



## wwPDB X-ray Structure Validation Summary Report

Jan 4, 2024 – 11:32 pm GMT

PDB ID : 4V5C  
Title : Structure of the *Thermus thermophilus* 70S ribosome in complex with mRNA, paromomycin, acylated A-site tRNA, deacylated P-site tRNA, and E-site tRNA.  
Authors : Voorhees, R.M.; Weixlbaumer, A.; Loakes, D.; Kelley, A.C.; Ramakrishnan, V.  
Deposited on : 2009-03-24  
Resolution : 3.30 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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>.

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

MolProbity : 4.02b-467  
Mogul : 1.8.4, CSD as541be (2020)  
Xtrriage (Phenix) : 1.13  
EDS : 2.36  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.36

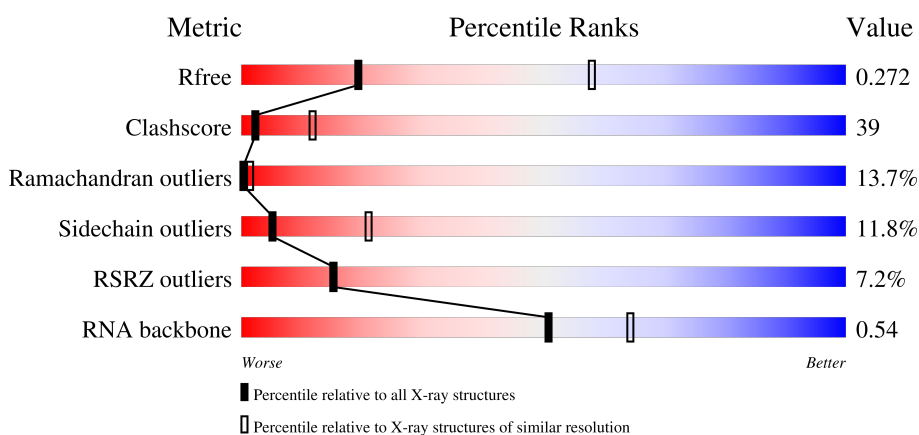
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 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.



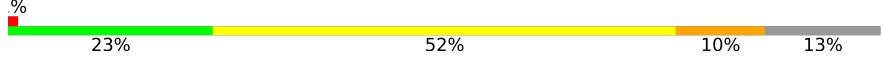
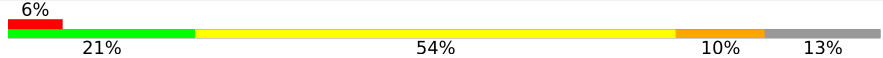


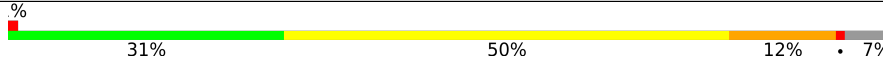
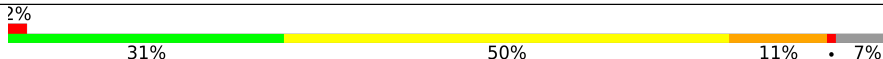
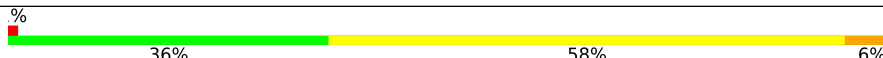
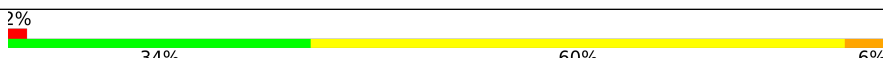
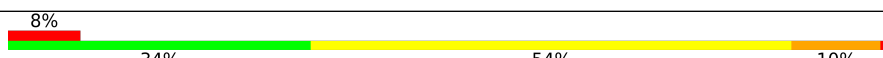
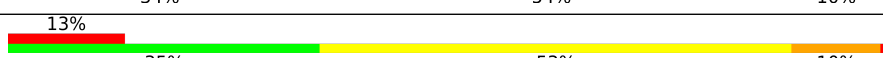
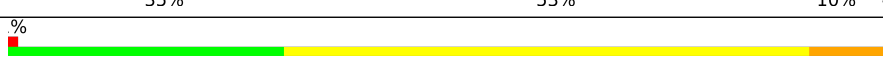
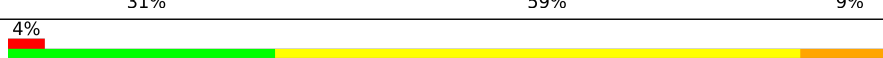
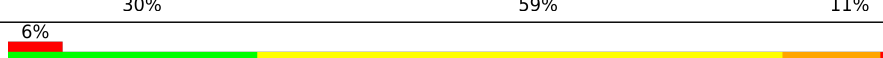
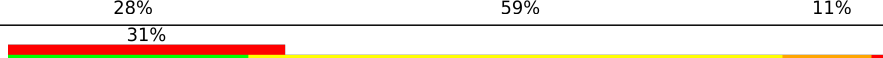
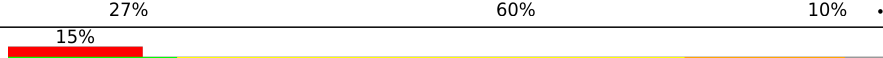
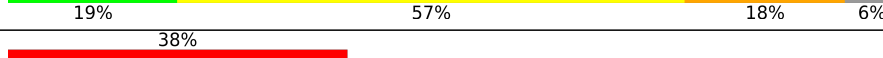
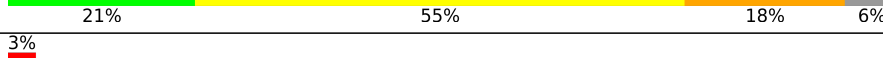
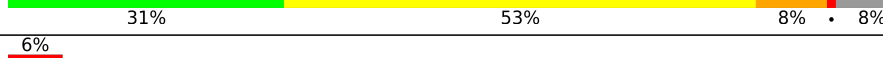
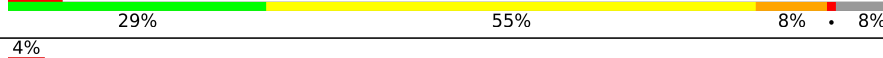

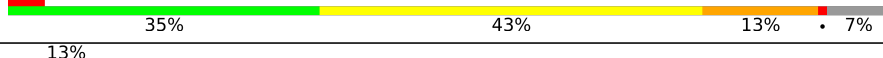
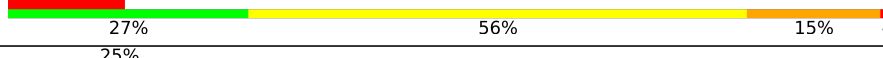
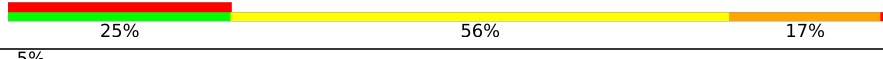
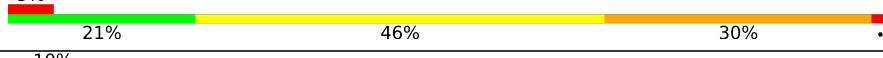
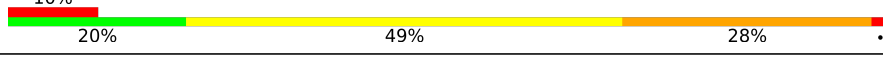
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1149 (3.34-3.26)
Clashscore	141614	1205 (3.34-3.26)
Ramachandran outliers	138981	1183 (3.34-3.26)
Sidechain outliers	138945	1182 (3.34-3.26)
RSRZ outliers	127900	1115 (3.34-3.26)
RNA backbone	3102	1117 (3.70-2.90)

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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1522	 27% 61% 10% ..
1	CA	1522	 26% 61% 10% ..
2	AB	256	 6% 20% 56% 14% • 8%
2	CB	256	 10% 18% 59% 14% • 8%


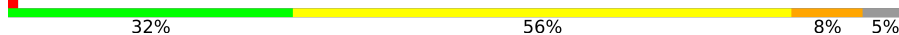

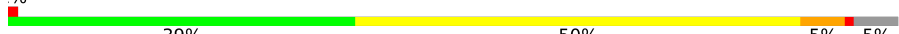
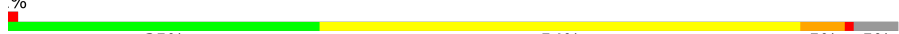

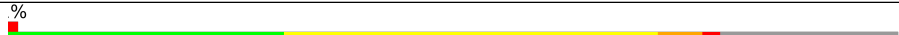
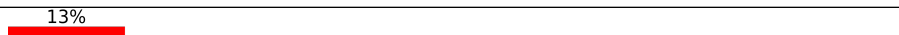
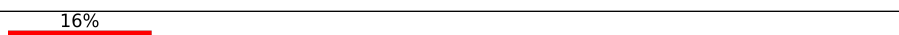
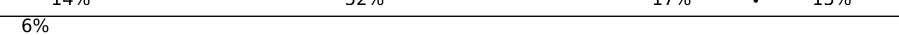
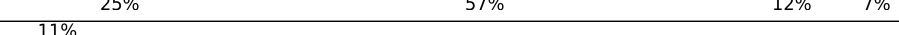
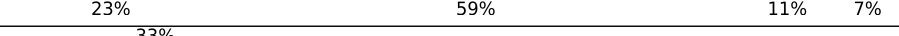



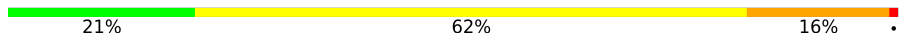
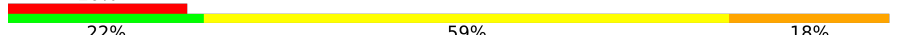



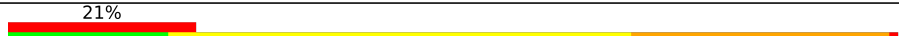




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Mol	Chain	Length	Quality of chain
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	
7	AG	156	
7	CG	156	
8	AH	138	
8	CH	138	
9	AI	128	
9	CI	128	
10	AJ	105	
10	CJ	105	
11	AK	129	
11	CK	129	
12	AL	135	
12	CL	135	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	

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Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AV	77	
22	CV	77	
23	AW	76	
23	CW	76	
24	AX	10	
24	CX	10	
25	AY	77	
25	CY	77	
26	B0	85	
26	D0	85	
27	B1	98	
27	D1	98	

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Mol	Chain	Length	Quality of chain
28	B2	72	
28	D2	72	
29	B3	60	
29	D3	60	
30	B4	71	
30	D4	71	
31	B5	60	
31	D5	60	
32	B6	54	
32	D6	54	
33	B7	49	
33	D7	49	
34	B8	65	
34	D8	65	
35	B9	37	
35	D9	37	
36	BA	2822	
36	DA	2822	
37	BB	122	
37	DB	122	
38	BC	229	
38	DC	229	
39	BD	276	
39	DD	276	
40	BE	206	

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Mol	Chain	Length	Quality of chain
40	DE	206	4% 23% 51% 22% .
41	BF	210	% 25% 59% 15% .
41	DF	210	7% 23% 61% 14% .
42	BG	182	4% 17% 64% 18% ..
42	DG	182	18% 7% 59% 31% ..
43	BH	180	27% 15% 53% 17% . 11%
43	DH	180	7% 16% 52% 17% . 11%
44	BI	148	6% 20% 55% 24% ..
44	DI	148	34% 19% 55% 24% ..
45	BN	140	2% 25% 50% 21% ..
45	DN	140	2% 25% 50% 21% ..
46	BO	122	% 40% 51% 9%
46	DO	122	43% 47% 10%
47	BP	150	7% 16% 47% 29% 5% .
47	DP	150	15% 17% 45% 30% 5% .
48	BQ	141	4% 30% 57% 11% .
48	DQ	141	6% 28% 57% 11% .
49	BR	118	31% 50% 18% ..
49	DR	118	25% 55% 17% ..
50	BS	112	4% 12% 44% 29% . 12%
50	DS	112	26% 15% 43% 27% . 12%
51	BT	146	7% 17% 49% 24% 5% 5%
51	DT	146	2% 16% 51% 23% 5% 5%
52	BU	118	2% 23% 64% 12% .
52	DU	118	2% 21% 66% 12% .

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Mol	Chain	Length	Quality of chain
53	BV	101	
53	DV	101	
54	BW	113	
54	DW	113	
55	BX	96	
55	DX	96	
56	BY	110	
56	DY	110	
57	BZ	206	
57	DZ	206	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	AA	1602	-	-	-	X
58	MG	AA	1604	-	-	-	X
58	MG	AA	1608	-	-	-	X
58	MG	AA	1618	-	-	-	X
58	MG	AA	1631	-	-	-	X
58	MG	AA	1635	-	-	-	X
58	MG	AA	1652	-	-	-	X
58	MG	AA	1655	-	-	-	X
58	MG	AA	1666	-	-	-	X
58	MG	AA	1685	-	-	-	X
58	MG	AA	1693	-	-	-	X
58	MG	AA	1694	-	-	-	X
58	MG	AA	1696	-	-	-	X
58	MG	AA	1700	-	-	-	X
58	MG	AA	1730	-	-	-	X
58	MG	AA	1734	-	-	-	X
58	MG	AA	1743	-	-	-	X
58	MG	AA	1745	-	-	-	X
58	MG	AA	1752	-	-	-	X
58	MG	AA	1760	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	AA	1762	-	-	-	X
58	MG	AA	1763	-	-	-	X
58	MG	AA	1765	-	-	-	X
58	MG	AA	1769	-	-	-	X
58	MG	AA	1771	-	-	-	X
58	MG	AA	1772	-	-	-	X
58	MG	AA	1780	-	-	-	X
58	MG	AA	1783	-	-	-	X
58	MG	AA	1788	-	-	-	X
58	MG	AA	1789	-	-	-	X
58	MG	AA	1799	-	-	-	X
58	MG	AA	1808	-	-	-	X
58	MG	AA	1812	-	-	-	X
58	MG	AG	201	-	-	-	X
58	MG	AV	105	-	-	-	X
58	MG	AW	101	-	-	-	X
58	MG	AW	110	-	-	-	X
58	MG	AW	116	-	-	-	X
58	MG	AW	117	-	-	-	X
58	MG	B2	601	-	-	-	X
58	MG	B5	102	-	-	-	X
58	MG	BA	3004	-	-	-	X
58	MG	BA	3009	-	-	-	X
58	MG	BA	3013	-	-	-	X
58	MG	BA	3034	-	-	-	X
58	MG	BA	3050	-	-	-	X
58	MG	BA	3070	-	-	-	X
58	MG	BA	3104	-	-	-	X
58	MG	BA	3130	-	-	-	X
58	MG	BA	3150	-	-	-	X
58	MG	BA	3158	-	-	-	X
58	MG	BA	3163	-	-	-	X
58	MG	BA	3164	-	-	-	X
58	MG	BA	3213	-	-	-	X
58	MG	BA	3221	-	-	-	X
58	MG	BA	3223	-	-	-	X
58	MG	BA	3228	-	-	-	X
58	MG	BA	3232	-	-	-	X
58	MG	BA	3234	-	-	-	X
58	MG	BA	3235	-	-	-	X
58	MG	BA	3238	-	-	-	X
58	MG	BA	3242	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	BA	3259	-	-	-	X
58	MG	BA	3260	-	-	-	X
58	MG	BA	3269	-	-	-	X
58	MG	BA	3272	-	-	-	X
58	MG	BA	3278	-	-	-	X
58	MG	BA	3284	-	-	-	X
58	MG	BA	3285	-	-	-	X
58	MG	BA	3287	-	-	-	X
58	MG	BA	3288	-	-	-	X
58	MG	BA	3295	-	-	-	X
58	MG	BA	3305	-	-	-	X
58	MG	BA	3308	-	-	-	X
58	MG	BA	3316	-	-	-	X
58	MG	BA	3321	-	-	-	X
58	MG	BA	3336	-	-	-	X
58	MG	BA	3339	-	-	-	X
58	MG	BA	3341	-	-	-	X
58	MG	BA	3345	-	-	-	X
58	MG	BA	3347	-	-	-	X
58	MG	BA	3349	-	-	-	X
58	MG	BA	3351	-	-	-	X
58	MG	BA	3355	-	-	-	X
58	MG	BA	3375	-	-	-	X
58	MG	BA	3377	-	-	-	X
58	MG	BA	3394	-	-	-	X
58	MG	BA	3401	-	-	-	X
58	MG	BA	3404	-	-	-	X
58	MG	BA	3424	-	-	-	X
58	MG	BA	3428	-	-	-	X
58	MG	BA	3429	-	-	-	X
58	MG	BA	3453	-	-	-	X
58	MG	BB	201	-	-	-	X
58	MG	BB	202	-	-	-	X
58	MG	BB	213	-	-	-	X
58	MG	BB	214	-	-	-	X
58	MG	BB	217	-	-	-	X
58	MG	BB	218	-	-	-	X
58	MG	BX	102	-	-	-	X
58	MG	CA	1612	-	-	-	X
58	MG	CA	1617	-	-	-	X
58	MG	CA	1618	-	-	-	X
58	MG	CA	1619	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	CA	1626	-	-	-	X
58	MG	CA	1627	-	-	-	X
58	MG	CA	1638	-	-	-	X
58	MG	CA	1639	-	-	-	X
58	MG	CA	1643	-	-	-	X
58	MG	CA	1647	-	-	-	X
58	MG	CA	1649	-	-	-	X
58	MG	CA	1650	-	-	-	X
58	MG	CA	1651	-	-	-	X
58	MG	CA	1661	-	-	-	X
58	MG	CA	1672	-	-	-	X
58	MG	CA	1675	-	-	-	X
58	MG	CA	1680	-	-	-	X
58	MG	CA	1682	-	-	-	X
58	MG	CA	1687	-	-	-	X
58	MG	CA	1688	-	-	-	X
58	MG	CA	1701	-	-	-	X
58	MG	CA	1710	-	-	-	X
58	MG	CA	1716	-	-	-	X
58	MG	CA	1724	-	-	-	X
58	MG	CA	1730	-	-	-	X
58	MG	CA	1731	-	-	-	X
58	MG	CA	1737	-	-	-	X
58	MG	CA	1739	-	-	-	X
58	MG	CA	1742	-	-	-	X
58	MG	CA	1743	-	-	-	X
58	MG	CA	1751	-	-	-	X
58	MG	CA	1762	-	-	-	X
58	MG	CA	1763	-	-	-	X
58	MG	CA	1767	-	-	-	X
58	MG	CA	1770	-	-	-	X
58	MG	CA	1772	-	-	-	X
58	MG	CA	1773	-	-	-	X
58	MG	CA	1780	-	-	-	X
58	MG	CA	1783	-	-	-	X
58	MG	CA	1810	-	-	-	X
58	MG	CA	1816	-	-	-	X
58	MG	CK	201	-	-	-	X
58	MG	CV	105	-	-	-	X
58	MG	CV	108	-	-	-	X
58	MG	CW	103	-	-	-	X
58	MG	CW	108	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	D1	101	-	-	-	X
58	MG	D7	102	-	-	-	X
58	MG	DA	3005	-	-	-	X
58	MG	DA	3035	-	-	-	X
58	MG	DA	3043	-	-	-	X
58	MG	DA	3088	-	-	-	X
58	MG	DA	3102	-	-	-	X
58	MG	DA	3103	-	-	-	X
58	MG	DA	3141	-	-	-	X
58	MG	DA	3144	-	-	-	X
58	MG	DA	3151	-	-	-	X
58	MG	DA	3156	-	-	-	X
58	MG	DA	3161	-	-	-	X
58	MG	DA	3166	-	-	-	X
58	MG	DA	3171	-	-	-	X
58	MG	DA	3178	-	-	-	X
58	MG	DA	3196	-	-	-	X
58	MG	DA	3198	-	-	-	X
58	MG	DA	3205	-	-	-	X
58	MG	DA	3209	-	-	-	X
58	MG	DA	3213	-	-	-	X
58	MG	DA	3219	-	-	-	X
58	MG	DA	3220	-	-	-	X
58	MG	DA	3224	-	-	-	X
58	MG	DA	3234	-	-	-	X
58	MG	DA	3241	-	-	-	X
58	MG	DA	3245	-	-	-	X
58	MG	DA	3246	-	-	-	X
58	MG	DA	3253	-	-	-	X
58	MG	DA	3255	-	-	-	X
58	MG	DA	3262	-	-	-	X
58	MG	DA	3264	-	-	-	X
58	MG	DA	3265	-	-	-	X
58	MG	DA	3273	-	-	-	X
58	MG	DA	3279	-	-	-	X
58	MG	DA	3283	-	-	-	X
58	MG	DA	3301	-	-	-	X
58	MG	DA	3303	-	-	-	X
58	MG	DA	3304	-	-	-	X
58	MG	DA	3311	-	-	-	X
58	MG	DA	3313	-	-	-	X
58	MG	DA	3327	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	DA	3330	-	-	-	X
58	MG	DA	3331	-	-	-	X
58	MG	DA	3334	-	-	-	X
58	MG	DA	3335	-	-	-	X
58	MG	DA	3336	-	-	-	X
58	MG	DA	3344	-	-	-	X
58	MG	DA	3346	-	-	-	X
58	MG	DA	3348	-	-	-	X
58	MG	DA	3351	-	-	-	X
58	MG	DA	3360	-	-	-	X
58	MG	DA	3364	-	-	-	X
58	MG	DA	3370	-	-	-	X
58	MG	DA	3380	-	-	-	X
58	MG	DA	3391	-	-	-	X
58	MG	DA	3399	-	-	-	X
58	MG	DA	3410	-	-	-	X
58	MG	DA	3414	-	-	-	X
58	MG	DA	3423	-	-	-	X
58	MG	DA	3426	-	-	-	X
58	MG	DA	3434	-	-	-	X
58	MG	DA	3447	-	-	-	X
58	MG	DB	202	-	-	-	X
58	MG	DB	213	-	-	-	X
58	MG	DB	214	-	-	-	X
58	MG	DB	216	-	-	-	X
58	MG	DB	217	-	-	-	X
58	MG	DN	201	-	-	-	X
58	MG	DN	202	-	-	-	X

## 2 Entry composition

There are 60 unique types of molecules in this entry. The entry contains 296168 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 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	AA	1504	Total 32329	C 14390	N 5992	O 10444	P 1503	0	0	0
1	CA	1504	Total 32329	C 14390	N 5992	O 10444	P 1503	0	0	0

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	AB	235	Total 1901	C 1213	N 342	O 341	S 5	0	0	1
2	CB	235	Total 1901	C 1213	N 342	O 341	S 5	0	0	1

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	AC	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1
3	CC	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1

- Molecule 4 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	AD	208	Total 1703	C 1066	N 339	O 291	S 7	0	0	0
4	CD	208	Total 1703	C 1066	N 339	O 291	S 7	0	0	0

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			
5	CE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 8 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			1011	639	198	174			
9	CI	127	Total	C	N	O	0	0	0
			1011	639	198	174			

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	CJ	99	795	499	157	138	1	0	0	1

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	AK	119	885	549	168	165	3	0	0	0
11	CK	119	885	549	168	165	3	0	0	0

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	AL	125	971	611	196	163	1	0	0	1
12	CL	125	971	611	196	163	1	0	0	1

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	AM	125	988	611	206	169	2	0	0	1
13	CM	125	988	611	206	169	2	0	0	1

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	AN	60	492	312	104	72	4	0	0	0
14	CN	60	492	312	104	72	4	0	0	0

- Molecule 15 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	AO	88	734	459	147	126	2	0	0	0
15	CO	88	734	459	147	126	2	0	0	0



- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

- Molecule 21 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

- Molecule 22 is a RNA chain called P-SITE TRNA FMET.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	77	Total	C	N	O	P	0	0	0
			1641	733	297	535	76			
22	CV	77	Total	C	N	O	P	0	0	0
			1641	733	297	535	76			

- Molecule 23 is a RNA chain called E-SITE TRNA PHE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
23	CW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			

- Molecule 24 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	10	Total	C	N	O	P	0	0	0
			210	96	39	66	9			
24	CX	10	Total	C	N	O	P	0	0	0
			210	96	39	66	9			

- Molecule 25 is a RNA chain called A-SITE PHE-TRNA PHE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AY	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			
25	CY	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	B0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	D0	84	662	410	140	111	1	0	0	0

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
27	B1	94	732	460	146	125	1	0	0	1
27	D1	94	732	460	146	125	1	0	0	1

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	B2	71	598	370	121	106	1	0	0	0
28	D2	71	598	370	121	106	1	0	0	0

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	B3	60	468	298	91	78	1	0	0	1
29	D3	60	468	298	91	78	1	0	0	1

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	B4	31	226	142	37	43	4	0	0	1
30	D4	31	226	142	37	43	4	0	0	1

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	B5	59	459	288	90	76	5	0	0	0
31	D5	59	459	288	90	76	5	0	0	0

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			
32	D6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
33	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			
34	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

- Molecule 35 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	B9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			
35	D9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			

- Molecule 36 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BA	2807	Total	C	N	O	P	0	0	0
			60459	26907	11311	19435	2806			
36	DA	2807	Total	C	N	O	P	0	0	0
			60459	26907	11311	19435	2806			

- Molecule 37 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
37	BB	119	2551	1136	471	826	118	0	0	0
37	DB	119	2551	1136	471	826	118	0	0	0

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
38	BC	191	1142	691	221	230	0	0	1
38	DC	191	1142	691	221	230	0	0	1

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
39	BD	272	2105	1329	417	356	3	0	0	1
39	DD	272	2105	1329	417	356	3	0	0	1

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	BE	205	1564	988	300	270	6	0	0	1
40	DE	205	1564	988	300	270	6	0	0	1

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	BF	208	1624	1035	304	282	3	0	0	1
41	DF	208	1624	1035	304	282	3	0	0	1

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	BG	181	1474	942	268	260	4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	DG	181	1474	942	268	260	4	0	0	0

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	BH	160	1223	773	229	220	1	0	0	1
43	DH	160	1223	773	229	220	1	0	0	1

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	BI	146	1132	723	201	207	1	0	0	1
44	DI	146	1132	723	201	207	1	0	0	1

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	BN	139	1105	712	207	182	4	0	0	1
45	DN	139	1105	712	207	182	4	0	0	1

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
46	BO	122	933	588	171	170	4	0	0	0
46	DO	122	933	588	171	170	4	0	0	0

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	BP	146	1114	692	227	193	2	0	0	0
47	DP	146	1114	692	227	193	2	0	0	0

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
48	BQ	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
48	DQ	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
49	BR	117	Total 960	C 599	N 202	O 159	0	0	0
49	DR	117	Total 960	C 599	N 202	O 159	0	0	0

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
50	BS	99	Total 771	C 486	N 155	O 130	0	0	1
50	DS	99	Total 771	C 486	N 155	O 130	0	0	1

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
51	BT	138	Total 1142	C 710	N 235	O 196	S 1	0	0	1
51	DT	138	Total 1142	C 710	N 235	O 196	S 1	0	0	1

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
52	BU	117	Total 958	C 604	N 202	O 151	S 1	0	0	0
52	DU	117	Total 958	C 604	N 202	O 151	S 1	0	0	0

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
53	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			
54	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	BX	93	Total	C	N	O	0	0	1
			726	471	132	123			
55	DX	93	Total	C	N	O	0	0	1
			726	471	132	123			

- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
56	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	BZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			
57	DZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

- Molecule 58 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	AA	213	Total	Mg	0	0
			213	213		

*Continued on next page...*



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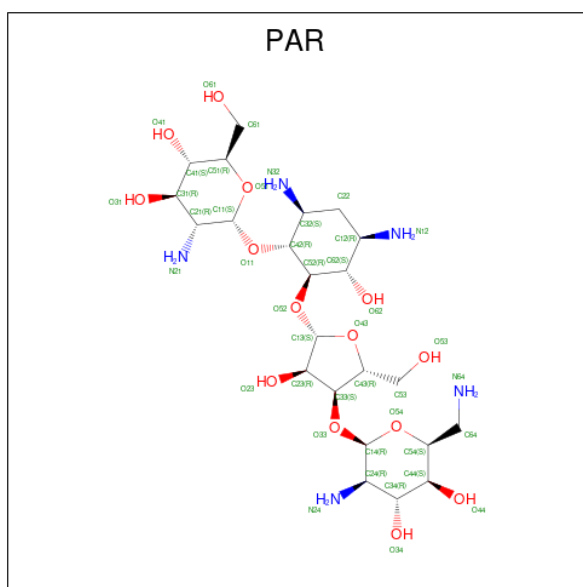
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	AD	1	Total Mg 1 1	0	0
58	AE	1	Total Mg 1 1	0	0
58	AG	1	Total Mg 1 1	0	0
58	AU	1	Total Mg 1 1	0	0
58	AV	8	Total Mg 8 8	0	0
58	AW	20	Total Mg 20 20	0	0
58	AX	4	Total Mg 4 4	0	0
58	B1	1	Total Mg 1 1	0	0
58	B2	2	Total Mg 2 2	0	0
58	B5	2	Total Mg 2 2	0	0
58	B7	1	Total Mg 1 1	0	0
58	BA	453	Total Mg 453 453	0	0
58	BB	19	Total Mg 19 19	0	0
58	BD	1	Total Mg 1 1	0	0
58	BE	1	Total Mg 1 1	0	0
58	BF	2	Total Mg 2 2	0	0
58	BN	2	Total Mg 2 2	0	0
58	BO	1	Total Mg 1 1	0	0
58	BP	2	Total Mg 2 2	0	0
58	BV	2	Total Mg 2 2	0	0
58	BW	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	BX	2	Total Mg 2 2	0	0
58	CA	216	Total Mg 216 216	0	0
58	CE	1	Total Mg 1 1	0	0
58	CK	1	Total Mg 1 1	0	0
58	CL	1	Total Mg 1 1	0	0
58	CV	8	Total Mg 8 8	0	0
58	CW	21	Total Mg 21 21	0	0
58	CX	3	Total Mg 3 3	0	0
58	D1	2	Total Mg 2 2	0	0
58	D2	3	Total Mg 3 3	0	0
58	D5	1	Total Mg 1 1	0	0
58	D7	2	Total Mg 2 2	0	0
58	DA	451	Total Mg 451 451	0	0
58	DB	18	Total Mg 18 18	0	0
58	DD	2	Total Mg 2 2	0	0
58	DE	2	Total Mg 2 2	0	0
58	DF	1	Total Mg 1 1	0	0
58	DN	3	Total Mg 3 3	0	0
58	DV	2	Total Mg 2 2	0	0
58	DX	3	Total Mg 3 3	0	0

- Molecule 59 is PAROMOMYCIN (three-letter code: PAR) (formula: C<sub>23</sub>H<sub>45</sub>N<sub>5</sub>O<sub>14</sub>).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
59	AA	1	Total	C	N	O	0	0
			42	23	5	14		
59	CA	1	Total	C	N	O	0	0
			42	23	5	14		

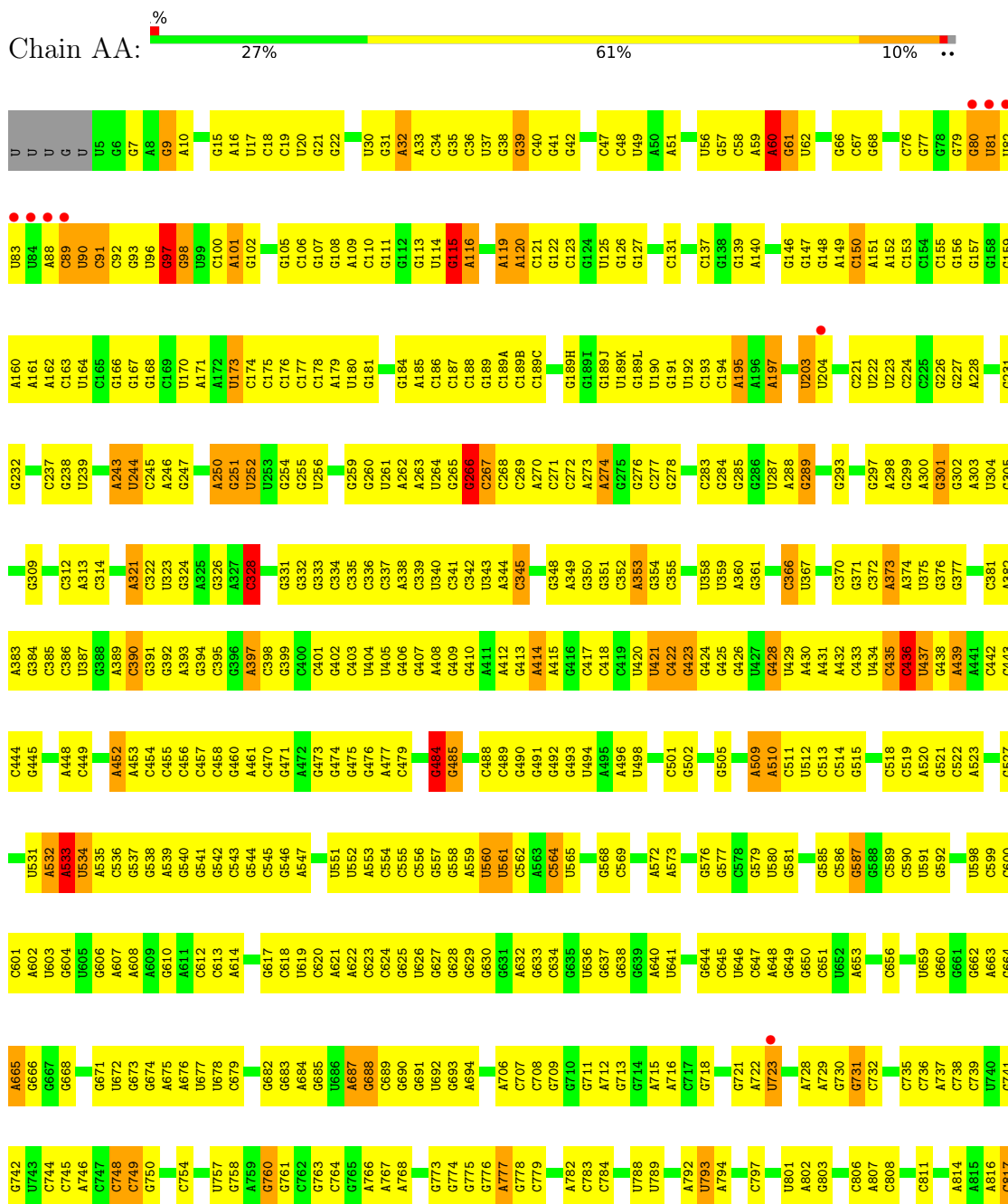
- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

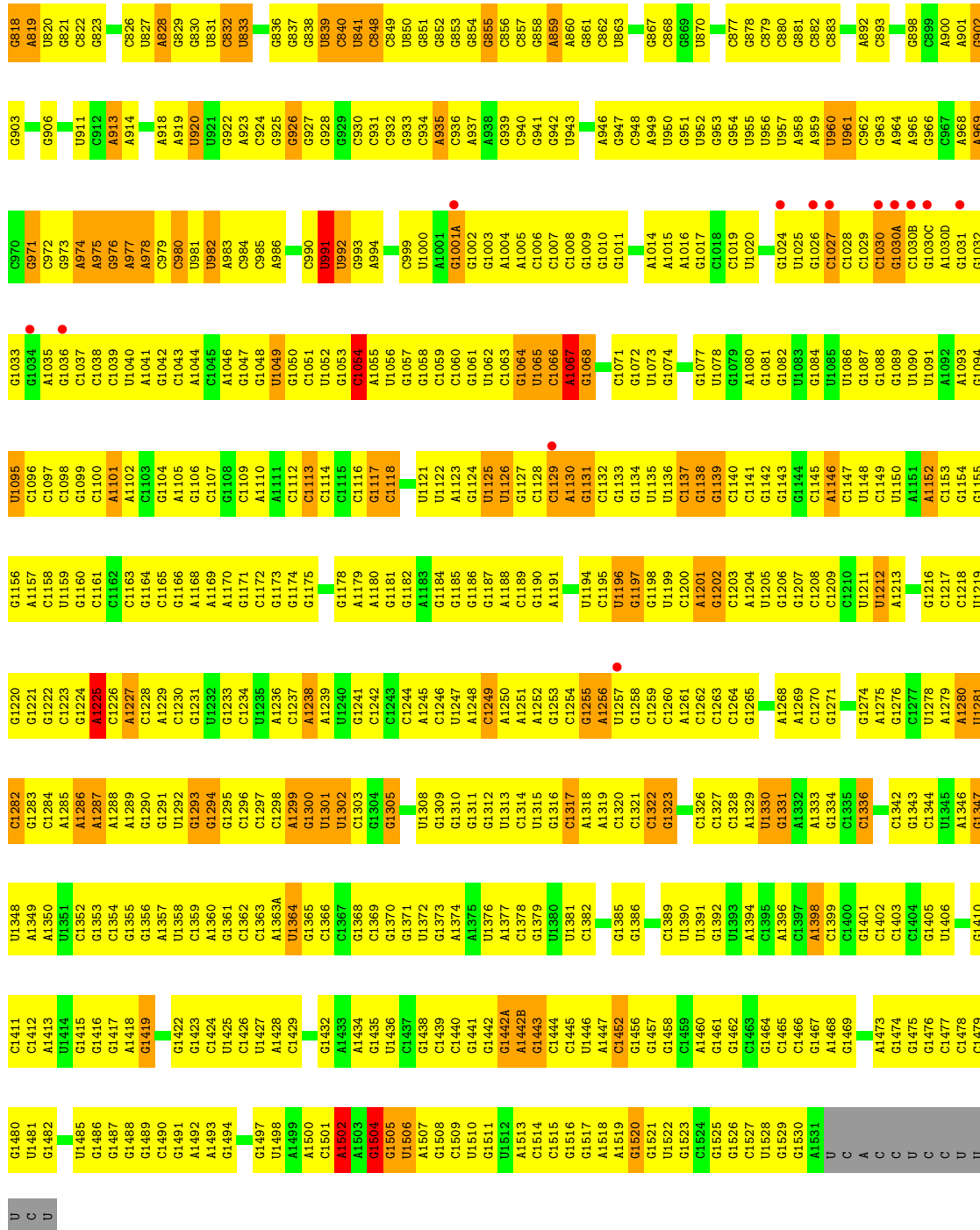
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	AD	1	Total	Zn	0	0
			1	1		
60	AN	1	Total	Zn	0	0
			1	1		
60	B9	1	Total	Zn	0	0
			1	1		
60	CD	1	Total	Zn	0	0
			1	1		
60	CN	1	Total	Zn	0	0
			1	1		
60	D9	1	Total	Zn	0	0
			1	1		

### 3 Residue-property plots

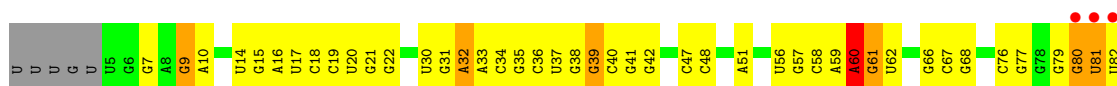
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

