Full wwPDB X-ray Structure Validation Report ⓘ

Sep 16, 2024 – 10:21 pm BST

PDB ID	:	8OEQ
Title	:	Crystal structure of the Candida albicans 80S ribosome in complex with Paromomycin (250uM)
Authors	:	Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on	:	2023-03-12
Resolution	:	3.30 Å(reported)

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

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

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

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

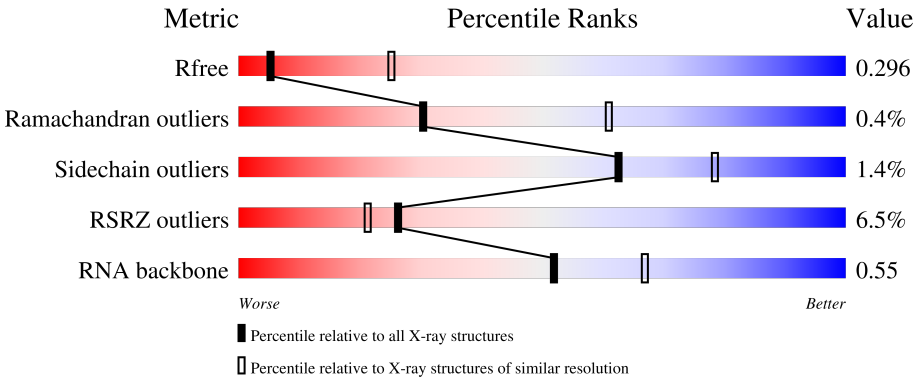
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.002 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.38.2

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 3.30 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1085 (3.32-3.28)
Ramachandran outliers	177936	1125 (3.32-3.28)
Sidechain outliers	177891	1124 (3.32-3.28)
RSRZ outliers	164620	1085 (3.32-3.28)
RNA backbone	3690	1014 (3.64-2.96)

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	1	3359	75% 19%
1	AS	3359	2% 75% 18% 5%
2	3	121	92% 8%
2	AT	121	93% 7%
3	4	158	83% 15%

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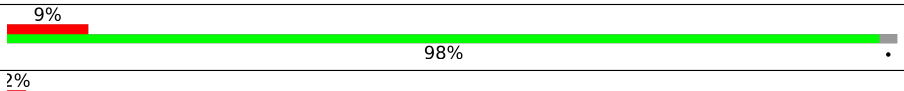
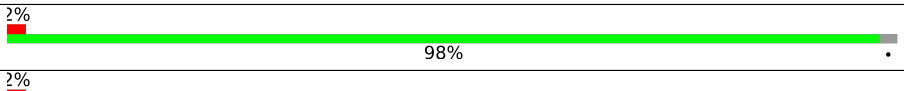
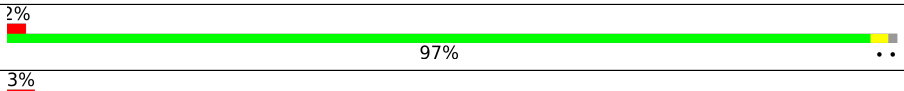
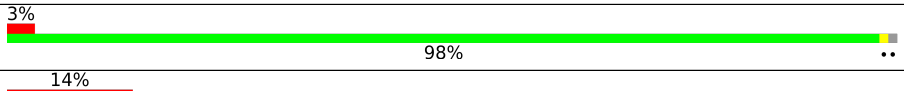
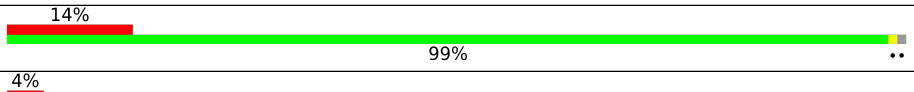
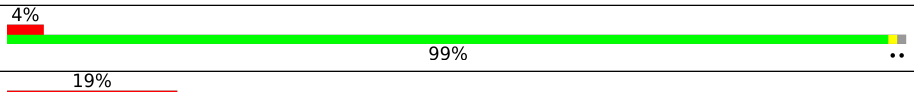
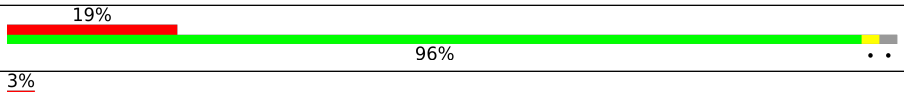
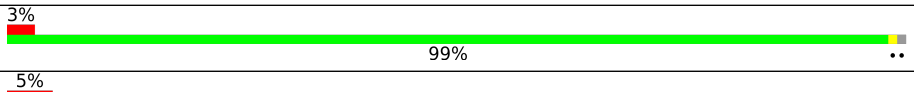
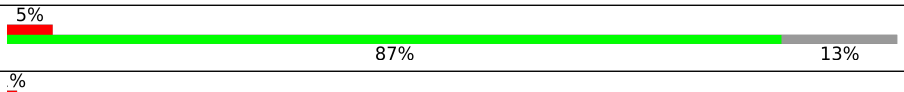
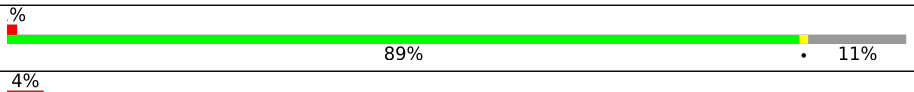
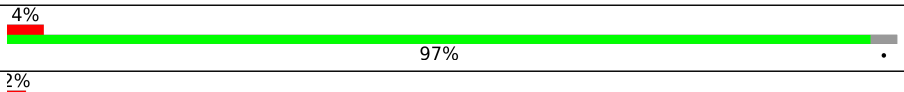
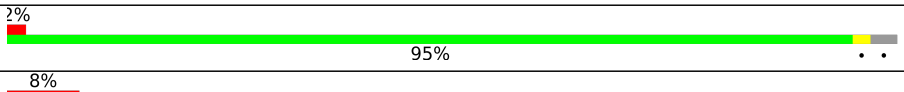
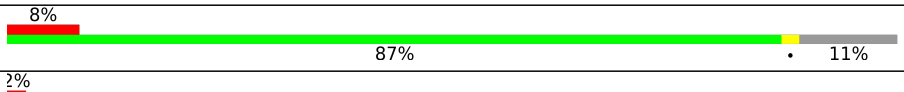
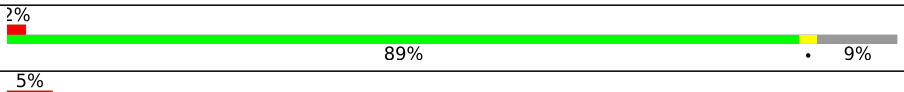
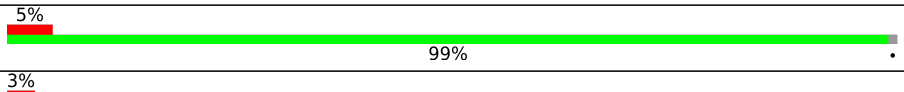
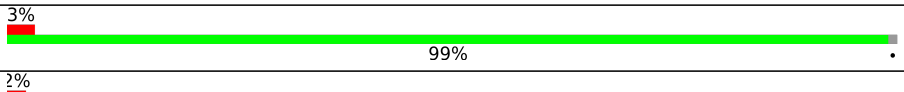
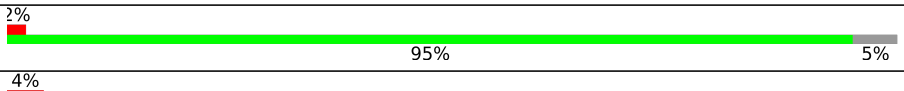
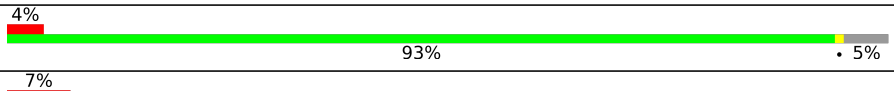
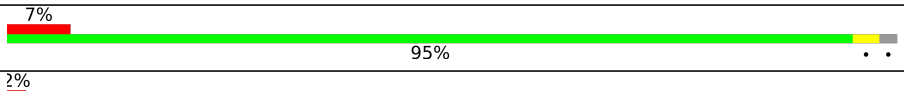
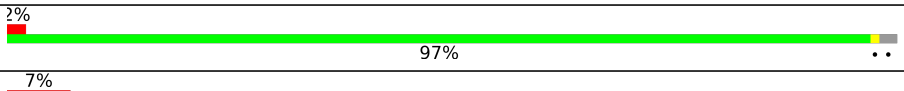
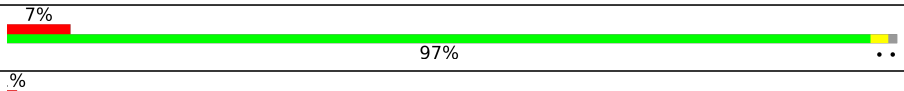
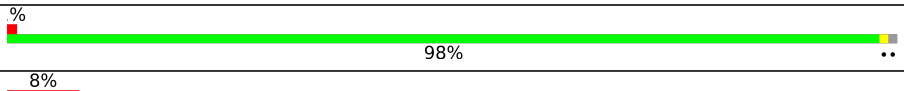
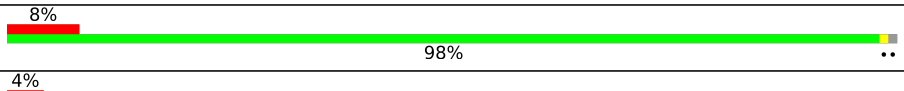
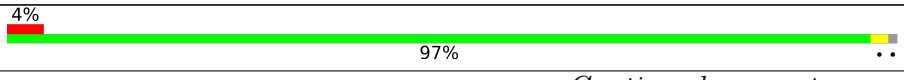
Mol	Chain	Length	Quality of chain
3	AU	158	
4	AW	254	
4	j	254	
5	AX	389	
5	k	389	
6	AY	363	
6	l	363	
7	AZ	298	
7	m	298	
8	BA	176	
8	n	176	
9	BB	241	
9	o	241	
10	BC	262	
10	p	262	
11	BD	191	
11	q	191	
12	BE	220	
12	r	220	
13	BF	174	
13	s	174	
14	BG	202	
14	t	202	
15	BH	131	
15	u	131	

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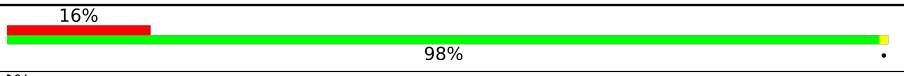
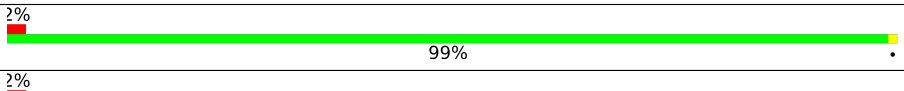
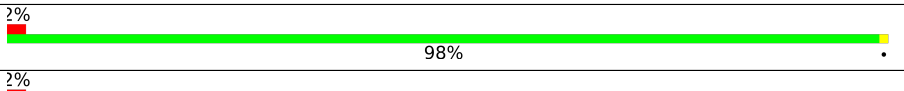
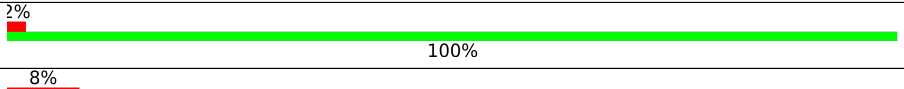
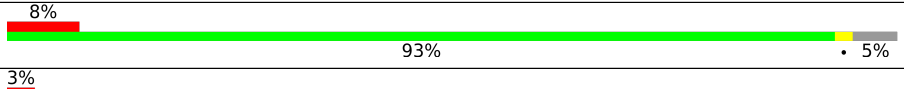
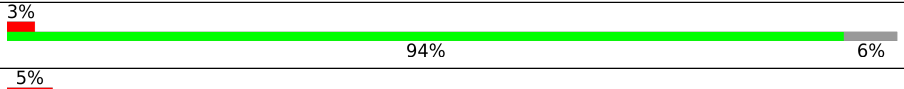
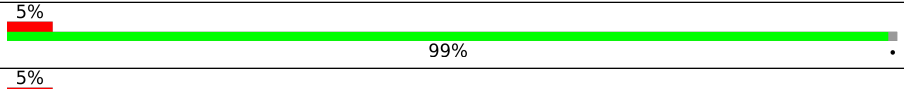
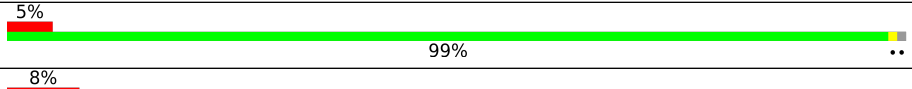
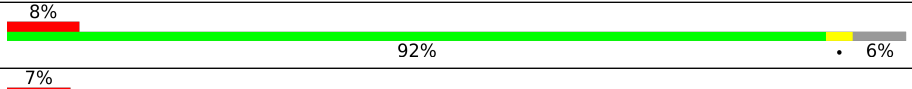
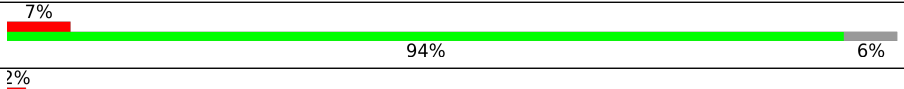
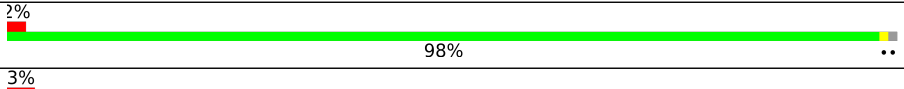
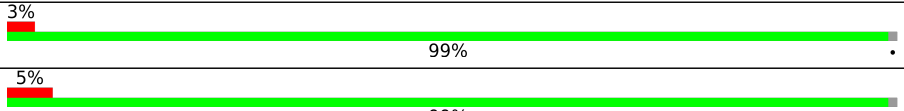
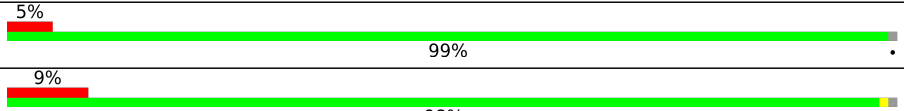
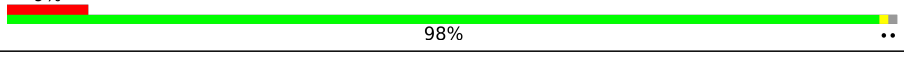
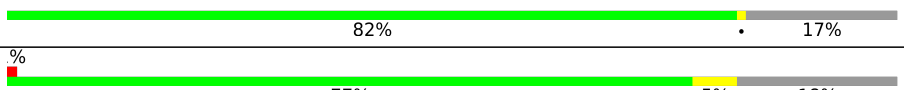
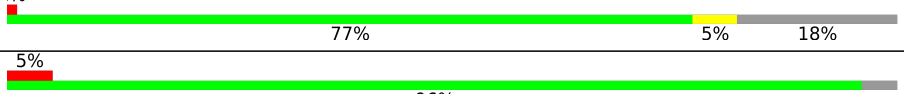
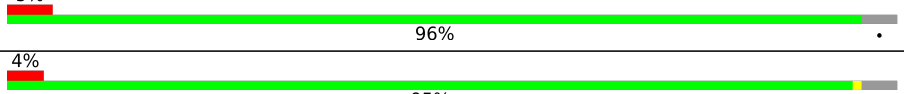
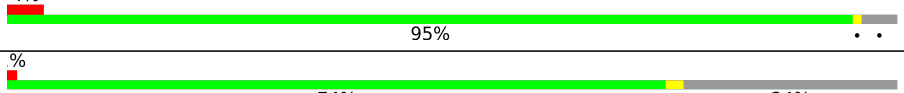
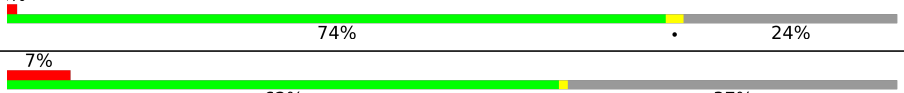
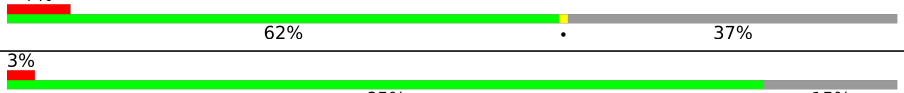
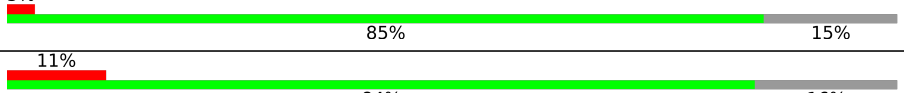
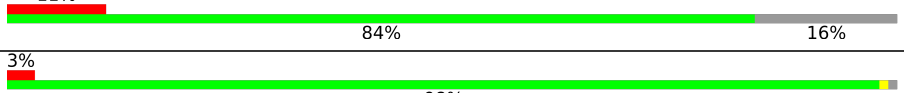
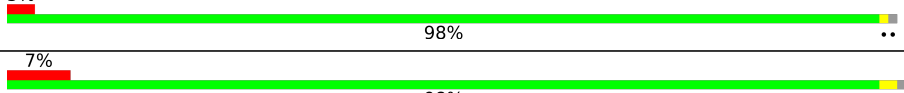
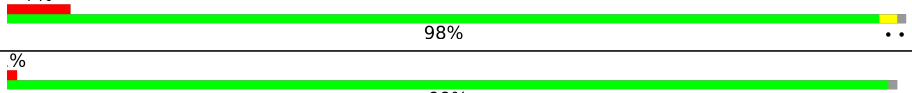
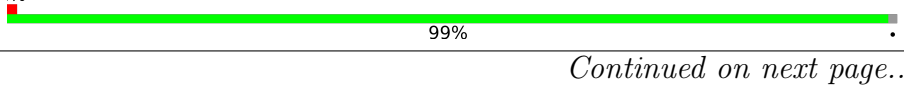
Mol	Chain	Length	Quality of chain
16	BI	204	
16	v	204	
17	BJ	200	
17	w	200	
18	BK	185	
18	x	185	
19	BL	186	
19	y	186	
20	BM	190	
20	z	190	
21	0	172	
21	BN	172	
22	2	160	
22	BO	160	
23	5	124	
23	BP	124	
24	6	137	
24	BQ	137	
25	7	155	
25	BR	155	
26	8	142	
26	BS	142	
27	9	127	
27	BT	127	
28	AA	136	

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Mol	Chain	Length	Quality of chain
28	BU	136	5% 99%
29	AB	149	4% 99%
29	BV	149	12% 99%
30	AC	63	13% 95%
30	BW	63	25% 98%
31	AD	106	2% 90% 9%
31	BX	106	5% 91% 9%
32	AE	112	96%
32	BY	112	4% 96%
33	AF	131	3% 94% 5%
33	BZ	131	8% 95% 5%
34	AG	107	2% 98%
34	CA	107	5% 99%
35	AH	113	5% 99%
35	CB	113	20% 98%
36	AI	120	2% 100%
36	CC	120	14% 98%
37	AJ	99	97%
37	CD	99	18% 97%
38	AK	90	2% 96%
38	CE	90	13% 96%
39	AL	78	4% 99%
39	CF	78	8% 99%
40	AM	51	4% 96%
40	CG	51	20% 98%

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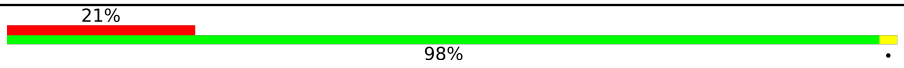
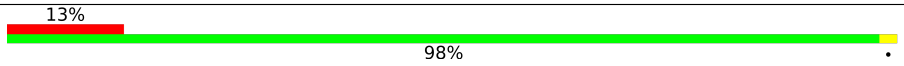
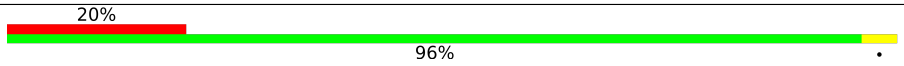
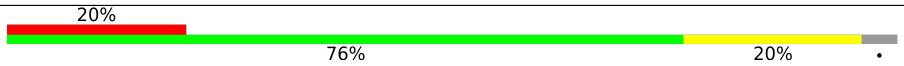
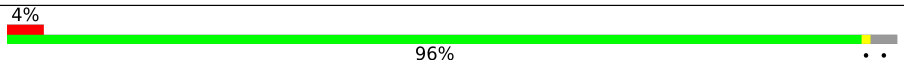
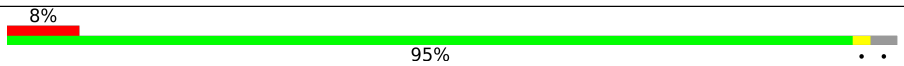
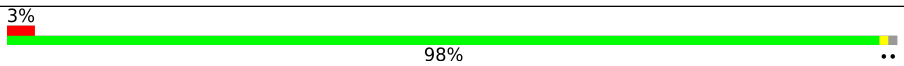
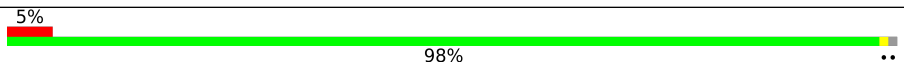
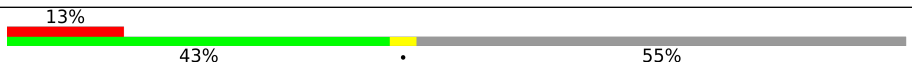
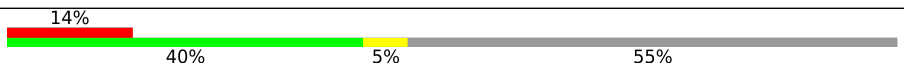
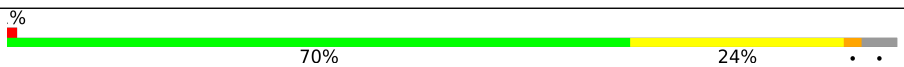
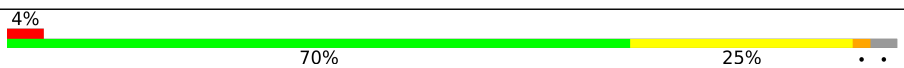
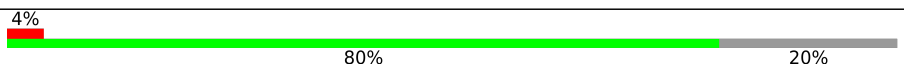
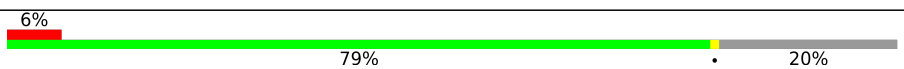
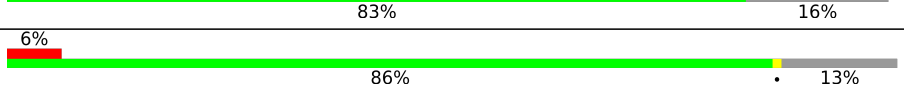
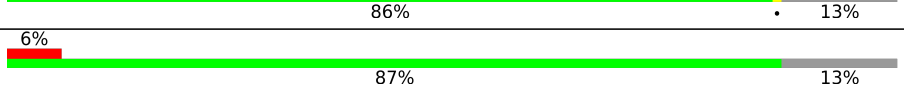
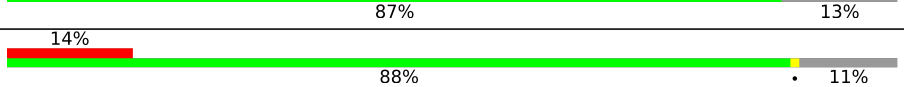
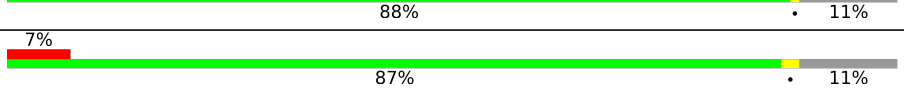
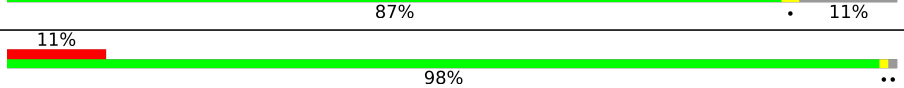
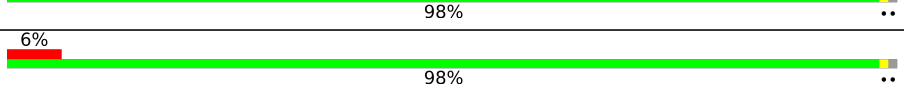
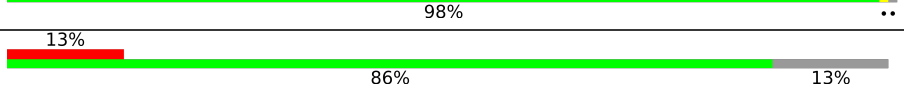
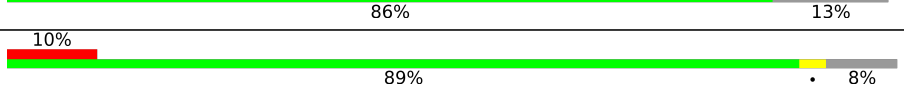
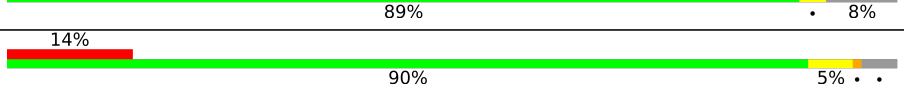
Mol	Chain	Length	Quality of chain
41	AN	52	
41	CH	52	
42	AO	25	
42	CI	25	
43	AP	106	
43	CJ	106	
44	AQ	92	
44	CK	92	
45	CL	267	
45	i	267	
46	B	1787	
46	CM	1787	
47	C	261	
47	CN	261	
48	CO	256	
48	D	256	
49	CP	249	
49	E	249	
50	CQ	251	
50	F	251	
51	CR	262	
51	G	262	
52	CS	225	
52	H	225	
53	CT	236	

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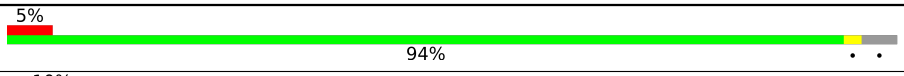
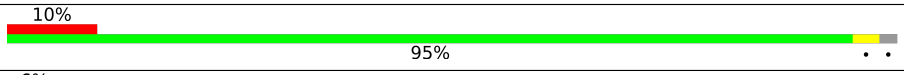
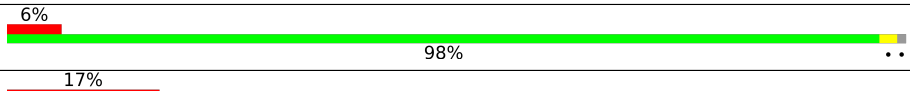
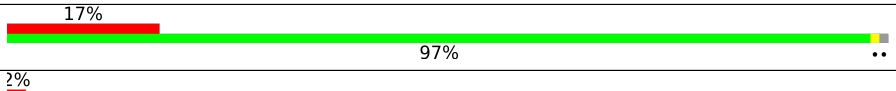
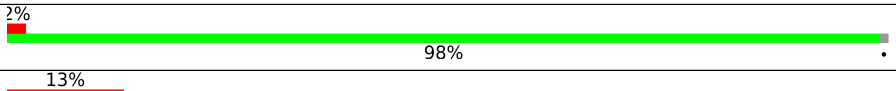
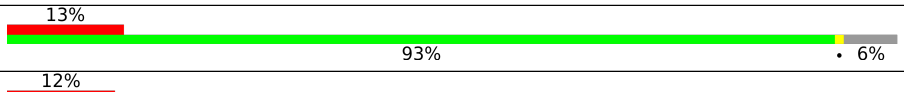
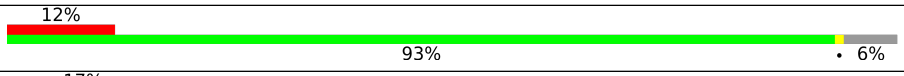
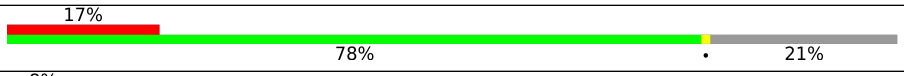
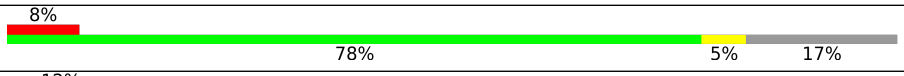
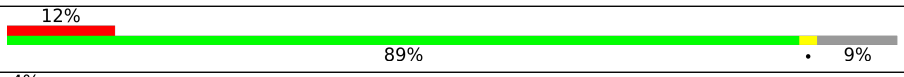
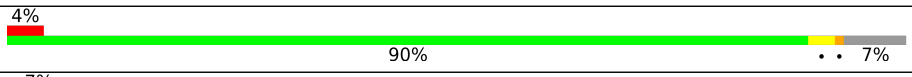
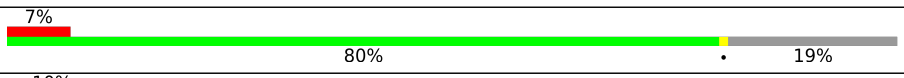
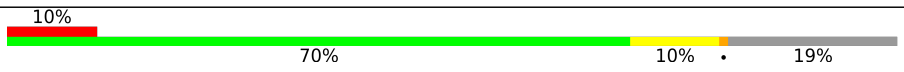
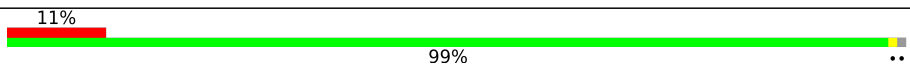
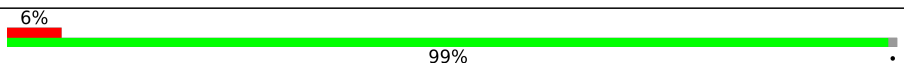
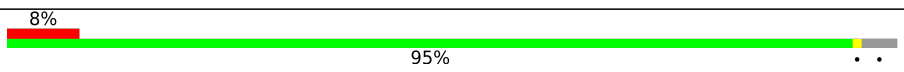
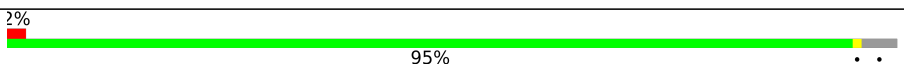
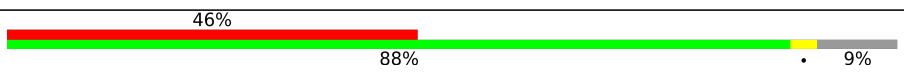
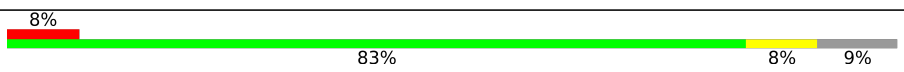
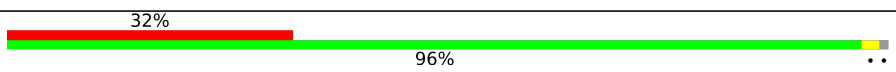
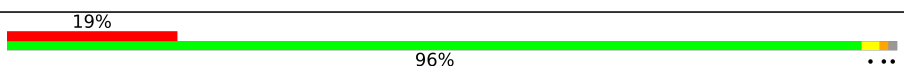
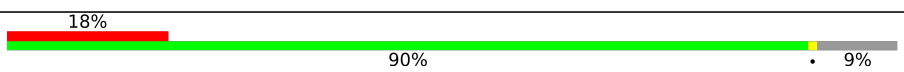
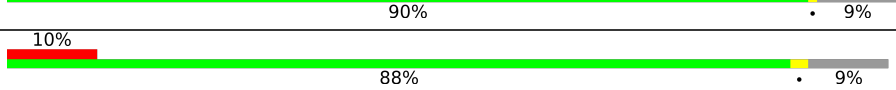
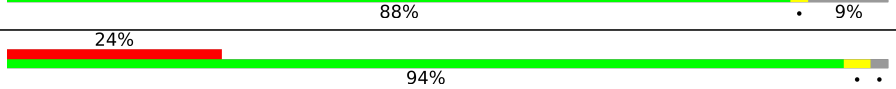
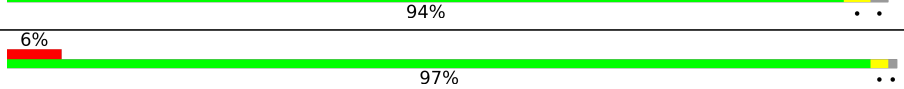
Mol	Chain	Length	Quality of chain
53	I	236	
54	CU	186	
54	J	186	
55	CV	206	
55	K	206	
56	CW	189	
56	L	189	
57	CX	118	
57	M	118	
58	CY	155	
58	N	155	
59	CZ	143	
59	O	143	
60	DA	151	
60	P	151	
61	DB	132	
61	Q	132	
62	DC	142	
62	R	142	
63	DD	142	
63	S	142	
64	DE	137	
64	T	137	
65	DF	145	
65	U	145	

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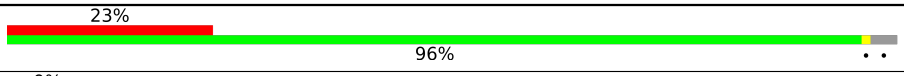
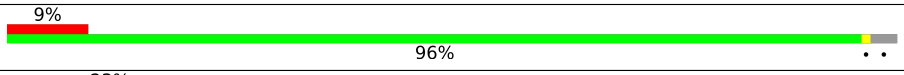
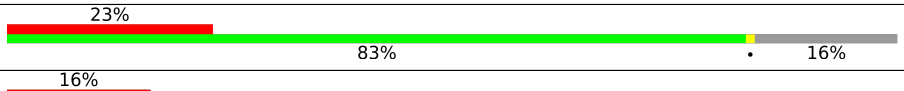
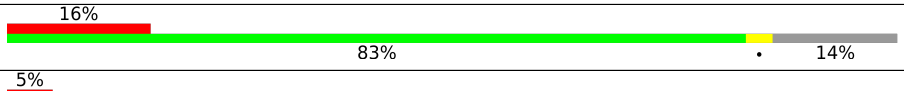
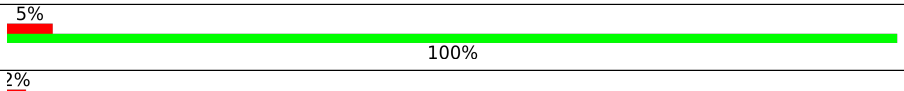
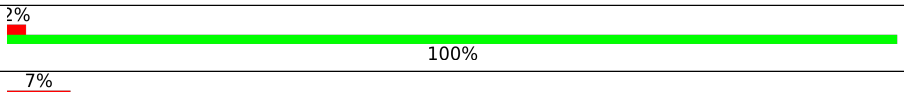
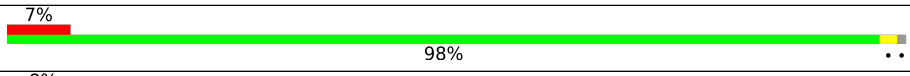
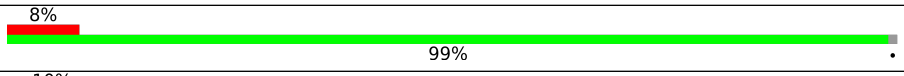
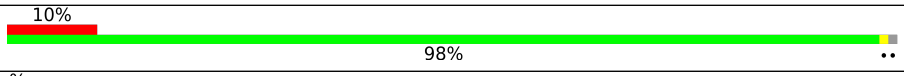
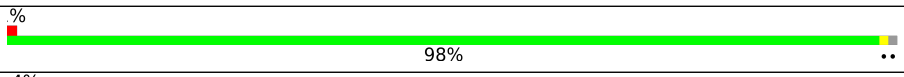
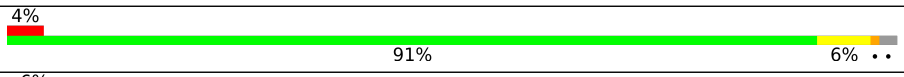
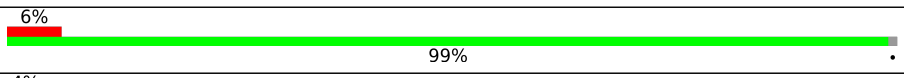
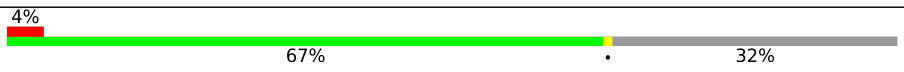
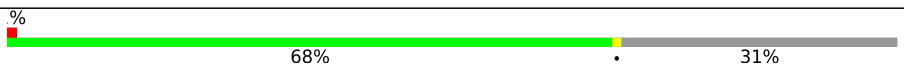
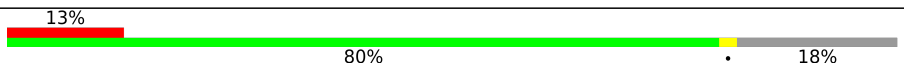
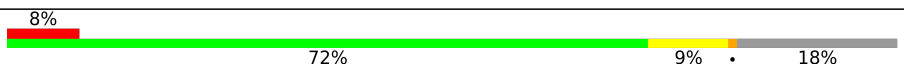
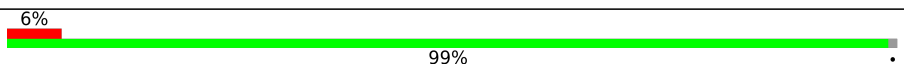
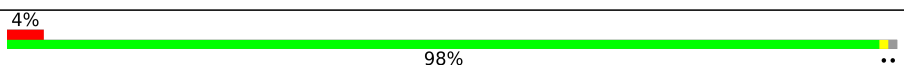
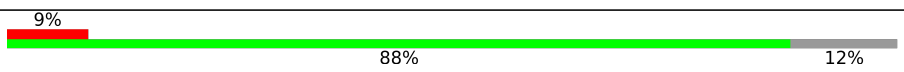
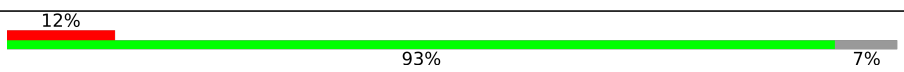
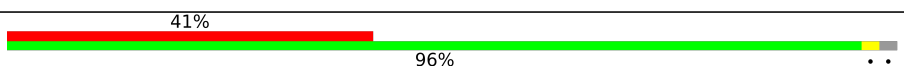
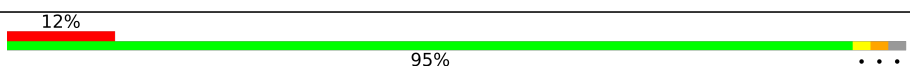
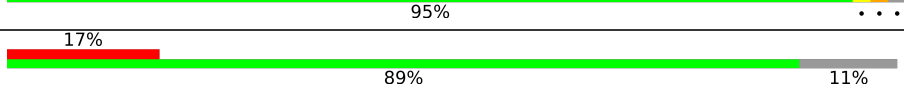
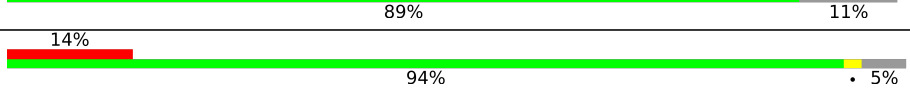
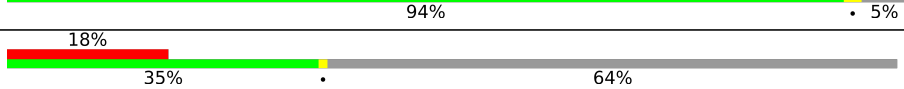
Mol	Chain	Length	Quality of chain
66	DG	145	
66	V	145	
67	DH	119	
67	W	119	
68	DI	87	
68	X	87	
69	DJ	130	
69	Y	130	
70	DK	145	
70	Z	145	
71	DL	135	
71	a	135	
72	DM	105	
72	b	105	
73	DN	119	
73	c	119	
74	DO	82	
74	d	82	
75	DP	67	
75	e	67	
76	DQ	56	
76	f	56	
77	DR	63	
77	g	63	
78	DS	193	

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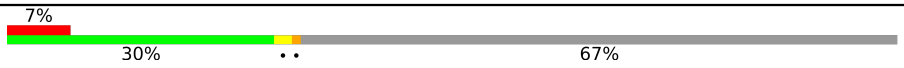
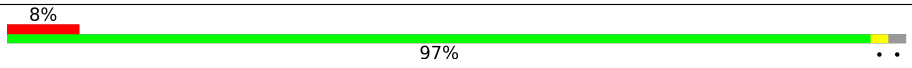
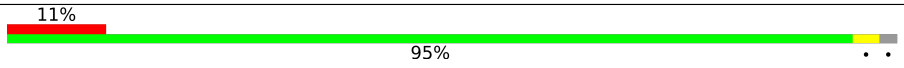
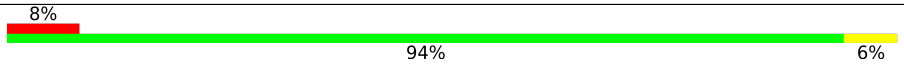
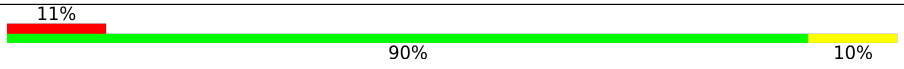
Mol	Chain	Length	Quality of chain
78	h	193	
79	AR	317	
79	DT	317	
80	L1	217	
80	l1	217	

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
81	MG	1	3597	-	-	-	X
81	MG	AS	3729	-	-	-	X

2 Entry composition

There are 85 unique types of molecules in this entry. The entry contains 405513 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 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3217	Total	C	N	O	P	0	0	0
			68774	30723	12366	22468	3217			
1	AS	3199	Total	C	N	O	P	0	0	0
			68387	30550	12293	22345	3199			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	3	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			
2	AT	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			

- Molecule 3 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	157	Total	C	N	O	P	0	0	0
			3333	1491	583	1102	157			
3	AU	158	Total	C	N	O	P	0	0	0
			3353	1500	585	1110	158			

- Molecule 4 is a protein called 60S ribosomal protein L2-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	j	249	Total	C	N	O	S	0	0	0
			1888	1180	376	330	2			
4	AW	249	Total	C	N	O	S	0	0	0
			1888	1180	376	330	2			

- Molecule 5 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	k	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			
5	AX	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			

- Molecule 6 is a protein called 60S ribosomal protein L4-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	l	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			
6	AY	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			

- Molecule 7 is a protein called Uncharacterized protein CaJ7.0206.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	m	296	Total	C	N	O	S	0	0	0
			2426	1544	422	458	2			
7	AZ	292	Total	C	N	O	S	0	0	0
			2394	1526	416	450	2			

- Molecule 8 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	n	157	Total	C	N	O	S	0	0	0
			1242	796	226	219	1			
8	BA	153	Total	C	N	O		0	0	0
			1210	777	221	212				

- Molecule 9 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	o	234	Total	C	N	O	S	0	0	0
			1885	1208	345	331	1			
9	BB	234	Total	C	N	O	S	0	0	0
			1885	1208	345	331	1			

- Molecule 10 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	238	Total	C	N	O	S	0	0	0
			1839	1175	327	334	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	BC	233	Total	C	N	O	S	0	0	0
			1805	1156	321	325	3			

- Molecule 11 is a protein called 60S ribosomal protein L9-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	q	190	Total	C	N	O	S	0	0	0
			1519	958	276	281	4			
11	BD	190	Total	C	N	O	S	0	0	0
			1519	958	276	281	4			

- Molecule 12 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	r	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			
12	BE	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			

- Molecule 13 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	s	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			
13	BF	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			

- Molecule 14 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	t	200	Total	C	N	O	0	0	0
			1610	1009	318	283			
14	BG	200	Total	C	N	O	0	0	0
			1610	1009	318	283			

- Molecule 15 is a protein called 60S ribosomal protein L14-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	u	130	Total	C	N	O	S	0	0	0
			1029	660	193	175	1			
15	BH	130	Total	C	N	O	S	0	0	0
			1029	660	193	175	1			

- Molecule 16 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	v	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			
16	BI	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			

- Molecule 17 is a protein called Ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	w	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			
17	BJ	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			

- Molecule 18 is a protein called Ribosomal protein L22.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	x	173	Total	C	N	O	0	0	0
			1387	856	280	251			
18	BK	176	Total	C	N	O	0	0	0
			1406	868	284	254			

- Molecule 19 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	y	185	Total	C	N	O	0	0	0
			1458	916	297	245			
19	BL	185	Total	C	N	O	0	0	0
			1458	916	297	245			

- Molecule 20 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	z	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			
20	BM	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			

- Molecule 21 is a protein called 60S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	0	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			
21	BN	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			

- Molecule 22 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	2	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			
22	BO	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			

- Molecule 23 is a protein called 60S ribosomal protein L22-B.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	5	103	Total	C	N	O	0	0	0
			831	539	138	154			
23	BP	102	Total	C	N	O	0	0	0
			826	536	137	153			

- Molecule 24 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	6	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			
24	BQ	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			

- Molecule 25 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	118	Total	C	N	O	S	0	0	0
			945	591	192	161	1			
25	BR	98	Total	C	N	O	S	0	0	0
			801	501	162	137	1			

- Molecule 26 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	8	121	Total	C	N	O	S	0	0	0
			974	622	175	176	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BS	119	Total 960	C 613	N 172	O 174	S 1	0	0	0

- Molecule 27 is a protein called Ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	9	126	Total 989	C 618	N 190	O 181	0	0	0
27	BT	126	Total 989	C 618	N 190	O 181	0	0	0

- Molecule 28 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	AA	135	Total 1087	C 705	N 197	O 183	S 2	0	0	0
28	BU	135	Total 1087	C 705	N 197	O 183	S 2	0	0	0

- Molecule 29 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	AB	148	Total 1170	C 741	N 231	O 197	S 1	0	0	0
29	BV	148	Total 1170	C 741	N 231	O 197	S 1	0	0	0

- Molecule 30 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	AC	62	Total 493	C 307	N 105	O 81		0	0	0
30	BW	63	Total 509	C 317	N 109	O 82	S 1	0	1	0

- Molecule 31 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	AD	96	Total 729	C 469	N 121	O 137	S 2	0	0	0
31	BX	96	Total 729	C 469	N 121	O 137	S 2	0	0	0

- Molecule 32 is a protein called 60S ribosomal protein L31-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	AE	110	Total	C	N	O	S	0	0	0
			894	565	168	159	2			
32	BY	108	Total	C	N	O	S	0	0	0
			881	556	166	157	2			

- Molecule 33 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	AF	124	Total	C	N	O	S	0	0	0
			1000	638	194	167	1			
33	BZ	125	Total	C	N	O	S	0	1	0
			1015	649	197	168	1			

- Molecule 34 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	AG	106	Total	C	N	O	S	0	0	0
			847	543	161	142	1			
34	CA	106	Total	C	N	O	S	0	3	0
			867	558	166	142	1			

- Molecule 35 is a protein called 60S ribosomal protein L34-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	AH	112	Total	C	N	O	S	0	0	0
			887	547	182	154	4			
35	CB	111	Total	C	N	O	S	0	4	0
			904	561	186	153	4			

- Molecule 36 is a protein called Ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	AI	120	Total	C	N	O	S	0	0	0
			992	629	195	167	1			
36	CC	118	Total	C	N	O		0	0	0
			979	621	193	165				

- Molecule 37 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	AJ	97	Total	C	N	O	S	0	0	0
			758	471	156	130	1			
37	CD	97	Total	C	N	O	S	0	1	0
			764	476	157	130	1			

- Molecule 38 is a protein called 60S ribosomal protein L37-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	AK	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			
38	CE	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			

- Molecule 39 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	AL	77	Total	C	N	O	0	0	0
			617	393	115	109			
39	CF	77	Total	C	N	O	0	1	0
			623	398	116	109			

- Molecule 40 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	AM	50	Total	C	N	O	0	0	0
			438	275	97	66			
40	CG	50	Total	C	N	O	0	0	0
			438	275	97	66			

- Molecule 41 is a protein called 60S ribosomal protein L40-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	AN	52	Total	C	N	O	S	0	0	0
			419	260	86	67	6			
41	CH	52	Total	C	N	O	S	0	1	0
			427	265	89	67	6			

- Molecule 42 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	AO	25	Total	C	N	O	S	0	0	0
			236	144	63	28	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	CI	24	Total	C	N	O	S	0	0	0
			227	138	61	27	1			

- Molecule 43 is a protein called 60S ribosomal protein L42-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	AP	103	Total	C	N	O	S	0	0	0
			828	521	165	137	5			
43	CJ	103	Total	C	N	O	S	0	2	0
			841	531	168	137	5			

- Molecule 44 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	AQ	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			
44	CK	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			

- Molecule 45 is a protein called 60S ribosomal protein CAALFM_C304810CA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	i	121	Total	C	N	O	0	0	0
			931	563	166	202			
45	CL	121	Total	C	N	O	0	0	0
			931	563	166	202			

- Molecule 46 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B	1712	Total	C	N	O	P	0	0	0
			36504	16318	6483	11991	1712			
46	CM	1726	Total	C	N	O	P	0	0	0
			36805	16452	6537	12090	1726			

- Molecule 47 is a protein called 40S ribosomal protein S0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	C	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			
47	CN	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			

- Molecule 48 is a protein called 40S ribosomal protein S1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	D	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			
48	CO	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			

- Molecule 49 is a protein called Ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	E	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			
49	CP	216	Total	C	N	O	S	0	0	0
			1620	1033	287	295	5			

- Molecule 50 is a protein called Ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	F	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			
50	CQ	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			

- Molecule 51 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	G	259	Total	C	N	O	S	0	0	0
			2051	1304	385	357	5			
51	CR	260	Total	C	N	O	S	0	0	0
			2055	1306	386	358	5			

- Molecule 52 is a protein called Ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	H	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			
52	CS	195	Total	C	N	O	S	0	0	0
			1530	960	280	286	4			

- Molecule 53 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	I	226	Total	C	N	O	S	0	0	0
			1820	1133	351	330	6			
53	CT	226	Total	C	N	O	S	0	0	0
			1820	1133	351	330	6			

- Molecule 54 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	J	185	Total	C	N	O	0	0	0
			1491	953	269	269			
54	CU	182	Total	C	N	O	0	0	0
			1466	939	264	263			

- Molecule 55 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	K	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			
55	CV	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			

- Molecule 56 is a protein called Ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	L	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			
56	CW	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			

- Molecule 57 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	M	98	Total	C	N	O	S	0	0	0
			817	531	135	150	1			
57	CX	93	Total	C	N	O	S	0	0	0
			783	511	129	142	1			

- Molecule 58 is a protein called 40S ribosomal protein S11A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	N	144	Total	C	N	O	S	0	0	0
			1150	734	215	198	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	CY	141	Total	C	N	O	S	0	0	0
			1129	722	212	192	3			

- Molecule 59 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	O	116	Total	C	N	O	S	0	0	0
			885	550	158	172	5			
59	CZ	116	Total	C	N	O	S	0	0	0
			885	550	158	172	5			

- Molecule 60 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	P	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			
60	DA	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			

- Molecule 61 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	Q	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			
61	DB	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			

- Molecule 62 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	R	129	Total	C	N	O	S	0	0	0
			1018	649	185	177	7			
62	DC	129	Total	C	N	O	S	0	0	0
			1018	649	185	177	7			

- Molecule 63 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	S	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			
63	DD	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			

- Molecule 64 is a protein called 40S ribosomal protein S17-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	T	124	Total	C	N	O	S	0	0	0
			997	628	183	185	1			
64	DE	125	Total	C	N	O	S	0	0	0
			1002	631	184	186	1			

- Molecule 65 is a protein called 40S ribosomal protein S18-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	U	144	Total	C	N	O	S	0	0	0
			1187	744	233	207	3			
65	DF	142	Total	C	N	O	S	0	0	0
			1169	733	228	205	3			

- Molecule 66 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	V	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			
66	DG	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			

- Molecule 67 is a protein called Ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	W	102	Total	C	N	O	S	0	0	0
			808	509	150	147	2			
67	DH	100	Total	C	N	O	S	0	0	0
			790	499	146	143	2			

- Molecule 68 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	X	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			
68	DI	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			

- Molecule 69 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	Y	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			
69	DJ	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			

- Molecule 70 is a protein called Ribosomal protein S23 (S12).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	Z	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			
70	DK	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			

- Molecule 71 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
71	a	134	Total	C	N	O	0	0	0
			1086	677	218	191			
71	DL	132	Total	C	N	O	0	0	0
			1072	670	216	186			

- Molecule 72 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
72	b	72	Total	C	N	O	0	0	0
			578	369	103	106			
72	DM	71	Total	C	N	O	0	0	0
			570	365	102	103			

- Molecule 73 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	c	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			
73	DN	97	Total	C	N	O	S	0	0	0
			770	477	161	126	6			

- Molecule 74 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	d	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	DO	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

- Molecule 75 is a protein called 40S ribosomal protein S28-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	e	62	Total	C	N	O	S	0	0	0
			487	299	98	88	2			
75	DP	59	Total	C	N	O	S	0	0	0
			457	281	89	85	2			

- Molecule 76 is a protein called 40S ribosomal protein S29A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	f	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			
76	DQ	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			

- Molecule 77 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	g	60	Total	C	N	O	S	0	0	0
			474	297	96	79	2			
77	DR	56	Total	C	N	O	S	0	0	0
			444	278	89	75	2			

- Molecule 78 is a protein called Ubiquitin-40S ribosomal protein S31 fusion protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	h	63	Total	C	N	O	S	0	0	0
			510	320	100	84	6			
78	DS	70	Total	C	N	O	S	0	0	0
			574	362	113	93	6			

- Molecule 79 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	AR	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			
79	DT	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			

- Molecule 80 is a protein called Ribosomal protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	L1	217	Total 1711	C 1096	N 294	O 312	S 9	0	0	0
80	l1	217	Total 1711	C 1096	N 294	O 312	S 9	0	0	0

- Molecule 81 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	1	565	Total 565	Mg 565	0	0
81	3	14	Total 14	Mg 14	0	0
81	4	16	Total 16	Mg 16	0	0
81	j	4	Total 4	Mg 4	0	0
81	k	5	Total 5	Mg 5	0	0
81	l	2	Total 2	Mg 2	0	0
81	m	1	Total 1	Mg 1	0	0
81	o	4	Total 4	Mg 4	0	0
81	r	3	Total 3	Mg 3	0	0
81	s	1	Total 1	Mg 1	0	0
81	u	2	Total 2	Mg 2	0	0
81	v	2	Total 2	Mg 2	0	0
81	w	3	Total 3	Mg 3	0	0
81	x	5	Total 5	Mg 5	0	0
81	y	2	Total 2	Mg 2	0	0
81	z	1	Total 1	Mg 1	0	0
81	0	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	2	1	Total Mg 1 1	0	0
81	5	1	Total Mg 1 1	0	0
81	6	2	Total Mg 2 2	0	0
81	8	2	Total Mg 2 2	0	0
81	9	2	Total Mg 2 2	0	0
81	AB	1	Total Mg 1 1	0	0
81	AC	1	Total Mg 1 1	0	0
81	AD	2	Total Mg 2 2	0	0
81	AF	4	Total Mg 4 4	0	0
81	AG	2	Total Mg 2 2	0	0
81	AH	2	Total Mg 2 2	0	0
81	AI	1	Total Mg 1 1	0	0
81	AP	3	Total Mg 3 3	0	0
81	AQ	1	Total Mg 1 1	0	0
81	i	1	Total Mg 1 1	0	0
81	B	169	Total Mg 169 169	0	0
81	D	1	Total Mg 1 1	0	0
81	E	2	Total Mg 2 2	0	0
81	F	1	Total Mg 1 1	0	0
81	G	1	Total Mg 1 1	0	0
81	H	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	I	1	Total Mg 1 1	0	0
81	K	1	Total Mg 1 1	0	0
81	Q	2	Total Mg 2 2	0	0
81	V	1	Total Mg 1 1	0	0
81	Y	1	Total Mg 1 1	0	0
81	Z	3	Total Mg 3 3	0	0
81	c	1	Total Mg 1 1	0	0
81	f	1	Total Mg 1 1	0	0
81	g	1	Total Mg 1 1	0	0
81	AR	1	Total Mg 1 1	0	0
81	AS	387	Total Mg 387 387	0	0
81	AT	13	Total Mg 13 13	0	0
81	AU	7	Total Mg 7 7	0	0
81	AW	3	Total Mg 3 3	0	0
81	AX	2	Total Mg 2 2	0	0
81	AY	1	Total Mg 1 1	0	0
81	BB	3	Total Mg 3 3	0	0
81	BE	2	Total Mg 2 2	0	0
81	BF	1	Total Mg 1 1	0	0
81	BG	2	Total Mg 2 2	0	0
81	BH	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	BI	1	Total Mg 1 1	0	0
81	BJ	4	Total Mg 4 4	0	0
81	BK	2	Total Mg 2 2	0	0
81	BN	2	Total Mg 2 2	0	0
81	BO	1	Total Mg 1 1	0	0
81	BS	1	Total Mg 1 1	0	0
81	BV	1	Total Mg 1 1	0	0
81	BZ	4	Total Mg 4 4	0	0
81	CA	1	Total Mg 1 1	0	0
81	CJ	1	Total Mg 1 1	0	0
81	CK	1	Total Mg 1 1	0	0
81	CM	145	Total Mg 145 145	0	0
81	CN	1	Total Mg 1 1	0	0
81	CP	2	Total Mg 2 2	0	0
81	CQ	4	Total Mg 4 4	0	0
81	CW	1	Total Mg 1 1	0	0
81	DA	2	Total Mg 2 2	0	0
81	DB	4	Total Mg 4 4	0	0
81	DC	1	Total Mg 1 1	0	0
81	DG	1	Total Mg 1 1	0	0
81	DJ	2	Total Mg 2 2	0	0

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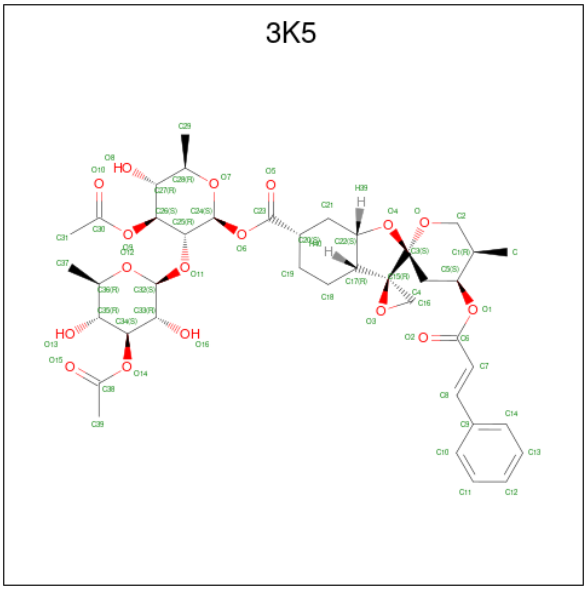
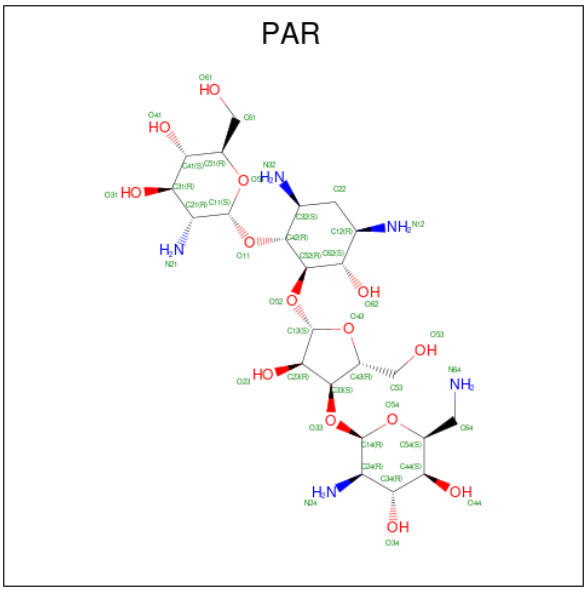
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	DQ	1	Total Mg 1 1	0	0
81	CL	3	Total Mg 3 3	0	0

- Molecule 82 is 3-O-acetyl-2-O-(3-O-acetyl-6-deoxy-beta-D-glucopyranosyl)-6-deoxy-1-O-{[(2R,2'S,3a'R,4''S,5''R,6'S,7a'S)-5''-methyl-4''-{[(2E)-3-phenylprop-2-enoyl]oxy}decahydrodispiro[oxirane-2,3'-[1]benzofuran-2',2''-pyran]-6'-yl]carbonyl}-beta-D-glucopyranose (three-letter code: 3K5) (formula: $C_{40}H_{52}O_{17}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	1	1	Total C O 57 40 17	0	0
82	CJ	1	Total C O 57 40 17	0	0

- Molecule 83 is PAROMOMYCIN (three-letter code: PAR) (formula: $C_{23}H_{45}N_5O_{14}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	1	1	Total C N O 42 23 5 14	0	0
83	1	1	Total C N O 42 23 5 14	0	0
83	1	1	Total C N O 42 23 5 14	0	0
83	B	1	Total C N O 42 23 5 14	0	0
83	AS	1	Total C N O 42 23 5 14	0	0
83	AS	1	Total C N O 42 23 5 14	0	0
83	AS	1	Total C N O 42 23 5 14	0	0
83	CM	1	Total C N O 42 23 5 14	0	0

- Molecule 84 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
84	AH	1	Total Zn 1 1	0	0
84	AK	1	Total Zn 1 1	0	0
84	AN	1	Total Zn 1 1	0	0
84	AP	1	Total Zn 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
84	AQ	1	Total Zn 1 1	0	0
84	c	1	Total Zn 1 1	0	0
84	f	1	Total Zn 1 1	0	0
84	CB	1	Total Zn 1 1	0	0
84	CE	1	Total Zn 1 1	0	0
84	CK	1	Total Zn 1 1	0	0
84	DQ	1	Total Zn 1 1	0	0

- Molecule 85 is water.

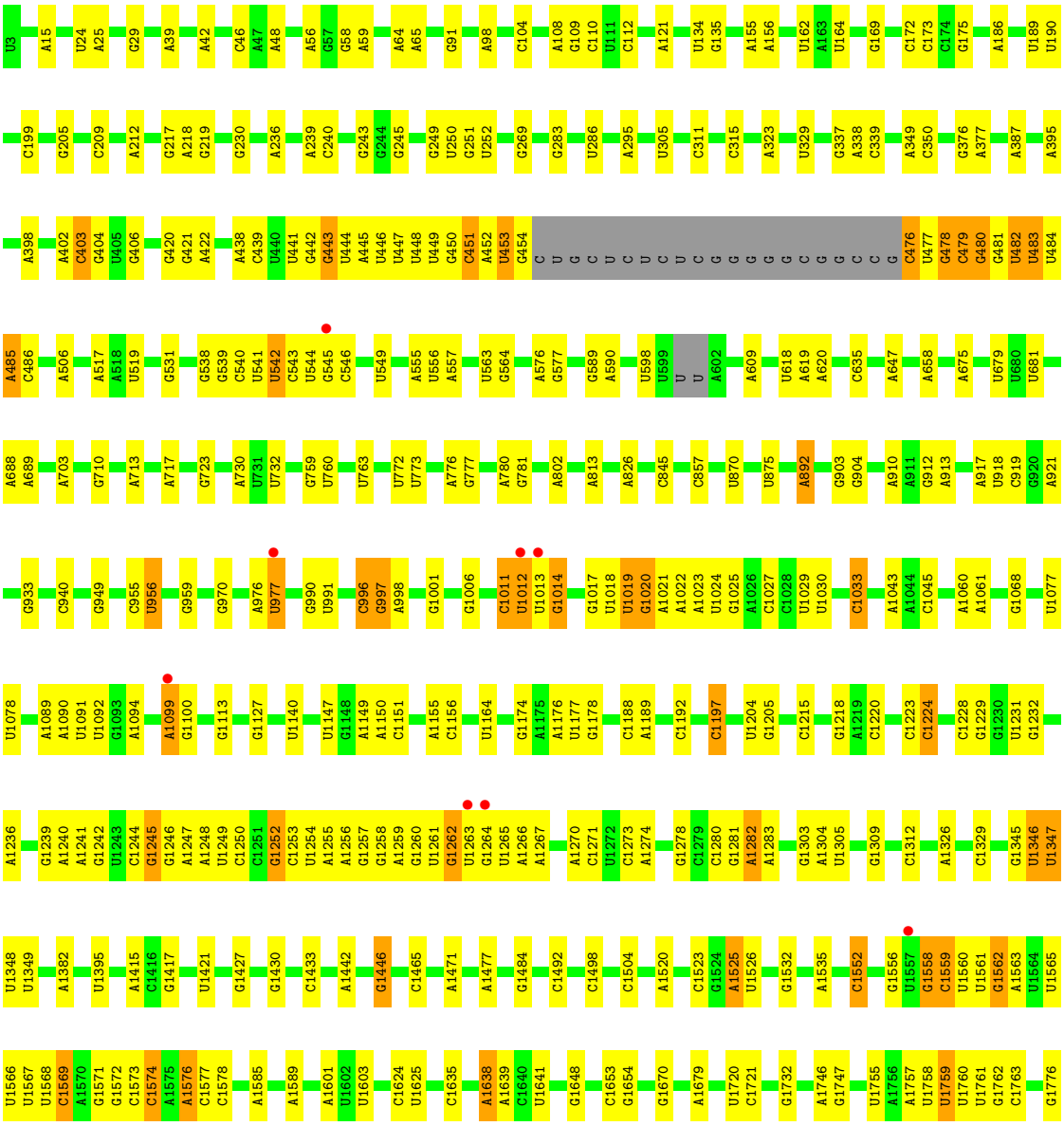
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	1	9	Total O 9 9	0	0
85	4	3	Total O 3 3	0	0
85	B	11	Total O 11 11	0	0
85	G	1	Total O 1 1	0	0
85	AS	20	Total O 20 20	0	0
85	BQ	3	Total O 3 3	0	0
85	BV	1	Total O 1 1	0	0

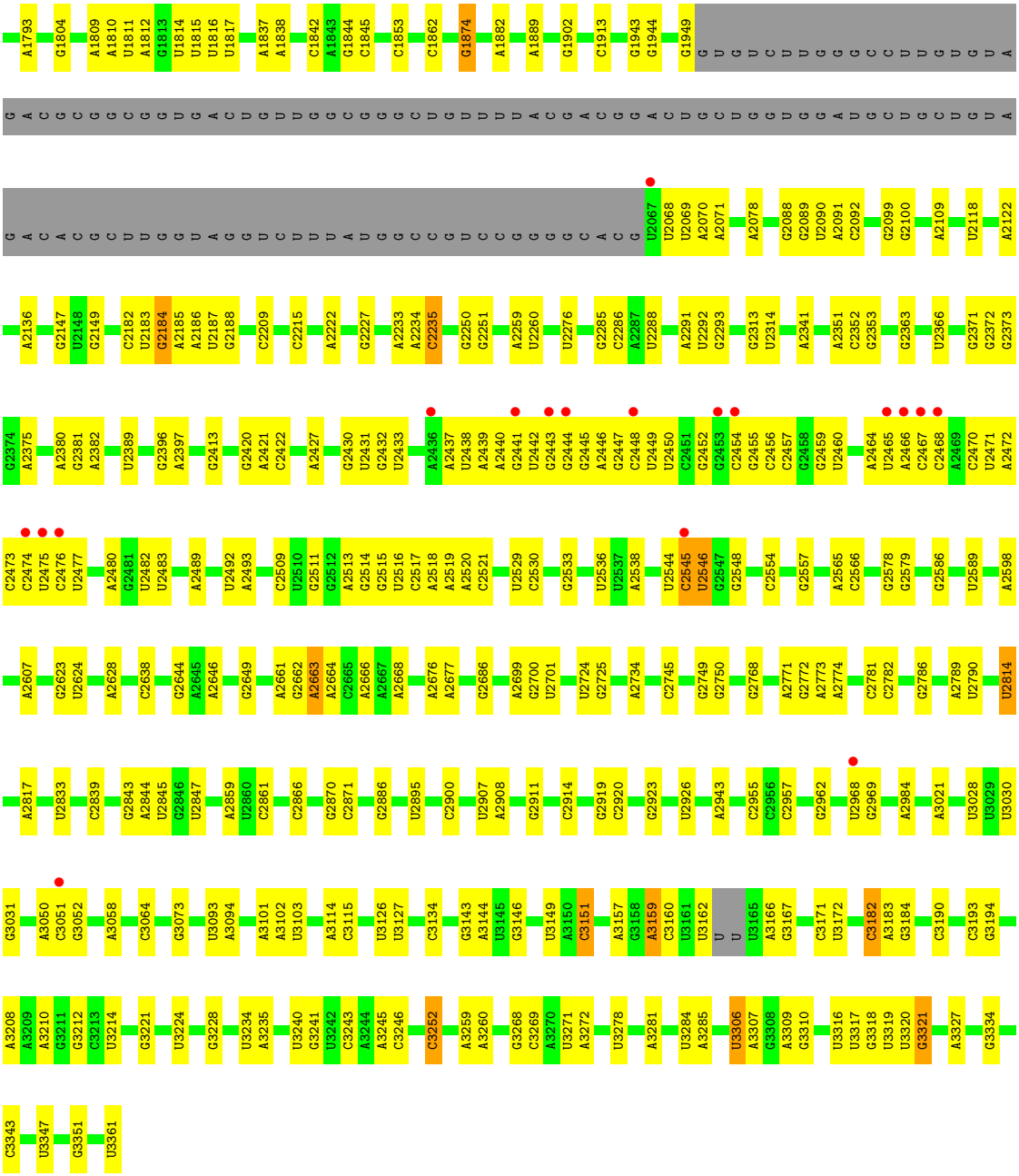
3 Residue-property plots (i)

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: 25S ribosomal RNA

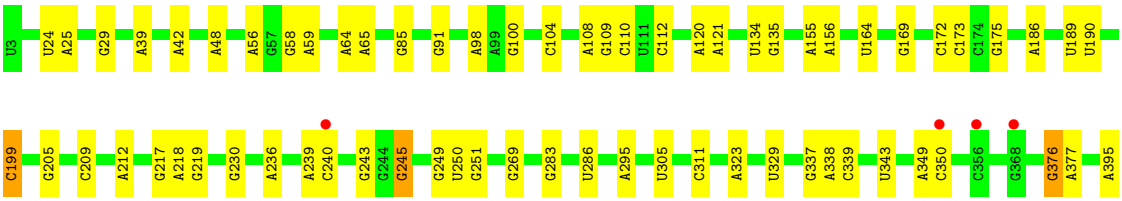
Chain 1:

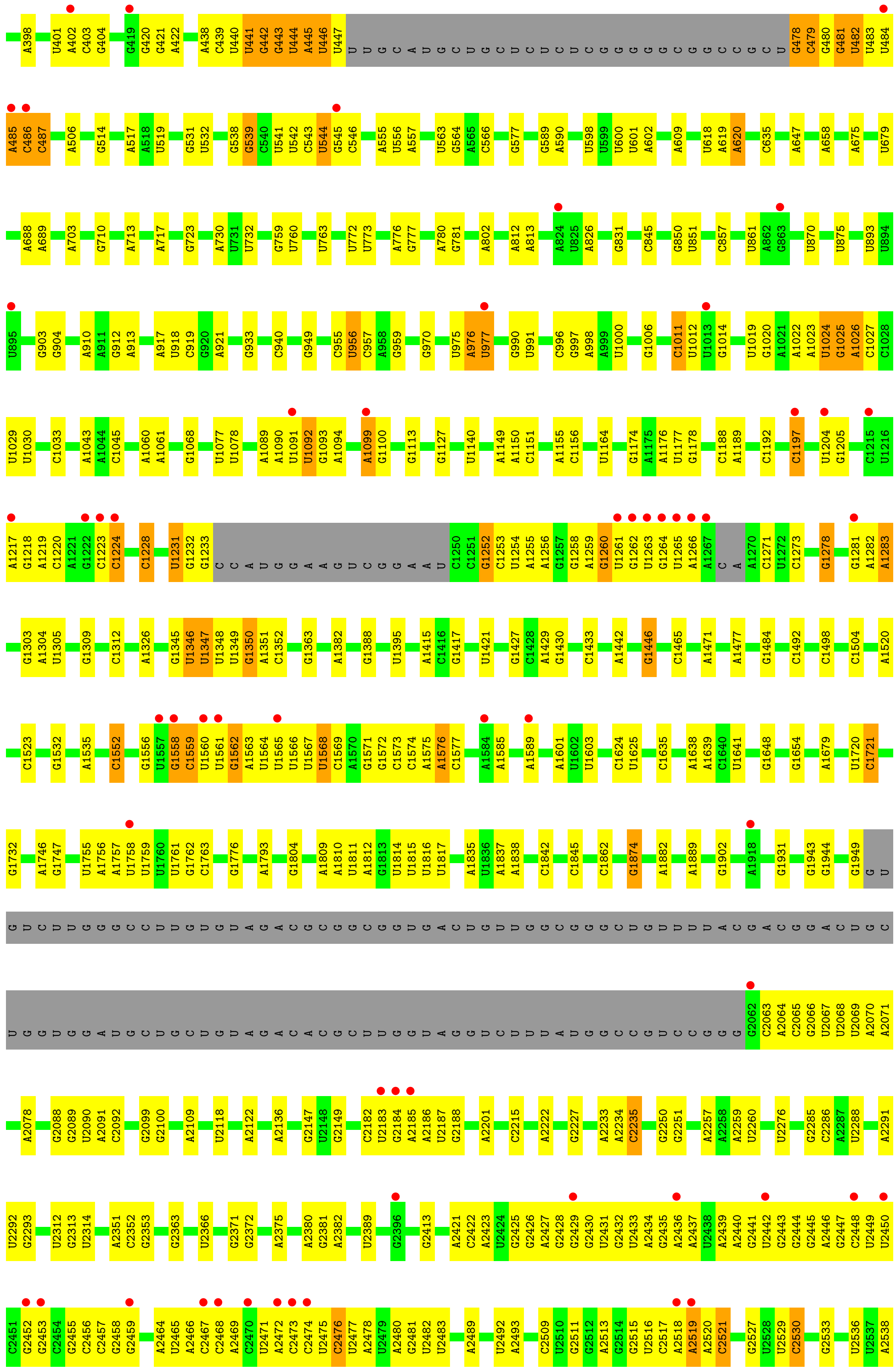




• Molecule 1: 25S ribosomal RNA

Chain AS:




A398 U401 A402 C403 G404 G419 G420 G421 A422 A438 C439 U440 U441 G442 G443 U444 A445 U446 U447 U U G C A U G C U G C U C U C U C G G G G G C G G C C G C U G478 C479 G480 G481 U482 U483 U484
A485 C486 C487 A506 G514 A517 A518 U519 G531 U532 G538 G539 C540 U541 U542 C543 U544 G545 C546 A555 U556 A557 U563 G564 A565 C566 G577 G589 A590 U598 U599 U600 U601 A602 A609 U618 A619 A620 C635 A647 A658 A675 U679
A688 A689 A703 G710 A713 A717 G723 A730 U731 U732 G759 U760 U763 U772 U773 A776 G777 A780 G781 A802 A812 A813 A824 U825 A826 G831 C845 G850 U851 C857 U861 A862 G863 U870 U875 U893 U894
U895 G903 G904 A910 A911 G912 A913 A917 U918 C919 G920 A921 G933 C940 G949 C955 U956 C957 A958 G959 G970 U975 A976 U977 G990 U991 C996 G997 A998 A999 U1000 G1006 C1011 U1012 U1013 G1014 U1019 G1020 A1021 A1022 A1023 U1024 G1025 A1026 C1027 C1028
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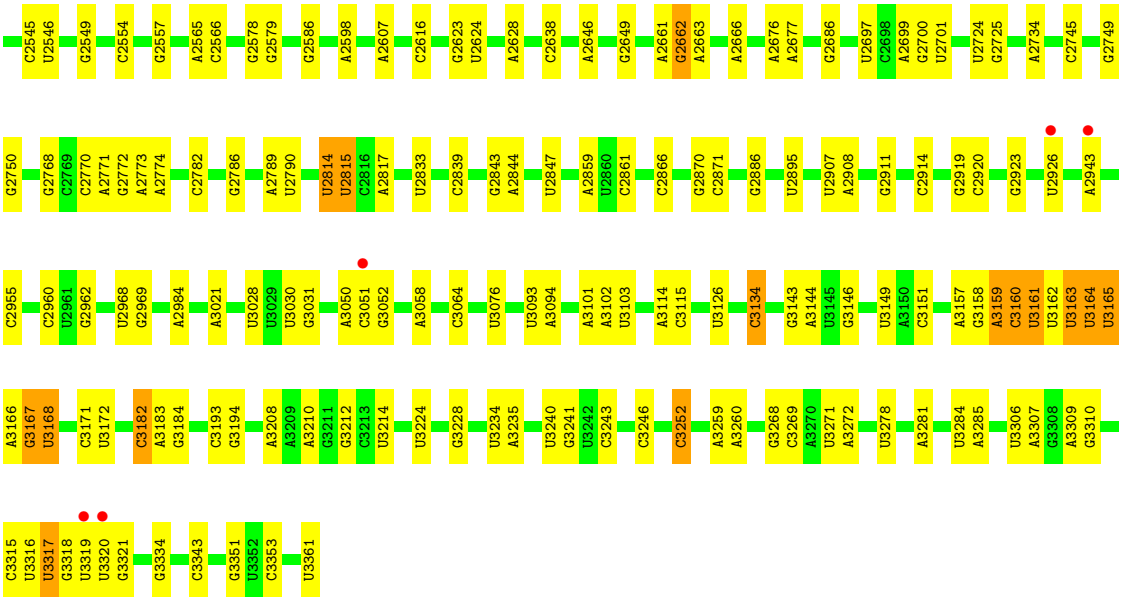
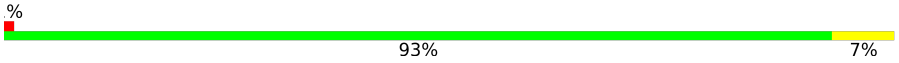


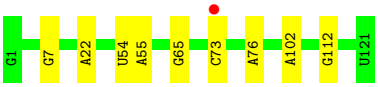
• Molecule 2: 5S ribosomal RNA

Chain 3:

• Molecule 2: 5S ribosomal RNA

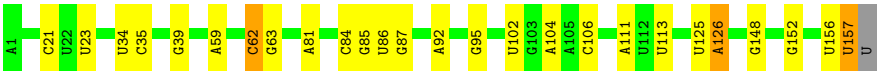
Chain AT:





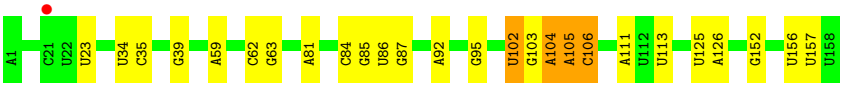
• Molecule 3: 5.8S ribosomal RNA

Chain 4:



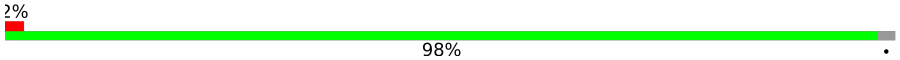
• Molecule 3: 5.8S ribosomal RNA

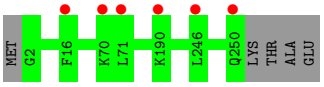
Chain AU:



• Molecule 4: 60S ribosomal protein L2-B

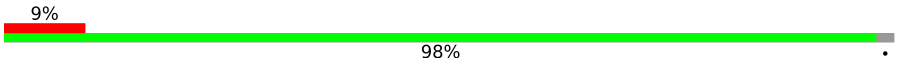
Chain j:

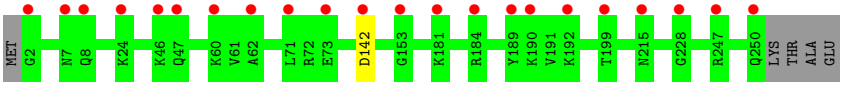




• Molecule 4: 60S ribosomal protein L2-B

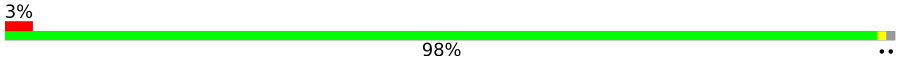
Chain AW:

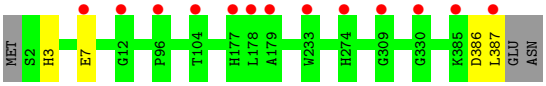




• Molecule 5: 60S ribosomal protein L3

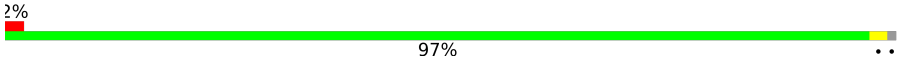
Chain k:

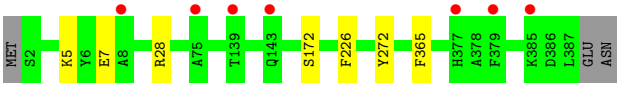




• Molecule 5: 60S ribosomal protein L3

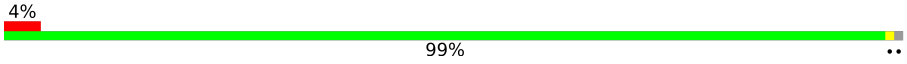
Chain AX:

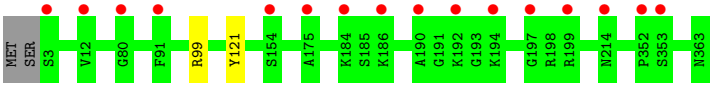




• Molecule 6: 60S ribosomal protein L4-B

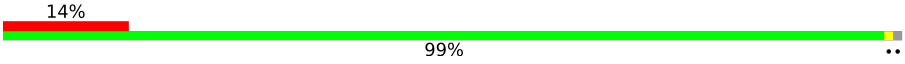
Chain l:

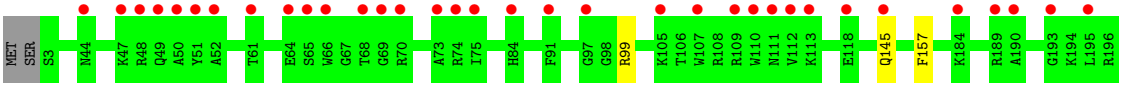


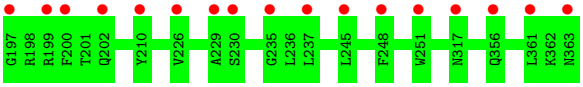


• Molecule 6: 60S ribosomal protein L4-B

Chain AY:

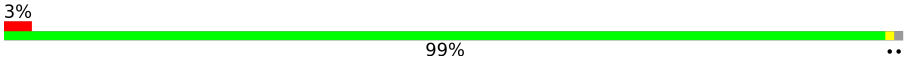


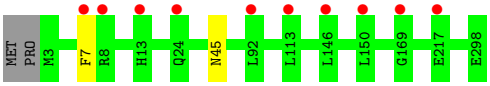




• Molecule 7: Uncharacterized protein CaJ7.0206

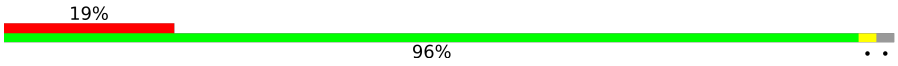
Chain m:

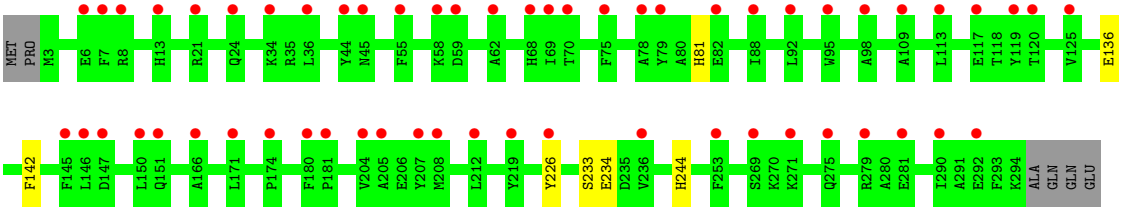




• Molecule 7: Uncharacterized protein CaJ7.0206

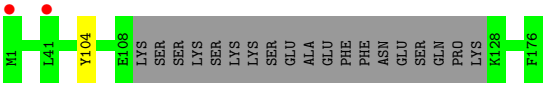
Chain AZ:





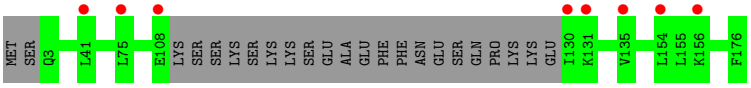
• Molecule 8: 60S ribosomal protein L6

Chain n:



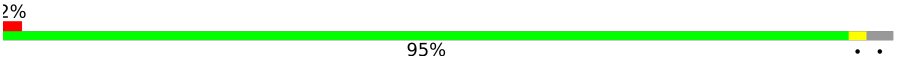
• Molecule 8: 60S ribosomal protein L6

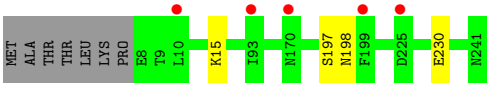
Chain BA:



• Molecule 9: 60S ribosomal protein L7-A

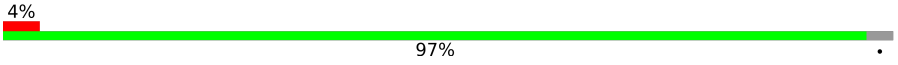
Chain o:

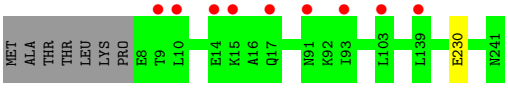




• Molecule 9: 60S ribosomal protein L7-A

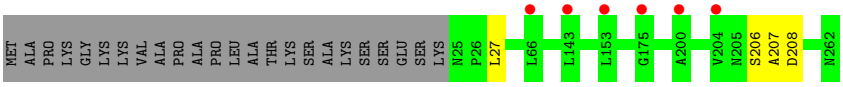
Chain BB:



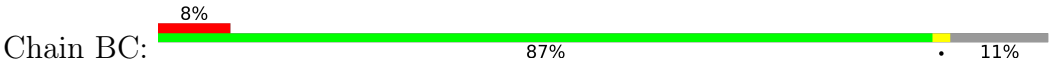


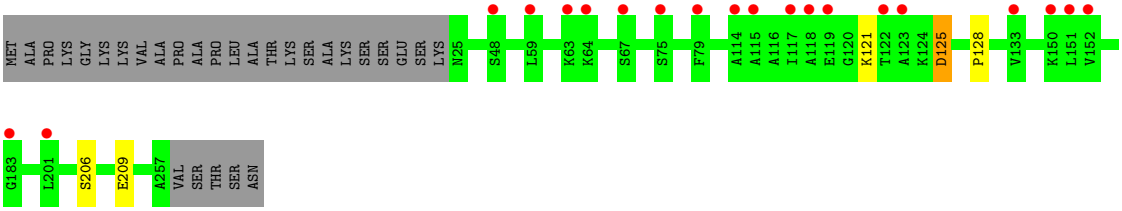
• Molecule 10: 60S ribosomal protein L8

Chain p:

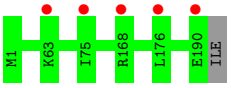


• Molecule 10: 60S ribosomal protein L8

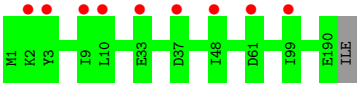




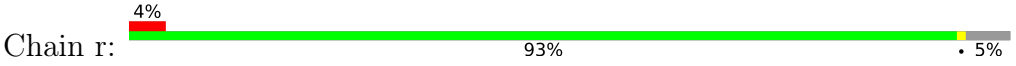
• Molecule 11: 60S ribosomal protein L9-B

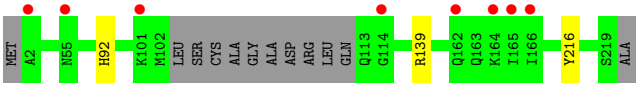


• Molecule 11: 60S ribosomal protein L9-B

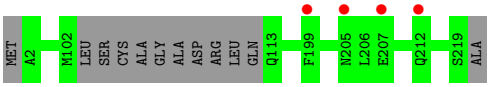


• Molecule 12: 60S ribosomal protein L10

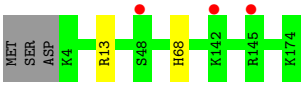




• Molecule 12: 60S ribosomal protein L10

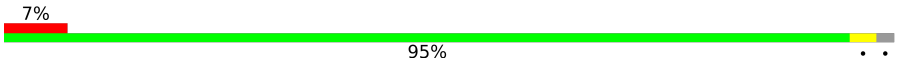


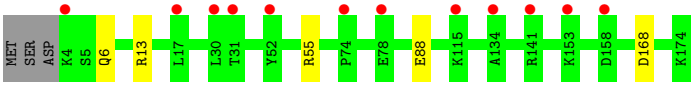
• Molecule 13: 60S ribosomal protein L11-B



• Molecule 13: 60S ribosomal protein L11-B

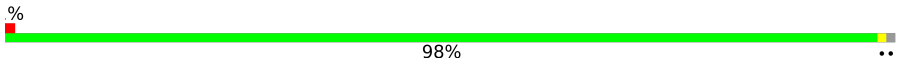
Chain BF:

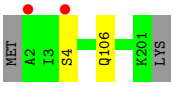




• Molecule 14: 60S ribosomal protein L13

Chain t:





• Molecule 14: 60S ribosomal protein L13

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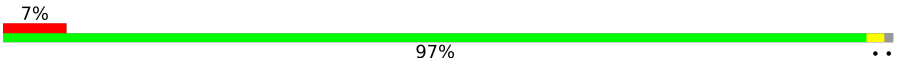
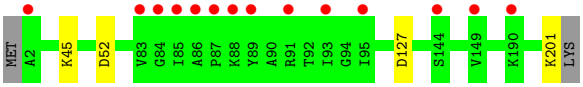
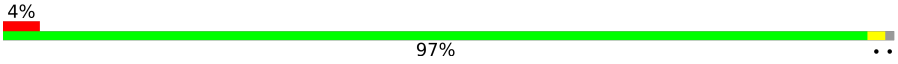
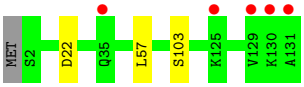




• Molecule 15: 60S ribosomal protein L14-B

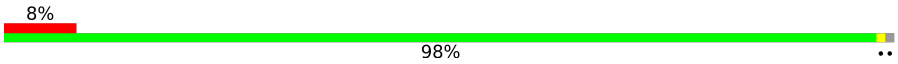
Chain u:

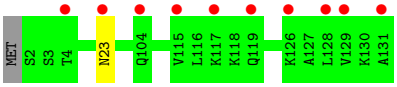




• Molecule 15: 60S ribosomal protein L14-B

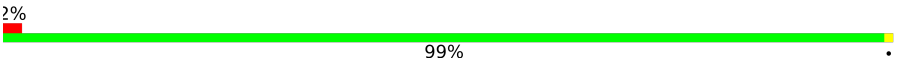
Chain BH:

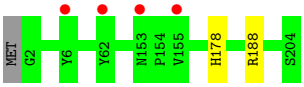




• Molecule 16: 60S ribosomal protein L15-A

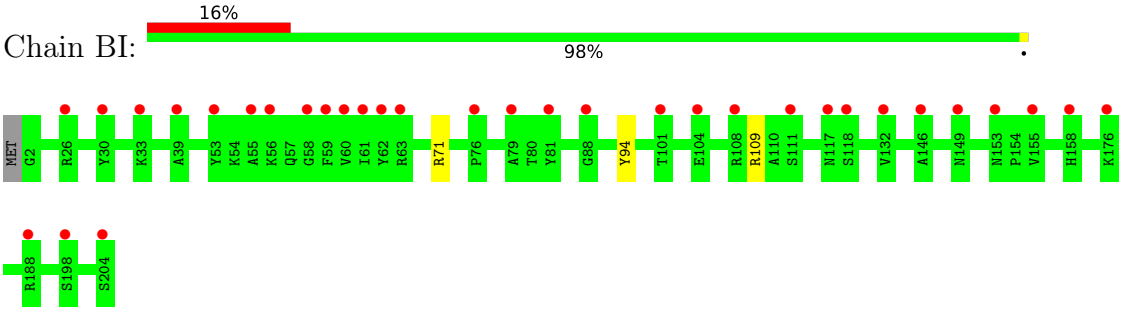
Chain v:





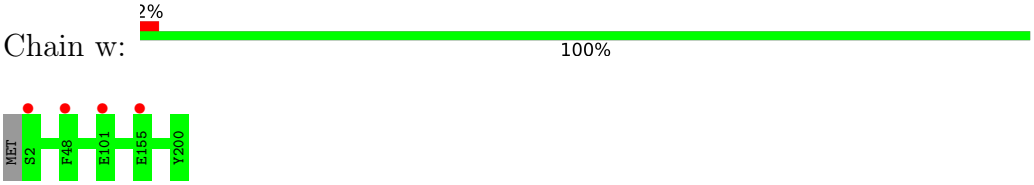
• Molecule 16: 60S ribosomal protein L15-A

Chain BI:



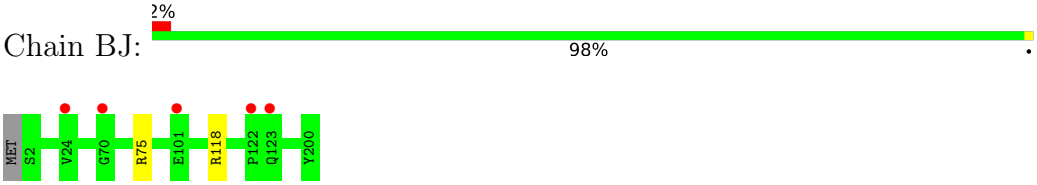
• Molecule 17: Ribosomal protein L13

Chain w:



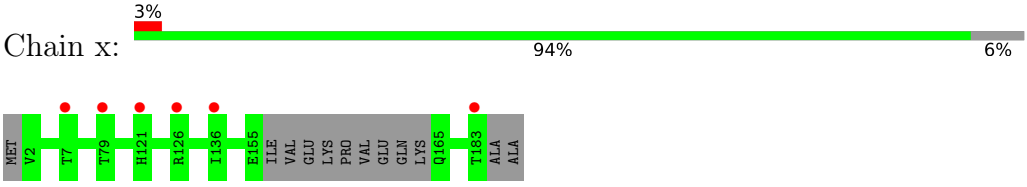
• Molecule 17: Ribosomal protein L13

Chain BJ:



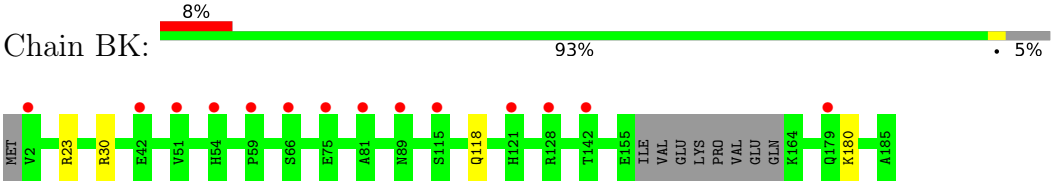
• Molecule 18: Ribosomal protein L22

Chain x:



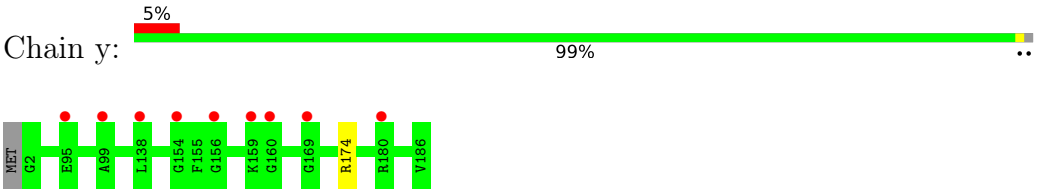
• Molecule 18: Ribosomal protein L22

Chain BK:



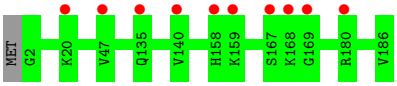
• Molecule 19: 60S ribosomal protein L18-A

Chain y:



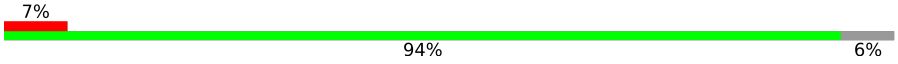
• Molecule 19: 60S ribosomal protein L18-A

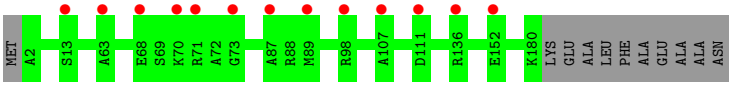
Chain BL:



• Molecule 20: 60S ribosomal protein L19-A

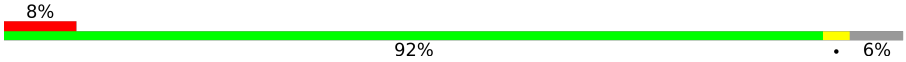
Chain z:

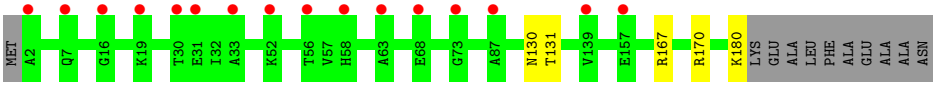




• Molecule 20: 60S ribosomal protein L19-A

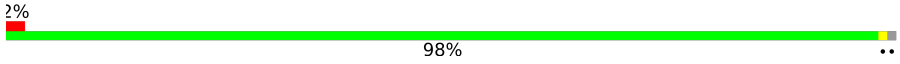
Chain BM:

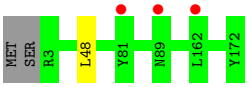




• Molecule 21: 60S ribosomal protein L20

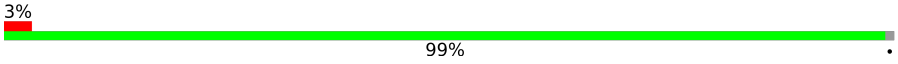
Chain 0:

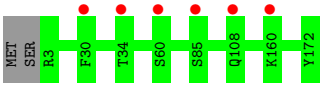




• Molecule 21: 60S ribosomal protein L20

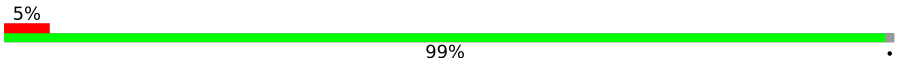
Chain BN:

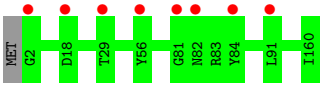




• Molecule 22: 60S ribosomal protein L21-A

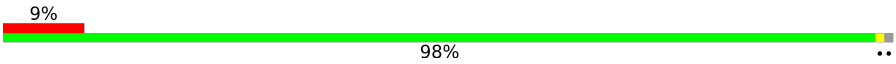
Chain 2:

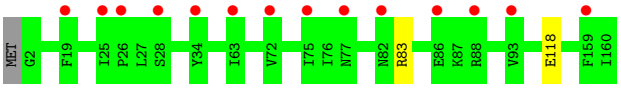




• Molecule 22: 60S ribosomal protein L21-A

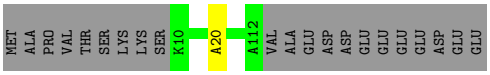
Chain BO:





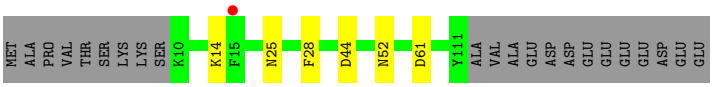
• Molecule 23: 60S ribosomal protein L22-B

Chain 5:



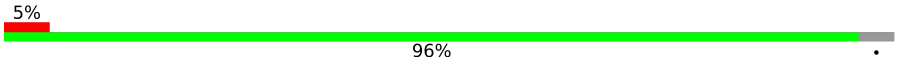
• Molecule 23: 60S ribosomal protein L22-B

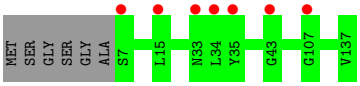
Chain BP:



• Molecule 24: 60S ribosomal protein L23-A

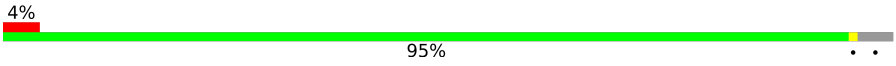
Chain 6:

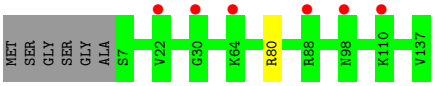




• Molecule 24: 60S ribosomal protein L23-A

Chain BQ:



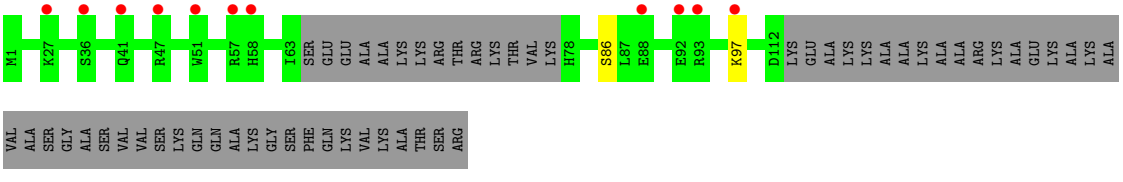


• Molecule 25: 60S ribosomal protein L24-A

Chain 7:

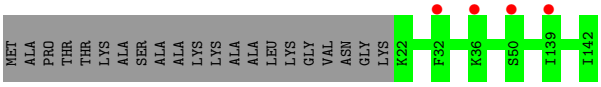
• Molecule 25: 60S ribosomal protein L24-A

Chain BR:

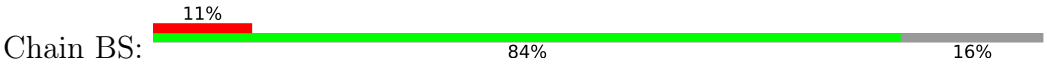


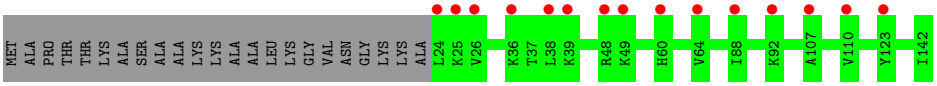
• Molecule 26: 60S ribosomal protein L25

Chain 8:

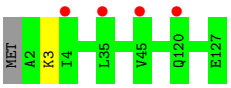


• Molecule 26: 60S ribosomal protein L25

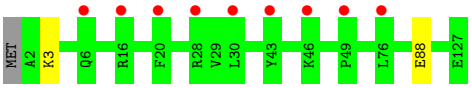




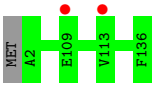
• Molecule 27: Ribosomal protein L24



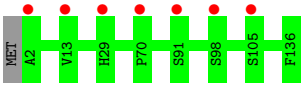
• Molecule 27: Ribosomal protein L24



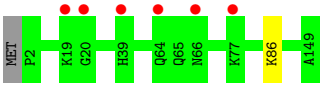
• Molecule 28: 60S ribosomal protein L27



• Molecule 28: 60S ribosomal protein L27

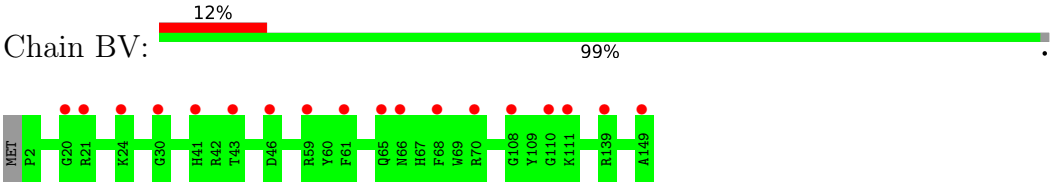


• Molecule 29: 60S ribosomal protein L28



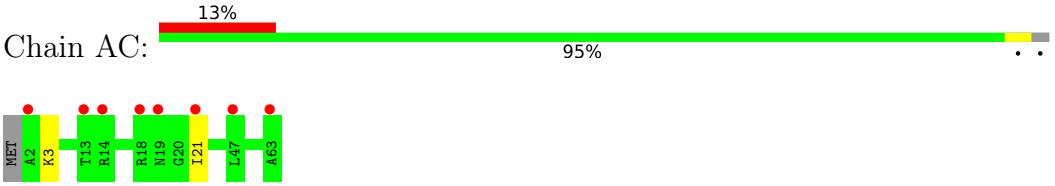
• Molecule 29: 60S ribosomal protein L28

Chain BV:



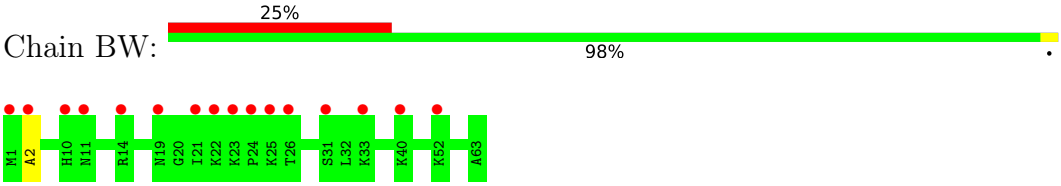
• Molecule 30: 60S ribosomal protein L29

Chain AC:



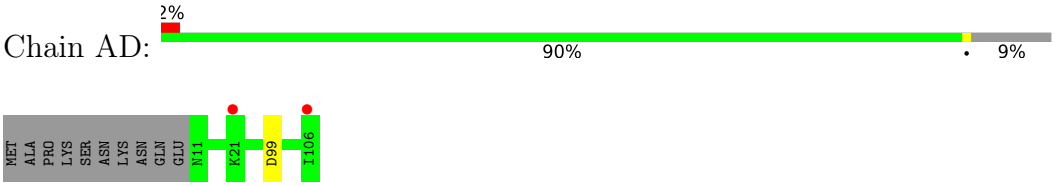
• Molecule 30: 60S ribosomal protein L29

Chain BW:



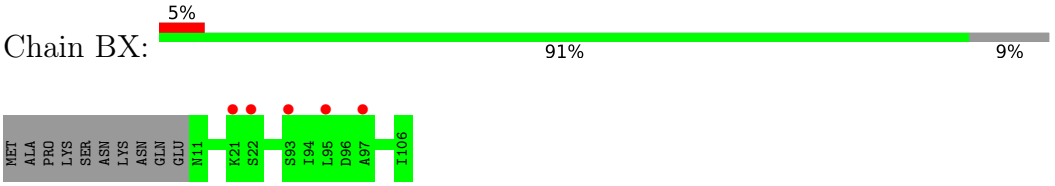
• Molecule 31: 60S ribosomal protein L30

Chain AD:



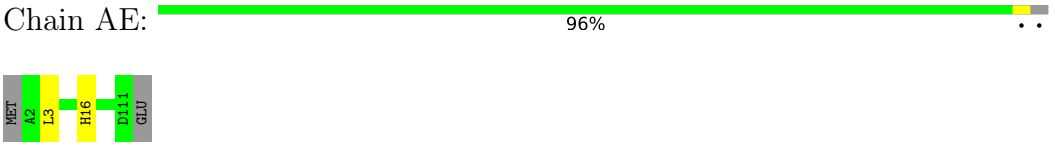
• Molecule 31: 60S ribosomal protein L30

Chain BX:



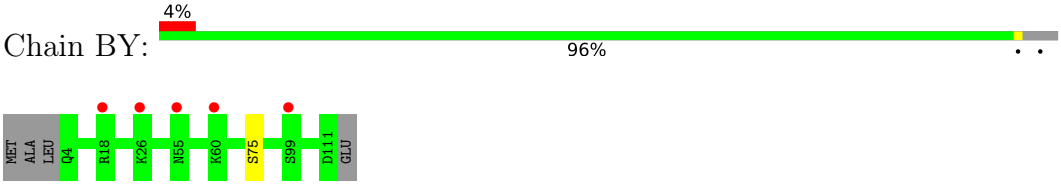
• Molecule 32: 60S ribosomal protein L31-B

Chain AE:



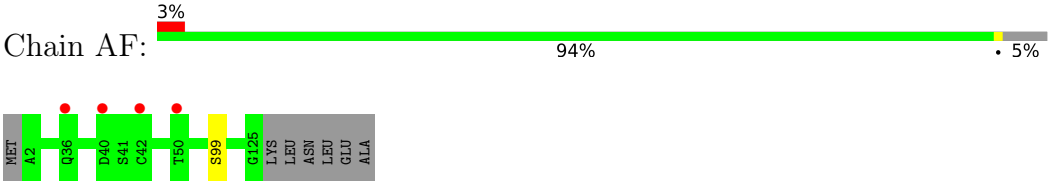
• Molecule 32: 60S ribosomal protein L31-B

Chain BY:



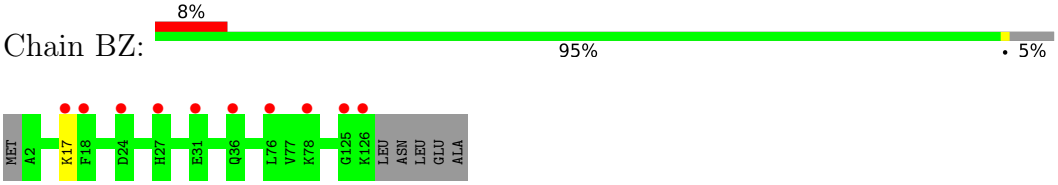
• Molecule 33: 60S ribosomal protein L32

Chain AF:



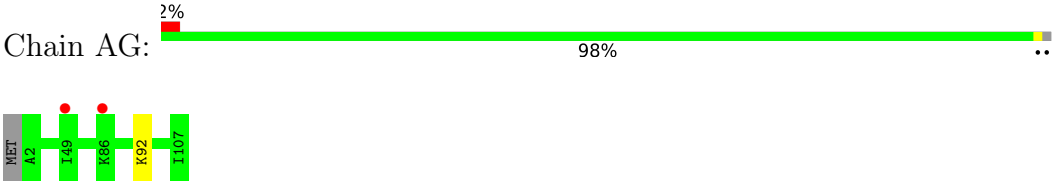
• Molecule 33: 60S ribosomal protein L32

Chain BZ:



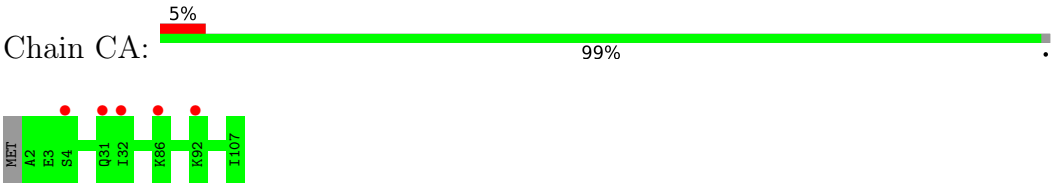
• Molecule 34: 60S ribosomal protein L33-A

Chain AG:



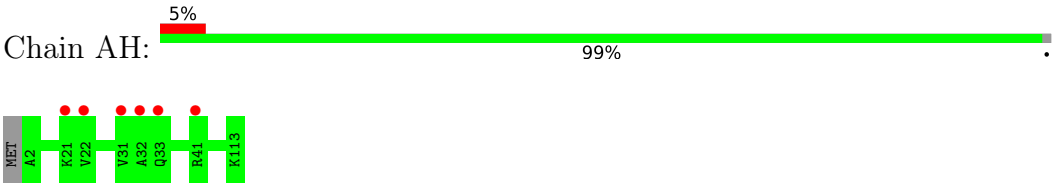
• Molecule 34: 60S ribosomal protein L33-A

Chain CA:



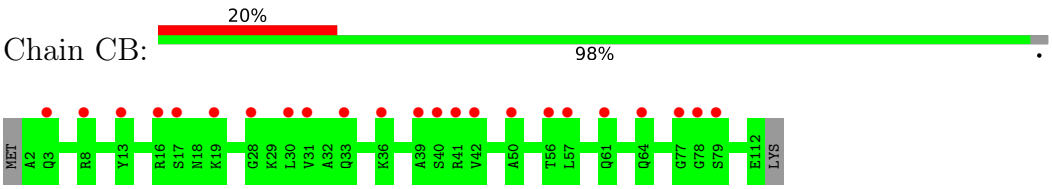
• Molecule 35: 60S ribosomal protein L34-B

Chain AH:



• Molecule 35: 60S ribosomal protein L34-B

Chain CB:

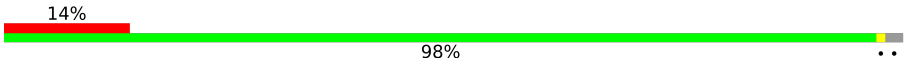


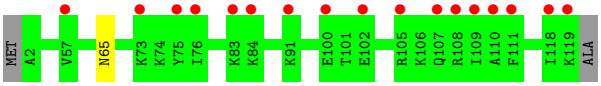
• Molecule 36: Ribosomal protein L29

Chain AI:

• Molecule 36: Ribosomal protein L29

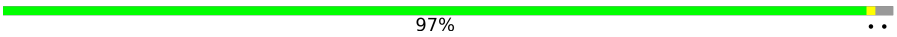
Chain CC:





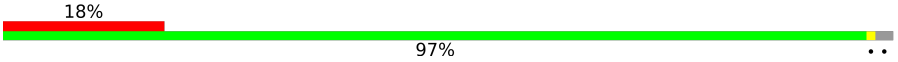
• Molecule 37: 60S ribosomal protein L36

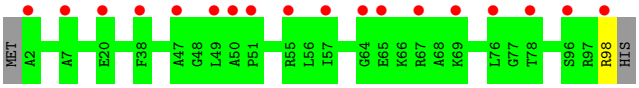
Chain AJ:



• Molecule 37: 60S ribosomal protein L36

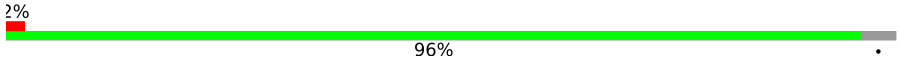
Chain CD:

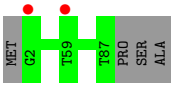




• Molecule 38: 60S ribosomal protein L37-B

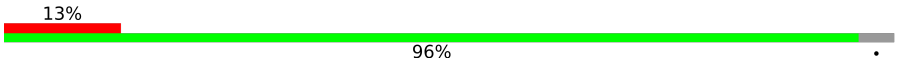
Chain AK:

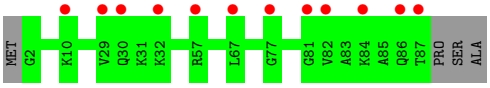




• Molecule 38: 60S ribosomal protein L37-B

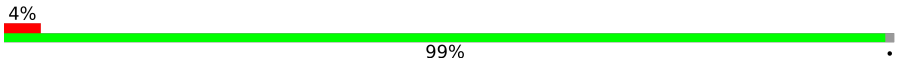
Chain CE:

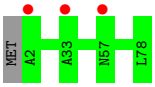




• Molecule 39: 60S ribosomal protein L38

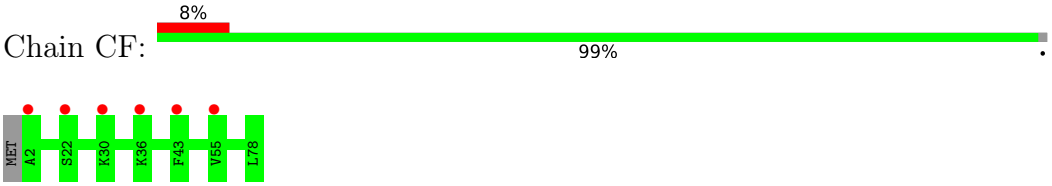
Chain AL:





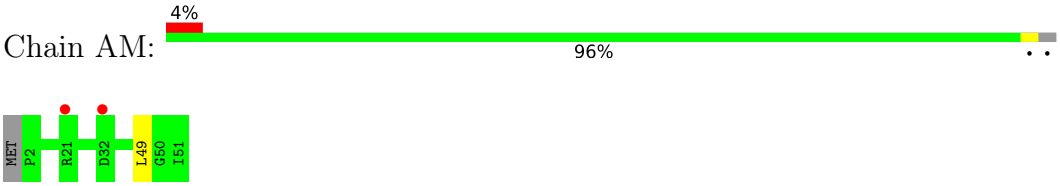
• Molecule 39: 60S ribosomal protein L38

Chain CF:



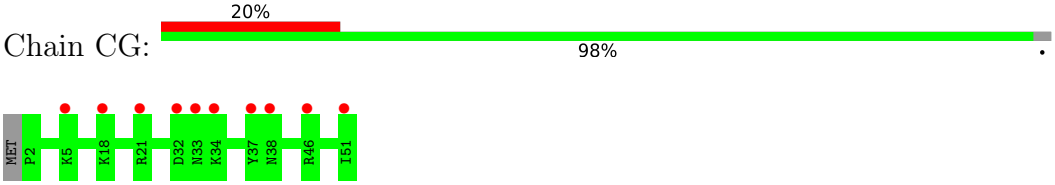
• Molecule 40: 60S ribosomal protein L39

Chain AM:



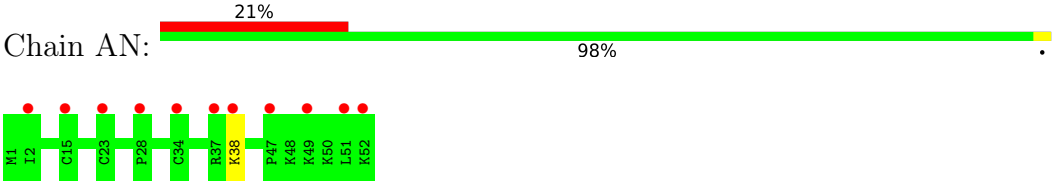
• Molecule 40: 60S ribosomal protein L39

Chain CG:



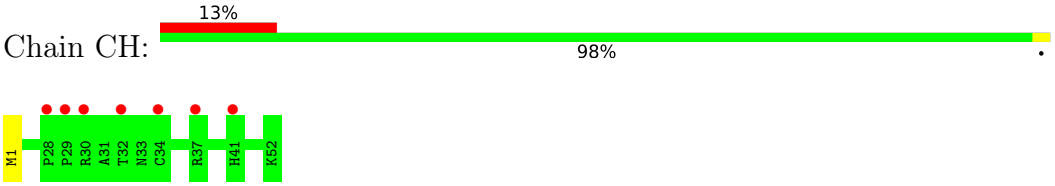
• Molecule 41: 60S ribosomal protein L40-B

Chain AN:



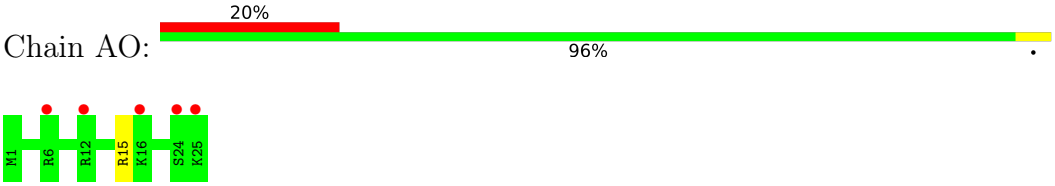
• Molecule 41: 60S ribosomal protein L40-B

Chain CH:



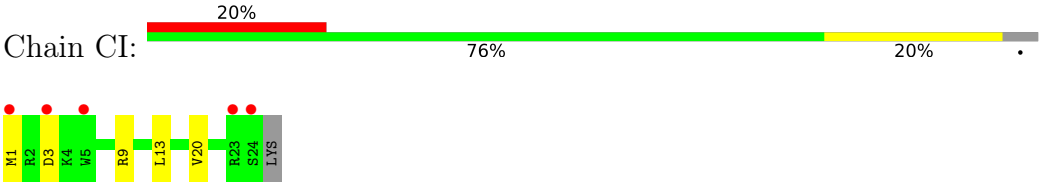
• Molecule 42: 60S ribosomal protein L41

Chain AO:



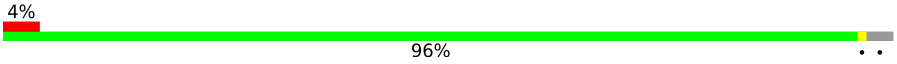
• Molecule 42: 60S ribosomal protein L41

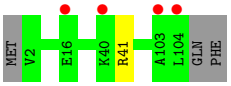
Chain CI:



• Molecule 43: 60S ribosomal protein L42-B

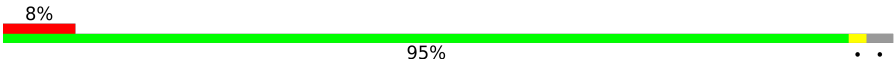
Chain AP:

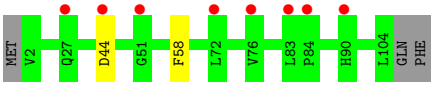




• Molecule 43: 60S ribosomal protein L42-B

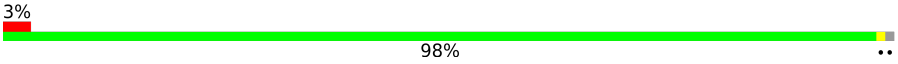
Chain CJ:

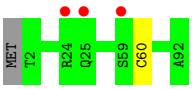




• Molecule 44: 60S ribosomal protein L43-A

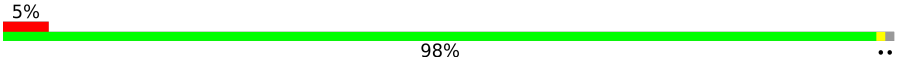
Chain AQ:

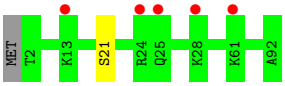




• Molecule 44: 60S ribosomal protein L43-A

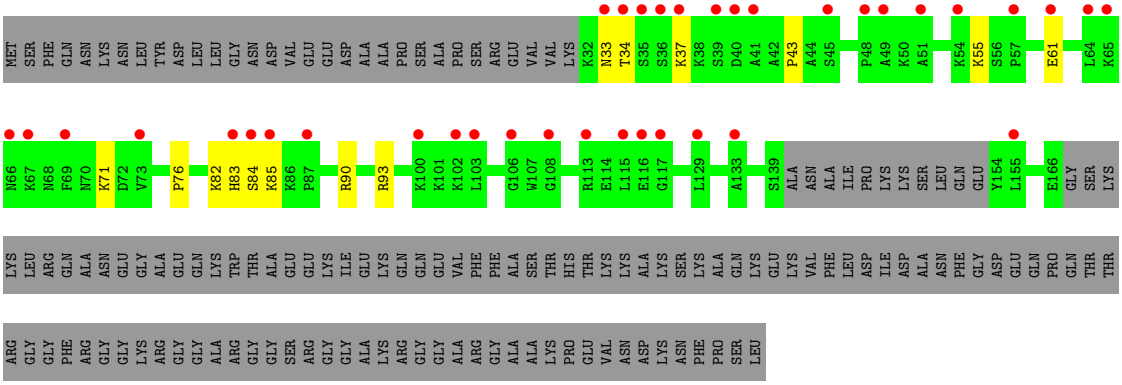
Chain CK:





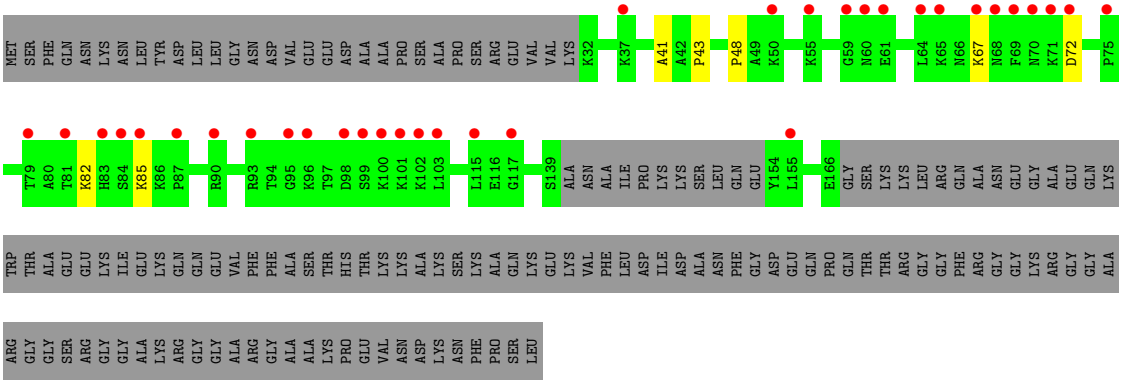
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

Chain i:



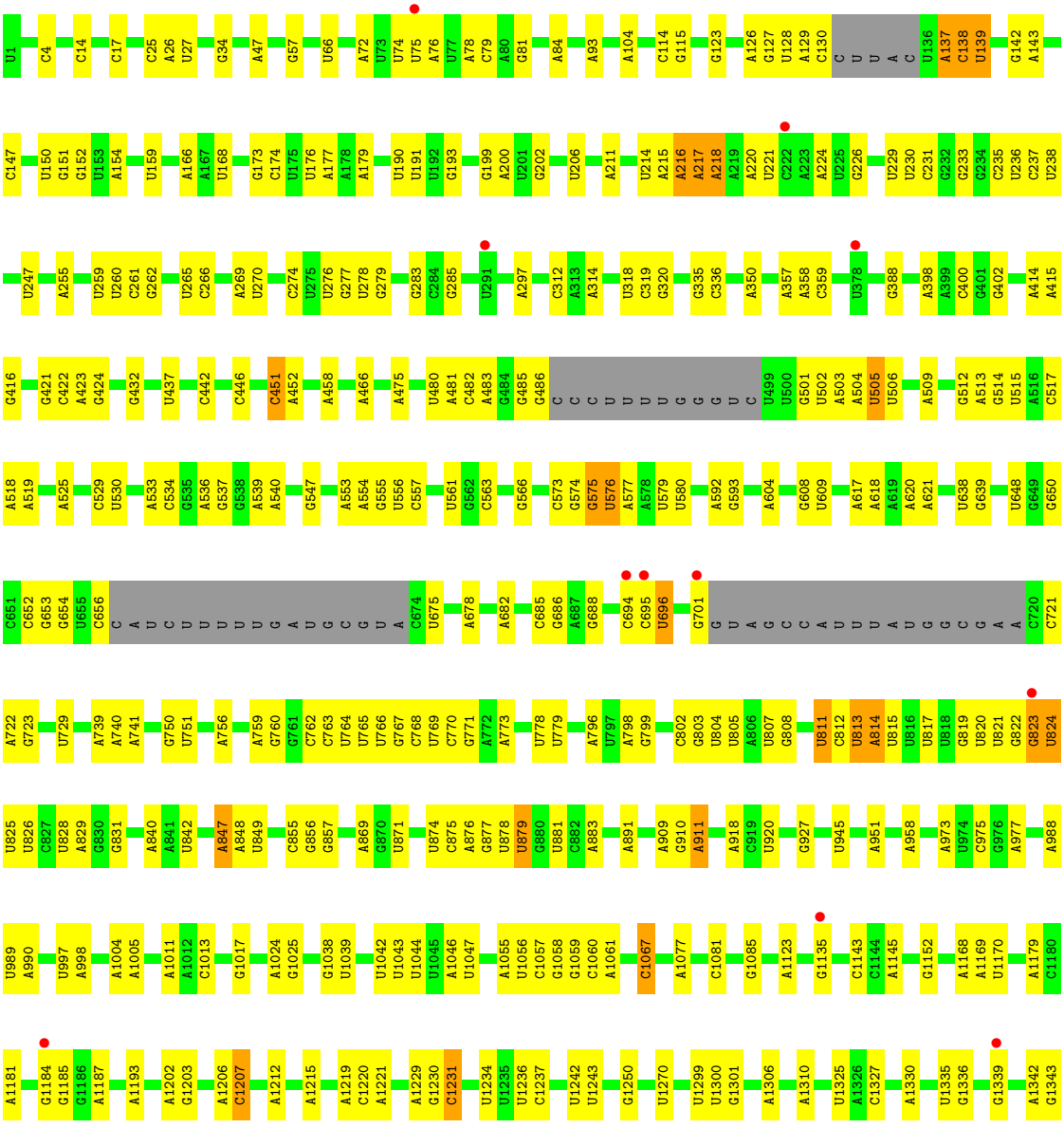
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

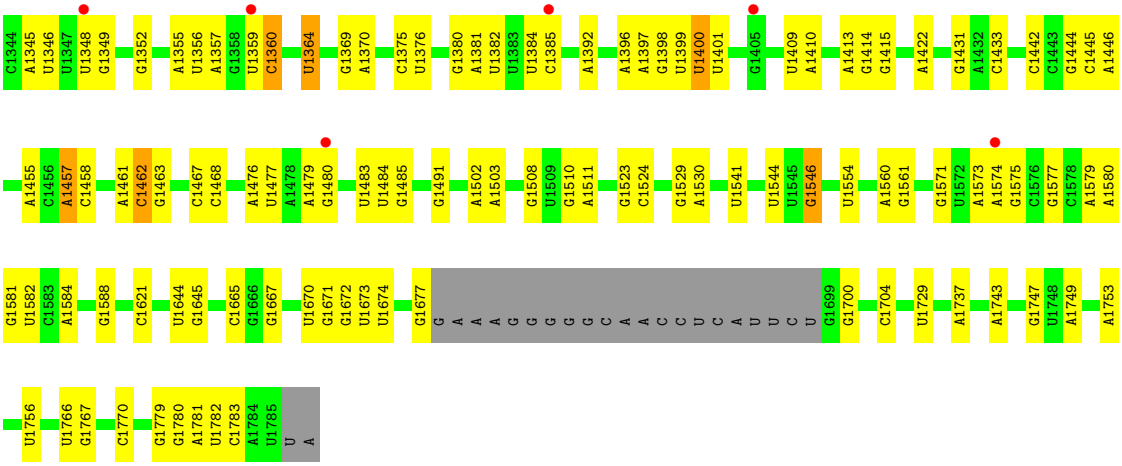
Chain CL:



• Molecule 46: 18S ribosomal RNA

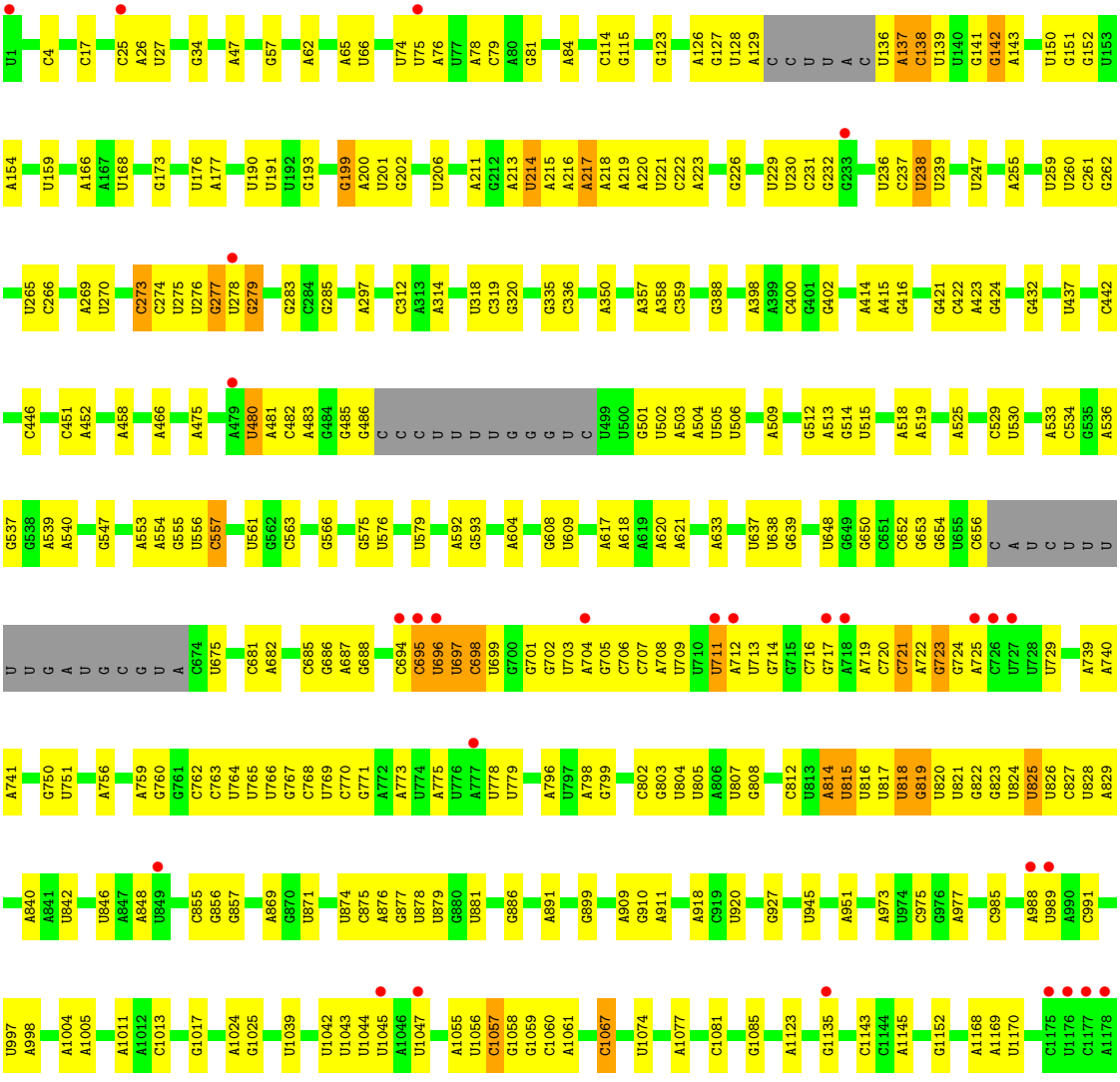
Chain B:

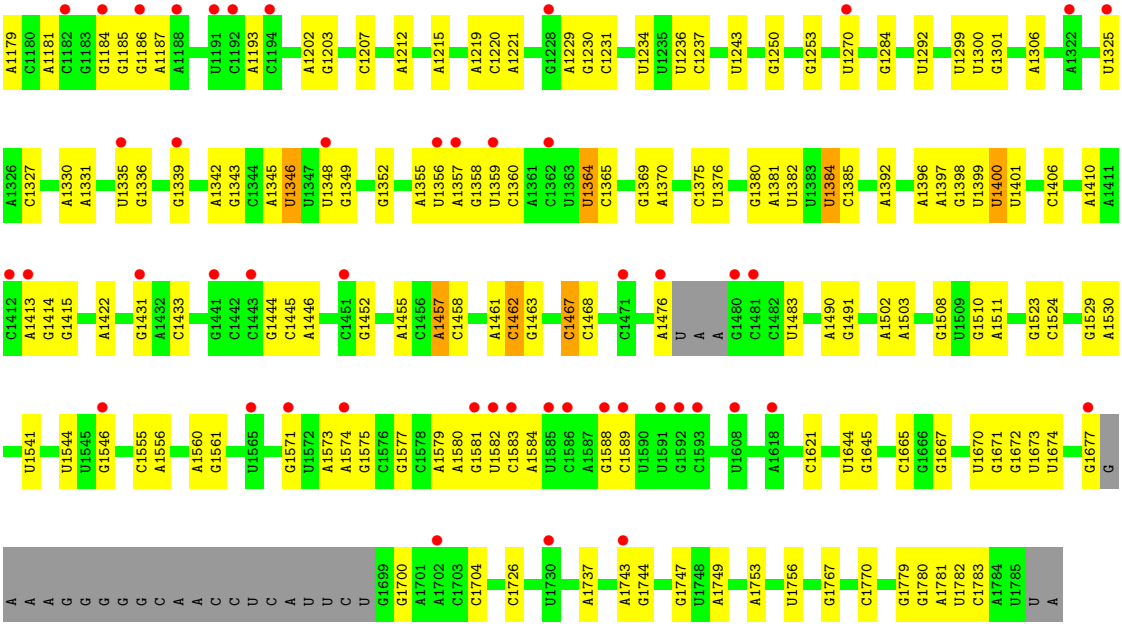




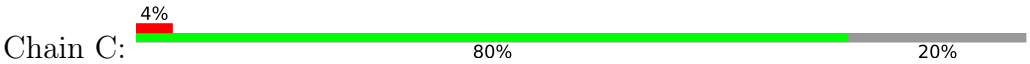
• Molecule 46: 18S ribosomal RNA

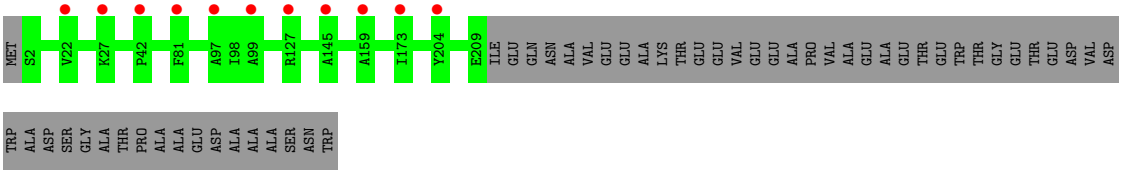
Chain CM:



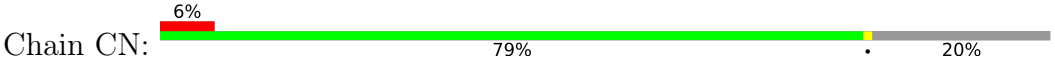


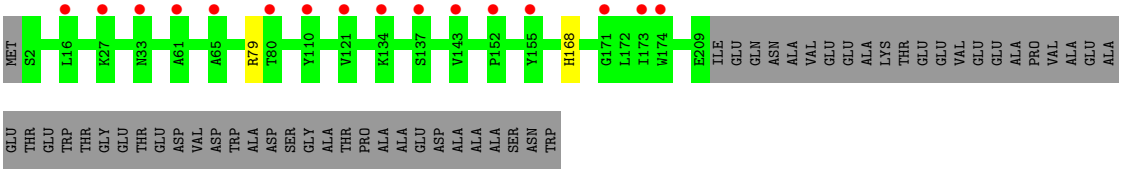
• Molecule 47: 40S ribosomal protein S0



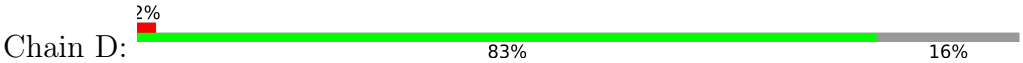


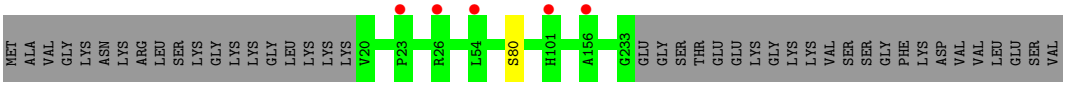
• Molecule 47: 40S ribosomal protein S0



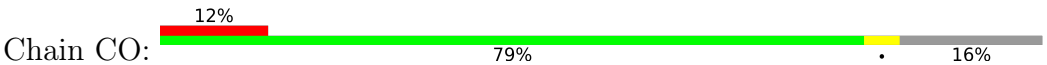


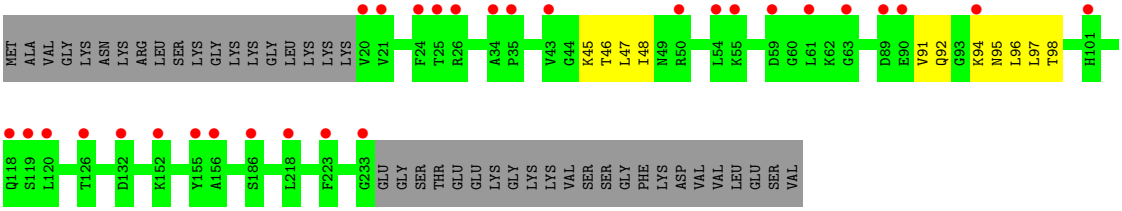
• Molecule 48: 40S ribosomal protein S1



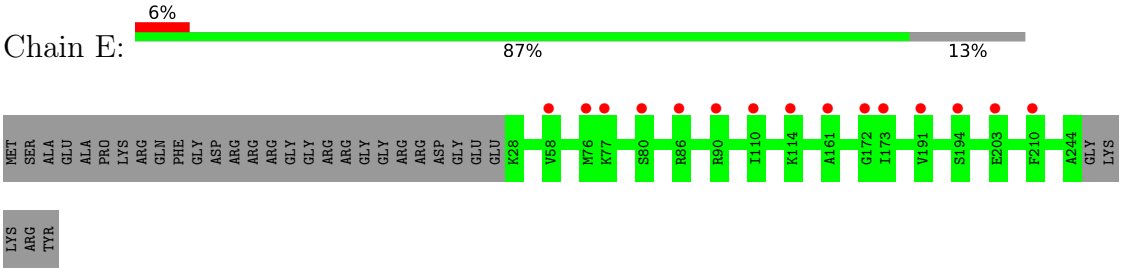


• Molecule 48: 40S ribosomal protein S1

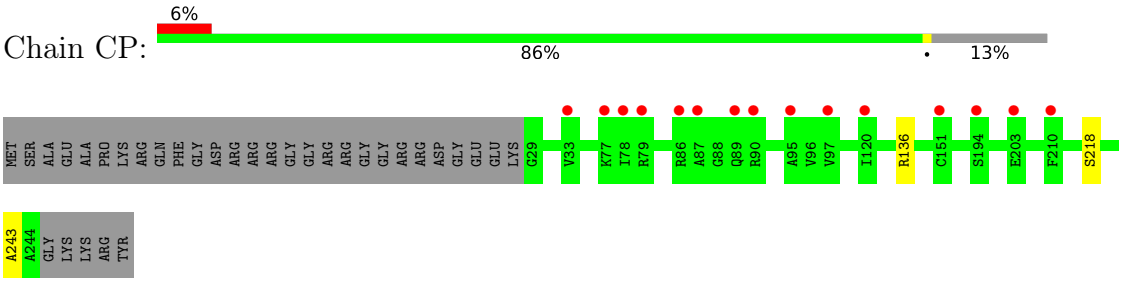




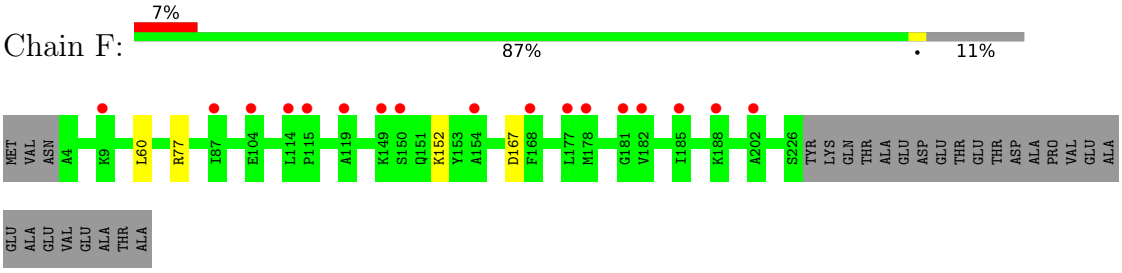
• Molecule 49: Ribosomal protein S5



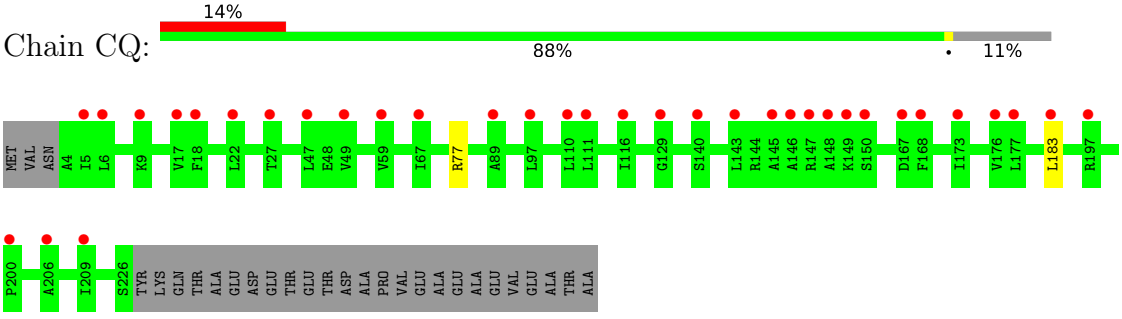
• Molecule 49: Ribosomal protein S5



• Molecule 50: Ribosomal protein S3

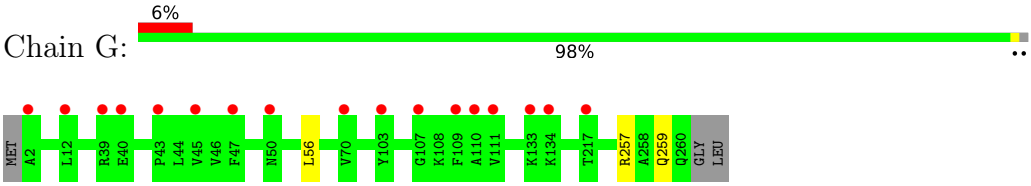


• Molecule 50: Ribosomal protein S3



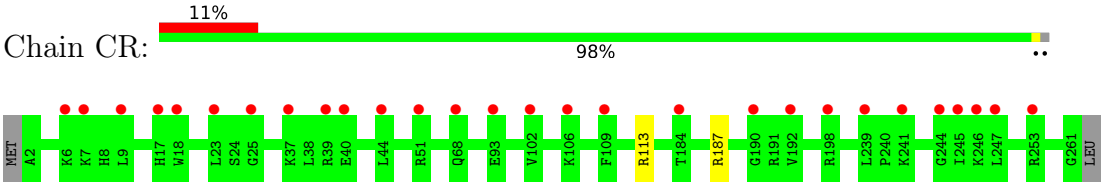
• Molecule 51: 40S ribosomal protein S4

Chain G:



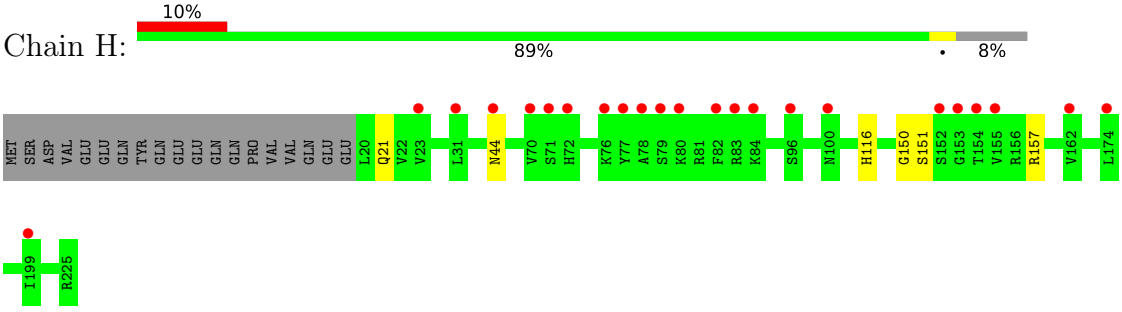
• Molecule 51: 40S ribosomal protein S4

Chain CR:



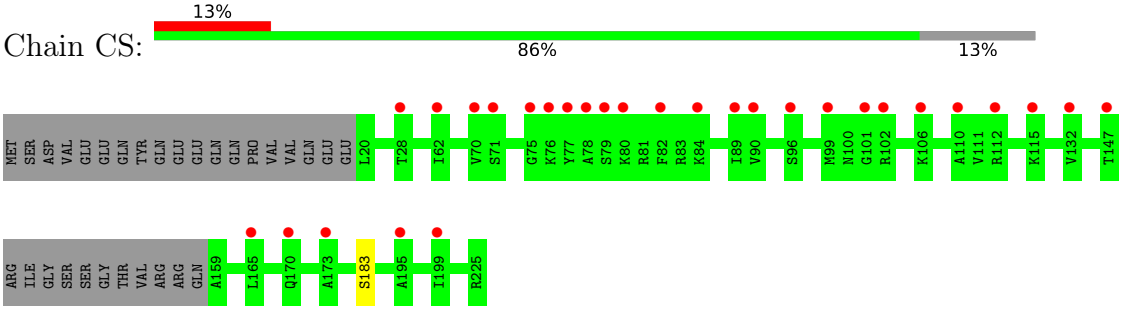
• Molecule 52: Ribosomal protein S7

Chain H:



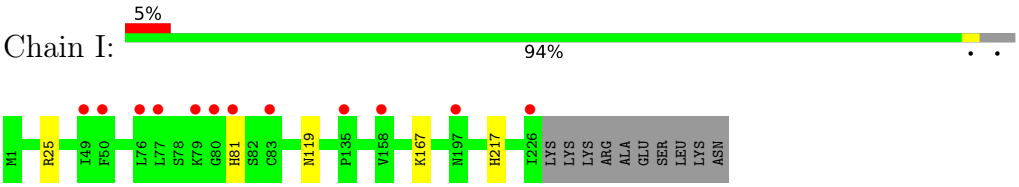
• Molecule 52: Ribosomal protein S7

Chain CS:



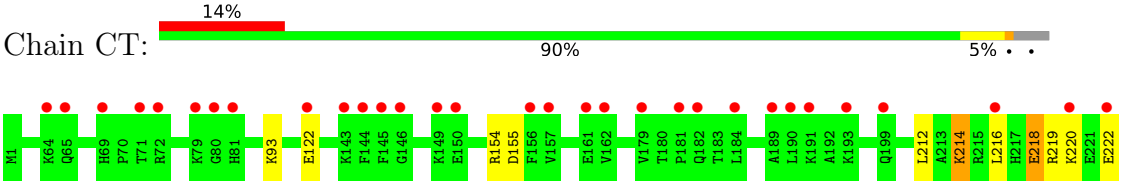
• Molecule 53: 40S ribosomal protein S6

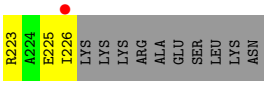
Chain I:



• Molecule 53: 40S ribosomal protein S6

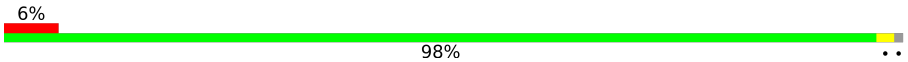
Chain CT:

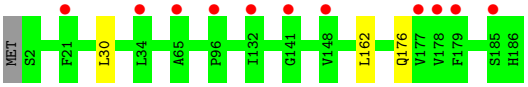




• Molecule 54: 40S ribosomal protein S7

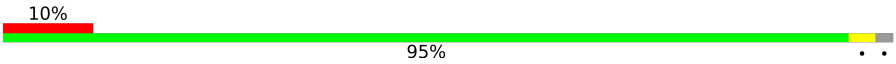
Chain J:





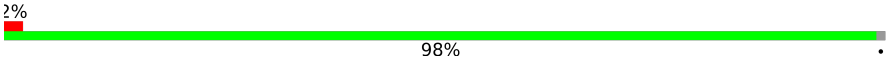
• Molecule 54: 40S ribosomal protein S7

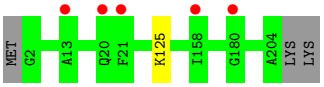
Chain CU:



• Molecule 55: 40S ribosomal protein S8

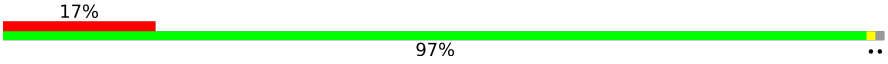
Chain K:

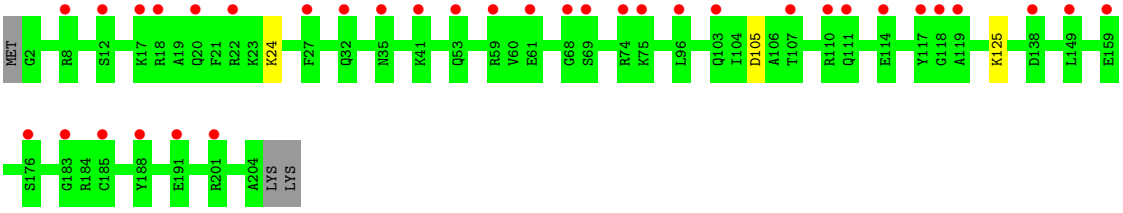




• Molecule 55: 40S ribosomal protein S8

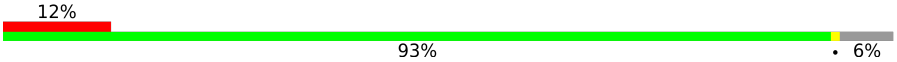
Chain CV:

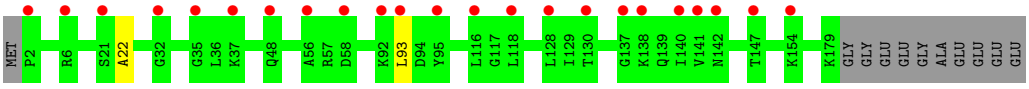




• Molecule 56: Ribosomal protein S4

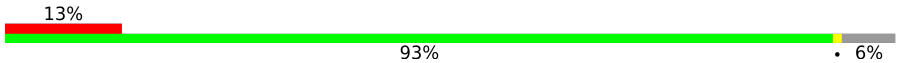
Chain L:

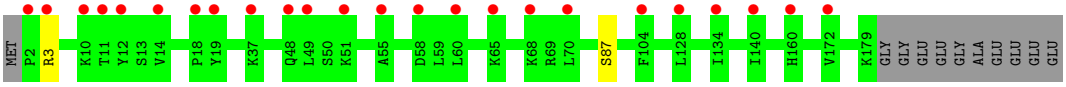




• Molecule 56: Ribosomal protein S4

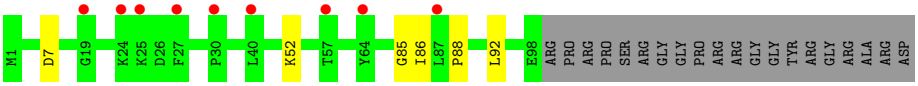
Chain CW:





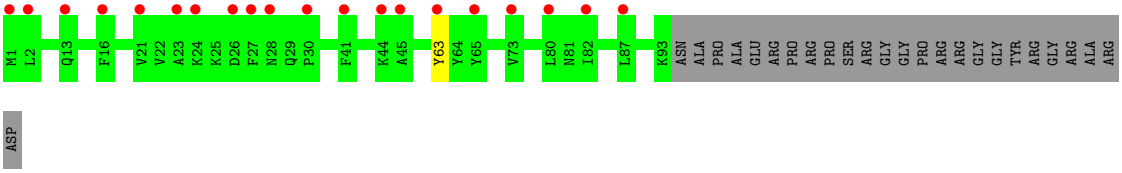
• Molecule 57: 40S ribosomal protein S10-A

Chain M:



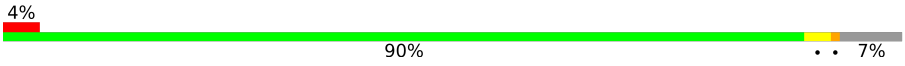
• Molecule 57: 40S ribosomal protein S10-A

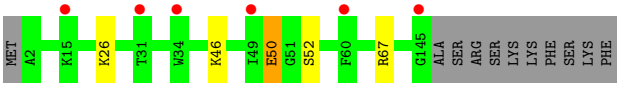
Chain CX:



• Molecule 58: 40S ribosomal protein S11A

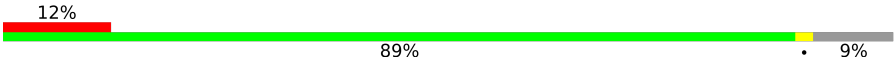
Chain N:

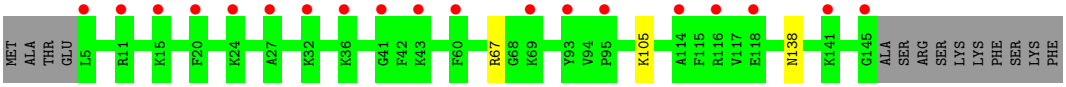




• Molecule 58: 40S ribosomal protein S11A

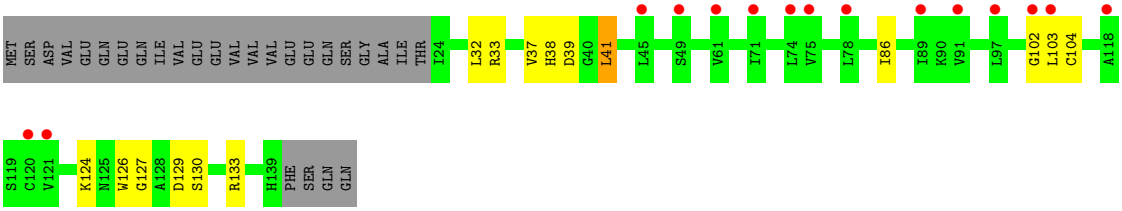
Chain CY:





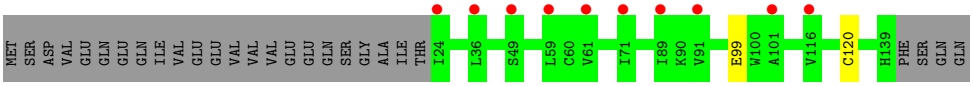
• Molecule 59: 40S ribosomal protein S12

Chain O:



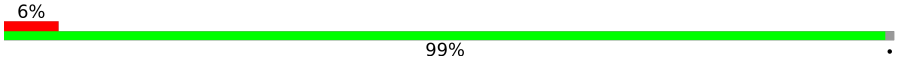
• Molecule 59: 40S ribosomal protein S12

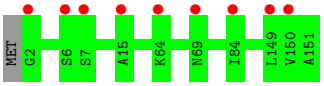
Chain CZ:



• Molecule 60: 40S ribosomal protein S13

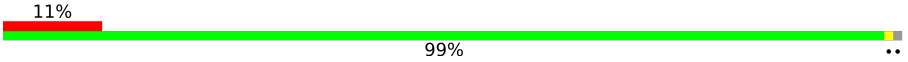
Chain P:

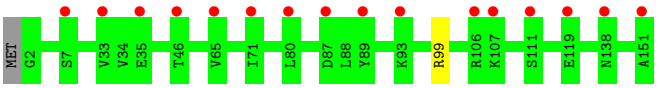




• Molecule 60: 40S ribosomal protein S13

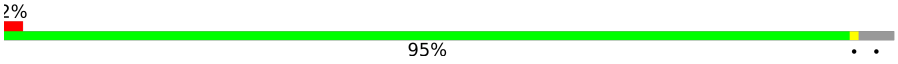
Chain DA:

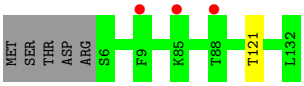




• Molecule 61: 40S ribosomal protein S14-A

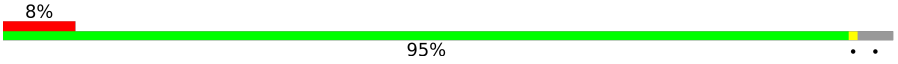
Chain Q:

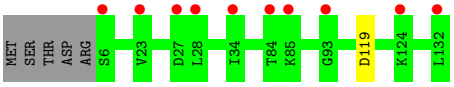




• Molecule 61: 40S ribosomal protein S14-A

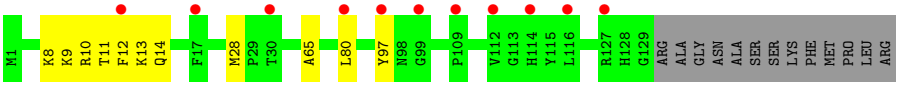
Chain DB:





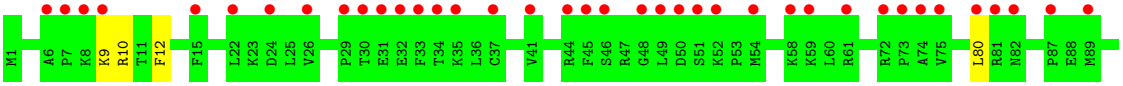
• Molecule 62: 40S ribosomal protein S15

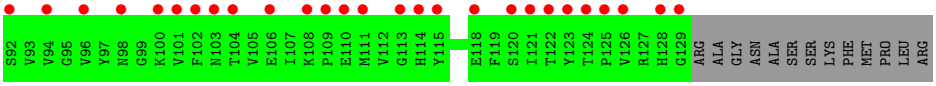
Chain R:



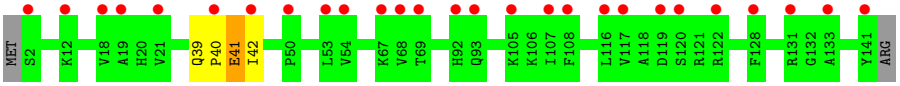
• Molecule 62: 40S ribosomal protein S15

Chain DC:

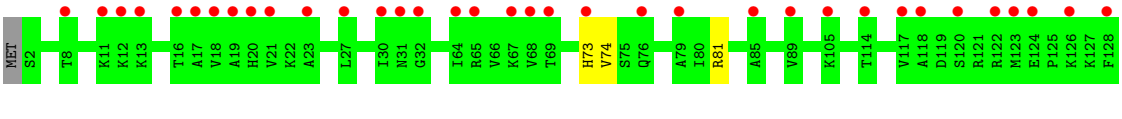




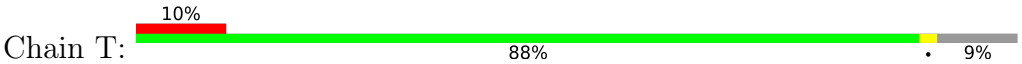
• Molecule 63: 40S ribosomal protein S16

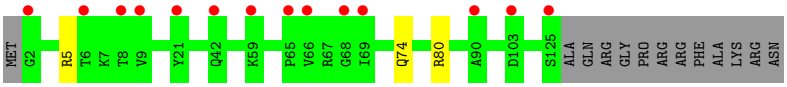


• Molecule 63: 40S ribosomal protein S16

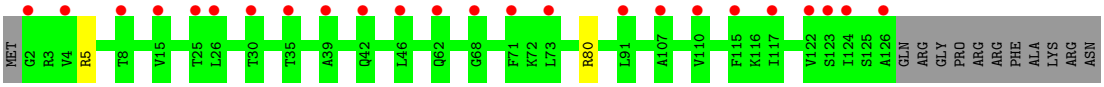


• Molecule 64: 40S ribosomal protein S17-B

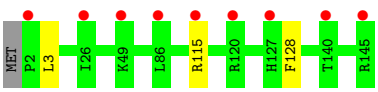




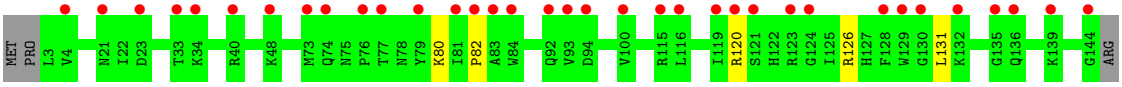
• Molecule 64: 40S ribosomal protein S17-B



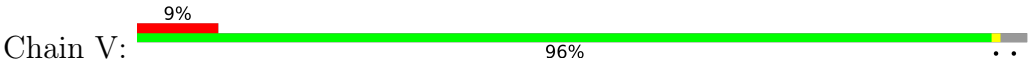
• Molecule 65: 40S ribosomal protein S18-B

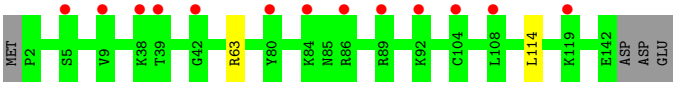


• Molecule 65: 40S ribosomal protein S18-B

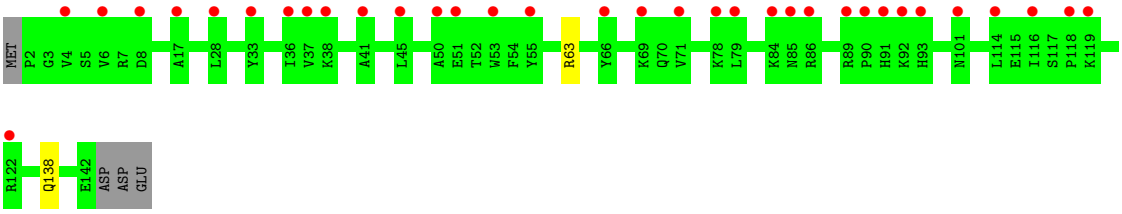


• Molecule 66: 40S ribosomal protein S19-A

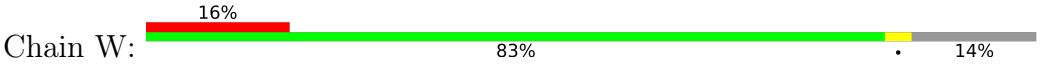


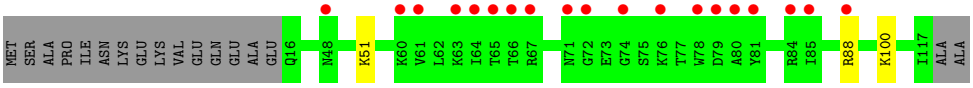


• Molecule 66: 40S ribosomal protein S19-A

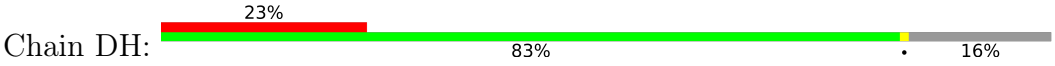


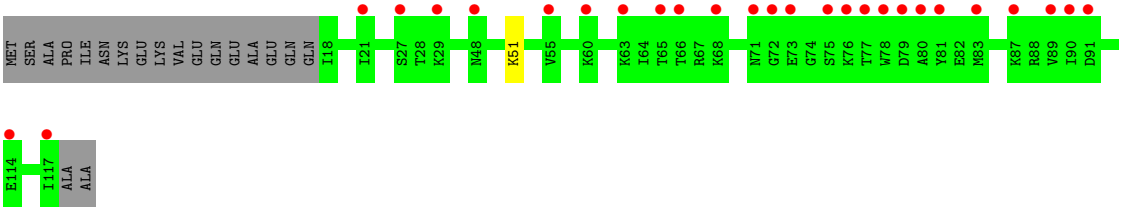
• Molecule 67: Ribosomal protein S10



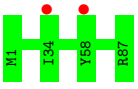


• Molecule 67: Ribosomal protein S10



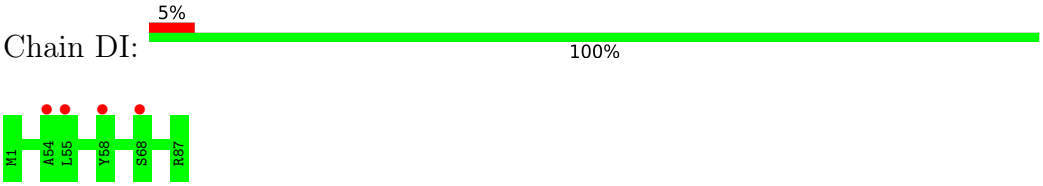


• Molecule 68: 40S ribosomal protein S21



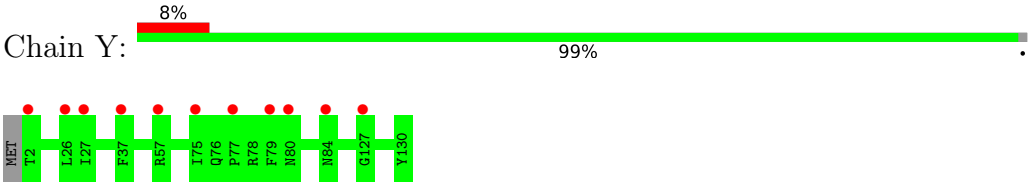
• Molecule 68: 40S ribosomal protein S21

Chain DI:



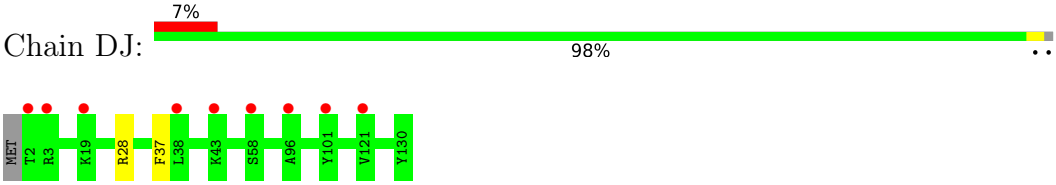
• Molecule 69: 40S ribosomal protein S22-A

Chain Y:



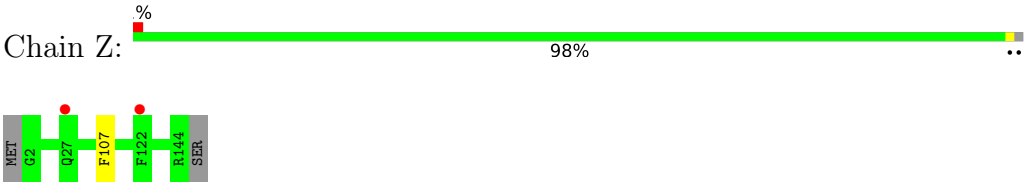
• Molecule 69: 40S ribosomal protein S22-A

Chain DJ:



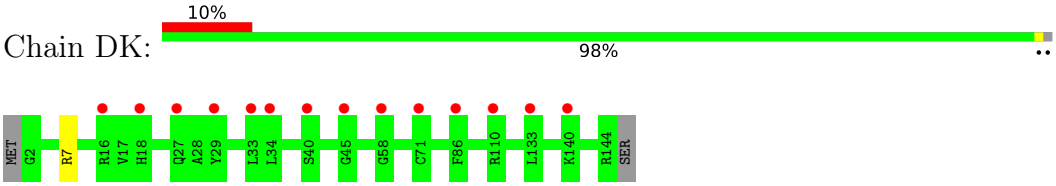
• Molecule 70: Ribosomal protein S23 (S12)

Chain Z:



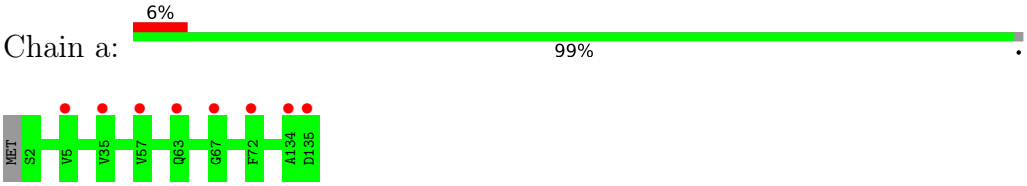
• Molecule 70: Ribosomal protein S23 (S12)

Chain DK:



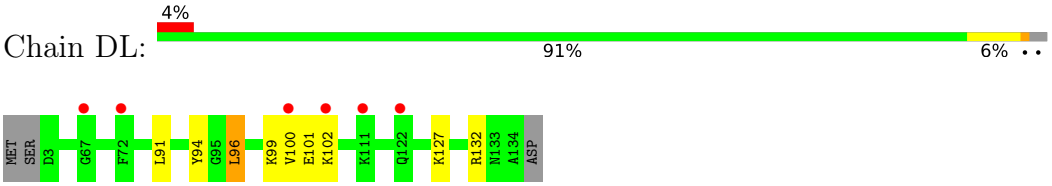
• Molecule 71: 40S ribosomal protein S24

Chain a:



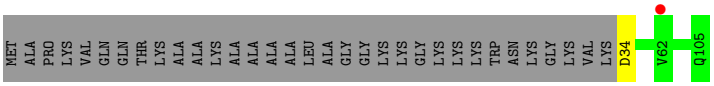
• Molecule 71: 40S ribosomal protein S24

Chain DL:



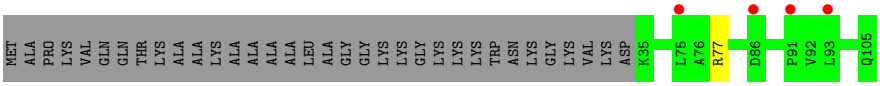
• Molecule 72: 40S ribosomal protein S25

Chain b:



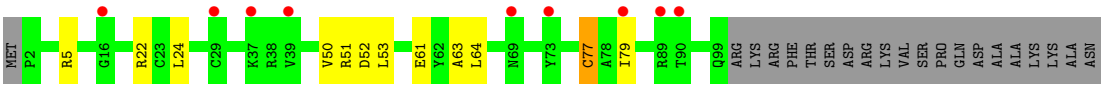
• Molecule 72: 40S ribosomal protein S25

Chain DM:



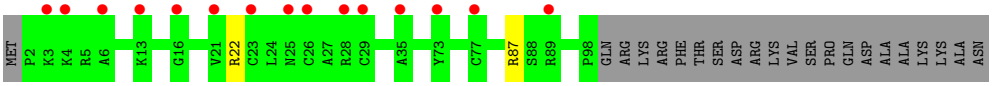
• Molecule 73: 40S ribosomal protein S26

Chain c:



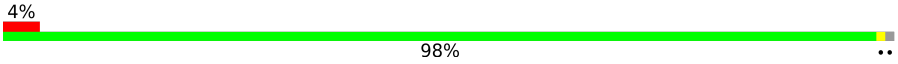
• Molecule 73: 40S ribosomal protein S26

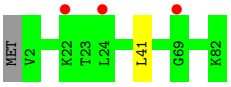
Chain DN:



• Molecule 74: 40S ribosomal protein S27

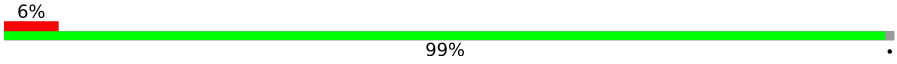
Chain d:

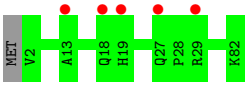




• Molecule 74: 40S ribosomal protein S27

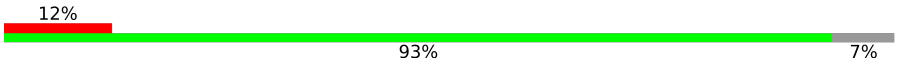
Chain DO:

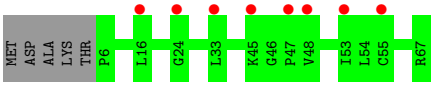




• Molecule 75: 40S ribosomal protein S28-B

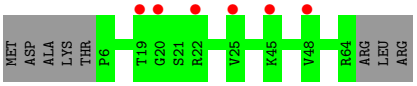
Chain e:





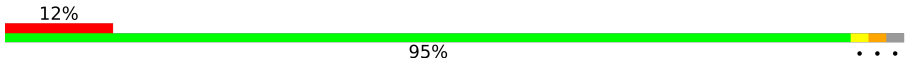
• Molecule 75: 40S ribosomal protein S28-B

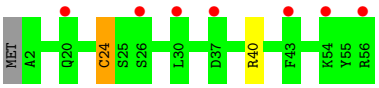
Chain DP:



• Molecule 76: 40S ribosomal protein S29A

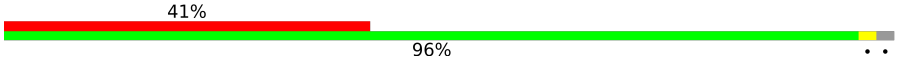
Chain f:

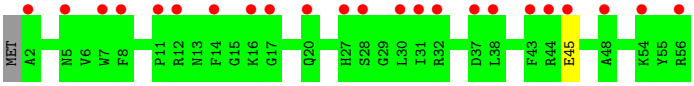




• Molecule 76: 40S ribosomal protein S29A

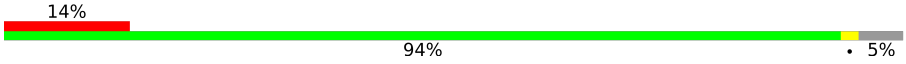
Chain DQ:

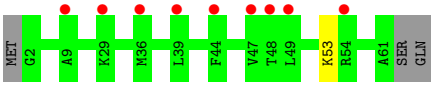




• Molecule 77: 40S ribosomal protein S30

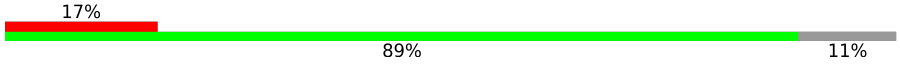
Chain g:

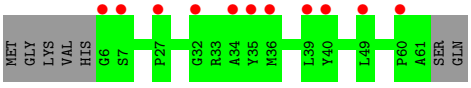




• Molecule 77: 40S ribosomal protein S30

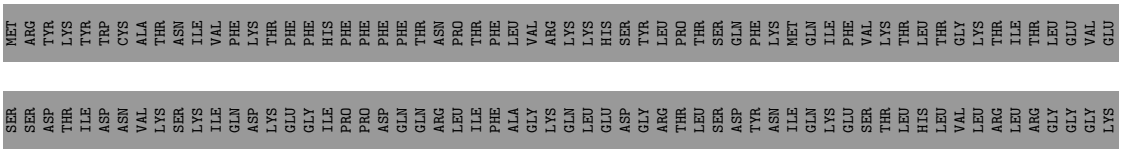
Chain DR:

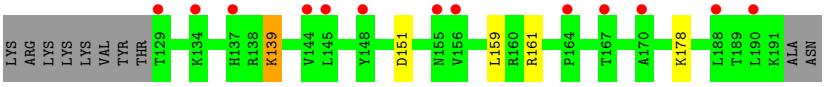




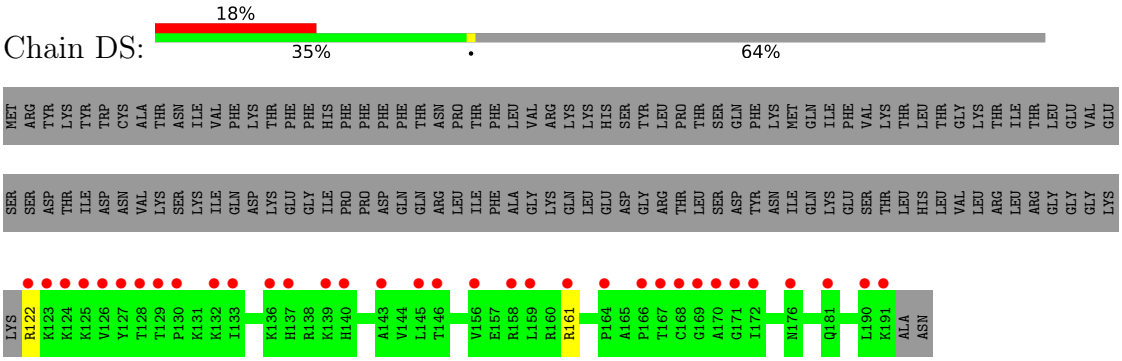
• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

Chain h:

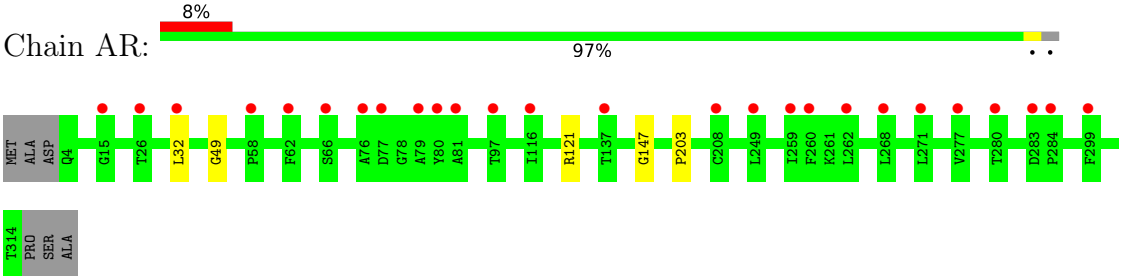




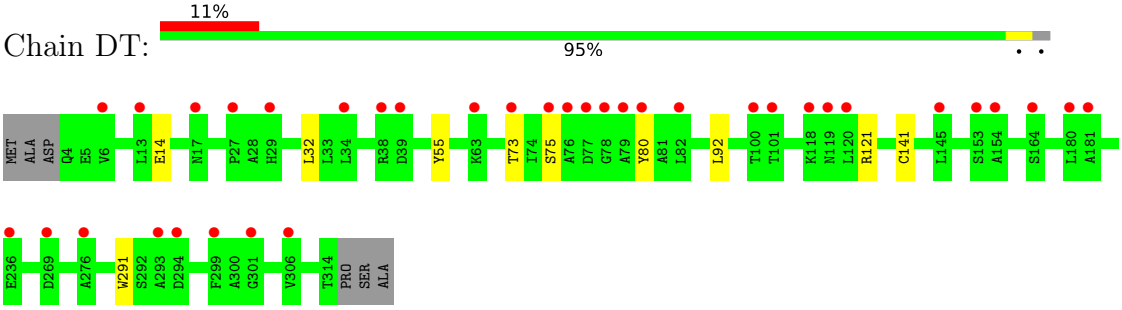
• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein



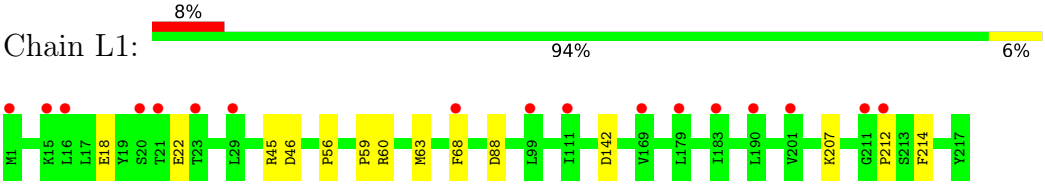
• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein



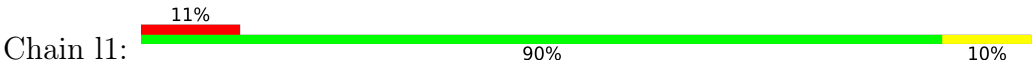
• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

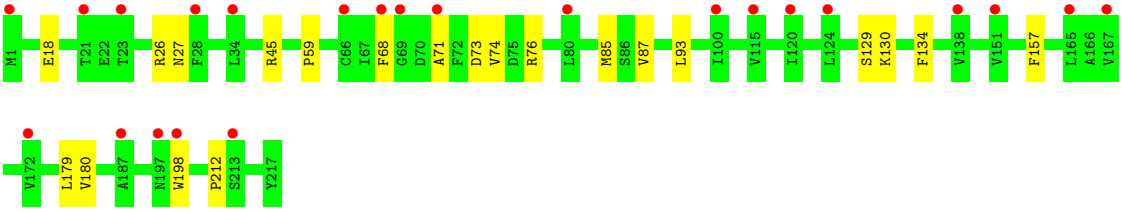


• Molecule 80: Ribosomal protein



• Molecule 80: Ribosomal protein




M1
E18
T21
E22
T23
R26
N27
F28
L34
R45
P59
C66
I67
F68
G69
D70
A71
F72
D73
V74
D75
R76
L80
M85
S86
V87
L93
I100
V115
I120
L124
S129
K130
F134
V138
V151
F157
L165
A166
V167
V172
L179
V180
A187
N197
W198
P212
S213
Y217

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	298.32Å 293.37Å 451.08Å 90.00° 100.16° 90.00°	Depositor
Resolution (Å)	177.03 – 3.30 177.03 – 3.30	Depositor EDS
% Data completeness (in resolution range)	99.3 (177.03-3.30) 88.6 (177.03-3.30)	Depositor EDS
R_{merge}	0.69	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.74 (at 3.19Å)	Xtriage
Refinement program	PHENIX 1.19rc4_4035	Depositor
R, R_{free}	0.254 , 0.297 0.256 , 0.296	Depositor DCC
R_{free} test set	1824 reflections (0.16%)	wwPDB-VP
Wilson B-factor (Å^2)	60.9	Xtriage
Anisotropy	0.055	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.24 , 57.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.42$, $< L^2 > = 0.24$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.88	EDS
Total number of atoms	405513	wwPDB-VP
Average B, all atoms (Å^2)	102.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.33% 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: ZN, MG, PAR, 3K5

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	1	0.41	0/76973	1.00	183/119996 (0.2%)
1	AS	0.40	0/76539	1.00	199/119319 (0.2%)
2	3	0.34	0/2884	0.85	1/4492 (0.0%)
2	AT	0.36	0/2884	0.85	0/4492
3	4	0.35	0/3724	0.90	5/5798 (0.1%)
3	AU	0.32	0/3746	0.89	6/5832 (0.1%)
4	AW	0.30	0/1922	0.62	0/2581
4	j	0.32	0/1922	0.65	0/2581
5	AX	0.32	0/3145	0.65	1/4231 (0.0%)
5	k	0.31	0/3145	0.65	1/4231 (0.0%)
6	AY	0.28	0/2799	0.62	0/3777
6	l	0.32	0/2799	0.66	0/3777
7	AZ	0.30	0/2447	0.64	0/3294
7	m	0.31	0/2479	0.61	0/3337
8	BA	0.30	0/1231	0.62	0/1662
8	n	0.31	0/1263	0.67	0/1703
9	BB	0.32	0/1918	0.59	0/2575
9	o	0.33	0/1918	0.60	0/2575
10	BC	0.30	0/1835	0.62	0/2472
10	p	0.33	0/1869	0.59	0/2519
11	BD	0.30	0/1537	0.62	0/2067
11	q	0.30	0/1537	0.65	0/2067
12	BE	0.31	0/1724	0.65	0/2314
12	r	0.31	0/1724	0.65	0/2314
13	BF	0.30	0/1390	0.68	0/1861
13	s	0.30	0/1390	0.67	0/1861
14	BG	0.29	0/1637	0.65	0/2195
14	t	0.31	0/1637	0.65	0/2195
15	BH	0.32	0/1044	0.64	0/1407
15	u	0.29	0/1044	0.63	1/1407 (0.1%)
16	BI	0.29	0/1753	0.68	0/2347
16	v	0.32	0/1753	0.68	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	BJ	0.31	0/1620	0.64	0/2167
17	w	0.32	0/1620	0.64	0/2167
18	BK	0.29	0/1429	0.65	0/1920
18	x	0.29	0/1410	0.66	0/1895
19	BL	0.30	0/1482	0.66	0/1985
19	y	0.31	0/1482	0.66	0/1985
20	BM	0.28	0/1475	0.70	0/1961
20	z	0.29	0/1475	0.68	0/1961
21	0	0.31	0/1457	0.65	0/1962
21	BN	0.30	0/1457	0.61	0/1962
22	2	0.30	0/1285	0.64	0/1723
22	BO	0.29	0/1285	0.62	0/1723
23	5	0.30	0/846	0.60	0/1140
23	BP	0.35	0/841	0.67	0/1133
24	6	0.30	0/993	0.64	0/1339
24	BQ	0.30	0/993	0.64	0/1339
25	7	0.31	0/958	0.58	0/1267
25	BR	0.30	0/814	0.60	0/1079
26	8	0.29	0/990	0.63	0/1337
26	BS	0.27	0/976	0.61	0/1319
27	9	0.29	0/999	0.61	0/1334
27	BT	0.29	0/999	0.63	0/1334
28	AA	0.31	0/1112	0.58	0/1488
28	BU	0.29	0/1112	0.58	0/1488
29	AB	0.30	0/1199	0.61	0/1607
29	BV	0.31	0/1199	0.63	0/1607
30	AC	0.28	0/503	0.71	0/668
30	BW	0.29	0/522	0.68	0/692
31	AD	0.30	0/738	0.59	0/994
31	BX	0.30	0/738	0.59	0/994
32	AE	0.30	0/907	0.67	2/1219 (0.2%)
32	BY	0.28	0/894	0.66	0/1201
33	AF	0.30	0/1021	0.62	0/1368
33	BZ	0.30	0/1039	0.65	0/1390
34	AG	0.31	0/866	0.60	0/1165
34	CA	0.32	0/895	0.63	0/1201
35	AH	0.31	0/896	0.66	0/1195
35	CB	0.29	0/925	0.66	0/1231
36	AI	0.28	0/1003	0.64	0/1336
36	CC	0.27	0/990	0.66	0/1319
37	AJ	0.29	0/763	0.67	0/1012
37	CD	0.30	0/772	0.67	0/1023
38	AK	0.34	0/690	0.71	0/916

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	CE	0.30	0/690	0.69	0/916
39	AL	0.29	0/623	0.61	0/831
39	CF	0.29	0/632	0.63	0/842
40	AM	0.29	0/447	0.67	0/594
40	CG	0.31	0/447	0.72	0/594
41	AN	0.31	0/425	0.69	0/563
41	CH	0.32	0/436	0.69	0/577
42	AO	0.30	0/237	0.80	0/304
42	CI	0.49	0/228	0.63	0/293
43	AP	0.32	0/840	0.65	0/1110
43	CJ	0.33	0/860	0.65	0/1136
44	AQ	0.34	0/705	0.69	0/940
44	CK	0.32	0/705	0.67	0/940
45	CL	0.34	0/942	0.66	0/1258
45	i	0.38	0/942	0.86	3/1258 (0.2%)
46	B	0.38	0/40832	1.02	84/63622 (0.1%)
46	CM	0.40	0/41169	1.01	92/64148 (0.1%)
47	C	0.27	0/1666	0.58	0/2273
47	CN	0.29	0/1666	0.62	0/2273
48	CO	0.32	0/1750	0.69	0/2354
48	D	0.29	0/1750	0.63	0/2354
49	CP	0.31	0/1648	0.60	0/2237
49	E	0.29	0/1657	0.62	0/2248
50	CQ	0.31	0/1731	0.68	1/2324 (0.0%)
50	F	0.33	0/1731	0.73	1/2324 (0.0%)
51	CR	0.30	0/2096	0.65	0/2822
51	G	0.29	0/2092	0.66	1/2817 (0.0%)
52	CS	0.31	0/1546	0.64	0/2085
52	H	0.30	0/1631	0.65	0/2199
53	CT	0.35	0/1845	0.63	0/2464
53	I	0.30	0/1845	0.68	0/2464
54	CU	0.30	0/1490	0.65	0/2004
54	J	0.31	0/1516	0.68	1/2039 (0.0%)
55	CV	0.30	0/1606	0.69	0/2150
55	K	0.30	0/1606	0.67	0/2150
56	CW	0.28	0/1478	0.65	0/1978
56	L	0.31	0/1478	0.69	1/1978 (0.1%)
57	CX	0.35	0/801	0.66	0/1081
57	M	0.35	0/836	0.71	2/1130 (0.2%)
58	CY	0.31	0/1154	0.66	0/1553
58	N	0.32	0/1175	0.70	1/1582 (0.1%)
59	CZ	0.31	0/892	0.75	0/1203
59	O	0.41	0/892	1.00	2/1203 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
60	DA	0.27	0/1210	0.61	0/1631
60	P	0.28	0/1210	0.60	0/1631
61	DB	0.30	0/953	0.73	0/1279
61	Q	0.31	0/953	0.71	0/1279
62	DC	0.36	0/1038	0.73	1/1395 (0.1%)
62	R	0.37	0/1038	0.73	1/1395 (0.1%)
63	DD	0.30	0/1109	0.63	0/1486
63	S	0.31	0/1109	0.63	0/1486
64	DE	0.28	0/1014	0.68	0/1361
64	T	0.31	0/1009	0.74	0/1354
65	DF	0.32	0/1186	0.80	1/1590 (0.1%)
65	U	0.31	0/1205	0.68	1/1615 (0.1%)
66	DG	0.30	0/1120	0.64	0/1508
66	V	0.31	0/1120	0.72	1/1508 (0.1%)
67	DH	0.29	0/800	0.64	0/1082
67	W	0.30	0/818	0.72	0/1106
68	DI	0.31	0/683	0.67	0/918
68	X	0.31	0/683	0.72	0/918
69	DJ	0.31	0/1049	0.65	0/1412
69	Y	0.29	0/1049	0.63	0/1412
70	DK	0.31	0/1128	0.70	0/1505
70	Z	0.29	0/1128	0.69	0/1505
71	DL	0.35	0/1086	0.67	0/1447
71	a	0.31	0/1100	0.70	0/1466
72	DM	0.29	0/577	0.70	0/778
72	b	0.29	0/585	0.62	0/789
73	DN	0.34	0/782	0.76	0/1048
73	c	0.49	0/791	1.08	5/1060 (0.5%)
74	DO	0.30	0/624	0.66	0/843
74	d	0.30	0/624	0.67	1/843 (0.1%)
75	DP	0.31	0/459	0.79	0/615
75	e	0.32	0/489	0.77	0/654
76	DQ	0.35	0/466	0.73	0/620
76	f	0.33	0/466	0.75	1/620 (0.2%)
77	DR	0.32	0/451	0.72	0/601
77	g	0.40	0/482	0.85	1/642 (0.2%)
78	DS	0.30	0/585	0.75	0/778
78	h	0.33	0/520	0.93	1/693 (0.1%)
79	AR	0.28	0/2451	0.65	1/3337 (0.0%)
79	DT	0.33	0/2451	0.71	3/3337 (0.1%)
80	L1	0.28	0/1737	0.53	0/2335
80	l1	0.29	0/1737	0.57	1/2335 (0.0%)
All	All	0.36	0/433095	0.88	607/635204 (0.1%)

There are no bond length outliers.

All (607) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1224	C	O5'-P-OP2	-18.14	88.93	110.70
46	B	823	G	OP1-P-O3'	-15.09	72.01	105.20
46	B	824	U	O4'-C1'-N1	-13.61	97.31	108.20
73	c	53	LEU	CB-CG-CD2	-12.73	89.37	111.00
1	AS	1576	A	O4'-C1'-N9	11.75	117.60	108.20
1	AS	3160	C	P-O3'-C3'	-11.75	105.61	119.70
46	B	812	C	C6-N1-C2	11.45	124.88	120.30
1	AS	484	U	P-O3'-C3'	-11.02	106.48	119.70
73	c	53	LEU	CA-CB-CG	11.00	140.59	115.30
1	AS	1224	C	O5'-P-OP1	10.98	123.87	110.70
1	1	1576	A	O4'-C1'-N9	10.97	116.97	108.20
1	1	481	G	P-O3'-C3'	-10.91	106.61	119.70
46	B	1409	U	OP2-P-O3'	-10.87	81.28	105.20
1	1	449	U	P-O3'-C3'	-10.82	106.71	119.70
1	AS	3167	G	P-O3'-C3'	-10.79	106.75	119.70
1	AS	3159	A	P-O3'-C3'	-10.68	106.89	119.70
1	1	1012	U	O5'-P-OP1	-10.61	96.15	105.70
1	1	1576	A	C4-N9-C1'	10.60	145.37	126.30
46	CM	815	U	O5'-P-OP1	-10.55	96.20	105.70
46	B	824	U	O5'-P-OP1	10.48	123.28	110.70
1	1	444	U	P-O3'-C3'	-10.20	107.47	119.70
1	1	451	C	P-O3'-C3'	-10.15	107.52	119.70
3	AU	104	A	P-O3'-C3'	-10.15	107.52	119.70
1	1	1654	G	O5'-P-OP1	-10.10	96.61	105.70
1	AS	199	C	C6-N1-C2	-10.09	116.27	120.30
1	AS	1024	U	O4'-C1'-N1	-10.01	100.19	108.20
1	AS	483	U	P-O3'-C3'	-9.99	107.71	119.70
1	1	445	A	P-O3'-C3'	-9.90	107.82	119.70
1	1	443	G	P-O3'-C3'	-9.88	107.84	119.70
1	AS	850	G	N9-C4-C5	-9.86	101.45	105.40
1	AS	485	A	P-O3'-C3'	-9.76	107.99	119.70
1	1	453	U	P-O3'-C3'	-9.73	108.03	119.70
1	1	450	G	P-O3'-C3'	-9.71	108.05	119.70
1	1	2546	U	O5'-P-OP2	-9.69	96.98	105.70
1	1	1019	U	P-O3'-C3'	-9.66	108.10	119.70
46	CM	698	C	N1-C2-O2	9.63	124.68	118.90
1	1	448	U	P-O3'-C3'	-9.53	108.26	119.70
79	DT	92	LEU	CA-CB-CG	9.49	137.14	115.30
46	B	576	U	O5'-P-OP1	-9.42	97.22	105.70
1	1	1576	A	C8-N9-C1'	-9.35	110.88	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	N	26	LYS	CD-CE-NZ	-9.33	90.24	111.70
1	1	1020	G	P-O3'-C3'	-9.29	108.55	119.70
1	AS	3165	U	P-O3'-C3'	-9.27	108.58	119.70
1	1	447	U	P-O3'-C3'	-9.21	108.65	119.70
1	1	477	U	P-O3'-C3'	-9.21	108.65	119.70
1	AS	1576	A	C4-N9-C1'	9.21	142.87	126.30
1	1	446	U	P-O3'-C3'	-9.11	108.77	119.70
1	1	3347	U	C2-N1-C1'	9.04	128.54	117.70
1	AS	1224	C	C5-C6-N1	9.02	125.51	121.00
46	CM	481	A	P-O3'-C3'	-9.01	108.89	119.70
1	1	482	U	P-O3'-C3'	-8.96	108.95	119.70
1	AS	443	G	P-O3'-C3'	-8.88	109.04	119.70
1	1	476	C	P-O3'-C3'	-8.86	109.06	119.70
1	1	484	U	P-O3'-C3'	-8.84	109.09	119.70
1	AS	1568	U	C2-N1-C1'	8.75	128.20	117.70
1	1	403	C	O4'-C1'-N1	8.75	115.20	108.20
1	1	480	G	P-O3'-C3'	-8.71	109.25	119.70
77	g	53	LYS	CA-CB-CG	8.66	132.45	113.40
1	AS	446	U	P-O3'-C3'	-8.57	109.41	119.70
1	AS	1252	G	C8-N9-C1'	-8.53	115.91	127.00
1	AS	1347	U	P-O3'-C3'	8.50	129.90	119.70
1	AS	486	C	P-O3'-C3'	-8.48	109.52	119.70
1	AS	1576	A	C8-N9-C1'	-8.41	112.57	127.70
1	1	478	G	P-O3'-C3'	-8.37	109.66	119.70
46	B	451	C	N1-C2-O2	8.30	123.88	118.90
1	AS	850	G	C8-N9-C4	8.27	109.71	106.40
1	AS	1252	G	C4-N9-C1'	8.24	137.21	126.50
1	AS	1228	C	N1-C2-O2	8.20	123.82	118.90
1	AS	481	G	P-O3'-C3'	-8.20	109.86	119.70
1	1	2545	C	OP1-P-O3'	8.14	123.11	105.20
1	AS	3163	U	P-O3'-C3'	-8.13	109.94	119.70
1	AS	2638	C	C6-N1-C2	-8.13	117.05	120.30
46	CM	1400	U	O4'-C1'-N1	8.11	114.69	108.20
1	1	483	U	P-O3'-C3'	-8.10	109.97	119.70
1	AS	1026	A	O4'-C1'-N9	-8.05	101.76	108.20
1	AS	1224	C	C6-N1-C2	-8.05	117.08	120.30
1	AS	1228	C	C2-N1-C1'	8.02	127.62	118.80
73	c	77	CYS	CB-CA-C	-8.00	94.39	110.40
1	1	452	A	P-O3'-C3'	-7.95	110.16	119.70
46	B	217	A	O4'-C1'-N9	7.88	114.50	108.20
1	1	479	C	P-O3'-C3'	-7.87	110.26	119.70
46	B	813	U	O5'-P-OP1	-7.83	98.66	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	3164	U	P-O3'-C3'	-7.76	110.39	119.70
1	AS	478	G	P-O3'-C3'	-7.75	110.39	119.70
1	AS	1562	G	C4-N9-C1'	7.74	136.56	126.50
1	AS	3161	U	P-O3'-C3'	-7.72	110.43	119.70
1	1	442	G	P-O3'-C3'	-7.71	110.44	119.70
46	B	451	C	C2-N1-C1'	7.71	127.28	118.80
1	AS	1352	C	C2-N1-C1'	7.62	127.18	118.80
1	1	1280	C	C6-N1-C2	-7.60	117.26	120.30
1	AS	3166	A	P-O3'-C3'	-7.59	110.59	119.70
1	AS	482	U	P-O3'-C3'	-7.56	110.63	119.70
1	1	1446	G	N3-C2-N2	-7.54	114.62	119.90
1	1	1228	C	C6-N1-C2	-7.54	117.29	120.30
1	AS	479	C	P-O3'-C3'	-7.54	110.66	119.70
46	CM	279	G	C8-N9-C1'	-7.53	117.22	127.00
1	AS	1026	A	C4-N9-C1'	7.51	139.82	126.30
46	CM	697	U	C6-N1-C2	-7.50	116.50	121.00
1	AS	2814	U	N1-C2-O2	7.50	128.05	122.80
46	CM	814	A	OP2-P-O3'	7.49	121.68	105.20
46	CM	698	C	C2-N1-C1'	7.48	127.03	118.80
46	CM	1375	C	C2-N1-C1'	7.41	126.95	118.80
46	CM	279	G	C4-N9-C1'	7.38	136.10	126.50
1	1	1281	G	N3-C4-N9	-7.37	121.58	126.00
62	R	80	LEU	CA-CB-CG	7.36	132.23	115.30
1	1	3126	U	C2-N1-C1'	7.36	126.53	117.70
1	AS	445	A	P-O3'-C3'	-7.34	110.89	119.70
1	AS	1562	G	C8-N9-C4	-7.32	103.47	106.40
46	CM	480	U	P-O3'-C3'	-7.31	110.92	119.70
1	AS	1252	G	C6-C5-N7	-7.30	126.02	130.40
1	AS	976	A	C8-N9-C4	-7.26	102.89	105.80
1	AS	1562	G	N7-C8-N9	7.21	116.71	113.10
1	AS	1568	U	C5-C6-N1	7.19	126.29	122.70
1	AS	1026	A	C8-N9-C1'	-7.18	114.78	127.70
1	1	1558	G	C8-N9-C1'	-7.13	117.73	127.00
1	AS	3134	C	C2-N1-C1'	7.07	126.58	118.80
1	AS	2235	C	C2-N1-C1'	7.06	126.57	118.80
1	1	1558	G	N3-C4-N9	7.04	130.22	126.00
1	1	1558	G	C4-N9-C1'	7.03	135.64	126.50
46	CM	698	C	C5-C6-N1	7.01	124.50	121.00
1	1	1576	A	N7-C8-N9	7.00	117.30	113.80
1	AS	1568	U	C6-N1-C1'	-6.98	111.43	121.20
1	1	485	A	P-O3'-C3'	-6.95	111.37	119.70
1	AS	1231	U	N3-C4-O4	6.94	124.26	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	3347	U	C6-N1-C1'	-6.92	111.51	121.20
1	AS	977	U	C2-N1-C1'	6.92	126.00	117.70
1	AS	1492	C	C2-N1-C1'	6.92	126.41	118.80
46	B	812	C	OP2-P-O3'	6.89	120.35	105.20
46	B	575	G	OP2-P-O3'	6.89	120.35	105.20
1	AS	1224	C	C2-N1-C1'	6.88	126.37	118.80
54	J	30	LEU	CA-CB-CG	6.85	131.06	115.30
1	AS	1349	U	C2-N1-C1'	6.85	125.92	117.70
1	AS	3182	C	C2-N1-C1'	6.85	126.33	118.80
1	AS	1228	C	C6-N1-C1'	-6.83	112.61	120.80
46	CM	1346	U	O4'-C1'-N1	-6.82	102.74	108.20
1	1	3182	C	C2-N1-C1'	6.81	126.29	118.80
1	AS	3126	U	C2-N1-C1'	6.81	125.87	117.70
1	AS	2662	G	O4'-C1'-N9	6.79	113.63	108.20
1	1	918	U	C2-N1-C1'	6.78	125.84	117.70
1	1	1281	G	N3-C4-C5	6.78	131.99	128.60
1	AS	2215	C	N3-C2-O2	-6.77	117.16	121.90
46	CM	217	A	C8-N9-C4	-6.76	103.10	105.80
1	1	1759	U	O4'-C1'-N1	6.75	113.60	108.20
1	AS	1552	C	C2-N1-C1'	6.75	126.22	118.80
1	AS	1092	U	C2-N1-C1'	6.74	125.79	117.70
46	B	1444	G	N3-C4-N9	6.72	130.03	126.00
1	1	977	U	C2-N1-C1'	6.72	125.77	117.70
46	CM	985	C	C6-N1-C2	-6.71	117.62	120.30
1	1	1011	C	N1-C1'-C2'	-6.69	104.64	112.00
1	AS	1092	U	O4'-C1'-N1	-6.68	102.85	108.20
46	B	823	G	OP2-P-O3'	-6.68	90.51	105.20
1	1	3306	U	C2-N1-C1'	6.67	125.71	117.70
1	1	542	U	C5-C6-N1	6.67	126.03	122.70
1	AS	1562	G	C6-C5-N7	-6.66	126.40	130.40
3	AU	39	G	O4'-C1'-N9	6.65	113.52	108.20
46	B	138	C	P-O3'-C3'	6.64	127.67	119.70
1	AS	1224	C	O4'-C1'-N1	-6.64	102.89	108.20
3	AU	103	G	P-O3'-C3'	-6.62	111.75	119.70
1	1	3306	U	O4'-C1'-N1	-6.62	102.90	108.20
1	AS	401	U	C2-N1-C1'	6.61	125.63	117.70
1	AS	3271	U	O4'-C1'-N1	6.59	113.47	108.20
1	AS	1025	G	P-O3'-C3'	6.59	127.61	119.70
1	1	1229	G	N3-C4-C5	-6.59	125.30	128.60
46	CM	696	U	C2-N1-C1'	6.59	125.61	117.70
73	c	52	ASP	CB-CG-OD1	-6.58	112.37	118.30
1	AS	444	U	P-O3'-C3'	-6.58	111.81	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1853	C	C2-N1-C1'	6.58	126.03	118.80
1	AS	1026	A	C6-C5-N7	-6.57	127.70	132.30
32	AE	3	LEU	CA-CB-CG	6.57	130.42	115.30
1	1	442	G	N9-C4-C5	-6.55	102.78	105.40
1	1	441	U	O4'-C1'-N1	6.55	113.44	108.20
1	AS	1558	G	N9-C4-C5	-6.55	102.78	105.40
1	AS	1552	C	O4'-C1'-N1	6.54	113.43	108.20
46	CM	1045	U	C2-N1-C1'	6.54	125.55	117.70
1	AS	401	U	O4'-C1'-N1	6.53	113.42	108.20
1	1	1018	U	P-O3'-C3'	-6.51	111.89	119.70
46	CM	279	G	C6-C5-N7	-6.50	126.50	130.40
1	AS	620	A	N1-C6-N6	6.48	122.49	118.60
46	CM	721	C	O4'-C1'-N1	-6.46	103.03	108.20
1	AS	539	G	C6-C5-N7	-6.46	126.52	130.40
1	1	1576	A	C6-C5-N7	-6.46	127.78	132.30
1	AS	441	U	P-O3'-C3'	-6.46	111.95	119.70
1	AS	1252	G	C4-C5-N7	6.45	113.38	110.80
1	AS	1262	G	C8-N9-C1'	-6.44	118.62	127.00
57	M	85	GLY	N-CA-C	-6.43	97.01	113.10
1	1	3245	A	O4'-C1'-N9	6.43	113.35	108.20
1	AS	1568	U	O4'-C1'-N1	-6.43	103.05	108.20
1	AS	2215	C	N1-C2-O2	6.43	122.76	118.90
1	AS	442	G	P-O3'-C3'	-6.41	112.01	119.70
1	1	3321	G	O5'-P-OP2	6.41	118.39	110.70
46	B	1375	C	C2-N1-C1'	6.40	125.84	118.80
1	1	112	C	C2-N1-C1'	6.40	125.84	118.80
1	1	1248	A	O4'-C1'-N9	6.39	113.31	108.20
1	1	1558	G	C6-C5-N7	-6.38	126.57	130.40
1	1	3321	G	O5'-P-OP1	-6.38	99.95	105.70
1	1	2814	U	C2-N1-C1'	6.38	125.36	117.70
46	B	1237	C	C2-N1-C1'	6.37	125.80	118.80
1	AS	1262	G	C4-N9-C1'	6.36	134.77	126.50
1	1	1525	A	C8-N9-C1'	-6.36	116.25	127.70
1	1	1558	G	N9-C4-C5	-6.36	102.86	105.40
1	1	3243	C	N1-C2-O2	6.35	122.71	118.90
1	1	3030	U	C2-N1-C1'	6.35	125.31	117.70
1	AS	918	U	C2-N1-C1'	6.34	125.31	117.70
46	CM	846	U	C2-N1-C1'	6.33	125.30	117.70
1	AS	1562	G	O4'-C1'-N9	-6.33	103.14	108.20
46	CM	697	U	C5-C6-N1	6.33	125.86	122.70
3	AU	105	A	P-O3'-C3'	-6.32	112.12	119.70
46	CM	62	A	O4'-C1'-N9	6.32	113.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1022	A	N7-C8-N9	6.30	116.95	113.80
1	AS	851	U	O5'-P-OP2	6.30	118.26	110.70
1	1	162	U	O4'-C1'-N1	6.29	113.23	108.20
1	1	2544	U	O4'-C1'-N1	6.29	113.23	108.20
46	CM	1292	U	C2-N1-C1'	6.29	125.25	117.70
1	AS	1562	G	C8-N9-C1'	-6.28	118.83	127.00
1	AS	2509	C	N1-C2-O2	6.27	122.66	118.90
1	AS	1558	G	N3-C4-N9	6.26	129.75	126.00
46	B	218	A	N1-C6-N6	-6.25	114.85	118.60
46	B	1242	U	C6-N1-C2	-6.25	117.25	121.00
46	B	451	C	N3-C2-O2	-6.24	117.53	121.90
1	AS	956	U	C2-N1-C1'	6.23	125.18	117.70
1	AS	245	G	C8-N9-C1'	-6.23	118.90	127.00
46	B	1038	G	N3-C4-C5	-6.22	125.49	128.60
1	AS	1721	C	O4'-C1'-N1	6.22	113.18	108.20
1	1	1228	C	C2-N1-C1'	6.22	125.64	118.80
1	1	1574	C	C2-N1-C1'	6.22	125.64	118.80
1	1	1492	C	C2-N1-C1'	6.21	125.63	118.80
46	B	812	C	N1-C2-N3	-6.21	114.85	119.20
1	AS	850	G	C2-N3-C4	-6.21	108.79	111.90
1	1	2845	U	O4'-C1'-N1	6.21	113.17	108.20
46	CM	822	G	O4'-C1'-N9	6.19	113.16	108.20
1	1	1576	A	C4-C5-C6	6.19	120.10	117.00
1	1	2589	U	N3-C2-O2	-6.16	117.89	122.20
1	AS	1231	U	C5-C4-O4	-6.16	122.20	125.90
1	AS	487	C	P-O3'-C3'	-6.16	112.31	119.70
1	AS	2814	U	C2-N1-C1'	6.15	125.08	117.70
5	AX	7	GLU	C-N-CA	6.15	137.08	121.70
46	CM	1444	G	C4-N9-C1'	6.15	134.50	126.50
1	1	2215	C	N3-C2-O2	-6.14	117.60	121.90
46	CM	608	G	C4-N9-C1'	6.13	134.47	126.50
79	DT	121	ARG	CA-CB-CG	6.13	126.89	113.40
46	B	1242	U	C5-C6-N1	6.12	125.76	122.70
1	1	1552	C	C2-N1-C1'	6.12	125.53	118.80
46	CM	825	U	C5-C6-N1	-6.12	119.64	122.70
46	CM	1462	C	C2-N1-C1'	6.10	125.51	118.80
45	i	71	LYS	N-CA-C	-6.09	94.54	111.00
46	B	1242	U	C2-N1-C1'	6.09	125.01	117.70
1	AS	1260	G	C4-N9-C1'	6.09	134.42	126.50
46	B	879	U	N3-C2-O2	-6.08	117.94	122.20
46	B	813	U	C5-C6-N1	6.08	125.74	122.70
46	B	1364	U	C2-N1-C1'	6.08	124.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2663	A	P-O3'-C3'	6.07	126.98	119.70
46	B	1067	C	C2-N1-C1'	6.06	125.47	118.80
1	AS	566	C	C2-N1-C1'	6.05	125.45	118.80
1	1	1033	C	C2-N1-C1'	6.04	125.44	118.80
56	L	93	LEU	CA-CB-CG	6.03	129.18	115.30
1	1	3167	G	C5-C6-O6	-6.03	124.98	128.60
78	h	159	LEU	CA-CB-CG	6.02	129.15	115.30
46	B	812	C	O4'-C1'-N1	-6.02	103.38	108.20
46	B	1457	A	C8-N9-C4	-6.02	103.39	105.80
1	AS	1558	G	C8-N9-C1'	-6.02	119.18	127.00
1	1	2474	C	N1-C2-O2	6.02	122.51	118.90
46	CM	721	C	C2-N1-C1'	5.99	125.39	118.80
1	1	1022	A	C8-N9-C4	-5.99	103.41	105.80
46	CM	138	C	C2-N1-C1'	5.99	125.38	118.80
46	CM	1467	C	OP1-P-O3'	5.98	118.35	105.20
1	AS	2815	U	N3-C2-O2	-5.97	118.02	122.20
1	1	3182	C	N1-C2-O2	5.96	122.48	118.90
46	CM	238	U	C5'-C4'-O4'	5.96	116.26	109.10
46	B	451	C	C6-N1-C1'	-5.96	113.65	120.80
1	1	1573	C	C2-N1-C1'	5.95	125.35	118.80
46	B	1554	U	C6-N1-C2	-5.94	117.43	121.00
1	AS	1576	A	N7-C8-N9	5.94	116.77	113.80
1	1	3327	A	O4'-C1'-N9	5.94	112.95	108.20
1	1	252	U	O4'-C1'-N1	5.93	112.95	108.20
1	1	1224	C	C2-N1-C1'	5.93	125.32	118.80
1	1	1001	G	N3-C4-N9	-5.93	122.44	126.00
1	AS	850	G	N3-C4-C5	5.92	131.56	128.60
1	AS	918	U	N1-C2-O2	5.92	126.95	122.80
1	AS	3317	U	P-O3'-C3'	5.92	126.81	119.70
1	1	1346	U	P-O3'-C3'	5.92	126.80	119.70
1	AS	3243	C	N1-C2-O2	5.92	122.45	118.90
1	1	3167	G	C6-C5-N7	-5.91	126.85	130.40
46	CM	698	C	C2-N3-C4	5.91	122.85	119.90
46	CM	1067	C	C2-N1-C1'	5.90	125.30	118.80
46	CM	721	C	C6-N1-C1'	-5.90	113.72	120.80
1	1	2235	C	C2-N1-C1'	5.90	125.29	118.80
46	CM	1583	C	O4'-C1'-N1	5.90	112.92	108.20
1	1	3167	G	N1-C6-O6	5.89	123.44	119.90
1	1	1147	U	C6-N1-C2	-5.89	117.47	121.00
1	1	1229	G	C8-N9-C4	-5.88	104.05	106.40
3	4	39	G	O4'-C1'-N9	5.88	112.90	108.20
46	B	481	A	C8-N9-C4	-5.88	103.45	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1352	C	C6-N1-C1'	-5.88	113.75	120.80
1	AS	544	U	O4'-C1'-N1	5.87	112.90	108.20
1	AS	2814	U	N3-C2-O2	-5.87	118.09	122.20
1	1	3167	G	C8-N9-C1'	-5.87	119.38	127.00
1	AS	918	U	N3-C2-O2	-5.87	118.09	122.20
1	AS	1350	G	OP2-P-O3'	5.87	118.10	105.20
1	AS	1231	U	O4'-C1'-N1	-5.86	103.51	108.20
1	1	1558	G	C4-C5-N7	5.86	113.14	110.80
1	AS	1559	C	P-O3'-C3'	5.86	126.73	119.70
1	AS	1011	C	N1-C1'-C2'	-5.86	105.56	112.00
1	1	1022	A	C4-N9-C1'	5.86	136.84	126.30
1	AS	1283	A	N9-C4-C5	-5.85	103.46	105.80
1	AS	1092	U	C6-N1-C1'	-5.84	113.02	121.20
1	AS	1231	U	C2-N1-C1'	5.84	124.71	117.70
1	1	1347	U	N3-C2-O2	-5.84	118.11	122.20
46	B	139	U	O5'-P-OP2	5.84	117.70	110.70
46	CM	711	U	P-O3'-C3'	5.83	126.70	119.70
46	B	1231	C	N1-C2-O2	5.83	122.40	118.90
1	AS	1252	G	N9-C4-C5	-5.83	103.07	105.40
1	1	406	G	O4'-C1'-N9	5.83	112.86	108.20
1	1	1525	A	C4-N9-C1'	5.81	136.76	126.30
1	AS	566	C	C6-N1-C1'	-5.81	113.83	120.80
1	1	315	C	C6-N1-C2	-5.80	117.98	120.30
1	1	2968	U	C2-N1-C1'	5.79	124.65	117.70
46	CM	1327	C	N1-C2-O2	5.79	122.38	118.90
46	B	847	A	O4'-C1'-N9	5.79	112.83	108.20
1	1	1874	G	C4-N9-C1'	5.79	134.02	126.50
1	1	3167	G	C4-N9-C1'	5.79	134.02	126.50
1	AS	831	G	O4'-C1'-N9	5.79	112.83	108.20
46	B	579	U	C2-N1-C1'	5.78	124.63	117.70
1	AS	1228	C	C5-C6-N1	5.78	123.89	121.00
1	1	1252	G	O4'-C1'-N9	5.77	112.82	108.20
46	B	1360	C	N1-C2-O2	5.76	122.36	118.90
1	AS	1223	C	N3-C2-O2	-5.76	117.87	121.90
1	AS	283	G	N3-C4-C5	-5.75	125.72	128.60
1	1	996	C	O4'-C1'-N1	5.75	112.80	108.20
1	AS	3243	C	N3-C2-O2	-5.75	117.87	121.90
46	B	1038	G	C2-N3-C4	5.75	114.78	111.90
46	CM	579	U	C2-N1-C1'	5.75	124.60	117.70
50	F	60	LEU	CA-CB-CG	5.74	128.49	115.30
46	CM	279	G	N9-C4-C5	-5.74	103.11	105.40
1	1	1012	U	OP2-P-O3'	5.73	117.81	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1429	A	O4'-C1'-N9	-5.73	103.62	108.20
1	1	1282	A	O4'-C1'-N9	5.72	112.78	108.20
5	k	387	LEU	CA-CB-CG	5.71	128.43	115.30
46	B	696	U	C2-N1-C1'	5.71	124.55	117.70
46	CM	279	G	C4-C5-N7	5.70	113.08	110.80
1	1	3167	G	N3-C4-N9	5.70	129.42	126.00
1	1	3159	A	N9-C4-C5	-5.68	103.53	105.80
1	AS	1099	A	P-O3'-C3'	5.68	126.52	119.70
59	O	86	ILE	CG1-CB-CG2	-5.68	98.91	111.40
1	AS	1197	C	C2-N1-C1'	5.68	125.04	118.80
46	CM	696	U	C6-N1-C1'	-5.68	113.25	121.20
46	B	812	C	P-O3'-C3'	5.67	126.51	119.70
1	1	976	A	C8-N9-C4	-5.66	103.53	105.80
46	CM	1375	C	C6-N1-C1'	-5.66	114.01	120.80
46	CM	608	G	C8-N9-C1'	-5.65	119.66	127.00
46	CM	825	U	C4-C5-C6	5.65	123.09	119.70
1	AS	2519	A	P-O3'-C3'	5.65	126.47	119.70
46	CM	698	C	C6-N1-C1'	-5.64	114.03	120.80
46	CM	1346	U	O5'-P-OP2	-5.64	100.62	105.70
46	CM	819	G	C4-N9-C1'	5.63	133.82	126.50
46	B	216	A	OP1-P-O3'	5.63	117.58	105.20
1	AS	1252	G	N3-C4-N9	5.63	129.38	126.00
46	CM	142	G	O4'-C1'-N9	5.63	112.70	108.20
46	B	608	G	C4-N9-C1'	5.62	133.81	126.50
1	AS	1363	G	C4-N9-C1'	5.62	133.80	126.50
46	CM	846	U	C6-N1-C1'	-5.62	113.34	121.20
1	1	46	C	O5'-P-OP2	5.61	117.44	110.70
1	AS	3182	C	C6-N1-C1'	-5.61	114.07	120.80
57	M	52	LYS	CA-CB-CG	5.61	125.73	113.40
46	CM	561	U	N3-C2-O2	-5.61	118.28	122.20
62	DC	80	LEU	CA-CB-CG	5.60	128.18	115.30
46	B	561	U	N3-C2-O2	-5.59	118.29	122.20
1	AS	1283	A	C8-N9-C4	5.58	108.03	105.80
1	1	1574	C	C6-N1-C1'	-5.58	114.10	120.80
46	CM	1444	G	C8-N9-C1'	-5.58	119.74	127.00
1	AS	1492	C	C6-N1-C1'	-5.58	114.11	120.80
1	AS	245	G	C4-N9-C1'	5.57	133.75	126.50
1	1	892	A	O5'-P-OP2	-5.57	100.69	105.70
46	B	1327	C	N1-C2-O2	5.57	122.24	118.90
46	B	879	U	N1-C2-O2	5.57	126.70	122.80
3	AU	102	U	P-O3'-C3'	-5.57	113.02	119.70
1	AS	1223	C	OP1-P-O3'	5.56	117.44	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	850	G	C4-C5-N7	5.56	113.02	110.80
1	AS	2815	U	O4'-C1'-N1	5.56	112.64	108.20
1	1	1573	C	C6-N1-C1'	-5.55	114.14	120.80
46	CM	818	U	C2-N1-C1'	5.55	124.37	117.70
46	CM	277	G	O4'-C1'-N9	-5.55	103.76	108.20
46	B	577	A	O4'-C1'-N9	5.55	112.64	108.20
46	CM	1457	A	C8-N9-C4	-5.54	103.58	105.80
1	AS	1874	G	C4-N9-C1'	5.54	133.70	126.50
1	AS	100	G	C8-N9-C1'	-5.54	119.80	127.00
1	1	3243	C	N3-C2-O2	-5.54	118.02	121.90
1	AS	514	G	C8-N9-C4	-5.53	104.19	106.40
1	AS	3168	U	P-O3'-C3'	-5.53	113.06	119.70
66	V	114	LEU	CA-CB-CG	5.53	128.01	115.30
1	1	2184	G	O4'-C1'-N9	5.52	112.62	108.20
1	1	3321	G	N3-C4-N9	5.52	129.31	126.00
1	1	1014	G	N3-C4-C5	5.51	131.36	128.60
46	CM	199	G	N3-C4-N9	5.51	129.31	126.00
46	CM	1384	U	O4'-C1'-N1	5.51	112.61	108.20
46	CM	1331	A	O4'-C1'-N9	5.51	112.61	108.20
46	B	814	A	P-O3'-C3'	5.51	126.31	119.70
46	B	811	U	C2-N1-C1'	5.50	124.31	117.70
1	AS	3134	C	C6-N1-C1'	-5.50	114.20	120.80
46	CM	1400	U	C2-N1-C1'	5.50	124.30	117.70
46	CM	637	U	O4'-C1'-N1	5.50	112.60	108.20
1	AS	1575	A	O4'-C1'-N9	5.49	112.59	108.20
46	CM	1452	G	N9-C4-C5	5.49	107.60	105.40
1	1	442	G	C4-C5-N7	5.49	113.00	110.80
1	AS	539	G	C4-C5-N7	5.49	113.00	110.80
1	1	1197	C	N3-C2-O2	-5.49	118.06	121.90
65	DF	131	LEU	CA-CB-CG	5.48	127.91	115.30
79	AR	32	LEU	CA-CB-CG	5.48	127.90	115.30
1	AS	245	G	N9-C4-C5	-5.48	103.21	105.40
1	AS	283	G	N3-C4-N9	5.48	129.29	126.00
1	AS	1349	U	N1-C2-O2	5.48	126.64	122.80
1	AS	1558	G	C4-C5-N7	5.48	112.99	110.80
1	1	1559	C	C2-N1-C1'	5.47	124.82	118.80
46	CM	1490	A	O4'-C1'-N9	5.47	112.58	108.20
46	CM	723	G	C8-N9-C1'	-5.47	119.89	127.00
1	AS	1558	G	C4-N9-C1'	5.47	133.61	126.50
1	1	892	A	C8-N9-C4	-5.46	103.61	105.80
65	U	3	LEU	CA-CB-CG	5.46	127.87	115.30
1	AS	2476	C	OP1-P-O3'	5.46	117.22	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	3321	G	C4-N9-C1'	5.46	133.60	126.50
46	B	481	A	N7-C8-N9	5.46	116.53	113.80
46	CM	138	C	C6-N1-C1'	-5.46	114.25	120.80
46	B	576	U	O5'-P-OP2	5.44	117.23	110.70
1	1	1262	G	C4-N9-C1'	5.44	133.58	126.50
46	CM	681	C	N3-C2-O2	-5.44	118.09	121.90
1	1	1099	A	OP2-P-O3'	5.43	117.15	105.20
1	1	3151	C	C2-N1-C1'	5.43	124.78	118.80
46	B	1234	U	C2-N1-C1'	5.43	124.22	117.70
46	CM	886	G	C4-N9-C1'	5.43	133.56	126.50
46	B	1046	A	O4'-C1'-N9	5.43	112.54	108.20
46	B	1766	U	O4'-C1'-N1	5.43	112.54	108.20
1	AS	1446	G	N3-C2-N2	-5.43	116.10	119.90
1	1	1228	C	C6-N1-C1'	-5.43	114.29	120.80
73	c	52	ASP	CB-CG-OD2	5.42	123.18	118.30
46	B	1364	U	O4'-C1'-N1	5.42	112.54	108.20
76	f	24	CYS	CB-CA-C	5.42	121.24	110.40
46	B	1242	U	N3-C2-O2	-5.42	118.41	122.20
46	CM	273	C	N1-C1'-C2'	5.42	121.04	114.00
1	AS	2476	C	P-O3'-C3'	5.42	126.20	119.70
3	AU	106	C	P-O3'-C3'	-5.41	113.21	119.70
1	1	1569	C	C2-N1-C1'	5.40	124.74	118.80
1	AS	2549	G	N1-C6-O6	-5.40	116.66	119.90
1	1	3182	C	C6-N1-C1'	-5.40	114.32	120.80
1	AS	100	G	C4-N9-C1'	5.40	133.52	126.50
1	1	1197	C	C2-N1-C1'	5.39	124.73	118.80
3	4	157	U	O4'-C1'-N1	5.39	112.52	108.20
1	AS	2521	C	C2-N1-C1'	5.39	124.73	118.80
1	1	1229	G	C4-N9-C1'	5.39	133.51	126.50
1	AS	1278	G	N3-C2-N2	5.39	123.67	119.90
46	B	72	A	O4'-C1'-N9	-5.39	103.89	108.20
1	AS	1026	A	N9-C4-C5	-5.39	103.64	105.80
1	AS	112	C	C2-N1-C1'	5.38	124.72	118.80
50	CQ	183	LEU	CA-CB-CG	5.38	127.67	115.30
46	B	505	U	O4'-C1'-N1	5.38	112.50	108.20
46	B	1231	C	N3-C2-O2	-5.38	118.14	121.90
46	B	137	A	P-O3'-C3'	5.37	126.15	119.70
46	CM	1400	U	C6-N1-C1'	-5.37	113.68	121.20
1	1	2545	C	OP2-P-O3'	-5.37	93.39	105.20
1	1	1256	A	P-O3'-C3'	5.36	126.14	119.70
1	1	3321	G	C8-N9-C1'	-5.36	120.03	127.00
1	1	3321	G	C6-C5-N7	-5.36	127.18	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	851	U	O5'-P-OP1	-5.36	100.88	105.70
1	1	1562	G	N3-C4-N9	5.35	129.21	126.00
1	1	1853	C	C6-N1-C2	-5.35	118.16	120.30
1	1	1245	G	O4'-C1'-N9	5.35	112.48	108.20
1	AS	1026	A	N7-C8-N9	5.35	116.47	113.80
1	AS	1558	G	C6-C5-N7	-5.34	127.20	130.40
46	B	1546	G	O4'-C1'-N9	5.33	112.46	108.20
46	CM	557	C	C2-N1-C1'	5.33	124.66	118.80
46	B	911	A	N1-C2-N3	5.32	131.96	129.30
1	1	283	G	N3-C4-N9	5.32	129.19	126.00
1	1	2474	C	N3-C2-O2	-5.32	118.18	121.90
1	1	2509	C	N1-C2-O2	5.32	122.09	118.90
59	O	32	LEU	CA-CB-CG	5.32	127.53	115.30
46	B	1462	C	C2-N1-C1'	5.31	124.64	118.80
1	AS	1347	U	C6-N1-C2	-5.31	117.81	121.00
1	1	3252	C	C2-N1-C1'	5.30	124.64	118.80
1	AS	3252	C	C2-N1-C1'	5.30	124.63	118.80
1	1	997	G	P-O3'-C3'	5.30	126.06	119.70
1	AS	544	U	C2-N1-C1'	5.29	124.05	117.70
1	AS	2527	G	C8-N9-C1'	-5.29	120.12	127.00
1	1	2209	C	O4'-C1'-N1	5.29	112.43	108.20
3	4	126	A	O4'-C1'-N9	5.29	112.43	108.20
1	1	1573	C	N1-C2-O2	5.29	122.07	118.90
1	AS	539	G	C4-N9-C1'	5.29	133.37	126.50
46	CM	1057	C	C2-N1-C1'	5.29	124.61	118.80
46	CM	723	G	O4'-C1'-N9	-5.28	103.97	108.20
46	B	138	C	O4'-C1'-N1	5.28	112.42	108.20
1	AS	2509	C	N3-C2-O2	-5.28	118.21	121.90
1	1	977	U	C6-N1-C1'	-5.27	113.82	121.20
1	1	1446	G	C6-N1-C2	-5.26	121.94	125.10
46	B	678	A	O4'-C1'-N9	5.26	112.41	108.20
1	AS	100	G	O4'-C1'-N9	5.26	112.41	108.20
46	B	1375	C	C5-C6-N1	5.26	123.63	121.00
1	AS	977	U	C6-N1-C1'	-5.26	113.84	121.20
46	CM	1375	C	N1-C2-O2	5.26	122.06	118.90
1	1	1559	C	N1-C2-O2	5.26	122.05	118.90
1	1	2373	G	N3-C4-N9	-5.25	122.85	126.00
1	1	2957	C	C6-N1-C2	-5.25	118.20	120.30
32	AE	3	LEU	CB-CG-CD2	5.25	119.93	111.00
46	B	218	A	O4'-C1'-N9	5.25	112.40	108.20
46	B	1400	U	O4'-C1'-N1	5.25	112.40	108.20
2	3	77	G	O4'-C1'-N9	5.24	112.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	3353	C	N1-C2-O2	-5.24	115.75	118.90
46	CM	991	C	O4'-C1'-N1	5.24	112.39	108.20
1	1	2546	U	O5'-P-OP1	5.24	116.99	110.70
1	AS	3158	G	P-O3'-C3'	-5.24	113.41	119.70
1	AS	2527	G	C4-N9-C1'	5.24	133.31	126.50
1	1	1280	C	C5-C6-N1	5.23	123.62	121.00
1	1	3151	C	O4'-C1'-N1	5.23	112.39	108.20
46	B	849	U	C2-N1-C1'	5.23	123.98	117.70
1	1	1197	C	C6-N1-C2	-5.23	118.21	120.30
46	CM	818	U	N3-C2-O2	-5.23	118.54	122.20
1	AS	1223	C	N1-C2-O2	5.22	122.03	118.90
46	CM	136	U	N1-C2-O2	5.22	126.45	122.80
80	l1	93	LEU	CA-CB-CG	5.22	127.31	115.30
1	AS	1346	U	P-O3'-C3'	5.22	125.97	119.70
46	CM	814	A	P-O3'-C3'	5.22	125.96	119.70
1	AS	1562	G	O5'-P-OP1	5.22	116.96	110.70
1	1	1197	C	N1-C2-O2	5.21	122.03	118.90
46	CM	214	U	O4'-C1'-N1	5.21	112.37	108.20
46	CM	273	C	C6-N1-C1'	-5.21	114.55	120.80
1	1	2514	G	N3-C4-C5	5.21	131.20	128.60
1	1	3159	A	C6-C5-N7	-5.21	128.66	132.30
15	u	57	LEU	CA-CB-CG	5.21	127.27	115.30
46	B	1207	C	C2-N1-C1'	5.20	124.52	118.80
1	AS	1026	A	C4-C5-N7	5.20	113.30	110.70
1	AS	1552	C	C6-N1-C1'	-5.20	114.56	120.80
46	CM	4	C	C2-N1-C1'	5.20	124.52	118.80
1	1	3126	U	C6-N1-C1'	-5.20	113.92	121.20
1	1	1874	G	C8-N9-C1'	-5.20	120.25	127.00
1	AS	376	G	O4'-C1'-N9	5.20	112.36	108.20
46	CM	137	A	P-O3'-C3'	5.20	125.93	119.70
46	CM	714	G	O4'-C1'-N9	5.19	112.35	108.20
46	B	1409	U	OP1-P-O3'	5.19	116.61	105.20
46	B	1444	G	C4-N9-C1'	5.18	133.24	126.50
1	AS	85	G	O4'-C1'-N9	5.18	112.35	108.20
45	i	90	ARG	CB-CG-CD	-5.18	98.14	111.60
46	B	824	U	P-O3'-C3'	5.18	125.92	119.70
1	1	1569	C	C6-N1-C1'	-5.17	114.59	120.80
1	1	2781	C	N1-C2-O2	-5.17	115.80	118.90
1	1	1654	G	OP1-P-OP2	5.17	127.36	119.60
1	AS	539	G	C8-N9-C1'	-5.17	120.28	127.00
46	B	1457	A	C8-N9-C1'	-5.16	118.41	127.70
46	B	1444	G	C6-C5-N7	-5.15	127.31	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2215	C	N1-C2-O2	5.15	121.99	118.90
1	AS	2638	C	O5'-P-OP2	-5.15	101.07	105.70
1	AS	2530	C	C6-N1-C2	-5.14	118.24	120.30
79	DT	32	LEU	CA-CB-CG	5.14	127.13	115.30
46	B	147	C	C2-N1-C1'	5.13	124.45	118.80
1	AS	1252	G	N7-C8-N9	5.13	115.67	113.10
1	1	1576	A	C8-N9-C4	-5.13	103.75	105.80
1	AS	2521	C	C6-N1-C1'	-5.13	114.64	120.80
1	1	956	U	C2-N1-C1'	5.13	123.85	117.70
3	4	62	C	C5'-C4'-C3'	5.12	124.20	116.00
1	AS	1025	G	C4-N9-C1'	5.12	133.16	126.50
1	AS	1573	C	C2-N1-C1'	5.12	124.44	118.80
46	CM	1444	G	N3-C4-N9	5.12	129.07	126.00
1	1	1638	A	O4'-C1'-N9	-5.12	104.10	108.20
3	4	21	C	O4'-C1'-N1	5.12	112.30	108.20
1	AS	2697	U	O4'-C1'-N1	5.12	112.29	108.20
1	1	3167	G	N9-C4-C5	-5.12	103.35	105.40
1	AS	1559	C	C2-N1-C1'	5.12	124.43	118.80
46	B	4	C	C2-N1-C1'	5.11	124.42	118.80
1	AS	1000	U	C2-N3-C4	-5.11	123.94	127.00
1	AS	3271	U	C2-N1-C1'	5.11	123.83	117.70
1	1	3271	U	C2-N1-C1'	5.11	123.83	117.70
46	B	517	C	C2-N1-C1'	5.10	124.41	118.80
1	AS	957	C	C6-N1-C2	5.10	122.34	120.30
1	1	1253	C	C2-N1-C1'	5.09	124.40	118.80
46	B	1046	A	C8-N9-C4	-5.09	103.76	105.80
46	CM	1467	C	O4'-C1'-N1	5.09	112.27	108.20
1	1	1260	G	C4-N9-C1'	5.09	133.12	126.50
1	AS	2616	C	N1-C2-O2	5.08	121.95	118.90
1	AS	514	G	C4-N9-C1'	5.08	133.11	126.50
74	d	41	LEU	CA-CB-CG	5.08	126.98	115.30
46	B	14	C	C6-N1-C2	-5.08	118.27	120.30
1	1	549	U	C5'-C4'-C3'	-5.07	107.89	116.00
46	CM	1406	C	O4'-C1'-N1	5.07	112.26	108.20
46	B	1310	A	O4'-C1'-N9	-5.07	104.15	108.20
46	CM	1237	C	C2-N1-C1'	5.06	124.37	118.80
1	1	112	C	C6-N1-C1'	-5.06	114.73	120.80
46	CM	1726	C	C6-N1-C2	-5.05	118.28	120.30
1	1	1329	C	C2-N1-C1'	5.05	124.36	118.80
1	1	3347	U	N1-C2-O2	5.05	126.33	122.80
1	1	3159	A	C4-N9-C1'	5.04	135.38	126.30
46	CM	815	U	O5'-P-OP2	5.04	116.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	3347	U	C5-C6-N1	5.04	125.22	122.70
46	CM	695	C	P-O3'-C3'	-5.04	113.65	119.70
1	AS	1253	C	C2-N1-C1'	5.04	124.34	118.80
46	CM	1364	U	N3-C2-O2	-5.04	118.67	122.20
46	B	1360	C	C2-N1-C1'	5.03	124.34	118.80
1	1	1913	C	C6-N1-C2	5.03	122.31	120.30
46	B	1442	C	C2-N1-C1'	5.03	124.33	118.80
1	AS	975	U	N3-C2-O2	-5.03	118.68	122.20
1	AS	2549	G	C5-C6-O6	5.03	131.62	128.60
1	1	1220	C	C6-N1-C2	-5.03	118.29	120.30
51	G	56	LEU	CA-CB-CG	5.03	126.86	115.30
46	B	1237	C	C6-N1-C1'	-5.02	114.77	120.80
1	AS	539	G	N9-C4-C5	-5.02	103.39	105.40
46	CM	698	C	N3-C2-O2	-5.02	118.39	121.90
1	AS	1093	G	C4-N9-C1'	5.01	133.02	126.50
46	CM	819	G	C8-N9-C1'	-5.01	120.48	127.00
46	CM	1364	U	N1-C2-O2	5.01	126.31	122.80
1	AS	2968	U	N3-C2-O2	-5.01	118.69	122.20
1	1	1001	G	N3-C2-N2	-5.01	116.39	119.90
45	i	93	ARG	CB-CG-CD	5.00	124.61	111.60
1	AS	3030	U	C2-N1-C1'	5.00	123.70	117.70

