1/1	0.88	0.16	50,50,50,50	0
58	MG	1A	3907	1/1	0.88	0.13	42,42,42,42	0
58	MG	2A	3279	1/1	0.88	0.13	61,61,61,61	0
58	MG	2A	3698	1/1	0.88	0.16	37,37,37,37	0
58	MG	1a	1692	1/1	0.88	0.23	47,47,47,47	0
58	MG	1A	3728	1/1	0.88	0.13	54,54,54,54	0
58	MG	1A	3729	1/1	0.88	0.10	40,40,40,40	0
58	MG	1A	3255	1/1	0.88	0.07	53,53,53,53	0
58	MG	2A	3413	1/1	0.88	0.20	54,54,54,54	0
58	MG	2A	3302	1/1	0.88	0.22	49,49,49,49	0
58	MG	2A	3104	1/1	0.88	0.17	59,59,59,59	0
58	MG	1A	3931	1/1	0.88	0.07	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1644	1/1	0.88	0.29	58,58,58,58	0
58	MG	1E	308	1/1	0.88	0.16	63,63,63,63	0
58	MG	2a	1647	1/1	0.88	0.16	61,61,61,61	0
58	MG	2A	3113	1/1	0.88	0.23	63,63,63,63	0
58	MG	1A	3183	1/1	0.88	0.22	49,49,49,49	0
58	MG	2A	3743	1/1	0.88	0.09	57,57,57,57	0
58	MG	2a	1655	1/1	0.88	0.12	68,68,68,68	0
58	MG	2a	1656	1/1	0.88	0.33	62,62,62,62	0
58	MG	2A	3153	1/1	0.88	0.10	62,62,62,62	0
58	MG	1A	3507	1/1	0.88	0.11	51,51,51,51	0
58	MG	2A	3747	1/1	0.88	0.10	53,53,53,53	0
58	MG	1Q	203	1/1	0.88	0.08	56,56,56,56	0
58	MG	1a	1740	1/1	0.88	0.15	52,52,52,52	0
58	MG	1A	4067	1/1	0.88	0.10	41,41,41,41	0
58	MG	2A	3482	1/1	0.88	0.12	55,55,55,55	0
58	MG	2A	3760	1/1	0.88	0.12	61,61,61,61	0
58	MG	2a	1708	1/1	0.88	0.16	60,60,60,60	0
58	MG	2A	3767	1/1	0.88	0.12	59,59,59,59	0
58	MG	2A	3773	1/1	0.88	0.15	54,54,54,54	0
58	MG	2a	1722	1/1	0.88	0.34	65,65,65,65	0
58	MG	2A	3774	1/1	0.88	0.12	45,45,45,45	0
58	MG	1A	3410	1/1	0.88	0.16	55,55,55,55	0
58	MG	2a	1735	1/1	0.88	0.15	58,58,58,58	0
58	MG	2a	1737	1/1	0.88	0.23	52,52,52,52	0
58	MG	2A	3496	1/1	0.88	0.16	63,63,63,63	0
58	MG	2a	1746	1/1	0.88	0.32	63,63,63,63	0
58	MG	2A	3344	1/1	0.88	0.12	78,78,78,78	0
58	MG	2a	1751	1/1	0.88	0.14	85,85,85,85	0
58	MG	2a	1760	1/1	0.88	0.08	81,81,81,81	0
58	MG	1a	1761	1/1	0.88	0.11	73,73,73,73	0
58	MG	16	102	1/1	0.88	0.14	41,41,41,41	0
58	MG	1A	4074	1/1	0.88	0.09	38,38,38,38	0
58	MG	2A	3543	1/1	0.88	0.12	52,52,52,52	0
58	MG	1a	1609	1/1	0.88	0.25	58,58,58,58	0
58	MG	2a	1793	1/1	0.88	0.21	61,61,61,61	0
58	MG	2a	1794	1/1	0.88	0.14	67,67,67,67	0
58	MG	1A	3616	1/1	0.88	0.10	27,27,27,27	0
58	MG	2A	3820	1/1	0.88	0.10	51,51,51,51	0
58	MG	1a	1634	1/1	0.88	0.21	65,65,65,65	0
58	MG	1A	3441	1/1	0.88	0.14	61,61,61,61	0
58	MG	2A	3580	1/1	0.88	0.13	46,46,46,46	0
58	MG	1a	1660	1/1	0.88	0.20	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1814	1/1	0.88	0.29	58,58,58,58	0
58	MG	2A	3596	1/1	0.88	0.15	65,65,65,65	0
58	MG	1A	4093	1/1	0.88	0.21	57,57,57,57	0
58	MG	1A	3841	1/1	0.88	0.10	42,42,42,42	0
58	MG	2A	3877	1/1	0.88	0.19	76,76,76,76	0
58	MG	2a	1835	1/1	0.88	0.20	45,45,45,45	0
58	MG	2A	3608	1/1	0.88	0.12	45,45,45,45	0
58	MG	2l	205	1/1	0.88	0.11	66,66,66,66	0
58	MG	2A	3376	1/1	0.88	0.18	56,56,56,56	0
58	MG	2B	211	1/1	0.88	0.22	73,73,73,73	0
58	MG	1A	3995	1/1	0.88	0.09	34,34,34,34	0
58	MG	2A	3383	1/1	0.88	0.19	56,56,56,56	0
58	MG	1A	3447	1/1	0.88	0.12	62,62,62,62	0
58	MG	2A	3640	1/1	0.88	0.12	35,35,35,35	0
58	MG	2w	112	1/1	0.88	0.15	65,65,65,65	0
58	MG	2A	3649	1/1	0.88	0.12	45,45,45,45	0
58	MG	2A	3252	1/1	0.88	0.16	65,65,65,65	0
58	MG	1A	3448	1/1	0.88	0.11	48,48,48,48	0
58	MG	1A	3333	1/1	0.88	0.15	47,47,47,47	0
58	MG	1A	3468	1/1	0.89	0.23	40,40,40,40	0
58	MG	2A	3619	1/1	0.89	0.11	30,30,30,30	0
58	MG	1A	3478	1/1	0.89	0.20	69,69,69,69	0
58	MG	2A	3169	1/1	0.89	0.12	68,68,68,68	0
58	MG	2F	309	1/1	0.89	0.11	54,54,54,54	0
58	MG	2N	201	1/1	0.89	0.07	54,54,54,54	0
58	MG	2T	202	1/1	0.89	0.14	66,66,66,66	0
58	MG	2A	3173	1/1	0.89	0.24	75,75,75,75	0
58	MG	2A	3351	1/1	0.89	0.29	64,64,64,64	0
58	MG	2A	3647	1/1	0.89	0.12	35,35,35,35	0
58	MG	2A	3352	1/1	0.89	0.10	50,50,50,50	0
58	MG	1A	3744	1/1	0.89	0.12	57,57,57,57	0
58	MG	1A	3552	1/1	0.89	0.20	51,51,51,51	0
58	MG	1A	4068	1/1	0.89	0.11	45,45,45,45	0
58	MG	2A	3656	1/1	0.89	0.10	38,38,38,38	0
58	MG	1Y	202	1/1	0.89	0.08	62,62,62,62	0
58	MG	1A	3415	1/1	0.89	0.12	52,52,52,52	0
58	MG	2a	1618	1/1	0.89	0.22	61,61,61,61	0
58	MG	15	102	1/1	0.89	0.17	35,35,35,35	0
58	MG	2a	1621	1/1	0.89	0.21	72,72,72,72	0
58	MG	2A	3194	1/1	0.89	0.28	63,63,63,63	0
58	MG	1A	3174	1/1	0.89	0.15	42,42,42,42	0
58	MG	2A	3199	1/1	0.89	0.20	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3204	1/1	0.89	0.12	62,62,62,62	0
58	MG	2A	3686	1/1	0.89	0.18	60,60,60,60	0
58	MG	2A	3207	1/1	0.89	0.10	53,53,53,53	0
58	MG	1a	1775	1/1	0.89	0.11	64,64,64,64	0
58	MG	2A	3211	1/1	0.89	0.14	62,62,62,62	0
58	MG	2A	3703	1/1	0.89	0.14	50,50,50,50	0
58	MG	2a	1650	1/1	0.89	0.19	58,58,58,58	0
58	MG	2A	3212	1/1	0.89	0.26	54,54,54,54	0
58	MG	1A	3349	1/1	0.89	0.12	54,54,54,54	0
58	MG	1a	1603	1/1	0.89	0.12	64,64,64,64	0
58	MG	1a	1606	1/1	0.89	0.24	59,59,59,59	0
58	MG	1A	3806	1/1	0.89	0.06	38,38,38,38	0
58	MG	2A	3715	1/1	0.89	0.19	54,54,54,54	0
58	MG	2A	3237	1/1	0.89	0.15	66,66,66,66	0
58	MG	2A	3724	1/1	0.89	0.09	47,47,47,47	0
58	MG	2A	3238	1/1	0.89	0.15	55,55,55,55	0
58	MG	1A	4091	1/1	0.89	0.13	43,43,43,43	0
58	MG	2a	1688	1/1	0.89	0.20	53,53,53,53	0
58	MG	2a	1697	1/1	0.89	0.13	66,66,66,66	0
58	MG	2A	3245	1/1	0.89	0.10	60,60,60,60	0
58	MG	2A	3407	1/1	0.89	0.09	66,66,66,66	0
58	MG	1A	3350	1/1	0.89	0.16	64,64,64,64	0
58	MG	1A	3833	1/1	0.89	0.19	43,43,43,43	0
58	MG	2a	1709	1/1	0.89	0.19	59,59,59,59	0
58	MG	1A	3131	1/1	0.89	0.10	58,58,58,58	0
58	MG	2a	1718	1/1	0.89	0.28	62,62,62,62	0
58	MG	2A	3426	1/1	0.89	0.17	57,57,57,57	0
58	MG	2A	3431	1/1	0.89	0.20	60,60,60,60	0
58	MG	1A	4098	1/1	0.89	0.13	60,60,60,60	0
58	MG	2A	3434	1/1	0.89	0.19	58,58,58,58	0
58	MG	1a	1667	1/1	0.89	0.16	45,45,45,45	0
58	MG	1w	109	1/1	0.89	0.15	65,65,65,65	0
58	MG	1x	105	1/1	0.89	0.10	59,59,59,59	0
58	MG	2a	1745	1/1	0.89	0.16	58,58,58,58	0
58	MG	2A	3770	1/1	0.89	0.16	68,68,68,68	0
58	MG	2A	3771	1/1	0.89	0.13	53,53,53,53	0
58	MG	2A	3260	1/1	0.89	0.12	50,50,50,50	0
58	MG	1A	3511	1/1	0.89	0.08	67,67,67,67	0
58	MG	1A	3843	1/1	0.89	0.15	53,53,53,53	0
58	MG	2A	3017	1/1	0.89	0.13	38,38,38,38	0
58	MG	1A	3390	1/1	0.89	0.11	63,63,63,63	0
58	MG	1A	3314	1/1	0.89	0.14	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3273	1/1	0.89	0.08	52,52,52,52	0
58	MG	2a	1792	1/1	0.89	0.12	60,60,60,60	0
58	MG	2A	3288	1/1	0.89	0.09	57,57,57,57	0
58	MG	1A	3691	1/1	0.89	0.13	53,53,53,53	0
58	MG	1a	1677	1/1	0.89	0.19	47,47,47,47	0
58	MG	2A	3294	1/1	0.89	0.26	62,62,62,62	0
58	MG	2A	3059	1/1	0.89	0.18	51,51,51,51	0
58	MG	2A	3520	1/1	0.89	0.17	47,47,47,47	0
58	MG	1A	3870	1/1	0.89	0.12	56,56,56,56	0
58	MG	2A	3071	1/1	0.89	0.19	48,48,48,48	0
58	MG	2A	3847	1/1	0.89	0.12	67,67,67,67	0
58	MG	2A	3542	1/1	0.89	0.11	46,46,46,46	0
58	MG	2A	3853	1/1	0.89	0.16	67,67,67,67	0
58	MG	2A	3856	1/1	0.89	0.11	52,52,52,52	0
58	MG	2a	1824	1/1	0.89	0.21	67,67,67,67	0
58	MG	1a	1682	1/1	0.89	0.09	64,64,64,64	0
58	MG	2a	1833	1/1	0.89	0.18	54,54,54,54	0
58	MG	2A	3315	1/1	0.89	0.11	59,59,59,59	0
58	MG	2A	3085	1/1	0.89	0.13	45,45,45,45	0
58	MG	1A	3873	1/1	0.89	0.11	42,42,42,42	0
58	MG	2p	101	1/1	0.89	0.15	64,64,64,64	0
58	MG	2A	3879	1/1	0.89	0.12	39,39,39,39	0
58	MG	1a	1688	1/1	0.89	0.27	47,47,47,47	0
58	MG	2A	3882	1/1	0.89	0.27	55,55,55,55	0
58	MG	2B	202	1/1	0.89	0.11	62,62,62,62	0
58	MG	1B	223	1/1	0.89	0.09	53,53,53,53	0
58	MG	2B	205	1/1	0.89	0.18	59,59,59,59	0
58	MG	2w	109	1/1	0.89	0.33	72,72,72,72	0
58	MG	1A	3530	1/1	0.89	0.11	68,68,68,68	0
58	MG	1A	3412	1/1	0.89	0.10	44,44,44,44	0
58	MG	2y	101	1/1	0.89	0.14	73,73,73,73	0
58	MG	2y	102	1/1	0.89	0.16	69,69,69,69	0
58	MG	1a	1703	1/1	0.89	0.12	57,57,57,57	0
58	MG	1A	4045	1/1	0.89	0.11	43,43,43,43	0
58	MG	1D	312	1/1	0.89	0.13	59,59,59,59	0
58	MG	26	101	1/1	0.90	0.22	58,58,58,58	0
58	MG	1A	3270	1/1	0.90	0.10	62,62,62,62	0
58	MG	1A	3921	1/1	0.90	0.08	21,21,21,21	0
58	MG	2A	3385	1/1	0.90	0.09	59,59,59,59	0
58	MG	1A	3926	1/1	0.90	0.12	70,70,70,70	0
58	MG	2a	1608	1/1	0.90	0.38	66,66,66,66	0
58	MG	2A	3682	1/1	0.90	0.10	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3683	1/1	0.90	0.10	51,51,51,51	0
58	MG	1A	3598	1/1	0.90	0.19	49,49,49,49	0
58	MG	2A	3392	1/1	0.90	0.19	50,50,50,50	0
58	MG	1A	3804	1/1	0.90	0.11	34,34,34,34	0
58	MG	2A	3694	1/1	0.90	0.14	47,47,47,47	0
58	MG	1a	1815	1/1	0.90	0.20	65,65,65,65	0
58	MG	2A	3213	1/1	0.90	0.14	60,60,60,60	0
58	MG	2a	1626	1/1	0.90	0.12	56,56,56,56	0
58	MG	1A	3510	1/1	0.90	0.10	47,47,47,47	0
58	MG	2A	3219	1/1	0.90	0.17	61,61,61,61	0
58	MG	2a	1630	1/1	0.90	0.10	58,58,58,58	0
58	MG	1A	3253	1/1	0.90	0.16	47,47,47,47	0
58	MG	1l	201	1/1	0.90	0.12	68,68,68,68	0
58	MG	1A	3074	1/1	0.90	0.20	53,53,53,53	0
58	MG	2a	1639	1/1	0.90	0.25	53,53,53,53	0
58	MG	1t	201	1/1	0.90	0.13	55,55,55,55	0
58	MG	1A	3983	1/1	0.90	0.09	68,68,68,68	0
58	MG	1w	102	1/1	0.90	0.13	49,49,49,49	0
58	MG	2a	1648	1/1	0.90	0.20	59,59,59,59	0
58	MG	2A	3723	1/1	0.90	0.10	43,43,43,43	0
58	MG	1w	108	1/1	0.90	0.19	52,52,52,52	0
58	MG	1A	3354	1/1	0.90	0.10	48,48,48,48	0
58	MG	1A	3668	1/1	0.90	0.11	53,53,53,53	0
58	MG	2A	3738	1/1	0.90	0.14	53,53,53,53	0
58	MG	1A	3458	1/1	0.90	0.13	61,61,61,61	0
58	MG	1A	3842	1/1	0.90	0.11	54,54,54,54	0
58	MG	2A	3432	1/1	0.90	0.10	55,55,55,55	0
58	MG	1A	3360	1/1	0.90	0.17	55,55,55,55	0
58	MG	1A	3338	1/1	0.90	0.10	45,45,45,45	0
58	MG	2A	3024	1/1	0.90	0.14	57,57,57,57	0
58	MG	2A	3441	1/1	0.90	0.16	54,54,54,54	0
58	MG	2A	3029	1/1	0.90	0.22	60,60,60,60	0
58	MG	1A	3382	1/1	0.90	0.19	46,46,46,46	0
58	MG	2a	1700	1/1	0.90	0.15	46,46,46,46	0
58	MG	2a	1703	1/1	0.90	0.23	59,59,59,59	0
58	MG	1A	4010	1/1	0.90	0.07	72,72,72,72	0
58	MG	1A	4018	1/1	0.90	0.07	35,35,35,35	0
58	MG	2A	3765	1/1	0.90	0.10	38,38,38,38	0
58	MG	2A	3462	1/1	0.90	0.27	62,62,62,62	0
58	MG	1a	1678	1/1	0.90	0.18	62,62,62,62	0
58	MG	2A	3277	1/1	0.90	0.14	64,64,64,64	0
58	MG	2A	3772	1/1	0.90	0.09	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1B	214	1/1	0.90	0.20	56,56,56,56	0
58	MG	2a	1724	1/1	0.90	0.24	59,59,59,59	0
58	MG	1A	3386	1/1	0.90	0.10	39,39,39,39	0
58	MG	2A	3070	1/1	0.90	0.16	51,51,51,51	0
58	MG	1a	1685	1/1	0.90	0.20	57,57,57,57	0
58	MG	2A	3487	1/1	0.90	0.18	48,48,48,48	0
58	MG	1A	4024	1/1	0.90	0.09	55,55,55,55	0
58	MG	2A	3293	1/1	0.90	0.22	55,55,55,55	0
58	MG	2A	3807	1/1	0.90	0.09	41,41,41,41	0
58	MG	2A	3074	1/1	0.90	0.12	58,58,58,58	0
58	MG	1A	4026	1/1	0.90	0.12	48,48,48,48	0
58	MG	2a	1755	1/1	0.90	0.14	63,63,63,63	0
58	MG	2A	3514	1/1	0.90	0.13	29,29,29,29	0
58	MG	1A	3482	1/1	0.90	0.14	61,61,61,61	0
58	MG	2A	3093	1/1	0.90	0.21	54,54,54,54	0
58	MG	2A	3825	1/1	0.90	0.10	39,39,39,39	0
58	MG	2A	3309	1/1	0.90	0.22	63,63,63,63	0
58	MG	1B	229	1/1	0.90	0.09	42,42,42,42	0
58	MG	2A	3100	1/1	0.90	0.24	58,58,58,58	0
58	MG	2A	3845	1/1	0.90	0.10	35,35,35,35	0
58	MG	2A	3546	1/1	0.90	0.16	48,48,48,48	0
58	MG	1A	4030	1/1	0.90	0.09	65,65,65,65	0
58	MG	2a	1796	1/1	0.90	0.16	42,42,42,42	0
58	MG	2A	3102	1/1	0.90	0.15	50,50,50,50	0
58	MG	2a	1803	1/1	0.90	0.10	59,59,59,59	0
58	MG	1A	4031	1/1	0.90	0.08	46,46,46,46	0
58	MG	2A	3567	1/1	0.90	0.11	61,61,61,61	0
58	MG	1A	3859	1/1	0.90	0.11	57,57,57,57	0
58	MG	2a	1812	1/1	0.90	0.14	67,67,67,67	0
58	MG	2A	3333	1/1	0.90	0.13	62,62,62,62	0
58	MG	1A	3554	1/1	0.90	0.13	54,54,54,54	0
58	MG	2a	1815	1/1	0.90	0.23	64,64,64,64	0
58	MG	2a	1816	1/1	0.90	0.16	66,66,66,66	0
58	MG	1a	1726	1/1	0.90	0.09	57,57,57,57	0
58	MG	2A	3131	1/1	0.90	0.10	58,58,58,58	0
58	MG	1A	4035	1/1	0.90	0.10	44,44,44,44	0
58	MG	2a	1823	1/1	0.90	0.11	59,59,59,59	0
58	MG	2A	3883	1/1	0.90	0.21	74,74,74,74	0
58	MG	1A	3731	1/1	0.90	0.14	57,57,57,57	0
58	MG	2A	3609	1/1	0.90	0.26	48,48,48,48	0
58	MG	2A	3162	1/1	0.90	0.18	49,49,49,49	0
58	MG	2a	1837	1/1	0.90	0.25	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2d	301	1/1	0.90	0.27	50,50,50,50	0
58	MG	1O	205	1/1	0.90	0.16	60,60,60,60	0
58	MG	2l	201	1/1	0.90	0.15	60,60,60,60	0
58	MG	1A	3738	1/1	0.90	0.15	72,72,72,72	0
58	MG	2B	217	1/1	0.90	0.12	46,46,46,46	0
58	MG	1A	3901	1/1	0.90	0.19	64,64,64,64	0
58	MG	2A	3627	1/1	0.90	0.12	63,63,63,63	0
58	MG	1A	3903	1/1	0.90	0.15	33,33,33,33	0
58	MG	2A	3178	1/1	0.90	0.13	47,47,47,47	0
58	MG	10	106	1/1	0.90	0.12	57,57,57,57	0
58	MG	1A	3419	1/1	0.90	0.14	57,57,57,57	0
58	MG	10	110	1/1	0.90	0.07	43,43,43,43	0
58	MG	1a	1767	1/1	0.90	0.10	66,66,66,66	0
58	MG	1a	1772	1/1	0.90	0.12	64,64,64,64	0
58	MG	2x	105	1/1	0.90	0.07	50,50,50,50	0
58	MG	2Q	202	1/1	0.90	0.14	45,45,45,45	0
58	MG	14	101	1/1	0.90	0.20	62,62,62,62	0
58	MG	2U	201	1/1	0.90	0.19	42,42,42,42	0
58	MG	1A	3387	1/1	0.90	0.08	53,53,53,53	0
58	MG	2A	3196	1/1	0.90	0.21	60,60,60,60	0
58	MG	2A	3324	1/1	0.91	0.18	55,55,55,55	0
58	MG	1A	3413	1/1	0.91	0.11	47,47,47,47	0
58	MG	2a	1602	1/1	0.91	0.10	53,53,53,53	0
58	MG	2A	3326	1/1	0.91	0.10	57,57,57,57	0
58	MG	1A	3950	1/1	0.91	0.10	55,55,55,55	0
58	MG	2A	3633	1/1	0.91	0.14	46,46,46,46	0
58	MG	2A	3329	1/1	0.91	0.17	51,51,51,51	0
58	MG	1A	4095	1/1	0.91	0.11	53,53,53,53	0
58	MG	1A	3617	1/1	0.91	0.11	49,49,49,49	0
58	MG	1A	3955	1/1	0.91	0.07	59,59,59,59	0
58	MG	2a	1612	1/1	0.91	0.11	60,60,60,60	0
58	MG	1A	3456	1/1	0.91	0.09	48,48,48,48	0
58	MG	1a	1676	1/1	0.91	0.16	56,56,56,56	0
58	MG	2a	1617	1/1	0.91	0.27	57,57,57,57	0
58	MG	1A	3979	1/1	0.91	0.11	71,71,71,71	0
58	MG	1A	3982	1/1	0.91	0.08	55,55,55,55	0
58	MG	2A	3343	1/1	0.91	0.20	52,52,52,52	0
58	MG	1a	1679	1/1	0.91	0.10	52,52,52,52	0
58	MG	1A	3649	1/1	0.91	0.09	65,65,65,65	0
58	MG	1A	3985	1/1	0.91	0.08	60,60,60,60	0
58	MG	1A	3655	1/1	0.91	0.10	59,59,59,59	0
58	MG	1A	3660	1/1	0.91	0.07	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1632	1/1	0.91	0.26	56,56,56,56	0
58	MG	1B	212	1/1	0.91	0.08	46,46,46,46	0
58	MG	1A	3814	1/1	0.91	0.14	51,51,51,51	0
58	MG	2A	3354	1/1	0.91	0.20	65,65,65,65	0
58	MG	2a	1637	1/1	0.91	0.20	48,48,48,48	0
58	MG	2A	3124	1/1	0.91	0.14	50,50,50,50	0
58	MG	2A	3693	1/1	0.91	0.12	61,61,61,61	0