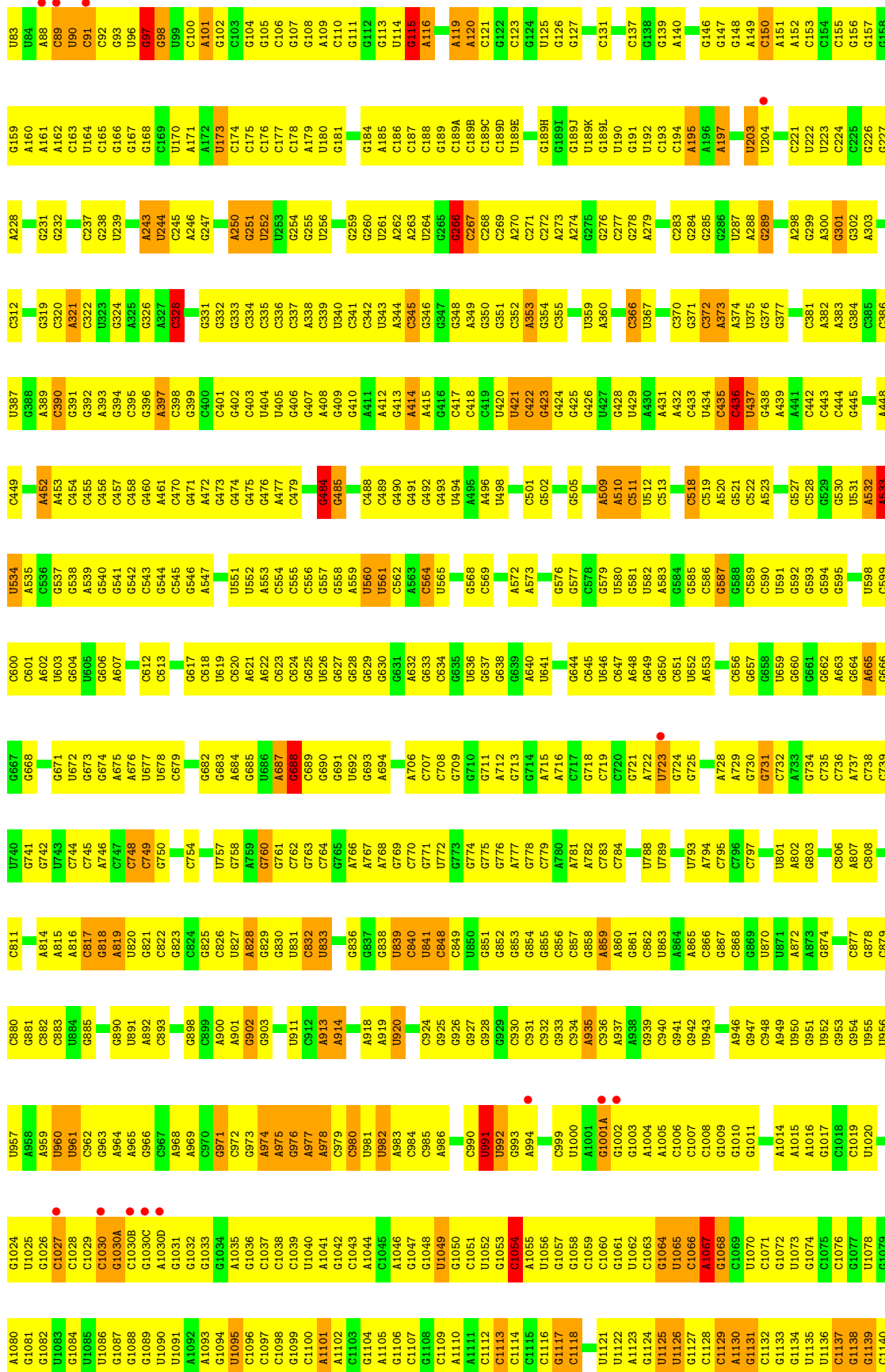
- Molecule 1: 16S ribosomal RNA

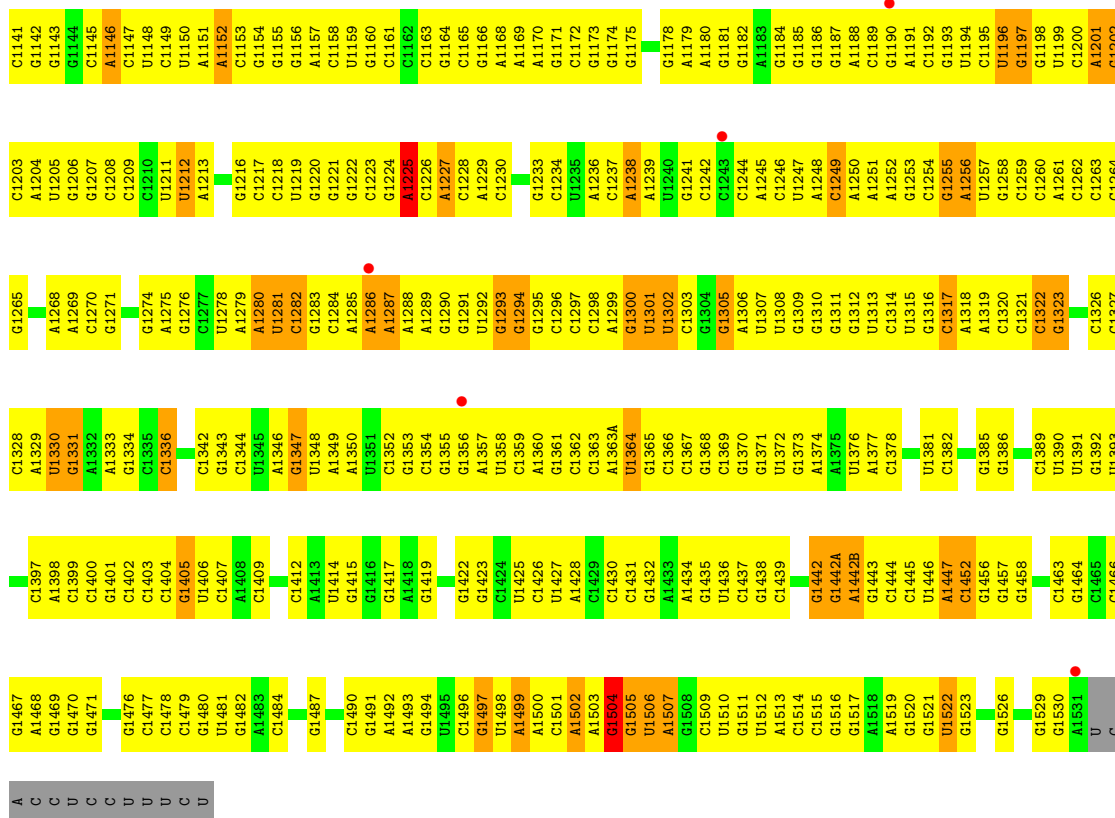




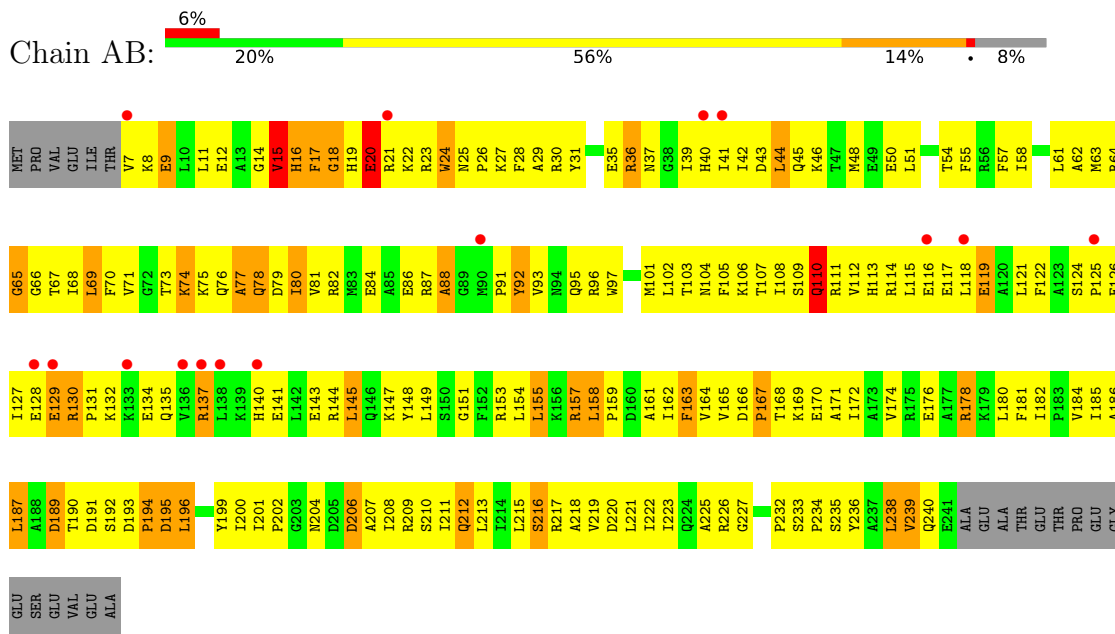
• Molecule 1: 16S ribosomal RNA



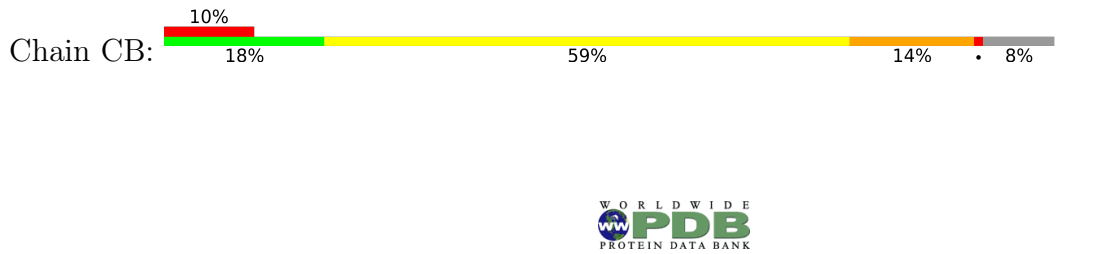


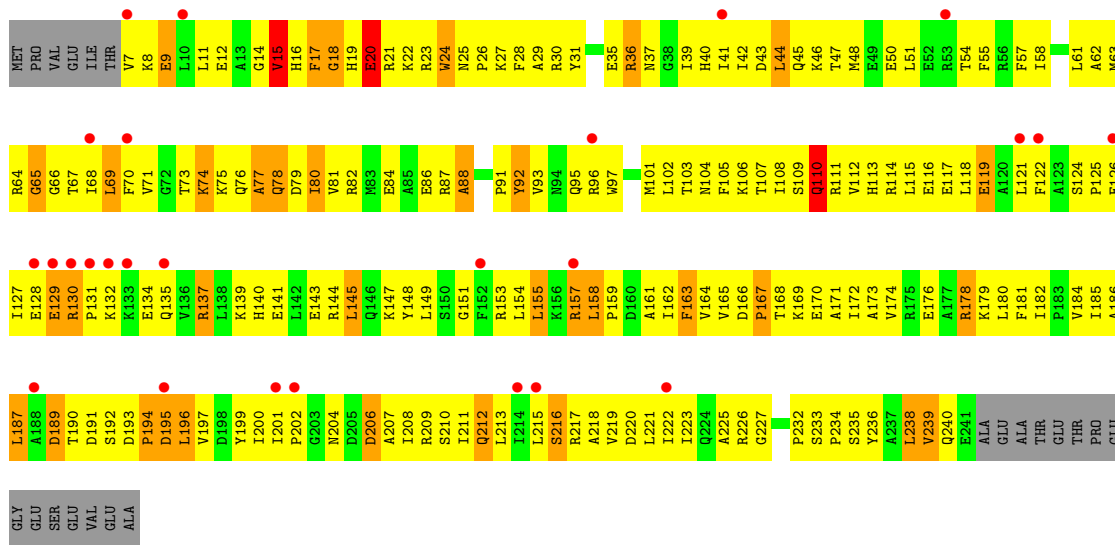


• Molecule 2: 30S RIBOSOMAL PROTEIN S2

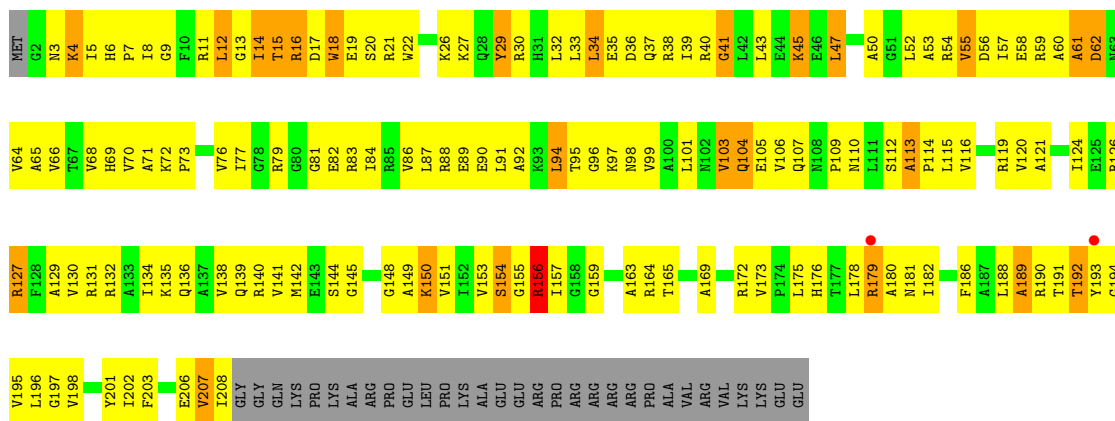


• Molecule 2: 30S RIBOSOMAL PROTEIN S2

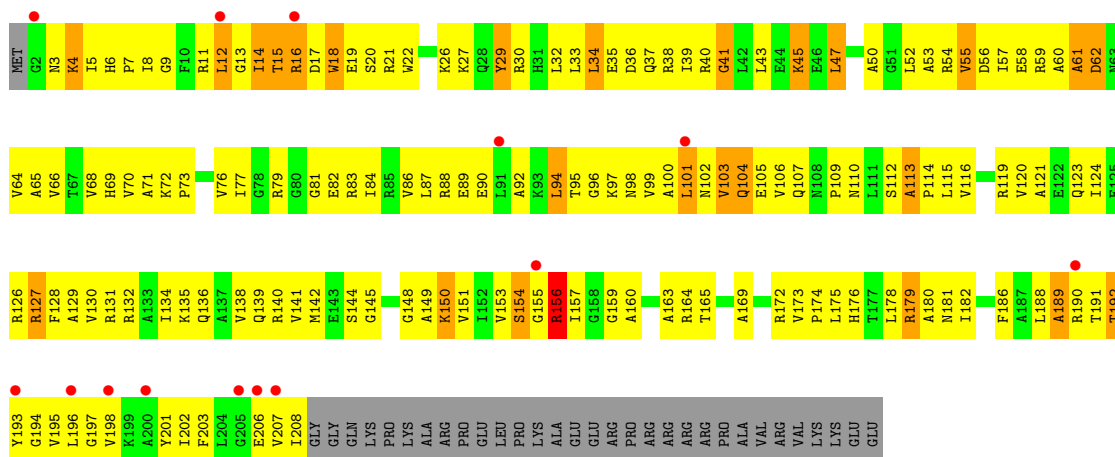




• Molecule 3: 30S RIBOSOMAL PROTEIN S3

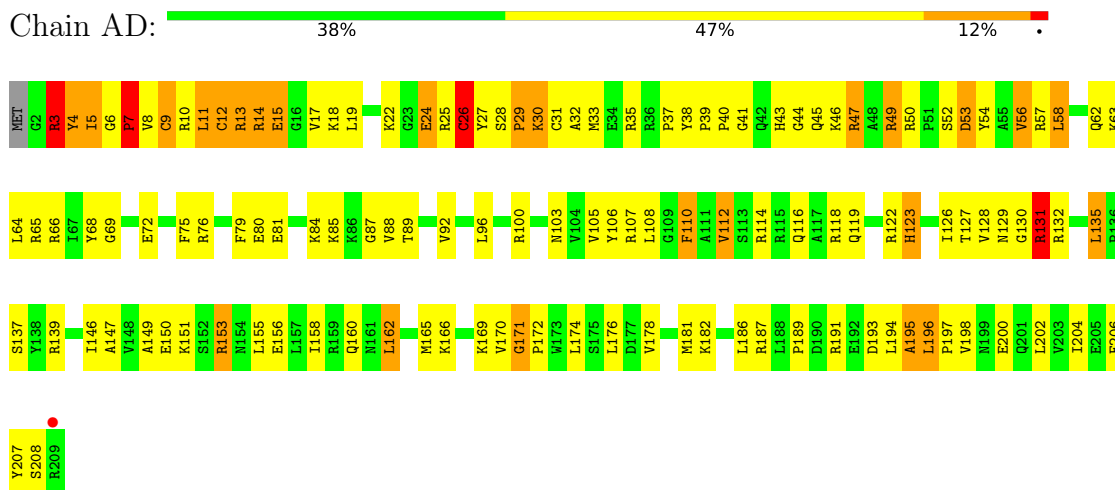


• Molecule 3: 30S RIBOSOMAL PROTEIN S3

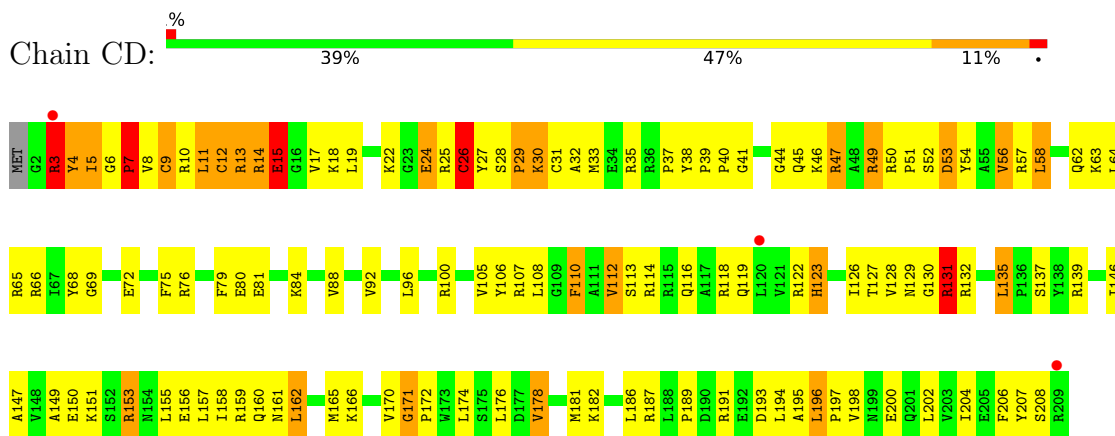




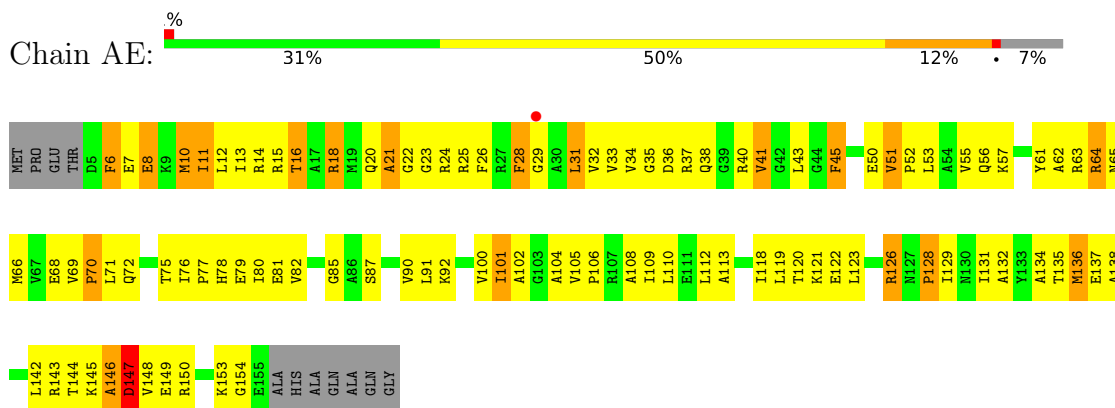
- Molecule 4: 30S RIBOSOMAL PROTEIN S4



- Molecule 4: 30S RIBOSOMAL PROTEIN S4

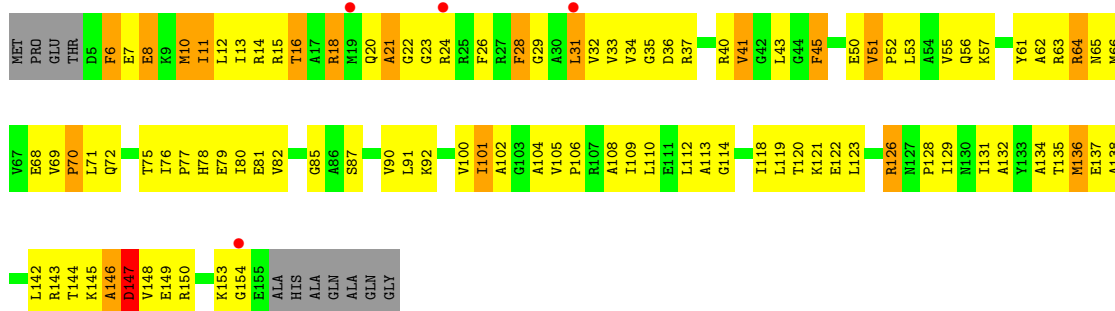


- Molecule 5: 30S RIBOSOMAL PROTEIN S5

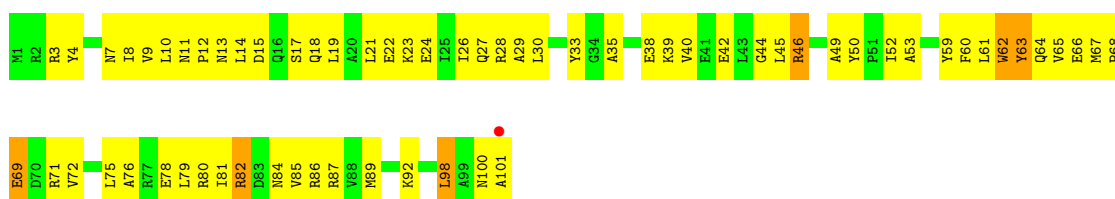


- Molecule 5: 30S RIBOSOMAL PROTEIN S5

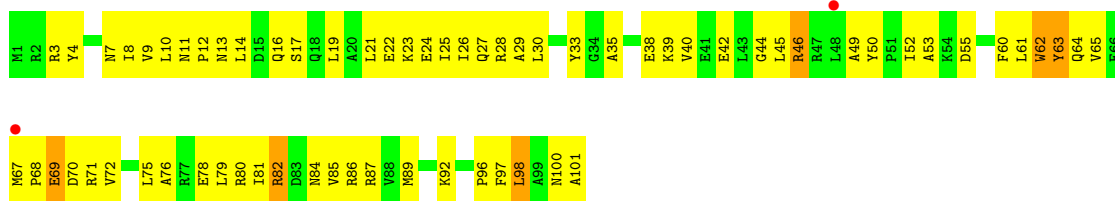




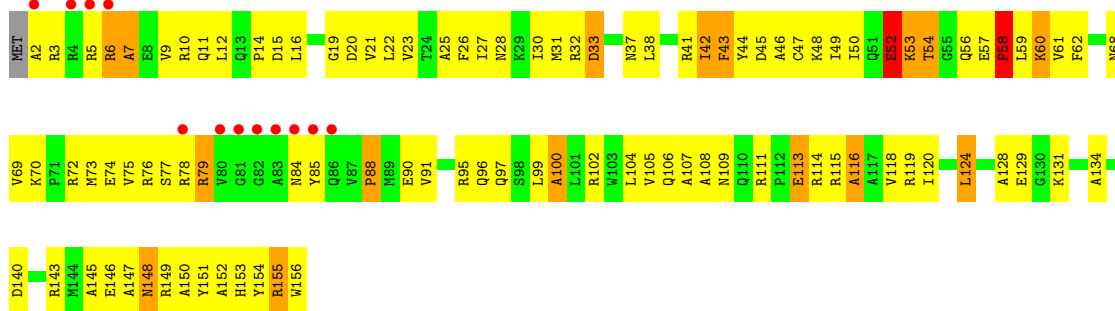
● Molecule 6: 30S RIBOSOMAL PROTEIN S6



● Molecule 6: 30S RIBOSOMAL PROTEIN S6

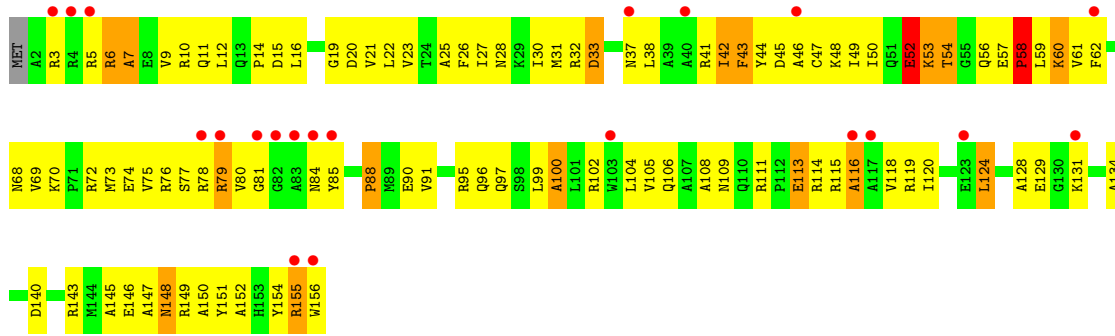


● Molecule 7: 30S RIBOSOMAL PROTEIN S7

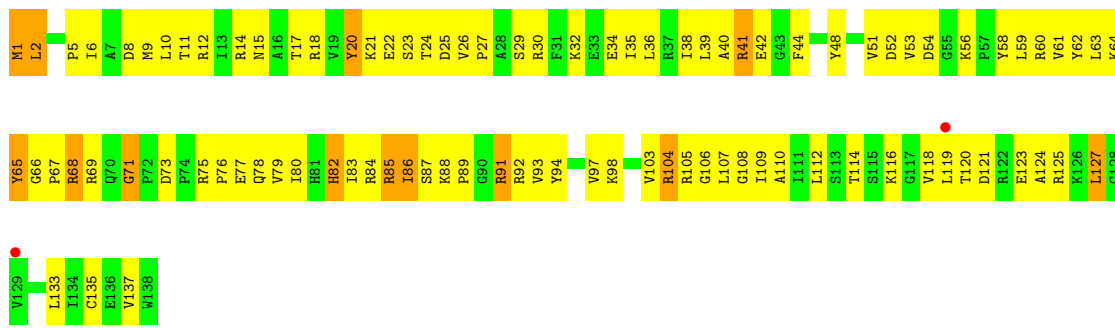


● Molecule 7: 30S RIBOSOMAL PROTEIN S7

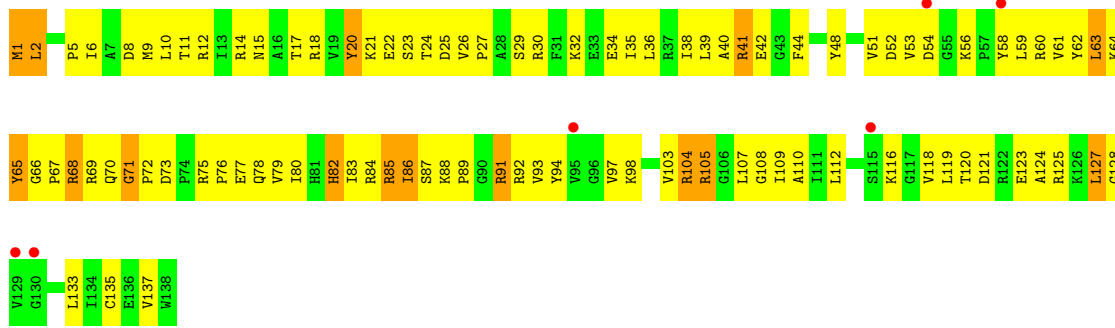




• Molecule 8: 30S RIBOSOMAL PROTEIN S8



• Molecule 8: 30S RIBOSOMAL PROTEIN S8

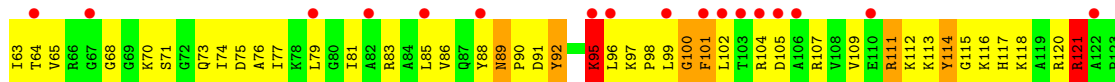
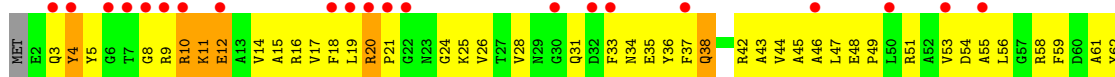


• Molecule 9: 30S RIBOSOMAL PROTEIN S9



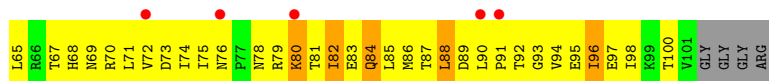
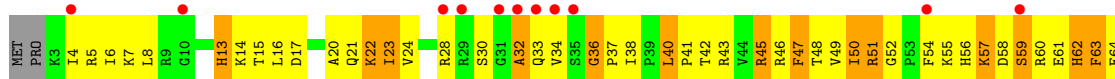
R128

• Molecule 9: 30S RIBOSOMAL PROTEIN S9

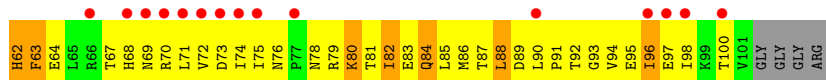
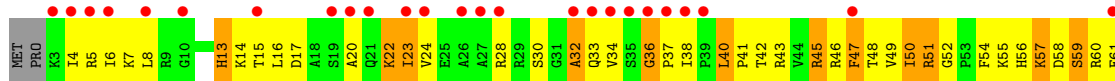


Q124  
Y125  
S126  
K127  
R128

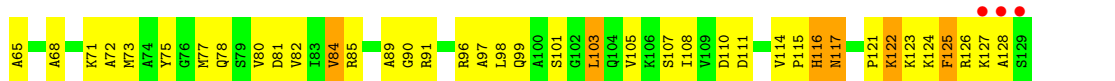
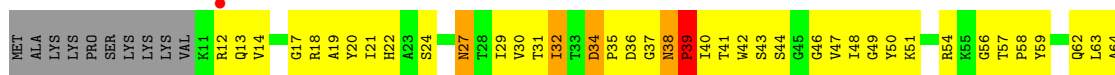
• Molecule 10: 30S RIBOSOMAL PROTEIN S10



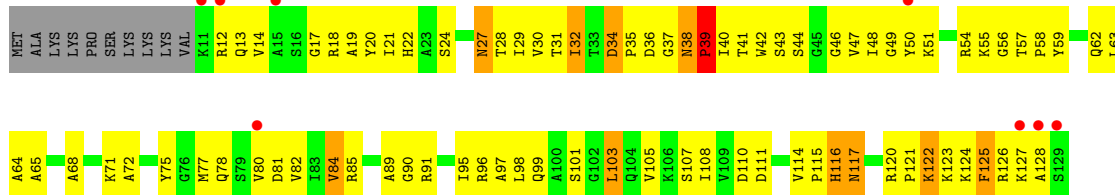
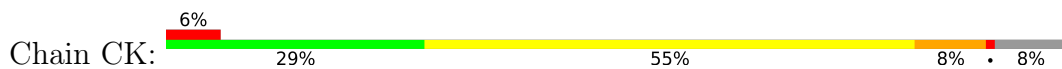
• Molecule 10: 30S RIBOSOMAL PROTEIN S10



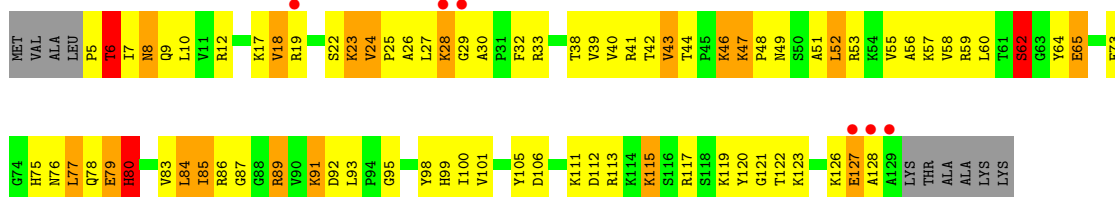
• Molecule 11: 30S RIBOSOMAL PROTEIN S11



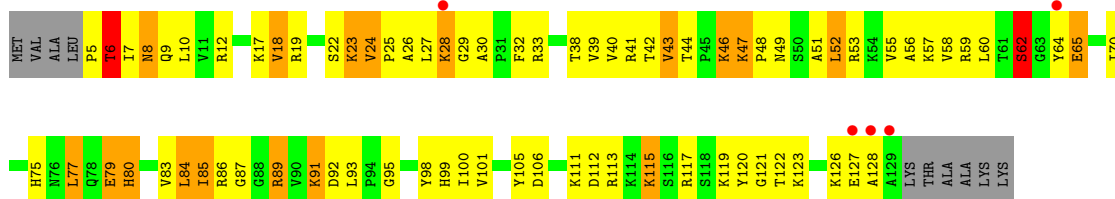
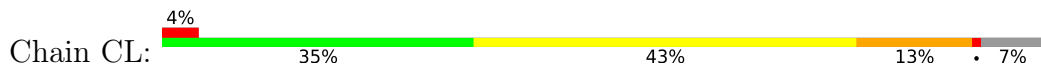
• Molecule 11: 30S RIBOSOMAL PROTEIN S11



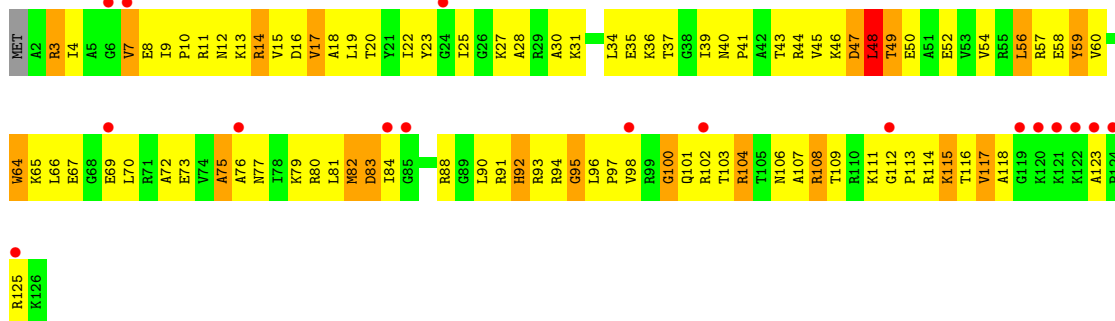
- Molecule 12: 30S RIBOSOMAL PROTEIN S12



- Molecule 12: 30S RIBOSOMAL PROTEIN S12

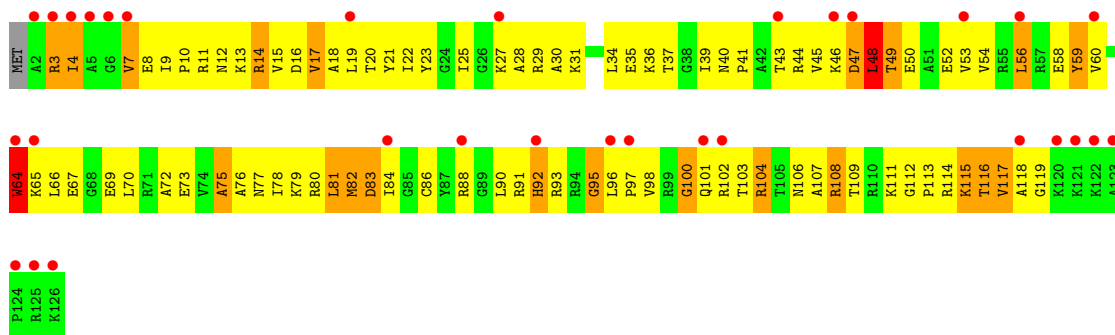


- Molecule 13: 30S RIBOSOMAL PROTEIN S13

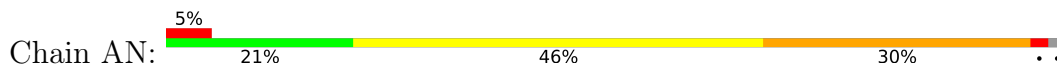


- Molecule 13: 30S RIBOSOMAL PROTEIN S13

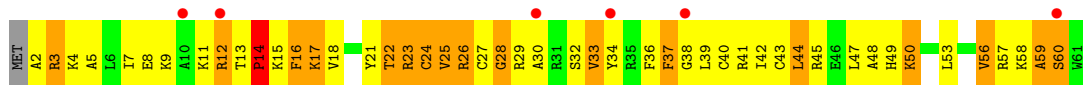
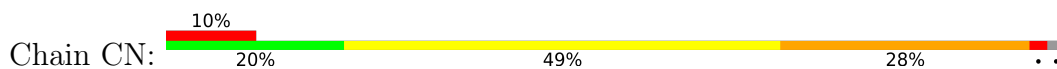




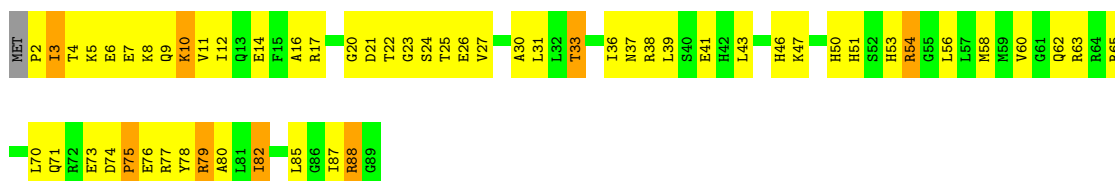
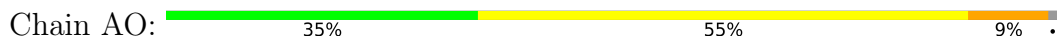
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



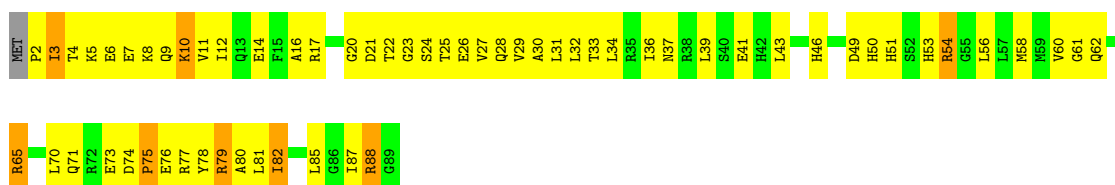
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



• Molecule 15: 30S RIBOSOMAL PROTEIN S15

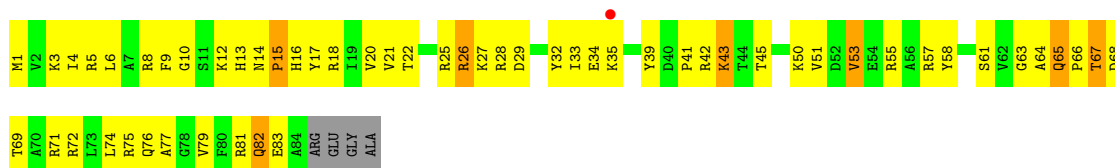


• Molecule 15: 30S RIBOSOMAL PROTEIN S15



• Molecule 16: 30S RIBOSOMAL PROTEIN S16

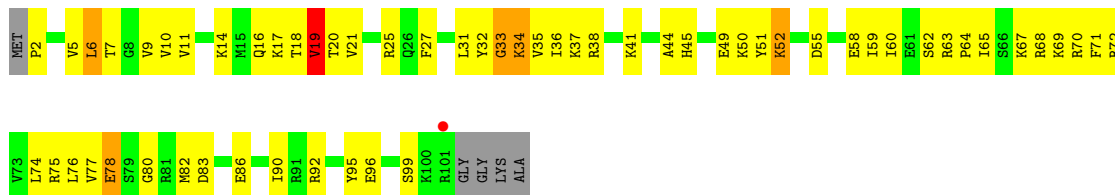




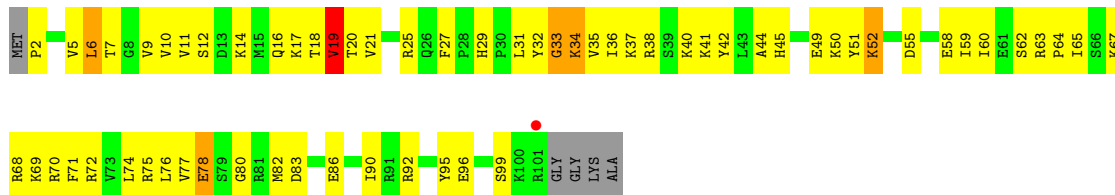
- Molecule 16: 30S RIBOSOMAL PROTEIN S16



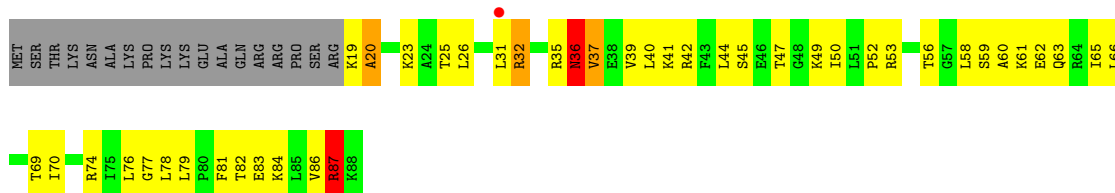
- Molecule 17: 30S RIBOSOMAL PROTEIN S17



- Molecule 17: 30S RIBOSOMAL PROTEIN S17



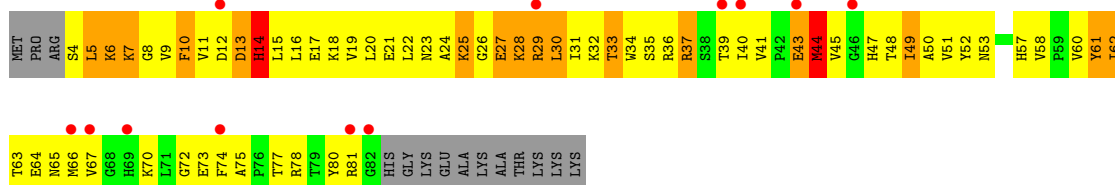
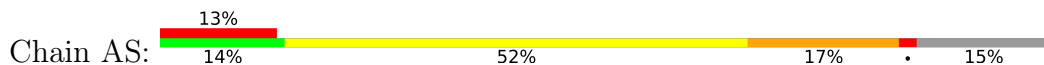
- Molecule 18: 30S RIBOSOMAL PROTEIN S18



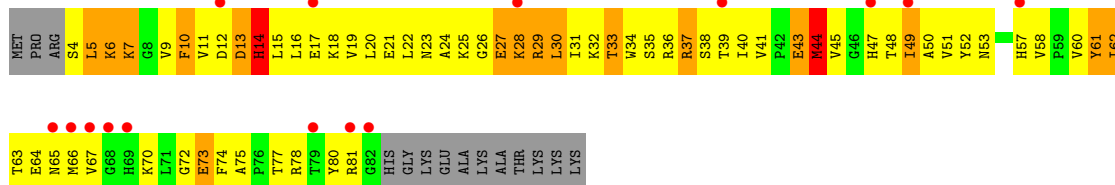
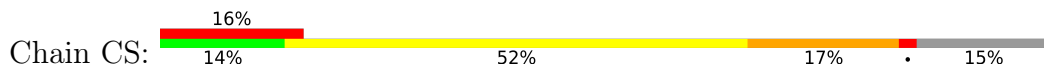
- Molecule 18: 30S RIBOSOMAL PROTEIN S18



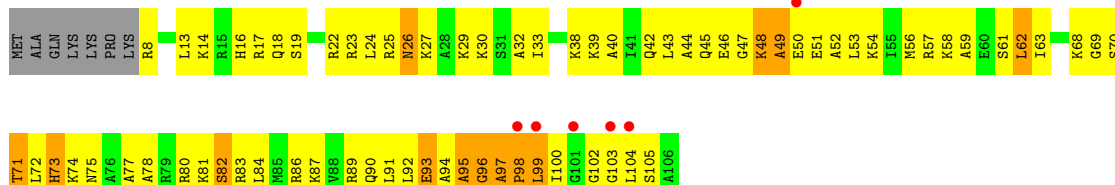
• Molecule 19: 30S RIBOSOMAL PROTEIN S19



• Molecule 19: 30S RIBOSOMAL PROTEIN S19



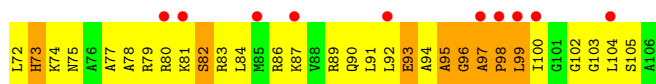
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



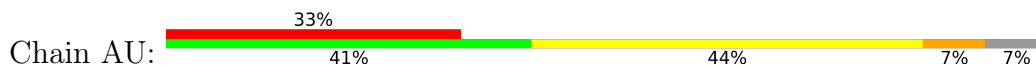
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



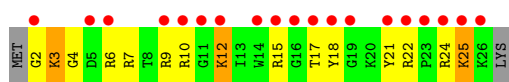
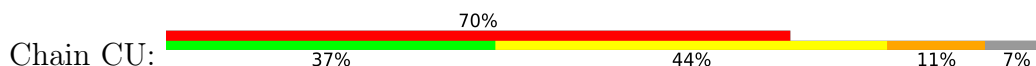




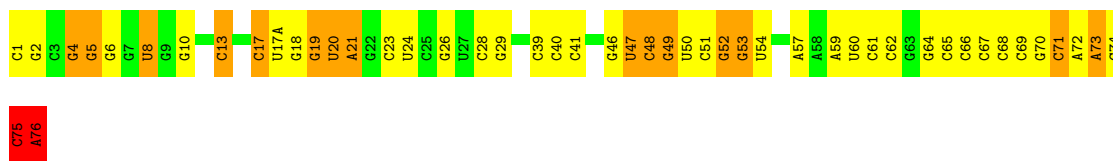
- Molecule 21: 30S RIBOSOMAL PROTEIN THX



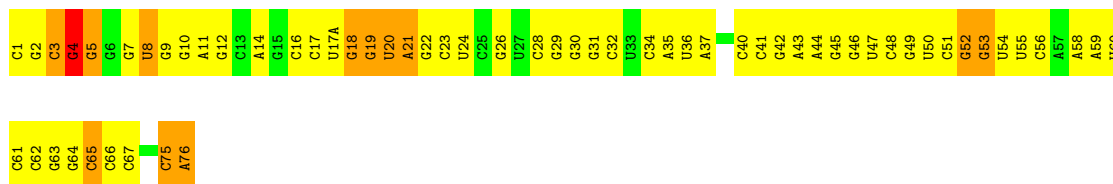
- Molecule 21: 30S RIBOSOMAL PROTEIN THX



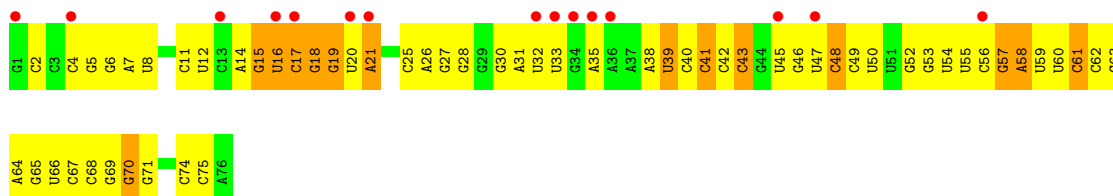
- Molecule 22: P-SITE TRNA FMET



- Molecule 22: P-SITE TRNA FMET

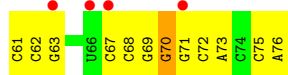


- Molecule 23: E-SITE TRNA PHE

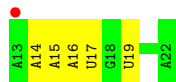


- Molecule 23: E-SITE TRNA PHE





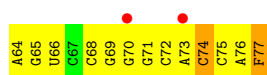
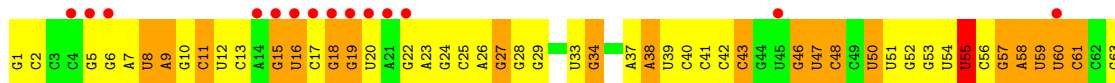
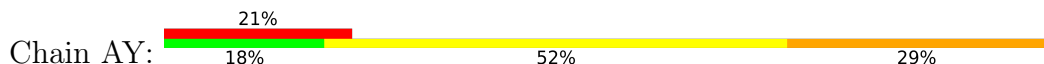
• Molecule 24: MRNA



