



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 6, 2026 – 05:14 AM EDT

PDB ID : 8UVR / pdb_00008uvr
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with spectinomycin, mRNA, deacylated A- and E-site tRNA^{phe}, and deacylated P-site tRNA^{met} at 2.60Å resolution
Authors : Killam, B.Y.; Phelps, G.A.; Lee, R.E.; Polikanov, Y.S.
Deposited on : 2023-11-03
Resolution : 2.60 Å(reported)

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ 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
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.50

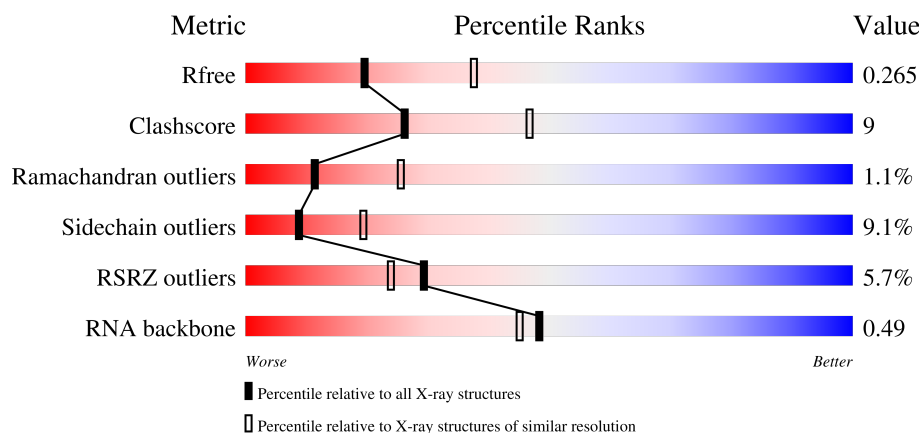
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.60 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	4008 (2.60-2.60)
Clashscore	190562	4347 (2.60-2.60)
Ramachandran outliers	187476	4277 (2.60-2.60)
Sidechain outliers	187428	4277 (2.60-2.60)
RSRZ outliers	180081	4008 (2.60-2.60)
RNA backbone	3983	1014 (2.84-2.36)

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	
2	1B	121	

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

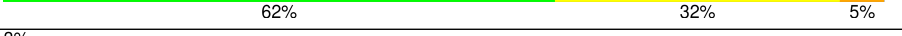
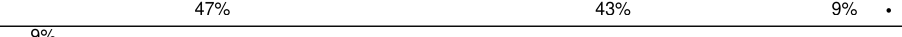
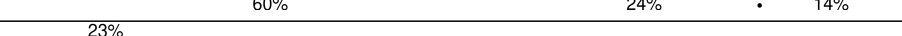
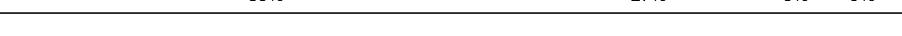
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Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25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

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Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
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	
39	2h	138	

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Mol	Chain	Length	Quality of chain
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	
52	1u	27	

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

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	2A	3453	-	-	-	X
60	SF4	1d	501	-	-	X	-

2 Entry composition [i](#)

There are 61 unique types of molecules in this entry. The entry contains 300591 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	202	Total	C	N	O	S	0	0	0
			1583	1009	297	275	2			
5	2F	202	Total	C	N	O	S	0	0	0
			1579	1007	296	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	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1592	713	285	518	74	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1544	690	278	502	72	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1116	Total	Mg	0	0
			1116	1116		
56	1B	39	Total	Mg	0	0
			39	39		
56	1D	15	Total	Mg	0	0
			15	15		
56	1E	14	Total	Mg	0	0
			14	14		
56	1F	15	Total	Mg	0	0
			15	15		
56	1G	5	Total	Mg	0	0
			5	5		
56	1H	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1I	1	Total Mg 1 1	0	0
56	1N	5	Total Mg 5 5	0	0
56	1O	6	Total Mg 6 6	0	0
56	1P	4	Total Mg 4 4	0	0
56	1Q	8	Total Mg 8 8	0	0
56	1R	4	Total Mg 4 4	0	0
56	1S	3	Total Mg 3 3	0	0
56	1T	2	Total Mg 2 2	0	0
56	1U	13	Total Mg 13 13	0	0
56	1V	9	Total Mg 9 9	0	0
56	1W	7	Total Mg 7 7	0	0
56	1X	5	Total Mg 5 5	0	0
56	1Y	3	Total Mg 3 3	0	0
56	1Z	2	Total Mg 2 2	0	0
56	10	10	Total Mg 10 10	0	0
56	11	5	Total Mg 5 5	0	0
56	12	2	Total Mg 2 2	0	0
56	13	5	Total Mg 5 5	0	0
56	14	1	Total Mg 1 1	0	0
56	15	10	Total Mg 10 10	0	0
56	16	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	17	4	Total 4	Mg 4	0	0
56	18	8	Total 8	Mg 8	0	0
56	19	2	Total 2	Mg 2	0	0
56	1a	214	Total 214	Mg 214	0	0
56	1b	1	Total 1	Mg 1	0	0
56	1e	1	Total 1	Mg 1	0	0
56	1f	2	Total 2	Mg 2	0	0
56	1k	1	Total 1	Mg 1	0	0
56	1l	2	Total 2	Mg 2	0	0
56	1m	1	Total 1	Mg 1	0	0
56	1n	2	Total 2	Mg 2	0	0
56	1p	1	Total 1	Mg 1	0	0
56	1t	1	Total 1	Mg 1	0	0
56	1v	1	Total 1	Mg 1	0	0
56	1w	9	Total 9	Mg 9	0	0
56	1x	13	Total 13	Mg 13	0	0
56	1y	2	Total 2	Mg 2	0	0
56	2A	880	Total 880	Mg 880	0	0
56	2B	19	Total 19	Mg 19	0	0
56	2D	8	Total 8	Mg 8	0	0
56	2E	10	Total 10	Mg 10	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2F	8	Total 8	Mg 8	0	0
56	2G	1	Total 1	Mg 1	0	0
56	2O	1	Total 1	Mg 1	0	0
56	2P	2	Total 2	Mg 2	0	0
56	2Q	3	Total 3	Mg 3	0	0
56	2R	2	Total 2	Mg 2	0	0
56	2S	1	Total 1	Mg 1	0	0
56	2T	3	Total 3	Mg 3	0	0
56	2U	2	Total 2	Mg 2	0	0
56	2V	2	Total 2	Mg 2	0	0
56	2W	3	Total 3	Mg 3	0	0
56	2X	1	Total 1	Mg 1	0	0
56	2Z	1	Total 1	Mg 1	0	0
56	20	4	Total 4	Mg 4	0	0
56	21	2	Total 2	Mg 2	0	0
56	23	1	Total 1	Mg 1	0	0
56	25	6	Total 6	Mg 6	0	0
56	26	1	Total 1	Mg 1	0	0
56	27	2	Total 2	Mg 2	0	0
56	28	4	Total 4	Mg 4	0	0
56	29	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2a	235	Total 235	Mg 235	0	0
56	2d	2	Total 2	Mg 2	0	0
56	2e	3	Total 3	Mg 3	0	0
56	2f	3	Total 3	Mg 3	0	0
56	2g	1	Total 1	Mg 1	0	0
56	2j	1	Total 1	Mg 1	0	0
56	2l	6	Total 6	Mg 6	0	0
56	2q	4	Total 4	Mg 4	0	0
56	2t	1	Total 1	Mg 1	0	0
56	2v	3	Total 3	Mg 3	0	0
56	2w	9	Total 9	Mg 9	0	0
56	2x	7	Total 7	Mg 7	0	0
56	2y	7	Total 7	Mg 7	0	0

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

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

- Molecule 58 is ZINC ION (CCD ID: ZN) (formula: Zn).

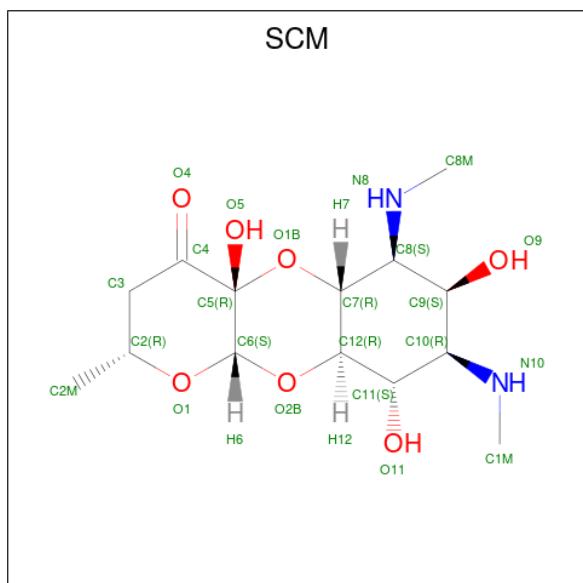
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1Y	1	Total 1	Zn 1	0	0
58	14	1	Total 1	Zn 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	15	1	Total Zn 1 1	0	0
58	16	1	Total Zn 1 1	0	0
58	19	1	Total Zn 1 1	0	0
58	1n	1	Total Zn 1 1	0	0
58	2Y	1	Total Zn 1 1	0	0
58	24	1	Total Zn 1 1	0	0
58	25	1	Total Zn 1 1	0	0
58	26	1	Total Zn 1 1	0	0
58	29	1	Total Zn 1 1	0	0
58	2n	1	Total Zn 1 1	0	0

- Molecule 59 is SPECTINOMYCIN (CCD ID: SCM) (formula: $C_{14}H_{24}N_2O_7$).



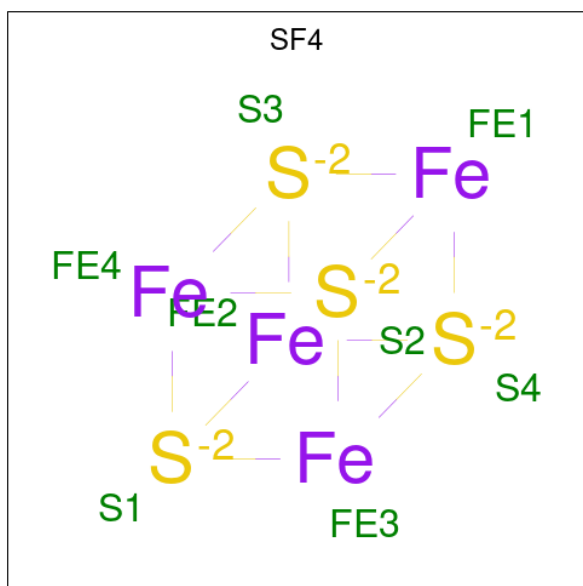
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
59	1a	1	Total	C	N	O	0	0
			23	14	2	7		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
59	2a	1	Total	C	N	O	0	0
			23	14	2	7		

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



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

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1A	2167	Total	O	0	0
			2167	2167		
61	1B	69	Total	O	0	0
			69	69		
61	1D	27	Total	O	0	0
			27	27		
61	1E	25	Total	O	0	0
			25	25		
61	1F	21	Total	O	0	0
			21	21		
61	1G	2	Total	O	0	0
			2	2		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1H	2	Total	O	0	0
			2	2		
61	1I	1	Total	O	0	0
			1	1		
61	1N	5	Total	O	0	0
			5	5		
61	1O	5	Total	O	0	0
			5	5		
61	1P	24	Total	O	0	0
			24	24		
61	1Q	11	Total	O	0	0
			11	11		
61	1R	11	Total	O	0	0
			11	11		
61	1S	5	Total	O	0	0
			5	5		
61	1T	9	Total	O	0	0
			9	9		
61	1U	15	Total	O	0	0
			15	15		
61	1V	10	Total	O	0	0
			10	10		
61	1W	8	Total	O	0	0
			8	8		
61	1X	5	Total	O	0	0
			5	5		
61	1Y	3	Total	O	0	0
			3	3		
61	1Z	2	Total	O	0	0
			2	2		
61	10	18	Total	O	0	0
			18	18		
61	11	8	Total	O	0	0
			8	8		
61	12	3	Total	O	0	0
			3	3		
61	13	4	Total	O	0	0
			4	4		
61	14	1	Total	O	0	0
			1	1		
61	15	8	Total	O	0	0
			8	8		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	16	3	Total 3	O 3	0	0
61	17	8	Total 8	O 8	0	0
61	18	11	Total 11	O 11	0	0
61	1a	426	Total 426	O 426	0	0
61	1b	1	Total 1	O 1	0	0
61	1c	1	Total 1	O 1	0	0
61	1d	1	Total 1	O 1	0	0
61	1f	1	Total 1	O 1	0	0
61	1i	2	Total 2	O 2	0	0
61	1j	2	Total 2	O 2	0	0
61	1l	8	Total 8	O 8	0	0
61	1m	1	Total 1	O 1	0	0
61	1n	2	Total 2	O 2	0	0
61	1o	2	Total 2	O 2	0	0
61	1p	1	Total 1	O 1	0	0
61	1q	2	Total 2	O 2	0	0
61	1t	2	Total 2	O 2	0	0
61	1u	1	Total 1	O 1	0	0
61	1v	5	Total 5	O 5	0	0
61	1w	14	Total 14	O 14	0	0
61	1x	15	Total 15	O 15	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1y	1	Total 1	O 1	0	0
61	2A	1243	Total 1243	O 1243	0	0
61	2B	23	Total 23	O 23	0	0
61	2D	25	Total 25	O 25	0	0
61	2E	11	Total 11	O 11	0	0
61	2F	12	Total 12	O 12	0	0
61	2I	2	Total 2	O 2	0	0
61	2N	2	Total 2	O 2	0	0
61	2O	2	Total 2	O 2	0	0
61	2P	10	Total 10	O 10	0	0
61	2Q	2	Total 2	O 2	0	0
61	2R	4	Total 4	O 4	0	0
61	2T	5	Total 5	O 5	0	0
61	2U	1	Total 1	O 1	0	0
61	2V	2	Total 2	O 2	0	0
61	2W	2	Total 2	O 2	0	0
61	2X	2	Total 2	O 2	0	0
61	2Z	1	Total 1	O 1	0	0
61	20	3	Total 3	O 3	0	0
61	21	11	Total 11	O 11	0	0
61	23	2	Total 2	O 2	0	0

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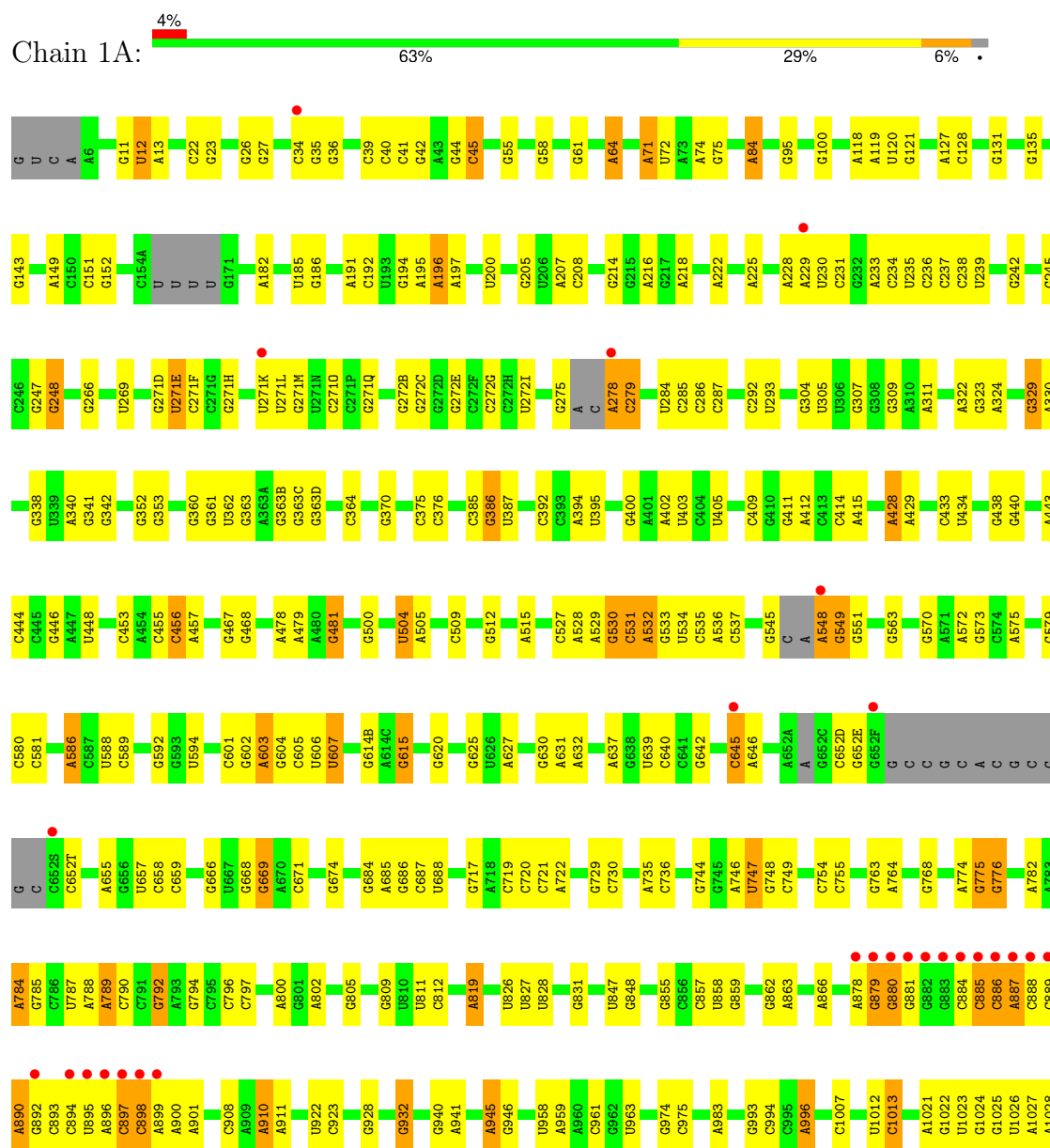
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	25	1	Total 1	O 1	0	0
61	27	4	Total 4	O 4	0	0
61	28	4	Total 4	O 4	0	0
61	29	1	Total 1	O 1	0	0
61	2a	311	Total 311	O 311	0	0
61	2c	1	Total 1	O 1	0	0
61	2d	4	Total 4	O 4	0	0
61	2e	2	Total 2	O 2	0	0
61	2g	1	Total 1	O 1	0	0
61	2j	2	Total 2	O 2	0	0
61	2l	5	Total 5	O 5	0	0
61	2p	2	Total 2	O 2	0	0
61	2r	1	Total 1	O 1	0	0
61	2t	2	Total 2	O 2	0	0
61	2v	1	Total 1	O 1	0	0
61	2w	3	Total 3	O 3	0	0
61	2x	3	Total 3	O 3	0	0
61	2y	14	Total 14	O 14	0	0

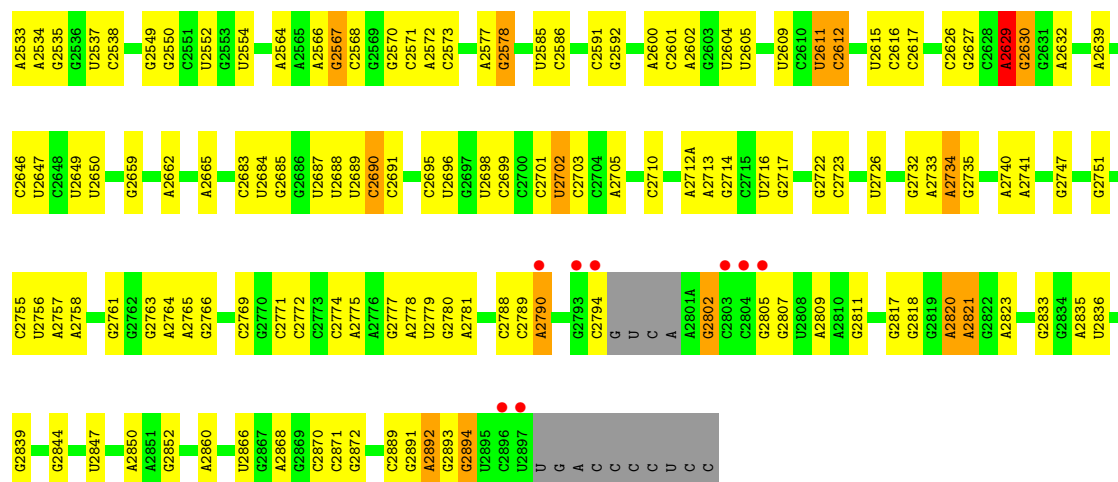
3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

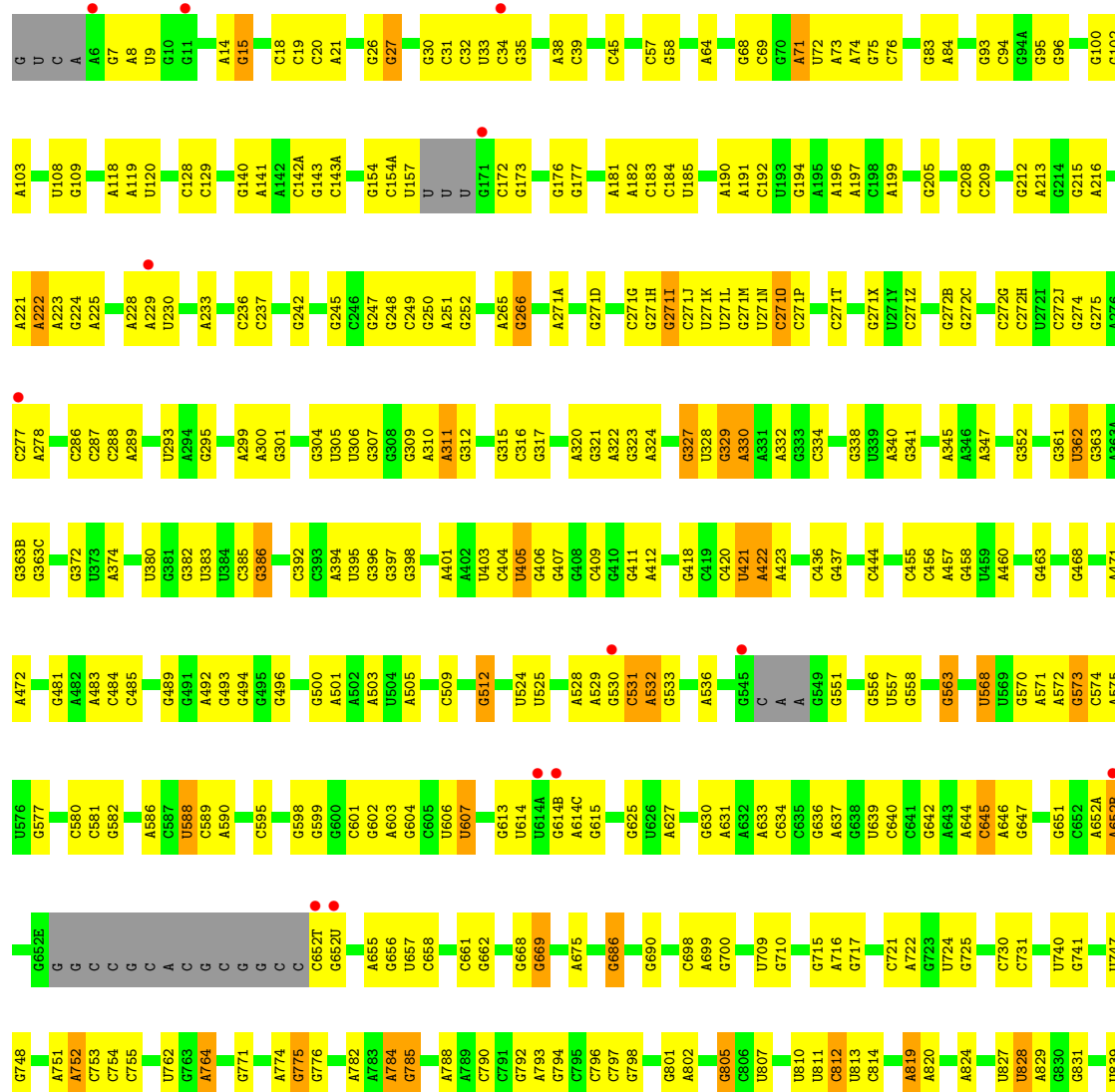
• Molecule 1: 23S Ribosomal RNA

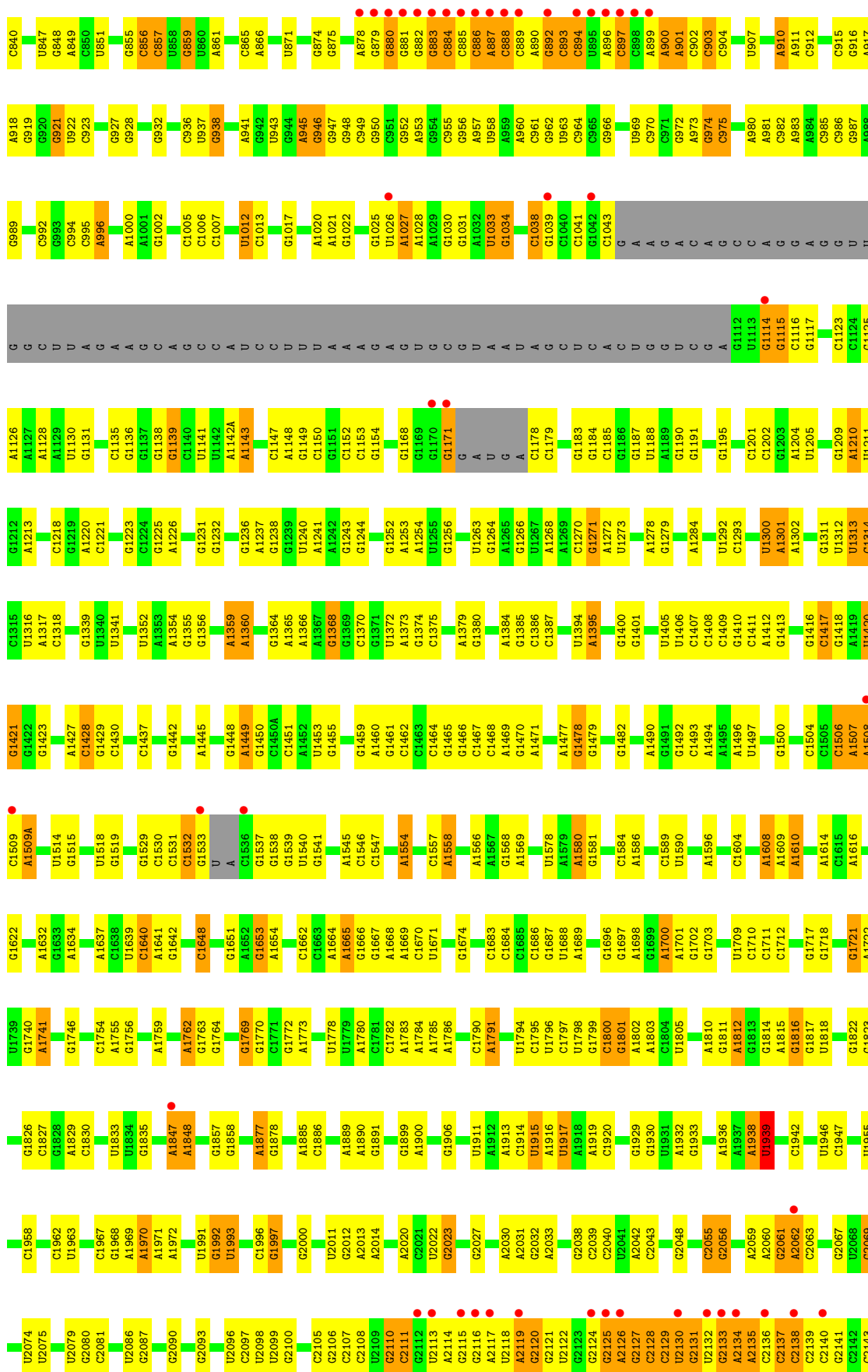


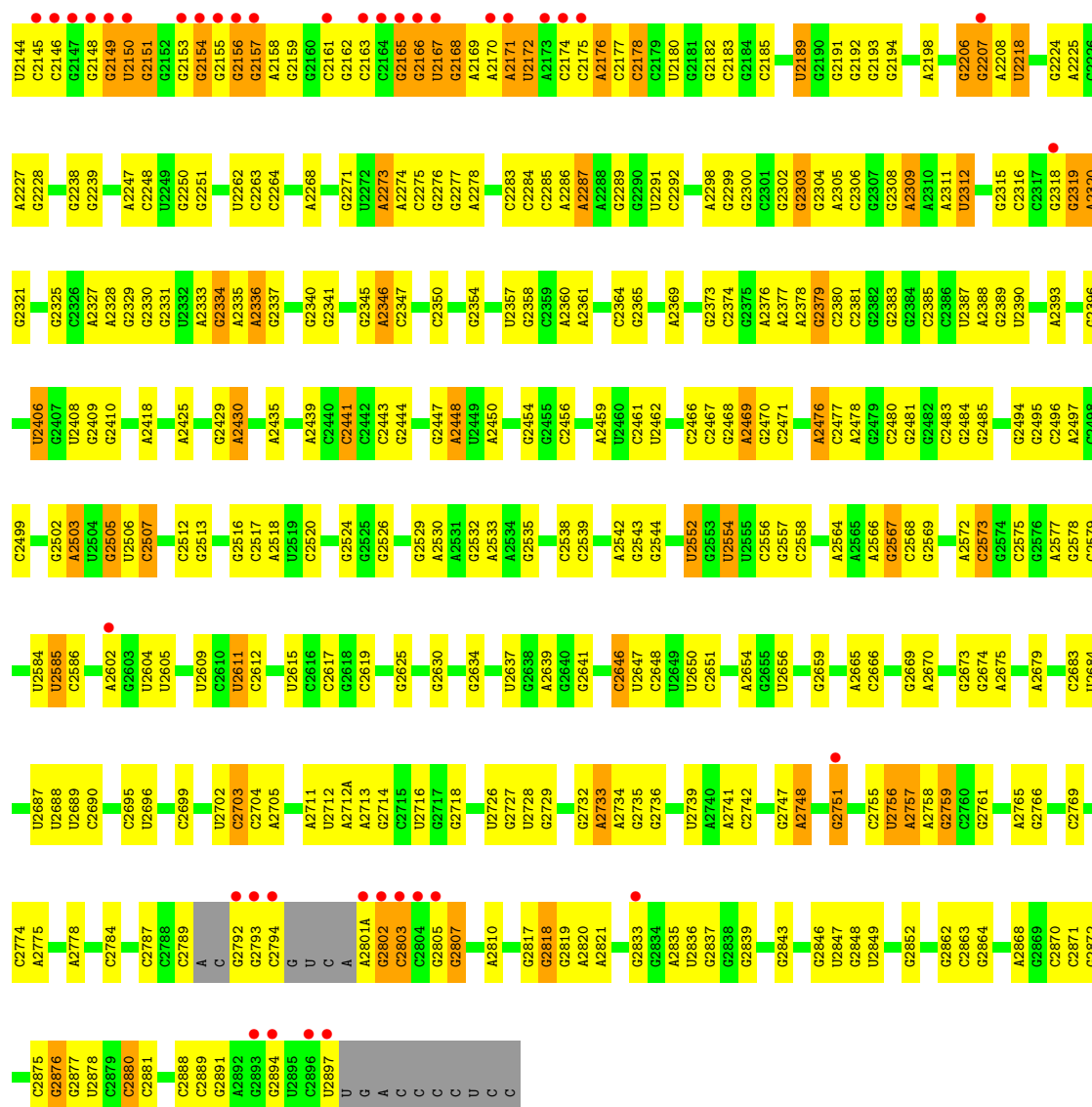
A2326	C2427	A2328	G2224	C2139	C2063	U1963	G1825	A1722	A1572	A1445	C1330	G1187	C1092	A1029
G2427	A2327	G2428	A2225	C2140	C2064	G1964	G1826	U1739	U1578	A1445A	A1330	U1188	G1093	G1030
G2429	G2330	A2330	G2228	C2141	C2065	C1965	G1827	G1740	U1578	C1445A	G1332	A1189	U1094	G1031
A2430	G2331	A2331	G2235	C2142	C2066	A1966	C1828	A1741	G1581	G1448	C1345	G1193	A1095	A1032
U2431	G2332	A2332	G2236	C2143	G2069	C1967	A1847	G1743	C1584	G1449	A1349	C1201	U1097	G1034
A2435	A2335	A2335	C2236	C2145	U2074	A1970	U1851	C1744	A1586	G1450	A1352	G1202	U1098	U1035
G2436	A2336	A2336	G2237	C2146	U2075	A1971	C1852	C1745	A1587	G1455	U1352	G1203	G1099	G1036
G2437	G2337	A2337	G2238	G2147	U2076	A1972	A1853	G1750	C1588	A1466	A1354	U1204	C1100	G1037
A2439	G2338	A2338	G2239	G2148	U2079	G1973	A1854	G1756	C1589	C1467	G1355	U1205	U1101	C1038
C2440	U2441	C2441	U2243	G2149	G2080	C1979	G1860	G1756	U1590	C1467	G1356	A1220	C1102	C1041
C2441	C2342	C2342	U2244	U2150	U2086	A1986	G1861	G1763	G1593	G1478	U1105	U1220	U1105	G1044
G2445	C2343	C2343	U2245	G2151	G2087	A1986	G1861	G1764	G1594	G1479	G1106	G1223	G1107	G1044
G2446	U2344	A2345	G2251	G2153	G2090	U1991	G1865	U1991	G1594	G1480	G1107	G1223	G1107	A1045
G2447	A2346	A2346	G2252	G2154	G2091	G1992	C1866	G1769	G1594	A1481	A1359	A1226	G1110	A1046
A2448	C2347	A2347	G2253	G2155	G2092	U1993	A1876	G1770	U1602	G1482	A1360	A1226	G1111	A1047
U2449	C2348	A2348	G2254	G2156	G2093	C1996	A1877	C1771	C1607	C1493	A1365	G1238	G1112	A1048
A2450	C2349	A2349	G2255	G2157	G2094	G1997	G1878	G1772	A1608	C1494	G1368	G1238	G1112	G1051
A2451	C2350	A2350	G2256	G2158	U2098	G1997	G1878	G1773	A1609	A1495	G1369	G1243	G1115	G1052
C2461	U2351	A2351	G2257	G2159	U2099	G1997	A1889	U1773	A1610	A1496	G1372	G1244	C1116	C1053
C2462	A2352	A2352	U2262	C2160	G2100	A2001	A1890	U1775	A1610	A1496	U1373	G1244	G1117	A1054
C2463	U2353	A2353	G2263	G2161	G2101	G2002	A1891	C1775	U1639	C1501	A1374	A1253	G1125	G1055
C2464	C2354	A2354	G2264	G2162	U2102	G2002	G1899	U1778	C1640	C1501	A1374	A1253	G1125	G1056
C2465	U2355	A2355	G2265	G2163	G2103	A2013	A1900	U1779	A1641	A1508	G1374	G1256	A1126	A1057
C2466	C2356	A2356	G2266	G2164	G2104	A2014	A1900	U1780	G1642	A1509A	A1379	G1266	A1127	G1058
C2467	A2357	A2357	G2267	G2165	C2105	A2015	G1906	C1781	G1642	A1509A	G1380	G1266	A1128	G1059
C2468	U2358	A2358	G2268	G2166	G2106	U2016	G1906	U1782	G1647	A1509A	A1380	U1267	A1129	U1060
A2469	C2359	A2359	G2269	G2167	G2107	U2016	G1906	A1783	G1648	A1509A	A1380	U1267	A1129	U1060
C2470	U2360	A2360	G2270	G2168	C2108	A2019	U1911	A1784	G1649	A1509A	A1380	U1267	A1129	U1060
C2471	C2361	A2361	G2271	G2169	U2109	A2020	U1911	A1785	G1650	A1509A	A1380	U1267	A1129	U1060
C2472	A2362	A2362	G2272	G2170	G2110	A2021	U1911	A1786	G1651	A1509A	A1380	U1267	A1129	U1060
C2473	C2363	A2363	G2273	G2171	G2111	C2021	U1911	A1787	G1652	A1509A	A1380	U1267	A1129	U1060
C2474	U2364	A2364	G2274	G2172	G2112	U2022	U1911	A1788	G1653	A1509A	A1380	U1267	A1129	U1060
C2475	C2365	A2365	G2275	G2173	G2113	G2023	U1911	A1789	G1654	A1509A	A1380	U1267	A1129	U1060
C2476	U2366	A2366	G2276	G2174	G2114	G2024	U1911	A1790	G1655	A1509A	A1380	U1267	A1129	U1060
C2477	C2367	A2367	G2277	G2175	G2115	G2025	U1911	A1791	G1656	A1509A	A1380	U1267	A1129	U1060
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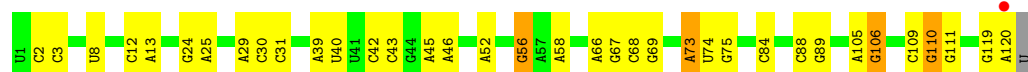
• Molecule 1: 23S Ribosomal RNA



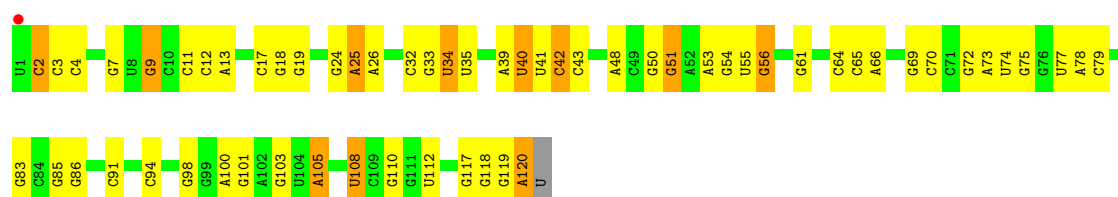




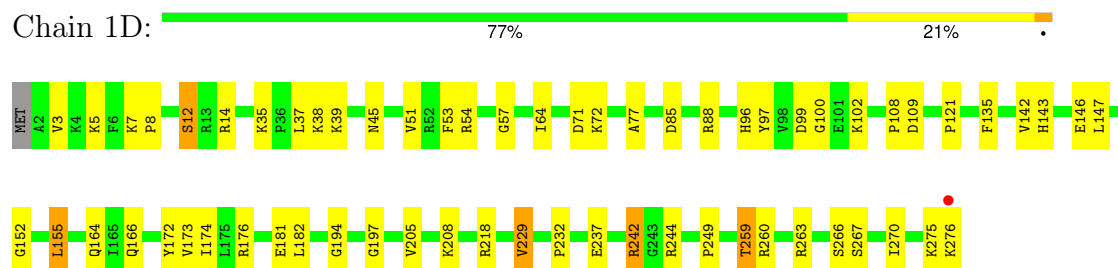
• Molecule 2: 5S Ribosomal RNA



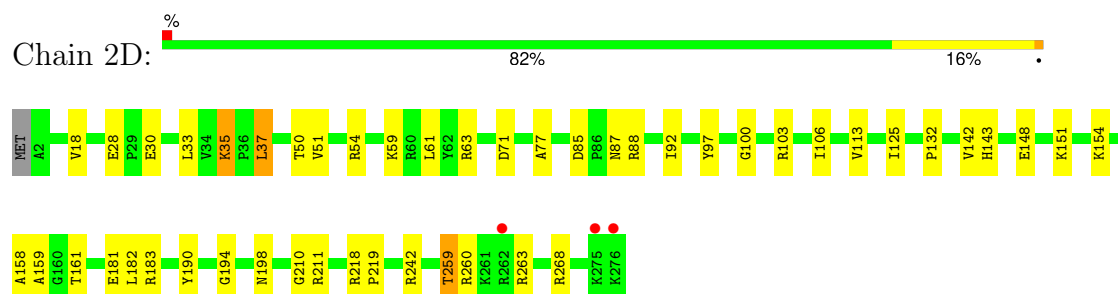
• Molecule 2: 5S Ribosomal RNA



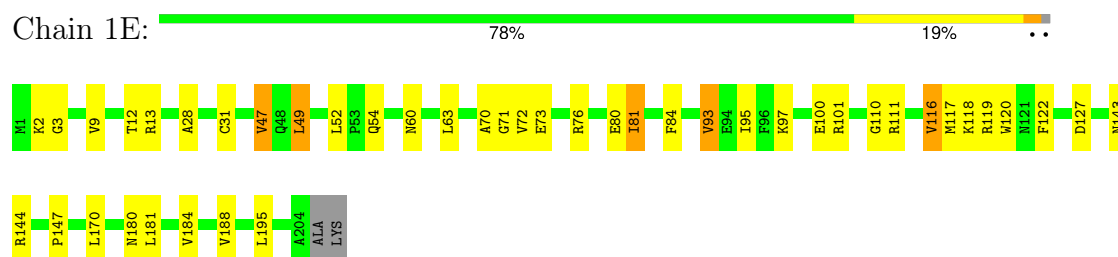
- Molecule 3: 50S ribosomal protein L2



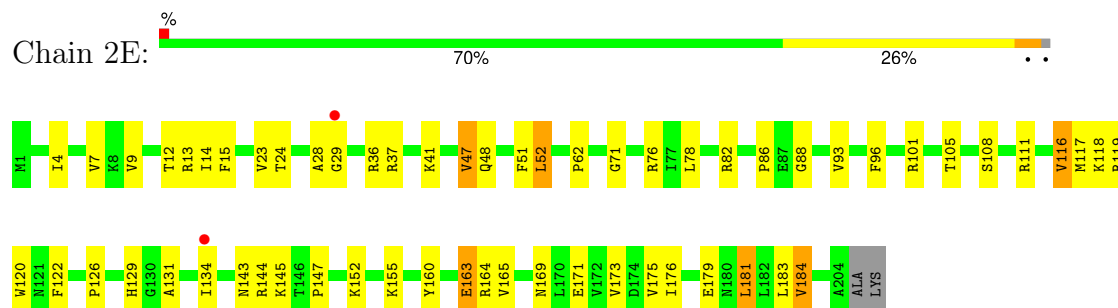
- Molecule 3: 50S ribosomal protein L2



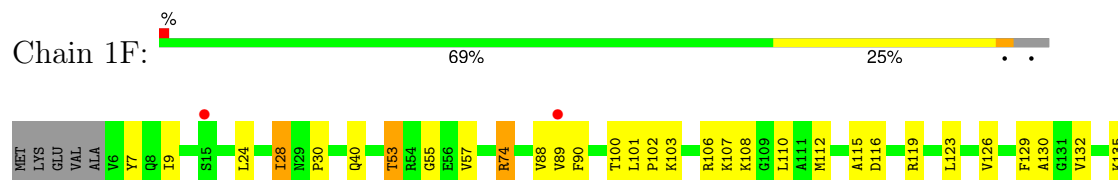
- Molecule 4: 50S ribosomal protein L3



- Molecule 4: 50S ribosomal protein L3



- Molecule 5: 50S ribosomal protein L4

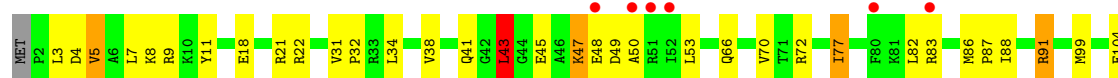




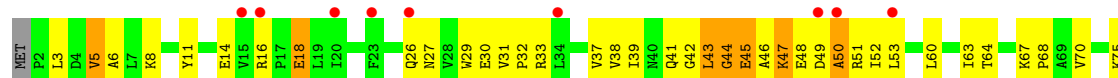
- Molecule 5: 50S ribosomal protein L4



- Molecule 6: 50S ribosomal protein L5



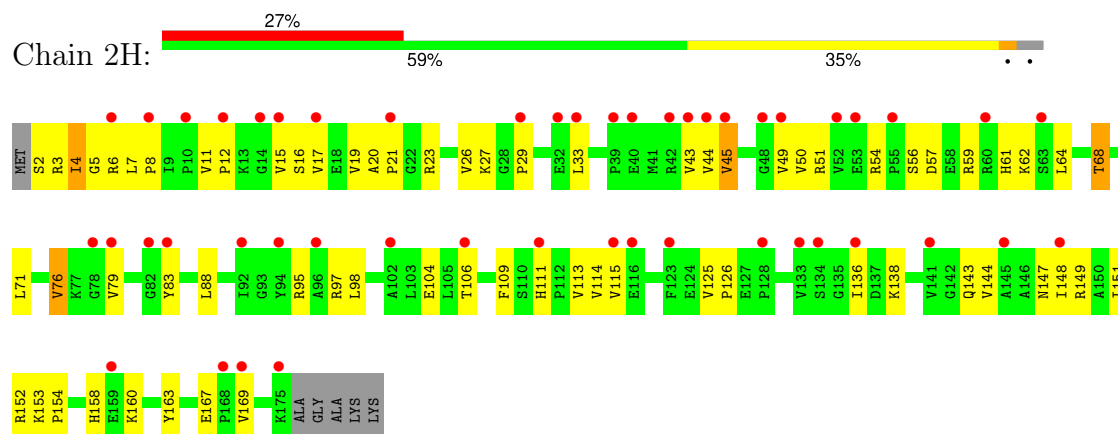
- Molecule 6: 50S ribosomal protein L5



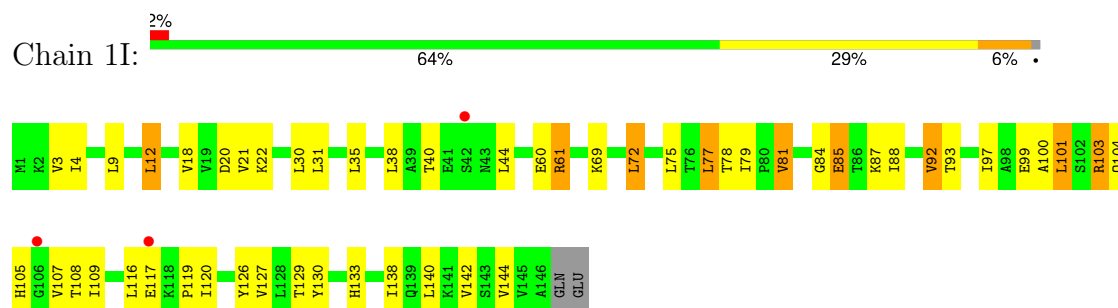
- Molecule 7: 50S ribosomal protein L6



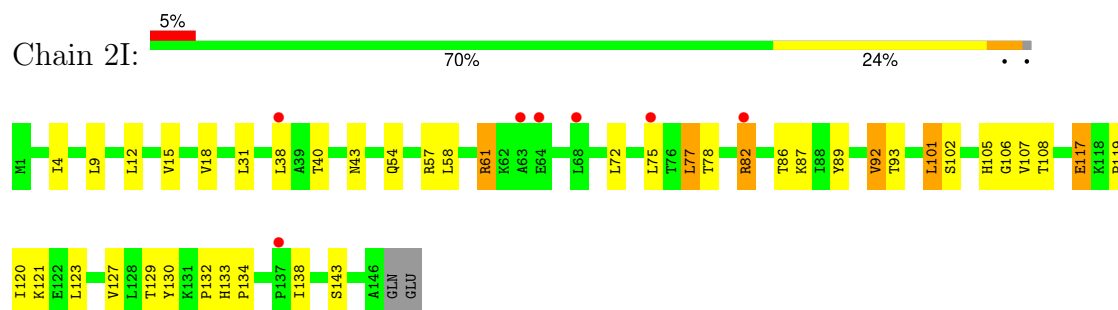
- Molecule 7: 50S ribosomal protein L6



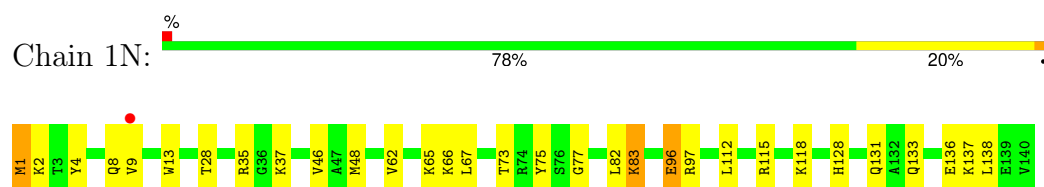
- Molecule 8: 50S ribosomal protein L9



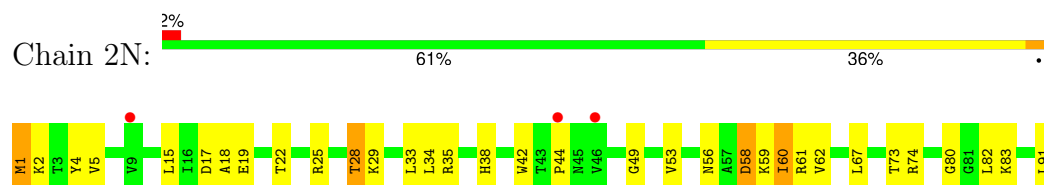
- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13

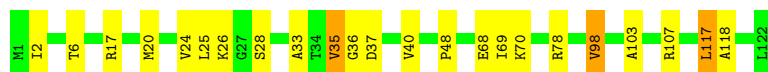
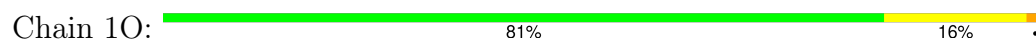


- Molecule 9: 50S ribosomal protein L13

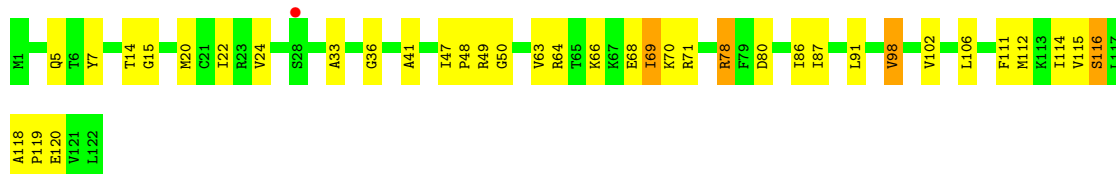




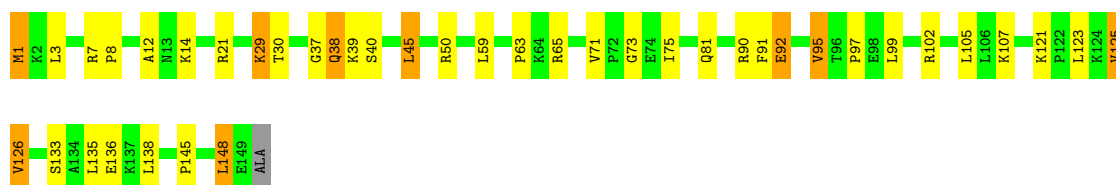
- Molecule 10: 50S ribosomal protein L14



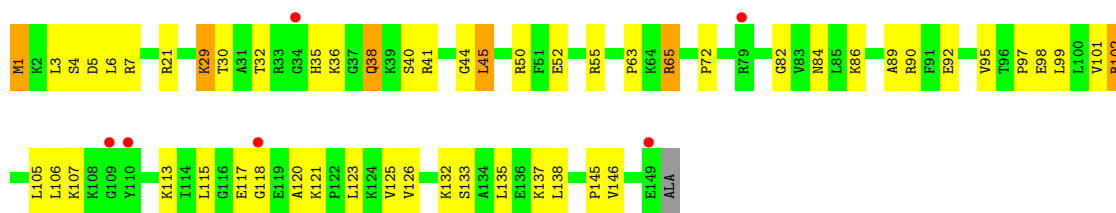
- Molecule 10: 50S ribosomal protein L14



- Molecule 11: 50S ribosomal protein L15

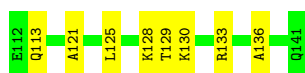


- Molecule 11: 50S ribosomal protein L15



- Molecule 12: 50S ribosomal protein L16





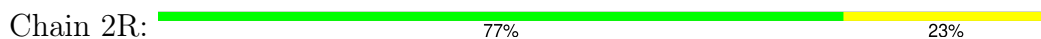
- Molecule 12: 50S ribosomal protein L16



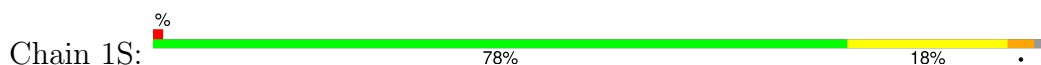
- Molecule 13: 50S ribosomal protein L17



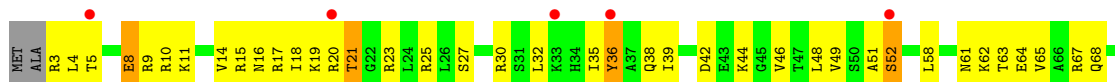
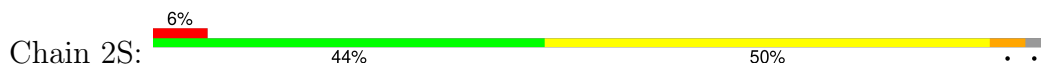
- Molecule 13: 50S ribosomal protein L17



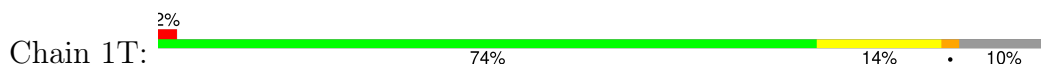
- Molecule 14: 50S ribosomal protein L18

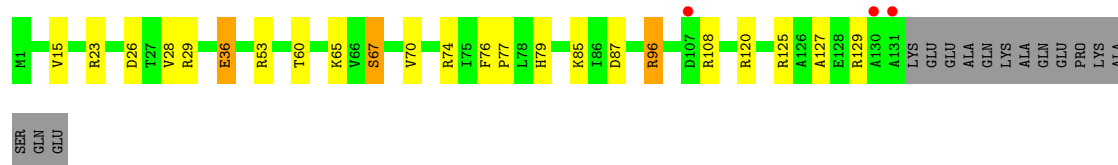


- Molecule 14: 50S ribosomal protein L18

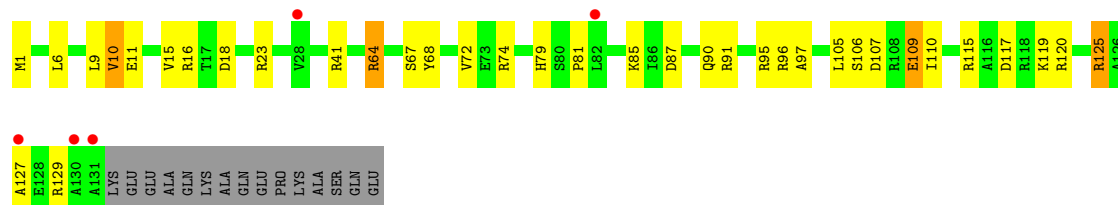


- Molecule 15: 50S ribosomal protein L19





- Molecule 15: 50S ribosomal protein L19



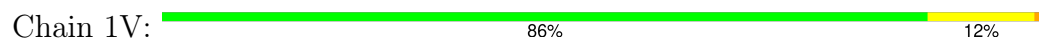
- Molecule 16: 50S ribosomal protein L20



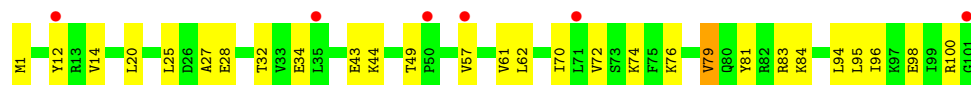
- Molecule 16: 50S ribosomal protein L20



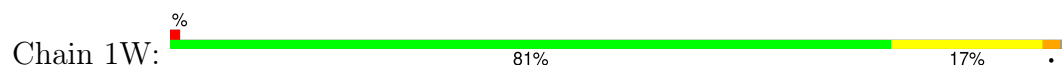
- Molecule 17: 50S ribosomal protein L21



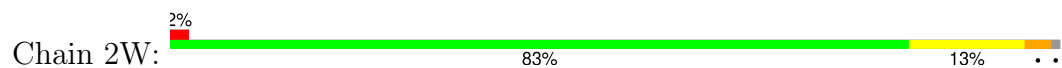
- Molecule 17: 50S ribosomal protein L21



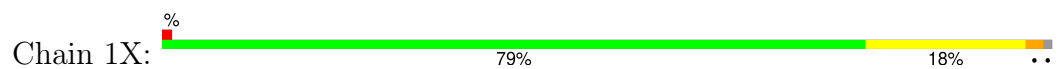
- Molecule 18: 50S ribosomal protein L22



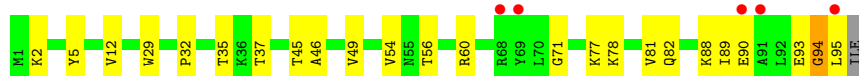
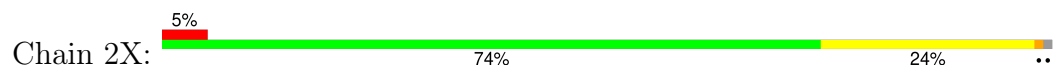
- Molecule 18: 50S ribosomal protein L22



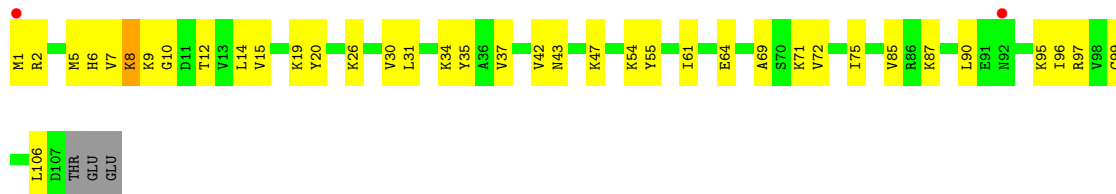
- Molecule 19: 50S ribosomal protein L23



- Molecule 19: 50S ribosomal protein L23



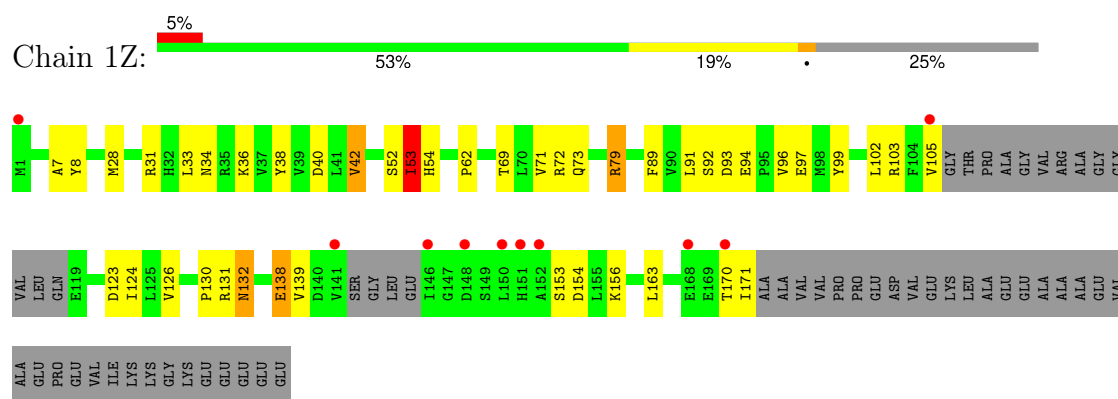
- Molecule 20: 50S ribosomal protein L24



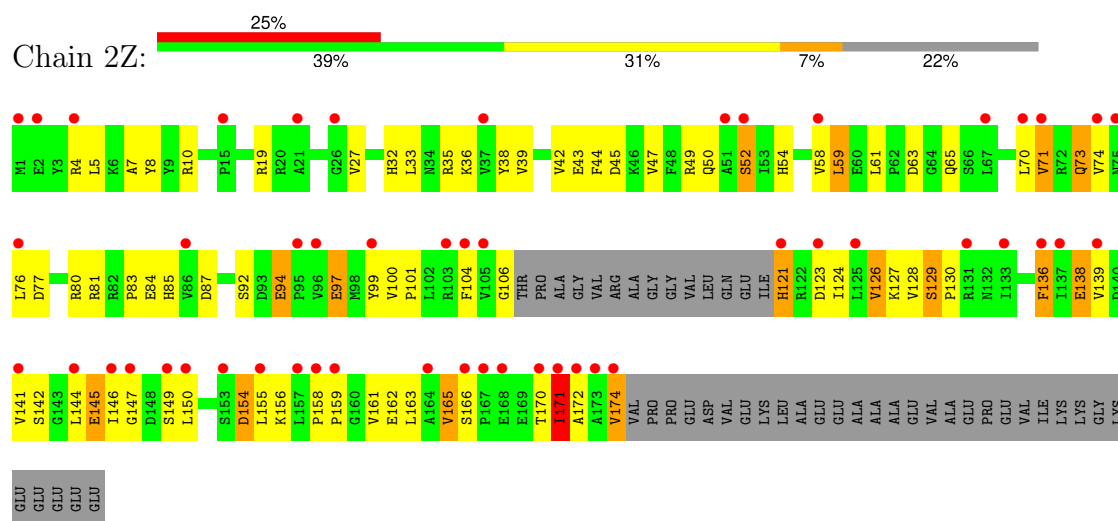
- Molecule 20: 50S ribosomal protein L24



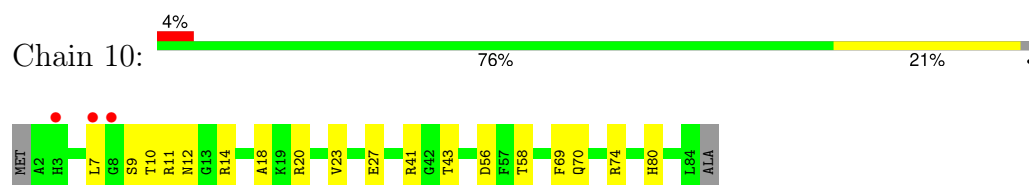
- Molecule 21: 50S ribosomal protein L25



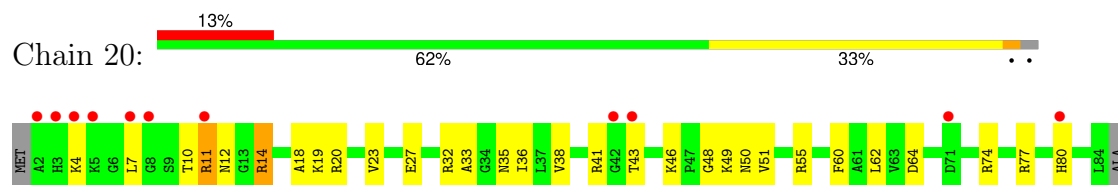
• Molecule 21: 50S ribosomal protein L25



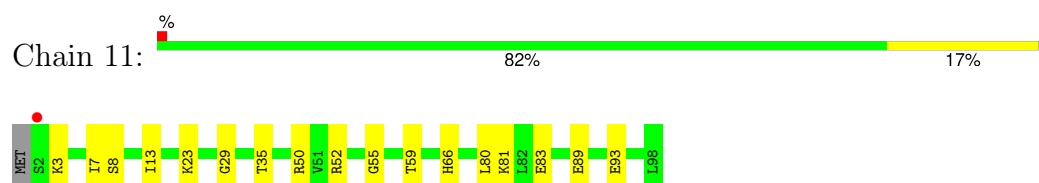
• Molecule 22: 50S ribosomal protein L27



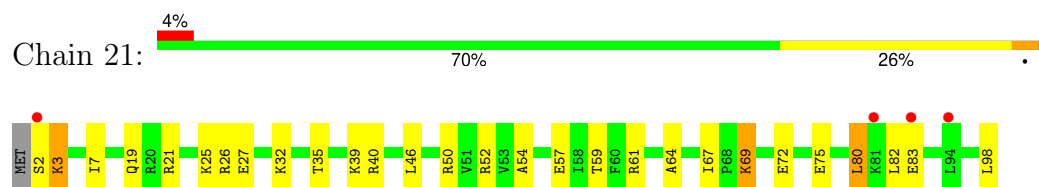
• Molecule 22: 50S ribosomal protein L27



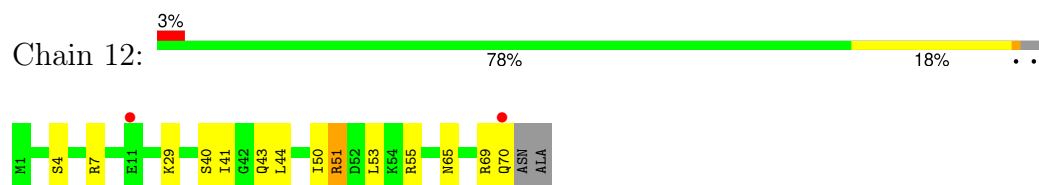
• Molecule 23: 50S ribosomal protein L28



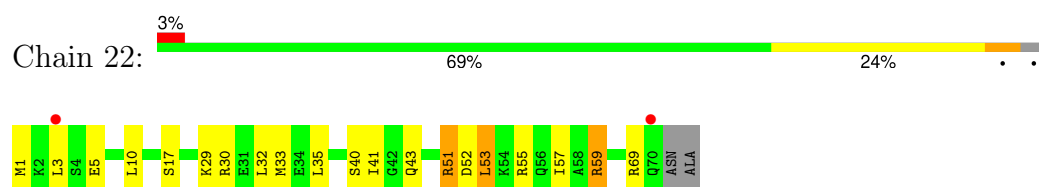
- Molecule 23: 50S ribosomal protein L28



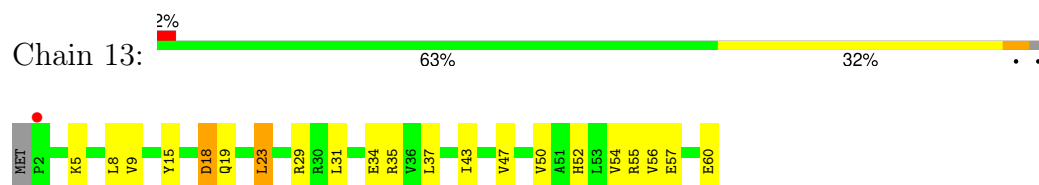
- Molecule 24: 50S ribosomal protein L29



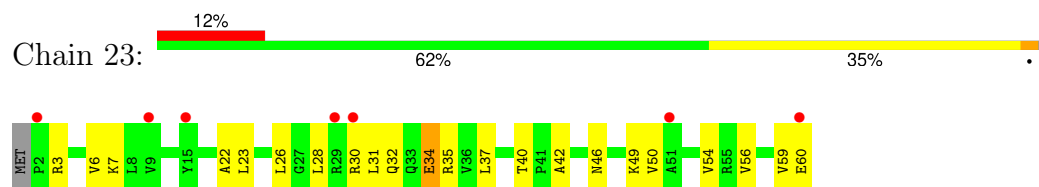
- Molecule 24: 50S ribosomal protein L29



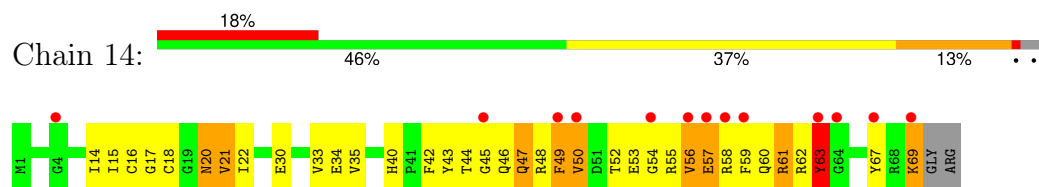
- Molecule 25: 50S ribosomal protein L30



- Molecule 25: 50S ribosomal protein L30

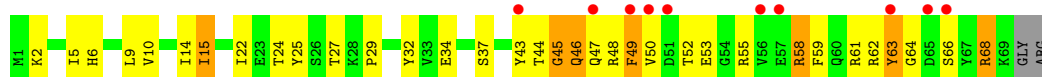


- Molecule 26: 50S ribosomal protein L31

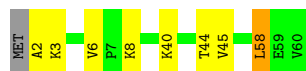
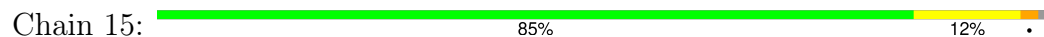


- Molecule 26: 50S ribosomal protein L31

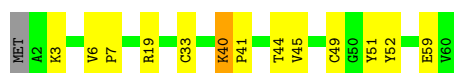
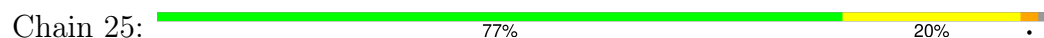




- Molecule 27: 50S ribosomal protein L32



- Molecule 27: 50S ribosomal protein L32



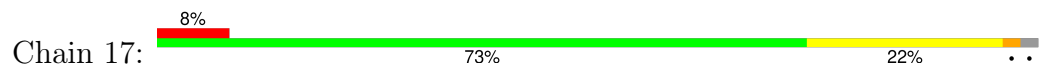
- Molecule 28: 50S ribosomal protein L33



- Molecule 28: 50S ribosomal protein L33



- Molecule 29: 50S ribosomal protein L34

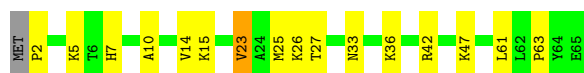


- Molecule 29: 50S ribosomal protein L34

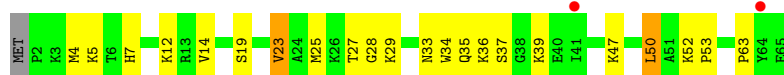


- Molecule 30: 50S ribosomal protein L35

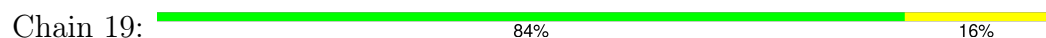




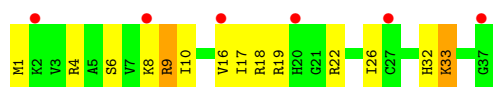
- Molecule 30: 50S ribosomal protein L35



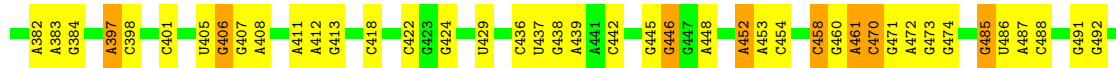
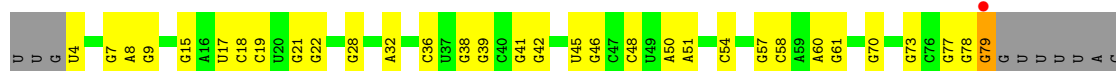
- Molecule 31: 50S ribosomal protein L36

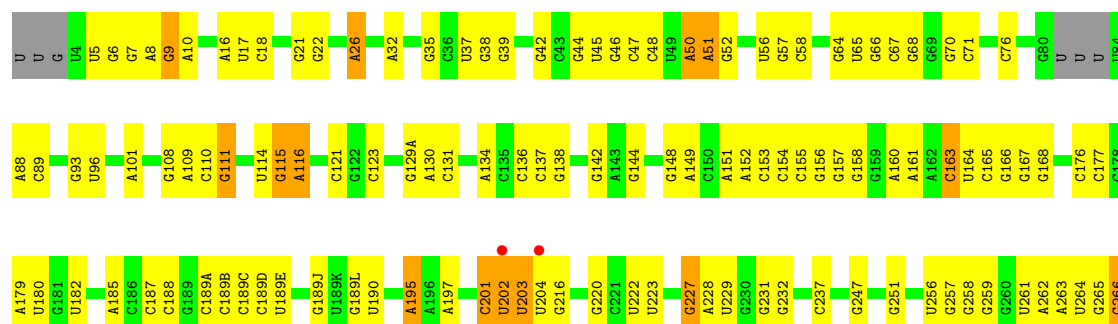


- Molecule 31: 50S ribosomal protein L36

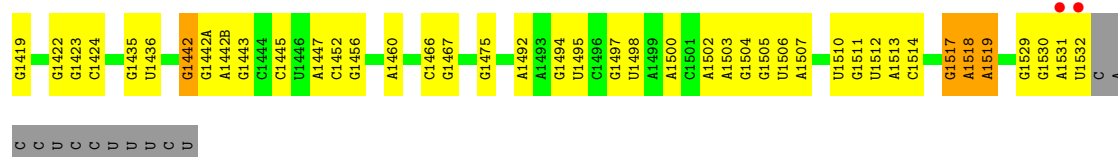


- Molecule 32: 16S Ribosomal RNA

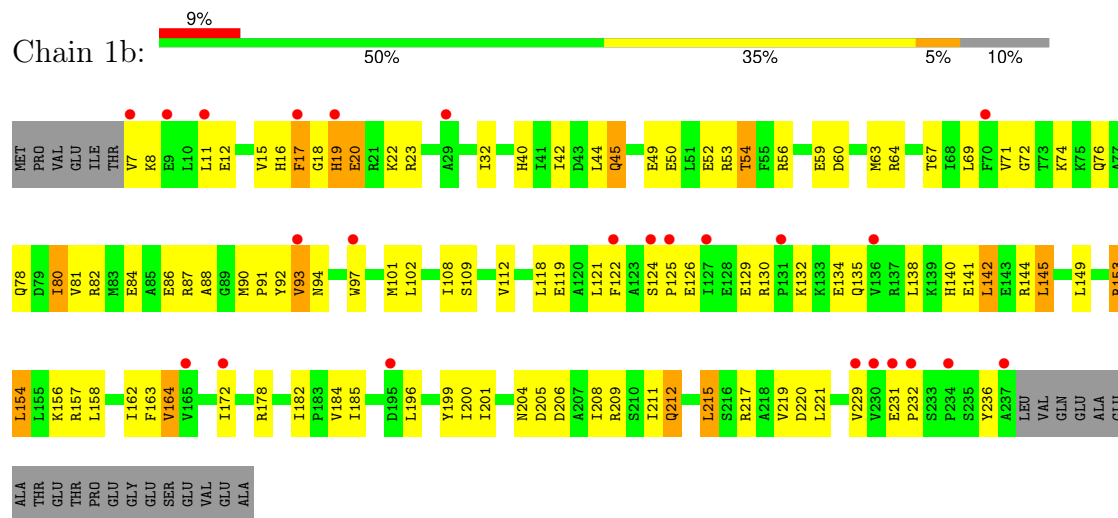




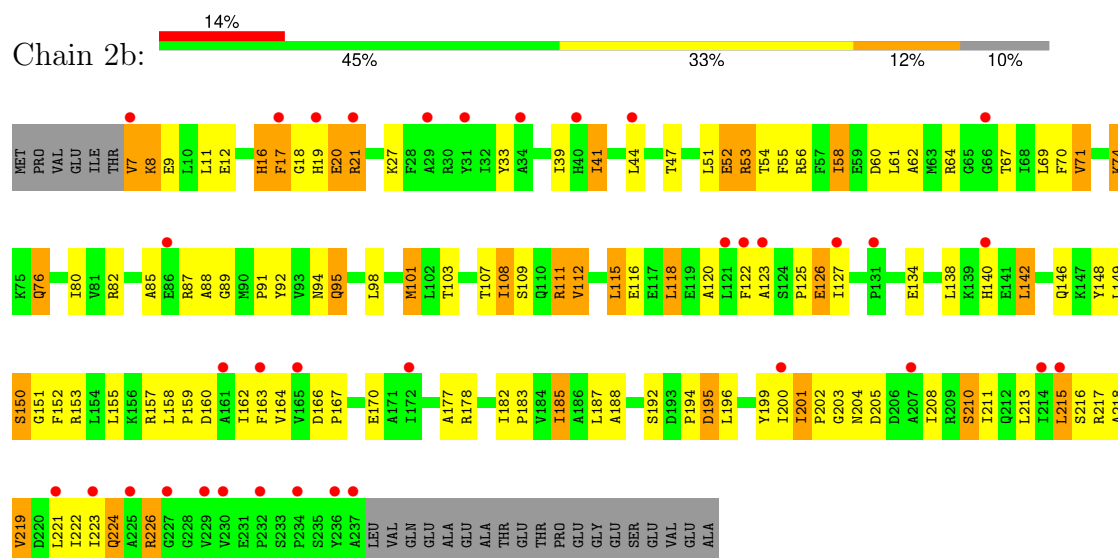




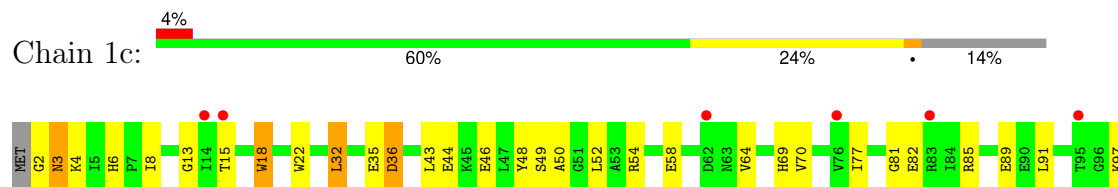
• Molecule 33: 30S ribosomal protein S2

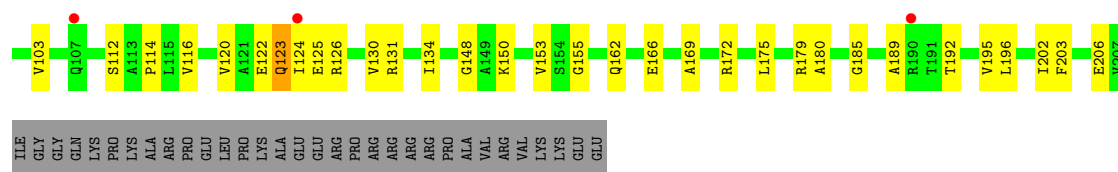


• Molecule 33: 30S ribosomal protein S2

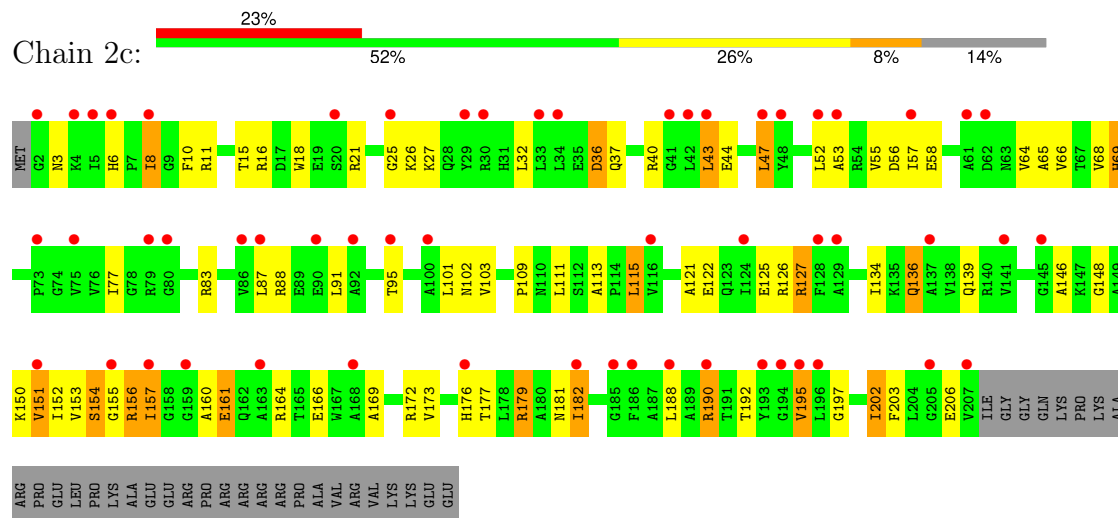


• Molecule 34: 30S ribosomal protein S3

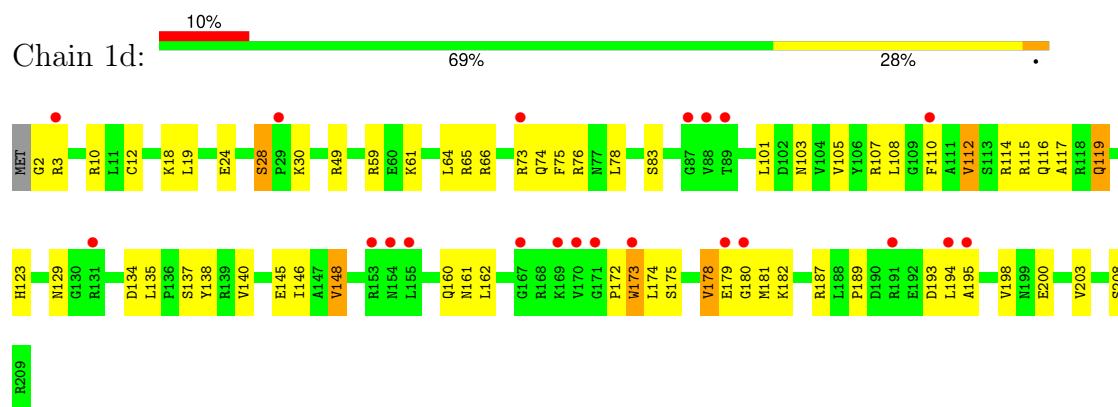




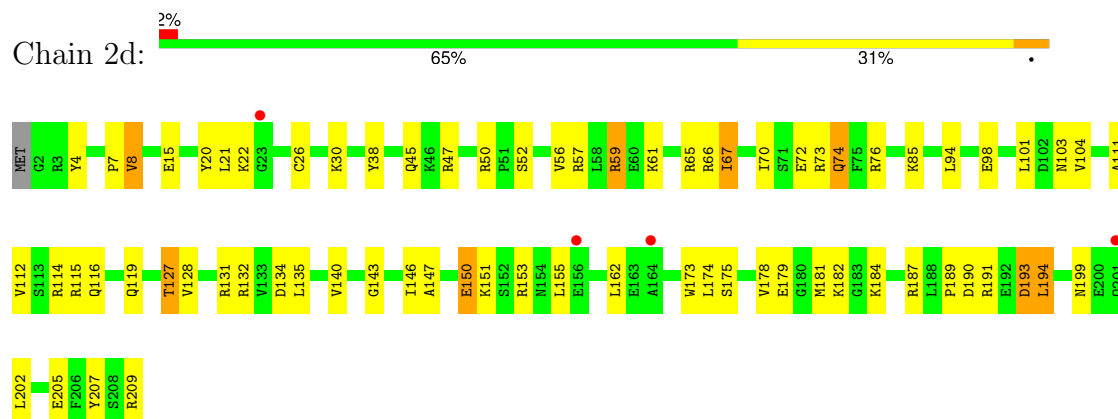
- Molecule 34: 30S ribosomal protein S3



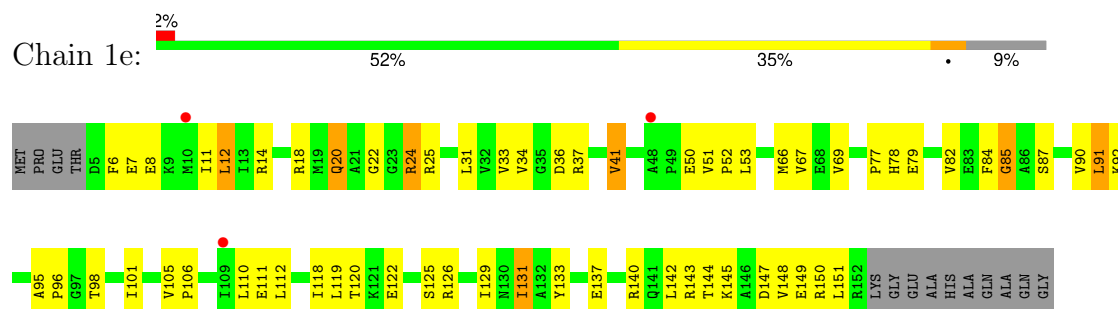
- Molecule 35: 30S ribosomal protein S4



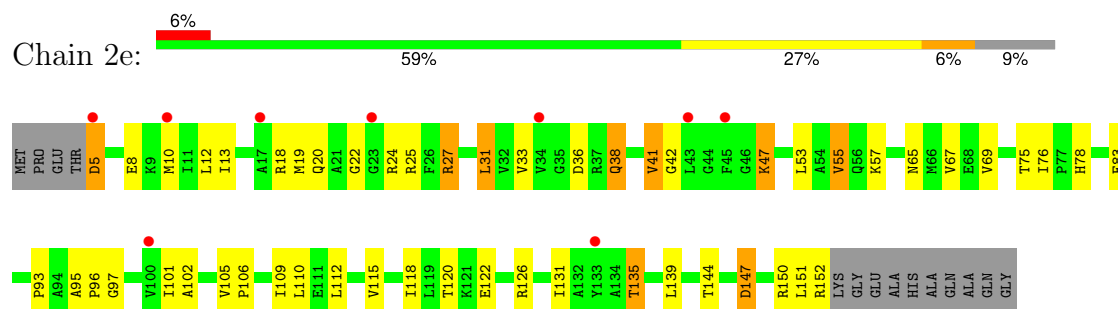
- Molecule 35: 30S ribosomal protein S4



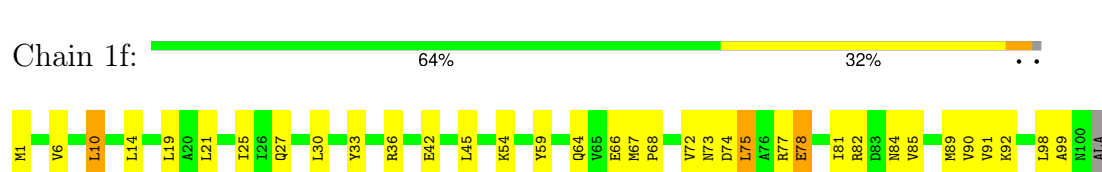
- Molecule 36: 30S ribosomal protein S5



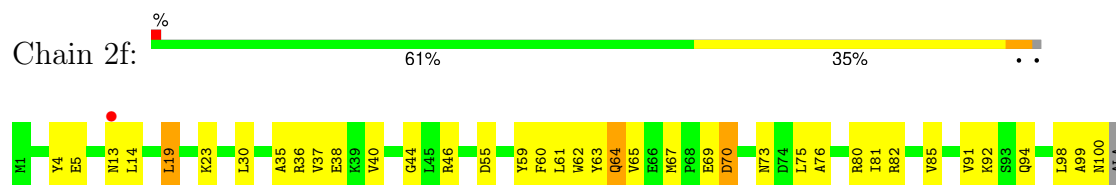
- Molecule 36: 30S ribosomal protein S5



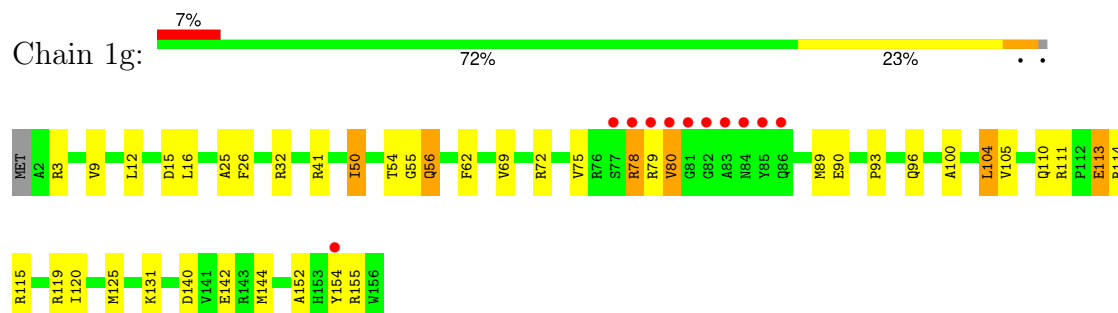
- Molecule 37: 30S ribosomal protein S6



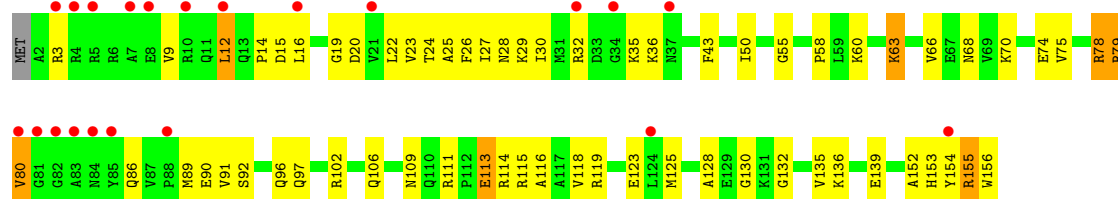
- Molecule 37: 30S ribosomal protein S6



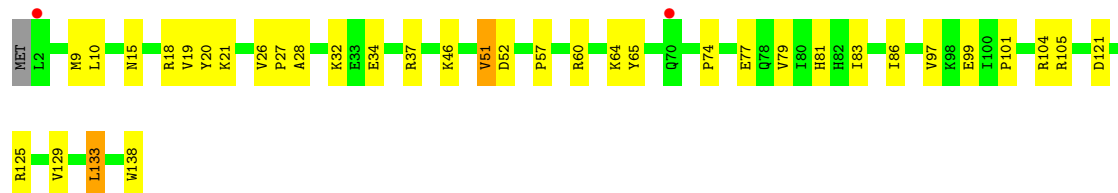
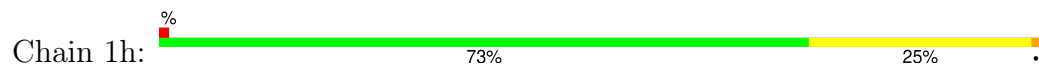
- Molecule 38: 30S ribosomal protein S7



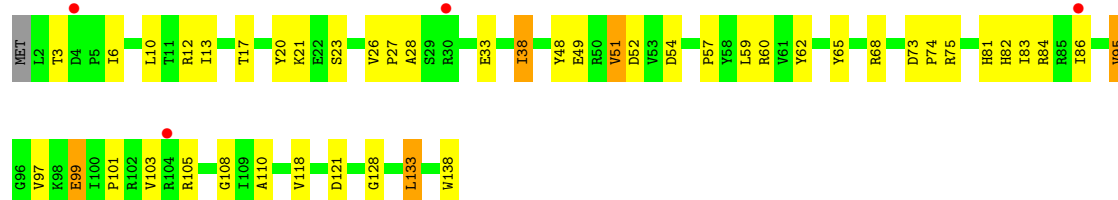
- Molecule 38: 30S ribosomal protein S7



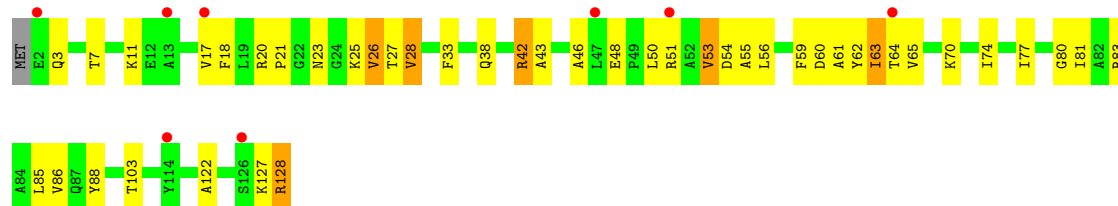
- Molecule 39: 30S ribosomal protein S8



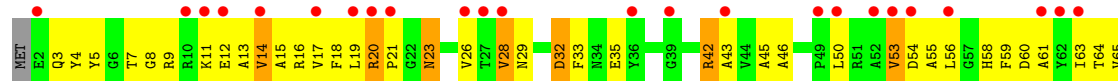
- Molecule 39: 30S ribosomal protein S8



- Molecule 40: 30S ribosomal protein S9

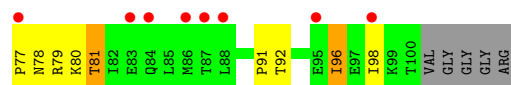
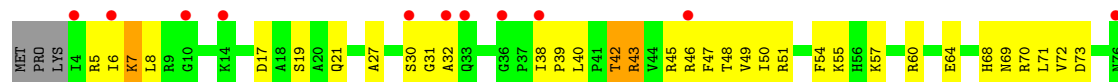


- Molecule 40: 30S ribosomal protein S9

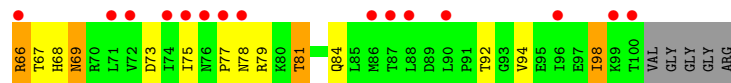
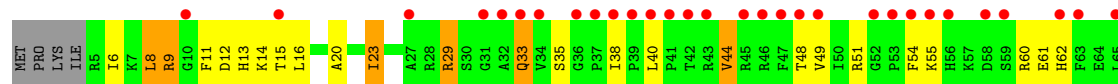
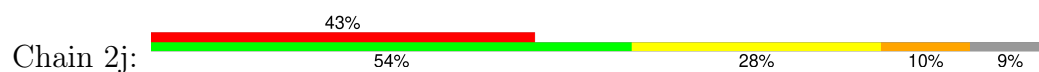




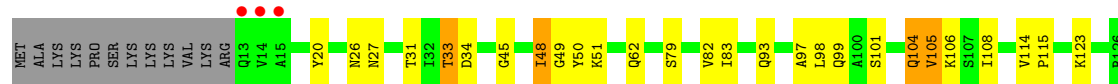
- Molecule 41: 30S ribosomal protein S10



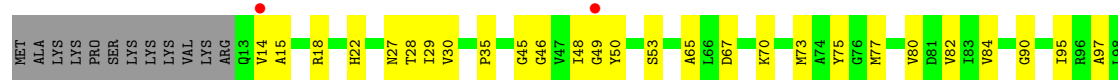
- Molecule 41: 30S ribosomal protein S10



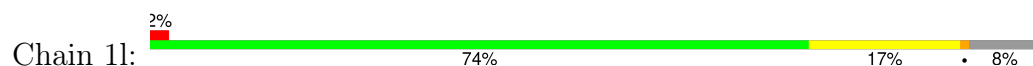
- Molecule 42: 30S ribosomal protein S11

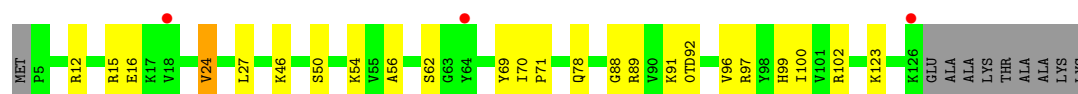


- Molecule 42: 30S ribosomal protein S11

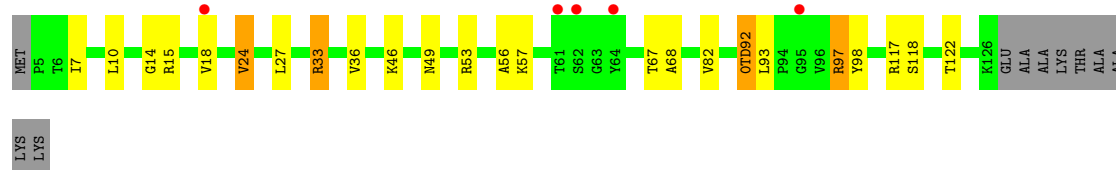
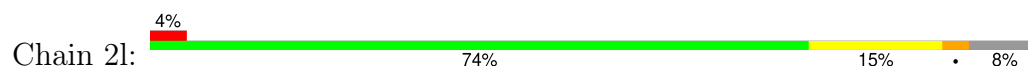


- Molecule 43: 30S ribosomal protein S12

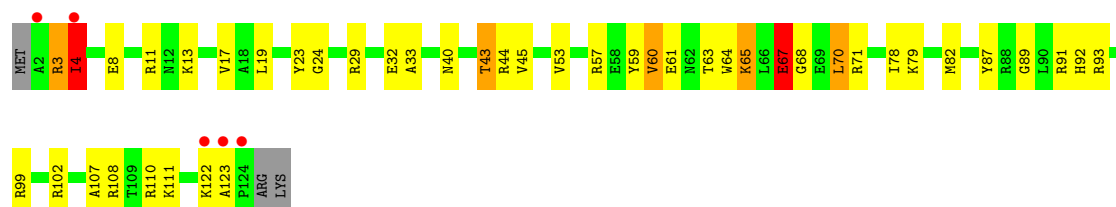




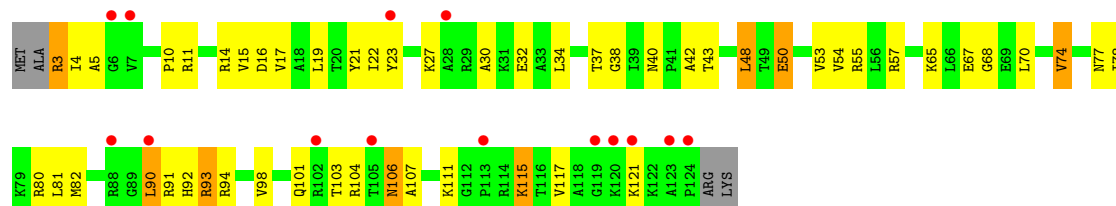
- Molecule 43: 30S ribosomal protein S12



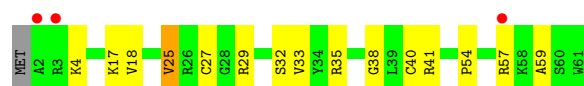
- Molecule 44: 30S ribosomal protein S13



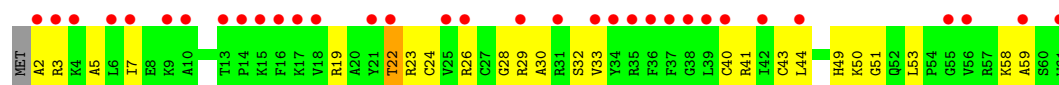
- Molecule 44: 30S ribosomal protein S13



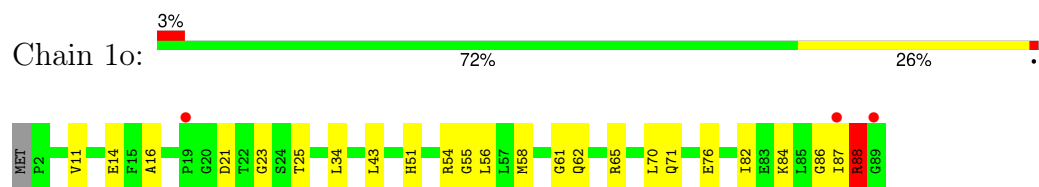
- Molecule 45: 30S ribosomal protein S14 type Z



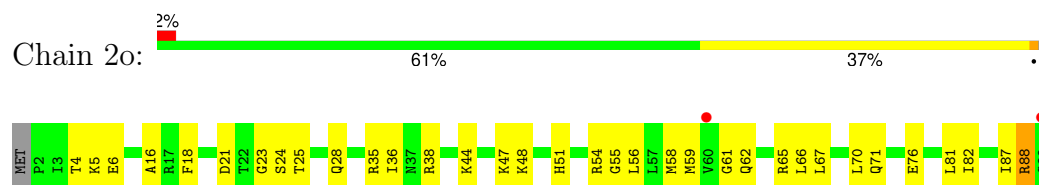
- Molecule 45: 30S ribosomal protein S14 type Z



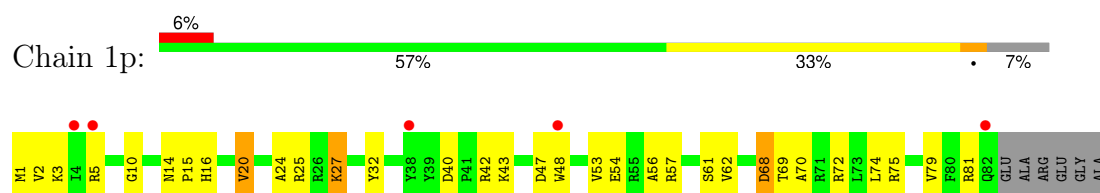
- Molecule 46: 30S ribosomal protein S15



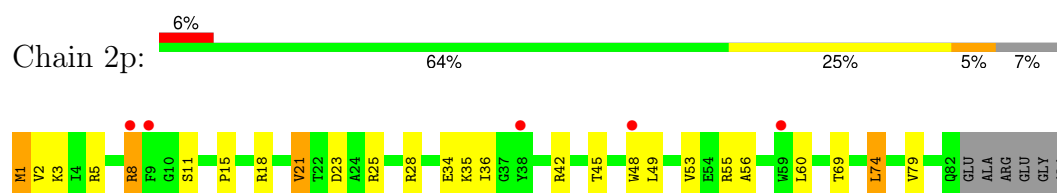
- Molecule 46: 30S ribosomal protein S15



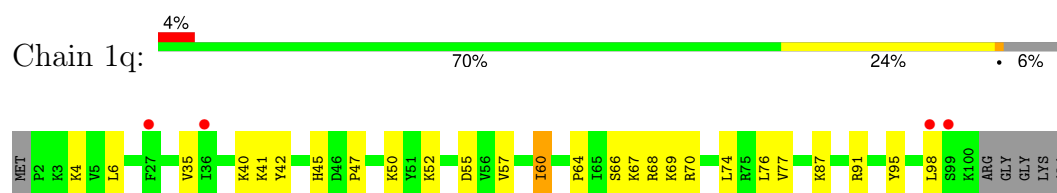
- Molecule 47: 30S ribosomal protein S16



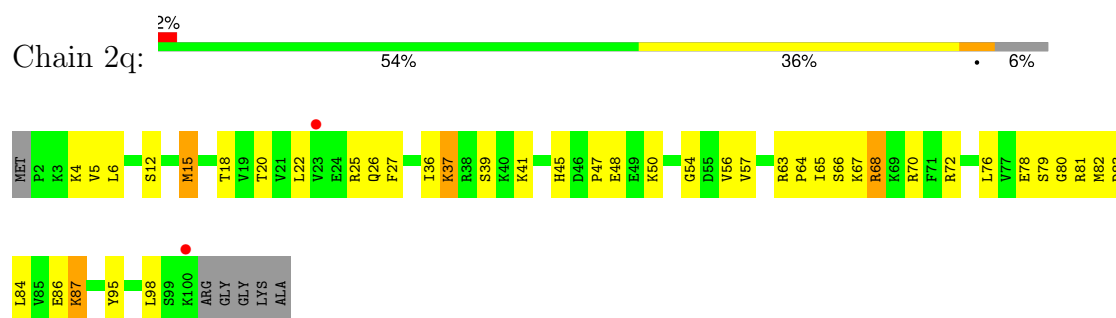
- Molecule 47: 30S ribosomal protein S16



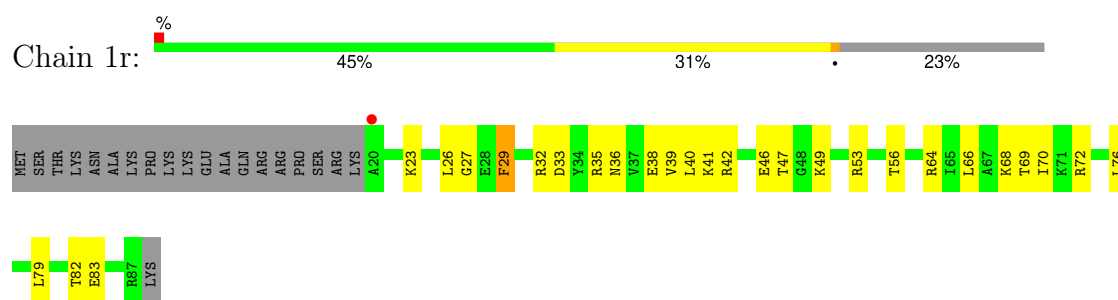
- Molecule 48: 30S ribosomal protein S17



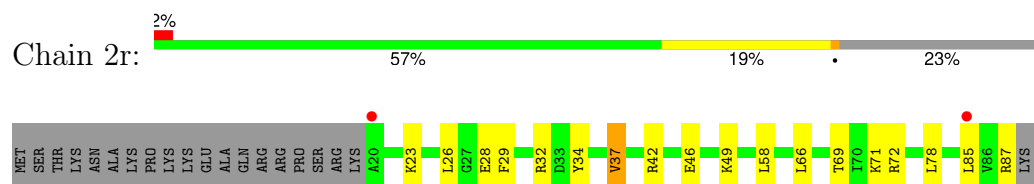
- Molecule 48: 30S ribosomal protein S17



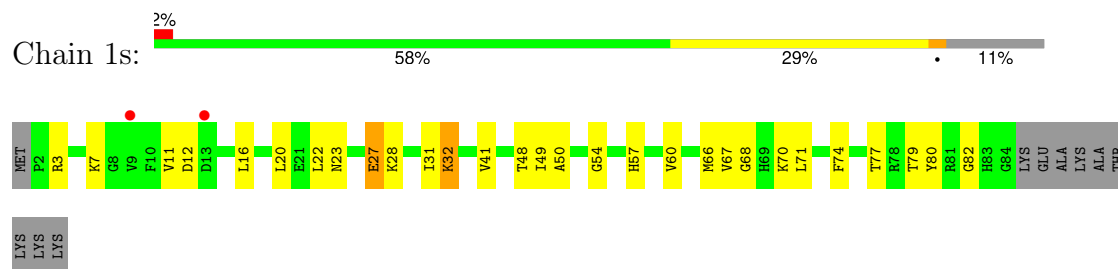
- Molecule 49: 30S ribosomal protein S18



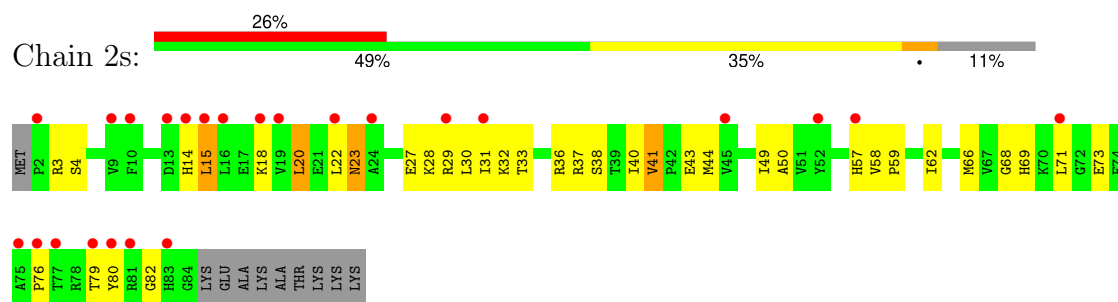
- Molecule 49: 30S ribosomal protein S18



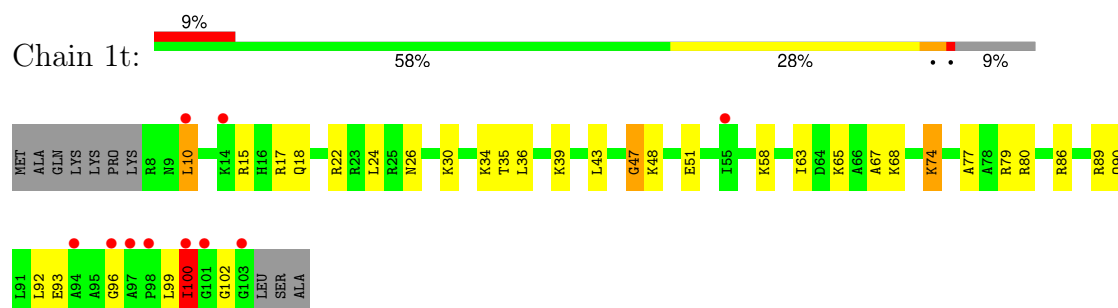
- Molecule 50: 30S ribosomal protein S19



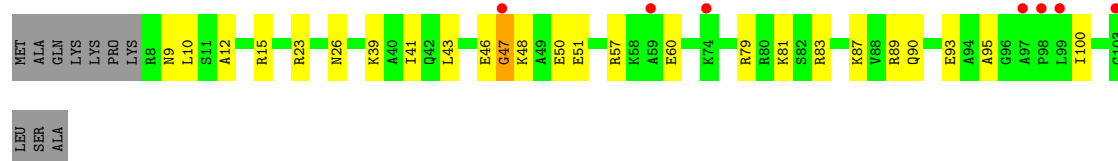
- Molecule 50: 30S ribosomal protein S19



- Molecule 51: 30S ribosomal protein S20



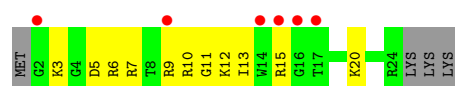
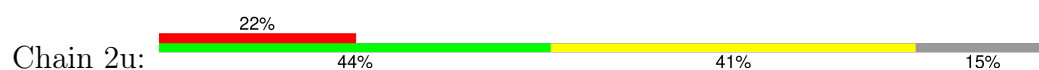
- Molecule 51: 30S ribosomal protein S20



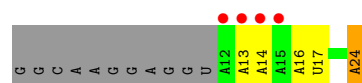
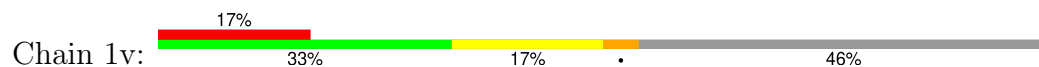
- Molecule 52: 30S ribosomal protein Thx



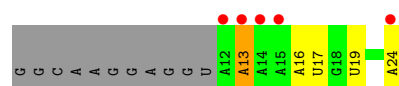
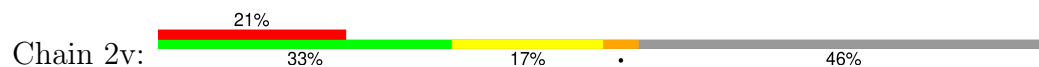
- Molecule 52: 30S ribosomal protein Thx



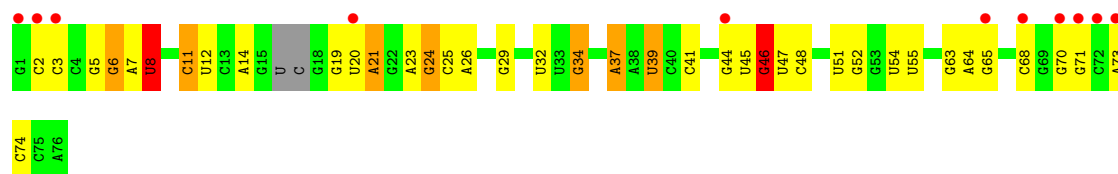
- Molecule 53: MF-mRNA



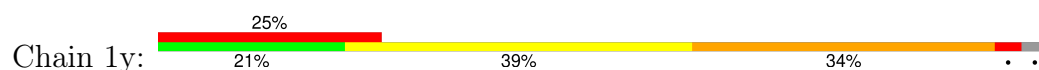
- Molecule 53: MF-mRNA

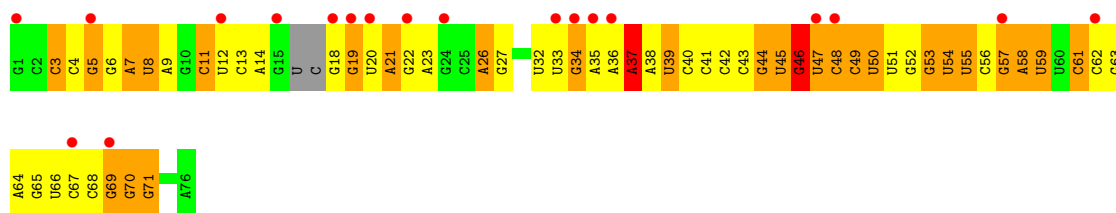


- Molecule 54: A-site and E-site Deacylated tRNAphe

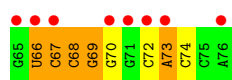
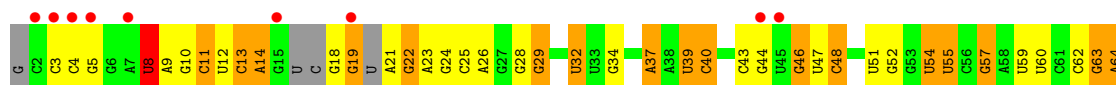


- Molecule 54: A-site and E-site Deacylated tRNAphe

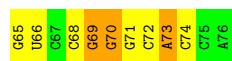
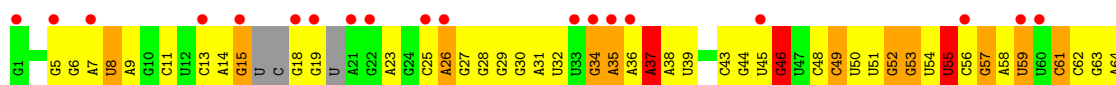




● Molecule 54: A-site and E-site Deacylated tRNA^{phe}



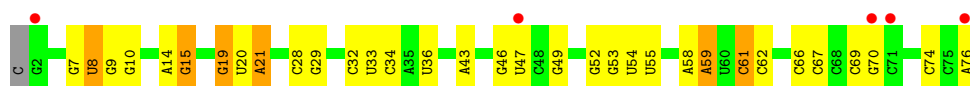
● Molecule 54: A-site and E-site Deacylated tRNA^{phe}



● Molecule 55: P-site Deacylated tRNA^{met}



● Molecule 55: P-site Deacylated tRNA^{met}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.07Å 447.77Å 621.31Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	255.24 – 2.60 255.24 – 2.60	Depositor EDS
% Data completeness (in resolution range)	98.8 (255.24-2.60) 98.8 (255.24-2.60)	Depositor EDS
R_{merge}	0.14	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.35 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.218 , 0.265 0.220 , 0.265	Depositor DCC
R_{free} test set	87480 reflections (4.97%)	wwPDB-VP
Wilson B-factor (Å ²)	48.8	Xtriage
Anisotropy	0.181	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 67.7	EDS
L-test for twinning ²	$\langle L \rangle = 0.40$, $\langle L^2 \rangle = 0.22$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	300591	wwPDB-VP
Average B, all atoms (Å ²)	54.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.51% 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: OMC, OMU, 4SU, ZN, MG, M2G, MIA, MA6, G7M, 4OC, 0TD, OMG, PSU, 2MA, SCM, K, 2MG, 5MU, SF4, UR3, 5MC

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	0.30	0/69011	0.48	3/107720 (0.0%)
1	2A	0.21	0/67295	0.40	0/105042
2	1B	0.24	0/2882	0.42	0/4494
2	2B	0.18	0/2879	0.36	0/4487
3	1D	0.28	0/2186	0.50	0/2944
3	2D	0.24	0/2186	0.46	0/2944
4	1E	0.29	0/1592	0.52	0/2149
4	2E	0.20	0/1592	0.43	0/2149
5	1F	0.27	0/1618	0.51	0/2191
5	2F	0.21	0/1614	0.47	0/2186
6	1G	0.21	0/1448	0.43	0/1957
6	2G	0.20	0/1453	0.49	2/1963 (0.1%)
7	1H	0.23	0/1356	0.44	0/1834
7	2H	0.19	0/1356	0.40	0/1834
8	1I	0.20	0/1112	0.44	0/1514
8	2I	0.19	0/1079	0.40	0/1475
9	1N	0.28	0/1144	0.50	0/1543
9	2N	0.19	0/1144	0.42	0/1543
10	1O	0.27	0/943	0.47	0/1269
10	2O	0.20	0/943	0.45	0/1269
11	1P	0.28	0/1152	0.56	0/1533
11	2P	0.20	0/1152	0.48	0/1533
12	1Q	0.28	0/1143	0.48	0/1527
12	2Q	0.21	0/1143	0.42	0/1527
13	1R	0.30	0/982	0.52	0/1312
13	2R	0.20	0/982	0.45	0/1312
14	1S	0.25	0/883	0.48	0/1176
14	2S	0.20	0/880	0.45	0/1172
15	1T	0.25	0/1105	0.48	0/1477
15	2T	0.20	0/1097	0.45	0/1468
16	1U	0.31	0/977	0.49	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.19	0/977	0.41	0/1301
17	1V	0.31	0/782	0.47	0/1049
17	2V	0.19	0/782	0.39	0/1049
18	1W	0.31	0/897	0.45	0/1205
18	2W	0.21	0/897	0.40	0/1205
19	1X	0.30	0/764	0.57	2/1025 (0.2%)
19	2X	0.23	0/764	0.48	0/1025
20	1Y	0.25	0/819	0.52	0/1095
20	2Y	0.20	0/819	0.41	0/1095
21	1Z	0.23	0/1267	0.48	0/1717
21	2Z	0.21	0/1299	0.44	0/1763
22	10	0.29	0/662	0.55	0/881
22	20	0.19	0/662	0.42	0/881
23	11	0.28	0/762	0.46	0/1014
23	21	0.23	0/762	0.40	0/1014
24	12	0.26	0/590	0.42	0/781
24	22	0.20	0/590	0.41	0/781
25	13	0.26	0/474	0.49	0/635
25	23	0.21	0/469	0.46	0/630
26	14	0.26	0/565	0.59	0/761
26	24	0.23	0/545	0.52	0/737
27	15	0.29	0/469	0.51	0/635
27	25	0.26	0/469	0.42	0/635
28	16	0.27	0/460	0.51	0/613
28	26	0.22	0/456	0.45	0/608
29	17	0.32	0/426	0.54	0/561
29	27	0.26	0/426	0.52	0/561
30	18	0.29	0/525	0.47	0/691
30	28	0.21	0/525	0.40	0/691
31	19	0.29	0/310	0.50	0/407
31	29	0.16	0/310	0.38	0/407
32	1a	0.22	0/35795	0.40	1/55864 (0.0%)
32	2a	0.20	0/35886	0.38	2/56005 (0.0%)
33	1b	0.21	0/1881	0.49	0/2542
33	2b	0.22	0/1860	0.48	0/2518
34	1c	0.19	0/1572	0.37	0/2126
34	2c	0.25	0/1566	0.51	2/2119 (0.1%)
35	1d	0.20	0/1685	0.46	0/2262
35	2d	0.21	0/1704	0.42	0/2284
36	1e	0.21	0/1145	0.46	0/1543
36	2e	0.22	0/1149	0.45	0/1548
37	1f	0.20	0/823	0.39	0/1115
37	2f	0.20	0/829	0.41	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.21	0/1250	0.40	0/1679
38	2g	0.20	0/1254	0.41	0/1683
39	1h	0.19	0/1108	0.42	0/1494
39	2h	0.18	0/1108	0.42	0/1494
40	1i	0.20	0/1002	0.48	0/1346
40	2i	0.21	0/997	0.50	0/1343
41	1j	0.22	0/722	0.44	0/982
41	2j	0.22	0/727	0.46	0/988
42	1k	0.19	0/844	0.44	0/1145
42	2k	0.18	0/848	0.42	0/1149
43	1l	0.21	0/937	0.42	0/1260
43	2l	0.18	0/937	0.39	0/1260
44	1m	0.20	0/969	0.46	0/1302
44	2m	0.21	0/961	0.49	0/1291
45	1n	0.20	0/501	0.44	0/664
45	2n	0.20	0/501	0.42	0/664
46	1o	0.20	0/739	0.41	0/985
46	2o	0.19	0/739	0.39	0/985
47	1p	0.22	0/697	0.50	0/939
47	2p	0.21	0/693	0.45	0/935
48	1q	0.20	0/836	0.40	0/1117
48	2q	0.19	0/836	0.47	1/1117 (0.1%)
49	1r	0.20	0/560	0.38	0/746
49	2r	0.18	0/560	0.42	0/746
50	1s	0.20	0/667	0.48	0/900
50	2s	0.24	0/661	0.57	0/893
51	1t	0.22	0/730	0.49	0/965
51	2t	0.20	0/729	0.45	0/965
52	1u	0.18	0/203	0.44	0/266
52	2u	0.20	0/203	0.40	0/266
53	1v	0.25	0/310	0.42	0/480
53	2v	0.22	0/310	0.39	0/480
54	1w	0.29	2/1606 (0.1%)	0.41	0/2497
54	1y	0.29	1/1606 (0.1%)	0.41	0/2497
54	2w	0.29	1/1556 (0.1%)	0.39	0/2418
54	2y	0.31	2/1583 (0.1%)	0.43	0/2459
55	1x	0.28	0/1725	0.42	0/2689
55	2x	0.25	1/1725 (0.1%)	0.38	0/2689
All	All	0.24	7/316688 (0.0%)	0.43	13/474125 (0.0%)

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	46	G7M	O3'-P	5.50	1.61	1.56
54	2w	46	G7M	O3'-P	5.33	1.61	1.56
54	1w	46	G7M	O3'-P	5.30	1.61	1.56
54	1w	8	4SU	O3'-P	5.14	1.61	1.56
55	2x	8	4SU	O3'-P	5.13	1.61	1.56
54	1y	8	4SU	O3'-P	5.09	1.61	1.56
54	2y	8	4SU	O3'-P	5.06	1.61	1.56

All (13) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	2G	45	GLU	N-CA-C	-6.51	105.41	113.15
1	1A	1992	G	C2'-C3'-O3'	6.41	119.12	109.50
34	2c	8	ILE	N-CA-C	-5.77	106.85	111.81
34	2c	126	ARG	N-CA-C	-5.40	106.88	112.93
19	1X	94	GLY	CA-C-N	5.39	131.41	121.70
19	1X	94	GLY	C-N-CA	5.39	131.41	121.70
48	2q	65	ILE	N-CA-C	-5.27	107.63	111.90
32	2a	1272	G	N1-C2-N2	-5.24	100.50	116.20
1	1A	2629	A	P-O3'-C3'	5.14	127.91	120.20
1	1A	1992	G	P-O3'-C3'	5.13	127.90	120.20
6	2G	44	GLY	N-CA-C	-5.05	108.73	115.40
32	1a	1442	G	OP1-P-O3'	5.01	116.23	105.20
32	2a	1263	C	N1-C2-O2	5.01	133.93	118.90

There are no chirality outliers.