58	MG	1A	3993	1/1	0.91	0.06	20,20,20,20	0
58	MG	1a	1695	1/1	0.91	0.24	54,54,54,54	0
58	MG	2A	3365	1/1	0.91	0.13	66,66,66,66	0
58	MG	2A	3146	1/1	0.91	0.19	50,50,50,50	0
58	MG	1A	3819	1/1	0.91	0.15	63,63,63,63	0
58	MG	2A	3161	1/1	0.91	0.23	67,67,67,67	0
58	MG	2A	3706	1/1	0.91	0.08	51,51,51,51	0
58	MG	1A	3830	1/1	0.91	0.09	34,34,34,34	0
58	MG	1a	1707	1/1	0.91	0.10	50,50,50,50	0
58	MG	1a	1711	1/1	0.91	0.13	42,42,42,42	0
58	MG	2A	3171	1/1	0.91	0.15	56,56,56,56	0
58	MG	2a	1660	1/1	0.91	0.10	61,61,61,61	0
58	MG	1B	224	1/1	0.91	0.10	49,49,49,49	0
58	MG	1a	1720	1/1	0.91	0.25	54,54,54,54	0
58	MG	2a	1670	1/1	0.91	0.14	70,70,70,70	0
58	MG	2a	1672	1/1	0.91	0.16	57,57,57,57	0
58	MG	1A	3999	1/1	0.91	0.08	46,46,46,46	0
58	MG	2a	1686	1/1	0.91	0.15	51,51,51,51	0
58	MG	1A	3494	1/1	0.91	0.18	49,49,49,49	0
58	MG	1A	3837	1/1	0.91	0.12	52,52,52,52	0
58	MG	1A	3496	1/1	0.91	0.17	52,52,52,52	0
58	MG	1B	233	1/1	0.91	0.10	62,62,62,62	0
58	MG	1B	235	1/1	0.91	0.14	47,47,47,47	0
58	MG	1A	3839	1/1	0.91	0.11	35,35,35,35	0
58	MG	1A	3669	1/1	0.91	0.07	41,41,41,41	0
58	MG	2A	3401	1/1	0.91	0.07	64,64,64,64	0
58	MG	2A	3403	1/1	0.91	0.10	59,59,59,59	0
58	MG	1a	1741	1/1	0.91	0.14	51,51,51,51	0
58	MG	2a	1715	1/1	0.91	0.29	60,60,60,60	0
58	MG	1A	3498	1/1	0.91	0.18	51,51,51,51	0
58	MG	1A	3684	1/1	0.91	0.16	49,49,49,49	0
58	MG	1a	1756	1/1	0.91	0.11	42,42,42,42	0
58	MG	2A	3208	1/1	0.91	0.16	51,51,51,51	0
58	MG	1G	205	1/1	0.91	0.11	41,41,41,41	0
58	MG	1A	3502	1/1	0.91	0.10	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1734	1/1	0.91	0.25	52,52,52,52	0
58	MG	1A	3689	1/1	0.91	0.09	39,39,39,39	0
58	MG	1A	3050	1/1	0.91	0.13	47,47,47,47	0
58	MG	1V	209	1/1	0.91	0.09	49,49,49,49	0
58	MG	2a	1744	1/1	0.91	0.29	58,58,58,58	0
58	MG	1W	202	1/1	0.91	0.18	41,41,41,41	0
58	MG	1a	1781	1/1	0.91	0.08	58,58,58,58	0
58	MG	2A	3777	1/1	0.91	0.12	36,36,36,36	0
58	MG	1a	1786	1/1	0.91	0.07	56,56,56,56	0
58	MG	2A	3785	1/1	0.91	0.09	73,73,73,73	0
58	MG	2A	3440	1/1	0.91	0.12	59,59,59,59	0
58	MG	1X	106	1/1	0.91	0.09	48,48,48,48	0
58	MG	1A	3853	1/1	0.91	0.10	37,37,37,37	0
58	MG	2A	3800	1/1	0.91	0.10	61,61,61,61	0
58	MG	1A	3555	1/1	0.91	0.18	53,53,53,53	0
58	MG	2a	1788	1/1	0.91	0.10	50,50,50,50	0
58	MG	1A	3709	1/1	0.91	0.11	44,44,44,44	0
58	MG	1a	1813	1/1	0.91	0.16	53,53,53,53	0
58	MG	2A	3247	1/1	0.91	0.17	55,55,55,55	0
58	MG	2A	3248	1/1	0.91	0.14	71,71,71,71	0
58	MG	1A	3557	1/1	0.91	0.11	53,53,53,53	0
58	MG	11	102	1/1	0.91	0.11	60,60,60,60	0
58	MG	1A	3716	1/1	0.91	0.13	66,66,66,66	0
58	MG	1A	3432	1/1	0.91	0.19	54,54,54,54	0
58	MG	2a	1807	1/1	0.91	0.20	59,59,59,59	0
58	MG	16	101	1/1	0.91	0.15	51,51,51,51	0
58	MG	1A	3476	1/1	0.91	0.10	45,45,45,45	0
58	MG	2A	3491	1/1	0.91	0.10	55,55,55,55	0
58	MG	1A	3303	1/1	0.91	0.20	44,44,44,44	0
58	MG	19	101	1/1	0.91	0.16	46,46,46,46	0
58	MG	2A	3851	1/1	0.91	0.08	53,53,53,53	0
58	MG	1a	1602	1/1	0.91	0.09	61,61,61,61	0
58	MG	1A	3592	1/1	0.91	0.14	52,52,52,52	0
58	MG	2A	3512	1/1	0.91	0.08	48,48,48,48	0
58	MG	1x	101	1/1	0.91	0.18	57,57,57,57	0
58	MG	1x	104	1/1	0.91	0.10	50,50,50,50	0
58	MG	1A	3739	1/1	0.91	0.13	52,52,52,52	0
58	MG	1A	3342	1/1	0.91	0.08	49,49,49,49	0
58	MG	2A	3541	1/1	0.91	0.14	46,46,46,46	0
58	MG	2a	1827	1/1	0.91	0.20	51,51,51,51	0
58	MG	1A	3745	1/1	0.91	0.10	56,56,56,56	0
58	MG	2A	3283	1/1	0.91	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3006	1/1	0.91	0.22	58,58,58,58	0
58	MG	2a	1838	1/1	0.91	0.09	73,73,73,73	0
58	MG	2A	3548	1/1	0.91	0.10	32,32,32,32	0
58	MG	1A	3925	1/1	0.91	0.07	27,27,27,27	0
58	MG	2B	206	1/1	0.91	0.19	54,54,54,54	0
58	MG	2l	204	1/1	0.91	0.11	59,59,59,59	0
58	MG	1a	1638	1/1	0.91	0.23	56,56,56,56	0
58	MG	1a	1647	1/1	0.91	0.12	49,49,49,49	0
58	MG	1a	1656	1/1	0.91	0.26	55,55,55,55	0
58	MG	2A	3295	1/1	0.91	0.09	65,65,65,65	0
58	MG	2A	3039	1/1	0.91	0.16	62,62,62,62	0
58	MG	2A	3585	1/1	0.91	0.09	55,55,55,55	0
58	MG	2A	3300	1/1	0.91	0.11	69,69,69,69	0
58	MG	1A	3080	1/1	0.91	0.11	53,53,53,53	0
58	MG	2w	106	1/1	0.91	0.14	46,46,46,46	0
58	MG	2E	306	1/1	0.91	0.15	54,54,54,54	0
58	MG	2w	110	1/1	0.91	0.17	57,57,57,57	0
58	MG	2A	3045	1/1	0.91	0.15	58,58,58,58	0
58	MG	2A	3605	1/1	0.91	0.14	47,47,47,47	0
58	MG	2x	103	1/1	0.91	0.15	55,55,55,55	0
58	MG	2A	3606	1/1	0.91	0.08	31,31,31,31	0
58	MG	1A	4081	1/1	0.91	0.08	47,47,47,47	0
58	MG	1A	3763	1/1	0.91	0.11	38,38,38,38	0
58	MG	1a	1663	1/1	0.91	0.12	51,51,51,51	0
58	MG	1A	3767	1/1	0.91	0.10	27,27,27,27	0
58	MG	2A	3320	1/1	0.91	0.09	64,64,64,64	0
58	MG	2B	207	1/1	0.92	0.10	66,66,66,66	0
58	MG	1a	1797	1/1	0.92	0.07	69,69,69,69	0
58	MG	1A	3145	1/1	0.92	0.10	40,40,40,40	0
58	MG	2B	216	1/1	0.92	0.21	58,58,58,58	0
58	MG	1a	1807	1/1	0.92	0.17	57,57,57,57	0
58	MG	2A	3503	1/1	0.92	0.13	46,46,46,46	0
58	MG	2A	3509	1/1	0.92	0.12	61,61,61,61	0
58	MG	1A	3661	1/1	0.92	0.12	44,44,44,44	0
58	MG	1a	1810	1/1	0.92	0.11	58,58,58,58	0
58	MG	1A	3503	1/1	0.92	0.19	60,60,60,60	0
58	MG	2A	3256	1/1	0.92	0.16	51,51,51,51	0
58	MG	1A	3267	1/1	0.92	0.11	59,59,59,59	0
58	MG	2F	302	1/1	0.92	0.12	51,51,51,51	0
58	MG	2F	303	1/1	0.92	0.16	56,56,56,56	0
58	MG	2F	304	1/1	0.92	0.10	58,58,58,58	0
58	MG	2A	3540	1/1	0.92	0.19	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3425	1/1	0.92	0.09	55,55,55,55	0
58	MG	2A	3267	1/1	0.92	0.11	52,52,52,52	0
58	MG	1f	202	1/1	0.92	0.21	50,50,50,50	0
58	MG	1A	3165	1/1	0.92	0.17	48,48,48,48	0
58	MG	1A	3062	1/1	0.92	0.09	52,52,52,52	0
58	MG	2V	202	1/1	0.92	0.09	58,58,58,58	0
58	MG	2Z	301	1/1	0.92	0.15	64,64,64,64	0
58	MG	1A	3854	1/1	0.92	0.08	43,43,43,43	0
58	MG	1A	3365	1/1	0.92	0.20	60,60,60,60	0
58	MG	1A	3519	1/1	0.92	0.14	56,56,56,56	0
58	MG	28	101	1/1	0.92	0.20	61,61,61,61	0
58	MG	2A	3280	1/1	0.92	0.14	59,59,59,59	0
58	MG	2A	3577	1/1	0.92	0.10	60,60,60,60	0
58	MG	1A	4052	1/1	0.92	0.06	42,42,42,42	0
58	MG	2a	1605	1/1	0.92	0.21	50,50,50,50	0
58	MG	1a	1618	1/1	0.92	0.07	44,44,44,44	0
58	MG	1a	1626	1/1	0.92	0.18	50,50,50,50	0
58	MG	1a	1627	1/1	0.92	0.17	36,36,36,36	0
58	MG	1A	4054	1/1	0.92	0.07	45,45,45,45	0
58	MG	2A	3597	1/1	0.92	0.08	61,61,61,61	0
58	MG	2A	3598	1/1	0.92	0.16	65,65,65,65	0
58	MG	2a	1613	1/1	0.92	0.24	59,59,59,59	0
58	MG	1A	3865	1/1	0.92	0.10	46,46,46,46	0
58	MG	2A	3604	1/1	0.92	0.16	54,54,54,54	0
58	MG	1x	107	1/1	0.92	0.12	56,56,56,56	0
58	MG	1x	109	1/1	0.92	0.07	63,63,63,63	0
58	MG	1a	1635	1/1	0.92	0.12	49,49,49,49	0
58	MG	1A	3868	1/1	0.92	0.13	46,46,46,46	0
58	MG	1a	1643	1/1	0.92	0.12	63,63,63,63	0
58	MG	2a	1624	1/1	0.92	0.16	66,66,66,66	0
58	MG	2A	3610	1/1	0.92	0.10	49,49,49,49	0
58	MG	2A	3305	1/1	0.92	0.08	48,48,48,48	0
58	MG	2A	3012	1/1	0.92	0.07	40,40,40,40	0
58	MG	2A	3620	1/1	0.92	0.09	39,39,39,39	0
58	MG	2A	3624	1/1	0.92	0.11	39,39,39,39	0
58	MG	1A	3367	1/1	0.92	0.17	58,58,58,58	0
58	MG	2A	3311	1/1	0.92	0.10	54,54,54,54	0
58	MG	2a	1635	1/1	0.92	0.24	70,70,70,70	0
58	MG	2A	3019	1/1	0.92	0.08	43,43,43,43	0
58	MG	1a	1654	1/1	0.92	0.07	44,44,44,44	0
58	MG	2A	3316	1/1	0.92	0.11	61,61,61,61	0
58	MG	2a	1642	1/1	0.92	0.23	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3317	1/1	0.92	0.11	51,51,51,51	0
58	MG	1a	1655	1/1	0.92	0.20	50,50,50,50	0
58	MG	1A	3370	1/1	0.92	0.14	54,54,54,54	0
58	MG	2A	3322	1/1	0.92	0.09	53,53,53,53	0
58	MG	2a	1649	1/1	0.92	0.19	61,61,61,61	0
58	MG	2A	3036	1/1	0.92	0.14	61,61,61,61	0
58	MG	1A	3707	1/1	0.92	0.06	22,22,22,22	0
58	MG	2A	3654	1/1	0.92	0.22	57,57,57,57	0
58	MG	1A	4076	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3890	1/1	0.92	0.05	18,18,18,18	0
58	MG	2A	3662	1/1	0.92	0.15	55,55,55,55	0
58	MG	2A	3664	1/1	0.92	0.14	61,61,61,61	0
58	MG	2A	3666	1/1	0.92	0.10	49,49,49,49	0
58	MG	1a	1662	1/1	0.92	0.12	59,59,59,59	0
58	MG	2a	1661	1/1	0.92	0.13	60,60,60,60	0
58	MG	1A	3892	1/1	0.92	0.14	29,29,29,29	0
58	MG	2a	1665	1/1	0.92	0.15	61,61,61,61	0
58	MG	2a	1666	1/1	0.92	0.12	59,59,59,59	0
58	MG	2A	3332	1/1	0.92	0.15	61,61,61,61	0
58	MG	1A	3893	1/1	0.92	0.08	32,32,32,32	0
58	MG	1A	3092	1/1	0.92	0.08	37,37,37,37	0
58	MG	2A	3336	1/1	0.92	0.10	56,56,56,56	0
58	MG	2a	1683	1/1	0.92	0.09	47,47,47,47	0
58	MG	1A	3902	1/1	0.92	0.07	30,30,30,30	0
58	MG	2A	3066	1/1	0.92	0.21	52,52,52,52	0
58	MG	2a	1696	1/1	0.92	0.29	51,51,51,51	0
58	MG	1A	3531	1/1	0.92	0.12	72,72,72,72	0
58	MG	1A	3532	1/1	0.92	0.08	54,54,54,54	0
58	MG	1A	3717	1/1	0.92	0.09	40,40,40,40	0
58	MG	2a	1702	1/1	0.92	0.19	68,68,68,68	0
58	MG	1A	3912	1/1	0.92	0.09	54,54,54,54	0
58	MG	2A	3080	1/1	0.92	0.09	41,41,41,41	0
58	MG	2A	3082	1/1	0.92	0.15	51,51,51,51	0
58	MG	1A	3723	1/1	0.92	0.10	58,58,58,58	0
58	MG	1A	3726	1/1	0.92	0.14	38,38,38,38	0
58	MG	1A	4101	1/1	0.92	0.10	48,48,48,48	0
58	MG	1A	3536	1/1	0.92	0.12	44,44,44,44	0
58	MG	2a	1717	1/1	0.92	0.13	54,54,54,54	0
58	MG	1A	3455	1/1	0.92	0.13	38,38,38,38	0
58	MG	2a	1720	1/1	0.92	0.15	56,56,56,56	0
58	MG	1A	3544	1/1	0.92	0.11	36,36,36,36	0
58	MG	1A	3735	1/1	0.92	0.07	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1723	1/1	0.92	0.21	57,57,57,57	0
58	MG	1A	3184	1/1	0.92	0.16	43,43,43,43	0
58	MG	2A	3716	1/1	0.92	0.10	43,43,43,43	0
58	MG	1A	3945	1/1	0.92	0.09	52,52,52,52	0
58	MG	2A	3366	1/1	0.92	0.09	57,57,57,57	0
58	MG	2A	3367	1/1	0.92	0.29	46,46,46,46	0
58	MG	2A	3369	1/1	0.92	0.09	57,57,57,57	0
58	MG	2a	1740	1/1	0.92	0.16	52,52,52,52	0
58	MG	2A	3727	1/1	0.92	0.09	42,42,42,42	0
58	MG	2a	1743	1/1	0.92	0.30	60,60,60,60	0
58	MG	1A	3208	1/1	0.92	0.20	45,45,45,45	0
58	MG	2A	3734	1/1	0.92	0.08	61,61,61,61	0
58	MG	2A	3372	1/1	0.92	0.11	53,53,53,53	0
58	MG	1B	216	1/1	0.92	0.09	57,57,57,57	0
58	MG	2A	3740	1/1	0.92	0.10	42,42,42,42	0
58	MG	2a	1754	1/1	0.92	0.09	62,62,62,62	0
58	MG	2A	3121	1/1	0.92	0.09	58,58,58,58	0
58	MG	1A	3461	1/1	0.92	0.12	54,54,54,54	0
58	MG	2A	3378	1/1	0.92	0.12	45,45,45,45	0
58	MG	1B	220	1/1	0.92	0.08	45,45,45,45	0
58	MG	1a	1698	1/1	0.92	0.14	51,51,51,51	0
58	MG	2A	3384	1/1	0.92	0.12	52,52,52,52	0
58	MG	2A	3139	1/1	0.92	0.16	48,48,48,48	0
58	MG	1A	3464	1/1	0.92	0.08	51,51,51,51	0
58	MG	1a	1705	1/1	0.92	0.12	49,49,49,49	0
58	MG	1A	3300	1/1	0.92	0.13	57,57,57,57	0
58	MG	1a	1710	1/1	0.92	0.24	60,60,60,60	0
58	MG	1A	3977	1/1	0.92	0.10	62,62,62,62	0
58	MG	1a	1712	1/1	0.92	0.19	50,50,50,50	0
58	MG	1a	1713	1/1	0.92	0.26	50,50,50,50	0
58	MG	1a	1718	1/1	0.92	0.18	65,65,65,65	0
58	MG	2a	1806	1/1	0.92	0.08	45,45,45,45	0
58	MG	1A	3758	1/1	0.92	0.11	31,31,31,31	0
58	MG	1A	3762	1/1	0.92	0.09	43,43,43,43	0
58	MG	1A	3473	1/1	0.92	0.09	60,60,60,60	0
58	MG	2A	3187	1/1	0.92	0.24	63,63,63,63	0
58	MG	2A	3189	1/1	0.92	0.09	62,62,62,62	0
58	MG	1A	3765	1/1	0.92	0.13	40,40,40,40	0
58	MG	1A	3093	1/1	0.92	0.07	50,50,50,50	0
58	MG	1B	239	1/1	0.92	0.07	38,38,38,38	0
58	MG	1A	3477	1/1	0.92	0.08	42,42,42,42	0
58	MG	1A	3402	1/1	0.92	0.11	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3806	1/1	0.92	0.11	47,47,47,47	0
58	MG	1A	3226	1/1	0.92	0.12	38,38,38,38	0
58	MG	2A	3809	1/1	0.92	0.10	66,66,66,66	0
58	MG	2A	3420	1/1	0.92	0.15	52,52,52,52	0
58	MG	1F	304	1/1	0.92	0.09	54,54,54,54	0
58	MG	1A	3597	1/1	0.92	0.11	35,35,35,35	0
58	MG	2a	1828	1/1	0.92	0.12	54,54,54,54	0
58	MG	2A	3814	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3315	1/1	0.92	0.10	53,53,53,53	0
58	MG	2A	3816	1/1	0.92	0.09	44,44,44,44	0
58	MG	2A	3817	1/1	0.92	0.10	54,54,54,54	0
58	MG	1A	3603	1/1	0.92	0.17	53,53,53,53	0
58	MG	1a	1755	1/1	0.92	0.10	62,62,62,62	0
58	MG	1A	3318	1/1	0.92	0.14	47,47,47,47	0
58	MG	1a	1758	1/1	0.92	0.16	57,57,57,57	0
58	MG	1R	202	1/1	0.92	0.14	47,47,47,47	0
58	MG	2A	3444	1/1	0.92	0.07	52,52,52,52	0
58	MG	2r	101	1/1	0.92	0.14	64,64,64,64	0
58	MG	2t	201	1/1	0.92	0.15	47,47,47,47	0
58	MG	1a	1764	1/1	0.92	0.14	55,55,55,55	0
58	MG	1A	3095	1/1	0.92	0.08	47,47,47,47	0
58	MG	1a	1770	1/1	0.92	0.07	71,71,71,71	0
58	MG	1A	3821	1/1	0.92	0.10	55,55,55,55	0
58	MG	2A	3458	1/1	0.92	0.18	52,52,52,52	0
58	MG	1A	3067	1/1	0.92	0.08	39,39,39,39	0
58	MG	2A	3224	1/1	0.92	0.09	57,57,57,57	0
58	MG	2A	3872	1/1	0.92	0.11	64,64,64,64	0
58	MG	2A	3227	1/1	0.92	0.10	51,51,51,51	0
58	MG	1A	3832	1/1	0.92	0.13	46,46,46,46	0
58	MG	1a	1779	1/1	0.92	0.10	61,61,61,61	0
58	MG	1A	3640	1/1	0.92	0.11	44,44,44,44	0
58	MG	1Z	3700	1/1	0.92	0.17	55,55,55,55	0
58	MG	2x	106	1/1	0.92	0.26	64,64,64,64	0
58	MG	2A	3485	1/1	0.92	0.24	65,65,65,65	0
58	MG	1A	3125	1/1	0.92	0.21	50,50,50,50	0
58	MG	1A	3497	1/1	0.92	0.13	56,56,56,56	0
58	MG	2A	3493	1/1	0.92	0.09	55,55,55,55	0
58	MG	1A	3027	1/1	0.92	0.12	51,51,51,51	0
58	MG	2A	3533	1/1	0.93	0.09	32,32,32,32	0
58	MG	1A	4106	1/1	0.93	0.20	55,55,55,55	0
58	MG	1A	4107	1/1	0.93	0.19	55,55,55,55	0
58	MG	2B	219	1/1	0.93	0.24	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3003	1/1	0.93	0.20	47,47,47,47	0
58	MG	2D	304	1/1	0.93	0.26	57,57,57,57	0
58	MG	1A	3835	1/1	0.93	0.21	59,59,59,59	0
58	MG	1B	204	1/1	0.93	0.10	44,44,44,44	0
58	MG	1A	3548	1/1	0.93	0.18	41,41,41,41	0
58	MG	2A	3286	1/1	0.93	0.19	56,56,56,56	0
58	MG	1A	3066	1/1	0.93	0.08	35,35,35,35	0
58	MG	1A	3711	1/1	0.93	0.07	21,21,21,21	0
58	MG	1A	3713	1/1	0.93	0.12	40,40,40,40	0
58	MG	2A	3292	1/1	0.93	0.19	49,49,49,49	0
58	MG	1A	3987	1/1	0.93	0.13	53,53,53,53	0
58	MG	2A	3031	1/1	0.93	0.09	57,57,57,57	0
58	MG	2G	201	1/1	0.93	0.13	60,60,60,60	0
58	MG	1A	3553	1/1	0.93	0.27	54,54,54,54	0
58	MG	2A	3581	1/1	0.93	0.12	40,40,40,40	0
58	MG	2R	202	1/1	0.93	0.08	45,45,45,45	0
58	MG	2A	3584	1/1	0.93	0.10	48,48,48,48	0
58	MG	2A	3296	1/1	0.93	0.07	52,52,52,52	0
58	MG	2A	3298	1/1	0.93	0.24	56,56,56,56	0
58	MG	2W	201	1/1	0.93	0.09	50,50,50,50	0
58	MG	2A	3037	1/1	0.93	0.13	48,48,48,48	0
58	MG	1A	3493	1/1	0.93	0.07	39,39,39,39	0
58	MG	1A	3096	1/1	0.93	0.10	48,48,48,48	0
58	MG	25	104	1/1	0.93	0.08	48,48,48,48	0
58	MG	2A	3042	1/1	0.93	0.18	50,50,50,50	0
58	MG	2A	3043	1/1	0.93	0.08	60,60,60,60	0
58	MG	28	104	1/1	0.93	0.23	53,53,53,53	0
