Full wwPDB X-ray Structure Validation Report ⓘ

Oct 2, 2024 – 04:06 am BST

PDB ID	:	8OI5
Title	:	Crystal structure of the Candida albicans 80S ribosome in complex with Paromomycin (2mM)
Authors	:	Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on	:	2023-03-22
Resolution	:	2.90 Å(reported)

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

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

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

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

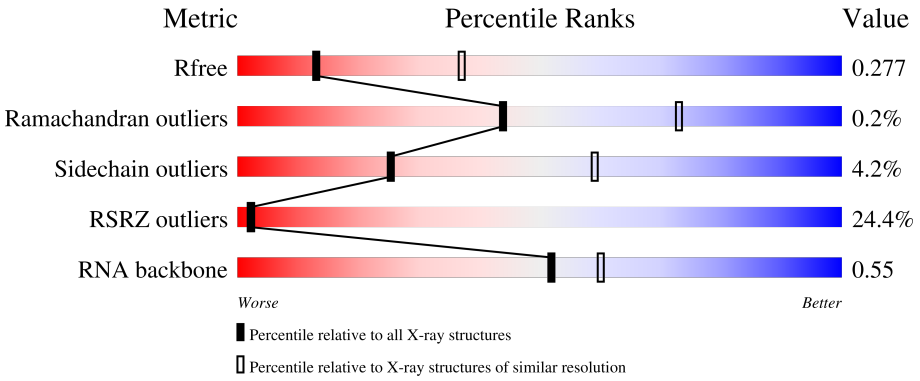
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.90 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	2335 (2.90-2.90)
Ramachandran outliers	177936	2514 (2.90-2.90)
Sidechain outliers	177891	2516 (2.90-2.90)
RSRZ outliers	164620	2337 (2.90-2.90)
RNA backbone	3690	1039 (3.10-2.70)

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

Mol	Chain	Length	Quality of chain
1	1	3359	6% 76% 17% • 6%
1	AS	3359	11% 75% 15% • 9%
2	3	121	% 93% 7%
2	AT	121	3% 92% 8%
3	4	158	4% 84% 14% ••

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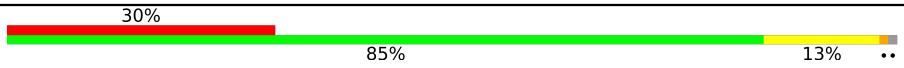
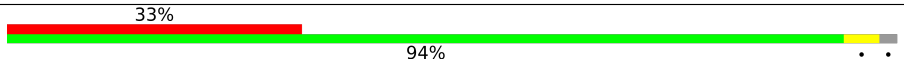
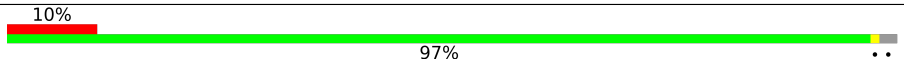
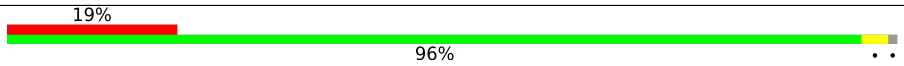
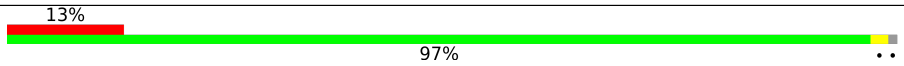
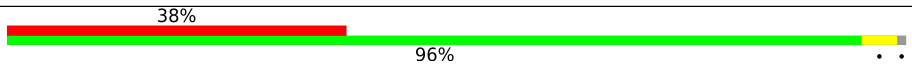
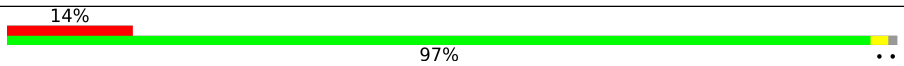
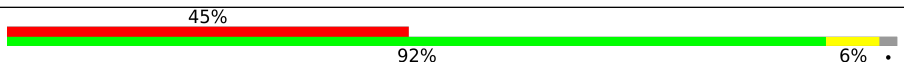
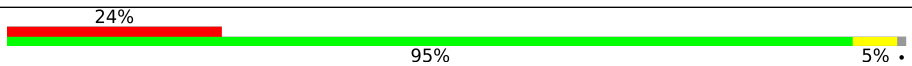
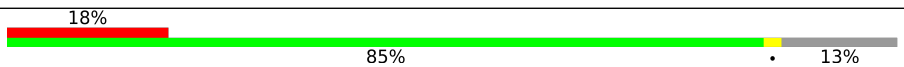
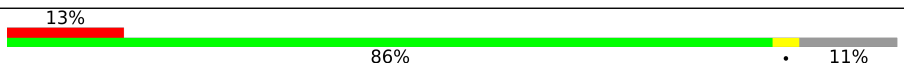
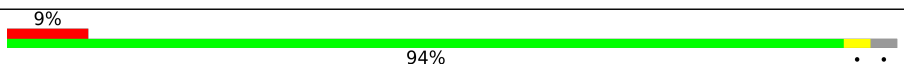
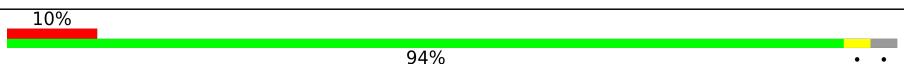
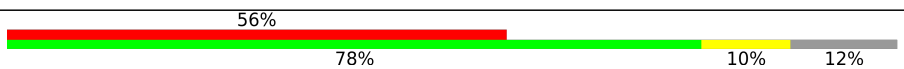
Mol	Chain	Length	Quality of chain
3	AU	158	
4	AW	254	
4	j	254	
5	AX	389	
5	k	389	
6	AY	363	
6	l	363	
7	AZ	298	
7	m	298	
8	BA	176	
8	n	176	
9	BB	241	
9	o	241	
10	BC	262	
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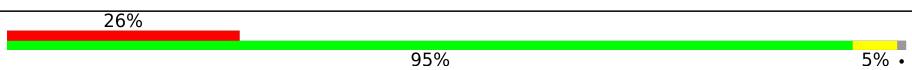
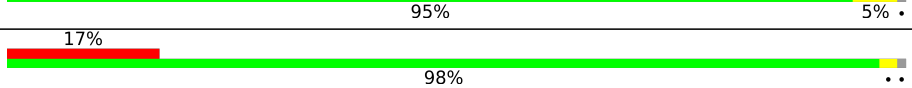
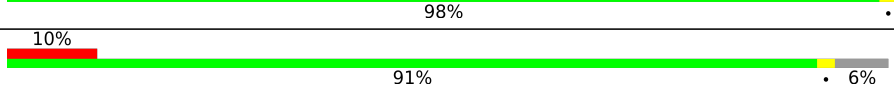
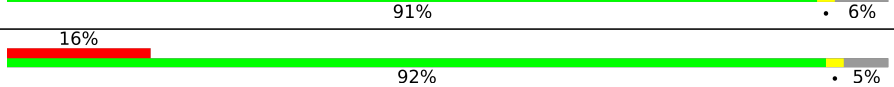
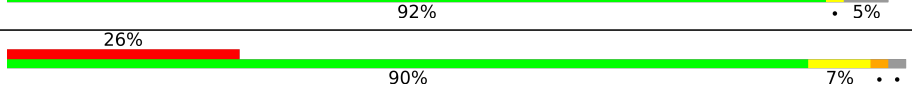
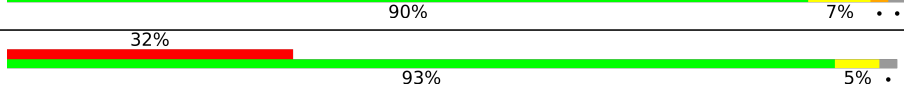
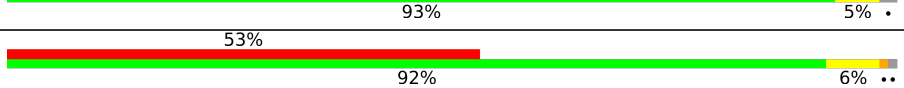
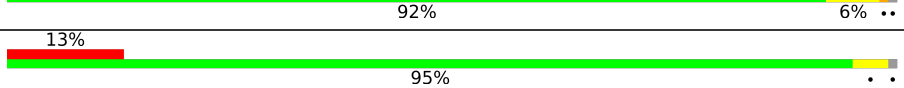
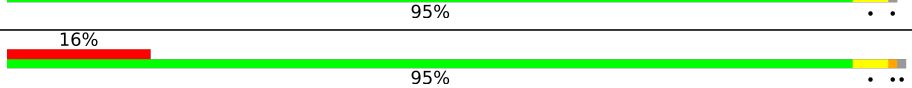
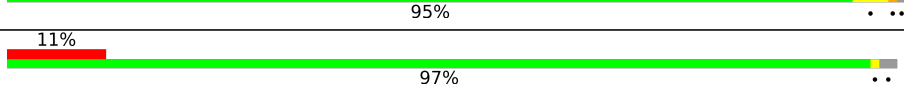
11	BD	191	
11	q	191	
12	BE	220	
12	r	220	
13	BF	174	
13	s	174	
14	BG	202	
14	t	202	
15	BH	131	
15	u	131	

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Mol	Chain	Length	Quality of chain
16	BI	204	71% 95%
16	v	204	19% 98%
17	BJ	200	14% 96%
17	w	200	10% 97%
18	BK	185	39% 90% 6%
18	x	185	16% 91% 8%
19	BL	186	35% 97%
19	y	186	16% 96%
20	BM	190	46% 88% 5% 6%
20	z	190	17% 92% 6%
21	0	172	8% 98%
21	BN	172	16% 97%
22	2	160	19% 95%
22	BO	160	34% 95%
23	5	124	31% 80% 17%
23	BP	124	42% 77% 5% 18%
24	6	137	10% 93%
24	BQ	137	23% 93%
25	7	155	5% 46% 50%
25	BR	155	27% 61% 8% 30%
26	8	142	11% 81% 15%
26	BS	142	53% 80% 16%
27	9	127	27% 98%
27	BT	127	64% 89% 10%
28	AA	136	31% 98%

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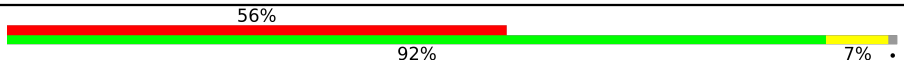
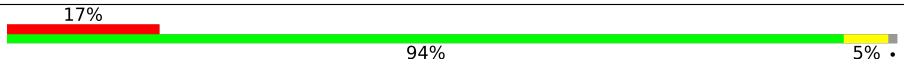
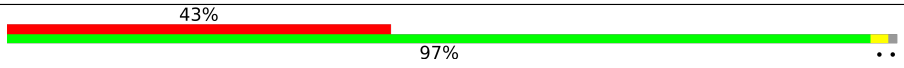
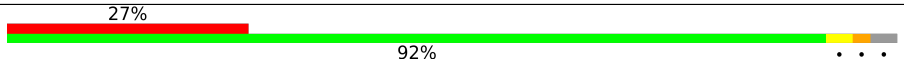
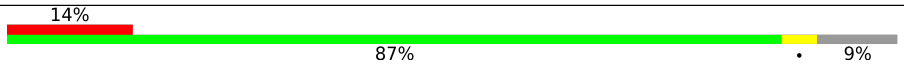
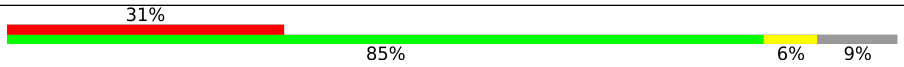
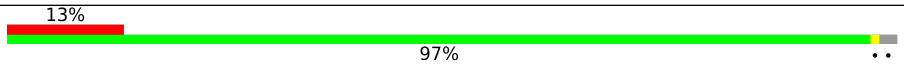
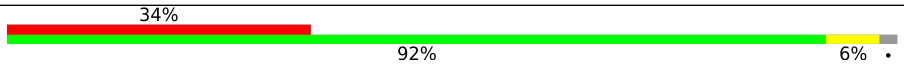
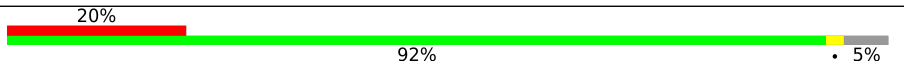
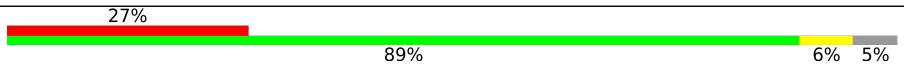
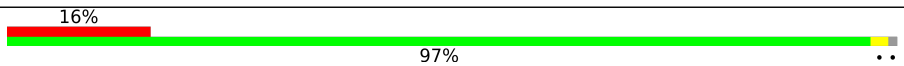
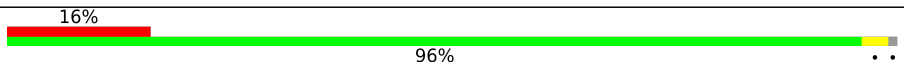
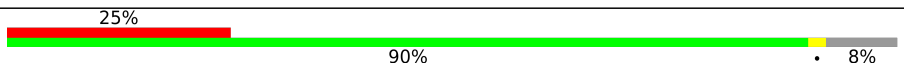
Mol	Chain	Length	Quality of chain
28	BU	136	
29	AB	149	
29	BV	149	
30	AC	63	
30	BW	63	
31	AD	106	
31	BX	106	
32	AE	112	
32	BY	112	
33	AF	131	
33	BZ	131	
34	AG	107	
34	CA	107	
35	AH	122	
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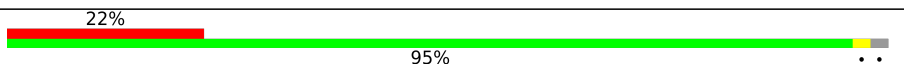
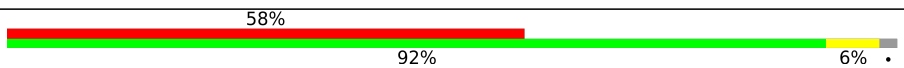
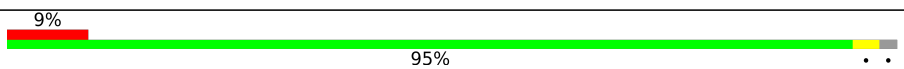
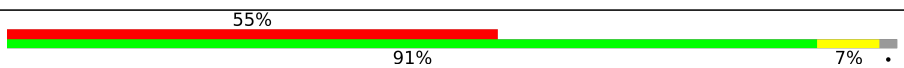
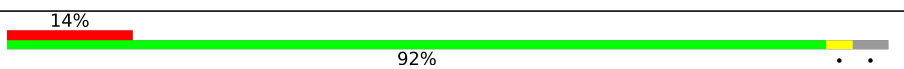
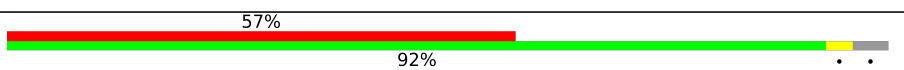
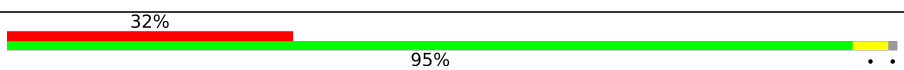
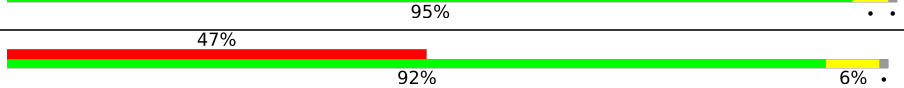
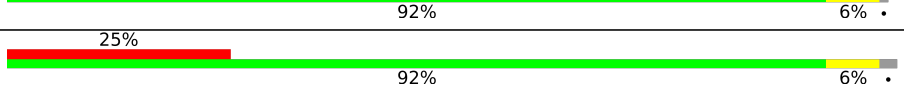
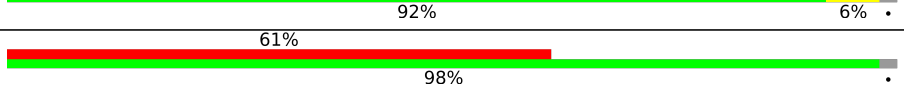
36	AI	120	
36	CC	120	
37	AJ	99	
37	CD	99	
38	AK	90	
38	CE	90	
39	AL	78	
39	CF	78	
40	AM	51	
40	CG	51	

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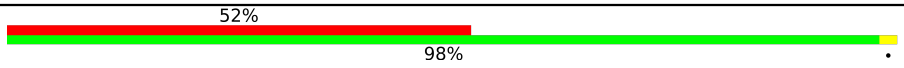
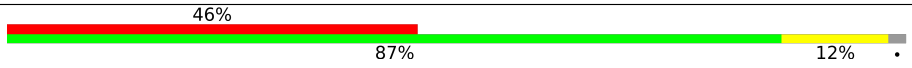
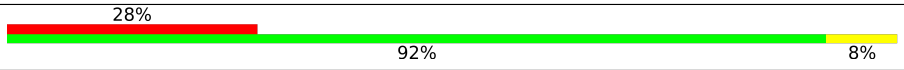
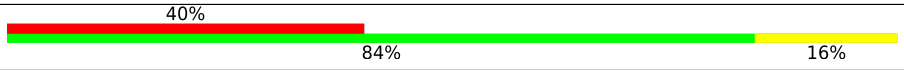
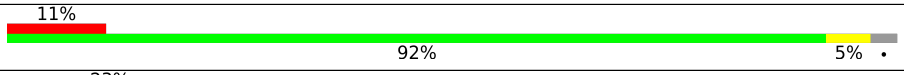
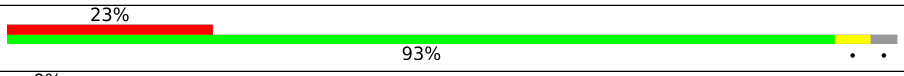
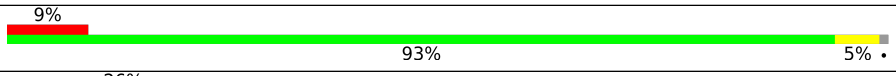
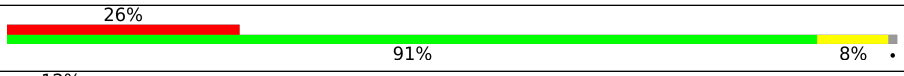
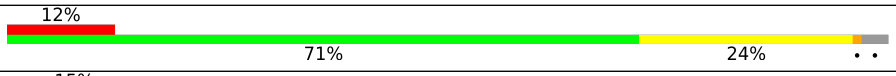
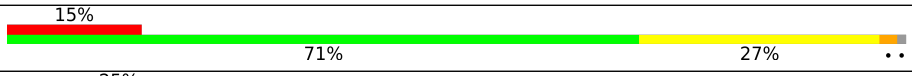
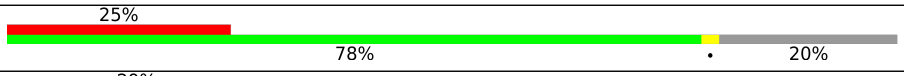
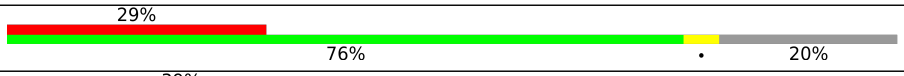
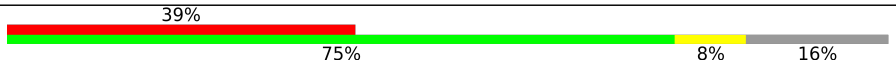
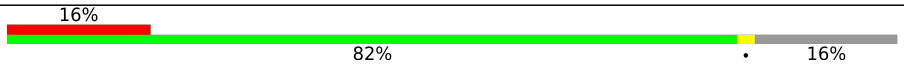
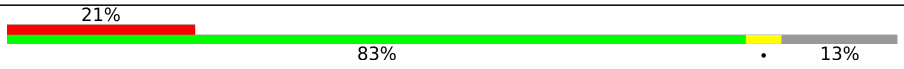
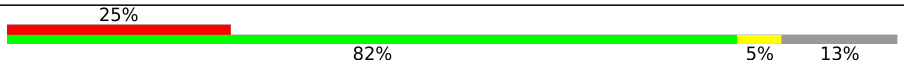
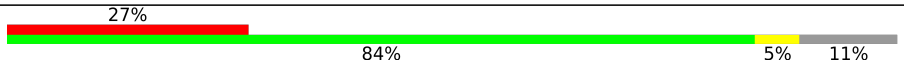
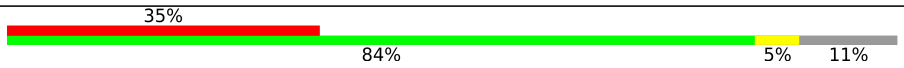
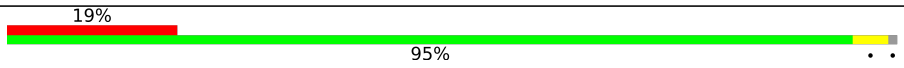
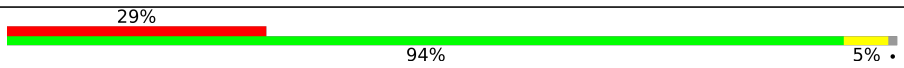
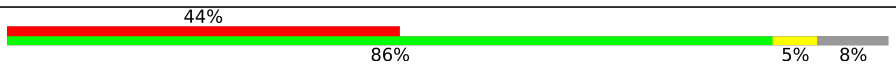
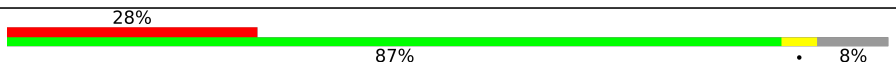
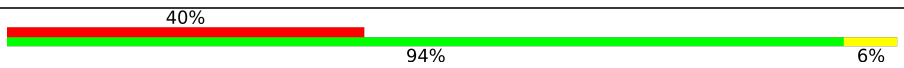
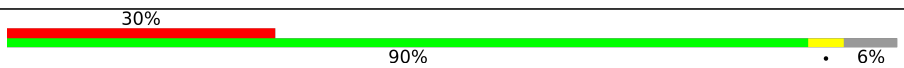
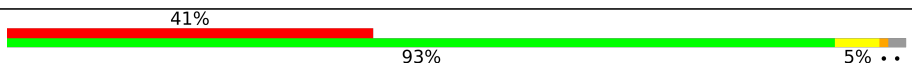
Mol	Chain	Length	Quality of chain
41	AN	52	
41	CH	52	
42	AO	25	
42	CI	25	
43	AP	106	
43	CJ	106	
44	AQ	92	
44	CK	92	
45	B	1787	
45	CM	1787	
46	C	261	
46	CN	261	
47	CO	256	
47	D	256	
48	CP	249	
48	E	249	
49	CQ	251	
49	F	251	
50	CR	262	
50	G	262	
51	CS	225	
51	H	225	
52	CT	236	
52	I	236	
53	CU	186	

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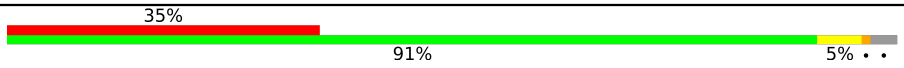
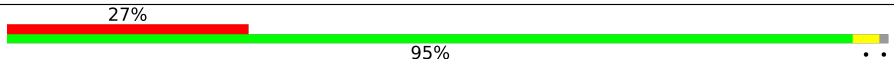
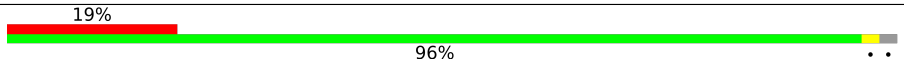
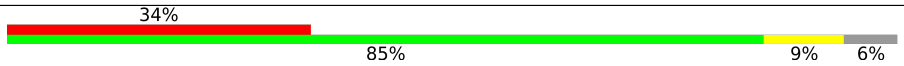
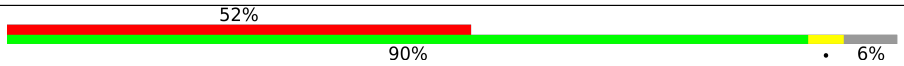
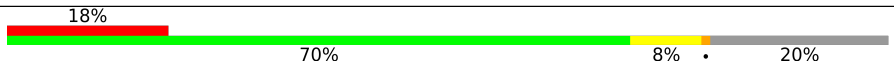
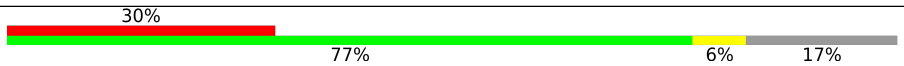
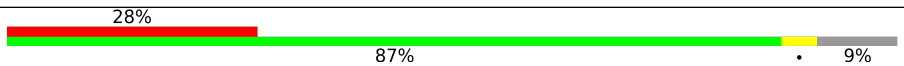
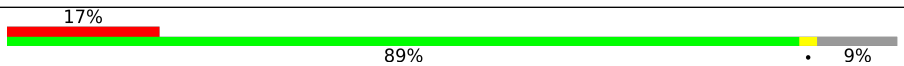
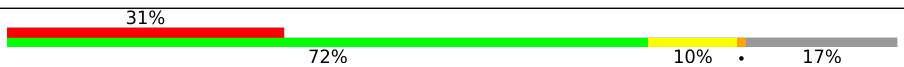
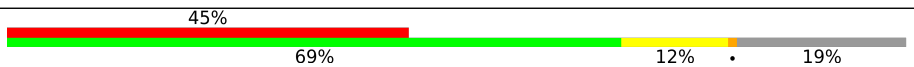
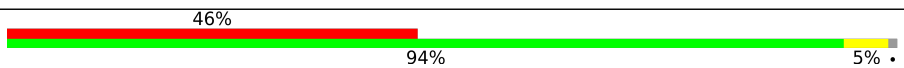
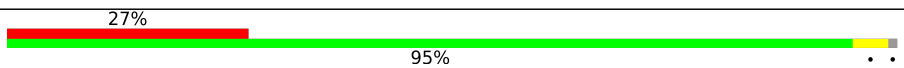
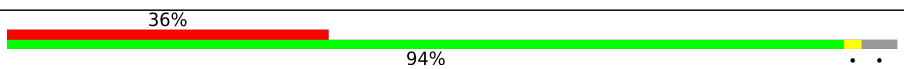
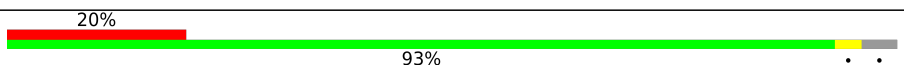
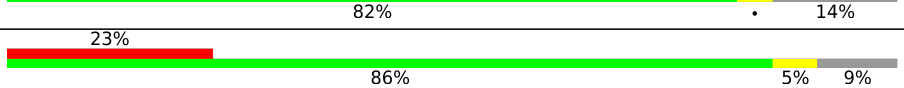
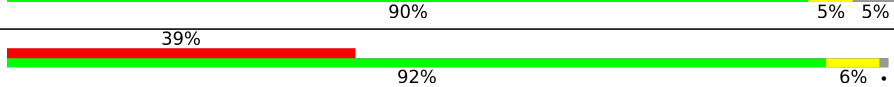
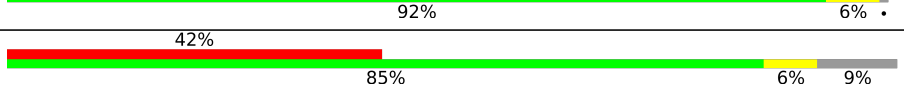
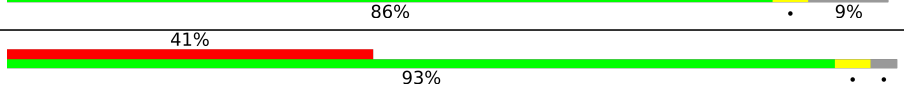
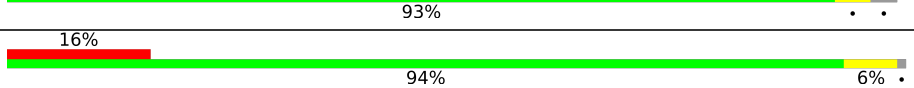
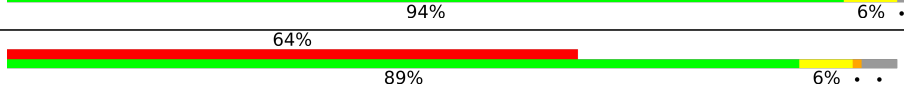
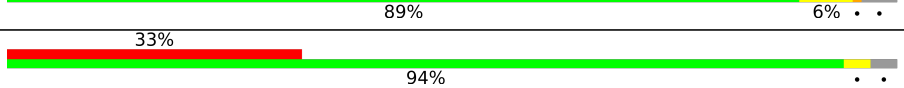
Mol	Chain	Length	Quality of chain
53	J	186	
54	CV	206	
54	K	206	
55	CW	189	
55	L	189	
56	CX	118	
56	M	118	
57	CY	155	
57	N	155	
58	CZ	143	
58	O	143	
59	DA	151	
59	P	151	
60	DB	132	
60	Q	132	
61	DC	142	
61	R	142	
62	DD	142	
62	S	142	
63	DE	137	
63	T	137	
64	DF	145	
64	U	145	
65	DG	145	
65	V	145	

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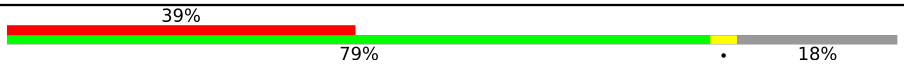
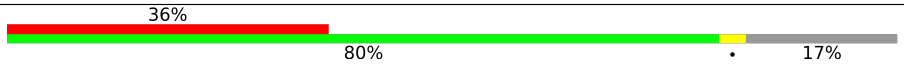
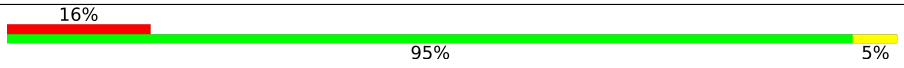
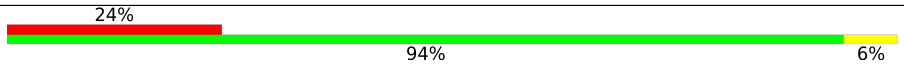
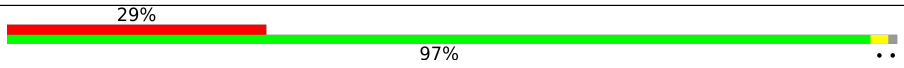
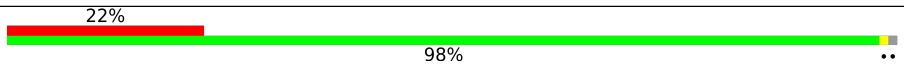
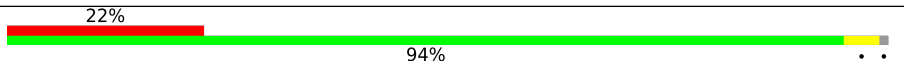
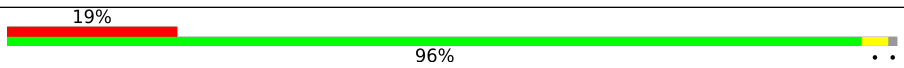
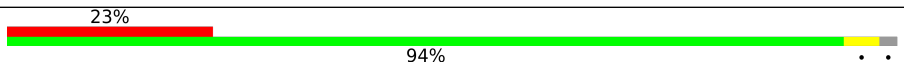
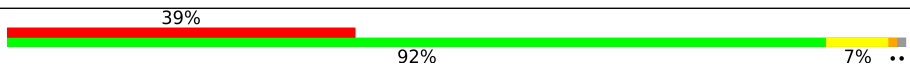
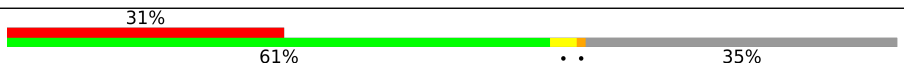
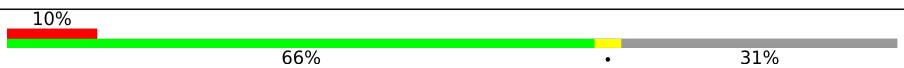
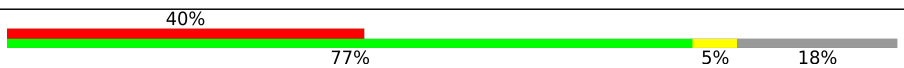
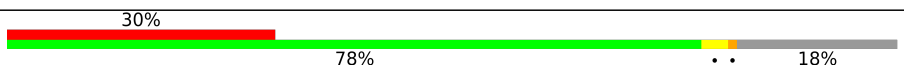
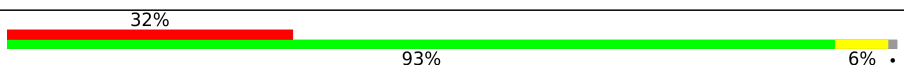
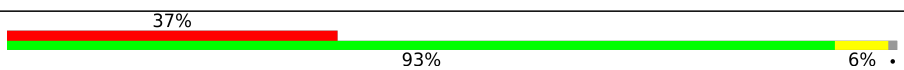
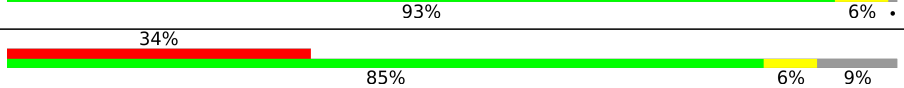
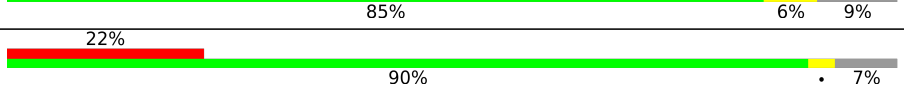
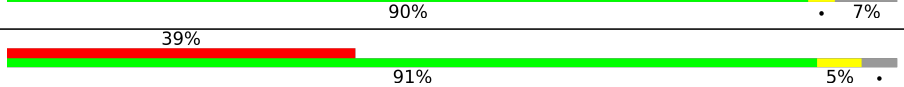
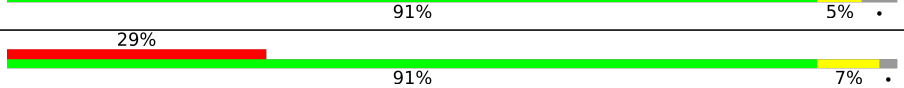
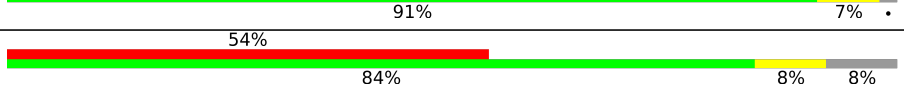
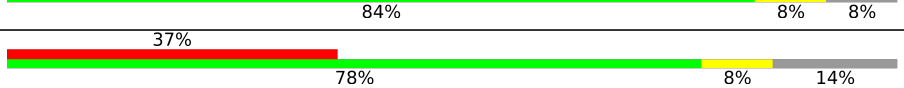
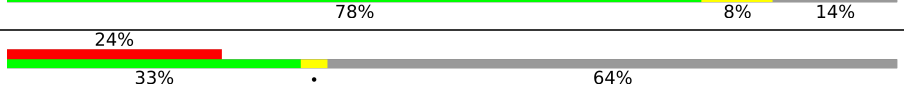
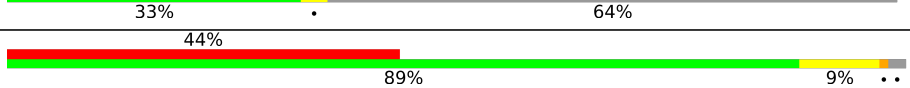
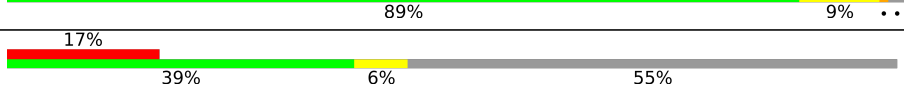
Mol	Chain	Length	Quality of chain
66	DH	119	
66	W	119	
67	DI	87	
67	X	87	
68	DJ	130	
68	Y	130	
69	DK	145	
69	Z	145	
70	DL	135	
70	a	135	
71	DM	105	
71	b	105	
72	DN	119	
72	c	119	
73	DO	82	
73	d	82	
74	DP	67	
74	e	67	
75	DQ	56	
75	f	56	
76	DR	63	
76	g	63	
77	h	193	
78	AR	317	
79	CL	267	

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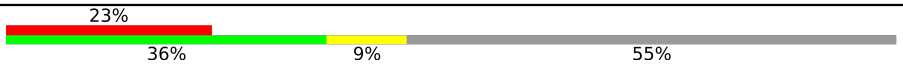
Mol	Chain	Length	Quality of chain
79	i	267	

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
82	MG	1	3490	-	-	-	X
82	MG	1	3498	-	-	-	X
82	MG	AS	3469	-	-	-	X
82	MG	AS	3685	-	-	-	X
82	MG	AW	303	-	-	-	X
82	MG	B	1830	-	-	-	X
82	MG	B	1849	-	-	-	X
82	MG	B	1925	-	-	-	X

2 Entry composition

There are 83 unique types of molecules in this entry. The entry contains 397530 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 25S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3171	Total	C	N	O	P	0	0	0
			67782	30282	12183	22146	3171			
1	AS	3065	Total	C	N	O	P	0	0	0
			65508	29266	11762	21415	3065			

- Molecule 2 is a RNA chain called 5S.

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

- Molecule 3 is a RNA chain called 5.8S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	156	Total	C	N	O	P	0	0	0
			3313	1482	581	1094	156			
3	AU	156	Total	C	N	O	P	0	0	0
			3313	1482	581	1094	156			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	j	249	Total	C	N	O	S	0	1	0
			1894	1185	377	330	2			
4	AW	249	Total	C	N	O	S	0	1	0
			1894	1185	377	330	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	k	386	Total	C	N	O	S	0	1	0
			3084	1955	584	538	7			
5	AX	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	l	360	Total	C	N	O	S	0	0	0
			2745	1726	528	488	3			
6	AY	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	230	Total	C	N	O	S	0	0	0
			1790	1147	318	322	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	BC	231	Total	C	N	O	S	0	0	0
			1795	1150	319	323	3			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	r	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			
12	BE	206	Total	C	N	O	S	0	0	0
			1671	1057	320	287	7			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	u	128	Total	C	N	O	S	0	0	0
			1015	651	190	173	1			
15	BH	130	Total	C	N	O	S	0	0	0
			1029	660	193	175	1			

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

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

- Molecule 17 is a protein called Ribosomal protein L13.

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

- Molecule 18 is a protein called Ribosomal protein L22.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	x	171	Total	C	N	O	0	0	0
			1372	846	278	248			
18	BK	174	Total	C	N	O	0	0	0
			1396	862	282	252			

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	5	103	Total	C	N	O	0	0	0
			831	539	138	154			
23	BP	102	Total	C	N	O	0	1	0
			837	546	138	153			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	77	Total	C	N	O	S	0	0	0
			632	402	124	105	1			
25	BR	109	Total	C	N	O	S	0	0	0
			877	549	178	149	1			

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

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

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

- Molecule 27 is a protein called Ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	9	125	Total 980	C 613	N 189	O 178	0	0	0
27	BT	126	Total 989	C 618	N 190	O 181	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
30	AC	61	Total 488	C 304	N 104	O 80	0	0	0
30	BW	61	Total 488	C 304	N 104	O 80	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	AF	124	Total	C	N	O	S	0	0	0
			1000	638	194	167	1			
33	BZ	124	Total	C	N	O	S	0	0	0
			1004	641	195	167	1			

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

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

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

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

- Molecule 36 is a protein called Ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	AI	117	Total	C	N	O	0	1	0
			981	624	193	164			
36	CC	118	Total	C	N	O	0	1	0
			985	626	194	165			

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	AM	50	Total	C	N	O	0	0	0
			438	275	97	66			
40	CG	50	Total	C	N	O	0	1	0
			446	280	100	66			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	AN	52	Total	C	N	O	S	0	0	0
			419	260	86	67	6			
41	CH	51	Total	C	N	O	S	0	0	0
			411	255	85	66	5			

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

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

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

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

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

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

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

- Molecule 45 is a RNA chain called 18S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	B	1725	Total	C	N	O	P	0	0	0
			36771	16437	6521	12088	1725			
45	CM	1778	Total	C	N	O	P	0	0	0
			37902	16943	6724	12457	1778			

- Molecule 46 is a protein called 40S ribosomal protein S0.

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

- Molecule 47 is a protein called 40S ribosomal protein S1.

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

- Molecule 48 is a protein called Ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	E	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			
48	CP	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			

- Molecule 49 is a protein called Ribosomal protein S3.

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

- Molecule 50 is a protein called 40S ribosomal protein S4.

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

- Molecule 51 is a protein called Ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	H	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			
51	CS	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			

- Molecule 52 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	I	222	Total	C	N	O	S	0	0	0
			1787	1113	344	324	6			
52	CT	236	Total	C	N	O	S	0	0	0
			1904	1184	369	345	6			

- Molecule 53 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	J	181	Total	C	N	O	0	0	0
			1462	937	263	262			
53	CU	183	Total	C	N	O	0	0	0
			1475	944	265	266			

- Molecule 54 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	K	202	Total	C	N	O	S	0	0	0
			1574	970	321	282	1			
54	CV	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			

- Molecule 55 is a protein called Ribosomal protein S4.

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

- Molecule 56 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	M	98	Total	C	N	O	S	0	0	0
			817	531	135	150	1			
56	CX	94	Total	C	N	O	S	0	0	0
			791	515	131	144	1			

- Molecule 57 is a protein called 40S ribosomal protein S11A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	N	141	Total	C	N	O	S	0	0	0
			1128	721	210	194	3			
57	CY	141	Total	C	N	O	S	0	0	0
			1129	722	212	192	3			

- Molecule 58 is a protein called 40S ribosomal protein S12.

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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	CZ	119	Total 913	C 566	N 163	O 179	S 5	0	0	0

- Molecule 59 is a protein called 40S ribosomal protein S13.

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

- Molecule 60 is a protein called 40S ribosomal protein S14-A.

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

- Molecule 61 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	R	129	Total 1018	C 649	N 185	O 177	S 7	0	0	0
61	DC	122	Total 963	C 612	N 176	O 168	S 7	0	0	0

- Molecule 62 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	S	140	Total 1091	C 700	N 198	O 192	S 1	0	0	0
62	DD	135	Total 1053	C 675	N 192	O 185	S 1	0	0	0

- Molecule 63 is a protein called 40S ribosomal protein S17-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	T	124	Total 997	C 628	N 183	O 185	S 1	0	0	0
63	DE	124	Total 997	C 628	N 183	O 185	S 1	0	0	0

- Molecule 64 is a protein called 40S ribosomal protein S18-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	U	144	Total	C	N	O	S	0	0	0
			1187	744	233	207	3			
64	DF	141	Total	C	N	O	S	0	0	0
			1161	727	227	204	3			

- Molecule 65 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	V	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			
65	DG	139	Total	C	N	O	S	0	0	0
			1089	682	208	198	1			

- Molecule 66 is a protein called Ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	W	99	Total	C	N	O	S	0	0	0
			782	493	145	142	2			
66	DH	97	Total	C	N	O	S	0	0	0
			763	481	140	140	2			

- Molecule 67 is a protein called 40S ribosomal protein S21.