There are no planarity outliers.

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	31194	626	0
1	2A	60322	0	30425	791	0
2	1B	2577	0	1305	22	0
2	2B	2575	0	1303	42	0
3	1D	2136	0	2218	46	0
3	2D	2136	0	2218	40	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	1E	1559	0	1618	28	0
4	2E	1559	0	1618	36	0
5	1F	1583	0	1625	33	0
5	2F	1579	0	1619	52	0
6	1G	1423	0	1436	36	0
6	2G	1428	0	1438	52	0
7	1H	1330	0	1407	25	0
7	2H	1330	0	1407	35	0
8	1I	1097	0	1140	32	0
8	2I	1064	0	1082	27	0
9	1N	1117	0	1184	15	0
9	2N	1117	0	1184	35	0
10	1O	933	0	996	18	0
10	2O	933	0	996	27	0
11	1P	1135	0	1212	34	0
11	2P	1135	0	1212	45	0
12	1Q	1122	0	1179	23	0
12	2Q	1122	0	1178	42	0
13	1R	968	0	1033	24	0
13	2R	968	0	1033	15	0
14	1S	873	0	926	15	0
14	2S	870	0	923	50	0
15	1T	1091	0	1151	13	0
15	2T	1083	0	1136	30	0
16	1U	959	0	1019	24	0
16	2U	959	0	1019	24	0
17	1V	771	0	829	10	0
17	2V	771	0	830	16	0
18	1W	886	0	940	11	0
18	2W	886	0	940	11	0
19	1X	750	0	814	19	0
19	2X	750	0	813	18	0
20	1Y	806	0	881	20	0
20	2Y	806	0	881	25	0
21	1Z	1240	0	1240	30	0
21	2Z	1271	0	1273	54	0
22	10	653	0	674	17	0
22	20	653	0	674	30	0
23	11	755	0	826	10	0
23	21	755	0	826	22	0
24	12	588	0	643	6	0
24	22	588	0	643	13	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	13	469	0	518	13	0
25	23	464	0	514	15	0
26	14	552	0	533	32	0
26	24	532	0	503	26	0
27	15	455	0	465	5	0
27	25	455	0	465	9	0
28	16	453	0	473	11	0
28	26	449	0	469	14	0
29	17	418	0	467	12	0
29	27	418	0	467	11	0
30	18	517	0	582	13	0
30	28	517	0	582	18	0
31	19	307	0	335	3	0
31	29	307	0	335	13	0
32	1a	32246	0	16294	439	0
32	2a	32327	0	16338	583	0
33	1b	1846	0	1867	64	0
33	2b	1825	0	1828	83	0
34	1c	1548	0	1535	35	0
34	2c	1542	0	1517	54	0
35	1d	1655	0	1672	46	0
35	2d	1674	0	1714	58	0
36	1e	1129	0	1185	44	0
36	2e	1133	0	1191	31	0
37	1f	810	0	803	25	0
37	2f	816	0	808	23	0
38	1g	1231	0	1238	25	0
38	2g	1235	0	1249	44	0
39	1h	1088	0	1126	20	0
39	2h	1088	0	1126	31	0
40	1i	983	0	986	27	0
40	2i	978	0	966	58	0
41	1j	709	0	650	31	0
41	2j	714	0	672	29	0
42	1k	829	0	825	18	0
42	2k	833	0	836	16	0
43	1l	932	0	981	14	0
43	2l	932	0	980	16	0
44	1m	958	0	1002	30	0
44	2m	950	0	988	38	0
45	1n	492	0	529	13	0
45	2n	492	0	529	19	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	1o	728	0	760	11	0
46	2o	728	0	760	19	0
47	1p	681	0	697	28	0
47	2p	677	0	686	19	0
48	1q	823	0	891	20	0
48	2q	823	0	891	25	0
49	1r	555	0	618	15	0
49	2r	555	0	618	15	0
50	1s	652	0	662	27	0
50	2s	646	0	644	32	0
51	1t	728	0	798	23	0
51	2t	727	0	796	20	0
52	1u	199	0	208	3	0
52	2u	199	0	208	10	0
53	1v	277	0	140	4	0
53	2v	277	0	140	3	0
54	1w	1592	0	818	14	0
54	1y	1585	0	803	51	0
54	2w	1544	0	787	28	0
54	2y	1565	0	794	41	0
55	1x	1625	0	828	8	0
55	2x	1625	0	828	14	0
56	10	10	0	0	0	0
56	11	5	0	0	0	0
56	12	2	0	0	0	0
56	13	5	0	0	0	0
56	14	1	0	0	0	0
56	15	10	0	0	0	0
56	16	1	0	0	0	0
56	17	4	0	0	0	0
56	18	8	0	0	0	0
56	19	2	0	0	0	0
56	1A	1116	0	0	0	0
56	1B	39	0	0	0	0
56	1D	15	0	0	0	0
56	1E	14	0	0	0	0
56	1F	15	0	0	0	0
56	1G	5	0	0	0	0
56	1H	1	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0
56	1O	6	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1P	4	0	0	0	0
56	1Q	8	0	0	0	0
56	1R	4	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	13	0	0	0	0
56	1V	9	0	0	0	0
56	1W	7	0	0	0	0
56	1X	5	0	0	0	0
56	1Y	3	0	0	0	0
56	1Z	2	0	0	0	0
56	1a	214	0	0	0	0
56	1b	1	0	0	0	0
56	1e	1	0	0	0	0
56	1f	2	0	0	0	0
56	1k	1	0	0	0	0
56	1l	2	0	0	0	0
56	1m	1	0	0	0	0
56	1n	2	0	0	0	0
56	1p	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	9	0	0	0	0
56	1x	13	0	0	0	0
56	1y	2	0	0	0	0
56	20	4	0	0	0	0
56	21	2	0	0	0	0
56	23	1	0	0	0	0
56	25	6	0	0	0	0
56	26	1	0	0	0	0
56	27	2	0	0	0	0
56	28	4	0	0	0	0
56	29	1	0	0	0	0
56	2A	880	0	0	0	0
56	2B	19	0	0	0	0
56	2D	8	0	0	0	0
56	2E	10	0	0	0	0
56	2F	8	0	0	0	0
56	2G	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	2	0	0	0	0
56	2Q	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2R	2	0	0	0	0
56	2S	1	0	0	0	0
56	2T	3	0	0	0	0
56	2U	2	0	0	0	0
56	2V	2	0	0	0	0
56	2W	3	0	0	0	0
56	2X	1	0	0	0	0
56	2Z	1	0	0	0	0
56	2a	235	0	0	0	0
56	2d	2	0	0	0	0
56	2e	3	0	0	0	0
56	2f	3	0	0	0	0
56	2g	1	0	0	0	0
56	2j	1	0	0	0	0
56	2l	6	0	0	0	0
56	2q	4	0	0	0	0
56	2t	1	0	0	0	0
56	2v	3	0	0	0	0
56	2w	9	0	0	0	0
56	2x	7	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2A	1	0	0	0	0
58	14	1	0	0	0	0
58	15	1	0	0	0	0
58	16	1	0	0	0	0
58	19	1	0	0	0	0
58	1Y	1	0	0	0	0
58	1n	1	0	0	0	0
58	24	1	0	0	0	0
58	25	1	0	0	0	0
58	26	1	0	0	0	0
58	29	1	0	0	0	0
58	2Y	1	0	0	0	0
58	2n	1	0	0	0	0
59	1a	23	0	24	3	0
59	2a	23	0	24	1	0
60	1d	8	0	0	3	0
60	2d	8	0	0	0	0
61	10	18	0	0	1	0
61	11	8	0	0	0	0
61	12	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	13	4	0	0	0	0
61	14	1	0	0	0	0
61	15	8	0	0	1	0
61	16	3	0	0	0	0
61	17	8	0	0	1	0
61	18	11	0	0	1	0
61	1A	2167	0	0	99	0
61	1B	69	0	0	1	0
61	1D	27	0	0	1	0
61	1E	25	0	0	2	0
61	1F	21	0	0	0	0
61	1G	2	0	0	1	0
61	1H	2	0	0	0	0
61	1I	1	0	0	0	0
61	1N	5	0	0	0	0
61	1O	5	0	0	1	0
61	1P	24	0	0	0	0
61	1Q	11	0	0	0	0
61	1R	11	0	0	3	0
61	1S	5	0	0	1	0
61	1T	9	0	0	0	0
61	1U	15	0	0	1	0
61	1V	10	0	0	0	0
61	1W	8	0	0	0	0
61	1X	5	0	0	0	0
61	1Y	3	0	0	1	0
61	1Z	2	0	0	0	0
61	1a	426	0	0	27	0
61	1b	1	0	0	0	0
61	1c	1	0	0	0	0
61	1d	1	0	0	0	0
61	1f	1	0	0	0	0
61	1i	2	0	0	0	0
61	1j	2	0	0	0	0
61	1l	8	0	0	0	0
61	1m	1	0	0	0	0
61	1n	2	0	0	0	0
61	1o	2	0	0	0	0
61	1p	1	0	0	0	0
61	1q	2	0	0	0	0
61	1t	2	0	0	1	0
61	1u	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1v	5	0	0	0	0
61	1w	14	0	0	0	0
61	1x	15	0	0	2	0
61	1y	1	0	0	0	0
61	20	3	0	0	2	0
61	21	11	0	0	0	0
61	23	2	0	0	0	0
61	25	1	0	0	0	0
61	27	4	0	0	0	0
61	28	4	0	0	0	0
61	29	1	0	0	0	0
61	2A	1243	0	0	80	0
61	2B	23	0	0	1	0
61	2D	25	0	0	1	0
61	2E	11	0	0	0	0
61	2F	12	0	0	0	0
61	2I	2	0	0	0	0
61	2N	2	0	0	0	0
61	2O	2	0	0	0	0
61	2P	10	0	0	2	0
61	2Q	2	0	0	0	0
61	2R	4	0	0	0	0
61	2T	5	0	0	0	0
61	2U	1	0	0	0	0
61	2V	2	0	0	0	0
61	2W	2	0	0	0	0
61	2X	2	0	0	0	0
61	2Z	1	0	0	0	0
61	2a	311	0	0	32	0
61	2c	1	0	0	0	0
61	2d	4	0	0	0	0
61	2e	2	0	0	1	0
61	2g	1	0	0	1	0
61	2j	2	0	0	0	0
61	2l	5	0	0	1	0
61	2p	2	0	0	0	0
61	2r	1	0	0	1	0
61	2t	2	0	0	0	0
61	2v	1	0	0	0	0
61	2w	3	0	0	0	0
61	2x	3	0	0	0	0
61	2y	14	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	300591	0	196727	4512	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 9.