58	MG	2A	3308	1/1	0.93	0.12	61,61,61,61	0
58	MG	1A	3719	1/1	0.93	0.17	56,56,56,56	0
58	MG	1A	3305	1/1	0.93	0.09	45,45,45,45	0
58	MG	2A	3052	1/1	0.93	0.13	64,64,64,64	0
58	MG	1A	3101	1/1	0.93	0.10	59,59,59,59	0
58	MG	1B	227	1/1	0.93	0.07	47,47,47,47	0
58	MG	2A	3611	1/1	0.93	0.16	46,46,46,46	0
58	MG	1a	1684	1/1	0.93	0.20	50,50,50,50	0
58	MG	2A	3617	1/1	0.93	0.10	64,64,64,64	0
58	MG	2A	3062	1/1	0.93	0.20	50,50,50,50	0
58	MG	2A	3319	1/1	0.93	0.11	62,62,62,62	0
58	MG	1A	3256	1/1	0.93	0.09	57,57,57,57	0
58	MG	2A	3321	1/1	0.93	0.08	62,62,62,62	0
58	MG	1A	3501	1/1	0.93	0.10	50,50,50,50	0
58	MG	1a	1687	1/1	0.93	0.07	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3257	1/1	0.93	0.08	53,53,53,53	0
58	MG	2A	3631	1/1	0.93	0.15	51,51,51,51	0
58	MG	2a	1622	1/1	0.93	0.11	71,71,71,71	0
58	MG	1A	4017	1/1	0.93	0.08	41,41,41,41	0
58	MG	1B	234	1/1	0.93	0.09	58,58,58,58	0
58	MG	2A	3645	1/1	0.93	0.09	37,37,37,37	0
58	MG	1a	1693	1/1	0.93	0.27	46,46,46,46	0
58	MG	1a	1694	1/1	0.93	0.21	53,53,53,53	0
58	MG	1A	3863	1/1	0.93	0.08	50,50,50,50	0
58	MG	2A	3088	1/1	0.93	0.13	50,50,50,50	0
58	MG	1A	4019	1/1	0.93	0.07	33,33,33,33	0
58	MG	1D	302	1/1	0.93	0.17	51,51,51,51	0
58	MG	2A	3094	1/1	0.93	0.16	40,40,40,40	0
58	MG	2A	3657	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3658	1/1	0.93	0.13	48,48,48,48	0
58	MG	2a	1638	1/1	0.93	0.25	46,46,46,46	0
58	MG	1A	3732	1/1	0.93	0.14	44,44,44,44	0
58	MG	1D	313	1/1	0.93	0.16	31,31,31,31	0
58	MG	2A	3663	1/1	0.93	0.09	54,54,54,54	0
58	MG	2A	3341	1/1	0.93	0.27	68,68,68,68	0
58	MG	1A	3451	1/1	0.93	0.12	35,35,35,35	0
58	MG	1E	309	1/1	0.93	0.06	24,24,24,24	0
58	MG	1A	3320	1/1	0.93	0.06	32,32,32,32	0
58	MG	2A	3673	1/1	0.93	0.08	48,48,48,48	0
58	MG	2A	3674	1/1	0.93	0.11	49,49,49,49	0
58	MG	2A	3109	1/1	0.93	0.06	63,63,63,63	0
58	MG	2A	3677	1/1	0.93	0.16	56,56,56,56	0
58	MG	1E	313	1/1	0.93	0.10	42,42,42,42	0
58	MG	2A	3349	1/1	0.93	0.29	56,56,56,56	0
58	MG	2A	3680	1/1	0.93	0.07	56,56,56,56	0
58	MG	1A	3260	1/1	0.93	0.07	50,50,50,50	0
58	MG	2a	1659	1/1	0.93	0.12	74,74,74,74	0
58	MG	1F	311	1/1	0.93	0.17	29,29,29,29	0
58	MG	2A	3114	1/1	0.93	0.20	51,51,51,51	0
58	MG	2a	1662	1/1	0.93	0.21	69,69,69,69	0
58	MG	1A	4029	1/1	0.93	0.06	39,39,39,39	0
58	MG	2A	3687	1/1	0.93	0.08	54,54,54,54	0
58	MG	1G	204	1/1	0.93	0.06	53,53,53,53	0
58	MG	2a	1667	1/1	0.93	0.11	64,64,64,64	0
58	MG	1A	3605	1/1	0.93	0.15	35,35,35,35	0
58	MG	1N	205	1/1	0.93	0.12	45,45,45,45	0
58	MG	2A	3697	1/1	0.93	0.12	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1673	1/1	0.93	0.20	57,57,57,57	0
58	MG	1O	201	1/1	0.93	0.15	63,63,63,63	0
58	MG	2a	1680	1/1	0.93	0.19	54,54,54,54	0
58	MG	2a	1682	1/1	0.93	0.19	55,55,55,55	0
58	MG	2A	3141	1/1	0.93	0.21	48,48,48,48	0
58	MG	2a	1685	1/1	0.93	0.08	49,49,49,49	0
58	MG	1A	3886	1/1	0.93	0.09	34,34,34,34	0
58	MG	2A	3151	1/1	0.93	0.16	50,50,50,50	0
58	MG	2A	3368	1/1	0.93	0.28	62,62,62,62	0
58	MG	1A	3889	1/1	0.93	0.08	18,18,18,18	0
58	MG	2A	3156	1/1	0.93	0.20	51,51,51,51	0
58	MG	2A	3708	1/1	0.93	0.08	60,60,60,60	0
58	MG	2A	3160	1/1	0.93	0.07	51,51,51,51	0
58	MG	2A	3712	1/1	0.93	0.06	27,27,27,27	0
58	MG	1A	3335	1/1	0.93	0.05	49,49,49,49	0
58	MG	2a	1705	1/1	0.93	0.16	48,48,48,48	0
58	MG	1A	3751	1/1	0.93	0.18	52,52,52,52	0
58	MG	1A	3194	1/1	0.93	0.11	47,47,47,47	0
58	MG	2A	3166	1/1	0.93	0.22	52,52,52,52	0
58	MG	2A	3379	1/1	0.93	0.08	48,48,48,48	0
58	MG	2a	1711	1/1	0.93	0.09	51,51,51,51	0
58	MG	2A	3167	1/1	0.93	0.14	41,41,41,41	0
58	MG	1A	3899	1/1	0.93	0.07	23,23,23,23	0
58	MG	1a	1744	1/1	0.93	0.07	51,51,51,51	0
58	MG	1a	1745	1/1	0.93	0.14	63,63,63,63	0
58	MG	1A	3755	1/1	0.93	0.06	30,30,30,30	0
58	MG	1A	3756	1/1	0.93	0.09	55,55,55,55	0
58	MG	2A	3180	1/1	0.93	0.13	53,53,53,53	0
58	MG	2A	3183	1/1	0.93	0.10	45,45,45,45	0
58	MG	1a	1754	1/1	0.93	0.17	49,49,49,49	0
58	MG	2A	3742	1/1	0.93	0.15	66,66,66,66	0
58	MG	2a	1729	1/1	0.93	0.13	50,50,50,50	0
58	MG	2a	1730	1/1	0.93	0.16	61,61,61,61	0
58	MG	1A	3512	1/1	0.93	0.09	69,69,69,69	0
58	MG	1Z	3701	1/1	0.93	0.05	56,56,56,56	0
58	MG	2a	1736	1/1	0.93	0.24	47,47,47,47	0
58	MG	1A	3462	1/1	0.93	0.18	39,39,39,39	0
58	MG	1a	1759	1/1	0.93	0.09	56,56,56,56	0
58	MG	2A	3748	1/1	0.93	0.15	50,50,50,50	0
58	MG	1A	4050	1/1	0.93	0.08	18,18,18,18	0
58	MG	1A	3266	1/1	0.93	0.07	47,47,47,47	0
58	MG	1A	3198	1/1	0.93	0.21	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3757	1/1	0.93	0.09	64,64,64,64	0
58	MG	2A	3758	1/1	0.93	0.13	59,59,59,59	0
58	MG	1a	1768	1/1	0.93	0.07	50,50,50,50	0
58	MG	11	106	1/1	0.93	0.10	49,49,49,49	0
58	MG	2A	3764	1/1	0.93	0.31	43,43,43,43	0
58	MG	1a	1771	1/1	0.93	0.11	58,58,58,58	0
58	MG	2a	1764	1/1	0.93	0.13	53,53,53,53	0
58	MG	2a	1770	1/1	0.93	0.07	50,50,50,50	0
58	MG	2a	1773	1/1	0.93	0.08	63,63,63,63	0
58	MG	2a	1775	1/1	0.93	0.08	59,59,59,59	0
58	MG	12	101	1/1	0.93	0.11	48,48,48,48	0
58	MG	2A	3206	1/1	0.93	0.19	61,61,61,61	0
58	MG	2a	1779	1/1	0.93	0.14	62,62,62,62	0
58	MG	1A	4057	1/1	0.93	0.10	59,59,59,59	0
58	MG	2a	1782	1/1	0.93	0.12	56,56,56,56	0
58	MG	2a	1785	1/1	0.93	0.15	40,40,40,40	0
58	MG	1A	4058	1/1	0.93	0.07	12,12,12,12	0
58	MG	2a	1787	1/1	0.93	0.15	57,57,57,57	0
58	MG	2A	3417	1/1	0.93	0.23	44,44,44,44	0
58	MG	1A	3522	1/1	0.93	0.21	35,35,35,35	0
58	MG	2A	3421	1/1	0.93	0.15	39,39,39,39	0
58	MG	1A	3527	1/1	0.93	0.09	55,55,55,55	0
58	MG	2A	3781	1/1	0.93	0.12	67,67,67,67	0
58	MG	2A	3427	1/1	0.93	0.23	46,46,46,46	0
58	MG	2A	3429	1/1	0.93	0.24	59,59,59,59	0
58	MG	2a	1798	1/1	0.93	0.08	58,58,58,58	0
58	MG	2A	3796	1/1	0.93	0.11	56,56,56,56	0
58	MG	2A	3430	1/1	0.93	0.21	53,53,53,53	0
58	MG	1A	3923	1/1	0.93	0.11	41,41,41,41	0
58	MG	2A	3799	1/1	0.93	0.07	55,55,55,55	0
58	MG	1A	3471	1/1	0.93	0.13	63,63,63,63	0
58	MG	2a	1809	1/1	0.93	0.20	60,60,60,60	0
58	MG	2A	3801	1/1	0.93	0.12	45,45,45,45	0
58	MG	1A	3153	1/1	0.93	0.15	42,42,42,42	0
58	MG	1A	3928	1/1	0.93	0.08	41,41,41,41	0
58	MG	1a	1796	1/1	0.93	0.10	54,54,54,54	0
58	MG	2A	3221	1/1	0.93	0.20	49,49,49,49	0
58	MG	1A	4079	1/1	0.93	0.09	44,44,44,44	0
58	MG	1A	4080	1/1	0.93	0.10	49,49,49,49	0
58	MG	2A	3226	1/1	0.93	0.11	58,58,58,58	0
58	MG	1a	1614	1/1	0.93	0.10	48,48,48,48	0
58	MG	1A	3087	1/1	0.93	0.20	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3230	1/1	0.93	0.19	46,46,46,46	0
58	MG	1a	1619	1/1	0.93	0.08	46,46,46,46	0
58	MG	2A	3819	1/1	0.93	0.05	44,44,44,44	0
58	MG	2A	3460	1/1	0.93	0.10	51,51,51,51	0
58	MG	1a	1812	1/1	0.93	0.09	58,58,58,58	0
58	MG	2a	1829	1/1	0.93	0.12	55,55,55,55	0
58	MG	2A	3466	1/1	0.93	0.10	68,68,68,68	0
58	MG	2A	3838	1/1	0.93	0.07	53,53,53,53	0
58	MG	1a	1621	1/1	0.93	0.25	55,55,55,55	0
58	MG	1A	3169	1/1	0.93	0.19	35,35,35,35	0
58	MG	2A	3246	1/1	0.93	0.08	49,49,49,49	0
58	MG	2e	201	1/1	0.93	0.05	69,69,69,69	0
58	MG	2f	202	1/1	0.93	0.12	65,65,65,65	0
58	MG	1A	4086	1/1	0.93	0.10	21,21,21,21	0
58	MG	1A	3935	1/1	0.93	0.07	42,42,42,42	0
58	MG	1a	1631	1/1	0.93	0.27	53,53,53,53	0
58	MG	1A	3173	1/1	0.93	0.22	50,50,50,50	0
58	MG	1A	3674	1/1	0.93	0.08	27,27,27,27	0
58	MG	2q	201	1/1	0.93	0.32	71,71,71,71	0
58	MG	2q	203	1/1	0.93	0.12	67,67,67,67	0
58	MG	2A	3489	1/1	0.93	0.19	54,54,54,54	0
58	MG	2A	3870	1/1	0.93	0.11	59,59,59,59	0
58	MG	1A	3364	1/1	0.93	0.09	53,53,53,53	0
58	MG	1a	1639	1/1	0.93	0.13	45,45,45,45	0
58	MG	2A	3254	1/1	0.93	0.09	58,58,58,58	0
58	MG	2A	3876	1/1	0.93	0.10	35,35,35,35	0
58	MG	1A	3542	1/1	0.93	0.19	45,45,45,45	0
58	MG	1A	3421	1/1	0.93	0.16	34,34,34,34	0
58	MG	1a	1648	1/1	0.93	0.17	66,66,66,66	0
58	MG	1A	3957	1/1	0.93	0.06	51,51,51,51	0
58	MG	2A	3506	1/1	0.93	0.11	42,42,42,42	0
58	MG	2B	201	1/1	0.93	0.13	58,58,58,58	0
58	MG	1A	3248	1/1	0.93	0.09	46,46,46,46	0
58	MG	2A	3511	1/1	0.93	0.10	63,63,63,63	0
58	MG	1A	3967	1/1	0.93	0.08	48,48,48,48	0
58	MG	2A	3271	1/1	0.93	0.06	56,56,56,56	0
58	MG	1A	3971	1/1	0.93	0.10	40,40,40,40	0
58	MG	2B	208	1/1	0.93	0.13	50,50,50,50	0
58	MG	1A	3483	1/1	0.93	0.18	41,41,41,41	0
58	MG	2B	212	1/1	0.93	0.14	62,62,62,62	0
58	MG	2A	3532	1/1	0.93	0.08	50,50,50,50	0
58	MG	2A	3508	1/1	0.94	0.10	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3443	1/1	0.94	0.15	38,38,38,38	0
58	MG	2B	213	1/1	0.94	0.16	48,48,48,48	0
58	MG	2A	3240	1/1	0.94	0.12	55,55,55,55	0
58	MG	1A	3653	1/1	0.94	0.08	19,19,19,19	0
58	MG	2A	3513	1/1	0.94	0.06	44,44,44,44	0
58	MG	1A	3361	1/1	0.94	0.14	63,63,63,63	0
58	MG	2A	3515	1/1	0.94	0.20	47,47,47,47	0
58	MG	2A	3516	1/1	0.94	0.13	57,57,57,57	0
58	MG	1a	1787	1/1	0.94	0.07	42,42,42,42	0
58	MG	2D	307	1/1	0.94	0.21	49,49,49,49	0
58	MG	2A	3526	1/1	0.94	0.09	55,55,55,55	0
58	MG	1A	3298	1/1	0.94	0.14	41,41,41,41	0
58	MG	1a	1791	1/1	0.94	0.12	59,59,59,59	0
58	MG	1A	3041	1/1	0.94	0.14	55,55,55,55	0
58	MG	2E	308	1/1	0.94	0.11	61,61,61,61	0
58	MG	1A	3366	1/1	0.94	0.13	42,42,42,42	0
58	MG	2A	3539	1/1	0.94	0.10	63,63,63,63	0
58	MG	1A	3665	1/1	0.94	0.05	22,22,22,22	0
58	MG	1A	3251	1/1	0.94	0.11	44,44,44,44	0
58	MG	1l	101	1/1	0.94	0.30	34,34,34,34	0
58	MG	1A	3368	1/1	0.94	0.13	44,44,44,44	0
58	MG	2A	3544	1/1	0.94	0.10	40,40,40,40	0
58	MG	1a	1809	1/1	0.94	0.17	48,48,48,48	0
58	MG	1A	3845	1/1	0.94	0.07	35,35,35,35	0
58	MG	2A	3551	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	4033	1/1	0.94	0.07	35,35,35,35	0
58	MG	2T	203	1/1	0.94	0.18	55,55,55,55	0
58	MG	1A	3524	1/1	0.94	0.14	39,39,39,39	0
58	MG	2A	3561	1/1	0.94	0.09	33,33,33,33	0
58	MG	2A	3262	1/1	0.94	0.09	53,53,53,53	0
58	MG	2X	101	1/1	0.94	0.10	56,56,56,56	0
58	MG	2A	3264	1/1	0.94	0.39	64,64,64,64	0
58	MG	2A	3575	1/1	0.94	0.06	30,30,30,30	0
58	MG	2A	3266	1/1	0.94	0.10	59,59,59,59	0
58	MG	25	101	1/1	0.94	0.09	46,46,46,46	0
58	MG	25	102	1/1	0.94	0.19	47,47,47,47	0
58	MG	1A	3672	1/1	0.94	0.06	31,31,31,31	0
58	MG	1b	301	1/1	0.94	0.08	53,53,53,53	0
58	MG	2A	3270	1/1	0.94	0.09	56,56,56,56	0
58	MG	1A	3526	1/1	0.94	0.06	41,41,41,41	0
58	MG	1A	3459	1/1	0.94	0.12	54,54,54,54	0
58	MG	1A	3686	1/1	0.94	0.06	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3590	1/1	0.94	0.10	44,44,44,44	0
58	MG	1A	4044	1/1	0.94	0.06	24,24,24,24	0
58	MG	2A	3276	1/1	0.94	0.12	42,42,42,42	0
58	MG	1A	3460	1/1	0.94	0.20	48,48,48,48	0
58	MG	1A	3103	1/1	0.94	0.23	57,57,57,57	0
58	MG	2A	3603	1/1	0.94	0.08	49,49,49,49	0
58	MG	1A	3186	1/1	0.94	0.19	64,64,64,64	0
58	MG	1A	4049	1/1	0.94	0.09	26,26,26,26	0
58	MG	1a	1611	1/1	0.94	0.09	51,51,51,51	0
58	MG	2A	3285	1/1	0.94	0.10	42,42,42,42	0
58	MG	1a	1613	1/1	0.94	0.18	52,52,52,52	0
58	MG	1A	3867	1/1	0.94	0.07	48,48,48,48	0
58	MG	1A	3381	1/1	0.94	0.17	57,57,57,57	0
58	MG	2a	1619	1/1	0.94	0.14	58,58,58,58	0
58	MG	1A	3702	1/1	0.94	0.07	29,29,29,29	0
58	MG	1x	106	1/1	0.94	0.15	51,51,51,51	0
58	MG	2A	3615	1/1	0.94	0.11	58,58,58,58	0
58	MG	1A	3309	1/1	0.94	0.30	48,48,48,48	0
58	MG	1a	1622	1/1	0.94	0.07	47,47,47,47	0
58	MG	1a	1624	1/1	0.94	0.20	51,51,51,51	0
58	MG	2A	3621	1/1	0.94	0.07	41,41,41,41	0
58	MG	1A	3878	1/1	0.94	0.09	29,29,29,29	0
58	MG	1A	4062	1/1	0.94	0.08	50,50,50,50	0
58	MG	1A	3537	1/1	0.94	0.16	45,45,45,45	0
58	MG	2A	3007	1/1	0.94	0.10	49,49,49,49	0
58	MG	2A	3011	1/1	0.94	0.16	47,47,47,47	0
58	MG	1A	4064	1/1	0.94	0.16	51,51,51,51	0
58	MG	2A	3013	1/1	0.94	0.07	40,40,40,40	0
58	MG	2A	3634	1/1	0.94	0.11	38,38,38,38	0
58	MG	1A	3470	1/1	0.94	0.07	45,45,45,45	0
58	MG	1A	3888	1/1	0.94	0.08	44,44,44,44	0
58	MG	1a	1637	1/1	0.94	0.17	54,54,54,54	0
58	MG	2A	3312	1/1	0.94	0.12	59,59,59,59	0
58	MG	2A	3650	1/1	0.94	0.10	36,36,36,36	0
58	MG	2a	1646	1/1	0.94	0.13	57,57,57,57	0
58	MG	1A	3190	1/1	0.94	0.15	46,46,46,46	0
58	MG	1A	3159	1/1	0.94	0.06	48,48,48,48	0
58	MG	1a	1640	1/1	0.94	0.14	53,53,53,53	0
58	MG	2A	3032	1/1	0.94	0.09	33,33,33,33	0
58	MG	1a	1641	1/1	0.94	0.22	54,54,54,54	0
58	MG	1A	3316	1/1	0.94	0.15	47,47,47,47	0
58	MG	2a	1653	1/1	0.94	0.16	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1644	1/1	0.94	0.12	54,54,54,54	0
58	MG	1A	3164	1/1	0.94	0.25	49,49,49,49	0
58	MG	1A	3898	1/1	0.94	0.09	24,24,24,24	0
58	MG	1A	3016	1/1	0.94	0.17	56,56,56,56	0
58	MG	1A	3900	1/1	0.94	0.08	15,15,15,15	0
58	MG	2A	3665	1/1	0.94	0.06	48,48,48,48	0
58	MG	1A	3550	1/1	0.94	0.18	43,43,43,43	0
58	MG	1A	3551	1/1	0.94	0.19	49,49,49,49	0
58	MG	2A	3053	1/1	0.94	0.09	50,50,50,50	0
58	MG	1a	1659	1/1	0.94	0.09	49,49,49,49	0
58	MG	1A	3322	1/1	0.94	0.08	46,46,46,46	0
58	MG	1A	3329	1/1	0.94	0.15	45,45,45,45	0
58	MG	1A	3264	1/1	0.94	0.07	31,31,31,31	0
58	MG	1A	3265	1/1	0.94	0.10	45,45,45,45	0
58	MG	1a	1665	1/1	0.94	0.13	50,50,50,50	0
58	MG	1A	3733	1/1	0.94	0.10	57,57,57,57	0
58	MG	1A	3916	1/1	0.94	0.08	35,35,35,35	0
58	MG	1A	3484	1/1	0.94	0.12	51,51,51,51	0
58	MG	1A	3558	1/1	0.94	0.07	69,69,69,69	0
58	MG	2a	1681	1/1	0.94	0.12	53,53,53,53	0
58	MG	2A	3079	1/1	0.94	0.07	39,39,39,39	0
58	MG	1A	3568	1/1	0.94	0.15	37,37,37,37	0
58	MG	2A	3081	1/1	0.94	0.08	47,47,47,47	0
58	MG	2A	3346	1/1	0.94	0.11	66,66,66,66	0
58	MG	1A	3743	1/1	0.94	0.06	50,50,50,50	0
58	MG	2a	1690	1/1	0.94	0.13	55,55,55,55	0
58	MG	2a	1692	1/1	0.94	0.19	40,40,40,40	0
58	MG	2A	3696	1/1	0.94	0.08	40,40,40,40	0
58	MG	2A	3083	1/1	0.94	0.09	51,51,51,51	0
58	MG	1A	3927	1/1	0.94	0.08	37,37,37,37	0
58	MG	1A	3569	1/1	0.94	0.19	45,45,45,45	0
58	MG	1A	3210	1/1	0.94	0.06	43,43,43,43	0
58	MG	2A	3091	1/1	0.94	0.11	53,53,53,53	0
58	MG	1A	3747	1/1	0.94	0.07	17,17,17,17	0
58	MG	2A	3356	1/1	0.94	0.09	56,56,56,56	0
58	MG	2A	3357	1/1	0.94	0.12	51,51,51,51	0
58	MG	1B	207	1/1	0.94	0.21	46,46,46,46	0
58	MG	1A	3486	1/1	0.94	0.06	34,34,34,34	0
58	MG	2A	3711	1/1	0.94	0.10	58,58,58,58	0
58	MG	2A	3363	1/1	0.94	0.16	63,63,63,63	0
58	MG	2A	3097	1/1	0.94	0.14	58,58,58,58	0
58	MG	2a	1716	1/1	0.94	0.12	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3940	1/1	0.94	0.05	34,34,34,34	0
58	MG	1A	3491	1/1	0.94	0.09	41,41,41,41	0
58	MG	2a	1719	1/1	0.94	0.13	59,59,59,59	0