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

- Molecule 68 is a protein called 40S ribosomal protein S22-A.

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

- Molecule 69 is a protein called Ribosomal protein S23 (S12).

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

- Molecule 70 is a protein called 40S ribosomal protein S24.

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

- Molecule 71 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
71	b	72	Total	C	N	O	0	0	0
			578	369	103	106			
71	DM	68	Total	C	N	O	0	0	0
			545	351	95	99			

- Molecule 72 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	c	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			
72	DN	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			

- Molecule 73 is a protein called 40S ribosomal protein S27.

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

- Molecule 74 is a protein called 40S ribosomal protein S28-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	e	62	Total	C	N	O	S	0	0	0
			487	299	98	88	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	DP	61	Total	C	N	O	S	0	0	0
			476	293	94	87	2			

- Molecule 75 is a protein called 40S ribosomal protein S29A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	f	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			
75	DQ	54	Total	C	N	O	S	0	0	0
			449	278	93	74	4			

- Molecule 76 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	g	54	Total	C	N	O	S	0	0	0
			431	271	88	70	2			
76	DR	58	Total	C	N	O	S	0	0	0
			461	289	93	77	2			

- Molecule 77 is a protein called Ubiquitin-40S ribosomal protein S31 fusion protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	h	70	Total	C	N	O	S	0	0	0
			574	362	113	93	6			

- Molecule 78 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

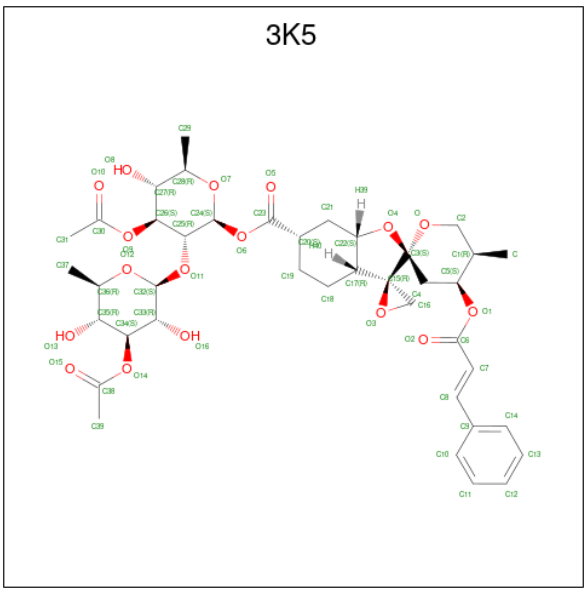
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	AR	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			

- Molecule 79 is a protein called 60S ribosomal protein CAALFM_C304810CA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
79	i	120	Total	C	N	O	0	0	0
			918	554	165	199			
79	CL	121	Total	C	N	O	0	0	0
			930	563	166	201			

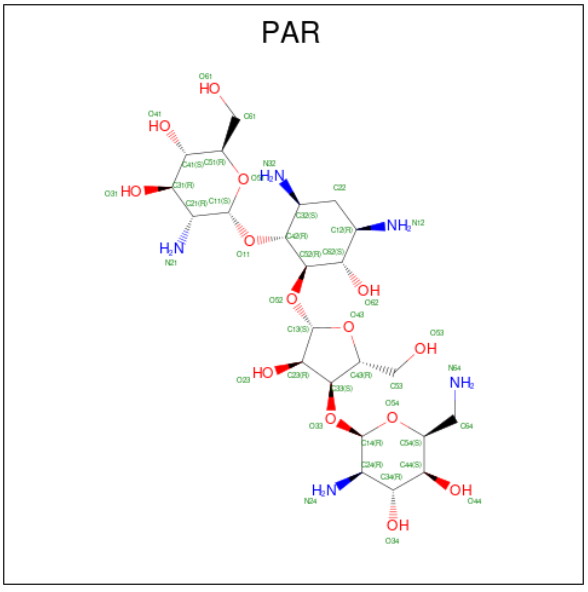
- Molecule 80 is 3-O-acetyl-2-O-(3-O-acetyl-6-deoxy-beta-D-glucopyranosyl)-6-deoxy-1-O-{[(2R,2'S,3a'R,4''S,5''R,6'S,7a'S)-5''-methyl-4''-{[(2E)-3-phenylprop-2-enoyl]oxy}decahydrodispiro[oxirane-2,3'-[1]benzofuran-2',2''-pyran]-6'-yl]carbonyl}-beta-D-glucopyranose

(three-letter code: 3K5) (formula: $C_{40}H_{52}O_{17}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
80	1	1	57	40	17	0	0

- Molecule 81 is PAROMOMYCIN (three-letter code: PAR) (formula: $C_{23}H_{45}N_5O_{14}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
81	1	1	42	23	5	14	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	1	1	Total C N O 42 23 5 14	0	0
81	4	1	Total C N O 42 23 5 14	0	0
81	4	1	Total C N O 42 23 5 14	0	0
81	B	1	Total C N O 42 23 5 14	0	0
81	B	1	Total C N O 42 23 5 14	0	0
81	B	1	Total C N O 42 23 5 14	0	0
81	B	1	Total C N O 42 23 5 14	0	0
81	B	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0
81	AS	1	Total C N O 42 23 5 14	0	0

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

- Molecule 82 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	1	346	Total Mg 346 346	0	0
82	3	1	Total Mg 1 1	0	0
82	4	7	Total Mg 7 7	0	0
82	j	1	Total Mg 1 1	0	0
82	p	1	Total Mg 1 1	0	0
82	v	5	Total Mg 5 5	0	0
82	w	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	x	1	Total Mg 1 1	0	0
82	6	2	Total Mg 2 2	0	0
82	AB	1	Total Mg 1 1	0	0
82	AL	1	Total Mg 1 1	0	0
82	AP	2	Total Mg 2 2	0	0
82	B	140	Total Mg 140 140	0	0
82	C	1	Total Mg 1 1	0	0
82	E	1	Total Mg 1 1	0	0
82	F	1	Total Mg 1 1	0	0
82	G	1	Total Mg 1 1	0	0
82	K	1	Total Mg 1 1	0	0
82	f	1	Total Mg 1 1	0	0
82	AS	334	Total Mg 334 334	0	0
82	AT	1	Total Mg 1 1	0	0
82	AU	1	Total Mg 1 1	0	0
82	AW	3	Total Mg 3 3	0	0
82	AX	1	Total Mg 1 1	0	0
82	AY	1	Total Mg 1 1	0	0
82	CJ	1	Total Mg 1 1	0	0
82	CM	139	Total Mg 139 139	0	0
82	CR	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	DG	1	Total Mg 1 1	0	0
82	DJ	1	Total Mg 1 1	0	0
82	DK	1	Total Mg 1 1	0	0
82	CL	1	Total Mg 1 1	0	0

- Molecule 83 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	AH	1	Total Zn 1 1	0	0
83	AK	1	Total Zn 1 1	0	0
83	AN	1	Total Zn 1 1	0	0
83	AP	1	Total Zn 1 1	0	0
83	AQ	1	Total Zn 1 1	0	0
83	c	1	Total Zn 1 1	0	0
83	d	1	Total Zn 1 1	0	0
83	f	1	Total Zn 1 1	0	0
83	h	1	Total Zn 1 1	0	0
83	CB	1	Total Zn 1 1	0	0
83	CE	1	Total Zn 1 1	0	0
83	CH	1	Total Zn 1 1	0	0
83	CJ	1	Total Zn 1 1	0	0
83	CK	1	Total Zn 1 1	0	0
83	DN	1	Total Zn 1 1	0	0

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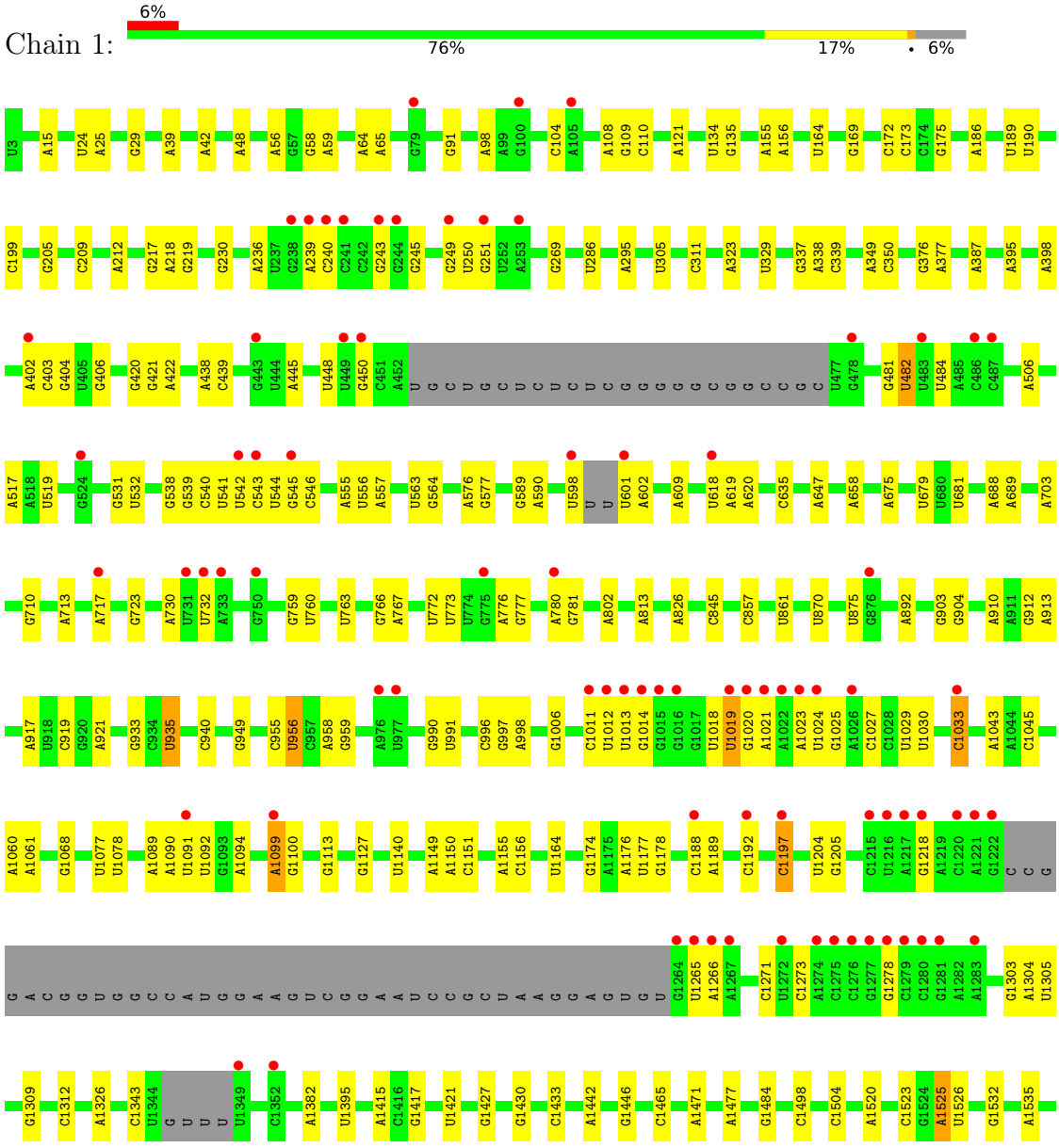
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	DO	1	Total Zn 1 1	0	0
83	DQ	1	Total Zn 1 1	0	0

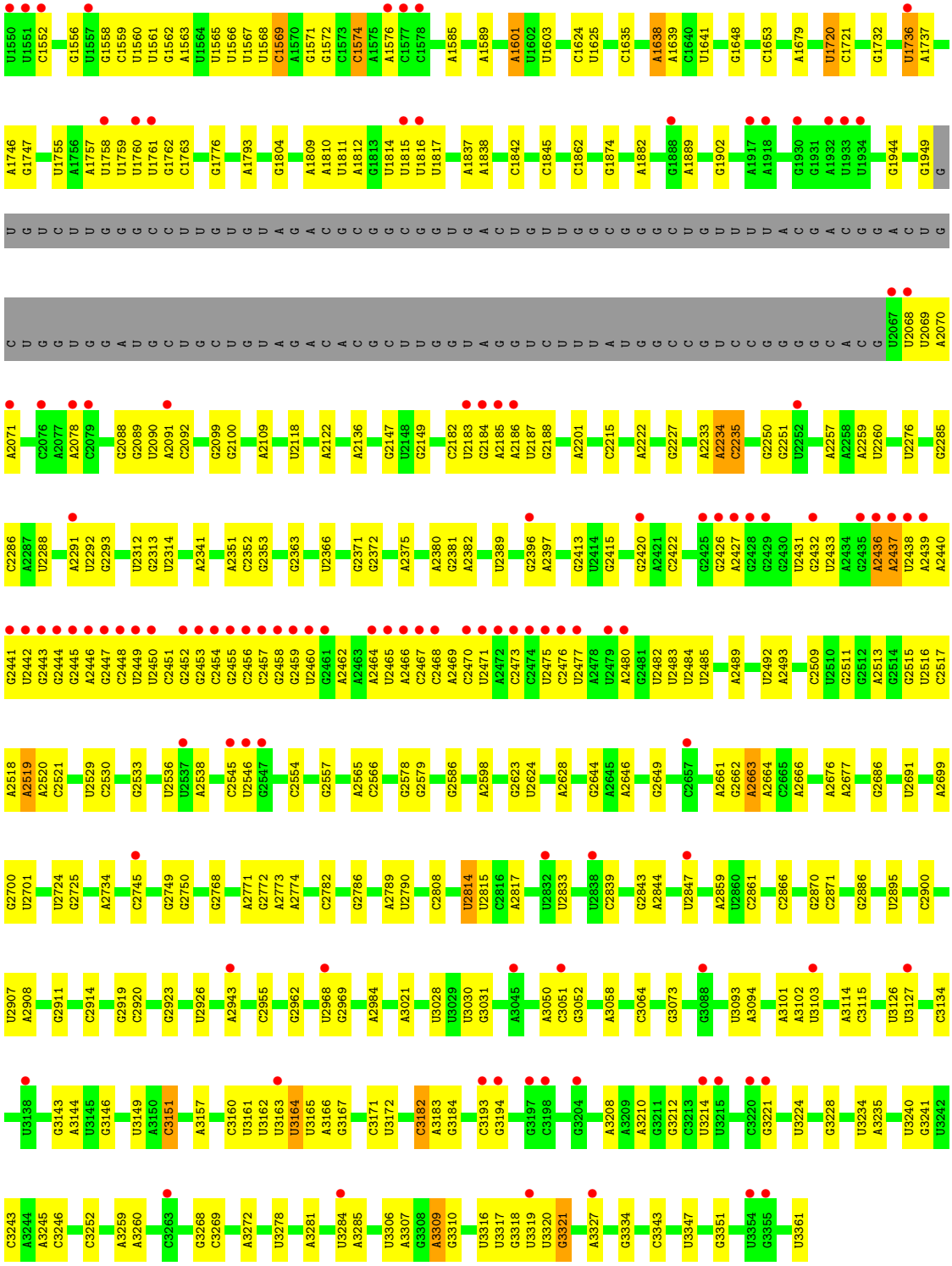
3 Residue-property plots (i)

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

- Molecule 1: 25S

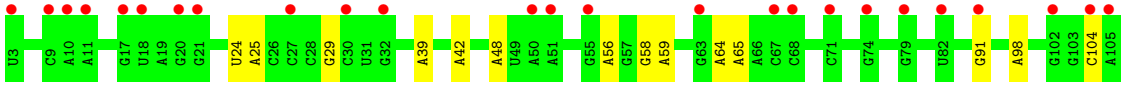
Chain 1:

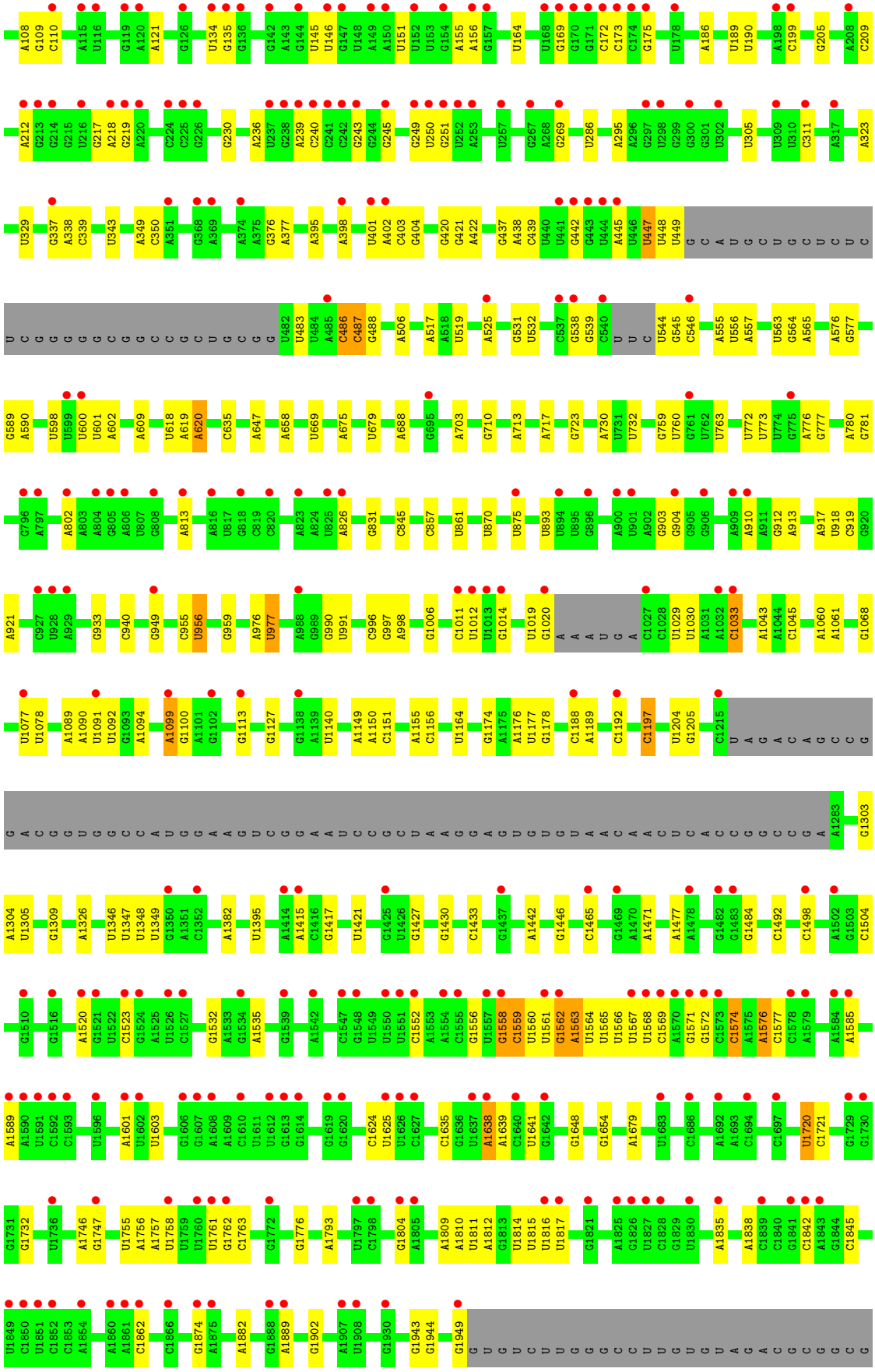


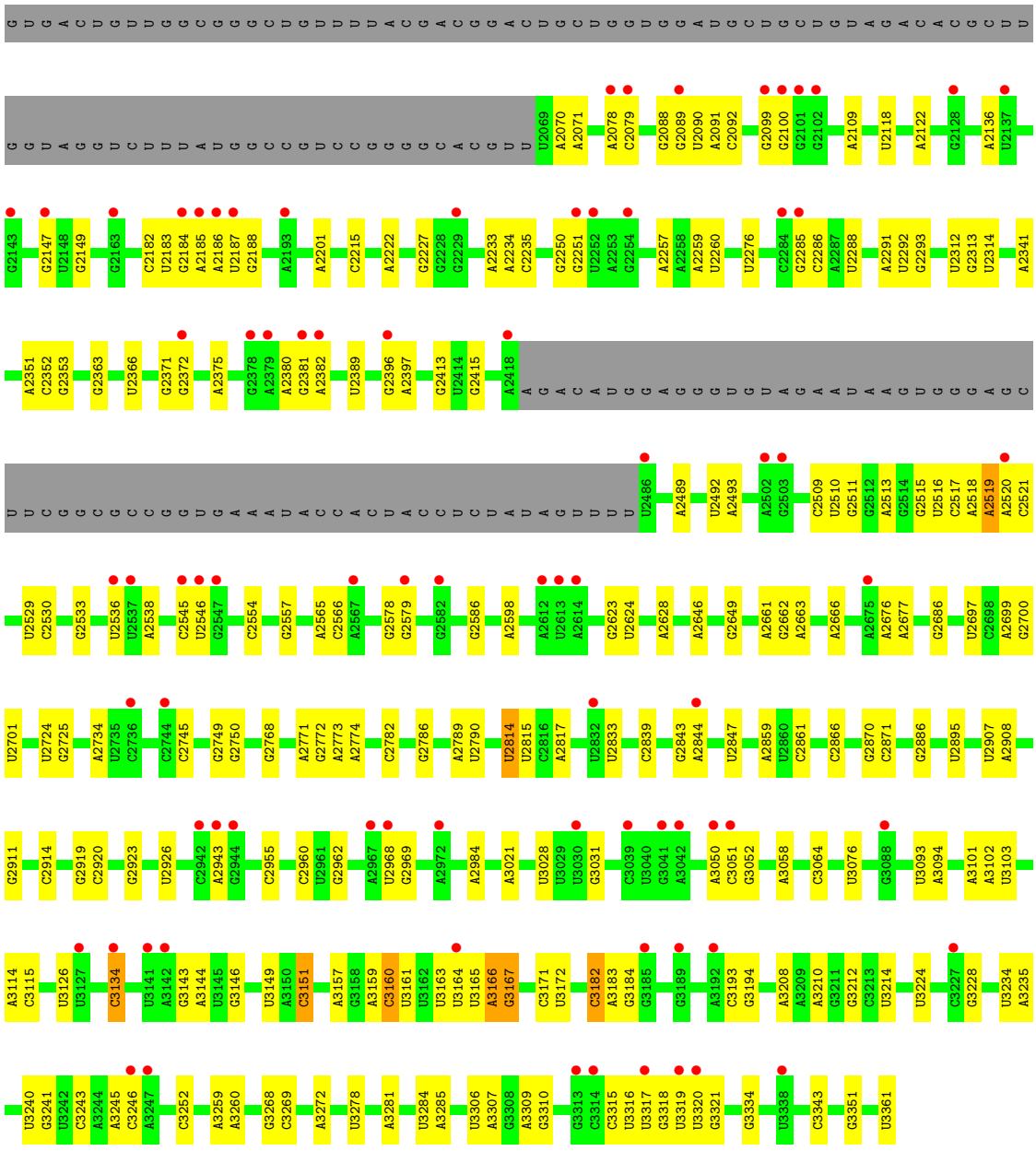


• Molecule 1: 25S

Chain AS:

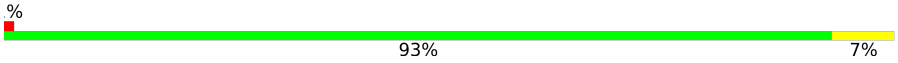


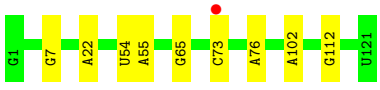




• Molecule 2: 5S

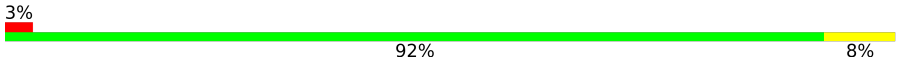
Chain 3:

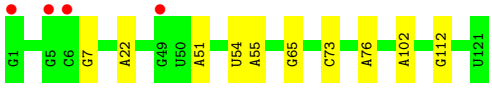




• Molecule 2: 5S

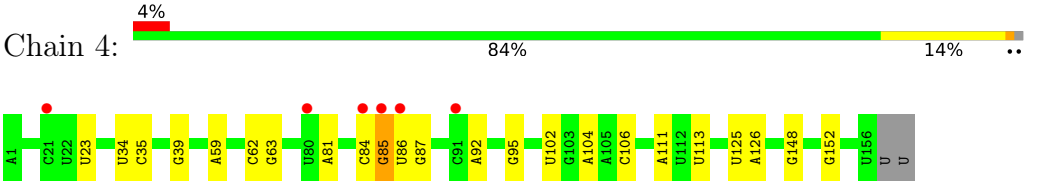
Chain AT:





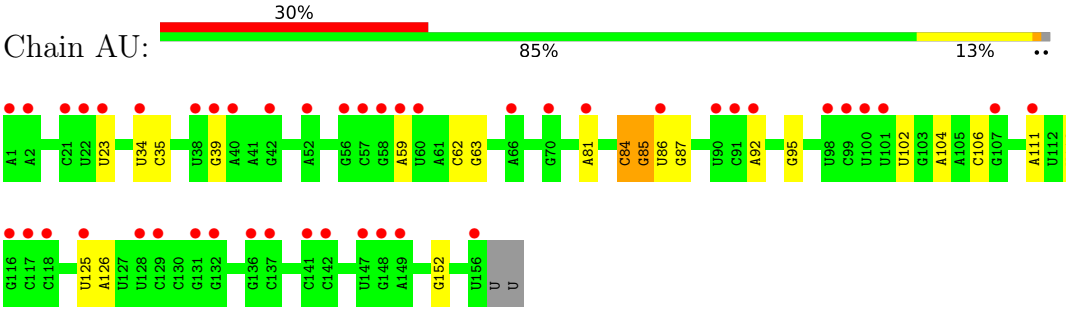
• Molecule 3: 5.8S

Chain 4:



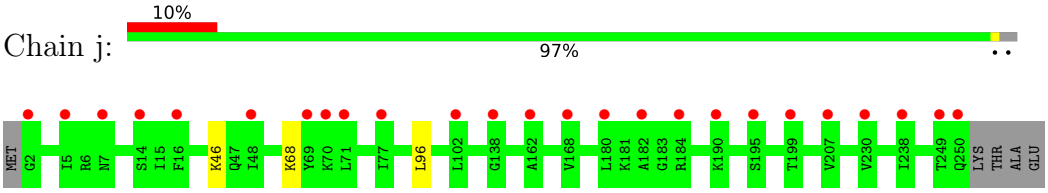
• Molecule 3: 5.8S

Chain AU:



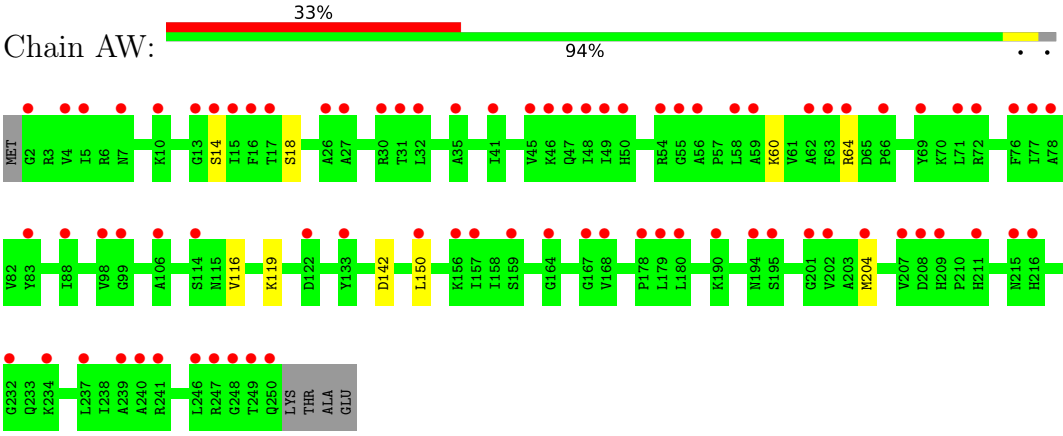
• Molecule 4: 60S ribosomal protein L2-B

Chain j:



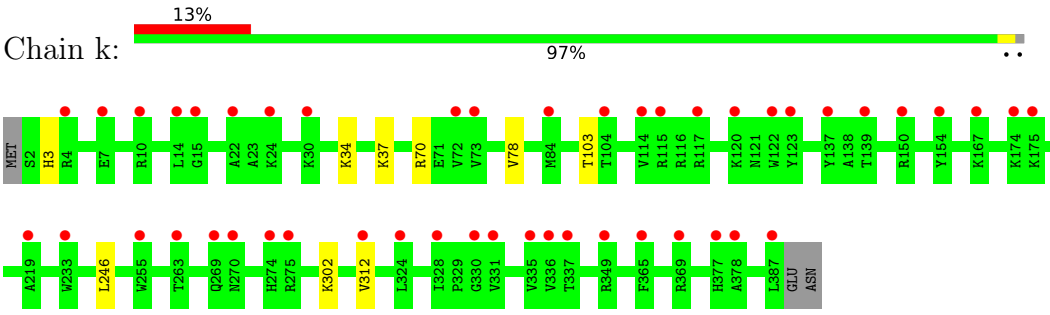
• Molecule 4: 60S ribosomal protein L2-B

Chain AW:



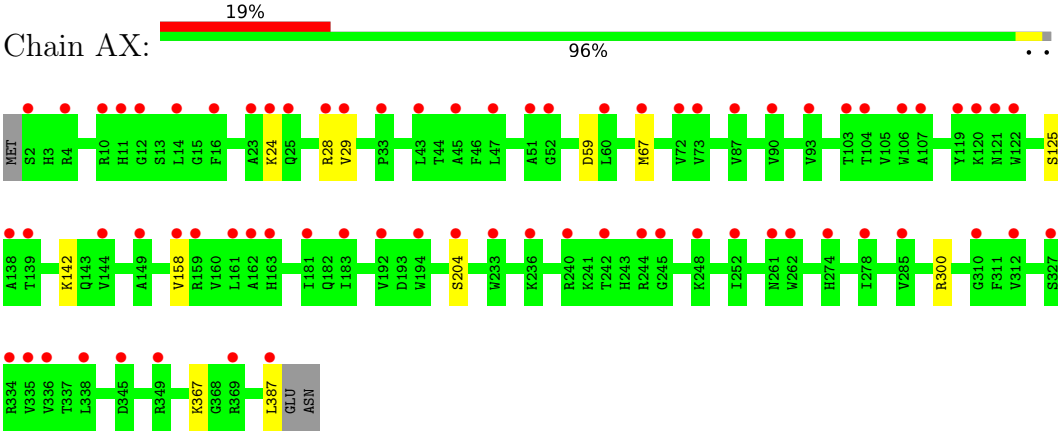
• Molecule 5: 60S ribosomal protein L3

Chain k:



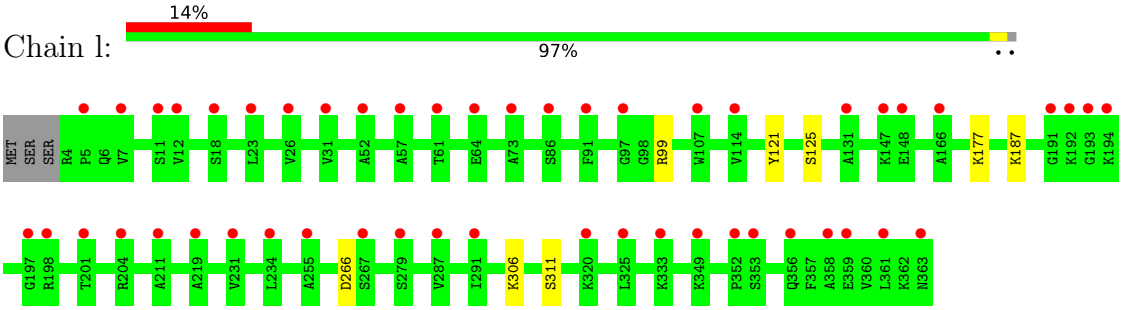
• Molecule 5: 60S ribosomal protein L3

Chain AX:



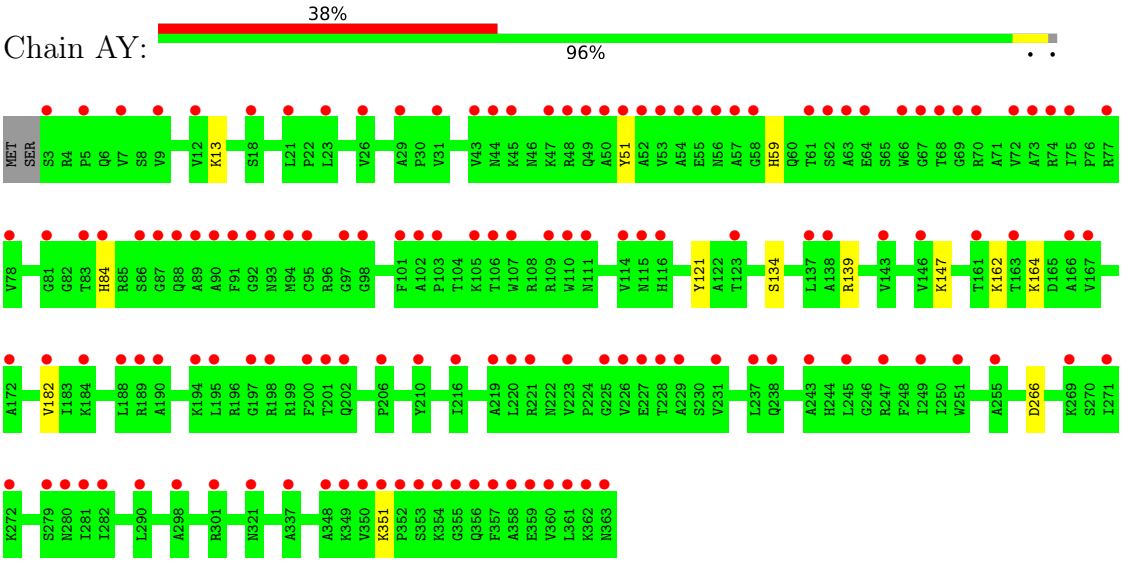
• Molecule 6: 60S ribosomal protein L4-B

Chain l:



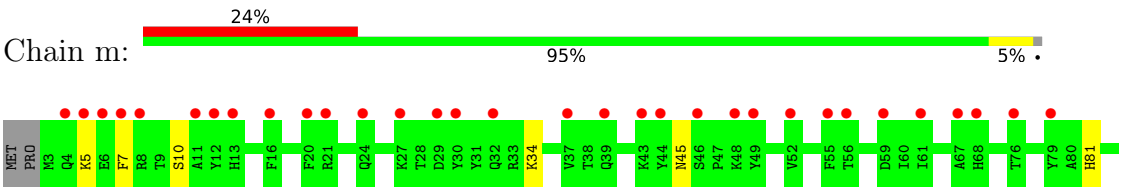
• Molecule 6: 60S ribosomal protein L4-B

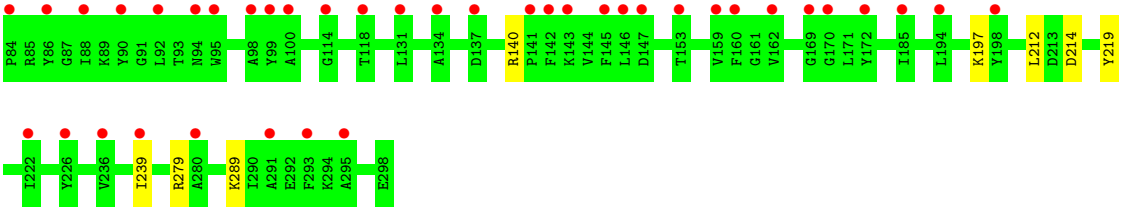
Chain AY:



• Molecule 7: Uncharacterized protein CaJ7.0206

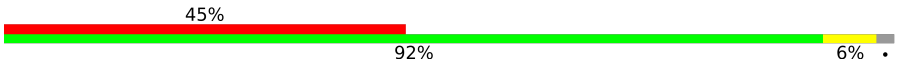
Chain m:

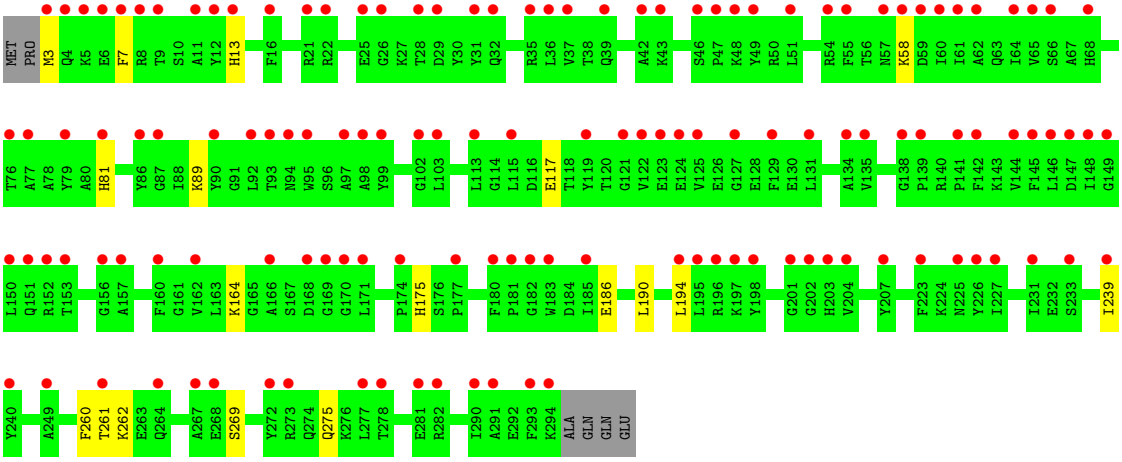




• Molecule 7: Uncharacterized protein CaJ7.0206

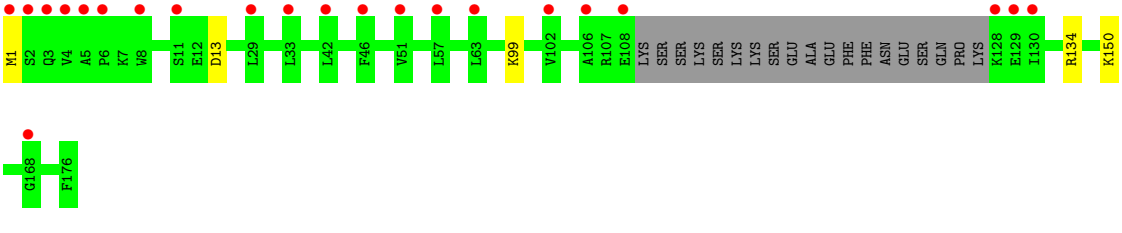
Chain AZ:





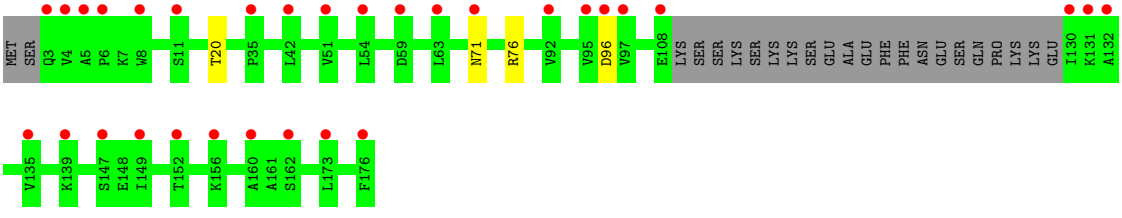
• Molecule 8: 60S ribosomal protein L6

Chain n:



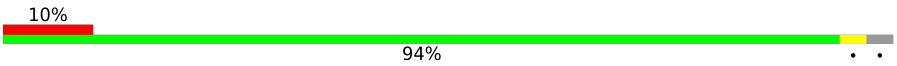
• Molecule 8: 60S ribosomal protein L6

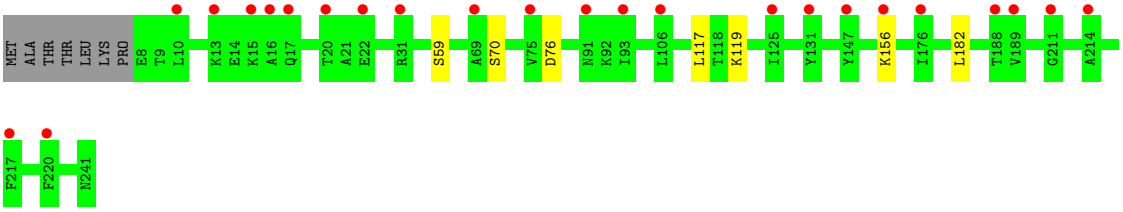
Chain BA:



• Molecule 9: 60S ribosomal protein L7-A

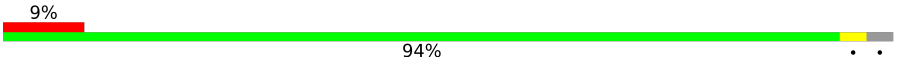
Chain o:

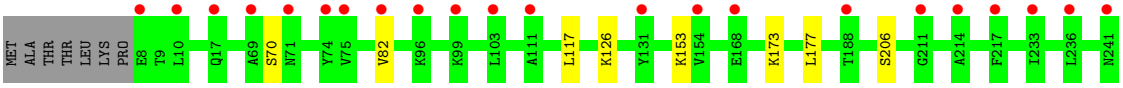




• Molecule 9: 60S ribosomal protein L7-A

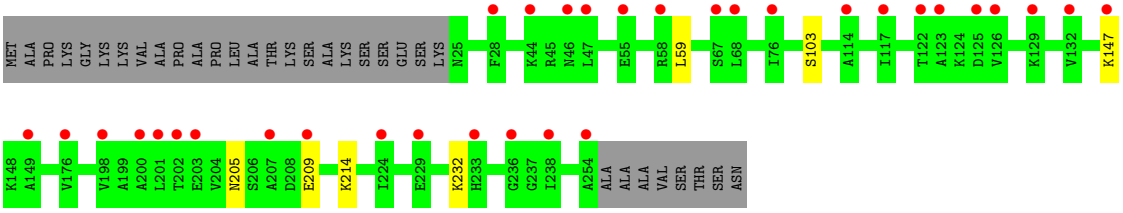
Chain BB:





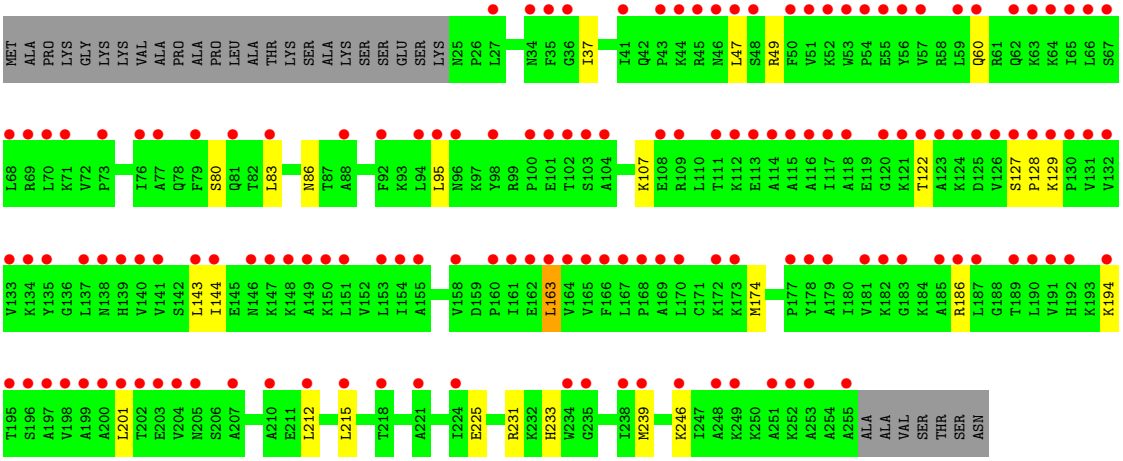
• Molecule 10: 60S ribosomal protein L8

Chain p:



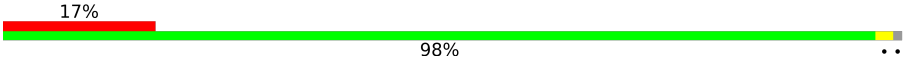
• Molecule 10: 60S ribosomal protein L8

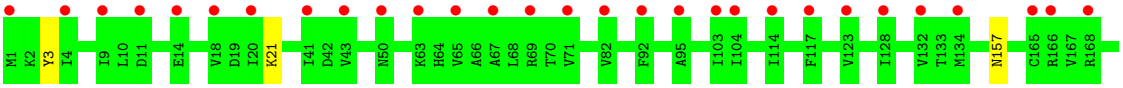
Chain BC:

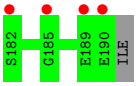


• Molecule 11: 60S ribosomal protein L9-B

Chain q:

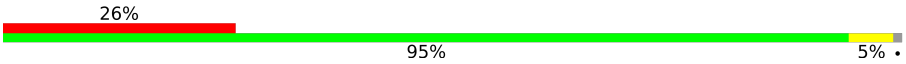


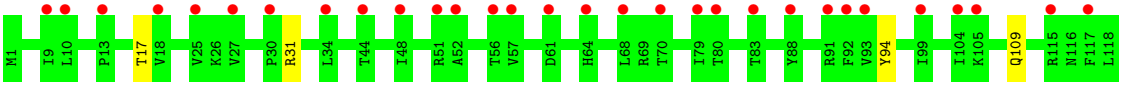


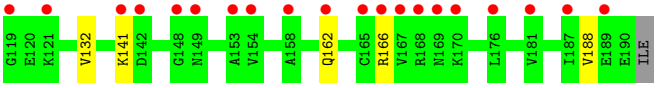


• Molecule 11: 60S ribosomal protein L9-B

Chain BD:

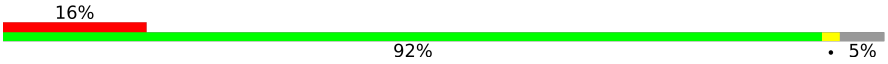


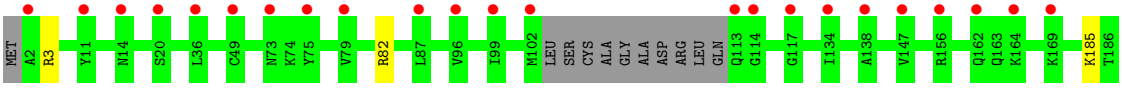


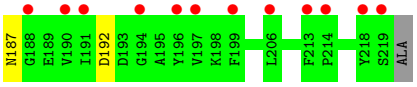


• Molecule 12: 60S ribosomal protein L10

Chain r:

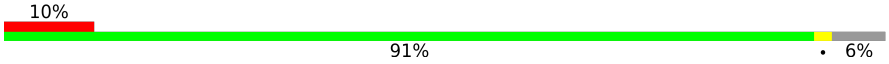


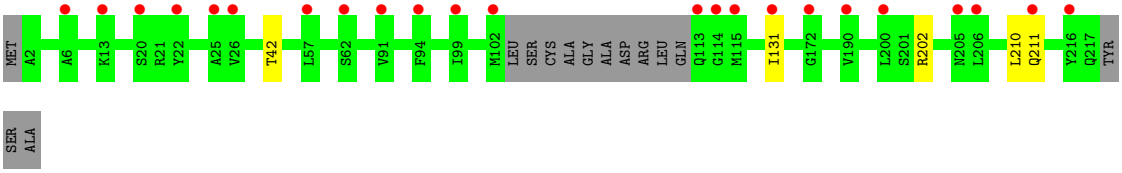




• Molecule 12: 60S ribosomal protein L10

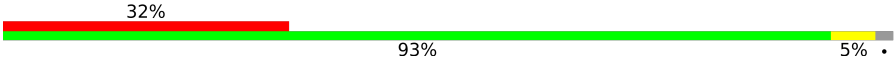
Chain BE:

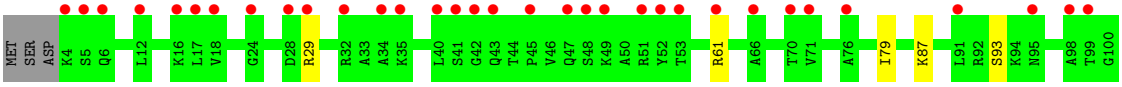


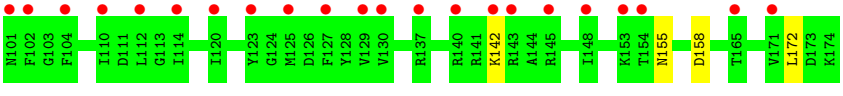


• Molecule 13: 60S ribosomal protein L11-B

Chain s:

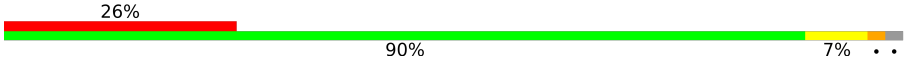


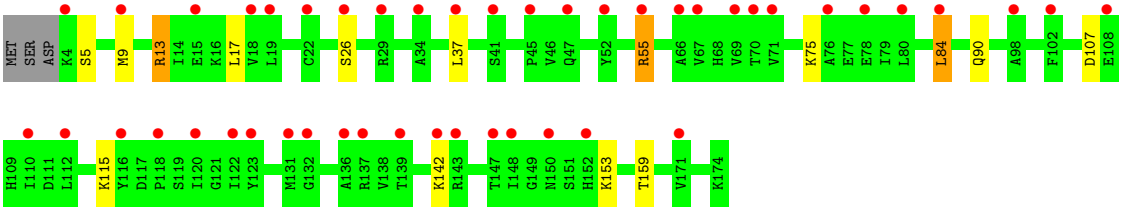




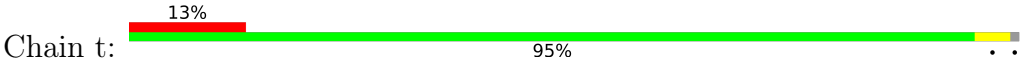
• Molecule 13: 60S ribosomal protein L11-B

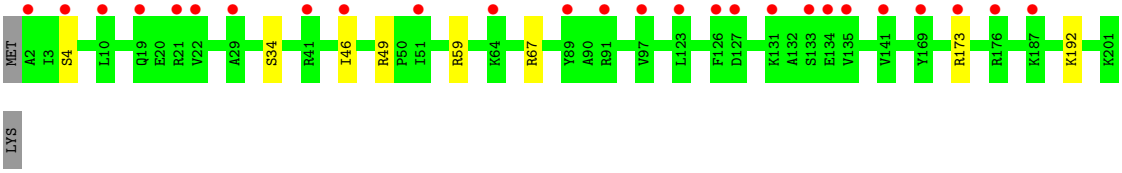
Chain BF:



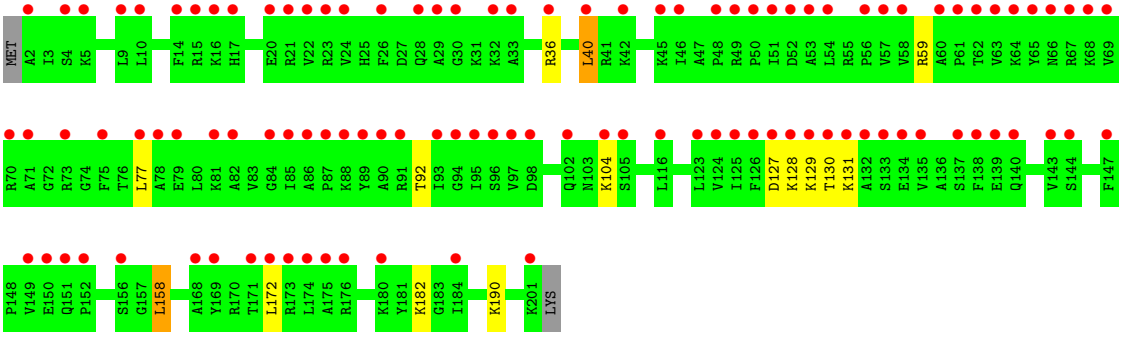


• Molecule 14: 60S ribosomal protein L13





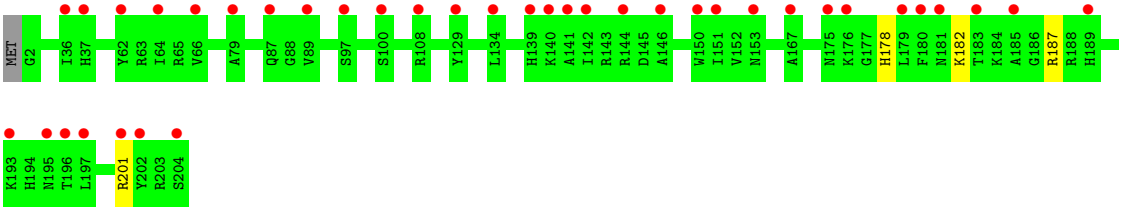
• Molecule 14: 60S ribosomal protein L13



• Molecule 15: 60S ribosomal protein L14-B

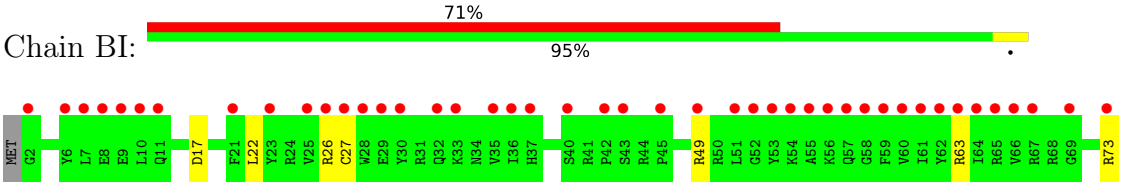
• Molecule 15: 60S ribosomal protein L14-B

• Molecule 16: 60S ribosomal protein L15-A



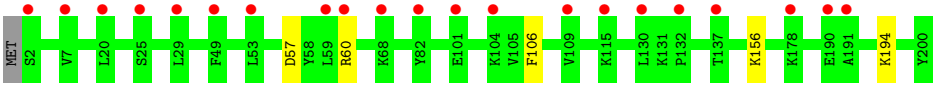
• Molecule 16: 60S ribosomal protein L15-A

Chain BI:



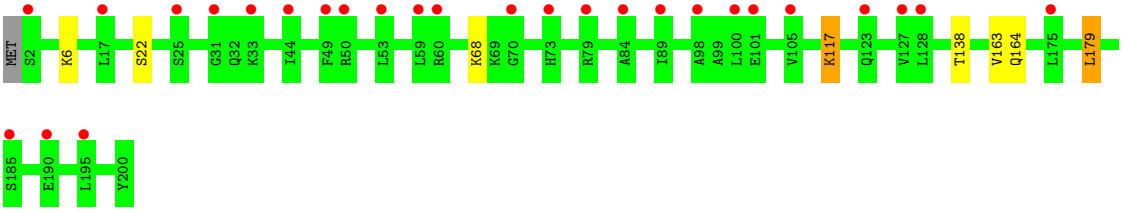
• Molecule 17: Ribosomal protein L13

Chain w:



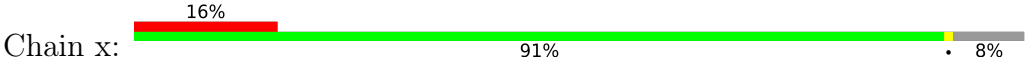
• Molecule 17: Ribosomal protein L13

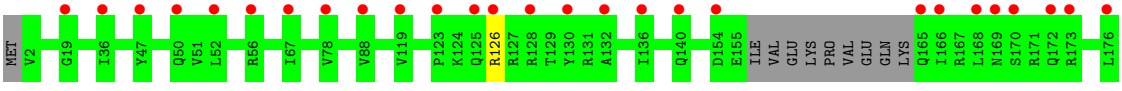
Chain BJ:

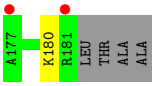


• Molecule 18: Ribosomal protein L22

Chain x:

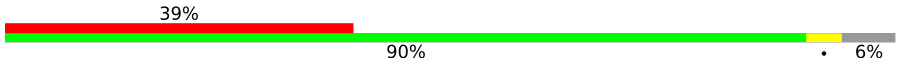


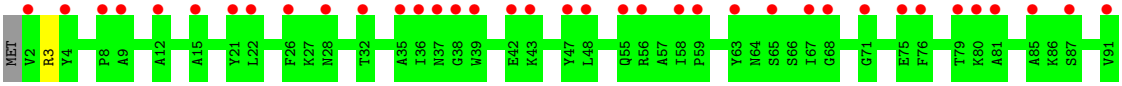


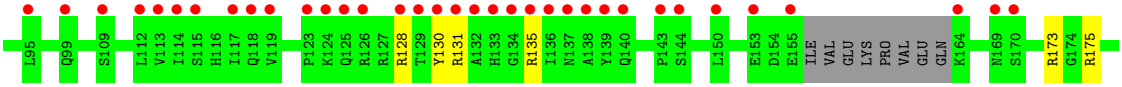


• Molecule 18: Ribosomal protein L22

Chain BK:

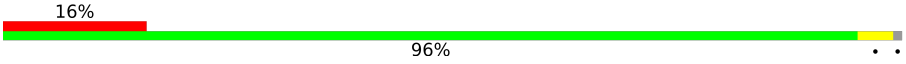


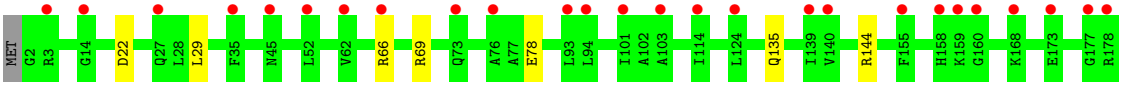




• Molecule 19: 60S ribosomal protein L18-A

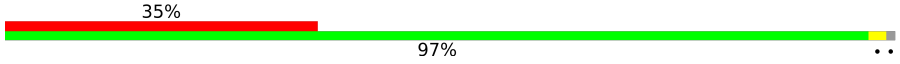
Chain y:

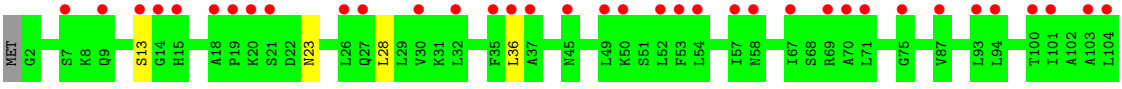


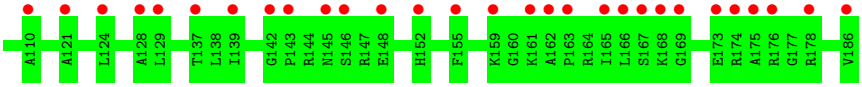


• Molecule 19: 60S ribosomal protein L18-A

Chain BL:

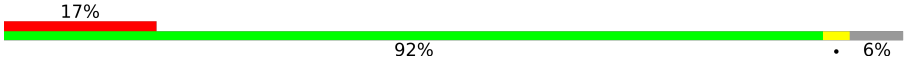


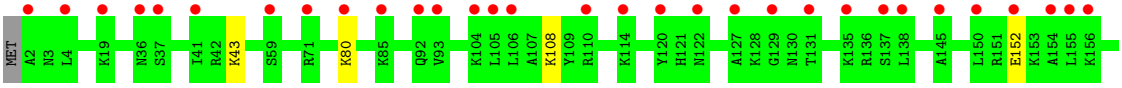


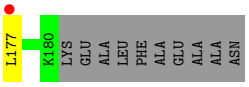


• Molecule 20: 60S ribosomal protein L19-A

Chain z:

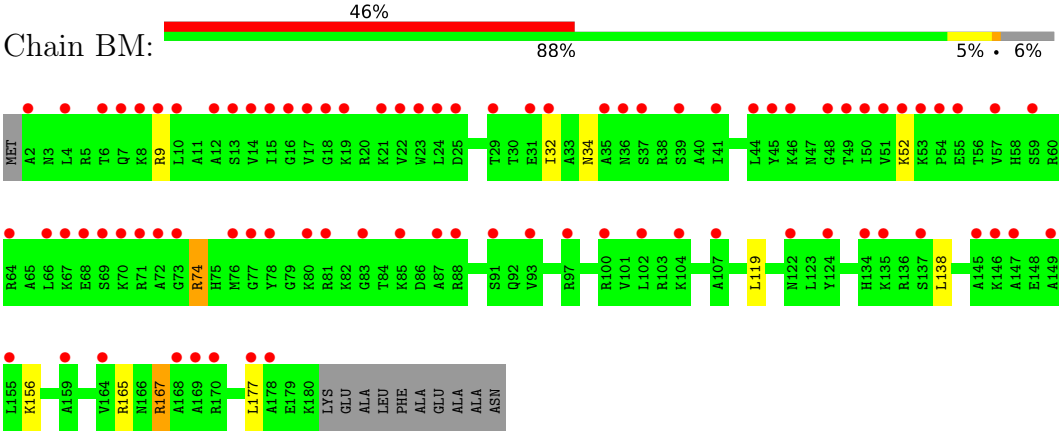






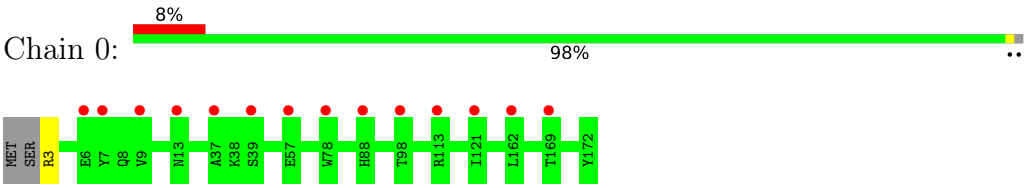
• Molecule 20: 60S ribosomal protein L19-A

Chain BM:



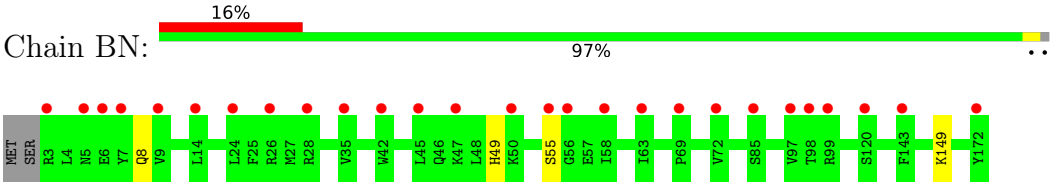
• Molecule 21: 60S ribosomal protein L20

Chain 0:



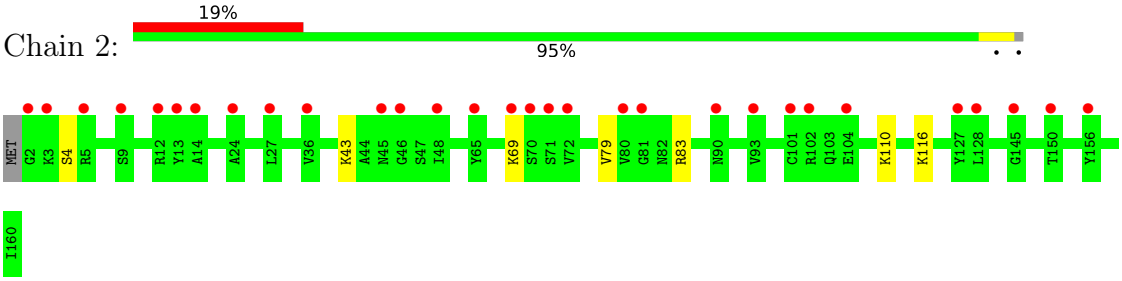
• Molecule 21: 60S ribosomal protein L20

Chain BN:



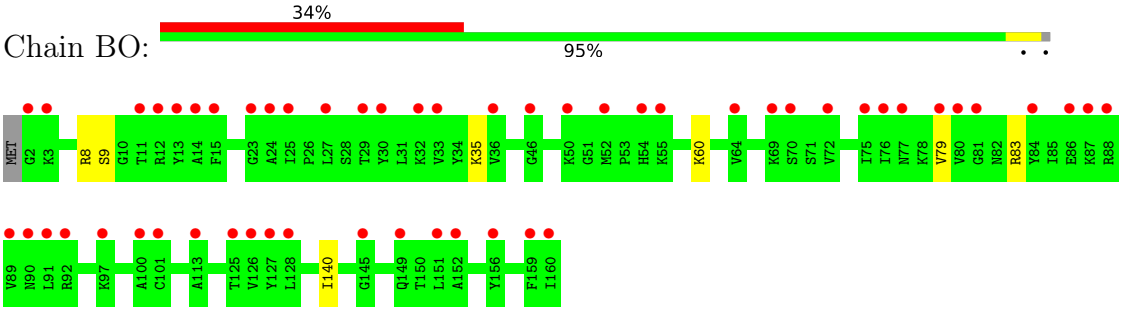
• Molecule 22: 60S ribosomal protein L21-A

Chain 2:



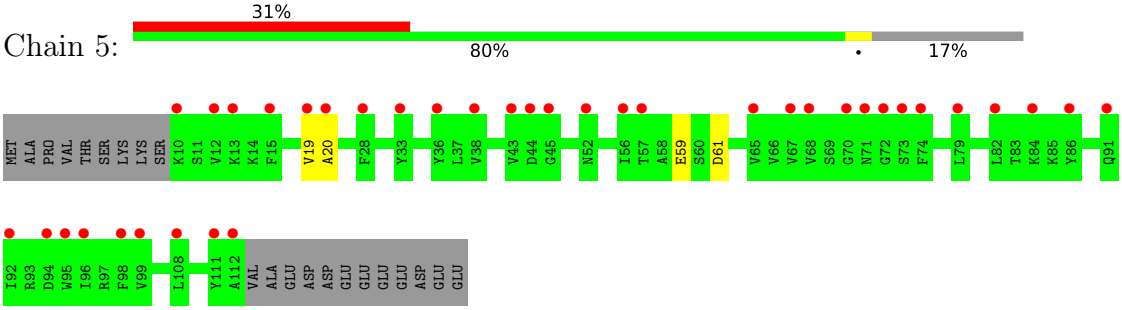
• Molecule 22: 60S ribosomal protein L21-A

Chain BO:



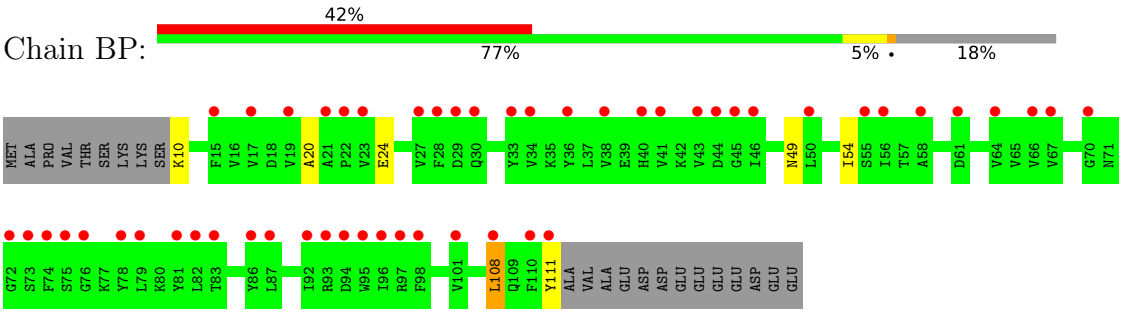
• Molecule 23: 60S ribosomal protein L22-B

Chain 5:



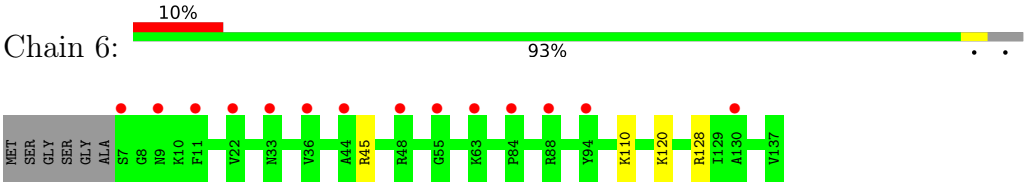
• Molecule 23: 60S ribosomal protein L22-B

Chain BP:



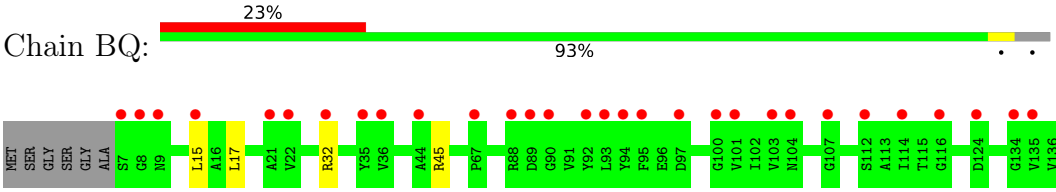
• Molecule 24: 60S ribosomal protein L23-A

Chain 6:



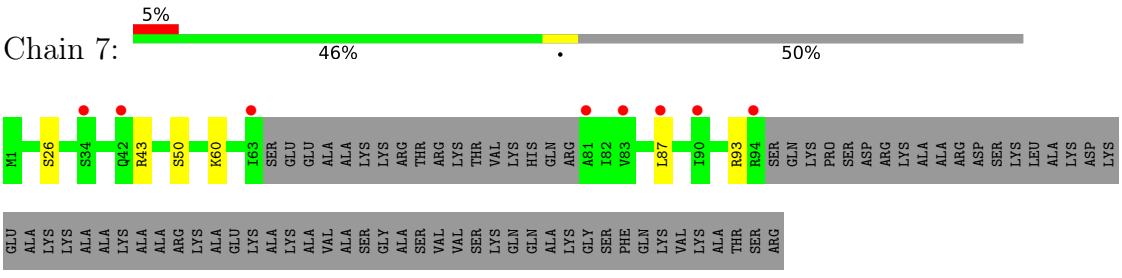
• Molecule 24: 60S ribosomal protein L23-A

Chain BQ:



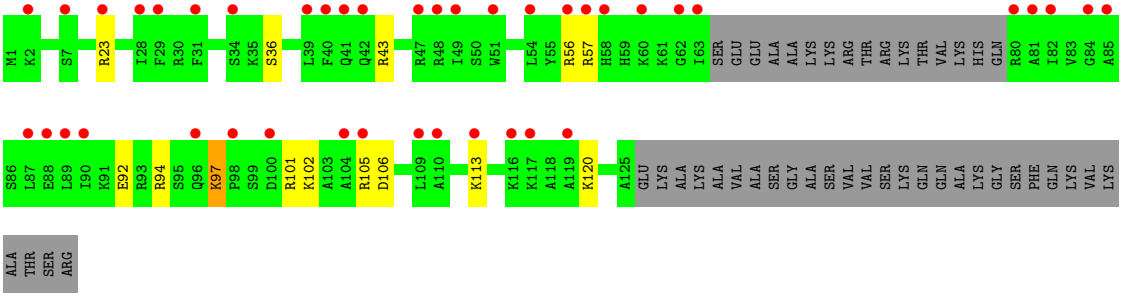
• Molecule 25: 60S ribosomal protein L24-A

Chain 7:



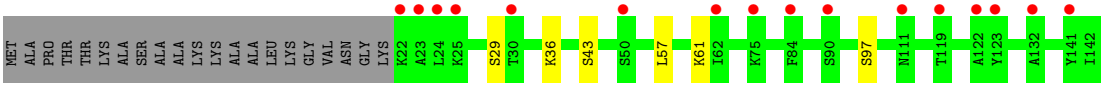
• Molecule 25: 60S ribosomal protein L24-A

Chain BR:



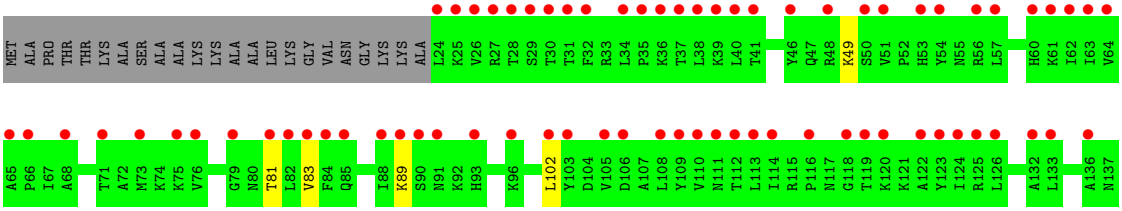
• Molecule 26: 60S ribosomal protein L25

Chain 8:



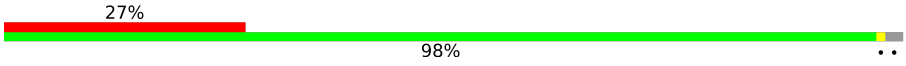
• Molecule 26: 60S ribosomal protein L25

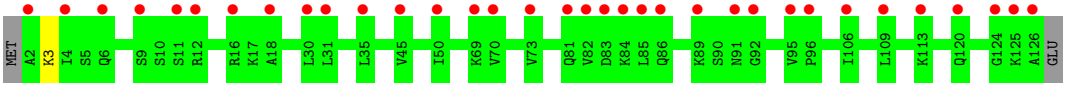
Chain BS:



• Molecule 27: Ribosomal protein L24

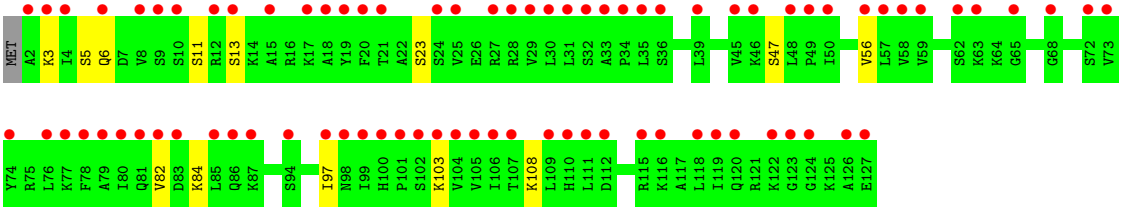
Chain 9:





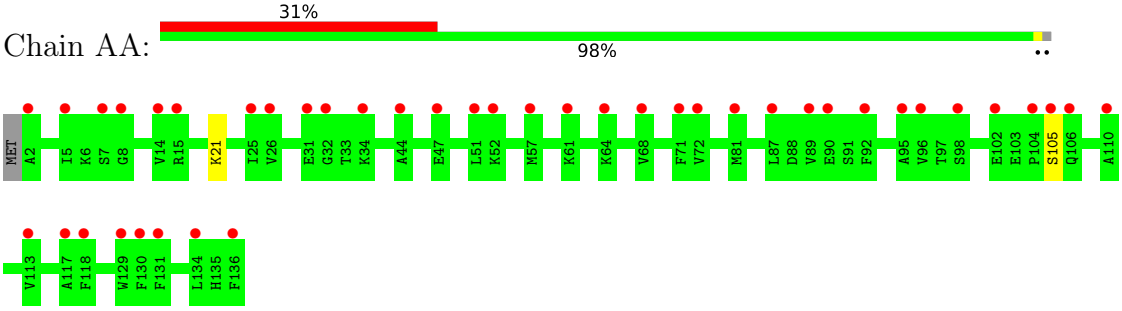
• Molecule 27: Ribosomal protein L24

Chain BT:



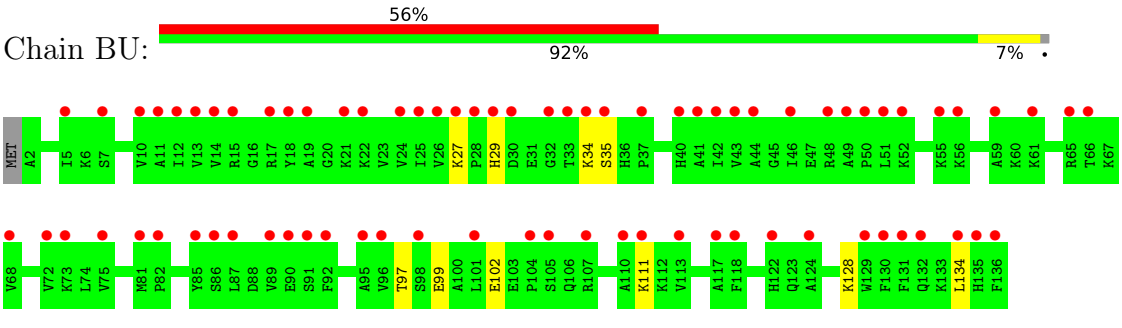
• Molecule 28: 60S ribosomal protein L27

Chain AA:



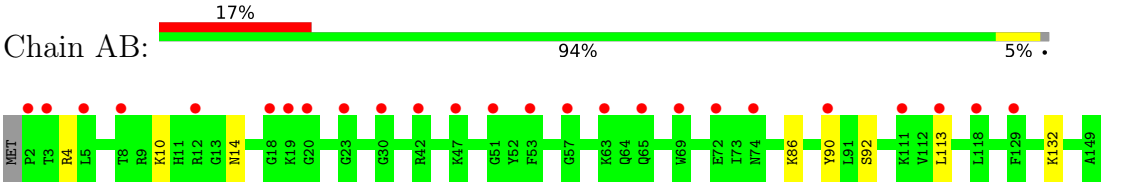
• Molecule 28: 60S ribosomal protein L27

Chain BU:



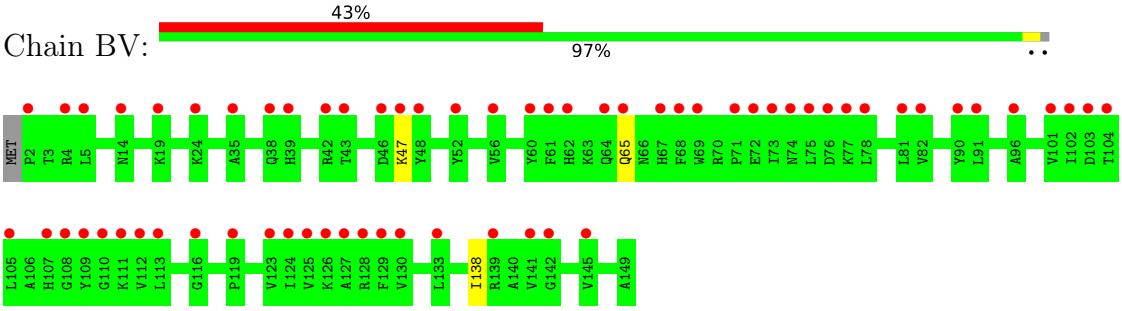
• Molecule 29: 60S ribosomal protein L28

Chain AB:



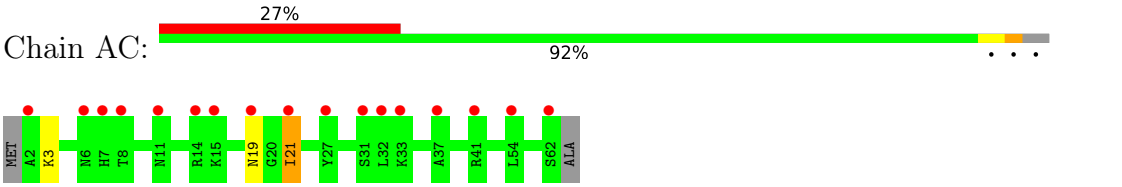
• Molecule 29: 60S ribosomal protein L28

Chain BV:



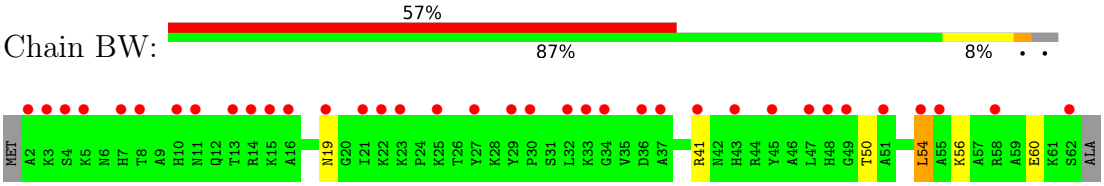
• Molecule 30: 60S ribosomal protein L29

Chain AC:



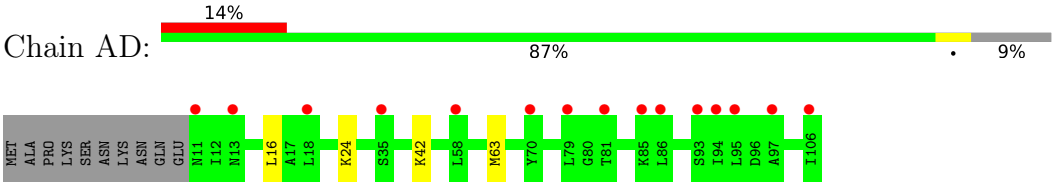
• Molecule 30: 60S ribosomal protein L29

Chain BW:



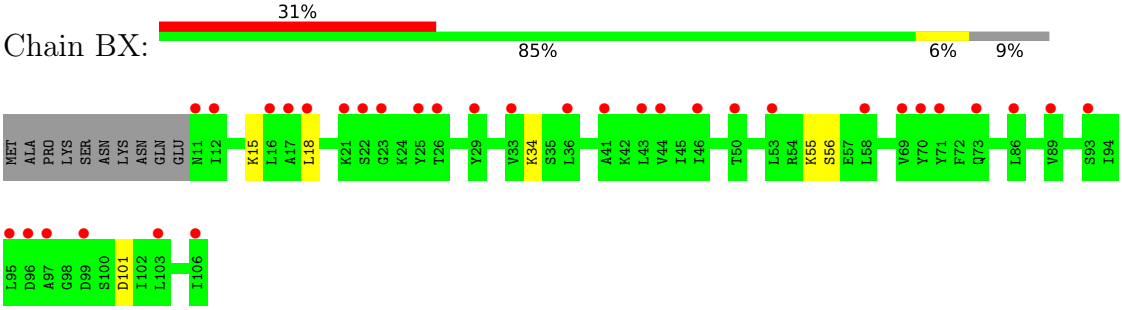
• Molecule 31: 60S ribosomal protein L30

Chain AD:



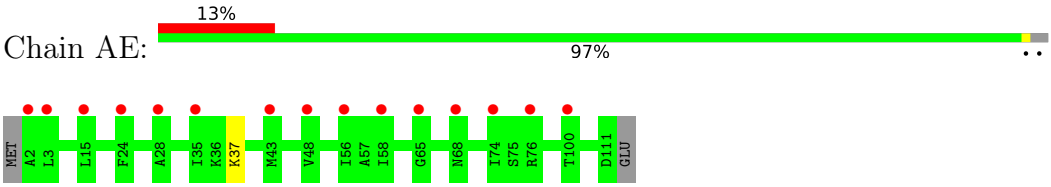
• Molecule 31: 60S ribosomal protein L30

Chain BX:



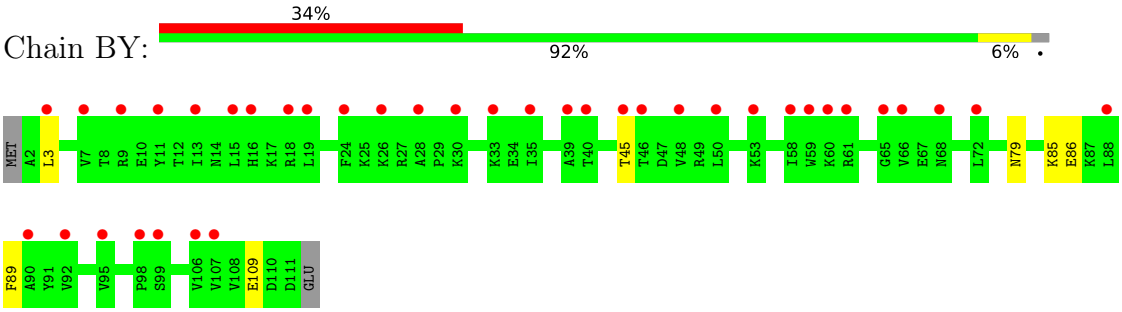
• Molecule 32: 60S ribosomal protein L31-B

Chain AE:



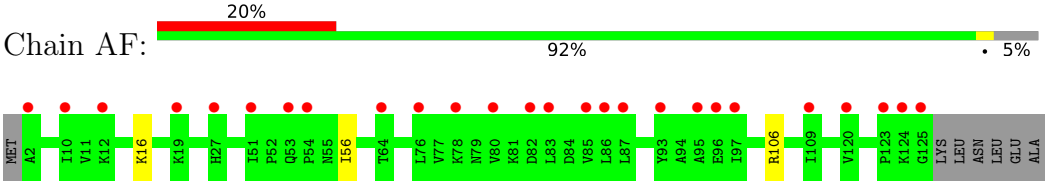
• Molecule 32: 60S ribosomal protein L31-B

Chain BY:



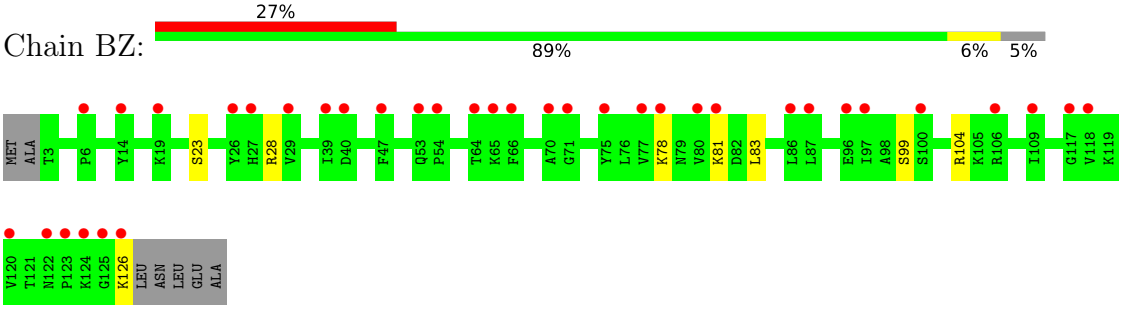
• Molecule 33: 60S ribosomal protein L32

Chain AF:



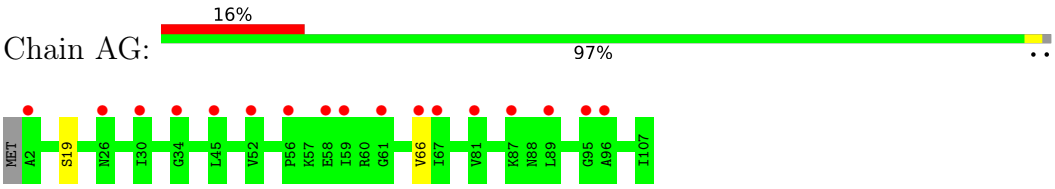
• Molecule 33: 60S ribosomal protein L32

Chain BZ:



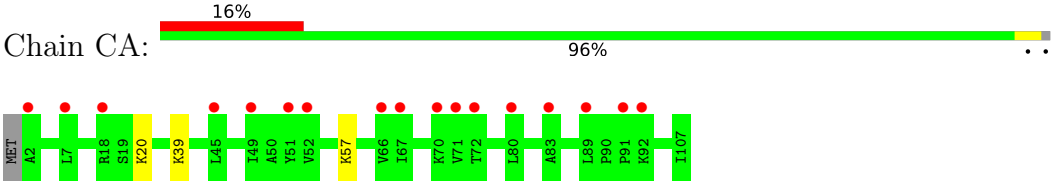
• Molecule 34: 60S ribosomal protein L33-A

Chain AG:



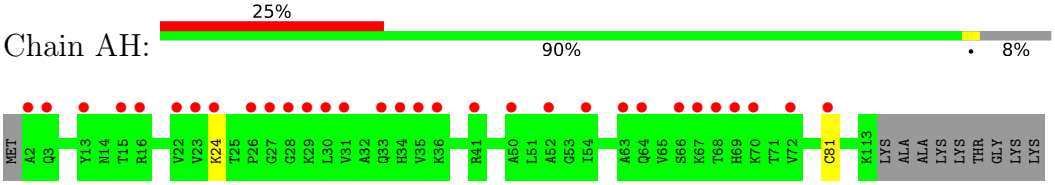
• Molecule 34: 60S ribosomal protein L33-A

Chain CA:



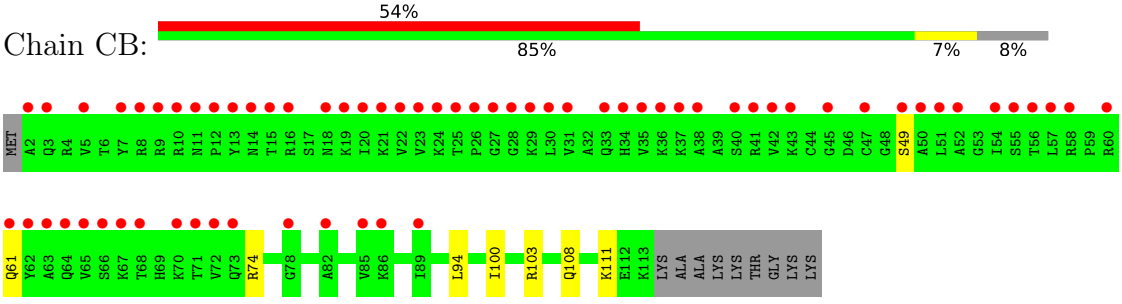
• Molecule 35: 60S ribosomal protein L34-B

Chain AH:



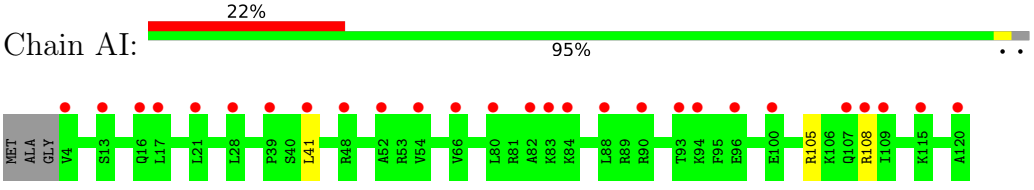
• Molecule 35: 60S ribosomal protein L34-B

Chain CB:



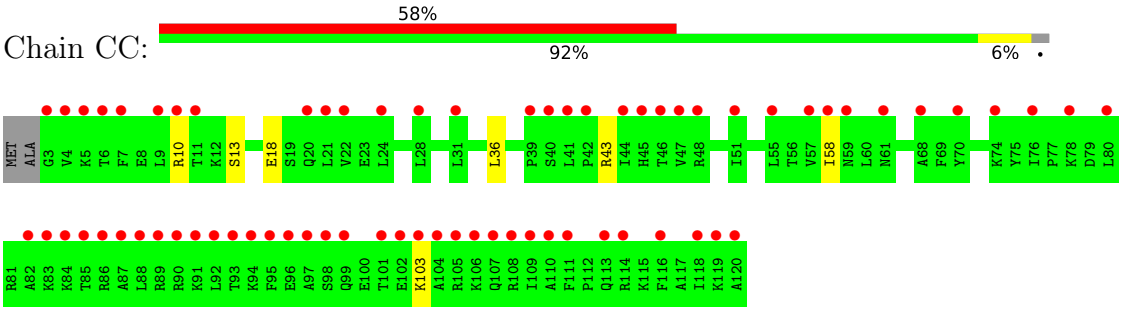
• Molecule 36: Ribosomal protein L29

Chain AI:



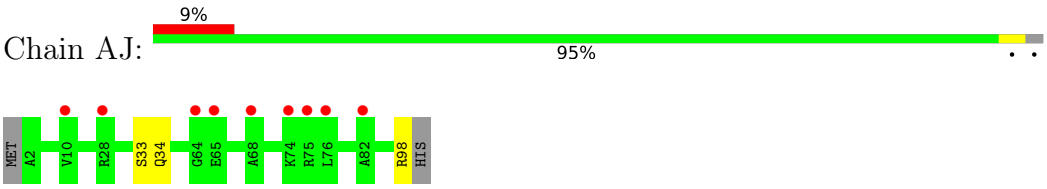
• Molecule 36: Ribosomal protein L29

Chain CC:



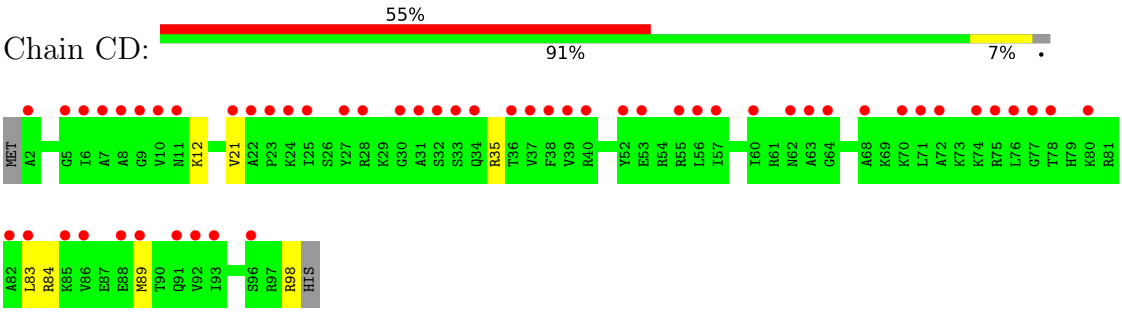
• Molecule 37: 60S ribosomal protein L36

Chain AJ:



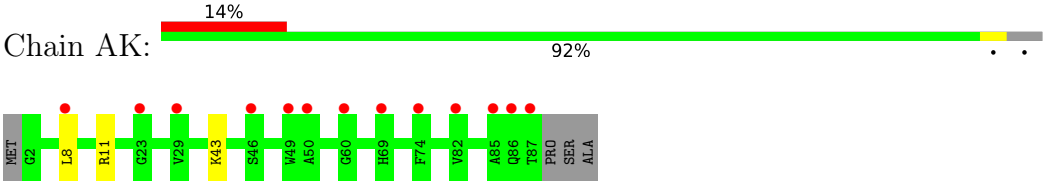
• Molecule 37: 60S ribosomal protein L36

Chain CD:



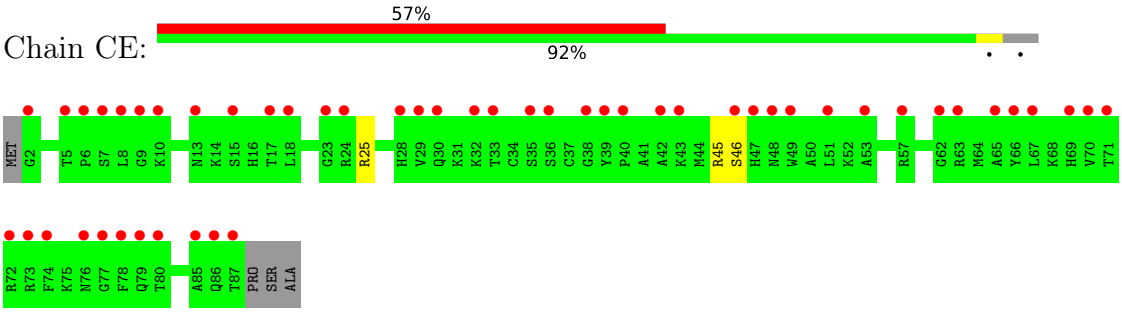
• Molecule 38: 60S ribosomal protein L37-B

Chain AK:



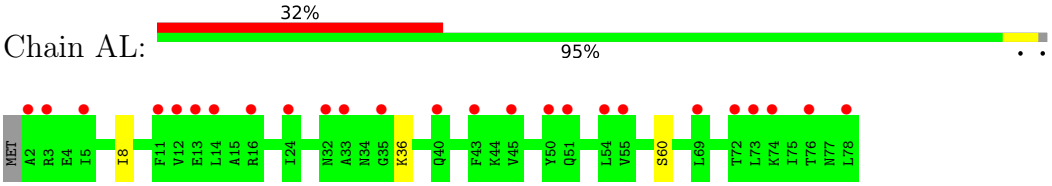
• Molecule 38: 60S ribosomal protein L37-B

Chain CE:



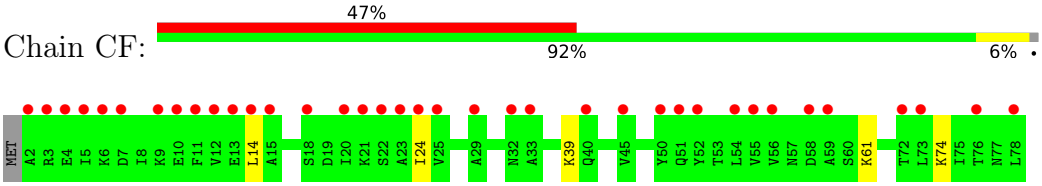
• Molecule 39: 60S ribosomal protein L38

Chain AL:



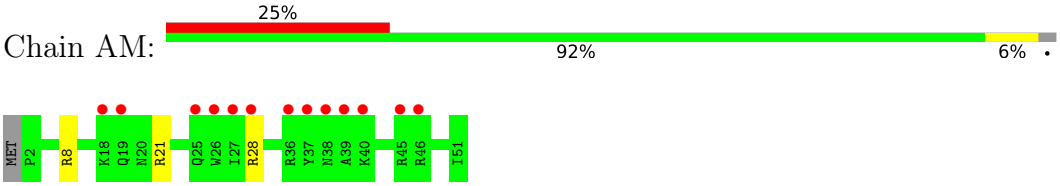
• Molecule 39: 60S ribosomal protein L38

Chain CF:



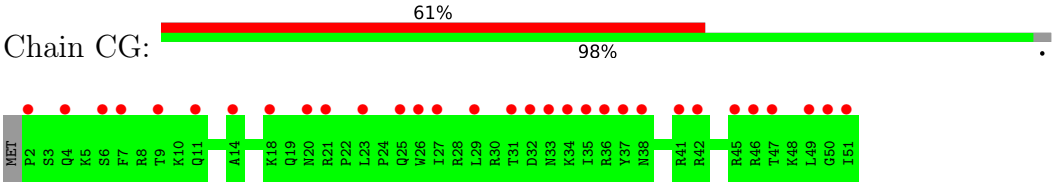
• Molecule 40: 60S ribosomal protein L39

Chain AM:



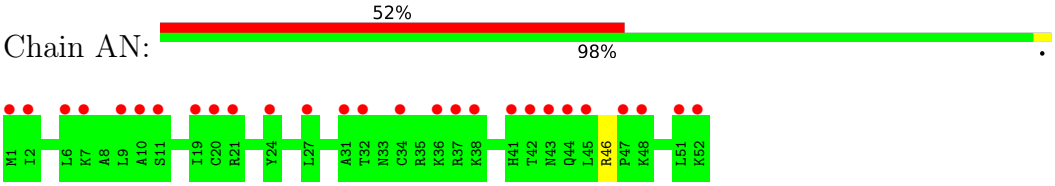
• Molecule 40: 60S ribosomal protein L39

Chain CG:



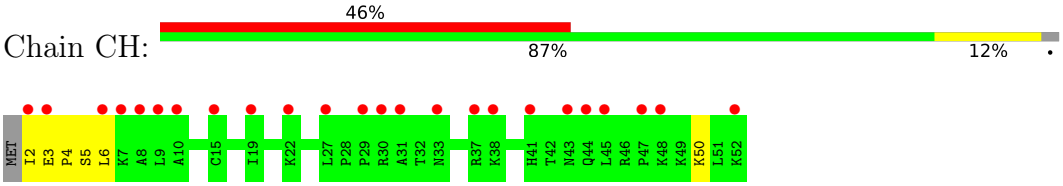
• Molecule 41: 60S ribosomal protein L40-B

Chain AN:



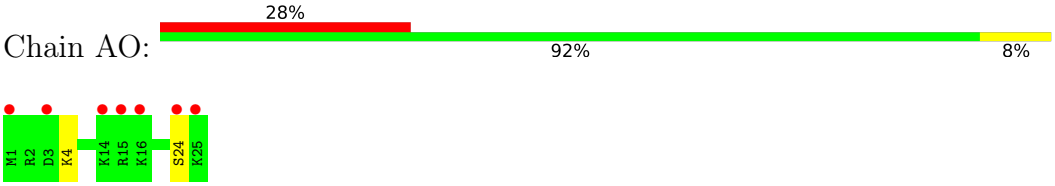
• Molecule 41: 60S ribosomal protein L40-B

Chain CH:



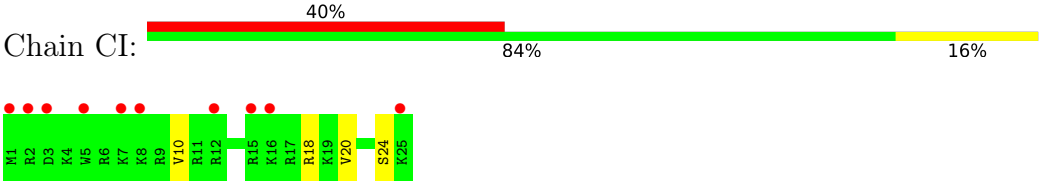
• Molecule 42: 60S ribosomal protein L41

Chain AO:



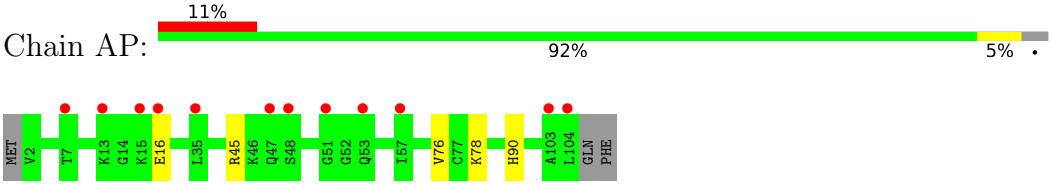
• Molecule 42: 60S ribosomal protein L41

Chain CI:



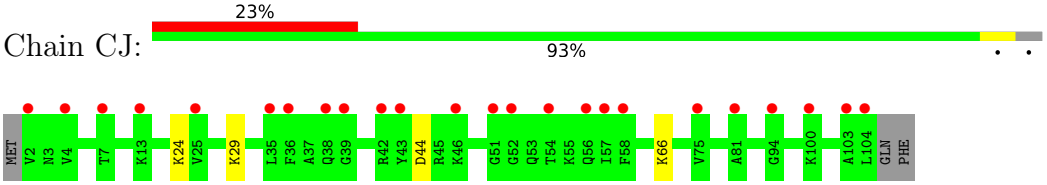
• Molecule 43: 60S ribosomal protein L42-B

Chain AP:



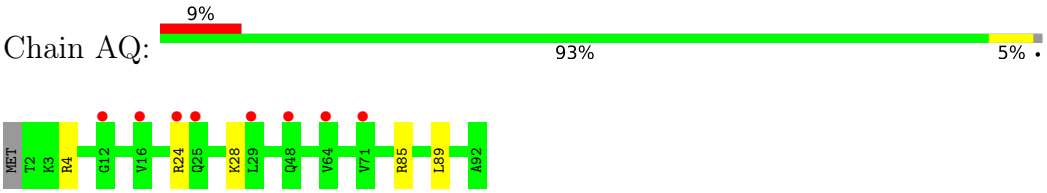
• Molecule 43: 60S ribosomal protein L42-B

Chain CJ:



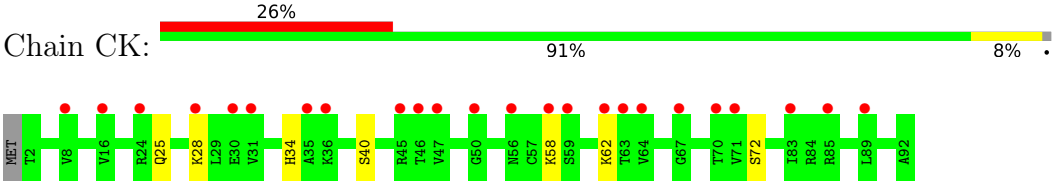
• Molecule 44: 60S ribosomal protein L43-A

Chain AQ:



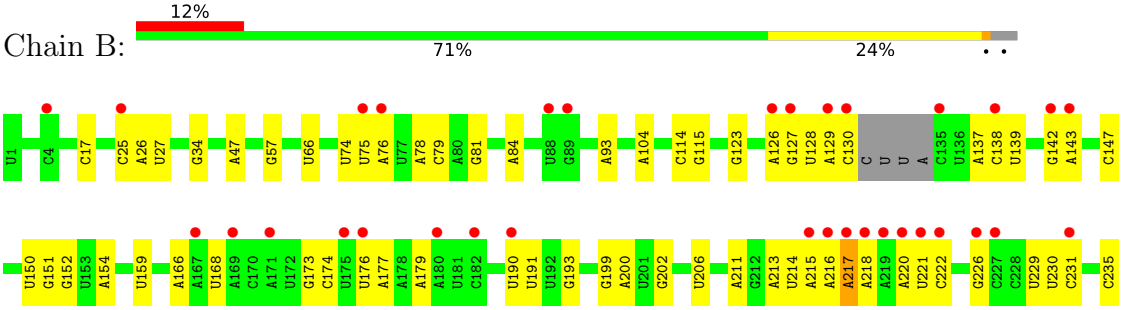
• Molecule 44: 60S ribosomal protein L43-A

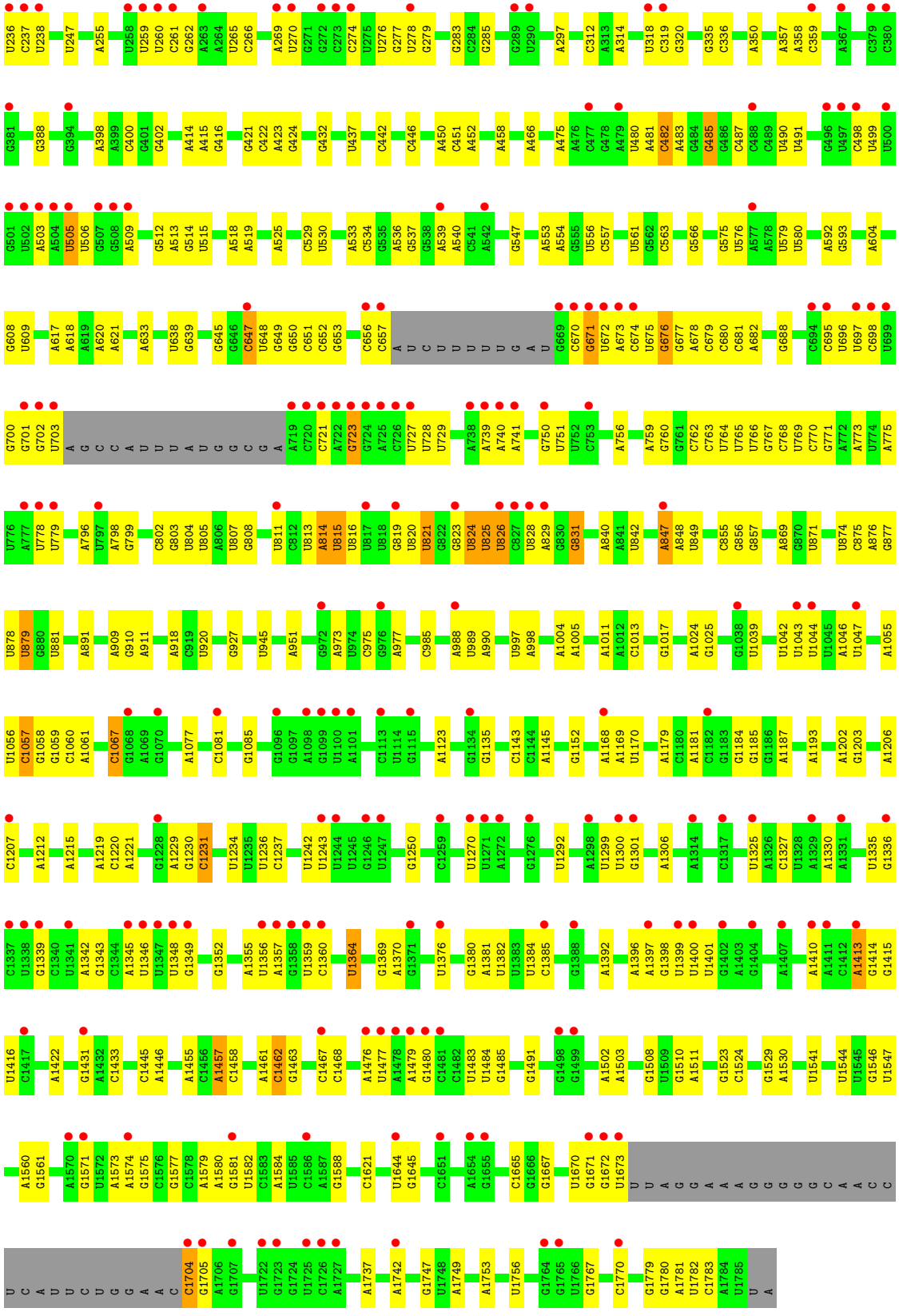
Chain CK:



• Molecule 45: 18S

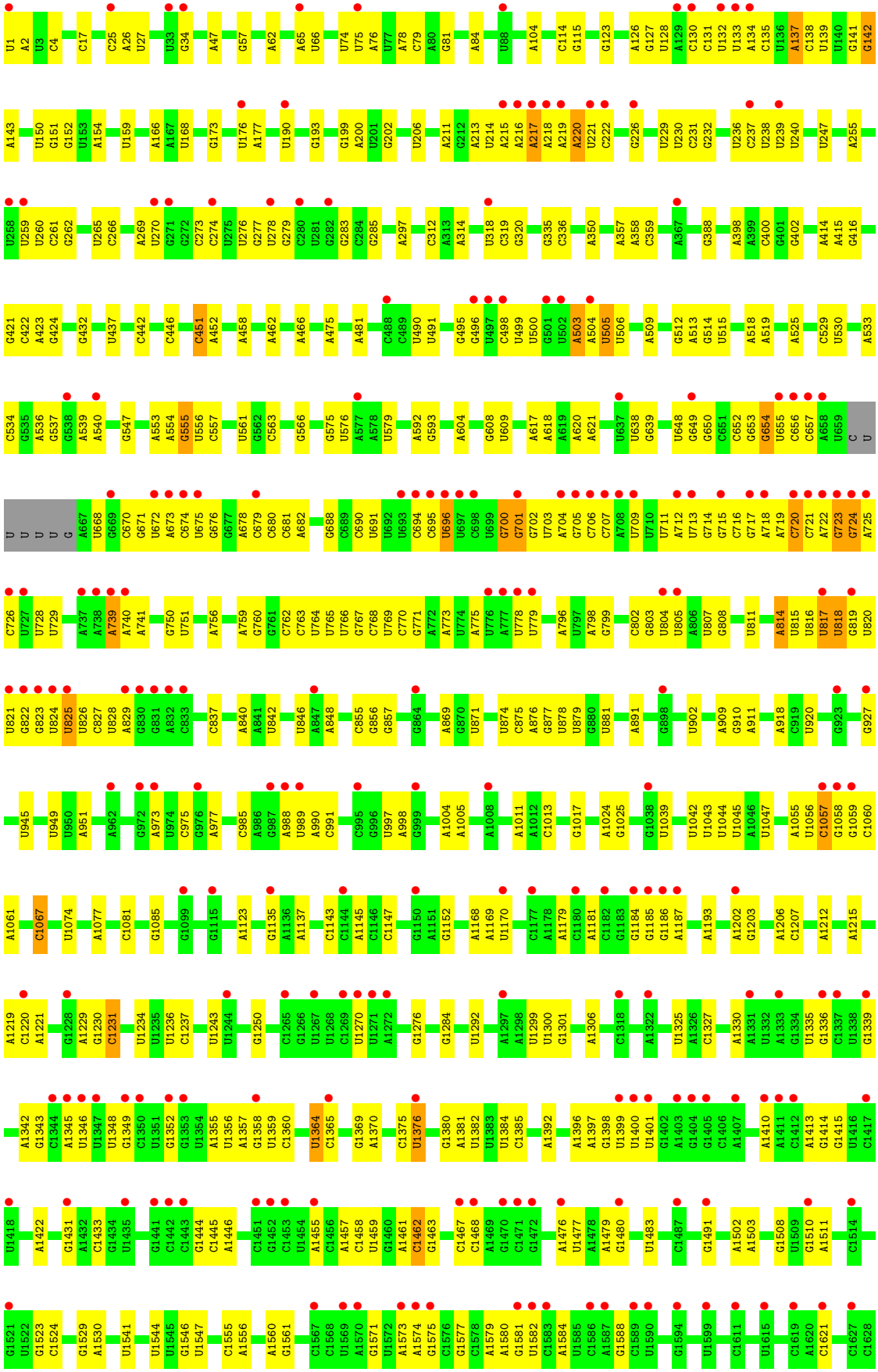
Chain B:





• Molecule 45: 18S

Chain CM: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A143 U150 G151 G152 U153 A154 U159 A166 A167 U168 G173 U176 A177 U190 G193 G199 A200 U201 G202 U206 A211 G212 A213 U214 A215 A216 A217 A218 A219 A220 U221 C222 G226 U229 U230 C231 C232 U236 C237 U238 U239 U240 U247 A255
U258 U259 U260 C261 G262 U265 C266 A269 U270 G271 G272 C273 C274 U275 U276 G277 U278 G279 G280 U281 G282 G283 C284 G285 A297 C312 A313 A314 U318 C319 G320 G335 C336 A350 A357 A358 C359 A367 G388 A398 A399 C400 G401 G402 A414 A415 G416
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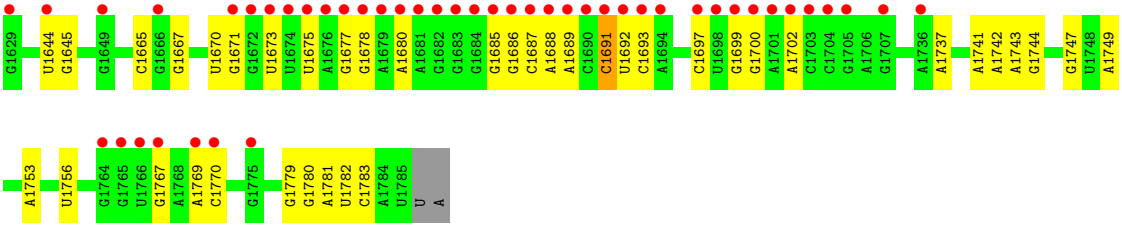
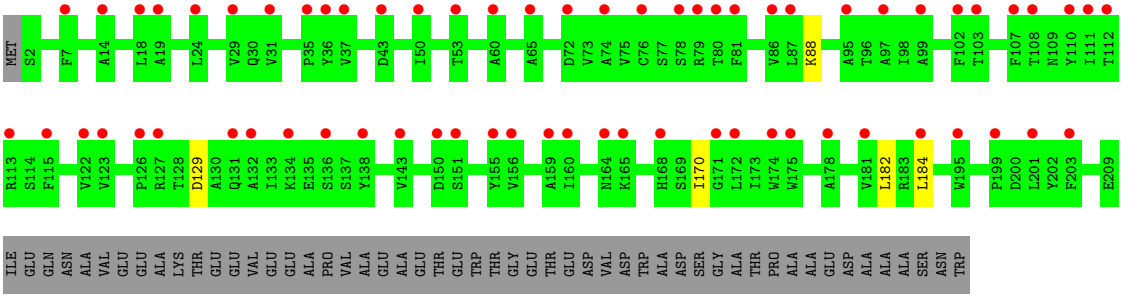
U1418 A1422 G1431 A1432 C1433 G1434 U1435 G1441 C1442 C1443 G1444 C1445 A1446 C1451 G1452 C1453 U1454 A1455 C1456 A1457 C1458 U1459 G1460 A1461 C1462 G1463 C1467 C1468 A1469 G1470 C1471 G1472 A1476 U1477 A1478 A1479 G1480 U1483 C1487 G1491 A1502 A1503 G1508 U1509 G1510 A1511 C1514
G1521 U1522 G1523 C1524 G1529 A1530 U1541 U1544 U1545 G1546 U1547 C1555 A1556 A1560 G1561 C1567 C1568 U1569 A1570 U1571 U1572 A1573 A1574 G1575 C1576 G1577 C1578 A1579 A1580 G1581 U1582 C1583 A1584 U1585 C1586 A1587 G1588 C1589 U1590 G1594 U1599 C1611 U1615 C1619 A1620 C1621 C1627 C1628



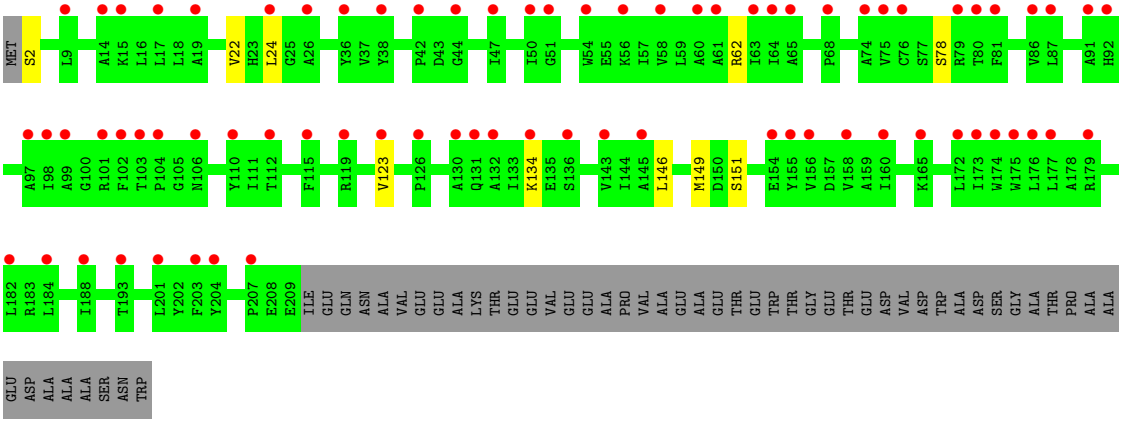
• Molecule 46: 40S ribosomal protein S0

Chain C:



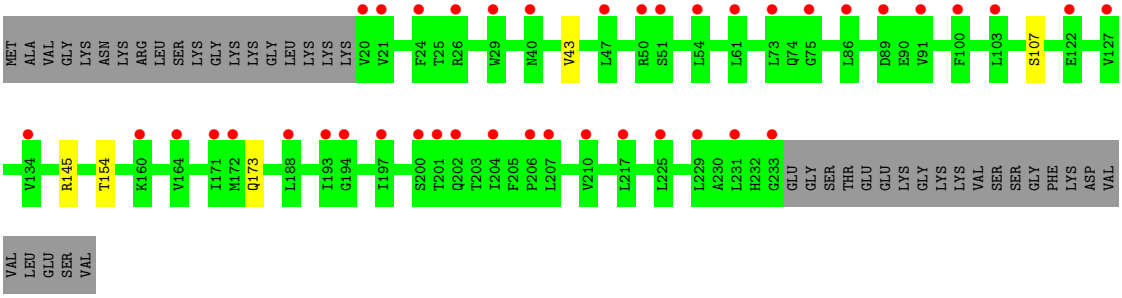
• Molecule 46: 40S ribosomal protein S0

Chain CN:



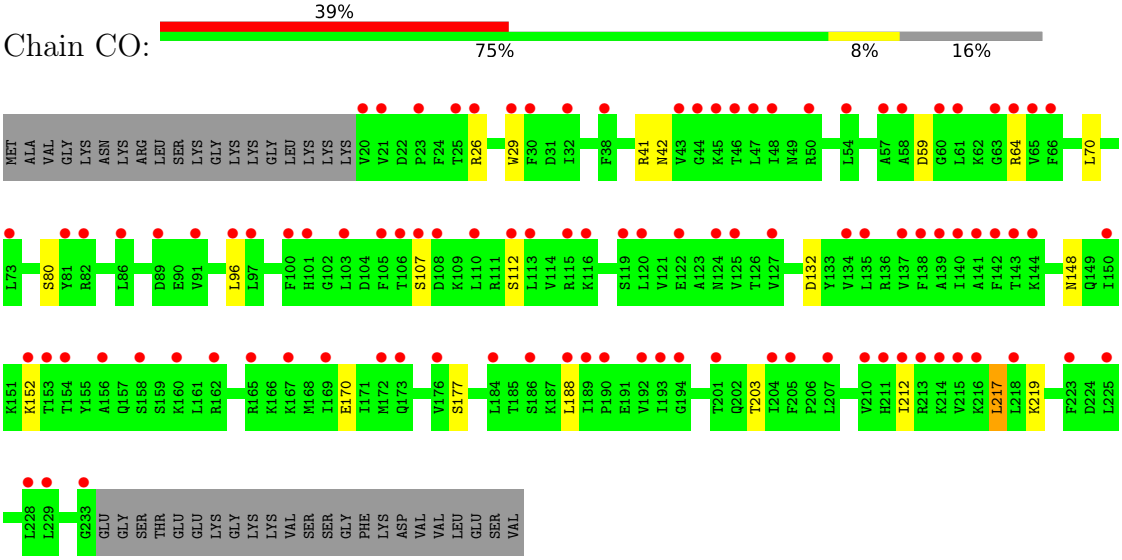
• Molecule 47: 40S ribosomal protein S1

Chain D:



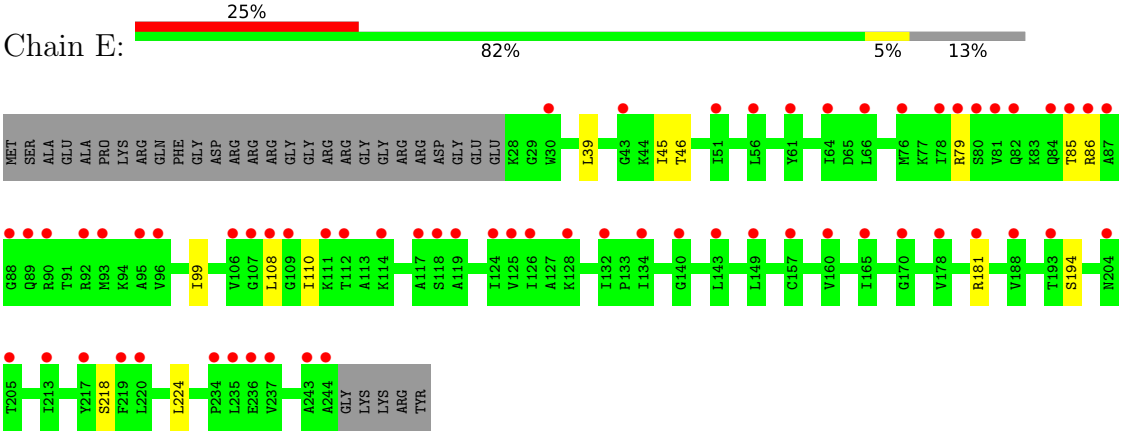
• Molecule 47: 40S ribosomal protein S1

Chain CO:



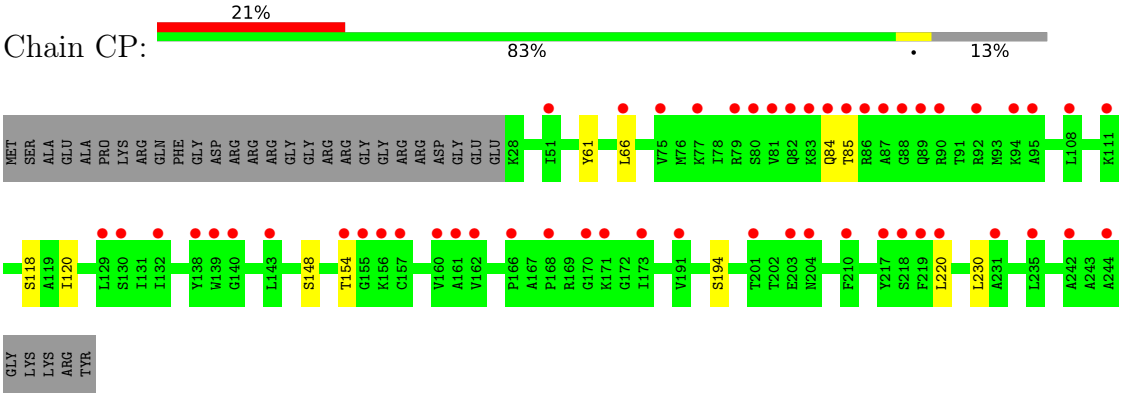
• Molecule 48: Ribosomal protein S5

Chain E:



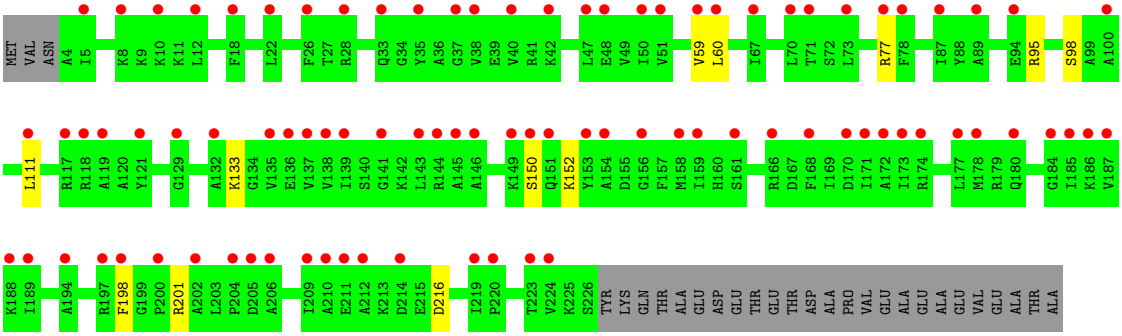
• Molecule 48: Ribosomal protein S5

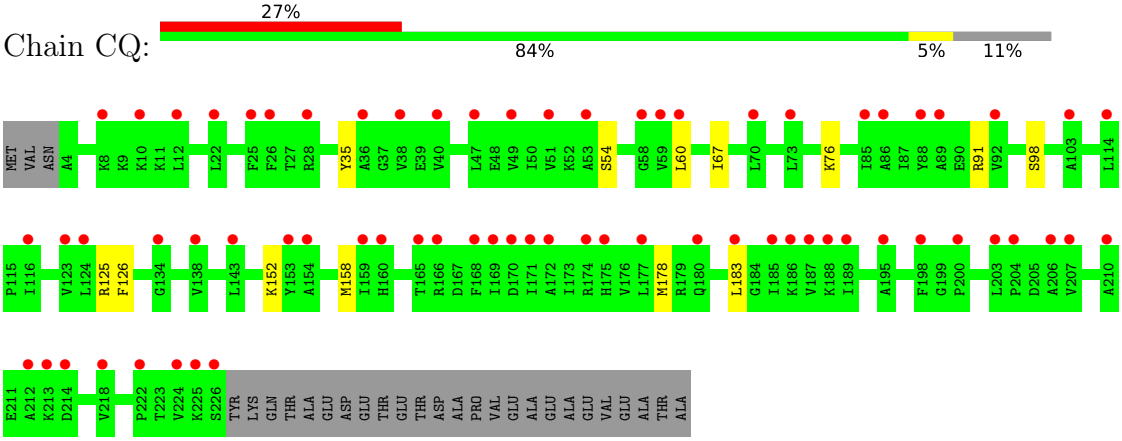
Chain CP:



• Molecule 49: Ribosomal protein S3

Chain F:



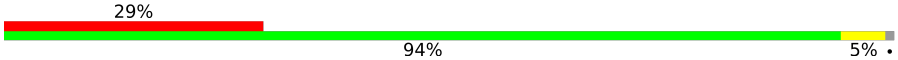


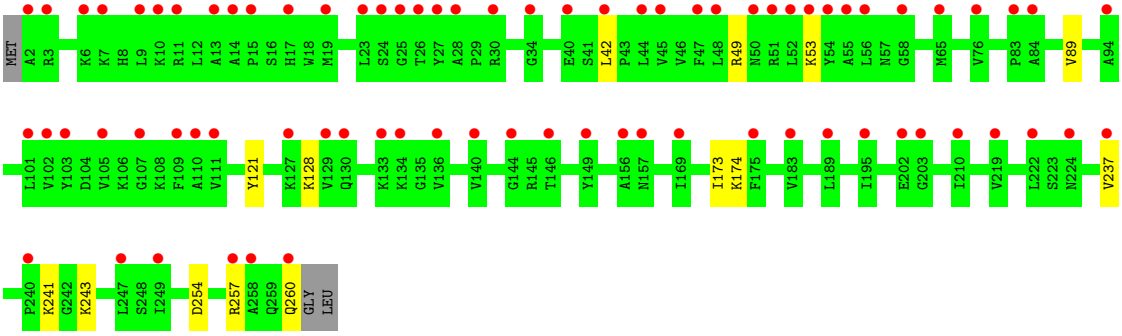
• Molecule 49: Ribosomal protein S3

Chain CQ:

• Molecule 50: 40S ribosomal protein S4

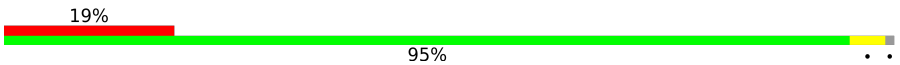
Chain G:

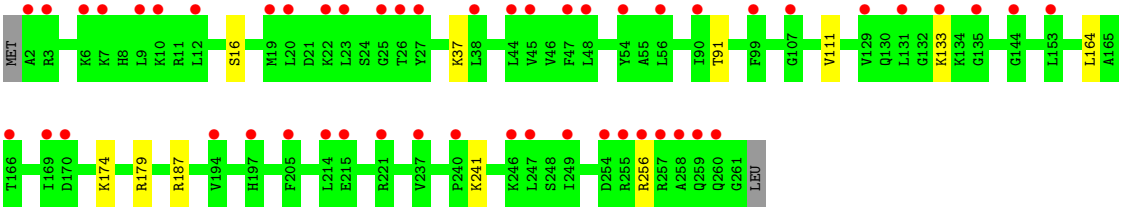




• Molecule 50: 40S ribosomal protein S4

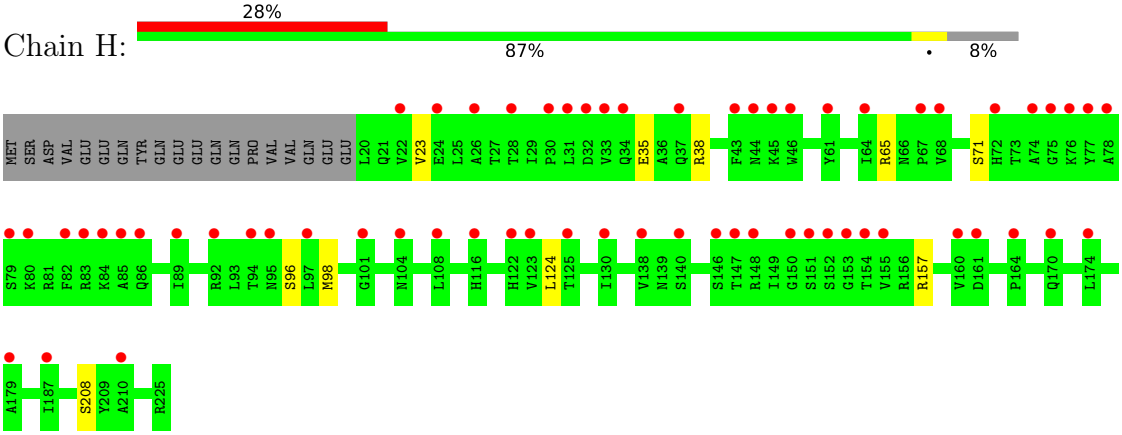
Chain CR:





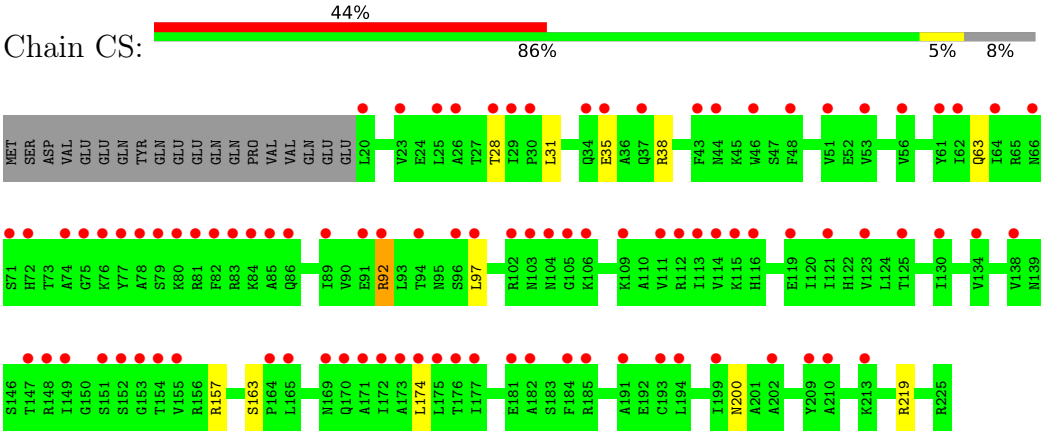
• Molecule 51: Ribosomal protein S7

Chain H:



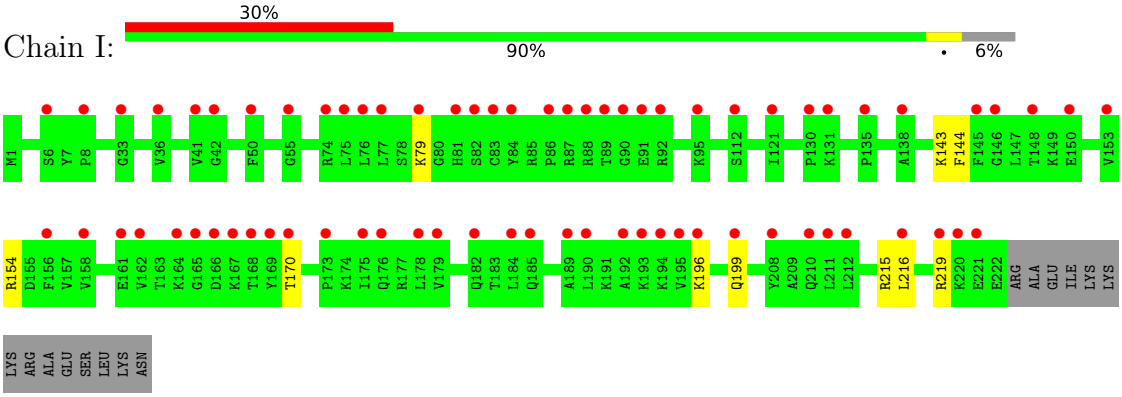
• Molecule 51: Ribosomal protein S7

Chain CS:



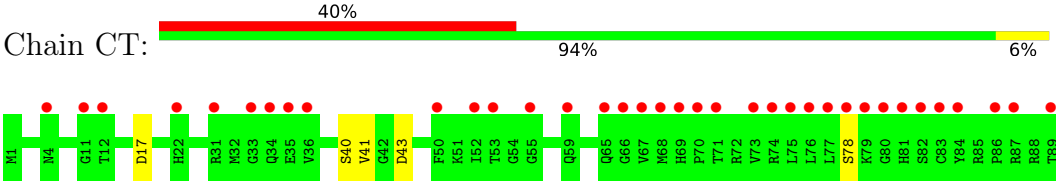
• Molecule 52: 40S ribosomal protein S6

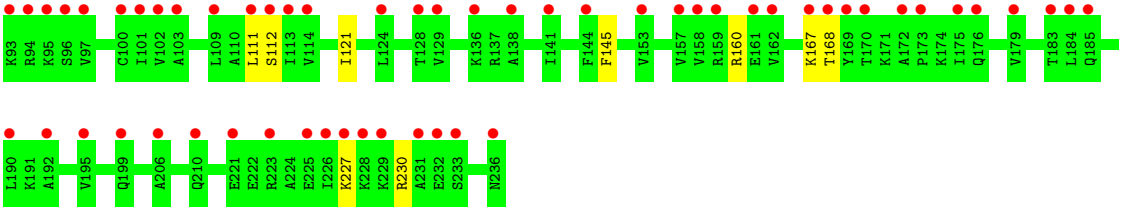
Chain I:



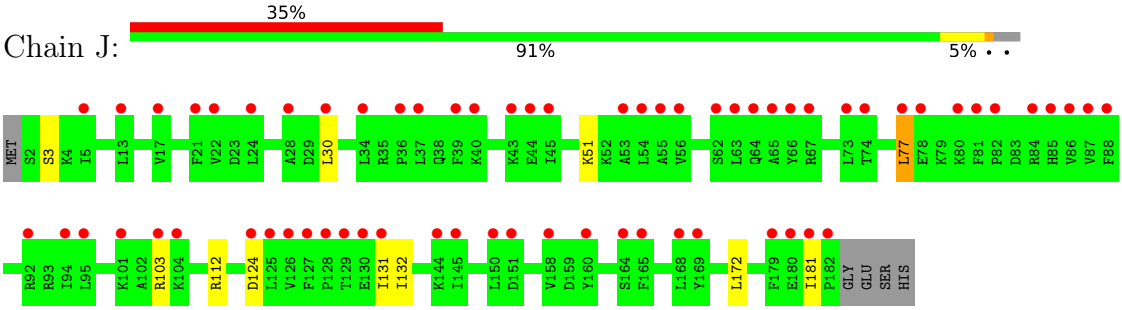
• Molecule 52: 40S ribosomal protein S6

Chain CT:

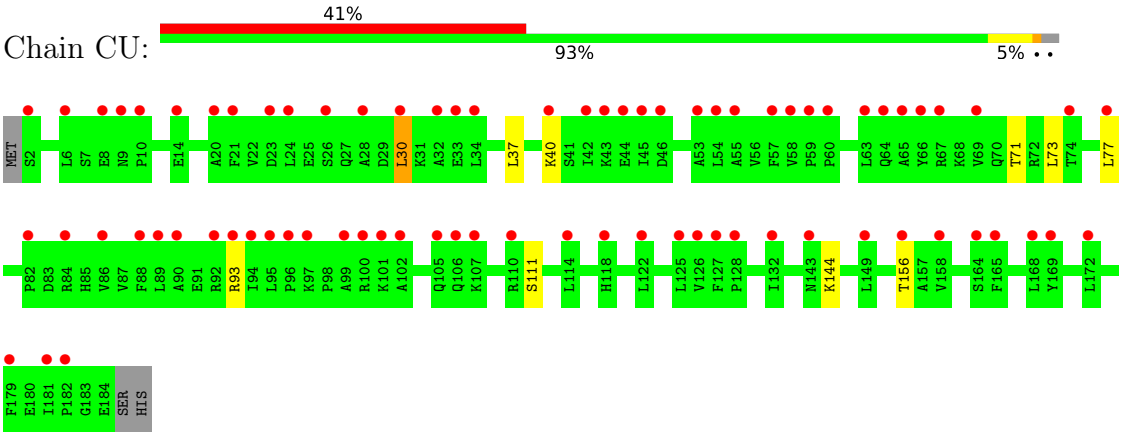




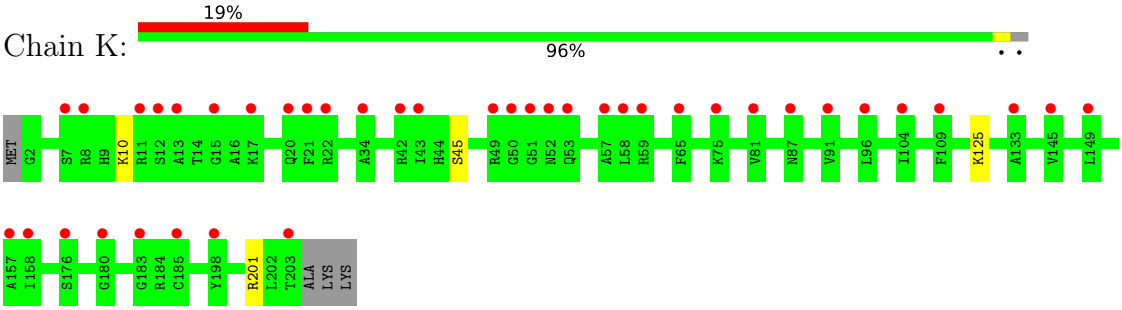
• Molecule 53: 40S ribosomal protein S7



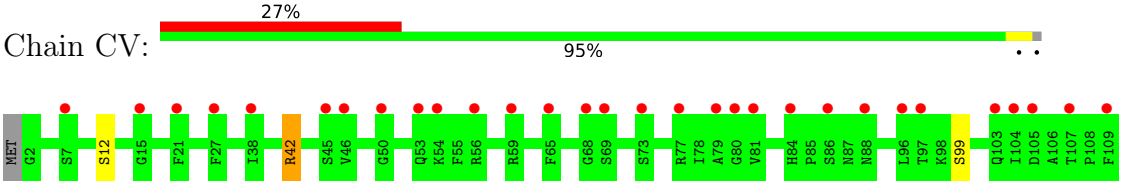
• Molecule 53: 40S ribosomal protein S7

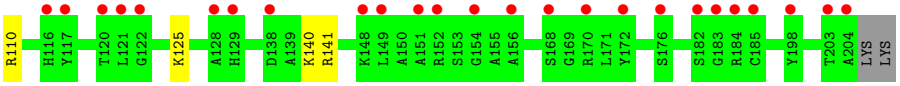


• Molecule 54: 40S ribosomal protein S8

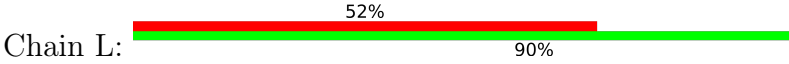


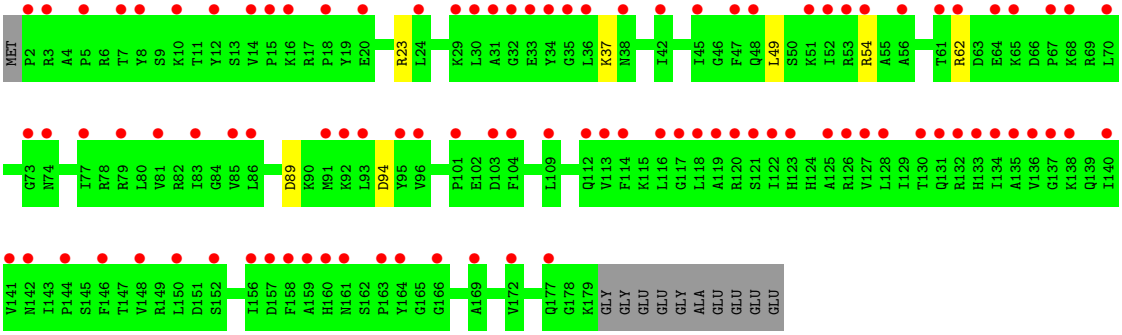
• Molecule 54: 40S ribosomal protein S8



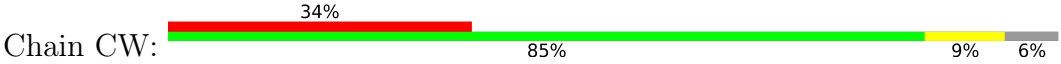


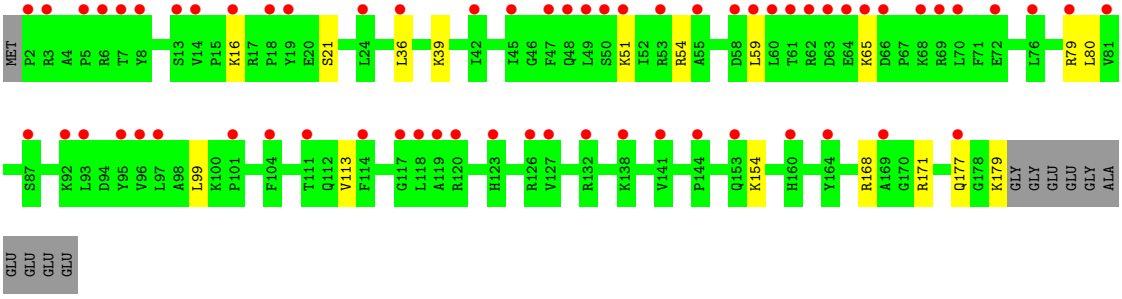
• Molecule 55: Ribosomal protein S4



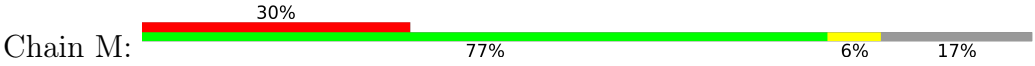


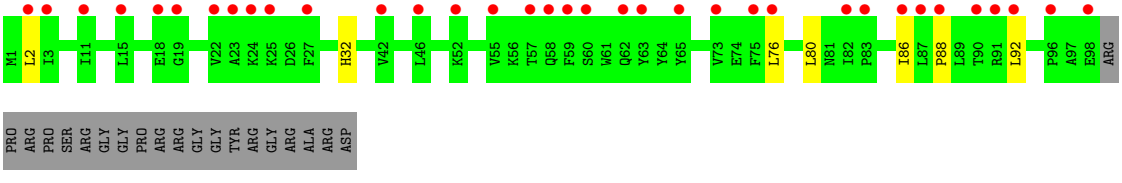
• Molecule 55: Ribosomal protein S4



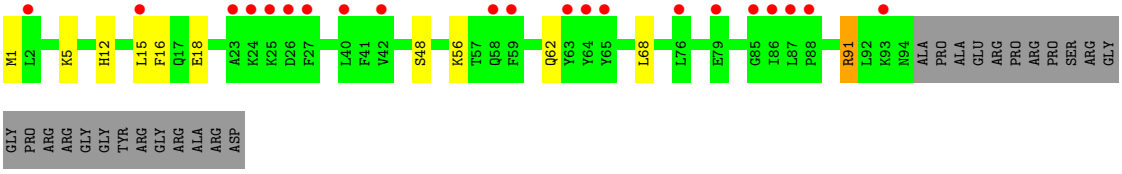


• Molecule 56: 40S ribosomal protein S10-A



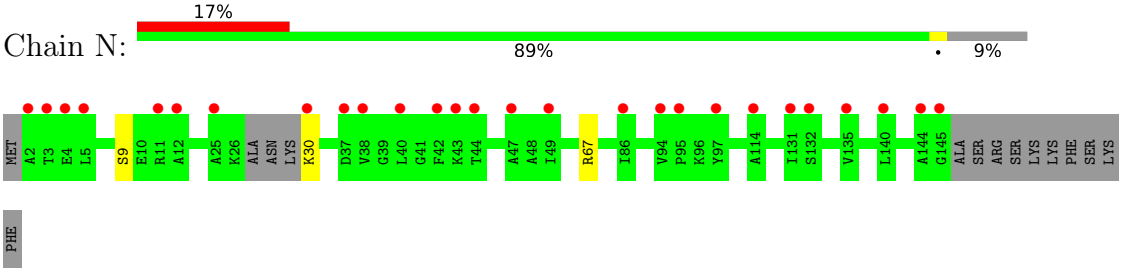


• Molecule 56: 40S ribosomal protein S10-A



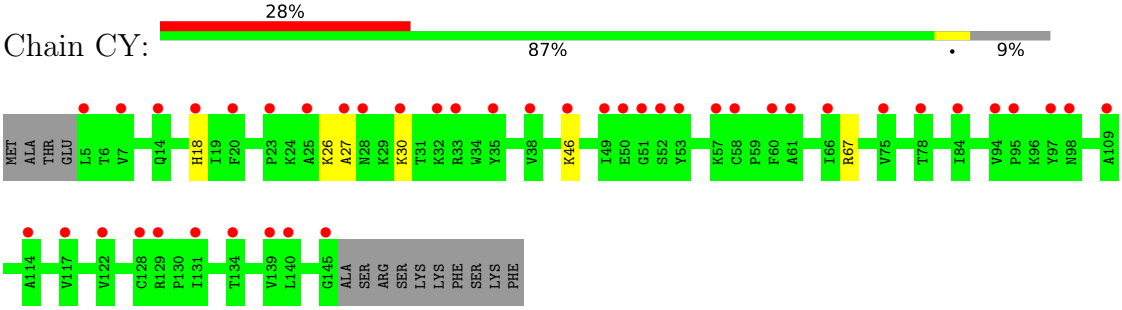
• Molecule 57: 40S ribosomal protein S11A

Chain N:



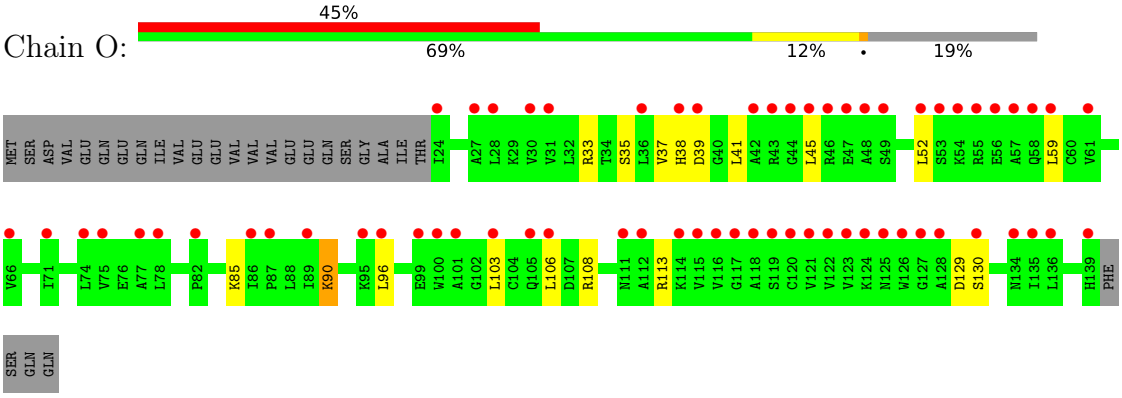
• Molecule 57: 40S ribosomal protein S11A

Chain CY:



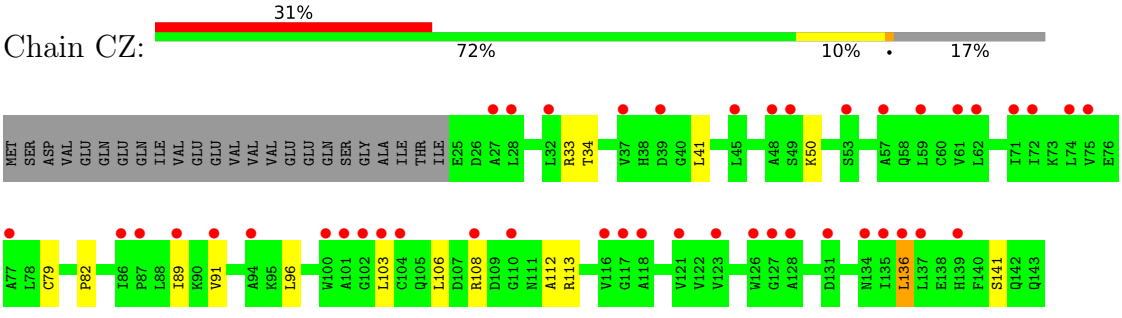
• Molecule 58: 40S ribosomal protein S12

Chain O:



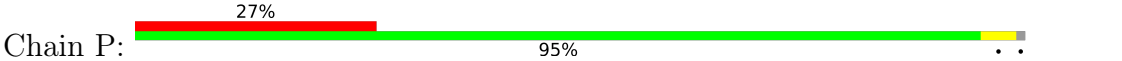
• Molecule 58: 40S ribosomal protein S12

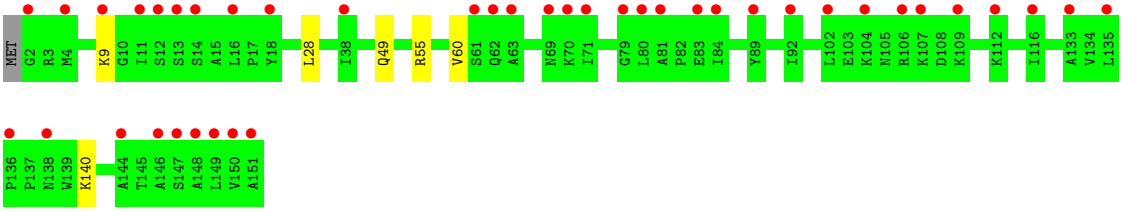
Chain CZ:



• Molecule 59: 40S ribosomal protein S13

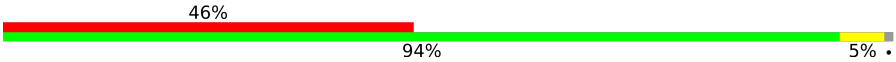
Chain P:

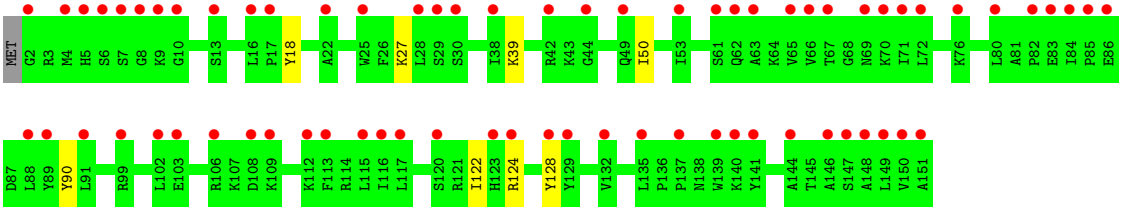




• Molecule 59: 40S ribosomal protein S13

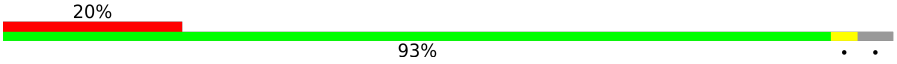
Chain DA:

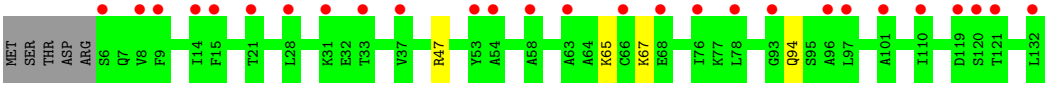




• Molecule 60: 40S ribosomal protein S14-A

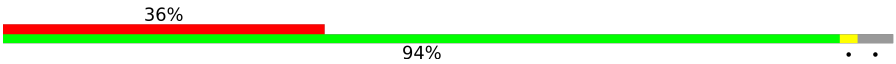
Chain Q:

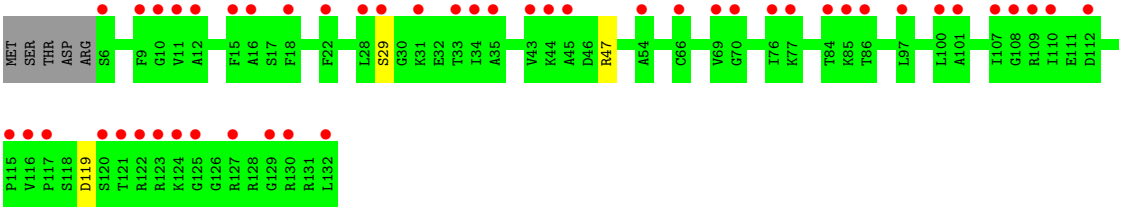




• Molecule 60: 40S ribosomal protein S14-A

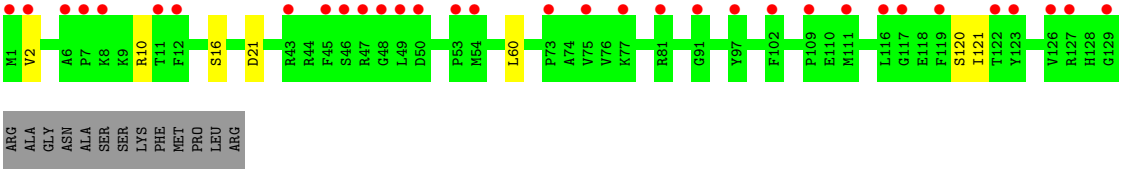
Chain DB:





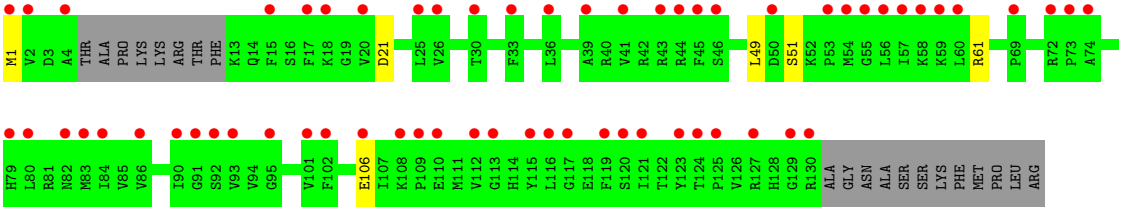
• Molecule 61: 40S ribosomal protein S15

Chain R:



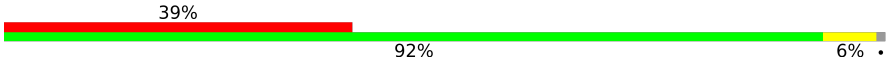
• Molecule 61: 40S ribosomal protein S15

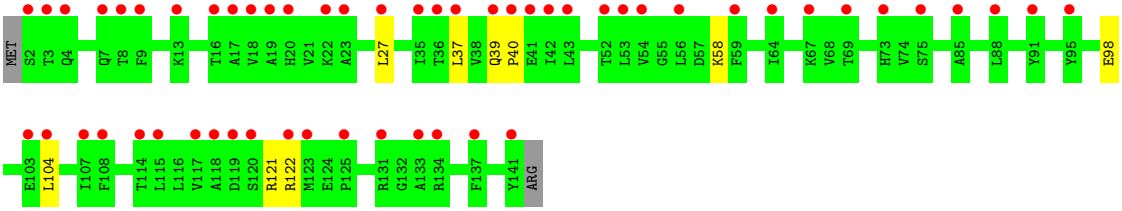
Chain DC:



• Molecule 62: 40S ribosomal protein S16

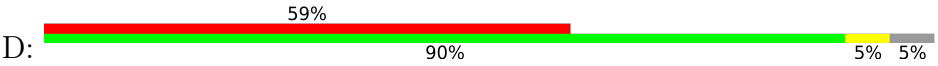
Chain S:

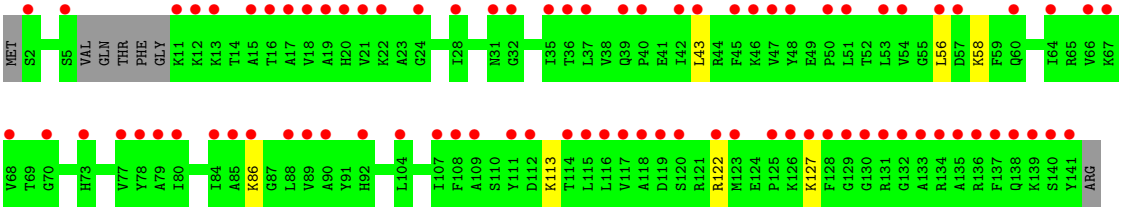




• Molecule 62: 40S ribosomal protein S16

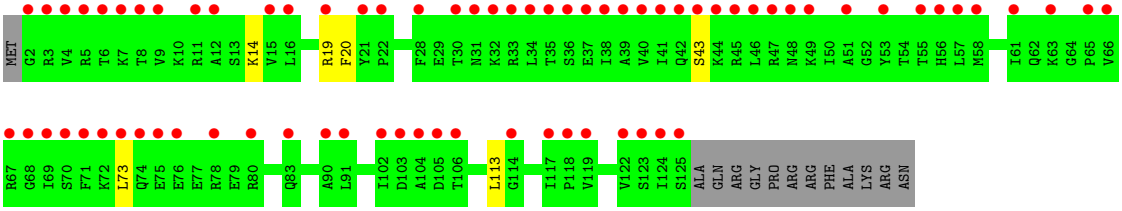
Chain DD:





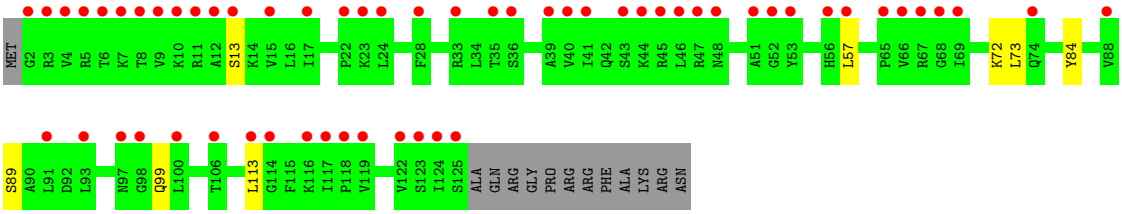
• Molecule 63: 40S ribosomal protein S17-B

Chain T:



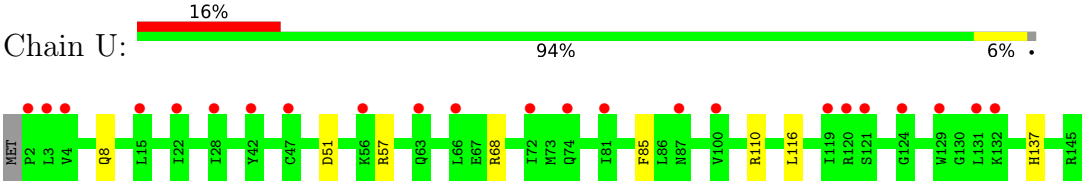
• Molecule 63: 40S ribosomal protein S17-B

Chain DE:



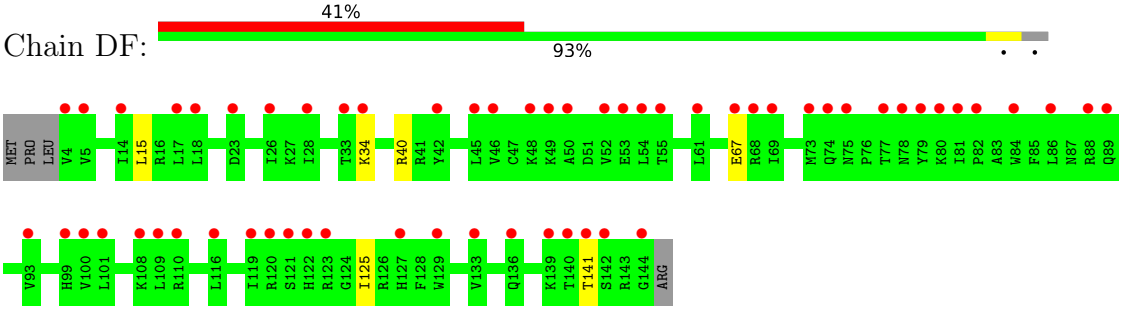
• Molecule 64: 40S ribosomal protein S18-B

Chain U:



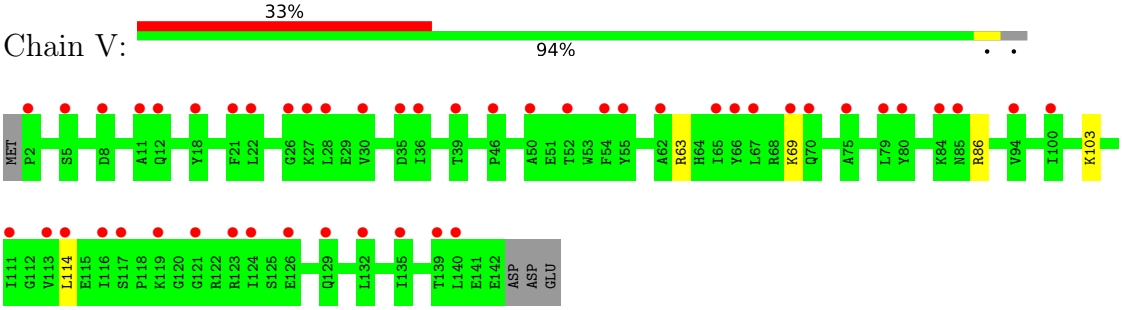
• Molecule 64: 40S ribosomal protein S18-B

Chain DF:



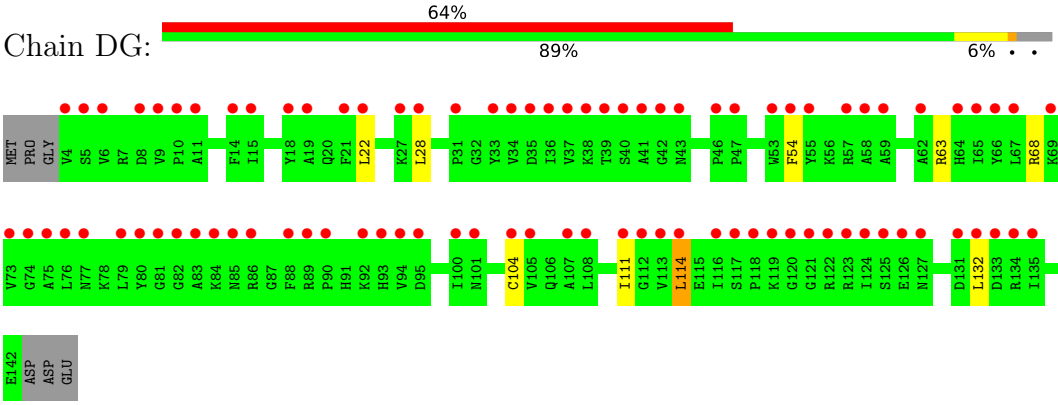
• Molecule 65: 40S ribosomal protein S19-A

Chain V:



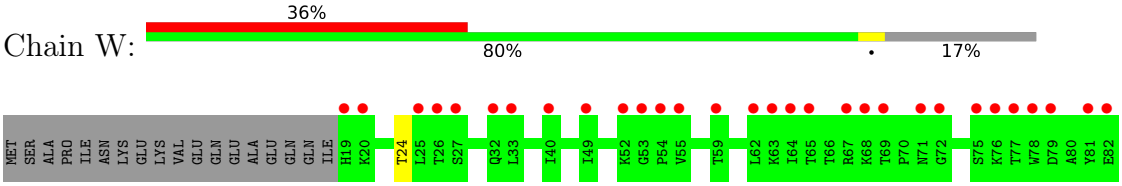
• Molecule 65: 40S ribosomal protein S19-A

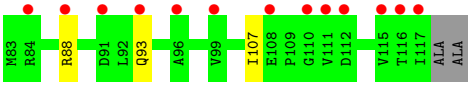
Chain DG:



• Molecule 66: Ribosomal protein S10

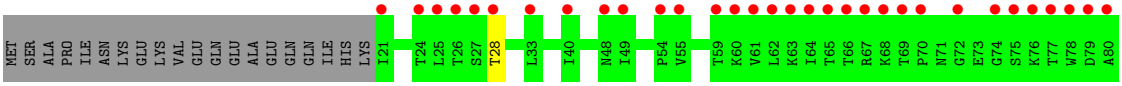
Chain W:

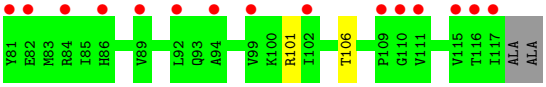




• Molecule 66: Ribosomal protein S10

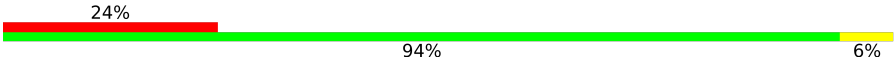
Chain DH:

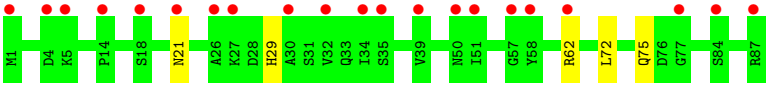




• Molecule 67: 40S ribosomal protein S21

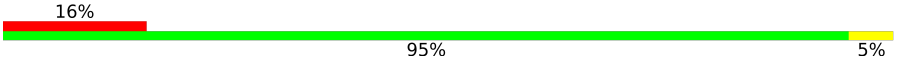
Chain X:

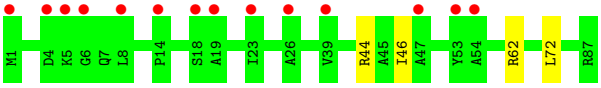




• Molecule 67: 40S ribosomal protein S21

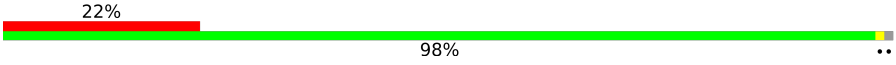
Chain DI:

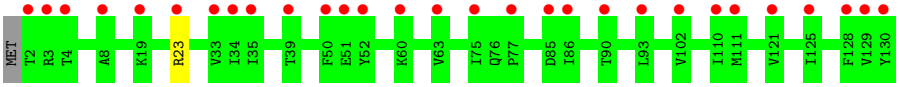




• Molecule 68: 40S ribosomal protein S22-A

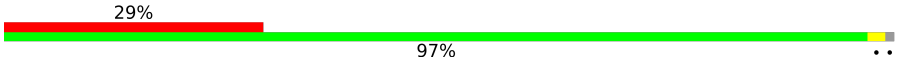
Chain Y:

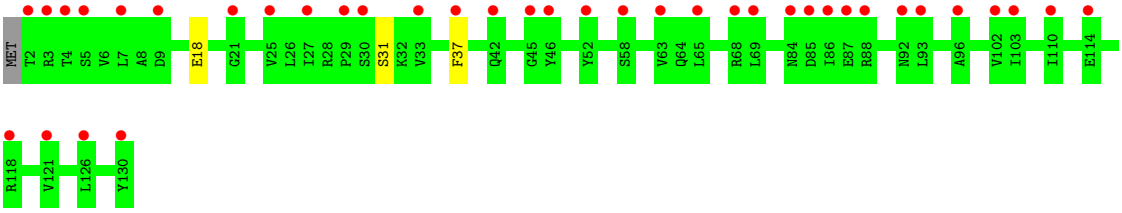




• Molecule 68: 40S ribosomal protein S22-A

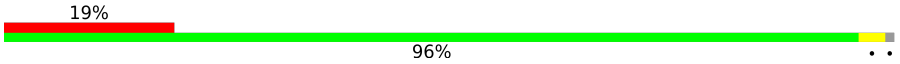
Chain DJ:

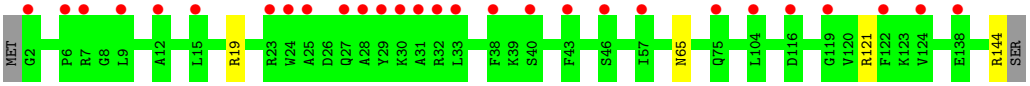




• Molecule 69: Ribosomal protein S23 (S12)

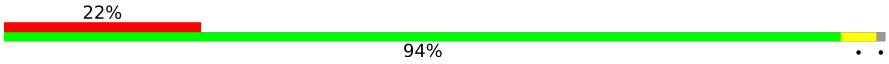
Chain Z:

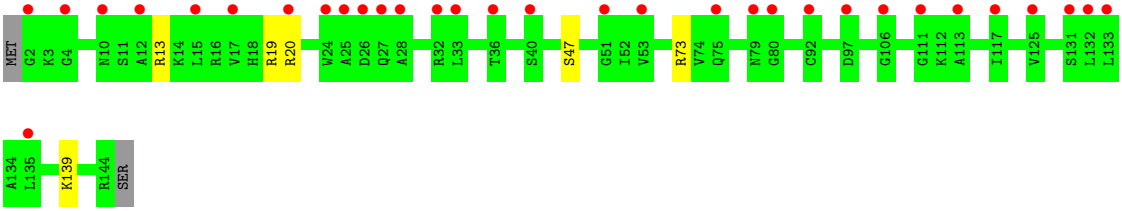




• Molecule 69: Ribosomal protein S23 (S12)

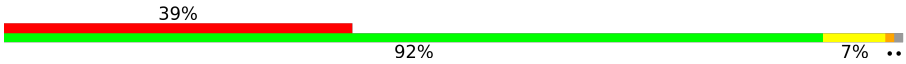
Chain DK:

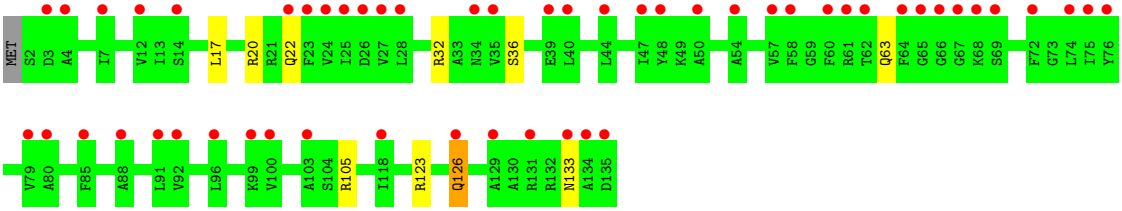




• Molecule 70: 40S ribosomal protein S24

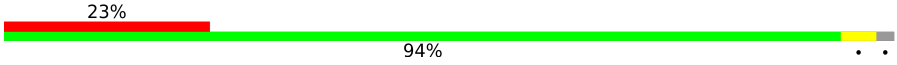
Chain a:

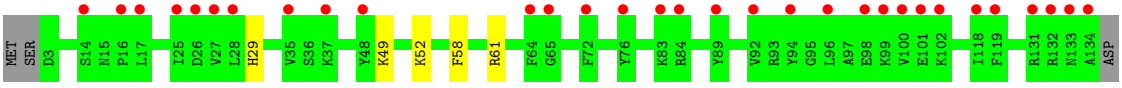




• Molecule 70: 40S ribosomal protein S24

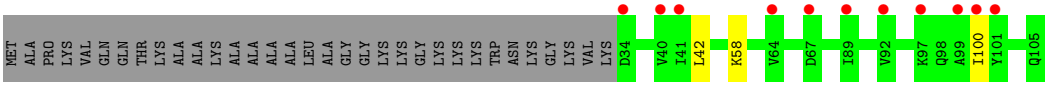
Chain DL:





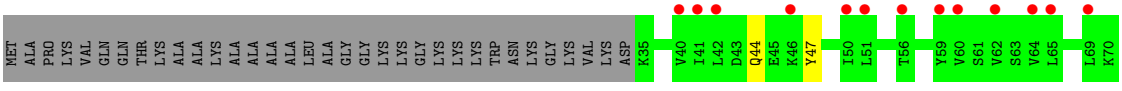
• Molecule 71: 40S ribosomal protein S25

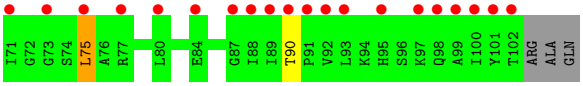
Chain b:



• Molecule 71: 40S ribosomal protein S25

Chain DM:



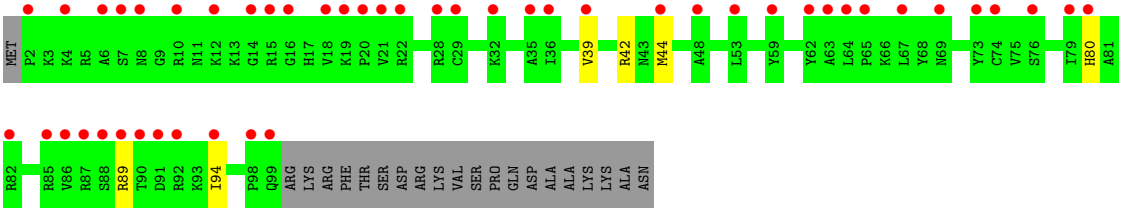


• Molecule 72: 40S ribosomal protein S26

Chain c:

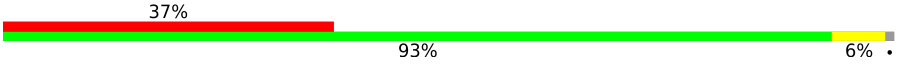
• Molecule 72: 40S ribosomal protein S26

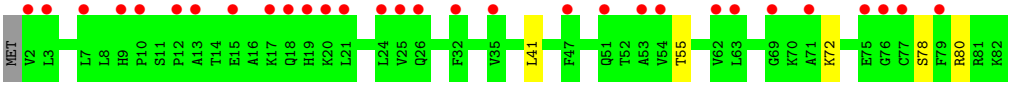
Chain DN:



• Molecule 73: 40S ribosomal protein S27

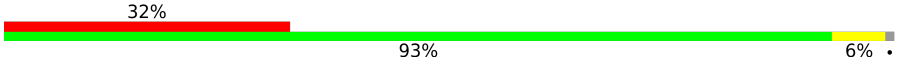
Chain d:

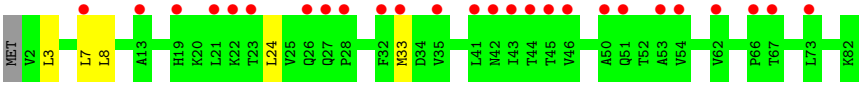




• Molecule 73: 40S ribosomal protein S27

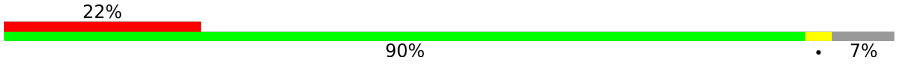
Chain DO:

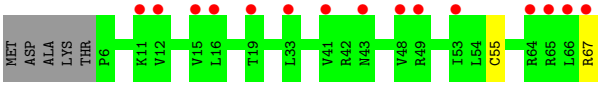




• Molecule 74: 40S ribosomal protein S28-B

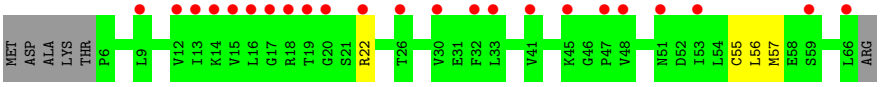
Chain e:



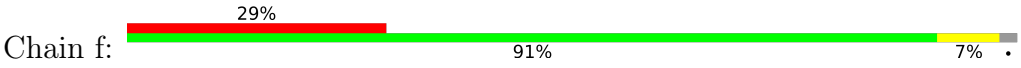


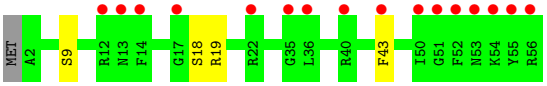
• Molecule 74: 40S ribosomal protein S28-B

Chain DP:

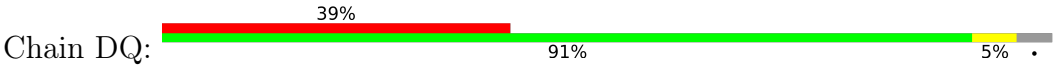


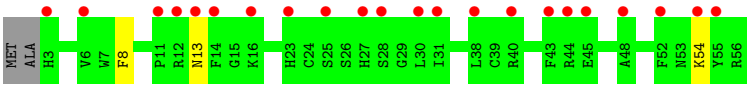
• Molecule 75: 40S ribosomal protein S29A



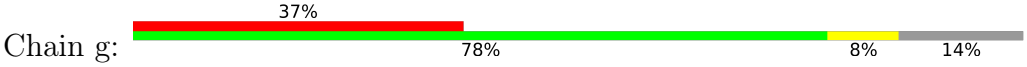


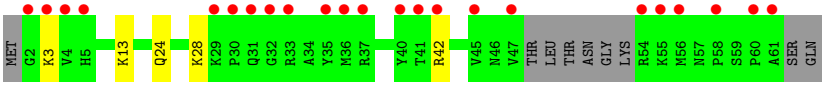
• Molecule 75: 40S ribosomal protein S29A



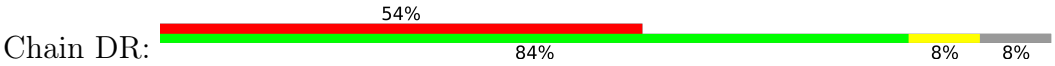


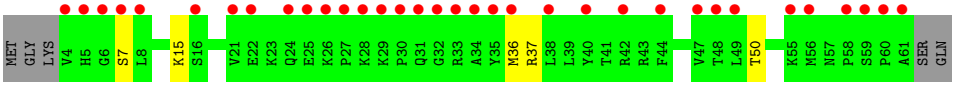
• Molecule 76: 40S ribosomal protein S30



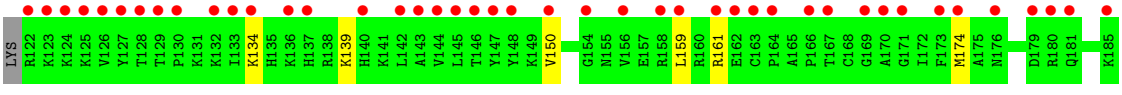


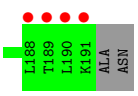
• Molecule 76: 40S ribosomal protein S30





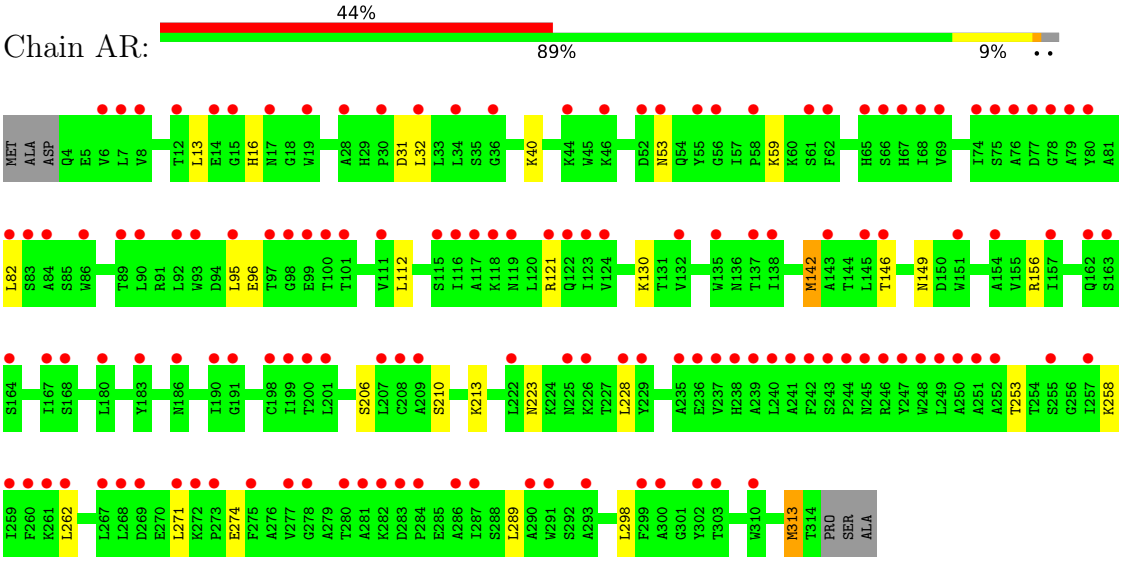
• Molecule 77: Ubiquitin-40S ribosomal protein S31 fusion protein





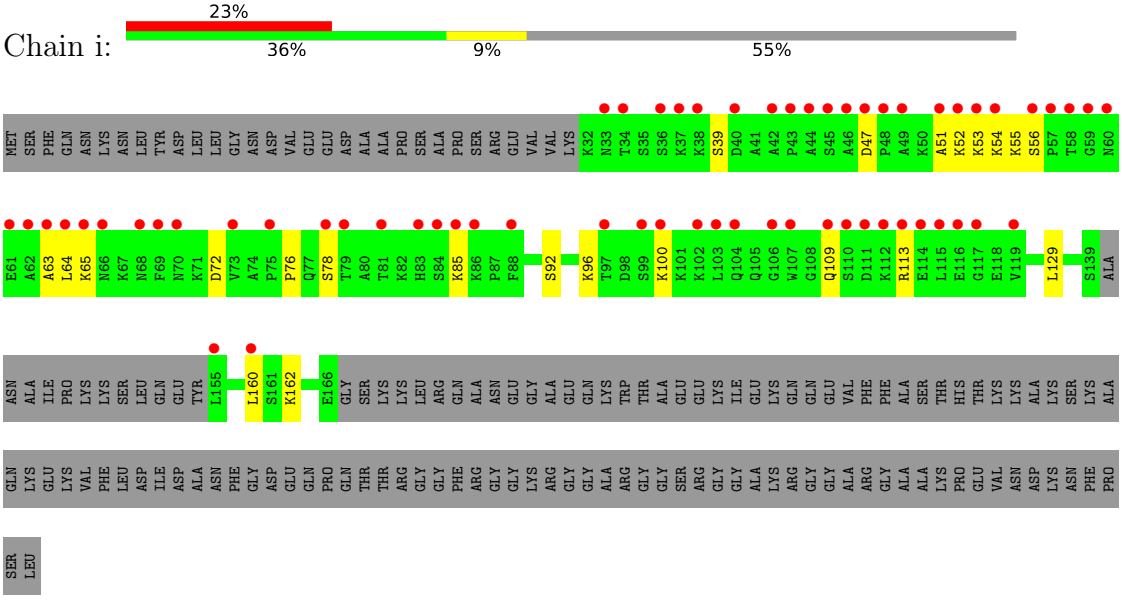
• Molecule 78: Guanine nucleotide-binding protein subunit beta-like protein

Chain AR:



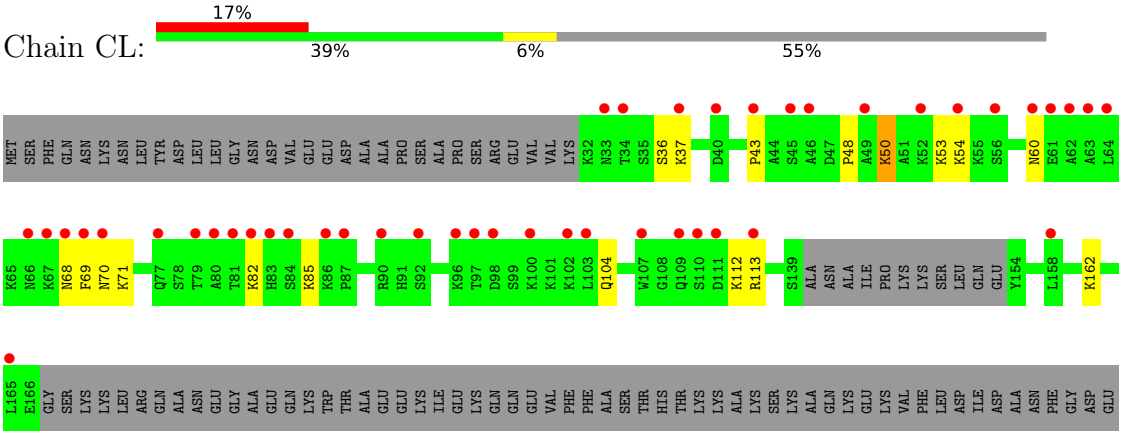
• Molecule 79: 60S ribosomal protein CAALFM_C304810CA

Chain i:



• Molecule 79: 60S ribosomal protein CAALFM_C304810CA

Chain CL:



GLN
PRO
GLN
THR
THR
ARG
GLY
GLY
PHE
ARG
GLY
GLY
LYS
ARG
GLY
GLY
ALA
ARG
GLY
GLY
SER
ARG
GLY
GLY
ALA
LYS
ARG
GLY
GLY
ALA
ARG
GLY
ALA
ALA
LYS
PRO
GLU
VAL
ASN
ASP
LYS
ASN
PHE
PRO
SER
LEU

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	297.30Å 292.54Å 442.98Å 90.00° 99.37° 90.00°	Depositor
Resolution (Å)	163.00 – 2.90 163.00 – 2.90	Depositor EDS
% Data completeness (in resolution range)	99.2 (163.00-2.90) 82.8 (163.00-2.90)	Depositor EDS
R_{merge}	0.56	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.52 (at 2.91Å)	Xtriage
Refinement program	PHENIX 1.19rc4_4035	Depositor
R, R_{free}	0.257 , 0.283 0.266 , 0.277	Depositor DCC
R_{free} test set	2000 reflections (0.12%)	wwPDB-VP
Wilson B-factor (Å^2)	47.7	Xtriage
Anisotropy	0.168	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 51.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.28$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.87	EDS
Total number of atoms	397530	wwPDB-VP
Average B, all atoms (Å^2)	84.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.43% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, PAR, ZN, 3K5

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|>5$	RMSZ	#$\|Z\|>5$
1	1	0.34	0/75861	0.91	56/118257 (0.0%)
1	AS	0.32	0/73312	0.92	75/114279 (0.1%)
2	3	0.28	0/2884	0.81	0/4492
2	AT	0.34	0/2884	0.89	6/4492 (0.1%)
3	4	0.31	0/3702	0.87	4/5764 (0.1%)
3	AU	0.29	0/3702	0.86	3/5764 (0.1%)
4	AW	0.36	0/1931	0.81	3/2592 (0.1%)
4	j	0.34	0/1931	0.68	1/2592 (0.0%)
5	AX	0.35	0/3145	0.73	4/4231 (0.1%)
5	k	0.35	0/3156	0.72	3/4246 (0.1%)
6	AY	0.35	0/2799	0.73	1/3777 (0.0%)
6	l	0.36	0/2793	0.71	1/3769 (0.0%)
7	AZ	0.42	0/2447	0.86	4/3294 (0.1%)
7	m	0.40	0/2479	0.78	5/3337 (0.1%)
8	BA	0.38	0/1231	0.76	1/1662 (0.1%)
8	n	0.38	0/1263	0.72	1/1703 (0.1%)
9	BB	0.34	0/1918	0.65	2/2575 (0.1%)
9	o	0.39	0/1918	0.69	1/2575 (0.0%)
10	BC	0.43	0/1825	0.90	9/2458 (0.4%)
10	p	0.37	0/1820	0.71	1/2451 (0.0%)
11	BD	0.43	0/1537	0.87	1/2067 (0.0%)
11	q	0.37	0/1537	0.76	0/2067
12	BE	0.37	0/1705	0.76	2/2288 (0.1%)
12	r	0.35	0/1724	0.75	1/2314 (0.0%)
13	BF	0.39	0/1390	0.97	8/1861 (0.4%)
13	s	0.43	0/1390	0.95	2/1861 (0.1%)
14	BG	0.42	0/1637	0.89	4/2195 (0.2%)
14	t	0.38	0/1637	0.77	3/2195 (0.1%)
15	BH	0.37	0/1044	0.81	2/1407 (0.1%)
15	u	0.39	0/1030	0.77	0/1389
16	BI	0.38	0/1753	0.85	2/2347 (0.1%)
16	v	0.34	0/1753	0.73	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	BJ	0.39	0/1620	0.74	4/2167 (0.2%)
17	w	0.40	0/1620	0.73	2/2167 (0.1%)
18	BK	0.37	0/1419	0.80	1/1906 (0.1%)
18	x	0.35	0/1395	0.77	1/1874 (0.1%)
19	BL	0.38	0/1482	0.81	1/1985 (0.1%)
19	y	0.37	0/1482	0.79	1/1985 (0.1%)
20	BM	0.39	0/1475	0.93	7/1961 (0.4%)
20	z	0.35	0/1475	0.79	2/1961 (0.1%)
21	0	0.34	0/1457	0.71	0/1962
21	BN	0.37	0/1457	0.70	0/1962
22	2	0.38	0/1285	0.72	1/1723 (0.1%)
22	BO	0.39	0/1285	0.74	2/1723 (0.1%)
23	5	0.40	0/846	0.75	1/1140 (0.1%)
23	BP	0.41	0/857	0.79	1/1156 (0.1%)
24	6	0.34	0/993	0.70	0/1339
24	BQ	0.37	0/993	0.79	2/1339 (0.1%)
25	7	0.30	0/643	0.61	0/853
25	BR	0.36	0/889	0.65	0/1175
26	8	0.35	0/990	0.75	1/1337 (0.1%)
26	BS	0.42	0/976	0.84	3/1319 (0.2%)
27	9	0.38	0/990	0.72	0/1322
27	BT	0.43	0/999	0.83	3/1334 (0.2%)
28	AA	0.44	0/1112	0.74	0/1488
28	BU	0.47	0/1112	0.88	3/1488 (0.2%)
29	AB	0.35	0/1199	0.72	2/1607 (0.1%)
29	BV	0.38	0/1199	0.75	1/1607 (0.1%)
30	AC	0.35	0/498	0.87	0/661
30	BW	0.39	0/498	0.81	1/661 (0.2%)
31	AD	0.35	0/738	0.73	1/994 (0.1%)
31	BX	0.37	0/738	0.85	1/994 (0.1%)
32	AE	0.39	0/907	0.82	0/1219
32	BY	0.43	0/907	0.88	0/1219
33	AF	0.38	0/1021	0.72	0/1368
33	BZ	0.41	0/1025	0.83	4/1372 (0.3%)
34	AG	0.34	0/866	0.69	1/1165 (0.1%)
34	CA	0.38	0/866	0.75	2/1165 (0.2%)
35	AH	0.36	0/896	0.79	0/1195
35	CB	0.37	0/896	0.85	2/1195 (0.2%)
36	AI	0.34	0/995	0.87	1/1325 (0.1%)
36	CC	0.40	0/999	0.93	5/1330 (0.4%)
37	AJ	0.35	0/763	0.78	0/1012
37	CD	0.33	0/763	0.84	1/1012 (0.1%)
38	AK	0.38	0/690	0.81	2/916 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	CE	0.36	0/690	0.76	0/916
39	AL	0.37	0/623	0.75	1/831 (0.1%)
39	CF	0.38	0/623	0.77	1/831 (0.1%)
40	AM	0.34	0/447	0.83	0/594
40	CG	0.31	0/458	0.80	0/609
41	AN	0.41	0/425	0.74	0/563
41	CH	0.40	0/417	0.74	1/553 (0.2%)
42	AO	0.37	0/237	0.96	1/304 (0.3%)
42	CI	0.31	0/237	0.92	0/304
43	AP	0.36	0/840	0.72	1/1110 (0.1%)
43	CJ	0.36	0/840	0.72	1/1110 (0.1%)
44	AQ	0.42	0/705	0.77	0/940
44	CK	0.40	0/705	0.82	1/940 (0.1%)
45	B	0.33	0/41128	0.97	69/64084 (0.1%)
45	CM	0.34	0/42397	0.99	86/66069 (0.1%)
46	C	0.45	0/1666	0.88	2/2273 (0.1%)
46	CN	0.40	0/1666	0.88	6/2273 (0.3%)
47	CO	0.39	0/1750	0.92	7/2354 (0.3%)
47	D	0.38	0/1750	0.81	0/2354
48	CP	0.39	0/1657	0.77	2/2248 (0.1%)
48	E	0.40	0/1657	0.82	5/2248 (0.2%)
49	CQ	0.43	0/1731	0.95	6/2324 (0.3%)
49	F	0.38	0/1731	0.84	2/2324 (0.1%)
50	CR	0.38	0/2096	0.79	2/2822 (0.1%)
50	G	0.42	0/2092	0.85	5/2817 (0.2%)
51	CS	0.37	0/1631	0.83	3/2199 (0.1%)
51	H	0.38	0/1631	0.73	0/2199
52	CT	0.40	0/1929	0.85	2/2571 (0.1%)
52	I	0.37	0/1812	0.82	3/2420 (0.1%)
53	CU	0.40	0/1499	0.91	4/2016 (0.2%)
53	J	0.39	0/1486	0.89	6/1999 (0.3%)
54	CV	0.33	0/1606	0.78	1/2150 (0.0%)
54	K	0.36	0/1601	0.78	0/2143
55	CW	0.43	0/1478	0.96	5/1978 (0.3%)
55	L	0.37	0/1478	0.81	2/1978 (0.1%)
56	CX	0.40	0/809	0.93	3/1092 (0.3%)
56	M	0.39	0/836	0.85	3/1130 (0.3%)
57	CY	0.39	0/1154	0.75	0/1553
57	N	0.38	0/1152	0.74	0/1550
58	CZ	0.36	0/921	1.04	6/1240 (0.5%)
58	O	0.38	0/892	0.97	4/1203 (0.3%)
59	DA	0.39	0/1210	0.85	4/1631 (0.2%)
59	P	0.40	0/1210	0.81	2/1631 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
60	DB	0.44	0/953	0.87	1/1279 (0.1%)
60	Q	0.39	0/953	0.83	1/1279 (0.1%)
61	DC	0.35	0/980	0.77	1/1315 (0.1%)
61	R	0.41	0/1038	0.86	2/1395 (0.1%)
62	DD	0.36	0/1069	0.74	2/1430 (0.1%)
62	S	0.40	0/1109	0.86	2/1486 (0.1%)
63	DE	0.41	0/1009	0.96	3/1354 (0.2%)
63	T	0.39	0/1009	0.83	2/1354 (0.1%)
64	DF	0.36	0/1178	0.90	2/1579 (0.1%)
64	U	0.41	0/1205	0.89	3/1615 (0.2%)
65	DG	0.34	0/1108	0.77	2/1492 (0.1%)
65	V	0.44	0/1120	0.83	0/1508
66	DH	0.35	0/772	0.80	1/1045 (0.1%)
66	W	0.36	0/792	0.81	0/1071
67	DI	0.35	0/683	0.89	3/918 (0.3%)
67	X	0.43	0/683	0.82	1/918 (0.1%)
68	DJ	0.41	0/1049	0.79	0/1412
68	Y	0.39	0/1049	0.77	0/1412
69	DK	0.35	0/1128	0.82	2/1505 (0.1%)
69	Z	0.38	0/1128	0.88	1/1505 (0.1%)
70	DL	0.35	0/1086	0.80	0/1447
70	a	0.36	0/1100	0.89	2/1466 (0.1%)
71	DM	0.43	0/552	0.86	1/745 (0.1%)
71	b	0.41	0/585	0.83	2/789 (0.3%)
72	DN	0.48	0/791	0.86	2/1060 (0.2%)
72	c	0.33	0/791	0.80	2/1060 (0.2%)
73	DO	0.44	0/624	0.97	4/843 (0.5%)
73	d	0.35	0/624	0.73	1/843 (0.1%)
74	DP	0.43	0/478	1.01	4/640 (0.6%)
74	e	0.36	0/489	0.95	0/654
75	DQ	0.33	0/461	0.72	0/613
75	f	0.38	0/466	0.80	1/620 (0.2%)
76	DR	0.35	0/469	0.78	1/626 (0.2%)
76	g	0.48	0/438	0.95	2/581 (0.3%)
77	h	0.39	0/585	1.02	1/778 (0.1%)
78	AR	0.39	0/2451	0.89	12/3337 (0.4%)
79	CL	0.38	0/941	0.83	1/1257 (0.1%)
79	i	0.44	0/928	1.06	3/1239 (0.2%)
All	All	0.35	0/423231	0.89	581/621279 (0.1%)

There are no bond length outliers.

