Full wwPDB X-ray Structure Validation Report (i)

Sep 2, 2026 – 08:50 PM EDT

PDB ID	:	9Q6P / pdb_00009q6p
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with pleuromutilin and protein Y at 2.70A resolution
Authors	:	Killam, B.Y.; Kopec, I.; Breiner, L.M.; Hoernig, M.; LoPresti, M.; Abdelsattar, A.S.; Abouelkhair, A.A.; Briganti, A.J.; Slowinski, R.P.; Vogelaar, N.J.; Seleem, M.N.; Brown, A.M.; Lowell, A.N.; Polikanov, Y.S.
Deposited on	:	2025-08-22
Resolution	:	2.70 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (1)) were used in the production of this report:

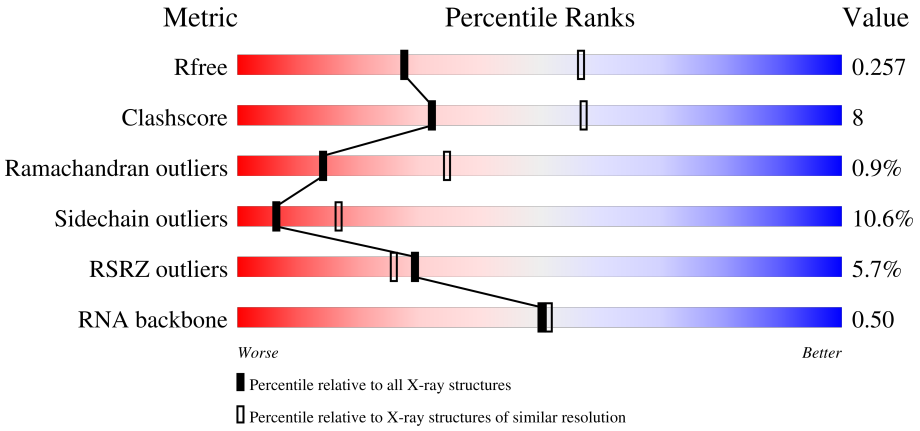
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal 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 (i)

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

The reported resolution of this entry is 2.70 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	3538 (2.70-2.70)
Clashscore	190562	3843 (2.70-2.70)
Ramachandran outliers	187476	3778 (2.70-2.70)
Sidechain outliers	187428	3778 (2.70-2.70)
RSRZ outliers	180081	3538 (2.70-2.70)
RNA backbone	3983	1044 (2.90-2.50)

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

Mol	Chain	Length	Quality of chain
1	1A	2915	4% 67% 26% 5%
1	2A	2915	5% 61% 31% 7%
2	1B	121	% 74% 21%
2	2B	121	7% 52% 41% 6%

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Mol	Chain	Length	Quality of chain
3	1D	276	80% 16%
3	2D	276	78% 18%
4	1E	206	73% 21%
4	2E	206	74% 18% 6%
5	1F	210	70% 20% 6%
5	2F	210	60% 33%
6	1G	182	4% 68% 26%
6	2G	182	29% 54% 38% 7%
7	1H	180	70% 26%
7	2H	180	8% 56% 37%
8	1I	148	74% 21%
8	2I	148	3% 73% 20% 5%
9	1N	140	81% 15%
9	2N	140	72% 22% 6%
10	1O	122	75% 25%
10	2O	122	79% 21%
11	1P	150	80% 17%
11	2P	150	78% 18%
12	1Q	141	82% 17%
12	2Q	141	3% 75% 23%
13	1R	118	71% 24% 5%
13	2R	118	68% 28%
14	1S	112	73% 22%
14	2S	112	17% 60% 34%
15	1T	146	70% 18% 10%

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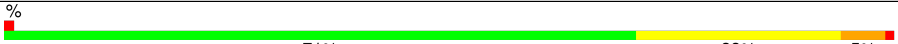
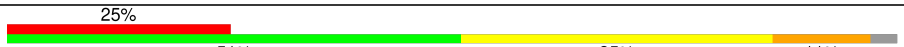
Mol	Chain	Length	Quality of chain
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	
27	25	60	

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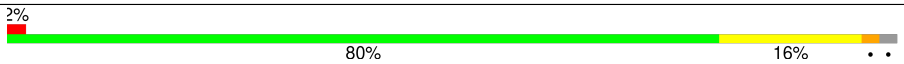
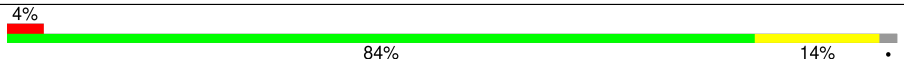
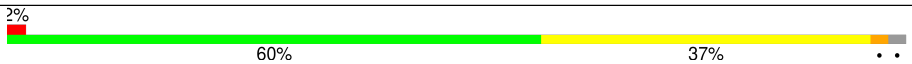
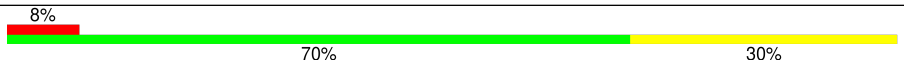
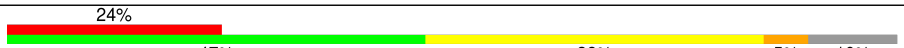
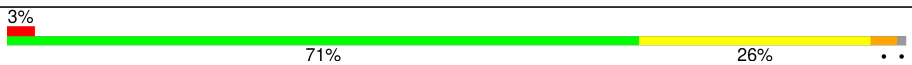
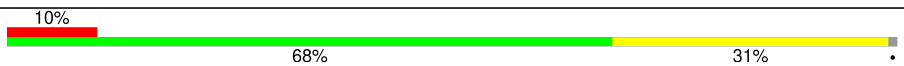
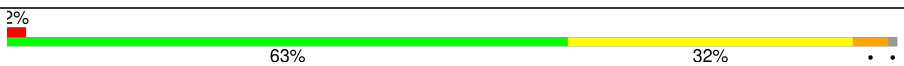
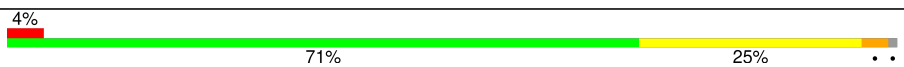
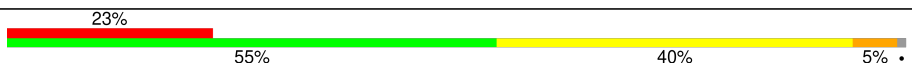
Mol	Chain	Length	Quality of chain
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	

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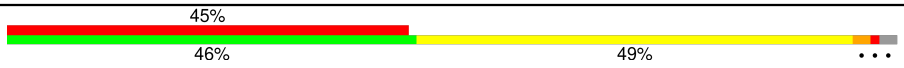
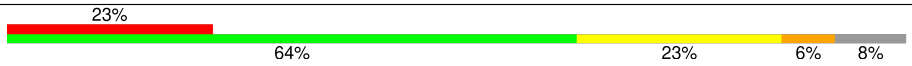
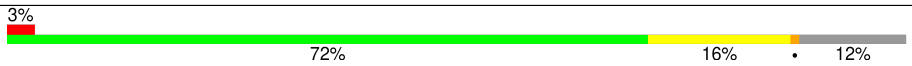
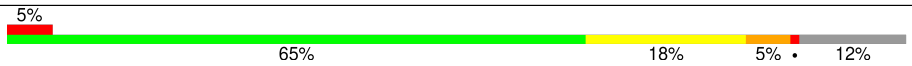
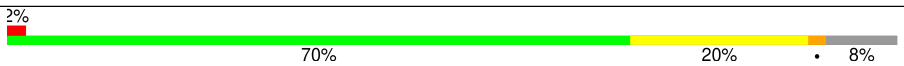
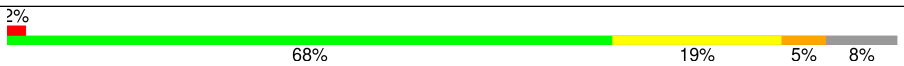
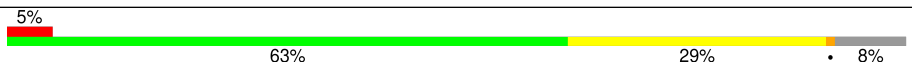
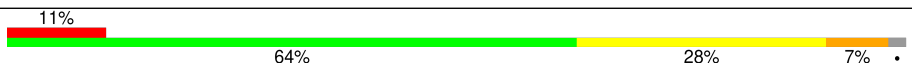
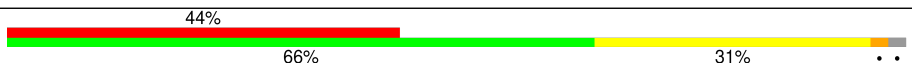
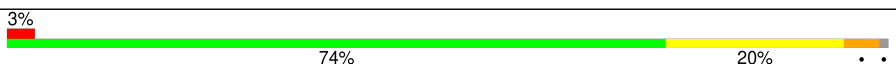
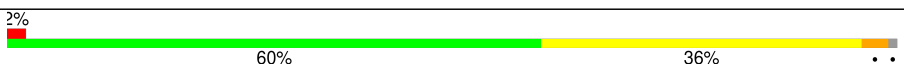
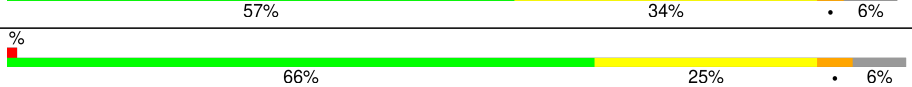
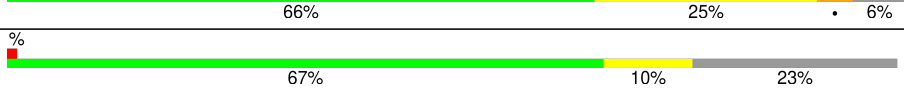
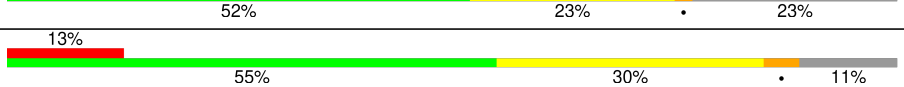
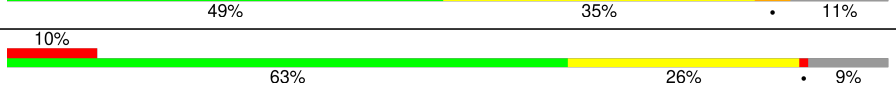
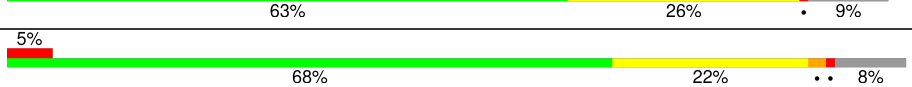
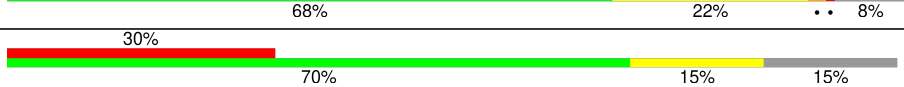
Mol	Chain	Length	Quality of chain
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	

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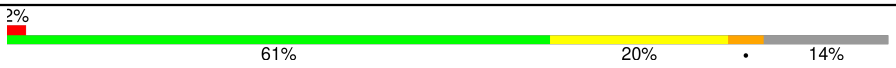
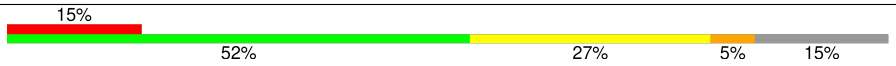
Mol	Chain	Length	Quality of chain
53	1y	113	
53	2y	113	

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
54	MG	1A	3617	-	-	-	X

2 Entry composition (i)

There are 60 unique types of molecules in this entry. The entry contains 298590 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	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- 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
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- 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
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1426	916	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1424	912	259	249	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	173	Total	C	N	O	S	0	0	0
			1324	842	247	234	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	147	Total	C	N	O	S	0	0	0
			1094	699	191	203	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1076	687	186	202	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
			1121	722	208	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
			877	553	175	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
			775	498	141	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
			810	520	153	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			810	519	153	132	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	77	Total	C	N	O	S	0	0	0
			608	375	129	103	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
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	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
			592	368	119	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
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	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
			459	288	90	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	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- 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
			1842	1175	330	332	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
			1558	979	305	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
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	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
			1133	716	214	199	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
			814	516	144	151	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
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	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
			1098	694	210	192	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
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- 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
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	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
			834	520	156	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	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	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
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	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
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	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 protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total 764	C 478	N 144	O 139	S 3	0	0	0
53	2y	96	Total 749	C 468	N 141	O 137	S 3	0	0	0

- Molecule 54 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1045	Total 1045	Mg 1045	0	0
54	1B	31	Total 31	Mg 31	0	0
54	1D	16	Total 16	Mg 16	0	0
54	1E	9	Total 9	Mg 9	0	0
54	1F	20	Total 20	Mg 20	0	0
54	1G	4	Total 4	Mg 4	0	0
54	1H	2	Total 2	Mg 2	0	0
54	1N	4	Total 4	Mg 4	0	0
54	1O	1	Total 1	Mg 1	0	0
54	1P	6	Total 6	Mg 6	0	0
54	1Q	6	Total 6	Mg 6	0	0
54	1R	8	Total 8	Mg 8	0	0
54	1T	4	Total 4	Mg 4	0	0
54	1U	6	Total 6	Mg 6	0	0
54	1V	8	Total 8	Mg 8	0	0
54	1W	5	Total 5	Mg 5	0	0
54	1X	1	Total 1	Mg 1	0	0
54	1Z	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	10	8	Total Mg 8 8	0	0
54	11	5	Total Mg 5 5	0	0
54	13	4	Total Mg 4 4	0	0
54	15	8	Total Mg 8 8	0	0
54	17	6	Total Mg 6 6	0	0
54	18	3	Total Mg 3 3	0	0
54	19	3	Total Mg 3 3	0	0
54	1a	277	Total Mg 277 277	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	5	Total Mg 5 5	0	0
54	1e	2	Total Mg 2 2	0	0
54	1f	1	Total Mg 1 1	0	0
54	1g	3	Total Mg 3 3	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1k	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	3	Total Mg 3 3	0	0
54	1o	1	Total Mg 1 1	0	0
54	1r	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1t	2	Total Mg 2 2	0	0
54	1y	4	Total Mg 4 4	0	0
54	2A	752	Total Mg 752 752	0	0
54	2B	18	Total Mg 18 18	0	0
54	2D	12	Total Mg 12 12	0	0
54	2E	7	Total Mg 7 7	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	3	Total Mg 3 3	0	0
54	2I	1	Total Mg 1 1	0	0
54	2N	1	Total Mg 1 1	0	0
54	2O	1	Total Mg 1 1	0	0
54	2P	2	Total Mg 2 2	0	0
54	2Q	3	Total Mg 3 3	0	0
54	2R	3	Total Mg 3 3	0	0
54	2T	3	Total Mg 3 3	0	0
54	2V	3	Total Mg 3 3	0	0
54	2W	2	Total Mg 2 2	0	0
54	2Y	1	Total Mg 1 1	0	0
54	20	1	Total Mg 1 1	0	0
54	21	1	Total Mg 1 1	0	0
54	23	1	Total Mg 1 1	0	0

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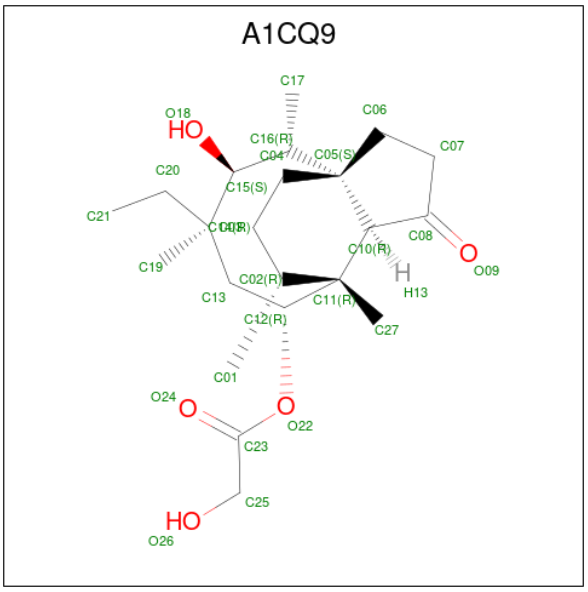
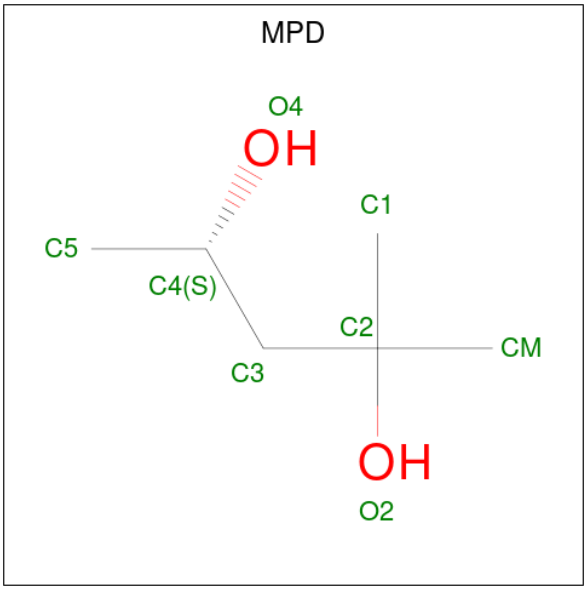
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	25	2	Total Mg 2 2	0	0
54	27	1	Total Mg 1 1	0	0
54	28	1	Total Mg 1 1	0	0
54	29	1	Total Mg 1 1	0	0
54	2a	203	Total Mg 203 203	0	0
54	2e	2	Total Mg 2 2	0	0
54	2h	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2m	1	Total Mg 1 1	0	0
54	2n	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0

- Molecule 55 is (3aS,4R,5S,6R,8R,9R,9aR,10R)-6-ethyl-5-hydroxy-4,6,9,10-tetramethyl-1-oxodecahydro-3a,9-propanocyclopenta[8]annulen-8-yl hydroxyacetate (CCD ID: A1CQ9) (formula: $C_{22}H_{36}O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1A	1	Total C O 27 22 5	0	0
55	2A	1	Total C O 27 22 5	0	0

- Molecule 56 is (4S)-2-METHYL-2,4-PENTANEDIOL (CCD ID: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1A	1	Total C O 8 6 2	0	0
56	1T	1	Total C O 8 6 2	0	0

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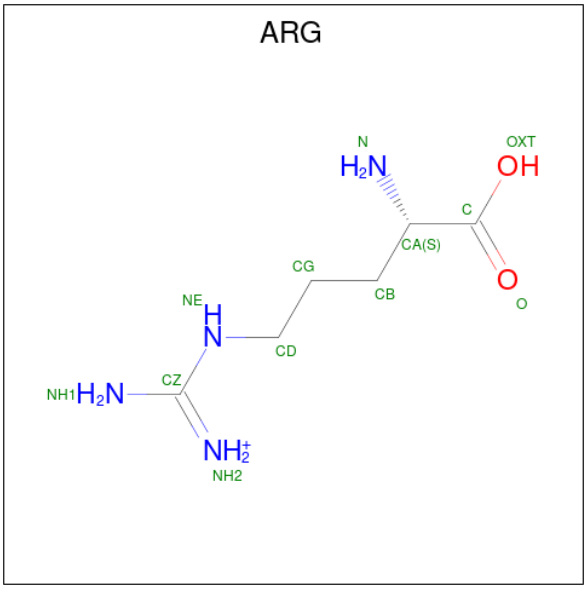
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	18	1	Total C O 8 6 2	0	0
56	1a	1	Total C O 8 6 2	0	0
56	2A	1	Total C O 8 6 2	0	0
56	2A	1	Total C O 8 6 2	0	0
56	2B	1	Total C O 8 6 2	0	0

- Molecule 57 is ARGININE (CCD ID: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1B	1	Total C N O 12 6 4 2	0	0
57	1F	1	Total C N O 12 6 4 2	0	0

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

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

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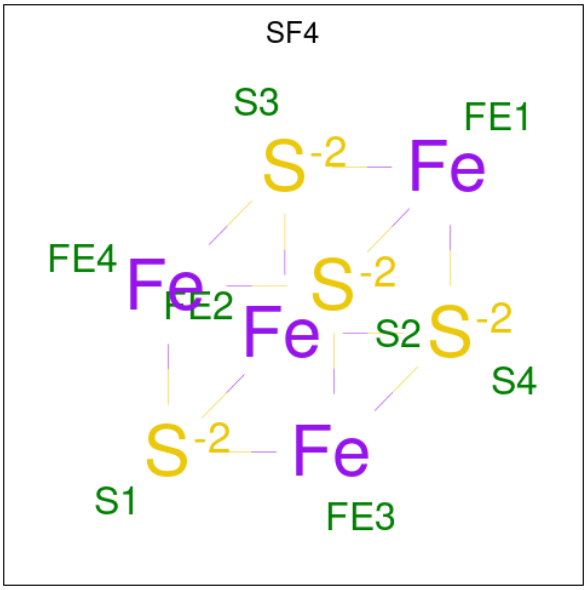
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	15	1	Total Zn 1 1	0	0
58	16	1	Total Zn 1 1	0	0
58	19	1	Total Zn 1 1	0	0
58	1n	1	Total Zn 1 1	0	0
58	2Y	1	Total Zn 1 1	0	0
58	24	1	Total Zn 1 1	0	0
58	25	1	Total Zn 1 1	0	0
58	26	1	Total Zn 1 1	0	0
58	29	1	Total Zn 1 1	0	0
58	2n	1	Total Zn 1 1	0	0

- Molecule 59 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1d	1	Total Fe S 8 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	2d	1	Total Fe S 8 4 4	0	0

- Molecule 60 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1A	4109	Total O 4109 4109	0	0
60	1B	114	Total O 114 114	0	0
60	1D	117	Total O 117 117	0	0
60	1E	81	Total O 81 81	0	0
60	1F	69	Total O 69 69	0	0
60	1G	19	Total O 19 19	0	0
60	1H	15	Total O 15 15	0	0
60	1I	8	Total O 8 8	0	0
60	1N	57	Total O 57 57	0	0
60	1O	29	Total O 29 29	0	0
60	1P	64	Total O 64 64	0	0
60	1Q	41	Total O 41 41	0	0
60	1R	36	Total O 36 36	0	0
60	1S	11	Total O 11 11	0	0
60	1T	35	Total O 35 35	0	0
60	1U	50	Total O 50 50	0	0
60	1V	36	Total O 36 36	0	0
60	1W	33	Total O 33 33	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1X	26	Total O 26 26	0	0
60	1Y	17	Total O 17 17	0	0
60	1Z	13	Total O 13 13	0	0
60	10	27	Total O 27 27	0	0
60	11	28	Total O 28 28	0	0
60	12	18	Total O 18 18	0	0
60	13	26	Total O 26 26	0	0
60	14	3	Total O 3 3	0	0
60	15	25	Total O 25 25	0	0
60	16	22	Total O 22 22	0	0
60	17	18	Total O 18 18	0	0
60	18	31	Total O 31 31	0	0
60	19	10	Total O 10 10	0	0
60	1a	600	Total O 600 600	0	0
60	1b	1	Total O 1 1	0	0
60	1c	1	Total O 1 1	0	0
60	1d	9	Total O 9 9	0	0
60	1e	8	Total O 8 8	0	0
60	1f	3	Total O 3 3	0	0
60	1i	2	Total O 2 2	0	0
60	1j	1	Total O 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1k	1	Total O 1 1	0	0
60	1l	5	Total O 5 5	0	0
60	1m	3	Total O 3 3	0	0
60	1o	6	Total O 6 6	0	0
60	1p	2	Total O 2 2	0	0
60	1r	1	Total O 1 1	0	0
60	1t	2	Total O 2 2	0	0
60	1u	1	Total O 1 1	0	0
60	1y	5	Total O 5 5	0	0
60	2A	2651	Total O 2651 2651	0	0
60	2B	64	Total O 64 64	0	0
60	2D	63	Total O 63 63	0	0
60	2E	41	Total O 41 41	0	0
60	2F	21	Total O 21 21	0	0
60	2G	5	Total O 5 5	0	0
60	2H	3	Total O 3 3	0	0
60	2I	4	Total O 4 4	0	0
60	2N	7	Total O 7 7	0	0
60	2O	22	Total O 22 22	0	0
60	2P	31	Total O 31 31	0	0
60	2Q	26	Total O 26 26	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	2R	24	Total O 24 24	0	0
60	2S	6	Total O 6 6	0	0
60	2T	14	Total O 14 14	0	0
60	2U	19	Total O 19 19	0	0
60	2V	6	Total O 6 6	0	0
60	2W	24	Total O 24 24	0	0
60	2X	10	Total O 10 10	0	0
60	2Y	5	Total O 5 5	0	0
60	2Z	15	Total O 15 15	0	0
60	20	15	Total O 15 15	0	0
60	21	23	Total O 23 23	0	0
60	22	5	Total O 5 5	0	0
60	23	4	Total O 4 4	0	0
60	24	3	Total O 3 3	0	0
60	25	8	Total O 8 8	0	0
60	26	5	Total O 5 5	0	0
60	27	11	Total O 11 11	0	0
60	28	20	Total O 20 20	0	0
60	29	1	Total O 1 1	0	0
60	2a	485	Total O 485 485	0	0
60	2d	4	Total O 4 4	0	0

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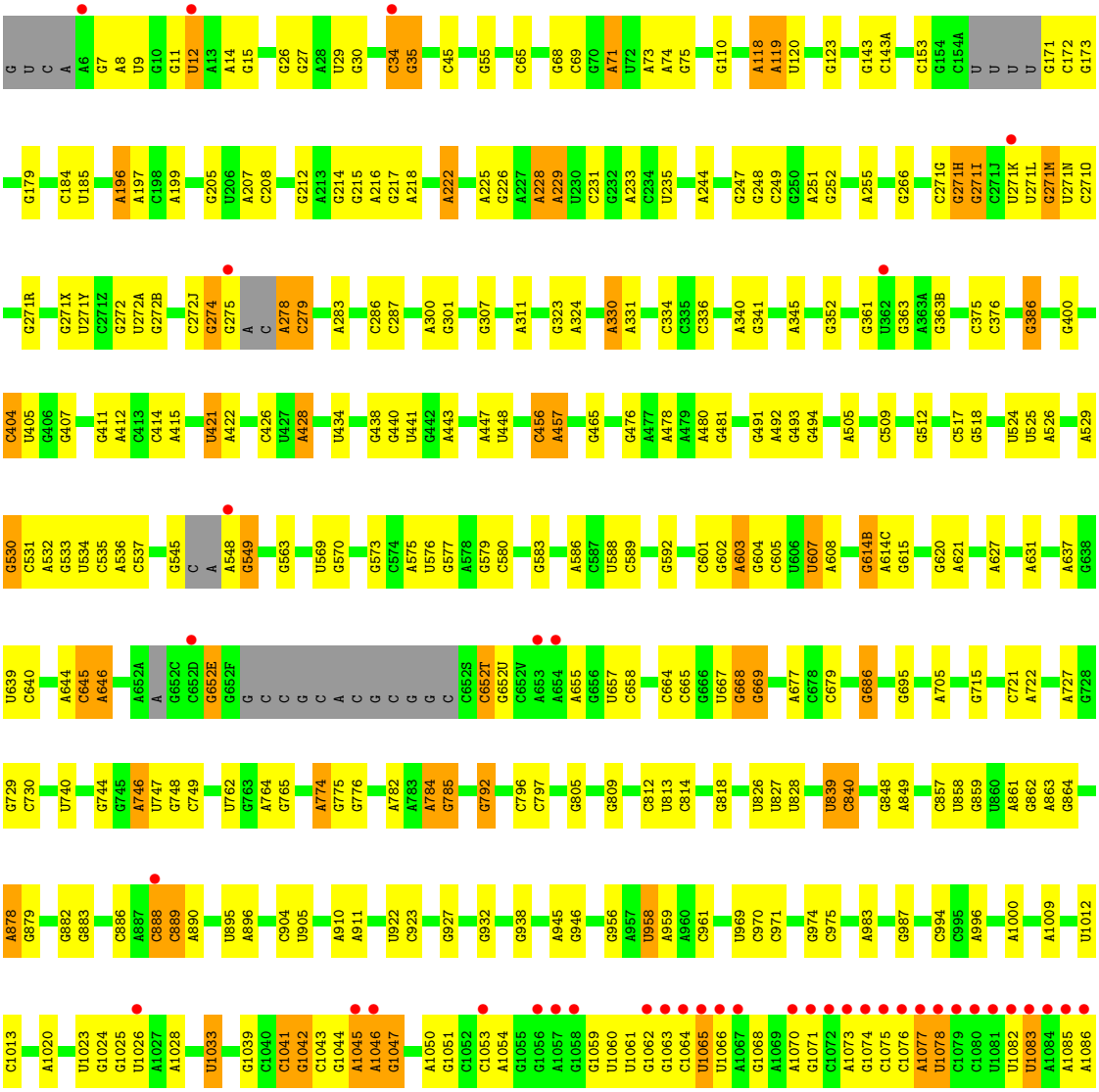
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	2e	4	Total O 4 4	0	0
60	2f	2	Total O 2 2	0	0
60	2j	2	Total O 2 2	0	0
60	2l	3	Total O 3 3	0	0
60	2n	1	Total O 1 1	0	0
60	2o	2	Total O 2 2	0	0
60	2p	3	Total O 3 3	0	0
60	2q	1	Total O 1 1	0	0
60	2r	3	Total O 3 3	0	0
60	2s	1	Total O 1 1	0	0
60	2t	2	Total O 2 2	0	0
60	2y	3	Total O 3 3	0	0

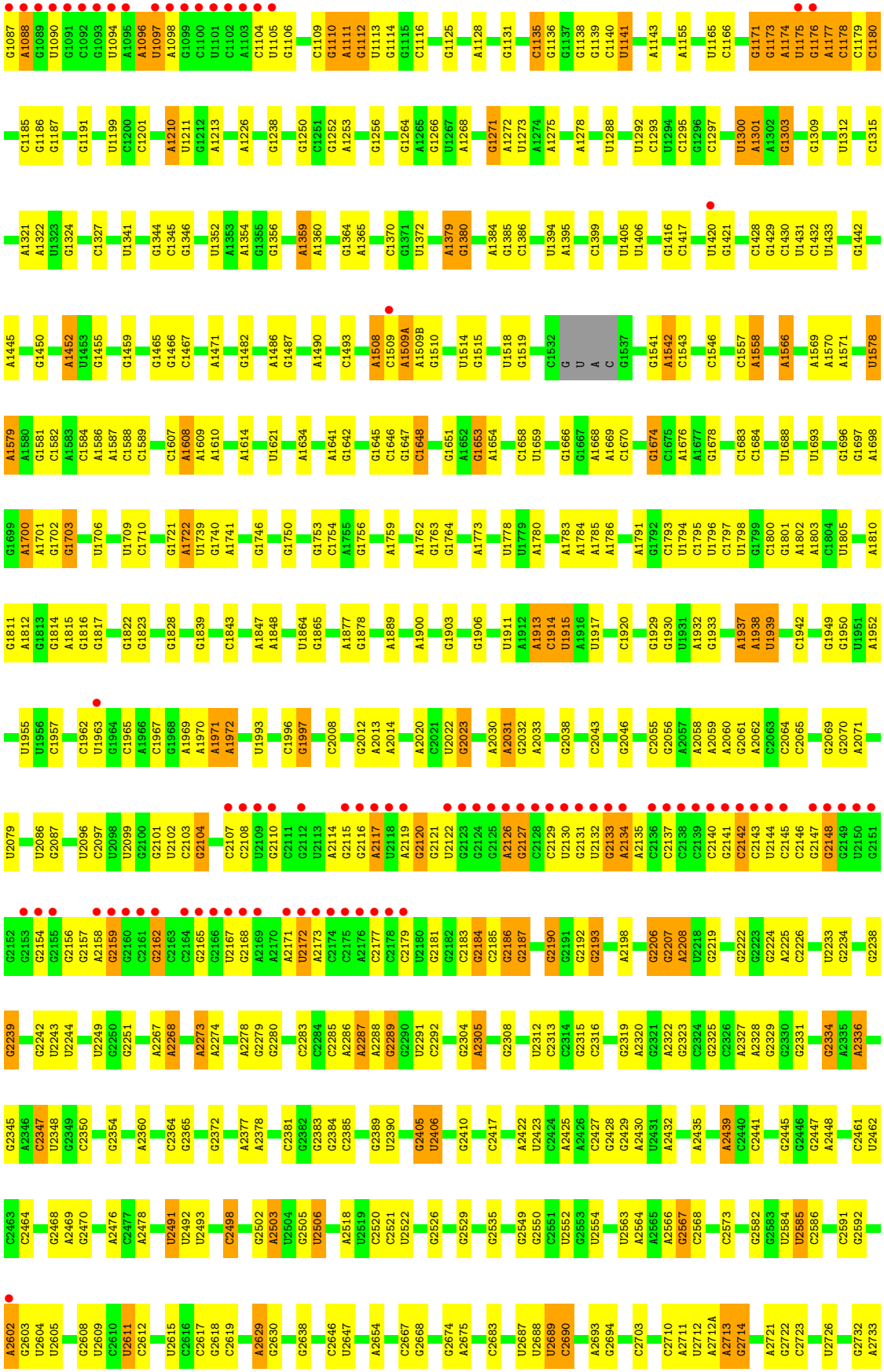
3 Residue-property plots (i)

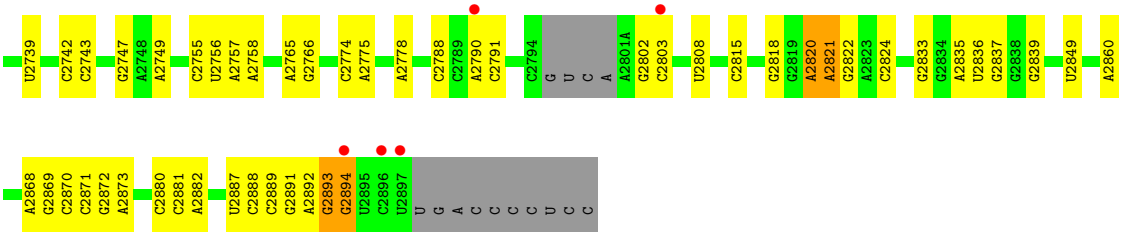
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

- Molecule 1: 23S Ribosomal RNA

Chain 1A:

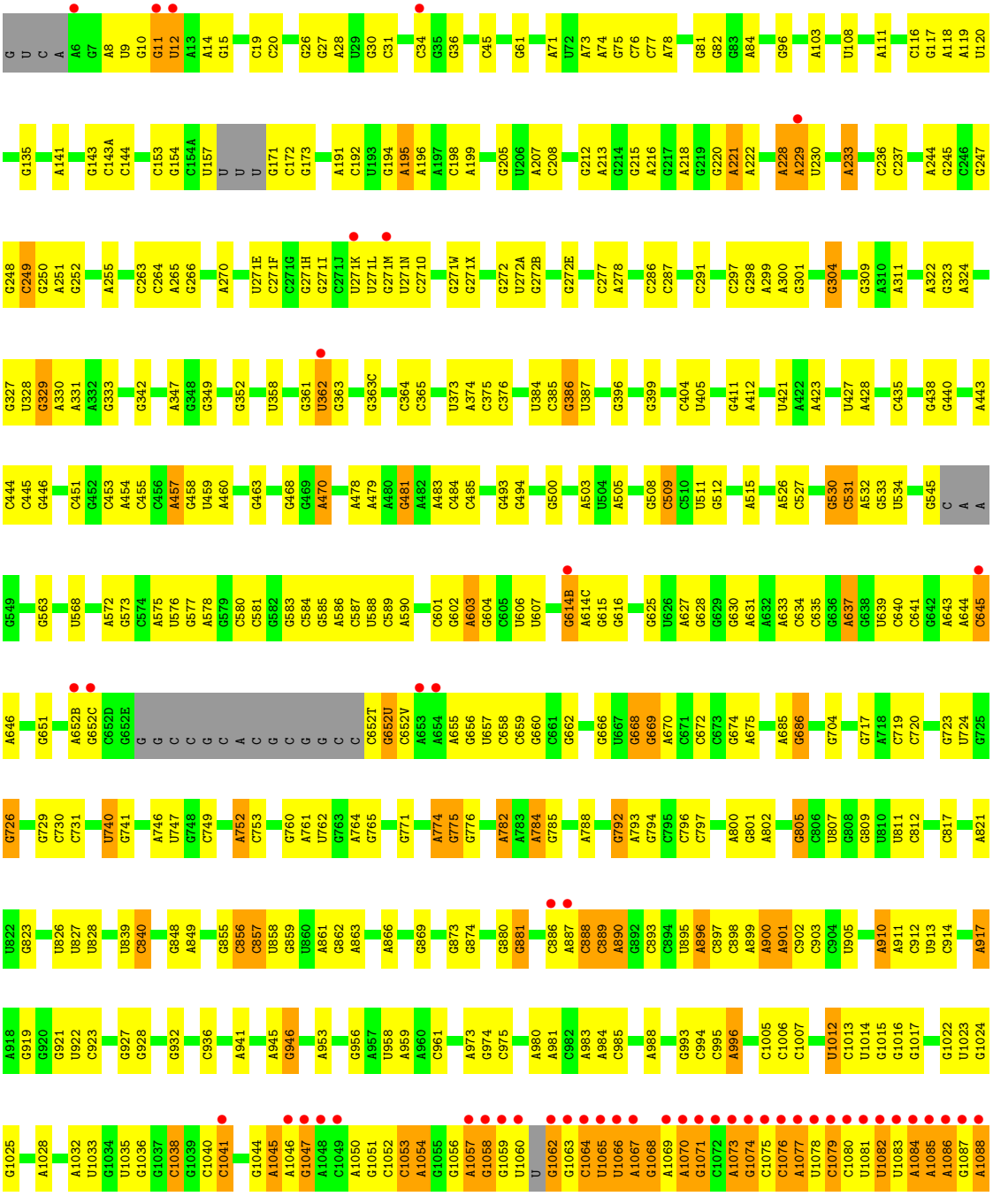


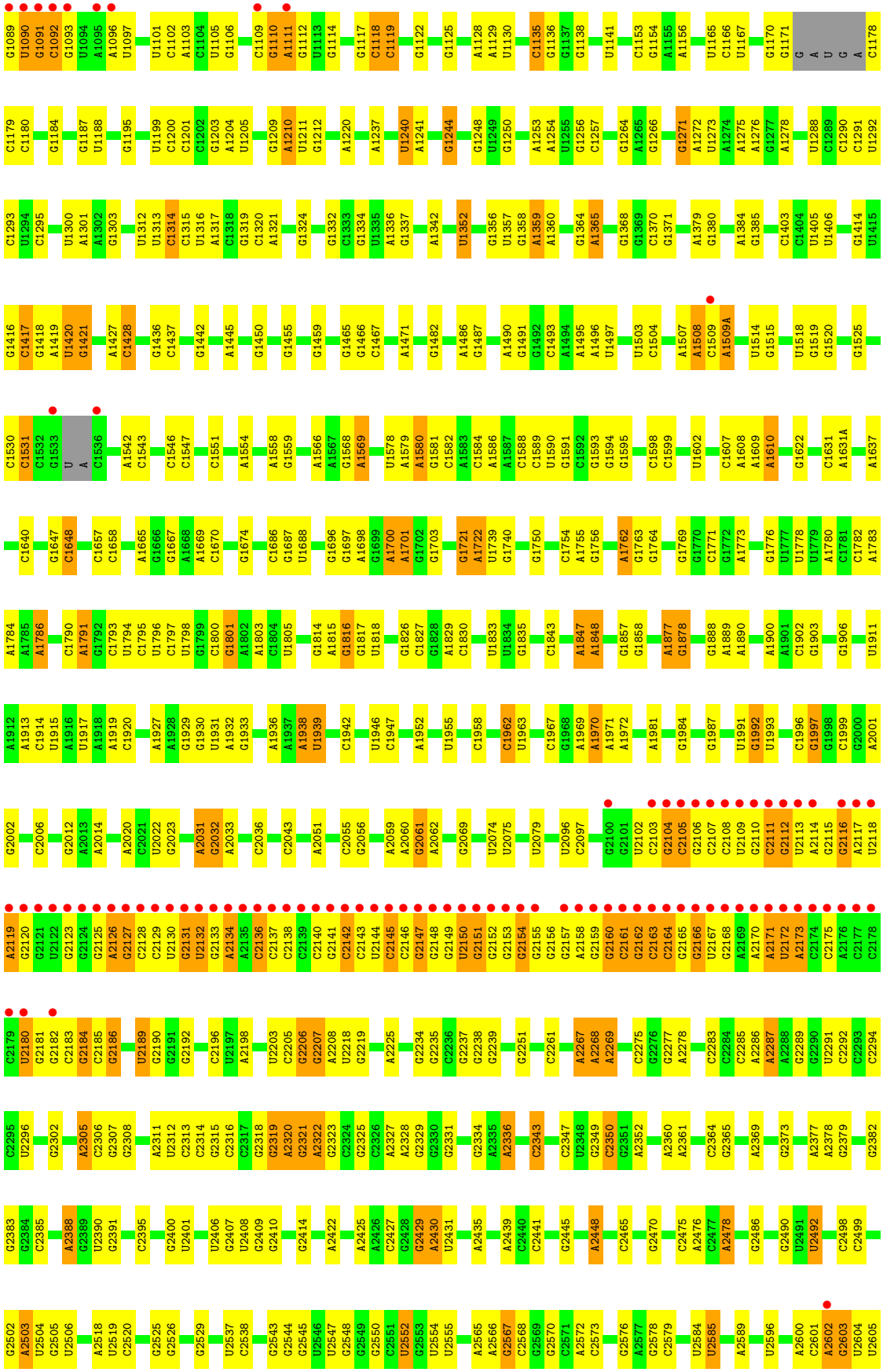

G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 C1100 U1101 C1102 A1103 C1104 U1105 G1106 C1109 G1110 A1111 G1112 U1113 G1114 G1115 C1116 G1125 A1128 G1131 C1135 G1136 G1137 G1138 G1139 C1140 U1141 A1143 A1155 U1165 C1166 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180
C1185 G1186 G1187 G1191 U1199 C1200 C1201 A1210 U1211 G1212 A1213 A1226 G1238 G1250 C1251 G1252 A1253 G1256 G1264 A1265 G1266 U1267 A1268 G1271 A1272 U1273 A1274 A1275 A1278 U1288 U1292 C1293 U1294 C1295 G1296 C1297 U1300 A1301 A1302 G1303 G1309 U1312 C1315
A1321 A1322 U1323 G1324 C1327 U1341 G1344 C1345 G1346 U1352 A1353 A1354 G1355 G1356 A1359 A1360 G1364 A1365 C1370 G1371 U1372 A1379 G1380 A1384 G1385 C1386 U1394 A1395 C1399 U1405 U1406 G1416 C1417 U1420 G1421 C1428 G1429 C1430 U1431 C1432 U1433 G1442
A1445 G1450 A1452 U1453 G1455 G1459 G1465 G1466 C1467 A1471 G1482 A1486 G1487 A1490 C1493 A1508 C1509 A1509A A1509B G1510 U1514 G1515 U1518 G1519 C1532 G U A C G1537 G1541 A1542 C1543 C1546 C1557 A1558 A1566 A1569 A1570 A1571 U1578
A1579 A1580 G1581 C1582 A1583 C1584 A1586 A1587 C1588 C1589 C1607 A1608 A1609 A1610 A1614 U1621 A1634 A1641 G1642 G1645 C1646 G1647 C1648 G1651 A1652 G1653 A1654 C1658 U1659 G1666 A1667 A1668 A1669 C1670 G1674 C1675 A1676 A1677 G1678 C1683 C1684 U1688 U1693 G1696 G1697 A1698
G1699 A1700 A1701 G1702 G1703 U1706 U1709 C1710 G1721 A1722 U1739 G1740 A1741 G1746 G1750 G1753 C1754 A1755 G1756 A1759 A1762 G1763 G1764 A1773 U1778 U1779 A1780 A1783 A1784 A1785 A1786 A1791 G1792 C1793 U1794 C1795 U1796 C1797 U1798 G1799 C1800 G1801 A1802 A1803 C1804 U1805 A1810
G1811 A1812 G1813 G1814 A1815 G1816 G1817 G1822 G1823 G1828 G1839 C1843 A1847 A1848 U1864 G1865 A1877 G1878 A1889 A1900 G1903 G1906 U1911 A1912 A1913 C1914 U1915 A1916 U1917 C1920 G1929 G1930 U1931 A1932 G1933 A1937 A1938 U1939 C1942 G1949 G1950 U1951 A1952
U1955 U1956 C1957 C1962 U1963 G1964 C1965 A1966 C1967 G1968 A1969 A1970 A1971 A1972 U1993 C1996 G1997 C2008 G2012 A2013 A2014 A2020 C2021 U2022 G2023 A2030 A2031 G2032 A2033 G2038 C2043 G2046 C2055 G2056 A2057 A2058 A2059 A2060 G2061 A2062 C2063 C2064 C2065 G2069 G2070 A2071
U2079 U2086 G2087 U2096 C2097 U2098 U2099 G2100 G2101 U2102 C2103 G2104 C2107 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116 A2117 U2118 A2119 G2120 G2121 U2122 G2123 G2124 G2125 A2126 G2127 C2128 C2129 U2130 G2131 U2132 G2133 A2134 A2135 C2136 C2137 C2138 C2139 C2140 G2141 C2142 C2143 U2144 C2145 C2146 G2147 G2148 G2149 U2150 G2151
G2152 G2153 G2154 G2155 G2156 G2157 A2158 G2159 G2160 C2161 G2162 C2163 C2164 G2165 G2166 U2167 C2168 A2169 A2170 A2171 U2172 A2173 C2174 C2175 A2176 C2177 C2178 C2179 U2180 G2181 G2182 C2183 G2184 C2185 G2186 G2187 G2190 G2191 G2192 G2193 A2198 G2206 G2207 A2208 U2218 G2219 G2222 G2223 G2224 A2225 C2226 U2233 G2234 G2238
G2239 G2242 U2243 U2244 U2249 G2250 C2251 A2267 A2268 A2273 A2274 A2278 G2279 G2280 C2283 C2284 C2285 A2286 A2287 A2288 G2289 G2290 U2291 C2292 G2304 A2305 G2308 U2312 C2313 C2314 G2315 C2316 G2319 A2320 G2321 A2322 G2323 C2324 G2325 C2326 A2327 A2328 G2329 G2330 G2331 G2334 A2335 A2336
G2345 A2346 C2347 U2348 G2349 C2350 G2354 A2360 C2364 G2365 G2372 A2377 A2378 C2381 G2382 G2383 G2384 C2385 G2389 U2390 G2405 U2406 G2410 C2417 A2422 U2423 C2424 A2425 A2426 C2427 G2428 G2429 A2430 U2431 A2432 A2435 A2439 C2440 C2441 G2445 G2446 G2447 A2448 C2461 U2462
C2463 C2464 G2468 A2469 G2470 A2476 C2477 A2478 U2491 U2492 U2493 C2498 G2502 A2503 U2504 G2505 U2506 A2518 U2519 C2520 C2521 U2522 G2526 G2529 G2535 G2549 C2550 C2551 U2552 G2553 U2554 U2563 A2564 A2565 A2566 G2567 C2568 C2573 G2582 G2583 U2584 U2585 C2586 C2591 G2592
A2602 G2603 U2604 U2605 G2608 U2609 C2610 U2611 C2612 U2615 C2616 C2617 C2618 C2619 A2629 G2630 G2638 C2646 U2647 A2654 C2667 G2668 G2674 A2675 C2683 U2687 U2688 U2689 C2690 A2693 G2694 C2703 C2710 A2711 U2712 A2712A A2713 G2714 A2721 G2722 C2723 U2726 G2732 A2733

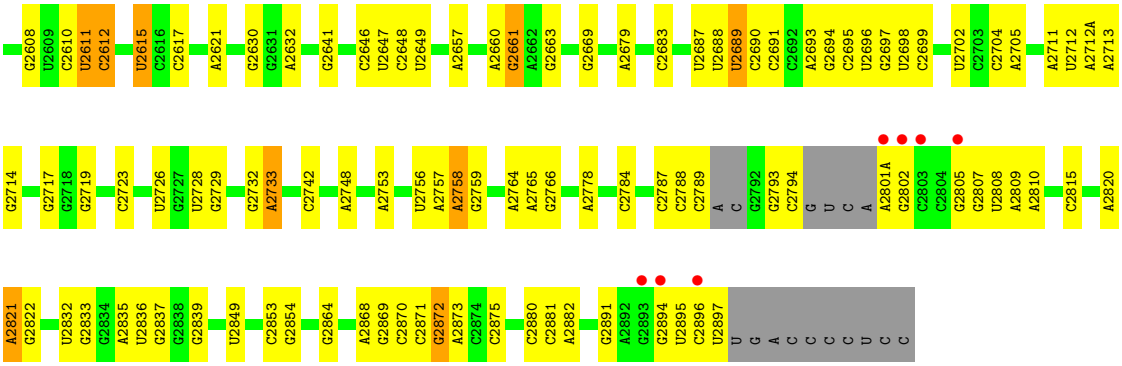


• Molecule 1: 23S Ribosomal RNA

Chain 2A:

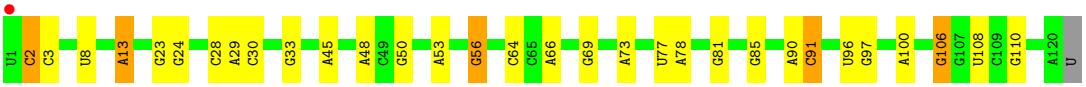






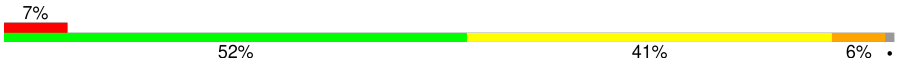
• Molecule 2: 5S Ribosomal RNA

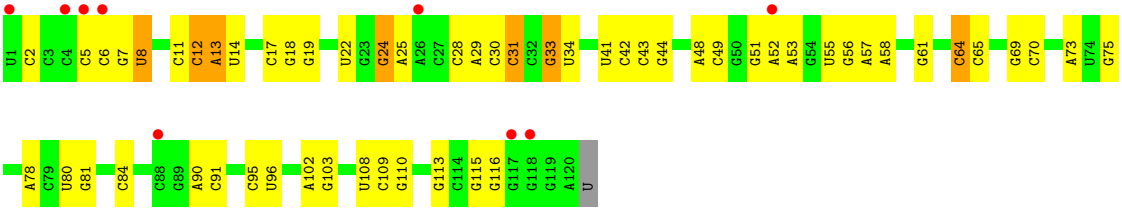
Chain 1B:



• Molecule 2: 5S Ribosomal RNA

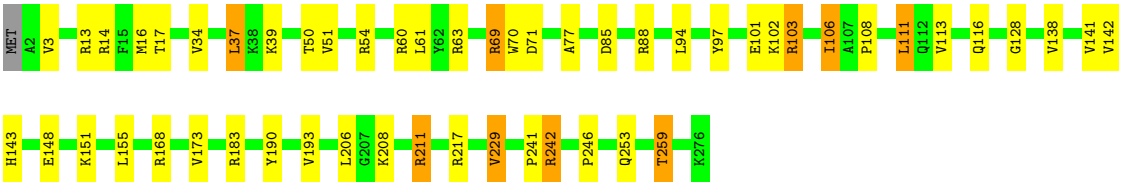
Chain 2B:





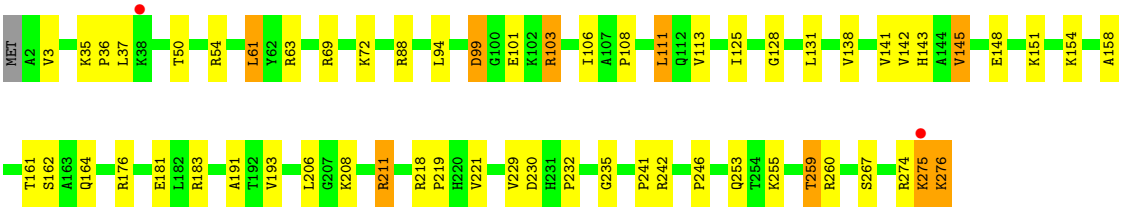
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



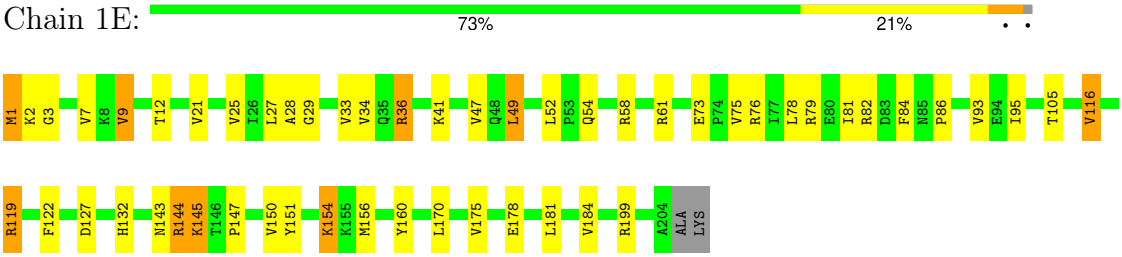
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



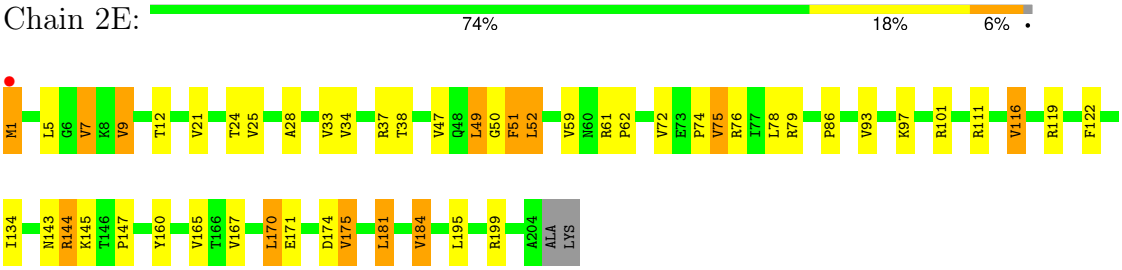
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



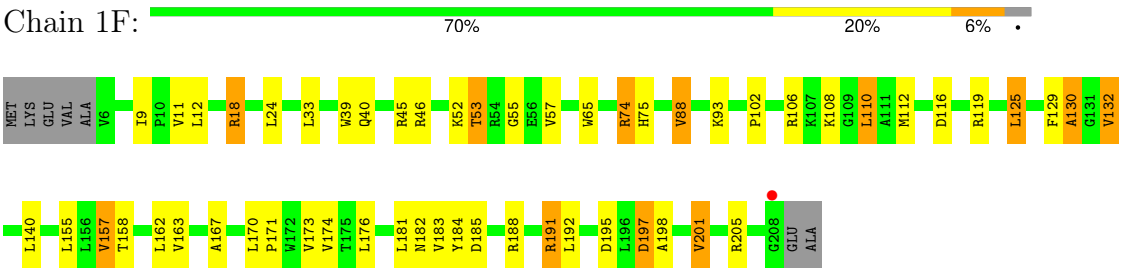
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



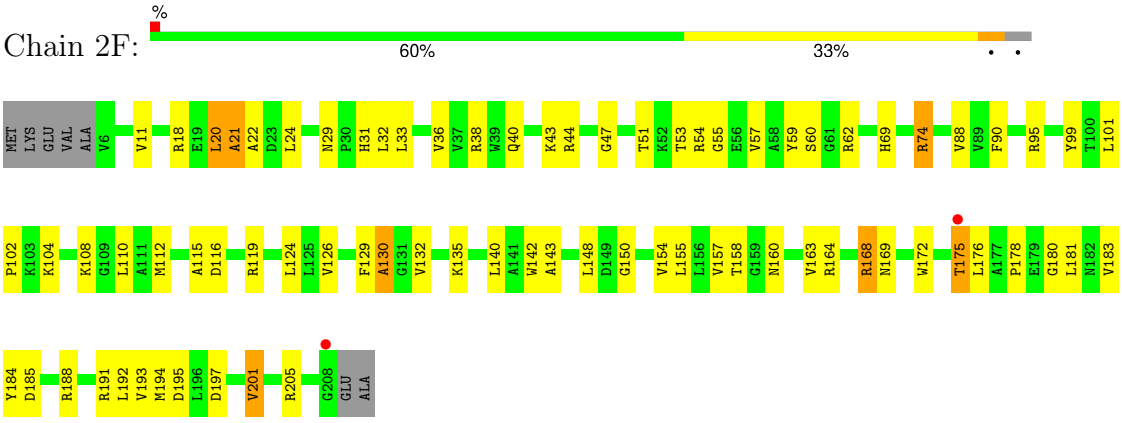
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



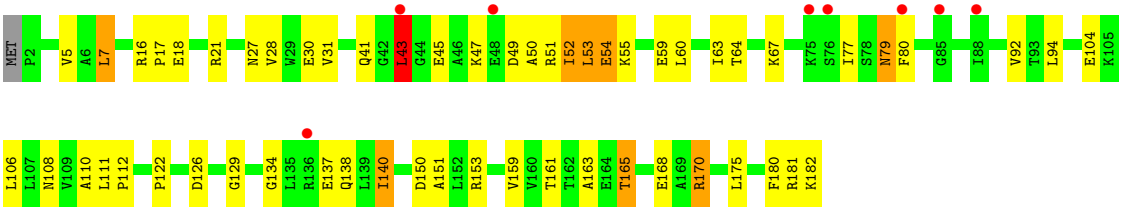
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



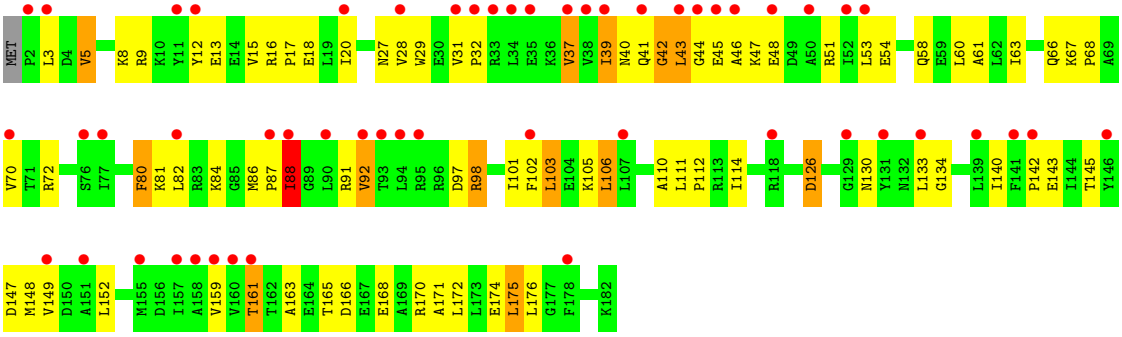
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



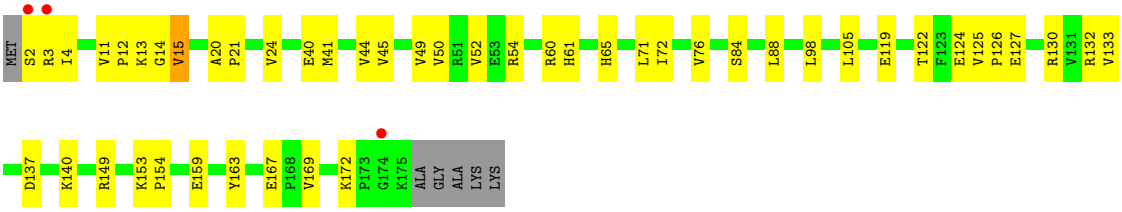
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



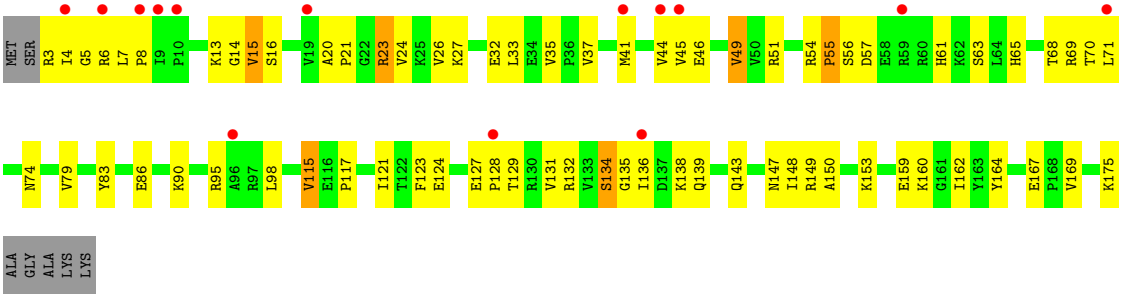
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



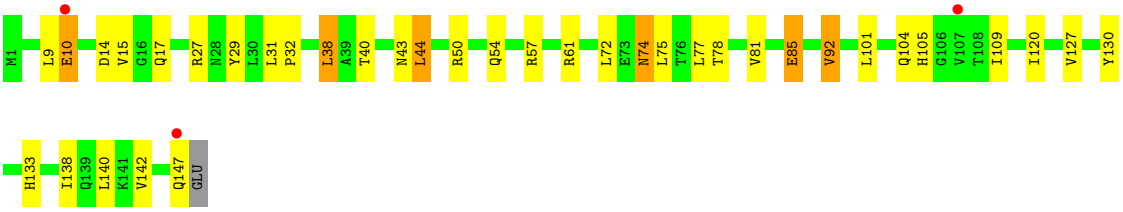
• Molecule 7: 50S ribosomal protein L6

Chain 2H:

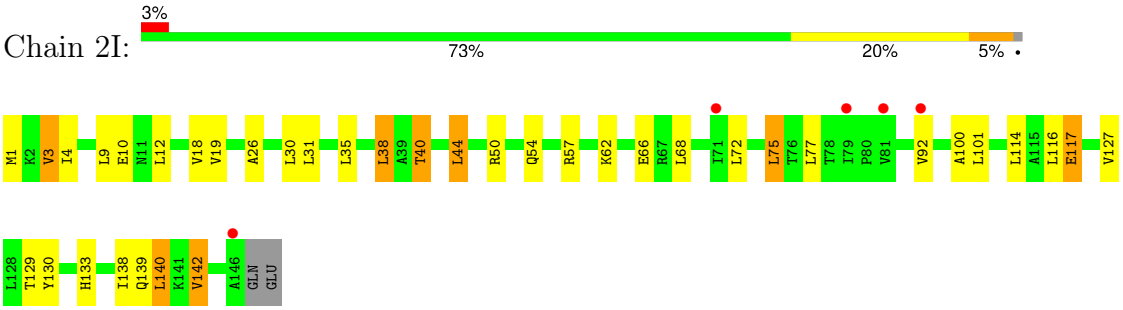


• Molecule 8: 50S ribosomal protein L9

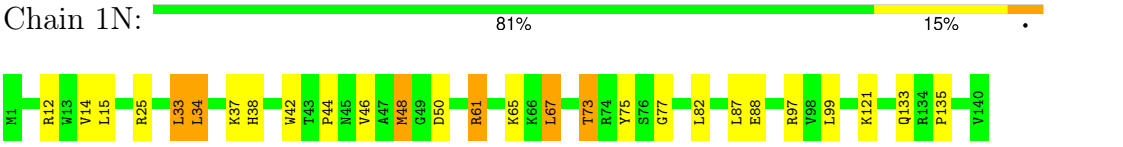
Chain 1I:



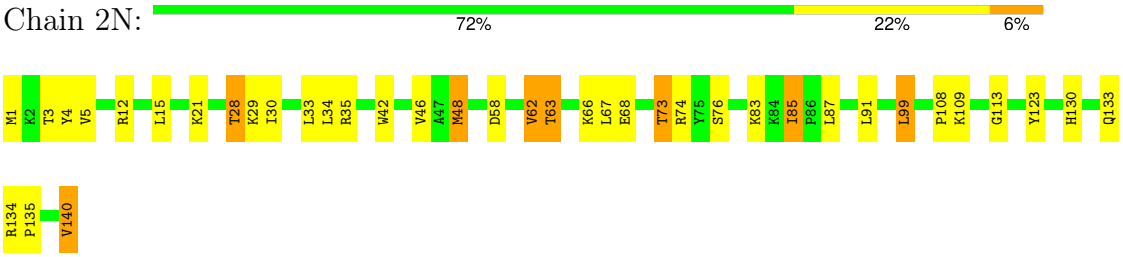
• Molecule 8: 50S ribosomal protein L9



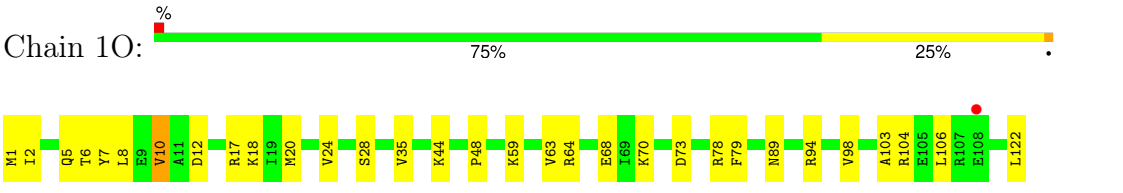
• Molecule 9: 50S ribosomal protein L13



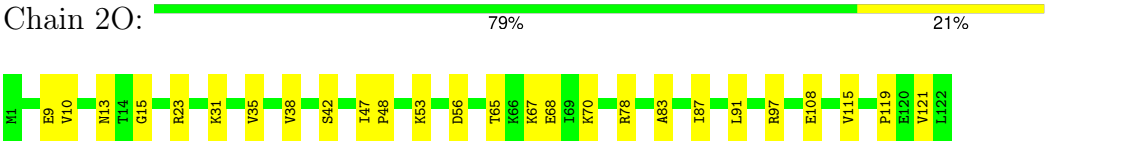
• Molecule 9: 50S ribosomal protein L13



• Molecule 10: 50S ribosomal protein L14

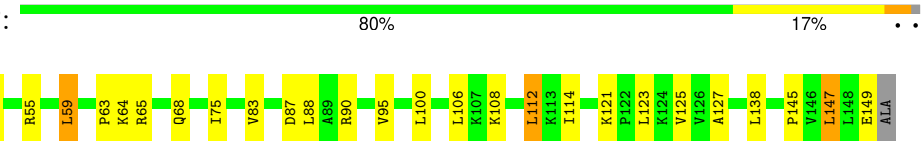


• Molecule 10: 50S ribosomal protein L14



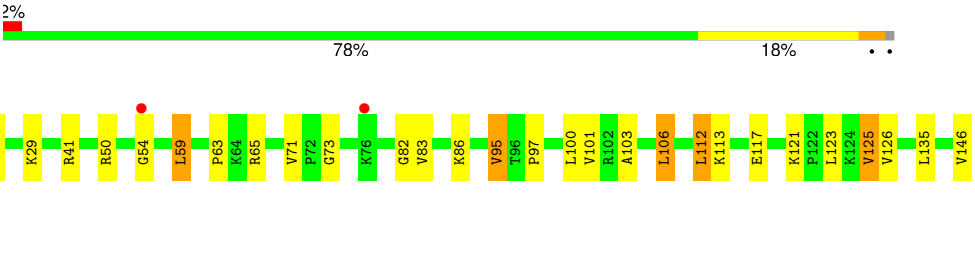
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



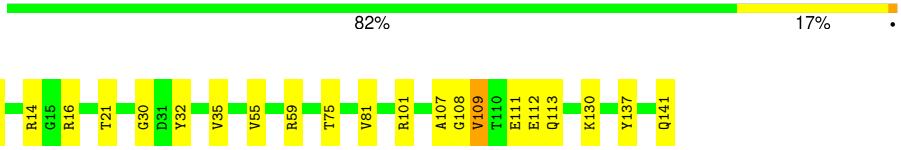
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



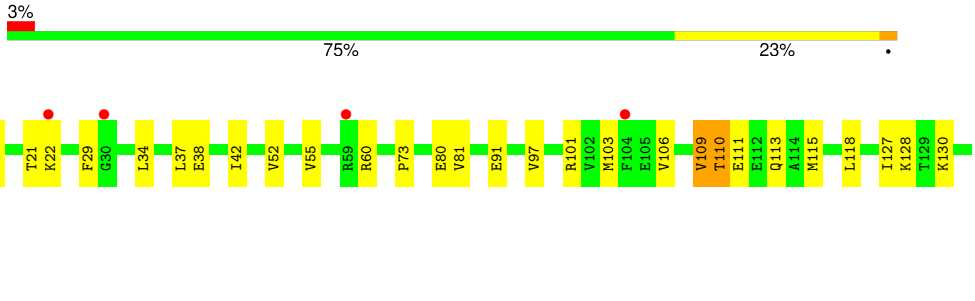
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



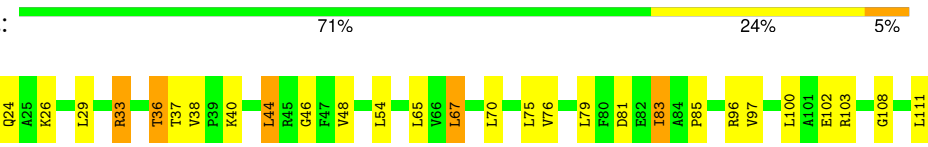
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



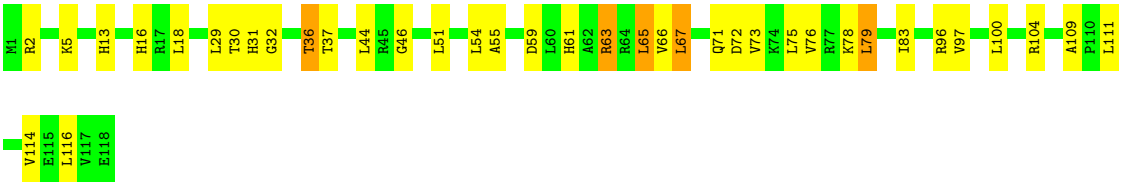
• Molecule 13: 50S ribosomal protein L17

Chain 1R:

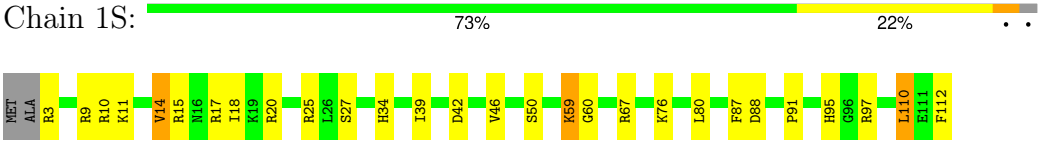


• Molecule 13: 50S ribosomal protein L17

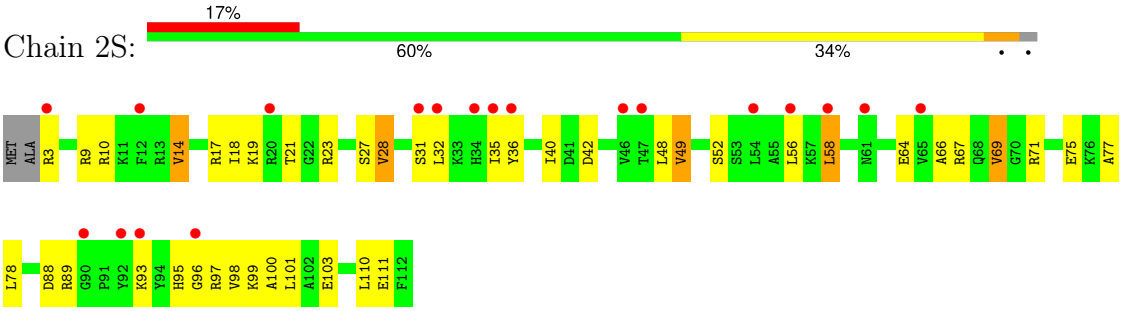
Chain 2R:



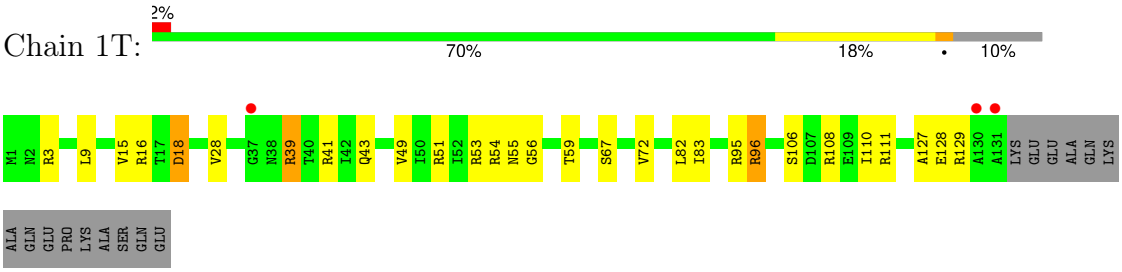
• Molecule 14: 50S ribosomal protein L18



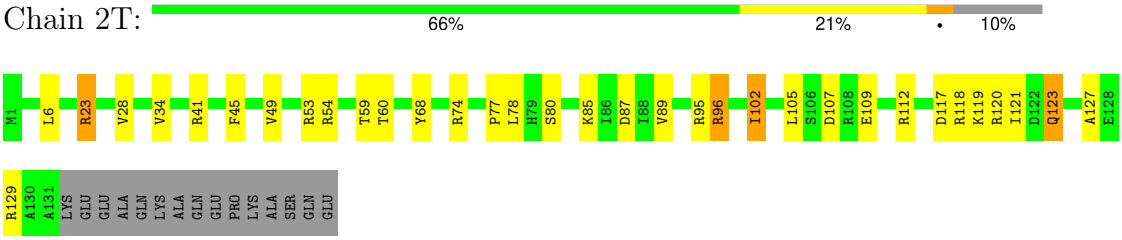
• Molecule 14: 50S ribosomal protein L18



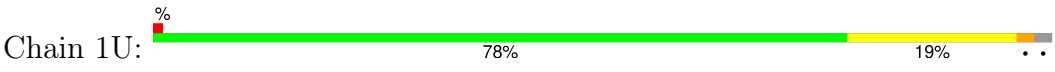
• Molecule 15: 50S ribosomal protein L19



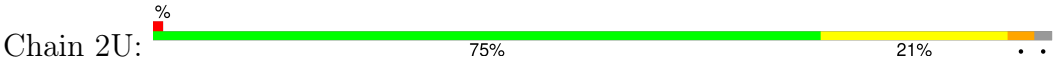
• Molecule 15: 50S ribosomal protein L19

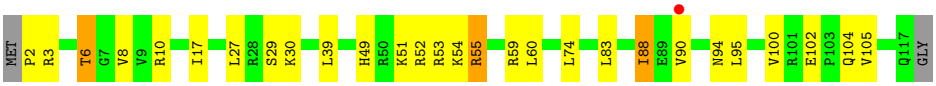


• Molecule 16: 50S ribosomal protein L20



• Molecule 16: 50S ribosomal protein L20

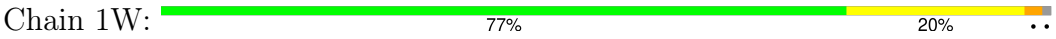


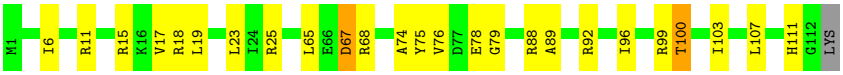


• Molecule 17: 50S ribosomal protein L21

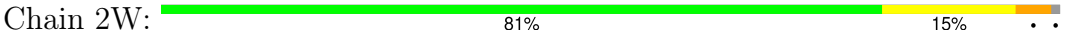
• Molecule 17: 50S ribosomal protein L21

• Molecule 18: 50S ribosomal protein L22

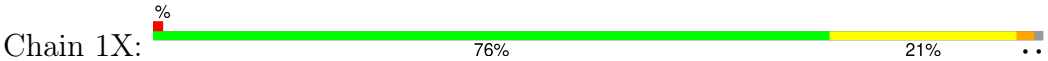


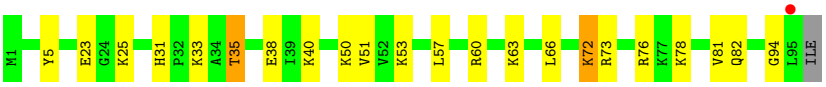


• Molecule 18: 50S ribosomal protein L22

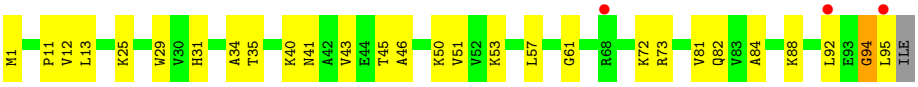


• Molecule 19: 50S ribosomal protein L23



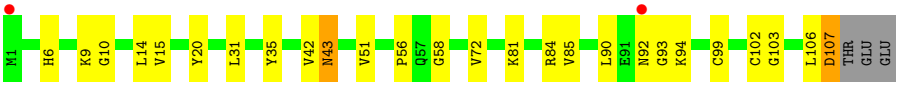


• Molecule 19: 50S ribosomal protein L23



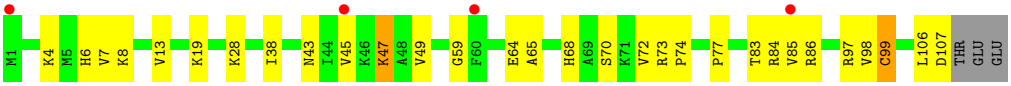
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



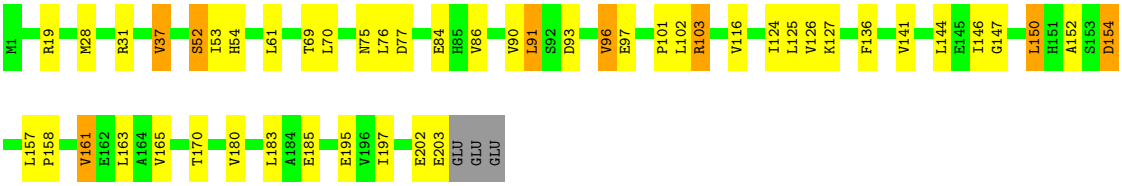
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



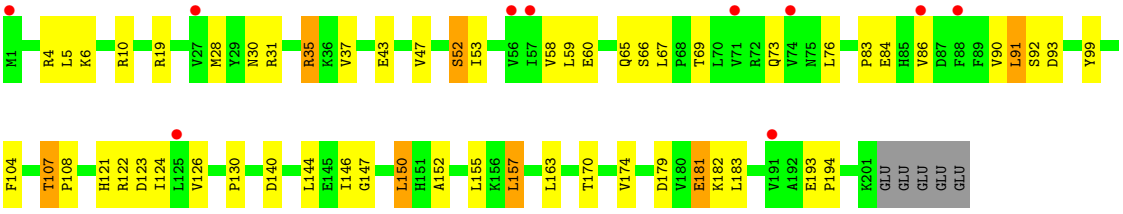
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



• Molecule 21: 50S ribosomal protein L25

Chain 2Z:

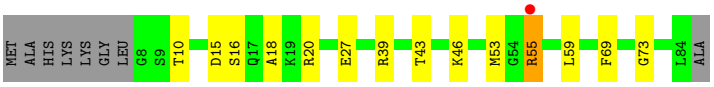


• Molecule 22: 50S ribosomal protein L27

Chain 10:

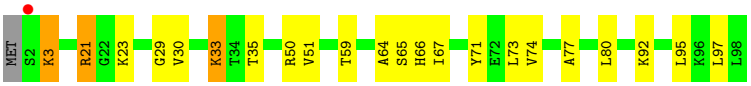
• Molecule 22: 50S ribosomal protein L27

Chain 20:



• Molecule 23: 50S ribosomal protein L28

Chain 11:

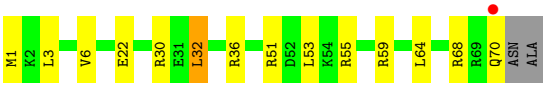


• Molecule 23: 50S ribosomal protein L28

Chain 21:

• Molecule 24: 50S ribosomal protein L29

Chain 12:

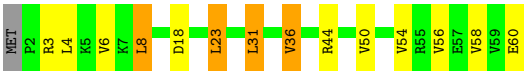


• Molecule 24: 50S ribosomal protein L29

Chain 22:

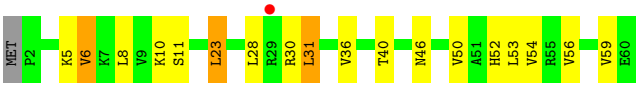
• Molecule 25: 50S ribosomal protein L30

Chain 13:



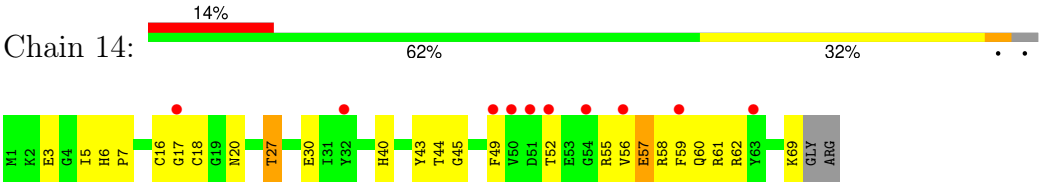
• Molecule 25: 50S ribosomal protein L30

Chain 23:



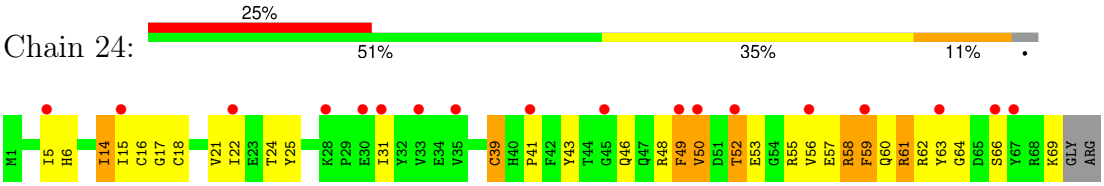
• Molecule 26: 50S ribosomal protein L31

Chain 14:



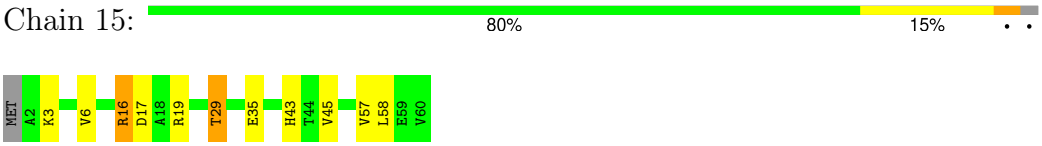
• Molecule 26: 50S ribosomal protein L31

Chain 24:



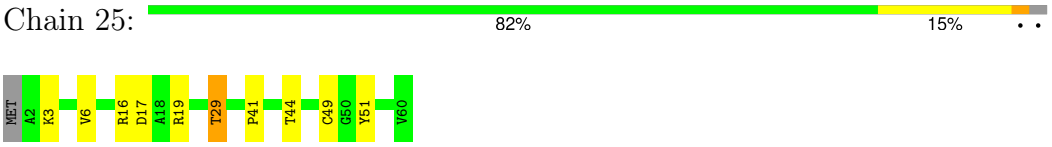
• Molecule 27: 50S ribosomal protein L32

Chain 15:



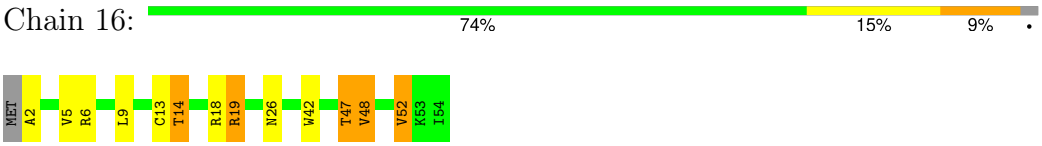
• Molecule 27: 50S ribosomal protein L32

Chain 25:



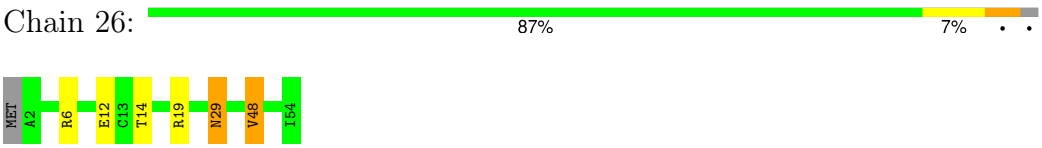
• Molecule 28: 50S ribosomal protein L33

Chain 16:



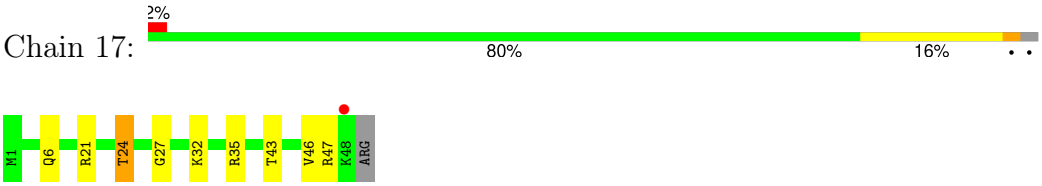
• Molecule 28: 50S ribosomal protein L33

Chain 26:



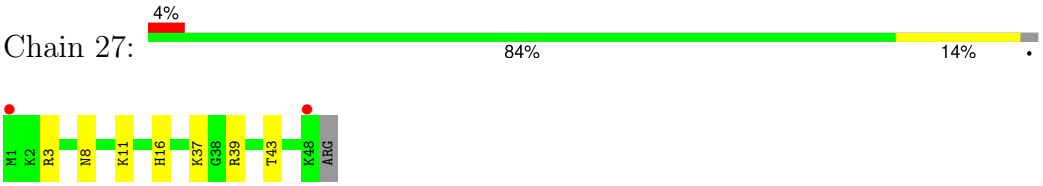
• Molecule 29: 50S ribosomal protein L34

Chain 17:



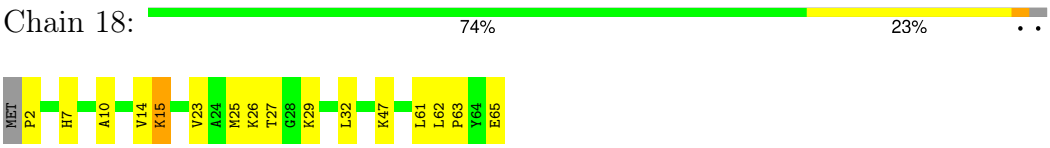
• Molecule 29: 50S ribosomal protein L34

Chain 27:



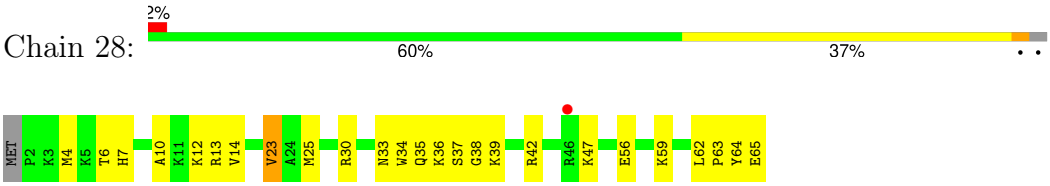
• Molecule 30: 50S ribosomal protein L35

Chain 18:



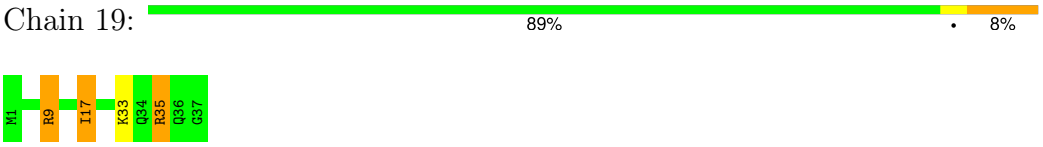
• Molecule 30: 50S ribosomal protein L35

Chain 28:



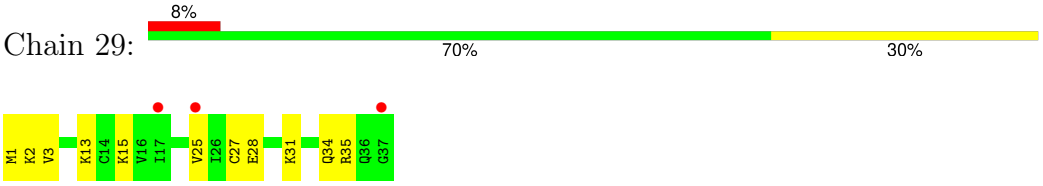
• Molecule 31: 50S ribosomal protein L36

Chain 19:



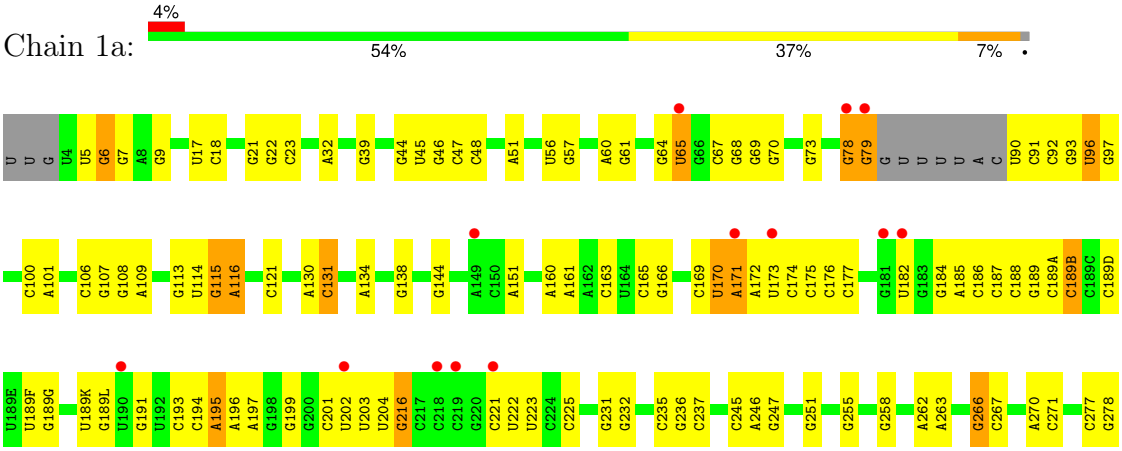
• Molecule 31: 50S ribosomal protein L36

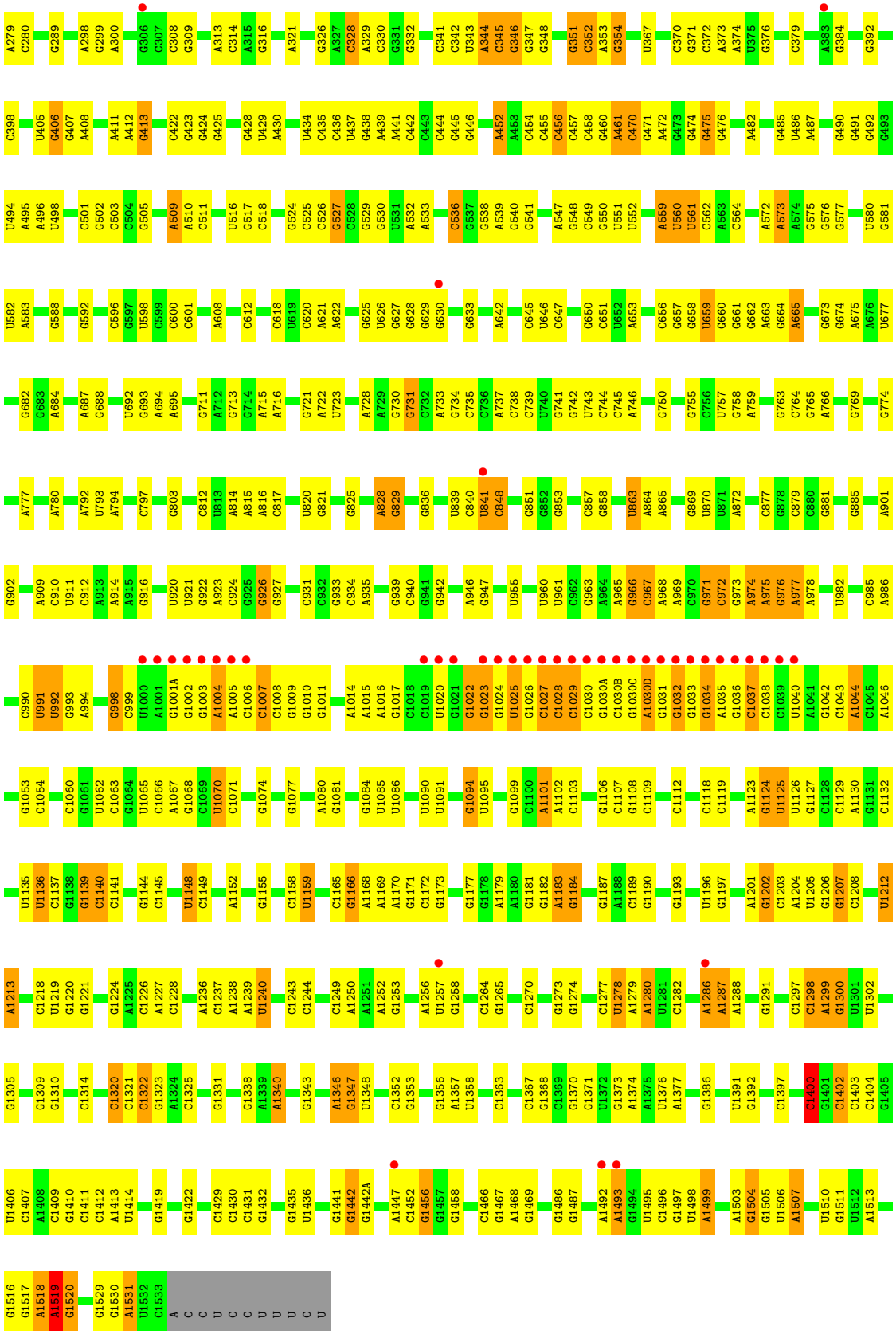
Chain 29:



• Molecule 32: 16S Ribosomal RNA

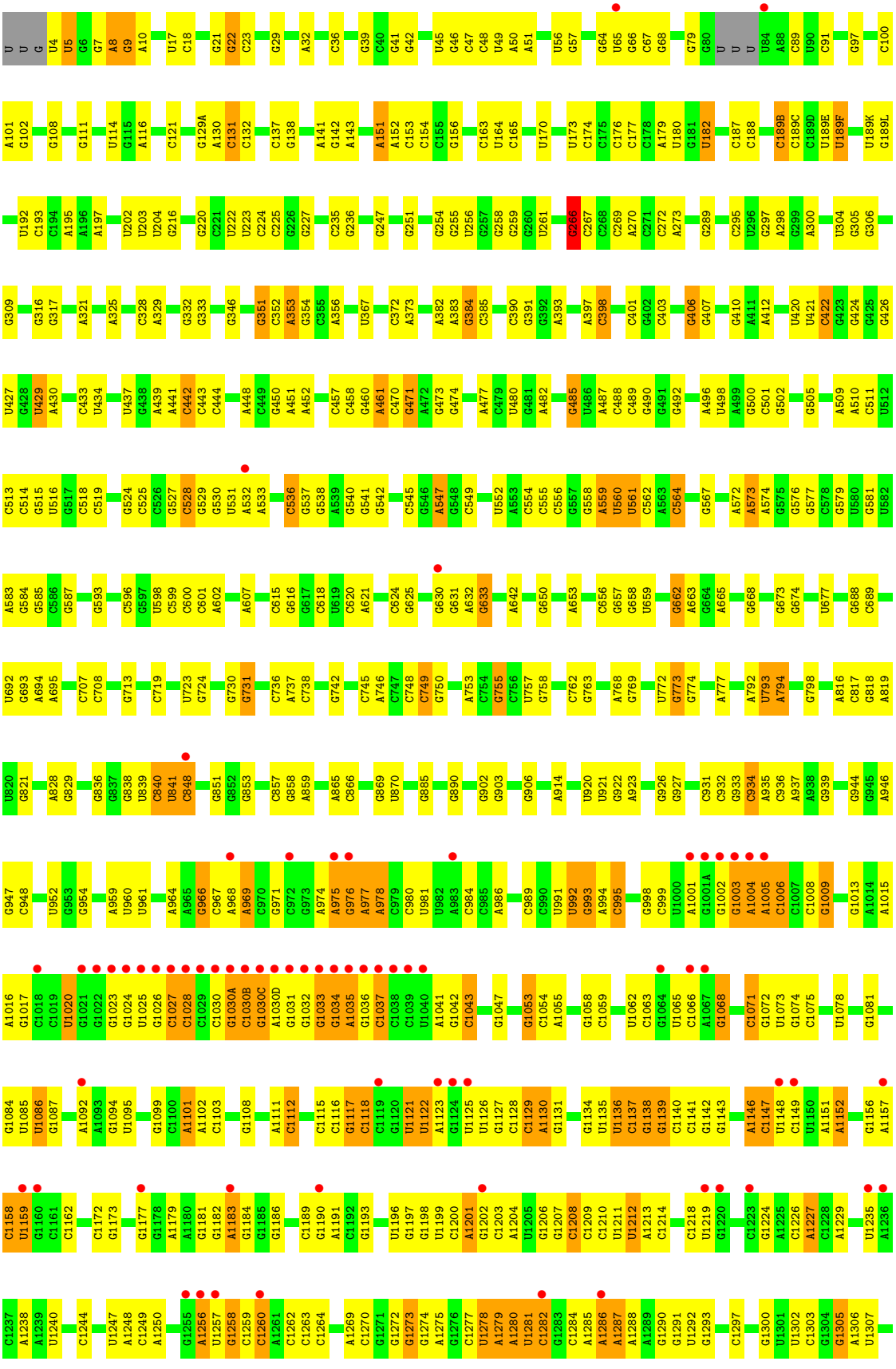
Chain 1a:

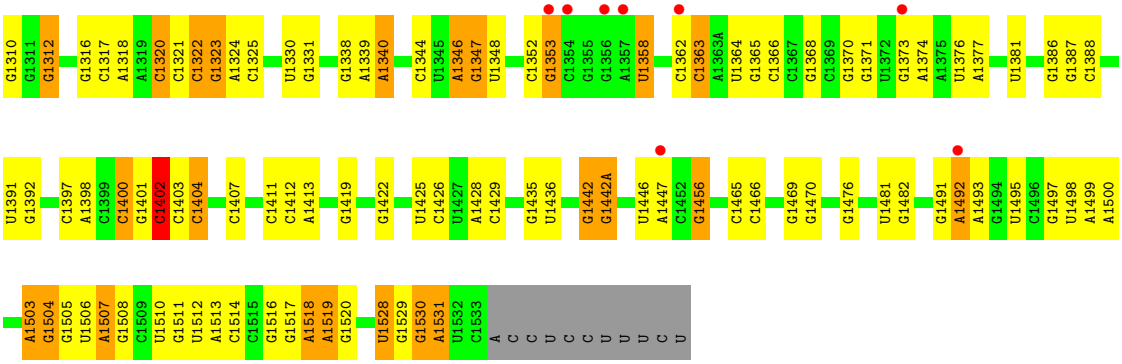




• Molecule 32: 16S Ribosomal RNA

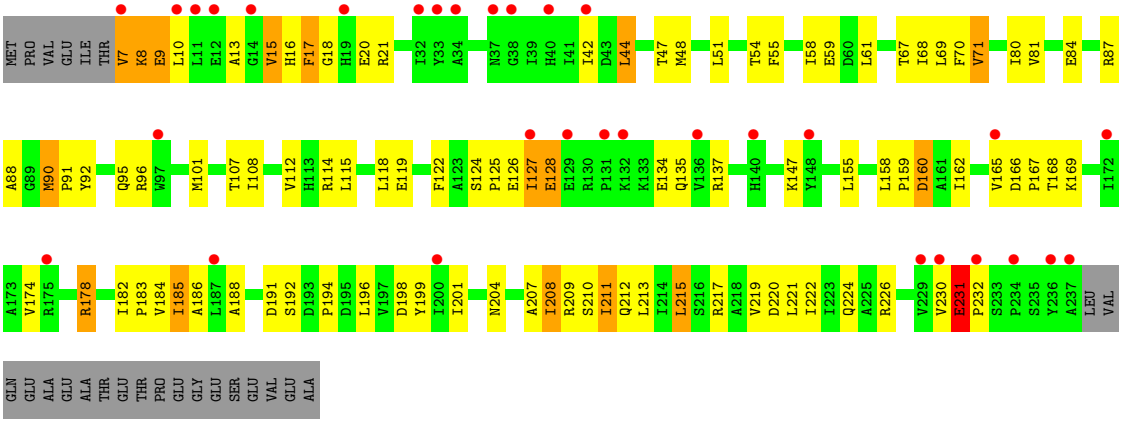
Chain 2a:





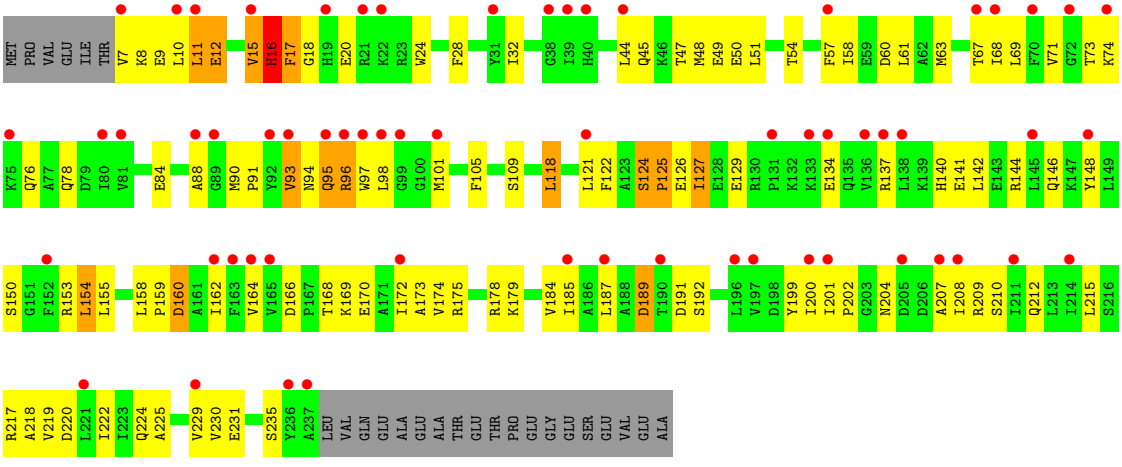
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



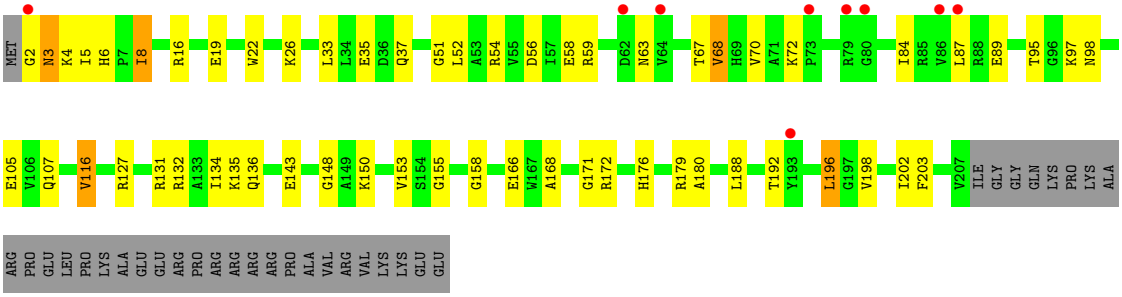
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



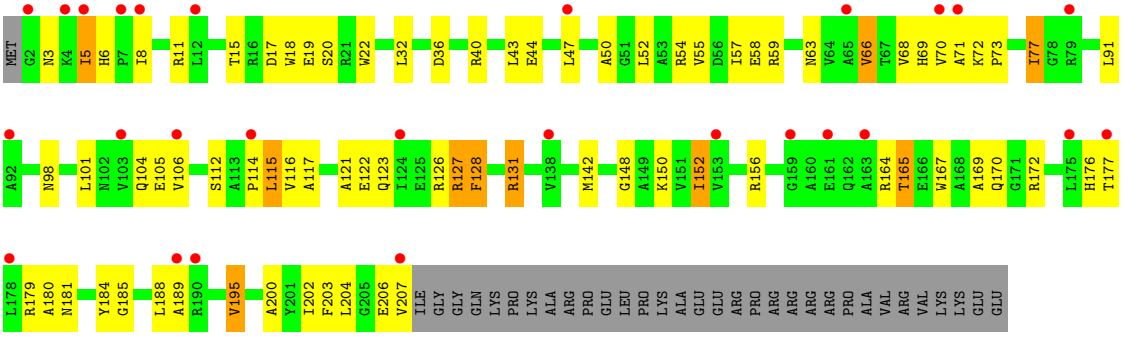
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



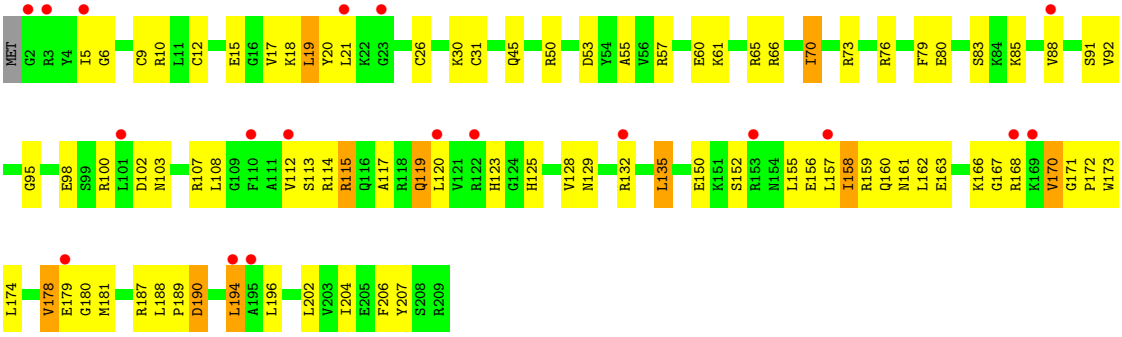
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



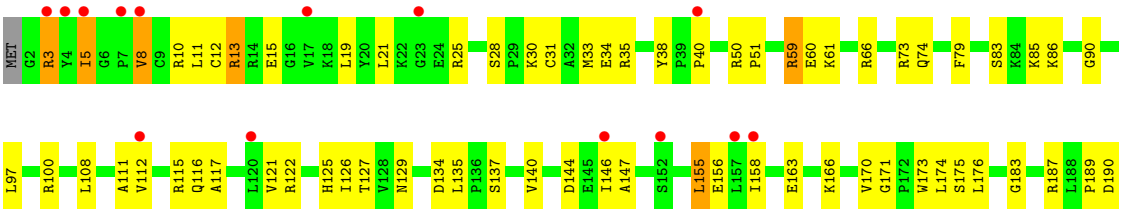
• Molecule 35: 30S ribosomal protein S4

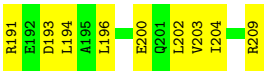
Chain 1d:



• Molecule 35: 30S ribosomal protein S4

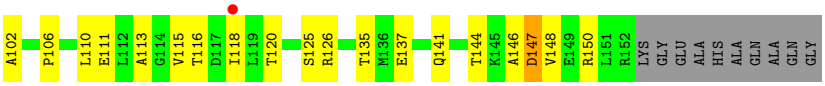
Chain 2d:





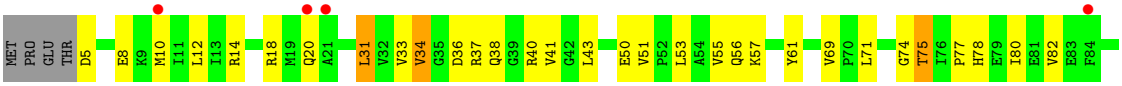
• Molecule 36: 30S ribosomal protein S5

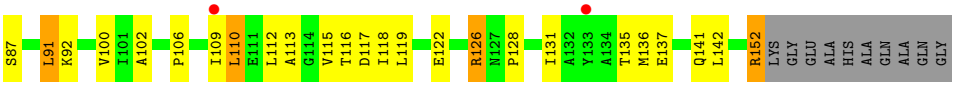
Chain 1e:



• Molecule 36: 30S ribosomal protein S5

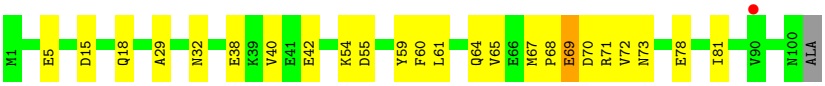
Chain 2e:





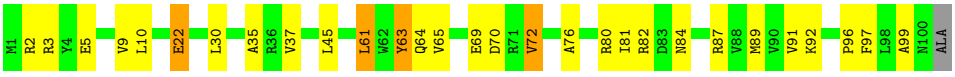
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



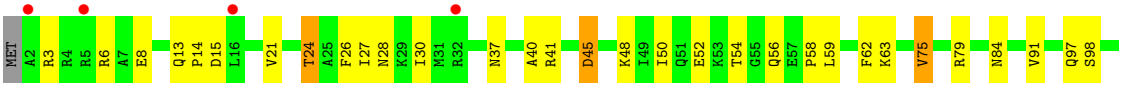
• Molecule 37: 30S ribosomal protein S6

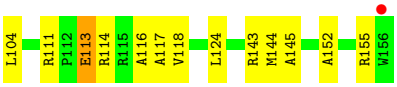
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

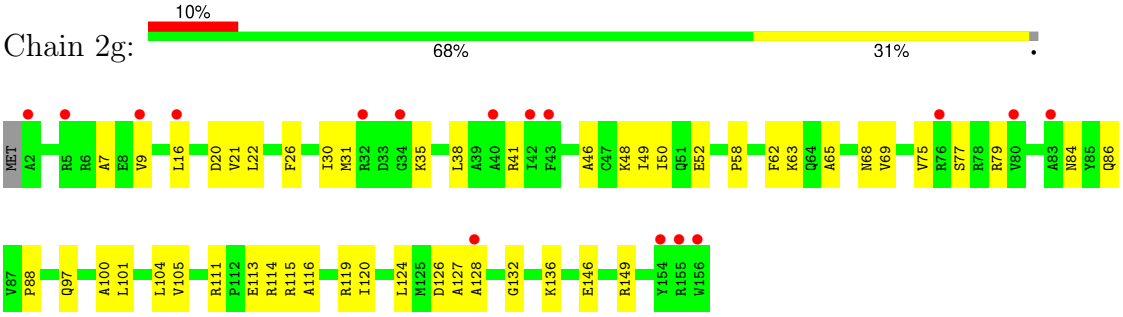
Chain 1g:





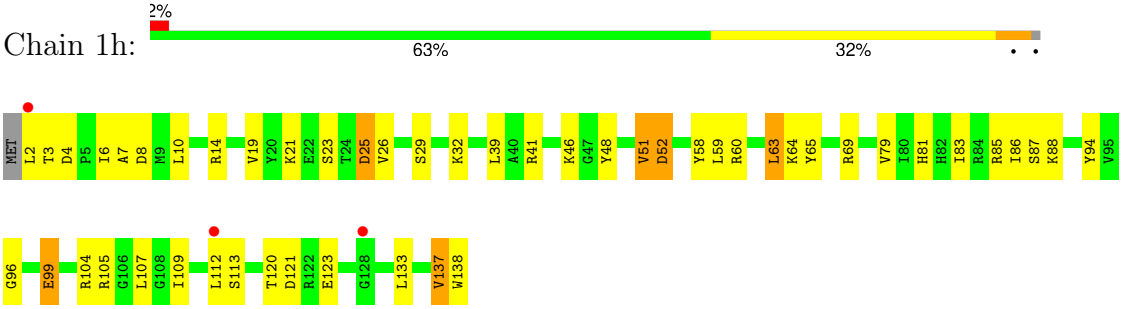
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



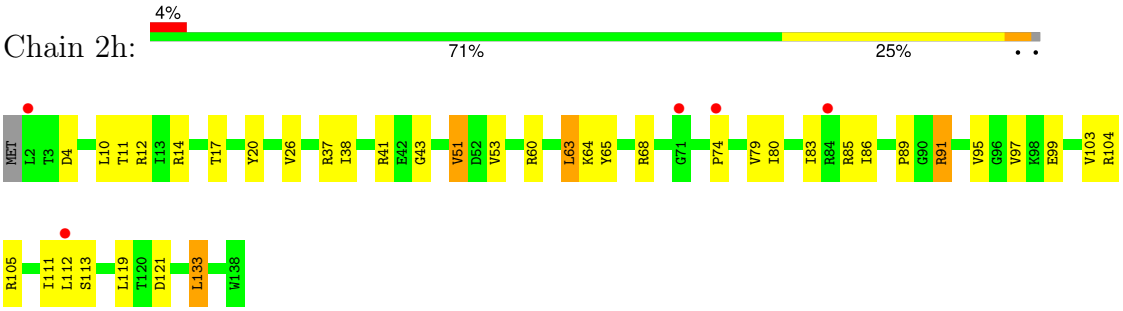
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



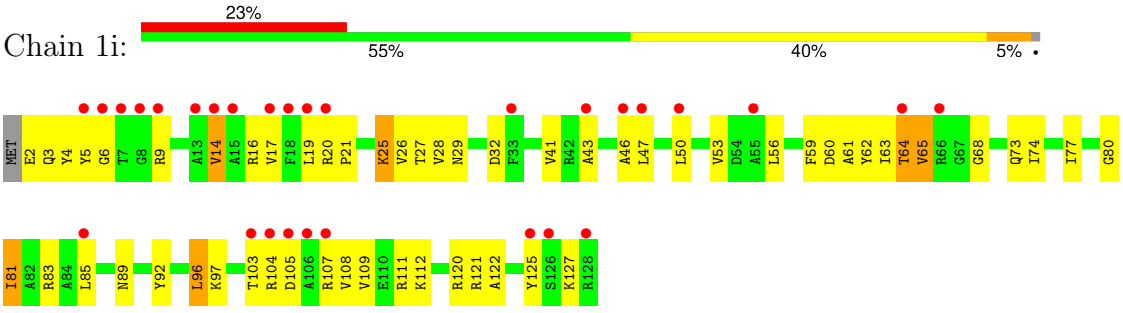
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



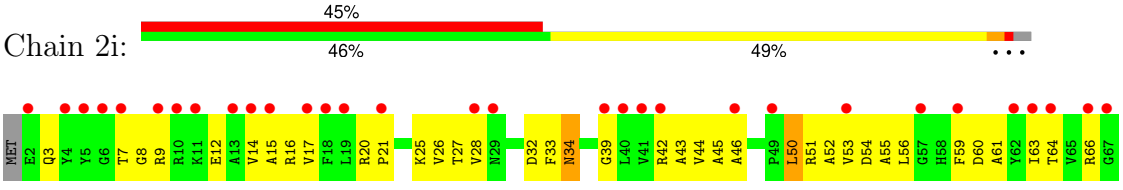
• Molecule 40: 30S ribosomal protein S9

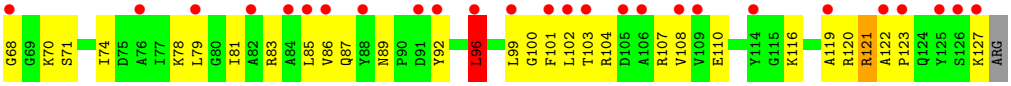
Chain 1i:



• Molecule 40: 30S ribosomal protein S9

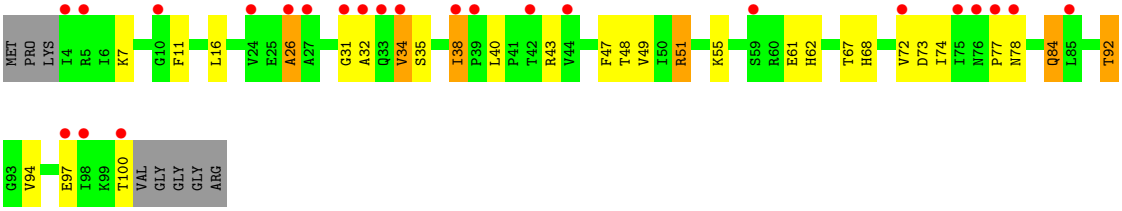
Chain 2i:





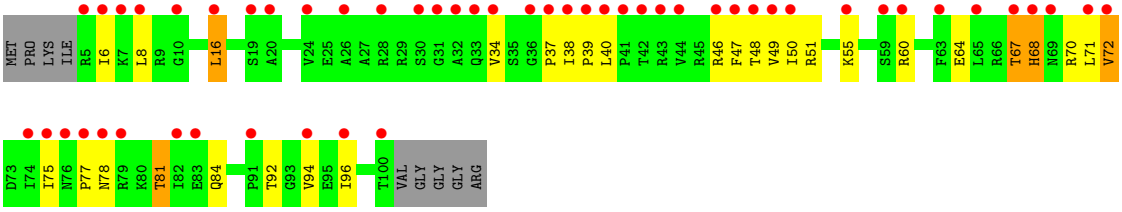
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



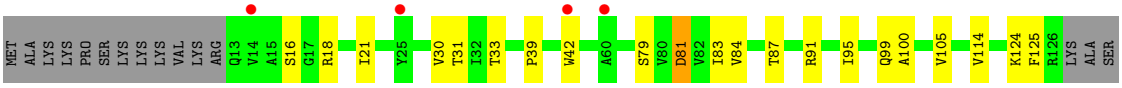
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



• Molecule 42: 30S ribosomal protein S11

Chain 1k:

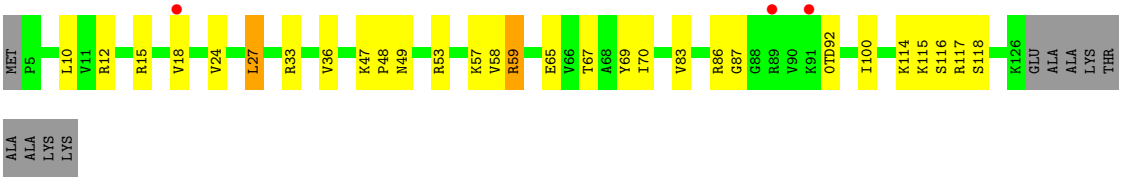


• Molecule 42: 30S ribosomal protein S11

Chain 2k:

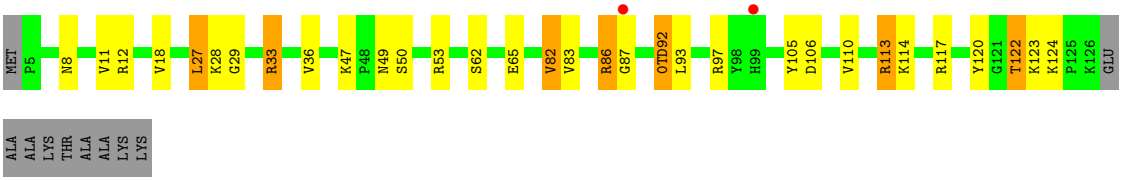
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



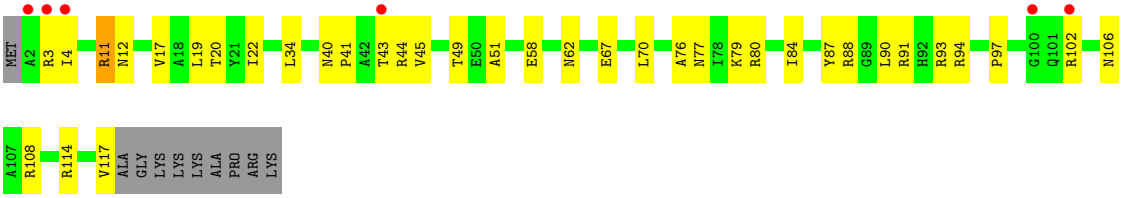
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



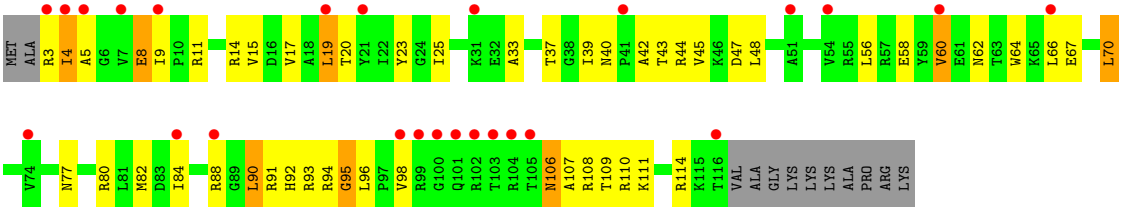
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



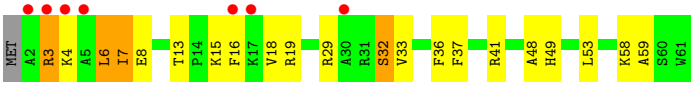
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



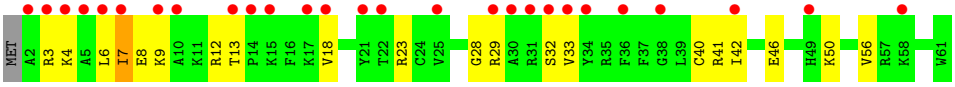
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



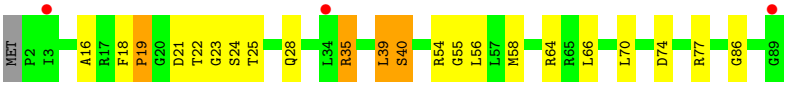
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



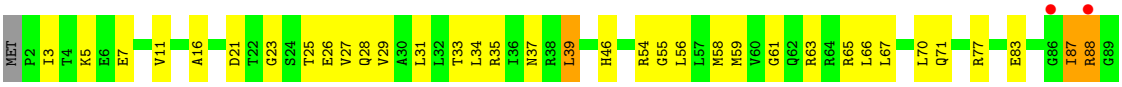
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



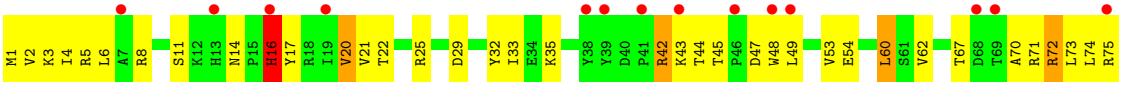
• Molecule 46: 30S ribosomal protein S15

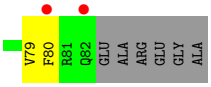
Chain 2o:



• Molecule 47: 30S ribosomal protein S16

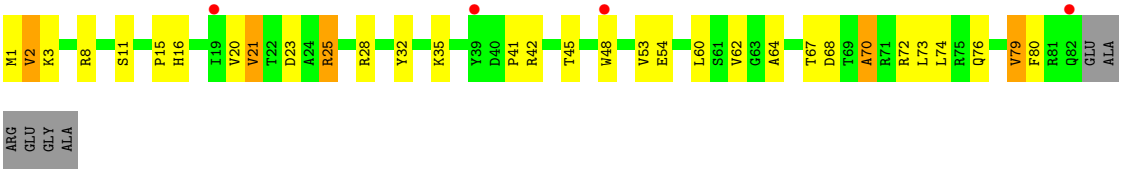
Chain 1p:





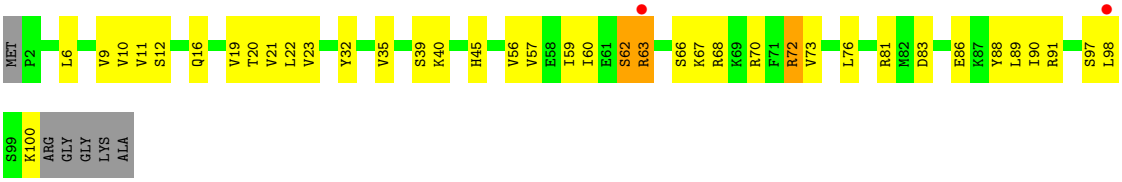
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



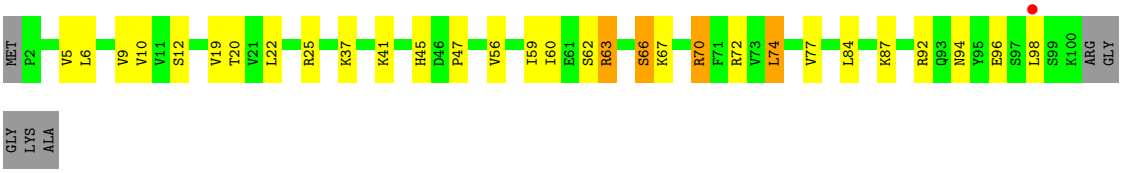
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



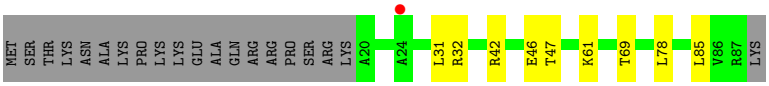
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



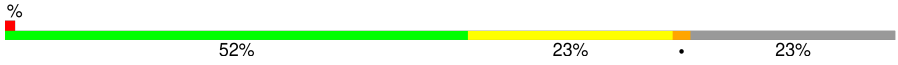
• Molecule 49: 30S ribosomal protein S18

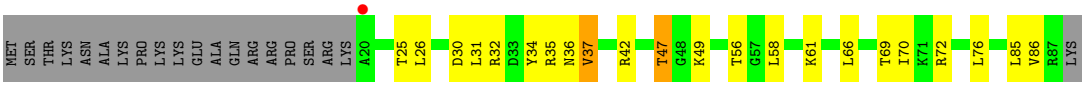
Chain 1r:



• Molecule 49: 30S ribosomal protein S18

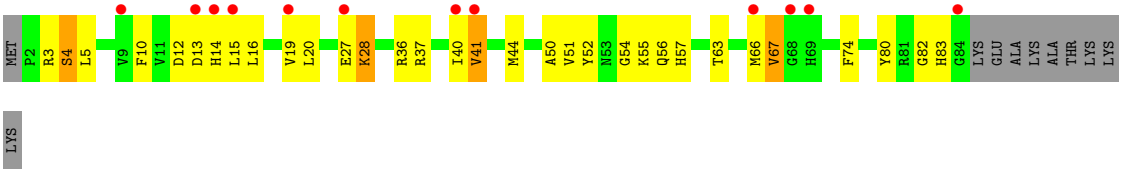
Chain 2r:





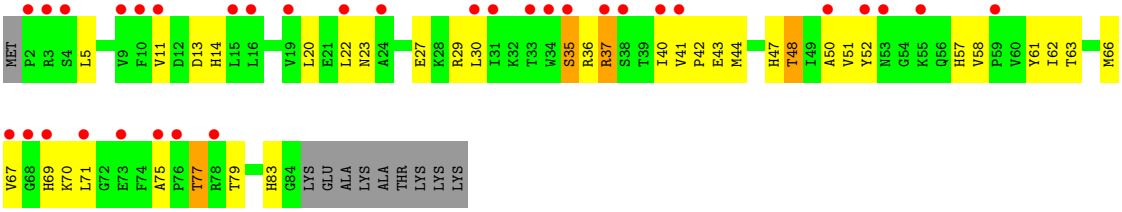
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



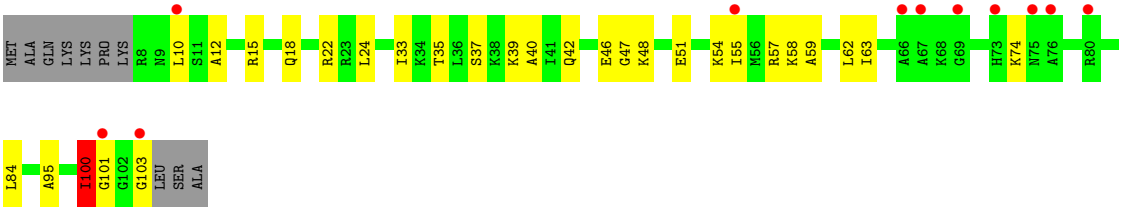
• Molecule 50: 30S ribosomal protein S19

Chain 2s:

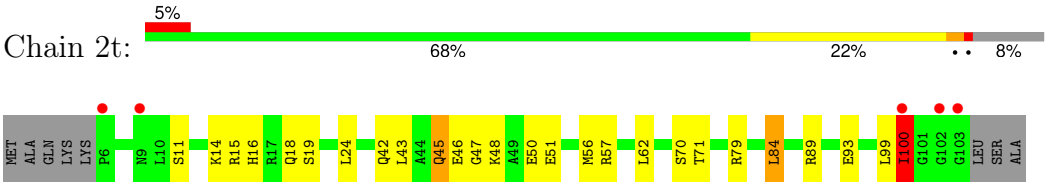


• Molecule 51: 30S ribosomal protein S20

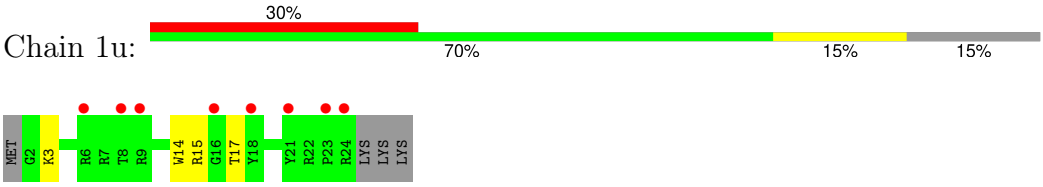
Chain 1t:



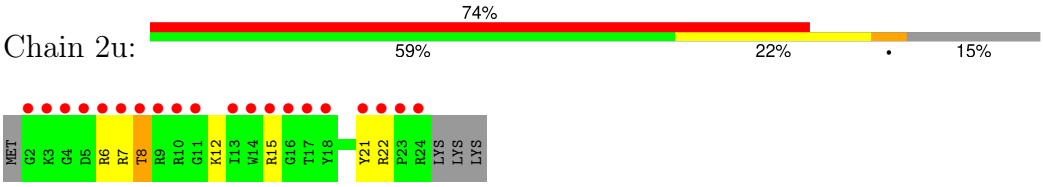
• Molecule 51: 30S ribosomal protein S20



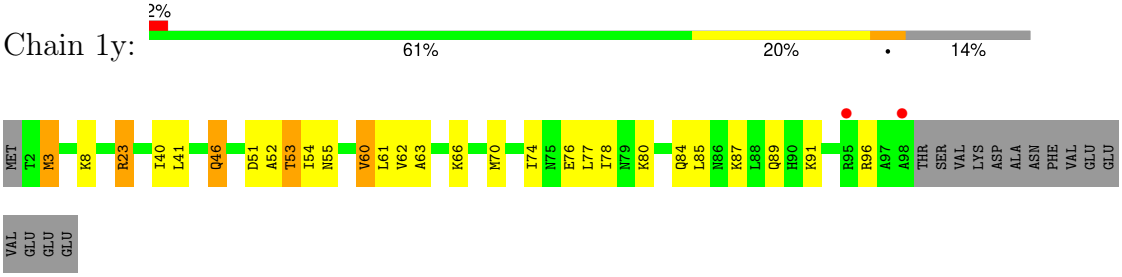
• Molecule 52: 30S ribosomal protein Thx



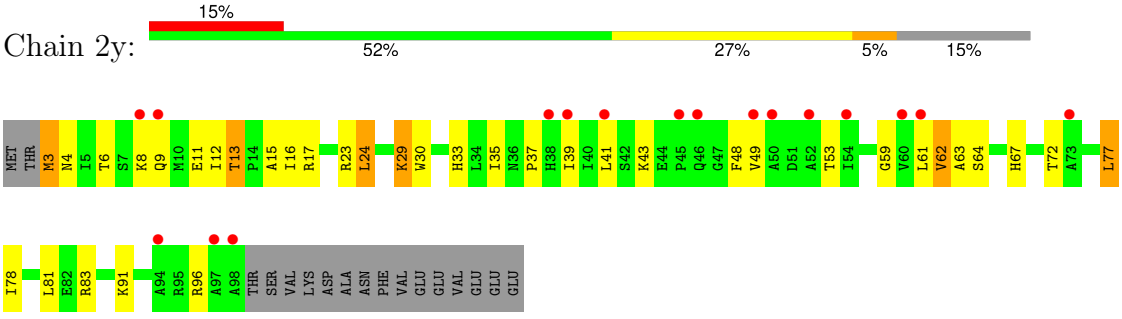
• Molecule 52: 30S ribosomal protein Thx



• Molecule 53: Ribosome-associated inhibitor A



• Molecule 53: Ribosome-associated inhibitor A



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.50Å 449.68Å 622.97Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	40.09 – 2.70 40.09 – 2.70	Depositor EDS
% Data completeness (in resolution range)	99.7 (40.09-2.70) 99.8 (40.09-2.70)	Depositor EDS
R_{merge}	0.32	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.22 (at 2.69Å)	Xtriage
Refinement program	PHENIX 1.17.1	Depositor
R, R_{free}	0.211 , 0.259 0.211 , 0.257	Depositor DCC
R_{free} test set	79935 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	46.8	Xtriage
Anisotropy	0.124	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 50.6	EDS
L-test for twinning[2]	$< \|L\| > = 0.44$, $< L^2 > = 0.27$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	298590	wwPDB-VP
Average B, all atoms (Å^2)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.52% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: OMG, 0TD, G7M, MPD, UR3, 5MU, SF4, OMU, A1CQ9, 2MG, ZN, M2G, 5MC, MA6, PSU, MG, OMC, 4OC, 2MA

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	0.27	0/69031	0.44	0/107754
1	2A	0.21	1/68903 (0.0%)	0.40	1/107552 (0.0%)
2	1B	0.22	0/2876	0.40	0/4486
2	2B	0.19	0/2878	0.36	0/4490
3	1D	0.26	0/2181	0.50	0/2940
3	2D	0.22	0/2186	0.46	0/2944
4	1E	0.26	0/1592	0.48	0/2149
4	2E	0.22	0/1592	0.49	0/2149
5	1F	0.26	0/1619	0.48	0/2193
5	2F	0.20	0/1615	0.46	2/2188 (0.1%)
6	1G	0.20	0/1451	0.47	0/1961
6	2G	0.21	0/1449	0.44	0/1957
7	1H	0.21	0/1356	0.40	0/1834
7	2H	0.19	0/1350	0.39	0/1826
8	1I	0.22	0/1109	0.47	1/1512 (0.1%)
8	2I	0.18	0/1091	0.38	0/1490
9	1N	0.25	0/1148	0.45	0/1547
9	2N	0.18	0/1144	0.40	0/1543
10	1O	0.27	0/943	0.50	0/1269
10	2O	0.20	0/943	0.42	0/1269
11	1P	0.26	0/1152	0.52	0/1533
11	2P	0.19	0/1152	0.46	0/1533
12	1Q	0.25	0/1143	0.46	0/1527
12	2Q	0.19	0/1143	0.40	0/1527
13	1R	0.27	0/982	0.49	0/1312
13	2R	0.19	0/982	0.46	0/1312
14	1S	0.21	0/887	0.45	0/1180
14	2S	0.20	0/880	0.42	0/1172
15	1T	0.26	0/1105	0.50	0/1477
15	2T	0.21	0/1097	0.44	0/1468
16	1U	0.29	0/977	0.48	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.20	0/977	0.39	0/1301
17	1V	0.25	0/786	0.46	0/1053
17	2V	0.18	0/782	0.42	0/1049
18	1W	0.28	0/897	0.48	0/1205
18	2W	0.20	0/897	0.41	0/1205
19	1X	0.26	0/764	0.50	0/1025
19	2X	0.20	0/764	0.50	0/1025
20	1Y	0.24	0/823	0.49	0/1099
20	2Y	0.20	0/823	0.45	0/1100
21	1Z	0.21	0/1620	0.41	0/2200
21	2Z	0.19	0/1590	0.44	0/2162
22	10	0.26	0/616	0.51	0/821
22	20	0.20	0/616	0.45	0/821
23	11	0.25	0/761	0.43	0/1013
23	21	0.22	0/766	0.40	0/1018
24	12	0.23	0/590	0.43	0/781
24	22	0.20	0/594	0.35	0/785
25	13	0.25	0/474	0.46	0/635
25	23	0.19	0/469	0.41	0/630
26	14	0.24	0/559	0.56	0/754
26	24	0.29	0/549	0.65	2/741 (0.3%)
27	15	0.25	0/473	0.46	0/639
27	25	0.21	0/469	0.44	0/635
28	16	0.24	0/460	0.46	0/613
28	26	0.20	0/456	0.43	0/608
29	17	0.30	0/426	0.51	0/561
29	27	0.22	0/426	0.45	0/561
30	18	0.30	0/525	0.50	0/691
30	28	0.21	0/525	0.41	0/691
31	19	0.28	0/310	0.46	0/407
31	29	0.19	0/310	0.42	0/407
32	1a	0.19	0/35795	0.37	0/55864
32	2a	0.19	0/35890	0.37	2/56012 (0.0%)
33	1b	0.24	0/1876	0.50	0/2533
33	2b	0.23	0/1860	0.49	0/2518
34	1c	0.20	0/1582	0.42	0/2137
34	2c	0.23	0/1566	0.44	0/2119
35	1d	0.21	0/1695	0.46	0/2274
35	2d	0.20	0/1698	0.43	0/2277
36	1e	0.20	0/1149	0.47	0/1548
36	2e	0.19	0/1149	0.44	0/1548
37	1f	0.19	0/827	0.41	0/1120
37	2f	0.19	0/829	0.42	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.18	0/1254	0.39	0/1683
38	2g	0.21	0/1248	0.42	0/1676
39	1h	0.19	0/1118	0.42	0/1506
39	2h	0.20	0/1108	0.43	0/1494
40	1i	0.20	0/1005	0.48	0/1351
40	2i	0.25	0/985	0.45	0/1329
41	1j	0.19	0/732	0.40	0/993
41	2j	0.21	0/723	0.48	0/984
42	1k	0.19	0/849	0.42	0/1150
42	2k	0.19	0/848	0.45	0/1149
43	1l	0.18	0/937	0.42	0/1260
43	2l	0.20	0/937	0.44	0/1260
44	1m	0.20	0/924	0.44	0/1242
44	2m	0.22	0/905	0.49	0/1217
45	1n	0.20	0/501	0.41	0/664
45	2n	0.20	0/501	0.42	0/664
46	1o	0.20	0/739	0.40	0/985
46	2o	0.18	0/739	0.39	0/985
47	1p	0.21	0/697	0.48	0/939
47	2p	0.21	0/693	0.57	1/935 (0.1%)
48	1q	0.21	0/836	0.42	0/1117
48	2q	0.20	0/836	0.41	0/1117
49	1r	0.18	0/560	0.40	0/746
49	2r	0.19	0/560	0.40	0/746
50	1s	0.18	0/663	0.43	0/895
50	2s	0.19	0/660	0.41	0/893
51	1t	0.24	0/734	0.48	0/969
51	2t	0.18	0/736	0.40	0/976
52	1u	0.20	0/203	0.45	0/266
52	2u	0.39	0/203	0.49	0/266
53	1y	0.17	0/776	0.35	0/1048
53	2y	0.19	0/761	0.42	1/1030 (0.1%)
All	All	0.22	1/309941 (0.0%)	0.42	10/463239 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
33	1b	0	1
43	2l	0	1
All	All	0	2

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2552	OMU	O3'-P	5.21	1.61	1.56

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	2p	70	ALA	N-CA-C	-8.42	105.03	114.62
1	2A	1992	G	C2'-C3'-O3'	6.02	118.53	109.50
32	2a	266	G	C2'-C3'-O3'	5.85	118.28	109.50
53	2y	59	GLY	N-CA-C	5.84	117.90	110.20
32	2a	266	G	P-O3'-C3'	5.32	128.19	120.20
26	24	59	PHE	CA-C-N	5.26	131.16	121.70
26	24	59	PHE	C-N-CA	5.26	131.16	121.70
5	2F	21	ALA	CA-C-N	5.14	130.95	121.70
5	2F	21	ALA	C-N-CA	5.14	130.95	121.70
8	1I	133	HIS	N-CA-C	-5.12	98.50	109.81

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
33	1b	231	GLU	Peptide
43	2l	86	ARG	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61869	0	31205	527	0
1	2A	61758	0	31154	649	0
2	1B	2572	0	1305	18	0
2	2B	2573	0	1306	36	0
3	1D	2131	0	2207	41	0
3	2D	2136	0	2218	40	0
4	1E	1559	0	1618	31	0
4	2E	1559	0	1618	31	0
5	1F	1584	0	1625	33	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	2F	1580	0	1619	50	0
6	1G	1426	0	1445	40	0
6	2G	1424	0	1441	57	0
7	1H	1330	0	1407	26	0
7	2H	1324	0	1402	36	0
8	1I	1094	0	1127	17	0
8	2I	1076	0	1094	21	0
9	1N	1121	0	1195	16	0
9	2N	1117	0	1184	24	0
10	1O	933	0	996	20	0
10	2O	933	0	996	16	0
11	1P	1135	0	1212	22	0
11	2P	1135	0	1212	21	0
12	1Q	1122	0	1179	15	0
12	2Q	1122	0	1179	25	0
13	1R	968	0	1033	19	0
13	2R	968	0	1033	18	0
14	1S	877	0	938	23	0
14	2S	870	0	923	20	0
15	1T	1091	0	1151	23	0
15	2T	1083	0	1136	24	0
16	1U	959	0	1019	16	0
16	2U	959	0	1019	21	0
17	1V	775	0	841	14	0
17	2V	771	0	830	17	0
18	1W	886	0	940	14	0
18	2W	886	0	940	11	0
19	1X	750	0	814	16	0
19	2X	750	0	814	17	0
20	1Y	810	0	892	15	0
20	2Y	810	0	887	17	0
21	1Z	1587	0	1598	24	0
21	2Z	1557	0	1564	37	0
22	10	608	0	622	12	0
22	20	608	0	622	8	0
23	11	754	0	823	14	0
23	21	759	0	837	22	0
24	12	588	0	643	11	0
24	22	592	0	654	11	0
25	13	469	0	518	7	0
25	23	464	0	514	10	0
26	14	546	0	522	16	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	24	536	0	514	28	0
27	15	459	0	476	9	0
27	25	455	0	465	7	0
28	16	453	0	473	7	0
28	26	449	0	469	4	0
29	17	418	0	467	5	0
29	27	418	0	467	5	0
30	18	517	0	582	11	0
30	28	517	0	582	17	0
31	19	307	0	335	4	0
31	29	307	0	335	8	0
32	1a	32246	0	16295	432	0
32	2a	32331	0	16338	427	0
33	1b	1842	0	1862	62	0
33	2b	1825	0	1828	73	0
34	1c	1558	0	1557	37	0
34	2c	1542	0	1517	59	0
35	1d	1665	0	1687	62	0
35	2d	1668	0	1703	51	0
36	1e	1133	0	1191	29	0
36	2e	1133	0	1191	31	0
37	1f	814	0	808	13	0
37	2f	816	0	808	20	0
38	1g	1235	0	1249	26	0
38	2g	1229	0	1238	22	0
39	1h	1098	0	1143	34	0
39	2h	1088	0	1126	28	0
40	1i	986	0	990	45	0
40	2i	966	0	953	47	0
41	1j	719	0	672	20	0
41	2j	710	0	661	20	0
42	1k	834	0	838	13	0
42	2k	833	0	836	16	0
43	1l	932	0	981	15	0
43	2l	932	0	981	20	0
44	1m	914	0	954	20	0
44	2m	895	0	920	37	0
45	1n	492	0	529	13	0
45	2n	492	0	529	15	0
46	1o	728	0	760	14	0
46	2o	728	0	760	24	0
47	1p	681	0	697	22	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
47	2p	677	0	686	16	0
48	1q	823	0	891	22	0
48	2q	823	0	891	19	0
49	1r	555	0	618	3	0
49	2r	555	0	618	12	0
50	1s	648	0	658	24	0
50	2s	645	0	635	24	0
51	1t	732	0	809	21	0
51	2t	733	0	795	17	0
52	1u	199	0	208	4	0
52	2u	199	0	208	4	0
53	1y	764	0	786	21	0
53	2y	749	0	757	22	0
54	10	8	0	0	0	0
54	11	5	0	0	0	0
54	13	4	0	0	0	0
54	15	8	0	0	0	0
54	17	6	0	0	0	0
54	18	3	0	0	0	0
54	19	3	0	0	0	0
54	1A	1045	0	0	0	0
54	1B	31	0	0	0	0
54	1D	16	0	0	0	0
54	1E	9	0	0	0	0
54	1F	20	0	0	0	0
54	1G	4	0	0	0	0
54	1H	2	0	0	0	0
54	1N	4	0	0	0	0
54	1O	1	0	0	0	0
54	1P	6	0	0	0	0
54	1Q	6	0	0	0	0
54	1R	8	0	0	0	0
54	1T	4	0	0	0	0
54	1U	6	0	0	0	0
54	1V	8	0	0	0	0
54	1W	5	0	0	0	0
54	1X	1	0	0	0	0
54	1Z	1	0	0	0	0
54	1a	277	0	0	0	0
54	1b	1	0	0	0	0
54	1d	5	0	0	0	0
54	1e	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	1f	1	0	0	0	0
54	1g	3	0	0	0	0
54	1h	2	0	0	0	0
54	1i	1	0	0	0	0
54	1k	1	0	0	0	0
54	1l	2	0	0	0	0
54	1m	1	0	0	0	0
54	1n	3	0	0	0	0
54	1o	1	0	0	0	0
54	1r	1	0	0	0	0
54	1t	2	0	0	0	0
54	1y	4	0	0	0	0
54	20	1	0	0	0	0
54	21	1	0	0	0	0
54	23	1	0	0	0	0
54	25	2	0	0	0	0
54	27	1	0	0	0	0
54	28	1	0	0	0	0
54	29	1	0	0	0	0
54	2A	752	0	0	0	0
54	2B	18	0	0	0	0
54	2D	12	0	0	0	0
54	2E	7	0	0	0	0
54	2F	4	0	0	0	0
54	2G	3	0	0	0	0
54	2I	1	0	0	0	0
54	2N	1	0	0	0	0
54	2O	1	0	0	0	0
54	2P	2	0	0	0	0
54	2Q	3	0	0	0	0
54	2R	3	0	0	0	0
54	2T	3	0	0	0	0
54	2V	3	0	0	0	0
54	2W	2	0	0	0	0
54	2Y	1	0	0	0	0
54	2a	203	0	0	0	0
54	2e	2	0	0	0	0
54	2h	1	0	0	0	0
54	2j	1	0	0	0	0
54	2k	1	0	0	0	0
54	2m	1	0	0	0	0
54	2n	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	2t	1	0	0	0	0
55	1A	27	0	0	0	0
55	2A	27	0	0	0	0
56	18	8	0	14	2	0
56	1A	8	0	14	2	0
56	1T	8	0	14	1	0
56	1a	8	0	13	5	0
56	2A	16	0	27	1	0
56	2B	8	0	14	0	0
57	1B	12	0	12	2	0
57	1F	12	0	12	1	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	1d	8	0	0	0	0
59	2d	8	0	0	1	0
60	10	27	0	0	0	0
60	11	28	0	0	0	0
60	12	18	0	0	2	0
60	13	26	0	0	0	0
60	14	3	0	0	0	0
60	15	25	0	0	0	0
60	16	22	0	0	0	0
60	17	18	0	0	2	0
60	18	31	0	0	0	0
60	19	10	0	0	0	0
60	1A	4109	0	0	97	0
60	1B	114	0	0	3	0
60	1D	117	0	0	6	0
60	1E	81	0	0	3	0
60	1F	69	0	0	2	0
60	1G	19	0	0	1	0
60	1H	15	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	1I	8	0	0	0	0
60	1N	57	0	0	1	0
60	1O	29	0	0	3	0
60	1P	64	0	0	2	0
60	1Q	41	0	0	1	0
60	1R	36	0	0	1	0
60	1S	11	0	0	0	0
60	1T	35	0	0	3	0
60	1U	50	0	0	5	0
60	1V	36	0	0	3	0
60	1W	33	0	0	2	0
60	1X	26	0	0	1	0
60	1Y	17	0	0	0	0
60	1Z	13	0	0	0	0
60	1a	600	0	0	29	0
60	1b	1	0	0	0	0
60	1c	1	0	0	0	0
60	1d	9	0	0	2	0
60	1e	8	0	0	2	0
60	1f	3	0	0	1	0
60	1i	2	0	0	1	0
60	1j	1	0	0	0	0
60	1k	1	0	0	0	0
60	1l	5	0	0	0	0
60	1m	3	0	0	0	0
60	1o	6	0	0	0	0
60	1p	2	0	0	0	0
60	1r	1	0	0	0	0
60	1t	2	0	0	0	0
60	1u	1	0	0	0	0
60	1y	5	0	0	1	0
60	20	15	0	0	0	0
60	21	23	0	0	2	0
60	22	5	0	0	0	0
60	23	4	0	0	0	0
60	24	3	0	0	2	0
60	25	8	0	0	0	0
60	26	5	0	0	0	0
60	27	11	0	0	0	0
60	28	20	0	0	2	0
60	29	1	0	0	0	0
60	2A	2651	0	0	132	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	2B	64	0	0	5	0
60	2D	63	0	0	3	0
60	2E	41	0	0	3	0
60	2F	21	0	0	0	0
60	2G	5	0	0	1	0
60	2H	3	0	0	0	0
60	2I	4	0	0	0	0
60	2N	7	0	0	0	0
60	2O	22	0	0	0	0
60	2P	31	0	0	2	0
60	2Q	26	0	0	3	0
60	2R	24	0	0	1	0
60	2S	6	0	0	1	0
60	2T	14	0	0	0	0
60	2U	19	0	0	1	0
60	2V	6	0	0	0	0
60	2W	24	0	0	0	0
60	2X	10	0	0	1	0
60	2Y	5	0	0	0	0
60	2Z	15	0	0	0	0
60	2a	485	0	0	29	0
60	2d	4	0	0	0	0
60	2e	4	0	0	0	0
60	2f	2	0	0	0	0
60	2j	2	0	0	0	0
60	2l	3	0	0	0	0
60	2n	1	0	0	0	0
60	2o	2	0	0	0	0
60	2p	3	0	0	0	0
60	2q	1	0	0	0	0
60	2r	3	0	0	0	0
60	2s	1	0	0	0	0
60	2t	2	0	0	0	0
60	2y	3	0	0	0	0
All	All	298590	0	194518	3782	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 8.