58	MG	1A	3019	1/1	0.94	0.08	44,44,44,44	0
58	MG	2A	3722	1/1	0.94	0.09	44,44,44,44	0
58	MG	1A	3268	1/1	0.94	0.11	46,46,46,46	0
58	MG	1A	3952	1/1	0.94	0.06	42,42,42,42	0
58	MG	1A	3345	1/1	0.94	0.13	53,53,53,53	0
58	MG	1B	218	1/1	0.94	0.08	51,51,51,51	0
58	MG	1A	3761	1/1	0.94	0.08	50,50,50,50	0
58	MG	1A	3956	1/1	0.94	0.12	57,57,57,57	0
58	MG	1A	3602	1/1	0.94	0.21	58,58,58,58	0
58	MG	2a	1733	1/1	0.94	0.16	58,58,58,58	0
58	MG	2A	3122	1/1	0.94	0.10	49,49,49,49	0
58	MG	2A	3123	1/1	0.94	0.15	47,47,47,47	0
58	MG	1A	3170	1/1	0.94	0.13	50,50,50,50	0
58	MG	2A	3126	1/1	0.94	0.10	58,58,58,58	0
58	MG	2a	1739	1/1	0.94	0.17	58,58,58,58	0
58	MG	2A	3127	1/1	0.94	0.14	50,50,50,50	0
58	MG	2a	1741	1/1	0.94	0.27	36,36,36,36	0
58	MG	2A	3744	1/1	0.94	0.09	48,48,48,48	0
58	MG	2A	3129	1/1	0.94	0.11	45,45,45,45	0
58	MG	2A	3387	1/1	0.94	0.07	61,61,61,61	0
58	MG	2A	3389	1/1	0.94	0.11	47,47,47,47	0
58	MG	1B	226	1/1	0.94	0.09	53,53,53,53	0
58	MG	1A	3962	1/1	0.94	0.08	46,46,46,46	0
58	MG	2A	3750	1/1	0.94	0.09	64,64,64,64	0
58	MG	2a	1753	1/1	0.94	0.07	75,75,75,75	0
58	MG	2A	3752	1/1	0.94	0.10	60,60,60,60	0
58	MG	1a	1700	1/1	0.94	0.27	57,57,57,57	0
58	MG	2a	1757	1/1	0.94	0.10	56,56,56,56	0
58	MG	1a	1702	1/1	0.94	0.09	47,47,47,47	0
58	MG	2a	1762	1/1	0.94	0.08	63,63,63,63	0
58	MG	2A	3142	1/1	0.94	0.14	40,40,40,40	0
58	MG	1B	228	1/1	0.94	0.09	42,42,42,42	0
58	MG	2a	1771	1/1	0.94	0.06	78,78,78,78	0
58	MG	2A	3147	1/1	0.94	0.10	44,44,44,44	0
58	MG	1a	1704	1/1	0.94	0.14	55,55,55,55	0
58	MG	2A	3762	1/1	0.94	0.07	34,34,34,34	0
58	MG	2A	3763	1/1	0.94	0.15	55,55,55,55	0
58	MG	2A	3152	1/1	0.94	0.20	51,51,51,51	0
58	MG	2A	3399	1/1	0.94	0.10	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3966	1/1	0.94	0.07	24,24,24,24	0
58	MG	2A	3154	1/1	0.94	0.10	44,44,44,44	0
58	MG	1A	3604	1/1	0.94	0.10	54,54,54,54	0
58	MG	1a	1708	1/1	0.94	0.19	45,45,45,45	0
58	MG	1A	3422	1/1	0.94	0.15	53,53,53,53	0
58	MG	2a	1790	1/1	0.94	0.12	48,48,48,48	0
58	MG	1A	3772	1/1	0.94	0.11	27,27,27,27	0
58	MG	1A	3978	1/1	0.94	0.09	57,57,57,57	0
58	MG	2A	3778	1/1	0.94	0.06	54,54,54,54	0
58	MG	1A	3777	1/1	0.94	0.07	53,53,53,53	0
58	MG	1B	236	1/1	0.94	0.12	72,72,72,72	0
58	MG	1A	3981	1/1	0.94	0.09	40,40,40,40	0
58	MG	2A	3789	1/1	0.94	0.07	61,61,61,61	0
58	MG	2a	1799	1/1	0.94	0.14	57,57,57,57	0
58	MG	2a	1801	1/1	0.94	0.12	52,52,52,52	0
58	MG	2A	3791	1/1	0.94	0.11	50,50,50,50	0
58	MG	2A	3792	1/1	0.94	0.09	59,59,59,59	0
58	MG	2a	1804	1/1	0.94	0.09	51,51,51,51	0
58	MG	2A	3416	1/1	0.94	0.20	51,51,51,51	0
58	MG	2A	3795	1/1	0.94	0.09	45,45,45,45	0
58	MG	1A	3607	1/1	0.94	0.07	43,43,43,43	0
58	MG	2A	3419	1/1	0.94	0.18	28,28,28,28	0
58	MG	1a	1721	1/1	0.94	0.12	48,48,48,48	0
58	MG	2A	3174	1/1	0.94	0.18	52,52,52,52	0
58	MG	2A	3423	1/1	0.94	0.23	50,50,50,50	0
58	MG	1A	3611	1/1	0.94	0.10	49,49,49,49	0
58	MG	1a	1725	1/1	0.94	0.07	47,47,47,47	0
58	MG	2A	3804	1/1	0.94	0.12	48,48,48,48	0
58	MG	1A	3801	1/1	0.94	0.10	26,26,26,26	0
58	MG	2A	3181	1/1	0.94	0.13	51,51,51,51	0
58	MG	1E	307	1/1	0.94	0.11	50,50,50,50	0
58	MG	1A	3233	1/1	0.94	0.10	43,43,43,43	0
58	MG	1A	3351	1/1	0.94	0.10	37,37,37,37	0
58	MG	1A	3129	1/1	0.94	0.12	48,48,48,48	0
58	MG	1a	1736	1/1	0.94	0.12	46,46,46,46	0
58	MG	2A	3437	1/1	0.94	0.27	53,53,53,53	0
58	MG	1A	3626	1/1	0.94	0.09	54,54,54,54	0
58	MG	1A	3813	1/1	0.94	0.08	45,45,45,45	0
58	MG	1A	3630	1/1	0.94	0.11	32,32,32,32	0
58	MG	1A	3996	1/1	0.94	0.15	52,52,52,52	0
58	MG	2A	3447	1/1	0.94	0.12	57,57,57,57	0
58	MG	2A	3831	1/1	0.94	0.12	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1839	1/1	0.94	0.19	52,52,52,52	0
58	MG	1A	3632	1/1	0.94	0.08	47,47,47,47	0
58	MG	1a	1748	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3840	1/1	0.94	0.10	55,55,55,55	0
58	MG	1A	3358	1/1	0.94	0.09	54,54,54,54	0
58	MG	1A	4000	1/1	0.94	0.11	42,42,42,42	0
58	MG	2A	3844	1/1	0.94	0.06	45,45,45,45	0
58	MG	1a	1751	1/1	0.94	0.06	54,54,54,54	0
58	MG	2n	101	1/1	0.94	0.34	61,61,61,61	0
58	MG	1A	4002	1/1	0.94	0.08	49,49,49,49	0
58	MG	2A	3463	1/1	0.94	0.06	52,52,52,52	0
58	MG	1O	204	1/1	0.94	0.06	44,44,44,44	0
58	MG	1A	3827	1/1	0.94	0.07	22,22,22,22	0
58	MG	1a	1757	1/1	0.94	0.08	52,52,52,52	0
58	MG	2A	3860	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3476	1/1	0.94	0.08	60,60,60,60	0
58	MG	2v	103	1/1	0.94	0.25	54,54,54,54	0
58	MG	1P	202	1/1	0.94	0.08	23,23,23,23	0
58	MG	2w	102	1/1	0.94	0.07	82,82,82,82	0
58	MG	2A	3478	1/1	0.94	0.17	41,41,41,41	0
58	MG	1A	4008	1/1	0.94	0.10	54,54,54,54	0
58	MG	1Q	205	1/1	0.94	0.09	47,47,47,47	0
58	MG	1A	3645	1/1	0.94	0.13	42,42,42,42	0
58	MG	1a	1766	1/1	0.94	0.07	49,49,49,49	0
58	MG	1R	205	1/1	0.94	0.13	29,29,29,29	0
58	MG	1S	203	1/1	0.94	0.07	61,61,61,61	0
58	MG	1T	201	1/1	0.94	0.12	54,54,54,54	0
58	MG	1U	205	1/1	0.94	0.05	33,33,33,33	0
58	MG	2x	104	1/1	0.94	0.18	71,71,71,71	0
58	MG	1A	3831	1/1	0.94	0.06	32,32,32,32	0
58	MG	2A	3495	1/1	0.94	0.06	47,47,47,47	0
58	MG	1V	202	1/1	0.94	0.11	38,38,38,38	0
58	MG	1V	208	1/1	0.94	0.12	58,58,58,58	0
58	MG	2A	3234	1/1	0.94	0.10	57,57,57,57	0
58	MG	2A	3235	1/1	0.94	0.11	49,49,49,49	0
58	MG	1A	3100	1/1	0.94	0.08	39,39,39,39	0
60	ZN	24	501	1/1	0.94	0.10	111,111,111,111	0
58	MG	2A	3200	1/1	0.95	0.11	46,46,46,46	0
58	MG	2A	3201	1/1	0.95	0.11	43,43,43,43	0
58	MG	2A	3483	1/1	0.95	0.28	58,58,58,58	0
58	MG	2A	3202	1/1	0.95	0.15	62,62,62,62	0
58	MG	1A	3803	1/1	0.95	0.07	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3488	1/1	0.95	0.18	41,41,41,41	0
58	MG	2A	3205	1/1	0.95	0.17	54,54,54,54	0
58	MG	1Q	204	1/1	0.95	0.07	52,52,52,52	0
58	MG	1A	3989	1/1	0.95	0.13	55,55,55,55	0
58	MG	1a	1762	1/1	0.95	0.15	45,45,45,45	0
58	MG	1R	201	1/1	0.95	0.10	28,28,28,28	0
58	MG	1A	3990	1/1	0.95	0.07	16,16,16,16	0
58	MG	1A	3122	1/1	0.95	0.07	33,33,33,33	0
58	MG	1A	3172	1/1	0.95	0.13	39,39,39,39	0
58	MG	2A	3214	1/1	0.95	0.20	65,65,65,65	0
58	MG	1a	1769	1/1	0.95	0.07	59,59,59,59	0
58	MG	2A	3217	1/1	0.95	0.12	40,40,40,40	0
58	MG	1A	3319	1/1	0.95	0.08	45,45,45,45	0
58	MG	1T	202	1/1	0.95	0.09	45,45,45,45	0
58	MG	2D	301	1/1	0.95	0.07	40,40,40,40	0
58	MG	1T	203	1/1	0.95	0.14	48,48,48,48	0
58	MG	1A	3057	1/1	0.95	0.10	37,37,37,37	0
58	MG	1A	3811	1/1	0.95	0.05	18,18,18,18	0
58	MG	1A	3127	1/1	0.95	0.11	32,32,32,32	0
58	MG	1A	3635	1/1	0.95	0.04	26,26,26,26	0
58	MG	2A	3519	1/1	0.95	0.10	17,17,17,17	0
58	MG	2E	307	1/1	0.95	0.06	33,33,33,33	0
58	MG	1A	3817	1/1	0.95	0.06	52,52,52,52	0
58	MG	1A	3818	1/1	0.95	0.16	62,62,62,62	0
58	MG	2E	310	1/1	0.95	0.10	32,32,32,32	0
58	MG	2A	3232	1/1	0.95	0.19	44,44,44,44	0
58	MG	2A	3529	1/1	0.95	0.06	36,36,36,36	0
58	MG	1A	3637	1/1	0.95	0.06	18,18,18,18	0
58	MG	1A	3182	1/1	0.95	0.08	34,34,34,34	0
58	MG	2A	3236	1/1	0.95	0.23	60,60,60,60	0
58	MG	1A	3644	1/1	0.95	0.08	33,33,33,33	0
58	MG	1a	1794	1/1	0.95	0.09	69,69,69,69	0
58	MG	1A	4011	1/1	0.95	0.07	30,30,30,30	0
58	MG	2A	3242	1/1	0.95	0.08	48,48,48,48	0
58	MG	1Z	3702	1/1	0.95	0.13	43,43,43,43	0
58	MG	10	102	1/1	0.95	0.16	41,41,41,41	0
58	MG	1a	1800	1/1	0.95	0.05	50,50,50,50	0
58	MG	1a	1802	1/1	0.95	0.06	58,58,58,58	0
58	MG	1A	3828	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3331	1/1	0.95	0.22	48,48,48,48	0
58	MG	1A	3646	1/1	0.95	0.05	12,12,12,12	0
58	MG	1A	4021	1/1	0.95	0.12	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	20	103	1/1	0.95	0.13	58,58,58,58	0
58	MG	2A	3562	1/1	0.95	0.11	27,27,27,27	0
58	MG	1A	3508	1/1	0.95	0.08	32,32,32,32	0
58	MG	1A	3509	1/1	0.95	0.10	46,46,46,46	0
58	MG	1A	3420	1/1	0.95	0.07	41,41,41,41	0
58	MG	2A	3576	1/1	0.95	0.13	49,49,49,49	0
58	MG	1a	1814	1/1	0.95	0.06	47,47,47,47	0
58	MG	28	102	1/1	0.95	0.22	49,49,49,49	0
58	MG	28	103	1/1	0.95	0.08	42,42,42,42	0
58	MG	1A	3332	1/1	0.95	0.27	56,56,56,56	0
58	MG	1A	3656	1/1	0.95	0.09	44,44,44,44	0
58	MG	2A	3258	1/1	0.95	0.12	41,41,41,41	0
58	MG	2A	3259	1/1	0.95	0.07	52,52,52,52	0
58	MG	1A	3015	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3261	1/1	0.95	0.17	54,54,54,54	0
58	MG	2A	3587	1/1	0.95	0.05	22,22,22,22	0
58	MG	2A	3588	1/1	0.95	0.11	44,44,44,44	0
58	MG	1e	201	1/1	0.95	0.08	55,55,55,55	0
58	MG	2A	3591	1/1	0.95	0.10	50,50,50,50	0
58	MG	2a	1611	1/1	0.95	0.20	56,56,56,56	0
58	MG	1A	3513	1/1	0.95	0.08	34,34,34,34	0
58	MG	2A	3265	1/1	0.95	0.18	53,53,53,53	0
58	MG	2a	1614	1/1	0.95	0.20	53,53,53,53	0
58	MG	17	103	1/1	0.95	0.12	30,30,30,30	0
58	MG	1A	3004	1/1	0.95	0.07	23,23,23,23	0
58	MG	18	101	1/1	0.95	0.39	46,46,46,46	0
58	MG	1A	3664	1/1	0.95	0.05	25,25,25,25	0
58	MG	1a	1601	1/1	0.95	0.08	55,55,55,55	0
58	MG	1A	3517	1/1	0.95	0.07	48,48,48,48	0
58	MG	1w	104	1/1	0.95	0.24	53,53,53,53	0
58	MG	1w	105	1/1	0.95	0.08	54,54,54,54	0
58	MG	1A	3666	1/1	0.95	0.05	18,18,18,18	0
58	MG	1A	3846	1/1	0.95	0.14	46,46,46,46	0
58	MG	2A	3278	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3848	1/1	0.95	0.07	55,55,55,55	0
58	MG	2A	3613	1/1	0.95	0.07	54,54,54,54	0
58	MG	2A	3614	1/1	0.95	0.10	37,37,37,37	0
58	MG	1A	3144	1/1	0.95	0.08	39,39,39,39	0
58	MG	1A	3851	1/1	0.95	0.09	48,48,48,48	0
58	MG	1A	3431	1/1	0.95	0.07	42,42,42,42	0
58	MG	2A	3284	1/1	0.95	0.05	38,38,38,38	0
58	MG	1a	1616	1/1	0.95	0.09	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3622	1/1	0.95	0.13	38,38,38,38	0
58	MG	1A	3339	1/1	0.95	0.13	42,42,42,42	0
58	MG	1A	3523	1/1	0.95	0.23	32,32,32,32	0
58	MG	2a	1640	1/1	0.95	0.16	51,51,51,51	0
58	MG	1A	3438	1/1	0.95	0.09	58,58,58,58	0
58	MG	2a	1643	1/1	0.95	0.19	55,55,55,55	0
58	MG	1A	3675	1/1	0.95	0.06	34,34,34,34	0
58	MG	2A	3005	1/1	0.95	0.17	52,52,52,52	0
58	MG	1a	1623	1/1	0.95	0.09	43,43,43,43	0
58	MG	1A	3439	1/1	0.95	0.06	44,44,44,44	0
58	MG	2A	3008	1/1	0.95	0.08	54,54,54,54	0
58	MG	2A	3637	1/1	0.95	0.06	36,36,36,36	0
58	MG	1a	1625	1/1	0.95	0.14	54,54,54,54	0
58	MG	2A	3643	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3263	1/1	0.95	0.05	20,20,20,20	0
58	MG	2A	3646	1/1	0.95	0.10	51,51,51,51	0
58	MG	1A	3036	1/1	0.95	0.09	46,46,46,46	0
58	MG	2A	3648	1/1	0.95	0.10	41,41,41,41	0
58	MG	1a	1628	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3301	1/1	0.95	0.14	56,56,56,56	0
58	MG	1A	3191	1/1	0.95	0.12	40,40,40,40	0
58	MG	2A	3304	1/1	0.95	0.14	55,55,55,55	0
58	MG	2A	3020	1/1	0.95	0.09	52,52,52,52	0
58	MG	2A	3022	1/1	0.95	0.11	42,42,42,42	0
58	MG	1A	4059	1/1	0.95	0.10	61,61,61,61	0
58	MG	1A	4061	1/1	0.95	0.09	34,34,34,34	0
58	MG	1A	3869	1/1	0.95	0.09	44,44,44,44	0
58	MG	2A	3660	1/1	0.95	0.10	47,47,47,47	0
58	MG	1A	3444	1/1	0.95	0.12	42,42,42,42	0
58	MG	1A	3871	1/1	0.95	0.06	19,19,19,19	0
58	MG	2A	3033	1/1	0.95	0.16	42,42,42,42	0
58	MG	1A	3695	1/1	0.95	0.11	22,22,22,22	0
58	MG	1A	3875	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3877	1/1	0.95	0.04	29,29,29,29	0
58	MG	1a	1642	1/1	0.95	0.12	53,53,53,53	0
58	MG	2A	3669	1/1	0.95	0.14	54,54,54,54	0
58	MG	1A	3346	1/1	0.95	0.07	41,41,41,41	0
58	MG	1A	3697	1/1	0.95	0.07	27,27,27,27	0
58	MG	2a	1684	1/1	0.95	0.13	54,54,54,54	0
58	MG	1a	1645	1/1	0.95	0.14	43,43,43,43	0
58	MG	2A	3323	1/1	0.95	0.07	39,39,39,39	0
58	MG	2A	3048	1/1	0.95	0.12	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3534	1/1	0.95	0.09	43,43,43,43	0
58	MG	2A	3051	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3705	1/1	0.95	0.11	47,47,47,47	0
58	MG	1a	1653	1/1	0.95	0.07	45,45,45,45	0
58	MG	2A	3054	1/1	0.95	0.07	57,57,57,57	0
58	MG	2A	3684	1/1	0.95	0.11	48,48,48,48	0
58	MG	1A	3348	1/1	0.95	0.09	36,36,36,36	0
58	MG	1A	3149	1/1	0.95	0.24	36,36,36,36	0
58	MG	1A	4083	1/1	0.95	0.12	46,46,46,46	0
58	MG	2A	3060	1/1	0.95	0.18	54,54,54,54	0
58	MG	2A	3692	1/1	0.95	0.10	51,51,51,51	0
58	MG	2a	1707	1/1	0.95	0.15	51,51,51,51	0
58	MG	1A	4085	1/1	0.95	0.07	43,43,43,43	0
58	MG	1A	3891	1/1	0.95	0.07	28,28,28,28	0
58	MG	2A	3065	1/1	0.95	0.22	53,53,53,53	0
58	MG	1A	3151	1/1	0.95	0.10	30,30,30,30	0
58	MG	2A	3067	1/1	0.95	0.16	49,49,49,49	0
58	MG	2A	3068	1/1	0.95	0.07	34,34,34,34	0
58	MG	2A	3701	1/1	0.95	0.07	56,56,56,56	0
58	MG	1A	3204	1/1	0.95	0.09	34,34,34,34	0
58	MG	1A	3895	1/1	0.95	0.05	34,34,34,34	0
58	MG	1A	3205	1/1	0.95	0.09	44,44,44,44	0
58	MG	1a	1664	1/1	0.95	0.08	60,60,60,60	0
58	MG	2A	3348	1/1	0.95	0.09	55,55,55,55	0
58	MG	2A	3077	1/1	0.95	0.07	49,49,49,49	0
58	MG	1A	3097	1/1	0.95	0.16	31,31,31,31	0
58	MG	1a	1666	1/1	0.95	0.19	50,50,50,50	0
58	MG	1A	3156	1/1	0.95	0.07	39,39,39,39	0
58	MG	1A	3718	1/1	0.95	0.08	65,65,65,65	0
58	MG	1A	3005	1/1	0.95	0.08	40,40,40,40	0
58	MG	2A	3355	1/1	0.95	0.13	62,62,62,62	0
58	MG	2A	3719	1/1	0.95	0.08	26,26,26,26	0
58	MG	2A	3720	1/1	0.95	0.06	31,31,31,31	0
58	MG	1A	3276	1/1	0.95	0.06	34,34,34,34	0
58	MG	1A	3905	1/1	0.95	0.09	26,26,26,26	0
58	MG	1A	3294	1/1	0.95	0.07	43,43,43,43	0
58	MG	1A	3297	1/1	0.95	0.06	31,31,31,31	0
58	MG	1A	3910	1/1	0.95	0.09	40,40,40,40	0
58	MG	1A	3469	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3213	1/1	0.95	0.12	39,39,39,39	0
58	MG	1B	205	1/1	0.95	0.27	55,55,55,55	0
58	MG	2A	3737	1/1	0.95	0.10	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1680	1/1	0.95	0.07	55,55,55,55	0
58	MG	1A	3915	1/1	0.95	0.18	37,37,37,37	0
58	MG	2a	1748	1/1	0.95	0.07	55,55,55,55	0
58	MG	2a	1750	1/1	0.95	0.06	59,59,59,59	0
58	MG	1A	3221	1/1	0.95	0.11	35,35,35,35	0
58	MG	1A	3918	1/1	0.95	0.12	23,23,23,23	0
58	MG	2A	3371	1/1	0.95	0.14	60,60,60,60	0
58	MG	2A	3105	1/1	0.95	0.17	60,60,60,60	0
58	MG	2a	1756	1/1	0.95	0.08	58,58,58,58	0
58	MG	1B	210	1/1	0.95	0.06	37,37,37,37	0
58	MG	1A	3920	1/1	0.95	0.04	28,28,28,28	0
58	MG	2A	3375	1/1	0.95	0.32	61,61,61,61	0
58	MG	1A	3222	1/1	0.95	0.14	43,43,43,43	0
58	MG	2a	1765	1/1	0.95	0.07	42,42,42,42	0
58	MG	2a	1769	1/1	0.95	0.09	62,62,62,62	0
58	MG	1A	3922	1/1	0.95	0.08	28,28,28,28	0
58	MG	1A	3475	1/1	0.95	0.10	33,33,33,33	0
58	MG	2A	3117	1/1	0.95	0.07	41,41,41,41	0