All (4512) 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	1.20	1.34
1:1A:1082:U:N3	1:1A:1086:A:N6	2.01	1.06
1:1A:1082:U:O4	1:1A:1086:A:N1	1.92	1.02
1:1A:2427:C:OP1	61:1A:4205:HOH:O	1.78	0.98
54:2y:55:PSU:HN1	54:2y:57:G:H5''	1.26	0.98
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.48	0.96
47:1p:15:PRO:HD2	47:1p:42:ARG:HD2	1.54	0.90
1:1A:1082:U:H3	1:1A:1086:A:H61	1.02	0.90
1:1A:1647:G:OP1	61:1A:4207:HOH:O	1.90	0.90
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.54	0.90
1:1A:2499:C:OP1	61:1A:4206:HOH:O	1.87	0.90
29:27:24:THR:HG22	29:27:27:GLY:H	1.37	0.89
32:1a:1027:C:C2	32:1a:1034:G:N2	2.40	0.89
29:17:24:THR:HG22	29:17:27:GLY:H	1.35	0.88
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.20	0.88
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.56	0.87
1:2A:1689:A:H62	1:2A:1698:A:H2	1.23	0.87
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.55	0.87
1:2A:2120:G:H1	1:2A:2178:C:H42	1.22	0.87
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.20	0.86
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.58	0.86
1:1A:1069:A:H5'	1:1A:1070:A:H8	1.41	0.85
32:2a:1279:A:O2'	32:2a:1281:U:OP2	1.94	0.85
22:10:10:THR:HG22	22:10:12:ASN:H	1.42	0.84
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.24	0.84
1:1A:248:G:OP1	61:1A:4208:HOH:O	1.95	0.83
54:2y:18:G:N2	54:2y:55:PSU:N3	2.26	0.83
1:1A:1062:G:H1	1:1A:1077:A:H61	1.24	0.83
1:2A:740:U:OP2	61:2A:3908:HOH:O	1.96	0.83
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.59	0.83
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.44	0.82
32:1a:997:U:H3	32:1a:1044:A:H61	1.27	0.82
1:1A:1060:U:H3	1:1A:1088:A:H8	1.25	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.12	0.82
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.12	0.82
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.13	0.82
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.62	0.82
1:2A:962:G:OP1	61:2A:3909:HOH:O	1.98	0.82
1:1A:594:U:O4	61:1A:4210:HOH:O	1.98	0.82
1:1A:792:G:O6	61:1A:4209:HOH:O	1.97	0.81
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.63	0.81
1:2A:948:G:OP1	61:2A:3909:HOH:O	1.99	0.80
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.47	0.80
1:1A:2550:G:OP1	61:1A:4212:HOH:O	1.99	0.80
32:1a:1456:G:N2	51:1t:51:GLU:OE2	2.14	0.80
32:2a:1417:G:O6	61:2a:3303:HOH:O	1.99	0.80
1:1A:1602:U:O4	61:1A:4211:HOH:O	1.99	0.80
32:2a:1316:G:H22	32:2a:1319:A:H5''	1.44	0.80
1:2A:2345:G:H4'	1:2A:2346:A:H5''	1.62	0.80
1:2A:323:G:HO2'	1:2A:1205:U:H3	1.28	0.80
1:2A:570:G:O6	61:2A:3910:HOH:O	2.00	0.79
32:2a:1049:U:O4	45:2n:3:ARG:NH2	2.15	0.79
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.14	0.79
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.65	0.79
24:22:1:MET:N	24:22:52:ASP:OD2	2.16	0.79
1:1A:1970:A:OP1	61:1A:4214:HOH:O	2.01	0.79
1:1A:1023:U:OP2	61:1A:4213:HOH:O	2.00	0.79
55:1x:76:A:OP2	61:1x:201:HOH:O	1.99	0.79
1:2A:2524:G:N7	61:2A:3937:HOH:O	2.15	0.79
32:2a:64:G:H4'	32:2a:65:U:H3'	1.63	0.79
41:1j:30:SER:HB3	41:1j:81:THR:HG23	1.66	0.78
42:2k:77:MET:HE2	42:2k:80:VAL:HG12	1.63	0.78
1:2A:1395:A:OP1	61:2A:3911:HOH:O	2.00	0.78
32:2a:999:C:H42	32:2a:1042:G:H1	1.29	0.78
26:24:44:THR:O	26:24:46:GLN:N	2.16	0.78
6:2G:37:VAL:HG21	6:2G:103:LEU:HD11	1.64	0.78
1:2A:143:G:H4'	19:2X:35:THR:HG21	1.66	0.78
1:2A:1670:C:OP1	61:2A:3912:HOH:O	2.01	0.78
54:1y:50:U:O4	54:1y:64:A:N1	2.16	0.78
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.16	0.78
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.16	0.78
32:2a:266:G:H5''	32:2a:268:C:H41	1.49	0.78
33:1b:15:VAL:HG13	33:1b:209:ARG:HG3	1.66	0.78
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.66	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2048:G:N7	61:2A:3948:HOH:O	2.17	0.77
12:2Q:97:VAL:HG11	12:2Q:103:MET:HE3	1.65	0.77
37:1f:36:ARG:NH1	37:1f:66:GLU:OE2	2.17	0.77
32:1a:1086:U:H3	32:1a:1099:G:H22	1.31	0.77
35:1d:187:ARG:NH2	35:1d:193:ASP:OD2	2.17	0.77
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.32	0.77
1:2A:2121:G:H1	1:2A:2177:C:H42	1.32	0.77
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.18	0.76
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.16	0.76
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.31	0.76
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.67	0.76
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.19	0.76
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.67	0.76
38:2g:111:ARG:NH1	38:2g:113:GLU:OE2	2.17	0.76
8:1I:99:GLU:O	8:1I:103:ARG:NH1	2.18	0.76
54:1w:26:A:H61	54:1w:44:G:H1	1.31	0.76
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.68	0.76
26:24:58:ARG:HD3	50:2s:68:GLY:H	1.50	0.76
32:1a:664:G:H22	32:1a:741:G:H1	1.34	0.75
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.68	0.75
1:2A:731:C:OP2	61:2A:3913:HOH:O	2.03	0.75
6:2G:47:LYS:HB2	6:2G:86:MET:HE2	1.68	0.75
1:2A:468:G:N7	29:27:39:ARG:NH2	2.34	0.75
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.18	0.75
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.51	0.75
1:1A:2099:U:H3	1:1A:2190:G:H1	1.31	0.75
1:2A:304:G:O6	61:2A:3914:HOH:O	2.03	0.75
1:2A:1604:C:OP2	61:2A:3911:HOH:O	2.04	0.75
1:2A:563:G:OP2	61:2A:3915:HOH:O	2.05	0.75
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.21	0.75
1:1A:1253:A:OP1	61:1A:4215:HOH:O	2.05	0.75
32:1a:504:C:OP1	61:1a:1903:HOH:O	2.05	0.75
32:2a:158:G:N2	32:2a:163:C:O2	2.20	0.75
38:2g:78:ARG:HG3	38:2g:156:TRP:HZ3	1.50	0.75
54:2y:8:4SU:HN3	54:2y:14:A:H62	1.32	0.75
1:1A:668:G:N7	61:1A:4249:HOH:O	2.17	0.75
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.34	0.74
32:1a:324:G:N7	61:1a:1922:HOH:O	2.20	0.74
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.68	0.74
54:1y:50:U:H3	54:1y:64:A:H2	1.35	0.74
1:2A:907:U:O2'	12:2Q:101:ARG:NH2	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.51	0.74
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.19	0.74
1:2A:2819:G:N7	61:2A:3955:HOH:O	2.19	0.74
33:2b:21:ARG:HA	33:2b:39:ILE:HG13	1.69	0.74
1:2A:2136:C:N4	1:2A:2155:G:H1	1.86	0.74
32:2a:664:G:H22	32:2a:741:G:H1	1.36	0.74
1:1A:1013:C:OP2	61:1A:4217:HOH:O	2.06	0.74
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.20	0.74
35:1d:112:VAL:HG23	35:1d:116:GLN:HE22	1.53	0.74
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.70	0.74
1:2A:2111:C:N4	1:2A:2144:U:O2'	2.20	0.74
26:14:58:ARG:HG2	50:1s:68:GLY:H	1.51	0.74
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.68	0.74
1:1A:1669:A:OP2	61:1A:4212:HOH:O	2.05	0.73
6:2G:5:VAL:HG22	6:2G:8:LYS:H	1.54	0.73
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.22	0.73
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.70	0.73
40:2i:9:ARG:H	40:2i:79:LEU:HD23	1.52	0.73
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.70	0.73
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.21	0.73
32:1a:1292:U:OP2	38:1g:41:ARG:NH2	2.21	0.73
32:2a:934:C:OP1	61:2a:3304:HOH:O	2.05	0.73
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.21	0.73
1:1A:1356:G:OP2	61:1A:4216:HOH:O	2.06	0.73
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.21	0.73
1:2A:2625:G:O6	61:2A:3917:HOH:O	2.05	0.73
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.21	0.73
12:2Q:11:LYS:HD3	12:2Q:87:LYS:HG2	1.70	0.73
7:1H:149:ARG:NH1	7:1H:167:GLU:OE2	2.20	0.73
1:2A:793:A:O2'	61:2A:3916:HOH:O	2.05	0.73
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.22	0.73
1:1A:2763:G:OP2	61:1A:4219:HOH:O	2.06	0.73
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.52	0.73
17:1V:98:GLU:OE2	17:1V:100:ARG:NH1	2.22	0.73
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.70	0.73
1:2A:741:G:OP2	61:2A:3919:HOH:O	2.07	0.73
32:2a:903:G:OP1	61:2a:3306:HOH:O	2.06	0.73
1:1A:1069:A:H5'	1:1A:1070:A:C8	2.22	0.72
47:1p:1:MET:HE3	47:1p:3:LYS:HD2	1.70	0.72
1:2A:1830:C:OP2	61:2A:3921:HOH:O	2.07	0.72
1:2A:2705:A:OP2	61:2A:3920:HOH:O	2.07	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.22	0.72
33:2b:16:HIS:HB2	33:2b:204:ASN:HB2	1.71	0.72
34:2c:10:PHE:HD1	45:2n:58:LYS:HE2	1.54	0.72
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.35	0.72
32:1a:375:U:OP1	47:1p:69:THR:OG1	2.06	0.72
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.22	0.72
26:24:46:GLN:HE22	26:24:48:ARG:HH11	1.36	0.72
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.70	0.72
32:2a:974:A:OP2	45:2n:29:ARG:NH1	2.22	0.72
1:1A:1890:A:OP2	61:1A:4218:HOH:O	2.06	0.72
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	1.71	0.72
54:2y:8:4SU:S4	54:2y:14:A:N7	2.62	0.72
19:2X:35:THR:HG22	19:2X:37:THR:H	1.52	0.72
1:2A:2503:2MA:O2'	1:2A:2505:G:OP2	2.08	0.72
1:1A:1058:G:N2	1:1A:1081:U:O2	2.22	0.72
32:2a:975:A:H4'	32:2a:976:G:H5''	1.72	0.72
32:2a:289:G:OP2	61:2a:3305:HOH:O	2.06	0.72
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.69	0.72
1:2A:921:G:O6	61:2A:3918:HOH:O	2.06	0.71
14:2S:99:LYS:NZ	14:2S:103:GLU:OE2	2.22	0.71
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.25	0.71
32:1a:1500:A:OP1	61:1a:1904:HOH:O	2.07	0.71
54:1y:26:A:N6	54:1y:44:G:N1	2.37	0.71
1:2A:1783:A:OP1	61:2A:3908:HOH:O	2.08	0.71
2:2B:77:U:OP1	21:2Z:19:ARG:NH2	2.22	0.71
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.72	0.71
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.05	0.71
32:1a:645:C:OP2	61:1a:1905:HOH:O	2.07	0.71
1:1A:2448:A:OP1	61:1A:4206:HOH:O	2.08	0.71
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.20	0.71
1:1A:1315:C:OP2	61:1A:4221:HOH:O	2.09	0.71
51:1t:86:ARG:O	51:1t:90:GLN:NE2	2.23	0.71
16:2U:83:LEU:HD23	16:2U:88:ILE:HD12	1.72	0.71
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.23	0.71
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.73	0.71
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.73	0.71
1:1A:1332:G:OP1	61:1A:4221:HOH:O	2.07	0.71
6:2G:38:VAL:HG22	6:2G:93:THR:HG23	1.73	0.71
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.73	0.71
10:2O:111:PHE:HB3	10:2O:114:ILE:HD12	1.73	0.71
15:2T:41:ARG:NH2	32:2a:346:G:OP1	2.17	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.73	0.71
32:2a:299:G:O6	61:2a:3307:HOH:O	2.07	0.71
33:2b:7:VAL:O	33:2b:217:ARG:NH1	2.24	0.71
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.24	0.71
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.24	0.71
5:1F:140:LEU:HD21	5:1F:170:LEU:HD21	1.73	0.71
10:1O:98:VAL:HG13	10:1O:117:LEU:HB2	1.72	0.71
32:2a:504:C:OP1	61:2a:3310:HOH:O	2.09	0.71
32:2a:650:G:N7	61:2a:3329:HOH:O	2.23	0.71
45:2n:23:ARG:NH1	45:2n:28:GLY:O	2.21	0.71
10:2O:7:TYR:HE2	10:2O:20:MET:HE3	1.56	0.70
11:2P:120:ALA:HB2	11:2P:137:LYS:HB3	1.72	0.70
32:2a:1224:G:OP1	61:2a:3309:HOH:O	2.09	0.70
1:1A:2794:C:H42	1:1A:2802:G:H22	1.37	0.70
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.71	0.70
1:2A:2495:G:H5''	12:2Q:82:ARG:HG2	1.73	0.70
1:1A:1271:G:OP2	61:1A:4207:HOH:O	2.09	0.70
26:14:16:CYS:SG	26:14:17:GLY:N	2.64	0.70
32:1a:794:A:OP2	61:1a:1907:HOH:O	2.09	0.70
32:2a:1108:G:O6	61:2a:3308:HOH:O	2.08	0.70
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.25	0.70
1:1A:2817:G:OP1	13:1R:99:LYS:NZ	2.22	0.70
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.57	0.70
2:2B:66:A:N6	2:2B:108:U:H3'	2.07	0.70
32:2a:692:U:O2'	32:2a:694:A:N7	2.20	0.70
32:2a:1106:G:H5''	34:2c:172:ARG:HB3	1.72	0.70
35:2d:70:ILE:HD11	35:2d:74:GLN:HB2	1.73	0.70
25:13:55:ARG:HH22	25:13:57:GLU:HB2	1.56	0.70
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.25	0.70
11:2P:118:GLY:O	11:2P:137:LYS:NZ	2.24	0.70
1:1A:1865:G:OP1	61:1A:4220:HOH:O	2.07	0.70
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.25	0.70
50:2s:38:SER:HB2	50:2s:71:LEU:HD22	1.71	0.70
8:1I:101:LEU:HD22	8:1I:107:VAL:HB	1.74	0.70
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.24	0.70
26:14:55:ARG:H	26:14:56:VAL:HA	1.55	0.70
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.74	0.69
1:2A:2120:G:H1	1:2A:2178:C:N4	1.90	0.69
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.27	0.69
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.24	0.69
42:1k:79:SER:HA	42:1k:104:GLN:HB3	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2430:A:OP2	61:2A:3922:HOH:O	2.09	0.69
21:2Z:150:LEU:H	21:2Z:171:ILE:HD11	1.56	0.69
1:1A:1816:G:O6	3:1D:35:LYS:NZ	2.25	0.69
37:2f:82:ARG:HB2	37:2f:85:VAL:HG23	1.74	0.69
1:1A:1971:A:OP1	61:1A:4214:HOH:O	2.11	0.69
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.15	0.69
32:1a:473:G:H2'	32:1a:474:G:H8	1.58	0.69
32:1a:975:A:H4'	32:1a:976:G:H5''	1.73	0.69
1:2A:1116:C:H2'	1:2A:1117:G:H8	1.55	0.69
3:2D:28:GLU:OE2	61:2D:401:HOH:O	2.09	0.69
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.25	0.69
32:2a:673:G:H2'	32:2a:674:G:C8	2.28	0.69
32:2a:1263:C:N3	32:2a:1272:G:O6	2.26	0.69
27:15:40:LYS:NZ	27:15:44:THR:O	2.20	0.69
32:1a:606:G:N2	32:1a:631:G:N7	2.41	0.69
8:2I:78:THR:HA	8:2I:143:SER:HB2	1.75	0.69
32:2a:393:A:OP1	61:2a:3312:HOH:O	2.11	0.69
32:2a:588:G:OP2	61:2a:3311:HOH:O	2.10	0.69
5:1F:185:ASP:OD1	5:1F:188:ARG:NH1	2.22	0.69
34:1c:13:GLY:HA3	45:1n:57:ARG:HH12	1.58	0.69
1:2A:1762:A:N1	61:2A:3990:HOH:O	2.24	0.69
1:2A:2224:G:OP1	3:2D:268:ARG:NE	2.26	0.69
2:2B:9:G:H1	2:2B:112:U:H3	1.38	0.69
1:1A:2276:G:N7	61:1A:4298:HOH:O	2.25	0.69
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.57	0.69
33:1b:80:ILE:HD13	33:1b:212:GLN:HA	1.74	0.69
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.56	0.69
37:1f:74:ASP:OD1	37:1f:77:ARG:NH2	2.26	0.69
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.73	0.69
1:2A:890:A:H2'	1:2A:892:G:C8	2.29	0.69
1:2A:2061:G:OP2	61:2A:3925:HOH:O	2.11	0.69
40:2i:55:ALA:HA	40:2i:58:HIS:HD2	1.57	0.69
1:1A:135:G:O6	61:1A:4222:HOH:O	2.08	0.68
32:1a:644:G:OP1	61:1a:1909:HOH:O	2.10	0.68
1:2A:963:U:OP2	61:2A:3909:HOH:O	2.09	0.68
1:2A:2373:G:O6	61:2A:3923:HOH:O	2.09	0.68
6:2G:67:LYS:HD3	26:24:5:ILE:HD12	1.75	0.68
7:2H:16:SER:HB3	7:2H:27:LYS:HB2	1.75	0.68
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.74	0.68
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.74	0.68
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.73	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:71:VAL:HB	33:1b:164:VAL:HG13	1.74	0.68
1:2A:1204:A:H2	1:2A:1241:A:H62	1.39	0.68
22:20:11:ARG:O	22:20:14:ARG:NH2	2.26	0.68
25:23:6:VAL:HA	25:23:56:VAL:HG22	1.74	0.68
51:2t:43:LEU:HD13	51:2t:51:GLU:HB3	1.74	0.68
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	1.75	0.68
33:1b:52:GLU:HG2	33:1b:56:ARG:HH12	1.57	0.68
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.29	0.68
1:1A:1986:A:OP1	61:1A:4223:HOH:O	2.11	0.68
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	1.75	0.68
32:1a:473:G:OP2	47:1p:75:ARG:NH1	2.27	0.68
1:2A:2126:A:N6	1:2A:2163:C:O4'	2.26	0.68
25:23:40:THR:HG22	25:23:42:ALA:H	1.58	0.68
1:2A:1812:A:OP2	61:2A:3924:HOH:O	2.10	0.68
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.19	0.68
11:2P:35:HIS:O	61:2P:302:HOH:O	2.11	0.68
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.74	0.68
9:1N:115:ARG:HA	9:1N:118:LYS:HE3	1.74	0.68
32:1a:1355:G:OP1	61:1a:1912:HOH:O	2.11	0.68
32:2a:406:G:H21	35:2d:119:GLN:HE22	1.42	0.68
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.26	0.68
32:2a:779:C:H2'	32:2a:780:A:O4'	1.93	0.68
32:2a:953:G:H5'	32:2a:965:A:H61	1.58	0.68
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.75	0.68
8:1I:78:THR:O	8:1I:104:GLN:NE2	2.26	0.68
32:1a:117:G:OP2	61:1a:1913:HOH:O	2.12	0.68
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.12	0.68
44:2m:78:ILE:HA	44:2m:81:LEU:HD12	1.76	0.68
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.27	0.68
5:1F:108:LYS:NZ	5:1F:112:MET:SD	2.67	0.68
20:1Y:5:MET:HE2	20:1Y:30:VAL:HG13	1.75	0.68
54:1y:26:A:H61	54:1y:44:G:H1	1.41	0.68
1:2A:2448:A:OP1	61:2A:3910:HOH:O	2.11	0.68
54:2w:14:A:H61	54:2w:21:A:H2	1.41	0.68
1:1A:2255:G:OP2	61:1A:4227:HOH:O	2.13	0.67
32:1a:628:G:O6	61:1a:1906:HOH:O	2.08	0.67
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.25	0.67
9:2N:1:MET:HE1	17:2V:12:TYR:HA	1.75	0.67
12:2Q:103:MET:HE1	12:2Q:127:ILE:HD11	1.76	0.67
32:2a:567:G:N3	61:2a:3335:HOH:O	2.27	0.67
40:2i:18:PHE:HB3	40:2i:20:ARG:HD2	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:84:A:OP2	20:1Y:8:LYS:NZ	2.22	0.67
1:2A:2136:C:H42	1:2A:2155:G:H1	1.40	0.67
1:1A:2136:C:N4	1:1A:2155:G:H1	1.91	0.67
32:1a:972:C:OP1	61:1a:1911:HOH:O	2.11	0.67
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.77	0.67
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	1.75	0.67
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.77	0.67
33:2b:158:LEU:HD23	33:2b:182:ILE:HD11	1.74	0.67
35:2d:153:ARG:HG2	35:2d:181:MET:HE2	1.76	0.67
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.26	0.67
1:1A:1494:A:OP1	61:1A:4225:HOH:O	2.12	0.67
32:1a:1467:G:O6	61:1a:1910:HOH:O	2.10	0.67
32:1a:544:G:OP1	35:1d:59:ARG:NH2	2.23	0.67
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.12	0.67
33:1b:88:ALA:HB2	33:1b:219:VAL:HG13	1.77	0.67
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.29	0.67
32:2a:1025:U:H3	32:2a:1036:G:H1	1.41	0.67
39:2h:95:VAL:HG12	39:2h:99:GLU:HG3	1.75	0.67
54:2y:18:G:N2	54:2y:55:PSU:C4	2.61	0.67
1:2A:1671:U:OP2	61:2A:3912:HOH:O	2.13	0.67
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.12	0.67
54:2y:55:PSU:N1	54:2y:57:G:H5''	2.07	0.67
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.76	0.67
49:1r:26:LEU:HD11	49:1r:42:ARG:HD3	1.77	0.67
1:1A:2722:G:OP2	61:1A:4224:HOH:O	2.12	0.67
4:1E:110:GLY:O	61:1R:301:HOH:O	2.12	0.67
32:1a:1006:C:H42	32:1a:1023:G:H1	1.43	0.67
32:1a:1497:G:OP2	61:1a:1914:HOH:O	2.12	0.67
51:1t:90:GLN:HA	51:1t:93:GLU:HG2	1.77	0.67
1:2A:625:G:N7	11:2P:107:LYS:NZ	2.43	0.67
1:2A:2852:G:H5'	13:2R:64:ARG:HH22	1.60	0.67
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.58	0.67
1:1A:884:C:H42	1:1A:892:G:H1	1.41	0.66
1:2A:775:G:O3'	61:2A:3926:HOH:O	2.12	0.66
32:2a:38:G:H22	32:2a:397:A:H5''	1.59	0.66
32:2a:576:G:OP1	61:2a:3314:HOH:O	2.13	0.66
32:2a:920:U:H2'	32:2a:921:U:C6	2.30	0.66
32:1a:405:U:O4	35:1d:2:GLY:N	2.28	0.66
1:2A:690:G:O6	61:2A:3927:HOH:O	2.12	0.66
1:2A:1313:U:OP1	61:2A:3929:HOH:O	2.13	0.66
21:2Z:159:PRO:HA	21:2Z:161:VAL:H	1.60	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.27	0.66
32:2a:983:A:N1	32:2a:1222:G:N2	2.43	0.66
1:1A:2136:C:N3	1:1A:2155:G:N2	2.43	0.66
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.76	0.66
54:2y:26:A:N1	54:2y:44:G:C6	2.64	0.66
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.11	0.66
4:1E:3:GLY:HA3	4:1E:81:ILE:HG12	1.77	0.66
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.12	0.66
1:2A:2390:U:P	30:28:35:GLN:HE22	2.18	0.66
32:2a:617:G:OP2	61:2a:3313:HOH:O	2.13	0.66
34:2c:156:ARG:NE	34:2c:160:ALA:O	2.21	0.66
1:1A:1300:U:OP1	61:1A:4232:HOH:O	2.14	0.66
1:1A:2206:G:H8	1:1A:2207:G:N7	1.93	0.66
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.77	0.66
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.29	0.66
1:1A:1297:C:OP1	61:1A:4234:HOH:O	2.14	0.66
1:2A:801:G:O6	5:2F:53:THR:OG1	2.13	0.66
1:2A:1468:C:OP1	61:2A:3932:HOH:O	2.13	0.66
6:1G:82:LEU:HD11	6:1G:88:ILE:HG21	1.77	0.66
1:2A:606:U:OP2	61:2A:3928:HOH:O	2.12	0.66
1:2A:890:A:H2'	1:2A:892:G:H8	1.59	0.66
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.30	0.66
33:2b:17:PHE:HA	33:2b:44:LEU:HD11	1.78	0.66
40:2i:13:ALA:HB2	40:2i:68:GLY:HA3	1.77	0.66
1:1A:2447:G:OP2	61:1A:4226:HOH:O	2.13	0.66
10:1O:26:LYS:NZ	10:1O:37:ASP:OD2	2.26	0.66
32:1a:944:G:OP1	61:1a:1916:HOH:O	2.14	0.66
32:1a:1505:G:OP2	61:1a:1915:HOH:O	2.13	0.66
1:2A:981:A:OP2	1:2A:982:C:N4	2.29	0.66
6:2G:29:TRP:HA	6:2G:33:ARG:HH12	1.61	0.66
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.30	0.66
1:1A:789:A:OP1	61:1A:4233:HOH:O	2.14	0.66
1:1A:2467:C:OP2	61:1A:4231:HOH:O	2.14	0.66
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.29	0.66
32:1a:953:G:H5'	32:1a:965:A:H61	1.61	0.66
1:2A:1341:U:OP2	1:2A:1394:U:O2'	2.10	0.66
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.78	0.66
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.60	0.66
1:1A:1973:G:OP1	61:1A:4238:HOH:O	2.15	0.66
1:1A:2128:C:H42	1:1A:2160:G:H1	1.40	0.66
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.76	0.66
7:2H:6:ARG:HH22	7:2H:54:ARG:HH12	1.43	0.66
1:1A:400:G:N7	61:1A:4316:HOH:O	2.29	0.65
11:1P:59:LEU:HD11	30:18:10:ALA:HA	1.76	0.65
1:2A:1993:U:OP2	61:2A:3930:HOH:O	2.13	0.65
43:2l:97:ARG:O	61:2l:301:HOH:O	2.14	0.65
54:2w:68:C:H2'	54:2w:69:G:C8	2.31	0.65
15:1T:65:LYS:HE3	15:1T:67:SER:HB2	1.78	0.65
1:1A:826:U:OP1	61:1A:4205:HOH:O	2.13	0.65
1:1A:1025:G:O2'	61:1A:4213:HOH:O	2.02	0.65
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.32	0.65
26:14:55:ARG:N	26:14:56:VAL:HA	2.12	0.65
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.28	0.65
1:2A:1616:A:O2'	61:2A:3936:HOH:O	2.15	0.65
1:2A:1648:C:OP1	61:2A:3935:HOH:O	2.14	0.65
21:2Z:138:GLU:H	21:2Z:156:LYS:HE3	1.60	0.65
32:2a:491:G:N7	61:2a:3337:HOH:O	2.28	0.65
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.29	0.65
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.79	0.65
1:2A:831:G:OP1	61:2A:3933:HOH:O	2.14	0.65
1:2A:1639:U:H2'	1:2A:1640:C:H5''	1.77	0.65
7:2H:8:PRO:HB3	7:2H:51:ARG:HG2	1.79	0.65
1:1A:2474:C:OP2	61:1A:4228:HOH:O	2.13	0.65
1:2A:309:G:N3	1:2A:329:G:O2'	2.29	0.65
1:2A:805:G:OP1	61:2A:3934:HOH:O	2.14	0.65
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.78	0.65
34:2c:16:ARG:NH1	34:2c:181:ASN:OD1	2.30	0.65
34:1c:155:GLY:HA3	34:1c:196:LEU:HD22	1.78	0.65
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.78	0.65
1:1A:1127:A:OP1	61:1A:4230:HOH:O	2.13	0.65
50:2s:18:LYS:HB3	50:2s:31:ILE:HD13	1.78	0.65
54:2y:30:G:H2'	54:2y:31:A:H8	1.60	0.65
7:1H:6:ARG:HH22	7:1H:54:ARG:HH22	1.44	0.65
32:2a:560:U:H5'	32:2a:566:G:N2	2.11	0.65
1:1A:1030:G:OP2	12:1Q:128:LYS:NZ	2.30	0.65
3:1D:166:GLN:HB2	3:1D:174:ILE:HG22	1.79	0.65
32:2a:558:G:OP1	61:2a:3307:HOH:O	2.15	0.65
54:2w:51:U:H2'	54:2w:52:G:C8	2.32	0.65
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.30	0.65
1:1A:2053:G:OP2	61:1A:4239:HOH:O	2.15	0.65
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.30	0.65
6:2G:5:VAL:HG13	6:2G:8:LYS:HE2	1.78	0.65
14:2S:5:THR:H	14:2S:8:GLU:HG3	1.61	0.65
40:2i:17:VAL:HG11	40:2i:81:ILE:HA	1.79	0.65
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.77	0.65
34:1c:120:VAL:HA	34:1c:123:GLN:HG3	1.78	0.64
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.15	0.64
1:2A:1622:G:OP2	61:2A:3931:HOH:O	2.13	0.64
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.32	0.64
1:2A:307:G:N7	61:2A:4038:HOH:O	2.30	0.64
8:1I:60:GLU:HG3	8:1I:61:ARG:HH12	1.60	0.64
32:1a:980:C:OP1	61:1a:1917:HOH:O	2.15	0.64
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.79	0.64
14:2S:23:ARG:NH2	14:2S:84:GLN:OE1	2.31	0.64
1:1A:194:G:OP2	61:1A:4237:HOH:O	2.14	0.64
1:1A:668:G:OP2	61:1A:4235:HOH:O	2.14	0.64
13:1R:56:LYS:NZ	13:1R:87:TYR:O	2.29	0.64
32:1a:78:G:N1	32:1a:91:C:N4	2.45	0.64
54:1y:26:A:N1	54:1y:44:G:N2	2.46	0.64
48:2q:57:VAL:HG12	48:2q:76:LEU:HA	1.78	0.64
33:1b:78:GLN:O	33:1b:94:ASN:ND2	2.31	0.64
14:2S:10:ARG:HG2	14:2S:91:PRO:HA	1.79	0.64
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.13	0.64
44:2m:3:ARG:HH22	44:2m:11:ARG:HG3	1.62	0.64
1:2A:884:C:H3'	1:2A:885:C:H6	1.63	0.64
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.31	0.64
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.79	0.64
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.80	0.64
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.33	0.64
36:1e:12:LEU:HD11	36:1e:14:ARG:HB3	1.80	0.64
32:2a:818:G:OP2	61:2a:3317:HOH:O	2.15	0.64
32:2a:929:G:H1	32:2a:1388:C:H42	1.46	0.64
12:1Q:17:LEU:HB3	12:1Q:39:PRO:HB2	1.80	0.63
1:2A:752:A:H3'	29:27:1:MET:HE1	1.79	0.63
10:2O:120:GLU:HB2	15:2T:68:TYR:HE2	1.63	0.63
16:2U:88:ILE:HG12	17:2V:49:THR:HG22	1.80	0.63
38:2g:78:ARG:HH21	38:2g:79:ARG:HE	1.44	0.63
32:1a:1318:A:OP1	50:1s:7:LYS:NZ	2.24	0.63
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.31	0.63
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.80	0.63
35:2d:67:ILE:HG23	35:2d:114:ARG:HH12	1.62	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1007:C:OP2	61:1A:4240:HOH:O	2.15	0.63
2:1B:84:C:OP1	25:13:15:TYR:OH	2.14	0.63
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.78	0.63
1:2A:784:A:H5'	1:2A:785:G:OP1	1.98	0.63
32:2a:1271:G:N2	32:2a:1272:G:N7	2.47	0.63
1:1A:1783:A:N7	61:1A:4335:HOH:O	2.31	0.63
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.81	0.63
4:2E:126:PRO:HG2	4:2E:131:ALA:HB2	1.80	0.63
32:1a:1036:G:H5''	32:1a:1037:C:C5	2.33	0.63
33:1b:22:LYS:HA	33:1b:40:HIS:HE1	1.64	0.63
33:1b:91:PRO:HG3	33:1b:154:LEU:HB2	1.80	0.63
32:2a:853:G:H2'	32:2a:854:G:H8	1.63	0.63
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.13	0.63
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.97	0.63
1:1A:2131:G:N2	1:1A:2158:A:N1	2.47	0.63
7:1H:101:ARG:HH22	7:1H:122:THR:HA	1.63	0.63
2:2B:4:C:H42	2:2B:117:G:H1	1.45	0.63
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.32	0.63
32:2a:1507:A:OP2	53:2v:13:A:N6	2.32	0.63
32:2a:1129:C:H4'	32:2a:1130:A:H5'	1.81	0.63
47:2p:1:MET:HE3	47:2p:3:LYS:HD3	1.81	0.63
11:2P:121:LYS:HB3	11:2P:123:LEU:HD13	1.81	0.63
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.99	0.63
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.81	0.63
32:1a:78:G:N2	32:1a:91:C:N3	2.47	0.63
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.31	0.63
5:2F:24:LEU:HB3	5:2F:115:ALA:HB2	1.80	0.63
32:2a:352:C:O2'	32:2a:354:G:OP1	2.16	0.63
32:2a:1097:C:O2'	32:2a:1169:A:N3	2.31	0.63
32:2a:1271:G:C2	32:2a:1272:G:N7	2.67	0.63
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.81	0.63
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.34	0.62
35:1d:173:TRP:HE1	35:1d:193:ASP:HB3	1.64	0.62
55:1x:58:A:O2'	61:1x:202:HOH:O	2.16	0.62
34:2c:58:GLU:HB2	34:2c:65:ALA:HB3	1.79	0.62
32:1a:1027:C:C4	32:1a:1034:G:N1	2.66	0.62
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.27	0.62
32:2a:148:G:H2'	32:2a:149:A:C8	2.34	0.62
32:2a:1202:G:O3'	45:2n:3:ARG:NH2	2.32	0.62
32:2a:1256:A:OP1	34:2c:26:LYS:NZ	2.31	0.62
1:1A:1223:G:N2	1:1A:1226:A:OP2	2.24	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.82	0.62
13:1R:2:ARG:NH1	13:1R:5:LYS:O	2.33	0.62
32:1a:1387:G:H5''	59:1a:1815:SCM:H8M3	1.80	0.62
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.32	0.62
32:2a:148:G:H2'	32:2a:149:A:H8	1.63	0.62
32:2a:597:G:OP2	61:2a:3315:HOH:O	2.16	0.62
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.34	0.62
50:1s:20:LEU:HD23	50:1s:23:ASN:HD22	1.64	0.62
1:1A:881:G:N2	1:1A:897:C:O2	2.33	0.62
1:1A:1062:G:H1	1:1A:1077:A:N6	1.97	0.62
32:1a:848:C:H2'	32:1a:849:C:H6	1.65	0.62
32:1a:1124:G:N2	32:1a:1125:U:O4	2.30	0.62
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.80	0.62
21:2Z:156:LYS:HD2	21:2Z:158:PRO:HD3	1.81	0.62
54:2w:51:U:H3	54:2w:63:G:H1	1.47	0.62
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.08	0.62
18:2W:65:LEU:HD12	18:2W:68:ARG:HE	1.63	0.62
1:1A:309:G:N3	1:1A:329:G:O2'	2.30	0.62
32:1a:8:A:N7	35:1d:208:SER:OG	2.32	0.62
1:2A:2167:U:H3'	1:2A:2168:G:H21	1.64	0.62
5:2F:179:GLU:OE1	5:2F:179:GLU:N	2.32	0.62
42:2k:73:MET:HA	42:2k:77:MET:H	1.65	0.62
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.28	0.62
1:1A:1187:G:H5''	17:1V:81:TYR:CE1	2.35	0.62
1:2A:1147:C:H2'	1:2A:1148:A:H8	1.64	0.62
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.30	0.62
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.32	0.62
1:1A:1466:G:O6	61:1A:4229:HOH:O	2.13	0.62
47:1p:74:LEU:HD23	47:1p:79:VAL:HG21	1.81	0.62
32:1a:78:G:C6	32:1a:91:C:N4	2.66	0.62
32:2a:134:A:H61	47:2p:25:ARG:HH12	1.48	0.62
32:2a:598:U:O4	61:2a:3315:HOH:O	2.13	0.62
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.15	0.61
19:2X:88:LYS:NZ	19:2X:90:GLU:OE1	2.26	0.61
19:2X:94:GLY:H	19:2X:95:LEU:C	2.08	0.61
32:2a:1240:U:OP2	38:2g:116:ALA:N	2.30	0.61
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.82	0.61
1:2A:1012:U:H5	9:2N:28:THR:HG21	1.65	0.61
32:2a:596:C:OP2	61:2a:3315:HOH:O	2.16	0.61
37:2f:30:LEU:HD23	37:2f:75:LEU:HD11	1.82	0.61
1:1A:279:C:H42	1:1A:361:G:H1	1.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:89:G:OP1	61:1B:301:HOH:O	2.15	0.61
37:1f:67:MET:HE1	37:1f:75:LEU:HD12	1.81	0.61
1:2A:2666:C:O2	7:2H:152:ARG:NH1	2.33	0.61
8:2I:57:ARG:HA	8:2I:61:ARG:HH12	1.65	0.61
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.82	0.61
32:2a:1174:G:H2'	32:2a:1175:G:H8	1.64	0.61
33:2b:76:GLN:HB2	33:2b:208:ILE:HD11	1.80	0.61
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.35	0.61
25:13:5:LYS:NZ	25:13:34:GLU:OE2	2.34	0.61
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.34	0.61
33:1b:17:PHE:HA	33:1b:44:LEU:HD21	1.83	0.61
34:1c:54:ARG:HB3	34:1c:69:HIS:HB2	1.82	0.61
54:1y:51:U:H3	54:1y:63:G:H1	1.48	0.61
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.80	0.61
1:1A:453:C:OP1	61:1A:4244:HOH:O	2.16	0.61
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.82	0.61
36:1e:11:ILE:HB	36:1e:31:LEU:HB3	1.80	0.61
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.33	0.61
1:1A:2051:A:OP2	61:1A:4242:HOH:O	2.16	0.61
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.35	0.61
1:2A:981:A:OP1	61:2A:3941:HOH:O	2.16	0.61
5:2F:155:LEU:HD23	5:2F:192:LEU:HD13	1.81	0.61
21:2Z:128:VAL:HG22	21:2Z:129:SER:H	1.66	0.61
30:28:28:GLY:O	30:28:36:LYS:NZ	2.33	0.61
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.36	0.61
19:1X:94:GLY:CA	19:1X:95:LEU:HB2	2.31	0.61
35:1d:112:VAL:HG23	35:1d:116:GLN:NE2	2.15	0.61
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.34	0.61
1:2A:884:C:H3'	1:2A:885:C:C6	2.36	0.61
1:2A:2499:C:OP2	61:2A:3940:HOH:O	2.16	0.61
26:24:48:ARG:HE	26:24:52:THR:HA	1.65	0.61
32:2a:972:C:O2'	41:2j:55:LYS:O	2.19	0.61
1:1A:272(C):G:N7	61:1A:4346:HOH:O	2.31	0.61
1:1A:2323:G:N7	61:1A:4349:HOH:O	2.31	0.61
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.65	0.61
32:1a:1025:U:O2'	32:1a:1026:G:O4'	2.18	0.61
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.35	0.61
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.36	0.61
16:2U:76:TYR:OH	16:2U:92:ARG:NE	2.28	0.61
1:1A:2136:C:N4	1:1A:2155:G:N1	2.49	0.61
8:1I:93:THR:HG22	8:1I:119:PRO:HB3	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:964:A:O2'	41:1j:55:LYS:HD2	2.00	0.61
1:2A:946:G:OP1	61:2A:3943:HOH:O	2.16	0.61
1:2A:2306:C:N4	6:2G:42:GLY:O	2.30	0.61
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.34	0.61
22:20:33:ALA:N	22:20:64:ASP:OD1	2.34	0.61
23:21:7:ILE:HG23	23:21:98:LEU:HD11	1.83	0.61
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.34	0.61
50:2s:41:VAL:HG13	50:2s:43:GLU:H	1.65	0.61
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.16	0.60
1:1A:2130:U:H2'	1:1A:2158:A:N1	2.16	0.60
15:1T:74:ARG:HG2	15:1T:76:PHE:CZ	2.36	0.60
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.32	0.60
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.82	0.60
54:1w:26:A:N6	54:1w:44:G:H1	1.98	0.60
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.83	0.60
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.66	0.60
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.66	0.60
13:1R:104:ARG:HB2	13:1R:111:LEU:HD21	1.82	0.60
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.83	0.60
15:2T:85:LYS:NZ	15:2T:87:ASP:OD2	2.31	0.60
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.13	0.60
33:2b:53:ARG:HH12	33:2b:199:TYR:HD1	1.49	0.60
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.84	0.60
54:2w:13:C:H4'	54:2w:14:A:OP1	2.00	0.60
1:1A:2260:C:OP1	61:1A:4246:HOH:O	2.16	0.60
13:1R:78:LYS:HE2	13:1R:83:ILE:HD11	1.83	0.60
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.83	0.60
32:1a:504:C:OP1	61:1a:1918:HOH:O	2.16	0.60
36:1e:110:LEU:HD13	36:1e:118:ILE:HD13	1.83	0.60
21:2Z:104:PHE:HA	21:2Z:139:VAL:HB	1.82	0.60
25:23:23:LEU:HG	25:23:50:VAL:HG11	1.84	0.60
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.36	0.60
54:1y:26:A:N6	54:1y:44:G:H1	1.98	0.60
1:2A:2454:G:O6	61:2A:3938:HOH:O	2.15	0.60
32:2a:999:C:N4	32:2a:1042:G:H1	1.98	0.60
32:2a:1329:A:N7	52:2u:7:ARG:NH2	2.48	0.60
32:2a:1346:A:H5''	40:2i:120:ARG:HH12	1.66	0.60
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.83	0.60
8:1I:100:ALA:HA	8:1I:103:ARG:HD2	1.84	0.60
26:14:15:ILE:O	26:14:33:VAL:N	2.33	0.60
1:2A:1356:G:OP2	61:2A:3939:HOH:O	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1721:G:H8	1:2A:1741:A:H62	1.50	0.60
32:2a:1178:G:OP1	40:2i:93:ARG:NH1	2.34	0.60
1:1A:601:C:O2'	1:1A:605:C:OP1	2.18	0.60
1:1A:898:C:N4	1:1A:899:A:H62	2.00	0.60
1:1A:1919:A:O2'	32:1a:1517:G:N3	2.34	0.60
32:1a:731:G:H5'	32:1a:766:A:H4'	1.84	0.60
54:1y:5:G:H1'	54:1y:69:G:N2	2.17	0.60
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.21	0.60
1:2A:2801(A):A:H5'	1:2A:2802:G:H8	1.65	0.60
4:2E:14:ILE:HD11	4:2E:173:VAL:HG11	1.84	0.60
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.83	0.60
1:1A:1359:A:H2	1:1A:1372:U:O4	1.84	0.60
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.67	0.60
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.34	0.60
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.83	0.60
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.48	0.60
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.66	0.60
8:2I:82:ARG:NH1	8:2I:89:TYR:HB2	2.17	0.60
21:2Z:144:LEU:O	21:2Z:145:GLU:HB2	2.02	0.60
32:2a:707:C:H2'	32:2a:708:C:H6	1.65	0.60
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.37	0.60
1:1A:271(Q):G:O6	61:1A:4236:HOH:O	2.14	0.60
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.84	0.60
7:1H:7:LEU:HD23	7:1H:8:PRO:HD2	1.83	0.60
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.84	0.60
1:2A:878:A:N6	1:2A:899:A:O2'	2.35	0.60
1:2A:2100:G:H1	1:2A:2189:U:H3	1.48	0.60
32:2a:67:C:H2'	32:2a:68:G:C8	2.37	0.60
32:2a:539:A:H2'	32:2a:540:G:C8	2.37	0.60
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.67	0.60
32:2a:1348:U:H2'	32:2a:1349:A:H8	1.65	0.60
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.21	0.60
1:1A:1671:U:O4	61:1A:4212:HOH:O	2.15	0.60
4:1E:28:ALA:HB3	4:1E:93:VAL:HG13	1.84	0.60
32:1a:683:G:N7	61:1a:1932:HOH:O	2.31	0.60
5:2F:165:ARG:HG2	5:2F:168:ARG:NH2	2.17	0.60
14:2S:105:ALA:HB1	14:2S:110:LEU:HD12	1.82	0.60
26:24:48:ARG:NH2	26:24:52:THR:O	2.35	0.60
27:25:40:LYS:NZ	27:25:44:THR:O	2.31	0.60
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.17	0.60
48:2q:82:MET:O	48:2q:86:GLU:HG2	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:1f:99:ALA:HB3	49:1r:29:PHE:HE1	1.67	0.59
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.18	0.59
14:2S:23:ARG:HB2	14:2S:86:ALA:HB2	1.85	0.59
21:2Z:73:GLN:H	21:2Z:87:ASP:HB2	1.66	0.59
1:1A:414:C:H2'	1:1A:415:A:C8	2.36	0.59
11:1P:95:VAL:HG22	11:1P:125:VAL:HB	1.84	0.59
28:16:28:ARG:NH1	28:16:29:ASN:OD1	2.35	0.59
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.37	0.59
38:2g:111:ARG:HD2	38:2g:123:GLU:HB2	1.84	0.59
49:2r:85:LEU:HD21	49:2r:87:ARG:HE	1.66	0.59
1:1A:1024:G:OP2	61:1A:4213:HOH:O	2.17	0.59
32:1a:997:U:H3	32:1a:1044:A:N6	1.97	0.59
28:26:23:THR:HG22	28:26:24:GLU:H	1.67	0.59
1:1A:414:C:H2'	1:1A:415:A:H8	1.68	0.59
32:2a:165:C:H2'	32:2a:166:G:C8	2.37	0.59
32:2a:792:A:O2'	32:2a:794:A:N7	2.33	0.59
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.36	0.59
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.66	0.59
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.49	0.59
35:1d:64:LEU:HB2	35:1d:198:VAL:HG11	1.85	0.59
1:2A:299:A:N1	1:2A:322:A:O2'	2.25	0.59
1:2A:947:G:O6	61:2A:3945:HOH:O	2.17	0.59
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.84	0.59
32:2a:165:C:H2'	32:2a:166:G:H8	1.67	0.59
32:1a:181:G:H4'	32:1a:182:U:H5'	1.84	0.59
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.37	0.59
33:1b:80:ILE:HD12	33:1b:84:GLU:HG3	1.83	0.59
54:1y:55:PSU:C4	54:1y:57:G:H5'	2.37	0.59
1:2A:2000:G:N7	61:2A:4046:HOH:O	2.32	0.59
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.21	0.59
1:2A:2651:C:H42	1:2A:2669:G:H1	1.49	0.59
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.15	0.59
12:2Q:39:PRO:HD3	12:2Q:99:PRO:HG3	1.83	0.59
15:2T:127:ALA:C	15:2T:129:ARG:H	2.11	0.59
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.84	0.59
32:2a:624:C:H2'	32:2a:625:G:H8	1.68	0.59
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.34	0.59
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.66	0.59
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.67	0.59
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.35	0.59
39:1h:81:HIS:N	39:1h:138:TRP:O	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:272(G):C:H42	1:2A:363(C):G:H1	1.51	0.59
1:2A:668:G:H5'	1:2A:669:G:OP2	2.03	0.59
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.46	0.59
32:2a:1245:A:H61	32:2a:1292:U:H3	1.51	0.59
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.02	0.59
4:1E:180:ASN:OD1	61:1E:401:HOH:O	2.17	0.59
33:1b:82:ARG:NH1	33:1b:86:GLU:OE2	2.35	0.59
36:1e:122:GLU:O	36:1e:126:ARG:NH1	2.35	0.59
1:2A:796:C:H2'	1:2A:797:C:C6	2.37	0.59
34:2c:47:LEU:HD12	34:2c:68:VAL:HG11	1.84	0.59
7:1H:6:ARG:HH22	7:1H:54:ARG:NH2	2.00	0.59
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.36	0.59
38:1g:93:PRO:HA	38:1g:96:GLN:HG3	1.85	0.59
38:1g:111:ARG:NE	38:1g:113:GLU:OE2	2.27	0.59
1:2A:382:G:OP2	61:2A:3947:HOH:O	2.17	0.59
1:2A:392:C:H5''	1:2A:409:C:H5''	1.85	0.59
1:2A:1772:G:OP1	61:2A:3942:HOH:O	2.16	0.59
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.03	0.59
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.24	0.59
21:2Z:92:SER:O	21:2Z:130:PRO:HG3	2.02	0.59
27:25:41:PRO:O	27:25:44:THR:OG1	2.18	0.59
1:1A:286:C:H2'	1:1A:287:C:H6	1.68	0.59
1:2A:20:C:OP1	16:2U:22:LYS:NZ	2.34	0.59
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.20	0.59
1:2A:2443:C:H2'	1:2A:2444:G:H8	1.67	0.59
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.67	0.59
11:2P:84:ASN:ND2	11:2P:117:GLU:HB3	2.18	0.59
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.18	0.59
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.36	0.58
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.03	0.58
32:2a:1239:A:H4'	32:2a:1240:U:H5'	1.85	0.58
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.03	0.58
1:1A:748:G:O6	18:1W:90:ARG:NH1	2.36	0.58
5:2F:7:TYR:O	5:2F:22:ALA:N	2.36	0.58
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.37	0.58
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.39	0.58
1:2A:883:G:N1	1:2A:894:C:O2	2.36	0.58
32:2a:189(L):G:H2'	32:2a:190:U:C6	2.38	0.58
32:2a:1178:G:O2'	32:2a:1180:A:N7	2.27	0.58
47:2p:55:ARG:HA	47:2p:55:ARG:HH11	1.67	0.58
9:1N:35:ARG:HD3	9:1N:37:LYS:HD2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:122:GLU:O	34:1c:126:ARG:HD3	2.03	0.58
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.17	0.58
8:2I:75:LEU:HD13	8:2I:105:HIS:CD2	2.37	0.58
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.84	0.58
48:2q:45:HIS:CD2	48:2q:47:PRO:HG3	2.37	0.58
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.85	0.58
27:15:45:VAL:HG11	27:15:58:LEU:HD22	1.85	0.58
32:1a:501:C:H2'	32:1a:502:G:C8	2.39	0.58
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.36	0.58
1:2A:857:C:OP2	22:20:77:ARG:NH2	2.37	0.58
31:29:4:ARG:HG3	31:29:6:SER:H	1.69	0.58
34:2c:164:ARG:NH2	34:2c:166:GLU:OE1	2.37	0.58
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.31	0.58
1:1A:2131:G:H5'	1:1A:2133:G:C8	2.38	0.58
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.04	0.58
1:2A:1209:G:O2'	1:2A:1237:A:N1	2.33	0.58
25:23:26:LEU:HD21	25:23:46:ASN:HB2	1.86	0.58
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.28	0.58
8:1I:77:LEU:HD12	8:1I:97:ILE:HG23	1.85	0.58
32:1a:103:C:P	51:1t:17:ARG:HH21	2.26	0.58
32:1a:986:A:H1'	50:1s:54:GLY:O	2.03	0.58
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.39	0.58
1:2A:252:G:OP1	11:2P:50:ARG:NH1	2.32	0.58
1:2A:327:G:N2	20:2Y:70:SER:OG	2.37	0.58
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.38	0.58
1:2A:2619:C:OP1	4:2E:152:LYS:NZ	2.37	0.58
6:2G:150:ASP:OD1	6:2G:150:ASP:N	2.37	0.58
15:2T:106:SER:OG	15:2T:109:GLU:OE2	2.18	0.58
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.84	0.58
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.12	0.58
1:1A:2794:C:N4	1:1A:2802:G:H22	2.01	0.58
32:1a:38:G:H22	32:1a:397:A:H5'	1.69	0.58
33:1b:208:ILE:H	33:1b:208:ILE:HD12	1.69	0.58
42:1k:82:VAL:HB	42:1k:108:ILE:HG12	1.84	0.58
54:1w:51:U:H2'	54:1w:52:G:C8	2.38	0.58
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.86	0.58
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.85	0.58
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.38	0.58
1:2A:2533:A:OP1	1:2A:2665:A:O2'	2.15	0.58
21:2Z:32:HIS:NE2	21:2Z:94:GLU:OE2	2.34	0.58
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:800:A:H8	1:1A:800:A:OP1	1.87	0.58
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.03	0.58
1:1A:2243:U:OP1	61:1A:4251:HOH:O	2.17	0.58
32:1a:1285:A:H5'	32:1a:1286:A:C4	2.39	0.58
1:2A:642:G:H21	1:2A:646:A:H2	1.49	0.58
1:2A:1783:A:OP1	61:2A:3950:HOH:O	2.17	0.58
1:2A:2098:U:H3	1:2A:2191:G:H1	1.51	0.58
42:2k:95:ILE:HG22	42:2k:99:GLN:HE21	1.69	0.58
1:1A:586:A:N1	1:1A:809:G:O2'	2.32	0.57
1:1A:857:C:H4'	22:10:23:VAL:HG21	1.86	0.57
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.39	0.57
32:1a:299:G:O6	61:1a:1908:HOH:O	2.09	0.57
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.36	0.57
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.39	0.57
32:1a:263:A:OP1	51:1t:79:ARG:NH1	2.38	0.57
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.52	0.57
1:2A:1131:G:OP1	9:2N:80:GLY:N	2.32	0.57
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.37	0.57
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.37	0.57
10:2O:87:ILE:HD12	10:2O:91:LEU:HA	1.86	0.57
32:2a:42:G:H5''	61:2a:3470:HOH:O	2.04	0.57
35:2d:191:ARG:HD2	35:2d:194:LEU:HD12	1.85	0.57
50:2s:41:VAL:HG12	50:2s:44:MET:HG3	1.85	0.57
1:1A:898:C:H41	1:1A:899:A:H62	1.52	0.57
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.36	0.57
22:10:10:THR:HG22	22:10:12:ASN:N	2.16	0.57
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.39	0.57
46:2o:82:ILE:HD12	46:2o:88:ARG:HB2	1.86	0.57
1:1A:242:G:C8	30:18:5:LYS:HG2	2.40	0.57
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.86	0.57
32:1a:473:G:H2'	32:1a:474:G:C8	2.40	0.57
35:1d:129:ASN:OD1	35:1d:145:GLU:N	2.34	0.57
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.36	0.57
54:1y:48:C:C2	54:1y:59:U:H1'	2.40	0.57
1:2A:383:U:H2'	1:2A:385:C:H5	1.70	0.57
1:2A:2137:C:H42	1:2A:2154:G:H1	1.52	0.57
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	1.86	0.57
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.34	0.57
11:2P:38:GLN:HG2	11:2P:45:LEU:H	1.69	0.57
16:2U:52:ARG:HA	16:2U:55:ARG:HG3	1.86	0.57
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:12:GLU:HA	33:2b:213:LEU:HD11	1.86	0.57
16:1U:83:LEU:HD12	16:1U:113:ALA:HB2	1.86	0.57
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.86	0.57
37:1f:14:LEU:HD11	37:1f:84:ASN:ND2	2.20	0.57
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.70	0.57
1:2A:2334:G:O6	22:20:74:ARG:NH2	2.28	0.57
35:2d:187:ARG:NH2	35:2d:193:ASP:OD2	2.38	0.57
1:1A:880:G:H2'	1:1A:881:G:H8	1.69	0.57
1:1A:2123:G:H1	1:1A:2175:C:H42	1.52	0.57
32:1a:953:G:H5'	32:1a:965:A:N6	2.19	0.57
34:1c:35:GLU:OE1	34:1c:97:LYS:NZ	2.35	0.57
38:1g:78:ARG:HD3	38:1g:79:ARG:H	1.68	0.57
1:2A:751:A:OP1	61:2A:3949:HOH:O	2.17	0.57
10:2O:63:VAL:HG23	10:2O:64:ARG:HG3	1.85	0.57
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.86	0.57
15:1T:127:ALA:C	15:1T:129:ARG:H	2.12	0.57
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	1.87	0.57
38:1g:72:ARG:HD3	38:1g:142:GLU:OE2	2.05	0.57
1:2A:2121:G:H1	1:2A:2177:C:N4	2.01	0.57
32:2a:811:C:O2'	32:2a:901:A:N1	2.37	0.57
32:2a:1178:G:H21	32:2a:1180:A:H3'	1.69	0.57
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.38	0.57
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.39	0.57
15:1T:26:ASP:OD1	15:1T:120:ARG:NH2	2.34	0.57
39:1h:10:LEU:HB3	39:1h:83:ILE:HG12	1.87	0.57
51:1t:35:THR:OG1	61:1t:4901:HOH:O	2.18	0.57
21:2Z:5:LEU:HD11	21:2Z:43:GLU:HB3	1.87	0.57
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.70	0.57
33:2b:58:ILE:O	33:2b:62:ALA:N	2.29	0.57
1:1A:1649:G:O2'	13:1R:107:ASP:OD2	2.18	0.57
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.87	0.57
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.40	0.57
1:2A:1218:C:H42	1:2A:1231:G:H1	1.53	0.57
10:2O:36:GLY:HA2	10:2O:106:LEU:HD23	1.87	0.57
41:2j:16:LEU:O	41:2j:20:ALA:N	2.36	0.57
44:2m:82:MET:O	44:2m:93:ARG:NH2	2.38	0.57
1:1A:625:G:N7	11:1P:107:LYS:NZ	2.52	0.57
1:1A:847:U:OP2	61:1A:4248:HOH:O	2.17	0.57
1:1A:2279:G:O6	22:10:14:ARG:HG3	2.05	0.57
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.87	0.57
32:1a:45:U:H2'	32:1a:46:G:C8	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:509:A:O2'	32:1a:510:A:OP1	2.19	0.57
32:1a:749:C:H2'	32:1a:750:G:H8	1.69	0.57
49:1r:38:GLU:HA	49:1r:41:LYS:HE2	1.87	0.57
1:2A:2316:C:O2'	6:2G:128:ARG:NH1	2.35	0.57
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.86	0.57
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.04	0.57
40:2i:61:ALA:HB1	40:2i:63:ILE:HD11	1.87	0.57
41:2j:9:ARG:NH2	41:2j:69:ASN:OD1	2.38	0.57
1:1A:2223:G:OP1	3:1D:172:TYR:OH	2.20	0.56
61:1A:4241:HOH:O	6:1G:45:GLU:OE2	2.17	0.56
3:1D:147:LEU:HD13	3:1D:155:LEU:HD11	1.86	0.56
11:1P:38:GLN:O	11:1P:40:SER:N	2.33	0.56
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	1.85	0.56
1:2A:2728:U:H2'	1:2A:2729:G:C8	2.39	0.56
40:2i:9:ARG:O	40:2i:104:ARG:HG3	2.05	0.56
1:1A:1094:U:N3	1:1A:1096:A:H5'	2.20	0.56
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.40	0.56
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.86	0.56
32:2a:1272:G:N2	32:2a:1273:G:C5	2.73	0.56
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.87	0.56
50:2s:22:LEU:HD13	50:2s:31:ILE:HD11	1.88	0.56
55:2x:15:G:H2'	55:2x:59:A:N1	2.21	0.56
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.39	0.56
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.18	0.56
32:1a:636:U:H2'	32:1a:637:G:H8	1.69	0.56
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.20	0.56
32:1a:974:A:H8	32:1a:974:A:OP1	1.88	0.56
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.87	0.56
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.38	0.56
1:2A:2137:C:N4	1:2A:2154:G:H1	2.03	0.56
14:2S:19:LYS:HE2	14:2S:25:ARG:HD2	1.86	0.56
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.38	0.56
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.46	0.56
32:2a:951:G:N3	32:2a:970:C:O2'	2.31	0.56
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.86	0.56
36:2e:147:ASP:OD1	36:2e:147:ASP:N	2.38	0.56
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.70	0.56
54:2y:15:G:H22	54:2y:48:C:H42	1.54	0.56
21:1Z:93:ASP:HA	21:1Z:131:ARG:HH22	1.70	0.56
32:1a:783:C:OP1	32:1a:1515:C:O2'	2.23	0.56
35:1d:61:LYS:HA	35:1d:203:VAL:HG22	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:7:G:H2'	1:2A:8:A:C8	2.40	0.56
1:2A:900:A:H3'	1:2A:901:A:H8	1.70	0.56
13:2R:2:ARG:HG2	13:2R:5:LYS:HB2	1.87	0.56
32:2a:932:C:H2'	32:2a:933:G:C8	2.39	0.56
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.29	0.56
32:2a:1387:G:H5''	59:2a:3236:SCM:H8M3	1.87	0.56
1:1A:1054:A:H61	1:1A:1105:U:H3	1.53	0.56
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.87	0.56
39:1h:46:LYS:HG3	39:1h:64:LYS:HG3	1.88	0.56
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.87	0.56
1:2A:2756:U:OP2	31:29:19:ARG:NH2	2.37	0.56
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	1.85	0.56
32:2a:1278:U:H5'	32:2a:1279:A:H5'	1.86	0.56
33:2b:178:ARG:HH12	39:2h:68:ARG:HH22	1.54	0.56
34:2c:6:HIS:HB3	45:2n:49:HIS:CD2	2.40	0.56
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	1.97	0.56
1:1A:1220:A:OP2	16:1U:19:LYS:NZ	2.39	0.56
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.17	0.56
32:1a:377:G:OP1	47:1p:5:ARG:HD2	2.06	0.56
1:2A:460:A:P	29:27:41:ARG:HH22	2.28	0.56
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.23	0.56
25:23:22:ALA:HB2	25:23:49:LYS:HD3	1.87	0.56
32:2a:932:C:H2'	32:2a:933:G:H8	1.69	0.56
1:1A:630:G:OP2	30:18:15:LYS:NZ	2.25	0.56
1:1A:1301:A:OP1	61:1A:4252:HOH:O	2.17	0.56
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.06	0.56
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.40	0.56
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.34	0.56
11:2P:29:LYS:HE2	11:2P:30:THR:HG23	1.87	0.56
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.38	0.56
18:2W:68:ARG:HH11	18:2W:111:HIS:HA	1.70	0.56
32:2a:1010:G:H2'	32:2a:1011:G:C8	2.41	0.56
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.70	0.56
1:1A:185:U:H2'	1:1A:186:G:C8	2.41	0.56
1:1A:1183:G:HO2'	25:13:29:ARG:HH12	1.51	0.56
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.35	0.56
41:1j:42:THR:HG23	41:1j:68:HIS:HA	1.87	0.56
1:2A:397:G:N7	61:2A:4053:HOH:O	2.33	0.56
1:2A:1263:U:OP2	61:2A:3954:HOH:O	2.18	0.56
14:2S:44:LYS:HB2	14:2S:46:VAL:HG22	1.88	0.56
20:2Y:5:MET:HE1	20:2Y:35:TYR:HA	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:743:U:H2'	32:2a:744:C:C6	2.40	0.56
6:1G:150:ASP:N	6:1G:150:ASP:OD1	2.39	0.56
33:1b:122:PHE:HZ	33:1b:135:GLN:HG3	1.71	0.56
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.86	0.56
1:2A:324:A:N6	1:2A:338:G:O2'	2.38	0.56
1:2A:639:U:H2'	1:2A:640:C:C6	2.41	0.56
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.71	0.56
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.88	0.56
11:2P:50:ARG:HH21	30:28:7:HIS:HD2	1.54	0.56
37:2f:36:ARG:NH2	37:2f:38:GLU:OE2	2.37	0.56
49:2r:26:LEU:HD11	49:2r:42:ARG:HD3	1.88	0.56
1:1A:2079:U:O3'	23:11:35:THR:OG1	2.21	0.56
3:1D:147:LEU:HD22	3:1D:155:LEU:HD21	1.86	0.56
32:1a:1047:G:H5''	45:1n:4:LYS:HD3	1.87	0.56
44:1m:4:ILE:HB	44:1m:57:ARG:HG3	1.88	0.56
40:2i:23:ASN:OD1	40:2i:23:ASN:N	2.39	0.56
54:2w:18:G:H4'	54:2w:60:U:C5	2.41	0.56
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.38	0.55
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.39	0.55
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.20	0.55
1:1A:2533:A:OP1	1:1A:2665:A:O2'	2.18	0.55
1:1A:2820:A:OP1	13:1R:2:ARG:NH2	2.39	0.55
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.87	0.55
32:1a:620:C:H2'	32:1a:621:A:O4'	2.06	0.55
32:1a:1196:U:N3	53:1v:24:A:O2'	2.40	0.55
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.88	0.55
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.41	0.55
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.25	0.55
1:2A:2849:U:O4	15:2T:23:ARG:NH2	2.35	0.55
32:2a:331:G:OP2	61:2a:3319:HOH:O	2.18	0.55
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.55	0.55
1:1A:922:U:H2'	1:1A:923:C:C6	2.42	0.55
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.34	0.55
1:1A:2844:G:O6	61:1A:4253:HOH:O	2.17	0.55
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.88	0.55
21:1Z:7:ALA:O	21:1Z:62:PRO:HD3	2.06	0.55
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.38	0.55
1:2A:947:G:H2'	1:2A:948:G:C8	2.41	0.55
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.41	0.55
2:2B:2:C:H2'	2:2B:3:C:H6	1.70	0.55
32:2a:826:C:H4'	39:2h:12:ARG:HG2	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:944:G:OP1	61:2a:3318:HOH:O	2.18	0.55
33:2b:211:ILE:O	33:2b:215:LEU:HB2	2.05	0.55
1:1A:530:G:N1	1:1A:2023:G:OP1	2.35	0.55
32:1a:96:U:H2'	32:1a:97:G:C8	2.41	0.55
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.41	0.55
36:1e:137:GLU:OE1	36:1e:140:ARG:NH1	2.39	0.55
1:2A:317:G:O6	61:2A:3952:HOH:O	2.18	0.55
1:2A:1213:A:N3	1:2A:1238:G:O2'	2.39	0.55
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.32	0.55
6:2G:109:VAL:HG11	26:24:14:ILE:HG21	1.88	0.55
11:2P:50:ARG:HH21	30:28:7:HIS:CD2	2.25	0.55
32:2a:920:U:H2'	32:2a:921:U:H6	1.68	0.55
44:2m:90:LEU:HD22	44:2m:94:ARG:HD2	1.89	0.55
1:1A:671:C:N4	61:1A:4420:HOH:O	2.39	0.55
1:1A:2062:A:N3	1:1A:2062:A:H2'	2.22	0.55
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.41	0.55
26:14:58:ARG:O	26:14:61:ARG:HB3	2.07	0.55
32:1a:219:C:H2'	32:1a:220:G:O4'	2.06	0.55
32:1a:460:G:N2	32:1a:471:G:N7	2.53	0.55
32:1a:691:G:OP2	42:1k:26:ASN:ND2	2.38	0.55
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.07	0.55
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.87	0.55
47:1p:40:ASP:HB3	47:1p:48:TRP:HB2	1.89	0.55
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.24	0.55
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.06	0.55
5:2F:165:ARG:HG2	5:2F:168:ARG:HH21	1.70	0.55
15:2T:16:ARG:NH2	15:2T:18:ASP:OD2	2.40	0.55
32:2a:1223:C:H5''	32:2a:1224:G:H5''	1.88	0.55
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.88	0.55
1:1A:1140:C:P	9:1N:66:LYS:HZ3	2.30	0.55
1:1A:2821:A:OP2	61:1R:301:HOH:O	2.18	0.55
6:1G:122:PRO:HG3	6:1G:182:LYS:H	1.72	0.55
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.21	0.55
32:1a:1181:G:O2'	32:1a:1182:G:N7	2.35	0.55
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.41	0.55
1:2A:892:G:H3'	1:2A:893:C:C5'	2.37	0.55
1:2A:995:C:OP2	16:2U:54:LYS:NZ	2.39	0.55
12:2Q:43:THR:HA	12:2Q:94:VAL:HG12	1.89	0.55
32:2a:1263:C:C4	32:2a:1272:G:O6	2.59	0.55
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.05	0.55
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.40	0.55
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.89	0.55
32:1a:341:C:H2'	32:1a:342:C:C6	2.41	0.55
33:1b:60:ASP:OD2	33:1b:64:ARG:NH2	2.39	0.55
40:1i:53:VAL:O	40:1i:55:ALA:N	2.39	0.55
47:1p:43:LYS:HG2	47:1p:48:TRP:CE2	2.41	0.55
1:2A:1717:G:H2'	1:2A:1718:G:H8	1.71	0.55
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.40	0.55
6:2G:124:SER:O	6:2G:124:SER:OG	2.21	0.55
32:2a:646:U:H2'	32:2a:647:C:C6	2.41	0.55
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.41	0.55
33:2b:16:HIS:HB2	33:2b:204:ASN:CB	2.35	0.55
51:2t:50:GLU:HG3	51:2t:100:ILE:HD13	1.87	0.55
7:1H:56:SER:OG	7:1H:57:ASP:N	2.38	0.55
32:1a:194:C:O3'	51:1t:68:LYS:HD2	2.06	0.55
32:1a:316:G:OP2	32:1a:351:G:O2'	2.25	0.55
32:1a:1027:C:N4	32:1a:1034:G:H1	2.04	0.55
1:2A:880:G:H1	1:2A:897:C:H42	1.53	0.55
1:2A:922:U:H2'	1:2A:923:C:C6	2.41	0.55
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.89	0.55
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.06	0.55
16:2U:79:PHE:CZ	16:2U:83:LEU:HD11	2.41	0.55
35:2d:57:ARG:HD3	35:2d:205:GLU:HB2	1.89	0.55
36:2e:95:ALA:O	36:2e:97:GLY:N	2.40	0.55
37:2f:5:GLU:OE1	49:2r:34:TYR:OH	2.22	0.55
54:2y:9:A:O2'	54:2y:11:C:N4	2.29	0.55
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.88	0.55
3:1D:237:GLU:OE2	61:1D:401:HOH:O	2.18	0.55
32:1a:116:A:OP1	61:1a:1913:HOH:O	2.18	0.55
32:1a:165:C:H2'	32:1a:166:G:C8	2.42	0.55
1:2A:8:A:H2'	1:2A:9:U:H6	1.72	0.55
1:2A:1021:A:H62	1:2A:1141:U:H3	1.55	0.55
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.06	0.55
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.42	0.55
32:1a:277:C:OP2	48:1q:41:LYS:NZ	2.40	0.55
33:1b:91:PRO:HA	33:1b:154:LEU:HD12	1.89	0.55
1:2A:224:G:H2'	1:2A:225:A:O4'	2.06	0.55
1:2A:856:C:O4'	22:20:27:GLU:HB3	2.07	0.55
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.42	0.55
1:2A:2396:G:OP1	23:21:25:LYS:NZ	2.31	0.55
7:2H:15:VAL:HG21	7:2H:76:VAL:HG23	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.42	0.55
54:2y:15:G:N2	54:2y:48:C:H42	2.03	0.55
1:1A:2612:C:OP2	27:15:2:ALA:N	2.40	0.54
32:1a:1442(A):G:N3	61:1a:1934:HOH:O	2.33	0.54
48:1q:4:LYS:HE2	48:1q:6:LEU:HD21	1.90	0.54
1:2A:947:G:H2'	1:2A:948:G:H8	1.71	0.54
2:2B:17:C:H2'	2:2B:18:G:O4'	2.07	0.54
32:2a:185:A:N3	51:2t:81:LYS:NZ	2.56	0.54
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.40	0.54
33:2b:101:MET:HA	33:2b:108:ILE:HD12	1.89	0.54
34:2c:57:ILE:HG12	34:2c:66:VAL:HG22	1.90	0.54
38:2g:78:ARG:NH2	38:2g:79:ARG:HE	2.05	0.54
41:2j:16:LEU:HD23	41:2j:94:VAL:HG12	1.89	0.54
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.88	0.54
1:1A:747:U:O2	1:1A:2014:A:H1'	2.06	0.54
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.41	0.54
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.03	0.54
34:1c:125:GLU:HG3	34:1c:189:ALA:HB1	1.88	0.54
41:1j:57:LYS:HE3	41:1j:60:ARG:NH2	2.22	0.54
1:2A:859:G:O2'	1:2A:916:G:O6	2.24	0.54
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.72	0.54
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.32	0.54
32:2a:323:U:OP1	51:2t:26:ASN:ND2	2.39	0.54
1:1A:286:C:H2'	1:1A:287:C:C6	2.42	0.54
1:2A:492:A:H2'	1:2A:493:G:O4'	2.07	0.54
1:2A:1007:C:H5''	9:2N:35:ARG:HH11	1.70	0.54
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.71	0.54
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.05	0.54
32:2a:973:G:H3'	32:2a:974:A:H5''	1.89	0.54
32:2a:1332:A:H2'	32:2a:1333:A:C8	2.42	0.54
44:2m:16:ASP:HB3	44:2m:34:LEU:HD11	1.90	0.54
5:1F:7:TYR:CD2	5:1F:24:LEU:HB2	2.42	0.54
32:1a:1070:U:P	36:1e:25:ARG:HH12	2.31	0.54
33:1b:60:ASP:O	33:1b:64:ARG:HG2	2.06	0.54
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.40	0.54
1:2A:1991:U:H2'	1:2A:1992:G:H5''	1.88	0.54
9:2N:18:ALA:HB1	9:2N:60:ILE:HD12	1.88	0.54
19:2X:94:GLY:N	19:2X:95:LEU:O	2.39	0.54
25:23:35:ARG:HG2	25:23:37:LEU:HD21	1.89	0.54
32:2a:438:G:N1	32:2a:495:A:OP2	2.37	0.54
32:2a:1031:G:H2'	32:2a:1032:G:C8	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:113:ALA:HB2	34:2c:202:ILE:HG13	1.88	0.54
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.07	0.54
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.42	0.54
1:1A:2684:U:O2'	10:1O:68:GLU:OE2	2.20	0.54
54:1y:56:C:H2'	54:1y:57:G:O4'	2.08	0.54
1:2A:829:A:N7	1:2A:2248:C:H5'	2.22	0.54
1:2A:1223:G:N2	1:2A:1226:A:OP2	2.37	0.54
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	1.88	0.54
16:2U:50:ARG:HH22	17:2V:72:VAL:HG22	1.71	0.54
32:2a:137:C:H2'	32:2a:138:G:H8	1.72	0.54
32:2a:1174:G:H2'	32:2a:1175:G:C8	2.40	0.54
37:2f:46:ARG:HH22	49:2r:37:VAL:HG11	1.72	0.54
39:2h:97:VAL:HG21	39:2h:128:GLY:HA2	1.90	0.54
42:2k:15:ALA:HA	42:2k:77:MET:HA	1.89	0.54
1:1A:185:U:H2'	1:1A:186:G:H8	1.72	0.54
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.21	0.54
32:1a:1343:G:H4'	40:1i:122:ALA:HB3	1.88	0.54
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.73	0.54
1:2A:288:C:H2'	1:2A:289:A:H8	1.72	0.54
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.34	0.54
1:2A:994:C:O2'	1:2A:996:A:OP1	2.24	0.54
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.43	0.54
1:2A:2278:A:OP2	22:20:12:ASN:ND2	2.36	0.54
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.72	0.54
21:2Z:47:VAL:O	21:2Z:50:GLN:NE2	2.41	0.54
21:2Z:54:HIS:HB3	21:2Z:101:PRO:HD3	1.88	0.54
32:2a:553:A:H5''	43:2l:24:VAL:HG21	1.90	0.54
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.42	0.54
32:2a:1129:C:H5''	32:2a:1130:A:OP1	2.07	0.54
48:2q:12:SER:HB3	48:2q:20:THR:HB	1.89	0.54
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.90	0.54
12:1Q:65:PHE:HB2	12:1Q:105:GLU:HB2	1.90	0.54
32:1a:501:C:H2'	32:1a:502:G:H8	1.72	0.54
33:1b:76:GLN:NE2	33:1b:206:ASP:OD1	2.40	0.54
34:1c:134:ILE:HD11	34:1c:153:VAL:HB	1.89	0.54
48:1q:45:HIS:CD2	48:1q:47:PRO:HG3	2.42	0.54
1:2A:1364:G:OP1	23:21:2:SER:HA	2.08	0.54
1:2A:2741:A:OP1	31:29:22:ARG:NH2	2.31	0.54
32:2a:1239:A:H62	32:2a:1299:A:H62	1.56	0.54
32:2a:1259:C:O2'	32:2a:1283:G:N2	2.38	0.54
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.40	0.54
36:2e:131:ILE:O	36:2e:135:THR:OG1	2.24	0.54
42:2k:45:GLY:O	42:2k:50:TYR:HB2	2.08	0.54
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.43	0.54
19:1X:92:LEU:O	19:1X:94:GLY:N	2.41	0.54
35:1d:65:ARG:HG3	35:1d:75:PHE:CD1	2.43	0.54
1:2A:1183:G:H5''	25:23:30:ARG:HH21	1.73	0.54
12:2Q:75:THR:HG21	12:2Q:87:LYS:HE3	1.89	0.54
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.43	0.54
26:24:45:GLY:C	26:24:47:GLN:H	2.16	0.54
32:2a:707:C:H2'	32:2a:708:C:C6	2.43	0.54
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.23	0.54
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.07	0.54
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.48	0.54
1:1A:307:G:N7	61:1A:4365:HOH:O	2.34	0.54
1:1A:744:G:OP1	61:1A:4255:HOH:O	2.18	0.54
11:1P:29:LYS:HG3	11:1P:30:THR:H	1.71	0.54
4:2E:163:GLU:HG2	4:2E:164:ARG:N	2.21	0.54
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.73	0.54
36:2e:18:ARG:NH2	36:2e:25:ARG:HE	2.05	0.54
54:2y:48:C:H2'	54:2y:59:U:H1'	1.89	0.54
1:1A:2090:G:O6	61:1A:4256:HOH:O	2.18	0.54
6:1G:179:PRO:HB2	26:14:42:PHE:HE2	1.73	0.54
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.90	0.54
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.43	0.54
32:1a:141:A:H2'	32:1a:142:G:H8	1.72	0.54
42:1k:33:THR:OG1	42:1k:34:ASP:N	2.37	0.54
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.90	0.54
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.43	0.54
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.23	0.54
1:2A:1031:G:H5''	31:29:8:LYS:HE3	1.89	0.54
1:2A:1231:G:H2'	1:2A:1232:G:C8	2.43	0.54
1:2A:2471:C:N4	1:2A:2476:A:O2'	2.41	0.54
8:2I:82:ARG:HH12	8:2I:89:TYR:HB2	1.72	0.54
17:2V:76:LYS:HB2	17:2V:81:TYR:HB3	1.90	0.54
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.33	0.54
32:1a:966:M2G:O2'	40:1i:127:LYS:O	2.26	0.53
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.19	0.53
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.89	0.53
5:2F:123:LEU:HD12	5:2F:124:LEU:N	2.24	0.53
16:2U:65:ILE:HG13	16:2U:96:ALA:HB2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:11:ARG:CZ	34:2c:182:ILE:HD11	2.38	0.53
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.27	0.53
32:1a:19:C:OP1	36:1e:125:SER:OG	2.21	0.53
32:1a:881:G:P	43:1l:12:ARG:HH22	2.31	0.53
1:2A:810:U:O4	61:2A:3944:HOH:O	2.17	0.53
1:2A:956:G:H5''	12:2Q:77:LYS:HD2	1.90	0.53
40:2i:65:VAL:HG21	40:2i:73:GLN:HB3	1.89	0.53
54:2y:49:C:H42	54:2y:65:G:H1	1.56	0.53
1:1A:26:G:H1'	1:1A:515:A:H61	1.74	0.53
1:1A:1094:U:H3	1:1A:1096:A:H5'	1.72	0.53
11:1P:121:LYS:O	11:1P:123:LEU:N	2.41	0.53
19:1X:94:GLY:HA3	19:1X:95:LEU:HB2	1.90	0.53
32:1a:555:C:H2'	32:1a:556:C:C6	2.43	0.53
32:1a:977:A:H1'	32:1a:982:U:O4	2.09	0.53
1:2A:881:G:H3'	1:2A:882:G:H8	1.72	0.53
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.09	0.53
1:2A:2443:C:H2'	1:2A:2444:G:C8	2.43	0.53
1:2A:2843:G:O6	61:2A:3951:HOH:O	2.18	0.53
34:2c:8:ILE:HG23	34:2c:16:ARG:HG2	1.90	0.53
35:2d:4:TYR:O	35:2d:115:ARG:NH1	2.41	0.53
38:2g:60:LYS:HA	38:2g:63:LYS:HE2	1.91	0.53
1:1A:879:G:N2	1:1A:880:G:N3	2.55	0.53
1:1A:884:C:C4	1:1A:885:C:H1'	2.44	0.53
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.90	0.53
22:10:11:ARG:O	22:10:14:ARG:NH2	2.38	0.53
32:1a:38:G:N2	32:1a:397:A:H5'	2.23	0.53
1:2A:191:A:H2'	1:2A:192:C:C6	2.42	0.53
1:2A:422:A:H2'	1:2A:423:A:C8	2.44	0.53
1:2A:1877:A:OP2	1:2A:1877:A:H8	1.92	0.53
32:2a:1279:A:H5''	32:2a:1280:A:OP1	2.09	0.53
32:2a:1318:A:H5''	50:2s:3:ARG:NH2	2.23	0.53
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.41	0.53
1:1A:1670:C:OP2	61:1A:4212:HOH:O	2.19	0.53
32:1a:165:C:H2'	32:1a:166:G:H8	1.74	0.53
32:1a:560:U:O2'	32:1a:561:U:OP2	2.25	0.53
32:1a:1130:A:O2'	40:1i:3:GLN:OE1	2.26	0.53
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.08	0.53
32:1a:1445:C:O2'	32:1a:1447:A:N6	2.41	0.53
1:2A:882:G:N2	1:2A:883:G:O6	2.41	0.53
1:2A:2129:C:N4	1:2A:2159:G:H1	2.06	0.53
9:2N:33:LEU:HD23	9:2N:38:HIS:CE1	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:54:VAL:HG22	19:2X:81:VAL:HG12	1.90	0.53
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.24	0.53
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.91	0.53
26:14:44:THR:OG1	26:14:47:GLN:HB2	2.08	0.53
32:1a:1285:A:H4'	32:1a:1286:A:O5'	2.09	0.53
1:2A:700:G:O2'	1:2A:1632:A:N3	2.41	0.53
1:2A:2134:A:N6	1:2A:2157:G:H4'	2.24	0.53
2:2B:41:U:H5	6:2G:70:VAL:H	1.56	0.53
4:2E:48:GLN:HG2	4:2E:78:LEU:HD22	1.91	0.53
23:21:52:ARG:NH2	23:21:57:GLU:HB2	2.24	0.53
32:2a:765:G:N1	32:2a:812:C:O2'	2.36	0.53
33:2b:221:LEU:HA	33:2b:224:GLN:HG2	1.91	0.53
39:2h:12:ARG:HD3	39:2h:26:VAL:HG12	1.90	0.53
40:2i:32:ASP:O	40:2i:35:GLU:N	2.41	0.53
1:1A:72:U:OP1	61:1A:4258:HOH:O	2.19	0.53
1:1A:218:A:C2	1:1A:235:U:H4'	2.44	0.53
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	1.90	0.53
32:1a:269:C:H2'	32:1a:270:A:C8	2.44	0.53
35:1d:173:TRP:NE1	35:1d:193:ASP:HB3	2.22	0.53
40:1i:50:LEU:HD23	40:1i:81:ILE:HD11	1.91	0.53
41:1j:78:ASN:O	41:1j:80:LYS:N	2.41	0.53
54:1y:9:A:H4'	54:1y:46:G7M:OP2	2.08	0.53
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.90	0.53
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.44	0.53
19:2X:60:ARG:HH22	29:27:47:ARG:HH12	1.56	0.53
20:2Y:6:HIS:HB2	20:2Y:85:VAL:HG21	1.91	0.53
32:2a:17:U:H2'	32:2a:18:C:C6	2.44	0.53
35:2d:189:PRO:HB2	35:2d:194:LEU:HD21	1.90	0.53
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.40	0.53
32:1a:232:G:H1'	32:1a:262:A:N1	2.23	0.53
1:2A:288:C:H2'	1:2A:289:A:C8	2.44	0.53
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.44	0.53
1:2A:1537:G:H2'	1:2A:1538:G:H8	1.74	0.53
8:2I:133:HIS:CD2	8:2I:134:PRO:HD2	2.44	0.53
19:2X:35:THR:HG22	19:2X:37:THR:N	2.21	0.53
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.09	0.53
40:2i:117:HIS:HB2	40:2i:121:ARG:HG2	1.90	0.53
1:1A:2128:C:N4	1:1A:2160:G:H1	2.05	0.53
1:1A:2629:A:H1'	1:1A:2630:G:H5''	1.91	0.53
4:1E:72:VAL:HG12	4:1E:73:GLU:O	2.09	0.53
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:1V:1:MET:HE3	17:1V:43:GLU:HB2	1.91	0.53
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.23	0.53
23:11:89:GLU:O	23:11:93:GLU:HG2	2.09	0.53
32:1a:736:C:H2'	32:1a:737:A:C8	2.44	0.53
37:1f:27:GLN:HA	37:1f:30:LEU:HD12	1.90	0.53
1:2A:557:U:H2'	1:2A:558:G:C8	2.43	0.53
1:2A:851:U:H5'	25:23:49:LYS:HD2	1.91	0.53
1:2A:2376:A:H2'	1:2A:2377:A:O4'	2.09	0.53
6:2G:68:PRO:HG2	6:2G:90:LEU:HD22	1.91	0.53
32:2a:628:G:H2'	32:2a:629:G:C8	2.44	0.53
32:2a:677:U:H3	32:2a:713:G:H22	1.57	0.53
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.26	0.53
32:2a:1149:C:H2'	32:2a:1150:U:C6	2.43	0.53
32:2a:1298:C:OP2	38:2g:114:ARG:NH2	2.32	0.53
18:1W:68:ARG:NH1	18:1W:112:GLY:H	2.07	0.53
34:1c:114:PRO:HA	34:1c:185:GLY:HA3	1.91	0.53
37:1f:99:ALA:HB1	49:1r:23:LYS:HZ3	1.74	0.53
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.91	0.53
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.09	0.53
1:2A:963:U:OP1	61:2A:3959:HOH:O	2.19	0.53
1:2A:1970:A:OP1	61:2A:3956:HOH:O	2.19	0.53
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.44	0.53
12:2Q:30:GLY:N	12:2Q:105:GLU:OE1	2.36	0.53
14:2S:15:ARG:NE	14:2S:88:ASP:OD2	2.42	0.53
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.44	0.53
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.92	0.53
44:2m:50:GLU:HA	44:2m:53:VAL:HG22	1.90	0.53
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.37	0.52
32:1a:1291:G:O2'	40:1i:38:GLN:OE1	2.25	0.52
42:1k:33:THR:OG1	42:1k:34:ASP:O	2.27	0.52
54:1y:57:G:H2'	54:1y:58:A:H5''	1.91	0.52
1:2A:483:A:O2'	20:2Y:59:GLY:N	2.41	0.52
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.90	0.52
32:2a:232:G:H1'	32:2a:262:A:N1	2.24	0.52
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.45	0.52
32:2a:1057:G:H5''	34:2c:154:SER:OG	2.09	0.52
33:2b:47:THR:O	33:2b:51:LEU:HG	2.09	0.52
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	1.92	0.52
38:2g:132:GLY:O	38:2g:135:VAL:HG12	2.09	0.52
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.09	0.52
10:1O:68:GLU:HB3	10:1O:78:ARG:HB2	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:1U:108:GLU:O	16:1U:112:ARG:HG2	2.08	0.52
18:1W:13:SER:HB3	18:1W:16:LYS:HG3	1.92	0.52
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.90	0.52
32:1a:1064:G:H4'	32:1a:1065:U:OP1	2.08	0.52
32:1a:1191:A:N6	59:1a:1815:SCM:H11	2.24	0.52
36:1e:33:VAL:HG22	36:1e:112:LEU:HD12	1.91	0.52
1:2A:651:G:OP1	30:28:19:SER:HB3	2.08	0.52
1:2A:1420:U:HO2'	1:2A:1421:G:H8	1.55	0.52
1:2A:2156:G:H2'	1:2A:2157:G:C6	2.44	0.52
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.92	0.52
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.24	0.52
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.09	0.52
32:2a:446:G:O6	61:2a:3316:HOH:O	2.13	0.52
39:2h:101:PRO:HG3	39:2h:133:LEU:HD11	1.90	0.52
43:2l:53:ARG:HD2	43:2l:93:LEU:HD11	1.90	0.52
52:2u:6:ARG:HG2	52:2u:15:ARG:HE	1.74	0.52
1:1A:247:G:H4'	1:1A:386:G:C5	2.44	0.52
1:1A:1865:G:N2	1:1A:1877:A:OP2	2.35	0.52
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.45	0.52
3:1D:275:LYS:HG3	3:1D:276:LYS:HB2	1.90	0.52
13:1R:34:ILE:HG13	13:1R:114:VAL:HG23	1.91	0.52
19:1X:60:ARG:HH12	29:17:47:ARG:HH12	1.58	0.52
32:1a:174:C:H2'	32:1a:175:C:H6	1.74	0.52
32:1a:1004:A:H5'	32:1a:1024:G:H22	1.73	0.52
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.74	0.52
2:2B:24:G:H4'	2:2B:25:A:C8	2.45	0.52
2:2B:103:G:H21	21:2Z:73:GLN:HE22	1.57	0.52
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.74	0.52
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	1.91	0.52
24:22:35:LEU:HD12	24:22:53:LEU:HD12	1.90	0.52
25:23:3:ARG:NH1	25:23:60:GLU:HA	2.25	0.52
32:2a:933:G:O6	38:2g:3:ARG:NH2	2.43	0.52
35:2d:20:TYR:HD1	35:2d:26:CYS:HB3	1.75	0.52
51:2t:57:ARG:HH22	51:2t:100:ILE:HD12	1.74	0.52
1:1A:668:G:H5'	1:1A:669:G:OP2	2.10	0.52
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.91	0.52
36:1e:31:LEU:HD11	36:1e:129:ILE:HA	1.91	0.52
1:2A:888:C:OP1	44:2m:93:ARG:HD3	2.10	0.52
1:2A:992:C:OP1	16:2U:47:TYR:OH	2.17	0.52
6:2G:60:LEU:HA	6:2G:63:ILE:HD12	1.91	0.52
7:2H:17:VAL:HG13	7:2H:26:VAL:HG22	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:807:A:H2'	32:2a:808:C:C6	2.44	0.52
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.45	0.52
33:2b:142:LEU:HD11	33:2b:146:GLN:HE21	1.74	0.52
33:2b:219:VAL:HG22	33:2b:222:ILE:HD11	1.91	0.52
39:2h:86:ILE:HD12	39:2h:133:LEU:HD22	1.92	0.52
46:2o:44:LYS:O	46:2o:47:LYS:HE3	2.10	0.52
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.33	0.52
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	1.92	0.52
8:1I:77:LEU:HD11	8:1I:100:ALA:HB3	1.92	0.52
12:2Q:57:HIS:CD2	12:2Q:117:ALA:HB2	2.43	0.52
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.90	0.52
32:2a:362:G:N1	32:2a:365:U:OP2	2.42	0.52
32:2a:1041:A:H2'	32:2a:1042:G:C8	2.44	0.52
32:2a:1327:C:OP2	52:2u:12:LYS:NZ	2.33	0.52
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.40	0.52
42:1k:99:GLN:HA	42:1k:105:VAL:HG21	1.90	0.52
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.74	0.52
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.09	0.52
1:2A:2801(A):A:H5'	1:2A:2802:G:C8	2.43	0.52
8:2I:72:LEU:HA	8:2I:75:LEU:HD12	1.90	0.52
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.08	0.52
32:2a:645:C:OP2	61:2a:3320:HOH:O	2.19	0.52
32:2a:730:G:O6	46:2o:51:HIS:NE2	2.40	0.52
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.77	0.52
1:1A:652(D):C:H2'	1:1A:652(E):G:C8	2.44	0.52
9:1N:128:HIS:O	9:1N:131:GLN:NE2	2.43	0.52
19:1X:60:ARG:HH22	29:17:47:ARG:HH22	1.58	0.52
20:1Y:15:VAL:HG21	20:1Y:42:VAL:HG11	1.92	0.52
26:14:40:HIS:HB3	26:14:43:TYR:HB2	1.91	0.52
32:1a:174:C:H2'	32:1a:175:C:C6	2.45	0.52
32:1a:848:C:H2'	32:1a:849:C:C6	2.44	0.52
40:1i:20:ARG:O	40:1i:60:ASP:N	2.28	0.52
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.42	0.52
1:2A:2470:G:OP1	12:2Q:56:ARG:NH2	2.43	0.52
3:2D:77:ALA:HA	3:2D:97:TYR:HA	1.92	0.52
8:2I:9:LEU:HD22	8:2I:12:LEU:HD12	1.91	0.52
14:2S:67:ARG:NH1	14:2S:107:GLU:OE2	2.39	0.52
31:29:10:ILE:HD12	31:29:32:HIS:HA	1.91	0.52
32:2a:736:C:H2'	32:2a:737:A:C8	2.44	0.52
1:1A:479:A:N3	1:1A:481:G:H5''	2.24	0.52
1:1A:888:C:H5'	44:1m:93:ARG:HB3	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.43	0.52
3:1D:72:LYS:NZ	3:1D:99:ASP:OD2	2.38	0.52
3:1D:143:HIS:ND1	3:1D:194:GLY:O	2.38	0.52
14:1S:78:LEU:HD11	14:1S:109:GLY:HA3	1.92	0.52
32:1a:411:A:OP1	35:1d:30:LYS:NZ	2.37	0.52
32:1a:1136:U:H5''	32:1a:1137:C:N3	2.25	0.52
37:1f:1:MET:HE2	37:1f:68:PRO:HD3	1.92	0.52
49:1r:47:THR:O	49:1r:83:GLU:N	2.40	0.52
54:1y:67:C:H2'	54:1y:68:C:C6	2.45	0.52
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.36	0.52
32:2a:1117:G:N2	32:2a:1180:A:O2'	2.42	0.52
54:2w:12:U:H2'	54:2w:13:C:H5''	1.92	0.52
54:2y:28:G:H2'	54:2y:29:G:C8	2.44	0.52
54:2y:28:G:H2'	54:2y:29:G:H8	1.75	0.52
54:2y:62:C:H2'	54:2y:63:G:C8	2.45	0.52
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.25	0.52
1:1A:2683:C:OP1	15:1T:53:ARG:NH2	2.42	0.52
32:1a:266:G:H2'	32:1a:266:G:N3	2.25	0.52
1:2A:247:G:H4'	1:2A:386:G:C5	2.44	0.52
1:2A:500:G:N1	1:2A:503:A:OP2	2.42	0.52
1:2A:740:U:H2'	1:2A:741:G:C8	2.45	0.52
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.10	0.52
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.44	0.52
32:2a:1054:C:C5	54:2w:34:G:H1'	2.45	0.52
50:2s:33:THR:H	50:2s:57:HIS:HE1	1.56	0.52
55:2x:69:C:H2'	55:2x:70:G:C8	2.44	0.52
5:1F:107:LYS:HD2	5:1F:206:ILE:HA	1.92	0.52
32:1a:221:C:H2'	32:1a:222:U:H6	1.75	0.52
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.10	0.52
33:1b:162:ILE:HD11	33:1b:184:VAL:HG22	1.91	0.52
36:1e:92:LYS:HB3	36:1e:119:LEU:HB2	1.91	0.52
41:1j:49:VAL:HG13	45:1n:41:ARG:HB2	1.91	0.52
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.92	0.52
1:2A:2113:U:H3	1:2A:2170:A:N6	2.08	0.52
14:2S:3:ARG:NH2	14:2S:4:LEU:O	2.43	0.52
21:2Z:39:VAL:HG21	21:2Z:44:PHE:HB2	1.92	0.52
32:2a:1079:G:OP1	61:2a:3322:HOH:O	2.19	0.52
32:2a:1083:U:OP2	61:2a:3323:HOH:O	2.19	0.52
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.09	0.52
32:1a:28:G:O2'	32:1a:296:U:OP1	2.25	0.51
32:1a:1318:A:H5''	50:1s:3:ARG:HH12	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:33:ALA:HB2	44:1m:64:TRP:HH2	1.74	0.51
50:1s:31:ILE:O	50:1s:50:ALA:N	2.36	0.51
1:2A:2131:G:N7	1:2A:2133:G:N2	2.58	0.51
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.76	0.51
1:2A:2683:C:O2	10:2O:70:LYS:NZ	2.32	0.51
6:2G:83:ARG:N	6:2G:86:MET:SD	2.80	0.51
12:2Q:110:THR:HG22	12:2Q:112:GLU:H	1.74	0.51
21:2Z:52:SER:HB3	21:2Z:54:HIS:ND1	2.24	0.51
33:2b:18:GLY:HA3	33:2b:41:ILE:HA	1.92	0.51
33:2b:146:GLN:O	33:2b:150:SER:OG	2.28	0.51
39:2h:12:ARG:NH1	39:2h:27:PRO:HD3	2.25	0.51
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.92	0.51
1:1A:787:U:H5''	1:1A:788:A:H5'	1.92	0.51
6:1G:179:PRO:HG3	26:14:43:TYR:CZ	2.45	0.51
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.11	0.51
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.10	0.51
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.10	0.51
20:2Y:43:ASN:HB2	20:2Y:67:LEU:HD21	1.92	0.51
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.91	0.51
21:2Z:121:HIS:N	21:2Z:172:ALA:HB2	2.24	0.51
32:2a:688:G:H5'	42:2k:46:GLY:C	2.35	0.51
33:2b:223:ILE:HA	33:2b:226:ARG:HD3	1.92	0.51
40:2i:20:ARG:O	40:2i:60:ASP:HB2	2.10	0.51
48:2q:95:TYR:HA	48:2q:98:LEU:HD12	1.92	0.51
6:1G:77:ILE:HG13	6:1G:82:LEU:HD23	1.91	0.51
26:14:53:GLU:CD	26:14:54:GLY:H	2.18	0.51
32:1a:486:U:H2'	32:1a:487:A:H8	1.75	0.51
33:1b:54:THR:HG21	33:1b:201:ILE:HG13	1.91	0.51
33:1b:132:LYS:HA	33:1b:135:GLN:HB3	1.92	0.51
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.92	0.51
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.10	0.51
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.75	0.51
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	1.93	0.51
8:2I:130:TYR:CE2	8:2I:132:PRO:HB3	2.45	0.51
10:2O:68:GLU:HB3	10:2O:78:ARG:HB3	1.92	0.51
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.10	0.51
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.92	0.51
32:2a:114:U:O2'	32:2a:115:G:H5'	2.10	0.51
32:2a:266:G:H2'	32:2a:266:G:N3	2.25	0.51
32:2a:1239:A:H62	32:2a:1299:A:N6	2.08	0.51
36:2e:36:ASP:O	36:2e:38:GLN:N	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.26	0.51
1:1A:1769:G:O2'	1:1A:1958:C:OP1	2.25	0.51
6:1G:135:LEU:HD13	6:1G:140:ILE:HD11	1.93	0.51
32:1a:626:U:H2'	32:1a:627:G:C8	2.46	0.51
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.91	0.51
48:1q:95:TYR:HA	48:1q:98:LEU:HD12	1.93	0.51
1:2A:484:C:H2'	1:2A:485:C:C6	2.45	0.51
1:2A:675:A:OP1	5:2F:63:LYS:NZ	2.42	0.51
1:2A:947:G:OP2	61:2A:3961:HOH:O	2.19	0.51
7:2H:45:VAL:HG13	7:2H:50:VAL:HG22	1.91	0.51
12:2Q:68:ILE:HD13	12:2Q:103:MET:HG2	1.92	0.51
32:2a:741:G:H5''	46:2o:59:MET:HE1	1.92	0.51
32:2a:1250:A:N3	32:2a:1370:G:O2'	2.37	0.51
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.43	0.51
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	1.92	0.51
1:1A:880:G:H2'	1:1A:881:G:C8	2.44	0.51
1:1A:1176:G:H21	1:1A:1178:C:P	2.33	0.51
32:1a:1095:U:P	32:1a:1108:G:H1	2.34	0.51
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.94	0.51
54:1y:19:G:C5'	54:1y:57:G:H1	2.24	0.51
32:2a:316:G:OP2	32:2a:351:G:O2'	2.24	0.51
35:2d:150:GLU:CD	35:2d:151:LYS:H	2.18	0.51
51:2t:60:GLU:HG3	51:2t:81:LYS:HD2	1.93	0.51
1:1A:1419:A:O2'	1:1A:1421:G:N7	2.38	0.51
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.27	0.51
1:1A:2428:G:OP1	61:1A:4205:HOH:O	2.19	0.51
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.46	0.51
6:1G:137:GLU:HG2	6:1G:152:LEU:HD22	1.92	0.51
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.24	0.51
32:1a:1136:U:H5''	32:1a:1137:C:C2	2.46	0.51
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.92	0.51
1:2A:1637:A:H4'	1:2A:2711:A:O2'	2.11	0.51
1:2A:2263:C:OP2	61:2A:3957:HOH:O	2.19	0.51
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.46	0.51
16:2U:82:GLY:HA3	16:2U:113:ALA:HB1	1.92	0.51
21:2Z:8:TYR:HB2	21:2Z:38:TYR:CE2	2.45	0.51
32:2a:130:A:H5'	48:2q:63:ARG:HE	1.76	0.51
32:2a:1111:A:N1	34:2c:177:THR:OG1	2.34	0.51
1:1A:2160:G:H2'	1:1A:2161:C:H5'	1.92	0.51
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.32	0.51
2:1B:75:G:H22	21:1Z:73:GLN:NE2	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.46	0.51
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.25	0.51
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.45	0.51
43:1l:56:ALA:HB2	43:1l:70:ILE:HD11	1.92	0.51
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.45	0.51
1:2A:2615:U:C2	27:25:7:PRO:HA	2.46	0.51
2:2B:9:G:OP1	14:2S:15:ARG:HD2	2.11	0.51
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.11	0.51
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.09	0.51
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.46	0.51
33:2b:85:ALA:O	33:2b:89:GLY:N	2.44	0.51
1:1A:455:C:H3'	1:1A:456:C:H5''	1.93	0.51
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.44	0.51
2:1B:74:U:H2'	2:1B:75:G:O4'	2.11	0.51
8:1l:69:LYS:HA	8:1l:138:ILE:HD12	1.92	0.51
26:14:14:ILE:HB	26:14:22:ILE:HB	1.93	0.51
30:18:42:ARG:HD2	61:18:205:HOH:O	2.10	0.51
32:1a:656:C:H4'	46:1o:62:GLN:HE22	1.75	0.51
44:1m:79:LYS:HA	44:1m:82:MET:HE2	1.92	0.51
54:1w:63:G:H2'	54:1w:64:A:O4'	2.11	0.51
1:2A:72:U:OP1	61:2A:3960:HOH:O	2.19	0.51
1:2A:831:G:O2'	11:2P:38:GLN:OE1	2.25	0.51
1:2A:1231:G:H2'	1:2A:1232:G:H8	1.76	0.51
1:2A:2650:U:H2'	1:2A:2651:C:C6	2.45	0.51
1:2A:2741:A:H2'	1:2A:2742:C:O4'	2.11	0.51
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.74	0.51
32:2a:164:U:H2'	32:2a:165:C:H6	1.76	0.51
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.11	0.51
32:2a:979:C:OP1	32:2a:1223:C:N4	2.44	0.51
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.45	0.51
34:2c:88:ARG:HA	34:2c:91:LEU:HB2	1.92	0.51
42:2k:48:ILE:O	42:2k:50:TYR:N	2.39	0.51
1:1A:588:U:H2'	1:1A:589:C:C6	2.46	0.51
1:1A:887:A:H1'	1:1A:889:C:OP2	2.11	0.51
32:1a:519:C:OP2	43:1l:50:SER:OG	2.22	0.51
32:1a:677:U:H3	32:1a:713:G:H22	1.59	0.51
32:1a:710:G:H5''	37:1f:54:LYS:HE2	1.93	0.51
32:1a:1191:A:H5''	34:1c:4:LYS:HZ2	1.76	0.51
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.93	0.51
32:1a:1304:G:OP2	61:1a:1920:HOH:O	2.19	0.51
1:2A:856:C:O2'	1:2A:857:C:OP1	2.27	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:149:ARG:NH1	7:2H:167:GLU:OE1	2.44	0.51
12:2Q:72:LYS:HB3	12:2Q:94:VAL:HG23	1.92	0.51
22:20:14:ARG:NE	61:20:202:HOH:O	2.44	0.51
32:2a:772:U:H2'	32:2a:773:G:O4'	2.11	0.51
32:2a:1104:G:O2'	32:2a:1105:A:H5'	2.10	0.51
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.26	0.51
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.93	0.51
54:2y:36:A:H2'	54:2y:37:MIA:O4'	2.11	0.51
7:1H:88:LEU:HD23	7:1H:130:ARG:HG2	1.93	0.51
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.93	0.51
1:2A:212:G:H2'	1:2A:213:A:O4'	2.10	0.51
1:2A:774:A:H2'	1:2A:774:A:N3	2.26	0.51
1:2A:819:A:OP2	1:2A:1187:G:N2	2.29	0.51
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.11	0.51
22:20:4:LYS:NZ	61:20:201:HOH:O	2.43	0.51
32:2a:419:C:OP1	32:2a:513:C:O2'	2.26	0.51
32:2a:619:U:N3	35:2d:134:ASP:OD1	2.33	0.51
32:2a:1077:G:H5'	32:2a:1078:U:OP2	2.11	0.51
32:2a:1368:G:OP2	40:2i:112:LYS:HD3	2.10	0.51
37:2f:4:TYR:CE1	37:2f:92:LYS:HG2	2.46	0.51
54:2w:21:A:O2'	54:2w:22:G:OP1	2.28	0.51
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.26	0.50
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.45	0.50
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.45	0.50
4:1E:2:LYS:NZ	4:1E:95:ILE:O	2.35	0.50
12:1Q:34:LEU:HD11	12:1Q:129:THR:HB	1.92	0.50
32:1a:21:G:H2'	32:1a:22:G:C8	2.46	0.50
2:2B:64:C:H2'	2:2B:65:C:C6	2.46	0.50
14:2S:51:ALA:HB3	14:2S:73:LEU:HB2	1.92	0.50
47:2p:48:TRP:CE3	47:2p:49:LEU:HB2	2.46	0.50
1:1A:284:U:H2'	1:1A:285:C:C6	2.46	0.50
5:1F:24:LEU:HB3	5:1F:115:ALA:HB2	1.94	0.50
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.43	0.50
32:1a:17:U:H2'	32:1a:18:C:C6	2.46	0.50
32:1a:60:A:N7	32:1a:110:C:N4	2.60	0.50
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.41	0.50
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.76	0.50
1:2A:307:G:N1	1:2A:310:A:OP2	2.39	0.50
1:2A:1754:C:OP1	15:2T:96:ARG:NH1	2.44	0.50
2:2B:13:A:N1	2:2B:69:G:O2'	2.40	0.50
20:2Y:45:VAL:HG23	20:2Y:63:LYS:HB2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:21:G:H2'	32:2a:22:G:C8	2.46	0.50
32:2a:435:C:H2'	32:2a:436:C:H6	1.76	0.50
32:2a:968:A:OP2	61:2a:3321:HOH:O	2.19	0.50
34:2c:18:TRP:O	34:2c:21:ARG:NH1	2.44	0.50
35:2d:143:GLY:HA2	35:2d:184:LYS:HE3	1.94	0.50
38:2g:27:ILE:HA	38:2g:30:ILE:HD12	1.92	0.50
43:2l:27:LEU:HA	43:2l:33:ARG:HD3	1.93	0.50
1:1A:322:A:OP2	5:1F:169:ASN:HB2	2.12	0.50
1:1A:409:C:OP1	61:1A:4257:HOH:O	2.19	0.50
7:1H:127:GLU:OE2	7:1H:130:ARG:NE	2.45	0.50
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.94	0.50
32:1a:189(D):C:H2'	32:1a:189(E):U:O4'	2.11	0.50
32:1a:1006:C:N4	32:1a:1023:G:H1	2.08	0.50
51:1t:92:LEU:O	51:1t:96:GLY:HA2	2.11	0.50
55:1x:67:C:C2'	55:1x:68:C:H5'	2.42	0.50
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.46	0.50
10:2O:120:GLU:HB2	15:2T:68:TYR:CE2	2.45	0.50
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.77	0.50
21:2Z:163:LEU:HG	21:2Z:165:VAL:HG23	1.92	0.50
32:2a:110:C:O2'	47:2p:25:ARG:O	2.28	0.50
32:2a:859:A:H2'	32:2a:860:A:O4'	2.09	0.50
32:2a:1004:A:N3	32:2a:1038:C:C2	2.79	0.50
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.93	0.50
1:1A:1965:C:OP1	1:1A:1966:A:O2'	2.28	0.50
32:1a:54:C:N4	32:1a:353:A:OP2	2.39	0.50
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.94	0.50
36:1e:37:ARG:HH12	36:1e:111:GLU:HB3	1.77	0.50
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.93	0.50
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.27	0.50
1:2A:320:A:H4'	1:2A:322:A:N7	2.27	0.50
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.26	0.50
9:2N:42:TRP:CH2	9:2N:44:PRO:HB3	2.46	0.50
12:2Q:39:PRO:HA	12:2Q:97:VAL:O	2.11	0.50
15:2T:15:VAL:HG13	15:2T:79:HIS:CE1	2.45	0.50
32:2a:560:U:H5'	32:2a:566:G:H22	1.73	0.50
32:2a:1004:A:H5''	32:2a:1024:G:H22	1.76	0.50
33:2b:82:ARG:HB3	33:2b:94:ASN:ND2	2.26	0.50
34:2c:40:ARG:HA	34:2c:43:LEU:HD12	1.92	0.50
35:2d:111:ALA:HA	35:2d:116:GLN:HE21	1.77	0.50
48:2q:78:GLU:OE2	48:2q:81:ARG:NH1	2.42	0.50
1:1A:61:G:H5'	24:12:50:ILE:HG21	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:748:G:OP1	1:1A:2612:C:N4	2.44	0.50
1:1A:890:A:H2'	1:1A:892:G:O4'	2.12	0.50
1:1A:1651:G:OP1	13:1R:40:LYS:NZ	2.41	0.50
1:1A:1744:C:H2'	1:1A:1745:C:C6	2.46	0.50
1:1A:2659:G:O6	61:1A:4254:HOH:O	2.18	0.50
6:1G:115:ARG:HG2	6:1G:136:ARG:NH2	2.26	0.50
25:13:35:ARG:HE	25:13:37:LEU:HD21	1.76	0.50
32:1a:345:C:H5'	32:1a:346:G:C5	2.47	0.50
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.46	0.50
33:1b:22:LYS:HA	33:1b:40:HIS:CE1	2.45	0.50
33:1b:80:ILE:HD11	33:1b:215:LEU:HB2	1.92	0.50
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.12	0.50
1:2A:242:G:C8	30:28:5:LYS:HG2	2.46	0.50
1:2A:2227:A:H5''	3:2D:263:ARG:HH11	1.77	0.50
11:2P:84:ASN:OD1	11:2P:115:LEU:HB2	2.12	0.50
14:2S:64:GLU:O	14:2S:68:GLN:HG2	2.12	0.50
14:2S:78:LEU:HD11	14:2S:108:GLY:O	2.11	0.50
32:2a:517:G:N3	32:2a:531:U:H5'	2.27	0.50
1:1A:729:G:O2'	1:1A:763:G:H4'	2.12	0.50
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.94	0.50
1:1A:1954:G:O2'	1:1A:1956:U:O4	2.26	0.50
6:1G:11:TYR:OH	6:1G:32:PRO:O	2.21	0.50
18:1W:61:ASN:HB2	18:1W:62:HIS:CD2	2.47	0.50
32:1a:184:G:H2'	32:1a:185:A:H8	1.77	0.50
32:1a:738:C:H2'	32:1a:739:C:H6	1.77	0.50
33:1b:19:HIS:CG	33:1b:20:GLU:N	2.77	0.50
34:1c:148:GLY:HA3	34:1c:172:ARG:O	2.12	0.50
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.09	0.50
1:2A:141:A:H8	1:2A:1408:C:O2'	1.95	0.50
1:2A:2848:G:C8	15:2T:97:ALA:HB2	2.47	0.50
4:2E:36:ARG:NH2	4:2E:88:GLY:O	2.44	0.50
5:2F:111:ALA:HB2	5:2F:206:ILE:HG21	1.94	0.50
9:2N:22:THR:HB	9:2N:25:ARG:HB2	1.92	0.50
32:2a:7:G:O2'	36:2e:120:THR:O	2.29	0.50
32:2a:448:A:O5'	32:2a:485:G:N2	2.40	0.50
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.46	0.50
33:2b:200:ILE:HG22	33:2b:202:PRO:HD3	1.94	0.50
35:2d:193:ASP:N	35:2d:193:ASP:OD1	2.43	0.50
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.27	0.50
54:2w:28:G:H2'	54:2w:29:G:O4'	2.12	0.50
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2629:A:H1'	1:1A:2630:G:C5'	2.42	0.50
9:1N:73:THR:HA	9:1N:83:LYS:O	2.11	0.50
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.47	0.50
32:1a:141:A:H2'	32:1a:142:G:C8	2.47	0.50
32:1a:691:G:H2'	32:1a:692:U:C6	2.47	0.50
32:1a:841:U:H3'	32:1a:848:C:O4'	2.12	0.50
32:1a:1278:U:H5''	32:1a:1279:A:O4'	2.11	0.50
41:1j:19:SER:OG	41:1j:91:PRO:HD2	2.10	0.50
54:1y:35:A:OP2	54:1y:35:A:H8	1.95	0.50
1:2A:286:C:H2'	1:2A:287:C:H6	1.77	0.50
1:2A:2113:U:H3	1:2A:2170:A:H61	1.58	0.50
6:2G:125:PHE:HB3	6:2G:166:ASP:OD1	2.12	0.50
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.27	0.50
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.26	0.50
41:2j:68:HIS:CD2	41:2j:68:HIS:H	2.28	0.50
54:2y:74:C:O2	61:2y:201:HOH:O	2.14	0.50
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.47	0.50
1:1A:2059:A:OP2	61:1A:4260:HOH:O	2.19	0.50
2:1B:13:A:N1	2:1B:69:G:O2'	2.38	0.50
7:1H:83:TYR:CE2	7:1H:138:LYS:HB2	2.46	0.50
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.93	0.50
26:14:58:ARG:HB3	50:1s:67:VAL:HB	1.92	0.50
32:1a:1137:C:H4'	32:1a:1138:G:C2	2.47	0.50
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.76	0.50
36:1e:91:LEU:HG	36:1e:118:ILE:HD11	1.93	0.50
36:1e:145:LYS:O	36:1e:148:VAL:HG22	2.12	0.50
54:1y:9:A:O3'	54:1y:45:U:O2'	2.24	0.50
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.30	0.50
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.11	0.50
1:2A:2136:C:N3	1:2A:2155:G:N2	2.46	0.50
5:2F:12:LEU:HD12	5:2F:124:LEU:HD21	1.94	0.50
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.27	0.50
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.12	0.50
32:2a:110:C:H2'	32:2a:111:G:O4'	2.12	0.50
32:2a:714:G:H2'	32:2a:715:A:C8	2.47	0.50
32:2a:1244:C:H42	32:2a:1293:G:H1	1.59	0.50
35:2d:153:ARG:HE	35:2d:181:MET:HG3	1.76	0.50
41:2j:62:HIS:HB3	45:2n:59:ALA:HB3	1.92	0.50
54:2w:19:G:N2	54:2w:57:G:H1'	2.27	0.50
1:1A:1720:U:H2'	1:1A:1721:G:O4'	2.12	0.50
1:1A:2291:U:OP1	1:1A:2380:C:O2'	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.27	0.50
11:1P:90:ARG:HH11	11:1P:105:LEU:HD11	1.76	0.50
21:1Z:31:ARG:NE	21:1Z:94:GLU:OE2	2.45	0.50
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.93	0.50
32:1a:407:G:H5''	35:1d:115:ARG:HB3	1.93	0.50
38:1g:140:ASP:OD1	54:1y:41:C:O2'	2.26	0.50
1:2A:38:A:H2'	1:2A:39:C:C6	2.47	0.50
1:2A:249:C:O2	30:28:12:LYS:NZ	2.31	0.50
1:2A:394:A:C6	1:2A:395:U:C4	3.00	0.50
1:2A:747:U:O2	1:2A:2014:A:H1'	2.12	0.50
1:2A:892:G:H3'	1:2A:893:C:H4'	1.94	0.50
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.45	0.50
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.47	0.50
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.12	0.50
25:23:7:LYS:NZ	25:23:32:GLN:O	2.43	0.50
32:2a:445:G:H1	32:2a:489:C:H42	1.59	0.50
32:2a:984:C:H2'	32:2a:985:C:H6	1.77	0.50
32:2a:1203:C:H2'	32:2a:1204:A:O4'	2.12	0.50
35:2d:147:ALA:HA	35:2d:182:LYS:HA	1.93	0.50
38:2g:50:ILE:HD11	38:2g:58:PRO:HB3	1.93	0.50
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.94	0.50
1:1A:1038:C:H42	1:1A:1117:G:H1	1.60	0.49
6:1G:123:ASN:O	61:1G:301:HOH:O	2.19	0.49
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.12	0.49
32:1a:1394:A:N1	32:1a:1500:A:O2'	2.44	0.49
33:1b:60:ASP:HA	33:1b:63:MET:HE3	1.94	0.49
34:1c:44:GLU:HA	34:1c:52:LEU:HD23	1.92	0.49
34:1c:77:ILE:HG22	34:1c:81:GLY:H	1.77	0.49
40:1i:18:PHE:HB2	40:1i:62:TYR:HB3	1.94	0.49
1:2A:963:U:H2'	1:2A:964:C:C6	2.47	0.49
1:2A:1301:A:O2'	1:2A:1302:A:H3'	2.12	0.49
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.76	0.49
20:2Y:86:ARG:HE	20:2Y:100:ALA:HA	1.77	0.49
24:22:32:LEU:HD13	24:22:53:LEU:HB3	1.94	0.49
32:2a:742:G:P	46:2o:35:ARG:HH22	2.35	0.49
32:2a:1398:A:C6	36:2e:19:MET:HE3	2.47	0.49
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.77	0.49
54:2w:66:U:O4	54:2w:67:C:N4	2.45	0.49
55:2x:7:G:O2'	55:2x:49:G:OP2	2.28	0.49
1:1A:278:A:O2'	1:1A:279:C:OP1	2.25	0.49
1:1A:433:C:H2'	1:1A:434:U:C6	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2577:A:H5'	27:15:3:LYS:HE3	1.93	0.49
32:1a:353:A:H5'	32:1a:353:A:H8	1.77	0.49
36:1e:90:VAL:O	36:1e:120:THR:HA	2.12	0.49
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.30	0.49
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.45	0.49
1:2A:1243:G:O2'	11:2P:4:SER:O	2.26	0.49
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.94	0.49
9:2N:56:ASN:N	9:2N:125:GLY:O	2.34	0.49
15:2T:90:GLN:OE1	15:2T:91:ARG:N	2.43	0.49
32:2a:1230:C:H2'	32:2a:1231:G:C8	2.47	0.49
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.78	0.49
32:1a:626:U:H2'	32:1a:627:G:H8	1.77	0.49
32:1a:894:G:N7	61:1a:1940:HOH:O	2.34	0.49
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.47	0.49
34:1c:18:TRP:O	34:1c:54:ARG:NH2	2.45	0.49
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.95	0.49
1:2A:1823:G:OP1	3:2D:54:ARG:NH1	2.45	0.49
1:2A:2120:G:H2'	1:2A:2121:G:H8	1.76	0.49
32:2a:444:C:H2'	32:2a:445:G:H8	1.76	0.49
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	1.95	0.49
45:2n:24:CYS:O	45:2n:28:GLY:N	2.41	0.49
54:2y:7:A:H61	54:2y:66:U:H3	1.59	0.49
54:2y:68:C:C4	54:2y:69:G:C8	3.00	0.49
1:1A:185:U:H4'	1:1A:218:A:H4'	1.94	0.49
1:1A:1068:G:H2'	1:1A:1096:A:H1'	1.93	0.49
32:1a:767:A:H2'	32:1a:768:A:O4'	2.12	0.49
1:2A:2393:A:H5''	11:2P:63:PRO:HB3	1.94	0.49
7:2H:76:VAL:HA	7:2H:79:VAL:HG22	1.95	0.49
32:2a:939:G:H5'	38:2g:102:ARG:CZ	2.42	0.49
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.27	0.49
49:2r:58:LEU:HD11	49:2r:66:LEU:HD13	1.94	0.49
1:1A:271(E):U:H2'	1:1A:271(F):C:C6	2.47	0.49
32:1a:458:C:H2'	32:1a:460:G:O4'	2.12	0.49
32:1a:1004:A:H5''	32:1a:1025:U:O4	2.13	0.49
33:1b:59:GLU:HB2	33:1b:221:LEU:HD21	1.95	0.49
1:2A:1033:U:OP1	31:29:9:ARG:NH1	2.36	0.49
1:2A:1420:U:O2'	1:2A:1421:G:H8	1.95	0.49
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.47	0.49
1:2A:2456:C:N4	61:2A:4141:HOH:O	2.45	0.49
1:2A:2659:G:P	7:2H:158:HIS:HE2	2.36	0.49
17:2V:27:ALA:HB3	17:2V:61:VAL:HG21	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:199:ASN:HB3	35:2d:202:LEU:HD12	1.94	0.49
37:2f:99:ALA:HB3	49:2r:29:PHE:CE1	2.48	0.49
40:2i:43:ALA:HA	40:2i:74:ILE:HD13	1.93	0.49
1:1A:11:G:H2'	1:1A:12:U:H5''	1.94	0.49
1:1A:191:A:H2'	1:1A:192:C:C6	2.48	0.49
1:1A:481:G:OP2	20:1Y:47:LYS:NZ	2.35	0.49
1:1A:2136:C:N3	1:1A:2155:G:C2	2.80	0.49
1:1A:2147:G:H2'	1:1A:2148:G:O4'	2.11	0.49
23:11:52:ARG:NH1	23:11:55:GLY:O	2.42	0.49
26:14:59:PHE:CD1	26:14:60:GLN:HG2	2.48	0.49
32:1a:401:C:P	35:1d:73:ARG:HE	2.34	0.49
32:1a:911:U:H2'	32:1a:912:C:C6	2.48	0.49
1:2A:143(A):C:O2'	19:2X:2:LYS:NZ	2.46	0.49
1:2A:184:C:H2'	1:2A:185:U:C6	2.47	0.49
1:2A:286:C:H2'	1:2A:287:C:C6	2.47	0.49
16:2U:81:HIS:CD2	16:2U:84:LYS:HD3	2.46	0.49
21:2Z:146:ILE:HG23	21:2Z:174:VAL:HG13	1.93	0.49
32:2a:392:G:H2'	32:2a:393:A:H8	1.78	0.49
32:2a:1086:U:H3	32:2a:1099:G:H22	1.60	0.49
32:2a:1098:C:H2'	32:2a:1099:G:O4'	2.11	0.49
40:2i:9:ARG:HG2	40:2i:14:VAL:HB	1.95	0.49
1:1A:446:G:OP1	16:1U:3:ARG:NH1	2.45	0.49
1:1A:2161:C:O2'	1:1A:2162:G:H5''	2.12	0.49
1:1A:2497:A:H5''	61:1A:4368:HOH:O	2.12	0.49
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.47	0.49
2:1B:66:A:H61	2:1B:109:C:H5'	1.76	0.49
3:1D:53:PHE:HB3	3:1D:218:ARG:O	2.12	0.49
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	1.95	0.49
22:10:27:GLU:HB2	22:10:69:PHE:HD1	1.77	0.49
32:1a:676:A:H1'	42:1k:115:PRO:HB3	1.95	0.49
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.13	0.49
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.48	0.49
35:1d:18:LYS:HG2	60:1d:501:SF4:S1	2.53	0.49
54:1w:11:C:H2'	54:1w:12:U:C6	2.48	0.49
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.12	0.49
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.12	0.49
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.94	0.49
32:2a:745:C:OP1	32:2a:851:G:O2'	2.30	0.49
33:2b:163:PHE:HZ	33:2b:201:ILE:HD12	1.78	0.49
33:2b:178:ARG:CZ	39:2h:74:PRO:HG3	2.43	0.49
37:2f:35:ALA:HB2	37:2f:67:MET:HG3	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:79:SER:OG	48:2q:80:GLY:N	2.44	0.49
54:2y:37:MIA:H2'	54:2y:38:A:O4'	2.12	0.49
1:1A:536:A:H2'	1:1A:537:C:C6	2.47	0.49
1:1A:2751:G:C4	7:1H:2:SER:HA	2.48	0.49
32:1a:222:U:H2'	32:1a:223:U:C6	2.48	0.49
32:1a:258:G:H2'	32:1a:259:G:H8	1.78	0.49
1:2A:361:G:O2'	1:2A:362:U:H5'	2.12	0.49
1:2A:602:G:N1	1:2A:655:A:OP2	2.41	0.49
1:2A:871:U:OP1	12:2Q:5:ARG:HG3	2.12	0.49
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.46	0.49
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.76	0.49
1:2A:2177:C:H2'	1:2A:2178:C:O4'	2.13	0.49
1:2A:2274:A:O2'	1:2A:2276:G:OP1	2.25	0.49
1:2A:2577:A:H5''	1:2A:2578:G:H5'	1.94	0.49
5:2F:117:ARG:HH12	11:2P:1:MET:N	2.11	0.49
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.95	0.49
12:2Q:137:TYR:CE1	21:2Z:83:PRO:HG3	2.47	0.49
22:20:50:ASN:HA	22:20:62:LEU:HD12	1.95	0.49
32:2a:109:A:C6	32:2a:326:G:C6	3.01	0.49
32:2a:548:G:OP1	61:2a:3324:HOH:O	2.20	0.49
32:2a:1130:A:HO2'	40:2i:3:GLN:HE22	1.53	0.49
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.13	0.49
51:2t:23:ARG:HB3	51:2t:23:ARG:HH11	1.78	0.49
55:2x:8:4SU:O5'	55:2x:8:4SU:H6	2.12	0.49
1:1A:2344:U:OP1	28:16:37:ARG:NH1	2.46	0.49
7:1H:72:ILE:O	7:1H:76:VAL:HG12	2.13	0.49
32:1a:448:A:P	32:1a:485:G:H22	2.36	0.49
41:1j:38:ILE:HD11	41:1j:71:LEU:HB3	1.95	0.49
45:1n:33:VAL:HA	45:1n:40:CYS:HA	1.95	0.49
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.27	0.49
1:2A:839:U:H1'	1:2A:1191:G:H1'	1.95	0.49
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.40	0.49
1:2A:2067:G:O2'	1:2A:2069:G:H5'	2.12	0.49
20:2Y:30:VAL:HG13	20:2Y:37:VAL:HG12	1.94	0.49
25:23:6:VAL:HG12	25:23:28:LEU:HD11	1.95	0.49
32:2a:56:U:H2'	32:2a:57:G:C8	2.47	0.49
33:2b:76:GLN:CD	33:2b:76:GLN:H	2.21	0.49
34:2c:36:ASP:OD1	34:2c:57:ILE:HG21	2.12	0.49
1:1A:143:G:H4'	19:1X:35:THR:HG21	1.94	0.49
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.28	0.49
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.31	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:711:G:H2'	32:1a:712:A:C8	2.47	0.49
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.47	0.49
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.94	0.49
1:2A:812:C:H2'	1:2A:813:U:H6	1.78	0.49
1:2A:2418:A:OP2	30:28:29:LYS:NZ	2.31	0.49
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.47	0.49
1:2A:2639:A:O3'	9:2N:97:ARG:NH2	2.42	0.49
6:2G:41:GLN:HE22	6:2G:153:ARG:HB3	1.78	0.49
7:2H:12:PRO:O	7:2H:15:VAL:HG22	2.13	0.49
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.94	0.49
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.43	0.49
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.28	0.49
55:2x:58:A:H4'	55:2x:59:A:OP1	2.11	0.49
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.46	0.48
1:1A:1052:C:H2'	1:1A:1053:C:H6	1.77	0.48
1:1A:2029:G:H2'	1:1A:2031:A:OP1	2.13	0.48
1:1A:2334:G:O6	22:10:74:ARG:NH2	2.45	0.48
26:14:34:GLU:HG2	26:14:35:VAL:N	2.29	0.48
32:1a:341:C:O2'	32:1a:342:C:H5'	2.13	0.48
32:1a:376:G:H5''	47:1p:5:ARG:HG2	1.95	0.48
32:1a:584:G:H5'	48:1q:91:ARG:HH21	1.78	0.48
32:1a:865:A:H2	32:1a:918:A:H4'	1.78	0.48
32:1a:1095:U:OP2	61:1a:1919:HOH:O	2.19	0.48
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.61	0.48
33:1b:102:LEU:HD23	33:1b:182:ILE:HD12	1.94	0.48
36:1e:6:PHE:CE1	36:1e:36:ASP:HB3	2.48	0.48
54:1w:5:G:H2'	54:1w:6:G:C8	2.48	0.48
1:2A:236:C:H2'	1:2A:237:C:C6	2.48	0.48
1:2A:657:U:H2'	1:2A:658:C:C6	2.48	0.48
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.48	0.48
1:2A:2735:G:H2'	1:2A:2736:G:H8	1.78	0.48
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.46	0.48
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.95	0.48
22:20:43:THR:OG1	22:20:46:LYS:HG2	2.13	0.48
32:2a:189(L):G:H2'	32:2a:190:U:H6	1.77	0.48
36:2e:78:HIS:HA	39:2h:105:ARG:HG3	1.94	0.48
54:2y:14:A:N3	54:2y:14:A:H2'	2.28	0.48
54:2y:18:G:N1	54:2y:55:PSU:C4	2.79	0.48
1:1A:135:G:N7	61:1A:4385:HOH:O	2.35	0.48
1:1A:504:U:O2'	61:1A:4263:HOH:O	2.20	0.48
1:1A:768:G:O2'	1:1A:1379:A:N1	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:44:VAL:HG22	7:1H:51:ARG:HB2	1.94	0.48
19:1X:60:ARG:NH1	29:17:47:ARG:HH12	2.12	0.48
32:1a:841:U:C5	32:1a:848:C:H1'	2.49	0.48
44:1m:57:ARG:HG2	44:1m:61:GLU:OE1	2.13	0.48
54:1y:47:U:H2'	54:1y:50:U:OP1	2.14	0.48
1:2A:975:C:O2'	61:2A:3962:HOH:O	2.19	0.48
3:2D:85:ASP:HB2	3:2D:92:ILE:HD13	1.94	0.48
32:2a:533:A:OP1	61:2a:3325:HOH:O	2.20	0.48
32:2a:1144:G:N2	32:2a:1146:A:H62	2.11	0.48
44:2m:92:HIS:NE2	44:2m:98:VAL:HG21	2.28	0.48
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.13	0.48
54:2w:25:C:H2'	54:2w:26:A:H8	1.78	0.48
1:1A:385:C:O2	11:1P:71:VAL:HG21	2.13	0.48
1:1A:572:A:OP2	17:1V:78:LYS:NZ	2.46	0.48
1:1A:862:G:H2'	1:1A:863:A:O4'	2.13	0.48
3:1D:164:GLN:OE1	3:1D:176:ARG:NH1	2.36	0.48
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.95	0.48
32:1a:107:G:H2'	32:1a:108:G:O4'	2.14	0.48
32:1a:544:G:P	35:1d:59:ARG:HH22	2.33	0.48
33:1b:16:HIS:C	33:1b:18:GLY:H	2.22	0.48
35:1d:28:SER:HG	35:1d:30:LYS:H	1.61	0.48
54:1y:61:C:H2'	54:1y:62:C:C6	2.48	0.48
1:2A:484:C:H2'	1:2A:485:C:H6	1.79	0.48
1:2A:1653:G:O6	13:2R:11:ASN:ND2	2.46	0.48
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.31	0.48
5:2F:126:VAL:HG21	5:2F:129:PHE:CE1	2.47	0.48
20:2Y:15:VAL:HG21	20:2Y:42:VAL:HG11	1.95	0.48
32:2a:136:C:H42	32:2a:227:G:H1	1.60	0.48
33:2b:16:HIS:CE1	33:2b:203:GLY:HA2	2.49	0.48
37:2f:100:ASN:HB2	49:2r:28:GLU:HA	1.94	0.48
1:1A:39:C:H2'	1:1A:40:C:C6	2.48	0.48
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.48	0.48
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.48	0.48
19:1X:35:THR:HG22	19:1X:37:THR:N	2.29	0.48
20:1Y:34:LYS:NZ	61:1Y:301:HOH:O	2.46	0.48
26:14:46:GLN:O	26:14:48:ARG:N	2.47	0.48
26:14:54:GLY:N	26:14:55:ARG:HA	2.29	0.48
35:1d:74:GLN:NE2	35:1d:137:SER:OG	2.46	0.48
43:1l:89:ARG:HA	43:1l:97:ARG:HA	1.95	0.48
1:2A:2329:G:H2'	1:2A:2330:G:C8	2.48	0.48
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:25:ARG:HD3	14:2S:42:ASP:OD2	2.13	0.48
24:22:41:ILE:HG13	24:22:43:GLN:HG3	1.95	0.48
32:2a:646:U:H2'	32:2a:647:C:H6	1.77	0.48
32:2a:1081:G:H5'	36:2e:18:ARG:HG2	1.95	0.48
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.48	0.48
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.96	0.48
48:2q:54:GLY:O	48:2q:81:ARG:N	2.29	0.48
54:2y:14:A:H3'	54:2y:15:G:C8	2.49	0.48
1:1A:1860:G:H2'	1:1A:1861:G:O4'	2.13	0.48
1:1A:2774:C:H2'	1:1A:2775:A:O4'	2.14	0.48
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.46	0.48
19:1X:60:ARG:NH2	29:17:47:ARG:HH22	2.12	0.48
32:1a:15:G:H21	36:1e:18:ARG:HA	1.77	0.48
32:1a:152:A:N6	32:1a:169:C:N3	2.61	0.48
32:1a:436:C:H2'	32:1a:437:U:C6	2.49	0.48
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.24	0.48
38:1g:16:LEU:HD12	40:1i:42:ARG:HA	1.94	0.48
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.14	0.48
54:1y:40:C:H2'	54:1y:41:C:C6	2.49	0.48
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.13	0.48
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.14	0.48
22:20:48:GLY:H	22:20:51:VAL:HB	1.78	0.48
32:2a:1246:C:H2'	32:2a:1247:U:H6	1.78	0.48
38:2g:28:ASN:HD21	38:2g:36:LYS:NZ	2.11	0.48
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.13	0.48
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.77	0.48
26:14:58:ARG:HG2	50:1s:68:GLY:N	2.25	0.48
32:1a:487:A:H2'	32:1a:488:C:O4'	2.14	0.48
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.28	0.48
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.95	0.48
54:1w:23:A:H3'	54:1w:24:G:H8	1.77	0.48
54:1w:29:G:H1	54:1w:41:C:H42	1.61	0.48
1:2A:194:G:N7	61:2A:4064:HOH:O	2.35	0.48
1:2A:601:C:OP1	5:2F:108:LYS:NZ	2.40	0.48
1:2A:2115:G:N2	1:2A:2119:A:OP1	2.47	0.48
1:2A:2130:U:O2	1:2A:2134:A:O2'	2.22	0.48
25:23:7:LYS:HB2	25:23:34:GLU:HG3	1.94	0.48
32:2a:22:G:H4'	32:2a:885:G:C8	2.49	0.48
32:2a:130:A:H1'	32:2a:263:A:O2'	2.13	0.48
32:2a:1189:C:HO2'	34:2c:176:HIS:CE1	2.26	0.48
32:2a:1320:C:H2'	32:2a:1321:C:O4'	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:15:THR:HB	41:2j:94:VAL:HG13	1.95	0.48
42:2k:65:ALA:HB3	42:2k:97:ALA:HB3	1.94	0.48
54:2y:8:4SU:C2	54:2y:14:A:H62	2.26	0.48
1:1A:2049:G:N7	61:1A:4384:HOH:O	2.35	0.48
1:1A:2134:A:H61	1:1A:2157:G:H4'	1.79	0.48
32:1a:145:G:H1	32:1a:177:C:H42	1.62	0.48
34:1c:180:ALA:HA	34:1c:206:GLU:HA	1.96	0.48
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.94	0.48
51:1t:67:ALA:HB2	51:1t:77:ALA:HB2	1.95	0.48
1:2A:1417:C:H2'	1:2A:1418:G:O4'	2.14	0.48
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.48	0.48
8:2I:77:LEU:O	8:2I:143:SER:N	2.29	0.48
10:2O:49:ARG:HH12	32:2a:1423:G:P	2.35	0.48
23:21:26:ARG:HG3	23:21:27:GLU:HG3	1.94	0.48
32:2a:151:A:H2'	32:2a:152:A:O4'	2.13	0.48
32:2a:584:G:OP1	48:2q:87:LYS:NZ	2.40	0.48
32:2a:1243:C:H42	32:2a:1294:G:H1	1.61	0.48
36:2e:33:VAL:HG21	36:2e:109:ILE:HA	1.95	0.48
41:2j:44:VAL:HA	41:2j:66:ARG:HA	1.96	0.48
46:2o:36:ILE:HG23	46:2o:56:LEU:HD11	1.96	0.48
54:2w:14:A:N6	54:2w:21:A:H2	2.09	0.48
1:1A:196:A:H2'	1:1A:196:A:N3	2.29	0.48
1:1A:2447:G:N2	1:1A:2450:A:OP2	2.47	0.48
1:1A:2723:C:OP1	13:1R:3:HIS:ND1	2.47	0.48
32:1a:8:A:H5'	36:1e:101:ILE:HG22	1.96	0.48
32:1a:344:A:O2'	32:1a:346:G:N7	2.45	0.48
32:1a:829:G:O6	61:1a:1921:HOH:O	2.19	0.48
37:1f:33:TYR:CD2	37:1f:75:LEU:HD23	2.49	0.48
38:1g:54:THR:O	38:1g:56:GLN:N	2.47	0.48
38:1g:89:MET:SD	38:1g:155:ARG:HB2	2.53	0.48
49:1r:33:ASP:OD2	49:1r:36:ASN:HB2	2.14	0.48
1:2A:570:G:H2'	1:2A:2030:A:C5	2.48	0.48
1:2A:2684:U:H1'	10:2O:70:LYS:HD2	1.96	0.48
6:2G:14:GLU:O	6:2G:18:GLU:HB2	2.14	0.48
7:2H:20:ALA:HB3	7:2H:23:ARG:HG3	1.95	0.48
32:2a:1073:U:C2	32:2a:1074:G:C8	3.01	0.48
34:2c:109:PRO:C	34:2c:111:LEU:H	2.22	0.48
42:2k:18:ARG:NH2	42:2k:35:PRO:O	2.42	0.48
1:1A:375:C:H2'	1:1A:376:C:C6	2.48	0.48
1:1A:848:G:O6	1:1A:928:G:H2'	2.14	0.48
1:1A:1775:U:OP1	1:1A:1979:C:O2'	2.26	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:23:ARG:HD3	15:1T:120:ARG:NH1	2.29	0.48
32:1a:235:C:H2'	32:1a:236:G:H8	1.78	0.48
32:1a:341:C:H2'	32:1a:342:C:H6	1.77	0.48
32:1a:553:A:H5''	43:1l:24:VAL:HG21	1.96	0.48
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.48	0.48
54:1w:51:U:H2'	54:1w:52:G:H8	1.78	0.48
1:2A:307:G:H21	1:2A:330:A:H62	1.60	0.48
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.14	0.48
1:2A:1662:C:O2'	1:2A:2687:U:OP1	2.29	0.48
1:2A:2530:A:O2'	1:2A:2532:G:OP2	2.29	0.48
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.40	0.48
6:2G:111:LEU:HD21	6:2G:120:LEU:HD11	1.96	0.48
12:2Q:87:LYS:HG3	12:2Q:88:GLY:N	2.29	0.48
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.35	0.48
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.49	0.48
44:2m:34:LEU:O	44:2m:38:GLY:N	2.44	0.48
1:1A:1316:U:H2'	1:1A:1317:A:C8	2.49	0.48
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.14	0.48
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.48	0.48
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.29	0.48
5:1F:148:LEU:HD11	5:1F:193:VAL:HG21	1.96	0.48
16:1U:69:CYS:HB3	16:1U:74:LEU:HD13	1.96	0.48
20:1Y:30:VAL:HG22	20:1Y:37:VAL:HG12	1.95	0.48
32:1a:78:G:O6	32:1a:92:C:N4	2.47	0.48
36:1e:77:PRO:HD2	36:1e:142:LEU:HD13	1.96	0.48
1:2A:57:C:H2'	1:2A:58:G:O4'	2.14	0.48
1:2A:572:A:H2'	1:2A:573:G:O4'	2.14	0.48
1:2A:824:A:H1'	1:2A:2358:G:N7	2.29	0.48
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.49	0.48
1:2A:1368:G:OP1	29:27:28:ARG:NH2	2.47	0.48
1:2A:2262:U:OP1	22:20:19:LYS:HE2	2.14	0.48
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.57	0.48
9:2N:17:ASP:OD1	9:2N:56:ASN:ND2	2.44	0.48
32:2a:16:A:OP2	61:2a:3326:HOH:O	2.20	0.48
32:2a:620:C:C2	35:2d:135:LEU:HG	2.49	0.48
32:2a:853:G:H2'	32:2a:854:G:C8	2.47	0.48
32:2a:1053:G:N7	32:2a:1200:C:H5'	2.29	0.48
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.49	0.48
32:2a:1381:U:H1'	38:2g:79:ARG:HD2	1.96	0.48
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.13	0.48
33:2b:195:ASP:OD1	33:2b:195:ASP:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.54	0.48
36:2e:144:THR:OG1	36:2e:147:ASP:OD1	2.25	0.48
54:2y:30:G:H2'	54:2y:31:A:C8	2.46	0.48
1:1A:932:G:OP2	25:13:29:ARG:NH2	2.48	0.47
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.96	0.47
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.14	0.47
7:1H:3:ARG:HG2	7:1H:6:ARG:HB2	1.95	0.47
10:1O:36:GLY:O	61:1O:301:HOH:O	2.19	0.47
21:1Z:40:ASP:OD2	21:1Z:42:VAL:HG22	2.14	0.47
25:13:23:LEU:HD13	25:13:50:VAL:HG11	1.96	0.47
32:1a:715:A:H2'	32:1a:716:A:C8	2.49	0.47
32:1a:1053:G:N7	32:1a:1200:C:H5''	2.29	0.47
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.82	0.47
55:1x:19:G:H4'	55:1x:20:U:OP2	2.13	0.47
1:2A:192:C:O2'	1:2A:802:A:N3	2.47	0.47
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.14	0.47
1:2A:2206:G:H5''	1:2A:2207:G:C8	2.49	0.47
24:22:51:ARG:O	24:22:55:ARG:HG2	2.14	0.47
32:2a:202:U:H3'	32:2a:203:U:C5	2.48	0.47
38:2g:15:ASP:OD1	38:2g:20:ASP:N	2.40	0.47
46:2o:48:LYS:HD3	46:2o:48:LYS:HA	1.62	0.47
55:2x:61:C:H2'	55:2x:62:C:H6	1.79	0.47
1:1A:218:A:H2	1:1A:235:U:H4'	1.79	0.47
1:1A:1466:G:O2'	1:1A:1546:C:O2'	2.06	0.47
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.49	0.47
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.13	0.47
1:1A:2331:G:O2'	22:10:43:THR:HG22	2.14	0.47
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.49	0.47
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.13	0.47
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.29	0.47
5:1F:9:ILE:HD13	5:1F:123:LEU:HD23	1.95	0.47
32:1a:974:A:OP2	45:1n:29:ARG:NH1	2.40	0.47
32:1a:1236:A:H2'	32:1a:1237:C:C6	2.48	0.47
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.97	0.47
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.95	0.47
54:1y:55:PSU:N3	54:1y:57:G:H5'	2.30	0.47
1:2A:647:G:H8	1:2A:647:G:O5'	1.97	0.47
1:2A:910:A:N1	1:2A:2277:G:H1'	2.28	0.47
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.48	0.47
1:2A:1799:G:O2'	3:2D:181:GLU:OE2	2.26	0.47
1:2A:2136:C:N4	1:2A:2155:G:N1	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2483:C:OP1	54:2w:64:A:H4'	2.14	0.47
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.14	0.47
9:2N:73:THR:HB	9:2N:82:LEU:HD11	1.96	0.47
32:2a:227:G:H2'	32:2a:228:A:H8	1.80	0.47
32:2a:939:G:H2'	32:2a:940:C:C6	2.49	0.47
54:2y:8:4SU:H6	54:2y:8:4SU:O5'	2.14	0.47
1:1A:886:C:H3'	1:1A:887:A:H5''	1.97	0.47
1:1A:1062:G:H22	1:1A:1077:A:H61	1.62	0.47
1:1A:1779:U:H2'	61:1A:4335:HOH:O	2.14	0.47
8:1I:40:THR:O	8:1I:44:LEU:HB2	2.15	0.47
11:1P:81:GLN:NE2	11:1P:105:LEU:O	2.47	0.47
16:1U:34:LYS:NZ	16:1U:37:GLU:OE1	2.46	0.47
32:1a:1380:U:C4	38:1g:3:ARG:HG2	2.49	0.47
47:1p:57:ARG:HG3	47:1p:79:VAL:HG13	1.96	0.47
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.46	0.47
1:2A:875:G:O2'	21:2Z:170:THR:OG1	2.32	0.47
1:2A:1268:A:C2	1:2A:2013:A:C4	3.02	0.47
1:2A:2572:A:C8	4:2E:144:ARG:HD3	2.49	0.47
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.63	0.47
8:2I:133:HIS:HD2	8:2I:134:PRO:HD2	1.79	0.47
24:22:10:LEU:HD21	24:22:59:ARG:HG2	1.96	0.47
32:2a:6:G:H4'	32:2a:298:A:H4'	1.97	0.47
32:2a:932:C:H3'	38:2g:3:ARG:HD2	1.96	0.47
33:2b:12:GLU:HB2	33:2b:213:LEU:HD21	1.96	0.47
1:1A:548:A:H1'	1:1A:549:G:OP1	2.13	0.47
1:1A:884:C:C5	1:1A:885:C:H1'	2.49	0.47
1:1A:2101:G:H1	1:1A:2188:C:H42	1.62	0.47
2:1B:42:C:O2'	6:1G:66:GLN:HG2	2.14	0.47
3:1D:260:ARG:NH1	3:1D:267:SER:OG	2.48	0.47
5:1F:195:ASP:HB3	5:1F:198:ALA:H	1.78	0.47
18:1W:84:ARG:O	18:1W:96:ILE:N	2.38	0.47
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.14	0.47
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.14	0.47
34:1c:22:TRP:CH2	34:1c:32:LEU:HB3	2.50	0.47
37:1f:19:LEU:HD21	37:1f:59:TYR:CE2	2.49	0.47
42:1k:97:ALA:O	42:1k:101:SER:HB3	2.14	0.47
32:2a:743:U:H2'	32:2a:744:C:H6	1.79	0.47
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.49	0.47
1:1A:796:C:H2'	1:1A:797:C:C6	2.49	0.47
1:1A:2128:C:O2'	1:1A:2174:C:H4'	2.15	0.47
1:1A:2336:A:H61	22:10:43:THR:HG22	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2350:C:OP2	61:1A:4262:HOH:O	2.20	0.47
6:1G:171:ALA:O	6:1G:175:LEU:HG	2.15	0.47
20:1Y:19:LYS:HE2	20:1Y:20:TYR:CE2	2.50	0.47
32:1a:673:G:H2'	32:1a:674:G:C8	2.49	0.47
32:1a:738:C:H2'	32:1a:739:C:C6	2.49	0.47
32:1a:984:C:H2'	32:1a:985:C:C6	2.50	0.47
42:1k:48:ILE:O	42:1k:50:TYR:N	2.40	0.47
1:2A:1754:C:H5	15:2T:96:ARG:NH2	2.11	0.47
1:2A:1790:C:H2'	1:2A:1791:A:C5	2.49	0.47
1:2A:2250:G:O2'	1:2A:2496:C:OP1	2.31	0.47
1:2A:2787:C:O2'	1:2A:2810:A:O2'	2.31	0.47
11:2P:3:LEU:HD23	11:2P:6:LEU:HD12	1.97	0.47