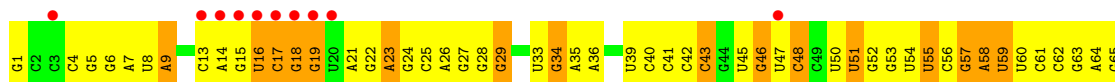
• Molecule 24: MRNA



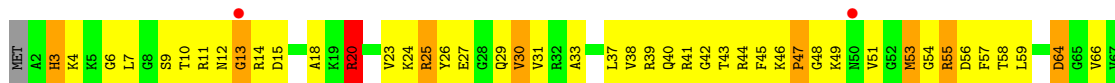
• Molecule 25: A-SITE PHE-TRNA PHE



• Molecule 25: A-SITE PHE-TRNA PHE

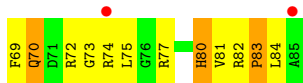
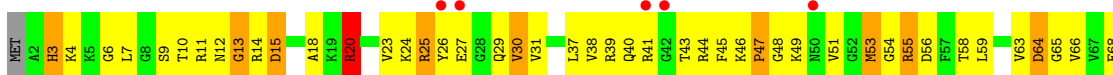


• Molecule 26: 50S RIBOSOMAL PROTEIN L27

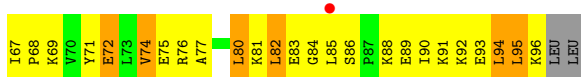




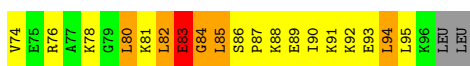
- Molecule 26: 50S RIBOSOMAL PROTEIN L27



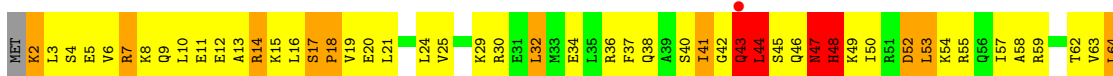
- Molecule 27: 50S RIBOSOMAL PROTEIN L28



- Molecule 27: 50S RIBOSOMAL PROTEIN L28



- Molecule 28: 50S RIBOSOMAL PROTEIN L29

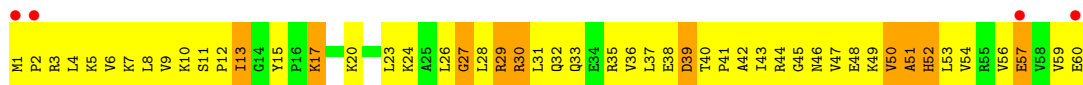


- Molecule 28: 50S RIBOSOMAL PROTEIN L29





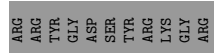
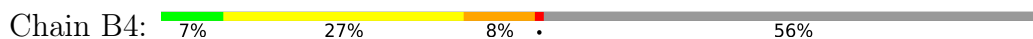
• Molecule 29: 50S RIBOSOMAL PROTEIN L30



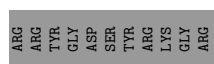
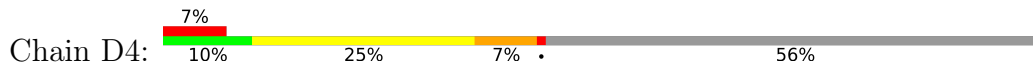
• Molecule 29: 50S RIBOSOMAL PROTEIN L30



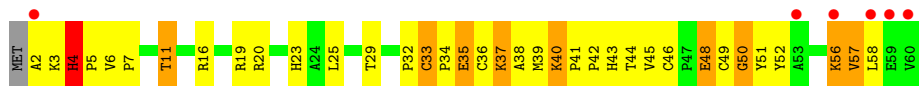
• Molecule 30: 50S RIBOSOMAL PROTEIN L31



• Molecule 30: 50S RIBOSOMAL PROTEIN L31

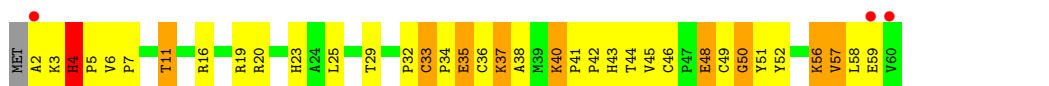


• Molecule 31: 50S RIBOSOMAL PROTEIN L32

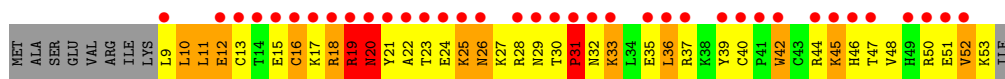


• Molecule 31: 50S RIBOSOMAL PROTEIN L32

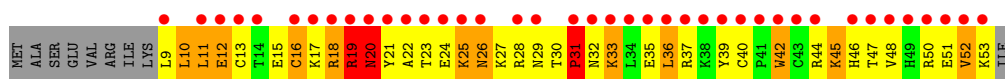
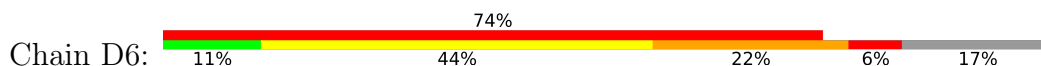




• Molecule 32: 50S RIBOSOMAL PROTEIN L33



• Molecule 32: 50S RIBOSOMAL PROTEIN L33



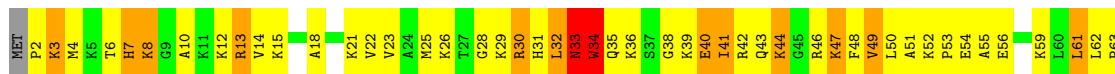
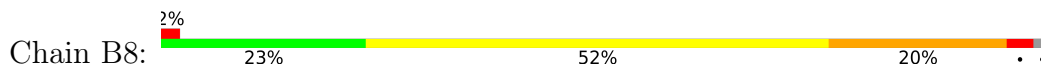
• Molecule 33: 50S RIBOSOMAL PROTEIN L34



• Molecule 33: 50S RIBOSOMAL PROTEIN L34



• Molecule 34: 50S RIBOSOMAL PROTEIN L35

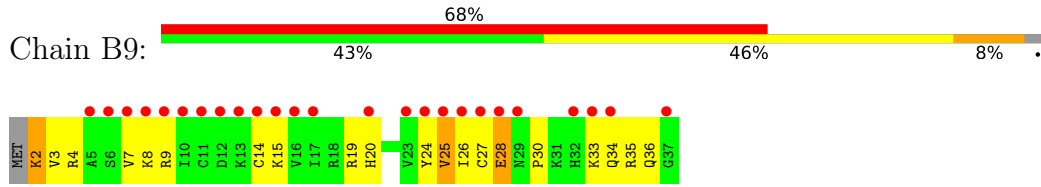


• Molecule 34: 50S RIBOSOMAL PROTEIN L35

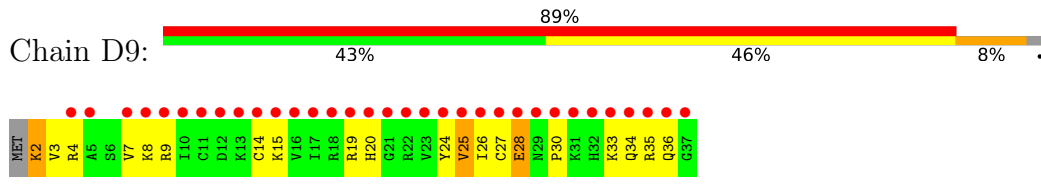


E65

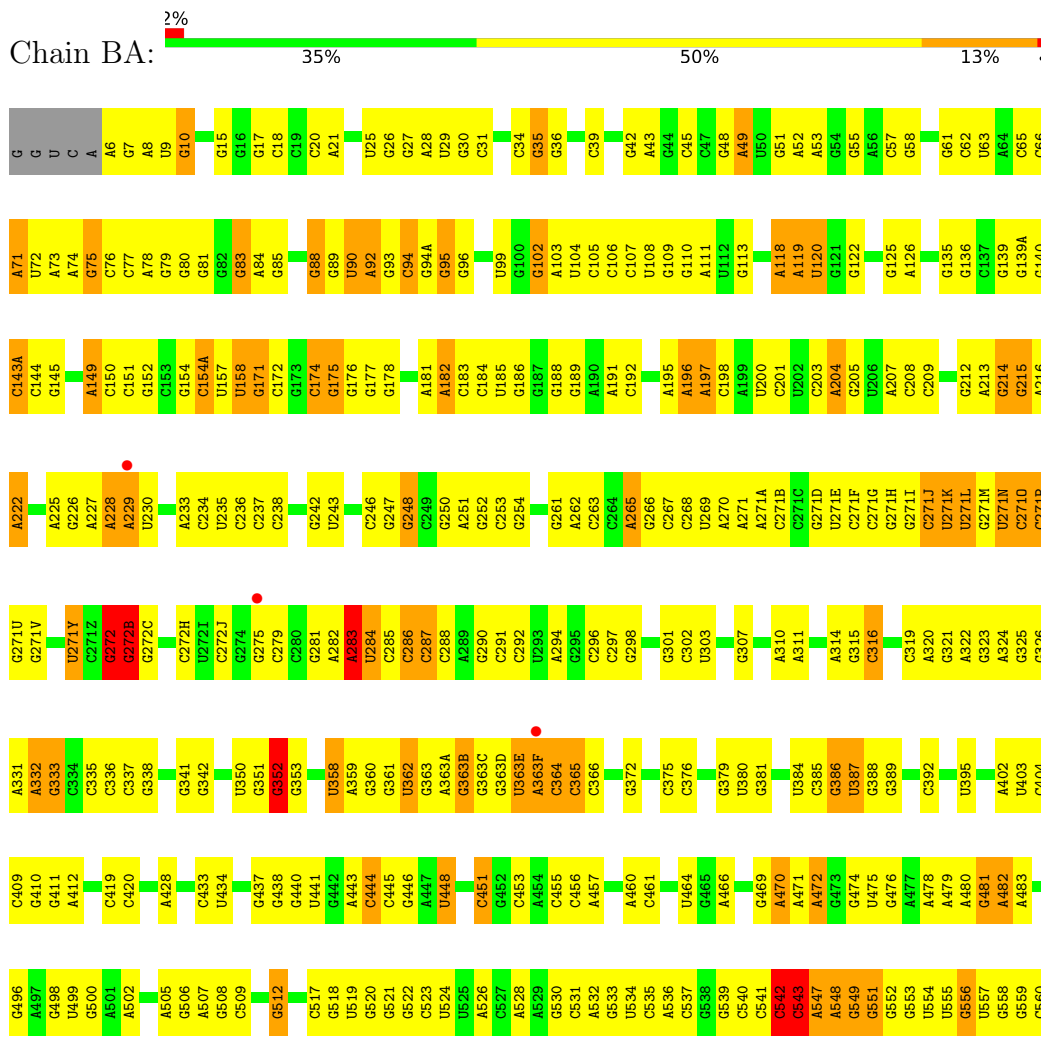
● Molecule 35: 50S RIBOSOMAL PROTEIN L36

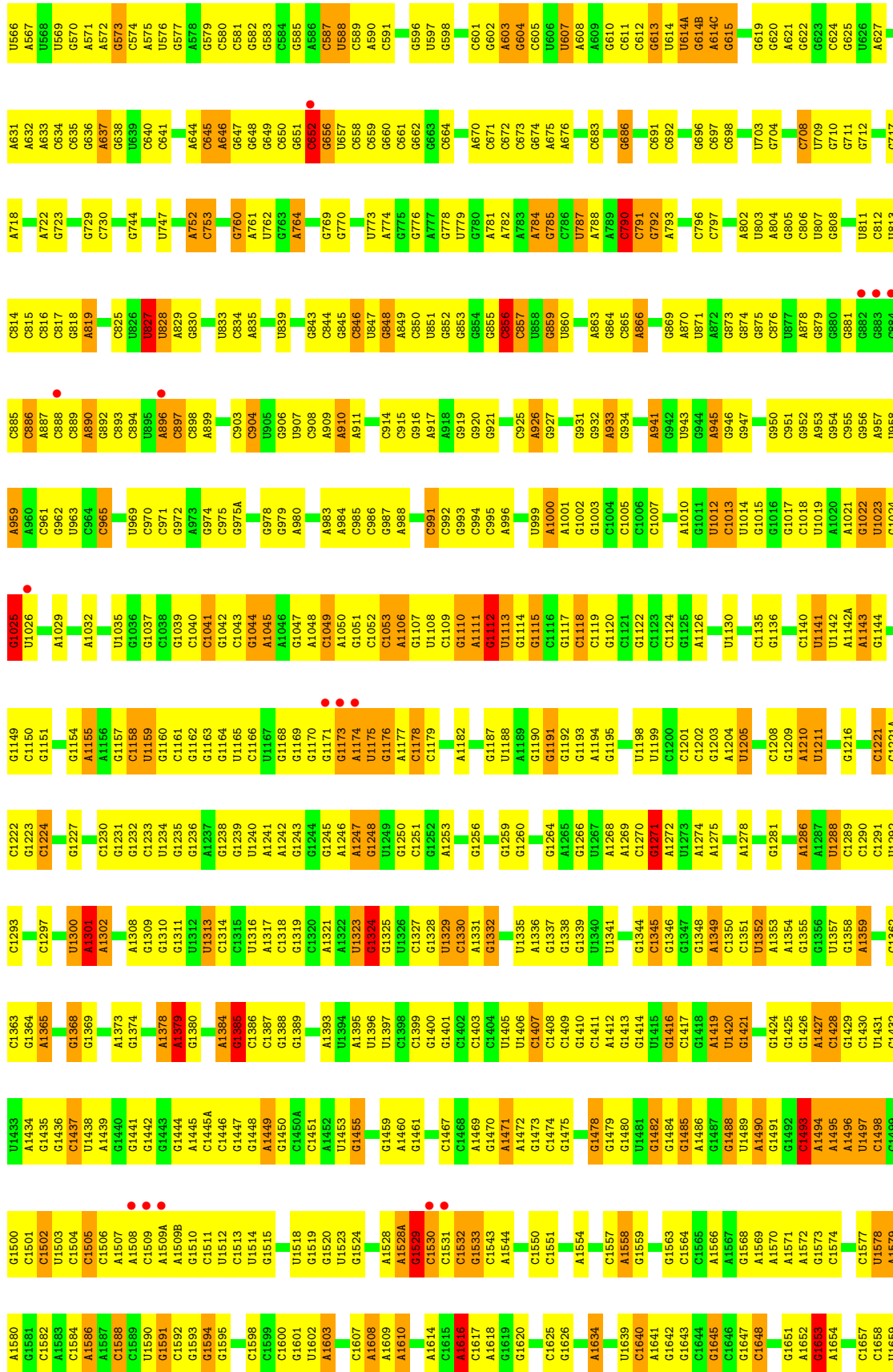


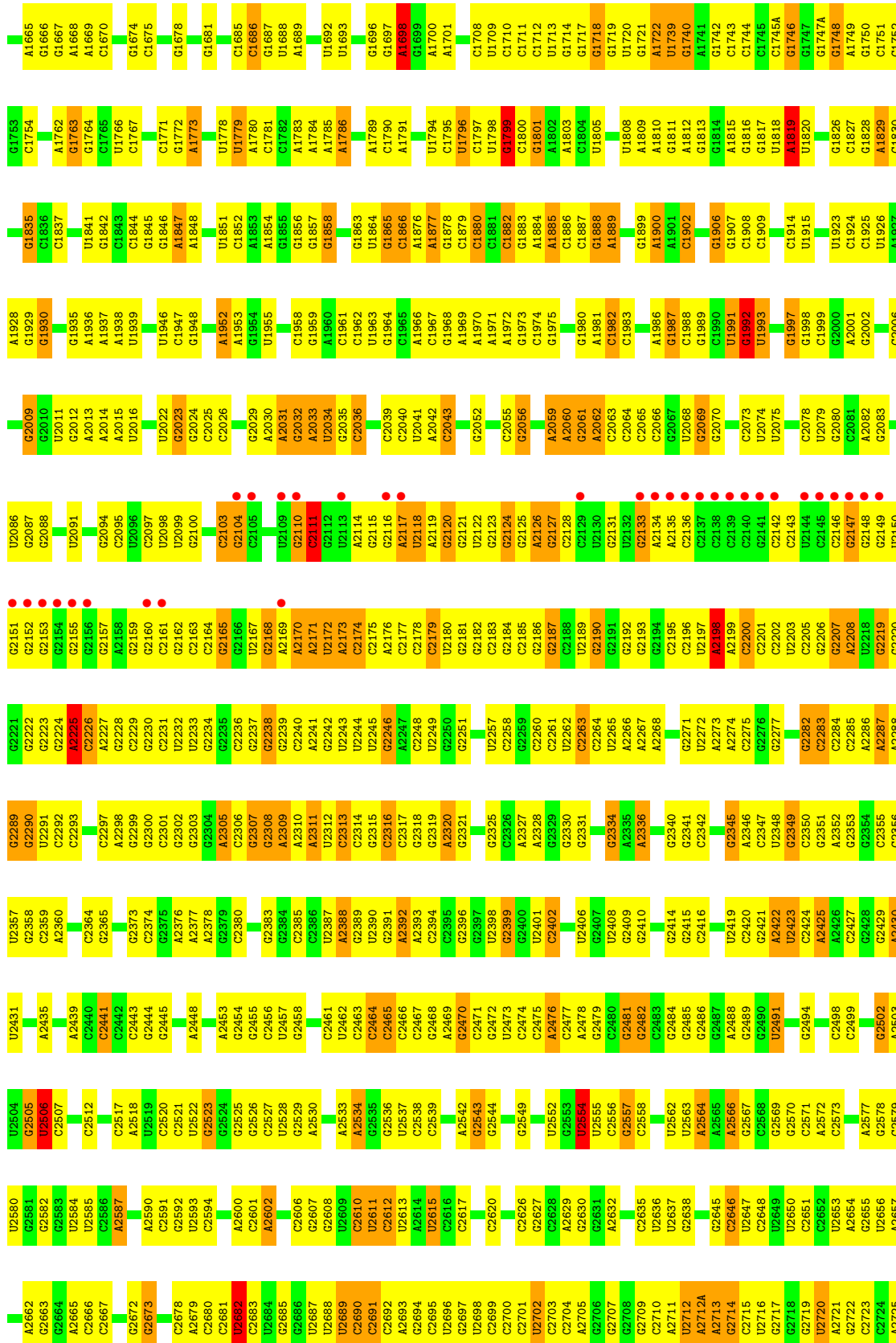
● Molecule 35: 50S RIBOSOMAL PROTEIN L36