All (3782) 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	1.31	1.25
1:1A:1082:U:O4	1:1A:1086:A:N1	1.95	0.99
15:1T:55:ASN:H	15:1T:59:THR:HG22	1.30	0.93
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.49	0.93
32:2a:1256:A:H61	32:2a:1278:U:H1'	1.34	0.92
32:1a:255:G:H1'	48:1q:16:GLN:HE21	1.33	0.91
35:1d:107:ARG:HH21	35:1d:194:LEU:HD21	1.37	0.90
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.56	0.88
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.08	0.87
22:10:10:THR:HG22	22:10:12:ASN:H	1.40	0.87
11:1P:59:LEU:HD11	30:18:10:ALA:HB2	1.55	0.87
3:1D:13:ARG:NH1	3:1D:16:MET:SD	2.48	0.86
26:24:46:GLN:HE21	26:24:48:ARG:HH22	1.24	0.85
29:17:24:THR:HG22	29:17:27:GLY:H	1.40	0.85
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.58	0.85
32:1a:1158:C:H5	32:1a:1181:G:H1	1.23	0.85
32:1a:1441:G:H5"	32:1a:1442:G:H5'	1.59	0.84
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.59	0.83
32:1a:78:G:H1	32:1a:91:C:H42	1.21	0.83
32:2a:1500:A:OP1	60:2a:3307:HOH:O	1.96	0.83
10:2O:48:PRO:HB3	32:2a:1422:G:H5"	1.59	0.82
1:1A:11:G:H2'	1:1A:12:U:H5"	1.60	0.82
1:1A:1082:U:H3	1:1A:1086:A:H61	0.84	0.82
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.59	0.82
32:1a:664:G:H22	32:1a:741:G:H1	1.25	0.82
20:1Y:92:ASN:HB2	20:1Y:94:LYS:H	1.45	0.81
1:2A:826:U:OP1	60:2A:3811:HOH:O	1.98	0.81
32:2a:406:G:H5'	35:2d:5:ILE:HD11	1.63	0.81
1:2A:805:G:OP1	60:2A:3812:HOH:O	1.99	0.81
1:1A:1009:A:OP2	9:1N:37:LYS:NZ	2.14	0.80
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.64	0.80
40:2i:9:ARG:HB2	40:2i:104:ARG:HE	1.45	0.80
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.30	0.80
50:2s:20:LEU:HD23	50:2s:23:ASN:HD22	1.46	0.80
47:1p:4:ILE:HG12	47:1p:21:VAL:HG23	1.65	0.79
34:2c:180:ALA:HB1	34:2c:203:PHE:HE1	1.46	0.79
32:1a:975:A:H4'	32:1a:976:G:H5"	1.64	0.79
33:2b:63:MET:HG3	33:2b:225:ALA:HB1	1.63	0.79
32:2a:547:A:OP1	60:2a:3308:HOH:O	2.01	0.79
1:1A:1085:A:O2'	1:1A:1104:C:O2'	2.01	0.79
26:14:16:CYS:SG	26:14:17:GLY:N	2.56	0.79
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.14	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2499:C:OP1	60:2A:3815:HOH:O	2.01	0.78
1:2A:2596:U:OP2	60:2A:3814:HOH:O	2.00	0.78
1:2A:2427:C:OP1	60:2A:3811:HOH:O	2.01	0.78
1:1A:2822:G:OP2	60:1A:4104:HOH:O	2.02	0.78
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.64	0.78
34:1c:56:ASP:HB2	34:1c:67:THR:HB	1.64	0.78
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.63	0.78
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.16	0.78
1:2A:1314:C:OP1	60:2A:3813:HOH:O	2.00	0.78
1:2A:2156:G:N7	1:2A:2157:G:N2	2.32	0.78
32:2a:1500:A:OP2	60:2a:3310:HOH:O	2.02	0.78
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	1.66	0.78
6:1G:161:THR:HG22	6:1G:163:ALA:H	1.48	0.77
4:1E:47:VAL:HG21	4:1E:86:PRO:HD2	1.67	0.77
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.16	0.77
1:1A:1082:U:N3	1:1A:1086:A:N6	2.11	0.77
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.66	0.77
32:1a:1004:A:H3'	32:1a:1005:A:H8	1.50	0.77
1:1A:2242:G:OP1	60:1A:4105:HOH:O	2.02	0.77
32:2a:794:A:OP2	60:2a:3309:HOH:O	2.01	0.77
1:2A:143:G:H4'	19:2X:35:THR:HG21	1.66	0.77
1:2A:1271:G:OP2	60:2A:3817:HOH:O	2.02	0.77
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.18	0.77
50:2s:50:ALA:HB1	50:2s:57:HIS:HB3	1.65	0.77
1:1A:2427:C:OP1	60:1A:4109:HOH:O	2.03	0.76
3:1D:69:ARG:NH2	3:1D:128:GLY:O	2.18	0.76
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.49	0.76
1:1A:2447:G:OP2	60:1A:4106:HOH:O	2.02	0.76
1:2A:674:G:OP2	60:2A:3819:HOH:O	2.02	0.76
1:2A:685:A:OP1	60:2A:3818:HOH:O	2.02	0.76
1:1A:1670:C:OP2	60:1A:4107:HOH:O	2.02	0.76
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.66	0.76
44:1m:58:GLU:O	44:1m:62:ASN:ND2	2.18	0.76
46:1o:18:PHE:HB2	46:1o:19:PRO:HD2	1.66	0.76
1:1A:1634:A:OP2	60:1A:4108:HOH:O	2.02	0.76
26:24:6:HIS:ND1	60:24:601:HOH:O	2.19	0.76
1:2A:2576:G:O2'	60:2A:3820:HOH:O	2.03	0.76
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.18	0.76
36:2e:80:ILE:HD12	39:2h:104:ARG:HH12	1.51	0.76
1:1A:2144:U:H2'	1:1A:2147:G:H1	1.50	0.76
21:1Z:28:MET:HG3	21:1Z:37:VAL:HG11	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:86:ILE:HG21	39:2h:133:LEU:HD13	1.65	0.76
26:14:57:GLU:HB2	26:14:58:ARG:HA	1.67	0.75
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.19	0.75
1:1A:2364:C:OP1	22:10:55:ARG:NH1	2.20	0.75
1:2A:2504:U:OP2	60:2A:3821:HOH:O	2.04	0.75
1:2A:2115:G:H22	1:2A:2119:A:H5'	1.52	0.75
1:2A:2429:G:OP1	60:2A:3811:HOH:O	2.05	0.75
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.51	0.75
32:2a:975:A:H4'	32:2a:976:G:H5"	1.67	0.75
17:2V:40:LEU:HB2	17:2V:46:VAL:HG13	1.68	0.74
1:1A:1669:A:OP2	60:1A:4107:HOH:O	2.04	0.74
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.68	0.74
32:2a:656:C:O2'	46:2o:28:GLN:NE2	2.21	0.74
4:1E:54:GLN:HE21	4:1E:76:ARG:HG2	1.51	0.74
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.69	0.74
36:1e:147:ASP:OD1	36:1e:147:ASP:N	2.19	0.74
32:1a:536:C:OP2	60:1a:1908:HOH:O	2.06	0.74
35:1d:18:LYS:NZ	35:1d:31:CYS:SG	2.61	0.74
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.53	0.74
1:1A:179:G:N7	60:1A:4172:HOH:O	2.21	0.74
40:1i:17:VAL:HG21	40:1i:81:ILE:HG22	1.69	0.74
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.52	0.74
1:2A:2602:A:H1'	1:2A:2603:G:H5"	1.68	0.74
1:2A:2306:C:N4	6:2G:42:GLY:O	2.21	0.73
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.69	0.73
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.23	0.73
1:2A:526:A:OP1	60:2A:3825:HOH:O	2.06	0.73
1:2A:399:G:OP2	60:2A:3824:HOH:O	2.06	0.73
32:1a:1028:C:H2'	32:1a:1029:C:H4'	1.68	0.73
32:2a:768:A:OP2	60:2a:3311:HOH:O	2.05	0.73
32:2a:1292:U:OP2	38:2g:41:ARG:NH2	2.22	0.73
1:1A:826:U:OP1	60:1A:4109:HOH:O	2.05	0.73
1:1A:1023:U:OP2	60:1A:4110:HOH:O	2.06	0.73
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.21	0.73
32:2a:677:U:H3	32:2a:713:G:H22	1.36	0.73
25:13:3:ARG:NH1	25:13:60:GLU:OE2	2.21	0.73
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.70	0.73
32:2a:853:G:N7	60:2a:3330:HOH:O	2.22	0.73
1:1A:747:U:OP1	60:1A:4111:HOH:O	2.06	0.73
33:1b:67:THR:HA	33:1b:90:MET:HE2	1.70	0.73
1:2A:2821:A:OP2	60:2R:301:HOH:O	2.05	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:65:C:OP2	60:1A:4114:HOH:O	2.07	0.73
1:1A:1721:G:H8	1:1A:1741:A:H62	1.36	0.73
32:1a:780:A:OP2	60:1a:1907:HOH:O	2.05	0.73
1:2A:775:G:O3'	60:2A:3823:HOH:O	2.06	0.73
1:1A:1706:U:OP1	60:1A:4112:HOH:O	2.06	0.72
17:2V:35:LEU:HB2	17:2V:57:VAL:HG23	1.70	0.72
34:2c:70:VAL:HG22	34:2c:72:LYS:H	1.54	0.72
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.22	0.72
32:2a:1135:U:H4'	32:2a:1136:U:H5	1.53	0.72
33:1b:61:LEU:HD21	33:1b:160:ASP:HB2	1.70	0.72
34:1c:70:VAL:HG22	34:1c:72:LYS:H	1.53	0.72
32:2a:437:U:H5'	35:2d:155:LEU:HD21	1.71	0.72
27:15:45:VAL:HG11	27:15:58:LEU:HD13	1.71	0.72
32:1a:454:C:OP1	47:1p:75:ARG:NH2	2.22	0.72
32:1a:812:C:N3	60:1a:1934:HOH:O	2.23	0.72
1:2A:1332:G:OP2	60:2A:3822:HOH:O	2.06	0.72
1:1A:279:C:H42	1:1A:361:G:H1	1.37	0.72
1:2A:1047:G:H2'	1:2A:1110:G:H22	1.54	0.72
1:1A:1185:C:OP2	60:1A:4115:HOH:O	2.07	0.72
32:1a:64:G:H4'	32:1a:65:U:H3'	1.72	0.72
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.72	0.72
1:2A:1754:C:OP1	15:2T:96:ARG:NH1	2.23	0.72
1:1A:749:C:OP2	60:1A:4113:HOH:O	2.06	0.71
7:2H:164:TYR:HB2	7:2H:167:GLU:HB2	1.71	0.71
32:2a:1518:MA6:H93	32:2a:1519:MA6:H102	1.70	0.71
1:1A:1138:G:OP1	60:1A:4117:HOH:O	2.08	0.71
1:1A:1359:A:H61	1:1A:1372:U:H3	1.36	0.71
1:2A:2180:U:H2'	1:2A:2181:G:C8	2.24	0.71
6:2G:112:PRO:HG3	26:24:43:TYR:HE2	1.54	0.71
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	1.73	0.71
1:2A:585:G:OP2	60:2A:3828:HOH:O	2.07	0.71
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.72	0.71
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.72	0.71
1:1A:971:C:OP2	60:1A:4116:HOH:O	2.08	0.71
47:1p:22:THR:HA	47:1p:33:ILE:HG13	1.71	0.71
1:2A:1332:G:OP1	60:2A:3813:HOH:O	2.09	0.71
33:2b:91:PRO:HG3	33:2b:155:LEU:HD13	1.71	0.71
1:1A:330:A:H2	1:1A:1210:A:HO2'	1.36	0.71
32:1a:1086:U:H3	32:1a:1099:G:H22	1.37	0.71
1:2A:1075:C:H2'	1:2A:1076:C:H5'	1.72	0.71
1:2A:1658:C:OP1	60:2E:401:HOH:O	2.08	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:352:C:OP2	60:1a:1909:HOH:O	2.08	0.71
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.24	0.71
1:1A:2821:A:OP2	60:1A:4104:HOH:O	2.08	0.71
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.24	0.71
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.24	0.71
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.23	0.71
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.72	0.71
32:1a:1124:G:N2	32:1a:1125:U:O4	2.23	0.71
32:2a:980:C:OP2	60:2a:3312:HOH:O	2.08	0.71
1:1A:2137:C:H42	1:1A:2154:G:H1	1.39	0.70
32:1a:1068:G:OP1	60:1a:1910:HOH:O	2.09	0.70
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.24	0.70
1:2A:2499:C:OP2	60:2A:3826:HOH:O	2.06	0.70
12:1Q:21:THR:HG21	12:1Q:101:ARG:HB2	1.72	0.70
32:1a:588:G:OP2	60:1a:1913:HOH:O	2.09	0.70
7:2H:95:ARG:HB2	7:2H:128:PRO:HB3	1.72	0.70
32:2a:1285:A:H4'	32:2a:1286:A:H5'	1.73	0.70
32:1a:548:G:O5'	60:1a:1912:HOH:O	2.09	0.70
1:1A:465:G:O6	60:1A:4118:HOH:O	2.09	0.70
1:2A:1890:A:OP2	60:2A:3830:HOH:O	2.09	0.70
32:1a:100:C:H2'	32:1a:101:A:C8	2.27	0.70
1:2A:198:C:OP2	60:2A:3804:HOH:O	2.08	0.70
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.22	0.70
2:2B:49:C:OP1	60:2B:303:HOH:O	2.08	0.70
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	1.74	0.70
16:2U:104:GLN:HE21	16:2U:105:VAL:HG23	1.57	0.70
1:1A:447:A:OP2	60:1A:4122:HOH:O	2.09	0.70
47:1p:53:VAL:HG13	47:1p:79:VAL:HG12	1.71	0.70
45:2n:23:ARG:NH1	45:2n:28:GLY:O	2.25	0.70
1:1A:217:G:OP2	60:1A:4123:HOH:O	2.10	0.70
32:1a:642:A:N3	39:1h:113:SER:OG	2.23	0.70
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.25	0.70
21:2Z:28:MET:HE3	21:2Z:37:VAL:HG11	1.74	0.70
1:2A:2697:G:OP1	60:2A:3834:HOH:O	2.10	0.70
17:2V:72:VAL:HG13	17:2V:85:LYS:HB3	1.74	0.70
26:24:24:THR:OG1	26:24:25:TYR:N	2.24	0.70
32:2a:564:C:O2'	39:2h:91:ARG:NH2	2.25	0.70
41:2j:8:LEU:HB2	41:2j:70:ARG:HB2	1.73	0.70
8:1I:31:LEU:HD21	8:1I:38:LEU:HD13	1.72	0.69
36:1e:137:GLU:HG3	36:1e:141:GLN:HE21	1.57	0.69
1:2A:2235:G:O6	60:2A:3829:HOH:O	2.09	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.74	0.69
32:2a:673:G:H2'	32:2a:674:G:C8	2.27	0.69
40:2i:121:ARG:NH1	40:2i:122:ALA:O	2.24	0.69
1:1A:434:U:OP2	60:1A:4120:HOH:O	2.09	0.69
1:1A:762:U:OP1	60:1A:4121:HOH:O	2.09	0.69
1:1A:1865:G:OP1	60:1A:4127:HOH:O	2.10	0.69
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.72	0.69
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.74	0.69
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.25	0.69
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.74	0.69
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.73	0.69
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.73	0.69
1:1A:1647:G:OP1	60:1A:4128:HOH:O	2.10	0.69
1:1A:1648:C:OP1	60:1A:4128:HOH:O	2.10	0.69
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.74	0.69
1:2A:1647:G:OP1	60:2A:3817:HOH:O	2.09	0.69
34:2c:20:SER:HB2	34:2c:40:ARG:HH21	1.57	0.69
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.25	0.69
16:1U:33:ARG:NH1	60:1U:301:HOH:O	2.24	0.69
32:1a:1129:C:H5"	40:1i:16:ARG:HH12	1.57	0.69
1:1A:2267:A:H5"	1:1A:2268:A:H5'	1.73	0.69
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.26	0.69
1:1A:1295:C:OP2	60:1A:4129:HOH:O	2.11	0.69
1:2A:387:U:OP1	60:2A:3832:HOH:O	2.10	0.69
1:2A:1057:A:H2'	1:2A:1058:G:H8	1.56	0.69
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.74	0.69
1:1A:517:C:OP1	27:15:16:ARG:NH2	2.25	0.69
1:1A:1271:G:OP2	60:1A:4128:HOH:O	2.11	0.69
4:1E:36:ARG:HG2	4:1E:47:VAL:HG22	1.75	0.69
32:1a:1340:A:OP2	60:1a:1911:HOH:O	2.09	0.69
32:1a:1469:G:N7	60:1a:1940:HOH:O	2.26	0.69
1:2A:1288:U:OP1	60:2A:3833:HOH:O	2.10	0.69
1:2A:1771:C:OP1	60:2A:3836:HOH:O	2.11	0.69
1:2A:2519:U:OP2	60:2A:3841:HOH:O	2.11	0.69
7:2H:24:VAL:HG13	7:2H:37:VAL:HG21	1.75	0.69
27:25:16:ARG:NH1	27:25:17:ASP:OD1	2.26	0.69
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.26	0.69
39:1h:64:LYS:HG2	39:1h:79:VAL:HG21	1.75	0.69
1:1A:14:A:OP2	60:1A:4126:HOH:O	2.10	0.68
32:1a:78:G:H1	32:1a:91:C:N4	1.90	0.68
32:1a:501:C:OP1	43:1l:117:ARG:NH2	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:9:ARG:NH1	6:2G:13:GLU:OE2	2.26	0.68
32:2a:254:G:OP1	48:2q:66:SER:OG	2.10	0.68
32:1a:262:A:H2'	32:1a:263:A:C8	2.28	0.68
36:1e:102:ALA:HB1	36:1e:106:PRO:HG2	1.73	0.68
32:2a:1030:C:N3	32:2a:1031:G:N2	2.41	0.68
1:1A:2722:G:O6	60:1A:4119:HOH:O	2.09	0.68
1:2A:1023:U:OP2	60:2A:3839:HOH:O	2.11	0.68
1:2A:1793:C:OP1	60:2A:3842:HOH:O	2.11	0.68
26:24:59:PHE:HA	26:24:60:GLN:C	2.19	0.68
51:2t:50:GLU:HB2	51:2t:99:LEU:HD22	1.76	0.68
34:1c:132:ARG:HG2	34:1c:136:GLN:HE21	1.58	0.68
1:2A:672:C:OP1	60:2A:3837:HOH:O	2.11	0.68
32:2a:1278:U:H5"	32:2a:1279:A:H5'	1.74	0.68
1:1A:1300:U:H4'	1:1A:1301:A:H5"	1.76	0.68
1:2A:1814:G:OP1	60:2A:3840:HOH:O	2.11	0.68
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.27	0.68
1:2A:509:C:OP1	60:2A:3844:HOH:O	2.12	0.68
1:1A:1753:G:N7	60:1A:4223:HOH:O	2.26	0.68
1:1A:2304:G:H22	1:1A:2312:U:H3	1.42	0.68
44:1m:87:TYR:HA	44:1m:90:LEU:HD12	1.74	0.68
1:2A:1602:U:OP1	60:2A:3831:HOH:O	2.09	0.68
9:2N:21:LYS:NZ	9:2N:140:VAL:OXT	2.26	0.68
32:2a:536:C:OP2	60:2a:3313:HOH:O	2.10	0.68
33:1b:9:GLU:OE2	33:1b:217:ARG:NH1	2.27	0.68
47:1p:20:VAL:HG23	47:1p:35:LYS:HA	1.75	0.68
1:2A:2589:A:OP1	60:2A:3843:HOH:O	2.12	0.68
21:2Z:69:THR:HG22	21:2Z:90:VAL:HA	1.76	0.68
32:2a:1505:G:OP1	60:2a:3307:HOH:O	2.12	0.68
1:1A:2292:C:OP1	14:1S:17:ARG:NH2	2.27	0.67
1:2A:881:G:H1	1:2A:895:U:H3	1.40	0.67
2:2B:58:A:OP2	60:2B:304:HOH:O	2.10	0.67
1:1A:12:U:O4	60:1A:4125:HOH:O	2.10	0.67
6:1G:161:THR:O	60:1G:301:HOH:O	2.12	0.67
33:2b:61:LEU:HD11	33:2b:160:ASP:HB3	1.77	0.67
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.77	0.67
3:2D:235:GLY:O	60:2D:401:HOH:O	2.13	0.67
32:2a:1118:C:N3	32:2a:1156:G:N2	2.42	0.67
33:2b:166:ASP:HB3	33:2b:169:LYS:HB3	1.76	0.67
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.24	0.67
1:1A:614(C):A:OP2	60:1A:4130:HOH:O	2.11	0.67
32:1a:573:A:N1	60:1a:1945:HOH:O	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:5:VAL:HG22	6:2G:8:LYS:HB2	1.77	0.67
1:1A:404:C:OP1	60:1A:4133:HOH:O	2.12	0.67
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.28	0.67
41:1j:26:ALA:HB1	41:1j:84:GLN:HE22	1.59	0.67
1:2A:2448:A:OP1	60:2A:3815:HOH:O	2.12	0.67
1:2A:2526:G:O6	60:2A:3838:HOH:O	2.11	0.67
12:2Q:91:GLU:O	60:2Q:301:HOH:O	2.12	0.67
16:2U:49:HIS:HA	16:2U:52:ARG:HG2	1.76	0.67
1:1A:2372:G:O6	60:1A:4124:HOH:O	2.10	0.67
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.76	0.67
3:1D:242:ARG:HG3	3:1D:242:ARG:HH11	1.58	0.67
48:1q:9:VAL:HG22	48:1q:56:VAL:HG22	1.76	0.67
1:2A:511:U:OP2	60:2A:3847:HOH:O	2.12	0.67
32:2a:42:G:OP1	60:2a:3315:HOH:O	2.13	0.67
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.27	0.67
1:1A:1315:C:OP2	60:1A:4134:HOH:O	2.12	0.67
5:1F:195:ASP:HB2	5:1F:198:ALA:H	1.59	0.67
14:1S:3:ARG:HA	14:1S:3:ARG:HH11	1.59	0.67
1:2A:1776:G:OP1	60:2A:3849:HOH:O	2.12	0.67
28:16:13:CYS:SG	28:16:47:THR:HG21	2.35	0.67
32:1a:620:C:OP1	60:1a:1915:HOH:O	2.13	0.67
1:2A:2349:G:OP1	60:2A:3848:HOH:O	2.12	0.67
1:1A:1346:G:OP2	60:1A:4136:HOH:O	2.13	0.67
32:1a:79:G:N1	32:1a:90:U:N3	2.43	0.67
6:2G:12:TYR:HA	6:2G:16:ARG:HG3	1.76	0.67
32:2a:1086:U:H3	32:2a:1099:G:H22	1.43	0.67
34:2c:47:LEU:HD13	34:2c:68:VAL:HG11	1.74	0.67
2:1B:23:G:O6	60:1B:301:HOH:O	2.13	0.66
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.27	0.66
19:1X:35:THR:HG22	19:1X:38:GLU:H	1.60	0.66
1:2A:731:C:OP2	60:2A:3846:HOH:O	2.12	0.66
1:2A:2152:G:H2'	1:2A:2153:G:H8	1.59	0.66
32:2a:642:A:N3	39:2h:113:SER:OG	2.27	0.66
32:2a:1346:A:H5"	40:2i:120:ARG:HH12	1.59	0.66
1:1A:2249:U:OP2	60:1A:4132:HOH:O	2.12	0.66
1:2A:2140:C:H2'	1:2A:2141:G:H8	1.61	0.66
1:2A:2499:C:N3	60:2A:3979:HOH:O	2.29	0.66
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.77	0.66
1:1A:441:U:O2	5:1F:46:ARG:NH2	2.29	0.66
33:1b:88:ALA:HB2	33:1b:219:VAL:HG13	1.76	0.66
1:2A:958:U:OP2	12:2Q:14:ARG:NH1	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1466:G:HO2'	1:2A:1546:C:HO2'	1.42	0.66
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.27	0.66
34:2c:11:ARG:NH2	34:2c:177:THR:O	2.29	0.66
1:1A:2360:A:N1	60:1A:4245:HOH:O	2.28	0.66
1:1A:2550:G:OP1	60:1A:4107:HOH:O	2.13	0.66
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.78	0.66
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.76	0.66
1:1A:1175:U:O2'	1:1A:1176:G:O5'	2.14	0.66
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.14	0.66
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.28	0.66
1:1A:426:C:OP2	60:1A:4137:HOH:O	2.14	0.66
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.14	0.66
1:2A:775:G:OP1	60:2A:3852:HOH:O	2.13	0.66
1:2A:1244:G:O6	60:2A:3845:HOH:O	2.12	0.66
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.77	0.66
32:2a:393:A:OP1	60:2a:3314:HOH:O	2.13	0.66
2:1B:81:G:N7	57:1B:232:ARG:NH2	2.43	0.66
4:1E:29:GLY:HA3	60:1E:409:HOH:O	1.94	0.66
32:1a:976:G:H5'	32:1a:1358:U:O2'	1.94	0.66
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	1.77	0.66
17:1V:19:LYS:O	60:1V:301:HOH:O	2.13	0.66
20:1Y:92:ASN:N	20:1Y:93:GLY:HA2	2.11	0.66
26:14:7:PRO:HB2	26:14:27:THR:HG21	1.78	0.66
32:1a:656:C:O2'	46:1o:28:GLN:NE2	2.29	0.66
1:2A:2323:G:O6	60:2A:3851:HOH:O	2.13	0.66
3:1D:106:ILE:HG12	60:1D:427:HOH:O	1.96	0.66
6:1G:181:ARG:HG3	6:1G:182:LYS:H	1.61	0.66
32:1a:116:A:H61	32:1a:313:A:H1'	1.61	0.66
1:2A:848:G:OP1	60:2A:3853:HOH:O	2.14	0.66
1:2A:2352:A:OP2	60:2A:3850:HOH:O	2.13	0.66
6:2G:17:PRO:HA	6:2G:20:ILE:HB	1.77	0.66
34:2c:40:ARG:NH1	34:2c:55:VAL:O	2.29	0.66
1:1A:1653:G:H3'	13:1R:2:ARG:HD3	1.78	0.65
1:2A:81:G:N7	60:2A:3978:HOH:O	2.29	0.65
1:2A:823:G:N7	60:2A:3981:HOH:O	2.29	0.65
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.29	0.65
33:2b:7:VAL:O	33:2b:217:ARG:NH1	2.23	0.65
34:2c:6:HIS:HD2	34:2c:8:ILE:H	1.44	0.65
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.29	0.65
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.30	0.65
3:2D:232:PRO:O	60:2D:403:HOH:O	2.14	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:65:SER:HA	60:21:218:HOH:O	1.97	0.65
1:1A:1186:G:OP2	60:1A:4140:HOH:O	2.15	0.65
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.26	0.65
1:2A:635:C:O2'	1:2A:639:U:OP1	2.14	0.65
1:2A:1041:C:H42	1:2A:1114:G:H1	1.44	0.65
6:2G:46:ALA:HB1	6:2G:51:ARG:HA	1.78	0.65
32:2a:317:G:OP2	60:2a:3317:HOH:O	2.15	0.65
32:2a:903:G:OP1	60:2a:3316:HOH:O	2.13	0.65
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.78	0.65
1:2A:2822:G:OP2	60:2A:3855:HOH:O	2.15	0.65
3:2D:230:ASP:OD2	60:2D:402:HOH:O	2.13	0.65
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.78	0.65
41:1j:61:GLU:OE2	45:1n:58:LYS:NZ	2.28	0.65
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.30	0.65
32:1a:171:A:H2'	32:1a:172:A:C8	2.32	0.65
1:2A:1199:U:OP1	60:2A:3856:HOH:O	2.15	0.65
15:1T:55:ASN:N	15:1T:59:THR:HG22	2.09	0.65
43:1l:24:VAL:HB	43:1l:27:LEU:HD23	1.79	0.65
2:2B:102:A:OP2	60:2B:305:HOH:O	2.14	0.65
32:2a:1366:C:O2'	41:2j:60:ARG:NH2	2.28	0.65
32:1a:1003:G:H2'	32:1a:1004:A:H4'	1.79	0.65
1:2A:1602:U:O4	60:2A:3835:HOH:O	2.10	0.65
1:2A:2104:G:O6	1:2A:2185:C:N3	2.30	0.65
32:2a:461:A:O2'	32:2a:471:G:N7	2.26	0.65
1:1A:2384:G:O6	60:1A:4135:HOH:O	2.12	0.64
1:2A:1843:C:H5'	3:2D:253:GLN:NE2	2.12	0.64
19:2X:25:LYS:O	60:2X:101:HOH:O	2.15	0.64
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	1.78	0.64
40:2i:51:ARG:HG2	40:2i:56:LEU:HD21	1.79	0.64
26:14:61:ARG:HG3	26:14:62:ARG:H	1.63	0.64
33:1b:160:ASP:N	33:1b:160:ASP:OD1	2.28	0.64
1:2A:1065:U:H3	1:2A:1073:A:H61	1.44	0.64
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.78	0.64
5:2F:164:ARG:HD2	5:2F:175:THR:HG23	1.78	0.64
33:2b:155:LEU:HD11	33:2b:159:PRO:HG3	1.78	0.64
44:2m:3:ARG:HB2	44:2m:8:GLU:HG3	1.79	0.64
1:1A:1786:A:N1	60:1A:4258:HOH:O	2.28	0.64
1:1A:2104:G:H1	1:1A:2185:C:H42	1.43	0.64
12:2Q:60:ARG:NH2	21:2Z:181:GLU:OE2	2.31	0.64
1:1A:652(E):G:O6	1:1A:652(T):C:N4	2.19	0.64
3:1D:168:ARG:NH1	60:1D:405:HOH:O	2.29	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:468:G:O2'	5:2F:62:ARG:NH2	2.23	0.64
1:2A:1551:C:OP2	60:2A:3857:HOH:O	2.15	0.64
12:2Q:109:VAL:HG13	12:2Q:113:GLN:HB2	1.77	0.64
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.31	0.64
1:1A:1541:G:OP2	60:1A:4139:HOH:O	2.15	0.64
14:1S:11:LYS:HG3	14:1S:91:PRO:HD3	1.78	0.64
32:1a:437:U:H5'	35:1d:155:LEU:HD21	1.77	0.64
50:1s:55:LYS:HG2	50:1s:56:GLN:HG2	1.78	0.64
1:2A:2306:C:H3'	1:2A:2307:G:H2'	1.79	0.64
1:2A:2610:C:O2'	60:2A:3816:HOH:O	2.01	0.64
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	1.80	0.64
32:2a:839:U:H5"	32:2a:840:C:H5	1.61	0.64
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.80	0.64
50:1s:36:ARG:NH1	50:1s:52:TYR:O	2.31	0.64
53:2y:3:MET:HE1	53:2y:24:LEU:HD12	1.79	0.64
53:2y:64:SER:HA	53:2y:77:LEU:HD12	1.78	0.64
48:1q:86:GLU:O	48:1q:90:ILE:HG12	1.97	0.64
1:2A:494:G:OP2	60:2A:3860:HOH:O	2.15	0.64
1:2A:2552:OMU:OP2	60:2A:3859:HOH:O	2.15	0.64
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.25	0.64
33:1b:7:VAL:HG21	33:1b:221:LEU:HD21	1.79	0.64
35:1d:107:ARG:NH2	35:1d:194:LEU:HD21	2.12	0.64
48:1q:59:ILE:HG22	48:1q:73:VAL:HA	1.80	0.64
1:2A:2849:U:O4	15:2T:23:ARG:NH2	2.29	0.64
24:22:19:VAL:HG12	24:22:23:LYS:HE3	1.80	0.64
33:2b:118:LEU:HD22	33:2b:142:LEU:HB2	1.79	0.64
32:1a:803:G:OP1	60:1a:1917:HOH:O	2.15	0.64
53:1y:53:THR:HG22	53:1y:62:VAL:HG22	1.79	0.64
20:2Y:77:PRO:HD2	20:2Y:106:LEU:HD22	1.78	0.64
32:1a:201:C:H42	32:1a:216:G:H1	1.46	0.64
39:1h:14:ARG:NH1	39:1h:83:ILE:O	2.31	0.64
1:2A:1056:G:H5"	1:2A:1057:A:H5'	1.79	0.64
1:2A:2832:U:OP2	60:2A:3858:HOH:O	2.15	0.64
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.79	0.64
42:2k:87:THR:O	42:2k:87:THR:OG1	2.16	0.64
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.62	0.63
1:2A:2445:G:OP1	5:2F:74:ARG:NH2	2.31	0.63
32:2a:1507:A:N6	32:2a:1528:U:O4	2.20	0.63
1:1A:476:G:OP1	60:1A:4142:HOH:O	2.15	0.63
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.31	0.63
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:13:ARG:HB2	35:2d:40:PRO:HD3	1.79	0.63
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.80	0.63
32:1a:330:C:OP2	60:1a:1916:HOH:O	2.15	0.63
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.30	0.63
26:24:16:CYS:SG	26:24:17:GLY:N	2.71	0.63
26:24:48:ARG:O	26:24:50:VAL:N	2.30	0.63
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.63	0.63
42:2k:99:GLN:HE21	42:2k:105:VAL:HG21	1.64	0.63
1:1A:927:G:N7	60:1A:4276:HOH:O	2.30	0.63
10:1O:5:GLN:O	60:1O:301:HOH:O	2.15	0.63
21:1Z:19:ARG:NH1	21:1Z:84:GLU:O	2.31	0.63
32:1a:165:C:H2'	32:1a:166:G:C8	2.34	0.63
32:1a:600:C:H2'	32:1a:601:C:H6	1.63	0.63
1:2A:1257:C:OP2	60:2A:3854:HOH:O	2.14	0.63
32:1a:189(K):U:H2'	32:1a:189(L):G:H8	1.63	0.63
2:2B:6:C:H42	2:2B:115:G:H1	1.45	0.63
1:1A:1937:A:H1'	1:1A:1939:5MU:H72	1.79	0.63
1:1A:2319:G:H22	14:1S:3:ARG:HH11	1.46	0.63
21:1Z:144:LEU:HD11	21:1Z:150:LEU:HD22	1.80	0.63
32:1a:560:U:O2'	32:1a:561:U:OP2	2.16	0.63
36:1e:148:VAL:HG21	39:1h:107:LEU:HB3	1.80	0.63
1:1A:1065:U:O2	1:1A:1066:U:N3	2.31	0.63
32:1a:1103:C:OP1	33:1b:96:ARG:NH2	2.30	0.63
1:2A:572:A:OP2	17:2V:78:LYS:NZ	2.31	0.63
32:2a:999:C:H42	32:2a:1042:G:H1	1.46	0.63
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.14	0.63
1:1A:2615:U:OP2	60:1A:4144:HOH:O	2.15	0.63
13:1R:33:ARG:NH2	27:15:57:VAL:O	2.29	0.63
32:1a:17:U:H2'	32:1a:18:C:C6	2.34	0.63
33:1b:10:LEU:HD12	33:1b:48:MET:HE3	1.81	0.63
35:1d:65:ARG:HG3	35:1d:70:ILE:HG22	1.81	0.63
1:2A:1843:C:H5'	3:2D:253:GLN:HE22	1.64	0.63
4:1E:54:GLN:NE2	4:1E:76:ARG:HG2	2.14	0.62
32:1a:673:G:H2'	32:1a:674:G:C8	2.34	0.62
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.34	0.62
1:2A:2114:A:H3'	1:2A:2115:G:H8	1.62	0.62
23:21:51:VAL:HG11	23:21:74:VAL:HG21	1.80	0.62
4:1E:127:ASP:OD2	60:1E:402:HOH:O	2.15	0.62
10:1O:104:ARG:NH2	15:1T:43:GLN:OE1	2.31	0.62
32:1a:1249:C:O2'	40:1i:73:GLN:NE2	2.32	0.62
33:1b:134:GLU:HG3	33:1b:137:ARG:HH21	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:44:G:OP1	6:2G:98:ARG:NH2	2.32	0.62
35:2d:187:ARG:NH2	35:2d:193:ASP:OD2	2.30	0.62
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.81	0.62
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.99	0.62
46:2o:5:LYS:H	46:2o:5:LYS:HD2	1.65	0.62
32:2a:130:A:H5'	48:2q:63:ARG:HE	1.65	0.62
1:1A:2689:U:H4'	1:1A:2690:C:H5'	1.80	0.62
42:1k:99:GLN:HG2	42:1k:105:VAL:HG21	1.80	0.62
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.81	0.62
1:1A:249:C:O2'	11:1P:64:LYS:NZ	2.19	0.62
1:1A:2126:A:H4'	1:1A:2127:G:O5'	1.98	0.62
1:2A:641:C:O2'	1:2A:2350:C:OP1	2.12	0.62
1:2A:2319:G:H22	14:2S:3:ARG:HD3	1.64	0.62
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.48	0.62
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	1.81	0.62
40:2i:9:ARG:H	40:2i:79:LEU:HD23	1.65	0.62
1:1A:1452:A:OP2	60:1A:4146:HOH:O	2.16	0.62
32:1a:472:A:H5"	47:1p:80:PHE:HB3	1.81	0.62
33:1b:231:GLU:HB3	33:1b:232:PRO:CD	2.30	0.62
39:1h:86:ILE:HG13	39:1h:133:LEU:HD22	1.82	0.62
1:2A:1064:C:H3'	1:2A:1065:U:C5'	2.29	0.62
1:2A:1568:G:N7	60:2A:3998:HOH:O	2.31	0.62
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.35	0.62
40:2i:42:ARG:NH1	40:2i:71:SER:O	2.32	0.62
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.81	0.62
32:1a:1108:G:O6	60:1a:1914:HOH:O	2.13	0.62
1:2A:1057:A:H62	1:2A:1086:A:H3'	1.64	0.62
1:2A:1076:C:H4'	1:2A:1077:A:OP1	1.99	0.62
6:2G:171:ALA:O	6:2G:175:LEU:N	2.30	0.62
23:21:77:ALA:HA	23:21:80:LEU:HD13	1.81	0.62
32:2a:1130:A:H2'	32:2a:1131:G:H8	1.65	0.62
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.48	0.62
51:2t:57:ARG:HH22	51:2t:100:ILE:HD12	1.64	0.62
3:1D:17:THR:O	3:1D:211:ARG:NH2	2.32	0.62
32:1a:300:A:O2'	32:1a:564:C:N3	2.32	0.62
1:2A:1952:A:OP1	10:2O:42:SER:OG	2.16	0.62
1:2A:2206:G:H5"	1:2A:2207:G:C8	2.35	0.62
3:2D:69:ARG:NH2	3:2D:128:GLY:O	2.32	0.62
32:2a:192:U:H2'	32:2a:193:C:H6	1.65	0.62
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.82	0.61
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:231:GLU:HB3	33:1b:232:PRO:HD3	1.81	0.61
32:2a:558:G:OP1	60:2a:3321:HOH:O	2.16	0.61
1:2A:2134:A:N6	1:2A:2156:G:O2'	2.27	0.61
1:1A:2038:G:O6	60:1A:4149:HOH:O	2.16	0.61
1:2A:2161:C:O2'	1:2A:2173:A:O2'	2.14	0.61
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.26	0.61
21:1Z:158:PRO:HG2	21:1Z:161:VAL:HG11	1.82	0.61
1:2A:365:C:OP2	60:2A:3862:HOH:O	2.16	0.61
1:2A:1356:G:OP1	60:2A:3864:HOH:O	2.16	0.61
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.99	0.61
6:2G:41:GLN:HB3	6:2G:43:LEU:HD13	1.81	0.61
40:2i:116:LYS:HD2	40:2i:122:ALA:HA	1.81	0.61
1:1A:2114:A:H3'	1:1A:2115:G:C8	2.34	0.61
1:1A:2122:U:O2	60:1A:4141:HOH:O	2.15	0.61
1:1A:2239:G:OP2	60:1A:4145:HOH:O	2.16	0.61
1:1A:1143:A:OP1	9:1N:25:ARG:NH2	2.33	0.61
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.34	0.61
2:2B:75:G:O3'	21:2Z:10:ARG:NH2	2.33	0.61
32:2a:567:G:OP2	60:2a:3320:HOH:O	2.16	0.61
46:2o:55:GLY:HA2	46:2o:58:MET:HE3	1.81	0.61
1:1A:956:G:O6	60:1A:4131:HOH:O	2.11	0.61
1:1A:1173:G:O2'	1:1A:1174:A:O5'	2.18	0.61
20:1Y:15:VAL:HG21	20:1Y:42:VAL:HG11	1.82	0.61
30:18:15:LYS:HB3	56:18:104:MPD:H52	1.82	0.61
32:1a:1003:G:N2	32:1a:1004:A:N3	2.49	0.61
42:1k:81:ASP:N	42:1k:81:ASP:OD1	2.32	0.61
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.66	0.61
15:1T:56:GLY:O	15:1T:59:THR:HG23	2.01	0.61
34:1c:84:ILE:HA	34:1c:87:LEU:HD12	1.82	0.61
35:1d:53:ASP:HB3	35:1d:57:ARG:HH12	1.66	0.61
44:1m:12:ASN:O	44:1m:44:ARG:NH1	2.32	0.61
5:2F:154:VAL:HG22	5:2F:191:ARG:HB2	1.83	0.61
6:2G:15:VAL:HG21	6:2G:176:LEU:HD23	1.81	0.61
13:2R:51:LEU:HD22	13:2R:66:VAL:HG13	1.82	0.61
32:2a:49:U:OP2	60:2a:3319:HOH:O	2.16	0.61
1:1A:457:A:OP2	60:1A:4152:HOH:O	2.16	0.61
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.00	0.61
15:2T:85:LYS:NZ	15:2T:87:ASP:OD2	2.33	0.61
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.35	0.61
1:1A:456:C:H4'	60:1A:6701:HOH:O	2.01	0.61
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:48:ARG:HD2	26:24:52:THR:HA	1.81	0.61
1:1A:1094:U:H1'	1:1A:1097:U:H5	1.65	0.60
24:12:59:ARG:NH2	60:12:102:HOH:O	2.34	0.60
33:1b:80:ILE:HD12	33:1b:208:ILE:HG22	1.83	0.60
1:2A:1210:A:N7	60:2A:3991:HOH:O	2.30	0.60
1:2A:459:U:OP1	60:2A:3863:HOH:O	2.16	0.60
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.18	0.60
22:20:18:ALA:O	22:20:20:ARG:NH1	2.33	0.60
40:2i:7:THR:HG1	40:2i:83:ARG:HH11	1.49	0.60
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.28	0.60
1:1A:1075:C:N4	1:1A:1077:A:N1	2.47	0.60
1:1A:1466:G:HO2'	1:1A:1546:C:HO2'	1.41	0.60
25:13:8:LEU:HD13	25:13:31:LEU:HD23	1.84	0.60
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.34	0.60
1:2A:309:G:N3	1:2A:329:G:O2'	2.33	0.60
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.65	0.60
32:1a:828:A:H2'	32:1a:829:G:O4'	2.01	0.60
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.26	0.60
32:2a:1135:U:H4'	32:2a:1136:U:C5	2.35	0.60
33:2b:134:GLU:HA	33:2b:137:ARG:HH21	1.66	0.60
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.33	0.60
32:1a:352:C:O2'	32:1a:354:G:OP1	2.19	0.60
23:21:54:ALA:HB1	23:21:83:GLU:HG3	1.83	0.60
50:2s:41:VAL:HG12	50:2s:44:MET:HG3	1.84	0.60
53:2y:61:LEU:HB3	53:2y:81:LEU:HD22	1.83	0.60
1:1A:1064:C:H3'	1:1A:1065:U:H5"	1.83	0.60
52:1u:3:LYS:HD2	52:1u:14:TRP:HD1	1.67	0.60
1:2A:270:A:OP2	1:2A:271(X):G:N1	2.28	0.60
1:2A:1141:U:OP2	9:2N:63:THR:OG1	2.20	0.60
1:2A:2267:A:H5"	1:2A:2268:A:H5'	1.84	0.60
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.82	0.60
26:24:59:PHE:HA	26:24:61:ARG:N	2.16	0.60
1:1A:493:G:O6	60:1A:4151:HOH:O	2.16	0.60
32:2a:964:A:OP1	60:2a:3322:HOH:O	2.17	0.60
33:2b:98:LEU:H	33:2b:101:MET:HE3	1.66	0.60
35:2d:30:LYS:HG2	35:2d:35:ARG:HH21	1.67	0.60
52:2u:12:LYS:HE2	52:2u:21:TYR:HB2	1.82	0.60
1:2A:423:A:OP1	60:2A:3866:HOH:O	2.16	0.60
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.34	0.60
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.01	0.60
1:2A:2683:C:O2	10:2O:70:LYS:NZ	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:100:ARG:NH1	35:2d:137:SER:OG	2.35	0.60
1:1A:2506:U:OP1	4:1E:144:ARG:NH2	2.35	0.60
33:2b:48:MET:HA	33:2b:51:LEU:HD12	1.84	0.60
34:2c:20:SER:OG	34:2c:22:TRP:NE1	2.33	0.60
14:1S:59:LYS:HD2	14:1S:60:GLY:H	1.67	0.60
40:1i:20:ARG:O	40:1i:60:ASP:N	2.35	0.60
1:2A:2601:C:H3'	1:2A:2602:A:H5"	1.82	0.60
32:2a:1003:G:H3'	32:2a:1003:G:N3	2.17	0.60
1:1A:330:A:H2	1:1A:1210:A:O2'	1.86	0.59
1:1A:2058:A:OP1	60:1A:4148:HOH:O	2.16	0.59
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.16	0.59
32:2a:501:C:H2'	32:2a:502:G:C8	2.36	0.59
1:1A:110:G:O6	60:1A:4143:HOH:O	2.15	0.59
7:1H:149:ARG:NH1	7:1H:167:GLU:OE2	2.34	0.59
15:1T:51:ARG:NH1	60:1T:302:HOH:O	2.35	0.59
32:1a:222:U:H2'	32:1a:223:U:C6	2.36	0.59
1:2A:670:A:O2'	60:2A:3869:HOH:O	2.17	0.59
15:2T:102:ILE:HA	15:2T:105:LEU:HD12	1.84	0.59
18:2W:86:LEU:HD13	18:2W:96:ILE:HD11	1.83	0.59
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.35	0.59
40:1i:27:THR:HG22	40:1i:62:TYR:HA	1.84	0.59
1:2A:27:G:O2'	1:2A:28:A:OP2	2.15	0.59
6:2G:170:ARG:NH2	6:2G:174:GLU:OE2	2.32	0.59
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.02	0.59
16:1U:101:ARG:NH2	60:1U:304:HOH:O	2.35	0.59
21:1Z:52:SER:OG	21:1Z:53:ILE:N	2.32	0.59
40:1i:17:VAL:HA	40:1i:63:ILE:HG12	1.83	0.59
1:2A:1371:G:N7	60:2A:4003:HOH:O	2.32	0.59
32:2a:111:G:OP2	60:2a:3318:HOH:O	2.16	0.59
34:2c:180:ALA:HA	34:2c:206:GLU:HA	1.84	0.59
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.02	0.59
40:1i:9:ARG:HG2	40:1i:14:VAL:HG13	1.84	0.59
1:2A:2641:G:P	9:2N:74:ARG:HH21	2.25	0.59
32:2a:932:C:H2'	32:2a:933:G:H8	1.68	0.59
32:2a:1030:C:H42	32:2a:1031:G:H1	1.46	0.59
36:2e:74:GLY:HA3	36:2e:116:THR:HG22	1.85	0.59
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.34	0.59
32:2a:1503:A:H5'	32:2a:1531:A:H1'	1.83	0.59
1:1A:530:G:N1	1:1A:2023:G:OP1	2.31	0.59
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.35	0.59
32:1a:374:A:OP1	60:1a:1918:HOH:O	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:73:A:OP2	60:2A:3865:HOH:O	2.16	0.59
2:2B:103:G:H21	21:2Z:73:GLN:HE22	1.49	0.59
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.37	0.59
32:2a:1347:G:HO2'	32:2a:1373:G:H1	1.49	0.59
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.85	0.59
47:2p:60:LEU:HD21	47:2p:80:PHE:HE1	1.68	0.59
1:1A:2319:G:H22	14:1S:3:ARG:HD2	1.68	0.59
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.67	0.59
11:2P:121:LYS:O	11:2P:123:LEU:N	2.34	0.59
14:2S:93:LYS:HG2	14:2S:95:HIS:HB2	1.85	0.59
19:2X:40:LYS:HG3	19:2X:51:VAL:HB	1.84	0.59
32:2a:1108:G:H5'	34:2c:176:HIS:HD2	1.68	0.59
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.37	0.59
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.35	0.59
32:1a:1140:C:H2'	32:1a:1141:C:H6	1.68	0.59
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.31	0.59
26:24:53:GLU:H	26:24:53:GLU:CD	2.10	0.59
35:2d:111:ALA:HB1	35:2d:116:GLN:HE21	1.68	0.59
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.38	0.59
6:1G:137:GLU:HB2	6:1G:140:ILE:HD12	1.85	0.59
32:1a:946:A:H2'	32:1a:947:G:C8	2.38	0.59
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.68	0.59
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.85	0.59
32:2a:1030:C:N4	32:2a:1031:G:N1	2.44	0.59
32:1a:538:G:H5"	43:1l:114:LYS:HB2	1.85	0.58
1:2A:404:C:OP1	60:2A:3870:HOH:O	2.17	0.58
19:2X:50:LYS:HB3	19:2X:84:ALA:HB2	1.83	0.58
32:2a:189(K):U:H2'	32:2a:189(L):G:C8	2.38	0.58
33:2b:174:VAL:O	33:2b:178:ARG:HG2	2.02	0.58
33:2b:178:ARG:HH22	39:2h:74:PRO:HB3	1.68	0.58
35:2d:25:ARG:NH1	35:2d:30:LYS:O	2.36	0.58
1:1A:695:G:OP1	1:1A:1380:G:O2'	2.21	0.58
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.37	0.58
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.36	0.58
32:1a:1228:C:P	44:1m:108:ARG:HH22	2.26	0.58
1:2A:740:U:OP2	60:2A:3861:HOH:O	2.16	0.58
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.84	0.58
1:1A:1344:G:O6	60:1A:4150:HOH:O	2.16	0.58
19:1X:57:LEU:HD11	19:1X:78:LYS:HE2	1.85	0.58
32:1a:316:G:OP2	32:1a:351:G:O2'	2.21	0.58
14:2S:99:LYS:NZ	14:2S:103:GLU:OE2	2.26	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:72:ARG:HH21	47:2p:73:LEU:HD21	1.67	0.58
37:1f:38:GLU:HB2	37:1f:64:GLN:HG2	1.85	0.58
1:2A:2104:G:O6	1:2A:2185:C:C4	2.56	0.58
5:2F:178:PRO:HB2	5:2F:201:VAL:HG21	1.84	0.58
6:2G:32:PRO:HB2	6:2G:172:LEU:HD22	1.84	0.58
6:2G:72:ARG:HG2	6:2G:87:PRO:HA	1.85	0.58
32:2a:450:G:H4'	47:2p:41:PRO:HB2	1.85	0.58
4:2E:199:ARG:NH1	60:2E:405:HOH:O	2.37	0.58
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.85	0.58
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.19	0.58
1:1A:1226:A:OP1	17:1V:84:LYS:NZ	2.36	0.58
1:1A:2137:C:N4	1:1A:2154:G:H1	2.01	0.58
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.38	0.58
32:1a:757:U:H2'	32:1a:758:G:O4'	2.04	0.58
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.18	0.58
1:2A:2319:G:N2	14:2S:3:ARG:HD3	2.17	0.58
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.84	0.58
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.67	0.58
1:1A:184:C:H2'	1:1A:185:U:C6	2.38	0.58
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.37	0.58
1:1A:2134:A:N6	1:1A:2157:G:H4'	2.19	0.58
7:1H:88:LEU:HD23	7:1H:130:ARG:HG3	1.86	0.58
34:1c:26:LYS:HA	45:1n:36:PHE:HE1	1.68	0.58
1:2A:630:G:N2	1:2A:633:A:OP2	2.31	0.58
3:2D:101:GLU:OE2	3:2D:103:ARG:NH1	2.37	0.58
37:2f:61:LEU:HB3	37:2f:63:TYR:CE2	2.39	0.58
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.86	0.58
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.39	0.58
1:2A:2305:A:H5"	6:2G:134:GLY:HA3	1.86	0.58
6:2G:54:GLU:O	6:2G:58:GLN:N	2.36	0.58
32:2a:1362:C:H2'	32:2a:1363:C:H5"	1.86	0.58
47:2p:20:VAL:HG23	47:2p:35:LYS:HA	1.86	0.58
7:1H:127:GLU:OE2	7:1H:130:ARG:NH1	2.37	0.58
13:1R:38:VAL:HG22	13:1R:112:ALA:HB2	1.84	0.58
7:2H:124:GLU:HB2	7:2H:132:ARG:HB3	1.86	0.58
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.69	0.58
37:2f:22:GLU:OE1	37:2f:84:ASN:ND2	2.36	0.58
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.33	0.58
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.32	0.58
9:1N:73:THR:HG23	9:1N:82:LEU:HD11	1.85	0.58
33:1b:80:ILE:HD11	33:1b:212:GLN:HB2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:265:A:N1	1:2A:427:U:O2'	2.36	0.58
32:1a:1003:G:C2'	32:1a:1004:A:H4'	2.33	0.57
32:2a:579:G:H4'	46:2o:54:ARG:HH21	1.67	0.57
1:1A:1509(A):A:H2'	1:1A:1509(B):A:O4'	2.04	0.57
32:1a:1112:C:H1'	34:1c:179:ARG:HE	1.69	0.57
36:1e:110:LEU:HD13	36:1e:118:ILE:HD13	1.87	0.57
32:2a:976:G:P	45:2n:32:SER:H	2.27	0.57
1:1A:679:C:OP1	60:1A:4105:HOH:O	2.17	0.57
1:1A:2114:A:H3'	1:1A:2115:G:H8	1.70	0.57
32:1a:737:A:H2'	32:1a:738:C:C6	2.40	0.57
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.36	0.57
1:2A:2206:G:H5"	1:2A:2207:G:N7	2.19	0.57
6:2G:161:THR:HG23	6:2G:163:ALA:H	1.69	0.57
32:2a:1310:G:OP2	44:2m:88:ARG:NH2	2.37	0.57
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.85	0.57
32:1a:965:A:OP2	53:1y:8:LYS:NZ	2.36	0.57
1:2A:1365:A:O2'	23:21:11:ARG:NH2	2.37	0.57
7:2H:150:ALA:HA	7:2H:153:LYS:HG3	1.86	0.57
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.86	0.57
1:1A:1045:A:O2'	1:1A:1047:G:N3	2.35	0.57
32:1a:1291:G:OP1	38:1g:37:ASN:ND2	2.38	0.57
1:2A:2548:G:N7	60:2A:4007:HOH:O	2.32	0.57
32:2a:959:A:O2'	32:2a:984:C:O2'	2.23	0.57
36:2e:10:MET:HE2	36:2e:55:VAL:HG11	1.86	0.57
40:2i:89:ASN:HB3	40:2i:92:TYR:CD2	2.40	0.57
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.57
1:1A:1509(A):A:H2'	1:1A:1509(B):A:C8	2.39	0.57
32:1a:130:A:O2'	32:1a:131:C:O5'	2.21	0.57
1:2A:586:A:N1	1:2A:809:G:O2'	2.35	0.57
26:24:18:CYS:SG	26:24:39:CYS:HB3	2.44	0.57
32:2a:1112:C:O2	34:2c:179:ARG:N	2.37	0.57
36:2e:12:LEU:HD12	36:2e:128:PRO:HB2	1.86	0.57
1:1A:1045:A:H5'	1:1A:1046:A:H5"	1.87	0.57
1:1A:2130:U:O2'	1:1A:2133:G:O2'	2.20	0.57
47:1p:42:ARG:HB3	47:1p:44:THR:HG23	1.85	0.57
1:2A:2602:A:H8	60:2A:4349:HOH:O	1.87	0.57
42:2k:31:THR:HG23	42:2k:42:TRP:HB3	1.86	0.57
1:1A:271(R):G:O6	60:1A:4138:HOH:O	2.14	0.57
3:1D:71:ASP:HB3	3:1D:103:ARG:HH22	1.69	0.57
3:1D:71:ASP:HB3	3:1D:103:ARG:NH2	2.19	0.57
47:1p:49:LEU:HD11	47:1p:73:LEU:HB3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:17:PHE:HD1	33:2b:18:GLY:H	1.52	0.57
1:1A:1762:A:H2'	60:1A:7528:HOH:O	2.04	0.57
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.17	0.57
30:18:23:VAL:HG11	30:18:47:LYS:HD3	1.87	0.57
33:1b:166:ASP:HB3	33:1b:169:LYS:HB3	1.87	0.57
1:2A:1795:C:O2	3:2D:255:LYS:NZ	2.36	0.57
7:2H:27:LYS:NZ	7:2H:32:GLU:OE1	2.37	0.57
6:1G:64:THR:HB	6:1G:94:LEU:HD21	1.86	0.57
13:1R:36:THR:HG22	13:1R:37:THR:H	1.69	0.57
22:10:38:VAL:HB	22:10:59:LEU:HB2	1.87	0.57
32:1a:79:G:N2	32:1a:90:U:O2	2.38	0.57
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.40	0.57
1:2A:2126:A:H4'	1:2A:2127:G:O5'	2.05	0.57
1:2A:2377:A:N6	60:2A:3953:HOH:O	2.38	0.57
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.40	0.57
33:2b:93:VAL:HG21	33:2b:97:TRP:HD1	1.70	0.57
1:1A:1913:A:N6	32:1a:1409:C:O2	2.38	0.56
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.87	0.56
35:1d:60:GLU:HG3	35:1d:202:LEU:HD12	1.86	0.56
32:2a:1075:C:H5"	33:2b:179:LYS:HE2	1.87	0.56
48:2q:66:SER:OG	48:2q:67:LYS:N	2.37	0.56
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.40	0.56
17:1V:60:GLU:OE1	17:1V:97:LYS:NZ	2.31	0.56
32:1a:1094:G:OP1	60:1a:1910:HOH:O	2.17	0.56
53:1y:89:GLN:OE1	60:1y:301:HOH:O	2.18	0.56
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.39	0.56
1:2A:1014:U:H2'	1:2A:1015:G:H8	1.70	0.56
1:2A:1105:U:H2'	1:2A:1106:G:H8	1.70	0.56
1:2A:2661:G:O6	7:2H:175:LYS:NZ	2.38	0.56
7:2H:86:GLU:OE2	7:2H:132:ARG:NH2	2.38	0.56
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.70	0.56
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.69	0.56
1:1A:123:G:OP2	60:1A:4155:HOH:O	2.18	0.56
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.38	0.56
1:1A:1364:G:N7	23:11:3:LYS:HE2	2.20	0.56
18:1W:67:ASP:N	18:1W:67:ASP:OD1	2.38	0.56
32:1a:176:C:H2'	32:1a:177:C:H6	1.70	0.56
32:1a:438:G:H4'	35:1d:123:HIS:CD2	2.39	0.56
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.37	0.56
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.87	0.56
1:2A:446:G:OP1	16:2U:3:ARG:NH1	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1276:A:O5'	60:2A:3872:HOH:O	2.18	0.56
7:2H:24:VAL:HG22	7:2H:35:VAL:HB	1.87	0.56
12:2Q:137:TYR:HB3	21:2Z:76:LEU:HD11	1.86	0.56
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.38	0.56
32:2a:500:G:H2'	32:2a:501:C:C6	2.40	0.56
35:2d:8:VAL:HG22	35:2d:21:LEU:HD13	1.85	0.56
46:2o:28:GLN:HE21	46:2o:66:LEU:HD21	1.70	0.56
10:1O:18:LYS:NZ	60:1O:304:HOH:O	2.37	0.56
1:2A:644:A:H4'	1:2A:645:C:H5	1.70	0.56
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.24	0.56
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.88	0.56
30:28:56:GLU:HA	30:28:59:LYS:HG3	1.87	0.56
32:2a:45:U:H2'	32:2a:46:G:C8	2.41	0.56
32:2a:528:C:H5'	32:2a:529:G:OP2	2.05	0.56
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.87	0.56
15:1T:16:ARG:NH2	15:1T:18:ASP:OD2	2.32	0.56
32:1a:96:U:H2'	32:1a:97:G:C8	2.40	0.56
32:1a:1300:G:N7	60:1a:1954:HOH:O	2.33	0.56
1:2A:2237:G:OP1	60:2A:3873:HOH:O	2.18	0.56
6:2G:112:PRO:HG3	26:24:43:TYR:CE2	2.39	0.56
11:2P:59:LEU:HD11	30:28:10:ALA:HB2	1.88	0.56
32:2a:489:C:H2'	32:2a:490:G:C8	2.41	0.56
48:2q:41:LYS:NZ	48:2q:92:ARG:HH21	2.03	0.56
1:1A:548:A:O2'	1:1A:549:G:OP1	2.22	0.56
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.40	0.56
3:1D:34:VAL:HG12	3:1D:63:ARG:HG3	1.87	0.56
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.87	0.56
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.87	0.56
47:1p:74:LEU:HD23	47:1p:79:VAL:HG11	1.87	0.56
1:2A:2492:U:OP1	60:2A:3871:HOH:O	2.17	0.56
16:2U:104:GLN:NE2	16:2U:105:VAL:HG23	2.21	0.56
32:2a:944:G:N1	32:2a:1338:G:OP2	2.39	0.56
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.71	0.56
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.86	0.56
34:2c:121:ALA:HB1	34:2c:189:ALA:HB2	1.87	0.56
40:1i:121:ARG:NH2	60:1i:301:HOH:O	2.38	0.56
2:2B:8:U:H3	2:2B:113:G:H1	1.53	0.56
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.87	0.56
32:2a:1286:A:H2'	32:2a:1287:A:H4'	1.87	0.56
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.33	0.56
32:1a:344:A:H4'	32:1a:345:C:OP2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:966:M2G:H1'	53:1y:53:THR:HG21	1.88	0.56
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	1.87	0.56
35:1d:173:TRP:CD1	35:1d:189:PRO:HB3	2.40	0.56
48:1q:6:LEU:HD23	48:1q:23:VAL:HG21	1.87	0.56
1:2A:1428:C:O2'	1:2A:1569:A:OP2	2.18	0.56
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.21	0.56
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.41	0.56
6:2G:16:ARG:HB2	6:2G:17:PRO:HD3	1.86	0.56
22:20:53:MET:HG3	22:20:59:LEU:HD23	1.88	0.56
34:2c:54:ARG:HB2	34:2c:69:HIS:HB2	1.87	0.56
1:1A:1364:G:OP2	23:11:3:LYS:HD3	2.05	0.56
17:1V:21:ARG:HD3	17:1V:91:TYR:CD1	2.41	0.56
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.53	0.56
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.24	0.56
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.87	0.56
32:2a:1456:G:N1	51:2t:51:GLU:OE2	2.37	0.56
34:2c:50:ALA:HB1	34:2c:70:VAL:HG21	1.88	0.56
1:1A:958:U:H5"	12:1Q:14:ARG:HD3	1.88	0.56
40:1i:4:TYR:HB2	40:1i:19:LEU:HB2	1.86	0.56
5:2F:20:LEU:HD23	5:2F:21:ALA:H	1.71	0.56
8:1I:77:LEU:HB3	8:1I:142:VAL:HG22	1.88	0.55
32:1a:107:G:N7	51:1t:15:ARG:NH2	2.54	0.55
1:2A:800:A:H8	1:2A:800:A:OP1	1.89	0.55
15:2T:120:ARG:HA	15:2T:123:GLN:HB2	1.87	0.55
32:2a:398:C:OP2	60:2a:3323:HOH:O	2.18	0.55
32:2a:1030(A):G:H1'	32:2a:1030(C):G:N7	2.21	0.55
32:2a:1158:C:H2'	32:2a:1159:U:H4'	1.88	0.55
1:1A:2167:U:H2'	1:1A:2168:G:C8	2.41	0.55
32:1a:600:C:H2'	32:1a:601:C:C6	2.41	0.55
47:1p:43:LYS:HG2	47:1p:48:TRP:CE2	2.41	0.55
47:1p:70:ALA:O	47:1p:74:LEU:HD12	2.06	0.55
53:1y:52:ALA:HB2	53:1y:77:LEU:HD21	1.88	0.55
1:2A:27:G:HO2'	1:2A:28:A:P	2.27	0.55
1:2A:2615:U:OP1	60:2A:3874:HOH:O	2.18	0.55
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.42	0.55
4:2E:181:LEU:HD11	15:2T:6:LEU:HD23	1.88	0.55
32:2a:401:C:OP1	35:2d:73:ARG:NH2	2.39	0.55
32:2a:1108:G:H5'	34:2c:176:HIS:CD2	2.41	0.55
34:2c:71:ALA:HA	34:2c:106:VAL:HB	1.88	0.55
38:2g:77:SER:OG	38:2g:86:GLN:NE2	2.39	0.55
32:1a:44:G:OP2	60:1a:1920:HOH:O	2.18	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.88	0.55
1:2A:304:G:O6	60:2A:3875:HOH:O	2.18	0.55
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.40	0.55
6:2G:32:PRO:HB3	6:2G:163:ALA:HB2	1.88	0.55
26:24:14:ILE:HD11	26:24:24:THR:HG21	1.88	0.55
32:2a:890:G:O2'	32:2a:906:G:O6	2.22	0.55
33:2b:16:HIS:O	33:2b:18:GLY:N	2.39	0.55
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.03	0.55
32:1a:165:C:H2'	32:1a:166:G:H8	1.71	0.55
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.87	0.55
35:1d:98:GLU:O	35:1d:103:ASN:ND2	2.39	0.55
1:2A:2267:A:H5"	1:2A:2268:A:C5'	2.37	0.55
13:2R:2:ARG:NH1	13:2R:5:LYS:O	2.40	0.55
32:2a:1030(C):G:H2'	32:2a:1030(D):A:C8	2.41	0.55
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.42	0.55
6:1G:16:ARG:NE	6:1G:31:VAL:HG21	2.22	0.55
6:1G:16:ARG:HE	6:1G:31:VAL:HG21	1.72	0.55
21:1Z:70:LEU:HG	21:1Z:91:LEU:HD21	1.89	0.55
40:1i:105:ASP:HB2	40:1i:107:ARG:HG3	1.88	0.55
6:2G:39:ILE:HD12	6:2G:60:LEU:HD11	1.87	0.55
6:2G:105:LYS:NZ	6:2G:143:GLU:OE2	2.38	0.55
32:1a:346:G:H21	56:1a:1878:MPD:H53	1.70	0.55
1:2A:530:G:H4'	1:2A:531:C:OP1	2.06	0.55
1:2A:888:C:H2'	1:2A:889:C:C2	2.42	0.55
1:2A:2162:G:H4'	1:2A:2172:U:O2'	2.07	0.55
3:2D:164:GLN:OE1	3:2D:176:ARG:NH2	2.40	0.55
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.42	0.55
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	1.89	0.55
1:1A:639:U:H2'	1:1A:640:C:C6	2.42	0.55
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.88	0.55
32:1a:235:C:H2'	32:1a:236:G:H8	1.72	0.55
1:2A:588:U:H2'	1:2A:589:C:C6	2.42	0.55
1:2A:1589:C:H2'	1:2A:1590:U:H6	1.71	0.55
6:2G:80:PHE:O	6:2G:82:LEU:N	2.39	0.55
27:25:41:PRO:O	27:25:44:THR:OG1	2.23	0.55
32:2a:748:C:H4'	32:2a:749:C:O5'	2.06	0.55
17:1V:23:GLU:OE2	60:1V:302:HOH:O	2.18	0.55
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.41	0.55
31:29:2:LYS:NZ	31:29:31:LYS:O	2.30	0.55
21:2Z:4:ARG:HH21	21:2Z:60:GLU:HG3	1.71	0.55
32:2a:542:G:OP1	35:2d:10:ARG:NH1	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:59:ARG:HH11	35:2d:59:ARG:HA	1.71	0.55
38:2g:114:ARG:HB2	38:2g:115:ARG:NH2	2.22	0.55
1:1A:2134:A:N7	1:1A:2157:G:O2'	2.40	0.55
3:1D:242:ARG:HD2	3:1D:246:PRO:HG3	1.89	0.55
35:1d:6:GLY:O	35:1d:115:ARG:NH1	2.38	0.55
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.40	0.55
1:1A:1666:G:O6	60:1A:4153:HOH:O	2.17	0.54
1:1A:2147:G:H2'	1:1A:2148:G:H4'	1.89	0.54
3:1D:88:ARG:NH1	60:1D:408:HOH:O	2.36	0.54
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.72	0.54
32:1a:1140:C:H2'	32:1a:1141:C:C6	2.41	0.54
1:2A:686:G:H1	29:27:16:HIS:CD2	2.25	0.54
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.52	0.54
33:2b:178:ARG:HH12	39:2h:68:ARG:HH22	1.55	0.54
41:2j:6:ILE:HB	41:2j:72:VAL:HG23	1.88	0.54
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.72	0.54
1:1A:1754:C:OP1	15:1T:96:ARG:NH1	2.40	0.54
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.41	0.54
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.90	0.54
35:1d:190:ASP:N	35:1d:190:ASP:OD1	2.40	0.54
1:2A:249:C:O2	30:28:12:LYS:NZ	2.36	0.54
1:2A:1038:C:H42	1:2A:1117:G:H1	1.53	0.54
1:2A:1701:A:OP2	60:2A:3877:HOH:O	2.18	0.54
1:2A:1754:C:P	15:2T:96:ARG:HH12	2.30	0.54
32:2a:489:C:H2'	32:2a:490:G:H8	1.72	0.54
32:2a:1003:G:H2'	32:2a:1004:A:H4'	1.88	0.54
35:2d:8:VAL:HA	35:2d:11:LEU:HD13	1.88	0.54
36:2e:50:GLU:HB2	36:2e:53:LEU:HD13	1.89	0.54
37:2f:61:LEU:HB3	37:2f:63:TYR:HE2	1.72	0.54
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.42	0.54
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.07	0.54
2:1B:66:A:H61	2:1B:108:U:H2'	1.73	0.54
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.42	0.54
36:1e:53:LEU:H	36:1e:53:LEU:HD12	1.73	0.54
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.36	0.54
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.07	0.54
23:11:51:VAL:HG11	23:11:74:VAL:HG21	1.90	0.54
33:1b:88:ALA:O	33:1b:226:ARG:NH2	2.40	0.54
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.90	0.54
32:2a:552:U:H4'	43:2l:87:GLY:HA2	1.89	0.54
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:45:LEU:HD12	37:2f:45:LEU:H	1.73	0.54
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	1.90	0.54
1:1A:2115:G:H2'	1:1A:2117:A:N6	2.22	0.54
2:1B:48:A:H4'	14:1S:95:HIS:HD2	1.73	0.54
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.89	0.54
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.24	0.54
1:2A:2152:G:H2'	1:2A:2153:G:C8	2.41	0.54
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.41	0.54
32:2a:1005:A:H5"	32:2a:1006:C:C5	2.42	0.54
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.40	0.54
47:2p:20:VAL:HG21	47:2p:32:TYR:CG	2.42	0.54
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.43	0.54
40:1i:25:LYS:NZ	40:1i:32:ASP:OD1	2.36	0.54
13:2R:55:ALA:HB2	13:2R:79:LEU:HD13	1.88	0.54
33:2b:127:ILE:C	33:2b:129:GLU:H	2.16	0.54
33:2b:230:VAL:HG22	33:2b:231:GLU:H	1.72	0.54
35:2d:176:LEU:HA	35:2d:183:GLY:HA2	1.89	0.54
32:1a:186:C:H2'	32:1a:187:C:C6	2.43	0.54
32:1a:1297:C:O2'	38:1g:114:ARG:NH1	2.41	0.54
1:2A:527:C:OP1	60:2A:3825:HOH:O	2.18	0.54
5:2F:160:ASN:HB3	5:2F:163:VAL:HB	1.89	0.54
32:2a:707:C:H2'	32:2a:708:C:C6	2.43	0.54
32:2a:857:C:H2'	32:2a:858:G:O4'	2.08	0.54
32:2a:986:A:N3	50:2s:52:TYR:OH	2.34	0.54
32:2a:1123:A:H4'	41:2j:37:PRO:HD2	1.90	0.54
44:2m:15:VAL:HG11	44:2m:48:LEU:HD21	1.90	0.54
1:1A:715:G:H21	46:1o:40:SER:HB2	1.73	0.54
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.07	0.54
21:1Z:144:LEU:HD21	21:1Z:150:LEU:HD13	1.89	0.54
1:2A:988:A:N6	60:2A:4123:HOH:O	2.41	0.54
1:2A:1064:C:H3'	1:2A:1065:U:H5'	1.90	0.54
1:2A:1315:C:OP2	60:2A:3813:HOH:O	2.17	0.54
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.08	0.54
1:2A:1657:C:H2'	1:2A:1658:C:C6	2.43	0.54
1:2A:2343:C:HO2'	1:2A:2373:G:HO2'	1.55	0.54
22:20:15:ASP:OD1	22:20:16:SER:N	2.40	0.54
49:2r:56:THR:HB	49:2r:58:LEU:HD13	1.90	0.54
1:1A:784:A:H5'	1:1A:785:G:OP1	2.08	0.54
1:1A:1721:G:H2'	1:1A:1740:G:O6	2.08	0.54
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.90	0.54
16:1U:8:VAL:HG23	16:1U:11:ARG:HH21	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.89	0.54
32:1a:376:G:H5"	47:1p:5:ARG:HD2	1.90	0.54
32:1a:757:U:O2'	32:1a:879:C:O2	2.26	0.54
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.43	0.54
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.73	0.54
39:1h:81:HIS:N	39:1h:138:TRP:O	2.41	0.54
1:2A:749:C:OP2	60:2A:3881:HOH:O	2.19	0.54
1:2A:973:A:H8	1:2A:973:A:OP1	1.89	0.54
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.24	0.54
1:2A:2114:A:H3'	1:2A:2115:G:C8	2.42	0.54
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.43	0.54
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.38	0.54
13:2R:97:VAL:HG22	13:2R:114:VAL:HG22	1.90	0.54
34:2c:43:LEU:HD21	34:2c:91:LEU:HD13	1.88	0.54
37:2f:89:MET:HE1	49:2r:72:ARG:HB3	1.89	0.54
41:2j:38:ILE:HD11	41:2j:71:LEU:HD22	1.90	0.54
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.34	0.54
36:1e:91:LEU:HG	36:1e:118:ILE:HD11	1.90	0.54
53:1y:55:ASN:OD1	53:1y:60:VAL:HG12	2.08	0.54
1:2A:323:G:O2'	1:2A:1205:U:N3	2.37	0.54
1:2A:468:G:N7	29:27:39:ARG:NH2	2.51	0.54
1:2A:747:U:H1'	18:2W:92:ARG:HH22	1.73	0.54
1:2A:2584:U:H2'	1:2A:2585:U:H2'	1.90	0.54
1:2A:2602:A:H1'	1:2A:2603:G:C5'	2.37	0.54
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.23	0.54
40:2i:33:PHE:HE2	40:2i:43:ALA:HB1	1.73	0.54
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.24	0.53
6:1G:41:GLN:HG3	6:1G:60:LEU:HD11	1.90	0.53
15:1T:59:THR:HG21	60:1T:327:HOH:O	2.07	0.53
1:2A:8:A:H2'	1:2A:9:U:C6	2.43	0.53
32:2a:707:C:H2'	32:2a:708:C:H6	1.72	0.53
39:2h:17:THR:HG22	39:2h:63:LEU:HG	1.88	0.53
1:1A:278:A:O2'	1:1A:279:C:OP1	2.22	0.53
1:1A:1155:A:OP1	16:1U:55:ARG:HD3	2.08	0.53
5:1F:197:ASP:N	5:1F:197:ASP:OD1	2.40	0.53
32:1a:176:C:H2'	32:1a:177:C:C6	2.43	0.53
1:2A:1352:U:OP2	60:2A:3879:HOH:O	2.19	0.53
1:2A:2112:G:H2'	1:2A:2113:U:C6	2.43	0.53
1:2A:2570:G:O6	60:2A:3876:HOH:O	2.18	0.53
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.22	0.53
32:2a:932:C:H2'	32:2a:933:G:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1269:A:N1	32:2a:1312:G:O2'	2.32	0.53
33:2b:71:VAL:HA	33:2b:93:VAL:HG22	1.91	0.53
46:2o:3:ILE:HD13	46:2o:34:LEU:HD23	1.90	0.53
1:1A:414:C:H2'	1:1A:415:A:C8	2.42	0.53
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.26	0.53
1:1A:2319:G:H22	14:1S:3:ARG:HA	1.74	0.53
34:1c:54:ARG:NH1	34:1c:56:ASP:OD1	2.42	0.53
39:1h:6:ILE:HB	39:1h:85:ARG:NH1	2.24	0.53
1:2A:2061:G:H5"	1:2A:2503:2MA:C2	2.39	0.53
1:2A:2602:A:H4'	1:2A:2603:G:OP1	2.08	0.53
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.09	0.53
16:2U:10:ARG:NH2	60:2U:201:HOH:O	2.42	0.53
32:2a:1009:G:H1	32:2a:1020:U:H3	1.56	0.53
33:1b:188:ALA:HB1	33:1b:192:SER:HB2	1.91	0.53
39:1h:4:ASP:OD2	39:1h:85:ARG:NH1	2.41	0.53
32:2a:738:C:OP1	37:2f:2:ARG:NH1	2.42	0.53
4:1E:2:LYS:HB2	4:1E:95:ILE:HD12	1.91	0.53
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.90	0.53
32:1a:560:U:OP2	60:1a:1921:HOH:O	2.19	0.53
33:1b:185:ILE:CG2	33:1b:199:TYR:HB2	2.37	0.53
44:1m:76:ALA:HA	44:1m:79:LYS:HB3	1.90	0.53
34:2c:73:PRO:O	34:2c:77:ILE:HG12	2.08	0.53
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.90	0.53
48:2q:10:VAL:HG13	48:2q:19:VAL:HB	1.91	0.53
32:1a:56:U:H2'	32:1a:57:G:C8	2.44	0.53
32:1a:1158:C:H5	32:1a:1181:G:N1	2.01	0.53
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.74	0.53
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.27	0.53
32:2a:1003:G:C6	32:2a:1004:A:H1'	2.44	0.53
60:1A:4345:HOH:O	5:1F:52:LYS:NZ	2.39	0.53
40:1i:26:VAL:HA	40:1i:61:ALA:HB3	1.90	0.53
5:2F:32:LEU:HD22	5:2F:112:MET:HE2	1.90	0.53
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.91	0.53
32:2a:736:C:H2'	32:2a:737:A:C8	2.43	0.53
33:2b:73:THR:OG1	33:2b:170:GLU:OE2	2.20	0.53
36:2e:77:PRO:HD2	36:2e:142:LEU:HD22	1.91	0.53
43:2l:110:VAL:HB	43:2l:113:ARG:HG2	1.89	0.53
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.91	0.53
1:1A:226:G:H21	1:1A:228:A:H62	1.55	0.53
1:2A:922:U:H2'	1:2A:923:C:C6	2.44	0.53
32:2a:574:A:OP2	60:2a:3324:HOH:O	2.18	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:122:ARG:NH1	35:2d:134:ASP:O	2.40	0.53
36:2e:100:VAL:HA	36:2e:118:ILE:HG22	1.91	0.53
36:2e:102:ALA:HB1	36:2e:106:PRO:HG2	1.91	0.53
42:2k:116:HIS:N	42:2k:117:ASN:HA	2.24	0.53
1:1A:271(M):G:H21	8:1I:50:ARG:HD3	1.73	0.53
32:1a:583:A:N6	32:1a:758:G:O2'	2.42	0.53
32:1a:665:A:H1'	32:1a:733:A:O4'	2.09	0.53
32:1a:1135:U:H4'	32:1a:1136:U:H5	1.74	0.53
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.09	0.53
1:2A:2155:G:C2	1:2A:2156:G:H1'	2.44	0.53
11:2P:126:VAL:HG22	11:2P:146:VAL:HB	1.91	0.53
32:2a:693:G:C4	53:2y:96:ARG:HD3	2.43	0.53
5:1F:93:LYS:O	60:1F:401:HOH:O	2.19	0.53
5:1F:108:LYS:HE2	5:1F:112:MET:HE3	1.91	0.53
11:1P:1:MET:HE2	11:1P:6:LEU:HD23	1.90	0.53
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	1.91	0.53
32:1a:184:G:H2'	32:1a:185:A:H8	1.74	0.53
32:1a:437:U:O3'	35:1d:125:HIS:HE1	1.92	0.53
32:1a:1320:C:H2'	32:1a:1321:C:O4'	2.08	0.53
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.44	0.53
1:2A:479:A:N3	1:2A:481:G:H5"	2.24	0.53
1:2A:2128:C:H42	1:2A:2160:G:H1	1.56	0.53
3:2D:72:LYS:NZ	3:2D:99:ASP:OD2	2.34	0.53
7:2H:8:PRO:HB3	7:2H:51:ARG:HG2	1.90	0.53
32:2a:142:G:H2'	32:2a:143:A:C8	2.43	0.53
32:2a:1272:G:H2'	32:2a:1273:G:O4'	2.09	0.53
33:2b:146:GLN:O	33:2b:150:SER:HB3	2.09	0.53
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.09	0.52
1:1A:2121:G:H1	1:1A:2177:C:H42	1.57	0.52
10:1O:7:TYR:HE1	10:1O:20:MET:HE3	1.74	0.52
32:1a:911:U:H2'	32:1a:912:C:C6	2.44	0.52
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.44	0.52
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.44	0.52
1:2A:1065:U:H3	1:2A:1073:A:N6	2.07	0.52
1:2A:2870:C:H5"	13:2R:65:LEU:HD21	1.91	0.52
32:2a:4:U:C4	39:2h:105:ARG:HD3	2.44	0.52
32:2a:946:A:H2'	32:2a:947:G:C8	2.44	0.52
32:2a:1172:C:H2'	32:2a:1173:G:H8	1.73	0.52
39:2h:51:VAL:HG11	39:2h:60:ARG:HH11	1.73	0.52
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.09	0.52
1:1A:2079:U:O3'	23:11:35:THR:OG1	2.26	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2584:U:H2'	1:1A:2585:U:H2'	1.90	0.52
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.44	0.52
18:1W:18:ARG:HG3	18:1W:76:VAL:HB	1.89	0.52
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.24	0.52
33:1b:167:PRO:HG2	33:1b:188:ALA:HB2	1.91	0.52
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.44	0.52
32:2a:1027:C:C4	32:2a:1034:G:O6	2.63	0.52
32:2a:1279:A:H2'	32:2a:1279:A:N3	2.23	0.52
1:1A:185:U:H4'	1:1A:218:A:H4'	1.92	0.52
1:1A:1097:U:H3'	1:1A:1098:A:H8	1.73	0.52
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.08	0.52
32:1a:1278:U:H5'	32:1a:1279:A:O4'	2.09	0.52
39:1h:29:SER:HB3	39:1h:32:LYS:HG3	1.91	0.52
5:2F:132:VAL:HG21	5:2F:163:VAL:HG22	1.90	0.52
43:2l:33:ARG:HH11	43:2l:62:SER:HB3	1.73	0.52
1:1A:2336:A:H61	22:10:43:THR:HG22	1.75	0.52
7:1H:11:VAL:HG21	7:1H:50:VAL:HG23	1.91	0.52
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.27	0.52
32:1a:461:A:O2'	32:1a:470:C:H5'	2.10	0.52
1:2A:11:G:H2'	1:2A:12:U:H5'	1.92	0.52
1:2A:221:A:N1	1:2A:265:A:O2'	2.42	0.52
32:2a:437:U:O2'	35:2d:125:HIS:HE1	1.92	0.52
32:2a:600:C:H2'	32:2a:601:C:C6	2.44	0.52
34:2c:188:LEU:HD11	34:2c:195:VAL:HG22	1.91	0.52
43:2l:28:LYS:N	43:2l:29:GLY:HA2	2.24	0.52
1:1A:1083:U:H1'	1:1A:1086:A:N6	2.25	0.52
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.44	0.52
4:1E:78:LEU:O	4:1E:79:ARG:NH1	2.43	0.52
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.73	0.52
8:1I:72:LEU:C	8:1I:74:ASN:H	2.18	0.52
32:1a:7:G:H5'	32:1a:298:A:O4'	2.09	0.52
32:1a:1008:C:H2'	32:1a:1009:G:O4'	2.08	0.52
32:2a:451:A:N6	32:2a:480:U:H2'	2.25	0.52
37:2f:96:PRO:HB3	49:2r:30:ASP:CG	2.35	0.52
44:2m:90:LEU:HD23	44:2m:93:ARG:HH21	1.73	0.52
1:1A:249:C:HO2'	11:1P:64:LYS:HZ2	1.48	0.52
1:1A:2319:G:H22	14:1S:3:ARG:NH1	2.07	0.52
32:1a:406:G:H21	35:1d:119:GLN:NE2	2.08	0.52
32:1a:626:U:H2'	32:1a:627:G:C8	2.44	0.52
32:1a:627:G:H2'	32:1a:628:G:H8	1.73	0.52
32:1a:971:G:OP1	32:1a:972:C:H5"	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.45	0.52
1:2A:500:G:N1	1:2A:503:A:OP2	2.42	0.52
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.25	0.52
32:2a:601:C:H2'	32:2a:602:A:H8	1.74	0.52
38:2g:79:ARG:HA	38:2g:84:ASN:HA	1.91	0.52
44:2m:82:MET:HE2	44:2m:92:HIS:HB3	1.92	0.52
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.25	0.52
1:1A:307:G:H21	1:1A:330:A:H62	1.58	0.52
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.09	0.52
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.10	0.52
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.91	0.52
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.39	0.52
38:1g:48:LYS:O	38:1g:52:GLU:HG2	2.10	0.52
40:1i:16:ARG:HB2	40:1i:64:THR:HG23	1.92	0.52
1:2A:644:A:H4'	1:2A:645:C:C5	2.44	0.52
1:2A:1105:U:H2'	1:2A:1106:G:C8	2.44	0.52
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.45	0.52
1:2A:2125:G:O2'	1:2A:2173:A:N6	2.43	0.52
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.91	0.52
30:28:33:ASN:HA	30:28:36:LYS:HD2	1.92	0.52
32:2a:992:U:H4'	32:2a:993:G:O5'	2.09	0.52
34:2c:63:ASN:HB2	34:2c:98:ASN:HB2	1.91	0.52
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.10	0.52
1:1A:813:U:H2'	1:1A:814:C:C6	2.44	0.52
1:1A:1140:C:O3'	9:1N:25:ARG:NH1	2.43	0.52
16:1U:19:LYS:O	16:1U:22:LYS:HG3	2.10	0.52
24:12:64:LEU:HD21	24:12:68:ARG:NH2	2.24	0.52
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.45	0.52
33:1b:17:PHE:HB3	33:1b:44:LEU:HD21	1.91	0.52
35:1d:170:VAL:HG12	35:1d:171:GLY:H	1.74	0.52
1:2A:1073:A:H2'	1:2A:1074:G:C8	2.45	0.52
1:2A:1275:A:H4'	60:2A:3872:HOH:O	2.08	0.52
1:2A:2105:C:H42	1:2A:2184:G:H1	1.58	0.52
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.45	0.52
60:2A:3975:HOH:O	5:2F:53:THR:HG21	2.10	0.52
5:2F:24:LEU:HD23	5:2F:115:ALA:HA	1.92	0.52
1:1A:330:A:HO2'	1:1A:331:A:H8	1.58	0.52
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.44	0.52
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.09	0.52
7:1H:98:LEU:HD13	7:1H:125:VAL:HG23	1.91	0.52
19:1X:35:THR:HG22	19:1X:38:GLU:HB3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:10:32:ARG:H	22:10:35:ASN:ND2	2.08	0.52
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.92	0.52
1:2A:2648:C:H2'	1:2A:2649:U:C6	2.45	0.52
32:2a:443:C:H2'	32:2a:444:C:C6	2.45	0.52
34:2c:91:LEU:HD22	34:2c:101:LEU:HD22	1.92	0.52
45:2n:46:GLU:O	45:2n:50:LYS:HG2	2.10	0.52
1:1A:400:G:N7	60:1A:4313:HOH:O	2.34	0.52
1:1A:1094:U:N3	1:1A:1096:A:H5"	2.25	0.52
1:1A:1486:A:H2'	1:1A:1487:G:H8	1.74	0.52
32:1a:503:C:OP2	43:1l:116:SER:OG	2.15	0.52
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.22	0.52
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.26	0.52
35:1d:128:VAL:HG12	35:1d:129:ASN:HD22	1.75	0.52
1:2A:111:A:N3	60:2A:4035:HOH:O	2.34	0.52
1:2A:817:C:O2'	1:2A:839:U:H5"	2.10	0.52
1:2A:821:A:H2'	1:2A:946:G:H5"	1.91	0.52
3:2D:36:PRO:HA	3:2D:61:LEU:HD12	1.92	0.52
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	1.92	0.52
11:2P:95:VAL:HG23	11:2P:125:VAL:HA	1.91	0.52
32:2a:316:G:OP2	32:2a:351:G:O2'	2.27	0.52
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.91	0.52
40:2i:78:LYS:HA	40:2i:81:ILE:HG22	1.92	0.52
19:1X:60:ARG:NH1	29:17:47:ARG:HH22	2.08	0.51
32:1a:517:G:N2	32:1a:533:A:OP2	2.37	0.51
32:1a:1025:U:C2	32:1a:1036:G:O6	2.62	0.51
33:1b:15:VAL:HG11	33:1b:213:LEU:HD22	1.92	0.51
1:2A:1250:G:H5"	60:2A:4505:HOH:O	2.10	0.51
1:2A:1334:G:O6	60:2A:3882:HOH:O	2.19	0.51
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.44	0.51
1:2A:2131:G:OP1	1:2A:2132:U:H5'	2.10	0.51
1:2A:2196:C:OP2	60:2A:3884:HOH:O	2.19	0.51
15:2T:127:ALA:C	15:2T:129:ARG:H	2.17	0.51
23:21:50:ARG:NH1	23:21:57:GLU:OE2	2.43	0.51
25:23:23:LEU:HD13	25:23:50:VAL:HG11	1.92	0.51
32:2a:501:C:H2'	32:2a:502:G:H8	1.74	0.51
32:2a:1117:G:H4'	40:2i:104:ARG:NH1	2.26	0.51
32:2a:1146:A:H5'	32:2a:1147:C:OP2	2.09	0.51
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.45	0.51
36:2e:5:ASP:N	36:2e:5:ASP:OD1	2.43	0.51
1:1A:784:A:C5	3:1D:229:VAL:HG21	2.44	0.51
1:1A:2114:A:H1'	1:1A:2168:G:H5'	1.90	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:18:GLU:OE2	6:1G:21:ARG:NH1	2.43	0.51
32:1a:575:G:O2'	32:1a:821:G:H5'	2.10	0.51
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.09	0.51
41:1j:7:LYS:HB3	41:1j:97:GLU:HB2	1.93	0.51
1:2A:889:C:O2'	1:2A:890:A:O5'	2.27	0.51
1:2A:1631(A):A:N6	60:2A:3897:HOH:O	2.21	0.51
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.10	0.51
13:2R:36:THR:HG22	13:2R:37:THR:H	1.75	0.51
40:2i:53:VAL:C	40:2i:55:ALA:H	2.19	0.51
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.43	0.51
6:1G:53:LEU:O	6:1G:55:LYS:N	2.43	0.51
32:1a:408:A:OP1	35:1d:113:SER:OG	2.24	0.51
32:1a:456:C:H2'	32:1a:457:C:C6	2.46	0.51
32:1a:1273:G:H3'	32:1a:1274:G:H8	1.73	0.51
35:1d:50:ARG:HH22	36:1e:10:MET:HE3	1.74	0.51
38:1g:28:ASN:H	38:1g:28:ASN:HD22	1.59	0.51
48:1q:10:VAL:HG22	48:1q:21:VAL:HG22	1.91	0.51
4:2E:7:VAL:HG12	4:2E:51:PHE:HZ	1.75	0.51
6:2G:18:GLU:HG2	6:2G:175:LEU:HD21	1.92	0.51
7:2H:41:MET:HE2	7:2H:55:PRO:HD2	1.92	0.51
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.93	0.51
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.93	0.51
45:2n:32:SER:O	45:2n:40:CYS:HA	2.11	0.51
1:1A:529:A:N1	60:1A:4315:HOH:O	2.34	0.51
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.28	0.51
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.90	0.51
6:1G:49:ASP:O	6:1G:51:ARG:N	2.44	0.51
23:11:77:ALA:HA	23:11:80:LEU:HD13	1.92	0.51
32:1a:659:U:H2'	32:1a:660:G:C8	2.46	0.51
42:1k:18:ARG:HB2	42:1k:33:THR:OG1	2.11	0.51
1:2A:2036:C:O2'	60:2A:3880:HOH:O	2.19	0.51
21:2Z:92:SER:O	21:2Z:130:PRO:HG2	2.11	0.51
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.10	0.51
35:2d:111:ALA:HB1	35:2d:116:GLN:HG2	1.92	0.51
32:1a:92:C:H2'	32:1a:93:G:C8	2.46	0.51
32:1a:456:C:H2'	32:1a:457:C:H6	1.75	0.51
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.91	0.51
8:2I:72:LEU:HA	8:2I:75:LEU:HD22	1.93	0.51
32:2a:407:G:OP1	35:2d:115:ARG:HD3	2.11	0.51
32:2a:1226:C:H3'	44:2m:96:LEU:HD21	1.92	0.51
1:1A:1645:G:H5"	1:1A:1646:C:H5'	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:509:A:OP2	60:1a:1922:HOH:O	2.19	0.51
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.75	0.51
39:1h:109:ILE:HG13	39:1h:137:VAL:HG23	1.92	0.51
1:2A:2815:C:H5'	27:25:29:THR:HG21	1.92	0.51
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.41	0.51
4:2E:170:LEU:HB3	4:2E:184:VAL:HG22	1.92	0.51
32:2a:17:U:H2'	32:2a:18:C:C6	2.46	0.51
35:2d:163:GLU:HA	35:2d:166:LYS:HD3	1.91	0.51
1:1A:2526:G:N2	60:1A:4476:HOH:O	2.44	0.51
9:1N:12:ARG:NH1	9:1N:50:ASP:OD2	2.43	0.51
13:1R:12:ARG:O	13:1R:17:ARG:NH1	2.43	0.51
24:12:32:LEU:HD13	24:12:36:ARG:HH12	1.76	0.51
32:1a:266:G:H2'	32:1a:266:G:N3	2.25	0.51
44:1m:49:THR:HG22	44:1m:51:ALA:H	1.75	0.51
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.46	0.51
18:2W:18:ARG:HG2	18:2W:76:VAL:HB	1.91	0.51
32:2a:41:G:H2'	32:2a:42:G:C8	2.46	0.51
32:2a:473:G:H2'	32:2a:474:G:H8	1.76	0.51
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.93	0.51
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.45	0.51
44:2m:44:ARG:HB2	44:2m:47:ASP:OD2	2.10	0.51
1:1A:2099:U:H3	1:1A:2190:G:H1	1.57	0.51
35:1d:20:TYR:HA	35:1d:26:CYS:SG	2.51	0.51
38:1g:24:THR:O	38:1g:28:ASN:ND2	2.43	0.51
43:1l:70:ILE:HG12	43:1l:100:ILE:HD12	1.93	0.51
1:2A:1919:A:N1	32:2a:1495:U:O2'	2.40	0.51
1:2A:1987:G:OP2	60:2A:3883:HOH:O	2.19	0.51
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.76	0.51
7:2H:54:ARG:HD3	7:2H:65:HIS:ND1	2.26	0.51
32:2a:1172:C:H2'	32:2a:1173:G:C8	2.45	0.51
32:2a:1456:G:H1	51:2t:51:GLU:CD	2.18	0.51
5:1F:39:TRP:CH2	5:1F:106:ARG:HD3	2.46	0.51
32:1a:1004:A:H3'	32:1a:1005:A:C8	2.40	0.51
32:1a:1010:G:H2'	32:1a:1011:G:H8	1.76	0.51
1:2A:8:A:H2'	1:2A:9:U:H6	1.76	0.51
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.74	0.51
1:2A:1648:C:OP1	60:2A:3817:HOH:O	2.19	0.51
1:2A:2171:A:H4'	1:2A:2172:U:OP1	2.11	0.51
6:2G:37:VAL:HG21	6:2G:103:LEU:HD21	1.93	0.51
12:2Q:73:PRO:O	60:2Q:302:HOH:O	2.19	0.51
12:2Q:97:VAL:HG11	12:2Q:103:MET:HE3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:11:PRO:HB3	19:2X:92:LEU:HD11	1.92	0.51
1:1A:9:U:H3	1:1A:2629:A:H2	1.54	0.51
1:1A:2345:G:N3	1:1A:2381:C:H2'	2.26	0.51
32:1a:107:G:H2'	32:1a:108:G:O4'	2.11	0.51
32:1a:715:A:H2'	32:1a:716:A:C8	2.46	0.51
34:1c:155:GLY:HA3	34:1c:196:LEU:HD22	1.93	0.51
39:1h:121:ASP:OD1	39:1h:121:ASP:N	2.43	0.51
40:1i:28:VAL:HA	40:1i:63:ILE:O	2.11	0.51
1:2A:1084:A:H3'	1:2A:1085:A:H4'	1.93	0.51
8:2I:129:THR:HG22	8:2I:139:GLN:HE22	1.76	0.51
11:2P:106:LEU:HD22	11:2P:112:LEU:HG	1.93	0.51
20:2Y:13:VAL:HG12	20:2Y:74:PRO:HA	1.93	0.51
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.46	0.51
32:1a:974:A:H8	32:1a:974:A:OP1	1.94	0.50
32:1a:1492:A:H4'	32:1a:1493:A:C2	2.46	0.50
35:1d:83:SER:O	60:1d:402:HOH:O	2.19	0.50
37:1f:65:VAL:HG21	37:1f:67:MET:HE2	1.93	0.50
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.92	0.50
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.46	0.50
1:2A:2382:G:N7	60:2A:4026:HOH:O	2.33	0.50
33:2b:95:GLN:HG2	33:2b:148:TYR:HE1	1.76	0.50
46:2o:29:VAL:HG11	46:2o:67:LEU:HD21	1.92	0.50
21:1Z:69:THR:HG22	21:1Z:90:VAL:HG22	1.94	0.50
26:14:40:HIS:HB3	26:14:43:TYR:HD2	1.75	0.50
32:1a:280:C:OP1	48:1q:91:ARG:NH1	2.44	0.50
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.26	0.50
33:1b:51:LEU:HD23	33:1b:201:ILE:HD12	1.94	0.50
1:2A:2112:G:H2'	1:2A:2113:U:H6	1.76	0.50
3:2D:145:VAL:HG13	3:2D:191:ALA:HB2	1.93	0.50
32:2a:975:A:N1	41:2j:48:THR:HB	2.26	0.50
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.92	0.50
1:1A:207:A:H2'	1:1A:208:C:O4'	2.11	0.50
1:1A:251:A:C5	1:1A:252:G:H1'	2.47	0.50
1:1A:307:G:H21	1:1A:330:A:N6	2.09	0.50
1:1A:2134:A:H62	1:1A:2157:G:H4'	1.76	0.50
26:14:69:LYS:HD3	50:1s:20:LEU:HD22	1.93	0.50
32:1a:864:A:OP2	60:1e:301:HOH:O	2.19	0.50
38:1g:79:ARG:HA	38:1g:84:ASN:HA	1.93	0.50
6:2G:145:THR:HG22	6:2G:148:MET:SD	2.52	0.50
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.93	0.50
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH2	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:22:GLU:OE2	24:22:68:ARG:NH2	2.44	0.50
32:2a:403:C:N4	60:2a:3308:HOH:O	2.24	0.50
32:2a:1127:G:H5'	32:2a:1280:A:O2'	2.11	0.50
35:2d:79:PHE:HE1	35:2d:204:ILE:HD13	1.76	0.50
1:1A:586:A:N1	1:1A:809:G:O2'	2.44	0.50
1:1A:1174:A:H1'	1:1A:1175:U:H5'	1.93	0.50
1:1A:1430:C:H2'	1:1A:1431:U:C6	2.45	0.50
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.11	0.50
1:1A:1952:A:OP1	10:1O:44:LYS:NZ	2.40	0.50
3:1D:108:PRO:HG3	3:1D:143:HIS:CE1	2.47	0.50
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.94	0.50
32:1a:160:A:H2'	32:1a:161:A:O4'	2.11	0.50
32:1a:1325:C:H4'	52:1u:17:THR:HG21	1.92	0.50
35:1d:85:LYS:O	60:1d:401:HOH:O	2.19	0.50
35:1d:173:TRP:HB3	35:1d:187:ARG:HG3	1.94	0.50
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.93	0.50
1:2A:662:G:H5"	11:2P:16:ARG:HG2	1.93	0.50
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.12	0.50
2:2B:11:C:OP2	2:2B:12:C:N4	2.32	0.50
3:2D:158:ALA:O	3:2D:161:THR:OG1	2.23	0.50
12:2Q:101:ARG:NH1	60:2Q:305:HOH:O	2.37	0.50
32:2a:192:U:H2'	32:2a:193:C:C6	2.44	0.50
32:2a:427:U:OP1	35:2d:13:ARG:NH2	2.43	0.50
33:2b:212:GLN:NE2	33:2b:235:SER:OG	2.45	0.50
38:2g:62:PHE:HA	38:2g:124:LEU:HD22	1.92	0.50
1:1A:2142:C:H2'	1:1A:2143:C:C6	2.46	0.50
32:1a:1409:C:H2'	32:1a:1410:G:C8	2.46	0.50
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.37	0.50
19:2X:94:GLY:HA3	19:2X:95:LEU:C	2.37	0.50
32:2a:164:U:H2'	32:2a:165:C:C6	2.45	0.50
32:2a:222:U:H2'	32:2a:223:U:C6	2.46	0.50
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.11	0.50
32:2a:1258:G:H2'	32:2a:1259:C:C6	2.46	0.50
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.27	0.50
33:2b:96:ARG:HG3	33:2b:97:TRP:N	2.26	0.50
1:1A:2129:C:N3	1:1A:2159:G:O6	2.45	0.50
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.46	0.50
32:1a:108:G:N1	51:1t:15:ARG:HG2	2.27	0.50
32:1a:131:C:O2'	32:1a:262:A:N3	2.37	0.50
32:1a:343:U:H1'	32:1a:347:G:N2	2.26	0.50
32:1a:626:U:H2'	32:1a:627:G:H8	1.75	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	1.93	0.50
1:2A:993:G:N2	17:2V:23:GLU:OE2	2.45	0.50
1:2A:1024:G:OP2	60:2A:3839:HOH:O	2.20	0.50
1:2A:2318:G:N2	14:2S:3:ARG:HE	2.09	0.50
32:2a:1047:G:H5"	45:2n:4:LYS:HD2	1.94	0.50
32:2a:1227:A:N3	50:2s:83:HIS:HB3	2.27	0.50
34:2c:20:SER:HB2	34:2c:40:ARG:NH2	2.26	0.50
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.46	0.50
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.47	0.50
8:1I:10:GLU:HG2	8:1I:10:GLU:O	2.12	0.50
32:1a:1492:A:H4'	32:1a:1493:A:C6	2.47	0.50
36:1e:85:GLY:O	60:1e:301:HOH:O	2.19	0.50
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.92	0.50
1:2A:994:C:O2'	1:2A:996:A:OP1	2.28	0.50
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.45	0.50
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.47	0.50
2:2B:90:A:N7	2:2B:91:C:H1'	2.26	0.50
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.12	0.50
14:2S:71:ARG:O	14:2S:75:GLU:HG2	2.12	0.50
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.92	0.50
32:2a:1347:G:C8	40:2i:107:ARG:HB3	2.46	0.50
35:2d:61:LYS:HA	35:2d:203:VAL:HG22	1.94	0.50
35:2d:189:PRO:HB2	35:2d:194:LEU:HD11	1.93	0.50
41:2j:8:LEU:HB3	41:2j:16:LEU:HD22	1.92	0.50
53:2y:29:LYS:HG2	53:2y:30:TRP:CE3	2.47	0.50
1:1A:744:G:OP1	4:1E:132:HIS:ND1	2.44	0.50
1:1A:2222:G:O2'	3:1D:148:GLU:OE2	2.22	0.50
1:1A:2224:G:H4'	1:1A:2226:C:C2	2.47	0.50
1:1A:2319:G:N2	14:1S:3:ARG:HA	2.27	0.50
1:1A:2491:U:OP2	60:1A:4158:HOH:O	2.19	0.50
18:1W:88:ARG:HG3	18:1W:92:ARG:HH21	1.77	0.50
25:13:18:ASP:OD1	25:13:18:ASP:N	2.44	0.50
32:1a:841:U:C5	32:1a:848:C:H1'	2.47	0.50
32:1a:977:A:H1'	32:1a:982:U:O4	2.11	0.50
32:1a:1002:G:H1	32:1a:1038:C:H42	1.59	0.50
33:1b:15:VAL:HG12	33:1b:16:HIS:HD2	1.77	0.50
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	1.94	0.50
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.94	0.50
1:2A:212:G:H2'	1:2A:213:A:O4'	2.11	0.50
1:2A:603:A:N1	1:2A:625:G:O2'	2.45	0.50
1:2A:1090:U:H2'	1:2A:1091:G:H8	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1771:C:H41	56:2A:3754:MPD:HM1	1.77	0.50
32:2a:137:C:H2'	32:2a:138:G:H8	1.77	0.50
32:2a:936:C:H2'	32:2a:937:A:O4'	2.11	0.50
32:2a:952:U:H4'	32:2a:964:A:N1	2.26	0.50
32:2a:977:A:O2'	32:2a:980:C:N4	2.44	0.50
33:2b:78:GLN:HE22	33:2b:95:GLN:HA	1.76	0.50
60:1A:4604:HOH:O	19:1X:50:LYS:HE2	2.10	0.50
32:1a:96:U:H2'	32:1a:97:G:H8	1.76	0.50
32:1a:221:C:H2'	32:1a:222:U:H6	1.77	0.50
38:1g:152:ALA:O	38:1g:155:ARG:NH1	2.45	0.50
40:1i:53:VAL:HG21	40:1i:85:LEU:HD13	1.94	0.50
6:2G:68:PRO:HA	6:2G:92:VAL:HB	1.94	0.50
18:2W:2:GLU:OE2	18:2W:72:LYS:NZ	2.30	0.50
33:2b:121:LEU:HG	33:2b:127:ILE:HG23	1.93	0.50
44:2m:56:LEU:O	44:2m:60:VAL:N	2.36	0.50
1:1A:1094:U:H2'	1:1A:1096:A:OP2	2.12	0.49
1:1A:1721:G:H5'	1:1A:1722:A:OP2	2.11	0.49
1:1A:1750:G:O2'	1:1A:2860:A:N1	2.40	0.49
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.12	0.49
1:1A:2104:G:H1	1:1A:2185:C:N4	2.10	0.49
6:1G:43:LEU:C	6:1G:45:GLU:H	2.20	0.49
11:1P:88:LEU:HD11	11:1P:114:ILE:HD12	1.94	0.49
32:1a:562:C:H1'	43:1l:15:ARG:HD2	1.93	0.49
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.77	0.49
41:1j:47:PHE:CZ	45:1n:37:PHE:HE2	2.30	0.49
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.12	0.49
1:2A:1762:A:N1	60:2A:4030:HOH:O	2.34	0.49
2:2B:13:A:N1	2:2B:69:G:O2'	2.39	0.49
32:2a:1128:C:O2'	32:2a:1147:C:N3	2.40	0.49
34:2c:5:ILE:HG12	34:2c:6:HIS:H	1.77	0.49
36:2e:110:LEU:HD23	36:2e:115:VAL:HG21	1.94	0.49
1:1A:2115:G:N3	1:1A:2117:A:N6	2.59	0.49
1:1A:2140:C:H2'	1:1A:2141:G:H8	1.77	0.49
1:1A:2815:C:H5'	27:15:29:THR:HG21	1.93	0.49
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.94	0.49
32:1a:6:G:H4'	32:1a:298:A:H4'	1.95	0.49
1:2A:1041:C:N4	1:2A:1114:G:H1	2.08	0.49
1:2A:1066:U:O2'	1:2A:1068:G:OP2	2.25	0.49
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.41	0.49
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.13	0.49
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:86:ARG:HH11	43:2l:87:GLY:HA3	1.78	0.49
1:1A:1359:A:N6	1:1A:1372:U:H3	2.08	0.49
1:1A:2096:U:H2'	1:1A:2097:C:C6	2.47	0.49
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.47	0.49
1:1A:2305:A:H5"	6:1G:134:GLY:HA3	1.94	0.49
5:1F:11:VAL:HB	5:1F:18:ARG:HG3	1.94	0.49
11:1P:106:LEU:HD22	11:1P:112:LEU:HG	1.93	0.49
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.41	0.49
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.92	0.49
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.95	0.49
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.48	0.49
8:2I:77:LEU:HB3	8:2I:142:VAL:HG13	1.94	0.49
32:2a:390:C:H2'	32:2a:391:G:C8	2.46	0.49
44:2m:84:ILE:HB	50:2s:66:MET:HE2	1.93	0.49
1:1A:2618:G:H21	4:1E:150:VAL:HG21	1.78	0.49
32:1a:745:C:H2'	32:1a:746:A:C8	2.48	0.49
32:1a:975:A:O2'	45:1n:32:SER:OG	2.20	0.49
34:1c:8:ILE:HG13	34:1c:16:ARG:HD3	1.94	0.49
38:1g:45:ASP:HB3	38:1g:117:ALA:HB1	1.93	0.49
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.77	0.49
2:2B:56:G:H4'	2:2B:57:A:H8	1.77	0.49
15:2T:95:ARG:HG2	15:2T:95:ARG:HH11	1.78	0.49
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.48	0.49
1:1A:34:C:O2'	1:1A:35:G:H5'	2.12	0.49
1:1A:668:G:H5'	1:1A:669:G:OP2	2.13	0.49
1:1A:2145:C:H2'	1:1A:2147:G:N2	2.26	0.49
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.47	0.49
1:1A:2305:A:N7	60:1A:4322:HOH:O	2.35	0.49
5:1F:197:ASP:O	5:1F:201:VAL:HG12	2.12	0.49
32:1a:299:G:O5'	32:1a:299:G:H8	1.95	0.49
36:1e:75:THR:OG1	36:1e:76:ILE:N	2.45	0.49
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.93	0.49
1:2A:602:G:O2'	1:2A:655:A:N6	2.45	0.49
32:2a:839:U:H5"	32:2a:840:C:C5	2.46	0.49
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.12	0.49
5:1F:191:ARG:NH2	60:1F:403:HOH:O	2.44	0.49
6:1G:64:THR:HG21	6:1G:92:VAL:HG11	1.94	0.49
18:1W:92:ARG:HD2	60:1W:327:HOH:O	2.11	0.49
32:1a:730:G:N2	32:1a:766:A:OP1	2.38	0.49
32:1a:1027:C:H2'	32:1a:1028:C:C5	2.48	0.49
32:1a:1348:U:H4'	40:1i:120:ARG:HD2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:33:LEU:O	34:1c:37:GLN:HG2	2.12	0.49
1:2A:1064:C:C6	1:2A:1065:U:H5'	2.47	0.49
1:2A:1118:C:H2'	1:2A:1119:C:O4'	2.12	0.49
1:2A:1178:C:H2'	1:2A:1179:C:C6	2.47	0.49
1:2A:2104:G:N2	1:2A:2105:C:C4	2.81	0.49
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.27	0.49
32:2a:224:C:H2'	32:2a:225:C:C6	2.48	0.49
32:2a:333:G:H4'	51:2t:16:HIS:CE1	2.48	0.49
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.47	0.49
32:2a:1400:5MC:C2	53:2y:63:ALA:HA	2.47	0.49
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.47	0.49
43:2l:117:ARG:NH2	43:2l:124:LYS:HB2	2.28	0.49
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.78	0.49
1:1A:644:A:H4'	1:1A:645:C:H5	1.78	0.49
1:1A:657:U:H2'	1:1A:658:C:C6	2.48	0.49
1:1A:969:U:H2'	1:1A:970:C:C6	2.47	0.49
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.24	0.49
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.47	0.49
30:18:15:LYS:HB3	56:18:104:MPD:H31	1.95	0.49
32:1a:69:G:H2'	32:1a:70:G:H8	1.77	0.49
32:1a:73:G:H1	32:1a:96:U:H3	1.60	0.49
32:1a:692:U:OP1	42:1k:124:LYS:NZ	2.34	0.49
36:1e:37:ARG:HH12	36:1e:111:GLU:HG2	1.76	0.49
53:1y:55:ASN:HA	53:1y:60:VAL:HA	1.94	0.49
1:2A:247:G:H4'	1:2A:386:G:C5	2.48	0.49
1:2A:796:C:H2'	1:2A:797:C:C6	2.47	0.49
1:2A:1771:C:OP1	60:2A:3887:HOH:O	2.20	0.49
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.47	0.49
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.13	0.49
32:2a:625:G:H4'	47:2p:16:HIS:CD2	2.47	0.49
33:2b:170:GLU:HB3	33:2b:173:ALA:HB3	1.93	0.49
34:2c:126:ARG:C	34:2c:127:ARG:HG2	2.37	0.49
47:2p:3:LYS:O	47:2p:21:VAL:HA	2.13	0.49
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.11	0.49
1:1A:1275:A:N1	1:1A:1295:C:O2'	2.42	0.49
12:1Q:21:THR:HG21	12:1Q:101:ARG:N	2.28	0.49
32:1a:255:G:H1'	48:1q:16:GLN:NE2	2.15	0.49
32:1a:743:U:H2'	32:1a:744:C:C6	2.48	0.49
32:1a:750:G:O2'	46:1o:22:THR:O	2.16	0.49
35:1d:88:VAL:HG13	36:1e:97:GLY:HA2	1.95	0.49
3:2D:260:ARG:NH1	3:2D:267:SER:OG	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:737:A:H2'	32:2a:738:C:C6	2.48	0.49
32:2a:977:A:H2'	32:2a:977:A:N3	2.28	0.49
1:1A:228:A:H3'	1:1A:229:A:C5'	2.42	0.49
1:1A:2712:U:OP1	1:1A:2714:G:H4'	2.13	0.49
60:1A:5842:HOH:O	16:1U:59:ARG:HD2	2.13	0.49
2:1B:2:C:H2'	2:1B:3:C:C6	2.48	0.49
20:1Y:92:ASN:HB2	20:1Y:94:LYS:HG2	1.93	0.49
32:1a:1183:A:H3'	32:1a:1184:G:H5"	1.94	0.49
39:1h:2:LEU:HD12	39:1h:3:THR:H	1.78	0.49
43:1l:59:ARG:NH1	43:1l:65:GLU:OE1	2.46	0.49
1:2A:1503:U:H2'	1:2A:1504:C:C6	2.48	0.49
1:2A:1981:A:N7	60:2A:4039:HOH:O	2.34	0.49
9:2N:1:MET:HE1	16:2U:94:ASN:ND2	2.28	0.49
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.48	0.49
21:2Z:30:ASN:ND2	21:2Z:90:VAL:HB	2.28	0.49
38:2g:22:LEU:HD23	38:2g:63:LYS:HG2	1.95	0.49
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.46	0.49
1:1A:721:C:H2'	1:1A:722:A:H8	1.78	0.49
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.95	0.49
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.12	0.49
1:1A:2849:U:P	15:1T:95:ARG:HH12	2.35	0.49
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.95	0.49
16:1U:8:VAL:HG23	16:1U:11:ARG:NH2	2.28	0.49
34:1c:180:ALA:HB1	34:1c:203:PHE:HE1	1.78	0.49
39:1h:25:ASP:N	39:1h:25:ASP:OD1	2.46	0.49
50:1s:40:ILE:HD11	50:1s:74:PHE:HE2	1.78	0.49
50:1s:41:VAL:HG12	50:1s:44:MET:HG3	1.93	0.49
1:2A:463:G:O6	60:2A:3878:HOH:O	2.18	0.49
1:2A:2168:G:O2'	1:2A:2170:A:N6	2.41	0.49
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.47	0.49
2:2B:52:A:N3	2:2B:53:A:N6	2.60	0.49
8:2I:1:MET:HE2	8:2I:38:LEU:HD21	1.94	0.49
32:2a:473:G:H2'	32:2a:474:G:C8	2.48	0.49
32:2a:1032:G:C2'	32:2a:1033:G:H5'	2.43	0.49
32:2a:1147:C:O2	40:2i:16:ARG:NH2	2.46	0.49
50:2s:52:TYR:HB2	50:2s:57:HIS:CE1	2.47	0.49
1:1A:548:A:H61	17:1V:19:LYS:H	1.60	0.48
1:1A:2147:G:H2'	1:1A:2148:G:C4'	2.42	0.48
1:1A:2319:G:N2	14:1S:3:ARG:HD2	2.27	0.48
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.25	0.48
6:1G:170:ARG:HH21	6:1G:180:PHE:HB2	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:22:G:H4'	32:1a:885:G:C8	2.48	0.48
32:1a:405:U:H5"	32:1a:495:A:H2	1.78	0.48
32:1a:1250:A:H4'	40:1i:68:GLY:N	2.28	0.48
32:1a:1368:G:OP2	40:1i:112:LYS:HG3	2.13	0.48
35:1d:119:GLN:O	35:1d:123:HIS:ND1	2.44	0.48
44:1m:76:ALA:O	44:1m:80:ARG:HG2	2.13	0.48
48:1q:12:SER:HB3	48:1q:20:THR:HB	1.94	0.48
1:2A:515:A:H1'	1:2A:581:C:H1'	1.95	0.48
1:2A:1110:G:H1'	1:2A:1111:A:H8	1.78	0.48
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.48	0.48
14:2S:67:ARG:HB2	14:2S:100:ALA:HB1	1.94	0.48
17:2V:52:VAL:HG23	17:2V:55:ALA:HB3	1.94	0.48
33:2b:121:LEU:HA	33:2b:125:PRO:HG2	1.94	0.48
50:2s:20:LEU:HA	50:2s:23:ASN:HB2	1.95	0.48
1:1A:1041:C:H5'	1:1A:1042:G:OP2	2.12	0.48
33:1b:80:ILE:HD13	33:1b:211:ILE:HB	1.95	0.48
42:1k:21:ILE:HG12	42:1k:30:VAL:HG22	1.95	0.48
1:2A:30:G:H2'	1:2A:31:C:C6	2.48	0.48
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.44	0.48
1:2A:2313:C:H5"	6:2G:91:ARG:HD3	1.95	0.48
3:2D:275:LYS:HZ2	3:2D:276:LYS:HA	1.78	0.48
20:2Y:86:ARG:HB2	20:2Y:98:VAL:HG23	1.95	0.48
32:2a:662:G:O2'	32:2a:836:G:OP1	2.28	0.48
1:1A:614(B):G:OP1	57:1F:321:ARG:N	2.46	0.48
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.43	0.48
1:1A:1252:G:N3	16:1U:33:ARG:HG2	2.28	0.48
1:1A:2285:C:OP2	28:16:6:ARG:NH1	2.46	0.48
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.31	0.48
17:1V:82:ARG:NH2	60:1V:306:HOH:O	2.46	0.48
32:1a:328:C:H4'	32:1a:329:A:H5'	1.95	0.48
32:1a:738:C:H2'	32:1a:739:C:H6	1.78	0.48
32:1a:1007:C:N3	32:1a:1022:G:O6	2.46	0.48
32:1a:1264:C:H2'	32:1a:1265:G:H8	1.78	0.48
43:1l:10:LEU:HB3	48:1q:32:TYR:CE2	2.48	0.48
1:2A:484:C:H2'	1:2A:485:C:C6	2.48	0.48
1:2A:740:U:H2'	1:2A:741:G:C8	2.48	0.48
1:2A:2600:A:O2'	1:2A:2601:C:H5'	2.13	0.48
2:2B:14:U:OP2	2:2B:70:C:O2'	2.23	0.48
5:2F:29:ASN:HB3	5:2F:112:MET:HE1	1.94	0.48
5:2F:32:LEU:O	5:2F:36:VAL:HG23	2.13	0.48
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.48	0.48
44:2m:37:THR:HG21	44:2m:56:LEU:HA	1.95	0.48
1:1A:428:A:OP1	60:1A:4160:HOH:O	2.20	0.48
1:1A:1171:G:H3'	1:1A:1173:G:H5'	1.95	0.48
7:1H:40:GLU:OE1	7:1H:61:HIS:NE2	2.36	0.48
15:1T:127:ALA:C	15:1T:129:ARG:H	2.21	0.48
38:1g:41:ARG:O	38:1g:45:ASP:HB2	2.13	0.48
44:1m:90:LEU:HD23	44:1m:93:ARG:HH21	1.78	0.48
53:1y:40:ILE:HB	53:1y:51:ASP:HB2	1.96	0.48
19:2X:11:PRO:HG2	19:2X:13:LEU:HD21	1.95	0.48
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.47	0.48
40:2i:89:ASN:HB3	40:2i:92:TYR:HD2	1.77	0.48
1:1A:118:A:H3'	1:1A:119:A:H5"	1.95	0.48
1:1A:536:A:H2'	1:1A:537:C:C6	2.48	0.48
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.42	0.48
5:1F:65:TRP:CZ2	5:1F:75:HIS:HD2	2.31	0.48
11:1P:64:LYS:NZ	60:1P:304:HOH:O	2.47	0.48
32:1a:346:G:H21	56:1a:1878:MPD:H31	1.78	0.48
32:1a:1145:C:O2'	60:1a:1923:HOH:O	2.20	0.48
32:1a:1400:5MC:C2	53:1y:63:ALA:HA	2.49	0.48
33:1b:219:VAL:HA	33:1b:222:ILE:HD12	1.94	0.48
34:1c:153:VAL:HG22	34:1c:198:VAL:HG22	1.93	0.48
42:1k:84:VAL:HG11	42:1k:91:ARG:HD2	1.95	0.48
1:2A:1670:C:OP1	60:2A:3888:HOH:O	2.20	0.48
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.96	0.48
14:2S:101:LEU:HB3	60:2S:201:HOH:O	2.13	0.48
21:2Z:5:LEU:HD13	21:2Z:47:VAL:HG21	1.95	0.48
25:23:8:LEU:HG	25:23:31:LEU:HD22	1.96	0.48
32:2a:258:G:H2'	32:2a:259:G:H8	1.77	0.48
32:2a:838:G:H1	32:2a:848:C:H42	1.61	0.48
32:2a:1126:U:O4'	32:2a:1281:U:H1'	2.13	0.48
37:2f:97:PHE:CZ	49:2r:61:LYS:HE3	2.49	0.48
40:2i:43:ALA:C	40:2i:45:ALA:H	2.21	0.48
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.13	0.48
3:1D:54:ARG:HD3	60:1D:497:HOH:O	2.13	0.48
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.49	0.48
32:1a:998:G:H2'	32:1a:999:C:C6	2.48	0.48
51:1t:42:GLN:NE2	51:1t:46:GLU:OE1	2.45	0.48
1:2A:331:A:N1	60:2A:4046:HOH:O	2.35	0.48
7:2H:46:GLU:HB2	7:2H:49:VAL:HG12	1.95	0.48
19:2X:31:HIS:HB3	19:2X:34:ALA:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:53:LEU:HD12	36:2e:53:LEU:H	1.79	0.48
38:2g:75:VAL:HA	38:2g:88:PRO:HA	1.94	0.48
1:1A:153:C:OP2	23:11:92:LYS:NZ	2.46	0.48
1:1A:271(H):G:HO2'	1:1A:271(I):G:H8	1.61	0.48
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.48	0.48
1:1A:721:C:H2'	1:1A:722:A:C8	2.47	0.48
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.49	0.48
1:1A:1651:G:OP1	13:1R:40:LYS:NZ	2.45	0.48
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.94	0.48
26:14:43:TYR:O	26:14:45:GLY:N	2.47	0.48
32:1a:711:G:OP1	37:1f:54:LYS:NZ	2.42	0.48
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.95	0.48
33:1b:207:ALA:O	33:1b:211:ILE:HG13	2.13	0.48
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.95	0.48
1:2A:863:A:P	12:2Q:22:LYS:HG3	2.53	0.48
1:2A:1102:C:H2'	1:2A:1103:A:H8	1.78	0.48
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.13	0.48
2:2B:5:C:OP1	2:2B:61:G:O2'	2.31	0.48
13:2R:32:GLY:HA2	13:2R:116:LEU:HD12	1.95	0.48
32:2a:1073:U:H2'	32:2a:1074:G:C8	2.48	0.48
32:2a:1112:C:H1'	34:2c:179:ARG:HD3	1.95	0.48
33:2b:57:PHE:CE2	33:2b:185:ILE:HD11	2.49	0.48
34:2c:22:TRP:CB	34:2c:59:ARG:HB2	2.44	0.48
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.49	0.48
32:1a:21:G:H2'	32:1a:22:G:C8	2.49	0.48
32:1a:677:U:H3	32:1a:713:G:H22	1.62	0.48
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.44	0.48
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.48	0.48
1:2A:1156:A:O4'	16:2U:51:LYS:NZ	2.46	0.48
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.48	0.48
1:2A:2115:G:N2	1:2A:2171:A:H61	2.11	0.48
10:2O:119:PRO:HB2	15:2T:68:TYR:CE2	2.48	0.48
21:2Z:146:ILE:HA	21:2Z:174:VAL:HG12	1.96	0.48
32:2a:1111:A:H2'	32:2a:1112:C:H6	1.78	0.48
33:2b:8:LYS:HD2	33:2b:48:MET:HG2	1.95	0.48
35:2d:117:ALA:O	35:2d:121:VAL:HG23	2.14	0.48
1:1A:143:G:H2'	1:1A:143(A):C:C6	2.48	0.48
1:1A:222:A:H3'	1:1A:421:U:H5'	1.94	0.48
1:1A:1359:A:N1	1:1A:1372:U:O4	2.47	0.48
1:1A:1783:A:H5'	1:1A:2608:G:H4'	1.95	0.48
3:1D:37:LEU:HD22	3:1D:60:ARG:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:96:VAL:O	21:1Z:127:LYS:HA	2.14	0.48
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.11	0.48
32:1a:991:U:H4'	32:1a:992:U:OP2	2.13	0.48
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.48	0.48
1:2A:2137:C:C2	1:2A:2154:G:N2	2.81	0.48
2:2B:6:C:N4	2:2B:115:G:H1	2.11	0.48
4:2E:59:VAL:HG21	4:2E:74:PRO:HB3	1.95	0.48
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE3	1.96	0.48
33:2b:50:GLU:O	33:2b:54:THR:OG1	2.13	0.48
40:2i:9:ARG:HB2	40:2i:104:ARG:NE	2.22	0.48
1:1A:1793:C:OP1	60:1A:4162:HOH:O	2.20	0.48
1:1A:2722:G:H2'	1:1A:2723:C:C6	2.49	0.48
31:19:17:ILE:HD12	31:19:17:ILE:HA	1.74	0.48
32:1a:189(A):C:H2'	32:1a:189(B):C:C6	2.49	0.48
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.49	0.48
32:1a:1400:5MC:N3	53:1y:63:ALA:HA	2.28	0.48
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.78	0.48
34:1c:131:ARG:HH21	34:1c:135:LYS:HE3	1.77	0.48
1:2A:192:C:O2'	1:2A:802:A:N3	2.46	0.48
1:2A:481:G:OP2	20:2Y:47:LYS:NZ	2.47	0.48
1:2A:1032:A:H2	1:2A:1122:G:H22	1.61	0.48
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.49	0.48
13:2R:78:LYS:HE2	13:2R:83:ILE:HD11	1.95	0.48
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.14	0.48
35:2d:173:TRP:CD1	35:2d:189:PRO:HG3	2.49	0.48
50:2s:40:ILE:HA	50:2s:44:MET:SD	2.54	0.48
1:1A:2743:C:OP1	31:19:33:LYS:NZ	2.46	0.47
32:1a:308:C:H2'	32:1a:309:G:C8	2.49	0.47
33:1b:9:GLU:HG3	33:1b:217:ARG:HH22	1.79	0.47
33:1b:95:GLN:HB3	33:1b:147:LYS:HE2	1.95	0.47
34:1c:16:ARG:HH21	34:1c:54:ARG:HH21	1.62	0.47
35:1d:79:PHE:HE1	35:1d:204:ILE:HD13	1.79	0.47
38:1g:59:LEU:HD11	38:1g:63:LYS:HE2	1.95	0.47
38:1g:111:ARG:HB3	38:1g:113:GLU:OE2	2.14	0.47
41:1j:38:ILE:HD11	41:1j:40:LEU:HD23	1.96	0.47
46:1o:74:ASP:CG	46:1o:77:ARG:HB2	2.38	0.47
1:2A:782:A:OP2	60:2A:3886:HOH:O	2.19	0.47
1:2A:1057:A:H2'	1:2A:1058:G:C8	2.42	0.47
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.49	0.47
1:2A:2545:G:O2'	1:2A:2565:A:N1	2.45	0.47
1:2A:2717:G:O2'	15:2T:96:ARG:HD3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:43:LEU:HD12	6:2G:43:LEU:HA	1.74	0.47
14:2S:56:LEU:HB3	14:2S:58:LEU:HD21	1.96	0.47
33:2b:122:PHE:HA	33:2b:127:ILE:HG12	1.96	0.47
35:2d:79:PHE:CE1	35:2d:204:ILE:HD13	2.49	0.47
36:2e:8:GLU:HB3	36:2e:34:VAL:HG23	1.95	0.47
40:2i:7:THR:OG1	40:2i:83:ARG:NH1	2.41	0.47
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.14	0.47
46:2o:35:ARG:HH21	46:2o:59:MET:HE2	1.78	0.47
1:1A:336:C:HO2'	20:1Y:35:TYR:HH	1.60	0.47
1:1A:1324:G:O2'	60:1A:4147:HOH:O	2.16	0.47
1:1A:2059:A:H2'	1:1A:2503:2MA:HM23	1.96	0.47
1:1A:2267:A:H5"	1:1A:2268:A:C5'	2.41	0.47
11:1P:147:LEU:HD23	11:1P:147:LEU:HA	1.77	0.47
32:1a:196:A:N3	32:1a:222:U:H1'	2.29	0.47
32:1a:308:C:H2'	32:1a:309:G:H8	1.80	0.47
32:1a:692:U:O2'	32:1a:694:A:N7	2.36	0.47
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.14	0.47
32:1a:1264:C:H2'	32:1a:1265:G:C8	2.49	0.47
35:1d:12:CYS:SG	35:1d:19:LEU:HB2	2.54	0.47
39:1h:19:VAL:HG23	39:1h:21:LYS:HG2	1.96	0.47
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.47	0.47
1:2A:922:U:H2'	1:2A:923:C:H6	1.79	0.47
1:2A:1101:U:H2'	1:2A:1102:C:H6	1.79	0.47
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.14	0.47
10:2O:70:LYS:HB3	10:2O:70:LYS:HE2	1.71	0.47
13:2R:13:HIS:CE1	13:2R:16:HIS:HB2	2.49	0.47
13:2R:30:THR:HG22	13:2R:31:HIS:CD2	2.49	0.47
20:2Y:43:ASN:CG	20:2Y:65:ALA:HB3	2.39	0.47
32:2a:1203:C:OP1	45:2n:3:ARG:HD3	2.14	0.47
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.49	0.47
35:2d:90:GLY:HA2	35:2d:204:ILE:HD11	1.97	0.47
6:1G:59:GLU:CD	6:1G:138:GLN:HE21	2.22	0.47
15:1T:39:ARG:HH12	15:1T:41:ARG:HD3	1.78	0.47
30:18:23:VAL:CG1	30:18:47:LYS:HD3	2.44	0.47
32:1a:130:A:OP2	48:1q:63:ARG:NE	2.38	0.47
32:1a:625:G:H4'	47:1p:16:HIS:CG	2.49	0.47
35:1d:91:SER:O	35:1d:95:GLY:N	2.35	0.47
40:1i:25:LYS:HZ2	40:1i:26:VAL:H	1.61	0.47
53:1y:3:MET:HE2	53:1y:3:MET:HB3	1.66	0.47
1:2A:272:G:N7	1:2A:421:U:H2'	2.29	0.47
1:2A:898:C:H2'	1:2A:899:A:O4'	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:984:A:H5”	1:2A:985:C:H5	1.80	0.47
1:2A:2185:C:N4	1:2A:2186:G:O6	2.48	0.47
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.49	0.47
32:2a:442:C:H42	32:2a:492:G:H1	1.61	0.47
32:2a:841:U:OP1	32:2a:841:U:H6	1.98	0.47
32:2a:1505:G:OP2	60:2a:3310:HOH:O	2.20	0.47
34:2c:181:ASN:ND2	34:2c:204:LEU:HD12	2.30	0.47
36:2e:43:LEU:HB2	36:2e:136:MET:SD	2.54	0.47
36:2e:137:GLU:OE1	36:2e:141:GLN:NE2	2.47	0.47
49:2r:66:LEU:O	49:2r:70:ILE:HG13	2.15	0.47
53:2y:53:THR:HG22	53:2y:62:VAL:HG12	1.96	0.47
1:1A:813:U:OP1	60:1A:4161:HOH:O	2.20	0.47
1:1A:1078:U:C5	1:1A:1088:A:H5”	2.50	0.47
1:1A:1570:A:H2’	1:1A:1571:A:C8	2.50	0.47
1:1A:2584:U:O4	60:1A:4156:HOH:O	2.19	0.47
7:1H:40:GLU:OE2	7:1H:60:ARG:NH1	2.48	0.47
10:1O:68:GLU:OE1	10:1O:78:ARG:NH1	2.45	0.47
33:1b:211:ILE:O	33:1b:215:LEU:HB2	2.14	0.47
35:1d:178:VAL:C	35:1d:180:GLY:H	2.21	0.47
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.95	0.47
1:2A:82:G:N1	1:2A:103:A:OP2	2.40	0.47
1:2A:1530:C:O2’	1:2A:1531:C:O5’	2.30	0.47
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	1.95	0.47
8:2I:62:LYS:HG2	8:2I:133:HIS:NE2	2.29	0.47
8:2I:62:LYS:O	8:2I:66:GLU:HB2	2.14	0.47
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.95	0.47
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.50	0.47
1:1A:888:C:N3	44:1m:93:ARG:NH1	2.62	0.47
5:1F:155:LEU:HD12	5:1F:174:VAL:O	2.14	0.47
29:17:35:ARG:NH1	60:17:202:HOH:O	2.48	0.47
32:1a:738:C:H2’	32:1a:739:C:C6	2.48	0.47
36:1e:8:GLU:OE2	36:1e:63:ARG:NH2	2.46	0.47
1:2A:576:U:H2’	1:2A:577:G:C8	2.49	0.47
1:2A:1005:C:H2’	1:2A:1006:C:C6	2.50	0.47
1:2A:1092:C:H2’	1:2A:1092:C:O2	2.14	0.47
1:2A:1316:U:H2’	1:2A:1317:A:C8	2.49	0.47
2:2B:55:U:H2’	2:2B:56:G:C8	2.50	0.47
6:2G:110:ALA:HB1	6:2G:140:ILE:HG22	1.96	0.47
6:2G:126:ASP:HB2	6:2G:130:ASN:HB2	1.96	0.47
32:2a:719:C:O2’	49:2r:49:LYS:HB3	2.13	0.47
32:2a:1151:A:N3	41:2j:39:PRO:HG3	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1347:G:H8	40:2i:107:ARG:HB3	1.79	0.47
33:2b:121:LEU:O	33:2b:125:PRO:HD2	2.14	0.47
1:1A:2008:C:OP2	60:1A:4164:HOH:O	2.20	0.47
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.59	0.47
26:14:16:CYS:HB3	26:14:20:ASN:HB3	1.95	0.47
32:1a:60:A:N1	32:1a:107:G:O2'	2.41	0.47
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.15	0.47
32:1a:1458:G:OP1	51:1t:35:THR:OG1	2.29	0.47
32:1a:1499:A:O2'	32:1a:1520:G:H5'	2.13	0.47
37:1f:78:GLU:O	37:1f:81:ILE:HG22	2.14	0.47
47:1p:20:VAL:HG21	47:1p:32:TYR:CG	2.49	0.47
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.48	0.47
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.23	0.47
1:2A:2115:G:H21	1:2A:2171:A:H61	1.60	0.47
1:2A:2144:U:H5"	1:2A:2145:C:C5	2.49	0.47
1:2A:2321:G:O2'	1:2A:2322:A:OP1	2.32	0.47
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.15	0.47
12:2Q:38:GLU:HG3	12:2Q:127:ILE:HG22	1.97	0.47
17:2V:24:LYS:HA	17:2V:92:THR:OG1	2.15	0.47
32:2a:1036:G:H3'	32:2a:1037:C:H6	1.79	0.47
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.28	0.47
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.80	0.47
33:2b:45:GLN:NE2	33:2b:49:GLU:OE2	2.47	0.47
34:2c:8:ILE:HG12	34:2c:184:TYR:HD2	1.79	0.47
53:2y:3:MET:HE3	53:2y:37:PRO:HG2	1.97	0.47