21:2Z:77:ASP:CG	21:2Z:80:ARG:HH11	2.22	0.47
26:24:46:GLN:C	26:24:48:ARG:H	2.22	0.47
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.50	0.47
32:2a:153:C:H2'	32:2a:154:C:C6	2.50	0.47
32:2a:949:A:OP1	44:2m:101:GLN:HB3	2.15	0.47
32:2a:994:A:N7	32:2a:1216:G:H4'	2.29	0.47
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.80	0.47
32:2a:1343:G:H4'	40:2i:122:ALA:HB3	1.97	0.47
35:2d:52:SER:O	35:2d:56:VAL:HG23	2.14	0.47
1:1A:579:G:H2'	1:1A:580:C:C6	2.49	0.47
1:1A:2567:G:H2'	1:1A:2568:C:H6	1.80	0.47
13:1R:104:ARG:HD2	13:1R:107:ASP:OD1	2.15	0.47
16:1U:89:GLU:HG3	17:1V:50:PRO:HB3	1.95	0.47
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.49	0.47
32:1a:73:G:H1	32:1a:96:U:H3	1.62	0.47
32:1a:950:U:H2'	32:1a:951:G:H8	1.80	0.47
32:1a:1135:U:H4'	32:1a:1136:U:H5	1.79	0.47
32:1a:1189:C:P	41:1j:51:ARG:HH22	2.36	0.47
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.15	0.47
32:1a:1320:C:OP1	50:1s:70:LYS:NZ	2.43	0.47
33:1b:145:LEU:HD23	33:1b:149:LEU:HD12	1.96	0.47
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.31	0.47
1:2A:2387:U:OP1	22:20:55:ARG:NH2	2.46	0.47
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.50	0.47
6:2G:39:ILE:HD11	6:2G:102:PHE:CZ	2.49	0.47
14:2S:32:LEU:O	14:2S:62:LYS:NZ	2.47	0.47
26:24:46:GLN:HE22	26:24:48:ARG:NH1	2.06	0.47
29:27:8:ASN:HB3	29:27:11:LYS:HB3	1.96	0.47
32:2a:160:A:H1'	32:2a:344:A:C5	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:620:C:H2'	32:2a:621:A:O4'	2.14	0.47
32:2a:792:A:H4'	32:2a:793:U:H5''	1.96	0.47
33:2b:95:GLN:HB3	33:2b:148:TYR:HD1	1.79	0.47
34:2c:101:LEU:HD22	34:2c:102:ASN:H	1.78	0.47
39:2h:48:TYR:HE1	39:2h:59:LEU:HD22	1.80	0.47
1:1A:2847:U:O4	61:1A:4259:HOH:O	2.19	0.47
4:1E:47:VAL:HG22	4:1E:84:PHE:O	2.15	0.47
15:1T:85:LYS:NZ	15:1T:87:ASP:OD2	2.48	0.47
17:1V:98:GLU:CD	17:1V:100:ARG:HD3	2.39	0.47
32:1a:575:G:O2'	32:1a:821:G:H5'	2.14	0.47
32:1a:977:A:HO2'	32:1a:981:U:H3	1.61	0.47
33:1b:140:HIS:O	33:1b:144:ARG:HG3	2.14	0.47
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.50	0.47
37:1f:42:GLU:OE2	37:1f:59:TYR:OH	2.24	0.47
42:1k:20:TYR:CE2	42:1k:33:THR:HG21	2.50	0.47
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	1.97	0.47
47:1p:56:ALA:HB1	47:1p:74:LEU:HD23	1.95	0.47
50:1s:20:LEU:HD23	50:1s:23:ASN:ND2	2.30	0.47
51:1t:36:LEU:HD13	51:1t:58:LYS:HG3	1.97	0.47
1:2A:68:G:H2'	1:2A:69:C:C6	2.49	0.47
1:2A:374:A:C2	1:2A:401:A:C4	3.02	0.47
1:2A:1152:C:H4'	16:2U:77:SER:HA	1.97	0.47
1:2A:1354:A:H2'	1:2A:1355:G:O4'	2.13	0.47
1:2A:1408:C:H2'	1:2A:1409:C:C6	2.50	0.47
1:2A:2061:G:H5''	1:2A:2503:2MA:C2	2.44	0.47
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.50	0.47
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.50	0.47
1:2A:2340:G:H2'	1:2A:2341:G:H8	1.79	0.47
1:2A:2357:U:P	22:20:20:ARG:HE	2.38	0.47
1:2A:2477:C:N4	31:29:10:ILE:HG23	2.30	0.47
1:2A:2647:U:H2'	1:2A:2648:C:C6	2.49	0.47
1:2A:2817:G:OP1	13:2R:99:LYS:NZ	2.47	0.47
4:2E:4:ILE:HD11	4:2E:29:GLY:HA2	1.96	0.47
18:2W:78:GLU:OE2	18:2W:99:ARG:HB3	2.15	0.47
21:2Z:7:ALA:HB2	21:2Z:59:LEU:HD12	1.97	0.47
26:24:14:ILE:HB	26:24:22:ILE:HB	1.95	0.47
32:2a:179:A:H2'	32:2a:180:U:C6	2.50	0.47
32:2a:929:G:H1	32:2a:1388:C:N4	2.10	0.47
32:2a:1006:C:H2'	32:2a:1007:C:O4'	2.15	0.47
32:2a:1152:A:H2'	32:2a:1153:C:C6	2.49	0.47
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1272:G:N2	32:2a:1273:G:N7	2.63	0.47
47:2p:28:ARG:HG2	47:2p:28:ARG:HH11	1.80	0.47
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.48	0.47
1:1A:200:U:O2	1:1A:386:G:N2	2.48	0.47
1:1A:324:A:N6	1:1A:338:G:O2'	2.48	0.47
1:1A:666:G:N2	30:18:2:PRO:O	2.48	0.47
1:1A:2098:U:H3	1:1A:2191:G:H1	1.62	0.47
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.50	0.47
1:1A:2305:A:H5''	6:1G:134:GLY:HA3	1.95	0.47
12:1Q:39:PRO:HA	12:1Q:97:VAL:O	2.15	0.47
32:1a:664:G:P	49:1r:64:ARG:HH21	2.37	0.47
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.50	0.47
32:1a:1441:G:H5''	32:1a:1442:G:H5'	1.96	0.47
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.97	0.47
39:1h:28:ALA:HB3	39:1h:57:PRO:HB2	1.96	0.47
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.97	0.47
51:1t:43:LEU:HD13	51:1t:51:GLU:HG2	1.95	0.47
1:2A:265:A:C8	1:2A:266:G:H1'	2.49	0.47
1:2A:1614:A:P	1:2A:1614:A:H8	2.38	0.47
1:2A:2497:A:H5''	61:2A:3959:HOH:O	2.14	0.47
1:2A:2755:C:H3'	31:29:19:ARG:HH21	1.79	0.47
2:2B:12:C:O2'	22:20:74:ARG:HG2	2.15	0.47
6:2G:44:GLY:C	6:2G:46:ALA:H	2.22	0.47
23:21:83:GLU:N	23:21:83:GLU:OE2	2.48	0.47
32:2a:201:C:H5'	32:2a:202:U:OP2	2.14	0.47
32:2a:390:C:H2'	32:2a:391:G:C8	2.50	0.47
32:2a:818:G:O2'	32:2a:819:A:H5'	2.15	0.47
32:2a:921:U:O2	36:2e:19:MET:HB3	2.14	0.47
32:2a:1135:U:H4'	32:2a:1136:U:C5	2.50	0.47
32:2a:1368:G:OP1	40:2i:111:ARG:NH2	2.48	0.47
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.15	0.47
54:2y:61:C:H2'	54:2y:62:C:C6	2.50	0.47
1:1A:35:G:H2'	1:1A:36:G:O4'	2.15	0.47
1:1A:2336:A:H61	22:10:43:THR:CG2	2.28	0.47
21:1Z:103:ARG:O	21:1Z:138:GLU:HA	2.14	0.47
32:1a:97:G:H2'	32:1a:98:G:O4'	2.15	0.47
32:1a:532:A:N6	32:1a:1206:G:O2'	2.48	0.47
32:1a:1244:C:H42	32:1a:1293:G:H1	1.62	0.47
33:1b:45:GLN:O	33:1b:49:GLU:HG3	2.14	0.47
36:1e:53:LEU:H	36:1e:53:LEU:HD12	1.80	0.47
54:1y:3:C:H42	54:1y:70:G:H1	1.63	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:190:A:OP2	23:21:39:LYS:HE3	2.15	0.47
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.15	0.47
1:2A:581:C:H2'	1:2A:582:G:H8	1.79	0.47
1:2A:903:C:H2'	1:2A:904:C:C6	2.50	0.47
1:2A:918:A:H5''	2:2B:98:G:O2'	2.15	0.47
1:2A:987:G:O2'	1:2A:1000:A:N3	2.43	0.47
1:2A:1997:G:H5''	4:2E:117:MET:HE3	1.95	0.47
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.30	0.47
1:2A:2575:C:O2'	1:2A:2578:G:N7	2.40	0.47
5:2F:140:LEU:HD21	5:2F:170:LEU:HD21	1.96	0.47
6:2G:68:PRO:HB3	6:2G:92:VAL:HB	1.97	0.47
7:2H:3:ARG:NH1	7:2H:5:GLY:H	2.13	0.47
14:2S:19:LYS:HE2	14:2S:25:ARG:CD	2.44	0.47
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.47	0.47
18:2W:33:ARG:NH2	18:2W:52:GLU:OE1	2.38	0.47
32:2a:392:G:H2'	32:2a:393:A:C8	2.50	0.47
32:2a:593:G:H2'	32:2a:594:G:O4'	2.15	0.47
32:2a:1030(A):G:N1	32:2a:1030(D):A:OP2	2.48	0.47
33:2b:116:GLU:HG3	33:2b:153:ARG:NH2	2.30	0.47
33:2b:149:LEU:HD22	33:2b:152:PHE:HD2	1.79	0.47
34:2c:134:ILE:HD12	34:2c:151:VAL:HB	1.96	0.47
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.95	0.47
44:2m:23:TYR:HE2	44:2m:70:LEU:HD22	1.79	0.47
1:1A:131:G:OP1	1:1A:1349:A:O2'	2.30	0.47
1:1A:1153:C:H2'	1:1A:1154:G:O4'	2.15	0.47
1:1A:2117:A:O2'	1:1A:2118:U:H5''	2.14	0.47
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.77	0.47
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.22	0.47
32:1a:189(D):C:C4	32:1a:189(E):U:C4	3.03	0.47
32:1a:719:C:O2'	49:1r:49:LYS:HB3	2.15	0.47
32:1a:971:G:N1	32:1a:1363(A):A:OP2	2.43	0.47
32:1a:972:C:OP2	41:1j:57:LYS:HE2	2.15	0.47
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.63	0.47
35:1d:172:PRO:C	35:1d:174:LEU:H	2.21	0.47
1:2A:222:A:H3'	1:2A:421:U:H5'	1.97	0.47
1:2A:1420:U:O2'	1:2A:1421:G:O5'	2.30	0.47
1:2A:2165:G:H2'	1:2A:2166:G:O4'	2.15	0.47
2:2B:77:U:P	21:2Z:19:ARG:HH22	2.38	0.47
7:2H:64:LEU:O	7:2H:68:THR:OG1	2.32	0.47
14:2S:49:VAL:HG13	14:2S:76:LYS:HB3	1.97	0.47
21:2Z:47:VAL:HA	21:2Z:50:GLN:HE22	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1107:C:H5'	34:2c:173:VAL:O	2.14	0.47
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.50	0.47
32:2a:1330:U:O4	32:2a:1331:G:C6	2.68	0.47
36:2e:110:LEU:HD21	36:2e:139:LEU:HD21	1.97	0.47
1:1A:684:G:OP1	29:17:16:HIS:ND1	2.45	0.46
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.15	0.46
1:1A:2341:G:H2'	1:1A:2342:C:C6	2.50	0.46
3:1D:121:PRO:HB3	3:1D:135:PHE:CE2	2.50	0.46
3:1D:266:SER:O	3:1D:270:ILE:HD12	2.14	0.46
32:1a:7:G:H5'	32:1a:298:A:O4'	2.15	0.46
32:1a:748:C:H4'	32:1a:749:C:O5'	2.15	0.46
32:1a:913:A:OP1	43:1l:46:LYS:NZ	2.40	0.46
32:1a:1309:G:N7	44:1m:99:ARG:NH2	2.63	0.46
47:1p:57:ARG:O	47:1p:61:SER:N	2.45	0.46
48:1q:66:SER:OG	48:1q:69:LYS:HB2	2.14	0.46
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.79	0.46
1:2A:2166:G:O6	1:2A:2171:A:N6	2.47	0.46
12:2Q:137:TYR:HB3	21:2Z:76:LEU:HD21	1.97	0.46
32:2a:406:G:H21	35:2d:119:GLN:NE2	2.10	0.46
32:2a:865:A:N3	32:2a:918:A:O2'	2.43	0.46
32:2a:1001(A):G:C5	32:2a:1002:G:H1'	2.51	0.46
32:2a:1096:C:O2	32:2a:1170:A:O2'	2.32	0.46
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.15	0.46
42:2k:82:VAL:HB	42:2k:108:ILE:HD13	1.97	0.46
46:2o:61:GLY:O	46:2o:65:ARG:HG3	2.15	0.46
1:1A:1997:G:N7	61:1A:4382:HOH:O	2.35	0.46
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.50	0.46
12:1Q:50:ALA:HB1	12:1Q:121:ALA:HB1	1.97	0.46
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.15	0.46
16:1U:28:ARG:NH1	16:1U:38:THR:OG1	2.43	0.46
21:1Z:52:SER:C	21:1Z:54:HIS:N	2.73	0.46
32:1a:664:G:N2	32:1a:741:G:H1	2.09	0.46
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.50	0.46
32:1a:1239:A:H62	32:1a:1299:A:H62	1.64	0.46
43:1l:69:TYR:HB2	43:1l:96:VAL:HG11	1.96	0.46
49:1r:53:ARG:HA	49:1r:56:THR:OG1	2.15	0.46
1:2A:252:G:P	11:2P:50:ARG:HH12	2.38	0.46
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.80	0.46
29:27:1:MET:HE3	29:27:3:ARG:NH2	2.31	0.46
32:2a:37:U:O2'	32:2a:547:A:N1	2.47	0.46
32:2a:413:G:H1'	32:2a:428:G:H21	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:953:G:N7	44:2m:104:ARG:NH2	2.58	0.46
32:2a:1025:U:O2	32:2a:1026:G:N1	2.48	0.46
32:2a:1051:C:H2'	32:2a:1052:U:H6	1.79	0.46
32:2a:1278:U:H5'	32:2a:1279:A:C5'	2.45	0.46
32:2a:1316:G:N2	32:2a:1319:A:H5''	2.22	0.46
33:2b:54:THR:O	33:2b:58:ILE:HG13	2.15	0.46
33:2b:188:ALA:HB1	33:2b:192:SER:OG	2.15	0.46
44:2m:10:PRO:HG2	44:2m:21:TYR:CD1	2.50	0.46
52:2u:10:ARG:HA	52:2u:13:ILE:HD12	1.97	0.46
54:2y:34:G:H2'	54:2y:35:A:C8	2.51	0.46
1:1A:884:C:N4	1:1A:892:G:H1	2.11	0.46
1:1A:2235:G:H2'	1:1A:2236:C:C6	2.50	0.46
1:1A:2245:U:O2'	1:1A:2436:G:OP2	2.30	0.46
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.16	0.46
4:1E:70:ALA:O	4:1E:72:VAL:N	2.48	0.46
6:1G:41:GLN:HG2	6:1G:154:GLY:O	2.16	0.46
15:1T:15:VAL:HG13	15:1T:79:HIS:CE1	2.50	0.46
26:14:18:CYS:SG	26:14:20:ASN:HB3	2.55	0.46
29:17:24:THR:HG23	61:17:202:HOH:O	2.14	0.46
32:1a:1080:A:H5'	36:1e:14:ARG:HH21	1.81	0.46
35:1d:110:PHE:CD1	35:1d:148:VAL:HG23	2.50	0.46
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.98	0.46
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.15	0.46
1:2A:95:G:H21	24:22:51:ARG:HH22	1.62	0.46
1:2A:208:C:H2'	1:2A:209:C:C6	2.50	0.46
1:2A:958:U:OP2	12:2Q:14:ARG:NE	2.44	0.46
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.51	0.46
1:2A:1697:G:OP2	1:2A:1698:A:O2'	2.29	0.46
1:2A:2171:A:N3	1:2A:2172:U:N3	2.63	0.46
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.16	0.46
7:2H:33:LEU:HD21	7:2H:136:ILE:HG12	1.97	0.46
23:21:54:ALA:HB1	23:21:83:GLU:HG3	1.98	0.46
26:24:24:THR:OG1	26:24:25:TYR:N	2.36	0.46
32:2a:652:U:O4	32:2a:752:G:O2'	2.29	0.46
32:2a:985:C:H2'	32:2a:986:A:C8	2.51	0.46
32:2a:1039:C:C2	32:2a:1040:U:H1'	2.51	0.46
35:2d:38:TYR:CZ	35:2d:45:GLN:HG2	2.51	0.46
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.97	0.46
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.51	0.46
1:1A:548:A:H61	17:1V:18:LEU:HA	1.81	0.46
1:1A:1948:G:N3	32:1a:1418:A:H2	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2850:A:N7	1:1A:2868:A:O2'	2.45	0.46
20:1Y:85:VAL:HG13	20:1Y:97:ARG:HB3	1.98	0.46
32:1a:195:A:OP1	51:1t:68:LYS:NZ	2.46	0.46
32:1a:976:G:OP1	45:1n:32:SER:N	2.43	0.46
32:1a:1036:G:H3'	32:1a:1037:C:C6	2.51	0.46
32:1a:1239:A:H62	32:1a:1299:A:N6	2.14	0.46
47:1p:68:ASP:N	47:1p:68:ASP:OD1	2.46	0.46
54:1y:7:A:O2'	54:1y:49:C:H5'	2.16	0.46
1:2A:300:A:P	20:2Y:86:ARG:HH22	2.37	0.46
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.15	0.46
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.16	0.46
1:2A:2888:C:H2'	1:2A:2889:C:H6	1.80	0.46
4:2E:15:PHE:CD1	15:2T:81:PRO:HD2	2.50	0.46
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.50	0.46
11:2P:86:LYS:HB3	11:2P:118:GLY:HA3	1.96	0.46
15:2T:41:ARG:NH2	32:2a:345:C:H3'	2.29	0.46
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.95	0.46
32:2a:340:U:H2'	32:2a:341:C:C6	2.49	0.46
32:2a:343:U:O2'	32:2a:344:A:H2'	2.14	0.46
32:2a:396:G:O2'	32:2a:398:C:OP1	2.18	0.46
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.16	0.46
40:2i:53:VAL:O	40:2i:55:ALA:N	2.48	0.46
1:1A:1328:G:O2'	1:1A:1329:U:H2'	2.15	0.46
1:1A:2160:G:C2'	1:1A:2161:C:H5'	2.46	0.46
1:1A:2390:U:O2'	1:1A:2391:G:H5'	2.16	0.46
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.16	0.46
21:1Z:91:LEU:HD22	21:1Z:130:PRO:HG3	1.97	0.46
32:1a:41:G:H2'	32:1a:42:G:C8	2.51	0.46
32:1a:60:A:OP1	32:1a:111:G:N2	2.46	0.46
32:1a:551:U:H2'	32:1a:552:U:C6	2.51	0.46
32:1a:973:G:H3'	32:1a:974:A:H5''	1.98	0.46
32:1a:1342:C:H2'	32:1a:1343:G:C8	2.51	0.46
36:1e:7:GLU:OE2	36:1e:37:ARG:NH2	2.49	0.46
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	1.96	0.46
1:2A:699:A:H2'	1:2A:700:G:O4'	2.15	0.46
1:2A:1469:A:H2'	1:2A:1470:G:C8	2.51	0.46
1:2A:2335:A:C8	1:2A:2337:G:C5	3.03	0.46
1:2A:2441:C:OP2	1:2A:2586:C:O2'	2.32	0.46
26:24:68:ARG:HA	26:24:68:ARG:HE	1.80	0.46
32:2a:911:U:H2'	32:2a:912:C:C6	2.50	0.46
32:2a:1040:U:H2'	32:2a:1041:A:C8	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1279:A:OP2	41:2j:9:ARG:NH1	2.48	0.46
44:2m:80:ARG:HH22	50:2s:69:HIS:HE1	1.63	0.46
47:2p:74:LEU:O	47:2p:79:VAL:HG23	2.14	0.46
1:1A:207:A:H2'	1:1A:208:C:O4'	2.14	0.46
1:1A:1325:G:OP1	61:1A:4261:HOH:O	2.20	0.46
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.30	0.46
1:1A:2133:G:O2'	1:1A:2157:G:N2	2.49	0.46
1:1A:2319:G:N2	14:1S:3:ARG:HA	2.31	0.46
1:1A:2789:C:O2	1:1A:2894:G:N1	2.40	0.46
15:1T:96:ARG:HB3	15:1T:96:ARG:CZ	2.45	0.46
32:1a:262:A:H2'	32:1a:263:A:C8	2.51	0.46
32:1a:271:C:H2'	32:1a:272:C:H6	1.81	0.46
32:1a:486:U:H2'	32:1a:487:A:C8	2.51	0.46
32:1a:977:A:O2'	32:1a:981:U:N3	2.41	0.46
32:1a:1002:G:N7	32:1a:1003:G:H1'	2.31	0.46
32:1a:1172:C:H2'	32:1a:1173:G:H8	1.80	0.46
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.15	0.46
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.15	0.46
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.63	0.46
1:2A:839:U:H2'	1:2A:840:C:C6	2.50	0.46
1:2A:885:C:H2'	1:2A:886:C:O4'	2.15	0.46
1:2A:937:U:H2'	1:2A:938:G:O4'	2.15	0.46
1:2A:1818:U:O2'	3:2D:154:LYS:O	2.31	0.46
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.31	0.46
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.51	0.46
1:2A:2466:C:H5''	31:29:6:SER:HB2	1.98	0.46
12:2Q:46:GLN:HE22	12:2Q:126:PRO:HG3	1.79	0.46
23:21:19:GLN:O	23:21:35:THR:HG22	2.16	0.46
30:28:4:MET:HE3	30:28:63:PRO:HG3	1.96	0.46
32:2a:685:G:C2	32:2a:686:U:C4	3.03	0.46
32:2a:782:A:OP1	61:2a:3327:HOH:O	2.21	0.46
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.51	0.46
37:2f:94:GLN:HE22	49:2r:72:ARG:HH12	1.63	0.46
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.33	0.46
1:1A:910:A:N1	1:1A:2277:G:H1'	2.31	0.46
1:1A:1696:G:N7	61:1A:4394:HOH:O	2.36	0.46
8:1I:84:GLY:O	8:1I:85:GLU:HB3	2.16	0.46
11:1P:29:LYS:HG3	11:1P:30:THR:N	2.31	0.46
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.16	0.46
21:1Z:132:ASN:N	21:1Z:132:ASN:OD1	2.49	0.46
32:1a:143:A:H5''	32:1a:144:G:H5'	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:242:C:O2'	32:1a:245:C:OP1	2.32	0.46
32:1a:661:G:N7	61:1a:1942:HOH:O	2.35	0.46
32:1a:872:A:C8	32:1a:874:G:C8	3.03	0.46
34:1c:13:GLY:HA3	45:1n:57:ARG:NH1	2.27	0.46
36:1e:52:PRO:HG2	36:1e:53:LEU:HD12	1.98	0.46
44:1m:78:ILE:O	44:1m:82:MET:HG3	2.15	0.46
54:1y:18:G:H1	54:1y:55:PSU:H1'	1.81	0.46
1:2A:471:A:H2'	1:2A:472:A:O4'	2.16	0.46
1:2A:949:C:H2'	1:2A:950:G:C8	2.50	0.46
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.98	0.46
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.51	0.46
1:2A:2756:U:H1'	1:2A:2757:A:H5''	1.97	0.46
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.98	0.46
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.24	0.46
32:2a:167:G:H2'	32:2a:168:G:H8	1.79	0.46
32:2a:335:C:H2'	32:2a:336:C:C6	2.51	0.46
32:2a:509:A:N3	32:2a:543:C:O2'	2.45	0.46
32:2a:1119:C:H2'	32:2a:1120:G:O4'	2.15	0.46
35:2d:4:TYR:OH	35:2d:7:PRO:O	2.30	0.46
39:2h:49:GLU:OE2	39:2h:62:TYR:OH	2.18	0.46
1:1A:228:A:H2'	1:1A:230:U:O4'	2.15	0.46
1:1A:1401:G:H2'	1:1A:1402:C:O4'	2.15	0.46
1:1A:2206:G:C8	1:1A:2207:G:N7	2.81	0.46
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.39	0.46
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.80	0.46
18:1W:18:ARG:HG2	18:1W:76:VAL:HB	1.97	0.46
32:1a:1106:G:H2'	32:1a:1107:C:C6	2.51	0.46
33:1b:20:GLU:HG2	33:1b:23:ARG:HH11	1.80	0.46
34:1c:162:GLN:NE2	53:1v:24:A:O2'	2.49	0.46
1:2A:103:A:H5'	24:22:3:LEU:HD11	1.98	0.46
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.39	0.46
1:2A:581:C:H2'	1:2A:582:G:C8	2.51	0.46
1:2A:1857:G:C6	1:2A:1858:G:N1	2.84	0.46
1:2A:2038:G:H2'	1:2A:2039:C:O4'	2.15	0.46
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.51	0.46
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.16	0.46
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.16	0.46
9:2N:115:ARG:HA	9:2N:118:LYS:HD2	1.98	0.46
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.49	0.46
26:24:58:ARG:CD	50:2s:68:GLY:H	2.25	0.46
32:2a:7:G:H5'	32:2a:298:A:O4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:524:G:H2'	32:2a:525:C:C6	2.51	0.46
32:2a:946:A:H2'	32:2a:947:G:C8	2.51	0.46
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.97	0.46
1:1A:602:G:O2'	1:1A:655:A:N6	2.48	0.46
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.31	0.46
1:1A:1062:G:H22	1:1A:1077:A:N6	2.14	0.46
1:1A:2165:G:H1	1:1A:2171:A:H2'	1.80	0.46
6:1G:5:VAL:HG13	6:1G:8:LYS:HE2	1.98	0.46
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.81	0.46
20:1Y:55:TYR:CE1	20:1Y:61:ILE:HG21	2.51	0.46
28:16:35:GLU:CD	28:16:50:ARG:HH22	2.24	0.46
32:1a:1342:C:H2'	32:1a:1343:G:H8	1.80	0.46
36:1e:85:GLY:C	36:1e:87:SER:H	2.24	0.46
41:1j:31:GLY:HA3	41:1j:32:ALA:HA	1.60	0.46
1:2A:699:A:H4'	1:2A:1554:A:H61	1.81	0.46
1:2A:880:G:H1	1:2A:897:C:N4	2.13	0.46
1:2A:910:A:N3	1:2A:2264:C:O2'	2.44	0.46
1:2A:1386:C:H2'	1:2A:1387:C:C6	2.51	0.46
1:2A:2080:G:H2'	1:2A:2081:C:H6	1.80	0.46
1:2A:2378:A:H4'	14:2S:23:ARG:HD2	1.98	0.46
14:2S:15:ARG:HE	14:2S:88:ASP:CG	2.23	0.46
32:2a:37:U:H2'	32:2a:38:G:O4'	2.16	0.46
32:2a:353:A:H5'	32:2a:353:A:H8	1.81	0.46
33:2b:162:ILE:HD11	33:2b:177:ALA:HB2	1.96	0.46
1:1A:127:A:H5''	1:1A:128:C:C6	2.51	0.46
1:1A:603:A:N1	1:1A:625:G:O2'	2.43	0.46
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.45	0.46
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.50	0.46
1:1A:2080:G:OP1	23:11:35:THR:HG21	2.16	0.46
1:1A:2136:C:C2	1:1A:2155:G:N2	2.84	0.46
1:1A:2298:A:H2'	1:1A:2299:G:O4'	2.16	0.46
1:1A:2376:A:H2'	1:1A:2377:A:O4'	2.16	0.46
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.40	0.46
10:1O:35:VAL:HG21	10:1O:69:ILE:HD13	1.98	0.46
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	1.98	0.46
18:1W:1:MET:HE3	18:1W:2:GLU:H	1.81	0.46
25:13:18:ASP:OD1	25:13:18:ASP:N	2.44	0.46
32:1a:300:A:H1'	32:1a:565:U:O2	2.16	0.46
32:1a:580:U:H2'	32:1a:581:G:O4'	2.15	0.46
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.31	0.46
32:1a:1027:C:N1	32:1a:1034:G:N2	2.63	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1221:G:H4'	50:1s:77:THR:HG21	1.98	0.46
35:1d:12:CYS:HB2	60:1d:501:SF4:S2	2.56	0.46
55:1x:13:C:H2'	55:1x:14:A:H5''	1.98	0.46
1:2A:271(A):A:H61	1:2A:271(X):G:H1'	1.81	0.46
1:2A:321:G:OP2	5:2F:135:LYS:HD3	2.16	0.46
1:2A:405:U:O2'	1:2A:406:G:H5'	2.15	0.46
1:2A:568:U:H5'	1:2A:945:A:N1	2.31	0.46
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.51	0.46
4:2E:51:PHE:CD2	4:2E:52:LEU:HG	2.51	0.46
11:2P:38:GLN:C	11:2P:40:SER:H	2.23	0.46
19:2X:5:TYR:CZ	24:22:30:ARG:HB2	2.51	0.46
20:2Y:20:TYR:CE2	20:2Y:43:ASN:HA	2.51	0.46
21:2Z:52:SER:C	21:2Z:54:HIS:H	2.23	0.46
32:2a:44:G:C2	32:2a:45:U:H1'	2.51	0.46
32:2a:553:A:H2'	32:2a:554:C:C6	2.52	0.46
32:2a:909:A:H2'	32:2a:910:C:O4'	2.16	0.46
32:2a:1327:C:OP1	52:2u:20:LYS:N	2.49	0.46
46:2o:62:GLN:O	46:2o:66:LEU:HG	2.16	0.46
1:1A:1175:U:OP1	1:1A:1177:A:N6	2.48	0.45
1:1A:1238:G:OP2	61:1A:4269:HOH:O	2.21	0.45
28:16:19:ARG:NH1	28:16:52:VAL:HG21	2.31	0.45
32:1a:461:A:O2'	32:1a:470:C:H5'	2.17	0.45
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.38	0.45
32:1a:1070:U:OP1	36:1e:25:ARG:NH1	2.49	0.45
32:1a:1191:A:H61	59:1a:1815:SCM:H11	1.82	0.45
33:1b:178:ARG:NH2	39:1h:74:PRO:HB3	2.30	0.45
35:1d:59:ARG:HH12	35:1d:66:ARG:HH12	1.62	0.45
1:2A:468:G:H5''	5:2F:60:SER:HB2	1.97	0.45
1:2A:636:G:OP1	11:2P:132:LYS:HE2	2.15	0.45
1:2A:698:C:OP1	1:2A:1634:A:N6	2.42	0.45
1:2A:856:C:H2'	1:2A:857:C:C6	2.51	0.45
1:2A:881:G:H3'	1:2A:882:G:C8	2.51	0.45
5:2F:170:LEU:HB2	5:2F:173:VAL:HB	1.98	0.45
9:2N:91:LEU:HD23	9:2N:98:VAL:HG21	1.98	0.45
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.49	0.45
16:2U:81:HIS:HD2	16:2U:84:LYS:HD3	1.81	0.45
32:2a:618:C:O2	32:2a:622:A:N6	2.49	0.45
33:2b:166:ASP:O	33:2b:170:GLU:HG2	2.17	0.45
33:2b:178:ARG:NH1	39:2h:68:ARG:HH22	2.14	0.45
34:2c:111:LEU:HD21	34:2c:146:ALA:HB2	1.97	0.45
42:2k:67:ASP:HA	42:2k:70:LYS:HE3	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:121:G:H4'	1:1A:149:A:H5'	1.98	0.45
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.16	0.45
4:1E:97:LYS:O	4:1E:100:GLU:HG3	2.16	0.45
7:1H:98:LEU:HG	7:1H:125:VAL:HG23	1.97	0.45
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.98	0.45
32:1a:110:C:H2'	32:1a:111:G:O4'	2.16	0.45
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.51	0.45
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.31	0.45
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	1.99	0.45
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.31	0.45
44:1m:59:TYR:O	44:1m:63:THR:OG1	2.30	0.45
45:1n:25:VAL:HG13	45:1n:38:GLY:O	2.16	0.45
54:1y:8:4SU:O2'	54:1y:21:A:N1	2.50	0.45
1:2A:1364:G:P	23:21:3:LYS:HG3	2.57	0.45
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.51	0.45
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.16	0.45
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.50	0.45
2:2B:24:G:O2'	2:2B:56:G:N7	2.40	0.45
14:2S:3:ARG:NH1	14:2S:3:ARG:HA	2.32	0.45
32:2a:35:G:O2'	43:2l:118:SER:O	2.32	0.45
32:2a:164:U:H2'	32:2a:165:C:C6	2.50	0.45
32:2a:176:C:H2'	32:2a:177:C:C6	2.51	0.45
32:2a:1168:A:C6	32:2a:1169:A:C6	3.03	0.45
32:2a:1265:G:C4	32:2a:1271:G:N2	2.84	0.45
32:2a:1273:G:C6	32:2a:1274:G:C4	3.04	0.45
33:2b:80:ILE:HD12	33:2b:208:ILE:HG23	1.98	0.45
33:2b:167:PRO:HG2	33:2b:192:SER:HB2	1.98	0.45
34:2c:25:GLY:C	34:2c:27:LYS:H	2.24	0.45
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.51	0.45
48:2q:67:LYS:O	48:2q:68:ARG:HB2	2.16	0.45
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.16	0.45
1:1A:1851:U:H4'	54:1y:71:G:H4'	1.98	0.45
1:1A:2317:C:H2'	1:1A:2318:G:O4'	2.16	0.45
3:1D:109:ASP:HB2	3:1D:197:GLY:HA2	1.97	0.45
32:1a:1004:A:H2'	32:1a:1005:A:H5'	1.97	0.45
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.51	0.45
32:1a:1191:A:OP1	34:1c:4:LYS:NZ	2.49	0.45
1:2A:630:G:N2	1:2A:633:A:OP2	2.40	0.45
1:2A:1464:C:H2'	1:2A:1465:G:C8	2.51	0.45
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.81	0.45
1:2A:1891:G:O6	61:2A:3946:HOH:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2378:A:H2'	14:2S:21:THR:HG21	1.97	0.45
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.52	0.45
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.16	0.45
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.15	0.45
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.16	0.45
21:2Z:63:ASP:CG	21:2Z:65:GLN:HE21	2.24	0.45
32:2a:26:A:O2'	35:2d:209:ARG:NH1	2.45	0.45
32:2a:528:C:H5'	32:2a:529:G:OP2	2.17	0.45
32:2a:1206:G:H2'	32:2a:1207:2MG:O4'	2.16	0.45
34:2c:148:GLY:O	34:2c:203:PHE:N	2.31	0.45
47:2p:1:MET:HE2	47:2p:1:MET:N	2.32	0.45
48:2q:64:PRO:HB3	48:2q:70:ARG:NH1	2.31	0.45
1:1A:271(D):G:H2'	1:1A:271(E):U:O4'	2.16	0.45
1:1A:606:U:H4'	1:1A:658:C:H4'	1.98	0.45
1:1A:2031:A:C6	1:1A:2498:C:H1'	2.50	0.45
1:1A:2345:G:N3	1:1A:2381:C:H2'	2.31	0.45
32:1a:162:A:N7	32:1a:163:C:H1'	2.31	0.45
32:1a:1004:A:H5'	32:1a:1024:G:N2	2.32	0.45
32:1a:1277:C:H1'	32:1a:1282:C:O2	2.17	0.45
51:1t:10:LEU:HD22	51:1t:10:LEU:HA	1.70	0.45
1:2A:1311:G:N2	1:2A:1312:U:O4	2.39	0.45
1:2A:2287:A:C8	1:2A:2289:G:C8	3.05	0.45
8:2I:82:ARG:NE	8:2I:82:ARG:H	2.14	0.45
14:2S:65:VAL:HA	14:2S:68:GLN:HB2	1.98	0.45
21:2Z:70:LEU:HD12	21:2Z:71:VAL:H	1.80	0.45
32:2a:328:C:H4'	32:2a:329:A:H5'	1.98	0.45
32:2a:502:G:H2'	32:2a:503:C:O4'	2.16	0.45
32:2a:1157:A:C2	32:2a:1180:A:H2'	2.51	0.45
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.81	0.45
32:2a:1359:C:OP1	45:2n:22:THR:OG1	2.34	0.45
35:2d:175:SER:HB3	35:2d:184:LYS:HB3	1.98	0.45
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.16	0.45
43:2l:57:LYS:HA	43:2l:67:THR:HA	1.99	0.45
50:2s:41:VAL:HG13	50:2s:43:GLU:N	2.32	0.45
55:2x:21:A:N6	55:2x:46:G:H2'	2.31	0.45
54:2y:9:A:H5'	54:2y:46:G7M:N3	2.31	0.45
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.17	0.45
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.16	0.45
9:1N:65:LYS:HB2	9:1N:65:LYS:HZ2	1.81	0.45
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG2	1.99	0.45
16:1U:59:ARG:HD3	61:1U:311:HOH:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:17:12:ARG:NH2	29:17:44:PRO:HB3	2.32	0.45
32:1a:78:G:C2	32:1a:91:C:N3	2.85	0.45
32:1a:613:C:H2'	32:1a:614:A:H8	1.82	0.45
33:1b:101:MET:HA	33:1b:108:ILE:HD12	1.99	0.45
37:1f:21:LEU:O	37:1f:25:ILE:HG13	2.17	0.45
1:2A:861:A:N3	2:2B:79:C:O2'	2.49	0.45
1:2A:985:C:H2'	1:2A:986:C:H6	1.80	0.45
1:2A:2484:G:C2	1:2A:2485:G:C8	3.05	0.45
1:2A:2579:C:OP1	61:2A:3965:HOH:O	2.21	0.45
10:2O:69:ILE:H	10:2O:69:ILE:HG13	1.45	0.45
10:2O:80:ASP:OD1	15:2T:64:ARG:NH2	2.50	0.45
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.51	0.45
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.16	0.45
32:2a:418:C:H2'	32:2a:419:C:C6	2.51	0.45
32:2a:441:A:H3'	32:2a:442:C:C6	2.52	0.45
32:2a:866:C:H4'	32:2a:919:A:H5'	1.99	0.45
32:2a:1246:C:H2'	32:2a:1247:U:C6	2.52	0.45
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.51	0.45
32:2a:1260:C:P	32:2a:1284:C:H4'	2.57	0.45
33:2b:98:LEU:HD13	33:2b:101:MET:HE3	1.97	0.45
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.52	0.45
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.16	0.45
40:2i:28:VAL:HB	40:2i:63:ILE:HB	1.97	0.45
43:2l:56:ALA:O	43:2l:68:ALA:N	2.40	0.45
45:2n:23:ARG:CZ	45:2n:30:ALA:HB2	2.46	0.45
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.51	0.45
1:1A:2277:G:OP2	22:10:10:THR:HG21	2.17	0.45
1:1A:2441:C:OP2	1:1A:2586:C:O2'	2.35	0.45
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.45	0.45
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.52	0.45
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.51	0.45
1:2A:1034:G:H5'	31:29:18:ARG:HD2	1.98	0.45
1:2A:1580:A:H5'	1:2A:1581:G:OP2	2.17	0.45
1:2A:1668:A:H4'	1:2A:1669:A:O5'	2.16	0.45
1:2A:1915:5MU:H2'	1:2A:1916:A:O4'	2.17	0.45
1:2A:2345:G:N3	1:2A:2381:C:H2'	2.32	0.45
11:2P:90:ARG:HH12	11:2P:105:LEU:HD21	1.81	0.45
19:2X:60:ARG:NH2	29:27:47:ARG:HH12	2.15	0.45
20:2Y:90:LEU:HD21	20:2Y:96:ILE:HD13	1.98	0.45
32:2a:958:A:HO2'	32:2a:985:C:HO2'	1.65	0.45
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:155:LEU:HD21	33:2b:159:PRO:HD3	1.98	0.45
34:2c:52:LEU:HD12	34:2c:53:ALA:N	2.31	0.45
40:2i:8:GLY:O	40:2i:15:ALA:N	2.29	0.45
41:2j:48:THR:OG1	41:2j:62:HIS:ND1	2.43	0.45
1:1A:27:G:C2	1:1A:512:G:N3	2.84	0.45
1:1A:100:G:H21	24:12:7:ARG:HH22	1.65	0.45
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.16	0.45
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.52	0.45
2:1B:40:U:O2'	2:1B:43:C:OP2	2.31	0.45
4:1E:12:THR:HG22	4:1E:13:ARG:N	2.30	0.45
4:1E:54:GLN:NE2	4:1E:76:ARG:HG2	2.32	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.64	0.45
32:1a:757:U:H2'	32:1a:758:G:O4'	2.16	0.45
32:1a:1226:C:H4'	50:1s:80:TYR:OH	2.16	0.45
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.52	0.45
32:1a:1361:G:H2'	32:1a:1362:C:O4'	2.16	0.45
36:1e:95:ALA:O	36:1e:98:THR:HG23	2.17	0.45
41:1j:54:PHE:CD2	41:1j:55:LYS:HB2	2.52	0.45
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.99	0.45
1:2A:1147:C:H2'	1:2A:1148:A:C8	2.48	0.45
1:2A:1171:G:H1	1:2A:1178:C:H42	1.65	0.45
1:2A:1359:A:H2'	1:2A:1360:A:H5'	1.98	0.45
1:2A:1506:C:C2'	1:2A:1507:A:H5'	2.46	0.45
1:2A:1802:A:N1	1:2A:1822:G:H1'	2.31	0.45
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.97	0.45
1:2A:2156:G:H2'	1:2A:2157:G:C5	2.51	0.45
1:2A:2321:G:H22	1:2A:2333:A:N6	2.15	0.45
7:2H:6:ARG:HH22	7:2H:54:ARG:NH1	2.14	0.45
12:2Q:38:GLU:OE2	12:2Q:128:LYS:N	2.42	0.45
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.99	0.45
14:2S:84:GLN:H	14:2S:111:GLU:HB2	1.81	0.45
32:2a:999:C:H2'	32:2a:1000:U:C6	2.51	0.45
32:2a:1084:G:C5	32:2a:1085:U:C4	3.04	0.45
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.17	0.45
32:2a:1194:U:H4'	36:2e:22:GLY:HA3	1.99	0.45
43:2l:46:LYS:HE2	43:2l:92:OTD:H8	1.99	0.45
1:1A:1289:C:H2'	1:1A:1290:C:H6	1.81	0.45
1:1A:1372:U:H2'	1:1A:1373:A:O4'	2.17	0.45
1:1A:1792:G:H5'	3:1D:205:VAL:HG13	1.98	0.45
16:1U:102:GLU:HB3	16:1U:104:GLN:NE2	2.32	0.45
21:1Z:99:TYR:HB3	21:1Z:123:ASP:OD2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:40:HIS:O	26:14:44:THR:HG23	2.16	0.45
32:1a:236:G:H5''	48:1q:42:TYR:OH	2.16	0.45
32:1a:278:G:OP2	48:1q:41:LYS:HE2	2.17	0.45
32:1a:382:A:H2'	32:1a:383:A:C8	2.52	0.45
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.32	0.45
1:2A:2042:A:OP1	61:2A:3966:HOH:O	2.21	0.45
2:2B:66:A:H61	2:2B:108:U:H3'	1.79	0.45
2:2B:119:G:H5'	2:2B:120:A:OP2	2.17	0.45
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.97	0.45
10:2O:48:PRO:CB	32:2a:1422:G:H5''	2.46	0.45
19:2X:56:THR:HB	19:2X:77:LYS:HE3	1.99	0.45
32:2a:8:A:N6	35:2d:205:GLU:O	2.46	0.45
32:2a:489:C:OP1	35:2d:132:ARG:NH2	2.24	0.45
32:2a:545:C:OP2	35:2d:65:ARG:NH2	2.50	0.45
32:2a:1057:G:O3'	34:2c:197:GLY:HA3	2.17	0.45
32:2a:1104:G:H4'	33:2b:111:ARG:CZ	2.46	0.45
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	1.99	0.45
41:2j:44:VAL:HG13	41:2j:66:ARG:HB3	1.98	0.45
1:1A:26:G:H1'	1:1A:515:A:N6	2.32	0.45
1:1A:39:C:H2'	1:1A:40:C:H6	1.80	0.45
1:1A:580:C:H2'	1:1A:581:C:C6	2.52	0.45
1:1A:631:A:OP1	11:1P:65:ARG:HD3	2.16	0.45
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.82	0.45
2:1B:88:C:H2'	2:1B:89:G:O4'	2.17	0.45
6:1G:4:ASP:OD2	6:1G:9:ARG:NH1	2.50	0.45
12:1Q:7:MET:HE2	12:1Q:7:MET:HB3	1.79	0.45
32:1a:926:G:H5''	32:1a:927:G:O5'	2.17	0.45
33:1b:69:LEU:HD11	33:1b:93:VAL:HG12	1.99	0.45
1:2A:20:C:H2'	1:2A:21:A:H8	1.82	0.45
1:2A:108:U:H2'	1:2A:109:G:C8	2.51	0.45
1:2A:1114:G:C2'	1:2A:1115:G:H5'	2.47	0.45
1:2A:2875:C:H2'	1:2A:2876:G:O4'	2.17	0.45
5:2F:117:ARG:HH12	11:2P:1:MET:H2	1.65	0.45
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.99	0.45
10:2O:15:GLY:HA3	10:2O:50:GLY:HA3	1.99	0.45
17:2V:76:LYS:HD2	17:2V:81:TYR:CD2	2.52	0.45
32:2a:114:U:C2'	32:2a:115:G:H5'	2.47	0.45
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.16	0.45
1:1A:392:C:OP1	61:1A:4257:HOH:O	2.21	0.45
1:1A:534:U:H2'	1:1A:535:C:C6	2.52	0.45
1:1A:1358:G:O2'	1:1A:1359:A:H5''	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.17	0.45
5:1F:135:LYS:HB2	5:1F:138:GLU:CD	2.42	0.45
32:1a:186:C:H2'	32:1a:187:C:C6	2.52	0.45
32:1a:984:C:H2'	32:1a:985:C:H6	1.81	0.45
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.17	0.45
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.44	0.45
54:1y:40:C:H2'	54:1y:41:C:H6	1.82	0.45
1:2A:340:A:H2'	1:2A:341:G:O4'	2.16	0.45
6:2G:107:LEU:HD23	6:2G:111:LEU:HD13	1.99	0.45
11:2P:126:VAL:HG22	11:2P:146:VAL:HB	1.99	0.45
28:26:8:LYS:HD3	30:28:34:TRP:CD2	2.52	0.45
32:2a:540:G:H2'	32:2a:541:G:O4'	2.17	0.45
32:2a:583:A:H2'	32:2a:584:G:O4'	2.16	0.45
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.17	0.45
32:2a:1327:C:P	52:2u:12:LYS:HZ1	2.36	0.45
33:2b:52:GLU:HG2	33:2b:56:ARG:NH1	2.27	0.45
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.82	0.45
1:1A:657:U:H2'	1:1A:658:C:C6	2.52	0.44
1:1A:2319:G:C2	14:1S:3:ARG:HA	2.53	0.44
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.42	0.44
2:1B:24:G:N7	2:1B:56:G:H2'	2.32	0.44
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.99	0.44
15:1T:29:ARG:HB3	15:1T:87:ASP:HB2	1.99	0.44
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.32	0.44
22:10:14:ARG:HB2	61:10:206:HOH:O	2.17	0.44
32:1a:277:C:P	48:1q:68:ARG:HH12	2.40	0.44
32:1a:890:G:O2'	32:1a:906:G:O6	2.29	0.44
33:1b:32:ILE:HD13	33:1b:40:HIS:CD2	2.52	0.44
1:2A:1639:U:OP1	61:2A:3967:HOH:O	2.21	0.44
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.17	0.44
1:2A:2304:G:H22	1:2A:2312:U:H3	1.64	0.44
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.17	0.44
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.52	0.44
14:2S:36:TYR:CD2	14:2S:36:TYR:N	2.85	0.44
17:2V:74:LYS:HB2	17:2V:83:ARG:HB2	1.99	0.44
32:2a:160:A:H2'	32:2a:161:A:O4'	2.17	0.44
32:2a:841:U:C5	32:2a:848:C:H1'	2.52	0.44
32:2a:1049:U:H4'	32:2a:1050:G:H5''	1.99	0.44
34:2c:179:ARG:HH12	34:2c:206:GLU:CD	2.24	0.44
40:2i:11:LYS:H	40:2i:104:ARG:HH21	1.66	0.44
48:2q:15:MET:HB3	48:2q:18:THR:HB	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:32:ARG:NE	61:2r:101:HOH:O	2.50	0.44
1:1A:878:A:N6	1:1A:899:A:O2'	2.50	0.44
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.18	0.44
1:1A:2839:G:H5'	13:1R:46:GLY:CA	2.47	0.44
6:1G:43:LEU:C	6:1G:45:GLU:H	2.25	0.44
11:1P:90:ARG:HH12	11:1P:105:LEU:HD21	1.82	0.44
20:1Y:87:LYS:HB3	20:1Y:95:LYS:HD2	2.00	0.44
24:12:51:ARG:O	24:12:55:ARG:HG2	2.16	0.44
25:13:43:ILE:O	25:13:47:VAL:HG23	2.17	0.44
32:1a:309:G:O2'	32:1a:607:A:N6	2.42	0.44
32:1a:790:A:N1	32:1a:1497:G:H5''	2.31	0.44
33:1b:76:GLN:HB3	33:1b:208:ILE:HG13	1.98	0.44
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.82	0.44
44:1m:13:LYS:O	44:1m:44:ARG:HA	2.17	0.44
44:1m:24:GLY:O	44:1m:29:ARG:NH1	2.50	0.44
47:1p:70:ALA:O	47:1p:74:LEU:HD12	2.17	0.44
48:1q:55:ASP:O	48:1q:57:VAL:HG13	2.17	0.44
1:2A:394:A:N6	1:2A:395:U:O4	2.50	0.44
1:2A:910:A:H2'	1:2A:911:A:C8	2.52	0.44
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.17	0.44
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.17	0.44
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.17	0.44
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.99	0.44
5:2F:123:LEU:HD12	5:2F:124:LEU:H	1.82	0.44
7:2H:3:ARG:HG2	7:2H:6:ARG:HE	1.82	0.44
12:2Q:50:ALA:HB1	12:2Q:121:ALA:HB1	1.98	0.44
22:20:32:ARG:H	22:20:35:ASN:ND2	2.14	0.44
22:20:49:LYS:HB2	22:20:80:HIS:HB3	1.98	0.44
28:26:11:LEU:HD12	28:26:21:TYR:HB2	1.99	0.44
32:2a:152:A:OP2	32:2a:153:C:N4	2.37	0.44
32:2a:337:C:H2'	32:2a:338:A:C8	2.52	0.44
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.53	0.44
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.99	0.44
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	1.99	0.44
54:2w:43:C:H2'	54:2w:44:G:C8	2.52	0.44
55:2x:33:U:N3	55:2x:36:U:OP2	2.43	0.44
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.52	0.44
1:1A:402:A:O2'	1:1A:403:U:H5'	2.18	0.44
1:1A:899:A:H2'	1:1A:899:A:N3	2.32	0.44
1:1A:2780:G:OP2	9:1N:118:LYS:HD3	2.17	0.44
32:1a:250:A:H4'	32:1a:251:G:O5'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:562:C:N3	43:1l:16:GLU:HB3	2.33	0.44
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.52	0.44
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.82	0.44
40:1i:26:VAL:HB	40:1i:33:PHE:HB2	2.00	0.44
44:1m:53:VAL:O	44:1m:57:ARG:HB2	2.18	0.44
50:1s:3:ARG:NH2	50:1s:7:LYS:HE2	2.32	0.44
1:2A:330:A:H2	1:2A:1210:A:O2'	2.01	0.44
1:2A:652(A):A:H3'	1:2A:652(B):A:H5''	1.98	0.44
1:2A:813:U:H2'	1:2A:814:C:C6	2.52	0.44
1:2A:1027:A:C6	1:2A:1126:A:C4	3.05	0.44
1:2A:1532:C:H42	1:2A:1537:G:H1	1.65	0.44
1:2A:1639:U:C2'	1:2A:1640:C:H5''	2.45	0.44
19:2X:32:PRO:HA	19:2X:77:LYS:HB3	1.98	0.44
26:24:53:GLU:C	26:24:55:ARG:H	2.24	0.44
28:26:40:CYS:O	28:26:44:ARG:N	2.50	0.44
32:2a:265:G:N2	32:2a:267:C:H5'	2.32	0.44
32:2a:865:A:H5'	32:2a:1078:U:C5	2.52	0.44
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.80	0.44
32:2a:1375:A:H4'	38:2g:29:LYS:HD3	2.00	0.44
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.32	0.44
36:2e:95:ALA:C	36:2e:97:GLY:H	2.25	0.44
39:2h:10:LEU:HD22	39:2h:83:ILE:HD11	1.99	0.44
39:2h:12:ARG:HH11	39:2h:26:VAL:HA	1.82	0.44
54:2y:55:PSU:H6	54:2y:55:PSU:H2'	1.51	0.44
1:1A:548:A:H3'	1:1A:548:A:OP2	2.17	0.44
1:1A:789:A:N1	61:1A:4396:HOH:O	2.36	0.44
1:1A:811:U:H2'	11:1P:21:ARG:HA	1.99	0.44
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.82	0.44
42:1k:62:GLN:HB2	42:1k:93:GLN:HG3	1.98	0.44
45:1n:27:CYS:SG	45:1n:29:ARG:HB2	2.57	0.44
54:1y:33:U:H2'	54:1y:34:G:H3'	1.99	0.44
1:2A:655:A:H8	1:2A:656:G:O4'	2.01	0.44
1:2A:1770:G:H4'	1:2A:1938:A:OP1	2.18	0.44
1:2A:2080:G:H2'	1:2A:2081:C:C6	2.53	0.44
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.52	0.44
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.53	0.44
6:2G:29:TRP:HA	6:2G:33:ARG:NH1	2.31	0.44
6:2G:99:MET:O	6:2G:103:LEU:HD12	2.18	0.44
8:2I:101:LEU:O	8:2I:106:GLY:N	2.51	0.44
10:2O:112:MET:O	10:2O:116:SER:OG	2.35	0.44
14:2S:30:ARG:HB2	14:2S:35:ILE:HD12	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	2.00	0.44
21:2Z:7:ALA:HB3	21:2Z:59:LEU:HB3	2.00	0.44
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.50	0.44
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.53	0.44
34:2c:136:GLN:HA	34:2c:139:GLN:HB3	1.98	0.44
38:2g:109:ASN:OD1	38:2g:119:ARG:NH2	2.49	0.44
54:2y:15:G:H22	54:2y:48:C:N4	2.14	0.44
1:1A:2464:C:H1'	61:1A:5452:HOH:O	2.16	0.44
1:1A:2600:A:H2'	1:1A:2601:C:C6	2.52	0.44
7:1H:40:GLU:OE2	7:1H:60:ARG:NH2	2.50	0.44
14:1S:105:ALA:HB1	14:1S:110:LEU:HD23	1.99	0.44
32:1a:838:G:H2'	32:1a:839:U:H2'	1.99	0.44
33:1b:74:LYS:NZ	33:1b:206:ASP:OD1	2.49	0.44
33:1b:134:GLU:O	33:1b:138:LEU:HG	2.18	0.44
37:1f:89:MET:HG2	37:1f:91:VAL:HG23	1.97	0.44
39:1h:121:ASP:O	39:1h:125:ARG:HG3	2.18	0.44
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.53	0.44
1:2A:493:G:H2'	1:2A:494:G:O4'	2.17	0.44
1:2A:981:A:N1	1:2A:2027:G:O2'	2.45	0.44
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.52	0.44
1:2A:1826:G:H2'	1:2A:1827:C:O4'	2.18	0.44
1:2A:2877:G:H2'	1:2A:2878:U:O4'	2.18	0.44
3:2D:159:ALA:HB1	3:2D:198:ASN:O	2.18	0.44
7:2H:83:TYR:CE1	7:2H:138:LYS:HE2	2.52	0.44
26:24:62:ARG:HB2	26:24:63:TYR:CZ	2.52	0.44
28:26:11:LEU:HB2	28:26:21:TYR:HB2	1.99	0.44
32:2a:137:C:H2'	32:2a:138:G:C8	2.51	0.44
32:2a:1443:G:N2	32:2a:1460:A:H1'	2.33	0.44
34:2c:18:TRP:HE3	34:2c:18:TRP:H	1.64	0.44
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.50	0.44
1:1A:468:G:N7	29:17:39:ARG:NH2	2.62	0.44
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.18	0.44
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.53	0.44
4:1E:31:CYS:HB3	4:1E:49:LEU:HG	2.00	0.44
26:14:44:THR:O	26:14:46:GLN:N	2.51	0.44
32:1a:946:A:H2'	32:1a:947:G:C8	2.52	0.44
33:1b:50:GLU:HB3	33:1b:200:ILE:O	2.17	0.44
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.53	0.44
36:1e:144:THR:O	36:1e:148:VAL:HG13	2.18	0.44
1:2A:26:G:C6	1:2A:27:G:N1	2.85	0.44
1:2A:644:A:H4'	1:2A:645:C:C5	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:54:G:H2'	2:2B:55:U:H6	1.82	0.44
3:2D:18:VAL:HG12	3:2D:211:ARG:NH2	2.33	0.44
6:2G:49:ASP:O	6:2G:50:ALA:C	2.61	0.44
8:2I:61:ARG:N	8:2I:61:ARG:HH11	2.15	0.44
11:2P:138:LEU:HD23	11:2P:145:PRO:HB3	2.00	0.44
12:2Q:132:VAL:HG11	21:2Z:81:ARG:HD3	2.00	0.44
22:20:14:ARG:H	22:20:14:ARG:HG2	1.56	0.44
22:20:18:ALA:HB3	22:20:20:ARG:HH12	1.82	0.44
30:28:23:VAL:CG1	30:28:47:LYS:HD3	2.47	0.44
32:2a:413:G:H1'	32:2a:428:G:N2	2.33	0.44
32:2a:737:A:H2'	32:2a:738:C:C6	2.53	0.44
33:2b:160:ASP:O	33:2b:183:PRO:HD2	2.16	0.44
37:2f:14:LEU:HB2	37:2f:19:LEU:HD12	2.00	0.44
39:2h:38:ILE:HD11	39:2h:118:VAL:O	2.17	0.44
41:2j:23:ILE:HD12	41:2j:23:ILE:HA	1.91	0.44
1:1A:304:G:H2'	1:1A:305:U:C6	2.52	0.44
1:1A:1445(A):C:N4	61:1A:4229:HOH:O	2.48	0.44
1:1A:1571:A:H2'	1:1A:1572:A:C8	2.53	0.44
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.71	0.44
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.53	0.44
1:1A:2639:A:O3'	9:1N:97:ARG:NH2	2.44	0.44
2:1B:119:G:O6	2:1B:120:A:N6	2.49	0.44
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.48	0.44
5:1F:110:LEU:HD11	5:1F:181:LEU:HG	2.00	0.44
19:1X:11:PRO:HB3	19:1X:92:LEU:HD11	1.99	0.44
21:1Z:93:ASP:OD1	21:1Z:93:ASP:N	2.51	0.44
26:14:69:LYS:HZ1	50:1s:20:LEU:HD22	1.81	0.44
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.16	0.44
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.99	0.44
32:1a:328:C:H4'	32:1a:329:A:H5'	2.00	0.44
34:1c:179:ARG:HG3	34:1c:206:GLU:HB3	2.00	0.44
44:1m:89:GLY:O	44:1m:93:ARG:HG3	2.17	0.44
1:2A:322:A:H5'	1:2A:340:A:H1'	1.99	0.44
1:2A:458:G:C8	29:27:37:LYS:HG2	2.53	0.44
1:2A:883:G:O6	1:2A:893:C:O2'	2.30	0.44
1:2A:963:U:H2'	1:2A:964:C:H6	1.83	0.44
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.53	0.44
1:2A:1717:G:H2'	1:2A:1718:G:C8	2.52	0.44
1:2A:1810:A:H2'	1:2A:1811:G:O4'	2.17	0.44
1:2A:2097:C:H2'	1:2A:2098:U:O4'	2.18	0.44
1:2A:2507:C:H5''	1:2A:2573:C:N4	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2647:U:H2'	1:2A:2648:C:H6	1.82	0.44
1:2A:2792:G:H2'	1:2A:2792:G:N3	2.33	0.44
10:2O:71:ARG:NH1	15:2T:74:ARG:HH12	2.16	0.44
10:2O:119:PRO:HB2	15:2T:68:TYR:CZ	2.53	0.44
25:23:6:VAL:HG13	25:23:54:VAL:HG11	2.00	0.44
31:29:4:ARG:HD2	31:29:6:SER:O	2.18	0.44
32:2a:229:U:O2'	47:2p:23:ASP:OD2	2.35	0.44
32:2a:1103:C:C4	32:2a:1104:G:N7	2.86	0.44
40:2i:112:LYS:NZ	40:2i:113:LYS:O	2.48	0.44
45:2n:32:SER:O	45:2n:40:CYS:HA	2.18	0.44
54:2y:5:G:H2'	54:2y:6:G:O4'	2.18	0.44
1:1A:22:C:H2'	1:1A:23:G:O4'	2.18	0.44
1:1A:570:G:H2'	1:1A:2030:A:N7	2.33	0.44
1:1A:1184:G:H5'	25:13:29:ARG:NH1	2.33	0.44
1:1A:1744:C:H2'	1:1A:1745:C:H6	1.82	0.44
1:1A:2889:C:H3'	1:1A:2891:G:H8	1.82	0.44
10:1O:17:ARG:HD2	10:1O:17:ARG:HA	1.81	0.44
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	2.00	0.44
25:13:19:GLN:OE1	25:13:52:HIS:NE2	2.48	0.44
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.43	0.44
32:1a:584:G:H2'	32:1a:585:G:C8	2.53	0.44
32:1a:600:C:H5'	39:1h:129:VAL:HA	1.99	0.44
32:1a:922:G:C6	32:1a:923:A:C6	3.05	0.44
32:1a:924:C:O2'	32:1a:1502:A:N1	2.47	0.44
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.53	0.44
32:1a:1189:C:OP1	41:1j:51:ARG:NH2	2.38	0.44
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.18	0.44
36:1e:8:GLU:HG2	36:1e:34:VAL:HG23	2.00	0.44
37:1f:82:ARG:HB2	37:1f:85:VAL:HG23	2.00	0.44
41:1j:64:GLU:HB3	45:1n:59:ALA:HB2	2.00	0.44
1:2A:272(G):C:N4	1:2A:363(C):G:H1	2.16	0.44
1:2A:1785:A:N6	61:2A:4152:HOH:O	2.51	0.44
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.33	0.44
1:2A:2115:G:H4'	1:2A:2167:U:N3	2.33	0.44
1:2A:2128:C:H6	1:2A:2128:C:O5'	2.00	0.44
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.52	0.44
2:2B:11:C:H3'	2:2B:12:C:C6	2.53	0.44
2:2B:54:G:OP2	61:2B:302:HOH:O	2.21	0.44
3:2D:61:LEU:O	3:2D:63:ARG:NH1	2.50	0.44
9:2N:97:ARG:HA	9:2N:100:GLU:HB2	2.00	0.44
21:2Z:45:ASP:O	21:2Z:49:ARG:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.83	0.44
32:2a:46:G:H2'	32:2a:366:C:C5	2.53	0.44
32:2a:582:U:C2	32:2a:760:G:C6	3.06	0.44
32:2a:1325:C:H2'	32:2a:1326:C:H6	1.83	0.44
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.18	0.44
50:2s:15:LEU:HD12	50:2s:18:LYS:HD2	1.99	0.44
1:1A:394:A:O2'	1:1A:395:U:H5'	2.18	0.44
1:1A:429:A:OP2	61:1A:4268:HOH:O	2.20	0.44
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.41	0.44
1:1A:2572:A:C8	4:1E:144:ARG:HD3	2.52	0.44
26:14:53:GLU:H	26:14:53:GLU:HG3	1.70	0.44
32:1a:603:U:H2'	32:1a:604:G:H8	1.83	0.44
32:1a:1053:G:N7	32:1a:1199:U:H3'	2.33	0.44
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.53	0.44
32:1a:1367:C:H4'	41:1j:48:THR:HG21	2.00	0.44
41:1j:39:PRO:HA	41:1j:70:ARG:HD3	2.00	0.44
54:1w:37:MIA:H162	54:1w:37:MIA:H121	1.74	0.44
1:2A:598:G:C6	1:2A:599:G:C5	3.06	0.44
1:2A:731:C:H5''	61:2A:4056:HOH:O	2.18	0.44
1:2A:1759:A:H1'	1:2A:2711:A:C2	2.53	0.44
1:2A:2114:A:H2	1:2A:2171:A:H61	1.63	0.44
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.17	0.44
9:2N:1:MET:HB3	9:2N:1:MET:HE2	1.75	0.44
11:2P:121:LYS:O	11:2P:123:LEU:N	2.50	0.44
22:20:36:ILE:HD13	22:20:60:PHE:HB3	1.99	0.44
32:2a:167:G:H2'	32:2a:168:G:C8	2.53	0.44
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.18	0.44
32:2a:429:U:H1'	32:2a:430:A:H5''	2.00	0.44
32:2a:455:C:H2'	32:2a:456:C:C6	2.53	0.44
32:2a:1400:5MC:N4	55:2x:34:C:H1'	2.32	0.44
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.32	0.44
33:2b:82:ARG:HB3	33:2b:94:ASN:HD22	1.82	0.44
36:2e:41:VAL:HG23	36:2e:67:VAL:HG23	2.00	0.44
51:2t:79:ARG:HD2	51:2t:83:ARG:HH21	1.83	0.44
54:2w:59:U:H2'	54:2w:60:U:H5'	2.00	0.44
1:1A:1032:A:O3'	31:19:16:VAL:HG11	2.18	0.43
1:1A:1529:G:H1	1:1A:1540:U:H3	1.66	0.43
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.53	0.43
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.34	0.43
1:1A:1824:G:O3'	3:1D:249:PRO:HD3	2.18	0.43
1:1A:2262:U:OP1	1:1A:2387:U:O2'	2.24	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.45	0.43
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.18	0.43
8:1I:38:LEU:HG	8:1I:40:THR:HG23	2.00	0.43
30:18:23:VAL:CG1	30:18:47:LYS:HD3	2.47	0.43
32:1a:567:G:H2'	32:1a:568:G:O4'	2.17	0.43
32:1a:1291:G:OP1	38:1g:41:ARG:NE	2.51	0.43
32:1a:1302:U:C5	44:1m:17:VAL:HG21	2.53	0.43
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.51	0.43
1:2A:64:A:O3'	19:2X:71:GLY:HA3	2.18	0.43
1:2A:403:U:H4'	1:2A:404:C:H5'	1.99	0.43
1:2A:642:G:O2'	1:2A:644:A:N7	2.47	0.43
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.33	0.43
1:2A:2542:A:H4'	1:2A:2543:G:C8	2.53	0.43
1:2A:2659:G:OP1	7:2H:158:HIS:NE2	2.49	0.43
1:2A:2848:G:H8	15:2T:97:ALA:HB2	1.81	0.43
3:2D:158:ALA:O	3:2D:161:THR:OG1	2.29	0.43
32:2a:1130:A:O2'	40:2i:3:GLN:NE2	2.35	0.43
32:2a:1399:C:H4'	32:2a:1400:5MC:O5'	2.18	0.43
33:2b:19:HIS:CG	33:2b:20:GLU:N	2.86	0.43
33:2b:187:LEU:HA	33:2b:201:ILE:HB	2.00	0.43
38:2g:152:ALA:C	38:2g:154:TYR:H	2.26	0.43
39:2h:51:VAL:HG12	39:2h:52:ASP:H	1.82	0.43
44:2m:14:ARG:CZ	44:2m:42:ALA:HA	2.48	0.43
45:2n:51:GLY:C	45:2n:53:LEU:H	2.26	0.43
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	2.00	0.43
53:2v:16:A:H2'	53:2v:17:U:O4'	2.18	0.43
1:1A:631:A:H2'	1:1A:632:A:O4'	2.18	0.43
1:1A:2344:U:O2'	28:16:36:LEU:HB3	2.18	0.43
3:1D:35:LYS:HE2	3:1D:64:ILE:HG12	2.00	0.43
7:1H:7:LEU:HD22	7:1H:69:ARG:NH2	2.33	0.43
17:1V:98:GLU:CD	17:1V:100:ARG:HH11	2.27	0.43
21:1Z:102:LEU:HG	21:1Z:123:ASP:HA	1.99	0.43
28:16:14:THR:HB	28:16:48:VAL:O	2.17	0.43
32:1a:950:U:H2'	32:1a:951:G:C8	2.53	0.43
1:2A:83:G:O2'	1:2A:102:G:N2	2.50	0.43
1:2A:315:G:H2'	1:2A:316:C:C6	2.53	0.43
1:2A:1500:G:O2'	3:2D:100:GLY:O	2.34	0.43
1:2A:1827:C:O2'	1:2A:1970:A:N3	2.38	0.43
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.18	0.43
1:2A:2674:G:H2'	1:2A:2675:A:C8	2.53	0.43
2:2B:39:A:O2'	2:2B:40:U:H5'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:77:ALA:HB2	3:2D:97:TYR:CD1	2.53	0.43
21:2Z:121:HIS:HB2	21:2Z:171:ILE:O	2.17	0.43
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.83	0.43
27:25:45:VAL:HG13	27:25:52:TYR:HB2	2.00	0.43
32:2a:264:U:H2'	32:2a:265:G:O4'	2.17	0.43
32:2a:1022:G:C6	32:2a:1023:G:C6	3.07	0.43
47:2p:36:ILE:HD12	47:2p:56:ALA:HB2	2.00	0.43
51:2t:50:GLU:O	51:2t:100:ILE:HD11	2.18	0.43
54:2y:51:U:H2'	54:2y:52:G:C8	2.53	0.43
1:1A:387:U:O4	61:1A:4245:HOH:O	2.16	0.43
1:1A:1082:U:C4	1:1A:1086:A:N1	2.80	0.43
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.18	0.43
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.83	0.43
1:1A:2038:G:H2'	1:1A:2039:C:O4'	2.19	0.43
1:1A:2171:A:O2'	1:1A:2172:U:H5''	2.18	0.43
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.53	0.43
1:1A:2690:C:OP2	13:1R:14:SER:HB3	2.18	0.43
2:1B:30:C:H2'	2:1B:31:C:H5'	2.00	0.43
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.66	0.43
4:1E:2:LYS:HB2	4:1E:95:ILE:HD12	2.00	0.43
14:1S:59:LYS:O	61:1S:301:HOH:O	2.21	0.43
18:1W:67:ASP:OD1	18:1W:67:ASP:N	2.50	0.43
32:1a:865:A:C2	32:1a:918:A:H4'	2.53	0.43
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.53	0.43
37:1f:78:GLU:HA	37:1f:81:ILE:HG13	1.99	0.43
51:1t:30:LYS:O	51:1t:34:LYS:HG3	2.18	0.43
1:2A:911:A:H2'	12:2Q:9:TYR:OH	2.17	0.43
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.53	0.43
1:2A:2291:U:H2'	1:2A:2292:C:H6	1.83	0.43
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.53	0.43
2:2B:13:A:H2'	2:2B:70:C:O2'	2.19	0.43
4:2E:101:ARG:HD2	4:2E:169:ASN:ND2	2.33	0.43
21:2Z:99:TYR:HB3	21:2Z:123:ASP:HB2	1.99	0.43
21:2Z:165:VAL:HG12	21:2Z:166:SER:H	1.84	0.43
28:26:10:LEU:HG	28:26:54:ILE:HG13	2.01	0.43
28:26:25:LYS:NZ	28:26:32:ASN:O	2.52	0.43
32:2a:947:G:O2'	32:2a:1306:A:H4'	2.17	0.43
32:2a:1008:C:C2	32:2a:1022:G:C2	3.06	0.43
32:2a:1141:C:C2	32:2a:1142:G:C8	3.06	0.43
32:2a:1227:A:H5'	44:2m:111:LYS:HZ3	1.83	0.43
34:2c:6:HIS:HB3	45:2n:49:HIS:HD2	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:37:THR:HB	44:2m:55:ARG:HD2	1.99	0.43
48:2q:81:ARG:HH21	48:2q:84:LEU:HD21	1.83	0.43
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.18	0.43
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.48	0.43
1:1A:1508:A:O2'	1:1A:1509:C:OP1	2.31	0.43
1:1A:1771:C:OP1	61:1A:4266:HOH:O	2.20	0.43
1:1A:2135:A:N6	1:1A:2156:G:O2'	2.52	0.43
1:1A:2168:G:O6	1:1A:2171:A:H5''	2.18	0.43
1:1A:2722:G:H2'	1:1A:2723:C:C6	2.53	0.43
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.51	0.43
2:1B:68:C:H2'	2:1B:69:G:O4'	2.19	0.43
4:1E:117:MET:HE2	4:1E:117:MET:HB3	1.82	0.43
11:1P:3:LEU:HD23	11:1P:3:LEU:HA	1.92	0.43
19:1X:12:VAL:HG21	19:1X:27:THR:HG22	1.99	0.43
20:1Y:12:THR:OG1	20:1Y:26:LYS:HE2	2.18	0.43
26:14:56:VAL:O	26:14:60:GLN:HG3	2.18	0.43
32:1a:1358:U:OP1	45:1n:35:ARG:HG3	2.19	0.43
32:1a:1456:G:H8	32:1a:1456:G:OP1	2.02	0.43
37:1f:89:MET:HE3	37:1f:91:VAL:HG21	1.99	0.43
38:1g:16:LEU:HD11	40:1i:42:ARG:HG2	2.01	0.43
38:1g:78:ARG:HD3	38:1g:79:ARG:N	2.33	0.43
39:1h:15:ASN:O	39:1h:19:VAL:HG22	2.18	0.43
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.99	0.43
54:1y:63:G:H2'	54:1y:64:A:H8	1.83	0.43
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.17	0.43
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.48	0.43
6:2G:129:GLY:O	6:2G:161:THR:HB	2.18	0.43
14:2S:11:LYS:HB3	14:2S:11:LYS:HE2	1.71	0.43
21:2Z:27:VAL:HG12	21:2Z:85:HIS:HE1	1.82	0.43
32:2a:1216:G:OP1	45:2n:2:ALA:HA	2.17	0.43
32:2a:1263:C:O2	32:2a:1272:G:N1	2.51	0.43
34:2c:83:ARG:HA	34:2c:87:LEU:HG	2.01	0.43
55:2x:19:G:H4'	55:2x:20:U:OP2	2.18	0.43
1:1A:192:C:O2'	1:1A:802:A:N3	2.49	0.43
1:1A:831:G:O2'	11:1P:38:GLN:OE1	2.28	0.43
1:1A:1087:G:H1	1:1A:1102:C:H42	1.66	0.43
1:1A:1407:C:H2'	1:1A:1408:C:C6	2.53	0.43
1:1A:1889:A:H2'	1:1A:1890:A:C8	2.53	0.43
1:1A:2319:G:H22	14:1S:3:ARG:NE	2.17	0.43
61:1A:4321:HOH:O	16:1U:16:LYS:HD3	2.18	0.43
11:1P:1:MET:HB2	11:1P:1:MET:HE3	1.63	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:97:PRO:HD3	11:1P:126:VAL:O	2.19	0.43
12:1Q:77:LYS:NZ	12:1Q:84:GLY:O	2.42	0.43
32:1a:377:G:OP1	47:1p:3:LYS:HD3	2.18	0.43
32:1a:690:G:C6	32:1a:691:G:C6	3.07	0.43
34:1c:36:ASP:N	34:1c:36:ASP:OD1	2.50	0.43
35:1d:12:CYS:CB	60:1d:501:SF4:S2	3.06	0.43
35:1d:59:ARG:HH12	35:1d:66:ARG:NH1	2.16	0.43
38:1g:26:PHE:CG	38:1g:62:PHE:HE1	2.37	0.43
38:1g:79:ARG:HD2	38:1g:80:VAL:N	2.33	0.43
50:1s:66:MET:HB2	50:1s:74:PHE:CZ	2.53	0.43
54:1y:35:A:C6	54:1y:36:A:C6	3.07	0.43
1:2A:8:A:H2'	1:2A:9:U:C6	2.53	0.43
1:2A:754:C:H2'	1:2A:755:C:C6	2.54	0.43
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.53	0.43
9:2N:28:THR:HG22	9:2N:29:LYS:HG3	1.99	0.43
14:2S:36:TYR:CD1	14:2S:52:SER:HB3	2.54	0.43
32:2a:187:C:H2'	32:2a:188:C:C6	2.53	0.43
32:2a:562:C:H4'	32:2a:563:A:O5'	2.18	0.43
32:2a:964:A:N3	32:2a:969:A:O2'	2.45	0.43
32:2a:984:C:H2'	32:2a:985:C:C6	2.53	0.43
32:2a:1009:G:N3	32:2a:1009:G:H2'	2.33	0.43
32:2a:1179:A:H2'	32:2a:1180:A:C8	2.54	0.43
32:2a:1202:G:C1'	45:2n:29:ARG:HE	2.32	0.43
34:2c:69:HIS:ND1	34:2c:69:HIS:N	2.67	0.43
38:2g:79:ARG:HB2	38:2g:79:ARG:NH2	2.34	0.43
40:2i:3:GLN:CG	40:2i:20:ARG:HE	2.32	0.43
43:2l:24:VAL:HG12	43:2l:98:TYR:CE1	2.53	0.43
1:1A:438:G:H2'	1:1A:440:G:C8	2.53	0.43
1:1A:1063:G:C6	1:1A:1064:C:N4	2.87	0.43
1:1A:1448:G:H1'	1:1A:1528:A:N1	2.33	0.43
1:1A:1466:G:H2'	1:1A:1547:C:N4	2.33	0.43
1:1A:2019:A:O4'	16:1U:34:LYS:HE2	2.19	0.43
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.50	0.43
1:1A:2361:A:OP2	30:18:26:LYS:NZ	2.41	0.43
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.83	0.43
11:1P:90:ARG:NH1	11:1P:105:LEU:HD11	2.34	0.43
15:1T:127:ALA:C	15:1T:129:ARG:N	2.76	0.43
21:1Z:138:GLU:HB2	21:1Z:156:LYS:HZ3	1.83	0.43
26:14:53:GLU:HB2	26:14:55:ARG:O	2.19	0.43
32:1a:1004:A:C5'	32:1a:1024:G:H22	2.32	0.43
32:1a:1054:C:C5	54:1w:34:G:H1'	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1304:G:C6	32:1a:1305:G:N1	2.87	0.43
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.43	0.43
41:1j:17:ASP:OD1	41:1j:70:ARG:NE	2.48	0.43
43:1l:54:LYS:HD2	43:1l:54:LYS:N	2.34	0.43
50:1s:27:GLU:H	50:1s:27:GLU:CD	2.26	0.43
1:2A:250:G:H2'	1:2A:251:A:C8	2.54	0.43
1:2A:1919:A:N1	32:2a:1495:U:O2'	2.41	0.43
1:2A:2062:A:OP1	61:2A:3969:HOH:O	2.21	0.43
1:2A:2110:G:H3'	1:2A:2111:C:C5'	2.48	0.43
1:2A:2228:G:P	3:2D:263:ARG:HH12	2.42	0.43
3:2D:182:LEU:HD23	3:2D:182:LEU:HA	1.88	0.43
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.99	0.43
8:2I:102:SER:O	8:2I:106:GLY:HA2	2.19	0.43
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.19	0.43
30:28:50:LEU:HD23	30:28:50:LEU:HA	1.83	0.43
32:2a:397:A:H3'	32:2a:397:A:N3	2.34	0.43
32:2a:435:C:H2'	32:2a:436:C:C6	2.54	0.43
32:2a:942:G:C2	32:2a:1342:C:C2	3.07	0.43
32:2a:1104:G:C2'	32:2a:1105:A:H5'	2.48	0.43
32:2a:1256:A:H61	32:2a:1278:U:H1'	1.83	0.43
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.18	0.43
32:2a:1272:G:N2	32:2a:1273:G:C6	2.86	0.43
33:2b:87:ARG:HH11	33:2b:219:VAL:HG12	1.84	0.43
33:2b:115:LEU:HD23	33:2b:115:LEU:HA	1.89	0.43
33:2b:216:SER:OG	33:2b:217:ARG:N	2.52	0.43
36:2e:31:LEU:HD23	36:2e:31:LEU:HA	1.80	0.43
37:2f:13:ASN:ND2	37:2f:55:ASP:OD2	2.50	0.43
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.17	0.43
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.54	0.43
48:2q:83:ASP:O	48:2q:87:LYS:HG2	2.18	0.43
54:2y:69:G:H3'	54:2y:70:G:H5''	2.01	0.43
1:1A:362:U:H6	1:1A:362:U:H2'	1.69	0.43
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.18	0.43
1:1A:2322:A:N6	61:1A:4485:HOH:O	2.45	0.43
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.19	0.43
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.18	0.43
32:1a:814:A:N7	32:1a:816:A:C4	2.87	0.43
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	2.00	0.43
47:1p:3:LYS:HG3	47:1p:24:ALA:HB2	1.99	0.43
48:1q:76:LEU:HD12	48:1q:77:VAL:H	1.83	0.43
54:1w:21:A:N6	54:1w:46:G7M:C4	2.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:265:A:H1'	1:2A:266:G:O4'	2.19	0.43
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.54	0.43
1:2A:1466:G:O3'	1:2A:1546:C:O2'	2.37	0.43
1:2A:2373:G:H2'	1:2A:2374:C:C6	2.54	0.43
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	2.00	0.43
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.83	0.43
9:2N:61:ARG:HD3	9:2N:61:ARG:HA	1.87	0.43
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	2.00	0.43
11:2P:55:ARG:HA	61:2P:304:HOH:O	2.18	0.43
24:22:1:MET:HE3	24:22:5:GLU:HB2	2.00	0.43
32:2a:45:U:H2'	32:2a:46:G:C8	2.53	0.43
32:2a:116:A:H61	32:2a:313:A:H1'	1.84	0.43
32:2a:409:G:H1	32:2a:433:C:H42	1.64	0.43
32:2a:1055:A:N7	32:2a:1200:C:N4	2.66	0.43
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.54	0.43
35:2d:111:ALA:HB1	35:2d:116:GLN:HB3	2.00	0.43
38:2g:22:LEU:HD13	38:2g:97:GLN:HE21	1.84	0.43
41:2j:35:SER:HB3	41:2j:73:ASP:HB2	2.00	0.43
54:2w:48:C:O2'	54:2w:59:U:H1'	2.18	0.43
1:1A:340:A:H2'	1:1A:341:G:O4'	2.19	0.43
1:1A:1057:A:H61	1:1A:1081:U:H3	1.66	0.43
1:1A:1289:C:H2'	1:1A:1290:C:C6	2.54	0.43
1:1A:2356:C:H2'	1:1A:2357:U:O4'	2.18	0.43
1:1A:2529:G:H5''	1:1A:2530:A:H5''	2.00	0.43
1:1A:2695:C:H2'	1:1A:2696:U:C6	2.53	0.43
3:1D:8:PRO:HB3	3:1D:14:ARG:HG3	1.99	0.43
4:1E:119:ARG:HH11	4:1E:119:ARG:HG3	1.84	0.43
11:1P:92:GLU:HA	11:1P:123:LEU:HD11	2.00	0.43
32:1a:7:G:O2'	36:1e:120:THR:O	2.37	0.43
32:1a:109:A:C6	32:1a:326:G:C6	3.07	0.43
32:1a:436:C:H2'	32:1a:437:U:H6	1.83	0.43
32:1a:445:G:H2'	32:1a:446:G:O4'	2.19	0.43
32:1a:491:G:H2'	32:1a:492:G:O4'	2.19	0.43
32:1a:859:A:H2'	32:1a:860:A:O4'	2.19	0.43
32:1a:1144:G:C6	32:1a:1145:C:C4	3.07	0.43
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.37	0.43
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.19	0.43
1:2A:27:G:N2	1:2A:512:G:H1'	2.33	0.43
1:2A:287:C:H2'	1:2A:288:C:H6	1.84	0.43
1:2A:463:G:N7	61:2A:4071:HOH:O	2.36	0.43
1:2A:571:A:H5'	1:2A:2030:A:N7	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2641:G:P	9:2N:74:ARG:HH21	2.42	0.43
2:2B:24:G:N3	2:2B:26:A:N6	2.67	0.43
5:2F:182:ASN:HD21	5:2F:185:ASP:HB2	1.82	0.43
7:2H:11:VAL:HG13	7:2H:15:VAL:HG23	2.00	0.43
32:2a:444:C:H2'	32:2a:445:G:C8	2.54	0.43
32:2a:487:A:H2'	32:2a:488:C:O4'	2.19	0.43
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.54	0.43
33:2b:126:GLU:H	33:2b:126:GLU:CD	2.27	0.43
35:2d:67:ILE:O	35:2d:114:ARG:NH1	2.52	0.43
35:2d:191:ARG:NH1	35:2d:194:LEU:HB2	2.33	0.43
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	2.00	0.43
41:2j:12:ASP:HB3	41:2j:15:THR:OG1	2.18	0.43
1:1A:278:A:OP2	1:1A:278:A:H8	2.02	0.43
1:1A:639:U:H2'	1:1A:640:C:C6	2.54	0.43
1:1A:1741:A:H2'	1:1A:1742:G:O4'	2.19	0.43
1:1A:2115:G:H2'	1:1A:2116:G:H5''	2.00	0.43
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	2.01	0.43
32:1a:271:C:H2'	32:1a:272:C:C6	2.53	0.43
32:1a:1391:U:O2'	32:1a:1532:U:OP1	2.26	0.43
35:1d:65:ARG:HG3	35:1d:75:PHE:CG	2.54	0.43
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.51	0.43
54:1y:43:C:H2'	54:1y:44:G:O4'	2.17	0.43
1:2A:589:C:H2'	1:2A:590:A:C8	2.54	0.43
1:2A:801:G:OP2	5:2F:55:GLY:HA2	2.18	0.43
1:2A:1784:A:OP2	61:2A:3908:HOH:O	2.21	0.43
1:2A:2117:A:O2'	1:2A:2118:U:H5''	2.19	0.43
4:2E:23:VAL:HA	4:2E:184:VAL:O	2.19	0.43
5:2F:28:ILE:HG12	5:2F:112:MET:HG2	2.00	0.43
14:2S:87:PHE:HB2	14:2S:112:PHE:CD1	2.54	0.43
17:2V:14:VAL:HB	17:2V:96:ILE:HG13	1.99	0.43
32:2a:963:G:N3	41:2j:54:PHE:HZ	2.17	0.43
32:2a:977:A:O2'	32:2a:981:U:N3	2.50	0.43
32:2a:1249:C:O4'	40:2i:70:LYS:HE2	2.19	0.43
32:2a:1360:A:H8	32:2a:1360:A:OP1	2.02	0.43
33:2b:55:PHE:HE1	33:2b:218:ALA:HA	1.84	0.43
34:2c:53:ALA:HB2	34:2c:115:LEU:HD13	2.01	0.43
38:2g:91:VAL:O	38:2g:96:GLN:NE2	2.42	0.43
39:2h:82:HIS:HB3	39:2h:138:TRP:CE2	2.54	0.43
1:1A:819:A:C4	1:1A:1189:A:C2	3.06	0.43
1:1A:886:C:H3'	1:1A:887:A:C5'	2.48	0.43
1:1A:1814:G:C4'	3:1D:51:VAL:HG21	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2104:G:H2'	1:1A:2105:C:C6	2.54	0.43
3:1D:5:LYS:HE3	3:1D:5:LYS:HB3	1.89	0.43
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.59	0.43
8:1I:103:ARG:HG2	8:1I:104:GLN:N	2.33	0.43
24:12:44:LEU:HD12	24:12:44:LEU:HA	1.87	0.43
32:1a:265:G:H5'	48:1q:64:PRO:O	2.19	0.43
39:1h:20:TYR:HA	39:1h:65:TYR:CZ	2.54	0.43
54:1y:56:C:C4	54:1y:57:G:C8	3.07	0.43
1:2A:287:C:H2'	1:2A:288:C:C6	2.54	0.43
1:2A:614:U:H5'	1:2A:614(C):A:N6	2.34	0.43
1:2A:1614:A:C2	18:2W:93:ALA:HB2	2.54	0.43
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.54	0.43
7:2H:6:ARG:NH2	7:2H:54:ARG:HH12	2.15	0.43
10:2O:98:VAL:CG2	10:2O:118:ALA:HA	2.49	0.43
11:2P:101:VAL:HA	11:2P:106:LEU:O	2.19	0.43
21:2Z:159:PRO:HA	21:2Z:161:VAL:N	2.31	0.43
32:2a:555:C:H2'	32:2a:556:C:C6	2.54	0.43
32:2a:1100:C:H2'	32:2a:1102:A:O5'	2.18	0.43
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.50	0.43
44:2m:40:ASN:HD22	44:2m:43:THR:HG23	1.84	0.43
1:1A:620:G:H2'	1:1A:620:G:N3	2.34	0.42
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.53	0.42
1:1A:958:U:H5'	12:1Q:14:ARG:HD3	1.99	0.42
1:1A:1815:A:H8	1:1A:1815:A:OP1	2.02	0.42
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.54	0.42
2:1B:110:G:H2'	2:1B:111:G:C8	2.54	0.42
8:1I:109:ILE:HD12	8:1I:130:TYR:CZ	2.53	0.42
10:1O:107:ARG:CZ	15:1T:36:GLU:HG2	2.49	0.42
34:1c:48:TYR:C	34:1c:50:ALA:H	2.25	0.42
41:1j:49:VAL:HG12	41:1j:50:ILE:O	2.18	0.42
43:1l:24:VAL:HB	43:1l:27:LEU:HG	2.01	0.42
44:1m:60:VAL:HG22	44:1m:64:TRP:HZ3	1.83	0.42
50:1s:20:LEU:HA	50:1s:23:ASN:ND2	2.33	0.42
54:1y:18:G:N1	54:1y:55:PSU:H1'	2.34	0.42
1:2A:223:A:O2'	1:2A:420:C:O2	2.32	0.42
1:2A:272(H):C:H42	1:2A:363(B):G:H1	1.67	0.42
1:2A:536:A:H5'	16:2U:53:ARG:HD2	2.00	0.42
1:2A:956:G:H2'	1:2A:957:A:H2'	2.01	0.42
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.42	0.42
1:2A:2012:G:H4'	18:2W:96:ILE:HD13	2.00	0.42
2:2B:78:A:C2	2:2B:100:A:C4	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:129:THR:HA	8:2I:138:ILE:O	2.19	0.42
11:2P:99:LEU:HA	11:2P:102:ARG:HE	1.83	0.42
21:2Z:59:LEU:HD13	21:2Z:59:LEU:HA	1.86	0.42
26:24:58:ARG:HD3	50:2s:68:GLY:N	2.26	0.42
26:24:64:GLY:C	26:24:66:SER:H	2.27	0.42
32:2a:560:U:H4'	32:2a:561:U:H5''	2.01	0.42
32:2a:596:C:H2'	32:2a:597:G:H8	1.84	0.42
32:2a:677:U:O2	32:2a:777:A:O2'	2.32	0.42
32:2a:1029:C:N4	32:2a:1032:G:H1	2.17	0.42
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.19	0.42
32:2a:1321:C:OP2	32:2a:1322:C:O2'	2.31	0.42
38:2g:79:ARG:O	38:2g:80:VAL:C	2.62	0.42
39:2h:33:GLU:HG2	39:2h:59:LEU:HD11	2.01	0.42
46:2o:4:THR:O	46:2o:6:GLU:N	2.51	0.42
54:2w:9:A:O2'	54:2w:10:G:N7	2.51	0.42
54:2y:56:C:H2'	54:2y:57:G:H8	1.84	0.42
1:1A:1083:U:H2'	1:1A:1085:A:OP2	2.18	0.42
1:1A:1352:U:OP1	61:1A:4265:HOH:O	2.20	0.42
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.19	0.42
1:1A:1826:G:H4'	3:1D:242:ARG:CZ	2.49	0.42
10:1O:117:LEU:H	10:1O:117:LEU:HG	1.64	0.42
22:10:18:ALA:HB3	22:10:20:ARG:NH1	2.34	0.42
32:1a:235:C:H2'	32:1a:236:G:C8	2.54	0.42
32:1a:325:A:H2'	32:1a:326:G:O4'	2.19	0.42
32:1a:1314:C:H2'	32:1a:1315:U:C6	2.54	0.42
37:1f:6:VAL:HG13	37:1f:90:VAL:HG22	2.01	0.42
46:1o:82:ILE:HD12	46:1o:88:ARG:HB2	2.01	0.42
49:1r:40:LEU:HB3	49:1r:79:LEU:HD11	2.01	0.42
1:2A:128:C:H2'	1:2A:129:C:H6	1.84	0.42
1:2A:557:U:H2'	1:2A:558:G:H8	1.84	0.42
1:2A:580:C:H2'	1:2A:581:C:H6	1.84	0.42
1:2A:686:G:N2	1:2A:788:A:H61	2.16	0.42
1:2A:721:C:H2'	1:2A:722:A:C8	2.54	0.42
25:23:6:VAL:O	25:23:35:ARG:N	2.52	0.42
32:2a:5:U:H5'	32:2a:6:G:C5	2.54	0.42
32:2a:302:G:O2'	32:2a:556:C:H5''	2.19	0.42
32:2a:748:C:H4'	32:2a:749:C:O5'	2.19	0.42
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.44	0.42
34:2c:125:GLU:C	34:2c:127:ARG:H	2.27	0.42
35:2d:8:VAL:HG13	35:2d:21:LEU:HB2	2.01	0.42
35:2d:61:LYS:HD2	35:2d:207:TYR:OH	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:10:MET:HE2	36:2e:55:VAL:HG21	2.01	0.42
36:2e:53:LEU:O	36:2e:57:LYS:HB2	2.19	0.42
40:2i:42:ARG:HE	40:2i:42:ARG:HB3	1.38	0.42
43:2l:117:ARG:HB3	43:2l:122:THR:O	2.18	0.42
44:2m:48:LEU:HD12	44:2m:48:LEU:HA	1.87	0.42
48:2q:81:ARG:NH2	48:2q:84:LEU:HD21	2.34	0.42
53:2v:19:U:C4	54:2w:37:MIA:H113	2.54	0.42
54:2y:52:G:H5'	54:2y:53:G:OP2	2.19	0.42
1:1A:230:U:H2'	1:1A:231:C:C6	2.54	0.42
1:1A:428:A:H8	1:1A:428:A:OP2	2.02	0.42
1:1A:900:A:H2'	1:1A:901:A:O4'	2.19	0.42
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.38	0.42
1:1A:1087:G:H1	1:1A:1102:C:N4	2.17	0.42
1:1A:2102:U:H3	1:1A:2187:G:H1	1.67	0.42
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.54	0.42
1:1A:2360:A:H2'	1:1A:2361:A:O4'	2.19	0.42
5:1F:101:LEU:HD23	5:1F:106:ARG:HG3	2.00	0.42
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	2.01	0.42
14:1S:38:GLN:HB2	14:1S:47:THR:CG2	2.49	0.42
32:1a:953:G:H2'	32:1a:954:G:O4'	2.18	0.42
32:1a:1280:A:OP1	41:1j:7:LYS:NZ	2.52	0.42
33:1b:16:HIS:CD2	33:1b:204:ASN:H	2.37	0.42
33:1b:71:VAL:HG13	33:1b:93:VAL:HG13	2.00	0.42
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.19	0.42
42:1k:20:TYR:HE2	42:1k:33:THR:HG21	1.85	0.42
42:1k:51:LYS:HA	42:1k:51:LYS:HD3	1.77	0.42
51:1t:99:LEU:HA	51:1t:100:ILE:O	2.19	0.42
1:2A:14:A:N6	1:2A:15:G:C2	2.87	0.42
1:2A:93:G:H2'	1:2A:94:C:C6	2.54	0.42
1:2A:172:C:H2'	1:2A:173:G:H8	1.84	0.42
1:2A:345:A:N3	1:2A:347:A:N6	2.67	0.42
1:2A:372:G:OP2	23:21:69:LYS:HE3	2.19	0.42
1:2A:886:C:H2'	1:2A:887:A:O4'	2.20	0.42
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.54	0.42
1:2A:2126:A:N3	1:2A:2127:G:H1'	2.34	0.42
1:2A:2129:C:N4	1:2A:2159:G:N1	2.68	0.42
1:2A:2138:C:C2	1:2A:2154:G:N2	2.87	0.42
6:2G:113:ARG:HD3	6:2G:140:ILE:O	2.19	0.42
10:2O:14:THR:OG1	10:2O:86:ILE:HD12	2.19	0.42
26:24:53:GLU:HG2	26:24:55:ARG:H	1.84	0.42
32:2a:123:C:OP1	32:2a:312:C:H5'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:195:A:N3	32:2a:222:U:O2'	2.46	0.42
32:2a:715:A:H2'	32:2a:716:A:C8	2.54	0.42
32:2a:1095:U:H5''	32:2a:1109:C:O2	2.20	0.42
32:2a:1154:G:H2'	32:2a:1155:G:C8	2.54	0.42
32:2a:1207:2MG:C6	32:2a:1208:C:C4	3.08	0.42
50:2s:20:LEU:HA	50:2s:23:ASN:ND2	2.34	0.42
50:2s:40:ILE:HA	50:2s:44:MET:SD	2.59	0.42
1:1A:2424:C:O2	1:1A:2429:G:O2'	2.36	0.42
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.54	0.42
4:1E:127:ASP:OD2	61:1E:402:HOH:O	2.22	0.42
8:1I:116:LEU:HD11	8:1I:120:ILE:HG13	2.01	0.42
26:14:15:ILE:HG13	26:14:21:VAL:HG22	2.01	0.42
30:18:61:LEU:O	30:18:63:PRO:HD3	2.19	0.42
32:1a:613:C:H2'	32:1a:614:A:C8	2.55	0.42
32:1a:875:C:H4'	39:1h:18:ARG:NH1	2.34	0.42
36:1e:41:VAL:O	36:1e:66:MET:HA	2.19	0.42
54:1y:4:C:N3	54:1y:69:G:O6	2.53	0.42
1:2A:71:A:H5''	1:2A:73:A:C8	2.53	0.42
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	2.02	0.42
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.20	0.42
32:2a:512:U:H2'	32:2a:513:C:H6	1.84	0.42
32:2a:519:C:H2'	32:2a:520:A:O4'	2.18	0.42
32:2a:1014:A:C2	32:2a:1219:U:H1'	2.55	0.42
32:2a:1245:A:N6	32:2a:1292:U:H3	2.16	0.42
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.81	0.42
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.34	0.42
32:2a:1502:A:C8	32:2a:1505:G:N2	2.87	0.42
35:2d:162:LEU:HD23	35:2d:162:LEU:HA	1.89	0.42
39:2h:81:HIS:HB2	39:2h:138:TRP:CD1	2.54	0.42
48:2q:48:GLU:HB2	48:2q:50:LYS:HG3	2.02	0.42
1:1A:329:G:OP2	20:1Y:71:LYS:HD2	2.19	0.42
1:1A:776:G:OP1	61:1A:4273:HOH:O	2.22	0.42
1:1A:2471:C:OP2	61:1A:4272:HOH:O	2.21	0.42
4:1E:60:ASN:OD1	4:1E:63:LEU:HG	2.19	0.42
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.55	0.42
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	2.00	0.42
11:1P:91:PHE:CD1	11:1P:99:LEU:HD21	2.54	0.42
26:14:58:ARG:O	26:14:61:ARG:N	2.51	0.42
32:1a:297:G:H4'	32:1a:557:G:H4'	2.01	0.42
32:1a:659:U:H2'	32:1a:660:G:C8	2.54	0.42
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1009:G:H1'	32:1a:1021:G:N2	2.34	0.42
32:1a:1191:A:H5''	34:1c:4:LYS:NZ	2.34	0.42
32:1a:1196:U:H3	34:1c:162:GLN:HE22	1.67	0.42
32:1a:1371:G:OP2	40:1i:11:LYS:HE2	2.19	0.42
33:1b:72:GLY:HA3	33:1b:81:VAL:HG11	2.02	0.42
51:1t:63:ILE:HD13	51:1t:80:ARG:HB3	2.00	0.42
1:2A:142(A):C:H2'	1:2A:143:G:O4'	2.18	0.42
1:2A:855:G:C5	1:2A:856:C:C4	3.08	0.42
1:2A:2135:A:C5	1:2A:2136:C:H5	2.37	0.42
1:2A:2862:G:C6	1:2A:2863:C:C4	3.08	0.42
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.48	0.42
4:2E:105:THR:HG21	4:2E:164:ARG:CZ	2.49	0.42
6:2G:27:ASN:HB3	6:2G:30:GLU:HB2	2.00	0.42
6:2G:75:LYS:HA	6:2G:84:LYS:HD2	2.02	0.42
8:2I:117:GLU:OE1	8:2I:117:GLU:N	2.50	0.42
10:2O:22:ILE:HG23	10:2O:41:ALA:HA	2.01	0.42
23:21:64:ALA:HA	23:21:67:ILE:HG13	2.01	0.42
32:2a:222:U:H2'	32:2a:223:U:C6	2.53	0.42
32:2a:976:G:C8	32:2a:1358:U:C2	3.07	0.42
32:2a:1302:U:C5	44:2m:17:VAL:HG11	2.55	0.42
32:2a:1316:G:H22	32:2a:1319:A:C5'	2.23	0.42
33:2b:87:ARG:NH1	33:2b:219:VAL:HG12	2.34	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.54	0.42
54:2w:72:C:N3	54:2w:73:A:N6	2.66	0.42
1:1A:26:G:C6	1:1A:27:G:N1	2.88	0.42
1:1A:151:C:H2'	1:1A:152:G:H8	1.85	0.42
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.38	0.42
26:14:61:ARG:O	26:14:63:TYR:N	2.52	0.42
32:1a:108:G:C6	51:1t:15:ARG:HD2	2.54	0.42
32:1a:453:A:C5	32:1a:454:C:C4	3.08	0.42
32:1a:659:U:H2'	32:1a:660:G:H8	1.84	0.42
32:1a:707:C:H4'	42:1k:20:TYR:CD2	2.55	0.42
32:1a:920:U:H2'	32:1a:921:U:C6	2.55	0.42
35:1d:49:ARG:H	35:1d:49:ARG:HG3	1.64	0.42
36:1e:24:ARG:NH2	53:1v:24:A:OP2	2.53	0.42
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.82	0.42
40:1i:7:THR:O	40:1i:83:ARG:NH1	2.53	0.42
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.55	0.42
49:1r:68:LYS:HE2	49:1r:68:LYS:HB2	1.92	0.42
54:1y:11:C:H2'	54:1y:12:U:O4'	2.20	0.42
1:2A:2099:U:H2'	1:2A:2100:G:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2406:U:C4	11:2P:72:PRO:HD2	2.53	0.42
1:2A:2499:C:O2	61:2A:3968:HOH:O	2.21	0.42
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.54	0.42
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.51	0.42
4:2E:179:GLU:HG3	15:2T:9:LEU:HD21	2.02	0.42
6:2G:171:ALA:O	6:2G:175:LEU:HG	2.20	0.42
16:2U:50:ARG:NH2	17:2V:72:VAL:HG22	2.34	0.42
20:2Y:55:TYR:N	20:2Y:56:PRO:HD3	2.34	0.42
32:2a:9:G:H2'	32:2a:10:A:C8	2.55	0.42
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.55	0.42
32:2a:1242:C:H2'	32:2a:1243:C:O4'	2.19	0.42
32:2a:1394:A:N1	32:2a:1500:A:O2'	2.45	0.42
33:2b:61:LEU:HA	33:2b:64:ARG:HB2	2.01	0.42
33:2b:222:ILE:HG13	33:2b:223:ILE:N	2.34	0.42
37:2f:61:LEU:HD13	37:2f:63:TYR:HE2	1.85	0.42
1:1A:271(H):G:H4'	23:11:81:LYS:HG2	2.02	0.42
1:1A:570:G:O6	61:1A:4206:HOH:O	2.21	0.42
1:1A:1357:U:H2'	1:1A:1358:G:O4'	2.20	0.42
1:1A:2187:G:C6	1:1A:2188:C:C4	3.08	0.42
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.21	0.42
1:1A:2889:C:H3'	1:1A:2891:G:C8	2.54	0.42
5:1F:28:ILE:O	5:1F:30:PRO:HD3	2.20	0.42
8:1I:4:ILE:HG12	8:1I:18:VAL:HG22	2.00	0.42
10:1O:98:VAL:HG22	10:1O:118:ALA:HA	2.02	0.42
14:1S:32:LEU:HA	14:1S:32:LEU:HD23	1.80	0.42
23:11:23:LYS:HB3	23:11:29:GLY:HA3	2.01	0.42
32:1a:4:U:C4	39:1h:105:ARG:HD3	2.55	0.42
32:1a:993:G:H2'	32:1a:995:C:H41	1.84	0.42
32:1a:1035:A:C2	32:1a:1036:G:N2	2.88	0.42
32:1a:1286:A:C8	32:1a:1287:A:H4'	2.55	0.42
37:1f:19:LEU:HD11	37:1f:59:TYR:CG	2.54	0.42
41:1j:45:ARG:HG2	41:1j:47:PHE:CZ	2.55	0.42
49:1r:26:LEU:HD23	49:1r:39:VAL:HG13	2.02	0.42
1:2A:927:G:H2'	1:2A:928:G:O4'	2.18	0.42
1:2A:1183:G:H2'	1:2A:1184:G:H8	1.84	0.42
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.51	0.42
1:2A:1818:U:O4	3:2D:154:LYS:HD2	2.19	0.42
1:2A:2011:U:H2'	1:2A:2012:G:O4'	2.19	0.42
1:2A:2227:A:H5''	3:2D:263:ARG:NH1	2.34	0.42
1:2A:2309:A:H8	1:2A:2309:A:OP1	2.03	0.42
1:2A:2556:C:H2'	1:2A:2557:G:O4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:120:TRP:CE3	4:2E:155:LYS:HD3	2.55	0.42
5:2F:64:ILE:HG13	5:2F:65:TRP:N	2.34	0.42
6:2G:16:ARG:HA	6:2G:16:ARG:HD2	1.90	0.42
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.19	0.42
32:2a:9:G:H2'	32:2a:10:A:H8	1.85	0.42
32:2a:1074:G:O2'	33:2b:103:THR:OG1	2.36	0.42
32:2a:1205:U:O2'	34:2c:195:VAL:HG12	2.19	0.42
33:2b:153:ARG:C	33:2b:155:LEU:H	2.27	0.42
36:2e:27:ARG:NH1	61:2e:301:HOH:O	2.52	0.42
39:2h:73:ASP:OD2	39:2h:75:ARG:NE	2.48	0.42
40:2i:16:ARG:HB2	40:2i:64:THR:CG2	2.50	0.42
44:2m:14:ARG:HB2	44:2m:17:VAL:HG22	2.00	0.42
1:1A:996:A:H4'	16:1U:91:ASP:OD2	2.19	0.42
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.55	0.42
1:1A:2016:U:OP2	61:1A:4274:HOH:O	2.22	0.42
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.55	0.42
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	2.01	0.42
6:1G:104:GLU:O	6:1G:108:ASN:HB2	2.20	0.42
16:1U:102:GLU:HB3	16:1U:104:GLN:HE22	1.84	0.42
32:1a:184:G:H2'	32:1a:185:A:C8	2.54	0.42
32:1a:624:C:O3'	47:1p:10:GLY:HA2	2.20	0.42
32:1a:662:G:H2'	32:1a:663:A:C8	2.55	0.42
32:1a:765:G:H5''	32:1a:766:A:OP1	2.20	0.42
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	2.01	0.42
38:1g:152:ALA:O	38:1g:155:ARG:HB3	2.20	0.42
40:1i:85:LEU:O	40:1i:88:TYR:HB3	2.20	0.42
1:2A:361:G:C2'	1:2A:362:U:H5'	2.49	0.42
1:2A:848:G:OP1	61:2A:3964:HOH:O	2.20	0.42
1:2A:960:A:C5	1:2A:962:G:H1'	2.55	0.42
1:2A:1187:G:O6	61:2A:3970:HOH:O	2.22	0.42
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.55	0.42
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.19	0.42
1:2A:1670:C:O2	4:2E:129:HIS:NE2	2.39	0.42
1:2A:1805:U:O2	3:2D:50:THR:HB	2.20	0.42
1:2A:1885:A:H2'	1:2A:1886:C:O4'	2.20	0.42
2:2B:118:G:C2	2:2B:119:G:H1'	2.55	0.42
4:2E:78:LEU:HD23	4:2E:78:LEU:HA	1.86	0.42
4:2E:176:ILE:HB	4:2E:181:LEU:HB2	2.01	0.42
6:2G:32:PRO:HB3	6:2G:163:ALA:HB2	2.01	0.42
8:2I:86:THR:C	8:2I:123:LEU:HD12	2.45	0.42
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH1	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:133:ARG:HG2	12:2Q:134:ARG:N	2.35	0.42
15:2T:127:ALA:C	15:2T:129:ARG:N	2.73	0.42
16:2U:95:LEU:HD23	16:2U:95:LEU:HA	1.90	0.42
32:2a:51:A:N7	32:2a:114:U:O2'	2.42	0.42
32:2a:189(A):C:H2'	32:2a:189(B):C:C6	2.55	0.42
32:2a:189(A):C:H2'	32:2a:189(B):C:H6	1.84	0.42
32:2a:237:C:H5''	48:2q:25:ARG:CZ	2.50	0.42
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.34	0.42
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	2.02	0.42
40:2i:43:ALA:O	40:2i:45:ALA:N	2.53	0.42
41:2j:13:HIS:CG	41:2j:14:LYS:N	2.88	0.42
46:2o:18:PHE:CE2	46:2o:21:ASP:HB2	2.55	0.42
46:2o:55:GLY:HA2	46:2o:58:MET:HE3	2.02	0.42
1:1A:238:C:H2'	1:1A:239:U:O4'	2.19	0.42
1:1A:528:A:O2'	1:1A:529:A:H5'	2.20	0.42
1:1A:719:C:H2'	1:1A:720:C:H6	1.85	0.42
1:1A:908:C:OP1	12:1Q:22:LYS:HB3	2.20	0.42
1:1A:1501:C:O4'	3:1D:100:GLY:HA2	2.19	0.42
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.38	0.42
1:1A:2094:G:OP1	8:1I:22:LYS:HD2	2.20	0.42
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.44	0.42
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.19	0.42
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.55	0.42
8:1I:30:LEU:HD23	8:1I:35:LEU:HD12	2.00	0.42
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	2.02	0.42
32:1a:189:G:C6	32:1a:189(L):G:N1	2.88	0.42
32:1a:262:A:C6	32:1a:263:A:C6	3.08	0.42
35:1d:180:GLY:O	35:1d:182:LYS:HG3	2.20	0.42
39:1h:101:PRO:HG3	39:1h:133:LEU:HD11	2.00	0.42
48:1q:60:ILE:HG22	48:1q:74:LEU:HB2	2.02	0.42
1:2A:140:G:N2	1:2A:1596:A:H4'	2.35	0.42
1:2A:328:U:H4'	20:2Y:68:HIS:ND1	2.34	0.42
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.20	0.42
1:2A:2129:C:N3	1:2A:2159:G:N2	2.58	0.42
1:2A:2469:A:H5''	1:2A:2470:G:OP2	2.20	0.42
1:2A:2483:C:H2'	1:2A:2484:G:O4'	2.20	0.42
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.20	0.42
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	2.02	0.42
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.35	0.42
9:2N:19:GLU:HG3	9:2N:59:LYS:HB3	2.01	0.42
32:2a:157:G:H2'	32:2a:158:G:H8	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:841:U:H6	32:2a:841:U:P	2.43	0.42
32:2a:1230:C:H2'	32:2a:1231:G:H8	1.84	0.42
38:2g:35:LYS:HG2	61:2g:301:HOH:O	2.19	0.42
41:2j:81:THR:O	41:2j:84:GLN:N	2.53	0.42
42:2k:75:TYR:CD2	42:2k:75:TYR:N	2.88	0.42
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	2.02	0.42
1:1A:1203:G:O6	61:1A:4264:HOH:O	2.20	0.42
1:1A:2412:A:H2'	1:1A:2413:G:O4'	2.19	0.42
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.20	0.42
4:1E:101:ARG:HA	4:1E:170:LEU:O	2.19	0.42
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.20	0.42
16:1U:58:ARG:HA	16:1U:61:TRP:CE3	2.55	0.42
32:1a:587:G:N7	61:1a:1945:HOH:O	2.37	0.42
32:1a:670:G:H2'	32:1a:671:G:O4'	2.20	0.42
32:1a:1106:G:H2'	32:1a:1107:C:H6	1.84	0.42
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.85	0.42
40:1i:83:ARG:HA	40:1i:86:VAL:HG22	2.02	0.42
42:1k:99:GLN:HG2	42:1k:105:VAL:HG11	2.02	0.42
47:1p:14:ASN:N	47:1p:15:PRO:HD3	2.35	0.42
54:1y:7:A:HO2'	54:1y:49:C:H5'	1.85	0.42
54:1y:37:MIA:H2'	54:1y:38:A:O4'	2.19	0.42
1:2A:588:U:H2'	1:2A:589:C:C6	2.54	0.42
1:2A:646:A:H2'	1:2A:647:G:O4'	2.19	0.42
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.24	0.42
1:2A:1754:C:H2'	1:2A:1755:A:O4'	2.20	0.42
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.53	0.42
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.53	0.42
4:2E:183:LEU:HD11	15:2T:10:VAL:HG11	2.02	0.42
6:2G:96:ARG:N	6:2G:99:MET:HE2	2.35	0.42
8:2I:130:TYR:HE2	8:2I:132:PRO:HB3	1.84	0.42
9:2N:1:MET:CE	17:2V:12:TYR:HA	2.46	0.42
11:2P:89:ALA:O	11:2P:121:LYS:NZ	2.45	0.42
12:2Q:22:LYS:HB3	12:2Q:22:LYS:HE2	1.88	0.42
13:2R:18:LEU:O	13:2R:22:ARG:HG3	2.20	0.42
13:2R:26:LYS:HE2	13:2R:70:LEU:O	2.19	0.42
14:2S:39:ILE:HG13	14:2S:73:LEU:HD11	2.02	0.42
19:2X:29:TRP:CZ3	19:2X:78:LYS:HB3	2.55	0.42
20:2Y:37:VAL:N	20:2Y:67:LEU:O	2.48	0.42
32:2a:227:G:H2'	32:2a:228:A:C8	2.55	0.42
32:2a:1240:U:N3	38:2g:30:ILE:O	2.26	0.42
32:2a:1265:G:C2	32:2a:1271:G:C2	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:95:GLN:HB3	33:2b:148:TYR:CD1	2.55	0.42
35:2d:101:LEU:HA	35:2d:104:VAL:HG22	2.02	0.42
38:2g:79:ARG:NH1	38:2g:80:VAL:HA	2.35	0.42
39:2h:84:ARG:HH12	39:2h:86:ILE:HG12	1.85	0.42
40:2i:3:GLN:HG3	40:2i:20:ARG:HE	1.85	0.42
44:2m:92:HIS:CE1	44:2m:98:VAL:HG21	2.54	0.42
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.48	0.42
54:2y:70:G:C6	54:2y:71:G:C5	3.07	0.42
1:1A:41:C:H2'	1:1A:42:G:O4'	2.19	0.41
1:1A:1386:C:H2'	1:1A:1387:C:C6	2.55	0.41
1:1A:1802:A:N1	1:1A:1822:G:H1'	2.35	0.41
1:1A:2030:A:H4'	1:1A:2031:A:C8	2.55	0.41
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.55	0.41
5:1F:103:LYS:HA	5:1F:106:ARG:HD3	2.02	0.41
8:1I:81:VAL:HG21	8:1I:88:ILE:HD13	2.01	0.41
20:1Y:1:MET:HB3	20:1Y:2:ARG:H	1.61	0.41
20:1Y:90:LEU:HD21	20:1Y:96:ILE:HG12	2.02	0.41
21:1Z:52:SER:O	21:1Z:52:SER:OG	2.32	0.41
21:1Z:131:ARG:H	21:1Z:131:ARG:HG2	1.64	0.41
32:1a:119:A:H4'	32:1a:120:A:C8	2.55	0.41
32:1a:257:G:C6	32:1a:258:G:C5	3.08	0.41
32:1a:1358:U:OP2	32:1a:1359:C:N4	2.42	0.41
38:1g:79:ARG:O	38:1g:80:VAL:C	2.62	0.41
39:1h:64:LYS:HB3	39:1h:79:VAL:HG21	2.02	0.41
40:1i:63:ILE:HG21	40:1i:77:ILE:HG12	2.01	0.41
42:1k:45:GLY:O	42:1k:50:TYR:HB2	2.19	0.41
54:1y:27:G:H22	54:1y:44:G:H1'	1.85	0.41
1:2A:176:G:O2'	1:2A:177:G:H5'	2.20	0.41
1:2A:570:G:H2'	1:2A:2030:A:N7	2.35	0.41
1:2A:580:C:H2'	1:2A:581:C:C6	2.55	0.41
1:2A:972:G:OP2	1:2A:973:A:O2'	2.33	0.41
1:2A:1506:C:H2'	1:2A:1507:A:H5'	2.00	0.41
1:2A:1709:U:H2'	1:2A:1710:C:C6	2.55	0.41
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.55	0.41
1:2A:2320:A:N6	1:2A:2333:A:H2'	2.35	0.41
1:2A:2864:G:OP1	15:2T:119:LYS:HD3	2.20	0.41
2:2B:72:G:O2'	2:2B:105:A:N6	2.52	0.41
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.18	0.41
4:2E:24:THR:O	4:2E:184:VAL:HG23	2.20	0.41
5:2F:184:TYR:C	5:2F:186:ILE:H	2.28	0.41
9:2N:73:THR:HA	9:2N:83:LYS:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:2T:125:ARG:NH1	32:2a:1442(B):A:H4'	2.35	0.41
23:21:80:LEU:HD23	23:21:82:LEU:HD21	2.02	0.41
32:2a:374:A:C6	32:2a:375:U:C4	3.08	0.41
32:2a:529:G:O6	43:2l:49:ASN:HA	2.20	0.41
32:2a:689:C:P	42:2k:46:GLY:HA3	2.60	0.41
32:2a:789:U:H2'	32:2a:791:G:OP2	2.19	0.41
32:2a:922:G:N3	32:2a:1398:A:H2	2.17	0.41
32:2a:1001(A):G:C4	32:2a:1002:G:H1'	2.55	0.41
32:2a:1306:A:H2'	32:2a:1307:U:O4'	2.20	0.41
37:2f:44:GLY:HA2	37:2f:59:TYR:CE1	2.54	0.41
38:2g:14:PRO:HB3	38:2g:19:GLY:O	2.19	0.41
38:2g:92:SER:O	38:2g:96:GLN:HG3	2.20	0.41
40:2i:5:TYR:HD1	40:2i:18:PHE:HE1	1.67	0.41
44:2m:65:LYS:HB2	44:2m:65:LYS:HE3	1.80	0.41
44:2m:107:ALA:HB3	44:2m:111:LYS:HG3	2.01	0.41
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	2.01	0.41
55:2x:66:C:H2'	55:2x:67:C:C6	2.55	0.41
1:1A:234:C:H2'	1:1A:235:U:H6	1.85	0.41
1:1A:236:C:H2'	1:1A:237:C:C6	2.55	0.41
1:1A:1167:U:H2'	1:1A:1168:G:C8	2.55	0.41
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.20	0.41
1:1A:2123:G:H1	1:1A:2175:C:N4	2.17	0.41
1:1A:2716:U:O2'	1:1A:2717:G:H5'	2.20	0.41
1:1A:2788:C:O2	1:1A:2809:A:H2	2.04	0.41
11:1P:37:GLY:C	11:1P:38:GLN:O	2.63	0.41
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.35	0.41
33:1b:141:GLU:O	33:1b:145:LEU:HD12	2.20	0.41
35:1d:101:LEU:O	35:1d:105:VAL:HG23	2.20	0.41
35:1d:194:LEU:HD12	35:1d:195:ALA:H	1.85	0.41
36:1e:84:PHE:CE2	36:1e:133:TYR:HD2	2.37	0.41
39:1h:9:MET:HG3	39:1h:26:VAL:HG21	2.01	0.41
53:1v:16:A:H2'	53:1v:17:U:O4'	2.19	0.41
1:2A:18:C:H2'	1:2A:19:C:C6	2.56	0.41
1:2A:489:G:N7	18:2W:49:LYS:NZ	2.68	0.41
1:2A:969:U:H2'	1:2A:970:C:C6	2.55	0.41
1:2A:2136:C:HO2'	1:2A:2137:C:H6	1.65	0.41
12:2Q:85:LYS:HG2	22:20:7:LEU:HB2	2.01	0.41
17:2V:20:LEU:HD12	17:2V:20:LEU:HA	1.83	0.41
32:2a:57:G:H2'	32:2a:58:C:C6	2.55	0.41
32:2a:685:G:N1	32:2a:686:U:O4	2.53	0.41
32:2a:967:5MC:H2'	32:2a:968:A:N7	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1014:A:H4'	50:2s:14:HIS:CD2	2.55	0.41
33:2b:47:THR:HA	33:2b:202:PRO:HG2	2.01	0.41
33:2b:109:SER:O	33:2b:112:VAL:HG12	2.20	0.41
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.19	0.41
37:2f:23:LYS:HG2	37:2f:61:LEU:HD11	2.02	0.41
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.54	0.41
54:2y:72:C:H2'	54:2y:73:A:O4'	2.20	0.41
1:1A:1054:A:C6	1:1A:1055:G:C6	3.08	0.41
1:1A:1074:G:N1	1:1A:1075:C:H1'	2.36	0.41
1:1A:1702:G:H2'	1:1A:1703:G:O4'	2.20	0.41
1:1A:2155:G:H3'	1:1A:2156:G:H5'	2.02	0.41
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.84	0.41
1:1A:2662:A:H8	1:1A:2662:A:O5'	2.03	0.41
61:1A:4332:HOH:O	22:10:41:ARG:HD3	2.20	0.41
10:1O:25:LEU:HG	10:1O:40:VAL:HG23	2.02	0.41
10:1O:70:LYS:HB3	10:1O:70:LYS:HE2	1.88	0.41
13:1R:44:LEU:O	13:1R:48:VAL:HG23	2.20	0.41
28:16:17:LYS:HE3	28:16:17:LYS:HB3	1.85	0.41
32:1a:148:G:H2'	32:1a:149:A:H8	1.85	0.41
32:1a:1112:C:H1'	34:1c:179:ARG:HH11	1.86	0.41
33:1b:157:ARG:HG2	33:1b:158:LEU:N	2.35	0.41
33:1b:205:ASP:C	33:1b:211:ILE:HD11	2.45	0.41
41:1j:78:ASN:C	41:1j:80:LYS:H	2.29	0.41
51:1t:26:ASN:O	51:1t:30:LYS:HG3	2.21	0.41
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.85	0.41
1:2A:613:G:O2'	1:2A:614(C):A:N1	2.41	0.41
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.36	0.41
1:2A:2193:G:H2'	1:2A:2194:G:H8	1.83	0.41
1:2A:2538:C:H2'	1:2A:2539:C:C6	2.55	0.41
1:2A:2584:U:H2'	1:2A:2585:U:H2'	2.02	0.41
1:2A:2747:G:O6	1:2A:2755:C:H5''	2.19	0.41
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	2.02	0.41
5:2F:129:PHE:HA	5:2F:142:TRP:NE1	2.36	0.41
13:2R:8:ARG:HE	13:2R:43:GLU:HG2	1.84	0.41
32:2a:50:A:H1'	32:2a:52:G:C8	2.55	0.41
32:2a:68:G:N2	32:2a:152:A:O2'	2.53	0.41
32:2a:93:G:H2'	32:2a:96:U:O4'	2.20	0.41
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.54	0.41
32:2a:297:G:N2	32:2a:300:A:OP2	2.52	0.41
32:2a:1023:G:C5	32:2a:1024:G:C8	3.09	0.41
32:2a:1170:A:C4	32:2a:1171:G:H1'	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1315:U:H2'	32:2a:1316:G:O4'	2.20	0.41
33:2b:91:PRO:HA	33:2b:151:GLY:O	2.21	0.41
36:2e:5:ASP:OD1	36:2e:5:ASP:N	2.53	0.41
41:2j:33:GLN:HE21	41:2j:33:GLN:HB3	1.66	0.41
43:2l:36:VAL:HG22	43:2l:82:VAL:HG22	2.02	0.41
52:2u:9:ARG:O	52:2u:13:ILE:HG13	2.20	0.41
1:1A:44:G:H5''	1:1A:45:C:OP1	2.20	0.41
1:1A:659:C:H4'	5:1F:100:THR:O	2.21	0.41
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.20	0.41
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.56	0.41
1:1A:1750:G:O2'	1:1A:2860:A:N1	2.51	0.41
1:1A:2807:G:N1	1:1A:2893:G:O6	2.47	0.41
6:1G:116:ASP:OD2	44:1m:68:GLY:HA3	2.20	0.41
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HE2	2.03	0.41
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	2.02	0.41
13:1R:86:ARG:NH2	61:1R:303:HOH:O	2.31	0.41
21:1Z:69:THR:HA	21:1Z:89:PHE:O	2.20	0.41
32:1a:57:G:H2'	32:1a:58:C:C6	2.55	0.41
32:1a:161:A:H2'	32:1a:162:A:O4'	2.20	0.41
32:1a:562:C:H1'	43:1l:15:ARG:HB3	2.02	0.41
32:1a:625:G:H2'	32:1a:626:U:C6	2.55	0.41
32:1a:672:U:H2'	32:1a:673:G:H8	1.85	0.41
32:1a:784:C:H2'	32:1a:785:G:O4'	2.21	0.41
32:1a:936:C:H2'	32:1a:937:A:O4'	2.20	0.41
32:1a:1225:A:H2'	32:1a:1226:C:C5	2.55	0.41
50:1s:49:ILE:N	50:1s:60:VAL:O	2.40	0.41
54:1y:7:A:C6	54:1y:49:C:C4	3.09	0.41
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.21	0.41
1:2A:724:U:H2'	1:2A:725:G:O4'	2.20	0.41
1:2A:775:G:C4	1:2A:794:G:C8	3.08	0.41
1:2A:902:C:H2'	1:2A:903:C:C6	2.55	0.41
1:2A:1847:A:H3'	1:2A:1848:A:H5'	2.02	0.41
1:2A:2286:A:H61	28:26:23:THR:HG21	1.85	0.41
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.20	0.41
1:2A:2774:C:H2'	1:2A:2775:A:O4'	2.20	0.41
3:2D:37:LEU:HD13	3:2D:87:ASN:ND2	2.35	0.41
9:2N:103:VAL:HG11	9:2N:120:LEU:HD22	2.02	0.41
12:2Q:43:THR:HG23	12:2Q:46:GLN:CD	2.46	0.41
21:2Z:136:PHE:HD1	21:2Z:136:PHE:HA	1.75	0.41
28:26:15:GLU:HG3	28:26:47:THR:HG23	2.01	0.41
32:2a:9:G:OP1	36:2e:122:GLU:N	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:837:G:H1	32:2a:849:C:H42	1.67	0.41
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.85	0.41
32:2a:1314:C:H2'	32:2a:1315:U:C6	2.55	0.41
32:2a:1372:U:OP1	40:2i:72:GLY:N	2.53	0.41
33:2b:219:VAL:O	33:2b:223:ILE:HG13	2.20	0.41
35:2d:59:ARG:NH1	35:2d:59:ARG:HA	2.35	0.41
35:2d:128:VAL:N	35:2d:131:ARG:O	2.43	0.41
36:2e:47:LYS:HZ2	36:2e:47:LYS:HB3	1.85	0.41
37:2f:60:PHE:CE2	49:2r:78:LEU:HD21	2.56	0.41
50:2s:69:HIS:HD2	50:2s:73:GLU:OE2	2.03	0.41
1:1A:292:C:H2'	1:1A:293:U:C6	2.55	0.41
1:1A:893:C:H2'	1:1A:894:C:C6	2.55	0.41
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.55	0.41
1:1A:2701:C:H2'	1:1A:2702:U:H2'	2.02	0.41
1:1A:2740:A:C6	1:1A:2741:A:C6	3.08	0.41
2:1B:75:G:H5''	21:1Z:36:LYS:HD3	2.03	0.41
8:1I:77:LEU:HG	8:1I:101:LEU:HG	2.02	0.41
36:1e:131:ILE:HD13	36:1e:131:ILE:HA	1.85	0.41
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.20	0.41
1:2A:644:A:C2	1:2A:2369:A:H1'	2.56	0.41
1:2A:875:G:C2	1:2A:903:C:C2	3.08	0.41
1:2A:1184:G:C6	1:2A:1185:C:C4	3.09	0.41
1:2A:1201:C:H2'	1:2A:1202:C:C6	2.55	0.41
1:2A:1639:U:H4'	1:2A:2699:C:H4'	2.03	0.41
1:2A:1754:C:N3	1:2A:2716:U:O2'	2.49	0.41
1:2A:2336:A:H61	22:20:43:THR:HG22	1.85	0.41
1:2A:2669:G:H2'	1:2A:2670:A:H8	1.84	0.41
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.20	0.41
1:2A:2802:G:N3	1:2A:2803:C:H1'	2.36	0.41
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.21	0.41
5:2F:64:ILE:HD12	5:2F:65:TRP:CZ3	2.56	0.41
5:2F:176:LEU:HD23	5:2F:176:LEU:HA	1.96	0.41
7:2H:3:ARG:HD2	7:2H:3:ARG:HA	1.68	0.41
14:2S:39:ILE:HB	14:2S:49:VAL:HB	2.03	0.41
16:2U:61:TRP:CH2	16:2U:93:LYS:HB2	2.55	0.41
17:2V:94:LEU:HD23	17:2V:94:LEU:HA	1.93	0.41
18:2W:11:ARG:HA	18:2W:100:THR:HG22	2.01	0.41
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.57	0.41
21:2Z:35:ARG:HD3	21:2Z:35:ARG:HA	1.88	0.41
26:24:46:GLN:C	26:24:48:ARG:N	2.78	0.41
32:2a:256:U:H2'	32:2a:257:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:762:C:H2'	32:2a:763:G:H8	1.85	0.41
32:2a:938:A:C6	32:2a:939:G:C5	3.08	0.41
32:2a:1124:G:N7	32:2a:1145:C:O2'	2.48	0.41
32:2a:1350:A:C2	32:2a:1351:U:C2	3.08	0.41
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.50	0.41
33:2b:33:TYR:HB3	33:2b:41:ILE:HD12	2.03	0.41
33:2b:70:PHE:H	33:2b:92:TYR:HA	1.85	0.41
35:2d:153:ARG:HA	35:2d:181:MET:HE2	2.03	0.41
38:2g:66:VAL:HG12	38:2g:70:LYS:HE3	2.01	0.41
39:2h:103:VAL:HB	39:2h:108:GLY:C	2.46	0.41
47:2p:21:VAL:HG13	47:2p:34:GLU:HB3	2.03	0.41
51:2t:87:LYS:HA	51:2t:90:GLN:HB2	2.03	0.41
54:2y:15:G:N1	54:2y:48:C:N3	2.63	0.41
1:1A:1330:C:O2'	1:1A:1331:A:H5'	2.21	0.41
1:1A:1449:A:H2'	1:1A:1450:G:O4'	2.21	0.41
1:1A:1480:G:O6	61:1A:4247:HOH:O	2.17	0.41
1:1A:1652:A:OP1	13:1R:8:ARG:HD3	2.20	0.41
1:1A:2313:C:H4'	6:1G:91:ARG:HG3	2.02	0.41
1:1A:2632:A:O2'	1:1A:2811:G:O2'	2.28	0.41
14:1S:105:ALA:O	14:1S:110:LEU:HB2	2.21	0.41
16:1U:34:LYS:HA	16:1U:34:LYS:HD2	1.83	0.41
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.56	0.41
32:1a:138:G:H1	32:1a:225:C:H42	1.69	0.41
32:1a:731:G:OP1	32:1a:766:A:H1'	2.21	0.41
32:1a:855:G:C2	32:1a:856:C:C2	3.08	0.41
32:1a:962:C:H2'	32:1a:963:G:O4'	2.20	0.41
32:1a:1198:G:OP1	61:1a:1923:HOH:O	2.22	0.41
35:1d:103:ASN:O	35:1d:107:ARG:HG2	2.21	0.41
38:1g:144:MET:HE2	38:1g:144:MET:HB3	1.78	0.41
41:1j:38:ILE:CG1	41:1j:71:LEU:HB3	2.51	0.41
42:1k:20:TYR:CZ	42:1k:83:ILE:HD12	2.56	0.41
54:1y:68:C:N3	54:1y:69:G:C8	2.89	0.41
1:2A:108:U:OP1	1:2A:293:U:O2'	2.39	0.41
1:2A:141:A:C8	1:2A:1408:C:O2'	2.73	0.41
1:2A:524:U:H2'	1:2A:525:U:C6	2.56	0.41
1:2A:709:U:H2'	1:2A:710:G:C8	2.56	0.41
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.35	0.41
1:2A:1278:A:H2'	1:2A:1279:G:C8	2.56	0.41
1:2A:2055:C:H5'	1:2A:2056:G:O5'	2.21	0.41
1:2A:2881:C:O2'	13:2R:96:ARG:HA	2.21	0.41
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	2.01	0.41
5:2F:196:LEU:HD23	5:2F:196:LEU:HA	1.88	0.41
9:2N:34:LEU:O	9:2N:49:GLY:HA3	2.19	0.41
14:2S:16:ASN:O	14:2S:20:ARG:HG2	2.21	0.41
21:2Z:127:LYS:N	21:2Z:162:GLU:O	2.50	0.41
32:2a:38:G:C2	32:2a:397:A:C2	3.08	0.41
32:2a:70:G:H2'	32:2a:71:C:O4'	2.21	0.41
32:2a:154:C:H2'	32:2a:155:C:H6	1.85	0.41
32:2a:300:A:H1'	32:2a:565:U:O2	2.21	0.41
32:2a:325:A:H2'	32:2a:326:G:O4'	2.19	0.41
32:2a:441:A:H3'	32:2a:442:C:H6	1.85	0.41
32:2a:512:U:H2'	32:2a:513:C:C6	2.55	0.41
32:2a:554:C:H2'	32:2a:555:C:H6	1.86	0.41
32:2a:860:A:H2'	32:2a:861:G:O4'	2.19	0.41
32:2a:977:A:H2	32:2a:1224:G:C6	2.39	0.41
32:2a:1005:A:N7	32:2a:1024:G:H1'	2.35	0.41
36:2e:110:LEU:HD13	36:2e:118:ILE:HD13	2.02	0.41
39:2h:20:TYR:HA	39:2h:65:TYR:CZ	2.56	0.41
44:2m:30:ALA:O	44:2m:34:LEU:HG	2.21	0.41
46:2o:67:LEU:HD21	46:2o:81:LEU:HD23	2.03	0.41
50:2s:27:GLU:OE1	50:2s:28:LYS:NZ	2.47	0.41
50:2s:50:ALA:O	50:2s:57:HIS:ND1	2.44	0.41
1:1A:467:G:P	29:17:33:ARG:HH12	2.44	0.41
1:1A:719:C:H2'	1:1A:720:C:C6	2.56	0.41
1:1A:1041:C:C2	1:1A:1115:G:C2	3.09	0.41
1:1A:1057:A:N7	1:1A:1086:A:H2'	2.35	0.41
1:1A:1096:A:N6	1:1A:1097:U:O2	2.53	0.41
1:1A:1413:G:N2	1:1A:1590:U:C2	2.89	0.41
1:1A:2134:A:H2'	1:1A:2159:G:O2'	2.20	0.41
1:1A:2531:A:H5''	7:1H:157:TYR:CZ	2.55	0.41
1:1A:2627:G:N2	1:1A:2777:G:OP2	2.52	0.41
4:1E:49:LEU:HD12	4:1E:49:LEU:HA	1.76	0.41
6:1G:49:ASP:O	6:1G:50:ALA:HB2	2.21	0.41
9:1N:1:MET:HE2	9:1N:1:MET:HB3	1.73	0.41
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.56	0.41
31:19:2:LYS:NZ	31:19:31:LYS:O	2.37	0.41
32:1a:245:C:O2	32:1a:283:C:N3	2.54	0.41
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.53	0.41
37:1f:10:LEU:HA	37:1f:84:ASN:O	2.21	0.41
44:1m:92:HIS:CD2	44:1m:110:ARG:HH22	2.39	0.41
54:1y:50:U:C4	54:1y:64:A:N1	2.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:848:G:H2'	1:2A:849:A:C8	2.55	0.41
1:2A:1139:G:O2'	1:2A:1143:A:N1	2.45	0.41
1:2A:2176:A:H8	1:2A:2176:A:OP2	2.04	0.41
1:2A:2711:A:OP1	1:2A:2712:U:H3'	2.21	0.41
2:2B:33:G:C2	2:2B:50:G:C2	3.09	0.41
8:2I:43:ASN:ND2	23:21:75:GLU:OE2	2.53	0.41
16:2U:27:LEU:HD23	16:2U:27:LEU:HA	1.78	0.41
23:21:69:LYS:HE2	23:21:72:GLU:OE1	2.21	0.41
26:24:10:VAL:HG11	26:24:29:PRO:HG3	2.02	0.41
28:26:13:CYS:SG	28:26:47:THR:HG21	2.60	0.41
32:2a:407:G:H5''	35:2d:115:ARG:HB3	2.03	0.41
32:2a:448:A:C4	32:2a:487:A:C2	3.09	0.41
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.55	0.41
32:2a:1219:U:P	45:2n:19:ARG:HH12	2.44	0.41
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.55	0.41
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.56	0.41
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	2.02	0.41
33:2b:58:ILE:HG13	33:2b:58:ILE:H	1.62	0.41
34:2c:58:GLU:O	34:2c:64:VAL:HA	2.20	0.41
38:2g:12:LEU:HD22	38:2g:25:ALA:HB2	2.03	0.41
41:2j:9:ARG:NH1	41:2j:69:ASN:HD21	2.17	0.41
48:2q:26:GLN:HG2	48:2q:37:LYS:HG3	2.02	0.41
1:1A:272(E):G:C2	1:1A:364:C:C2	3.09	0.41
1:1A:323:G:H1'	1:1A:1205:U:O2	2.20	0.41
1:1A:642:G:N2	1:1A:645:C:OP2	2.48	0.41
1:1A:945:A:C4	1:1A:2448:A:C2	3.09	0.41
1:1A:1052:C:H2'	1:1A:1053:C:C6	2.55	0.41
1:1A:1373:A:H2'	1:1A:1374:G:O4'	2.21	0.41
1:1A:1478:G:O2'	1:1A:1558:A:N7	2.53	0.41
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.85	0.41
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.36	0.41
1:1A:2182:G:H2'	1:1A:2183:C:H6	1.79	0.41
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.35	0.41
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.56	0.41
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	2.03	0.41
12:1Q:103:MET:HE1	12:1Q:125:LEU:HD13	2.03	0.41
13:1R:87:TYR:OH	13:1R:116:LEU:HB3	2.21	0.41
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.21	0.41
32:1a:418:C:H1'	32:1a:540:G:O2'	2.21	0.41
38:1g:50:ILE:HG12	38:1g:125:MET:SD	2.61	0.41
44:1m:23:TYR:CE2	44:1m:71:ARG:HG3	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:107:ALA:O	44:1m:111:LYS:HB2	2.21	0.41
54:1y:26:A:N6	54:1y:44:G:C6	2.83	0.41
1:2A:32:C:N4	1:2A:33:U:O4	2.54	0.41
1:2A:332:A:O2'	1:2A:334:C:OP2	2.33	0.41
1:2A:398:G:OP1	1:2A:2090:G:O2'	2.34	0.41
1:2A:661:C:H2'	1:2A:662:G:C8	2.56	0.41
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.54	0.41
1:2A:2118:U:N3	1:2A:2149:G:H1'	2.36	0.41
1:2A:2651:C:N4	1:2A:2669:G:H1	2.17	0.41
1:2A:2751:G:H5'	7:2H:2:SER:HA	2.02	0.41
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.54	0.41
2:2B:51:G:OP2	14:2S:61:ASN:HA	2.21	0.41
6:2G:6:ALA:HB3	6:2G:104:GLU:OE2	2.20	0.41
7:2H:160:LYS:N	7:2H:163:TYR:OH	2.53	0.41
8:2I:31:LEU:HD21	8:2I:38:LEU:HG	2.03	0.41
10:2O:111:PHE:O	10:2O:115:VAL:HG23	2.20	0.41
11:2P:5:ASP:O	11:2P:7:ARG:HG2	2.21	0.41
12:2Q:85:LYS:HG2	22:20:7:LEU:CB	2.51	0.41
14:2S:67:ARG:HG2	14:2S:71:ARG:HH21	1.86	0.41
17:2V:1:MET:HE1	17:2V:44:LYS:H	1.85	0.41
29:27:31:LEU:HA	29:27:31:LEU:HD23	1.81	0.41
32:2a:382:A:H2'	32:2a:383:A:C8	2.55	0.41
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.21	0.41
32:2a:833:U:H2'	32:2a:834:C:C6	2.55	0.41
32:2a:1251:A:H4'	40:2i:12:GLU:OE2	2.20	0.41
38:2g:75:VAL:HG21	38:2g:86:GLN:HB3	2.02	0.41
39:2h:6:ILE:O	39:2h:10:LEU:HG	2.21	0.41
39:2h:13:ILE:O	39:2h:17:THR:HG23	2.20	0.41
40:2i:78:LYS:HD3	40:2i:101:PHE:HD1	1.85	0.41
43:2l:7:ILE:HD13	43:2l:7:ILE:HA	1.89	0.41
50:2s:62:ILE:HA	50:2s:66:MET:SD	2.60	0.41
54:2w:10:G:H2'	54:2w:11:C:C6	2.56	0.41
54:2w:23:A:H2'	54:2w:24:G:C8	2.56	0.41
1:1A:687:C:H2'	1:1A:688:U:O4'	2.21	0.41
1:1A:749:C:H4'	1:1A:1271:G:N3	2.36	0.41
1:1A:858:U:O2	1:1A:2268:A:H2'	2.20	0.41
1:1A:1268:A:C2	1:1A:2013:A:C4	3.09	0.41
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.20	0.41
1:1A:1812:A:O2'	3:1D:45:ASN:N	2.53	0.41
1:1A:1991:U:H2'	1:1A:1992:G:H5''	2.02	0.41
1:1A:2160:G:O6	1:1A:2161:C:N4	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:182:LEU:HD23	3:1D:182:LEU:HA	1.97	0.41
4:1E:70:ALA:O	4:1E:72:VAL:HG23	2.20	0.41
5:1F:157:VAL:HB	5:1F:194:MET:HG2	2.02	0.41
6:1G:34:LEU:HD23	6:1G:34:LEU:HA	1.80	0.41
6:1G:38:VAL:HB	6:1G:158:ALA:HB3	2.03	0.41
6:1G:99:MET:HE2	6:1G:99:MET:HB3	1.93	0.41
7:1H:108:GLY:HA3	7:1H:152:ARG:HH21	1.85	0.41
19:1X:50:LYS:N	19:1X:87:GLN:OE1	2.49	0.41
30:18:15:LYS:HB3	30:18:23:VAL:HG12	2.03	0.41
32:1a:70:G:H1	32:1a:99:U:H3	1.67	0.41
32:1a:99:U:H2'	32:1a:100:C:C6	2.55	0.41
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.36	0.41
32:1a:1134:G:C2	32:1a:1141:C:C2	3.09	0.41
32:1a:1160:G:C6	32:1a:1161:C:C4	3.09	0.41
32:1a:1170:A:H2'	32:1a:1171:G:O4'	2.21	0.41
33:1b:23:ARG:H	33:1b:23:ARG:HG2	1.71	0.41
39:1h:27:PRO:O	39:1h:32:LYS:NZ	2.38	0.41
46:1o:43:LEU:HD12	46:1o:56:LEU:HD22	2.02	0.41
50:1s:71:LEU:HD23	50:1s:71:LEU:HA	1.90	0.41
1:2A:531:C:H4'	1:2A:532:A:H5''	2.03	0.41
1:2A:855:G:C6	1:2A:856:C:C4	3.09	0.41
1:2A:893:C:H5'	1:2A:894:C:C5	2.56	0.41
1:2A:1123:C:H1'	31:29:18:ARG:NH2	2.36	0.41
1:2A:1190:G:H5''	11:2P:32:THR:O	2.21	0.41
1:2A:1312:U:H4'	1:2A:1313:U:O5'	2.21	0.41
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.20	0.41
1:2A:1968:G:H5''	61:2A:4349:HOH:O	2.21	0.41
1:2A:1992:G:H1'	61:2A:3930:HOH:O	2.21	0.41
1:2A:2138:C:H42	1:2A:2153:G:H1	1.68	0.41
1:2A:2409:G:H2'	1:2A:2410:G:O4'	2.21	0.41
1:2A:2516:G:C6	1:2A:2517:C:C4	3.09	0.41
2:2B:33:G:C6	2:2B:34:U:C4	3.09	0.41
2:2B:42:C:C4	2:2B:43:C:C4	3.08	0.41
2:2B:83:G:H1	2:2B:94:C:H42	1.68	0.41
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.53	0.41
6:2G:127:GLY:N	6:2G:166:ASP:OD1	2.54	0.41
8:2I:61:ARG:HD3	8:2I:61:ARG:HA	1.68	0.41
12:2Q:1:MET:HE3	12:2Q:1:MET:HB2	1.83	0.41
14:2S:71:ARG:HA	14:2S:74:ALA:HB3	2.03	0.41
14:2S:78:LEU:HD21	14:2S:109:GLY:HA3	2.02	0.41
16:2U:27:LEU:HA	16:2U:30:LYS:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:6:HIS:CD2	20:2Y:6:HIS:H	2.39	0.41
21:2Z:50:GLN:OE1	21:2Z:50:GLN:N	2.52	0.41
28:26:38:LYS:HB2	28:26:49:HIS:CE1	2.55	0.41
30:28:33:ASN:HA	30:28:36:LYS:HD2	2.02	0.41
32:2a:201:C:H2'	32:2a:202:U:H2'	2.03	0.41
32:2a:769:G:H4'	32:2a:1513:A:H4'	2.03	0.41
32:2a:1052:U:O2'	32:2a:1055:A:OP2	2.34	0.41
32:2a:1121:U:H2'	32:2a:1122:U:C6	2.56	0.41
32:2a:1133:G:C4	32:2a:1134:G:C8	3.09	0.41
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.51	0.41
32:2a:1165:C:H42	32:2a:1171:G:H1	1.67	0.41
32:2a:1243:C:H2'	32:2a:1244:C:C6	2.55	0.41
32:2a:1366:C:O2'	41:2j:60:ARG:NH2	2.54	0.41
33:2b:8:LYS:HD2	33:2b:55:PHE:CE2	2.56	0.41
33:2b:16:HIS:O	33:2b:18:GLY:N	2.53	0.41
33:2b:118:LEU:O	33:2b:122:PHE:HB3	2.21	0.41
34:2c:101:LEU:HD22	34:2c:102:ASN:N	2.36	0.41
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.86	0.41
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	2.02	0.41
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.56	0.41
40:2i:82:ALA:HA	40:2i:85:LEU:HD12	2.02	0.41
41:2j:6:ILE:HG12	41:2j:98:ILE:HG13	2.03	0.41
54:2w:14:A:C5	54:2w:22:G:C2	3.09	0.41
1:1A:360:G:H2'	1:1A:361:G:C8	2.56	0.41
1:1A:478:A:N1	1:1A:500:G:H4'	2.36	0.41
1:1A:721:C:H2'	1:1A:722:A:C8	2.56	0.41
1:1A:1951:U:O2'	1:1A:1953:A:N7	2.47	0.41
1:1A:2335:A:C8	1:1A:2337:G:C5	3.09	0.41
1:1A:2615:U:H2'	1:1A:2616:C:C6	2.56	0.41
1:1A:2734:A:H2'	1:1A:2735:G:O4'	2.21	0.41
1:1A:2866:U:C2	1:1A:2868:A:H1'	2.56	0.41
2:1B:39:A:O2'	2:1B:46:A:N1	2.44	0.41
5:1F:126:VAL:HG21	5:1F:129:PHE:CZ	2.56	0.41
8:1I:72:LEU:HB2	8:1I:138:ILE:HG21	2.02	0.41
11:1P:8:PRO:HB2	11:1P:12:ALA:HB3	2.03	0.41
12:1Q:15:GLY:H	12:1Q:41:TRP:HZ2	1.69	0.41
14:1S:83:LYS:HB3	14:1S:111:GLU:OE1	2.21	0.41
19:1X:44:GLU:HG2	19:1X:49:VAL:O	2.21	0.41
26:14:50:VAL:HG11	44:1m:64:TRP:HA	2.03	0.41
32:1a:161:A:H2'	32:1a:162:A:C8	2.56	0.41
32:1a:163:C:H2'	32:1a:164:U:C6	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:674:G:H2'	32:1a:675:A:H8	1.84	0.41
32:1a:1045:C:H2'	32:1a:1046:A:O4'	2.21	0.41
44:1m:108:ARG:HA	44:1m:108:ARG:HD3	1.57	0.41
1:2A:182:A:H2'	1:2A:183:C:C6	2.56	0.41
1:2A:271(Z):C:O2	1:2A:272(C):G:H1'	2.21	0.41
1:2A:274:G:H2'	1:2A:275:G:C8	2.56	0.41
1:2A:602:G:O2'	1:2A:655:A:N6	2.54	0.41
1:2A:952:G:C6	1:2A:966:G:C6	3.09	0.41
1:2A:1138:G:N3	9:2N:106:MET:HE2	2.36	0.41
1:2A:1786:A:C4	1:2A:1938:A:C6	3.08	0.41
1:2A:2168:G:H8	1:2A:2170:A:N7	2.18	0.41
3:2D:143:HIS:HD1	3:2D:194:GLY:C	2.27	0.41
4:2E:108:SER:HB3	4:2E:165:VAL:HG21	2.03	0.41
5:2F:130:ALA:H	5:2F:142:TRP:CD1	2.39	0.41
9:2N:104:LYS:HA	9:2N:107:LEU:HD12	2.02	0.41
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.21	0.41
21:2Z:149:SER:OG	21:2Z:170:THR:HG23	2.21	0.41
26:24:15:ILE:HB	26:24:32:TYR:CD1	2.56	0.41
32:2a:486:U:H2'	32:2a:487:A:C8	2.55	0.41
32:2a:757:U:H2'	32:2a:758:G:O4'	2.21	0.41
32:2a:762:C:H2'	32:2a:763:G:C8	2.56	0.41
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.21	0.41
32:2a:1385:G:C6	32:2a:1386:G:C5	3.08	0.41
34:2c:190:ARG:NE	34:2c:190:ARG:O	2.55	0.41
37:2f:76:ALA:HB1	37:2f:80:ARG:NH2	2.35	0.41
1:1A:532:A:OP1	16:1U:45:TYR:OH	2.37	0.40
1:1A:657:U:H2'	1:1A:658:C:H6	1.86	0.40
1:1A:754:C:H2'	1:1A:755:C:C6	2.55	0.40
1:1A:940:G:H2'	1:1A:941:A:O4'	2.20	0.40
1:1A:1047:G:N2	1:1A:1110:G:O2'	2.55	0.40
1:1A:1193:G:OP1	11:1P:14:LYS:NZ	2.33	0.40
1:1A:1368:G:C2	1:1A:1369:G:C8	3.09	0.40
1:1A:1639:U:O2'	1:1A:2699:C:H4'	2.21	0.40
2:1B:2:C:H2'	2:1B:3:C:C6	2.56	0.40
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.33	0.40
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	2.02	0.40
12:1Q:25:ASP:OD1	12:1Q:25:ASP:N	2.51	0.40
26:14:57:GLU:HA	26:14:58:ARG:HA	1.74	0.40
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.88	0.40
32:1a:310:G:OP2	47:1p:27:LYS:HE2	2.21	0.40
32:1a:397:A:H3'	32:1a:397:A:N3	2.37	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:958:A:C6	32:1a:959:A:N1	2.89	0.40
33:1b:16:HIS:O	33:1b:18:GLY:N	2.54	0.40
33:1b:74:LYS:NZ	33:1b:205:ASP:O	2.45	0.40
35:1d:146:ILE:H	35:1d:146:ILE:HD12	1.86	0.40
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	2.03	0.40
38:1g:104:LEU:HD13	38:1g:104:LEU:HA	1.90	0.40
39:1h:51:VAL:HG21	39:1h:60:ARG:NH1	2.35	0.40
44:1m:70:LEU:HA	44:1m:70:LEU:HD23	1.86	0.40
48:1q:87:LYS:HD3	48:1q:87:LYS:HA	1.66	0.40
54:1y:51:U:H2'	54:1y:52:G:C8	2.56	0.40
54:1y:53:G:H1	54:1y:61:C:H42	1.69	0.40
1:2A:436:C:H2'	1:2A:437:G:H8	1.86	0.40
1:2A:764:A:H5'	3:2D:210:GLY:CA	2.51	0.40
1:2A:1427:A:H4'	1:2A:1428:C:O4'	2.21	0.40
1:2A:1448:G:H2'	1:2A:1449:A:C8	2.55	0.40
1:2A:1462:C:H4'	1:2A:2703:C:H5'	2.03	0.40
1:2A:2298:A:N6	1:2A:2318:G:H8	2.19	0.40
2:2B:86:G:H1	2:2B:91:C:H42	1.70	0.40
4:2E:111:ARG:HG2	4:2E:118:LYS:HD3	2.03	0.40
5:2F:64:ILE:HG13	5:2F:65:TRP:H	1.85	0.40
20:2Y:73:ARG:HH21	20:2Y:83:THR:C	2.29	0.40
21:2Z:10:ARG:CZ	21:2Z:36:LYS:HG2	2.51	0.40
27:25:45:VAL:HA	27:25:52:TYR:HB2	2.03	0.40
32:2a:189(C):C:H2'	32:2a:189(D):C:O4'	2.21	0.40
32:2a:580:U:H2'	32:2a:581:G:O4'	2.21	0.40
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.36	0.40
32:2a:1348:U:OP1	40:2i:110:GLU:N	2.54	0.40
32:2a:1456:G:O2'	51:2t:39:LYS:HE3	2.20	0.40
33:2b:134:GLU:O	33:2b:138:LEU:HD13	2.20	0.40
38:2g:79:ARG:HB2	38:2g:79:ARG:HH21	1.85	0.40
40:2i:112:LYS:HZ3	40:2i:113:LYS:C	2.27	0.40
48:2q:22:LEU:HD11	48:2q:39:SER:HB2	2.03	0.40
50:2s:50:ALA:HA	50:2s:59:PRO:HA	2.02	0.40
1:1A:1695:G:H1'	3:1D:8:PRO:O	2.21	0.40
1:1A:1970:A:H4'	1:1A:1971:A:OP1	2.21	0.40
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.21	0.40
1:1A:2789:C:H1'	1:1A:2892:A:H2	1.86	0.40
7:1H:109:PHE:C	7:1H:111:HIS:H	2.30	0.40
12:1Q:78:PRO:O	12:1Q:81:VAL:HG22	2.21	0.40
16:1U:8:VAL:HG13	16:1U:12:ARG:HD2	2.03	0.40
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:41:G:H2'	32:1a:42:G:H8	1.86	0.40
32:1a:78:G:O2'	32:1a:79:G:O5'	2.39	0.40
32:1a:374:A:C6	32:1a:375:U:C4	3.09	0.40
32:1a:472:A:O3'	47:1p:81:ARG:HA	2.20	0.40
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.42	0.40
32:1a:922:G:H4'	36:1e:20:GLN:HA	2.02	0.40
32:1a:1159:U:C2	32:1a:1182:G:C2	3.09	0.40
38:1g:69:VAL:HG12	38:1g:100:ALA:HA	2.04	0.40
41:1j:6:ILE:O	41:1j:72:VAL:N	2.49	0.40
44:1m:33:ALA:HB2	44:1m:64:TRP:CH2	2.56	0.40
1:2A:295:G:O5'	20:2Y:1:MET:HG3	2.21	0.40
1:2A:305:U:H2'	1:2A:306:U:C6	2.56	0.40
1:2A:820:A:H1'	1:2A:943:U:H1'	2.04	0.40
1:2A:1183:G:H2'	1:2A:1184:G:C8	2.56	0.40
1:2A:1372:U:H2'	1:2A:1373:A:O4'	2.20	0.40
1:2A:2284:C:OP2	28:26:2:ALA:N	2.54	0.40
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.57	0.40
1:2A:2526:G:O2'	31:29:33:LYS:NZ	2.43	0.40
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.56	0.40
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.56	0.40
15:2T:6:LEU:HD23	15:2T:6:LEU:HA	1.93	0.40
32:2a:261:U:OP2	51:2t:79:ARG:NH2	2.54	0.40
32:2a:1026:G:H5'	32:2a:1027:C:OP2	2.21	0.40
32:2a:1221:G:OP1	32:2a:1320:C:N4	2.53	0.40
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.56	0.40
32:2a:1324:A:O4'	32:2a:1362:C:H4'	2.21	0.40
32:2a:1511:G:H2'	32:2a:1512:U:O4'	2.20	0.40
34:2c:121:ALA:HB1	34:2c:188:LEU:O	2.21	0.40
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.56	0.40
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.56	0.40
38:2g:74:GLU:HG2	38:2g:91:VAL:HG22	2.03	0.40
44:2m:70:LEU:O	44:2m:74:VAL:HG23	2.21	0.40
48:2q:27:PHE:CE1	48:2q:36:ILE:HD11	2.56	0.40
50:2s:80:TYR:CZ	50:2s:82:GLY:HA2	2.57	0.40
54:2w:54:5MU:H2'	54:2w:55:PSU:O4'	2.21	0.40
1:1A:775:G:C4	1:1A:794:G:C8	3.10	0.40
1:1A:1654:A:H1'	1:1A:2823:A:H5'	2.04	0.40
1:1A:2066:C:H5''	61:1A:5368:HOH:O	2.21	0.40
2:1B:29:A:O2'	2:1B:58:A:N1	2.48	0.40
3:1D:96:HIS:CD2	3:1D:102:LYS:HG2	2.56	0.40
5:1F:172:TRP:CD1	5:1F:172:TRP:H	2.38	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:72:ARG:HH12	6:1G:87:PRO:HG3	1.86	0.40
6:1G:83:ARG:O	6:1G:86:MET:HG3	2.21	0.40
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.38	0.40
22:10:56:ASP:OD1	22:10:58:THR:OG1	2.33	0.40
32:1a:352:C:H4'	32:1a:354:G:OP1	2.20	0.40
32:1a:1070:U:H2'	32:1a:1071:C:C6	2.56	0.40
32:1a:1172:C:H2'	32:1a:1173:G:C8	2.55	0.40
32:1a:1391:U:H2'	32:1a:1392:G:H8	1.83	0.40
44:1m:65:LYS:HB2	44:1m:65:LYS:HE2	1.76	0.40
48:1q:67:LYS:O	48:1q:68:ARG:HB2	2.21	0.40
54:1y:22:G:H2'	54:1y:23:A:C8	2.55	0.40
54:1y:63:G:H2'	54:1y:64:A:C8	2.56	0.40
1:2A:222:A:H5''	1:2A:421:U:OP1	2.22	0.40
1:2A:1002:G:N2	1:2A:1154:G:H1'	2.37	0.40
1:2A:1314:C:C2	1:2A:1339:G:N2	2.90	0.40
1:2A:1366:A:OP1	23:21:3:LYS:NZ	2.35	0.40
1:2A:1479:G:H1'	1:2A:1558:A:OP1	2.21	0.40
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.57	0.40
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.45	0.40
1:2A:2302:G:C2'	1:2A:2303:G:H5'	2.51	0.40
1:2A:2542:A:H4'	1:2A:2543:G:H8	1.86	0.40
2:2B:40:U:H2'	26:24:2:LYS:HE3	2.03	0.40
3:2D:30:GLU:HB3	3:2D:33:LEU:HD12	2.03	0.40
5:2F:157:VAL:HB	5:2F:194:MET:HG2	2.03	0.40
5:2F:180:GLY:O	5:2F:182:ASN:ND2	2.45	0.40
5:2F:182:ASN:ND2	5:2F:185:ASP:HB2	2.36	0.40
7:2H:59:ARG:HA	7:2H:62:LYS:HD3	2.03	0.40
7:2H:98:LEU:HG	7:2H:125:VAL:HG23	2.02	0.40
7:2H:109:PHE:C	7:2H:111:HIS:H	2.29	0.40
11:2P:52:GLU:OE1	11:2P:55:ARG:NH2	2.46	0.40
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.21	0.40
13:2R:1:MET:HE3	13:2R:1:MET:HB2	1.84	0.40
16:2U:80:ILE:HA	16:2U:83:LEU:HD12	2.02	0.40
22:20:4:LYS:HB3	55:2x:74:C:H41	1.85	0.40
30:28:52:LYS:N	30:28:53:PRO:HD2	2.37	0.40
32:2a:791:G:O6	32:2a:792:A:N6	2.54	0.40
32:2a:827:U:C2	32:2a:874:G:N2	2.89	0.40
32:2a:1010:G:C2	32:2a:1020:U:H1'	2.57	0.40
33:2b:118:LEU:C	33:2b:120:ALA:N	2.79	0.40
54:2y:57:G:N3	54:2y:57:G:H2'	2.36	0.40
1:1A:527:C:N3	1:1A:2779:U:H2'	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1075:C:H2'	1:1A:1076:C:H2'	2.03	0.40
1:1A:2038:G:O6	61:1A:4271:HOH:O	2.21	0.40
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.22	0.40
7:1H:125:VAL:HG22	7:1H:131:VAL:HG22	2.04	0.40
8:1I:130:TYR:HD2	8:1I:138:ILE:HG13	1.85	0.40
11:1P:125:VAL:HG13	11:1P:138:LEU:HD21	2.03	0.40
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.56	0.40
17:1V:72:VAL:HB	17:1V:85:LYS:HB3	2.03	0.40
23:11:7:ILE:HA	23:11:7:ILE:HD13	1.82	0.40
26:14:48:ARG:HA	26:14:48:ARG:HD3	1.94	0.40
27:15:8:LYS:NZ	61:15:201:HOH:O	2.42	0.40
28:16:35:GLU:HA	28:16:49:HIS:O	2.22	0.40
29:17:3:ARG:HA	29:17:3:ARG:HD3	1.79	0.40
32:1a:674:G:N2	32:1a:717:C:O2	2.54	0.40
32:1a:1413:A:H2	32:1a:1487:G:H22	1.68	0.40
40:1i:28:VAL:HG12	40:1i:65:VAL:HG22	2.03	0.40
44:1m:67:GLU:HB3	44:1m:68:GLY:H	1.59	0.40
54:1y:41:C:H2'	54:1y:42:C:C6	2.55	0.40
1:2A:30:G:C6	1:2A:31:C:C4	3.09	0.40
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.21	0.40
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.21	0.40
1:2A:1453:U:H1'	13:2R:60:LEU:HD11	2.04	0.40
1:2A:1568:G:H4'	3:2D:59:LYS:HB3	2.02	0.40
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	2.04	0.40
1:2A:2074:U:O4	61:2A:3972:HOH:O	2.22	0.40
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.50	0.40
1:2A:2505:G:N7	27:25:3:LYS:NZ	2.69	0.40
1:2A:2695:C:H2'	1:2A:2696:U:H6	1.84	0.40
1:2A:2802:G:H5''	1:2A:2803:C:OP2	2.22	0.40
2:2B:2:C:H2'	2:2B:3:C:C6	2.53	0.40
4:2E:52:LEU:HB3	4:2E:76:ARG:HD3	2.03	0.40
5:2F:152:GLU:HA	5:2F:190:GLU:OE1	2.20	0.40
6:2G:97:ASP:O	6:2G:101:ILE:HG13	2.21	0.40
19:2X:89:ILE:O	19:2X:93:GLU:HG2	2.22	0.40
28:26:35:GLU:HG2	28:26:50:ARG:HE	1.86	0.40
32:2a:523:A:H61	43:2l:92:0TD:CG	2.33	0.40
32:2a:1055:A:O2'	34:2c:161:GLU:HG2	2.21	0.40
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.54	0.40
32:2a:1170:A:C5	32:2a:1171:G:H1'	2.57	0.40
32:2a:1203:C:O5'	32:2a:1203:C:H6	2.05	0.40
32:2a:1263:C:C2	32:2a:1272:G:O6	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:56:ARG:CZ	33:2b:56:ARG:HB2	2.50	0.40
34:2c:155:GLY:O	34:2c:157:ILE:N	2.54	0.40
36:2e:76:ILE:HG13	36:2e:93:PRO:HG3	2.04	0.40
36:2e:102:ALA:HB1	36:2e:106:PRO:HB2	2.03	0.40
38:2g:22:LEU:HD13	38:2g:97:GLN:NE2	2.37	0.40
40:2i:97:LYS:HA	40:2i:102:LEU:HG	2.04	0.40
44:2m:54:VAL:HG12	44:2m:57:ARG:HH12	1.87	0.40
1:1A:530:G:H4'	1:1A:531:C:OP1	2.20	0.40
1:1A:735:A:H3'	1:1A:736:C:C6	2.57	0.40
1:1A:1055:G:H3'	1:1A:1056:G:H8	1.87	0.40
1:1A:1076:C:H1'	1:1A:1077:A:C8	2.56	0.40
1:1A:1526:G:C6	1:1A:1527:G:C2	3.10	0.40
1:1A:1853:A:H2'	1:1A:1854:A:C8	2.56	0.40
1:1A:2570:G:H2'	1:1A:2571:C:O4'	2.20	0.40
12:1Q:136:ALA:HB1	21:1Z:52:SER:HB2	2.03	0.40
25:13:8:LEU:HG	25:13:31:LEU:HD23	2.02	0.40
32:1a:407:G:H2'	32:1a:408:A:H8	1.85	0.40
32:1a:1021:G:HO2'	32:1a:1022:G:P	2.43	0.40
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.21	0.40
33:1b:118:LEU:HD13	33:1b:142:LEU:HB2	2.03	0.40
33:1b:119:GLU:CD	33:1b:153:ARG:HH12	2.29	0.40
33:1b:231:GLU:HB3	33:1b:232:PRO:HD3	2.04	0.40
37:1f:1:MET:HA	37:1f:68:PRO:HA	2.04	0.40
38:1g:12:LEU:HD11	38:1g:25:ALA:HB2	2.03	0.40
48:1q:50:LYS:H	48:1q:50:LYS:HG3	1.74	0.40
50:1s:80:TYR:C	50:1s:82:GLY:H	2.29	0.40
51:1t:65:LYS:HA	51:1t:68:LYS:HD3	2.03	0.40
1:2A:311:A:C6	1:2A:328:U:C4	3.10	0.40
1:2A:715:G:H2'	1:2A:716:A:O4'	2.21	0.40
1:2A:797:C:H2'	1:2A:798:G:O4'	2.21	0.40
1:2A:828:U:C5	1:2A:2247:A:H4'	2.57	0.40
1:2A:945:A:C4	1:2A:2448:A:C2	3.09	0.40
1:2A:1038:C:H42	1:2A:1117:G:H1	1.69	0.40
1:2A:1142(A):A:O2'	1:2A:1143:A:H3'	2.22	0.40
1:2A:1178:C:N3	1:2A:1179:C:N4	2.69	0.40
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.56	0.40
9:2N:53:VAL:HA	9:2N:121:LYS:O	2.21	0.40
32:2a:176:C:H2'	32:2a:177:C:H6	1.86	0.40
32:2a:662:G:H2'	32:2a:663:A:C8	2.57	0.40
32:2a:674:G:H2'	32:2a:675:A:H8	1.87	0.40
32:2a:719:C:N4	49:2r:71:LYS:HE2	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:986:A:H2'	32:2a:987:G:O4'	2.21	0.40
32:2a:1009:G:C2	32:2a:1010:G:C8	3.09	0.40
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.57	0.40
34:2c:37:GLN:O	34:2c:40:ARG:N	2.55	0.40
35:2d:20:TYR:CD1	35:2d:26:CYS:HB3	2.56	0.40
38:2g:130:GLY:O	38:2g:135:VAL:HG11	2.21	0.40
43:2l:10:LEU:O	43:2l:14:GLY:N	2.54	0.40
51:2t:39:LYS:O	51:2t:43:LEU:HG	2.22	0.40
54:2w:68:C:H2'	54:2w:69:G:H8	1.81	0.40
55:2x:28:C:H2'	55:2x:29:G:C8	2.57	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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%)	262 (96%)	11 (4%)	0	100	100
3	2D	273/276 (99%)	252 (92%)	21 (8%)	0	100	100
4	1E	202/206 (98%)	192 (95%)	8 (4%)	2 (1%)	12	28
4	2E	202/206 (98%)	188 (93%)	12 (6%)	2 (1%)	12	28
5	1F	200/210 (95%)	190 (95%)	9 (4%)	1 (0%)	24	46
5	2F	200/210 (95%)	187 (94%)	11 (6%)	2 (1%)	12	28
6	1G	179/182 (98%)	164 (92%)	13 (7%)	2 (1%)	11	25
6	2G	179/182 (98%)	158 (88%)	17 (10%)	4 (2%)	5	10
7	1H	172/180 (96%)	161 (94%)	11 (6%)	0	100	100
7	2H	172/180 (96%)	153 (89%)	17 (10%)	2 (1%)	10	23
8	1I	144/148 (97%)	129 (90%)	14 (10%)	1 (1%)	18	38
8	2I	144/148 (97%)	126 (88%)	17 (12%)	1 (1%)	18	38