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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	
4	AW	247/254 (97%)	239 (97%)	8 (3%)	0	100	100
4	j	247/254 (97%)	239 (97%)	8 (3%)	0	100	100
5	AX	384/389 (99%)	373 (97%)	11 (3%)	0	100	100
5	k	384/389 (99%)	372 (97%)	12 (3%)	0	100	100
6	AY	359/363 (99%)	348 (97%)	11 (3%)	0	100	100
6	l	359/363 (99%)	346 (96%)	13 (4%)	0	100	100
7	AZ	290/298 (97%)	275 (95%)	12 (4%)	3 (1%)	13	42
7	m	294/298 (99%)	281 (96%)	13 (4%)	0	100	100
8	BA	149/176 (85%)	146 (98%)	3 (2%)	0	100	100
8	n	153/176 (87%)	149 (97%)	4 (3%)	0	100	100
9	BB	232/241 (96%)	225 (97%)	6 (3%)	1 (0%)	30	61
9	o	232/241 (96%)	223 (96%)	8 (3%)	1 (0%)	30	61
10	BC	231/262 (88%)	220 (95%)	9 (4%)	2 (1%)	14	44
10	p	236/262 (90%)	224 (95%)	9 (4%)	3 (1%)	10	36
11	BD	188/191 (98%)	182 (97%)	6 (3%)	0	100	100
11	q	188/191 (98%)	184 (98%)	4 (2%)	0	100	100
12	BE	204/220 (93%)	199 (98%)	5 (2%)	0	100	100
12	r	204/220 (93%)	201 (98%)	3 (2%)	0	100	100
13	BF	169/174 (97%)	163 (96%)	6 (4%)	0	100	100
13	s	169/174 (97%)	161 (95%)	8 (5%)	0	100	100
14	BG	198/202 (98%)	194 (98%)	3 (2%)	1 (0%)	25	56
14	t	198/202 (98%)	196 (99%)	2 (1%)	0	100	100
15	BH	128/131 (98%)	123 (96%)	5 (4%)	0	100	100
15	u	128/131 (98%)	125 (98%)	3 (2%)	0	100	100
16	BI	201/204 (98%)	195 (97%)	6 (3%)	0	100	100
16	v	201/204 (98%)	196 (98%)	5 (2%)	0	100	100
17	BJ	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
17	w	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
18	BK	172/185 (93%)	167 (97%)	5 (3%)	0	100	100
18	x	169/185 (91%)	166 (98%)	3 (2%)	0	100	100
19	BL	183/186 (98%)	178 (97%)	5 (3%)	0	100	100
19	y	183/186 (98%)	177 (97%)	6 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	BM	177/190 (93%)	171 (97%)	6 (3%)	0	100	100
20	z	177/190 (93%)	174 (98%)	3 (2%)	0	100	100
21	0	168/172 (98%)	165 (98%)	3 (2%)	0	100	100
21	BN	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
22	2	157/160 (98%)	153 (98%)	4 (2%)	0	100	100
22	BO	157/160 (98%)	151 (96%)	6 (4%)	0	100	100
23	5	101/124 (82%)	95 (94%)	5 (5%)	1 (1%)	13	42
23	BP	100/124 (81%)	85 (85%)	13 (13%)	2 (2%)	6	28
24	6	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
24	BQ	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
25	7	114/155 (74%)	100 (88%)	13 (11%)	1 (1%)	14	44
25	BR	94/155 (61%)	90 (96%)	4 (4%)	0	100	100
26	8	119/142 (84%)	117 (98%)	2 (2%)	0	100	100
26	BS	117/142 (82%)	114 (97%)	3 (3%)	0	100	100
27	9	124/127 (98%)	123 (99%)	1 (1%)	0	100	100
27	BT	124/127 (98%)	124 (100%)	0	0	100	100
28	AA	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
28	BU	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
29	AB	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
29	BV	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
30	AC	60/63 (95%)	57 (95%)	1 (2%)	2 (3%)	3	19
30	BW	62/63 (98%)	60 (97%)	1 (2%)	1 (2%)	8	32
31	AD	94/106 (89%)	91 (97%)	2 (2%)	1 (1%)	12	40
31	BX	94/106 (89%)	92 (98%)	2 (2%)	0	100	100
32	AE	108/112 (96%)	104 (96%)	4 (4%)	0	100	100
32	BY	106/112 (95%)	105 (99%)	1 (1%)	0	100	100
33	AF	122/131 (93%)	121 (99%)	1 (1%)	0	100	100
33	BZ	124/131 (95%)	122 (98%)	2 (2%)	0	100	100
34	AG	104/107 (97%)	102 (98%)	2 (2%)	0	100	100
34	CA	107/107 (100%)	103 (96%)	4 (4%)	0	100	100
35	AH	110/113 (97%)	106 (96%)	4 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	CB	113/113 (100%)	109 (96%)	4 (4%)	0	100	100
36	AI	118/120 (98%)	114 (97%)	4 (3%)	0	100	100
36	CC	116/120 (97%)	114 (98%)	2 (2%)	0	100	100
37	AJ	95/99 (96%)	94 (99%)	1 (1%)	0	100	100
37	CD	96/99 (97%)	95 (99%)	1 (1%)	0	100	100
38	AK	84/90 (93%)	82 (98%)	2 (2%)	0	100	100
38	CE	84/90 (93%)	81 (96%)	3 (4%)	0	100	100
39	AL	75/78 (96%)	70 (93%)	5 (7%)	0	100	100
39	CF	76/78 (97%)	73 (96%)	3 (4%)	0	100	100
40	AM	48/51 (94%)	46 (96%)	1 (2%)	1 (2%)	5	27
40	CG	48/51 (94%)	45 (94%)	3 (6%)	0	100	100
41	AN	50/52 (96%)	49 (98%)	1 (2%)	0	100	100
41	CH	51/52 (98%)	49 (96%)	2 (4%)	0	100	100
42	AO	23/25 (92%)	21 (91%)	2 (9%)	0	100	100
42	CI	22/25 (88%)	7 (32%)	13 (59%)	2 (9%)	0	3
43	AP	101/106 (95%)	100 (99%)	1 (1%)	0	100	100
43	CJ	103/106 (97%)	101 (98%)	2 (2%)	0	100	100
44	AQ	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
44	CK	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
45	CL	117/267 (44%)	92 (79%)	21 (18%)	4 (3%)	3	19
45	i	117/267 (44%)	89 (76%)	25 (21%)	3 (3%)	4	23
47	C	206/261 (79%)	200 (97%)	6 (3%)	0	100	100
47	CN	206/261 (79%)	200 (97%)	6 (3%)	0	100	100
48	CO	212/256 (83%)	198 (93%)	14 (7%)	0	100	100
48	D	212/256 (83%)	208 (98%)	4 (2%)	0	100	100
49	CP	214/249 (86%)	205 (96%)	8 (4%)	1 (0%)	25	56
49	E	215/249 (86%)	210 (98%)	5 (2%)	0	100	100
50	CQ	221/251 (88%)	215 (97%)	6 (3%)	0	100	100
50	F	221/251 (88%)	214 (97%)	7 (3%)	0	100	100
51	CR	258/262 (98%)	246 (95%)	12 (5%)	0	100	100
51	G	257/262 (98%)	251 (98%)	5 (2%)	1 (0%)	30	61

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
52	CS	191/225 (85%)	180 (94%)	11 (6%)	0	100 100
52	H	204/225 (91%)	187 (92%)	15 (7%)	2 (1%)	13 42
53	CT	224/236 (95%)	208 (93%)	11 (5%)	5 (2%)	5 26
53	I	224/236 (95%)	218 (97%)	6 (3%)	0	100 100
54	CU	180/186 (97%)	168 (93%)	10 (6%)	2 (1%)	12 40
54	J	183/186 (98%)	171 (93%)	11 (6%)	1 (0%)	25 56
55	CV	201/206 (98%)	200 (100%)	1 (0%)	0	100 100
55	K	201/206 (98%)	200 (100%)	1 (0%)	0	100 100
56	CW	176/189 (93%)	174 (99%)	2 (1%)	0	100 100
56	L	176/189 (93%)	173 (98%)	2 (1%)	1 (1%)	22 53
57	CX	91/118 (77%)	84 (92%)	7 (8%)	0	100 100
57	M	96/118 (81%)	83 (86%)	11 (12%)	2 (2%)	5 27
58	CY	139/155 (90%)	136 (98%)	3 (2%)	0	100 100
58	N	142/155 (92%)	132 (93%)	9 (6%)	1 (1%)	19 50
59	CZ	114/143 (80%)	98 (86%)	16 (14%)	0	100 100
59	O	114/143 (80%)	82 (72%)	26 (23%)	6 (5%)	1 10
60	DA	148/151 (98%)	143 (97%)	5 (3%)	0	100 100
60	P	148/151 (98%)	146 (99%)	2 (1%)	0	100 100
61	DB	125/132 (95%)	118 (94%)	6 (5%)	1 (1%)	16 46
61	Q	125/132 (95%)	122 (98%)	2 (2%)	1 (1%)	16 46
62	DC	127/142 (89%)	110 (87%)	16 (13%)	1 (1%)	16 46
62	R	127/142 (89%)	110 (87%)	16 (13%)	1 (1%)	16 46
63	DD	138/142 (97%)	131 (95%)	5 (4%)	2 (1%)	9 34
63	S	138/142 (97%)	131 (95%)	5 (4%)	2 (1%)	9 34
64	DE	123/137 (90%)	118 (96%)	5 (4%)	0	100 100
64	T	122/137 (89%)	116 (95%)	6 (5%)	0	100 100
65	DF	140/145 (97%)	132 (94%)	6 (4%)	2 (1%)	9 34
65	U	142/145 (98%)	133 (94%)	9 (6%)	0	100 100
66	DG	139/145 (96%)	135 (97%)	4 (3%)	0	100 100
66	V	139/145 (96%)	136 (98%)	3 (2%)	0	100 100
67	DH	98/119 (82%)	95 (97%)	3 (3%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
67	W	100/119 (84%)	95 (95%)	5 (5%)	0	100	100
68	DI	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
68	X	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
69	DJ	127/130 (98%)	126 (99%)	1 (1%)	0	100	100
69	Y	127/130 (98%)	124 (98%)	3 (2%)	0	100	100
70	DK	141/145 (97%)	137 (97%)	4 (3%)	0	100	100
70	Z	141/145 (97%)	137 (97%)	4 (3%)	0	100	100
71	DL	130/135 (96%)	125 (96%)	3 (2%)	2 (2%)	8	33
71	a	132/135 (98%)	129 (98%)	3 (2%)	0	100	100
72	DM	69/105 (66%)	65 (94%)	4 (6%)	0	100	100
72	b	70/105 (67%)	69 (99%)	1 (1%)	0	100	100
73	DN	95/119 (80%)	93 (98%)	2 (2%)	0	100	100
73	c	96/119 (81%)	87 (91%)	8 (8%)	1 (1%)	13	42
74	DO	79/82 (96%)	73 (92%)	6 (8%)	0	100	100
74	d	79/82 (96%)	74 (94%)	5 (6%)	0	100	100
75	DP	57/67 (85%)	51 (90%)	6 (10%)	0	100	100
75	e	60/67 (90%)	56 (93%)	4 (7%)	0	100	100
76	DQ	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
76	f	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
77	DR	54/63 (86%)	51 (94%)	3 (6%)	0	100	100
77	g	58/63 (92%)	52 (90%)	6 (10%)	0	100	100
78	DS	68/193 (35%)	60 (88%)	8 (12%)	0	100	100
78	h	61/193 (32%)	49 (80%)	9 (15%)	3 (5%)	2	12
79	AR	309/317 (98%)	281 (91%)	25 (8%)	3 (1%)	13	42
79	DT	309/317 (98%)	285 (92%)	22 (7%)	2 (1%)	22	53
80	L1	215/217 (99%)	166 (77%)	45 (21%)	4 (2%)	6	29
80	l1	215/217 (99%)	124 (58%)	81 (38%)	10 (5%)	2	13
All	All	22518/24692 (91%)	21437 (95%)	995 (4%)	86 (0%)	30	61

All (86) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
10	p	208	ASP

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Mol	Chain	Res	Type
45	i	43	PRO
45	i	55	LYS
52	H	151	SER
54	J	162	LEU
59	O	130	SER
78	h	161	ARG
78	h	178	LYS
7	AZ	234	GLU
10	BC	125	ASP
14	BG	127	ASP
30	BW	2	ALA
49	CP	243	ALA
65	DF	82	PRO
79	DT	291	TRP
80	L1	45	ARG
80	l1	71	ALA
80	l1	74	VAL
80	l1	129	SER
80	l1	157	PHE
80	l1	179	LEU
80	l1	212	PRO
45	CL	41	ALA
45	CL	43	PRO
45	CL	72	ASP
10	p	206	SER
40	AM	49	LEU
45	i	76	PRO
56	L	22	ALA
57	M	88	PRO
58	N	50	GLU
59	O	104	CYS
10	BC	128	PRO
23	BP	25	ASN
53	CT	122	GLU
53	CT	222	GLU
62	DC	12	PHE
71	DL	96	LEU
80	L1	212	PRO
80	l1	27	ASN
80	l1	59	PRO
80	l1	87	VAL
80	l1	180	VAL

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Mol	Chain	Res	Type
9	o	230	GLU
23	5	20	ALA
25	7	98	PRO
52	H	150	GLY
59	O	127	GLY
63	S	41	GLU
78	h	139	LYS
79	AR	49	GLY
9	BB	230	GLU
23	BP	52	ASN
53	CT	214	LYS
65	DF	80	LYS
80	L1	56	PRO
80	L1	59	PRO
31	AD	99	ASP
59	O	102	GLY
63	S	40	PRO
79	AR	147	GLY
79	AR	203	PRO
7	AZ	226	TYR
7	AZ	233	SER
42	CI	3	ASP
53	CT	218	GLU
53	CT	219	ARG
79	DT	75	SER
10	p	207	ALA
59	O	37	VAL
59	O	41	LEU
73	c	63	ALA
54	CU	156	THR
63	DD	73	HIS
63	DD	74	VAL
71	DL	94	TYR
45	CL	48	PRO
30	AC	3	LYS
51	G	259	GLN
61	Q	121	THR
62	R	65	ALA
61	DB	119	ASP
57	M	86	ILE
42	CI	20	VAL
54	CU	142	GLY

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Mol	Chain	Res	Type
30	AC	21	ILE

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
4	AW	190/194 (98%)	189 (100%)	1 (0%)	86 91
4	j	190/194 (98%)	190 (100%)	0	100 100
5	AX	325/328 (99%)	319 (98%)	6 (2%)	54 74
5	k	325/328 (99%)	322 (99%)	3 (1%)	75 85
6	AY	290/292 (99%)	287 (99%)	3 (1%)	73 84
6	l	290/292 (99%)	288 (99%)	2 (1%)	81 88
7	AZ	247/252 (98%)	243 (98%)	4 (2%)	58 76
7	m	250/252 (99%)	248 (99%)	2 (1%)	79 87
8	BA	132/154 (86%)	132 (100%)	0	100 100
8	n	136/154 (88%)	135 (99%)	1 (1%)	81 88
9	BB	198/204 (97%)	198 (100%)	0	100 100
9	o	198/204 (97%)	195 (98%)	3 (2%)	60 77
10	BC	193/216 (89%)	189 (98%)	4 (2%)	48 70
10	p	198/216 (92%)	197 (100%)	1 (0%)	86 91
11	BD	169/170 (99%)	169 (100%)	0	100 100
11	q	169/170 (99%)	169 (100%)	0	100 100
12	BE	178/186 (96%)	178 (100%)	0	100 100
12	r	178/186 (96%)	175 (98%)	3 (2%)	56 74
13	BF	146/149 (98%)	141 (97%)	5 (3%)	32 59
13	s	146/149 (98%)	144 (99%)	2 (1%)	62 78
14	BG	166/168 (99%)	163 (98%)	3 (2%)	54 74
14	t	166/168 (99%)	164 (99%)	2 (1%)	67 80
15	BH	108/109 (99%)	107 (99%)	1 (1%)	75 85

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
15	u	108/109 (99%)	106 (98%)	2 (2%)	52 72
16	BI	177/178 (99%)	174 (98%)	3 (2%)	56 74
16	v	177/178 (99%)	175 (99%)	2 (1%)	70 82
17	BJ	166/167 (99%)	164 (99%)	2 (1%)	67 80
17	w	166/167 (99%)	166 (100%)	0	100 100
18	BK	145/154 (94%)	141 (97%)	4 (3%)	38 64
18	x	144/154 (94%)	144 (100%)	0	100 100
19	BL	153/154 (99%)	153 (100%)	0	100 100
19	y	153/154 (99%)	152 (99%)	1 (1%)	81 88
20	BM	146/153 (95%)	141 (97%)	5 (3%)	32 59
20	z	146/153 (95%)	146 (100%)	0	100 100
21	0	155/157 (99%)	154 (99%)	1 (1%)	84 90
21	BN	155/157 (99%)	155 (100%)	0	100 100
22	2	133/134 (99%)	133 (100%)	0	100 100
22	BO	133/134 (99%)	131 (98%)	2 (2%)	60 77
23	5	93/112 (83%)	93 (100%)	0	100 100
23	BP	93/112 (83%)	89 (96%)	4 (4%)	25 53
24	6	101/104 (97%)	101 (100%)	0	100 100
24	BQ	101/104 (97%)	100 (99%)	1 (1%)	73 84
25	7	97/127 (76%)	95 (98%)	2 (2%)	48 70
25	BR	86/127 (68%)	84 (98%)	2 (2%)	45 68
26	8	108/121 (89%)	108 (100%)	0	100 100
26	BS	107/121 (88%)	107 (100%)	0	100 100
27	9	111/112 (99%)	110 (99%)	1 (1%)	75 85
27	BT	111/112 (99%)	109 (98%)	2 (2%)	54 74
28	AA	117/118 (99%)	117 (100%)	0	100 100
28	BU	117/118 (99%)	117 (100%)	0	100 100
29	AB	120/121 (99%)	119 (99%)	1 (1%)	79 87
29	BV	120/121 (99%)	120 (100%)	0	100 100
30	AC	48/49 (98%)	48 (100%)	0	100 100
30	BW	50/49 (102%)	50 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	AD	81/90 (90%)	81 (100%)	0	100	100
31	BX	81/90 (90%)	81 (100%)	0	100	100
32	AE	98/100 (98%)	97 (99%)	1 (1%)	73	84
32	BY	97/100 (97%)	96 (99%)	1 (1%)	73	84
33	AF	109/115 (95%)	108 (99%)	1 (1%)	75	85
33	BZ	111/115 (96%)	109 (98%)	2 (2%)	54	74
34	AG	91/92 (99%)	90 (99%)	1 (1%)	70	82
34	CA	94/92 (102%)	94 (100%)	0	100	100
35	AH	95/96 (99%)	95 (100%)	0	100	100
35	CB	98/96 (102%)	98 (100%)	0	100	100
36	AI	106/106 (100%)	106 (100%)	0	100	100
36	CC	105/106 (99%)	104 (99%)	1 (1%)	73	84
37	AJ	77/79 (98%)	76 (99%)	1 (1%)	65	79
37	CD	78/79 (99%)	77 (99%)	1 (1%)	65	79
38	AK	70/73 (96%)	70 (100%)	0	100	100
38	CE	70/73 (96%)	70 (100%)	0	100	100
39	AL	68/69 (99%)	68 (100%)	0	100	100
39	CF	69/69 (100%)	69 (100%)	0	100	100
40	AM	46/47 (98%)	46 (100%)	0	100	100
40	CG	46/47 (98%)	46 (100%)	0	100	100
41	AN	47/47 (100%)	46 (98%)	1 (2%)	48	70
41	CH	48/47 (102%)	47 (98%)	1 (2%)	48	70
42	AO	24/24 (100%)	23 (96%)	1 (4%)	25	53
42	CI	23/24 (96%)	20 (87%)	3 (13%)	3	14
43	AP	88/91 (97%)	87 (99%)	1 (1%)	70	82
43	CJ	90/91 (99%)	88 (98%)	2 (2%)	47	69
44	AQ	72/73 (99%)	71 (99%)	1 (1%)	62	78
44	CK	72/73 (99%)	71 (99%)	1 (1%)	62	78
45	CL	100/212 (47%)	97 (97%)	3 (3%)	36	62
45	i	100/212 (47%)	92 (92%)	8 (8%)	10	32
47	C	176/215 (82%)	176 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
47	CN	176/215 (82%)	174 (99%)	2 (1%)	70 82
48	CO	194/229 (85%)	183 (94%)	11 (6%)	17 44
48	D	194/229 (85%)	193 (100%)	1 (0%)	86 91
49	CP	174/198 (88%)	172 (99%)	2 (1%)	70 82
49	E	175/198 (88%)	175 (100%)	0	100 100
50	CQ	174/196 (89%)	173 (99%)	1 (1%)	84 90
50	F	174/196 (89%)	171 (98%)	3 (2%)	56 74
51	CR	218/220 (99%)	216 (99%)	2 (1%)	75 85
51	G	218/220 (99%)	217 (100%)	1 (0%)	86 91
52	CS	169/197 (86%)	168 (99%)	1 (1%)	84 90
52	H	178/197 (90%)	174 (98%)	4 (2%)	47 69
53	CT	195/204 (96%)	184 (94%)	11 (6%)	17 45
53	I	195/204 (96%)	190 (97%)	5 (3%)	41 66
54	CU	163/167 (98%)	160 (98%)	3 (2%)	54 74
54	J	166/167 (99%)	165 (99%)	1 (1%)	84 90
55	CV	157/160 (98%)	154 (98%)	3 (2%)	52 72
55	K	157/160 (98%)	156 (99%)	1 (1%)	84 90
56	CW	153/160 (96%)	151 (99%)	2 (1%)	65 79
56	L	153/160 (96%)	153 (100%)	0	100 100
57	CX	87/104 (84%)	86 (99%)	1 (1%)	70 82
57	M	90/104 (86%)	88 (98%)	2 (2%)	47 69
58	CY	122/134 (91%)	119 (98%)	3 (2%)	42 67
58	N	124/134 (92%)	120 (97%)	4 (3%)	34 61
59	CZ	98/123 (80%)	96 (98%)	2 (2%)	50 71
59	O	98/123 (80%)	89 (91%)	9 (9%)	7 26
60	DA	129/130 (99%)	128 (99%)	1 (1%)	79 87
60	P	129/130 (99%)	129 (100%)	0	100 100
61	DB	97/102 (95%)	97 (100%)	0	100 100
61	Q	97/102 (95%)	97 (100%)	0	100 100
62	DC	111/121 (92%)	109 (98%)	2 (2%)	54 74
62	R	111/121 (92%)	102 (92%)	9 (8%)	9 31

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
63	DD	114/116 (98%)	113 (99%)	1 (1%)	75 85
63	S	114/116 (98%)	111 (97%)	3 (3%)	41 66
64	DE	112/122 (92%)	110 (98%)	2 (2%)	54 74
64	T	112/122 (92%)	109 (97%)	3 (3%)	40 65
65	DF	126/129 (98%)	124 (98%)	2 (2%)	58 76
65	U	128/129 (99%)	126 (98%)	2 (2%)	58 76
66	DG	113/117 (97%)	111 (98%)	2 (2%)	54 74
66	V	113/117 (97%)	112 (99%)	1 (1%)	75 85
67	DH	90/105 (86%)	89 (99%)	1 (1%)	70 82
67	W	92/105 (88%)	89 (97%)	3 (3%)	33 60
68	DI	71/71 (100%)	71 (100%)	0	100 100
68	X	71/71 (100%)	71 (100%)	0	100 100
69	DJ	112/113 (99%)	110 (98%)	2 (2%)	54 74
69	Y	112/113 (99%)	112 (100%)	0	100 100
70	DK	116/118 (98%)	115 (99%)	1 (1%)	75 85
70	Z	116/118 (98%)	115 (99%)	1 (1%)	75 85
71	DL	109/112 (97%)	101 (93%)	8 (7%)	11 35
71	a	111/112 (99%)	111 (100%)	0	100 100
72	DM	63/85 (74%)	62 (98%)	1 (2%)	58 76
72	b	64/85 (75%)	63 (98%)	1 (2%)	58 76
73	DN	83/102 (81%)	81 (98%)	2 (2%)	44 68
73	c	84/102 (82%)	75 (89%)	9 (11%)	5 21
74	DO	72/73 (99%)	72 (100%)	0	100 100
74	d	72/73 (99%)	72 (100%)	0	100 100
75	DP	51/58 (88%)	51 (100%)	0	100 100
75	e	54/58 (93%)	54 (100%)	0	100 100
76	DQ	47/48 (98%)	46 (98%)	1 (2%)	48 70
76	f	47/48 (98%)	45 (96%)	2 (4%)	25 53
77	DR	48/54 (89%)	48 (100%)	0	100 100
77	g	51/54 (94%)	51 (100%)	0	100 100
78	DS	62/175 (35%)	60 (97%)	2 (3%)	34 61

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
78	h	55/175 (31%)	53 (96%)	2 (4%)	30 57
79	AR	259/263 (98%)	258 (100%)	1 (0%)	89 93
79	DT	259/263 (98%)	254 (98%)	5 (2%)	52 72
80	L1	196/196 (100%)	186 (95%)	10 (5%)	20 48
80	l1	196/196 (100%)	186 (95%)	10 (5%)	20 48
All	All	19326/20828 (93%)	19049 (99%)	277 (1%)	62 78

All (277) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	k	3	HIS
5	k	7	GLU
5	k	386	ASP
6	l	99	ARG
6	l	121	TYR
7	m	7	PHE
7	m	45	ASN
8	n	104	TYR
9	o	15	LYS
9	o	197	SER
9	o	198	ASN
10	p	27	LEU
12	r	92	HIS
12	r	139	ARG
12	r	216	TYR
13	s	13	ARG
13	s	68	HIS
14	t	4	SER
14	t	106	GLN
15	u	22	ASP
15	u	103	SER
16	v	178	HIS
16	v	188	ARG
19	y	174	ARG
21	0	48	LEU
25	7	56	ARG
25	7	116	LYS
27	9	3	LYS
29	AB	86	LYS
32	AE	16	HIS

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Mol	Chain	Res	Type
33	AF	99	SER
34	AG	92	LYS
37	AJ	98	ARG
41	AN	38	LYS
42	AO	15	ARG
43	AP	41	ARG
44	AQ	60	CYS
45	i	33	ASN
45	i	34	THR
45	i	37	LYS
45	i	61	GLU
45	i	82	LYS
45	i	83	HIS
45	i	84	SER
45	i	85	LYS
48	D	80	SER
50	F	77	ARG
50	F	152	LYS
50	F	167	ASP
51	G	257	ARG
52	H	21	GLN
52	H	44	ASN
52	H	116	HIS
52	H	157	ARG
53	I	25	ARG
53	I	81	HIS
53	I	119	ASN
53	I	167	LYS
53	I	217	HIS
54	J	176	GLN
55	K	125	LYS
57	M	7	ASP
57	M	92	LEU
58	N	46	LYS
58	N	50	GLU
58	N	52	SER
58	N	67	ARG
59	O	33	ARG
59	O	38	HIS
59	O	39	ASP
59	O	41	LEU
59	O	103	LEU

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Mol	Chain	Res	Type
59	O	124	LYS
59	O	126	TRP
59	O	129	ASP
59	O	133	ARG
62	R	8	LYS
62	R	9	LYS
62	R	10	ARG
62	R	11	THR
62	R	12	PHE
62	R	13	LYS
62	R	14	GLN
62	R	28	MET
62	R	97	TYR
63	S	39	GLN
63	S	41	GLU
63	S	42	ILE
64	T	5	ARG
64	T	74	GLN
64	T	80	ARG
65	U	115	ARG
65	U	128	PHE
66	V	63	ARG
67	W	51	LYS
67	W	88	ARG
67	W	100	LYS
70	Z	107	PHE
72	b	34	ASP
73	c	5	ARG
73	c	22	ARG
73	c	24	LEU
73	c	50	VAL
73	c	51	ARG
73	c	61	GLU
73	c	64	LEU
73	c	77	CYS
73	c	79	ILE
76	f	24	CYS
76	f	40	ARG
78	h	139	LYS
78	h	151	ASP
79	AR	121	ARG
4	AW	142	ASP

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Mol	Chain	Res	Type
5	AX	5	LYS
5	AX	28	ARG
5	AX	172	SER
5	AX	226	PHE
5	AX	272	TYR
5	AX	365	PHE
6	AY	99	ARG
6	AY	145	GLN
6	AY	157	PHE
7	AZ	81	HIS
7	AZ	136	GLU
7	AZ	142	PHE
7	AZ	244	HIS
10	BC	121	LYS
10	BC	125	ASP
10	BC	206	SER
10	BC	209	GLU
13	BF	6	GLN
13	BF	13	ARG
13	BF	55	ARG
13	BF	88	GLU
13	BF	168	ASP
14	BG	45	LYS
14	BG	52	ASP
14	BG	201	LYS
15	BH	23	ASN
16	BI	71	ARG
16	BI	94	TYR
16	BI	109	ARG
17	BJ	75	ARG
17	BJ	118	ARG
18	BK	23	ARG
18	BK	30	ARG
18	BK	118	GLN
18	BK	180	LYS
20	BM	130	ASN
20	BM	131	THR
20	BM	167	ARG
20	BM	170	ARG
20	BM	180	LYS
22	BO	83	ARG
22	BO	118	GLU

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Mol	Chain	Res	Type
23	BP	14	LYS
23	BP	28	PHE
23	BP	44	ASP
23	BP	61	ASP
24	BQ	80	ARG
25	BR	86	SER
25	BR	97	LYS
27	BT	3	LYS
27	BT	88	GLU
32	BY	75	SER
33	BZ	17[A]	LYS
33	BZ	17[B]	LYS
36	CC	65	ASN
37	CD	98	ARG
41	CH	1	MET
42	CI	1	MET
42	CI	9	ARG
42	CI	13	LEU
43	CJ	44	ASP
43	CJ	58	PHE
44	CK	21	SER
47	CN	79	ARG
47	CN	168	HIS
48	CO	45	LYS
48	CO	46	THR
48	CO	47	LEU
48	CO	48	ILE
48	CO	91	VAL
48	CO	92	GLN
48	CO	94	LYS
48	CO	95	ASN
48	CO	96	LEU
48	CO	97	LEU
48	CO	98	THR
49	CP	136	ARG
49	CP	218	SER
50	CQ	77	ARG
51	CR	113	ARG
51	CR	187	ARG
52	CS	183	SER
53	CT	93	LYS
53	CT	154	ARG

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Mol	Chain	Res	Type
53	CT	155	ASP
53	CT	212	LEU
53	CT	214	LYS
53	CT	216	LEU
53	CT	218	GLU
53	CT	220	LYS
53	CT	223	ARG
53	CT	225	GLU
53	CT	226	ILE
54	CU	30	LEU
54	CU	72	ARG
54	CU	132	ILE
55	CV	24	LYS
55	CV	105	ASP
55	CV	125	LYS
56	CW	3	ARG
56	CW	87	SER
57	CX	63	TYR
58	CY	67	ARG
58	CY	105	LYS
58	CY	138	ASN
59	CZ	99	GLU
59	CZ	120	CYS
60	DA	99	ARG
62	DC	9	LYS
62	DC	10	ARG
63	DD	81	ARG
64	DE	5	ARG
64	DE	80	ARG
65	DF	120	ARG
65	DF	126	ARG
66	DG	63	ARG
66	DG	138	GLN
67	DH	51	LYS
69	DJ	28	ARG
69	DJ	37	PHE
70	DK	7	ARG
71	DL	91	LEU
71	DL	96	LEU
71	DL	99	LYS
71	DL	100	VAL
71	DL	101	GLU

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Mol	Chain	Res	Type
71	DL	102	LYS
71	DL	127	LYS
71	DL	132	ARG
72	DM	77	ARG
73	DN	22	ARG
73	DN	87	ARG
76	DQ	45	GLU
78	DS	122	ARG
78	DS	161	ARG
79	DT	14	GLU
79	DT	55	TYR
79	DT	73	THR
79	DT	80	TYR
79	DT	141	CYS
80	L1	18	GLU
80	L1	22	GLU
80	L1	46	ASP
80	L1	60	ARG
80	L1	63	MET
80	L1	68	PHE
80	L1	88	ASP
80	L1	142	ASP
80	L1	207	LYS
80	L1	214	PHE
80	l1	18	GLU
80	l1	26	ARG
80	l1	45	ARG
80	l1	68	PHE
80	l1	73	ASP
80	l1	76	ARG
80	l1	85	MET
80	l1	130	LYS
80	l1	134	PHE
80	l1	198	TRP
45	CL	67	LYS
45	CL	82	LYS
45	CL	85	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (49) such sidechains are listed below:

Mol	Chain	Res	Type
6	l	49	GLN

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Mol	Chain	Res	Type
9	o	198	ASN
10	p	192	HIS
11	q	149	ASN
15	u	35	GLN
19	y	5	HIS
19	y	9	GLN
25	7	78	HIS
28	AA	135	HIS
32	AE	42	HIS
32	AE	68	ASN
39	AL	77	ASN
47	C	30	GLN
47	C	49	ASN
59	O	38	HIS
62	R	14	GLN
71	a	126	GLN
79	AR	53	ASN
79	AR	122	GLN
4	AW	132	ASN
4	AW	187	HIS
7	AZ	94	ASN
11	BD	162	GLN
11	BD	163	GLN
12	BE	59	GLN
12	BE	95	HIS
13	BF	109	HIS
18	BK	118	GLN
18	BK	120	ASN
19	BL	158	HIS
20	BM	58	HIS
20	BM	134	HIS
28	BU	29	HIS
36	CC	62	GLN
38	CE	79	GLN
47	CN	33	ASN
53	CT	210	GLN
54	CU	48	ASN
54	CU	146	GLN
56	CW	112	GLN
57	CX	81	ASN
59	CZ	139	HIS
62	DC	98	ASN

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Mol	Chain	Res	Type
65	DF	136	GLN
77	DR	17	GLN
79	DT	53	ASN
79	DT	102	GLN
80	L1	182	GLN
45	CL	33	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3213/3359 (95%)	608 (18%)	43 (1%)
1	AS	3195/3359 (95%)	617 (19%)	51 (1%)
2	3	120/121 (99%)	9 (7%)	0
2	AT	120/121 (99%)	9 (7%)	0
3	4	156/158 (98%)	23 (14%)	3 (1%)
3	AU	157/158 (99%)	23 (14%)	3 (1%)
46	B	1706/1787 (95%)	407 (23%)	46 (2%)
46	CM	1720/1787 (96%)	434 (25%)	51 (2%)
All	All	10387/10850 (95%)	2130 (20%)	197 (1%)

All (2130) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	15	A
1	1	24	U
1	1	25	A
1	1	29	G
1	1	39	A
1	1	42	A
1	1	48	A
1	1	56	A
1	1	58	G
1	1	59	A
1	1	64	A
1	1	65	A
1	1	91	G
1	1	98	A
1	1	104	C
1	1	108	A
1	1	109	G
1	1	110	C

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Mol	Chain	Res	Type
1	1	121	A
1	1	134	U
1	1	135	G
1	1	155	A
1	1	156	A
1	1	164	U
1	1	169	G
1	1	172	C
1	1	173	C
1	1	175	G
1	1	186	A
1	1	189	U
1	1	190	U
1	1	199	C
1	1	205	G
1	1	209	C
1	1	212	A
1	1	217	G
1	1	218	A
1	1	219	G
1	1	230	G
1	1	236	A
1	1	239	A
1	1	240	C
1	1	243	G
1	1	245	G
1	1	249	G
1	1	250	U
1	1	251	G
1	1	269	G
1	1	286	U
1	1	295	A
1	1	305	U
1	1	311	C
1	1	323	A
1	1	329	U
1	1	337	G
1	1	338	A
1	1	339	C
1	1	349	A
1	1	350	C
1	1	376	G

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Mol	Chain	Res	Type
1	1	377	A
1	1	387	A
1	1	395	A
1	1	398	A
1	1	402	A
1	1	403	C
1	1	404	G
1	1	420	G
1	1	421	G
1	1	422	A
1	1	438	A
1	1	439	C
1	1	443	G
1	1	451	C
1	1	453	U
1	1	454	G
1	1	478	G
1	1	479	C
1	1	480	G
1	1	482	U
1	1	483	U
1	1	485	A
1	1	486	C
1	1	506	A
1	1	517	A
1	1	519	U
1	1	531	G
1	1	538	G
1	1	539	G
1	1	540	C
1	1	541	U
1	1	542	U
1	1	543	C
1	1	544	U
1	1	545	G
1	1	546	C
1	1	555	A
1	1	556	U
1	1	557	A
1	1	564	G
1	1	576	A
1	1	577	G

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Mol	Chain	Res	Type
1	1	589	G
1	1	590	A
1	1	598	U
1	1	609	A
1	1	618	U
1	1	619	A
1	1	620	A
1	1	635	C
1	1	647	A
1	1	658	A
1	1	675	A
1	1	679	U
1	1	681	U
1	1	688	A
1	1	689	A
1	1	703	A
1	1	710	G
1	1	713	A
1	1	717	A
1	1	723	G
1	1	730	A
1	1	732	U
1	1	760	U
1	1	763	U
1	1	772	U
1	1	773	U
1	1	776	A
1	1	777	G
1	1	780	A
1	1	781	G
1	1	802	A
1	1	813	A
1	1	826	A
1	1	845	C
1	1	857	C
1	1	870	U
1	1	875	U
1	1	892	A
1	1	903	G
1	1	904	G
1	1	910	A
1	1	912	G

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Mol	Chain	Res	Type
1	1	913	A
1	1	917	A
1	1	919	C
1	1	921	A
1	1	933	G
1	1	940	C
1	1	949	G
1	1	955	C
1	1	956	U
1	1	959	G
1	1	970	G
1	1	977	U
1	1	990	G
1	1	991	U
1	1	996	C
1	1	997	G
1	1	998	A
1	1	1006	G
1	1	1011	C
1	1	1012	U
1	1	1013	U
1	1	1014	G
1	1	1017	G
1	1	1019	U
1	1	1020	G
1	1	1021	A
1	1	1023	A
1	1	1024	U
1	1	1025	G
1	1	1027	C
1	1	1030	U
1	1	1033	C
1	1	1043	A
1	1	1045	C
1	1	1060	A
1	1	1061	A
1	1	1068	G
1	1	1077	U
1	1	1078	U
1	1	1089	A
1	1	1090	A
1	1	1091	U

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Mol	Chain	Res	Type
1	1	1092	U
1	1	1094	A
1	1	1099	A
1	1	1100	G
1	1	1113	G
1	1	1127	G
1	1	1140	U
1	1	1149	A
1	1	1150	A
1	1	1151	C
1	1	1155	A
1	1	1156	C
1	1	1164	U
1	1	1174	G
1	1	1176	A
1	1	1177	U
1	1	1178	G
1	1	1188	C
1	1	1189	A
1	1	1192	C
1	1	1197	C
1	1	1204	U
1	1	1205	G
1	1	1215	C
1	1	1218	G
1	1	1223	C
1	1	1224	C
1	1	1231	U
1	1	1232	G
1	1	1236	A
1	1	1239	G
1	1	1240	A
1	1	1241	A
1	1	1242	G
1	1	1244	C
1	1	1245	G
1	1	1246	G
1	1	1247	A
1	1	1249	U
1	1	1250	C
1	1	1252	G
1	1	1254	U

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Mol	Chain	Res	Type
1	1	1255	A
1	1	1257	G
1	1	1258	G
1	1	1259	A
1	1	1261	U
1	1	1262	G
1	1	1263	U
1	1	1264	G
1	1	1265	U
1	1	1266	A
1	1	1267	A
1	1	1270	A
1	1	1271	C
1	1	1273	C
1	1	1274	A
1	1	1278	G
1	1	1282	A
1	1	1283	A
1	1	1303	G
1	1	1304	A
1	1	1305	U
1	1	1309	G
1	1	1312	C
1	1	1326	A
1	1	1345	G
1	1	1346	U
1	1	1347	U
1	1	1348	U
1	1	1349	U
1	1	1382	A
1	1	1395	U
1	1	1415	A
1	1	1417	G
1	1	1421	U
1	1	1427	G
1	1	1430	G
1	1	1433	C
1	1	1442	A
1	1	1446	G
1	1	1465	C
1	1	1471	A
1	1	1477	A

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Mol	Chain	Res	Type
1	1	1484	G
1	1	1498	C
1	1	1504	C
1	1	1520	A
1	1	1523	C
1	1	1525	A
1	1	1526	U
1	1	1532	G
1	1	1535	A
1	1	1552	C
1	1	1556	G
1	1	1558	G
1	1	1559	C
1	1	1560	U
1	1	1561	U
1	1	1562	G
1	1	1563	A
1	1	1565	U
1	1	1566	U
1	1	1567	U
1	1	1568	U
1	1	1569	C
1	1	1571	G
1	1	1572	G
1	1	1574	C
1	1	1576	A
1	1	1577	C
1	1	1578	C
1	1	1585	A
1	1	1589	A
1	1	1601	A
1	1	1603	U
1	1	1624	C
1	1	1625	U
1	1	1635	C
1	1	1638	A
1	1	1639	A
1	1	1641	U
1	1	1648	G
1	1	1653	C
1	1	1670	G
1	1	1679	A

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Mol	Chain	Res	Type
1	1	1720	U
1	1	1721	C
1	1	1732	G
1	1	1746	A
1	1	1747	G
1	1	1755	U
1	1	1757	A
1	1	1758	U
1	1	1759	U
1	1	1760	U
1	1	1761	U
1	1	1762	G
1	1	1763	C
1	1	1776	G
1	1	1793	A
1	1	1804	G
1	1	1809	A
1	1	1810	A
1	1	1811	U
1	1	1812	A
1	1	1814	U
1	1	1815	U
1	1	1816	U
1	1	1817	U
1	1	1837	A
1	1	1838	A
1	1	1842	C
1	1	1844	G
1	1	1845	C
1	1	1862	C
1	1	1874	G
1	1	1882	A
1	1	1889	A
1	1	1902	G
1	1	1944	G
1	1	1949	G
1	1	2068	U
1	1	2069	U
1	1	2070	A
1	1	2071	A
1	1	2078	A
1	1	2088	G

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Mol	Chain	Res	Type
1	1	2089	G
1	1	2090	U
1	1	2091	A
1	1	2092	C
1	1	2099	G
1	1	2100	G
1	1	2109	A
1	1	2118	U
1	1	2122	A
1	1	2136	A
1	1	2147	G
1	1	2149	G
1	1	2183	U
1	1	2184	G
1	1	2185	A
1	1	2186	A
1	1	2187	U
1	1	2188	G
1	1	2222	A
1	1	2227	G
1	1	2233	A
1	1	2234	A
1	1	2235	C
1	1	2250	G
1	1	2251	G
1	1	2259	A
1	1	2260	U
1	1	2276	U
1	1	2285	G
1	1	2286	C
1	1	2288	U
1	1	2291	A
1	1	2292	U
1	1	2293	G
1	1	2313	G
1	1	2314	U
1	1	2341	A
1	1	2351	A
1	1	2352	C
1	1	2353	G
1	1	2363	G
1	1	2366	U

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Mol	Chain	Res	Type
1	1	2371	G
1	1	2372	G
1	1	2375	A
1	1	2380	A
1	1	2381	G
1	1	2382	A
1	1	2389	U
1	1	2396	G
1	1	2397	A
1	1	2413	G
1	1	2420	G
1	1	2421	A
1	1	2422	C
1	1	2427	A
1	1	2430	G
1	1	2431	U
1	1	2432	G
1	1	2433	U
1	1	2437	A
1	1	2438	U
1	1	2439	A
1	1	2440	A
1	1	2441	G
1	1	2442	U
1	1	2443	G
1	1	2444	G
1	1	2445	G
1	1	2446	A
1	1	2448	C
1	1	2449	U
1	1	2450	U
1	1	2452	G
1	1	2454	C
1	1	2455	G
1	1	2456	C
1	1	2457	C
1	1	2459	G
1	1	2460	U
1	1	2464	A
1	1	2465	U
1	1	2466	A
1	1	2467	C

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Mol	Chain	Res	Type
1	1	2468	C
1	1	2470	C
1	1	2471	U
1	1	2472	A
1	1	2473	C
1	1	2475	U
1	1	2476	C
1	1	2477	U
1	1	2480	A
1	1	2482	U
1	1	2483	U
1	1	2489	A
1	1	2492	U
1	1	2493	A
1	1	2511	G
1	1	2513	A
1	1	2515	G
1	1	2516	U
1	1	2517	C
1	1	2518	A
1	1	2519	A
1	1	2520	A
1	1	2521	C
1	1	2529	U
1	1	2530	C
1	1	2533	G
1	1	2536	U
1	1	2538	A
1	1	2545	C
1	1	2546	U
1	1	2548	G
1	1	2554	C
1	1	2557	G
1	1	2565	A
1	1	2566	C
1	1	2578	G
1	1	2579	G
1	1	2586	G
1	1	2598	A
1	1	2607	A
1	1	2623	G
1	1	2624	U

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Mol	Chain	Res	Type
1	1	2628	A
1	1	2638	C
1	1	2644	G
1	1	2646	A
1	1	2649	G
1	1	2661	A
1	1	2662	G
1	1	2663	A
1	1	2664	A
1	1	2666	A
1	1	2668	A
1	1	2676	A
1	1	2677	A
1	1	2686	G
1	1	2699	A
1	1	2700	G
1	1	2701	U
1	1	2724	U
1	1	2725	G
1	1	2734	A
1	1	2745	C
1	1	2749	G
1	1	2750	G
1	1	2768	G
1	1	2771	A
1	1	2772	G
1	1	2773	A
1	1	2774	A
1	1	2782	C
1	1	2786	G
1	1	2789	A
1	1	2790	U
1	1	2814	U
1	1	2817	A
1	1	2833	U
1	1	2839	C
1	1	2843	G
1	1	2844	A
1	1	2847	U
1	1	2859	A
1	1	2861	C
1	1	2866	C

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Mol	Chain	Res	Type
1	1	2870	G
1	1	2871	C
1	1	2886	G
1	1	2895	U
1	1	2900	C
1	1	2907	U
1	1	2908	A
1	1	2911	G
1	1	2914	C
1	1	2919	G
1	1	2920	C
1	1	2923	G
1	1	2926	U
1	1	2943	A
1	1	2955	C
1	1	2962	G
1	1	2969	G
1	1	2984	A
1	1	3021	A
1	1	3028	U
1	1	3031	G
1	1	3050	A
1	1	3051	C
1	1	3052	G
1	1	3058	A
1	1	3064	C
1	1	3073	G
1	1	3094	A
1	1	3101	A
1	1	3102	A
1	1	3103	U
1	1	3114	A
1	1	3115	C
1	1	3127	U
1	1	3134	C
1	1	3143	G
1	1	3144	A
1	1	3146	G
1	1	3149	U
1	1	3151	C
1	1	3157	A
1	1	3159	A

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Mol	Chain	Res	Type
1	1	3160	C
1	1	3162	U
1	1	3166	A
1	1	3171	C
1	1	3172	U
1	1	3182	C
1	1	3183	A
1	1	3184	G
1	1	3190	C
1	1	3194	G
1	1	3208	A
1	1	3210	A
1	1	3212	G
1	1	3214	U
1	1	3221	G
1	1	3224	U
1	1	3228	G
1	1	3235	A
1	1	3241	G
1	1	3246	C
1	1	3252	C
1	1	3259	A
1	1	3260	A
1	1	3268	G
1	1	3269	C
1	1	3272	A
1	1	3278	U
1	1	3281	A
1	1	3284	U
1	1	3285	A
1	1	3306	U
1	1	3307	A
1	1	3309	A
1	1	3310	G
1	1	3316	U
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	U
1	1	3321	G
1	1	3334	G
1	1	3343	C

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Mol	Chain	Res	Type
1	1	3351	G
1	1	3361	U
2	3	7	G
2	3	22	A
2	3	54	U
2	3	55	A
2	3	65	G
2	3	73	C
2	3	76	A
2	3	102	A
2	3	112	G
3	4	23	U
3	4	34	U
3	4	35	C
3	4	59	A
3	4	62	C
3	4	63	G
3	4	81	A
3	4	84	C
3	4	85	G
3	4	86	U
3	4	87	G
3	4	92	A
3	4	95	G
3	4	102	U
3	4	104	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	148	G
3	4	152	G
3	4	157	U
46	B	17	C
46	B	25	C
46	B	26	A
46	B	27	U
46	B	34	G
46	B	47	A
46	B	57	G
46	B	66	U

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Mol	Chain	Res	Type
46	B	74	U
46	B	75	U
46	B	76	A
46	B	79	C
46	B	81	G
46	B	84	A
46	B	93	A
46	B	104	A
46	B	114	C
46	B	115	G
46	B	123	G
46	B	126	A
46	B	127	G
46	B	128	U
46	B	129	A
46	B	130	C
46	B	138	C
46	B	139	U
46	B	142	G
46	B	143	A
46	B	150	U
46	B	151	G
46	B	152	G
46	B	154	A
46	B	159	U
46	B	166	A
46	B	168	U
46	B	173	G
46	B	174	C
46	B	176	U
46	B	177	A
46	B	179	A
46	B	190	U
46	B	191	U
46	B	193	G
46	B	199	G
46	B	200	A
46	B	202	G
46	B	206	U
46	B	211	A
46	B	215	A
46	B	216	A

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Mol	Chain	Res	Type
46	B	217	A
46	B	218	A
46	B	220	A
46	B	221	U
46	B	224	A
46	B	226	G
46	B	229	U
46	B	230	U
46	B	231	C
46	B	233	G
46	B	236	U
46	B	237	C
46	B	238	U
46	B	247	U
46	B	255	A
46	B	259	U
46	B	260	U
46	B	261	C
46	B	262	G
46	B	266	C
46	B	269	A
46	B	270	U
46	B	274	C
46	B	276	U
46	B	277	G
46	B	278	U
46	B	279	G
46	B	283	G
46	B	285	G
46	B	297	A
46	B	312	C
46	B	314	A
46	B	318	U
46	B	319	C
46	B	320	G
46	B	335	G
46	B	336	C
46	B	350	A
46	B	357	A
46	B	358	A
46	B	359	C
46	B	388	G

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Mol	Chain	Res	Type
46	B	398	A
46	B	400	C
46	B	402	G
46	B	414	A
46	B	416	G
46	B	421	G
46	B	422	C
46	B	423	A
46	B	424	G
46	B	432	G
46	B	437	U
46	B	442	C
46	B	446	C
46	B	452	A
46	B	458	A
46	B	466	A
46	B	475	A
46	B	480	U
46	B	482	C
46	B	483	A
46	B	485	G
46	B	486	G
46	B	501	G
46	B	502	U
46	B	503	A
46	B	504	A
46	B	505	U
46	B	506	U
46	B	509	A
46	B	512	G
46	B	513	A
46	B	515	U
46	B	518	A
46	B	519	A
46	B	525	A
46	B	530	U
46	B	534	C
46	B	536	A
46	B	537	G
46	B	539	A
46	B	540	A
46	B	547	G

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Mol	Chain	Res	Type
46	B	553	A
46	B	554	A
46	B	555	G
46	B	556	U
46	B	557	C
46	B	563	C
46	B	566	G
46	B	573	C
46	B	574	G
46	B	575	G
46	B	576	U
46	B	580	U
46	B	592	A
46	B	593	G
46	B	604	A
46	B	609	U
46	B	617	A
46	B	618	A
46	B	620	A
46	B	621	A
46	B	639	G
46	B	648	U
46	B	650	G
46	B	652	C
46	B	653	G
46	B	654	G
46	B	656	C
46	B	675	U
46	B	682	A
46	B	686	G
46	B	688	G
46	B	694	C
46	B	695	C
46	B	696	U
46	B	701	G
46	B	721	C
46	B	722	A
46	B	723	G
46	B	729	U
46	B	739	A
46	B	740	A
46	B	741	A

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Mol	Chain	Res	Type
46	B	750	G
46	B	751	U
46	B	756	A
46	B	759	A
46	B	760	G
46	B	762	C
46	B	764	U
46	B	765	U
46	B	766	U
46	B	767	G
46	B	768	C
46	B	770	C
46	B	771	G
46	B	773	A
46	B	778	U
46	B	779	U
46	B	796	A
46	B	798	A
46	B	799	G
46	B	802	C
46	B	803	G
46	B	804	U
46	B	805	U
46	B	807	U
46	B	808	G
46	B	811	U
46	B	813	U
46	B	815	U
46	B	817	U
46	B	819	G
46	B	820	U
46	B	821	U
46	B	822	G
46	B	823	G
46	B	824	U
46	B	825	U
46	B	826	U
46	B	828	U
46	B	829	A
46	B	831	G
46	B	840	A
46	B	842	U

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Mol	Chain	Res	Type
46	B	847	A
46	B	848	A
46	B	856	G
46	B	857	G
46	B	869	A
46	B	871	U
46	B	875	C
46	B	877	G
46	B	878	U
46	B	879	U
46	B	881	U
46	B	883	A
46	B	891	A
46	B	909	A
46	B	910	G
46	B	911	A
46	B	918	A
46	B	920	U
46	B	927	G
46	B	945	U
46	B	951	A
46	B	958	A
46	B	973	A
46	B	975	C
46	B	977	A
46	B	988	A
46	B	989	U
46	B	990	A
46	B	997	U
46	B	998	A
46	B	1004	A
46	B	1005	A
46	B	1011	A
46	B	1013	C
46	B	1017	G
46	B	1024	A
46	B	1025	G
46	B	1039	U
46	B	1042	U
46	B	1043	U
46	B	1044	U
46	B	1047	U

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Mol	Chain	Res	Type
46	B	1055	A
46	B	1056	U
46	B	1057	C
46	B	1058	G
46	B	1059	G
46	B	1060	C
46	B	1061	A
46	B	1067	C
46	B	1077	A
46	B	1081	C
46	B	1085	G
46	B	1123	A
46	B	1135	G
46	B	1143	C
46	B	1145	A
46	B	1152	G
46	B	1168	A
46	B	1169	A
46	B	1170	U
46	B	1179	A
46	B	1181	A
46	B	1184	G
46	B	1185	G
46	B	1187	A
46	B	1193	A
46	B	1202	A
46	B	1203	G
46	B	1206	A
46	B	1207	C
46	B	1212	A
46	B	1215	A
46	B	1219	A
46	B	1220	C
46	B	1221	A
46	B	1229	A
46	B	1230	G
46	B	1231	C
46	B	1236	U
46	B	1243	U
46	B	1250	G
46	B	1270	U
46	B	1299	U

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Mol	Chain	Res	Type
46	B	1300	U
46	B	1301	G
46	B	1306	A
46	B	1325	U
46	B	1330	A
46	B	1336	G
46	B	1339	G
46	B	1342	A
46	B	1343	G
46	B	1345	A
46	B	1346	U
46	B	1348	U
46	B	1349	G
46	B	1352	G
46	B	1355	A
46	B	1356	U
46	B	1357	A
46	B	1359	U
46	B	1360	C
46	B	1364	U
46	B	1369	G
46	B	1370	A
46	B	1376	U
46	B	1380	G
46	B	1381	A
46	B	1382	U
46	B	1384	U
46	B	1385	C
46	B	1392	A
46	B	1397	A
46	B	1398	G
46	B	1399	U
46	B	1400	U
46	B	1401	U
46	B	1410	A
46	B	1413	A
46	B	1414	G
46	B	1415	G
46	B	1422	A
46	B	1431	G
46	B	1433	C
46	B	1445	C

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Mol	Chain	Res	Type
46	B	1446	A
46	B	1455	A
46	B	1457	A
46	B	1458	C
46	B	1461	A
46	B	1462	C
46	B	1463	G
46	B	1468	C
46	B	1476	A
46	B	1477	U
46	B	1480	G
46	B	1483	U
46	B	1485	G
46	B	1491	G
46	B	1502	A
46	B	1503	A
46	B	1508	G
46	B	1510	G
46	B	1511	A
46	B	1523	G
46	B	1524	C
46	B	1529	G
46	B	1530	A
46	B	1541	U
46	B	1544	U
46	B	1546	G
46	B	1560	A
46	B	1561	G
46	B	1571	G
46	B	1574	A
46	B	1575	G
46	B	1577	G
46	B	1580	A
46	B	1582	U
46	B	1584	A
46	B	1588	G
46	B	1621	C
46	B	1644	U
46	B	1645	G
46	B	1665	C
46	B	1667	G
46	B	1670	U

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Mol	Chain	Res	Type
46	B	1671	G
46	B	1672	G
46	B	1673	U
46	B	1674	U
46	B	1677	G
46	B	1700	G
46	B	1704	C
46	B	1729	U
46	B	1737	A
46	B	1743	A
46	B	1747	G
46	B	1749	A
46	B	1753	A
46	B	1756	U
46	B	1767	G
46	B	1770	C
46	B	1779	G
46	B	1780	G
46	B	1781	A
46	B	1782	U
46	B	1783	C
1	AS	24	U
1	AS	25	A
1	AS	29	G
1	AS	39	A
1	AS	42	A
1	AS	48	A
1	AS	56	A
1	AS	58	G
1	AS	59	A
1	AS	64	A
1	AS	65	A
1	AS	91	G
1	AS	98	A
1	AS	104	C
1	AS	108	A
1	AS	109	G
1	AS	110	C
1	AS	120	A
1	AS	121	A
1	AS	134	U
1	AS	135	G

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Mol	Chain	Res	Type
1	AS	155	A
1	AS	156	A
1	AS	164	U
1	AS	169	G
1	AS	172	C
1	AS	173	C
1	AS	175	G
1	AS	186	A
1	AS	189	U
1	AS	190	U
1	AS	199	C
1	AS	205	G
1	AS	209	C
1	AS	212	A
1	AS	217	G
1	AS	218	A
1	AS	219	G
1	AS	230	G
1	AS	236	A
1	AS	239	A
1	AS	240	C
1	AS	243	G
1	AS	245	G
1	AS	249	G
1	AS	250	U
1	AS	251	G
1	AS	269	G
1	AS	286	U
1	AS	295	A
1	AS	305	U
1	AS	311	C
1	AS	323	A
1	AS	329	U
1	AS	337	G
1	AS	338	A
1	AS	339	C
1	AS	343	U
1	AS	349	A
1	AS	350	C
1	AS	376	G
1	AS	377	A
1	AS	395	A

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Mol	Chain	Res	Type
1	AS	398	A
1	AS	402	A
1	AS	403	C
1	AS	404	G
1	AS	420	G
1	AS	421	G
1	AS	422	A
1	AS	438	A
1	AS	439	C
1	AS	440	U
1	AS	441	U
1	AS	442	G
1	AS	443	G
1	AS	444	U
1	AS	445	A
1	AS	446	U
1	AS	447	U
1	AS	479	C
1	AS	480	G
1	AS	481	G
1	AS	482	U
1	AS	485	A
1	AS	486	C
1	AS	487	C
1	AS	506	A
1	AS	517	A
1	AS	519	U
1	AS	531	G
1	AS	532	U
1	AS	538	G
1	AS	539	G
1	AS	541	U
1	AS	542	U
1	AS	543	C
1	AS	544	U
1	AS	545	G
1	AS	546	C
1	AS	555	A
1	AS	556	U
1	AS	557	A
1	AS	564	G
1	AS	577	G

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Mol	Chain	Res	Type
1	AS	589	G
1	AS	590	A
1	AS	598	U
1	AS	600	U
1	AS	601	U
1	AS	602	A
1	AS	609	A
1	AS	618	U
1	AS	619	A
1	AS	620	A
1	AS	635	C
1	AS	647	A
1	AS	658	A
1	AS	675	A
1	AS	679	U
1	AS	688	A
1	AS	689	A
1	AS	703	A
1	AS	710	G
1	AS	713	A
1	AS	717	A
1	AS	723	G
1	AS	730	A
1	AS	732	U
1	AS	760	U
1	AS	763	U
1	AS	772	U
1	AS	773	U
1	AS	776	A
1	AS	777	G
1	AS	780	A
1	AS	781	G
1	AS	802	A
1	AS	812	A
1	AS	813	A
1	AS	826	A
1	AS	845	C
1	AS	857	C
1	AS	861	U
1	AS	870	U
1	AS	875	U
1	AS	893	U

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Mol	Chain	Res	Type
1	AS	903	G
1	AS	904	G
1	AS	910	A
1	AS	912	G
1	AS	913	A
1	AS	917	A
1	AS	919	C
1	AS	921	A
1	AS	933	G
1	AS	940	C
1	AS	949	G
1	AS	955	C
1	AS	956	U
1	AS	959	G
1	AS	970	G
1	AS	976	A
1	AS	977	U
1	AS	990	G
1	AS	991	U
1	AS	996	C
1	AS	997	G
1	AS	998	A
1	AS	1006	G
1	AS	1011	C
1	AS	1012	U
1	AS	1014	G
1	AS	1019	U
1	AS	1020	G
1	AS	1022	A
1	AS	1023	A
1	AS	1024	U
1	AS	1025	G
1	AS	1026	A
1	AS	1027	C
1	AS	1030	U
1	AS	1033	C
1	AS	1043	A
1	AS	1045	C
1	AS	1060	A
1	AS	1061	A
1	AS	1068	G
1	AS	1077	U

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Mol	Chain	Res	Type
1	AS	1078	U
1	AS	1089	A
1	AS	1090	A
1	AS	1091	U
1	AS	1092	U
1	AS	1094	A
1	AS	1099	A
1	AS	1100	G
1	AS	1113	G
1	AS	1127	G
1	AS	1140	U
1	AS	1149	A
1	AS	1150	A
1	AS	1151	C
1	AS	1155	A
1	AS	1156	C
1	AS	1164	U
1	AS	1174	G
1	AS	1176	A
1	AS	1177	U
1	AS	1178	G
1	AS	1188	C
1	AS	1189	A
1	AS	1192	C
1	AS	1197	C
1	AS	1204	U
1	AS	1205	G
1	AS	1217	A
1	AS	1218	G
1	AS	1219	A
1	AS	1220	C
1	AS	1224	C
1	AS	1228	C
1	AS	1231	U
1	AS	1232	G
1	AS	1233	G
1	AS	1252	G
1	AS	1254	U
1	AS	1255	A
1	AS	1256	A
1	AS	1258	G
1	AS	1259	A

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Mol	Chain	Res	Type
1	AS	1260	G
1	AS	1261	U
1	AS	1263	U
1	AS	1264	G
1	AS	1265	U
1	AS	1266	A
1	AS	1271	C
1	AS	1273	C
1	AS	1278	G
1	AS	1281	G
1	AS	1282	A
1	AS	1283	A
1	AS	1303	G
1	AS	1304	A
1	AS	1305	U
1	AS	1309	G
1	AS	1312	C
1	AS	1326	A
1	AS	1345	G
1	AS	1346	U
1	AS	1347	U
1	AS	1348	U
1	AS	1350	G
1	AS	1351	A
1	AS	1382	A
1	AS	1388	G
1	AS	1395	U
1	AS	1415	A
1	AS	1417	G
1	AS	1421	U
1	AS	1427	G
1	AS	1430	G
1	AS	1433	C
1	AS	1442	A
1	AS	1446	G
1	AS	1465	C
1	AS	1471	A
1	AS	1477	A
1	AS	1484	G
1	AS	1498	C
1	AS	1504	C
1	AS	1520	A

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Mol	Chain	Res	Type
1	AS	1523	C
1	AS	1532	G
1	AS	1535	A
1	AS	1552	C
1	AS	1556	G
1	AS	1558	G
1	AS	1559	C
1	AS	1560	U
1	AS	1561	U
1	AS	1562	G
1	AS	1563	A
1	AS	1564	U
1	AS	1565	U
1	AS	1566	U
1	AS	1567	U
1	AS	1568	U
1	AS	1569	C
1	AS	1571	G
1	AS	1572	G
1	AS	1574	C
1	AS	1576	A
1	AS	1577	C
1	AS	1585	A
1	AS	1589	A
1	AS	1601	A
1	AS	1603	U
1	AS	1624	C
1	AS	1625	U
1	AS	1635	C
1	AS	1638	A
1	AS	1639	A
1	AS	1641	U
1	AS	1648	G
1	AS	1654	G
1	AS	1679	A
1	AS	1720	U
1	AS	1721	C
1	AS	1732	G
1	AS	1746	A
1	AS	1747	G
1	AS	1755	U
1	AS	1756	A