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.14	0.47
1:1A:1578:U:H2'	1:1A:1579:A:H5'	1.96	0.47
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.15	0.47
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.50	0.47
60:1A:4404:HOH:O	28:16:2:ALA:N	2.47	0.47
6:1G:67:LYS:HD3	26:14:5:ILE:HB	1.95	0.47
16:1U:34:LYS:HD3	16:1U:34:LYS:HA	1.66	0.47
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.42	0.47
32:1a:344:A:O2'	32:1a:346:G:O6	2.21	0.47
32:1a:490:G:OP2	35:1d:132:ARG:NH2	2.47	0.47
32:1a:659:U:H2'	32:1a:660:G:H8	1.79	0.47
32:1a:863:U:O2'	32:1a:865:A:N7	2.43	0.47
32:1a:1043:C:H2'	32:1a:1044:A:O4'	2.14	0.47
32:1a:1127:G:H5'	32:1a:1280:A:O2'	2.15	0.47
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.30	0.47
33:1b:81:VAL:HG12	33:1b:215:LEU:HD11	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:53:ASP:HB3	35:1d:57:ARG:NH1	2.29	0.47
40:1i:121:ARG:NH1	40:1i:122:ALA:O	2.48	0.47
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.96	0.47
51:1t:33:ILE:O	51:1t:37:SER:OG	2.18	0.47
52:1u:3:LYS:HD2	52:1u:14:TRP:CD1	2.49	0.47
1:2A:245:G:O5'	11:2P:73:GLY:HA2	2.14	0.47
1:2A:438:G:H2'	1:2A:440:G:H8	1.80	0.47
1:2A:453:C:O2	1:2A:457:A:O2'	2.32	0.47
1:2A:459:U:H2'	1:2A:460:A:H8	1.80	0.47
1:2A:1637:A:OP2	60:2A:3889:HOH:O	2.20	0.47
1:2A:2118:U:O2'	1:2A:2119:A:H5"	2.15	0.47
1:2A:2286:A:H4'	1:2A:2287:A:O4'	2.15	0.47
1:2A:2302:G:O2'	6:2G:126:ASP:O	2.31	0.47
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.79	0.47
5:2F:164:ARG:O	5:2F:168:ARG:HG3	2.15	0.47
13:2R:67:LEU:HD13	13:2R:76:VAL:HG21	1.97	0.47
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.50	0.47
16:2U:102:GLU:HB3	16:2U:104:GLN:HE22	1.80	0.47
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.30	0.47
32:2a:179:A:H2'	32:2a:180:U:C6	2.50	0.47
32:2a:255:G:H2'	32:2a:256:U:C6	2.49	0.47
32:2a:624:C:H2'	32:2a:625:G:H8	1.78	0.47
32:2a:657:G:H4'	46:2o:28:GLN:HG3	1.97	0.47
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.33	0.47
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.50	0.47
34:2c:19:GLU:C	34:2c:40:ARG:HH22	2.22	0.47
34:2c:188:LEU:HD11	34:2c:195:VAL:HG13	1.97	0.47
48:2q:12:SER:HB3	48:2q:20:THR:HB	1.97	0.47
1:1A:286:C:H2'	1:1A:287:C:C6	2.50	0.47
1:1A:1508:A:H4'	1:1A:1509(A):A:C5	2.50	0.47
2:1B:77:U:OP1	21:1Z:19:ARG:NH2	2.48	0.47
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.45	0.47
32:1a:1166:G:N2	32:1a:1169:A:H3'	2.30	0.47
38:1g:75:VAL:HG13	38:1g:145:ALA:HA	1.96	0.47
44:1m:20:THR:C	44:1m:22:ILE:H	2.23	0.47
1:2A:494:G:OP1	18:2W:8:ARG:NH1	2.46	0.47
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.50	0.47
1:2A:1028:A:N3	1:2A:2486:G:O2'	2.47	0.47
1:2A:1290:C:H2'	1:2A:1291:C:H6	1.80	0.47
1:2A:1902:C:H5'	3:2D:246:PRO:HD3	1.97	0.47
1:2A:2172:U:H1'	1:2A:2173:A:OP1	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.50	0.47
8:2I:77:LEU:HD11	8:2I:100:ALA:HB1	1.96	0.47
18:2W:60:ASN:HD22	18:2W:60:ASN:N	2.13	0.47
21:2Z:76:LEU:HA	21:2Z:83:PRO:HA	1.97	0.47
32:2a:36:C:OP1	43:2l:123:LYS:NZ	2.47	0.47
33:2b:153:ARG:HG3	33:2b:154:LEU:HD23	1.96	0.47
43:2l:53:ARG:HB2	43:2l:93:LEU:HD11	1.97	0.47
53:2y:33:HIS:ND1	53:2y:35:ILE:HG13	2.30	0.47
1:1A:2279:G:O6	22:10:14:ARG:HG3	2.15	0.47
7:1H:72:ILE:O	7:1H:76:VAL:HG23	2.15	0.47
11:1P:68:GLN:HG3	60:1P:304:HOH:O	2.15	0.47
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.88	0.47
32:1a:486:U:H2'	32:1a:487:A:H8	1.80	0.47
32:1a:1189:C:OP1	41:1j:51:ARG:NH2	2.33	0.47
1:2A:1324:G:N7	60:2A:4054:HOH:O	2.36	0.47
12:2Q:29:PHE:O	21:2Z:122:ARG:NH2	2.48	0.47
1:1A:247:G:H4'	1:1A:386:G:C5	2.50	0.47
1:1A:1050:A:H2'	1:1A:1051:G:O4'	2.15	0.47
1:1A:1557:C:H5"	1:1A:1558:A:OP2	2.15	0.47
6:1G:53:LEU:HD12	6:1G:54:GLU:N	2.30	0.47
20:1Y:56:PRO:C	20:1Y:58:GLY:H	2.22	0.47
23:11:73:LEU:HD22	23:11:97:LEU:HB2	1.97	0.47
32:1a:79:G:O6	32:1a:90:U:O4	2.33	0.47
33:1b:15:VAL:HG22	33:1b:209:ARG:HD2	1.96	0.47
37:1f:5:GLU:OE2	60:1f:301:HOH:O	2.20	0.47
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.49	0.47
1:2A:723:G:H2'	1:2A:724:U:O4'	2.15	0.47
1:2A:1053:C:H2'	1:2A:1054:A:C8	2.50	0.47
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.78	0.47
1:2A:2104:G:O6	1:2A:2186:G:C5	2.68	0.47
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.50	0.47
1:2A:2660:A:H2'	1:2A:2661:G:O4'	2.14	0.47
5:2F:31:HIS:HB2	11:2P:9:ASN:OD1	2.15	0.47
6:2G:48:GLU:HA	6:2G:51:ARG:HE	1.80	0.47
15:2T:119:LYS:HB2	32:2a:1442(A):G:N2	2.30	0.47
16:2U:29:SER:C	16:2U:30:LYS:HD2	2.40	0.47
32:2a:976:G:OP1	45:2n:32:SER:N	2.45	0.47
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.14	0.47
35:2d:10:ARG:HB2	35:2d:40:PRO:HG3	1.97	0.47
45:2n:6:LEU:HD23	45:2n:23:ARG:HH21	1.80	0.47
51:2t:42:GLN:O	51:2t:45:GLN:HB3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:170:LEU:HB3	4:1E:184:VAL:HG22	1.96	0.46
16:1U:33:ARG:NH2	60:1U:303:HOH:O	2.33	0.46
32:1a:194:C:H2'	32:1a:195:A:H5"	1.97	0.46
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.15	0.46
32:1a:1466:C:H2'	32:1a:1467:G:O4'	2.16	0.46
40:1i:5:TYR:HE1	40:1i:16:ARG:HB3	1.80	0.46
1:2A:135:G:N7	60:2A:4051:HOH:O	2.35	0.46
1:2A:470:A:OP1	5:2F:59:TYR:HE1	1.98	0.46
7:2H:56:SER:OG	7:2H:57:ASP:N	2.49	0.46
21:2Z:144:LEU:HD11	21:2Z:150:LEU:HD22	1.96	0.46
26:24:41:PRO:HG3	26:24:49:PHE:CE2	2.50	0.46
32:2a:67:C:H2'	32:2a:68:G:C8	2.49	0.46
32:2a:142:G:H2'	32:2a:143:A:H8	1.80	0.46
32:2a:1003:G:C5	32:2a:1004:A:H1'	2.50	0.46
39:2h:63:LEU:HD23	39:2h:65:TYR:OH	2.14	0.46
1:1A:664:C:H2'	1:1A:665:C:H6	1.80	0.46
8:1I:54:GLN:O	8:1I:57:ARG:HG2	2.14	0.46
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.96	0.46
32:1a:662:G:H2'	32:1a:663:A:C8	2.50	0.46
32:1a:1352:C:OP1	52:1u:3:LYS:NZ	2.47	0.46
38:1g:113:GLU:HG3	38:1g:118:VAL:HG12	1.96	0.46
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.50	0.46
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.51	0.46
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.79	0.46
12:2Q:37:LEU:HD12	12:2Q:128:LYS:HB3	1.97	0.46
32:2a:187:C:O2'	51:2t:89:ARG:HD3	2.15	0.46
32:2a:632:A:H3'	32:2a:633:G:H8	1.80	0.46
32:2a:1068:G:H8	32:2a:1068:G:OP2	1.97	0.46
33:2b:9:GLU:C	33:2b:11:LEU:H	2.24	0.46
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.28	0.46
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.14	0.46
1:1A:2336:A:H61	22:10:43:THR:CG2	2.28	0.46
60:1A:5788:HOH:O	27:15:43:HIS:HB3	2.14	0.46
6:1G:60:LEU:HA	6:1G:63:ILE:HD12	1.97	0.46
9:1N:48:MET:HE2	9:1N:48:MET:HB2	1.77	0.46
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE1	2.23	0.46
14:1S:15:ARG:NE	14:1S:88:ASP:OD2	2.47	0.46
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.61	0.46
36:1e:71:LEU:HD21	36:1e:115:VAL:HG22	1.96	0.46
53:1y:87:LYS:O	53:1y:91:LYS:HB2	2.16	0.46
1:2A:218:A:OP2	60:2A:3892:HOH:O	2.20	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:746:A:H2'	1:2A:2612:C:H5"	1.97	0.46
2:2B:24:G:H4'	2:2B:25:A:C8	2.50	0.46
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.98	0.46
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.50	0.46
32:2a:272:C:H2'	32:2a:273:A:H8	1.80	0.46
32:2a:992:U:H5"	32:2a:993:G:C4	2.49	0.46
32:2a:999:C:N4	32:2a:1042:G:H1	2.12	0.46
32:2a:1263:C:H2'	32:2a:1264:C:C6	2.51	0.46
35:2d:126:ILE:HG23	35:2d:147:ALA:O	2.16	0.46
39:2h:37:ARG:NH1	39:2h:41:ARG:HH21	2.14	0.46
42:2k:32:ILE:H	42:2k:32:ILE:HG12	1.56	0.46
53:2y:24:LEU:HD11	53:2y:39:ILE:HD11	1.98	0.46
1:1A:715:G:C2	46:1o:56:LEU:HD21	2.50	0.46
8:1I:27:ARG:HD2	23:11:71:TYR:CE2	2.51	0.46
10:1O:122:LEU:HD13	15:1T:72:VAL:HG11	1.96	0.46
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.48	0.46
32:1a:79:G:C6	32:1a:90:U:N3	2.83	0.46
32:1a:428:G:OP2	35:1d:10:ARG:NH1	2.48	0.46
32:1a:1124:G:H1	32:1a:1149:C:H42	1.64	0.46
32:1a:1212:U:H4'	32:1a:1213:A:C8	2.50	0.46
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.80	0.46
37:1f:42:GLU:OE2	37:1f:59:TYR:OH	2.26	0.46
38:1g:27:ILE:HD13	38:1g:40:ALA:HA	1.98	0.46
1:2A:207:A:H2'	1:2A:208:C:O4'	2.15	0.46
1:2A:1057:A:N6	1:2A:1087:G:OP1	2.48	0.46
1:2A:1665:A:OP2	60:2A:3894:HOH:O	2.21	0.46
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.51	0.46
5:2F:11:VAL:HG21	5:2F:20:LEU:HD12	1.97	0.46
19:2X:41:ASN:O	19:2X:45:THR:HG23	2.15	0.46
24:22:9:GLN:HE22	24:22:56:GLN:HB3	1.80	0.46
32:2a:9:G:H2'	32:2a:10:A:H8	1.81	0.46
32:2a:555:C:H2'	32:2a:556:C:C6	2.50	0.46
32:2a:1400:5MC:N3	53:2y:63:ALA:HA	2.30	0.46
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.51	0.46
35:2d:196:LEU:H	35:2d:196:LEU:HD12	1.80	0.46
1:1A:226:G:N2	1:1A:228:A:H62	2.13	0.46
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.15	0.46
3:1D:113:VAL:HG12	60:1D:457:HOH:O	2.16	0.46
6:1G:27:ASN:HB3	6:1G:30:GLU:HG3	1.97	0.46
6:1G:181:ARG:HG3	6:1G:182:LYS:N	2.30	0.46
18:1W:18:ARG:NH1	18:1W:76:VAL:O	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:1W:78:GLU:OE2	18:1W:99:ARG:NH1	2.36	0.46
21:1Z:154:ASP:OD1	21:1Z:154:ASP:N	2.46	0.46
27:15:16:ARG:HG3	27:15:17:ASP:N	2.31	0.46
32:1a:1170:A:H2'	32:1a:1171:G:O4'	2.15	0.46
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.50	0.46
1:2A:911:A:H2'	12:2Q:9:TYR:OH	2.15	0.46
1:2A:1079:C:H6	1:2A:1088:A:N1	2.12	0.46
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.31	0.46
1:2A:1798:U:H5'	3:2D:259:THR:CG2	2.38	0.46
32:2a:4:U:O4	39:2h:105:ARG:HA	2.16	0.46
32:2a:56:U:H2'	32:2a:57:G:C8	2.50	0.46
32:2a:573:A:OP2	60:2a:3324:HOH:O	2.21	0.46
32:2a:1015:A:H2'	32:2a:1016:A:C8	2.50	0.46
33:2b:93:VAL:HG21	33:2b:97:TRP:CD1	2.50	0.46
34:2c:22:TRP:HB3	34:2c:59:ARG:HB2	1.97	0.46
39:2h:4:ASP:OD2	39:2h:85:ARG:NH1	2.46	0.46
39:2h:95:VAL:HB	39:2h:99:GLU:HG2	1.97	0.46
40:2i:99:LEU:HB3	40:2i:101:PHE:CE1	2.51	0.46
50:2s:61:TYR:CE2	50:2s:63:THR:HG22	2.51	0.46
1:1A:375:C:H2'	1:1A:376:C:C6	2.51	0.46
1:1A:1187:G:OP1	60:1A:4163:HOH:O	2.20	0.46
1:1A:2134:A:O2'	1:1A:2159:G:N3	2.49	0.46
5:1F:167:ALA:HB1	5:1F:173:VAL:HG11	1.98	0.46
10:1O:64:ARG:HD3	10:1O:79:PHE:CD1	2.51	0.46
32:1a:370:C:H2'	32:1a:371:G:C8	2.51	0.46
32:1a:1243:C:H2'	32:1a:1244:C:C6	2.50	0.46
36:1e:81:GLU:HG2	36:1e:90:VAL:HG22	1.97	0.46
42:1k:16:SER:HA	42:1k:79:SER:O	2.15	0.46
53:1y:61:LEU:HD11	53:1y:85:LEU:HB2	1.98	0.46
1:2A:839:U:H2'	1:2A:840:C:C6	2.51	0.46
1:2A:1248:G:OP1	60:2A:3893:HOH:O	2.21	0.46
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.16	0.46
1:2A:1827:C:O2'	1:2A:1970:A:N3	2.41	0.46
1:2A:2031:A:C6	1:2A:2498:C:H1'	2.50	0.46
1:2A:2728:U:H2'	1:2A:2729:G:C8	2.51	0.46
5:2F:101:LEU:HD12	5:2F:102:PRO:HD2	1.98	0.46
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.97	0.46
10:2O:15:GLY:O	10:2O:47:ILE:HG13	2.15	0.46
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.80	0.46
32:2a:1191:A:OP2	34:2c:3:ASN:ND2	2.48	0.46
40:2i:110:GLU:HG2	40:2i:119:ALA:HB1	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:60:LEU:HD21	47:2p:80:PHE:CE1	2.49	0.46
48:2q:84:LEU:HD23	48:2q:87:LYS:HD2	1.98	0.46
53:2y:3:MET:HB2	53:2y:37:PRO:HG2	1.97	0.46
1:1A:1805:U:O2	3:1D:50:THR:HB	2.15	0.46
13:1R:81:ASP:O	13:1R:85:PRO:HG2	2.16	0.46
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.96	0.46
32:1a:1220:G:N2	50:1s:54:GLY:O	2.46	0.46
36:1e:31:LEU:HD22	36:1e:43:LEU:HD11	1.98	0.46
38:1g:50:ILE:HD11	38:1g:58:PRO:HA	1.97	0.46
42:1k:31:THR:HA	42:1k:42:TRP:HA	1.97	0.46
1:2A:2184:G:N1	1:2A:2185:C:O2	2.48	0.46
6:2G:48:GLU:HA	6:2G:51:ARG:HH21	1.80	0.46
8:2I:4:ILE:HD11	8:2I:44:LEU:HD12	1.98	0.46
32:2a:41:G:H2'	32:2a:42:G:H8	1.80	0.46
32:2a:1338:G:H2'	32:2a:1339:A:C8	2.51	0.46
33:2b:124:SER:HB2	33:2b:125:PRO:HD3	1.97	0.46
43:2l:47:LYS:HB2	43:2l:47:LYS:HE3	1.72	0.46
44:2m:95:GLY:O	44:2m:110:ARG:HG3	2.15	0.46
1:1A:747:U:O2	1:1A:2014:A:H1'	2.16	0.46
1:1A:1086:A:H3'	1:1A:1086:A:N3	2.31	0.46
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.51	0.46
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.51	0.46
7:1H:124:GLU:CG	7:1H:132:ARG:HB3	2.46	0.46
11:1P:112:LEU:HD13	11:1P:127:ALA:HB2	1.97	0.46
13:1R:103:ARG:HD3	13:1R:108:GLY:O	2.16	0.46
32:1a:580:U:H2'	32:1a:581:G:O4'	2.15	0.46
32:1a:901:A:OP2	60:1a:1924:HOH:O	2.21	0.46
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.46	0.46
34:1c:148:GLY:HA3	34:1c:172:ARG:O	2.15	0.46
51:1t:46:GLU:HG3	51:1t:48:LYS:HD2	1.98	0.46
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.81	0.46
1:2A:2601:C:C3'	1:2A:2602:A:H5"	2.45	0.46
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.51	0.46
4:2E:50:GLY:HA3	4:2E:75:VAL:HG11	1.98	0.46
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.16	0.46
26:24:5:ILE:HB	60:24:603:HOH:O	2.15	0.46
32:2a:114:U:H1'	32:2a:353:A:H1'	1.98	0.46
32:2a:420:U:H3'	32:2a:422:C:H41	1.80	0.46
32:2a:954:G:H21	32:2a:1227:A:H62	1.63	0.46
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.49	0.46
32:2a:1320:C:H2'	32:2a:1321:C:O4'	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.51	0.46
37:2f:9:VAL:HB	37:2f:87:ARG:HB2	1.97	0.46
1:1A:443:A:N7	5:1F:45:ARG:HG2	2.30	0.46
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.50	0.46
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.16	0.46
12:1Q:7:MET:HE3	12:1Q:7:MET:HB2	1.65	0.46
32:1a:1070:U:H2'	32:1a:1071:C:C6	2.51	0.46
33:1b:134:GLU:HG3	33:1b:137:ARG:NH2	2.28	0.46
36:1e:89:ILE:HG21	36:1e:135:THR:HA	1.97	0.46
39:1h:23:SER:HA	39:1h:63:LEU:HD22	1.97	0.46
1:2A:251:A:C5	1:2A:252:G:H1'	2.51	0.46
1:2A:361:G:O2'	1:2A:362:U:H5'	2.16	0.46
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.80	0.46
1:2A:1790:C:H5"	1:2A:1791:A:OP1	2.15	0.46
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.50	0.46
1:2A:1962:5MC:N4	60:2A:4004:HOH:O	2.32	0.46
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.51	0.46
6:2G:142:PRO:O	26:24:31:ILE:HG21	2.16	0.46
32:2a:615:C:H2'	32:2a:616:G:O4'	2.16	0.46
32:2a:1013:G:H2'	32:2a:1015:A:OP2	2.16	0.46
33:2b:15:VAL:HG12	33:2b:209:ARG:HD2	1.97	0.46
33:2b:24:TRP:CD1	33:2b:24:TRP:H	2.33	0.46
34:2c:112:SER:OG	34:2c:115:LEU:HB2	2.16	0.46
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.80	0.46
41:2j:68:HIS:CD2	41:2j:68:HIS:H	2.30	0.46
1:1A:271(G):C:C2'	1:1A:271(H):G:H5'	2.45	0.46
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.48	0.46
7:1H:125:VAL:HG12	7:1H:127:GLU:O	2.16	0.46
32:1a:346:G:N2	56:1a:1878:MPD:H53	2.30	0.46
32:1a:1177:G:OP2	40:1i:97:LYS:NZ	2.44	0.46
33:1b:95:GLN:HG3	33:1b:147:LYS:HG2	1.99	0.46
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.78	0.46
1:2A:731:C:H3'	60:2A:4305:HOH:O	2.16	0.46
1:2A:1007:C:OP1	9:2N:35:ARG:NH1	2.49	0.46
1:2A:1657:C:H2'	1:2A:1658:C:H6	1.80	0.46
4:2E:93:VAL:HG13	60:2E:417:HOH:O	2.16	0.46
8:2I:50:ARG:O	8:2I:54:GLN:HG2	2.15	0.46
13:2R:59:ASP:OD1	13:2R:61:HIS:HB3	2.16	0.46
32:2a:749:C:H2'	32:2a:750:G:H8	1.81	0.46
32:2a:1212:U:H4'	32:2a:1213:A:C8	2.51	0.46
33:2b:58:ILE:HD11	33:2b:185:ILE:HD13	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:48:THR:HG22	50:2s:61:TYR:HA	1.99	0.46
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.51	0.45
1:1A:1486:A:H2'	1:1A:1487:G:C8	2.50	0.45
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.98	0.45
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.15	0.45
5:1F:110:LEU:HD12	5:1F:205:ARG:HD2	1.96	0.45
32:1a:430:A:OP1	35:1d:9:CYS:HB2	2.16	0.45
32:1a:939:G:C6	32:1a:940:C:C4	3.04	0.45
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.50	0.45
5:2F:116:ASP:OD1	5:2F:119:ARG:NH2	2.49	0.45
6:2G:145:THR:HG23	6:2G:147:ASP:H	1.80	0.45
17:2V:5:VAL:HG11	17:2V:57:VAL:HG21	1.99	0.45
32:2a:188:C:O4'	51:2t:89:ARG:NH2	2.50	0.45
32:2a:487:A:H2'	32:2a:488:C:O4'	2.16	0.45
32:2a:1310:G:H5'	44:2m:77:ASN:HD22	1.82	0.45
32:2a:1325:C:OP1	52:2u:15:ARG:HD2	2.17	0.45
33:2b:12:GLU:HA	33:2b:15:VAL:HG23	1.96	0.45
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.98	0.45
35:2d:187:ARG:HH12	35:2d:190:ASP:CG	2.23	0.45
38:2g:116:ALA:HA	38:2g:119:ARG:HG3	1.98	0.45
41:2j:16:LEU:HD23	41:2j:94:VAL:HG22	1.97	0.45
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.52	0.45
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.32	0.45
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.52	0.45
6:1G:67:LYS:HB3	26:14:6:HIS:CE1	2.51	0.45
32:1a:434:U:H2'	32:1a:435:C:C6	2.51	0.45
33:1b:59:GLU:OE2	33:1b:224:GLN:NE2	2.49	0.45
33:1b:114:ARG:O	33:1b:118:LEU:HG	2.16	0.45
39:1h:51:VAL:HG21	39:1h:60:ARG:HD2	1.98	0.45
1:2A:656:G:H2'	1:2A:657:U:O4'	2.15	0.45
5:2F:155:LEU:HD11	5:2F:176:LEU:HD12	1.98	0.45
7:2H:115:VAL:HG11	7:2H:148:ILE:HD11	1.98	0.45
11:2P:97:PRO:O	11:2P:101:VAL:HG23	2.16	0.45
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.32	0.45
43:2l:117:ARG:HD2	43:2l:122:THR:HG22	1.97	0.45
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.81	0.45
1:1A:863:A:H2'	1:1A:864:G:C8	2.51	0.45
1:1A:2469:A:H5'	1:1A:2470:G:OP2	2.16	0.45
57:1B:232:ARG:HB2	60:1B:363:HOH:O	2.16	0.45
4:1E:58:ARG:NH1	60:1E:403:HOH:O	2.23	0.45
5:1F:9:ILE:HG21	5:1F:125:LEU:HD22	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:34:LEU:HD12	9:1N:34:LEU:HA	1.82	0.45
15:1T:53:ARG:HB3	15:1T:53:ARG:NH1	2.32	0.45
21:1Z:102:LEU:HD11	21:1Z:124:ILE:HB	1.98	0.45
32:1a:1367:C:H4'	41:1j:48:THR:HG21	1.98	0.45
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.51	0.45
40:1i:3:GLN:HE21	40:1i:20:ARG:NE	2.14	0.45
1:2A:534:U:O2'	16:2U:49:HIS:ND1	2.42	0.45
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.52	0.45
1:2A:2136:C:H42	1:2A:2156:G:N2	2.15	0.45
3:2D:61:LEU:O	3:2D:63:ARG:NH1	2.49	0.45
3:2D:275:LYS:NZ	3:2D:276:LYS:HA	2.31	0.45
9:2N:42:TRP:HA	9:2N:48:MET:HE1	1.98	0.45
21:2Z:6:LYS:NZ	21:2Z:43:GLU:OE1	2.43	0.45
25:23:52:HIS:CD2	25:23:53:LEU:HG	2.51	0.45
32:2a:554:C:H2'	32:2a:555:C:C6	2.52	0.45
32:2a:624:C:H4'	47:2p:11:SER:HB3	1.98	0.45
34:2c:36:ASP:O	34:2c:40:ARG:HG2	2.16	0.45
50:2s:22:LEU:HB3	50:2s:27:GLU:HA	1.99	0.45
1:1A:1312:U:OP2	19:1X:63:LYS:NZ	2.36	0.45
1:1A:1509(B):A:H2'	1:1A:1510:G:O4'	2.15	0.45
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.31	0.45
32:1a:486:U:H2'	32:1a:487:A:C8	2.51	0.45
32:1a:646:U:H2'	32:1a:647:C:C6	2.51	0.45
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.51	0.45
32:1a:1277:C:H1'	32:1a:1282:C:O2	2.15	0.45
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	1.98	0.45
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.51	0.45
1:2A:784:A:C8	1:2A:792:G:C5	3.04	0.45
1:2A:1081:U:H2'	1:2A:1082:U:H5"	1.97	0.45
1:2A:1178:C:H2'	1:2A:1179:C:H6	1.82	0.45
1:2A:2116:G:OP2	1:2A:2165:G:N2	2.49	0.45
2:2B:49:C:OP1	14:2S:97:ARG:HB2	2.17	0.45
2:2B:95:C:N4	60:2B:315:HOH:O	2.48	0.45
4:2E:52:LEU:O	4:2E:76:ARG:N	2.46	0.45
32:2a:176:C:H2'	32:2a:177:C:H6	1.82	0.45
39:2h:14:ARG:NH1	39:2h:83:ILE:O	2.50	0.45
53:2y:33:HIS:HD1	53:2y:35:ILE:HG13	1.81	0.45
1:1A:746:A:OP2	60:1A:4166:HOH:O	2.21	0.45
1:1A:2096:U:H2'	1:1A:2097:C:H6	1.81	0.45
6:1G:16:ARG:HB2	6:1G:17:PRO:HD3	1.97	0.45
8:1I:29:TYR:C	8:1I:32:PRO:HD2	2.42	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:137:TYR:O	12:1Q:141:GLN:HG2	2.15	0.45
13:1R:24:GLN:NE2	60:1R:306:HOH:O	2.49	0.45
17:1V:97:LYS:HD3	17:1V:97:LYS:HA	1.83	0.45
24:12:3:LEU:HD23	24:12:3:LEU:HA	1.73	0.45
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.77	0.45
32:1a:411:A:OP1	35:1d:30:LYS:NZ	2.41	0.45
32:1a:457:C:H2'	32:1a:458:C:C6	2.52	0.45
32:1a:501:C:H2'	32:1a:502:G:C8	2.52	0.45
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.16	0.45
40:1i:29:ASN:ND2	40:1i:65:VAL:HG12	2.31	0.45
40:1i:89:ASN:HB3	40:1i:92:TYR:CD2	2.51	0.45
1:2A:668:G:H5'	1:2A:669:G:OP2	2.16	0.45
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.51	0.45
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.52	0.45
1:2A:2808:U:H5"	1:2A:2891:G:O6	2.16	0.45
2:2B:48:A:H2'	2:2B:49:C:C6	2.52	0.45
2:2B:56:G:H4'	2:2B:57:A:C8	2.51	0.45
30:28:34:TRP:CG	30:28:35:GLN:N	2.85	0.45
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.51	0.45
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.32	0.45
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.98	0.45
40:2i:14:VAL:HG22	40:2i:66:ARG:O	2.16	0.45
42:2k:34:ASP:N	42:2k:40:ILE:HD11	2.31	0.45
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.32	0.45
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.51	0.45
3:1D:70:TRP:HB3	3:1D:190:TYR:CE2	2.52	0.45
6:1G:59:GLU:OE1	6:1G:153:ARG:NH2	2.49	0.45
8:1I:38:LEU:HB3	8:1I:40:THR:HG23	1.98	0.45
12:1Q:112:GLU:HG3	12:1Q:113:GLN:N	2.31	0.45
32:1a:193:C:H2'	32:1a:194:C:C6	2.51	0.45
32:1a:1409:C:H2'	32:1a:1410:G:H8	1.80	0.45
50:1s:12:ASP:C	50:1s:14:HIS:H	2.25	0.45
1:2A:1097:U:O2	1:2A:1097:U:H2'	2.15	0.45
4:2E:181:LEU:HD12	4:2E:181:LEU:HA	1.73	0.45
7:2H:117:PRO:HG3	7:2H:123:PHE:CE2	2.51	0.45
16:2U:88:ILE:HG22	16:2U:90:VAL:HG23	1.98	0.45
21:2Z:181:GLU:H	21:2Z:181:GLU:HG2	1.47	0.45
32:2a:304:U:H2'	32:2a:305:G:C8	2.52	0.45
32:2a:384:G:H2'	32:2a:385:C:C6	2.52	0.45
32:2a:401:C:O2'	32:2a:621:A:N3	2.39	0.45
32:2a:457:C:H2'	32:2a:458:C:C6	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:67:THR:O	41:2j:67:THR:OG1	2.30	0.45
1:1A:667:U:O2	30:18:2:PRO:HD2	2.16	0.45
1:1A:2602:A:N3	1:1A:2602:A:H5"	2.32	0.45
2:1B:90:A:N7	2:1B:91:C:H1'	2.32	0.45
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.52	0.45
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.99	0.45
19:1X:76:ARG:NH1	60:1X:204:HOH:O	2.50	0.45
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.52	0.45
32:1a:221:C:H2'	32:1a:222:U:C6	2.51	0.45
32:1a:1084:G:C5	32:1a:1085:U:C4	3.05	0.45
32:1a:1414:U:H3	32:1a:1486:G:H1	1.65	0.45
33:1b:54:THR:HG21	33:1b:201:ILE:HD11	1.99	0.45
47:1p:1:MET:HG3	47:1p:3:LYS:HG3	1.99	0.45
1:2A:1014:U:H2'	1:2A:1015:G:C8	2.50	0.45
1:2A:2136:C:C2	1:2A:2155:G:N2	2.80	0.45
2:2B:64:C:H2'	2:2B:65:C:C6	2.52	0.45
32:2a:189(F):U:C4	48:2q:72:ARG:NH1	2.85	0.45
32:2a:1274:G:N2	32:2a:1275:A:N7	2.64	0.45
1:1A:774:A:N3	1:1A:774:A:H2'	2.31	0.45
1:1A:1578:U:C2'	1:1A:1579:A:H5'	2.47	0.45
1:1A:1614:A:OP2	60:1A:4171:HOH:O	2.21	0.45
1:1A:1621:U:OP1	60:1A:4167:HOH:O	2.21	0.45
1:1A:2096:U:H3	1:1A:2193:G:H1	1.64	0.45
4:1E:7:VAL:HG13	4:1E:27:LEU:HB3	1.98	0.45
6:1G:165:THR:OG1	6:1G:168:GLU:HG3	2.17	0.45
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.16	0.45
32:1a:721:G:H4'	32:1a:722:A:O4'	2.17	0.45
33:1b:8:LYS:O	33:1b:9:GLU:HB2	2.17	0.45
37:1f:69:GLU:O	37:1f:72:VAL:HG12	2.17	0.45
38:1g:54:THR:CB	38:1g:56:GLN:HE22	2.30	0.45
48:1q:45:HIS:HB3	48:1q:72:ARG:HB3	1.98	0.45
1:2A:1091:G:H2'	1:2A:1091:G:N3	2.32	0.45
7:2H:26:VAL:HG12	7:2H:79:VAL:HG21	1.98	0.45
11:2P:54:GLY:O	60:2P:301:HOH:O	2.21	0.45
32:2a:757:U:H2'	32:2a:758:G:O4'	2.16	0.45
32:2a:1030(A):G:H1'	32:2a:1030(C):G:C5	2.52	0.45
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.51	0.45
34:2c:164:ARG:HG2	34:2c:165:THR:H	1.82	0.45
38:2g:48:LYS:O	38:2g:52:GLU:HG2	2.16	0.45
53:2y:43:LYS:HA	53:2y:48:PHE:HD1	1.81	0.45
1:1A:218:A:C2	1:1A:235:U:H4'	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:300:A:H2'	1:1A:334:C:H1'	1.98	0.45
1:1A:862:G:H2'	1:1A:863:A:O4'	2.17	0.45
1:1A:1175:U:H1'	1:1A:1176:G:OP1	2.17	0.45
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.52	0.45
1:1A:2432:A:C4	23:11:33:LYS:HG3	2.51	0.45
1:1A:2820:A:OP1	13:1R:2:ARG:NH2	2.50	0.45
4:1E:119:ARG:HG2	4:1E:160:TYR:CG	2.52	0.45
7:1H:159:GLU:HG3	7:1H:169:VAL:HG11	1.98	0.45
24:12:1:MET:HE2	24:12:6:VAL:HG22	1.99	0.45
32:1a:138:G:H1	32:1a:225:C:H42	1.65	0.45
32:1a:277:C:OP1	48:1q:68:ARG:NH2	2.50	0.45
32:1a:438:G:O2'	32:1a:494:U:O4	2.24	0.45
32:1a:458:C:H2'	32:1a:460:G:O4'	2.16	0.45
32:1a:1203:C:OP1	45:1n:3:ARG:HD3	2.17	0.45
32:1a:1205:U:H2'	32:1a:1206:G:H8	1.81	0.45
35:1d:163:GLU:O	35:1d:166:LYS:HG2	2.17	0.45
50:1s:41:VAL:HB	50:1s:44:MET:HE3	1.99	0.45
1:2A:263:C:H2'	1:2A:264:C:O4'	2.17	0.45
1:2A:747:U:O2	1:2A:2014:A:H1'	2.17	0.45
1:2A:2168:G:N2	1:2A:2171:A:O5'	2.49	0.45
1:2A:2691:C:OP1	60:2A:3896:HOH:O	2.21	0.45
1:2A:2869:G:H2'	1:2A:2870:C:O4'	2.17	0.45
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.14	0.45
23:21:11:ARG:HD3	60:21:206:HOH:O	2.17	0.45
26:24:22:ILE:HG22	26:24:24:THR:HB	1.98	0.45
32:2a:692:U:O2'	32:2a:694:A:N7	2.44	0.45
32:2a:1028:C:H2'	32:2a:1033:G:N2	2.32	0.45
32:2a:1428:A:H2'	32:2a:1429:C:O4'	2.17	0.45
42:2k:97:ALA:O	42:2k:101:SER:HB3	2.17	0.45
50:2s:50:ALA:HA	50:2s:58:VAL:O	2.17	0.45
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.52	0.45
1:1A:2619:C:H4'	4:1E:151:TYR:O	2.17	0.45
1:1A:2836:U:H2'	1:1A:2837:G:C8	2.52	0.45
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.17	0.45
32:1a:114:U:H2'	32:1a:115:G:C8	2.51	0.45
32:1a:1456:G:N1	51:1t:51:GLU:OE2	2.49	0.45
34:1c:150:LYS:HB2	34:1c:150:LYS:HE3	1.85	0.45
35:1d:156:GLU:O	35:1d:160:GLN:HG2	2.17	0.45
40:1i:77:ILE:O	40:1i:81:ILE:HG23	2.16	0.45
44:1m:91:ARG:NE	44:1m:97:PRO:O	2.45	0.45
48:1q:81:ARG:NH1	48:1q:83:ASP:OD2	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:54:LYS:HA	51:1t:57:ARG:CZ	2.46	0.45
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.52	0.45
12:2Q:137:TYR:O	12:2Q:141:GLN:HG2	2.17	0.45
13:2R:63:ARG:O	13:2R:67:LEU:HB2	2.17	0.45
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.32	0.45
30:28:63:PRO:HG2	30:28:64:TYR:CE2	2.51	0.45
32:2a:29:G:HO2'	32:2a:295:C:H4'	1.82	0.45
32:2a:382:A:H2'	32:2a:383:A:C8	2.52	0.45
32:2a:441:A:H3'	32:2a:442:C:H6	1.82	0.45
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.17	0.45
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.52	0.45
36:2e:36:ASP:OD1	36:2e:38:GLN:N	2.32	0.45
36:2e:152:ARG:HB3	39:2h:43:GLY:O	2.17	0.45
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.49	0.45
39:2h:20:TYR:HA	39:2h:65:TYR:CZ	2.52	0.45
49:2r:26:LEU:HD11	49:2r:42:ARG:HD2	1.98	0.45
1:1A:1078:U:C6	1:1A:1088:A:H5"	2.52	0.44
1:1A:1083:U:H1'	1:1A:1086:A:H61	1.81	0.44
1:1A:2322:A:H2'	1:1A:2323:G:O4'	2.17	0.44
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.52	0.44
20:1Y:92:ASN:CB	20:1Y:94:LYS:HG2	2.46	0.44
41:1j:31:GLY:HA2	41:1j:32:ALA:HA	1.52	0.44
44:1m:40:ASN:HB3	44:1m:43:THR:HG23	1.98	0.44
1:2A:228:A:H8	1:2A:229:A:H5'	1.82	0.44
1:2A:291:C:H42	1:2A:349:G:H1	1.65	0.44
1:2A:675:A:OP2	60:2A:3895:HOH:O	2.21	0.44
1:2A:855:G:O6	60:2A:3867:HOH:O	2.16	0.44
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.32	0.44
1:2A:1058:G:H2'	1:2A:1059:G:C8	2.53	0.44
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.53	0.44
60:2A:3819:HOH:O	5:2F:54:ARG:NH1	2.50	0.44
2:2B:17:C:H2'	2:2B:18:G:O4'	2.18	0.44
4:2E:49:LEU:N	4:2E:79:ARG:O	2.47	0.44
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.31	0.44
8:2I:101:LEU:HD11	8:2I:140:LEU:HD11	1.99	0.44
15:2T:54:ARG:HA	15:2T:59:THR:HG23	1.98	0.44
21:2Z:99:TYR:HB3	21:2Z:123:ASP:HB2	2.00	0.44
35:2d:191:ARG:NH2	35:2d:200:GLU:OE1	2.49	0.44
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.52	0.44
1:1A:1173:G:C2	1:1A:1175:U:H4'	2.52	0.44
4:1E:144:ARG:HB3	4:1E:145:LYS:H	1.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1R:44:LEU:HD22	13:1R:48:VAL:HG23	1.98	0.44
32:1a:973:G:H3'	32:1a:974:A:H5"	2.00	0.44
32:1a:1054:C:H41	53:1y:46:GLN:HG3	1.81	0.44
33:1b:128:GLU:O	33:1b:135:GLN:NE2	2.51	0.44
39:1h:120:THR:OG1	39:1h:123:GLU:HG3	2.17	0.44
41:1j:7:LYS:N	41:1j:97:GLU:O	2.41	0.44
47:1p:71:ARG:HG3	47:1p:80:PHE:CZ	2.52	0.44
50:1s:63:THR:H	50:1s:66:MET:HE3	1.82	0.44
1:2A:76:C:O2'	24:22:62:THR:OG1	2.33	0.44
1:2A:919:G:N2	1:2A:2269:A:OP2	2.48	0.44
1:2A:2872:G:C2	1:2A:2873:A:N6	2.86	0.44
5:2F:178:PRO:HB2	5:2F:201:VAL:CG2	2.47	0.44
8:2I:114:LEU:HD12	8:2I:130:TYR:HA	1.99	0.44
32:2a:457:C:H2'	32:2a:458:C:H6	1.82	0.44
34:2c:17:ASP:OD1	34:2c:18:TRP:N	2.49	0.44
37:2f:30:LEU:HB3	37:2f:35:ALA:HB3	1.98	0.44
1:1A:548:A:N6	17:1V:19:LYS:H	2.16	0.44
1:1A:664:C:H2'	1:1A:665:C:C6	2.53	0.44
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.52	0.44
16:1U:33:ARG:NH2	60:1U:306:HOH:O	2.50	0.44
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.21	0.44
21:1Z:157:LEU:HD11	21:1Z:163:LEU:HD13	1.99	0.44
32:1a:524:G:H2'	32:1a:525:C:C6	2.52	0.44
32:1a:975:A:H4'	32:1a:976:G:C5'	2.43	0.44
32:1a:985:C:H2'	32:1a:986:A:C8	2.52	0.44
32:1a:1205:U:H2'	32:1a:1206:G:C8	2.52	0.44
32:1a:1298:C:P	38:1g:114:ARG:HH22	2.41	0.44
32:1a:1368:G:OP1	40:1i:111:ARG:NH2	2.47	0.44
43:1l:86:ARG:NH2	43:1l:87:GLY:O	2.50	0.44
50:1s:15:LEU:O	50:1s:19:VAL:HG23	2.17	0.44
53:1y:80:LYS:O	53:1y:84:GLN:HG3	2.18	0.44
1:2A:644:A:N6	1:2A:2349:G:O2'	2.51	0.44
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.17	0.44
1:2A:2809:A:H2'	1:2A:2810:A:C8	2.53	0.44
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.99	0.44
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.99	0.44
32:2a:587:G:OP1	39:2h:89:PRO:HB3	2.17	0.44
50:2s:41:VAL:HG13	50:2s:43:GLU:H	1.82	0.44
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.82	0.44
1:1A:1379:A:H1'	60:1A:4792:HOH:O	2.17	0.44
3:1D:206:LEU:HD22	3:1D:211:ARG:HG2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:16:ARG:NH1	15:1T:83:ILE:O	2.30	0.44
33:1b:215:LEU:O	33:1b:219:VAL:HG23	2.17	0.44
1:2A:438:G:H2'	1:2A:440:G:C8	2.53	0.44
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	2.00	0.44
21:2Z:35:ARG:HD2	21:2Z:35:ARG:HA	1.48	0.44
32:2a:798:G:O6	60:2a:3325:HOH:O	2.21	0.44
32:2a:1005:A:OP2	32:2a:1024:G:N2	2.51	0.44
32:2a:1465:C:H2'	32:2a:1466:C:O4'	2.17	0.44
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.99	0.44
37:2f:22:GLU:OE2	37:2f:82:ARG:NE	2.50	0.44
40:2i:3:GLN:HG3	40:2i:20:ARG:HE	1.82	0.44
44:2m:17:VAL:O	44:2m:20:THR:OG1	2.34	0.44
52:2u:12:LYS:HD2	52:2u:22:ARG:HB3	1.98	0.44
1:1A:569:U:C4	1:1A:570:G:C6	3.06	0.44
1:1A:1969:A:O2'	1:1A:1972:A:N3	2.50	0.44
2:1B:29:A:H2'	2:1B:30:C:O4'	2.17	0.44
10:1O:10:VAL:HG13	10:1O:17:ARG:C	2.42	0.44
26:14:59:PHE:HE1	50:1s:67:VAL:HG21	1.81	0.44
32:1a:237:C:OP2	48:1q:40:LYS:NZ	2.50	0.44
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.47	0.44
32:1a:491:G:H2'	32:1a:492:G:O4'	2.18	0.44
35:1d:61:LYS:HD2	35:1d:207:TYR:OH	2.16	0.44
39:1h:46:LYS:HG3	39:1h:64:LYS:HB2	1.98	0.44
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.99	0.44
53:1y:23:ARG:HA	53:1y:23:ARG:HD2	1.79	0.44
1:2A:862:G:O2'	2:2B:78:A:N3	2.51	0.44
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.18	0.44
1:2A:2657:A:O3'	7:2H:160:LYS:NZ	2.50	0.44
60:2B:308:HOH:O	21:2Z:30:ASN:HB2	2.17	0.44
6:2G:61:ALA:HA	6:2G:66:GLN:O	2.18	0.44
25:23:46:ASN:O	25:23:50:VAL:HG22	2.17	0.44
32:2a:353:A:H5'	32:2a:353:A:H8	1.82	0.44
32:2a:1092:A:N3	32:2a:1183:A:N6	2.65	0.44
32:2a:1135:U:H2'	32:2a:1137:C:C4	2.52	0.44
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.18	0.44
32:2a:1386:G:C2	32:2a:1387:G:C8	3.05	0.44
36:2e:78:HIS:HA	39:2h:105:ARG:HG3	2.00	0.44
1:1A:1131:G:H21	9:1N:73:THR:HG21	1.82	0.44
1:1A:1466:G:O2'	1:1A:1546:C:O2'	2.19	0.44
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.18	0.44
1:1A:2674:G:H2'	1:1A:2675:A:C8	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.98	0.44
19:1X:40:LYS:HG3	19:1X:51:VAL:HB	2.00	0.44
32:1a:435:C:H2'	32:1a:436:C:H6	1.82	0.44
32:1a:620:C:H2'	32:1a:621:A:O4'	2.17	0.44
32:1a:1036:G:H2'	32:1a:1036:G:N3	2.32	0.44
32:1a:1206:G:C6	32:1a:1207:2MG:C5	3.06	0.44
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.18	0.44
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.50	0.44
32:1a:1496:C:OP2	60:1a:1927:HOH:O	2.21	0.44
32:1a:1516:G:H2'	32:1a:1518:MA6:OP2	2.18	0.44
33:1b:13:ALA:C	33:1b:15:VAL:H	2.25	0.44
33:1b:55:PHE:CD1	33:1b:58:ILE:HD12	2.52	0.44
33:1b:160:ASP:O	33:1b:183:PRO:HD2	2.17	0.44
48:1q:88:TYR:HD2	48:1q:89:LEU:HD23	1.83	0.44
1:2A:286:C:H2'	1:2A:287:C:C6	2.53	0.44
1:2A:384:U:H2'	1:2A:385:C:H6	1.82	0.44
1:2A:760:G:H2'	1:2A:761:A:O4'	2.16	0.44
1:2A:774:A:H2'	1:2A:774:A:N3	2.33	0.44
1:2A:1045:A:N3	1:2A:1045:A:H2'	2.32	0.44
1:2A:1067:A:H4'	1:2A:1068:G:OP2	2.15	0.44
1:2A:1722:A:O2'	1:2A:1740:G:N7	2.50	0.44
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.52	0.44
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.53	0.44
6:2G:165:THR:OG1	6:2G:168:GLU:HG3	2.16	0.44
7:2H:3:ARG:HG2	7:2H:6:ARG:CZ	2.47	0.44
21:2Z:152:ALA:HB1	21:2Z:163:LEU:HD21	1.99	0.44
32:2a:5:U:H5	35:2d:86:LYS:HA	1.83	0.44
32:2a:141:A:H1'	32:2a:182:U:H1'	2.00	0.44
32:2a:934:C:H5"	60:2a:3557:HOH:O	2.17	0.44
32:2a:947:G:H2'	32:2a:948:C:O4'	2.18	0.44
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.50	0.44
32:2a:1516:G:N1	32:2a:1519:MA6:OP2	2.50	0.44
40:2i:100:GLY:O	40:2i:103:THR:HG22	2.17	0.44
43:2l:49:ASN:ND2	43:2l:92:0TD:SB	2.91	0.44
44:2m:66:LEU:O	44:2m:70:LEU:HB2	2.17	0.44
1:1A:2389:G:H5"	1:1A:2390:U:O4'	2.18	0.44
1:1A:2492:U:H2'	1:1A:2493:U:H6	1.83	0.44
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.33	0.44
9:1N:15:LEU:HB2	9:1N:135:PRO:HB2	1.99	0.44
9:1N:42:TRP:CH2	9:1N:44:PRO:HB3	2.52	0.44
32:1a:45:U:H2'	32:1a:46:G:C8	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:684:A:N6	60:1a:2005:HOH:O	2.47	0.44
32:1a:814:A:N7	32:1a:816:A:C4	2.86	0.44
32:1a:1010:G:N2	32:1a:1020:U:H1'	2.33	0.44
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.18	0.44
34:1c:131:ARG:HE	34:1c:135:LYS:HE3	1.83	0.44
40:1i:6:GLY:HA3	40:1i:83:ARG:HB2	1.99	0.44
53:1y:74:ILE:O	53:1y:78:ILE:HG12	2.17	0.44
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.17	0.44
1:2A:927:G:H2'	1:2A:928:G:O4'	2.18	0.44
1:2A:1319:G:C6	1:2A:1320:C:N4	2.86	0.44
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.53	0.44
1:2A:2163:C:H5"	1:2A:2164:C:OP2	2.16	0.44
3:2D:206:LEU:HD23	3:2D:206:LEU:HA	1.83	0.44
5:2F:110:LEU:HD11	5:2F:181:LEU:HG	1.99	0.44
9:2N:91:LEU:HD23	9:2N:91:LEU:HA	1.71	0.44
15:2T:60:THR:HG22	15:2T:77:PRO:HA	2.00	0.44
15:2T:117:ASP:O	15:2T:121:ILE:HG13	2.18	0.44
21:2Z:10:ARG:HD3	21:2Z:37:VAL:O	2.17	0.44
32:2a:325:A:OP2	51:2t:70:SER:OG	2.28	0.44
32:2a:583:A:H2'	32:2a:584:G:O4'	2.17	0.44
32:2a:730:G:C5	32:2a:731:G:H1'	2.53	0.44
32:2a:1158:C:H2'	32:2a:1158:C:O2	2.17	0.44
32:2a:1287:A:C6	32:2a:1288:A:C6	3.05	0.44
33:2b:105:PHE:CE2	33:2b:109:SER:HB3	2.53	0.44
39:2h:121:ASP:OD1	39:2h:121:ASP:N	2.49	0.44
50:2s:62:ILE:HG23	50:2s:66:MET:HG3	2.00	0.44
1:1A:620:G:N3	1:1A:620:G:H5'	2.33	0.44
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.46	0.44
1:1A:1045:A:O2'	1:1A:1047:G:C4	2.69	0.44
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.53	0.44
6:1G:129:GLY:O	6:1G:161:THR:HB	2.18	0.44
10:1O:64:ARG:HB2	10:1O:79:PHE:CG	2.52	0.44
32:1a:171:A:H2'	32:1a:172:A:H8	1.78	0.44
32:1a:967:5MC:H4'	40:1i:125:TYR:HE1	1.83	0.44
36:1e:80:ILE:HG23	36:1e:91:LEU:HB2	1.99	0.44
36:1e:146:ALA:O	36:1e:150:ARG:N	2.41	0.44
40:1i:53:VAL:HB	40:1i:92:TYR:CZ	2.53	0.44
41:1j:67:THR:O	41:1j:67:THR:OG1	2.31	0.44
43:1l:57:LYS:HG2	43:1l:67:THR:HG22	1.99	0.44
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.53	0.44
51:1t:59:ALA:O	51:1t:63:ILE:HG13	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:26:G:C6	1:2A:27:G:N1	2.86	0.44
1:2A:271(W):G:O6	60:2A:3901:HOH:O	2.21	0.44
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.99	0.44
1:2A:2286:A:OP1	28:26:29:ASN:ND2	2.49	0.44
5:2F:108:LYS:O	5:2F:112:MET:HG3	2.17	0.44
21:2Z:157:LEU:HD11	21:2Z:163:LEU:HB2	2.00	0.44
32:2a:79:G:C2	32:2a:91:C:C2	3.06	0.44
38:2g:31:MET:HG3	38:2g:35:LYS:H	1.81	0.44
44:2m:19:LEU:HB3	44:2m:25:ILE:HG21	1.99	0.44
46:2o:7:GLU:O	46:2o:11:VAL:HG23	2.18	0.44
51:2t:56:MET:HG3	51:2t:84:LEU:HD22	2.00	0.44
1:1A:524:U:H2'	1:1A:525:U:C6	2.53	0.44
1:1A:839:U:H2'	1:1A:840:C:C6	2.52	0.44
56:1A:4047:MPD:H4	56:1A:4047:MPD:HM2	1.66	0.44
7:1H:12:PRO:O	7:1H:15:VAL:HG13	2.17	0.44
11:1P:87:ASP:O	11:1P:90:ARG:NH1	2.51	0.44
14:1S:25:ARG:O	14:1S:39:ILE:HA	2.18	0.44
21:1Z:103:ARG:HD3	21:1Z:136:PHE:CG	2.52	0.44
21:1Z:141:VAL:HB	21:1Z:144:LEU:HD12	2.00	0.44
28:16:19:ARG:NH1	28:16:52:VAL:HG11	2.33	0.44
32:1a:262:A:C6	32:1a:263:A:C6	3.05	0.44
1:2A:628:G:HO2'	1:2A:651:G:HO2'	1.64	0.44
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	2.00	0.44
4:2E:111:ARG:HD3	4:2E:160:TYR:CD2	2.53	0.44
10:2O:35:VAL:HG13	10:2O:65:THR:HG23	2.00	0.44
14:2S:66:ALA:O	14:2S:69:VAL:HG13	2.18	0.44
26:24:46:GLN:HB3	26:24:48:ARG:CZ	2.47	0.44
32:2a:537:G:H5"	43:2l:113:ARG:NH1	2.33	0.44
32:2a:581:G:OP1	46:2o:61:GLY:HA3	2.18	0.44
32:2a:585:G:OP1	48:2q:37:LYS:NZ	2.42	0.44
32:2a:1240:U:OP2	38:2g:115:ARG:HA	2.18	0.44
32:2a:1249:C:O4'	40:2i:70:LYS:HE3	2.18	0.44
34:2c:6:HIS:CD2	34:2c:8:ILE:HB	2.53	0.44
1:1A:212:G:N2	60:1A:4357:HOH:O	2.37	0.43
1:1A:987:G:O2'	1:1A:1000:A:N3	2.45	0.43
1:1A:2207:G:O2'	1:1A:2208:A:OP1	2.34	0.43
8:1I:81:VAL:O	8:1I:147:GLN:N	2.51	0.43
24:12:51:ARG:HD3	24:12:55:ARG:NH1	2.33	0.43
32:1a:923:A:H2'	32:1a:924:C:C6	2.53	0.43
32:1a:1298:C:H2'	38:1g:114:ARG:NH2	2.32	0.43
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:134:ILE:HG22	34:1c:168:ALA:HB3	1.98	0.43
40:1i:47:LEU:O	40:1i:50:LEU:HG	2.17	0.43
1:2A:116:C:H2'	1:2A:117:G:O4'	2.18	0.43
1:2A:848:G:H2'	1:2A:849:A:C8	2.53	0.43
1:2A:995:C:O2	9:2N:3:THR:OG1	2.35	0.43
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.53	0.43
2:2B:41:U:H5	6:2G:70:VAL:O	2.01	0.43
4:2E:52:LEU:H	4:2E:76:ARG:HB2	1.83	0.43
5:2F:47:GLY:HA3	5:2F:95:ARG:O	2.18	0.43
16:2U:27:LEU:HD23	16:2U:27:LEU:HA	1.81	0.43
32:2a:224:C:H2'	32:2a:225:C:H6	1.83	0.43
33:2b:204:ASN:HD21	33:2b:207:ALA:HB3	1.82	0.43
38:2g:111:ARG:NH2	38:2g:126:ASP:OD2	2.47	0.43
44:2m:107:ALA:HB3	44:2m:111:LYS:HE3	2.00	0.43
1:1A:1341:U:OP2	1:1A:1394:U:O2'	2.34	0.43
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.53	0.43
1:1A:2521:C:C4	1:1A:2522:U:C4	3.06	0.43
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.84	0.43
11:1P:100:LEU:HD12	11:1P:112:LEU:HD11	1.99	0.43
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.54	0.43
32:1a:106:C:O2'	32:1a:379:C:H5"	2.18	0.43
32:1a:191:G:N3	51:1t:103:GLY:HA3	2.32	0.43
32:1a:313:A:H2'	32:1a:314:C:C6	2.53	0.43
32:1a:1314:C:OP2	50:1s:4:SER:HB3	2.18	0.43
35:1d:79:PHE:CE1	35:1d:204:ILE:HD13	2.53	0.43
43:1l:47:LYS:HA	43:1l:48:PRO:HA	1.80	0.43
47:1p:11:SER:OG	47:1p:14:ASN:HB3	2.18	0.43
1:2A:451:C:OP2	60:2A:3899:HOH:O	2.21	0.43
1:2A:784:A:N6	3:2D:229:VAL:HG11	2.33	0.43
1:2A:801:G:O6	5:2F:53:THR:OG1	2.36	0.43
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.53	0.43
2:2B:95:C:H2'	2:2B:96:U:C6	2.52	0.43
7:2H:4:ILE:O	7:2H:69:ARG:HD2	2.18	0.43
19:2X:1:MET:HE1	24:22:26:ARG:NH2	2.33	0.43
26:24:48:ARG:HH11	26:24:48:ARG:HA	1.83	0.43
32:2a:1002:G:C2	32:2a:1003:G:N7	2.86	0.43
32:2a:1058:G:H2'	32:2a:1059:C:O4'	2.17	0.43
32:2a:1087:G:OP1	60:2a:3328:HOH:O	2.21	0.43
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.53	0.43
36:2e:87:SER:HB3	36:2e:131:ILE:HD13	2.00	0.43
39:2h:37:ARG:HH12	39:2h:41:ARG:HH21	1.64	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	2.14	0.43
40:2i:116:LYS:HA	40:2i:123:PRO:HD3	2.00	0.43
1:1A:26:G:C6	1:1A:27:G:N1	2.86	0.43
1:1A:1266:G:O2'	1:1A:2012:G:O6	2.35	0.43
1:1A:1668:A:O2'	1:1A:1674:G:N7	2.48	0.43
1:1A:1815:A:N1	60:1A:4347:HOH:O	2.37	0.43
1:1A:2133:G:C2	1:1A:2157:G:H2'	2.53	0.43
2:1B:64:C:O2'	60:1B:302:HOH:O	2.21	0.43
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.66	0.43
8:1I:77:LEU:HD12	8:1I:77:LEU:HA	1.83	0.43
9:1N:67:LEU:HB2	60:1N:331:HOH:O	2.18	0.43
32:1a:445:G:C2	32:1a:446:G:C4	3.06	0.43
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.42	0.43
32:1a:1149:C:P	40:1i:9:ARG:HH21	2.41	0.43
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.18	0.43
50:1s:13:ASP:HA	50:1s:16:LEU:HB3	2.01	0.43
1:2A:172:C:H2'	1:2A:173:G:H8	1.83	0.43
1:2A:373:U:H2'	1:2A:374:A:H8	1.83	0.43
5:2F:176:LEU:HD23	5:2F:176:LEU:HA	1.75	0.43
8:2I:140:LEU:HD22	8:2I:142:VAL:HG22	1.99	0.43
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.53	0.43
32:2a:514:C:H2'	32:2a:515:G:H8	1.84	0.43
32:2a:920:U:H2'	32:2a:921:U:C6	2.53	0.43
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	2.00	0.43
38:2g:26:PHE:O	38:2g:30:ILE:HG13	2.18	0.43
44:2m:15:VAL:HG12	44:2m:45:VAL:HG22	2.00	0.43
1:1A:526:A:H2'	60:1A:4873:HOH:O	2.18	0.43
1:1A:2129:C:O2	1:1A:2159:G:N1	2.48	0.43
1:1A:2162:G:H4'	1:1A:2172:U:O2'	2.18	0.43
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.19	0.43
3:1D:16:MET:HE3	3:1D:16:MET:HB2	1.82	0.43
5:1F:110:LEU:HD23	5:1F:110:LEU:HA	1.89	0.43
6:1G:77:ILE:HG21	6:1G:80:PHE:CD2	2.53	0.43
6:1G:138:GLN:C	6:1G:140:ILE:H	2.24	0.43
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.18	0.43
13:1R:79:LEU:HA	13:1R:83:ILE:HB	1.99	0.43
28:16:14:THR:HB	28:16:48:VAL:O	2.19	0.43
32:1a:540:G:H2'	32:1a:541:G:O4'	2.17	0.43
32:1a:1109:C:OP2	34:1c:176:HIS:ND1	2.46	0.43
34:1c:59:ARG:O	41:1j:92:THR:HG22	2.19	0.43
35:1d:172:PRO:HB2	35:1d:187:ARG:NH2	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.80	0.43
1:2A:578:A:H3'	60:2A:4730:HOH:O	2.18	0.43
1:2A:762:U:OP1	60:2A:3900:HOH:O	2.21	0.43
1:2A:1073:A:H2'	1:2A:1074:G:H8	1.82	0.43
1:2A:1903:G:OP1	3:2D:241:PRO:HB2	2.18	0.43
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.35	0.43
1:2A:2032:G:OP1	60:2A:3903:HOH:O	2.21	0.43
1:2A:2430:A:H5'	1:2A:2431:U:OP2	2.18	0.43
2:2B:33:G:C6	2:2B:34:U:C4	3.07	0.43
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.54	0.43
32:2a:1401:G:N7	53:2y:83:ARG:NH1	2.66	0.43
34:2c:58:GLU:O	34:2c:59:ARG:HG2	2.18	0.43
36:2e:71:LEU:HD21	36:2e:115:VAL:HG22	2.00	0.43
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.19	0.43
48:2q:41:LYS:HZ3	48:2q:92:ARG:HH21	1.66	0.43
1:1A:888:C:H4'	1:1A:889:C:OP1	2.19	0.43
1:1A:1024:G:OP2	60:1A:4110:HOH:O	2.21	0.43
1:1A:1430:C:H2'	1:1A:1431:U:H6	1.83	0.43
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	2.00	0.43
12:1Q:3:MET:HE2	60:1Q:3415:HOH:O	2.18	0.43
20:1Y:107:ASP:OD1	20:1Y:107:ASP:N	2.52	0.43
32:1a:222:U:H2'	32:1a:223:U:H6	1.80	0.43
32:1a:651:C:OP1	60:1a:1929:HOH:O	2.21	0.43
32:1a:1033:G:H2'	32:1a:1034:G:C8	2.50	0.43
32:1a:1159:U:C2	32:1a:1182:G:C2	3.07	0.43
40:1i:3:GLN:HE21	40:1i:20:ARG:HE	1.66	0.43
50:1s:27:GLU:CB	50:1s:28:LYS:HD3	2.49	0.43
1:2A:2801(A):A:N3	1:2A:2895:U:H1'	2.33	0.43
2:2B:80:U:H2'	2:2B:81:G:C8	2.52	0.43
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	2.00	0.43
6:2G:39:ILE:O	6:2G:91:ARG:HG3	2.18	0.43
7:2H:55:PRO:HG2	7:2H:61:HIS:ND1	2.32	0.43
9:2N:73:THR:HA	9:2N:83:LYS:O	2.19	0.43
16:2U:105:VAL:HG22	17:2V:45:THR:HG23	1.99	0.43
23:21:83:GLU:HA	23:21:84:GLY:HA2	1.62	0.43
29:27:8:ASN:HB3	29:27:11:LYS:HB3	2.01	0.43
32:2a:448:A:P	32:2a:485:G:H22	2.41	0.43
32:2a:991:U:H2'	32:2a:1212:U:C4	2.54	0.43
32:2a:1201:A:H5'	32:2a:1203:C:OP2	2.18	0.43
32:2a:1227:A:OP2	44:2m:111:LYS:HE2	2.19	0.43
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:42:ARG:CZ	40:2i:71:SER:HB2	2.49	0.43
41:2j:46:ARG:HG2	41:2j:64:GLU:HB3	1.99	0.43
44:2m:3:ARG:HH12	44:2m:11:ARG:HE	1.67	0.43
45:2n:6:LEU:HD23	45:2n:23:ARG:NH2	2.33	0.43
48:2q:56:VAL:O	48:2q:77:VAL:HB	2.19	0.43
51:2t:89:ARG:O	51:2t:93:GLU:HG2	2.18	0.43
1:1A:118:A:H3'	1:1A:119:A:C5'	2.47	0.43
1:1A:570:G:H2'	1:1A:2030:A:N7	2.33	0.43
1:1A:608:A:C4	1:1A:621:A:C6	3.06	0.43
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.19	0.43
3:1D:101:GLU:HG3	3:1D:102:LYS:N	2.34	0.43
7:1H:52:VAL:HG12	7:1H:65:HIS:CD2	2.54	0.43
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	2.00	0.43
23:11:65:SER:OG	23:11:66:HIS:ND1	2.44	0.43
32:1a:68:G:H5'	32:1a:171:A:O2'	2.18	0.43
32:1a:978:A:O2'	32:1a:1322:C:N3	2.51	0.43
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.53	0.43
39:1h:112:LEU:HD22	39:1h:133:LEU:HA	2.00	0.43
1:2A:77:C:H5"	24:22:10:LEU:HD21	2.01	0.43
1:2A:639:U:H2'	1:2A:640:C:C6	2.54	0.43
1:2A:2390:U:P	30:28:35:GLN:HE22	2.41	0.43
2:2B:28:C:H2'	2:2B:29:A:O4'	2.19	0.43
6:2G:98:ARG:H	6:2G:98:ARG:HG2	1.57	0.43
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.99	0.43
32:2a:56:U:H2'	32:2a:57:G:H8	1.83	0.43
32:2a:978:A:O2'	32:2a:1322:C:N3	2.47	0.43
32:2a:1030:C:N4	32:2a:1032:G:H1	2.17	0.43
34:2c:184:TYR:HA	34:2c:200:ALA:O	2.18	0.43
39:2h:10:LEU:HD13	39:2h:83:ILE:HG12	2.00	0.43
44:2m:92:HIS:CE1	44:2m:98:VAL:HG21	2.53	0.43
1:1A:1033:U:OP1	31:19:9:ARG:NH2	2.51	0.43
1:1A:1957:C:OP1	60:1A:4168:HOH:O	2.21	0.43
1:1A:2141:G:C2'	1:1A:2142:C:H5'	2.49	0.43
6:1G:150:ASP:OD1	6:1G:151:ALA:N	2.52	0.43
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	2.01	0.43
19:1X:5:TYR:CZ	24:12:30:ARG:HB2	2.53	0.43
21:1Z:54:HIS:ND1	21:1Z:101:PRO:HG3	2.34	0.43
32:1a:341:C:H2'	32:1a:342:C:C6	2.53	0.43
32:1a:933:G:O6	38:1g:3:ARG:NH2	2.52	0.43
33:1b:91:PRO:HG2	33:1b:155:LEU:HD13	2.01	0.43
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:74:LYS:HE2	51:1t:74:LYS:HB3	1.87	0.43
1:2A:297:C:H2'	1:2A:298:G:O4'	2.19	0.43
1:2A:299:A:N1	1:2A:322:A:O2'	2.43	0.43
1:2A:666:G:H1'	30:28:4:MET:HE3	2.01	0.43
1:2A:1888:G:O6	60:2A:3885:HOH:O	2.19	0.43
1:2A:2647:U:H2'	1:2A:2648:C:C6	2.53	0.43
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.54	0.43
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.19	0.43
7:2H:20:ALA:HB3	7:2H:23:ARG:HB3	2.01	0.43
14:2S:49:VAL:HG11	14:2S:77:ALA:HB2	2.01	0.43
32:2a:538:G:H5"	43:2l:114:LYS:HB2	2.00	0.43
32:2a:662:G:H2'	32:2a:663:A:C8	2.53	0.43
32:2a:1281:U:H6	32:2a:1281:U:H2'	1.65	0.43
32:2a:1512:U:H2'	32:2a:1513:A:H8	1.84	0.43
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.99	0.43
49:2r:35:ARG:O	49:2r:37:VAL:N	2.51	0.43
50:2s:27:GLU:OE1	50:2s:47:HIS:NE2	2.52	0.43
1:1A:491:G:H2'	1:1A:492:A:C8	2.54	0.43
1:1A:748:G:C8	18:1W:89:ALA:HB1	2.54	0.43
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.52	0.43
6:1G:43:LEU:HD12	6:1G:43:LEU:HA	1.91	0.43
6:1G:59:GLU:OE2	6:1G:138:GLN:NE2	2.37	0.43
7:1H:41:MET:HE1	7:1H:54:ARG:HB3	2.00	0.43
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.69	0.43
13:1R:24:GLN:HE21	13:1R:44:LEU:HG	1.84	0.43
14:1S:76:LYS:O	14:1S:80:LEU:HD12	2.19	0.43
32:1a:598:U:H4'	39:1h:94:TYR:CG	2.54	0.43
32:1a:657:G:C2	32:1a:750:G:C5	3.06	0.43
32:1a:881:G:P	43:1l:12:ARG:HH22	2.42	0.43
32:1a:1144:G:O2'	32:1a:1145:C:H5'	2.19	0.43
36:1e:78:HIS:HD1	39:1h:104:ARG:HD2	1.84	0.43
1:2A:323:G:H1'	1:2A:1205:U:O2	2.18	0.43
1:2A:568:U:O4	60:2A:3868:HOH:O	2.16	0.43
1:2A:1847:A:H3'	1:2A:1848:A:H5'	2.00	0.43
1:2A:2336:A:H61	22:20:43:THR:CG2	2.31	0.43
1:2A:2711:A:OP1	1:2A:2712:U:H3'	2.18	0.43
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.84	0.43
4:2E:1:MET:HE2	4:2E:199:ARG:HD2	2.01	0.43
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	2.00	0.43
8:2I:26:ALA:HA	8:2I:30:LEU:HB2	2.00	0.43
8:2I:38:LEU:HD13	8:2I:40:THR:HG22	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	2.00	0.43
23:21:3:LYS:HB3	23:21:4:VAL:H	1.64	0.43
32:2a:261:U:OP2	51:2t:79:ARG:NH2	2.51	0.43
32:2a:668:G:O2'	46:2o:46:HIS:ND1	2.41	0.43
32:2a:1047:G:H5"	45:2n:4:LYS:CD	2.49	0.43
32:2a:1138:G:H2'	32:2a:1140:C:H5'	2.00	0.43
41:2j:81:THR:O	41:2j:84:GLN:HG2	2.18	0.43
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	2.01	0.43
1:1A:576:U:H2'	1:1A:577:G:C8	2.54	0.43
1:1A:2712:U:O2'	1:1A:2713:A:H5'	2.19	0.43
4:1E:9:VAL:HG13	4:1E:25:VAL:O	2.19	0.43
5:1F:129:PHE:O	5:1F:130:ALA:C	2.62	0.43
7:1H:124:GLU:HG3	7:1H:132:ARG:HB3	2.00	0.43
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.75	0.43
28:16:18:ARG:HD3	28:16:42:TRP:CE2	2.54	0.43
32:1a:67:C:H2'	32:1a:68:G:C8	2.54	0.43
32:1a:1071:C:H5"	36:1e:49:PRO:HG2	2.01	0.43
32:1a:1187:G:H4'	40:1i:111:ARG:HH11	1.84	0.43
32:1a:1402:4OC:O5'	32:1a:1402:4OC:H6	2.18	0.43
34:1c:22:TRP:CD1	34:1c:59:ARG:HD2	2.54	0.43
39:1h:48:TYR:HA	39:1h:60:ARG:O	2.18	0.43
49:1r:42:ARG:HA	49:1r:42:ARG:HD3	1.72	0.43
1:2A:194:G:H2'	1:2A:195:A:O4'	2.18	0.43
1:2A:478:A:N1	1:2A:500:G:H4'	2.33	0.43
1:2A:2165:G:H2'	1:2A:2166:G:O4'	2.19	0.43
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.84	0.43
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.52	0.43
60:2A:4713:HOH:O	5:2F:74:ARG:HD2	2.18	0.43
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.19	0.43
13:2R:72:ASP:HB3	13:2R:75:LEU:HB3	2.01	0.43
23:21:94:LEU:O	23:21:97:LEU:HB2	2.18	0.43
32:2a:519:C:OP2	43:2l:50:SER:OG	2.37	0.43
32:2a:1248:A:N3	40:2i:70:LYS:NZ	2.66	0.43
35:2d:121:VAL:O	35:2d:134:ASP:HA	2.18	0.43
46:2o:33:THR:HG23	46:2o:63:ARG:NH1	2.34	0.43
48:2q:45:HIS:CD2	48:2q:47:PRO:HD3	2.54	0.43
1:1A:603:A:C8	1:1A:655:A:C6	3.07	0.43
1:1A:878:A:H2'	1:1A:879:G:H5'	2.01	0.43
1:1A:1131:G:H21	9:1N:73:THR:CG2	2.32	0.43
1:1A:1914:C:H2'	1:1A:1915:5MU:O2	2.18	0.43
4:1E:47:VAL:HG12	4:1E:49:LEU:CD1	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:1V:98:GLU:CD	17:1V:100:ARG:HH11	2.27	0.43
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.84	0.43
22:10:43:THR:O	22:10:43:THR:HG23	2.18	0.43
32:1a:346:G:H5"	56:1a:1878:MPD:H32	2.00	0.43
33:1b:174:VAL:O	33:1b:178:ARG:HB2	2.19	0.43
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.51	0.43
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.83	0.43
1:2A:1038:C:N4	1:2A:1117:G:H1	2.16	0.43
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.19	0.43
1:2A:1166:C:H2'	1:2A:1167:U:C6	2.54	0.43
1:2A:1665:A:H4'	10:2O:67:LYS:HB2	2.00	0.43
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.52	0.43
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.54	0.43
5:2F:130:ALA:H	5:2F:142:TRP:CD1	2.37	0.43
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.37	0.43
7:2H:3:ARG:NH1	7:2H:5:GLY:H	2.17	0.43
7:2H:15:VAL:HB	7:2H:27:LYS:O	2.19	0.43
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.49	0.43
18:2W:68:ARG:HB2	18:2W:109:GLU:HG2	2.01	0.43
21:2Z:30:ASN:HD22	21:2Z:90:VAL:HB	1.84	0.43
26:24:58:ARG:HA	26:24:58:ARG:HD2	1.63	0.43
32:2a:266:G:N3	32:2a:266:G:H5"	2.33	0.43
32:2a:297:G:N2	32:2a:300:A:OP2	2.52	0.43
32:2a:922:G:N3	32:2a:1398:A:H2	2.17	0.43
32:2a:1030:C:N4	32:2a:1031:G:H1	2.10	0.43
32:2a:1031:G:H2'	32:2a:1032:G:C8	2.54	0.43
34:2c:131:ARG:HD2	34:2c:131:ARG:HA	1.74	0.43
52:2u:6:ARG:O	52:2u:8:THR:N	2.45	0.43
1:1A:668:G:OP2	60:1A:4159:HOH:O	2.20	0.42
1:1A:796:C:H2'	1:1A:797:C:C6	2.54	0.42
1:1A:1802:A:N1	1:1A:1822:G:H1'	2.34	0.42
1:1A:2417:C:OP1	11:1P:65:ARG:NH2	2.52	0.42
3:1D:101:GLU:HG2	3:1D:103:ARG:HD3	2.01	0.42
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.19	0.42
15:1T:54:ARG:HA	15:1T:59:THR:HG22	2.01	0.42
18:1W:79:GLY:HA3	18:1W:100:THR:HG22	2.00	0.42
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD21	2.01	0.42
32:1a:188:C:H2'	32:1a:189:G:C8	2.55	0.42
32:1a:270:A:H2'	32:1a:271:C:C6	2.54	0.42
32:1a:1391:U:H2'	32:1a:1392:G:H8	1.83	0.42
33:1b:71:VAL:O	33:1b:165:VAL:HG23	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:52:LEU:HD11	34:1c:68:VAL:HG13	2.01	0.42
35:1d:19:LEU:HB3	35:1d:21:LEU:HG	2.00	0.42
38:1g:28:ASN:HD22	38:1g:28:ASN:N	2.17	0.42
1:2A:910:A:N1	1:2A:2277:G:H1'	2.34	0.42
1:2A:921:G:H4'	1:2A:2269:A:C5	2.53	0.42
1:2A:1062:G:N7	1:2A:1070:A:H1'	2.34	0.42
1:2A:1783:A:H5'	1:2A:2608:G:H4'	2.01	0.42
5:2F:36:VAL:O	5:2F:40:GLN:HG3	2.19	0.42
7:2H:83:TYR:O	7:2H:134:SER:HA	2.19	0.42
23:21:18:ILE:HG12	23:21:37:ILE:HG12	2.00	0.42
28:26:12:GLU:OE1	28:26:19:ARG:NH1	2.52	0.42
30:28:6:THR:HG23	30:28:64:TYR:HD2	1.84	0.42
32:2a:689:C:OP1	42:2k:27:ASN:ND2	2.44	0.42
32:2a:1103:C:OP1	33:2b:96:ARG:NH2	2.51	0.42
34:2c:104:GLN:HE21	34:2c:105:GLU:H	1.67	0.42
34:2c:117:ALA:HB2	34:2c:200:ALA:HB2	2.01	0.42
42:2k:20:TYR:O	42:2k:30:VAL:HA	2.19	0.42
42:2k:84:VAL:HG21	42:2k:95:ILE:HD11	2.01	0.42
1:1A:422:A:OP1	56:1A:4047:MPD:O4	2.35	0.42
1:1A:645:C:H5'	1:1A:646:A:OP2	2.19	0.42
1:1A:861:A:H2'	1:1A:862:G:O4'	2.19	0.42
1:1A:1321:A:H2'	1:1A:1322:A:O4'	2.19	0.42
1:1A:1949:G:C6	1:1A:1950:G:C6	3.07	0.42
1:1A:2405:G:O2'	1:1A:2406:U:OP1	2.32	0.42
1:1A:2638:G:P	4:1E:82:ARG:HH22	2.42	0.42
5:1F:12:LEU:HD12	5:1F:12:LEU:HA	1.92	0.42
6:1G:7:LEU:HD23	6:1G:7:LEU:HA	1.86	0.42
7:1H:84:SER:HA	7:1H:133:VAL:O	2.19	0.42
10:1O:59:LYS:NZ	10:1O:89:ASN:OD1	2.51	0.42
15:1T:106:SER:O	15:1T:110:ILE:HG13	2.20	0.42
32:1a:657:G:C2	32:1a:658:G:C8	3.06	0.42
32:1a:814:A:H2'	32:1a:816:A:H5"	2.01	0.42
32:1a:926:G:O6	53:1y:87:LYS:HE2	2.19	0.42
32:1a:1009:G:C2	32:1a:1010:G:C8	3.07	0.42
32:1a:1252:A:H2'	32:1a:1253:G:O4'	2.19	0.42
32:1a:1298:C:H4'	32:1a:1299:A:C4	2.54	0.42
35:1d:100:ARG:HB3	35:1d:102:ASP:OD1	2.19	0.42
51:1t:100:ILE:HB	51:1t:101:GLY:H	1.60	0.42
53:1y:70:MET:HE2	53:1y:70:MET:HB3	1.94	0.42
1:2A:171:G:H2'	1:2A:172:C:C6	2.54	0.42
1:2A:236:C:H2'	1:2A:237:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1292:U:H2'	1:2A:1293:C:H6	1.83	0.42
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.19	0.42
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.19	0.42
2:2B:18:G:H2'	2:2B:19:G:C8	2.54	0.42
10:2O:13:ASN:ND2	10:2O:97:ARG:HG2	2.34	0.42
12:2Q:137:TYR:CE1	21:2Z:83:PRO:HG3	2.54	0.42
15:2T:41:ARG:NH1	32:2a:346:G:OP1	2.50	0.42
32:2a:1053:G:N7	32:2a:1200:C:H5"	2.34	0.42
32:2a:1244:C:H42	32:2a:1293:G:H1	1.66	0.42
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.20	0.42
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.84	0.42
33:2b:168:THR:OG1	33:2b:192:SER:HA	2.19	0.42
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.82	0.42
44:2m:80:ARG:HH12	50:2s:69:HIS:CE1	2.37	0.42
48:2q:5:VAL:HA	48:2q:59:ILE:O	2.19	0.42
1:1A:271(X):G:C2	1:1A:271(Y):U:O4	2.72	0.42
1:1A:1082:U:C4	1:1A:1086:A:N1	2.82	0.42
2:1B:78:A:C2	2:1B:100:A:C4	3.07	0.42
7:1H:15:VAL:HG21	7:1H:76:VAL:HG13	2.00	0.42
25:13:3:ARG:HH11	25:13:60:GLU:CD	2.19	0.42
32:1a:22:G:H2'	32:1a:23:C:C6	2.53	0.42
32:1a:175:C:H2'	32:1a:176:C:C6	2.54	0.42
32:1a:279:A:C5	48:1q:98:LEU:HD23	2.53	0.42
32:1a:328:C:OP1	60:1a:1930:HOH:O	2.21	0.42
32:1a:1492:A:H4'	32:1a:1493:A:N1	2.33	0.42
37:1f:29:ALA:HA	37:1f:32:ASN:HB2	2.01	0.42
42:1k:84:VAL:HG21	42:1k:95:ILE:HD11	2.01	0.42
1:2A:220:G:O2'	1:2A:233:A:N3	2.49	0.42
1:2A:1012:U:H5	9:2N:28:THR:HG21	1.84	0.42
1:2A:1070:A:H2'	1:2A:1071:G:H5'	2.01	0.42
1:2A:1588:C:H2'	1:2A:1589:C:C6	2.54	0.42
1:2A:2032:G:N7	60:2A:4066:HOH:O	2.37	0.42
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.19	0.42
5:2F:11:VAL:HB	5:2F:18:ARG:HG2	2.00	0.42
9:2N:62:VAL:CG1	9:2N:66:LYS:HB2	2.49	0.42
9:2N:85:ILE:HD13	9:2N:85:ILE:HA	1.80	0.42
12:2Q:3:MET:SD	21:2Z:194:PRO:HG3	2.59	0.42
32:2a:189(F):U:O4	48:2q:72:ARG:NH1	2.52	0.42
32:2a:235:C:H2'	32:2a:236:G:H8	1.84	0.42
32:2a:1115:C:H2'	32:2a:1116:C:O4'	2.19	0.42
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	2.01	0.42
37:2f:99:ALA:HB2	49:2r:31:LEU:HD11	2.01	0.42
40:2i:85:LEU:HD12	40:2i:96:LEU:HD11	2.01	0.42
1:1A:68:G:H2'	1:1A:69:C:O4'	2.20	0.42
1:1A:602:G:O2'	1:1A:655:A:N6	2.50	0.42
1:1A:1301:A:C8	1:1A:1303:G:C8	3.06	0.42
1:1A:1669:A:H5"	1:1A:2550:G:OP1	2.20	0.42
1:1A:2287:A:O2'	1:1A:2289:G:N7	2.44	0.42
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.55	0.42
1:1A:2690:C:N4	1:1A:2713:A:H1'	2.35	0.42
12:1Q:109:VAL:HG22	12:1Q:113:GLN:CD	2.44	0.42
14:1S:87:PHE:HB2	14:1S:112:PHE:CE1	2.55	0.42
18:1W:65:LEU:HD23	18:1W:65:LEU:HA	1.86	0.42
32:1a:982:U:H5"	45:1n:6:LEU:HD21	2.02	0.42
32:1a:1343:G:O2'	40:1i:121:ARG:HD2	2.18	0.42
32:1a:1392:G:H4'	32:1a:1531:A:H5'	2.00	0.42
32:1a:1410:G:H2'	32:1a:1411:C:H6	1.85	0.42
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.19	0.42
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.44	0.42
50:1s:3:ARG:NH1	50:1s:10:PHE:HB2	2.34	0.42
1:2A:153:C:H2'	1:2A:154:G:C8	2.54	0.42
1:2A:614(C):A:C4	5:2F:180:GLY:HA2	2.53	0.42
1:2A:1101:U:H2'	1:2A:1102:C:C6	2.54	0.42
1:2A:1598:C:H2'	1:2A:1599:C:C6	2.53	0.42
4:2E:28:ALA:HB3	4:2E:93:VAL:CG1	2.45	0.42
6:2G:63:ILE:HG22	6:2G:102:PHE:HE1	1.84	0.42
14:2S:28:VAL:HG11	14:2S:98:VAL:HG13	2.02	0.42
18:2W:18:ARG:NH1	18:2W:76:VAL:O	2.52	0.42
26:24:41:PRO:HG3	26:24:49:PHE:CD2	2.54	0.42
32:2a:137:C:H2'	32:2a:138:G:C8	2.55	0.42
32:2a:189(B):C:H2'	32:2a:189(C):C:C6	2.54	0.42
32:2a:1027:C:H3'	32:2a:1028:C:C6	2.54	0.42
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.85	0.42
33:2b:74:LYS:O	33:2b:78:GLN:HB2	2.19	0.42
34:2c:57:ILE:HG12	34:2c:66:VAL:HG13	2.02	0.42
43:2l:27:LEU:HD12	43:2l:27:LEU:HA	1.85	0.42
46:2o:27:VAL:O	46:2o:31:LEU:HG	2.18	0.42
51:2t:43:LEU:HD23	51:2t:43:LEU:HA	1.83	0.42
1:1A:412:A:OP2	60:1A:4175:HOH:O	2.22	0.42
1:1A:818:G:H5'	1:1A:839:U:OP1	2.19	0.42
1:1A:1796:U:H2'	1:1A:1797:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1843:C:H5'	3:1D:253:GLN:NE2	2.35	0.42
5:1F:132:VAL:HG22	5:1F:163:VAL:HG22	2.01	0.42
9:1N:33:LEU:HD12	9:1N:38:HIS:CE1	2.54	0.42
15:1T:108:ARG:HA	15:1T:111:ARG:NH1	2.34	0.42
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	2.01	0.42
32:1a:5:U:H4'	32:1a:6:G:O5'	2.19	0.42
32:1a:108:G:H1	51:1t:15:ARG:HG2	1.85	0.42
32:1a:452:A:OP1	47:1p:43:LYS:NZ	2.50	0.42
33:1b:158:LEU:HG	33:1b:182:ILE:HD11	2.00	0.42
41:1j:38:ILE:O	41:1j:38:ILE:HG13	2.17	0.42
42:1k:33:THR:HA	42:1k:39:PRO:HA	2.01	0.42
1:2A:1040:C:H2'	1:2A:1041:C:O4'	2.19	0.42
1:2A:1590:U:H2'	1:2A:1591:G:C8	2.54	0.42
1:2A:1818:U:O2'	3:2D:154:LYS:O	2.27	0.42
1:2A:2853:C:H2'	1:2A:2854:G:C8	2.55	0.42
60:2A:5425:HOH:O	17:2V:23:GLU:HB2	2.18	0.42
11:2P:100:LEU:HA	11:2P:103:ALA:HB3	2.01	0.42
16:2U:55:ARG:H	16:2U:55:ARG:HG3	1.59	0.42
24:22:65:ASN:O	24:22:69:ARG:HG3	2.20	0.42
31:29:27:CYS:SG	31:29:28:GLU:N	2.93	0.42
32:2a:443:C:H2'	32:2a:444:C:H6	1.83	0.42
32:2a:1391:U:H2'	32:2a:1392:G:C8	2.55	0.42
32:2a:1425:U:H1'	32:2a:1476:G:N2	2.35	0.42
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	2.00	0.42
39:2h:38:ILE:HD12	39:2h:111:ILE:HG23	2.01	0.42
49:2r:47:THR:O	49:2r:47:THR:OG1	2.32	0.42
1:1A:7:G:H2'	1:1A:8:A:O4'	2.19	0.42
1:1A:2464:C:H1'	60:1A:5720:HOH:O	2.18	0.42
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	2.00	0.42
9:1N:61:ARG:HD3	9:1N:61:ARG:HA	1.74	0.42
10:1O:1:MET:HB3	10:1O:1:MET:HE2	1.85	0.42
56:1T:205:MPD:H11	56:1T:205:MPD:H4	1.71	0.42
32:1a:1022:G:H3'	32:1a:1023:G:C8	2.55	0.42
32:1a:1279:A:H5"	32:1a:1280:A:OP1	2.20	0.42
33:1b:15:VAL:HG12	33:1b:16:HIS:CD2	2.54	0.42
35:1d:73:ARG:HD2	35:1d:73:ARG:HA	1.65	0.42
1:2A:856:C:HO2'	1:2A:857:C:P	2.41	0.42
1:2A:861:A:C2	1:2A:917:A:C4	3.08	0.42
1:2A:981:A:OP1	60:2A:3890:HOH:O	2.20	0.42
1:2A:2395:C:O2'	23:21:30:VAL:HG22	2.19	0.42
1:2A:2641:G:H5"	9:2N:76:SER:HB3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:42:C:C4	2:2B:43:C:C4	3.07	0.42
11:2P:16:ARG:HG3	60:2P:325:HOH:O	2.19	0.42
12:2Q:138:ASP:OD1	12:2Q:138:ASP:N	2.52	0.42
19:2X:72:LYS:HG2	19:2X:73:ARG:O	2.20	0.42
23:21:52:ARG:NH1	23:21:55:GLY:O	2.52	0.42
28:26:14:THR:OG1	28:26:48:VAL:O	2.22	0.42
30:28:13:ARG:O	60:28:201:HOH:O	2.22	0.42
32:2a:458:C:H2'	32:2a:460:G:O4'	2.19	0.42
32:2a:540:G:C6	32:2a:541:G:C5	3.07	0.42
32:2a:858:G:O6	32:2a:869:G:H3'	2.20	0.42
32:2a:1122:U:C4	32:2a:1123:A:N7	2.87	0.42
32:2a:1516:G:H2'	32:2a:1518:MA6:OP2	2.20	0.42
33:2b:78:GLN:O	33:2b:94:ASN:ND2	2.51	0.42
34:2c:77:ILE:HG12	34:2c:77:ILE:H	1.64	0.42
36:2e:71:LEU:HD11	36:2e:113:ALA:O	2.19	0.42
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	2.00	0.42
47:2p:68:ASP:C	47:2p:70:ALA:H	2.28	0.42
48:2q:94:ASN:O	48:2q:98:LEU:HD13	2.19	0.42
1:1A:244:A:C2	1:1A:255:A:C4	3.08	0.42
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.19	0.42
1:1A:1268:A:C2	1:1A:2013:A:C4	3.08	0.42
1:1A:1566:A:OP1	3:1D:211:ARG:NH1	2.53	0.42
2:1B:13:A:N1	2:1B:69:G:O2'	2.36	0.42
6:1G:122:PRO:HD3	6:1G:181:ARG:HG3	2.02	0.42
12:1Q:109:VAL:HG13	12:1Q:113:GLN:HB2	2.02	0.42
18:1W:75:TYR:OH	60:1W:301:HOH:O	2.18	0.42
21:1Z:183:LEU:HD23	21:1Z:183:LEU:HA	1.85	0.42
22:10:11:ARG:O	22:10:14:ARG:NH2	2.31	0.42
32:1a:413:G:N2	32:1a:428:G:H1'	2.35	0.42
32:1a:857:C:H2'	32:1a:858:G:O4'	2.20	0.42
32:1a:1028:C:H3'	32:1a:1028:C:H6	1.84	0.42
32:1a:1226:C:H4'	50:1s:80:TYR:OH	2.20	0.42
32:1a:1431:C:H2'	32:1a:1432:G:O4'	2.19	0.42
1:2A:1417:C:H2'	1:2A:1418:G:O4'	2.19	0.42
1:2A:2104:G:N7	1:2A:2186:G:N3	2.68	0.42
1:2A:2261:C:H1'	1:2A:2388:A:N3	2.35	0.42
8:2I:50:ARG:HG2	8:2I:54:GLN:HE21	1.84	0.42
22:20:43:THR:OG1	22:20:46:LYS:HG2	2.20	0.42
32:2a:22:G:H4'	32:2a:885:G:C8	2.55	0.42
32:2a:153:C:H2'	32:2a:154:C:C6	2.55	0.42
32:2a:772:U:H2'	32:2a:773:G:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:944:G:C2	32:2a:1340:A:C6	3.08	0.42
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.37	0.42
32:2a:1262:C:H42	32:2a:1273:G:H1	1.67	0.42
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.20	0.42
35:2d:121:VAL:HG22	35:2d:126:ILE:HD12	2.01	0.42
1:1A:228:A:H8	1:1A:229:A:H5'	1.84	0.42
1:1A:1394:U:H2'	1:1A:1395:A:O4'	2.20	0.42
1:1A:1541:G:H5"	1:1A:1542:A:OP2	2.19	0.42
2:1B:33:G:C2	2:1B:50:G:C2	3.07	0.42
8:1I:14:ASP:O	8:1I:17:GLN:HB3	2.19	0.42
8:1I:72:LEU:HD12	8:1I:138:ILE:HG21	2.02	0.42
25:13:3:ARG:HD3	25:13:60:GLU:CD	2.44	0.42
32:1a:444:C:H2'	32:1a:445:G:H8	1.85	0.42
32:1a:551:U:H2'	32:1a:552:U:C6	2.55	0.42
32:1a:909:A:H2'	32:1a:910:C:O4'	2.20	0.42
32:1a:1239:A:H62	32:1a:1299:A:H61	1.68	0.42
35:1d:155:LEU:HD23	35:1d:156:GLU:N	2.34	0.42
37:1f:60:PHE:O	37:1f:61:LEU:HD12	2.20	0.42
39:1h:104:ARG:HA	39:1h:104:ARG:HD3	1.81	0.42
1:2A:752:A:P	29:27:3:ARG:HH22	2.42	0.42
1:2A:873:G:N2	1:2A:905:U:C2	2.88	0.42
1:2A:1007:C:H5"	9:2N:35:ARG:NH1	2.33	0.42
1:2A:1102:C:C2	1:2A:1103:A:C8	3.08	0.42
1:2A:1199:U:O2'	60:2A:3827:HOH:O	2.07	0.42
1:2A:1204:A:H61	1:2A:1240:U:H2'	1.84	0.42
1:2A:1209:G:O2'	1:2A:1237:A:N1	2.49	0.42
1:2A:1721:G:H2'	1:2A:1740:G:O6	2.20	0.42
6:2G:53:LEU:HD23	6:2G:53:LEU:HA	1.86	0.42
9:2N:62:VAL:HG11	9:2N:66:LYS:HB2	2.01	0.42
10:2O:9:GLU:O	10:2O:83:ALA:HA	2.20	0.42
20:2Y:28:LYS:NZ	20:2Y:64:GLU:OE1	2.38	0.42
30:28:38:GLY:O	30:28:42:ARG:HB2	2.20	0.42
32:2a:102:G:O2'	32:2a:151:A:N3	2.44	0.42
32:2a:1030(A):G:H2'	32:2a:1030(B):C:H5"	2.01	0.42
32:2a:1117:G:H4'	40:2i:104:ARG:HH12	1.84	0.42
32:2a:1204:A:P	45:2n:3:ARG:HH22	2.43	0.42
42:2k:18:ARG:NH2	42:2k:35:PRO:O	2.39	0.42
42:2k:33:THR:HG22	42:2k:39:PRO:HA	2.02	0.42
44:2m:33:ALA:O	44:2m:37:THR:OG1	2.21	0.42
45:2n:9:LYS:HG3	45:2n:12:ARG:HE	1.85	0.42
1:1A:1702:G:H2'	1:1A:1703:G:O4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:7:LEU:HB2	6:1G:104:GLU:HB2	2.02	0.42
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.55	0.42
32:1a:109:A:H2'	32:1a:326:G:N2	2.35	0.42
32:1a:184:G:H2'	32:1a:185:A:C8	2.54	0.42
32:1a:1236:A:H2'	32:1a:1237:C:C6	2.55	0.42
34:1c:51:GLY:O	34:1c:70:VAL:HG23	2.20	0.42
51:1t:40:ALA:HB2	51:1t:55:ILE:HG22	2.02	0.42
1:2A:606:U:H4'	1:2A:658:C:H4'	2.01	0.42
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.55	0.42
1:2A:1436:G:H2'	1:2A:1437:C:O4'	2.20	0.42
1:2A:1486:A:H2'	1:2A:1487:G:H8	1.84	0.42
1:2A:2079:U:OP1	23:21:21:ARG:NH1	2.47	0.42
1:2A:2106:G:C2	1:2A:2184:G:C2	3.08	0.42
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.20	0.42
14:2S:32:LEU:HD23	14:2S:32:LEU:HA	1.90	0.42
32:2a:18:C:H4'	32:2a:1078:U:O2	2.19	0.42
32:2a:441:A:H3'	32:2a:442:C:C6	2.55	0.42
32:2a:1297:C:OP2	44:2m:44:ARG:NH2	2.49	0.42
33:2b:218:ALA:O	33:2b:222:ILE:HG23	2.20	0.42
34:2c:116:VAL:HG21	34:2c:202:ILE:HD11	2.02	0.42
35:2d:129:ASN:ND2	35:2d:144:ASP:OD1	2.53	0.42
36:2e:33:VAL:HG21	36:2e:109:ILE:HA	2.01	0.42
37:2f:5:GLU:OE1	49:2r:34:TYR:OH	2.32	0.42
39:2h:11:THR:HG23	39:2h:14:ARG:HH21	1.83	0.42
40:2i:12:GLU:O	40:2i:68:GLY:N	2.53	0.42
45:2n:4:LYS:O	45:2n:7:ILE:HG12	2.20	0.42
46:2o:70:LEU:HD11	46:2o:77:ARG:HB2	2.02	0.42
48:2q:62:SER:OG	48:2q:72:ARG:NH1	2.52	0.42
51:2t:16:HIS:O	51:2t:19:SER:OG	2.32	0.42
1:1A:2563:U:H4'	10:1O:28:SER:HA	2.01	0.42
1:1A:2893:G:H4'	1:1A:2894:G:O5'	2.19	0.42
24:12:64:LEU:HD21	24:12:68:ARG:HH21	1.85	0.42
26:14:40:HIS:HB3	26:14:43:TYR:CD2	2.53	0.42
32:1a:620:C:C2	35:1d:135:LEU:HG	2.55	0.42
34:1c:63:ASN:HB3	34:1c:98:ASN:HB2	2.02	0.42
34:1c:148:GLY:HA2	34:1c:171:GLY:HA3	2.01	0.42
37:1f:68:PRO:HG2	37:1f:71:ARG:HD2	2.01	0.42
1:2A:108:U:H4'	1:2A:347:A:H2	1.85	0.42
1:2A:493:G:H2'	1:2A:494:G:O4'	2.19	0.42
1:2A:1016:G:H2'	1:2A:1017:G:O4'	2.20	0.42
1:2A:1128:A:O2'	1:2A:2490:G:OP1	2.31	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1889:A:N1	1:2A:2234:G:H1'	2.34	0.42
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.55	0.42
1:2A:2705:A:OP2	60:2A:3902:HOH:O	2.21	0.42
1:2A:2748:A:O2'	7:2H:63:SER:O	2.32	0.42
12:2Q:42:ILE:HD13	12:2Q:97:VAL:HG21	2.01	0.42
30:28:30:ARG:HD3	60:28:213:HOH:O	2.19	0.42
32:2a:189(K):U:H2'	32:2a:189(L):G:H8	1.85	0.42
32:2a:513:C:H2'	32:2a:514:C:C6	2.55	0.42
32:2a:745:C:H2'	32:2a:746:A:H8	1.84	0.42
32:2a:792:A:H4'	32:2a:793:U:O5'	2.19	0.42
32:2a:1229:A:O2'	53:2y:4:ASN:ND2	2.51	0.42
35:2d:3:ARG:O	35:2d:5:ILE:HG22	2.20	0.42
35:2d:12:CYS:HB2	59:2d:501:SF4:S2	2.59	0.42
37:2f:2:ARG:NE	37:2f:69:GLU:HG2	2.35	0.42
50:2s:36:ARG:HH12	50:2s:75:ALA:HB3	1.85	0.42
1:1A:493:G:H2'	1:1A:494:G:O4'	2.19	0.41
1:1A:1179:C:O2'	1:1A:1180:C:H5'	2.20	0.41
1:1A:2168:G:C2	1:1A:2171:A:C8	3.08	0.41
2:1B:24:G:N7	2:1B:56:G:H2'	2.35	0.41
19:1X:72:LYS:HE2	19:1X:73:ARG:O	2.20	0.41
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.59	0.41
32:1a:113:G:H2'	32:1a:114:U:C6	2.55	0.41
35:1d:120:LEU:HD23	35:1d:120:LEU:HA	1.87	0.41
39:1h:51:VAL:HG21	39:1h:60:ARG:HH11	1.85	0.41
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.55	0.41
41:1j:16:LEU:HD22	41:1j:68:HIS:HB2	2.02	0.41
42:1k:84:VAL:CG1	42:1k:91:ARG:HD2	2.50	0.41
42:1k:124:LYS:HE3	42:1k:125:PHE:CE2	2.55	0.41
45:1n:15:LYS:HG2	45:1n:16:PHE:CE2	2.55	0.41
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.19	0.41
1:2A:1358:G:O2'	1:2A:1359:A:H5'	2.20	0.41
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.20	0.41
1:2A:2390:U:O2'	1:2A:2391:G:H5'	2.20	0.41
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	2.01	0.41
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.72	0.41
23:21:62:VAL:HG22	23:21:63:ALA:O	2.20	0.41
32:2a:922:G:C6	32:2a:923:A:C6	3.07	0.41
32:2a:1121:U:O2'	32:2a:1122:U:H5'	2.20	0.41
32:2a:1481:U:H2'	32:2a:1482:G:C8	2.55	0.41
33:2b:95:GLN:HG2	33:2b:148:TYR:CE1	2.54	0.41
34:2c:122:GLU:O	34:2c:126:ARG:HD2	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:51:VAL:O	50:2s:57:HIS:HA	2.20	0.41
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.20	0.41
1:1A:1668:A:H4'	1:1A:1669:A:O5'	2.21	0.41
1:1A:1678:G:N3	1:1A:1678:G:H5"	2.35	0.41
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.55	0.41
1:1A:2120:G:C2	1:1A:2179:C:C2	3.08	0.41
3:1D:108:PRO:HD2	3:1D:111:LEU:HG	2.02	0.41
5:1F:40:GLN:NE2	5:1F:182:ASN:HB2	2.35	0.41
11:1P:121:LYS:HE2	11:1P:123:LEU:HD11	2.02	0.41
32:1a:825:G:O2'	39:1h:8:ASP:OD1	2.27	0.41
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.36	0.41
32:1a:1288:A:N1	32:1a:1371:G:H1'	2.35	0.41
34:1c:5:ILE:HD11	45:1n:49:HIS:HE1	1.85	0.41
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	2.02	0.41
38:1g:13:GLN:HG2	38:1g:14:PRO:HD2	2.02	0.41
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.30	0.41
48:1q:62:SER:OG	48:1q:72:ARG:HG2	2.20	0.41
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.55	0.41
1:2A:686:G:N2	1:2A:788:A:H61	2.18	0.41
1:2A:719:C:H2'	1:2A:720:C:C6	2.55	0.41
1:2A:896:A:H5"	21:2Z:147:GLY:HA3	2.02	0.41
1:2A:1050:A:H2'	1:2A:1051:G:C8	2.54	0.41
1:2A:1079:C:N4	1:2A:1080:C:O2	2.53	0.41
1:2A:1403:C:OP1	1:2A:1520:G:N2	2.46	0.41
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.54	0.41
2:2B:42:C:OP1	6:2G:67:LYS:NZ	2.38	0.41
8:2I:9:LEU:HD21	8:2I:35:LEU:HD22	2.02	0.41
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.20	0.41
14:2S:10:ARG:O	14:2S:14:VAL:HG13	2.20	0.41
19:2X:46:ALA:HB1	24:22:33:MET:HE1	2.02	0.41
19:2X:61:GLY:HA3	19:2X:73:ARG:O	2.20	0.41
21:2Z:91:LEU:HD12	21:2Z:91:LEU:HA	1.89	0.41
32:2a:23:C:OP2	32:2a:561:U:N3	2.42	0.41
33:2b:57:PHE:HE2	33:2b:185:ILE:HD11	1.85	0.41
37:2f:3:ARG:HD3	37:2f:64:GLN:NE2	2.35	0.41
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	2.02	0.41
40:2i:8:GLY:O	40:2i:15:ALA:N	2.47	0.41
42:2k:56:GLY:O	42:2k:89:ALA:HB3	2.21	0.41
43:2l:93:LEU:HD23	43:2l:93:LEU:HA	1.81	0.41
44:2m:91:ARG:HH21	44:2m:96:LEU:HB3	1.85	0.41
44:2m:108:ARG:CZ	44:2m:114:ARG:HG2	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:2y:8:LYS:HD2	53:2y:9:GLN:NE2	2.35	0.41
53:2y:12:ILE:HG22	53:2y:17:ARG:HG3	2.00	0.41
1:1A:27:G:C2	1:1A:512:G:N3	2.88	0.41
1:1A:826:U:H4'	11:1P:55:ARG:HB3	2.01	0.41
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.20	0.41
6:1G:52:ILE:H	6:1G:52:ILE:HG13	1.51	0.41
15:1T:95:ARG:O	60:1T:301:HOH:O	2.21	0.41
30:18:62:LEU:HB3	30:18:65:GLU:HG2	2.02	0.41
32:1a:682:G:O6	60:1a:1925:HOH:O	2.21	0.41
32:1a:763:G:H2'	32:1a:764:C:C6	2.55	0.41
32:1a:820:U:H4'	32:1a:821:G:OP2	2.20	0.41
34:1c:63:ASN:OD1	34:1c:63:ASN:N	2.51	0.41
51:1t:58:LYS:HD2	51:1t:58:LYS:HA	1.83	0.41
1:2A:191:A:H2'	1:2A:192:C:C6	2.55	0.41
1:2A:674:G:H1'	5:2F:74:ARG:HD3	2.02	0.41
1:2A:2127:G:H2'	1:2A:2128:C:O4'	2.21	0.41
3:2D:111:LEU:HD23	3:2D:111:LEU:HA	1.84	0.41
26:24:46:GLN:HB3	26:24:48:ARG:NH2	2.35	0.41
32:2a:1047:G:H1	32:2a:1210:C:H42	1.68	0.41
32:2a:1055:A:C6	32:2a:1206:G:C5	3.08	0.41
32:2a:1318:A:O2'	50:2s:37:ARG:HD3	2.21	0.41
35:2d:122:ARG:HA	35:2d:122:ARG:HD2	1.54	0.41
41:2j:50:ILE:H	41:2j:50:ILE:HG13	1.66	0.41
43:2l:110:VAL:O	43:2l:122:THR:OG1	2.37	0.41
44:2m:92:HIS:HA	44:2m:110:ARG:NH2	2.35	0.41
53:2y:23:ARG:HG3	53:2y:78:ILE:HG13	2.02	0.41
1:1A:340:A:H2'	1:1A:341:G:O4'	2.20	0.41
1:1A:478:A:C6	1:1A:480:A:C6	3.08	0.41
1:1A:705:A:C2	1:1A:727:A:H1'	2.54	0.41
1:1A:784:A:C8	1:1A:792:G:C5	3.08	0.41
1:1A:1111:A:N3	1:1A:1112:G:H1'	2.36	0.41
1:1A:1341:U:O4'	19:1X:57:LEU:HD23	2.21	0.41
1:1A:2130:U:O2	1:1A:2159:G:N1	2.54	0.41
1:1A:2134:A:N7	1:1A:2156:G:N2	2.67	0.41
2:1B:28:C:H2'	2:1B:29:A:O4'	2.20	0.41
4:1E:49:LEU:HD22	4:1E:81:ILE:HG13	2.03	0.41
17:1V:25:LEU:HD23	17:1V:25:LEU:HA	1.92	0.41
32:1a:69:G:H2'	32:1a:70:G:C8	2.55	0.41
32:1a:246:A:N1	32:1a:278:G:O2'	2.50	0.41
32:1a:438:G:H4'	35:1d:123:HIS:HD2	1.81	0.41
32:1a:692:U:H1'	32:1a:695:A:N7	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1036:G:H5'	32:1a:1037:C:OP2	2.20	0.41
32:1a:1106:G:H2'	32:1a:1107:C:C6	2.56	0.41
33:1b:183:PRO:HA	33:1b:198:ASP:OD2	2.20	0.41
35:1d:178:VAL:O	35:1d:180:GLY:N	2.44	0.41
37:1f:15:ASP:OD1	37:1f:18:GLN:N	2.34	0.41
37:1f:70:ASP:OD1	37:1f:70:ASP:N	2.40	0.41
39:1h:58:TYR:O	39:1h:59:LEU:HD23	2.20	0.41
1:2A:30:G:H2'	1:2A:31:C:H6	1.85	0.41
1:2A:143(A):C:H2'	1:2A:144:C:H6	1.86	0.41
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.20	0.41
1:2A:587:C:P	11:2P:21:ARG:HH22	2.42	0.41
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.56	0.41
5:2F:124:LEU:HB3	5:2F:193:VAL:HG22	2.02	0.41
17:2V:28:GLU:O	17:2V:61:VAL:HG21	2.20	0.41
26:24:48:ARG:HG3	26:24:52:THR:HG23	2.01	0.41
32:2a:559:A:H4'	32:2a:560:U:H3'	2.02	0.41
32:2a:564:C:HO2'	39:2h:91:ARG:HH22	1.64	0.41
32:2a:658:G:C6	32:2a:659:U:C4	3.08	0.41
32:2a:1256:A:H61	32:2a:1278:U:C1'	2.19	0.41
32:2a:1277:C:H1'	32:2a:1282:C:C2	2.55	0.41
33:2b:24:TRP:H	33:2b:24:TRP:HD1	1.69	0.41
35:2d:129:ASN:HD21	35:2d:144:ASP:HA	1.85	0.41
53:2y:67:HIS:ND1	53:2y:72:THR:HB	2.35	0.41
1:1A:904:C:H2'	1:1A:905:U:C6	2.56	0.41
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.51	0.41
1:1A:1176:G:H4'	1:1A:1177:A:OP1	2.19	0.41
1:1A:1693:U:H1'	3:1D:14:ARG:NH1	2.35	0.41
21:1Z:75:ASN:O	21:1Z:84:GLU:HG2	2.21	0.41
26:14:62:ARG:HA	26:14:62:ARG:HD3	1.80	0.41
29:17:21:ARG:NH1	60:17:201:HOH:O	2.36	0.41
32:1a:437:U:O3'	35:1d:125:HIS:CE1	2.70	0.41
32:1a:474:G:H2'	32:1a:475:G:H8	1.85	0.41
33:1b:88:ALA:HB1	33:1b:222:ILE:HG21	2.03	0.41
39:1h:96:GLY:H	39:1h:99:GLU:CD	2.27	0.41
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	2.03	0.41
53:1y:76:GLU:O	53:1y:80:LYS:HG3	2.21	0.41
1:2A:637:A:H2'	11:2P:117:GLU:OE2	2.20	0.41
1:2A:1015:G:O2'	1:2A:1016:G:H5'	2.21	0.41
1:2A:1357:U:H2'	1:2A:1358:G:O4'	2.20	0.41
12:2Q:110:THR:HG23	12:2Q:113:GLN:OE1	2.21	0.41
13:2R:65:LEU:HD12	13:2R:65:LEU:HA	1.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:4:LYS:HD3	20:2Y:4:LYS:HA	1.89	0.41
21:2Z:107:THR:HA	21:2Z:108:PRO:HD3	1.96	0.41
24:22:8:LYS:HA	24:22:8:LYS:HD2	1.88	0.41
32:2a:17:U:H5"	36:2e:14:ARG:NH1	2.36	0.41
32:2a:269:C:H2'	32:2a:270:A:C8	2.55	0.41
32:2a:407:G:H5"	35:2d:115:ARG:HG2	2.02	0.41
32:2a:620:C:OP1	60:2a:3326:HOH:O	2.21	0.41
32:2a:818:G:O2'	32:2a:819:A:H5'	2.20	0.41
32:2a:1198:G:H2'	32:2a:1199:U:C6	2.55	0.41
32:2a:1518:MA6:H93	32:2a:1519:MA6:C10	2.45	0.41
35:2d:50:ARG:HA	35:2d:51:PRO:HD3	1.95	0.41
37:2f:69:GLU:O	37:2f:72:VAL:HG13	2.21	0.41
1:1A:184:C:H2'	1:1A:185:U:H6	1.86	0.41
1:1A:272:G:O2'	1:1A:421:U:OP2	2.18	0.41
1:1A:686:G:H8	29:17:6:GLN:O	2.03	0.41
1:1A:839:U:H1'	1:1A:1191:G:H1'	2.03	0.41
1:1A:922:U:H2'	1:1A:923:C:C6	2.55	0.41
1:1A:1288:U:C2	1:1A:1327:C:O2	2.74	0.41
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.20	0.41
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.56	0.41
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.21	0.41
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	2.01	0.41
5:1F:157:VAL:HA	5:1F:176:LEU:O	2.20	0.41
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	2.02	0.41
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	2.00	0.41
32:1a:645:C:OP2	60:1a:1928:HOH:O	2.21	0.41
32:1a:977:A:H2'	32:1a:978:A:H5"	2.02	0.41
32:1a:986:A:H1'	50:1s:54:GLY:O	2.20	0.41
34:1c:95:THR:O	34:1c:97:LYS:HE3	2.20	0.41
35:1d:152:SER:O	35:1d:158:ILE:HD11	2.21	0.41
44:1m:80:ARG:O	44:1m:84:ILE:HG23	2.19	0.41
1:2A:236:C:H2'	1:2A:237:C:C6	2.55	0.41
1:2A:589:C:H2'	1:2A:590:A:C8	2.56	0.41
1:2A:1647:G:H3'	1:2A:1647:G:OP2	2.20	0.41
1:2A:2113:U:H2'	1:2A:2114:A:O4'	2.20	0.41
4:2E:144:ARG:HB3	4:2E:145:LYS:H	1.53	0.41
6:2G:43:LEU:C	6:2G:45:GLU:H	2.28	0.41
16:2U:17:ILE:HG23	16:2U:39:LEU:HD12	2.02	0.41
18:2W:78:GLU:OE2	18:2W:99:ARG:NH1	2.40	0.41
20:2Y:6:HIS:CD2	20:2Y:7:VAL:HG23	2.56	0.41
32:2a:130:A:O2'	32:2a:131:C:O5'	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:998:G:H1	32:2a:1043:C:H42	1.67	0.41
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.53	0.41
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.53	0.41
32:2a:1504:G:OP1	32:2a:1507:A:H4'	2.20	0.41
40:2i:34:ASN:OD1	40:2i:34:ASN:N	2.52	0.41
44:2m:94:ARG:HB3	44:2m:96:LEU:HD12	2.01	0.41
44:2m:108:ARG:HA	44:2m:108:ARG:HD3	1.76	0.41
46:2o:33:THR:HG22	46:2o:37:ASN:HD21	1.85	0.41
53:2y:24:LEU:HD23	53:2y:24:LEU:HA	1.84	0.41
1:1A:29:U:H2'	1:1A:30:G:C8	2.56	0.41
1:1A:171:G:O2'	1:1A:172:C:H5'	2.20	0.41
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.20	0.41
1:1A:1250:G:H5"	60:1U:320:HOH:O	2.20	0.41
1:1A:1759:A:H1'	1:1A:2711:A:C2	2.56	0.41
1:1A:2101:G:H2'	1:1A:2102:U:O4'	2.21	0.41
1:1A:2824:C:N4	60:1A:4283:HOH:O	2.31	0.41
5:1F:52:LYS:O	5:1F:88:VAL:HG13	2.21	0.41
15:1T:53:ARG:HB3	15:1T:53:ARG:HH11	1.85	0.41
20:1Y:92:ASN:HB2	20:1Y:94:LYS:N	2.24	0.41
24:12:36:ARG:HD3	60:12:109:HOH:O	2.20	0.41
32:1a:169:C:H2'	32:1a:170:U:C6	2.55	0.41
32:1a:582:U:OP1	46:1o:64:ARG:NH1	2.54	0.41
32:1a:920:U:H2'	32:1a:921:U:C6	2.56	0.41
33:1b:115:LEU:O	33:1b:119:GLU:HG2	2.21	0.41
33:1b:192:SER:O	33:1b:194:PRO:HD3	2.21	0.41
38:1g:62:PHE:HA	38:1g:124:LEU:HD22	2.02	0.41
50:1s:3:ARG:HH11	50:1s:10:PHE:HB2	1.86	0.41
1:2A:27:G:N2	1:2A:512:G:H1'	2.35	0.41
1:2A:483:A:O2'	20:2Y:59:GLY:N	2.45	0.41
1:2A:729:G:C5	3:2D:208:LYS:HB2	2.56	0.41
1:2A:912:C:H2'	1:2A:913:U:H6	1.85	0.41
1:2A:1184:G:OP1	25:23:30:ARG:NH1	2.52	0.41
1:2A:1364:G:P	23:21:3:LYS:HG3	2.61	0.41
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.20	0.41
1:2A:1805:U:O2	3:2D:50:THR:HB	2.20	0.41
1:2A:1826:G:H2'	1:2A:1827:C:O4'	2.21	0.41
1:2A:2111:C:H42	1:2A:2147:G:N2	2.18	0.41
6:2G:20:ILE:HG23	60:2G:302:HOH:O	2.21	0.41
6:2G:43:LEU:O	6:2G:45:GLU:N	2.49	0.41
6:2G:114:ILE:HA	6:2G:140:ILE:HD12	2.02	0.41
20:2Y:68:HIS:ND1	20:2Y:70:SER:HB3	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:5:LYS:HG3	25:23:36:VAL:HG22	2.03	0.41
30:28:23:VAL:HG11	30:28:47:LYS:HD3	2.01	0.41
32:2a:21:G:H2'	32:2a:22:G:C8	2.56	0.41
32:2a:131:C:H2'	32:2a:132:C:C6	2.56	0.41
38:2g:101:LEU:O	38:2g:105:VAL:HG23	2.19	0.41
40:2i:92:TYR:O	40:2i:96:LEU:HB2	2.20	0.41
1:1A:286:C:H2'	1:1A:287:C:H6	1.85	0.41
1:1A:1508:A:H4'	1:1A:1509(A):A:C4	2.55	0.41
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.33	0.41
2:1B:90:A:C5	2:1B:91:C:H1'	2.56	0.41
3:1D:229:VAL:HG22	60:1D:495:HOH:O	2.20	0.41
32:1a:509:A:H5"	35:1d:55:ALA:HB2	2.02	0.41
32:1a:858:G:O6	32:1a:869:G:H3'	2.21	0.41
32:1a:1002:G:H1	32:1a:1038:C:N4	2.19	0.41
32:1a:1495:U:OP1	53:1y:23:ARG:NH2	2.53	0.41
35:1d:107:ARG:HD2	35:1d:107:ARG:HA	1.73	0.41
35:1d:157:LEU:HG	35:1d:161:ASN:ND2	2.36	0.41
35:1d:167:GLY:H	35:1d:168:ARG:NH1	2.19	0.41
51:1t:10:LEU:HD23	51:1t:10:LEU:HA	1.81	0.41
1:2A:484:C:H2'	1:2A:485:C:H6	1.86	0.41
1:2A:902:C:H2'	1:2A:903:C:C6	2.55	0.41
1:2A:1313:U:H2'	1:2A:1610:A:C2	2.56	0.41
1:2A:2006:C:OP2	60:2A:3908:HOH:O	2.22	0.41
1:2A:2114:A:C2	1:2A:2115:G:H1'	2.56	0.41
1:2A:2478:A:H5'	31:29:31:LYS:HE2	2.03	0.41
1:2A:2679:A:H4'	4:2E:165:VAL:HG11	2.03	0.41
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.54	0.41
8:2I:57:ARG:CZ	8:2I:57:ARG:HB2	2.49	0.41
15:2T:95:ARG:NH1	15:2T:95:ARG:HG2	2.36	0.41
21:2Z:65:GLN:OE1	21:2Z:67:LEU:HD21	2.21	0.41
22:20:27:GLU:HB2	22:20:69:PHE:HD1	1.86	0.41
25:23:11:SER:HA	25:23:31:LEU:HD21	2.02	0.41
32:2a:309:G:O2'	32:2a:607:A:N1	2.48	0.41
35:2d:155:LEU:HD23	35:2d:156:GLU:N	2.36	0.41
36:2e:75:THR:OG1	36:2e:117:ASP:O	2.33	0.41
43:2l:82:VAL:O	43:2l:106:ASP:HB2	2.21	0.41
53:2y:13:THR:C	53:2y:15:ALA:H	2.29	0.41
1:1A:534:U:H2'	1:1A:535:C:C6	2.56	0.41
1:1A:848:G:H2'	1:1A:849:A:C8	2.56	0.41
1:1A:857:C:N4	1:1A:858:U:O4	2.54	0.41
1:1A:1674:G:N3	1:1A:1676:A:N6	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2031:A:C6	1:1A:2498:C:H1'	2.56	0.41
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.56	0.41
1:1A:2742:C:OP1	31:19:35:ARG:HD3	2.21	0.41
2:1B:96:U:H2'	2:1B:97:G:C8	2.56	0.41
12:1Q:6:ARG:HA	21:1Z:195:GLU:O	2.20	0.41
12:1Q:130:LYS:HB3	12:1Q:130:LYS:HE2	1.91	0.41
21:1Z:125:LEU:HB3	21:1Z:165:VAL:HG13	2.02	0.41
22:10:59:LEU:HD12	22:10:59:LEU:HA	1.86	0.41
32:1a:232:G:H1'	32:1a:262:A:N1	2.36	0.41
32:1a:425:G:O3'	35:1d:45:GLN:NE2	2.54	0.41
32:1a:657:G:O2'	46:1o:23:GLY:HA2	2.20	0.41
32:1a:955:U:O2'	50:1s:83:HIS:HD2	2.03	0.41
32:1a:1001(A):G:N2	32:1a:1040:U:H1'	2.36	0.41
32:1a:1010:G:H2'	32:1a:1011:G:C8	2.56	0.41
32:1a:1015:A:H2'	32:1a:1016:A:C8	2.55	0.41
32:1a:1309:G:OP1	44:1m:88:ARG:NH2	2.54	0.41
32:1a:1468:A:H8	32:1a:1468:A:O5'	2.03	0.41
33:1b:101:MET:HA	33:1b:108:ILE:HD12	2.02	0.41
33:1b:167:PRO:HG3	33:1b:186:ALA:HB1	2.03	0.41
34:1c:35:GLU:HB3	34:1c:59:ARG:NH2	2.36	0.41
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.55	0.41
39:1h:7:ALA:HB2	39:1h:85:ARG:HG3	2.02	0.41
40:1i:16:ARG:HB2	40:1i:64:THR:CG2	2.50	0.41
45:1n:4:LYS:HA	45:1n:7:ILE:HG23	2.03	0.41
50:1s:52:TYR:HB2	50:1s:57:HIS:CE1	2.55	0.41
1:2A:328:U:H4'	20:2Y:68:HIS:CE1	2.56	0.41
1:2A:375:C:H2'	1:2A:376:C:C6	2.56	0.41
1:2A:459:U:H2'	1:2A:460:A:C8	2.55	0.41
1:2A:580:C:H2'	1:2A:581:C:C6	2.56	0.41
1:2A:584:C:OP2	16:2U:6:THR:OG1	2.38	0.41
1:2A:704:G:H1'	1:2A:726:G:N2	2.36	0.41
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.55	0.41
1:2A:984:A:H5"	1:2A:985:C:C5	2.56	0.41
1:2A:1087:G:H1	1:2A:1102:C:H42	1.68	0.41
1:2A:1117:G:H2'	1:2A:1118:C:C6	2.56	0.41
1:2A:1203:G:C6	1:2A:1204:A:N6	2.89	0.41
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.31	0.41
1:2A:1669:A:H5"	1:2A:2550:G:OP1	2.21	0.41
1:2A:1697:G:OP2	1:2A:1698:A:O2'	2.34	0.41
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.54	0.41
1:2A:2621:A:OP1	4:2E:119:ARG:NH2	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:50:GLY:O	4:2E:51:PHE:HB2	2.20	0.41
7:2H:74:ASN:OD1	7:2H:138:LYS:HD2	2.21	0.41
7:2H:149:ARG:HG3	7:2H:162:ILE:O	2.20	0.41
9:2N:109:LYS:HD3	9:2N:109:LYS:HA	1.80	0.41
10:2O:87:ILE:HD12	10:2O:91:LEU:HA	2.02	0.41
12:2Q:52:VAL:HG13	21:2Z:183:LEU:HD13	2.03	0.41
13:2R:104:ARG:HD2	13:2R:109:ALA:HB3	2.03	0.41
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	2.02	0.41
20:2Y:97:ARG:HH21	20:2Y:107:ASP:C	2.29	0.41
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.52	0.41
21:2Z:179:ASP:O	21:2Z:182:LYS:HG2	2.20	0.41
26:24:64:GLY:C	26:24:66:SER:H	2.29	0.41
32:2a:524:G:H2'	32:2a:525:C:C6	2.56	0.41
32:2a:762:C:H2'	32:2a:763:G:C8	2.56	0.41
32:2a:1371:G:OP1	40:2i:12:GLU:HB2	2.21	0.41
34:2c:43:LEU:O	34:2c:47:LEU:HB2	2.21	0.41
36:2e:80:ILE:HG22	36:2e:91:LEU:HB2	2.03	0.41
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	2.02	0.41
38:2g:69:VAL:HG12	38:2g:100:ALA:HA	2.01	0.41
39:2h:12:ARG:HD2	39:2h:26:VAL:HG12	2.03	0.41
42:2k:115:PRO:C	42:2k:117:ASN:HA	2.46	0.41
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.21	0.41
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	2.02	0.41
44:2m:14:ARG:NE	44:2m:42:ALA:HA	2.35	0.41
44:2m:15:VAL:HG13	44:2m:43:THR:O	2.21	0.41
1:1A:71:A:H5"	1:1A:73:A:C8	2.56	0.41
1:1A:579:G:H2'	1:1A:580:C:C6	2.56	0.41
1:1A:601:C:O2'	1:1A:605:C:H5"	2.21	0.41
1:1A:1514:U:H2'	1:1A:1515:G:H8	1.86	0.41
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.21	0.41
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.56	0.41
25:13:23:LEU:HD13	25:13:50:VAL:HG11	2.03	0.41
32:1a:529:G:O6	43:1l:49:ASN:HA	2.21	0.41
32:1a:1172:C:H2'	32:1a:1173:G:C8	2.56	0.41
32:1a:1203:C:H2'	32:1a:1204:A:O4'	2.21	0.41
36:1e:87:SER:OG	36:1e:125:SER:O	2.35	0.41
1:2A:858:U:O2	1:2A:2268:A:H2'	2.21	0.41
1:2A:1035:U:H2'	1:2A:1036:G:C8	2.56	0.41
1:2A:1275:A:N1	1:2A:1295:C:O2'	2.46	0.41
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.56	0.41
10:2O:53:LYS:HG2	10:2O:56:ASP:OD2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:15:ILE:HD12	26:24:21:VAL:HG22	2.03	0.41
32:2a:598:U:H2'	32:2a:599:C:C6	2.56	0.41
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.86	0.41
32:2a:1272:G:C6	32:2a:1273:G:C5	3.09	0.41
32:2a:1347:G:H22	32:2a:1374:A:P	2.43	0.41
32:2a:1469:G:H2'	32:2a:1470:G:C8	2.56	0.41
33:2b:47:THR:HA	33:2b:202:PRO:HG2	2.02	0.41
33:2b:95:GLN:HB3	33:2b:148:TYR:HD1	1.85	0.41
33:2b:137:ARG:O	33:2b:141:GLU:HG3	2.20	0.41
34:2c:114:PRO:HB3	34:2c:185:GLY:HA3	2.03	0.41
48:2q:22:LEU:HD13	48:2q:41:LYS:HG3	2.03	0.41
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.45	0.41
1:1A:1199:U:H5'	60:1A:4465:HOH:O	2.20	0.40
1:1A:1309:G:O6	60:1A:4173:HOH:O	2.21	0.40
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.21	0.40
1:1A:2774:C:H2'	1:1A:2775:A:O4'	2.20	0.40
1:1A:2889:C:H2'	1:1A:2891:G:O4'	2.21	0.40
4:1E:154:LYS:HG2	4:1E:156:MET:HE3	2.01	0.40
10:1O:12:ASP:OD2	60:1O:302:HOH:O	2.22	0.40
12:1Q:108:GLY:HA3	21:1Z:116:VAL:HG13	2.03	0.40
16:1U:28:ARG:NH1	16:1U:38:THR:OG1	2.48	0.40
22:10:40:GLN:HE21	22:10:57:PHE:HB3	1.86	0.40
25:13:4:LEU:O	25:13:36:VAL:HA	2.21	0.40
32:1a:407:G:H5"	35:1d:115:ARG:HG2	2.03	0.40
32:1a:966:M2G:O2'	40:1i:127:LYS:O	2.39	0.40
34:1c:19:GLU:HA	34:1c:54:ARG:HH12	1.86	0.40
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	2.04	0.40
1:2A:658:C:H2'	1:2A:659:C:C6	2.57	0.40
1:2A:1200:C:H5'	60:2A:3827:HOH:O	2.20	0.40
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.42	0.40
1:2A:2881:C:H2'	1:2A:2882:A:O4'	2.21	0.40
60:2A:5114:HOH:O	10:2O:31:LYS:HE3	2.21	0.40
6:2G:142:PRO:O	26:24:31:ILE:HD13	2.21	0.40
9:2N:99:LEU:HD23	9:2N:99:LEU:HA	1.92	0.40
21:2Z:152:ALA:O	21:2Z:155:LEU:HB3	2.21	0.40
33:2b:9:GLU:O	33:2b:11:LEU:N	2.54	0.40
33:2b:88:ALA:HB1	33:2b:90:MET:HG3	2.03	0.40
38:2g:46:ALA:O	38:2g:50:ILE:HG23	2.22	0.40
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	2.03	0.40
48:2q:74:LEU:HD23	48:2q:74:LEU:HA	1.89	0.40
1:1A:438:G:H2'	1:1A:440:G:C8	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1354:A:H5'	60:1A:5345:HOH:O	2.22	0.40
1:1A:2145:C:H2'	1:1A:2147:G:H21	1.85	0.40
4:1E:1:MET:O	4:1E:84:PHE:HB2	2.20	0.40
5:1F:74:ARG:H	5:1F:74:ARG:HG3	1.48	0.40
6:1G:67:LYS:HD3	26:14:5:ILE:HD12	2.03	0.40
7:1H:41:MET:HE2	7:1H:65:HIS:HA	2.04	0.40
32:1a:108:G:C6	51:1t:15:ARG:HG2	2.57	0.40
32:1a:441:A:OP2	32:1a:441:A:H8	2.04	0.40
32:1a:612:C:O2	32:1a:629:G:N2	2.54	0.40
32:1a:1220:G:H21	50:1s:54:GLY:CA	2.33	0.40
37:1f:38:GLU:OE1	37:1f:64:GLN:NE2	2.37	0.40
41:1j:34:VAL:HG12	41:1j:74:ILE:HA	2.03	0.40
47:1p:60:LEU:HD12	47:1p:60:LEU:HA	1.81	0.40
1:2A:244:A:C2	1:2A:255:A:C4	3.08	0.40
1:2A:583:G:OP2	16:2U:10:ARG:HD2	2.22	0.40
1:2A:1006:C:C2	1:2A:1138:G:N2	2.89	0.40
1:2A:1857:G:C6	1:2A:1858:G:C6	3.09	0.40
1:2A:2336:A:H61	22:20:43:THR:HG22	1.86	0.40
6:2G:41:GLN:O	6:2G:43:LEU:N	2.54	0.40
7:2H:54:ARG:HB3	7:2H:65:HIS:CG	2.57	0.40
7:2H:121:ILE:HD13	7:2H:135:GLY:HA3	2.02	0.40
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.21	0.40
32:2a:1263:C:H2'	32:2a:1264:C:H6	1.85	0.40
32:2a:1491:G:O2'	32:2a:1492:A:OP1	2.33	0.40
33:2b:175:ARG:NH1	33:2b:175:ARG:HB3	2.36	0.40
34:2c:152:ILE:HG22	34:2c:167:TRP:HB3	2.03	0.40
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.21	0.40
47:2p:2:VAL:O	47:2p:64:ALA:HA	2.22	0.40
1:1A:1064:C:C4	1:1A:1074:G:O6	2.75	0.40
1:1A:1174:A:C1'	1:1A:1175:U:H5'	2.51	0.40
1:1A:1784:A:H4'	1:1A:1785:A:O5'	2.22	0.40
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.57	0.40
1:1A:2186:G:C2	1:1A:2187:G:C8	3.09	0.40
6:1G:111:LEU:HB2	6:1G:112:PRO:HD3	2.03	0.40
15:1T:9:LEU:HD12	15:1T:9:LEU:HA	1.81	0.40
32:1a:621:A:H2'	32:1a:622:A:C8	2.56	0.40
32:1a:674:G:H2'	32:1a:675:A:C8	2.56	0.40
32:1a:1027:C:H2'	32:1a:1028:C:C4	2.57	0.40
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.57	0.40
36:1e:69:VAL:HG11	36:1e:113:ALA:HB1	2.02	0.40
40:1i:92:TYR:O	40:1i:96:LEU:HB2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.56	0.40
1:2A:373:U:H2'	1:2A:374:A:C8	2.56	0.40
1:2A:900:A:H2'	1:2A:901:A:O4'	2.22	0.40
1:2A:956:G:OP2	12:2Q:14:ARG:NH2	2.53	0.40
1:2A:1999:C:H4'	1:2A:2723:C:O2	2.21	0.40
1:2A:2294:C:P	14:2S:89:ARG:HH22	2.45	0.40
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.54	0.40
1:2A:2579:C:H4'	4:2E:134:ILE:HG12	2.03	0.40
27:25:49:CYS:O	27:25:51:TYR:HD2	2.04	0.40
32:2a:410:G:H2'	32:2a:429:U:C4	2.56	0.40
32:2a:501:C:H1'	32:2a:549:C:H1'	2.03	0.40
32:2a:964:A:N3	32:2a:969:A:O2'	2.41	0.40
32:2a:993:G:H2'	32:2a:995:C:H41	1.86	0.40
32:2a:1121:U:C2'	32:2a:1122:U:H5'	2.51	0.40
32:2a:1126:U:O4	41:2j:71:LEU:HD12	2.21	0.40
32:2a:1291:G:H4'	40:2i:39:GLY:HA3	2.03	0.40
40:2i:25:LYS:O	40:2i:60:ASP:HB2	2.21	0.40
1:1A:2046:G:H5'	27:15:19:ARG:HG3	2.02	0.40
1:1A:2881:C:H2'	1:1A:2882:A:O4'	2.20	0.40
8:1I:44:LEU:HD12	8:1I:44:LEU:HA	1.95	0.40
11:1P:3:LEU:HD12	11:1P:3:LEU:HA	1.96	0.40
30:18:61:LEU:O	30:18:63:PRO:HD3	2.22	0.40
32:1a:116:A:OP1	60:1a:1926:HOH:O	2.21	0.40
32:1a:501:C:H1'	32:1a:549:C:H1'	2.03	0.40
32:1a:731:G:OP1	32:1a:766:A:H1'	2.21	0.40
32:1a:1190:G:H4'	34:1c:176:HIS:CE1	2.57	0.40
33:1b:70:PHE:O	33:1b:92:TYR:HA	2.22	0.40
38:1g:8:GLU:OE1	38:1g:8:GLU:N	2.45	0.40
1:2A:19:C:H2'	1:2A:20:C:H6	1.86	0.40
1:2A:643:A:N1	1:2A:2369:A:O2'	2.47	0.40
1:2A:1110:G:H1'	1:2A:1111:A:C8	2.56	0.40
1:2A:1754:C:H2'	1:2A:1755:A:O4'	2.22	0.40
1:2A:1830:C:OP2	60:2A:3907:HOH:O	2.22	0.40
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.57	0.40
1:2A:2864:G:OP1	15:2T:119:LYS:HE3	2.22	0.40
6:2G:5:VAL:HG22	6:2G:8:LYS:CB	2.50	0.40
6:2G:86:MET:HA	6:2G:87:PRO:HD3	1.94	0.40
15:2T:45:PHE:CE1	15:2T:74:ARG:HG3	2.55	0.40
25:23:10:LYS:HB3	25:23:53:LEU:HA	2.03	0.40
27:25:16:ARG:O	27:25:19:ARG:HB3	2.21	0.40
30:28:62:LEU:HB3	30:28:65:GLU:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:29:1:MET:HG3	31:29:2:LYS:N	2.36	0.40
32:2a:152:A:N6	32:2a:170:U:C2	2.90	0.40
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.28	0.40
32:2a:433:C:H2'	32:2a:434:U:H6	1.86	0.40
32:2a:742:G:OP1	46:2o:35:ARG:NH2	2.54	0.40
32:2a:865:A:H2'	32:2a:866:C:O4'	2.20	0.40
32:2a:981:U:O4	60:2a:3312:HOH:O	2.22	0.40
32:2a:1035:A:O2'	32:2a:1036:G:C8	2.75	0.40
32:2a:1425:U:H2'	32:2a:1426:C:C6	2.57	0.40
32:2a:1508:G:H5'	60:2a:3366:HOH:O	2.21	0.40
33:2b:105:PHE:HD1	33:2b:158:LEU:HD13	1.86	0.40
33:2b:126:GLU:CD	33:2b:126:GLU:H	2.30	0.40
33:2b:178:ARG:NH2	39:2h:74:PRO:HB3	2.34	0.40
40:2i:50:LEU:HD23	40:2i:50:LEU:H	1.85	0.40
47:2p:23:ASP:C	47:2p:25:ARG:H	2.28	0.40
50:2s:41:VAL:HG22	50:2s:42:PRO:HD2	2.02	0.40
50:2s:77:THR:O	50:2s:77:THR:OG1	2.38	0.40
1:1A:196:A:N3	1:1A:196:A:H2'	2.36	0.40
1:1A:1064:C:N4	1:1A:1065:U:C2	2.89	0.40
1:1A:2070:G:H2'	1:1A:2071:A:O4'	2.22	0.40
5:1F:181:LEU:HD12	5:1F:181:LEU:HA	1.89	0.40
18:1W:6:ILE:HA	18:1W:103:ILE:O	2.21	0.40
32:1a:346:G:OP2	56:1a:1878:MPD:HM1	2.22	0.40
32:1a:539:A:OP2	43:1l:115:LYS:NZ	2.50	0.40
32:1a:765:G:H5"	32:1a:766:A:OP1	2.21	0.40
32:1a:797:C:OP1	42:1k:124:LYS:HD2	2.22	0.40
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.21	0.40
32:1a:1310:G:H5'	44:1m:77:ASN:ND2	2.36	0.40
32:1a:1412:C:H2'	32:1a:1413:A:H8	1.86	0.40
35:1d:61:LYS:HD3	35:1d:206:PHE:CD2	2.56	0.40
39:1h:87:SER:C	39:1h:88:LYS:HG2	2.46	0.40
1:2A:272(E):G:C2	1:2A:364:C:C2	3.10	0.40
1:2A:458:G:C8	29:27:37:LYS:HG2	2.56	0.40
1:2A:588:U:H1'	5:2F:90:PHE:CG	2.56	0.40
1:2A:1179:C:H2'	1:2A:1180:C:C6	2.57	0.40
1:2A:2012:G:O3'	18:2W:96:ILE:HG23	2.21	0.40
9:2N:28:THR:HG22	9:2N:29:LYS:HG2	2.03	0.40
23:21:90:ILE:O	23:21:94:LEU:HG	2.21	0.40
26:24:57:GLU:HA	26:24:58:ARG:HA	1.71	0.40
31:29:3:VAL:HA	31:29:35:ARG:O	2.22	0.40
31:29:13:LYS:HG2	31:29:28:GLU:OE2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:64:G:H4'	32:2a:65:U:H3'	2.03	0.40
32:2a:939:G:H1	32:2a:1344:C:H42	1.68	0.40
32:2a:1028:C:H2'	32:2a:1033:G:H22	1.86	0.40
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.49	0.40
33:2b:98:LEU:HD12	33:2b:101:MET:HE2	2.03	0.40
34:2c:5:ILE:HG12	34:2c:6:HIS:N	2.37	0.40
37:2f:89:MET:HE3	37:2f:91:VAL:HG21	2.03	0.40
50:2s:14:HIS:HE1	50:2s:35:SER:OG	2.04	0.40
51:2t:14:LYS:O	51:2t:18:GLN:HG3	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
3	1D	273/276 (99%)	259 (95%)	14 (5%)	0	100 100
3	2D	273/276 (99%)	260 (95%)	12 (4%)	1 (0%)	30 54
4	1E	202/206 (98%)	195 (96%)	6 (3%)	1 (0%)	24 48
4	2E	202/206 (98%)	189 (94%)	12 (6%)	1 (0%)	24 48
5	1F	201/210 (96%)	196 (98%)	4 (2%)	1 (0%)	24 48
5	2F	201/210 (96%)	190 (94%)	10 (5%)	1 (0%)	24 48
6	1G	179/182 (98%)	157 (88%)	17 (10%)	5 (3%)	4 9
6	2G	179/182 (98%)	161 (90%)	14 (8%)	4 (2%)	5 14
7	1H	172/180 (96%)	161 (94%)	10 (6%)	1 (1%)	21 44
7	2H	171/180 (95%)	153 (90%)	16 (9%)	2 (1%)	10 27
8	1I	145/148 (98%)	130 (90%)	14 (10%)	1 (1%)	18 41
8	2I	144/148 (97%)	123 (85%)	19 (13%)	2 (1%)	9 23
9	1N	138/140 (99%)	136 (99%)	2 (1%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
9	2N	138/140 (99%)	130 (94%)	8 (6%)	0	100 100
10	1O	120/122 (98%)	112 (93%)	8 (7%)	0	100 100
10	2O	120/122 (98%)	114 (95%)	6 (5%)	0	100 100
11	1P	147/150 (98%)	141 (96%)	6 (4%)	0	100 100
11	2P	147/150 (98%)	135 (92%)	11 (8%)	1 (1%)	18 41
12	1Q	139/141 (99%)	133 (96%)	5 (4%)	1 (1%)	18 41
12	2Q	139/141 (99%)	132 (95%)	7 (5%)	0	100 100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100 100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100 100
14	1S	108/112 (96%)	100 (93%)	8 (7%)	0	100 100
14	2S	108/112 (96%)	93 (86%)	12 (11%)	3 (3%)	4 9
15	1T	129/146 (88%)	121 (94%)	8 (6%)	0	100 100
15	2T	129/146 (88%)	124 (96%)	5 (4%)	0	100 100
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100 100
17	1V	99/101 (98%)	95 (96%)	2 (2%)	2 (2%)	6 16
17	2V	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	12 32
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100 100
18	2W	110/113 (97%)	108 (98%)	2 (2%)	0	100 100
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	11 29
19	2X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	11 29
20	1Y	105/110 (96%)	96 (91%)	9 (9%)	0	100 100
20	2Y	105/110 (96%)	96 (91%)	9 (9%)	0	100 100
21	1Z	201/206 (98%)	188 (94%)	13 (6%)	0	100 100
21	2Z	199/206 (97%)	176 (88%)	21 (11%)	2 (1%)	12 32
22	10	75/85 (88%)	70 (93%)	5 (7%)	0	100 100
22	20	75/85 (88%)	68 (91%)	6 (8%)	1 (1%)	9 25
23	11	95/98 (97%)	94 (99%)	0	1 (1%)	11 29
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	11 29
24	12	68/72 (94%)	68 (100%)	0	0	100 100
24	22	68/72 (94%)	65 (96%)	3 (4%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
25	13	57/60 (95%)	57 (100%)	0	0	100 100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
26	14	67/71 (94%)	51 (76%)	13 (19%)	3 (4%)	2 4
26	24	67/71 (94%)	46 (69%)	17 (25%)	4 (6%)	1 2
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	48 (94%)	3 (6%)	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	196 (86%)	24 (10%)	9 (4%)	2 5
33	2b	229/256 (90%)	192 (84%)	29 (13%)	8 (4%)	3 6
34	1c	204/239 (85%)	181 (89%)	21 (10%)	2 (1%)	12 32
34	2c	204/239 (85%)	180 (88%)	23 (11%)	1 (0%)	24 48
35	1d	206/209 (99%)	187 (91%)	19 (9%)	0	100 100
35	2d	206/209 (99%)	185 (90%)	19 (9%)	2 (1%)	12 32
36	1e	146/162 (90%)	134 (92%)	12 (8%)	0	100 100
36	2e	146/162 (90%)	138 (94%)	7 (5%)	1 (1%)	18 41
37	1f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100 100
38	1g	153/156 (98%)	147 (96%)	6 (4%)	0	100 100
38	2g	153/156 (98%)	143 (94%)	9 (6%)	1 (1%)	18 41
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	121 (90%)	13 (10%)	1 (1%)	18 41
40	1i	125/128 (98%)	108 (86%)	17 (14%)	0	100 100
40	2i	124/128 (97%)	106 (86%)	13 (10%)	5 (4%)	2 5
41	1j	95/105 (90%)	80 (84%)	11 (12%)	4 (4%)	2 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
41	2j	94/105 (90%)	76 (81%)	14 (15%)	4 (4%)	2 4
42	1k	112/129 (87%)	103 (92%)	8 (7%)	1 (1%)	14 35
42	2k	112/129 (87%)	102 (91%)	9 (8%)	1 (1%)	14 35
43	1l	119/132 (90%)	109 (92%)	10 (8%)	0	100 100
43	2l	119/132 (90%)	107 (90%)	11 (9%)	1 (1%)	16 37
44	1m	114/126 (90%)	107 (94%)	5 (4%)	2 (2%)	6 18
44	2m	112/126 (89%)	99 (88%)	8 (7%)	5 (4%)	2 4
45	1n	58/61 (95%)	55 (95%)	2 (3%)	1 (2%)	7 19
45	2n	58/61 (95%)	54 (93%)	4 (7%)	0	100 100
46	1o	86/89 (97%)	81 (94%)	3 (4%)	2 (2%)	5 13
46	2o	86/89 (97%)	81 (94%)	4 (5%)	1 (1%)	10 27
47	1p	80/88 (91%)	65 (81%)	14 (18%)	1 (1%)	9 25
47	2p	80/88 (91%)	65 (81%)	14 (18%)	1 (1%)	9 25
48	1q	97/105 (92%)	89 (92%)	8 (8%)	0	100 100
48	2q	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
49	1r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
49	2r	66/88 (75%)	64 (97%)	1 (2%)	1 (2%)	8 22
50	1s	81/93 (87%)	72 (89%)	9 (11%)	0	100 100
50	2s	81/93 (87%)	72 (89%)	8 (10%)	1 (1%)	10 27
51	1t	94/106 (89%)	84 (89%)	7 (7%)	3 (3%)	3 7
51	2t	96/106 (91%)	88 (92%)	7 (7%)	1 (1%)	12 32
52	1u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100
52	2u	21/27 (78%)	18 (86%)	2 (10%)	1 (5%)	2 3
53	1y	95/113 (84%)	93 (98%)	2 (2%)	0	100 100
53	2y	94/113 (83%)	89 (95%)	5 (5%)	0	100 100
All	All	11629/12354 (94%)	10741 (92%)	785 (7%)	103 (1%)	14 35