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	1N	138/140 (99%)	131 (95%)	5 (4%)	2 (1%)	9	19
9	2N	138/140 (99%)	129 (94%)	8 (6%)	1 (1%)	18	38
10	1O	120/122 (98%)	116 (97%)	4 (3%)	0	100	100
10	2O	120/122 (98%)	108 (90%)	11 (9%)	1 (1%)	16	34
11	1P	147/150 (98%)	132 (90%)	13 (9%)	2 (1%)	9	19
11	2P	147/150 (98%)	129 (88%)	13 (9%)	5 (3%)	3	4
12	1Q	139/141 (99%)	129 (93%)	10 (7%)	0	100	100
12	2Q	139/141 (99%)	128 (92%)	11 (8%)	0	100	100
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100	100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
14	1S	108/112 (96%)	101 (94%)	6 (6%)	1 (1%)	14	30
14	2S	108/112 (96%)	103 (95%)	4 (4%)	1 (1%)	14	30
15	1T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
15	2T	129/146 (88%)	121 (94%)	8 (6%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	91 (92%)	6 (6%)	2 (2%)	6	12
17	2V	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	12	28
18	1W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
19	1X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	11	25
19	2X	93/96 (97%)	89 (96%)	3 (3%)	1 (1%)	11	25
20	1Y	105/110 (96%)	96 (91%)	8 (8%)	1 (1%)	12	28
20	2Y	105/110 (96%)	97 (92%)	8 (8%)	0	100	100
21	1Z	148/206 (72%)	137 (93%)	9 (6%)	2 (1%)	9	19
21	2Z	156/206 (76%)	122 (78%)	29 (19%)	5 (3%)	3	5
22	10	81/85 (95%)	77 (95%)	4 (5%)	0	100	100
22	20	81/85 (95%)	75 (93%)	6 (7%)	0	100	100
23	11	95/98 (97%)	93 (98%)	2 (2%)	0	100	100
23	21	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	11	25
24	12	68/72 (94%)	66 (97%)	2 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
24	22	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	52 (91%)	4 (7%)	1 (2%)	6	14
26	14	67/71 (94%)	51 (76%)	9 (13%)	7 (10%)	0	0
26	24	67/71 (94%)	52 (78%)	12 (18%)	3 (4%)	2	2
27	15	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
27	25	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
28	16	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
28	26	51/54 (94%)	46 (90%)	5 (10%)	0	100	100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100	100
31	19	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
33	1b	229/256 (90%)	187 (82%)	36 (16%)	6 (3%)	4	7
33	2b	229/256 (90%)	180 (79%)	42 (18%)	7 (3%)	3	5
34	1c	204/239 (85%)	184 (90%)	19 (9%)	1 (0%)	24	46
34	2c	204/239 (85%)	166 (81%)	33 (16%)	5 (2%)	4	8
35	1d	206/209 (99%)	189 (92%)	16 (8%)	1 (0%)	24	46
35	2d	206/209 (99%)	189 (92%)	17 (8%)	0	100	100
36	1e	146/162 (90%)	133 (91%)	10 (7%)	3 (2%)	5	11
36	2e	146/162 (90%)	132 (90%)	12 (8%)	2 (1%)	9	19
37	1f	98/101 (97%)	91 (93%)	7 (7%)	0	100	100
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
38	1g	153/156 (98%)	147 (96%)	4 (3%)	2 (1%)	9	21
38	2g	153/156 (98%)	142 (93%)	8 (5%)	3 (2%)	6	12
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100	100
39	2h	135/138 (98%)	127 (94%)	8 (6%)	0	100	100
40	1i	125/128 (98%)	109 (87%)	15 (12%)	1 (1%)	16	34
40	2i	125/128 (98%)	103 (82%)	20 (16%)	2 (2%)	7	16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
41	1j	95/105 (90%)	84 (88%)	9 (10%)	2 (2%)	5	11
41	2j	94/105 (90%)	76 (81%)	13 (14%)	5 (5%)	1	1
42	1k	112/129 (87%)	101 (90%)	8 (7%)	3 (3%)	4	7
42	2k	112/129 (87%)	99 (88%)	10 (9%)	3 (3%)	4	7
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	121/126 (96%)	111 (92%)	8 (7%)	2 (2%)	7	15
44	2m	120/126 (95%)	105 (88%)	13 (11%)	2 (2%)	7	15
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100	100
45	2n	58/61 (95%)	50 (86%)	8 (14%)	0	100	100
46	1o	86/89 (97%)	78 (91%)	5 (6%)	3 (4%)	3	4
46	2o	86/89 (97%)	81 (94%)	2 (2%)	3 (4%)	3	4
47	1p	80/88 (91%)	73 (91%)	7 (9%)	0	100	100
47	2p	80/88 (91%)	73 (91%)	7 (9%)	0	100	100
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100	100
48	2q	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	12	28
49	1r	66/88 (75%)	64 (97%)	1 (2%)	1 (2%)	8	18
49	2r	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
50	1s	81/93 (87%)	72 (89%)	8 (10%)	1 (1%)	10	23
50	2s	81/93 (87%)	71 (88%)	9 (11%)	1 (1%)	10	23
51	1t	94/106 (89%)	84 (89%)	6 (6%)	4 (4%)	2	2
51	2t	94/106 (89%)	87 (93%)	5 (5%)	2 (2%)	5	11
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
52	2u	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
All	All	11368/12128 (94%)	10408 (92%)	839 (7%)	121 (1%)	11	25