58	MG	2A	3751	1/1	0.95	0.09	45,45,45,45	0
58	MG	2A	3381	1/1	0.95	0.21	40,40,40,40	0
58	MG	2A	3118	1/1	0.95	0.13	63,63,63,63	0
58	MG	2A	3755	1/1	0.95	0.22	50,50,50,50	0
58	MG	2a	1780	1/1	0.95	0.12	54,54,54,54	0
58	MG	1a	1691	1/1	0.95	0.20	37,37,37,37	0
58	MG	1A	3559	1/1	0.95	0.07	47,47,47,47	0
58	MG	2a	1784	1/1	0.95	0.07	53,53,53,53	0
58	MG	1A	3566	1/1	0.95	0.10	36,36,36,36	0
58	MG	1A	3301	1/1	0.95	0.06	41,41,41,41	0
58	MG	2A	3125	1/1	0.95	0.08	49,49,49,49	0
58	MG	1A	3376	1/1	0.95	0.09	52,52,52,52	0
58	MG	1A	3049	1/1	0.95	0.06	15,15,15,15	0
58	MG	1A	3304	1/1	0.95	0.29	58,58,58,58	0
58	MG	1A	3932	1/1	0.95	0.06	39,39,39,39	0
58	MG	2A	3132	1/1	0.95	0.07	58,58,58,58	0
58	MG	1a	1701	1/1	0.95	0.18	48,48,48,48	0
58	MG	2A	3137	1/1	0.95	0.14	39,39,39,39	0
58	MG	1A	3578	1/1	0.95	0.10	44,44,44,44	0
58	MG	1A	3752	1/1	0.95	0.09	55,55,55,55	0
58	MG	1A	3025	1/1	0.95	0.08	41,41,41,41	0
58	MG	2A	3144	1/1	0.95	0.11	42,42,42,42	0
58	MG	2A	3145	1/1	0.95	0.25	68,68,68,68	0
58	MG	1B	230	1/1	0.95	0.06	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3308	1/1	0.95	0.16	39,39,39,39	0
58	MG	2a	1805	1/1	0.95	0.12	53,53,53,53	0
58	MG	2A	3782	1/1	0.95	0.08	45,45,45,45	0
58	MG	2A	3784	1/1	0.95	0.12	46,46,46,46	0
58	MG	1A	3948	1/1	0.95	0.07	18,18,18,18	0
58	MG	1A	3594	1/1	0.95	0.23	32,32,32,32	0
58	MG	1A	3167	1/1	0.95	0.13	29,29,29,29	0
58	MG	1A	3400	1/1	0.95	0.22	36,36,36,36	0
58	MG	2A	3793	1/1	0.95	0.08	53,53,53,53	0
58	MG	2A	3155	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3414	1/1	0.95	0.12	31,31,31,31	0
58	MG	1A	3599	1/1	0.95	0.09	48,48,48,48	0
58	MG	2A	3159	1/1	0.95	0.11	52,52,52,52	0
58	MG	2A	3418	1/1	0.95	0.17	41,41,41,41	0
58	MG	2a	1819	1/1	0.95	0.05	52,52,52,52	0
58	MG	1A	3310	1/1	0.95	0.14	38,38,38,38	0
58	MG	1A	3246	1/1	0.95	0.12	38,38,38,38	0
58	MG	1D	304	1/1	0.95	0.18	32,32,32,32	0
58	MG	2A	3802	1/1	0.95	0.09	73,73,73,73	0
58	MG	2A	3422	1/1	0.95	0.18	39,39,39,39	0
58	MG	2a	1826	1/1	0.95	0.14	47,47,47,47	0
58	MG	2A	3163	1/1	0.95	0.13	48,48,48,48	0
58	MG	1A	3489	1/1	0.95	0.18	34,34,34,34	0
58	MG	1A	3405	1/1	0.95	0.18	31,31,31,31	0
58	MG	2a	1831	1/1	0.95	0.09	47,47,47,47	0
58	MG	2a	1832	1/1	0.95	0.22	67,67,67,67	0
58	MG	1E	305	1/1	0.95	0.12	45,45,45,45	0
58	MG	2a	1834	1/1	0.95	0.08	63,63,63,63	0
58	MG	1E	306	1/1	0.95	0.08	35,35,35,35	0
58	MG	2A	3170	1/1	0.95	0.06	58,58,58,58	0
58	MG	1A	3965	1/1	0.95	0.06	40,40,40,40	0
58	MG	2A	3172	1/1	0.95	0.10	49,49,49,49	0
58	MG	1A	3773	1/1	0.95	0.08	35,35,35,35	0
58	MG	1A	3775	1/1	0.95	0.05	25,25,25,25	0
58	MG	1A	3606	1/1	0.95	0.12	48,48,48,48	0
58	MG	2A	3176	1/1	0.95	0.09	56,56,56,56	0
58	MG	1A	3972	1/1	0.95	0.08	46,46,46,46	0
58	MG	2A	3823	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3443	1/1	0.95	0.20	47,47,47,47	0
58	MG	2A	3179	1/1	0.95	0.21	59,59,59,59	0
58	MG	1A	3973	1/1	0.95	0.11	48,48,48,48	0
58	MG	1F	310	1/1	0.95	0.10	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2q	202	1/1	0.95	0.06	63,63,63,63	0
58	MG	2A	3182	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3779	1/1	0.95	0.06	22,22,22,22	0
58	MG	2A	3451	1/1	0.95	0.24	52,52,52,52	0
58	MG	2A	3452	1/1	0.95	0.09	50,50,50,50	0
58	MG	1a	1742	1/1	0.95	0.07	49,49,49,49	0
58	MG	2A	3186	1/1	0.95	0.07	45,45,45,45	0
58	MG	1G	202	1/1	0.95	0.08	45,45,45,45	0
58	MG	2A	3850	1/1	0.95	0.07	64,64,64,64	0
58	MG	2A	3461	1/1	0.95	0.18	38,38,38,38	0
58	MG	2A	3852	1/1	0.95	0.06	23,23,23,23	0
58	MG	1A	3786	1/1	0.95	0.08	41,41,41,41	0
58	MG	2A	3855	1/1	0.95	0.10	31,31,31,31	0
58	MG	2w	108	1/1	0.95	0.09	46,46,46,46	0
58	MG	1A	3787	1/1	0.95	0.11	48,48,48,48	0
58	MG	2A	3465	1/1	0.95	0.20	50,50,50,50	0
58	MG	2A	3864	1/1	0.95	0.07	56,56,56,56	0
58	MG	2A	3865	1/1	0.95	0.07	54,54,54,54	0
58	MG	2x	102	1/1	0.95	0.15	43,43,43,43	0
58	MG	2A	3868	1/1	0.95	0.08	47,47,47,47	0
58	MG	1A	3790	1/1	0.95	0.07	42,42,42,42	0
58	MG	1N	202	1/1	0.95	0.12	41,41,41,41	0
58	MG	2A	3471	1/1	0.95	0.05	42,42,42,42	0
58	MG	2x	107	1/1	0.95	0.05	31,31,31,31	0
58	MG	1A	3407	1/1	0.95	0.15	29,29,29,29	0
58	MG	2A	3873	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3408	1/1	0.95	0.13	46,46,46,46	0
58	MG	1A	3797	1/1	0.95	0.09	46,46,46,46	0
58	MG	1A	3090	1/1	0.95	0.11	41,41,41,41	0
58	MG	2y	106	1/1	0.95	0.10	66,66,66,66	0
59	K	2A	3467	1/1	0.95	0.08	50,50,50,50	0
58	MG	1A	3802	1/1	0.95	0.09	16,16,16,16	0
58	MG	1A	4013	1/1	0.96	0.06	11,11,11,11	0
58	MG	1A	3006	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3547	1/1	0.96	0.06	40,40,40,40	0
58	MG	13	102	1/1	0.96	0.10	38,38,38,38	0
58	MG	2A	3550	1/1	0.96	0.07	36,36,36,36	0
58	MG	1A	3185	1/1	0.96	0.10	56,56,56,56	0
58	MG	2A	3552	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3409	1/1	0.96	0.11	39,39,39,39	0
58	MG	1w	107	1/1	0.96	0.10	47,47,47,47	0
58	MG	15	107	1/1	0.96	0.08	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3321	1/1	0.96	0.13	49,49,49,49	0
58	MG	1A	3411	1/1	0.96	0.07	45,45,45,45	0
58	MG	1x	103	1/1	0.96	0.04	45,45,45,45	0
58	MG	2A	3574	1/1	0.96	0.10	40,40,40,40	0
58	MG	2F	301	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3652	1/1	0.96	0.06	23,23,23,23	0
58	MG	1A	3834	1/1	0.96	0.16	39,39,39,39	0
58	MG	1A	3133	1/1	0.96	0.11	32,32,32,32	0
58	MG	2F	305	1/1	0.96	0.06	41,41,41,41	0
58	MG	2A	3578	1/1	0.96	0.05	33,33,33,33	0
58	MG	2F	308	1/1	0.96	0.15	44,44,44,44	0
58	MG	1A	3324	1/1	0.96	0.17	31,31,31,31	0
58	MG	1A	3325	1/1	0.96	0.06	48,48,48,48	0
58	MG	1x	110	1/1	0.96	0.05	48,48,48,48	0
58	MG	2Q	201	1/1	0.96	0.09	48,48,48,48	0
58	MG	1A	3658	1/1	0.96	0.07	35,35,35,35	0
58	MG	2Q	203	1/1	0.96	0.15	47,47,47,47	0
58	MG	2R	201	1/1	0.96	0.15	58,58,58,58	0
58	MG	1A	3840	1/1	0.96	0.04	30,30,30,30	0
58	MG	2A	3001	1/1	0.96	0.19	43,43,43,43	0
58	MG	1a	1604	1/1	0.96	0.10	55,55,55,55	0
58	MG	2T	204	1/1	0.96	0.06	58,58,58,58	0
58	MG	1A	3259	1/1	0.96	0.07	26,26,26,26	0
58	MG	2V	201	1/1	0.96	0.15	46,46,46,46	0
58	MG	1A	3136	1/1	0.96	0.09	48,48,48,48	0
58	MG	1A	3138	1/1	0.96	0.26	35,35,35,35	0
58	MG	2A	3594	1/1	0.96	0.09	52,52,52,52	0
58	MG	1a	1612	1/1	0.96	0.07	63,63,63,63	0
58	MG	2A	3287	1/1	0.96	0.08	55,55,55,55	0
58	MG	1A	3262	1/1	0.96	0.09	21,21,21,21	0
58	MG	1A	4040	1/1	0.96	0.05	38,38,38,38	0
58	MG	1a	1615	1/1	0.96	0.06	50,50,50,50	0
58	MG	2A	3015	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	4041	1/1	0.96	0.06	43,43,43,43	0
58	MG	2A	3018	1/1	0.96	0.12	49,49,49,49	0
58	MG	1A	3063	1/1	0.96	0.14	42,42,42,42	0
58	MG	1A	3336	1/1	0.96	0.20	46,46,46,46	0
58	MG	1A	3022	1/1	0.96	0.07	40,40,40,40	0
58	MG	1A	3521	1/1	0.96	0.17	29,29,29,29	0
58	MG	1A	3201	1/1	0.96	0.07	30,30,30,30	0
58	MG	1A	3428	1/1	0.96	0.10	39,39,39,39	0
58	MG	1A	3011	1/1	0.96	0.09	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3430	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3676	1/1	0.96	0.08	38,38,38,38	0
58	MG	2A	3616	1/1	0.96	0.14	53,53,53,53	0
58	MG	1A	3069	1/1	0.96	0.05	40,40,40,40	0
58	MG	2A	3618	1/1	0.96	0.07	23,23,23,23	0
58	MG	2A	3307	1/1	0.96	0.06	54,54,54,54	0
58	MG	1A	3860	1/1	0.96	0.08	15,15,15,15	0
58	MG	1A	3862	1/1	0.96	0.07	33,33,33,33	0
58	MG	2A	3310	1/1	0.96	0.19	42,42,42,42	0
58	MG	1A	3207	1/1	0.96	0.09	26,26,26,26	0
58	MG	1A	3864	1/1	0.96	0.28	39,39,39,39	0
58	MG	2A	3313	1/1	0.96	0.07	55,55,55,55	0
58	MG	1a	1636	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3434	1/1	0.96	0.07	32,32,32,32	0
58	MG	1A	3152	1/1	0.96	0.10	28,28,28,28	0
58	MG	1A	3001	1/1	0.96	0.06	32,32,32,32	0
58	MG	1A	3694	1/1	0.96	0.10	33,33,33,33	0
58	MG	1A	3533	1/1	0.96	0.07	56,56,56,56	0
58	MG	2A	3639	1/1	0.96	0.06	35,35,35,35	0
58	MG	1A	3272	1/1	0.96	0.10	40,40,40,40	0
58	MG	2A	3641	1/1	0.96	0.06	30,30,30,30	0
58	MG	1A	3102	1/1	0.96	0.08	43,43,43,43	0
58	MG	2A	3056	1/1	0.96	0.17	52,52,52,52	0
58	MG	2a	1629	1/1	0.96	0.18	62,62,62,62	0
58	MG	1A	4075	1/1	0.96	0.07	14,14,14,14	0
58	MG	1A	3874	1/1	0.96	0.10	32,32,32,32	0
58	MG	1a	1646	1/1	0.96	0.12	49,49,49,49	0
58	MG	1A	4077	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3327	1/1	0.96	0.16	47,47,47,47	0
58	MG	2A	3061	1/1	0.96	0.08	37,37,37,37	0
58	MG	1A	3698	1/1	0.96	0.09	55,55,55,55	0
58	MG	1a	1650	1/1	0.96	0.06	42,42,42,42	0
58	MG	1A	3876	1/1	0.96	0.18	29,29,29,29	0
58	MG	1A	3699	1/1	0.96	0.10	26,26,26,26	0
58	MG	1A	3053	1/1	0.96	0.09	32,32,32,32	0
58	MG	2A	3335	1/1	0.96	0.12	51,51,51,51	0
58	MG	2A	3659	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3879	1/1	0.96	0.12	28,28,28,28	0
58	MG	1A	3880	1/1	0.96	0.21	28,28,28,28	0
58	MG	1a	1658	1/1	0.96	0.06	46,46,46,46	0
58	MG	2A	3072	1/1	0.96	0.05	46,46,46,46	0
58	MG	1A	3882	1/1	0.96	0.10	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	4087	1/1	0.96	0.05	17,17,17,17	0
58	MG	2A	3076	1/1	0.96	0.16	42,42,42,42	0
58	MG	2A	3667	1/1	0.96	0.09	51,51,51,51	0
58	MG	1A	3883	1/1	0.96	0.09	24,24,24,24	0
58	MG	1A	3217	1/1	0.96	0.05	44,44,44,44	0
58	MG	2A	3670	1/1	0.96	0.10	60,60,60,60	0
58	MG	2A	3671	1/1	0.96	0.06	31,31,31,31	0
58	MG	1A	3541	1/1	0.96	0.17	38,38,38,38	0
58	MG	1A	3446	1/1	0.96	0.08	53,53,53,53	0
58	MG	1A	3543	1/1	0.96	0.14	50,50,50,50	0
58	MG	1A	3281	1/1	0.96	0.06	36,36,36,36	0
58	MG	1A	3359	1/1	0.96	0.09	48,48,48,48	0
58	MG	2A	3086	1/1	0.96	0.05	44,44,44,44	0
58	MG	2a	1663	1/1	0.96	0.05	57,57,57,57	0
58	MG	2A	3087	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3449	1/1	0.96	0.12	33,33,33,33	0
58	MG	2A	3089	1/1	0.96	0.07	48,48,48,48	0
58	MG	1a	1669	1/1	0.96	0.17	53,53,53,53	0
58	MG	1A	3450	1/1	0.96	0.22	49,49,49,49	0
58	MG	1A	3293	1/1	0.96	0.07	37,37,37,37	0
58	MG	2a	1671	1/1	0.96	0.06	51,51,51,51	0
58	MG	1a	1672	1/1	0.96	0.18	48,48,48,48	0
58	MG	1A	4102	1/1	0.96	0.09	38,38,38,38	0
58	MG	2a	1674	1/1	0.96	0.13	39,39,39,39	0
58	MG	2a	1677	1/1	0.96	0.20	52,52,52,52	0
58	MG	2A	3689	1/1	0.96	0.06	35,35,35,35	0
58	MG	1A	3896	1/1	0.96	0.07	12,12,12,12	0
58	MG	1A	3220	1/1	0.96	0.08	37,37,37,37	0
58	MG	1A	3721	1/1	0.96	0.09	50,50,50,50	0
58	MG	1A	4108	1/1	0.96	0.14	43,43,43,43	0
58	MG	1A	3722	1/1	0.96	0.06	23,23,23,23	0
58	MG	1A	3362	1/1	0.96	0.14	33,33,33,33	0
58	MG	1A	3457	1/1	0.96	0.09	33,33,33,33	0
58	MG	2a	1687	1/1	0.96	0.16	52,52,52,52	0
58	MG	1A	3083	1/1	0.96	0.11	44,44,44,44	0
58	MG	2a	1689	1/1	0.96	0.12	51,51,51,51	0
58	MG	2A	3700	1/1	0.96	0.09	30,30,30,30	0
58	MG	2a	1691	1/1	0.96	0.18	51,51,51,51	0
58	MG	1A	3109	1/1	0.96	0.18	39,39,39,39	0
58	MG	2a	1693	1/1	0.96	0.22	53,53,53,53	0
58	MG	1A	3906	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3223	1/1	0.96	0.09	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3115	1/1	0.96	0.18	54,54,54,54	0
58	MG	1A	3224	1/1	0.96	0.08	31,31,31,31	0
58	MG	2a	1701	1/1	0.96	0.22	51,51,51,51	0
58	MG	1A	3114	1/1	0.96	0.12	32,32,32,32	0
58	MG	1A	3561	1/1	0.96	0.10	33,33,33,33	0
58	MG	1A	3369	1/1	0.96	0.07	52,52,52,52	0
58	MG	1A	3465	1/1	0.96	0.07	45,45,45,45	0
58	MG	1A	3741	1/1	0.96	0.04	42,42,42,42	0
58	MG	2A	3382	1/1	0.96	0.33	52,52,52,52	0
58	MG	1B	219	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	3917	1/1	0.96	0.08	28,28,28,28	0
58	MG	1A	3742	1/1	0.96	0.07	26,26,26,26	0
58	MG	2A	3386	1/1	0.96	0.08	60,60,60,60	0
58	MG	2a	1713	1/1	0.96	0.07	64,64,64,64	0
58	MG	2a	1714	1/1	0.96	0.17	57,57,57,57	0
58	MG	1A	3115	1/1	0.96	0.12	37,37,37,37	0
58	MG	2A	3130	1/1	0.96	0.15	46,46,46,46	0
58	MG	1a	1697	1/1	0.96	0.32	54,54,54,54	0
58	MG	1A	3371	1/1	0.96	0.08	44,44,44,44	0
58	MG	2A	3134	1/1	0.96	0.19	48,48,48,48	0
58	MG	1A	3119	1/1	0.96	0.15	27,27,27,27	0
58	MG	1A	3573	1/1	0.96	0.24	45,45,45,45	0
58	MG	2A	3731	1/1	0.96	0.09	55,55,55,55	0
58	MG	1A	3749	1/1	0.96	0.06	14,14,14,14	0
58	MG	2A	3736	1/1	0.96	0.11	46,46,46,46	0
58	MG	1A	3750	1/1	0.96	0.04	9,9,9,9	0
58	MG	1A	3374	1/1	0.96	0.09	45,45,45,45	0
58	MG	1A	3580	1/1	0.96	0.10	40,40,40,40	0
58	MG	1a	1706	1/1	0.96	0.15	44,44,44,44	0
58	MG	2a	1732	1/1	0.96	0.15	48,48,48,48	0
58	MG	1A	3582	1/1	0.96	0.16	44,44,44,44	0
58	MG	1A	3754	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	3585	1/1	0.96	0.05	27,27,27,27	0
58	MG	1A	3236	1/1	0.96	0.07	46,46,46,46	0
58	MG	1A	3937	1/1	0.96	0.04	32,32,32,32	0
58	MG	1A	3591	1/1	0.96	0.11	40,40,40,40	0
58	MG	1a	1714	1/1	0.96	0.24	52,52,52,52	0
58	MG	1A	3941	1/1	0.96	0.07	26,26,26,26	0
58	MG	1D	303	1/1	0.96	0.21	44,44,44,44	0
58	MG	1A	3379	1/1	0.96	0.08	47,47,47,47	0
58	MG	1D	310	1/1	0.96	0.07	37,37,37,37	0
58	MG	2A	3415	1/1	0.96	0.23	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1723	1/1	0.96	0.07	52,52,52,52	0
58	MG	1A	3380	1/1	0.96	0.23	46,46,46,46	0
58	MG	1A	3947	1/1	0.96	0.04	15,15,15,15	0
58	MG	1A	3595	1/1	0.96	0.09	46,46,46,46	0
58	MG	1a	1727	1/1	0.96	0.04	39,39,39,39	0
58	MG	2a	1752	1/1	0.96	0.06	55,55,55,55	0
58	MG	1A	3596	1/1	0.96	0.27	42,42,42,42	0
58	MG	1A	3306	1/1	0.96	0.08	25,25,25,25	0
58	MG	1A	3768	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3954	1/1	0.96	0.08	64,64,64,64	0
58	MG	1E	310	1/1	0.96	0.07	21,21,21,21	0
58	MG	1A	3769	1/1	0.96	0.05	20,20,20,20	0
58	MG	2A	3766	1/1	0.96	0.08	57,57,57,57	0
58	MG	1A	3771	1/1	0.96	0.07	23,23,23,23	0
58	MG	1E	314	1/1	0.96	0.07	40,40,40,40	0
58	MG	1A	3055	1/1	0.96	0.08	40,40,40,40	0
58	MG	1F	307	1/1	0.96	0.08	20,20,20,20	0
58	MG	1F	309	1/1	0.96	0.06	41,41,41,41	0
58	MG	2a	1772	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	3958	1/1	0.96	0.06	44,44,44,44	0
58	MG	2a	1774	1/1	0.96	0.12	53,53,53,53	0
58	MG	1A	3384	1/1	0.96	0.07	49,49,49,49	0
58	MG	2a	1776	1/1	0.96	0.09	57,57,57,57	0
58	MG	2A	3438	1/1	0.96	0.12	47,47,47,47	0
58	MG	2A	3439	1/1	0.96	0.18	55,55,55,55	0
58	MG	1A	3774	1/1	0.96	0.08	19,19,19,19	0
58	MG	1A	3385	1/1	0.96	0.15	31,31,31,31	0
58	MG	2A	3783	1/1	0.96	0.06	56,56,56,56	0
58	MG	2A	3442	1/1	0.96	0.18	42,42,42,42	0
58	MG	2a	1783	1/1	0.96	0.09	41,41,41,41	0
58	MG	1a	1753	1/1	0.96	0.09	46,46,46,46	0