All (103) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	47	LYS
26	14	44	THR

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Mol	Chain	Res	Type
33	1b	9	GLU
33	1b	17	PHE
33	1b	124	SER
33	1b	127	ILE
4	2E	51	PHE
5	2F	130	ALA
8	2I	10	GLU
14	2S	96	GLY
26	24	62	ARG
33	2b	17	PHE
33	2b	20	GLU
44	2m	5	ALA
6	1G	50	ALA
6	1G	126	ASP
7	1H	126	PRO
17	1V	79	VAL
19	1X	94	GLY
33	1b	21	ARG
47	1p	16	HIS
6	2G	81	LYS
6	2G	126	ASP
17	2V	79	VAL
19	2X	94	GLY
26	24	49	PHE
33	2b	10	LEU
38	2g	7	ALA
40	2i	44	VAL
41	2j	55	LYS
44	2m	67	GLU
12	1Q	59	ARG
45	1n	19	ARG
46	1o	19	PRO
11	2P	29	LYS
22	20	73	GLY
23	21	3	LYS
33	2b	16	HIS
33	2b	28	PHE
34	2c	156	ARG
40	2i	121	ARG
41	2j	75	ILE
44	2m	106	ASN
52	2u	7	ARG

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Mol	Chain	Res	Type
4	1E	52	LEU
6	1G	43	LEU
6	1G	54	GLU
8	1I	85	GLU
26	14	55	ARG
33	1b	8	LYS
33	1b	231	GLU
34	1c	107	GLN
41	1j	26	ALA
44	1m	67	GLU
44	1m	106	ASN
51	1t	47	GLY
51	1t	95	ALA
8	2I	117	GLU
21	2Z	52	SER
26	24	39	CYS
26	24	55	ARG
35	2d	5	ILE
40	2i	52	ALA
40	2i	96	LEU
42	2k	87	THR
23	11	3	LYS
26	14	57	GLU
41	1j	55	LYS
41	1j	78	ASN
42	1k	100	ALA
46	1o	86	GLY
7	2H	129	THR
14	2S	31	SER
14	2S	35	ILE
21	2Z	104	PHE
33	2b	95	GLN
33	2b	125	PRO
36	2e	37	ARG
40	2i	54	ASP
41	2j	78	ASN
44	2m	95	GLY
46	2o	88	ARG
47	2p	48	TRP
49	2r	36	ASN
50	2s	29	ARG
17	1V	43	GLU

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Mol	Chain	Res	Type
33	1b	20	GLU
51	1t	100	ILE
33	2b	124	SER
43	2l	105	TYR
34	1c	158	GLY
41	1j	77	PRO
3	2D	125	ILE
6	2G	42	GLY
6	2G	88	ILE
7	2H	55	PRO
44	2m	4	ILE
51	2t	100	ILE
33	1b	125	PRO
35	2d	171	GLY
39	2h	51	VAL
41	2j	77	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	214/218 (98%)	192 (90%)	22 (10%)	7 18
3	2D	215/218 (99%)	190 (88%)	25 (12%)	5 13
4	1E	164/166 (99%)	145 (88%)	19 (12%)	5 13
4	2E	164/166 (99%)	141 (86%)	23 (14%)	3 9
5	1F	160/166 (96%)	140 (88%)	20 (12%)	4 11
5	2F	159/166 (96%)	138 (87%)	21 (13%)	4 10
6	1G	144/156 (92%)	131 (91%)	13 (9%)	9 23
6	2G	142/156 (91%)	117 (82%)	25 (18%)	2 5
7	1H	144/148 (97%)	132 (92%)	12 (8%)	10 26
7	2H	143/148 (97%)	125 (87%)	18 (13%)	4 11
8	1I	111/124 (90%)	94 (85%)	17 (15%)	3 7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
8	2I	108/124 (87%)	95 (88%)	13 (12%)	5 12
9	1N	119/119 (100%)	105 (88%)	14 (12%)	5 13
9	2N	118/119 (99%)	99 (84%)	19 (16%)	2 6
10	1O	100/100 (100%)	95 (95%)	5 (5%)	22 48
10	2O	100/100 (100%)	97 (97%)	3 (3%)	36 66
11	1P	115/116 (99%)	106 (92%)	9 (8%)	11 29
11	2P	115/116 (99%)	104 (90%)	11 (10%)	8 20
12	1Q	111/111 (100%)	102 (92%)	9 (8%)	11 27
12	2Q	111/111 (100%)	102 (92%)	9 (8%)	11 27
13	1R	101/101 (100%)	86 (85%)	15 (15%)	3 8
13	2R	101/101 (100%)	87 (86%)	14 (14%)	3 9
14	1S	87/88 (99%)	80 (92%)	7 (8%)	11 28
14	2S	85/88 (97%)	68 (80%)	17 (20%)	1 4
15	1T	115/127 (91%)	107 (93%)	8 (7%)	14 34
15	2T	113/127 (89%)	102 (90%)	11 (10%)	8 20
16	1U	93/94 (99%)	82 (88%)	11 (12%)	5 13
16	2U	93/94 (99%)	84 (90%)	9 (10%)	8 20
17	1V	81/82 (99%)	70 (86%)	11 (14%)	3 9
17	2V	80/82 (98%)	70 (88%)	10 (12%)	4 11
18	1W	90/92 (98%)	82 (91%)	8 (9%)	9 23
18	2W	90/92 (98%)	79 (88%)	11 (12%)	5 12
19	1X	77/78 (99%)	72 (94%)	5 (6%)	15 37
19	2X	77/78 (99%)	75 (97%)	2 (3%)	40 70
20	1Y	86/91 (94%)	77 (90%)	9 (10%)	6 17
20	2Y	86/91 (94%)	77 (90%)	9 (10%)	6 17
21	1Z	169/179 (94%)	148 (88%)	21 (12%)	4 11
21	2Z	165/179 (92%)	149 (90%)	16 (10%)	8 20
22	10	61/67 (91%)	58 (95%)	3 (5%)	22 49
22	20	61/67 (91%)	58 (95%)	3 (5%)	22 49
23	11	79/83 (95%)	75 (95%)	4 (5%)	21 48
23	21	81/83 (98%)	75 (93%)	6 (7%)	13 32

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
24	12	65/67 (97%)	63 (97%)	2 (3%)	35 65
24	22	66/67 (98%)	60 (91%)	6 (9%)	9 22
25	13	51/52 (98%)	42 (82%)	9 (18%)	2 5
25	23	50/52 (96%)	44 (88%)	6 (12%)	5 12
26	14	58/63 (92%)	51 (88%)	7 (12%)	5 12
26	24	54/63 (86%)	46 (85%)	8 (15%)	3 8
27	15	51/52 (98%)	47 (92%)	4 (8%)	11 29
27	25	50/52 (96%)	48 (96%)	2 (4%)	28 56
28	16	51/52 (98%)	44 (86%)	7 (14%)	3 9
28	26	50/52 (96%)	48 (96%)	2 (4%)	28 56
29	17	41/42 (98%)	37 (90%)	4 (10%)	7 19
29	27	41/42 (98%)	40 (98%)	1 (2%)	43 72
30	18	54/55 (98%)	49 (91%)	5 (9%)	8 21
30	28	54/55 (98%)	51 (94%)	3 (6%)	19 44
31	19	34/34 (100%)	31 (91%)	3 (9%)	9 23
31	29	34/34 (100%)	34 (100%)	0	100 100
33	1b	191/220 (87%)	167 (87%)	24 (13%)	4 11
33	2b	187/220 (85%)	160 (86%)	27 (14%)	3 8
34	1c	144/188 (77%)	132 (92%)	12 (8%)	10 26
34	2c	140/188 (74%)	126 (90%)	14 (10%)	7 19
35	1d	171/181 (94%)	151 (88%)	20 (12%)	5 13
35	2d	172/181 (95%)	152 (88%)	20 (12%)	5 13
36	1e	114/123 (93%)	101 (89%)	13 (11%)	5 14
36	2e	114/123 (93%)	99 (87%)	15 (13%)	4 10
37	1f	85/90 (94%)	81 (95%)	4 (5%)	23 51
37	2f	85/90 (94%)	78 (92%)	7 (8%)	10 27
38	1g	120/127 (94%)	107 (89%)	13 (11%)	6 16
38	2g	119/127 (94%)	110 (92%)	9 (8%)	12 30
39	1h	116/119 (98%)	106 (91%)	10 (9%)	10 25
39	2h	114/119 (96%)	105 (92%)	9 (8%)	11 28
40	1i	91/99 (92%)	79 (87%)	12 (13%)	4 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
40	2i	88/99 (89%)	76 (86%)	12 (14%)	3 9
41	1j	68/92 (74%)	59 (87%)	9 (13%)	4 10
41	2j	68/92 (74%)	60 (88%)	8 (12%)	5 13
42	1k	83/99 (84%)	79 (95%)	4 (5%)	23 50
42	2k	83/99 (84%)	72 (87%)	11 (13%)	4 10
43	1l	96/108 (89%)	88 (92%)	8 (8%)	10 26
43	2l	96/108 (89%)	85 (88%)	11 (12%)	5 14
44	1m	90/101 (89%)	83 (92%)	7 (8%)	11 29
44	2m	87/101 (86%)	78 (90%)	9 (10%)	7 18
45	1n	49/50 (98%)	41 (84%)	8 (16%)	2 6
45	2n	49/50 (98%)	42 (86%)	7 (14%)	3 8
46	1o	78/80 (98%)	73 (94%)	5 (6%)	16 38
46	2o	78/80 (98%)	73 (94%)	5 (6%)	16 38
47	1p	69/74 (93%)	56 (81%)	13 (19%)	1 4
47	2p	68/74 (92%)	57 (84%)	11 (16%)	2 6
48	1q	94/97 (97%)	85 (90%)	9 (10%)	8 20
48	2q	94/97 (97%)	85 (90%)	9 (10%)	8 20
49	1r	59/77 (77%)	54 (92%)	5 (8%)	10 25
49	2r	59/77 (77%)	53 (90%)	6 (10%)	7 18
50	1s	68/80 (85%)	61 (90%)	7 (10%)	7 18
50	2s	67/80 (84%)	56 (84%)	11 (16%)	2 6
51	1t	71/82 (87%)	67 (94%)	4 (6%)	19 44
51	2t	70/82 (85%)	62 (89%)	8 (11%)	5 14
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19 44
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19 44
53	1y	82/98 (84%)	73 (89%)	9 (11%)	6 15
53	2y	79/98 (81%)	67 (85%)	12 (15%)	3 7
All	All	9524/10260 (93%)	8519 (89%)	1005 (11%)	6 17

All (1005) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL

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Mol	Chain	Res	Type
3	1D	37	LEU
3	1D	39	LYS
3	1D	61	LEU
3	1D	69	ARG
3	1D	94	LEU
3	1D	103	ARG
3	1D	106	ILE
3	1D	111	LEU
3	1D	116	GLN
3	1D	138	VAL
3	1D	141	VAL
3	1D	142	VAL
3	1D	155	LEU
3	1D	173	VAL
3	1D	183	ARG
3	1D	193	VAL
3	1D	211	ARG
3	1D	217	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	1	MET
4	1E	9	VAL
4	1E	12	THR
4	1E	21	VAL
4	1E	33	VAL
4	1E	34	VAL
4	1E	36	ARG
4	1E	41	LYS
4	1E	49	LEU
4	1E	73	GLU
4	1E	75	VAL
4	1E	116	VAL
4	1E	119	ARG
4	1E	144	ARG
4	1E	145	LYS
4	1E	154	LYS
4	1E	175	VAL
4	1E	178	GLU
4	1E	181	LEU
5	1F	18	ARG
5	1F	24	LEU

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Mol	Chain	Res	Type
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	110	LEU
5	1F	125	LEU
5	1F	132	VAL
5	1F	140	LEU
5	1F	157	VAL
5	1F	158	THR
5	1F	162	LEU
5	1F	170	LEU
5	1F	183	VAL
5	1F	191	ARG
5	1F	192	LEU
5	1F	197	ASP
5	1F	201	VAL
6	1G	5	VAL
6	1G	7	LEU
6	1G	28	VAL
6	1G	43	LEU
6	1G	52	ILE
6	1G	53	LEU
6	1G	79	ASN
6	1G	108	ASN
6	1G	140	ILE
6	1G	159	VAL
6	1G	165	THR
6	1G	170	ARG
6	1G	175	LEU
7	1H	2	SER
7	1H	15	VAL
7	1H	24	VAL
7	1H	44	VAL
7	1H	45	VAL
7	1H	49	VAL
7	1H	71	LEU
7	1H	105	LEU
7	1H	119	GLU
7	1H	122	THR
7	1H	153	LYS

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Mol	Chain	Res	Type
7	1H	172	LYS
8	1I	9	LEU
8	1I	10	GLU
8	1I	15	VAL
8	1I	38	LEU
8	1I	43	ASN
8	1I	44	LEU
8	1I	74	ASN
8	1I	75	LEU
8	1I	78	THR
8	1I	85	GLU
8	1I	92	VAL
8	1I	101	LEU
8	1I	104	GLN
8	1I	105	HIS
8	1I	109	ILE
8	1I	127	VAL
8	1I	140	LEU
9	1N	14	VAL
9	1N	33	LEU
9	1N	34	LEU
9	1N	46	VAL
9	1N	48	MET
9	1N	61	ARG
9	1N	65	LYS
9	1N	67	LEU
9	1N	73	THR
9	1N	87	LEU
9	1N	97	ARG
9	1N	99	LEU
9	1N	121	LYS
9	1N	133	GLN
10	1O	8	LEU
10	1O	10	VAL
10	1O	24	VAL
10	1O	94	ARG
10	1O	98	VAL
11	1P	1	MET
11	1P	59	LEU
11	1P	75	ILE
11	1P	83	VAL
11	1P	95	VAL

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Mol	Chain	Res	Type
11	1P	112	LEU
11	1P	125	VAL
11	1P	147	LEU
11	1P	149	GLU
12	1Q	2	LEU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	16	ARG
12	1Q	35	VAL
12	1Q	55	VAL
12	1Q	75	THR
12	1Q	81	VAL
12	1Q	109	VAL
13	1R	29	LEU
13	1R	33	ARG
13	1R	36	THR
13	1R	44	LEU
13	1R	54	LEU
13	1R	65	LEU
13	1R	67	LEU
13	1R	75	LEU
13	1R	83	ILE
13	1R	96	ARG
13	1R	100	LEU
13	1R	102	GLU
13	1R	111	LEU
13	1R	114	VAL
13	1R	117	VAL
14	1S	14	VAL
14	1S	20	ARG
14	1S	46	VAL
14	1S	50	SER
14	1S	59	LYS
14	1S	67	ARG
14	1S	110	LEU
15	1T	15	VAL
15	1T	18	ASP
15	1T	28	VAL
15	1T	39	ARG
15	1T	49	VAL
15	1T	67	SER
15	1T	96	ARG

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Mol	Chain	Res	Type
15	1T	128	GLU
16	1U	8	VAL
16	1U	16	LYS
16	1U	27	LEU
16	1U	52	ARG
16	1U	59	ARG
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
16	1U	104	GLN
16	1U	110	VAL
16	1U	112	ARG
17	1V	35	LEU
17	1V	46	VAL
17	1V	51	VAL
17	1V	52	VAL
17	1V	61	VAL
17	1V	62	LEU
17	1V	70	ILE
17	1V	72	VAL
17	1V	79	VAL
17	1V	82	ARG
17	1V	100	ARG
18	1W	11	ARG
18	1W	17	VAL
18	1W	19	LEU
18	1W	23	LEU
18	1W	67	ASP
18	1W	96	ILE
18	1W	100	THR
18	1W	107	LEU
19	1X	23	GLU
19	1X	35	THR
19	1X	66	LEU
19	1X	72	LYS
19	1X	81	VAL
20	1Y	14	LEU
20	1Y	31	LEU
20	1Y	43	ASN
20	1Y	51	VAL
20	1Y	72	VAL
20	1Y	81	LYS

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Mol	Chain	Res	Type
20	1Y	85	VAL
20	1Y	90	LEU
20	1Y	107	ASP
21	1Z	37	VAL
21	1Z	52	SER
21	1Z	61	LEU
21	1Z	76	LEU
21	1Z	77	ASP
21	1Z	86	VAL
21	1Z	91	LEU
21	1Z	93	ASP
21	1Z	96	VAL
21	1Z	97	GLU
21	1Z	103	ARG
21	1Z	126	VAL
21	1Z	150	LEU
21	1Z	154	ASP
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	180	VAL
21	1Z	185	GLU
21	1Z	197	ILE
21	1Z	202	GLU
21	1Z	203	GLU
22	10	39	ARG
22	10	59	LEU
22	10	74	ARG
23	11	21	ARG
23	11	30	VAL
23	11	33	LYS
23	11	95	LEU
24	12	32	LEU
24	12	70	GLN
25	13	6	VAL
25	13	8	LEU
25	13	23	LEU
25	13	31	LEU
25	13	36	VAL
25	13	44	ARG
25	13	54	VAL
25	13	56	VAL
25	13	58	VAL

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Mol	Chain	Res	Type
26	14	3	GLU
26	14	27	THR
26	14	30	GLU
26	14	49	PHE
26	14	52	THR
26	14	56	VAL
26	14	60	GLN
27	15	6	VAL
27	15	16	ARG
27	15	29	THR
27	15	35	GLU
28	16	5	VAL
28	16	9	LEU
28	16	14	THR
28	16	19	ARG
28	16	47	THR
28	16	48	VAL
28	16	52	VAL
29	17	24	THR
29	17	32	LYS
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	15	LYS
30	18	26	LYS
30	18	29	LYS
30	18	32	LEU
31	19	9	ARG
31	19	17	ILE
31	19	35	ARG
33	1b	7	VAL
33	1b	15	VAL
33	1b	44	LEU
33	1b	47	THR
33	1b	68	ILE
33	1b	71	VAL
33	1b	90	MET
33	1b	107	THR
33	1b	112	VAL
33	1b	122	PHE
33	1b	126	GLU
33	1b	127	ILE

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Mol	Chain	Res	Type
33	1b	128	GLU
33	1b	160	ASP
33	1b	168	THR
33	1b	178	ARG
33	1b	184	VAL
33	1b	185	ILE
33	1b	191	ASP
33	1b	196	LEU
33	1b	208	ILE
33	1b	211	ILE
33	1b	215	LEU
33	1b	230	VAL
34	1c	3	ASN
34	1c	4	LYS
34	1c	8	ILE
34	1c	68	VAL
34	1c	89	GLU
34	1c	105	GLU
34	1c	116	VAL
34	1c	127	ARG
34	1c	143	GLU
34	1c	188	LEU
34	1c	192	THR
34	1c	196	LEU
35	1d	5	ILE
35	1d	17	VAL
35	1d	19	LEU
35	1d	70	ILE
35	1d	76	ARG
35	1d	80	GLU
35	1d	108	LEU
35	1d	112	VAL
35	1d	115	ARG
35	1d	119	GLN
35	1d	135	LEU
35	1d	150	GLU
35	1d	158	ILE
35	1d	159	ARG
35	1d	170	VAL
35	1d	178	VAL
35	1d	188	LEU
35	1d	190	ASP

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Mol	Chain	Res	Type
35	1d	194	LEU
35	1d	196	LEU
36	1e	10	MET
36	1e	12	LEU
36	1e	13	ILE
36	1e	31	LEU
36	1e	41	VAL
36	1e	69	VAL
36	1e	79	GLU
36	1e	80	ILE
36	1e	91	LEU
36	1e	92	LYS
36	1e	120	THR
36	1e	144	THR
36	1e	147	ASP
37	1f	40	VAL
37	1f	55	ASP
37	1f	69	GLU
37	1f	73	ASN
38	1g	6	ARG
38	1g	15	ASP
38	1g	21	VAL
38	1g	24	THR
38	1g	45	ASP
38	1g	75	VAL
38	1g	91	VAL
38	1g	97	GLN
38	1g	98	SER
38	1g	104	LEU
38	1g	113	GLU
38	1g	143	ARG
38	1g	144	MET
39	1h	25	ASP
39	1h	26	VAL
39	1h	39	LEU
39	1h	51	VAL
39	1h	52	ASP
39	1h	63	LEU
39	1h	69	ARG
39	1h	99	GLU
39	1h	105	ARG
39	1h	137	VAL

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Mol	Chain	Res	Type
40	1i	2	GLU
40	1i	14	VAL
40	1i	25	LYS
40	1i	41	VAL
40	1i	64	THR
40	1i	65	VAL
40	1i	81	ILE
40	1i	96	LEU
40	1i	103	THR
40	1i	104	ARG
40	1i	108	VAL
40	1i	109	VAL
41	1j	34	VAL
41	1j	38	ILE
41	1j	43	ARG
41	1j	51	ARG
41	1j	72	VAL
41	1j	84	GLN
41	1j	92	THR
41	1j	94	VAL
41	1j	100	THR
42	1k	81	ASP
42	1k	83	ILE
42	1k	87	THR
42	1k	114	VAL
43	1l	18	VAL
43	1l	27	LEU
43	1l	33	ARG
43	1l	36	VAL
43	1l	58	VAL
43	1l	59	ARG
43	1l	83	VAL
43	1l	118	SER
44	1m	11	ARG
44	1m	19	LEU
44	1m	70	LEU
44	1m	94	ARG
44	1m	102	ARG
44	1m	114	ARG
44	1m	117	VAL
45	1n	3	ARG
45	1n	6	LEU

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Mol	Chain	Res	Type
45	1n	7	ILE
45	1n	8	GLU
45	1n	13	THR
45	1n	18	VAL
45	1n	32	SER
45	1n	33	VAL
46	1o	24	SER
46	1o	35	ARG
46	1o	39	LEU
46	1o	40	SER
46	1o	66	LEU
47	1p	2	VAL
47	1p	8	ARG
47	1p	16	HIS
47	1p	20	VAL
47	1p	29	ASP
47	1p	42	ARG
47	1p	45	THR
47	1p	47	ASP
47	1p	54	GLU
47	1p	60	LEU
47	1p	62	VAL
47	1p	67	THR
47	1p	72	ARG
48	1q	11	VAL
48	1q	19	VAL
48	1q	35	VAL
48	1q	60	ILE
48	1q	62	SER
48	1q	63	ARG
48	1q	72	ARG
48	1q	97	SER
48	1q	100	LYS
49	1r	31	LEU
49	1r	46	GLU
49	1r	47	THR
49	1r	78	LEU
49	1r	85	LEU
50	1s	4	SER
50	1s	5	LEU
50	1s	28	LYS
50	1s	37	ARG

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Mol	Chain	Res	Type
50	1s	41	VAL
50	1s	51	VAL
50	1s	67	VAL
51	1t	24	LEU
51	1t	62	LEU
51	1t	84	LEU
51	1t	100	ILE
52	1u	15	ARG
53	1y	3	MET
53	1y	23	ARG
53	1y	41	LEU
53	1y	46	GLN
53	1y	53	THR
53	1y	54	ILE
53	1y	60	VAL
53	1y	66	LYS
53	1y	96	ARG
3	2D	3	VAL
3	2D	37	LEU
3	2D	61	LEU
3	2D	94	LEU
3	2D	99	ASP
3	2D	103	ARG
3	2D	106	ILE
3	2D	111	LEU
3	2D	113	VAL
3	2D	131	LEU
3	2D	138	VAL
3	2D	141	VAL
3	2D	142	VAL
3	2D	145	VAL
3	2D	162	SER
3	2D	181	GLU
3	2D	183	ARG
3	2D	193	VAL
3	2D	211	ARG
3	2D	221	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	274	ARG
3	2D	275	LYS
3	2D	276	LYS

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Mol	Chain	Res	Type
4	2E	1	MET
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR
4	2E	21	VAL
4	2E	24	THR
4	2E	33	VAL
4	2E	34	VAL
4	2E	38	THR
4	2E	49	LEU
4	2E	52	LEU
4	2E	72	VAL
4	2E	75	VAL
4	2E	78	LEU
4	2E	97	LYS
4	2E	116	VAL
4	2E	144	ARG
4	2E	167	VAL
4	2E	170	LEU
4	2E	175	VAL
4	2E	181	LEU
4	2E	184	VAL
4	2E	195	LEU
5	2F	20	LEU
5	2F	33	LEU
5	2F	38	ARG
5	2F	43	LYS
5	2F	51	THR
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	88	VAL
5	2F	126	VAL
5	2F	135	LYS
5	2F	140	LEU
5	2F	158	THR
5	2F	168	ARG
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	195	ASP
5	2F	197	ASP

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Mol	Chain	Res	Type
5	2F	201	VAL
5	2F	205	ARG
6	2G	3	LEU
6	2G	5	VAL
6	2G	28	VAL
6	2G	31	VAL
6	2G	37	VAL
6	2G	39	ILE
6	2G	40	ASN
6	2G	43	LEU
6	2G	47	LYS
6	2G	80	PHE
6	2G	84	LYS
6	2G	88	ILE
6	2G	92	VAL
6	2G	97	ASP
6	2G	98	ARG
6	2G	103	LEU
6	2G	106	LEU
6	2G	111	LEU
6	2G	133	LEU
6	2G	149	VAL
6	2G	152	LEU
6	2G	159	VAL
6	2G	161	THR
6	2G	166	ASP
6	2G	175	LEU
7	2H	15	VAL
7	2H	16	SER
7	2H	23	ARG
7	2H	33	LEU
7	2H	44	VAL
7	2H	45	VAL
7	2H	49	VAL
7	2H	68	THR
7	2H	70	THR
7	2H	71	LEU
7	2H	90	LYS
7	2H	98	LEU
7	2H	115	VAL
7	2H	127	GLU
7	2H	131	VAL

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Mol	Chain	Res	Type
7	2H	134	SER
7	2H	136	ILE
7	2H	139	GLN
8	2I	3	VAL
8	2I	31	LEU
8	2I	38	LEU
8	2I	40	THR
8	2I	44	LEU
8	2I	68	LEU
8	2I	75	LEU
8	2I	92	VAL
8	2I	116	LEU
8	2I	117	GLU
8	2I	127	VAL
8	2I	140	LEU
8	2I	142	VAL
9	2N	5	VAL
9	2N	12	ARG
9	2N	28	THR
9	2N	30	ILE
9	2N	33	LEU
9	2N	34	LEU
9	2N	46	VAL
9	2N	48	MET
9	2N	62	VAL
9	2N	63	THR
9	2N	67	LEU
9	2N	68	GLU
9	2N	73	THR
9	2N	85	ILE
9	2N	87	LEU
9	2N	99	LEU
9	2N	133	GLN
9	2N	134	ARG
9	2N	140	VAL
10	2O	10	VAL
10	2O	38	VAL
10	2O	108	GLU
11	2P	59	LEU
11	2P	71	VAL
11	2P	83	VAL
11	2P	86	LYS

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Mol	Chain	Res	Type
11	2P	95	VAL
11	2P	106	LEU
11	2P	112	LEU
11	2P	125	VAL
11	2P	135	LEU
11	2P	147	LEU
11	2P	148	LEU
12	2Q	2	LEU
12	2Q	3	MET
12	2Q	21	THR
12	2Q	55	VAL
12	2Q	80	GLU
12	2Q	81	VAL
12	2Q	106	VAL
12	2Q	109	VAL
12	2Q	110	THR
13	2R	18	LEU
13	2R	29	LEU
13	2R	36	THR
13	2R	44	LEU
13	2R	54	LEU
13	2R	63	ARG
13	2R	65	LEU
13	2R	67	LEU
13	2R	71	GLN
13	2R	73	VAL
13	2R	79	LEU
13	2R	96	ARG
13	2R	100	LEU
13	2R	111	LEU
14	2S	14	VAL
14	2S	19	LYS
14	2S	21	THR
14	2S	23	ARG
14	2S	28	VAL
14	2S	36	TYR
14	2S	40	ILE
14	2S	42	ASP
14	2S	48	LEU
14	2S	49	VAL
14	2S	52	SER
14	2S	58	LEU

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Mol	Chain	Res	Type
14	2S	64	GLU
14	2S	69	VAL
14	2S	78	LEU
14	2S	110	LEU
14	2S	111	GLU
15	2T	23	ARG
15	2T	28	VAL
15	2T	34	VAL
15	2T	49	VAL
15	2T	78	LEU
15	2T	80	SER
15	2T	89	VAL
15	2T	96	ARG
15	2T	102	ILE
15	2T	107	ASP
15	2T	123	GLN
16	2U	6	THR
16	2U	8	VAL
16	2U	55	ARG
16	2U	59	ARG
16	2U	60	LEU
16	2U	74	LEU
16	2U	83	LEU
16	2U	88	ILE
16	2U	95	LEU
17	2V	5	VAL
17	2V	7	THR
17	2V	25	LEU
17	2V	32	THR
17	2V	46	VAL
17	2V	51	VAL
17	2V	57	VAL
17	2V	72	VAL
17	2V	79	VAL
17	2V	95	LEU
18	2W	4	LYS
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	19	LEU
18	2W	23	LEU
18	2W	60	ASN

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Mol	Chain	Res	Type
18	2W	86	LEU
18	2W	92	ARG
18	2W	100	THR
18	2W	107	LEU
19	2X	57	LEU
19	2X	88	LYS
20	2Y	19	LYS
20	2Y	38	ILE
20	2Y	45	VAL
20	2Y	47	LYS
20	2Y	49	VAL
20	2Y	72	VAL
20	2Y	73	ARG
20	2Y	85	VAL
20	2Y	99	CYS
21	2Z	31	ARG
21	2Z	35	ARG
21	2Z	58	VAL
21	2Z	66	SER
21	2Z	86	VAL
21	2Z	91	LEU
21	2Z	93	ASP
21	2Z	107	THR
21	2Z	121	HIS
21	2Z	126	VAL
21	2Z	140	ASP
21	2Z	150	LEU
21	2Z	157	LEU
21	2Z	170	THR
21	2Z	181	GLU
21	2Z	193	GLU
22	20	10	THR
22	20	39	ARG
22	20	55	ARG
23	21	4	VAL
23	21	30	VAL
23	21	37	ILE
23	21	40	ARG
23	21	62	VAL
23	21	85	LEU
24	22	11	GLU
24	22	19	VAL

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Mol	Chain	Res	Type
24	22	32	LEU
24	22	53	LEU
24	22	62	THR
24	22	64	LEU
25	23	6	VAL
25	23	23	LEU
25	23	31	LEU
25	23	40	THR
25	23	54	VAL
25	23	59	VAL
26	24	14	ILE
26	24	50	VAL
26	24	52	THR
26	24	56	VAL
26	24	58	ARG
26	24	61	ARG
26	24	63	TYR
26	24	69	LYS
27	25	6	VAL
27	25	29	THR
28	26	29	ASN
28	26	48	VAL
29	27	43	THR
30	28	14	VAL
30	28	23	VAL
30	28	37	SER
33	2b	11	LEU
33	2b	12	GLU
33	2b	15	VAL
33	2b	16	HIS
33	2b	32	ILE
33	2b	44	LEU
33	2b	60	ASP
33	2b	67	THR
33	2b	68	ILE
33	2b	76	GLN
33	2b	93	VAL
33	2b	96	ARG
33	2b	118	LEU
33	2b	127	ILE
33	2b	140	HIS
33	2b	154	LEU

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Mol	Chain	Res	Type
33	2b	160	ASP
33	2b	164	VAL
33	2b	172	ILE
33	2b	189	ASP
33	2b	191	ASP
33	2b	200	ILE
33	2b	208	ILE
33	2b	210	SER
33	2b	215	LEU
33	2b	224	GLN
33	2b	229	VAL
34	2c	5	ILE
34	2c	15	THR
34	2c	44	GLU
34	2c	52	LEU
34	2c	66	VAL
34	2c	77	ILE
34	2c	115	LEU
34	2c	127	ARG
34	2c	128	PHE
34	2c	131	ARG
34	2c	152	ILE
34	2c	165	THR
34	2c	195	VAL
34	2c	207	VAL
35	2d	3	ARG
35	2d	8	VAL
35	2d	13	ARG
35	2d	19	LEU
35	2d	28	SER
35	2d	31	CYS
35	2d	33	MET
35	2d	34	GLU
35	2d	59	ARG
35	2d	74	GLN
35	2d	83	SER
35	2d	85	LYS
35	2d	97	LEU
35	2d	108	LEU
35	2d	127	THR
35	2d	135	LEU
35	2d	155	LEU

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Mol	Chain	Res	Type
35	2d	158	ILE
35	2d	170	VAL
35	2d	175	SER
36	2e	18	ARG
36	2e	31	LEU
36	2e	34	VAL
36	2e	40	ARG
36	2e	41	VAL
36	2e	51	VAL
36	2e	56	GLN
36	2e	69	VAL
36	2e	75	THR
36	2e	82	VAL
36	2e	91	LEU
36	2e	110	LEU
36	2e	126	ARG
36	2e	135	THR
36	2e	152	ARG
37	2f	10	LEU
37	2f	22	GLU
37	2f	61	LEU
37	2f	63	TYR
37	2f	72	VAL
37	2f	81	ILE
37	2f	92	LYS
38	2g	9	VAL
38	2g	16	LEU
38	2g	20	ASP
38	2g	21	VAL
38	2g	38	LEU
38	2g	49	ILE
38	2g	97	GLN
38	2g	104	LEU
38	2g	113	GLU
39	2h	53	VAL
39	2h	63	LEU
39	2h	80	ILE
39	2h	91	ARG
39	2h	97	VAL
39	2h	103	VAL
39	2h	112	LEU
39	2h	119	LEU

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Mol	Chain	Res	Type
39	2h	133	LEU
40	2i	17	VAL
40	2i	27	THR
40	2i	32	ASP
40	2i	34	ASN
40	2i	50	LEU
40	2i	64	THR
40	2i	86	VAL
40	2i	87	GLN
40	2i	96	LEU
40	2i	102	LEU
40	2i	108	VAL
40	2i	127	LYS
41	2j	16	LEU
41	2j	34	VAL
41	2j	47	PHE
41	2j	67	THR
41	2j	68	HIS
41	2j	72	VAL
41	2j	81	THR
41	2j	96	ILE
42	2k	14	VAL
42	2k	18	ARG
42	2k	30	VAL
42	2k	32	ILE
42	2k	40	ILE
42	2k	84	VAL
42	2k	87	THR
42	2k	93	GLN
42	2k	103	LEU
42	2k	112	THR
42	2k	117	ASN
43	2l	11	VAL
43	2l	18	VAL
43	2l	27	LEU
43	2l	33	ARG
43	2l	36	VAL
43	2l	65	GLU
43	2l	82	VAL
43	2l	83	VAL
43	2l	97	ARG
43	2l	113	ARG

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Mol	Chain	Res	Type
43	2l	122	THR
44	2m	4	ILE
44	2m	8	GLU
44	2m	19	LEU
44	2m	39	ILE
44	2m	60	VAL
44	2m	64	TRP
44	2m	70	LEU
44	2m	90	LEU
44	2m	106	ASN
45	2n	7	ILE
45	2n	8	GLU
45	2n	13	THR
45	2n	18	VAL
45	2n	33	VAL
45	2n	42	ILE
45	2n	56	VAL
46	2o	26	GLU
46	2o	39	LEU
46	2o	71	GLN
46	2o	83	GLU
46	2o	87	ILE
47	2p	1	MET
47	2p	2	VAL
47	2p	21	VAL
47	2p	25	ARG
47	2p	45	THR
47	2p	54	GLU
47	2p	62	VAL
47	2p	67	THR
47	2p	74	LEU
47	2p	76	GLN
47	2p	79	VAL
48	2q	6	LEU
48	2q	9	VAL
48	2q	25	ARG
48	2q	60	ILE
48	2q	63	ARG
48	2q	66	SER
48	2q	70	ARG
48	2q	74	LEU
48	2q	96	GLU

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Mol	Chain	Res	Type
49	2r	25	THR
49	2r	37	VAL
49	2r	47	THR
49	2r	76	LEU
49	2r	85	LEU
49	2r	86	VAL
50	2s	5	LEU
50	2s	11	VAL
50	2s	13	ASP
50	2s	30	LEU
50	2s	35	SER
50	2s	37	ARG
50	2s	48	THR
50	2s	70	LYS
50	2s	71	LEU
50	2s	77	THR
50	2s	79	THR
51	2t	11	SER
51	2t	24	LEU
51	2t	45	GLN
51	2t	46	GLU
51	2t	62	LEU
51	2t	71	THR
51	2t	84	LEU
51	2t	100	ILE
52	2u	8	THR
53	2y	3	MET
53	2y	6	THR
53	2y	11	GLU
53	2y	13	THR
53	2y	16	ILE
53	2y	24	LEU
53	2y	29	LYS
53	2y	41	LEU
53	2y	49	VAL
53	2y	62	VAL
53	2y	77	LEU
53	2y	91	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (139) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	115	GLN
3	1D	166	GLN
3	1D	253	GLN
4	1E	54	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	67	GLN
5	1F	133	ASN
6	1G	40	ASN
6	1G	108	ASN
8	1I	104	GLN
9	1N	133	GLN
10	1O	3	GLN
13	1R	50	HIS
14	1S	95	HIS
15	1T	58	ASN
15	1T	123	GLN
19	1X	31	HIS
19	1X	82	GLN
21	1Z	73	GLN
23	11	56	GLN
26	14	60	GLN
31	19	34	GLN
33	1b	224	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	104	GLN
34	1c	108	ASN
34	1c	136	GLN
35	1d	45	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	119	GLN
35	1d	129	ASN
35	1d	161	ASN
36	1e	141	GLN
37	1f	57	GLN
37	1f	100	ASN
38	1g	11	GLN
38	1g	28	ASN
38	1g	51	GLN
38	1g	56	GLN

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Mol	Chain	Res	Type
38	1g	86	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	73	GLN
41	1j	13	HIS
41	1j	68	HIS
41	1j	84	GLN
42	1k	93	GLN
43	1l	8	ASN
44	1m	77	ASN
46	1o	28	GLN
46	1o	46	HIS
47	1p	13	HIS
48	1q	16	GLN
50	1s	56	GLN
50	1s	83	HIS
51	1t	42	GLN
53	1y	38	HIS
53	1y	46	GLN
53	1y	89	GLN
3	2D	87	ASN
3	2D	126	GLN
3	2D	143	HIS
3	2D	253	GLN
5	2F	29	ASN
5	2F	69	HIS
6	2G	132	ASN
8	2I	43	ASN
8	2I	54	GLN
8	2I	104	GLN
8	2I	139	GLN
9	2N	56	ASN
9	2N	94	HIS
9	2N	133	GLN
10	2O	3	GLN
10	2O	89	ASN
12	2Q	89	ASN
12	2Q	141	GLN
15	2T	58	ASN
15	2T	84	GLN
15	2T	123	GLN
16	2U	94	ASN

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Mol	Chain	Res	Type
16	2U	104	GLN
18	2W	60	ASN
19	2X	82	GLN
21	2Z	73	GLN
22	20	35	ASN
22	20	70	GLN
24	22	56	GLN
25	23	32	GLN
26	24	46	GLN
33	2b	19	HIS
33	2b	40	HIS
33	2b	78	GLN
33	2b	135	GLN
33	2b	212	GLN
34	2c	6	HIS
34	2c	98	ASN
34	2c	104	GLN
34	2c	162	GLN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	129	ASN
35	2d	161	ASN
36	2e	130	ASN
37	2f	100	ASN
38	2g	56	GLN
38	2g	68	ASN
39	2h	82	HIS
40	2i	3	GLN
40	2i	29	ASN
40	2i	73	GLN
41	2j	13	HIS
41	2j	21	GLN
42	2k	93	GLN
42	2k	99	GLN
42	2k	117	ASN
43	2l	99	HIS
46	2o	28	GLN
46	2o	37	ASN
47	2p	16	HIS

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Mol	Chain	Res	Type
48	2q	26	GLN
50	2s	14	HIS
50	2s	23	ASN
50	2s	57	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	90	GLN
53	2y	4	ASN
53	2y	9	GLN
53	2y	55	ASN
53	2y	84	GLN
53	2y	89	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2865/2915 (98%)	413 (14%)	30 (1%)
1	2A	2859/2915 (98%)	490 (17%)	34 (1%)
2	1B	119/121 (98%)	10 (8%)	0
2	2B	119/121 (98%)	18 (15%)	0
32	1a	1497/1521 (98%)	275 (18%)	0
32	2a	1501/1521 (98%)	286 (19%)	0
All	All	8960/9114 (98%)	1492 (16%)	64 (0%)

All (1492) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	15	G
1	1A	34	C
1	1A	35	G
1	1A	45	C
1	1A	55	G
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	173	G
1	1A	196	A

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Mol	Chain	Res	Type
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	231	C
1	1A	233	A
1	1A	248	G
1	1A	271(H)	G
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	274	G
1	1A	275	G
1	1A	279	C
1	1A	283	A
1	1A	311	A
1	1A	324	A
1	1A	330	A
1	1A	345	A
1	1A	352	G
1	1A	363	G
1	1A	363(B)	G
1	1A	386	G
1	1A	404	C
1	1A	405	U
1	1A	407	G
1	1A	411	G
1	1A	421	U
1	1A	428	A
1	1A	448	U
1	1A	456	C

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Mol	Chain	Res	Type
1	1A	457	A
1	1A	481	G
1	1A	505	A
1	1A	509	C
1	1A	518	G
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	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(E)	G
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	668	G
1	1A	669	G
1	1A	677	A
1	1A	686	G
1	1A	730	C
1	1A	740	U
1	1A	764	A
1	1A	765	G
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	792	G

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Mol	Chain	Res	Type
1	1A	805	G
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	878	A
1	1A	882	G
1	1A	883	G
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	910	A
1	1A	932	G
1	1A	938	G
1	1A	945	A
1	1A	946	G
1	1A	958	U
1	1A	959	A
1	1A	961	C
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	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1053	C
1	1A	1054	A
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G

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Mol	Chain	Res	Type
1	1A	1065	U
1	1A	1068	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1090	U
1	1A	1096	A
1	1A	1097	U
1	1A	1109	C
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A
1	1A	1135	C
1	1A	1136	G
1	1A	1139	G
1	1A	1141	U
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	1180	C
1	1A	1210	A
1	1A	1211	U
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G

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Mol	Chain	Res	Type
1	1A	1345	C
1	1A	1352	U
1	1A	1356	G
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1386	C
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	1452	A
1	1A	1455	G
1	1A	1459	G
1	1A	1465	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1490	A
1	1A	1493	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1542	A
1	1A	1543	C
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A

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Mol	Chain	Res	Type
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1658	C
1	1A	1659	U
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1746	G
1	1A	1756	G
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1812	A
1	1A	1816	G
1	1A	1828	G
1	1A	1839	G
1	1A	1847	A
1	1A	1848	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1914	C
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

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Mol	Chain	Res	Type
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2103	C
1	1A	2104	G
1	1A	2107	C
1	1A	2108	C
1	1A	2110	G
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2120	G
1	1A	2126	A
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2142	C
1	1A	2146	C
1	1A	2148	G
1	1A	2158	A
1	1A	2159	G
1	1A	2162	G
1	1A	2165	G
1	1A	2173	A

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Mol	Chain	Res	Type
1	1A	2181	G
1	1A	2184	G
1	1A	2186	G
1	1A	2187	G
1	1A	2190	G
1	1A	2192	G
1	1A	2193	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2273	A
1	1A	2278	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2313	C
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2354	G
1	1A	2383	G
1	1A	2385	C
1	1A	2405	G
1	1A	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A

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Mol	Chain	Res	Type
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2498	C
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2520	C
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	2582	G
1	1A	2585	U
1	1A	2586	C
1	1A	2602	A
1	1A	2603	G
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2689	U
1	1A	2690	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2721	A
1	1A	2726	U
1	1A	2733	A
1	1A	2739	U

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Mol	Chain	Res	Type
1	1A	2757	A
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2803	C
1	1A	2808	U
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2873	A
1	1A	2880	C
1	1A	2892	A
1	1A	2893	G
1	1A	2894	G
2	1B	2	C
2	1B	13	A
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	73	A
2	1B	85	G
2	1B	91	C
2	1B	106	G
2	1B	110	G
32	1a	6	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	61	G
32	1a	65	U
32	1a	78	G
32	1a	79	G

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Mol	Chain	Res	Type
32	1a	96	U
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	151	A
32	1a	163	C
32	1a	170	U
32	1a	171	A
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(B)	C
32	1a	189(D)	C
32	1a	189(F)	U
32	1a	189(G)	G
32	1a	195	A
32	1a	197	A
32	1a	199	G
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	231	G
32	1a	245	C
32	1a	247	G
32	1a	251	G
32	1a	258	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	344	A
32	1a	345	C
32	1a	346	G
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A

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Mol	Chain	Res	Type
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	392	G
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	455	C
32	1a	456	C
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	475	G
32	1a	476	G
32	1a	482	A
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	526	C
32	1a	527	G7M
32	1a	530	G
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	560	U

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Mol	Chain	Res	Type
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	596	C
32	1a	608	A
32	1a	618	C
32	1a	630	G
32	1a	633	G
32	1a	650	G
32	1a	653	A
32	1a	659	U
32	1a	661	G
32	1a	665	A
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	723	U
32	1a	728	A
32	1a	731	G
32	1a	734	G
32	1a	735	C
32	1a	755	G
32	1a	759	A
32	1a	774	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	828	A
32	1a	829	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	848	C
32	1a	851	G
32	1a	853	G
32	1a	863	U

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Mol	Chain	Res	Type
32	1a	870	U
32	1a	872	A
32	1a	902	G
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	931	C
32	1a	934	C
32	1a	935	A
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	963	G
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	990	C
32	1a	991	U
32	1a	992	U
32	1a	993	G
32	1a	994	A
32	1a	998	G
32	1a	1004	A
32	1a	1006	C
32	1a	1007	C
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(B)	C

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Mol	Chain	Res	Type
32	1a	1030(D)	A
32	1a	1031	G
32	1a	1032	G
32	1a	1034	G
32	1a	1035	A
32	1a	1037	C
32	1a	1042	G
32	1a	1044	A
32	1a	1046	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1067	A
32	1a	1070	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1119	C
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1126	U
32	1a	1130	A
32	1a	1132	C
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C
32	1a	1148	U
32	1a	1152	A
32	1a	1155	G
32	1a	1159	U
32	1a	1165	C
32	1a	1166	G
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G

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Mol	Chain	Res	Type
32	1a	1208	C
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1240	U
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1298	C
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1322	C
32	1a	1323	G
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1370	G
32	1a	1386	G
32	1a	1397	C
32	1a	1400	5MC
32	1a	1406	U
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1487	G
32	1a	1493	A
32	1a	1497	G

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Mol	Chain	Res	Type
32	1a	1499	A
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1507	A
32	1a	1517	G
32	1a	1519	MA6
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	10	G
1	2A	11	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	36	G
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	84	A
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	157	U
1	2A	196	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

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Mol	Chain	Res	Type
1	2A	248	G
1	2A	250	G
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(A)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	304	G
1	2A	311	A
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	342	G
1	2A	352	G
1	2A	358	U
1	2A	362	U
1	2A	363	G
1	2A	363(C)	G
1	2A	386	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	412	A
1	2A	428	A
1	2A	435	C
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	530	G
1	2A	531	C

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Mol	Chain	Res	Type
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	652(V)	C
1	2A	668	G
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	740	U
1	2A	752	A
1	2A	753	C
1	2A	765	G
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	792	G
1	2A	793	A
1	2A	794	G
1	2A	805	G
1	2A	812	C

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Mol	Chain	Res	Type
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	874	G
1	2A	880	G
1	2A	881	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	932	G
1	2A	936	C
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	980	A
1	2A	983	A
1	2A	996	A
1	2A	1012	U
1	2A	1013	C
1	2A	1022	G
1	2A	1033	U
1	2A	1038	C
1	2A	1041	C
1	2A	1044	G

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Mol	Chain	Res	Type
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1052	C
1	2A	1053	C
1	2A	1054	A
1	2A	1057	A
1	2A	1058	G
1	2A	1060	U
1	2A	1063	G
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1069	A
1	2A	1070	A
1	2A	1071	G
1	2A	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1089	G
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1096	A
1	2A	1109	C
1	2A	1110	G
1	2A	1111	A
1	2A	1112	G
1	2A	1118	C
1	2A	1119	C

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Mol	Chain	Res	Type
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1170	G
1	2A	1171	G
1	2A	1195	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1241	A
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1312	U
1	2A	1314	C
1	2A	1321	A
1	2A	1342	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1384	A
1	2A	1385	G
1	2A	1414	G
1	2A	1416	G
1	2A	1417	C
1	2A	1419	A
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1445	A

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Mol	Chain	Res	Type
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1465	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1525	G
1	2A	1531	C
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1554	A
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1584	C
1	2A	1586	A
1	2A	1595	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1631	C
1	2A	1640	C
1	2A	1648	C
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U

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Mol	Chain	Res	Type
1	2A	1750	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1786	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
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
1	2A	1913	A
1	2A	1914	C
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G

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Mol	Chain	Res	Type
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2096	U
1	2A	2097	C
1	2A	2102	U
1	2A	2103	C
1	2A	2104	G
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2116	G
1	2A	2117	A
1	2A	2119	A
1	2A	2120	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2130	U
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2136	C
1	2A	2138	C
1	2A	2142	C
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U

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Mol	Chain	Res	Type
1	2A	2151	G
1	2A	2154	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2162	G
1	2A	2163	C
1	2A	2164	C
1	2A	2166	G
1	2A	2167	U
1	2A	2172	U
1	2A	2173	A
1	2A	2175	C
1	2A	2180	U
1	2A	2182	G
1	2A	2184	G
1	2A	2186	G
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2267	A
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2278	A
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G

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Mol	Chain	Res	Type
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2334	G
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2350	C
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2406	U
1	2A	2407	G
1	2A	2410	G
1	2A	2414	G
1	2A	2422	A
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	2465	C
1	2A	2470	G
1	2A	2475	C
1	2A	2476	A
1	2A	2478	A
1	2A	2492	U
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2572	A

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Mol	Chain	Res	Type
1	2A	2573	C
1	2A	2585	U
1	2A	2602	A
1	2A	2603	G
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2630	G
1	2A	2632	A
1	2A	2661	G
1	2A	2663	G
1	2A	2669	G
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2757	A
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2872	G
1	2A	2875	C
1	2A	2880	C
1	2A	2894	G
1	2A	2896	C
1	2A	2897	U
2	2B	2	C
2	2B	7	G

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Mol	Chain	Res	Type
2	2B	8	U
2	2B	12	C
2	2B	13	A
2	2B	22	U
2	2B	24	G
2	2B	30	C
2	2B	31	C
2	2B	33	G
2	2B	51	G
2	2B	64	C
2	2B	73	A
2	2B	84	C
2	2B	108	U
2	2B	109	C
2	2B	110	G
2	2B	116	G
32	2a	5	U
32	2a	7	G
32	2a	8	A
32	2a	9	G
32	2a	22	G
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	89	C
32	2a	97	G
32	2a	100	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	151	A
32	2a	156	G
32	2a	163	C
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(B)	C

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Mol	Chain	Res	Type
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	220	G
32	2a	227	G
32	2a	247	G
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	298	A
32	2a	306	G
32	2a	321	A
32	2a	328	C
32	2a	329	A
32	2a	332	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	356	A
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	421	U
32	2a	422	C
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A

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Mol	Chain	Res	Type
32	2a	470	C
32	2a	471	G
32	2a	477	A
32	2a	482	A
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	528	C
32	2a	530	G
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	536	C
32	2a	545	C
32	2a	547	A
32	2a	559	A
32	2a	560	U
32	2a	561	U
32	2a	562	C
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	593	G
32	2a	596	C
32	2a	618	C
32	2a	630	G
32	2a	631	G
32	2a	633	G
32	2a	650	G
32	2a	653	A
32	2a	662	G
32	2a	665	A
32	2a	688	G
32	2a	695	A
32	2a	723	U

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Mol	Chain	Res	Type
32	2a	724	G
32	2a	731	G
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	793	U
32	2a	794	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	829	G
32	2a	840	C
32	2a	841	U
32	2a	848	C
32	2a	851	G
32	2a	859	A
32	2a	870	U
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	935	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	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	989	C
32	2a	992	U
32	2a	993	G

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Mol	Chain	Res	Type
32	2a	994	A
32	2a	995	C
32	2a	1001	A
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1008	C
32	2a	1009	G
32	2a	1017	G
32	2a	1020	U
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1030(C)	G
32	2a	1033	G
32	2a	1034	G
32	2a	1035	A
32	2a	1037	C
32	2a	1041	A
32	2a	1043	C
32	2a	1053	G
32	2a	1054	C
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1071	C
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1112	C
32	2a	1117	G
32	2a	1118	C
32	2a	1121	U
32	2a	1122	U

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Mol	Chain	Res	Type
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1141	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1162	C
32	2a	1177	G
32	2a	1183	A
32	2a	1184	G
32	2a	1186	G
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1208	C
32	2a	1211	U
32	2a	1212	U
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1238	A
32	2a	1247	U
32	2a	1250	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1273	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A

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Mol	Chain	Res	Type
32	2a	1281	U
32	2a	1282	C
32	2a	1286	A
32	2a	1287	A
32	2a	1290	G
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1306	A
32	2a	1307	U
32	2a	1312	G
32	2a	1316	G
32	2a	1317	C
32	2a	1320	C
32	2a	1322	C
32	2a	1323	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	1364	U
32	2a	1365	G
32	2a	1368	G
32	2a	1370	G
32	2a	1381	U
32	2a	1397	C
32	2a	1402	4OC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1492	A
32	2a	1493	A
32	2a	1497	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G

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Mol	Chain	Res	Type
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1520	G
32	2a	1528	U
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A

All (64) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	34	C
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	839	U
1	1A	840	C
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1065	U
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1379	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	2126	A
1	1A	2172	U
1	1A	2288	A
1	1A	2406	U
1	1A	2422	A
1	1A	2689	U
1	1A	2756	U
1	1A	2893	G

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Mol	Chain	Res	Type
1	2A	195	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	752	A
1	2A	764	A
1	2A	774	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
1	2A	1053	C
1	2A	1057	A
1	2A	1062	G
1	2A	1065	U
1	2A	1067	A
1	2A	1073	A
1	2A	1076	C
1	2A	1210	A
1	2A	1240	U
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1608	A
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A
1	2A	2172	U
1	2A	2321	G
1	2A	2406	U
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

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

48 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	MA6	1a	1518	32	23,26,27	0.41	0	33,38,41	2.03	10 (30%)
32	PSU	2a	516	54,32	18,21,22	1.36	3 (16%)	21,30,33	2.04	5 (23%)
1	PSU	1A	1911	1	18,21,22	1.36	2 (11%)	21,30,33	2.05	3 (14%)
32	MA6	2a	1518	32	23,26,27	0.40	0	33,38,41	2.04	9 (27%)
32	G7M	1a	527	54,32	23,26,27	1.55	3 (13%)	34,39,42	1.74	5 (14%)
1	OMG	2A	2251	54,1	23,26,27	1.19	3 (13%)	32,38,41	2.00	6 (18%)
32	4OC	1a	1402	32	20,23,24	0.74	0	25,32,35	0.91	1 (4%)
1	OMC	2A	1920	1	19,22,23	0.80	0	25,31,34	0.98	1 (4%)
32	4OC	2a	1402	32	20,23,24	0.78	0	25,32,35	1.00	1 (4%)
32	5MC	1a	1400	32	19,22,23	1.68	3 (15%)	26,32,35	1.13	2 (7%)
1	2MA	2A	2503	54,1	22,25,26	1.46	5 (22%)	32,37,40	2.26	9 (28%)
32	5MC	2a	1400	32	19,22,23	1.65	3 (15%)	26,32,35	1.26	5 (19%)
1	5MU	2A	1915	1	19,22,23	1.45	4 (21%)	27,32,35	2.22	9 (33%)
1	5MC	2A	1942	54,1	19,22,23	1.62	3 (15%)	26,32,35	1.12	3 (11%)
1	OMC	1A	1920	1	19,22,23	0.78	0	25,31,34	0.90	1 (4%)
32	5MC	1a	1404	32	19,22,23	1.75	3 (15%)	26,32,35	1.14	2 (7%)
1	OMU	2A	2552	54,1	19,22,23	1.27	2 (10%)	25,31,34	1.90	5 (20%)
32	MA6	2a	1519	32	23,26,27	0.43	0	33,38,41	2.08	9 (27%)
32	5MC	2a	967	32	19,22,23	1.82	3 (15%)	26,32,35	1.15	2 (7%)
1	OMG	1A	2251	54,1	23,26,27	1.20	3 (13%)	32,38,41	2.06	6 (18%)
32	G7M	2a	527	54,32	23,26,27	1.49	3 (13%)	34,39,42	1.66	5 (14%)
32	UR3	1a	1498	32	19,22,23	0.97	1 (5%)	26,32,35	1.79	2 (7%)
1	5MU	1A	1939	54,1	19,22,23	1.42	4 (21%)	27,32,35	2.22	6 (22%)
32	5MC	2a	1404	32	19,22,23	1.68	3 (15%)	26,32,35	1.16	3 (11%)
1	OMU	1A	2552	54,1	19,22,23	1.28	3 (15%)	25,31,34	1.74	5 (20%)
32	UR3	2a	1498	32	19,22,23	0.95	1 (5%)	26,32,35	1.78	3 (11%)
1	5MC	1A	1942	1	19,22,23	1.65	3 (15%)	26,32,35	1.13	2 (7%)
32	MA6	1a	1519	32	23,26,27	0.41	0	33,38,41	2.04	9 (27%)
32	M2G	1a	966	32	24,27,28	1.26	3 (12%)	33,40,43	1.88	6 (18%)
32	5MC	2a	1407	32	19,22,23	1.49	2 (10%)	26,32,35	1.18	3 (11%)
32	PSU	1a	516	54,32	18,21,22	1.42	3 (16%)	21,30,33	1.94	5 (23%)
32	5MC	1a	1407	32	19,22,23	1.67	2 (10%)	26,32,35	1.17	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
43	0TD	2l	92	43	8,9,10	4.36	1 (12%)	6,11,13	2.02	3 (50%)
43	0TD	1l	92	43	8,9,10	4.58	1 (12%)	6,11,13	3.15	1 (16%)
1	5MC	2A	1962	1	19,22,23	1.52	3 (15%)	26,32,35	1.12	2 (7%)
1	PSU	2A	2605	1	18,21,22	1.36	2 (11%)	21,30,33	2.06	4 (19%)
1	5MU	2A	1939	1	19,22,23	1.41	5 (26%)	27,32,35	2.14	6 (22%)
1	5MC	1A	1962	54,1	19,22,23	1.58	3 (15%)	26,32,35	1.17	2 (7%)
32	5MC	1a	967	32	19,22,23	1.56	3 (15%)	26,32,35	1.04	2 (7%)
32	M2G	2a	966	54,32	24,27,28	1.30	3 (12%)	33,40,43	1.85	6 (18%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	21,30,33	2.03	3 (14%)
1	PSU	2A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	1.98	3 (14%)
32	2MG	1a	1207	32	23,26,27	1.23	2 (8%)	33,38,41	2.35	9 (27%)
1	PSU	1A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	1.99	4 (19%)
32	2MG	2a	1207	32	23,26,27	1.26	3 (13%)	33,38,41	2.05	5 (15%)
1	PSU	1A	2605	1	18,21,22	1.42	4 (22%)	21,30,33	2.09	4 (19%)
1	2MA	1A	2503	54,1	22,25,26	1.40	3 (13%)	32,37,40	2.47	7 (21%)
1	5MU	1A	1915	1	19,22,23	1.42	3 (15%)	27,32,35	2.25	9 (33%)

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	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
32	PSU	2a	516	54,32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
32	G7M	1a	527	54,32	-	3/7/25/26	0/3/3/3
1	OMG	2A	2251	54,1	-	0/9/27/28	0/3/3/3
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	4OC	2a	1402	32	-	3/9/29/30	0/2/2/2
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
1	2MA	2A	2503	54,1	-	1/7/25/26	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MC	2A	1942	54,1	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	0/9/27/28	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	54,1	-	0/9/27/28	0/3/3/3
32	G7M	2a	527	54,32	-	1/7/25/26	0/3/3/3
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	54,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	54,1	-	0/9/27/28	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	2/11/29/30	0/3/3/3
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
43	0TD	1l	92	43	-	2/7/12/14	-
1	5MC	2A	1962	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	54,1	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	54,32	-	0/11/29/30	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	1/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
1	PSU	1A	1917	1	-	1/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	2/9/27/28	0/3/3/3
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	54,1	-	2/7/25/26	0/3/3/3
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2