All (121) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	1E	71	GLY
5	1F	130	ALA
11	1P	29	LYS
21	1Z	53	ILE
26	14	49	PHE

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Mol	Chain	Res	Type
26	14	62	ARG
26	14	63	TYR
33	1b	17	PHE
38	1g	80	VAL
40	1i	54	ASP
42	1k	106	LYS
5	2F	130	ALA
6	2G	43	LEU
8	2I	40	THR
11	2P	29	LYS
11	2P	36	LYS
11	2P	45	LEU
23	21	3	LYS
26	24	45	GLY
33	2b	17	PHE
33	2b	21	ARG
38	2g	80	VAL
48	2q	68	ARG
11	1P	38	GLN
17	1V	79	VAL
19	1X	93	GLU
21	1Z	163	LEU
26	14	45	GLY
26	14	47	GLN
33	1b	129	GLU
35	1d	173	TRP
38	1g	55	GLY
41	1j	79	ARG
44	1m	67	GLU
4	2E	71	GLY
5	2F	17	ARG
6	2G	47	LYS
6	2G	50	ALA
21	2Z	52	SER
21	2Z	145	GLU
21	2Z	171	ILE
33	2b	150	SER
40	2i	54	ASP
44	2m	106	ASN
44	2m	115	LYS
6	1G	43	LEU
9	1N	8	GLN

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Mol	Chain	Res	Type
17	1V	100	ARG
26	14	57	GLU
33	1b	8	LYS
46	1o	87	ILE
46	1o	88	ARG
51	1t	89	ARG
51	1t	100	ILE
7	2H	126	PRO
10	2O	5	GLN
21	2Z	147	GLY
26	24	49	PHE
33	2b	74	LYS
34	2c	3	ASN
34	2c	43	LEU
38	2g	55	GLY
40	2i	33	PHE
41	2j	75	ILE
41	2j	78	ASN
46	2o	5	LYS
51	2t	47	GLY
51	2t	95	ALA
4	1E	52	LEU
20	1Y	54	LYS
26	14	52	THR
33	1b	124	SER
33	1b	125	PRO
34	1c	18	TRP
41	1j	77	PRO
42	1k	49	GLY
42	1k	105	VAL
51	1t	102	GLY
4	2E	52	LEU
9	2N	2	LYS
11	2P	38	GLN
17	2V	79	VAL
33	2b	20	GLU
33	2b	126	GLU
34	2c	95	THR
34	2c	156	ARG
34	2c	179	ARG
36	2e	96	PRO
41	2j	79	ARG

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Mol	Chain	Res	Type
6	1G	47	LYS
8	1I	117	GLU
9	1N	2	LYS
14	1S	94	TYR
33	1b	20	GLU
36	1e	69	VAL
49	1r	27	GLY
50	1s	27	GLU
11	2P	44	GLY
26	24	46	GLN
38	2g	153	HIS
41	2j	77	PRO
42	2k	117	ASN
46	2o	87	ILE
14	2S	109	GLY
33	2b	123	ALA
41	2j	29	ARG
42	2k	49	GLY
46	2o	88	ARG
36	1e	96	PRO
36	2e	69	VAL
42	2k	90	GLY
46	1o	86	GLY
51	1t	47	GLY
6	2G	52	ILE
36	1e	85	GLY
7	2H	29	PRO
25	23	59	VAL
50	2s	76	PRO
44	1m	4	ILE
19	2X	94	GLY
21	2Z	124	ILE

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%)	203 (94%)	12 (6%)	19	40
3	2D	215/218 (99%)	207 (96%)	8 (4%)	30	57
4	1E	164/166 (99%)	154 (94%)	10 (6%)	17	37
4	2E	164/166 (99%)	154 (94%)	10 (6%)	17	37
5	1F	160/166 (96%)	146 (91%)	14 (9%)	9	21
5	2F	159/166 (96%)	150 (94%)	9 (6%)	18	40
6	1G	143/156 (92%)	125 (87%)	18 (13%)	4	9
6	2G	143/156 (92%)	124 (87%)	19 (13%)	4	8
7	1H	144/148 (97%)	128 (89%)	16 (11%)	6	12
7	2H	144/148 (97%)	124 (86%)	20 (14%)	3	7
8	1I	113/124 (91%)	93 (82%)	20 (18%)	2	3
8	2I	105/124 (85%)	92 (88%)	13 (12%)	4	9
9	1N	118/119 (99%)	107 (91%)	11 (9%)	8	18
9	2N	118/119 (99%)	109 (92%)	9 (8%)	12	27
10	1O	100/100 (100%)	95 (95%)	5 (5%)	22	46
10	2O	100/100 (100%)	94 (94%)	6 (6%)	17	37
11	1P	115/116 (99%)	103 (90%)	12 (10%)	7	14
11	2P	115/116 (99%)	106 (92%)	9 (8%)	11	26
12	1Q	111/111 (100%)	104 (94%)	7 (6%)	16	36
12	2Q	111/111 (100%)	107 (96%)	4 (4%)	31	58
13	1R	101/101 (100%)	99 (98%)	2 (2%)	48	74
13	2R	101/101 (100%)	94 (93%)	7 (7%)	14	32
14	1S	86/88 (98%)	78 (91%)	8 (9%)	8	18
14	2S	85/88 (97%)	77 (91%)	8 (9%)	8	18
15	1T	115/127 (91%)	108 (94%)	7 (6%)	17	37
15	2T	113/127 (89%)	104 (92%)	9 (8%)	11	25
16	1U	93/94 (99%)	89 (96%)	4 (4%)	26	51
16	2U	93/94 (99%)	88 (95%)	5 (5%)	20	42
17	1V	80/82 (98%)	77 (96%)	3 (4%)	29	56
17	2V	80/82 (98%)	71 (89%)	9 (11%)	5	12
18	1W	90/92 (98%)	86 (96%)	4 (4%)	25	50
18	2W	90/92 (98%)	85 (94%)	5 (6%)	19	40

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
19	1X	77/78 (99%)	74 (96%)	3 (4%)	28	55
19	2X	77/78 (99%)	74 (96%)	3 (4%)	28	55
20	1Y	85/91 (93%)	80 (94%)	5 (6%)	18	38
20	2Y	85/91 (93%)	73 (86%)	12 (14%)	3	6
21	1Z	135/179 (75%)	122 (90%)	13 (10%)	8	17
21	2Z	137/179 (76%)	115 (84%)	22 (16%)	2	4
22	10	65/67 (97%)	64 (98%)	1 (2%)	57	80
22	20	65/67 (97%)	62 (95%)	3 (5%)	24	49
23	11	80/83 (96%)	76 (95%)	4 (5%)	22	46
23	21	80/83 (96%)	76 (95%)	4 (5%)	22	46
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	10
25	23	50/52 (96%)	48 (96%)	2 (4%)	28	55
26	14	59/63 (94%)	49 (83%)	10 (17%)	2	4
26	24	53/63 (84%)	41 (77%)	12 (23%)	1	1
27	15	50/52 (96%)	48 (96%)	2 (4%)	28	55
27	25	50/52 (96%)	46 (92%)	4 (8%)	11	25
28	16	51/52 (98%)	45 (88%)	6 (12%)	5	10
28	26	50/52 (96%)	46 (92%)	4 (8%)	11	25
29	17	41/42 (98%)	37 (90%)	4 (10%)	7	17
29	27	41/42 (98%)	36 (88%)	5 (12%)	5	10
30	18	54/55 (98%)	52 (96%)	2 (4%)	30	57
30	28	54/55 (98%)	50 (93%)	4 (7%)	13	29
31	19	34/34 (100%)	33 (97%)	1 (3%)	37	65
31	29	34/34 (100%)	28 (82%)	6 (18%)	2	3
33	1b	192/220 (87%)	165 (86%)	27 (14%)	3	6
33	2b	187/220 (85%)	153 (82%)	34 (18%)	2	3
34	1c	142/188 (76%)	123 (87%)	19 (13%)	4	7
34	2c	140/188 (74%)	118 (84%)	22 (16%)	2	4
35	1d	169/181 (93%)	150 (89%)	19 (11%)	6	12

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	2d	173/181 (96%)	156 (90%)	17 (10%)	7	17
36	1e	113/123 (92%)	100 (88%)	13 (12%)	5	11
36	2e	114/123 (93%)	94 (82%)	20 (18%)	2	3
37	1f	84/90 (93%)	75 (89%)	9 (11%)	6	14
37	2f	85/90 (94%)	77 (91%)	8 (9%)	8	18
38	1g	119/127 (94%)	103 (87%)	16 (13%)	4	7
38	2g	120/127 (94%)	106 (88%)	14 (12%)	5	11
39	1h	114/119 (96%)	108 (95%)	6 (5%)	20	43
39	2h	114/119 (96%)	106 (93%)	8 (7%)	14	31
40	1i	90/99 (91%)	79 (88%)	11 (12%)	5	10
40	2i	89/99 (90%)	75 (84%)	14 (16%)	2	4
41	1j	66/92 (72%)	58 (88%)	8 (12%)	5	10
41	2j	69/92 (75%)	57 (83%)	12 (17%)	2	3
42	1k	82/99 (83%)	75 (92%)	7 (8%)	10	22
42	2k	83/99 (84%)	77 (93%)	6 (7%)	13	30
43	1l	96/108 (89%)	91 (95%)	5 (5%)	21	44
43	2l	96/108 (89%)	92 (96%)	4 (4%)	26	52
44	1m	93/101 (92%)	82 (88%)	11 (12%)	5	10
44	2m	92/101 (91%)	79 (86%)	13 (14%)	3	6
45	1n	49/50 (98%)	46 (94%)	3 (6%)	17	37
45	2n	49/50 (98%)	44 (90%)	5 (10%)	7	15
46	1o	78/80 (98%)	73 (94%)	5 (6%)	16	35
46	2o	78/80 (98%)	74 (95%)	4 (5%)	21	45
47	1p	69/74 (93%)	63 (91%)	6 (9%)	9	21
47	2p	68/74 (92%)	60 (88%)	8 (12%)	5	10
48	1q	94/97 (97%)	91 (97%)	3 (3%)	34	62
48	2q	94/97 (97%)	89 (95%)	5 (5%)	20	43
49	1r	59/77 (77%)	52 (88%)	7 (12%)	5	10
49	2r	59/77 (77%)	57 (97%)	2 (3%)	32	60
50	1s	69/80 (86%)	64 (93%)	5 (7%)	13	30
50	2s	67/80 (84%)	61 (91%)	6 (9%)	9	20

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
51	1t	70/82 (85%)	66 (94%)	4 (6%)	18	40
51	2t	70/82 (85%)	67 (96%)	3 (4%)	26	51
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19	40
52	2u	18/22 (82%)	18 (100%)	0	100	100
All	All	9303/10064 (92%)	8460 (91%)	843 (9%)	9	19

All (843) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	7	LYS
3	1D	12	SER
3	1D	37	LEU
3	1D	38	LYS
3	1D	71	ASP
3	1D	142	VAL
3	1D	155	LEU
3	1D	173	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	9	VAL
4	1E	47	VAL
4	1E	49	LEU
4	1E	81	ILE
4	1E	93	VAL
4	1E	116	VAL
4	1E	181	LEU
4	1E	184	VAL
4	1E	188	VAL
4	1E	195	LEU
5	1F	28	ILE
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	132	VAL
5	1F	140	LEU
5	1F	144	LYS
5	1F	158	THR
5	1F	168	ARG

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Mol	Chain	Res	Type
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	21	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	53	LEU
6	1G	70	VAL
6	1G	77	ILE
6	1G	91	ARG
6	1G	108	ASN
6	1G	109	VAL
6	1G	126	ASP
6	1G	133	LEU
6	1G	139	LEU
6	1G	145	THR
6	1G	148	MET
6	1G	150	ASP
7	1H	7	LEU
7	1H	15	VAL
7	1H	16	SER
7	1H	18	GLU
7	1H	24	VAL
7	1H	27	LYS
7	1H	47	GLU
7	1H	56	SER
7	1H	76	VAL
7	1H	107	VAL
7	1H	119	GLU
7	1H	124	GLU
7	1H	133	VAL
7	1H	134	SER
7	1H	149	ARG
7	1H	175	LYS
8	1I	3	VAL
8	1I	9	LEU
8	1I	12	LEU
8	1I	20	ASP

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Mol	Chain	Res	Type
8	1I	21	VAL
8	1I	61	ARG
8	1I	72	LEU
8	1I	77	LEU
8	1I	79	ILE
8	1I	81	VAL
8	1I	85	GLU
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	103	ARG
8	1I	108	THR
8	1I	127	VAL
8	1I	129	THR
8	1I	133	HIS
8	1I	140	LEU
9	1N	1	MET
9	1N	9	VAL
9	1N	28	THR
9	1N	62	VAL
9	1N	67	LEU
9	1N	83	LYS
9	1N	96	GLU
9	1N	112	LEU
9	1N	136	GLU
9	1N	137	LYS
9	1N	138	LEU
10	1O	20	MET
10	1O	28	SER
10	1O	35	VAL
10	1O	98	VAL
10	1O	117	LEU
11	1P	1	MET
11	1P	45	LEU
11	1P	75	ILE
11	1P	92	GLU
11	1P	95	VAL
11	1P	102	ARG
11	1P	125	VAL
11	1P	126	VAL
11	1P	133	SER
11	1P	135	LEU

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Mol	Chain	Res	Type
11	1P	136	GLU
11	1P	148	LEU
12	1Q	2	LEU
12	1Q	10	ARG
12	1Q	56	ARG
12	1Q	63	LYS
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	113	GLN
13	1R	111	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	46	VAL
14	1S	50	SER
14	1S	68	GLN
14	1S	69	VAL
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	36	GLU
15	1T	67	SER
15	1T	70	VAL
15	1T	96	ARG
15	1T	108	ARG
15	1T	125	ARG
16	1U	8	VAL
16	1U	27	LEU
16	1U	31	SER
16	1U	74	LEU
17	1V	32	THR
17	1V	73	SER
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	60	ASN
18	1W	96	ILE
19	1X	35	THR
19	1X	57	LEU
19	1X	81	VAL
20	1Y	7	VAL
20	1Y	8	LYS

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Mol	Chain	Res	Type
20	1Y	31	LEU
20	1Y	64	GLU
20	1Y	72	VAL
21	1Z	33	LEU
21	1Z	42	VAL
21	1Z	53	ILE
21	1Z	79	ARG
21	1Z	96	VAL
21	1Z	124	ILE
21	1Z	126	VAL
21	1Z	132	ASN
21	1Z	138	GLU
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	170	THR
21	1Z	171	ILE
22	10	9	SER
23	11	3	LYS
23	11	13	ILE
23	11	80	LEU
23	11	83	GLU
24	12	4	SER
24	12	29	LYS
24	12	40	SER
24	12	51	ARG
24	12	53	LEU
24	12	70	GLN
25	13	9	VAL
25	13	18	ASP
25	13	23	LEU
25	13	54	VAL
25	13	56	VAL
25	13	60	GLU
26	14	20	ASN
26	14	21	VAL
26	14	30	GLU
26	14	49	PHE
26	14	50	VAL
26	14	56	VAL
26	14	61	ARG
26	14	63	TYR
26	14	67	TYR

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Mol	Chain	Res	Type
26	14	69	LYS
27	15	6	VAL
27	15	58	LEU
28	16	5	VAL
28	16	7	ILE
28	16	9	LEU
28	16	14	THR
28	16	19	ARG
28	16	44	ARG
29	17	24	THR
29	17	41	ARG
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
31	19	17	ILE
33	1b	7	VAL
33	1b	11	LEU
33	1b	12	GLU
33	1b	19	HIS
33	1b	45	GLN
33	1b	53	ARG
33	1b	54	THR
33	1b	67	THR
33	1b	80	ILE
33	1b	90	MET
33	1b	93	VAL
33	1b	121	LEU
33	1b	126	GLU
33	1b	130	ARG
33	1b	142	LEU
33	1b	145	LEU
33	1b	153	ARG
33	1b	154	LEU
33	1b	156	LYS
33	1b	164	VAL
33	1b	172	ILE
33	1b	196	LEU
33	1b	212	GLN
33	1b	215	LEU
33	1b	217	ARG
33	1b	229	VAL

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Mol	Chain	Res	Type
33	1b	236	TYR
34	1c	3	ASN
34	1c	15	THR
34	1c	32	LEU
34	1c	36	ASP
34	1c	43	LEU
34	1c	46	GLU
34	1c	49	SER
34	1c	64	VAL
34	1c	70	VAL
34	1c	82	GLU
34	1c	85	ARG
34	1c	89	GLU
34	1c	91	LEU
34	1c	103	VAL
34	1c	112	SER
34	1c	123	GLN
34	1c	175	LEU
34	1c	192	THR
34	1c	195	VAL
35	1d	3	ARG
35	1d	19	LEU
35	1d	24	GLU
35	1d	28	SER
35	1d	76	ARG
35	1d	78	LEU
35	1d	83	SER
35	1d	108	LEU
35	1d	112	VAL
35	1d	119	GLN
35	1d	134	ASP
35	1d	135	LEU
35	1d	140	VAL
35	1d	148	VAL
35	1d	160	GLN
35	1d	161	ASN
35	1d	175	SER
35	1d	178	VAL
35	1d	200	GLU
36	1e	12	LEU
36	1e	20	GLN
36	1e	24	ARG

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Mol	Chain	Res	Type
36	1e	41	VAL
36	1e	51	VAL
36	1e	67	VAL
36	1e	79	GLU
36	1e	82	VAL
36	1e	91	LEU
36	1e	131	ILE
36	1e	149	GLU
36	1e	150	ARG
36	1e	151	LEU
37	1f	10	LEU
37	1f	45	LEU
37	1f	64	GLN
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	78	GLU
37	1f	92	LYS
37	1f	98	LEU
38	1g	9	VAL
38	1g	15	ASP
38	1g	32	ARG
38	1g	50	ILE
38	1g	56	GLN
38	1g	75	VAL
38	1g	78	ARG
38	1g	90	GLU
38	1g	104	LEU
38	1g	105	VAL
38	1g	110	GLN
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
38	1g	120	ILE
38	1g	131	LYS
39	1h	51	VAL
39	1h	52	ASP
39	1h	77	GLU
39	1h	97	VAL
39	1h	99	GLU
39	1h	133	LEU
40	1i	23	ASN

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Mol	Chain	Res	Type
40	1i	25	LYS
40	1i	26	VAL
40	1i	27	THR
40	1i	28	VAL
40	1i	42	ARG
40	1i	53	VAL
40	1i	63	ILE
40	1i	64	THR
40	1i	103	THR
40	1i	128	ARG
41	1j	7	LYS
41	1j	21	GLN
41	1j	42	THR
41	1j	43	ARG
41	1j	46	ARG
41	1j	81	THR
41	1j	96	ILE
41	1j	98	ILE
42	1k	31	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	98	LEU
42	1k	104	GLN
42	1k	114	VAL
42	1k	123	LYS
43	1l	24	VAL
43	1l	62	SER
43	1l	78	GLN
43	1l	91	LYS
43	1l	100	ILE
44	1m	3	ARG
44	1m	4	ILE
44	1m	19	LEU
44	1m	32	GLU
44	1m	43	THR
44	1m	60	VAL
44	1m	65	LYS
44	1m	67	GLU
44	1m	70	LEU
44	1m	102	ARG
44	1m	122	LYS
45	1n	17	LYS

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Mol	Chain	Res	Type
45	1n	18	VAL
45	1n	25	VAL
46	1o	14	GLU
46	1o	71	GLN
46	1o	76	GLU
46	1o	84	LYS
46	1o	88	ARG
47	1p	2	VAL
47	1p	20	VAL
47	1p	27	LYS
47	1p	54	GLU
47	1p	62	VAL
47	1p	68	ASP
48	1q	35	VAL
48	1q	52	LYS
48	1q	60	ILE
49	1r	29	PHE
49	1r	35	ARG
49	1r	46	GLU
49	1r	66	LEU
49	1r	70	ILE
49	1r	76	LEU
49	1r	82	THR
50	1s	12	ASP
50	1s	32	LYS
50	1s	41	VAL
50	1s	48	THR
50	1s	79	THR
51	1t	10	LEU
51	1t	24	LEU
51	1t	74	LYS
51	1t	100	ILE
52	1u	15	ARG
3	2D	35	LYS
3	2D	37	LEU
3	2D	106	ILE
3	2D	113	VAL
3	2D	142	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	260	ARG
4	2E	7	VAL

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Mol	Chain	Res	Type
4	2E	9	VAL
4	2E	41	LYS
4	2E	47	VAL
4	2E	116	VAL
4	2E	134	ILE
4	2E	145	LYS
4	2E	163	GLU
4	2E	181	LEU
4	2E	184	VAL
5	2F	20	LEU
5	2F	27	GLU
5	2F	53	THR
5	2F	145	GLU
5	2F	153	SER
5	2F	165	ARG
5	2F	175	THR
5	2F	187	VAL
5	2F	195	ASP
6	2G	3	LEU
6	2G	5	VAL
6	2G	18	GLU
6	2G	26	GLN
6	2G	31	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	51	ARG
6	2G	53	LEU
6	2G	103	LEU
6	2G	111	LEU
6	2G	124	SER
6	2G	140	ILE
6	2G	145	THR
6	2G	150	ASP
6	2G	153	ARG
6	2G	159	VAL
6	2G	170	ARG
6	2G	173	LEU
7	2H	4	ILE
7	2H	7	LEU
7	2H	19	VAL
7	2H	43	VAL
7	2H	44	VAL

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Mol	Chain	Res	Type
7	2H	45	VAL
7	2H	49	VAL
7	2H	57	ASP
7	2H	68	THR
7	2H	71	LEU
7	2H	76	VAL
7	2H	88	LEU
7	2H	95	ARG
7	2H	97	ARG
7	2H	104	GLU
7	2H	106	THR
7	2H	114	VAL
7	2H	115	VAL
7	2H	153	LYS
7	2H	169	VAL
8	2I	15	VAL
8	2I	54	GLN
8	2I	58	LEU
8	2I	61	ARG
8	2I	77	LEU
8	2I	82	ARG
8	2I	87	LYS
8	2I	92	VAL
8	2I	101	LEU
8	2I	108	THR
8	2I	117	GLU
8	2I	121	LYS
8	2I	127	VAL
9	2N	1	MET
9	2N	5	VAL
9	2N	28	THR
9	2N	58	ASP
9	2N	60	ILE
9	2N	62	VAL
9	2N	67	LEU
9	2N	127	ASP
9	2N	138	LEU
10	2O	66	LYS
10	2O	69	ILE
10	2O	78	ARG
10	2O	98	VAL
10	2O	102	VAL

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Mol	Chain	Res	Type
10	2O	116	SER
11	2P	1	MET
11	2P	65	ARG
11	2P	92	GLU
11	2P	95	VAL
11	2P	98	GLU
11	2P	102	ARG
11	2P	125	VAL
11	2P	133	SER
11	2P	135	LEU
12	2Q	10	ARG
12	2Q	43	THR
12	2Q	98	LYS
12	2Q	139	GLU
13	2R	6	SER
13	2R	15	SER
13	2R	20	LEU
13	2R	24	GLN
13	2R	35	THR
13	2R	73	VAL
13	2R	111	LEU
14	2S	8	GLU
14	2S	21	THR
14	2S	36	TYR
14	2S	48	LEU
14	2S	52	SER
14	2S	58	LEU
14	2S	63	THR
14	2S	83	LYS
15	2T	1	MET
15	2T	10	VAL
15	2T	64	ARG
15	2T	67	SER
15	2T	72	VAL
15	2T	107	ASP
15	2T	109	GLU
15	2T	115	ARG
15	2T	125	ARG
16	2U	8	VAL
16	2U	74	LEU
16	2U	78	THR
16	2U	83	LEU

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Mol	Chain	Res	Type
16	2U	100	VAL
17	2V	25	LEU
17	2V	28	GLU
17	2V	32	THR
17	2V	34	GLU
17	2V	57	VAL
17	2V	70	ILE
17	2V	79	VAL
17	2V	98	GLU
17	2V	100	ARG
18	2W	11	ARG
18	2W	63	ASP
18	2W	71	VAL
18	2W	78	GLU
18	2W	96	ILE
19	2X	45	THR
19	2X	49	VAL
19	2X	82	GLN
20	2Y	1	MET
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	14	LEU
20	2Y	45	VAL
20	2Y	49	VAL
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	88	LYS
20	2Y	91	GLU
20	2Y	92	ASN
20	2Y	99	CYS
21	2Z	33	LEU
21	2Z	42	VAL
21	2Z	59	LEU
21	2Z	61	LEU
21	2Z	71	VAL
21	2Z	73	GLN
21	2Z	74	VAL
21	2Z	84	GLU
21	2Z	94	GLU
21	2Z	97	GLU
21	2Z	100	VAL
21	2Z	121	HIS

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Mol	Chain	Res	Type
21	2Z	126	VAL
21	2Z	129	SER
21	2Z	136	PHE
21	2Z	138	GLU
21	2Z	142	SER
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	165	VAL
21	2Z	171	ILE
21	2Z	174	VAL
22	20	10	THR
22	20	11	ARG
22	20	14	ARG
23	21	32	LYS
23	21	40	ARG
23	21	69	LYS
23	21	80	LEU
24	22	17	SER
24	22	40	SER
24	22	51	ARG
24	22	53	LEU
24	22	59	ARG
24	22	69	ARG
25	23	31	LEU
25	23	34	GLU
26	24	9	LEU
26	24	15	ILE
26	24	27	THR
26	24	34	GLU
26	24	37	SER
26	24	49	PHE
26	24	50	VAL
26	24	58	ARG
26	24	59	PHE
26	24	61	ARG
26	24	63	TYR
26	24	68	ARG
27	25	6	VAL
27	25	33	CYS
27	25	40	LYS
27	25	59	GLU
28	26	9	LEU

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Mol	Chain	Res	Type
28	26	28	ARG
28	26	32	ASN
28	26	52	VAL
29	27	24	THR
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
29	27	48	LYS
30	28	14	VAL
30	28	23	VAL
30	28	37	SER
30	28	50	LEU
31	29	1	MET
31	29	9	ARG
31	29	16	VAL
31	29	17	ILE
31	29	26	ILE
31	29	33	LYS
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	11	LEU
33	2b	16	HIS
33	2b	41	ILE
33	2b	52	GLU
33	2b	53	ARG
33	2b	58	ILE
33	2b	60	ASP
33	2b	67	THR
33	2b	71	VAL
33	2b	76	GLN
33	2b	95	GLN
33	2b	101	MET
33	2b	107	THR
33	2b	108	ILE
33	2b	111	ARG
33	2b	112	VAL
33	2b	115	LEU
33	2b	118	LEU
33	2b	127	ILE
33	2b	140	HIS
33	2b	142	LEU

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Mol	Chain	Res	Type
33	2b	157	ARG
33	2b	185	ILE
33	2b	195	ASP
33	2b	196	LEU
33	2b	201	ILE
33	2b	210	SER
33	2b	215	LEU
33	2b	219	VAL
33	2b	224	GLN
33	2b	226	ARG
34	2c	15	THR
34	2c	36	ASP
34	2c	47	LEU
34	2c	55	VAL
34	2c	56	ASP
34	2c	69	HIS
34	2c	77	ILE
34	2c	103	VAL
34	2c	115	LEU
34	2c	127	ARG
34	2c	136	GLN
34	2c	151	VAL
34	2c	152	ILE
34	2c	153	VAL
34	2c	154	SER
34	2c	157	ILE
34	2c	161	GLU
34	2c	182	ILE
34	2c	190	ARG
34	2c	192	THR
34	2c	195	VAL
34	2c	202	ILE
35	2d	8	VAL
35	2d	47	ARG
35	2d	50	ARG
35	2d	59	ARG
35	2d	67	ILE
35	2d	74	GLN
35	2d	76	ARG
35	2d	85	LYS
35	2d	94	LEU
35	2d	127	THR

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Mol	Chain	Res	Type
35	2d	150	GLU
35	2d	155	LEU
35	2d	178	VAL
35	2d	179	GLU
35	2d	190	ASP
35	2d	193	ASP
35	2d	194	LEU
36	2e	5	ASP
36	2e	8	GLU
36	2e	12	LEU
36	2e	13	ILE
36	2e	20	GLN
36	2e	24	ARG
36	2e	27	ARG
36	2e	31	LEU
36	2e	38	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	55	VAL
36	2e	75	THR
36	2e	83	GLU
36	2e	115	VAL
36	2e	135	THR
36	2e	147	ASP
36	2e	150	ARG
36	2e	151	LEU
36	2e	152	ARG
37	2f	19	LEU
37	2f	37	VAL
37	2f	40	VAL
37	2f	64	GLN
37	2f	65	VAL
37	2f	69	GLU
37	2f	70	ASP
37	2f	98	LEU
38	2g	9	VAL
38	2g	12	LEU
38	2g	16	LEU
38	2g	24	THR
38	2g	32	ARG
38	2g	63	LYS
38	2g	78	ARG

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Mol	Chain	Res	Type
38	2g	79	ARG
38	2g	90	GLU
38	2g	106	GLN
38	2g	113	GLU
38	2g	125	MET
38	2g	139	GLU
38	2g	155	ARG
39	2h	3	THR
39	2h	23	SER
39	2h	38	ILE
39	2h	51	VAL
39	2h	54	ASP
39	2h	95	VAL
39	2h	99	GLU
39	2h	133	LEU
40	2i	7	THR
40	2i	14	VAL
40	2i	20	ARG
40	2i	23	ASN
40	2i	28	VAL
40	2i	29	ASN
40	2i	32	ASP
40	2i	42	ARG
40	2i	53	VAL
40	2i	85	LEU
40	2i	89	ASN
40	2i	102	LEU
40	2i	112	LYS
40	2i	128	ARG
41	2j	8	LEU
41	2j	9	ARG
41	2j	23	ILE
41	2j	29	ARG
41	2j	33	GLN
41	2j	38	ILE
41	2j	44	VAL
41	2j	61	GLU
41	2j	66	ARG
41	2j	69	ASN
41	2j	81	THR
41	2j	98	ILE
42	2k	14	VAL

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Mol	Chain	Res	Type
42	2k	30	VAL
42	2k	53	SER
42	2k	84	VAL
42	2k	109	VAL
42	2k	126	ARG
43	2l	18	VAL
43	2l	24	VAL
43	2l	33	ARG
43	2l	97	ARG
44	2m	3	ARG
44	2m	22	ILE
44	2m	27	LYS
44	2m	32	GLU
44	2m	48	LEU
44	2m	50	GLU
44	2m	74	VAL
44	2m	90	LEU
44	2m	93	ARG
44	2m	103	THR
44	2m	106	ASN
44	2m	117	VAL
44	2m	121	LYS
45	2n	7	ILE
45	2n	22	THR
45	2n	33	VAL
45	2n	44	LEU
45	2n	50	LYS
46	2o	24	SER
46	2o	38	ARG
46	2o	71	GLN
46	2o	76	GLU
47	2p	1	MET
47	2p	2	VAL
47	2p	8	ARG
47	2p	11	SER
47	2p	21	VAL
47	2p	45	THR
47	2p	60	LEU
47	2p	74	LEU
48	2q	5	VAL
48	2q	15	MET
48	2q	37	LYS

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Mol	Chain	Res	Type
48	2q	56	VAL
48	2q	87	LYS
49	2r	37	VAL
49	2r	46	GLU
50	2s	15	LEU
50	2s	20	LEU
50	2s	23	ASN
50	2s	41	VAL
50	2s	58	VAL
50	2s	79	THR
51	2t	41	ILE
51	2t	46	GLU
51	2t	93	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (150) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	116	GLN
3	1D	203	ASN
4	1E	48	GLN
4	1E	85	ASN
5	1F	8	GLN
5	1F	69	HIS
6	1G	26	GLN
6	1G	40	ASN
8	1I	105	HIS
8	1I	133	HIS
9	1N	8	GLN
9	1N	56	ASN
9	1N	69	GLN
9	1N	94	HIS
11	1P	70	GLN
12	1Q	57	HIS
12	1Q	113	GLN
12	1Q	123	HIS
13	1R	31	HIS
13	1R	71	GLN
14	1S	68	GLN
16	1U	81	HIS
16	1U	94	ASN
18	1W	60	ASN
19	1X	31	HIS

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Mol	Chain	Res	Type
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	43	ASN
20	1Y	92	ASN
21	1Z	34	ASN
21	1Z	73	GLN
25	13	32	GLN
26	14	47	GLN
33	1b	16	HIS
33	1b	40	HIS
33	1b	78	GLN
34	1c	6	HIS
34	1c	69	HIS
34	1c	162	GLN
34	1c	176	HIS
35	1d	74	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	119	GLN
35	1d	125	HIS
35	1d	160	GLN
35	1d	201	GLN
36	1e	20	GLN
36	1e	38	GLN
36	1e	78	HIS
36	1e	141	GLN
37	1f	7	ASN
37	1f	73	ASN
37	1f	84	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	148	ASN
40	1i	31	GLN
40	1i	34	ASN
41	1j	56	HIS
42	1k	116	HIS
43	1l	99	HIS
44	1m	77	ASN
44	1m	92	HIS
46	1o	13	GLN
46	1o	46	HIS
46	1o	62	GLN

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Mol	Chain	Res	Type
47	1p	13	HIS
49	1r	63	GLN
50	1s	23	ASN
50	1s	83	HIS
51	1t	16	HIS
3	2D	87	ASN
3	2D	116	GLN
4	2E	180	ASN
5	2F	69	HIS
5	2F	133	ASN
5	2F	203	GLN
6	2G	27	ASN
6	2G	41	GLN
6	2G	108	ASN
7	2H	111	HIS
7	2H	139	GLN
8	2I	105	HIS
9	2N	8	GLN
9	2N	38	HIS
9	2N	56	ASN
10	2O	3	GLN
10	2O	5	GLN
12	2Q	12	GLN
12	2Q	123	HIS
13	2R	11	ASN
13	2R	24	GLN
14	2S	38	GLN
14	2S	95	HIS
15	2T	58	ASN
16	2U	81	HIS
16	2U	94	ASN
19	2X	82	GLN
20	2Y	92	ASN
21	2Z	73	GLN
22	20	35	ASN
24	22	56	GLN
26	24	46	GLN
30	28	35	GLN
33	2b	40	HIS
33	2b	76	GLN
33	2b	95	GLN
33	2b	110	GLN

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Mol	Chain	Res	Type
33	2b	113	HIS
33	2b	135	GLN
33	2b	146	GLN
33	2b	224	GLN
34	2c	98	ASN
34	2c	108	ASN
34	2c	170	GLN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
36	2e	38	GLN
36	2e	56	GLN
36	2e	72	GLN
37	2f	73	ASN
37	2f	94	GLN
37	2f	100	ASN
38	2g	28	ASN
38	2g	68	ASN
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	89	ASN
41	2j	21	GLN
41	2j	33	GLN
41	2j	68	HIS
42	2k	99	GLN
42	2k	104	GLN
43	2l	99	HIS
44	2m	92	HIS
46	2o	13	GLN
47	2p	16	HIS
48	2q	45	HIS
49	2r	63	GLN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	42	GLN
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	420 (14%)	31 (1%)
1	2A	2791/2915 (95%)	483 (17%)	22 (0%)
2	1B	119/121 (98%)	9 (7%)	0
2	2B	118/121 (97%)	22 (18%)	0
32	1a	1497/1521 (98%)	238 (15%)	0
32	2a	1501/1521 (98%)	285 (18%)	0
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	2 (16%)	0
54	1w	72/76 (94%)	23 (31%)	0
54	1y	72/76 (94%)	31 (43%)	0
54	2w	69/76 (90%)	26 (37%)	0
54	2y	70/76 (92%)	26 (37%)	0
55	1x	75/77 (97%)	13 (17%)	0
55	2x	75/77 (97%)	13 (17%)	0
All	All	9347/9620 (97%)	1594 (17%)	53 (0%)

All (1594) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	45	C
1	1A	55	G
1	1A	58	G
1	1A	64	A
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	205	G
1	1A	214	G
1	1A	216	A
1	1A	222	A

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Mol	Chain	Res	Type
1	1A	225	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(O)	C
1	1A	272(B)	G
1	1A	272(G)	C
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	342	G
1	1A	352	G
1	1A	353	G
1	1A	363	G
1	1A	363(B)	G
1	1A	370	G
1	1A	386	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G

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Mol	Chain	Res	Type
1	1A	549	G
1	1A	551	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	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	855	G
1	1A	859	G
1	1A	866	A
1	1A	879	G

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Mol	Chain	Res	Type
1	1A	880	G
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	959	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1041	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1051	G
1	1A	1052	C
1	1A	1054	A
1	1A	1055	G
1	1A	1057	A
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G
1	1A	1068	G
1	1A	1069	A
1	1A	1070	A

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Mol	Chain	Res	Type
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	1080	C
1	1A	1081	U
1	1A	1082	U
1	1A	1084	A
1	1A	1086	A
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	1098	A
1	1A	1101	U
1	1A	1107	G
1	1A	1110	G
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1220	A
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G

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Mol	Chain	Res	Type
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1320	C
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1384	A
1	1A	1385	G
1	1A	1386	C
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1496	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1554	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A

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Mol	Chain	Res	Type
1	1A	1647	G
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1740	G
1	1A	1756	G
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1802	A
1	1A	1816	G
1	1A	1828	G
1	1A	1847	A
1	1A	1861	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	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

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Mol	Chain	Res	Type
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
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	2110	G
1	1A	2111	C
1	1A	2113	U
1	1A	2116	G
1	1A	2121	G
1	1A	2127	G
1	1A	2129	C
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	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2145	C
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2152	G
1	1A	2155	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2162	G
1	1A	2163	C
1	1A	2165	G
1	1A	2166	G

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Mol	Chain	Res	Type
1	1A	2167	U
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2175	C
1	1A	2180	U
1	1A	2182	G
1	1A	2184	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2305	A
1	1A	2307	G
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
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

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Mol	Chain	Res	Type
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2469	A
1	1A	2470	G
1	1A	2474	C
1	1A	2476	A
1	1A	2477	C
1	1A	2491	U
1	1A	2494	G
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2578	G
1	1A	2585	U
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	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
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

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Mol	Chain	Res	Type
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	2769	C
1	1A	2778	A
1	1A	2790	A
1	1A	2802	G
1	1A	2805	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2836	U
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	12	C
2	1B	25	A
2	1B	45	A
2	1B	52	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	106	G
2	1B	110	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	92	C
32	1a	97	G
32	1a	98	G

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Mol	Chain	Res	Type
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	145	G
32	1a	163	C
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(A)	C
32	1a	189(F)	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	201	C
32	1a	203	U
32	1a	204	U
32	1a	216	G
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	321	A
32	1a	328	C
32	1a	332	G
32	1a	342	C
32	1a	347	G
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	397	A
32	1a	398	C
32	1a	406	G

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Mol	Chain	Res	Type
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	446	G
32	1a	452	A
32	1a	458	C
32	1a	461	A
32	1a	470	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	518	C
32	1a	521	G
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	630	G
32	1a	653	A
32	1a	657	G
32	1a	661	G
32	1a	662	G
32	1a	665	A
32	1a	673	G
32	1a	687	A
32	1a	688	G

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Mol	Chain	Res	Type
32	1a	693	G
32	1a	695	A
32	1a	703	G
32	1a	723	U
32	1a	731	G
32	1a	733	A
32	1a	749	C
32	1a	752	G
32	1a	753	A
32	1a	755	G
32	1a	777	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	864	A
32	1a	870	U
32	1a	876	G
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	982	U
32	1a	992	U
32	1a	993	G

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Mol	Chain	Res	Type
32	1a	996	A
32	1a	1000	U
32	1a	1001	A
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1024	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	1033	G
32	1a	1034	G
32	1a	1037	C
32	1a	1039	C
32	1a	1044	A
32	1a	1053	G
32	1a	1064	G
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G
32	1a	1124	G
32	1a	1125	U
32	1a	1132	C
32	1a	1133	G
32	1a	1134	G
32	1a	1135	U

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Mol	Chain	Res	Type
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1141	C
32	1a	1146	A
32	1a	1152	A
32	1a	1157	A
32	1a	1159	U
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1222	G
32	1a	1227	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1285	A
32	1a	1286	A
32	1a	1287	A
32	1a	1297	C
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1364	U
32	1a	1370	G

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Mol	Chain	Res	Type
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	14	A
53	1v	24	A
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	11	C
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	24	G
54	1w	25	C
54	1w	34	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	65	G
54	1w	68	C
54	1w	70	G
54	1w	71	G
54	1w	73	A
54	1w	74	C
55	1x	9	G

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Mol	Chain	Res	Type
55	1x	13	C
55	1x	14	A
55	1x	16	C
55	1x	18	G
55	1x	19	G
55	1x	20	U
55	1x	21	A
55	1x	47	U
55	1x	48	C
55	1x	61	C
55	1x	68	C
55	1x	76	A
54	1y	3	C
54	1y	5	G
54	1y	6	G
54	1y	7	A
54	1y	11	C
54	1y	13	C
54	1y	14	A
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	26	A
54	1y	34	G
54	1y	37	MIA
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	49	C
54	1y	50	U
54	1y	53	G
54	1y	54	5MU
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	61	C
54	1y	65	G
54	1y	66	U
54	1y	69	G
54	1y	70	G

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Mol	Chain	Res	Type
54	1y	71	G
1	2A	15	G
1	2A	27	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	96	G
1	2A	100	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	154	G
1	2A	154(A)	C
1	2A	157	U
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	245	G
1	2A	248	G
1	2A	266	G
1	2A	271(I)	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G

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Mol	Chain	Res	Type
1	2A	272(J)	C
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	312	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	380	U
1	2A	386	G
1	2A	396	G
1	2A	405	U
1	2A	407	G
1	2A	411	G
1	2A	412	A
1	2A	418	G
1	2A	421	U
1	2A	422	A
1	2A	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	496	G
1	2A	501	A
1	2A	505	A
1	2A	509	C
1	2A	512	G
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	556	G
1	2A	563	G
1	2A	568	U
1	2A	573	G

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Mol	Chain	Res	Type
1	2A	574	C
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	595	C
1	2A	603	A
1	2A	604	G
1	2A	607	U
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	669	G
1	2A	686	G
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	762	U
1	2A	764	A
1	2A	771	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	847	U
1	2A	857	C
1	2A	859	G
1	2A	865	C
1	2A	866	A
1	2A	874	G
1	2A	879	G

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Mol	Chain	Res	Type
1	2A	880	G
1	2A	883	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	903	C
1	2A	910	A
1	2A	915	C
1	2A	917	A
1	2A	919	G
1	2A	921	G
1	2A	932	G
1	2A	936	C
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	980	A
1	2A	983	A
1	2A	989	G
1	2A	996	A
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A

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Mol	Chain	Res	Type
1	2A	1033	U
1	2A	1034	G
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1115	G
1	2A	1128	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1143	A
1	2A	1168	G
1	2A	1171	G
1	2A	1188	U
1	2A	1195	G
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1221	C
1	2A	1236	G
1	2A	1244	G
1	2A	1252	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	1300	U
1	2A	1301	A
1	2A	1313	U
1	2A	1314	C
1	2A	1318	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C

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Mol	Chain	Res	Type
1	2A	1384	A
1	2A	1385	G
1	2A	1395	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1451	C
1	2A	1455	G
1	2A	1459	G
1	2A	1460	A
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1478	G
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1496	A
1	2A	1497	U
1	2A	1504	C
1	2A	1506	C
1	2A	1507	A
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1541	G
1	2A	1545	A
1	2A	1547	C
1	2A	1554	A
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A

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Mol	Chain	Res	Type
1	2A	1578	U
1	2A	1580	A
1	2A	1584	C
1	2A	1586	A
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A
1	2A	1665	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
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	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1769	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	1829	A
1	2A	1835	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

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Mol	Chain	Res	Type
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1939	5MU
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	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2063	C
1	2A	2069	G
1	2A	2093	G
1	2A	2108	C
1	2A	2110	G
1	2A	2111	C
1	2A	2116	G
1	2A	2120	G
1	2A	2122	U
1	2A	2124	G
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2130	U

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Mol	Chain	Res	Type
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
1	2A	2140	C
1	2A	2141	G
1	2A	2145	C
1	2A	2146	C
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2154	G
1	2A	2156	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	2175	C
1	2A	2176	A
1	2A	2178	C
1	2A	2180	U
1	2A	2182	G
1	2A	2183	C
1	2A	2185	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

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Mol	Chain	Res	Type
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	2283	C
1	2A	2287	A
1	2A	2303	G
1	2A	2305	A
1	2A	2308	G
1	2A	2309	A
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2336	A
1	2A	2346	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2389	G
1	2A	2406	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2448	A
1	2A	2459	A
1	2A	2468	G
1	2A	2469	A
1	2A	2476	A
1	2A	2478	A

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Mol	Chain	Res	Type
1	2A	2480	C
1	2A	2481	G
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2535	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2569	G
1	2A	2573	C
1	2A	2585	U
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2634	G
1	2A	2646	C
1	2A	2654	A
1	2A	2656	U
1	2A	2673	G
1	2A	2679	A
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2718	G
1	2A	2726	U
1	2A	2733	A
1	2A	2739	U
1	2A	2748	A
1	2A	2751	G
1	2A	2757	A

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Mol	Chain	Res	Type
1	2A	2759	G
1	2A	2761	G
1	2A	2765	A
1	2A	2766	G
1	2A	2769	C
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
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2872	G
1	2A	2876	G
1	2A	2880	C
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	9	G
2	2B	19	G
2	2B	25	A
2	2B	32	C
2	2B	34	U
2	2B	35	U
2	2B	40	U
2	2B	42	C
2	2B	51	G
2	2B	53	A
2	2B	56	G
2	2B	61	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	101	G
2	2B	105	A
2	2B	108	U

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Mol	Chain	Res	Type
2	2B	110	G
2	2B	120	A
32	2a	9	G
32	2a	26	A
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	66	G
32	2a	76	C
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	111	G
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	144	G
32	2a	156	G
32	2a	163	C
32	2a	182	U
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	220	G
32	2a	227	G
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

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Mol	Chain	Res	Type
32	2a	301	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	350	G
32	2a	351	G
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	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	414	A
32	2a	418	C
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	441	A
32	2a	442	C
32	2a	452	A
32	2a	458	C
32	2a	461	A
32	2a	470	C
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	521	G

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Mol	Chain	Res	Type
32	2a	524	G
32	2a	528	C
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	536	C
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	595	G
32	2a	596	C
32	2a	607	A
32	2a	619	U
32	2a	630	G
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	721	G
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	733	A
32	2a	749	C
32	2a	755	G
32	2a	773	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	817	C
32	2a	821	G
32	2a	828	A

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Mol	Chain	Res	Type
32	2a	834	C
32	2a	840	C
32	2a	841	U
32	2a	859	A
32	2a	874	G
32	2a	875	C
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	933	G
32	2a	934	C
32	2a	935	A
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	966	M2G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	982	U
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	995	C
32	2a	996	A
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1002	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G

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Mol	Chain	Res	Type
32	2a	1011	G
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(C)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1041	A
32	2a	1046	A
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1078	U
32	2a	1081	G
32	2a	1086	U
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1105	A
32	2a	1117	G
32	2a	1118	C
32	2a	1121	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1133	G
32	2a	1136	U

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Mol	Chain	Res	Type
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1171	G
32	2a	1172	C
32	2a	1173	G
32	2a	1179	A
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1212	U
32	2a	1213	A
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1249	C
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1264	C
32	2a	1270	C
32	2a	1272	G
32	2a	1275	A
32	2a	1277	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1281	U
32	2a	1287	A
32	2a	1299	A

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Mol	Chain	Res	Type
32	2a	1301	U
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1306	A
32	2a	1320	C
32	2a	1323	G
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1358	U
32	2a	1363	C
32	2a	1363(A)	A
32	2a	1370	G
32	2a	1378	C
32	2a	1397	C
32	2a	1400	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1452	C
32	2a	1475	G
32	2a	1492	A
32	2a	1494	G
32	2a	1497	G
32	2a	1503	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	24	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	8	4SU
54	2w	11	C

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Mol	Chain	Res	Type
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	29	G
54	2w	32	PSU
54	2w	40	C
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	57	G
54	2w	62	C
54	2w	63	G
54	2w	64	A
54	2w	66	U
54	2w	67	C
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	73	A
54	2w	74	C
55	2x	9	G
55	2x	10	G
55	2x	14	A
55	2x	15	G
55	2x	19	G
55	2x	21	A
55	2x	43	A
55	2x	47	U
55	2x	52	G
55	2x	53	G
55	2x	59	A
55	2x	61	C
55	2x	76	A
54	2y	13	C
54	2y	15	G
54	2y	19	G
54	2y	23	A
54	2y	25	C
54	2y	26	A
54	2y	27	G
54	2y	34	G

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Mol	Chain	Res	Type
54	2y	35	A
54	2y	37	MIA
54	2y	43	C
54	2y	45	U
54	2y	46	G7M
54	2y	49	C
54	2y	50	U
54	2y	52	G
54	2y	53	G
54	2y	55	PSU
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	61	C
54	2y	64	A
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (53) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	266	G
1	1A	278	A
1	1A	548	A
1	1A	669	G
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	895	U
1	1A	974	G
1	1A	1067	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A

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Mol	Chain	Res	Type
1	1A	1992	G
1	1A	2134	A
1	1A	2170	A
1	1A	2181	G
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
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	528	A
1	2A	752	A
1	2A	827	U
1	2A	856	C
1	2A	1026	U
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2062	A
1	2A	2119	A
1	2A	2126	A
1	2A	2689	U
1	2A	2756	U

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

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

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
32	5MC	1a	1404	32	19,22,23	1.66	3 (15%)	26,32,35	1.21	3 (11%)
54	PSU	1w	39	54	18,21,22	1.35	2 (11%)	21,30,33	2.10	4 (19%)
1	OMU	2A	2552	1,56	19,22,23	1.19	3 (15%)	25,31,34	1.78	5 (20%)
54	MIA	1y	37	54	21,24,32	1.62	4 (19%)	30,35,47	2.04	7 (23%)
54	PSU	2y	32	54	18,21,22	1.34	2 (11%)	21,30,33	1.96	4 (19%)
32	MA6	2a	1519	32	23,26,27	0.44	0	33,38,41	2.06	9 (27%)
1	PSU	1A	2605	1,56	18,21,22	1.35	2 (11%)	21,30,33	2.14	4 (19%)
32	PSU	2a	516	32	18,21,22	1.31	2 (11%)	21,30,33	2.12	4 (19%)
55	5MC	2x	32	55	19,22,23	1.63	3 (15%)	26,32,35	1.25	3 (11%)
54	PSU	2w	39	54	18,21,22	1.34	2 (11%)	21,30,33	2.09	4 (19%)
32	5MC	1a	1400	32	19,22,23	1.65	3 (15%)	26,32,35	1.32	5 (19%)
1	OMU	1A	2552	1,56	19,22,23	1.21	3 (15%)	25,31,34	1.81	5 (20%)
54	PSU	2w	32	54	18,21,22	1.34	2 (11%)	21,30,33	1.91	4 (19%)
55	5MC	1x	32	55	19,22,23	1.62	3 (15%)	26,32,35	1.22	2 (7%)
54	G7M	2w	46	54	23,26,27	1.49	3 (13%)	34,39,42	1.79	5 (14%)
54	MIA	1w	37	54	28,31,32	2.40	7 (25%)	38,44,47	2.73	12 (31%)
54	4SU	1w	8	54	18,21,22	1.89	5 (27%)	25,30,33	1.86	4 (16%)
54	MIA	2y	37	54	21,24,32	1.60	3 (14%)	30,35,47	2.10	8 (26%)
1	PSU	2A	2605	1	18,21,22	1.37	3 (16%)	21,30,33	2.00	5 (23%)
54	5MU	2y	54	54	19,22,23	1.50	5 (26%)	27,32,35	1.82	8 (29%)
1	5MC	1A	1962	1,56	19,22,23	1.73	3 (15%)	26,32,35	1.25	3 (11%)
54	MIA	2w	37	54	24,27,32	2.08	5 (20%)	32,39,47	2.51	11 (34%)
55	PSU	1x	55	55	18,21,22	1.37	2 (11%)	21,30,33	1.91	4 (19%)
54	PSU	1w	55	54	18,21,22	1.36	2 (11%)	21,30,33	2.02	4 (19%)
54	4SU	2w	8	54	18,21,22	1.82	6 (33%)	25,30,33	1.99	4 (16%)
54	5MU	1w	54	54	19,22,23	1.42	5 (26%)	27,32,35	1.68	5 (18%)
54	4SU	1y	8	54	18,21,22	1.79	5 (27%)	25,30,33	1.66	5 (20%)
54	PSU	2w	55	54	18,21,22	1.36	2 (11%)	21,30,33	2.03	3 (14%)
1	PSU	1A	1917	1	18,21,22	1.33	3 (16%)	21,30,33	2.09	3 (14%)
32	PSU	1a	516	32	18,21,22	1.40	3 (16%)	21,30,33	1.93	4 (19%)
1	2MA	2A	2503	1,56	22,25,26	1.45	5 (22%)	32,37,40	2.30	9 (28%)
32	MA6	1a	1518	32	23,26,27	0.42	0	33,38,41	1.94	10 (30%)
55	4SU	2x	8	55	18,21,22	2.14	5 (27%)	25,30,33	1.38	3 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	967	32	19,22,23	1.72	3 (15%)	26,32,35	1.10	2 (7%)
43	0TD	1l	92	43	8,9,10	4.63	1 (12%)	6,11,13	8.17	2 (33%)
32	4OC	2a	1402	56,32	20,23,24	0.78	0	25,32,35	0.96	1 (4%)
54	PSU	1y	39	54	18,21,22	1.44	2 (11%)	21,30,33	1.86	5 (23%)
32	2MG	1a	1207	56,32	23,26,27	1.22	3 (13%)	33,38,41	2.29	8 (24%)
1	OMC	2A	1920	1	19,22,23	0.79	0	25,31,34	0.93	1 (4%)
32	M2G	2a	966	32	24,27,28	1.31	4 (16%)	33,40,43	1.83	6 (18%)
55	5MU	2x	54	55	19,22,23	1.44	6 (31%)	27,32,35	1.88	5 (18%)
32	5MC	2a	1404	32	19,22,23	1.61	3 (15%)	26,32,35	1.15	3 (11%)
54	PSU	1y	32	54	18,21,22	1.36	2 (11%)	21,30,33	1.93	4 (19%)
54	G7M	1y	46	54	23,26,27	1.55	4 (17%)	34,39,42	1.82	4 (11%)
1	2MA	1A	2503	1,56	22,25,26	1.38	4 (18%)	32,37,40	2.40	9 (28%)
32	5MC	2a	1407	32	19,22,23	1.71	3 (15%)	26,32,35	1.27	3 (11%)
32	MA6	2a	1518	32	23,26,27	0.44	0	33,38,41	2.05	10 (30%)
54	PSU	1w	32	54,56	18,21,22	1.38	2 (11%)	21,30,33	2.04	3 (14%)
43	0TD	2l	92	43	8,9,10	4.52	1 (12%)	6,11,13	1.32	1 (16%)
1	5MU	1A	1915	1	19,22,23	1.37	5 (26%)	27,32,35	2.29	8 (29%)
32	UR3	2a	1498	32	19,22,23	1.11	1 (5%)	26,32,35	1.82	4 (15%)
32	2MG	2a	1207	56,32	23,26,27	1.26	4 (17%)	33,38,41	2.14	7 (21%)
54	G7M	1w	46	54	23,26,27	1.57	4 (17%)	34,39,42	1.60	4 (11%)
54	PSU	2y	39	54	18,21,22	1.49	2 (11%)	21,30,33	1.63	4 (19%)
54	PSU	2y	55	54	18,21,22	1.35	3 (16%)	21,30,33	1.91	4 (19%)
1	OMG	2A	2251	1,56,55	23,26,27	1.23	3 (13%)	32,38,41	2.06	6 (18%)
1	5MC	2A	1962	1,56	19,22,23	1.57	3 (15%)	26,32,35	1.08	2 (7%)
1	5MU	1A	1939	1,56	19,22,23	1.41	4 (21%)	27,32,35	2.10	6 (22%)
1	OMC	1A	1920	1	19,22,23	0.83	0	25,31,34	1.00	0
32	5MC	1a	1407	32	19,22,23	1.65	3 (15%)	26,32,35	1.00	2 (7%)
32	G7M	2a	527	56,32	23,26,27	1.52	4 (17%)	34,39,42	1.75	5 (14%)
54	G7M	2y	46	54	23,26,27	1.58	4 (17%)	34,39,42	1.79	4 (11%)
1	5MU	2A	1939	1,56	19,22,23	1.48	6 (31%)	27,32,35	2.20	8 (29%)
54	5MU	1y	54	54	19,22,23	1.50	6 (31%)	27,32,35	2.04	6 (22%)
1	PSU	1A	1911	1	18,21,22	1.38	2 (11%)	21,30,33	2.01	4 (19%)
1	5MU	2A	1915	1,56	19,22,23	1.44	6 (31%)	27,32,35	2.22	6 (22%)
55	5MU	1x	54	56,55	19,22,23	1.40	5 (26%)	27,32,35	1.95	6 (22%)
32	5MC	1a	967	32	19,22,23	1.79	3 (15%)	26,32,35	1.16	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	OMG	1A	2251	1,56,55	23,26,27	1.23	3 (13%)	32,38,41	1.99	6 (18%)
55	4SU	1x	8	55	18,21,22	2.26	5 (27%)	25,30,33	1.68	5 (20%)
32	4OC	1a	1402	32	20,23,24	0.74	0	25,32,35	1.03	1 (4%)
1	PSU	2A	1911	1	18,21,22	1.38	2 (11%)	21,30,33	2.06	3 (14%)
32	M2G	1a	966	32	24,27,28	1.34	4 (16%)	33,40,43	1.89	7 (21%)
54	4SU	2y	8	54	18,21,22	1.73	4 (22%)	25,30,33	2.78	5 (20%)
32	G7M	1a	527	56,32	23,26,27	1.53	3 (13%)	34,39,42	1.71	5 (14%)
1	PSU	2A	1917	1	18,21,22	1.32	2 (11%)	21,30,33	1.93	4 (19%)
32	MA6	1a	1519	32	23,26,27	0.44	0	33,38,41	2.04	9 (27%)
1	5MC	1A	1942	1	19,22,23	1.58	3 (15%)	26,32,35	1.19	3 (11%)
55	PSU	2x	55	55	18,21,22	1.41	2 (11%)	21,30,33	1.91	5 (23%)
1	5MC	2A	1942	1	19,22,23	1.72	3 (15%)	26,32,35	1.19	3 (11%)
32	5MC	2a	1400	32	19,22,23	1.73	3 (15%)	26,32,35	1.23	3 (11%)
54	PSU	1y	55	54	18,21,22	1.36	2 (11%)	21,30,33	1.94	4 (19%)
54	5MU	2w	54	54	19,22,23	1.35	4 (21%)	27,32,35	1.83	7 (25%)
32	UR3	1a	1498	32	19,22,23	0.95	0	26,32,35	1.79	2 (7%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
1	OMU	2A	2552	1,56	-	0/9/27/28	0/2/2/2
54	MIA	1y	37	54	-	2/7/25/34	0/3/3/3
54	PSU	2y	32	54	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	2/11/29/30	0/3/3/3
1	PSU	1A	2605	1,56	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	1,56	-	0/9/27/28	0/2/2/2
54	PSU	2w	32	54	-	2/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	3/7/25/26	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	MIA	1w	37	54	-	1/15/33/34	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
54	MIA	2y	37	54	-	2/7/25/34	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
1	5MC	1A	1962	1,56	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	4/11/29/34	0/3/3/3
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	1/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,56	-	0/7/25/26	0/3/3/3
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	2/7/12/14	-
32	4OC	2a	1402	56,32	-	0/9/29/30	0/2/2/2
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	56,32	-	2/9/27/28	0/3/3/3
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
54	G7M	1y	46	54	-	2/7/25/26	0/3/3/3
1	2MA	1A	2503	1,56	-	1/7/25/26	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
54	PSU	1w	32	54,56	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	4/7/12/14	-
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	56,32	-	0/9/27/28	0/3/3/3
54	G7M	1w	46	54	-	1/7/25/26	0/3/3/3
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
54	PSU	2y	55	54	-	3/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMG	2A	2251	1,56,55	-	0/9/27/28	0/3/3/3
1	5MC	2A	1962	1,56	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1,56	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	56,32	-	2/7/25/26	0/3/3/3
54	G7M	2y	46	54	-	0/7/25/26	0/3/3/3
1	5MU	2A	1939	1,56	-	0/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	2/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1,56	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	56,55	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	1,56,55	-	0/9/27/28	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
54	4SU	2y	8	54	-	1/7/25/26	0/2/2/2
32	G7M	1a	527	56,32	-	2/7/25/26	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	2/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	2/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2

All (252) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.76	1.69	1.82
43	2l	92	0TD	CB-SB	-12.33	1.69	1.82
54	1w	37	MIA	C2-S10	-7.73	1.69	1.75
54	1w	37	MIA	C13-C14	6.92	1.53	1.32
54	2w	37	MIA	C2-S10	-6.78	1.70	1.75
32	1a	967	5MC	C5-C4	6.77	1.49	1.44
32	2a	967	5MC	C5-C4	6.39	1.49	1.44
32	2a	1400	5MC	C5-C4	6.36	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1962	5MC	C5-C4	6.26	1.48	1.44
1	2A	1942	5MC	C5-C4	6.17	1.48	1.44
32	2a	1407	5MC	C5-C4	6.09	1.48	1.44
32	1a	1407	5MC	C5-C4	5.93	1.48	1.44
32	1a	1404	5MC	C5-C4	5.91	1.48	1.44
32	1a	1400	5MC	C5-C4	5.90	1.48	1.44
55	1x	32	5MC	C5-C4	5.75	1.48	1.44
55	2x	32	5MC	C5-C4	5.66	1.48	1.44
1	2A	1962	5MC	C5-C4	5.64	1.48	1.44
32	2a	1404	5MC	C5-C4	5.59	1.48	1.44
55	1x	8	4SU	C4-N3	-5.55	1.31	1.37
1	1A	1942	5MC	C5-C4	5.48	1.48	1.44
54	1y	37	MIA	C5-C4	5.18	1.48	1.39
54	2y	8	4SU	C4-S4	-5.14	1.59	1.68
54	2y	37	MIA	C5-C4	5.01	1.48	1.39
55	2x	8	4SU	C4-S4	-4.97	1.59	1.68
54	1w	8	4SU	C4-S4	-4.96	1.59	1.68
54	2w	37	MIA	C5-C4	4.91	1.47	1.39
55	2x	8	4SU	C4-N3	-4.91	1.32	1.37
54	1w	46	G7M	C5-N7	-4.87	1.33	1.39
54	1w	37	MIA	C5-C4	4.84	1.47	1.39
55	1x	8	4SU	C4-S4	-4.81	1.60	1.68
32	2a	527	G7M	C5-N7	-4.73	1.33	1.39
32	1a	527	G7M	C5-N7	-4.70	1.33	1.39
54	2y	46	G7M	C5-N7	-4.62	1.33	1.39
54	2w	8	4SU	C4-S4	-4.61	1.60	1.68
54	2w	46	G7M	C5-N7	-4.59	1.33	1.39
54	1y	39	PSU	C6-C5	4.39	1.40	1.35
54	1y	8	4SU	C4-S4	-4.35	1.61	1.68
54	2y	39	PSU	C6-C5	4.27	1.40	1.35
1	2A	2503	2MA	C5-C4	4.23	1.46	1.39
54	1y	46	G7M	C5-N7	-4.19	1.34	1.39
54	2w	55	PSU	C6-C5	3.90	1.39	1.35
1	1A	2503	2MA	C5-C4	3.89	1.46	1.39
54	1y	55	PSU	C6-C5	3.88	1.39	1.35
54	2y	32	PSU	C6-C5	3.86	1.39	1.35
54	1y	46	G7M	C5-C4	3.73	1.47	1.38
54	1w	8	4SU	C4-N3	-3.71	1.33	1.37
54	2w	8	4SU	C4-N3	-3.71	1.33	1.37
54	1y	32	PSU	C6-C5	3.70	1.39	1.35
54	1w	55	PSU	C6-C5	3.66	1.39	1.35
55	2x	55	PSU	C6-C5	3.62	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	46	G7M	C5-C4	3.57	1.47	1.38
1	2A	1911	PSU	C6-C5	3.56	1.39	1.35
55	1x	8	4SU	C5-C4	-3.52	1.38	1.42
55	2x	8	4SU	C5-C4	-3.51	1.38	1.42
1	1A	1911	PSU	C6-C5	3.49	1.39	1.35
32	2a	516	PSU	C6-C5	3.48	1.39	1.35
32	1a	516	PSU	C6-C5	3.48	1.39	1.35
54	1y	8	4SU	C4-N3	-3.45	1.34	1.37
54	1w	46	G7M	C5-C4	3.44	1.46	1.38
54	2w	39	PSU	C6-C5	3.43	1.39	1.35
55	1x	55	PSU	C6-C5	3.43	1.39	1.35
54	1w	32	PSU	C6-C5	3.39	1.39	1.35
1	2A	1917	PSU	C6-C5	3.38	1.39	1.35
55	1x	8	4SU	C2-N3	-3.37	1.32	1.38
54	2w	32	PSU	C6-C5	3.34	1.39	1.35
32	2a	966	M2G	C5-C4	3.30	1.47	1.38
32	2a	1404	5MC	C6-C5	3.28	1.40	1.34
32	1a	966	M2G	C5-C4	3.28	1.47	1.38
32	2a	527	G7M	C5-C4	3.22	1.46	1.38
32	2a	1207	2MG	C5-C4	3.21	1.47	1.38
54	2w	46	G7M	C5-C4	3.18	1.46	1.38
32	1a	527	G7M	C5-C4	3.13	1.46	1.38
1	2A	2251	OMG	C5-C4	3.13	1.47	1.38
1	1A	1917	PSU	C6-C5	3.13	1.38	1.35
54	2y	54	5MU	C2-N1	3.13	1.43	1.38
1	1A	1939	5MU	C4-N3	-3.10	1.33	1.38
54	1w	39	PSU	C6-C5	3.10	1.38	1.35
32	1a	1207	2MG	C5-C4	3.08	1.47	1.38
32	2a	1407	5MC	C6-C5	3.05	1.39	1.34
1	2A	2605	PSU	C6-C5	3.05	1.38	1.35
1	2A	1942	5MC	C6-C5	3.03	1.39	1.34
32	1a	1407	5MC	C6-C5	3.02	1.39	1.34
55	2x	32	5MC	C6-C5	3.00	1.39	1.34
54	2w	37	MIA	C5-C6	2.97	1.49	1.41
54	2y	37	MIA	C5-C6	2.96	1.49	1.41
54	1y	54	5MU	C6-C5	2.96	1.39	1.34
54	2y	55	PSU	C6-C5	2.92	1.38	1.35
1	2A	1915	5MU	C6-C5	2.91	1.39	1.34
1	1A	1942	5MC	C6-C5	2.90	1.39	1.34
1	1A	2605	PSU	C6-C5	2.90	1.38	1.35
54	2y	39	PSU	C4-N3	-2.90	1.33	1.38
1	1A	1962	5MC	C6-C5	2.89	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1939	5MU	C6-C5	2.89	1.39	1.34
1	1A	2251	OMG	C5-C4	2.88	1.46	1.38
1	2A	1939	5MU	C4-N3	-2.87	1.33	1.38
1	2A	2605	PSU	C4-N3	-2.86	1.33	1.38
54	1y	37	MIA	C5-C6	2.85	1.48	1.41
32	2a	966	M2G	C2-N2	2.84	1.40	1.35
32	1a	966	M2G	C2-N2	2.83	1.40	1.35
54	2y	54	5MU	C6-C5	2.82	1.39	1.34
55	2x	54	5MU	C6-C5	2.81	1.39	1.34
54	1w	8	4SU	C5-C4	-2.78	1.39	1.42
54	1w	54	5MU	C4-N3	-2.74	1.33	1.38
55	1x	54	5MU	C6-C5	2.74	1.39	1.34
55	1x	54	5MU	C4-N3	-2.74	1.33	1.38
32	1a	967	5MC	C6-C5	2.74	1.39	1.34
54	1w	39	PSU	C4-N3	-2.72	1.33	1.38
54	1y	54	5MU	C4-C5	2.72	1.49	1.44
32	1a	1404	5MC	C6-N1	-2.70	1.33	1.38
55	1x	32	5MC	C6-C5	2.69	1.39	1.34
54	1w	54	5MU	C6-C5	2.68	1.39	1.34
55	2x	54	5MU	C4-N3	-2.68	1.33	1.38
55	2x	55	PSU	C4-N3	-2.67	1.33	1.38
54	1y	54	5MU	C4-N3	-2.67	1.33	1.38
32	1a	516	PSU	C4-N3	-2.66	1.33	1.38
1	2A	1939	5MU	C6-C5	2.66	1.38	1.34
1	1A	2605	PSU	C4-N3	-2.65	1.33	1.38
54	2y	8	4SU	C5-C4	-2.64	1.39	1.42
32	1a	966	M2G	C6-N1	-2.64	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.63	1.33	1.38
1	2A	1915	5MU	C4-N3	-2.63	1.33	1.38
54	2w	54	5MU	C6-C5	2.62	1.38	1.34
54	1w	32	PSU	C4-N3	-2.62	1.34	1.38
32	2a	1498	UR3	C2-N1	2.61	1.42	1.38
54	2y	55	PSU	C4-N3	-2.60	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.59	1.33	1.38
1	2A	1915	5MU	C4-C5	2.59	1.49	1.44
1	1A	1915	5MU	C4-N3	-2.58	1.34	1.38
32	1a	527	G7M	C6-N1	-2.58	1.34	1.38
1	1A	2251	OMG	C6-N1	-2.58	1.34	1.38
54	2y	54	5MU	C4-N3	-2.58	1.34	1.38
32	2a	967	5MC	C6-C5	2.57	1.38	1.34
1	1A	1911	PSU	C4-N3	-2.57	1.34	1.38
54	2w	32	PSU	C4-N3	-2.57	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	32	PSU	C4-N3	-2.56	1.34	1.38
54	1y	54	5MU	C2-N1	2.56	1.42	1.38
1	2A	1917	PSU	C4-N3	-2.55	1.34	1.38
32	1a	1400	5MC	C6-C5	2.55	1.38	1.34
1	2A	2251	OMG	C6-N1	-2.55	1.34	1.38
55	1x	32	5MC	C6-N1	-2.54	1.33	1.38
54	2y	8	4SU	C4-N3	-2.53	1.35	1.37
1	2A	2552	OMU	C4-N3	-2.53	1.34	1.38
32	2a	1400	5MC	C6-C5	2.52	1.38	1.34
55	2x	8	4SU	O2-C2	2.52	1.27	1.23
1	1A	2552	OMU	C4-N3	-2.52	1.34	1.38
1	1A	2503	2MA	C5-N7	-2.51	1.34	1.39
1	1A	1915	5MU	C2-N1	2.51	1.42	1.38
1	2A	1962	5MC	C6-C5	2.51	1.38	1.34
54	2w	39	PSU	C4-N3	-2.51	1.34	1.38
1	2A	2503	2MA	C5-C6	2.51	1.48	1.41
54	1y	8	4SU	C5-C4	-2.50	1.39	1.42
1	2A	1939	5MU	C4-C5	2.48	1.48	1.44
55	1x	55	PSU	C4-N3	-2.48	1.34	1.38
32	1a	1404	5MC	C6-C5	2.48	1.38	1.34
54	1w	37	MIA	C5-C6	2.48	1.47	1.41
54	2w	54	5MU	C4-C5	2.47	1.48	1.44
54	2y	37	MIA	C8-N7	2.47	1.36	1.31
55	2x	8	4SU	C2-N3	-2.47	1.33	1.38
32	1a	1207	2MG	C6-N1	-2.46	1.34	1.38
1	2A	1939	5MU	C2-N1	2.46	1.42	1.38
1	1A	2251	OMG	C5-N7	-2.46	1.34	1.39
54	2w	37	MIA	C8-N7	2.45	1.36	1.31
54	1w	55	PSU	C4-N3	-2.45	1.34	1.38
54	1y	55	PSU	C4-N3	-2.44	1.34	1.38
1	2A	2503	2MA	C8-N7	2.44	1.36	1.31
54	1w	54	5MU	C4-C5	2.43	1.48	1.44
54	1w	37	MIA	C5-N7	-2.42	1.34	1.39
1	1A	1915	5MU	C6-C5	2.41	1.38	1.34
32	2a	1207	2MG	C6-N1	-2.41	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.41	1.33	1.38
55	2x	54	5MU	C4-C5	2.40	1.48	1.44
54	1y	8	4SU	C2-N1	2.38	1.42	1.38
54	2w	8	4SU	C2-N3	-2.37	1.33	1.38
54	1y	37	MIA	C8-N7	2.37	1.36	1.31
54	1y	39	PSU	C4-N3	-2.36	1.34	1.38
54	1y	46	G7M	C6-N1	-2.36	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	32	PSU	C4-N3	-2.36	1.34	1.38
1	1A	2503	2MA	C5-C6	2.36	1.47	1.41
32	2a	966	M2G	C6-N1	-2.36	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.36	1.34	1.38
32	1a	1400	5MC	C6-N1	-2.36	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.35	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.35	1.34	1.38
54	2y	46	G7M	C6-N1	-2.34	1.34	1.38
1	1A	1915	5MU	C4-C5	2.34	1.48	1.44
54	1w	8	4SU	C2-N3	-2.33	1.33	1.38
1	1A	1939	5MU	C2-N3	-2.33	1.33	1.38
55	1x	8	4SU	O2-C2	2.33	1.27	1.23
32	2a	516	PSU	C4-N3	-2.33	1.34	1.38
54	2w	54	5MU	C4-N3	-2.33	1.34	1.38
54	1w	46	G7M	C6-N1	-2.32	1.34	1.38
54	1w	37	MIA	C8-N7	2.31	1.36	1.31
1	2A	2552	OMU	C2-N3	-2.31	1.33	1.38
55	1x	54	5MU	C4-C5	2.30	1.48	1.44
1	2A	2251	OMG	C5-N7	-2.30	1.34	1.39
1	2A	2503	2MA	C4-N9	-2.29	1.32	1.37
54	2w	8	4SU	C2-N1	2.29	1.42	1.38
32	2a	527	G7M	C6-N1	-2.28	1.34	1.38
54	2y	54	5MU	C4-C5	2.27	1.48	1.44
54	2w	55	PSU	C4-N3	-2.27	1.34	1.38
54	1y	8	4SU	C2-N3	-2.26	1.34	1.38
55	2x	54	5MU	C2-N1	2.25	1.42	1.38
32	1a	967	5MC	C6-N1	-2.25	1.34	1.38
1	2A	1915	5MU	C2-N1	2.25	1.42	1.38
54	2w	37	MIA	C5-N7	-2.24	1.35	1.39
32	2a	967	5MC	C6-N1	-2.23	1.34	1.38
54	1y	54	5MU	C2-N3	-2.23	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.22	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.22	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.21	1.33	1.37
54	1w	54	5MU	C2-N1	2.21	1.41	1.38
1	2A	2503	2MA	C5-N7	-2.20	1.35	1.39
1	1A	1939	5MU	C6-N1	-2.20	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.19	1.34	1.38
55	2x	32	5MC	C6-N1	-2.19	1.34	1.38
54	2w	8	4SU	C5-C4	-2.18	1.39	1.42
1	1A	2503	2MA	C8-N7	2.18	1.35	1.31
1	1A	2552	OMU	C5-C4	-2.17	1.39	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1207	2MG	C2-N3	2.17	1.36	1.32
54	1w	54	5MU	C2-N3	-2.15	1.34	1.38
1	1A	1915	5MU	C6-N1	-2.15	1.34	1.38
54	2y	55	PSU	C2-N3	-2.14	1.33	1.37
55	2x	54	5MU	C2-N3	-2.14	1.34	1.38
32	1a	1407	5MC	C6-N1	-2.14	1.34	1.38
32	2a	1207	2MG	C5-N7	-2.13	1.34	1.39
55	1x	54	5MU	C6-N1	-2.12	1.34	1.38
1	2A	1915	5MU	C2-N3	-2.12	1.34	1.38
54	2y	8	4SU	C2-N1	2.11	1.41	1.38
32	1a	966	M2G	C5-N7	-2.11	1.34	1.39
1	2A	1942	5MC	C6-N1	-2.11	1.34	1.38
1	2A	2552	OMU	C5-C4	-2.10	1.39	1.43
1	1A	1917	PSU	C2-N1	-2.09	1.33	1.36
54	1y	37	MIA	C5-N7	-2.08	1.35	1.39
32	2a	966	M2G	C5-N7	-2.08	1.34	1.39
32	2a	527	G7M	C5-C6	2.08	1.49	1.43
54	1w	46	G7M	C4-N9	-2.08	1.32	1.38
54	1y	54	5MU	C6-N1	-2.07	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.07	1.34	1.38
54	1w	37	MIA	C4-N9	-2.06	1.33	1.37
54	2w	54	5MU	C2-N1	2.06	1.41	1.38
55	1x	54	5MU	C2-N3	-2.05	1.34	1.38
54	2y	46	G7M	C5-C6	2.04	1.48	1.43
1	2A	1939	5MU	C2-N3	-2.03	1.34	1.38
32	1a	516	PSU	C2-N3	-2.03	1.34	1.37
54	1y	46	G7M	C5-C6	2.03	1.48	1.43
54	2w	46	G7M	C5-C6	2.02	1.48	1.43
54	2w	8	4SU	C6-C5	2.02	1.39	1.35
32	2a	1404	5MC	C6-N1	-2.02	1.34	1.38
32	1a	1207	2MG	C4-N9	-2.01	1.32	1.38
54	1w	8	4SU	C2-N1	2.01	1.41	1.38
55	2x	54	5MU	C6-N1	-2.00	1.34	1.38
54	2y	54	5MU	C2-N3	-2.00	1.34	1.38