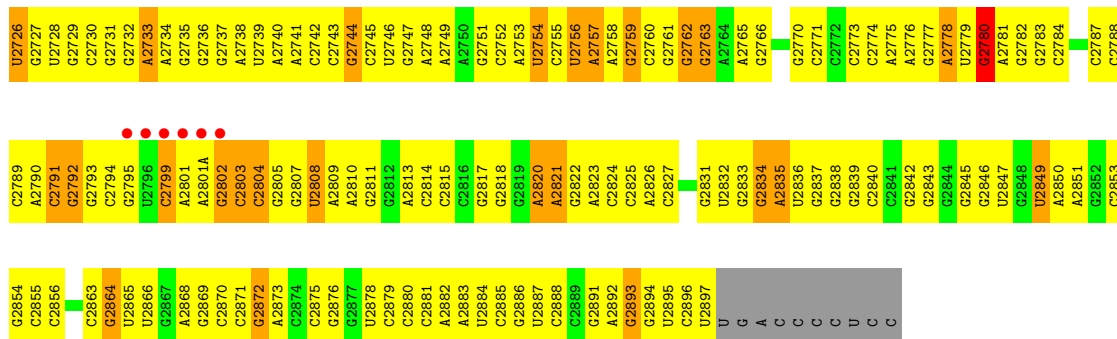
● Molecule 36: 23S Ribosomal RNA



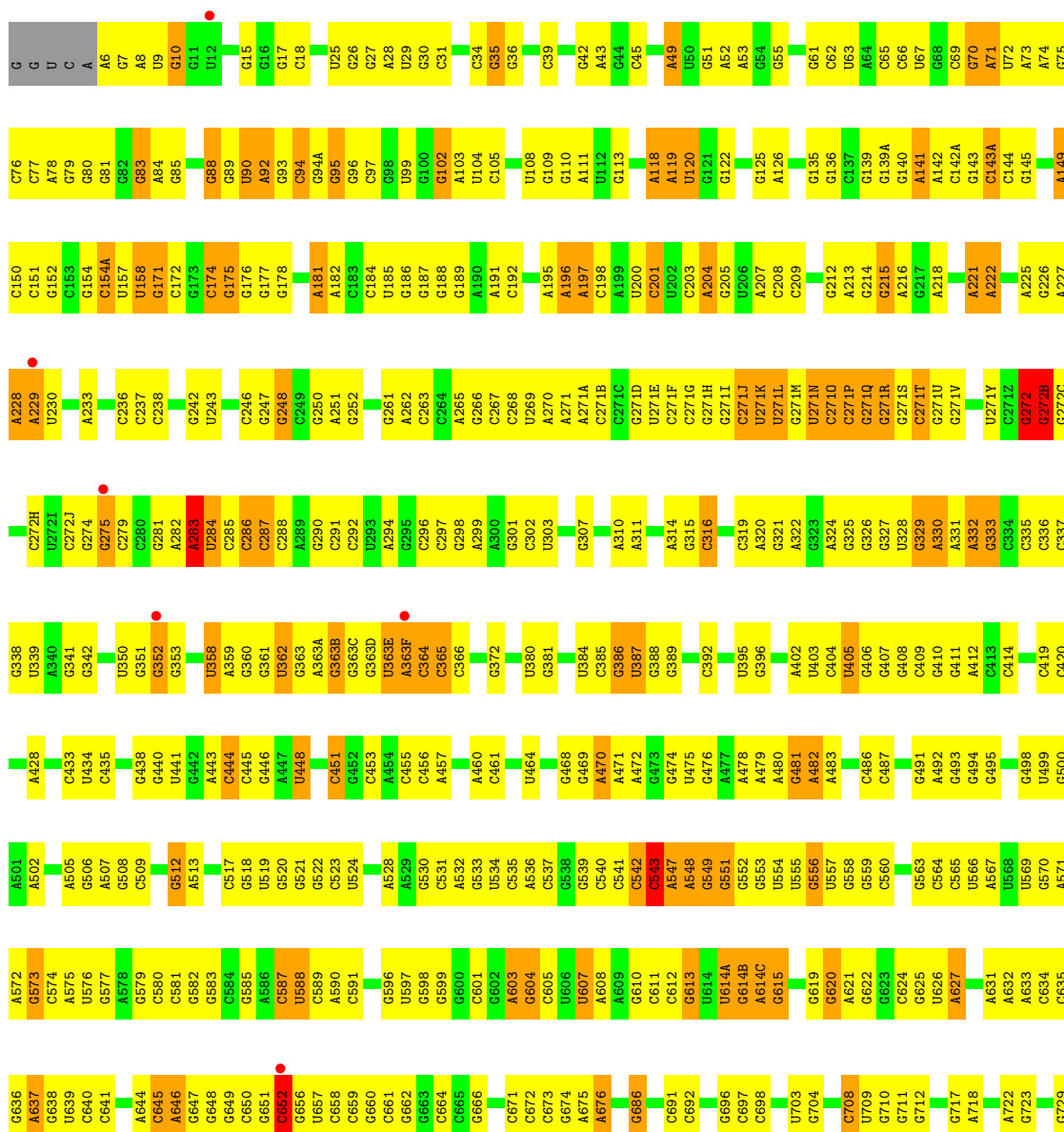


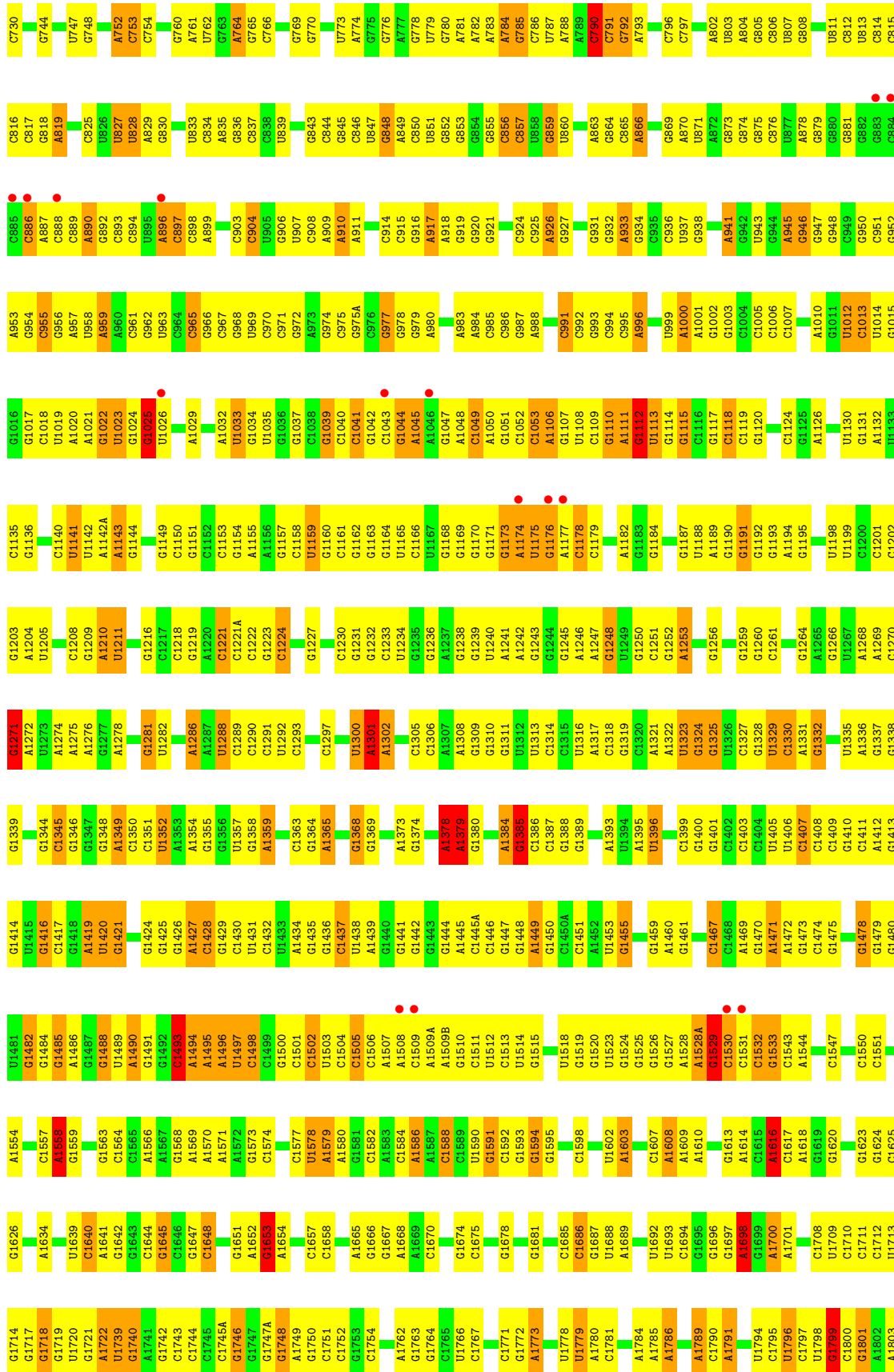


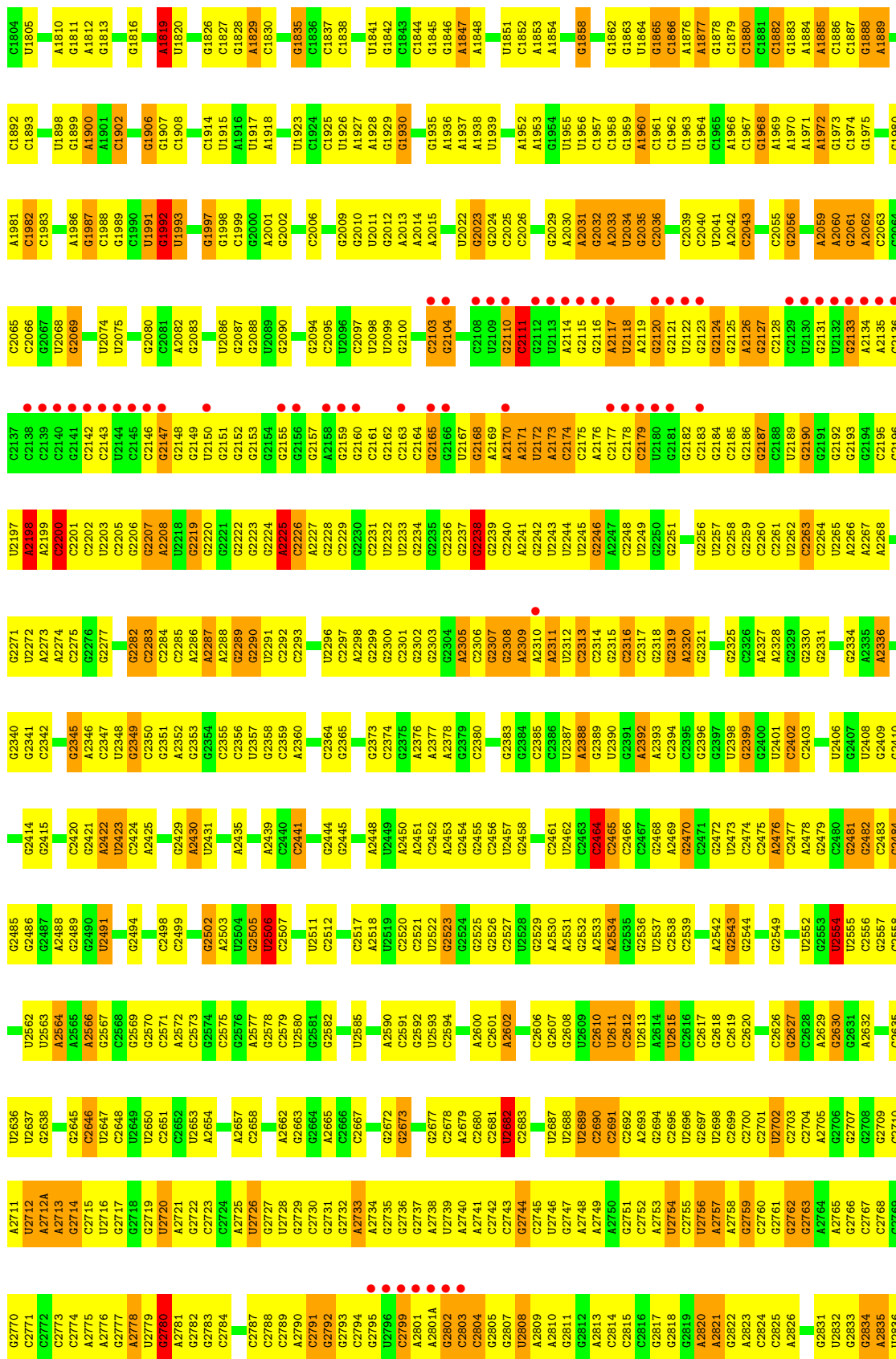


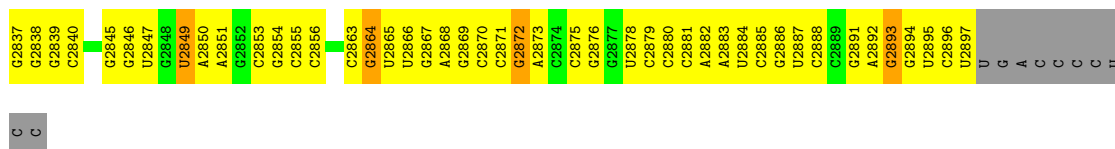


### • Molecule 36: 23S Ribosomal RNA

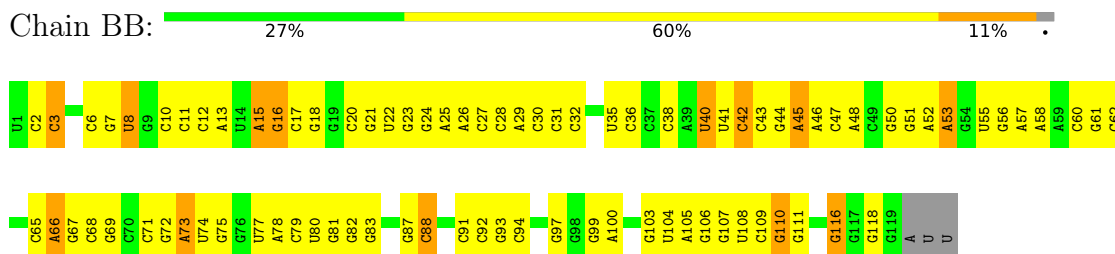




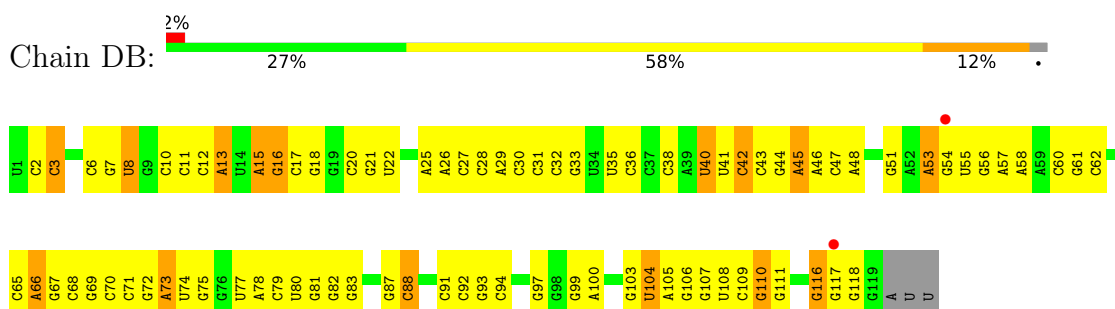




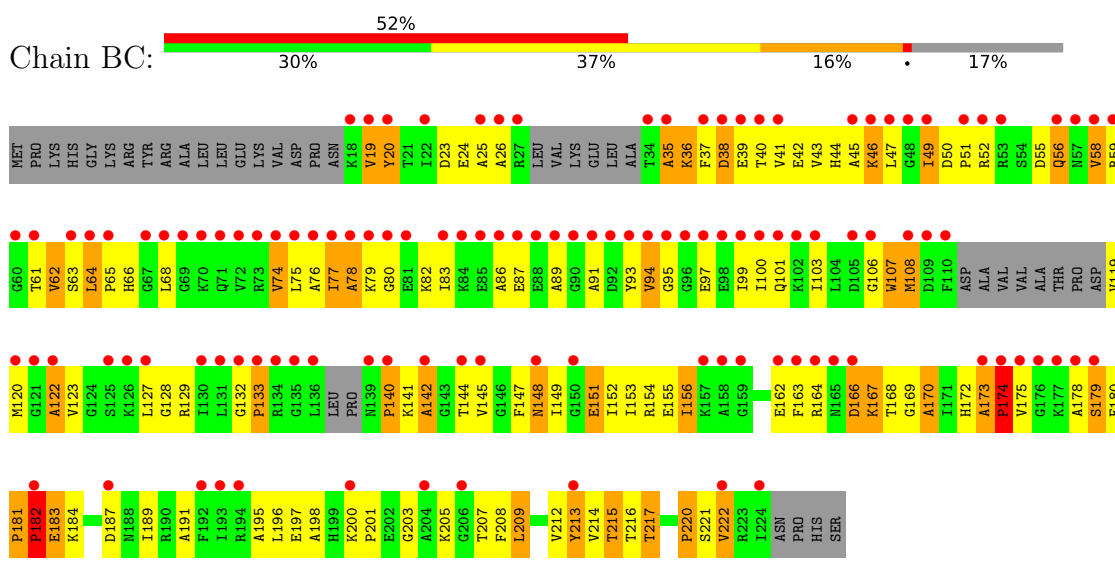
• Molecule 37: 5S RIBOSOMAL RNA



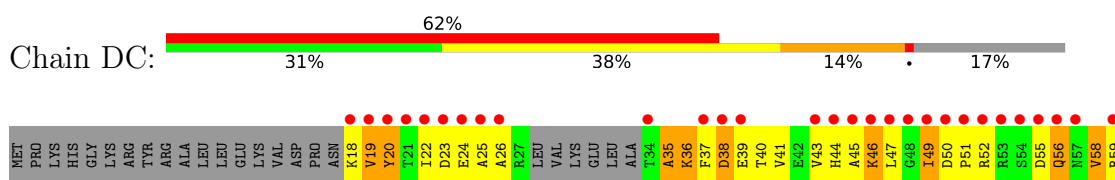
• Molecule 37: 5S RIBOSOMAL RNA

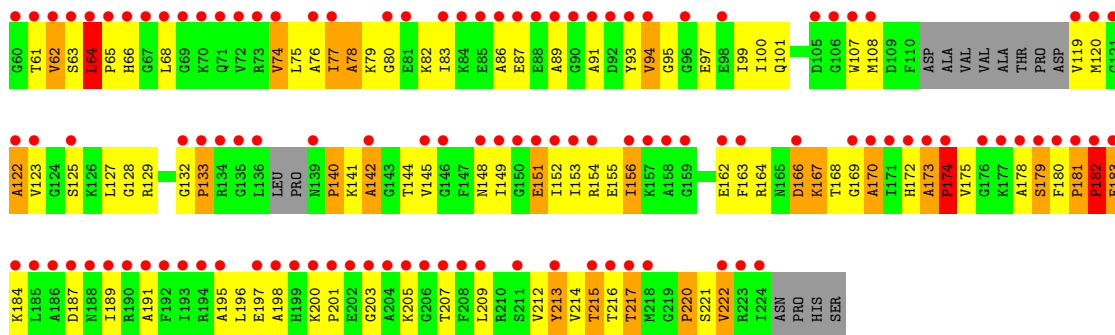


• Molecule 38: 50S RIBOSOMAL PROTEIN L1

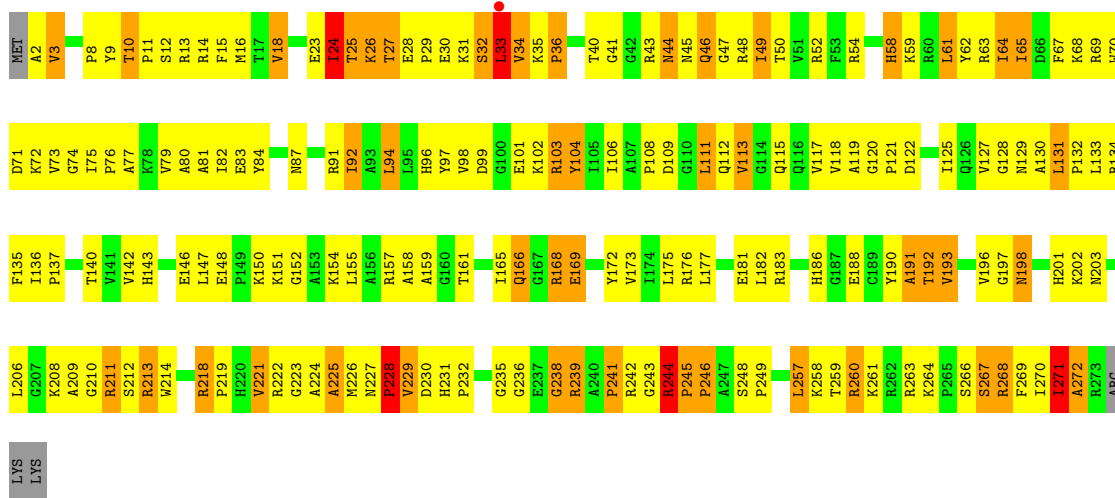


• Molecule 38: 50S RIBOSOMAL PROTEIN L1

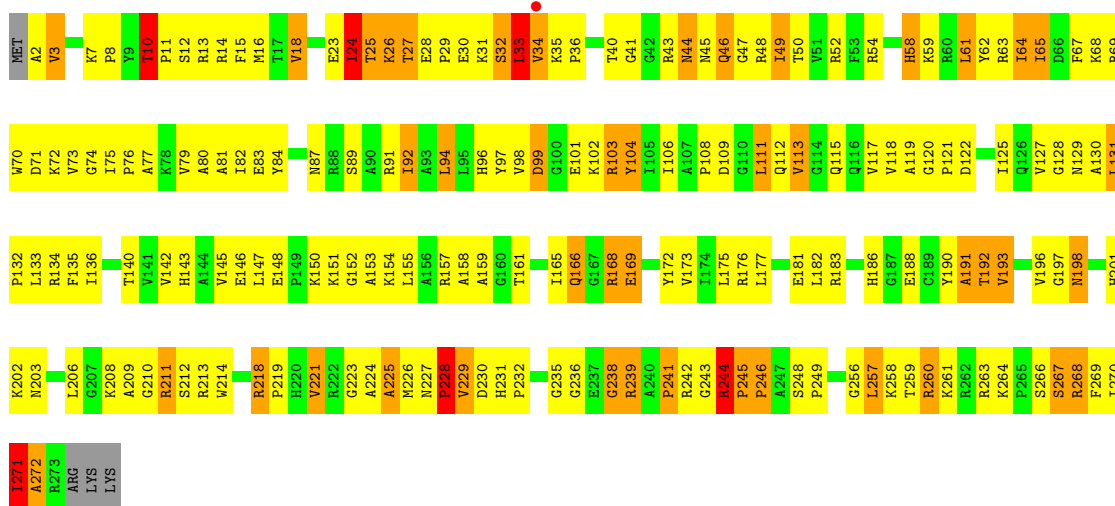




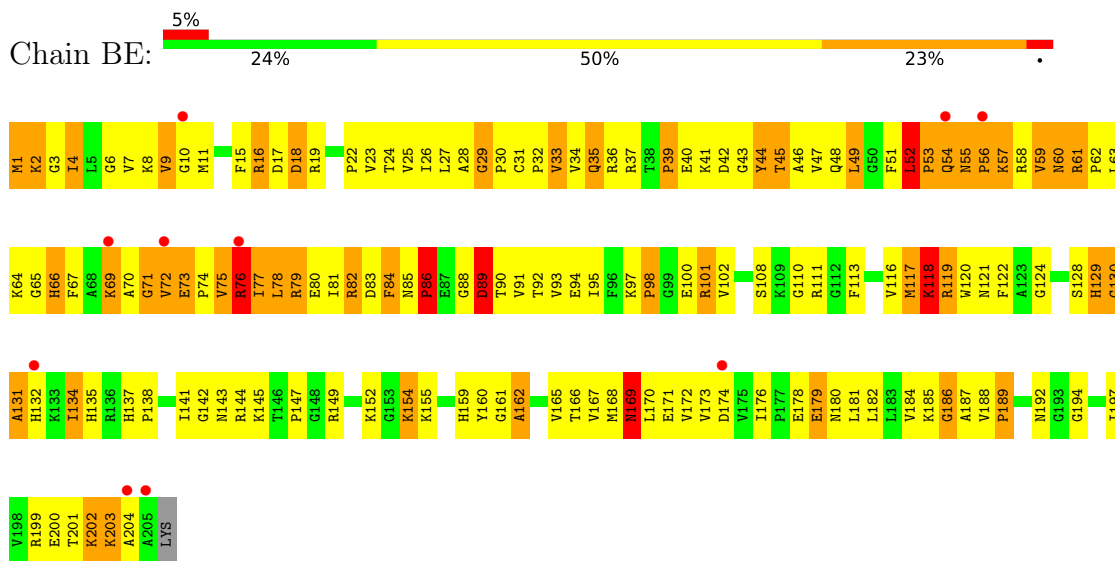
• Molecule 39: 50S RIBOSOMAL PROTEIN L2



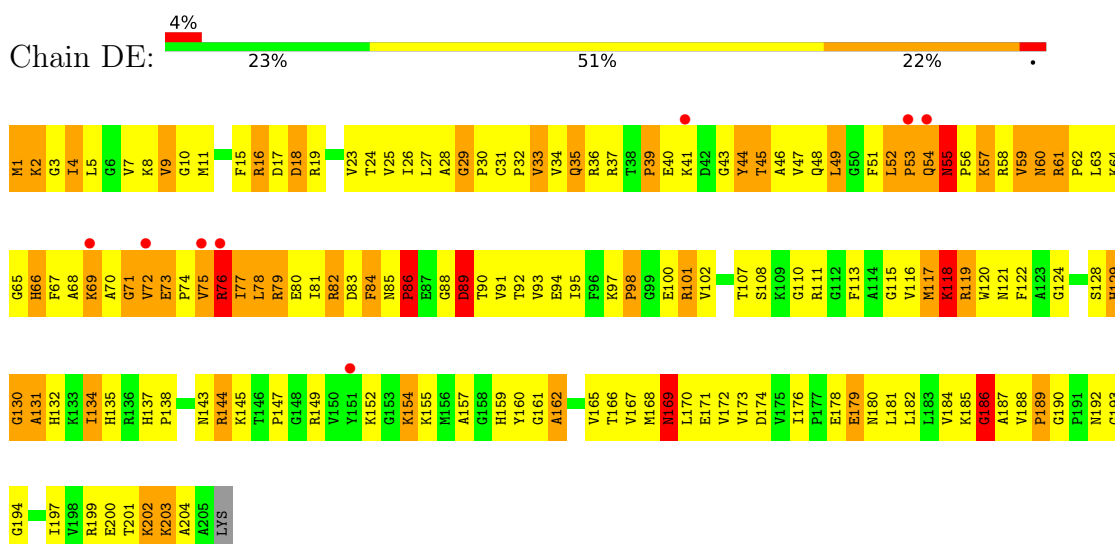
• Molecule 39: 50S RIBOSOMAL PROTEIN L2



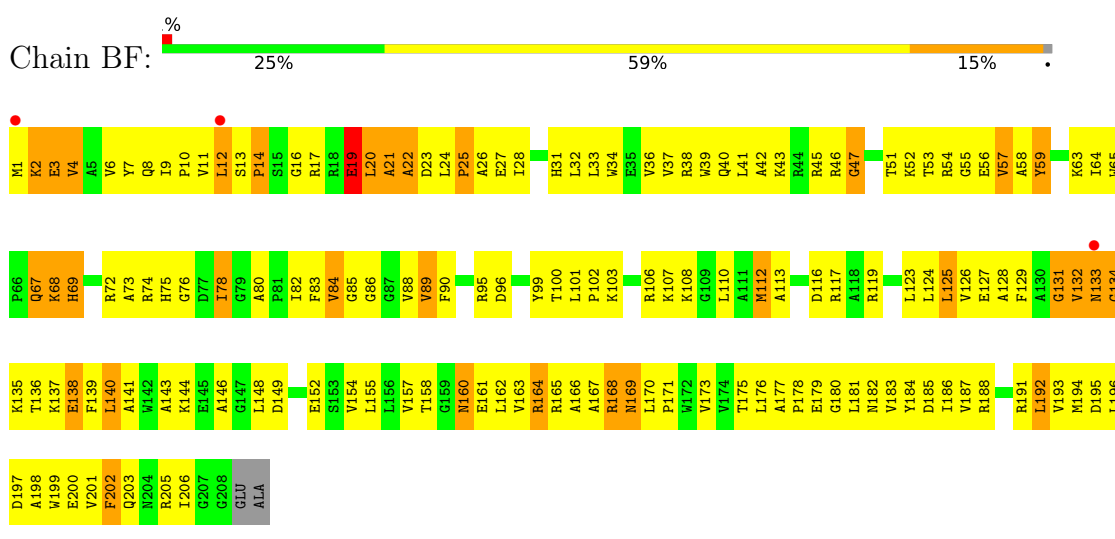
• Molecule 40: 50S RIBOSOMAL PROTEIN L3



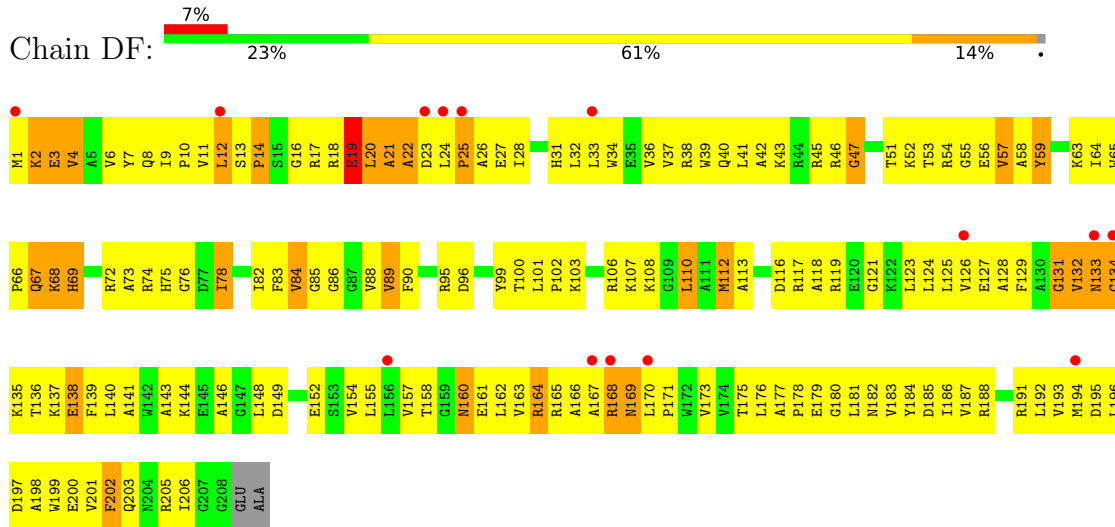
• Molecule 40: 50S RIBOSOMAL PROTEIN L3



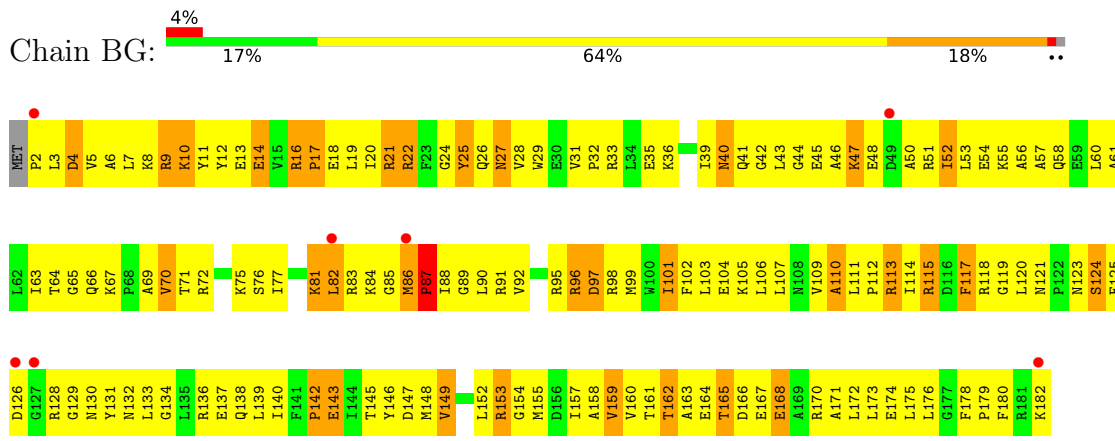
• Molecule 41: 50S RIBOSOMAL PROTEIN L4



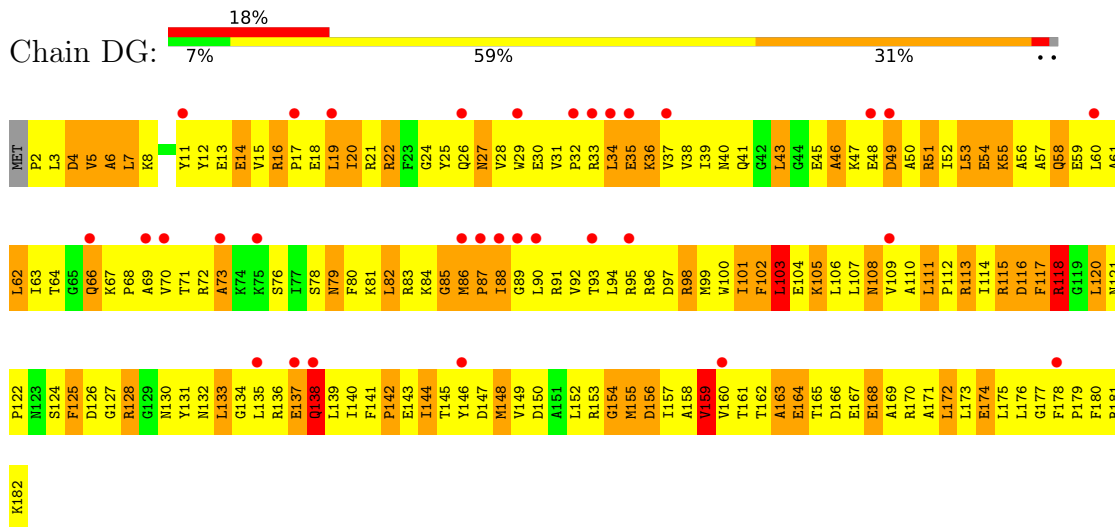
● Molecule 41: 50S RIBOSOMAL PROTEIN L4



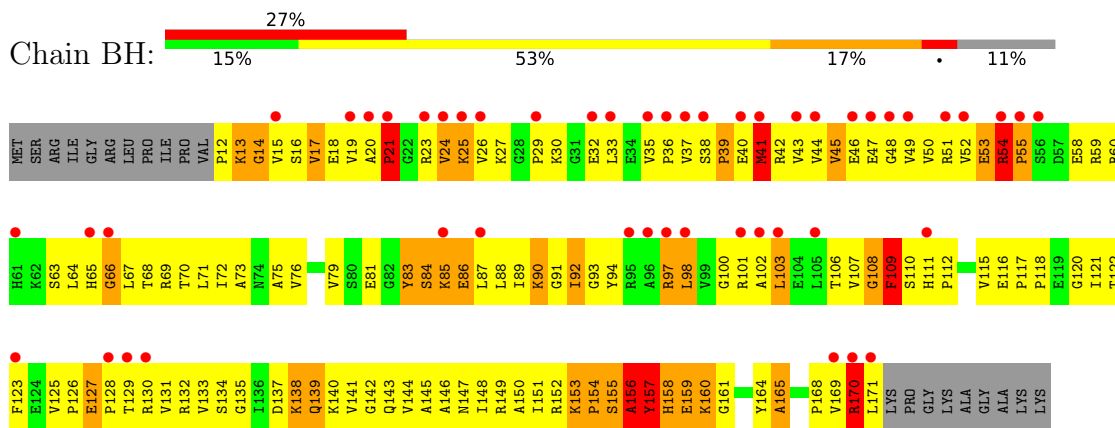
● Molecule 42: 50S RIBOSOMAL PROTEIN L5



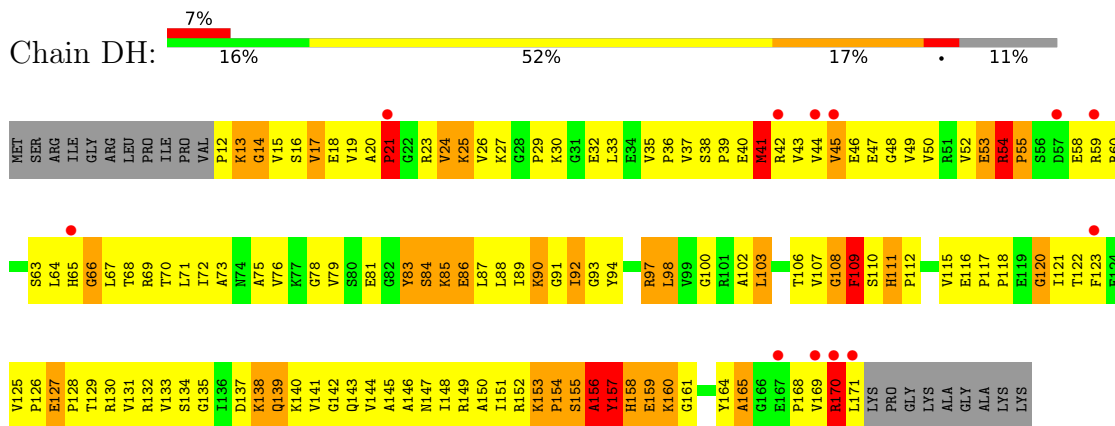
● Molecule 42: 50S RIBOSOMAL PROTEIN L5



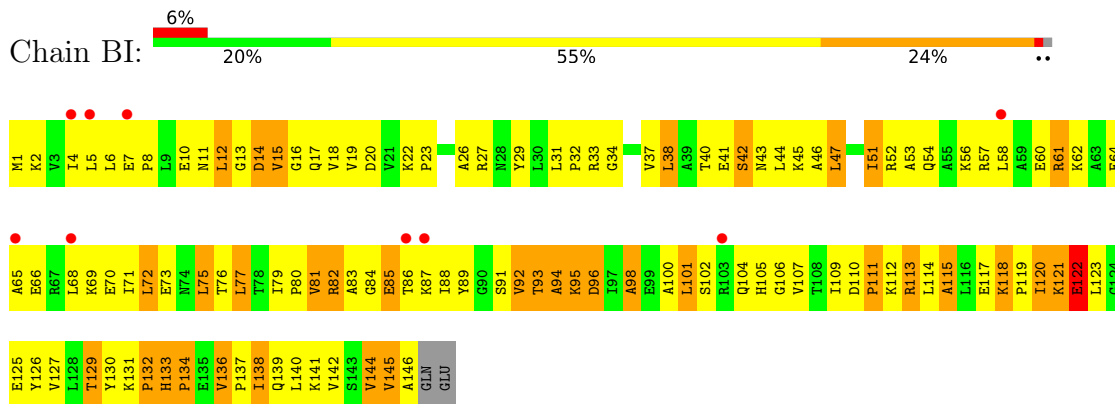
● Molecule 43: 50S RIBOSOMAL PROTEIN L6



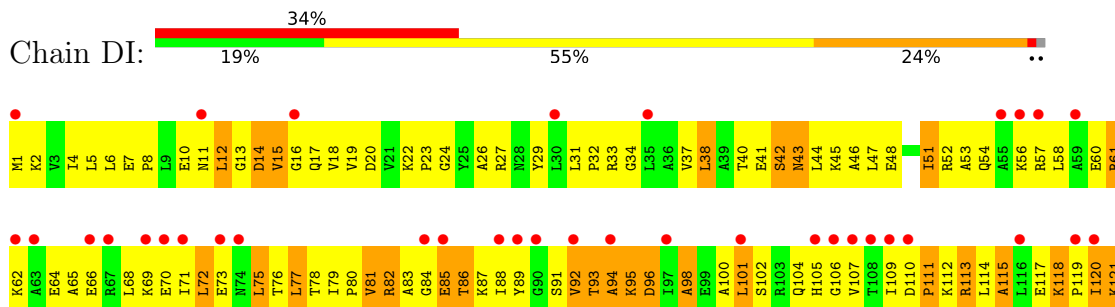
• Molecule 43: 50S RIBOSOMAL PROTEIN L6



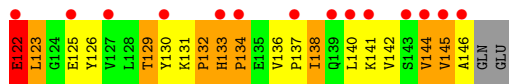
• Molecule 44: 50S RIBOSOMAL PROTEIN L9



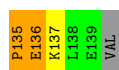
• Molecule 44: 50S RIBOSOMAL PROTEIN L9







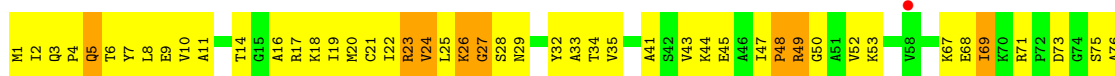
• Molecule 45: 50S RIBOSOMAL PROTEIN L13



• Molecule 45: 50S RIBOSOMAL PROTEIN L13



• Molecule 46: 50S RIBOSOMAL PROTEIN L14

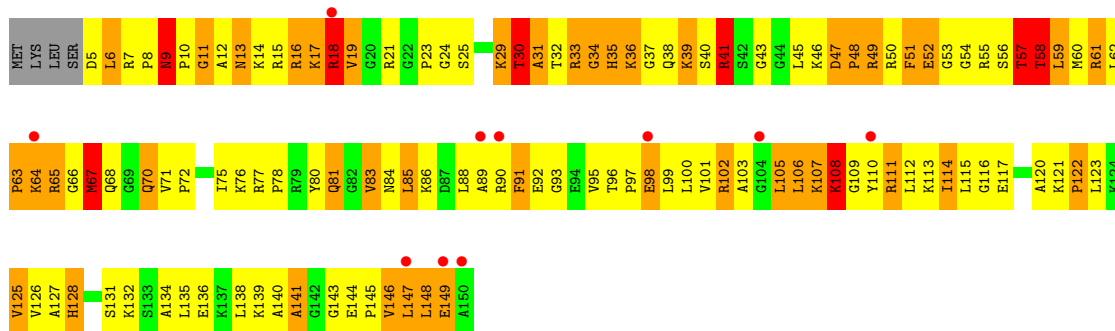


• Molecule 46: 50S RIBOSOMAL PROTEIN L14



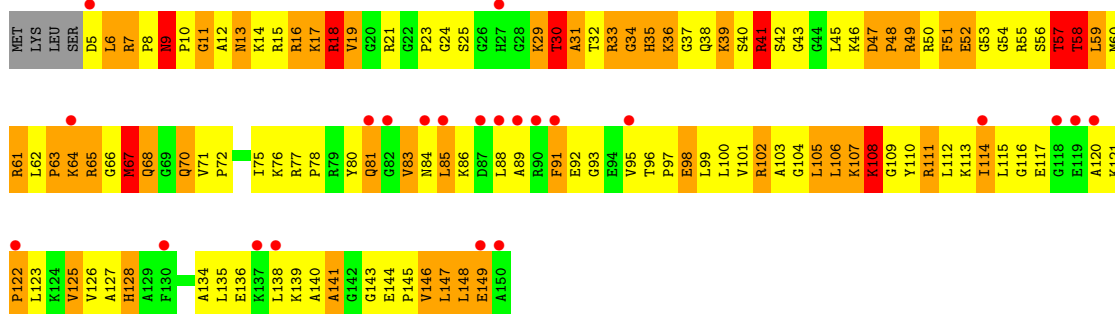
- Molecule 47: 50S RIBOSOMAL PROTEIN L15

Chain BP: 7% 16% 47% 29% 5%



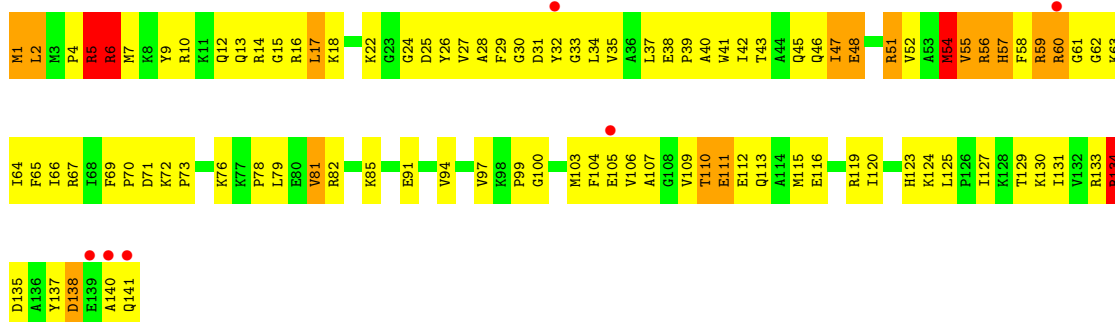
- Molecule 47: 50S RIBOSOMAL PROTEIN L15

Chain DP: 15% 17% 45% 30% 5%



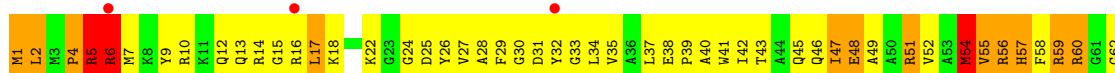
- Molecule 48: 50S RIBOSOMAL PROTEIN L16

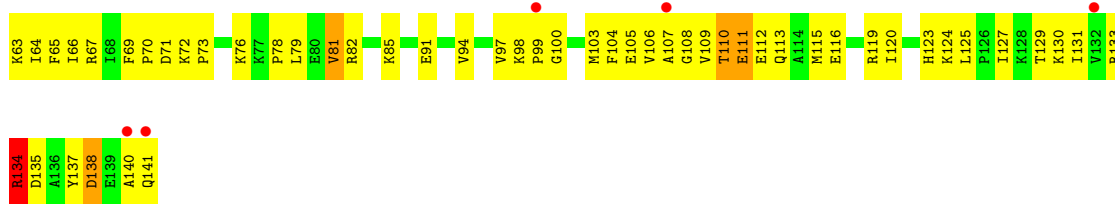
Chain BQ: 4% 30% 57% 11%



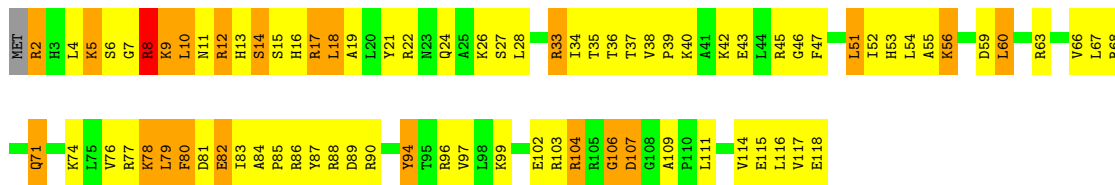
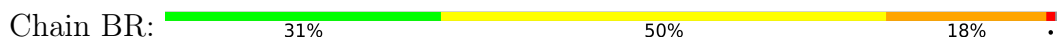
- Molecule 48: 50S RIBOSOMAL PROTEIN L16

Chain DQ: 6% 28% 57% 11%

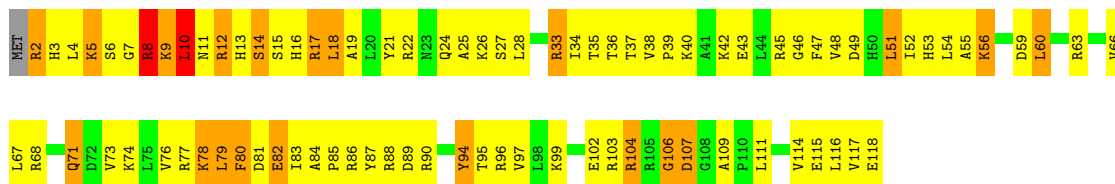




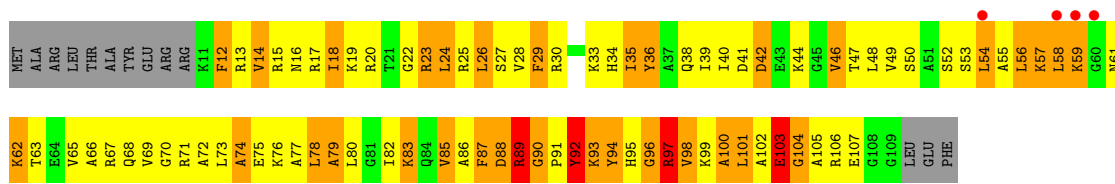
• Molecule 49: 50S RIBOSOMAL PROTEIN L17



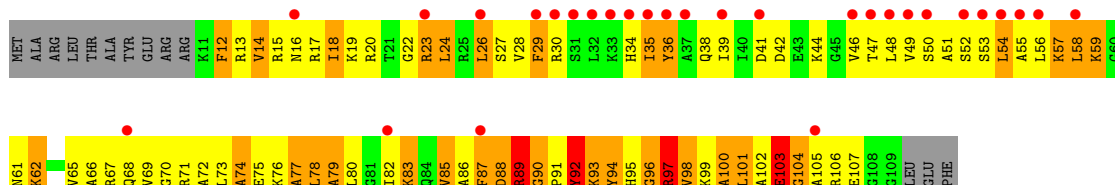
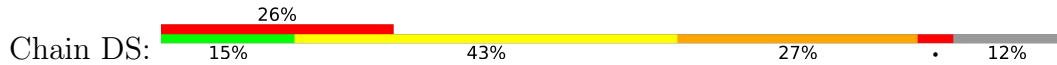
• Molecule 49: 50S RIBOSOMAL PROTEIN L17



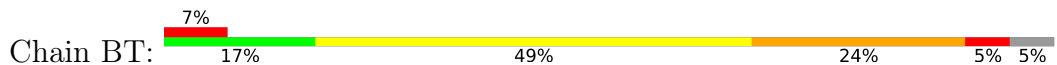
• Molecule 50: 50S RIBOSOMAL PROTEIN L18

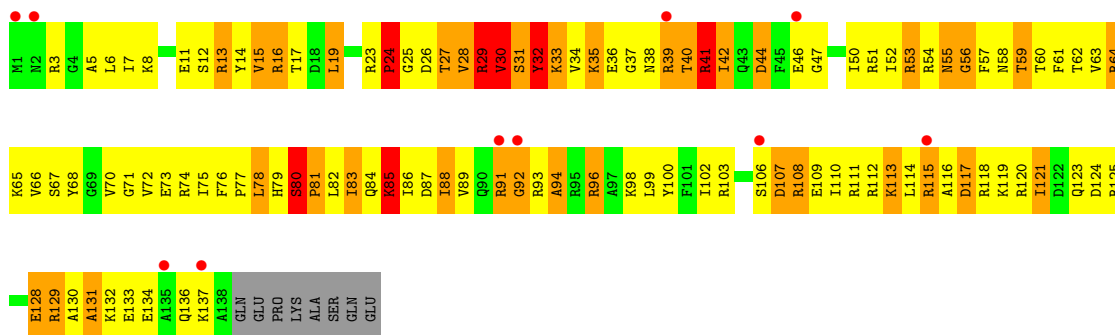


• Molecule 50: 50S RIBOSOMAL PROTEIN L18

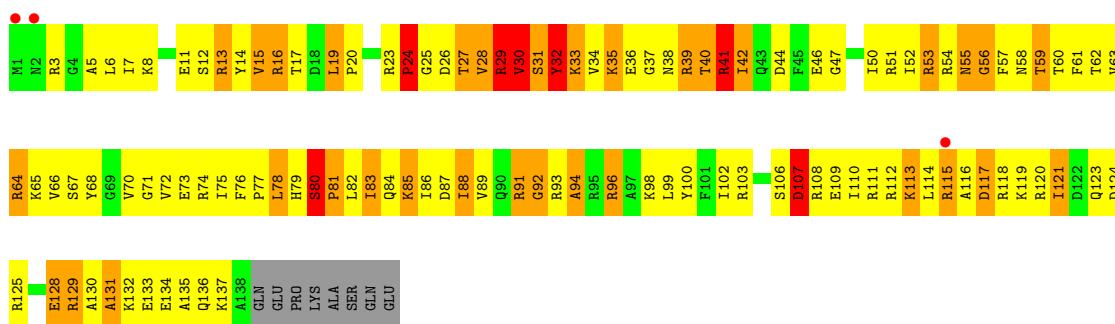
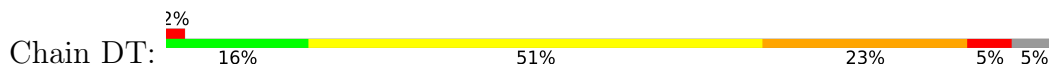


• Molecule 51: 50S RIBOSOMAL PROTEIN L19

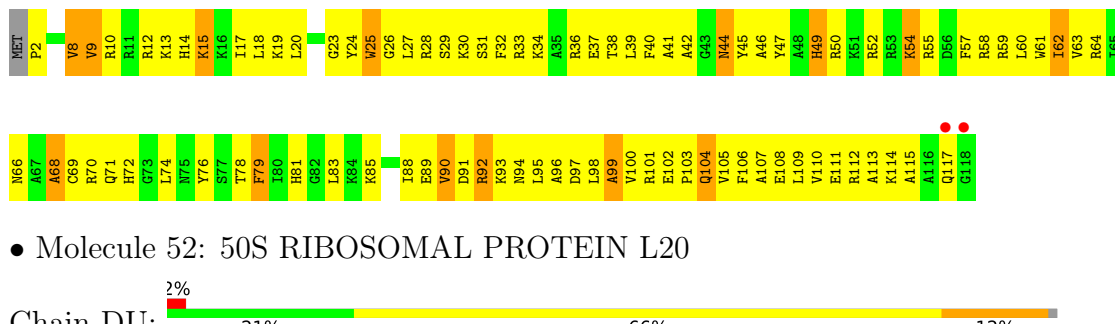




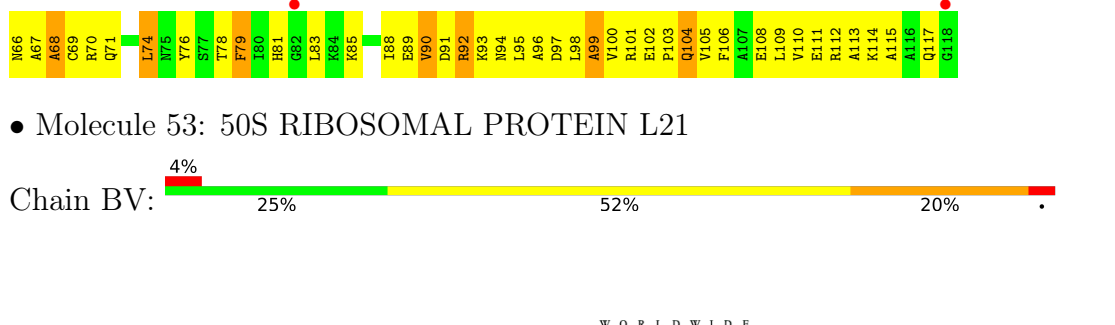
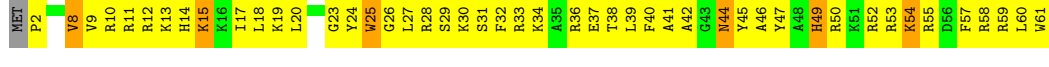
• Molecule 51: 50S RIBOSOMAL PROTEIN L19



• Molecule 52: 50S RIBOSOMAL PROTEIN L20

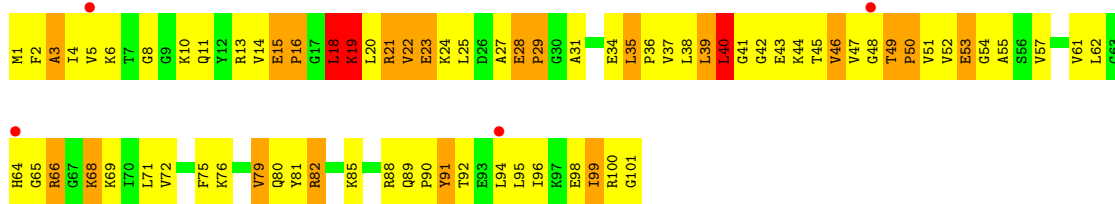


• Molecule 52: 50S RIBOSOMAL PROTEIN L20

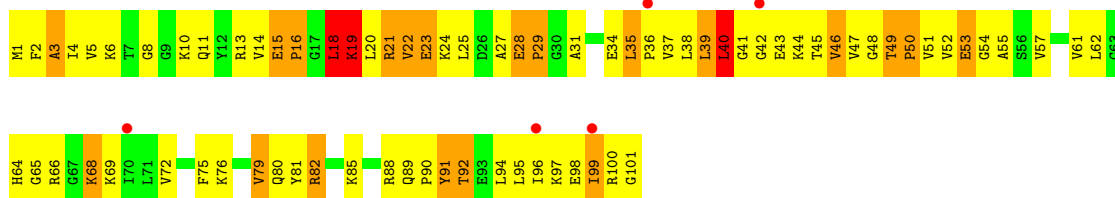


• Molecule 53: 50S RIBOSOMAL PROTEIN L21

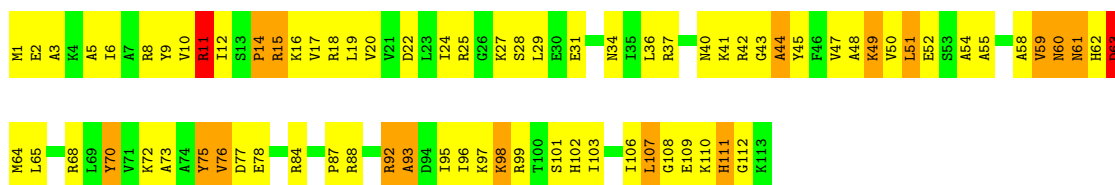




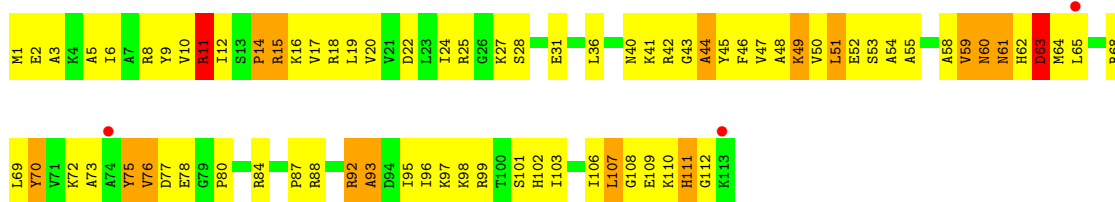
● Molecule 53: 50S RIBOSOMAL PROTEIN L21



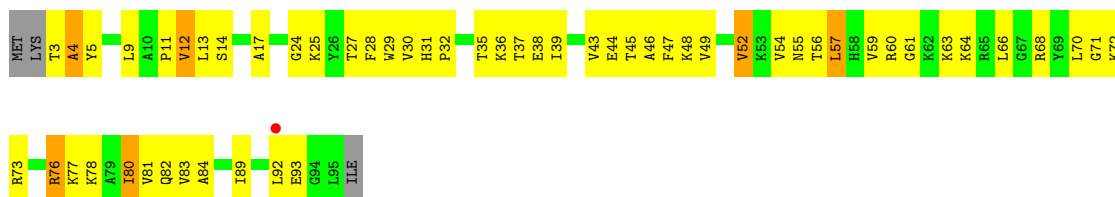
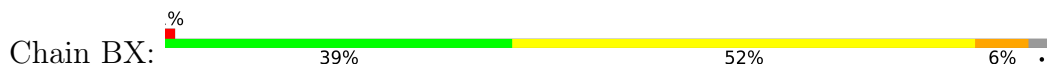
● Molecule 54: 50S RIBOSOMAL PROTEIN L22



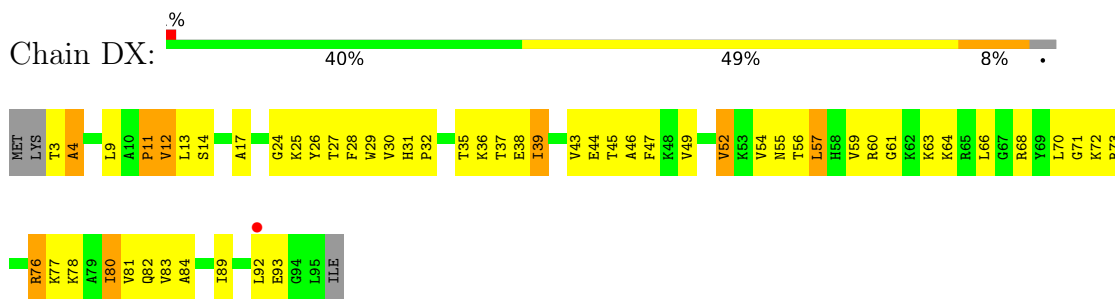
● Molecule 54: 50S RIBOSOMAL PROTEIN L22



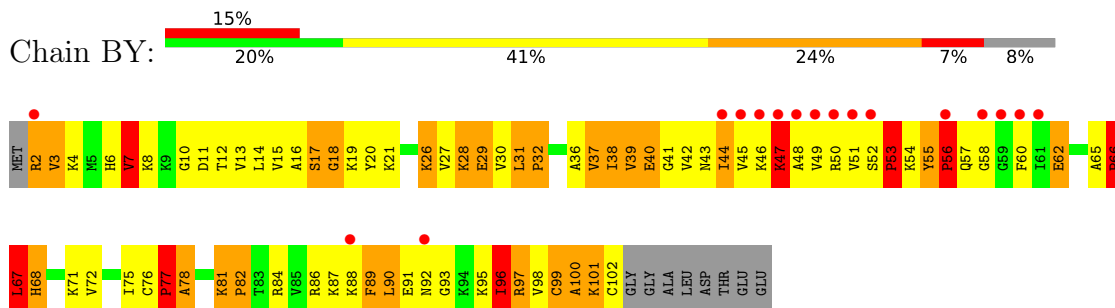
● Molecule 55: 50S RIBOSOMAL PROTEIN L23



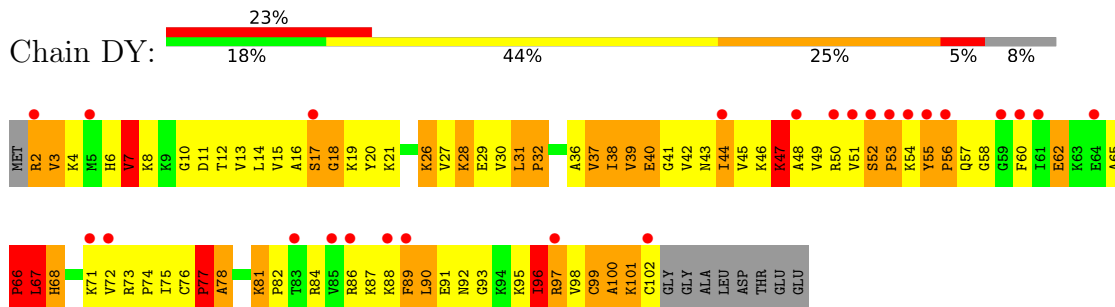
● Molecule 55: 50S RIBOSOMAL PROTEIN L23



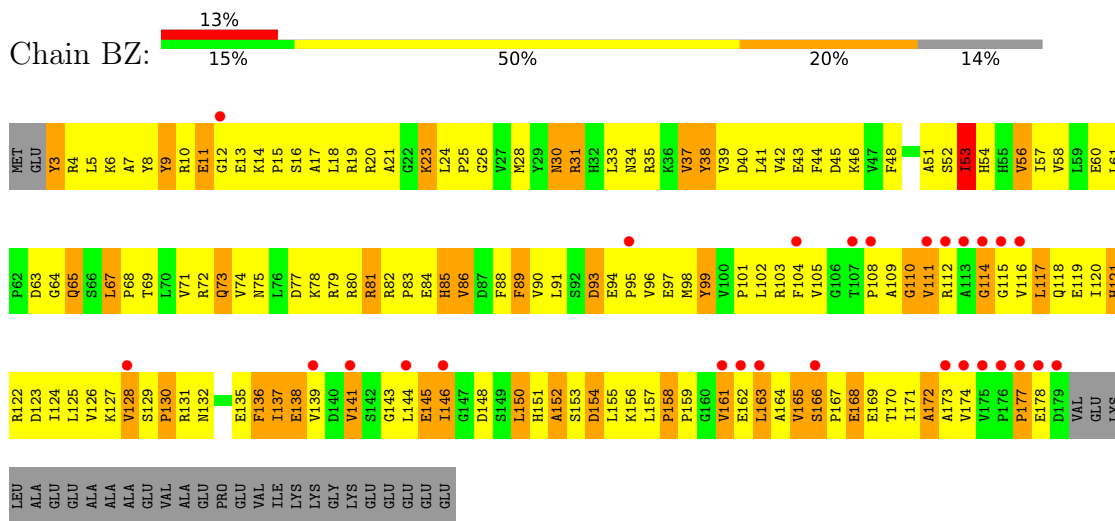
- Molecule 56: 50S RIBOSOMAL PROTEIN L24



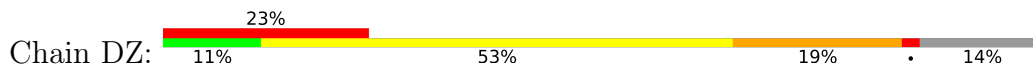
- Molecule 56: 50S RIBOSOMAL PROTEIN L24

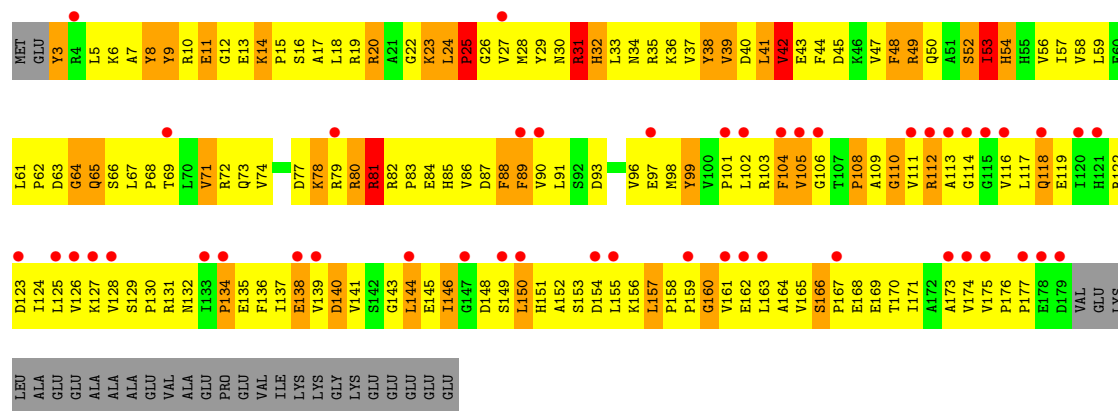


- Molecule 57: 50S RIBOSOMAL PROTEIN L25



- Molecule 57: 50S RIBOSOMAL PROTEIN L25





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	212.13Å 450.80Å 629.62Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.30 49.99 – 3.01	Depositor EDS
% Data completeness (in resolution range)	99.4 (50.00-3.30) 98.2 (49.99-3.01)	Depositor EDS
$R_{merge}$	0.15	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.27 (at 3.01Å)	Xtrriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.223 , 0.272 0.224 , 0.272	Depositor DCC
$R_{free}$ test set	54674 reflections (4.71%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	78.6	Xtrriage
Anisotropy	0.163	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 111.4	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.26$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	296168	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	112.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.40% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.



## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: PAR, ZN, MG, 5MU, 8AN, PHA

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	AA	0.45	0/36190	0.70	18/56486 (0.0%)
1	CA	0.43	0/36190	0.70	14/56486 (0.0%)
2	AB	0.34	0/1936	0.62	0/2611
2	CB	0.34	0/1936	0.61	0/2611
3	AC	0.35	0/1637	0.60	0/2207
3	CC	0.34	0/1637	0.59	0/2207
4	AD	0.39	0/1733	0.66	0/2318
4	CD	0.37	0/1733	0.65	0/2318
5	AE	0.39	0/1163	0.66	0/1566
5	CE	0.38	0/1163	0.65	0/1566
6	AF	0.36	0/856	0.65	0/1154
6	CF	0.35	0/856	0.65	0/1154
7	AG	0.34	0/1276	0.57	0/1709
7	CG	0.33	0/1276	0.57	0/1709
8	AH	0.34	0/1136	0.64	0/1527
8	CH	0.34	0/1136	0.64	0/1527
9	AI	0.33	0/1027	0.60	0/1372
9	CI	0.34	0/1027	0.60	0/1372
10	AJ	0.38	0/808	0.64	0/1087
10	CJ	0.37	0/808	0.64	0/1087
11	AK	0.36	0/900	0.66	0/1213
11	CK	0.36	0/900	0.66	0/1213
12	AL	0.43	0/987	0.76	0/1322
12	CL	0.43	0/987	0.76	0/1322
13	AM	0.35	0/994	0.67	0/1322
13	CM	0.33	0/994	0.66	0/1322
14	AN	0.37	0/501	0.63	0/664
14	CN	0.37	0/501	0.63	0/664
15	AO	0.36	0/745	0.58	0/992
15	CO	0.35	0/745	0.58	0/992
16	AP	0.38	0/717	0.65	0/965
16	CP	0.38	0/717	0.63	0/965

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AQ	0.38	0/837	0.64	0/1119
17	CQ	0.36	0/837	0.63	0/1119
18	AR	0.38	0/579	0.71	0/768
18	CR	0.39	0/579	0.70	0/768
19	AS	0.37	0/643	0.63	0/867
19	CS	0.38	0/643	0.63	0/867
20	AT	0.35	0/765	0.64	0/1007
20	CT	0.31	0/765	0.63	0/1007
21	AU	0.45	0/213	0.59	0/279
21	CU	0.45	0/213	0.59	0/279
22	AV	0.47	0/1810	0.73	2/2821 (0.1%)
22	CV	0.46	0/1810	0.72	0/2821
23	AW	0.48	0/1809	0.73	0/2819
23	CW	0.53	0/1809	0.71	0/2819
24	AX	0.54	0/235	0.78	0/364
24	CX	0.46	0/235	0.74	1/364 (0.3%)
25	AY	0.48	0/1784	0.75	0/2780
25	CY	0.46	0/1784	0.75	0/2780
26	B0	0.39	0/671	0.67	0/892
26	D0	0.39	0/671	0.67	0/892
27	B1	0.46	0/739	0.84	1/983 (0.1%)
27	D1	0.46	0/739	0.83	1/983 (0.1%)
28	B2	0.43	0/600	0.71	0/793
28	D2	0.38	0/600	0.63	0/793
29	B3	0.38	0/473	0.67	0/636
29	D3	0.38	0/473	0.66	0/636
30	B4	0.44	0/229	0.65	0/311
30	D4	0.44	0/229	0.65	0/311
31	B5	0.37	0/473	0.68	0/639
31	D5	0.38	0/473	0.70	0/639
32	B6	0.43	0/387	0.61	0/517
32	D6	0.42	0/387	0.60	0/517
33	B7	0.56	0/427	0.74	0/563
33	D7	0.58	0/427	0.74	0/563
34	B8	0.52	0/516	0.85	0/681
34	D8	0.49	0/516	0.85	0/681
35	B9	0.31	0/302	0.58	0/397
35	D9	0.33	0/302	0.58	0/397
36	BA	0.53	3/67716 (0.0%)	0.75	39/105718 (0.0%)
36	DA	0.55	3/67716 (0.0%)	0.75	42/105718 (0.0%)
37	BB	0.40	0/2853	0.71	1/4451 (0.0%)
37	DB	0.44	0/2853	0.71	1/4451 (0.0%)
38	BC	0.37	0/1145	0.67	7/1556 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	DC	0.38	0/1145	0.67	7/1556 (0.4%)
39	BD	0.53	0/2155	0.84	1/2907 (0.0%)
39	DD	0.54	0/2155	0.84	1/2907 (0.0%)
40	BE	0.44	0/1597	0.76	1/2155 (0.0%)
40	DE	0.46	0/1597	0.77	1/2155 (0.0%)
41	BF	0.45	0/1659	0.73	0/2246
41	DF	0.44	0/1659	0.73	0/2246
42	BG	0.41	0/1498	0.74	1/2013 (0.0%)
42	DG	0.37	0/1498	0.78	2/2013 (0.1%)
43	BH	0.37	0/1246	0.70	2/1684 (0.1%)
43	DH	0.40	0/1246	0.72	2/1684 (0.1%)
44	BI	0.37	0/1147	0.70	0/1553
44	DI	0.44	0/1147	0.71	0/1553
45	BN	0.39	0/1132	0.75	1/1527 (0.1%)
45	DN	0.41	0/1132	0.75	1/1527 (0.1%)
46	BO	0.41	0/943	0.72	0/1269
46	DO	0.46	0/943	0.74	0/1269
47	BP	0.50	0/1131	0.98	7/1504 (0.5%)
47	DP	0.46	0/1131	0.96	6/1504 (0.4%)
48	BQ	0.40	0/1143	0.69	0/1527
48	DQ	0.41	0/1143	0.70	0/1527
49	BR	0.39	0/974	0.76	0/1302
49	DR	0.42	0/974	0.78	1/1302 (0.1%)
50	BS	0.41	0/779	0.72	0/1038
50	DS	0.39	0/779	0.71	0/1038
51	BT	0.46	0/1156	0.83	2/1544 (0.1%)
51	DT	0.46	0/1156	0.82	3/1544 (0.2%)
52	BU	0.40	0/975	0.71	0/1297
52	DU	0.42	0/975	0.72	0/1297
53	BV	0.39	0/790	0.72	0/1057
53	DV	0.38	0/790	0.73	0/1057
54	BW	0.41	0/907	0.70	0/1216
54	DW	0.40	0/907	0.70	0/1216
55	BX	0.49	0/740	0.72	0/995
55	DX	0.48	0/740	0.72	0/995
56	BY	0.50	0/789	0.81	0/1053
56	DY	0.48	0/789	0.80	0/1053
57	BZ	0.39	0/1436	0.67	0/1951
57	DZ	0.39	0/1436	0.68	0/1951
All	All	0.48	6/320018 (0.0%)	0.72	166/478628 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected

by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	0	18
1	CA	0	19
22	AV	0	4
22	CV	0	3
25	AY	0	2
36	BA	3	51
36	DA	5	43
37	DB	0	1
39	BD	0	1
45	DN	0	1
All	All	8	143

The worst 5 of 6 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	DA	786	C	P-OP2	7.36	1.61	1.49
36	DA	652	C	C3'-O3'	6.63	1.51	1.42
36	BA	652	C	C3'-O3'	6.51	1.51	1.42
36	DA	652	C	O3'-P	5.39	1.67	1.61
36	BA	656	G	O5'-C5'	5.38	1.53	1.44

The worst 5 of 166 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BA	1992	G	C2'-C3'-O3'	11.05	133.81	109.50
36	DA	1992	G	C2'-C3'-O3'	10.94	133.58	109.50
36	BA	1799	G	C2'-C3'-O3'	9.57	130.56	109.50
36	BA	1786	A	N9-C1'-C2'	9.41	126.24	114.00
47	DP	52	GLU	N-CA-C	9.36	136.27	111.00

5 of 8 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
36	BA	283	A	C3'
36	BA	1799	G	C3'
36	BA	1992	G	C3'
36	DA	283	A	C3'
36	DA	1653	G	C3'

5 of 143 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	265	G	Sidechain
1	AA	436	C	Sidechain
1	AA	484	G	Sidechain
1	AA	56	U	Sidechain
1	AA	97	G	Sidechain

## 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32329	0	16314	1190	0
1	CA	32329	0	16315	1198	0
2	AB	1901	0	1951	275	0
2	CB	1901	0	1951	287	0
3	AC	1613	0	1677	212	0
3	CC	1613	0	1677	206	0
4	AD	1703	0	1763	172	0
4	CD	1703	0	1763	167	0
5	AE	1147	0	1207	129	0
5	CE	1147	0	1207	128	0
6	AF	843	0	857	84	0
6	CF	843	0	857	87	0
7	AG	1257	0	1296	145	0
7	CG	1257	0	1296	145	0
8	AH	1116	0	1177	139	0
8	CH	1116	0	1177	150	0
9	AI	1011	0	1041	137	0
9	CI	1011	0	1041	141	0
10	AJ	795	0	840	152	0
10	CJ	795	0	840	148	0
11	AK	885	0	904	103	0
11	CK	885	0	904	115	0
12	AL	971	0	1057	110	0
12	CL	971	0	1057	109	0
13	AM	988	0	1055	130	0
13	CM	988	0	1055	132	0
14	AN	492	0	529	89	0
14	CN	492	0	529	92	0
15	AO	734	0	771	61	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	CO	734	0	771	67	0
16	AP	701	0	720	61	0
16	CP	701	0	720	64	0
17	AQ	824	0	891	67	0
17	CQ	824	0	891	70	0
18	AR	574	0	644	60	0
18	CR	574	0	644	62	0
19	AS	630	0	652	110	0
19	CS	630	0	652	115	0
20	AT	763	0	861	100	0
20	CT	763	0	861	102	0
21	AU	209	0	221	16	0
21	CU	209	0	221	18	0
22	AV	1641	0	839	63	0
22	CV	1641	0	839	62	0
23	AW	1619	0	822	93	0
23	CW	1619	0	820	78	0
24	AX	210	0	108	9	0
24	CX	210	0	109	9	0
25	AY	1630	0	831	102	0
25	CY	1630	0	831	101	0
26	B0	662	0	688	74	0
26	D0	662	0	688	80	0
27	B1	732	0	808	96	0
27	D1	732	0	808	92	0
28	B2	598	0	653	72	0
28	D2	598	0	653	75	0
29	B3	468	0	523	67	0
29	D3	468	0	523	69	0
30	B4	226	0	229	34	0
30	D4	226	0	229	32	0
31	B5	459	0	480	51	0
31	D5	459	0	480	51	1
32	B6	381	0	390	63	0
32	D6	381	0	390	64	0
33	B7	419	0	467	46	0
33	D7	419	0	467	44	0
34	B8	508	0	576	100	0
34	D8	508	0	576	95	0
35	B9	299	0	326	22	0
35	D9	299	0	326	24	0
36	BA	60459	0	30476	2031	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	DA	60459	0	30472	2077	0
37	BB	2551	0	1295	108	0
37	DB	2551	0	1295	125	0
38	BC	1142	0	865	105	0
38	DC	1142	0	865	100	0
39	BD	2105	0	2182	298	0
39	DD	2105	0	2182	297	0
40	BE	1564	0	1629	259	0
40	DE	1564	0	1629	258	0
41	BF	1624	0	1677	230	0
41	DF	1624	0	1677	229	0
42	BG	1474	0	1534	276	0
42	DG	1474	0	1534	430	0
43	BH	1223	0	1282	197	0
43	DH	1223	0	1282	206	0
44	BI	1132	0	1218	201	0
44	DI	1132	0	1218	209	0
45	BN	1105	0	1180	171	0
45	DN	1105	0	1180	171	0
46	BO	933	0	996	111	0
46	DO	933	0	996	105	0
47	BP	1114	0	1187	300	0
47	DP	1114	0	1187	298	0
48	BQ	1122	0	1179	142	0
48	DQ	1122	0	1179	146	0
49	BR	960	0	1021	145	0
49	DR	960	0	1021	154	0
50	BS	771	0	832	180	0
50	DS	771	0	832	177	0
51	BT	1142	0	1202	260	0
51	DT	1142	0	1202	261	0
52	BU	958	0	1015	179	0
52	DU	958	0	1014	177	0
53	BV	779	0	852	160	0
53	DV	779	0	852	157	1
54	BW	896	0	953	110	0
54	DW	896	0	953	107	0
55	BX	726	0	778	71	0
55	DX	726	0	778	72	0
56	BY	776	0	870	147	0
56	DY	776	0	870	144	0
57	BZ	1404	0	1432	228	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	DZ	1404	0	1432	279	0
58	AA	213	0	0	0	0
58	AD	1	0	0	0	0
58	AE	1	0	0	0	0
58	AG	1	0	0	0	0
58	AU	1	0	0	0	0
58	AV	8	0	0	0	0
58	AW	20	0	0	0	0
58	AX	4	0	0	0	0
58	B1	1	0	0	0	0
58	B2	2	0	0	0	0
58	B5	2	0	0	0	0
58	B7	1	0	0	0	0
58	BA	453	0	0	0	0
58	BB	19	0	0	0	0
58	BD	1	0	0	0	0
58	BE	1	0	0	0	0
58	BF	2	0	0	0	0
58	BN	2	0	0	0	0
58	BO	1	0	0	0	0
58	BP	2	0	0	0	0
58	BV	2	0	0	0	0
58	BW	1	0	0	0	0
58	BX	2	0	0	0	0
58	CA	216	0	0	0	0
58	CE	1	0	0	0	0
58	CK	1	0	0	0	0
58	CL	1	0	0	0	0
58	CV	8	0	0	0	0
58	CW	21	0	0	0	0
58	CX	3	0	0	0	0
58	D1	2	0	0	0	0
58	D2	3	0	0	0	0
58	D5	1	0	0	0	0
58	D7	2	0	0	0	0
58	DA	451	0	0	0	0
58	DB	18	0	0	0	0
58	DD	2	0	0	0	0
58	DE	2	0	0	0	0
58	DF	1	0	0	0	0
58	DN	3	0	0	0	0
58	DV	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	DX	3	0	0	0	0
59	AA	42	0	45	1	0
59	CA	42	0	45	3	0
60	AD	1	0	0	0	0
60	AN	1	0	0	0	0
60	B9	1	0	0	0	0
60	CD	1	0	0	0	0
60	CN	1	0	0	0	0
60	D9	1	0	0	0	0
All	All	296168	0	199731	19126	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 39.

The worst 5 of 19126 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1879:C:H2'	36:BA:1880:C:H5''	1.23	1.19
36:DA:1590:U:H2'	36:DA:1591:G:H5''	1.26	1.18
55:BX:27:THR:HG22	55:BX:80:ILE:HB	1.25	1.18
36:DA:271(S):G:H2'	36:DA:271(T):C:H5''	1.25	1.17
13:CM:112:GLY:HA2	13:CM:113:PRO:HD2	1.25	1.16

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:D5:59:GLU:N	53:DV:51:VAL:N[4_545]	2.15	0.05

## 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	
2	AB	233/256 (91%)	148 (64%)	64 (28%)	21 (9%)	1	4
2	CB	233/256 (91%)	148 (64%)	64 (28%)	21 (9%)	1	4
3	AC	205/239 (86%)	137 (67%)	44 (22%)	24 (12%)	0	2
3	CC	205/239 (86%)	137 (67%)	43 (21%)	25 (12%)	0	1
4	AD	206/209 (99%)	145 (70%)	41 (20%)	20 (10%)	0	3
4	CD	206/209 (99%)	144 (70%)	40 (19%)	22 (11%)	0	3
5	AE	149/162 (92%)	112 (75%)	20 (13%)	17 (11%)	0	2
5	CE	149/162 (92%)	113 (76%)	19 (13%)	17 (11%)	0	2
6	AF	99/101 (98%)	82 (83%)	14 (14%)	3 (3%)	4	24
6	CF	99/101 (98%)	81 (82%)	15 (15%)	3 (3%)	4	24
7	AG	153/156 (98%)	107 (70%)	32 (21%)	14 (9%)	1	4
7	CG	153/156 (98%)	107 (70%)	32 (21%)	14 (9%)	1	4
8	AH	136/138 (99%)	101 (74%)	27 (20%)	8 (6%)	1	10
8	CH	136/138 (99%)	102 (75%)	26 (19%)	8 (6%)	1	10
9	AI	121/128 (94%)	86 (71%)	23 (19%)	12 (10%)	0	3
9	CI	121/128 (94%)	86 (71%)	23 (19%)	12 (10%)	0	3
10	AJ	97/105 (92%)	66 (68%)	22 (23%)	9 (9%)	0	4
10	CJ	97/105 (92%)	67 (69%)	21 (22%)	9 (9%)	0	4
11	AK	117/129 (91%)	93 (80%)	19 (16%)	5 (4%)	2	16
11	CK	117/129 (91%)	92 (79%)	20 (17%)	5 (4%)	2	16
12	AL	123/135 (91%)	83 (68%)	25 (20%)	15 (12%)	0	1
12	CL	123/135 (91%)	83 (68%)	26 (21%)	14 (11%)	0	2
13	AM	113/126 (90%)	67 (59%)	29 (26%)	17 (15%)	0	1
13	CM	113/126 (90%)	67 (59%)	28 (25%)	18 (16%)	0	1
14	AN	58/61 (95%)	37 (64%)	9 (16%)	12 (21%)	0	0
14	CN	58/61 (95%)	37 (64%)	9 (16%)	12 (21%)	0	0
15	AO	86/89 (97%)	62 (72%)	19 (22%)	5 (6%)	1	11
15	CO	86/89 (97%)	63 (73%)	18 (21%)	5 (6%)	1	11
16	AP	82/88 (93%)	57 (70%)	22 (27%)	3 (4%)	3	20
16	CP	82/88 (93%)	58 (71%)	21 (26%)	3 (4%)	3	20
17	AQ	98/105 (93%)	77 (79%)	14 (14%)	7 (7%)	1	7
17	CQ	98/105 (93%)	77 (79%)	14 (14%)	7 (7%)	1	7

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	AR	68/88 (77%)	48 (71%)	15 (22%)	5 (7%)	1	7
18	CR	68/88 (77%)	45 (66%)	17 (25%)	6 (9%)	1	5
19	AS	77/93 (83%)	54 (70%)	11 (14%)	12 (16%)	0	1
19	CS	77/93 (83%)	53 (69%)	13 (17%)	11 (14%)	0	1
20	AT	97/106 (92%)	69 (71%)	17 (18%)	11 (11%)	0	2
20	CT	97/106 (92%)	69 (71%)	18 (19%)	10 (10%)	0	3
21	AU	23/27 (85%)	16 (70%)	4 (17%)	3 (13%)	0	1
21	CU	23/27 (85%)	16 (70%)	4 (17%)	3 (13%)	0	1
26	B0	82/85 (96%)	63 (77%)	12 (15%)	7 (8%)	1	5
26	D0	82/85 (96%)	63 (77%)	11 (13%)	8 (10%)	0	3
27	B1	92/98 (94%)	64 (70%)	19 (21%)	9 (10%)	0	3
27	D1	92/98 (94%)	67 (73%)	15 (16%)	10 (11%)	0	2
28	B2	69/72 (96%)	48 (70%)	12 (17%)	9 (13%)	0	1
28	D2	69/72 (96%)	52 (75%)	7 (10%)	10 (14%)	0	1
29	B3	58/60 (97%)	41 (71%)	7 (12%)	10 (17%)	0	1
29	D3	58/60 (97%)	41 (71%)	8 (14%)	9 (16%)	0	1
30	B4	29/71 (41%)	15 (52%)	7 (24%)	7 (24%)	0	0
30	D4	29/71 (41%)	15 (52%)	7 (24%)	7 (24%)	0	0
31	B5	57/60 (95%)	42 (74%)	8 (14%)	7 (12%)	0	1
31	D5	57/60 (95%)	42 (74%)	8 (14%)	7 (12%)	0	1
32	B6	41/54 (76%)	18 (44%)	12 (29%)	11 (27%)	0	0
32	D6	41/54 (76%)	18 (44%)	12 (29%)	11 (27%)	0	0
33	B7	47/49 (96%)	44 (94%)	2 (4%)	1 (2%)	7	31
33	D7	47/49 (96%)	43 (92%)	3 (6%)	1 (2%)	7	31
34	B8	62/65 (95%)	39 (63%)	14 (23%)	9 (14%)	0	1
34	D8	62/65 (95%)	38 (61%)	15 (24%)	9 (14%)	0	1
35	B9	34/37 (92%)	27 (79%)	6 (18%)	1 (3%)	4	24
35	D9	34/37 (92%)	27 (79%)	6 (18%)	1 (3%)	4	24
38	BC	183/229 (80%)	84 (46%)	45 (25%)	54 (30%)	0	0
38	DC	183/229 (80%)	84 (46%)	43 (24%)	56 (31%)	0	0
39	BD	270/276 (98%)	205 (76%)	38 (14%)	27 (10%)	0	3

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
39	DD	270/276 (98%)	204 (76%)	40 (15%)	26 (10%)	0	4
40	BE	203/206 (98%)	128 (63%)	36 (18%)	39 (19%)	0	1
40	DE	203/206 (98%)	128 (63%)	34 (17%)	41 (20%)	0	0
41	BF	206/210 (98%)	128 (62%)	55 (27%)	23 (11%)	0	2
41	DF	206/210 (98%)	130 (63%)	53 (26%)	23 (11%)	0	2
42	BG	177/182 (97%)	111 (63%)	40 (23%)	26 (15%)	0	1
42	DG	177/182 (97%)	83 (47%)	53 (30%)	41 (23%)	0	0
43	BH	158/180 (88%)	93 (59%)	31 (20%)	34 (22%)	0	0
43	DH	158/180 (88%)	91 (58%)	34 (22%)	33 (21%)	0	0
44	BI	144/148 (97%)	88 (61%)	29 (20%)	27 (19%)	0	1
44	DI	144/148 (97%)	88 (61%)	28 (19%)	28 (19%)	0	1
45	BN	137/140 (98%)	84 (61%)	33 (24%)	20 (15%)	0	1
45	DN	137/140 (98%)	85 (62%)	32 (23%)	20 (15%)	0	1
46	BO	120/122 (98%)	99 (82%)	14 (12%)	7 (6%)	1	11
46	DO	120/122 (98%)	99 (82%)	14 (12%)	7 (6%)	1	11
47	BP	144/150 (96%)	78 (54%)	32 (22%)	34 (24%)	0	0
47	DP	144/150 (96%)	79 (55%)	31 (22%)	34 (24%)	0	0
48	BQ	139/141 (99%)	105 (76%)	18 (13%)	16 (12%)	0	2
48	DQ	139/141 (99%)	104 (75%)	18 (13%)	17 (12%)	0	1
49	BR	115/118 (98%)	83 (72%)	22 (19%)	10 (9%)	1	5
49	DR	115/118 (98%)	84 (73%)	21 (18%)	10 (9%)	1	5
50	BS	97/112 (87%)	38 (39%)	27 (28%)	32 (33%)	0	0
50	DS	97/112 (87%)	36 (37%)	30 (31%)	31 (32%)	0	0
51	BT	136/146 (93%)	75 (55%)	31 (23%)	30 (22%)	0	0
51	DT	136/146 (93%)	75 (55%)	31 (23%)	30 (22%)	0	0
52	BU	115/118 (98%)	70 (61%)	35 (30%)	10 (9%)	1	5
52	DU	115/118 (98%)	68 (59%)	37 (32%)	10 (9%)	1	5
53	BV	99/101 (98%)	61 (62%)	20 (20%)	18 (18%)	0	1
53	DV	99/101 (98%)	62 (63%)	19 (19%)	18 (18%)	0	1
54	BW	111/113 (98%)	75 (68%)	24 (22%)	12 (11%)	0	2
54	DW	111/113 (98%)	75 (68%)	24 (22%)	12 (11%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
55	BX	91/96 (95%)	66 (72%)	20 (22%)	5 (6%)	2	11
55	DX	91/96 (95%)	65 (71%)	20 (22%)	6 (7%)	1	8
56	BY	99/110 (90%)	47 (48%)	19 (19%)	33 (33%)	0	0
56	DY	99/110 (90%)	47 (48%)	19 (19%)	33 (33%)	0	0
57	BZ	175/206 (85%)	101 (58%)	37 (21%)	37 (21%)	0	0
57	DZ	175/206 (85%)	91 (52%)	48 (27%)	36 (21%)	0	0
All	All	11662/12592 (93%)	7696 (66%)	2368 (20%)	1598 (14%)	0	1

5 of 1598 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	9	GLU
2	AB	15	VAL
2	AB	20	GLU
2	AB	88	ALA
2	AB	195	ASP

### 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	
2	AB	202/220 (92%)	178 (88%)	24 (12%)	5	21
2	CB	202/220 (92%)	179 (89%)	23 (11%)	5	22
3	AC	160/188 (85%)	151 (94%)	9 (6%)	21	52
3	CC	160/188 (85%)	151 (94%)	9 (6%)	21	52
4	AD	180/181 (99%)	161 (89%)	19 (11%)	6	25
4	CD	180/181 (99%)	161 (89%)	19 (11%)	6	25
5	AE	115/123 (94%)	102 (89%)	13 (11%)	6	22
5	CE	115/123 (94%)	103 (90%)	12 (10%)	7	25
6	AF	90/90 (100%)	85 (94%)	5 (6%)	21	52
6	CF	90/90 (100%)	84 (93%)	6 (7%)	16	45

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	AG	126/127 (99%)	116 (92%)	10 (8%)	12	37
7	CG	126/127 (99%)	116 (92%)	10 (8%)	12	37
8	AH	119/119 (100%)	111 (93%)	8 (7%)	16	45
8	CH	119/119 (100%)	110 (92%)	9 (8%)	13	39
9	AI	98/99 (99%)	87 (89%)	11 (11%)	6	23
9	CI	98/99 (99%)	87 (89%)	11 (11%)	6	23
10	AJ	88/92 (96%)	77 (88%)	11 (12%)	4	19
10	CJ	88/92 (96%)	77 (88%)	11 (12%)	4	19
11	AK	90/99 (91%)	81 (90%)	9 (10%)	7	27
11	CK	90/99 (91%)	81 (90%)	9 (10%)	7	27
12	AL	104/111 (94%)	93 (89%)	11 (11%)	6	25
12	CL	104/111 (94%)	93 (89%)	11 (11%)	6	25
13	AM	99/101 (98%)	88 (89%)	11 (11%)	6	23
13	CM	99/101 (98%)	88 (89%)	11 (11%)	6	23
14	AN	49/50 (98%)	41 (84%)	8 (16%)	2	10
14	CN	49/50 (98%)	42 (86%)	7 (14%)	3	15
15	AO	79/80 (99%)	72 (91%)	7 (9%)	9	32
15	CO	79/80 (99%)	72 (91%)	7 (9%)	9	32
16	AP	72/74 (97%)	63 (88%)	9 (12%)	4	19
16	CP	72/74 (97%)	65 (90%)	7 (10%)	8	29
17	AQ	94/97 (97%)	87 (93%)	7 (7%)	13	40
17	CQ	94/97 (97%)	87 (93%)	7 (7%)	13	40
18	AR	61/77 (79%)	57 (93%)	4 (7%)	16	46
18	CR	61/77 (79%)	57 (93%)	4 (7%)	16	46
19	AS	69/80 (86%)	58 (84%)	11 (16%)	2	11
19	CS	69/80 (86%)	58 (84%)	11 (16%)	2	11
20	AT	76/82 (93%)	72 (95%)	4 (5%)	22	53
20	CT	76/82 (93%)	72 (95%)	4 (5%)	22	53
21	AU	19/22 (86%)	18 (95%)	1 (5%)	22	53
21	CU	19/22 (86%)	18 (95%)	1 (5%)	22	53
26	B0	66/67 (98%)	58 (88%)	8 (12%)	5	20

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
26	D0	66/67 (98%)	57 (86%)	9 (14%)	3	16
27	B1	78/83 (94%)	66 (85%)	12 (15%)	2	12
27	D1	78/83 (94%)	62 (80%)	16 (20%)	1	4
28	B2	66/67 (98%)	55 (83%)	11 (17%)	2	10
28	D2	66/67 (98%)	58 (88%)	8 (12%)	5	20
29	B3	51/52 (98%)	49 (96%)	2 (4%)	32	62
29	D3	51/52 (98%)	49 (96%)	2 (4%)	32	62
30	B4	27/63 (43%)	24 (89%)	3 (11%)	6	23
30	D4	27/63 (43%)	24 (89%)	3 (11%)	6	23
31	B5	51/52 (98%)	45 (88%)	6 (12%)	5	21
31	D5	51/52 (98%)	45 (88%)	6 (12%)	5	21
32	B6	43/52 (83%)	34 (79%)	9 (21%)	1	4
32	D6	43/52 (83%)	34 (79%)	9 (21%)	1	4
33	B7	41/42 (98%)	36 (88%)	5 (12%)	5	20
33	D7	41/42 (98%)	35 (85%)	6 (15%)	3	14
34	B8	53/55 (96%)	43 (81%)	10 (19%)	1	6
34	D8	53/55 (96%)	43 (81%)	10 (19%)	1	6
35	B9	33/34 (97%)	30 (91%)	3 (9%)	9	31
35	D9	33/34 (97%)	30 (91%)	3 (9%)	9	31
38	BC	61/181 (34%)	56 (92%)	5 (8%)	11	36
38	DC	61/181 (34%)	55 (90%)	6 (10%)	8	29
39	BD	213/218 (98%)	180 (84%)	33 (16%)	2	12
39	DD	213/218 (98%)	177 (83%)	36 (17%)	2	9
40	BE	165/166 (99%)	140 (85%)	25 (15%)	3	13
40	DE	165/166 (99%)	141 (86%)	24 (14%)	3	14
41	BF	165/166 (99%)	147 (89%)	18 (11%)	6	24
41	DF	165/166 (99%)	149 (90%)	16 (10%)	8	29
42	BG	155/156 (99%)	138 (89%)	17 (11%)	6	24
42	DG	155/156 (99%)	130 (84%)	25 (16%)	2	10
43	BH	132/148 (89%)	119 (90%)	13 (10%)	8	29
43	DH	132/148 (89%)	119 (90%)	13 (10%)	8	29

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
44	BI	122/124 (98%)	107 (88%)	15 (12%)	4	20
44	DI	122/124 (98%)	108 (88%)	14 (12%)	5	22
45	BN	117/119 (98%)	96 (82%)	21 (18%)	2	8
45	DN	117/119 (98%)	96 (82%)	21 (18%)	2	8
46	BO	100/100 (100%)	94 (94%)	6 (6%)	19	49
46	DO	100/100 (100%)	93 (93%)	7 (7%)	15	43
47	BP	112/116 (97%)	86 (77%)	26 (23%)	1	3
47	DP	112/116 (97%)	85 (76%)	27 (24%)	0	2
48	BQ	111/111 (100%)	96 (86%)	15 (14%)	4	16
48	DQ	111/111 (100%)	96 (86%)	15 (14%)	4	16
49	BR	100/101 (99%)	86 (86%)	14 (14%)	3	16
49	DR	100/101 (99%)	86 (86%)	14 (14%)	3	16
50	BS	77/88 (88%)	67 (87%)	10 (13%)	4	17
50	DS	77/88 (88%)	68 (88%)	9 (12%)	5	21
51	BT	120/127 (94%)	98 (82%)	22 (18%)	1	7
51	DT	120/127 (94%)	100 (83%)	20 (17%)	2	10
52	BU	92/94 (98%)	85 (92%)	7 (8%)	13	39
52	DU	92/94 (98%)	85 (92%)	7 (8%)	13	39
53	BV	82/82 (100%)	72 (88%)	10 (12%)	5	20
53	DV	82/82 (100%)	71 (87%)	11 (13%)	4	16
54	BW	91/92 (99%)	82 (90%)	9 (10%)	8	28
54	DW	91/92 (99%)	82 (90%)	9 (10%)	8	28
55	BX	74/78 (95%)	67 (90%)	7 (10%)	8	29
55	DX	74/78 (95%)	67 (90%)	7 (10%)	8	29
56	BY	84/91 (92%)	69 (82%)	15 (18%)	2	8
56	DY	84/91 (92%)	70 (83%)	14 (17%)	2	10
57	BZ	155/179 (87%)	138 (89%)	17 (11%)	6	24
57	DZ	155/179 (87%)	136 (88%)	19 (12%)	4	20
All	All	9654/10432 (92%)	8513 (88%)	1141 (12%)	5	21

5 of 1141 residues with a non-rotameric sidechain are listed below:



Mol	Chain	Res	Type
42	DG	133	LEU
44	DI	82	ARG
42	DG	125	PHE
49	DR	71	GLN
45	BN	12	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 323 such sidechains are listed below:

Mol	Chain	Res	Type
27	D1	45	ASN
47	DP	9	ASN
28	D2	65	ASN
40	DE	66	HIS
49	DR	71	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	206 (13%)	29 (1%)
1	CA	1503/1522 (98%)	207 (13%)	28 (1%)
22	AV	76/77 (98%)	16 (21%)	0
22	CV	76/77 (98%)	15 (19%)	1 (1%)
23	AW	75/76 (98%)	15 (20%)	0
23	CW	75/76 (98%)	15 (20%)	0
24	AX	9/10 (90%)	0	0
24	CX	9/10 (90%)	0	0
25	AY	74/77 (96%)	25 (33%)	1 (1%)
25	CY	74/77 (96%)	22 (29%)	0
36	BA	2806/2822 (99%)	523 (18%)	54 (1%)
36	DA	2806/2822 (99%)	523 (18%)	54 (1%)
37	BB	118/122 (96%)	16 (13%)	1 (0%)
37	DB	118/122 (96%)	16 (13%)	1 (0%)
All	All	9322/9412 (99%)	1599 (17%)	169 (1%)

5 of 1599 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G

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Mol	Chain	Res	Type
1	AA	47	C

5 of 169 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
36	DA	74	A
36	DA	1608	A
36	DA	283	A
36	DA	752	A
36	DA	2033	A

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	PHA	AY	77	25	10,11,11	0.59	0	10,13,13	0.90	1 (10%)
22	5MU	AV	54	22	19,22,23	0.28	0	28,32,35	0.38	0
25	8AN	AY	76	25,36	19,24,25	1.22	2 (10%)	13,35,38	0.77	0
25	8AN	CY	76	25,36	19,24,25	1.23	1 (5%)	13,35,38	0.90	1 (7%)
22	5MU	CV	54	22	19,22,23	0.25	0	28,32,35	0.33	0
25	PHA	CY	77	25	10,11,11	0.53	0	10,13,13	0.71	1 (10%)

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
25	PHA	AY	77	25	-	1/5/6/6	0/1/1/1
22	5MU	AV	54	22	-	0/7/25/26	0/2/2/2
25	8AN	AY	76	25,36	-	0/3/25/26	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	8AN	CY	76	25,36	-	0/3/25/26	0/3/3/3
22	5MU	CV	54	22	-	0/7/25/26	0/2/2/2
25	PHA	CY	77	25	-	1/5/6/6	0/1/1/1

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	CY	76	8AN	C3'-N3'	-4.42	1.40	1.47
25	AY	76	8AN	C3'-N3'	-4.37	1.40	1.47
25	AY	76	8AN	C8-N7	-2.02	1.31	1.34

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AY	77	PHA	CB-CA-C	-2.64	106.52	111.47
25	CY	76	8AN	C5-C6-N6	2.25	123.77	120.35
25	CY	77	PHA	CB-CA-C	-2.06	107.60	111.47

There are no chirality outliers.

All (2) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	AY	77	PHA	O-C-CA-CB
25	CY	77	PHA	C-CA-CB-CG

There are no ring outliers.

5 monomers are involved in 6 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	AY	77	PHA	1	0
22	AV	54	5MU	1	0
25	CY	76	8AN	2	0
22	CV	54	5MU	1	0
25	CY	77	PHA	1	0

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry

Of 1490 ligands modelled in this entry, 1488 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
59	PAR	CA	1817	-	45,45,45	1.86	11 (24%)	64,67,67	1.38	7 (10%)
59	PAR	AA	1814	-	45,45,45	1.56	9 (20%)	64,67,67	1.26	6 (9%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	PAR	CA	1817	-	-	3/18/94/94	0/4/4/4
59	PAR	AA	1814	-	-	5/18/94/94	0/4/4/4

The worst 5 of 20 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	CA	1817	PAR	C34-C24	6.08	1.61	1.53
59	CA	1817	PAR	C64-C54	5.62	1.59	1.52
59	AA	1814	PAR	C64-C54	4.48	1.58	1.52
59	CA	1817	PAR	C52-C42	3.64	1.59	1.52
59	AA	1814	PAR	C34-C24	3.32	1.57	1.53

The worst 5 of 13 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	CA	1817	PAR	C14-O54-C54	4.49	122.51	113.69
59	CA	1817	PAR	O54-C54-C64	4.19	113.81	106.01
59	AA	1814	PAR	O54-C54-C64	3.89	113.26	106.01
59	CA	1817	PAR	O52-C13-C23	3.84	115.93	107.96
59	AA	1814	PAR	C14-O54-C54	3.67	120.89	113.69

There are no chirality outliers.

5 of 8 torsion outliers are listed below:

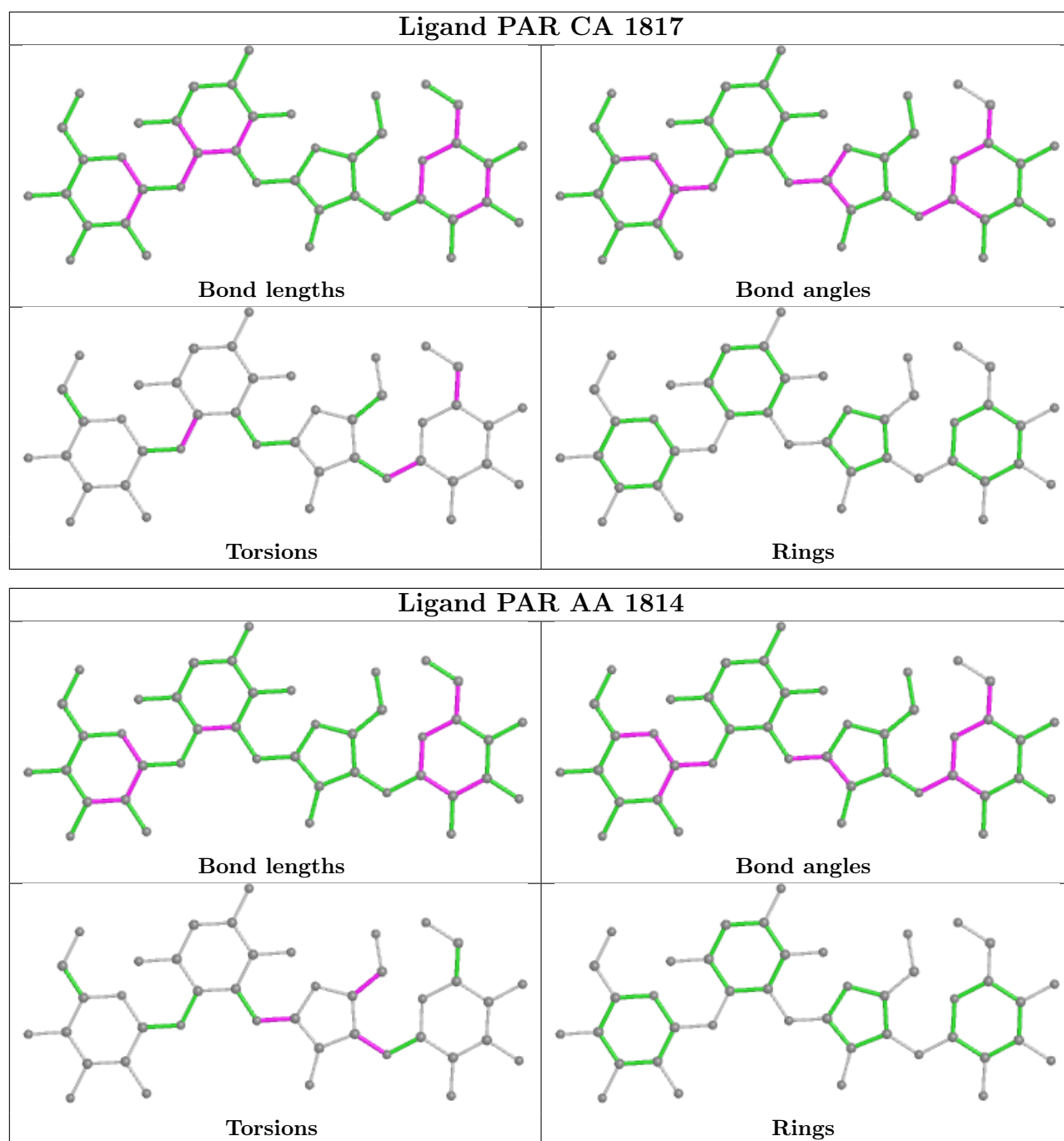
Mol	Chain	Res	Type	Atoms
59	AA	1814	PAR	C23-C13-O52-C52
59	AA	1814	PAR	O43-C43-C53-O53
59	AA	1814	PAR	C33-C43-C53-O53
59	AA	1814	PAR	O43-C13-O52-C52
59	CA	1817	PAR	C44-C54-C64-N64

There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	CA	1817	PAR	3	0
59	AA	1814	PAR	1	0

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



## 5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [\(i\)](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
13	AM	5
13	CM	5
9	CI	2
9	AI	2
42	DG	1
32	D6	1
32	B6	1
42	BG	1

The worst 5 of 18 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	DG	112:PRO	C	113:ARG	N	6.74
1	D6	46:HIS	C	47:THR	N	5.22
1	B6	46:HIS	C	47:THR	N	5.21
1	AM	112:GLY	C	113:PRO	N	4.65
1	CM	112:GLY	C	113:PRO	N	4.62

## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	AA	1504/1522 (98%)	-0.21	22 (1%) 73 72	56, 99, 180, 200	0
1	CA	1504/1522 (98%)	-0.06	21 (1%) 75 75	55, 119, 194, 200	0
2	AB	235/256 (91%)	0.18	15 (6%) 19 19	65, 132, 188, 200	0
2	CB	235/256 (91%)	0.69	26 (11%) 5 5	83, 158, 197, 200	0
3	AC	207/239 (86%)	-0.09	2 (0%) 82 82	72, 120, 172, 200	0
3	CC	207/239 (86%)	0.37	14 (6%) 17 17	83, 147, 188, 200	0
4	AD	208/209 (99%)	-0.16	1 (0%) 91 91	59, 97, 139, 199	0
4	CD	208/209 (99%)	0.06	3 (1%) 75 75	70, 115, 158, 194	0
5	AE	151/162 (93%)	-0.20	1 (0%) 87 88	51, 99, 134, 164	0
5	CE	151/162 (93%)	0.23	4 (2%) 56 53	67, 116, 165, 199	0
6	AF	101/101 (100%)	-0.21	1 (0%) 82 82	69, 108, 147, 198	0
6	CF	101/101 (100%)	-0.05	2 (1%) 65 64	67, 107, 154, 167	0
7	AG	155/156 (99%)	0.34	12 (7%) 13 12	73, 120, 164, 188	0
7	CG	155/156 (99%)	0.69	21 (13%) 3 3	90, 155, 196, 200	0
8	AH	138/138 (100%)	-0.01	2 (1%) 75 75	65, 102, 141, 173	0
8	CH	138/138 (100%)	0.22	6 (4%) 35 34	74, 121, 168, 200	0
9	AI	127/128 (99%)	0.42	8 (6%) 20 20	86, 139, 185, 198	0
9	CI	127/128 (99%)	1.63	40 (31%) 0 0	83, 170, 200, 200	0
10	AJ	99/105 (94%)	0.75	16 (16%) 1 2	81, 139, 195, 200	0
10	CJ	99/105 (94%)	1.98	40 (40%) 0 0	92, 170, 195, 200	0
11	AK	119/129 (92%)	0.12	4 (3%) 45 43	65, 100, 162, 200	0
11	CK	119/129 (92%)	0.42	8 (6%) 17 17	68, 118, 177, 200	0
12	AL	125/135 (92%)	0.15	6 (4%) 30 28	56, 93, 136, 200	0
12	CL	125/135 (92%)	0.16	5 (4%) 38 36	60, 90, 157, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	AM	125/126 (99%)	0.63	17 (13%) 3 2	86, 123, 177, 200	0
13	CM	125/126 (99%)	1.10	31 (24%) 0 0	100, 161, 200, 200	0
14	AN	60/61 (98%)	0.39	3 (5%) 28 27	72, 117, 161, 173	0
14	CN	60/61 (98%)	0.71	6 (10%) 7 7	84, 144, 185, 200	0
15	AO	88/89 (98%)	0.03	0 100 100	52, 92, 144, 159	0
15	CO	88/89 (98%)	0.10	0 100 100	63, 107, 147, 155	0
16	AP	84/88 (95%)	0.11	1 (1%) 79 78	67, 87, 142, 154	0
16	CP	84/88 (95%)	0.44	6 (7%) 16 16	76, 113, 167, 192	0
17	AQ	100/105 (95%)	-0.03	1 (1%) 82 82	63, 95, 133, 147	0
17	CQ	100/105 (95%)	0.13	1 (1%) 82 82	73, 118, 154, 200	0
18	AR	70/88 (79%)	-0.04	1 (1%) 75 75	71, 104, 153, 170	0
18	CR	70/88 (79%)	0.13	1 (1%) 75 75	71, 110, 158, 170	0
19	AS	79/93 (84%)	0.82	12 (15%) 2 2	85, 136, 188, 200	0
19	CS	79/93 (84%)	1.05	15 (18%) 1 1	107, 160, 198, 200	0
20	AT	99/106 (93%)	0.36	6 (6%) 21 20	63, 105, 167, 199	0
20	CT	99/106 (93%)	0.77	12 (12%) 4 3	80, 128, 184, 200	0
21	AU	25/27 (92%)	1.72	9 (36%) 0 0	85, 125, 162, 187	0
21	CU	25/27 (92%)	3.98	19 (76%) 0 0	87, 142, 197, 200	0
22	AV	76/77 (98%)	-0.47	0 100 100	68, 102, 144, 189	0
22	CV	76/77 (98%)	-0.35	0 100 100	63, 116, 168, 182	0
23	AW	76/76 (100%)	1.34	15 (19%) 1 1	107, 196, 200, 200	0
23	CW	76/76 (100%)	2.53	42 (55%) 0 0	128, 199, 200, 200	0
24	AX	10/10 (100%)	0.15	1 (10%) 7 7	62, 94, 148, 162	0
24	CX	10/10 (100%)	0.65	1 (10%) 7 7	92, 111, 183, 192	0
25	AY	75/77 (97%)	1.15	16 (21%) 0 1	57, 187, 200, 200	0
25	CY	75/77 (97%)	1.20	11 (14%) 2 2	64, 189, 200, 200	0
26	B0	84/85 (98%)	0.50	4 (4%) 30 28	63, 94, 144, 189	0
26	D0	84/85 (98%)	0.67	7 (8%) 11 11	76, 127, 170, 191	0
27	B1	94/98 (95%)	0.11	4 (4%) 35 34	47, 77, 135, 155	0
27	D1	94/98 (95%)	0.06	0 100 100	49, 80, 138, 157	0
28	B2	71/72 (98%)	-0.09	2 (2%) 53 51	68, 99, 133, 184	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	D2	71/72 (98%)	0.30	4 (5%) 24 23	61, 105, 152, 190	0
29	B3	60/60 (100%)	0.42	4 (6%) 17 17	72, 108, 152, 188	0
29	D3	60/60 (100%)	0.89	5 (8%) 11 11	75, 134, 178, 200	0
30	B4	31/71 (43%)	-0.14	0 100 100	87, 126, 171, 176	0
30	D4	31/71 (43%)	0.95	5 (16%) 1 2	118, 175, 194, 200	0
31	B5	59/60 (98%)	0.35	6 (10%) 6 6	52, 100, 190, 200	0
31	D5	59/60 (98%)	0.09	3 (5%) 28 26	43, 99, 189, 200	0
32	B6	45/54 (83%)	4.65	37 (82%) 0 0	109, 171, 197, 200	0
32	D6	45/54 (83%)	5.02	40 (88%) 0 0	146, 183, 200, 200	0
33	B7	49/49 (100%)	0.13	1 (2%) 65 64	49, 65, 124, 185	0
33	D7	49/49 (100%)	0.29	5 (10%) 6 6	37, 62, 124, 198	0
34	B8	64/65 (98%)	0.28	1 (1%) 72 70	51, 87, 151, 173	0
34	D8	64/65 (98%)	0.83	8 (12%) 3 3	75, 110, 159, 200	0
35	B9	36/37 (97%)	3.01	25 (69%) 0 0	117, 148, 189, 200	0
35	D9	36/37 (97%)	4.10	33 (91%) 0 0	101, 145, 182, 197	0
36	BA	2807/2822 (99%)	-0.12	57 (2%) 65 64	48, 87, 188, 200	0
36	DA	2807/2822 (99%)	-0.05	79 (2%) 53 51	35, 94, 191, 200	0
37	BB	119/122 (97%)	-0.44	0 100 100	88, 121, 165, 179	0
37	DB	119/122 (97%)	0.17	2 (1%) 70 68	114, 168, 197, 200	0
38	BC	191/229 (83%)	2.81	118 (61%) 0 0	119, 183, 200, 200	0
38	DC	191/229 (83%)	3.82	143 (74%) 0 0	149, 184, 200, 200	0
39	BD	272/276 (98%)	-0.23	1 (0%) 92 93	39, 71, 116, 164	0
39	DD	272/276 (98%)	-0.18	1 (0%) 92 93	31, 69, 114, 173	0
40	BE	205/206 (99%)	0.23	10 (4%) 29 27	47, 96, 160, 200	0
40	DE	205/206 (99%)	0.04	8 (3%) 39 37	47, 90, 159, 199	0
41	BF	208/210 (99%)	-0.20	3 (1%) 75 75	43, 89, 164, 200	0
41	DF	208/210 (99%)	0.28	14 (6%) 17 17	44, 120, 179, 200	0
42	BG	181/182 (99%)	-0.04	7 (3%) 39 37	68, 118, 162, 194	0
42	DG	181/182 (99%)	0.88	32 (17%) 1 1	105, 163, 200, 200	0
43	BH	160/180 (88%)	1.32	49 (30%) 0 0	98, 160, 199, 200	0
43	DH	160/180 (88%)	0.51	12 (7%) 14 13	65, 135, 186, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	BI	146/148 (98%)	0.41	9 (6%) 20 20	62, 122, 180, 199	0
44	DI	146/148 (98%)	1.95	50 (34%) 0 0	54, 152, 200, 200	0
45	BN	139/140 (99%)	0.19	3 (2%) 62 60	69, 110, 162, 198	0
45	DN	139/140 (99%)	0.08	3 (2%) 62 60	65, 107, 161, 190	0
46	BO	122/122 (100%)	-0.13	1 (0%) 86 86	53, 85, 116, 134	0
46	DO	122/122 (100%)	-0.21	0 100 100	48, 75, 110, 131	0
47	BP	146/150 (97%)	0.47	10 (6%) 17 17	46, 105, 171, 200	0
47	DP	146/150 (97%)	1.02	23 (15%) 2 2	60, 130, 184, 200	0
48	BQ	141/141 (100%)	0.23	6 (4%) 35 34	64, 103, 160, 200	0
48	DQ	141/141 (100%)	0.27	8 (5%) 23 23	55, 109, 156, 200	0
49	BR	117/118 (99%)	-0.09	0 100 100	53, 85, 130, 157	0
49	DR	117/118 (99%)	-0.02	0 100 100	49, 91, 138, 150	0
50	BS	99/112 (88%)	0.31	4 (4%) 38 36	65, 115, 170, 200	0
50	DS	99/112 (88%)	1.45	29 (29%) 0 0	113, 164, 199, 200	0
51	BT	138/146 (94%)	0.06	10 (7%) 15 15	55, 102, 175, 200	0
51	DT	138/146 (94%)	-0.03	3 (2%) 62 60	62, 101, 178, 200	0
52	BU	117/118 (99%)	0.10	2 (1%) 70 68	52, 95, 146, 198	0
52	DU	117/118 (99%)	0.21	2 (1%) 70 68	59, 103, 156, 200	0
53	BV	101/101 (100%)	0.28	4 (3%) 38 36	66, 120, 158, 200	0
53	DV	101/101 (100%)	0.51	5 (4%) 28 27	57, 136, 175, 200	0
54	BW	113/113 (100%)	-0.12	0 100 100	48, 85, 143, 200	0
54	DW	113/113 (100%)	-0.03	3 (2%) 54 52	57, 93, 155, 200	0
55	BX	93/96 (96%)	-0.17	1 (1%) 80 81	56, 86, 120, 156	0
55	DX	93/96 (96%)	0.02	1 (1%) 80 81	57, 95, 135, 152	0
56	BY	101/110 (91%)	1.14	17 (16%) 1 1	67, 115, 183, 200	0
56	DY	101/110 (91%)	1.31	25 (24%) 0 0	62, 134, 192, 200	0
57	BZ	177/206 (85%)	0.82	27 (15%) 2 2	80, 150, 200, 200	0
57	DZ	177/206 (85%)	1.16	47 (26%) 0 0	94, 164, 200, 200	0
All	All	21244/22004 (96%)	0.26	1530 (7%) 15 15	31, 108, 192, 200	0

The worst 5 of 1530 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
48	BQ	140	ALA	20.5
25	CY	17	C	19.2
38	DC	172	HIS	18.4
13	AM	123	ALA	17.9
29	D3	1	MET	14.7

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
22	5MU	CV	54	21/22	0.82	0.27	173,181,194,194	0
22	5MU	AV	54	21/22	0.91	0.14	104,135,151,151	0
25	PHA	AY	77	11/11	0.94	0.34	60,62,65,66	0
25	PHA	CY	77	11/11	0.94	0.46	60,62,65,66	0
25	8AN	CY	76	22/23	0.95	0.22	37,58,79,189	0
25	8AN	AY	76	22/23	0.95	0.18	37,58,79,189	0