All (110) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.48	1.69	1.82
43	2l	92	0TD	CB-SB	-11.94	1.70	1.82
32	2a	967	5MC	C5-C4	6.80	1.49	1.44
32	1a	1404	5MC	C5-C4	6.35	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1404	5MC	C5-C4	6.21	1.48	1.44
32	1a	1407	5MC	C5-C4	6.09	1.48	1.44
32	1a	1400	5MC	C5-C4	6.08	1.48	1.44
1	1A	1942	5MC	C5-C4	6.02	1.48	1.44
32	2a	1400	5MC	C5-C4	5.93	1.48	1.44
1	2A	1942	5MC	C5-C4	5.71	1.48	1.44
1	1A	1962	5MC	C5-C4	5.59	1.48	1.44
32	1a	967	5MC	C5-C4	5.49	1.48	1.44
1	2A	1962	5MC	C5-C4	5.30	1.48	1.44
32	2a	1407	5MC	C5-C4	5.13	1.48	1.44
32	1a	527	G7M	C5-N7	-4.96	1.33	1.39
32	2a	527	G7M	C5-N7	-4.56	1.33	1.39
1	2A	2503	2MA	C5-C4	4.41	1.46	1.39
1	1A	2503	2MA	C5-C4	3.89	1.46	1.39
1	1A	1911	PSU	C6-C5	3.70	1.39	1.35
32	1a	516	PSU	C6-C5	3.57	1.39	1.35
1	2A	2605	PSU	C6-C5	3.46	1.39	1.35
32	1a	527	G7M	C5-C4	3.46	1.46	1.38
1	2A	1917	PSU	C6-C5	3.41	1.39	1.35
1	2A	1911	PSU	C6-C5	3.39	1.39	1.35
32	2a	516	PSU	C6-C5	3.30	1.38	1.35
32	2a	1207	2MG	C5-C4	3.28	1.47	1.38
1	1A	1917	PSU	C6-C5	3.27	1.38	1.35
1	2A	1915	5MU	C2-N1	3.22	1.43	1.38
32	2a	966	M2G	C5-C4	3.20	1.47	1.38
32	2a	527	G7M	C5-C4	3.17	1.46	1.38
1	2A	2251	OMG	C5-C4	3.17	1.47	1.38
1	2A	2552	OMU	C4-N3	-3.10	1.33	1.38
32	1a	1404	5MC	C6-C5	3.05	1.39	1.34
1	1A	2503	2MA	C5-N7	-3.03	1.33	1.39
1	1A	2552	OMU	C4-N3	-3.01	1.33	1.38
1	1A	2605	PSU	C4-N3	-3.00	1.33	1.38
32	1a	966	M2G	C5-C4	2.99	1.47	1.38
32	1a	1207	2MG	C5-C4	2.98	1.46	1.38
32	2a	966	M2G	C2-N2	2.95	1.40	1.35
1	1A	1939	5MU	C4-N3	-2.92	1.33	1.38
1	1A	1915	5MU	C2-N1	2.92	1.43	1.38
1	2A	1942	5MC	C6-C5	2.90	1.39	1.34
1	1A	1939	5MU	C6-C5	2.90	1.39	1.34
32	1a	1407	5MC	C6-C5	2.90	1.39	1.34
1	1A	1942	5MC	C6-C5	2.89	1.39	1.34
1	1A	2251	OMG	C5-C4	2.85	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	967	5MC	C6-C5	2.84	1.39	1.34
32	2a	1407	5MC	C6-C5	2.81	1.39	1.34
1	1A	2552	OMU	C2-N3	-2.80	1.33	1.38
1	2A	1915	5MU	C6-C5	2.79	1.39	1.34
1	1A	1915	5MU	C4-N3	-2.77	1.33	1.38
32	1a	1400	5MC	C6-C5	2.77	1.39	1.34
32	1a	966	M2G	C2-N2	2.74	1.40	1.35
1	2A	1939	5MU	C4-C5	2.73	1.49	1.44
1	1A	2251	OMG	C6-N1	-2.72	1.33	1.38
1	1A	1917	PSU	C4-N3	-2.72	1.33	1.38
32	2a	1404	5MC	C6-C5	2.70	1.39	1.34
1	1A	1915	5MU	C6-C5	2.69	1.39	1.34
32	1a	967	5MC	C6-C5	2.68	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.68	1.33	1.38
1	2A	1939	5MU	C6-C5	2.64	1.38	1.34
1	2A	1962	5MC	C6-C5	2.61	1.38	1.34
1	2A	2552	OMU	C2-N3	-2.59	1.33	1.38
1	1A	1962	5MC	C6-N1	-2.57	1.33	1.38
32	2a	516	PSU	C4-N3	-2.56	1.34	1.38
1	2A	1915	5MU	C4-C5	2.52	1.48	1.44
1	2A	2503	2MA	C5-C6	2.52	1.48	1.41
1	2A	1917	PSU	C4-N3	-2.52	1.34	1.38
1	2A	2503	2MA	C8-N7	2.52	1.36	1.31
1	1A	1962	5MC	C6-C5	2.48	1.38	1.34
32	2a	966	M2G	C6-N1	-2.48	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.47	1.33	1.38
32	1a	1207	2MG	C6-N1	-2.47	1.34	1.38
32	2a	1400	5MC	C6-C5	2.47	1.38	1.34
32	1a	1400	5MC	C6-N1	-2.47	1.33	1.38
1	1A	2605	PSU	C6-C5	2.46	1.38	1.35
1	2A	2251	OMG	C6-N1	-2.46	1.34	1.38
1	2A	1939	5MU	C4-N3	-2.46	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.43	1.34	1.38
32	1a	966	M2G	C6-N1	-2.40	1.34	1.38
32	1a	516	PSU	C4-N3	-2.38	1.34	1.38
32	2a	527	G7M	C6-N1	-2.37	1.34	1.38
1	1A	2605	PSU	C2-N1	-2.35	1.33	1.36
32	2a	1207	2MG	C6-N1	-2.35	1.34	1.38
1	1A	1939	5MU	C6-N1	-2.33	1.34	1.38
1	1A	1939	5MU	C2-N3	-2.33	1.33	1.38
32	1a	527	G7M	C6-N1	-2.33	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.31	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1939	5MU	C6-N1	-2.29	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.28	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.28	1.34	1.38
32	1a	967	5MC	C6-N1	-2.26	1.34	1.38
1	2A	2503	2MA	C5-N7	-2.23	1.35	1.39
1	1A	1942	5MC	C6-N1	-2.22	1.34	1.38
1	1A	2552	OMU	C5-C4	-2.21	1.38	1.43
32	2a	1207	2MG	C2-N3	2.19	1.36	1.32
1	2A	2251	OMG	C5-N7	-2.18	1.34	1.39
1	2A	1942	5MC	C6-N1	-2.17	1.34	1.38
1	1A	2503	2MA	C5-C6	2.15	1.47	1.41
32	2a	967	5MC	C6-N1	-2.14	1.34	1.38
1	1A	2251	OMG	C5-N7	-2.14	1.34	1.39
32	2a	1404	5MC	C6-N1	-2.14	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.12	1.34	1.38
32	2a	516	PSU	O4'-C1'	-2.10	1.40	1.43
1	2A	2503	2MA	C4-N9	-2.10	1.33	1.37
1	1A	2605	PSU	C2-N3	-2.09	1.34	1.37
1	2A	1939	5MU	C2-N3	-2.09	1.34	1.38
32	2a	1498	UR3	C6-C5	2.08	1.39	1.35
32	1a	516	PSU	C2-N1	-2.02	1.34	1.36
32	1a	1498	UR3	C6-C5	2.02	1.39	1.35

All (216) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C5-C4-N3	-8.71	118.00	127.18
1	2A	2503	2MA	C5-C4-N3	-7.94	118.81	127.18
32	2a	1498	UR3	C4-N3-C2	-7.37	118.65	124.58
43	1l	92	0TD	CSB-SB-CB	7.28	115.46	102.36
32	1a	1498	UR3	C4-N3-C2	-7.21	118.78	124.58
32	1a	1207	2MG	C2-N3-C4	7.10	120.88	112.00
1	1A	2503	2MA	N3-C4-N9	7.09	135.99	126.99
32	2a	1207	2MG	C2-N3-C4	6.79	120.49	112.00
1	1A	1911	PSU	N1-C2-N3	6.43	121.95	115.17
1	2A	2605	PSU	N1-C2-N3	6.42	121.94	115.17
1	2A	2251	OMG	C5-C4-N3	-6.29	118.38	128.39
1	2A	1911	PSU	N1-C2-N3	6.29	121.80	115.17
1	1A	1917	PSU	N1-C2-N3	6.27	121.79	115.17
1	1A	2605	PSU	N1-C2-N3	6.23	121.74	115.17
1	1A	2251	OMG	C5-C4-N3	-6.15	118.60	128.39
1	2A	1917	PSU	N1-C2-N3	6.09	121.59	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	516	PSU	N1-C2-N3	6.07	121.58	115.17
1	2A	2503	2MA	N3-C4-N9	5.97	134.57	126.99
32	1a	966	M2G	C5-C4-N3	-5.87	119.04	128.39
32	2a	966	M2G	C5-C4-N3	-5.81	119.14	128.39
32	2a	1207	2MG	C5-C4-N3	-5.77	119.20	128.39
32	1a	516	PSU	N1-C2-N3	5.64	121.12	115.17
32	1a	1207	2MG	C5-C4-N3	-5.64	119.41	128.39
32	1a	527	G7M	N9-C4-N3	5.58	137.10	125.95
1	1A	2251	OMG	C2-N3-C4	5.53	121.83	112.30
32	1a	527	G7M	C5-C4-N3	-5.39	117.96	128.15
1	1A	1939	5MU	C4-N3-C2	-5.37	120.30	127.34
1	2A	1939	5MU	C4-N3-C2	-5.34	120.33	127.34
1	1A	1939	5MU	C5-C4-N3	5.30	119.93	115.32
32	2a	527	G7M	N9-C4-N3	5.25	136.46	125.95
1	2A	1939	5MU	N3-C2-N1	5.19	121.64	114.89
32	2a	527	G7M	C5-C4-N3	-5.09	118.53	128.15
1	2A	2552	OMU	C4-N3-C2	-5.05	120.34	126.61
1	1A	1915	5MU	N3-C2-N1	5.03	121.44	114.89
32	2a	1518	MA6	N1-C2-N3	-4.93	121.12	128.58
1	2A	2251	OMG	C2-N3-C4	4.92	120.77	112.30
32	1a	1519	MA6	N1-C2-N3	-4.84	121.25	128.58
32	2a	1519	MA6	N1-C2-N3	-4.83	121.28	128.58
32	1a	1518	MA6	N1-C2-N3	-4.80	121.31	128.58
1	1A	1939	5MU	O4-C4-C5	-4.77	119.47	124.92
1	2A	2251	OMG	N9-C4-N3	4.75	135.44	125.95
1	2A	2552	OMU	N3-C2-N1	4.75	121.07	114.89
1	2A	1915	5MU	N3-C2-N1	4.74	121.06	114.89
1	1A	1939	5MU	N3-C2-N1	4.71	121.03	114.89
1	2A	1915	5MU	C1'-N1-C2	4.66	125.96	117.59
1	1A	1915	5MU	C1'-N1-C2	4.63	125.91	117.59
32	2a	527	G7M	C2-N3-C4	4.61	120.23	112.30
1	1A	2552	OMU	C4-N3-C2	-4.60	120.91	126.61
32	1a	966	M2G	C2-N3-C4	4.58	120.98	112.51
32	2a	966	M2G	C2-N3-C4	4.53	120.89	112.51
32	2a	1519	MA6	C5-C4-N3	-4.51	120.50	126.72
32	1a	527	G7M	C2-N3-C4	4.51	120.08	112.30
1	1A	1915	5MU	C4-N3-C2	-4.45	121.51	127.34
1	1A	1939	5MU	C5-C6-N1	-4.42	118.51	123.31
32	1a	1519	MA6	C5-C4-N3	-4.42	120.63	126.72
32	2a	1518	MA6	C5-C4-N3	-4.42	120.64	126.72
1	2A	1915	5MU	C4-N3-C2	-4.35	121.63	127.34
1	2A	2605	PSU	C4-N3-C2	-4.32	120.41	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2605	PSU	C4-N3-C2	-4.29	120.46	126.37
32	2a	516	PSU	C4-N3-C2	-4.24	120.53	126.37
1	1A	2251	OMG	N9-C4-N3	4.22	134.39	125.95
1	1A	2503	2MA	N6-C6-N1	4.21	122.70	117.03
32	1a	1518	MA6	C2-N1-C6	4.20	122.10	111.83
32	1a	966	M2G	N9-C4-N3	4.18	134.30	125.95
1	2A	1939	5MU	C5-C4-N3	4.14	118.92	115.32
32	2a	966	M2G	N9-C4-N3	4.14	134.23	125.95
32	2a	1207	2MG	N9-C4-N3	4.12	134.19	125.95
1	2A	1911	PSU	C4-N3-C2	-4.11	120.71	126.37
1	1A	2605	PSU	O2-C2-N1	-4.09	118.57	122.79
1	1A	2552	OMU	N3-C2-N1	4.09	120.22	114.89
32	2a	1518	MA6	C2-N1-C6	4.09	121.82	111.83
32	1a	1519	MA6	C2-N1-C6	4.04	121.70	111.83
32	1a	1518	MA6	C5-N7-C8	4.02	109.77	103.45
32	2a	1519	MA6	C4-C5-N7	-4.02	105.99	110.58
32	1a	1207	2MG	C6-C5-N7	4.01	137.59	130.29
1	2A	1939	5MU	C5-C6-N1	-4.00	118.96	123.31
32	2a	967	5MC	C5-C6-N1	-3.98	119.00	123.31
32	2a	1519	MA6	C5-N7-C8	3.96	109.67	103.45
1	2A	1915	5MU	C1'-N1-C6	-3.96	114.63	121.15
1	1A	1911	PSU	C4-N3-C2	-3.95	120.94	126.37
32	2a	1519	MA6	C2-N1-C6	3.94	121.44	111.83
32	1a	1518	MA6	N9-C8-N7	-3.93	108.36	113.94
32	1a	1404	5MC	C5-C6-N1	-3.91	119.07	123.31
1	1A	1915	5MU	C5-C4-N3	3.89	118.70	115.32
1	1A	2552	OMU	C5-C4-N3	3.85	120.20	114.80
1	1A	1917	PSU	C4-N3-C2	-3.85	121.07	126.37
1	1A	1911	PSU	O2-C2-N1	-3.85	118.82	122.79
32	2a	1518	MA6	C4-C5-N7	-3.85	106.18	110.58
1	2A	1917	PSU	C4-N3-C2	-3.83	121.09	126.37
1	2A	2552	OMU	C5-C4-N3	3.83	120.16	114.80
32	2a	1518	MA6	C5-N7-C8	3.82	109.45	103.45
1	1A	2251	OMG	C6-C5-N7	3.80	137.21	130.29
1	2A	1917	PSU	O2-C2-N1	-3.80	118.87	122.79
32	1a	1519	MA6	C4-C5-N7	-3.79	106.25	110.58
32	1a	1518	MA6	C5-C4-N3	-3.79	121.49	126.72
32	1a	1519	MA6	C5-N7-C8	3.79	109.40	103.45
1	1A	1915	5MU	O4-C4-C5	-3.75	120.62	124.92
1	2A	1939	5MU	O4-C4-C5	-3.67	120.72	124.92
1	1A	1915	5MU	C1'-N1-C6	-3.66	115.12	121.15
1	1A	1917	PSU	O2-C2-N1	-3.65	119.03	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1207	2MG	N9-C4-N3	3.64	133.23	125.95
32	1a	516	PSU	C4-N3-C2	-3.59	121.42	126.37
32	2a	966	M2G	C6-C5-N7	3.59	136.82	130.29
1	2A	1911	PSU	O2-C2-N1	-3.58	119.10	122.79
1	2A	1915	5MU	C5-C4-N3	3.57	118.43	115.32
1	2A	1915	5MU	O4-C4-C5	-3.57	120.83	124.92
32	1a	516	PSU	O2-C2-N1	-3.56	119.11	122.79
32	1a	966	M2G	C6-C5-N7	3.56	136.76	130.29
32	1a	1518	MA6	C4-C5-N7	-3.55	106.52	110.58
32	1a	1400	5MC	C5-C6-N1	-3.54	119.47	123.31
1	2A	2503	2MA	C4-C5-N7	-3.50	106.58	110.58
1	2A	1962	5MC	C5-C6-N1	-3.48	119.53	123.31
32	2a	1519	MA6	N9-C8-N7	-3.46	109.02	113.94
32	2a	1519	MA6	C2-N3-C4	3.45	120.26	111.83
32	2a	1404	5MC	C5-C6-N1	-3.43	119.59	123.31
1	1A	1942	5MC	C5-C6-N1	-3.42	119.60	123.31
32	2a	1518	MA6	C2-N3-C4	3.41	120.16	111.83
1	1A	1962	5MC	C5-C6-N1	-3.39	119.63	123.31
32	2a	1400	5MC	C5-C6-N1	-3.36	119.67	123.31
32	1a	1519	MA6	C2-N3-C4	3.35	120.02	111.83
32	2a	1207	2MG	C6-C5-N7	3.31	136.32	130.29
32	2a	1518	MA6	N9-C8-N7	-3.30	109.26	113.94
32	1a	1519	MA6	N9-C8-N7	-3.29	109.27	113.94
32	2a	1498	UR3	C5-C4-N3	3.28	119.36	115.04
1	2A	1939	5MU	O2-C2-N1	-3.26	118.55	122.80
32	1a	1407	5MC	C5-C6-N1	-3.23	119.80	123.31
1	2A	1942	5MC	C5-C6-N1	-3.23	119.80	123.31
32	1a	967	5MC	C5-C6-N1	-3.19	119.85	123.31
1	2A	2503	2MA	N6-C6-N1	3.17	121.31	117.03
43	2l	92	0TD	CSB-SB-CB	3.16	108.05	102.36
1	1A	2503	2MA	C4-C5-N7	-3.15	106.98	110.58
32	1a	1498	UR3	C5-C4-N3	3.15	119.18	115.04
32	1a	1207	2MG	N1-C2-N2	3.14	119.77	116.56
1	2A	2552	OMU	O2-C2-N1	-3.13	118.73	122.80
32	2a	516	PSU	O2-C2-N1	-3.08	119.61	122.79
32	1a	1518	MA6	C2-N3-C4	3.05	119.28	111.83
32	1a	1207	2MG	C4-C5-N7	-3.03	105.86	110.67
1	2A	2605	PSU	O2-C2-N1	-3.03	119.67	122.79
1	1A	1942	5MC	C5-C4-N3	-3.01	118.67	121.75
32	2a	1407	5MC	C5-C6-N1	-2.99	120.07	123.31
32	2a	1407	5MC	C5-C4-N3	-2.93	118.75	121.75
1	2A	2251	OMG	C6-C5-N7	2.91	135.59	130.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	OD2-CG-CB	2.88	119.37	113.15
32	1a	516	PSU	C6-C5-C4	-2.87	116.24	118.17
1	1A	2251	OMG	C4-C5-N7	-2.84	106.17	110.67
32	2a	1404	5MC	C5-C4-N3	-2.78	118.91	121.75
32	1a	1407	5MC	C5-C4-N3	-2.75	118.94	121.75
1	2A	1942	5MC	C5-C4-N3	-2.75	118.94	121.75
1	1A	1915	5MU	O2-C2-N3	-2.74	116.44	121.49
1	1A	2503	2MA	C5-N7-C8	2.72	107.72	103.45
1	2A	2503	2MA	C4-N9-C8	2.70	108.58	105.74
32	1a	1404	5MC	C5-C4-N3	-2.67	119.02	121.75
32	1a	966	M2G	C4-C5-N7	-2.66	106.45	110.67
1	1A	2503	2MA	C4-N9-C8	2.66	108.53	105.74
1	1A	2552	OMU	O4-C4-C5	-2.65	120.60	125.16
32	1a	1400	5MC	C5-C4-N3	-2.64	119.05	121.75
32	2a	966	M2G	C4-C5-N7	-2.62	106.52	110.67
32	2a	1519	MA6	N3-C4-N9	2.62	131.62	127.17
1	1A	1962	5MC	C5-C4-N3	-2.62	119.07	121.75
32	2a	1207	2MG	C4-C5-N7	-2.61	106.54	110.67
32	1a	1519	MA6	N3-C4-N9	2.60	131.59	127.17
32	2a	1518	MA6	N3-C4-N9	2.59	131.57	127.17
32	1a	1518	MA6	N3-C4-N9	2.58	131.56	127.17
32	1a	967	5MC	C5-C4-N3	-2.57	119.12	121.75
32	1a	1518	MA6	C4-N9-C8	2.55	108.41	105.74
1	1A	2605	PSU	C5-C6-N1	-2.54	118.61	122.14
1	2A	1920	OMC	O2-C2-N3	-2.54	118.32	122.33
32	2a	1400	5MC	C5-C4-N3	-2.54	119.15	121.75
1	2A	2503	2MA	C2-N1-C6	2.53	121.99	118.10
32	1a	527	G7M	O6-C6-C5	-2.53	122.37	128.01
32	1a	1519	MA6	C4-C5-C6	2.52	118.52	115.91
1	2A	2251	OMG	C4-C5-N7	-2.52	106.68	110.67
1	2A	2503	2MA	C5-N7-C8	2.47	107.33	103.45
1	1A	2552	OMU	O2-C2-N1	-2.46	119.59	122.80
32	2a	967	5MC	C5-C4-N3	-2.45	119.25	121.75
32	2a	516	PSU	O4'-C1'-C2'	2.42	108.50	105.15
32	2a	1402	4OC	C6-C5-C4	2.42	119.92	117.00
32	2a	516	PSU	C5-C6-N1	-2.41	118.79	122.14
32	2a	1518	MA6	C4-C5-C6	2.39	118.38	115.91
32	2a	1400	5MC	C1'-N1-C6	-2.39	117.22	121.15
1	2A	2552	OMU	O4-C4-C5	-2.38	121.05	125.16
1	1A	1939	5MU	O2-C2-N1	-2.38	119.69	122.80
1	2A	1915	5MU	O2-C2-N3	-2.38	117.10	121.49
32	2a	1407	5MC	O2-C2-N3	-2.36	118.61	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1498	UR3	C3U-N3-C4	2.35	121.13	117.87
32	1a	1407	5MC	O2-C2-N3	-2.35	118.62	122.33
1	1A	1915	5MU	C6-N1-C2	-2.35	118.96	121.30
1	2A	1962	5MC	C5-C4-N3	-2.31	119.38	121.75
32	1a	1207	2MG	N2-C2-N3	-2.31	117.57	120.51
32	1a	1207	2MG	O3'-C3'-C2'	2.31	119.21	111.82
32	2a	527	G7M	O6-C6-C5	-2.30	122.87	128.01
32	2a	1519	MA6	C4-C5-C6	2.30	118.29	115.91
32	1a	516	PSU	O4'-C1'-C2'	2.24	108.26	105.15
1	1A	2503	2MA	N9-C8-N7	-2.24	110.76	113.94
1	2A	2251	OMG	O6-C6-C5	-2.24	120.63	126.53
32	1a	1518	MA6	C4-C5-C6	2.23	118.21	115.91
1	2A	2605	PSU	C5-C6-N1	-2.22	119.06	122.14
1	2A	1942	5MC	O2-C2-N3	-2.20	118.86	122.33
1	2A	2503	2MA	C6-C5-N7	2.19	136.31	132.09
32	1a	966	M2G	O6-C6-C5	-2.18	120.78	126.53
1	2A	1915	5MU	C5-C6-N1	-2.17	120.96	123.31
1	2A	1915	5MU	C5M-C5-C4	2.16	121.09	118.78
1	1A	1915	5MU	C5-C6-N1	-2.14	120.99	123.31
1	2A	2503	2MA	N9-C8-N7	-2.14	110.90	113.94
32	1a	527	G7M	C5-C6-N1	2.13	116.24	111.84
32	1a	1402	4OC	C6-C5-C4	2.13	119.56	117.00
32	2a	527	G7M	C5-C6-N1	2.13	116.23	111.84
32	2a	1400	5MC	CM5-C5-C6	-2.08	120.03	122.85
32	2a	966	M2G	O6-C6-C5	-2.08	121.05	126.53
1	1A	2251	OMG	C5-C6-N1	2.07	118.52	113.25
1	1A	1917	PSU	C5-C6-N1	-2.07	119.27	122.14
32	1a	1207	2MG	C8-N7-C5	2.06	107.92	104.26
32	2a	1400	5MC	O2-C2-N3	-2.04	119.11	122.33
1	1A	1920	OMC	O2-C2-N3	-2.03	119.12	122.33
43	2l	92	0TD	OD1-CG-CB	-2.03	118.19	122.44
32	2a	1404	5MC	CM5-C5-C6	-2.02	120.11	122.85

There are no chirality outliers.

All (31) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
32	1a	1519	MA6	O4'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6

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Mol	Chain	Res	Type	Atoms
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
32	2a	1519	MA6	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	1a	1402	4OC	C3'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
32	2a	1402	4OC	C3'-C2'-O2'-CM2
1	1A	2503	2MA	C4'-C5'-O5'-P
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	1917	PSU	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C4'-C5'-O5'-P
1	1A	1917	PSU	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	1a	527	G7M	C4'-C5'-O5'-P

There are no ring outliers.

20 monomers are involved in 29 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	1518	MA6	3	0
32	2a	1518	MA6	3	0
32	1a	1402	4OC	2	0
32	2a	1402	4OC	2	0
32	1a	1400	5MC	2	0
1	2A	2503	2MA	1	0
32	2a	1400	5MC	2	0
1	2A	2552	OMU	1	0
32	2a	1519	MA6	4	0
1	1A	1939	5MU	2	0
32	2a	1404	5MC	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	1519	MA6	1	0
32	1a	966	M2G	2	0
43	2l	92	0TD	1	0
1	2A	1962	5MC	1	0
1	2A	1939	5MU	1	0
32	1a	967	5MC	1	0
32	1a	1207	2MG	1	0
1	1A	2503	2MA	1	0
1	1A	1915	5MU	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2581 ligands modelled in this entry, 2568 are monoatomic - leaving 13 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	$\#\|Z\| > 2$
56	MPD	1a	1878	32	7,7,7	0.24	0	9,10,10	0.58	0
57	ARG	1F	321	-	10,11,11	0.80	1 (10%)	9,13,13	1.04	1 (11%)
56	MPD	2A	3754	1	7,7,7	0.42	0	9,10,10	0.51	0
56	MPD	2B	219	-	7,7,7	0.34	0	9,10,10	0.36	0
57	ARG	1B	232	54	10,11,11	0.75	1 (10%)	9,13,13	0.96	1 (11%)
56	MPD	1T	205	-	7,7,7	0.29	0	9,10,10	0.40	0
56	MPD	2A	3755	-	7,7,7	0.35	0	9,10,10	0.28	0
59	SF4	1d	306	35	0,12,12	-	-	-		
59	SF4	2d	501	35	0,12,12	-	-	-		
55	A1CQ9	2A	3753	1	26,29,29	2.81	9 (34%)	36,47,47	2.54	14 (38%)
56	MPD	1A	4047	-	7,7,7	0.34	0	9,10,10	0.33	0
56	MPD	18	104	-	7,7,7	0.37	0	9,10,10	0.36	0
55	A1CQ9	1A	4046	-	26,29,29	2.79	7 (26%)	36,47,47	2.65	12 (33%)

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
56	MPD	1a	1878	32	-	5/5/5/5	-
57	ARG	1F	321	-	-	3/11/11/11	-
56	MPD	2A	3754	1	-	2/5/5/5	-
56	MPD	2B	219	-	-	3/5/5/5	-
57	ARG	1B	232	54	-	4/11/11/11	-
56	MPD	1T	205	-	-	4/5/5/5	-
56	MPD	2A	3755	-	-	4/5/5/5	-
59	SF4	1d	306	35	-	-	0/6/5/5
59	SF4	2d	501	35	-	-	0/6/5/5
55	A1CQ9	2A	3753	1	-	2/7/70/70	0/3/3/3
56	MPD	1A	4047	-	-	3/5/5/5	-
56	MPD	18	104	-	-	0/5/5/5	-
55	A1CQ9	1A	4046	-	-	1/7/70/70	0/3/3/3

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2A	3753	A1CQ9	C10-C08	-8.73	1.40	1.53
55	1A	4046	A1CQ9	C10-C08	-8.49	1.40	1.53
55	1A	4046	A1CQ9	C07-C08	-7.92	1.38	1.51
55	2A	3753	A1CQ9	C07-C08	-7.77	1.38	1.51
55	1A	4046	A1CQ9	O22-C12	-3.98	1.39	1.46
55	2A	3753	A1CQ9	C16-C15	-3.96	1.52	1.56
55	1A	4046	A1CQ9	C06-C05	-3.21	1.48	1.54
55	2A	3753	A1CQ9	O22-C12	-3.06	1.41	1.46
55	1A	4046	A1CQ9	C11-C12	-2.95	1.53	1.56
55	2A	3753	A1CQ9	C11-C12	-2.91	1.53	1.56
55	2A	3753	A1CQ9	C06-C05	-2.64	1.49	1.54
55	1A	4046	A1CQ9	C03-C02	-2.54	1.49	1.53
55	2A	3753	A1CQ9	C03-C02	-2.49	1.49	1.53
55	2A	3753	A1CQ9	C11-C02	-2.30	1.52	1.56
57	1B	232	ARG	OXT-C	-2.22	1.23	1.30
55	1A	4046	A1CQ9	C13-C12	-2.21	1.50	1.53
55	2A	3753	A1CQ9	C04-C03	-2.08	1.49	1.53
57	1F	321	ARG	OXT-C	-2.07	1.24	1.30

All (28) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1A	4046	A1CQ9	C13-C12-C11	-8.91	106.71	116.28
55	2A	3753	A1CQ9	C13-C12-C11	-7.70	108.01	116.28
55	1A	4046	A1CQ9	C27-C11-C12	-5.72	102.97	108.81
55	2A	3753	A1CQ9	C27-C11-C12	-5.26	103.44	108.81
55	2A	3753	A1CQ9	C04-C03-C02	-4.47	106.61	112.38
55	1A	4046	A1CQ9	C04-C03-C02	-4.01	107.21	112.38
55	1A	4046	A1CQ9	C02-C11-C12	3.96	114.82	112.13
55	2A	3753	A1CQ9	C05-C10-C11	-3.81	112.80	117.94
55	1A	4046	A1CQ9	C05-C10-C11	-3.80	112.81	117.94
55	1A	4046	A1CQ9	C04-C05-C10	3.50	112.89	106.82
55	2A	3753	A1CQ9	C12-O22-C23	-3.45	111.75	118.03
55	2A	3753	A1CQ9	C03-C02-C11	-3.40	107.78	111.57
55	1A	4046	A1CQ9	C12-O22-C23	-3.32	111.98	118.03
55	1A	4046	A1CQ9	C03-C02-C11	-3.24	107.96	111.57
55	1A	4046	A1CQ9	O22-C12-C11	3.24	111.36	106.32
55	2A	3753	A1CQ9	C04-C05-C10	3.12	112.23	106.82
55	2A	3753	A1CQ9	O09-C08-C07	-3.06	121.14	125.52
57	1F	321	ARG	OXT-C-O	-2.91	117.49	124.08
55	2A	3753	A1CQ9	O22-C12-C11	2.88	110.81	106.32
55	1A	4046	A1CQ9	O09-C08-C07	-2.87	121.42	125.52
55	1A	4046	A1CQ9	C07-C08-C10	2.79	111.50	108.53
57	1B	232	ARG	OXT-C-O	-2.79	117.76	124.08
55	2A	3753	A1CQ9	C07-C08-C10	2.69	111.39	108.53
55	2A	3753	A1CQ9	C05-C16-C15	-2.58	110.06	112.46
55	2A	3753	A1CQ9	C02-C11-C12	2.43	113.78	112.13
55	1A	4046	A1CQ9	C17-C16-C05	-2.33	108.22	111.23
55	2A	3753	A1CQ9	C03-C04-C05	-2.24	108.86	112.95
55	2A	3753	A1CQ9	C06-C05-C16	-2.03	108.20	110.55

There are no chirality outliers.

All (31) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4046	A1CQ9	C13-C14-C20-C21
55	2A	3753	A1CQ9	C13-C14-C20-C21
56	1a	1878	MPD	C2-C3-C4-O4
56	1a	1878	MPD	C2-C3-C4-C5
56	2B	219	MPD	C1-C2-C3-C4
56	2B	219	MPD	O2-C2-C3-C4
57	1B	232	ARG	O-C-CA-N
57	1F	321	ARG	N-CA-CB-CG
57	1F	321	ARG	C-CA-CB-CG
57	1B	232	ARG	OXT-C-CA-N

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Mol	Chain	Res	Type	Atoms
57	1B	232	ARG	NE-CD-CG-CB
57	1B	232	ARG	CA-CB-CG-CD
56	1T	205	MPD	C1-C2-C3-C4
56	1a	1878	MPD	CM-C2-C3-C4
56	2A	3755	MPD	C1-C2-C3-C4
55	2A	3753	A1CQ9	O22-C23-C25-O26
56	1T	205	MPD	C2-C3-C4-C5
56	2A	3754	MPD	C2-C3-C4-C5
56	1A	4047	MPD	O2-C2-C3-C4
56	1a	1878	MPD	O2-C2-C3-C4
56	2A	3755	MPD	O2-C2-C3-C4
56	1A	4047	MPD	C2-C3-C4-O4
56	1T	205	MPD	C2-C3-C4-O4
56	2A	3755	MPD	C2-C3-C4-O4
56	1A	4047	MPD	C1-C2-C3-C4
56	1T	205	MPD	CM-C2-C3-C4
56	1a	1878	MPD	C1-C2-C3-C4
56	2A	3754	MPD	C1-C2-C3-C4
56	2A	3755	MPD	CM-C2-C3-C4
56	2B	219	MPD	CM-C2-C3-C4
57	1F	321	ARG	OXT-C-CA-N

There are no ring outliers.

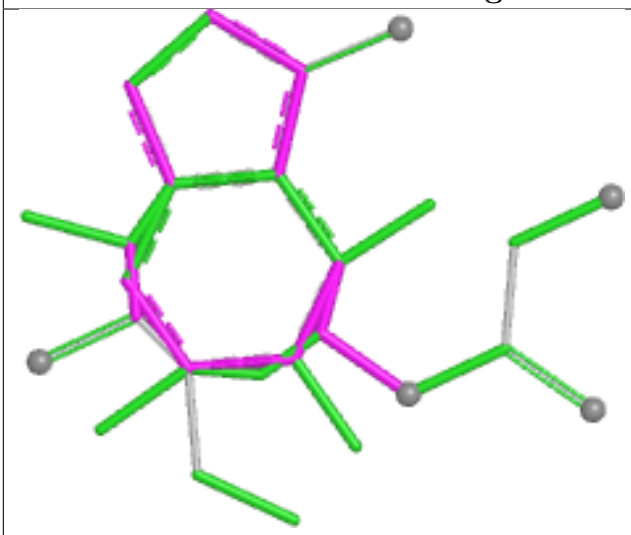
8 monomers are involved in 15 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	1a	1878	MPD	5	0
57	1F	321	ARG	1	0
56	2A	3754	MPD	1	0
57	1B	232	ARG	2	0
56	1T	205	MPD	1	0
59	2d	501	SF4	1	0
56	1A	4047	MPD	2	0
56	18	104	MPD	2	0

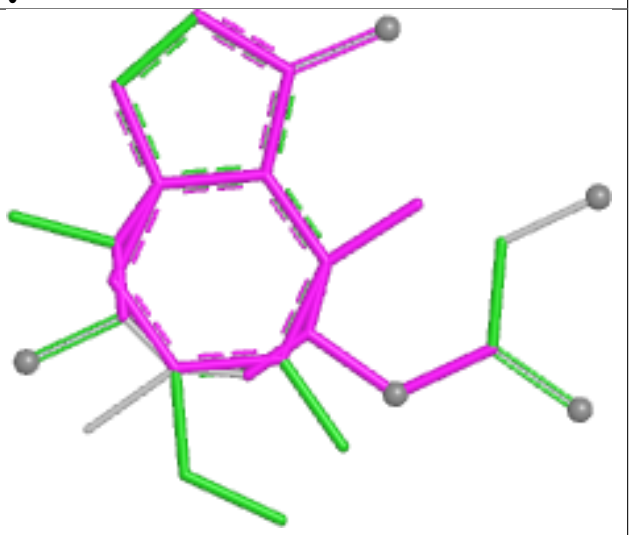
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring

in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

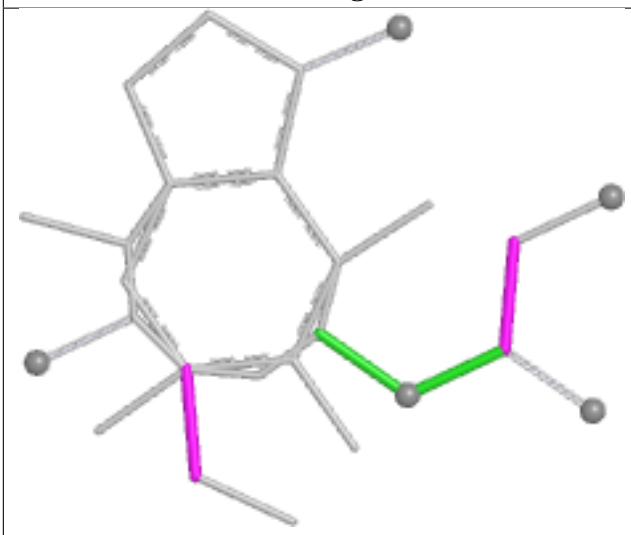
Ligand A1CQ9 2A 3753



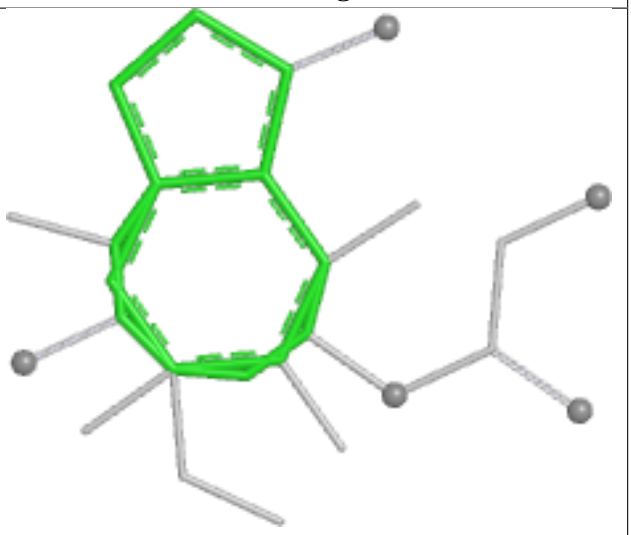
Bond lengths



Bond angles

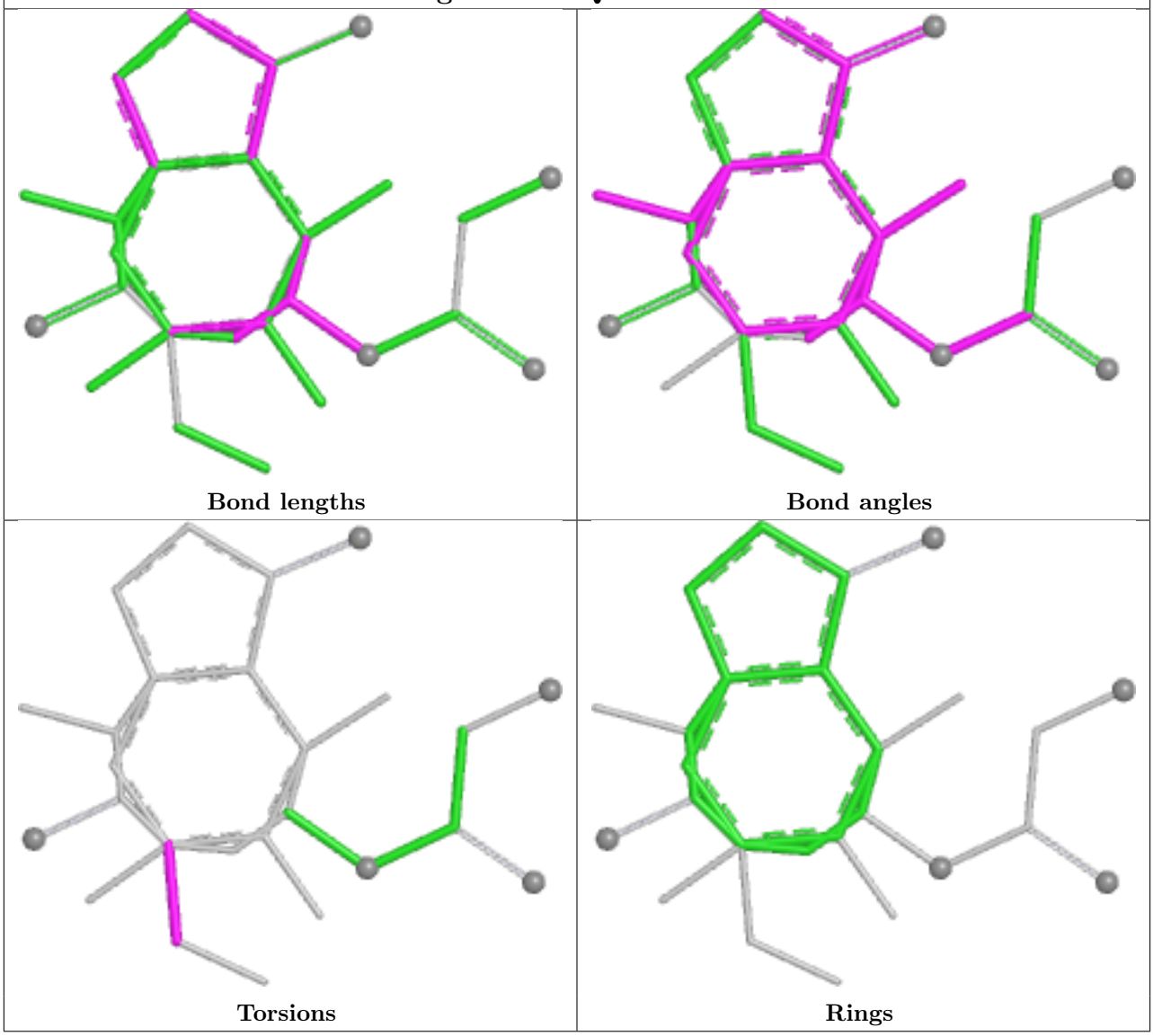


Torsions



Rings

Ligand A1CQ9 1A 4046



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2861/2915 (98%)	-0.70	131 (4%) 37 34	10, 26, 85, 100	0
1	2A	2856/2915 (97%)	-0.16	149 (5%) 33 29	24, 48, 89, 101	0
2	1B	120/121 (99%)	-0.51	1 (0%) 82 81	21, 41, 59, 75	0
2	2B	120/121 (99%)	0.80	9 (7%) 20 17	48, 73, 82, 86	0
3	1D	275/276 (99%)	-0.51	0 100 100	12, 26, 40, 62	0
3	2D	275/276 (99%)	-0.14	2 (0%) 84 83	23, 42, 54, 72	0
4	1E	204/206 (99%)	-0.43	0 100 100	10, 29, 49, 66	0
4	2E	204/206 (99%)	0.02	1 (0%) 87 86	25, 48, 62, 75	0
5	1F	203/210 (96%)	-0.37	1 (0%) 87 86	10, 31, 59, 77	0
5	2F	203/210 (96%)	0.21	2 (0%) 79 78	25, 54, 71, 85	0
6	1G	181/182 (99%)	0.42	8 (4%) 39 35	38, 57, 71, 82	0
6	2G	181/182 (99%)	1.60	53 (29%) 1 1	68, 77, 84, 89	0
7	1H	174/180 (96%)	-0.12	3 (1%) 69 67	28, 42, 56, 63	0
7	2H	173/180 (96%)	0.95	14 (8%) 18 15	60, 72, 80, 84	0
8	1I	147/148 (99%)	0.43	3 (2%) 65 62	34, 63, 73, 78	0
8	2I	146/148 (98%)	0.54	5 (3%) 48 44	45, 66, 76, 81	0
9	1N	140/140 (100%)	-0.47	0 100 100	18, 27, 49, 67	0
9	2N	140/140 (100%)	0.16	0 100 100	35, 53, 68, 73	0
10	1O	122/122 (100%)	-0.43	1 (0%) 82 81	18, 30, 47, 52	0
10	2O	122/122 (100%)	-0.18	0 100 100	35, 45, 59, 65	0
11	1P	149/150 (99%)	-0.31	0 100 100	11, 35, 55, 70	0
11	2P	149/150 (99%)	0.25	3 (2%) 65 62	26, 57, 72, 82	0
12	1Q	141/141 (100%)	-0.45	0 100 100	16, 29, 42, 60	0
12	2Q	141/141 (100%)	0.38	4 (2%) 55 51	34, 53, 64, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.58	0 100 100	17, 25, 39, 54	0
13	2R	118/118 (100%)	-0.02	0 100 100	29, 42, 53, 57	0
14	1S	110/112 (98%)	-0.09	0 100 100	30, 41, 55, 65	0
14	2S	110/112 (98%)	1.24	19 (17%) 4 3	58, 68, 75, 79	0
15	1T	131/146 (89%)	-0.20	3 (2%) 61 58	23, 34, 61, 69	0
15	2T	131/146 (89%)	0.11	0 100 100	40, 50, 67, 76	0
16	1U	116/118 (98%)	-0.60	1 (0%) 81 80	13, 20, 35, 51	0
16	2U	116/118 (98%)	0.21	1 (0%) 81 80	30, 49, 62, 66	0
17	1V	101/101 (100%)	-0.53	0 100 100	13, 30, 50, 57	0
17	2V	101/101 (100%)	0.41	1 (0%) 79 78	31, 59, 68, 75	0
18	1W	112/113 (99%)	-0.61	0 100 100	14, 20, 39, 76	0
18	2W	112/113 (99%)	-0.18	0 100 100	28, 39, 58, 76	0
19	1X	95/96 (98%)	-0.31	1 (1%) 78 76	17, 27, 49, 64	0
19	2X	95/96 (98%)	0.47	3 (3%) 50 46	39, 51, 67, 73	0
20	1Y	107/110 (97%)	-0.12	2 (1%) 66 63	24, 38, 59, 66	0
20	2Y	107/110 (97%)	0.64	4 (3%) 45 41	46, 62, 73, 74	0
21	1Z	203/206 (98%)	0.03	0 100 100	29, 47, 64, 74	0
21	2Z	201/206 (97%)	0.88	10 (4%) 34 30	55, 67, 77, 84	0
22	10	77/85 (90%)	-0.40	0 100 100	19, 27, 46, 57	0
22	20	77/85 (90%)	0.37	1 (1%) 75 73	42, 54, 64, 66	0
23	11	97/98 (98%)	-0.26	1 (1%) 79 78	17, 32, 58, 65	0
23	21	97/98 (98%)	0.26	1 (1%) 79 78	30, 48, 66, 71	0
24	12	70/72 (97%)	-0.19	1 (1%) 73 72	24, 38, 51, 76	0
24	22	70/72 (97%)	0.53	1 (1%) 73 72	49, 61, 69, 71	0
25	13	59/60 (98%)	-0.43	0 100 100	18, 25, 52, 65	0
25	23	59/60 (98%)	0.24	1 (1%) 69 67	40, 51, 66, 74	0
26	14	69/71 (97%)	0.81	10 (14%) 6 5	54, 73, 84, 88	0
26	24	69/71 (97%)	1.60	18 (26%) 1 1	73, 83, 90, 91	0
27	15	59/60 (98%)	-0.61	0 100 100	11, 23, 46, 55	0
27	25	59/60 (98%)	-0.06	0 100 100	26, 43, 62, 70	0
28	16	53/54 (98%)	-0.48	0 100 100	25, 32, 47, 55	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.32	0 100 100	43, 52, 62, 68	0
29	17	48/49 (97%)	-0.48	1 (2%) 63 61	12, 18, 50, 56	0
29	27	48/49 (97%)	-0.08	2 (4%) 40 37	24, 33, 58, 67	0
30	18	64/65 (98%)	-0.49	0 100 100	19, 23, 32, 39	0
30	28	64/65 (98%)	0.17	1 (1%) 70 68	35, 45, 53, 61	0
31	19	37/37 (100%)	-0.35	0 100 100	22, 30, 45, 48	0
31	29	37/37 (100%)	1.07	3 (8%) 18 15	50, 58, 66, 72	0
32	1a	1488/1521 (97%)	0.33	55 (3%) 45 41	28, 64, 88, 101	0
32	2a	1492/1521 (98%)	0.51	77 (5%) 33 29	38, 69, 90, 100	0
33	1b	231/256 (90%)	1.17	32 (13%) 6 5	64, 75, 84, 89	0
33	2b	231/256 (90%)	1.53	62 (26%) 1 1	67, 79, 85, 91	0
34	1c	206/239 (86%)	0.83	9 (4%) 39 35	58, 69, 78, 83	0
34	2c	206/239 (86%)	1.34	27 (13%) 7 6	65, 77, 82, 91	0
35	1d	208/209 (99%)	0.97	19 (9%) 15 12	50, 66, 75, 81	0
35	2d	208/209 (99%)	0.88	14 (6%) 24 21	53, 65, 74, 78	0
36	1e	148/162 (91%)	0.40	3 (2%) 65 62	41, 59, 69, 77	0
36	2e	148/162 (91%)	0.68	6 (4%) 41 37	53, 66, 75, 80	0
37	1f	100/101 (99%)	0.40	1 (1%) 79 78	48, 59, 69, 77	0
37	2f	100/101 (99%)	0.42	0 100 100	51, 61, 71, 76	0
38	1g	155/156 (99%)	0.60	5 (3%) 50 46	58, 67, 74, 83	0
38	2g	155/156 (99%)	1.05	16 (10%) 12 10	66, 73, 79, 86	0
39	1h	137/138 (99%)	0.60	3 (2%) 62 59	48, 61, 68, 81	0
39	2h	137/138 (99%)	0.69	5 (3%) 46 42	56, 66, 73, 77	0
40	1i	127/128 (99%)	1.36	29 (22%) 2 2	54, 73, 80, 87	0
40	2i	126/128 (98%)	1.95	57 (45%) 0 0	68, 80, 84, 87	0
41	1j	97/105 (92%)	1.56	24 (24%) 2 1	59, 74, 83, 85	0
41	2j	96/105 (91%)	2.23	52 (54%) 0 0	69, 80, 85, 86	0
42	1k	114/129 (88%)	0.43	4 (3%) 47 43	36, 55, 67, 76	0
42	2k	114/129 (88%)	0.76	6 (5%) 32 28	49, 65, 74, 78	0
43	1l	121/132 (91%)	0.29	3 (2%) 58 55	40, 52, 62, 67	0
43	2l	121/132 (91%)	0.59	2 (1%) 69 67	49, 60, 66, 70	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.76	6 (5%) 33 29	59, 68, 75, 78	0
44	2m	114/126 (90%)	1.43	25 (21%) 2 2	68, 77, 83, 84	0
45	1n	60/61 (98%)	1.02	7 (11%) 9 7	60, 67, 73, 77	0
45	2n	60/61 (98%)	2.15	27 (45%) 0 0	67, 77, 83, 85	0
46	1o	88/89 (98%)	0.50	3 (3%) 48 44	41, 56, 67, 76	0
46	2o	88/89 (98%)	0.72	2 (2%) 61 58	49, 64, 72, 74	0
47	1p	82/88 (93%)	1.32	16 (19%) 3 2	56, 65, 74, 78	0
47	2p	82/88 (93%)	0.93	4 (4%) 35 31	53, 62, 74, 79	0
48	1q	99/105 (94%)	0.67	2 (2%) 65 62	46, 60, 69, 71	0
48	2q	99/105 (94%)	0.50	1 (1%) 79 78	51, 61, 69, 73	0
49	1r	68/88 (77%)	0.38	1 (1%) 72 70	48, 58, 69, 76	0
49	2r	68/88 (77%)	0.50	1 (1%) 72 70	55, 62, 71, 73	0
50	1s	83/93 (89%)	1.20	12 (14%) 6 5	62, 72, 79, 81	0
50	2s	83/93 (89%)	1.94	33 (39%) 1 0	69, 81, 87, 90	0
51	1t	96/106 (90%)	1.03	11 (11%) 9 8	52, 65, 72, 74	0
51	2t	98/106 (92%)	0.74	5 (5%) 33 29	53, 61, 73, 78	0
52	1u	23/27 (85%)	1.70	8 (34%) 1 1	60, 67, 69, 72	0
52	2u	23/27 (85%)	3.10	20 (86%) 0 0	72, 77, 80, 81	0
53	1y	97/113 (85%)	0.42	2 (2%) 63 61	46, 58, 67, 73	0
53	2y	96/113 (84%)	1.30	17 (17%) 4 3	62, 73, 80, 84	0
All	All	20766/21468 (96%)	0.20	1190 (5%) 29 26	10, 55, 83, 101	0

All (1190) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
45	2n	2	ALA	10.9
32	2a	1036	G	7.0
40	2i	102	LEU	6.5
1	1A	1076	C	6.4
1	1A	1081	U	6.2
1	2A	2176	A	6.2
1	2A	2125	G	6.1
32	2a	1030(A)	G	6.0
32	2a	1030(B)	C	5.7
51	1t	103	GLY	5.6

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Mol	Chain	Res	Type	RSRZ
7	1H	2	SER	5.5
1	1A	1080	C	5.5
38	2g	5	ARG	5.4
1	2A	2130	U	5.4
1	1A	1087	G	5.4
52	2u	14	TRP	5.4
52	2u	6	ARG	5.3
45	1n	2	ALA	5.2
1	1A	1064	C	5.2
1	2A	1046	A	5.2
32	2a	1034	G	5.1
1	1A	1082	U	5.1
1	1A	1086	A	5.1
32	2a	1037	C	5.1
1	1A	1093	G	5.0
1	1A	2173	A	5.0
32	1a	1036	G	5.0
41	2j	37	PRO	5.0
1	2A	2124	G	4.9
1	2A	2139	C	4.9
32	1a	1030(B)	C	4.9
32	2a	1027	C	4.9
53	2y	98	ALA	4.9
1	1A	1091	G	4.9
1	2A	2123	G	4.9
1	2A	2133	G	4.9
41	1j	4	ILE	4.9
1	2A	2174	C	4.8
1	1A	1092	C	4.8
1	2A	652(B)	A	4.8
1	2A	2173	A	4.8
1	2A	1082	U	4.8
46	2o	86	GLY	4.8
52	2u	11	GLY	4.7
41	2j	40	LEU	4.7
1	2A	1083	U	4.7
40	2i	126	SER	4.7
1	2A	2172	U	4.7
1	1A	1102	C	4.7
1	2A	2116	G	4.7
41	2j	38	ILE	4.6
1	2A	1076	C	4.6

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Mol	Chain	Res	Type	RSRZ
41	2j	75	ILE	4.6
26	24	56	VAL	4.6
1	2A	2132	U	4.6
1	1A	1057	A	4.5
50	2s	2	PRO	4.5
45	2n	30	ALA	4.5
1	2A	1085	A	4.5
1	2A	2169	A	4.5
1	1A	1072	C	4.5
1	2A	2179	C	4.5
1	2A	2165	G	4.5
1	1A	2174	C	4.4
1	2A	2175	C	4.4
40	1i	15	ALA	4.4
1	1A	1089	G	4.4
1	2A	2153	G	4.4
1	2A	1070	A	4.4
1	2A	2602	A	4.4
32	2a	1035	A	4.4
41	1j	76	ASN	4.4
32	1a	1286	A	4.4
41	2j	36	GLY	4.4
1	2A	2162	G	4.4
32	1a	1026	G	4.4
1	1A	2108	C	4.3
1	2A	1536	C	4.3
1	2A	1088	A	4.3
1	2A	2136	C	4.3
34	1c	2	GLY	4.3
6	2G	88	ILE	4.3
1	2A	1089	G	4.3
1	2A	2138	C	4.3
1	2A	1067	A	4.3
52	2u	4	GLY	4.2
1	1A	1103	A	4.2
1	2A	2131	G	4.2
45	2n	5	ALA	4.2
23	21	2	SER	4.2
1	2A	2135	A	4.2
32	1a	1031	G	4.2
32	2a	1001(A)	G	4.2
50	2s	9	VAL	4.2

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Mol	Chain	Res	Type	RSRZ
32	1a	1025	U	4.2
7	2H	6	ARG	4.2
1	1A	2116	G	4.2
1	2A	2147	G	4.2
32	2a	1003	G	4.2
40	1i	106	ALA	4.1
20	2Y	1	MET	4.1
41	2j	63	PHE	4.1
41	1j	44	VAL	4.1
1	1A	1104	C	4.1
1	2A	1075	C	4.1
1	2A	2134	A	4.1
1	2A	2802	G	4.1
32	1a	1030(A)	G	4.1
51	2t	103	GLY	4.1
1	1A	1078	U	4.1
45	2n	6	LEU	4.1
1	1A	1088	A	4.1
1	1A	2176	A	4.1
1	2A	2107	C	4.1
32	1a	1002	G	4.1
32	2a	1031	G	4.1
1	1A	1083	U	4.1
32	1a	1030(C)	G	4.0
1	2A	2167	U	4.0
26	14	59	PHE	4.0
41	2j	47	PHE	4.0
1	2A	1091	G	4.0
1	2A	2119	A	4.0
32	1a	1492	A	4.0
52	2u	9	ARG	4.0
6	2G	157	ILE	4.0
40	2i	109	VAL	4.0
45	2n	33	VAL	4.0
33	2b	97	TRP	4.0
52	2u	3	LYS	4.0
1	2A	2106	G	3.9
32	1a	1034	G	3.9
1	1A	1509	C	3.9
32	1a	1030	C	3.9
6	2G	160	VAL	3.9
33	1b	7	VAL	3.9

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Mol	Chain	Res	Type	RSRZ
50	2s	67	VAL	3.9
1	1A	2167	U	3.9
40	1i	19	LEU	3.9
1	2A	2108	C	3.9
1	2A	2120	G	3.8
1	2A	2159	G	3.8
1	2A	2160	G	3.8
40	2i	13	ALA	3.8
52	2u	2	GLY	3.8
41	2j	5	ARG	3.8
1	2A	2117	A	3.8
32	2a	1286	A	3.8
1	1A	1075	C	3.8
1	2A	2109	U	3.8
50	2s	68	GLY	3.8
1	1A	1067	A	3.8
1	1A	2147	G	3.8
1	2A	1087	G	3.8
1	2A	2121	G	3.8
32	1a	1001	A	3.8
32	2a	1032	G	3.8
51	2t	6	PRO	3.8
6	2G	35	GLU	3.8
1	2A	2118	U	3.8
1	1A	2107	C	3.8
44	2m	102	ARG	3.8
40	2i	11	LYS	3.8
1	1A	1062	G	3.7
1	1A	1074	G	3.7
47	2p	19	ILE	3.7
33	2b	237	ALA	3.7
1	1A	2132	U	3.7
1	2A	2168	G	3.7
32	1a	1001(A)	G	3.7
32	1a	1003	G	3.7
1	1A	2161	C	3.7
33	2b	133	LYS	3.7
1	2A	12	U	3.7
32	1a	65	U	3.7
45	2n	18	VAL	3.7
1	2A	2154	G	3.7
45	2n	21	TYR	3.7

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Mol	Chain	Res	Type	RSRZ
52	2u	24	ARG	3.7
33	1b	131	PRO	3.7
33	2b	136	VAL	3.7
32	1a	1035	A	3.6
1	2A	2149	G	3.6
32	2a	1033	G	3.6
40	1i	66	ARG	3.6
1	1A	1079	C	3.6
1	2A	2803	C	3.6
32	2a	1030	C	3.6
26	24	49	PHE	3.6
33	2b	121	LEU	3.6
1	1A	1105	U	3.6
1	1A	2602	A	3.6
1	2A	2122	U	3.6
1	2A	2170	A	3.6
40	2i	82	ALA	3.6
1	2A	2151	G	3.6
23	11	2	SER	3.6
32	2a	1002	G	3.6
26	14	56	VAL	3.6
33	1b	97	TRP	3.6
33	2b	38	GLY	3.6
38	1g	2	ALA	3.6
40	2i	18	PHE	3.6
36	2e	20	GLN	3.6
15	1T	130	ALA	3.6
1	1A	2150	U	3.6
1	1A	1077	A	3.6
1	2A	2110	G	3.5
40	2i	125	TYR	3.5
26	24	66	SER	3.5
40	2i	6	GLY	3.5
44	2m	100	GLY	3.5
1	2A	2129	C	3.5
1	2A	2140	C	3.5
1	2A	2177	C	3.5
32	1a	1027	C	3.5
52	2u	23	PRO	3.5
1	2A	1071	G	3.5
1	2A	2148	G	3.5
33	2b	164	VAL	3.5

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Mol	Chain	Res	Type	RSRZ
1	2A	1096	A	3.5
1	2A	1064	C	3.5
1	2A	1509	C	3.5
44	2m	4	ILE	3.5
1	1A	1063	G	3.5
1	1A	1176	G	3.5
1	1A	2166	G	3.5
1	2A	229	A	3.5
33	1b	187	LEU	3.5
6	2G	159	VAL	3.5
1	2A	2150	U	3.4
1	2A	652(C)	G	3.4
1	2A	2152	G	3.4
1	1A	1085	A	3.4
1	2A	2126	A	3.4
40	1i	128	ARG	3.4
1	2A	1080	C	3.4
40	2i	2	GLU	3.4
49	2r	20	ALA	3.4
1	1A	1058	G	3.4
44	1m	2	ALA	3.4
50	2s	16	LEU	3.4
30	28	46	ARG	3.4
38	1g	5	ARG	3.4
45	2n	3	ARG	3.4
50	1s	13	ASP	3.4
1	2A	2161	C	3.4
1	2A	1074	G	3.4
32	1a	1024	G	3.4
53	1y	95	ARG	3.4
32	1a	1029	C	3.3
45	2n	34	TYR	3.3
34	1c	87	LEU	3.3
44	2m	66	LEU	3.3
40	2i	106	ALA	3.3
1	1A	2129	C	3.3
32	2a	1038	C	3.3
34	2c	2	GLY	3.3
52	1u	16	GLY	3.3
1	1A	1071	G	3.3
1	1A	2127	G	3.3
1	1A	2159	G	3.3

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Mol	Chain	Res	Type	RSRZ
1	2A	2127	G	3.3
1	2A	1081	U	3.3
32	1a	1257	U	3.3
32	2a	1219	U	3.3
6	2G	37	VAL	3.3
40	2i	86	VAL	3.3
6	2G	53	LEU	3.3
53	2y	97	ALA	3.3
1	1A	1066	U	3.3
34	2c	8	ILE	3.3
50	1s	9	VAL	3.3
1	2A	2111	C	3.2
1	1A	2126	A	3.2
1	2A	1073	A	3.2
1	2A	1086	A	3.2
41	2j	65	LEU	3.2
33	2b	22	LYS	3.2
6	2G	158	ALA	3.2
32	2a	1026	G	3.2
47	1p	68	ASP	3.2
44	2m	105	THR	3.2
51	2t	102	GLY	3.2
1	2A	1057	A	3.2
6	2G	31	VAL	3.2
33	2b	172	ILE	3.2
33	2b	185	ILE	3.2
1	1A	1099	G	3.2
40	2i	10	ARG	3.2
1	1A	2109	U	3.2
6	1G	48	GLU	3.2
1	2A	2171	A	3.2
52	2u	10	ARG	3.2
1	2A	2155	G	3.2
40	1i	7	THR	3.2
43	2l	87	GLY	3.2
50	1s	68	GLY	3.2
35	1d	110	PHE	3.2
1	1A	2128	C	3.1
1	1A	2178	C	3.1
40	1i	20	ARG	3.1
40	2i	105	ASP	3.1
1	1A	2117	A	3.1

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Mol	Chain	Res	Type	RSRZ
14	2S	32	LEU	3.1
21	2Z	191	VAL	3.1
35	1d	122	ARG	3.1
1	1A	888	C	3.1
1	2A	1079	C	3.1
1	2A	2145	C	3.1
35	1d	179	GLU	3.1
40	2i	119	ALA	3.1
41	2j	32	ALA	3.1
6	2G	28	VAL	3.1
26	24	35	VAL	3.1
41	2j	34	VAL	3.1
44	2m	98	VAL	3.1
34	1c	193	TYR	3.1
40	2i	5	TYR	3.1
41	1j	78	ASN	3.1
42	2k	117	ASN	3.1
48	2q	98	LEU	3.1
50	2s	30	LEU	3.1
50	2s	71	LEU	3.1
47	1p	82	GLN	3.1
1	1A	2175	C	3.1
32	1a	1037	C	3.1
33	2b	39	ILE	3.1
53	1y	98	ALA	3.1
32	2a	1001	A	3.1
32	2a	1004	A	3.1
41	2j	55	LYS	3.1
45	1n	16	PHE	3.1
6	2G	45	GLU	3.1
52	2u	5	ASP	3.1
1	1A	2125	G	3.1
1	1A	2133	G	3.1
33	2b	67	THR	3.1
40	2i	7	THR	3.1
42	2k	31	THR	3.1
1	1A	1053	C	3.1
1	2A	2146	C	3.1
33	2b	57	PHE	3.1
50	2s	35	SER	3.1
33	2b	148	TYR	3.0
50	2s	15	LEU	3.0

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Mol	Chain	Res	Type	RSRZ
34	2c	159	GLY	3.0
41	2j	74	ILE	3.0
45	2n	7	ILE	3.0
33	1b	237	ALA	3.0
36	1e	21	ALA	3.0
44	2m	5	ALA	3.0
33	2b	165	VAL	3.0
38	2g	9	VAL	3.0
1	1A	2165	G	3.0
1	2A	2166	G	3.0
6	2G	133	LEU	3.0
1	1A	1090	U	3.0
31	29	17	ILE	3.0
41	2j	44	VAL	3.0
44	2m	7	VAL	3.0
19	2X	92	LEU	3.0
50	2s	53	ASN	3.0
1	1A	2162	G	3.0
32	1a	630	G	3.0
41	1j	33	GLN	3.0
1	2A	2137	C	3.0
1	1A	1073	A	3.0
1	2A	2801(A)	A	3.0
6	2G	46	ALA	3.0
41	2j	24	VAL	3.0
41	2j	72	VAL	3.0
43	1l	18	VAL	3.0
40	2i	79	LEU	3.0
33	1b	12	GLU	3.0
14	2S	35	ILE	3.0
40	1i	8	GLY	3.0
2	2B	118	G	3.0
32	1a	1033	G	3.0
1	1A	2143	C	3.0
1	2A	1072	C	3.0
1	2A	2105	C	3.0
1	2A	2178	C	3.0
32	1a	1019	C	3.0
32	1a	1028	C	3.0
40	2i	101	PHE	3.0
14	2S	54	LEU	2.9
1	1A	271(K)	U	2.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2118	U	2.9
1	2A	2180	U	2.9
6	2G	131	TYR	2.9
33	1b	33	TYR	2.9
40	2i	62	TYR	2.9
35	1d	153	ARG	2.9
41	2j	26	ALA	2.9
33	1b	165	VAL	2.9
41	1j	34	VAL	2.9
1	2A	2143	C	2.9
1	1A	1084	A	2.9
1	1A	2123	G	2.9
32	1a	1040	U	2.9
26	24	67	TYR	2.9
34	2c	92	ALA	2.9
33	2b	152	PHE	2.9
40	2i	108	VAL	2.9
35	2d	120	LEU	2.9
47	1p	43	LYS	2.9
6	2G	142	PRO	2.9
50	2s	76	PRO	2.9
1	2A	1092	C	2.9
1	2A	1095	A	2.9
1	2A	2164	C	2.9
32	1a	1030(D)	A	2.9
52	1u	6	ARG	2.9
1	1A	1963	U	2.9
1	1A	2160	G	2.9
1	1A	2172	U	2.9
6	2G	38	VAL	2.9
39	1h	112	LEU	2.9
44	2m	19	LEU	2.9
51	1t	10	LEU	2.9
6	2G	87	PRO	2.9
41	2j	39	PRO	2.9
41	2j	19	SER	2.9
40	2i	91	ASP	2.9
1	2A	2158	A	2.9
5	2F	208	GLY	2.9
32	2a	1039	C	2.9
44	1m	100	GLY	2.9
29	27	48	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
32	1a	1032	G	2.9
40	2i	127	LYS	2.9
41	2j	7	LYS	2.9
41	2j	16	LEU	2.9
40	2i	59	PHE	2.9
40	2i	9	ARG	2.8
33	2b	208	ILE	2.8
14	2S	92	TYR	2.8
33	1b	236	TYR	2.8
40	2i	4	TYR	2.8
19	1X	95	LEU	2.8
41	1j	85	LEU	2.8
35	1d	112	VAL	2.8
40	2i	14	VAL	2.8
32	2a	1029	C	2.8
1	1A	2153	G	2.8
12	2Q	59	ARG	2.8
32	1a	1023	G	2.8
52	2u	22	ARG	2.8
38	2g	156	TRP	2.8
44	2m	9	ILE	2.8
6	2G	146	TYR	2.8
33	2b	197	VAL	2.8
51	1t	73	HIS	2.8
53	2y	49	VAL	2.8
41	2j	46	ARG	2.8
1	1A	2142	C	2.8
1	2A	2128	C	2.8
12	2Q	22	LYS	2.8
45	2n	15	LYS	2.8
1	2A	614(B)	G	2.8
1	2A	1062	G	2.8
33	2b	10	LEU	2.8
15	1T	131	ALA	2.8
33	2b	15	VAL	2.8
1	2A	1090	U	2.8
1	2A	653	A	2.8
33	1b	172	ILE	2.8
50	2s	4	SER	2.8
34	2c	175	LEU	2.8
41	1j	10	GLY	2.8
8	1I	107	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
26	14	49	PHE	2.8
40	1i	18	PHE	2.8
32	2a	976	G	2.8
32	2a	1124	G	2.8
32	2a	1190	G	2.8
33	2b	21	ARG	2.8
40	1i	125	TYR	2.8
41	2j	43	ARG	2.8
50	2s	55	LYS	2.7
1	1A	1097	U	2.7
1	2A	362	U	2.7
6	1G	76	SER	2.7
1	2A	1069	A	2.7
32	2a	1357	A	2.7
32	1a	219	C	2.7
32	2a	1028	C	2.7
34	2c	163	ALA	2.7
33	2b	163	PHE	2.7
51	1t	80	ARG	2.7
40	2i	40	LEU	2.7
35	1d	23	GLY	2.7
1	1A	12	U	2.7
1	1A	1065	U	2.7
1	2A	271(K)	U	2.7
45	2n	49	HIS	2.7
50	2s	69	HIS	2.7
1	1A	1095	A	2.7
32	2a	1030(D)	A	2.7
47	2p	82	GLN	2.7
6	2G	52	ILE	2.7
35	1d	5	ILE	2.7
33	1b	11	LEU	2.7
41	2j	71	LEU	2.7
48	1q	63	ARG	2.7
47	1p	7	ALA	2.7
52	2u	8	THR	2.7
2	2B	1	U	2.7
7	2H	128	PRO	2.7
26	24	28	LYS	2.7
32	1a	202	U	2.7
1	2A	2114	A	2.7
32	2a	532	A	2.7

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Mol	Chain	Res	Type	RSRZ
45	2n	42	ILE	2.7
32	2a	1149	C	2.7
34	1c	79	ARG	2.7
40	2i	67	GLY	2.7
41	1j	31	GLY	2.7
44	1m	102	ARG	2.7
50	1s	84	GLY	2.7
41	2j	59	SER	2.7
6	2G	141	PHE	2.7
33	2b	81	VAL	2.7
44	2m	60	VAL	2.7
1	2A	2141	G	2.6
1	2A	2182	G	2.6
32	2a	1030(C)	G	2.6
1	1A	2144	U	2.6
33	1b	127	ILE	2.6
50	2s	31	ILE	2.6
52	2u	13	ILE	2.6
1	1A	2158	A	2.6
1	2A	1084	A	2.6
32	2a	1183	A	2.6
40	2i	99	LEU	2.6
45	1n	3	ARG	2.6
1	1A	2177	C	2.6
32	1a	1039	C	2.6
20	1Y	92	ASN	2.6
33	1b	132	LYS	2.6
45	1n	17	LYS	2.6
16	2U	90	VAL	2.6
26	24	50	VAL	2.6
33	2b	7	VAL	2.6
38	2g	80	VAL	2.6
6	2G	2	PRO	2.6
34	2c	7	PRO	2.6
40	2i	64	THR	2.6
41	2j	42	THR	2.6
35	2d	4	TYR	2.6
40	2i	63	ILE	2.6
47	1p	19	ILE	2.6
1	2A	1059	G	2.6
32	1a	1020	U	2.6
32	2a	1025	U	2.6

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Mol	Chain	Res	Type	RSRZ
33	2b	196	LEU	2.6
53	2y	41	LEU	2.6
40	2i	42	ARG	2.6
14	2S	93	LYS	2.6
1	1A	6	A	2.6
1	1A	653	A	2.6
1	1A	1046	A	2.6
8	2I	146	ALA	2.6
50	2s	24	ALA	2.6
26	24	52	THR	2.6
1	2A	2142	C	2.6
1	2A	2163	C	2.6
32	2a	1119	C	2.6
26	24	15	ILE	2.6
33	1b	200	ILE	2.6
36	2e	109	ILE	2.6
33	2b	72	GLY	2.6
41	2j	10	GLY	2.6
1	2A	11	G	2.6
32	2a	1373	G	2.6
33	2b	131	PRO	2.6
41	1j	32	ALA	2.6
41	1j	72	VAL	2.6
45	1n	5	ALA	2.6
40	1i	126	SER	2.6
45	2n	22	THR	2.6
1	1A	2119	A	2.6
8	2I	79	ILE	2.6
35	2d	5	ILE	2.6
35	2d	158	ILE	2.6
1	1A	2138	C	2.6
34	2c	12	LEU	2.6
47	1p	38	TYR	2.6
47	1p	39	TYR	2.6
45	2n	17	LYS	2.6
21	2Z	71	VAL	2.6
32	2a	84	U	2.6
32	2a	1257	U	2.6
40	2i	49	PRO	2.6
24	12	70	GLN	2.6
2	2B	117	G	2.5
32	1a	306	G	2.5

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Mol	Chain	Res	Type	RSRZ
38	2g	42	ILE	2.5
41	2j	6	ILE	2.5
1	2A	1048	A	2.5
33	1b	10	LEU	2.5
35	1d	101	LEU	2.5
35	1d	3	ARG	2.5
41	2j	28	ARG	2.5
44	2m	31	LYS	2.5
52	1u	9	ARG	2.5
40	2i	88	TYR	2.5
26	24	30	GLU	2.5
1	2A	2103	C	2.5
5	1F	208	GLY	2.5
35	2d	17	VAL	2.5
41	2j	41	PRO	2.5
50	2s	41	VAL	2.5
41	2j	76	ASN	2.5
32	1a	841	U	2.5
50	1s	40	ILE	2.5
34	2c	47	LEU	2.5
50	1s	15	LEU	2.5
1	1A	1056	G	2.5
1	1A	2154	G	2.5
32	1a	79	G	2.5
32	2a	1202	G	2.5
1	1A	548	A	2.5
1	2A	6	A	2.5
41	2j	83	GLU	2.5
52	1u	18	TYR	2.5
38	2g	34	GLY	2.5
40	2i	17	VAL	2.5
40	2i	76	ALA	2.5
45	1n	30	ALA	2.5
47	1p	80	PHE	2.5
33	2b	190	THR	2.5
47	1p	48	TRP	2.5
1	1A	2130	U	2.5
14	2S	58	LEU	2.5
34	2c	79	ARG	2.5
41	2j	79	ARG	2.5
45	2n	29	ARG	2.5
10	1O	108	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
33	2b	99	GLY	2.5
32	2a	1005	A	2.5
32	2a	1024	G	2.5
6	2G	93	THR	2.5
52	1u	8	THR	2.5
43	1l	91	LYS	2.5
6	2G	20	ILE	2.5
6	2G	76	SER	2.5
7	2H	59	ARG	2.5
7	2H	71	LEU	2.5
7	2H	136	ILE	2.5
33	2b	187	LEU	2.5
33	2b	200	ILE	2.5
38	2g	32	ARG	2.5
48	1q	98	LEU	2.5
1	1A	362	U	2.5
1	1A	2897	U	2.5
1	2A	2144	U	2.5
26	24	45	GLY	2.5
7	2H	41	MET	2.5
29	27	1	MET	2.5
21	2Z	27	VAL	2.5
31	29	25	VAL	2.5
6	2G	102	PHE	2.5
41	2j	67	THR	2.4
1	2A	1111	A	2.4
38	1g	32	ARG	2.4
6	2G	82	LEU	2.4
6	2G	139	LEU	2.4
33	2b	145	LEU	2.4
35	1d	157	LEU	2.4
35	2d	157	LEU	2.4
1	2A	2894	G	2.4
53	2y	38	HIS	2.4
1	1A	2139	C	2.4
2	2B	5	C	2.4
32	1a	218	C	2.4
1	2A	1066	U	2.4
41	1j	77	PRO	2.4
44	2m	41	PRO	2.4
50	2s	59	PRO	2.4
26	14	63	TYR	2.4

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Mol	Chain	Res	Type	RSRZ
14	2S	46	VAL	2.4
20	2Y	45	VAL	2.4
26	24	59	PHE	2.4
38	2g	83	ALA	2.4
42	1k	60	ALA	2.4
51	1t	67	ALA	2.4
33	2b	137	ARG	2.4
44	2m	103	THR	2.4
33	1b	37	ASN	2.4
33	2b	138	LEU	2.4
33	2b	221	LEU	2.4
40	2i	96	LEU	2.4
46	1o	3	ILE	2.4
41	2j	30	SER	2.4
1	1A	1045	A	2.4
32	2a	1492	A	2.4
1	1A	2115	G	2.4
1	1A	2141	G	2.4
1	2A	2112	G	2.4
1	2A	2157	G	2.4
34	1c	73	PRO	2.4
45	1n	4	LYS	2.4
1	1A	2179	C	2.4
1	2A	34	C	2.4
1	2A	1049	C	2.4
6	2G	11	TYR	2.4
32	2a	1260	C	2.4
33	1b	136	VAL	2.4
41	2j	33	GLN	2.4
42	1k	14	VAL	2.4
53	2y	9	GLN	2.4
1	2A	1078	U	2.4
6	1G	80	PHE	2.4
22	20	55	ARG	2.4
33	1b	34	ALA	2.4
35	1d	168	ARG	2.4
41	2j	20	ALA	2.4
44	2m	51	ALA	2.4
44	2m	104	ARG	2.4
50	2s	78	ARG	2.4
53	2y	94	ALA	2.4
6	1G	43	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
33	2b	214	ILE	2.4
39	1h	2	LEU	2.4
39	2h	2	LEU	2.4
41	2j	100	THR	2.4
51	2t	100	ILE	2.4
53	2y	54	ILE	2.4
51	1t	75	ASN	2.4
42	2k	36	ASP	2.4
1	1A	2134	A	2.4
15	1T	37	GLY	2.4
17	2V	42	GLY	2.4
34	2c	114	PRO	2.4
40	2i	123	PRO	2.4
35	2d	8	VAL	2.4
41	2j	49	VAL	2.4
53	2y	60	VAL	2.4
1	1A	275	G	2.4
1	1A	2148	G	2.4
1	1A	2149	G	2.4
6	1G	136	ARG	2.4
33	2b	88	ALA	2.4
34	2c	71	ALA	2.4
35	1d	132	ARG	2.4
36	2e	21	ALA	2.4
40	1i	55	ALA	2.4
6	2G	3	LEU	2.4
33	2b	201	ILE	2.4
41	1j	38	ILE	2.4
41	2j	48	THR	2.4
45	2n	13	THR	2.4
1	1A	2136	C	2.4
1	1A	2145	C	2.4
41	1j	59	SER	2.4
29	17	48	LYS	2.4
35	1d	169	LYS	2.4
34	1c	80	GLY	2.4
40	2i	57	GLY	2.4
6	2G	92	VAL	2.4
7	2H	44	VAL	2.4
34	2c	106	VAL	2.4
35	2d	3	ARG	2.4
40	2i	28	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
45	2n	25	VAL	2.4
50	1s	19	VAL	2.4
50	2s	37	ARG	2.4
1	1A	2790	A	2.4
32	1a	1004	A	2.4
53	2y	73	ALA	2.4
14	2S	36	TYR	2.3
33	2b	44	LEU	2.3
33	1b	32	ILE	2.3
44	1m	4	ILE	2.3
44	2m	84	ILE	2.3
41	1j	42	THR	2.3
33	2b	19	HIS	2.3
47	1p	13	HIS	2.3
1	1A	1026	U	2.3
1	1A	2155	G	2.3
1	2A	2104	G	2.3
32	1a	173	U	2.3
32	1a	182	U	2.3
32	1a	1000	U	2.3
33	2b	101	MET	2.3
35	2d	7	PRO	2.3
35	1d	2	GLY	2.3
39	1h	128	GLY	2.3
41	2j	31	GLY	2.3
6	2G	118	ARG	2.3
26	14	50	VAL	2.3
33	2b	93	VAL	2.3
34	1c	64	VAL	2.3
21	2Z	88	PHE	2.3
34	2c	189	ALA	2.3
40	1i	33	PHE	2.3
6	2G	39	ILE	2.3
8	2I	71	ILE	2.3
33	2b	31	TYR	2.3
50	2s	52	TYR	2.3
52	2u	18	TYR	2.3
40	2i	103	THR	2.3
52	2u	17	THR	2.3
8	1I	10	GLU	2.3
1	1A	1101	U	2.3
32	2a	1040	U	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	271(M)	G	2.3
32	2a	1353	G	2.3
41	2j	77	PRO	2.3
6	1G	85	GLY	2.3
36	1e	22	GLY	2.3
40	1i	6	GLY	2.3
42	2k	126	ARG	2.3
44	2m	99	ARG	2.3
7	2H	45	VAL	2.3
40	1i	17	VAL	2.3
40	2i	41	VAL	2.3
35	1d	120	LEU	2.3
40	1i	50	LEU	2.3
40	2i	19	LEU	2.3
26	24	5	ILE	2.3
33	1b	19	HIS	2.3
33	1b	140	HIS	2.3
26	24	63	TYR	2.3
44	2m	116	THR	2.3
47	1p	69	THR	2.3
52	2u	21	TYR	2.3
53	2y	8	LYS	2.3
1	2A	1077	A	2.3
2	2B	26	A	2.3
50	2s	38	SER	2.3
38	1g	156	TRP	2.3
38	2g	76	ARG	2.3
40	2i	66	ARG	2.3
50	2s	34	TRP	2.3
52	2u	7	ARG	2.3
6	2G	44	GLY	2.3
26	14	54	GLY	2.3
6	2G	70	VAL	2.3
21	2Z	86	VAL	2.3
44	2m	54	VAL	2.3
50	2s	19	VAL	2.3
38	2g	16	LEU	2.3
6	2G	50	ALA	2.3
33	1b	42	ILE	2.3
35	1d	195	ALA	2.3
40	1i	43	ALA	2.3
40	1i	46	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
1	1A	652(D)	C	2.3
1	1A	2112	G	2.3
32	1a	181	G	2.3
32	2a	630	G	2.3
51	1t	55	ILE	2.3
40	1i	103	THR	2.3
41	1j	100	THR	2.3
45	2n	58	LYS	2.3
6	2G	12	TYR	2.3
11	2P	15	ARG	2.3
26	14	51	ASP	2.3
33	1b	232	PRO	2.3
34	2c	190	ARG	2.3
40	1i	9	ARG	2.3
47	1p	41	PRO	2.3
53	2y	45	PRO	2.3
1	2A	654	A	2.3
6	2G	41	GLN	2.3
33	2b	95	GLN	2.3
31	29	37	GLY	2.3
42	2k	42	TRP	2.3
47	2p	48	TRP	2.3
34	2c	207	VAL	2.3
35	1d	88	VAL	2.3
35	1d	194	LEU	2.3
38	1g	16	LEU	2.3
41	1j	24	VAL	2.3
45	2n	36	PHE	2.3
51	1t	66	ALA	2.2
33	2b	74	LYS	2.2
50	1s	66	MET	2.2
32	2a	1066	C	2.2
32	2a	1223	C	2.2
1	1A	2151	G	2.2
1	2A	1533	G	2.2
1	2A	2805	G	2.2
32	1a	1021	G	2.2
26	24	41	PRO	2.2
40	1i	105	ASP	2.2
45	2n	32	SER	2.2
51	1t	101	GLY	2.2
52	2u	16	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
6	2G	149	VAL	2.2
3	2D	275	LYS	2.2
32	2a	1123	A	2.2
32	2a	1447	A	2.2
40	2i	46	ALA	2.2
40	2i	84	ALA	2.2
51	1t	76	ALA	2.2
53	2y	52	ALA	2.2
2	1B	1	U	2.2
6	2G	48	GLU	2.2
32	2a	65	U	2.2
33	2b	236	TYR	2.2
36	2e	133	TYR	2.2
33	2b	96	ARG	2.2
41	1j	39	PRO	2.2
1	1A	34	C	2.2
1	1A	1100	C	2.2
1	1A	2803	C	2.2
2	2B	4	C	2.2
2	2B	88	C	2.2
32	2a	1282	C	2.2
1	1A	2110	G	2.2
6	2G	43	LEU	2.2
32	2a	1356	G	2.2
33	2b	89	GLY	2.2
45	2n	38	GLY	2.2
51	1t	69	GLY	2.2
40	1i	47	LEU	2.2
6	1G	75	LYS	2.2
33	1b	229	VAL	2.2
33	2b	229	VAL	2.2
45	2n	4	LYS	2.2
33	2b	40	HIS	2.2
33	2b	80	ILE	2.2
41	1j	75	ILE	2.2
6	2G	151	ALA	2.2
40	1i	13	ALA	2.2
40	2i	122	ALA	2.2
1	2A	887	A	2.2
5	2F	175	THR	2.2
6	2G	161	THR	2.2
32	2a	1125	U	2.2

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Mol	Chain	Res	Type	RSRZ
52	1u	24	ARG	2.2
38	2g	154	TYR	2.2
41	2j	69	ASN	2.2
41	2j	78	ASN	2.2
52	1u	21	TYR	2.2
3	2D	38	LYS	2.2
47	1p	49	LEU	2.2
20	1Y	1	MET	2.2
26	24	33	VAL	2.2
1	1A	2140	C	2.2
12	2Q	104	PHE	2.2
32	2a	848	C	2.2
41	1j	98	ILE	2.2
1	1A	2131	G	2.2
32	2a	1021	G	2.2
32	2a	1255	G	2.2
40	1i	104	ARG	2.2
1	1A	654	A	2.2
1	1A	1070	A	2.2
1	1A	1098	A	2.2
6	2G	32	PRO	2.2
32	1a	171	A	2.2
32	1a	1493	A	2.2
32	2a	983	A	2.2
40	2i	21	PRO	2.2
47	2p	39	TYR	2.2
1	1A	1094	U	2.2
1	1A	1175	U	2.2
8	1I	147	GLN	2.2
32	2a	1159	U	2.2
45	2n	9	LYS	2.2
35	1d	21	LEU	2.2
33	1b	40	HIS	2.2
34	2c	153	VAL	2.2
35	2d	152	SER	2.2
6	2G	77	ILE	2.2
41	2j	50	ILE	2.2
50	1s	69	HIS	2.2
14	2S	12	PHE	2.2
38	2g	40	ALA	2.1
42	1k	42	TRP	2.1
45	2n	10	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
33	2b	134	GLU	2.1
1	1A	2896	C	2.1
1	2A	2896	C	2.1
14	2S	3	ARG	2.1
14	2S	20	ARG	2.1
34	2c	177	THR	2.1
41	2j	60	ARG	2.1
50	2s	33	THR	2.1
52	2u	15	ARG	2.1
1	1A	2124	G	2.1
1	1A	2168	G	2.1
1	2A	2893	G	2.1
32	2a	1023	G	2.1
35	2d	40	PRO	2.1
47	1p	46	PRO	2.1
40	1i	5	TYR	2.1
44	2m	21	TYR	2.1
53	2y	46	GLN	2.1
21	2Z	125	LEU	2.1
32	2a	1236	A	2.1
1	1A	1420	U	2.1
1	2A	2113	U	2.1
8	2I	92	VAL	2.1
20	2Y	85	VAL	2.1
33	2b	211	ILE	2.1
34	1c	62	ASP	2.1
34	2c	103	VAL	2.1
35	2d	112	VAL	2.1
36	1e	118	ILE	2.1
37	1f	90	VAL	2.1
40	2i	53	VAL	2.1
36	2e	84	PHE	2.1
40	2i	15	ALA	2.1
49	1r	24	ALA	2.1
50	1s	27	GLU	2.1
6	2G	33	ARG	2.1
38	2g	155	ARG	2.1
50	2s	3	ARG	2.1
44	1m	43	THR	2.1
1	2A	1041	C	2.1
32	2a	1354	C	2.1
14	2S	61	ASN	2.1