All (581) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	CQ	183	LEU	CB-CG-CD2	-15.59	84.49	111.00
53	CU	73	LEU	CA-CB-CG	12.79	144.72	115.30
78	AR	271	LEU	CB-CG-CD1	-11.97	90.65	111.00
13	BF	84	LEU	CB-CG-CD1	-11.31	91.78	111.00
1	AS	1576	A	O4'-C1'-N9	11.11	117.09	108.20
45	B	1413	A	O4'-C1'-N9	10.78	116.82	108.20
1	AS	146	U	O5'-P-OP2	10.29	123.05	110.70
45	CM	902	U	N3-C2-O2	-10.20	115.06	122.20
49	CQ	60	LEU	CA-CB-CG	10.11	138.55	115.30
46	CN	24	LEU	CA-CB-CG	10.02	138.35	115.30
59	DA	50	ILE	CG1-CB-CG2	-10.00	89.40	111.40
45	B	217	A	O4'-C1'-N9	9.78	116.02	108.20
20	BM	32	ILE	CG1-CB-CG2	-9.67	90.12	111.40
58	O	96	LEU	CB-CG-CD2	-9.61	94.67	111.00
79	i	47	ASP	CB-CG-OD1	9.52	126.87	118.30
1	AS	1563	A	O4'-C1'-N9	9.46	115.77	108.20
58	CZ	136	LEU	CA-CB-CG	9.35	136.81	115.30
13	s	79	ILE	CG1-CB-CG2	-9.26	91.02	111.40
58	CZ	136	LEU	CB-CG-CD1	-9.21	95.34	111.00
73	DO	7	LEU	CB-CG-CD2	-9.08	95.57	111.00
1	AS	1576	A	C4-N9-C1'	9.07	142.63	126.30
62	S	37	LEU	CA-CB-CG	8.89	135.75	115.30
45	CM	902	U	C6-N1-C2	-8.77	115.74	121.00
53	CU	37	LEU	CA-CB-CG	8.71	135.33	115.30
10	p	59	LEU	CB-CG-CD1	-8.58	96.41	111.00
58	O	52	LEU	CA-CB-CG	8.51	134.87	115.30
45	CM	837	C	O5'-P-OP1	-8.45	98.10	105.70
74	DP	56	LEU	CA-CB-CG	8.40	134.63	115.30
45	CM	451	C	N1-C2-O2	8.40	123.94	118.90
45	B	824	U	O4'-C1'-N1	-8.37	101.50	108.20
7	AZ	239	ILE	CG1-CB-CG2	-8.34	93.05	111.40
46	CN	62	ARG	CG-CD-NE	8.28	129.20	111.80
20	BM	119	LEU	CA-CB-CG	8.23	134.22	115.30
15	BH	105	LEU	CA-CB-CG	8.14	134.01	115.30
14	t	46	ILE	CG1-CB-CG2	-8.10	93.58	111.40
1	AS	2814	U	C2-N1-C1'	8.10	127.42	117.70
1	AS	487	C	C2-N1-C1'	8.07	127.68	118.80
55	L	89	ASP	CB-CG-OD1	8.07	125.56	118.30
33	BZ	83	LEU	CB-CG-CD2	-8.02	97.36	111.00
1	AS	1576	A	C8-N9-C1'	-8.00	113.30	127.70
64	DF	125	ILE	CG1-CB-CG2	-7.99	93.81	111.40
77	h	159	LEU	CA-CB-CG	7.97	133.62	115.30
78	AR	298	LEU	CB-CG-CD1	7.91	124.45	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CN	123	VAL	CG1-CB-CG2	-7.89	98.27	110.90
33	BZ	28	ARG	NE-CZ-NH1	7.89	124.25	120.30
10	BC	144	ILE	CG1-CB-CG2	-7.86	94.11	111.40
67	X	72	LEU	CA-CB-CG	7.84	133.33	115.30
36	CC	36	LEU	CA-CB-CG	7.83	133.31	115.30
46	CN	146	LEU	CA-CB-CG	7.82	133.29	115.30
7	AZ	190	LEU	CB-CG-CD1	7.76	124.20	111.00
1	1	2814	U	C2-N1-C1'	7.75	127.00	117.70
1	AS	2079	C	O5'-P-OP2	-7.75	98.72	105.70
1	AS	2215	C	N3-C2-O2	-7.74	116.48	121.90
45	CM	656	C	N1-C2-O2	7.72	123.53	118.90
45	CM	1147	C	C6-N1-C2	-7.71	117.21	120.30
45	CM	451	C	C2-N1-C1'	7.71	127.28	118.80
45	B	647	C	C6-N1-C2	-7.67	117.23	120.30
7	AZ	164	LYS	CD-CE-NZ	-7.66	94.07	111.70
55	CW	113	VAL	CG1-CB-CG2	-7.64	98.67	110.90
34	AG	66	VAL	CG1-CB-CG2	-7.62	98.70	110.90
45	B	815	U	C2-N1-C1'	7.57	126.78	117.70
2	AT	51	A	O4'-C1'-N9	7.56	114.25	108.20
2	AT	51	A	C8-N9-C4	7.56	108.82	105.80
23	BP	108	LEU	CA-CB-CG	7.55	132.67	115.30
3	AU	85	G	O5'-P-OP2	-7.53	98.92	105.70
12	BE	210	LEU	CA-CB-CG	7.53	132.61	115.30
14	t	49	ARG	CG-CD-NE	7.52	127.59	111.80
45	B	671	G	O4'-C1'-N9	7.50	114.20	108.20
1	AS	145	U	OP2-P-O3'	-7.49	88.72	105.20
24	BQ	17	LEU	CB-CG-CD2	-7.43	98.37	111.00
3	AU	39	G	O4'-C1'-N9	7.42	114.13	108.20
7	AZ	194	LEU	CB-CG-CD2	7.42	123.61	111.00
73	d	41	LEU	CB-CG-CD2	7.40	123.58	111.00
48	E	110	ILE	CG1-CB-CG2	-7.39	95.14	111.40
45	CM	555	G	C5'-C4'-O4'	7.37	117.94	109.10
65	DG	22	LEU	CA-CB-CG	7.36	132.24	115.30
45	B	847	A	O4'-C1'-N9	7.36	114.09	108.20
10	BC	143	LEU	CA-CB-CG	7.34	132.18	115.30
17	BJ	179	LEU	CA-CB-CG	7.30	132.10	115.30
50	G	89	VAL	CG1-CB-CG2	-7.29	99.24	110.90
14	BG	158	LEU	CB-CG-CD1	7.28	123.37	111.00
1	1	3321	G	O5'-P-OP1	-7.27	99.15	105.70
45	CM	701	G	O4'-C1'-N9	7.27	114.02	108.20
61	R	121	ILE	CG1-CB-CG2	-7.27	95.41	111.40
59	DA	124	ARG	CG-CD-NE	-7.24	96.60	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	AL	8	ILE	CG1-CB-CG2	-7.24	95.48	111.40
1	AS	1349	U	C2-N1-C1'	7.21	126.35	117.70
1	AS	3126	U	C2-N1-C1'	7.17	126.30	117.70
48	CP	120	ILE	CG1-CB-CG2	-7.14	95.68	111.40
53	J	131	ILE	CG1-CB-CG2	-7.12	95.72	111.40
45	B	831	G	C4-N9-C1'	7.11	135.75	126.50
52	I	154	ARG	CG-CD-NE	7.11	126.74	111.80
33	BZ	28	ARG	CD-NE-CZ	7.07	133.50	123.60
45	CM	701	G	N3-C4-N9	-7.07	121.76	126.00
61	R	60	LEU	CA-CB-CG	7.06	131.54	115.30
1	AS	977	U	C2-N1-C1'	7.06	126.17	117.70
71	b	100	ILE	CG1-CB-CG2	-7.04	95.90	111.40
53	CU	77	LEU	CA-CB-CG	7.03	131.48	115.30
14	BG	158	LEU	CB-CG-CD2	-7.03	99.05	111.00
55	CW	154	LYS	CD-CE-NZ	7.03	127.86	111.70
1	AS	151	U	OP2-P-O3'	-7.02	89.75	105.20
14	BG	36	ARG	CA-CB-CG	6.99	128.77	113.40
53	J	172	LEU	CB-CG-CD2	-6.98	99.13	111.00
1	AS	620	A	N1-C6-N6	6.97	122.78	118.60
10	BC	201	LEU	CA-CB-CG	-6.96	99.28	115.30
78	AR	262	LEU	CA-CB-CG	6.95	131.29	115.30
49	CQ	91	ARG	CG-CD-NE	-6.91	97.30	111.80
76	g	13	LYS	CD-CE-NZ	-6.89	95.85	111.70
53	CU	30	LEU	CA-CB-CG	6.88	131.11	115.30
11	BD	132	VAL	CG1-CB-CG2	6.87	121.89	110.90
1	AS	3182	C	C2-N1-C1'	6.85	126.34	118.80
1	AS	2215	C	N1-C2-O2	6.85	123.01	118.90
1	AS	3245	A	O4'-C1'-N9	6.85	113.68	108.20
63	DE	73	LEU	CB-CG-CD2	-6.82	99.41	111.00
43	AP	76	VAL	CG1-CB-CG2	-6.81	100.00	110.90
28	BU	29	HIS	N-CA-CB	6.81	122.86	110.60
45	CM	1376	U	O5'-P-OP1	-6.80	99.58	105.70
56	M	80	LEU	CB-CG-CD1	-6.78	99.47	111.00
58	CZ	106	LEU	CA-CB-CG	6.78	130.89	115.30
1	1	3182	C	C2-N1-C1'	6.77	126.25	118.80
7	m	212	LEU	CB-CG-CD1	6.77	122.51	111.00
1	AS	487	C	C5-C6-N1	6.75	124.37	121.00
46	C	170	ILE	CG1-CB-CG2	-6.75	96.56	111.40
47	CO	217	LEU	CB-CG-CD2	-6.74	99.54	111.00
45	B	485	G	C4-N9-C1'	6.72	135.24	126.50
1	AS	487	C	C6-N1-C2	-6.72	117.61	120.30
47	CO	96	LEU	CA-CB-CG	6.71	130.73	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	U	116	LEU	CB-CG-CD2	-6.70	99.61	111.00
45	B	608	G	C4-N9-C1'	6.70	135.21	126.50
48	E	99	ILE	CG1-CB-CG2	-6.68	96.71	111.40
45	B	561	U	N3-C2-O2	-6.67	117.53	122.20
45	CM	723	G	N9-C4-C5	6.67	108.07	105.40
52	CT	111	LEU	CB-CG-CD2	-6.66	99.67	111.00
1	1	3126	U	C2-N1-C1'	6.65	125.68	117.70
45	B	579	U	C2-N1-C1'	6.65	125.67	117.70
45	CM	503	A	N9-C1'-C2'	-6.64	104.70	112.00
50	G	128	LYS	CD-CE-NZ	6.62	126.93	111.70
45	CM	825	U	P-O3'-C3'	6.62	127.65	119.70
45	B	814	A	P-O3'-C3'	6.60	127.62	119.70
45	B	1704	C	O4'-C1'-N1	6.60	113.48	108.20
67	DI	46	ILE	CG1-CB-CG2	-6.60	96.88	111.40
5	AX	158	VAL	CG1-CB-CG2	6.59	121.45	110.90
72	DN	94	ILE	CG1-CB-CG2	-6.59	96.91	111.40
1	AS	1562	G	O5'-P-OP1	6.58	118.59	110.70
45	CM	505	U	P-O3'-C3'	6.56	127.58	119.70
67	DI	72	LEU	CA-CB-CG	6.56	130.40	115.30
5	AX	387	LEU	CA-CB-CG	6.55	130.37	115.30
38	AK	8	LEU	CB-CG-CD2	-6.54	99.89	111.00
51	CS	174	LEU	CB-CG-CD2	-6.54	99.89	111.00
2	AT	51	A	C4-N9-C1'	-6.53	114.54	126.30
13	BF	17	LEU	CB-CG-CD2	-6.53	99.90	111.00
45	B	1704	C	C2-N1-C1'	-6.52	111.63	118.80
45	CM	818	U	N3-C2-O2	-6.51	117.64	122.20
70	a	17	LEU	CA-CB-CG	6.50	130.25	115.30
2	AT	51	A	N7-C8-N9	-6.50	110.55	113.80
48	E	45	ILE	CG1-CB-CG2	-6.49	97.11	111.40
1	AS	918	U	C2-N1-C1'	6.49	125.49	117.70
71	DM	75	LEU	CA-CB-CG	6.49	130.23	115.30
45	CM	696	U	C5-C6-N1	6.49	125.94	122.70
1	AS	447	U	P-O3'-C3'	6.49	127.48	119.70
1	AS	486	C	C2-N1-C1'	6.48	125.93	118.80
30	BW	54	LEU	CA-CB-CG	6.48	130.21	115.30
46	CN	22	VAL	CG1-CB-CG2	-6.48	100.53	110.90
49	CQ	67	ILE	CG1-CB-CG2	-6.48	97.14	111.40
58	CZ	96	LEU	CA-CB-CG	6.47	130.19	115.30
5	k	302	LYS	CD-CE-NZ	6.47	126.58	111.70
62	S	27	LEU	CA-CB-CG	6.46	130.17	115.30
79	i	129	LEU	CA-CB-CG	6.45	130.14	115.30
26	BS	102	LEU	CA-CB-CG	6.44	130.11	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
74	DP	22	ARG	CA-CB-CG	6.44	127.57	113.40
45	CM	656	C	N3-C2-O2	-6.42	117.41	121.90
58	CZ	103	LEU	CB-CG-CD1	-6.41	100.11	111.00
78	AR	142	MET	CB-CG-SD	-6.40	93.20	112.40
45	B	676	G	O4'-C1'-N9	6.39	113.31	108.20
46	C	182	LEU	CB-CG-CD2	6.39	121.86	111.00
45	B	1242	U	C2-N1-C1'	6.38	125.36	117.70
1	AS	831	G	O4'-C1'-N9	6.37	113.30	108.20
49	F	60	LEU	CA-CB-CG	6.36	129.92	115.30
67	DI	44	ARG	CA-CB-CG	6.34	127.35	113.40
45	CM	220	A	O4'-C1'-N9	6.33	113.26	108.20
12	r	185	LYS	CD-CE-NZ	-6.32	97.16	111.70
45	B	831	G	C8-N9-C1'	-6.32	118.78	127.00
36	CC	43	ARG	CA-CB-CG	6.29	127.23	113.40
1	AS	2235	C	C6-N1-C2	-6.28	117.79	120.30
20	BM	74	ARG	CG-CD-NE	-6.28	98.61	111.80
28	BU	134	LEU	CA-CB-CG	6.27	129.72	115.30
45	CM	579	U	C2-N1-C1'	6.27	125.22	117.70
34	CA	20	LYS	CD-CE-NZ	6.26	126.11	111.70
1	AS	956	U	C2-N1-C1'	6.26	125.21	117.70
45	B	1457	A	C8-N9-C4	-6.26	103.30	105.80
13	BF	13	ARG	CA-CB-CG	6.25	127.15	113.40
45	CM	608	G	C4-N9-C1'	6.25	134.62	126.50
45	CM	1045	U	C2-N1-C1'	6.24	125.18	117.70
50	G	173	ILE	CG1-CB-CG2	-6.23	97.70	111.40
78	AR	95	LEU	CB-CG-CD1	-6.22	100.42	111.00
48	CP	230	LEU	CB-CG-CD2	-6.22	100.42	111.00
6	AY	182	VAL	CG1-CB-CG2	-6.22	100.95	110.90
78	AR	298	LEU	CB-CG-CD2	-6.22	100.43	111.00
45	CM	656	C	C2-N1-C1'	6.21	125.63	118.80
1	1	3160	C	C2-N1-C1'	6.21	125.63	118.80
63	DE	57	LEU	CA-CB-CG	6.21	129.57	115.30
45	B	505	U	O4'-C1'-N1	6.19	113.15	108.20
45	CM	451	C	N3-C2-O2	-6.18	117.57	121.90
61	DC	49	LEU	CB-CG-CD1	-6.18	100.49	111.00
13	BF	9	MET	CG-SD-CE	6.17	110.08	100.20
16	BI	49	ARG	CG-CD-NE	-6.17	98.84	111.80
18	x	126	ARG	CA-CB-CG	6.17	126.98	113.40
45	CM	902	U	C2-N1-C1'	6.16	125.09	117.70
8	n	150	LYS	CD-CE-NZ	-6.15	97.55	111.70
22	BO	79	VAL	CG1-CB-CG2	6.15	120.73	110.90
1	AS	486	C	C6-N1-C1'	-6.14	113.44	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	CM	1067	C	C2-N1-C1'	6.12	125.53	118.80
10	BC	37	ILE	CG1-CB-CG2	-6.12	97.93	111.40
17	w	194	LYS	CD-CE-NZ	-6.11	97.64	111.70
56	CX	91	ARG	CA-CB-CG	6.11	126.84	113.40
70	a	126	GLN	CA-CB-CG	6.10	126.82	113.40
1	1	3245	A	O4'-C1'-N9	6.09	113.08	108.20
45	B	824	U	P-O5'-C5'	-6.09	111.15	120.90
66	DH	106	THR	CA-CB-CG2	-6.09	103.88	112.40
45	CM	1444	G	C4-N9-C1'	6.08	134.41	126.50
1	AS	3160	C	C2-N1-C1'	6.08	125.49	118.80
10	BC	174	MET	CG-SD-CE	6.08	109.93	100.20
45	CM	814	A	P-O3'-C3'	6.07	126.98	119.70
3	4	39	G	O4'-C1'-N9	6.07	113.05	108.20
72	DN	89	ARG	CG-CD-NE	-6.07	99.06	111.80
1	AS	1562	G	C4-N9-C1'	6.06	134.38	126.50
1	AS	3167	G	N3-C4-N9	6.06	129.64	126.00
1	1	3347	U	C2-N1-C1'	6.06	124.97	117.70
3	4	85	G	O5'-P-OP2	-6.05	100.25	105.70
45	CM	1234	U	C2-N1-C1'	6.05	124.96	117.70
45	B	481	A	O4'-C1'-N9	6.05	113.04	108.20
55	L	54	ARG	CG-CD-NE	6.05	124.50	111.80
48	E	79	ARG	CB-CA-C	-6.04	98.31	110.40
1	AS	1638	A	O4'-C1'-N9	-6.04	103.36	108.20
45	CM	728	U	O5'-P-OP1	-6.04	100.26	105.70
12	BE	131	ILE	CG1-CB-CG2	6.03	124.66	111.40
63	T	113	LEU	CB-CG-CD2	6.02	121.23	111.00
1	AS	1576	A	N7-C8-N9	6.01	116.81	113.80
45	CM	656	C	C6-N1-C2	-6.01	117.90	120.30
45	B	482	C	C6-N1-C2	-6.00	117.90	120.30
4	AW	116	VAL	CG1-CB-CG2	-5.98	101.34	110.90
10	BC	212	LEU	CA-CB-CG	5.97	129.04	115.30
47	CO	64	ARG	CB-CG-CD	5.97	127.12	111.60
8	BA	76	ARG	CG-CD-NE	5.97	124.33	111.80
45	B	485	G	C6-C5-N7	-5.96	126.82	130.40
45	B	1547	U	N3-C2-O2	-5.96	118.03	122.20
60	DB	47	ARG	CB-CG-CD	-5.96	96.10	111.60
48	E	39	LEU	CA-CB-CG	5.96	129.01	115.30
59	P	60	VAL	CG1-CB-CG2	5.95	120.43	110.90
14	BG	40	LEU	CA-CB-CG	5.95	128.99	115.30
79	i	47	ASP	CB-CG-OD2	-5.95	112.94	118.30
1	1	3243	C	N1-C2-O2	5.95	122.47	118.90
1	AS	1562	G	O4'-C1'-N9	-5.95	103.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	DR	15	LYS	CD-CE-NZ	5.95	125.38	111.70
49	F	111	LEU	CB-CG-CD2	5.93	121.09	111.00
45	CM	700	G	O4'-C1'-N9	5.93	112.95	108.20
45	CM	846	U	C2-N1-C1'	5.93	124.82	117.70
17	BJ	117	LYS	CB-CG-CD	5.93	127.02	111.60
56	M	76	LEU	CA-CB-CG	5.92	128.93	115.30
41	CH	2	ILE	C-N-CA	5.92	136.50	121.70
46	CN	149	MET	CA-CB-CG	-5.92	103.24	113.30
1	1	406	G	O4'-C1'-N9	5.92	112.93	108.20
74	DP	22	ARG	CB-CG-CD	-5.91	96.23	111.60
45	B	1057	C	C2-N1-C1'	5.91	125.30	118.80
5	k	78	VAL	CG1-CB-CG2	-5.90	101.45	110.90
1	AS	2235	C	C2-N1-C1'	5.90	125.29	118.80
45	CM	654	G	N7-C8-N9	5.90	116.05	113.10
45	CM	451	C	C6-N1-C1'	-5.89	113.73	120.80
47	CO	217	LEU	CA-CB-CG	5.88	128.82	115.30
37	CD	89	MET	CG-SD-CE	5.88	109.60	100.20
45	CM	1375	C	C2-N1-C1'	5.87	125.25	118.80
50	G	237	VAL	CG1-CB-CG2	5.86	120.28	110.90
1	1	3243	C	N3-C2-O2	-5.86	117.80	121.90
72	c	94	ILE	CG1-CB-CG2	-5.85	98.52	111.40
1	AS	2814	U	C6-N1-C1'	-5.85	113.00	121.20
45	CM	608	G	C8-N9-C1'	-5.85	119.39	127.00
1	1	2437	A	N1-C2-N3	5.85	132.22	129.30
64	DF	15	LEU	CB-CG-CD1	-5.85	101.06	111.00
1	AS	525	A	C8-N9-C4	5.84	108.14	105.80
36	CC	58	ILE	CG1-CB-CG2	-5.84	98.54	111.40
45	CM	561	U	N3-C2-O2	-5.84	118.11	122.20
45	B	1046	A	C8-N9-C4	-5.84	103.46	105.80
78	AR	40	LYS	CD-CE-NZ	-5.84	98.28	111.70
56	M	92	LEU	CA-CB-CG	5.83	128.72	115.30
75	f	43	PHE	CB-CG-CD2	-5.83	116.72	120.80
5	k	70	ARG	CG-CD-NE	5.83	124.04	111.80
1	1	2235	C	C2-N1-C1'	5.83	125.21	118.80
1	1	3030	U	C2-N1-C1'	5.82	124.68	117.70
19	BL	36	LEU	CB-CG-CD2	-5.82	101.11	111.00
45	B	608	G	C8-N9-C1'	-5.82	119.44	127.00
53	J	181	ILE	CG1-CB-CG2	-5.81	98.62	111.40
45	CM	701	G	C8-N9-C4	-5.81	104.08	106.40
3	4	85	G	O5'-P-OP1	5.80	117.66	110.70
45	B	656	C	C2-N1-C1'	5.80	125.18	118.80
44	CK	28	LYS	CD-CE-NZ	5.80	125.04	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	CM	1462	C	C2-N1-C1'	5.80	125.18	118.80
1	1	956	U	C2-N1-C1'	5.80	124.66	117.70
45	B	1462	C	C2-N1-C1'	5.80	125.18	118.80
45	CM	654	G	C6-C5-N7	-5.80	126.92	130.40
1	AS	2509	C	N1-C2-O2	5.79	122.38	118.90
1	AS	2814	U	N1-C2-O2	5.79	126.85	122.80
45	CM	1547	U	N3-C2-O2	-5.79	118.15	122.20
1	AS	669	U	O5'-P-OP2	-5.79	100.49	105.70
1	AS	1492	C	C2-N1-C1'	5.79	125.17	118.80
10	BC	83	LEU	CA-CB-CG	-5.78	102.00	115.30
45	CM	724	G	O4'-C1'-N9	5.78	112.83	108.20
1	AS	401	U	C2-N1-C1'	5.78	124.64	117.70
45	B	485	G	N7-C8-N9	5.78	115.99	113.10
52	CT	121	ILE	CG1-CB-CG2	-5.78	98.69	111.40
45	B	1413	A	C4-N9-C1'	-5.78	115.90	126.30
69	DK	20	ARG	CG-CD-NE	5.77	123.91	111.80
13	s	172	LEU	CA-CB-CG	5.76	128.56	115.30
78	AR	13	LEU	CA-CB-CG	5.76	128.55	115.30
29	BV	138	ILE	CG1-CB-CG2	-5.75	98.75	111.40
45	B	1067	C	C2-N1-C1'	5.75	125.12	118.80
60	Q	47	ARG	CG-CD-NE	5.75	123.87	111.80
55	CW	39	LYS	CD-CE-NZ	-5.74	98.50	111.70
45	B	1067	C	N1-C2-O2	5.74	122.34	118.90
47	CO	219	LYS	C-N-CA	5.73	136.02	121.70
1	AS	1099	A	P-O3'-C3'	5.73	126.58	119.70
52	I	216	LEU	CA-CB-CG	5.73	128.47	115.30
1	AS	3243	C	N3-C2-O2	-5.73	117.89	121.90
45	CM	1364	U	C2-N1-C1'	5.72	124.56	117.70
45	B	1234	U	C2-N1-C1'	5.72	124.56	117.70
20	BM	74	ARG	NE-CZ-NH2	-5.71	117.44	120.30
45	CM	1237	C	N3-C2-O2	-5.71	117.90	121.90
45	CM	817	U	P-O3'-C3'	5.71	126.55	119.70
45	B	688	G	C8-N9-C1'	-5.70	119.59	127.00
1	AS	1574	C	C2-N1-C1'	5.70	125.06	118.80
45	CM	701	G	C5'-C4'-O4'	5.69	115.93	109.10
1	1	1525	A	C8-N9-C1'	-5.69	117.46	127.70
1	1	3164	U	OP1-P-O3'	5.69	117.71	105.20
28	BU	29	HIS	N-CA-C	-5.68	95.67	111.00
45	CM	1327	C	N1-C2-O2	5.67	122.30	118.90
1	AS	3243	C	N1-C2-O2	5.67	122.30	118.90
29	AB	90	TYR	CA-CB-CG	5.66	124.15	113.40
1	1	2215	C	N1-C2-O2	5.65	122.29	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	g	28	LYS	C-N-CA	-5.65	107.58	121.70
45	B	815	U	N1-C2-O2	5.65	126.75	122.80
7	m	239	ILE	CG1-CB-CG2	-5.64	98.98	111.40
1	AS	3134	C	C2-N1-C1'	5.63	124.99	118.80
50	CR	179	ARG	CA-CB-CG	-5.63	101.02	113.40
45	B	1327	C	N1-C2-O2	5.62	122.27	118.90
45	CM	217	A	C8-N9-C4	-5.62	103.55	105.80
45	B	825	U	P-O3'-C3'	5.61	126.43	119.70
22	2	79	VAL	CG1-CB-CG2	5.61	119.87	110.90
1	1	1638	A	O4'-C1'-N9	-5.60	103.72	108.20
14	t	49	ARG	CB-CG-CD	5.60	126.16	111.60
45	B	485	G	C8-N9-C1'	-5.60	119.72	127.00
1	AS	1720	U	O4'-C1'-N1	5.60	112.68	108.20
1	AS	401	U	O4'-C1'-N1	5.59	112.67	108.20
79	CL	53	LYS	CA-CB-CG	5.59	125.70	113.40
1	1	3126	U	N1-C2-O2	5.59	126.71	122.80
53	J	77	LEU	CA-CB-CG	5.59	128.15	115.30
1	1	2663	A	P-O3'-C3'	5.58	126.40	119.70
1	1	1197	C	C2-N1-C1'	5.58	124.94	118.80
64	U	110	ARG	CG-CD-NE	5.58	123.51	111.80
1	1	2519	A	P-O3'-C3'	5.57	126.38	119.70
78	AR	313	MET	CA-CB-CG	5.57	122.77	113.30
1	AS	1720	U	N1-C1'-C2'	5.57	121.24	114.00
1	AS	3160	C	C6-N1-C1'	-5.57	114.12	120.80
33	BZ	78	LYS	CD-CE-NZ	5.57	124.51	111.70
10	BC	95	LEU	CA-CB-CG	-5.56	102.51	115.30
45	CM	700	G	C8-N9-C4	-5.54	104.18	106.40
1	1	3151	C	C2-N1-C1'	5.54	124.89	118.80
20	z	108	LYS	CD-CE-NZ	-5.54	98.96	111.70
1	1	1033	C	C2-N1-C1'	5.54	124.89	118.80
45	CM	723	G	C8-N9-C4	-5.53	104.19	106.40
29	AB	113	LEU	CB-CG-CD1	-5.53	101.60	111.00
45	CM	1691	C	C5-C6-N1	5.52	123.76	121.00
7	m	140	ARG	CG-CD-NE	5.52	123.39	111.80
45	CM	654	G	N1-C6-O6	5.52	123.21	119.90
45	CM	902	U	N1-C2-N3	5.52	118.21	114.90
13	BF	159	THR	CA-CB-CG2	-5.51	104.69	112.40
45	CM	62	A	O4'-C1'-N9	5.51	112.61	108.20
1	1	2968	U	C2-N1-C1'	5.50	124.31	117.70
22	BO	140	ILE	CG1-CB-CG2	-5.50	99.29	111.40
1	1	1343	C	OP1-P-O3'	-5.50	93.10	105.20
55	CW	51	LYS	CB-CA-C	-5.50	99.41	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2814	U	C6-N1-C1'	-5.50	113.50	121.20
1	1	1601	A	O4'-C1'-N9	5.49	112.59	108.20
26	8	57	LEU	CB-CG-CD2	-5.49	101.67	111.00
1	1	935	U	O4'-C1'-N1	-5.47	103.82	108.20
1	1	1720	U	O4'-C1'-N1	5.47	112.58	108.20
13	BF	37	LEU	CB-CG-CD2	-5.47	101.70	111.00
1	1	1019	U	O4'-C1'-N1	5.46	112.57	108.20
1	1	1569	C	C2-N1-C1'	5.46	124.81	118.80
45	B	826	U	N1-C2-N3	5.46	118.18	114.90
45	B	1242	U	C5-C6-N1	5.46	125.43	122.70
1	1	484	U	C6-N1-C2	-5.45	117.73	121.00
43	CJ	44	ASP	CB-CG-OD1	-5.45	113.39	118.30
51	CS	92	ARG	CA-CB-CG	5.45	125.39	113.40
7	m	289	LYS	CD-CE-NZ	-5.45	99.17	111.70
59	P	28	LEU	CB-CG-CD2	5.45	120.26	111.00
1	AS	1197	C	C2-N1-C1'	5.44	124.79	118.80
45	B	505	U	P-O3'-C3'	5.44	126.23	119.70
1	1	2814	U	N1-C2-O2	5.44	126.61	122.80
5	AX	67	MET	CG-SD-CE	5.44	108.90	100.20
45	B	849	U	C2-N1-C1'	5.43	124.22	117.70
50	G	254	ASP	CB-CG-OD1	-5.43	113.41	118.30
45	CM	1231	C	C2-N1-C1'	5.43	124.77	118.80
26	BS	89	LYS	CD-CE-NZ	-5.42	99.22	111.70
58	CZ	103	LEU	CA-CB-CG	5.42	127.78	115.30
45	CM	142	G	O4'-C1'-N9	5.42	112.54	108.20
45	B	1046	A	O4'-C1'-N9	5.42	112.53	108.20
1	AS	3160	C	OP1-P-O3'	5.42	117.11	105.20
1	1	3309	A	N7-C8-N9	5.41	116.50	113.80
45	CM	654	G	C5-C6-O6	-5.41	125.35	128.60
20	BM	167	ARG	CG-CD-NE	5.41	123.16	111.80
45	B	482	C	O4'-C1'-N1	5.40	112.52	108.20
10	BC	163	LEU	CA-CB-CG	5.40	127.73	115.30
42	AO	4	LYS	CD-CE-NZ	-5.40	99.28	111.70
20	BM	138	LEU	CB-CG-CD2	-5.40	101.83	111.00
45	CM	1292	U	C2-N1-C1'	5.39	124.17	117.70
74	DP	22	ARG	CD-NE-CZ	5.39	131.15	123.60
45	B	723	G	C8-N9-C1'	5.39	134.01	127.00
1	AS	437	G	N3-C4-N9	-5.39	122.77	126.00
45	CM	723	G	C4-C5-N7	-5.39	108.64	110.80
45	B	647	C	C5-C6-N1	5.38	123.69	121.00
36	CC	43	ARG	CB-CA-C	5.38	121.15	110.40
45	B	811	U	C2-N1-C1'	5.38	124.15	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	CM	991	C	O4'-C1'-N1	5.37	112.50	108.20
69	Z	121	ARG	CG-CD-NE	-5.37	100.52	111.80
1	1	1736	U	C5-C6-N1	5.37	125.38	122.70
78	AR	228	LEU	CA-CB-CG	5.37	127.64	115.30
1	AS	3166	A	N9-C4-C5	5.37	107.95	105.80
20	BM	177	LEU	CA-CB-CG	5.36	127.63	115.30
45	B	723	G	N3-C4-N9	-5.36	122.78	126.00
1	1	3126	U	N3-C2-O2	-5.35	118.46	122.20
51	CS	174	LEU	CA-CB-CG	5.35	127.60	115.30
45	CM	1137	A	C8-N9-C4	5.34	107.94	105.80
45	CM	1276	G	N3-C4-N9	-5.34	122.79	126.00
1	1	3164	U	P-O3'-C3'	5.34	126.11	119.70
1	1	3327	A	O4'-C1'-N9	5.34	112.47	108.20
58	O	103	LEU	CA-CB-CG	5.34	127.58	115.30
45	CM	720	C	O4'-C1'-N1	5.34	112.47	108.20
1	AS	487	C	C6-N1-C1'	-5.34	114.39	120.80
3	4	85	G	O4'-C1'-N9	-5.34	103.93	108.20
1	1	1720	U	P-O3'-C3'	5.33	126.10	119.70
27	BT	97	ILE	CG1-CB-CG2	-5.33	99.67	111.40
45	CM	1375	C	N1-C2-O2	5.33	122.10	118.90
53	J	30	LEU	CA-CB-CG	5.33	127.55	115.30
45	B	1364	U	C2-N1-C1'	5.33	124.09	117.70
15	BH	101	ARG	CA-CB-CG	-5.33	101.68	113.40
49	CQ	76	LYS	CD-CE-NZ	-5.33	99.45	111.70
45	CM	1147	C	C2-N1-C1'	5.32	124.66	118.80
63	DE	113	LEU	CB-CG-CD2	5.32	120.03	111.00
52	I	144	PHE	CB-CG-CD2	-5.31	117.08	120.80
59	DA	122	ILE	CG1-CB-CG2	-5.31	99.73	111.40
24	BQ	15	LEU	CB-CG-CD2	5.30	120.02	111.00
45	CM	818	U	N1-C2-O2	5.30	126.51	122.80
1	1	482	U	O4'-C1'-N1	5.30	112.44	108.20
45	CM	696	U	O5'-P-OP1	-5.30	100.93	105.70
7	m	219	TYR	CB-CG-CD1	5.29	124.18	121.00
4	AW	204	MET	CG-SD-CE	5.29	108.67	100.20
3	AU	84	C	OP2-P-O3'	5.29	116.84	105.20
26	BS	49	LYS	CD-CE-NZ	-5.29	99.54	111.70
45	B	1416	U	N3-C2-O2	-5.28	118.50	122.20
45	B	1231	C	N1-C2-O2	5.28	122.07	118.90
35	CB	94	LEU	CA-CB-CG	-5.28	103.17	115.30
73	DO	3	LEU	CB-CG-CD2	-5.27	102.04	111.00
62	DD	43	LEU	CA-CB-CG	5.27	127.41	115.30
45	B	1242	U	C6-N1-C2	-5.27	117.84	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	CQ	178	MET	CA-CB-CG	5.27	122.25	113.30
47	CO	188	LEU	CA-CB-CG	5.26	127.41	115.30
1	1	1574	C	C2-N1-C1'	5.25	124.58	118.80
20	z	177	LEU	CA-CB-CG	5.25	127.37	115.30
45	B	1292	U	C2-N1-C1'	5.25	124.00	117.70
27	BT	56	VAL	CG1-CB-CG2	-5.25	102.51	110.90
31	BX	18	LEU	CA-CB-CG	5.24	127.35	115.30
39	CF	24	ILE	CG1-CB-CG2	-5.24	99.88	111.40
1	1	3243	C	C2-N1-C1'	5.24	124.56	118.80
38	AK	43	LYS	CD-CE-NZ	5.24	123.74	111.70
1	AS	620	A	C5-C6-N6	-5.21	119.53	123.70
1	AS	1576	A	C6-C5-N7	-5.21	128.65	132.30
45	B	815	U	C6-N1-C1'	-5.21	113.90	121.20
1	AS	2519	A	P-O3'-C3'	5.21	125.95	119.70
73	DO	33	MET	N-CA-CB	-5.21	101.22	110.60
72	c	53	LEU	CA-CB-CG	5.21	127.27	115.30
1	AS	3182	C	C6-N1-C1'	-5.21	114.55	120.80
13	BF	55	ARG	NE-CZ-NH1	5.21	122.90	120.30
45	CM	1444	G	C8-N9-C1'	-5.21	120.23	127.00
45	B	1413	A	C8-N9-C1'	5.20	137.06	127.70
1	AS	3151	C	C2-N1-C1'	5.20	124.53	118.80
54	CV	42	ARG	CG-CD-NE	5.20	122.72	111.80
36	CC	36	LEU	CB-CG-CD1	-5.20	102.16	111.00
2	AT	51	A	N1-C2-N3	-5.20	126.70	129.30
1	AS	1033	C	C2-N1-C1'	5.20	124.52	118.80
35	CB	100	ILE	CG1-CB-CG2	-5.20	99.97	111.40
71	b	42	LEU	CA-CB-CG	5.19	127.25	115.30
17	BJ	68	LYS	CD-CE-NZ	5.19	123.64	111.70
45	CM	739	A	P-O3'-C3'	5.19	125.93	119.70
69	DK	13	ARG	CG-CD-NE	5.19	122.70	111.80
45	B	671	G	N3-C4-N9	5.19	129.11	126.00
27	BT	82	VAL	CG1-CB-CG2	-5.19	102.60	110.90
1	1	2234	A	C2-N3-C4	5.19	113.19	110.60
9	BB	117	LEU	CB-CG-CD2	5.18	119.81	111.00
45	B	217	A	C8-N9-C4	-5.17	103.73	105.80
13	BF	159	THR	OG1-CB-CG2	-5.17	98.10	110.00
45	CM	818	U	C6-N1-C2	-5.17	117.90	121.00
1	AS	2968	U	N1-C2-O2	5.17	126.42	122.80
1	AS	620	A	N9-C4-C5	-5.16	103.73	105.80
45	CM	985	C	C2-N1-C1'	5.16	124.48	118.80
5	AX	367	LYS	CD-CE-NZ	5.16	123.56	111.70
1	1	2808	C	C2-N1-C1'	5.15	124.47	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	B	1057	C	C6-N1-C1'	-5.15	114.62	120.80
45	B	1462	C	C6-N1-C2	-5.15	118.24	120.30
9	BB	82	VAL	CG1-CB-CG2	5.15	119.14	110.90
1	AS	1562	G	N7-C8-N9	5.15	115.67	113.10
45	CM	1276	G	N3-C2-N2	-5.14	116.30	119.90
45	CM	4	C	C2-N1-C1'	5.14	124.45	118.80
64	U	57	ARG	CG-CD-NE	5.14	122.59	111.80
23	5	61	ASP	CB-CG-OD2	5.13	122.92	118.30
45	B	217	A	N9-C1'-C2'	-5.13	106.36	112.00
53	J	132	ILE	CG1-CB-CG2	5.13	122.69	111.40
1	1	3182	C	N1-C2-O2	5.13	121.98	118.90
9	o	156	LYS	CB-CG-CD	-5.13	98.27	111.60
31	AD	42	LYS	CD-CE-NZ	-5.13	99.91	111.70
1	AS	1349	U	N1-C2-O2	5.13	126.39	122.80
45	B	821	U	C6-N1-C2	-5.12	117.93	121.00
34	CA	39	LYS	CD-CE-NZ	-5.12	99.93	111.70
45	CM	811	U	C2-N1-C1'	5.12	123.84	117.70
45	B	1242	U	N3-C2-O2	-5.11	118.62	122.20
45	CM	137	A	P-O3'-C3'	5.11	125.83	119.70
45	CM	725	A	O5'-C5'-C4'	-5.11	101.99	111.70
1	AS	1558	G	N3-C4-N9	5.11	129.06	126.00
45	B	879	U	N1-C2-O2	5.10	126.37	122.80
1	AS	544	U	O4'-C1'-N1	5.10	112.28	108.20
4	AW	150	LEU	CB-CG-CD2	-5.10	102.32	111.00
58	O	59	LEU	CB-CG-CD2	5.10	119.68	111.00
17	BJ	68	LYS	CA-CB-CG	-5.10	102.18	113.40
1	1	2509	C	C2-N1-C1'	5.10	124.41	118.80
1	AS	1349	U	C6-N1-C1'	-5.10	114.06	121.20
47	CO	70	LEU	CB-CG-CD1	5.10	119.67	111.00
1	AS	2509	C	N3-C2-O2	-5.10	118.33	121.90
45	CM	726	C	C6-N1-C2	-5.09	118.26	120.30
73	DO	24	LEU	CB-CG-CD2	5.09	119.66	111.00
18	BK	131	ARG	CB-CG-CD	-5.09	98.36	111.60
56	CX	1	MET	CB-CG-SD	5.09	127.67	112.40
45	B	1237	C	C2-N1-C1'	5.08	124.39	118.80
1	AS	565	A	N7-C8-N9	5.08	116.34	113.80
45	CM	500	U	C5'-C4'-O4'	5.07	115.19	109.10
59	DA	90	TYR	CB-CG-CD1	-5.07	117.96	121.00
1	1	2436	A	N1-C2-N3	5.07	131.84	129.30
2	AT	51	A	C4-C5-C6	-5.07	114.47	117.00
1	1	3309	A	C8-N9-C4	-5.07	103.77	105.80
36	AI	41	LEU	CA-CB-CG	5.07	126.96	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1559	C	C2-N1-C1'	5.07	124.38	118.80
45	B	723	G	O4'-C1'-N9	5.06	112.25	108.20
1	1	3160	C	C6-N1-C1'	-5.06	114.73	120.80
1	AS	3166	A	N1-C2-N3	5.06	131.83	129.30
45	CM	1057	C	C2-N1-C1'	5.06	124.36	118.80
1	1	3126	U	C5-C6-N1	5.05	125.23	122.70
16	BI	22	LEU	CB-CG-CD1	-5.05	102.41	111.00
19	y	78	GLU	N-CA-CB	5.05	119.69	110.60
1	1	1099	A	OP2-P-O3'	5.05	116.31	105.20
45	B	985	C	C2-N1-C1'	5.05	124.35	118.80
45	CM	1147	C	C5-C6-N1	5.05	123.52	121.00
65	DG	114	LEU	CA-CB-CG	5.05	126.91	115.30
78	AR	32	LEU	CA-CB-CG	5.04	126.90	115.30
78	AR	82	LEU	CB-CG-CD1	-5.04	102.43	111.00
45	CM	1459	U	C2-N1-C1'	5.04	123.75	117.70
45	B	147	C	C2-N1-C1'	5.04	124.34	118.80
45	CM	496	G	N7-C8-N9	5.04	115.62	113.10
45	CM	721	C	C6-N1-C2	-5.04	118.28	120.30
1	1	1197	C	N1-C2-O2	5.03	121.92	118.90
45	CM	500	U	O4'-C1'-N1	5.03	112.22	108.20
56	CX	68	LEU	CA-CB-CG	5.02	126.86	115.30
6	l	266	ASP	CB-CG-OD2	-5.02	113.78	118.30
1	AS	2697	U	O4'-C1'-N1	5.02	112.22	108.20
1	1	3182	C	C6-N1-C1'	-5.02	114.78	120.80
4	j	46	LYS	CA-CB-CG	5.02	124.44	113.40
1	1	3321	G	O5'-P-OP2	5.01	116.72	110.70
50	CR	241	LYS	CD-CE-NZ	-5.01	100.17	111.70
17	w	106	PHE	CB-CG-CD2	-5.01	117.29	120.80
55	CW	36	LEU	CB-CG-CD2	-5.01	102.48	111.00
62	DD	56	LEU	CB-CG-CD2	-5.01	102.48	111.00
1	AS	3160	C	N1-C2-O2	5.00	121.90	118.90
1	1	3030	U	N1-C2-O2	5.00	126.30	122.80
63	T	20	PHE	CB-CG-CD2	-5.00	117.30	120.80
45	CM	1444	G	N3-C4-N9	5.00	129.00	126.00

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	AW	248/254 (98%)	238 (96%)	10 (4%)	0	100	100
4	j	248/254 (98%)	240 (97%)	8 (3%)	0	100	100
5	AX	384/389 (99%)	371 (97%)	13 (3%)	0	100	100
5	k	385/389 (99%)	373 (97%)	12 (3%)	0	100	100
6	AY	359/363 (99%)	349 (97%)	10 (3%)	0	100	100
6	l	358/363 (99%)	347 (97%)	11 (3%)	0	100	100
7	AZ	290/298 (97%)	277 (96%)	13 (4%)	0	100	100
7	m	294/298 (99%)	283 (96%)	11 (4%)	0	100	100
8	BA	149/176 (85%)	147 (99%)	2 (1%)	0	100	100
8	n	153/176 (87%)	150 (98%)	3 (2%)	0	100	100
9	BB	232/241 (96%)	225 (97%)	7 (3%)	0	100	100
9	o	232/241 (96%)	225 (97%)	7 (3%)	0	100	100
10	BC	229/262 (87%)	220 (96%)	7 (3%)	2 (1%)	14	43
10	p	228/262 (87%)	220 (96%)	7 (3%)	1 (0%)	30	60
11	BD	188/191 (98%)	183 (97%)	5 (3%)	0	100	100
11	q	188/191 (98%)	184 (98%)	4 (2%)	0	100	100
12	BE	202/220 (92%)	198 (98%)	4 (2%)	0	100	100
12	r	204/220 (93%)	202 (99%)	2 (1%)	0	100	100
13	BF	169/174 (97%)	163 (96%)	6 (4%)	0	100	100
13	s	169/174 (97%)	162 (96%)	7 (4%)	0	100	100
14	BG	198/202 (98%)	194 (98%)	3 (2%)	1 (0%)	25	56
14	t	198/202 (98%)	196 (99%)	2 (1%)	0	100	100
15	BH	128/131 (98%)	124 (97%)	4 (3%)	0	100	100
15	u	126/131 (96%)	122 (97%)	4 (3%)	0	100	100
16	BI	201/204 (98%)	197 (98%)	4 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	v	201/204 (98%)	198 (98%)	3 (2%)	0	100	100
17	BJ	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
17	w	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
18	BK	170/185 (92%)	166 (98%)	4 (2%)	0	100	100
18	x	167/185 (90%)	163 (98%)	4 (2%)	0	100	100
19	BL	183/186 (98%)	179 (98%)	4 (2%)	0	100	100
19	y	183/186 (98%)	180 (98%)	3 (2%)	0	100	100
20	BM	177/190 (93%)	172 (97%)	5 (3%)	0	100	100
20	z	177/190 (93%)	175 (99%)	2 (1%)	0	100	100
21	0	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
21	BN	168/172 (98%)	167 (99%)	1 (1%)	0	100	100
22	2	157/160 (98%)	153 (98%)	4 (2%)	0	100	100
22	BO	157/160 (98%)	154 (98%)	3 (2%)	0	100	100
23	5	101/124 (82%)	94 (93%)	6 (6%)	1 (1%)	13	40
23	BP	101/124 (82%)	90 (89%)	9 (9%)	2 (2%)	6	23
24	6	129/137 (94%)	127 (98%)	2 (2%)	0	100	100
24	BQ	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
25	7	73/155 (47%)	69 (94%)	3 (4%)	1 (1%)	9	31
25	BR	105/155 (68%)	97 (92%)	7 (7%)	1 (1%)	13	40
26	8	119/142 (84%)	118 (99%)	1 (1%)	0	100	100
26	BS	117/142 (82%)	116 (99%)	1 (1%)	0	100	100
27	9	123/127 (97%)	122 (99%)	1 (1%)	0	100	100
27	BT	124/127 (98%)	122 (98%)	2 (2%)	0	100	100
28	AA	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
28	BU	133/136 (98%)	128 (96%)	5 (4%)	0	100	100
29	AB	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
29	BV	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
30	AC	59/63 (94%)	56 (95%)	1 (2%)	2 (3%)	3	13
30	BW	59/63 (94%)	58 (98%)	1 (2%)	0	100	100
31	AD	94/106 (89%)	93 (99%)	1 (1%)	0	100	100
31	BX	94/106 (89%)	91 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
32	AE	108/112 (96%)	106 (98%)	2 (2%)	0	100	100
32	BY	108/112 (96%)	103 (95%)	4 (4%)	1 (1%)	14	43
33	AF	122/131 (93%)	122 (100%)	0	0	100	100
33	BZ	122/131 (93%)	119 (98%)	3 (2%)	0	100	100
34	AG	104/107 (97%)	101 (97%)	3 (3%)	0	100	100
34	CA	104/107 (97%)	101 (97%)	3 (3%)	0	100	100
35	AH	110/122 (90%)	108 (98%)	2 (2%)	0	100	100
35	CB	110/122 (90%)	106 (96%)	4 (4%)	0	100	100
36	AI	116/120 (97%)	112 (97%)	4 (3%)	0	100	100
36	CC	117/120 (98%)	114 (97%)	3 (3%)	0	100	100
37	AJ	95/99 (96%)	94 (99%)	1 (1%)	0	100	100
37	CD	95/99 (96%)	93 (98%)	1 (1%)	1 (1%)	12	37
38	AK	84/90 (93%)	81 (96%)	3 (4%)	0	100	100
38	CE	84/90 (93%)	82 (98%)	2 (2%)	0	100	100
39	AL	75/78 (96%)	70 (93%)	5 (7%)	0	100	100
39	CF	75/78 (96%)	71 (95%)	4 (5%)	0	100	100
40	AM	48/51 (94%)	46 (96%)	2 (4%)	0	100	100
40	CG	49/51 (96%)	49 (100%)	0	0	100	100
41	AN	50/52 (96%)	50 (100%)	0	0	100	100
41	CH	49/52 (94%)	45 (92%)	2 (4%)	2 (4%)	2	9
42	AO	23/25 (92%)	23 (100%)	0	0	100	100
42	CI	23/25 (92%)	21 (91%)	2 (9%)	0	100	100
43	AP	101/106 (95%)	100 (99%)	1 (1%)	0	100	100
43	CJ	101/106 (95%)	100 (99%)	1 (1%)	0	100	100
44	AQ	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
44	CK	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
46	C	206/261 (79%)	200 (97%)	6 (3%)	0	100	100
46	CN	206/261 (79%)	198 (96%)	8 (4%)	0	100	100
47	CO	212/256 (83%)	205 (97%)	6 (3%)	1 (0%)	25	56
47	D	212/256 (83%)	207 (98%)	5 (2%)	0	100	100
48	CP	215/249 (86%)	209 (97%)	6 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
48	E	215/249 (86%)	212 (99%)	3 (1%)	0	100	100
49	CQ	221/251 (88%)	211 (96%)	10 (4%)	0	100	100
49	F	221/251 (88%)	215 (97%)	6 (3%)	0	100	100
50	CR	258/262 (98%)	254 (98%)	4 (2%)	0	100	100
50	G	257/262 (98%)	253 (98%)	4 (2%)	0	100	100
51	CS	204/225 (91%)	195 (96%)	9 (4%)	0	100	100
51	H	204/225 (91%)	195 (96%)	8 (4%)	1 (0%)	25	56
52	CT	234/236 (99%)	229 (98%)	5 (2%)	0	100	100
52	I	220/236 (93%)	215 (98%)	5 (2%)	0	100	100
53	CU	181/186 (97%)	173 (96%)	7 (4%)	1 (1%)	22	52
53	J	179/186 (96%)	168 (94%)	11 (6%)	0	100	100
54	CV	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
54	K	200/206 (97%)	199 (100%)	1 (0%)	0	100	100
55	CW	176/189 (93%)	174 (99%)	2 (1%)	0	100	100
55	L	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
56	CX	92/118 (78%)	87 (95%)	5 (5%)	0	100	100
56	M	96/118 (81%)	81 (84%)	12 (12%)	3 (3%)	3	14
57	CY	139/155 (90%)	133 (96%)	4 (3%)	2 (1%)	9	31
57	N	137/155 (88%)	133 (97%)	4 (3%)	0	100	100
58	CZ	117/143 (82%)	91 (78%)	21 (18%)	5 (4%)	2	8
58	O	114/143 (80%)	91 (80%)	17 (15%)	6 (5%)	1	5
59	DA	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
59	P	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
60	DB	125/132 (95%)	121 (97%)	3 (2%)	1 (1%)	16	45
60	Q	125/132 (95%)	120 (96%)	5 (4%)	0	100	100
61	DC	118/142 (83%)	102 (86%)	16 (14%)	0	100	100
61	R	127/142 (89%)	115 (91%)	11 (9%)	1 (1%)	16	45
62	DD	131/142 (92%)	128 (98%)	3 (2%)	0	100	100
62	S	138/142 (97%)	134 (97%)	3 (2%)	1 (1%)	19	49
63	DE	122/137 (89%)	117 (96%)	5 (4%)	0	100	100
63	T	122/137 (89%)	117 (96%)	5 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
64	DF	139/145 (96%)	133 (96%)	6 (4%)	0	100 100
64	U	142/145 (98%)	136 (96%)	6 (4%)	0	100 100
65	DG	137/145 (94%)	133 (97%)	3 (2%)	1 (1%)	19 49
65	V	139/145 (96%)	136 (98%)	3 (2%)	0	100 100
66	DH	95/119 (80%)	94 (99%)	1 (1%)	0	100 100
66	W	97/119 (82%)	94 (97%)	3 (3%)	0	100 100
67	DI	85/87 (98%)	83 (98%)	2 (2%)	0	100 100
67	X	85/87 (98%)	83 (98%)	2 (2%)	0	100 100
68	DJ	127/130 (98%)	125 (98%)	2 (2%)	0	100 100
68	Y	127/130 (98%)	126 (99%)	1 (1%)	0	100 100
69	DK	141/145 (97%)	139 (99%)	2 (1%)	0	100 100
69	Z	141/145 (97%)	138 (98%)	3 (2%)	0	100 100
70	DL	130/135 (96%)	130 (100%)	0	0	100 100
70	a	132/135 (98%)	131 (99%)	1 (1%)	0	100 100
71	DM	66/105 (63%)	62 (94%)	3 (4%)	1 (2%)	8 29
71	b	70/105 (67%)	69 (99%)	1 (1%)	0	100 100
72	DN	96/119 (81%)	94 (98%)	2 (2%)	0	100 100
72	c	96/119 (81%)	94 (98%)	2 (2%)	0	100 100
73	DO	79/82 (96%)	73 (92%)	6 (8%)	0	100 100
73	d	79/82 (96%)	75 (95%)	4 (5%)	0	100 100
74	DP	59/67 (88%)	55 (93%)	4 (7%)	0	100 100
74	e	60/67 (90%)	57 (95%)	3 (5%)	0	100 100
75	DQ	52/56 (93%)	50 (96%)	2 (4%)	0	100 100
75	f	53/56 (95%)	51 (96%)	2 (4%)	0	100 100
76	DR	56/63 (89%)	50 (89%)	5 (9%)	1 (2%)	7 25
76	g	50/63 (79%)	48 (96%)	2 (4%)	0	100 100
77	h	68/193 (35%)	56 (82%)	11 (16%)	1 (2%)	8 29
78	AR	309/317 (98%)	293 (95%)	16 (5%)	0	100 100
79	CL	117/267 (44%)	91 (78%)	22 (19%)	4 (3%)	3 13
79	i	116/267 (43%)	90 (78%)	21 (18%)	5 (4%)	2 8
All	All	21638/23766 (91%)	20895 (97%)	693 (3%)	50 (0%)	44 73

All (50) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
10	p	205	ASN
56	M	86	ILE
58	O	38	HIS
58	O	39	ASP
58	O	90	LYS
58	O	130	SER
77	h	161	ARG
14	BG	127	ASP
32	BY	3	LEU
41	CH	3	GLU
41	CH	4	PRO
58	CZ	82	PRO
58	CZ	91	VAL
58	CZ	108	ARG
58	CZ	112	ALA
65	DG	70	GLN
79	i	51	ALA
79	i	52	LYS
79	i	76	PRO
79	CL	43	PRO
79	CL	68	ASN
56	M	88	PRO
10	BC	128	PRO
57	CY	26	LYS
58	CZ	34	THR
71	DM	44	GLN
79	i	64	LEU
23	5	20	ALA
61	R	2	VAL
23	BP	20	ALA
25	BR	97	LYS
37	CD	83	LEU
53	CU	156	THR
60	DB	119	ASP
79	CL	48	PRO
56	M	32	HIS
10	BC	127	SER
23	BP	24	GLU
79	i	63	ALA
79	CL	50	LYS
25	7	60	LYS
62	S	40	PRO

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Mol	Chain	Res	Type
30	AC	3	LYS
51	H	35	GLU
58	O	41	LEU
47	CO	29	TRP
57	CY	27	ALA
76	DR	7	SER
58	O	37	VAL
30	AC	21	ILE

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	AW	191/194 (98%)	185 (97%)	6 (3%)	35 70
4	j	191/194 (98%)	189 (99%)	2 (1%)	73 91
5	AX	325/328 (99%)	316 (97%)	9 (3%)	38 73
5	k	326/328 (99%)	320 (98%)	6 (2%)	54 82
6	AY	290/292 (99%)	278 (96%)	12 (4%)	26 60
6	l	289/292 (99%)	282 (98%)	7 (2%)	44 76
7	AZ	247/252 (98%)	233 (94%)	14 (6%)	17 47
7	m	250/252 (99%)	241 (96%)	9 (4%)	30 65
8	BA	132/154 (86%)	129 (98%)	3 (2%)	45 77
8	n	136/154 (88%)	132 (97%)	4 (3%)	37 72
9	BB	198/204 (97%)	192 (97%)	6 (3%)	36 71
9	o	198/204 (97%)	192 (97%)	6 (3%)	36 71
10	BC	193/216 (89%)	176 (91%)	17 (9%)	8 26
10	p	193/216 (89%)	188 (97%)	5 (3%)	41 74
11	BD	169/170 (99%)	161 (95%)	8 (5%)	22 55
11	q	169/170 (99%)	166 (98%)	3 (2%)	54 82
12	BE	176/186 (95%)	173 (98%)	3 (2%)	56 83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
12	r	178/186 (96%)	174 (98%)	4 (2%)	47 78
13	BF	146/149 (98%)	135 (92%)	11 (8%)	11 33
13	s	146/149 (98%)	139 (95%)	7 (5%)	21 54
14	BG	166/168 (99%)	153 (92%)	13 (8%)	10 31
14	t	166/168 (99%)	160 (96%)	6 (4%)	30 65
15	BH	108/109 (99%)	103 (95%)	5 (5%)	23 55
15	u	107/109 (98%)	106 (99%)	1 (1%)	75 92
16	BI	177/178 (99%)	170 (96%)	7 (4%)	27 61
16	v	177/178 (99%)	173 (98%)	4 (2%)	45 77
17	BJ	166/167 (99%)	159 (96%)	7 (4%)	25 59
17	w	166/167 (99%)	163 (98%)	3 (2%)	54 82
18	BK	145/154 (94%)	139 (96%)	6 (4%)	26 60
18	x	142/154 (92%)	141 (99%)	1 (1%)	81 94
19	BL	153/154 (99%)	150 (98%)	3 (2%)	50 79
19	y	153/154 (99%)	147 (96%)	6 (4%)	27 62
20	BM	146/153 (95%)	139 (95%)	7 (5%)	21 54
20	z	146/153 (95%)	143 (98%)	3 (2%)	48 78
21	0	155/157 (99%)	154 (99%)	1 (1%)	84 95
21	BN	155/157 (99%)	151 (97%)	4 (3%)	41 74
22	2	133/134 (99%)	127 (96%)	6 (4%)	23 56
22	BO	133/134 (99%)	128 (96%)	5 (4%)	28 63
23	5	93/112 (83%)	91 (98%)	2 (2%)	47 78
23	BP	94/112 (84%)	89 (95%)	5 (5%)	19 49
24	6	101/104 (97%)	97 (96%)	4 (4%)	27 61
24	BQ	101/104 (97%)	99 (98%)	2 (2%)	50 79
25	7	68/127 (54%)	63 (93%)	5 (7%)	11 34
25	BR	91/127 (72%)	77 (85%)	14 (15%)	2 7
26	8	108/121 (89%)	103 (95%)	5 (5%)	23 55
26	BS	107/121 (88%)	104 (97%)	3 (3%)	38 73
27	9	110/112 (98%)	109 (99%)	1 (1%)	75 92
27	BT	111/112 (99%)	101 (91%)	10 (9%)	8 25