## 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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
58	MG	BA	3288	1/1	-0.16	2.52	88,88,88,88	1
58	MG	CW	114	1/1	-0.08	0.33	108,108,108,108	1
58	MG	AA	1688	1/1	-0.01	0.33	118,118,118,118	0
58	MG	DA	3443	1/1	0.01	0.22	111,111,111,111	0
58	MG	DB	201	1/1	0.01	0.30	135,135,135,135	0
58	MG	CA	1719	1/1	0.08	0.26	112,112,112,112	0
58	MG	AA	1666	1/1	0.08	0.92	122,122,122,122	0
58	MG	DA	3327	1/1	0.11	0.73	106,106,106,106	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3424	1/1	0.15	0.55	107,107,107,107	0
58	MG	BA	3450	1/1	0.16	0.25	125,125,125,125	0
58	MG	DA	3213	1/1	0.18	0.49	124,124,124,124	0
58	MG	BA	3336	1/1	0.18	0.74	105,105,105,105	1
58	MG	DA	3360	1/1	0.21	1.08	97,97,97,97	1
58	MG	DA	3103	1/1	0.24	1.05	102,102,102,102	1
58	MG	CA	1626	1/1	0.24	0.87	119,119,119,119	0
58	MG	BA	3009	1/1	0.26	1.95	109,109,109,109	0
58	MG	DA	3273	1/1	0.26	0.76	155,155,155,155	0
58	MG	BA	3305	1/1	0.30	1.07	112,112,112,112	0
58	MG	BA	3285	1/1	0.31	0.97	112,112,112,112	0
58	MG	BA	3050	1/1	0.31	0.76	84,84,84,84	0
58	MG	BB	213	1/1	0.32	0.97	148,148,148,148	0
58	MG	AA	1725	1/1	0.32	0.31	77,77,77,77	0
58	MG	AA	1763	1/1	0.32	1.06	114,114,114,114	1
58	MG	CA	1722	1/1	0.32	0.16	106,106,106,106	0
58	MG	DA	3448	1/1	0.33	0.12	97,97,97,97	0
58	MG	CW	103	1/1	0.33	0.48	119,119,119,119	0
58	MG	AA	1789	1/1	0.34	0.56	152,152,152,152	0
58	MG	CA	1783	1/1	0.34	1.21	100,100,100,100	0
58	MG	DA	3434	1/1	0.35	0.76	107,107,107,107	1
58	MG	CE	201	1/1	0.35	0.28	132,132,132,132	0
58	MG	DA	3166	1/1	0.36	0.96	104,104,104,104	0
58	MG	BA	3213	1/1	0.36	0.56	109,109,109,109	0
58	MG	CA	1801	1/1	0.36	0.40	128,128,128,128	0
58	MG	CA	1663	1/1	0.36	0.32	127,127,127,127	0
58	MG	DA	3357	1/1	0.36	0.24	111,111,111,111	0
58	MG	DA	3358	1/1	0.38	0.36	102,102,102,102	0
58	MG	BA	3104	1/1	0.38	0.63	65,65,65,65	1
58	MG	AA	1762	1/1	0.38	1.01	76,76,76,76	1
58	MG	CA	1688	1/1	0.39	1.02	115,115,115,115	0
58	MG	BA	3242	1/1	0.39	1.09	115,115,115,115	0
58	MG	DA	3345	1/1	0.40	0.28	110,110,110,110	1
58	MG	AW	117	1/1	0.41	1.09	134,134,134,134	0
58	MG	CA	1739	1/1	0.41	0.73	109,109,109,109	0
58	MG	CA	1636	1/1	0.42	0.19	103,103,103,103	1
58	MG	CA	1680	1/1	0.42	0.77	83,83,83,83	1
58	MG	CA	1751	1/1	0.43	0.89	128,128,128,128	0
58	MG	BA	3234	1/1	0.44	0.67	115,115,115,115	0
58	MG	AA	1670	1/1	0.44	0.32	95,95,95,95	0
58	MG	CA	1772	1/1	0.44	0.67	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3130	1/1	0.45	0.87	92,92,92,92	1
58	MG	DA	3264	1/1	0.45	1.03	98,98,98,98	0
58	MG	CA	1731	1/1	0.45	0.42	142,142,142,142	0
58	MG	BA	3446	1/1	0.45	0.19	92,92,92,92	0
58	MG	DA	3346	1/1	0.46	1.11	109,109,109,109	0
58	MG	CA	1724	1/1	0.46	0.67	91,91,91,91	1
58	MG	CW	115	1/1	0.46	0.36	139,139,139,139	0
58	MG	CA	1810	1/1	0.46	0.76	95,95,95,95	0
58	MG	DA	3411	1/1	0.47	0.29	115,115,115,115	1
58	MG	CA	1726	1/1	0.47	0.26	65,65,65,65	0
58	MG	AA	1773	1/1	0.47	0.22	71,71,71,71	0
58	MG	DA	3447	1/1	0.47	1.49	87,87,87,87	1
58	MG	AA	1676	1/1	0.47	0.32	95,95,95,95	0
58	MG	DA	3227	1/1	0.47	0.40	91,91,91,91	0
58	MG	BA	3340	1/1	0.48	0.38	97,97,97,97	1
58	MG	CA	1649	1/1	0.48	0.48	82,82,82,82	0
58	MG	AA	1772	1/1	0.48	0.46	100,100,100,100	1
58	MG	CW	105	1/1	0.48	0.20	123,123,123,123	0
58	MG	DA	3262	1/1	0.49	0.89	96,96,96,96	0
58	MG	AW	110	1/1	0.49	0.59	77,77,77,77	1
58	MG	BA	3223	1/1	0.49	0.48	82,82,82,82	0
58	MG	DA	3219	1/1	0.49	0.44	102,102,102,102	0
58	MG	CA	1682	1/1	0.49	0.54	83,83,83,83	0
58	MG	AA	1652	1/1	0.50	0.43	107,107,107,107	0
58	MG	BA	3187	1/1	0.50	0.16	98,98,98,98	0
58	MG	AA	1696	1/1	0.51	0.83	103,103,103,103	0
58	MG	DA	3395	1/1	0.51	0.34	73,73,73,73	1
58	MG	B2	601	1/1	0.51	0.53	68,68,68,68	1
58	MG	DA	3151	1/1	0.51	0.54	94,94,94,94	0
58	MG	AA	1608	1/1	0.52	0.96	110,110,110,110	0
58	MG	AA	1700	1/1	0.52	0.53	90,90,90,90	0
58	MG	DA	3344	1/1	0.52	0.49	72,72,72,72	1
58	MG	DB	213	1/1	0.52	0.60	102,102,102,102	0
58	MG	AA	1602	1/1	0.53	0.52	91,91,91,91	0
58	MG	DA	3420	1/1	0.53	0.38	66,66,66,66	0
58	MG	BA	3309	1/1	0.53	0.31	94,94,94,94	0
58	MG	DA	3223	1/1	0.53	0.38	82,82,82,82	0
58	MG	DN	202	1/1	0.53	0.76	97,97,97,97	0
58	MG	BA	3259	1/1	0.54	0.48	91,91,91,91	0
58	MG	CA	1627	1/1	0.54	0.87	97,97,97,97	0
58	MG	CW	108	1/1	0.54	0.48	130,130,130,130	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	DB	214	1/1	0.54	0.66	94,94,94,94	1
58	MG	CA	1716	1/1	0.54	0.74	83,83,83,83	0
58	MG	CA	1678	1/1	0.55	0.28	109,109,109,109	0
58	MG	DA	3209	1/1	0.55	0.64	105,105,105,105	0
58	MG	BA	3221	1/1	0.55	0.47	72,72,72,72	0
58	MG	DA	3351	1/1	0.55	0.52	79,79,79,79	1
58	MG	BA	3345	1/1	0.55	0.60	93,93,93,93	1
58	MG	BA	3389	1/1	0.55	0.33	107,107,107,107	0
58	MG	DA	3161	1/1	0.56	0.62	131,131,131,131	0
58	MG	AA	1661	1/1	0.56	0.18	83,83,83,83	0
58	MG	DA	3304	1/1	0.56	0.59	88,88,88,88	0
58	MG	BA	3347	1/1	0.56	0.54	85,85,85,85	1
58	MG	AD	301	1/1	0.56	0.23	84,84,84,84	0
58	MG	AA	1745	1/1	0.56	1.51	121,121,121,121	0
58	MG	CV	105	1/1	0.56	0.81	110,110,110,110	0
58	MG	DA	3224	1/1	0.56	0.97	99,99,99,99	1
58	MG	BA	3291	1/1	0.56	0.16	90,90,90,90	0
58	MG	DA	3255	1/1	0.56	0.41	96,96,96,96	0
58	MG	DA	3156	1/1	0.56	0.52	94,94,94,94	0
58	MG	DA	3102	1/1	0.57	0.80	107,107,107,107	0
58	MG	CA	1730	1/1	0.57	1.30	111,111,111,111	0
58	MG	CA	1639	1/1	0.57	0.46	140,140,140,140	0
58	MG	DA	3265	1/1	0.57	0.51	69,69,69,69	0
58	MG	BB	202	1/1	0.57	0.50	97,97,97,97	1
58	MG	CA	1661	1/1	0.58	0.50	98,98,98,98	0
58	MG	AA	1743	1/1	0.58	0.73	86,86,86,86	0
58	MG	BA	3422	1/1	0.58	0.28	67,67,67,67	0
58	MG	BA	3249	1/1	0.59	0.36	57,57,57,57	0
58	MG	DA	3445	1/1	0.59	0.08	98,98,98,98	0
58	MG	CA	1635	1/1	0.59	0.31	81,81,81,81	0
58	MG	DA	3178	1/1	0.59	0.55	125,125,125,125	0
58	MG	DA	3183	1/1	0.59	0.30	68,68,68,68	0
58	MG	AA	1685	1/1	0.59	0.49	101,101,101,101	0
58	MG	BA	3260	1/1	0.59	0.60	102,102,102,102	1
58	MG	AW	112	1/1	0.59	0.18	107,107,107,107	1
58	MG	DA	3196	1/1	0.60	0.56	82,82,82,82	0
58	MG	BA	3164	1/1	0.60	0.47	84,84,84,84	0
58	MG	CA	1774	1/1	0.60	0.23	63,63,63,63	0
58	MG	AA	1655	1/1	0.60	0.87	89,89,89,89	0
58	MG	CA	1701	1/1	0.60	0.58	113,113,113,113	0
58	MG	DA	3301	1/1	0.60	0.76	91,91,91,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	AA	1662	1/1	0.60	0.22	95,95,95,95	0
58	MG	DA	3191	1/1	0.60	0.25	75,75,75,75	0
58	MG	DA	3234	1/1	0.60	1.45	91,91,91,91	0
58	MG	DA	3231	1/1	0.61	0.38	85,85,85,85	0
58	MG	DA	3005	1/1	0.61	1.01	138,138,138,138	0
58	MG	CA	1643	1/1	0.61	0.41	95,95,95,95	0
58	MG	DA	3374	1/1	0.61	0.21	72,72,72,72	0
58	MG	BX	102	1/1	0.61	0.46	97,97,97,97	0
58	MG	BA	3394	1/1	0.61	1.27	105,105,105,105	0
58	MG	CA	1770	1/1	0.61	0.50	121,121,121,121	0
58	MG	DA	3159	1/1	0.61	0.35	74,74,74,74	0
58	MG	BA	3428	1/1	0.62	0.80	90,90,90,90	0
58	MG	DA	3291	1/1	0.62	0.22	105,105,105,105	0
58	MG	BA	3163	1/1	0.62	1.05	132,132,132,132	0
58	MG	AA	1780	1/1	0.62	0.52	84,84,84,84	0
58	MG	DA	3311	1/1	0.62	0.64	93,93,93,93	0
58	MG	BA	3295	1/1	0.62	0.65	89,89,89,89	0
58	MG	BA	3298	1/1	0.62	0.35	91,91,91,91	0
58	MG	AA	1730	1/1	0.62	0.49	93,93,93,93	0
58	MG	DA	3250	1/1	0.62	0.18	82,82,82,82	0
58	MG	BA	3278	1/1	0.62	0.49	119,119,119,119	0
58	MG	BA	3423	1/1	0.62	0.11	125,125,125,125	1
58	MG	CA	1816	1/1	0.62	1.29	102,102,102,102	0
58	MG	AA	1796	1/1	0.62	0.13	106,106,106,106	1
58	MG	CA	1647	1/1	0.63	0.51	94,94,94,94	0
58	MG	AA	1765	1/1	0.63	0.67	116,116,116,116	0
58	MG	CA	1762	1/1	0.63	0.53	60,60,60,60	1
58	MG	DA	3440	1/1	0.63	0.10	77,77,77,77	0
58	MG	BA	3436	1/1	0.64	0.21	60,60,60,60	1
58	MG	DA	3334	1/1	0.64	0.48	107,107,107,107	1
58	MG	DA	3364	1/1	0.64	0.45	95,95,95,95	0
58	MG	AV	105	1/1	0.64	0.52	86,86,86,86	0
58	MG	BA	3089	1/1	0.64	0.21	61,61,61,61	0
58	MG	BA	3034	1/1	0.64	0.47	73,73,73,73	0
58	MG	BA	3431	1/1	0.64	0.32	124,124,124,124	0
58	MG	DA	3426	1/1	0.64	0.51	88,88,88,88	0
58	MG	DA	3317	1/1	0.64	0.22	88,88,88,88	1
58	MG	DA	3197	1/1	0.65	0.15	89,89,89,89	1
58	MG	BA	3355	1/1	0.65	0.49	63,63,63,63	1
58	MG	DA	3325	1/1	0.65	0.21	90,90,90,90	0
58	MG	CA	1743	1/1	0.65	0.48	128,128,128,128	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	D1	101	1/1	0.65	0.61	113,113,113,113	0
58	MG	AA	1734	1/1	0.65	0.41	92,92,92,92	0
58	MG	AA	1704	1/1	0.65	0.14	87,87,87,87	0
58	MG	DA	3179	1/1	0.66	0.22	109,109,109,109	0
58	MG	BA	3160	1/1	0.66	0.21	61,61,61,61	0
58	MG	CA	1677	1/1	0.66	0.21	88,88,88,88	0
58	MG	BA	3214	1/1	0.66	0.29	97,97,97,97	0
58	MG	BA	3013	1/1	0.66	0.60	80,80,80,80	0
58	MG	AA	1606	1/1	0.66	0.24	76,76,76,76	0
58	MG	BA	3270	1/1	0.66	0.27	74,74,74,74	0
58	MG	CA	1697	1/1	0.66	0.23	87,87,87,87	0
58	MG	BB	219	1/1	0.66	0.26	89,89,89,89	1
58	MG	DA	3449	1/1	0.66	0.10	92,92,92,92	0
58	MG	CA	1710	1/1	0.66	1.36	127,127,127,127	0
58	MG	DA	3309	1/1	0.66	0.34	89,89,89,89	0
58	MG	BA	3351	1/1	0.66	1.07	125,125,125,125	0
58	MG	AA	1629	1/1	0.66	0.21	87,87,87,87	0
58	MG	AA	1601	1/1	0.67	0.24	92,92,92,92	0
58	MG	BB	204	1/1	0.67	0.23	103,103,103,103	0
58	MG	BA	3158	1/1	0.67	0.57	97,97,97,97	0
58	MG	BA	3220	1/1	0.67	0.13	80,80,80,80	1
58	MG	CA	1773	1/1	0.67	0.47	82,82,82,82	1
58	MG	BA	3070	1/1	0.67	0.87	116,116,116,116	0
58	MG	BA	3074	1/1	0.67	0.28	75,75,75,75	0
58	MG	AA	1693	1/1	0.67	1.61	109,109,109,109	1
58	MG	CA	1808	1/1	0.67	0.10	107,107,107,107	0
58	MG	AA	1635	1/1	0.67	0.48	94,94,94,94	0
58	MG	DA	3043	1/1	0.67	0.41	111,111,111,111	0
58	MG	DA	3375	1/1	0.67	0.22	106,106,106,106	0
58	MG	DA	3380	1/1	0.67	0.44	85,85,85,85	1
58	MG	DA	3251	1/1	0.67	0.18	95,95,95,95	0
58	MG	DA	3348	1/1	0.68	0.52	94,94,94,94	0
58	MG	BA	3404	1/1	0.68	0.50	97,97,97,97	0
58	MG	CA	1705	1/1	0.68	0.21	76,76,76,76	0
58	MG	CW	116	1/1	0.68	0.22	103,103,103,103	1
58	MG	AG	201	1/1	0.68	1.31	127,127,127,127	0
58	MG	AA	1672	1/1	0.68	0.31	87,87,87,87	0
58	MG	DA	3171	1/1	0.68	1.84	88,88,88,88	0
58	MG	DA	3175	1/1	0.68	0.33	87,87,87,87	0
58	MG	AA	1808	1/1	0.68	0.50	101,101,101,101	0
58	MG	BA	3276	1/1	0.68	0.22	68,68,68,68	0
58	MG	DB	202	1/1	0.68	1.14	113,113,113,113	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	DA	3409	1/1	0.68	0.27	141,141,141,141	0
58	MG	DA	3410	1/1	0.68	0.96	99,99,99,99	0
58	MG	AA	1711	1/1	0.68	0.22	85,85,85,85	0
58	MG	BA	3296	1/1	0.69	0.33	83,83,83,83	0
58	MG	BA	3287	1/1	0.69	0.74	92,92,92,92	1
58	MG	BA	3200	1/1	0.69	0.20	52,52,52,52	0
58	MG	BB	208	1/1	0.69	0.10	103,103,103,103	0
58	MG	DA	3277	1/1	0.69	0.16	104,104,104,104	0
58	MG	AA	1769	1/1	0.69	0.46	74,74,74,74	0
58	MG	DA	3148	1/1	0.69	0.39	88,88,88,88	0
58	MG	BA	3316	1/1	0.69	0.49	81,81,81,81	0
58	MG	BA	3363	1/1	0.69	0.37	116,116,116,116	0
58	MG	AA	1799	1/1	0.69	0.46	117,117,117,117	0
58	MG	BA	3339	1/1	0.69	0.48	120,120,120,120	1
58	MG	CA	1673	1/1	0.70	0.28	92,92,92,92	0
58	MG	DA	3279	1/1	0.70	0.78	92,92,92,92	0
58	MG	AA	1812	1/1	0.70	0.46	93,93,93,93	0
58	MG	BA	3148	1/1	0.70	0.24	59,59,59,59	1
58	MG	CA	1629	1/1	0.70	0.22	89,89,89,89	0
58	MG	BA	3199	1/1	0.70	0.23	73,73,73,73	0
58	MG	BA	3228	1/1	0.70	0.62	107,107,107,107	1
58	MG	BA	3233	1/1	0.70	0.11	98,98,98,98	0
58	MG	AA	1747	1/1	0.70	0.39	85,85,85,85	1
58	MG	BB	214	1/1	0.70	0.48	92,92,92,92	0
58	MG	AA	1650	1/1	0.70	0.24	66,66,66,66	0
58	MG	DA	3335	1/1	0.70	0.42	87,87,87,87	1
58	MG	AA	1742	1/1	0.70	0.25	96,96,96,96	0
58	MG	DN	201	1/1	0.70	1.46	95,95,95,95	0
58	MG	CA	1621	1/1	0.70	0.20	91,91,91,91	0
58	MG	BA	3453	1/1	0.71	0.40	114,114,114,114	0
58	MG	DA	3323	1/1	0.71	0.23	105,105,105,105	1
58	MG	DA	3141	1/1	0.71	1.03	102,102,102,102	0
58	MG	BA	3141	1/1	0.71	0.22	60,60,60,60	0
58	MG	DA	3331	1/1	0.71	0.97	116,116,116,116	1
58	MG	AA	1783	1/1	0.71	0.52	144,144,144,144	0
58	MG	DA	3377	1/1	0.71	0.12	89,89,89,89	0
58	MG	D7	102	1/1	0.71	0.64	73,73,73,73	1
58	MG	BA	3403	1/1	0.71	0.38	58,58,58,58	0
58	MG	AA	1631	1/1	0.71	0.49	109,109,109,109	0
58	MG	DA	3198	1/1	0.71	0.54	106,106,106,106	0
58	MG	DA	3071	1/1	0.71	0.23	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	DB	216	1/1	0.71	0.59	108,108,108,108	0
58	MG	DA	3414	1/1	0.71	0.79	130,130,130,130	0
58	MG	CA	1672	1/1	0.71	0.46	86,86,86,86	0
58	MG	BA	3202	1/1	0.72	0.28	80,80,80,80	1
58	MG	DA	3252	1/1	0.72	0.27	65,65,65,65	0
58	MG	CA	1618	1/1	0.72	1.10	109,109,109,109	0
58	MG	CA	1665	1/1	0.72	0.33	64,64,64,64	0
58	MG	BA	3447	1/1	0.72	0.39	104,104,104,104	0
58	MG	CV	108	1/1	0.72	0.54	67,67,67,67	1
58	MG	DA	3035	1/1	0.72	0.50	78,78,78,78	0
58	MG	BA	3341	1/1	0.72	0.46	112,112,112,112	0
58	MG	AA	1618	1/1	0.72	0.69	106,106,106,106	0
58	MG	CW	106	1/1	0.72	0.24	106,106,106,106	0
58	MG	DA	3298	1/1	0.72	0.27	50,50,50,50	0
58	MG	BA	3401	1/1	0.72	0.65	119,119,119,119	0
58	MG	CA	1651	1/1	0.72	0.43	85,85,85,85	0
58	MG	DA	3144	1/1	0.72	0.40	68,68,68,68	0
58	MG	DA	3088	1/1	0.73	0.44	83,83,83,83	0
58	MG	BA	3331	1/1	0.73	0.20	119,119,119,119	0
58	MG	AA	1695	1/1	0.73	0.26	62,62,62,62	0
58	MG	DA	3107	1/1	0.73	0.32	95,95,95,95	0
58	MG	AA	1647	1/1	0.73	0.14	94,94,94,94	0
58	MG	BA	3362	1/1	0.73	0.29	90,90,90,90	0
58	MG	DA	3399	1/1	0.73	0.74	131,131,131,131	0
58	MG	AA	1760	1/1	0.73	0.44	66,66,66,66	0
58	MG	AA	1779	1/1	0.73	0.34	72,72,72,72	1
58	MG	CA	1609	1/1	0.73	0.37	109,109,109,109	0
58	MG	BA	3279	1/1	0.73	0.36	105,105,105,105	0
58	MG	DA	3070	1/1	0.73	0.12	54,54,54,54	0
58	MG	DA	3423	1/1	0.73	0.57	117,117,117,117	0
58	MG	CA	1675	1/1	0.73	0.68	116,116,116,116	0
58	MG	BA	3232	1/1	0.74	0.67	101,101,101,101	0
58	MG	CK	201	1/1	0.74	0.61	95,95,95,95	1
58	MG	AW	103	1/1	0.74	0.22	100,100,100,100	0
58	MG	DA	3332	1/1	0.74	0.18	100,100,100,100	0
58	MG	BA	3170	1/1	0.74	0.12	65,65,65,65	0
58	MG	BA	3238	1/1	0.74	0.58	67,67,67,67	0
58	MG	BB	209	1/1	0.74	0.23	114,114,114,114	0
58	MG	BA	3329	1/1	0.74	0.13	88,88,88,88	1
58	MG	AW	104	1/1	0.74	0.25	98,98,98,98	1
58	MG	AA	1788	1/1	0.74	0.45	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	AA	1668	1/1	0.74	0.34	66,66,66,66	0
58	MG	BA	3227	1/1	0.74	0.35	73,73,73,73	0
58	MG	CA	1687	1/1	0.74	0.63	84,84,84,84	0
58	MG	AA	1813	1/1	0.74	0.39	101,101,101,101	0
58	MG	DA	3435	1/1	0.75	0.20	59,59,59,59	0
58	MG	DA	3195	1/1	0.75	0.31	96,96,96,96	0
58	MG	BA	3183	1/1	0.75	0.22	122,122,122,122	0
58	MG	DA	3249	1/1	0.75	0.33	83,83,83,83	0
58	MG	CX	101	1/1	0.75	0.20	83,83,83,83	0
58	MG	BA	3409	1/1	0.75	0.10	95,95,95,95	0
58	MG	BA	3429	1/1	0.75	0.67	87,87,87,87	0
58	MG	CA	1613	1/1	0.75	0.28	68,68,68,68	0
58	MG	CA	1617	1/1	0.75	0.71	73,73,73,73	0
58	MG	DA	3220	1/1	0.75	1.42	97,97,97,97	0
58	MG	BA	3230	1/1	0.75	0.32	82,82,82,82	0
58	MG	CA	1619	1/1	0.75	0.78	119,119,119,119	0
58	MG	DA	3330	1/1	0.75	0.46	97,97,97,97	0
58	MG	BA	3269	1/1	0.75	0.54	85,85,85,85	0
58	MG	DA	3287	1/1	0.76	0.36	77,77,77,77	0
58	MG	AV	103	1/1	0.76	0.17	102,102,102,102	0
58	MG	AW	101	1/1	0.76	0.52	73,73,73,73	1
58	MG	DA	3241	1/1	0.76	0.57	60,60,60,60	0
58	MG	DA	3303	1/1	0.76	1.03	97,97,97,97	0
58	MG	BA	3235	1/1	0.76	0.53	82,82,82,82	0
58	MG	CA	1638	1/1	0.76	0.46	82,82,82,82	0
58	MG	BA	3377	1/1	0.76	0.55	94,94,94,94	0
58	MG	DA	3205	1/1	0.76	0.57	81,81,81,81	0
58	MG	BA	3262	1/1	0.76	0.17	81,81,81,81	0
58	MG	BA	3308	1/1	0.76	0.86	97,97,97,97	0
58	MG	BA	3209	1/1	0.76	0.23	49,49,49,49	0
58	MG	DA	3379	1/1	0.76	0.37	66,66,66,66	0
58	MG	BA	3176	1/1	0.76	0.21	62,62,62,62	0
58	MG	DA	3387	1/1	0.76	0.23	63,63,63,63	0
58	MG	DA	3391	1/1	0.76	0.65	86,86,86,86	1
58	MG	BA	3272	1/1	0.76	0.52	92,92,92,92	0
58	MG	BB	217	1/1	0.76	0.43	121,121,121,121	0
58	MG	CA	1742	1/1	0.76	0.61	94,94,94,94	0
58	MG	DA	3283	1/1	0.76	0.49	66,66,66,66	1
58	MG	AA	1689	1/1	0.77	0.21	106,106,106,106	0
58	MG	BA	3236	1/1	0.77	0.38	67,67,67,67	0
58	MG	BA	3284	1/1	0.77	0.40	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	AA	1697	1/1	0.77	0.18	92,92,92,92	0
58	MG	CA	1737	1/1	0.77	0.45	95,95,95,95	1
58	MG	DA	3336	1/1	0.77	0.42	75,75,75,75	1
58	MG	AA	1616	1/1	0.77	0.34	74,74,74,74	0
58	MG	BA	3192	1/1	0.77	0.36	124,124,124,124	0
58	MG	AE	201	1/1	0.77	0.13	110,110,110,110	0
58	MG	DA	3428	1/1	0.77	0.13	91,91,91,91	0
58	MG	DA	3146	1/1	0.77	0.28	58,58,58,58	1
58	MG	AA	1694	1/1	0.77	0.42	22,22,22,22	1
58	MG	BA	3346	1/1	0.77	0.23	76,76,76,76	1
58	MG	AA	1624	1/1	0.77	0.12	74,74,74,74	0
58	MG	BA	3231	1/1	0.77	0.30	114,114,114,114	0
58	MG	BA	3206	1/1	0.77	0.23	63,63,63,63	0
58	MG	DA	3370	1/1	0.77	1.79	74,74,74,74	1
58	MG	CA	1612	1/1	0.77	0.43	116,116,116,116	0
58	MG	CA	1780	1/1	0.77	0.86	81,81,81,81	1
58	MG	DA	3313	1/1	0.77	0.63	73,73,73,73	0
58	MG	BA	3307	1/1	0.77	0.19	104,104,104,104	0
58	MG	CA	1784	1/1	0.77	0.35	78,78,78,78	0
58	MG	AA	1764	1/1	0.77	0.08	94,94,94,94	0
58	MG	DB	217	1/1	0.77	0.66	110,110,110,110	1
58	MG	DA	3388	1/1	0.77	0.36	94,94,94,94	0
58	MG	B5	102	1/1	0.77	0.90	73,73,73,73	1
58	MG	BA	3375	1/1	0.78	0.76	58,58,58,58	1
58	MG	BA	3150	1/1	0.78	0.45	73,73,73,73	0
58	MG	BA	3381	1/1	0.78	0.10	108,108,108,108	0
58	MG	DA	3036	1/1	0.78	0.18	94,94,94,94	0
58	MG	BB	218	1/1	0.78	0.44	78,78,78,78	1
58	MG	DA	3245	1/1	0.78	0.55	64,64,64,64	0
58	MG	AA	1785	1/1	0.78	0.27	70,70,70,70	0
58	MG	BA	3001	1/1	0.78	0.32	71,71,71,71	0
58	MG	BA	3004	1/1	0.78	0.47	109,109,109,109	0
58	MG	CA	1644	1/1	0.78	0.24	72,72,72,72	0
58	MG	DA	3376	1/1	0.78	0.34	128,128,128,128	0
58	MG	DA	3253	1/1	0.78	0.42	72,72,72,72	1
58	MG	AA	1723	1/1	0.78	0.39	85,85,85,85	1
58	MG	BA	3290	1/1	0.78	0.29	51,51,51,51	0
58	MG	CA	1650	1/1	0.78	0.42	98,98,98,98	0
58	MG	BB	201	1/1	0.78	0.81	94,94,94,94	0
58	MG	BA	3321	1/1	0.78	0.42	102,102,102,102	0
58	MG	AA	1683	1/1	0.78	0.35	72,72,72,72	0
58	MG	DA	3398	1/1	0.78	0.23	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	AA	1626	1/1	0.78	0.31	99,99,99,99	0
58	MG	AA	1731	1/1	0.78	0.12	64,64,64,64	0
58	MG	CA	1799	1/1	0.78	0.17	89,89,89,89	0
58	MG	BA	3445	1/1	0.79	0.25	84,84,84,84	0
58	MG	CA	1660	1/1	0.79	0.29	91,91,91,91	0
58	MG	DA	3259	1/1	0.79	0.16	70,70,70,70	0
58	MG	BA	3327	1/1	0.79	0.14	123,123,123,123	0
58	MG	AA	1658	1/1	0.79	0.37	58,58,58,58	1
58	MG	AW	116	1/1	0.79	0.58	129,129,129,129	1
58	MG	CA	1747	1/1	0.79	0.16	67,67,67,67	0
58	MG	DA	3246	1/1	0.79	0.51	53,53,53,53	0
58	MG	DA	3421	1/1	0.79	0.24	107,107,107,107	1
58	MG	AA	1753	1/1	0.79	0.38	81,81,81,81	0
58	MG	AW	119	1/1	0.79	0.15	98,98,98,98	0
58	MG	CA	1763	1/1	0.79	0.67	93,93,93,93	1
58	MG	DA	3390	1/1	0.79	0.30	112,112,112,112	0
58	MG	AA	1604	1/1	0.79	0.42	99,99,99,99	0
58	MG	AA	1632	1/1	0.80	0.14	64,64,64,64	0
58	MG	AA	1686	1/1	0.80	0.33	75,75,75,75	0
58	MG	BA	3349	1/1	0.80	0.46	76,76,76,76	1
58	MG	CA	1725	1/1	0.80	0.49	131,131,131,131	0
58	MG	BA	3071	1/1	0.80	0.33	70,70,70,70	0
58	MG	BA	3253	1/1	0.80	0.37	85,85,85,85	0
58	MG	BA	3002	1/1	0.80	0.28	71,71,71,71	0
58	MG	AA	1771	1/1	0.80	0.41	73,73,73,73	0
58	MG	BA	3328	1/1	0.80	0.47	116,116,116,116	1
58	MG	BA	3289	1/1	0.80	0.21	93,93,93,93	0
58	MG	DA	3319	1/1	0.80	0.44	105,105,105,105	1
58	MG	CA	1603	1/1	0.80	0.37	88,88,88,88	0
58	MG	CA	1745	1/1	0.80	0.55	96,96,96,96	0
58	MG	AA	1718	1/1	0.80	0.17	150,150,150,150	0
58	MG	BA	3267	1/1	0.80	0.23	66,66,66,66	0
58	MG	CA	1755	1/1	0.80	0.23	105,105,105,105	0
58	MG	BA	3108	1/1	0.80	0.24	87,87,87,87	0
58	MG	DA	3333	1/1	0.80	0.20	130,130,130,130	0
58	MG	BA	3113	1/1	0.80	0.89	82,82,82,82	0
58	MG	CA	1767	1/1	0.80	0.43	76,76,76,76	0
58	MG	AA	1691	1/1	0.80	0.30	54,54,54,54	0
58	MG	DA	3282	1/1	0.80	0.36	73,73,73,73	1
58	MG	AA	1752	1/1	0.80	0.47	104,104,104,104	0
58	MG	CA	1653	1/1	0.81	0.52	110,110,110,110	0
58	MG	CA	1656	1/1	0.81	0.63	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	CA	1658	1/1	0.81	1.44	103,103,103,103	0
58	MG	AA	1612	1/1	0.81	0.33	80,80,80,80	0
58	MG	BA	3419	1/1	0.81	0.77	93,93,93,93	0
58	MG	DA	3314	1/1	0.81	0.39	72,72,72,72	0
58	MG	BA	3177	1/1	0.81	0.14	55,55,55,55	0
58	MG	BA	3292	1/1	0.81	0.24	65,65,65,65	0
58	MG	CA	1813	1/1	0.81	0.56	96,96,96,96	0
58	MG	DA	3117	1/1	0.81	0.63	69,69,69,69	0
58	MG	CA	1815	1/1	0.81	0.53	68,68,68,68	0
58	MG	BA	3142	1/1	0.81	0.41	77,77,77,77	0
58	MG	BA	3365	1/1	0.81	0.61	76,76,76,76	1
58	MG	AA	1740	1/1	0.81	0.43	81,81,81,81	1
58	MG	CV	102	1/1	0.81	0.12	89,89,89,89	1
58	MG	BA	3191	1/1	0.81	0.27	71,71,71,71	0
58	MG	AV	108	1/1	0.81	0.18	67,67,67,67	1
58	MG	AA	1728	1/1	0.81	0.26	69,69,69,69	0
58	MG	BN	201	1/1	0.81	0.93	79,79,79,79	0
58	MG	CA	1750	1/1	0.81	0.28	109,109,109,109	0
58	MG	CA	1686	1/1	0.81	0.37	80,80,80,80	0
58	MG	BP	202	1/1	0.81	0.29	14,14,14,14	1
58	MG	AA	1719	1/1	0.81	0.27	91,91,91,91	0
58	MG	DA	3181	1/1	0.81	0.61	74,74,74,74	0
58	MG	CA	1690	1/1	0.81	0.12	122,122,122,122	0
58	MG	CW	119	1/1	0.81	0.37	108,108,108,108	0
58	MG	AA	1643	1/1	0.81	0.22	65,65,65,65	0
58	MG	BA	3123	1/1	0.81	0.21	46,46,46,46	0
58	MG	BA	3451	1/1	0.81	0.11	85,85,85,85	0
58	MG	CA	1709	1/1	0.81	0.73	96,96,96,96	0
58	MG	DA	3297	1/1	0.81	0.15	84,84,84,84	0
58	MG	DA	3201	1/1	0.81	0.65	55,55,55,55	0
58	MG	AA	1802	1/1	0.81	0.21	110,110,110,110	0
58	MG	DX	103	1/1	0.81	0.24	112,112,112,112	0
58	MG	AX	104	1/1	0.82	0.64	71,71,71,71	1
58	MG	AA	1791	1/1	0.82	0.48	60,60,60,60	1
58	MG	AA	1755	1/1	0.82	0.42	83,83,83,83	0
58	MG	CA	1729	1/1	0.82	0.35	81,81,81,81	0
58	MG	DA	3430	1/1	0.82	0.22	106,106,106,106	0
58	MG	CA	1601	1/1	0.82	0.29	49,49,49,49	0
58	MG	DA	3293	1/1	0.82	0.51	52,52,52,52	0
58	MG	DA	3296	1/1	0.82	1.24	66,66,66,66	1
58	MG	DA	3216	1/1	0.82	0.16	78,78,78,78	1
58	MG	DA	3009	1/1	0.82	0.29	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3389	1/1	0.82	0.28	42,42,42,42	1
58	MG	CA	1659	1/1	0.82	0.39	64,64,64,64	1
58	MG	DA	3258	1/1	0.82	0.28	66,66,66,66	0
58	MG	CA	1732	1/1	0.82	0.11	66,66,66,66	0
58	MG	DA	3189	1/1	0.82	0.39	77,77,77,77	0
58	MG	AA	1790	1/1	0.82	0.98	28,28,28,28	1
58	MG	DA	3401	1/1	0.82	0.34	68,68,68,68	0
58	MG	DA	3049	1/1	0.82	0.89	83,83,83,83	0
58	MG	DA	3269	1/1	0.82	0.18	65,65,65,65	0
58	MG	BA	3275	1/1	0.82	0.13	61,61,61,61	0
58	MG	DA	3318	1/1	0.82	0.35	122,122,122,122	0
58	MG	CW	117	1/1	0.82	0.73	125,125,125,125	0
58	MG	BA	3149	1/1	0.83	0.42	116,116,116,116	0
58	MG	DA	3093	1/1	0.83	0.38	50,50,50,50	0
58	MG	AA	1638	1/1	0.83	0.54	115,115,115,115	0
58	MG	CA	1775	1/1	0.83	0.14	69,69,69,69	0
58	MG	DA	3254	1/1	0.83	0.28	123,123,123,123	0
58	MG	CA	1615	1/1	0.83	0.17	81,81,81,81	0
58	MG	BA	3157	1/1	0.83	0.45	78,78,78,78	1
58	MG	DA	3128	1/1	0.83	0.27	65,65,65,65	0
58	MG	BA	3271	1/1	0.83	0.08	114,114,114,114	0
58	MG	BA	3255	1/1	0.83	0.19	102,102,102,102	0
58	MG	BA	3378	1/1	0.83	0.49	65,65,65,65	1
58	MG	BA	3313	1/1	0.83	0.24	38,38,38,38	0
58	MG	BA	3386	1/1	0.83	0.09	63,63,63,63	0
58	MG	BA	3273	1/1	0.83	0.32	76,76,76,76	0
58	MG	BA	3393	1/1	0.83	0.34	101,101,101,101	1
58	MG	BA	3256	1/1	0.83	0.39	61,61,61,61	0
58	MG	DA	3018	1/1	0.83	0.53	51,51,51,51	0
58	MG	CA	1756	1/1	0.83	0.22	59,59,59,59	0
58	MG	DA	3289	1/1	0.83	0.19	73,73,73,73	0
58	MG	AA	1778	1/1	0.83	0.23	84,84,84,84	0
58	MG	BA	3350	1/1	0.83	0.34	105,105,105,105	0
58	MG	DD	302	1/1	0.83	0.37	64,64,64,64	0
58	MG	BA	3060	1/1	0.83	0.27	72,72,72,72	0
58	MG	CA	1606	1/1	0.83	0.35	66,66,66,66	0
58	MG	BA	3181	1/1	0.83	0.47	67,67,67,67	0
58	MG	BA	3055	1/1	0.84	0.16	33,33,33,33	0
58	MG	BA	3006	1/1	0.84	0.37	104,104,104,104	0
58	MG	DA	3404	1/1	0.84	0.21	51,51,51,51	0
58	MG	DA	3408	1/1	0.84	1.02	106,106,106,106	0
58	MG	DA	3154	1/1	0.84	0.29	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3341	1/1	0.84	0.48	78,78,78,78	1
58	MG	BA	3257	1/1	0.84	0.28	46,46,46,46	1
58	MG	BA	3061	1/1	0.84	0.28	38,38,38,38	0
58	MG	CA	1645	1/1	0.84	0.41	78,78,78,78	0
58	MG	BA	3153	1/1	0.84	0.62	118,118,118,118	0
58	MG	DA	3167	1/1	0.84	0.12	79,79,79,79	0
58	MG	DA	3040	1/1	0.84	0.13	78,78,78,78	0
58	MG	CA	1764	1/1	0.84	0.14	87,87,87,87	0
58	MG	BA	3314	1/1	0.84	0.33	74,74,74,74	0
58	MG	DA	3362	1/1	0.84	0.17	111,111,111,111	0
58	MG	DA	3363	1/1	0.84	0.08	114,114,114,114	0
58	MG	DA	3059	1/1	0.84	0.76	84,84,84,84	0
58	MG	DA	3180	1/1	0.84	0.14	79,79,79,79	0
58	MG	DA	3372	1/1	0.84	0.26	106,106,106,106	0
58	MG	CA	1727	1/1	0.84	0.45	80,80,80,80	0
58	MG	BA	3432	1/1	0.84	0.13	57,57,57,57	0
58	MG	AA	1761	1/1	0.84	0.64	83,83,83,83	1
58	MG	AA	1774	1/1	0.84	0.15	70,70,70,70	0
58	MG	AW	114	1/1	0.84	0.67	91,91,91,91	1
58	MG	DB	205	1/1	0.84	0.32	58,58,58,58	1
58	MG	AA	1776	1/1	0.84	0.14	94,94,94,94	0
58	MG	CA	1691	1/1	0.84	0.15	67,67,67,67	0
58	MG	DB	215	1/1	0.84	0.14	64,64,64,64	1
58	MG	BA	3300	1/1	0.84	0.11	80,80,80,80	0
58	MG	BA	3302	1/1	0.84	0.17	56,56,56,56	0
58	MG	DA	3135	1/1	0.84	0.36	52,52,52,52	0
58	MG	BA	3304	1/1	0.84	0.34	95,95,95,95	0
58	MG	CA	1805	1/1	0.84	0.18	59,59,59,59	1
58	MG	CA	1602	1/1	0.84	0.15	64,64,64,64	0
58	MG	AW	118	1/1	0.85	0.44	103,103,103,103	1
58	MG	CW	107	1/1	0.85	0.13	91,91,91,91	1
58	MG	BF	301	1/1	0.85	0.19	70,70,70,70	0
58	MG	AA	1709	1/1	0.85	1.05	119,119,119,119	0
58	MG	BA	3005	1/1	0.85	0.48	85,85,85,85	0
58	MG	AA	1758	1/1	0.85	0.35	70,70,70,70	1
58	MG	BA	3186	1/1	0.85	0.20	63,63,63,63	0
58	MG	BA	3121	1/1	0.85	0.20	82,82,82,82	0
58	MG	CA	1684	1/1	0.85	0.26	67,67,67,67	0
58	MG	BA	3065	1/1	0.85	0.35	59,59,59,59	0
58	MG	DA	3299	1/1	0.85	0.20	119,119,119,119	0
58	MG	BA	3323	1/1	0.85	0.16	83,83,83,83	1
58	MG	CA	1804	1/1	0.85	0.12	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	BA	3325	1/1	0.85	0.38	104,104,104,104	1
58	MG	BA	3411	1/1	0.85	0.63	95,95,95,95	0
58	MG	DA	3033	1/1	0.85	0.30	91,91,91,91	0
58	MG	BA	3128	1/1	0.85	0.24	37,37,37,37	0
58	MG	CA	1614	1/1	0.85	0.31	71,71,71,71	0
58	MG	BB	205	1/1	0.85	1.13	45,45,45,45	1
58	MG	AA	1807	1/1	0.85	0.37	71,71,71,71	1
58	MG	CA	1753	1/1	0.85	0.13	74,74,74,74	0
58	MG	DA	3321	1/1	0.85	0.28	100,100,100,100	0
58	MG	CA	1708	1/1	0.85	0.52	81,81,81,81	0
58	MG	AA	1675	1/1	0.85	0.30	69,69,69,69	0
58	MG	CV	104	1/1	0.85	0.24	85,85,85,85	1
58	MG	BA	3373	1/1	0.85	0.68	56,56,56,56	1
58	MG	AA	1712	1/1	0.85	0.46	67,67,67,67	0
58	MG	BA	3174	1/1	0.85	1.34	77,77,77,77	0
58	MG	CW	104	1/1	0.85	0.44	108,108,108,108	1
58	MG	DA	3199	1/1	0.85	0.31	68,68,68,68	0
58	MG	DX	102	1/1	0.85	0.73	68,68,68,68	0
58	MG	BA	3261	1/1	0.85	0.19	79,79,79,79	0
58	MG	AA	1609	1/1	0.86	0.24	58,58,58,58	0
58	MG	DA	3140	1/1	0.86	0.26	64,64,64,64	0
58	MG	CW	121	1/1	0.86	0.53	125,125,125,125	0
58	MG	CA	1671	1/1	0.86	0.35	79,79,79,79	0
58	MG	AA	1660	1/1	0.86	0.49	90,90,90,90	0
58	MG	BA	3337	1/1	0.86	0.08	116,116,116,116	0
58	MG	BA	3367	1/1	0.86	0.59	107,107,107,107	0
58	MG	BA	3371	1/1	0.86	0.27	81,81,81,81	0
58	MG	BA	3161	1/1	0.86	0.42	68,68,68,68	0
58	MG	BA	3299	1/1	0.86	0.26	68,68,68,68	0
58	MG	DA	3230	1/1	0.86	0.52	119,119,119,119	0
58	MG	DA	3431	1/1	0.86	0.22	137,137,137,137	0
58	MG	BA	3317	1/1	0.86	0.25	117,117,117,117	0
58	MG	DA	3163	1/1	0.86	0.36	84,84,84,84	0
58	MG	BA	3319	1/1	0.86	0.39	75,75,75,75	0
58	MG	AA	1620	1/1	0.86	1.10	91,91,91,91	0
58	MG	DA	3170	1/1	0.86	0.14	46,46,46,46	1
58	MG	AA	1748	1/1	0.86	0.12	76,76,76,76	0
58	MG	DA	3048	1/1	0.86	0.35	44,44,44,44	0
58	MG	BA	3166	1/1	0.86	0.27	71,71,71,71	0
58	MG	AA	1803	1/1	0.86	0.15	33,33,33,33	1
58	MG	DA	3069	1/1	0.86	0.20	79,79,79,79	0
58	MG	BA	3437	1/1	0.86	0.15	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DB	208	1/1	0.86	0.15	87,87,87,87	0
58	MG	DB	211	1/1	0.86	0.62	69,69,69,69	1
58	MG	DA	3320	1/1	0.86	0.15	101,101,101,101	1
58	MG	AA	1805	1/1	0.86	0.60	88,88,88,88	1
58	MG	BA	3396	1/1	0.86	0.34	78,78,78,78	1
58	MG	CA	1789	1/1	0.86	0.31	61,61,61,61	0
58	MG	CW	109	1/1	0.86	0.16	57,57,57,57	1
58	MG	CA	1797	1/1	0.86	0.54	111,111,111,111	0
58	MG	CA	1744	1/1	0.86	0.72	75,75,75,75	0
58	MG	BA	3293	1/1	0.86	0.30	75,75,75,75	0
58	MG	DV	202	1/1	0.86	0.39	63,63,63,63	1
58	MG	CA	1634	1/1	0.86	0.14	97,97,97,97	0
58	MG	DA	3275	1/1	0.86	0.29	57,57,57,57	0
58	MG	CA	1779	1/1	0.87	0.28	121,121,121,121	0
58	MG	DA	3393	1/1	0.87	0.56	89,89,89,89	0
58	MG	BB	211	1/1	0.87	0.99	75,75,75,75	1
58	MG	BA	3353	1/1	0.87	0.32	89,89,89,89	0
58	MG	AW	120	1/1	0.87	0.22	92,92,92,92	1
58	MG	BA	3154	1/1	0.87	0.36	106,106,106,106	1
58	MG	CA	1679	1/1	0.87	0.23	86,86,86,86	1
58	MG	BA	3023	1/1	0.87	0.26	71,71,71,71	0
58	MG	CX	102	1/1	0.87	0.09	95,95,95,95	0
58	MG	AA	1744	1/1	0.87	0.27	84,84,84,84	0
58	MG	D2	101	1/1	0.87	0.27	73,73,73,73	0
58	MG	AA	1692	1/1	0.87	0.59	61,61,61,61	0
58	MG	BA	3198	1/1	0.87	0.24	61,61,61,61	0
58	MG	CA	1807	1/1	0.87	0.50	62,62,62,62	1
58	MG	DA	3013	1/1	0.87	0.25	67,67,67,67	0
58	MG	AA	1707	1/1	0.87	0.45	66,66,66,66	0
58	MG	DA	3032	1/1	0.87	0.28	69,69,69,69	0
58	MG	AA	1633	1/1	0.87	0.14	75,75,75,75	0
58	MG	BA	3201	1/1	0.87	0.31	59,59,59,59	0
58	MG	CA	1749	1/1	0.87	0.52	87,87,87,87	0
58	MG	AA	1645	1/1	0.87	0.44	59,59,59,59	0
58	MG	BA	3237	1/1	0.87	0.43	78,78,78,78	0
58	MG	DA	3268	1/1	0.87	0.20	79,79,79,79	0
58	MG	AA	1687	1/1	0.87	0.33	105,105,105,105	0
58	MG	DA	3187	1/1	0.87	0.28	71,71,71,71	0
58	MG	AA	1615	1/1	0.87	0.15	63,63,63,63	0
58	MG	BA	3344	1/1	0.87	0.21	46,46,46,46	1
58	MG	DA	3194	1/1	0.87	0.30	84,84,84,84	0
58	MG	BA	3244	1/1	0.87	0.36	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	AA	1619	1/1	0.87	0.47	78,78,78,78	0
58	MG	CA	1712	1/1	0.87	0.16	128,128,128,128	0
58	MG	BA	3398	1/1	0.87	0.12	113,113,113,113	0
58	MG	BA	3007	1/1	0.87	0.53	66,66,66,66	0
58	MG	BA	3217	1/1	0.87	0.46	79,79,79,79	0
58	MG	DA	3203	1/1	0.87	0.30	50,50,50,50	0
58	MG	AA	1669	1/1	0.87	0.42	82,82,82,82	0
58	MG	BA	3151	1/1	0.87	0.38	64,64,64,64	0
58	MG	BA	3410	1/1	0.87	0.28	113,113,113,113	0
58	MG	DA	3120	1/1	0.87	0.32	81,81,81,81	0
58	MG	DA	3302	1/1	0.87	0.10	86,86,86,86	0
58	MG	DA	3218	1/1	0.87	0.19	75,75,75,75	0
58	MG	DA	3127	1/1	0.87	0.20	65,65,65,65	0
58	MG	CW	110	1/1	0.87	0.30	85,85,85,85	1
58	MG	DA	3115	1/1	0.88	0.15	36,36,36,36	0
58	MG	DA	3206	1/1	0.88	0.29	55,55,55,55	0
58	MG	AA	1767	1/1	0.88	0.28	44,44,44,44	1
58	MG	DA	3300	1/1	0.88	0.34	63,63,63,63	0
58	MG	CA	1785	1/1	0.88	0.42	85,85,85,85	0
58	MG	DA	3124	1/1	0.88	0.20	63,63,63,63	0
58	MG	CA	1787	1/1	0.88	0.09	56,56,56,56	0
58	MG	AA	1656	1/1	0.88	0.10	68,68,68,68	0
58	MG	CA	1791	1/1	0.88	0.86	27,27,27,27	1
58	MG	AA	1677	1/1	0.88	0.44	96,96,96,96	0
58	MG	BA	3294	1/1	0.88	0.16	85,85,85,85	0
58	MG	BA	3263	1/1	0.88	0.10	77,77,77,77	0
58	MG	AA	1702	1/1	0.88	0.24	57,57,57,57	0
58	MG	BA	3100	1/1	0.88	0.54	43,43,43,43	0
58	MG	AA	1703	1/1	0.88	0.10	45,45,45,45	0
58	MG	DA	3003	1/1	0.88	0.41	79,79,79,79	0
58	MG	BA	3380	1/1	0.88	0.07	66,66,66,66	0
58	MG	DA	3322	1/1	0.88	0.35	100,100,100,100	1
58	MG	DA	3006	1/1	0.88	0.27	87,87,87,87	0
58	MG	AA	1678	1/1	0.88	0.32	93,93,93,93	1
58	MG	DA	3162	1/1	0.88	0.22	65,65,65,65	0
58	MG	AA	1797	1/1	0.88	0.33	137,137,137,137	0
58	MG	DA	3165	1/1	0.88	0.08	100,100,100,100	0
58	MG	BA	3118	1/1	0.88	0.38	53,53,53,53	0
58	MG	AA	1679	1/1	0.88	0.15	49,49,49,49	1
58	MG	AA	1729	1/1	0.88	0.48	104,104,104,104	0
58	MG	AA	1681	1/1	0.88	0.37	69,69,69,69	0
58	MG	AA	1682	1/1	0.88	0.16	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	BA	3400	1/1	0.88	0.14	67,67,67,67	0
58	MG	DA	3343	1/1	0.88	0.40	89,89,89,89	1
58	MG	DA	3042	1/1	0.88	0.56	76,76,76,76	0
58	MG	BA	3136	1/1	0.88	0.17	64,64,64,64	0
58	MG	CV	107	1/1	0.88	0.20	66,66,66,66	0
58	MG	DA	3347	1/1	0.88	0.09	71,71,71,71	0
58	MG	CA	1769	1/1	0.88	0.21	122,122,122,122	0
58	MG	DA	3056	1/1	0.88	0.18	48,48,48,48	0
58	MG	CA	1616	1/1	0.88	0.09	75,75,75,75	0
58	MG	BB	203	1/1	0.88	0.13	134,134,134,134	0
58	MG	BA	3173	1/1	0.88	0.32	72,72,72,72	1
58	MG	DA	3361	1/1	0.88	0.36	71,71,71,71	0
58	MG	AA	1766	1/1	0.88	0.33	74,74,74,74	0
58	MG	AW	108	1/1	0.88	0.16	143,143,143,143	0
58	MG	DA	3286	1/1	0.88	0.19	53,53,53,53	0
58	MG	BA	3144	1/1	0.88	0.44	68,68,68,68	0
58	MG	DA	3100	1/1	0.88	0.61	71,71,71,71	0
58	MG	DA	3290	1/1	0.88	0.59	64,64,64,64	0
58	MG	BB	210	1/1	0.88	0.28	50,50,50,50	1
58	MG	BA	3178	1/1	0.88	0.30	67,67,67,67	0
58	MG	CW	112	1/1	0.88	0.17	81,81,81,81	1
60	ZN	D9	101	1/1	0.88	0.24	196,196,196,196	0
58	MG	DA	3142	1/1	0.89	0.93	125,125,125,125	0
58	MG	AA	1641	1/1	0.89	0.08	65,65,65,65	0
58	MG	AA	1751	1/1	0.89	0.27	75,75,75,75	0
58	MG	AA	1614	1/1	0.89	0.18	76,76,76,76	0
58	MG	DA	3226	1/1	0.89	0.33	121,121,121,121	0
58	MG	DA	3305	1/1	0.89	0.33	60,60,60,60	0
58	MG	DA	3308	1/1	0.89	0.26	48,48,48,48	0
58	MG	BA	3413	1/1	0.89	0.18	105,105,105,105	1
58	MG	CA	1631	1/1	0.89	0.32	88,88,88,88	0
58	MG	BA	3416	1/1	0.89	1.92	95,95,95,95	0
58	MG	DA	3157	1/1	0.89	0.25	47,47,47,47	1
58	MG	DA	3239	1/1	0.89	0.23	63,63,63,63	0
58	MG	AW	105	1/1	0.89	0.13	116,116,116,116	0
58	MG	CA	1748	1/1	0.89	0.24	88,88,88,88	1
58	MG	DA	3028	1/1	0.89	0.32	63,63,63,63	0
58	MG	CA	1814	1/1	0.89	0.70	115,115,115,115	1
58	MG	DA	3164	1/1	0.89	0.35	63,63,63,63	0
58	MG	AA	1782	1/1	0.89	0.59	71,71,71,71	0
58	MG	BA	3369	1/1	0.89	0.32	96,96,96,96	0
58	MG	DA	3326	1/1	0.89	0.32	134,134,134,134	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	BA	3072	1/1	0.89	0.49	67,67,67,67	0
58	MG	DA	3424	1/1	0.89	0.21	53,53,53,53	0
58	MG	BA	3245	1/1	0.89	0.55	81,81,81,81	0
58	MG	BA	3274	1/1	0.89	0.12	54,54,54,54	0
58	MG	BA	3159	1/1	0.89	0.30	52,52,52,52	1
58	MG	CA	1761	1/1	0.89	0.63	94,94,94,94	0
58	MG	BA	3132	1/1	0.89	0.27	36,36,36,36	0
58	MG	CA	1648	1/1	0.89	0.23	108,108,108,108	0
58	MG	CW	102	1/1	0.89	1.00	98,98,98,98	1
58	MG	BA	3433	1/1	0.89	0.14	121,121,121,121	0
58	MG	BA	3301	1/1	0.89	0.72	67,67,67,67	1
58	MG	DA	3270	1/1	0.89	0.12	44,44,44,44	0
58	MG	AA	1794	1/1	0.89	0.20	70,70,70,70	0
58	MG	CA	1711	1/1	0.89	0.08	95,95,95,95	0
58	MG	BA	3443	1/1	0.89	0.34	100,100,100,100	0
58	MG	CA	1715	1/1	0.89	0.14	80,80,80,80	0
58	MG	B2	602	1/1	0.89	0.31	112,112,112,112	0
58	MG	DA	3356	1/1	0.89	0.69	78,78,78,78	1
58	MG	BA	3343	1/1	0.89	0.38	55,55,55,55	1
58	MG	BA	3280	1/1	0.89	0.08	87,87,87,87	0
58	MG	BA	3282	1/1	0.89	0.19	121,121,121,121	0
58	MG	AA	1622	1/1	0.89	0.23	45,45,45,45	0
58	MG	BA	3103	1/1	0.89	0.28	68,68,68,68	0
58	MG	BA	3286	1/1	0.89	0.43	66,66,66,66	0
58	MG	DA	3292	1/1	0.89	0.48	49,49,49,49	0
58	MG	CA	1670	1/1	0.89	0.85	84,84,84,84	0
58	MG	DA	3295	1/1	0.89	0.16	85,85,85,85	0
58	MG	AV	106	1/1	0.89	0.15	119,119,119,119	0
58	MG	BA	3172	1/1	0.89	0.25	78,78,78,78	0
58	MG	CA	1795	1/1	0.89	0.21	55,55,55,55	0
58	MG	AA	1639	1/1	0.89	0.20	57,57,57,57	0
58	MG	DA	3266	1/1	0.90	0.09	87,87,87,87	0
58	MG	DA	3016	1/1	0.90	0.18	74,74,74,74	0
58	MG	BA	3044	1/1	0.90	0.50	115,115,115,115	0
58	MG	AU	101	1/1	0.90	0.53	117,117,117,117	0
58	MG	AA	1659	1/1	0.90	0.83	88,88,88,88	0
58	MG	BA	3332	1/1	0.90	0.15	138,138,138,138	0
58	MG	BA	3207	1/1	0.90	0.09	59,59,59,59	0
58	MG	AA	1708	1/1	0.90	0.46	93,93,93,93	0
58	MG	DA	3417	1/1	0.90	0.32	71,71,71,71	0
58	MG	BA	3029	1/1	0.90	0.40	63,63,63,63	0
58	MG	DA	3210	1/1	0.90	0.15	145,145,145,145	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3131	1/1	0.90	0.09	60,60,60,60	0
58	MG	DA	3155	1/1	0.90	0.20	53,53,53,53	1
58	MG	DA	3217	1/1	0.90	0.47	109,109,109,109	0
58	MG	BA	3189	1/1	0.90	0.33	54,54,54,54	0
58	MG	CA	1717	1/1	0.90	0.11	67,67,67,67	0
58	MG	DA	3158	1/1	0.90	0.39	51,51,51,51	0
58	MG	BA	3421	1/1	0.90	0.24	110,110,110,110	0
58	MG	CA	1757	1/1	0.90	0.40	76,76,76,76	0
58	MG	CA	1759	1/1	0.90	0.88	88,88,88,88	1
58	MG	BA	3218	1/1	0.90	0.21	87,87,87,87	0
58	MG	AA	1786	1/1	0.90	0.24	55,55,55,55	0
58	MG	CW	120	1/1	0.90	0.29	117,117,117,117	1
58	MG	BA	3134	1/1	0.90	0.28	70,70,70,70	0
58	MG	CA	1681	1/1	0.90	0.13	69,69,69,69	0
58	MG	BA	3156	1/1	0.90	0.69	89,89,89,89	0
58	MG	BA	3224	1/1	0.90	0.36	96,96,96,96	0
58	MG	BA	3226	1/1	0.90	0.34	33,33,33,33	0
58	MG	DB	207	1/1	0.90	0.07	79,79,79,79	0
58	MG	DA	3248	1/1	0.90	0.30	62,62,62,62	0
58	MG	DA	3104	1/1	0.90	0.26	60,60,60,60	0
58	MG	BA	3254	1/1	0.90	0.18	74,74,74,74	0
58	MG	DA	3112	1/1	0.90	0.32	70,70,70,70	0
58	MG	CA	1655	1/1	0.90	0.11	99,99,99,99	0
58	MG	DA	3182	1/1	0.90	0.40	65,65,65,65	0
58	MG	DA	3004	1/1	0.90	0.34	54,54,54,54	0
58	MG	DA	3118	1/1	0.90	0.10	29,29,29,29	0
58	MG	DA	3257	1/1	0.90	0.17	99,99,99,99	0
58	MG	CA	1736	1/1	0.90	0.28	73,73,73,73	0
58	MG	DA	3122	1/1	0.90	0.20	49,49,49,49	0
58	MG	BA	3036	1/1	0.90	0.72	90,90,90,90	0
58	MG	BA	3326	1/1	0.90	0.61	111,111,111,111	1
60	ZN	B9	101	1/1	0.90	0.50	199,199,199,199	0
58	MG	BA	3042	1/1	0.90	0.14	35,35,35,35	0
58	MG	AA	1673	1/1	0.91	0.27	53,53,53,53	0
58	MG	BA	3407	1/1	0.91	0.39	82,82,82,82	0
58	MG	AA	1726	1/1	0.91	0.32	65,65,65,65	0
58	MG	DA	3074	1/1	0.91	0.12	40,40,40,40	0
58	MG	AA	1727	1/1	0.91	0.16	62,62,62,62	0
58	MG	DA	3403	1/1	0.91	0.50	72,72,72,72	0
58	MG	BA	3372	1/1	0.91	0.82	105,105,105,105	0
58	MG	CW	118	1/1	0.91	0.14	95,95,95,95	1
58	MG	CA	1652	1/1	0.91	0.18	113,113,113,113	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	CA	1803	1/1	0.91	0.06	70,70,70,70	0
58	MG	AA	1705	1/1	0.91	0.12	35,35,35,35	0
58	MG	BA	3079	1/1	0.91	0.17	28,28,28,28	0
58	MG	DA	3109	1/1	0.91	0.22	43,43,43,43	0
58	MG	BA	3417	1/1	0.91	0.28	49,49,49,49	0
58	MG	BA	3418	1/1	0.91	0.30	61,61,61,61	0
58	MG	AA	1746	1/1	0.91	0.11	57,57,57,57	0
58	MG	D7	101	1/1	0.91	0.18	51,51,51,51	0
58	MG	DA	3272	1/1	0.91	0.22	51,51,51,51	0
58	MG	BA	3025	1/1	0.91	0.33	42,42,42,42	0
58	MG	BB	207	1/1	0.91	0.09	81,81,81,81	0
58	MG	CA	1662	1/1	0.91	0.12	114,114,114,114	0
58	MG	DA	3278	1/1	0.91	0.05	116,116,116,116	0
58	MG	AA	1715	1/1	0.91	0.26	63,63,63,63	0
58	MG	DA	3436	1/1	0.91	0.23	60,60,60,60	0
58	MG	DA	3437	1/1	0.91	0.36	52,52,52,52	0
58	MG	AA	1621	1/1	0.91	0.13	55,55,55,55	0
58	MG	DA	3133	1/1	0.91	0.18	52,52,52,52	0
58	MG	DA	3284	1/1	0.91	0.24	70,70,70,70	0
58	MG	DA	3008	1/1	0.91	0.83	70,70,70,70	0
58	MG	CA	1668	1/1	0.91	0.09	80,80,80,80	0
58	MG	DA	3012	1/1	0.91	0.61	70,70,70,70	0
58	MG	CA	1720	1/1	0.91	0.14	79,79,79,79	0
58	MG	AA	1636	1/1	0.91	0.16	44,44,44,44	1
58	MG	DA	3017	1/1	0.91	0.20	58,58,58,58	0
58	MG	BA	3426	1/1	0.91	0.37	76,76,76,76	0
58	MG	DA	3022	1/1	0.91	0.16	69,69,69,69	0
58	MG	DA	3222	1/1	0.91	0.38	39,39,39,39	0
58	MG	AW	102	1/1	0.91	0.16	78,78,78,78	1
58	MG	AA	1721	1/1	0.91	0.22	55,55,55,55	0
58	MG	CW	101	1/1	0.91	0.41	94,94,94,94	1
58	MG	DA	3034	1/1	0.91	0.24	54,54,54,54	0
58	MG	BB	216	1/1	0.91	0.30	94,94,94,94	1
58	MG	AA	1787	1/1	0.91	0.23	58,58,58,58	0
58	MG	AA	1735	1/1	0.91	0.25	58,58,58,58	0
58	MG	AW	106	1/1	0.91	0.27	103,103,103,103	0
58	MG	DV	201	1/1	0.91	0.33	95,95,95,95	0
58	MG	AA	1738	1/1	0.91	0.58	89,89,89,89	0
58	MG	BA	3064	1/1	0.91	0.36	39,39,39,39	0
58	MG	BA	3442	1/1	0.91	0.09	67,67,67,67	0
58	MG	AA	1653	1/1	0.91	0.54	82,82,82,82	1
58	MG	CA	1741	1/1	0.91	0.32	130,130,130,130	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3182	1/1	0.92	0.30	107,107,107,107	0
58	MG	DA	3238	1/1	0.92	0.53	135,135,135,135	0
58	MG	BA	3035	1/1	0.92	0.18	70,70,70,70	0
58	MG	CA	1781	1/1	0.92	0.36	82,82,82,82	0
58	MG	DA	3050	1/1	0.92	0.57	45,45,45,45	0
58	MG	BA	3101	1/1	0.92	0.37	58,58,58,58	0
58	MG	AA	1674	1/1	0.92	0.44	63,63,63,63	0
58	MG	DA	3064	1/1	0.92	0.48	61,61,61,61	0
58	MG	AA	1690	1/1	0.92	0.20	69,69,69,69	0
58	MG	DA	3168	1/1	0.92	0.17	62,62,62,62	0
58	MG	AW	111	1/1	0.92	0.10	24,24,24,24	1
58	MG	CA	1620	1/1	0.92	0.61	65,65,65,65	0
58	MG	BA	3110	1/1	0.92	0.31	47,47,47,47	0
58	MG	BA	3111	1/1	0.92	0.17	38,38,38,38	0
58	MG	DA	3091	1/1	0.92	0.53	84,84,84,84	0
58	MG	BA	3277	1/1	0.92	0.12	58,58,58,58	0
58	MG	BA	3352	1/1	0.92	0.58	70,70,70,70	0
58	MG	BA	3310	1/1	0.92	0.41	36,36,36,36	0
58	MG	CA	1633	1/1	0.92	0.10	73,73,73,73	0
58	MG	DA	3425	1/1	0.92	0.12	76,76,76,76	0
58	MG	AA	1617	1/1	0.92	0.50	66,66,66,66	0
58	MG	AA	1714	1/1	0.92	0.25	86,86,86,86	0
58	MG	D2	102	1/1	0.92	0.41	50,50,50,50	1
58	MG	AA	1634	1/1	0.92	0.14	106,106,106,106	0
58	MG	AA	1806	1/1	0.92	0.07	68,68,68,68	0
58	MG	AA	1644	1/1	0.92	0.13	57,57,57,57	0
58	MG	DA	3342	1/1	0.92	0.17	62,62,62,62	1
58	MG	BB	215	1/1	0.92	0.20	88,88,88,88	1
58	MG	DA	3274	1/1	0.92	0.23	141,141,141,141	0
58	MG	DA	3441	1/1	0.92	0.44	74,74,74,74	0
58	MG	DA	3119	1/1	0.92	0.18	50,50,50,50	0
58	MG	AA	1775	1/1	0.92	0.04	68,68,68,68	0
58	MG	BA	3208	1/1	0.92	0.21	59,59,59,59	0
58	MG	BA	3165	1/1	0.92	0.15	63,63,63,63	0
58	MG	DA	3349	1/1	0.92	0.16	103,103,103,103	0
58	MG	DA	3280	1/1	0.92	0.53	107,107,107,107	0
58	MG	DA	3204	1/1	0.92	0.09	33,33,33,33	0
58	MG	CA	1703	1/1	0.92	0.36	71,71,71,71	0
58	MG	BA	3014	1/1	0.92	0.11	40,40,40,40	0
58	MG	AA	1664	1/1	0.92	0.24	55,55,55,55	0
58	MG	CV	103	1/1	0.92	0.09	89,89,89,89	0
58	MG	BA	3430	1/1	0.92	0.16	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	AA	1720	1/1	0.92	0.14	56,56,56,56	0
58	MG	AA	1640	1/1	0.92	0.54	56,56,56,56	0
58	MG	DA	3027	1/1	0.92	0.35	50,50,50,50	0
58	MG	BA	3139	1/1	0.92	0.29	59,59,59,59	0
58	MG	DA	3147	1/1	0.92	0.25	105,105,105,105	0
58	MG	BA	3033	1/1	0.92	0.32	63,63,63,63	0
58	MG	BA	3333	1/1	0.92	0.37	79,79,79,79	1
58	MG	CA	1605	1/1	0.92	0.12	72,72,72,72	0
58	MG	BA	3222	1/1	0.92	0.07	57,57,57,57	0
58	MG	BA	3085	1/1	0.92	0.20	49,49,49,49	0
58	MG	BA	3088	1/1	0.92	0.29	69,69,69,69	0
58	MG	AA	1680	1/1	0.92	0.13	79,79,79,79	0
58	MG	DA	3233	1/1	0.92	0.22	50,50,50,50	0
58	MG	BA	3180	1/1	0.93	0.26	93,93,93,93	0
58	MG	BA	3037	1/1	0.93	0.14	61,61,61,61	0
58	MG	BA	3334	1/1	0.93	0.11	137,137,137,137	0
58	MG	AA	1698	1/1	0.93	0.28	61,61,61,61	0
58	MG	DA	3240	1/1	0.93	0.32	51,51,51,51	0
58	MG	BA	3297	1/1	0.93	0.57	51,51,51,51	0
58	MG	AA	1625	1/1	0.93	0.20	39,39,39,39	0
58	MG	BA	3185	1/1	0.93	0.18	69,69,69,69	0
58	MG	AW	109	1/1	0.93	0.15	50,50,50,50	1
58	MG	CW	111	1/1	0.93	0.73	89,89,89,89	1
58	MG	DA	3405	1/1	0.93	0.66	129,129,129,129	0
58	MG	DA	3407	1/1	0.93	0.29	140,140,140,140	0
58	MG	BA	3399	1/1	0.93	0.21	70,70,70,70	1
58	MG	CW	113	1/1	0.93	0.24	41,41,41,41	1
58	MG	BA	3449	1/1	0.93	0.46	107,107,107,107	1
58	MG	AA	1701	1/1	0.93	0.34	61,61,61,61	0
58	MG	DA	3177	1/1	0.93	0.14	103,103,103,103	0
58	MG	AA	1710	1/1	0.93	0.12	82,82,82,82	0
58	MG	AA	1722	1/1	0.93	0.18	67,67,67,67	0
58	MG	BA	3120	1/1	0.93	0.29	87,87,87,87	0
58	MG	DA	3422	1/1	0.93	0.29	69,69,69,69	0
58	MG	AA	1627	1/1	0.93	0.57	74,74,74,74	0
58	MG	DA	3260	1/1	0.93	0.09	29,29,29,29	0
58	MG	AV	104	1/1	0.93	0.37	98,98,98,98	1
58	MG	CA	1674	1/1	0.93	0.55	89,89,89,89	0
58	MG	CA	1734	1/1	0.93	0.21	144,144,144,144	1
58	MG	CA	1796	1/1	0.93	0.09	51,51,51,51	1
58	MG	AA	1642	1/1	0.93	0.20	34,34,34,34	0
58	MG	DA	3338	1/1	0.93	0.19	123,123,123,123	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3340	1/1	0.93	0.68	63,63,63,63	1
58	MG	BA	3017	1/1	0.93	0.22	69,69,69,69	0
58	MG	BA	3412	1/1	0.93	0.28	67,67,67,67	0
58	MG	BA	3018	1/1	0.93	0.14	80,80,80,80	0
58	MG	BA	3204	1/1	0.93	0.15	51,51,51,51	0
58	MG	AA	1768	1/1	0.93	0.33	100,100,100,100	0
58	MG	AA	1754	1/1	0.93	0.17	114,114,114,114	0
58	MG	DA	3200	1/1	0.93	0.45	57,57,57,57	0
58	MG	BA	3167	1/1	0.93	0.44	55,55,55,55	0
58	MG	DA	3202	1/1	0.93	0.06	38,38,38,38	0
58	MG	CA	1746	1/1	0.93	0.21	87,87,87,87	0
58	MG	DA	3354	1/1	0.93	0.24	110,110,110,110	0
58	MG	DB	204	1/1	0.93	0.77	148,148,148,148	0
58	MG	BA	3320	1/1	0.93	0.07	40,40,40,40	0
58	MG	DB	206	1/1	0.93	0.19	78,78,78,78	0
58	MG	BA	3250	1/1	0.93	0.48	65,65,65,65	0
58	MG	AA	1770	1/1	0.93	0.21	55,55,55,55	0
58	MG	DB	210	1/1	0.93	0.20	51,51,51,51	1
58	MG	BA	3137	1/1	0.93	0.33	61,61,61,61	0
58	MG	DA	3137	1/1	0.93	0.44	39,39,39,39	0
58	MG	AA	1713	1/1	0.93	0.21	82,82,82,82	0
58	MG	CA	1752	1/1	0.93	0.16	94,94,94,94	0
58	MG	CL	201	1/1	0.93	0.54	51,51,51,51	0
58	MG	DA	3143	1/1	0.93	0.72	63,63,63,63	0
58	MG	CA	1693	1/1	0.93	0.29	74,74,74,74	0
58	MG	DE	302	1/1	0.93	0.53	83,83,83,83	0
58	MG	DA	3024	1/1	0.93	0.30	37,37,37,37	0
58	MG	AA	1628	1/1	0.93	0.31	71,71,71,71	0
58	MG	DN	203	1/1	0.93	0.12	109,109,109,109	1
58	MG	BA	3094	1/1	0.93	0.40	63,63,63,63	0
58	MG	AA	1809	1/1	0.93	0.20	88,88,88,88	0
58	MG	AA	1657	1/1	0.93	0.37	73,73,73,73	0
58	MG	CA	1706	1/1	0.93	0.18	56,56,56,56	0
59	PAR	AA	1814	42/42	0.93	0.22	80,85,103,108	0
58	MG	BW	201	1/1	0.93	0.37	120,120,120,120	0
58	MG	BX	101	1/1	0.93	0.30	69,69,69,69	0
58	MG	DA	3129	1/1	0.94	0.12	58,58,58,58	1
58	MG	DA	3130	1/1	0.94	0.13	80,80,80,80	0
58	MG	DA	3131	1/1	0.94	0.27	40,40,40,40	0
58	MG	AA	1781	1/1	0.94	0.20	89,89,89,89	0
58	MG	CA	1630	1/1	0.94	0.23	81,81,81,81	0
58	MG	CA	1702	1/1	0.94	0.32	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3382	1/1	0.94	0.32	86,86,86,86	0
58	MG	BA	3003	1/1	0.94	0.39	68,68,68,68	0
58	MG	BA	3387	1/1	0.94	0.18	107,107,107,107	0
58	MG	CA	1777	1/1	0.94	0.30	99,99,99,99	0
58	MG	CA	1707	1/1	0.94	0.09	82,82,82,82	0
58	MG	BA	3098	1/1	0.94	0.33	45,45,45,45	0
58	MG	BA	3145	1/1	0.94	0.46	61,61,61,61	0
58	MG	BA	3184	1/1	0.94	0.08	52,52,52,52	0
58	MG	DA	3149	1/1	0.94	0.48	73,73,73,73	0
58	MG	DA	3002	1/1	0.94	0.10	63,63,63,63	0
58	MG	AW	113	1/1	0.94	0.23	45,45,45,45	1
58	MG	CA	1640	1/1	0.94	0.60	61,61,61,61	0
58	MG	CA	1713	1/1	0.94	0.23	54,54,54,54	0
58	MG	CA	1788	1/1	0.94	0.07	75,75,75,75	0
58	MG	DA	3267	1/1	0.94	0.37	79,79,79,79	0
58	MG	BA	3283	1/1	0.94	0.06	100,100,100,100	0
58	MG	CA	1790	1/1	0.94	0.10	84,84,84,84	0
58	MG	DA	3010	1/1	0.94	0.09	51,51,51,51	0
58	MG	DA	3271	1/1	0.94	0.09	62,62,62,62	0
58	MG	AA	1737	1/1	0.94	0.30	78,78,78,78	0
58	MG	CA	1792	1/1	0.94	0.22	70,70,70,70	1
58	MG	CA	1794	1/1	0.94	0.77	77,77,77,77	0
58	MG	AW	115	1/1	0.94	0.15	130,130,130,130	0
58	MG	AA	1665	1/1	0.94	0.48	55,55,55,55	0
58	MG	BA	3402	1/1	0.94	0.42	59,59,59,59	0
58	MG	BA	3105	1/1	0.94	0.44	55,55,55,55	0
58	MG	DA	3169	1/1	0.94	0.05	52,52,52,52	0
58	MG	DA	3026	1/1	0.94	0.47	49,49,49,49	0
58	MG	CA	1800	1/1	0.94	0.23	108,108,108,108	0
58	MG	DA	3174	1/1	0.94	0.15	77,77,77,77	0
58	MG	CA	1723	1/1	0.94	0.08	47,47,47,47	0
58	MG	DA	3176	1/1	0.94	0.16	49,49,49,49	0
58	MG	DA	3413	1/1	0.94	0.27	96,96,96,96	0
58	MG	DA	3288	1/1	0.94	0.27	32,32,32,32	0
58	MG	CA	1802	1/1	0.94	0.11	70,70,70,70	1
58	MG	BB	212	1/1	0.94	0.12	59,59,59,59	1
58	MG	BA	3107	1/1	0.94	0.30	46,46,46,46	0
58	MG	BA	3195	1/1	0.94	0.27	48,48,48,48	0
58	MG	BA	3243	1/1	0.94	0.30	45,45,45,45	0
58	MG	BA	3196	1/1	0.94	0.39	60,60,60,60	0
58	MG	BA	3052	1/1	0.94	0.59	134,134,134,134	1
58	MG	DA	3184	1/1	0.94	0.26	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	BA	3247	1/1	0.94	0.16	33,33,33,33	0
58	MG	DA	3429	1/1	0.94	0.14	80,80,80,80	0
58	MG	AA	1699	1/1	0.94	0.20	106,106,106,106	0
58	MG	BA	3059	1/1	0.94	0.22	45,45,45,45	0
58	MG	BA	3252	1/1	0.94	0.12	46,46,46,46	0
58	MG	BA	3010	1/1	0.94	0.24	40,40,40,40	0
58	MG	DA	3058	1/1	0.94	0.23	49,49,49,49	0
58	MG	AA	1759	1/1	0.94	0.22	70,70,70,70	1
58	MG	DA	3438	1/1	0.94	0.67	97,97,97,97	0
58	MG	DA	3060	1/1	0.94	0.49	35,35,35,35	0
58	MG	BA	3203	1/1	0.94	0.49	86,86,86,86	0
58	MG	CA	1666	1/1	0.94	0.47	75,75,75,75	0
58	MG	BA	3063	1/1	0.94	0.25	20,20,20,20	0
58	MG	AA	1800	1/1	0.94	0.22	59,59,59,59	1
58	MG	DA	3073	1/1	0.94	0.33	55,55,55,55	0
58	MG	AA	1801	1/1	0.94	0.09	71,71,71,71	0
58	MG	BA	3124	1/1	0.94	0.40	40,40,40,40	0
58	MG	BA	3356	1/1	0.94	0.30	67,67,67,67	0
58	MG	AA	1741	1/1	0.94	0.45	72,72,72,72	0
58	MG	BA	3129	1/1	0.94	0.46	63,63,63,63	0
58	MG	BA	3169	1/1	0.94	0.17	83,83,83,83	0
58	MG	AA	1732	1/1	0.94	0.20	64,64,64,64	1
58	MG	DA	3324	1/1	0.94	0.29	104,104,104,104	1
58	MG	DB	209	1/1	0.94	0.09	117,117,117,117	0
58	MG	BA	3171	1/1	0.94	0.14	59,59,59,59	0
58	MG	AA	1804	1/1	0.94	0.16	49,49,49,49	0
58	MG	B5	101	1/1	0.94	0.36	50,50,50,50	0
58	MG	DA	3110	1/1	0.94	0.17	38,38,38,38	0
58	MG	DA	3221	1/1	0.94	0.31	43,43,43,43	0
58	MG	BA	3439	1/1	0.94	0.34	52,52,52,52	0
58	MG	BA	3031	1/1	0.94	0.31	35,35,35,35	0
58	MG	AA	1671	1/1	0.94	0.41	61,61,61,61	0
58	MG	CA	1760	1/1	0.94	0.19	85,85,85,85	1
58	MG	DF	301	1/1	0.94	0.22	90,90,90,90	0
58	MG	BA	3318	1/1	0.94	0.37	110,110,110,110	0
58	MG	DA	3229	1/1	0.94	0.12	101,101,101,101	0
58	MG	BA	3086	1/1	0.94	0.32	36,36,36,36	0
58	MG	CA	1622	1/1	0.94	0.14	36,36,36,36	0
58	MG	AA	1605	1/1	0.94	0.13	53,53,53,53	0
58	MG	DA	3126	1/1	0.94	0.22	24,24,24,24	0
58	MG	DA	3235	1/1	0.94	0.22	44,44,44,44	0
58	MG	DA	3236	1/1	0.94	0.42	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
59	PAR	CA	1817	42/42	0.94	0.23	72,78,95,100	0
58	MG	BA	3448	1/1	0.94	0.05	67,67,67,67	0
58	MG	CA	1768	1/1	0.94	0.29	65,65,65,65	1
58	MG	DA	3185	1/1	0.95	0.20	40,40,40,40	0
58	MG	DA	3186	1/1	0.95	0.16	49,49,49,49	0
58	MG	CA	1728	1/1	0.95	0.10	86,86,86,86	0
58	MG	BA	3168	1/1	0.95	0.12	72,72,72,72	0
58	MG	BA	3358	1/1	0.95	0.17	60,60,60,60	0
58	MG	DA	3193	1/1	0.95	0.16	62,62,62,62	0
58	MG	DA	3105	1/1	0.95	0.39	52,52,52,52	0
58	MG	BA	3452	1/1	0.95	0.37	114,114,114,114	1
58	MG	D1	102	1/1	0.95	0.09	54,54,54,54	1
58	MG	BA	3405	1/1	0.95	0.36	53,53,53,53	0
58	MG	DA	3392	1/1	0.95	0.32	74,74,74,74	0
58	MG	DA	3111	1/1	0.95	0.21	44,44,44,44	0
58	MG	BA	3360	1/1	0.95	0.14	60,60,60,60	0
58	MG	AA	1733	1/1	0.95	0.19	91,91,91,91	1
58	MG	BA	3194	1/1	0.95	0.12	43,43,43,43	0
58	MG	BA	3330	1/1	0.95	0.30	114,114,114,114	1
58	MG	AA	1717	1/1	0.95	0.32	48,48,48,48	0
58	MG	DA	3294	1/1	0.95	0.57	63,63,63,63	0
58	MG	BA	3125	1/1	0.95	0.20	64,64,64,64	0
58	MG	DA	3121	1/1	0.95	0.29	44,44,44,44	0
58	MG	BA	3126	1/1	0.95	0.53	47,47,47,47	0
58	MG	DA	3123	1/1	0.95	0.42	40,40,40,40	0
58	MG	AV	102	1/1	0.95	0.13	85,85,85,85	1
58	MG	BA	3306	1/1	0.95	0.48	67,67,67,67	0
58	MG	DA	3412	1/1	0.95	0.20	109,109,109,109	0
58	MG	DA	3214	1/1	0.95	0.10	131,131,131,131	0
58	MG	AA	1810	1/1	0.95	0.30	36,36,36,36	0
58	MG	DA	3415	1/1	0.95	0.37	70,70,70,70	0
58	MG	DA	3416	1/1	0.95	0.28	114,114,114,114	0
58	MG	BA	3376	1/1	0.95	0.21	68,68,68,68	1
58	MG	DA	3419	1/1	0.95	0.13	83,83,83,83	0
58	MG	BA	3338	1/1	0.95	0.09	121,121,121,121	0
58	MG	B7	101	1/1	0.95	1.07	73,73,73,73	1
58	MG	CA	1689	1/1	0.95	0.14	138,138,138,138	0
58	MG	DA	3132	1/1	0.95	0.17	34,34,34,34	0
58	MG	BA	3379	1/1	0.95	0.20	110,110,110,110	0
58	MG	CA	1637	1/1	0.95	0.21	40,40,40,40	0
58	MG	DA	3020	1/1	0.95	0.33	15,15,15,15	0
58	MG	AA	1811	1/1	0.95	0.15	93,93,93,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	CA	1754	1/1	0.95	0.10	93,93,93,93	0
58	MG	DA	3228	1/1	0.95	0.49	75,75,75,75	0
58	MG	CA	1695	1/1	0.95	0.37	49,49,49,49	1
58	MG	BA	3075	1/1	0.95	0.17	36,36,36,36	0
58	MG	CA	1699	1/1	0.95	0.14	44,44,44,44	0
58	MG	DA	3030	1/1	0.95	0.21	24,24,24,24	0
58	MG	BA	3342	1/1	0.95	0.34	92,92,92,92	0
58	MG	BA	3383	1/1	0.95	0.19	89,89,89,89	0
58	MG	CV	106	1/1	0.95	0.11	93,93,93,93	0
58	MG	BD	301	1/1	0.95	0.16	44,44,44,44	0
58	MG	BE	301	1/1	0.95	0.21	30,30,30,30	0
58	MG	CA	1646	1/1	0.95	0.24	64,64,64,64	0
58	MG	DA	3041	1/1	0.95	0.30	56,56,56,56	0
58	MG	AW	107	1/1	0.95	0.09	74,74,74,74	1
58	MG	AA	1750	1/1	0.95	0.74	97,97,97,97	0
58	MG	BO	201	1/1	0.95	0.22	44,44,44,44	0
58	MG	AA	1757	1/1	0.95	0.13	71,71,71,71	0
58	MG	DB	203	1/1	0.95	0.06	89,89,89,89	0
58	MG	BA	3390	1/1	0.95	0.19	57,57,57,57	0
58	MG	DA	3051	1/1	0.95	0.11	110,110,110,110	1
58	MG	BA	3392	1/1	0.95	0.26	79,79,79,79	0
58	MG	BA	3264	1/1	0.95	0.09	27,27,27,27	0
58	MG	BA	3162	1/1	0.95	0.17	51,51,51,51	0
58	MG	AA	1646	1/1	0.95	0.21	47,47,47,47	0
58	MG	DA	3256	1/1	0.95	0.27	82,82,82,82	1
58	MG	DA	3063	1/1	0.95	0.38	35,35,35,35	0
58	MG	CA	1657	1/1	0.95	0.15	78,78,78,78	0
58	MG	BA	3444	1/1	0.95	0.09	90,90,90,90	0
58	MG	BA	3212	1/1	0.95	0.19	75,75,75,75	0
58	MG	DA	3261	1/1	0.95	0.37	32,32,32,32	0
58	MG	DA	3173	1/1	0.95	0.15	46,46,46,46	0
58	MG	CA	1721	1/1	0.95	0.34	94,94,94,94	0
58	MG	DA	3072	1/1	0.95	0.40	31,31,31,31	0
58	MG	BA	3116	1/1	0.95	0.16	38,38,38,38	0
58	MG	CA	1607	1/1	0.95	0.11	52,52,52,52	0
58	MG	DA	3082	1/1	0.95	0.26	37,37,37,37	0
58	MG	DA	3085	1/1	0.95	0.56	60,60,60,60	0
58	MG	DA	3087	1/1	0.95	0.25	45,45,45,45	0
58	MG	AX	103	1/1	0.95	0.21	98,98,98,98	0
58	MG	DX	101	1/1	0.95	0.23	51,51,51,51	0
58	MG	DA	3365	1/1	0.95	0.19	135,135,135,135	1
58	MG	DA	3366	1/1	0.95	0.15	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	CA	1611	1/1	0.95	0.23	61,61,61,61	0
58	MG	BA	3092	1/1	0.95	0.56	100,100,100,100	0
58	MG	DA	3373	1/1	0.95	0.28	78,78,78,78	1
58	MG	AA	1667	1/1	0.95	0.09	56,56,56,56	0
58	MG	AA	1623	1/1	0.96	0.17	106,106,106,106	0
58	MG	DA	3047	1/1	0.96	0.34	27,27,27,27	0
58	MG	CA	1667	1/1	0.96	0.11	147,147,147,147	0
58	MG	BA	3056	1/1	0.96	0.13	53,53,53,53	0
58	MG	DA	3402	1/1	0.96	0.13	178,178,178,178	0
58	MG	AA	1630	1/1	0.96	0.18	84,84,84,84	0
58	MG	CA	1624	1/1	0.96	0.33	99,99,99,99	0
58	MG	DA	3054	1/1	0.96	0.33	45,45,45,45	0
58	MG	CA	1625	1/1	0.96	0.20	40,40,40,40	0
58	MG	BA	3030	1/1	0.96	0.32	70,70,70,70	0
58	MG	CA	1786	1/1	0.96	0.07	53,53,53,53	0
58	MG	BA	3095	1/1	0.96	0.26	40,40,40,40	0
58	MG	CA	1628	1/1	0.96	0.34	80,80,80,80	0
58	MG	B1	101	1/1	0.96	0.08	29,29,29,29	1
58	MG	BA	3434	1/1	0.96	0.15	90,90,90,90	0
58	MG	CA	1733	1/1	0.96	0.07	49,49,49,49	1
58	MG	AA	1613	1/1	0.96	0.37	53,53,53,53	0
58	MG	CA	1632	1/1	0.96	0.09	73,73,73,73	0
58	MG	AA	1716	1/1	0.96	0.07	46,46,46,46	0
58	MG	BA	3225	1/1	0.96	0.35	38,38,38,38	0
58	MG	DA	3076	1/1	0.96	0.26	48,48,48,48	0
58	MG	DA	3078	1/1	0.96	0.19	24,24,24,24	0
58	MG	DA	3243	1/1	0.96	0.16	45,45,45,45	0
58	MG	DA	3080	1/1	0.96	0.17	35,35,35,35	0
58	MG	DA	3081	1/1	0.96	0.29	96,96,96,96	0
58	MG	BA	3440	1/1	0.96	0.41	93,93,93,93	0
58	MG	DA	3083	1/1	0.96	0.16	32,32,32,32	0
58	MG	CA	1685	1/1	0.96	0.10	101,101,101,101	0
58	MG	AA	1663	1/1	0.96	0.20	31,31,31,31	0
58	MG	DA	3172	1/1	0.96	0.27	42,42,42,42	0
58	MG	D5	101	1/1	0.96	0.16	51,51,51,51	0
58	MG	DA	3433	1/1	0.96	0.09	94,94,94,94	1
58	MG	BN	202	1/1	0.96	0.12	97,97,97,97	1
58	MG	AA	1793	1/1	0.96	0.39	106,106,106,106	0
58	MG	DA	3095	1/1	0.96	0.13	33,33,33,33	0
58	MG	DA	3097	1/1	0.96	0.30	53,53,53,53	0
58	MG	DA	3099	1/1	0.96	0.52	45,45,45,45	0
58	MG	BP	201	1/1	0.96	0.14	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	AA	1749	1/1	0.96	0.42	117,117,117,117	0
58	MG	CA	1641	1/1	0.96	0.12	39,39,39,39	0
58	MG	DA	3444	1/1	0.96	0.07	70,70,70,70	0
58	MG	CA	1692	1/1	0.96	0.12	92,92,92,92	0
58	MG	DA	3446	1/1	0.96	0.08	51,51,51,51	0
58	MG	BV	201	1/1	0.96	0.54	101,101,101,101	0
58	MG	BA	3229	1/1	0.96	0.12	117,117,117,117	0
58	MG	CA	1811	1/1	0.96	0.15	165,165,165,165	0
58	MG	BA	3106	1/1	0.96	0.42	52,52,52,52	0
58	MG	BA	3266	1/1	0.96	0.16	64,64,64,64	0
58	MG	BA	3368	1/1	0.96	0.18	74,74,74,74	0
58	MG	DA	3113	1/1	0.96	0.42	42,42,42,42	0
58	MG	DA	3014	1/1	0.96	0.27	28,28,28,28	0
58	MG	AA	1648	1/1	0.96	0.15	95,95,95,95	0
58	MG	AA	1706	1/1	0.96	0.06	63,63,63,63	0
58	MG	BA	3143	1/1	0.96	0.17	90,90,90,90	0
58	MG	BA	3049	1/1	0.96	0.31	35,35,35,35	0
58	MG	BA	3076	1/1	0.96	0.29	40,40,40,40	0
58	MG	CA	1608	1/1	0.96	0.21	80,80,80,80	0
58	MG	CA	1654	1/1	0.96	0.27	76,76,76,76	1
58	MG	BA	3414	1/1	0.96	0.12	78,78,78,78	0
58	MG	BA	3077	1/1	0.96	0.28	55,55,55,55	0
58	MG	BA	3303	1/1	0.96	0.32	89,89,89,89	0
58	MG	BA	3078	1/1	0.96	0.15	23,23,23,23	0
58	MG	DB	218	1/1	0.96	0.15	82,82,82,82	1
58	MG	BA	3020	1/1	0.96	0.34	41,41,41,41	0
58	MG	BA	3119	1/1	0.96	0.06	24,24,24,24	0
58	MG	DA	3207	1/1	0.96	0.09	60,60,60,60	0
58	MG	DA	3378	1/1	0.96	0.28	72,72,72,72	0
58	MG	DA	3208	1/1	0.96	0.10	76,76,76,76	0
58	MG	CA	1771	1/1	0.96	0.12	47,47,47,47	0
58	MG	DA	3382	1/1	0.96	0.14	59,59,59,59	0
58	MG	DA	3385	1/1	0.96	0.23	138,138,138,138	0
58	MG	BA	3082	1/1	0.96	0.24	63,63,63,63	0
58	MG	DA	3211	1/1	0.96	0.31	61,61,61,61	0
58	MG	DA	3212	1/1	0.96	0.13	60,60,60,60	0
58	MG	BA	3210	1/1	0.96	0.22	43,43,43,43	0
58	MG	AX	101	1/1	0.96	0.18	85,85,85,85	0
58	MG	DA	3136	1/1	0.96	0.29	44,44,44,44	0
58	MG	BA	3053	1/1	0.96	0.25	18,18,18,18	0
58	MG	AA	1739	1/1	0.97	0.24	102,102,102,102	0
58	MG	DA	3371	1/1	0.97	0.10	98,98,98,98	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3065	1/1	0.97	0.17	41,41,41,41	0
58	MG	BA	3087	1/1	0.97	0.17	47,47,47,47	0
58	MG	CA	1766	1/1	0.97	0.21	44,44,44,44	0
58	MG	BA	3258	1/1	0.97	0.22	100,100,100,100	0
58	MG	AA	1649	1/1	0.97	0.32	53,53,53,53	0
58	MG	BA	3022	1/1	0.97	0.40	64,64,64,64	0
58	MG	BV	202	1/1	0.97	0.18	136,136,136,136	1
58	MG	AA	1684	1/1	0.97	0.16	97,97,97,97	0
58	MG	BA	3093	1/1	0.97	0.29	37,37,37,37	0
58	MG	DA	3079	1/1	0.97	0.24	22,22,22,22	0
58	MG	BA	3388	1/1	0.97	0.16	66,66,66,66	0
58	MG	DA	3386	1/1	0.97	0.20	49,49,49,49	0
58	MG	BA	3438	1/1	0.97	0.33	71,71,71,71	0
58	MG	BA	3188	1/1	0.97	0.13	47,47,47,47	0
58	MG	BA	3039	1/1	0.97	0.22	45,45,45,45	0
58	MG	DA	3276	1/1	0.97	0.21	75,75,75,75	0
58	MG	BA	3265	1/1	0.97	0.36	32,32,32,32	0
58	MG	BA	3127	1/1	0.97	0.15	35,35,35,35	0
58	MG	BA	3040	1/1	0.97	0.15	33,33,33,33	0
58	MG	CA	1782	1/1	0.97	0.31	160,160,160,160	0
58	MG	DA	3092	1/1	0.97	0.29	29,29,29,29	0
58	MG	CX	103	1/1	0.97	0.08	97,97,97,97	0
58	MG	CA	1718	1/1	0.97	0.24	71,71,71,71	0
58	MG	DA	3285	1/1	0.97	0.07	36,36,36,36	0
58	MG	DA	3188	1/1	0.97	0.18	123,123,123,123	0
58	MG	BA	3395	1/1	0.97	0.34	70,70,70,70	0
58	MG	BA	3067	1/1	0.97	0.28	34,34,34,34	0
58	MG	DA	3192	1/1	0.97	0.21	65,65,65,65	0
58	MG	BA	3099	1/1	0.97	0.11	59,59,59,59	0
58	MG	D2	103	1/1	0.97	0.17	78,78,78,78	0
58	MG	AA	1798	1/1	0.97	0.17	135,135,135,135	0
58	MG	BA	3026	1/1	0.97	0.20	52,52,52,52	0
58	MG	CA	1664	1/1	0.97	0.25	40,40,40,40	0
58	MG	DA	3001	1/1	0.97	0.09	92,92,92,92	0
58	MG	DA	3108	1/1	0.97	0.12	32,32,32,32	0
58	MG	BA	3133	1/1	0.97	0.27	56,56,56,56	0
58	MG	BA	3046	1/1	0.97	0.25	64,64,64,64	0
58	MG	BA	3073	1/1	0.97	0.42	36,36,36,36	0
58	MG	DA	3418	1/1	0.97	0.14	60,60,60,60	0
58	MG	BA	3047	1/1	0.97	0.29	34,34,34,34	0
58	MG	BA	3315	1/1	0.97	0.40	100,100,100,100	1
58	MG	DA	3007	1/1	0.97	0.45	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3116	1/1	0.97	0.28	30,30,30,30	0
58	MG	BA	3406	1/1	0.97	0.13	38,38,38,38	0
58	MG	BA	3138	1/1	0.97	0.37	37,37,37,37	0
58	MG	DA	3307	1/1	0.97	0.29	30,30,30,30	0
58	MG	CA	1798	1/1	0.97	0.06	89,89,89,89	1
58	MG	DA	3427	1/1	0.97	0.19	133,133,133,133	0
58	MG	BA	3048	1/1	0.97	0.42	32,32,32,32	0
58	MG	DA	3310	1/1	0.97	0.27	110,110,110,110	1
58	MG	BA	3240	1/1	0.97	0.32	32,32,32,32	0
58	MG	DA	3312	1/1	0.97	0.18	101,101,101,101	0
58	MG	DA	3432	1/1	0.97	0.10	91,91,91,91	0
58	MG	CA	1623	1/1	0.97	0.10	74,74,74,74	0
58	MG	CA	1735	1/1	0.97	0.12	74,74,74,74	0
58	MG	DA	3315	1/1	0.97	0.06	29,29,29,29	0
58	MG	CA	1676	1/1	0.97	0.27	88,88,88,88	0
58	MG	DA	3215	1/1	0.97	0.10	82,82,82,82	0
58	MG	DA	3125	1/1	0.97	0.44	53,53,53,53	0
58	MG	BB	206	1/1	0.97	0.30	130,130,130,130	0
58	MG	DA	3019	1/1	0.97	0.27	21,21,21,21	0
58	MG	DA	3442	1/1	0.97	0.13	71,71,71,71	0
58	MG	CA	1738	1/1	0.97	0.37	95,95,95,95	0
58	MG	BA	3205	1/1	0.97	0.27	59,59,59,59	0
58	MG	CA	1740	1/1	0.97	0.25	132,132,132,132	0
58	MG	CA	1809	1/1	0.97	0.17	56,56,56,56	1
58	MG	BA	3028	1/1	0.97	0.25	45,45,45,45	0
58	MG	BA	3366	1/1	0.97	0.29	60,60,60,60	0
58	MG	CA	1812	1/1	0.97	0.22	39,39,39,39	0
58	MG	DA	3031	1/1	0.97	0.18	31,31,31,31	0
58	MG	AA	1784	1/1	0.97	0.14	66,66,66,66	0
58	MG	BA	3415	1/1	0.97	0.15	80,80,80,80	0
58	MG	CA	1683	1/1	0.97	0.19	84,84,84,84	0
58	MG	BA	3109	1/1	0.97	0.04	28,28,28,28	0
58	MG	DA	3232	1/1	0.97	0.38	55,55,55,55	0
58	MG	AA	1724	1/1	0.97	0.17	109,109,109,109	0
58	MG	BA	3370	1/1	0.97	0.34	110,110,110,110	1
58	MG	DA	3145	1/1	0.97	0.44	36,36,36,36	0
58	MG	BA	3248	1/1	0.97	0.08	22,22,22,22	0
58	MG	BA	3420	1/1	0.97	0.26	93,93,93,93	0
58	MG	BA	3015	1/1	0.97	0.30	47,47,47,47	0
58	MG	DA	3044	1/1	0.97	0.37	66,66,66,66	0
58	MG	DA	3150	1/1	0.97	0.10	46,46,46,46	0
58	MG	BA	3080	1/1	0.97	0.22	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3152	1/1	0.97	0.15	65,65,65,65	1
58	MG	DA	3153	1/1	0.97	0.16	45,45,45,45	1
58	MG	DD	301	1/1	0.97	0.26	27,27,27,27	0
58	MG	DA	3350	1/1	0.97	0.16	65,65,65,65	1
58	MG	BA	3179	1/1	0.97	0.10	48,48,48,48	0
58	MG	DA	3353	1/1	0.97	0.20	58,58,58,58	0
58	MG	BA	3032	1/1	0.97	0.17	68,68,68,68	0
58	MG	BA	3215	1/1	0.97	0.37	51,51,51,51	0
58	MG	BA	3427	1/1	0.97	0.28	106,106,106,106	0
58	MG	CA	1696	1/1	0.97	0.24	59,59,59,59	0
58	MG	CA	1758	1/1	0.97	0.08	110,110,110,110	0
58	MG	DA	3160	1/1	0.97	0.19	96,96,96,96	0
58	MG	BF	302	1/1	0.97	0.18	93,93,93,93	0
58	MG	CA	1698	1/1	0.97	0.10	106,106,106,106	0
58	MG	AA	1611	1/1	0.97	0.21	48,48,48,48	0
58	MG	DA	3062	1/1	0.97	0.33	13,13,13,13	0
58	MG	CA	1700	1/1	0.97	0.14	102,102,102,102	0
58	MG	DA	3367	1/1	0.97	0.50	127,127,127,127	0
58	MG	DA	3384	1/1	0.98	0.25	67,67,67,67	0
58	MG	AA	1795	1/1	0.98	0.08	91,91,91,91	1
58	MG	CA	1714	1/1	0.98	0.48	102,102,102,102	0
58	MG	AA	1756	1/1	0.98	0.49	64,64,64,64	0
58	MG	CA	1610	1/1	0.98	0.20	46,46,46,46	0
58	MG	BA	3152	1/1	0.98	0.14	30,30,30,30	0
58	MG	BA	3397	1/1	0.98	0.19	112,112,112,112	1
58	MG	DA	3037	1/1	0.98	0.17	32,32,32,32	0
58	MG	DA	3038	1/1	0.98	0.24	53,53,53,53	0
58	MG	BA	3041	1/1	0.98	0.09	78,78,78,78	0
58	MG	BA	3027	1/1	0.98	0.33	25,25,25,25	0
58	MG	DA	3396	1/1	0.98	0.07	83,83,83,83	0
58	MG	DA	3397	1/1	0.98	0.09	48,48,48,48	1
58	MG	CA	1776	1/1	0.98	0.04	72,72,72,72	0
58	MG	BA	3155	1/1	0.98	0.10	31,31,31,31	1
58	MG	DA	3400	1/1	0.98	0.51	33,33,33,33	0
58	MG	BA	3122	1/1	0.98	0.17	30,30,30,30	0
58	MG	DA	3046	1/1	0.98	0.25	30,30,30,30	0
58	MG	BA	3090	1/1	0.98	0.26	40,40,40,40	0
58	MG	CA	1669	1/1	0.98	0.30	118,118,118,118	0
58	MG	DA	3134	1/1	0.98	0.14	32,32,32,32	0
58	MG	DA	3406	1/1	0.98	0.08	87,87,87,87	1
58	MG	AV	101	1/1	0.98	0.24	34,34,34,34	0
58	MG	BA	3268	1/1	0.98	0.28	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	BA	3045	1/1	0.98	0.16	69,69,69,69	0
58	MG	DA	3306	1/1	0.98	0.18	45,45,45,45	1
58	MG	DA	3139	1/1	0.98	0.16	106,106,106,106	0
58	MG	DA	3052	1/1	0.98	0.21	9,9,9,9	0
58	MG	BA	3193	1/1	0.98	0.47	56,56,56,56	0
58	MG	DA	3055	1/1	0.98	0.13	44,44,44,44	0
58	MG	BA	3069	1/1	0.98	0.42	31,31,31,31	0
58	MG	BA	3408	1/1	0.98	0.20	64,64,64,64	1
58	MG	DA	3225	1/1	0.98	0.13	115,115,115,115	0
58	MG	BA	3357	1/1	0.98	0.08	56,56,56,56	0
58	MG	BA	3311	1/1	0.98	0.33	71,71,71,71	1
58	MG	DA	3061	1/1	0.98	0.28	43,43,43,43	0
58	MG	BA	3312	1/1	0.98	0.34	32,32,32,32	0
58	MG	AA	1777	1/1	0.98	0.33	57,57,57,57	0
58	MG	BA	3096	1/1	0.98	0.11	33,33,33,33	0
58	MG	BA	3197	1/1	0.98	0.38	71,71,71,71	0
58	MG	DA	3066	1/1	0.98	0.20	22,22,22,22	0
58	MG	DA	3067	1/1	0.98	0.22	31,31,31,31	0
58	MG	DA	3068	1/1	0.98	0.27	22,22,22,22	0
58	MG	AX	102	1/1	0.98	0.13	85,85,85,85	0
58	MG	DA	3237	1/1	0.98	0.35	40,40,40,40	0
58	MG	BA	3016	1/1	0.98	0.17	50,50,50,50	0
58	MG	AA	1736	1/1	0.98	0.36	60,60,60,60	1
58	MG	AA	1637	1/1	0.98	0.20	44,44,44,44	0
58	MG	BA	3051	1/1	0.98	0.54	45,45,45,45	0
58	MG	DA	3242	1/1	0.98	0.30	22,22,22,22	0
58	MG	BA	3241	1/1	0.98	0.25	31,31,31,31	0
58	MG	DA	3244	1/1	0.98	0.12	22,22,22,22	0
58	MG	DA	3075	1/1	0.98	0.20	33,33,33,33	0
58	MG	DA	3337	1/1	0.98	0.11	82,82,82,82	0
58	MG	DA	3439	1/1	0.98	0.15	65,65,65,65	1
58	MG	BA	3281	1/1	0.98	0.27	54,54,54,54	0
58	MG	DA	3339	1/1	0.98	0.41	85,85,85,85	1
58	MG	BA	3324	1/1	0.98	0.28	121,121,121,121	0
58	MG	BA	3374	1/1	0.98	0.20	95,95,95,95	0
58	MG	AA	1607	1/1	0.98	0.12	50,50,50,50	0
58	MG	BA	3021	1/1	0.98	0.37	24,24,24,24	0
58	MG	BA	3054	1/1	0.98	0.23	38,38,38,38	0
58	MG	CA	1642	1/1	0.98	0.37	52,52,52,52	0
58	MG	DA	3084	1/1	0.98	0.22	35,35,35,35	0
58	MG	AA	1654	1/1	0.98	0.22	129,129,129,129	0
58	MG	DA	3450	1/1	0.98	0.20	120,120,120,120	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	DA	3451	1/1	0.98	0.15	105,105,105,105	0
58	MG	DA	3086	1/1	0.98	0.19	29,29,29,29	0
58	MG	BA	3246	1/1	0.98	0.29	24,24,24,24	0
58	MG	AV	107	1/1	0.98	0.55	76,76,76,76	0
58	MG	BA	3140	1/1	0.98	0.15	75,75,75,75	0
58	MG	DA	3352	1/1	0.98	0.10	52,52,52,52	0
58	MG	DA	3011	1/1	0.98	0.32	27,27,27,27	0
58	MG	BA	3081	1/1	0.98	0.13	46,46,46,46	0
58	MG	DA	3355	1/1	0.98	0.10	37,37,37,37	0
58	MG	DA	3094	1/1	0.98	0.27	43,43,43,43	0
58	MG	BA	3175	1/1	0.98	0.29	70,70,70,70	0
58	MG	BA	3384	1/1	0.98	0.49	83,83,83,83	0
58	MG	DA	3098	1/1	0.98	0.23	60,60,60,60	0
58	MG	DA	3015	1/1	0.98	0.17	45,45,45,45	0
58	MG	BA	3058	1/1	0.98	0.32	49,49,49,49	0
58	MG	DA	3101	1/1	0.98	0.12	71,71,71,71	0
58	MG	CA	1704	1/1	0.98	0.07	41,41,41,41	0
58	MG	BA	3083	1/1	0.98	0.34	47,47,47,47	0
58	MG	BA	3112	1/1	0.98	0.11	35,35,35,35	0
58	MG	BA	3084	1/1	0.98	0.16	39,39,39,39	0
58	MG	DA	3021	1/1	0.98	0.40	59,59,59,59	0
58	MG	BA	3114	1/1	0.98	0.49	44,44,44,44	0
58	MG	DA	3190	1/1	0.98	0.44	49,49,49,49	0
58	MG	DA	3023	1/1	0.98	0.52	61,61,61,61	0
58	MG	CA	1604	1/1	0.98	0.13	107,107,107,107	0
58	MG	DA	3025	1/1	0.98	0.18	42,42,42,42	0
58	MG	BA	3391	1/1	0.98	0.15	33,33,33,33	0
58	MG	DA	3281	1/1	0.98	0.28	65,65,65,65	0
58	MG	CA	1765	1/1	0.98	0.17	114,114,114,114	0
58	MG	BA	3038	1/1	0.98	0.23	35,35,35,35	0
58	MG	DA	3029	1/1	0.98	0.23	25,25,25,25	0
58	MG	DA	3381	1/1	0.98	0.16	149,149,149,149	0
58	MG	BA	3219	1/1	0.98	0.10	106,106,106,106	0
60	ZN	CD	301	1/1	0.98	0.28	87,87,87,87	0
60	ZN	CN	101	1/1	0.98	0.16	109,109,109,109	0
58	MG	DA	3383	1/1	0.98	0.11	76,76,76,76	0
58	MG	DA	3089	1/1	0.99	0.26	45,45,45,45	0
58	MG	DA	3090	1/1	0.99	0.42	25,25,25,25	0
58	MG	BA	3091	1/1	0.99	0.39	34,34,34,34	0
58	MG	BA	3359	1/1	0.99	0.13	92,92,92,92	0
58	MG	BA	3008	1/1	0.99	0.37	31,31,31,31	0
58	MG	DA	3368	1/1	0.99	0.11	57,57,57,57	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	DA	3369	1/1	0.99	0.10	117,117,117,117	0
58	MG	DA	3045	1/1	0.99	0.27	50,50,50,50	0
58	MG	BA	3361	1/1	0.99	0.08	107,107,107,107	1
58	MG	DA	3096	1/1	0.99	0.19	43,43,43,43	0
58	MG	CV	101	1/1	0.99	0.20	25,25,25,25	0
58	MG	CA	1778	1/1	0.99	0.48	68,68,68,68	0
58	MG	BA	3024	1/1	0.99	0.40	36,36,36,36	0
58	MG	BA	3043	1/1	0.99	0.27	63,63,63,63	0
58	MG	DA	3316	1/1	0.99	0.28	41,41,41,41	0
58	MG	BA	3435	1/1	0.99	0.08	80,80,80,80	1
58	MG	BA	3364	1/1	0.99	0.12	96,96,96,96	1
58	MG	DA	3263	1/1	0.99	0.34	57,57,57,57	0
58	MG	DA	3053	1/1	0.99	0.18	31,31,31,31	0
58	MG	BA	3066	1/1	0.99	0.14	39,39,39,39	0
58	MG	AA	1610	1/1	0.99	0.17	43,43,43,43	0
58	MG	DA	3106	1/1	0.99	0.36	36,36,36,36	0
58	MG	BA	3251	1/1	0.99	0.10	58,58,58,58	1
58	MG	DA	3057	1/1	0.99	0.28	18,18,18,18	0
58	MG	BA	3097	1/1	0.99	0.16	46,46,46,46	0
58	MG	BA	3441	1/1	0.99	0.10	61,61,61,61	1
58	MG	DA	3328	1/1	0.99	0.15	103,103,103,103	0
58	MG	DA	3329	1/1	0.99	0.27	83,83,83,83	1
58	MG	BA	3335	1/1	0.99	0.10	89,89,89,89	1
58	MG	BA	3115	1/1	0.99	0.54	42,42,42,42	0
58	MG	BA	3135	1/1	0.99	0.15	34,34,34,34	0
58	MG	DA	3394	1/1	0.99	0.20	48,48,48,48	1
58	MG	DA	3114	1/1	0.99	0.46	33,33,33,33	0
58	MG	BA	3068	1/1	0.99	0.33	40,40,40,40	0
58	MG	BA	3117	1/1	0.99	0.34	38,38,38,38	0
58	MG	AA	1792	1/1	0.99	0.10	78,78,78,78	0
58	MG	BA	3011	1/1	0.99	0.10	42,42,42,42	0
58	MG	BA	3057	1/1	0.99	0.22	35,35,35,35	0
58	MG	DB	212	1/1	0.99	0.05	30,30,30,30	1
58	MG	BA	3102	1/1	0.99	0.23	49,49,49,49	0
58	MG	BA	3019	1/1	0.99	0.43	41,41,41,41	0
58	MG	BA	3012	1/1	0.99	0.24	27,27,27,27	0
58	MG	BA	3211	1/1	0.99	0.20	55,55,55,55	0
58	MG	AA	1651	1/1	0.99	0.27	95,95,95,95	0
58	MG	BA	3348	1/1	0.99	0.09	78,78,78,78	1
58	MG	AA	1603	1/1	0.99	0.15	101,101,101,101	0
58	MG	BA	3239	1/1	0.99	0.14	48,48,48,48	0
58	MG	DE	301	1/1	0.99	0.39	38,38,38,38	0