All (401) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	19.78	137.91	102.36
54	1w	37	MIA	C12-C13-C14	-8.91	111.02	127.01
1	1A	2503	2MA	C5-C4-N3	-8.39	118.34	127.18
54	2y	8	4SU	C4-N3-C2	-8.28	119.38	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	37	MIA	C5-C4-N3	-8.11	118.63	127.18
54	1w	37	MIA	C5-C4-N3	-7.63	119.15	127.18
1	2A	2503	2MA	C5-C4-N3	-7.52	119.26	127.18
32	1a	1498	UR3	C4-N3-C2	-7.24	118.75	124.58
32	2a	1498	UR3	C4-N3-C2	-6.95	118.99	124.58
32	1a	1207	2MG	C2-N3-C4	6.92	120.66	112.00
32	2a	1207	2MG	C2-N3-C4	6.91	120.64	112.00
54	2y	8	4SU	C5-C4-N3	6.82	121.09	114.75
1	1A	2503	2MA	N3-C4-N9	6.71	135.51	126.99
32	2a	516	PSU	N1-C2-N3	6.59	122.12	115.17
1	2A	2251	OMG	C5-C4-N3	-6.55	117.97	128.39
54	1w	39	PSU	N1-C2-N3	6.48	122.01	115.17
1	2A	1911	PSU	N1-C2-N3	6.48	122.00	115.17
54	1w	32	PSU	N1-C2-N3	6.46	121.98	115.17
1	2A	2605	PSU	N1-C2-N3	6.41	121.93	115.17
54	2w	39	PSU	N1-C2-N3	6.41	121.93	115.17
1	1A	2605	PSU	N1-C2-N3	6.36	121.88	115.17
1	1A	1911	PSU	N1-C2-N3	6.29	121.81	115.17
1	1A	1917	PSU	N1-C2-N3	6.27	121.79	115.17
54	2w	55	PSU	N1-C2-N3	6.25	121.76	115.17
55	2x	55	PSU	N1-C2-N3	6.15	121.66	115.17
54	1y	37	MIA	C5-C4-N3	-6.14	118.27	126.72
32	2a	966	M2G	C5-C4-N3	-6.12	118.65	128.39
54	2y	32	PSU	N1-C2-N3	6.12	121.62	115.17
32	1a	966	M2G	C5-C4-N3	-6.10	118.69	128.39
54	1y	46	G7M	N9-C4-N3	6.06	138.08	125.95
54	1y	32	PSU	N1-C2-N3	6.05	121.55	115.17
55	1x	55	PSU	N1-C2-N3	6.02	121.52	115.17
54	2w	8	4SU	C4-N3-C2	-6.01	121.55	127.31
54	2w	37	MIA	N3-C4-N9	5.96	134.56	126.99
54	2y	37	MIA	C5-C4-N3	-5.94	118.53	126.72
32	1a	516	PSU	N1-C2-N3	5.94	121.43	115.17
54	1y	55	PSU	N1-C2-N3	5.93	121.42	115.17
54	1w	37	MIA	N3-C4-N9	5.90	134.47	126.99
32	2a	1207	2MG	C5-C4-N3	-5.87	119.05	128.39
1	2A	1917	PSU	N1-C2-N3	5.86	121.35	115.17
54	2w	32	PSU	N1-C2-N3	5.82	121.30	115.17
54	2y	8	4SU	C5-C4-S4	-5.81	117.67	124.31
54	1w	55	PSU	N1-C2-N3	5.80	121.29	115.17
54	2y	46	G7M	N9-C4-N3	5.74	137.43	125.95
54	1y	39	PSU	N1-C2-N3	5.72	121.20	115.17
1	1A	2251	OMG	C5-C4-N3	-5.72	119.29	128.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2503	2MA	N3-C4-N9	5.67	134.19	126.99
54	2y	55	PSU	N1-C2-N3	5.63	121.11	115.17
32	2a	527	G7M	C5-C4-N3	-5.57	117.63	128.15
54	2y	46	G7M	C5-C4-N3	-5.55	117.66	128.15
54	2w	46	G7M	C5-C4-N3	-5.53	117.70	128.15
1	2A	1939	5MU	C4-N3-C2	-5.52	120.10	127.34
1	2A	1915	5MU	C4-N3-C2	-5.50	120.13	127.34
32	2a	527	G7M	N9-C4-N3	5.48	136.91	125.95
1	2A	1939	5MU	N3-C2-N1	5.48	122.02	114.89
54	1y	46	G7M	C5-C4-N3	-5.47	117.81	128.15
1	1A	1915	5MU	C4-N3-C2	-5.46	120.18	127.34
32	1a	1207	2MG	C5-C4-N3	-5.46	119.70	128.39
54	1w	8	4SU	C5-C4-N3	5.46	119.83	114.75
1	2A	2251	OMG	N9-C4-N3	5.36	136.67	125.95
32	1a	527	G7M	N9-C4-N3	5.32	136.59	125.95
32	1a	527	G7M	C5-C4-N3	-5.22	118.28	128.15
1	1A	1939	5MU	N3-C2-N1	5.18	121.63	114.89
1	2A	1915	5MU	N3-C2-N1	5.18	121.63	114.89
54	1w	46	G7M	N9-C4-N3	5.17	136.29	125.95
1	1A	2251	OMG	C2-N3-C4	5.14	121.14	112.30
1	1A	1915	5MU	N3-C2-N1	5.13	121.56	114.89
54	2w	46	G7M	C2-N3-C4	5.12	121.12	112.30
54	2w	46	G7M	N9-C4-N3	5.12	136.19	125.95
54	1w	8	4SU	C4-N3-C2	-5.11	122.42	127.31
1	1A	1939	5MU	C4-N3-C2	-5.10	120.65	127.34
54	2y	46	G7M	C2-N3-C4	5.06	121.01	112.30
54	1y	54	5MU	N3-C2-N1	5.04	121.45	114.89
1	2A	1915	5MU	C5-C4-N3	5.02	119.69	115.32
54	1y	54	5MU	C4-N3-C2	-5.01	120.78	127.34
32	2a	1518	MA6	C5-C4-N3	-5.00	119.83	126.72
54	1y	46	G7M	C2-N3-C4	4.97	120.86	112.30
54	1y	37	MIA	N3-C4-N9	4.96	135.60	127.17
54	2y	39	PSU	N1-C2-N3	4.95	120.39	115.17
32	1a	966	M2G	N9-C4-N3	4.93	135.81	125.95
32	1a	1519	MA6	N1-C2-N3	-4.92	121.13	128.58
54	2w	8	4SU	C5-C4-N3	4.91	119.31	114.75
1	2A	2251	OMG	C2-N3-C4	4.89	120.72	112.30
32	2a	1519	MA6	N1-C2-N3	-4.88	121.20	128.58
54	2y	37	MIA	N3-C4-N9	4.86	135.44	127.17
1	1A	1915	5MU	C5-C4-N3	4.84	119.53	115.32
32	2a	527	G7M	C2-N3-C4	4.83	120.62	112.30
1	1A	2552	OMU	C4-N3-C2	-4.81	120.64	126.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1518	MA6	N1-C2-N3	-4.72	121.44	128.58
1	1A	1915	5MU	O4-C4-C5	-4.71	119.53	124.92
1	2A	2552	OMU	C4-N3-C2	-4.67	120.81	126.61
1	1A	2605	PSU	C4-N3-C2	-4.66	119.95	126.37
54	1w	46	G7M	C5-C4-N3	-4.63	119.39	128.15
1	1A	1939	5MU	C5-C4-N3	4.63	119.35	115.32
32	2a	966	M2G	N9-C4-N3	4.63	135.21	125.95
55	1x	54	5MU	C4-N3-C2	-4.58	121.33	127.34
55	1x	54	5MU	N3-C2-N1	4.57	120.84	114.89
32	1a	527	G7M	C2-N3-C4	4.49	120.04	112.30
1	1A	2251	OMG	N9-C4-N3	4.47	134.89	125.95
55	2x	54	5MU	N3-C2-N1	4.47	120.71	114.89
1	1A	1917	PSU	O2-C2-N1	-4.46	118.19	122.79
32	2a	516	PSU	C4-N3-C2	-4.46	120.23	126.37
32	2a	1519	MA6	C5-C4-N3	-4.46	120.58	126.72
54	2y	8	4SU	N3-C2-N1	4.45	120.68	114.89
32	1a	1518	MA6	N1-C2-N3	-4.43	121.87	128.58
1	2A	1939	5MU	C5-C4-N3	4.38	119.13	115.32
1	2A	2552	OMU	N3-C2-N1	4.38	120.59	114.89
32	1a	1519	MA6	C5-C4-N3	-4.37	120.69	126.72
54	1w	39	PSU	C4-N3-C2	-4.36	120.36	126.37
54	1y	8	4SU	C5-C4-N3	4.35	118.80	114.75
55	2x	54	5MU	C4-N3-C2	-4.34	121.65	127.34
32	1a	1207	2MG	C6-C5-N7	4.31	138.14	130.29
54	2w	39	PSU	C4-N3-C2	-4.30	120.45	126.37
32	2a	966	M2G	C2-N3-C4	4.29	120.44	112.51
32	1a	966	M2G	C2-N3-C4	4.28	120.42	112.51
54	1y	54	5MU	C5-C4-N3	4.25	119.02	115.32
54	2w	8	4SU	N3-C2-N1	4.21	120.38	114.89
1	1A	2552	OMU	N3-C2-N1	4.19	120.35	114.89
55	1x	8	4SU	C6-C5-C4	-4.12	116.38	119.95
1	2A	1915	5MU	O4-C4-C5	-4.11	120.22	124.92
32	2a	1207	2MG	N9-C4-N3	4.11	134.17	125.95
54	2w	54	5MU	N3-C2-N1	4.10	120.23	114.89
1	1A	1917	PSU	C4-N3-C2	-4.08	120.75	126.37
54	2y	55	PSU	C4-N3-C2	-4.07	120.77	126.37
55	2x	54	5MU	C5-C4-N3	4.05	118.85	115.32
32	2a	1519	MA6	C2-N1-C6	4.05	121.71	111.83
54	1w	37	MIA	C15-C14-C13	-4.05	110.51	122.66
54	1y	55	PSU	C4-N3-C2	-4.04	120.80	126.37
1	2A	1917	PSU	C4-N3-C2	-4.04	120.80	126.37
1	1A	1911	PSU	C4-N3-C2	-4.04	120.81	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	32	PSU	C4-N3-C2	-4.04	120.81	126.37
54	1w	37	MIA	C11-S10-C2	-4.04	99.22	102.25
54	1w	54	5MU	N3-C2-N1	4.03	120.14	114.89
1	2A	1911	PSU	C4-N3-C2	-4.02	120.84	126.37
54	2w	37	MIA	C11-S10-C2	-4.01	99.24	102.25
54	1w	55	PSU	C4-N3-C2	-4.00	120.86	126.37
1	1A	1939	5MU	O4-C4-C5	-4.00	120.34	124.92
54	2w	55	PSU	C4-N3-C2	-4.00	120.87	126.37
54	2w	54	5MU	C4-N3-C2	-3.99	122.11	127.34
55	1x	54	5MU	C5-C4-N3	3.98	118.78	115.32
1	2A	2605	PSU	C4-N3-C2	-3.98	120.89	126.37
32	1a	1519	MA6	C2-N1-C6	3.97	121.52	111.83
54	1y	54	5MU	C5-C6-N1	-3.97	119.01	123.31
54	1y	32	PSU	C4-N3-C2	-3.96	120.92	126.37
54	1y	8	4SU	C4-N3-C2	-3.95	123.53	127.31
32	1a	1518	MA6	C2-N1-C6	3.94	121.45	111.83
54	2y	32	PSU	C4-N3-C2	-3.94	120.95	126.37
54	2w	39	PSU	O2-C2-N1	-3.93	118.74	122.79
32	2a	1400	5MC	C5-C6-N1	-3.93	119.05	123.31
32	2a	1518	MA6	C2-N1-C6	3.91	121.39	111.83
54	1w	46	G7M	C2-N3-C4	3.91	119.03	112.30
32	1a	516	PSU	C4-N3-C2	-3.90	121.00	126.37
54	2w	55	PSU	O2-C2-N1	-3.89	118.77	122.79
32	1a	1518	MA6	C5-C4-N3	-3.89	121.36	126.72
1	2A	1911	PSU	O2-C2-N1	-3.88	118.79	122.79
1	2A	1915	5MU	C5-C6-N1	-3.88	119.10	123.31
32	2a	1519	MA6	C4-C5-N7	-3.86	106.17	110.58
55	2x	8	4SU	C5-C4-N3	3.85	118.33	114.75
54	2w	32	PSU	C4-N3-C2	-3.85	121.06	126.37
55	1x	55	PSU	C4-N3-C2	-3.83	121.09	126.37
32	1a	1519	MA6	C5-N7-C8	3.82	109.46	103.45
32	2a	1519	MA6	C5-N7-C8	3.82	109.45	103.45
1	1A	2552	OMU	C5-C4-N3	3.81	120.13	114.80
32	1a	1519	MA6	C4-C5-N7	-3.81	106.23	110.58
54	2w	37	MIA	C4-C5-N7	-3.80	106.23	110.58
1	1A	1939	5MU	C5-C6-N1	-3.79	119.19	123.31
54	2y	54	5MU	C5-C4-N3	3.78	118.61	115.32
55	2x	55	PSU	C4-N3-C2	-3.77	121.18	126.37
1	1A	2605	PSU	O2-C2-N1	-3.77	118.91	122.79
1	2A	2503	2MA	C4-C5-N7	-3.76	106.28	110.58
32	2a	1407	5MC	C5-C6-N1	-3.75	119.25	123.31
54	2w	37	MIA	C12-N6-C6	-3.74	119.38	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	55	PSU	O2-C2-N1	-3.74	118.94	122.79
32	2a	1518	MA6	C4-C5-N7	-3.73	106.31	110.58
54	1w	54	5MU	C4-N3-C2	-3.73	122.45	127.34
54	2y	37	MIA	C2-N3-C4	3.73	120.94	111.83
54	2y	54	5MU	N3-C2-N1	3.73	119.75	114.89
54	1w	39	PSU	O2-C2-N1	-3.72	118.95	122.79
32	1a	1404	5MC	C5-C6-N1	-3.71	119.28	123.31
32	1a	1518	MA6	C5-N7-C8	3.71	109.28	103.45
54	2y	54	5MU	O4-C4-C5	-3.70	120.68	124.92
32	2a	516	PSU	O2-C2-N1	-3.69	118.98	122.79
1	2A	1939	5MU	C5-C6-N1	-3.69	119.31	123.31
1	2A	2552	OMU	C5-C4-N3	3.67	119.94	114.80
55	1x	32	5MC	C5-C6-N1	-3.66	119.33	123.31
54	1w	54	5MU	C5-C4-N3	3.66	118.51	115.32
54	2w	54	5MU	C5-C4-N3	3.66	118.50	115.32
54	1w	32	PSU	O2-C2-N1	-3.65	119.02	122.79
55	2x	54	5MU	O4-C4-C5	-3.65	120.74	124.92
32	1a	1207	2MG	N1-C2-N2	3.64	120.28	116.56
54	1y	39	PSU	C4-N3-C2	-3.64	121.36	126.37
54	2w	54	5MU	O4-C4-C5	-3.63	120.76	124.92
54	1w	37	MIA	C16-C14-C13	-3.63	111.76	122.66
55	1x	54	5MU	O4-C4-C5	-3.62	120.77	124.92
55	1x	54	5MU	C5-C6-N1	-3.61	119.39	123.31
32	1a	967	5MC	C5-C6-N1	-3.60	119.41	123.31
55	2x	8	4SU	C6-C5-C4	-3.60	116.84	119.95
32	1a	1518	MA6	N9-C8-N7	-3.59	108.84	113.94
54	1y	37	MIA	C2-N3-C4	3.57	120.55	111.83
54	2y	37	MIA	C4-C5-N7	-3.57	106.50	110.58
54	2y	54	5MU	C4-N3-C2	-3.54	122.69	127.34
32	2a	1518	MA6	C2-N3-C4	3.54	120.47	111.83
1	1A	2503	2MA	N6-C6-N1	3.53	121.79	117.03
1	1A	1911	PSU	O2-C2-N1	-3.51	119.17	122.79
54	1y	37	MIA	C4-C5-N7	-3.51	106.57	110.58
54	2y	8	4SU	O2-C2-N1	-3.50	118.23	122.80
32	2a	967	5MC	C5-C6-N1	-3.50	119.51	123.31
32	1a	1207	2MG	N9-C4-N3	3.48	132.92	125.95
54	2w	37	MIA	C6-C5-N7	3.48	136.22	132.43
54	2w	37	MIA	C2-N3-C4	3.47	121.39	112.29
32	1a	1519	MA6	C2-N3-C4	3.44	120.24	111.83
32	2a	1518	MA6	C5-N7-C8	3.44	108.86	103.45
32	2a	1519	MA6	C2-N3-C4	3.41	120.16	111.83
1	2A	1939	5MU	O4-C4-C5	-3.40	121.03	124.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1y	54	5MU	O4-C4-C5	-3.39	121.04	124.92
54	2y	37	MIA	N3-C2-N1	-3.38	123.46	128.58
32	2a	1498	UR3	C5-C4-N3	3.36	119.47	115.04
1	2A	1962	5MC	C5-C6-N1	-3.36	119.66	123.31
32	2a	1207	2MG	C6-C5-N7	3.35	136.39	130.29
32	1a	1519	MA6	N9-C8-N7	-3.34	109.19	113.94
54	1w	37	MIA	C4-C5-N7	-3.34	106.77	110.58
1	1A	2251	OMG	C6-C5-N7	3.31	136.32	130.29
1	1A	2503	2MA	C4-C5-N7	-3.30	106.81	110.58
1	1A	1942	5MC	C5-C6-N1	-3.30	119.73	123.31
32	1a	1518	MA6	C4-C5-N7	-3.29	106.82	110.58
54	1w	37	MIA	C6-C5-N7	3.29	136.01	132.43
32	2a	1519	MA6	N9-C8-N7	-3.29	109.27	113.94
55	1x	32	5MC	C5-C4-N3	-3.26	118.41	121.75
32	1a	1207	2MG	C4-C5-N7	-3.26	105.50	110.67
55	1x	8	4SU	C1'-N1-C2	3.25	123.43	117.59
32	1a	1498	UR3	C5-C4-N3	3.25	119.32	115.04
1	2A	1942	5MC	C5-C4-N3	-3.21	118.46	121.75
1	2A	2503	2MA	C4-N9-C8	3.21	109.11	105.74
54	1w	8	4SU	N3-C2-N1	3.21	119.07	114.89
1	1A	1962	5MC	C5-C4-N3	-3.19	118.48	121.75
54	1w	37	MIA	C2-N3-C4	3.17	120.59	112.29
1	1A	1942	5MC	C5-C4-N3	-3.15	118.52	121.75
32	2a	1404	5MC	C5-C6-N1	-3.15	119.89	123.31
32	2a	1404	5MC	C5-C4-N3	-3.15	118.53	121.75
55	1x	8	4SU	O2-C2-N1	3.14	126.88	122.80
54	1y	37	MIA	N3-C2-N1	-3.13	123.84	128.58
1	1A	1915	5MU	O2-C2-N1	-3.13	118.72	122.80
1	2A	2503	2MA	N6-C6-N1	3.12	121.23	117.03
1	2A	1917	PSU	O2-C2-N1	-3.11	119.58	122.79
1	1A	1962	5MC	C5-C6-N1	-3.11	119.94	123.31
54	2y	32	PSU	O2-C2-N1	-3.09	119.61	122.79
55	2x	54	5MU	C5-C6-N1	-3.07	119.98	123.31
32	2a	1518	MA6	C4-C5-C6	3.07	119.08	115.91
55	2x	32	5MC	C5-C6-N1	-3.06	119.98	123.31
1	2A	1942	5MC	C5-C6-N1	-3.06	119.99	123.31
54	2y	54	5MU	C1'-N1-C2	3.05	123.06	117.59
54	1w	54	5MU	O4-C4-C5	-3.04	121.44	124.92
1	1A	2503	2MA	C4-N9-C8	3.03	108.92	105.74
1	1A	2552	OMU	O4-C4-C5	-3.01	119.96	125.16
32	1a	1518	MA6	C2-N3-C4	3.01	119.19	111.83
54	2w	32	PSU	O2-C2-N1	-3.01	119.69	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	8	4SU	C5-C4-N3	3.00	117.54	114.75
55	1x	55	PSU	O2-C2-N1	-3.00	119.70	122.79
32	1a	516	PSU	O2-C2-N1	-2.99	119.70	122.79
32	1a	1400	5MC	C5-C6-N1	-2.98	120.08	123.31
54	1y	8	4SU	N3-C2-N1	2.97	118.76	114.89
32	1a	1207	2MG	N2-C2-N3	-2.96	116.74	120.51
32	1a	966	M2G	C6-C5-N7	2.95	135.66	130.29
1	1A	1915	5MU	C5-C6-N1	-2.95	120.11	123.31
54	1y	32	PSU	O2-C2-N1	-2.92	119.78	122.79
54	1y	8	4SU	C1'-N1-C2	2.91	122.82	117.59
32	2a	1407	5MC	O2-C2-N3	-2.91	117.74	122.33
54	2y	37	MIA	C4-N9-C8	2.90	108.78	105.74
1	2A	2552	OMU	O4-C4-C5	-2.90	120.17	125.16
32	2a	1518	MA6	N3-C4-N9	2.89	132.09	127.17
54	1y	55	PSU	O2-C2-N1	-2.89	119.81	122.79
32	2a	1407	5MC	C5-C4-N3	-2.87	118.81	121.75
55	2x	32	5MC	C5-C4-N3	-2.87	118.82	121.75
55	2x	8	4SU	C1'-N1-C2	2.86	122.72	117.59
55	2x	32	5MC	O2-C2-N3	-2.83	117.86	122.33
32	2a	966	M2G	C6-C5-N7	2.83	135.43	130.29
32	1a	1400	5MC	C5-C4-N3	-2.82	118.87	121.75
55	1x	54	5MU	O2-C2-N1	-2.81	119.14	122.80
1	2A	2503	2MA	C2-N1-C6	2.80	122.41	118.10
32	1a	1407	5MC	C5-C6-N1	-2.80	120.28	123.31
54	2w	54	5MU	C5M-C5-C4	2.80	121.77	118.78
54	1w	54	5MU	C5-C6-N1	-2.77	120.30	123.31
1	1A	1962	5MC	O2-C2-N3	-2.75	117.99	122.33
1	1A	2552	OMU	O2-C2-N1	-2.75	119.22	122.80
32	1a	1518	MA6	N3-C4-N9	2.73	131.81	127.17
54	2y	54	5MU	C1'-N1-C6	-2.73	116.66	121.15
54	2y	37	MIA	C5-N7-C8	2.72	107.73	103.45
1	1A	2503	2MA	C5-N7-C8	2.72	107.72	103.45
54	2y	39	PSU	C4-N3-C2	-2.70	122.65	126.37
32	1a	1400	5MC	C1'-N1-C6	-2.69	116.72	121.15
32	1a	1404	5MC	C5-C4-N3	-2.69	119.00	121.75
1	2A	2503	2MA	C5-N7-C8	2.69	107.67	103.45
54	2w	46	G7M	O6-C6-C5	-2.68	122.02	128.01
32	2a	1518	MA6	N9-C8-N7	-2.68	110.13	113.94
1	2A	1915	5MU	O2-C2-N1	-2.66	119.33	122.80
32	2a	1207	2MG	C4-C5-N7	-2.66	106.45	110.67
54	1w	55	PSU	C6-C5-C4	-2.66	116.38	118.17
1	2A	2251	OMG	O6-C6-C5	-2.66	119.51	126.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2y	55	PSU	C6-C5-C4	-2.64	116.39	118.17
55	1x	8	4SU	S4-C4-N3	-2.63	117.45	120.20
32	2a	1519	MA6	N3-C4-N9	2.63	131.64	127.17
54	1w	8	4SU	C5-C4-S4	-2.62	121.31	124.31
54	2w	37	MIA	C5-N7-C8	2.62	107.56	103.45
1	1A	1915	5MU	C5M-C5-C4	2.61	121.57	118.78
54	1y	37	MIA	C5-N7-C8	2.61	107.55	103.45
32	1a	1407	5MC	C5-C4-N3	-2.60	119.09	121.75
32	1a	1519	MA6	N3-C4-N9	2.60	131.59	127.17
1	2A	2503	2MA	C6-C5-N7	2.58	137.07	132.09
32	1a	1402	4OC	C6-C5-C4	2.57	120.10	117.00
32	1a	527	G7M	O6-C6-C5	-2.55	122.33	128.01
32	2a	1207	2MG	N1-C2-N2	2.54	119.15	116.56
55	2x	55	PSU	O2-C2-N1	-2.53	120.18	122.79
1	1A	2251	OMG	O6-C6-C5	-2.52	119.88	126.53
1	1A	1939	5MU	O2-C2-N1	-2.52	119.52	122.80
32	2a	967	5MC	C5-C4-N3	-2.52	119.17	121.75
1	2A	2503	2MA	N9-C8-N7	-2.50	110.39	113.94
1	1A	2605	PSU	C5-C6-N1	-2.49	118.68	122.14
1	1A	2503	2MA	N9-C8-N7	-2.49	110.41	113.94
32	1a	967	5MC	C5-C4-N3	-2.49	119.20	121.75
32	2a	1519	MA6	C4-C5-C6	2.46	118.46	115.91
1	2A	2251	OMG	C6-C5-N7	2.46	134.77	130.29
1	1A	2251	OMG	C4-C5-N7	-2.44	106.80	110.67
54	2y	55	PSU	O2-C2-N1	-2.44	120.27	122.79
32	1a	1400	5MC	CM5-C5-C6	-2.44	119.55	122.85
32	2a	1498	UR3	C1'-N1-C2	2.43	121.02	117.04
54	2w	54	5MU	C5-C6-N1	-2.43	120.67	123.31
54	1w	37	MIA	C4-N9-C8	2.43	108.29	105.74
54	2y	54	5MU	C5-C6-N1	-2.42	120.69	123.31
54	1w	46	G7M	O6-C6-C5	-2.42	122.62	128.01
1	2A	2605	PSU	O2-C2-N3	-2.40	117.59	121.86
54	2w	37	MIA	C2-N1-C6	2.39	122.08	117.54
1	2A	1962	5MC	C5-C4-N3	-2.38	119.31	121.75
54	1w	37	MIA	C5-N7-C8	2.38	107.18	103.45
32	1a	1518	MA6	C4-N9-C8	2.37	108.23	105.74
32	2a	966	M2G	C4-C5-N7	-2.37	106.92	110.67
54	2w	37	MIA	N3-C2-N1	-2.36	122.68	127.00
54	1y	37	MIA	C4-N9-C8	2.36	108.21	105.74
54	1w	39	PSU	C5-C6-N1	-2.36	118.87	122.14
32	2a	1404	5MC	O2-C2-N3	-2.35	118.62	122.33
1	2A	2605	PSU	C5-C6-N1	-2.33	118.91	122.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1y	8	4SU	C5-C4-S4	-2.32	121.66	124.31
54	2w	8	4SU	C5-C4-S4	-2.31	121.67	124.31
32	2a	1400	5MC	O2-C2-N3	-2.31	118.69	122.33
1	2A	2552	OMU	O2-C2-N1	-2.29	119.82	122.80
32	2a	527	G7M	C5-C6-N1	2.28	116.56	111.84
1	2A	1939	5MU	O2-C2-N1	-2.27	119.84	122.80
54	2w	46	G7M	C5-C6-N1	2.27	116.53	111.84
1	2A	1920	OMC	O2-C2-N3	-2.26	118.76	122.33
32	1a	966	M2G	O6-C6-C5	-2.26	120.56	126.53
1	2A	1942	5MC	O2-C2-N3	-2.26	118.77	122.33
32	2a	527	G7M	O6-C6-C5	-2.25	122.98	128.01
32	1a	527	G7M	C5-C6-N1	2.24	116.47	111.84
1	2A	2605	PSU	O2-C2-N1	-2.24	120.48	122.79
54	1y	39	PSU	C6-C5-C4	-2.23	116.67	118.17
54	2y	39	PSU	O2-C2-N3	-2.22	117.92	121.86
32	1a	966	M2G	C4-C5-N7	-2.21	107.16	110.67
32	1a	1400	5MC	O2-C2-N3	-2.21	118.84	122.33
54	2y	54	5MU	O2-C2-N3	-2.21	117.41	121.49
54	1y	39	PSU	O2-C2-N1	-2.21	120.51	122.79
54	1w	37	MIA	C2-N1-C6	2.21	121.73	117.54
32	2a	1402	4OC	CM4-N4-C4	-2.20	118.15	122.45
1	2A	2251	OMG	C4-C5-N7	-2.19	107.19	110.67
32	1a	1207	2MG	C8-N7-C5	2.19	108.15	104.26
32	2a	1400	5MC	C5-C4-N3	-2.18	119.52	121.75
32	2a	966	M2G	O6-C6-C5	-2.16	120.82	126.53
43	1l	92	0TD	OD2-CG-CB	2.16	117.81	113.15
32	2a	1498	UR3	C3U-N3-C4	2.15	120.86	117.87
32	1a	967	5MC	CM5-C5-C6	-2.14	119.95	122.85
1	2A	1917	PSU	C5-C6-N1	-2.14	119.17	122.14
54	2w	32	PSU	C6-C5-C4	-2.13	116.74	118.17
54	1y	46	G7M	O6-C6-C5	-2.12	123.28	128.01
32	1a	1519	MA6	C4-C5-C6	2.12	118.10	115.91
54	2y	39	PSU	C6-C5-C4	-2.12	116.75	118.17
54	2w	37	MIA	C4-N9-C8	2.11	107.96	105.74
1	2A	1939	5MU	C5M-C5-C6	-2.11	119.99	122.85
54	1y	32	PSU	C5-C6-N1	-2.11	119.22	122.14
54	2y	37	MIA	N9-C8-N7	-2.10	110.95	113.94
32	2a	1207	2MG	N2-C2-N3	-2.10	117.83	120.51
1	1A	1915	5MU	C5M-C5-C6	-2.10	120.01	122.85
55	1x	55	PSU	C5-C6-N1	-2.09	119.24	122.14
32	1a	1518	MA6	C4-C5-C6	2.09	118.07	115.91
1	1A	2503	2MA	C6-C5-N7	2.09	136.11	132.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1939	5MU	C5M-C5-C4	2.09	121.01	118.78
32	2a	1518	MA6	C5-C4-N9	2.08	108.08	105.81
55	2x	55	PSU	O2-C2-N3	-2.08	118.16	121.86
54	2w	39	PSU	C5-C6-N1	-2.08	119.25	122.14
55	2x	55	PSU	C5-C6-N1	-2.07	119.26	122.14
32	1a	1404	5MC	CM5-C5-C6	-2.06	120.06	122.85
32	1a	966	M2G	C5-C6-N1	2.06	118.49	113.25
54	2w	54	5MU	O2-C2-N1	-2.05	120.13	122.80
1	1A	1942	5MC	O2-C2-N3	-2.05	119.10	122.33
54	2y	46	G7M	O6-C6-C5	-2.05	123.44	128.01
43	2l	92	0TD	OD2-CG-CB	2.05	117.57	113.15
32	2a	516	PSU	C5-C6-N1	-2.04	119.30	122.14
1	1A	1911	PSU	C5-C6-N1	-2.04	119.31	122.14
54	2y	32	PSU	C5-C6-N1	-2.02	119.33	122.14
54	1y	54	5MU	O2-C2-N1	-2.02	120.17	122.80
1	1A	2503	2MA	C2-N1-C6	2.01	121.19	118.10
54	1y	39	PSU	O2-C2-N3	-2.01	118.29	121.86
54	1y	55	PSU	O4'-C1'-C2'	2.01	107.93	105.15
32	1a	516	PSU	C5-C6-N1	-2.00	119.36	122.14

There are no chirality outliers.

All (50) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
54	1w	37	MIA	C12-C13-C14-C16
54	1y	46	G7M	C4'-C5'-O5'-P
54	1y	54	5MU	O4'-C4'-C5'-O5'
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	2y	55	PSU	C2'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
54	1y	37	MIA	C3'-C4'-C5'-O5'
54	1y	54	5MU	C3'-C4'-C5'-O5'
54	2y	37	MIA	C3'-C4'-C5'-O5'
54	2w	37	MIA	N3-C2-S10-C11
54	1y	37	MIA	O4'-C4'-C5'-O5'
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
54	2w	32	PSU	C3'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
54	2y	37	MIA	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1400	5MC	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
54	2w	37	MIA	N1-C2-S10-C11
54	2w	32	PSU	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
54	1y	46	G7M	C3'-C4'-C5'-O5'
43	2l	92	0TD	SB-CB-CG-OD1
54	2w	46	G7M	C4'-C5'-O5'-P
32	1a	527	G7M	C3'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
54	1y	55	PSU	O4'-C1'-C5-C4
32	1a	527	G7M	C4'-C5'-O5'-P
54	2y	55	PSU	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
54	2y	8	4SU	C4'-C5'-O5'-P
32	2a	527	G7M	C4'-C5'-O5'-P
43	1l	92	0TD	SB-CB-CG-OD2
43	2l	92	0TD	CA-CB-SB-CSB
43	2l	92	0TD	SB-CB-CG-OD2
54	1y	55	PSU	O4'-C1'-C5-C6
54	2y	54	5MU	C2'-C1'-N1-C6
32	1a	1519	MA6	C4'-C5'-O5'-P
54	2y	54	5MU	O4'-C4'-C5'-O5'
54	1y	8	4SU	C2'-C1'-N1-C6
1	1A	1920	OMC	C2'-C1'-N1-C2

There are no ring outliers.

38 monomers are involved in 57 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	39	PSU	1	0
1	2A	2552	OMU	1	0
54	1y	37	MIA	2	0
32	2a	1519	MA6	2	0
54	2w	39	PSU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	37	MIA	1	0
54	1w	8	4SU	1	0
54	2y	37	MIA	2	0
54	2w	37	MIA	1	0
54	2w	8	4SU	1	0
54	1y	8	4SU	2	0
54	2w	55	PSU	1	0
1	2A	2503	2MA	2	0
32	1a	1518	MA6	1	0
55	2x	8	4SU	1	0
32	2a	967	5MC	2	0
32	2a	1402	4OC	1	0
54	1y	39	PSU	1	0
54	1y	46	G7M	1	0
32	2a	1518	MA6	3	0
43	2l	92	0TD	2	0
32	2a	1207	2MG	2	0
54	1w	46	G7M	1	0
54	2y	55	PSU	6	0
1	1A	1939	5MU	1	0
54	2y	46	G7M	1	0
1	2A	1939	5MU	1	0
1	2A	1915	5MU	1	0
1	1A	2251	OMG	1	0
55	1x	8	4SU	1	0
32	1a	1402	4OC	2	0
32	1a	966	M2G	1	0
54	2y	8	4SU	4	0
1	2A	1917	PSU	1	0
32	1a	1519	MA6	1	0
32	2a	1400	5MC	2	0
54	1y	55	PSU	4	0
54	2w	54	5MU	1	0

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 2844 ligands modelled in this entry, 2840 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
59	SCM	1a	1815	-	23,25,25	0.74	0	27,39,39	1.64	4 (14%)
59	SCM	2a	3236	-	23,25,25	0.81	1 (4%)	27,39,39	1.60	4 (14%)
60	SF4	2d	303	35	0,12,12	-	-	-	-	-
60	SF4	1d	501	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
59	SCM	1a	1815	-	-	0/4/57/57	0/3/3/3
59	SCM	2a	3236	-	-	1/4/57/57	0/3/3/3
60	SF4	2d	303	35	-	-	0/6/5/5
60	SF4	1d	501	35	-	-	0/6/5/5

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	2a	3236	SCM	O5-C5	2.44	1.43	1.39

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	2a	3236	SCM	C8M-N8-C8	5.39	121.19	114.23
59	1a	1815	SCM	C1M-N10-C10	4.92	120.57	114.23
59	1a	1815	SCM	C8M-N8-C8	4.27	119.74	114.23
59	2a	3236	SCM	C1M-N10-C10	3.64	118.93	114.23
59	2a	3236	SCM	O1-C2-C3	3.55	113.56	108.62
59	1a	1815	SCM	O2B-C6-O1	3.15	109.91	107.40
59	1a	1815	SCM	C2-C3-C4	-2.23	105.69	111.61
59	2a	3236	SCM	O1-C6-C5	-2.14	108.38	111.60

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
59	2a	3236	SCM	C9-C8-N8-C8M

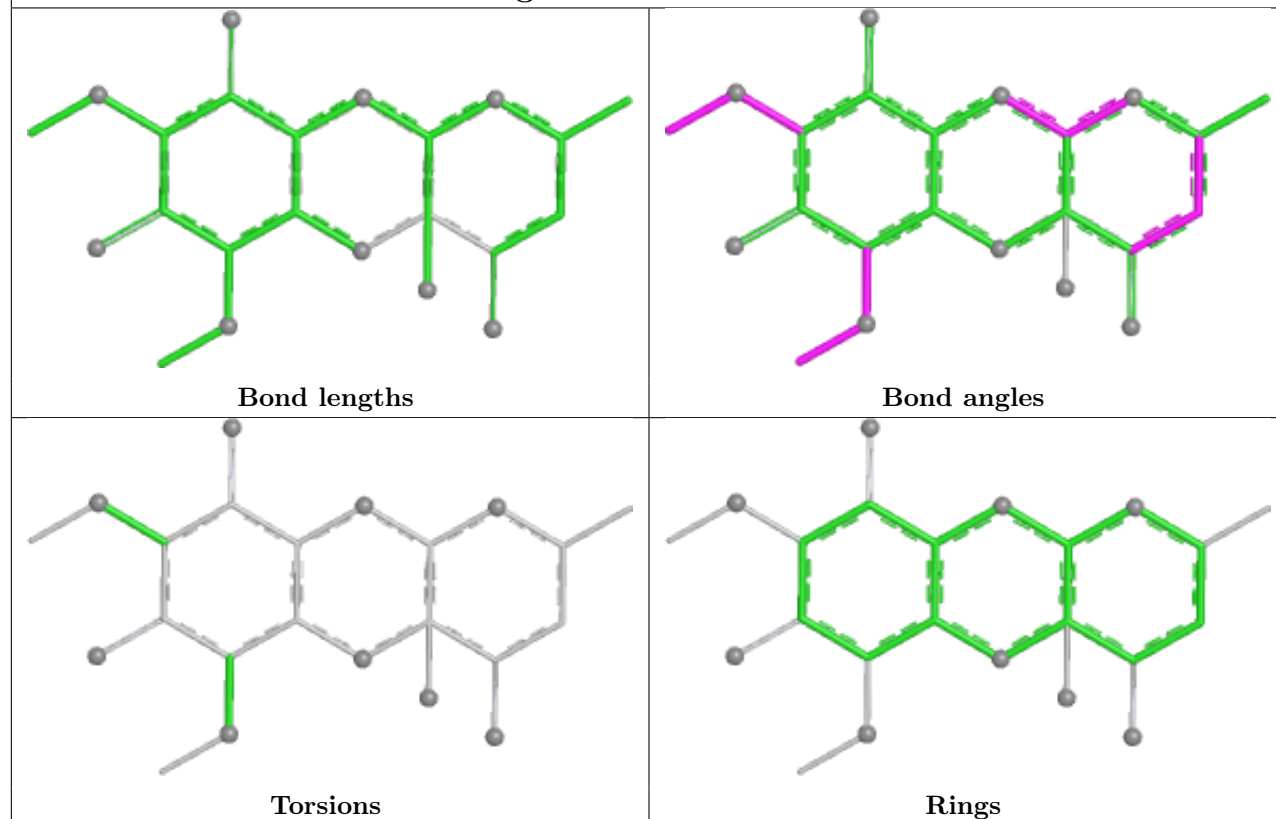
There are no ring outliers.

3 monomers are involved in 7 short contacts:

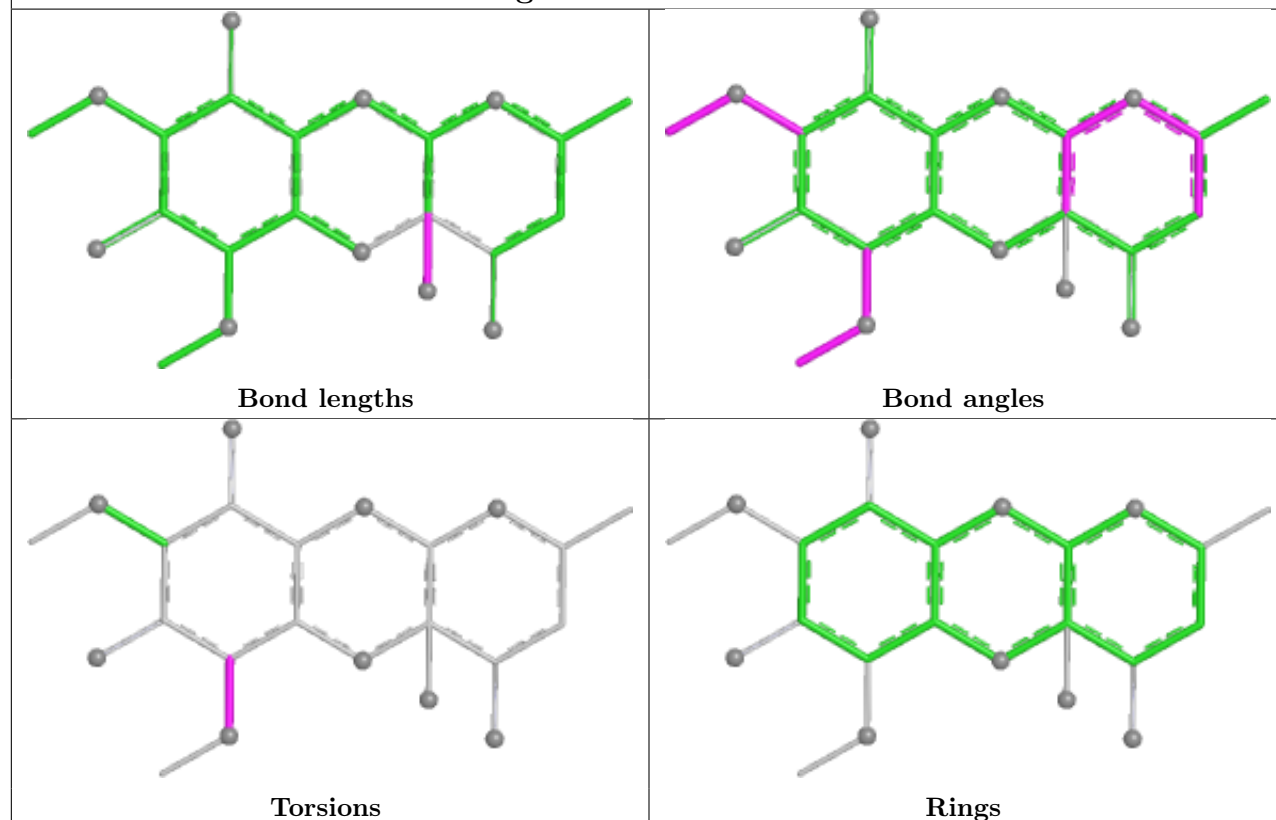
Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	1a	1815	SCM	3	0
59	2a	3236	SCM	1	0
60	1d	501	SF4	3	0

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

Ligand SCM 1a 1815



Ligand SCM 2a 3236



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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%)	-0.60	123 (4%) 40 34	14, 30, 85, 98	0
1	2A	2789/2915 (95%)	0.13	99 (3%) 47 41	33, 56, 85, 98	0
2	1B	120/121 (99%)	-0.46	1 (0%) 82 80	25, 44, 56, 82	0
2	2B	120/121 (99%)	0.74	1 (0%) 82 80	57, 70, 78, 85	0
3	1D	275/276 (99%)	-0.34	1 (0%) 88 86	16, 32, 46, 72	0
3	2D	275/276 (99%)	0.19	3 (1%) 78 74	28, 46, 56, 71	0
4	1E	204/206 (99%)	-0.27	0 100 100	14, 34, 52, 67	0
4	2E	204/206 (99%)	0.50	2 (0%) 79 76	36, 59, 70, 78	0
5	1F	202/210 (96%)	-0.19	3 (1%) 72 68	16, 35, 59, 77	0
5	2F	202/210 (96%)	0.62	5 (2%) 58 52	35, 62, 74, 80	0
6	1G	181/182 (99%)	0.36	8 (4%) 39 33	34, 50, 65, 77	0
6	2G	181/182 (99%)	1.07	19 (10%) 11 9	58, 69, 76, 84	0
7	1H	174/180 (96%)	0.07	2 (1%) 78 74	34, 48, 60, 72	0
7	2H	174/180 (96%)	1.64	48 (27%) 1 1	66, 77, 83, 87	0
8	1I	146/148 (98%)	0.54	3 (2%) 63 58	40, 65, 72, 75	0
8	2I	146/148 (98%)	0.76	7 (4%) 35 30	48, 65, 74, 79	0
9	1N	140/140 (100%)	-0.25	1 (0%) 84 82	20, 31, 52, 63	0
9	2N	140/140 (100%)	0.86	3 (2%) 63 58	51, 63, 74, 77	0
10	1O	122/122 (100%)	-0.11	0 100 100	20, 36, 51, 56	0
10	2O	122/122 (100%)	0.56	1 (0%) 82 80	43, 57, 65, 72	0
11	1P	149/150 (99%)	0.01	0 100 100	17, 41, 62, 72	0
11	2P	149/150 (99%)	0.80	6 (4%) 42 37	40, 62, 75, 86	0
12	1Q	141/141 (100%)	-0.14	0 100 100	23, 36, 49, 64	0
12	2Q	141/141 (100%)	1.17	13 (9%) 14 11	47, 65, 72, 75	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.44	0 100 100	19, 28, 41, 53	0
13	2R	118/118 (100%)	0.34	0 100 100	39, 49, 59, 63	0
14	1S	110/112 (98%)	0.05	1 (0%) 81 78	31, 43, 56, 59	0
14	2S	110/112 (98%)	1.14	7 (6%) 25 20	55, 66, 73, 77	0
15	1T	131/146 (89%)	-0.00	3 (2%) 61 55	27, 39, 60, 72	0
15	2T	131/146 (89%)	0.69	5 (3%) 44 38	49, 59, 68, 74	0
16	1U	116/118 (98%)	-0.55	0 100 100	16, 23, 38, 53	0
16	2U	116/118 (98%)	0.72	4 (3%) 48 42	43, 63, 72, 74	0
17	1V	101/101 (100%)	-0.45	0 100 100	16, 31, 47, 59	0
17	2V	101/101 (100%)	1.06	6 (5%) 28 23	45, 69, 76, 81	0
18	1W	112/113 (99%)	-0.45	1 (0%) 81 78	18, 25, 42, 73	0
18	2W	112/113 (99%)	0.44	2 (1%) 67 63	39, 49, 66, 82	0
19	1X	95/96 (98%)	-0.25	1 (1%) 78 74	21, 30, 57, 68	0
19	2X	95/96 (98%)	0.65	5 (5%) 32 26	38, 54, 66, 76	0
20	1Y	107/110 (97%)	0.25	2 (1%) 66 61	31, 43, 61, 74	0
20	2Y	107/110 (97%)	1.19	14 (13%) 7 5	58, 67, 76, 79	0
21	1Z	154/206 (74%)	0.64	10 (6%) 25 19	28, 57, 74, 81	0
21	2Z	160/206 (77%)	1.73	51 (31%) 1 1	65, 75, 81, 85	0
22	10	83/85 (97%)	0.05	3 (3%) 46 40	21, 33, 52, 64	0
22	20	83/85 (97%)	1.27	11 (13%) 7 5	49, 62, 69, 73	0
23	11	97/98 (98%)	0.09	1 (1%) 79 76	24, 39, 62, 66	0
23	21	97/98 (98%)	0.65	4 (4%) 41 36	38, 52, 68, 75	0
24	12	70/72 (97%)	0.02	2 (2%) 53 48	28, 42, 53, 66	0
24	22	70/72 (97%)	0.68	2 (2%) 53 48	52, 62, 69, 74	0
25	13	59/60 (98%)	-0.24	1 (1%) 69 64	20, 29, 53, 68	0
25	23	59/60 (98%)	1.07	7 (11%) 9 7	55, 63, 72, 79	0
26	14	69/71 (97%)	0.94	13 (18%) 3 2	43, 62, 77, 82	0
26	24	69/71 (97%)	1.17	10 (14%) 6 4	63, 75, 82, 85	0
27	15	59/60 (98%)	-0.58	0 100 100	15, 24, 38, 45	0
27	25	59/60 (98%)	0.30	0 100 100	37, 50, 60, 73	0
28	16	53/54 (98%)	-0.20	0 100 100	28, 35, 50, 53	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.72	2 (3%) 44 38	48, 56, 63, 71	0
29	17	48/49 (97%)	-0.26	4 (8%) 17 13	15, 23, 49, 62	0
29	27	48/49 (97%)	0.17	3 (6%) 26 20	30, 38, 59, 68	0
30	18	64/65 (98%)	-0.32	0 100 100	23, 27, 36, 46	0
30	28	64/65 (98%)	0.68	2 (3%) 51 45	47, 54, 60, 63	0
31	19	37/37 (100%)	-0.22	0 100 100	24, 34, 53, 59	0
31	29	37/37 (100%)	1.45	6 (16%) 4 3	61, 68, 76, 78	0
32	1a	1488/1521 (97%)	0.18	43 (2%) 53 48	30, 56, 82, 95	0
32	2a	1491/1521 (98%)	0.54	65 (4%) 39 33	43, 68, 85, 97	0
33	1b	231/256 (90%)	0.98	24 (10%) 11 9	54, 68, 78, 87	0
33	2b	231/256 (90%)	1.33	35 (15%) 5 4	64, 75, 82, 86	0
34	1c	206/239 (86%)	0.83	9 (4%) 39 33	50, 62, 74, 77	0
34	2c	206/239 (86%)	1.54	56 (27%) 1 1	64, 74, 80, 87	0
35	1d	208/209 (99%)	0.94	21 (10%) 12 9	50, 62, 72, 76	0
35	2d	208/209 (99%)	0.74	4 (1%) 66 61	50, 62, 70, 80	0
36	1e	148/162 (91%)	0.57	3 (2%) 65 60	44, 56, 66, 71	0
36	2e	148/162 (91%)	0.97	9 (6%) 27 22	55, 67, 73, 76	0
37	1f	100/101 (99%)	0.38	0 100 100	48, 57, 66, 67	0
37	2f	100/101 (99%)	0.49	1 (1%) 79 76	51, 61, 68, 77	0
38	1g	155/156 (99%)	0.83	11 (7%) 22 17	48, 58, 73, 85	0
38	2g	155/156 (99%)	1.16	21 (13%) 7 5	58, 68, 75, 82	0
39	1h	137/138 (99%)	0.59	2 (1%) 72 68	46, 58, 65, 69	0
39	2h	137/138 (99%)	0.87	4 (2%) 53 48	57, 68, 72, 78	0
40	1i	127/128 (99%)	1.11	8 (6%) 26 20	45, 64, 73, 77	0
40	2i	127/128 (99%)	1.78	45 (35%) 1 1	59, 74, 79, 83	0
41	1j	97/105 (92%)	1.40	19 (19%) 3 2	48, 66, 75, 77	0
41	2j	96/105 (91%)	2.03	45 (46%) 0 0	67, 75, 80, 89	0
42	1k	114/129 (88%)	0.46	3 (2%) 57 51	41, 56, 67, 71	0
42	2k	114/129 (88%)	0.77	4 (3%) 47 41	51, 64, 71, 75	0
43	1l	121/132 (91%)	0.07	3 (2%) 58 52	36, 46, 57, 66	0
43	2l	121/132 (91%)	0.72	5 (4%) 41 36	52, 60, 67, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.57	5 (4%) 41 36	43, 58, 66, 70	0
44	2m	122/126 (96%)	1.20	14 (11%) 9 7	61, 71, 78, 80	0
45	1n	60/61 (98%)	0.80	3 (5%) 34 28	50, 56, 64, 65	0
45	2n	60/61 (98%)	2.21	33 (55%) 0 0	68, 74, 78, 80	0
46	1o	88/89 (98%)	0.52	3 (3%) 48 42	41, 56, 67, 74	0
46	2o	88/89 (98%)	0.54	2 (2%) 61 55	53, 64, 72, 76	0
47	1p	82/88 (93%)	0.99	5 (6%) 27 22	47, 60, 67, 72	0
47	2p	82/88 (93%)	0.87	5 (6%) 27 22	53, 61, 69, 74	0
48	1q	99/105 (94%)	0.68	4 (4%) 42 37	47, 58, 67, 71	0
48	2q	99/105 (94%)	0.57	2 (2%) 65 60	56, 65, 72, 74	0
49	1r	68/88 (77%)	0.36	1 (1%) 72 68	47, 55, 67, 69	0
49	2r	68/88 (77%)	0.53	2 (2%) 53 48	56, 63, 69, 71	0
50	1s	83/93 (89%)	0.83	2 (2%) 59 54	47, 60, 70, 73	0
50	2s	83/93 (89%)	1.77	24 (28%) 1 1	68, 76, 81, 84	0
51	1t	96/106 (90%)	0.92	10 (10%) 11 9	51, 62, 71, 74	0
51	2t	96/106 (90%)	0.83	7 (7%) 21 17	51, 63, 73, 77	0
52	1u	23/27 (85%)	0.68	0 100 100	49, 56, 61, 63	0
52	2u	23/27 (85%)	1.52	6 (26%) 1 1	64, 69, 73, 80	0
53	1v	13/24 (54%)	0.68	4 (30%) 1 1	39, 45, 83, 95	0
53	2v	13/24 (54%)	1.37	5 (38%) 1 0	61, 69, 88, 96	0
54	1w	67/76 (88%)	1.09	11 (16%) 4 3	41, 74, 90, 91	0
54	1y	67/76 (88%)	1.57	19 (28%) 1 1	30, 86, 91, 92	0
54	2w	65/76 (85%)	1.53	17 (26%) 1 1	63, 85, 95, 98	0
54	2y	66/76 (86%)	1.68	19 (28%) 1 1	47, 87, 93, 96	0
55	1x	72/77 (93%)	0.32	3 (4%) 40 35	31, 58, 72, 84	0
55	2x	72/77 (93%)	0.69	5 (6%) 23 18	50, 70, 81, 90	0
All	All	20873/21748 (95%)	0.35	1183 (5%) 29 24	14, 57, 80, 98	0

All (1183) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
38	1g	83	ALA	6.9
38	2g	82	GLY	6.7

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Mol	Chain	Res	Type	RSRZ
41	2j	32	ALA	6.3
45	1n	2	ALA	6.1
1	1A	2141	G	5.7
3	2D	275	LYS	5.5
44	2m	123	ALA	5.5
21	2Z	149	SER	5.3
54	2w	71	G	5.2
1	1A	896	A	5.1
15	1T	130	ALA	5.0
45	2n	38	GLY	5.0
32	1a	1030(A)	G	4.9
21	1Z	141	VAL	4.9
1	1A	898	C	4.9
1	1A	1096	A	4.8
45	2n	34	TYR	4.8
34	2c	159	GLY	4.8
44	2m	124	PRO	4.8
38	1g	85	TYR	4.8
1	2A	888	C	4.8
21	2Z	172	ALA	4.8
7	1H	2	SER	4.8
1	1A	885	C	4.7
41	2j	47	PHE	4.7
23	11	2	SER	4.7
23	21	2	SER	4.7
1	1A	1094	U	4.7
38	2g	84	ASN	4.7
54	1w	71	G	4.7
50	2s	80	TYR	4.6
32	1a	1030(B)	C	4.6
1	1A	897	C	4.5
50	2s	76	PRO	4.5
38	1g	81	GLY	4.5
34	2c	2	GLY	4.5
1	2A	883	G	4.5
21	2Z	146	ILE	4.4
1	2A	2802	G	4.4
1	1A	1095	A	4.4
1	1A	884	C	4.4
12	2Q	104	PHE	4.4
20	1Y	1	MET	4.3
38	1g	84	ASN	4.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1257	U	4.3
54	2w	3	C	4.3
22	10	7	LEU	4.2
41	2j	65	LEU	4.2
51	2t	98	PRO	4.2
20	2Y	44	ILE	4.2
32	1a	1023	G	4.2
48	1q	98	LEU	4.2
32	1a	1030	C	4.2
26	14	50	VAL	4.2
31	29	20	HIS	4.1
1	2A	896	A	4.1
54	1w	72	C	4.1
1	1A	1078	U	4.1
51	2t	47	GLY	4.1
1	1A	2117	A	4.0
45	2n	55	GLY	4.0
51	2t	103	GLY	4.0
22	20	7	LEU	4.0
32	1a	1024	G	4.0
38	1g	80	VAL	4.0
38	1g	79	ARG	4.0
1	1A	888	C	4.0
15	2T	131	ALA	3.9
45	2n	2	ALA	3.9
38	1g	82	GLY	3.9
38	2g	81	GLY	3.9
26	14	56	VAL	3.9
41	2j	48	THR	3.9
1	2A	884	C	3.8
1	2A	1536	C	3.8
53	2v	12	A	3.8
1	1A	1070	A	3.8
1	2A	882	G	3.8
32	1a	162	A	3.8
41	2j	100	THR	3.8
32	2a	1030(B)	C	3.8
7	2H	82	GLY	3.8
41	2j	55	LYS	3.8
32	1a	1531	A	3.7
32	1a	204	U	3.7
21	2Z	173	ALA	3.7

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Mol	Chain	Res	Type	RSRZ
40	2i	19	LEU	3.7
26	14	63	TYR	3.7
1	2A	885	C	3.7
41	2j	37	PRO	3.7
19	2X	95	LEU	3.7
22	10	3	HIS	3.7
38	1g	77	SER	3.7
20	2Y	45	VAL	3.7
38	2g	80	VAL	3.7
45	2n	37	PHE	3.7
21	2Z	155	LEU	3.6
45	1n	3	ARG	3.6
41	1j	36	GLY	3.6
33	1b	232	PRO	3.6
33	2b	121	LEU	3.6
1	1A	1097	U	3.6
1	1A	2119	A	3.6
32	1a	1257	U	3.6
15	1T	131	ALA	3.6
33	1b	125	PRO	3.6
50	2s	2	PRO	3.6
53	1v	12	A	3.6
33	2b	200	ILE	3.5
1	1A	879	G	3.5
40	2i	69	GLY	3.5
44	2m	90	LEU	3.5
21	1Z	170	THR	3.5
32	1a	1027	C	3.5
21	2Z	171	ILE	3.5
40	2i	91	ASP	3.5
7	2H	39	PRO	3.5
40	2i	10	ARG	3.5
32	1a	1030(C)	G	3.5
51	1t	103	GLY	3.5
54	2w	73	A	3.5
41	2j	59	SER	3.4
21	2Z	170	THR	3.4
54	1w	20	U	3.4
1	1A	880	G	3.4
1	1A	2115	G	3.4
32	2a	1032	G	3.4
41	2j	10	GLY	3.4

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Mol	Chain	Res	Type	RSRZ
34	2c	87	LEU	3.4
22	20	3	HIS	3.4
33	2b	17	PHE	3.4
32	1a	1005	A	3.4
7	2H	159	GLU	3.4
50	2s	13	ASP	3.4
33	2b	165	VAL	3.4
1	2A	2165	G	3.4
21	1Z	152	ALA	3.4
41	2j	41	PRO	3.4
7	2H	60	ARG	3.4
1	1A	2140	C	3.4
6	1G	182	LYS	3.4
38	2g	85	TYR	3.4
54	1w	1	G	3.4
45	2n	39	LEU	3.4
54	2w	4	C	3.3
40	2i	61	ALA	3.3
32	2a	1030(A)	G	3.3
40	2i	63	ILE	3.3
1	1A	1060	U	3.3
1	2A	2896	C	3.3
17	2V	50	PRO	3.3
21	2Z	144	LEU	3.3
18	1W	112	GLY	3.3
41	1j	32	ALA	3.3
44	1m	123	ALA	3.3
34	2c	195	VAL	3.3
32	1a	1035	A	3.3
41	2j	74	ILE	3.3
6	2G	136	ARG	3.3
38	2g	16	LEU	3.3
40	2i	102	LEU	3.3
50	2s	71	LEU	3.3
29	17	48	LYS	3.3
41	2j	78	ASN	3.3
1	1A	2114	A	3.3
1	2A	229	A	3.3
32	1a	1030(D)	A	3.3
1	1A	1059	G	3.3
1	2A	2125	G	3.3
40	2i	110	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
54	2w	70	G	3.3
21	1Z	146	ILE	3.3
29	27	46	VAL	3.3
54	1y	67	C	3.2
38	2g	12	LEU	3.2
41	2j	88	LEU	3.2
3	1D	276	LYS	3.2
35	1d	87	GLY	3.2
44	2m	6	GLY	3.2
1	1A	2152	G	3.2
54	2w	19	G	3.2
26	24	56	VAL	3.2
45	2n	3	ARG	3.2
1	1A	2143	C	3.2
34	2c	176	HIS	3.2
12	2Q	33	GLY	3.2
1	1A	1069	A	3.2
33	1b	237	ALA	3.2
42	2k	14	VAL	3.2
1	1A	1068	G	3.2
54	2w	5	G	3.2
52	2u	2	GLY	3.2
1	1A	2145	C	3.2
1	2A	2164	C	3.2
40	2i	53	VAL	3.2
1	1A	887	A	3.2
1	2A	887	A	3.2
32	1a	160	A	3.2
45	2n	35	ARG	3.2
32	1a	1031	G	3.2
54	2y	34	G	3.2
40	2i	109	VAL	3.2
45	2n	25	VAL	3.2
1	1A	2136	C	3.1
1	1A	2138	C	3.1
34	2c	190	ARG	3.1
53	1v	13	A	3.1
22	20	8	GLY	3.1
21	2Z	166	SER	3.1
26	14	49	PHE	3.1
1	1A	1099	G	3.1
38	2g	32	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
21	1Z	148	ASP	3.1
11	2P	149	GLU	3.1
32	1a	161	A	3.1
35	1d	167	GLY	3.1
22	20	2	ALA	3.1
34	2c	182	ILE	3.1
21	2Z	74	VAL	3.1
41	2j	34	VAL	3.1
50	2s	81	ARG	3.1
34	2c	193	TYR	3.1
21	2Z	150	LEU	3.1
34	2c	62	ASP	3.1
7	2H	128	PRO	3.1
7	2H	17	VAL	3.1
40	2i	114	TYR	3.1
34	2c	52	LEU	3.1
41	1j	88	LEU	3.1
47	1p	82	GLN	3.1
32	1a	1026	G	3.1
3	2D	276	LYS	3.1
7	2H	92	ILE	3.1
7	2H	145	ALA	3.1
35	2d	164	ALA	3.1
40	2i	97	LYS	3.1
1	1A	886	C	3.1
1	2A	886	C	3.1
1	2A	2136	C	3.1
33	2b	7	VAL	3.1
33	1b	124	SER	3.1
1	1A	899	A	3.0
32	1a	344	A	3.0
53	2v	14	A	3.0
54	1w	73	A	3.0
33	2b	215	LEU	3.0
21	2Z	121	HIS	3.0
1	1A	2113	U	3.0
1	1A	2897	U	3.0
7	2H	14	GLY	3.0
34	2c	5	ILE	3.0
6	1G	51	ARG	3.0
38	2g	83	ALA	3.0
20	2Y	49	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
1	1A	2151	G	3.0
1	2A	2116	G	3.0
54	2y	15	G	3.0
32	2a	1030	C	3.0
7	2H	10	PRO	3.0
1	1A	2158	A	3.0
1	2A	899	A	3.0
6	2G	49	ASP	3.0
54	2w	66	U	3.0
22	20	42	GLY	3.0
26	14	45	GLY	3.0
40	1i	64	THR	3.0
41	1j	4	ILE	3.0
41	1j	87	THR	3.0
42	1k	15	ALA	3.0
45	2n	33	VAL	3.0
7	2H	134	SER	3.0
41	1j	83	GLU	3.0
7	2H	55	PRO	3.0
20	1Y	92	ASN	3.0
20	2Y	53	PRO	3.0
1	1A	1087	G	3.0
1	1A	1176	G	3.0
1	2A	1171	G	3.0
1	2A	2138	C	3.0
32	2a	1066	C	3.0
1	1A	1177	A	3.0
22	20	43	THR	3.0
45	2n	31	ARG	3.0
32	2a	1033	G	3.0
1	1A	1509	C	3.0
1	1A	2142	C	3.0
32	1a	848	C	3.0
54	1y	35	A	3.0
54	2y	21	A	3.0
32	1a	1532	U	2.9
32	2a	204	U	2.9
41	2j	62	HIS	2.9
31	29	16	VAL	2.9
34	2c	188	LEU	2.9
35	1d	194	LEU	2.9
1	1A	1058	G	2.9

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Mol	Chain	Res	Type	RSRZ
32	2a	1002	G	2.9
54	1w	70	G	2.9
45	2n	14	PRO	2.9
1	1A	895	U	2.9
25	23	29	ARG	2.9
38	1g	78	ARG	2.9
38	2g	4	ARG	2.9
30	28	64	TYR	2.9
41	1j	10	GLY	2.9
15	2T	130	ALA	2.9
40	2i	28	VAL	2.9
45	2n	56	VAL	2.9
50	2s	9	VAL	2.9
19	1X	95	LEU	2.9
1	1A	1064	C	2.9
1	1A	2173	A	2.9
1	2A	2803	C	2.9
32	2a	1043	C	2.9
54	2y	35	A	2.9
1	1A	1081	U	2.9
1	2A	880	G	2.9
1	2A	881	G	2.9
7	2H	106	THR	2.9
9	2N	9	VAL	2.9
40	2i	14	VAL	2.9
41	2j	56	HIS	2.9
50	2s	83	HIS	2.9
47	2p	59	TRP	2.9
50	2s	29	ARG	2.9
1	1A	2144	U	2.9
1	1A	2164	C	2.9
1	2A	2173	A	2.9
1	1A	2793	G	2.9
44	1m	122	LYS	2.9
15	2T	28	VAL	2.9
33	1b	17	PHE	2.9
18	2W	112	GLY	2.8
40	2i	105	ASP	2.8
41	2j	58	ASP	2.8
20	2Y	55	TYR	2.8
52	2u	17	THR	2.8
1	1A	2118	U	2.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2119	A	2.8
32	1a	1286	A	2.8
32	2a	1001	A	2.8
55	2x	47	U	2.8
1	1A	2794	C	2.8
32	2a	1149	C	2.8
1	2A	2115	G	2.8
14	2S	20	ARG	2.8
29	27	47	ARG	2.8
26	24	47	GLN	2.8
41	2j	33	GLN	2.8
26	14	64	GLY	2.8
7	2H	33	LEU	2.8
33	1b	11	LEU	2.8
45	2n	22	THR	2.8
34	2c	86	VAL	2.8
20	2Y	1	MET	2.8
1	1A	1065	U	2.8
1	1A	548	A	2.8
32	1a	1028	C	2.8
54	2w	72	C	2.8
20	2Y	54	LYS	2.8
45	2n	61	TRP	2.8
1	1A	1093	G	2.8
1	2A	1533	G	2.8
54	1y	15	G	2.8
54	2y	1	G	2.8
46	1o	89	GLY	2.8
25	23	60	GLU	2.8
29	17	46	VAL	2.8
34	2c	129	ALA	2.8
45	2n	10	ALA	2.8
45	2n	36	PHE	2.8
1	2A	2167	U	2.8
1	1A	1073	A	2.8
32	2a	1286	A	2.8
1	1A	2146	C	2.8
34	2c	34	LEU	2.8
20	2Y	65	ALA	2.8
36	2e	45	PHE	2.8
41	2j	63	PHE	2.8
1	2A	11	G	2.8

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Mol	Chain	Res	Type	RSRZ
40	2i	36	TYR	2.8
54	1y	34	G	2.8
22	20	5	LYS	2.7
6	2G	132	ASN	2.7
21	2Z	26	GLY	2.7
40	2i	39	GLY	2.7
36	1e	10	MET	2.7
6	1G	50	ALA	2.7
12	2Q	10	ARG	2.7
32	1a	163	C	2.7
34	2c	186	PHE	2.7
40	2i	101	PHE	2.7
33	1b	234	PRO	2.7
33	2b	236	TYR	2.7
1	1A	881	G	2.7
1	2A	2133	G	2.7
1	2A	2155	G	2.7
1	2A	2166	G	2.7
32	1a	1034	G	2.7
32	2a	1031	G	2.7
32	2a	1182	G	2.7
54	2y	19	G	2.7
7	2H	136	ILE	2.7
7	2H	45	VAL	2.7
14	2S	85	VAL	2.7
33	1b	165	VAL	2.7
44	2m	102	ARG	2.7
7	2H	12	PRO	2.7
29	27	48	LYS	2.7
38	2g	154	TYR	2.7
1	1A	1079	C	2.7
32	1a	1029	C	2.7
54	2y	25	C	2.7
34	2c	8	ILE	2.7
45	2n	7	ILE	2.7
21	2Z	157	LEU	2.7
32	2a	1124	G	2.7
54	1y	19	G	2.7
7	2H	43	VAL	2.7
7	2H	133	VAL	2.7
1	2A	2130	U	2.7
1	2A	2897	U	2.7

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Mol	Chain	Res	Type	RSRZ
45	2n	15	LYS	2.7
54	2y	33	U	2.7
1	1A	1067	A	2.7
1	1A	1077	A	2.7
32	2a	1531	A	2.7
1	1A	2804	C	2.7
40	1i	47	LEU	2.7
26	24	66	SER	2.7
14	2S	83	LYS	2.7
19	2X	91	ALA	2.7
33	2b	122	PHE	2.7
40	2i	106	ALA	2.7
47	2p	9	PHE	2.7
50	2s	19	VAL	2.7
26	24	65	ASP	2.7
32	1a	1032	G	2.6
38	1g	86	GLN	2.6
32	1a	1025	U	2.6
50	2s	52	TYR	2.6
54	1y	20	U	2.6
54	2y	45	U	2.6
41	1j	98	ILE	2.6
1	1A	229	A	2.6
41	2j	90	LEU	2.6
52	2u	15	ARG	2.6
42	2k	49	GLY	2.6
43	2l	95	GLY	2.6
1	2A	277	C	2.6
1	2A	897	C	2.6
21	2Z	75	ASN	2.6
26	14	69	LYS	2.6
34	2c	4	LYS	2.6
7	2H	79	VAL	2.6
41	2j	27	ALA	2.6
44	1m	2	ALA	2.6
9	2N	44	PRO	2.6
40	2i	27	THR	2.6
1	1A	2159	G	2.6
1	2A	879	G	2.6
1	2A	1026	U	2.6
32	2a	485	G	2.6
32	2a	1001(A)	G	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1036	G	2.6
41	1j	86	MET	2.6
50	2s	22	LEU	2.6
21	2Z	168	GLU	2.6
1	1A	1057	A	2.6
1	1A	2062	A	2.6
9	1N	9	VAL	2.6
33	1b	7	VAL	2.6
33	2b	229	VAL	2.6
1	2A	898	C	2.6
54	2y	13	C	2.6
51	1t	55	ILE	2.6
6	2G	34	LEU	2.6
26	14	58	ARG	2.6
8	1I	106	GLY	2.6
11	2P	109	GLY	2.6
1	1A	883	G	2.6
1	1A	2112	G	2.6
1	1A	2149	G	2.6
55	2x	70	G	2.6
33	1b	229	VAL	2.6
33	2b	237	ALA	2.6
34	2c	207	VAL	2.6
40	2i	126	SER	2.6
41	1j	30	SER	2.6
1	1A	1098	A	2.6
1	1A	2790	A	2.6
54	2y	7	A	2.6
32	2a	1038	C	2.6
45	2n	6	LEU	2.6
51	1t	10	LEU	2.6
54	1w	3	C	2.6
6	1G	146	TYR	2.6
14	2S	33	LYS	2.6
40	2i	11	LYS	2.6
6	1G	48	GLU	2.6
40	2i	2	GLU	2.6
51	1t	101	GLY	2.6
32	2a	1196	U	2.6
33	2b	34	ALA	2.6
41	2j	76	ASN	2.6
50	2s	75	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
52	2u	14	TRP	2.5
41	2j	38	ILE	2.5
1	1A	1174	A	2.5
1	2A	652(B)	A	2.5
33	2b	44	LEU	2.5
54	2y	36	A	2.5
42	2k	126	ARG	2.5
34	2c	90	GLU	2.5
34	2c	194	GLY	2.5
46	2o	89	GLY	2.5
7	2H	169	VAL	2.5
25	23	2	PRO	2.5
48	2q	23	VAL	2.5
48	1q	27	PHE	2.5
34	2c	95	THR	2.5
6	2G	182	LYS	2.5
17	2V	71	LEU	2.5
1	1A	2116	G	2.5
1	2A	2149	G	2.5
1	2A	2154	G	2.5
1	2A	2751	G	2.5
5	2F	127	GLU	2.5
21	1Z	168	GLU	2.5
26	24	43	TYR	2.5
26	24	63	TYR	2.5
32	2a	1030(D)	A	2.5
54	1y	36	A	2.5
21	2Z	139	VAL	2.5
45	2n	18	VAL	2.5
34	2c	137	ALA	2.5
50	2s	10	PHE	2.5
1	1A	2111	C	2.5
1	2A	894	C	2.5
1	2A	2140	C	2.5
21	2Z	1	MET	2.5
40	1i	126	SER	2.5
43	2l	62	SER	2.5
20	2Y	61	ILE	2.5
45	2n	17	LYS	2.5
33	2b	40	HIS	2.5
33	2b	86	GLU	2.5
19	2X	69	TYR	2.5

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Mol	Chain	Res	Type	RSRZ
44	1m	124	PRO	2.5
1	1A	882	G	2.5
1	2A	2147	G	2.5
21	2Z	37	VAL	2.5
32	1a	1003	G	2.5
32	2a	1190	G	2.5
54	2y	18	G	2.5
7	2H	123	PHE	2.5
12	2Q	65	PHE	2.5
33	1b	70	PHE	2.5
40	1i	13	ALA	2.5
50	2s	79	THR	2.5
22	20	4	LYS	2.5
5	2F	12	LEU	2.5
29	17	47	ARG	2.5
33	1b	172	ILE	2.5
34	2c	30	ARG	2.5
1	1A	1075	C	2.5
1	1A	1092	C	2.5
1	2A	2146	C	2.5
4	2E	29	GLY	2.5
7	2H	21	PRO	2.5
7	2H	83	TYR	2.5
22	10	8	GLY	2.5
31	29	37	GLY	2.5
5	1F	89	VAL	2.5
42	2k	105	VAL	2.5
21	2Z	136	PHE	2.5
41	2j	54	PHE	2.5
41	2j	99	LYS	2.4
45	2n	4	LYS	2.4
1	2A	878	A	2.4
1	2A	2170	A	2.4
7	2H	42	ARG	2.4
21	2Z	76	LEU	2.4
21	2Z	137	ILE	2.4
41	2j	71	LEU	2.4
46	1o	87	ILE	2.4
1	1A	2131	G	2.4
1	1A	2805	G	2.4
45	2n	40	CYS	2.4
54	1w	44	G	2.4

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Mol	Chain	Res	Type	RSRZ
34	1c	62	ASP	2.4
40	1i	2	GLU	2.4
1	2A	2163	C	2.4
1	2A	2132	U	2.4
34	2c	155	GLY	2.4
34	2c	185	GLY	2.4
40	2i	67	GLY	2.4
54	1y	47	U	2.4
41	2j	77	PRO	2.4
41	2j	86	MET	2.4
45	2n	21	TYR	2.4
7	2H	49	VAL	2.4
12	2Q	106	VAL	2.4
23	21	81	LYS	2.4
34	2c	116	VAL	2.4
42	1k	14	VAL	2.4
29	17	45	ALA	2.4
40	2i	119	ALA	2.4
40	2i	103	THR	2.4
43	2l	61	THR	2.4
24	22	3	LEU	2.4
30	28	41	ILE	2.4
50	2s	57	HIS	2.4
1	1A	2171	A	2.4
1	2A	2134	A	2.4
54	2w	76	A	2.4
38	2g	8	GLU	2.4
1	2A	1170	G	2.4
1	2A	2124	G	2.4
32	1a	1021	G	2.4
32	2a	1034	G	2.4
54	2w	44	G	2.4
34	2c	145	GLY	2.4
1	1A	645	C	2.4
1	1A	1076	C	2.4
1	2A	889	C	2.4
1	2A	2161	C	2.4
32	2a	1263	C	2.4
32	2a	1532	U	2.4
34	2c	48	TYR	2.4
34	2c	151	VAL	2.4
54	2w	67	C	2.4

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Mol	Chain	Res	Type	RSRZ
55	1x	67	C	2.4
1	1A	271(K)	U	2.4
1	1A	1175	U	2.4
32	2a	1012	U	2.4
35	1d	131	ARG	2.4
6	2G	161	THR	2.4
33	2b	127	ILE	2.4
50	2s	16	LEU	2.4
51	1t	100	ILE	2.4
48	1q	99	SER	2.4
33	1b	195	ASP	2.4
33	1b	231	GLU	2.4
21	1Z	1	MET	2.4
1	1A	1088	A	2.4
1	2A	1508	A	2.4
12	2Q	63	LYS	2.4
50	2s	18	LYS	2.4
51	1t	14	LYS	2.4
11	2P	34	GLY	2.4
11	2P	118	GLY	2.4
21	2Z	147	GLY	2.4
36	2e	23	GLY	2.4
41	2j	31	GLY	2.4
52	2u	16	GLY	2.4
34	2c	75	VAL	2.4
35	1d	88	VAL	2.4
35	1d	170	VAL	2.4
1	2A	652(U)	G	2.4
26	24	49	PHE	2.4
32	2a	1024	G	2.4
34	2c	61	ALA	2.4
40	2i	43	ALA	2.4
50	2s	24	ALA	2.4
1	1A	1100	C	2.4
1	1A	2150	U	2.4
1	1A	2172	U	2.4
1	2A	895	U	2.4
1	2A	2113	U	2.4
4	2E	134	ILE	2.4
7	2H	148	ILE	2.4
12	2Q	2	LEU	2.4
32	2a	1007	C	2.4

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Mol	Chain	Res	Type	RSRZ
33	2b	140	HIS	2.4
7	2H	63	SER	2.4
7	2H	116	GLU	2.4
33	2b	234	PRO	2.4
41	2j	53	PRO	2.4
46	1o	19	PRO	2.4
12	2Q	15	GLY	2.4
39	1h	70	GLN	2.4
6	1G	83	ARG	2.4
19	2X	68	ARG	2.4
20	2Y	42	VAL	2.4
21	2Z	58	VAL	2.4
33	1b	136	VAL	2.4
41	2j	72	VAL	2.4
32	2a	1256	A	2.4
53	2v	13	A	2.4
5	2F	196	LEU	2.3
21	2Z	70	LEU	2.3
34	2c	124	ILE	2.3
41	2j	75	ILE	2.3
44	1m	4	ILE	2.3
1	1A	1071	G	2.3
1	1A	1082	U	2.3
1	1A	2110	G	2.3
1	2A	545	G	2.3
1	2A	1039	G	2.3
1	2A	2793	G	2.3
1	2A	2893	G	2.3
32	1a	202	U	2.3
32	1a	346	G	2.3
21	2Z	2	GLU	2.3
32	2a	202	U	2.3
32	2a	1281	U	2.3
54	1w	65	G	2.3
54	2w	15	G	2.3
33	1b	9	GLU	2.3
1	1A	889	C	2.3
5	1F	15	SER	2.3
8	1I	42	SER	2.3
18	2W	94	ASP	2.3
32	2a	1018	C	2.3
40	2i	54	ASP	2.3

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Mol	Chain	Res	Type	RSRZ
16	2U	117	GLN	2.3
41	1j	33	GLN	2.3
21	2Z	86	VAL	2.3
36	2e	34	VAL	2.3
36	2e	100	VAL	2.3
34	2c	92	ALA	2.3
44	2m	28	ALA	2.3
51	1t	97	ALA	2.3
6	2G	20	ILE	2.3
34	2c	157	ILE	2.3
50	2s	31	ILE	2.3
38	1g	154	TYR	2.3
1	1A	278	A	2.3
1	2A	2602	A	2.3
1	2A	2801(A)	A	2.3
41	2j	42	THR	2.3
20	2Y	62	GLU	2.3
15	1T	107	ASP	2.3
21	2Z	123	ASP	2.3
26	24	51	ASP	2.3
36	2e	5	ASP	2.3
1	1A	1063	G	2.3
1	1A	2125	G	2.3
1	1A	2166	G	2.3
1	2A	530	G	2.3
21	2Z	158	PRO	2.3
21	2Z	167	PRO	2.3
32	2a	1127	G	2.3
54	1y	69	G	2.3
54	2y	22	G	2.3
1	1A	652(S)	C	2.3
1	2A	2145	C	2.3
21	2Z	131	ARG	2.3
22	20	11	ARG	2.3
32	2a	1254	C	2.3
38	2g	5	ARG	2.3
38	2g	10	ARG	2.3
41	2j	45	ARG	2.3
52	2u	9	ARG	2.3
54	2w	2	C	2.3
55	1x	69	C	2.3
40	2i	108	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
6	2G	50	ALA	2.3
20	2Y	48	ALA	2.3
21	2Z	67	LEU	2.3
34	2c	128	PHE	2.3
33	1b	19	HIS	2.3
50	2s	14	HIS	2.3
41	2j	87	THR	2.3
43	1l	126	LYS	2.3
32	1a	1447	A	2.3
32	2a	1004	A	2.3
32	2a	1357	A	2.3
21	2Z	103	ARG	2.3
33	2b	232	PRO	2.3
40	2i	21	PRO	2.3
40	2i	128	ARG	2.3
41	1j	77	PRO	2.3
41	2j	66	ARG	2.3
24	12	70	GLN	2.3
47	1p	48	TRP	2.3
34	2c	25	GLY	2.3
44	2m	119	GLY	2.3
51	1t	96	GLY	2.3
21	2Z	71	VAL	2.3
33	1b	93	VAL	2.3
46	2o	60	VAL	2.3
8	2I	75	LEU	2.3
21	2Z	104	PHE	2.3
34	2c	47	LEU	2.3
33	1b	29	ALA	2.3
51	2t	59	ALA	2.3
1	1A	2156	G	2.3
1	2A	2804	C	2.3
21	1Z	151	HIS	2.3
32	2a	980	C	2.3
54	1w	68	C	2.3
54	1y	5	G	2.3
54	1y	57	G	2.3
12	2Q	1	MET	2.3
44	2m	120	LYS	2.3
45	2n	13	THR	2.3
26	14	67	TYR	2.3
7	2H	29	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
35	1d	73	ARG	2.3
40	2i	49	PRO	2.3
5	1F	207	GLY	2.3
35	1d	171	GLY	2.3
53	1v	14	A	2.3
6	2G	53	LEU	2.3
7	2H	141	VAL	2.3
9	2N	46	VAL	2.3
41	2j	49	VAL	2.3
1	2A	2150	U	2.2
12	2Q	20	ALA	2.2
21	2Z	51	ALA	2.2
34	1c	14	ILE	2.2
48	1q	36	ILE	2.2
8	1I	117	GLU	2.2
8	2I	64	GLU	2.2
23	2l	83	GLU	2.2
47	1p	38	TYR	2.2
1	2A	1509	C	2.2
1	2A	2174	C	2.2
54	2y	56	C	2.2
1	1A	1089	G	2.2
1	2A	171	G	2.2
1	2A	2153	G	2.2
1	2A	2157	G	2.2
38	2g	37	ASN	2.2
45	1n	57	ARG	2.2
21	2Z	95	PRO	2.2
22	20	71	ASP	2.2
41	2j	36	GLY	2.2
40	2i	50	LEU	2.2
47	2p	48	TRP	2.2
25	23	9	VAL	2.2
49	2r	85	LEU	2.2
1	2A	2062	A	2.2
6	2G	140	ILE	2.2
21	2Z	21	ALA	2.2
33	2b	123	ALA	2.2
34	1c	124	ILE	2.2
45	2n	42	ILE	2.2
51	2t	74	LYS	2.2
1	1A	2167	U	2.2

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Mol	Chain	Res	Type	RSRZ
32	1a	1446	U	2.2
40	2i	12	GLU	2.2
50	2s	77	THR	2.2
54	1y	12	U	2.2
34	2c	29	TYR	2.2
35	1d	3	ARG	2.2
40	2i	107	ARG	2.2
7	2H	8	PRO	2.2
35	1d	29	PRO	2.2
1	1A	34	C	2.2
1	1A	2896	C	2.2
1	2A	2175	C	2.2
1	2A	2794	C	2.2
32	1a	91	C	2.2
32	1a	345	C	2.2
32	2a	1027	C	2.2
10	2O	28	SER	2.2
33	2b	227	GLY	2.2
34	2c	20	SER	2.2
34	2c	80	GLY	2.2
39	2h	4	ASP	2.2
1	1A	1173	G	2.2
1	1A	2133	G	2.2
1	1A	2154	G	2.2
1	1A	2157	G	2.2
1	2A	892	G	2.2
1	2A	2156	G	2.2
17	2V	35	LEU	2.2
32	2a	630	G	2.2
38	2g	124	LEU	2.2
41	2j	40	LEU	2.2
54	1y	18	G	2.2
55	2x	2	G	2.2
33	1b	97	TRP	2.2
33	2b	223	ILE	2.2
41	2j	96	ILE	2.2
33	2b	161	ALA	2.2
40	2i	52	ALA	2.2
49	2r	20	ALA	2.2
7	2H	32	GLU	2.2
7	2H	40	GLU	2.2
28	26	50	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	21	ARG	2.2
47	2p	8	ARG	2.2
7	2H	94	TYR	2.2
47	2p	38	TYR	2.2
21	2Z	159	PRO	2.2
33	1b	131	PRO	2.2
41	2j	39	PRO	2.2
6	2G	152	LEU	2.2
31	29	2	LYS	2.2
35	1d	180	GLY	2.2
39	1h	2	LEU	2.2
41	2j	52	GLY	2.2
16	2U	90	VAL	2.2
17	2V	57	VAL	2.2
34	1c	76	VAL	2.2
40	2i	26	VAL	2.2
43	1l	18	VAL	2.2
1	1A	2175	C	2.2
26	14	59	PHE	2.2
32	2a	1137	C	2.2
33	1b	127	ILE	2.2
34	2c	6	HIS	2.2
35	1d	110	PHE	2.2
36	1e	109	ILE	2.2
28	26	2	ALA	2.2
36	2e	17	ALA	2.2
45	2n	59	ALA	2.2
51	2t	97	ALA	2.2
1	1A	2124	G	2.2
26	24	57	GLU	2.2
32	2a	1003	G	2.2
32	2a	1222	G	2.2
54	1y	1	G	2.2
54	2w	65	G	2.2
54	2y	5	G	2.2
8	2I	82	ARG	2.2
31	29	27	CYS	2.2
40	2i	111	ARG	2.2
41	2j	43	ARG	2.2
45	2n	26	ARG	2.2
1	2A	2117	A	2.2
1	2A	2126	A	2.2

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Mol	Chain	Res	Type	RSRZ
7	2H	168	PRO	2.2
21	2Z	99	TYR	2.2
33	2b	31	TYR	2.2
40	2i	62	TYR	2.2
43	2l	64	TYR	2.2
53	2v	15	A	2.2
32	2a	1025	U	2.2
32	2a	1148	U	2.2
42	1k	13	GLN	2.2
20	2Y	46	LYS	2.2
48	2q	100	LYS	2.2
34	2c	33	LEU	2.2
34	2c	196	LEU	2.2
35	2d	23	GLY	2.2
51	2t	99	LEU	2.2
16	2U	88	ILE	2.2
33	2b	172	ILE	2.2
33	2b	214	ILE	2.2
43	2l	18	VAL	2.2
6	2G	23	PHE	2.2
45	2n	16	PHE	2.2
25	23	51	ALA	2.1
33	2b	225	ALA	2.1
49	1r	20	ALA	2.1
1	1A	1072	C	2.1
1	2A	34	C	2.1
7	2H	6	ARG	2.1
32	2a	1145	C	2.1
32	2a	1260	C	2.1
41	1j	46	ARG	2.1
47	1p	5	ARG	2.1
1	1A	652(F)	G	2.1
1	2A	2148	G	2.1
1	2A	2318	G	2.1
1	2A	2805	G	2.1
1	2A	2894	G	2.1
5	2F	171	PRO	2.1
32	1a	1033	G	2.1
33	2b	131	PRO	2.1
6	2G	26	GLN	2.1
12	2Q	26	TYR	2.1
20	2Y	63	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
24	22	70	GLN	2.1
31	29	8	LYS	2.1
34	2c	43	LEU	2.1
36	2e	43	LEU	2.1
7	2H	48	GLY	2.1
53	1v	15	A	2.1
54	2w	7	A	2.1
55	2x	76	A	2.1
1	1A	2130	U	2.1
2	2B	1	U	2.1
6	2G	15	VAL	2.1
32	2a	1205	U	2.1
33	2b	19	HIS	2.1
33	2b	230	VAL	2.1
38	2g	21	VAL	2.1
50	2s	45	VAL	2.1
54	1y	33	U	2.1
21	2Z	52	SER	2.1
21	2Z	153	SER	2.1
7	2H	96	ALA	2.1
33	2b	207	ALA	2.1
51	1t	94	ALA	2.1
6	2G	167	GLU	2.1
7	2H	53	GLU	2.1
26	14	57	GLU	2.1
14	2S	5	THR	2.1
41	2j	15	THR	2.1
6	2G	122	PRO	2.1
7	2H	175	LYS	2.1
25	13	2	PRO	2.1
35	1d	169	LYS	2.1
44	2m	121	LYS	2.1
1	1A	894	C	2.1
1	1A	1080	C	2.1
1	1A	2139	C	2.1
54	1w	2	C	2.1
33	2b	221	LEU	2.1
34	2c	42	LEU	2.1
35	1d	155	LEU	2.1
41	1j	76	ASN	2.1
44	2m	23	TYR	2.1
50	2s	15	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
34	2c	41	GLY	2.1
1	1A	2160	G	2.1
1	2A	1042	G	2.1
1	2A	2207	G	2.1
6	1G	52	ILE	2.1
21	1Z	105	VAL	2.1
21	2Z	96	VAL	2.1
32	1a	79	G	2.1
32	2a	971	G	2.1
32	2a	1048	G	2.1
33	1b	230	VAL	2.1
40	1i	17	VAL	2.1
54	1y	24	G	2.1
33	1b	122	PHE	2.1
1	1A	2135	A	2.1
2	1B	120	A	2.1
8	2I	63	ALA	2.1
15	2T	127	ALA	2.1
34	2c	100	ALA	2.1
35	1d	195	ALA	2.1
36	1e	48	ALA	2.1
35	2d	156	GLU	2.1
54	2w	45	U	2.1
39	2h	30	ARG	2.1
41	2j	46	ARG	2.1
44	2m	88	ARG	2.1
34	1c	95	THR	2.1
7	1H	13	LYS	2.1
8	2I	137	PRO	2.1
38	2g	88	PRO	2.1
51	1t	98	PRO	2.1
34	1c	107	GLN	2.1
36	2e	10	MET	2.1
8	2I	68	LEU	2.1
22	20	80	HIS	2.1
26	14	4	GLY	2.1
34	2c	205	GLY	2.1
36	2e	133	TYR	2.1
40	2i	72	GLY	2.1
7	2H	15	VAL	2.1
21	2Z	105	VAL	2.1
21	2Z	133	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1244	C	2.1
40	2i	17	VAL	2.1
54	1y	62	C	2.1
33	2b	163	PHE	2.1
50	1s	13	ASP	2.1
21	2Z	4	ARG	2.1
33	2b	29	ALA	2.1
34	1c	83	ARG	2.1
34	1c	190	ARG	2.1
34	2c	79	ARG	2.1
34	2c	163	ALA	2.1
35	1d	191	ARG	2.1
38	2g	7	ALA	2.1
1	1A	2207	G	2.1
1	2A	614(B)	G	2.1
1	2A	1114	G	2.1
1	2A	2792	G	2.1
32	1a	159	G	2.1
32	2a	1021	G	2.1
32	2a	1276	G	2.1
32	2a	1356	G	2.1
54	1y	22	G	2.1
55	1x	46	G	2.1
1	1A	878	A	2.1
1	1A	1101	U	2.1
1	2A	1847	A	2.1
32	2a	1000	U	2.1
32	2a	1126	U	2.1
44	2m	105	THR	2.1
54	2y	59	U	2.1
54	2y	60	U	2.1
41	1j	84	GLN	2.1
21	1Z	150	LEU	2.1
23	2l	94	LEU	2.1
40	2i	56	LEU	2.1
45	2n	44	LEU	2.1
35	1d	154	ASN	2.1
11	2P	110	TYR	2.1
17	2V	12	TYR	2.1
40	1i	114	TYR	2.1
41	1j	6	ILE	2.1
6	2G	159	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
7	2H	52	VAL	2.1
21	2Z	141	VAL	2.1
50	1s	9	VAL	2.1
6	2G	16	ARG	2.0
6	2G	156	ASP	2.0
11	2P	79	ARG	2.0
12	2Q	133	ARG	2.0
14	1S	3	ARG	2.0
7	2H	102	ALA	2.0
19	2X	90	GLU	2.0
35	1d	153	ARG	2.0
38	2g	3	ARG	2.0
39	2h	104	ARG	2.0
40	1i	51	ARG	2.0
34	2c	53	ALA	2.0
41	1j	95	GLU	2.0
14	2S	52	SER	2.0
1	1A	2129	C	2.0
1	1A	2137	C	2.0
1	1A	2803	C	2.0
41	1j	14	LYS	2.0
54	1y	48	C	2.0
35	1d	173	TRP	2.0
21	2Z	15	PRO	2.0
44	2m	113	PRO	2.0
1	2A	614(A)	U	2.0
15	2T	82	LEU	2.0
21	2Z	125	LEU	2.0
32	2a	793	U	2.0
1	1A	892	G	2.0
1	2A	6	A	2.0
1	2A	2112	G	2.0
1	2A	2833	G	2.0
32	1a	1002	G	2.0
32	1a	1256	A	2.0
32	2a	1013	G	2.0
32	2a	1026	G	2.0
32	2a	1035	A	2.0
32	2a	1138	G	2.0
32	2a	1280	A	2.0
32	2a	1346	A	2.0
7	2H	111	HIS	2.0

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Mol	Chain	Res	Type	RSRZ
5	2F	207	GLY	2.0
7	2H	78	GLY	2.0
26	14	54	GLY	2.0
33	2b	66	GLY	2.0
39	2h	86	ILE	2.0
47	1p	4	ILE	2.0
21	2Z	174	VAL	2.0
40	2i	92	TYR	2.0
3	2D	262	ARG	2.0
6	1G	80	PHE	2.0
25	23	30	ARG	2.0
40	2i	20	ARG	2.0
45	2n	29	ARG	2.0
16	2U	89	GLU	2.0
24	12	11	GLU	2.0
35	1d	179	GLU	2.0
21	2Z	164	ALA	2.0
34	2c	168	ALA	2.0
45	2n	9	LYS	2.0
34	1c	15	THR	2.0
34	2c	73	PRO	2.0
35	1d	89	THR	2.0
1	2A	652(T)	C	2.0
8	2I	38	LEU	2.0
32	1a	1006	C	2.0
32	1a	1008	C	2.0
35	2d	201	GLN	2.0
55	2x	71	C	2.0
17	2V	101	GLY	2.0
34	2c	57	ILE	2.0
37	2f	13	ASN	2.0
38	2g	34	GLY	2.0
41	1j	38	ILE	2.0
1	2A	2171	A	2.0
7	2H	44	VAL	2.0
7	2H	115	VAL	2.0
26	24	50	VAL	2.0
32	2a	1092	A	2.0
34	2c	141	VAL	2.0
40	2i	104	ARG	2.0
44	2m	7	VAL	2.0
53	2v	24	A	2.0