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Mol	Chain	Res	Type	RSRZ
26	14	32	TYR	2.1
33	2b	11	LEU	2.1
33	2b	98	LEU	2.1
34	2c	178	LEU	2.1
42	2k	98	LEU	2.1
39	2h	71	GLY	2.1
40	2i	39	GLY	2.1
7	2H	4	ILE	2.1
14	2S	34	HIS	2.1
1	2A	1047	G	2.1
1	2A	1058	G	2.1
1	2A	1063	G	2.1
33	2b	162	ILE	2.1
33	2b	205	ASP	2.1
34	2c	5	ILE	2.1
34	2c	138	VAL	2.1
44	2m	74	VAL	2.1
50	2s	11	VAL	2.1
1	1A	2122	U	2.1
32	1a	1005	A	2.1
32	2a	975	A	2.1
32	2a	1235	U	2.1
50	2s	50	ALA	2.1
50	2s	75	ALA	2.1
53	2y	50	ALA	2.1
41	1j	97	GLU	2.1
33	1b	175	ARG	2.1
40	1i	107	ARG	2.1
45	2n	31	ARG	2.1
26	14	52	THR	2.1
34	2c	4	LYS	2.1
41	2j	91	PRO	2.1
44	2m	101	GLN	2.1
6	2G	94	LEU	2.1
14	2S	56	LEU	2.1
40	2i	85	LEU	2.1
51	2t	9	ASN	2.1
41	2j	68	HIS	2.1
1	1A	2137	C	2.1
1	1A	2164	C	2.1
1	2A	886	C	2.1
6	1G	88	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
14	2S	65	VAL	2.1
21	2Z	57	ILE	2.1
32	1a	221	C	2.1
32	2a	972	C	2.1
32	2a	1018	C	2.1
32	2a	1362	C	2.1
50	2s	40	ILE	2.1
6	2G	178	PHE	2.1
38	2g	43	PHE	2.1
6	2G	95	ARG	2.1
19	2X	68	ARG	2.1
38	2g	2	ALA	2.1
43	1l	89	ARG	2.1
1	2A	2100	G	2.1
32	1a	78	G	2.1
32	2a	1022	G	2.1
32	2a	1160	G	2.1
1	2A	1065	U	2.1
14	2S	47	THR	2.1
32	1a	149	A	2.1
32	2a	1157	A	2.1
33	2b	75	LYS	2.1
7	2H	10	PRO	2.1
33	1b	234	PRO	2.1
52	1u	23	PRO	2.1
6	2G	155	MET	2.1
21	2Z	1	MET	2.1
6	2G	34	LEU	2.1
19	2X	95	LEU	2.1
24	22	60	LEU	2.1
41	2j	8	LEU	2.1
14	2S	90	GLY	2.1
43	2l	99	HIS	2.1
46	1o	89	GLY	2.1
7	2H	9	ILE	2.1
26	24	22	ILE	2.1
26	24	31	ILE	2.1
42	1k	25	TYR	2.1
7	2H	19	VAL	2.1
21	2Z	74	VAL	2.1
34	2c	70	VAL	2.1
41	2j	94	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
50	1s	41	VAL	2.1
33	2b	70	PHE	2.1
50	2s	10	PHE	2.1
25	23	29	ARG	2.0
33	2b	207	ALA	2.0
34	2c	161	GLU	2.0
44	2m	3	ARG	2.0
44	2m	88	ARG	2.0
7	2H	96	ALA	2.0
41	1j	26	ALA	2.0
41	1j	27	ALA	2.0
50	2s	73	GLU	2.0
1	2A	645	C	2.0
40	1i	64	THR	2.0
7	2H	8	PRO	2.0
36	2e	10	MET	2.0
39	2h	74	PRO	2.0
1	2A	1060	U	2.0
6	2G	90	LEU	2.0
16	1U	117	GLN	2.0
32	2a	1148	U	2.0
46	1o	34	LEU	2.0
50	2s	22	LEU	2.0
53	2y	61	LEU	2.0
1	1A	2169	A	2.0
1	1A	2894	G	2.0
1	2A	1093	G	2.0
2	2B	52	A	2.0
32	1a	383	A	2.0
32	1a	1447	A	2.0
32	2a	1064	G	2.0
32	2a	1067	A	2.0
32	2a	1177	G	2.0
32	2a	1220	G	2.0
32	2a	1256	A	2.0
6	2G	129	GLY	2.0
7	1H	174	GLY	2.0
12	2Q	30	GLY	2.0
26	14	17	GLY	2.0
33	1b	14	GLY	2.0
34	2c	124	ILE	2.0
35	2d	23	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
41	2j	82	ILE	2.0
41	2j	96	ILE	2.0
34	1c	86	VAL	2.0
20	2Y	60	PHE	2.0
39	2h	84	ARG	2.0
41	1j	5	ARG	2.0
47	1p	75	ARG	2.0
33	1b	129	GLU	2.0
11	2P	76	LYS	2.0
34	2c	65	ALA	2.0
38	2g	128	ALA	2.0
14	2S	31	SER	2.0
4	2E	1	MET	2.0
45	2n	14	PRO	2.0
1	2A	1109	C	2.0
2	2B	6	C	2.0
6	2G	107	LEU	2.0
32	1a	1006	C	2.0
32	1a	1038	C	2.0
39	2h	112	LEU	2.0
40	1i	85	LEU	2.0
47	1p	16	HIS	2.0
50	1s	14	HIS	2.0
32	1a	190	U	2.0
11	2P	54	GLY	2.0
14	2S	96	GLY	2.0
33	1b	38	GLY	2.0
33	2b	68	ILE	2.0
35	2d	146	ILE	2.0
40	2i	29	ASN	2.0
40	2i	68	GLY	2.0
53	2y	39	ILE	2.0
1	1A	2171	A	2.0
7	1H	3	ARG	2.0
8	2I	81	VAL	2.0
21	2Z	56	VAL	2.0
32	2a	968	A	2.0
32	2a	1092	A	2.0
33	1b	230	VAL	2.0
40	1i	14	VAL	2.0
44	1m	3	ARG	2.0
46	2o	88	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
33	1b	148	TYR	2.0
33	2b	92	TYR	2.0
40	2i	92	TYR	2.0
40	2i	114	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, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	2MG	2a	1207	24/25	0.76	0.15	76,83,88,97	0
1	5MU	2A	1915	21/22	0.79	0.13	68,77,83,90	0
1	PSU	2A	1911	20/21	0.88	0.10	56,67,85,87	0
1	5MU	1A	1915	21/22	0.88	0.11	61,71,84,87	0
32	5MC	2a	967	21/22	0.88	0.12	62,67,76,86	0
32	2MG	1a	1207	24/25	0.88	0.12	59,72,75,78	0
32	M2G	2a	966	25/26	0.89	0.13	59,65,76,81	0
1	PSU	1A	1917	20/21	0.89	0.11	56,64,78,78	0
32	PSU	2a	516	20/21	0.89	0.10	68,72,75,78	0
32	G7M	2a	527	24/25	0.90	0.12	59,63,67,70	0
1	PSU	2A	1917	20/21	0.90	0.08	54,72,82,89	0
43	0TD	2l	92	10/11	0.90	0.11	55,59,66,74	0
1	PSU	1A	1911	20/21	0.91	0.10	48,59,63,67	0
32	4OC	2a	1402	22/23	0.92	0.11	49,61,66,68	0
32	PSU	1a	516	20/21	0.92	0.09	51,57,61,62	0
32	5MC	2a	1400	21/22	0.93	0.11	52,66,71,74	0
1	OMC	2A	1920	21/22	0.93	0.11	57,64,69,71	0
43	0TD	1l	92	10/11	0.93	0.12	48,49,53,60	0
32	5MC	2a	1404	21/22	0.94	0.08	44,53,58,63	0
32	5MC	2a	1407	21/22	0.94	0.10	50,56,60,63	0
32	UR3	2a	1498	21/22	0.94	0.10	45,54,58,62	0
32	MA6	2a	1519	24/25	0.94	0.12	49,54,62,68	0
32	5MC	1a	1407	21/22	0.94	0.09	37,44,49,53	0
1	OMC	1A	1920	21/22	0.95	0.09	44,49,55,56	0
32	5MC	1a	1404	21/22	0.95	0.09	35,40,44,49	0
32	MA6	2a	1518	24/25	0.95	0.10	42,56,60,61	0
32	G7M	1a	527	24/25	0.95	0.09	44,49,53,60	0
32	5MC	1a	967	21/22	0.95	0.09	51,58,69,75	0
32	4OC	1a	1402	22/23	0.96	0.08	40,44,48,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	M2G	1a	966	25/26	0.96	0.08	48,55,60,62	0
32	5MC	1a	1400	21/22	0.96	0.09	42,48,54,57	0
32	UR3	1a	1498	21/22	0.96	0.09	35,41,49,50	0
32	MA6	1a	1518	24/25	0.96	0.10	32,37,43,45	0
32	MA6	1a	1519	24/25	0.96	0.09	37,42,48,49	0
1	5MC	2A	1942	21/22	0.97	0.07	35,47,51,55	0
1	5MC	2A	1962	21/22	0.97	0.08	32,38,47,61	0
1	OMG	2A	2251	24/25	0.97	0.08	24,32,34,36	0
1	2MA	2A	2503	23/24	0.97	0.08	22,27,30,33	0
1	PSU	2A	2605	20/21	0.97	0.08	27,31,36,38	0
1	5MC	1A	1942	21/22	0.97	0.06	17,26,31,33	0
1	5MC	1A	1962	21/22	0.98	0.06	24,28,33,36	0
1	5MU	2A	1939	21/22	0.98	0.07	24,29,34,37	0
1	OMG	1A	2251	24/25	0.98	0.06	11,15,17,18	0
1	OMU	1A	2552	21/22	0.98	0.07	17,20,25,31	0
1	PSU	1A	2605	20/21	0.98	0.06	17,18,23,26	0
1	5MU	1A	1939	21/22	0.98	0.07	14,20,22,24	0
1	OMU	2A	2552	21/22	0.98	0.07	26,31,33,34	0
1	2MA	1A	2503	23/24	0.99	0.05	7,12,15,18	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2j	201	1/1	0.25	0.18	86,86,86,86	0
54	MG	1a	1759	1/1	0.30	0.29	84,84,84,84	0
54	MG	2a	3114	1/1	0.48	0.28	73,73,73,73	0
54	MG	1a	1780	1/1	0.51	0.28	75,75,75,75	0
54	MG	1a	1657	1/1	0.52	0.35	75,75,75,75	0
54	MG	2A	3752	1/1	0.53	0.18	73,73,73,73	0
54	MG	2a	3168	1/1	0.54	0.28	82,82,82,82	0
54	MG	1a	1774	1/1	0.54	0.25	77,77,77,77	0
54	MG	1t	202	1/1	0.55	0.18	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3332	1/1	0.56	0.25	61,61,61,61	0
54	MG	1A	3655	1/1	0.56	0.19	66,66,66,66	0
54	MG	19	102	1/1	0.56	0.16	67,67,67,67	0
54	MG	2A	3536	1/1	0.57	0.15	55,55,55,55	0
54	MG	1a	1760	1/1	0.58	0.26	74,74,74,74	0
54	MG	1A	3769	1/1	0.59	0.27	64,64,64,64	0
54	MG	2a	3065	1/1	0.60	0.20	73,73,73,73	0
54	MG	1F	316	1/1	0.62	0.18	40,40,40,40	0
54	MG	1a	1870	1/1	0.62	0.26	71,71,71,71	0
54	MG	1A	3558	1/1	0.62	0.26	61,61,61,61	0
54	MG	2a	3146	1/1	0.63	0.15	68,68,68,68	0
56	MPD	2B	219	8/8	0.63	0.38	59,67,73,74	0
54	MG	1a	1843	1/1	0.64	0.30	63,63,63,63	0
54	MG	1a	1860	1/1	0.64	0.20	79,79,79,79	0
54	MG	1A	3823	1/1	0.64	0.17	63,63,63,63	0
54	MG	1a	1748	1/1	0.64	0.19	72,72,72,72	0
54	MG	2a	3002	1/1	0.65	0.25	70,70,70,70	0
54	MG	1A	3664	1/1	0.65	0.17	57,57,57,57	0
54	MG	2A	3081	1/1	0.65	0.14	77,77,77,77	0
54	MG	2a	3120	1/1	0.65	0.17	66,66,66,66	0
54	MG	2A	3492	1/1	0.65	0.15	71,71,71,71	0
54	MG	2A	3518	1/1	0.65	0.18	73,73,73,73	0
54	MG	1A	4001	1/1	0.65	0.19	60,60,60,60	0
54	MG	1a	1790	1/1	0.65	0.19	66,66,66,66	0
54	MG	2a	3126	1/1	0.66	0.15	82,82,82,82	0
54	MG	2a	3047	1/1	0.66	0.22	66,66,66,66	0
54	MG	2A	3736	1/1	0.66	0.26	78,78,78,78	0
54	MG	1A	3458	1/1	0.66	0.10	11,11,11,11	0
54	MG	1A	3898	1/1	0.66	0.16	27,27,27,27	0
54	MG	1B	213	1/1	0.67	0.20	59,59,59,59	0
54	MG	2I	201	1/1	0.67	0.11	67,67,67,67	0
54	MG	2a	3201	1/1	0.67	0.13	66,66,66,66	0
54	MG	2A	3334	1/1	0.67	0.24	79,79,79,79	0
54	MG	1G	202	1/1	0.67	0.17	56,56,56,56	0
54	MG	1a	1755	1/1	0.68	0.20	54,54,54,54	0
54	MG	1A	3356	1/1	0.68	0.15	44,44,44,44	0
54	MG	1a	1811	1/1	0.68	0.16	75,75,75,75	0
54	MG	2a	3186	1/1	0.68	0.19	74,74,74,74	0
54	MG	1n	103	1/1	0.68	0.33	68,68,68,68	0
54	MG	2E	303	1/1	0.68	0.22	53,53,53,53	0
54	MG	2G	203	1/1	0.68	0.19	69,69,69,69	0
54	MG	1A	3834	1/1	0.69	0.20	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3310	1/1	0.69	0.19	49,49,49,49	0
54	MG	1a	1724	1/1	0.69	0.12	54,54,54,54	0
54	MG	2a	3030	1/1	0.69	0.23	71,71,71,71	0
56	MPD	2A	3755	8/8	0.69	0.29	59,61,68,70	0
54	MG	1A	3666	1/1	0.69	0.15	67,67,67,67	0
54	MG	2A	3594	1/1	0.70	0.20	80,80,80,80	0
56	MPD	2A	3754	8/8	0.70	0.33	39,47,51,57	0
54	MG	2A	3747	1/1	0.70	0.19	64,64,64,64	0
54	MG	2a	3036	1/1	0.70	0.22	75,75,75,75	0
54	MG	1a	1749	1/1	0.71	0.21	65,65,65,65	0
54	MG	2a	3181	1/1	0.71	0.20	73,73,73,73	0
54	MG	2A	3464	1/1	0.71	0.14	66,66,66,66	0
54	MG	1a	1788	1/1	0.71	0.21	77,77,77,77	0
54	MG	1a	1688	1/1	0.72	0.27	60,60,60,60	0
54	MG	1y	204	1/1	0.72	0.16	69,69,69,69	0
54	MG	1A	3866	1/1	0.72	0.16	55,55,55,55	0
54	MG	1a	1820	1/1	0.72	0.18	63,63,63,63	0
54	MG	2A	3372	1/1	0.72	0.16	34,34,34,34	0
54	MG	1a	1821	1/1	0.72	0.23	71,71,71,71	0
54	MG	1a	1772	1/1	0.72	0.25	74,74,74,74	0
54	MG	1a	1849	1/1	0.72	0.16	58,58,58,58	0
54	MG	1A	3646	1/1	0.72	0.29	60,60,60,60	0
54	MG	1A	3618	1/1	0.72	0.15	64,64,64,64	0
54	MG	1A	3676	1/1	0.72	0.32	53,53,53,53	0
54	MG	2A	3402	1/1	0.73	0.32	69,69,69,69	0
54	MG	2A	3414	1/1	0.73	0.12	46,46,46,46	0
54	MG	1A	3406	1/1	0.73	0.17	40,40,40,40	0
54	MG	1A	3943	1/1	0.73	0.21	73,73,73,73	0
54	MG	2a	3056	1/1	0.73	0.28	67,67,67,67	0
54	MG	2A	3511	1/1	0.73	0.19	68,68,68,68	0
54	MG	15	106	1/1	0.73	0.14	42,42,42,42	0
54	MG	1A	3974	1/1	0.73	0.39	53,53,53,53	0
54	MG	1a	1641	1/1	0.73	0.24	66,66,66,66	0
54	MG	2A	3614	1/1	0.73	0.15	75,75,75,75	0
54	MG	1A	3981	1/1	0.73	0.23	53,53,53,53	0
54	MG	2A	3740	1/1	0.73	0.14	71,71,71,71	0
54	MG	1a	1663	1/1	0.73	0.22	72,72,72,72	0
54	MG	2a	3189	1/1	0.73	0.26	63,63,63,63	0
54	MG	1A	3685	1/1	0.73	0.24	67,67,67,67	0
54	MG	1a	1707	1/1	0.73	0.24	67,67,67,67	0
54	MG	1A	3619	1/1	0.73	0.23	61,61,61,61	0
54	MG	1B	225	1/1	0.73	0.13	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	25	102	1/1	0.73	0.19	64,64,64,64	0
54	MG	1A	3482	1/1	0.74	0.17	38,38,38,38	0
54	MG	1a	1763	1/1	0.74	0.14	60,60,60,60	0
54	MG	1a	1833	1/1	0.74	0.16	79,79,79,79	0
54	MG	1A	3501	1/1	0.74	0.26	52,52,52,52	0
54	MG	2A	3563	1/1	0.74	0.17	51,51,51,51	0
54	MG	1A	3419	1/1	0.74	0.24	72,72,72,72	0
54	MG	2A	3075	1/1	0.74	0.18	80,80,80,80	0
54	MG	2A	3682	1/1	0.74	0.14	68,68,68,68	0
54	MG	2A	3731	1/1	0.74	0.31	70,70,70,70	0
54	MG	2A	3398	1/1	0.75	0.22	68,68,68,68	0
54	MG	1a	1744	1/1	0.75	0.14	64,64,64,64	0
54	MG	2a	3107	1/1	0.75	0.20	69,69,69,69	0
54	MG	2A	3413	1/1	0.75	0.24	63,63,63,63	0
54	MG	1B	210	1/1	0.75	0.16	59,59,59,59	0
54	MG	2A	3035	1/1	0.75	0.28	70,70,70,70	0
54	MG	1A	3671	1/1	0.75	0.19	62,62,62,62	0
54	MG	2A	3502	1/1	0.75	0.14	29,29,29,29	0
54	MG	1a	1812	1/1	0.75	0.20	75,75,75,75	0
54	MG	2A	3116	1/1	0.75	0.24	66,66,66,66	0
54	MG	2A	3228	1/1	0.75	0.33	58,58,58,58	0
54	MG	1a	1684	1/1	0.75	0.23	52,52,52,52	0
54	MG	1a	1743	1/1	0.75	0.15	63,63,63,63	0
54	MG	2A	3596	1/1	0.75	0.15	57,57,57,57	0
54	MG	2a	3043	1/1	0.75	0.39	71,71,71,71	0
54	MG	2A	3383	1/1	0.75	0.15	64,64,64,64	0
54	MG	2A	3516	1/1	0.76	0.19	60,60,60,60	0
54	MG	2A	3061	1/1	0.76	0.17	58,58,58,58	0
54	MG	2A	3532	1/1	0.76	0.13	85,85,85,85	0
54	MG	2B	204	1/1	0.76	0.18	59,59,59,59	0
54	MG	2D	307	1/1	0.76	0.31	71,71,71,71	0
54	MG	2a	3141	1/1	0.76	0.15	69,69,69,69	0
54	MG	1A	3269	1/1	0.76	0.12	80,80,80,80	0
54	MG	2A	3550	1/1	0.76	0.10	73,73,73,73	0
54	MG	1A	3268	1/1	0.76	0.24	73,73,73,73	0
54	MG	1r	101	1/1	0.76	0.13	62,62,62,62	0
54	MG	1A	3617	1/1	0.76	0.42	37,37,37,37	0
54	MG	2A	3266	1/1	0.76	0.16	69,69,69,69	0
54	MG	2A	3619	1/1	0.76	0.22	50,50,50,50	0
54	MG	1a	1732	1/1	0.76	0.26	60,60,60,60	0
54	MG	2A	3369	1/1	0.76	0.18	52,52,52,52	0
54	MG	1A	3727	1/1	0.76	0.32	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1864	1/1	0.77	0.21	65,65,65,65	0
54	MG	1A	3226	1/1	0.77	0.18	64,64,64,64	0
54	MG	2a	3006	1/1	0.77	0.20	66,66,66,66	0
54	MG	2a	3019	1/1	0.77	0.26	74,74,74,74	0
54	MG	1d	303	1/1	0.77	0.15	72,72,72,72	0
54	MG	2e	202	1/1	0.77	0.14	64,64,64,64	0
54	MG	2a	3034	1/1	0.77	0.20	68,68,68,68	0
56	MPD	1T	205	8/8	0.77	0.23	58,65,67,70	0
54	MG	2A	3103	1/1	0.77	0.17	68,68,68,68	0
54	MG	1a	1809	1/1	0.77	0.22	57,57,57,57	0
54	MG	2a	3045	1/1	0.77	0.26	64,64,64,64	0
54	MG	2B	215	1/1	0.78	0.14	70,70,70,70	0
54	MG	1E	307	1/1	0.78	0.17	40,40,40,40	0
54	MG	2A	3079	1/1	0.78	0.17	50,50,50,50	0
54	MG	2A	3267	1/1	0.78	0.13	28,28,28,28	0
54	MG	2A	3689	1/1	0.78	0.16	67,67,67,67	0
54	MG	2a	3198	1/1	0.78	0.19	65,65,65,65	0
54	MG	2A	3287	1/1	0.78	0.14	39,39,39,39	0
54	MG	2a	3101	1/1	0.78	0.31	66,66,66,66	0
54	MG	2A	3290	1/1	0.78	0.15	49,49,49,49	0
54	MG	2A	3453	1/1	0.78	0.20	62,62,62,62	0
54	MG	1a	1698	1/1	0.78	0.16	69,69,69,69	0
54	MG	1B	223	1/1	0.78	0.20	47,47,47,47	0
54	MG	1A	3404	1/1	0.78	0.12	18,18,18,18	0
57	ARG	1F	321	12/12	0.78	0.18	38,59,72,75	0
54	MG	2A	3021	1/1	0.79	0.32	66,66,66,66	0
54	MG	2a	3115	1/1	0.79	0.25	66,66,66,66	0
54	MG	2A	3242	1/1	0.79	0.18	54,54,54,54	0
54	MG	2A	3570	1/1	0.79	0.11	33,33,33,33	0
54	MG	1A	3608	1/1	0.79	0.15	24,24,24,24	0
54	MG	2A	3425	1/1	0.79	0.14	52,52,52,52	0
54	MG	2a	3165	1/1	0.79	0.11	87,87,87,87	0
54	MG	1a	1874	1/1	0.79	0.23	72,72,72,72	0
54	MG	2a	3180	1/1	0.79	0.19	60,60,60,60	0
54	MG	2a	3008	1/1	0.79	0.10	64,64,64,64	0
54	MG	2A	3275	1/1	0.79	0.16	52,52,52,52	0
54	MG	2A	3481	1/1	0.79	0.15	48,48,48,48	0
54	MG	2A	3489	1/1	0.79	0.34	75,75,75,75	0
54	MG	1a	1796	1/1	0.79	0.33	77,77,77,77	0
54	MG	2A	3500	1/1	0.79	0.26	60,60,60,60	0
54	MG	1A	3813	1/1	0.79	0.12	25,25,25,25	0
54	MG	1A	3622	1/1	0.79	0.16	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3085	1/1	0.79	0.13	44,44,44,44	0
54	MG	1A	3766	1/1	0.79	0.11	43,43,43,43	0
54	MG	1A	3768	1/1	0.79	0.15	64,64,64,64	0
54	MG	2A	3214	1/1	0.79	0.20	60,60,60,60	0
54	MG	2A	3750	1/1	0.80	0.24	60,60,60,60	0
54	MG	2a	3104	1/1	0.80	0.12	62,62,62,62	0
54	MG	2A	3751	1/1	0.80	0.12	50,50,50,50	0
54	MG	1A	3916	1/1	0.80	0.21	69,69,69,69	0
54	MG	2B	203	1/1	0.80	0.21	62,62,62,62	0
54	MG	2A	3512	1/1	0.80	0.28	64,64,64,64	0
54	MG	2A	3368	1/1	0.80	0.12	25,25,25,25	0
54	MG	1A	3652	1/1	0.80	0.09	38,38,38,38	0
54	MG	2a	3144	1/1	0.80	0.16	68,68,68,68	0
54	MG	1a	1771	1/1	0.80	0.24	71,71,71,71	0
54	MG	1A	3965	1/1	0.80	0.13	42,42,42,42	0
54	MG	1A	3720	1/1	0.80	0.13	58,58,58,58	0
54	MG	1A	3846	1/1	0.80	0.11	53,53,53,53	0
54	MG	2A	3569	1/1	0.80	0.22	69,69,69,69	0
54	MG	1a	1730	1/1	0.80	0.14	58,58,58,58	0
54	MG	2A	3210	1/1	0.80	0.20	54,54,54,54	0
54	MG	1a	1877	1/1	0.80	0.14	76,76,76,76	0
54	MG	1A	3726	1/1	0.80	0.11	21,21,21,21	0
54	MG	2A	3462	1/1	0.80	0.23	64,64,64,64	0
54	MG	15	108	1/1	0.80	0.17	65,65,65,65	0
54	MG	2m	201	1/1	0.80	0.28	71,71,71,71	0
54	MG	1A	4038	1/1	0.80	0.18	61,61,61,61	0
56	MPD	1a	1878	8/8	0.80	0.16	48,61,67,68	0
54	MG	1a	1612	1/1	0.80	0.30	62,62,62,62	0
54	MG	1A	3887	1/1	0.80	0.11	25,25,25,25	0
54	MG	1A	3539	1/1	0.80	0.18	54,54,54,54	0
54	MG	1B	222	1/1	0.80	0.13	48,48,48,48	0
54	MG	1a	1793	1/1	0.81	0.12	64,64,64,64	0
54	MG	2a	3111	1/1	0.81	0.34	77,77,77,77	0
54	MG	2A	3387	1/1	0.81	0.17	57,57,57,57	0
54	MG	1A	3286	1/1	0.81	0.16	75,75,75,75	0
54	MG	1b	301	1/1	0.81	0.21	61,61,61,61	0
54	MG	2A	3541	1/1	0.81	0.21	40,40,40,40	0
54	MG	2A	3409	1/1	0.81	0.11	68,68,68,68	0
54	MG	1A	3648	1/1	0.81	0.14	47,47,47,47	0
54	MG	1A	3614	1/1	0.81	0.23	18,18,18,18	0
54	MG	21	101	1/1	0.81	0.12	72,72,72,72	0
54	MG	1A	3275	1/1	0.81	0.24	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3571	1/1	0.81	0.11	50,50,50,50	0
54	MG	1a	1817	1/1	0.81	0.12	50,50,50,50	0
54	MG	13	103	1/1	0.81	0.11	53,53,53,53	0
54	MG	2A	3604	1/1	0.81	0.14	33,33,33,33	0
54	MG	1A	4039	1/1	0.81	0.17	58,58,58,58	0
54	MG	2A	3474	1/1	0.81	0.12	60,60,60,60	0
54	MG	1A	3657	1/1	0.81	0.13	59,59,59,59	0
54	MG	1A	3790	1/1	0.81	0.16	39,39,39,39	0
54	MG	1A	3692	1/1	0.81	0.14	33,33,33,33	0
54	MG	2A	3494	1/1	0.81	0.14	75,75,75,75	0
54	MG	2A	3342	1/1	0.81	0.17	70,70,70,70	0
54	MG	1a	1736	1/1	0.81	0.17	63,63,63,63	0
54	MG	1A	3658	1/1	0.81	0.15	56,56,56,56	0
54	MG	2a	3103	1/1	0.81	0.28	72,72,72,72	0
54	MG	1a	1655	1/1	0.81	0.23	45,45,45,45	0
54	MG	2A	3094	1/1	0.82	0.23	54,54,54,54	0
54	MG	1a	1754	1/1	0.82	0.19	72,72,72,72	0
54	MG	1A	3187	1/1	0.82	0.12	64,64,64,64	0
54	MG	1A	4010	1/1	0.82	0.12	56,56,56,56	0
54	MG	1H	202	1/1	0.82	0.10	62,62,62,62	0
54	MG	2B	211	1/1	0.82	0.15	57,57,57,57	0
54	MG	1A	3385	1/1	0.82	0.14	51,51,51,51	0
54	MG	1A	3939	1/1	0.82	0.16	61,61,61,61	0
54	MG	1A	3567	1/1	0.82	0.10	15,15,15,15	0
54	MG	2A	3426	1/1	0.82	0.12	56,56,56,56	0
54	MG	1A	3953	1/1	0.82	0.17	47,47,47,47	0
54	MG	2A	3583	1/1	0.82	0.11	50,50,50,50	0
54	MG	2A	3030	1/1	0.82	0.24	58,58,58,58	0
54	MG	1A	3956	1/1	0.82	0.15	51,51,51,51	0
54	MG	2A	3288	1/1	0.82	0.21	58,58,58,58	0
54	MG	2A	3611	1/1	0.82	0.15	33,33,33,33	0
54	MG	1A	3860	1/1	0.82	0.09	16,16,16,16	0
54	MG	2a	3192	1/1	0.82	0.14	65,65,65,65	0
54	MG	2a	3021	1/1	0.82	0.41	67,67,67,67	0
54	MG	2A	3071	1/1	0.82	0.30	59,59,59,59	0
54	MG	2A	3622	1/1	0.82	0.14	49,49,49,49	0
54	MG	1a	1863	1/1	0.82	0.21	68,68,68,68	0
54	MG	2A	3348	1/1	0.82	0.11	69,69,69,69	0
54	MG	2A	3360	1/1	0.82	0.23	62,62,62,62	0
54	MG	1A	3511	1/1	0.82	0.24	55,55,55,55	0
54	MG	1B	226	1/1	0.82	0.11	59,59,59,59	0
54	MG	2A	3743	1/1	0.82	0.15	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3082	1/1	0.82	0.21	55,55,55,55	0
54	MG	1A	3754	1/1	0.82	0.12	12,12,12,12	0
54	MG	2A	3506	1/1	0.83	0.21	57,57,57,57	0
54	MG	2a	3075	1/1	0.83	0.22	66,66,66,66	0
54	MG	1a	1789	1/1	0.83	0.12	73,73,73,73	0
54	MG	1B	229	1/1	0.83	0.17	60,60,60,60	0
54	MG	1A	3936	1/1	0.83	0.16	66,66,66,66	0
54	MG	1A	3689	1/1	0.83	0.16	32,32,32,32	0
54	MG	2A	3129	1/1	0.83	0.17	56,56,56,56	0
54	MG	1a	1805	1/1	0.83	0.12	59,59,59,59	0
54	MG	2B	207	1/1	0.83	0.18	67,67,67,67	0
54	MG	1a	1671	1/1	0.83	0.18	62,62,62,62	0
54	MG	2A	3411	1/1	0.83	0.10	30,30,30,30	0
54	MG	1A	3440	1/1	0.83	0.09	36,36,36,36	0
54	MG	2D	311	1/1	0.83	0.11	30,30,30,30	0
54	MG	1A	3849	1/1	0.83	0.14	58,58,58,58	0
54	MG	1a	1816	1/1	0.83	0.13	65,65,65,65	0
54	MG	11	104	1/1	0.83	0.14	40,40,40,40	0
54	MG	2P	201	1/1	0.83	0.17	65,65,65,65	0
54	MG	2a	3178	1/1	0.83	0.22	61,61,61,61	0
54	MG	2A	3433	1/1	0.83	0.26	70,70,70,70	0
54	MG	2A	3452	1/1	0.83	0.20	55,55,55,55	0
54	MG	2A	3001	1/1	0.83	0.22	62,62,62,62	0
54	MG	1A	3271	1/1	0.83	0.14	63,63,63,63	0
54	MG	1a	1767	1/1	0.83	0.22	65,65,65,65	0
54	MG	2A	3289	1/1	0.83	0.10	38,38,38,38	0
54	MG	2A	3476	1/1	0.83	0.09	44,44,44,44	0
54	MG	1B	214	1/1	0.83	0.11	42,42,42,42	0
54	MG	1A	3776	1/1	0.83	0.18	43,43,43,43	0
54	MG	1A	3142	1/1	0.83	0.19	46,46,46,46	0
54	MG	2a	3037	1/1	0.83	0.18	54,54,54,54	0
54	MG	2A	3697	1/1	0.83	0.15	63,63,63,63	0
54	MG	1a	1856	1/1	0.83	0.20	70,70,70,70	0
54	MG	1A	3609	1/1	0.83	0.14	55,55,55,55	0
54	MG	1A	3540	1/1	0.83	0.13	42,42,42,42	0
54	MG	2a	3064	1/1	0.83	0.10	47,47,47,47	0
54	MG	1A	3078	1/1	0.84	0.13	26,26,26,26	0
54	MG	1a	1615	1/1	0.84	0.14	63,63,63,63	0
54	MG	2a	3052	1/1	0.84	0.16	58,58,58,58	0
54	MG	2A	3466	1/1	0.84	0.12	47,47,47,47	0
54	MG	1A	3852	1/1	0.84	0.17	23,23,23,23	0
54	MG	2A	3703	1/1	0.84	0.12	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1824	1/1	0.84	0.11	71,71,71,71	0
54	MG	1a	1829	1/1	0.84	0.17	63,63,63,63	0
54	MG	2a	3089	1/1	0.84	0.13	67,67,67,67	0
54	MG	2a	3093	1/1	0.84	0.27	49,49,49,49	0
54	MG	1a	1773	1/1	0.84	0.12	44,44,44,44	0
54	MG	2A	3050	1/1	0.84	0.28	55,55,55,55	0
54	MG	2A	3322	1/1	0.84	0.11	29,29,29,29	0
54	MG	2A	3749	1/1	0.84	0.17	61,61,61,61	0
54	MG	2A	3052	1/1	0.84	0.29	67,67,67,67	0
54	MG	1A	3937	1/1	0.84	0.12	46,46,46,46	0
54	MG	1a	1656	1/1	0.84	0.32	70,70,70,70	0
54	MG	2A	3509	1/1	0.84	0.16	58,58,58,58	0
54	MG	1A	3489	1/1	0.84	0.12	13,13,13,13	0
54	MG	1A	3022	1/1	0.84	0.08	32,32,32,32	0
54	MG	2a	3143	1/1	0.84	0.12	79,79,79,79	0
54	MG	1a	1745	1/1	0.84	0.18	55,55,55,55	0
54	MG	1B	224	1/1	0.84	0.11	54,54,54,54	0
54	MG	2a	3156	1/1	0.84	0.15	60,60,60,60	0
54	MG	2B	217	1/1	0.84	0.11	75,75,75,75	0
54	MG	2A	3521	1/1	0.84	0.17	61,61,61,61	0
54	MG	2A	3373	1/1	0.84	0.12	35,35,35,35	0
54	MG	1a	1794	1/1	0.84	0.20	57,57,57,57	0
54	MG	2A	3102	1/1	0.84	0.13	66,66,66,66	0
54	MG	2a	3182	1/1	0.84	0.12	81,81,81,81	0
54	MG	2A	3394	1/1	0.84	0.10	35,35,35,35	0
54	MG	1a	1680	1/1	0.84	0.21	68,68,68,68	0
54	MG	1A	4016	1/1	0.84	0.11	45,45,45,45	0
54	MG	2A	3122	1/1	0.84	0.28	60,60,60,60	0
54	MG	1A	3634	1/1	0.84	0.08	28,28,28,28	0
54	MG	2A	3170	1/1	0.84	0.17	71,71,71,71	0
54	MG	1d	302	1/1	0.84	0.18	64,64,64,64	0
54	MG	1a	1693	1/1	0.84	0.22	53,53,53,53	0
54	MG	2A	3220	1/1	0.84	0.22	43,43,43,43	0
54	MG	2A	3606	1/1	0.84	0.14	34,34,34,34	0
54	MG	1a	1695	1/1	0.84	0.15	58,58,58,58	0
54	MG	1A	3728	1/1	0.84	0.12	50,50,50,50	0
54	MG	2A	3618	1/1	0.84	0.11	88,88,88,88	0
54	MG	2A	3245	1/1	0.84	0.19	48,48,48,48	0
54	MG	1i	201	1/1	0.85	0.16	61,61,61,61	0
54	MG	2A	3531	1/1	0.85	0.14	58,58,58,58	0
54	MG	2A	3307	1/1	0.85	0.10	41,41,41,41	0
54	MG	1A	3890	1/1	0.85	0.11	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1662	1/1	0.85	0.12	76,76,76,76	0
54	MG	1A	3607	1/1	0.85	0.08	17,17,17,17	0
54	MG	2A	3562	1/1	0.85	0.11	58,58,58,58	0
54	MG	2a	3023	1/1	0.85	0.16	48,48,48,48	0
54	MG	1a	1776	1/1	0.85	0.14	57,57,57,57	0
54	MG	2A	3355	1/1	0.85	0.12	56,56,56,56	0
54	MG	2a	3035	1/1	0.85	0.19	63,63,63,63	0
54	MG	2A	3358	1/1	0.85	0.09	27,27,27,27	0
54	MG	1A	3641	1/1	0.85	0.19	20,20,20,20	0
54	MG	2A	3578	1/1	0.85	0.15	50,50,50,50	0
54	MG	1A	3179	1/1	0.85	0.15	44,44,44,44	0
54	MG	1A	3507	1/1	0.85	0.10	36,36,36,36	0
54	MG	1a	1686	1/1	0.85	0.21	53,53,53,53	0
54	MG	2A	3045	1/1	0.85	0.20	62,62,62,62	0
54	MG	2a	3060	1/1	0.85	0.19	64,64,64,64	0
54	MG	1A	3490	1/1	0.85	0.10	43,43,43,43	0
54	MG	2A	3609	1/1	0.85	0.16	55,55,55,55	0
54	MG	1A	3807	1/1	0.85	0.22	47,47,47,47	0
54	MG	1A	3513	1/1	0.85	0.10	33,33,33,33	0
54	MG	2A	3616	1/1	0.85	0.11	57,57,57,57	0
54	MG	1A	3569	1/1	0.85	0.15	56,56,56,56	0
54	MG	1A	3962	1/1	0.85	0.10	50,50,50,50	0
54	MG	1a	1717	1/1	0.85	0.09	58,58,58,58	0
54	MG	2A	3623	1/1	0.85	0.31	57,57,57,57	0
54	MG	2A	3647	1/1	0.85	0.08	43,43,43,43	0
54	MG	2a	3109	1/1	0.85	0.22	69,69,69,69	0
54	MG	2A	3654	1/1	0.85	0.14	83,83,83,83	0
54	MG	1a	1722	1/1	0.85	0.27	70,70,70,70	0
54	MG	1A	3593	1/1	0.85	0.21	36,36,36,36	0
54	MG	2a	3118	1/1	0.85	0.16	59,59,59,59	0
54	MG	1a	1726	1/1	0.85	0.26	59,59,59,59	0
54	MG	2A	3701	1/1	0.85	0.12	54,54,54,54	0
54	MG	2a	3129	1/1	0.85	0.16	63,63,63,63	0
54	MG	1H	201	1/1	0.85	0.12	63,63,63,63	0
54	MG	2A	3708	1/1	0.85	0.36	50,50,50,50	0
54	MG	1A	3844	1/1	0.85	0.08	32,32,32,32	0
54	MG	2A	3732	1/1	0.85	0.12	52,52,52,52	0
54	MG	2a	3153	1/1	0.85	0.12	75,75,75,75	0
54	MG	2A	3108	1/1	0.85	0.13	55,55,55,55	0
54	MG	2a	3157	1/1	0.85	0.12	70,70,70,70	0
54	MG	1a	1733	1/1	0.85	0.20	55,55,55,55	0
54	MG	1P	205	1/1	0.85	0.08	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1740	1/1	0.85	0.11	60,60,60,60	0
54	MG	1A	3597	1/1	0.85	0.12	14,14,14,14	0
54	MG	2A	3177	1/1	0.85	0.26	64,64,64,64	0
54	MG	2A	3183	1/1	0.85	0.21	61,61,61,61	0
54	MG	2a	3184	1/1	0.85	0.16	59,59,59,59	0
54	MG	2A	3205	1/1	0.85	0.19	53,53,53,53	0
54	MG	1A	3733	1/1	0.85	0.16	61,61,61,61	0
54	MG	1A	4008	1/1	0.85	0.17	69,69,69,69	0
54	MG	1A	3751	1/1	0.85	0.09	12,12,12,12	0
54	MG	1a	1862	1/1	0.85	0.23	59,59,59,59	0
54	MG	18	101	1/1	0.85	0.21	58,58,58,58	0
54	MG	1A	3625	1/1	0.85	0.12	39,39,39,39	0
54	MG	1A	3758	1/1	0.85	0.12	19,19,19,19	0
54	MG	2D	310	1/1	0.85	0.32	41,41,41,41	0
54	MG	1A	3867	1/1	0.85	0.18	53,53,53,53	0
54	MG	1A	4045	1/1	0.85	0.15	69,69,69,69	0
54	MG	1a	1653	1/1	0.85	0.12	66,66,66,66	0
54	MG	1A	3763	1/1	0.85	0.20	48,48,48,48	0
54	MG	1B	212	1/1	0.85	0.13	49,49,49,49	0
54	MG	1A	3552	1/1	0.86	0.15	40,40,40,40	0
54	MG	2A	3553	1/1	0.86	0.10	77,77,77,77	0
54	MG	2a	3007	1/1	0.86	0.29	70,70,70,70	0
54	MG	2A	3559	1/1	0.86	0.12	30,30,30,30	0
54	MG	1a	1623	1/1	0.86	0.12	51,51,51,51	0
54	MG	1a	1739	1/1	0.86	0.15	66,66,66,66	0
54	MG	2A	3065	1/1	0.86	0.12	44,44,44,44	0
54	MG	1a	1624	1/1	0.86	0.22	54,54,54,54	0
54	MG	2A	3073	1/1	0.86	0.20	49,49,49,49	0
54	MG	1A	3931	1/1	0.86	0.11	50,50,50,50	0
54	MG	1A	3391	1/1	0.86	0.10	57,57,57,57	0
54	MG	1a	1823	1/1	0.86	0.16	63,63,63,63	0
54	MG	2a	3040	1/1	0.86	0.26	61,61,61,61	0
54	MG	2A	3083	1/1	0.86	0.26	65,65,65,65	0
54	MG	1A	3565	1/1	0.86	0.12	65,65,65,65	0
54	MG	1a	1828	1/1	0.86	0.18	65,65,65,65	0
54	MG	2a	3048	1/1	0.86	0.21	54,54,54,54	0
54	MG	1A	3333	1/1	0.86	0.09	27,27,27,27	0
54	MG	2A	3408	1/1	0.86	0.12	45,45,45,45	0
54	MG	2A	3612	1/1	0.86	0.17	35,35,35,35	0
54	MG	1A	3339	1/1	0.86	0.09	37,37,37,37	0
54	MG	2A	3615	1/1	0.86	0.12	61,61,61,61	0
54	MG	1A	3695	1/1	0.86	0.09	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3712	1/1	0.86	0.18	50,50,50,50	0
54	MG	2a	3083	1/1	0.86	0.13	54,54,54,54	0
54	MG	1A	3716	1/1	0.86	0.10	37,37,37,37	0
54	MG	1a	1676	1/1	0.86	0.24	64,64,64,64	0
54	MG	2a	3099	1/1	0.86	0.12	63,63,63,63	0
54	MG	2A	3153	1/1	0.86	0.27	67,67,67,67	0
54	MG	2A	3432	1/1	0.86	0.13	58,58,58,58	0
54	MG	1A	3589	1/1	0.86	0.14	40,40,40,40	0
54	MG	2A	3674	1/1	0.86	0.11	59,59,59,59	0
54	MG	2A	3678	1/1	0.86	0.09	53,53,53,53	0
54	MG	2A	3435	1/1	0.86	0.25	54,54,54,54	0
54	MG	2A	3686	1/1	0.86	0.11	44,44,44,44	0
54	MG	2A	3443	1/1	0.86	0.21	64,64,64,64	0
54	MG	2a	3116	1/1	0.86	0.22	70,70,70,70	0
54	MG	2A	3445	1/1	0.86	0.11	66,66,66,66	0
54	MG	2a	3119	1/1	0.86	0.22	51,51,51,51	0
54	MG	1a	1766	1/1	0.86	0.11	54,54,54,54	0
54	MG	1a	1682	1/1	0.86	0.24	62,62,62,62	0
54	MG	2A	3454	1/1	0.86	0.25	68,68,68,68	0
54	MG	1A	3642	1/1	0.86	0.18	60,60,60,60	0
54	MG	1A	3343	1/1	0.86	0.11	39,39,39,39	0
54	MG	1A	3595	1/1	0.86	0.16	58,58,58,58	0
54	MG	1A	4006	1/1	0.86	0.10	32,32,32,32	0
54	MG	2a	3147	1/1	0.86	0.13	83,83,83,83	0
54	MG	2A	3227	1/1	0.86	0.30	60,60,60,60	0
54	MG	1a	1775	1/1	0.86	0.11	70,70,70,70	0
54	MG	1A	3327	1/1	0.86	0.08	19,19,19,19	0
54	MG	10	106	1/1	0.86	0.16	53,53,53,53	0
54	MG	2A	3265	1/1	0.86	0.19	44,44,44,44	0
54	MG	2A	3499	1/1	0.86	0.10	36,36,36,36	0
54	MG	1A	4009	1/1	0.86	0.08	52,52,52,52	0
54	MG	1a	1716	1/1	0.86	0.14	59,59,59,59	0
54	MG	1A	3377	1/1	0.86	0.14	41,41,41,41	0
54	MG	2A	3280	1/1	0.86	0.12	52,52,52,52	0
54	MG	2B	213	1/1	0.86	0.10	87,87,87,87	0
54	MG	1A	3523	1/1	0.86	0.11	54,54,54,54	0
54	MG	1A	3869	1/1	0.86	0.25	22,22,22,22	0
54	MG	1A	3467	1/1	0.86	0.11	26,26,26,26	0
54	MG	2D	308	1/1	0.86	0.17	60,60,60,60	0
54	MG	2A	3022	1/1	0.86	0.17	65,65,65,65	0
54	MG	1a	1801	1/1	0.86	0.09	63,63,63,63	0
54	MG	2A	3523	1/1	0.86	0.14	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3529	1/1	0.86	0.16	25,25,25,25	0
54	MG	1A	3227	1/1	0.86	0.24	61,61,61,61	0
54	MG	2A	3330	1/1	0.86	0.10	24,24,24,24	0
54	MG	2T	203	1/1	0.86	0.08	53,53,53,53	0
54	MG	2A	3044	1/1	0.86	0.23	62,62,62,62	0
54	MG	1A	3550	1/1	0.86	0.10	57,57,57,57	0
54	MG	1a	1639	1/1	0.87	0.17	64,64,64,64	0
54	MG	2A	3246	1/1	0.87	0.23	55,55,55,55	0
54	MG	2A	3247	1/1	0.87	0.22	59,59,59,59	0
54	MG	1A	3571	1/1	0.87	0.13	28,28,28,28	0
54	MG	1A	3814	1/1	0.87	0.09	35,35,35,35	0
54	MG	1A	3284	1/1	0.87	0.15	61,61,61,61	0
54	MG	1A	3027	1/1	0.87	0.14	43,43,43,43	0
54	MG	1f	201	1/1	0.87	0.12	43,43,43,43	0
54	MG	1h	202	1/1	0.87	0.12	49,49,49,49	0
54	MG	1A	3626	1/1	0.87	0.15	59,59,59,59	0
54	MG	2a	3018	1/1	0.87	0.24	55,55,55,55	0
54	MG	1a	1658	1/1	0.87	0.36	61,61,61,61	0
54	MG	2A	3543	1/1	0.87	0.12	62,62,62,62	0
54	MG	2a	3022	1/1	0.87	0.08	46,46,46,46	0
54	MG	1A	3672	1/1	0.87	0.21	40,40,40,40	0
54	MG	2a	3028	1/1	0.87	0.19	62,62,62,62	0
54	MG	2A	3291	1/1	0.87	0.14	43,43,43,43	0
54	MG	2A	3292	1/1	0.87	0.08	35,35,35,35	0
54	MG	1A	3493	1/1	0.87	0.08	18,18,18,18	0
54	MG	1a	1666	1/1	0.87	0.30	65,65,65,65	0
54	MG	1a	1670	1/1	0.87	0.14	69,69,69,69	0
54	MG	1D	315	1/1	0.87	0.14	42,42,42,42	0
54	MG	2A	3337	1/1	0.87	0.10	29,29,29,29	0
54	MG	1a	1673	1/1	0.87	0.17	67,67,67,67	0
54	MG	2A	3344	1/1	0.87	0.19	49,49,49,49	0
54	MG	2A	3026	1/1	0.87	0.13	51,51,51,51	0
54	MG	1D	316	1/1	0.87	0.13	41,41,41,41	0
54	MG	2A	3356	1/1	0.87	0.12	64,64,64,64	0
54	MG	2A	3032	1/1	0.87	0.23	54,54,54,54	0
54	MG	1A	3348	1/1	0.87	0.12	51,51,51,51	0
54	MG	1A	3982	1/1	0.87	0.14	48,48,48,48	0
54	MG	1a	1683	1/1	0.87	0.15	52,52,52,52	0
54	MG	2a	3080	1/1	0.87	0.31	68,68,68,68	0
54	MG	2A	3371	1/1	0.87	0.14	53,53,53,53	0
54	MG	2A	3046	1/1	0.87	0.09	46,46,46,46	0
54	MG	1G	201	1/1	0.87	0.13	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3381	1/1	0.87	0.09	30,30,30,30	0
54	MG	1A	3459	1/1	0.87	0.12	16,16,16,16	0
54	MG	2A	3054	1/1	0.87	0.12	50,50,50,50	0
54	MG	1A	3410	1/1	0.87	0.19	53,53,53,53	0
54	MG	1A	3562	1/1	0.87	0.12	31,31,31,31	0
54	MG	2A	3401	1/1	0.87	0.15	59,59,59,59	0
54	MG	2A	3670	1/1	0.87	0.10	59,59,59,59	0
54	MG	1a	1802	1/1	0.87	0.09	89,89,89,89	0
54	MG	2A	3677	1/1	0.87	0.12	65,65,65,65	0
54	MG	1P	203	1/1	0.87	0.21	27,27,27,27	0
54	MG	1A	3512	1/1	0.87	0.23	18,18,18,18	0
54	MG	1W	201	1/1	0.87	0.21	48,48,48,48	0
54	MG	1A	3412	1/1	0.87	0.14	42,42,42,42	0
54	MG	1A	3518	1/1	0.87	0.10	25,25,25,25	0
54	MG	1a	1718	1/1	0.87	0.16	72,72,72,72	0
54	MG	1A	4020	1/1	0.87	0.12	61,61,61,61	0
54	MG	1A	3891	1/1	0.87	0.12	14,14,14,14	0
54	MG	2A	3723	1/1	0.87	0.12	54,54,54,54	0
54	MG	1A	3795	1/1	0.87	0.11	56,56,56,56	0
54	MG	1a	1728	1/1	0.87	0.14	47,47,47,47	0
54	MG	2A	3733	1/1	0.87	0.10	49,49,49,49	0
54	MG	2A	3734	1/1	0.87	0.08	60,60,60,60	0
54	MG	1a	1826	1/1	0.87	0.13	47,47,47,47	0
54	MG	1A	3801	1/1	0.87	0.16	63,63,63,63	0
54	MG	2A	3124	1/1	0.87	0.25	64,64,64,64	0
54	MG	2A	3745	1/1	0.87	0.11	78,78,78,78	0
54	MG	1B	204	1/1	0.87	0.11	40,40,40,40	0
54	MG	2A	3748	1/1	0.87	0.11	59,59,59,59	0
54	MG	1a	1601	1/1	0.87	0.12	47,47,47,47	0
54	MG	1a	1607	1/1	0.87	0.21	49,49,49,49	0
54	MG	1B	206	1/1	0.87	0.26	59,59,59,59	0
54	MG	2a	3185	1/1	0.87	0.17	54,54,54,54	0
54	MG	2A	3182	1/1	0.87	0.19	58,58,58,58	0
54	MG	1A	3805	1/1	0.87	0.08	18,18,18,18	0
54	MG	2A	3185	1/1	0.87	0.22	42,42,42,42	0
54	MG	2A	3188	1/1	0.87	0.26	46,46,46,46	0
54	MG	2A	3488	1/1	0.87	0.14	48,48,48,48	0
54	MG	1a	1620	1/1	0.87	0.12	48,48,48,48	0
54	MG	1A	3722	1/1	0.87	0.10	50,50,50,50	0
54	MG	1A	3809	1/1	0.87	0.10	40,40,40,40	0
54	MG	2t	201	1/1	0.87	0.32	54,54,54,54	0
54	MG	1a	1634	1/1	0.87	0.27	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3225	1/1	0.87	0.15	61,61,61,61	0
54	MG	1a	1866	1/1	0.87	0.10	52,52,52,52	0
54	MG	1a	1635	1/1	0.87	0.34	49,49,49,49	0
54	MG	1a	1873	1/1	0.87	0.18	61,61,61,61	0
54	MG	2G	201	1/1	0.87	0.08	73,73,73,73	0
54	MG	1A	3675	1/1	0.88	0.14	57,57,57,57	0
54	MG	1A	3870	1/1	0.88	0.14	42,42,42,42	0
54	MG	1A	3767	1/1	0.88	0.09	31,31,31,31	0
54	MG	2A	3276	1/1	0.88	0.15	52,52,52,52	0
54	MG	2A	3279	1/1	0.88	0.17	57,57,57,57	0
54	MG	1A	3582	1/1	0.88	0.23	25,25,25,25	0
54	MG	2A	3284	1/1	0.88	0.08	32,32,32,32	0
54	MG	1A	3434	1/1	0.88	0.23	50,50,50,50	0
54	MG	2a	3005	1/1	0.88	0.08	45,45,45,45	0
54	MG	1A	3631	1/1	0.88	0.17	53,53,53,53	0
54	MG	1t	201	1/1	0.88	0.15	54,54,54,54	0
54	MG	1a	1761	1/1	0.88	0.15	59,59,59,59	0
54	MG	2a	3014	1/1	0.88	0.21	59,59,59,59	0
54	MG	1y	203	1/1	0.88	0.07	71,71,71,71	0
54	MG	1A	3899	1/1	0.88	0.09	35,35,35,35	0
54	MG	2A	3296	1/1	0.88	0.23	60,60,60,60	0
54	MG	2A	3556	1/1	0.88	0.14	28,28,28,28	0
54	MG	1A	3492	1/1	0.88	0.09	41,41,41,41	0
54	MG	1a	1646	1/1	0.88	0.27	54,54,54,54	0
54	MG	2A	3324	1/1	0.88	0.12	47,47,47,47	0
54	MG	1A	3635	1/1	0.88	0.08	13,13,13,13	0
54	MG	1a	1654	1/1	0.88	0.20	63,63,63,63	0
54	MG	1A	3932	1/1	0.88	0.11	43,43,43,43	0
54	MG	1A	3933	1/1	0.88	0.17	42,42,42,42	0
54	MG	2a	3039	1/1	0.88	0.35	62,62,62,62	0
54	MG	1A	3708	1/1	0.88	0.18	60,60,60,60	0
54	MG	1A	3545	1/1	0.88	0.12	52,52,52,52	0
54	MG	1a	1659	1/1	0.88	0.13	65,65,65,65	0
54	MG	2a	3046	1/1	0.88	0.33	70,70,70,70	0
54	MG	1a	1782	1/1	0.88	0.10	60,60,60,60	0
54	MG	1a	1660	1/1	0.88	0.13	69,69,69,69	0
54	MG	2a	3051	1/1	0.88	0.19	62,62,62,62	0
54	MG	1B	227	1/1	0.88	0.07	51,51,51,51	0
54	MG	2a	3054	1/1	0.88	0.23	65,65,65,65	0
54	MG	1A	3398	1/1	0.88	0.13	17,17,17,17	0
54	MG	2a	3057	1/1	0.88	0.20	72,72,72,72	0
54	MG	1A	3600	1/1	0.88	0.10	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3063	1/1	0.88	0.09	68,68,68,68	0
54	MG	1A	3551	1/1	0.88	0.11	13,13,13,13	0
54	MG	1A	3449	1/1	0.88	0.08	10,10,10,10	0
54	MG	2a	3067	1/1	0.88	0.31	65,65,65,65	0
54	MG	2a	3073	1/1	0.88	0.21	59,59,59,59	0
54	MG	1A	3957	1/1	0.88	0.13	46,46,46,46	0
54	MG	2a	3078	1/1	0.88	0.14	60,60,60,60	0
54	MG	1A	3959	1/1	0.88	0.09	37,37,37,37	0
54	MG	1a	1803	1/1	0.88	0.09	71,71,71,71	0
54	MG	1a	1677	1/1	0.88	0.13	59,59,59,59	0
54	MG	2A	3393	1/1	0.88	0.09	43,43,43,43	0
54	MG	1A	3014	1/1	0.88	0.29	55,55,55,55	0
54	MG	1A	3827	1/1	0.88	0.09	29,29,29,29	0
54	MG	1A	3363	1/1	0.88	0.10	19,19,19,19	0
54	MG	1N	203	1/1	0.88	0.08	54,54,54,54	0
54	MG	1A	3837	1/1	0.88	0.09	54,54,54,54	0
54	MG	1a	1687	1/1	0.88	0.18	62,62,62,62	0
54	MG	1A	3840	1/1	0.88	0.10	32,32,32,32	0
54	MG	2A	3684	1/1	0.88	0.12	41,41,41,41	0
54	MG	1T	201	1/1	0.88	0.12	34,34,34,34	0
54	MG	1T	204	1/1	0.88	0.10	57,57,57,57	0
54	MG	2A	3419	1/1	0.88	0.18	59,59,59,59	0
54	MG	1V	205	1/1	0.88	0.09	42,42,42,42	0
54	MG	2A	3130	1/1	0.88	0.10	48,48,48,48	0
54	MG	2A	3706	1/1	0.88	0.14	45,45,45,45	0
54	MG	2A	3427	1/1	0.88	0.09	42,42,42,42	0
54	MG	2A	3714	1/1	0.88	0.10	72,72,72,72	0
54	MG	1A	3984	1/1	0.88	0.21	29,29,29,29	0
54	MG	2A	3727	1/1	0.88	0.10	55,55,55,55	0
54	MG	2A	3162	1/1	0.88	0.10	56,56,56,56	0
54	MG	1W	204	1/1	0.88	0.11	39,39,39,39	0
54	MG	1W	205	1/1	0.88	0.17	38,38,38,38	0
54	MG	2A	3181	1/1	0.88	0.23	53,53,53,53	0
54	MG	2a	3154	1/1	0.88	0.11	68,68,68,68	0
54	MG	2A	3735	1/1	0.88	0.12	67,67,67,67	0
54	MG	2A	3446	1/1	0.88	0.14	59,59,59,59	0
54	MG	2A	3739	1/1	0.88	0.14	66,66,66,66	0
54	MG	2a	3166	1/1	0.88	0.09	60,60,60,60	0
54	MG	1Z	301	1/1	0.88	0.08	56,56,56,56	0
54	MG	2A	3741	1/1	0.88	0.12	50,50,50,50	0
54	MG	1a	1847	1/1	0.88	0.17	60,60,60,60	0
54	MG	10	103	1/1	0.88	0.08	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3008	1/1	0.88	0.07	31,31,31,31	0
54	MG	1A	3738	1/1	0.88	0.14	37,37,37,37	0
54	MG	1A	3741	1/1	0.88	0.10	48,48,48,48	0
54	MG	1A	3474	1/1	0.88	0.11	46,46,46,46	0
54	MG	15	107	1/1	0.88	0.10	35,35,35,35	0
54	MG	2A	3478	1/1	0.88	0.16	61,61,61,61	0
54	MG	2a	3197	1/1	0.88	0.16	68,68,68,68	0
54	MG	2A	3224	1/1	0.88	0.12	59,59,59,59	0
54	MG	2a	3200	1/1	0.88	0.22	61,61,61,61	0
54	MG	1A	3854	1/1	0.88	0.14	43,43,43,43	0
54	MG	1A	3239	1/1	0.88	0.12	49,49,49,49	0
54	MG	2A	3490	1/1	0.88	0.13	41,41,41,41	0
54	MG	1A	3621	1/1	0.88	0.17	26,26,26,26	0
54	MG	1A	4025	1/1	0.88	0.11	47,47,47,47	0
56	MPD	1A	4047	8/8	0.88	0.22	41,46,50,51	0
54	MG	1a	1602	1/1	0.88	0.15	65,65,65,65	0
54	MG	1A	4031	1/1	0.88	0.09	43,43,43,43	0
54	MG	1d	301	1/1	0.88	0.18	61,61,61,61	0
54	MG	2A	3249	1/1	0.88	0.16	56,56,56,56	0
54	MG	2A	3508	1/1	0.88	0.24	50,50,50,50	0
54	MG	1A	3107	1/1	0.88	0.09	45,45,45,45	0
54	MG	2A	3392	1/1	0.89	0.17	65,65,65,65	0
54	MG	1A	4015	1/1	0.89	0.20	58,58,58,58	0
54	MG	1A	3588	1/1	0.89	0.21	21,21,21,21	0
54	MG	2A	3397	1/1	0.89	0.12	39,39,39,39	0
54	MG	2a	3024	1/1	0.89	0.40	59,59,59,59	0
54	MG	1A	3549	1/1	0.89	0.13	56,56,56,56	0
54	MG	1a	1747	1/1	0.89	0.18	48,48,48,48	0
54	MG	1T	202	1/1	0.89	0.14	59,59,59,59	0
54	MG	2A	3406	1/1	0.89	0.11	75,75,75,75	0
54	MG	1A	3908	1/1	0.89	0.12	53,53,53,53	0
54	MG	1a	1869	1/1	0.89	0.12	49,49,49,49	0
54	MG	1A	3506	1/1	0.89	0.18	26,26,26,26	0
54	MG	1A	3736	1/1	0.89	0.17	47,47,47,47	0
54	MG	2A	3192	1/1	0.89	0.10	57,57,57,57	0
54	MG	2A	3632	1/1	0.89	0.13	71,71,71,71	0
54	MG	2A	3193	1/1	0.89	0.17	52,52,52,52	0
54	MG	1A	3737	1/1	0.89	0.12	44,44,44,44	0
54	MG	2A	3208	1/1	0.89	0.20	57,57,57,57	0
54	MG	1A	3826	1/1	0.89	0.10	19,19,19,19	0
54	MG	1A	3934	1/1	0.89	0.12	53,53,53,53	0
54	MG	1A	3464	1/1	0.89	0.07	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1765	1/1	0.89	0.11	56,56,56,56	0
54	MG	2A	3683	1/1	0.89	0.10	71,71,71,71	0
54	MG	2a	3058	1/1	0.89	0.29	74,74,74,74	0
54	MG	2a	3059	1/1	0.89	0.14	61,61,61,61	0
54	MG	10	104	1/1	0.89	0.13	46,46,46,46	0
54	MG	1e	202	1/1	0.89	0.14	55,55,55,55	0
54	MG	10	105	1/1	0.89	0.08	38,38,38,38	0
54	MG	2A	3447	1/1	0.89	0.11	32,32,32,32	0
54	MG	2A	3240	1/1	0.89	0.23	55,55,55,55	0
54	MG	2a	3071	1/1	0.89	0.24	49,49,49,49	0
54	MG	1A	3739	1/1	0.89	0.09	23,23,23,23	0
54	MG	11	102	1/1	0.89	0.15	43,43,43,43	0
54	MG	2A	3457	1/1	0.89	0.11	52,52,52,52	0
54	MG	2a	3079	1/1	0.89	0.17	57,57,57,57	0
54	MG	2A	3711	1/1	0.89	0.09	59,59,59,59	0
54	MG	2A	3713	1/1	0.89	0.15	65,65,65,65	0
54	MG	1A	3298	1/1	0.89	0.15	60,60,60,60	0
54	MG	2A	3722	1/1	0.89	0.09	48,48,48,48	0
54	MG	2a	3091	1/1	0.89	0.23	53,53,53,53	0
54	MG	11	105	1/1	0.89	0.08	33,33,33,33	0
54	MG	2a	3096	1/1	0.89	0.21	55,55,55,55	0
54	MG	2A	3725	1/1	0.89	0.13	58,58,58,58	0
54	MG	1a	1679	1/1	0.89	0.22	57,57,57,57	0
54	MG	2A	3728	1/1	0.89	0.10	49,49,49,49	0
54	MG	2A	3730	1/1	0.89	0.25	53,53,53,53	0
54	MG	2A	3472	1/1	0.89	0.20	57,57,57,57	0
54	MG	2A	3254	1/1	0.89	0.12	42,42,42,42	0
54	MG	2A	3260	1/1	0.89	0.15	58,58,58,58	0
54	MG	13	102	1/1	0.89	0.14	33,33,33,33	0
54	MG	1a	1681	1/1	0.89	0.29	55,55,55,55	0
54	MG	1A	3299	1/1	0.89	0.09	13,13,13,13	0
54	MG	1a	1785	1/1	0.89	0.12	57,57,57,57	0
54	MG	1A	3345	1/1	0.89	0.10	27,27,27,27	0
54	MG	1A	3056	1/1	0.89	0.23	53,53,53,53	0
54	MG	2a	3121	1/1	0.89	0.14	75,75,75,75	0
54	MG	1A	3848	1/1	0.89	0.07	30,30,30,30	0
54	MG	2A	3497	1/1	0.89	0.14	40,40,40,40	0
54	MG	1A	3761	1/1	0.89	0.10	47,47,47,47	0
54	MG	1A	3397	1/1	0.89	0.13	23,23,23,23	0
54	MG	1a	1690	1/1	0.89	0.23	58,58,58,58	0
54	MG	2A	3040	1/1	0.89	0.25	57,57,57,57	0
54	MG	1A	3647	1/1	0.89	0.09	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3148	1/1	0.89	0.09	91,91,91,91	0
54	MG	1A	3968	1/1	0.89	0.10	59,59,59,59	0
54	MG	1A	3973	1/1	0.89	0.28	30,30,30,30	0
54	MG	1A	3701	1/1	0.89	0.11	25,25,25,25	0
54	MG	1a	1806	1/1	0.89	0.09	71,71,71,71	0
54	MG	2a	3158	1/1	0.89	0.21	68,68,68,68	0
54	MG	2a	3163	1/1	0.89	0.17	56,56,56,56	0
54	MG	2B	208	1/1	0.89	0.23	62,62,62,62	0
54	MG	1a	1613	1/1	0.89	0.20	61,61,61,61	0
54	MG	1A	3568	1/1	0.89	0.15	44,44,44,44	0
54	MG	2A	3522	1/1	0.89	0.13	62,62,62,62	0
54	MG	2B	216	1/1	0.89	0.12	52,52,52,52	0
54	MG	1A	3351	1/1	0.89	0.12	53,53,53,53	0
54	MG	2D	303	1/1	0.89	0.25	50,50,50,50	0
54	MG	1A	3715	1/1	0.89	0.09	13,13,13,13	0
54	MG	1a	1723	1/1	0.89	0.24	46,46,46,46	0
54	MG	1a	1819	1/1	0.89	0.12	45,45,45,45	0
54	MG	1A	3352	1/1	0.89	0.11	46,46,46,46	0
54	MG	1a	1627	1/1	0.89	0.16	46,46,46,46	0
54	MG	2a	3193	1/1	0.89	0.14	49,49,49,49	0
54	MG	1a	1822	1/1	0.89	0.17	73,73,73,73	0
54	MG	2G	202	1/1	0.89	0.16	67,67,67,67	0
54	MG	1a	1631	1/1	0.89	0.23	54,54,54,54	0
54	MG	1a	1633	1/1	0.89	0.12	45,45,45,45	0
54	MG	2e	201	1/1	0.89	0.08	69,69,69,69	0
54	MG	1A	3580	1/1	0.89	0.10	50,50,50,50	0
54	MG	1A	3336	1/1	0.89	0.08	8,8,8,8	0
54	MG	2A	3105	1/1	0.89	0.23	44,44,44,44	0
54	MG	2n	101	1/1	0.89	0.18	69,69,69,69	0
54	MG	1A	3661	1/1	0.89	0.10	26,26,26,26	0
54	MG	1a	1832	1/1	0.89	0.09	49,49,49,49	0
54	MG	1a	1738	1/1	0.89	0.23	49,49,49,49	0
54	MG	1A	3897	1/1	0.89	0.14	47,47,47,47	0
54	MG	1a	1645	1/1	0.89	0.20	71,71,71,71	0
54	MG	2A	3580	1/1	0.89	0.13	31,31,31,31	0
54	MG	1a	1742	1/1	0.89	0.10	65,65,65,65	0
54	MG	2A	3390	1/1	0.89	0.11	51,51,51,51	0
54	MG	1A	3486	1/1	0.90	0.09	10,10,10,10	0
54	MG	1A	4029	1/1	0.90	0.10	54,54,54,54	0
54	MG	1A	3750	1/1	0.90	0.07	21,21,21,21	0
54	MG	1e	201	1/1	0.90	0.17	52,52,52,52	0
54	MG	1A	4033	1/1	0.90	0.16	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	4037	1/1	0.90	0.15	46,46,46,46	0
54	MG	1A	3516	1/1	0.90	0.14	24,24,24,24	0
54	MG	1A	3690	1/1	0.90	0.21	19,19,19,19	0
54	MG	1n	101	1/1	0.90	0.13	54,54,54,54	0
54	MG	1n	102	1/1	0.90	0.24	61,61,61,61	0
54	MG	1a	1770	1/1	0.90	0.09	58,58,58,58	0
54	MG	1o	101	1/1	0.90	0.10	42,42,42,42	0
54	MG	1A	3604	1/1	0.90	0.11	46,46,46,46	0
54	MG	2a	3012	1/1	0.90	0.19	63,63,63,63	0
54	MG	10	108	1/1	0.90	0.26	35,35,35,35	0
54	MG	1B	203	1/1	0.90	0.18	47,47,47,47	0
54	MG	1A	3845	1/1	0.90	0.14	32,32,32,32	0
54	MG	2A	3533	1/1	0.90	0.09	60,60,60,60	0
54	MG	1A	3643	1/1	0.90	0.08	46,46,46,46	0
54	MG	1A	3335	1/1	0.90	0.07	35,35,35,35	0
54	MG	2A	3002	1/1	0.90	0.23	51,51,51,51	0
54	MG	2A	3545	1/1	0.90	0.17	38,38,38,38	0
54	MG	1a	1777	1/1	0.90	0.07	64,64,64,64	0
54	MG	1A	3944	1/1	0.90	0.19	35,35,35,35	0
54	MG	2A	3554	1/1	0.90	0.08	65,65,65,65	0
54	MG	2A	3294	1/1	0.90	0.16	56,56,56,56	0
54	MG	2A	3024	1/1	0.90	0.16	51,51,51,51	0
54	MG	2A	3305	1/1	0.90	0.08	42,42,42,42	0
54	MG	1A	3946	1/1	0.90	0.14	61,61,61,61	0
54	MG	2a	3041	1/1	0.90	0.20	66,66,66,66	0
54	MG	2A	3567	1/1	0.90	0.10	45,45,45,45	0
54	MG	2A	3312	1/1	0.90	0.08	33,33,33,33	0
54	MG	2A	3320	1/1	0.90	0.09	38,38,38,38	0
54	MG	2A	3029	1/1	0.90	0.18	53,53,53,53	0
54	MG	2A	3577	1/1	0.90	0.09	70,70,70,70	0
54	MG	1A	3951	1/1	0.90	0.14	28,28,28,28	0
54	MG	1A	3704	1/1	0.90	0.10	26,26,26,26	0
54	MG	2A	3331	1/1	0.90	0.14	69,69,69,69	0
54	MG	2A	3592	1/1	0.90	0.12	38,38,38,38	0
54	MG	2A	3333	1/1	0.90	0.09	23,23,23,23	0
54	MG	17	106	1/1	0.90	0.10	35,35,35,35	0
54	MG	2A	3036	1/1	0.90	0.15	48,48,48,48	0
54	MG	2A	3338	1/1	0.90	0.09	46,46,46,46	0
54	MG	1A	3445	1/1	0.90	0.11	31,31,31,31	0
54	MG	1A	3535	1/1	0.90	0.08	36,36,36,36	0
54	MG	1A	3536	1/1	0.90	0.22	48,48,48,48	0
54	MG	1a	1795	1/1	0.90	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3772	1/1	0.90	0.22	65,65,65,65	0
54	MG	1a	1606	1/1	0.90	0.19	50,50,50,50	0
54	MG	1a	1694	1/1	0.90	0.19	76,76,76,76	0
54	MG	2A	3363	1/1	0.90	0.08	50,50,50,50	0
54	MG	1A	3963	1/1	0.90	0.10	45,45,45,45	0
54	MG	1A	3615	1/1	0.90	0.13	54,54,54,54	0
54	MG	2A	3625	1/1	0.90	0.07	69,69,69,69	0
54	MG	1a	1702	1/1	0.90	0.14	45,45,45,45	0
54	MG	1a	1807	1/1	0.90	0.25	60,60,60,60	0
54	MG	2A	3649	1/1	0.90	0.11	69,69,69,69	0
54	MG	1a	1808	1/1	0.90	0.10	53,53,53,53	0
54	MG	2A	3376	1/1	0.90	0.13	44,44,44,44	0
54	MG	1A	3191	1/1	0.90	0.15	52,52,52,52	0
54	MG	2A	3675	1/1	0.90	0.09	39,39,39,39	0
54	MG	2a	3102	1/1	0.90	0.11	50,50,50,50	0
54	MG	1a	1709	1/1	0.90	0.12	58,58,58,58	0
54	MG	1a	1712	1/1	0.90	0.13	64,64,64,64	0
54	MG	1a	1814	1/1	0.90	0.16	58,58,58,58	0
54	MG	2A	3090	1/1	0.90	0.18	57,57,57,57	0
54	MG	1A	3389	1/1	0.90	0.09	12,12,12,12	0
54	MG	2a	3113	1/1	0.90	0.14	62,62,62,62	0
54	MG	1a	1619	1/1	0.90	0.20	60,60,60,60	0
54	MG	1E	305	1/1	0.90	0.08	30,30,30,30	0
54	MG	2A	3690	1/1	0.90	0.12	57,57,57,57	0
54	MG	1A	3874	1/1	0.90	0.11	46,46,46,46	0
54	MG	2A	3106	1/1	0.90	0.19	40,40,40,40	0
54	MG	1F	313	1/1	0.90	0.12	18,18,18,18	0
54	MG	2A	3405	1/1	0.90	0.24	47,47,47,47	0
54	MG	1A	3878	1/1	0.90	0.09	59,59,59,59	0
54	MG	1F	318	1/1	0.90	0.21	30,30,30,30	0
54	MG	2A	3123	1/1	0.90	0.15	56,56,56,56	0
54	MG	1A	3881	1/1	0.90	0.08	31,31,31,31	0
54	MG	1A	3884	1/1	0.90	0.09	12,12,12,12	0
54	MG	1A	3993	1/1	0.90	0.09	71,71,71,71	0
54	MG	2A	3132	1/1	0.90	0.09	39,39,39,39	0
54	MG	2A	3421	1/1	0.90	0.21	32,32,32,32	0
54	MG	2A	3139	1/1	0.90	0.09	56,56,56,56	0
54	MG	2A	3148	1/1	0.90	0.15	52,52,52,52	0
54	MG	1a	1637	1/1	0.90	0.17	55,55,55,55	0
54	MG	2A	3161	1/1	0.90	0.07	41,41,41,41	0
54	MG	1a	1638	1/1	0.90	0.30	59,59,59,59	0
54	MG	1a	1737	1/1	0.90	0.10	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3439	1/1	0.90	0.09	46,46,46,46	0
54	MG	2A	3174	1/1	0.90	0.20	52,52,52,52	0
54	MG	2A	3176	1/1	0.90	0.17	51,51,51,51	0
54	MG	1a	1840	1/1	0.90	0.12	67,67,67,67	0
54	MG	1a	1842	1/1	0.90	0.12	68,68,68,68	0
54	MG	2A	3449	1/1	0.90	0.10	74,74,74,74	0
54	MG	2A	3451	1/1	0.90	0.09	57,57,57,57	0
54	MG	1A	3581	1/1	0.90	0.11	22,22,22,22	0
54	MG	1a	1640	1/1	0.90	0.17	68,68,68,68	0
54	MG	1A	3177	1/1	0.90	0.21	32,32,32,32	0
54	MG	2a	3188	1/1	0.90	0.12	47,47,47,47	0
54	MG	1a	1854	1/1	0.90	0.07	79,79,79,79	0
54	MG	2a	3191	1/1	0.90	0.14	62,62,62,62	0
54	MG	2A	3190	1/1	0.90	0.10	50,50,50,50	0
54	MG	1a	1644	1/1	0.90	0.22	49,49,49,49	0
54	MG	2B	202	1/1	0.90	0.19	58,58,58,58	0
54	MG	1A	3076	1/1	0.90	0.14	45,45,45,45	0
54	MG	2A	3471	1/1	0.90	0.09	34,34,34,34	0
54	MG	1A	3420	1/1	0.90	0.08	44,44,44,44	0
54	MG	1a	1647	1/1	0.90	0.19	46,46,46,46	0
54	MG	2A	3475	1/1	0.90	0.11	57,57,57,57	0
54	MG	1a	1746	1/1	0.90	0.16	56,56,56,56	0
54	MG	1a	1650	1/1	0.90	0.18	54,54,54,54	0
54	MG	1A	3592	1/1	0.90	0.10	53,53,53,53	0
54	MG	1A	3428	1/1	0.90	0.13	37,37,37,37	0
54	MG	1a	1750	1/1	0.90	0.14	69,69,69,69	0
54	MG	1a	1751	1/1	0.90	0.15	44,44,44,44	0
54	MG	1A	3097	1/1	0.90	0.11	28,28,28,28	0
54	MG	2A	3236	1/1	0.90	0.09	52,52,52,52	0
54	MG	2A	3496	1/1	0.90	0.11	63,63,63,63	0
54	MG	2D	312	1/1	0.90	0.09	49,49,49,49	0
54	MG	1A	3683	1/1	0.90	0.06	43,43,43,43	0
58	ZN	14	501	1/1	0.90	0.16	138,138,138,138	0
54	MG	2A	3209	1/1	0.91	0.09	44,44,44,44	0
54	MG	1A	3775	1/1	0.91	0.07	20,20,20,20	0
54	MG	2A	3470	1/1	0.91	0.12	22,22,22,22	0
54	MG	1A	3531	1/1	0.91	0.07	31,31,31,31	0
54	MG	1a	1757	1/1	0.91	0.19	67,67,67,67	0
54	MG	2A	3221	1/1	0.91	0.15	52,52,52,52	0
54	MG	1A	3785	1/1	0.91	0.13	56,56,56,56	0
54	MG	1d	304	1/1	0.91	0.07	79,79,79,79	0
54	MG	2B	218	1/1	0.91	0.09	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3226	1/1	0.91	0.10	49,49,49,49	0
54	MG	2A	3479	1/1	0.91	0.14	41,41,41,41	0
54	MG	1F	311	1/1	0.91	0.10	37,37,37,37	0
54	MG	2A	3486	1/1	0.91	0.16	54,54,54,54	0
54	MG	1A	3684	1/1	0.91	0.07	29,29,29,29	0
54	MG	2A	3229	1/1	0.91	0.09	49,49,49,49	0
54	MG	2A	3234	1/1	0.91	0.18	53,53,53,53	0
54	MG	2E	307	1/1	0.91	0.11	56,56,56,56	0
54	MG	1a	1762	1/1	0.91	0.18	48,48,48,48	0
54	MG	1A	3347	1/1	0.91	0.12	40,40,40,40	0
54	MG	2A	3241	1/1	0.91	0.21	44,44,44,44	0
54	MG	1a	1764	1/1	0.91	0.08	61,61,61,61	0
54	MG	2N	201	1/1	0.91	0.08	60,60,60,60	0
54	MG	1A	3800	1/1	0.91	0.24	26,26,26,26	0
54	MG	2T	202	1/1	0.91	0.15	59,59,59,59	0
54	MG	1A	3164	1/1	0.91	0.12	39,39,39,39	0
54	MG	2Y	201	1/1	0.91	0.19	53,53,53,53	0
54	MG	1A	3538	1/1	0.91	0.10	48,48,48,48	0
54	MG	2A	3505	1/1	0.91	0.08	23,23,23,23	0
54	MG	1A	3175	1/1	0.91	0.15	47,47,47,47	0
54	MG	2A	3507	1/1	0.91	0.31	37,37,37,37	0
54	MG	2A	3252	1/1	0.91	0.11	31,31,31,31	0
54	MG	1A	3693	1/1	0.91	0.31	28,28,28,28	0
54	MG	1A	3694	1/1	0.91	0.16	26,26,26,26	0
54	MG	1A	3453	1/1	0.91	0.13	15,15,15,15	0
54	MG	1y	201	1/1	0.91	0.13	66,66,66,66	0
54	MG	2a	3016	1/1	0.91	0.14	60,60,60,60	0
54	MG	1A	3095	1/1	0.91	0.13	52,52,52,52	0
54	MG	1A	3620	1/1	0.91	0.09	39,39,39,39	0
54	MG	1A	3038	1/1	0.91	0.21	50,50,50,50	0
54	MG	1A	3971	1/1	0.91	0.27	33,33,33,33	0
54	MG	2A	3525	1/1	0.91	0.08	58,58,58,58	0
54	MG	2A	3526	1/1	0.91	0.09	32,32,32,32	0
54	MG	2a	3027	1/1	0.91	0.19	56,56,56,56	0
54	MG	1A	3359	1/1	0.91	0.08	8,8,8,8	0
54	MG	2a	3029	1/1	0.91	0.19	72,72,72,72	0
54	MG	2A	3281	1/1	0.91	0.12	43,43,43,43	0
54	MG	2a	3031	1/1	0.91	0.31	55,55,55,55	0
54	MG	1A	3285	1/1	0.91	0.15	49,49,49,49	0
54	MG	2A	3285	1/1	0.91	0.07	31,31,31,31	0
54	MG	1A	3186	1/1	0.91	0.11	39,39,39,39	0
54	MG	1A	3719	1/1	0.91	0.17	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3629	1/1	0.91	0.16	41,41,41,41	0
54	MG	2A	3544	1/1	0.91	0.09	70,70,70,70	0
54	MG	1A	3987	1/1	0.91	0.12	22,22,22,22	0
54	MG	1A	3478	1/1	0.91	0.10	35,35,35,35	0
54	MG	2A	3034	1/1	0.91	0.10	56,56,56,56	0
54	MG	1A	3847	1/1	0.91	0.06	33,33,33,33	0
54	MG	2A	3295	1/1	0.91	0.19	60,60,60,60	0
54	MG	1A	3559	1/1	0.91	0.08	32,32,32,32	0
54	MG	2A	3300	1/1	0.91	0.10	56,56,56,56	0
54	MG	1A	3289	1/1	0.91	0.10	35,35,35,35	0
54	MG	2a	3053	1/1	0.91	0.17	61,61,61,61	0
54	MG	2A	3043	1/1	0.91	0.21	55,55,55,55	0
54	MG	2a	3055	1/1	0.91	0.15	47,47,47,47	0
54	MG	2A	3310	1/1	0.91	0.10	35,35,35,35	0
54	MG	1A	3639	1/1	0.91	0.12	14,14,14,14	0
54	MG	1A	3485	1/1	0.91	0.11	14,14,14,14	0
54	MG	1A	3734	1/1	0.91	0.09	36,36,36,36	0
54	MG	1a	1691	1/1	0.91	0.15	55,55,55,55	0
54	MG	1A	3100	1/1	0.91	0.10	32,32,32,32	0
54	MG	1A	4018	1/1	0.91	0.11	51,51,51,51	0
54	MG	1A	3080	1/1	0.91	0.13	32,32,32,32	0
54	MG	2A	3063	1/1	0.91	0.17	51,51,51,51	0
54	MG	1A	4024	1/1	0.91	0.13	47,47,47,47	0
54	MG	1a	1810	1/1	0.91	0.13	64,64,64,64	0
54	MG	1A	3868	1/1	0.91	0.10	21,21,21,21	0
54	MG	2a	3077	1/1	0.91	0.12	63,63,63,63	0
54	MG	1a	1705	1/1	0.91	0.12	55,55,55,55	0
54	MG	2A	3077	1/1	0.91	0.23	50,50,50,50	0
54	MG	2A	3353	1/1	0.91	0.18	58,58,58,58	0
54	MG	2A	3613	1/1	0.91	0.12	44,44,44,44	0
54	MG	1A	4027	1/1	0.91	0.09	45,45,45,45	0
54	MG	1A	3204	1/1	0.91	0.19	54,54,54,54	0
54	MG	18	103	1/1	0.91	0.24	37,37,37,37	0
54	MG	1a	1713	1/1	0.91	0.12	60,60,60,60	0
54	MG	2A	3089	1/1	0.91	0.14	47,47,47,47	0
54	MG	1A	3211	1/1	0.91	0.13	31,31,31,31	0
54	MG	2a	3100	1/1	0.91	0.08	56,56,56,56	0
54	MG	1A	3401	1/1	0.91	0.09	11,11,11,11	0
54	MG	2A	3624	1/1	0.91	0.10	71,71,71,71	0
54	MG	2A	3370	1/1	0.91	0.15	55,55,55,55	0
54	MG	2A	3095	1/1	0.91	0.22	70,70,70,70	0
54	MG	2A	3636	1/1	0.91	0.13	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3096	1/1	0.91	0.34	52,52,52,52	0
54	MG	2A	3101	1/1	0.91	0.09	38,38,38,38	0
54	MG	2A	3652	1/1	0.91	0.07	39,39,39,39	0
54	MG	1A	3745	1/1	0.91	0.06	17,17,17,17	0
54	MG	2A	3657	1/1	0.91	0.09	21,21,21,21	0
54	MG	2A	3669	1/1	0.91	0.08	56,56,56,56	0
54	MG	1A	3403	1/1	0.91	0.22	50,50,50,50	0
54	MG	1A	3883	1/1	0.91	0.10	13,13,13,13	0
54	MG	1a	1608	1/1	0.91	0.11	60,60,60,60	0
54	MG	1a	1609	1/1	0.91	0.13	55,55,55,55	0
54	MG	1A	3331	1/1	0.91	0.15	49,49,49,49	0
54	MG	2A	3681	1/1	0.91	0.12	71,71,71,71	0
54	MG	2a	3130	1/1	0.91	0.07	62,62,62,62	0
54	MG	2a	3132	1/1	0.91	0.11	65,65,65,65	0
54	MG	2a	3133	1/1	0.91	0.10	67,67,67,67	0
54	MG	2a	3134	1/1	0.91	0.09	66,66,66,66	0
54	MG	2A	3119	1/1	0.91	0.16	61,61,61,61	0
54	MG	2A	3120	1/1	0.91	0.33	57,57,57,57	0
54	MG	1A	3113	1/1	0.91	0.22	33,33,33,33	0
54	MG	2a	3145	1/1	0.91	0.12	57,57,57,57	0
54	MG	1A	3755	1/1	0.91	0.11	34,34,34,34	0
54	MG	2A	3688	1/1	0.91	0.20	59,59,59,59	0
54	MG	1a	1838	1/1	0.91	0.07	61,61,61,61	0
54	MG	1a	1616	1/1	0.91	0.15	49,49,49,49	0
54	MG	1a	1735	1/1	0.91	0.24	58,58,58,58	0
54	MG	1A	3130	1/1	0.91	0.07	34,34,34,34	0
54	MG	1a	1846	1/1	0.91	0.10	57,57,57,57	0
54	MG	2A	3704	1/1	0.91	0.12	63,63,63,63	0
54	MG	2a	3161	1/1	0.91	0.08	66,66,66,66	0
54	MG	2A	3145	1/1	0.91	0.17	48,48,48,48	0
54	MG	1A	3230	1/1	0.91	0.26	58,58,58,58	0
54	MG	2A	3709	1/1	0.91	0.14	63,63,63,63	0
54	MG	1A	3084	1/1	0.91	0.18	38,38,38,38	0
54	MG	2a	3172	1/1	0.91	0.08	78,78,78,78	0
54	MG	2A	3158	1/1	0.91	0.23	50,50,50,50	0
54	MG	2A	3415	1/1	0.91	0.16	47,47,47,47	0
54	MG	2A	3715	1/1	0.91	0.12	57,57,57,57	0
54	MG	2A	3160	1/1	0.91	0.11	73,73,73,73	0
54	MG	2a	3183	1/1	0.91	0.17	56,56,56,56	0
54	MG	1a	1852	1/1	0.91	0.12	50,50,50,50	0
54	MG	1A	3241	1/1	0.91	0.07	36,36,36,36	0
54	MG	1A	3265	1/1	0.91	0.37	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1858	1/1	0.91	0.13	52,52,52,52	0
54	MG	2A	3729	1/1	0.91	0.12	56,56,56,56	0
54	MG	2A	3430	1/1	0.91	0.11	50,50,50,50	0
54	MG	1A	3522	1/1	0.91	0.17	33,33,33,33	0
54	MG	1A	3917	1/1	0.91	0.14	50,50,50,50	0
54	MG	1A	3921	1/1	0.91	0.11	38,38,38,38	0
54	MG	2A	3436	1/1	0.91	0.13	51,51,51,51	0
54	MG	1A	3926	1/1	0.91	0.12	66,66,66,66	0
54	MG	2A	3441	1/1	0.91	0.31	43,43,43,43	0
54	MG	2A	3442	1/1	0.91	0.11	59,59,59,59	0
54	MG	1A	3160	1/1	0.91	0.17	36,36,36,36	0
54	MG	1a	1867	1/1	0.91	0.12	57,57,57,57	0
54	MG	2A	3186	1/1	0.91	0.19	46,46,46,46	0
54	MG	1A	3771	1/1	0.91	0.16	56,56,56,56	0
54	MG	1A	3525	1/1	0.91	0.23	25,25,25,25	0
54	MG	2A	3450	1/1	0.91	0.12	54,54,54,54	0
54	MG	1a	1872	1/1	0.91	0.06	89,89,89,89	0
54	MG	1D	311	1/1	0.91	0.14	20,20,20,20	0
54	MG	2A	3199	1/1	0.91	0.14	40,40,40,40	0
54	MG	2A	3204	1/1	0.91	0.10	54,54,54,54	0
54	MG	2B	201	1/1	0.91	0.11	66,66,66,66	0
54	MG	1D	314	1/1	0.91	0.06	54,54,54,54	0
54	MG	1A	3773	1/1	0.91	0.07	78,78,78,78	0
54	MG	1a	1876	1/1	0.92	0.18	49,49,49,49	0
54	MG	2A	3557	1/1	0.92	0.06	69,69,69,69	0
54	MG	1F	317	1/1	0.92	0.16	43,43,43,43	0
54	MG	1A	3972	1/1	0.92	0.11	28,28,28,28	0
54	MG	1A	3381	1/1	0.92	0.07	12,12,12,12	0
54	MG	1A	3046	1/1	0.92	0.15	30,30,30,30	0
54	MG	2a	3011	1/1	0.92	0.16	57,57,57,57	0
54	MG	1A	3510	1/1	0.92	0.18	45,45,45,45	0
54	MG	1A	3126	1/1	0.92	0.12	31,31,31,31	0
54	MG	2A	3175	1/1	0.92	0.08	65,65,65,65	0
54	MG	1A	3309	1/1	0.92	0.12	30,30,30,30	0
54	MG	1A	3393	1/1	0.92	0.05	53,53,53,53	0
54	MG	2A	3377	1/1	0.92	0.10	41,41,41,41	0
54	MG	2A	3378	1/1	0.92	0.10	32,32,32,32	0
54	MG	2A	3178	1/1	0.92	0.10	55,55,55,55	0
54	MG	1A	3395	1/1	0.92	0.10	20,20,20,20	0
54	MG	1g	202	1/1	0.92	0.11	61,61,61,61	0
54	MG	2A	3598	1/1	0.92	0.06	32,32,32,32	0
54	MG	1A	3997	1/1	0.92	0.08	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3999	1/1	0.92	0.11	39,39,39,39	0
54	MG	1a	1665	1/1	0.92	0.09	55,55,55,55	0
54	MG	1A	3574	1/1	0.92	0.09	37,37,37,37	0
54	MG	1A	4003	1/1	0.92	0.07	43,43,43,43	0
54	MG	1A	4004	1/1	0.92	0.18	45,45,45,45	0
54	MG	1A	4005	1/1	0.92	0.10	46,46,46,46	0
54	MG	2A	3195	1/1	0.92	0.12	56,56,56,56	0
54	MG	1a	1778	1/1	0.92	0.13	62,62,62,62	0
54	MG	1A	3575	1/1	0.92	0.29	30,30,30,30	0
54	MG	2a	3042	1/1	0.92	0.19	70,70,70,70	0
54	MG	1A	3061	1/1	0.92	0.06	32,32,32,32	0
54	MG	2a	3044	1/1	0.92	0.28	60,60,60,60	0
54	MG	2A	3621	1/1	0.92	0.14	52,52,52,52	0
54	MG	1A	3889	1/1	0.92	0.08	8,8,8,8	0
54	MG	1A	3320	1/1	0.92	0.10	40,40,40,40	0
54	MG	1A	3786	1/1	0.92	0.31	27,27,27,27	0
54	MG	2a	3049	1/1	0.92	0.21	50,50,50,50	0
54	MG	2A	3212	1/1	0.92	0.22	48,48,48,48	0
54	MG	1A	3399	1/1	0.92	0.08	18,18,18,18	0
54	MG	2A	3418	1/1	0.92	0.17	59,59,59,59	0
54	MG	2A	3215	1/1	0.92	0.17	46,46,46,46	0
54	MG	2A	3420	1/1	0.92	0.09	35,35,35,35	0
54	MG	2A	3216	1/1	0.92	0.10	54,54,54,54	0
54	MG	2A	3217	1/1	0.92	0.14	52,52,52,52	0
54	MG	1A	3322	1/1	0.92	0.07	20,20,20,20	0
54	MG	2A	3659	1/1	0.92	0.07	33,33,33,33	0
54	MG	11	101	1/1	0.92	0.26	37,37,37,37	0
54	MG	1A	3797	1/1	0.92	0.19	30,30,30,30	0
54	MG	1A	4021	1/1	0.92	0.10	52,52,52,52	0
54	MG	1a	1799	1/1	0.92	0.07	52,52,52,52	0
54	MG	1A	3906	1/1	0.92	0.12	46,46,46,46	0
54	MG	2a	3069	1/1	0.92	0.23	58,58,58,58	0
54	MG	1A	3527	1/1	0.92	0.13	50,50,50,50	0
54	MG	2a	3072	1/1	0.92	0.17	68,68,68,68	0
54	MG	2A	3438	1/1	0.92	0.07	42,42,42,42	0
54	MG	1A	3473	1/1	0.92	0.08	30,30,30,30	0
54	MG	2A	3233	1/1	0.92	0.20	39,39,39,39	0
54	MG	15	105	1/1	0.92	0.25	18,18,18,18	0
54	MG	1A	3324	1/1	0.92	0.09	50,50,50,50	0
54	MG	2A	3037	1/1	0.92	0.20	42,42,42,42	0
54	MG	1A	3919	1/1	0.92	0.09	32,32,32,32	0
54	MG	1A	3242	1/1	0.92	0.06	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3695	1/1	0.92	0.10	49,49,49,49	0
54	MG	2a	3090	1/1	0.92	0.17	48,48,48,48	0
54	MG	1a	1701	1/1	0.92	0.17	62,62,62,62	0
54	MG	2A	3698	1/1	0.92	0.11	63,63,63,63	0
54	MG	1A	4034	1/1	0.92	0.10	39,39,39,39	0
54	MG	1a	1704	1/1	0.92	0.12	54,54,54,54	0
54	MG	2A	3248	1/1	0.92	0.24	50,50,50,50	0
54	MG	1A	3922	1/1	0.92	0.14	40,40,40,40	0
54	MG	2A	3707	1/1	0.92	0.10	49,49,49,49	0
54	MG	1A	3925	1/1	0.92	0.14	56,56,56,56	0
54	MG	1A	3808	1/1	0.92	0.06	47,47,47,47	0
54	MG	2A	3710	1/1	0.92	0.10	56,56,56,56	0
54	MG	2A	3459	1/1	0.92	0.09	22,22,22,22	0
54	MG	2A	3460	1/1	0.92	0.18	61,61,61,61	0
54	MG	2a	3112	1/1	0.92	0.12	66,66,66,66	0
54	MG	2A	3057	1/1	0.92	0.11	32,32,32,32	0
54	MG	2A	3463	1/1	0.92	0.11	49,49,49,49	0
54	MG	2A	3718	1/1	0.92	0.07	40,40,40,40	0
54	MG	2A	3263	1/1	0.92	0.23	57,57,57,57	0
54	MG	2A	3060	1/1	0.92	0.09	40,40,40,40	0
54	MG	19	103	1/1	0.92	0.22	37,37,37,37	0
54	MG	1A	4043	1/1	0.92	0.12	46,46,46,46	0
54	MG	2A	3271	1/1	0.92	0.13	21,21,21,21	0
54	MG	1A	3930	1/1	0.92	0.09	10,10,10,10	0
54	MG	2A	3067	1/1	0.92	0.08	41,41,41,41	0
54	MG	2A	3068	1/1	0.92	0.23	45,45,45,45	0
54	MG	1A	3248	1/1	0.92	0.13	44,44,44,44	0
54	MG	1A	3408	1/1	0.92	0.14	40,40,40,40	0
54	MG	1a	1720	1/1	0.92	0.11	45,45,45,45	0
54	MG	2A	3485	1/1	0.92	0.09	44,44,44,44	0
54	MG	1A	3729	1/1	0.92	0.23	51,51,51,51	0
54	MG	2A	3487	1/1	0.92	0.10	50,50,50,50	0
54	MG	1A	3409	1/1	0.92	0.07	42,42,42,42	0
54	MG	1A	3605	1/1	0.92	0.10	41,41,41,41	0
54	MG	1A	3541	1/1	0.92	0.18	56,56,56,56	0
54	MG	2A	3744	1/1	0.92	0.09	63,63,63,63	0
54	MG	2a	3152	1/1	0.92	0.10	76,76,76,76	0
54	MG	1A	3665	1/1	0.92	0.09	46,46,46,46	0
54	MG	2A	3087	1/1	0.92	0.23	64,64,64,64	0
54	MG	1B	216	1/1	0.92	0.10	29,29,29,29	0
54	MG	1a	1618	1/1	0.92	0.15	62,62,62,62	0
54	MG	1A	3488	1/1	0.92	0.07	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3135	1/1	0.92	0.08	30,30,30,30	0
54	MG	1A	3190	1/1	0.92	0.10	33,33,33,33	0
54	MG	1A	3949	1/1	0.92	0.09	21,21,21,21	0
54	MG	2A	3306	1/1	0.92	0.09	23,23,23,23	0
54	MG	1A	3674	1/1	0.92	0.11	46,46,46,46	0
54	MG	2a	3170	1/1	0.92	0.08	62,62,62,62	0
54	MG	1a	1628	1/1	0.92	0.18	60,60,60,60	0
54	MG	2a	3177	1/1	0.92	0.07	71,71,71,71	0
54	MG	2A	3311	1/1	0.92	0.10	46,46,46,46	0
54	MG	2a	3179	1/1	0.92	0.08	69,69,69,69	0
54	MG	1A	3749	1/1	0.92	0.10	42,42,42,42	0
54	MG	1A	3414	1/1	0.92	0.07	30,30,30,30	0
54	MG	2A	3321	1/1	0.92	0.09	25,25,25,25	0
54	MG	2B	214	1/1	0.92	0.07	53,53,53,53	0
54	MG	1A	3375	1/1	0.92	0.07	12,12,12,12	0
54	MG	2A	3519	1/1	0.92	0.11	42,42,42,42	0
54	MG	2A	3323	1/1	0.92	0.13	53,53,53,53	0
54	MG	2a	3187	1/1	0.92	0.09	54,54,54,54	0
54	MG	1D	312	1/1	0.92	0.30	30,30,30,30	0
54	MG	2D	302	1/1	0.92	0.42	35,35,35,35	0
54	MG	2A	3328	1/1	0.92	0.11	48,48,48,48	0
54	MG	1a	1636	1/1	0.92	0.09	44,44,44,44	0
54	MG	1D	313	1/1	0.92	0.19	48,48,48,48	0
54	MG	2a	3194	1/1	0.92	0.21	58,58,58,58	0
54	MG	1A	3958	1/1	0.92	0.11	47,47,47,47	0
54	MG	1A	3753	1/1	0.92	0.14	39,39,39,39	0
54	MG	2A	3335	1/1	0.92	0.09	29,29,29,29	0
54	MG	1A	3961	1/1	0.92	0.14	38,38,38,38	0
54	MG	1A	3679	1/1	0.92	0.20	26,26,26,26	0
54	MG	2A	3538	1/1	0.92	0.09	80,80,80,80	0
54	MG	1A	3681	1/1	0.92	0.27	53,53,53,53	0
54	MG	2k	201	1/1	0.92	0.12	57,57,57,57	0
54	MG	1A	3555	1/1	0.92	0.12	39,39,39,39	0
54	MG	2A	3135	1/1	0.92	0.13	40,40,40,40	0
54	MG	2A	3352	1/1	0.92	0.12	46,46,46,46	0
54	MG	1A	3863	1/1	0.92	0.11	30,30,30,30	0
54	MG	2Q	202	1/1	0.92	0.10	58,58,58,58	0
54	MG	2Q	203	1/1	0.92	0.08	66,66,66,66	0
54	MG	2A	3551	1/1	0.92	0.08	58,58,58,58	0
54	MG	2A	3552	1/1	0.92	0.08	66,66,66,66	0
54	MG	2W	202	1/1	0.92	0.09	51,51,51,51	0
54	MG	1A	3292	1/1	0.92	0.24	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1649	1/1	0.92	0.12	44,44,44,44	0
54	MG	1A	3288	1/1	0.93	0.10	29,29,29,29	0
54	MG	2A	3343	1/1	0.93	0.22	47,47,47,47	0
54	MG	1A	3557	1/1	0.93	0.11	34,34,34,34	0
54	MG	28	101	1/1	0.93	0.12	42,42,42,42	0
54	MG	1a	1851	1/1	0.93	0.08	75,75,75,75	0
54	MG	2A	3351	1/1	0.93	0.09	45,45,45,45	0
54	MG	2A	3128	1/1	0.93	0.24	57,57,57,57	0
54	MG	2A	3558	1/1	0.93	0.10	28,28,28,28	0
54	MG	1A	3145	1/1	0.93	0.12	46,46,46,46	0
54	MG	2A	3561	1/1	0.93	0.08	25,25,25,25	0
54	MG	1A	3147	1/1	0.93	0.17	49,49,49,49	0
54	MG	1a	1610	1/1	0.93	0.10	48,48,48,48	0
54	MG	2a	3015	1/1	0.93	0.14	49,49,49,49	0
54	MG	2A	3134	1/1	0.93	0.10	45,45,45,45	0
54	MG	1A	3825	1/1	0.93	0.09	40,40,40,40	0
54	MG	1A	3349	1/1	0.93	0.14	39,39,39,39	0
54	MG	2A	3367	1/1	0.93	0.09	26,26,26,26	0
54	MG	1A	3246	1/1	0.93	0.13	34,34,34,34	0
54	MG	1A	3940	1/1	0.93	0.09	44,44,44,44	0
54	MG	1a	1617	1/1	0.93	0.17	58,58,58,58	0
54	MG	1A	3941	1/1	0.93	0.08	41,41,41,41	0
54	MG	2A	3159	1/1	0.93	0.07	43,43,43,43	0
54	MG	1B	221	1/1	0.93	0.09	31,31,31,31	0
54	MG	2A	3375	1/1	0.93	0.12	38,38,38,38	0
54	MG	1a	1868	1/1	0.93	0.06	52,52,52,52	0
54	MG	2A	3600	1/1	0.93	0.10	21,21,21,21	0
54	MG	2A	3603	1/1	0.93	0.07	17,17,17,17	0
54	MG	1a	1741	1/1	0.93	0.18	56,56,56,56	0
54	MG	2A	3164	1/1	0.93	0.17	37,37,37,37	0
54	MG	2a	3038	1/1	0.93	0.19	54,54,54,54	0
54	MG	2A	3167	1/1	0.93	0.15	50,50,50,50	0
54	MG	2A	3169	1/1	0.93	0.12	49,49,49,49	0
54	MG	1A	3010	1/1	0.93	0.07	31,31,31,31	0
54	MG	2A	3173	1/1	0.93	0.09	49,49,49,49	0
54	MG	1A	3355	1/1	0.93	0.08	46,46,46,46	0
54	MG	1A	3418	1/1	0.93	0.18	53,53,53,53	0
54	MG	1A	3841	1/1	0.93	0.12	21,21,21,21	0
54	MG	1A	3307	1/1	0.93	0.11	4,4,4,4	0
54	MG	1a	1629	1/1	0.93	0.23	53,53,53,53	0
54	MG	1A	3572	1/1	0.93	0.06	39,39,39,39	0