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Mol	Chain	Res	Type
1	AS	1757	A
1	AS	1758	U
1	AS	1759	U
1	AS	1761	U
1	AS	1762	G
1	AS	1763	C
1	AS	1776	G
1	AS	1793	A
1	AS	1804	G
1	AS	1809	A
1	AS	1810	A
1	AS	1811	U
1	AS	1812	A
1	AS	1814	U
1	AS	1815	U
1	AS	1816	U
1	AS	1817	U
1	AS	1835	A
1	AS	1837	A
1	AS	1838	A
1	AS	1842	C
1	AS	1845	C
1	AS	1862	C
1	AS	1874	G
1	AS	1882	A
1	AS	1889	A
1	AS	1902	G
1	AS	1931	G
1	AS	1944	G
1	AS	1949	G
1	AS	2063	C
1	AS	2064	A
1	AS	2065	C
1	AS	2066	G
1	AS	2067	U
1	AS	2068	U
1	AS	2069	U
1	AS	2070	A
1	AS	2071	A
1	AS	2078	A
1	AS	2088	G
1	AS	2089	G

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Mol	Chain	Res	Type
1	AS	2091	A
1	AS	2092	C
1	AS	2099	G
1	AS	2100	G
1	AS	2109	A
1	AS	2118	U
1	AS	2122	A
1	AS	2136	A
1	AS	2147	G
1	AS	2149	G
1	AS	2183	U
1	AS	2184	G
1	AS	2185	A
1	AS	2186	A
1	AS	2187	U
1	AS	2188	G
1	AS	2201	A
1	AS	2222	A
1	AS	2227	G
1	AS	2233	A
1	AS	2234	A
1	AS	2235	C
1	AS	2250	G
1	AS	2251	G
1	AS	2257	A
1	AS	2259	A
1	AS	2260	U
1	AS	2276	U
1	AS	2285	G
1	AS	2286	C
1	AS	2288	U
1	AS	2291	A
1	AS	2292	U
1	AS	2293	G
1	AS	2312	U
1	AS	2313	G
1	AS	2314	U
1	AS	2351	A
1	AS	2352	C
1	AS	2353	G
1	AS	2363	G
1	AS	2366	U

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Mol	Chain	Res	Type
1	AS	2371	G
1	AS	2372	G
1	AS	2375	A
1	AS	2380	A
1	AS	2381	G
1	AS	2382	A
1	AS	2389	U
1	AS	2413	G
1	AS	2421	A
1	AS	2422	C
1	AS	2423	A
1	AS	2425	G
1	AS	2426	G
1	AS	2427	A
1	AS	2428	G
1	AS	2429	G
1	AS	2430	G
1	AS	2431	U
1	AS	2432	G
1	AS	2433	U
1	AS	2434	A
1	AS	2435	G
1	AS	2436	A
1	AS	2437	A
1	AS	2439	A
1	AS	2440	A
1	AS	2441	G
1	AS	2442	U
1	AS	2443	G
1	AS	2444	G
1	AS	2445	G
1	AS	2446	A
1	AS	2447	G
1	AS	2448	C
1	AS	2449	U
1	AS	2450	U
1	AS	2452	G
1	AS	2453	G
1	AS	2455	G
1	AS	2456	C
1	AS	2457	C
1	AS	2458	G

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Mol	Chain	Res	Type
1	AS	2459	G
1	AS	2464	A
1	AS	2465	U
1	AS	2466	A
1	AS	2467	C
1	AS	2468	C
1	AS	2469	A
1	AS	2471	U
1	AS	2472	A
1	AS	2473	C
1	AS	2474	C
1	AS	2475	U
1	AS	2476	C
1	AS	2477	U
1	AS	2478	A
1	AS	2480	A
1	AS	2481	G
1	AS	2482	U
1	AS	2483	U
1	AS	2489	A
1	AS	2492	U
1	AS	2493	A
1	AS	2511	G
1	AS	2513	A
1	AS	2515	G
1	AS	2516	U
1	AS	2517	C
1	AS	2518	A
1	AS	2519	A
1	AS	2520	A
1	AS	2521	C
1	AS	2529	U
1	AS	2530	C
1	AS	2533	G
1	AS	2536	U
1	AS	2538	A
1	AS	2545	C
1	AS	2546	U
1	AS	2554	C
1	AS	2557	G
1	AS	2565	A
1	AS	2566	C

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Mol	Chain	Res	Type
1	AS	2578	G
1	AS	2579	G
1	AS	2586	G
1	AS	2598	A
1	AS	2607	A
1	AS	2623	G
1	AS	2624	U
1	AS	2628	A
1	AS	2646	A
1	AS	2649	G
1	AS	2661	A
1	AS	2662	G
1	AS	2663	A
1	AS	2666	A
1	AS	2676	A
1	AS	2677	A
1	AS	2686	G
1	AS	2699	A
1	AS	2700	G
1	AS	2701	U
1	AS	2724	U
1	AS	2725	G
1	AS	2734	A
1	AS	2745	C
1	AS	2749	G
1	AS	2750	G
1	AS	2768	G
1	AS	2770	C
1	AS	2771	A
1	AS	2772	G
1	AS	2773	A
1	AS	2774	A
1	AS	2782	C
1	AS	2786	G
1	AS	2789	A
1	AS	2790	U
1	AS	2814	U
1	AS	2815	U
1	AS	2817	A
1	AS	2833	U
1	AS	2839	C
1	AS	2843	G

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Mol	Chain	Res	Type
1	AS	2844	A
1	AS	2847	U
1	AS	2859	A
1	AS	2861	C
1	AS	2866	C
1	AS	2870	G
1	AS	2871	C
1	AS	2886	G
1	AS	2895	U
1	AS	2907	U
1	AS	2908	A
1	AS	2911	G
1	AS	2914	C
1	AS	2919	G
1	AS	2920	C
1	AS	2923	G
1	AS	2926	U
1	AS	2943	A
1	AS	2955	C
1	AS	2960	C
1	AS	2962	G
1	AS	2969	G
1	AS	2984	A
1	AS	3021	A
1	AS	3028	U
1	AS	3031	G
1	AS	3050	A
1	AS	3051	C
1	AS	3052	G
1	AS	3058	A
1	AS	3064	C
1	AS	3076	U
1	AS	3094	A
1	AS	3101	A
1	AS	3102	A
1	AS	3103	U
1	AS	3114	A
1	AS	3115	C
1	AS	3134	C
1	AS	3143	G
1	AS	3144	A
1	AS	3146	G

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Mol	Chain	Res	Type
1	AS	3149	U
1	AS	3151	C
1	AS	3157	A
1	AS	3159	A
1	AS	3160	C
1	AS	3161	U
1	AS	3163	U
1	AS	3164	U
1	AS	3165	U
1	AS	3167	G
1	AS	3168	U
1	AS	3171	C
1	AS	3172	U
1	AS	3182	C
1	AS	3183	A
1	AS	3184	G
1	AS	3194	G
1	AS	3208	A
1	AS	3210	A
1	AS	3212	G
1	AS	3214	U
1	AS	3224	U
1	AS	3228	G
1	AS	3235	A
1	AS	3241	G
1	AS	3246	C
1	AS	3252	C
1	AS	3259	A
1	AS	3260	A
1	AS	3268	G
1	AS	3269	C
1	AS	3272	A
1	AS	3278	U
1	AS	3281	A
1	AS	3284	U
1	AS	3285	A
1	AS	3306	U
1	AS	3307	A
1	AS	3309	A
1	AS	3310	G
1	AS	3316	U
1	AS	3317	U

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Mol	Chain	Res	Type
1	AS	3318	G
1	AS	3319	U
1	AS	3320	U
1	AS	3321	G
1	AS	3334	G
1	AS	3343	C
1	AS	3351	G
1	AS	3361	U
2	AT	7	G
2	AT	22	A
2	AT	54	U
2	AT	55	A
2	AT	65	G
2	AT	73	C
2	AT	76	A
2	AT	102	A
2	AT	112	G
3	AU	23	U
3	AU	34	U
3	AU	35	C
3	AU	59	A
3	AU	62	C
3	AU	63	G
3	AU	81	A
3	AU	84	C
3	AU	85	G
3	AU	86	U
3	AU	87	G
3	AU	92	A
3	AU	95	G
3	AU	102	U
3	AU	104	A
3	AU	105	A
3	AU	106	C
3	AU	111	A
3	AU	113	U
3	AU	125	U
3	AU	126	A
3	AU	152	G
3	AU	157	U
46	CM	17	C
46	CM	25	C

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Mol	Chain	Res	Type
46	CM	26	A
46	CM	27	U
46	CM	34	G
46	CM	47	A
46	CM	57	G
46	CM	65	A
46	CM	66	U
46	CM	74	U
46	CM	75	U
46	CM	76	A
46	CM	78	A
46	CM	79	C
46	CM	81	G
46	CM	84	A
46	CM	114	C
46	CM	115	G
46	CM	123	G
46	CM	126	A
46	CM	127	G
46	CM	128	U
46	CM	129	A
46	CM	138	C
46	CM	139	U
46	CM	141	G
46	CM	142	G
46	CM	143	A
46	CM	150	U
46	CM	151	G
46	CM	152	G
46	CM	154	A
46	CM	159	U
46	CM	166	A
46	CM	168	U
46	CM	173	G
46	CM	176	U
46	CM	177	A
46	CM	190	U
46	CM	191	U
46	CM	193	G
46	CM	199	G
46	CM	200	A
46	CM	201	U

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Mol	Chain	Res	Type
46	CM	202	G
46	CM	206	U
46	CM	211	A
46	CM	213	A
46	CM	214	U
46	CM	215	A
46	CM	217	A
46	CM	218	A
46	CM	219	A
46	CM	220	A
46	CM	221	U
46	CM	222	C
46	CM	223	A
46	CM	226	G
46	CM	229	U
46	CM	230	U
46	CM	231	C
46	CM	232	G
46	CM	236	U
46	CM	237	C
46	CM	238	U
46	CM	239	U
46	CM	247	U
46	CM	255	A
46	CM	259	U
46	CM	260	U
46	CM	261	C
46	CM	262	G
46	CM	266	C
46	CM	269	A
46	CM	270	U
46	CM	273	C
46	CM	274	C
46	CM	275	U
46	CM	276	U
46	CM	277	G
46	CM	278	U
46	CM	279	G
46	CM	283	G
46	CM	285	G
46	CM	297	A
46	CM	312	C

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Mol	Chain	Res	Type
46	CM	314	A
46	CM	318	U
46	CM	319	C
46	CM	320	G
46	CM	335	G
46	CM	336	C
46	CM	350	A
46	CM	357	A
46	CM	358	A
46	CM	359	C
46	CM	388	G
46	CM	398	A
46	CM	400	C
46	CM	402	G
46	CM	414	A
46	CM	416	G
46	CM	421	G
46	CM	422	C
46	CM	423	A
46	CM	424	G
46	CM	432	G
46	CM	437	U
46	CM	442	C
46	CM	446	C
46	CM	452	A
46	CM	458	A
46	CM	466	A
46	CM	475	A
46	CM	480	U
46	CM	482	C
46	CM	483	A
46	CM	485	G
46	CM	486	G
46	CM	501	G
46	CM	502	U
46	CM	503	A
46	CM	504	A
46	CM	505	U
46	CM	506	U
46	CM	509	A
46	CM	512	G
46	CM	513	A

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Mol	Chain	Res	Type
46	CM	515	U
46	CM	518	A
46	CM	519	A
46	CM	525	A
46	CM	530	U
46	CM	534	C
46	CM	536	A
46	CM	537	G
46	CM	539	A
46	CM	540	A
46	CM	547	G
46	CM	553	A
46	CM	554	A
46	CM	555	G
46	CM	556	U
46	CM	557	C
46	CM	563	C
46	CM	566	G
46	CM	575	G
46	CM	576	U
46	CM	592	A
46	CM	593	G
46	CM	604	A
46	CM	609	U
46	CM	617	A
46	CM	618	A
46	CM	620	A
46	CM	621	A
46	CM	633	A
46	CM	639	G
46	CM	648	U
46	CM	650	G
46	CM	652	C
46	CM	653	G
46	CM	654	G
46	CM	656	C
46	CM	675	U
46	CM	682	A
46	CM	686	G
46	CM	687	A
46	CM	688	G
46	CM	694	C

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Mol	Chain	Res	Type
46	CM	695	C
46	CM	696	U
46	CM	697	U
46	CM	698	C
46	CM	699	U
46	CM	701	G
46	CM	702	G
46	CM	703	U
46	CM	704	A
46	CM	705	G
46	CM	706	C
46	CM	707	C
46	CM	708	A
46	CM	709	U
46	CM	711	U
46	CM	712	A
46	CM	713	U
46	CM	716	C
46	CM	717	G
46	CM	719	A
46	CM	720	C
46	CM	721	C
46	CM	722	A
46	CM	723	G
46	CM	724	G
46	CM	725	A
46	CM	729	U
46	CM	739	A
46	CM	740	A
46	CM	741	A
46	CM	750	G
46	CM	751	U
46	CM	756	A
46	CM	759	A
46	CM	760	G
46	CM	762	C
46	CM	764	U
46	CM	765	U
46	CM	766	U
46	CM	767	G
46	CM	768	C
46	CM	770	C

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Mol	Chain	Res	Type
46	CM	771	G
46	CM	773	A
46	CM	775	A
46	CM	778	U
46	CM	779	U
46	CM	796	A
46	CM	798	A
46	CM	799	G
46	CM	802	C
46	CM	803	G
46	CM	804	U
46	CM	805	U
46	CM	807	U
46	CM	808	G
46	CM	812	C
46	CM	814	A
46	CM	815	U
46	CM	816	U
46	CM	818	U
46	CM	819	G
46	CM	820	U
46	CM	821	U
46	CM	823	G
46	CM	824	U
46	CM	825	U
46	CM	826	U
46	CM	827	C
46	CM	828	U
46	CM	829	A
46	CM	840	A
46	CM	842	U
46	CM	848	A
46	CM	856	G
46	CM	857	G
46	CM	869	A
46	CM	871	U
46	CM	875	C
46	CM	877	G
46	CM	878	U
46	CM	879	U
46	CM	881	U
46	CM	891	A

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Mol	Chain	Res	Type
46	CM	899	G
46	CM	909	A
46	CM	910	G
46	CM	911	A
46	CM	918	A
46	CM	920	U
46	CM	927	G
46	CM	945	U
46	CM	951	A
46	CM	973	A
46	CM	975	C
46	CM	977	A
46	CM	988	A
46	CM	989	U
46	CM	997	U
46	CM	998	A
46	CM	1004	A
46	CM	1005	A
46	CM	1011	A
46	CM	1013	C
46	CM	1017	G
46	CM	1024	A
46	CM	1025	G
46	CM	1039	U
46	CM	1042	U
46	CM	1043	U
46	CM	1044	U
46	CM	1047	U
46	CM	1055	A
46	CM	1056	U
46	CM	1057	C
46	CM	1058	G
46	CM	1059	G
46	CM	1060	C
46	CM	1061	A
46	CM	1067	C
46	CM	1074	U
46	CM	1077	A
46	CM	1081	C
46	CM	1085	G
46	CM	1123	A
46	CM	1135	G

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Mol	Chain	Res	Type
46	CM	1143	C
46	CM	1145	A
46	CM	1152	G
46	CM	1168	A
46	CM	1169	A
46	CM	1170	U
46	CM	1179	A
46	CM	1181	A
46	CM	1184	G
46	CM	1185	G
46	CM	1186	G
46	CM	1187	A
46	CM	1193	A
46	CM	1202	A
46	CM	1203	G
46	CM	1207	C
46	CM	1212	A
46	CM	1215	A
46	CM	1219	A
46	CM	1220	C
46	CM	1221	A
46	CM	1229	A
46	CM	1230	G
46	CM	1231	C
46	CM	1234	U
46	CM	1236	U
46	CM	1243	U
46	CM	1250	G
46	CM	1253	G
46	CM	1270	U
46	CM	1284	G
46	CM	1299	U
46	CM	1300	U
46	CM	1301	G
46	CM	1306	A
46	CM	1325	U
46	CM	1330	A
46	CM	1336	G
46	CM	1339	G
46	CM	1342	A
46	CM	1343	G
46	CM	1345	A

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Mol	Chain	Res	Type
46	CM	1346	U
46	CM	1348	U
46	CM	1349	G
46	CM	1352	G
46	CM	1355	A
46	CM	1356	U
46	CM	1357	A
46	CM	1358	G
46	CM	1359	U
46	CM	1360	C
46	CM	1364	U
46	CM	1365	C
46	CM	1369	G
46	CM	1370	A
46	CM	1376	U
46	CM	1380	G
46	CM	1381	A
46	CM	1382	U
46	CM	1384	U
46	CM	1385	C
46	CM	1392	A
46	CM	1397	A
46	CM	1398	G
46	CM	1399	U
46	CM	1400	U
46	CM	1401	U
46	CM	1410	A
46	CM	1413	A
46	CM	1414	G
46	CM	1415	G
46	CM	1422	A
46	CM	1431	G
46	CM	1433	C
46	CM	1445	C
46	CM	1446	A
46	CM	1455	A
46	CM	1457	A
46	CM	1458	C
46	CM	1461	A
46	CM	1462	C
46	CM	1463	G
46	CM	1468	C

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Mol	Chain	Res	Type
46	CM	1476	A
46	CM	1483	U
46	CM	1491	G
46	CM	1502	A
46	CM	1503	A
46	CM	1508	G
46	CM	1510	G
46	CM	1511	A
46	CM	1523	G
46	CM	1524	C
46	CM	1529	G
46	CM	1530	A
46	CM	1541	U
46	CM	1544	U
46	CM	1546	G
46	CM	1556	A
46	CM	1560	A
46	CM	1561	G
46	CM	1571	G
46	CM	1574	A
46	CM	1575	G
46	CM	1577	G
46	CM	1580	A
46	CM	1582	U
46	CM	1584	A
46	CM	1588	G
46	CM	1589	C
46	CM	1621	C
46	CM	1644	U
46	CM	1645	G
46	CM	1665	C
46	CM	1667	G
46	CM	1670	U
46	CM	1671	G
46	CM	1672	G
46	CM	1673	U
46	CM	1674	U
46	CM	1677	G
46	CM	1700	G
46	CM	1704	C
46	CM	1737	A
46	CM	1743	A

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Mol	Chain	Res	Type
46	CM	1744	G
46	CM	1747	G
46	CM	1749	A
46	CM	1753	A
46	CM	1756	U
46	CM	1767	G
46	CM	1770	C
46	CM	1779	G
46	CM	1780	G
46	CM	1781	A
46	CM	1782	U
46	CM	1783	C

All (197) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	172	C
1	1	403	C
1	1	476	C
1	1	480	G
1	1	485	A
1	1	538	G
1	1	563	U
1	1	759	G
1	1	912	G
1	1	997	G
1	1	1012	U
1	1	1029	U
1	1	1060	A
1	1	1099	A
1	1	1346	U
1	1	1347	U
1	1	1559	C
1	1	1561	U
1	1	1576	A
1	1	1762	G
1	1	1815	U
1	1	1943	G
1	1	2090	U
1	1	2182	C
1	1	2183	U
1	1	2441	G

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Mol	Chain	Res	Type
1	1	2442	U
1	1	2447	G
1	1	2455	G
1	1	2465	U
1	1	2476	C
1	1	2515	G
1	1	2519	A
1	1	2545	C
1	1	2663	A
1	1	2789	A
1	1	3093	U
1	1	3193	C
1	1	3234	U
1	1	3240	U
1	1	3284	U
1	1	3309	A
1	1	3317	U
3	4	85	G
3	4	125	U
3	4	156	U
46	B	25	C
46	B	78	A
46	B	129	A
46	B	137	A
46	B	151	G
46	B	176	U
46	B	214	U
46	B	215	A
46	B	216	A
46	B	235	C
46	B	259	U
46	B	265	U
46	B	278	U
46	B	415	A
46	B	451	C
46	B	502	U
46	B	504	A
46	B	505	U
46	B	514	G
46	B	518	A
46	B	529	C
46	B	533	A

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Mol	Chain	Res	Type
46	B	553	A
46	B	556	U
46	B	638	U
46	B	685	C
46	B	740	A
46	B	763	C
46	B	769	U
46	B	814	A
46	B	855	C
46	B	874	U
46	B	876	A
46	B	1168	A
46	B	1335	U
46	B	1369	G
46	B	1396	A
46	B	1398	G
46	B	1457	A
46	B	1467	C
46	B	1479	A
46	B	1484	U
46	B	1523	G
46	B	1573	A
46	B	1579	A
46	B	1581	G
1	AS	172	C
1	AS	403	C
1	AS	443	G
1	AS	478	G
1	AS	479	C
1	AS	480	G
1	AS	538	G
1	AS	563	U
1	AS	601	U
1	AS	759	G
1	AS	912	G
1	AS	1029	U
1	AS	1060	A
1	AS	1099	A
1	AS	1217	A
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C

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Mol	Chain	Res	Type
1	AS	1576	A
1	AS	1762	G
1	AS	1815	U
1	AS	1943	G
1	AS	2090	U
1	AS	2182	C
1	AS	2183	U
1	AS	2430	G
1	AS	2431	U
1	AS	2434	A
1	AS	2447	G
1	AS	2448	C
1	AS	2449	U
1	AS	2452	G
1	AS	2455	G
1	AS	2458	G
1	AS	2465	U
1	AS	2476	C
1	AS	2515	G
1	AS	2519	A
1	AS	2545	C
1	AS	2789	A
1	AS	2790	U
1	AS	3093	U
1	AS	3160	C
1	AS	3162	U
1	AS	3193	C
1	AS	3234	U
1	AS	3240	U
1	AS	3284	U
1	AS	3309	A
1	AS	3315	C
1	AS	3317	U
3	AU	85	G
3	AU	125	U
3	AU	156	U
46	CM	25	C
46	CM	65	A
46	CM	78	A
46	CM	137	A
46	CM	151	G
46	CM	176	U

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Mol	Chain	Res	Type
46	CM	216	A
46	CM	238	U
46	CM	259	U
46	CM	265	U
46	CM	278	U
46	CM	415	A
46	CM	451	C
46	CM	482	C
46	CM	502	U
46	CM	504	A
46	CM	505	U
46	CM	514	G
46	CM	518	A
46	CM	529	C
46	CM	533	A
46	CM	553	A
46	CM	556	U
46	CM	638	U
46	CM	685	C
46	CM	702	G
46	CM	711	U
46	CM	719	A
46	CM	740	A
46	CM	763	C
46	CM	769	U
46	CM	814	A
46	CM	817	U
46	CM	823	G
46	CM	855	C
46	CM	874	U
46	CM	876	A
46	CM	1168	A
46	CM	1335	U
46	CM	1357	A
46	CM	1359	U
46	CM	1369	G
46	CM	1396	A
46	CM	1398	G
46	CM	1457	A
46	CM	1467	C
46	CM	1523	G
46	CM	1555	C

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Mol	Chain	Res	Type
46	CM	1573	A
46	CM	1579	A
46	CM	1581	G

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1476 ligands modelled in this entry, 1466 are monoatomic - leaving 10 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	$\#\|Z\| > 2$
83	PAR	1	3967	-	45,45,45	0.50	0	64,67,67	1.18	5 (7%)
83	PAR	CM	1946	-	45,45,45	0.44	0	64,67,67	0.76	2 (3%)
82	3K5	CJ	202	-	62,63,63	0.32	0	82,95,95	0.62	1 (1%)
83	PAR	AS	3790	-	45,45,45	0.53	0	64,67,67	1.25	5 (7%)
83	PAR	AS	3789	-	45,45,45	0.51	0	64,67,67	0.72	1 (1%)
83	PAR	AS	3788	-	45,45,45	0.62	1 (2%)	64,67,67	1.05	3 (4%)
83	PAR	B	1970	-	45,45,45	0.59	0	64,67,67	1.83	13 (20%)
83	PAR	1	3969	-	45,45,45	0.69	1 (2%)	64,67,67	1.70	12 (18%)
83	PAR	1	3968	-	45,45,45	0.54	0	64,67,67	1.07	5 (7%)
82	3K5	1	3406	-	62,63,63	2.92	31 (50%)	82,95,95	1.96	20 (24%)

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
83	PAR	1	3967	-	-	9/18/94/94	0/4/4/4
83	PAR	CM	1946	-	-	4/18/94/94	0/4/4/4
82	3K5	CJ	202	-	-	12/29/121/121	0/7/7/7
83	PAR	AS	3790	-	-	9/18/94/94	1/4/4/4
83	PAR	AS	3789	-	-	10/18/94/94	0/4/4/4
83	PAR	AS	3788	-	-	6/18/94/94	0/4/4/4
83	PAR	B	1970	-	-	12/18/94/94	0/4/4/4
83	PAR	1	3969	-	-	10/18/94/94	0/4/4/4
83	PAR	1	3968	-	-	7/18/94/94	1/4/4/4
82	3K5	1	3406	-	-	6/29/121/121	0/7/7/7

All (33) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
82	1	3406	3K5	C17-C22	-9.42	1.35	1.53
82	1	3406	3K5	O4-C22	7.60	1.60	1.43
82	1	3406	3K5	C21-C22	5.77	1.62	1.52
82	1	3406	3K5	C37-C36	-4.91	1.39	1.51
82	1	3406	3K5	C29-C28	-4.66	1.40	1.51
82	1	3406	3K5	O6-C23	4.61	1.45	1.34
82	1	3406	3K5	O12-C36	4.58	1.55	1.44
82	1	3406	3K5	O4-C3	-4.31	1.32	1.42
82	1	3406	3K5	O-C2	4.29	1.49	1.43
82	1	3406	3K5	O1-C6	4.26	1.43	1.34
82	1	3406	3K5	O7-C28	3.78	1.53	1.44
82	1	3406	3K5	C21-C20	-3.71	1.45	1.53
82	1	3406	3K5	C18-C17	3.59	1.59	1.53
82	1	3406	3K5	C20-C23	3.56	1.60	1.51
82	1	3406	3K5	C26-C25	-3.35	1.45	1.52
82	1	3406	3K5	O14-C38	3.29	1.42	1.35
82	1	3406	3K5	O9-C30	3.20	1.42	1.35
83	1	3969	PAR	C11-C21	-3.07	1.46	1.52
82	1	3406	3K5	O14-C34	3.04	1.49	1.44
82	1	3406	3K5	O9-C26	2.80	1.49	1.44
82	1	3406	3K5	C7-C6	2.78	1.54	1.48
83	AS	3788	PAR	C11-C21	2.58	1.57	1.52
82	1	3406	3K5	C9-C8	2.57	1.55	1.47
82	1	3406	3K5	O-C3	2.53	1.45	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
82	1	3406	3K5	O11-C25	2.52	1.50	1.43
82	1	3406	3K5	C4-C3	2.51	1.57	1.52
82	1	3406	3K5	C2-C1	2.42	1.55	1.51
82	1	3406	3K5	C1-C5	-2.39	1.47	1.52
82	1	3406	3K5	O16-C33	2.36	1.48	1.43
82	1	3406	3K5	C-C1	2.18	1.58	1.53
82	1	3406	3K5	O12-C32	2.12	1.47	1.41
82	1	3406	3K5	O6-C24	-2.08	1.39	1.43
82	1	3406	3K5	O7-C24	2.05	1.47	1.41

All (67) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	B	1970	PAR	C13-C23-C33	-8.07	92.40	102.10
82	1	3406	3K5	O14-C38-C39	6.54	123.12	111.09
82	1	3406	3K5	C9-C8-C7	-6.34	112.41	126.91
83	1	3969	PAR	O54-C54-C64	5.61	116.45	106.01
83	1	3969	PAR	C52-C42-C32	-5.55	100.80	111.16
83	AS	3788	PAR	O11-C11-C21	5.44	117.58	108.22
83	B	1970	PAR	O52-C13-C23	5.26	118.87	107.96
83	1	3969	PAR	O11-C11-C21	-5.18	99.29	108.22
83	AS	3790	PAR	O54-C14-C24	5.05	121.41	110.06
83	1	3967	PAR	C13-C23-C33	-4.87	96.24	102.10
83	AS	3790	PAR	O11-C11-C21	4.78	116.45	108.22
82	1	3406	3K5	O9-C30-C31	4.72	119.77	111.09
82	1	3406	3K5	O-C3-C4	4.70	115.63	110.76
83	1	3967	PAR	O11-C11-C21	3.97	115.06	108.22
82	1	3406	3K5	C37-C36-C35	-3.76	106.12	113.07
83	1	3968	PAR	O54-C14-C24	3.74	118.48	110.06
83	1	3968	PAR	O11-C11-C21	3.73	114.63	108.22
83	AS	3790	PAR	O33-C14-C24	-3.64	101.95	108.22
83	AS	3789	PAR	O11-C11-C21	3.61	114.44	108.22
83	B	1970	PAR	C13-O52-C52	-3.55	109.19	117.96
83	B	1970	PAR	O54-C14-C24	3.54	118.01	110.06
83	AS	3788	PAR	O33-C14-C24	3.49	114.22	108.22
83	B	1970	PAR	O33-C33-C23	-3.45	100.24	111.32
82	1	3406	3K5	O7-C24-C25	3.44	116.32	109.51
82	1	3406	3K5	C21-C20-C23	-3.36	103.53	111.36
82	1	3406	3K5	C32-C33-C34	3.32	115.90	110.07
83	CM	1946	PAR	O11-C11-C21	3.31	113.92	108.22
83	1	3969	PAR	O33-C14-C24	3.17	113.68	108.22
82	1	3406	3K5	C35-C34-C33	3.15	115.39	110.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	1	3406	3K5	C2-O-C3	-3.09	111.47	113.66
83	1	3969	PAR	C62-C52-C42	-3.05	104.69	111.66
83	B	1970	PAR	C13-O43-C43	-3.02	94.93	106.13
83	1	3968	PAR	O33-C14-C24	-2.97	103.09	108.22
83	1	3969	PAR	O52-C52-C42	2.94	114.95	107.48
82	1	3406	3K5	O6-C23-C20	2.82	118.09	111.83
83	B	1970	PAR	C44-C34-C24	2.78	115.85	111.07
82	1	3406	3K5	O4-C22-C21	2.76	118.41	111.36
82	1	3406	3K5	C24-O6-C23	-2.76	112.84	116.94
83	B	1970	PAR	O52-C52-C62	2.76	114.62	107.28
83	1	3969	PAR	O52-C52-C62	2.69	114.45	107.28
83	1	3969	PAR	O54-C14-C24	2.60	115.91	110.06
82	1	3406	3K5	O7-C28-C27	-2.59	104.87	109.52
82	1	3406	3K5	O1-C5-C1	-2.57	103.58	107.23
82	1	3406	3K5	C32-O11-C25	-2.54	111.67	117.96
82	1	3406	3K5	C5-O1-C6	2.52	121.20	117.45
83	B	1970	PAR	C52-C42-C32	2.52	115.86	111.16
82	CJ	202	3K5	C3-C15-C17	2.51	107.65	103.01
82	1	3406	3K5	O4-C3-C4	-2.50	105.67	109.89
83	B	1970	PAR	O52-C13-O43	2.42	114.05	111.43
83	1	3967	PAR	O54-C54-C64	2.38	110.43	106.01
83	1	3968	PAR	C32-C22-C12	2.36	116.02	111.18
83	B	1970	PAR	O52-C52-C42	2.30	113.34	107.48
83	1	3967	PAR	C52-C42-C32	2.28	115.41	111.16
83	1	3969	PAR	C14-O54-C54	2.23	118.06	113.69
83	AS	3790	PAR	O33-C33-C23	-2.22	104.16	111.32
82	1	3406	3K5	C32-O12-C36	-2.20	109.89	113.67
83	AS	3788	PAR	O51-C11-C21	2.19	114.98	110.06
83	1	3968	PAR	O51-C11-C21	2.18	114.95	110.06
83	1	3969	PAR	O52-C13-C23	2.15	112.42	107.96
83	1	3969	PAR	C11-O51-C51	2.13	117.86	113.69
83	B	1970	PAR	C32-C22-C12	2.11	115.52	111.18
83	CM	1946	PAR	O54-C54-C64	2.10	109.92	106.01
83	1	3967	PAR	O33-C14-C24	-2.08	104.63	108.22
83	AS	3790	PAR	O54-C54-C64	2.05	109.83	106.01
83	B	1970	PAR	C52-C62-C12	-2.05	104.63	109.63
82	1	3406	3K5	O15-C38-C39	-2.04	117.36	124.81
83	1	3969	PAR	O11-C42-C32	2.04	114.04	109.18

There are no chirality outliers.

All (85) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
82	1	3406	3K5	O15-C38-O14-C34
82	CJ	202	3K5	C39-C38-O14-C34
82	CJ	202	3K5	C35-C34-O14-C38
82	CJ	202	3K5	C31-C30-O9-C26
82	CJ	202	3K5	O10-C30-O9-C26
82	CJ	202	3K5	C6-C7-C8-C9
83	1	3967	PAR	C23-C13-O52-C52
83	1	3967	PAR	O43-C13-O52-C52
83	1	3967	PAR	C43-C33-O33-C14
83	1	3967	PAR	C24-C14-O33-C33
83	1	3967	PAR	C44-C54-C64-N64
83	1	3968	PAR	C44-C54-C64-N64
83	1	3968	PAR	O54-C54-C64-N64
83	1	3969	PAR	C23-C13-O52-C52
83	1	3969	PAR	O43-C13-O52-C52
83	1	3969	PAR	C44-C54-C64-N64
83	1	3969	PAR	O54-C54-C64-N64
83	B	1970	PAR	C32-C42-O11-C11
83	B	1970	PAR	C23-C13-O52-C52
83	B	1970	PAR	C24-C14-O33-C33
83	B	1970	PAR	O54-C54-C64-N64
83	AS	3788	PAR	C23-C13-O52-C52
83	AS	3788	PAR	O54-C54-C64-N64
83	AS	3789	PAR	C21-C11-O11-C42
83	AS	3789	PAR	C23-C13-O52-C52
83	AS	3789	PAR	O43-C13-O52-C52
83	AS	3789	PAR	C43-C33-O33-C14
83	AS	3790	PAR	O54-C54-C64-N64
83	CM	1946	PAR	C23-C13-O52-C52
82	1	3406	3K5	C39-C38-O14-C34
82	CJ	202	3K5	O15-C38-O14-C34
83	B	1970	PAR	O54-C14-O33-C33
83	B	1970	PAR	O51-C11-O11-C42
83	AS	3789	PAR	O51-C11-O11-C42
83	1	3968	PAR	O54-C14-O33-C33
83	B	1970	PAR	C41-C51-C61-O61
83	AS	3790	PAR	O43-C43-C53-O53
83	B	1970	PAR	O51-C51-C61-O61
83	AS	3790	PAR	O54-C14-O33-C33
83	1	3967	PAR	O51-C51-C61-O61
83	AS	3790	PAR	O51-C51-C61-O61
83	1	3968	PAR	O51-C51-C61-O61
83	AS	3789	PAR	O51-C51-C61-O61

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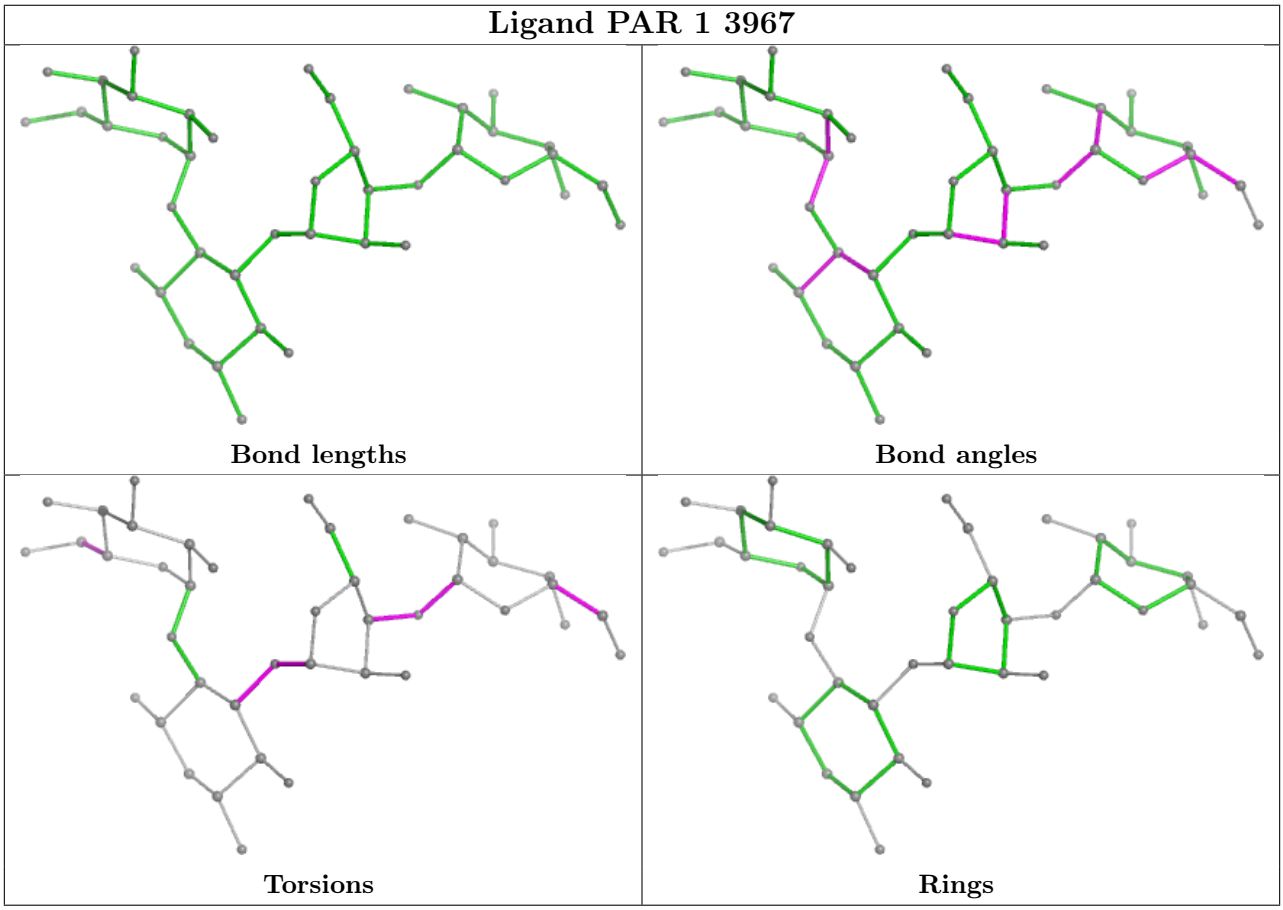
Mol	Chain	Res	Type	Atoms
83	1	3968	PAR	C41-C51-C61-O61
83	AS	3789	PAR	C41-C51-C61-O61
83	AS	3790	PAR	C41-C51-C61-O61
83	AS	3790	PAR	C33-C43-C53-O53
83	1	3969	PAR	O43-C43-C53-O53
82	CJ	202	3K5	O1-C6-C7-C8
82	1	3406	3K5	C1-C5-O1-C6
83	AS	3790	PAR	C62-C52-O52-C13
82	CJ	202	3K5	O2-C6-C7-C8
83	1	3968	PAR	C62-C52-O52-C13
82	CJ	202	3K5	O2-C6-O1-C5
83	1	3969	PAR	C33-C43-C53-O53
82	1	3406	3K5	C4-C5-O1-C6
83	1	3968	PAR	C42-C52-O52-C13
83	1	3969	PAR	O51-C51-C61-O61
83	AS	3790	PAR	C42-C52-O52-C13
83	B	1970	PAR	O43-C13-O52-C52
83	AS	3788	PAR	O43-C13-O52-C52
83	CM	1946	PAR	O43-C13-O52-C52
83	1	3967	PAR	C42-C52-O52-C13
83	1	3967	PAR	C41-C51-C61-O61
83	1	3969	PAR	C52-C42-O11-C11
83	1	3967	PAR	C62-C52-O52-C13
83	CM	1946	PAR	C44-C54-C64-N64
82	CJ	202	3K5	C7-C6-O1-C5
82	1	3406	3K5	O7-C24-O6-C23
83	AS	3789	PAR	C42-C52-O52-C13
83	AS	3789	PAR	C62-C52-O52-C13
83	AS	3788	PAR	C41-C51-C61-O61
82	1	3406	3K5	O2-C6-O1-C5
83	1	3969	PAR	C42-C52-O52-C13
83	1	3969	PAR	C62-C52-O52-C13
83	CM	1946	PAR	O54-C54-C64-N64
83	B	1970	PAR	C44-C54-C64-N64
82	CJ	202	3K5	C7-C8-C9-C14
82	CJ	202	3K5	C7-C8-C9-C10
83	B	1970	PAR	O43-C43-C53-O53
83	AS	3790	PAR	C23-C13-O52-C52
83	B	1970	PAR	C43-C33-O33-C14
83	AS	3788	PAR	C23-C33-O33-C14
83	AS	3789	PAR	C23-C33-O33-C14
83	AS	3788	PAR	O51-C51-C61-O61

All (2) ring outliers are listed below:

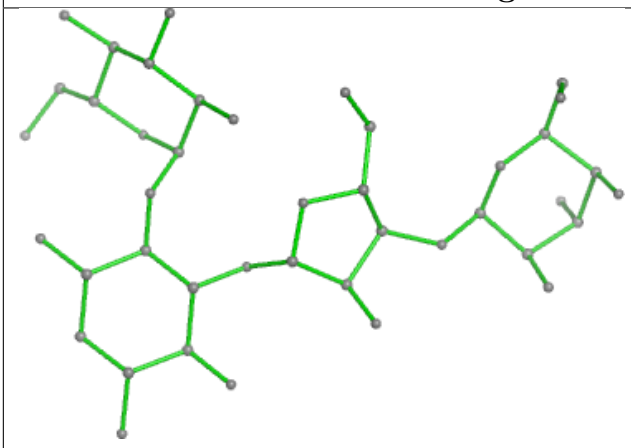
Mol	Chain	Res	Type	Atoms
83	1	3968	PAR	C12-C22-C32-C42-C52-C62
83	AS	3790	PAR	C12-C22-C32-C42-C52-C62

No monomer is involved in short contacts.

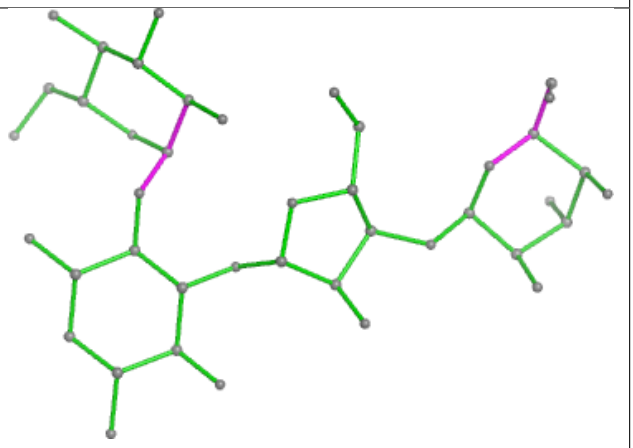
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.



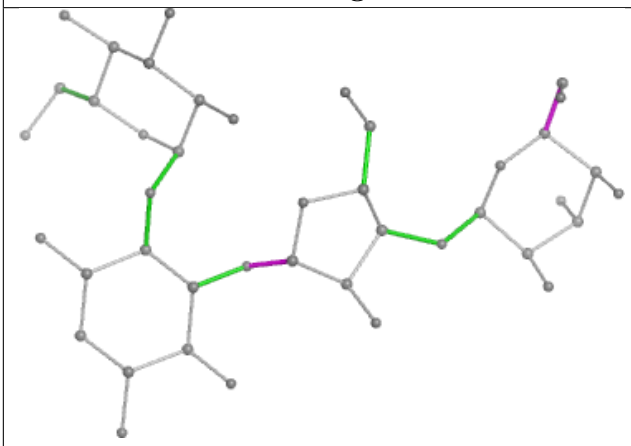
Ligand PAR CM 1946



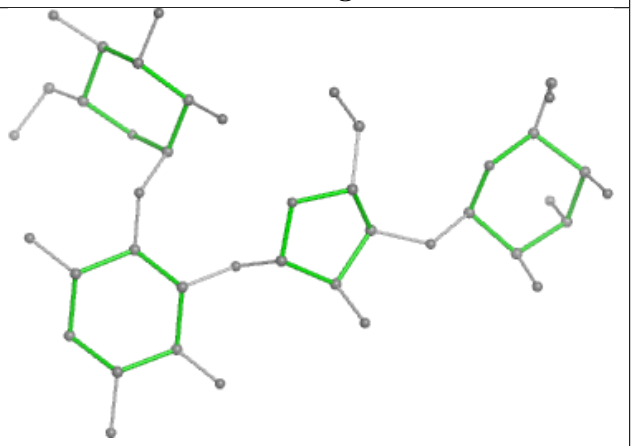
Bond lengths



Bond angles

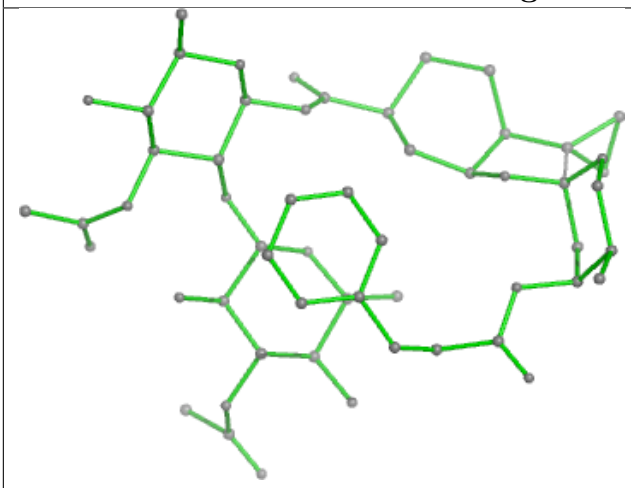


Torsions

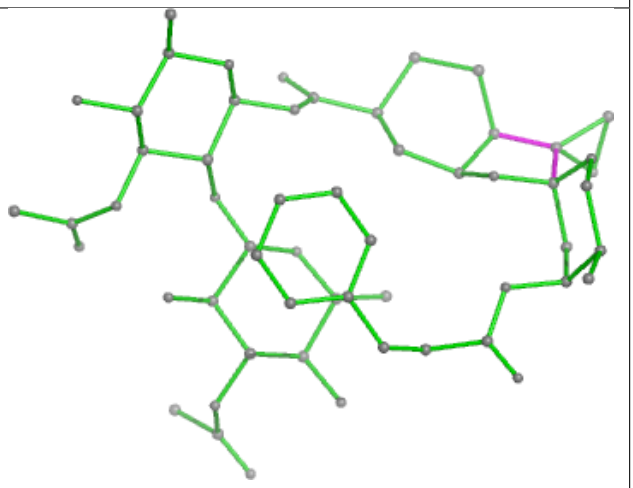


Rings

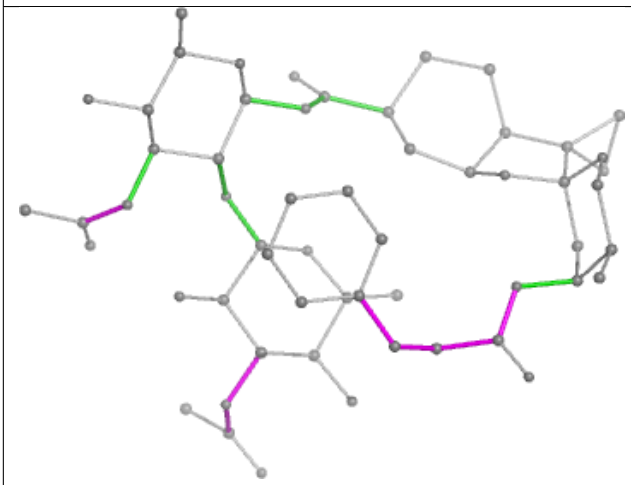
Ligand 3K5 CJ 202



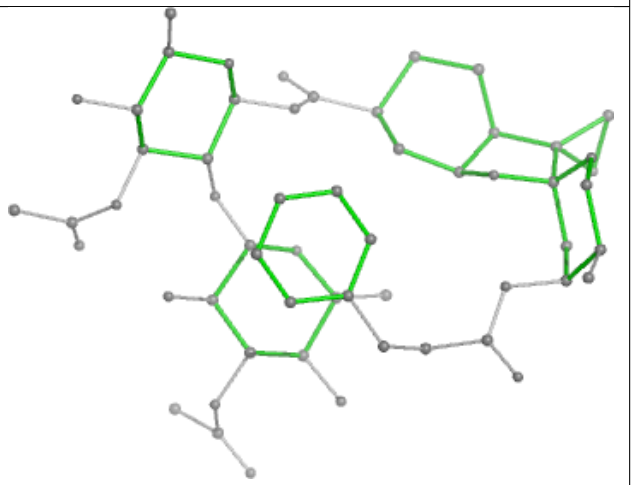
Bond lengths



Bond angles

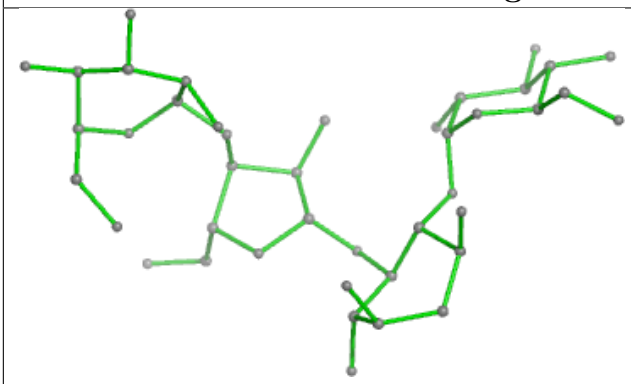


Torsions

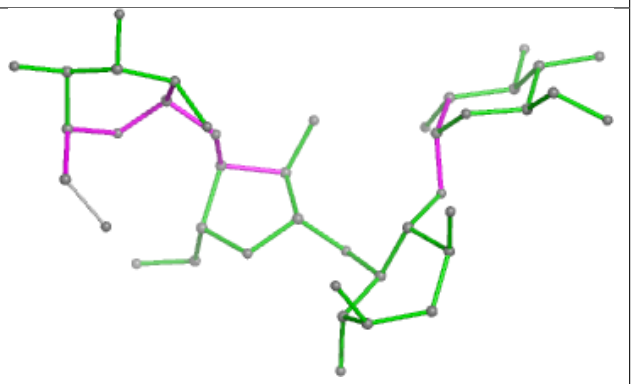


Rings

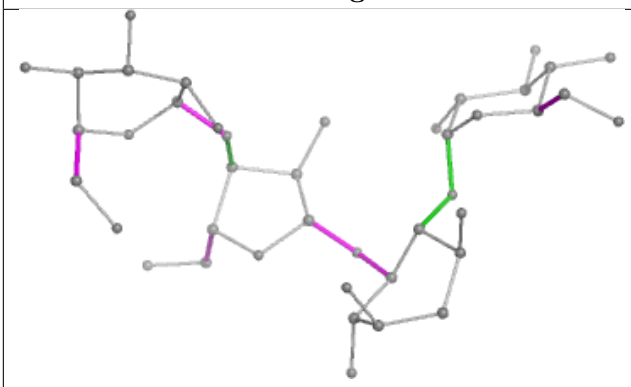
Ligand PAR AS 3790



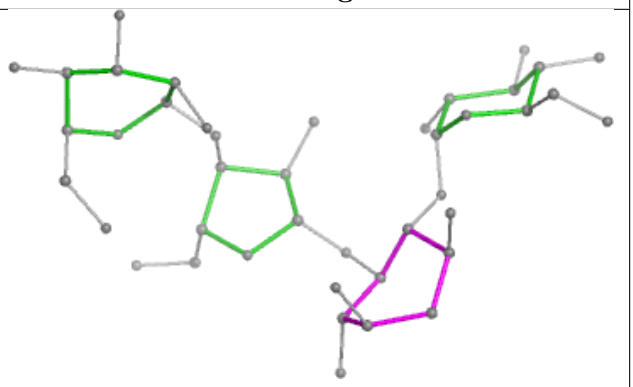
Bond lengths



Bond angles

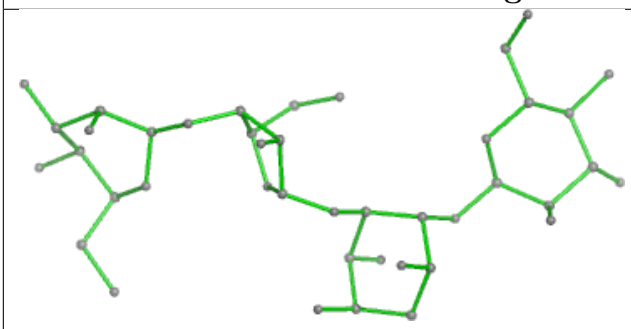


Torsions

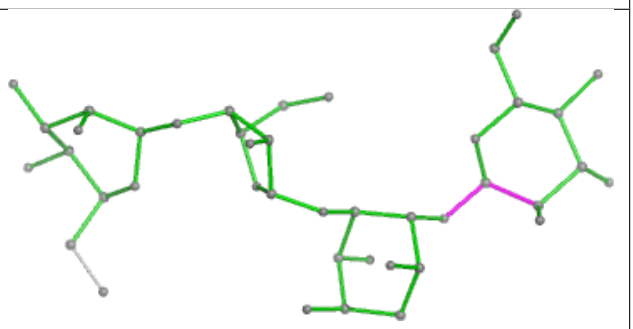


Rings

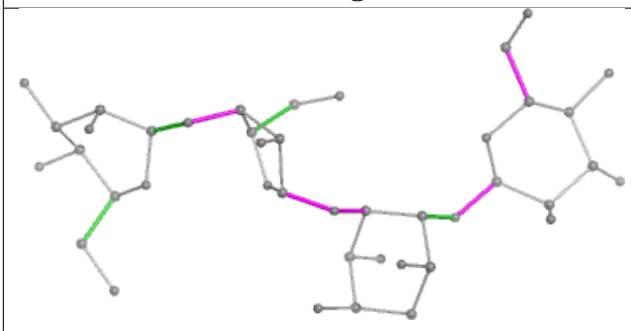
Ligand PAR AS 3789



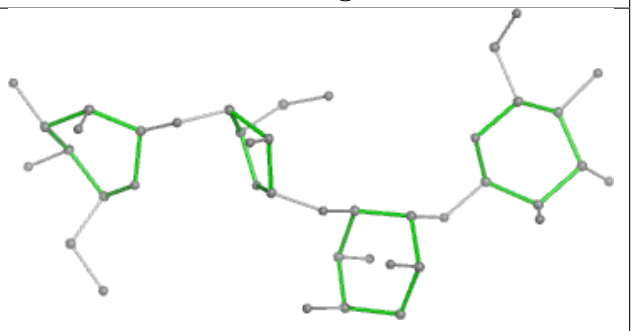
Bond lengths



Bond angles

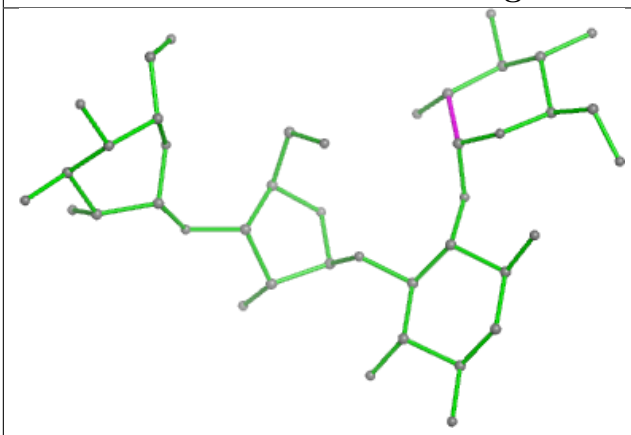


Torsions

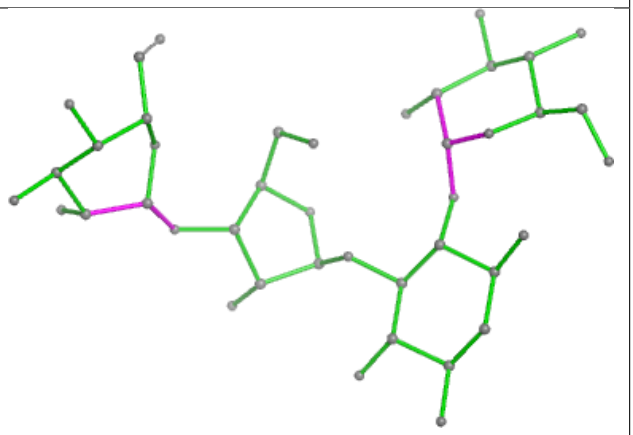


Rings

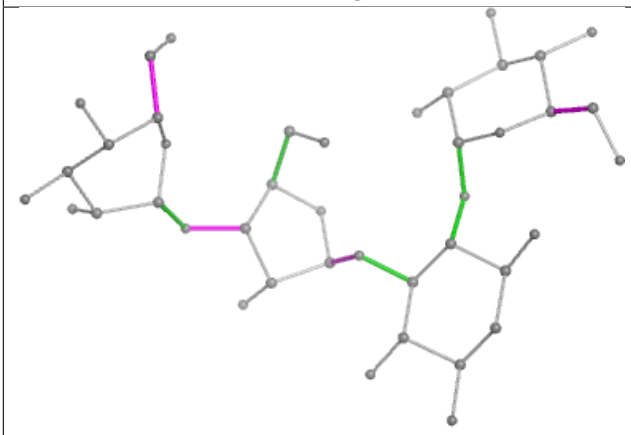
Ligand PAR AS 3788



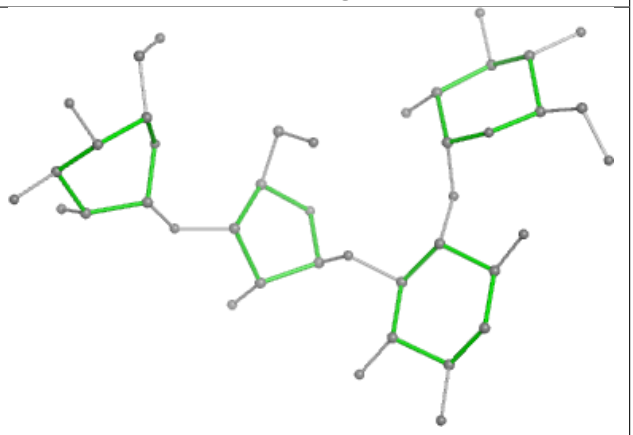
Bond lengths



Bond angles

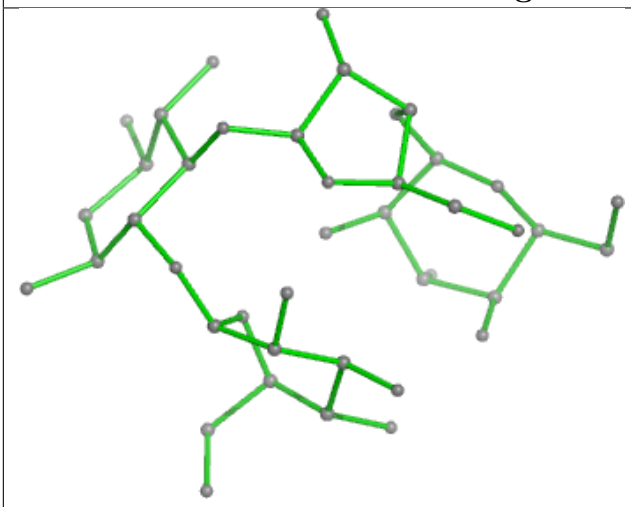


Torsions

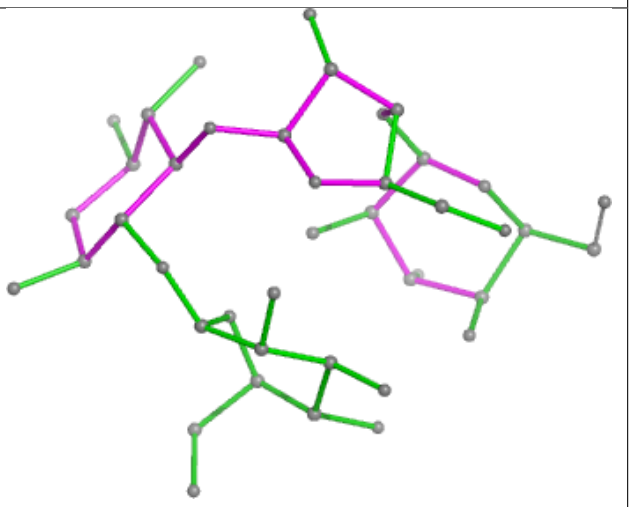


Rings

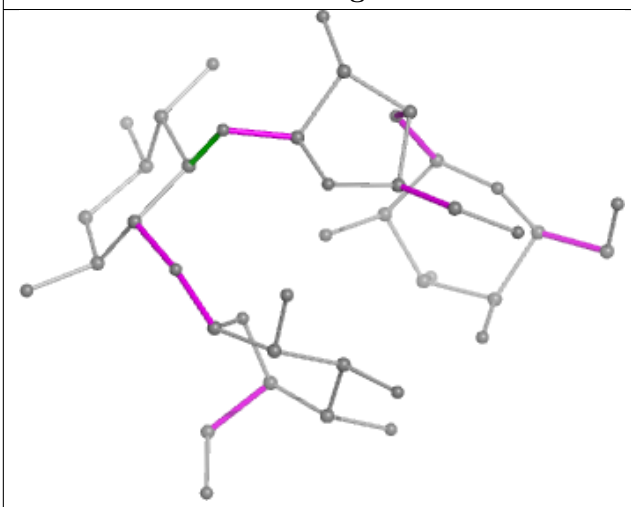
Ligand PAR B 1970



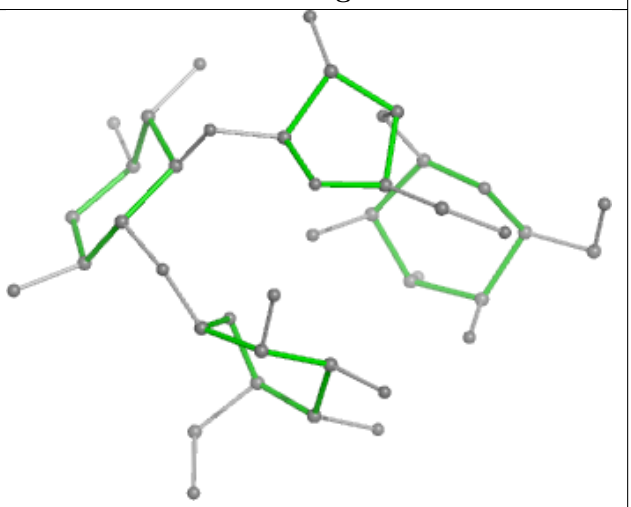
Bond lengths



Bond angles



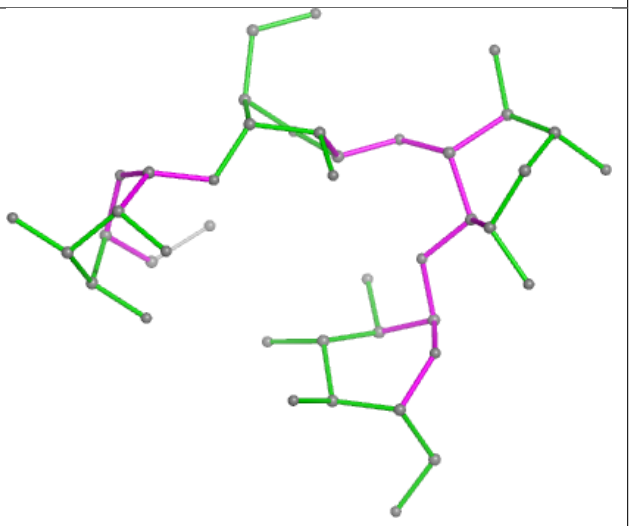
Torsions



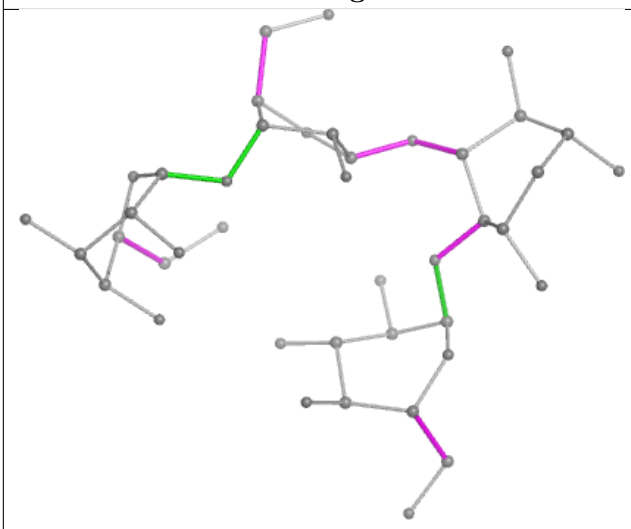
Rings

Ligand PAR 1 3969

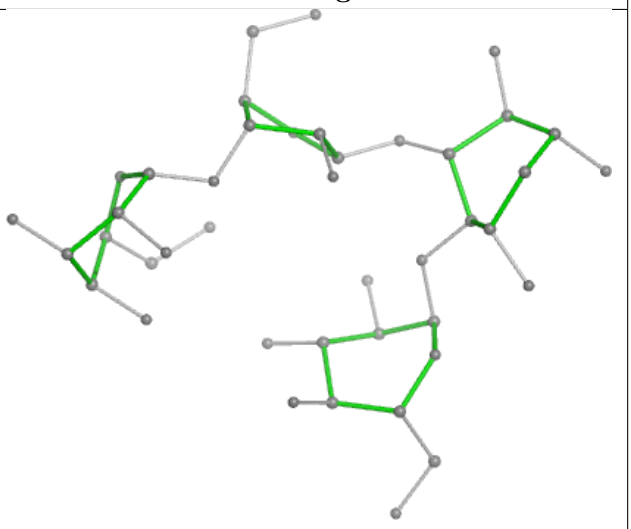
Bond lengths



Bond angles

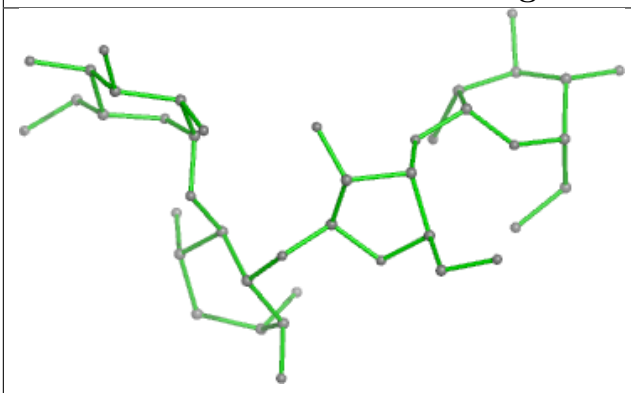


Torsions

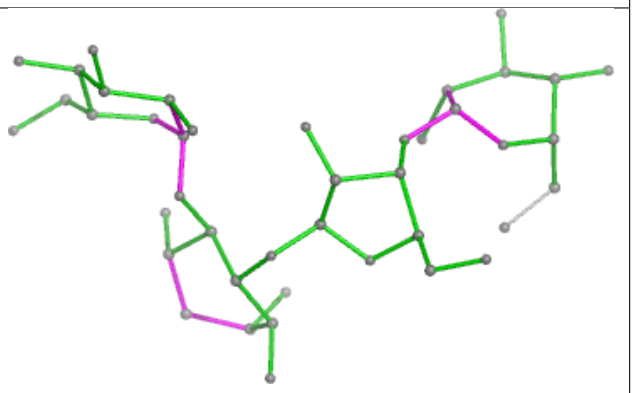


Rings

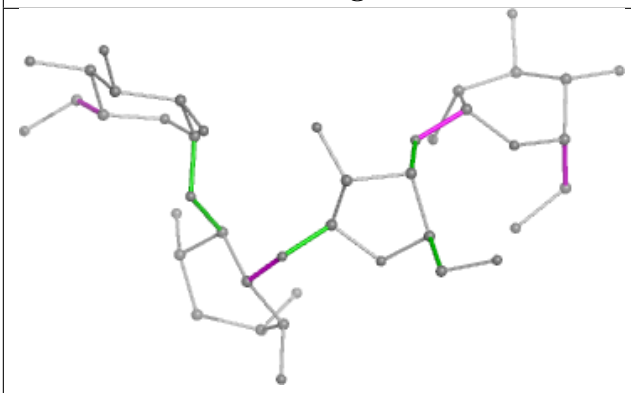
Ligand PAR 1 3968



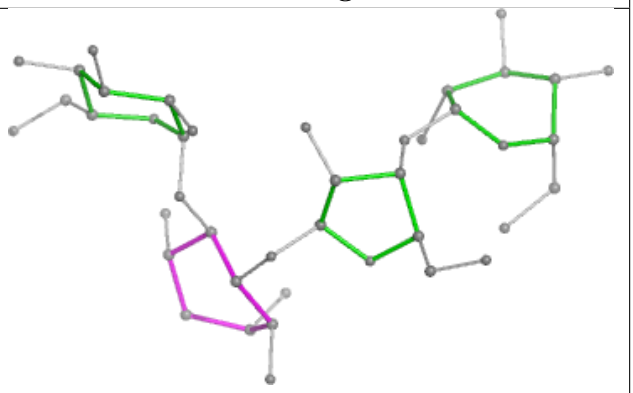
Bond lengths



Bond angles

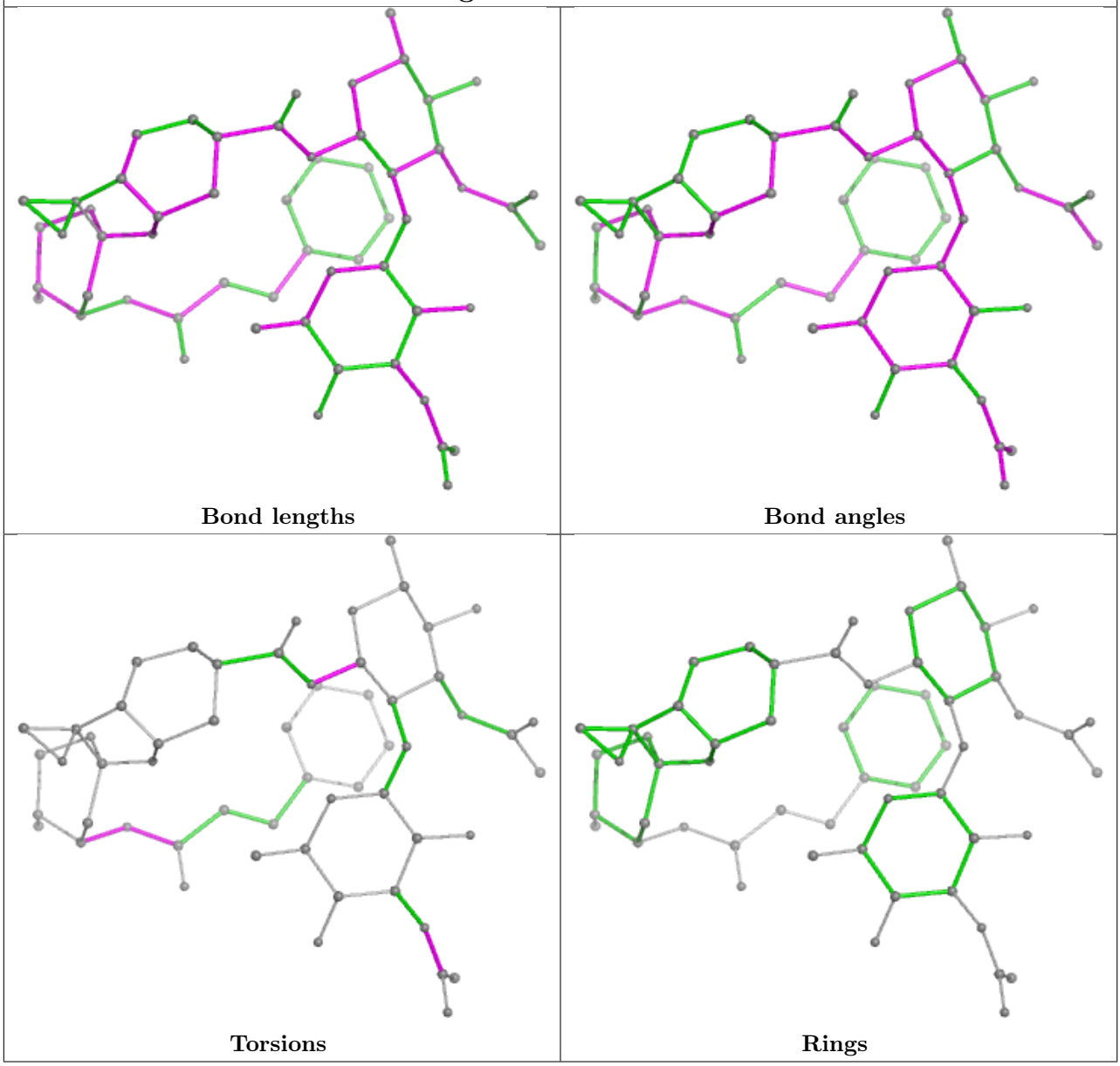


Torsions



Rings

Ligand 3K5 1 3406



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	1	3217/3359 (95%)	-0.26	26 (0%) 82 72	33, 71, 185, 393	0
1	AS	3199/3359 (95%)	-0.00	67 (2%) 63 48	49, 89, 219, 337	0
2	3	121/121 (100%)	-0.37	0 100 100	53, 92, 111, 143	0
2	AT	121/121 (100%)	-0.03	1 (0%) 82 72	53, 98, 122, 145	0
3	4	157/158 (99%)	-0.41	0 100 100	48, 71, 125, 166	0
3	AU	158/158 (100%)	0.01	1 (0%) 85 78	68, 108, 154, 217	0
4	AW	249/254 (98%)	0.64	22 (8%) 17 16	50, 91, 113, 132	0
4	j	249/254 (98%)	0.24	6 (2%) 59 44	26, 53, 80, 240	0
5	AX	386/389 (99%)	0.27	7 (1%) 67 53	47, 76, 110, 158	0
5	k	386/389 (99%)	0.31	13 (3%) 48 35	40, 67, 91, 136	0
6	AY	361/363 (99%)	1.06	51 (14%) 7 8	63, 95, 129, 159	0
6	l	361/363 (99%)	0.36	16 (4%) 39 30	38, 79, 114, 146	0
7	AZ	292/298 (97%)	1.24	57 (19%) 4 3	63, 120, 153, 172	0
7	m	296/298 (99%)	0.50	10 (3%) 48 35	64, 100, 125, 148	0
8	BA	153/176 (86%)	0.72	8 (5%) 34 27	66, 99, 128, 152	0
8	n	157/176 (89%)	0.36	2 (1%) 74 61	69, 92, 119, 145	0
9	BB	234/241 (97%)	0.46	9 (3%) 44 33	49, 79, 140, 187	0
9	o	234/241 (97%)	0.21	5 (2%) 63 48	48, 74, 120, 164	0
10	BC	233/262 (88%)	0.83	20 (8%) 18 16	100, 128, 169, 189	0
10	p	238/262 (90%)	0.21	6 (2%) 58 43	54, 81, 127, 159	0
11	BD	190/191 (99%)	0.61	9 (4%) 37 28	71, 101, 131, 160	0
11	q	190/191 (99%)	0.46	5 (2%) 57 42	69, 90, 115, 139	0
12	BE	208/220 (94%)	0.25	4 (1%) 66 51	50, 79, 129, 163	0
12	r	208/220 (94%)	0.43	8 (3%) 44 33	46, 79, 114, 131	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	BF	171/174 (98%)	0.88	12 (7%) 24 20	85, 125, 151, 166	0
13	s	171/174 (98%)	0.52	3 (1%) 67 53	68, 103, 125, 135	0
14	BG	200/202 (99%)	0.77	14 (7%) 24 20	60, 112, 148, 175	0
14	t	200/202 (99%)	0.18	2 (1%) 79 68	48, 85, 119, 152	0
15	BH	130/131 (99%)	0.54	10 (7%) 21 18	62, 93, 126, 146	0
15	u	130/131 (99%)	0.21	5 (3%) 44 33	67, 86, 106, 121	0
16	BI	203/204 (99%)	1.25	33 (16%) 5 5	64, 101, 120, 130	0
16	v	203/204 (99%)	0.35	4 (1%) 64 50	41, 60, 77, 96	0
17	BJ	199/200 (99%)	0.36	5 (2%) 58 43	49, 72, 111, 148	0
17	w	199/200 (99%)	0.37	4 (2%) 64 50	44, 68, 101, 129	0
18	BK	176/185 (95%)	0.80	14 (7%) 20 18	51, 84, 115, 143	0
18	x	173/185 (93%)	0.46	6 (3%) 47 35	41, 68, 111, 132	0
19	BL	185/186 (99%)	0.67	10 (5%) 32 26	63, 90, 111, 128	0
19	y	185/186 (99%)	0.54	9 (4%) 36 28	50, 75, 97, 121	0
20	BM	179/190 (94%)	0.81	16 (8%) 17 16	68, 98, 166, 190	0
20	z	179/190 (94%)	0.46	13 (7%) 22 19	49, 75, 130, 160	0
21	0	170/172 (98%)	0.20	3 (1%) 67 53	56, 76, 97, 141	0
21	BN	170/172 (98%)	0.52	6 (3%) 47 35	54, 78, 109, 127	0
22	2	159/160 (99%)	0.47	8 (5%) 35 28	49, 74, 119, 141	0
22	BO	159/160 (99%)	0.89	14 (8%) 17 16	57, 84, 139, 157	0
23	5	103/124 (83%)	0.47	0 100 100	82, 112, 136, 152	0
23	BP	102/124 (82%)	0.47	1 (0%) 79 68	101, 139, 160, 183	0
24	6	131/137 (95%)	0.47	7 (5%) 33 26	40, 65, 90, 106	0
24	BQ	131/137 (95%)	0.61	6 (4%) 38 29	49, 70, 99, 123	0
25	7	118/155 (76%)	0.39	1 (0%) 82 72	44, 91, 134, 145	0
25	BR	98/155 (63%)	0.92	11 (11%) 11 11	62, 93, 145, 155	0
26	8	121/142 (85%)	0.41	4 (3%) 49 36	56, 76, 94, 135	0
26	BS	119/142 (83%)	0.94	15 (12%) 9 9	84, 109, 128, 137	0
27	9	126/127 (99%)	0.59	4 (3%) 50 37	60, 86, 110, 122	0
27	BT	126/127 (99%)	0.70	9 (7%) 23 20	71, 109, 138, 164	0
28	AA	135/136 (99%)	0.47	2 (1%) 71 58	55, 91, 112, 144	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	BU	135/136 (99%)	0.75	7 (5%) 34 27	98, 127, 145, 166	0
29	AB	148/149 (99%)	0.38	6 (4%) 42 31	37, 70, 95, 125	0
29	BV	148/149 (99%)	0.98	18 (12%) 10 10	53, 95, 123, 144	0
30	AC	62/63 (98%)	1.02	8 (12%) 9 9	55, 87, 122, 137	0
30	BW	63/63 (100%)	1.57	16 (25%) 2 1	53, 105, 146, 167	1 (1%)
31	AD	96/106 (90%)	-0.03	2 (2%) 63 48	52, 79, 107, 130	0
31	BX	96/106 (90%)	0.65	5 (5%) 34 27	90, 116, 148, 155	0
32	AE	110/112 (98%)	0.22	0 100 100	53, 74, 122, 137	0
32	BY	108/112 (96%)	0.74	5 (4%) 38 29	63, 96, 138, 172	0
33	AF	124/131 (94%)	0.55	4 (3%) 50 37	51, 75, 95, 108	0
33	BZ	125/131 (95%)	0.81	10 (8%) 20 18	52, 84, 111, 128	1 (0%)
34	AG	106/107 (99%)	0.29	2 (1%) 66 51	51, 72, 97, 109	0
34	CA	106/107 (99%)	0.52	5 (4%) 37 28	44, 73, 98, 118	3 (2%)
35	AH	112/113 (99%)	0.62	6 (5%) 32 26	51, 72, 119, 139	0
35	CB	111/113 (98%)	1.25	23 (20%) 3 3	71, 109, 145, 171	4 (3%)
36	AI	120/120 (100%)	0.47	2 (1%) 69 55	62, 86, 116, 137	0
36	CC	118/120 (98%)	1.12	17 (14%) 7 7	87, 116, 139, 160	0
37	AJ	97/99 (97%)	0.23	0 100 100	52, 78, 109, 153	0
37	CD	97/99 (97%)	1.38	18 (18%) 4 4	90, 120, 159, 176	1 (1%)
38	AK	86/90 (95%)	0.42	2 (2%) 61 46	33, 56, 93, 130	0
38	CE	86/90 (95%)	0.88	12 (13%) 7 8	63, 88, 128, 161	0
39	AL	77/78 (98%)	0.50	3 (3%) 44 33	75, 97, 121, 146	0
39	CF	77/78 (98%)	0.79	6 (7%) 20 18	93, 129, 166, 184	1 (1%)
40	AM	50/51 (98%)	0.38	2 (4%) 43 32	44, 65, 96, 97	0
40	CG	50/51 (98%)	1.37	10 (20%) 3 3	78, 95, 117, 129	0
41	AN	52/52 (100%)	1.26	11 (21%) 3 2	90, 109, 125, 140	0
41	CH	52/52 (100%)	1.04	7 (13%) 8 8	81, 121, 140, 160	1 (1%)
42	AO	25/25 (100%)	1.38	5 (20%) 3 3	69, 80, 96, 100	0
42	CI	24/25 (96%)	1.11	5 (20%) 3 2	72, 81, 96, 109	0
43	AP	103/106 (97%)	0.21	4 (3%) 44 33	39, 71, 108, 129	0
43	CJ	103/106 (97%)	0.80	8 (7%) 20 18	63, 100, 134, 159	2 (1%)