58	MG	1A	3776	1/1	0.96	0.06	14,14,14,14	0
58	MG	1A	3247	1/1	0.96	0.08	47,47,47,47	0
58	MG	1A	3088	1/1	0.96	0.15	29,29,29,29	0
58	MG	1A	3388	1/1	0.96	0.05	33,33,33,33	0
58	MG	1A	3389	1/1	0.96	0.19	22,22,22,22	0
58	MG	1O	202	1/1	0.96	0.24	44,44,44,44	0
58	MG	1O	203	1/1	0.96	0.11	42,42,42,42	0
58	MG	2A	3453	1/1	0.96	0.20	41,41,41,41	0
58	MG	1A	3975	1/1	0.96	0.08	47,47,47,47	0
58	MG	2A	3456	1/1	0.96	0.22	42,42,42,42	0
58	MG	2A	3457	1/1	0.96	0.28	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3976	1/1	0.96	0.12	41,41,41,41	0
58	MG	2A	3459	1/1	0.96	0.08	34,34,34,34	0
58	MG	2a	1800	1/1	0.96	0.07	52,52,52,52	0
58	MG	1a	1765	1/1	0.96	0.06	68,68,68,68	0
58	MG	1A	3788	1/1	0.96	0.05	22,22,22,22	0
58	MG	1A	3789	1/1	0.96	0.06	66,66,66,66	0
58	MG	1A	3002	1/1	0.96	0.07	46,46,46,46	0
58	MG	2A	3808	1/1	0.96	0.07	57,57,57,57	0
58	MG	2A	3203	1/1	0.96	0.08	53,53,53,53	0
58	MG	1A	3980	1/1	0.96	0.11	59,59,59,59	0
58	MG	1Q	206	1/1	0.96	0.10	33,33,33,33	0
58	MG	2A	3470	1/1	0.96	0.12	45,45,45,45	0
58	MG	1A	3608	1/1	0.96	0.07	39,39,39,39	0
58	MG	1A	3610	1/1	0.96	0.05	27,27,27,27	0
58	MG	2A	3475	1/1	0.96	0.09	53,53,53,53	0
58	MG	1A	3391	1/1	0.96	0.06	37,37,37,37	0
58	MG	1a	1776	1/1	0.96	0.07	40,40,40,40	0
58	MG	1S	202	1/1	0.96	0.08	44,44,44,44	0
58	MG	2A	3822	1/1	0.96	0.06	60,60,60,60	0
58	MG	2A	3479	1/1	0.96	0.20	45,45,45,45	0
58	MG	2A	3824	1/1	0.96	0.07	26,26,26,26	0
58	MG	1a	1778	1/1	0.96	0.07	53,53,53,53	0
58	MG	2a	1821	1/1	0.96	0.09	57,57,57,57	0
58	MG	2A	3828	1/1	0.96	0.05	38,38,38,38	0
58	MG	2A	3829	1/1	0.96	0.08	30,30,30,30	0
58	MG	2A	3830	1/1	0.96	0.07	33,33,33,33	0
58	MG	1A	3800	1/1	0.96	0.05	16,16,16,16	0
58	MG	1A	3490	1/1	0.96	0.10	34,34,34,34	0
58	MG	2A	3837	1/1	0.96	0.08	44,44,44,44	0
58	MG	1A	3393	1/1	0.96	0.13	58,58,58,58	0
58	MG	1a	1785	1/1	0.96	0.07	53,53,53,53	0
58	MG	2a	1830	1/1	0.96	0.13	42,42,42,42	0
58	MG	1A	3492	1/1	0.96	0.12	50,50,50,50	0
58	MG	1U	203	1/1	0.96	0.10	35,35,35,35	0
58	MG	1U	204	1/1	0.96	0.13	28,28,28,28	0
58	MG	1A	3620	1/1	0.96	0.08	38,38,38,38	0
58	MG	2A	3492	1/1	0.96	0.06	35,35,35,35	0
58	MG	2a	1836	1/1	0.96	0.08	55,55,55,55	0
58	MG	2A	3848	1/1	0.96	0.06	51,51,51,51	0
58	MG	1a	1793	1/1	0.96	0.06	71,71,71,71	0
58	MG	1A	3623	1/1	0.96	0.11	10,10,10,10	0
58	MG	2a	1840	1/1	0.96	0.07	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3059	1/1	0.96	0.05	29,29,29,29	0
58	MG	1V	203	1/1	0.96	0.18	27,27,27,27	0
58	MG	1A	3628	1/1	0.96	0.06	31,31,31,31	0
58	MG	2g	201	1/1	0.96	0.12	56,56,56,56	0
58	MG	2A	3854	1/1	0.96	0.05	49,49,49,49	0
58	MG	2A	3231	1/1	0.96	0.12	42,42,42,42	0
58	MG	2l	203	1/1	0.96	0.08	52,52,52,52	0
58	MG	1A	3401	1/1	0.96	0.08	53,53,53,53	0
58	MG	2A	3857	1/1	0.96	0.07	33,33,33,33	0
58	MG	2A	3858	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3504	1/1	0.96	0.06	43,43,43,43	0
58	MG	2A	3862	1/1	0.96	0.07	42,42,42,42	0
58	MG	2A	3863	1/1	0.96	0.10	43,43,43,43	0
58	MG	1A	3812	1/1	0.96	0.21	16,16,16,16	0
58	MG	1a	1803	1/1	0.96	0.06	53,53,53,53	0
58	MG	1W	205	1/1	0.96	0.14	38,38,38,38	0
58	MG	1a	1806	1/1	0.96	0.18	41,41,41,41	0
58	MG	1W	206	1/1	0.96	0.15	24,24,24,24	0
58	MG	1A	3495	1/1	0.96	0.07	42,42,42,42	0
58	MG	1Y	201	1/1	0.96	0.12	41,41,41,41	0
58	MG	1A	3130	1/1	0.96	0.07	44,44,44,44	0
58	MG	1a	1811	1/1	0.96	0.12	50,50,50,50	0
58	MG	2A	3875	1/1	0.96	0.11	50,50,50,50	0
58	MG	2A	3518	1/1	0.96	0.09	36,36,36,36	0
58	MG	1A	3317	1/1	0.96	0.17	53,53,53,53	0
58	MG	2A	3878	1/1	0.96	0.13	50,50,50,50	0
58	MG	1A	3254	1/1	0.96	0.17	34,34,34,34	0
58	MG	2A	3523	1/1	0.96	0.11	52,52,52,52	0
58	MG	2w	111	1/1	0.96	0.07	53,53,53,53	0
58	MG	2A	3524	1/1	0.96	0.11	50,50,50,50	0
58	MG	2A	3525	1/1	0.96	0.11	44,44,44,44	0
58	MG	1A	3642	1/1	0.96	0.04	15,15,15,15	0
58	MG	10	101	1/1	0.96	0.13	39,39,39,39	0
58	MG	1A	4004	1/1	0.96	0.07	10,10,10,10	0
58	MG	10	105	1/1	0.96	0.17	53,53,53,53	0
58	MG	1A	3643	1/1	0.96	0.07	42,42,42,42	0
58	MG	2A	3535	1/1	0.96	0.06	29,29,29,29	0
58	MG	1e	202	1/1	0.96	0.19	56,56,56,56	0
58	MG	2B	209	1/1	0.96	0.13	50,50,50,50	0
58	MG	2A	3538	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3822	1/1	0.96	0.18	25,25,25,25	0
58	MG	1A	3823	1/1	0.96	0.08	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3824	1/1	0.96	0.07	23,23,23,23	0
58	MG	1A	4012	1/1	0.96	0.04	24,24,24,24	0
58	MG	1n	101	1/1	0.96	0.06	33,33,33,33	0
58	MG	2A	3880	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3227	1/1	0.97	0.11	41,41,41,41	0
58	MG	1A	3636	1/1	0.97	0.04	31,31,31,31	0
58	MG	2A	3216	1/1	0.97	0.09	38,38,38,38	0
58	MG	1A	3228	1/1	0.97	0.06	34,34,34,34	0
58	MG	2A	3517	1/1	0.97	0.11	32,32,32,32	0
58	MG	2B	203	1/1	0.97	0.08	56,56,56,56	0
58	MG	2A	3218	1/1	0.97	0.09	38,38,38,38	0
58	MG	1a	1783	1/1	0.97	0.06	45,45,45,45	0
58	MG	1U	206	1/1	0.97	0.12	39,39,39,39	0
58	MG	2A	3521	1/1	0.97	0.08	33,33,33,33	0
58	MG	1U	207	1/1	0.97	0.16	30,30,30,30	0
58	MG	2A	3222	1/1	0.97	0.16	41,41,41,41	0
58	MG	1A	3394	1/1	0.97	0.17	49,49,49,49	0
58	MG	1A	3815	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3997	1/1	0.97	0.06	41,41,41,41	0
58	MG	1a	1792	1/1	0.97	0.04	56,56,56,56	0
58	MG	2B	215	1/1	0.97	0.14	49,49,49,49	0
58	MG	2A	3530	1/1	0.97	0.06	49,49,49,49	0
58	MG	2A	3531	1/1	0.97	0.06	26,26,26,26	0
58	MG	1V	204	1/1	0.97	0.30	37,37,37,37	0
58	MG	2A	3229	1/1	0.97	0.11	44,44,44,44	0
58	MG	1V	207	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3641	1/1	0.97	0.07	29,29,29,29	0
58	MG	1A	3396	1/1	0.97	0.22	35,35,35,35	0
58	MG	2A	3233	1/1	0.97	0.13	36,36,36,36	0
58	MG	1A	3397	1/1	0.97	0.07	21,21,21,21	0
58	MG	1a	1799	1/1	0.97	0.04	63,63,63,63	0
58	MG	1A	3398	1/1	0.97	0.06	42,42,42,42	0
58	MG	1a	1801	1/1	0.97	0.05	57,57,57,57	0
58	MG	1A	3229	1/1	0.97	0.11	40,40,40,40	0
58	MG	2A	3545	1/1	0.97	0.04	38,38,38,38	0
58	MG	2A	3239	1/1	0.97	0.05	37,37,37,37	0
58	MG	1X	104	1/1	0.97	0.14	35,35,35,35	0
58	MG	2A	3241	1/1	0.97	0.17	42,42,42,42	0
58	MG	2A	3549	1/1	0.97	0.04	46,46,46,46	0
58	MG	1X	105	1/1	0.97	0.05	36,36,36,36	0
58	MG	1A	3499	1/1	0.97	0.13	44,44,44,44	0
58	MG	1A	3312	1/1	0.97	0.10	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3825	1/1	0.97	0.04	18,18,18,18	0
58	MG	2F	307	1/1	0.97	0.14	39,39,39,39	0
58	MG	2A	3556	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	3826	1/1	0.97	0.04	27,27,27,27	0
58	MG	1A	3231	1/1	0.97	0.13	25,25,25,25	0
58	MG	1A	3651	1/1	0.97	0.05	24,24,24,24	0
58	MG	1A	3829	1/1	0.97	0.04	29,29,29,29	0
58	MG	2A	3565	1/1	0.97	0.07	26,26,26,26	0
58	MG	2A	3566	1/1	0.97	0.11	35,35,35,35	0
58	MG	1A	4016	1/1	0.97	0.06	16,16,16,16	0
58	MG	2A	3571	1/1	0.97	0.04	34,34,34,34	0
58	MG	2A	3573	1/1	0.97	0.08	30,30,30,30	0
58	MG	10	103	1/1	0.97	0.05	33,33,33,33	0
58	MG	10	104	1/1	0.97	0.14	28,28,28,28	0
58	MG	1a	1816	1/1	0.97	0.14	38,38,38,38	0
58	MG	1A	3403	1/1	0.97	0.20	52,52,52,52	0
58	MG	1A	3033	1/1	0.97	0.18	23,23,23,23	0
58	MG	10	107	1/1	0.97	0.05	35,35,35,35	0
58	MG	1A	3654	1/1	0.97	0.04	26,26,26,26	0
58	MG	1f	201	1/1	0.97	0.13	46,46,46,46	0
58	MG	2A	3583	1/1	0.97	0.08	32,32,32,32	0
58	MG	1A	3505	1/1	0.97	0.11	26,26,26,26	0
58	MG	1A	3024	1/1	0.97	0.11	36,36,36,36	0
58	MG	1A	3118	1/1	0.97	0.20	42,42,42,42	0
58	MG	2A	3263	1/1	0.97	0.06	53,53,53,53	0
58	MG	25	103	1/1	0.97	0.05	41,41,41,41	0
58	MG	11	103	1/1	0.97	0.04	28,28,28,28	0
58	MG	1A	3836	1/1	0.97	0.07	49,49,49,49	0
58	MG	1A	3659	1/1	0.97	0.04	30,30,30,30	0
58	MG	2A	3592	1/1	0.97	0.08	52,52,52,52	0
58	MG	1A	4028	1/1	0.97	0.08	56,56,56,56	0
58	MG	2A	3595	1/1	0.97	0.06	53,53,53,53	0
58	MG	2a	1601	1/1	0.97	0.05	47,47,47,47	0
58	MG	1v	102	1/1	0.97	0.06	47,47,47,47	0
58	MG	2A	3269	1/1	0.97	0.07	47,47,47,47	0
58	MG	1A	3237	1/1	0.97	0.11	33,33,33,33	0
58	MG	1w	103	1/1	0.97	0.10	37,37,37,37	0
58	MG	2A	3602	1/1	0.97	0.07	52,52,52,52	0
58	MG	1A	3238	1/1	0.97	0.05	51,51,51,51	0
58	MG	15	103	1/1	0.97	0.14	33,33,33,33	0
58	MG	15	104	1/1	0.97	0.14	28,28,28,28	0
58	MG	2A	3275	1/1	0.97	0.05	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3239	1/1	0.97	0.20	25,25,25,25	0
58	MG	1A	3240	1/1	0.97	0.09	23,23,23,23	0
58	MG	1A	3241	1/1	0.97	0.07	37,37,37,37	0
58	MG	1x	102	1/1	0.97	0.11	48,48,48,48	0
58	MG	1A	3323	1/1	0.97	0.12	29,29,29,29	0
58	MG	1A	3667	1/1	0.97	0.03	14,14,14,14	0
58	MG	2A	3282	1/1	0.97	0.12	52,52,52,52	0
58	MG	1A	3516	1/1	0.97	0.11	16,16,16,16	0
58	MG	1A	3414	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3242	1/1	0.97	0.10	26,26,26,26	0
58	MG	1A	3061	1/1	0.97	0.06	28,28,28,28	0
58	MG	1A	3673	1/1	0.97	0.05	19,19,19,19	0
58	MG	1x	111	1/1	0.97	0.10	49,49,49,49	0
58	MG	1x	112	1/1	0.97	0.12	49,49,49,49	0
58	MG	2a	1625	1/1	0.97	0.06	46,46,46,46	0
58	MG	2A	3290	1/1	0.97	0.09	45,45,45,45	0
58	MG	1A	3327	1/1	0.97	0.08	41,41,41,41	0
58	MG	2A	3623	1/1	0.97	0.10	33,33,33,33	0
58	MG	1a	1605	1/1	0.97	0.08	43,43,43,43	0
58	MG	1z	101	1/1	0.97	0.06	59,59,59,59	0
58	MG	2a	1631	1/1	0.97	0.09	66,66,66,66	0
58	MG	1A	3328	1/1	0.97	0.06	40,40,40,40	0
58	MG	2A	3002	1/1	0.97	0.22	44,44,44,44	0
58	MG	2A	3628	1/1	0.97	0.06	30,30,30,30	0
58	MG	1a	1608	1/1	0.97	0.14	40,40,40,40	0
58	MG	2A	3297	1/1	0.97	0.09	45,45,45,45	0
58	MG	2A	3004	1/1	0.97	0.20	48,48,48,48	0
58	MG	1A	3121	1/1	0.97	0.14	41,41,41,41	0
58	MG	2A	3635	1/1	0.97	0.08	53,53,53,53	0
58	MG	1A	3856	1/1	0.97	0.09	18,18,18,18	0
58	MG	2a	1641	1/1	0.97	0.10	50,50,50,50	0
58	MG	2A	3638	1/1	0.97	0.11	49,49,49,49	0
58	MG	1A	3857	1/1	0.97	0.10	46,46,46,46	0
58	MG	1A	3678	1/1	0.97	0.04	18,18,18,18	0
58	MG	1A	4051	1/1	0.97	0.04	29,29,29,29	0
58	MG	2A	3642	1/1	0.97	0.05	31,31,31,31	0
58	MG	1A	3680	1/1	0.97	0.04	15,15,15,15	0
58	MG	1A	4053	1/1	0.97	0.04	34,34,34,34	0
58	MG	1a	1617	1/1	0.97	0.06	38,38,38,38	0
58	MG	1A	3681	1/1	0.97	0.03	22,22,22,22	0
58	MG	1A	3861	1/1	0.97	0.08	20,20,20,20	0
58	MG	1a	1620	1/1	0.97	0.04	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3330	1/1	0.97	0.09	30,30,30,30	0
58	MG	1A	3525	1/1	0.97	0.13	26,26,26,26	0
58	MG	1A	3091	1/1	0.97	0.08	28,28,28,28	0
58	MG	1A	3688	1/1	0.97	0.06	15,15,15,15	0
58	MG	2A	3028	1/1	0.97	0.28	46,46,46,46	0
58	MG	2A	3655	1/1	0.97	0.10	40,40,40,40	0
58	MG	1A	3123	1/1	0.97	0.12	44,44,44,44	0
58	MG	1A	3528	1/1	0.97	0.05	39,39,39,39	0
58	MG	1A	3423	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	3424	1/1	0.97	0.07	48,48,48,48	0
58	MG	2A	3035	1/1	0.97	0.08	30,30,30,30	0
58	MG	1A	4071	1/1	0.97	0.04	14,14,14,14	0
58	MG	1a	1630	1/1	0.97	0.13	53,53,53,53	0
58	MG	1A	3040	1/1	0.97	0.11	28,28,28,28	0
58	MG	2A	3040	1/1	0.97	0.05	44,44,44,44	0
58	MG	1a	1632	1/1	0.97	0.19	55,55,55,55	0
58	MG	2a	1669	1/1	0.97	0.12	38,38,38,38	0
58	MG	1a	1633	1/1	0.97	0.15	29,29,29,29	0
58	MG	1A	3872	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3044	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	3426	1/1	0.97	0.14	49,49,49,49	0
58	MG	2A	3046	1/1	0.97	0.10	42,42,42,42	0
58	MG	2A	3047	1/1	0.97	0.26	54,54,54,54	0
58	MG	2a	1678	1/1	0.97	0.05	41,41,41,41	0
58	MG	1A	3427	1/1	0.97	0.16	43,43,43,43	0
58	MG	2A	3049	1/1	0.97	0.13	21,21,21,21	0
58	MG	1A	3020	1/1	0.97	0.15	49,49,49,49	0
58	MG	1A	3700	1/1	0.97	0.06	35,35,35,35	0
58	MG	2A	3676	1/1	0.97	0.07	35,35,35,35	0
58	MG	1A	3535	1/1	0.97	0.07	49,49,49,49	0
58	MG	1A	3704	1/1	0.97	0.05	12,12,12,12	0
58	MG	2A	3339	1/1	0.97	0.11	55,55,55,55	0
58	MG	1A	3064	1/1	0.97	0.12	39,39,39,39	0
58	MG	2A	3055	1/1	0.97	0.11	45,45,45,45	0
58	MG	1A	3706	1/1	0.97	0.07	25,25,25,25	0
58	MG	1A	4084	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	3881	1/1	0.97	0.25	36,36,36,36	0
58	MG	1A	3337	1/1	0.97	0.07	41,41,41,41	0
58	MG	1A	3538	1/1	0.97	0.13	32,32,32,32	0
58	MG	2a	1694	1/1	0.97	0.19	52,52,52,52	0
58	MG	2a	1695	1/1	0.97	0.12	42,42,42,42	0
58	MG	2A	3688	1/1	0.97	0.09	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3884	1/1	0.97	0.10	24,24,24,24	0
58	MG	1A	3048	1/1	0.97	0.10	34,34,34,34	0
58	MG	2a	1699	1/1	0.97	0.13	31,31,31,31	0
58	MG	2A	3691	1/1	0.97	0.10	42,42,42,42	0
58	MG	2A	3063	1/1	0.97	0.06	58,58,58,58	0
58	MG	1a	1649	1/1	0.97	0.18	53,53,53,53	0
58	MG	1A	4092	1/1	0.97	0.10	43,43,43,43	0
58	MG	2A	3695	1/1	0.97	0.13	51,51,51,51	0
58	MG	1a	1652	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3026	1/1	0.97	0.12	31,31,31,31	0
58	MG	1A	3433	1/1	0.97	0.15	42,42,42,42	0
58	MG	1A	3341	1/1	0.97	0.10	41,41,41,41	0
58	MG	1A	3435	1/1	0.97	0.09	38,38,38,38	0
58	MG	1A	3545	1/1	0.97	0.23	45,45,45,45	0
58	MG	2A	3702	1/1	0.97	0.06	55,55,55,55	0
58	MG	2a	1712	1/1	0.97	0.05	45,45,45,45	0
58	MG	1A	3436	1/1	0.97	0.06	35,35,35,35	0
58	MG	1A	3437	1/1	0.97	0.07	41,41,41,41	0
58	MG	2A	3362	1/1	0.97	0.08	57,57,57,57	0
58	MG	2A	3075	1/1	0.97	0.07	41,41,41,41	0
58	MG	1A	3187	1/1	0.97	0.07	32,32,32,32	0
58	MG	1A	3343	1/1	0.97	0.07	48,48,48,48	0
58	MG	1A	3725	1/1	0.97	0.07	37,37,37,37	0
58	MG	1A	4105	1/1	0.97	0.07	48,48,48,48	0
58	MG	1A	3188	1/1	0.97	0.10	32,32,32,32	0
58	MG	1A	3021	1/1	0.97	0.07	20,20,20,20	0
58	MG	2A	3714	1/1	0.97	0.09	45,45,45,45	0
58	MG	1A	3051	1/1	0.97	0.09	24,24,24,24	0
58	MG	2a	1726	1/1	0.97	0.16	43,43,43,43	0
58	MG	1B	202	1/1	0.97	0.16	48,48,48,48	0
58	MG	2A	3717	1/1	0.97	0.12	44,44,44,44	0
58	MG	1A	3730	1/1	0.97	0.05	38,38,38,38	0
58	MG	1A	3192	1/1	0.97	0.11	28,28,28,28	0
58	MG	2a	1731	1/1	0.97	0.12	38,38,38,38	0
58	MG	1A	3904	1/1	0.97	0.06	36,36,36,36	0
58	MG	1A	3445	1/1	0.97	0.17	40,40,40,40	0
58	MG	1A	3075	1/1	0.97	0.05	22,22,22,22	0
58	MG	1A	3195	1/1	0.97	0.23	38,38,38,38	0
58	MG	1A	3736	1/1	0.97	0.07	21,21,21,21	0
58	MG	1B	211	1/1	0.97	0.09	40,40,40,40	0
58	MG	2A	3095	1/1	0.97	0.07	39,39,39,39	0
58	MG	2A	3729	1/1	0.97	0.07	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3909	1/1	0.97	0.07	41,41,41,41	0
58	MG	2A	3733	1/1	0.97	0.06	31,31,31,31	0
58	MG	1A	3139	1/1	0.97	0.06	34,34,34,34	0
58	MG	2A	3099	1/1	0.97	0.06	42,42,42,42	0