54	MG	1B	228	1/1	0.93	0.08	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3257	1/1	0.93	0.07	45,45,45,45	0
54	MG	1B	231	1/1	0.93	0.08	51,51,51,51	0
54	MG	1A	3425	1/1	0.93	0.09	41,41,41,41	0
54	MG	2A	3626	1/1	0.93	0.12	56,56,56,56	0
54	MG	1d	305	1/1	0.93	0.09	50,50,50,50	0
54	MG	1A	3577	1/1	0.93	0.06	25,25,25,25	0
54	MG	2A	3645	1/1	0.93	0.07	89,89,89,89	0
54	MG	2A	3412	1/1	0.93	0.10	50,50,50,50	0
54	MG	1A	3579	1/1	0.93	0.10	39,39,39,39	0
54	MG	1a	1758	1/1	0.93	0.05	72,72,72,72	0
54	MG	2a	3061	1/1	0.93	0.12	78,78,78,78	0
54	MG	1A	3426	1/1	0.93	0.07	42,42,42,42	0
54	MG	2A	3655	1/1	0.93	0.11	41,41,41,41	0
54	MG	2A	3656	1/1	0.93	0.11	30,30,30,30	0
54	MG	2a	3066	1/1	0.93	0.07	53,53,53,53	0
54	MG	2A	3198	1/1	0.93	0.09	49,49,49,49	0
54	MG	2A	3658	1/1	0.93	0.06	38,38,38,38	0
54	MG	1A	3258	1/1	0.93	0.07	36,36,36,36	0
54	MG	2A	3660	1/1	0.93	0.07	16,16,16,16	0
54	MG	1A	3431	1/1	0.93	0.09	30,30,30,30	0
54	MG	1l	201	1/1	0.93	0.08	50,50,50,50	0
54	MG	2A	3422	1/1	0.93	0.09	59,59,59,59	0
54	MG	1l	202	1/1	0.93	0.09	51,51,51,51	0
54	MG	1A	3862	1/1	0.93	0.08	22,22,22,22	0
54	MG	1A	3367	1/1	0.93	0.07	16,16,16,16	0
54	MG	2a	3081	1/1	0.93	0.24	39,39,39,39	0
54	MG	2A	3679	1/1	0.93	0.08	45,45,45,45	0
54	MG	2A	3429	1/1	0.93	0.13	53,53,53,53	0
54	MG	2a	3087	1/1	0.93	0.11	59,59,59,59	0
54	MG	1A	3865	1/1	0.93	0.10	39,39,39,39	0
54	MG	1A	3521	1/1	0.93	0.09	39,39,39,39	0
54	MG	1F	314	1/1	0.93	0.21	33,33,33,33	0
54	MG	2A	3434	1/1	0.93	0.07	53,53,53,53	0
54	MG	2A	3687	1/1	0.93	0.10	67,67,67,67	0
54	MG	2a	3097	1/1	0.93	0.18	54,54,54,54	0
54	MG	2a	3098	1/1	0.93	0.16	66,66,66,66	0
54	MG	1F	315	1/1	0.93	0.33	31,31,31,31	0
54	MG	1a	1768	1/1	0.93	0.08	77,77,77,77	0
54	MG	1a	1769	1/1	0.93	0.08	67,67,67,67	0
54	MG	2A	3691	1/1	0.93	0.08	45,45,45,45	0
54	MG	1y	202	1/1	0.93	0.08	54,54,54,54	0
54	MG	1A	3590	1/1	0.93	0.17	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3105	1/1	0.93	0.09	61,61,61,61	0
54	MG	1A	3007	1/1	0.93	0.10	25,25,25,25	0
54	MG	1A	3979	1/1	0.93	0.28	61,61,61,61	0
54	MG	1A	3980	1/1	0.93	0.16	52,52,52,52	0
54	MG	2A	3005	1/1	0.93	0.11	53,53,53,53	0
54	MG	1A	3202	1/1	0.93	0.16	29,29,29,29	0
54	MG	1A	3323	1/1	0.93	0.07	27,27,27,27	0
54	MG	2A	3023	1/1	0.93	0.16	38,38,38,38	0
54	MG	1A	3452	1/1	0.93	0.07	17,17,17,17	0
54	MG	1A	3167	1/1	0.93	0.17	39,39,39,39	0
54	MG	1A	3601	1/1	0.93	0.07	56,56,56,56	0
54	MG	1A	3603	1/1	0.93	0.13	12,12,12,12	0
54	MG	2A	3456	1/1	0.93	0.12	61,61,61,61	0
54	MG	1P	206	1/1	0.93	0.09	30,30,30,30	0
54	MG	1R	205	1/1	0.93	0.09	42,42,42,42	0
54	MG	1a	1787	1/1	0.93	0.06	67,67,67,67	0
54	MG	2A	3461	1/1	0.93	0.08	57,57,57,57	0
54	MG	1a	1667	1/1	0.93	0.09	56,56,56,56	0
54	MG	1A	3998	1/1	0.93	0.12	37,37,37,37	0
54	MG	2a	3137	1/1	0.93	0.06	69,69,69,69	0
54	MG	2a	3138	1/1	0.93	0.09	40,40,40,40	0
54	MG	1A	3454	1/1	0.93	0.09	34,34,34,34	0
54	MG	1T	203	1/1	0.93	0.08	49,49,49,49	0
54	MG	2A	3468	1/1	0.93	0.10	52,52,52,52	0
54	MG	1A	3134	1/1	0.93	0.07	40,40,40,40	0
54	MG	2A	3262	1/1	0.93	0.09	48,48,48,48	0
54	MG	1U	206	1/1	0.93	0.17	29,29,29,29	0
54	MG	1A	3094	1/1	0.93	0.12	41,41,41,41	0
54	MG	2A	3047	1/1	0.93	0.19	40,40,40,40	0
54	MG	1A	3277	1/1	0.93	0.14	43,43,43,43	0
54	MG	1A	3688	1/1	0.93	0.08	22,22,22,22	0
54	MG	1A	3895	1/1	0.93	0.20	24,24,24,24	0
54	MG	1A	4007	1/1	0.93	0.06	45,45,45,45	0
54	MG	2A	3277	1/1	0.93	0.18	55,55,55,55	0
54	MG	2a	3159	1/1	0.93	0.09	67,67,67,67	0
54	MG	1A	3278	1/1	0.93	0.13	32,32,32,32	0
54	MG	2a	3162	1/1	0.93	0.10	53,53,53,53	0
54	MG	1a	1685	1/1	0.93	0.13	48,48,48,48	0
54	MG	1A	3781	1/1	0.93	0.10	56,56,56,56	0
54	MG	1A	3610	1/1	0.93	0.08	35,35,35,35	0
54	MG	1A	3900	1/1	0.93	0.07	43,43,43,43	0
54	MG	2a	3169	1/1	0.93	0.13	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3491	1/1	0.93	0.06	48,48,48,48	0
54	MG	1A	3611	1/1	0.93	0.12	31,31,31,31	0
54	MG	1A	3612	1/1	0.93	0.14	43,43,43,43	0
54	MG	1A	3909	1/1	0.93	0.14	64,64,64,64	0
54	MG	1a	1813	1/1	0.93	0.08	66,66,66,66	0
54	MG	2A	3498	1/1	0.93	0.13	51,51,51,51	0
54	MG	1A	3913	1/1	0.93	0.09	59,59,59,59	0
54	MG	1a	1815	1/1	0.93	0.10	64,64,64,64	0
54	MG	2A	3293	1/1	0.93	0.07	25,25,25,25	0
54	MG	2A	3080	1/1	0.93	0.14	41,41,41,41	0
54	MG	1A	4023	1/1	0.93	0.12	50,50,50,50	0
54	MG	1A	3914	1/1	0.93	0.09	24,24,24,24	0
54	MG	2A	3084	1/1	0.93	0.26	53,53,53,53	0
54	MG	2A	3302	1/1	0.93	0.15	47,47,47,47	0
54	MG	2A	3510	1/1	0.93	0.10	44,44,44,44	0
54	MG	2a	3190	1/1	0.93	0.12	51,51,51,51	0
54	MG	1A	3282	1/1	0.93	0.06	35,35,35,35	0
54	MG	2A	3086	1/1	0.93	0.23	43,43,43,43	0
54	MG	1A	4026	1/1	0.93	0.09	57,57,57,57	0
54	MG	1A	3796	1/1	0.93	0.08	15,15,15,15	0
54	MG	1A	3079	1/1	0.93	0.16	40,40,40,40	0
54	MG	2D	309	1/1	0.93	0.12	47,47,47,47	0
54	MG	2a	3199	1/1	0.93	0.15	68,68,68,68	0
54	MG	1A	3547	1/1	0.93	0.20	44,44,44,44	0
54	MG	2A	3317	1/1	0.93	0.16	45,45,45,45	0
54	MG	2a	3202	1/1	0.93	0.11	51,51,51,51	0
54	MG	1A	3476	1/1	0.93	0.07	35,35,35,35	0
54	MG	1a	1711	1/1	0.93	0.13	51,51,51,51	0
54	MG	1A	3923	1/1	0.93	0.09	36,36,36,36	0
54	MG	1A	3924	1/1	0.93	0.13	38,38,38,38	0
54	MG	1A	3180	1/1	0.93	0.30	55,55,55,55	0
54	MG	1A	3340	1/1	0.93	0.07	25,25,25,25	0
54	MG	1A	3185	1/1	0.93	0.08	36,36,36,36	0
54	MG	1a	1719	1/1	0.93	0.21	44,44,44,44	0
54	MG	2A	3110	1/1	0.93	0.09	37,37,37,37	0
54	MG	2A	3111	1/1	0.93	0.08	74,74,74,74	0
54	MG	1A	4044	1/1	0.93	0.11	62,62,62,62	0
54	MG	2R	202	1/1	0.93	0.16	39,39,39,39	0
54	MG	1a	1603	1/1	0.93	0.11	39,39,39,39	0
54	MG	1a	1605	1/1	0.93	0.15	57,57,57,57	0
54	MG	2A	3340	1/1	0.93	0.07	27,27,27,27	0
54	MG	1A	3500	1/1	0.94	0.42	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3950	1/1	0.94	0.14	53,53,53,53	0
54	MG	1A	3338	1/1	0.94	0.16	56,56,56,56	0
54	MG	1A	3152	1/1	0.94	0.34	36,36,36,36	0
54	MG	1A	3208	1/1	0.94	0.09	37,37,37,37	0
54	MG	1E	302	1/1	0.94	0.31	32,32,32,32	0
54	MG	1a	1798	1/1	0.94	0.07	73,73,73,73	0
54	MG	2A	3072	1/1	0.94	0.06	46,46,46,46	0
54	MG	2A	3517	1/1	0.94	0.07	54,54,54,54	0
54	MG	1A	3829	1/1	0.94	0.07	40,40,40,40	0
54	MG	2P	202	1/1	0.94	0.11	54,54,54,54	0
54	MG	1A	3831	1/1	0.94	0.10	47,47,47,47	0
54	MG	2A	3301	1/1	0.94	0.17	43,43,43,43	0
54	MG	2A	3076	1/1	0.94	0.09	48,48,48,48	0
54	MG	2A	3303	1/1	0.94	0.13	47,47,47,47	0
54	MG	2A	3304	1/1	0.94	0.09	33,33,33,33	0
54	MG	2V	201	1/1	0.94	0.07	57,57,57,57	0
54	MG	1A	3833	1/1	0.94	0.12	9,9,9,9	0
54	MG	1A	3041	1/1	0.94	0.08	36,36,36,36	0
54	MG	1A	3697	1/1	0.94	0.07	40,40,40,40	0
54	MG	23	101	1/1	0.94	0.07	52,52,52,52	0
54	MG	25	101	1/1	0.94	0.29	44,44,44,44	0
54	MG	1A	3417	1/1	0.94	0.09	34,34,34,34	0
54	MG	1A	3221	1/1	0.94	0.14	30,30,30,30	0
54	MG	1A	3966	1/1	0.94	0.06	62,62,62,62	0
54	MG	2A	3537	1/1	0.94	0.06	55,55,55,55	0
54	MG	1A	3967	1/1	0.94	0.09	31,31,31,31	0
54	MG	2A	3539	1/1	0.94	0.09	64,64,64,64	0
54	MG	1A	3161	1/1	0.94	0.06	21,21,21,21	0
54	MG	1a	1674	1/1	0.94	0.11	61,61,61,61	0
54	MG	1a	1675	1/1	0.94	0.06	54,54,54,54	0
54	MG	1A	3514	1/1	0.94	0.06	16,16,16,16	0
54	MG	2A	3093	1/1	0.94	0.25	54,54,54,54	0
54	MG	2A	3327	1/1	0.94	0.10	48,48,48,48	0
54	MG	1G	203	1/1	0.94	0.08	54,54,54,54	0
54	MG	1A	3163	1/1	0.94	0.05	31,31,31,31	0
54	MG	2a	3020	1/1	0.94	0.08	46,46,46,46	0
54	MG	1A	3422	1/1	0.94	0.10	36,36,36,36	0
54	MG	2A	3555	1/1	0.94	0.11	36,36,36,36	0
54	MG	1A	3077	1/1	0.94	0.23	33,33,33,33	0
54	MG	1A	3978	1/1	0.94	0.10	48,48,48,48	0
54	MG	2a	3026	1/1	0.94	0.09	54,54,54,54	0
54	MG	1A	3291	1/1	0.94	0.27	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3109	1/1	0.94	0.24	24,24,24,24	0
54	MG	1R	203	1/1	0.94	0.15	43,43,43,43	0
54	MG	1R	204	1/1	0.94	0.23	26,26,26,26	0
54	MG	2A	3341	1/1	0.94	0.09	36,36,36,36	0
54	MG	1A	3723	1/1	0.94	0.09	44,44,44,44	0
54	MG	1R	207	1/1	0.94	0.07	16,16,16,16	0
54	MG	1A	3858	1/1	0.94	0.10	50,50,50,50	0
54	MG	2A	3346	1/1	0.94	0.17	60,60,60,60	0
54	MG	2A	3574	1/1	0.94	0.10	45,45,45,45	0
54	MG	1A	3429	1/1	0.94	0.15	43,43,43,43	0
54	MG	1a	1830	1/1	0.94	0.10	53,53,53,53	0
54	MG	2A	3121	1/1	0.94	0.20	36,36,36,36	0
54	MG	2A	3581	1/1	0.94	0.08	47,47,47,47	0
54	MG	1a	1692	1/1	0.94	0.10	54,54,54,54	0
54	MG	2A	3589	1/1	0.94	0.10	31,31,31,31	0
54	MG	2A	3590	1/1	0.94	0.06	56,56,56,56	0
54	MG	2A	3591	1/1	0.94	0.08	24,24,24,24	0
54	MG	2A	3354	1/1	0.94	0.08	52,52,52,52	0
54	MG	1A	3986	1/1	0.94	0.14	49,49,49,49	0
54	MG	1A	3526	1/1	0.94	0.08	25,25,25,25	0
54	MG	2a	3050	1/1	0.94	0.11	68,68,68,68	0
54	MG	2A	3127	1/1	0.94	0.13	46,46,46,46	0
54	MG	1U	201	1/1	0.94	0.10	24,24,24,24	0
54	MG	1a	1841	1/1	0.94	0.15	53,53,53,53	0
54	MG	2A	3366	1/1	0.94	0.09	47,47,47,47	0
54	MG	1A	3988	1/1	0.94	0.10	40,40,40,40	0
54	MG	2A	3608	1/1	0.94	0.06	60,60,60,60	0
54	MG	1V	204	1/1	0.94	0.13	37,37,37,37	0
54	MG	1A	3353	1/1	0.94	0.13	33,33,33,33	0
54	MG	1V	208	1/1	0.94	0.10	36,36,36,36	0
54	MG	1A	3994	1/1	0.94	0.08	50,50,50,50	0
54	MG	1A	3529	1/1	0.94	0.10	62,62,62,62	0
54	MG	2A	3146	1/1	0.94	0.25	48,48,48,48	0
54	MG	1A	3034	1/1	0.94	0.10	50,50,50,50	0
54	MG	2A	3150	1/1	0.94	0.19	46,46,46,46	0
54	MG	2A	3151	1/1	0.94	0.08	48,48,48,48	0
54	MG	2A	3620	1/1	0.94	0.08	40,40,40,40	0
54	MG	1A	3437	1/1	0.94	0.07	34,34,34,34	0
54	MG	2A	3380	1/1	0.94	0.21	47,47,47,47	0
54	MG	1a	1855	1/1	0.94	0.07	68,68,68,68	0
54	MG	1A	3438	1/1	0.94	0.06	34,34,34,34	0
54	MG	2A	3384	1/1	0.94	0.11	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	4002	1/1	0.94	0.09	33,33,33,33	0
54	MG	1A	3049	1/1	0.94	0.23	37,37,37,37	0
54	MG	1A	3623	1/1	0.94	0.07	36,36,36,36	0
54	MG	2A	3644	1/1	0.94	0.07	46,46,46,46	0
54	MG	1A	3303	1/1	0.94	0.18	36,36,36,36	0
54	MG	2A	3646	1/1	0.94	0.09	50,50,50,50	0
54	MG	2A	3166	1/1	0.94	0.13	33,33,33,33	0
54	MG	1A	3740	1/1	0.94	0.10	47,47,47,47	0
54	MG	2A	3651	1/1	0.94	0.08	42,42,42,42	0
54	MG	1A	3447	1/1	0.94	0.09	9,9,9,9	0
54	MG	2A	3653	1/1	0.94	0.08	43,43,43,43	0
54	MG	2A	3399	1/1	0.94	0.19	51,51,51,51	0
54	MG	1a	1721	1/1	0.94	0.12	39,39,39,39	0
54	MG	2A	3172	1/1	0.94	0.23	56,56,56,56	0
54	MG	2A	3403	1/1	0.94	0.11	33,33,33,33	0
54	MG	1A	3743	1/1	0.94	0.10	46,46,46,46	0
54	MG	1A	3361	1/1	0.94	0.07	27,27,27,27	0
54	MG	1A	3748	1/1	0.94	0.07	20,20,20,20	0
54	MG	2A	3667	1/1	0.94	0.07	52,52,52,52	0
54	MG	1a	1871	1/1	0.94	0.13	53,53,53,53	0
54	MG	1A	3450	1/1	0.94	0.10	21,21,21,21	0
54	MG	2A	3672	1/1	0.94	0.07	35,35,35,35	0
54	MG	1A	3178	1/1	0.94	0.08	53,53,53,53	0
54	MG	1A	3055	1/1	0.94	0.09	35,35,35,35	0
54	MG	1A	3249	1/1	0.94	0.22	56,56,56,56	0
54	MG	1A	3455	1/1	0.94	0.09	20,20,20,20	0
54	MG	2A	3184	1/1	0.94	0.11	49,49,49,49	0
54	MG	1A	3313	1/1	0.94	0.11	31,31,31,31	0
54	MG	1A	3315	1/1	0.94	0.09	29,29,29,29	0
54	MG	2A	3187	1/1	0.94	0.12	43,43,43,43	0
54	MG	1A	3556	1/1	0.94	0.20	29,29,29,29	0
54	MG	1A	3904	1/1	0.94	0.17	49,49,49,49	0
54	MG	1A	3461	1/1	0.94	0.09	14,14,14,14	0
54	MG	1A	3256	1/1	0.94	0.08	42,42,42,42	0
54	MG	2a	3124	1/1	0.94	0.07	63,63,63,63	0
54	MG	1A	3649	1/1	0.94	0.17	22,22,22,22	0
54	MG	1A	4032	1/1	0.94	0.07	69,69,69,69	0
54	MG	2A	3431	1/1	0.94	0.12	45,45,45,45	0
54	MG	1a	1604	1/1	0.94	0.10	63,63,63,63	0
54	MG	2A	3200	1/1	0.94	0.10	46,46,46,46	0
54	MG	2A	3201	1/1	0.94	0.23	49,49,49,49	0
54	MG	2a	3135	1/1	0.94	0.07	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3912	1/1	0.94	0.09	48,48,48,48	0
54	MG	1A	3037	1/1	0.94	0.10	39,39,39,39	0
54	MG	2A	3437	1/1	0.94	0.08	50,50,50,50	0
54	MG	1A	3089	1/1	0.94	0.22	21,21,21,21	0
54	MG	1A	3915	1/1	0.94	0.10	37,37,37,37	0
54	MG	2A	3440	1/1	0.94	0.10	50,50,50,50	0
54	MG	1A	3031	1/1	0.94	0.09	17,17,17,17	0
54	MG	1A	4040	1/1	0.94	0.49	35,35,35,35	0
54	MG	1A	4042	1/1	0.94	0.20	53,53,53,53	0
54	MG	2a	3149	1/1	0.94	0.09	48,48,48,48	0
54	MG	1A	3143	1/1	0.94	0.07	26,26,26,26	0
54	MG	1a	1752	1/1	0.94	0.15	53,53,53,53	0
54	MG	1a	1753	1/1	0.94	0.10	72,72,72,72	0
54	MG	2A	3219	1/1	0.94	0.10	52,52,52,52	0
54	MG	2A	3719	1/1	0.94	0.08	50,50,50,50	0
54	MG	1A	3396	1/1	0.94	0.11	33,33,33,33	0
54	MG	1A	3480	1/1	0.94	0.07	61,61,61,61	0
54	MG	1A	3328	1/1	0.94	0.08	11,11,11,11	0
54	MG	2A	3726	1/1	0.94	0.08	70,70,70,70	0
54	MG	1A	3330	1/1	0.94	0.10	15,15,15,15	0
54	MG	1B	205	1/1	0.94	0.08	48,48,48,48	0
54	MG	1A	3067	1/1	0.94	0.25	23,23,23,23	0
54	MG	1a	1621	1/1	0.94	0.06	56,56,56,56	0
54	MG	2A	3458	1/1	0.94	0.10	54,54,54,54	0
54	MG	1B	207	1/1	0.94	0.06	47,47,47,47	0
54	MG	2A	3230	1/1	0.94	0.19	55,55,55,55	0
54	MG	2a	3173	1/1	0.94	0.10	69,69,69,69	0
54	MG	2a	3175	1/1	0.94	0.07	48,48,48,48	0
54	MG	1A	3487	1/1	0.94	0.06	32,32,32,32	0
54	MG	2A	3010	1/1	0.94	0.12	52,52,52,52	0
54	MG	2A	3019	1/1	0.94	0.07	36,36,36,36	0
54	MG	2A	3237	1/1	0.94	0.25	32,32,32,32	0
54	MG	1A	3673	1/1	0.94	0.28	30,30,30,30	0
54	MG	1A	3072	1/1	0.94	0.06	29,29,29,29	0
54	MG	1A	3578	1/1	0.94	0.13	32,32,32,32	0
54	MG	1B	215	1/1	0.94	0.05	22,22,22,22	0
54	MG	1A	3272	1/1	0.94	0.08	48,48,48,48	0
54	MG	1B	218	1/1	0.94	0.07	51,51,51,51	0
54	MG	1B	220	1/1	0.94	0.08	40,40,40,40	0
54	MG	1A	3201	1/1	0.94	0.17	30,30,30,30	0
54	MG	2A	3251	1/1	0.94	0.17	36,36,36,36	0
54	MG	1A	3491	1/1	0.94	0.06	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3935	1/1	0.94	0.07	46,46,46,46	0
54	MG	2A	3483	1/1	0.94	0.11	56,56,56,56	0
54	MG	1A	3803	1/1	0.94	0.18	29,29,29,29	0
54	MG	1A	3682	1/1	0.94	0.18	43,43,43,43	0
54	MG	2A	3038	1/1	0.94	0.13	38,38,38,38	0
54	MG	2B	205	1/1	0.94	0.23	50,50,50,50	0
54	MG	2B	206	1/1	0.94	0.14	41,41,41,41	0
54	MG	1A	3150	1/1	0.94	0.16	48,48,48,48	0
54	MG	2A	3042	1/1	0.94	0.13	57,57,57,57	0
54	MG	2B	209	1/1	0.94	0.13	40,40,40,40	0
54	MG	2a	3203	1/1	0.94	0.07	73,73,73,73	0
54	MG	2B	210	1/1	0.94	0.22	60,60,60,60	0
54	MG	1A	3337	1/1	0.94	0.08	8,8,8,8	0
54	MG	2h	201	1/1	0.94	0.13	59,59,59,59	0
54	MG	1A	3495	1/1	0.94	0.11	46,46,46,46	0
54	MG	1A	3811	1/1	0.94	0.08	40,40,40,40	0
54	MG	1A	3496	1/1	0.94	0.08	15,15,15,15	0
54	MG	2A	3495	1/1	0.94	0.08	59,59,59,59	0
54	MG	1a	1783	1/1	0.94	0.12	56,56,56,56	0
54	MG	1a	1648	1/1	0.94	0.18	48,48,48,48	0
54	MG	2A	3051	1/1	0.94	0.22	61,61,61,61	0
54	MG	1a	1786	1/1	0.94	0.09	63,63,63,63	0
54	MG	2D	306	1/1	0.94	0.21	46,46,46,46	0
54	MG	1D	307	1/1	0.94	0.14	35,35,35,35	0
54	MG	1A	3497	1/1	0.94	0.10	44,44,44,44	0
54	MG	2A	3504	1/1	0.94	0.08	38,38,38,38	0
54	MG	2A	3059	1/1	0.94	0.10	37,37,37,37	0
54	MG	1a	1725	1/1	0.95	0.17	52,52,52,52	0
54	MG	1A	3990	1/1	0.95	0.09	42,42,42,42	0
54	MG	1A	3992	1/1	0.95	0.09	23,23,23,23	0
54	MG	1A	3116	1/1	0.95	0.16	19,19,19,19	0
54	MG	10	101	1/1	0.95	0.07	33,33,33,33	0
54	MG	10	102	1/1	0.95	0.13	36,36,36,36	0
54	MG	1A	3584	1/1	0.95	0.07	38,38,38,38	0
54	MG	1A	3585	1/1	0.95	0.18	25,25,25,25	0
54	MG	1A	3586	1/1	0.95	0.29	24,24,24,24	0
54	MG	1A	3407	1/1	0.95	0.10	40,40,40,40	0
54	MG	2A	3238	1/1	0.95	0.15	42,42,42,42	0
54	MG	1A	3193	1/1	0.95	0.08	38,38,38,38	0
54	MG	1A	3494	1/1	0.95	0.09	25,25,25,25	0
54	MG	1A	3850	1/1	0.95	0.07	18,18,18,18	0
54	MG	2A	3244	1/1	0.95	0.06	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2D	304	1/1	0.95	0.31	35,35,35,35	0
54	MG	2D	305	1/1	0.95	0.10	36,36,36,36	0
54	MG	1A	3270	1/1	0.95	0.07	28,28,28,28	0
54	MG	1A	3707	1/1	0.95	0.09	28,28,28,28	0
54	MG	2A	3493	1/1	0.95	0.05	41,41,41,41	0
54	MG	2A	3003	1/1	0.95	0.08	55,55,55,55	0
54	MG	2A	3004	1/1	0.95	0.06	34,34,34,34	0
54	MG	1A	3196	1/1	0.95	0.19	28,28,28,28	0
54	MG	2A	3250	1/1	0.95	0.22	62,62,62,62	0
54	MG	2A	3006	1/1	0.95	0.14	37,37,37,37	0
54	MG	2A	3007	1/1	0.95	0.06	31,31,31,31	0
54	MG	1A	3710	1/1	0.95	0.11	25,25,25,25	0
54	MG	2A	3501	1/1	0.95	0.11	61,61,61,61	0
54	MG	2A	3256	1/1	0.95	0.37	43,43,43,43	0
54	MG	2A	3257	1/1	0.95	0.18	40,40,40,40	0
54	MG	1A	3711	1/1	0.95	0.08	36,36,36,36	0
54	MG	1A	3158	1/1	0.95	0.12	50,50,50,50	0
54	MG	1A	3713	1/1	0.95	0.08	25,25,25,25	0
54	MG	2A	3264	1/1	0.95	0.07	36,36,36,36	0
54	MG	1A	4011	1/1	0.95	0.08	38,38,38,38	0
54	MG	17	103	1/1	0.95	0.26	30,30,30,30	0
54	MG	17	104	1/1	0.95	0.24	29,29,29,29	0
54	MG	2A	3270	1/1	0.95	0.07	40,40,40,40	0
54	MG	2A	3513	1/1	0.95	0.09	61,61,61,61	0
54	MG	2W	201	1/1	0.95	0.10	39,39,39,39	0
54	MG	2A	3515	1/1	0.95	0.16	61,61,61,61	0
54	MG	1A	4013	1/1	0.95	0.12	50,50,50,50	0
54	MG	1A	4014	1/1	0.95	0.06	34,34,34,34	0
54	MG	1A	3125	1/1	0.95	0.06	24,24,24,24	0
54	MG	1A	3598	1/1	0.95	0.08	21,21,21,21	0
54	MG	1a	1756	1/1	0.95	0.12	59,59,59,59	0
54	MG	1A	3717	1/1	0.95	0.13	39,39,39,39	0
54	MG	2a	3001	1/1	0.95	0.07	41,41,41,41	0
54	MG	1A	3415	1/1	0.95	0.07	37,37,37,37	0
54	MG	1A	3503	1/1	0.95	0.08	20,20,20,20	0
54	MG	1A	4022	1/1	0.95	0.17	37,37,37,37	0
54	MG	2A	3286	1/1	0.95	0.07	27,27,27,27	0
54	MG	2A	3041	1/1	0.95	0.12	42,42,42,42	0
54	MG	2a	3009	1/1	0.95	0.22	49,49,49,49	0
54	MG	1A	3090	1/1	0.95	0.18	30,30,30,30	0
54	MG	1A	3205	1/1	0.95	0.14	26,26,26,26	0
54	MG	2a	3013	1/1	0.95	0.05	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3508	1/1	0.95	0.10	34,34,34,34	0
54	MG	1A	3341	1/1	0.95	0.07	22,22,22,22	0
54	MG	1A	3057	1/1	0.95	0.12	10,10,10,10	0
54	MG	2a	3017	1/1	0.95	0.10	50,50,50,50	0
54	MG	1A	4028	1/1	0.95	0.16	46,46,46,46	0
54	MG	2A	3540	1/1	0.95	0.07	73,73,73,73	0
54	MG	2A	3048	1/1	0.95	0.15	46,46,46,46	0
54	MG	2A	3049	1/1	0.95	0.10	38,38,38,38	0
54	MG	1A	3421	1/1	0.95	0.07	34,34,34,34	0
54	MG	2A	3298	1/1	0.95	0.12	50,50,50,50	0
54	MG	2A	3548	1/1	0.95	0.06	40,40,40,40	0
54	MG	1A	4030	1/1	0.95	0.05	31,31,31,31	0
54	MG	1A	3210	1/1	0.95	0.07	38,38,38,38	0
54	MG	1A	3346	1/1	0.95	0.07	20,20,20,20	0
54	MG	1A	3058	1/1	0.95	0.07	43,43,43,43	0
54	MG	1A	3427	1/1	0.95	0.07	40,40,40,40	0
54	MG	1A	4035	1/1	0.95	0.10	45,45,45,45	0
54	MG	1A	3519	1/1	0.95	0.09	37,37,37,37	0
54	MG	1A	3219	1/1	0.95	0.24	23,23,23,23	0
54	MG	2A	3308	1/1	0.95	0.06	40,40,40,40	0
54	MG	1A	3166	1/1	0.95	0.14	25,25,25,25	0
54	MG	1A	3052	1/1	0.95	0.14	24,24,24,24	0
54	MG	1A	3524	1/1	0.95	0.27	47,47,47,47	0
54	MG	2A	3313	1/1	0.95	0.06	30,30,30,30	0
54	MG	2A	3315	1/1	0.95	0.08	32,32,32,32	0
54	MG	2A	3568	1/1	0.95	0.05	39,39,39,39	0
54	MG	1A	3172	1/1	0.95	0.09	23,23,23,23	0
54	MG	2A	3319	1/1	0.95	0.09	36,36,36,36	0
54	MG	1A	3137	1/1	0.95	0.14	26,26,26,26	0
54	MG	2A	3572	1/1	0.95	0.12	36,36,36,36	0
54	MG	1A	3232	1/1	0.95	0.14	38,38,38,38	0
54	MG	2A	3576	1/1	0.95	0.06	56,56,56,56	0
54	MG	1a	1784	1/1	0.95	0.14	49,49,49,49	0
54	MG	1A	3910	1/1	0.95	0.06	33,33,33,33	0
54	MG	1A	3624	1/1	0.95	0.12	39,39,39,39	0
54	MG	1A	3528	1/1	0.95	0.09	43,43,43,43	0
54	MG	1A	3002	1/1	0.95	0.07	39,39,39,39	0
54	MG	1A	3628	1/1	0.95	0.07	37,37,37,37	0
54	MG	1A	3358	1/1	0.95	0.07	19,19,19,19	0
54	MG	1A	3534	1/1	0.95	0.09	43,43,43,43	0
54	MG	1A	3760	1/1	0.95	0.15	35,35,35,35	0
54	MG	1A	3920	1/1	0.95	0.07	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3336	1/1	0.95	0.16	55,55,55,55	0
54	MG	2A	3597	1/1	0.95	0.07	34,34,34,34	0
54	MG	1A	3633	1/1	0.95	0.08	24,24,24,24	0
54	MG	1a	1642	1/1	0.95	0.23	53,53,53,53	0
54	MG	1A	3446	1/1	0.95	0.10	36,36,36,36	0
54	MG	1a	1800	1/1	0.95	0.09	63,63,63,63	0
54	MG	2A	3605	1/1	0.95	0.08	53,53,53,53	0
54	MG	1B	217	1/1	0.95	0.14	56,56,56,56	0
54	MG	2A	3607	1/1	0.95	0.08	48,48,48,48	0
54	MG	2a	3070	1/1	0.95	0.10	65,65,65,65	0
54	MG	1A	3764	1/1	0.95	0.10	40,40,40,40	0
54	MG	1A	3104	1/1	0.95	0.06	18,18,18,18	0
54	MG	2A	3097	1/1	0.95	0.07	21,21,21,21	0
54	MG	2a	3074	1/1	0.95	0.13	40,40,40,40	0
54	MG	1a	1804	1/1	0.95	0.19	57,57,57,57	0
54	MG	1A	3306	1/1	0.95	0.04	21,21,21,21	0
54	MG	1A	3069	1/1	0.95	0.06	33,33,33,33	0
54	MG	1A	3927	1/1	0.95	0.09	20,20,20,20	0
54	MG	1a	1651	1/1	0.95	0.07	44,44,44,44	0
54	MG	1A	3929	1/1	0.95	0.15	18,18,18,18	0
54	MG	1A	3245	1/1	0.95	0.14	28,28,28,28	0
54	MG	1A	3372	1/1	0.95	0.06	12,12,12,12	0
54	MG	2A	3112	1/1	0.95	0.11	38,38,38,38	0
54	MG	2a	3088	1/1	0.95	0.08	35,35,35,35	0
54	MG	2A	3362	1/1	0.95	0.09	49,49,49,49	0
54	MG	2A	3114	1/1	0.95	0.10	30,30,30,30	0
54	MG	1A	3644	1/1	0.95	0.07	49,49,49,49	0
54	MG	1A	3146	1/1	0.95	0.08	30,30,30,30	0
54	MG	1A	3774	1/1	0.95	0.06	33,33,33,33	0
54	MG	2A	3629	1/1	0.95	0.06	67,67,67,67	0
54	MG	1A	3376	1/1	0.95	0.06	20,20,20,20	0
54	MG	2A	3635	1/1	0.95	0.06	62,62,62,62	0
54	MG	1D	301	1/1	0.95	0.26	25,25,25,25	0
54	MG	2A	3641	1/1	0.95	0.08	42,42,42,42	0
54	MG	1A	3456	1/1	0.95	0.08	21,21,21,21	0
54	MG	1a	1818	1/1	0.95	0.09	36,36,36,36	0
54	MG	1A	3778	1/1	0.95	0.07	33,33,33,33	0
54	MG	2A	3374	1/1	0.95	0.07	40,40,40,40	0
54	MG	1a	1664	1/1	0.95	0.18	63,63,63,63	0
54	MG	1A	3457	1/1	0.95	0.06	21,21,21,21	0
54	MG	1A	3784	1/1	0.95	0.24	39,39,39,39	0
54	MG	2A	3131	1/1	0.95	0.13	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3650	1/1	0.95	0.07	45,45,45,45	0
54	MG	1a	1668	1/1	0.95	0.26	53,53,53,53	0
54	MG	1A	3651	1/1	0.95	0.10	55,55,55,55	0
54	MG	1A	3311	1/1	0.95	0.11	20,20,20,20	0
54	MG	1A	3945	1/1	0.95	0.10	41,41,41,41	0
54	MG	1A	3793	1/1	0.95	0.12	30,30,30,30	0
54	MG	1a	1831	1/1	0.95	0.07	38,38,38,38	0
54	MG	2A	3661	1/1	0.95	0.08	69,69,69,69	0
54	MG	2a	3122	1/1	0.95	0.08	50,50,50,50	0
54	MG	2a	3123	1/1	0.95	0.13	48,48,48,48	0
54	MG	2A	3663	1/1	0.95	0.12	58,58,58,58	0
54	MG	1A	3653	1/1	0.95	0.07	53,53,53,53	0
54	MG	2a	3127	1/1	0.95	0.06	49,49,49,49	0
54	MG	1F	305	1/1	0.95	0.08	24,24,24,24	0
54	MG	2A	3396	1/1	0.95	0.24	58,58,58,58	0
54	MG	1A	3312	1/1	0.95	0.09	38,38,38,38	0
54	MG	2A	3157	1/1	0.95	0.09	50,50,50,50	0
54	MG	1a	1678	1/1	0.95	0.12	51,51,51,51	0
54	MG	2A	3676	1/1	0.95	0.06	47,47,47,47	0
54	MG	2a	3136	1/1	0.95	0.06	51,51,51,51	0
54	MG	1A	3382	1/1	0.95	0.05	34,34,34,34	0
54	MG	1A	3799	1/1	0.95	0.14	37,37,37,37	0
54	MG	1A	3184	1/1	0.95	0.08	48,48,48,48	0
54	MG	2A	3680	1/1	0.95	0.06	35,35,35,35	0
54	MG	1a	1845	1/1	0.95	0.22	45,45,45,45	0
54	MG	1A	3465	1/1	0.95	0.07	21,21,21,21	0
54	MG	1A	3802	1/1	0.95	0.10	9,9,9,9	0
54	MG	1a	1848	1/1	0.95	0.11	34,34,34,34	0
54	MG	2A	3685	1/1	0.95	0.07	29,29,29,29	0
54	MG	2A	3168	1/1	0.95	0.05	41,41,41,41	0
54	MG	2a	3150	1/1	0.95	0.07	37,37,37,37	0
54	MG	1A	3386	1/1	0.95	0.06	31,31,31,31	0
54	MG	1A	3472	1/1	0.95	0.07	33,33,33,33	0
54	MG	1A	3070	1/1	0.95	0.13	23,23,23,23	0
54	MG	1A	3667	1/1	0.95	0.07	28,28,28,28	0
54	MG	2A	3417	1/1	0.95	0.09	25,25,25,25	0
54	MG	2A	3694	1/1	0.95	0.20	46,46,46,46	0
54	MG	1G	204	1/1	0.95	0.10	48,48,48,48	0
54	MG	1A	3564	1/1	0.95	0.06	34,34,34,34	0
54	MG	1A	3317	1/1	0.95	0.09	46,46,46,46	0
54	MG	2A	3699	1/1	0.95	0.10	53,53,53,53	0
54	MG	2A	3700	1/1	0.95	0.05	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1859	1/1	0.95	0.07	47,47,47,47	0
54	MG	2A	3702	1/1	0.95	0.12	54,54,54,54	0
54	MG	1A	3475	1/1	0.95	0.07	38,38,38,38	0
54	MG	2A	3424	1/1	0.95	0.06	50,50,50,50	0
54	MG	2A	3705	1/1	0.95	0.17	66,66,66,66	0
54	MG	1A	3250	1/1	0.95	0.15	31,31,31,31	0
54	MG	1P	204	1/1	0.95	0.06	31,31,31,31	0
54	MG	1A	3815	1/1	0.95	0.10	35,35,35,35	0
54	MG	1a	1865	1/1	0.95	0.12	46,46,46,46	0
54	MG	1A	3822	1/1	0.95	0.23	39,39,39,39	0
54	MG	1a	1699	1/1	0.95	0.06	50,50,50,50	0
54	MG	1Q	3304	1/1	0.95	0.08	32,32,32,32	0
54	MG	1Q	3306	1/1	0.95	0.08	37,37,37,37	0
54	MG	1a	1703	1/1	0.95	0.09	64,64,64,64	0
54	MG	2A	3191	1/1	0.95	0.11	40,40,40,40	0
54	MG	1A	3253	1/1	0.95	0.14	53,53,53,53	0
54	MG	1A	3479	1/1	0.95	0.07	14,14,14,14	0
54	MG	2A	3194	1/1	0.95	0.09	40,40,40,40	0
54	MG	1A	3975	1/1	0.95	0.07	39,39,39,39	0
54	MG	2A	3196	1/1	0.95	0.09	50,50,50,50	0
54	MG	2A	3197	1/1	0.95	0.15	32,32,32,32	0
54	MG	1A	3977	1/1	0.95	0.06	58,58,58,58	0
54	MG	1A	3149	1/1	0.95	0.31	33,33,33,33	0
54	MG	1A	3011	1/1	0.95	0.11	45,45,45,45	0
54	MG	1A	3828	1/1	0.95	0.07	28,28,28,28	0
54	MG	2a	3196	1/1	0.95	0.09	47,47,47,47	0
54	MG	1a	1714	1/1	0.95	0.10	42,42,42,42	0
54	MG	1a	1715	1/1	0.95	0.06	57,57,57,57	0
54	MG	2A	3206	1/1	0.95	0.15	37,37,37,37	0
54	MG	2A	3207	1/1	0.95	0.08	43,43,43,43	0
54	MG	1A	3325	1/1	0.95	0.05	22,22,22,22	0
54	MG	1A	3189	1/1	0.95	0.08	40,40,40,40	0
54	MG	1A	3400	1/1	0.95	0.09	13,13,13,13	0
54	MG	2A	3455	1/1	0.95	0.10	40,40,40,40	0
54	MG	2A	3742	1/1	0.95	0.07	42,42,42,42	0
54	MG	2A	3211	1/1	0.95	0.13	41,41,41,41	0
54	MG	1A	3985	1/1	0.95	0.26	11,11,11,11	0
54	MG	2A	3213	1/1	0.95	0.09	57,57,57,57	0
54	MG	2A	3746	1/1	0.95	0.06	56,56,56,56	0
54	MG	1A	3260	1/1	0.95	0.10	27,27,27,27	0
54	MG	1V	206	1/1	0.95	0.09	56,56,56,56	0
54	MG	1g	201	1/1	0.95	0.15	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3151	1/1	0.95	0.15	36,36,36,36	0
54	MG	1h	201	1/1	0.95	0.08	28,28,28,28	0
54	MG	1A	3266	1/1	0.95	0.09	50,50,50,50	0
54	MG	1W	203	1/1	0.95	0.07	31,31,31,31	0
54	MG	2A	3223	1/1	0.95	0.26	38,38,38,38	0
54	MG	2A	3469	1/1	0.95	0.06	55,55,55,55	0
54	MG	1k	201	1/1	0.95	0.14	39,39,39,39	0
58	ZN	24	501	1/1	0.95	0.16	124,124,124,124	0
54	MG	1A	3842	1/1	0.96	0.05	53,53,53,53	0
54	MG	2A	3579	1/1	0.96	0.08	30,30,30,30	0
54	MG	1A	3969	1/1	0.96	0.05	32,32,32,32	0
54	MG	1A	3244	1/1	0.96	0.06	38,38,38,38	0
54	MG	1A	3039	1/1	0.96	0.12	36,36,36,36	0
54	MG	2A	3584	1/1	0.96	0.06	58,58,58,58	0
54	MG	29	101	1/1	0.96	0.33	53,53,53,53	0
54	MG	1A	3020	1/1	0.96	0.31	32,32,32,32	0
54	MG	1A	3537	1/1	0.96	0.05	46,46,46,46	0
54	MG	2a	3003	1/1	0.96	0.04	33,33,33,33	0
54	MG	2a	3004	1/1	0.96	0.15	51,51,51,51	0
54	MG	1A	3148	1/1	0.96	0.15	31,31,31,31	0
54	MG	2A	3386	1/1	0.96	0.15	41,41,41,41	0
54	MG	2A	3008	1/1	0.96	0.08	29,29,29,29	0
54	MG	1A	3976	1/1	0.96	0.15	33,33,33,33	0
54	MG	2A	3011	1/1	0.96	0.12	34,34,34,34	0
54	MG	2a	3010	1/1	0.96	0.07	59,59,59,59	0
54	MG	2A	3012	1/1	0.96	0.09	52,52,52,52	0
54	MG	2A	3013	1/1	0.96	0.09	21,21,21,21	0
54	MG	2A	3395	1/1	0.96	0.11	30,30,30,30	0
54	MG	2A	3202	1/1	0.96	0.08	43,43,43,43	0
54	MG	2A	3018	1/1	0.96	0.19	34,34,34,34	0
54	MG	1F	302	1/1	0.96	0.14	18,18,18,18	0
54	MG	1F	304	1/1	0.96	0.19	23,23,23,23	0
54	MG	1a	1779	1/1	0.96	0.13	40,40,40,40	0
54	MG	1A	3060	1/1	0.96	0.05	26,26,26,26	0
54	MG	2A	3610	1/1	0.96	0.07	78,78,78,78	0
54	MG	1F	306	1/1	0.96	0.20	22,22,22,22	0
54	MG	2A	3404	1/1	0.96	0.06	39,39,39,39	0
54	MG	1F	308	1/1	0.96	0.06	27,27,27,27	0
54	MG	1A	3316	1/1	0.96	0.15	35,35,35,35	0
54	MG	2a	3025	1/1	0.96	0.22	59,59,59,59	0
54	MG	2A	3407	1/1	0.96	0.08	33,33,33,33	0
54	MG	1F	312	1/1	0.96	0.09	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3731	1/1	0.96	0.07	34,34,34,34	0
54	MG	1A	3627	1/1	0.96	0.06	25,25,25,25	0
54	MG	1A	3387	1/1	0.96	0.05	35,35,35,35	0
54	MG	1A	3544	1/1	0.96	0.06	28,28,28,28	0
54	MG	2a	3032	1/1	0.96	0.13	41,41,41,41	0
54	MG	2a	3033	1/1	0.96	0.12	37,37,37,37	0
54	MG	1A	3032	1/1	0.96	0.10	39,39,39,39	0
54	MG	2A	3218	1/1	0.96	0.23	36,36,36,36	0
54	MG	2A	3416	1/1	0.96	0.12	42,42,42,42	0
54	MG	1A	3546	1/1	0.96	0.13	25,25,25,25	0
54	MG	1F	319	1/1	0.96	0.07	50,50,50,50	0
54	MG	2A	3627	1/1	0.96	0.07	58,58,58,58	0
54	MG	2A	3628	1/1	0.96	0.13	70,70,70,70	0
54	MG	1A	3864	1/1	0.96	0.07	41,41,41,41	0
54	MG	1a	1661	1/1	0.96	0.11	51,51,51,51	0
54	MG	2A	3633	1/1	0.96	0.09	48,48,48,48	0
54	MG	1A	3390	1/1	0.96	0.07	9,9,9,9	0
54	MG	1A	3318	1/1	0.96	0.09	49,49,49,49	0
54	MG	1A	3636	1/1	0.96	0.06	53,53,53,53	0
54	MG	2A	3642	1/1	0.96	0.07	70,70,70,70	0
54	MG	1A	3081	1/1	0.96	0.22	28,28,28,28	0
54	MG	1A	3082	1/1	0.96	0.28	33,33,33,33	0
54	MG	1N	202	1/1	0.96	0.11	30,30,30,30	0
54	MG	1A	3123	1/1	0.96	0.06	42,42,42,42	0
54	MG	2A	3231	1/1	0.96	0.11	45,45,45,45	0
54	MG	2A	3232	1/1	0.96	0.10	54,54,54,54	0
54	MG	1A	3995	1/1	0.96	0.07	33,33,33,33	0
54	MG	1A	3554	1/1	0.96	0.09	28,28,28,28	0
54	MG	1A	3063	1/1	0.96	0.08	37,37,37,37	0
54	MG	2A	3053	1/1	0.96	0.08	31,31,31,31	0
54	MG	1A	3086	1/1	0.96	0.04	34,34,34,34	0
54	MG	1Q	3302	1/1	0.96	0.06	22,22,22,22	0
54	MG	1A	3477	1/1	0.96	0.09	39,39,39,39	0
54	MG	1A	3261	1/1	0.96	0.18	57,57,57,57	0
54	MG	2a	3062	1/1	0.96	0.12	52,52,52,52	0
54	MG	2A	3243	1/1	0.96	0.10	39,39,39,39	0
54	MG	1R	202	1/1	0.96	0.17	31,31,31,31	0
54	MG	2A	3062	1/1	0.96	0.19	44,44,44,44	0
54	MG	2A	3666	1/1	0.96	0.09	59,59,59,59	0
54	MG	1A	3885	1/1	0.96	0.05	21,21,21,21	0
54	MG	2A	3444	1/1	0.96	0.14	30,30,30,30	0
54	MG	1A	3162	1/1	0.96	0.14	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3066	1/1	0.96	0.06	21,21,21,21	0
54	MG	2A	3673	1/1	0.96	0.05	31,31,31,31	0
54	MG	1A	3329	1/1	0.96	0.07	15,15,15,15	0
54	MG	2A	3448	1/1	0.96	0.07	55,55,55,55	0
54	MG	1R	206	1/1	0.96	0.12	42,42,42,42	0
54	MG	1A	3203	1/1	0.96	0.22	26,26,26,26	0
54	MG	1A	3128	1/1	0.96	0.08	25,25,25,25	0
54	MG	2A	3253	1/1	0.96	0.09	40,40,40,40	0
54	MG	1A	3087	1/1	0.96	0.10	28,28,28,28	0
54	MG	1A	3654	1/1	0.96	0.15	52,52,52,52	0
54	MG	1A	3765	1/1	0.96	0.07	23,23,23,23	0
54	MG	1A	3033	1/1	0.96	0.07	28,28,28,28	0
54	MG	2a	3085	1/1	0.96	0.10	62,62,62,62	0
54	MG	2A	3261	1/1	0.96	0.06	57,57,57,57	0
54	MG	2A	3078	1/1	0.96	0.14	36,36,36,36	0
54	MG	1a	1689	1/1	0.96	0.15	43,43,43,43	0
54	MG	1U	202	1/1	0.96	0.39	25,25,25,25	0
54	MG	1A	4012	1/1	0.96	0.10	38,38,38,38	0
54	MG	1A	3051	1/1	0.96	0.13	20,20,20,20	0
54	MG	2a	3095	1/1	0.96	0.11	56,56,56,56	0
54	MG	1A	3901	1/1	0.96	0.07	52,52,52,52	0
54	MG	2A	3268	1/1	0.96	0.18	45,45,45,45	0
54	MG	2A	3692	1/1	0.96	0.06	36,36,36,36	0
54	MG	1A	3168	1/1	0.96	0.20	19,19,19,19	0
54	MG	1A	3213	1/1	0.96	0.32	27,27,27,27	0
54	MG	2A	3696	1/1	0.96	0.07	45,45,45,45	0
54	MG	2A	3273	1/1	0.96	0.13	34,34,34,34	0
54	MG	1A	4017	1/1	0.96	0.10	42,42,42,42	0
54	MG	2A	3088	1/1	0.96	0.15	51,51,51,51	0
54	MG	1A	3411	1/1	0.96	0.04	8,8,8,8	0
54	MG	2a	3106	1/1	0.96	0.11	45,45,45,45	0
54	MG	2A	3473	1/1	0.96	0.06	41,41,41,41	0
54	MG	2a	3108	1/1	0.96	0.15	58,58,58,58	0
54	MG	2A	3278	1/1	0.96	0.11	30,30,30,30	0
54	MG	1A	3214	1/1	0.96	0.23	25,25,25,25	0
54	MG	2A	3092	1/1	0.96	0.14	43,43,43,43	0
54	MG	2A	3477	1/1	0.96	0.06	30,30,30,30	0
54	MG	1A	3215	1/1	0.96	0.25	26,26,26,26	0
54	MG	1A	3216	1/1	0.96	0.18	22,22,22,22	0
54	MG	1A	3217	1/1	0.96	0.07	49,49,49,49	0
54	MG	1A	3169	1/1	0.96	0.09	30,30,30,30	0
54	MG	1A	3220	1/1	0.96	0.28	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3099	1/1	0.96	0.17	37,37,37,37	0
54	MG	1A	3779	1/1	0.96	0.21	30,30,30,30	0
54	MG	1A	3093	1/1	0.96	0.07	8,8,8,8	0
54	MG	1A	3583	1/1	0.96	0.07	63,63,63,63	0
54	MG	2A	3104	1/1	0.96	0.24	58,58,58,58	0
54	MG	10	107	1/1	0.96	0.08	51,51,51,51	0
54	MG	2A	3720	1/1	0.96	0.07	37,37,37,37	0
54	MG	1A	3141	1/1	0.96	0.17	25,25,25,25	0
54	MG	2A	3107	1/1	0.96	0.16	46,46,46,46	0
54	MG	2a	3131	1/1	0.96	0.05	73,73,73,73	0
54	MG	1A	3677	1/1	0.96	0.14	30,30,30,30	0
54	MG	1A	3788	1/1	0.96	0.06	16,16,16,16	0
54	MG	2A	3299	1/1	0.96	0.05	38,38,38,38	0
54	MG	1A	3502	1/1	0.96	0.12	44,44,44,44	0
54	MG	1A	3791	1/1	0.96	0.05	28,28,28,28	0
54	MG	1a	1857	1/1	0.96	0.05	55,55,55,55	0
54	MG	1A	3290	1/1	0.96	0.10	11,11,11,11	0
54	MG	1A	3794	1/1	0.96	0.05	38,38,38,38	0
54	MG	1A	3505	1/1	0.96	0.06	49,49,49,49	0
54	MG	1A	3001	1/1	0.96	0.05	25,25,25,25	0
54	MG	1A	3016	1/1	0.96	0.16	26,26,26,26	0
54	MG	1A	3295	1/1	0.96	0.08	18,18,18,18	0
54	MG	17	102	1/1	0.96	0.12	22,22,22,22	0
54	MG	1A	4041	1/1	0.96	0.05	43,43,43,43	0
54	MG	1A	3687	1/1	0.96	0.18	30,30,30,30	0
54	MG	1A	3296	1/1	0.96	0.11	20,20,20,20	0
54	MG	2a	3151	1/1	0.96	0.09	43,43,43,43	0
54	MG	2A	3314	1/1	0.96	0.12	21,21,21,21	0
54	MG	1A	3297	1/1	0.96	0.10	51,51,51,51	0
54	MG	1A	3144	1/1	0.96	0.28	28,28,28,28	0
54	MG	2a	3155	1/1	0.96	0.06	64,64,64,64	0
54	MG	1B	201	1/1	0.96	0.05	28,28,28,28	0
54	MG	2A	3133	1/1	0.96	0.07	53,53,53,53	0
54	MG	1A	3432	1/1	0.96	0.09	9,9,9,9	0
54	MG	1A	3433	1/1	0.96	0.05	26,26,26,26	0
54	MG	1A	3237	1/1	0.96	0.20	25,25,25,25	0
54	MG	2A	3140	1/1	0.96	0.12	32,32,32,32	0
54	MG	2A	3144	1/1	0.96	0.15	65,65,65,65	0
54	MG	1a	1875	1/1	0.96	0.15	59,59,59,59	0
54	MG	2A	3524	1/1	0.96	0.05	42,42,42,42	0
54	MG	1A	3517	1/1	0.96	0.07	24,24,24,24	0
54	MG	2A	3147	1/1	0.96	0.11	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3527	1/1	0.96	0.09	31,31,31,31	0
54	MG	2A	3528	1/1	0.96	0.10	22,22,22,22	0
54	MG	2A	3332	1/1	0.96	0.12	36,36,36,36	0
54	MG	1A	3435	1/1	0.96	0.06	44,44,44,44	0
54	MG	1B	209	1/1	0.96	0.04	34,34,34,34	0
54	MG	1A	3700	1/1	0.96	0.06	67,67,67,67	0
54	MG	1A	3302	1/1	0.96	0.11	13,13,13,13	0
54	MG	2A	3154	1/1	0.96	0.28	45,45,45,45	0
54	MG	1A	3703	1/1	0.96	0.09	43,43,43,43	0
54	MG	1A	3820	1/1	0.96	0.11	46,46,46,46	0
54	MG	1A	3947	1/1	0.96	0.10	26,26,26,26	0
54	MG	1a	1611	1/1	0.96	0.18	44,44,44,44	0
54	MG	1A	3360	1/1	0.96	0.05	13,13,13,13	0
54	MG	1A	3706	1/1	0.96	0.05	23,23,23,23	0
54	MG	1a	1614	1/1	0.96	0.09	14,14,14,14	0
54	MG	2A	3547	1/1	0.96	0.05	20,20,20,20	0
54	MG	1A	3028	1/1	0.96	0.20	19,19,19,19	0
54	MG	1g	203	1/1	0.96	0.10	67,67,67,67	0
54	MG	1A	3952	1/1	0.96	0.04	46,46,46,46	0
54	MG	1A	3305	1/1	0.96	0.08	15,15,15,15	0
54	MG	1A	3366	1/1	0.96	0.07	13,13,13,13	0
54	MG	1A	3240	1/1	0.96	0.11	23,23,23,23	0
54	MG	1A	3368	1/1	0.96	0.06	25,25,25,25	0
54	MG	1A	3181	1/1	0.96	0.17	22,22,22,22	0
54	MG	2A	3359	1/1	0.96	0.09	50,50,50,50	0
54	MG	2E	304	1/1	0.96	0.08	28,28,28,28	0
54	MG	1m	201	1/1	0.96	0.05	67,67,67,67	0
54	MG	2F	301	1/1	0.96	0.16	35,35,35,35	0
54	MG	1a	1622	1/1	0.96	0.08	45,45,45,45	0
54	MG	1A	3960	1/1	0.96	0.09	51,51,51,51	0
54	MG	2A	3364	1/1	0.96	0.12	55,55,55,55	0
54	MG	1A	3714	1/1	0.96	0.07	30,30,30,30	0
54	MG	1a	1625	1/1	0.96	0.11	46,46,46,46	0
54	MG	1A	3451	1/1	0.96	0.06	15,15,15,15	0
54	MG	1A	3836	1/1	0.96	0.05	29,29,29,29	0
54	MG	2Q	201	1/1	0.96	0.11	47,47,47,47	0
54	MG	1A	3964	1/1	0.96	0.08	25,25,25,25	0
54	MG	1A	3374	1/1	0.96	0.06	11,11,11,11	0
55	A1CQ9	1A	4046	27/27	0.96	0.09	16,21,25,27	0
55	A1CQ9	2A	3753	27/27	0.96	0.08	31,36,40,45	0
54	MG	2R	201	1/1	0.96	0.15	46,46,46,46	0
54	MG	1D	305	1/1	0.96	0.13	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3573	1/1	0.96	0.07	49,49,49,49	0
54	MG	1A	3183	1/1	0.96	0.20	35,35,35,35	0
54	MG	2A	3575	1/1	0.96	0.07	78,78,78,78	0
54	MG	2V	202	1/1	0.96	0.13	45,45,45,45	0
57	ARG	1B	232	12/12	0.96	0.08	24,32,37,37	0
54	MG	2V	203	1/1	0.96	0.07	52,52,52,52	0
54	MG	1A	3532	1/1	0.96	0.07	37,37,37,37	0
54	MG	2A	3189	1/1	0.96	0.23	60,60,60,60	0
54	MG	1A	3991	1/1	0.97	0.06	36,36,36,36	0
54	MG	1A	3718	1/1	0.97	0.04	28,28,28,28	0
54	MG	1A	3520	1/1	0.97	0.04	24,24,24,24	0
54	MG	1A	3131	1/1	0.97	0.05	41,41,41,41	0
54	MG	1A	3174	1/1	0.97	0.42	25,25,25,25	0
54	MG	1A	3436	1/1	0.97	0.05	28,28,28,28	0
54	MG	2R	203	1/1	0.97	0.07	27,27,27,27	0
54	MG	2T	201	1/1	0.97	0.16	48,48,48,48	0
54	MG	1A	3725	1/1	0.97	0.06	23,23,23,23	0
54	MG	1a	1696	1/1	0.97	0.05	26,26,26,26	0
54	MG	1A	3856	1/1	0.97	0.08	18,18,18,18	0
54	MG	2A	3136	1/1	0.97	0.07	31,31,31,31	0
54	MG	2A	3137	1/1	0.97	0.09	46,46,46,46	0
54	MG	1A	4000	1/1	0.97	0.06	32,32,32,32	0
54	MG	2A	3565	1/1	0.97	0.10	71,71,71,71	0
54	MG	2A	3566	1/1	0.97	0.12	52,52,52,52	0
54	MG	20	101	1/1	0.97	0.05	49,49,49,49	0
54	MG	1a	1700	1/1	0.97	0.05	33,33,33,33	0
54	MG	2A	3142	1/1	0.97	0.12	35,35,35,35	0
54	MG	1A	3857	1/1	0.97	0.07	10,10,10,10	0
54	MG	1A	3616	1/1	0.97	0.15	14,14,14,14	0
54	MG	1A	3006	1/1	0.97	0.07	18,18,18,18	0
54	MG	1A	3035	1/1	0.97	0.08	30,30,30,30	0
54	MG	1V	201	1/1	0.97	0.10	17,17,17,17	0
54	MG	2A	3149	1/1	0.97	0.09	37,37,37,37	0
54	MG	1a	1706	1/1	0.97	0.14	52,52,52,52	0
54	MG	1V	202	1/1	0.97	0.07	19,19,19,19	0
54	MG	1V	203	1/1	0.97	0.11	28,28,28,28	0
54	MG	2A	3357	1/1	0.97	0.13	42,42,42,42	0
54	MG	1A	3228	1/1	0.97	0.33	28,28,28,28	0
54	MG	2A	3155	1/1	0.97	0.12	40,40,40,40	0
54	MG	1A	3444	1/1	0.97	0.09	46,46,46,46	0
54	MG	1A	3054	1/1	0.97	0.09	25,25,25,25	0
54	MG	1V	207	1/1	0.97	0.04	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3585	1/1	0.97	0.07	60,60,60,60	0
54	MG	1A	3365	1/1	0.97	0.08	7,7,7,7	0
54	MG	1A	3073	1/1	0.97	0.14	29,29,29,29	0
54	MG	1A	3301	1/1	0.97	0.08	12,12,12,12	0
54	MG	1A	3533	1/1	0.97	0.08	33,33,33,33	0
54	MG	2A	3165	1/1	0.97	0.07	42,42,42,42	0
54	MG	2A	3595	1/1	0.97	0.05	55,55,55,55	0
54	MG	1A	3234	1/1	0.97	0.13	17,17,17,17	0
54	MG	1X	101	1/1	0.97	0.05	40,40,40,40	0
54	MG	1A	3235	1/1	0.97	0.24	30,30,30,30	0
54	MG	1A	3373	1/1	0.97	0.08	15,15,15,15	0
54	MG	1A	3742	1/1	0.97	0.05	17,17,17,17	0
54	MG	2A	3171	1/1	0.97	0.04	37,37,37,37	0
54	MG	1A	3882	1/1	0.97	0.21	15,15,15,15	0
54	MG	1A	3236	1/1	0.97	0.11	38,38,38,38	0
54	MG	1A	3744	1/1	0.97	0.11	45,45,45,45	0
54	MG	1a	1727	1/1	0.97	0.09	53,53,53,53	0
54	MG	1A	4019	1/1	0.97	0.12	38,38,38,38	0
54	MG	1a	1729	1/1	0.97	0.06	53,53,53,53	0
54	MG	1A	3019	1/1	0.97	0.18	19,19,19,19	0
54	MG	2A	3179	1/1	0.97	0.15	38,38,38,38	0
54	MG	2A	3180	1/1	0.97	0.07	44,44,44,44	0
54	MG	2A	3388	1/1	0.97	0.09	25,25,25,25	0
54	MG	1A	3029	1/1	0.97	0.10	29,29,29,29	0
54	MG	2A	3391	1/1	0.97	0.07	21,21,21,21	0
54	MG	2A	3617	1/1	0.97	0.04	53,53,53,53	0
54	MG	1A	3888	1/1	0.97	0.06	16,16,16,16	0
54	MG	1a	1734	1/1	0.97	0.05	52,52,52,52	0
54	MG	1A	3182	1/1	0.97	0.11	25,25,25,25	0
54	MG	1A	3102	1/1	0.97	0.24	23,23,23,23	0
54	MG	1A	3542	1/1	0.97	0.13	30,30,30,30	0
54	MG	1A	3892	1/1	0.97	0.15	41,41,41,41	0
54	MG	1A	3752	1/1	0.97	0.07	37,37,37,37	0
54	MG	1A	3638	1/1	0.97	0.06	34,34,34,34	0
54	MG	1A	3030	1/1	0.97	0.04	23,23,23,23	0
54	MG	1A	3640	1/1	0.97	0.04	38,38,38,38	0
54	MG	1A	3756	1/1	0.97	0.10	28,28,28,28	0
54	MG	17	101	1/1	0.97	0.05	22,22,22,22	0
54	MG	2A	3630	1/1	0.97	0.07	47,47,47,47	0
54	MG	2A	3631	1/1	0.97	0.05	59,59,59,59	0
54	MG	1A	3383	1/1	0.97	0.17	33,33,33,33	0
54	MG	1A	3902	1/1	0.97	0.07	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3634	1/1	0.97	0.04	45,45,45,45	0
54	MG	1A	3105	1/1	0.97	0.09	42,42,42,42	0
54	MG	17	105	1/1	0.97	0.13	39,39,39,39	0
54	MG	1A	3012	1/1	0.97	0.21	36,36,36,36	0
54	MG	2A	3410	1/1	0.97	0.06	39,39,39,39	0
54	MG	1A	3762	1/1	0.97	0.06	18,18,18,18	0
54	MG	1A	3548	1/1	0.97	0.08	31,31,31,31	0
54	MG	19	101	1/1	0.97	0.06	38,38,38,38	0
54	MG	1A	3108	1/1	0.97	0.19	15,15,15,15	0
54	MG	2A	3648	1/1	0.97	0.09	57,57,57,57	0
54	MG	2A	3203	1/1	0.97	0.20	45,45,45,45	0
54	MG	1A	3466	1/1	0.97	0.07	15,15,15,15	0
54	MG	1A	3388	1/1	0.97	0.07	20,20,20,20	0
54	MG	1A	3469	1/1	0.97	0.06	31,31,31,31	0
54	MG	1A	3470	1/1	0.97	0.10	13,13,13,13	0
54	MG	1A	3188	1/1	0.97	0.12	27,27,27,27	0
54	MG	1A	3770	1/1	0.97	0.04	79,79,79,79	0
54	MG	2A	3016	1/1	0.97	0.08	35,35,35,35	0
54	MG	2A	3423	1/1	0.97	0.06	43,43,43,43	0
54	MG	1A	3059	1/1	0.97	0.12	39,39,39,39	0
54	MG	1A	3043	1/1	0.97	0.13	5,5,5,5	0
54	MG	2a	3076	1/1	0.97	0.29	42,42,42,42	0
54	MG	2A	3020	1/1	0.97	0.20	43,43,43,43	0
54	MG	2A	3662	1/1	0.97	0.04	54,54,54,54	0
54	MG	1A	3392	1/1	0.97	0.04	22,22,22,22	0
54	MG	2A	3664	1/1	0.97	0.05	56,56,56,56	0
54	MG	1A	3251	1/1	0.97	0.19	22,22,22,22	0
54	MG	1A	3560	1/1	0.97	0.12	48,48,48,48	0
54	MG	1A	3394	1/1	0.97	0.11	18,18,18,18	0
54	MG	2a	3084	1/1	0.97	0.04	59,59,59,59	0
54	MG	1A	3777	1/1	0.97	0.06	43,43,43,43	0
54	MG	2A	3028	1/1	0.97	0.07	34,34,34,34	0
54	MG	1A	3563	1/1	0.97	0.08	39,39,39,39	0
54	MG	1A	3114	1/1	0.97	0.27	28,28,28,28	0
54	MG	2A	3222	1/1	0.97	0.19	42,42,42,42	0
54	MG	2A	3031	1/1	0.97	0.22	38,38,38,38	0
54	MG	1A	3254	1/1	0.97	0.09	35,35,35,35	0
54	MG	1A	3782	1/1	0.97	0.10	46,46,46,46	0
54	MG	1A	3783	1/1	0.97	0.04	36,36,36,36	0
54	MG	1A	3566	1/1	0.97	0.11	46,46,46,46	0
54	MG	1A	3192	1/1	0.97	0.05	31,31,31,31	0
54	MG	1A	3115	1/1	0.97	0.08	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3039	1/1	0.97	0.05	17,17,17,17	0
54	MG	1A	3483	1/1	0.97	0.07	11,11,11,11	0
54	MG	1A	3789	1/1	0.97	0.06	50,50,50,50	0
54	MG	1A	3195	1/1	0.97	0.10	39,39,39,39	0
54	MG	1A	3938	1/1	0.97	0.06	56,56,56,56	0
54	MG	2A	3235	1/1	0.97	0.21	34,34,34,34	0
54	MG	1A	3259	1/1	0.97	0.26	32,32,32,32	0
54	MG	1A	3792	1/1	0.97	0.06	37,37,37,37	0
54	MG	1A	3573	1/1	0.97	0.09	50,50,50,50	0
54	MG	2A	3239	1/1	0.97	0.26	51,51,51,51	0
54	MG	2A	3693	1/1	0.97	0.05	33,33,33,33	0
54	MG	1A	3153	1/1	0.97	0.06	27,27,27,27	0
54	MG	1A	3197	1/1	0.97	0.14	34,34,34,34	0
54	MG	1A	3678	1/1	0.97	0.07	42,42,42,42	0
54	MG	1A	3576	1/1	0.97	0.04	23,23,23,23	0
54	MG	1A	3264	1/1	0.97	0.17	18,18,18,18	0
54	MG	2a	3117	1/1	0.97	0.14	58,58,58,58	0
54	MG	1D	304	1/1	0.97	0.09	38,38,38,38	0
54	MG	1A	3948	1/1	0.97	0.05	21,21,21,21	0
54	MG	1A	3405	1/1	0.97	0.04	16,16,16,16	0
54	MG	2A	3055	1/1	0.97	0.07	31,31,31,31	0
54	MG	2A	3056	1/1	0.97	0.08	42,42,42,42	0
54	MG	1D	310	1/1	0.97	0.15	26,26,26,26	0
54	MG	2A	3058	1/1	0.97	0.14	49,49,49,49	0
54	MG	1A	3200	1/1	0.97	0.11	31,31,31,31	0
54	MG	1A	3154	1/1	0.97	0.22	25,25,25,25	0
54	MG	1A	3334	1/1	0.97	0.06	5,5,5,5	0
54	MG	1a	1797	1/1	0.97	0.08	39,39,39,39	0
54	MG	1a	1643	1/1	0.97	0.16	35,35,35,35	0
54	MG	2A	3258	1/1	0.97	0.09	22,22,22,22	0
54	MG	2A	3712	1/1	0.97	0.06	58,58,58,58	0
54	MG	2A	3259	1/1	0.97	0.16	31,31,31,31	0
54	MG	2A	3064	1/1	0.97	0.14	36,36,36,36	0
54	MG	1A	3804	1/1	0.97	0.06	19,19,19,19	0
54	MG	2A	3716	1/1	0.97	0.07	33,33,33,33	0
54	MG	1A	3954	1/1	0.97	0.06	18,18,18,18	0
54	MG	1A	3267	1/1	0.97	0.07	38,38,38,38	0
54	MG	2a	3142	1/1	0.97	0.05	66,66,66,66	0
54	MG	1A	3806	1/1	0.97	0.06	32,32,32,32	0
54	MG	2A	3480	1/1	0.97	0.05	61,61,61,61	0
54	MG	2A	3069	1/1	0.97	0.20	40,40,40,40	0
54	MG	2A	3724	1/1	0.97	0.09	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3044	1/1	0.97	0.23	25,25,25,25	0
54	MG	2A	3484	1/1	0.97	0.04	25,25,25,25	0
54	MG	1E	306	1/1	0.97	0.10	8,8,8,8	0
54	MG	1A	3120	1/1	0.97	0.10	29,29,29,29	0
54	MG	2A	3269	1/1	0.97	0.07	23,23,23,23	0
54	MG	2A	3074	1/1	0.97	0.08	37,37,37,37	0
54	MG	1E	309	1/1	0.97	0.08	44,44,44,44	0
54	MG	1A	3121	1/1	0.97	0.12	21,21,21,21	0
54	MG	2A	3274	1/1	0.97	0.05	30,30,30,30	0
54	MG	1A	3498	1/1	0.97	0.05	37,37,37,37	0
54	MG	1A	3812	1/1	0.97	0.05	36,36,36,36	0
54	MG	1A	3413	1/1	0.97	0.06	31,31,31,31	0
54	MG	2A	3737	1/1	0.97	0.08	57,57,57,57	0
54	MG	2A	3738	1/1	0.97	0.05	41,41,41,41	0
54	MG	1F	307	1/1	0.97	0.26	23,23,23,23	0
54	MG	1A	3004	1/1	0.97	0.05	38,38,38,38	0
54	MG	2A	3082	1/1	0.97	0.09	25,25,25,25	0
54	MG	1A	3207	1/1	0.97	0.11	22,22,22,22	0
54	MG	2a	3167	1/1	0.97	0.11	43,43,43,43	0
54	MG	2A	3282	1/1	0.97	0.06	47,47,47,47	0
54	MG	2A	3283	1/1	0.97	0.06	23,23,23,23	0
54	MG	1A	3817	1/1	0.97	0.05	24,24,24,24	0
54	MG	2a	3171	1/1	0.97	0.05	70,70,70,70	0
54	MG	1A	3819	1/1	0.97	0.16	39,39,39,39	0
54	MG	2A	3503	1/1	0.97	0.07	54,54,54,54	0
54	MG	2a	3174	1/1	0.97	0.16	44,44,44,44	0
54	MG	1A	3696	1/1	0.97	0.07	11,11,11,11	0
54	MG	2a	3176	1/1	0.97	0.06	59,59,59,59	0
54	MG	1A	3591	1/1	0.97	0.06	34,34,34,34	0
54	MG	1A	3970	1/1	0.97	0.07	11,11,11,11	0
54	MG	1A	3698	1/1	0.97	0.07	25,25,25,25	0
54	MG	1A	3124	1/1	0.97	0.07	60,60,60,60	0
54	MG	1A	3342	1/1	0.97	0.07	25,25,25,25	0
54	MG	1A	3702	1/1	0.97	0.10	45,45,45,45	0
54	MG	1A	3064	1/1	0.97	0.11	19,19,19,19	0
54	MG	1A	3596	1/1	0.97	0.08	38,38,38,38	0
54	MG	1a	1672	1/1	0.97	0.12	50,50,50,50	0
54	MG	2A	3514	1/1	0.97	0.07	41,41,41,41	0
54	MG	1a	1827	1/1	0.97	0.10	61,61,61,61	0
54	MG	2A	3297	1/1	0.97	0.12	30,30,30,30	0
54	MG	1A	3344	1/1	0.97	0.10	34,34,34,34	0
54	MG	2A	3100	1/1	0.97	0.06	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3165	1/1	0.97	0.03	23,23,23,23	0
54	MG	2B	212	1/1	0.97	0.14	57,57,57,57	0
54	MG	2A	3520	1/1	0.97	0.18	44,44,44,44	0
54	MG	1A	3212	1/1	0.97	0.07	29,29,29,29	0
54	MG	1A	3283	1/1	0.97	0.12	29,29,29,29	0
54	MG	1A	3066	1/1	0.97	0.18	24,24,24,24	0
54	MG	1N	204	1/1	0.97	0.07	44,44,44,44	0
54	MG	1a	1834	1/1	0.97	0.05	64,64,64,64	0
54	MG	2D	301	1/1	0.97	0.14	34,34,34,34	0
54	MG	1a	1835	1/1	0.97	0.05	49,49,49,49	0
54	MG	1a	1836	1/1	0.97	0.04	54,54,54,54	0
54	MG	2A	3109	1/1	0.97	0.07	42,42,42,42	0
54	MG	2A	3309	1/1	0.97	0.08	28,28,28,28	0
54	MG	1a	1837	1/1	0.97	0.05	51,51,51,51	0
54	MG	1O	201	1/1	0.97	0.05	31,31,31,31	0
54	MG	1A	3838	1/1	0.97	0.05	32,32,32,32	0
54	MG	2A	3534	1/1	0.97	0.11	79,79,79,79	0
54	MG	2A	3113	1/1	0.97	0.24	37,37,37,37	0
54	MG	1A	3127	1/1	0.97	0.10	37,37,37,37	0
54	MG	2A	3115	1/1	0.97	0.18	42,42,42,42	0
54	MG	2E	301	1/1	0.97	0.10	35,35,35,35	0
54	MG	2E	302	1/1	0.97	0.06	33,33,33,33	0
54	MG	1A	3088	1/1	0.97	0.11	37,37,37,37	0
54	MG	1A	3023	1/1	0.97	0.06	28,28,28,28	0
56	MPD	18	104	8/8	0.97	0.09	20,25,29,33	0
54	MG	1Q	3301	1/1	0.97	0.07	25,25,25,25	0
54	MG	1A	3170	1/1	0.97	0.06	42,42,42,42	0
54	MG	1A	3354	1/1	0.97	0.08	28,28,28,28	0
54	MG	1Q	3305	1/1	0.97	0.10	28,28,28,28	0
54	MG	2A	3546	1/1	0.97	0.06	62,62,62,62	0
54	MG	1A	3171	1/1	0.97	0.25	27,27,27,27	0
54	MG	2A	3325	1/1	0.97	0.09	22,22,22,22	0
54	MG	2A	3125	1/1	0.97	0.14	43,43,43,43	0
58	ZN	29	102	1/1	0.97	0.04	62,62,62,62	0
58	ZN	2n	102	1/1	0.97	0.05	94,94,94,94	0
54	MG	1A	3003	1/1	0.98	0.05	18,18,18,18	0
54	MG	27	101	1/1	0.98	0.19	33,33,33,33	0
54	MG	1A	3229	1/1	0.98	0.19	26,26,26,26	0
54	MG	2A	3382	1/1	0.98	0.06	32,32,32,32	0
54	MG	2A	3599	1/1	0.98	0.06	57,57,57,57	0
54	MG	1A	3106	1/1	0.98	0.13	19,19,19,19	0
54	MG	2A	3601	1/1	0.98	0.06	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3602	1/1	0.98	0.09	44,44,44,44	0
54	MG	1A	3293	1/1	0.98	0.18	29,29,29,29	0
54	MG	1A	3721	1/1	0.98	0.14	40,40,40,40	0
54	MG	1A	3996	1/1	0.98	0.06	17,17,17,17	0
54	MG	1U	203	1/1	0.98	0.24	23,23,23,23	0
54	MG	1U	204	1/1	0.98	0.26	18,18,18,18	0
54	MG	1U	205	1/1	0.98	0.19	26,26,26,26	0
54	MG	1A	3294	1/1	0.98	0.08	14,14,14,14	0
54	MG	1A	3613	1/1	0.98	0.15	29,29,29,29	0
54	MG	1A	3851	1/1	0.98	0.04	34,34,34,34	0
54	MG	1A	3724	1/1	0.98	0.04	20,20,20,20	0
54	MG	1A	3853	1/1	0.98	0.04	20,20,20,20	0
54	MG	1A	3231	1/1	0.98	0.20	23,23,23,23	0
54	MG	1A	3362	1/1	0.98	0.05	29,29,29,29	0
54	MG	1A	3047	1/1	0.98	0.22	36,36,36,36	0
54	MG	1A	3364	1/1	0.98	0.07	8,8,8,8	0
54	MG	1A	3859	1/1	0.98	0.04	28,28,28,28	0
54	MG	1A	3442	1/1	0.98	0.09	22,22,22,22	0
54	MG	1A	3861	1/1	0.98	0.07	60,60,60,60	0
54	MG	1A	3443	1/1	0.98	0.04	26,26,26,26	0
54	MG	1A	3732	1/1	0.98	0.04	28,28,28,28	0
54	MG	1A	3048	1/1	0.98	0.15	20,20,20,20	0
54	MG	1A	3083	1/1	0.98	0.25	28,28,28,28	0
54	MG	1A	3735	1/1	0.98	0.06	23,23,23,23	0
54	MG	2A	3009	1/1	0.98	0.07	33,33,33,33	0
54	MG	1A	3111	1/1	0.98	0.10	20,20,20,20	0
54	MG	1A	3530	1/1	0.98	0.07	34,34,34,34	0
54	MG	1A	3300	1/1	0.98	0.05	49,49,49,49	0
54	MG	1A	3448	1/1	0.98	0.07	23,23,23,23	0
54	MG	2A	3015	1/1	0.98	0.19	31,31,31,31	0
54	MG	1A	3871	1/1	0.98	0.03	19,19,19,19	0
54	MG	2A	3017	1/1	0.98	0.14	39,39,39,39	0
54	MG	1A	3371	1/1	0.98	0.10	9,9,9,9	0
54	MG	1A	3036	1/1	0.98	0.04	25,25,25,25	0
54	MG	1A	3879	1/1	0.98	0.04	50,50,50,50	0
54	MG	2A	3637	1/1	0.98	0.03	55,55,55,55	0
54	MG	2A	3640	1/1	0.98	0.07	68,68,68,68	0
54	MG	1A	3880	1/1	0.98	0.06	49,49,49,49	0
54	MG	1A	3085	1/1	0.98	0.05	28,28,28,28	0
54	MG	2A	3643	1/1	0.98	0.05	42,42,42,42	0
54	MG	13	101	1/1	0.98	0.15	26,26,26,26	0
54	MG	1A	3050	1/1	0.98	0.14	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3025	1/1	0.98	0.05	24,24,24,24	0
54	MG	1A	3021	1/1	0.98	0.17	21,21,21,21	0
54	MG	2A	3027	1/1	0.98	0.08	33,33,33,33	0
54	MG	13	104	1/1	0.98	0.12	34,34,34,34	0
54	MG	2A	3650	1/1	0.98	0.04	38,38,38,38	0
54	MG	15	101	1/1	0.98	0.09	24,24,24,24	0
54	MG	15	102	1/1	0.98	0.29	19,19,19,19	0
54	MG	15	104	1/1	0.98	0.25	19,19,19,19	0
54	MG	1A	3632	1/1	0.98	0.05	31,31,31,31	0
54	MG	2A	3033	1/1	0.98	0.20	43,43,43,43	0
54	MG	1A	3068	1/1	0.98	0.18	22,22,22,22	0
54	MG	1A	3243	1/1	0.98	0.16	28,28,28,28	0
54	MG	1A	3378	1/1	0.98	0.06	31,31,31,31	0
54	MG	1A	3379	1/1	0.98	0.05	16,16,16,16	0
54	MG	1A	3637	1/1	0.98	0.05	8,8,8,8	0
54	MG	1A	3380	1/1	0.98	0.08	45,45,45,45	0
54	MG	1A	3543	1/1	0.98	0.07	6,6,6,6	0
54	MG	1A	3893	1/1	0.98	0.04	8,8,8,8	0
54	MG	1A	3156	1/1	0.98	0.21	21,21,21,21	0
54	MG	1A	4036	1/1	0.98	0.04	45,45,45,45	0
54	MG	18	102	1/1	0.98	0.16	33,33,33,33	0
54	MG	1A	3460	1/1	0.98	0.04	50,50,50,50	0
54	MG	2a	3068	1/1	0.98	0.23	36,36,36,36	0
54	MG	1A	3757	1/1	0.98	0.04	29,29,29,29	0
54	MG	1A	3194	1/1	0.98	0.18	32,32,32,32	0
54	MG	1A	3759	1/1	0.98	0.06	31,31,31,31	0
54	MG	1A	3462	1/1	0.98	0.08	12,12,12,12	0
54	MG	1A	3463	1/1	0.98	0.03	23,23,23,23	0
54	MG	1A	3903	1/1	0.98	0.05	44,44,44,44	0
54	MG	1A	3645	1/1	0.98	0.05	32,32,32,32	0
54	MG	1A	3157	1/1	0.98	0.14	28,28,28,28	0
54	MG	1A	3907	1/1	0.98	0.08	26,26,26,26	0
54	MG	1B	202	1/1	0.98	0.22	21,21,21,21	0
54	MG	1A	3005	1/1	0.98	0.11	15,15,15,15	0
54	MG	1A	3122	1/1	0.98	0.06	27,27,27,27	0
54	MG	1a	1781	1/1	0.98	0.06	67,67,67,67	0
54	MG	1A	3198	1/1	0.98	0.18	33,33,33,33	0
54	MG	1A	3911	1/1	0.98	0.08	36,36,36,36	0
54	MG	1A	3553	1/1	0.98	0.10	16,16,16,16	0
54	MG	1A	3199	1/1	0.98	0.26	37,37,37,37	0
54	MG	2a	3086	1/1	0.98	0.06	60,60,60,60	0
54	MG	1A	3053	1/1	0.98	0.25	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3465	1/1	0.98	0.15	56,56,56,56	0
54	MG	1A	3471	1/1	0.98	0.03	49,49,49,49	0
54	MG	1A	3091	1/1	0.98	0.07	30,30,30,30	0
54	MG	1A	3319	1/1	0.98	0.07	13,13,13,13	0
54	MG	2a	3092	1/1	0.98	0.08	42,42,42,42	0
54	MG	1A	3918	1/1	0.98	0.04	58,58,58,58	0
54	MG	1a	1791	1/1	0.98	0.06	42,42,42,42	0
54	MG	1A	3656	1/1	0.98	0.07	61,61,61,61	0
54	MG	2A	3070	1/1	0.98	0.05	42,42,42,42	0
54	MG	1A	3018	1/1	0.98	0.13	22,22,22,22	0
54	MG	1A	3321	1/1	0.98	0.05	32,32,32,32	0
54	MG	1A	3660	1/1	0.98	0.06	47,47,47,47	0
54	MG	1A	3040	1/1	0.98	0.14	31,31,31,31	0
54	MG	1A	3662	1/1	0.98	0.05	36,36,36,36	0
54	MG	1A	3075	1/1	0.98	0.15	25,25,25,25	0
54	MG	1a	1626	1/1	0.98	0.04	38,38,38,38	0
54	MG	2A	3272	1/1	0.98	0.07	47,47,47,47	0
54	MG	1A	3780	1/1	0.98	0.06	44,44,44,44	0
54	MG	1A	3096	1/1	0.98	0.13	23,23,23,23	0
54	MG	1A	3928	1/1	0.98	0.05	18,18,18,18	0
54	MG	1a	1630	1/1	0.98	0.14	44,44,44,44	0
54	MG	2a	3110	1/1	0.98	0.05	64,64,64,64	0
54	MG	1A	3206	1/1	0.98	0.25	27,27,27,27	0
54	MG	1a	1632	1/1	0.98	0.07	24,24,24,24	0
54	MG	1A	3129	1/1	0.98	0.18	24,24,24,24	0
54	MG	1A	3668	1/1	0.98	0.05	39,39,39,39	0
54	MG	1B	230	1/1	0.98	0.12	51,51,51,51	0
54	MG	1A	3669	1/1	0.98	0.05	38,38,38,38	0
54	MG	1A	3670	1/1	0.98	0.14	38,38,38,38	0
54	MG	1D	303	1/1	0.98	0.22	28,28,28,28	0
54	MG	2A	3717	1/1	0.98	0.07	58,58,58,58	0
54	MG	1A	3787	1/1	0.98	0.05	29,29,29,29	0
54	MG	2A	3091	1/1	0.98	0.08	28,28,28,28	0
54	MG	1A	3481	1/1	0.98	0.04	35,35,35,35	0
54	MG	1D	306	1/1	0.98	0.05	25,25,25,25	0
54	MG	1A	3263	1/1	0.98	0.09	21,21,21,21	0
54	MG	1D	308	1/1	0.98	0.06	8,8,8,8	0
54	MG	1A	3024	1/1	0.98	0.06	14,14,14,14	0
54	MG	1A	3570	1/1	0.98	0.04	31,31,31,31	0
54	MG	1A	3484	1/1	0.98	0.05	10,10,10,10	0
54	MG	1A	3209	1/1	0.98	0.14	26,26,26,26	0
54	MG	1A	3402	1/1	0.98	0.09	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3098	1/1	0.98	0.14	28,28,28,28	0
54	MG	1A	3133	1/1	0.98	0.18	13,13,13,13	0
54	MG	1a	1825	1/1	0.98	0.08	53,53,53,53	0
54	MG	1E	301	1/1	0.98	0.11	24,24,24,24	0
54	MG	1a	1652	1/1	0.98	0.14	38,38,38,38	0
54	MG	1A	3680	1/1	0.98	0.05	29,29,29,29	0
54	MG	2a	3139	1/1	0.98	0.06	34,34,34,34	0
54	MG	2a	3140	1/1	0.98	0.06	64,64,64,64	0
54	MG	1A	3798	1/1	0.98	0.08	27,27,27,27	0
54	MG	1A	3099	1/1	0.98	0.14	24,24,24,24	0
54	MG	1A	3042	1/1	0.98	0.09	24,24,24,24	0
54	MG	1E	308	1/1	0.98	0.05	19,19,19,19	0
54	MG	1A	3173	1/1	0.98	0.19	22,22,22,22	0
54	MG	1F	301	1/1	0.98	0.12	19,19,19,19	0
54	MG	1A	3136	1/1	0.98	0.25	32,32,32,32	0
54	MG	1A	3101	1/1	0.98	0.15	14,14,14,14	0
54	MG	1A	3686	1/1	0.98	0.12	36,36,36,36	0
54	MG	2A	3118	1/1	0.98	0.23	27,27,27,27	0
54	MG	1A	3273	1/1	0.98	0.15	14,14,14,14	0
54	MG	1a	1839	1/1	0.98	0.05	56,56,56,56	0
54	MG	1A	3176	1/1	0.98	0.10	29,29,29,29	0
54	MG	1A	3955	1/1	0.98	0.05	21,21,21,21	0
54	MG	2A	3316	1/1	0.98	0.09	22,22,22,22	0
54	MG	1F	309	1/1	0.98	0.10	15,15,15,15	0
54	MG	2A	3318	1/1	0.98	0.08	27,27,27,27	0
54	MG	1F	310	1/1	0.98	0.12	19,19,19,19	0
54	MG	2A	3530	1/1	0.98	0.04	37,37,37,37	0
54	MG	2a	3160	1/1	0.98	0.07	67,67,67,67	0
54	MG	1a	1844	1/1	0.98	0.05	40,40,40,40	0
54	MG	2A	3126	1/1	0.98	0.04	25,25,25,25	0
54	MG	1A	3276	1/1	0.98	0.20	21,21,21,21	0
54	MG	1a	1669	1/1	0.98	0.14	37,37,37,37	0
54	MG	2A	3535	1/1	0.98	0.05	56,56,56,56	0
54	MG	1A	3218	1/1	0.98	0.18	23,23,23,23	0
54	MG	1A	3691	1/1	0.98	0.10	32,32,32,32	0
54	MG	1A	3810	1/1	0.98	0.04	37,37,37,37	0
54	MG	1A	3138	1/1	0.98	0.18	12,12,12,12	0
54	MG	1A	3499	1/1	0.98	0.04	14,14,14,14	0
54	MG	1a	1853	1/1	0.98	0.07	41,41,41,41	0
54	MG	2A	3542	1/1	0.98	0.03	49,49,49,49	0
54	MG	1A	3587	1/1	0.98	0.17	19,19,19,19	0
54	MG	1A	3279	1/1	0.98	0.04	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3416	1/1	0.98	0.04	17,17,17,17	0
54	MG	1F	320	1/1	0.98	0.04	33,33,33,33	0
54	MG	1A	3280	1/1	0.98	0.21	29,29,29,29	0
54	MG	1A	3281	1/1	0.98	0.10	34,34,34,34	0
54	MG	2A	3549	1/1	0.98	0.05	51,51,51,51	0
54	MG	2A	3143	1/1	0.98	0.06	40,40,40,40	0
54	MG	2A	3339	1/1	0.98	0.06	26,26,26,26	0
54	MG	1A	3504	1/1	0.98	0.05	39,39,39,39	0
54	MG	1a	1861	1/1	0.98	0.04	42,42,42,42	0
54	MG	1A	3140	1/1	0.98	0.06	18,18,18,18	0
54	MG	1A	3594	1/1	0.98	0.10	25,25,25,25	0
54	MG	1A	3824	1/1	0.98	0.04	33,33,33,33	0
54	MG	1N	201	1/1	0.98	0.14	30,30,30,30	0
54	MG	2A	3347	1/1	0.98	0.09	38,38,38,38	0
54	MG	1A	3025	1/1	0.98	0.18	27,27,27,27	0
54	MG	2A	3350	1/1	0.98	0.05	36,36,36,36	0
54	MG	1A	3222	1/1	0.98	0.17	26,26,26,26	0
54	MG	2A	3152	1/1	0.98	0.10	38,38,38,38	0
54	MG	2E	305	1/1	0.98	0.07	44,44,44,44	0
54	MG	2a	3195	1/1	0.98	0.06	48,48,48,48	0
54	MG	1A	3705	1/1	0.98	0.06	39,39,39,39	0
54	MG	1A	3223	1/1	0.98	0.09	24,24,24,24	0
54	MG	2F	302	1/1	0.98	0.05	32,32,32,32	0
54	MG	2F	303	1/1	0.98	0.14	37,37,37,37	0
54	MG	1P	201	1/1	0.98	0.30	24,24,24,24	0
54	MG	2A	3156	1/1	0.98	0.11	39,39,39,39	0
54	MG	1P	202	1/1	0.98	0.29	18,18,18,18	0
54	MG	1A	3509	1/1	0.98	0.07	40,40,40,40	0
54	MG	1A	3830	1/1	0.98	0.03	25,25,25,25	0
54	MG	2O	201	1/1	0.98	0.06	38,38,38,38	0
54	MG	1A	3599	1/1	0.98	0.04	20,20,20,20	0
54	MG	2A	3361	1/1	0.98	0.07	39,39,39,39	0
54	MG	1A	3709	1/1	0.98	0.04	32,32,32,32	0
54	MG	1A	3350	1/1	0.98	0.05	21,21,21,21	0
54	MG	2A	3163	1/1	0.98	0.03	35,35,35,35	0
54	MG	1a	1697	1/1	0.98	0.08	29,29,29,29	0
54	MG	1A	3835	1/1	0.98	0.06	25,25,25,25	0
54	MG	1Q	3303	1/1	0.98	0.12	31,31,31,31	0
54	MG	1A	3225	1/1	0.98	0.20	20,20,20,20	0
54	MG	1A	3602	1/1	0.98	0.10	37,37,37,37	0
54	MG	1A	3983	1/1	0.98	0.08	86,86,86,86	0
54	MG	1R	201	1/1	0.98	0.15	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3287	1/1	0.98	0.05	32,32,32,32	0
54	MG	2A	3586	1/1	0.98	0.05	53,53,53,53	0
54	MG	2A	3588	1/1	0.98	0.05	35,35,35,35	0
54	MG	1A	3839	1/1	0.98	0.05	38,38,38,38	0
54	MG	1A	3103	1/1	0.98	0.20	30,30,30,30	0
54	MG	1A	3013	1/1	0.98	0.04	18,18,18,18	0
58	ZN	1n	104	1/1	0.98	0.03	67,67,67,67	0
58	ZN	2Y	202	1/1	0.98	0.04	91,91,91,91	0
54	MG	1A	3515	1/1	0.98	0.07	20,20,20,20	0
54	MG	1A	3843	1/1	0.98	0.06	19,19,19,19	0
54	MG	2A	3379	1/1	0.98	0.12	53,53,53,53	0
59	SF4	2d	501	8/8	0.98	0.05	55,75,81,84	0
54	MG	1A	3304	1/1	0.99	0.04	13,13,13,13	0
54	MG	2A	3638	1/1	0.99	0.04	29,29,29,29	0
54	MG	2a	3125	1/1	0.99	0.06	59,59,59,59	0
54	MG	2A	3639	1/1	0.99	0.02	29,29,29,29	0
54	MG	1A	3117	1/1	0.99	0.14	19,19,19,19	0
54	MG	2a	3128	1/1	0.99	0.08	66,66,66,66	0
54	MG	1A	3439	1/1	0.99	0.03	26,26,26,26	0
54	MG	1A	3118	1/1	0.99	0.13	15,15,15,15	0
54	MG	1A	3816	1/1	0.99	0.02	17,17,17,17	0
54	MG	1A	3989	1/1	0.99	0.03	34,34,34,34	0
54	MG	1A	3441	1/1	0.99	0.03	35,35,35,35	0
54	MG	2A	3365	1/1	0.99	0.03	44,44,44,44	0
54	MG	1a	1792	1/1	0.99	0.10	79,79,79,79	0
54	MG	2A	3117	1/1	0.99	0.12	31,31,31,31	0
54	MG	11	103	1/1	0.99	0.05	35,35,35,35	0
54	MG	1A	3818	1/1	0.99	0.11	31,31,31,31	0
54	MG	1A	3369	1/1	0.99	0.06	33,33,33,33	0
54	MG	1B	208	1/1	0.99	0.08	43,43,43,43	0
54	MG	1A	3370	1/1	0.99	0.08	8,8,8,8	0
54	MG	1A	3875	1/1	0.99	0.02	35,35,35,35	0
54	MG	1B	211	1/1	0.99	0.11	27,27,27,27	0
54	MG	1A	3877	1/1	0.99	0.03	26,26,26,26	0
54	MG	1A	3821	1/1	0.99	0.05	7,7,7,7	0
54	MG	2A	3467	1/1	0.99	0.05	25,25,25,25	0
54	MG	2A	3560	1/1	0.99	0.06	48,48,48,48	0
54	MG	15	103	1/1	0.99	0.19	23,23,23,23	0
54	MG	1A	3252	1/1	0.99	0.16	18,18,18,18	0
54	MG	1A	3119	1/1	0.99	0.03	19,19,19,19	0
54	MG	2A	3564	1/1	0.99	0.04	40,40,40,40	0
54	MG	1A	3045	1/1	0.99	0.05	4,4,4,4	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3665	1/1	0.99	0.03	57,57,57,57	0
54	MG	1a	1731	1/1	0.99	0.02	36,36,36,36	0
54	MG	1A	3561	1/1	0.99	0.03	30,30,30,30	0
54	MG	2A	3668	1/1	0.99	0.02	27,27,27,27	0
54	MG	1A	3255	1/1	0.99	0.12	26,26,26,26	0
54	MG	1B	219	1/1	0.99	0.03	23,23,23,23	0
54	MG	2A	3671	1/1	0.99	0.05	53,53,53,53	0
54	MG	2A	3385	1/1	0.99	0.03	28,28,28,28	0
54	MG	1A	3942	1/1	0.99	0.04	26,26,26,26	0
54	MG	1A	3730	1/1	0.99	0.03	19,19,19,19	0
54	MG	1A	3009	1/1	0.99	0.07	19,19,19,19	0
54	MG	2a	3164	1/1	0.99	0.04	74,74,74,74	0
54	MG	2A	3389	1/1	0.99	0.04	48,48,48,48	0
54	MG	2A	3138	1/1	0.99	0.16	42,42,42,42	0
54	MG	2A	3482	1/1	0.99	0.06	23,23,23,23	0
54	MG	1A	3886	1/1	0.99	0.03	39,39,39,39	0
54	MG	1A	3155	1/1	0.99	0.12	17,17,17,17	0
54	MG	2A	3141	1/1	0.99	0.08	34,34,34,34	0
54	MG	1A	3314	1/1	0.99	0.05	20,20,20,20	0
54	MG	1A	3233	1/1	0.99	0.10	28,28,28,28	0
54	MG	1A	3832	1/1	0.99	0.09	19,19,19,19	0
54	MG	1A	3606	1/1	0.99	0.07	13,13,13,13	0
54	MG	1A	3062	1/1	0.99	0.03	21,21,21,21	0
54	MG	1A	3139	1/1	0.99	0.09	20,20,20,20	0
54	MG	2A	3587	1/1	0.99	0.12	59,59,59,59	0
54	MG	2A	3400	1/1	0.99	0.03	45,45,45,45	0
54	MG	2F	304	1/1	0.99	0.09	39,39,39,39	0
54	MG	1A	3894	1/1	0.99	0.04	31,31,31,31	0
54	MG	1A	3026	1/1	0.99	0.15	28,28,28,28	0
54	MG	1A	3896	1/1	0.99	0.05	36,36,36,36	0
54	MG	1A	3262	1/1	0.99	0.06	12,12,12,12	0
54	MG	2A	3593	1/1	0.99	0.03	37,37,37,37	0
54	MG	1A	3159	1/1	0.99	0.06	26,26,26,26	0
54	MG	1A	3384	1/1	0.99	0.03	13,13,13,13	0
54	MG	1A	3238	1/1	0.99	0.03	27,27,27,27	0
54	MG	1A	3071	1/1	0.99	0.10	25,25,25,25	0
54	MG	1R	208	1/1	0.99	0.05	29,29,29,29	0
54	MG	1D	309	1/1	0.99	0.03	31,31,31,31	0
54	MG	1A	3699	1/1	0.99	0.10	36,36,36,36	0
54	MG	1A	3110	1/1	0.99	0.09	25,25,25,25	0
54	MG	1A	3746	1/1	0.99	0.04	20,20,20,20	0
54	MG	1A	3905	1/1	0.99	0.04	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3747	1/1	0.99	0.03	25,25,25,25	0
54	MG	2A	3326	1/1	0.99	0.05	29,29,29,29	0
54	MG	1A	3017	1/1	0.99	0.14	16,16,16,16	0
54	MG	1A	3112	1/1	0.99	0.16	21,21,21,21	0
54	MG	1A	3659	1/1	0.99	0.04	14,14,14,14	0
54	MG	1A	3326	1/1	0.99	0.04	14,14,14,14	0
54	MG	2a	3094	1/1	0.99	0.04	50,50,50,50	0
54	MG	1E	303	1/1	0.99	0.14	24,24,24,24	0
54	MG	1E	304	1/1	0.99	0.08	29,29,29,29	0
54	MG	1A	3357	1/1	0.99	0.03	17,17,17,17	0
54	MG	1A	3065	1/1	0.99	0.03	21,21,21,21	0
54	MG	1A	3663	1/1	0.99	0.05	26,26,26,26	0
54	MG	2A	3014	1/1	0.99	0.10	37,37,37,37	0
54	MG	1A	3092	1/1	0.99	0.09	26,26,26,26	0
54	MG	2A	3428	1/1	0.99	0.02	38,38,38,38	0
54	MG	2A	3255	1/1	0.99	0.11	13,13,13,13	0
54	MG	1A	3430	1/1	0.99	0.03	43,43,43,43	0
54	MG	2A	3721	1/1	0.99	0.11	40,40,40,40	0
54	MG	1A	3855	1/1	0.99	0.05	21,21,21,21	0
54	MG	1A	3468	1/1	0.99	0.06	47,47,47,47	0
54	MG	1W	202	1/1	0.99	0.10	26,26,26,26	0
54	MG	1a	1850	1/1	0.99	0.04	52,52,52,52	0
54	MG	2A	3345	1/1	0.99	0.03	27,27,27,27	0
54	MG	2A	3098	1/1	0.99	0.06	49,49,49,49	0
54	MG	1F	303	1/1	0.99	0.19	13,13,13,13	0
54	MG	1A	3074	1/1	0.99	0.23	17,17,17,17	0
54	MG	2A	3349	1/1	0.99	0.04	26,26,26,26	0
54	MG	1A	3224	1/1	0.99	0.10	19,19,19,19	0
58	ZN	1Y	501	1/1	0.99	0.02	47,47,47,47	0
54	MG	1A	3247	1/1	0.99	0.21	18,18,18,18	0
58	ZN	15	109	1/1	0.99	0.02	39,39,39,39	0
58	ZN	16	501	1/1	0.99	0.05	39,39,39,39	0
58	ZN	19	104	1/1	0.99	0.05	34,34,34,34	0
54	MG	1A	3274	1/1	0.99	0.13	8,8,8,8	0
54	MG	1A	3015	1/1	0.99	0.09	20,20,20,20	0
54	MG	1A	3132	1/1	0.99	0.21	23,23,23,23	0
58	ZN	25	103	1/1	0.99	0.02	55,55,55,55	0
58	ZN	26	501	1/1	0.99	0.02	49,49,49,49	0
54	MG	1a	1708	1/1	0.99	0.04	30,30,30,30	0
54	MG	1A	3630	1/1	0.99	0.04	43,43,43,43	0
59	SF4	1d	306	8/8	0.99	0.04	54,59,71,78	0
54	MG	1a	1710	1/1	0.99	0.05	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3873	1/1	1.00	0.05	25,25,25,25	0
54	MG	1D	302	1/1	1.00	0.11	19,19,19,19	0
54	MG	1A	3308	1/1	1.00	0.06	19,19,19,19	0
54	MG	2A	3329	1/1	1.00	0.05	26,26,26,26	0
54	MG	1A	3423	1/1	1.00	0.07	13,13,13,13	0
54	MG	1A	3876	1/1	1.00	0.04	13,13,13,13	0
54	MG	1A	3424	1/1	1.00	0.06	15,15,15,15	0
54	MG	2E	306	1/1	1.00	0.09	20,20,20,20	0
54	MG	1A	3872	1/1	1.00	0.02	26,26,26,26	0
54	MG	2A	3582	1/1	1.00	0.07	23,23,23,23	0

6.5 Other polymers (i)

There are no such residues in this entry.