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	AQ	91/92 (98%)	0.25	3 (3%) 49 36	37, 59, 101, 127	0
44	CK	91/92 (98%)	0.57	5 (5%) 32 25	60, 93, 141, 151	0
45	CL	121/267 (45%)	1.45	34 (28%) 2 1	79, 119, 153, 163	0
45	i	121/267 (45%)	1.48	37 (30%) 1 1	88, 117, 147, 157	0
46	B	1712/1787 (95%)	-0.03	17 (0%) 79 68	52, 102, 183, 234	0
46	CM	1726/1787 (96%)	0.40	76 (4%) 39 30	60, 114, 210, 260	0
47	C	208/261 (79%)	0.59	11 (5%) 33 26	86, 116, 138, 150	0
47	CN	208/261 (79%)	0.81	16 (7%) 21 18	85, 128, 158, 190	0
48	CO	214/256 (83%)	1.03	30 (14%) 7 8	99, 136, 168, 188	0
48	D	214/256 (83%)	0.28	5 (2%) 61 46	69, 96, 117, 128	0
49	CP	216/249 (86%)	0.54	15 (6%) 24 20	52, 98, 135, 160	0
49	E	217/249 (87%)	0.61	15 (6%) 24 20	74, 100, 128, 146	0
50	CQ	223/251 (88%)	1.10	35 (15%) 6 6	99, 123, 165, 199	0
50	F	223/251 (88%)	0.74	17 (7%) 21 19	85, 116, 144, 157	0
51	CR	260/262 (99%)	0.89	28 (10%) 12 12	69, 108, 134, 170	0
51	G	259/262 (98%)	0.74	17 (6%) 26 21	76, 101, 118, 127	0
52	CS	195/225 (86%)	1.03	29 (14%) 7 6	108, 135, 155, 164	0
52	H	206/225 (91%)	0.73	23 (11%) 11 11	89, 111, 140, 166	0
53	CT	226/236 (95%)	0.92	32 (14%) 7 7	74, 121, 172, 204	0
53	I	226/236 (95%)	0.59	12 (5%) 33 26	65, 109, 141, 157	0
54	CU	182/186 (97%)	0.79	18 (9%) 14 14	81, 142, 173, 184	0
54	J	185/186 (99%)	0.70	11 (5%) 29 24	85, 119, 141, 156	0
55	CV	203/206 (98%)	1.18	35 (17%) 5 4	65, 100, 153, 194	0
55	K	203/206 (98%)	0.36	5 (2%) 58 43	46, 86, 131, 146	0
56	CW	178/189 (94%)	1.08	24 (13%) 8 8	81, 116, 146, 160	0
56	L	178/189 (94%)	1.15	23 (12%) 9 9	78, 110, 129, 140	0
57	CX	93/118 (78%)	1.22	20 (21%) 3 2	103, 137, 163, 177	0
57	M	98/118 (83%)	0.76	9 (9%) 16 15	94, 123, 141, 148	0
58	CY	141/155 (90%)	1.06	19 (13%) 8 8	68, 93, 131, 177	0
58	N	144/155 (92%)	0.59	6 (4%) 41 31	60, 85, 116, 178	0
59	CZ	116/143 (81%)	0.90	10 (8%) 18 16	165, 183, 200, 209	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
59	O	116/143 (81%)	1.03	15 (12%) 9 9	132, 157, 173, 175	0
60	DA	150/151 (99%)	1.03	16 (10%) 12 12	79, 113, 136, 154	0
60	P	150/151 (99%)	0.53	9 (6%) 29 23	58, 89, 115, 122	0
61	DB	127/132 (96%)	0.76	10 (7%) 20 18	84, 125, 146, 153	0
61	Q	127/132 (96%)	0.16	3 (2%) 59 44	59, 85, 104, 117	0
62	DC	129/142 (90%)	2.09	65 (50%) 0 0	113, 139, 164, 181	0
62	R	129/142 (90%)	0.85	11 (8%) 18 17	83, 113, 146, 157	0
63	DD	140/142 (98%)	1.79	46 (32%) 1 1	112, 140, 160, 173	0
63	S	140/142 (98%)	1.22	27 (19%) 4 3	90, 118, 138, 151	0
64	DE	125/137 (91%)	1.20	24 (19%) 4 3	102, 141, 182, 190	0
64	T	124/137 (90%)	0.93	14 (11%) 11 11	98, 122, 152, 158	0
65	DF	142/145 (97%)	1.53	35 (24%) 2 1	104, 136, 161, 196	0
65	U	144/145 (99%)	0.60	9 (6%) 27 22	85, 104, 126, 153	0
66	DG	141/145 (97%)	1.40	34 (24%) 2 2	105, 135, 160, 186	0
66	V	141/145 (97%)	0.79	13 (9%) 16 15	99, 118, 138, 163	0
67	DH	100/119 (84%)	1.38	27 (27%) 2 1	91, 136, 168, 175	0
67	W	102/119 (85%)	1.11	19 (18%) 4 4	86, 125, 141, 156	0
68	DI	87/87 (100%)	0.50	4 (4%) 38 29	83, 112, 147, 169	0
68	X	87/87 (100%)	0.49	2 (2%) 61 46	76, 104, 128, 144	0
69	DJ	129/130 (99%)	0.71	9 (6%) 24 20	70, 93, 113, 121	0
69	Y	129/130 (99%)	0.74	11 (8%) 18 17	71, 88, 108, 117	0
70	DK	143/145 (98%)	1.07	14 (9%) 14 14	64, 88, 115, 142	0
70	Z	143/145 (98%)	0.36	2 (1%) 73 60	65, 86, 108, 128	0
71	DL	132/135 (97%)	0.54	6 (4%) 39 29	98, 127, 151, 176	0
71	a	134/135 (99%)	0.72	8 (5%) 29 23	84, 114, 131, 142	0
72	DM	71/105 (67%)	0.56	4 (5%) 31 25	125, 148, 169, 177	0
72	b	72/105 (68%)	0.19	1 (1%) 73 60	94, 122, 140, 143	0
73	DN	97/119 (81%)	1.18	15 (15%) 6 6	85, 105, 154, 166	0
73	c	98/119 (82%)	0.84	9 (9%) 16 15	71, 91, 127, 138	0
74	DO	81/82 (98%)	0.88	5 (6%) 28 22	92, 128, 173, 190	0
74	d	81/82 (98%)	0.51	3 (3%) 45 33	74, 101, 144, 158	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
75	DP	59/67 (88%)	0.75	6 (10%) 13 13	112, 139, 163, 178	0
75	e	62/67 (92%)	0.81	8 (12%) 9 9	100, 120, 139, 145	0
76	DQ	55/56 (98%)	1.91	23 (41%) 1 0	99, 119, 163, 182	0
76	f	55/56 (98%)	1.16	7 (12%) 9 9	88, 104, 133, 144	0
77	DR	56/63 (88%)	1.41	11 (19%) 4 3	91, 125, 176, 199	0
77	g	60/63 (95%)	0.87	9 (15%) 6 6	89, 116, 141, 158	0
78	DS	70/193 (36%)	1.93	34 (48%) 0 0	166, 184, 197, 204	0
78	h	63/193 (32%)	1.12	13 (20%) 3 3	132, 154, 164, 169	0
79	AR	311/317 (98%)	0.82	26 (8%) 18 17	112, 141, 163, 176	0
79	DT	311/317 (98%)	0.94	36 (11%) 11 11	131, 161, 184, 208	0
80	L1	217/217 (100%)	0.85	17 (7%) 20 18	116, 148, 185, 242	0
80	l1	217/217 (100%)	1.00	23 (10%) 13 12	132, 158, 182, 217	0
All	All	33241/35542 (93%)	0.48	2153 (6%) 26 21	26, 98, 166, 393	14 (0%)

All (2153) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
51	G	110	ALA	9.1
63	DD	131	ARG	9.0
6	AY	363	ASN	8.5
48	CO	55	LYS	8.4
46	CM	1480	G	7.6
65	DF	120	ARG	7.2
67	W	81	TYR	6.7
53	I	80	GLY	6.7
29	BV	20	GLY	6.6
45	i	84	SER	6.4
1	AS	1262	G	6.4
49	CP	86	ARG	6.3
73	c	69	ASN	6.3
59	O	74	LEU	6.2
46	CM	695	C	6.2
56	CW	12	TYR	6.0
48	CO	156	ALA	6.0
63	DD	132	GLY	6.0
56	L	138	LYS	6.0
73	DN	26	CYS	5.8
59	CZ	89	ILE	5.7

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Mol	Chain	Res	Type	RSRZ
65	DF	94	ASP	5.7
49	E	86	ARG	5.7
10	BC	119	GLU	5.6
59	O	49	SER	5.6
53	CT	226	ILE	5.5
46	CM	1476	A	5.5
62	DC	61	ARG	5.5
40	CG	33	ASN	5.5
71	a	135	ASP	5.4
67	DH	81	TYR	5.4
6	AY	66	TRP	5.4
5	k	12	GLY	5.4
48	CO	54	LEU	5.3
6	AY	361	LEU	5.3
37	CD	7	ALA	5.3
12	r	55	ASN	5.2
63	DD	141	TYR	5.2
6	AY	109	ARG	5.2
35	CB	61	GLN	5.2
5	k	330	GLY	5.2
56	L	116	LEU	5.2
15	u	130	LYS	5.2
52	CS	76	LYS	5.2
57	M	64	TYR	5.2
7	AZ	151	GLN	5.2
1	AS	1263	U	5.2
73	DN	3	LYS	5.1
6	AY	197	GLY	5.1
63	DD	32	GLY	5.1
76	DQ	37	ASP	5.1
45	i	49	ALA	5.1
4	j	250	GLN	5.1
65	DF	81	ILE	5.0
45	CL	81	THR	5.0
63	DD	68	VAL	5.0
57	CX	2	LEU	5.0
43	CJ	51	GLY	5.0
62	DC	103	ASN	5.0
56	CW	70	LEU	5.0
7	AZ	7	PHE	4.9
46	CM	1583	C	4.9
52	H	152	SER	4.9

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Mol	Chain	Res	Type	RSRZ
73	c	29	CYS	4.9
58	CY	145	GLY	4.9
63	DD	124	GLU	4.9
20	BM	33	ALA	4.9
48	CO	152	LYS	4.8
79	AR	260	PHE	4.8
65	U	145	ARG	4.8
30	BW	33	LYS	4.8
4	AW	247	ARG	4.8
33	BZ	17[A]	LYS	4.8
18	BK	2	VAL	4.8
67	W	80	ALA	4.8
76	DQ	28	SER	4.8
22	BO	82	ASN	4.8
75	e	24	GLY	4.8
7	AZ	82	GLU	4.7
40	CG	34	LYS	4.7
56	CW	10	LYS	4.7
7	AZ	78	ALA	4.7
1	AS	1261	U	4.6
78	DS	125	LYS	4.6
48	CO	24	PHE	4.6
77	DR	35	TYR	4.6
50	CQ	149	LYS	4.6
1	AS	1222	G	4.6
1	AS	2396	G	4.6
45	i	41	ALA	4.6
13	s	142	LYS	4.6
65	DF	76	PRO	4.6
6	AY	64	GLU	4.6
60	DA	106	ARG	4.6
4	j	70	LYS	4.5
78	DS	169	GLY	4.5
1	AS	3319	U	4.5
18	BK	89	ASN	4.5
50	F	202	ALA	4.5
51	G	40	GLU	4.5
63	DD	128	PHE	4.5
30	BW	11	ASN	4.5
7	m	150	LEU	4.5
45	CL	115	LEU	4.5
73	c	39	VAL	4.5

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Mol	Chain	Res	Type	RSRZ
76	DQ	17	GLY	4.5
65	DF	121	SER	4.4
63	DD	129	GLY	4.4
80	l1	68	PHE	4.4
54	CU	146	GLN	4.4
46	CM	1546	G	4.4
66	V	38	LYS	4.4
35	CB	33	GLN	4.4
30	BW	10	HIS	4.4
6	AY	65	SER	4.4
53	I	79	LYS	4.4
62	DC	104	THR	4.4
56	L	137	GLY	4.4
77	DR	6	GLY	4.4
15	u	131	ALA	4.3
7	m	7	PHE	4.3
1	1	2453	G	4.3
62	DC	80	LEU	4.3
67	W	78	TRP	4.3
46	CM	726	C	4.3
52	H	80	LYS	4.3
63	S	141	TYR	4.3
13	BF	74	PRO	4.3
62	DC	74	ALA	4.3
33	BZ	126	LYS	4.3
78	DS	191	LYS	4.3
65	DF	116	LEU	4.3
52	CS	112	ARG	4.3
66	V	84	LYS	4.3
30	BW	1	MET	4.2
45	CL	102	LYS	4.2
48	CO	21	VAL	4.2
67	DH	78	TRP	4.2
7	AZ	226	TYR	4.2
66	DG	55	TYR	4.2
45	CL	84	SER	4.2
30	BW	14[A]	ARG	4.2
45	CL	90	ARG	4.2
77	g	47	VAL	4.2
62	DC	125	PRO	4.2
50	CQ	167	ASP	4.2
46	CM	278	U	4.2

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Mol	Chain	Res	Type	RSRZ
37	CD	55	ARG	4.2
54	J	179	PHE	4.2
4	AW	250	GLN	4.1
79	DT	164	SER	4.1
73	DN	29	CYS	4.1
6	l	12	VAL	4.1
26	BS	110	VAL	4.1
52	CS	170	GLN	4.1
53	CT	190	LEU	4.1
16	BI	198	SER	4.1
45	CL	96	LYS	4.1
51	G	39	ARG	4.1
27	BT	20	PHE	4.1
62	DC	30	THR	4.1
16	BI	146	ALA	4.1
35	CB	3	GLN	4.1
58	N	49	ILE	4.1
59	O	45	LEU	4.1
73	DN	77	CYS	4.0
67	W	63	LYS	4.0
6	AY	356	GLN	4.0
10	BC	67	SER	4.0
62	DC	46	SER	4.0
76	DQ	8	PHE	4.0
53	CT	193	LYS	4.0
52	H	70	VAL	4.0
40	CG	21	ARG	4.0
63	DD	126	LYS	4.0
33	BZ	27	HIS	4.0
58	CY	60	PHE	4.0
18	BK	81	ALA	4.0
36	CC	109	ILE	4.0
59	O	71	ILE	4.0
59	CZ	71	ILE	4.0
57	CX	80	LEU	4.0
53	I	135	PRO	4.0
50	CQ	5	ILE	4.0
36	CC	75	TYR	3.9
74	DO	18	GLN	3.9
69	Y	127	GLY	3.9
80	l1	100	ILE	3.9
35	CB	39	ALA	3.9

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Mol	Chain	Res	Type	RSRZ
58	CY	95	PRO	3.9
19	y	159	LYS	3.9
62	DC	58	LYS	3.9
46	CM	75	U	3.9
76	f	56	ARG	3.9
36	CC	108	ARG	3.9
37	CD	51	PRO	3.9
65	U	115	ARG	3.9
55	CV	185	CYS	3.9
1	1	2476	C	3.9
30	BW	23	LYS	3.9
66	V	92	LYS	3.9
16	BI	108	ARG	3.9
45	CL	99	SER	3.9
57	CX	63	TYR	3.9
80	l1	34	LEU	3.9
62	DC	113	GLY	3.9
7	AZ	109	ALA	3.9
33	BZ	31	GLU	3.8
38	CE	29	VAL	3.8
22	BO	77	ASN	3.8
4	j	71	LEU	3.8
22	2	18	ASP	3.8
65	DF	82	PRO	3.8
24	6	7	SER	3.8
12	BE	205	ASN	3.8
52	H	72	HIS	3.8
46	CM	694	C	3.8
67	W	76	LYS	3.8
1	AS	1265	U	3.8
78	DS	164	PRO	3.8
61	DB	124	LYS	3.8
66	DG	69	LYS	3.8
1	AS	1557	U	3.8
59	O	120	CYS	3.8
62	DC	37	CYS	3.8
63	DD	139	LYS	3.8
6	AY	230	SER	3.8
22	2	2	GLY	3.8
45	i	83	HIS	3.8
62	DC	15	PHE	3.8
52	CS	115	LYS	3.8

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Mol	Chain	Res	Type	RSRZ
6	AY	111	ASN	3.7
59	O	121	VAL	3.7
76	DQ	11	PRO	3.7
17	w	101	GLU	3.7
29	BV	21	ARG	3.7
49	CP	78	ILE	3.7
15	BH	131	ALA	3.7
20	BM	87	ALA	3.7
33	AF	50	THR	3.7
6	AY	105	LYS	3.7
62	DC	7	PRO	3.7
22	BO	86	GLU	3.7
66	DG	51	GLU	3.7
7	AZ	147	ASP	3.7
48	CO	63	GLY	3.7
66	DG	33	TYR	3.7
78	DS	129	THR	3.7
55	CV	111	GLN	3.7
71	a	63	GLN	3.7
36	CC	84	LYS	3.7
7	AZ	8	ARG	3.7
64	T	68	GLY	3.7
25	BR	27	LYS	3.7
31	BX	95	LEU	3.7
45	i	65	LYS	3.7
52	CS	70	VAL	3.7
53	CT	220	LYS	3.7
57	M	25	LYS	3.7
35	CB	17	SER	3.7
1	AS	2450	U	3.7
73	DN	6	ALA	3.7
50	CQ	168	PHE	3.7
51	CR	247	LEU	3.7
56	CW	37	LYS	3.7
76	DQ	54	LYS	3.7
59	O	75	VAL	3.7
78	DS	156	VAL	3.7
63	DD	65	ARG	3.7
74	DO	27	GLN	3.7
16	BI	118	SER	3.7
50	CQ	173	ILE	3.7
62	DC	82	ASN	3.7

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Mol	Chain	Res	Type	RSRZ
4	AW	2	GLY	3.6
8	BA	108	GLU	3.6
55	CV	118	GLY	3.6
51	CR	246	LYS	3.6
15	BH	104	GLN	3.6
63	S	42	ILE	3.6
63	S	2	SER	3.6
49	E	172	GLY	3.6
45	CL	103	LEU	3.6
46	CM	989	U	3.6
78	DS	190	LEU	3.6
1	AS	1264	G	3.6
15	BH	129	VAL	3.6
65	DF	123	ARG	3.6
78	DS	126	VAL	3.6
48	CO	59	ASP	3.6
29	BV	108	GLY	3.6
62	DC	8	LYS	3.6
66	DG	92	LYS	3.6
67	W	60	LYS	3.6
35	CB	16	ARG	3.6
55	CV	114	GLU	3.6
62	DC	31	GLU	3.6
80	l1	124	LEU	3.6
62	DC	126	VAL	3.6
25	7	63	ILE	3.6
51	CR	245	ILE	3.6
32	BY	26	LYS	3.6
44	CK	61	LYS	3.6
66	DG	119	LYS	3.6
73	DN	23	CYS	3.6
63	DD	79	ALA	3.6
37	CD	96	SER	3.6
62	DC	129	GLY	3.6
76	DQ	12	ARG	3.6
79	AR	32	LEU	3.6
49	CP	97	VAL	3.6
16	BI	62	TYR	3.6
46	CM	725	A	3.6
5	k	96	PRO	3.6
19	BL	168	LYS	3.6
55	CV	41	LYS	3.6

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Mol	Chain	Res	Type	RSRZ
65	DF	83	ALA	3.6
64	DE	68	GLY	3.6
65	DF	115	ARG	3.6
6	AY	91	PHE	3.6
52	CS	199	ILE	3.6
6	l	352	PRO	3.6
4	AW	228	GLY	3.5
80	l1	167	VAL	3.5
16	BI	204	SER	3.5
17	BJ	101	GLU	3.5
1	AS	240	C	3.5
38	CE	84	LYS	3.5
57	CX	44	LYS	3.5
61	DB	85	LYS	3.5
6	AY	70	ARG	3.5
37	CD	67	ARG	3.5
51	CR	39	ARG	3.5
58	CY	5	LEU	3.5
63	DD	133	ALA	3.5
53	CT	80	GLY	3.5
71	DL	72	PHE	3.5
67	W	79	ASP	3.5
6	AY	75	ILE	3.5
24	6	35	TYR	3.5
64	DE	2	GLY	3.5
48	CO	20	VAL	3.5
47	C	173	ILE	3.5
50	F	149	LYS	3.5
62	DC	52	LYS	3.5
63	DD	13	LYS	3.5
6	AY	189	ARG	3.5
48	CO	50	ARG	3.5
64	T	21	TYR	3.5
61	DB	132	LEU	3.5
59	O	89	ILE	3.5
79	DT	269	ASP	3.5
30	AC	47	LEU	3.5
45	i	66	ASN	3.5
8	n	1	MET	3.5
42	CI	5	TRP	3.5
63	DD	105	LYS	3.5
3	AU	21	C	3.4

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Mol	Chain	Res	Type	RSRZ
10	BC	151	LEU	3.4
67	DH	75	SER	3.4
30	BW	2	ALA	3.4
45	CL	60	ASN	3.4
66	DG	41	ALA	3.4
39	CF	43	PHE	3.4
52	H	153	GLY	3.4
12	r	162	GLN	3.4
54	CU	132	ILE	3.4
78	DS	127	TYR	3.4
45	CL	85	LYS	3.4
66	V	119	LYS	3.4
76	DQ	16	LYS	3.4
42	AO	6	ARG	3.4
70	DK	27	GLN	3.4
74	DO	29	ARG	3.4
76	DQ	56	ARG	3.4
4	AW	62	ALA	3.4
75	e	47	PRO	3.4
7	AZ	34	LYS	3.4
38	CE	82	VAL	3.4
75	e	45	LYS	3.4
77	g	29	LYS	3.4
79	DT	299	PHE	3.4
42	CI	24	SER	3.4
52	CS	147	THR	3.4
41	AN	37	ARG	3.4
73	DN	89	ARG	3.4
1	1	2454	C	3.4
4	AW	73	GLU	3.4
10	BC	115	ALA	3.4
59	O	118	ALA	3.4
73	DN	13	LYS	3.4
78	DS	124	LYS	3.4
35	CB	31	VAL	3.4
27	9	4	ILE	3.4
48	CO	119	SER	3.4
54	CU	105	GLN	3.4
1	1	2467	C	3.4
76	f	54	LYS	3.4
14	BG	2	ALA	3.4
1	AS	3320	U	3.4

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Mol	Chain	Res	Type	RSRZ
58	N	145	GLY	3.4
78	DS	128	THR	3.4
52	H	79	SER	3.4
60	P	7	SER	3.4
47	CN	16	LEU	3.3
60	DA	151	ALA	3.3
52	H	154	THR	3.3
51	CR	44	LEU	3.3
52	CS	96	SER	3.3
50	F	119	ALA	3.3
51	G	111	VAL	3.3
78	DS	170	ALA	3.3
7	AZ	119	TYR	3.3
20	BM	30	THR	3.3
40	CG	32	ASP	3.3
65	DF	77	THR	3.3
30	BW	22	LYS	3.3
38	CE	10	LYS	3.3
42	AO	16	LYS	3.3
58	CY	32	LYS	3.3
25	BR	41	GLN	3.3
70	DK	40	SER	3.3
6	AY	112	VAL	3.3
6	AY	199	ARG	3.3
30	AC	14	ARG	3.3
36	AI	120	ALA	3.3
62	DC	101	VAL	3.3
58	CY	41	GLY	3.3
63	DD	67	LYS	3.3
78	DS	123	LYS	3.3
19	BL	180	ARG	3.3
55	CV	32	GLN	3.3
60	DA	7	SER	3.3
66	DG	89	ARG	3.3
7	AZ	55	PHE	3.3
45	CL	69	PHE	3.3
70	DK	45	GLY	3.3
1	AS	824	A	3.3
20	BM	68	GLU	3.3
6	AY	200	PHE	3.3
45	i	51	ALA	3.3
73	DN	35	ALA	3.3

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Mol	Chain	Res	Type	RSRZ
78	h	144	VAL	3.3
28	BU	105	SER	3.3
53	CT	144	PHE	3.3
55	CV	27	PHE	3.3
71	a	72	PHE	3.3
69	Y	80	ASN	3.3
1	AS	484	U	3.3
60	P	2	GLY	3.3
79	DT	180	LEU	3.3
37	CD	65	GLU	3.2
77	DR	36	MET	3.2
7	m	24	GLN	3.2
32	BY	99	SER	3.2
52	H	71	SER	3.2
56	CW	2	PRO	3.2
5	k	178	LEU	3.2
7	AZ	212	LEU	3.2
55	CV	8	ARG	3.2
46	CM	1586	C	3.2
48	CO	25	THR	3.2
67	DH	66	THR	3.2
7	AZ	59	ASP	3.2
27	BT	30	LEU	3.2
45	i	37	LYS	3.2
50	CQ	200	PRO	3.2
45	i	36	SER	3.2
54	CU	168	LEU	3.2
79	DT	82	LEU	3.2
51	G	50	ASN	3.2
67	W	67	ARG	3.2
15	BH	4	THR	3.2
47	CN	61	ALA	3.2
63	DD	16	THR	3.2
63	DD	137	PHE	3.2
30	AC	21	ILE	3.2
36	AI	84	LYS	3.2
54	CU	176	GLN	3.2
63	DD	138	GLN	3.2
64	DE	42	GLN	3.2
13	BF	158	ASP	3.2
62	DC	50	ASP	3.2
66	DG	118	PRO	3.2

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Mol	Chain	Res	Type	RSRZ
56	L	35	GLY	3.2
78	DS	171	GLY	3.2
24	6	33	ASN	3.2
14	BG	89	TYR	3.2
53	I	83	CYS	3.2
62	DC	54	MET	3.2
48	CO	94	LYS	3.2
50	CQ	97	LEU	3.2
67	W	72	GLY	3.2
70	DK	58	GLY	3.2
29	AB	39	HIS	3.2
45	CL	68	ASN	3.2
46	B	701	G	3.2
5	AX	75	ALA	3.2
7	AZ	58	LYS	3.2
26	8	36	LYS	3.2
9	BB	93	ILE	3.2
12	r	165	ILE	3.2
76	DQ	30	LEU	3.2
22	BO	88	ARG	3.1
25	BR	47	ARG	3.1
36	CC	107	GLN	3.1
79	AR	77	ASP	3.1
48	CO	186	SER	3.1
67	DH	55	VAL	3.1
6	AY	47	LYS	3.1
46	CM	1443	C	3.1
49	CP	95	ALA	3.1
57	CX	23	ALA	3.1
6	AY	245	LEU	3.1
5	AX	139	THR	3.1
65	DF	73	MET	3.1
35	CB	36[A]	LYS	3.1
46	CM	1730	U	3.1
52	H	155	VAL	3.1
66	DG	71	VAL	3.1
20	BM	31	GLU	3.1
52	H	78	ALA	3.1
63	DD	118	ALA	3.1
6	AY	195	LEU	3.1
12	r	166	ILE	3.1
37	CD	98	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
67	DH	77	THR	3.1
79	DT	73	THR	3.1
38	CE	81	GLY	3.1
56	CW	48	GLN	3.1
52	H	84	LYS	3.1
61	DB	23	VAL	3.1
46	B	1339	G	3.1
46	CM	1135	G	3.1
51	G	109	PHE	3.1
45	i	64	LEU	3.1
49	CP	194	SER	3.1
50	CQ	146	ALA	3.1
62	DC	22	LEU	3.1
77	DR	7	SER	3.1
79	AR	80	TYR	3.1
37	CD	57	ILE	3.1
19	y	180	ARG	3.1
66	DG	90	PRO	3.1
79	AR	284	PRO	3.1
50	F	181	GLY	3.1
51	G	107	GLY	3.1
65	DF	135	GLY	3.1
65	DF	136	GLN	3.1
8	BA	131	LYS	3.1
45	CL	65	LYS	3.1
57	CX	24	LYS	3.1
37	CD	2	ALA	3.1
37	CD	49	LEU	3.1
56	L	6	ARG	3.1
58	CY	116	ARG	3.1
79	DT	153	SER	3.1
46	CM	727	U	3.1
64	DE	110	VAL	3.1
52	CS	82	PHE	3.1
80	L1	16	LEU	3.1
1	AS	1197	C	3.1
46	CM	1451	C	3.1
57	CX	26	ASP	3.0
62	DC	32	GLU	3.0
22	2	82	ASN	3.0
45	i	33	ASN	3.0
52	H	76	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
65	U	49	LYS	3.0
77	g	36	MET	3.0
27	9	120	GLN	3.0
50	F	182	VAL	3.0
80	l1	172	VAL	3.0
43	CJ	72	LEU	3.0
1	AS	1281	G	3.0
1	AS	2062	G	3.0
47	C	127	ARG	3.0
6	AY	210	TYR	3.0
5	k	7	GLU	3.0
56	L	58	ASP	3.0
55	CV	75	LYS	3.0
35	CB	40	SER	3.0
1	AS	402	A	3.0
10	BC	133	VAL	3.0
57	CX	87	LEU	3.0
62	DC	49	LEU	3.0
64	T	42	GLN	3.0
66	DG	79	LEU	3.0
46	CM	1047	U	3.0
58	CY	114	ALA	3.0
79	DT	181	ALA	3.0
60	DA	119	GLU	3.0
6	l	197	GLY	3.0
35	CB	77	GLY	3.0
13	s	48	SER	3.0
59	CZ	91	VAL	3.0
80	l1	151	VAL	3.0
7	AZ	36	LEU	3.0
45	i	103	LEU	3.0
76	DQ	14	PHE	3.0
14	t	2	ALA	3.0
64	DE	124	ILE	3.0
4	AW	24	LYS	3.0
44	CK	28	LYS	3.0
67	DH	63	LYS	3.0
16	v	6	TYR	3.0
7	AZ	125	VAL	3.0
60	DA	87	ASP	3.0
35	CB	8	ARG	3.0
62	DC	75	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
64	T	9	VAL	3.0
49	E	194	SER	3.0
18	x	183	THR	3.0
35	AH	32	ALA	3.0
44	AQ	25	GLN	3.0
46	CM	1184	G	3.0
53	CT	182	GLN	3.0
66	DG	50	ALA	3.0
45	CL	71	LYS	3.0
53	CT	81	HIS	3.0
7	AZ	95	TRP	3.0
45	CL	61	GLU	3.0
65	DF	124	GLY	3.0
48	CO	26	ARG	3.0
49	CP	79	ARG	3.0
59	O	61	VAL	3.0
79	DT	38	ARG	3.0
9	BB	139	LEU	3.0
75	e	33	LEU	3.0
30	BW	31	SER	3.0
45	i	39	SER	3.0
57	M	27	PHE	3.0
75	DP	19	THR	3.0
4	AW	7	ASN	3.0
52	H	44	ASN	3.0
66	DG	36	ILE	3.0
5	AX	143	GLN	2.9
38	CE	32	LYS	2.9
55	CV	53	GLN	2.9
1	1	1264	G	2.9
11	BD	3	TYR	2.9
79	DT	80	TYR	2.9
62	DC	48	GLY	2.9
36	CC	102	GLU	2.9
54	J	148	VAL	2.9
60	DA	33	VAL	2.9
77	g	49	LEU	2.9
61	DB	84	THR	2.9
66	DG	84	LYS	2.9
67	DH	87	LYS	2.9
15	u	35	GLN	2.9
6	l	199	ARG	2.9

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Mol	Chain	Res	Type	RSRZ
56	CW	19	TYR	2.9
68	X	58	TYR	2.9
15	u	129	VAL	2.9
43	AP	104	LEU	2.9
45	i	115	LEU	2.9
51	G	43	PRO	2.9
63	DD	18	VAL	2.9
63	DD	117	VAL	2.9
67	DH	89	VAL	2.9
12	r	101	LYS	2.9
14	BG	85	ILE	2.9
19	BL	20	LYS	2.9
33	BZ	18	PHE	2.9
47	CN	27	LYS	2.9
54	CU	81	PHE	2.9
56	CW	65	LYS	2.9
58	N	15	LYS	2.9
63	DD	30	ILE	2.9
65	DF	119	ILE	2.9
1	AS	3051	C	2.9
6	l	190	ALA	2.9
13	BF	31	THR	2.9
46	CM	479	A	2.9
46	CM	712	A	2.9
63	DD	69	THR	2.9
64	T	8	THR	2.9
49	CP	89	GLN	2.9
62	DC	98	ASN	2.9
73	DN	25	ASN	2.9
20	z	71	ARG	2.9
50	CQ	147	ARG	2.9
52	CS	102	ARG	2.9
35	CB	57	LEU	2.9
48	CO	120	LEU	2.9
51	CR	23	LEU	2.9
7	AZ	219	TYR	2.9
65	DF	130	GLY	2.9
45	CL	67	LYS	2.9
51	G	133	LYS	2.9
63	DD	12	LYS	2.9
26	BS	88	ILE	2.9
6	AY	52	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
7	AZ	62	ALA	2.9
67	DH	80	ALA	2.9
6	AY	68	THR	2.9
7	AZ	70	THR	2.9
67	W	65	THR	2.9
35	CB	79	SER	2.9
40	AM	21	ARG	2.9
66	V	5	SER	2.9
73	c	89	ARG	2.9
1	AS	1099	A	2.9
1	AS	1217	A	2.9
16	BI	153	ASN	2.9
46	CM	696	U	2.9
46	CM	717	G	2.9
38	CE	77	GLY	2.9
49	E	191	VAL	2.9
64	DE	4	VAL	2.9
65	DF	93	VAL	2.9
20	BM	52	LYS	2.9
22	2	56	TYR	2.9
36	CC	91	LYS	2.9
58	CY	93	TYR	2.9
11	q	190	GLU	2.9
48	CO	90	GLU	2.9
51	G	47	PHE	2.9
53	CT	122	GLU	2.9
54	CU	21	PHE	2.9
62	DC	102	PHE	2.9
49	E	161	ALA	2.9
56	CW	55	ALA	2.9
75	e	55	CYS	2.9
26	BS	48	ARG	2.9
55	CV	103	GLN	2.9
66	DG	8	ASP	2.9
62	R	80	LEU	2.9
66	DG	91	HIS	2.9
6	AY	97	GLY	2.9
52	H	23	VAL	2.9
56	CW	14	VAL	2.9
67	W	61	VAL	2.9
26	BS	25	LYS	2.9
52	CS	84	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
62	R	109	PRO	2.9
62	DC	73	PRO	2.9
67	DH	76	LYS	2.9
77	DR	60	PRO	2.9
1	AS	1223	C	2.9
6	AY	107	TRP	2.9
65	DF	129	TRP	2.9
50	CQ	67	ILE	2.9
1	AS	2459	G	2.8
55	CV	61	GLU	2.8
47	C	99	ALA	2.8
78	h	170	ALA	2.8
62	DC	44	ARG	2.8
53	CT	184	LEU	2.8
79	DT	120	LEU	2.8
6	l	353	SER	2.8
10	BC	75	SER	2.8
14	BG	88	LYS	2.8
28	AA	113	VAL	2.8
36	CC	119	LYS	2.8
62	DC	109	PRO	2.8
22	BO	19	PHE	2.8
66	DG	53	TRP	2.8
1	AS	1204	U	2.8
76	DQ	2	ALA	2.8
16	BI	26	ARG	2.8
46	CM	1357	A	2.8
37	CD	76	LEU	2.8
59	O	78	LEU	2.8
62	DC	124	THR	2.8
63	S	116	LEU	2.8
66	DG	28	LEU	2.8
6	l	186	LYS	2.8
7	AZ	204	VAL	2.8
8	BA	135	VAL	2.8
45	CL	100	LYS	2.8
47	CN	143	VAL	2.8
29	BV	110	GLY	2.8
62	DC	114	HIS	2.8
28	BU	98	SER	2.8
47	CN	110	TYR	2.8
52	CS	173	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
79	AR	79	ALA	2.8
55	CV	17	LYS	2.8
62	DC	34	THR	2.8
79	DT	101	THR	2.8
1	1	2436	A	2.8
1	AS	2436	A	2.8
46	CM	1322	A	2.8
45	i	117	GLY	2.8
62	R	114	HIS	2.8
12	BE	199	PHE	2.8
36	CC	111	PHE	2.8
45	CL	87	PRO	2.8
45	CL	98	ASP	2.8
58	CY	20	PHE	2.8
41	CH	37	ARG	2.8
65	U	120	ARG	2.8
1	AS	368	G	2.8
6	AY	229	ALA	2.8
46	CM	1588	G	2.8
64	DE	126	ALA	2.8
29	BV	111	LYS	2.8
35	CB	30	LEU	2.8
40	CG	18	LYS	2.8
49	CP	77	LYS	2.8
51	CR	6	LYS	2.8
72	DM	75	LEU	2.8
4	AW	199	THR	2.8
30	BW	26	THR	2.8
35	CB	28	GLY	2.8
6	AY	202	GLN	2.8
38	CE	30	GLN	2.8
78	DS	168	CYS	2.8
45	i	69	PHE	2.8
63	DD	122	ARG	2.8
51	G	2	ALA	2.8
58	CY	27	ALA	2.8
62	DC	24	ASP	2.8
47	CN	155	TYR	2.8
28	AA	109	GLU	2.8
78	h	190	LEU	2.8
79	DT	63	LYS	2.8
54	J	178	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
11	BD	48	ILE	2.8
21	BN	30	PHE	2.8
64	T	69	ILE	2.8
67	W	84	ARG	2.7
67	DH	90	ILE	2.8
67	DH	117	ILE	2.8
45	i	48	PRO	2.7
47	CN	65	ALA	2.7
6	AY	184	LYS	2.7
67	DH	29	LYS	2.7
1	AS	2472	A	2.7
5	k	387	LEU	2.7
59	CZ	59	LEU	2.7
79	AR	271	LEU	2.7
1	1	2474	C	2.7
52	CS	99	MET	2.7
6	AY	226	VAL	2.7
10	p	204	VAL	2.7
51	CR	192	VAL	2.7
19	BL	169	GLY	2.7
25	BR	93	ARG	2.7
73	DN	16	GLY	2.7
80	l1	28	PHE	2.7
63	DD	17	ALA	2.7
41	AN	52	LYS	2.7
45	i	100	LYS	2.7
26	BS	24	LEU	2.7
27	BT	76	LEU	2.7
50	CQ	177	LEU	2.7
77	DR	39	LEU	2.7
6	l	154	SER	2.7
14	t	4	SER	2.7
48	CO	89	ASP	2.7
18	BK	42	GLU	2.7
30	AC	19	ASN	2.7
20	z	136	ARG	2.7
40	CG	46	ARG	2.7
42	AO	12	ARG	2.7
7	AZ	88	ILE	2.7
54	J	141	GLY	2.7
18	x	79	THR	2.7
52	H	82	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
62	DC	33	PHE	2.7
76	DQ	43	PHE	2.7
7	AZ	181	PRO	2.7
25	BR	58	HIS	2.7
56	L	92	LYS	2.7
71	DL	102	LYS	2.7
78	DS	181	GLN	2.7
79	DT	293	ALA	2.7
49	CP	151	CYS	2.7
19	BL	167	SER	2.7
20	z	13	SER	2.7
21	BN	60	SER	2.7
62	DC	94	VAL	2.7
25	BR	88	GLU	2.7
46	CM	1592	G	2.7
50	CQ	116	ILE	2.7
59	CZ	24	ILE	2.7
80	L1	111	ILE	2.7
41	CH	32	THR	2.7
45	CL	79	THR	2.7
46	CM	1618	A	2.7
46	CM	1743	A	2.7
65	DF	132	LYS	2.7
5	k	177	HIS	2.7
20	BM	7	GLN	2.7
53	CT	189	ALA	2.7
64	DE	62	GLN	2.7
64	DE	107	ALA	2.7
46	CM	1177	C	2.7
53	I	76	LEU	2.7
57	M	87	LEU	2.7
57	CX	65	TYR	2.7
73	c	73	TYR	2.7
57	CX	73	VAL	2.7
66	DG	37	VAL	2.7
32	BY	18	ARG	2.7
6	l	3	SER	2.7
54	J	185	SER	2.7
56	CW	58	ASP	2.7
76	DQ	45	GLU	2.7
63	DD	64	ILE	2.7
64	DE	117	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
1	AS	977	U	2.7
6	l	80	GLY	2.7
56	CW	104	PHE	2.7
51	CR	106	LYS	2.7
66	DG	78	LYS	2.7
80	L1	23	THR	2.7
7	AZ	205	ALA	2.7
41	AN	51	LEU	2.7
48	D	54	LEU	2.7
52	CS	110	ALA	2.7
74	DO	13	ALA	2.7
80	l1	71	ALA	2.7
53	CT	199	GLN	2.7
80	L1	1	MET	2.7
16	BI	132	VAL	2.7
35	CB	42	VAL	2.7
78	h	148	TYR	2.7
79	AR	277	VAL	2.7
1	AS	2448	C	2.7
1	AS	2468	C	2.7
46	B	694	C	2.7
56	CW	3	ARG	2.7
7	AZ	281	GLU	2.6
22	BO	75	ILE	2.6
56	CW	134	ILE	2.6
56	CW	140	ILE	2.6
4	AW	142	ASP	2.6
14	BG	84	GLY	2.6
38	AK	2	GLY	2.6
42	CI	3	ASP	2.6
49	E	77	LYS	2.6
53	CT	145	PHE	2.6
63	S	67	LYS	2.6
66	V	42	GLY	2.6
70	Z	122	PHE	2.6
30	AC	2	ALA	2.6
39	AL	33	ALA	2.6
50	F	177	LEU	2.6
53	CT	71	THR	2.6
55	CV	107	THR	2.6
77	g	39	LEU	2.6
80	L1	179	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
33	BZ	36	GLN	2.6
76	f	20	GLN	2.6
80	l1	1	MET	2.6
35	AH	31	VAL	2.6
50	CQ	176	VAL	2.6
48	CO	155	TYR	2.6
1	AS	545	G	2.6
46	CM	1441	G	2.6
4	AW	190	LYS	2.6
10	BC	117	ILE	2.6
16	BI	176	LYS	2.6
30	BW	25	LYS	2.6
30	BW	40	LYS	2.6
45	CL	37	LYS	2.6
56	CW	51	LYS	2.6
73	c	37	LYS	2.6
35	CB	78	GLY	2.6
55	CV	159	GLU	2.6
1	AS	2470	C	2.6
69	DJ	58	SER	2.6
79	DT	75	SER	2.6
27	9	35	LEU	2.6
61	DB	28	LEU	2.6
39	CF	2	ALA	2.6
65	U	2	PRO	2.6
79	AR	58	PRO	2.6
62	DC	89	MET	2.6
44	CK	24	ARG	2.6
53	CT	72	ARG	2.6
52	CS	90	VAL	2.6
55	K	20	GLN	2.6
78	DS	158	ARG	2.6
1	1	2067	U	2.6
75	DP	25	VAL	2.6
22	BO	34	TYR	2.6
29	AB	19	LYS	2.6
55	CV	188	TYR	2.6
49	E	110	ILE	2.6
57	CX	82	ILE	2.6
7	m	169	GLY	2.6
24	6	43	GLY	2.6
62	DC	118	GLU	2.6

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Mol	Chain	Res	Type	RSRZ
33	BZ	76	LEU	2.6
41	AN	34	CYS	2.6
50	CQ	111	LEU	2.6
51	CR	9	LEU	2.6
30	BW	24	PRO	2.6
46	CM	1178	A	2.6
52	CS	71	SER	2.6
56	L	21	SER	2.6
56	L	56	ALA	2.6
63	S	19	ALA	2.6
46	CM	1677	G	2.6
63	S	119	ASP	2.6
15	BH	23	ASN	2.6
66	DG	85	ASN	2.6
67	W	48	ASN	2.6
1	AS	2473	C	2.6
4	AW	184	ARG	2.6
57	M	57	THR	2.6
64	T	6	THR	2.6
71	DL	100	VAL	2.6
27	BT	6	GLN	2.6
33	AF	36	GLN	2.6
42	AO	25	LYS	2.6
1	AS	1013	U	2.6
16	BI	61	ILE	2.6
53	I	49	ILE	2.6
62	DC	121	ILE	2.6
4	AW	153	GLY	2.6
10	p	175	GLY	2.6
51	CR	25	GLY	2.6
52	CS	75	GLY	2.6
4	j	246	LEU	2.6
72	DM	93	LEU	2.6
43	AP	16	GLU	2.6
10	BC	123	ALA	2.6
43	CJ	84	PRO	2.6
54	CU	128	PRO	2.6
16	BI	111	SER	2.6
18	x	7	THR	2.6
48	CO	126	THR	2.6
60	DA	138	ASN	2.6
61	Q	88	THR	2.6

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Mol	Chain	Res	Type	RSRZ
80	l1	21	THR	2.6
58	CY	69	LYS	2.6
29	BV	65	GLN	2.6
1	AS	1224	C	2.6
46	CM	1589	C	2.6
69	Y	27	ILE	2.6
16	BI	59	PHE	2.6
23	BP	15	PHE	2.6
70	DK	33	LEU	2.6
80	L1	99	LEU	2.6
57	CX	45	ALA	2.6
63	DD	85	ALA	2.6
45	CL	75	PRO	2.6
69	Y	57	ARG	2.6
45	i	45	SER	2.6
45	CL	55	LYS	2.6
51	G	134	LYS	2.6
51	CR	7	LYS	2.6
62	R	112	VAL	2.6
63	DD	21	VAL	2.6
75	e	48	VAL	2.6
79	DT	77	ASP	2.6
80	L1	20	SER	2.6
22	BO	63	ILE	2.5
63	DD	76	GLN	2.5
7	AZ	113	LEU	2.5
9	BB	10	LEU	2.5
16	BI	30	TYR	2.5
54	CU	89	LEU	2.5
63	S	53	LEU	2.5
78	h	188	LEU	2.5
5	k	179	ALA	2.5
16	BI	63	ARG	2.5
35	CB	41	ARG	2.5
47	C	97	ALA	2.5
62	DC	72	ARG	2.5
76	DQ	48	ALA	2.5
50	F	104	GLU	2.5
53	CT	150	GLU	2.5
19	BL	159	LYS	2.5
46	CM	1582	U	2.5
65	DF	4	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
67	W	66	THR	2.5
7	AZ	290	ILE	2.5
47	CN	33	ASN	2.5
56	L	140	ILE	2.5
63	DD	31	ASN	2.5
73	c	79	ILE	2.5
9	BB	17	GLN	2.5
34	CA	31	GLN	2.5
4	AW	71	LEU	2.5
7	AZ	150	LEU	2.5
45	CL	64	LEU	2.5
50	CQ	143	LEU	2.5
56	L	93	LEU	2.5
59	O	97	LEU	2.5
59	CZ	36	LEU	2.5
16	BI	53	TYR	2.5
56	L	95	TYR	2.5
22	2	81	GLY	2.5
45	CL	95	GLY	2.5
54	CU	183	GLY	2.5
63	DD	130	GLY	2.5
73	c	16	GLY	2.5
31	BX	97	ALA	2.5
50	CQ	145	ALA	2.5
71	a	134	ALA	2.5
46	CM	1702	A	2.5
10	BC	63	LYS	2.5
26	BS	36	LYS	2.5
44	CK	13	LYS	2.5
49	E	203	GLU	2.5
49	CP	203	GLU	2.5
58	CY	141	LYS	2.5
62	DC	108	LYS	2.5
67	DH	114	GLU	2.5
69	Y	77	PRO	2.5
1	AS	2183	U	2.5
14	BG	93	ILE	2.5
34	CA	4	SER	2.5
62	R	30	THR	2.5
66	DG	116	ILE	2.5
69	Y	2	THR	2.5
78	DS	172	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
7	AZ	75	PHE	2.5
20	z	111	ASP	2.5
41	AN	23	CYS	2.5
54	J	21	PHE	2.5
67	DH	91	ASP	2.5
10	p	153	LEU	2.5
24	6	34	LEU	2.5
63	DD	27	LEU	2.5
79	DT	34	LEU	2.5
24	BQ	88	ARG	2.5
36	CC	105	ARG	2.5
45	i	106	GLY	2.5
59	O	102	GLY	2.5
39	AL	2	ALA	2.5
65	DF	34	LYS	2.5
45	i	87	PRO	2.5
62	DC	26	VAL	2.5
78	h	164	PRO	2.5
67	DH	73	GLU	2.5
7	AZ	13	HIS	2.5
31	AD	106	ILE	2.5
36	CC	118	ILE	2.5
22	2	91	LEU	2.5
48	CO	218	LEU	2.5
52	CS	28	THR	2.5
54	CU	88	PHE	2.5
54	CU	179	PHE	2.5
62	R	17	PHE	2.5
64	DE	30	THR	2.5
79	AR	262	LEU	2.5
80	L1	29	LEU	2.5
1	1	3051	C	2.5
1	AS	2467	C	2.5
2	AT	73	C	2.5
14	BG	144	SER	2.5
25	BR	36	SER	2.5
27	BT	28	ARG	2.5
38	CE	57	ARG	2.5
45	i	35	SER	2.5
1	1	2465	U	2.5
1	AS	2442	U	2.5
6	AY	110	TRP	2.5

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Mol	Chain	Res	Type	RSRZ
46	CM	25	C	2.5
70	DK	110	ARG	2.5
46	CM	1176	U	2.5
10	BC	118	ALA	2.5
14	BG	86	ALA	2.5
16	BI	79	ALA	2.5
26	BS	49	LYS	2.5
30	BW	52	LYS	2.5
45	i	54	LYS	2.5
50	F	154	ALA	2.5
50	CQ	9	LYS	2.5
52	CS	77	TYR	2.5
65	DF	79	TYR	2.5
78	h	134	LYS	2.5
22	BO	93	VAL	2.5
48	CO	35	PRO	2.5
79	DT	6	VAL	2.5
16	BI	104	GLU	2.5
62	DC	110	GLU	2.5
67	DH	21	ILE	2.5
6	AY	84	HIS	2.5
50	CQ	22	LEU	2.5
53	CT	69	HIS	2.5
65	U	127	HIS	2.5
51	CR	184	THR	2.5
64	DE	25	THR	2.5
67	DH	65	THR	2.5
76	DQ	32	ARG	2.5
79	AR	97	THR	2.5
5	k	233	TRP	2.5
46	CM	704	A	2.5
16	BI	56	LYS	2.5
26	BS	39	LYS	2.5
29	AB	20	GLY	2.5
32	BY	60	LYS	2.5
45	CL	59	GLY	2.5
52	CS	79	SER	2.5
53	CT	146	GLY	2.5
57	CX	13	GLN	2.5
60	DA	107	LYS	2.5
63	DD	120	SER	2.5
7	AZ	79	TYR	2.5

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Mol	Chain	Res	Type	RSRZ
41	AN	15	CYS	2.5
16	BI	55	ALA	2.5
30	AC	63	ALA	2.5
1	1	2448	C	2.5
42	CI	1	MET	2.5
46	CM	1348	U	2.5
18	BK	51	VAL	2.5
26	BS	26	VAL	2.5
14	BG	87	PRO	2.5
7	AZ	292	GLU	2.5
19	y	95	GLU	2.5
20	BM	157	GLU	2.5
60	P	149	LEU	2.4
66	DG	114	LEU	2.4
70	DK	34	LEU	2.4
78	h	145	LEU	2.4
1	1	2444	G	2.4
6	l	91	PHE	2.4
7	AZ	180	PHE	2.4
17	w	48	PHE	2.4
42	CI	23	ARG	2.4
53	CT	156	PHE	2.4
65	DF	128	PHE	2.4
79	AR	62	PHE	2.4
34	AG	86	LYS	2.4
35	AH	21	LYS	2.4
49	E	114	LYS	2.4
6	AY	235	GLY	2.4
10	BC	183	GLY	2.4
29	BV	30	GLY	2.4
56	L	32	GLY	2.4
76	DQ	20	GLN	2.4
7	AZ	44	TYR	2.4
20	BM	2	ALA	2.4
60	P	6	SER	2.4
64	T	125	SER	2.4
11	BD	37	ASP	2.4
1	1	2466	A	2.4
1	AS	2185	A	2.4
15	BH	115	VAL	2.4
33	AF	42	CYS	2.4
1	AS	1565	U	2.4

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Mol	Chain	Res	Type	RSRZ
1	AS	1758	U	2.4
46	B	1359	U	2.4
7	m	92	LEU	2.4
7	AZ	6	GLU	2.4
35	AH	41	ARG	2.4
51	CR	51	ARG	2.4
58	CY	11	ARG	2.4
78	DS	122	ARG	2.4
62	R	12	PHE	2.4
7	m	13	HIS	2.4
11	q	63	LYS	2.4
73	DN	4	LYS	2.4
20	BM	16	GLY	2.4
45	i	108	GLY	2.4
65	DF	84	TRP	2.4
67	W	74	GLY	2.4
67	DH	72	GLY	2.4
49	CP	87	ALA	2.4
1	AS	1558	G	2.4
10	BC	48	SER	2.4
10	BC	152	VAL	2.4
27	9	45	VAL	2.4
27	BT	43	TYR	2.4
35	AH	22	VAL	2.4
46	B	1480	G	2.4
52	H	77	TYR	2.4
55	CV	12	SER	2.4
64	DE	122	VAL	2.4
6	l	214	ASN	2.4
40	AM	32	ASP	2.4
41	AN	28	PRO	2.4
41	CH	28	PRO	2.4
78	DS	176	ASN	2.4
8	BA	130	ILE	2.4
27	BT	16	ARG	2.4
56	CW	128	LEU	2.4
63	S	131	ARG	2.4
80	l1	165	LEU	2.4
7	AZ	117	GLU	2.4
1	AS	1561	U	2.4
1	AS	2926	U	2.4
53	CT	64	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
65	DF	139	LYS	2.4
19	BL	158	HIS	2.4
62	DC	128	HIS	2.4
78	DS	140	HIS	2.4
6	AY	251	TRP	2.4
51	G	217	THR	2.4
73	c	90	THR	2.4
20	z	89	MET	2.4
37	CD	50	ALA	2.4
28	BU	13	VAL	2.4
35	CB	64	GLN	2.4
36	CC	57	VAL	2.4
59	CZ	116	VAL	2.4
71	DL	122	GLN	2.4
68	DI	58	TYR	2.4
22	BO	28	SER	2.4
79	DT	27	PRO	2.4
6	AY	317	ASN	2.4
14	BG	91	ARG	2.4
18	x	126	ARG	2.4
54	CU	145	ILE	2.4
76	DQ	38	LEU	2.4
77	g	54	ARG	2.4
78	DS	159	LEU	2.4
80	L1	190	LEU	2.4
8	BA	156	LYS	2.4
58	CY	15	LYS	2.4
62	DC	100	LYS	2.4
5	AX	379	PHE	2.4
55	CV	191	GLU	2.4
69	Y	79	PHE	2.4
1	AS	1266	A	2.4
20	BM	58	HIS	2.4
46	B	1574	A	2.4
53	I	81	HIS	2.4
1	1	1557	U	2.4
6	AY	69	GLY	2.4
45	i	133	ALA	2.4
46	CM	1359	U	2.4
46	CM	1585	U	2.4
55	CV	183	GLY	2.4
38	CE	87	THR	2.4

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Mol	Chain	Res	Type	RSRZ
52	CS	195	ALA	2.4
56	L	130	THR	2.4
63	S	133	ALA	2.4
63	DD	19	ALA	2.4
16	BI	155	VAL	2.4
49	E	58	VAL	2.4
65	DF	100	VAL	2.4
71	a	57	VAL	2.4
75	DP	48	VAL	2.4
78	h	156	VAL	2.4
79	DT	306	VAL	2.4
1	AS	486	C	2.4
6	AY	51	TYR	2.4
22	2	84	TYR	2.4
11	BD	10	LEU	2.4
36	CC	76	ILE	2.4
41	CH	29	PRO	2.4
72	DM	91	PRO	2.4
73	DN	28	ARG	2.4
49	E	173	ILE	2.4
56	L	118	LEU	2.4
62	DC	51	SER	2.4
79	AR	268	LEU	2.4
52	H	100	ASN	2.4
7	AZ	145	PHE	2.4
51	CR	109	PHE	2.4
63	S	108	PHE	2.4
77	g	44	PHE	2.4
45	i	116	GLU	2.4
51	CR	17	HIS	2.4
63	DD	20	HIS	2.4
63	DD	73	HIS	2.4
20	BM	63	ALA	2.4
50	CQ	206	ALA	2.4
79	DT	79	ALA	2.4
24	BQ	22	VAL	2.4
59	O	91	VAL	2.4
1	1	2441	G	2.4
46	CM	1186	G	2.4
46	CM	1431	G	2.4
6	AY	49	GLN	2.4
18	BK	179	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
21	0	162	LEU	2.3
4	j	190	LYS	2.3
7	AZ	271	LYS	2.3
22	BO	26	PRO	2.3
48	CO	61	LEU	2.3
53	CT	216	LEU	2.3
45	CL	101	LYS	2.3
58	CY	36	LYS	2.3
73	DN	73	TYR	2.3
29	BV	61	PHE	2.3
31	BX	93	SER	2.3
1	AS	350	C	2.3
46	CM	1412	C	2.3
46	CM	1593	C	2.3
47	C	81	PHE	2.3
49	CP	210	PHE	2.3
64	DE	115	PHE	2.3
11	BD	61	ASP	2.3
78	h	155	ASN	2.3
7	AZ	208	MET	2.3
10	p	200	ALA	2.3
16	BI	158	HIS	2.3
20	z	73	GLY	2.3
17	BJ	24	VAL	2.3
48	CO	34	ALA	2.3
50	CQ	148	ALA	2.3
64	DE	15	VAL	2.3
79	AR	76	ALA	2.3
7	AZ	279	ARG	2.3
55	CV	74	ARG	2.3
56	L	147	THR	2.3
76	DQ	7	TRP	2.3
8	BA	154	LEU	2.3
10	p	66	LEU	2.3
30	BW	21	ILE	2.3
43	CJ	27	GLN	2.3
56	CW	68	LYS	2.3
69	DJ	19	LYS	2.3
80	L1	15	LYS	2.3
40	CG	37	TYR	2.3
47	C	42	PRO	2.3
56	CW	18	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
80	l1	120	ILE	2.3
62	R	97	TYR	2.3
62	DC	123	TYR	2.3
1	1	1013	U	2.3
53	I	50	PHE	2.3
26	8	50	SER	2.3
64	T	103	ASP	2.3
5	k	274	HIS	2.3
6	l	175	ALA	2.3
6	AY	50	ALA	2.3
16	v	155	VAL	2.3
20	BM	73	GLY	2.3
18	BK	128	ARG	2.3
20	BM	139	VAL	2.3
46	CM	1175	C	2.3
46	CM	1362	C	2.3
52	H	162	VAL	2.3
57	M	19	GLY	2.3
60	P	150	VAL	2.3
66	DG	4	VAL	2.3
80	L1	201	VAL	2.3
80	L1	211	GLY	2.3
80	l1	187	ALA	2.3
25	BR	57	ARG	2.3
41	CH	30[A]	ARG	2.3
66	DG	122	ARG	2.3
69	DJ	3	ARG	2.3
15	BH	126	LYS	2.3
24	BQ	110	LYS	2.3
31	BX	21	LYS	2.3
33	BZ	78	LYS	2.3
43	AP	40	LYS	2.3
50	CQ	6	LEU	2.3
50	CQ	110	LEU	2.3
54	CU	54	LEU	2.3
58	N	34	TRP	2.3
75	DP	45	LYS	2.3
10	BC	122	THR	2.3
79	AR	137	THR	2.3
11	BD	9	ILE	2.3
49	CP	120	ILE	2.3
79	AR	116	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
44	CK	25	GLN	2.3
62	DC	115	TYR	2.3
26	8	32	PHE	2.3
76	f	43	PHE	2.3
1	1	1012	U	2.3
49	E	80	SER	2.3
1	AS	485	A	2.3
1	AS	1589	A	2.3
45	i	40	ASP	2.3
61	DB	27	ASP	2.3
52	CS	78	ALA	2.3
53	I	158	VAL	2.3
53	CT	162	VAL	2.3
55	CV	110	ARG	2.3
69	Y	84	ASN	2.3
12	r	2	ALA	2.3
22	BO	72	VAL	2.3
56	L	141	VAL	2.3
62	DC	6	ALA	2.3
74	d	69	GLY	2.3
79	AR	81	ALA	2.3
1	AS	2184	G	2.3
10	BC	64	LYS	2.3
41	CH	41	HIS	2.3
46	CM	1571	G	2.3
58	CY	43	LYS	2.3
62	DC	9	LYS	2.3
62	DC	35	LYS	2.3
71	DL	111	LYS	2.3
79	DT	29	HIS	2.3
62	R	116	LEU	2.3
40	CG	51	ILE	2.3
50	CQ	209	ILE	2.3
1	1	2545	C	2.3
21	BN	34	THR	2.3
22	2	29	THR	2.3
46	B	695	C	2.3
65	U	140	THR	2.3
4	AW	47	GLN	2.3
38	CE	86	GLN	2.3
64	T	65	PRO	2.3
47	C	204	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
49	E	210	PHE	2.3
16	BI	188	ARG	2.3
52	H	83	ARG	2.3
21	BN	85	SER	2.3
6	AY	113	LYS	2.3
6	AY	190	ALA	2.3
47	CN	137	SER	2.3
53	CT	157	VAL	2.3
53	CT	179	VAL	2.3
55	CV	69	SER	2.3
63	S	68	VAL	2.3
66	DG	6	VAL	2.3
65	DF	48	LYS	2.3
69	DJ	96	ALA	2.3
77	g	9	ALA	2.3
80	l1	213	SER	2.3
13	BF	4	LYS	2.3
13	BF	115	LYS	2.3
24	6	107	GLY	2.3
30	BW	19	ASN	2.3
34	CA	92[A]	LYS	2.3
53	CT	79	LYS	2.3
53	CT	161	GLU	2.3
78	DS	132	LYS	2.3
8	BA	75	LEU	2.3
9	o	225	ASP	2.3
46	B	1348	U	2.3
60	DA	80	LEU	2.3
69	DJ	38	LEU	2.3
70	DK	133	LEU	2.3
79	AR	283	ASP	2.3
1	AS	1584	A	2.3
1	AS	2943	A	2.3
46	CM	1188	A	2.3
46	CM	1574	A	2.3
50	F	185	ILE	2.3
54	CU	94	ILE	2.3
7	AZ	174	PRO	2.3
62	DC	29	PRO	2.3
77	DR	27	PRO	2.3
78	h	167	THR	2.3
6	AY	145	GLN	2.3

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Mol	Chain	Res	Type	RSRZ
29	BV	68	PHE	2.3
35	AH	33	GLN	2.3
48	CO	118	GLN	2.3
55	CV	20	GLN	2.3
66	DG	86	ARG	2.3
4	AW	46	LYS	2.3
6	l	194	LYS	2.3
19	BL	140	VAL	2.3
27	BT	46	LYS	2.3
50	CQ	17	VAL	2.3
56	L	154	LYS	2.3
59	CZ	61	VAL	2.3
55	K	180	GLY	2.3
55	CV	119	ALA	2.3
63	DD	89	VAL	2.3
65	DF	144	GLY	2.3
68	DI	54	ALA	2.3
71	a	67	GLY	2.3
71	DL	67	GLY	2.3
36	CC	100	GLU	2.3
44	AQ	59	SER	2.3
52	H	96	SER	2.3
60	DA	111	SER	2.3
62	DC	120	SER	2.3
64	DE	91	LEU	2.3
64	DE	123	SER	2.3
67	DH	27	SER	2.3
80	l1	80	LEU	2.3
18	x	136	ILE	2.2
67	W	71	ASN	2.2
79	DT	17	ASN	2.2
79	DT	294	ASP	2.2
1	AS	1091	U	2.2
46	CM	711	U	2.2
20	BM	56	THR	2.2
45	i	57	PRO	2.2
50	F	115	PRO	2.2
56	CW	11	THR	2.2
57	CX	16	PHE	2.2
57	CX	30	PRO	2.2
57	CX	41	PHE	2.2
58	N	60	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
79	AR	26	THR	2.2
79	AR	299	PHE	2.2
7	AZ	275	GLN	2.2
16	BI	81	TYR	2.2
65	DF	74	GLN	2.2
65	DF	92	GLN	2.2
55	CV	22	ARG	2.2
62	R	127	ARG	2.2
10	BC	150	LYS	2.2
36	CC	83	LYS	2.2
37	CD	69[A]	LYS	2.2
45	i	85	LYS	2.2
50	F	9	LYS	2.2
54	CU	101	LYS	2.2
63	DD	123	MET	2.2
67	DH	68	LYS	2.2
69	DJ	43	LYS	2.2
73	DN	21	VAL	2.2
10	BC	201	LEU	2.2
52	H	174	LEU	2.2
54	J	65	ALA	2.2
56	CW	60	LEU	2.2
74	d	24	LEU	2.2
79	AR	249	LEU	2.2
79	DT	13	LEU	2.2
80	l1	69	GLY	2.2
46	CM	1581	G	2.2
53	CT	222	GLU	2.2
60	DA	35	GLU	2.2
7	AZ	269	SER	2.2
50	F	150	SER	2.2
55	CV	176	SER	2.2
66	DG	93	HIS	2.2
75	e	53	ILE	2.2
76	DQ	31	ILE	2.2
7	AZ	45	ASN	2.2
16	v	153	ASN	2.2
29	BV	66	ASN	2.2
51	CR	18	TRP	2.2
67	DH	79	ASP	2.2
6	AY	248	PHE	2.2
27	BT	49	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
78	DS	166	PRO	2.2
63	DD	114	THR	2.2
78	DS	146	THR	2.2
1	AS	1560	U	2.2
11	q	168	ARG	2.2
46	B	291	U	2.2
49	E	90	ARG	2.2
55	CV	201	ARG	2.2
4	AW	189	TYR	2.2
47	C	27	LYS	2.2
47	CN	134	LYS	2.2
50	F	188	LYS	2.2
66	DG	38	LYS	2.2
50	CQ	49	VAL	2.2
51	CR	102	VAL	2.2
52	CS	132	VAL	2.2
80	l1	138	VAL	2.2
5	AX	8	ALA	2.2
7	m	113	LEU	2.2
26	BS	107	ALA	2.2
37	CD	47	ALA	2.2
46	CM	988	A	2.2
53	I	77	LEU	2.2
55	CV	149	LEU	2.2
79	DT	145	LEU	2.2
6	AY	193	GLY	2.2
33	BZ	125	GLY	2.2
51	CR	244	GLY	2.2
9	BB	14	GLU	2.2
11	BD	33	GLU	2.2
45	i	61	GLU	2.2
58	CY	118	GLU	2.2
78	h	137	HIS	2.2
50	CQ	140	SER	2.2
46	B	222	C	2.2
46	CM	1182	C	2.2
53	I	197	ASN	2.2
55	K	21	PHE	2.2
80	l1	198	TRP	2.2
80	L1	212	PRO	2.2
49	CP	90	ARG	2.2
55	CV	18	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
63	S	122	ARG	2.2
1	1	545	G	2.2
9	BB	15	LYS	2.2
26	BS	92	LYS	2.2
31	AD	21	LYS	2.2
35	CB	19	LYS	2.2
51	CR	241	LYS	2.2
53	CT	149	LYS	2.2
79	DT	118	LYS	2.2
15	BH	119	GLN	2.2
26	BS	123	TYR	2.2
29	AB	64	GLN	2.2
60	DA	89	TYR	2.2
63	S	93	GLN	2.2
67	DH	83	MET	2.2
49	CP	33	VAL	2.2
7	AZ	92	LEU	2.2
9	o	10	LEU	2.2
52	H	31	LEU	2.2
64	DE	46	LEU	2.2
64	DE	73	LEU	2.2
19	y	99	ALA	2.2
35	CB	50	ALA	2.2
46	CM	1325	U	2.2
46	CM	1335	U	2.2
46	CM	1356	U	2.2
16	BI	58	GLY	2.2
61	DB	93	GLY	2.2
79	DT	78	GLY	2.2
9	o	93	ILE	2.2
52	CS	89	ILE	2.2
1	AS	1918	A	2.2
20	z	152	GLU	2.2
18	x	121	HIS	2.2
45	CL	83	HIS	2.2
56	CW	160	HIS	2.2
63	S	92	HIS	2.2
74	DO	19	HIS	2.2
7	AZ	253	PHE	2.2
9	o	199	PHE	2.2
42	AO	24	SER	2.2
63	S	128	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
75	DP	22	ARG	2.2
76	DQ	44	ARG	2.2
79	AR	66	SER	2.2
5	k	385	LYS	2.2
13	BF	153	LYS	2.2
20	BM	19	LYS	2.2
21	BN	160	LYS	2.2
24	BQ	98	ASN	2.2
29	AB	77	LYS	2.2
29	BV	24	LYS	2.2
41	AN	49	LYS	2.2
48	D	23	PRO	2.2
56	L	2	PRO	2.2
63	S	40	PRO	2.2
63	S	50	PRO	2.2
78	DS	130	PRO	2.2
55	CV	35	ASN	2.2
76	DQ	5	ASN	2.2
76	f	37	ASP	2.2
6	AY	61	THR	2.2
45	i	34	THR	2.2
66	V	39	THR	2.2
78	h	129	THR	2.2
6	AY	237	LEU	2.2
7	AZ	146	LEU	2.2
7	AZ	236	VAL	2.2
24	6	15	LEU	2.2
69	Y	26	LEU	2.2
20	z	87	ALA	2.2
36	CC	110	ALA	2.2
41	CH	34	CYS	2.2
59	CZ	101	ALA	2.2
66	DG	17	ALA	2.2
79	DT	154	ALA	2.2
62	R	99	GLY	2.2
79	AR	15	GLY	2.2
46	CM	233	G	2.2
46	CM	1228	G	2.2
54	J	132	ILE	2.2
46	B	75	U	2.2
46	CM	1591	U	2.2
6	AY	74	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
7	m	217	GLU	2.2
13	BF	78	GLU	2.2
29	BV	70	ARG	2.2
4	AW	181	LYS	2.2
36	CC	73	LYS	2.2
56	L	37	LYS	2.2
61	Q	85	LYS	2.2
80	L1	68	PHE	2.2
46	CM	718	A	2.2
62	DC	92	SER	2.2
62	DC	111	MET	2.2
9	BB	9	THR	2.2
11	q	176	LEU	2.2
13	BF	30	LEU	2.2
19	y	138	LEU	2.2
29	BV	43	THR	2.2
37	CD	78	THR	2.2
45	CL	72	ASP	2.2
56	CW	172	VAL	2.2
64	DE	8	THR	2.2
68	DI	55	LEU	2.2
80	l1	115	VAL	2.2
16	v	62	TYR	2.2
51	G	103	TYR	2.2
66	V	80	TYR	2.2
77	DR	40	TYR	2.2
20	z	63	ALA	2.1
20	z	107	ALA	2.1
24	BQ	30	GLY	2.1
48	CO	233	GLY	2.1
78	DS	133	ILE	2.1
80	l1	66	CYS	2.1
46	CM	1471	C	2.1
7	AZ	21	ARG	2.1
13	s	145	ARG	2.1
78	DS	161	ARG	2.1
5	AX	385	LYS	2.1
11	BD	2	LYS	2.1
15	u	125	LYS	2.1
18	BK	75	GLU	2.1
22	BO	159	PHE	2.1
45	i	102	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
48	CO	223	PHE	2.1
53	CT	191	LYS	2.1
57	M	24	LYS	2.1
78	DS	137	HIS	2.1
1	1	1263	U	2.1
1	AS	419	G	2.1
1	AS	2452	G	2.1
46	B	1135	G	2.1
46	B	1405	G	2.1
46	CM	1339	G	2.1
57	M	30	PRO	2.1
10	p	143	LEU	2.1
18	BK	115	SER	2.1
66	V	9	VAL	2.1
72	b	62	VAL	2.1
76	f	26	SER	2.1
78	DS	145	LEU	2.1
9	BB	91	ASN	2.1
38	AK	59	THR	2.1
39	AL	57	ASN	2.1
50	CQ	27	THR	2.1
57	CX	28	ASN	2.1
64	DE	35	THR	2.1
65	DF	21	ASN	2.1
13	BF	134	ALA	2.1
21	0	81	TYR	2.1
55	CV	117	TYR	2.1
63	DD	23	ALA	2.1
1	1	1099	A	2.1
46	CM	1413	A	2.1
7	AZ	69	ILE	2.1
19	y	156	GLY	2.1
19	y	160	GLY	2.1
19	y	169	GLY	2.1
52	H	199	ILE	2.1
79	AR	259	ILE	2.1
66	V	89	ARG	2.1
4	AW	60	LYS	2.1
25	BR	97	LYS	2.1
45	CL	50	LYS	2.1
63	S	12	LYS	2.1
63	S	105	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
10	BC	79	PHE	2.1
6	AY	118	GLU	2.1
51	CR	93	GLU	2.1
1	1	2468	C	2.1
18	BK	59	PRO	2.1
9	BB	103	LEU	2.1
15	BH	128	LEU	2.1
43	CJ	83	LEU	2.1
51	CR	239	LEU	2.1
52	CS	165	LEU	2.1
54	CU	122	LEU	2.1
56	CW	49	LEU	2.1
59	O	103	LEU	2.1
64	DE	26	LEU	2.1
66	DG	45	LEU	2.1
77	DR	49	LEU	2.1
43	CJ	76	VAL	2.1
60	DA	65	VAL	2.1
71	a	35	VAL	2.1
46	CM	849	U	2.1
46	CM	1270	U	2.1
31	BX	22	SER	2.1
39	CF	22	SER	2.1
63	DD	140	SER	2.1
7	AZ	98	ALA	2.1
47	C	145	ALA	2.1
48	D	156	ALA	2.1
77	DR	34	ALA	2.1
80	l1	23	THR	2.1
32	BY	55	ASN	2.1
14	BG	95	ILE	2.1
29	BV	46	ASP	2.1
34	AG	49	ILE	2.1
35	CB	13	TYR	2.1
66	DG	66	TYR	2.1
67	DH	71	ASN	2.1
1	1	2443	G	2.1
16	BI	88	GLY	2.1
37	CD	64	GLY	2.1
43	CJ	44	ASP	2.1
55	K	158	ILE	2.1
63	S	107	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
72	DM	86	ASP	2.1
6	l	192	LYS	2.1
16	BI	33	LYS	2.1
20	z	70	LYS	2.1
39	CF	36	LYS	2.1
55	CV	59	ARG	2.1
62	DC	81	ARG	2.1
67	W	88	ARG	2.1
67	DH	60	LYS	2.1
70	DK	86	PHE	2.1
66	V	104	CYS	2.1
70	DK	71	CYS	2.1
18	BK	121	HIS	2.1
26	BS	60	HIS	2.1
43	CJ	90[A]	HIS	2.1
48	D	101	HIS	2.1
56	L	128	LEU	2.1
62	DC	87	PRO	2.1
62	DC	106	GLU	2.1
7	m	146	LEU	2.1
7	AZ	171	LEU	2.1
75	e	16	LEU	2.1
76	f	30	LEU	2.1
14	BG	149	VAL	2.1
39	CF	55	VAL	2.1
48	CO	43	VAL	2.1
57	CX	21	VAL	2.1
63	S	21	VAL	2.1
1	AS	1215	C	2.1
60	P	15	ALA	2.1
64	DE	39	ALA	2.1
5	k	104	THR	2.1
28	BU	91	SER	2.1
30	AC	13	THR	2.1
34	CA	32	ILE	2.1
41	AN	2	ILE	2.1
58	N	31	THR	2.1
61	DB	6	SER	2.1
63	S	120	SER	2.1
69	Y	75	ILE	2.1
69	DJ	2	THR	2.1
80	L1	21	THR	2.1