58	MG	1A	3911	1/1	0.97	0.23	15,15,15,15	0
58	MG	1A	3353	1/1	0.97	0.19	28,28,28,28	0
58	MG	1A	3740	1/1	0.97	0.06	44,44,44,44	0
58	MG	2A	3388	1/1	0.97	0.29	60,60,60,60	0
58	MG	1A	3563	1/1	0.97	0.07	47,47,47,47	0
58	MG	1A	3199	1/1	0.97	0.05	32,32,32,32	0
58	MG	2A	3108	1/1	0.97	0.09	43,43,43,43	0
58	MG	1A	3567	1/1	0.97	0.14	41,41,41,41	0
58	MG	1A	3357	1/1	0.97	0.17	48,48,48,48	0
58	MG	2A	3111	1/1	0.97	0.16	39,39,39,39	0
58	MG	1A	3452	1/1	0.97	0.13	29,29,29,29	0
58	MG	1A	3454	1/1	0.97	0.15	35,35,35,35	0
58	MG	2a	1758	1/1	0.97	0.04	61,61,61,61	0
58	MG	2a	1759	1/1	0.97	0.08	62,62,62,62	0
58	MG	1A	3200	1/1	0.97	0.09	31,31,31,31	0
58	MG	1a	1689	1/1	0.97	0.20	44,44,44,44	0
58	MG	2a	1763	1/1	0.97	0.06	60,60,60,60	0
58	MG	2A	3116	1/1	0.97	0.07	40,40,40,40	0
58	MG	1A	3140	1/1	0.97	0.10	41,41,41,41	0
58	MG	1A	3202	1/1	0.97	0.11	18,18,18,18	0
58	MG	2A	3402	1/1	0.97	0.06	54,54,54,54	0
58	MG	2A	3120	1/1	0.97	0.08	33,33,33,33	0
58	MG	1A	3203	1/1	0.97	0.08	37,37,37,37	0
58	MG	1A	3143	1/1	0.97	0.06	43,43,43,43	0
58	MG	1A	3363	1/1	0.97	0.05	39,39,39,39	0
58	MG	1A	3587	1/1	0.97	0.12	35,35,35,35	0
58	MG	2A	3761	1/1	0.97	0.06	45,45,45,45	0
58	MG	2A	3408	1/1	0.97	0.15	41,41,41,41	0
58	MG	1A	3077	1/1	0.97	0.17	41,41,41,41	0
58	MG	1A	3274	1/1	0.97	0.21	49,49,49,49	0
58	MG	2A	3412	1/1	0.97	0.09	34,34,34,34	0
58	MG	1A	3934	1/1	0.97	0.05	29,29,29,29	0
58	MG	2A	3128	1/1	0.97	0.05	45,45,45,45	0
58	MG	2A	3768	1/1	0.97	0.05	47,47,47,47	0
58	MG	1a	1699	1/1	0.97	0.16	41,41,41,41	0
58	MG	1A	3759	1/1	0.97	0.05	17,17,17,17	0
58	MG	1B	237	1/1	0.97	0.08	44,44,44,44	0
58	MG	1A	3760	1/1	0.97	0.05	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3938	1/1	0.97	0.06	57,57,57,57	0
58	MG	2a	1789	1/1	0.97	0.20	51,51,51,51	0
58	MG	2A	3776	1/1	0.97	0.09	37,37,37,37	0
58	MG	1A	3463	1/1	0.97	0.17	39,39,39,39	0
58	MG	1A	3104	1/1	0.97	0.09	27,27,27,27	0
58	MG	1D	306	1/1	0.97	0.06	31,31,31,31	0
58	MG	2A	3780	1/1	0.97	0.05	54,54,54,54	0
58	MG	1D	307	1/1	0.97	0.06	28,28,28,28	0
58	MG	2A	3425	1/1	0.97	0.09	40,40,40,40	0
58	MG	2a	1797	1/1	0.97	0.14	43,43,43,43	0
58	MG	1D	308	1/1	0.97	0.12	30,30,30,30	0
58	MG	1A	3148	1/1	0.97	0.04	27,27,27,27	0
58	MG	2A	3428	1/1	0.97	0.29	54,54,54,54	0
58	MG	2A	3787	1/1	0.97	0.05	65,65,65,65	0
58	MG	1A	3944	1/1	0.97	0.04	53,53,53,53	0
58	MG	2A	3790	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3764	1/1	0.97	0.09	14,14,14,14	0
58	MG	1A	3946	1/1	0.97	0.06	38,38,38,38	0
58	MG	2A	3148	1/1	0.97	0.13	28,28,28,28	0
58	MG	2A	3150	1/1	0.97	0.13	42,42,42,42	0
58	MG	1A	3012	1/1	0.97	0.05	21,21,21,21	0
58	MG	1a	1715	1/1	0.97	0.16	40,40,40,40	0
58	MG	2A	3436	1/1	0.97	0.22	53,53,53,53	0
58	MG	1A	3287	1/1	0.97	0.20	27,27,27,27	0
58	MG	1A	3289	1/1	0.97	0.11	34,34,34,34	0
58	MG	1A	3951	1/1	0.97	0.05	49,49,49,49	0
58	MG	1A	3291	1/1	0.97	0.14	31,31,31,31	0
58	MG	2A	3158	1/1	0.97	0.05	42,42,42,42	0
58	MG	1a	1722	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3472	1/1	0.97	0.07	28,28,28,28	0
58	MG	2A	3805	1/1	0.97	0.10	35,35,35,35	0
58	MG	1A	3372	1/1	0.97	0.26	33,33,33,33	0
58	MG	1A	3474	1/1	0.97	0.18	37,37,37,37	0
58	MG	2A	3446	1/1	0.97	0.11	36,36,36,36	0
58	MG	1F	302	1/1	0.97	0.15	24,24,24,24	0
58	MG	2A	3164	1/1	0.97	0.04	33,33,33,33	0
58	MG	1F	303	1/1	0.97	0.11	25,25,25,25	0
58	MG	1a	1729	1/1	0.97	0.10	27,27,27,27	0
58	MG	1a	1730	1/1	0.97	0.09	32,32,32,32	0
58	MG	1A	3292	1/1	0.97	0.07	42,42,42,42	0
58	MG	2A	3454	1/1	0.97	0.22	44,44,44,44	0
58	MG	1A	3108	1/1	0.97	0.04	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3818	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3030	1/1	0.97	0.05	27,27,27,27	0
58	MG	1a	1734	1/1	0.97	0.05	53,53,53,53	0
58	MG	2A	3821	1/1	0.97	0.07	45,45,45,45	0
58	MG	1A	3295	1/1	0.97	0.07	53,53,53,53	0
58	MG	1A	3960	1/1	0.97	0.10	51,51,51,51	0
58	MG	1F	312	1/1	0.97	0.09	42,42,42,42	0
58	MG	1G	201	1/1	0.97	0.10	34,34,34,34	0
58	MG	2A	3827	1/1	0.97	0.06	25,25,25,25	0
58	MG	1A	3778	1/1	0.97	0.04	14,14,14,14	0
58	MG	1A	3963	1/1	0.97	0.04	44,44,44,44	0
58	MG	2d	302	1/1	0.97	0.07	65,65,65,65	0
58	MG	2A	3464	1/1	0.97	0.13	43,43,43,43	0
58	MG	2f	201	1/1	0.97	0.11	42,42,42,42	0
58	MG	1A	3296	1/1	0.97	0.17	22,22,22,22	0
58	MG	2A	3833	1/1	0.97	0.10	33,33,33,33	0
58	MG	1A	3781	1/1	0.97	0.05	54,54,54,54	0
58	MG	1I	201	1/1	0.97	0.05	62,62,62,62	0
58	MG	1A	3782	1/1	0.97	0.07	39,39,39,39	0
58	MG	2A	3839	1/1	0.97	0.06	58,58,58,58	0
58	MG	2A	3184	1/1	0.97	0.13	35,35,35,35	0
58	MG	1N	203	1/1	0.97	0.04	36,36,36,36	0
58	MG	1A	3969	1/1	0.97	0.05	30,30,30,30	0
58	MG	1A	3970	1/1	0.97	0.09	20,20,20,20	0
58	MG	2A	3188	1/1	0.97	0.05	43,43,43,43	0
58	MG	1A	3215	1/1	0.97	0.03	34,34,34,34	0
58	MG	1A	3612	1/1	0.97	0.06	22,22,22,22	0
58	MG	1A	3481	1/1	0.97	0.10	58,58,58,58	0
58	MG	1A	3216	1/1	0.97	0.13	34,34,34,34	0
58	MG	1A	3110	1/1	0.97	0.20	32,32,32,32	0
58	MG	1P	204	1/1	0.97	0.08	38,38,38,38	0
58	MG	1A	3618	1/1	0.97	0.05	31,31,31,31	0
58	MG	1A	3794	1/1	0.97	0.05	16,16,16,16	0
58	MG	2A	3197	1/1	0.97	0.18	53,53,53,53	0
58	MG	2A	3198	1/1	0.97	0.14	50,50,50,50	0
58	MG	2A	3490	1/1	0.97	0.09	49,49,49,49	0
58	MG	1A	3619	1/1	0.97	0.06	35,35,35,35	0
58	MG	2w	107	1/1	0.97	0.13	57,57,57,57	0
58	MG	1A	3154	1/1	0.97	0.09	28,28,28,28	0
58	MG	2A	3861	1/1	0.97	0.10	49,49,49,49	0
58	MG	1A	3622	1/1	0.97	0.05	29,29,29,29	0
58	MG	1A	3111	1/1	0.97	0.15	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1R	203	1/1	0.97	0.12	27,27,27,27	0
58	MG	1A	3157	1/1	0.97	0.19	28,28,28,28	0
58	MG	2A	3866	1/1	0.97	0.08	39,39,39,39	0
58	MG	2A	3867	1/1	0.97	0.05	53,53,53,53	0
58	MG	1S	201	1/1	0.97	0.22	40,40,40,40	0
58	MG	1A	3112	1/1	0.97	0.04	37,37,37,37	0
58	MG	2A	3501	1/1	0.97	0.10	33,33,33,33	0
58	MG	2A	3502	1/1	0.97	0.13	36,36,36,36	0
58	MG	2x	108	1/1	0.97	0.08	51,51,51,51	0
58	MG	1A	3163	1/1	0.97	0.25	28,28,28,28	0
58	MG	1a	1774	1/1	0.97	0.06	56,56,56,56	0
58	MG	1A	3631	1/1	0.97	0.07	44,44,44,44	0
58	MG	2A	3210	1/1	0.97	0.07	41,41,41,41	0
58	MG	1A	3113	1/1	0.97	0.08	26,26,26,26	0
58	MG	2A	3510	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3634	1/1	0.97	0.05	48,48,48,48	0
58	MG	1U	202	1/1	0.97	0.13	42,42,42,42	0
58	MG	23	101	1/1	0.98	0.07	43,43,43,43	0
58	MG	1A	4025	1/1	0.98	0.07	40,40,40,40	0
58	MG	1A	3117	1/1	0.98	0.16	31,31,31,31	0
58	MG	1U	201	1/1	0.98	0.13	23,23,23,23	0
58	MG	1a	1743	1/1	0.98	0.07	44,44,44,44	0
58	MG	2A	3133	1/1	0.98	0.04	35,35,35,35	0
58	MG	27	101	1/1	0.98	0.17	40,40,40,40	0
58	MG	27	102	1/1	0.98	0.07	40,40,40,40	0
58	MG	1A	3724	1/1	0.98	0.06	34,34,34,34	0
58	MG	2A	3135	1/1	0.98	0.04	40,40,40,40	0
58	MG	1A	3206	1/1	0.98	0.03	12,12,12,12	0
58	MG	1a	1746	1/1	0.98	0.12	40,40,40,40	0
58	MG	2A	3138	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	3032	1/1	0.98	0.06	28,28,28,28	0
58	MG	2A	3140	1/1	0.98	0.12	33,33,33,33	0
58	MG	1A	3727	1/1	0.98	0.06	19,19,19,19	0
58	MG	1A	3017	1/1	0.98	0.05	40,40,40,40	0
58	MG	2A	3143	1/1	0.98	0.07	32,32,32,32	0
58	MG	1A	3334	1/1	0.98	0.05	33,33,33,33	0
58	MG	1a	1752	1/1	0.98	0.05	49,49,49,49	0
58	MG	1U	209	1/1	0.98	0.15	26,26,26,26	0
58	MG	1U	210	1/1	0.98	0.16	22,22,22,22	0
58	MG	1A	3600	1/1	0.98	0.14	27,27,27,27	0
58	MG	2A	3149	1/1	0.98	0.03	26,26,26,26	0
58	MG	1V	201	1/1	0.98	0.09	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3209	1/1	0.98	0.09	39,39,39,39	0
58	MG	1A	3158	1/1	0.98	0.07	36,36,36,36	0
58	MG	1A	4037	1/1	0.98	0.04	44,44,44,44	0
58	MG	1a	1760	1/1	0.98	0.04	49,49,49,49	0
58	MG	2A	3681	1/1	0.98	0.11	40,40,40,40	0
58	MG	1V	206	1/1	0.98	0.12	40,40,40,40	0
58	MG	1A	3018	1/1	0.98	0.08	24,24,24,24	0
58	MG	2A	3157	1/1	0.98	0.11	37,37,37,37	0
58	MG	1a	1763	1/1	0.98	0.06	45,45,45,45	0
58	MG	1A	4039	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	3212	1/1	0.98	0.11	36,36,36,36	0
58	MG	1A	3161	1/1	0.98	0.07	25,25,25,25	0
58	MG	1W	203	1/1	0.98	0.06	46,46,46,46	0
58	MG	1A	3737	1/1	0.98	0.04	22,22,22,22	0
58	MG	2A	3410	1/1	0.98	0.12	44,44,44,44	0
58	MG	1A	3500	1/1	0.98	0.09	35,35,35,35	0
58	MG	1X	101	1/1	0.98	0.10	31,31,31,31	0
58	MG	1X	103	1/1	0.98	0.15	32,32,32,32	0
58	MG	1A	3340	1/1	0.98	0.04	36,36,36,36	0
58	MG	2A	3168	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	3271	1/1	0.98	0.07	33,33,33,33	0
58	MG	1A	3052	1/1	0.98	0.13	26,26,26,26	0
58	MG	1A	3070	1/1	0.98	0.10	16,16,16,16	0
58	MG	1A	4048	1/1	0.98	0.06	26,26,26,26	0
58	MG	1Y	203	1/1	0.98	0.14	45,45,45,45	0
58	MG	1A	3614	1/1	0.98	0.07	25,25,25,25	0
58	MG	1A	3124	1/1	0.98	0.05	30,30,30,30	0
58	MG	1A	3506	1/1	0.98	0.11	25,25,25,25	0
58	MG	1A	3887	1/1	0.98	0.04	38,38,38,38	0
58	MG	1A	3218	1/1	0.98	0.12	35,35,35,35	0
58	MG	1A	3748	1/1	0.98	0.07	26,26,26,26	0
58	MG	1A	4055	1/1	0.98	0.05	23,23,23,23	0
58	MG	1A	4056	1/1	0.98	0.07	47,47,47,47	0
58	MG	2A	3710	1/1	0.98	0.06	49,49,49,49	0
58	MG	1A	3219	1/1	0.98	0.17	32,32,32,32	0
58	MG	1A	3347	1/1	0.98	0.16	41,41,41,41	0
58	MG	1A	3277	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	4060	1/1	0.98	0.09	50,50,50,50	0
58	MG	1A	3621	1/1	0.98	0.06	20,20,20,20	0
58	MG	1A	3894	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3279	1/1	0.98	0.04	31,31,31,31	0
58	MG	1I	104	1/1	0.98	0.04	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	11	105	1/1	0.98	0.04	46,46,46,46	0
58	MG	1A	3280	1/1	0.98	0.10	34,34,34,34	0
58	MG	1A	3897	1/1	0.98	0.06	25,25,25,25	0
58	MG	12	102	1/1	0.98	0.09	36,36,36,36	0
58	MG	1a	1804	1/1	0.98	0.16	40,40,40,40	0
58	MG	1A	3624	1/1	0.98	0.04	27,27,27,27	0
58	MG	13	103	1/1	0.98	0.04	38,38,38,38	0
58	MG	1A	4069	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	4070	1/1	0.98	0.04	39,39,39,39	0
58	MG	1A	3166	1/1	0.98	0.11	30,30,30,30	0
58	MG	2A	3732	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	4072	1/1	0.98	0.07	20,20,20,20	0
58	MG	15	105	1/1	0.98	0.04	23,23,23,23	0
58	MG	2A	3450	1/1	0.98	0.20	42,42,42,42	0
58	MG	15	106	1/1	0.98	0.10	35,35,35,35	0
58	MG	1A	3757	1/1	0.98	0.04	37,37,37,37	0
58	MG	1A	3627	1/1	0.98	0.10	25,25,25,25	0
58	MG	1A	3514	1/1	0.98	0.05	39,39,39,39	0
58	MG	17	101	1/1	0.98	0.07	24,24,24,24	0
58	MG	2a	1675	1/1	0.98	0.14	42,42,42,42	0
58	MG	2a	1676	1/1	0.98	0.08	34,34,34,34	0
58	MG	1A	3352	1/1	0.98	0.21	28,28,28,28	0
58	MG	1A	3284	1/1	0.98	0.07	22,22,22,22	0
58	MG	1A	3285	1/1	0.98	0.19	36,36,36,36	0
58	MG	18	102	1/1	0.98	0.14	32,32,32,32	0
58	MG	18	103	1/1	0.98	0.07	34,34,34,34	0
58	MG	1A	3633	1/1	0.98	0.06	18,18,18,18	0
58	MG	1A	3518	1/1	0.98	0.08	43,43,43,43	0
58	MG	1A	3355	1/1	0.98	0.16	25,25,25,25	0
58	MG	1A	3356	1/1	0.98	0.13	31,31,31,31	0
58	MG	1m	3001	1/1	0.98	0.04	51,51,51,51	0
58	MG	1A	3286	1/1	0.98	0.13	30,30,30,30	0
58	MG	1A	3638	1/1	0.98	0.05	20,20,20,20	0
58	MG	1A	3770	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3639	1/1	0.98	0.05	11,11,11,11	0
58	MG	2A	3472	1/1	0.98	0.17	40,40,40,40	0
58	MG	1w	101	1/1	0.98	0.06	40,40,40,40	0
58	MG	2A	3474	1/1	0.98	0.12	40,40,40,40	0
58	MG	1A	4088	1/1	0.98	0.03	26,26,26,26	0
58	MG	1a	1610	1/1	0.98	0.08	23,23,23,23	0
58	MG	2A	3225	1/1	0.98	0.18	30,30,30,30	0
58	MG	1A	3072	1/1	0.98	0.15	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3288	1/1	0.98	0.31	26,26,26,26	0
58	MG	1A	3168	1/1	0.98	0.05	28,28,28,28	0
58	MG	1A	3290	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	4094	1/1	0.98	0.06	42,42,42,42	0
58	MG	1A	3126	1/1	0.98	0.16	24,24,24,24	0
58	MG	2A	3769	1/1	0.98	0.04	49,49,49,49	0
58	MG	2A	3484	1/1	0.98	0.03	19,19,19,19	0
58	MG	1A	3098	1/1	0.98	0.10	35,35,35,35	0
58	MG	2A	3486	1/1	0.98	0.09	34,34,34,34	0
58	MG	1A	3442	1/1	0.98	0.08	35,35,35,35	0
58	MG	1A	3647	1/1	0.98	0.05	11,11,11,11	0
58	MG	2A	3775	1/1	0.98	0.05	27,27,27,27	0
58	MG	1A	3924	1/1	0.98	0.06	39,39,39,39	0
58	MG	1A	3225	1/1	0.98	0.10	34,34,34,34	0
58	MG	1A	3128	1/1	0.98	0.20	29,29,29,29	0
58	MG	1x	108	1/1	0.98	0.05	18,18,18,18	0
58	MG	1A	3783	1/1	0.98	0.05	25,25,25,25	0
58	MG	1A	3785	1/1	0.98	0.07	20,20,20,20	0
58	MG	1A	4104	1/1	0.98	0.05	48,48,48,48	0
58	MG	1A	3650	1/1	0.98	0.06	13,13,13,13	0
58	MG	1A	3930	1/1	0.98	0.04	42,42,42,42	0
58	MG	2A	3498	1/1	0.98	0.18	46,46,46,46	0
58	MG	2A	3786	1/1	0.98	0.09	41,41,41,41	0
58	MG	2A	3244	1/1	0.98	0.06	36,36,36,36	0
58	MG	2A	3500	1/1	0.98	0.12	51,51,51,51	0
58	MG	1A	3037	1/1	0.98	0.07	31,31,31,31	0
58	MG	1A	3039	1/1	0.98	0.16	27,27,27,27	0
58	MG	2a	1725	1/1	0.98	0.12	42,42,42,42	0
58	MG	1A	3933	1/1	0.98	0.07	35,35,35,35	0
58	MG	1A	3175	1/1	0.98	0.05	32,32,32,32	0
58	MG	2A	3505	1/1	0.98	0.07	56,56,56,56	0
58	MG	1A	3230	1/1	0.98	0.12	27,27,27,27	0
58	MG	1A	3791	1/1	0.98	0.04	31,31,31,31	0
58	MG	1B	206	1/1	0.98	0.04	44,44,44,44	0
58	MG	1A	3792	1/1	0.98	0.03	26,26,26,26	0
58	MG	1A	3939	1/1	0.98	0.05	33,33,33,33	0
58	MG	1A	3179	1/1	0.98	0.07	23,23,23,23	0
58	MG	2A	3009	1/1	0.98	0.04	34,34,34,34	0
58	MG	2A	3010	1/1	0.98	0.11	43,43,43,43	0
58	MG	1A	3180	1/1	0.98	0.10	18,18,18,18	0
58	MG	2a	1738	1/1	0.98	0.16	52,52,52,52	0
58	MG	1A	3657	1/1	0.98	0.07	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3943	1/1	0.98	0.05	26,26,26,26	0
58	MG	1B	213	1/1	0.98	0.06	30,30,30,30	0
58	MG	2A	3016	1/1	0.98	0.11	55,55,55,55	0
58	MG	1A	3796	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	3234	1/1	0.98	0.14	33,33,33,33	0
58	MG	2A	3810	1/1	0.98	0.10	55,55,55,55	0
58	MG	1A	3798	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	3799	1/1	0.98	0.04	10,10,10,10	0
58	MG	1A	3302	1/1	0.98	0.04	24,24,24,24	0
58	MG	2a	1749	1/1	0.98	0.05	58,58,58,58	0
58	MG	1A	3949	1/1	0.98	0.10	44,44,44,44	0
58	MG	2A	3527	1/1	0.98	0.07	33,33,33,33	0
58	MG	1A	3539	1/1	0.98	0.17	37,37,37,37	0
58	MG	2A	3025	1/1	0.98	0.06	48,48,48,48	0
58	MG	2A	3026	1/1	0.98	0.06	36,36,36,36	0
58	MG	2A	3027	1/1	0.98	0.06	32,32,32,32	0
58	MG	1B	221	1/1	0.98	0.10	31,31,31,31	0