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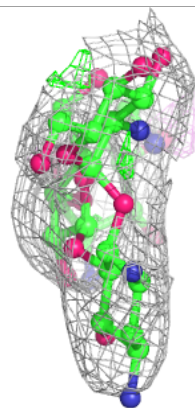
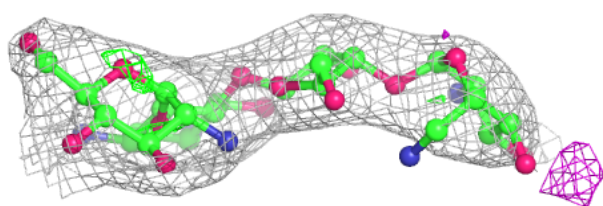
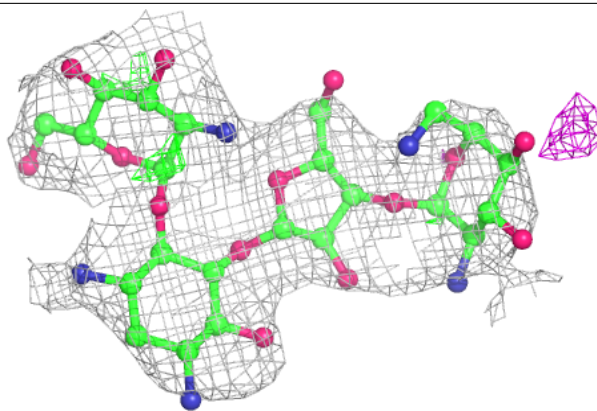
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	BA	3385	1/1	0.99	0.12	88,88,88,88	1
58	MG	DA	3077	1/1	0.99	0.21	16,16,16,16	0
58	MG	CA	1806	1/1	0.99	0.18	29,29,29,29	0
58	MG	BA	3190	1/1	0.99	0.19	41,41,41,41	0
58	MG	BA	3322	1/1	0.99	0.25	42,42,42,42	0
58	MG	BA	3146	1/1	0.99	0.39	31,31,31,31	0
58	MG	BA	3354	1/1	0.99	0.17	50,50,50,50	1
58	MG	BA	3425	1/1	0.99	0.17	108,108,108,108	0
58	MG	BA	3216	1/1	0.99	0.20	90,90,90,90	0
58	MG	BA	3147	1/1	0.99	0.23	20,20,20,20	0
58	MG	DA	3138	1/1	0.99	0.14	25,25,25,25	0
58	MG	DA	3039	1/1	0.99	0.28	45,45,45,45	0
60	ZN	AD	302	1/1	0.99	0.27	56,56,56,56	0
60	ZN	AN	101	1/1	0.99	0.17	106,106,106,106	0
58	MG	DA	3359	1/1	0.99	0.17	84,84,84,84	1
58	MG	CA	1694	1/1	0.99	0.14	124,124,124,124	1
58	MG	DA	3247	1/1	0.99	0.14	96,96,96,96	1
58	MG	BA	3062	1/1	0.99	0.33	32,32,32,32	0
58	MG	CA	1793	1/1	1.00	0.11	103,103,103,103	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.

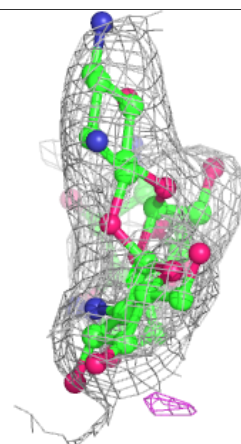
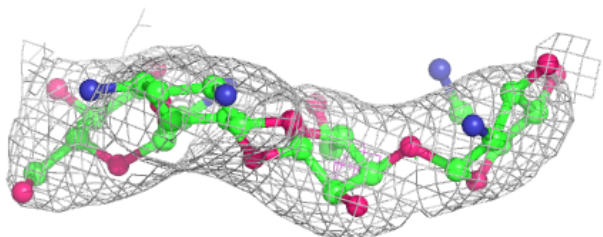
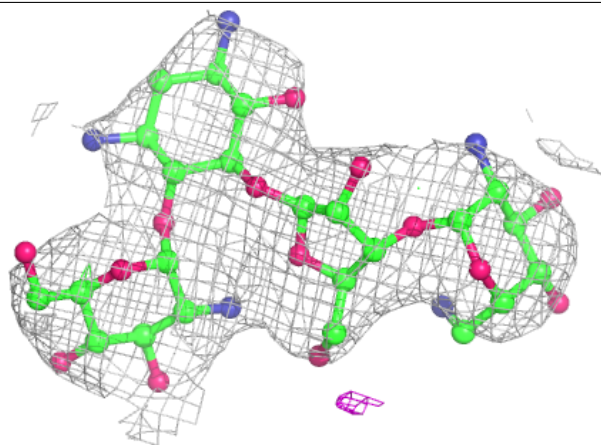


**Electron density around PAR AA 1814:**

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

**Electron density around PAR CA 1817:**

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



## 6.5 Other polymers [i](#)

There are no such residues in this entry.