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Mol	Chain	Res	Type	RSRZ
1	1	2475	U	2.1
6	AY	48	ARG	2.1
7	AZ	24	GLN	2.1
12	r	164	LYS	2.1
14	BG	190	LYS	2.1
20	z	98	ARG	2.1
29	BV	59	ARG	2.1
30	AC	18	ARG	2.1
41	AN	38	LYS	2.1
45	CL	93	ARG	2.1
45	CL	117	GLY	2.1
50	CQ	129	GLY	2.1
51	CR	253	ARG	2.1
55	CV	68	GLY	2.1
58	CY	24	LYS	2.1
70	DK	29	TYR	2.1
17	BJ	123	GLN	2.1
21	0	89	ASN	2.1
60	P	69	ASN	2.1
67	DH	48	ASN	2.1
70	DK	140	LYS	2.1
33	BZ	24	ASP	2.1
62	DC	45	PHE	2.1
64	DE	71	PHE	2.1
1	AS	863	G	2.1
1	AS	2429	G	2.1
7	AZ	68	HIS	2.1
1	AS	1267	A	2.1
12	BE	207	GLU	2.1
16	BI	76	PRO	2.1
25	BR	92	GLU	2.1
28	BU	70	PRO	2.1
45	i	155	LEU	2.1
46	B	1184	G	2.1
49	E	76	MET	2.1
50	F	114	LEU	2.1
50	F	178	MET	2.1
50	CQ	183	LEU	2.1
51	G	12	LEU	2.1
55	CV	96	LEU	2.1
57	CX	1	MET	2.1
79	AR	208	CYS	2.1

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Mol	Chain	Res	Type	RSRZ
20	z	68	GLU	2.1
26	BS	64	VAL	2.1
45	i	73	VAL	2.1
46	CM	777	A	2.1
50	CQ	59	VAL	2.1
51	CR	40	GLU	2.1
54	CU	56	VAL	2.1
64	T	66	VAL	2.1
28	BU	2	ALA	2.1
11	q	75	ILE	2.1
50	CQ	197	ARG	2.1
52	CS	62	ILE	2.1
52	CS	80	LYS	2.1
53	I	226	ILE	2.1
53	CT	143	LYS	2.1
62	DC	59	LYS	2.1
66	V	86	ARG	2.1
7	AZ	207	TYR	2.1
18	BK	142	THR	2.1
19	y	154	GLY	2.1
47	CN	80	THR	2.1
65	DF	33	THR	2.1
78	DS	167	THR	2.1
50	CQ	150	SER	2.1
59	CZ	49	SER	2.1
4	AW	8	GLN	2.1
4	AW	215	ASN	2.1
29	AB	66	ASN	2.1
40	CG	38	ASN	2.1
45	CL	70	ASN	2.1
56	L	142	ASN	2.1
79	DT	119	ASN	2.1
80	l1	197	ASN	2.1
33	AF	40	ASP	2.1
46	B	1385	C	2.1
46	CM	1192	C	2.1
46	CM	1194	C	2.1
1	1	2968	U	2.1
1	AS	895	U	2.1
46	B	378	U	2.1
46	CM	1	U	2.1
48	CO	132	ASP	2.1

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Mol	Chain	Res	Type	RSRZ
50	CQ	18	PHE	2.1
61	Q	9	PHE	2.1
69	Y	37	PHE	2.1
79	DT	39	ASP	2.1
8	n	41	LEU	2.1
13	BF	17	LEU	2.1
65	U	86	LEU	2.1
5	AX	377	HIS	2.1
16	BI	60	VAL	2.1
18	BK	54	HIS	2.1
51	G	70	VAL	2.1
54	J	96	PRO	2.1
63	S	54	VAL	2.1
71	a	5	VAL	2.1
76	DQ	27	HIS	2.1
80	L1	169	VAL	2.1
17	w	155	GLU	2.1
47	CN	174	TRP	2.0
7	m	8	ARG	2.0
15	BH	117	LYS	2.0
24	BQ	64	LYS	2.0
29	BV	149	ALA	2.0
45	i	113	ARG	2.0
47	C	159	ALA	2.0
52	CS	106	LYS	2.0
60	P	64	LYS	2.0
64	T	59	LYS	2.0
64	T	90	ALA	2.0
65	DF	40	ARG	2.0
47	CN	173	ILE	2.0
65	U	26	ILE	2.0
68	X	34	ILE	2.0
78	DS	136	LYS	2.0
79	DT	76	ALA	2.0
79	DT	276	ALA	2.0
1	AS	2518	A	2.0
1	AS	2453	G	2.0
17	BJ	70	GLY	2.0
46	B	823	G	2.0
64	T	2	GLY	2.0
79	DT	301	GLY	2.0
16	BI	101	THR	2.0

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Mol	Chain	Res	Type	RSRZ
60	DA	46	THR	2.0
63	DD	8	THR	2.0
69	DJ	101	TYR	2.0
79	AR	280	THR	2.0
79	DT	100	THR	2.0
18	BK	66	SER	2.0
21	BN	108	GLN	2.0
68	DI	68	SER	2.0
4	j	16	PHE	2.0
37	CD	38	PHE	2.0
50	F	168	PHE	2.0
6	AY	44	ASN	2.0
9	o	170	ASN	2.0
16	BI	117	ASN	2.0
45	i	129	LEU	2.0
45	CL	155	LEU	2.0
55	CV	138	ASP	2.0
57	M	40	LEU	2.0
66	V	108	LEU	2.0
14	BG	83	VAL	2.0
17	BJ	122	PRO	2.0
19	BL	47	VAL	2.0
41	AN	47	PRO	2.0
46	CM	1045	U	2.0
46	CM	1191	U	2.0
46	CM	1565	U	2.0
46	CM	1608	U	2.0
47	CN	152	PRO	2.0
62	DC	41	VAL	2.0
62	DC	96	VAL	2.0
63	S	117	VAL	2.0
29	BV	41	HIS	2.0
70	DK	18	HIS	2.0
4	AW	192	LYS	2.0
13	BF	141	ARG	2.0
44	AQ	24	ARG	2.0
45	i	67	LYS	2.0
48	D	26	ARG	2.0
51	CR	37	LYS	2.0
51	CR	198	ARG	2.0
63	DD	11	LYS	2.0
70	DK	16	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
74	d	22	LYS	2.0
79	DT	236	GLU	2.0
6	AY	73	ALA	2.0
11	BD	99	ILE	2.0
16	BI	39	ALA	2.0
26	8	139	ILE	2.0
50	F	87	ILE	2.0
55	K	13	ALA	2.0
60	P	84	ILE	2.0
61	DB	34	ILE	2.0
67	W	64	ILE	2.0
67	W	85	ILE	2.0
80	L1	183	ILE	2.0
5	k	309	GLY	2.0
12	r	114	GLY	2.0
52	CS	101	GLY	2.0
77	DR	32	GLY	2.0
7	AZ	120	THR	2.0
13	BF	52	TYR	2.0
35	CB	56	THR	2.0
62	DC	122	THR	2.0
63	S	69	THR	2.0
77	g	48	THR	2.0
12	BE	212	GLN	2.0
19	BL	135	GLN	2.0
51	CR	68	GLN	2.0
53	CT	65	GLN	2.0
56	L	48	GLN	2.0
57	CX	27	PHE	2.0
70	Z	27	GLN	2.0
1	AS	2519	A	2.0
8	BA	41	LEU	2.0
10	BC	59	LEU	2.0
17	w	2	SER	2.0
26	BS	38	LEU	2.0
38	CE	67	LEU	2.0
50	CQ	47	LEU	2.0
54	J	34	LEU	2.0
16	BI	149	ASN	2.0
66	DG	101	ASN	2.0
47	C	22	VAL	2.0
47	CN	121	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
51	G	45	VAL	2.0
54	J	177	VAL	2.0
63	S	18	VAL	2.0
65	DF	23	ASP	2.0
69	DJ	121	VAL	2.0
53	CT	181	PRO	2.0
6	l	184	LYS	2.0
28	BU	29	HIS	2.0
29	BV	139	ARG	2.0
34	CA	86[A]	LYS	2.0
39	CF	30[A]	LYS	2.0
40	CG	5	LYS	2.0
48	CO	101	HIS	2.0
60	DA	93	LYS	2.0
78	DS	139	LYS	2.0
1	1	977	U	2.0
7	AZ	166	ALA	2.0
10	BC	114	ALA	2.0
22	BO	25	ILE	2.0
25	BR	51	TRP	2.0
37	CD	20	GLU	2.0
43	AP	103	ALA	2.0
50	CQ	89	ALA	2.0
60	DA	71	ILE	2.0
63	DD	135	ALA	2.0
78	DS	143	ALA	2.0
1	AS	356	C	2.0
1	AS	2474	C	2.0
46	CM	1481	C	2.0
47	CN	171	GLY	2.0
51	CR	190	GLY	2.0
75	DP	20	GLY	2.0

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

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	B	1855	1/1	0.23	0.21	106,106,106,106	0
81	MG	B	1834	1/1	0.24	0.24	241,241,241,241	0
81	MG	B	1848	1/1	0.43	0.18	57,57,57,57	0
81	MG	CM	1811	1/1	0.43	0.36	73,73,73,73	0
81	MG	1	3470	1/1	0.47	0.28	48,48,48,48	0
81	MG	B	1805	1/1	0.47	0.35	82,82,82,82	0
81	MG	8	201	1/1	0.51	0.15	55,55,55,55	0
81	MG	B	1960	1/1	0.53	0.20	41,41,41,41	0
81	MG	AS	3484	1/1	0.53	0.18	43,43,43,43	0
81	MG	1	3694	1/1	0.53	0.18	120,120,120,120	0
81	MG	B	1932	1/1	0.54	0.29	81,81,81,81	0
81	MG	1	3800	1/1	0.54	0.26	95,95,95,95	0
81	MG	1	3783	1/1	0.55	0.16	36,36,36,36	0
81	MG	CM	1871	1/1	0.56	0.18	99,99,99,99	0
81	MG	CM	1925	1/1	0.56	0.29	61,61,61,61	0
81	MG	B	1966	1/1	0.57	0.17	99,99,99,99	0
81	MG	CM	1833	1/1	0.57	0.36	69,69,69,69	0
81	MG	AS	3581	1/1	0.58	0.11	66,66,66,66	0
81	MG	AS	3595	1/1	0.58	0.25	47,47,47,47	0
81	MG	g	101	1/1	0.58	0.34	66,66,66,66	0
81	MG	B	1925	1/1	0.59	0.13	76,76,76,76	0
81	MG	1	3457	1/1	0.60	0.20	44,44,44,44	0
81	MG	B	1919	1/1	0.60	0.15	110,110,110,110	0
81	MG	AS	3588	1/1	0.61	0.36	79,79,79,79	0
81	MG	CM	1883	1/1	0.61	0.20	65,65,65,65	0
81	MG	AS	3497	1/1	0.61	0.25	75,75,75,75	0
81	MG	AS	3647	1/1	0.62	0.24	62,62,62,62	0
81	MG	k	403	1/1	0.62	0.34	78,78,78,78	0
81	MG	1	3869	1/1	0.63	0.28	61,61,61,61	0
81	MG	1	3755	1/1	0.63	0.16	51,51,51,51	0
81	MG	CM	1822	1/1	0.63	0.22	81,81,81,81	0
81	MG	1	3677	1/1	0.63	0.12	55,55,55,55	0
81	MG	B	1893	1/1	0.63	0.17	69,69,69,69	0
81	MG	1	3433	1/1	0.63	0.36	72,72,72,72	0
81	MG	AS	3632	1/1	0.63	0.16	91,91,91,91	0
81	MG	CM	1940	1/1	0.63	0.30	59,59,59,59	0
84	ZN	AP	201	1/1	0.63	0.28	234,234,234,234	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	B	1836	1/1	0.64	0.35	78,78,78,78	0
81	MG	AS	3528	1/1	0.64	0.18	97,97,97,97	0
81	MG	B	1967	1/1	0.64	0.09	71,71,71,71	0
81	MG	AS	3704	1/1	0.65	0.24	49,49,49,49	0
81	MG	AS	3762	1/1	0.65	0.11	57,57,57,57	0
81	MG	4	212	1/1	0.65	0.14	81,81,81,81	0
81	MG	1	3603	1/1	0.65	0.31	64,64,64,64	0
81	MG	1	3668	1/1	0.65	0.22	57,57,57,57	0
81	MG	AS	3550	1/1	0.66	0.26	48,48,48,48	0
81	MG	B	1871	1/1	0.66	0.24	64,64,64,64	0
81	MG	1	3844	1/1	0.66	0.22	75,75,75,75	0
81	MG	3	211	1/1	0.66	0.21	64,64,64,64	0
81	MG	B	1801	1/1	0.66	0.19	54,54,54,54	0
81	MG	CM	1897	1/1	0.66	0.25	105,105,105,105	0
81	MG	B	1931	1/1	0.66	0.25	72,72,72,72	0
81	MG	1	3857	1/1	0.66	0.16	49,49,49,49	0
81	MG	CL	302	1/1	0.66	0.32	43,43,43,43	0
81	MG	B	1956	1/1	0.66	0.12	67,67,67,67	0
81	MG	AS	3737	1/1	0.67	0.30	60,60,60,60	0
81	MG	1	3748	1/1	0.67	0.15	27,27,27,27	0
81	MG	B	1854	1/1	0.67	0.17	96,96,96,96	0
81	MG	1	3894	1/1	0.67	0.24	52,52,52,52	0
81	MG	1	3788	1/1	0.68	0.20	57,57,57,57	0
81	MG	DB	201	1/1	0.68	0.19	67,67,67,67	0
81	MG	AS	3464	1/1	0.68	0.24	81,81,81,81	0
81	MG	1	3879	1/1	0.68	0.23	63,63,63,63	0
81	MG	D	301	1/1	0.69	0.32	69,69,69,69	0
81	MG	DC	201	1/1	0.69	0.32	42,42,42,42	0
81	MG	AS	3729	1/1	0.69	0.47	79,79,79,79	0
81	MG	1	3839	1/1	0.69	0.15	50,50,50,50	0
81	MG	1	3715	1/1	0.70	0.25	51,51,51,51	0
81	MG	B	1923	1/1	0.70	0.16	92,92,92,92	0
81	MG	1	3502	1/1	0.70	0.19	55,55,55,55	0
81	MG	1	3852	1/1	0.70	0.33	62,62,62,62	0
81	MG	AS	3765	1/1	0.70	0.18	44,44,44,44	0
81	MG	AT	203	1/1	0.70	0.29	71,71,71,71	0
81	MG	1	3584	1/1	0.70	0.25	61,61,61,61	0
81	MG	B	1889	1/1	0.70	0.23	71,71,71,71	0
83	PAR	AS	3789	42/42	0.70	0.16	69,100,118,123	42
81	MG	1	3802	1/1	0.70	0.08	89,89,89,89	0
81	MG	B	1843	1/1	0.71	0.12	83,83,83,83	0
81	MG	1	3464	1/1	0.71	0.28	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	B	1922	1/1	0.71	0.15	65,65,65,65	0
81	MG	3	207	1/1	0.71	0.24	87,87,87,87	0
81	MG	1	3766	1/1	0.71	0.12	63,63,63,63	0
81	MG	1	3789	1/1	0.71	0.31	46,46,46,46	0
81	MG	1	3796	1/1	0.71	0.13	62,62,62,62	0
81	MG	CM	1912	1/1	0.72	0.22	62,62,62,62	0
81	MG	1	3415	1/1	0.72	0.31	23,23,23,23	0
81	MG	AS	3535	1/1	0.72	0.18	88,88,88,88	0
81	MG	CM	1857	1/1	0.72	0.18	99,99,99,99	0
81	MG	1	3509	1/1	0.72	0.15	30,30,30,30	0
81	MG	1	3931	1/1	0.72	0.10	58,58,58,58	0
81	MG	CM	1890	1/1	0.72	0.17	57,57,57,57	0
81	MG	F	301	1/1	0.72	0.20	69,69,69,69	0
81	MG	B	1915	1/1	0.73	0.20	76,76,76,76	0
81	MG	BH	201	1/1	0.73	0.11	54,54,54,54	0
81	MG	DB	203	1/1	0.73	0.18	117,117,117,117	0
81	MG	AS	3507	1/1	0.73	0.28	72,72,72,72	0
81	MG	1	3890	1/1	0.73	0.09	45,45,45,45	0
81	MG	1	3798	1/1	0.73	0.21	50,50,50,50	0
83	PAR	AS	3790	42/42	0.73	0.19	81,107,127,140	0
81	MG	B	1815	1/1	0.73	0.32	59,59,59,59	0
84	ZN	CB	201	1/1	0.73	0.26	255,255,255,255	0
81	MG	1	3545	1/1	0.74	0.17	34,34,34,34	0
81	MG	AU	203	1/1	0.74	0.16	100,100,100,100	0
81	MG	1	3904	1/1	0.74	0.14	57,57,57,57	0
81	MG	1	3649	1/1	0.74	0.11	53,53,53,53	0
81	MG	CQ	304	1/1	0.74	0.11	71,71,71,71	0
81	MG	AS	3649	1/1	0.74	0.12	54,54,54,54	0
81	MG	1	3864	1/1	0.74	0.10	62,62,62,62	0
81	MG	1	3555	1/1	0.74	0.16	53,53,53,53	0
81	MG	CM	1862	1/1	0.74	0.26	64,64,64,64	0
83	PAR	B	1970	42/42	0.74	0.17	82,119,132,143	0
81	MG	1	3754	1/1	0.74	0.12	59,59,59,59	0
81	MG	CM	1873	1/1	0.74	0.33	40,40,40,40	0
81	MG	AS	3457	1/1	0.74	0.27	37,37,37,37	0
81	MG	1	3425	1/1	0.74	0.32	40,40,40,40	0
81	MG	B	1879	1/1	0.75	0.12	94,94,94,94	0
81	MG	AS	3671	1/1	0.75	0.25	46,46,46,46	0
81	MG	B	1946	1/1	0.75	0.10	72,72,72,72	0
81	MG	AS	3709	1/1	0.75	0.08	52,52,52,52	0
81	MG	B	1949	1/1	0.75	0.18	75,75,75,75	0
81	MG	4	215	1/1	0.75	0.15	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3843	1/1	0.75	0.25	63,63,63,63	0
81	MG	1	3909	1/1	0.75	0.14	44,44,44,44	0
81	MG	AS	3779	1/1	0.75	0.25	57,57,57,57	0
81	MG	AP	203	1/1	0.75	0.18	32,32,32,32	0
81	MG	4	208	1/1	0.75	0.21	57,57,57,57	0
81	MG	1	3866	1/1	0.75	0.15	81,81,81,81	0
81	MG	DJ	202	1/1	0.75	0.11	53,53,53,53	0
81	MG	CM	1801	1/1	0.75	0.21	36,36,36,36	0
81	MG	4	213	1/1	0.75	0.13	49,49,49,49	0
81	MG	AS	3598	1/1	0.75	0.17	69,69,69,69	0
81	MG	AS	3615	1/1	0.75	0.19	50,50,50,50	0
81	MG	AS	3424	1/1	0.75	0.20	52,52,52,52	0
81	MG	B	1874	1/1	0.75	0.23	51,51,51,51	0
81	MG	B	1909	1/1	0.76	0.08	62,62,62,62	0
81	MG	B	1924	1/1	0.76	0.08	89,89,89,89	0
81	MG	j	304	1/1	0.76	0.20	42,42,42,42	0
83	PAR	1	3969	42/42	0.76	0.14	47,103,124,126	0
81	MG	AS	3781	1/1	0.76	0.13	49,49,49,49	0
81	MG	1	3585	1/1	0.76	0.12	53,53,53,53	0
81	MG	1	3645	1/1	0.76	0.17	56,56,56,56	0
84	ZN	AH	201	1/1	0.76	0.14	213,213,213,213	0
81	MG	AS	3618	1/1	0.76	0.15	58,58,58,58	0
81	MG	B	1945	1/1	0.76	0.15	61,61,61,61	0
81	MG	CM	1917	1/1	0.77	0.15	86,86,86,86	0
81	MG	AT	208	1/1	0.77	0.29	49,49,49,49	0
81	MG	1	3423	1/1	0.77	0.24	55,55,55,55	0
81	MG	1	3611	1/1	0.77	0.15	50,50,50,50	0
81	MG	DA	202	1/1	0.77	0.23	70,70,70,70	0
81	MG	AS	3522	1/1	0.77	0.24	36,36,36,36	0
81	MG	1	3771	1/1	0.77	0.16	109,109,109,109	0
81	MG	1	3838	1/1	0.77	0.25	35,35,35,35	0
81	MG	V	201	1/1	0.77	0.13	75,75,75,75	0
81	MG	1	3644	1/1	0.77	0.12	56,56,56,56	0
81	MG	AS	3585	1/1	0.77	0.33	58,58,58,58	0
81	MG	AR	401	1/1	0.77	0.16	83,83,83,83	0
83	PAR	AS	3788	42/42	0.77	0.15	84,114,125,131	0
81	MG	1	3535	1/1	0.77	0.22	84,84,84,84	0
81	MG	1	3597	1/1	0.77	0.49	78,78,78,78	0
81	MG	B	1959	1/1	0.77	0.29	44,44,44,44	0
81	MG	AS	3783	1/1	0.77	0.14	65,65,65,65	0
81	MG	1	3667	1/1	0.77	0.12	50,50,50,50	0
81	MG	CM	1915	1/1	0.78	0.24	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3856	1/1	0.78	0.14	54,54,54,54	0
81	MG	1	3466	1/1	0.78	0.36	47,47,47,47	0
81	MG	AS	3620	1/1	0.78	0.14	110,110,110,110	0
81	MG	CM	1945	1/1	0.78	0.18	49,49,49,49	0
81	MG	1	3420	1/1	0.78	0.12	38,38,38,38	0
81	MG	B	1911	1/1	0.78	0.17	58,58,58,58	0
81	MG	1	3471	1/1	0.78	0.16	41,41,41,41	0
81	MG	1	3811	1/1	0.78	0.16	38,38,38,38	0
81	MG	AS	3682	1/1	0.78	0.25	77,77,77,77	0
81	MG	CM	1830	1/1	0.78	0.23	81,81,81,81	0
81	MG	1	3484	1/1	0.78	0.19	60,60,60,60	0
83	PAR	1	3968	42/42	0.78	0.16	56,91,119,122	0
81	MG	1	3888	1/1	0.78	0.14	55,55,55,55	0
81	MG	1	3552	1/1	0.78	0.18	75,75,75,75	0
81	MG	I	301	1/1	0.78	0.17	85,85,85,85	0
81	MG	1	3490	1/1	0.78	0.15	45,45,45,45	0
81	MG	y	202	1/1	0.78	0.13	45,45,45,45	0
81	MG	1	3730	1/1	0.78	0.20	48,48,48,48	0
81	MG	1	3578	1/1	0.78	0.14	41,41,41,41	0
81	MG	AS	3782	1/1	0.78	0.12	37,37,37,37	0
81	MG	1	3764	1/1	0.79	0.32	63,63,63,63	0
81	MG	B	1863	1/1	0.79	0.09	103,103,103,103	0
81	MG	1	3842	1/1	0.79	0.12	27,27,27,27	0
81	MG	1	3635	1/1	0.79	0.20	61,61,61,61	0
81	MG	1	3558	1/1	0.79	0.13	65,65,65,65	0
81	MG	1	3926	1/1	0.79	0.10	37,37,37,37	0
81	MG	Z	201	1/1	0.79	0.21	61,61,61,61	0
81	MG	1	3830	1/1	0.79	0.14	28,28,28,28	0
81	MG	B	1901	1/1	0.79	0.12	74,74,74,74	0
81	MG	AS	3612	1/1	0.79	0.18	52,52,52,52	0
81	MG	B	1903	1/1	0.79	0.17	61,61,61,61	0
81	MG	CM	1891	1/1	0.79	0.13	48,48,48,48	0
81	MG	B	1906	1/1	0.79	0.24	43,43,43,43	0
81	MG	CM	1907	1/1	0.79	0.16	103,103,103,103	0
81	MG	1	3960	1/1	0.79	0.18	35,35,35,35	0
81	MG	B	1957	1/1	0.79	0.09	31,31,31,31	0
81	MG	1	3961	1/1	0.79	0.19	85,85,85,85	0
81	MG	1	3660	1/1	0.79	0.12	58,58,58,58	0
81	MG	AS	3775	1/1	0.80	0.15	47,47,47,47	0
81	MG	AS	3605	1/1	0.80	0.13	72,72,72,72	0
81	MG	AS	3609	1/1	0.80	0.23	55,55,55,55	0
81	MG	AS	3483	1/1	0.80	0.25	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3823	1/1	0.80	0.16	48,48,48,48	0
81	MG	AS	3495	1/1	0.80	0.26	51,51,51,51	0
81	MG	1	3556	1/1	0.80	0.17	66,66,66,66	0
81	MG	1	3898	1/1	0.80	0.25	52,52,52,52	0
81	MG	AS	3516	1/1	0.80	0.36	48,48,48,48	0
81	MG	1	3477	1/1	0.80	0.16	18,18,18,18	0
81	MG	B	1862	1/1	0.80	0.10	80,80,80,80	0
81	MG	B	1809	1/1	0.80	0.12	37,37,37,37	0
81	MG	1	3561	1/1	0.80	0.25	53,53,53,53	0
81	MG	AS	3707	1/1	0.80	0.09	27,27,27,27	0
81	MG	B	1819	1/1	0.80	0.17	30,30,30,30	0
81	MG	CM	1858	1/1	0.80	0.17	113,113,113,113	0
81	MG	AS	3721	1/1	0.80	0.15	64,64,64,64	0
81	MG	1	3699	1/1	0.80	0.14	43,43,43,43	0
81	MG	AS	3735	1/1	0.80	0.18	56,56,56,56	0
81	MG	B	1880	1/1	0.80	0.12	49,49,49,49	0
81	MG	AS	3746	1/1	0.80	0.23	71,71,71,71	0
81	MG	5	201	1/1	0.80	0.15	65,65,65,65	0
81	MG	AS	3469	1/1	0.80	0.18	55,55,55,55	0
81	MG	B	1890	1/1	0.81	0.15	87,87,87,87	0
81	MG	1	3892	1/1	0.81	0.08	71,71,71,71	0
81	MG	BZ	201	1/1	0.81	0.29	67,67,67,67	0
81	MG	CM	1922	1/1	0.81	0.20	49,49,49,49	0
81	MG	1	3870	1/1	0.81	0.13	54,54,54,54	0
81	MG	CM	1936	1/1	0.81	0.10	62,62,62,62	0
81	MG	B	1841	1/1	0.81	0.17	55,55,55,55	0
81	MG	CM	1942	1/1	0.81	0.12	42,42,42,42	0
81	MG	CM	1816	1/1	0.81	0.22	45,45,45,45	0
81	MG	CM	1818	1/1	0.81	0.19	40,40,40,40	0
81	MG	AS	3583	1/1	0.81	0.16	61,61,61,61	0
81	MG	AS	3636	1/1	0.81	0.17	69,69,69,69	0
81	MG	AS	3641	1/1	0.81	0.14	80,80,80,80	0
81	MG	DB	204	1/1	0.81	0.14	26,26,26,26	0
81	MG	Y	201	1/1	0.81	0.20	69,69,69,69	0
81	MG	1	3760	1/1	0.81	0.16	43,43,43,43	0
81	MG	AS	3667	1/1	0.81	0.15	28,28,28,28	0
81	MG	CM	1864	1/1	0.81	0.22	54,54,54,54	0
81	MG	0	202	1/1	0.81	0.34	87,87,87,87	0
81	MG	AS	3677	1/1	0.81	0.09	65,65,65,65	0
81	MG	1	3782	1/1	0.81	0.18	66,66,66,66	0
81	MG	CM	1885	1/1	0.81	0.22	57,57,57,57	0
81	MG	AT	202	1/1	0.81	0.24	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3863	1/1	0.81	0.15	85,85,85,85	0
81	MG	AT	204	1/1	0.81	0.14	85,85,85,85	0
81	MG	AS	3436	1/1	0.81	0.21	65,65,65,65	0
81	MG	AS	3700	1/1	0.82	0.16	59,59,59,59	0
81	MG	1	3532	1/1	0.82	0.27	37,37,37,37	0
81	MG	BS	201	1/1	0.82	0.17	83,83,83,83	0
81	MG	B	1835	1/1	0.82	0.14	52,52,52,52	0
81	MG	o	304	1/1	0.82	0.20	47,47,47,47	0
81	MG	CM	1810	1/1	0.82	0.25	45,45,45,45	0
81	MG	1	3410	1/1	0.82	0.40	42,42,42,42	0
81	MG	3	206	1/1	0.82	0.19	55,55,55,55	0
81	MG	1	3572	1/1	0.82	0.11	44,44,44,44	0
81	MG	AS	3494	1/1	0.82	0.19	63,63,63,63	0
81	MG	AS	3742	1/1	0.82	0.10	72,72,72,72	0
81	MG	CM	1831	1/1	0.82	0.22	36,36,36,36	0
81	MG	1	3777	1/1	0.82	0.15	52,52,52,52	0
81	MG	CM	1855	1/1	0.82	0.08	131,131,131,131	0
81	MG	AI	201	1/1	0.82	0.13	66,66,66,66	0
81	MG	3	212	1/1	0.82	0.21	46,46,46,46	0
81	MG	1	3711	1/1	0.82	0.15	54,54,54,54	0
81	MG	B	1869	1/1	0.82	0.24	59,59,59,59	0
81	MG	1	3758	1/1	0.82	0.16	40,40,40,40	0
81	MG	1	3925	1/1	0.82	0.14	39,39,39,39	0
81	MG	1	3813	1/1	0.82	0.15	71,71,71,71	0
81	MG	AS	3670	1/1	0.82	0.14	63,63,63,63	0
81	MG	1	3483	1/1	0.82	0.17	30,30,30,30	0
81	MG	B	1882	1/1	0.82	0.10	56,56,56,56	0
81	MG	B	1883	1/1	0.82	0.30	82,82,82,82	0
81	MG	AT	212	1/1	0.82	0.12	41,41,41,41	0
81	MG	AS	3787	1/1	0.83	0.18	66,66,66,66	0
81	MG	AS	3651	1/1	0.83	0.10	22,22,22,22	0
81	MG	Z	202	1/1	0.83	0.35	69,69,69,69	0
81	MG	CM	1903	1/1	0.83	0.14	38,38,38,38	0
81	MG	AS	3554	1/1	0.83	0.15	44,44,44,44	0
81	MG	AS	3561	1/1	0.83	0.13	42,42,42,42	0
81	MG	o	303	1/1	0.83	0.19	52,52,52,52	0
81	MG	B	1938	1/1	0.83	0.07	51,51,51,51	0
81	MG	1	3707	1/1	0.83	0.09	82,82,82,82	0
81	MG	w	301	1/1	0.83	0.34	39,39,39,39	0
81	MG	w	303	1/1	0.83	0.51	64,64,64,64	0
81	MG	x	202	1/1	0.83	0.11	25,25,25,25	0
81	MG	CM	1808	1/1	0.83	0.26	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3603	1/1	0.83	0.19	44,44,44,44	0
81	MG	AS	3727	1/1	0.83	0.27	73,73,73,73	0
81	MG	1	3805	1/1	0.83	0.11	28,28,28,28	0
81	MG	AS	3733	1/1	0.83	0.12	89,89,89,89	0
81	MG	CM	1820	1/1	0.83	0.15	34,34,34,34	0
81	MG	1	3807	1/1	0.83	0.07	39,39,39,39	0
81	MG	1	3750	1/1	0.83	0.23	46,46,46,46	0
81	MG	1	3893	1/1	0.83	0.11	34,34,34,34	0
81	MG	AS	3617	1/1	0.83	0.14	62,62,62,62	0
81	MG	1	3544	1/1	0.83	0.37	47,47,47,47	0
81	MG	1	3769	1/1	0.83	0.22	37,37,37,37	0
81	MG	AS	3774	1/1	0.83	0.19	49,49,49,49	0
81	MG	1	3524	1/1	0.83	0.10	58,58,58,58	0
81	MG	AS	3776	1/1	0.83	0.12	52,52,52,52	0
81	MG	1	3831	1/1	0.83	0.17	38,38,38,38	0
81	MG	1	3772	1/1	0.83	0.22	49,49,49,49	0
81	MG	1	3560	1/1	0.83	0.24	73,73,73,73	0
81	MG	1	3840	1/1	0.83	0.22	52,52,52,52	0
81	MG	1	3918	1/1	0.84	0.09	43,43,43,43	0
81	MG	AS	3513	1/1	0.84	0.21	36,36,36,36	0
81	MG	CM	1832	1/1	0.84	0.15	63,63,63,63	0
81	MG	B	1867	1/1	0.84	0.19	65,65,65,65	0
81	MG	CM	1848	1/1	0.84	0.25	61,61,61,61	0
81	MG	CM	1849	1/1	0.84	0.25	53,53,53,53	0
81	MG	CM	1854	1/1	0.84	0.17	90,90,90,90	0
81	MG	1	3923	1/1	0.84	0.16	36,36,36,36	0
81	MG	AS	3717	1/1	0.84	0.23	64,64,64,64	0
81	MG	1	3860	1/1	0.84	0.15	70,70,70,70	0
81	MG	1	3812	1/1	0.84	0.27	58,58,58,58	0
81	MG	CM	1863	1/1	0.84	0.14	15,15,15,15	0
81	MG	AS	3540	1/1	0.84	0.28	55,55,55,55	0
81	MG	CM	1870	1/1	0.84	0.12	73,73,73,73	0
81	MG	AS	3548	1/1	0.84	0.17	49,49,49,49	0
81	MG	1	3574	1/1	0.84	0.25	53,53,53,53	0
81	MG	1	3434	1/1	0.84	0.24	25,25,25,25	0
81	MG	CM	1884	1/1	0.84	0.14	31,31,31,31	0
81	MG	AF	201	1/1	0.84	0.21	82,82,82,82	0
81	MG	1	3550	1/1	0.84	0.15	35,35,35,35	0
81	MG	AS	3747	1/1	0.84	0.22	48,48,48,48	0
81	MG	1	3787	1/1	0.84	0.17	43,43,43,43	0
81	MG	1	3873	1/1	0.84	0.07	57,57,57,57	0
81	MG	1	3693	1/1	0.84	0.13	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3882	1/1	0.84	0.12	31,31,31,31	0
81	MG	B	1813	1/1	0.84	0.18	42,42,42,42	0
81	MG	1	3636	1/1	0.84	0.11	34,34,34,34	0
81	MG	1	3563	1/1	0.84	0.32	46,46,46,46	0
81	MG	AS	3608	1/1	0.84	0.22	65,65,65,65	0
81	MG	CM	1933	1/1	0.84	0.20	69,69,69,69	0
81	MG	f	102	1/1	0.84	0.09	53,53,53,53	0
81	MG	CM	1939	1/1	0.84	0.19	82,82,82,82	0
81	MG	AS	3784	1/1	0.84	0.15	54,54,54,54	0
81	MG	1	3590	1/1	0.84	0.09	36,36,36,36	0
81	MG	B	1914	1/1	0.84	0.18	62,62,62,62	0
81	MG	AS	3410	1/1	0.84	0.31	25,25,25,25	0
81	MG	1	3765	1/1	0.84	0.16	49,49,49,49	0
81	MG	4	216	1/1	0.84	0.12	42,42,42,42	0
81	MG	AS	3628	1/1	0.84	0.24	73,73,73,73	0
81	MG	AS	3437	1/1	0.84	0.23	36,36,36,36	0
81	MG	B	1837	1/1	0.84	0.12	78,78,78,78	0
81	MG	DG	201	1/1	0.84	0.20	49,49,49,49	0
81	MG	BJ	302	1/1	0.84	0.12	42,42,42,42	0
81	MG	1	3648	1/1	0.84	0.13	51,51,51,51	0
81	MG	AS	3643	1/1	0.84	0.25	37,37,37,37	0
81	MG	1	3427	1/1	0.84	0.25	36,36,36,36	0
81	MG	o	302	1/1	0.84	0.18	37,37,37,37	0
81	MG	B	1929	1/1	0.84	0.21	70,70,70,70	0
81	MG	AS	3492	1/1	0.84	0.09	24,24,24,24	0
81	MG	1	3598	1/1	0.84	0.09	44,44,44,44	0
81	MG	1	3737	1/1	0.84	0.21	43,43,43,43	0
81	MG	1	3910	1/1	0.84	0.10	50,50,50,50	0
81	MG	AS	3498	1/1	0.84	0.24	33,33,33,33	0
81	MG	3	214	1/1	0.85	0.17	48,48,48,48	0
81	MG	AS	3702	1/1	0.85	0.10	72,72,72,72	0
81	MG	B	1884	1/1	0.85	0.18	107,107,107,107	0
81	MG	AS	3523	1/1	0.85	0.33	49,49,49,49	0
81	MG	B	1887	1/1	0.85	0.09	51,51,51,51	0
81	MG	AS	3712	1/1	0.85	0.15	45,45,45,45	0
81	MG	4	204	1/1	0.85	0.07	37,37,37,37	0
81	MG	1	3646	1/1	0.85	0.10	73,73,73,73	0
81	MG	AS	3725	1/1	0.85	0.07	38,38,38,38	0
81	MG	1	3595	1/1	0.85	0.10	52,52,52,52	0
81	MG	AS	3728	1/1	0.85	0.12	21,21,21,21	0
81	MG	AS	3549	1/1	0.85	0.21	34,34,34,34	0
81	MG	B	1899	1/1	0.85	0.19	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3623	1/1	0.85	0.12	44,44,44,44	0
81	MG	1	3650	1/1	0.85	0.10	30,30,30,30	0
81	MG	1	3653	1/1	0.85	0.10	47,47,47,47	0
81	MG	AS	3743	1/1	0.85	0.16	41,41,41,41	0
81	MG	1	3503	1/1	0.85	0.07	62,62,62,62	0
81	MG	B	1910	1/1	0.85	0.16	76,76,76,76	0
81	MG	AS	3748	1/1	0.85	0.18	60,60,60,60	0
81	MG	AS	3760	1/1	0.85	0.11	146,146,146,146	0
81	MG	CM	1894	1/1	0.85	0.35	49,49,49,49	0
81	MG	Z	203	1/1	0.85	0.20	62,62,62,62	0
81	MG	CM	1901	1/1	0.85	0.10	53,53,53,53	0
81	MG	c	202	1/1	0.85	0.11	60,60,60,60	0
81	MG	AS	3596	1/1	0.85	0.21	43,43,43,43	0
81	MG	1	3768	1/1	0.85	0.12	38,38,38,38	0
81	MG	1	3722	1/1	0.85	0.10	45,45,45,45	0
81	MG	1	3728	1/1	0.85	0.14	53,53,53,53	0
81	MG	AS	3407	1/1	0.85	0.10	37,37,37,37	0
81	MG	1	3411	1/1	0.85	0.23	24,24,24,24	0
81	MG	s	201	1/1	0.85	0.17	49,49,49,49	0
81	MG	1	3403	1/1	0.85	0.34	31,31,31,31	0
81	MG	1	3867	1/1	0.85	0.14	45,45,45,45	0
81	MG	AS	3442	1/1	0.85	0.19	41,41,41,41	0
81	MG	1	3827	1/1	0.85	0.08	36,36,36,36	0
81	MG	AS	3621	1/1	0.85	0.16	60,60,60,60	0
81	MG	B	1926	1/1	0.85	0.17	70,70,70,70	0
81	MG	x	203	1/1	0.85	0.20	70,70,70,70	0
81	MG	AT	213	1/1	0.85	0.08	51,51,51,51	0
81	MG	AS	3476	1/1	0.85	0.20	37,37,37,37	0
81	MG	AX	401	1/1	0.85	0.10	43,43,43,43	0
81	MG	1	3959	1/1	0.85	0.12	48,48,48,48	0
81	MG	1	3747	1/1	0.85	0.19	34,34,34,34	0
81	MG	B	1936	1/1	0.85	0.12	59,59,59,59	0
81	MG	1	3606	1/1	0.85	0.20	35,35,35,35	0
81	MG	1	3877	1/1	0.85	0.31	36,36,36,36	0
81	MG	CM	1806	1/1	0.85	0.21	68,68,68,68	0
81	MG	1	3837	1/1	0.85	0.09	59,59,59,59	0
81	MG	1	3678	1/1	0.85	0.16	38,38,38,38	0
81	MG	AS	3506	1/1	0.85	0.19	40,40,40,40	0
81	MG	AS	3672	1/1	0.85	0.24	58,58,58,58	0
81	MG	B	1955	1/1	0.85	0.22	45,45,45,45	0
81	MG	1	3682	1/1	0.85	0.28	60,60,60,60	0
81	MG	AS	3687	1/1	0.85	0.16	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3611	1/1	0.86	0.08	29,29,29,29	0
81	MG	1	3818	1/1	0.86	0.11	75,75,75,75	0
81	MG	AS	3517	1/1	0.86	0.23	34,34,34,34	0
81	MG	B	1846	1/1	0.86	0.19	56,56,56,56	0
81	MG	AW	303	1/1	0.86	0.13	82,82,82,82	0
81	MG	1	3438	1/1	0.86	0.18	30,30,30,30	0
81	MG	AX	402	1/1	0.86	0.25	34,34,34,34	0
81	MG	AS	3526	1/1	0.86	0.15	50,50,50,50	0
81	MG	1	3402	1/1	0.86	0.25	16,16,16,16	0
81	MG	1	3460	1/1	0.86	0.16	23,23,23,23	0
81	MG	CM	1911	1/1	0.86	0.09	63,63,63,63	0
81	MG	AS	3731	1/1	0.86	0.14	49,49,49,49	0
81	MG	1	3577	1/1	0.86	0.29	53,53,53,53	0
81	MG	CM	1804	1/1	0.86	0.33	48,48,48,48	0
81	MG	AS	3734	1/1	0.86	0.15	37,37,37,37	0
81	MG	AF	204	1/1	0.86	0.12	55,55,55,55	0
81	MG	AS	3639	1/1	0.86	0.17	59,59,59,59	0
81	MG	1	3832	1/1	0.86	0.08	46,46,46,46	0
81	MG	1	3654	1/1	0.86	0.11	49,49,49,49	0
81	MG	AS	3645	1/1	0.86	0.14	45,45,45,45	0
81	MG	1	3553	1/1	0.86	0.11	43,43,43,43	0
81	MG	AS	3648	1/1	0.86	0.09	43,43,43,43	0
81	MG	CN	301	1/1	0.86	0.15	54,54,54,54	0
81	MG	B	1968	1/1	0.86	0.07	48,48,48,48	0
81	MG	AS	3576	1/1	0.86	0.43	84,84,84,84	0
81	MG	AS	3654	1/1	0.86	0.23	34,34,34,34	0
81	MG	B	1969	1/1	0.86	0.14	50,50,50,50	0
81	MG	CM	1841	1/1	0.86	0.09	118,118,118,118	0
81	MG	1	3661	1/1	0.86	0.20	63,63,63,63	0
81	MG	1	3408	1/1	0.86	0.21	39,39,39,39	0
81	MG	CM	1850	1/1	0.86	0.20	55,55,55,55	0
81	MG	AS	3778	1/1	0.86	0.08	38,38,38,38	0
81	MG	1	3950	1/1	0.86	0.49	50,50,50,50	0
81	MG	1	3953	1/1	0.86	0.21	57,57,57,57	0
81	MG	1	3409	1/1	0.86	0.31	29,29,29,29	0
81	MG	1	3485	1/1	0.86	0.19	54,54,54,54	0
81	MG	1	3543	1/1	0.86	0.14	39,39,39,39	0
81	MG	1	3467	1/1	0.86	0.25	37,37,37,37	0
81	MG	1	3853	1/1	0.86	0.12	63,63,63,63	0
81	MG	AS	3705	1/1	0.86	0.26	58,58,58,58	0
81	MG	1	3691	1/1	0.86	0.09	35,35,35,35	0
81	MG	1	3803	1/1	0.87	0.17	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3721	1/1	0.87	0.14	42,42,42,42	0
81	MG	1	3643	1/1	0.87	0.12	50,50,50,50	0
81	MG	AS	3777	1/1	0.87	0.14	82,82,82,82	0
81	MG	1	3419	1/1	0.87	0.16	19,19,19,19	0
81	MG	CM	1869	1/1	0.87	0.12	55,55,55,55	0
81	MG	1	3911	1/1	0.87	0.10	39,39,39,39	0
81	MG	AS	3653	1/1	0.87	0.10	47,47,47,47	0
81	MG	1	3579	1/1	0.87	0.25	47,47,47,47	0
81	MG	1	3858	1/1	0.87	0.14	62,62,62,62	0
81	MG	AS	3668	1/1	0.87	0.18	78,78,78,78	0
81	MG	B	1847	1/1	0.87	0.09	28,28,28,28	0
81	MG	1	3604	1/1	0.87	0.13	46,46,46,46	0
81	MG	u	202	1/1	0.87	0.07	55,55,55,55	0
81	MG	AS	3566	1/1	0.87	0.27	37,37,37,37	0
81	MG	AT	207	1/1	0.87	0.12	80,80,80,80	0
81	MG	CM	1898	1/1	0.87	0.19	60,60,60,60	0
81	MG	AS	3574	1/1	0.87	0.12	48,48,48,48	0
81	MG	AT	209	1/1	0.87	0.07	24,24,24,24	0
81	MG	AS	3686	1/1	0.87	0.12	50,50,50,50	0
81	MG	1	3774	1/1	0.87	0.13	46,46,46,46	0
81	MG	AS	3698	1/1	0.87	0.21	48,48,48,48	0
81	MG	AS	3412	1/1	0.87	0.29	41,41,41,41	0
81	MG	B	1856	1/1	0.87	0.11	65,65,65,65	0
81	MG	AS	3430	1/1	0.87	0.21	39,39,39,39	0
81	MG	1	3738	1/1	0.87	0.10	22,22,22,22	0
81	MG	1	3936	1/1	0.87	0.29	43,43,43,43	0
81	MG	BO	201	1/1	0.87	0.18	65,65,65,65	0
81	MG	1	3495	1/1	0.87	0.11	50,50,50,50	0
81	MG	AS	3711	1/1	0.87	0.19	51,51,51,51	0
81	MG	BZ	203	1/1	0.87	0.21	83,83,83,83	0
81	MG	1	3829	1/1	0.87	0.21	61,61,61,61	0
81	MG	1	3565	1/1	0.87	0.22	31,31,31,31	0
81	MG	1	3525	1/1	0.87	0.19	46,46,46,46	0
81	MG	CW	201	1/1	0.87	0.19	83,83,83,83	0
81	MG	1	3629	1/1	0.87	0.33	60,60,60,60	0
81	MG	1	3965	1/1	0.87	0.09	42,42,42,42	0
81	MG	1	3833	1/1	0.87	0.14	47,47,47,47	0
81	MG	1	3698	1/1	0.87	0.16	26,26,26,26	0
81	MG	1	3880	1/1	0.87	0.12	30,30,30,30	0
81	MG	B	1886	1/1	0.87	0.13	52,52,52,52	0
81	MG	AQ	102	1/1	0.87	0.11	27,27,27,27	0
81	MG	1	3795	1/1	0.87	0.15	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	PAR	1	3967	42/42	0.87	0.17	62,83,103,110	0
81	MG	AS	3499	1/1	0.87	0.24	42,42,42,42	0
81	MG	1	3416	1/1	0.87	0.24	30,30,30,30	0
81	MG	AS	3630	1/1	0.87	0.13	41,41,41,41	0
81	MG	1	3478	1/1	0.87	0.16	25,25,25,25	0
81	MG	1	3841	1/1	0.87	0.16	55,55,55,55	0
81	MG	1	3638	1/1	0.87	0.27	48,48,48,48	0
83	PAR	CM	1946	42/42	0.87	0.30	80,100,118,130	42
81	MG	AS	3640	1/1	0.87	0.18	59,59,59,59	0
81	MG	B	1902	1/1	0.87	0.20	51,51,51,51	0
81	MG	1	3665	1/1	0.87	0.22	25,25,25,25	0
81	MG	CM	1845	1/1	0.88	0.22	60,60,60,60	0
81	MG	1	3447	1/1	0.88	0.18	96,96,96,96	0
81	MG	1	3570	1/1	0.88	0.17	61,61,61,61	0
81	MG	B	1907	1/1	0.88	0.19	54,54,54,54	0
81	MG	1	3546	1/1	0.88	0.26	54,54,54,54	0
81	MG	AS	3425	1/1	0.88	0.15	24,24,24,24	0
81	MG	1	3906	1/1	0.88	0.07	69,69,69,69	0
81	MG	B	1820	1/1	0.88	0.23	38,38,38,38	0
81	MG	B	1829	1/1	0.88	0.32	28,28,28,28	0
81	MG	AS	3751	1/1	0.88	0.14	70,70,70,70	0
81	MG	B	1832	1/1	0.88	0.13	63,63,63,63	0
81	MG	1	3907	1/1	0.88	0.20	77,77,77,77	0
81	MG	AS	3764	1/1	0.88	0.15	72,72,72,72	0
81	MG	1	3826	1/1	0.88	0.16	53,53,53,53	0
81	MG	1	3859	1/1	0.88	0.25	43,43,43,43	0
81	MG	CM	1881	1/1	0.88	0.19	34,34,34,34	0
81	MG	1	3612	1/1	0.88	0.14	21,21,21,21	0
81	MG	1	3914	1/1	0.88	0.15	31,31,31,31	0
81	MG	1	3757	1/1	0.88	0.17	38,38,38,38	0
81	MG	l	402	1/1	0.88	0.13	51,51,51,51	0
81	MG	1	3922	1/1	0.88	0.42	52,52,52,52	0
81	MG	1	3548	1/1	0.88	0.11	54,54,54,54	0
81	MG	CM	1895	1/1	0.88	0.07	30,30,30,30	0
81	MG	CM	1896	1/1	0.88	0.12	32,32,32,32	0
81	MG	B	1851	1/1	0.88	0.09	64,64,64,64	0
81	MG	1	3794	1/1	0.88	0.17	30,30,30,30	0
81	MG	1	3674	1/1	0.88	0.19	53,53,53,53	0
81	MG	CM	1902	1/1	0.88	0.10	63,63,63,63	0
81	MG	AS	3501	1/1	0.88	0.14	60,60,60,60	0
81	MG	1	3929	1/1	0.88	0.07	87,87,87,87	0
81	MG	B	1948	1/1	0.88	0.13	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3522	1/1	0.88	0.23	44,44,44,44	0
81	MG	AS	3515	1/1	0.88	0.30	55,55,55,55	0
81	MG	B	1952	1/1	0.88	0.21	64,64,64,64	0
81	MG	1	3933	1/1	0.88	0.08	35,35,35,35	0
81	MG	B	1865	1/1	0.88	0.14	95,95,95,95	0
81	MG	1	3630	1/1	0.88	0.15	34,34,34,34	0
81	MG	1	3943	1/1	0.88	0.11	61,61,61,61	0
81	MG	1	3723	1/1	0.88	0.15	51,51,51,51	0
81	MG	1	3952	1/1	0.88	0.20	33,33,33,33	0
81	MG	AS	3683	1/1	0.88	0.22	49,49,49,49	0
81	MG	1	3681	1/1	0.88	0.11	20,20,20,20	0
81	MG	AS	3544	1/1	0.88	0.16	34,34,34,34	0
81	MG	1	3632	1/1	0.88	0.08	45,45,45,45	0
81	MG	B	1881	1/1	0.88	0.23	53,53,53,53	0
81	MG	AC	101	1/1	0.88	0.12	43,43,43,43	0
81	MG	1	3804	1/1	0.88	0.18	26,26,26,26	0
81	MG	AS	3557	1/1	0.88	0.11	28,28,28,28	0
81	MG	G	301	1/1	0.88	0.13	49,49,49,49	0
81	MG	AF	203	1/1	0.88	0.18	43,43,43,43	0
81	MG	1	3685	1/1	0.88	0.27	38,38,38,38	0
81	MG	1	3430	1/1	0.88	0.24	34,34,34,34	0
81	MG	AS	3714	1/1	0.88	0.08	81,81,81,81	0
81	MG	3	201	1/1	0.88	0.15	62,62,62,62	0
81	MG	AS	3719	1/1	0.88	0.08	48,48,48,48	0
81	MG	AS	3582	1/1	0.88	0.17	49,49,49,49	0
81	MG	1	3473	1/1	0.88	0.28	18,18,18,18	0
81	MG	CM	1824	1/1	0.88	0.20	35,35,35,35	0
81	MG	CM	1829	1/1	0.88	0.15	76,76,76,76	0
81	MG	i	301	1/1	0.88	0.22	59,59,59,59	0
81	MG	B	1898	1/1	0.88	0.08	50,50,50,50	0
81	MG	1	3849	1/1	0.88	0.39	50,50,50,50	0
81	MG	1	3776	1/1	0.88	0.14	63,63,63,63	0
81	MG	B	1806	1/1	0.88	0.17	42,42,42,42	0
81	MG	AS	3681	1/1	0.89	0.19	64,64,64,64	0
81	MG	CM	1809	1/1	0.89	0.24	34,34,34,34	0
81	MG	1	3655	1/1	0.89	0.09	40,40,40,40	0
81	MG	AS	3519	1/1	0.89	0.10	73,73,73,73	0
81	MG	z	201	1/1	0.89	0.08	51,51,51,51	0
81	MG	1	3955	1/1	0.89	0.27	61,61,61,61	0
81	MG	AS	3696	1/1	0.89	0.21	66,66,66,66	0
81	MG	0	203	1/1	0.89	0.13	57,57,57,57	0
81	MG	AS	3699	1/1	0.89	0.07	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	B	1964	1/1	0.89	0.11	39,39,39,39	0
81	MG	AS	3701	1/1	0.89	0.14	43,43,43,43	0
81	MG	AS	3532	1/1	0.89	0.12	62,62,62,62	0
81	MG	1	3582	1/1	0.89	0.11	40,40,40,40	0
81	MG	1	3896	1/1	0.89	0.07	36,36,36,36	0
81	MG	CM	1840	1/1	0.89	0.19	35,35,35,35	0
81	MG	AS	3541	1/1	0.89	0.13	60,60,60,60	0
81	MG	1	3814	1/1	0.89	0.15	41,41,41,41	0
81	MG	1	3962	1/1	0.89	0.10	24,24,24,24	0
81	MG	1	3566	1/1	0.89	0.10	24,24,24,24	0
81	MG	1	3528	1/1	0.89	0.10	45,45,45,45	0
81	MG	1	3429	1/1	0.89	0.25	13,13,13,13	0
81	MG	1	3908	1/1	0.89	0.17	47,47,47,47	0
81	MG	1	3621	1/1	0.89	0.09	35,35,35,35	0
81	MG	1	3792	1/1	0.89	0.10	20,20,20,20	0
81	MG	AS	3570	1/1	0.89	0.24	37,37,37,37	0
81	MG	1	3591	1/1	0.89	0.09	35,35,35,35	0
81	MG	AS	3575	1/1	0.89	0.41	30,30,30,30	0
81	MG	B	1802	1/1	0.89	0.23	33,33,33,33	0
81	MG	1	3624	1/1	0.89	0.27	32,32,32,32	0
81	MG	4	205	1/1	0.89	0.12	76,76,76,76	0
81	MG	1	3917	1/1	0.89	0.18	27,27,27,27	0
81	MG	4	209	1/1	0.89	0.19	45,45,45,45	0
81	MG	1	3501	1/1	0.89	0.20	33,33,33,33	0
81	MG	1	3920	1/1	0.89	0.08	53,53,53,53	0
81	MG	4	214	1/1	0.89	0.09	25,25,25,25	0
81	MG	B	1823	1/1	0.89	0.16	32,32,32,32	0
81	MG	AS	3419	1/1	0.89	0.24	26,26,26,26	0
81	MG	AS	3604	1/1	0.89	0.13	61,61,61,61	0
81	MG	1	3523	1/1	0.89	0.10	28,28,28,28	0
81	MG	AS	3761	1/1	0.89	0.12	54,54,54,54	0
81	MG	1	3487	1/1	0.89	0.15	44,44,44,44	0
81	MG	j	302	1/1	0.89	0.09	35,35,35,35	0
81	MG	CM	1899	1/1	0.89	0.15	65,65,65,65	0
81	MG	B	1918	1/1	0.89	0.16	111,111,111,111	0
81	MG	AS	3766	1/1	0.89	0.05	29,29,29,29	0
81	MG	1	3684	1/1	0.89	0.12	35,35,35,35	0
81	MG	AS	3614	1/1	0.89	0.15	32,32,32,32	0
81	MG	B	1920	1/1	0.89	0.22	50,50,50,50	0
81	MG	AS	3451	1/1	0.89	0.18	35,35,35,35	0
81	MG	AS	3453	1/1	0.89	0.18	82,82,82,82	0
81	MG	B	1921	1/1	0.89	0.13	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3780	1/1	0.89	0.12	22,22,22,22	0
81	MG	AS	3461	1/1	0.89	0.11	38,38,38,38	0
81	MG	CM	1932	1/1	0.89	0.15	78,78,78,78	0
81	MG	AS	3623	1/1	0.89	0.15	89,89,89,89	0
81	MG	1	3481	1/1	0.89	0.21	44,44,44,44	0
81	MG	1	3734	1/1	0.89	0.12	44,44,44,44	0
81	MG	1	3689	1/1	0.89	0.14	33,33,33,33	0
81	MG	AS	3634	1/1	0.89	0.20	19,19,19,19	0
81	MG	AS	3480	1/1	0.89	0.15	23,23,23,23	0
81	MG	AS	3481	1/1	0.89	0.38	38,38,38,38	0
81	MG	1	3690	1/1	0.89	0.24	45,45,45,45	0
81	MG	1	3934	1/1	0.89	0.12	20,20,20,20	0
81	MG	1	3883	1/1	0.89	0.21	35,35,35,35	0
81	MG	1	3940	1/1	0.89	0.14	44,44,44,44	0
81	MG	v	301	1/1	0.89	0.18	21,21,21,21	0
81	MG	v	302	1/1	0.89	0.18	54,54,54,54	0
81	MG	1	3808	1/1	0.89	0.29	42,42,42,42	0
81	MG	B	1939	1/1	0.89	0.16	87,87,87,87	0
81	MG	1	3946	1/1	0.89	0.05	40,40,40,40	0
81	MG	AS	3504	1/1	0.89	0.18	44,44,44,44	0
81	MG	AS	3658	1/1	0.89	0.08	49,49,49,49	0
81	MG	B	1857	1/1	0.89	0.12	51,51,51,51	0
81	MG	B	1860	1/1	0.89	0.20	42,42,42,42	0
81	MG	AS	3508	1/1	0.89	0.12	62,62,62,62	0
81	MG	x	201	1/1	0.89	0.20	11,11,11,11	0
81	MG	CJ	203	1/1	0.89	0.19	51,51,51,51	0
81	MG	CK	102	1/1	0.89	0.16	50,50,50,50	0
81	MG	1	3810	1/1	0.89	0.15	32,32,32,32	0
81	MG	CM	1802	1/1	0.89	0.30	18,18,18,18	0
81	MG	1	3745	1/1	0.89	0.14	42,42,42,42	0
81	MG	AS	3680	1/1	0.89	0.15	31,31,31,31	0
81	MG	1	3538	1/1	0.90	0.20	51,51,51,51	0
81	MG	AS	3403	1/1	0.90	0.28	18,18,18,18	0
81	MG	2	201	1/1	0.90	0.28	49,49,49,49	0
81	MG	1	3583	1/1	0.90	0.17	30,30,30,30	0
81	MG	AS	3547	1/1	0.90	0.13	36,36,36,36	0
81	MG	6	201	1/1	0.90	0.23	38,38,38,38	0
81	MG	1	3743	1/1	0.90	0.21	34,34,34,34	0
81	MG	4	211	1/1	0.90	0.10	59,59,59,59	0
81	MG	1	3539	1/1	0.90	0.19	28,28,28,28	0
81	MG	1	3941	1/1	0.90	0.21	50,50,50,50	0
81	MG	1	3942	1/1	0.90	0.14	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	CM	1877	1/1	0.90	0.15	35,35,35,35	0
81	MG	AH	202	1/1	0.90	0.09	59,59,59,59	0
81	MG	CM	1882	1/1	0.90	0.09	36,36,36,36	0
81	MG	1	3454	1/1	0.90	0.18	29,29,29,29	0
81	MG	1	3836	1/1	0.90	0.09	49,49,49,49	0
81	MG	1	3948	1/1	0.90	0.09	35,35,35,35	0
81	MG	1	3587	1/1	0.90	0.19	37,37,37,37	0
81	MG	AS	3688	1/1	0.90	0.07	37,37,37,37	0
81	MG	1	3512	1/1	0.90	0.21	45,45,45,45	0
81	MG	AS	3697	1/1	0.90	0.17	49,49,49,49	0
81	MG	k	404	1/1	0.90	0.14	49,49,49,49	0
81	MG	AS	3466	1/1	0.90	0.20	46,46,46,46	0
81	MG	B	1803	1/1	0.90	0.22	50,50,50,50	0
81	MG	AU	206	1/1	0.90	0.14	30,30,30,30	0
81	MG	CM	1900	1/1	0.90	0.10	86,86,86,86	0
81	MG	AU	207	1/1	0.90	0.12	49,49,49,49	0
81	MG	1	3514	1/1	0.90	0.15	22,22,22,22	0
81	MG	AS	3594	1/1	0.90	0.15	46,46,46,46	0
81	MG	1	3594	1/1	0.90	0.15	46,46,46,46	0
81	MG	BG	302	1/1	0.90	0.07	28,28,28,28	0
81	MG	1	3956	1/1	0.90	0.16	55,55,55,55	0
81	MG	1	3421	1/1	0.90	0.23	17,17,17,17	0
81	MG	BN	201	1/1	0.90	0.07	33,33,33,33	0
81	MG	r	302	1/1	0.90	0.08	64,64,64,64	0
81	MG	AS	3485	1/1	0.90	0.15	47,47,47,47	0
81	MG	AS	3487	1/1	0.90	0.09	48,48,48,48	0
81	MG	B	1818	1/1	0.90	0.19	36,36,36,36	0
81	MG	r	303	1/1	0.90	0.12	42,42,42,42	0
81	MG	B	1961	1/1	0.90	0.07	48,48,48,48	0
81	MG	B	1962	1/1	0.90	0.12	29,29,29,29	0
81	MG	1	3874	1/1	0.90	0.14	48,48,48,48	0
81	MG	CM	1943	1/1	0.90	0.06	38,38,38,38	0
81	MG	CM	1944	1/1	0.90	0.13	60,60,60,60	0
81	MG	B	1822	1/1	0.90	0.17	34,34,34,34	0
81	MG	1	3875	1/1	0.90	0.08	32,32,32,32	0
81	MG	CP	301	1/1	0.90	0.18	19,19,19,19	0
81	MG	AS	3502	1/1	0.90	0.18	41,41,41,41	0
81	MG	AS	3730	1/1	0.90	0.28	44,44,44,44	0
81	MG	B	1900	1/1	0.90	0.22	42,42,42,42	0
81	MG	1	3534	1/1	0.90	0.11	30,30,30,30	0
81	MG	B	1830	1/1	0.90	0.20	39,39,39,39	0
81	MG	1	3497	1/1	0.90	0.24	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3816	1/1	0.90	0.14	51,51,51,51	0
81	MG	AS	3739	1/1	0.90	0.21	17,17,17,17	0
81	MG	3	202	1/1	0.90	0.22	50,50,50,50	0
81	MG	CM	1826	1/1	0.90	0.10	87,87,87,87	0
82	3K5	CJ	202	57/57	0.90	0.15	51,79,102,115	0
81	MG	B	1908	1/1	0.90	0.11	35,35,35,35	0
81	MG	1	3847	1/1	0.90	0.27	50,50,50,50	0
81	MG	1	3724	1/1	0.90	0.22	44,44,44,44	0
81	MG	1	3686	1/1	0.90	0.15	36,36,36,36	0
81	MG	1	3928	1/1	0.90	0.17	43,43,43,43	0
81	MG	1	3659	1/1	0.90	0.10	40,40,40,40	0
81	MG	AS	3527	1/1	0.90	0.20	64,64,64,64	0
81	MG	B	1917	1/1	0.90	0.11	28,28,28,28	0
81	MG	AS	3763	1/1	0.90	0.06	38,38,38,38	0
81	MG	AS	3531	1/1	0.90	0.17	51,51,51,51	0
84	ZN	c	201	1/1	0.90	0.08	91,91,91,91	0
81	MG	1	3580	1/1	0.90	0.15	44,44,44,44	0
81	MG	AF	202	1/1	0.91	0.17	26,26,26,26	0
81	MG	B	1943	1/1	0.91	0.10	65,65,65,65	0
81	MG	CM	1842	1/1	0.91	0.23	41,41,41,41	0
81	MG	4	210	1/1	0.91	0.10	49,49,49,49	0
81	MG	CM	1847	1/1	0.91	0.10	32,32,32,32	0
81	MG	1	3476	1/1	0.91	0.18	49,49,49,49	0
81	MG	1	3600	1/1	0.91	0.21	20,20,20,20	0
81	MG	1	3809	1/1	0.91	0.08	56,56,56,56	0
81	MG	CM	1851	1/1	0.91	0.22	45,45,45,45	0
81	MG	CM	1853	1/1	0.91	0.13	79,79,79,79	0
81	MG	1	3886	1/1	0.91	0.20	57,57,57,57	0
81	MG	AS	3750	1/1	0.91	0.06	21,21,21,21	0
81	MG	B	1953	1/1	0.91	0.09	37,37,37,37	0
81	MG	AS	3754	1/1	0.91	0.11	51,51,51,51	0
81	MG	CM	1861	1/1	0.91	0.09	57,57,57,57	0
81	MG	AS	3755	1/1	0.91	0.06	45,45,45,45	0
81	MG	AS	3757	1/1	0.91	0.09	29,29,29,29	0
81	MG	1	3938	1/1	0.91	0.14	30,30,30,30	0
81	MG	AS	3627	1/1	0.91	0.09	17,17,17,17	0
81	MG	1	3417	1/1	0.91	0.20	15,15,15,15	0
81	MG	1	3662	1/1	0.91	0.16	71,71,71,71	0
81	MG	1	3779	1/1	0.91	0.07	40,40,40,40	0
81	MG	1	3848	1/1	0.91	0.22	29,29,29,29	0
81	MG	B	1804	1/1	0.91	0.18	55,55,55,55	0
81	MG	1	3536	1/1	0.91	0.16	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3947	1/1	0.91	0.29	83,83,83,83	0
81	MG	1	3496	1/1	0.91	0.08	31,31,31,31	0
81	MG	1	3510	1/1	0.91	0.15	14,14,14,14	0
81	MG	1	3854	1/1	0.91	0.11	88,88,88,88	0
81	MG	B	1816	1/1	0.91	0.18	49,49,49,49	0
81	MG	CM	1893	1/1	0.91	0.26	32,32,32,32	0
81	MG	B	1891	1/1	0.91	0.27	26,26,26,26	0
81	MG	1	3905	1/1	0.91	0.06	39,39,39,39	0
81	MG	1	3540	1/1	0.91	0.10	33,33,33,33	0
81	MG	1	3819	1/1	0.91	0.08	34,34,34,34	0
81	MG	1	3821	1/1	0.91	0.07	56,56,56,56	0
81	MG	1	3822	1/1	0.91	0.14	42,42,42,42	0
81	MG	AS	3659	1/1	0.91	0.09	25,25,25,25	0
81	MG	AS	3660	1/1	0.91	0.15	34,34,34,34	0
81	MG	AS	3665	1/1	0.91	0.12	24,24,24,24	0
81	MG	B	1827	1/1	0.91	0.24	32,32,32,32	0
81	MG	1	3675	1/1	0.91	0.11	69,69,69,69	0
81	MG	1	3616	1/1	0.91	0.14	44,44,44,44	0
81	MG	AS	3533	1/1	0.91	0.23	19,19,19,19	0
81	MG	B	1831	1/1	0.91	0.17	37,37,37,37	0
81	MG	AS	3673	1/1	0.91	0.08	10,10,10,10	0
81	MG	CM	1918	1/1	0.91	0.10	86,86,86,86	0
81	MG	1	3913	1/1	0.91	0.18	43,43,43,43	0
81	MG	CM	1923	1/1	0.91	0.14	71,71,71,71	0
81	MG	B	1833	1/1	0.91	0.24	25,25,25,25	0
81	MG	1	3573	1/1	0.91	0.21	40,40,40,40	0
81	MG	AS	3546	1/1	0.91	0.11	45,45,45,45	0
81	MG	1	3413	1/1	0.91	0.18	9,9,9,9	0
81	MG	CM	1937	1/1	0.91	0.07	33,33,33,33	0
81	MG	BB	301	1/1	0.91	0.15	25,25,25,25	0
81	MG	AS	3404	1/1	0.91	0.32	33,33,33,33	0
81	MG	AS	3405	1/1	0.91	0.34	18,18,18,18	0
81	MG	1	3529	1/1	0.91	0.13	10,10,10,10	0
81	MG	AS	3553	1/1	0.91	0.08	23,23,23,23	0
81	MG	1	3797	1/1	0.91	0.27	23,23,23,23	0
81	MG	AS	3411	1/1	0.91	0.07	12,12,12,12	0
81	MG	B	1916	1/1	0.91	0.13	44,44,44,44	0
81	MG	B	1838	1/1	0.91	0.19	68,68,68,68	0
81	MG	1	3625	1/1	0.91	0.19	20,20,20,20	0
81	MG	B	1842	1/1	0.91	0.12	25,25,25,25	0
81	MG	AS	3427	1/1	0.91	0.18	22,22,22,22	0
81	MG	1	3726	1/1	0.91	0.22	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3579	1/1	0.91	0.17	77,77,77,77	0
81	MG	AS	3431	1/1	0.91	0.21	16,16,16,16	0
81	MG	3	213	1/1	0.91	0.08	26,26,26,26	0
81	MG	1	3559	1/1	0.91	0.18	39,39,39,39	0
81	MG	4	203	1/1	0.91	0.14	29,29,29,29	0
81	MG	1	3729	1/1	0.91	0.21	30,30,30,30	0
81	MG	B	1853	1/1	0.91	0.20	37,37,37,37	0
81	MG	1	3461	1/1	0.91	0.24	14,14,14,14	0
81	MG	9	202	1/1	0.91	0.25	93,93,93,93	0
81	MG	1	3731	1/1	0.91	0.52	30,30,30,30	0
81	MG	AS	3600	1/1	0.91	0.06	43,43,43,43	0
81	MG	AS	3602	1/1	0.91	0.27	49,49,49,49	0
81	MG	CM	1827	1/1	0.91	0.19	20,20,20,20	0
81	MG	1	3930	1/1	0.91	0.15	79,79,79,79	0
81	MG	AS	3468	1/1	0.91	0.22	44,44,44,44	0
81	MG	B	1934	1/1	0.91	0.09	69,69,69,69	0
81	MG	B	1858	1/1	0.91	0.08	77,77,77,77	0
81	MG	B	1859	1/1	0.91	0.22	45,45,45,45	0
81	MG	B	1944	1/1	0.92	0.28	51,51,51,51	0
81	MG	1	3944	1/1	0.92	0.10	52,52,52,52	0
81	MG	AS	3655	1/1	0.92	0.08	33,33,33,33	0
81	MG	1	3945	1/1	0.92	0.14	30,30,30,30	0
81	MG	1	3426	1/1	0.92	0.37	31,31,31,31	0
81	MG	1	3878	1/1	0.92	0.06	40,40,40,40	0
81	MG	AS	3663	1/1	0.92	0.18	31,31,31,31	0
81	MG	AS	3664	1/1	0.92	0.14	31,31,31,31	0
81	MG	B	1951	1/1	0.92	0.13	67,67,67,67	0
81	MG	AS	3514	1/1	0.92	0.16	18,18,18,18	0
81	MG	y	201	1/1	0.92	0.11	32,32,32,32	0
81	MG	AS	3669	1/1	0.92	0.17	12,12,12,12	0
81	MG	1	3442	1/1	0.92	0.25	33,33,33,33	0
81	MG	B	1954	1/1	0.92	0.11	63,63,63,63	0
81	MG	1	3703	1/1	0.92	0.08	49,49,49,49	0
81	MG	1	3825	1/1	0.92	0.06	31,31,31,31	0
81	MG	CM	1813	1/1	0.92	0.17	22,22,22,22	0
81	MG	1	3704	1/1	0.92	0.13	79,79,79,79	0
81	MG	1	3705	1/1	0.92	0.11	37,37,37,37	0
81	MG	1	3576	1/1	0.92	0.20	29,29,29,29	0
81	MG	1	3708	1/1	0.92	0.13	10,10,10,10	0
81	MG	6	202	1/1	0.92	0.07	8,8,8,8	0
81	MG	AS	3685	1/1	0.92	0.12	25,25,25,25	0
81	MG	B	1870	1/1	0.92	0.09	106,106,106,106	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	CM	1828	1/1	0.92	0.19	41,41,41,41	0
81	MG	1	3891	1/1	0.92	0.20	48,48,48,48	0
81	MG	AS	3534	1/1	0.92	0.17	30,30,30,30	0
81	MG	AS	3690	1/1	0.92	0.11	33,33,33,33	0
81	MG	AS	3693	1/1	0.92	0.10	77,77,77,77	0
81	MG	AS	3695	1/1	0.92	0.17	36,36,36,36	0
81	MG	CM	1835	1/1	0.92	0.13	15,15,15,15	0
81	MG	CM	1838	1/1	0.92	0.15	32,32,32,32	0
81	MG	CM	1839	1/1	0.92	0.18	46,46,46,46	0
81	MG	B	1873	1/1	0.92	0.17	50,50,50,50	0
81	MG	AS	3538	1/1	0.92	0.18	27,27,27,27	0
81	MG	1	3709	1/1	0.92	0.29	12,12,12,12	0
81	MG	B	1878	1/1	0.92	0.08	86,86,86,86	0
81	MG	1	3445	1/1	0.92	0.21	35,35,35,35	0
81	MG	1	3714	1/1	0.92	0.17	21,21,21,21	0
81	MG	1	3966	1/1	0.92	0.08	63,63,63,63	0
81	MG	1	3895	1/1	0.92	0.15	54,54,54,54	0
81	MG	K	301	1/1	0.92	0.06	35,35,35,35	0
81	MG	AS	3706	1/1	0.92	0.07	29,29,29,29	0
81	MG	1	3526	1/1	0.92	0.17	34,34,34,34	0
81	MG	3	204	1/1	0.92	0.13	39,39,39,39	0
81	MG	1	3720	1/1	0.92	0.11	47,47,47,47	0
81	MG	AP	202	1/1	0.92	0.20	37,37,37,37	0
81	MG	1	3899	1/1	0.92	0.12	48,48,48,48	0
81	MG	AS	3562	1/1	0.92	0.08	33,33,33,33	0
81	MG	3	208	1/1	0.92	0.14	35,35,35,35	0
81	MG	AS	3720	1/1	0.92	0.07	41,41,41,41	0
81	MG	CM	1865	1/1	0.92	0.09	32,32,32,32	0
81	MG	AS	3568	1/1	0.92	0.08	61,61,61,61	0
81	MG	AS	3724	1/1	0.92	0.08	43,43,43,43	0
81	MG	3	210	1/1	0.92	0.16	38,38,38,38	0
81	MG	AS	3572	1/1	0.92	0.14	58,58,58,58	0
81	MG	B	1892	1/1	0.92	0.18	55,55,55,55	0
81	MG	1	3901	1/1	0.92	0.06	39,39,39,39	0
81	MG	1	3784	1/1	0.92	0.10	45,45,45,45	0
81	MG	1	3617	1/1	0.92	0.17	29,29,29,29	0
81	MG	1	3500	1/1	0.92	0.18	37,37,37,37	0
81	MG	1	3463	1/1	0.92	0.20	12,12,12,12	0
81	MG	CM	1886	1/1	0.92	0.07	25,25,25,25	0
81	MG	1	3663	1/1	0.92	0.04	83,83,83,83	0
81	MG	AS	3736	1/1	0.92	0.07	35,35,35,35	0
81	MG	1	3479	1/1	0.92	0.18	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3587	1/1	0.92	0.14	37,37,37,37	0
81	MG	AS	3740	1/1	0.92	0.09	33,33,33,33	0
81	MG	1	3412	1/1	0.92	0.28	26,26,26,26	0
81	MG	AS	3416	1/1	0.92	0.30	16,16,16,16	0
81	MG	1	3627	1/1	0.92	0.20	25,25,25,25	0
81	MG	1	3448	1/1	0.92	0.27	20,20,20,20	0
81	MG	B	1817	1/1	0.92	0.22	19,19,19,19	0
81	MG	1	3450	1/1	0.92	0.16	82,82,82,82	0
81	MG	1	3537	1/1	0.92	0.28	52,52,52,52	0
81	MG	B	1912	1/1	0.92	0.09	59,59,59,59	0
81	MG	1	3468	1/1	0.92	0.18	28,28,28,28	0
81	MG	AS	3756	1/1	0.92	0.05	47,47,47,47	0
81	MG	1	3452	1/1	0.92	0.23	22,22,22,22	0
81	MG	CM	1913	1/1	0.92	0.17	60,60,60,60	0
81	MG	AS	3606	1/1	0.92	0.24	38,38,38,38	0
81	MG	AS	3607	1/1	0.92	0.12	63,63,63,63	0
81	MG	AS	3439	1/1	0.92	0.17	22,22,22,22	0
81	MG	1	3516	1/1	0.92	0.21	34,34,34,34	0
81	MG	AS	3610	1/1	0.92	0.14	64,64,64,64	0
81	MG	CM	1924	1/1	0.92	0.19	40,40,40,40	0
81	MG	AS	3444	1/1	0.92	0.06	5,5,5,5	0
81	MG	1	3639	1/1	0.92	0.26	28,28,28,28	0
81	MG	AS	3769	1/1	0.92	0.10	45,45,45,45	0
81	MG	AS	3772	1/1	0.92	0.11	65,65,65,65	0
81	MG	AS	3773	1/1	0.92	0.08	29,29,29,29	0
81	MG	AS	3613	1/1	0.92	0.07	46,46,46,46	0
81	MG	1	3542	1/1	0.92	0.16	42,42,42,42	0
81	MG	1	3596	1/1	0.92	0.09	31,31,31,31	0
81	MG	AS	3616	1/1	0.92	0.09	52,52,52,52	0
81	MG	k	401	1/1	0.92	0.12	41,41,41,41	0
81	MG	1	3568	1/1	0.92	0.21	29,29,29,29	0
81	MG	1	3862	1/1	0.92	0.16	23,23,23,23	0
81	MG	l	401	1/1	0.92	0.07	31,31,31,31	0
81	MG	1	3753	1/1	0.92	0.16	44,44,44,44	0
81	MG	AS	3624	1/1	0.92	0.14	67,67,67,67	0
81	MG	1	3569	1/1	0.92	0.12	46,46,46,46	0
81	MG	1	3647	1/1	0.92	0.16	50,50,50,50	0
81	MG	B	1927	1/1	0.92	0.19	39,39,39,39	0
81	MG	AS	3631	1/1	0.92	0.39	65,65,65,65	0
81	MG	1	3692	1/1	0.92	0.07	35,35,35,35	0
81	MG	B	1930	1/1	0.92	0.15	60,60,60,60	0
81	MG	1	3935	1/1	0.92	0.04	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	CL	301	1/1	0.92	0.06	22,22,22,22	0
81	MG	AS	3637	1/1	0.92	0.08	61,61,61,61	0
82	3K5	1	3406	57/57	0.92	0.15	46,67,95,99	0
81	MG	AT	211	1/1	0.92	0.20	41,41,41,41	0
81	MG	1	3518	1/1	0.92	0.15	26,26,26,26	0
81	MG	AS	3488	1/1	0.92	0.20	35,35,35,35	0
81	MG	B	1933	1/1	0.92	0.18	50,50,50,50	0
81	MG	1	3815	1/1	0.92	0.10	38,38,38,38	0
81	MG	AS	3644	1/1	0.92	0.08	22,22,22,22	0
81	MG	AW	302	1/1	0.92	0.12	23,23,23,23	0
81	MG	B	1935	1/1	0.92	0.21	56,56,56,56	0
81	MG	1	3871	1/1	0.92	0.08	93,93,93,93	0
81	MG	1	3405	1/1	0.92	0.20	16,16,16,16	0
81	MG	1	3763	1/1	0.92	0.21	40,40,40,40	0
81	MG	AS	3650	1/1	0.92	0.07	40,40,40,40	0
81	MG	1	3697	1/1	0.92	0.10	35,35,35,35	0
81	MG	1	3456	1/1	0.93	0.10	6,6,6,6	0
81	MG	AS	3703	1/1	0.93	0.15	32,32,32,32	0
81	MG	1	3887	1/1	0.93	0.06	18,18,18,18	0
81	MG	CM	1823	1/1	0.93	0.21	33,33,33,33	0
81	MG	B	1840	1/1	0.93	0.12	34,34,34,34	0
81	MG	AS	3434	1/1	0.93	0.08	19,19,19,19	0
81	MG	1	3401	1/1	0.93	0.33	24,24,24,24	0
81	MG	1	3609	1/1	0.93	0.16	63,63,63,63	0
81	MG	AS	3593	1/1	0.93	0.21	61,61,61,61	0
81	MG	1	3610	1/1	0.93	0.21	34,34,34,34	0
81	MG	1	3562	1/1	0.93	0.19	12,12,12,12	0
81	MG	AS	3716	1/1	0.93	0.09	85,85,85,85	0
81	MG	1	3435	1/1	0.93	0.16	10,10,10,10	0
81	MG	AS	3597	1/1	0.93	0.16	37,37,37,37	0
81	MG	CM	1836	1/1	0.93	0.15	41,41,41,41	0
81	MG	1	3954	1/1	0.93	0.11	17,17,17,17	0
81	MG	AS	3599	1/1	0.93	0.07	40,40,40,40	0
81	MG	AS	3722	1/1	0.93	0.10	43,43,43,43	0
81	MG	1	3652	1/1	0.93	0.06	38,38,38,38	0
81	MG	AS	3601	1/1	0.93	0.10	82,82,82,82	0
81	MG	AS	3456	1/1	0.93	0.17	13,13,13,13	0
81	MG	x	204	1/1	0.93	0.10	32,32,32,32	0
81	MG	1	3739	1/1	0.93	0.16	22,22,22,22	0
81	MG	1	3740	1/1	0.93	0.09	28,28,28,28	0
81	MG	1	3505	1/1	0.93	0.16	24,24,24,24	0
81	MG	0	201	1/1	0.93	0.32	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3696	1/1	0.93	0.12	50,50,50,50	0
81	MG	AS	3473	1/1	0.93	0.17	33,33,33,33	0
81	MG	1	3746	1/1	0.93	0.25	34,34,34,34	0
81	MG	1	3963	1/1	0.93	0.11	35,35,35,35	0
81	MG	1	3903	1/1	0.93	0.44	67,67,67,67	0
81	MG	CM	1860	1/1	0.93	0.16	45,45,45,45	0
81	MG	1	3506	1/1	0.93	0.17	13,13,13,13	0
81	MG	1	3586	1/1	0.93	0.09	54,54,54,54	0
81	MG	1	3851	1/1	0.93	0.16	25,25,25,25	0
81	MG	B	1868	1/1	0.93	0.12	39,39,39,39	0
81	MG	1	3436	1/1	0.93	0.12	20,20,20,20	0
81	MG	3	205	1/1	0.93	0.11	42,42,42,42	0
81	MG	1	3702	1/1	0.93	0.13	34,34,34,34	0
81	MG	1	3806	1/1	0.93	0.09	28,28,28,28	0
81	MG	1	3855	1/1	0.93	0.05	96,96,96,96	0
81	MG	CM	1874	1/1	0.93	0.10	48,48,48,48	0
81	MG	1	3588	1/1	0.93	0.12	31,31,31,31	0
81	MG	CM	1880	1/1	0.93	0.16	13,13,13,13	0
81	MG	AS	3625	1/1	0.93	0.09	51,51,51,51	0
81	MG	AS	3626	1/1	0.93	0.18	51,51,51,51	0
81	MG	1	3475	1/1	0.93	0.23	16,16,16,16	0
81	MG	1	3551	1/1	0.93	0.08	57,57,57,57	0
81	MG	AS	3629	1/1	0.93	0.09	41,41,41,41	0
81	MG	B	1958	1/1	0.93	0.12	29,29,29,29	0
81	MG	CM	1888	1/1	0.93	0.14	35,35,35,35	0
81	MG	AS	3503	1/1	0.93	0.17	10,10,10,10	0
81	MG	1	3916	1/1	0.93	0.15	29,29,29,29	0
81	MG	AS	3505	1/1	0.93	0.16	23,23,23,23	0
81	MG	AS	3768	1/1	0.93	0.11	38,38,38,38	0
81	MG	1	3706	1/1	0.93	0.47	77,77,77,77	0
81	MG	1	3488	1/1	0.93	0.23	10,10,10,10	0
81	MG	1	3437	1/1	0.93	0.16	13,13,13,13	0
81	MG	AS	3509	1/1	0.93	0.11	33,33,33,33	0
81	MG	AS	3510	1/1	0.93	0.22	26,26,26,26	0
81	MG	B	1963	1/1	0.93	0.08	33,33,33,33	0
81	MG	1	3418	1/1	0.93	0.20	18,18,18,18	0
81	MG	1	3633	1/1	0.93	0.17	33,33,33,33	0
81	MG	AS	3646	1/1	0.93	0.15	36,36,36,36	0
81	MG	CM	1904	1/1	0.93	0.07	28,28,28,28	0
81	MG	B	1888	1/1	0.93	0.12	52,52,52,52	0
81	MG	1	3924	1/1	0.93	0.07	24,24,24,24	0
81	MG	1	3713	1/1	0.93	0.22	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3767	1/1	0.93	0.24	51,51,51,51	0
81	MG	CM	1914	1/1	0.93	0.18	49,49,49,49	0
81	MG	E	302	1/1	0.93	0.16	22,22,22,22	0
81	MG	CM	1916	1/1	0.93	0.23	37,37,37,37	0
81	MG	1	3927	1/1	0.93	0.14	45,45,45,45	0
81	MG	1	3673	1/1	0.93	0.13	55,55,55,55	0
81	MG	B	1895	1/1	0.93	0.05	5,5,5,5	0
81	MG	B	1897	1/1	0.93	0.15	35,35,35,35	0
81	MG	Q	201	1/1	0.93	0.03	10,10,10,10	0
81	MG	1	3575	1/1	0.93	0.09	25,25,25,25	0
81	MG	CM	1928	1/1	0.93	0.13	78,78,78,78	0
81	MG	CM	1929	1/1	0.93	0.09	61,61,61,61	0
81	MG	AS	3662	1/1	0.93	0.14	39,39,39,39	0
81	MG	1	3716	1/1	0.93	0.18	25,25,25,25	0
81	MG	1	3414	1/1	0.93	0.24	12,12,12,12	0
81	MG	AS	3536	1/1	0.93	0.10	27,27,27,27	0
81	MG	CM	1938	1/1	0.93	0.10	20,20,20,20	0
81	MG	AU	201	1/1	0.93	0.17	34,34,34,34	0
81	MG	AS	3537	1/1	0.93	0.11	38,38,38,38	0
81	MG	1	3932	1/1	0.93	0.07	27,27,27,27	0
81	MG	1	3637	1/1	0.93	0.17	45,45,45,45	0
81	MG	1	3455	1/1	0.93	0.21	22,22,22,22	0
81	MG	B	1904	1/1	0.93	0.09	72,72,72,72	0
81	MG	1	3876	1/1	0.93	0.15	40,40,40,40	0
81	MG	B	1821	1/1	0.93	0.19	30,30,30,30	0
81	MG	CQ	302	1/1	0.93	0.09	99,99,99,99	0
81	MG	CQ	303	1/1	0.93	0.07	12,12,12,12	0
81	MG	AY	401	1/1	0.93	0.09	45,45,45,45	0
81	MG	1	3601	1/1	0.93	0.32	39,39,39,39	0
81	MG	BE	302	1/1	0.93	0.15	45,45,45,45	0
81	MG	AS	3679	1/1	0.93	0.07	62,62,62,62	0
81	MG	1	3778	1/1	0.93	0.10	49,49,49,49	0
81	MG	1	3939	1/1	0.93	0.15	22,22,22,22	0
81	MG	BJ	304	1/1	0.93	0.10	21,21,21,21	0
81	MG	AS	3406	1/1	0.93	0.24	16,16,16,16	0
81	MG	m	301	1/1	0.93	0.10	60,60,60,60	0
81	MG	AS	3684	1/1	0.93	0.07	57,57,57,57	0
81	MG	o	301	1/1	0.93	0.12	29,29,29,29	0
81	MG	AS	3560	1/1	0.93	0.13	34,34,34,34	0
81	MG	BZ	204	1/1	0.93	0.11	57,57,57,57	0
81	MG	1	3828	1/1	0.93	0.06	19,19,19,19	0
81	MG	1	3602	1/1	0.93	0.20	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3689	1/1	0.93	0.12	52,52,52,52	0
81	MG	AS	3413	1/1	0.93	0.20	18,18,18,18	0
81	MG	1	3881	1/1	0.93	0.12	39,39,39,39	0
81	MG	AS	3418	1/1	0.93	0.20	25,25,25,25	0
81	MG	r	301	1/1	0.93	0.16	41,41,41,41	0
81	MG	AS	3420	1/1	0.93	0.14	18,18,18,18	0
81	MG	1	3781	1/1	0.93	0.06	22,22,22,22	0
84	ZN	AK	101	1/1	0.93	0.19	42,42,42,42	0
81	MG	1	3480	1/1	0.93	0.20	15,15,15,15	0
81	MG	AS	3578	1/1	0.93	0.17	74,74,74,74	0
81	MG	AS	3426	1/1	0.93	0.16	16,16,16,16	0
81	MG	CM	1843	1/1	0.94	0.10	41,41,41,41	0
81	MG	3	203	1/1	0.94	0.19	31,31,31,31	0
81	MG	CM	1846	1/1	0.94	0.18	29,29,29,29	0
81	MG	AS	3429	1/1	0.94	0.26	30,30,30,30	0
81	MG	1	3507	1/1	0.94	0.14	17,17,17,17	0
81	MG	1	3680	1/1	0.94	0.14	26,26,26,26	0
81	MG	B	1947	1/1	0.94	0.13	62,62,62,62	0
81	MG	AS	3543	1/1	0.94	0.16	17,17,17,17	0
81	MG	1	3845	1/1	0.94	0.14	34,34,34,34	0
81	MG	AS	3545	1/1	0.94	0.20	22,22,22,22	0
81	MG	B	1826	1/1	0.94	0.10	54,54,54,54	0
81	MG	1	3443	1/1	0.94	0.15	53,53,53,53	0
81	MG	B	1828	1/1	0.94	0.17	41,41,41,41	0
81	MG	CM	1859	1/1	0.94	0.12	34,34,34,34	0
81	MG	1	3884	1/1	0.94	0.10	43,43,43,43	0
81	MG	AS	3446	1/1	0.94	0.18	36,36,36,36	0
81	MG	AS	3450	1/1	0.94	0.17	9,9,9,9	0
81	MG	1	3541	1/1	0.94	0.22	15,15,15,15	0
81	MG	AS	3767	1/1	0.94	0.07	56,56,56,56	0
81	MG	AS	3452	1/1	0.94	0.14	8,8,8,8	0
81	MG	CM	1866	1/1	0.94	0.07	24,24,24,24	0
81	MG	CM	1867	1/1	0.94	0.17	35,35,35,35	0
81	MG	1	3742	1/1	0.94	0.07	29,29,29,29	0
81	MG	AS	3771	1/1	0.94	0.10	37,37,37,37	0
81	MG	AS	3661	1/1	0.94	0.17	27,27,27,27	0
81	MG	CM	1872	1/1	0.94	0.04	26,26,26,26	0
81	MG	AS	3454	1/1	0.94	0.07	48,48,48,48	0
81	MG	1	3850	1/1	0.94	0.07	28,28,28,28	0
81	MG	B	1896	1/1	0.94	0.14	23,23,23,23	0
81	MG	AS	3460	1/1	0.94	0.12	26,26,26,26	0
81	MG	AS	3569	1/1	0.94	0.18	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3683	1/1	0.94	0.15	28,28,28,28	0
81	MG	AS	3463	1/1	0.94	0.20	25,25,25,25	0
81	MG	1	3474	1/1	0.94	0.23	16,16,16,16	0
81	MG	4	201	1/1	0.94	0.07	29,29,29,29	0
81	MG	4	202	1/1	0.94	0.10	29,29,29,29	0
81	MG	CM	1887	1/1	0.94	0.20	8,8,8,8	0
81	MG	1	3656	1/1	0.94	0.12	64,64,64,64	0
81	MG	AS	3675	1/1	0.94	0.13	54,54,54,54	0
81	MG	AS	3676	1/1	0.94	0.06	43,43,43,43	0
81	MG	AS	3472	1/1	0.94	0.14	16,16,16,16	0
81	MG	1	3511	1/1	0.94	0.18	16,16,16,16	0
81	MG	1	3687	1/1	0.94	0.15	32,32,32,32	0
81	MG	AS	3478	1/1	0.94	0.16	28,28,28,28	0
81	MG	AS	3584	1/1	0.94	0.06	37,37,37,37	0
81	MG	AS	3479	1/1	0.94	0.16	25,25,25,25	0
81	MG	AS	3586	1/1	0.94	0.11	11,11,11,11	0
81	MG	1	3786	1/1	0.94	0.26	33,33,33,33	0
81	MG	1	3489	1/1	0.94	0.12	41,41,41,41	0
81	MG	AS	3592	1/1	0.94	0.06	29,29,29,29	0
81	MG	8	202	1/1	0.94	0.11	34,34,34,34	0
81	MG	AU	205	1/1	0.94	0.18	50,50,50,50	0
81	MG	B	1845	1/1	0.94	0.18	30,30,30,30	0
81	MG	9	201	1/1	0.94	0.30	36,36,36,36	0
81	MG	1	3897	1/1	0.94	0.17	29,29,29,29	0
81	MG	AS	3694	1/1	0.94	0.17	62,62,62,62	0
81	MG	1	3751	1/1	0.94	0.12	28,28,28,28	0
81	MG	AS	3490	1/1	0.94	0.15	27,27,27,27	0
81	MG	1	3615	1/1	0.94	0.07	10,10,10,10	0
81	MG	B	1913	1/1	0.94	0.10	37,37,37,37	0
81	MG	BB	302	1/1	0.94	0.05	36,36,36,36	0
81	MG	CM	1920	1/1	0.94	0.10	58,58,58,58	0
81	MG	CM	1921	1/1	0.94	0.13	38,38,38,38	0
81	MG	1	3900	1/1	0.94	0.09	45,45,45,45	0
81	MG	BF	201	1/1	0.94	0.11	49,49,49,49	0
81	MG	AS	3496	1/1	0.94	0.21	21,21,21,21	0
81	MG	1	3530	1/1	0.94	0.15	19,19,19,19	0
81	MG	CM	1927	1/1	0.94	0.08	41,41,41,41	0
81	MG	1	3861	1/1	0.94	0.06	54,54,54,54	0
81	MG	1	3441	1/1	0.94	0.15	20,20,20,20	0
81	MG	CM	1931	1/1	0.94	0.10	58,58,58,58	0
81	MG	BK	202	1/1	0.94	0.07	45,45,45,45	0
81	MG	1	3491	1/1	0.94	0.24	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3581	1/1	0.94	0.13	12,12,12,12	0
81	MG	1	3517	1/1	0.94	0.08	66,66,66,66	0
81	MG	BV	201	1/1	0.94	0.14	51,51,51,51	0
81	MG	1	3951	1/1	0.94	0.18	32,32,32,32	0
81	MG	1	3761	1/1	0.94	0.11	33,33,33,33	0
81	MG	AS	3710	1/1	0.94	0.10	27,27,27,27	0
81	MG	1	3671	1/1	0.94	0.14	9,9,9,9	0
81	MG	1	3801	1/1	0.94	0.06	19,19,19,19	0
81	MG	AS	3713	1/1	0.94	0.11	36,36,36,36	0
81	MG	AS	3401	1/1	0.94	0.24	10,10,10,10	0
81	MG	B	1866	1/1	0.94	0.09	63,63,63,63	0
81	MG	1	3834	1/1	0.94	0.11	18,18,18,18	0
81	MG	AS	3511	1/1	0.94	0.15	28,28,28,28	0
81	MG	1	3872	1/1	0.94	0.05	42,42,42,42	0
81	MG	1	3493	1/1	0.94	0.07	22,22,22,22	0
81	MG	1	3915	1/1	0.94	0.12	43,43,43,43	0
81	MG	AS	3723	1/1	0.94	0.20	50,50,50,50	0
81	MG	1	3626	1/1	0.94	0.19	27,27,27,27	0
81	MG	CM	1817	1/1	0.94	0.20	48,48,48,48	0
81	MG	B	1811	1/1	0.94	0.18	42,42,42,42	0
81	MG	AS	3726	1/1	0.94	0.17	39,39,39,39	0
81	MG	1	3701	1/1	0.94	0.09	25,25,25,25	0
81	MG	AS	3520	1/1	0.94	0.18	29,29,29,29	0
81	MG	B	1876	1/1	0.94	0.14	33,33,33,33	0
81	MG	1	3494	1/1	0.94	0.21	20,20,20,20	0
81	MG	AS	3417	1/1	0.94	0.21	24,24,24,24	0
81	MG	1	3919	1/1	0.94	0.17	34,34,34,34	0
81	MG	1	3732	1/1	0.94	0.13	24,24,24,24	0
81	MG	AS	3529	1/1	0.94	0.06	91,91,91,91	0
81	MG	1	3458	1/1	0.94	0.14	10,10,10,10	0
81	MG	AS	3633	1/1	0.94	0.06	15,15,15,15	0
81	MG	AS	3738	1/1	0.94	0.10	17,17,17,17	0
81	MG	AS	3422	1/1	0.94	0.18	13,13,13,13	0
81	MG	B	1940	1/1	0.94	0.07	61,61,61,61	0
81	MG	AS	3741	1/1	0.94	0.18	43,43,43,43	0
81	MG	B	1942	1/1	0.94	0.13	49,49,49,49	0
81	MG	AS	3638	1/1	0.94	0.20	14,14,14,14	0
81	MG	AS	3745	1/1	0.94	0.08	41,41,41,41	0
81	MG	1	3735	1/1	0.94	0.09	28,28,28,28	0
84	ZN	CE	101	1/1	0.94	0.07	119,119,119,119	0
81	MG	CM	1875	1/1	0.95	0.18	48,48,48,48	0
81	MG	AS	3571	1/1	0.95	0.15	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	BB	303	1/1	0.95	0.22	28,28,28,28	0
81	MG	1	3719	1/1	0.95	0.15	15,15,15,15	0
81	MG	1	3513	1/1	0.95	0.12	36,36,36,36	0
81	MG	1	3571	1/1	0.95	0.13	38,38,38,38	0
81	MG	B	1877	1/1	0.95	0.19	30,30,30,30	0
81	MG	BI	301	1/1	0.95	0.11	53,53,53,53	0
81	MG	BJ	301	1/1	0.95	0.10	47,47,47,47	0
81	MG	1	3835	1/1	0.95	0.09	44,44,44,44	0
81	MG	AS	3657	1/1	0.95	0.14	19,19,19,19	0
81	MG	1	3641	1/1	0.95	0.14	31,31,31,31	0
81	MG	w	302	1/1	0.95	0.13	60,60,60,60	0
81	MG	CM	1892	1/1	0.95	0.10	50,50,50,50	0
81	MG	BN	202	1/1	0.95	0.08	31,31,31,31	0
81	MG	1	3439	1/1	0.95	0.27	25,25,25,25	0
81	MG	1	3759	1/1	0.95	0.43	28,28,28,28	0
81	MG	1	3666	1/1	0.95	0.17	41,41,41,41	0
81	MG	AS	3500	1/1	0.95	0.04	42,42,42,42	0
81	MG	AS	3415	1/1	0.95	0.21	17,17,17,17	0
81	MG	1	3424	1/1	0.95	0.23	7,7,7,7	0
81	MG	B	1885	1/1	0.95	0.09	34,34,34,34	0
81	MG	1	3727	1/1	0.95	0.14	39,39,39,39	0
81	MG	1	3482	1/1	0.95	0.19	26,26,26,26	0
81	MG	1	3669	1/1	0.95	0.15	48,48,48,48	0
81	MG	CM	1803	1/1	0.95	0.13	19,19,19,19	0
81	MG	CM	1906	1/1	0.95	0.16	48,48,48,48	0
81	MG	1	3670	1/1	0.95	0.21	25,25,25,25	0
81	MG	CM	1805	1/1	0.95	0.12	16,16,16,16	0
81	MG	1	3472	1/1	0.95	0.12	29,29,29,29	0
81	MG	1	3846	1/1	0.95	0.07	27,27,27,27	0
81	MG	1	3889	1/1	0.95	0.13	35,35,35,35	0
81	MG	1	3564	1/1	0.95	0.11	15,15,15,15	0
81	MG	AS	3428	1/1	0.95	0.18	23,23,23,23	0
81	MG	CM	1812	1/1	0.95	0.13	47,47,47,47	0
81	MG	AS	3758	1/1	0.95	0.08	22,22,22,22	0
81	MG	CM	1919	1/1	0.95	0.06	16,16,16,16	0
81	MG	CM	1814	1/1	0.95	0.19	22,22,22,22	0
81	MG	B	1894	1/1	0.95	0.06	21,21,21,21	0
81	MG	1	3521	1/1	0.95	0.16	32,32,32,32	0
81	MG	1	3608	1/1	0.95	0.11	24,24,24,24	0
81	MG	CM	1819	1/1	0.95	0.09	20,20,20,20	0
81	MG	4	206	1/1	0.95	0.09	32,32,32,32	0
81	MG	AS	3518	1/1	0.95	0.06	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3736	1/1	0.95	0.15	42,42,42,42	0
81	MG	B	1839	1/1	0.95	0.15	24,24,24,24	0
81	MG	1	3773	1/1	0.95	0.07	40,40,40,40	0
81	MG	1	3451	1/1	0.95	0.10	12,12,12,12	0
81	MG	1	3651	1/1	0.95	0.22	29,29,29,29	0
81	MG	AS	3770	1/1	0.95	0.07	40,40,40,40	0
81	MG	AB	201	1/1	0.95	0.18	64,64,64,64	0
81	MG	AS	3449	1/1	0.95	0.15	28,28,28,28	0
81	MG	AS	3691	1/1	0.95	0.08	51,51,51,51	0
81	MG	1	3631	1/1	0.95	0.09	37,37,37,37	0
81	MG	AD	201	1/1	0.95	0.13	88,88,88,88	0
81	MG	1	3592	1/1	0.95	0.09	68,68,68,68	0
81	MG	1	3817	1/1	0.95	0.09	87,87,87,87	0
81	MG	1	3567	1/1	0.95	0.15	42,42,42,42	0
81	MG	AS	3455	1/1	0.95	0.17	26,26,26,26	0
81	MG	B	1852	1/1	0.95	0.10	27,27,27,27	0
81	MG	1	3634	1/1	0.95	0.16	27,27,27,27	0
81	MG	AS	3459	1/1	0.95	0.20	6,6,6,6	0
81	MG	AG	201	1/1	0.95	0.09	59,59,59,59	0
81	MG	1	3820	1/1	0.95	0.09	48,48,48,48	0
81	MG	DA	201	1/1	0.95	0.16	38,38,38,38	0
81	MG	AS	3542	1/1	0.95	0.18	15,15,15,15	0
81	MG	AT	201	1/1	0.95	0.18	13,13,13,13	0
81	MG	DB	202	1/1	0.95	0.09	35,35,35,35	0
81	MG	1	3744	1/1	0.95	0.10	45,45,45,45	0
81	MG	1	3407	1/1	0.95	0.17	14,14,14,14	0
81	MG	AS	3465	1/1	0.95	0.08	41,41,41,41	0
81	MG	1	3658	1/1	0.95	0.15	20,20,20,20	0
81	MG	1	3824	1/1	0.95	0.06	29,29,29,29	0
81	MG	1	3785	1/1	0.95	0.13	15,15,15,15	0
81	MG	AT	210	1/1	0.95	0.13	27,27,27,27	0
81	MG	Q	202	1/1	0.95	0.08	62,62,62,62	0
81	MG	1	3865	1/1	0.95	0.10	53,53,53,53	0
81	MG	AS	3551	1/1	0.95	0.20	42,42,42,42	0
81	MG	AS	3474	1/1	0.95	0.14	29,29,29,29	0
81	MG	AU	202	1/1	0.95	0.13	47,47,47,47	0
81	MG	1	3614	1/1	0.95	0.15	49,49,49,49	0
81	MG	AU	204	1/1	0.95	0.06	39,39,39,39	0
81	MG	AS	3477	1/1	0.95	0.12	16,16,16,16	0
81	MG	1	3958	1/1	0.95	0.14	24,24,24,24	0
81	MG	1	3486	1/1	0.95	0.15	29,29,29,29	0
81	MG	1	3868	1/1	0.95	0.09	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3688	1/1	0.95	0.13	14,14,14,14	0
81	MG	AS	3567	1/1	0.95	0.15	9,9,9,9	0
81	MG	1	3717	1/1	0.95	0.13	37,37,37,37	0
81	MG	1	3790	1/1	0.95	0.08	33,33,33,33	0
81	MG	1	3752	1/1	0.95	0.22	47,47,47,47	0
81	MG	B	1807	1/1	0.96	0.07	101,101,101,101	0
81	MG	CM	1879	1/1	0.96	0.15	18,18,18,18	0
81	MG	AS	3432	1/1	0.96	0.11	24,24,24,24	0
81	MG	B	1808	1/1	0.96	0.20	54,54,54,54	0
81	MG	AS	3435	1/1	0.96	0.06	73,73,73,73	0
81	MG	BJ	303	1/1	0.96	0.13	20,20,20,20	0
81	MG	1	3492	1/1	0.96	0.10	43,43,43,43	0
81	MG	BK	201	1/1	0.96	0.15	27,27,27,27	0
81	MG	B	1810	1/1	0.96	0.10	11,11,11,11	0
81	MG	1	3593	1/1	0.96	0.14	14,14,14,14	0
81	MG	AS	3589	1/1	0.96	0.18	37,37,37,37	0
81	MG	AS	3591	1/1	0.96	0.06	28,28,28,28	0
81	MG	AS	3744	1/1	0.96	0.11	49,49,49,49	0
81	MG	AS	3666	1/1	0.96	0.19	17,17,17,17	0
81	MG	AS	3440	1/1	0.96	0.06	21,21,21,21	0
81	MG	B	1861	1/1	0.96	0.10	62,62,62,62	0
81	MG	AS	3443	1/1	0.96	0.07	36,36,36,36	0
81	MG	B	1812	1/1	0.96	0.13	24,24,24,24	0
81	MG	AS	3445	1/1	0.96	0.24	54,54,54,54	0
81	MG	AS	3753	1/1	0.96	0.10	27,27,27,27	0
81	MG	1	3672	1/1	0.96	0.05	8,8,8,8	0
81	MG	B	1864	1/1	0.96	0.13	49,49,49,49	0
81	MG	AS	3674	1/1	0.96	0.08	22,22,22,22	0
81	MG	x	205	1/1	0.96	0.21	30,30,30,30	0
81	MG	1	3628	1/1	0.96	0.08	17,17,17,17	0
81	MG	CM	1807	1/1	0.96	0.13	28,28,28,28	0
81	MG	AS	3759	1/1	0.96	0.04	39,39,39,39	0
81	MG	1	3921	1/1	0.96	0.13	33,33,33,33	0
81	MG	CM	1909	1/1	0.96	0.10	56,56,56,56	0
81	MG	CM	1910	1/1	0.96	0.09	46,46,46,46	0
81	MG	1	3453	1/1	0.96	0.11	6,6,6,6	0
81	MG	1	3422	1/1	0.96	0.19	1,1,1,1	0
81	MG	1	3957	1/1	0.96	0.22	46,46,46,46	0
81	MG	1	3733	1/1	0.96	0.06	33,33,33,33	0
81	MG	B	1872	1/1	0.96	0.06	12,12,12,12	0
81	MG	CM	1815	1/1	0.96	0.14	19,19,19,19	0
81	MG	AS	3530	1/1	0.96	0.11	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	1	3676	1/1	0.96	0.09	12,12,12,12	0
81	MG	1	3431	1/1	0.96	0.21	20,20,20,20	0
81	MG	B	1824	1/1	0.96	0.04	32,32,32,32	0
81	MG	AS	3462	1/1	0.96	0.20	40,40,40,40	0
81	MG	CM	1821	1/1	0.96	0.10	16,16,16,16	0
81	MG	1	3504	1/1	0.96	0.14	27,27,27,27	0
81	MG	1	3679	1/1	0.96	0.27	21,21,21,21	0
81	MG	1	3770	1/1	0.96	0.18	25,25,25,25	0
81	MG	CM	1825	1/1	0.96	0.21	37,37,37,37	0
81	MG	AS	3692	1/1	0.96	0.09	47,47,47,47	0
81	MG	k	402	1/1	0.96	0.08	55,55,55,55	0
81	MG	AS	3539	1/1	0.96	0.10	57,57,57,57	0
81	MG	AS	3467	1/1	0.96	0.11	19,19,19,19	0
81	MG	1	3613	1/1	0.96	0.10	22,22,22,22	0
81	MG	1	3446	1/1	0.96	0.09	5,5,5,5	0
81	MG	AS	3471	1/1	0.96	0.13	9,9,9,9	0
81	MG	k	405	1/1	0.96	0.17	61,61,61,61	0
81	MG	1	3657	1/1	0.96	0.07	20,20,20,20	0
81	MG	1	3741	1/1	0.96	0.06	42,42,42,42	0
81	MG	B	1937	1/1	0.96	0.08	70,70,70,70	0
81	MG	AD	202	1/1	0.96	0.13	17,17,17,17	0
81	MG	1	3599	1/1	0.96	0.10	19,19,19,19	0
81	MG	AS	3408	1/1	0.96	0.19	1,1,1,1	0
81	MG	1	3712	1/1	0.96	0.18	20,20,20,20	0
81	MG	1	3432	1/1	0.96	0.27	21,21,21,21	0
81	MG	CP	302	1/1	0.96	0.10	54,54,54,54	0
81	MG	AT	205	1/1	0.96	0.10	13,13,13,13	0
81	MG	1	3498	1/1	0.96	0.13	73,73,73,73	0
81	MG	1	3618	1/1	0.96	0.10	11,11,11,11	0
81	MG	1	3619	1/1	0.96	0.11	39,39,39,39	0
81	MG	AS	3486	1/1	0.96	0.14	32,32,32,32	0
81	MG	3	209	1/1	0.96	0.13	25,25,25,25	0
81	MG	AS	3563	1/1	0.96	0.17	53,53,53,53	0
81	MG	CM	1852	1/1	0.96	0.12	47,47,47,47	0
81	MG	AS	3715	1/1	0.96	0.07	73,73,73,73	0
81	MG	AS	3564	1/1	0.96	0.14	47,47,47,47	0
81	MG	1	3620	1/1	0.96	0.05	27,27,27,27	0
81	MG	CM	1856	1/1	0.96	0.10	36,36,36,36	0
81	MG	B	1844	1/1	0.96	0.10	15,15,15,15	0
81	MG	DQ	101	1/1	0.96	0.09	61,61,61,61	0
81	MG	1	3664	1/1	0.96	0.13	54,54,54,54	0
81	MG	u	201	1/1	0.96	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
81	MG	CL	303	1/1	0.96	0.09	66,66,66,66	0
81	MG	1	3508	1/1	0.96	0.12	27,27,27,27	0
81	MG	AS	3423	1/1	0.96	0.17	10,10,10,10	0
81	MG	AW	301	1/1	0.96	0.07	41,41,41,41	0
81	MG	1	3622	1/1	0.96	0.16	8,8,8,8	0
81	MG	AS	3573	1/1	0.96	0.23	16,16,16,16	0
81	MG	B	1849	1/1	0.96	0.18	28,28,28,28	0
81	MG	1	3519	1/1	0.96	0.28	45,45,45,45	0
81	MG	1	3557	1/1	0.96	0.13	33,33,33,33	0
81	MG	AS	3652	1/1	0.96	0.13	57,57,57,57	0
81	MG	1	3605	1/1	0.96	0.14	17,17,17,17	0
81	MG	1	3695	1/1	0.96	0.12	29,29,29,29	0
81	MG	BE	301	1/1	0.96	0.16	34,34,34,34	0
81	MG	AS	3732	1/1	0.96	0.10	74,74,74,74	0
81	MG	1	3949	1/1	0.96	0.07	42,42,42,42	0
84	ZN	f	101	1/1	0.96	0.10	123,123,123,123	0
81	MG	AS	3656	1/1	0.96	0.32	19,19,19,19	0
81	MG	CM	1876	1/1	0.96	0.19	19,19,19,19	0
81	MG	1	3444	1/1	0.97	0.13	18,18,18,18	0
81	MG	1	3520	1/1	0.97	0.05	14,14,14,14	0
81	MG	AS	3475	1/1	0.97	0.11	10,10,10,10	0
81	MG	1	3902	1/1	0.97	0.04	32,32,32,32	0
81	MG	BG	301	1/1	0.97	0.09	56,56,56,56	0
81	MG	CM	1844	1/1	0.97	0.10	34,34,34,34	0
81	MG	1	3749	1/1	0.97	0.12	24,24,24,24	0
81	MG	1	3791	1/1	0.97	0.12	22,22,22,22	0
81	MG	AS	3433	1/1	0.97	0.16	12,12,12,12	0
81	MG	AS	3590	1/1	0.97	0.06	55,55,55,55	0
81	MG	1	3700	1/1	0.97	0.09	41,41,41,41	0
81	MG	B	1814	1/1	0.97	0.07	79,79,79,79	0
81	MG	AS	3482	1/1	0.97	0.07	54,54,54,54	0
81	MG	1	3527	1/1	0.97	0.20	33,33,33,33	0
81	MG	1	3499	1/1	0.97	0.14	11,11,11,11	0
81	MG	AS	3708	1/1	0.97	0.19	43,43,43,43	0
81	MG	AS	3438	1/1	0.97	0.16	15,15,15,15	0
81	MG	1	3718	1/1	0.97	0.12	42,42,42,42	0
81	MG	B	1950	1/1	0.97	0.06	54,54,54,54	0
81	MG	AS	3441	1/1	0.97	0.17	22,22,22,22	0
81	MG	CM	1930	1/1	0.97	0.04	29,29,29,29	0
81	MG	B	1850	1/1	0.97	0.06	44,44,44,44	0
81	MG	BZ	202	1/1	0.97	0.16	102,102,102,102	0
81	MG	AS	3491	1/1	0.97	0.07	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	CM	1934	1/1	0.97	0.06	49,49,49,49	0
81	MG	CM	1935	1/1	0.97	0.07	109,109,109,109	0
81	MG	4	207	1/1	0.97	0.07	35,35,35,35	0
81	MG	CA	201	1/1	0.97	0.07	46,46,46,46	0
81	MG	1	3885	1/1	0.97	0.06	33,33,33,33	0
81	MG	AS	3402	1/1	0.97	0.26	16,16,16,16	0
81	MG	AS	3718	1/1	0.97	0.05	7,7,7,7	0
81	MG	CM	1941	1/1	0.97	0.06	29,29,29,29	0
81	MG	1	3462	1/1	0.97	0.12	13,13,13,13	0
81	MG	AS	3447	1/1	0.97	0.13	16,16,16,16	0
81	MG	1	3465	1/1	0.97	0.13	17,17,17,17	0
81	MG	1	3937	1/1	0.97	0.07	64,64,64,64	0
81	MG	1	3912	1/1	0.97	0.07	24,24,24,24	0
81	MG	AS	3552	1/1	0.97	0.09	39,39,39,39	0
81	MG	1	3799	1/1	0.97	0.09	15,15,15,15	0
81	MG	CQ	301	1/1	0.97	0.10	16,16,16,16	0
81	MG	1	3756	1/1	0.97	0.11	20,20,20,20	0
81	MG	AS	3409	1/1	0.97	0.06	91,91,91,91	0
81	MG	AS	3558	1/1	0.97	0.15	25,25,25,25	0
81	MG	CM	1878	1/1	0.97	0.09	13,13,13,13	0
81	MG	AS	3559	1/1	0.97	0.12	17,17,17,17	0
81	MG	AH	203	1/1	0.97	0.07	79,79,79,79	0
81	MG	1	3549	1/1	0.97	0.14	43,43,43,43	0
81	MG	1	3640	1/1	0.97	0.17	37,37,37,37	0
81	MG	AS	3458	1/1	0.97	0.12	11,11,11,11	0
81	MG	j	301	1/1	0.97	0.06	11,11,11,11	0
81	MG	AS	3678	1/1	0.97	0.22	16,16,16,16	0
81	MG	1	3780	1/1	0.97	0.11	33,33,33,33	0
81	MG	DJ	201	1/1	0.97	0.13	17,17,17,17	0
81	MG	B	1965	1/1	0.97	0.12	35,35,35,35	0
81	MG	j	303	1/1	0.97	0.08	13,13,13,13	0
81	MG	CM	1889	1/1	0.97	0.07	62,62,62,62	0
81	MG	AS	3512	1/1	0.97	0.14	17,17,17,17	0
81	MG	1	3607	1/1	0.97	0.04	13,13,13,13	0
81	MG	1	3642	1/1	0.97	0.14	18,18,18,18	0
81	MG	1	3725	1/1	0.97	0.09	6,6,6,6	0
81	MG	1	3531	1/1	0.97	0.04	25,25,25,25	0
81	MG	E	301	1/1	0.97	0.07	63,63,63,63	0
81	MG	1	3710	1/1	0.97	0.15	26,26,26,26	0
81	MG	1	3469	1/1	0.97	0.24	33,33,33,33	0
81	MG	AS	3470	1/1	0.97	0.16	18,18,18,18	0
81	MG	AS	3635	1/1	0.97	0.17	13,13,13,13	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	MG	AS	3749	1/1	0.97	0.07	51,51,51,51	0
81	MG	1	3589	1/1	0.97	0.10	44,44,44,44	0
81	MG	CM	1834	1/1	0.97	0.05	38,38,38,38	0
81	MG	H	1001	1/1	0.97	0.04	79,79,79,79	0
81	MG	AS	3752	1/1	0.97	0.08	33,33,33,33	0
84	ZN	AQ	101	1/1	0.97	0.05	95,95,95,95	0
81	MG	CM	1905	1/1	0.97	0.14	29,29,29,29	0
81	MG	CM	1837	1/1	0.97	0.07	12,12,12,12	0
81	MG	AS	3524	1/1	0.97	0.09	38,38,38,38	0
81	MG	CM	1908	1/1	0.97	0.07	23,23,23,23	0
81	MG	AS	3414	1/1	0.98	0.06	71,71,71,71	0
81	MG	AG	202	1/1	0.98	0.04	43,43,43,43	0
81	MG	CM	1926	1/1	0.98	0.05	36,36,36,36	0
81	MG	AS	3577	1/1	0.98	0.12	20,20,20,20	0
81	MG	AS	3555	1/1	0.98	0.08	39,39,39,39	0
81	MG	CM	1868	1/1	0.98	0.12	37,37,37,37	0
81	MG	AT	206	1/1	0.98	0.12	50,50,50,50	0
81	MG	AS	3556	1/1	0.98	0.06	38,38,38,38	0
81	MG	AS	3580	1/1	0.98	0.06	42,42,42,42	0
81	MG	B	1928	1/1	0.98	0.03	17,17,17,17	0
81	MG	B	1875	1/1	0.98	0.05	103,103,103,103	0
81	MG	1	3428	1/1	0.98	0.30	16,16,16,16	0
81	MG	1	3533	1/1	0.98	0.12	15,15,15,15	0
81	MG	AS	3521	1/1	0.98	0.08	59,59,59,59	0
81	MG	1	3964	1/1	0.98	0.08	76,76,76,76	0
81	MG	1	3404	1/1	0.98	0.14	13,13,13,13	0
81	MG	1	3554	1/1	0.98	0.10	36,36,36,36	0
81	MG	AS	3565	1/1	0.98	0.10	19,19,19,19	0
81	MG	AS	3525	1/1	0.98	0.14	25,25,25,25	0
81	MG	AS	3489	1/1	0.98	0.08	23,23,23,23	0
81	MG	AS	3642	1/1	0.98	0.04	99,99,99,99	0
81	MG	AP	204	1/1	0.98	0.04	49,49,49,49	0
81	MG	1	3547	1/1	0.98	0.14	24,24,24,24	0
81	MG	1	3449	1/1	0.98	0.21	14,14,14,14	0
81	MG	AS	3619	1/1	0.98	0.08	47,47,47,47	0
84	ZN	AN	101	1/1	0.98	0.08	149,149,149,149	0
81	MG	1	3515	1/1	0.98	0.14	11,11,11,11	0
81	MG	1	3459	1/1	0.98	0.17	16,16,16,16	0
81	MG	AS	3622	1/1	0.98	0.05	22,22,22,22	0
81	MG	AS	3786	1/1	0.98	0.03	31,31,31,31	0
81	MG	B	1825	1/1	0.98	0.13	22,22,22,22	0
81	MG	B	1941	1/1	0.98	0.05	48,48,48,48	0