58	MG	1B	222	1/1	0.98	0.05	29,29,29,29	0
58	MG	1a	1651	1/1	0.98	0.10	37,37,37,37	0
58	MG	2A	3536	1/1	0.98	0.06	51,51,51,51	0
58	MG	1A	3453	1/1	0.98	0.10	40,40,40,40	0
58	MG	2a	1761	1/1	0.98	0.07	56,56,56,56	0
58	MG	1A	3181	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3826	1/1	0.98	0.09	37,37,37,37	0
58	MG	2A	3034	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3663	1/1	0.98	0.04	25,25,25,25	0
58	MG	2a	1766	1/1	0.98	0.14	48,48,48,48	0
58	MG	2a	1767	1/1	0.98	0.03	54,54,54,54	0
58	MG	1A	3375	1/1	0.98	0.11	33,33,33,33	0
58	MG	1A	3076	1/1	0.98	0.03	20,20,20,20	0
58	MG	2A	3038	1/1	0.98	0.09	22,22,22,22	0
58	MG	2A	3832	1/1	0.98	0.04	34,34,34,34	0
58	MG	1A	3377	1/1	0.98	0.08	31,31,31,31	0
58	MG	2A	3834	1/1	0.98	0.04	38,38,38,38	0
58	MG	1A	3809	1/1	0.98	0.05	13,13,13,13	0
58	MG	1A	3378	1/1	0.98	0.10	27,27,27,27	0
58	MG	1A	3132	1/1	0.98	0.12	29,29,29,29	0
58	MG	1A	3056	1/1	0.98	0.05	29,29,29,29	0
58	MG	1A	3961	1/1	0.98	0.04	35,35,35,35	0
58	MG	1A	3134	1/1	0.98	0.04	35,35,35,35	0
58	MG	1A	3549	1/1	0.98	0.05	19,19,19,19	0
58	MG	2A	3843	1/1	0.98	0.05	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3964	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3816	1/1	0.98	0.05	39,39,39,39	0
58	MG	2A	3555	1/1	0.98	0.06	31,31,31,31	0
58	MG	1A	3078	1/1	0.98	0.07	24,24,24,24	0
58	MG	2A	3557	1/1	0.98	0.12	28,28,28,28	0
58	MG	1D	301	1/1	0.98	0.12	23,23,23,23	0
58	MG	1A	3383	1/1	0.98	0.14	41,41,41,41	0
58	MG	1A	3968	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3137	1/1	0.98	0.10	24,24,24,24	0
58	MG	2A	3564	1/1	0.98	0.08	42,42,42,42	0
58	MG	1A	3820	1/1	0.98	0.07	22,22,22,22	0
58	MG	1A	3311	1/1	0.98	0.03	29,29,29,29	0
58	MG	1A	3677	1/1	0.98	0.05	19,19,19,19	0
58	MG	2A	3568	1/1	0.98	0.04	44,44,44,44	0
58	MG	2A	3859	1/1	0.98	0.07	29,29,29,29	0
58	MG	2A	3569	1/1	0.98	0.07	29,29,29,29	0
58	MG	2A	3570	1/1	0.98	0.05	53,53,53,53	0
58	MG	1A	3466	1/1	0.98	0.07	42,42,42,42	0
58	MG	1D	311	1/1	0.98	0.14	29,29,29,29	0
58	MG	1A	3974	1/1	0.98	0.07	36,36,36,36	0
58	MG	2A	3303	1/1	0.98	0.06	44,44,44,44	0
58	MG	1A	3467	1/1	0.98	0.12	43,43,43,43	0
58	MG	1E	301	1/1	0.98	0.07	32,32,32,32	0
58	MG	1E	303	1/1	0.98	0.14	28,28,28,28	0
58	MG	1A	3556	1/1	0.98	0.04	39,39,39,39	0
58	MG	1A	3079	1/1	0.98	0.04	24,24,24,24	0
58	MG	1a	1683	1/1	0.98	0.05	51,51,51,51	0
58	MG	2A	3582	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3685	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3313	1/1	0.98	0.20	41,41,41,41	0
58	MG	1A	3244	1/1	0.98	0.12	25,25,25,25	0
58	MG	1A	3560	1/1	0.98	0.06	47,47,47,47	0
58	MG	1A	3107	1/1	0.98	0.06	34,34,34,34	0
58	MG	1E	312	1/1	0.98	0.07	31,31,31,31	0
58	MG	2a	1817	1/1	0.98	0.18	48,48,48,48	0
58	MG	2A	3589	1/1	0.98	0.16	46,46,46,46	0
58	MG	1A	3007	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3984	1/1	0.98	0.03	34,34,34,34	0
58	MG	1F	301	1/1	0.98	0.07	19,19,19,19	0
58	MG	1A	3693	1/1	0.98	0.05	23,23,23,23	0
58	MG	1A	3564	1/1	0.98	0.11	26,26,26,26	0
58	MG	2A	3078	1/1	0.98	0.08	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3565	1/1	0.98	0.13	24,24,24,24	0
58	MG	1F	305	1/1	0.98	0.03	25,25,25,25	0
58	MG	2A	3600	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3141	1/1	0.98	0.07	31,31,31,31	0
58	MG	1A	3392	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	3029	1/1	0.98	0.17	25,25,25,25	0
58	MG	2A	3084	1/1	0.98	0.06	38,38,38,38	0
58	MG	2B	210	1/1	0.98	0.04	50,50,50,50	0
58	MG	1A	3084	1/1	0.98	0.06	24,24,24,24	0
58	MG	1A	3992	1/1	0.98	0.11	32,32,32,32	0
58	MG	1A	3570	1/1	0.98	0.15	30,30,30,30	0
58	MG	2A	3331	1/1	0.98	0.06	40,40,40,40	0
58	MG	1A	3196	1/1	0.98	0.25	29,29,29,29	0
58	MG	1A	3703	1/1	0.98	0.07	20,20,20,20	0
58	MG	1A	3085	1/1	0.98	0.12	33,33,33,33	0
58	MG	1A	3042	1/1	0.98	0.04	34,34,34,34	0
58	MG	2A	3092	1/1	0.98	0.17	38,38,38,38	0
58	MG	1A	3577	1/1	0.98	0.17	29,29,29,29	0
58	MG	1N	201	1/1	0.98	0.09	28,28,28,28	0
58	MG	2D	302	1/1	0.98	0.16	46,46,46,46	0
58	MG	2D	303	1/1	0.98	0.16	40,40,40,40	0
58	MG	1a	1709	1/1	0.98	0.08	33,33,33,33	0
58	MG	2D	305	1/1	0.98	0.03	22,22,22,22	0
58	MG	2D	306	1/1	0.98	0.24	35,35,35,35	0
58	MG	2l	202	1/1	0.98	0.11	55,55,55,55	0
58	MG	1A	3399	1/1	0.98	0.28	39,39,39,39	0
58	MG	1A	4001	1/1	0.98	0.04	43,43,43,43	0
58	MG	2E	302	1/1	0.98	0.05	50,50,50,50	0
58	MG	1N	204	1/1	0.98	0.14	37,37,37,37	0
58	MG	1A	3847	1/1	0.98	0.08	28,28,28,28	0
58	MG	2E	305	1/1	0.98	0.08	41,41,41,41	0
58	MG	1A	3708	1/1	0.98	0.04	8,8,8,8	0
58	MG	1A	3579	1/1	0.98	0.13	33,33,33,33	0
58	MG	2A	3103	1/1	0.98	0.06	26,26,26,26	0
58	MG	1a	1717	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	4005	1/1	0.98	0.18	23,23,23,23	0
58	MG	2A	3106	1/1	0.98	0.07	42,42,42,42	0
58	MG	2A	3107	1/1	0.98	0.20	41,41,41,41	0
58	MG	1A	3710	1/1	0.98	0.05	22,22,22,22	0
58	MG	1A	3046	1/1	0.98	0.03	22,22,22,22	0
58	MG	1P	201	1/1	0.98	0.15	29,29,29,29	0
58	MG	2A	3632	1/1	0.98	0.04	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3712	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3150	1/1	0.98	0.14	29,29,29,29	0
58	MG	1Q	201	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3636	1/1	0.98	0.07	30,30,30,30	0
58	MG	1A	3855	1/1	0.98	0.06	35,35,35,35	0
58	MG	2O	201	1/1	0.98	0.12	50,50,50,50	0
58	MG	1A	3258	1/1	0.98	0.08	43,43,43,43	0
58	MG	2A	3359	1/1	0.98	0.16	48,48,48,48	0
58	MG	2A	3360	1/1	0.98	0.12	55,55,55,55	0
58	MG	1A	4014	1/1	0.98	0.04	25,25,25,25	0
58	MG	1A	4015	1/1	0.98	0.06	24,24,24,24	0
58	MG	1A	3715	1/1	0.98	0.04	44,44,44,44	0
58	MG	2A	3644	1/1	0.98	0.05	34,34,34,34	0
58	MG	2A	3119	1/1	0.98	0.05	31,31,31,31	0
58	MG	1A	3326	1/1	0.98	0.08	30,30,30,30	0
58	MG	1A	3089	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3590	1/1	0.98	0.13	39,39,39,39	0
58	MG	1A	4020	1/1	0.98	0.08	33,33,33,33	0
58	MG	1A	3013	1/1	0.98	0.09	18,18,18,18	0
58	MG	1A	3487	1/1	0.98	0.05	33,33,33,33	0
58	MG	20	101	1/1	0.98	0.04	55,55,55,55	0
58	MG	1a	1737	1/1	0.98	0.03	29,29,29,29	0
58	MG	1a	1738	1/1	0.98	0.08	34,34,34,34	0
60	ZN	14	102	1/1	0.98	0.05	96,96,96,96	0
60	ZN	2Y	501	1/1	0.98	0.04	79,79,79,79	0
58	MG	1A	3116	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3038	1/1	0.99	0.08	14,14,14,14	0
58	MG	2A	3788	1/1	0.99	0.04	45,45,45,45	0
58	MG	1A	3780	1/1	0.99	0.04	36,36,36,36	0
58	MG	1A	3701	1/1	0.99	0.06	31,31,31,31	0
58	MG	1A	3866	1/1	0.99	0.07	36,36,36,36	0
58	MG	1B	238	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3245	1/1	0.99	0.19	25,25,25,25	0
58	MG	1A	3073	1/1	0.99	0.03	10,10,10,10	0
58	MG	1A	3784	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3629	1/1	0.99	0.06	22,22,22,22	0
58	MG	1A	3160	1/1	0.99	0.06	26,26,26,26	0
58	MG	1D	305	1/1	0.99	0.03	11,11,11,11	0
58	MG	1A	3562	1/1	0.99	0.12	24,24,24,24	0
58	MG	1A	3099	1/1	0.99	0.10	13,13,13,13	0
58	MG	1A	3162	1/1	0.99	0.13	22,22,22,22	0
58	MG	10	109	1/1	0.99	0.05	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1D	309	1/1	0.99	0.04	41,41,41,41	0
58	MG	2A	3098	1/1	0.99	0.09	36,36,36,36	0
58	MG	1A	3250	1/1	0.99	0.06	45,45,45,45	0
58	MG	1A	3023	1/1	0.99	0.04	10,10,10,10	0
58	MG	2A	3507	1/1	0.99	0.05	56,56,56,56	0
58	MG	1A	3252	1/1	0.99	0.16	31,31,31,31	0
58	MG	1A	3406	1/1	0.99	0.03	22,22,22,22	0
58	MG	1A	3054	1/1	0.99	0.05	40,40,40,40	0
58	MG	1E	302	1/1	0.99	0.06	23,23,23,23	0
58	MG	1A	3009	1/1	0.99	0.03	17,17,17,17	0
58	MG	1E	304	1/1	0.99	0.10	26,26,26,26	0
58	MG	13	101	1/1	0.99	0.06	21,21,21,21	0
58	MG	1A	3031	1/1	0.99	0.14	22,22,22,22	0
58	MG	2A	3377	1/1	0.99	0.02	30,30,30,30	0
58	MG	1A	3014	1/1	0.99	0.04	17,17,17,17	0
58	MG	1A	3307	1/1	0.99	0.04	19,19,19,19	0
58	MG	2a	1768	1/1	0.99	0.04	53,53,53,53	0
58	MG	15	101	1/1	0.99	0.14	20,20,20,20	0
58	MG	1A	4065	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	4066	1/1	0.99	0.04	13,13,13,13	0
58	MG	2A	3522	1/1	0.99	0.06	34,34,34,34	0
58	MG	1A	3575	1/1	0.99	0.12	27,27,27,27	0
58	MG	1A	3576	1/1	0.99	0.03	15,15,15,15	0
58	MG	1w	106	1/1	0.99	0.05	51,51,51,51	0
58	MG	1A	3720	1/1	0.99	0.02	10,10,10,10	0
58	MG	1A	3105	1/1	0.99	0.07	33,33,33,33	0
58	MG	1A	3058	1/1	0.99	0.05	15,15,15,15	0
58	MG	1A	3135	1/1	0.99	0.07	29,29,29,29	0
58	MG	1A	3171	1/1	0.99	0.04	13,13,13,13	0
58	MG	17	102	1/1	0.99	0.15	28,28,28,28	0
58	MG	1A	3581	1/1	0.99	0.19	30,30,30,30	0
58	MG	1A	3214	1/1	0.99	0.17	26,26,26,26	0
58	MG	2A	3534	1/1	0.99	0.04	36,36,36,36	0
58	MG	1a	1716	1/1	0.99	0.11	32,32,32,32	0
58	MG	2A	3836	1/1	0.99	0.04	48,48,48,48	0
58	MG	1A	3808	1/1	0.99	0.03	18,18,18,18	0
58	MG	1F	306	1/1	0.99	0.03	30,30,30,30	0
58	MG	1A	3583	1/1	0.99	0.06	30,30,30,30	0
58	MG	1F	308	1/1	0.99	0.10	26,26,26,26	0
58	MG	1A	4078	1/1	0.99	0.03	28,28,28,28	0
58	MG	1A	3810	1/1	0.99	0.03	38,38,38,38	0
58	MG	1A	3584	1/1	0.99	0.09	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3043	1/1	0.99	0.12	17,17,17,17	0
58	MG	1A	3586	1/1	0.99	0.12	24,24,24,24	0
58	MG	2A	3846	1/1	0.99	0.06	29,29,29,29	0
58	MG	1A	3081	1/1	0.99	0.07	24,24,24,24	0
58	MG	1a	1607	1/1	0.99	0.03	40,40,40,40	0
58	MG	1a	1728	1/1	0.99	0.04	31,31,31,31	0
58	MG	1A	3588	1/1	0.99	0.18	32,32,32,32	0
58	MG	1A	3082	1/1	0.99	0.08	29,29,29,29	0
58	MG	1A	3734	1/1	0.99	0.04	30,30,30,30	0
58	MG	1A	3060	1/1	0.99	0.09	40,40,40,40	0
58	MG	1A	3176	1/1	0.99	0.20	28,28,28,28	0
58	MG	1A	4089	1/1	0.99	0.04	30,30,30,30	0
58	MG	2A	3554	1/1	0.99	0.09	39,39,39,39	0
58	MG	1A	3177	1/1	0.99	0.18	20,20,20,20	0
58	MG	1A	3994	1/1	0.99	0.05	21,21,21,21	0
58	MG	1A	3593	1/1	0.99	0.04	34,34,34,34	0
58	MG	2A	3558	1/1	0.99	0.05	30,30,30,30	0
58	MG	2A	3559	1/1	0.99	0.05	45,45,45,45	0
58	MG	1A	3044	1/1	0.99	0.15	26,26,26,26	0
58	MG	2A	3014	1/1	0.99	0.07	36,36,36,36	0
58	MG	1A	3045	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3142	1/1	0.99	0.04	9,9,9,9	0
58	MG	1A	3086	1/1	0.99	0.19	28,28,28,28	0
58	MG	1A	3010	1/1	0.99	0.04	22,22,22,22	0
58	MG	1A	3047	1/1	0.99	0.08	32,32,32,32	0
58	MG	1A	3146	1/1	0.99	0.15	24,24,24,24	0
58	MG	2A	3424	1/1	0.99	0.07	30,30,30,30	0
58	MG	1P	203	1/1	0.99	0.10	23,23,23,23	0
58	MG	1A	3914	1/1	0.99	0.04	32,32,32,32	0
58	MG	2A	3718	1/1	0.99	0.03	25,25,25,25	0
58	MG	1a	1747	1/1	0.99	0.04	40,40,40,40	0
58	MG	2A	3572	1/1	0.99	0.05	33,33,33,33	0
58	MG	1A	3746	1/1	0.99	0.06	41,41,41,41	0
58	MG	1Q	202	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3601	1/1	0.99	0.20	30,30,30,30	0
58	MG	1A	4006	1/1	0.99	0.04	14,14,14,14	0
58	MG	1A	4007	1/1	0.99	0.02	25,25,25,25	0
58	MG	2A	3726	1/1	0.99	0.03	42,42,42,42	0
58	MG	2A	3030	1/1	0.99	0.10	36,36,36,36	0
58	MG	1A	3670	1/1	0.99	0.07	26,26,26,26	0
58	MG	1A	3147	1/1	0.99	0.15	25,25,25,25	0
58	MG	2A	3730	1/1	0.99	0.09	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3919	1/1	0.99	0.03	24,24,24,24	0
58	MG	1A	3065	1/1	0.99	0.12	33,33,33,33	0
58	MG	1R	204	1/1	0.99	0.05	22,22,22,22	0
58	MG	1A	4109	1/1	0.99	0.03	45,45,45,45	0
58	MG	2A	3735	1/1	0.99	0.04	30,30,30,30	0
58	MG	1B	201	1/1	0.99	0.06	37,37,37,37	0
58	MG	1A	3034	1/1	0.99	0.18	23,23,23,23	0
58	MG	1A	3278	1/1	0.99	0.07	21,21,21,21	0
58	MG	1A	3189	1/1	0.99	0.09	30,30,30,30	0
58	MG	1A	3488	1/1	0.99	0.09	34,34,34,34	0
58	MG	1A	3232	1/1	0.99	0.10	19,19,19,19	0
58	MG	1A	3609	1/1	0.99	0.04	17,17,17,17	0
58	MG	2A	3177	1/1	0.99	0.05	24,24,24,24	0
58	MG	2A	3593	1/1	0.99	0.05	32,32,32,32	0
58	MG	1A	3679	1/1	0.99	0.03	15,15,15,15	0
58	MG	1A	3035	1/1	0.99	0.26	30,30,30,30	0
58	MG	1A	3282	1/1	0.99	0.08	34,34,34,34	0
58	MG	1A	3682	1/1	0.99	0.03	21,21,21,21	0
58	MG	1A	4022	1/1	0.99	0.03	51,51,51,51	0
58	MG	2A	3599	1/1	0.99	0.08	31,31,31,31	0
58	MG	1A	3683	1/1	0.99	0.05	29,29,29,29	0
58	MG	1U	208	1/1	0.99	0.19	29,29,29,29	0
58	MG	2A	3753	1/1	0.99	0.10	33,33,33,33	0
58	MG	1a	1773	1/1	0.99	0.03	45,45,45,45	0
58	MG	1A	3283	1/1	0.99	0.09	21,21,21,21	0
58	MG	1A	3613	1/1	0.99	0.07	34,34,34,34	0
58	MG	1A	3068	1/1	0.99	0.07	25,25,25,25	0
58	MG	1A	3120	1/1	0.99	0.13	29,29,29,29	0
58	MG	1A	3936	1/1	0.99	0.05	8,8,8,8	0
58	MG	1A	3849	1/1	0.99	0.03	48,48,48,48	0
58	MG	1A	3766	1/1	0.99	0.06	31,31,31,31	0
58	MG	1V	205	1/1	0.99	0.04	17,17,17,17	0
58	MG	1a	1782	1/1	0.99	0.04	59,59,59,59	0
58	MG	1A	3193	1/1	0.99	0.14	33,33,33,33	0
58	MG	1a	1784	1/1	0.99	0.02	41,41,41,41	0
58	MG	2A	3468	1/1	0.99	0.09	24,24,24,24	0
58	MG	1A	3003	1/1	0.99	0.06	23,23,23,23	0
58	MG	1A	3690	1/1	0.99	0.04	24,24,24,24	0
58	MG	1A	3094	1/1	0.99	0.04	23,23,23,23	0
58	MG	1W	201	1/1	0.99	0.07	38,38,38,38	0
58	MG	1a	1789	1/1	0.99	0.03	49,49,49,49	0
58	MG	1a	1790	1/1	0.99	0.02	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3069	1/1	0.99	0.02	23,23,23,23	0
58	MG	1A	3692	1/1	0.99	0.06	17,17,17,17	0
58	MG	1A	4036	1/1	0.99	0.02	16,16,16,16	0
58	MG	1W	204	1/1	0.99	0.13	23,23,23,23	0
58	MG	1A	3155	1/1	0.99	0.05	27,27,27,27	0
58	MG	1A	3197	1/1	0.99	0.18	26,26,26,26	0
58	MG	1A	3008	1/1	0.99	0.04	16,16,16,16	0
58	MG	1X	102	1/1	0.99	0.05	39,39,39,39	0
58	MG	2A	3629	1/1	0.99	0.05	30,30,30,30	0
58	MG	1a	1798	1/1	0.99	0.04	59,59,59,59	0
58	MG	2T	201	1/1	0.99	0.03	47,47,47,47	0
59	K	1A	3574	1/1	0.99	0.03	38,38,38,38	0
58	MG	1A	3071	1/1	0.99	0.05	10,10,10,10	0
60	ZN	1Y	204	1/1	0.99	0.03	52,52,52,52	0
58	MG	1A	3395	1/1	0.99	0.17	24,24,24,24	0
60	ZN	16	103	1/1	0.99	0.02	39,39,39,39	0
60	ZN	19	102	1/1	0.99	0.04	37,37,37,37	0
60	ZN	1n	102	1/1	0.99	0.03	55,55,55,55	0
58	MG	1A	3243	1/1	0.99	0.04	27,27,27,27	0
58	MG	1A	3625	1/1	0.99	0.05	28,28,28,28	0
60	ZN	25	105	1/1	0.99	0.04	55,55,55,55	0
60	ZN	29	501	1/1	0.99	0.03	71,71,71,71	0
60	ZN	2n	102	1/1	0.99	0.02	77,77,77,77	0
61	SF4	1d	302	8/8	0.99	0.05	52,55,58,66	0
61	SF4	2d	303	8/8	0.99	0.04	60,65,68,76	0
58	MG	2A	3021	1/1	1.00	0.05	19,19,19,19	0
58	MG	1A	3178	1/1	1.00	0.03	31,31,31,31	0
60	ZN	15	108	1/1	1.00	0.02	36,36,36,36	0
60	ZN	26	102	1/1	1.00	0.03	54,54,54,54	0

6.5 Other polymers ⓘ

There are no such residues in this entry.