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Mol	Chain	Res	Type	RSRZ
54	2y	26	A	2.0
12	2Q	32	TYR	2.0
14	2S	36	TYR	2.0
25	23	15	TYR	2.0
43	1l	64	TYR	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
54	5MU	2y	54	21/22	0.58	0.18	79,86,98,117	0
54	5MU	1y	54	21/22	0.62	0.17	81,88,95,107	0
54	PSU	1y	55	20/21	0.66	0.15	85,91,96,104	0
54	4SU	1y	8	20/21	0.67	0.14	84,88,98,104	0
54	MIA	2y	37	22/30	0.69	0.15	68,81,92,107	0
54	4SU	2y	8	20/21	0.69	0.14	80,90,100,111	0
54	G7M	2y	46	24/25	0.70	0.14	81,87,94,109	0
54	G7M	1y	46	24/25	0.72	0.14	79,89,95,98	0
54	4SU	2w	8	20/21	0.72	0.15	83,89,98,105	0
54	G7M	1w	46	24/25	0.72	0.14	68,76,94,104	0
54	PSU	2y	55	20/21	0.73	0.13	80,88,99,99	0
54	MIA	1y	37	22/30	0.75	0.14	68,76,88,98	0
54	G7M	2w	46	24/25	0.76	0.13	81,84,96,114	0
54	PSU	2y	32	20/21	0.78	0.13	72,78,87,92	0
54	PSU	2y	39	20/21	0.79	0.13	67,77,86,92	0
54	PSU	2w	55	20/21	0.82	0.13	74,81,88,90	0
55	PSU	2x	55	20/21	0.83	0.12	63,70,78,84	0
54	5MU	2w	54	21/22	0.83	0.15	68,76,78,79	0
54	4SU	1w	8	20/21	0.84	0.11	69,73,84,85	0
54	PSU	2w	32	20/21	0.85	0.15	69,76,82,89	0
32	2MG	2a	1207	24/25	0.85	0.14	73,77,85,88	0
54	PSU	1y	32	20/21	0.85	0.13	68,77,90,93	0
54	PSU	1y	39	20/21	0.87	0.12	65,72,77,77	0
55	4SU	2x	8	20/21	0.88	0.12	63,74,78,85	0
43	0TD	2l	92	10/11	0.89	0.12	57,61,63,69	0
55	5MU	2x	54	21/22	0.90	0.11	69,74,77,82	0
54	PSU	1w	55	20/21	0.90	0.10	48,63,71,71	0
54	MIA	2w	37	25/30	0.90	0.13	61,69,74,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	M2G	2a	966	25/26	0.91	0.14	58,65,72,80	0
32	5MC	2a	967	21/22	0.91	0.13	59,64,69,74	0
55	5MU	1x	54	21/22	0.91	0.11	58,61,69,73	0
1	5MU	2A	1915	21/22	0.91	0.12	59,66,73,77	0
55	PSU	1x	55	20/21	0.92	0.10	53,57,70,74	0
32	PSU	2a	516	20/21	0.92	0.10	46,64,69,71	0
55	5MC	2x	32	21/22	0.92	0.13	60,67,72,74	0
32	G7M	2a	527	24/25	0.92	0.11	51,61,67,72	0
43	0TD	1l	92	10/11	0.93	0.10	43,45,51,64	0
54	PSU	1w	32	20/21	0.93	0.10	51,55,66,68	0
32	5MC	2a	1400	21/22	0.93	0.11	60,65,71,73	0
54	PSU	2w	39	20/21	0.93	0.11	57,73,82,83	0
32	4OC	2a	1402	22/23	0.93	0.11	53,60,64,73	0
1	PSU	2A	1917	20/21	0.93	0.09	53,61,66,68	0
1	PSU	1A	1917	20/21	0.94	0.10	40,46,52,55	0
1	PSU	2A	1911	20/21	0.94	0.09	52,56,64,70	0
32	5MC	2a	1404	21/22	0.94	0.10	42,46,53,61	0
32	MA6	2a	1518	24/25	0.94	0.11	48,56,64,67	0
32	MA6	2a	1519	24/25	0.94	0.14	45,57,62,63	0
55	4SU	1x	8	20/21	0.94	0.09	47,59,68,68	0
54	5MU	1w	54	21/22	0.95	0.09	44,53,61,64	0
1	5MC	2A	1942	21/22	0.95	0.09	49,54,59,63	0
1	5MC	2A	1962	21/22	0.95	0.09	37,49,52,62	0
32	M2G	1a	966	25/26	0.95	0.10	43,48,54,57	0
32	5MC	2a	1407	21/22	0.95	0.10	42,50,56,56	0
32	UR3	2a	1498	21/22	0.95	0.10	47,49,53,57	0
32	2MG	1a	1207	24/25	0.95	0.09	47,59,63,65	0
55	5MC	1x	32	21/22	0.95	0.10	39,47,55,59	0
32	G7M	1a	527	24/25	0.95	0.10	36,40,47,49	0
1	OMU	2A	2552	21/22	0.96	0.09	44,47,55,60	0
54	PSU	1w	39	20/21	0.96	0.07	44,48,56,58	0
32	5MC	1a	967	21/22	0.96	0.10	41,49,55,57	0
1	OMC	2A	1920	21/22	0.96	0.08	45,54,58,58	0
1	5MU	2A	1939	21/22	0.96	0.09	34,40,46,48	0
1	5MU	1A	1915	21/22	0.96	0.08	36,45,50,50	0
32	5MC	1a	1400	21/22	0.96	0.10	36,44,49,56	0
1	OMG	2A	2251	24/25	0.96	0.09	38,44,48,52	0
32	PSU	1a	516	20/21	0.97	0.07	37,47,51,52	0
32	4OC	1a	1402	22/23	0.97	0.08	35,39,45,51	0
1	2MA	2A	2503	23/24	0.97	0.08	31,37,44,45	0
32	5MC	1a	1404	21/22	0.97	0.08	30,35,40,49	0
1	PSU	2A	2605	20/21	0.97	0.07	33,37,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	5MC	1a	1407	21/22	0.97	0.08	29,35,39,39	0
32	MA6	1a	1519	24/25	0.97	0.08	31,37,39,40	0
1	PSU	1A	1911	20/21	0.97	0.08	27,42,47,48	0
1	OMC	1A	1920	21/22	0.97	0.08	28,36,40,42	0
1	5MC	1A	1942	21/22	0.97	0.07	29,34,39,41	0
54	MIA	1w	37	29/30	0.97	0.09	34,42,60,63	0
1	OMU	1A	2552	21/22	0.97	0.07	20,26,30,34	0
1	PSU	1A	2605	20/21	0.98	0.05	21,25,31,32	0
32	UR3	1a	1498	21/22	0.98	0.07	29,35,39,41	0
32	MA6	1a	1518	24/25	0.98	0.07	28,34,38,39	0
1	5MC	1A	1962	21/22	0.98	0.06	20,27,33,40	0
1	5MU	1A	1939	21/22	0.98	0.07	19,25,28,36	0
1	2MA	1A	2503	23/24	0.99	0.05	12,17,21,26	0
1	OMG	1A	2251	24/25	0.99	0.05	17,21,26,29	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
56	MG	1B	229	1/1	0.42	0.22	84,84,84,84	0
56	MG	1B	228	1/1	0.57	0.15	78,78,78,78	0
56	MG	18	108	1/1	0.59	0.28	67,67,67,67	0
56	MG	2A	3628	1/1	0.61	0.28	75,75,75,75	0
56	MG	2A	3315	1/1	0.62	0.26	72,72,72,72	0
56	MG	2a	3099	1/1	0.64	0.27	81,81,81,81	0
56	MG	1a	1650	1/1	0.65	0.25	66,66,66,66	0
56	MG	2A	3765	1/1	0.65	0.17	68,68,68,68	0
56	MG	2A	3833	1/1	0.65	0.21	77,77,77,77	0
56	MG	1A	3828	1/1	0.65	0.20	31,31,31,31	0
56	MG	1A	3361	1/1	0.67	0.18	69,69,69,69	0
56	MG	1A	3959	1/1	0.67	0.19	80,80,80,80	0
56	MG	2B	212	1/1	0.67	0.26	73,73,73,73	0
56	MG	1A	3962	1/1	0.67	0.17	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2j	201	1/1	0.67	0.19	78,78,78,78	0
56	MG	1A	3345	1/1	0.68	0.36	67,67,67,67	0
56	MG	2A	3440	1/1	0.68	0.26	70,70,70,70	0
56	MG	2a	3008	1/1	0.68	0.21	72,72,72,72	0
56	MG	1a	1782	1/1	0.68	0.19	64,64,64,64	0
56	MG	1v	101	1/1	0.68	0.34	77,77,77,77	0
56	MG	1A	3669	1/1	0.69	0.18	55,55,55,55	0
56	MG	1A	3484	1/1	0.69	0.16	74,74,74,74	0
56	MG	2a	3184	1/1	0.69	0.17	75,75,75,75	0
56	MG	1A	3974	1/1	0.69	0.14	61,61,61,61	0
56	MG	2A	3851	1/1	0.70	0.18	48,48,48,48	0
56	MG	1E	312	1/1	0.70	0.19	62,62,62,62	0
56	MG	2A	3562	1/1	0.70	0.25	69,69,69,69	0
56	MG	2A	3035	1/1	0.70	0.22	72,72,72,72	0
56	MG	1A	3979	1/1	0.70	0.17	42,42,42,42	0
56	MG	2A	3379	1/1	0.70	0.18	68,68,68,68	0
56	MG	2A	3187	1/1	0.71	0.16	65,65,65,65	0
56	MG	2A	3242	1/1	0.71	0.33	75,75,75,75	0
56	MG	2A	3249	1/1	0.71	0.17	75,75,75,75	0
56	MG	2a	3189	1/1	0.71	0.21	72,72,72,72	0
56	MG	1A	4074	1/1	0.71	0.21	64,64,64,64	0
56	MG	1w	107	1/1	0.72	0.19	72,72,72,72	0
56	MG	1A	3790	1/1	0.72	0.18	49,49,49,49	0
56	MG	2a	3013	1/1	0.72	0.31	72,72,72,72	0
56	MG	2A	3173	1/1	0.72	0.23	64,64,64,64	0
56	MG	2A	3336	1/1	0.72	0.15	61,61,61,61	0
56	MG	2A	3365	1/1	0.72	0.29	59,59,59,59	0
56	MG	1A	3745	1/1	0.72	0.15	55,55,55,55	0
56	MG	2A	3644	1/1	0.73	0.29	74,74,74,74	0
56	MG	2A	3722	1/1	0.73	0.26	61,61,61,61	0
56	MG	2A	3734	1/1	0.73	0.22	59,59,59,59	0
56	MG	2A	3453	1/1	0.73	0.53	77,77,77,77	0
56	MG	2A	3363	1/1	0.73	0.29	75,75,75,75	0
56	MG	1A	3242	1/1	0.73	0.14	74,74,74,74	0
56	MG	2A	3871	1/1	0.73	0.13	69,69,69,69	0
56	MG	2A	3309	1/1	0.74	0.36	71,71,71,71	0
56	MG	1A	3946	1/1	0.74	0.13	71,71,71,71	0
56	MG	2A	3680	1/1	0.74	0.29	56,56,56,56	0
56	MG	2A	3427	1/1	0.74	0.21	66,66,66,66	0
56	MG	1A	3590	1/1	0.75	0.16	39,39,39,39	0
56	MG	2A	3348	1/1	0.75	0.23	67,67,67,67	0
56	MG	2A	3524	1/1	0.75	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
56	MG	2A	3261	1/1	0.75	0.30	62,62,62,62	0
56	MG	2a	3222	1/1	0.75	0.22	65,65,65,65	0
56	MG	2A	3431	1/1	0.75	0.22	65,65,65,65	0
56	MG	2v	101	1/1	0.75	0.18	63,63,63,63	0
56	MG	2A	3879	1/1	0.76	0.14	64,64,64,64	0
56	MG	1A	3887	1/1	0.76	0.14	20,20,20,20	0
56	MG	1B	231	1/1	0.76	0.27	73,73,73,73	0
56	MG	1A	4036	1/1	0.76	0.17	52,52,52,52	0
56	MG	1A	3904	1/1	0.76	0.13	45,45,45,45	0
56	MG	2A	3466	1/1	0.76	0.20	59,59,59,59	0
56	MG	2A	3502	1/1	0.76	0.26	73,73,73,73	0
56	MG	2A	3296	1/1	0.76	0.35	78,78,78,78	0
56	MG	2A	3538	1/1	0.76	0.17	52,52,52,52	0
56	MG	1A	3753	1/1	0.76	0.17	57,57,57,57	0
56	MG	2x	104	1/1	0.76	0.15	64,64,64,64	0
56	MG	2A	3823	1/1	0.77	0.17	63,63,63,63	0
56	MG	2A	3825	1/1	0.77	0.18	65,65,65,65	0
56	MG	2A	3319	1/1	0.77	0.12	81,81,81,81	0
56	MG	2A	3325	1/1	0.77	0.15	71,71,71,71	0
56	MG	1A	3747	1/1	0.77	0.19	54,54,54,54	0
56	MG	2A	3525	1/1	0.77	0.12	66,66,66,66	0
56	MG	1x	105	1/1	0.77	0.31	64,64,64,64	0
56	MG	28	101	1/1	0.77	0.17	71,71,71,71	0
56	MG	2A	3258	1/1	0.77	0.17	59,59,59,59	0
56	MG	1x	108	1/1	0.77	0.16	67,67,67,67	0
56	MG	2a	3034	1/1	0.77	0.27	63,63,63,63	0
56	MG	2a	3088	1/1	0.77	0.20	73,73,73,73	0
56	MG	2A	3285	1/1	0.77	0.28	67,67,67,67	0
56	MG	2a	3182	1/1	0.77	0.21	69,69,69,69	0
56	MG	1a	1680	1/1	0.77	0.27	73,73,73,73	0
56	MG	2A	3706	1/1	0.77	0.19	67,67,67,67	0
56	MG	1A	3735	1/1	0.77	0.15	73,73,73,73	0
56	MG	1A	4063	1/1	0.77	0.13	42,42,42,42	0
56	MG	2A	3757	1/1	0.77	0.13	68,68,68,68	0
56	MG	2A	3316	1/1	0.77	0.32	74,74,74,74	0
56	MG	2A	3322	1/1	0.78	0.15	71,71,71,71	0
56	MG	1a	1775	1/1	0.78	0.20	76,76,76,76	0
56	MG	1W	206	1/1	0.78	0.28	33,33,33,33	0
56	MG	2A	3081	1/1	0.78	0.20	78,78,78,78	0
56	MG	1A	3630	1/1	0.78	0.11	57,57,57,57	0
56	MG	2A	3773	1/1	0.78	0.14	51,51,51,51	0
56	MG	2a	3142	1/1	0.78	0.13	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3178	1/1	0.78	0.20	60,60,60,60	0
56	MG	2A	3554	1/1	0.78	0.21	72,72,72,72	0
56	MG	2A	3179	1/1	0.78	0.33	63,63,63,63	0
56	MG	2a	3210	1/1	0.78	0.18	55,55,55,55	0
56	MG	2A	3607	1/1	0.78	0.17	53,53,53,53	0
56	MG	1A	3898	1/1	0.78	0.14	52,52,52,52	0
56	MG	2A	3191	1/1	0.78	0.20	70,70,70,70	0
56	MG	1A	3870	1/1	0.78	0.12	28,28,28,28	0
56	MG	2A	3748	1/1	0.79	0.26	66,66,66,66	0
56	MG	2A	3358	1/1	0.79	0.12	70,70,70,70	0
56	MG	2a	3014	1/1	0.79	0.31	68,68,68,68	0
56	MG	1B	237	1/1	0.79	0.17	58,58,58,58	0
56	MG	2a	3041	1/1	0.79	0.16	73,73,73,73	0
56	MG	1A	4019	1/1	0.79	0.10	55,55,55,55	0
56	MG	1a	1722	1/1	0.79	0.34	57,57,57,57	0
56	MG	1A	3788	1/1	0.79	0.11	55,55,55,55	0
56	MG	2a	3160	1/1	0.79	0.20	66,66,66,66	0
56	MG	10	110	1/1	0.79	0.17	58,58,58,58	0
56	MG	2A	3844	1/1	0.79	0.20	60,60,60,60	0
56	MG	2A	3110	1/1	0.79	0.36	82,82,82,82	0
56	MG	2A	3152	1/1	0.79	0.23	70,70,70,70	0
56	MG	2A	3874	1/1	0.79	0.13	60,60,60,60	0
56	MG	1B	205	1/1	0.79	0.24	59,59,59,59	0
56	MG	2A	3265	1/1	0.79	0.17	63,63,63,63	0
56	MG	2A	3276	1/1	0.79	0.16	64,64,64,64	0
56	MG	2y	104	1/1	0.79	0.25	77,77,77,77	0
56	MG	1A	3650	1/1	0.80	0.13	27,27,27,27	0
56	MG	1A	3545	1/1	0.80	0.10	46,46,46,46	0
56	MG	29	101	1/1	0.80	0.32	69,69,69,69	0
56	MG	2A	3054	1/1	0.80	0.21	70,70,70,70	0
56	MG	1A	3886	1/1	0.80	0.10	16,16,16,16	0
56	MG	2A	3474	1/1	0.80	0.30	68,68,68,68	0
56	MG	2A	3751	1/1	0.80	0.12	38,38,38,38	0
56	MG	2A	3478	1/1	0.80	0.27	62,62,62,62	0
56	MG	2a	3045	1/1	0.80	0.37	80,80,80,80	0
56	MG	2a	3047	1/1	0.80	0.15	71,71,71,71	0
56	MG	2A	3328	1/1	0.80	0.21	60,60,60,60	0
56	MG	2A	3504	1/1	0.80	0.20	68,68,68,68	0
56	MG	2A	3778	1/1	0.80	0.14	77,77,77,77	0
56	MG	2A	3332	1/1	0.80	0.13	60,60,60,60	0
56	MG	2A	3824	1/1	0.80	0.13	55,55,55,55	0
56	MG	2A	3095	1/1	0.80	0.18	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3947	1/1	0.80	0.14	51,51,51,51	0
56	MG	1a	1797	1/1	0.80	0.14	53,53,53,53	0
56	MG	15	104	1/1	0.80	0.21	44,44,44,44	0
56	MG	2A	3861	1/1	0.80	0.12	66,66,66,66	0
56	MG	1A	3715	1/1	0.80	0.10	20,20,20,20	0
56	MG	2w	109	1/1	0.80	0.29	77,77,77,77	0
56	MG	2x	102	1/1	0.80	0.21	77,77,77,77	0
56	MG	2x	103	1/1	0.80	0.15	70,70,70,70	0
56	MG	1w	108	1/1	0.80	0.12	72,72,72,72	0
56	MG	1A	4058	1/1	0.80	0.15	49,49,49,49	0
56	MG	2A	3027	1/1	0.81	0.17	59,59,59,59	0
56	MG	1A	3539	1/1	0.81	0.15	55,55,55,55	0
56	MG	2a	3007	1/1	0.81	0.13	64,64,64,64	0
56	MG	1A	3416	1/1	0.81	0.17	71,71,71,71	0
56	MG	1A	3980	1/1	0.81	0.10	30,30,30,30	0
56	MG	2A	3482	1/1	0.81	0.16	57,57,57,57	0
56	MG	2A	3087	1/1	0.81	0.29	71,71,71,71	0
56	MG	1a	1631	1/1	0.81	0.18	65,65,65,65	0
56	MG	2A	3339	1/1	0.81	0.30	79,79,79,79	0
56	MG	2a	3046	1/1	0.81	0.17	65,65,65,65	0
56	MG	1A	3995	1/1	0.81	0.22	58,58,58,58	0
56	MG	2A	3810	1/1	0.81	0.18	80,80,80,80	0
56	MG	2a	3090	1/1	0.81	0.11	71,71,71,71	0
56	MG	2A	3120	1/1	0.81	0.16	66,66,66,66	0
56	MG	2a	3102	1/1	0.81	0.16	66,66,66,66	0
56	MG	2A	3539	1/1	0.81	0.14	54,54,54,54	0
56	MG	2A	3151	1/1	0.81	0.15	63,63,63,63	0
56	MG	2a	3175	1/1	0.81	0.20	75,75,75,75	0
56	MG	2A	3290	1/1	0.81	0.20	66,66,66,66	0
56	MG	2A	3591	1/1	0.81	0.16	61,61,61,61	0
56	MG	1a	1677	1/1	0.81	0.13	57,57,57,57	0
56	MG	2A	3854	1/1	0.81	0.12	50,50,50,50	0
56	MG	1A	3831	1/1	0.81	0.14	29,29,29,29	0
56	MG	1x	106	1/1	0.81	0.19	72,72,72,72	0
56	MG	2A	3665	1/1	0.81	0.13	65,65,65,65	0
56	MG	1B	225	1/1	0.81	0.20	60,60,60,60	0
56	MG	2A	3685	1/1	0.81	0.15	66,66,66,66	0
56	MG	2B	215	1/1	0.81	0.22	66,66,66,66	0
56	MG	2B	216	1/1	0.81	0.23	65,65,65,65	0
56	MG	2B	217	1/1	0.81	0.14	76,76,76,76	0
56	MG	1A	3472	1/1	0.82	0.16	57,57,57,57	0
56	MG	2A	3269	1/1	0.82	0.14	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3347	1/1	0.82	0.22	61,61,61,61	0
56	MG	2a	3017	1/1	0.82	0.14	75,75,75,75	0
56	MG	2a	3019	1/1	0.82	0.20	75,75,75,75	0
56	MG	2A	3809	1/1	0.82	0.15	33,33,33,33	0
56	MG	2A	3272	1/1	0.82	0.19	70,70,70,70	0
56	MG	2A	3357	1/1	0.82	0.17	60,60,60,60	0
56	MG	1a	1802	1/1	0.82	0.17	60,60,60,60	0
56	MG	2A	3053	1/1	0.82	0.14	63,63,63,63	0
56	MG	2a	3051	1/1	0.82	0.24	65,65,65,65	0
56	MG	2A	3286	1/1	0.82	0.19	56,56,56,56	0
56	MG	1A	3051	1/1	0.82	0.20	55,55,55,55	0
56	MG	2A	3293	1/1	0.82	0.16	58,58,58,58	0
56	MG	1A	3252	1/1	0.82	0.38	65,65,65,65	0
56	MG	2a	3129	1/1	0.82	0.11	77,77,77,77	0
56	MG	2A	3857	1/1	0.82	0.17	51,51,51,51	0
56	MG	2A	3669	1/1	0.82	0.12	40,40,40,40	0
56	MG	2A	3671	1/1	0.82	0.15	55,55,55,55	0
56	MG	1a	1706	1/1	0.82	0.13	70,70,70,70	0
56	MG	2A	3211	1/1	0.82	0.25	61,61,61,61	0
56	MG	2B	202	1/1	0.82	0.14	56,56,56,56	0
56	MG	2B	205	1/1	0.82	0.27	63,63,63,63	0
56	MG	2A	3224	1/1	0.82	0.35	65,65,65,65	0
56	MG	2a	3226	1/1	0.82	0.13	58,58,58,58	0
56	MG	2f	203	1/1	0.82	0.15	68,68,68,68	0
56	MG	1A	4032	1/1	0.82	0.16	67,67,67,67	0
56	MG	2A	3724	1/1	0.82	0.13	68,68,68,68	0
56	MG	1A	3325	1/1	0.82	0.24	71,71,71,71	0
56	MG	2A	3251	1/1	0.82	0.18	65,65,65,65	0
56	MG	1a	1649	1/1	0.82	0.15	52,52,52,52	0
56	MG	2a	3003	1/1	0.82	0.12	74,74,74,74	0
56	MG	1x	110	1/1	0.82	0.16	66,66,66,66	0
56	MG	10	106	1/1	0.83	0.17	57,57,57,57	0
56	MG	2A	3682	1/1	0.83	0.16	60,60,60,60	0
56	MG	1a	1707	1/1	0.83	0.13	52,52,52,52	0
56	MG	2A	3694	1/1	0.83	0.14	64,64,64,64	0
56	MG	2A	3869	1/1	0.83	0.18	57,57,57,57	0
56	MG	2a	3071	1/1	0.83	0.27	61,61,61,61	0
56	MG	2A	3481	1/1	0.83	0.16	53,53,53,53	0
56	MG	1A	3069	1/1	0.83	0.20	63,63,63,63	0
56	MG	2a	3098	1/1	0.83	0.20	70,70,70,70	0
56	MG	1a	1764	1/1	0.83	0.16	81,81,81,81	0
56	MG	1A	3244	1/1	0.83	0.14	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3351	1/1	0.83	0.11	46,46,46,46	0
56	MG	2A	3287	1/1	0.83	0.38	55,55,55,55	0
56	MG	2a	3147	1/1	0.83	0.14	70,70,70,70	0
56	MG	1a	1796	1/1	0.83	0.15	67,67,67,67	0
56	MG	2a	3161	1/1	0.83	0.15	57,57,57,57	0
56	MG	2a	3163	1/1	0.83	0.22	72,72,72,72	0
56	MG	2A	3291	1/1	0.83	0.16	69,69,69,69	0
56	MG	2a	3178	1/1	0.83	0.20	65,65,65,65	0
56	MG	2A	3772	1/1	0.83	0.14	82,82,82,82	0
56	MG	2E	306	1/1	0.83	0.13	66,66,66,66	0
56	MG	1A	3978	1/1	0.83	0.10	46,46,46,46	0
56	MG	2a	3191	1/1	0.83	0.17	60,60,60,60	0
56	MG	2A	3229	1/1	0.83	0.33	72,72,72,72	0
56	MG	2a	3002	1/1	0.83	0.09	73,73,73,73	0
56	MG	2A	3306	1/1	0.83	0.13	50,50,50,50	0
56	MG	1a	1634	1/1	0.83	0.22	62,62,62,62	0
56	MG	1A	3094	1/1	0.83	0.10	53,53,53,53	0
56	MG	2A	3439	1/1	0.83	0.40	71,71,71,71	0
56	MG	1A	3290	1/1	0.83	0.20	55,55,55,55	0
56	MG	1F	312	1/1	0.83	0.18	56,56,56,56	0
56	MG	1A	3441	1/1	0.83	0.24	41,41,41,41	0
56	MG	2a	3033	1/1	0.83	0.21	73,73,73,73	0
56	MG	2A	3845	1/1	0.83	0.18	60,60,60,60	0
56	MG	2A	3720	1/1	0.84	0.14	55,55,55,55	0
56	MG	2A	3378	1/1	0.84	0.09	63,63,63,63	0
56	MG	2A	3266	1/1	0.84	0.10	62,62,62,62	0
56	MG	1O	205	1/1	0.84	0.14	57,57,57,57	0
56	MG	1A	3812	1/1	0.84	0.13	53,53,53,53	0
56	MG	2A	3435	1/1	0.84	0.19	60,60,60,60	0
56	MG	2a	3018	1/1	0.84	0.19	59,59,59,59	0
56	MG	1A	3977	1/1	0.84	0.12	45,45,45,45	0
56	MG	2a	3022	1/1	0.84	0.17	71,71,71,71	0
56	MG	2A	3107	1/1	0.84	0.13	72,72,72,72	0
56	MG	1A	3814	1/1	0.84	0.12	43,43,43,43	0
56	MG	14	101	1/1	0.84	0.26	57,57,57,57	0
56	MG	1A	4093	1/1	0.84	0.12	44,44,44,44	0
56	MG	2A	3798	1/1	0.84	0.16	40,40,40,40	0
56	MG	1A	3346	1/1	0.84	0.20	52,52,52,52	0
56	MG	2A	3161	1/1	0.84	0.23	56,56,56,56	0
56	MG	2A	3812	1/1	0.84	0.10	40,40,40,40	0
56	MG	2a	3084	1/1	0.84	0.24	65,65,65,65	0
56	MG	2A	3168	1/1	0.84	0.10	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3498	1/1	0.84	0.23	66,66,66,66	0
56	MG	2A	3298	1/1	0.84	0.13	62,62,62,62	0
56	MG	1a	1621	1/1	0.84	0.15	55,55,55,55	0
56	MG	2A	3835	1/1	0.84	0.21	64,64,64,64	0
56	MG	2a	3118	1/1	0.84	0.10	84,84,84,84	0
56	MG	2A	3838	1/1	0.84	0.21	55,55,55,55	0
56	MG	2A	3518	1/1	0.84	0.14	68,68,68,68	0
56	MG	1w	102	1/1	0.84	0.23	71,71,71,71	0
56	MG	2A	3312	1/1	0.84	0.15	65,65,65,65	0
56	MG	1B	214	1/1	0.84	0.10	54,54,54,54	0
56	MG	2A	3181	1/1	0.84	0.12	57,57,57,57	0
56	MG	2A	3860	1/1	0.84	0.17	61,61,61,61	0
56	MG	2a	3177	1/1	0.84	0.12	68,68,68,68	0
56	MG	1A	3939	1/1	0.84	0.13	26,26,26,26	0
56	MG	1A	3983	1/1	0.84	0.10	43,43,43,43	0
56	MG	1A	3385	1/1	0.84	0.12	49,49,49,49	0
56	MG	2A	3217	1/1	0.84	0.13	61,61,61,61	0
56	MG	1a	1665	1/1	0.84	0.23	66,66,66,66	0
56	MG	1A	4000	1/1	0.84	0.20	35,35,35,35	0
56	MG	1y	102	1/1	0.84	0.12	67,67,67,67	0
56	MG	1A	3860	1/1	0.84	0.10	23,23,23,23	0
56	MG	2d	302	1/1	0.84	0.23	69,69,69,69	0
56	MG	2e	202	1/1	0.84	0.30	74,74,74,74	0
56	MG	1a	1693	1/1	0.84	0.13	64,64,64,64	0
56	MG	2A	3349	1/1	0.84	0.25	66,66,66,66	0
56	MG	2A	3254	1/1	0.84	0.18	74,74,74,74	0
56	MG	2w	105	1/1	0.84	0.12	78,78,78,78	0
56	MG	2A	3050	1/1	0.84	0.15	67,67,67,67	0
56	MG	25	102	1/1	0.84	0.18	57,57,57,57	0
56	MG	1A	3470	1/1	0.84	0.14	53,53,53,53	0
56	MG	2A	3705	1/1	0.84	0.14	66,66,66,66	0
56	MG	1A	3799	1/1	0.84	0.12	69,69,69,69	0
56	MG	2A	3605	1/1	0.85	0.15	40,40,40,40	0
56	MG	1A	3905	1/1	0.85	0.10	20,20,20,20	0
56	MG	2B	219	1/1	0.85	0.18	75,75,75,75	0
56	MG	2A	3616	1/1	0.85	0.18	68,68,68,68	0
56	MG	2E	307	1/1	0.85	0.15	49,49,49,49	0
56	MG	1G	205	1/1	0.85	0.15	55,55,55,55	0
56	MG	25	103	1/1	0.85	0.17	43,43,43,43	0
56	MG	2A	3155	1/1	0.85	0.28	58,58,58,58	0
56	MG	2A	3651	1/1	0.85	0.19	64,64,64,64	0
56	MG	1A	3906	1/1	0.85	0.10	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1U	212	1/1	0.85	0.46	59,59,59,59	0
56	MG	2a	3004	1/1	0.85	0.20	61,61,61,61	0
56	MG	1A	4030	1/1	0.85	0.18	57,57,57,57	0
56	MG	2A	3330	1/1	0.85	0.13	47,47,47,47	0
56	MG	1a	1806	1/1	0.85	0.10	57,57,57,57	0
56	MG	2A	3684	1/1	0.85	0.14	47,47,47,47	0
56	MG	1A	3712	1/1	0.85	0.11	33,33,33,33	0
56	MG	2A	3690	1/1	0.85	0.12	53,53,53,53	0
56	MG	2A	3338	1/1	0.85	0.22	71,71,71,71	0
56	MG	1A	3504	1/1	0.85	0.23	64,64,64,64	0
56	MG	1w	104	1/1	0.85	0.19	69,69,69,69	0
56	MG	1A	3394	1/1	0.85	0.14	48,48,48,48	0
56	MG	2A	3200	1/1	0.85	0.17	58,58,58,58	0
56	MG	15	101	1/1	0.85	0.15	38,38,38,38	0
56	MG	1A	3377	1/1	0.85	0.19	61,61,61,61	0
56	MG	2A	3220	1/1	0.85	0.18	73,73,73,73	0
56	MG	1A	4071	1/1	0.85	0.11	48,48,48,48	0
56	MG	2A	3376	1/1	0.85	0.10	70,70,70,70	0
56	MG	2a	3079	1/1	0.85	0.14	55,55,55,55	0
56	MG	1A	3960	1/1	0.85	0.10	59,59,59,59	0
56	MG	1A	4075	1/1	0.85	0.17	58,58,58,58	0
56	MG	2A	3417	1/1	0.85	0.34	68,68,68,68	0
56	MG	2A	3424	1/1	0.85	0.11	64,64,64,64	0
56	MG	2A	3786	1/1	0.85	0.15	50,50,50,50	0
56	MG	1A	4088	1/1	0.85	0.09	59,59,59,59	0
56	MG	2A	3006	1/1	0.85	0.17	60,60,60,60	0
56	MG	2A	3024	1/1	0.85	0.17	58,58,58,58	0
56	MG	2a	3131	1/1	0.85	0.11	74,74,74,74	0
56	MG	1A	3840	1/1	0.85	0.17	63,63,63,63	0
56	MG	1A	4108	1/1	0.85	0.16	65,65,65,65	0
56	MG	2a	3157	1/1	0.85	0.14	65,65,65,65	0
56	MG	2A	3444	1/1	0.85	0.18	51,51,51,51	0
56	MG	2A	3447	1/1	0.85	0.23	65,65,65,65	0
56	MG	2A	3830	1/1	0.85	0.22	68,68,68,68	0
56	MG	2A	3040	1/1	0.85	0.27	67,67,67,67	0
56	MG	2A	3045	1/1	0.85	0.33	52,52,52,52	0
56	MG	2A	3046	1/1	0.85	0.17	69,69,69,69	0
56	MG	2a	3181	1/1	0.85	0.16	67,67,67,67	0
56	MG	1A	3418	1/1	0.85	0.17	60,60,60,60	0
56	MG	1A	3862	1/1	0.85	0.14	35,35,35,35	0
56	MG	1A	3426	1/1	0.85	0.20	58,58,58,58	0
56	MG	2A	3059	1/1	0.85	0.17	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3204	1/1	0.85	0.11	64,64,64,64	0
56	MG	2A	3064	1/1	0.85	0.12	68,68,68,68	0
56	MG	1A	3782	1/1	0.85	0.16	54,54,54,54	0
56	MG	1A	3487	1/1	0.85	0.21	60,60,60,60	0
56	MG	2A	3868	1/1	0.85	0.09	69,69,69,69	0
56	MG	1A	3498	1/1	0.85	0.15	54,54,54,54	0
56	MG	2A	3870	1/1	0.85	0.17	67,67,67,67	0
56	MG	2A	3102	1/1	0.85	0.14	56,56,56,56	0
56	MG	2A	3872	1/1	0.85	0.11	55,55,55,55	0
56	MG	2A	3106	1/1	0.85	0.17	57,57,57,57	0
56	MG	2A	3300	1/1	0.85	0.15	55,55,55,55	0
56	MG	1a	1712	1/1	0.85	0.17	64,64,64,64	0
56	MG	2A	3555	1/1	0.85	0.13	67,67,67,67	0
56	MG	1A	3706	1/1	0.85	0.09	14,14,14,14	0
56	MG	1A	3999	1/1	0.85	0.12	48,48,48,48	0
56	MG	25	101	1/1	0.86	0.18	69,69,69,69	0
56	MG	2A	3679	1/1	0.86	0.14	67,67,67,67	0
56	MG	2A	3253	1/1	0.86	0.19	56,56,56,56	0
56	MG	2A	3082	1/1	0.86	0.22	63,63,63,63	0
56	MG	2A	3371	1/1	0.86	0.17	74,74,74,74	0
56	MG	1A	3758	1/1	0.86	0.18	64,64,64,64	0
56	MG	2A	3089	1/1	0.86	0.12	53,53,53,53	0
56	MG	2A	3264	1/1	0.86	0.10	56,56,56,56	0
56	MG	2A	3696	1/1	0.86	0.18	68,68,68,68	0
56	MG	2A	3382	1/1	0.86	0.13	48,48,48,48	0
56	MG	2A	3092	1/1	0.86	0.17	70,70,70,70	0
56	MG	2A	3716	1/1	0.86	0.12	46,46,46,46	0
56	MG	1A	3998	1/1	0.86	0.11	54,54,54,54	0
56	MG	1A	3957	1/1	0.86	0.15	42,42,42,42	0
56	MG	2A	3723	1/1	0.86	0.14	67,67,67,67	0
56	MG	2A	3104	1/1	0.86	0.21	63,63,63,63	0
56	MG	2a	3027	1/1	0.86	0.16	67,67,67,67	0
56	MG	2a	3032	1/1	0.86	0.25	69,69,69,69	0
56	MG	2A	3275	1/1	0.86	0.28	62,62,62,62	0
56	MG	2A	3438	1/1	0.86	0.32	69,69,69,69	0
56	MG	1A	4116	1/1	0.86	0.17	46,46,46,46	0
56	MG	2a	3044	1/1	0.86	0.21	77,77,77,77	0
56	MG	1a	1603	1/1	0.86	0.08	56,56,56,56	0
56	MG	1A	3817	1/1	0.86	0.23	32,32,32,32	0
56	MG	1A	4001	1/1	0.86	0.18	50,50,50,50	0
56	MG	2A	3124	1/1	0.86	0.29	57,57,57,57	0
56	MG	1B	220	1/1	0.86	0.09	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3471	1/1	0.86	0.11	56,56,56,56	0
56	MG	1A	3825	1/1	0.86	0.08	24,24,24,24	0
56	MG	2A	3802	1/1	0.86	0.12	46,46,46,46	0
56	MG	1A	4024	1/1	0.86	0.25	42,42,42,42	0
56	MG	1A	3587	1/1	0.86	0.19	62,62,62,62	0
56	MG	1a	1676	1/1	0.86	0.13	58,58,58,58	0
56	MG	1A	3743	1/1	0.86	0.13	41,41,41,41	0
56	MG	2a	3104	1/1	0.86	0.19	63,63,63,63	0
56	MG	2a	3112	1/1	0.86	0.12	70,70,70,70	0
56	MG	1B	233	1/1	0.86	0.20	70,70,70,70	0
56	MG	1A	4035	1/1	0.86	0.10	58,58,58,58	0
56	MG	2A	3828	1/1	0.86	0.19	62,62,62,62	0
56	MG	2A	3314	1/1	0.86	0.15	58,58,58,58	0
56	MG	1A	3382	1/1	0.86	0.21	59,59,59,59	0
56	MG	1A	4041	1/1	0.86	0.10	56,56,56,56	0
56	MG	2A	3037	1/1	0.86	0.21	58,58,58,58	0
56	MG	2A	3197	1/1	0.86	0.18	60,60,60,60	0
56	MG	2A	3546	1/1	0.86	0.12	58,58,58,58	0
56	MG	1a	1708	1/1	0.86	0.20	50,50,50,50	0
56	MG	1A	4054	1/1	0.86	0.14	59,59,59,59	0
56	MG	2A	3214	1/1	0.86	0.16	72,72,72,72	0
56	MG	2A	3564	1/1	0.86	0.12	40,40,40,40	0
56	MG	2A	3568	1/1	0.86	0.14	53,53,53,53	0
56	MG	2A	3573	1/1	0.86	0.13	54,54,54,54	0
56	MG	2a	3185	1/1	0.86	0.19	68,68,68,68	0
56	MG	2A	3577	1/1	0.86	0.12	34,34,34,34	0
56	MG	1A	3852	1/1	0.86	0.11	41,41,41,41	0
56	MG	1a	1727	1/1	0.86	0.20	57,57,57,57	0
56	MG	1A	3918	1/1	0.86	0.12	65,65,65,65	0
56	MG	2A	3227	1/1	0.86	0.26	60,60,60,60	0
56	MG	2A	3627	1/1	0.86	0.15	68,68,68,68	0
56	MG	1A	3419	1/1	0.86	0.12	56,56,56,56	0
56	MG	2A	3637	1/1	0.86	0.15	56,56,56,56	0
56	MG	2e	203	1/1	0.86	0.14	74,74,74,74	0
56	MG	2A	3236	1/1	0.86	0.19	66,66,66,66	0
56	MG	2B	214	1/1	0.86	0.15	62,62,62,62	0
56	MG	2A	3650	1/1	0.86	0.17	58,58,58,58	0
56	MG	1A	3096	1/1	0.86	0.18	65,65,65,65	0
56	MG	2A	3662	1/1	0.86	0.15	53,53,53,53	0
56	MG	2A	3350	1/1	0.86	0.20	59,59,59,59	0
56	MG	1a	1795	1/1	0.86	0.14	60,60,60,60	0
56	MG	1A	3994	1/1	0.86	0.09	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2S	3900	1/1	0.86	0.14	75,75,75,75	0
56	MG	1A	3607	1/1	0.87	0.15	52,52,52,52	0
56	MG	2A	3292	1/1	0.87	0.13	64,64,64,64	0
56	MG	2A	3164	1/1	0.87	0.33	66,66,66,66	0
56	MG	1a	1639	1/1	0.87	0.15	63,63,63,63	0
56	MG	2a	3012	1/1	0.87	0.14	68,68,68,68	0
56	MG	1A	3482	1/1	0.87	0.08	60,60,60,60	0
56	MG	1A	4020	1/1	0.87	0.10	23,23,23,23	0
56	MG	1A	3089	1/1	0.87	0.20	52,52,52,52	0
56	MG	1A	3780	1/1	0.87	0.10	33,33,33,33	0
56	MG	2A	3760	1/1	0.87	0.10	71,71,71,71	0
56	MG	1A	3303	1/1	0.87	0.14	53,53,53,53	0
56	MG	2A	3313	1/1	0.87	0.13	67,67,67,67	0
56	MG	2a	3028	1/1	0.87	0.14	71,71,71,71	0
56	MG	2a	3029	1/1	0.87	0.18	68,68,68,68	0
56	MG	2A	3189	1/1	0.87	0.07	50,50,50,50	0
56	MG	1A	3961	1/1	0.87	0.13	52,52,52,52	0
56	MG	1A	3688	1/1	0.87	0.08	25,25,25,25	0
56	MG	2A	3792	1/1	0.87	0.11	76,76,76,76	0
56	MG	2a	3043	1/1	0.87	0.23	66,66,66,66	0
56	MG	2A	3198	1/1	0.87	0.26	64,64,64,64	0
56	MG	2A	3801	1/1	0.87	0.14	52,52,52,52	0
56	MG	1A	3967	1/1	0.87	0.11	52,52,52,52	0
56	MG	2A	3544	1/1	0.87	0.21	67,67,67,67	0
56	MG	1A	3430	1/1	0.87	0.11	49,49,49,49	0
56	MG	1A	3433	1/1	0.87	0.15	61,61,61,61	0
56	MG	1A	3405	1/1	0.87	0.16	51,51,51,51	0
56	MG	2a	3083	1/1	0.87	0.18	72,72,72,72	0
56	MG	1O	206	1/1	0.87	0.20	53,53,53,53	0
56	MG	1Q	202	1/1	0.87	0.14	55,55,55,55	0
56	MG	1a	1756	1/1	0.87	0.10	65,65,65,65	0
56	MG	2a	3095	1/1	0.87	0.23	62,62,62,62	0
56	MG	2A	3569	1/1	0.87	0.19	65,65,65,65	0
56	MG	2A	3570	1/1	0.87	0.17	61,61,61,61	0
56	MG	1A	3443	1/1	0.87	0.18	63,63,63,63	0
56	MG	2A	3230	1/1	0.87	0.16	54,54,54,54	0
56	MG	2a	3106	1/1	0.87	0.14	70,70,70,70	0
56	MG	2A	3581	1/1	0.87	0.09	43,43,43,43	0
56	MG	1A	4073	1/1	0.87	0.19	59,59,59,59	0
56	MG	2A	3850	1/1	0.87	0.12	63,63,63,63	0
56	MG	1Y	202	1/1	0.87	0.12	53,53,53,53	0
56	MG	2a	3139	1/1	0.87	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
56	MG	2A	3088	1/1	0.87	0.25	69,69,69,69	0
56	MG	1a	1791	1/1	0.87	0.21	49,49,49,49	0
56	MG	2a	3150	1/1	0.87	0.14	60,60,60,60	0
56	MG	2A	3858	1/1	0.87	0.14	59,59,59,59	0
56	MG	2a	3158	1/1	0.87	0.24	61,61,61,61	0
56	MG	2A	3626	1/1	0.87	0.11	54,54,54,54	0
56	MG	1A	3742	1/1	0.87	0.11	17,17,17,17	0
56	MG	2A	3867	1/1	0.87	0.13	47,47,47,47	0
56	MG	2a	3167	1/1	0.87	0.13	66,66,66,66	0
56	MG	2A	3093	1/1	0.87	0.22	61,61,61,61	0
56	MG	1A	3075	1/1	0.87	0.15	55,55,55,55	0
56	MG	2A	3259	1/1	0.87	0.19	59,59,59,59	0
56	MG	2A	3372	1/1	0.87	0.18	63,63,63,63	0
56	MG	2A	3100	1/1	0.87	0.16	63,63,63,63	0
56	MG	2a	3183	1/1	0.87	0.23	57,57,57,57	0
56	MG	2A	3653	1/1	0.87	0.10	55,55,55,55	0
56	MG	2A	3658	1/1	0.87	0.12	61,61,61,61	0
56	MG	2A	3661	1/1	0.87	0.15	59,59,59,59	0
56	MG	2A	3262	1/1	0.87	0.11	50,50,50,50	0
56	MG	2a	3193	1/1	0.87	0.12	77,77,77,77	0
56	MG	13	105	1/1	0.87	0.09	40,40,40,40	0
56	MG	2B	213	1/1	0.87	0.18	60,60,60,60	0
56	MG	2a	3220	1/1	0.87	0.09	55,55,55,55	0
56	MG	1A	3907	1/1	0.87	0.09	43,43,43,43	0
56	MG	2a	3223	1/1	0.87	0.09	56,56,56,56	0
56	MG	2A	3392	1/1	0.87	0.24	43,43,43,43	0
56	MG	2a	3227	1/1	0.87	0.15	46,46,46,46	0
56	MG	2A	3411	1/1	0.87	0.18	56,56,56,56	0
56	MG	1A	4090	1/1	0.87	0.15	45,45,45,45	0
56	MG	1A	3827	1/1	0.87	0.09	39,39,39,39	0
56	MG	1A	4097	1/1	0.87	0.11	43,43,43,43	0
56	MG	2A	3116	1/1	0.87	0.16	64,64,64,64	0
56	MG	2l	204	1/1	0.87	0.25	66,66,66,66	0
56	MG	1A	3935	1/1	0.87	0.11	46,46,46,46	0
56	MG	2A	3279	1/1	0.87	0.24	63,63,63,63	0
56	MG	1a	1605	1/1	0.87	0.10	61,61,61,61	0
56	MG	1a	1612	1/1	0.87	0.13	60,60,60,60	0
56	MG	1A	3938	1/1	0.87	0.12	52,52,52,52	0
56	MG	1A	3383	1/1	0.87	0.10	49,49,49,49	0
56	MG	2y	102	1/1	0.87	0.15	68,68,68,68	0
56	MG	2A	3718	1/1	0.87	0.13	56,56,56,56	0
56	MG	1A	4092	1/1	0.88	0.09	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3371	1/1	0.88	0.19	40,40,40,40	0
56	MG	2A	3721	1/1	0.88	0.17	48,48,48,48	0
56	MG	1A	3501	1/1	0.88	0.12	57,57,57,57	0
56	MG	2A	3472	1/1	0.88	0.12	36,36,36,36	0
56	MG	1A	3432	1/1	0.88	0.09	62,62,62,62	0
56	MG	1A	3395	1/1	0.88	0.13	42,42,42,42	0
56	MG	2A	3185	1/1	0.88	0.09	51,51,51,51	0
56	MG	1a	1629	1/1	0.88	0.20	58,58,58,58	0
56	MG	2A	3752	1/1	0.88	0.15	73,73,73,73	0
56	MG	2A	3488	1/1	0.88	0.13	68,68,68,68	0
56	MG	1B	201	1/1	0.88	0.19	59,59,59,59	0
56	MG	2A	3764	1/1	0.88	0.16	63,63,63,63	0
56	MG	1A	3401	1/1	0.88	0.17	54,54,54,54	0
56	MG	2A	3766	1/1	0.88	0.13	68,68,68,68	0
56	MG	2A	3769	1/1	0.88	0.11	59,59,59,59	0
56	MG	1B	212	1/1	0.88	0.15	62,62,62,62	0
56	MG	1A	3555	1/1	0.88	0.17	52,52,52,52	0
56	MG	1A	3581	1/1	0.88	0.12	49,49,49,49	0
56	MG	2A	3317	1/1	0.88	0.20	64,64,64,64	0
56	MG	2a	3053	1/1	0.88	0.24	63,63,63,63	0
56	MG	2A	3531	1/1	0.88	0.13	30,30,30,30	0
56	MG	2A	3534	1/1	0.88	0.17	58,58,58,58	0
56	MG	2a	3081	1/1	0.88	0.14	63,63,63,63	0
56	MG	1a	1664	1/1	0.88	0.13	64,64,64,64	0
56	MG	1A	3777	1/1	0.88	0.14	66,66,66,66	0
56	MG	1A	3584	1/1	0.88	0.08	14,14,14,14	0
56	MG	1A	3912	1/1	0.88	0.15	50,50,50,50	0
56	MG	2A	3549	1/1	0.88	0.15	51,51,51,51	0
56	MG	1A	3275	1/1	0.88	0.24	55,55,55,55	0
56	MG	1A	3407	1/1	0.88	0.26	38,38,38,38	0
56	MG	2A	3335	1/1	0.88	0.15	68,68,68,68	0
56	MG	2A	3827	1/1	0.88	0.09	67,67,67,67	0
56	MG	1A	4026	1/1	0.88	0.20	52,52,52,52	0
56	MG	2A	3829	1/1	0.88	0.11	47,47,47,47	0
56	MG	1D	302	1/1	0.88	0.16	53,53,53,53	0
56	MG	2a	3120	1/1	0.88	0.10	70,70,70,70	0
56	MG	2a	3126	1/1	0.88	0.14	58,58,58,58	0
56	MG	2A	3232	1/1	0.88	0.25	74,74,74,74	0
56	MG	2A	3235	1/1	0.88	0.21	71,71,71,71	0
56	MG	1A	3006	1/1	0.88	0.19	52,52,52,52	0
56	MG	1A	3791	1/1	0.88	0.13	59,59,59,59	0
56	MG	2a	3146	1/1	0.88	0.11	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3247	1/1	0.88	0.08	68,68,68,68	0
56	MG	2A	3583	1/1	0.88	0.18	70,70,70,70	0
56	MG	2A	3590	1/1	0.88	0.10	44,44,44,44	0
56	MG	1a	1716	1/1	0.88	0.08	56,56,56,56	0
56	MG	2A	3250	1/1	0.88	0.18	66,66,66,66	0
56	MG	2A	3606	1/1	0.88	0.12	46,46,46,46	0
56	MG	1G	202	1/1	0.88	0.17	49,49,49,49	0
56	MG	1A	3114	1/1	0.88	0.14	47,47,47,47	0
56	MG	2A	3865	1/1	0.88	0.13	60,60,60,60	0
56	MG	2A	3091	1/1	0.88	0.24	58,58,58,58	0
56	MG	1I	201	1/1	0.88	0.10	63,63,63,63	0
56	MG	1A	3122	1/1	0.88	0.14	55,55,55,55	0
56	MG	2A	3634	1/1	0.88	0.11	44,44,44,44	0
56	MG	1A	3652	1/1	0.88	0.09	36,36,36,36	0
56	MG	2A	3643	1/1	0.88	0.10	49,49,49,49	0
56	MG	1a	1781	1/1	0.88	0.11	59,59,59,59	0
56	MG	2A	3649	1/1	0.88	0.18	49,49,49,49	0
56	MG	1A	3662	1/1	0.88	0.18	53,53,53,53	0
56	MG	2A	3387	1/1	0.88	0.25	45,45,45,45	0
56	MG	2a	3194	1/1	0.88	0.16	61,61,61,61	0
56	MG	2a	3198	1/1	0.88	0.14	60,60,60,60	0
56	MG	2a	3199	1/1	0.88	0.15	61,61,61,61	0
56	MG	1a	1789	1/1	0.88	0.14	60,60,60,60	0
56	MG	2A	3397	1/1	0.88	0.12	51,51,51,51	0
56	MG	2a	3219	1/1	0.88	0.15	59,59,59,59	0
56	MG	2A	3398	1/1	0.88	0.12	61,61,61,61	0
56	MG	2A	3400	1/1	0.88	0.33	64,64,64,64	0
56	MG	2A	3403	1/1	0.88	0.38	58,58,58,58	0
56	MG	1U	211	1/1	0.88	0.15	50,50,50,50	0
56	MG	1A	3667	1/1	0.88	0.15	69,69,69,69	0
56	MG	2a	3233	1/1	0.88	0.18	71,71,71,71	0
56	MG	2A	3678	1/1	0.88	0.12	58,58,58,58	0
56	MG	2A	3423	1/1	0.88	0.15	66,66,66,66	0
56	MG	1A	3485	1/1	0.88	0.14	50,50,50,50	0
56	MG	2Z	301	1/1	0.88	0.10	70,70,70,70	0
56	MG	1A	4068	1/1	0.88	0.14	54,54,54,54	0
56	MG	1A	3486	1/1	0.88	0.14	63,63,63,63	0
56	MG	2I	206	1/1	0.88	0.09	60,60,60,60	0
56	MG	1A	3700	1/1	0.88	0.12	53,53,53,53	0
56	MG	2w	104	1/1	0.88	0.12	76,76,76,76	0
56	MG	1n	102	1/1	0.88	0.16	53,53,53,53	0
56	MG	1A	3970	1/1	0.88	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
56	MG	1A	3393	1/1	0.88	0.17	54,54,54,54	0
56	MG	1A	3492	1/1	0.88	0.28	43,43,43,43	0
56	MG	1A	3496	1/1	0.88	0.13	50,50,50,50	0
56	MG	2x	106	1/1	0.88	0.11	63,63,63,63	0
56	MG	2y	101	1/1	0.88	0.07	50,50,50,50	0
56	MG	2A	3708	1/1	0.88	0.12	53,53,53,53	0
56	MG	2A	3448	1/1	0.88	0.17	61,61,61,61	0
56	MG	2a	3005	1/1	0.89	0.18	62,62,62,62	0
56	MG	2A	3712	1/1	0.89	0.15	44,44,44,44	0
56	MG	1a	1672	1/1	0.89	0.20	59,59,59,59	0
56	MG	2a	3011	1/1	0.89	0.24	60,60,60,60	0
56	MG	2A	3032	1/1	0.89	0.08	49,49,49,49	0
56	MG	2A	3192	1/1	0.89	0.23	60,60,60,60	0
56	MG	1F	314	1/1	0.89	0.09	41,41,41,41	0
56	MG	1A	3319	1/1	0.89	0.14	57,57,57,57	0
56	MG	1a	1679	1/1	0.89	0.09	57,57,57,57	0
56	MG	2A	3043	1/1	0.89	0.21	56,56,56,56	0
56	MG	2A	3727	1/1	0.89	0.18	63,63,63,63	0
56	MG	2a	3023	1/1	0.89	0.19	67,67,67,67	0
56	MG	2a	3025	1/1	0.89	0.32	59,59,59,59	0
56	MG	2A	3729	1/1	0.89	0.10	47,47,47,47	0
56	MG	2A	3730	1/1	0.89	0.14	65,65,65,65	0
56	MG	2A	3521	1/1	0.89	0.13	44,44,44,44	0
56	MG	2a	3030	1/1	0.89	0.23	69,69,69,69	0
56	MG	1A	3452	1/1	0.89	0.17	49,49,49,49	0
56	MG	1A	4086	1/1	0.89	0.08	28,28,28,28	0
56	MG	2A	3048	1/1	0.89	0.15	59,59,59,59	0
56	MG	2a	3038	1/1	0.89	0.14	64,64,64,64	0
56	MG	2a	3040	1/1	0.89	0.25	62,62,62,62	0
56	MG	1A	3835	1/1	0.89	0.10	16,16,16,16	0
56	MG	1A	3678	1/1	0.89	0.10	51,51,51,51	0
56	MG	1A	3424	1/1	0.89	0.17	54,54,54,54	0
56	MG	2A	3543	1/1	0.89	0.19	59,59,59,59	0
56	MG	1Q	205	1/1	0.89	0.09	44,44,44,44	0
56	MG	1A	3497	1/1	0.89	0.08	51,51,51,51	0
56	MG	2A	3770	1/1	0.89	0.11	52,52,52,52	0
56	MG	2A	3341	1/1	0.89	0.09	59,59,59,59	0
56	MG	2a	3055	1/1	0.89	0.15	53,53,53,53	0
56	MG	2A	3345	1/1	0.89	0.13	67,67,67,67	0
56	MG	2A	3233	1/1	0.89	0.12	55,55,55,55	0
56	MG	2A	3077	1/1	0.89	0.14	53,53,53,53	0
56	MG	1A	3784	1/1	0.89	0.09	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3566	1/1	0.89	0.13	63,63,63,63	0
56	MG	2A	3567	1/1	0.89	0.21	61,61,61,61	0
56	MG	1A	3786	1/1	0.89	0.19	55,55,55,55	0
56	MG	2A	3243	1/1	0.89	0.11	58,58,58,58	0
56	MG	2A	3245	1/1	0.89	0.14	56,56,56,56	0
56	MG	1A	3320	1/1	0.89	0.09	35,35,35,35	0
56	MG	1A	3027	1/1	0.89	0.20	59,59,59,59	0
56	MG	1A	4031	1/1	0.89	0.12	49,49,49,49	0
56	MG	11	102	1/1	0.89	0.22	59,59,59,59	0
56	MG	1B	210	1/1	0.89	0.09	46,46,46,46	0
56	MG	2a	3116	1/1	0.89	0.11	67,67,67,67	0
56	MG	2A	3377	1/1	0.89	0.25	74,74,74,74	0
56	MG	2A	3592	1/1	0.89	0.14	44,44,44,44	0
56	MG	1A	3614	1/1	0.89	0.09	29,29,29,29	0
56	MG	1A	4033	1/1	0.89	0.11	48,48,48,48	0
56	MG	1A	3618	1/1	0.89	0.06	18,18,18,18	0
56	MG	1B	221	1/1	0.89	0.11	42,42,42,42	0
56	MG	1B	222	1/1	0.89	0.15	55,55,55,55	0
56	MG	2a	3145	1/1	0.89	0.11	59,59,59,59	0
56	MG	2A	3394	1/1	0.89	0.25	47,47,47,47	0
56	MG	1B	223	1/1	0.89	0.15	54,54,54,54	0
56	MG	1a	1608	1/1	0.89	0.11	57,57,57,57	0
56	MG	1A	3737	1/1	0.89	0.14	50,50,50,50	0
56	MG	2A	3856	1/1	0.89	0.15	52,52,52,52	0
56	MG	2A	3114	1/1	0.89	0.11	52,52,52,52	0
56	MG	2A	3410	1/1	0.89	0.18	57,57,57,57	0
56	MG	2A	3859	1/1	0.89	0.10	57,57,57,57	0
56	MG	2a	3166	1/1	0.89	0.23	56,56,56,56	0
56	MG	2A	3647	1/1	0.89	0.14	55,55,55,55	0
56	MG	2a	3169	1/1	0.89	0.08	53,53,53,53	0
56	MG	2a	3171	1/1	0.89	0.17	69,69,69,69	0
56	MG	2A	3270	1/1	0.89	0.20	63,63,63,63	0
56	MG	1A	3414	1/1	0.89	0.12	55,55,55,55	0
56	MG	1A	3301	1/1	0.89	0.12	58,58,58,58	0
56	MG	2A	3652	1/1	0.89	0.08	58,58,58,58	0
56	MG	1A	4056	1/1	0.89	0.10	42,42,42,42	0
56	MG	2A	3425	1/1	0.89	0.34	50,50,50,50	0
56	MG	2A	3135	1/1	0.89	0.24	51,51,51,51	0
56	MG	2A	3283	1/1	0.89	0.10	61,61,61,61	0
56	MG	2A	3664	1/1	0.89	0.10	65,65,65,65	0
56	MG	2A	3877	1/1	0.89	0.16	56,56,56,56	0
56	MG	1w	105	1/1	0.89	0.19	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3881	1/1	0.89	0.14	59,59,59,59	0
56	MG	2A	3437	1/1	0.89	0.10	62,62,62,62	0
56	MG	2B	203	1/1	0.89	0.16	64,64,64,64	0
56	MG	2a	3201	1/1	0.89	0.22	56,56,56,56	0
56	MG	2B	204	1/1	0.89	0.21	66,66,66,66	0
56	MG	2A	3670	1/1	0.89	0.14	68,68,68,68	0
56	MG	2B	208	1/1	0.89	0.26	61,61,61,61	0
56	MG	1A	3223	1/1	0.89	0.10	29,29,29,29	0
56	MG	1A	3916	1/1	0.89	0.19	69,69,69,69	0
56	MG	1A	3981	1/1	0.89	0.14	51,51,51,51	0
56	MG	1D	312	1/1	0.89	0.10	53,53,53,53	0
56	MG	1a	1656	1/1	0.89	0.08	47,47,47,47	0
56	MG	1a	1657	1/1	0.89	0.25	69,69,69,69	0
56	MG	2A	3451	1/1	0.89	0.15	70,70,70,70	0
56	MG	1x	113	1/1	0.89	0.14	60,60,60,60	0
56	MG	2A	3691	1/1	0.89	0.13	55,55,55,55	0
56	MG	2F	307	1/1	0.89	0.15	55,55,55,55	0
56	MG	2g	201	1/1	0.89	0.15	64,64,64,64	0
56	MG	2G	201	1/1	0.89	0.13	57,57,57,57	0
56	MG	1A	3554	1/1	0.89	0.11	20,20,20,20	0
56	MG	2V	202	1/1	0.89	0.22	64,64,64,64	0
56	MG	2W	201	1/1	0.89	0.17	67,67,67,67	0
56	MG	2v	102	1/1	0.89	0.29	60,60,60,60	0
56	MG	2w	102	1/1	0.89	0.08	77,77,77,77	0
56	MG	2A	3695	1/1	0.89	0.20	56,56,56,56	0
56	MG	20	102	1/1	0.89	0.10	59,59,59,59	0
56	MG	2w	108	1/1	0.89	0.09	74,74,74,74	0
56	MG	2A	3180	1/1	0.89	0.23	63,63,63,63	0
56	MG	2A	3704	1/1	0.89	0.08	55,55,55,55	0
56	MG	2A	3001	1/1	0.89	0.13	49,49,49,49	0
56	MG	1A	3934	1/1	0.89	0.15	61,61,61,61	0
56	MG	2x	105	1/1	0.89	0.24	55,55,55,55	0
56	MG	2A	3707	1/1	0.89	0.10	66,66,66,66	0
56	MG	1a	1670	1/1	0.89	0.25	61,61,61,61	0
56	MG	2A	3709	1/1	0.89	0.09	56,56,56,56	0
56	MG	2A	3711	1/1	0.89	0.16	66,66,66,66	0
56	MG	2F	302	1/1	0.90	0.11	48,48,48,48	0
56	MG	2A	3621	1/1	0.90	0.12	58,58,58,58	0
56	MG	1A	3600	1/1	0.90	0.13	41,41,41,41	0
56	MG	2A	3169	1/1	0.90	0.14	63,63,63,63	0
56	MG	2A	3170	1/1	0.90	0.23	61,61,61,61	0
56	MG	2A	3337	1/1	0.90	0.15	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3172	1/1	0.90	0.18	69,69,69,69	0
56	MG	20	101	1/1	0.90	0.16	60,60,60,60	0
56	MG	1A	4053	1/1	0.90	0.18	55,55,55,55	0
56	MG	2A	3177	1/1	0.90	0.20	57,57,57,57	0
56	MG	1a	1809	1/1	0.90	0.18	52,52,52,52	0
56	MG	2A	3648	1/1	0.90	0.10	61,61,61,61	0
56	MG	1a	1810	1/1	0.90	0.11	67,67,67,67	0
56	MG	1a	1812	1/1	0.90	0.13	68,68,68,68	0
56	MG	2a	3001	1/1	0.90	0.09	53,53,53,53	0
56	MG	1b	301	1/1	0.90	0.15	67,67,67,67	0
56	MG	1l	201	1/1	0.90	0.09	69,69,69,69	0
56	MG	2A	3354	1/1	0.90	0.11	62,62,62,62	0
56	MG	1A	3188	1/1	0.90	0.10	39,39,39,39	0
56	MG	1p	101	1/1	0.90	0.18	49,49,49,49	0
56	MG	2A	3190	1/1	0.90	0.11	60,60,60,60	0
56	MG	2a	3010	1/1	0.90	0.20	69,69,69,69	0
56	MG	1A	3924	1/1	0.90	0.15	61,61,61,61	0
56	MG	10	104	1/1	0.90	0.20	62,62,62,62	0
56	MG	2A	3195	1/1	0.90	0.11	47,47,47,47	0
56	MG	2A	3373	1/1	0.90	0.16	66,66,66,66	0
56	MG	2a	3016	1/1	0.90	0.29	65,65,65,65	0
56	MG	1A	3933	1/1	0.90	0.21	43,43,43,43	0
56	MG	1A	4059	1/1	0.90	0.09	54,54,54,54	0
56	MG	1A	3483	1/1	0.90	0.24	68,68,68,68	0
56	MG	2a	3021	1/1	0.90	0.10	60,60,60,60	0
56	MG	2A	3208	1/1	0.90	0.15	43,43,43,43	0
56	MG	2A	3381	1/1	0.90	0.30	57,57,57,57	0
56	MG	1A	3338	1/1	0.90	0.23	52,52,52,52	0
56	MG	2a	3026	1/1	0.90	0.16	58,58,58,58	0
56	MG	2A	3384	1/1	0.90	0.10	53,53,53,53	0
56	MG	2A	3686	1/1	0.90	0.10	48,48,48,48	0
56	MG	2A	3212	1/1	0.90	0.14	51,51,51,51	0
56	MG	1w	109	1/1	0.90	0.09	65,65,65,65	0
56	MG	2A	3393	1/1	0.90	0.17	53,53,53,53	0
56	MG	1A	3340	1/1	0.90	0.17	48,48,48,48	0
56	MG	1A	3421	1/1	0.90	0.13	35,35,35,35	0
56	MG	1A	3422	1/1	0.90	0.12	47,47,47,47	0
56	MG	2a	3039	1/1	0.90	0.08	63,63,63,63	0
56	MG	15	109	1/1	0.90	0.13	50,50,50,50	0
56	MG	2A	3401	1/1	0.90	0.21	60,60,60,60	0
56	MG	1A	3489	1/1	0.90	0.11	37,37,37,37	0
56	MG	1A	3951	1/1	0.90	0.11	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3794	1/1	0.90	0.15	69,69,69,69	0
56	MG	2A	3412	1/1	0.90	0.18	51,51,51,51	0
56	MG	2A	3005	1/1	0.90	0.09	55,55,55,55	0
56	MG	2A	3713	1/1	0.90	0.18	65,65,65,65	0
56	MG	2A	3418	1/1	0.90	0.32	62,62,62,62	0
56	MG	2A	3419	1/1	0.90	0.25	61,61,61,61	0
56	MG	2A	3234	1/1	0.90	0.16	63,63,63,63	0
56	MG	2a	3072	1/1	0.90	0.21	55,55,55,55	0
56	MG	1A	3798	1/1	0.90	0.13	46,46,46,46	0
56	MG	1A	3199	1/1	0.90	0.12	59,59,59,59	0
56	MG	2A	3239	1/1	0.90	0.18	64,64,64,64	0
56	MG	1a	1619	1/1	0.90	0.11	64,64,64,64	0
56	MG	2A	3434	1/1	0.90	0.11	67,67,67,67	0
56	MG	1A	3810	1/1	0.90	0.10	39,39,39,39	0
56	MG	1A	3392	1/1	0.90	0.15	62,62,62,62	0
56	MG	2a	3097	1/1	0.90	0.25	59,59,59,59	0
56	MG	1A	3670	1/1	0.90	0.17	59,59,59,59	0
56	MG	1A	4115	1/1	0.90	0.10	51,51,51,51	0
56	MG	2a	3100	1/1	0.90	0.21	56,56,56,56	0
56	MG	1A	3671	1/1	0.90	0.10	32,32,32,32	0
56	MG	1a	1645	1/1	0.90	0.12	59,59,59,59	0
56	MG	2A	3446	1/1	0.90	0.12	42,42,42,42	0
56	MG	1A	3824	1/1	0.90	0.26	61,61,61,61	0
56	MG	2a	3115	1/1	0.90	0.19	65,65,65,65	0
56	MG	2A	3047	1/1	0.90	0.09	50,50,50,50	0
56	MG	2A	3450	1/1	0.90	0.15	57,57,57,57	0
56	MG	1A	3313	1/1	0.90	0.21	64,64,64,64	0
56	MG	2A	3767	1/1	0.90	0.12	58,58,58,58	0
56	MG	1A	3679	1/1	0.90	0.16	50,50,50,50	0
56	MG	2A	3454	1/1	0.90	0.20	60,60,60,60	0
56	MG	2a	3132	1/1	0.90	0.12	73,73,73,73	0
56	MG	2A	3052	1/1	0.90	0.12	73,73,73,73	0
56	MG	1A	3024	1/1	0.90	0.16	54,54,54,54	0
56	MG	1A	3179	1/1	0.90	0.15	34,34,34,34	0
56	MG	2A	3058	1/1	0.90	0.11	43,43,43,43	0
56	MG	1A	3362	1/1	0.90	0.27	36,36,36,36	0
56	MG	2A	3060	1/1	0.90	0.11	64,64,64,64	0
56	MG	1A	3982	1/1	0.90	0.07	41,41,41,41	0
56	MG	2A	3271	1/1	0.90	0.22	57,57,57,57	0
56	MG	2A	3806	1/1	0.90	0.09	64,64,64,64	0
56	MG	2A	3072	1/1	0.90	0.17	30,30,30,30	0
56	MG	1A	3710	1/1	0.90	0.12	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3369	1/1	0.90	0.16	46,46,46,46	0
56	MG	2A	3512	1/1	0.90	0.09	48,48,48,48	0
56	MG	1A	3445	1/1	0.90	0.09	43,43,43,43	0
56	MG	2A	3519	1/1	0.90	0.12	45,45,45,45	0
56	MG	2A	3826	1/1	0.90	0.10	50,50,50,50	0
56	MG	2A	3280	1/1	0.90	0.09	51,51,51,51	0
56	MG	2A	3522	1/1	0.90	0.11	63,63,63,63	0
56	MG	2a	3179	1/1	0.90	0.11	63,63,63,63	0
56	MG	1A	3724	1/1	0.90	0.09	31,31,31,31	0
56	MG	1A	3865	1/1	0.90	0.11	73,73,73,73	0
56	MG	1A	3866	1/1	0.90	0.17	28,28,28,28	0
56	MG	1a	1698	1/1	0.90	0.15	59,59,59,59	0
56	MG	2A	3535	1/1	0.90	0.18	62,62,62,62	0
56	MG	2a	3187	1/1	0.90	0.16	64,64,64,64	0
56	MG	2a	3188	1/1	0.90	0.14	56,56,56,56	0
56	MG	2A	3839	1/1	0.90	0.10	54,54,54,54	0
56	MG	2A	3842	1/1	0.90	0.16	66,66,66,66	0
56	MG	2A	3537	1/1	0.90	0.12	66,66,66,66	0
56	MG	1A	3321	1/1	0.90	0.11	56,56,56,56	0
56	MG	1A	4011	1/1	0.90	0.09	44,44,44,44	0
56	MG	1D	301	1/1	0.90	0.21	52,52,52,52	0
56	MG	1A	4013	1/1	0.90	0.13	60,60,60,60	0
56	MG	2A	3855	1/1	0.90	0.10	73,73,73,73	0
56	MG	2A	3294	1/1	0.90	0.12	55,55,55,55	0
56	MG	2a	3211	1/1	0.90	0.16	56,56,56,56	0
56	MG	2A	3295	1/1	0.90	0.11	48,48,48,48	0
56	MG	2A	3550	1/1	0.90	0.18	61,61,61,61	0
56	MG	1A	3881	1/1	0.90	0.12	50,50,50,50	0
56	MG	1D	314	1/1	0.90	0.28	44,44,44,44	0
56	MG	2a	3224	1/1	0.90	0.14	78,78,78,78	0
56	MG	2a	3225	1/1	0.90	0.22	55,55,55,55	0
56	MG	2A	3559	1/1	0.90	0.12	60,60,60,60	0
56	MG	2A	3561	1/1	0.90	0.14	66,66,66,66	0
56	MG	2a	3232	1/1	0.90	0.23	64,64,64,64	0
56	MG	1D	315	1/1	0.90	0.33	40,40,40,40	0
56	MG	2A	3303	1/1	0.90	0.22	54,54,54,54	0
56	MG	2A	3565	1/1	0.90	0.23	51,51,51,51	0
56	MG	2A	3305	1/1	0.90	0.16	62,62,62,62	0
56	MG	1A	3461	1/1	0.90	0.12	49,49,49,49	0
56	MG	1A	4021	1/1	0.90	0.14	47,47,47,47	0
56	MG	2A	3311	1/1	0.90	0.20	58,58,58,58	0
56	MG	1A	3578	1/1	0.90	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3469	1/1	0.90	0.10	40,40,40,40	0
56	MG	2A	3119	1/1	0.90	0.11	58,58,58,58	0
56	MG	2A	3578	1/1	0.90	0.11	43,43,43,43	0
56	MG	2w	101	1/1	0.90	0.20	59,59,59,59	0
56	MG	1A	3900	1/1	0.90	0.09	46,46,46,46	0
56	MG	1A	3582	1/1	0.90	0.09	30,30,30,30	0
56	MG	2A	3584	1/1	0.90	0.14	49,49,49,49	0
56	MG	1A	3411	1/1	0.90	0.10	53,53,53,53	0
56	MG	2A	3318	1/1	0.90	0.13	72,72,72,72	0
56	MG	2x	101	1/1	0.90	0.18	58,58,58,58	0
56	MG	1a	1792	1/1	0.90	0.18	59,59,59,59	0
56	MG	2A	3594	1/1	0.90	0.09	44,44,44,44	0
56	MG	1A	3471	1/1	0.90	0.14	46,46,46,46	0
56	MG	1A	3373	1/1	0.90	0.09	51,51,51,51	0
56	MG	1A	3772	1/1	0.90	0.12	49,49,49,49	0
56	MG	1a	1798	1/1	0.90	0.16	58,58,58,58	0
56	MG	2A	3618	1/1	0.90	0.12	56,56,56,56	0
56	MG	2A	3619	1/1	0.90	0.23	60,60,60,60	0
56	MG	2l	101	1/1	0.91	0.33	50,50,50,50	0
56	MG	1A	3836	1/1	0.91	0.10	24,24,24,24	0
56	MG	2A	3660	1/1	0.91	0.15	58,58,58,58	0
56	MG	2A	3386	1/1	0.91	0.22	49,49,49,49	0
56	MG	25	106	1/1	0.91	0.15	66,66,66,66	0
56	MG	15	106	1/1	0.91	0.14	27,27,27,27	0
56	MG	28	102	1/1	0.91	0.22	53,53,53,53	0
56	MG	2A	3663	1/1	0.91	0.11	45,45,45,45	0
56	MG	1A	3714	1/1	0.91	0.08	27,27,27,27	0
56	MG	18	106	1/1	0.91	0.17	41,41,41,41	0
56	MG	2A	3666	1/1	0.91	0.12	65,65,65,65	0
56	MG	1x	101	1/1	0.91	0.22	48,48,48,48	0
56	MG	18	107	1/1	0.91	0.20	40,40,40,40	0
56	MG	1A	3846	1/1	0.91	0.08	49,49,49,49	0
56	MG	2A	3673	1/1	0.91	0.08	54,54,54,54	0
56	MG	1x	107	1/1	0.91	0.22	59,59,59,59	0
56	MG	1A	3001	1/1	0.91	0.11	38,38,38,38	0
56	MG	1A	4111	1/1	0.91	0.14	46,46,46,46	0
56	MG	2A	3408	1/1	0.91	0.25	58,58,58,58	0
56	MG	1A	3854	1/1	0.91	0.14	58,58,58,58	0
56	MG	1A	3389	1/1	0.91	0.11	44,44,44,44	0
56	MG	1A	3488	1/1	0.91	0.10	42,42,42,42	0
56	MG	2A	3002	1/1	0.91	0.20	56,56,56,56	0
56	MG	1B	202	1/1	0.91	0.23	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3237	1/1	0.91	0.35	63,63,63,63	0
56	MG	2A	3238	1/1	0.91	0.14	58,58,58,58	0
56	MG	1a	1625	1/1	0.91	0.27	58,58,58,58	0
56	MG	2A	3701	1/1	0.91	0.10	53,53,53,53	0
56	MG	1A	3593	1/1	0.91	0.10	44,44,44,44	0
56	MG	2A	3026	1/1	0.91	0.16	63,63,63,63	0
56	MG	1A	3986	1/1	0.91	0.09	28,28,28,28	0
56	MG	2A	3432	1/1	0.91	0.25	49,49,49,49	0
56	MG	1a	1633	1/1	0.91	0.13	57,57,57,57	0
56	MG	1A	3993	1/1	0.91	0.12	46,46,46,46	0
56	MG	2A	3710	1/1	0.91	0.27	44,44,44,44	0
56	MG	2A	3436	1/1	0.91	0.38	50,50,50,50	0
56	MG	2A	3036	1/1	0.91	0.12	54,54,54,54	0
56	MG	1A	3599	1/1	0.91	0.09	59,59,59,59	0
56	MG	1A	3417	1/1	0.91	0.17	45,45,45,45	0
56	MG	1a	1648	1/1	0.91	0.15	62,62,62,62	0
56	MG	1A	3449	1/1	0.91	0.20	59,59,59,59	0
56	MG	1A	3493	1/1	0.91	0.14	44,44,44,44	0
56	MG	2A	3260	1/1	0.91	0.09	63,63,63,63	0
56	MG	1a	1652	1/1	0.91	0.15	60,60,60,60	0
56	MG	1a	1655	1/1	0.91	0.15	50,50,50,50	0
56	MG	1A	3291	1/1	0.91	0.21	53,53,53,53	0
56	MG	1A	3889	1/1	0.91	0.10	46,46,46,46	0
56	MG	1A	3619	1/1	0.91	0.08	13,13,13,13	0
56	MG	2a	3067	1/1	0.91	0.17	60,60,60,60	0
56	MG	2A	3267	1/1	0.91	0.12	51,51,51,51	0
56	MG	1A	3243	1/1	0.91	0.09	45,45,45,45	0
56	MG	1A	4015	1/1	0.91	0.11	41,41,41,41	0
56	MG	1a	1671	1/1	0.91	0.11	52,52,52,52	0
56	MG	1B	232	1/1	0.91	0.10	52,52,52,52	0
56	MG	1A	4017	1/1	0.91	0.24	45,45,45,45	0
56	MG	2A	3761	1/1	0.91	0.11	58,58,58,58	0
56	MG	1A	3903	1/1	0.91	0.09	36,36,36,36	0
56	MG	2a	3094	1/1	0.91	0.24	61,61,61,61	0
56	MG	2A	3484	1/1	0.91	0.15	59,59,59,59	0
56	MG	2a	3096	1/1	0.91	0.15	65,65,65,65	0
56	MG	2A	3076	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3495	1/1	0.91	0.11	57,57,57,57	0
56	MG	1A	3648	1/1	0.91	0.11	46,46,46,46	0
56	MG	2A	3079	1/1	0.91	0.09	56,56,56,56	0
56	MG	1A	3463	1/1	0.91	0.09	50,50,50,50	0
56	MG	2A	3506	1/1	0.91	0.09	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3774	1/1	0.91	0.16	56,56,56,56	0
56	MG	1A	3499	1/1	0.91	0.10	44,44,44,44	0
56	MG	1a	1694	1/1	0.91	0.09	43,43,43,43	0
56	MG	1A	3653	1/1	0.91	0.10	34,34,34,34	0
56	MG	2a	3117	1/1	0.91	0.10	59,59,59,59	0
56	MG	1A	3465	1/1	0.91	0.09	52,52,52,52	0
56	MG	2a	3119	1/1	0.91	0.11	63,63,63,63	0
56	MG	1E	305	1/1	0.91	0.32	35,35,35,35	0
56	MG	1E	309	1/1	0.91	0.10	58,58,58,58	0
56	MG	1E	310	1/1	0.91	0.08	18,18,18,18	0
56	MG	1A	3503	1/1	0.91	0.13	54,54,54,54	0
56	MG	1F	309	1/1	0.91	0.16	54,54,54,54	0
56	MG	2a	3133	1/1	0.91	0.08	46,46,46,46	0
56	MG	2A	3297	1/1	0.91	0.10	68,68,68,68	0
56	MG	2A	3815	1/1	0.91	0.11	44,44,44,44	0
56	MG	2a	3143	1/1	0.91	0.16	59,59,59,59	0
56	MG	1A	3332	1/1	0.91	0.12	44,44,44,44	0
56	MG	2A	3299	1/1	0.91	0.16	56,56,56,56	0
56	MG	1a	1730	1/1	0.91	0.13	53,53,53,53	0
56	MG	1a	1738	1/1	0.91	0.13	79,79,79,79	0
56	MG	2a	3152	1/1	0.91	0.13	52,52,52,52	0
56	MG	1a	1739	1/1	0.91	0.10	54,54,54,54	0
56	MG	2A	3109	1/1	0.91	0.13	40,40,40,40	0
56	MG	1a	1744	1/1	0.91	0.15	45,45,45,45	0
56	MG	1A	3535	1/1	0.91	0.13	37,37,37,37	0
56	MG	2a	3162	1/1	0.91	0.14	63,63,63,63	0
56	MG	1a	1763	1/1	0.91	0.11	53,53,53,53	0
56	MG	2A	3834	1/1	0.91	0.18	51,51,51,51	0
56	MG	1A	3931	1/1	0.91	0.08	22,22,22,22	0
56	MG	1A	3792	1/1	0.91	0.09	61,61,61,61	0
56	MG	1a	1776	1/1	0.91	0.23	51,51,51,51	0
56	MG	2a	3174	1/1	0.91	0.14	55,55,55,55	0
56	MG	2A	3133	1/1	0.91	0.18	56,56,56,56	0
56	MG	1A	3148	1/1	0.91	0.13	48,48,48,48	0
56	MG	2A	3150	1/1	0.91	0.13	59,59,59,59	0
56	MG	1A	4048	1/1	0.91	0.08	44,44,44,44	0
56	MG	2a	3180	1/1	0.91	0.18	60,60,60,60	0
56	MG	2A	3320	1/1	0.91	0.14	72,72,72,72	0
56	MG	1a	1785	1/1	0.91	0.08	58,58,58,58	0
56	MG	1a	1788	1/1	0.91	0.18	49,49,49,49	0
56	MG	1A	3217	1/1	0.91	0.10	47,47,47,47	0
56	MG	2A	3571	1/1	0.91	0.09	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3163	1/1	0.91	0.11	45,45,45,45	0
56	MG	1A	3548	1/1	0.91	0.08	28,28,28,28	0
56	MG	1A	3805	1/1	0.91	0.12	48,48,48,48	0
56	MG	1Q	208	1/1	0.91	0.15	48,48,48,48	0
56	MG	1R	201	1/1	0.91	0.11	61,61,61,61	0
56	MG	1T	202	1/1	0.91	0.17	53,53,53,53	0
56	MG	2A	3585	1/1	0.91	0.16	52,52,52,52	0
56	MG	2A	3588	1/1	0.91	0.09	53,53,53,53	0
56	MG	2a	3200	1/1	0.91	0.17	55,55,55,55	0
56	MG	1A	3681	1/1	0.91	0.16	66,66,66,66	0
56	MG	2a	3203	1/1	0.91	0.13	48,48,48,48	0
56	MG	2A	3174	1/1	0.91	0.12	57,57,57,57	0
56	MG	2a	3206	1/1	0.91	0.11	64,64,64,64	0
56	MG	2A	3342	1/1	0.91	0.23	54,54,54,54	0
56	MG	2A	3873	1/1	0.91	0.10	59,59,59,59	0
56	MG	1A	3684	1/1	0.91	0.12	51,51,51,51	0
56	MG	1V	208	1/1	0.91	0.09	46,46,46,46	0
56	MG	2a	3221	1/1	0.91	0.15	51,51,51,51	0
56	MG	1a	1807	1/1	0.91	0.16	61,61,61,61	0
56	MG	1A	3316	1/1	0.91	0.18	29,29,29,29	0
56	MG	2B	201	1/1	0.91	0.15	74,74,74,74	0
56	MG	2A	3615	1/1	0.91	0.09	51,51,51,51	0
56	MG	1X	103	1/1	0.91	0.34	33,33,33,33	0
56	MG	2A	3183	1/1	0.91	0.12	57,57,57,57	0
56	MG	2a	3228	1/1	0.91	0.15	67,67,67,67	0
56	MG	1A	3692	1/1	0.91	0.15	45,45,45,45	0
56	MG	2B	206	1/1	0.91	0.16	66,66,66,66	0
56	MG	2B	207	1/1	0.91	0.14	69,69,69,69	0
56	MG	2A	3186	1/1	0.91	0.08	37,37,37,37	0
56	MG	2B	211	1/1	0.91	0.06	62,62,62,62	0
56	MG	2f	201	1/1	0.91	0.10	43,43,43,43	0
56	MG	2A	3625	1/1	0.91	0.15	56,56,56,56	0
56	MG	1a	1814	1/1	0.91	0.13	51,51,51,51	0
56	MG	2A	3188	1/1	0.91	0.10	60,60,60,60	0
56	MG	2l	201	1/1	0.91	0.23	70,70,70,70	0
56	MG	2l	203	1/1	0.91	0.10	59,59,59,59	0
56	MG	2A	3370	1/1	0.91	0.20	57,57,57,57	0
56	MG	2A	3630	1/1	0.91	0.09	59,59,59,59	0
56	MG	2A	3632	1/1	0.91	0.15	56,56,56,56	0
56	MG	1A	3695	1/1	0.91	0.10	47,47,47,47	0
56	MG	1A	3699	1/1	0.91	0.08	31,31,31,31	0
56	MG	2A	3638	1/1	0.91	0.12	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1l	202	1/1	0.91	0.11	58,58,58,58	0
56	MG	2A	3374	1/1	0.91	0.08	53,53,53,53	0
56	MG	2F	308	1/1	0.91	0.10	54,54,54,54	0
56	MG	2A	3375	1/1	0.91	0.07	56,56,56,56	0
56	MG	2Q	201	1/1	0.91	0.11	61,61,61,61	0
56	MG	1A	3088	1/1	0.91	0.17	54,54,54,54	0
56	MG	1A	3348	1/1	0.91	0.10	53,53,53,53	0
56	MG	1A	3964	1/1	0.91	0.09	56,56,56,56	0
56	MG	2X	101	1/1	0.91	0.12	62,62,62,62	0
56	MG	1A	3412	1/1	0.91	0.14	29,29,29,29	0
56	MG	1A	3435	1/1	0.91	0.10	67,67,67,67	0
56	MG	2A	3203	1/1	0.91	0.14	59,59,59,59	0
56	MG	20	104	1/1	0.91	0.12	61,61,61,61	0
56	MG	2y	106	1/1	0.91	0.11	78,78,78,78	0
56	MG	2A	3610	1/1	0.92	0.16	55,55,55,55	0
56	MG	2D	305	1/1	0.92	0.30	40,40,40,40	0
56	MG	2D	306	1/1	0.92	0.13	54,54,54,54	0
56	MG	2A	3613	1/1	0.92	0.32	51,51,51,51	0
56	MG	2A	3614	1/1	0.92	0.11	48,48,48,48	0
56	MG	2F	301	1/1	0.92	0.09	52,52,52,52	0
56	MG	2A	3146	1/1	0.92	0.12	61,61,61,61	0
56	MG	1a	1749	1/1	0.92	0.10	63,63,63,63	0
56	MG	1G	204	1/1	0.92	0.09	42,42,42,42	0
56	MG	1A	3208	1/1	0.92	0.09	56,56,56,56	0
56	MG	2P	201	1/1	0.92	0.10	61,61,61,61	0
56	MG	2A	3620	1/1	0.92	0.18	59,59,59,59	0
56	MG	2Q	203	1/1	0.92	0.12	58,58,58,58	0
56	MG	2R	202	1/1	0.92	0.10	48,48,48,48	0
56	MG	1H	201	1/1	0.92	0.09	33,33,33,33	0
56	MG	2T	201	1/1	0.92	0.12	54,54,54,54	0
56	MG	2A	3622	1/1	0.92	0.15	59,59,59,59	0
56	MG	2A	3156	1/1	0.92	0.10	53,53,53,53	0
56	MG	2A	3159	1/1	0.92	0.18	62,62,62,62	0
56	MG	2A	3343	1/1	0.92	0.12	64,64,64,64	0
56	MG	2A	3160	1/1	0.92	0.10	49,49,49,49	0
56	MG	2A	3629	1/1	0.92	0.10	43,43,43,43	0
56	MG	1a	1768	1/1	0.92	0.07	46,46,46,46	0
56	MG	1a	1772	1/1	0.92	0.25	51,51,51,51	0
56	MG	1A	3711	1/1	0.92	0.10	21,21,21,21	0
56	MG	2A	3165	1/1	0.92	0.12	55,55,55,55	0
56	MG	2A	3352	1/1	0.92	0.24	65,65,65,65	0
56	MG	2A	3641	1/1	0.92	0.09	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	27	102	1/1	0.92	0.09	45,45,45,45	0
56	MG	2A	3166	1/1	0.92	0.17	55,55,55,55	0
56	MG	2A	3356	1/1	0.92	0.26	60,60,60,60	0
56	MG	2A	3645	1/1	0.92	0.17	58,58,58,58	0
56	MG	1O	201	1/1	0.92	0.11	61,61,61,61	0
56	MG	1a	1778	1/1	0.92	0.11	46,46,46,46	0
56	MG	2A	3361	1/1	0.92	0.09	52,52,52,52	0
56	MG	1a	1780	1/1	0.92	0.12	57,57,57,57	0
56	MG	1A	3567	1/1	0.92	0.07	27,27,27,27	0
56	MG	2A	3368	1/1	0.92	0.09	53,53,53,53	0
56	MG	1A	3873	1/1	0.92	0.09	38,38,38,38	0
56	MG	2a	3009	1/1	0.92	0.13	66,66,66,66	0
56	MG	2A	3654	1/1	0.92	0.10	53,53,53,53	0
56	MG	1A	3403	1/1	0.92	0.09	41,41,41,41	0
56	MG	1a	1787	1/1	0.92	0.12	51,51,51,51	0
56	MG	1A	3209	1/1	0.92	0.16	43,43,43,43	0
56	MG	1A	4027	1/1	0.92	0.16	39,39,39,39	0
56	MG	1A	3214	1/1	0.92	0.08	49,49,49,49	0
56	MG	1A	3728	1/1	0.92	0.07	56,56,56,56	0
56	MG	1A	3410	1/1	0.92	0.20	33,33,33,33	0
56	MG	1A	3115	1/1	0.92	0.18	40,40,40,40	0
56	MG	1A	3901	1/1	0.92	0.11	54,54,54,54	0
56	MG	1A	3359	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3591	1/1	0.92	0.07	24,24,24,24	0
56	MG	1a	1804	1/1	0.92	0.27	53,53,53,53	0
56	MG	2A	3676	1/1	0.92	0.09	27,27,27,27	0
56	MG	1A	4045	1/1	0.92	0.07	32,32,32,32	0
56	MG	10	101	1/1	0.92	0.16	42,42,42,42	0
56	MG	1A	3481	1/1	0.92	0.11	38,38,38,38	0
56	MG	1A	3598	1/1	0.92	0.07	31,31,31,31	0
56	MG	10	107	1/1	0.92	0.09	55,55,55,55	0
56	MG	10	109	1/1	0.92	0.09	54,54,54,54	0
56	MG	2A	3199	1/1	0.92	0.16	58,58,58,58	0
56	MG	2a	3037	1/1	0.92	0.15	56,56,56,56	0
56	MG	2A	3399	1/1	0.92	0.25	51,51,51,51	0
56	MG	1A	3306	1/1	0.92	0.10	45,45,45,45	0
56	MG	1A	3911	1/1	0.92	0.12	37,37,37,37	0
56	MG	13	104	1/1	0.92	0.08	33,33,33,33	0
56	MG	2a	3042	1/1	0.92	0.20	58,58,58,58	0
56	MG	1A	3310	1/1	0.92	0.08	48,48,48,48	0
56	MG	2A	3698	1/1	0.92	0.12	71,71,71,71	0
56	MG	2A	3409	1/1	0.92	0.14	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3760	1/1	0.92	0.10	36,36,36,36	0
56	MG	1A	3768	1/1	0.92	0.11	38,38,38,38	0
56	MG	2a	3049	1/1	0.92	0.21	66,66,66,66	0
56	MG	2A	3216	1/1	0.92	0.08	36,36,36,36	0
56	MG	2A	3414	1/1	0.92	0.20	61,61,61,61	0
56	MG	1A	3921	1/1	0.92	0.07	63,63,63,63	0
56	MG	2a	3057	1/1	0.92	0.17	54,54,54,54	0
56	MG	1A	3601	1/1	0.92	0.09	43,43,43,43	0
56	MG	15	108	1/1	0.92	0.14	35,35,35,35	0
56	MG	2A	3422	1/1	0.92	0.22	37,37,37,37	0
56	MG	1A	3776	1/1	0.92	0.11	42,42,42,42	0
56	MG	15	110	1/1	0.92	0.12	31,31,31,31	0
56	MG	2A	3714	1/1	0.92	0.10	63,63,63,63	0
56	MG	16	101	1/1	0.92	0.11	50,50,50,50	0
56	MG	2A	3231	1/1	0.92	0.09	48,48,48,48	0
56	MG	18	105	1/1	0.92	0.18	51,51,51,51	0
56	MG	2a	3092	1/1	0.92	0.14	58,58,58,58	0
56	MG	1A	3603	1/1	0.92	0.07	23,23,23,23	0
56	MG	1A	3368	1/1	0.92	0.13	43,43,43,43	0
56	MG	1A	3312	1/1	0.92	0.11	51,51,51,51	0
56	MG	1A	3015	1/1	0.92	0.13	30,30,30,30	0
56	MG	1x	109	1/1	0.92	0.16	65,65,65,65	0
56	MG	1A	3785	1/1	0.92	0.07	30,30,30,30	0
56	MG	1A	3941	1/1	0.92	0.18	26,26,26,26	0
56	MG	2A	3731	1/1	0.92	0.15	57,57,57,57	0
56	MG	2A	3241	1/1	0.92	0.25	64,64,64,64	0
56	MG	2a	3105	1/1	0.92	0.07	57,57,57,57	0
56	MG	2A	3738	1/1	0.92	0.14	64,64,64,64	0
56	MG	2A	3739	1/1	0.92	0.12	54,54,54,54	0
56	MG	2A	3745	1/1	0.92	0.12	65,65,65,65	0
56	MG	2A	3746	1/1	0.92	0.10	59,59,59,59	0
56	MG	2A	3747	1/1	0.92	0.10	58,58,58,58	0
56	MG	1A	3942	1/1	0.92	0.08	14,14,14,14	0
56	MG	1a	1616	1/1	0.92	0.09	54,54,54,54	0
56	MG	1A	3945	1/1	0.92	0.06	62,62,62,62	0
56	MG	2a	3122	1/1	0.92	0.07	69,69,69,69	0
56	MG	2a	3123	1/1	0.92	0.08	73,73,73,73	0
56	MG	2A	3004	1/1	0.92	0.20	57,57,57,57	0
56	MG	2a	3127	1/1	0.92	0.08	71,71,71,71	0
56	MG	2A	3759	1/1	0.92	0.12	72,72,72,72	0
56	MG	1A	4101	1/1	0.92	0.19	62,62,62,62	0
56	MG	1A	3090	1/1	0.92	0.07	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3625	1/1	0.92	0.06	30,30,30,30	0
56	MG	1A	3151	1/1	0.92	0.12	56,56,56,56	0
56	MG	2A	3457	1/1	0.92	0.12	52,52,52,52	0
56	MG	2A	3460	1/1	0.92	0.18	61,61,61,61	0
56	MG	1a	1632	1/1	0.92	0.25	61,61,61,61	0
56	MG	2A	3470	1/1	0.92	0.14	50,50,50,50	0
56	MG	2A	3255	1/1	0.92	0.15	61,61,61,61	0
56	MG	1A	3952	1/1	0.92	0.07	23,23,23,23	0
56	MG	2A	3473	1/1	0.92	0.10	42,42,42,42	0
56	MG	2a	3154	1/1	0.92	0.13	52,52,52,52	0
56	MG	2a	3156	1/1	0.92	0.15	55,55,55,55	0
56	MG	1A	3379	1/1	0.92	0.17	50,50,50,50	0
56	MG	2A	3782	1/1	0.92	0.12	43,43,43,43	0
56	MG	2A	3785	1/1	0.92	0.10	53,53,53,53	0
56	MG	1a	1635	1/1	0.92	0.22	55,55,55,55	0
56	MG	1a	1636	1/1	0.92	0.12	58,58,58,58	0
56	MG	1a	1638	1/1	0.92	0.16	56,56,56,56	0
56	MG	2a	3164	1/1	0.92	0.10	65,65,65,65	0
56	MG	2A	3263	1/1	0.92	0.19	50,50,50,50	0
56	MG	2A	3486	1/1	0.92	0.10	49,49,49,49	0
56	MG	2a	3168	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3381	1/1	0.92	0.09	45,45,45,45	0
56	MG	2A	3808	1/1	0.92	0.07	46,46,46,46	0
56	MG	2a	3173	1/1	0.92	0.08	49,49,49,49	0
56	MG	1A	3035	1/1	0.92	0.08	42,42,42,42	0
56	MG	1A	3797	1/1	0.92	0.12	44,44,44,44	0
56	MG	2A	3811	1/1	0.92	0.08	57,57,57,57	0
56	MG	1A	3431	1/1	0.92	0.12	43,43,43,43	0
56	MG	2A	3813	1/1	0.92	0.09	54,54,54,54	0
56	MG	1A	3655	1/1	0.92	0.17	50,50,50,50	0
56	MG	2A	3822	1/1	0.92	0.15	59,59,59,59	0
56	MG	2A	3505	1/1	0.92	0.09	68,68,68,68	0
56	MG	1A	3658	1/1	0.92	0.18	49,49,49,49	0
56	MG	2A	3511	1/1	0.92	0.11	42,42,42,42	0
56	MG	1A	3246	1/1	0.92	0.12	26,26,26,26	0
56	MG	2A	3513	1/1	0.92	0.08	43,43,43,43	0
56	MG	1A	3971	1/1	0.92	0.09	40,40,40,40	0
56	MG	1A	3324	1/1	0.92	0.10	56,56,56,56	0
56	MG	1a	1659	1/1	0.92	0.12	52,52,52,52	0
56	MG	2A	3277	1/1	0.92	0.07	48,48,48,48	0
56	MG	1A	3976	1/1	0.92	0.08	53,53,53,53	0
56	MG	2a	3195	1/1	0.92	0.23	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3197	1/1	0.92	0.11	65,65,65,65	0
56	MG	1A	3251	1/1	0.92	0.20	50,50,50,50	0
56	MG	2A	3282	1/1	0.92	0.10	45,45,45,45	0
56	MG	2A	3063	1/1	0.92	0.08	37,37,37,37	0
56	MG	2A	3840	1/1	0.92	0.10	56,56,56,56	0
56	MG	1a	1669	1/1	0.92	0.08	46,46,46,46	0
56	MG	1A	3815	1/1	0.92	0.17	27,27,27,27	0
56	MG	2a	3205	1/1	0.92	0.20	55,55,55,55	0
56	MG	1A	3438	1/1	0.92	0.09	41,41,41,41	0
56	MG	2A	3847	1/1	0.92	0.19	57,57,57,57	0
56	MG	2A	3288	1/1	0.92	0.21	59,59,59,59	0
56	MG	2a	3213	1/1	0.92	0.16	60,60,60,60	0
56	MG	2a	3215	1/1	0.92	0.12	61,61,61,61	0
56	MG	2A	3289	1/1	0.92	0.10	53,53,53,53	0
56	MG	2A	3853	1/1	0.92	0.10	65,65,65,65	0
56	MG	1A	3083	1/1	0.92	0.15	38,38,38,38	0
56	MG	1A	3336	1/1	0.92	0.18	37,37,37,37	0
56	MG	1A	3513	1/1	0.92	0.27	54,54,54,54	0
56	MG	1B	239	1/1	0.92	0.11	48,48,48,48	0
56	MG	2A	3084	1/1	0.92	0.35	45,45,45,45	0
56	MG	1A	3002	1/1	0.92	0.09	51,51,51,51	0
56	MG	1a	1682	1/1	0.92	0.08	52,52,52,52	0
56	MG	1A	3289	1/1	0.92	0.08	47,47,47,47	0
56	MG	1A	3685	1/1	0.92	0.08	52,52,52,52	0
56	MG	1A	3400	1/1	0.92	0.14	56,56,56,56	0
56	MG	1a	1701	1/1	0.92	0.08	52,52,52,52	0
56	MG	2e	201	1/1	0.92	0.15	60,60,60,60	0
56	MG	1A	3691	1/1	0.92	0.10	56,56,56,56	0
56	MG	2A	3096	1/1	0.92	0.23	71,71,71,71	0
56	MG	1E	301	1/1	0.92	0.10	44,44,44,44	0
56	MG	1A	3997	1/1	0.92	0.10	41,41,41,41	0
56	MG	1a	1711	1/1	0.92	0.09	51,51,51,51	0
56	MG	1A	3841	1/1	0.92	0.09	42,42,42,42	0
56	MG	2A	3875	1/1	0.92	0.16	62,62,62,62	0
56	MG	2A	3876	1/1	0.92	0.27	61,61,61,61	0
56	MG	1A	3546	1/1	0.92	0.12	46,46,46,46	0
56	MG	2l	205	1/1	0.92	0.09	53,53,53,53	0
56	MG	2A	3878	1/1	0.92	0.18	55,55,55,55	0
56	MG	2A	3576	1/1	0.92	0.13	34,34,34,34	0
56	MG	1A	3453	1/1	0.92	0.10	45,45,45,45	0
56	MG	1a	1724	1/1	0.92	0.15	45,45,45,45	0
56	MG	2A	3579	1/1	0.92	0.11	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3111	1/1	0.92	0.13	57,57,57,57	0
56	MG	1E	314	1/1	0.92	0.20	50,50,50,50	0
56	MG	2A	3115	1/1	0.92	0.07	59,59,59,59	0
56	MG	1a	1729	1/1	0.92	0.11	58,58,58,58	0
56	MG	1A	3549	1/1	0.92	0.09	46,46,46,46	0
56	MG	2A	3321	1/1	0.92	0.09	63,63,63,63	0
56	MG	2B	210	1/1	0.92	0.11	59,59,59,59	0
56	MG	1a	1732	1/1	0.92	0.10	52,52,52,52	0
56	MG	1A	3857	1/1	0.92	0.10	23,23,23,23	0
56	MG	2A	3326	1/1	0.92	0.08	53,53,53,53	0
56	MG	2A	3603	1/1	0.92	0.11	54,54,54,54	0
56	MG	2A	3132	1/1	0.92	0.18	59,59,59,59	0
56	MG	1A	3553	1/1	0.92	0.09	38,38,38,38	0
56	MG	1A	3456	1/1	0.92	0.10	52,52,52,52	0
59	SCM	2a	3236	23/23	0.92	0.15	63,68,73,77	0
56	MG	1A	3157	1/1	0.93	0.19	57,57,57,57	0
56	MG	1A	3406	1/1	0.93	0.13	45,45,45,45	0
56	MG	1B	213	1/1	0.93	0.17	52,52,52,52	0
56	MG	1A	3176	1/1	0.93	0.10	47,47,47,47	0
56	MG	1B	217	1/1	0.93	0.14	41,41,41,41	0
56	MG	1a	1674	1/1	0.93	0.20	54,54,54,54	0
56	MG	1A	3602	1/1	0.93	0.12	37,37,37,37	0
56	MG	1A	3775	1/1	0.93	0.21	52,52,52,52	0
56	MG	1A	3258	1/1	0.93	0.09	32,32,32,32	0
56	MG	2T	203	1/1	0.93	0.09	52,52,52,52	0
56	MG	2U	201	1/1	0.93	0.11	53,53,53,53	0
56	MG	2A	3103	1/1	0.93	0.10	65,65,65,65	0
56	MG	1A	3344	1/1	0.93	0.08	37,37,37,37	0
56	MG	2W	203	1/1	0.93	0.12	52,52,52,52	0
56	MG	1A	3779	1/1	0.93	0.10	39,39,39,39	0
56	MG	1a	1684	1/1	0.93	0.14	64,64,64,64	0
56	MG	2A	3635	1/1	0.93	0.13	62,62,62,62	0
56	MG	2A	3108	1/1	0.93	0.09	41,41,41,41	0
56	MG	20	103	1/1	0.93	0.09	61,61,61,61	0
56	MG	1a	1687	1/1	0.93	0.11	62,62,62,62	0
56	MG	1a	1689	1/1	0.93	0.17	51,51,51,51	0
56	MG	23	101	1/1	0.93	0.06	53,53,53,53	0
56	MG	2A	3642	1/1	0.93	0.14	54,54,54,54	0
56	MG	1A	3948	1/1	0.93	0.07	29,29,29,29	0
56	MG	1A	3613	1/1	0.93	0.09	23,23,23,23	0
56	MG	1a	1695	1/1	0.93	0.07	32,32,32,32	0
56	MG	1A	3271	1/1	0.93	0.15	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3273	1/1	0.93	0.07	45,45,45,45	0
56	MG	1a	1702	1/1	0.93	0.18	66,66,66,66	0
56	MG	2A	3123	1/1	0.93	0.09	58,58,58,58	0
56	MG	1A	3018	1/1	0.93	0.11	33,33,33,33	0
56	MG	2A	3126	1/1	0.93	0.16	44,44,44,44	0
56	MG	2A	3129	1/1	0.93	0.15	46,46,46,46	0
56	MG	2A	3130	1/1	0.93	0.12	45,45,45,45	0
56	MG	2A	3655	1/1	0.93	0.13	38,38,38,38	0
56	MG	2A	3657	1/1	0.93	0.10	30,30,30,30	0
56	MG	1A	3350	1/1	0.93	0.10	43,43,43,43	0
56	MG	1A	3787	1/1	0.93	0.11	32,32,32,32	0
56	MG	1A	3282	1/1	0.93	0.07	33,33,33,33	0
56	MG	2A	3137	1/1	0.93	0.14	59,59,59,59	0
56	MG	2A	3144	1/1	0.93	0.11	58,58,58,58	0
56	MG	1A	3633	1/1	0.93	0.09	27,27,27,27	0
56	MG	2A	3369	1/1	0.93	0.17	48,48,48,48	0
56	MG	2a	3015	1/1	0.93	0.10	65,65,65,65	0
56	MG	2A	3147	1/1	0.93	0.18	64,64,64,64	0
56	MG	2A	3149	1/1	0.93	0.10	55,55,55,55	0
56	MG	1a	1713	1/1	0.93	0.13	42,42,42,42	0
56	MG	1A	3634	1/1	0.93	0.13	15,15,15,15	0
56	MG	1A	3641	1/1	0.93	0.08	23,23,23,23	0
56	MG	2A	3674	1/1	0.93	0.11	54,54,54,54	0
56	MG	1A	3495	1/1	0.93	0.09	47,47,47,47	0
56	MG	2a	3024	1/1	0.93	0.11	62,62,62,62	0
56	MG	1a	1725	1/1	0.93	0.10	48,48,48,48	0
56	MG	1A	3285	1/1	0.93	0.08	38,38,38,38	0
56	MG	1A	3181	1/1	0.93	0.23	56,56,56,56	0
56	MG	2A	3681	1/1	0.93	0.12	55,55,55,55	0
56	MG	1A	3082	1/1	0.93	0.32	34,34,34,34	0
56	MG	2A	3162	1/1	0.93	0.21	55,55,55,55	0
56	MG	1A	3802	1/1	0.93	0.08	35,35,35,35	0
56	MG	1a	1735	1/1	0.93	0.09	66,66,66,66	0
56	MG	2A	3687	1/1	0.93	0.07	41,41,41,41	0
56	MG	1A	3367	1/1	0.93	0.10	57,57,57,57	0
56	MG	1A	3808	1/1	0.93	0.10	43,43,43,43	0
56	MG	1F	305	1/1	0.93	0.07	31,31,31,31	0
56	MG	1A	3656	1/1	0.93	0.09	37,37,37,37	0
56	MG	1F	310	1/1	0.93	0.12	26,26,26,26	0
56	MG	1A	3657	1/1	0.93	0.07	57,57,57,57	0
56	MG	1A	3190	1/1	0.93	0.10	30,30,30,30	0
56	MG	2A	3703	1/1	0.93	0.12	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3985	1/1	0.93	0.10	23,23,23,23	0
56	MG	2A	3175	1/1	0.93	0.15	53,53,53,53	0
56	MG	1a	1771	1/1	0.93	0.09	45,45,45,45	0
56	MG	2A	3402	1/1	0.93	0.27	47,47,47,47	0
56	MG	2a	3050	1/1	0.93	0.07	62,62,62,62	0
56	MG	1G	203	1/1	0.93	0.12	64,64,64,64	0
56	MG	2a	3052	1/1	0.93	0.15	64,64,64,64	0
56	MG	2A	3406	1/1	0.93	0.23	51,51,51,51	0
56	MG	2A	3407	1/1	0.93	0.18	50,50,50,50	0
56	MG	1a	1774	1/1	0.93	0.23	46,46,46,46	0
56	MG	2a	3061	1/1	0.93	0.15	47,47,47,47	0
56	MG	1A	3295	1/1	0.93	0.23	26,26,26,26	0
56	MG	1A	3992	1/1	0.93	0.10	56,56,56,56	0
56	MG	2A	3182	1/1	0.93	0.08	47,47,47,47	0
56	MG	2A	3715	1/1	0.93	0.10	48,48,48,48	0
56	MG	1A	3816	1/1	0.93	0.05	33,33,33,33	0
56	MG	2A	3184	1/1	0.93	0.09	53,53,53,53	0
56	MG	2A	3415	1/1	0.93	0.20	42,42,42,42	0
56	MG	1A	3664	1/1	0.93	0.10	55,55,55,55	0
56	MG	1A	3822	1/1	0.93	0.14	26,26,26,26	0
56	MG	1O	202	1/1	0.93	0.16	43,43,43,43	0
56	MG	1a	1783	1/1	0.93	0.14	54,54,54,54	0
56	MG	1A	3299	1/1	0.93	0.07	40,40,40,40	0
56	MG	1A	3095	1/1	0.93	0.18	50,50,50,50	0
56	MG	1A	3516	1/1	0.93	0.06	41,41,41,41	0
56	MG	1A	3530	1/1	0.93	0.12	43,43,43,43	0
56	MG	1Q	206	1/1	0.93	0.17	37,37,37,37	0
56	MG	1A	3375	1/1	0.93	0.07	34,34,34,34	0
56	MG	2A	3433	1/1	0.93	0.12	51,51,51,51	0
56	MG	1a	1793	1/1	0.93	0.10	60,60,60,60	0
56	MG	1a	1794	1/1	0.93	0.10	47,47,47,47	0
56	MG	1A	4009	1/1	0.93	0.06	39,39,39,39	0
56	MG	2a	3107	1/1	0.93	0.13	56,56,56,56	0
56	MG	2a	3109	1/1	0.93	0.17	62,62,62,62	0
56	MG	1A	3055	1/1	0.93	0.17	49,49,49,49	0
56	MG	2a	3113	1/1	0.93	0.26	53,53,53,53	0
56	MG	2A	3204	1/1	0.93	0.17	50,50,50,50	0
56	MG	2A	3206	1/1	0.93	0.19	48,48,48,48	0
56	MG	1A	4012	1/1	0.93	0.07	15,15,15,15	0
56	MG	1A	3097	1/1	0.93	0.12	40,40,40,40	0
56	MG	1a	1801	1/1	0.93	0.18	43,43,43,43	0
56	MG	1A	3380	1/1	0.93	0.07	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3103	1/1	0.93	0.28	29,29,29,29	0
56	MG	1A	3842	1/1	0.93	0.15	29,29,29,29	0
56	MG	1Y	201	1/1	0.93	0.23	54,54,54,54	0
56	MG	2A	3452	1/1	0.93	0.15	54,54,54,54	0
56	MG	2A	3222	1/1	0.93	0.09	52,52,52,52	0
56	MG	1a	1808	1/1	0.93	0.08	40,40,40,40	0
56	MG	1A	3845	1/1	0.93	0.09	50,50,50,50	0
56	MG	2A	3228	1/1	0.93	0.10	71,71,71,71	0
56	MG	1Z	301	1/1	0.93	0.06	58,58,58,58	0
56	MG	2A	3777	1/1	0.93	0.07	45,45,45,45	0
56	MG	1A	3686	1/1	0.93	0.07	13,13,13,13	0
56	MG	2A	3780	1/1	0.93	0.15	54,54,54,54	0
56	MG	10	102	1/1	0.93	0.21	47,47,47,47	0
56	MG	10	103	1/1	0.93	0.15	34,34,34,34	0
56	MG	1A	3084	1/1	0.93	0.11	38,38,38,38	0
56	MG	2A	3789	1/1	0.93	0.07	45,45,45,45	0
56	MG	1A	3689	1/1	0.93	0.06	11,11,11,11	0
56	MG	2A	3477	1/1	0.93	0.08	24,24,24,24	0
56	MG	2A	3800	1/1	0.93	0.07	33,33,33,33	0
56	MG	1n	101	1/1	0.93	0.11	51,51,51,51	0
56	MG	1A	3552	1/1	0.93	0.14	14,14,14,14	0
56	MG	1A	4028	1/1	0.93	0.07	41,41,41,41	0
56	MG	2A	3807	1/1	0.93	0.07	62,62,62,62	0
56	MG	1t	201	1/1	0.93	0.10	40,40,40,40	0
56	MG	1A	3446	1/1	0.93	0.27	41,41,41,41	0
56	MG	1A	3085	1/1	0.93	0.09	39,39,39,39	0
56	MG	2A	3490	1/1	0.93	0.11	58,58,58,58	0
56	MG	2A	3493	1/1	0.93	0.08	39,39,39,39	0
56	MG	1A	3229	1/1	0.93	0.07	35,35,35,35	0
56	MG	2a	3170	1/1	0.93	0.07	67,67,67,67	0
56	MG	1A	3558	1/1	0.93	0.10	41,41,41,41	0
56	MG	2A	3817	1/1	0.93	0.12	40,40,40,40	0
56	MG	2A	3499	1/1	0.93	0.07	38,38,38,38	0
56	MG	1A	3701	1/1	0.93	0.19	44,44,44,44	0
56	MG	2a	3176	1/1	0.93	0.13	67,67,67,67	0
56	MG	1A	3872	1/1	0.93	0.09	37,37,37,37	0
56	MG	2A	3248	1/1	0.93	0.09	77,77,77,77	0
56	MG	1A	3703	1/1	0.93	0.09	13,13,13,13	0
56	MG	1A	3559	1/1	0.93	0.08	16,16,16,16	0
56	MG	1A	3708	1/1	0.93	0.07	22,22,22,22	0
56	MG	2A	3252	1/1	0.93	0.10	62,62,62,62	0
56	MG	1A	4051	1/1	0.93	0.07	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3237	1/1	0.93	0.13	44,44,44,44	0
56	MG	1A	3570	1/1	0.93	0.09	53,53,53,53	0
56	MG	2a	3186	1/1	0.93	0.18	62,62,62,62	0
56	MG	2A	3256	1/1	0.93	0.09	58,58,58,58	0
56	MG	1A	3575	1/1	0.93	0.07	17,17,17,17	0
56	MG	1A	3240	1/1	0.93	0.20	54,54,54,54	0
56	MG	1A	3086	1/1	0.93	0.09	46,46,46,46	0
56	MG	1A	3902	1/1	0.93	0.09	36,36,36,36	0
56	MG	19	101	1/1	0.93	0.14	45,45,45,45	0
56	MG	1A	3716	1/1	0.93	0.07	50,50,50,50	0
56	MG	2a	3196	1/1	0.93	0.15	67,67,67,67	0
56	MG	1A	3142	1/1	0.93	0.18	24,24,24,24	0
56	MG	1A	3048	1/1	0.93	0.09	42,42,42,42	0
56	MG	2A	3541	1/1	0.93	0.14	46,46,46,46	0
56	MG	1A	3733	1/1	0.93	0.07	40,40,40,40	0
56	MG	1a	1614	1/1	0.93	0.07	50,50,50,50	0
56	MG	2a	3202	1/1	0.93	0.08	67,67,67,67	0
56	MG	2A	3268	1/1	0.93	0.09	55,55,55,55	0
56	MG	2A	3025	1/1	0.93	0.18	54,54,54,54	0
56	MG	1A	3398	1/1	0.93	0.07	40,40,40,40	0
56	MG	1a	1617	1/1	0.93	0.08	51,51,51,51	0
56	MG	2a	3209	1/1	0.93	0.10	58,58,58,58	0
56	MG	2A	3031	1/1	0.93	0.09	34,34,34,34	0
56	MG	1A	4077	1/1	0.93	0.07	37,37,37,37	0
56	MG	2a	3212	1/1	0.93	0.12	65,65,65,65	0
56	MG	1A	4081	1/1	0.93	0.14	50,50,50,50	0
56	MG	1a	1623	1/1	0.93	0.13	48,48,48,48	0
56	MG	2a	3218	1/1	0.93	0.10	65,65,65,65	0
56	MG	2A	3866	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	4083	1/1	0.93	0.12	58,58,58,58	0
56	MG	2A	3039	1/1	0.93	0.10	51,51,51,51	0
56	MG	1A	4085	1/1	0.93	0.10	61,61,61,61	0
56	MG	2A	3042	1/1	0.93	0.34	62,62,62,62	0
56	MG	1A	3736	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	3399	1/1	0.93	0.08	30,30,30,30	0
56	MG	1A	3915	1/1	0.93	0.09	62,62,62,62	0
56	MG	1A	4091	1/1	0.93	0.09	45,45,45,45	0
56	MG	1A	3330	1/1	0.93	0.13	49,49,49,49	0
56	MG	2a	3230	1/1	0.93	0.10	53,53,53,53	0
56	MG	2a	3231	1/1	0.93	0.11	53,53,53,53	0
56	MG	2A	3574	1/1	0.93	0.15	58,58,58,58	0
56	MG	1A	3917	1/1	0.93	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
56	MG	1A	3072	1/1	0.93	0.13	37,37,37,37	0
56	MG	1A	4099	1/1	0.93	0.07	55,55,55,55	0
56	MG	2A	3880	1/1	0.93	0.13	63,63,63,63	0
56	MG	1A	3919	1/1	0.93	0.10	69,69,69,69	0
56	MG	2A	3580	1/1	0.93	0.11	45,45,45,45	0
56	MG	1a	1646	1/1	0.93	0.09	58,58,58,58	0
56	MG	1a	1647	1/1	0.93	0.10	40,40,40,40	0
56	MG	1A	3596	1/1	0.93	0.07	30,30,30,30	0
56	MG	2A	3061	1/1	0.93	0.30	58,58,58,58	0
56	MG	2l	202	1/1	0.93	0.17	63,63,63,63	0
56	MG	2A	3586	1/1	0.93	0.08	30,30,30,30	0
56	MG	2A	3587	1/1	0.93	0.06	34,34,34,34	0
56	MG	1A	4109	1/1	0.93	0.06	34,34,34,34	0
56	MG	2B	209	1/1	0.93	0.20	54,54,54,54	0
56	MG	2q	201	1/1	0.93	0.13	52,52,52,52	0
56	MG	2q	204	1/1	0.93	0.13	64,64,64,64	0
56	MG	1A	3922	1/1	0.93	0.13	58,58,58,58	0
56	MG	2A	3066	1/1	0.93	0.07	49,49,49,49	0
56	MG	2A	3302	1/1	0.93	0.13	65,65,65,65	0
56	MG	2A	3067	1/1	0.93	0.18	57,57,57,57	0
56	MG	1a	1651	1/1	0.93	0.11	46,46,46,46	0
56	MG	1A	3597	1/1	0.93	0.08	47,47,47,47	0
56	MG	1a	1654	1/1	0.93	0.20	52,52,52,52	0
56	MG	1A	3926	1/1	0.93	0.08	17,17,17,17	0
56	MG	2A	3609	1/1	0.93	0.14	68,68,68,68	0
56	MG	2A	3080	1/1	0.93	0.14	63,63,63,63	0
56	MG	1A	3749	1/1	0.93	0.07	18,18,18,18	0
56	MG	2D	308	1/1	0.93	0.07	48,48,48,48	0
56	MG	2E	301	1/1	0.93	0.09	55,55,55,55	0
56	MG	2E	302	1/1	0.93	0.07	56,56,56,56	0
56	MG	2x	107	1/1	0.93	0.12	57,57,57,57	0
56	MG	1A	3333	1/1	0.93	0.10	43,43,43,43	0
56	MG	1A	3754	1/1	0.93	0.13	47,47,47,47	0
56	MG	1B	209	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3617	1/1	0.93	0.18	43,43,43,43	0
56	MG	2y	107	1/1	0.93	0.10	65,65,65,65	0
57	K	2A	3428	1/1	0.93	0.10	63,63,63,63	0
56	MG	2F	304	1/1	0.93	0.10	56,56,56,56	0
56	MG	2A	3672	1/1	0.94	0.17	49,49,49,49	0
56	MG	2A	3405	1/1	0.94	0.10	56,56,56,56	0
56	MG	1a	1607	1/1	0.94	0.12	40,40,40,40	0
56	MG	1A	3360	1/1	0.94	0.07	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	28	104	1/1	0.94	0.20	46,46,46,46	0
56	MG	1A	3161	1/1	0.94	0.13	31,31,31,31	0
56	MG	1A	3230	1/1	0.94	0.33	32,32,32,32	0
56	MG	1A	3365	1/1	0.94	0.13	36,36,36,36	0
56	MG	2A	3201	1/1	0.94	0.12	53,53,53,53	0
56	MG	1w	106	1/1	0.94	0.15	54,54,54,54	0
56	MG	1A	3236	1/1	0.94	0.08	41,41,41,41	0
56	MG	1A	3308	1/1	0.94	0.09	53,53,53,53	0
56	MG	1a	1620	1/1	0.94	0.16	62,62,62,62	0
56	MG	1B	206	1/1	0.94	0.22	54,54,54,54	0
56	MG	2A	3688	1/1	0.94	0.09	61,61,61,61	0
56	MG	1x	102	1/1	0.94	0.08	46,46,46,46	0
56	MG	1x	103	1/1	0.94	0.19	58,58,58,58	0
56	MG	1A	3040	1/1	0.94	0.05	26,26,26,26	0
56	MG	1a	1624	1/1	0.94	0.07	44,44,44,44	0
56	MG	1A	3837	1/1	0.94	0.06	16,16,16,16	0
56	MG	2A	3697	1/1	0.94	0.11	48,48,48,48	0
56	MG	2A	3426	1/1	0.94	0.23	46,46,46,46	0
56	MG	2A	3699	1/1	0.94	0.13	61,61,61,61	0
56	MG	1a	1626	1/1	0.94	0.07	66,66,66,66	0
56	MG	2A	3430	1/1	0.94	0.10	54,54,54,54	0
56	MG	2A	3223	1/1	0.94	0.14	53,53,53,53	0
56	MG	1A	3839	1/1	0.94	0.07	11,11,11,11	0
56	MG	1A	3720	1/1	0.94	0.09	57,57,57,57	0
56	MG	1A	3177	1/1	0.94	0.14	49,49,49,49	0
56	MG	1B	215	1/1	0.94	0.07	44,44,44,44	0
56	MG	1A	3020	1/1	0.94	0.15	48,48,48,48	0
56	MG	1A	3615	1/1	0.94	0.07	40,40,40,40	0
56	MG	1A	3374	1/1	0.94	0.08	36,36,36,36	0
56	MG	1a	1637	1/1	0.94	0.12	44,44,44,44	0
56	MG	2a	3031	1/1	0.94	0.20	49,49,49,49	0
56	MG	1A	3005	1/1	0.94	0.10	36,36,36,36	0
56	MG	2A	3008	1/1	0.94	0.10	46,46,46,46	0
56	MG	2A	3014	1/1	0.94	0.10	54,54,54,54	0
56	MG	2A	3020	1/1	0.94	0.13	62,62,62,62	0
56	MG	2A	3717	1/1	0.94	0.13	51,51,51,51	0
56	MG	1A	3317	1/1	0.94	0.10	34,34,34,34	0
56	MG	2A	3719	1/1	0.94	0.08	35,35,35,35	0
56	MG	1B	224	1/1	0.94	0.11	47,47,47,47	0
56	MG	1A	3184	1/1	0.94	0.08	37,37,37,37	0
56	MG	1B	227	1/1	0.94	0.06	32,32,32,32	0
56	MG	1A	3133	1/1	0.94	0.13	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3987	1/1	0.94	0.06	22,22,22,22	0
56	MG	2A	3456	1/1	0.94	0.12	56,56,56,56	0
56	MG	1A	3990	1/1	0.94	0.07	41,41,41,41	0
56	MG	2a	3048	1/1	0.94	0.17	49,49,49,49	0
56	MG	1A	3861	1/1	0.94	0.07	39,39,39,39	0
56	MG	1A	3434	1/1	0.94	0.08	53,53,53,53	0
56	MG	2A	3467	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3469	1/1	0.94	0.07	49,49,49,49	0
56	MG	2A	3038	1/1	0.94	0.10	65,65,65,65	0
56	MG	2A	3741	1/1	0.94	0.16	48,48,48,48	0
56	MG	2a	3056	1/1	0.94	0.13	52,52,52,52	0
56	MG	1B	234	1/1	0.94	0.09	60,60,60,60	0
56	MG	2a	3059	1/1	0.94	0.19	59,59,59,59	0
56	MG	1A	3637	1/1	0.94	0.10	64,64,64,64	0
56	MG	2a	3062	1/1	0.94	0.08	45,45,45,45	0
56	MG	2a	3066	1/1	0.94	0.15	55,55,55,55	0
56	MG	1A	3189	1/1	0.94	0.24	31,31,31,31	0
56	MG	1A	3868	1/1	0.94	0.09	48,48,48,48	0
56	MG	1A	3869	1/1	0.94	0.09	43,43,43,43	0
56	MG	2a	3076	1/1	0.94	0.12	57,57,57,57	0
56	MG	1D	304	1/1	0.94	0.25	36,36,36,36	0
56	MG	2a	3080	1/1	0.94	0.17	39,39,39,39	0
56	MG	2A	3754	1/1	0.94	0.19	60,60,60,60	0
56	MG	2A	3755	1/1	0.94	0.06	38,38,38,38	0
56	MG	1A	3752	1/1	0.94	0.17	16,16,16,16	0
56	MG	2a	3086	1/1	0.94	0.17	60,60,60,60	0
56	MG	2A	3758	1/1	0.94	0.10	55,55,55,55	0
56	MG	1a	1666	1/1	0.94	0.30	50,50,50,50	0
56	MG	2A	3049	1/1	0.94	0.14	60,60,60,60	0
56	MG	1A	3644	1/1	0.94	0.08	40,40,40,40	0
56	MG	2A	3763	1/1	0.94	0.12	54,54,54,54	0
56	MG	1A	3436	1/1	0.94	0.14	57,57,57,57	0
56	MG	1A	3874	1/1	0.94	0.06	34,34,34,34	0
56	MG	2A	3492	1/1	0.94	0.06	46,46,46,46	0
56	MG	1A	3876	1/1	0.94	0.07	28,28,28,28	0
56	MG	2A	3057	1/1	0.94	0.15	53,53,53,53	0
56	MG	2A	3497	1/1	0.94	0.09	48,48,48,48	0
56	MG	2A	3771	1/1	0.94	0.07	62,62,62,62	0
56	MG	1a	1673	1/1	0.94	0.20	53,53,53,53	0
56	MG	1E	306	1/1	0.94	0.10	49,49,49,49	0
56	MG	2A	3501	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3775	1/1	0.94	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
56	MG	1a	1675	1/1	0.94	0.14	46,46,46,46	0
56	MG	1E	308	1/1	0.94	0.15	60,60,60,60	0
56	MG	2a	3114	1/1	0.94	0.27	61,61,61,61	0
56	MG	1A	3756	1/1	0.94	0.09	42,42,42,42	0
56	MG	1A	3437	1/1	0.94	0.08	33,33,33,33	0
56	MG	1A	3759	1/1	0.94	0.19	59,59,59,59	0
56	MG	1A	3536	1/1	0.94	0.10	55,55,55,55	0
56	MG	1F	302	1/1	0.94	0.18	25,25,25,25	0
56	MG	2A	3514	1/1	0.94	0.11	43,43,43,43	0
56	MG	2A	3073	1/1	0.94	0.15	58,58,58,58	0
56	MG	1F	303	1/1	0.94	0.19	28,28,28,28	0
56	MG	2A	3520	1/1	0.94	0.10	37,37,37,37	0
56	MG	1A	4018	1/1	0.94	0.11	56,56,56,56	0
56	MG	2a	3128	1/1	0.94	0.08	60,60,60,60	0
56	MG	2A	3805	1/1	0.94	0.09	67,67,67,67	0
56	MG	2A	3281	1/1	0.94	0.22	57,57,57,57	0
56	MG	1A	3894	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3895	1/1	0.94	0.10	52,52,52,52	0
56	MG	2A	3527	1/1	0.94	0.07	32,32,32,32	0
56	MG	1A	3761	1/1	0.94	0.14	44,44,44,44	0
56	MG	1a	1697	1/1	0.94	0.07	31,31,31,31	0
56	MG	2a	3144	1/1	0.94	0.08	61,61,61,61	0
56	MG	1F	313	1/1	0.94	0.13	57,57,57,57	0
56	MG	2A	3536	1/1	0.94	0.10	36,36,36,36	0
56	MG	1a	1700	1/1	0.94	0.14	50,50,50,50	0
56	MG	2a	3149	1/1	0.94	0.13	60,60,60,60	0
56	MG	1A	3767	1/1	0.94	0.10	23,23,23,23	0
56	MG	1A	4025	1/1	0.94	0.17	49,49,49,49	0
56	MG	1a	1703	1/1	0.94	0.10	50,50,50,50	0
56	MG	2A	3542	1/1	0.94	0.10	40,40,40,40	0
56	MG	1A	3138	1/1	0.94	0.07	36,36,36,36	0
56	MG	1A	3769	1/1	0.94	0.07	31,31,31,31	0
56	MG	2A	3094	1/1	0.94	0.11	37,37,37,37	0
56	MG	1A	3541	1/1	0.94	0.11	45,45,45,45	0
56	MG	1A	3774	1/1	0.94	0.10	34,34,34,34	0
56	MG	1A	3542	1/1	0.94	0.16	37,37,37,37	0
56	MG	2A	3831	1/1	0.94	0.11	55,55,55,55	0
56	MG	1A	3254	1/1	0.94	0.07	48,48,48,48	0
56	MG	2A	3556	1/1	0.94	0.16	53,53,53,53	0
56	MG	1A	3384	1/1	0.94	0.07	41,41,41,41	0
56	MG	2A	3836	1/1	0.94	0.14	58,58,58,58	0
56	MG	2A	3837	1/1	0.94	0.13	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1718	1/1	0.94	0.11	51,51,51,51	0
56	MG	1O	204	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3909	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3778	1/1	0.94	0.08	39,39,39,39	0
56	MG	2A	3843	1/1	0.94	0.13	60,60,60,60	0
56	MG	1A	3328	1/1	0.94	0.09	54,54,54,54	0
56	MG	2A	3308	1/1	0.94	0.22	65,65,65,65	0
56	MG	1A	3913	1/1	0.94	0.07	55,55,55,55	0
56	MG	1A	4047	1/1	0.94	0.05	32,32,32,32	0
56	MG	2A	3113	1/1	0.94	0.12	54,54,54,54	0
56	MG	1Q	207	1/1	0.94	0.07	32,32,32,32	0
56	MG	2A	3572	1/1	0.94	0.09	52,52,52,52	0
56	MG	1A	3663	1/1	0.94	0.11	43,43,43,43	0
56	MG	1A	4049	1/1	0.94	0.11	17,17,17,17	0
56	MG	1R	204	1/1	0.94	0.10	27,27,27,27	0
56	MG	1a	1742	1/1	0.94	0.12	69,69,69,69	0
56	MG	1S	202	1/1	0.94	0.11	46,46,46,46	0
56	MG	1a	1748	1/1	0.94	0.07	46,46,46,46	0
56	MG	2A	3125	1/1	0.94	0.16	37,37,37,37	0
56	MG	1A	3781	1/1	0.94	0.08	41,41,41,41	0
56	MG	1a	1750	1/1	0.94	0.10	67,67,67,67	0
56	MG	1A	4052	1/1	0.94	0.07	54,54,54,54	0
56	MG	1A	3388	1/1	0.94	0.12	38,38,38,38	0
56	MG	2A	3327	1/1	0.94	0.14	54,54,54,54	0
56	MG	1V	203	1/1	0.94	0.19	32,32,32,32	0
56	MG	1A	3193	1/1	0.94	0.09	39,39,39,39	0
56	MG	2A	3331	1/1	0.94	0.12	47,47,47,47	0
56	MG	1W	202	1/1	0.94	0.11	40,40,40,40	0
56	MG	2A	3138	1/1	0.94	0.06	50,50,50,50	0
56	MG	2A	3139	1/1	0.94	0.08	42,42,42,42	0
56	MG	2A	3595	1/1	0.94	0.07	49,49,49,49	0
56	MG	2A	3598	1/1	0.94	0.15	47,47,47,47	0
56	MG	1A	3390	1/1	0.94	0.09	40,40,40,40	0
56	MG	2a	3207	1/1	0.94	0.08	52,52,52,52	0
56	MG	1A	3259	1/1	0.94	0.09	42,42,42,42	0
56	MG	1X	104	1/1	0.94	0.17	38,38,38,38	0
56	MG	2A	3148	1/1	0.94	0.09	46,46,46,46	0
56	MG	2A	3608	1/1	0.94	0.07	30,30,30,30	0
56	MG	1A	3087	1/1	0.94	0.14	47,47,47,47	0
56	MG	1A	4062	1/1	0.94	0.08	49,49,49,49	0
56	MG	2a	3216	1/1	0.94	0.10	58,58,58,58	0
56	MG	2A	3611	1/1	0.94	0.07	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3923	1/1	0.94	0.12	57,57,57,57	0
56	MG	1A	4064	1/1	0.94	0.06	42,42,42,42	0
56	MG	2A	3153	1/1	0.94	0.13	47,47,47,47	0
56	MG	2A	3154	1/1	0.94	0.23	68,68,68,68	0
56	MG	1A	3677	1/1	0.94	0.09	63,63,63,63	0
56	MG	1A	3459	1/1	0.94	0.12	35,35,35,35	0
56	MG	2A	3157	1/1	0.94	0.07	56,56,56,56	0
56	MG	1a	1784	1/1	0.94	0.22	50,50,50,50	0
56	MG	1A	3930	1/1	0.94	0.10	24,24,24,24	0
56	MG	1A	3205	1/1	0.94	0.09	51,51,51,51	0
56	MG	2A	3623	1/1	0.94	0.21	63,63,63,63	0
56	MG	2A	3359	1/1	0.94	0.10	74,74,74,74	0
56	MG	2A	3360	1/1	0.94	0.16	52,52,52,52	0
56	MG	1A	3462	1/1	0.94	0.10	39,39,39,39	0
56	MG	2d	301	1/1	0.94	0.11	58,58,58,58	0
56	MG	2D	301	1/1	0.94	0.17	44,44,44,44	0
56	MG	10	108	1/1	0.94	0.09	54,54,54,54	0
56	MG	1A	3146	1/1	0.94	0.07	23,23,23,23	0
56	MG	2A	3366	1/1	0.94	0.34	61,61,61,61	0
56	MG	2A	3367	1/1	0.94	0.09	66,66,66,66	0
56	MG	1A	4080	1/1	0.94	0.15	42,42,42,42	0
56	MG	1A	3574	1/1	0.94	0.06	29,29,29,29	0
56	MG	11	104	1/1	0.94	0.06	41,41,41,41	0
56	MG	12	102	1/1	0.94	0.13	39,39,39,39	0
56	MG	1A	3038	1/1	0.94	0.22	34,34,34,34	0
56	MG	1A	3341	1/1	0.94	0.25	46,46,46,46	0
56	MG	1A	3102	1/1	0.94	0.25	31,31,31,31	0
56	MG	1a	1800	1/1	0.94	0.09	53,53,53,53	0
56	MG	1A	3215	1/1	0.94	0.07	31,31,31,31	0
56	MG	2A	3176	1/1	0.94	0.07	44,44,44,44	0
56	MG	2q	202	1/1	0.94	0.25	55,55,55,55	0
56	MG	2P	202	1/1	0.94	0.10	48,48,48,48	0
56	MG	2t	201	1/1	0.94	0.15	53,53,53,53	0
56	MG	1A	3152	1/1	0.94	0.24	28,28,28,28	0
56	MG	1A	3479	1/1	0.94	0.07	40,40,40,40	0
56	MG	2v	103	1/1	0.94	0.13	55,55,55,55	0
56	MG	1A	3220	1/1	0.94	0.18	29,29,29,29	0
56	MG	1A	3057	1/1	0.94	0.08	30,30,30,30	0
56	MG	2w	103	1/1	0.94	0.09	75,75,75,75	0
56	MG	2A	3383	1/1	0.94	0.16	53,53,53,53	0
56	MG	1A	4096	1/1	0.94	0.11	55,55,55,55	0
56	MG	2w	106	1/1	0.94	0.13	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2w	107	1/1	0.94	0.08	58,58,58,58	0
56	MG	1A	3296	1/1	0.94	0.11	50,50,50,50	0
56	MG	2U	202	1/1	0.94	0.05	46,46,46,46	0
56	MG	1A	4098	1/1	0.94	0.12	41,41,41,41	0
56	MG	2A	3656	1/1	0.94	0.06	63,63,63,63	0
56	MG	2A	3390	1/1	0.94	0.25	49,49,49,49	0
56	MG	1a	1811	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3702	1/1	0.94	0.12	51,51,51,51	0
56	MG	1A	3954	1/1	0.94	0.07	32,32,32,32	0
56	MG	1A	4105	1/1	0.94	0.12	45,45,45,45	0
56	MG	1A	4107	1/1	0.94	0.20	48,48,48,48	0
56	MG	1a	1601	1/1	0.94	0.15	55,55,55,55	0
56	MG	1a	1602	1/1	0.94	0.11	46,46,46,46	0
56	MG	2y	105	1/1	0.94	0.21	67,67,67,67	0
56	MG	1A	3354	1/1	0.94	0.13	23,23,23,23	0
56	MG	1A	3226	1/1	0.94	0.07	58,58,58,58	0
56	MG	2A	3193	1/1	0.94	0.08	51,51,51,51	0
59	SCM	1a	1815	23/23	0.94	0.11	45,48,54,57	0
56	MG	2A	3404	1/1	0.94	0.23	53,53,53,53	0
56	MG	1A	3297	1/1	0.95	0.12	32,32,32,32	0
56	MG	1A	3004	1/1	0.95	0.06	23,23,23,23	0
56	MG	2W	202	1/1	0.95	0.23	42,42,42,42	0
56	MG	1A	3755	1/1	0.95	0.06	29,29,29,29	0
56	MG	1A	3137	1/1	0.95	0.13	43,43,43,43	0
56	MG	1A	3238	1/1	0.95	0.07	44,44,44,44	0
56	MG	1A	3304	1/1	0.95	0.16	44,44,44,44	0
56	MG	10	105	1/1	0.95	0.13	43,43,43,43	0
56	MG	1A	3098	1/1	0.95	0.12	26,26,26,26	0
56	MG	1A	4072	1/1	0.95	0.14	48,48,48,48	0
56	MG	1a	1786	1/1	0.95	0.11	42,42,42,42	0
56	MG	21	102	1/1	0.95	0.13	60,60,60,60	0
56	MG	1A	3026	1/1	0.95	0.23	57,57,57,57	0
56	MG	1A	3914	1/1	0.95	0.07	59,59,59,59	0
56	MG	1A	3764	1/1	0.95	0.05	31,31,31,31	0
56	MG	1a	1790	1/1	0.95	0.08	61,61,61,61	0
56	MG	1A	3623	1/1	0.95	0.14	47,47,47,47	0
56	MG	1A	3624	1/1	0.95	0.13	46,46,46,46	0
56	MG	1A	3429	1/1	0.95	0.09	46,46,46,46	0
56	MG	1A	3770	1/1	0.95	0.04	23,23,23,23	0
56	MG	1A	3627	1/1	0.95	0.07	18,18,18,18	0
56	MG	1A	3309	1/1	0.95	0.13	49,49,49,49	0
56	MG	1A	3500	1/1	0.95	0.12	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3091	1/1	0.95	0.12	39,39,39,39	0
56	MG	1a	1799	1/1	0.95	0.14	54,54,54,54	0
56	MG	1A	3636	1/1	0.95	0.10	20,20,20,20	0
56	MG	2A	3391	1/1	0.95	0.20	40,40,40,40	0
56	MG	2a	3006	1/1	0.95	0.06	47,47,47,47	0
56	MG	1A	3502	1/1	0.95	0.06	54,54,54,54	0
56	MG	1A	3311	1/1	0.95	0.10	29,29,29,29	0
56	MG	1A	3643	1/1	0.95	0.09	15,15,15,15	0
56	MG	2A	3396	1/1	0.95	0.33	64,64,64,64	0
56	MG	1a	1805	1/1	0.95	0.15	48,48,48,48	0
56	MG	1A	3106	1/1	0.95	0.20	35,35,35,35	0
56	MG	1A	3645	1/1	0.95	0.07	25,25,25,25	0
56	MG	2A	3677	1/1	0.95	0.07	41,41,41,41	0
56	MG	1A	3507	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3510	1/1	0.95	0.19	31,31,31,31	0
56	MG	1A	4104	1/1	0.95	0.10	43,43,43,43	0
56	MG	1A	3245	1/1	0.95	0.17	37,37,37,37	0
56	MG	1A	3514	1/1	0.95	0.07	44,44,44,44	0
56	MG	1A	3150	1/1	0.95	0.13	37,37,37,37	0
56	MG	1A	3525	1/1	0.95	0.12	36,36,36,36	0
56	MG	1e	201	1/1	0.95	0.09	69,69,69,69	0
56	MG	1f	201	1/1	0.95	0.19	43,43,43,43	0
56	MG	1f	202	1/1	0.95	0.08	56,56,56,56	0
56	MG	1a	1604	1/1	0.95	0.08	42,42,42,42	0
56	MG	1A	3527	1/1	0.95	0.12	28,28,28,28	0
56	MG	1m	3001	1/1	0.95	0.10	48,48,48,48	0
56	MG	2A	3413	1/1	0.95	0.18	49,49,49,49	0
56	MG	1A	4113	1/1	0.95	0.10	48,48,48,48	0
56	MG	1A	3528	1/1	0.95	0.27	33,33,33,33	0
56	MG	2A	3416	1/1	0.95	0.15	45,45,45,45	0
56	MG	1A	3949	1/1	0.95	0.10	13,13,13,13	0
56	MG	2A	3196	1/1	0.95	0.12	64,64,64,64	0
56	MG	2A	3702	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3793	1/1	0.95	0.08	39,39,39,39	0
56	MG	1A	3197	1/1	0.95	0.12	30,30,30,30	0
56	MG	1w	101	1/1	0.95	0.08	49,49,49,49	0
56	MG	1B	203	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3533	1/1	0.95	0.08	39,39,39,39	0
56	MG	1A	3955	1/1	0.95	0.07	32,32,32,32	0
56	MG	1B	208	1/1	0.95	0.27	46,46,46,46	0
56	MG	2A	3205	1/1	0.95	0.15	61,61,61,61	0
56	MG	1a	1622	1/1	0.95	0.22	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3045	1/1	0.95	0.04	20,20,20,20	0
56	MG	2A	3209	1/1	0.95	0.26	45,45,45,45	0
56	MG	2A	3210	1/1	0.95	0.16	45,45,45,45	0
56	MG	1A	3958	1/1	0.95	0.07	37,37,37,37	0
56	MG	1A	3665	1/1	0.95	0.12	34,34,34,34	0
56	MG	2A	3213	1/1	0.95	0.24	54,54,54,54	0
56	MG	1A	3800	1/1	0.95	0.09	17,17,17,17	0
56	MG	2A	3215	1/1	0.95	0.07	52,52,52,52	0
56	MG	1a	1628	1/1	0.95	0.22	63,63,63,63	0
56	MG	2A	3441	1/1	0.95	0.12	37,37,37,37	0
56	MG	2A	3442	1/1	0.95	0.14	43,43,43,43	0
56	MG	1A	3801	1/1	0.95	0.11	18,18,18,18	0
56	MG	2A	3445	1/1	0.95	0.06	58,58,58,58	0
56	MG	2A	3725	1/1	0.95	0.11	51,51,51,51	0
56	MG	2A	3726	1/1	0.95	0.07	54,54,54,54	0
56	MG	2a	3070	1/1	0.95	0.11	51,51,51,51	0
56	MG	2A	3218	1/1	0.95	0.29	46,46,46,46	0
56	MG	2A	3728	1/1	0.95	0.15	55,55,55,55	0
56	MG	2a	3073	1/1	0.95	0.15	56,56,56,56	0
56	MG	1A	3253	1/1	0.95	0.08	47,47,47,47	0
56	MG	2a	3077	1/1	0.95	0.12	50,50,50,50	0
56	MG	2A	3221	1/1	0.95	0.14	56,56,56,56	0
56	MG	2A	3449	1/1	0.95	0.11	44,44,44,44	0
56	MG	1B	216	1/1	0.95	0.11	41,41,41,41	0
56	MG	2a	3082	1/1	0.95	0.21	61,61,61,61	0
56	MG	2A	3735	1/1	0.95	0.08	45,45,45,45	0
56	MG	1A	3963	1/1	0.95	0.07	60,60,60,60	0
56	MG	1A	3803	1/1	0.95	0.10	54,54,54,54	0
56	MG	2A	3226	1/1	0.95	0.15	66,66,66,66	0
56	MG	2A	3744	1/1	0.95	0.09	64,64,64,64	0
56	MG	2a	3091	1/1	0.95	0.08	50,50,50,50	0
56	MG	1A	3965	1/1	0.95	0.06	52,52,52,52	0
56	MG	1x	111	1/1	0.95	0.24	59,59,59,59	0
56	MG	1A	3966	1/1	0.95	0.07	68,68,68,68	0
56	MG	1A	3538	1/1	0.95	0.12	35,35,35,35	0
56	MG	2A	3749	1/1	0.95	0.06	69,69,69,69	0
56	MG	2A	3750	1/1	0.95	0.10	56,56,56,56	0
56	MG	2A	3461	1/1	0.95	0.20	54,54,54,54	0
56	MG	2A	3464	1/1	0.95	0.13	49,49,49,49	0
56	MG	1A	3203	1/1	0.95	0.07	33,33,33,33	0
56	MG	1A	3046	1/1	0.95	0.10	29,29,29,29	0
56	MG	1a	1643	1/1	0.95	0.10	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3672	1/1	0.95	0.11	58,58,58,58	0
56	MG	1A	3153	1/1	0.95	0.12	23,23,23,23	0
56	MG	2a	3108	1/1	0.95	0.17	46,46,46,46	0
56	MG	1A	3326	1/1	0.95	0.09	39,39,39,39	0
56	MG	2A	3009	1/1	0.95	0.10	54,54,54,54	0
56	MG	1A	3448	1/1	0.95	0.16	47,47,47,47	0
56	MG	2A	3475	1/1	0.95	0.10	37,37,37,37	0
56	MG	2A	3476	1/1	0.95	0.10	46,46,46,46	0
56	MG	2A	3017	1/1	0.95	0.07	54,54,54,54	0
56	MG	1A	3327	1/1	0.95	0.17	53,53,53,53	0
56	MG	2A	3768	1/1	0.95	0.09	68,68,68,68	0
56	MG	2A	3022	1/1	0.95	0.14	40,40,40,40	0
56	MG	1A	3821	1/1	0.95	0.14	36,36,36,36	0
56	MG	2a	3121	1/1	0.95	0.10	63,63,63,63	0
56	MG	2A	3244	1/1	0.95	0.20	62,62,62,62	0
56	MG	1A	3683	1/1	0.95	0.07	43,43,43,43	0
56	MG	2a	3125	1/1	0.95	0.07	64,64,64,64	0
56	MG	2A	3487	1/1	0.95	0.06	33,33,33,33	0
56	MG	2A	3246	1/1	0.95	0.07	55,55,55,55	0
56	MG	1B	235	1/1	0.95	0.07	36,36,36,36	0
56	MG	1B	236	1/1	0.95	0.07	30,30,30,30	0
56	MG	2A	3030	1/1	0.95	0.07	40,40,40,40	0
56	MG	1A	3450	1/1	0.95	0.18	40,40,40,40	0
56	MG	2A	3781	1/1	0.95	0.06	34,34,34,34	0
56	MG	1A	3550	1/1	0.95	0.07	24,24,24,24	0
56	MG	1A	3262	1/1	0.95	0.15	31,31,31,31	0
56	MG	1a	1658	1/1	0.95	0.15	49,49,49,49	0
56	MG	1A	3391	1/1	0.95	0.12	48,48,48,48	0
56	MG	1a	1661	1/1	0.95	0.13	60,60,60,60	0
56	MG	2A	3795	1/1	0.95	0.08	47,47,47,47	0
56	MG	1A	3829	1/1	0.95	0.07	16,16,16,16	0
56	MG	2a	3148	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	3988	1/1	0.95	0.06	41,41,41,41	0
56	MG	2A	3041	1/1	0.95	0.09	49,49,49,49	0
56	MG	2A	3507	1/1	0.95	0.09	55,55,55,55	0
56	MG	2A	3804	1/1	0.95	0.08	71,71,71,71	0
56	MG	2a	3155	1/1	0.95	0.07	38,38,38,38	0
56	MG	2A	3510	1/1	0.95	0.08	47,47,47,47	0
56	MG	1A	3830	1/1	0.95	0.10	22,22,22,22	0
56	MG	1a	1668	1/1	0.95	0.25	42,42,42,42	0
56	MG	1A	3455	1/1	0.95	0.10	53,53,53,53	0
56	MG	1A	3834	1/1	0.95	0.06	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3690	1/1	0.95	0.10	37,37,37,37	0
56	MG	1A	3329	1/1	0.95	0.10	48,48,48,48	0
56	MG	1E	307	1/1	0.95	0.06	27,27,27,27	0
56	MG	1A	3063	1/1	0.95	0.12	40,40,40,40	0
56	MG	2A	3051	1/1	0.95	0.09	50,50,50,50	0
56	MG	1A	3693	1/1	0.95	0.08	24,24,24,24	0
56	MG	2A	3818	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3819	1/1	0.95	0.07	36,36,36,36	0
56	MG	1A	3694	1/1	0.95	0.06	29,29,29,29	0
56	MG	2a	3172	1/1	0.95	0.10	61,61,61,61	0
56	MG	1A	3159	1/1	0.95	0.20	30,30,30,30	0
56	MG	2A	3528	1/1	0.95	0.08	47,47,47,47	0
56	MG	2A	3056	1/1	0.95	0.09	65,65,65,65	0
56	MG	2A	3532	1/1	0.95	0.08	48,48,48,48	0
56	MG	2A	3273	1/1	0.95	0.11	59,59,59,59	0
56	MG	1a	1678	1/1	0.95	0.11	55,55,55,55	0
56	MG	1A	3560	1/1	0.95	0.06	23,23,23,23	0
56	MG	1A	4004	1/1	0.95	0.06	29,29,29,29	0
56	MG	1A	4005	1/1	0.95	0.12	62,62,62,62	0
56	MG	1a	1683	1/1	0.95	0.16	51,51,51,51	0
56	MG	2A	3540	1/1	0.95	0.11	40,40,40,40	0
56	MG	1A	3564	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	3566	1/1	0.95	0.05	26,26,26,26	0
56	MG	2A	3065	1/1	0.95	0.13	47,47,47,47	0
56	MG	1A	3126	1/1	0.95	0.07	34,34,34,34	0
56	MG	2A	3545	1/1	0.95	0.12	34,34,34,34	0
56	MG	1a	1691	1/1	0.95	0.20	45,45,45,45	0
56	MG	2A	3841	1/1	0.95	0.10	56,56,56,56	0
56	MG	2a	3192	1/1	0.95	0.16	56,56,56,56	0
56	MG	2A	3071	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3278	1/1	0.95	0.09	54,54,54,54	0
56	MG	2A	3552	1/1	0.95	0.10	55,55,55,55	0
56	MG	2A	3553	1/1	0.95	0.07	61,61,61,61	0
56	MG	1A	3464	1/1	0.95	0.12	47,47,47,47	0
56	MG	2A	3849	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3074	1/1	0.95	0.08	50,50,50,50	0
56	MG	1A	3279	1/1	0.95	0.11	52,52,52,52	0
56	MG	1A	3576	1/1	0.95	0.06	24,24,24,24	0
56	MG	1A	3163	1/1	0.95	0.10	49,49,49,49	0
56	MG	1a	1699	1/1	0.95	0.09	50,50,50,50	0
56	MG	1A	3164	1/1	0.95	0.18	29,29,29,29	0
56	MG	1A	3402	1/1	0.95	0.09	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3583	1/1	0.95	0.12	41,41,41,41	0
56	MG	1A	3287	1/1	0.95	0.05	33,33,33,33	0
56	MG	1N	201	1/1	0.95	0.12	34,34,34,34	0
56	MG	1A	3585	1/1	0.95	0.07	10,10,10,10	0
56	MG	2A	3090	1/1	0.95	0.12	56,56,56,56	0
56	MG	1A	3722	1/1	0.95	0.06	26,26,26,26	0
56	MG	1A	3474	1/1	0.95	0.14	34,34,34,34	0
56	MG	2a	3214	1/1	0.95	0.10	58,58,58,58	0
56	MG	1A	4029	1/1	0.95	0.11	51,51,51,51	0
56	MG	2A	3307	1/1	0.95	0.15	54,54,54,54	0
56	MG	2a	3217	1/1	0.95	0.08	49,49,49,49	0
56	MG	2A	3575	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3478	1/1	0.95	0.12	29,29,29,29	0
56	MG	1P	204	1/1	0.95	0.11	44,44,44,44	0
56	MG	1A	3730	1/1	0.95	0.05	27,27,27,27	0
56	MG	2A	3097	1/1	0.95	0.12	40,40,40,40	0
56	MG	1Q	204	1/1	0.95	0.18	50,50,50,50	0
56	MG	2A	3101	1/1	0.95	0.18	57,57,57,57	0
56	MG	1a	1723	1/1	0.95	0.12	56,56,56,56	0
56	MG	1A	3288	1/1	0.95	0.08	43,43,43,43	0
56	MG	1A	3882	1/1	0.95	0.07	34,34,34,34	0
56	MG	1a	1726	1/1	0.95	0.11	60,60,60,60	0
56	MG	2a	3229	1/1	0.95	0.08	59,59,59,59	0
56	MG	1A	3592	1/1	0.95	0.05	28,28,28,28	0
56	MG	1A	3480	1/1	0.95	0.07	39,39,39,39	0
56	MG	2A	3589	1/1	0.95	0.14	45,45,45,45	0
56	MG	1A	4040	1/1	0.95	0.06	16,16,16,16	0
56	MG	1a	1731	1/1	0.95	0.08	47,47,47,47	0
56	MG	1R	202	1/1	0.95	0.08	40,40,40,40	0
56	MG	1A	3221	1/1	0.95	0.07	44,44,44,44	0
56	MG	1a	1736	1/1	0.95	0.07	50,50,50,50	0
56	MG	2A	3596	1/1	0.95	0.14	61,61,61,61	0
56	MG	1S	201	1/1	0.95	0.15	36,36,36,36	0
56	MG	2A	3599	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	4043	1/1	0.95	0.06	17,17,17,17	0
56	MG	2A	3604	1/1	0.95	0.09	65,65,65,65	0
56	MG	1A	3893	1/1	0.95	0.06	62,62,62,62	0
56	MG	1U	203	1/1	0.95	0.06	25,25,25,25	0
56	MG	2A	3334	1/1	0.95	0.13	54,54,54,54	0
56	MG	2A	3121	1/1	0.95	0.08	47,47,47,47	0
56	MG	1a	1745	1/1	0.95	0.06	50,50,50,50	0
56	MG	1A	3739	1/1	0.95	0.05	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3166	1/1	0.95	0.07	36,36,36,36	0
56	MG	2D	302	1/1	0.95	0.08	44,44,44,44	0
56	MG	2D	303	1/1	0.95	0.14	50,50,50,50	0
56	MG	1A	3897	1/1	0.95	0.06	35,35,35,35	0
56	MG	2A	3340	1/1	0.95	0.15	52,52,52,52	0
56	MG	2A	3127	1/1	0.95	0.09	54,54,54,54	0
56	MG	1a	1753	1/1	0.95	0.14	58,58,58,58	0
56	MG	1a	1754	1/1	0.95	0.07	50,50,50,50	0
56	MG	2A	3344	1/1	0.95	0.18	55,55,55,55	0
56	MG	2A	3131	1/1	0.95	0.16	47,47,47,47	0
56	MG	2E	309	1/1	0.95	0.12	57,57,57,57	0
56	MG	2E	310	1/1	0.95	0.16	63,63,63,63	0
56	MG	2A	3346	1/1	0.95	0.09	47,47,47,47	0
56	MG	1A	4050	1/1	0.95	0.10	45,45,45,45	0
56	MG	2F	303	1/1	0.95	0.09	37,37,37,37	0
56	MG	1V	209	1/1	0.95	0.06	33,33,33,33	0
56	MG	1A	3349	1/1	0.95	0.06	41,41,41,41	0
56	MG	2A	3136	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3175	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3353	1/1	0.95	0.12	44,44,44,44	0
56	MG	1A	3292	1/1	0.95	0.17	51,51,51,51	0
56	MG	2A	3355	1/1	0.95	0.17	52,52,52,52	0
56	MG	2Q	202	1/1	0.95	0.08	64,64,64,64	0
56	MG	1A	3128	1/1	0.95	0.11	33,33,33,33	0
56	MG	2A	3141	1/1	0.95	0.13	51,51,51,51	0
56	MG	2y	103	1/1	0.95	0.17	63,63,63,63	0
56	MG	2A	3633	1/1	0.95	0.08	51,51,51,51	0
56	MG	2A	3142	1/1	0.95	0.13	64,64,64,64	0
56	MG	2T	202	1/1	0.95	0.08	57,57,57,57	0
56	MG	2A	3143	1/1	0.95	0.06	53,53,53,53	0
56	MG	2A	3636	1/1	0.95	0.10	45,45,45,45	0
56	MG	1A	3131	1/1	0.95	0.30	27,27,27,27	0
56	MG	2V	201	1/1	0.95	0.28	45,45,45,45	0
56	MG	1A	3639	1/1	0.96	0.08	34,34,34,34	0
56	MG	2A	3667	1/1	0.96	0.08	51,51,51,51	0
56	MG	2A	3668	1/1	0.96	0.10	56,56,56,56	0
56	MG	1a	1813	1/1	0.96	0.08	61,61,61,61	0
56	MG	17	103	1/1	0.96	0.09	27,27,27,27	0
56	MG	25	104	1/1	0.96	0.08	59,59,59,59	0
56	MG	18	101	1/1	0.96	0.06	40,40,40,40	0
56	MG	26	101	1/1	0.96	0.12	40,40,40,40	0
56	MG	27	101	1/1	0.96	0.15	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4094	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	4095	1/1	0.96	0.05	61,61,61,61	0
56	MG	1A	3927	1/1	0.96	0.07	29,29,29,29	0
56	MG	1A	3929	1/1	0.96	0.06	10,10,10,10	0
56	MG	1A	3060	1/1	0.96	0.06	48,48,48,48	0
56	MG	2A	3194	1/1	0.96	0.12	42,42,42,42	0
56	MG	1A	3642	1/1	0.96	0.08	34,34,34,34	0
56	MG	1A	3529	1/1	0.96	0.06	49,49,49,49	0
56	MG	1A	3305	1/1	0.96	0.11	47,47,47,47	0
56	MG	1A	3531	1/1	0.96	0.18	53,53,53,53	0
56	MG	1A	4106	1/1	0.96	0.11	37,37,37,37	0
56	MG	1A	3241	1/1	0.96	0.12	36,36,36,36	0
56	MG	1A	3534	1/1	0.96	0.09	37,37,37,37	0
56	MG	2A	3420	1/1	0.96	0.14	42,42,42,42	0
56	MG	2A	3202	1/1	0.96	0.12	43,43,43,43	0
56	MG	1a	1611	1/1	0.96	0.08	57,57,57,57	0
56	MG	1A	3651	1/1	0.96	0.06	24,24,24,24	0
56	MG	1A	4110	1/1	0.96	0.15	37,37,37,37	0
56	MG	1a	1615	1/1	0.96	0.07	39,39,39,39	0
56	MG	1A	3783	1/1	0.96	0.12	31,31,31,31	0
56	MG	1A	4112	1/1	0.96	0.08	48,48,48,48	0
56	MG	1A	3944	1/1	0.96	0.07	46,46,46,46	0
56	MG	1A	3186	1/1	0.96	0.31	23,23,23,23	0
56	MG	1A	3444	1/1	0.96	0.07	41,41,41,41	0
56	MG	1A	3537	1/1	0.96	0.13	29,29,29,29	0
56	MG	1x	104	1/1	0.96	0.14	51,51,51,51	0
56	MG	1A	3378	1/1	0.96	0.06	39,39,39,39	0
56	MG	1A	3145	1/1	0.96	0.19	35,35,35,35	0
56	MG	1B	204	1/1	0.96	0.12	36,36,36,36	0
56	MG	1A	3789	1/1	0.96	0.08	41,41,41,41	0
56	MG	1A	3447	1/1	0.96	0.06	43,43,43,43	0
56	MG	1A	3660	1/1	0.96	0.13	38,38,38,38	0
56	MG	1a	1630	1/1	0.96	0.07	38,38,38,38	0
56	MG	1A	3661	1/1	0.96	0.06	35,35,35,35	0
56	MG	1y	101	1/1	0.96	0.16	39,39,39,39	0
56	MG	2A	3225	1/1	0.96	0.13	63,63,63,63	0
56	MG	1A	3079	1/1	0.96	0.10	38,38,38,38	0
56	MG	1A	3544	1/1	0.96	0.13	34,34,34,34	0
56	MG	2a	3035	1/1	0.96	0.34	55,55,55,55	0
56	MG	1A	3796	1/1	0.96	0.06	19,19,19,19	0
56	MG	2A	3003	1/1	0.96	0.20	54,54,54,54	0
56	MG	1A	3081	1/1	0.96	0.30	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3192	1/1	0.96	0.11	25,25,25,25	0
56	MG	1A	3250	1/1	0.96	0.09	45,45,45,45	0
56	MG	1A	3315	1/1	0.96	0.28	32,32,32,32	0
56	MG	1B	218	1/1	0.96	0.14	38,38,38,38	0
56	MG	2A	3010	1/1	0.96	0.08	47,47,47,47	0
56	MG	2A	3459	1/1	0.96	0.06	51,51,51,51	0
56	MG	1a	1641	1/1	0.96	0.15	43,43,43,43	0
56	MG	2A	3015	1/1	0.96	0.13	50,50,50,50	0
56	MG	2A	3463	1/1	0.96	0.07	67,67,67,67	0
56	MG	1A	3149	1/1	0.96	0.16	30,30,30,30	0
56	MG	1a	1644	1/1	0.96	0.12	43,43,43,43	0
56	MG	2A	3240	1/1	0.96	0.10	66,66,66,66	0
56	MG	1A	3194	1/1	0.96	0.10	17,17,17,17	0
56	MG	2A	3732	1/1	0.96	0.05	33,33,33,33	0
56	MG	2A	3733	1/1	0.96	0.10	35,35,35,35	0
56	MG	1A	3196	1/1	0.96	0.06	50,50,50,50	0
56	MG	1A	3804	1/1	0.96	0.18	25,25,25,25	0
56	MG	2a	3058	1/1	0.96	0.09	55,55,55,55	0
56	MG	1A	3968	1/1	0.96	0.07	40,40,40,40	0
56	MG	1A	3675	1/1	0.96	0.05	21,21,21,21	0
56	MG	2A	3028	1/1	0.96	0.09	43,43,43,43	0
56	MG	1B	226	1/1	0.96	0.07	31,31,31,31	0
56	MG	1A	3107	1/1	0.96	0.11	36,36,36,36	0
56	MG	1A	3809	1/1	0.96	0.06	27,27,27,27	0
56	MG	1a	1653	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3109	1/1	0.96	0.04	25,25,25,25	0
56	MG	1A	3811	1/1	0.96	0.04	19,19,19,19	0
56	MG	2a	3074	1/1	0.96	0.14	48,48,48,48	0
56	MG	2A	3483	1/1	0.96	0.12	44,44,44,44	0
56	MG	1A	3556	1/1	0.96	0.09	27,27,27,27	0
56	MG	2a	3078	1/1	0.96	0.07	64,64,64,64	0
56	MG	1A	3557	1/1	0.96	0.08	45,45,45,45	0
56	MG	2A	3753	1/1	0.96	0.09	53,53,53,53	0
56	MG	1A	3682	1/1	0.96	0.06	35,35,35,35	0
56	MG	1A	3201	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3260	1/1	0.96	0.21	29,29,29,29	0
56	MG	2A	3491	1/1	0.96	0.09	46,46,46,46	0
56	MG	2a	3085	1/1	0.96	0.17	51,51,51,51	0
56	MG	1a	1662	1/1	0.96	0.15	46,46,46,46	0
56	MG	2A	3044	1/1	0.96	0.11	26,26,26,26	0
56	MG	2a	3089	1/1	0.96	0.16	46,46,46,46	0
56	MG	2A	3494	1/1	0.96	0.10	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3762	1/1	0.96	0.07	46,46,46,46	0
56	MG	1a	1663	1/1	0.96	0.17	59,59,59,59	0
56	MG	1A	3111	1/1	0.96	0.12	25,25,25,25	0
56	MG	1A	3561	1/1	0.96	0.15	9,9,9,9	0
56	MG	1A	3687	1/1	0.96	0.14	25,25,25,25	0
56	MG	1A	3466	1/1	0.96	0.12	36,36,36,36	0
56	MG	1A	3565	1/1	0.96	0.05	19,19,19,19	0
56	MG	2A	3503	1/1	0.96	0.09	44,44,44,44	0
56	MG	1D	306	1/1	0.96	0.09	38,38,38,38	0
56	MG	2a	3101	1/1	0.96	0.12	40,40,40,40	0
56	MG	1D	310	1/1	0.96	0.16	33,33,33,33	0
56	MG	1D	311	1/1	0.96	0.19	21,21,21,21	0
56	MG	1A	3263	1/1	0.96	0.12	21,21,21,21	0
56	MG	2A	3508	1/1	0.96	0.12	40,40,40,40	0
56	MG	2A	3509	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3055	1/1	0.96	0.18	49,49,49,49	0
56	MG	1A	3266	1/1	0.96	0.27	37,37,37,37	0
56	MG	2a	3110	1/1	0.96	0.10	49,49,49,49	0
56	MG	2A	3779	1/1	0.96	0.06	65,65,65,65	0
56	MG	1A	3269	1/1	0.96	0.18	19,19,19,19	0
56	MG	2A	3274	1/1	0.96	0.14	58,58,58,58	0
56	MG	1A	3270	1/1	0.96	0.14	38,38,38,38	0
56	MG	2A	3783	1/1	0.96	0.11	51,51,51,51	0
56	MG	2A	3516	1/1	0.96	0.06	41,41,41,41	0
56	MG	2A	3517	1/1	0.96	0.06	42,42,42,42	0
56	MG	2A	3787	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3788	1/1	0.96	0.12	54,54,54,54	0
56	MG	1E	302	1/1	0.96	0.13	25,25,25,25	0
56	MG	1A	3204	1/1	0.96	0.14	43,43,43,43	0
56	MG	2A	3794	1/1	0.96	0.12	53,53,53,53	0
56	MG	2A	3278	1/1	0.96	0.14	47,47,47,47	0
56	MG	1A	3996	1/1	0.96	0.10	59,59,59,59	0
56	MG	2A	3062	1/1	0.96	0.10	53,53,53,53	0
56	MG	1A	3476	1/1	0.96	0.28	31,31,31,31	0
56	MG	1A	3272	1/1	0.96	0.13	33,33,33,33	0
56	MG	1A	3016	1/1	0.96	0.15	38,38,38,38	0
56	MG	1A	3207	1/1	0.96	0.10	32,32,32,32	0
56	MG	1a	1685	1/1	0.96	0.12	35,35,35,35	0
56	MG	2a	3134	1/1	0.96	0.07	45,45,45,45	0
56	MG	2A	3069	1/1	0.96	0.20	45,45,45,45	0
56	MG	2A	3533	1/1	0.96	0.07	34,34,34,34	0
56	MG	2A	3070	1/1	0.96	0.16	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3156	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3092	1/1	0.96	0.10	29,29,29,29	0
56	MG	1a	1690	1/1	0.96	0.12	58,58,58,58	0
56	MG	1A	3704	1/1	0.96	0.12	30,30,30,30	0
56	MG	1A	3409	1/1	0.96	0.22	37,37,37,37	0
56	MG	1A	3280	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3850	1/1	0.96	0.22	16,16,16,16	0
56	MG	1A	3588	1/1	0.96	0.07	20,20,20,20	0
56	MG	2A	3821	1/1	0.96	0.06	59,59,59,59	0
56	MG	1F	311	1/1	0.96	0.16	46,46,46,46	0
56	MG	1A	3589	1/1	0.96	0.06	23,23,23,23	0
56	MG	1A	3210	1/1	0.96	0.11	33,33,33,33	0
56	MG	2A	3085	1/1	0.96	0.07	46,46,46,46	0
56	MG	2a	3159	1/1	0.96	0.20	47,47,47,47	0
56	MG	2A	3301	1/1	0.96	0.06	50,50,50,50	0
56	MG	1A	3212	1/1	0.96	0.20	47,47,47,47	0
56	MG	1G	201	1/1	0.96	0.08	32,32,32,32	0
56	MG	1A	3413	1/1	0.96	0.08	47,47,47,47	0
56	MG	1A	3117	1/1	0.96	0.06	30,30,30,30	0
56	MG	2a	3165	1/1	0.96	0.21	60,60,60,60	0
56	MG	1A	3864	1/1	0.96	0.07	37,37,37,37	0
56	MG	2A	3832	1/1	0.96	0.12	45,45,45,45	0
56	MG	1A	3717	1/1	0.96	0.05	17,17,17,17	0
56	MG	1A	3718	1/1	0.96	0.06	18,18,18,18	0
56	MG	2A	3560	1/1	0.96	0.07	50,50,50,50	0
56	MG	2A	3310	1/1	0.96	0.14	52,52,52,52	0
56	MG	1A	3867	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3563	1/1	0.96	0.15	54,54,54,54	0
56	MG	1A	3121	1/1	0.96	0.30	32,32,32,32	0
56	MG	1a	1715	1/1	0.96	0.08	47,47,47,47	0
56	MG	1A	3721	1/1	0.96	0.08	35,35,35,35	0
56	MG	1a	1717	1/1	0.96	0.16	56,56,56,56	0
56	MG	1A	3491	1/1	0.96	0.21	29,29,29,29	0
56	MG	1a	1721	1/1	0.96	0.10	52,52,52,52	0
56	MG	1A	3871	1/1	0.96	0.07	30,30,30,30	0
56	MG	2A	3846	1/1	0.96	0.17	44,44,44,44	0
56	MG	1A	3093	1/1	0.96	0.07	39,39,39,39	0
56	MG	2A	3105	1/1	0.96	0.09	51,51,51,51	0
56	MG	1A	3727	1/1	0.96	0.06	23,23,23,23	0
56	MG	1A	3064	1/1	0.96	0.10	20,20,20,20	0
56	MG	2A	3323	1/1	0.96	0.09	49,49,49,49	0
56	MG	2A	3324	1/1	0.96	0.14	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1Q	201	1/1	0.96	0.06	30,30,30,30	0
56	MG	1A	3165	1/1	0.96	0.07	41,41,41,41	0
56	MG	1Q	203	1/1	0.96	0.05	48,48,48,48	0
56	MG	1A	3877	1/1	0.96	0.06	63,63,63,63	0
56	MG	2A	3329	1/1	0.96	0.07	57,57,57,57	0
56	MG	1A	4037	1/1	0.96	0.10	54,54,54,54	0
56	MG	1A	3732	1/1	0.96	0.05	30,30,30,30	0
56	MG	2A	3862	1/1	0.96	0.06	70,70,70,70	0
56	MG	2A	3864	1/1	0.96	0.16	63,63,63,63	0
56	MG	1a	1733	1/1	0.96	0.05	72,72,72,72	0
56	MG	2A	3333	1/1	0.96	0.20	48,48,48,48	0
56	MG	1a	1734	1/1	0.96	0.05	45,45,45,45	0
56	MG	1A	3356	1/1	0.96	0.07	46,46,46,46	0
56	MG	1A	4042	1/1	0.96	0.08	32,32,32,32	0
56	MG	1a	1737	1/1	0.96	0.09	73,73,73,73	0
56	MG	1A	3884	1/1	0.96	0.09	49,49,49,49	0
56	MG	1A	3734	1/1	0.96	0.06	14,14,14,14	0
56	MG	2A	3593	1/1	0.96	0.14	56,56,56,56	0
56	MG	1a	1740	1/1	0.96	0.07	52,52,52,52	0
56	MG	2a	3208	1/1	0.96	0.08	58,58,58,58	0
56	MG	1A	4046	1/1	0.96	0.06	29,29,29,29	0
56	MG	1A	3357	1/1	0.96	0.32	27,27,27,27	0
56	MG	1A	3423	1/1	0.96	0.07	45,45,45,45	0
56	MG	1a	1747	1/1	0.96	0.10	53,53,53,53	0
56	MG	2A	3601	1/1	0.96	0.07	56,56,56,56	0
56	MG	2A	3602	1/1	0.96	0.09	36,36,36,36	0
56	MG	1S	203	1/1	0.96	0.05	51,51,51,51	0
56	MG	1A	3066	1/1	0.96	0.17	31,31,31,31	0
56	MG	1A	3738	1/1	0.96	0.06	43,43,43,43	0
56	MG	1U	204	1/1	0.96	0.08	42,42,42,42	0
56	MG	1U	205	1/1	0.96	0.12	26,26,26,26	0
56	MG	1U	206	1/1	0.96	0.11	26,26,26,26	0
56	MG	1A	3608	1/1	0.96	0.05	26,26,26,26	0
56	MG	1A	3741	1/1	0.96	0.11	17,17,17,17	0
56	MG	1U	213	1/1	0.96	0.06	28,28,28,28	0
56	MG	2A	3612	1/1	0.96	0.11	48,48,48,48	0
56	MG	1a	1770	1/1	0.96	0.06	58,58,58,58	0
56	MG	1A	3609	1/1	0.96	0.11	25,25,25,25	0
56	MG	1A	3610	1/1	0.96	0.09	18,18,18,18	0
56	MG	2A	3145	1/1	0.96	0.19	42,42,42,42	0
56	MG	1a	1773	1/1	0.96	0.16	47,47,47,47	0
56	MG	1A	4055	1/1	0.96	0.11	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3425	1/1	0.96	0.13	33,33,33,33	0
56	MG	2A	3362	1/1	0.96	0.12	49,49,49,49	0
56	MG	2B	218	1/1	0.96	0.18	64,64,64,64	0
56	MG	1A	4057	1/1	0.96	0.08	38,38,38,38	0
56	MG	2A	3364	1/1	0.96	0.07	50,50,50,50	0
56	MG	1X	101	1/1	0.96	0.20	27,27,27,27	0
56	MG	2A	3624	1/1	0.96	0.16	54,54,54,54	0
56	MG	1A	3028	1/1	0.96	0.15	24,24,24,24	0
56	MG	1A	3748	1/1	0.96	0.05	14,14,14,14	0
56	MG	2f	202	1/1	0.96	0.10	61,61,61,61	0
56	MG	1A	4060	1/1	0.96	0.08	46,46,46,46	0
56	MG	1A	4061	1/1	0.96	0.06	69,69,69,69	0
56	MG	1A	3427	1/1	0.96	0.20	37,37,37,37	0
56	MG	2E	304	1/1	0.96	0.16	56,56,56,56	0
56	MG	2E	305	1/1	0.96	0.07	29,29,29,29	0
56	MG	1A	3428	1/1	0.96	0.11	40,40,40,40	0
56	MG	2A	3631	1/1	0.96	0.06	48,48,48,48	0
56	MG	1A	3050	1/1	0.96	0.10	32,32,32,32	0
56	MG	2A	3158	1/1	0.96	0.13	30,30,30,30	0
56	MG	1A	4065	1/1	0.96	0.07	44,44,44,44	0
56	MG	1A	4066	1/1	0.96	0.12	36,36,36,36	0
56	MG	2q	203	1/1	0.96	0.05	64,64,64,64	0
56	MG	1A	3074	1/1	0.96	0.09	24,24,24,24	0
56	MG	1A	3509	1/1	0.96	0.14	22,22,22,22	0
56	MG	2F	305	1/1	0.96	0.22	38,38,38,38	0
56	MG	1A	3910	1/1	0.96	0.08	48,48,48,48	0
56	MG	2A	3639	1/1	0.96	0.12	37,37,37,37	0
56	MG	2A	3640	1/1	0.96	0.09	46,46,46,46	0
56	MG	2O	201	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3298	1/1	0.96	0.12	45,45,45,45	0
56	MG	2A	3380	1/1	0.96	0.04	45,45,45,45	0
56	MG	1A	3757	1/1	0.96	0.09	55,55,55,55	0
56	MG	1A	3626	1/1	0.96	0.06	43,43,43,43	0
56	MG	1A	3099	1/1	0.96	0.22	43,43,43,43	0
56	MG	1l	103	1/1	0.96	0.09	32,32,32,32	0
56	MG	1A	3628	1/1	0.96	0.05	26,26,26,26	0
56	MG	1l	105	1/1	0.96	0.13	41,41,41,41	0
56	MG	2A	3388	1/1	0.96	0.19	37,37,37,37	0
56	MG	2A	3389	1/1	0.96	0.20	45,45,45,45	0
56	MG	1A	3300	1/1	0.96	0.13	41,41,41,41	0
56	MG	1A	4082	1/1	0.96	0.08	49,49,49,49	0
56	MG	1A	3763	1/1	0.96	0.07	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3139	1/1	0.96	0.20	21,21,21,21	0
56	MG	1A	3519	1/1	0.96	0.20	44,44,44,44	0
56	MG	2A	3395	1/1	0.96	0.20	40,40,40,40	0
56	MG	15	103	1/1	0.96	0.17	29,29,29,29	0
56	MG	2A	3659	1/1	0.96	0.09	52,52,52,52	0
56	MG	1A	4087	1/1	0.96	0.05	62,62,62,62	0
56	MG	15	105	1/1	0.96	0.25	27,27,27,27	0
56	MG	1A	3635	1/1	0.96	0.07	15,15,15,15	0
57	K	1A	3515	1/1	0.96	0.05	47,47,47,47	0
56	MG	1A	3182	1/1	0.96	0.10	44,44,44,44	0
58	ZN	2n	501	1/1	0.96	0.06	90,90,90,90	0
56	MG	1A	3372	1/1	0.96	0.20	44,44,44,44	0
56	MG	1A	3638	1/1	0.96	0.06	16,16,16,16	0
56	MG	1A	3892	1/1	0.97	0.06	53,53,53,53	0
56	MG	28	103	1/1	0.97	0.05	44,44,44,44	0
56	MG	1A	3125	1/1	0.97	0.25	32,32,32,32	0
56	MG	1A	3595	1/1	0.97	0.04	24,24,24,24	0
56	MG	1A	3022	1/1	0.97	0.09	34,34,34,34	0
56	MG	2A	3693	1/1	0.97	0.06	55,55,55,55	0
56	MG	1A	3896	1/1	0.97	0.04	57,57,57,57	0
56	MG	1A	4067	1/1	0.97	0.07	43,43,43,43	0
56	MG	2A	3429	1/1	0.97	0.10	19,19,19,19	0
56	MG	1A	3080	1/1	0.97	0.18	25,25,25,25	0
56	MG	1A	4069	1/1	0.97	0.13	40,40,40,40	0
56	MG	1A	3178	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3899	1/1	0.97	0.06	45,45,45,45	0
56	MG	11	101	1/1	0.97	0.13	28,28,28,28	0
56	MG	1A	3129	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	3056	1/1	0.97	0.14	45,45,45,45	0
56	MG	1A	3132	1/1	0.97	0.11	37,37,37,37	0
56	MG	1A	4076	1/1	0.97	0.12	45,45,45,45	0
56	MG	12	101	1/1	0.97	0.04	41,41,41,41	0
56	MG	1A	3041	1/1	0.97	0.17	23,23,23,23	0
56	MG	13	102	1/1	0.97	0.10	35,35,35,35	0
56	MG	13	103	1/1	0.97	0.06	36,36,36,36	0
56	MG	2A	3443	1/1	0.97	0.07	45,45,45,45	0
56	MG	2a	3020	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	4078	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	4079	1/1	0.97	0.12	32,32,32,32	0
56	MG	1A	3744	1/1	0.97	0.05	32,32,32,32	0
56	MG	2A	3207	1/1	0.97	0.08	43,43,43,43	0
56	MG	1A	3396	1/1	0.97	0.05	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3604	1/1	0.97	0.06	16,16,16,16	0
56	MG	1A	3397	1/1	0.97	0.07	30,30,30,30	0
56	MG	1A	4084	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	3314	1/1	0.97	0.20	35,35,35,35	0
56	MG	15	107	1/1	0.97	0.12	30,30,30,30	0
56	MG	1A	3185	1/1	0.97	0.17	23,23,23,23	0
56	MG	1A	3136	1/1	0.97	0.05	40,40,40,40	0
56	MG	1A	3611	1/1	0.97	0.05	15,15,15,15	0
56	MG	2A	3458	1/1	0.97	0.07	44,44,44,44	0
56	MG	1A	3612	1/1	0.97	0.04	15,15,15,15	0
56	MG	2a	3036	1/1	0.97	0.06	50,50,50,50	0
56	MG	1A	3248	1/1	0.97	0.14	60,60,60,60	0
56	MG	1w	103	1/1	0.97	0.09	51,51,51,51	0
56	MG	2A	3462	1/1	0.97	0.12	53,53,53,53	0
56	MG	1A	3249	1/1	0.97	0.14	16,16,16,16	0
56	MG	18	103	1/1	0.97	0.16	37,37,37,37	0
56	MG	1A	3494	1/1	0.97	0.04	17,17,17,17	0
56	MG	1A	3058	1/1	0.97	0.16	49,49,49,49	0
56	MG	1A	3404	1/1	0.97	0.17	42,42,42,42	0
56	MG	1A	3622	1/1	0.97	0.04	24,24,24,24	0
56	MG	2A	3737	1/1	0.97	0.06	56,56,56,56	0
56	MG	1A	3920	1/1	0.97	0.10	39,39,39,39	0
56	MG	1A	3762	1/1	0.97	0.17	26,26,26,26	0
56	MG	1A	3101	1/1	0.97	0.04	18,18,18,18	0
56	MG	2A	3742	1/1	0.97	0.08	58,58,58,58	0
56	MG	1A	4100	1/1	0.97	0.09	34,34,34,34	0
56	MG	1A	3322	1/1	0.97	0.04	35,35,35,35	0
56	MG	1A	4103	1/1	0.97	0.14	31,31,31,31	0
56	MG	2a	3054	1/1	0.97	0.05	65,65,65,65	0
56	MG	1A	3765	1/1	0.97	0.05	19,19,19,19	0
56	MG	1A	3925	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3323	1/1	0.97	0.06	44,44,44,44	0
56	MG	1A	3042	1/1	0.97	0.08	23,23,23,23	0
56	MG	1a	1613	1/1	0.97	0.12	38,38,38,38	0
56	MG	2a	3060	1/1	0.97	0.12	47,47,47,47	0
56	MG	1A	3141	1/1	0.97	0.19	35,35,35,35	0
56	MG	1A	3043	1/1	0.97	0.08	26,26,26,26	0
56	MG	1A	3771	1/1	0.97	0.05	28,28,28,28	0
56	MG	1A	3255	1/1	0.97	0.07	25,25,25,25	0
56	MG	2a	3068	1/1	0.97	0.06	51,51,51,51	0
56	MG	2a	3069	1/1	0.97	0.10	65,65,65,65	0
56	MG	1a	1618	1/1	0.97	0.06	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3773	1/1	0.97	0.11	48,48,48,48	0
56	MG	1A	3631	1/1	0.97	0.05	18,18,18,18	0
56	MG	1A	3936	1/1	0.97	0.10	32,32,32,32	0
56	MG	1A	3632	1/1	0.97	0.03	15,15,15,15	0
56	MG	2a	3075	1/1	0.97	0.19	56,56,56,56	0
56	MG	2A	3007	1/1	0.97	0.07	32,32,32,32	0
56	MG	1A	4117	1/1	0.97	0.06	48,48,48,48	0
56	MG	1A	3256	1/1	0.97	0.18	42,42,42,42	0
56	MG	1A	3940	1/1	0.97	0.08	11,11,11,11	0
56	MG	2A	3500	1/1	0.97	0.07	44,44,44,44	0
56	MG	2A	3011	1/1	0.97	0.05	43,43,43,43	0
56	MG	2A	3012	1/1	0.97	0.05	40,40,40,40	0
56	MG	2A	3013	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3257	1/1	0.97	0.17	46,46,46,46	0
56	MG	1A	3508	1/1	0.97	0.13	27,27,27,27	0
56	MG	1A	3144	1/1	0.97	0.19	22,22,22,22	0
56	MG	2a	3087	1/1	0.97	0.08	55,55,55,55	0
56	MG	2A	3257	1/1	0.97	0.12	46,46,46,46	0
56	MG	1A	3003	1/1	0.97	0.08	20,20,20,20	0
56	MG	1A	3511	1/1	0.97	0.13	29,29,29,29	0
56	MG	2A	3776	1/1	0.97	0.04	49,49,49,49	0
56	MG	1A	3512	1/1	0.97	0.06	24,24,24,24	0
56	MG	1A	3640	1/1	0.97	0.06	26,26,26,26	0
56	MG	1B	211	1/1	0.97	0.20	48,48,48,48	0
56	MG	1A	3031	1/1	0.97	0.08	24,24,24,24	0
56	MG	1A	3950	1/1	0.97	0.05	22,22,22,22	0
56	MG	2A	3515	1/1	0.97	0.09	37,37,37,37	0
56	MG	2A	3029	1/1	0.97	0.07	47,47,47,47	0
56	MG	2A	3784	1/1	0.97	0.08	27,27,27,27	0
56	MG	1A	3335	1/1	0.97	0.12	39,39,39,39	0
56	MG	1A	3198	1/1	0.97	0.06	36,36,36,36	0
56	MG	2a	3103	1/1	0.97	0.10	41,41,41,41	0
56	MG	1A	3518	1/1	0.97	0.04	11,11,11,11	0
56	MG	2A	3033	1/1	0.97	0.10	44,44,44,44	0
56	MG	2A	3034	1/1	0.97	0.10	21,21,21,21	0
56	MG	1a	1640	1/1	0.97	0.04	41,41,41,41	0
56	MG	2A	3793	1/1	0.97	0.07	55,55,55,55	0
56	MG	2A	3523	1/1	0.97	0.07	39,39,39,39	0
56	MG	1A	3337	1/1	0.97	0.12	33,33,33,33	0
56	MG	2a	3111	1/1	0.97	0.27	48,48,48,48	0
56	MG	1a	1642	1/1	0.97	0.12	48,48,48,48	0
56	MG	2A	3526	1/1	0.97	0.06	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3520	1/1	0.97	0.21	36,36,36,36	0
56	MG	1A	3521	1/1	0.97	0.28	39,39,39,39	0
56	MG	2A	3529	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3523	1/1	0.97	0.14	26,26,26,26	0
56	MG	1A	3524	1/1	0.97	0.13	26,26,26,26	0
56	MG	1A	3108	1/1	0.97	0.12	33,33,33,33	0
56	MG	1A	3526	1/1	0.97	0.22	27,27,27,27	0
56	MG	1A	3795	1/1	0.97	0.20	35,35,35,35	0
56	MG	1A	3339	1/1	0.97	0.24	44,44,44,44	0
56	MG	1A	3265	1/1	0.97	0.12	28,28,28,28	0
56	MG	2a	3124	1/1	0.97	0.10	69,69,69,69	0
56	MG	1A	3200	1/1	0.97	0.08	31,31,31,31	0
56	MG	2A	3284	1/1	0.97	0.11	61,61,61,61	0
56	MG	2A	3814	1/1	0.97	0.06	40,40,40,40	0
56	MG	1A	3343	1/1	0.97	0.24	31,31,31,31	0
56	MG	2A	3816	1/1	0.97	0.04	44,44,44,44	0
56	MG	2a	3130	1/1	0.97	0.05	63,63,63,63	0
56	MG	1B	230	1/1	0.97	0.05	47,47,47,47	0
56	MG	1A	3267	1/1	0.97	0.15	19,19,19,19	0
56	MG	1A	3047	1/1	0.97	0.05	27,27,27,27	0
56	MG	1A	3110	1/1	0.97	0.06	36,36,36,36	0
56	MG	2a	3135	1/1	0.97	0.12	47,47,47,47	0
56	MG	2a	3137	1/1	0.97	0.05	59,59,59,59	0
56	MG	2a	3138	1/1	0.97	0.06	56,56,56,56	0
56	MG	1A	3973	1/1	0.97	0.04	46,46,46,46	0
56	MG	2a	3141	1/1	0.97	0.05	46,46,46,46	0
56	MG	1A	3033	1/1	0.97	0.20	22,22,22,22	0
56	MG	2A	3547	1/1	0.97	0.12	46,46,46,46	0
56	MG	2A	3548	1/1	0.97	0.14	56,56,56,56	0
56	MG	1a	1660	1/1	0.97	0.17	50,50,50,50	0
56	MG	1A	3113	1/1	0.97	0.16	26,26,26,26	0
56	MG	1A	3073	1/1	0.97	0.15	35,35,35,35	0
56	MG	1A	3806	1/1	0.97	0.08	34,34,34,34	0
56	MG	1A	3807	1/1	0.97	0.05	34,34,34,34	0
56	MG	1A	3274	1/1	0.97	0.04	26,26,26,26	0
56	MG	1D	303	1/1	0.97	0.16	40,40,40,40	0
56	MG	1A	3353	1/1	0.97	0.13	18,18,18,18	0
56	MG	1D	305	1/1	0.97	0.06	11,11,11,11	0
56	MG	1A	3540	1/1	0.97	0.09	44,44,44,44	0
56	MG	1D	308	1/1	0.97	0.12	31,31,31,31	0
56	MG	1D	309	1/1	0.97	0.12	40,40,40,40	0
56	MG	2A	3304	1/1	0.97	0.07	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3154	1/1	0.97	0.13	36,36,36,36	0
56	MG	1A	3674	1/1	0.97	0.05	32,32,32,32	0
56	MG	1A	3813	1/1	0.97	0.05	37,37,37,37	0
56	MG	1D	313	1/1	0.97	0.09	30,30,30,30	0
56	MG	1A	3276	1/1	0.97	0.05	40,40,40,40	0
56	MG	1A	3543	1/1	0.97	0.11	29,29,29,29	0
56	MG	1A	3989	1/1	0.97	0.06	32,32,32,32	0
56	MG	2A	3075	1/1	0.97	0.07	49,49,49,49	0
56	MG	1A	3025	1/1	0.97	0.09	34,34,34,34	0
56	MG	2A	3848	1/1	0.97	0.07	52,52,52,52	0
56	MG	1E	303	1/1	0.97	0.10	22,22,22,22	0
56	MG	2A	3078	1/1	0.97	0.05	48,48,48,48	0
56	MG	1A	3440	1/1	0.97	0.16	31,31,31,31	0
56	MG	1A	3017	1/1	0.97	0.05	41,41,41,41	0
56	MG	1A	3211	1/1	0.97	0.07	40,40,40,40	0
56	MG	1A	3823	1/1	0.97	0.15	25,25,25,25	0
56	MG	2A	3083	1/1	0.97	0.20	42,42,42,42	0
56	MG	1a	1688	1/1	0.97	0.09	52,52,52,52	0
56	MG	1A	3118	1/1	0.97	0.28	26,26,26,26	0
56	MG	2A	3086	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3160	1/1	0.97	0.06	26,26,26,26	0
56	MG	1A	3826	1/1	0.97	0.05	32,32,32,32	0
56	MG	1A	3551	1/1	0.97	0.08	26,26,26,26	0
56	MG	2A	3863	1/1	0.97	0.07	48,48,48,48	0
56	MG	1A	3363	1/1	0.97	0.06	33,33,33,33	0
56	MG	1A	3286	1/1	0.97	0.21	48,48,48,48	0
56	MG	1A	4002	1/1	0.97	0.09	22,22,22,22	0
56	MG	1F	306	1/1	0.97	0.13	32,32,32,32	0
56	MG	1F	307	1/1	0.97	0.16	23,23,23,23	0
56	MG	1F	308	1/1	0.97	0.30	34,34,34,34	0
56	MG	1A	3366	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	3119	1/1	0.97	0.12	27,27,27,27	0
56	MG	2A	3098	1/1	0.97	0.07	44,44,44,44	0
56	MG	2A	3099	1/1	0.97	0.06	37,37,37,37	0
56	MG	1A	4006	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	4007	1/1	0.97	0.06	34,34,34,34	0
56	MG	1A	4008	1/1	0.97	0.15	10,10,10,10	0
56	MG	1A	3832	1/1	0.97	0.07	39,39,39,39	0
56	MG	1a	1710	1/1	0.97	0.11	43,43,43,43	0
56	MG	1F	315	1/1	0.97	0.09	40,40,40,40	0
56	MG	1A	3216	1/1	0.97	0.09	30,30,30,30	0
56	MG	1A	3162	1/1	0.97	0.14	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3120	1/1	0.97	0.27	35,35,35,35	0
56	MG	1A	4014	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	3454	1/1	0.97	0.15	57,57,57,57	0
56	MG	1A	4016	1/1	0.97	0.05	41,41,41,41	0
56	MG	1A	3077	1/1	0.97	0.27	25,25,25,25	0
56	MG	1A	3078	1/1	0.97	0.07	30,30,30,30	0
56	MG	2A	3351	1/1	0.97	0.14	42,42,42,42	0
56	MG	1N	202	1/1	0.97	0.07	32,32,32,32	0
56	MG	1N	203	1/1	0.97	0.06	33,33,33,33	0
56	MG	2A	3117	1/1	0.97	0.07	47,47,47,47	0
56	MG	1N	204	1/1	0.97	0.19	31,31,31,31	0
56	MG	1N	205	1/1	0.97	0.09	41,41,41,41	0
56	MG	1A	3457	1/1	0.97	0.19	20,20,20,20	0
56	MG	2A	3122	1/1	0.97	0.14	49,49,49,49	0
56	MG	1A	3458	1/1	0.97	0.17	28,28,28,28	0
56	MG	1A	3844	1/1	0.97	0.04	22,22,22,22	0
56	MG	1A	3293	1/1	0.97	0.07	32,32,32,32	0
56	MG	1A	3294	1/1	0.97	0.08	26,26,26,26	0
56	MG	1P	201	1/1	0.97	0.18	24,24,24,24	0
56	MG	2A	3128	1/1	0.97	0.15	40,40,40,40	0
56	MG	1P	202	1/1	0.97	0.15	26,26,26,26	0
56	MG	1A	3847	1/1	0.97	0.07	41,41,41,41	0
56	MG	2D	304	1/1	0.97	0.07	30,30,30,30	0
56	MG	1A	3568	1/1	0.97	0.12	34,34,34,34	0
56	MG	1A	3851	1/1	0.97	0.06	51,51,51,51	0
56	MG	2D	307	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3569	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3853	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3224	1/1	0.97	0.09	35,35,35,35	0
56	MG	2E	303	1/1	0.97	0.11	41,41,41,41	0
56	MG	1A	3856	1/1	0.97	0.11	29,29,29,29	0
56	MG	1a	1743	1/1	0.97	0.05	59,59,59,59	0
56	MG	1A	3573	1/1	0.97	0.04	17,17,17,17	0
56	MG	2A	3140	1/1	0.97	0.06	30,30,30,30	0
56	MG	2E	308	1/1	0.97	0.05	42,42,42,42	0
56	MG	1A	4034	1/1	0.97	0.14	28,28,28,28	0
56	MG	1A	3124	1/1	0.97	0.08	59,59,59,59	0
56	MG	1A	3228	1/1	0.97	0.15	24,24,24,24	0
56	MG	1A	3171	1/1	0.97	0.12	23,23,23,23	0
56	MG	1A	4038	1/1	0.97	0.10	60,60,60,60	0
56	MG	1a	1751	1/1	0.97	0.06	48,48,48,48	0
56	MG	1a	1752	1/1	0.97	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3646	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3863	1/1	0.97	0.14	44,44,44,44	0
56	MG	1A	3172	1/1	0.97	0.10	15,15,15,15	0
56	MG	2A	3385	1/1	0.97	0.13	28,28,28,28	0
56	MG	1a	1755	1/1	0.97	0.05	40,40,40,40	0
56	MG	1T	201	1/1	0.97	0.07	53,53,53,53	0
56	MG	1a	1759	1/1	0.97	0.07	56,56,56,56	0
56	MG	1a	1761	1/1	0.97	0.06	69,69,69,69	0
56	MG	1a	1762	1/1	0.97	0.09	55,55,55,55	0
56	MG	2R	201	1/1	0.97	0.17	45,45,45,45	0
56	MG	1A	3579	1/1	0.97	0.06	26,26,26,26	0
56	MG	1A	3467	1/1	0.97	0.09	41,41,41,41	0
56	MG	1a	1766	1/1	0.97	0.05	61,61,61,61	0
56	MG	1A	3468	1/1	0.97	0.24	29,29,29,29	0
56	MG	1A	3231	1/1	0.97	0.04	22,22,22,22	0
56	MG	1A	3719	1/1	0.97	0.07	28,28,28,28	0
56	MG	1U	207	1/1	0.97	0.23	32,32,32,32	0
56	MG	1U	208	1/1	0.97	0.18	26,26,26,26	0
56	MG	1U	209	1/1	0.97	0.06	26,26,26,26	0
56	MG	1A	3232	1/1	0.97	0.22	27,27,27,27	0
56	MG	1A	3233	1/1	0.97	0.13	23,23,23,23	0
56	MG	1A	3586	1/1	0.97	0.18	54,54,54,54	0
56	MG	2A	3167	1/1	0.97	0.07	55,55,55,55	0
56	MG	1a	1779	1/1	0.97	0.08	47,47,47,47	0
56	MG	1V	201	1/1	0.97	0.12	17,17,17,17	0
56	MG	1A	3723	1/1	0.97	0.04	19,19,19,19	0
56	MG	2A	3171	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3234	1/1	0.97	0.11	33,33,33,33	0
56	MG	1A	3725	1/1	0.97	0.07	38,38,38,38	0
56	MG	1A	3726	1/1	0.97	0.08	49,49,49,49	0
56	MG	1W	205	1/1	0.97	0.08	24,24,24,24	0
56	MG	1A	3879	1/1	0.97	0.09	31,31,31,31	0
56	MG	1W	207	1/1	0.97	0.05	43,43,43,43	0
56	MG	1A	3473	1/1	0.97	0.14	21,21,21,21	0
56	MG	1A	3386	1/1	0.97	0.17	41,41,41,41	0
56	MG	25	105	1/1	0.97	0.09	46,46,46,46	0
56	MG	1A	3729	1/1	0.97	0.10	47,47,47,47	0
56	MG	1A	3475	1/1	0.97	0.14	30,30,30,30	0
58	ZN	2Y	501	1/1	0.97	0.05	103,103,103,103	0
56	MG	1A	3387	1/1	0.97	0.17	33,33,33,33	0
56	MG	1A	3477	1/1	0.97	0.10	33,33,33,33	0
56	MG	1Z	302	1/1	0.97	0.04	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3713	1/1	0.98	0.12	23,23,23,23	0
56	MG	1A	3460	1/1	0.98	0.06	30,30,30,30	0
56	MG	2A	3455	1/1	0.98	0.09	30,30,30,30	0
56	MG	1A	3928	1/1	0.98	0.06	28,28,28,28	0
56	MG	1A	3616	1/1	0.98	0.05	15,15,15,15	0
56	MG	2A	3852	1/1	0.98	0.11	61,61,61,61	0
56	MG	1a	1610	1/1	0.98	0.06	51,51,51,51	0
56	MG	1A	3222	1/1	0.98	0.07	43,43,43,43	0
56	MG	1E	311	1/1	0.98	0.08	18,18,18,18	0
56	MG	1A	3331	1/1	0.98	0.05	43,43,43,43	0
56	MG	1E	313	1/1	0.98	0.10	33,33,33,33	0
56	MG	1A	3932	1/1	0.98	0.11	34,34,34,34	0
56	MG	1F	301	1/1	0.98	0.12	29,29,29,29	0
56	MG	2a	3093	1/1	0.98	0.06	54,54,54,54	0
56	MG	2A	3465	1/1	0.98	0.06	56,56,56,56	0
56	MG	1A	3620	1/1	0.98	0.07	20,20,20,20	0
56	MG	1A	3621	1/1	0.98	0.03	21,21,21,21	0
56	MG	2A	3468	1/1	0.98	0.09	43,43,43,43	0
56	MG	1F	304	1/1	0.98	0.14	26,26,26,26	0
56	MG	2A	3112	1/1	0.98	0.17	50,50,50,50	0
56	MG	1A	3819	1/1	0.98	0.11	27,27,27,27	0
56	MG	1A	3174	1/1	0.98	0.09	30,30,30,30	0
56	MG	1A	3937	1/1	0.98	0.03	38,38,38,38	0
56	MG	1A	3013	1/1	0.98	0.07	20,20,20,20	0
56	MG	1A	3334	1/1	0.98	0.21	49,49,49,49	0
56	MG	1A	3225	1/1	0.98	0.29	30,30,30,30	0
56	MG	1A	3277	1/1	0.98	0.04	32,32,32,32	0
56	MG	1a	1627	1/1	0.98	0.05	18,18,18,18	0
56	MG	2A	3479	1/1	0.98	0.08	33,33,33,33	0
56	MG	2A	3480	1/1	0.98	0.05	36,36,36,36	0
56	MG	1A	3034	1/1	0.98	0.17	26,26,26,26	0
56	MG	1A	3943	1/1	0.98	0.05	31,31,31,31	0
56	MG	1A	3227	1/1	0.98	0.15	24,24,24,24	0
56	MG	1A	3135	1/1	0.98	0.04	11,11,11,11	0
56	MG	1A	3053	1/1	0.98	0.05	26,26,26,26	0
56	MG	1a	1803	1/1	0.98	0.05	45,45,45,45	0
56	MG	1A	4070	1/1	0.98	0.05	41,41,41,41	0
56	MG	1A	3104	1/1	0.98	0.23	21,21,21,21	0
56	MG	1A	3547	1/1	0.98	0.06	16,16,16,16	0
56	MG	2A	3683	1/1	0.98	0.03	44,44,44,44	0
56	MG	1A	3342	1/1	0.98	0.07	45,45,45,45	0
56	MG	1A	3105	1/1	0.98	0.04	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3023	1/1	0.98	0.04	16,16,16,16	0
56	MG	2A	3134	1/1	0.98	0.08	34,34,34,34	0
56	MG	2A	3496	1/1	0.98	0.04	35,35,35,35	0
56	MG	2A	3689	1/1	0.98	0.05	25,25,25,25	0
56	MG	1A	3408	1/1	0.98	0.13	37,37,37,37	0
56	MG	1A	3953	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3183	1/1	0.98	0.13	28,28,28,28	0
56	MG	1A	3838	1/1	0.98	0.04	16,16,16,16	0
56	MG	1A	3956	1/1	0.98	0.04	24,24,24,24	0
56	MG	1A	3140	1/1	0.98	0.19	26,26,26,26	0
56	MG	1A	3235	1/1	0.98	0.12	46,46,46,46	0
56	MG	1O	203	1/1	0.98	0.06	36,36,36,36	0
56	MG	1A	3036	1/1	0.98	0.07	23,23,23,23	0
56	MG	2A	3700	1/1	0.98	0.04	56,56,56,56	0
56	MG	2a	3136	1/1	0.98	0.08	64,64,64,64	0
56	MG	1k	201	1/1	0.98	0.11	35,35,35,35	0
56	MG	1A	3007	1/1	0.98	0.03	29,29,29,29	0
56	MG	1A	3843	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3187	1/1	0.98	0.19	21,21,21,21	0
56	MG	1A	3415	1/1	0.98	0.10	38,38,38,38	0
56	MG	1A	3352	1/1	0.98	0.17	30,30,30,30	0
56	MG	1A	3646	1/1	0.98	0.05	17,17,17,17	0
56	MG	1A	3848	1/1	0.98	0.07	39,39,39,39	0
56	MG	1A	3849	1/1	0.98	0.09	33,33,33,33	0
56	MG	1A	3746	1/1	0.98	0.06	32,32,32,32	0
56	MG	1A	3969	1/1	0.98	0.06	27,27,27,27	0
56	MG	1A	3239	1/1	0.98	0.23	26,26,26,26	0
56	MG	1A	3143	1/1	0.98	0.13	24,24,24,24	0
56	MG	2a	3151	1/1	0.98	0.10	49,49,49,49	0
56	MG	1A	3563	1/1	0.98	0.10	26,26,26,26	0
56	MG	2a	3153	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3751	1/1	0.98	0.06	22,22,22,22	0
56	MG	1A	3975	1/1	0.98	0.07	33,33,33,33	0
56	MG	1R	203	1/1	0.98	0.18	28,28,28,28	0
56	MG	1A	3855	1/1	0.98	0.04	34,34,34,34	0
56	MG	1A	3039	1/1	0.98	0.17	24,24,24,24	0
56	MG	1A	4102	1/1	0.98	0.04	63,63,63,63	0
56	MG	1a	1667	1/1	0.98	0.12	33,33,33,33	0
56	MG	1A	3420	1/1	0.98	0.14	40,40,40,40	0
56	MG	2F	306	1/1	0.98	0.18	46,46,46,46	0
56	MG	1A	3654	1/1	0.98	0.07	32,32,32,32	0
56	MG	1A	3059	1/1	0.98	0.09	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1U	202	1/1	0.98	0.12	29,29,29,29	0
56	MG	1A	3358	1/1	0.98	0.17	27,27,27,27	0
56	MG	1A	3191	1/1	0.98	0.05	26,26,26,26	0
56	MG	1A	3008	1/1	0.98	0.06	22,22,22,22	0
56	MG	1A	3659	1/1	0.98	0.03	9,9,9,9	0
56	MG	1x	112	1/1	0.98	0.14	45,45,45,45	0
56	MG	1A	3112	1/1	0.98	0.14	18,18,18,18	0
56	MG	1A	3571	1/1	0.98	0.07	19,19,19,19	0
56	MG	1A	3061	1/1	0.98	0.09	33,33,33,33	0
56	MG	1U	210	1/1	0.98	0.16	27,27,27,27	0
56	MG	1A	3302	1/1	0.98	0.10	30,30,30,30	0
56	MG	2A	3736	1/1	0.98	0.04	44,44,44,44	0
56	MG	1a	1681	1/1	0.98	0.21	33,33,33,33	0
56	MG	1A	4114	1/1	0.98	0.05	42,42,42,42	0
56	MG	1A	3364	1/1	0.98	0.18	29,29,29,29	0
56	MG	2A	3740	1/1	0.98	0.06	50,50,50,50	0
56	MG	1A	3247	1/1	0.98	0.09	42,42,42,42	0
56	MG	1V	202	1/1	0.98	0.09	28,28,28,28	0
56	MG	2A	3743	1/1	0.98	0.04	54,54,54,54	0
56	MG	1a	1686	1/1	0.98	0.12	28,28,28,28	0
56	MG	1A	3766	1/1	0.98	0.04	27,27,27,27	0
56	MG	1V	204	1/1	0.98	0.16	28,28,28,28	0
56	MG	1V	205	1/1	0.98	0.17	24,24,24,24	0
56	MG	1V	206	1/1	0.98	0.07	21,21,21,21	0
56	MG	1V	207	1/1	0.98	0.10	24,24,24,24	0
56	MG	2a	3190	1/1	0.98	0.06	63,63,63,63	0
56	MG	1A	3577	1/1	0.98	0.05	15,15,15,15	0
56	MG	1A	3668	1/1	0.98	0.04	44,44,44,44	0
56	MG	2A	3016	1/1	0.98	0.09	31,31,31,31	0
56	MG	1W	201	1/1	0.98	0.15	36,36,36,36	0
56	MG	2A	3018	1/1	0.98	0.11	34,34,34,34	0
56	MG	2A	3019	1/1	0.98	0.07	39,39,39,39	0
56	MG	2A	3756	1/1	0.98	0.03	56,56,56,56	0
56	MG	1a	1696	1/1	0.98	0.08	30,30,30,30	0
56	MG	2A	3021	1/1	0.98	0.06	54,54,54,54	0
56	MG	1A	3062	1/1	0.98	0.06	19,19,19,19	0
56	MG	2A	3023	1/1	0.98	0.12	34,34,34,34	0
56	MG	1W	203	1/1	0.98	0.21	36,36,36,36	0
56	MG	1A	3009	1/1	0.98	0.05	16,16,16,16	0
56	MG	1A	3116	1/1	0.98	0.23	31,31,31,31	0
56	MG	1A	3880	1/1	0.98	0.07	24,24,24,24	0
56	MG	1B	207	1/1	0.98	0.04	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1X	102	1/1	0.98	0.09	30,30,30,30	0
56	MG	1a	1704	1/1	0.98	0.04	39,39,39,39	0
56	MG	1a	1705	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3307	1/1	0.98	0.05	31,31,31,31	0
56	MG	1A	3673	1/1	0.98	0.05	28,28,28,28	0
56	MG	1X	105	1/1	0.98	0.07	27,27,27,27	0
56	MG	1a	1709	1/1	0.98	0.06	48,48,48,48	0
56	MG	1A	3883	1/1	0.98	0.04	51,51,51,51	0
56	MG	1A	4003	1/1	0.98	0.03	16,16,16,16	0
56	MG	1Y	203	1/1	0.98	0.14	42,42,42,42	0
56	MG	1A	3370	1/1	0.98	0.08	47,47,47,47	0
56	MG	2A	3582	1/1	0.98	0.11	36,36,36,36	0
56	MG	1a	1714	1/1	0.98	0.08	48,48,48,48	0
56	MG	1A	3885	1/1	0.98	0.03	34,34,34,34	0
56	MG	1A	3010	1/1	0.98	0.07	30,30,30,30	0
56	MG	2A	3219	1/1	0.98	0.08	55,55,55,55	0
56	MG	1A	3676	1/1	0.98	0.07	23,23,23,23	0
56	MG	1A	3888	1/1	0.98	0.04	44,44,44,44	0
56	MG	1a	1720	1/1	0.98	0.04	33,33,33,33	0
56	MG	1A	3505	1/1	0.98	0.14	22,22,22,22	0
56	MG	1A	3890	1/1	0.98	0.03	40,40,40,40	0
56	MG	1B	219	1/1	0.98	0.05	33,33,33,33	0
56	MG	1A	3019	1/1	0.98	0.13	42,42,42,42	0
56	MG	1A	3155	1/1	0.98	0.19	23,23,23,23	0
56	MG	2A	3790	1/1	0.98	0.05	38,38,38,38	0
56	MG	1A	3680	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3067	1/1	0.98	0.13	19,19,19,19	0
56	MG	2a	3234	1/1	0.98	0.04	69,69,69,69	0
56	MG	2a	3235	1/1	0.98	0.04	56,56,56,56	0
56	MG	2A	3597	1/1	0.98	0.06	39,39,39,39	0
56	MG	1a	1728	1/1	0.98	0.06	38,38,38,38	0
56	MG	2A	3797	1/1	0.98	0.08	64,64,64,64	0
56	MG	1A	3439	1/1	0.98	0.05	37,37,37,37	0
56	MG	2A	3799	1/1	0.98	0.05	63,63,63,63	0
56	MG	2A	3600	1/1	0.98	0.03	37,37,37,37	0
56	MG	1A	3068	1/1	0.98	0.04	9,9,9,9	0
56	MG	1A	3376	1/1	0.98	0.18	35,35,35,35	0
56	MG	1A	3442	1/1	0.98	0.11	27,27,27,27	0
56	MG	1A	3158	1/1	0.98	0.11	32,32,32,32	0
56	MG	1A	3044	1/1	0.98	0.07	29,29,29,29	0
56	MG	1A	4022	1/1	0.98	0.10	26,26,26,26	0
56	MG	1A	4023	1/1	0.98	0.10	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3517	1/1	0.98	0.10	27,27,27,27	0
56	MG	1A	3071	1/1	0.98	0.03	25,25,25,25	0
56	MG	1A	3123	1/1	0.98	0.08	34,34,34,34	0
56	MG	1A	3029	1/1	0.98	0.15	26,26,26,26	0
56	MG	1a	1741	1/1	0.98	0.04	51,51,51,51	0
56	MG	1A	3261	1/1	0.98	0.04	26,26,26,26	0
56	MG	2A	3421	1/1	0.98	0.03	50,50,50,50	0
56	MG	2A	3068	1/1	0.98	0.21	57,57,57,57	0
56	MG	15	102	1/1	0.98	0.20	28,28,28,28	0
56	MG	1A	3522	1/1	0.98	0.05	33,33,33,33	0
56	MG	1A	3030	1/1	0.98	0.16	24,24,24,24	0
56	MG	2A	3820	1/1	0.98	0.06	52,52,52,52	0
56	MG	1A	3012	1/1	0.98	0.04	24,24,24,24	0
56	MG	1A	3696	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3697	1/1	0.98	0.08	23,23,23,23	0
56	MG	1A	3698	1/1	0.98	0.04	12,12,12,12	0
56	MG	1A	3264	1/1	0.98	0.18	21,21,21,21	0
56	MG	1A	3605	1/1	0.98	0.07	18,18,18,18	0
56	MG	1A	3606	1/1	0.98	0.05	11,11,11,11	0
56	MG	17	101	1/1	0.98	0.12	22,22,22,22	0
56	MG	17	102	1/1	0.98	0.14	24,24,24,24	0
56	MG	1A	3032	1/1	0.98	0.15	20,20,20,20	0
56	MG	1a	1757	1/1	0.98	0.03	64,64,64,64	0
56	MG	1A	4039	1/1	0.98	0.07	11,11,11,11	0
56	MG	2a	3064	1/1	0.98	0.13	43,43,43,43	0
56	MG	2a	3065	1/1	0.98	0.04	48,48,48,48	0
56	MG	1A	3076	1/1	0.98	0.09	27,27,27,27	0
56	MG	18	104	1/1	0.98	0.08	37,37,37,37	0
56	MG	1A	3169	1/1	0.98	0.27	31,31,31,31	0
56	MG	1A	3130	1/1	0.98	0.09	26,26,26,26	0
56	MG	1a	1765	1/1	0.98	0.09	49,49,49,49	0
56	MG	1A	3707	1/1	0.98	0.06	31,31,31,31	0
56	MG	1a	1767	1/1	0.98	0.05	66,66,66,66	0
56	MG	1A	4044	1/1	0.98	0.10	17,17,17,17	0
56	MG	1a	1769	1/1	0.98	0.09	36,36,36,36	0
56	MG	1A	3219	1/1	0.98	0.15	21,21,21,21	0
58	ZN	1Y	204	1/1	0.98	0.04	67,67,67,67	0
56	MG	19	102	1/1	0.98	0.12	31,31,31,31	0
58	ZN	24	501	1/1	0.98	0.05	109,109,109,109	0
58	ZN	29	102	1/1	0.98	0.04	70,70,70,70	0
56	MG	1A	3100	1/1	0.98	0.04	29,29,29,29	0
56	MG	1A	3532	1/1	0.98	0.10	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3173	1/1	0.98	0.09	24,24,24,24	0
60	SF4	2d	303	8/8	0.98	0.05	61,64,74,78	0
56	MG	1A	3147	1/1	0.99	0.13	23,23,23,23	0
56	MG	1A	3021	1/1	0.99	0.03	21,21,21,21	0
56	MG	1E	304	1/1	0.99	0.09	22,22,22,22	0
56	MG	1A	3709	1/1	0.99	0.04	17,17,17,17	0
56	MG	1A	3629	1/1	0.99	0.04	21,21,21,21	0
56	MG	2A	3530	1/1	0.99	0.02	33,33,33,33	0
56	MG	1A	3049	1/1	0.99	0.06	20,20,20,20	0
56	MG	1U	201	1/1	0.99	0.05	22,22,22,22	0
56	MG	2A	3692	1/1	0.99	0.05	34,34,34,34	0
56	MG	1A	3594	1/1	0.99	0.05	36,36,36,36	0
56	MG	1A	3127	1/1	0.99	0.08	29,29,29,29	0
56	MG	1A	3355	1/1	0.99	0.11	18,18,18,18	0
56	MG	1A	3562	1/1	0.99	0.07	22,22,22,22	0
56	MG	1A	4010	1/1	0.99	0.04	18,18,18,18	0
56	MG	1A	3213	1/1	0.99	0.09	24,24,24,24	0
56	MG	2a	3140	1/1	0.99	0.03	68,68,68,68	0
56	MG	1A	3037	1/1	0.99	0.08	10,10,10,10	0
56	MG	1A	3195	1/1	0.99	0.09	20,20,20,20	0
56	MG	1A	3065	1/1	0.99	0.03	9,9,9,9	0
56	MG	1A	3281	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3908	1/1	0.99	0.04	16,16,16,16	0
56	MG	17	104	1/1	0.99	0.10	28,28,28,28	0
56	MG	2a	3063	1/1	0.99	0.06	41,41,41,41	0
56	MG	1A	3180	1/1	0.99	0.04	31,31,31,31	0
56	MG	18	102	1/1	0.99	0.12	30,30,30,30	0
56	MG	1A	3283	1/1	0.99	0.10	23,23,23,23	0
56	MG	1A	3858	1/1	0.99	0.04	19,19,19,19	0
56	MG	1A	3859	1/1	0.99	0.04	25,25,25,25	0
56	MG	1A	3506	1/1	0.99	0.16	30,30,30,30	0
56	MG	2A	3551	1/1	0.99	0.07	39,39,39,39	0
56	MG	1A	3284	1/1	0.99	0.03	20,20,20,20	0
56	MG	1A	3572	1/1	0.99	0.04	41,41,41,41	0
56	MG	1A	3218	1/1	0.99	0.08	27,27,27,27	0
56	MG	2A	3796	1/1	0.99	0.04	45,45,45,45	0
56	MG	1A	3011	1/1	0.99	0.03	34,34,34,34	0
56	MG	1A	3647	1/1	0.99	0.05	7,7,7,7	0
56	MG	1A	3052	1/1	0.99	0.03	38,38,38,38	0
56	MG	1A	3972	1/1	0.99	0.03	17,17,17,17	0
56	MG	1A	3818	1/1	0.99	0.16	25,25,25,25	0
56	MG	1W	204	1/1	0.99	0.11	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3803	1/1	0.99	0.04	26,26,26,26	0
56	MG	1a	1606	1/1	0.99	0.10	39,39,39,39	0
56	MG	1A	3649	1/1	0.99	0.08	18,18,18,18	0
56	MG	2A	3485	1/1	0.99	0.07	36,36,36,36	0
56	MG	1a	1746	1/1	0.99	0.03	52,52,52,52	0
56	MG	1A	3820	1/1	0.99	0.11	25,25,25,25	0
56	MG	1a	1609	1/1	0.99	0.04	18,18,18,18	0
56	MG	2A	3489	1/1	0.99	0.08	37,37,37,37	0
56	MG	1A	3731	1/1	0.99	0.04	36,36,36,36	0
56	MG	2A	3118	1/1	0.99	0.05	41,41,41,41	0
56	MG	1A	4089	1/1	0.99	0.04	39,39,39,39	0
56	MG	1A	3451	1/1	0.99	0.12	41,41,41,41	0
56	MG	1A	3167	1/1	0.99	0.08	31,31,31,31	0
56	MG	1A	3168	1/1	0.99	0.23	27,27,27,27	0
56	MG	1A	3202	1/1	0.99	0.15	19,19,19,19	0
56	MG	1A	3875	1/1	0.99	0.04	4,4,4,4	0
56	MG	1A	3580	1/1	0.99	0.05	10,10,10,10	0
56	MG	1A	3014	1/1	0.99	0.03	16,16,16,16	0
56	MG	1a	1758	1/1	0.99	0.03	41,41,41,41	0
56	MG	1A	3984	1/1	0.99	0.08	24,24,24,24	0
56	MG	1a	1760	1/1	0.99	0.03	47,47,47,47	0
56	MG	1B	238	1/1	0.99	0.08	46,46,46,46	0
56	MG	1A	3617	1/1	0.99	0.07	16,16,16,16	0
56	MG	1A	3170	1/1	0.99	0.04	18,18,18,18	0
56	MG	1A	3740	1/1	0.99	0.05	14,14,14,14	0
56	MG	1a	1692	1/1	0.99	0.05	48,48,48,48	0
56	MG	1A	3318	1/1	0.99	0.12	23,23,23,23	0
56	MG	1A	3268	1/1	0.99	0.28	30,30,30,30	0
56	MG	1P	203	1/1	0.99	0.29	31,31,31,31	0
56	MG	1A	3833	1/1	0.99	0.04	37,37,37,37	0
56	MG	1A	3991	1/1	0.99	0.05	21,21,21,21	0
56	MG	1D	307	1/1	0.99	0.10	24,24,24,24	0
56	MG	1A	3054	1/1	0.99	0.02	22,22,22,22	0
56	MG	1A	3347	1/1	0.99	0.09	16,16,16,16	0
56	MG	1A	3490	1/1	0.99	0.19	32,32,32,32	0
56	MG	2A	3675	1/1	0.99	0.05	33,33,33,33	0
56	MG	1A	3206	1/1	0.99	0.12	30,30,30,30	0
58	ZN	14	102	1/1	0.99	0.04	70,70,70,70	0
58	ZN	15	111	1/1	0.99	0.04	35,35,35,35	0
58	ZN	16	102	1/1	0.99	0.04	36,36,36,36	0
58	ZN	19	103	1/1	0.99	0.03	36,36,36,36	0
58	ZN	1n	103	1/1	0.99	0.05	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3134	1/1	0.99	0.12	26,26,26,26	0
56	MG	1a	1777	1/1	0.99	0.10	45,45,45,45	0
58	ZN	25	107	1/1	0.99	0.03	46,46,46,46	0
58	ZN	26	102	1/1	0.99	0.04	58,58,58,58	0
56	MG	1A	3705	1/1	0.99	0.04	34,34,34,34	0
56	MG	1A	3891	1/1	0.99	0.03	37,37,37,37	0
56	MG	1A	3070	1/1	0.99	0.07	19,19,19,19	0
56	MG	13	101	1/1	0.99	0.08	28,28,28,28	0
60	SF4	1d	501	8/8	0.99	0.04	53,59,64,67	0
56	MG	1A	3750	1/1	0.99	0.03	32,32,32,32	0
56	MG	1A	3878	1/1	1.00	0.04	15,15,15,15	0
56	MG	2A	3791	1/1	1.00	0.04	41,41,41,41	0
56	MG	1a	1719	1/1	1.00	0.03	45,45,45,45	0
56	MG	2A	3557	1/1	1.00	0.04	31,31,31,31	0
56	MG	2A	3558	1/1	1.00	0.05	34,34,34,34	0
56	MG	1A	3666	1/1	1.00	0.03	17,17,17,17	0

6.5 Other polymers

There are no such residues in this entry.