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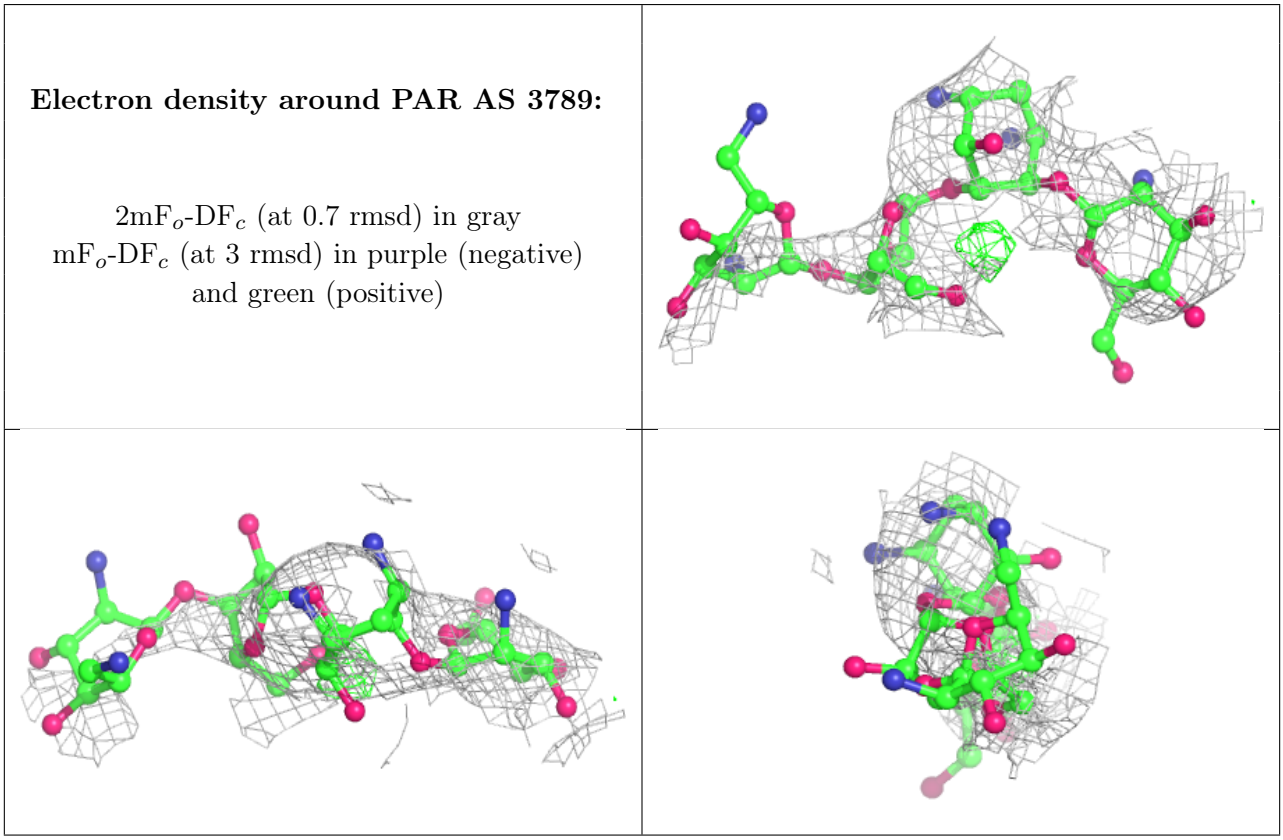
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
84	ZN	CK	101	1/1	0.98	0.06	137,137,137,137	0
84	ZN	DQ	102	1/1	0.98	0.04	47,47,47,47	0
81	MG	AS	3448	1/1	0.99	0.05	6,6,6,6	0
81	MG	1	3793	1/1	0.99	0.03	26,26,26,26	0
81	MG	1	3775	1/1	0.99	0.05	31,31,31,31	0
81	MG	AS	3493	1/1	0.99	0.07	7,7,7,7	0
81	MG	1	3440	1/1	0.99	0.09	50,50,50,50	0
81	MG	AS	3421	1/1	0.99	0.04	63,63,63,63	0
81	MG	1	3762	1/1	0.99	0.04	50,50,50,50	0
81	MG	AS	3785	1/1	0.99	0.07	13,13,13,13	0
81	MG	B	1905	1/1	0.99	0.06	93,93,93,93	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

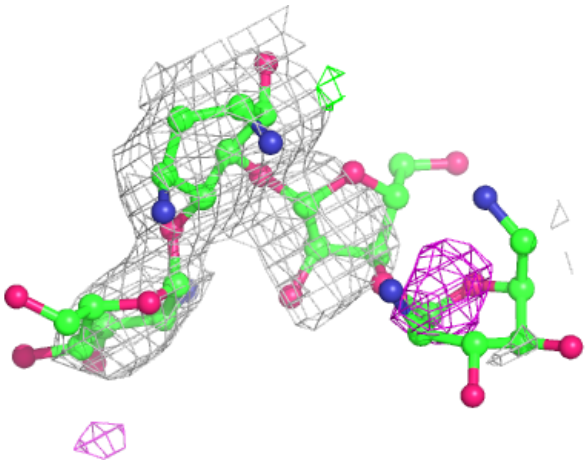
Electron density around PAR AS 3789:

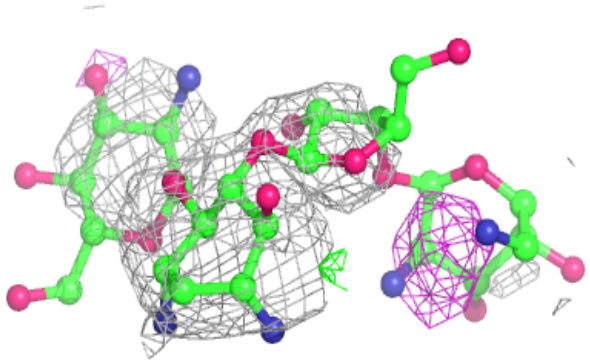
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

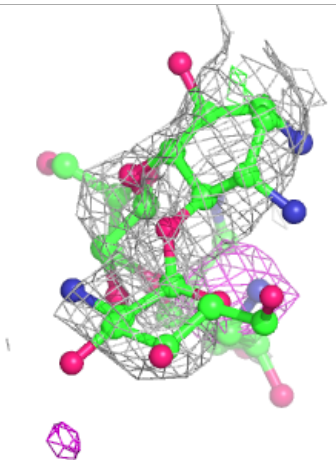


Electron density around PAR AS 3790:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

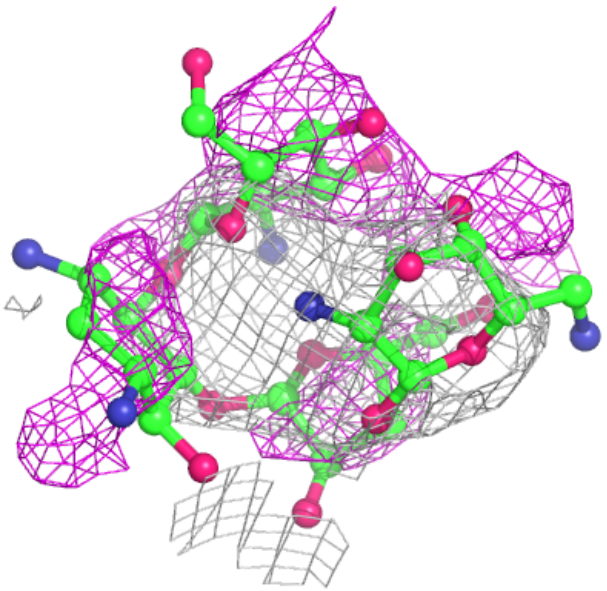


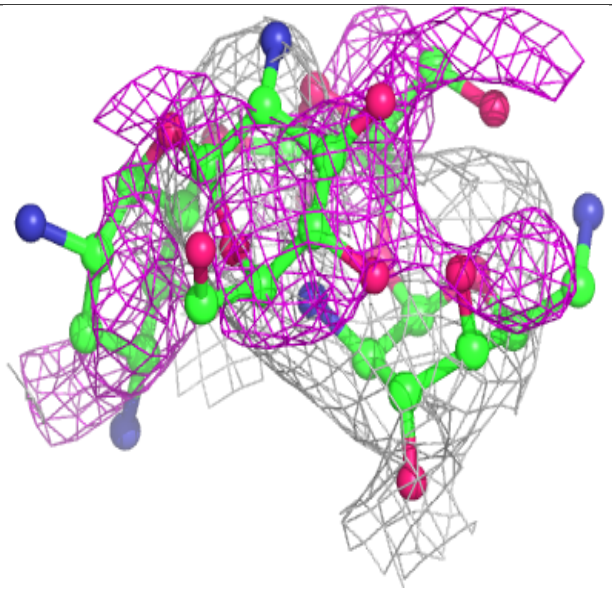


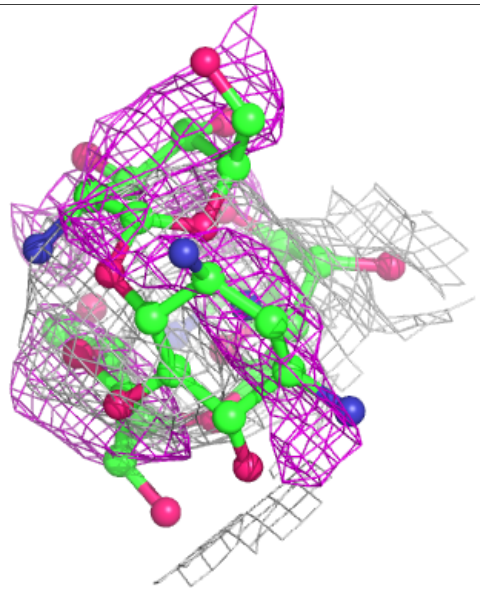


Electron density around PAR B 1970:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

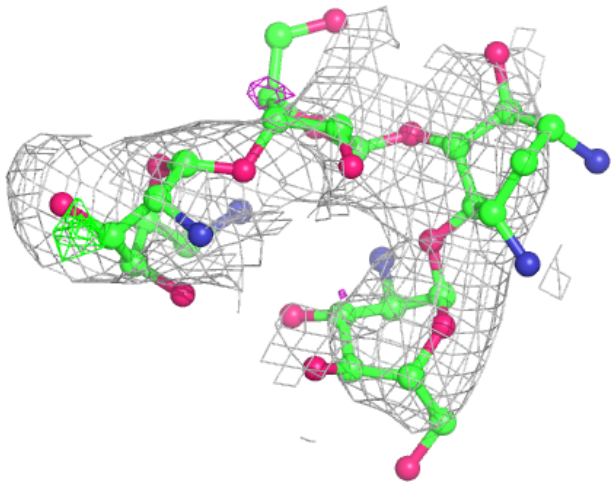


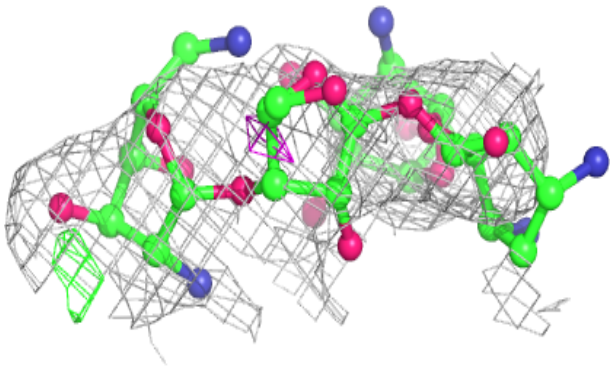


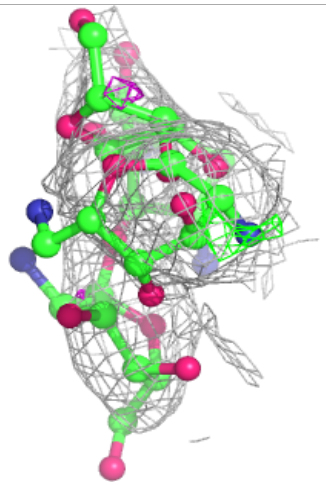


Electron density around PAR 1 3969:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

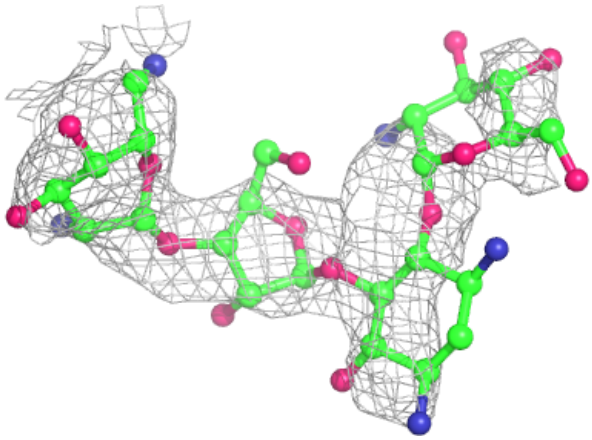


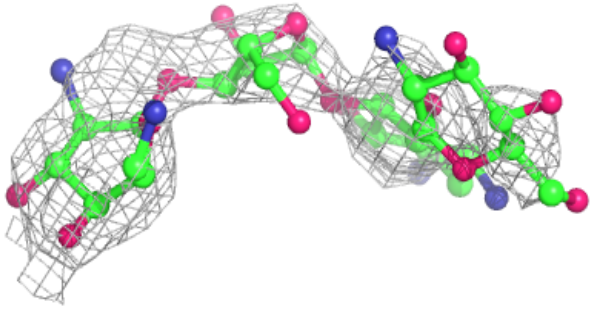


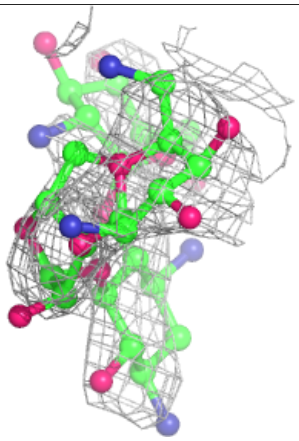


Electron density around PAR AS 3788:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

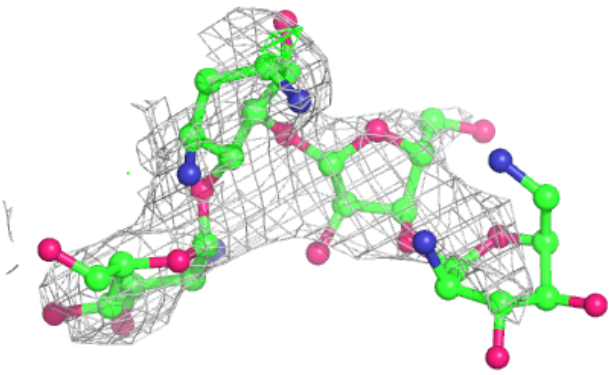


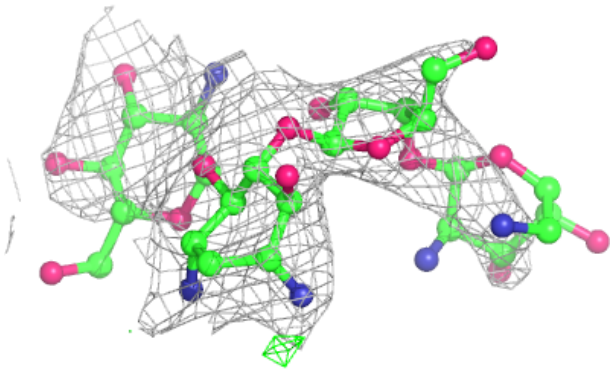


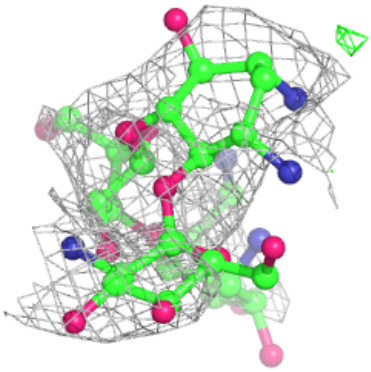


Electron density around PAR 1 3968:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

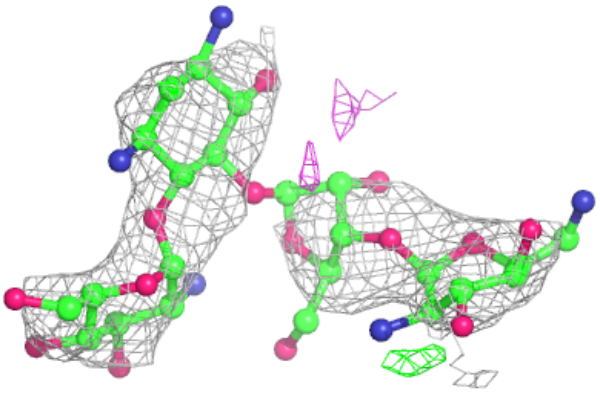


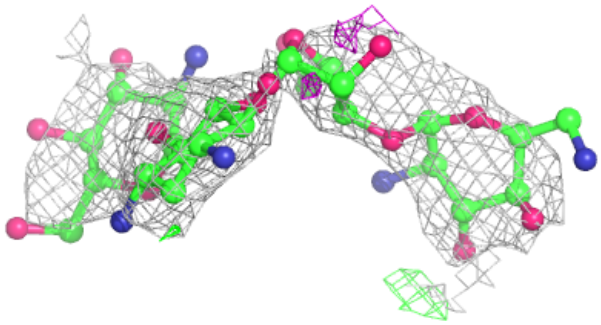


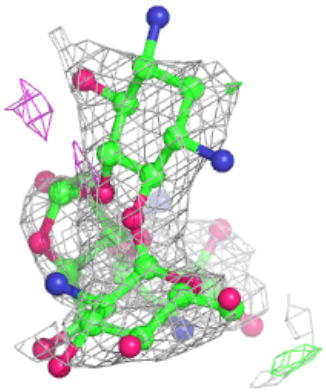


Electron density around PAR 1 3967:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

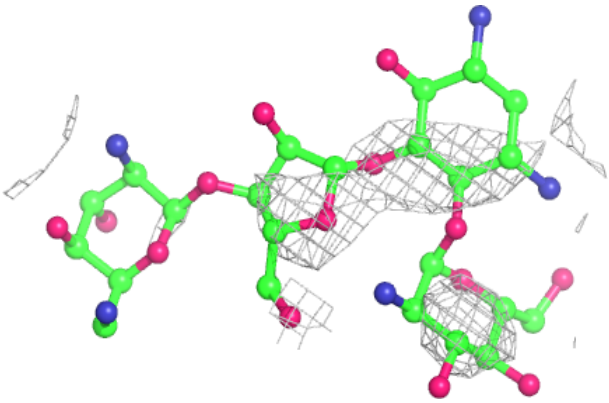


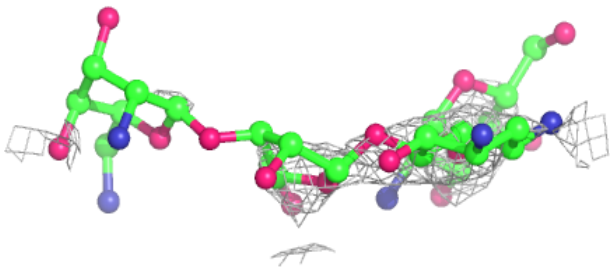


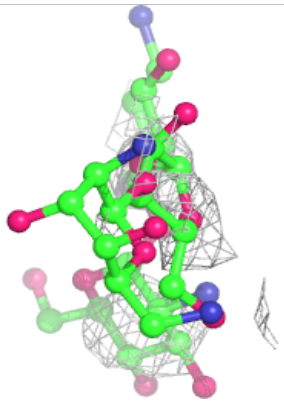


Electron density around PAR CM 1946:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

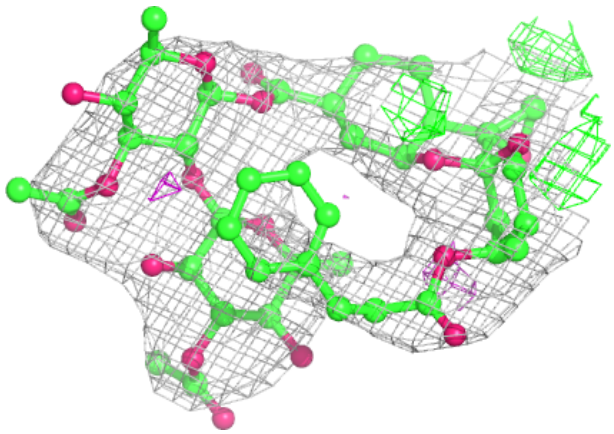


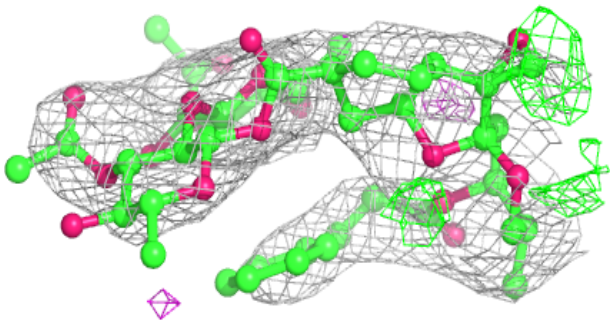


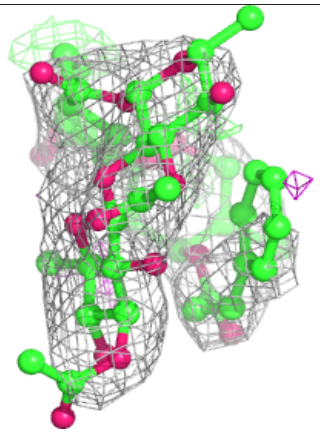


Electron density around 3K5 CJ 202:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

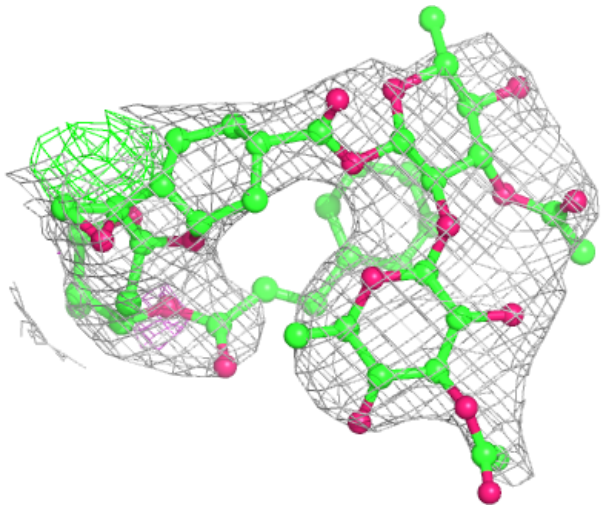


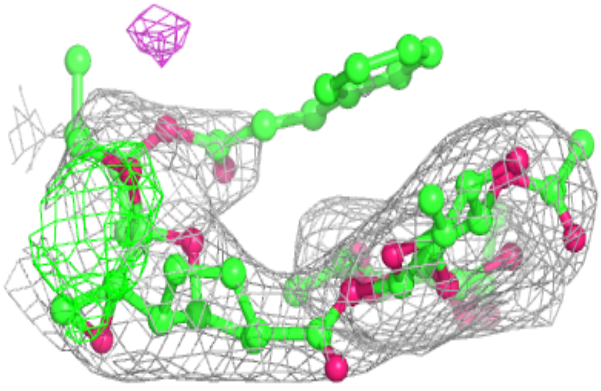


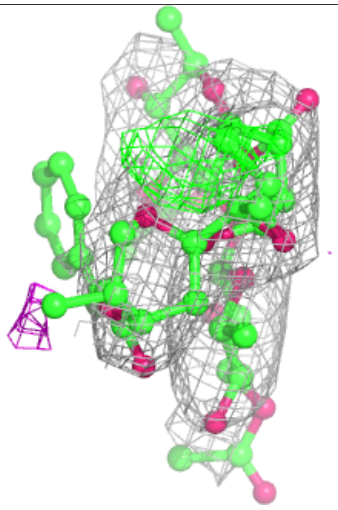


Electron density around 3K5 1 3406:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)







6.5 Other polymers

There are no such residues in this entry.