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
28	AA	117/118 (99%)	115 (98%)	2 (2%)	56 83
28	BU	117/118 (99%)	109 (93%)	8 (7%)	13 38
29	AB	120/121 (99%)	114 (95%)	6 (5%)	20 52
29	BV	120/121 (99%)	118 (98%)	2 (2%)	56 83
30	AC	48/49 (98%)	46 (96%)	2 (4%)	25 59
30	BW	48/49 (98%)	42 (88%)	6 (12%)	3 12
31	AD	81/90 (90%)	78 (96%)	3 (4%)	29 64
31	BX	81/90 (90%)	76 (94%)	5 (6%)	15 43
32	AE	98/100 (98%)	97 (99%)	1 (1%)	73 91
32	BY	98/100 (98%)	92 (94%)	6 (6%)	15 43
33	AF	109/115 (95%)	106 (97%)	3 (3%)	38 73
33	BZ	110/115 (96%)	105 (96%)	5 (4%)	23 56
34	AG	91/92 (99%)	90 (99%)	1 (1%)	70 90
34	CA	91/92 (99%)	90 (99%)	1 (1%)	70 90
35	AH	95/102 (93%)	93 (98%)	2 (2%)	48 78
35	CB	95/102 (93%)	89 (94%)	6 (6%)	15 42
36	AI	106/106 (100%)	104 (98%)	2 (2%)	52 81
36	CC	106/106 (100%)	102 (96%)	4 (4%)	28 63
37	AJ	77/79 (98%)	74 (96%)	3 (4%)	27 62
37	CD	77/79 (98%)	72 (94%)	5 (6%)	14 40
38	AK	70/73 (96%)	69 (99%)	1 (1%)	62 86
38	CE	70/73 (96%)	67 (96%)	3 (4%)	25 57
39	AL	68/69 (99%)	66 (97%)	2 (3%)	37 72
39	CF	68/69 (99%)	64 (94%)	4 (6%)	16 45
40	AM	46/47 (98%)	43 (94%)	3 (6%)	14 40
40	CG	47/47 (100%)	47 (100%)	0	100 100
41	AN	47/47 (100%)	46 (98%)	1 (2%)	48 78
41	CH	46/47 (98%)	43 (94%)	3 (6%)	14 40
42	AO	24/24 (100%)	23 (96%)	1 (4%)	25 59
42	CI	24/24 (100%)	20 (83%)	4 (17%)	2 5
43	AP	88/91 (97%)	84 (96%)	4 (4%)	23 56

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
43	CJ	88/91 (97%)	85 (97%)	3 (3%)	32 67
44	AQ	72/73 (99%)	67 (93%)	5 (7%)	13 37
44	CK	72/73 (99%)	66 (92%)	6 (8%)	9 28
46	C	176/215 (82%)	173 (98%)	3 (2%)	56 83
46	CN	176/215 (82%)	172 (98%)	4 (2%)	45 77
47	CO	194/229 (85%)	179 (92%)	15 (8%)	10 31
47	D	194/229 (85%)	189 (97%)	5 (3%)	41 74
48	CP	175/198 (88%)	166 (95%)	9 (5%)	20 51
48	E	175/198 (88%)	167 (95%)	8 (5%)	23 55
49	CQ	174/196 (89%)	167 (96%)	7 (4%)	27 61
49	F	174/196 (89%)	164 (94%)	10 (6%)	17 47
50	CR	218/220 (99%)	209 (96%)	9 (4%)	26 60
50	G	218/220 (99%)	209 (96%)	9 (4%)	26 60
51	CS	178/197 (90%)	167 (94%)	11 (6%)	15 43
51	H	178/197 (90%)	169 (95%)	9 (5%)	20 51
52	CT	204/204 (100%)	192 (94%)	12 (6%)	16 45
52	I	192/204 (94%)	185 (96%)	7 (4%)	30 65
53	CU	164/167 (98%)	158 (96%)	6 (4%)	29 64
53	J	163/167 (98%)	157 (96%)	6 (4%)	29 64
54	CV	157/160 (98%)	150 (96%)	7 (4%)	23 56
54	K	157/160 (98%)	153 (98%)	4 (2%)	42 75
55	CW	153/160 (96%)	141 (92%)	12 (8%)	10 31
55	L	153/160 (96%)	148 (97%)	5 (3%)	33 68
56	CX	88/104 (85%)	79 (90%)	9 (10%)	6 19
56	M	90/104 (86%)	89 (99%)	1 (1%)	70 90
57	CY	122/134 (91%)	118 (97%)	4 (3%)	33 68
57	N	122/134 (91%)	119 (98%)	3 (2%)	42 75
58	CZ	101/123 (82%)	93 (92%)	8 (8%)	10 30
58	O	98/123 (80%)	89 (91%)	9 (9%)	7 24
59	DA	129/130 (99%)	125 (97%)	4 (3%)	35 70
59	P	129/130 (99%)	125 (97%)	4 (3%)	35 70

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
60	DB	97/102 (95%)	96 (99%)	1 (1%)	73 91
60	Q	97/102 (95%)	94 (97%)	3 (3%)	35 70
61	DC	105/121 (87%)	100 (95%)	5 (5%)	21 54
61	R	111/121 (92%)	107 (96%)	4 (4%)	30 65
62	DD	110/116 (95%)	105 (96%)	5 (4%)	23 56
62	S	114/116 (98%)	108 (95%)	6 (5%)	19 49
63	DE	112/122 (92%)	107 (96%)	5 (4%)	23 56
63	T	112/122 (92%)	108 (96%)	4 (4%)	30 65
64	DF	125/129 (97%)	121 (97%)	4 (3%)	34 69
64	U	128/129 (99%)	123 (96%)	5 (4%)	27 62
65	DG	112/117 (96%)	103 (92%)	9 (8%)	10 30
65	V	113/117 (97%)	108 (96%)	5 (4%)	24 57
66	DH	87/105 (83%)	85 (98%)	2 (2%)	45 77
66	W	89/105 (85%)	85 (96%)	4 (4%)	23 56
67	DI	71/71 (100%)	70 (99%)	1 (1%)	62 86
67	X	71/71 (100%)	67 (94%)	4 (6%)	17 47
68	DJ	112/113 (99%)	109 (97%)	3 (3%)	40 73
68	Y	112/113 (99%)	111 (99%)	1 (1%)	75 92
69	DK	116/118 (98%)	112 (97%)	4 (3%)	32 67
69	Z	116/118 (98%)	113 (97%)	3 (3%)	41 74
70	DL	109/112 (97%)	104 (95%)	5 (5%)	23 55
70	a	111/112 (99%)	102 (92%)	9 (8%)	9 29
71	DM	61/85 (72%)	58 (95%)	3 (5%)	21 53
71	b	64/85 (75%)	63 (98%)	1 (2%)	58 84
72	DN	84/102 (82%)	80 (95%)	4 (5%)	21 54
72	c	84/102 (82%)	80 (95%)	4 (5%)	21 54
73	DO	72/73 (99%)	71 (99%)	1 (1%)	62 86
73	d	72/73 (99%)	68 (94%)	4 (6%)	17 47
74	DP	53/58 (91%)	51 (96%)	2 (4%)	28 63
74	e	54/58 (93%)	52 (96%)	2 (4%)	29 64
75	DQ	47/48 (98%)	44 (94%)	3 (6%)	14 41

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
75	f	47/48 (98%)	44 (94%)	3 (6%)	14 41
76	DR	50/54 (93%)	47 (94%)	3 (6%)	16 44
76	g	46/54 (85%)	43 (94%)	3 (6%)	14 40
77	h	62/175 (35%)	58 (94%)	4 (6%)	14 40
78	AR	259/263 (98%)	238 (92%)	21 (8%)	9 29
79	CL	99/212 (47%)	85 (86%)	14 (14%)	3 9
79	i	98/212 (46%)	82 (84%)	16 (16%)	2 6
All	All	18570/20010 (93%)	17796 (96%)	774 (4%)	25 59

All (774) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	j	68	LYS
4	j	96	LEU
5	k	3	HIS
5	k	34	LYS
5	k	37	LYS
5	k	103	THR
5	k	246	LEU
5	k	312	VAL
6	l	99	ARG
6	l	121	TYR
6	l	125	SER
6	l	177	LYS
6	l	187	LYS
6	l	306	LYS
6	l	311	SER
7	m	5	LYS
7	m	7	PHE
7	m	10	SER
7	m	34	LYS
7	m	45	ASN
7	m	81	HIS
7	m	197	LYS
7	m	214	ASP
7	m	279	ARG
8	n	1	MET
8	n	13	ASP
8	n	99	LYS
8	n	134	ARG

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Mol	Chain	Res	Type
9	o	59	SER
9	o	70	SER
9	o	76	ASP
9	o	117	LEU
9	o	119	LYS
9	o	182	LEU
10	p	103	SER
10	p	147	LYS
10	p	209	GLU
10	p	214	LYS
10	p	232	LYS
11	q	3	TYR
11	q	21	LYS
11	q	157	ASN
12	r	3	ARG
12	r	82	ARG
12	r	187	ASN
12	r	192	ASP
13	s	29	ARG
13	s	61	ARG
13	s	87	LYS
13	s	93	SER
13	s	142	LYS
13	s	155	ASN
13	s	158	ASP
14	t	4	SER
14	t	34	SER
14	t	59	ARG
14	t	67	ARG
14	t	173	ARG
14	t	192	LYS
15	u	121	ARG
16	v	178	HIS
16	v	182	LYS
16	v	187	ARG
16	v	201	ARG
17	w	57	ASP
17	w	60	ARG
17	w	156	LYS
18	x	180	LYS
19	y	22	ASP
19	y	29	LEU

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Mol	Chain	Res	Type
19	y	66	ARG
19	y	69	ARG
19	y	135	GLN
19	y	144	ARG
20	z	43	LYS
20	z	80	LYS
20	z	152	GLU
21	0	3	ARG
22	2	4	SER
22	2	43	LYS
22	2	69	LYS
22	2	83	ARG
22	2	110	LYS
22	2	116	LYS
23	5	19	VAL
23	5	59	GLU
24	6	45	ARG
24	6	110	LYS
24	6	120	LYS
24	6	128	ARG
25	7	26	SER
25	7	43	ARG
25	7	50	SER
25	7	87	LEU
25	7	93	ARG
26	8	29	SER
26	8	36	LYS
26	8	43	SER
26	8	61	LYS
26	8	97	SER
27	9	3	LYS
28	AA	21	LYS
28	AA	105	SER
29	AB	4	ARG
29	AB	10	LYS
29	AB	14	ASN
29	AB	86	LYS
29	AB	92	SER
29	AB	132	LYS
30	AC	19	ASN
30	AC	21	ILE
31	AD	16	LEU

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Mol	Chain	Res	Type
31	AD	24	LYS
31	AD	63	MET
32	AE	37	LYS
33	AF	16	LYS
33	AF	56	ILE
33	AF	106	ARG
34	AG	19	SER
35	AH	24	LYS
35	AH	81	CYS
36	AI	105	ARG
36	AI	108	ARG
37	AJ	33	SER
37	AJ	34	GLN
37	AJ	98	ARG
38	AK	11	ARG
39	AL	36	LYS
39	AL	60	SER
40	AM	8	ARG
40	AM	21	ARG
40	AM	28	ARG
41	AN	46	ARG
42	AO	24	SER
43	AP	16	GLU
43	AP	45	ARG
43	AP	78	LYS
43	AP	90	HIS
44	AQ	4	ARG
44	AQ	24	ARG
44	AQ	28	LYS
44	AQ	85	ARG
44	AQ	89	LEU
46	C	88	LYS
46	C	129	ASP
46	C	184	LEU
47	D	43	VAL
47	D	107	SER
47	D	145	ARG
47	D	154	THR
47	D	173	GLN
48	E	46	THR
48	E	85	THR
48	E	86	ARG

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Mol	Chain	Res	Type
48	E	108	LEU
48	E	181	ARG
48	E	194	SER
48	E	218	SER
48	E	224	LEU
49	F	59	VAL
49	F	77	ARG
49	F	95	ARG
49	F	98	SER
49	F	133	LYS
49	F	150	SER
49	F	152	LYS
49	F	198	PHE
49	F	201	ARG
49	F	216	ASP
50	G	42	LEU
50	G	49	ARG
50	G	53	LYS
50	G	121	TYR
50	G	174	LYS
50	G	241	LYS
50	G	243	LYS
50	G	257	ARG
50	G	260	GLN
51	H	23	VAL
51	H	38	ARG
51	H	65	ARG
51	H	71	SER
51	H	96	SER
51	H	98	MET
51	H	124	LEU
51	H	157	ARG
51	H	208	SER
52	I	79	LYS
52	I	143	LYS
52	I	170	THR
52	I	196	LYS
52	I	199	GLN
52	I	215	ARG
52	I	219	ARG
53	J	3	SER
53	J	51	LYS

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Mol	Chain	Res	Type
53	J	77	LEU
53	J	103	ARG
53	J	112	ARG
53	J	124	ASP
54	K	10	LYS
54	K	45	SER
54	K	125	LYS
54	K	201	ARG
55	L	23	ARG
55	L	37	LYS
55	L	49	LEU
55	L	62	ARG
55	L	94	ASP
56	M	2	LEU
57	N	9	SER
57	N	30	LYS
57	N	67	ARG
58	O	33	ARG
58	O	35	SER
58	O	45	LEU
58	O	85	LYS
58	O	90	LYS
58	O	106	LEU
58	O	108	ARG
58	O	113	ARG
58	O	129	ASP
59	P	9	LYS
59	P	49	GLN
59	P	55	ARG
59	P	140	LYS
60	Q	65	LYS
60	Q	67	LYS
60	Q	94	GLN
61	R	10	ARG
61	R	16	SER
61	R	21	ASP
61	R	120	SER
62	S	39	GLN
62	S	58	LYS
62	S	98	GLU
62	S	104	LEU
62	S	121	ARG

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Mol	Chain	Res	Type
62	S	122	ARG
63	T	14	LYS
63	T	19	ARG
63	T	43	SER
63	T	73	LEU
64	U	8	GLN
64	U	51	ASP
64	U	68	ARG
64	U	85	PHE
64	U	137	HIS
65	V	63	ARG
65	V	69	LYS
65	V	86	ARG
65	V	103	LYS
65	V	114	LEU
66	W	24	THR
66	W	88	ARG
66	W	93	GLN
66	W	107	ILE
67	X	21	ASN
67	X	29	HIS
67	X	62	ARG
67	X	75	GLN
68	Y	23	ARG
69	Z	19	ARG
69	Z	65	ASN
69	Z	144	ARG
70	a	20	ARG
70	a	22	GLN
70	a	32	ARG
70	a	36	SER
70	a	63	GLN
70	a	105	ARG
70	a	123	ARG
70	a	126	GLN
70	a	133	ASN
71	b	58	LYS
72	c	44	MET
72	c	51	ARG
72	c	53	LEU
72	c	99	GLN
73	d	55	THR

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Mol	Chain	Res	Type
73	d	72	LYS
73	d	78	SER
73	d	80	ARG
74	e	55	CYS
74	e	67	ARG
75	f	9	SER
75	f	18	SER
75	f	19	ARG
76	g	3	LYS
76	g	24	GLN
76	g	42	ARG
77	h	134	LYS
77	h	139	LYS
77	h	150	VAL
77	h	174	MET
78	AR	16	HIS
78	AR	31	ASP
78	AR	53	ASN
78	AR	59	LYS
78	AR	96	GLU
78	AR	112	LEU
78	AR	121	ARG
78	AR	130	LYS
78	AR	142	MET
78	AR	146	THR
78	AR	149	ASN
78	AR	156	ARG
78	AR	206	SER
78	AR	210	SER
78	AR	213	LYS
78	AR	223	ASN
78	AR	253	THR
78	AR	258	LYS
78	AR	274	GLU
78	AR	289	LEU
78	AR	313	MET
4	AW	14	SER
4	AW	18	SER
4	AW	60	LYS
4	AW	64	ARG
4	AW	119	LYS
4	AW	142	ASP

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Mol	Chain	Res	Type
5	AX	24	LYS
5	AX	28	ARG
5	AX	29	VAL
5	AX	59	ASP
5	AX	125	SER
5	AX	142	LYS
5	AX	204	SER
5	AX	300	ARG
5	AX	332	LYS
6	AY	13	LYS
6	AY	51	TYR
6	AY	59	HIS
6	AY	84	HIS
6	AY	121	TYR
6	AY	134	SER
6	AY	139	ARG
6	AY	147	LYS
6	AY	162	LYS
6	AY	164	LYS
6	AY	266	ASP
6	AY	351	LYS
7	AZ	3	MET
7	AZ	7	PHE
7	AZ	13	HIS
7	AZ	58	LYS
7	AZ	81	HIS
7	AZ	89	LYS
7	AZ	117	GLU
7	AZ	175	HIS
7	AZ	186	GLU
7	AZ	260	PHE
7	AZ	261	THR
7	AZ	262	LYS
7	AZ	269	SER
7	AZ	275	GLN
8	BA	20	THR
8	BA	71	ASN
8	BA	96	ASP
9	BB	70	SER
9	BB	126	LYS
9	BB	153	LYS
9	BB	173	LYS

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Mol	Chain	Res	Type
9	BB	177	LEU
9	BB	206	SER
10	BC	47	LEU
10	BC	49	ARG
10	BC	60	GLN
10	BC	80	SER
10	BC	86	ASN
10	BC	107	LYS
10	BC	122	THR
10	BC	129	LYS
10	BC	163	LEU
10	BC	186	ARG
10	BC	194	LYS
10	BC	215	LEU
10	BC	225	GLU
10	BC	231	ARG
10	BC	233	HIS
10	BC	239	MET
10	BC	246	LYS
11	BD	17	THR
11	BD	31	ARG
11	BD	94	TYR
11	BD	109	GLN
11	BD	141	LYS
11	BD	162	GLN
11	BD	166	ARG
11	BD	188	VAL
12	BE	42	THR
12	BE	202	ARG
12	BE	211	GLN
13	BF	5	SER
13	BF	13	ARG
13	BF	26	SER
13	BF	55	ARG
13	BF	75	LYS
13	BF	84	LEU
13	BF	90	GLN
13	BF	107	ASP
13	BF	115	LYS
13	BF	142	LYS
13	BF	153	LYS
14	BG	40	LEU

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Mol	Chain	Res	Type
14	BG	59	ARG
14	BG	77	LEU
14	BG	92	THR
14	BG	104	LYS
14	BG	128	LYS
14	BG	129	LYS
14	BG	130	THR
14	BG	131	LYS
14	BG	158	LEU
14	BG	172	LEU
14	BG	182	LYS
14	BG	190	LYS
15	BH	34	ASP
15	BH	101	ARG
15	BH	108	PHE
15	BH	120	ARG
15	BH	130	LYS
16	BI	17	ASP
16	BI	26	ARG
16	BI	27	CYS
16	BI	63	ARG
16	BI	73	ARG
16	BI	140	LYS
16	BI	170	LYS
17	BJ	6	LYS
17	BJ	22	SER
17	BJ	117	LYS
17	BJ	138	THR
17	BJ	163	VAL
17	BJ	164	GLN
17	BJ	179	LEU
18	BK	3	ARG
18	BK	128	ARG
18	BK	130	TYR
18	BK	135	ARG
18	BK	173	ARG
18	BK	175	ARG
19	BL	13	SER
19	BL	23	ASN
19	BL	28	LEU
20	BM	9	ARG
20	BM	34	ASN

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Mol	Chain	Res	Type
20	BM	52	LYS
20	BM	74	ARG
20	BM	156	LYS
20	BM	165	ARG
20	BM	167	ARG
21	BN	8	GLN
21	BN	49	HIS
21	BN	55	SER
21	BN	149	LYS
22	BO	8	ARG
22	BO	9	SER
22	BO	35	LYS
22	BO	60	LYS
22	BO	83	ARG
23	BP	10	LYS
23	BP	49	ASN
23	BP	54	ILE
23	BP	108	LEU
23	BP	111	TYR
24	BQ	32	ARG
24	BQ	45	ARG
25	BR	23	ARG
25	BR	36	SER
25	BR	43	ARG
25	BR	56	ARG
25	BR	57	ARG
25	BR	92	GLU
25	BR	94	ARG
25	BR	97	LYS
25	BR	101	ARG
25	BR	102	LYS
25	BR	105	ARG
25	BR	106	ASP
25	BR	113	LYS
25	BR	120	LYS
26	BS	81	THR
26	BS	83	VAL
26	BS	138	ARG
27	BT	3	LYS
27	BT	5	SER
27	BT	6	GLN
27	BT	11	SER

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Mol	Chain	Res	Type
27	BT	13	SER
27	BT	23	SER
27	BT	47	SER
27	BT	84	LYS
27	BT	103	LYS
27	BT	108	LYS
28	BU	27	LYS
28	BU	34	LYS
28	BU	35	SER
28	BU	97	THR
28	BU	99	GLU
28	BU	102	GLU
28	BU	111	LYS
28	BU	128	LYS
29	BV	47	LYS
29	BV	65	GLN
30	BW	19	ASN
30	BW	41	ARG
30	BW	50	THR
30	BW	54	LEU
30	BW	56	LYS
30	BW	60	GLU
31	BX	15	LYS
31	BX	34	LYS
31	BX	55	LYS
31	BX	56	SER
31	BX	101	ASP
32	BY	45	THR
32	BY	79	ASN
32	BY	85	LYS
32	BY	86	GLU
32	BY	89	PHE
32	BY	109	GLU
33	BZ	23	SER
33	BZ	81	LYS
33	BZ	99	SER
33	BZ	104	ARG
33	BZ	126	LYS
34	CA	57	LYS
35	CB	49	SER
35	CB	61	GLN
35	CB	74	ARG

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Mol	Chain	Res	Type
35	CB	103	ARG
35	CB	108	GLN
35	CB	111	LYS
36	CC	10	ARG
36	CC	13	SER
36	CC	18	GLU
36	CC	103	LYS
37	CD	12	LYS
37	CD	21	VAL
37	CD	35	ARG
37	CD	84	ARG
37	CD	98	ARG
38	CE	25	ARG
38	CE	45	ARG
38	CE	46	SER
39	CF	14	LEU
39	CF	39	LYS
39	CF	61	LYS
39	CF	74	LYS
41	CH	5	SER
41	CH	6	LEU
41	CH	50	LYS
42	CI	10	VAL
42	CI	18	ARG
42	CI	20	VAL
42	CI	24	SER
43	CJ	24	LYS
43	CJ	29	LYS
43	CJ	66	LYS
44	CK	25	GLN
44	CK	34	HIS
44	CK	40	SER
44	CK	58	LYS
44	CK	62	LYS
44	CK	72	SER
46	CN	2	SER
46	CN	78	SER
46	CN	134	LYS
46	CN	151	SER
47	CO	26	ARG
47	CO	41	ARG
47	CO	42	ASN

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Mol	Chain	Res	Type
47	CO	59	ASP
47	CO	80	SER
47	CO	107	SER
47	CO	112	SER
47	CO	132	ASP
47	CO	148	ASN
47	CO	152	LYS
47	CO	170	GLU
47	CO	177	SER
47	CO	203	THR
47	CO	212	ILE
47	CO	217	LEU
48	CP	61	TYR
48	CP	66	LEU
48	CP	84	GLN
48	CP	85	THR
48	CP	118	SER
48	CP	148	SER
48	CP	154	THR
48	CP	194	SER
48	CP	220	LEU
49	CQ	35	TYR
49	CQ	54	SER
49	CQ	98	SER
49	CQ	125	ARG
49	CQ	126	PHE
49	CQ	152	LYS
49	CQ	158	MET
50	CR	16	SER
50	CR	37	LYS
50	CR	91	THR
50	CR	111	VAL
50	CR	133	LYS
50	CR	164	LEU
50	CR	174	LYS
50	CR	187	ARG
50	CR	256	ARG
51	CS	28	THR
51	CS	31	LEU
51	CS	35	GLU
51	CS	38	ARG
51	CS	63	GLN

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Mol	Chain	Res	Type
51	CS	92	ARG
51	CS	97	LEU
51	CS	157	ARG
51	CS	163	SER
51	CS	200	ASN
51	CS	219	ARG
52	CT	17	ASP
52	CT	40	SER
52	CT	41	VAL
52	CT	43	ASP
52	CT	78	SER
52	CT	112	SER
52	CT	145	PHE
52	CT	160	ARG
52	CT	167	LYS
52	CT	168	THR
52	CT	227	LYS
52	CT	230	ARG
53	CU	30	LEU
53	CU	40	LYS
53	CU	71	THR
53	CU	93	ARG
53	CU	111	SER
53	CU	144	LYS
54	CV	12	SER
54	CV	42	ARG
54	CV	99	SER
54	CV	110	ARG
54	CV	125	LYS
54	CV	140	LYS
54	CV	141	ARG
55	CW	16	LYS
55	CW	21	SER
55	CW	54	ARG
55	CW	59	LEU
55	CW	65	LYS
55	CW	79	ARG
55	CW	80	LEU
55	CW	99	LEU
55	CW	168	ARG
55	CW	171	ARG
55	CW	177	GLN

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Mol	Chain	Res	Type
55	CW	179	LYS
56	CX	5	LYS
56	CX	12	HIS
56	CX	15	LEU
56	CX	16	PHE
56	CX	18	GLU
56	CX	48	SER
56	CX	56	LYS
56	CX	62	GLN
56	CX	91	ARG
57	CY	18	HIS
57	CY	30	LYS
57	CY	46	LYS
57	CY	67	ARG
58	CZ	33	ARG
58	CZ	41	LEU
58	CZ	50	LYS
58	CZ	79	CYS
58	CZ	89	ILE
58	CZ	113	ARG
58	CZ	136	LEU
58	CZ	141	SER
59	DA	18	TYR
59	DA	27	LYS
59	DA	39	LYS
59	DA	128	TYR
60	DB	29	SER
61	DC	1	MET
61	DC	21	ASP
61	DC	51	SER
61	DC	61	ARG
61	DC	106	GLU
62	DD	58	LYS
62	DD	86	LYS
62	DD	113	LYS
62	DD	122	ARG
62	DD	127	LYS
63	DE	13	SER
63	DE	72	LYS
63	DE	84	TYR
63	DE	89	SER
63	DE	99	GLN

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Mol	Chain	Res	Type
64	DF	34	LYS
64	DF	40	ARG
64	DF	67	GLU
64	DF	141	THR
65	DG	28	LEU
65	DG	54	PHE
65	DG	63	ARG
65	DG	68	ARG
65	DG	70	GLN
65	DG	104	CYS
65	DG	111	ILE
65	DG	114	LEU
65	DG	132	LEU
66	DH	28	THR
66	DH	101	ARG
67	DI	62	ARG
68	DJ	18	GLU
68	DJ	31	SER
68	DJ	37	PHE
69	DK	19	ARG
69	DK	47	SER
69	DK	73	ARG
69	DK	139	LYS
70	DL	29	HIS
70	DL	49	LYS
70	DL	52	LYS
70	DL	58	PHE
70	DL	61	ARG
71	DM	47	TYR
71	DM	75	LEU
71	DM	90	THR
72	DN	39	VAL
72	DN	42	ARG
72	DN	44	MET
72	DN	80	HIS
73	DO	8	LEU
74	DP	55	CYS
74	DP	57	MET
75	DQ	8	PHE
75	DQ	13	ASN
75	DQ	54	LYS
76	DR	36	MET

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Mol	Chain	Res	Type
76	DR	37	ARG
76	DR	50	THR
79	i	39	SER
79	i	53	LYS
79	i	54	LYS
79	i	55	LYS
79	i	56	SER
79	i	65	LYS
79	i	72	ASP
79	i	78	SER
79	i	85	LYS
79	i	92	SER
79	i	96	LYS
79	i	100	LYS
79	i	109	GLN
79	i	113	ARG
79	i	160	LEU
79	i	162	LYS
79	CL	36	SER
79	CL	37	LYS
79	CL	50	LYS
79	CL	54	LYS
79	CL	60	ASN
79	CL	69	PHE
79	CL	70	ASN
79	CL	71	LYS
79	CL	82	LYS
79	CL	85	LYS
79	CL	104	GLN
79	CL	112	LYS
79	CL	113	ARG
79	CL	162	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (136) such sidechains are listed below:

Mol	Chain	Res	Type
4	j	132	ASN
5	k	25	GLN
7	m	81	HIS
9	o	11	GLN
9	o	71	ASN
10	p	62	GLN

Continued on next page...

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Mol	Chain	Res	Type
10	p	81	GLN
10	p	192	HIS
11	q	109	GLN
13	s	101	ASN
13	s	150	ASN
15	u	98	ASN
15	u	104	GLN
16	v	90	ASN
16	v	149	ASN
18	x	34	GLN
20	z	75	HIS
21	0	8	GLN
21	0	138	GLN
22	2	16	GLN
22	2	90	ASN
24	6	104	ASN
35	AH	3	GLN
38	AK	79	GLN
40	AM	17	GLN
41	AN	33	ASN
43	AP	22	GLN
46	C	30	GLN
46	C	32	HIS
46	C	33	ASN
48	E	54	HIS
48	E	84	GLN
48	E	204	ASN
49	F	163	GLN
49	F	180	GLN
50	G	8	HIS
50	G	71	GLN
50	G	188	ASN
51	H	37	GLN
51	H	63	GLN
51	H	127	GLN
51	H	139	ASN
53	J	106	GLN
53	J	167	GLN
54	K	53	GLN
54	K	181	GLN
56	M	47	GLN
57	N	98	ASN

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Mol	Chain	Res	Type
58	O	38	HIS
62	S	60	GLN
64	U	103	ASN
65	V	48	GLN
65	V	129	GLN
65	V	138	GLN
67	X	3	ASN
67	X	75	GLN
68	Y	15	ASN
75	f	53	ASN
76	g	24	GLN
4	AW	86	GLN
4	AW	97	ASN
6	AY	212	GLN
8	BA	10	GLN
8	BA	60	ASN
8	BA	71	ASN
9	BB	18	GLN
10	BC	42	GLN
11	BD	8	GLN
11	BD	50	ASN
11	BD	156	GLN
11	BD	157	ASN
12	BE	209	ASN
12	BE	215	ASN
13	BF	39	GLN
13	BF	161	GLN
14	BG	151	GLN
16	BI	86	ASN
17	BJ	164	GLN
18	BK	118	GLN
18	BK	120	ASN
18	BK	140	GLN
18	BK	179	GLN
19	BL	23	ASN
21	BN	8	GLN
21	BN	33	ASN
21	BN	142	GLN
22	BO	122	ASN
23	BP	104	ASN
24	BQ	132	ASN
26	BS	60	HIS

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Mol	Chain	Res	Type
27	BT	100	HIS
29	BV	107	HIS
30	BW	42	ASN
32	BY	79	ASN
32	BY	104	GLN
33	BZ	36	GLN
34	CA	106	ASN
35	CB	11	ASN
36	CC	61	ASN
36	CC	99	GLN
40	CG	20	ASN
41	CH	33	ASN
41	CH	44	GLN
46	CN	46	ASN
46	CN	49	ASN
46	CN	83	GLN
46	CN	106	ASN
47	CO	42	ASN
47	CO	148	ASN
47	CO	202	GLN
48	CP	84	GLN
50	CR	68	GLN
51	CS	63	GLN
51	CS	116	HIS
52	CT	34	GLN
52	CT	201	GLN
54	CV	94	ASN
54	CV	181	GLN
55	CW	110	GLN
56	CX	29	GLN
56	CX	62	GLN
57	CY	14	GLN
57	CY	127	GLN
59	DA	58	HIS
60	DB	24	HIS
64	DF	122	HIS
66	DH	43	ASN
67	DI	21	ASN
67	DI	70	ASN
68	DJ	56	HIS
68	DJ	70	ASN
68	DJ	80	ASN

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Mol	Chain	Res	Type
70	DL	77	GLN
70	DL	122	GLN
76	DR	46	ASN
79	i	105	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3166/3359 (94%)	579 (18%)	39 (1%)
1	AS	3058/3359 (91%)	504 (16%)	38 (1%)
2	3	120/121 (99%)	9 (7%)	0
2	AT	120/121 (99%)	9 (7%)	0
3	4	155/158 (98%)	22 (14%)	2 (1%)
3	AU	155/158 (98%)	21 (13%)	2 (1%)
45	B	1721/1787 (96%)	418 (24%)	42 (2%)
45	CM	1777/1787 (99%)	461 (25%)	57 (3%)
All	All	10272/10850 (94%)	2023 (19%)	180 (1%)

All (2023) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	15	A
1	1	24	U
1	1	25	A
1	1	29	G
1	1	39	A
1	1	42	A
1	1	48	A
1	1	56	A
1	1	58	G
1	1	59	A
1	1	64	A
1	1	65	A
1	1	91	G
1	1	98	A
1	1	104	C
1	1	108	A
1	1	109	G
1	1	110	C
1	1	121	A
1	1	134	U

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Mol	Chain	Res	Type
1	1	135	G
1	1	155	A
1	1	156	A
1	1	164	U
1	1	169	G
1	1	172	C
1	1	173	C
1	1	175	G
1	1	186	A
1	1	189	U
1	1	190	U
1	1	199	C
1	1	205	G
1	1	209	C
1	1	212	A
1	1	217	G
1	1	218	A
1	1	219	G
1	1	230	G
1	1	236	A
1	1	239	A
1	1	240	C
1	1	243	G
1	1	245	G
1	1	249	G
1	1	250	U
1	1	251	G
1	1	269	G
1	1	286	U
1	1	295	A
1	1	305	U
1	1	311	C
1	1	323	A
1	1	329	U
1	1	337	G
1	1	338	A
1	1	339	C
1	1	349	A
1	1	350	C
1	1	376	G
1	1	377	A
1	1	387	A

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Mol	Chain	Res	Type
1	1	395	A
1	1	398	A
1	1	402	A
1	1	403	C
1	1	404	G
1	1	420	G
1	1	421	G
1	1	422	A
1	1	438	A
1	1	439	C
1	1	445	A
1	1	448	U
1	1	450	G
1	1	481	G
1	1	482	U
1	1	506	A
1	1	517	A
1	1	519	U
1	1	531	G
1	1	532	U
1	1	538	G
1	1	539	G
1	1	540	C
1	1	541	U
1	1	542	U
1	1	543	C
1	1	544	U
1	1	545	G
1	1	546	C
1	1	555	A
1	1	556	U
1	1	557	A
1	1	564	G
1	1	576	A
1	1	577	G
1	1	589	G
1	1	590	A
1	1	598	U
1	1	602	A
1	1	609	A
1	1	618	U
1	1	619	A

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Mol	Chain	Res	Type
1	1	620	A
1	1	635	C
1	1	647	A
1	1	658	A
1	1	675	A
1	1	679	U
1	1	681	U
1	1	688	A
1	1	689	A
1	1	703	A
1	1	710	G
1	1	713	A
1	1	717	A
1	1	723	G
1	1	730	A
1	1	732	U
1	1	760	U
1	1	763	U
1	1	766	G
1	1	767	A
1	1	772	U
1	1	773	U
1	1	776	A
1	1	777	G
1	1	780	A
1	1	781	G
1	1	802	A
1	1	813	A
1	1	826	A
1	1	845	C
1	1	857	C
1	1	861	U
1	1	870	U
1	1	875	U
1	1	892	A
1	1	903	G
1	1	904	G
1	1	910	A
1	1	912	G
1	1	913	A
1	1	917	A
1	1	919	C

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Mol	Chain	Res	Type
1	1	921	A
1	1	933	G
1	1	935	U
1	1	940	C
1	1	949	G
1	1	955	C
1	1	956	U
1	1	958	A
1	1	959	G
1	1	990	G
1	1	991	U
1	1	996	C
1	1	997	G
1	1	998	A
1	1	1006	G
1	1	1011	C
1	1	1012	U
1	1	1013	U
1	1	1014	G
1	1	1018	U
1	1	1019	U
1	1	1020	G
1	1	1021	A
1	1	1023	A
1	1	1024	U
1	1	1025	G
1	1	1027	C
1	1	1030	U
1	1	1033	C
1	1	1043	A
1	1	1045	C
1	1	1060	A
1	1	1061	A
1	1	1068	G
1	1	1077	U
1	1	1078	U
1	1	1089	A
1	1	1090	A
1	1	1091	U
1	1	1092	U
1	1	1094	A
1	1	1099	A

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Mol	Chain	Res	Type
1	1	1100	G
1	1	1113	G
1	1	1127	G
1	1	1140	U
1	1	1149	A
1	1	1150	A
1	1	1151	C
1	1	1155	A
1	1	1156	C
1	1	1164	U
1	1	1174	G
1	1	1176	A
1	1	1177	U
1	1	1178	G
1	1	1188	C
1	1	1189	A
1	1	1192	C
1	1	1197	C
1	1	1204	U
1	1	1205	G
1	1	1218	G
1	1	1265	U
1	1	1266	A
1	1	1271	C
1	1	1273	C
1	1	1278	G
1	1	1303	G
1	1	1304	A
1	1	1305	U
1	1	1309	G
1	1	1312	C
1	1	1326	A
1	1	1382	A
1	1	1395	U
1	1	1415	A
1	1	1417	G
1	1	1421	U
1	1	1427	G
1	1	1430	G
1	1	1433	C
1	1	1442	A
1	1	1446	G

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Mol	Chain	Res	Type
1	1	1465	C
1	1	1471	A
1	1	1477	A
1	1	1484	G
1	1	1498	C
1	1	1504	C
1	1	1520	A
1	1	1523	C
1	1	1525	A
1	1	1526	U
1	1	1532	G
1	1	1535	A
1	1	1552	C
1	1	1556	G
1	1	1558	G
1	1	1559	C
1	1	1560	U
1	1	1561	U
1	1	1562	G
1	1	1563	A
1	1	1565	U
1	1	1566	U
1	1	1567	U
1	1	1568	U
1	1	1569	C
1	1	1571	G
1	1	1572	G
1	1	1574	C
1	1	1576	A
1	1	1585	A
1	1	1589	A
1	1	1601	A
1	1	1603	U
1	1	1624	C
1	1	1625	U
1	1	1635	C
1	1	1638	A
1	1	1639	A
1	1	1641	U
1	1	1648	G
1	1	1653	C
1	1	1679	A

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Mol	Chain	Res	Type
1	1	1720	U
1	1	1721	C
1	1	1732	G
1	1	1736	U
1	1	1737	A
1	1	1746	A
1	1	1747	G
1	1	1755	U
1	1	1757	A
1	1	1758	U
1	1	1759	U
1	1	1760	U
1	1	1761	U
1	1	1762	G
1	1	1763	C
1	1	1776	G
1	1	1793	A
1	1	1804	G
1	1	1809	A
1	1	1810	A
1	1	1811	U
1	1	1812	A
1	1	1814	U
1	1	1815	U
1	1	1816	U
1	1	1817	U
1	1	1837	A
1	1	1838	A
1	1	1842	C
1	1	1845	C
1	1	1862	C
1	1	1874	G
1	1	1882	A
1	1	1889	A
1	1	1902	G
1	1	1944	G
1	1	1949	G
1	1	2068	U
1	1	2069	U
1	1	2070	A
1	1	2071	A
1	1	2078	A

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Mol	Chain	Res	Type
1	1	2088	G
1	1	2089	G
1	1	2090	U
1	1	2091	A
1	1	2092	C
1	1	2099	G
1	1	2100	G
1	1	2109	A
1	1	2118	U
1	1	2122	A
1	1	2136	A
1	1	2147	G
1	1	2149	G
1	1	2183	U
1	1	2184	G
1	1	2185	A
1	1	2186	A
1	1	2187	U
1	1	2188	G
1	1	2201	A
1	1	2222	A
1	1	2227	G
1	1	2233	A
1	1	2234	A
1	1	2235	C
1	1	2250	G
1	1	2251	G
1	1	2257	A
1	1	2259	A
1	1	2260	U
1	1	2276	U
1	1	2285	G
1	1	2286	C
1	1	2288	U
1	1	2291	A
1	1	2292	U
1	1	2293	G
1	1	2312	U
1	1	2313	G
1	1	2314	U
1	1	2341	A
1	1	2351	A

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Mol	Chain	Res	Type
1	1	2352	C
1	1	2353	G
1	1	2363	G
1	1	2366	U
1	1	2371	G
1	1	2372	G
1	1	2375	A
1	1	2380	A
1	1	2381	G
1	1	2382	A
1	1	2389	U
1	1	2396	G
1	1	2397	A
1	1	2413	G
1	1	2415	G
1	1	2420	G
1	1	2422	C
1	1	2426	G
1	1	2427	A
1	1	2431	U
1	1	2432	G
1	1	2433	U
1	1	2436	A
1	1	2437	A
1	1	2438	U
1	1	2439	A
1	1	2440	A
1	1	2441	G
1	1	2442	U
1	1	2443	G
1	1	2444	G
1	1	2445	G
1	1	2446	A
1	1	2447	G
1	1	2448	C
1	1	2449	U
1	1	2450	U
1	1	2451	C
1	1	2452	G
1	1	2453	G
1	1	2454	C
1	1	2456	C

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Mol	Chain	Res	Type
1	1	2457	C
1	1	2458	G
1	1	2459	G
1	1	2460	U
1	1	2462	A
1	1	2464	A
1	1	2465	U
1	1	2466	A
1	1	2467	C
1	1	2468	C
1	1	2469	A
1	1	2470	C
1	1	2471	U
1	1	2473	C
1	1	2475	U
1	1	2476	C
1	1	2477	U
1	1	2480	A
1	1	2482	U
1	1	2483	U
1	1	2484	U
1	1	2485	U
1	1	2489	A
1	1	2492	U
1	1	2493	A
1	1	2511	G
1	1	2513	A
1	1	2515	G
1	1	2516	U
1	1	2517	C
1	1	2518	A
1	1	2519	A
1	1	2520	A
1	1	2521	C
1	1	2529	U
1	1	2530	C
1	1	2533	G
1	1	2536	U
1	1	2538	A
1	1	2545	C
1	1	2546	U
1	1	2554	C

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Mol	Chain	Res	Type
1	1	2557	G
1	1	2565	A
1	1	2566	C
1	1	2578	G
1	1	2579	G
1	1	2586	G
1	1	2598	A
1	1	2623	G
1	1	2624	U
1	1	2628	A
1	1	2644	G
1	1	2646	A
1	1	2649	G
1	1	2661	A
1	1	2662	G
1	1	2663	A
1	1	2664	A
1	1	2666	A
1	1	2676	A
1	1	2677	A
1	1	2686	G
1	1	2691	U
1	1	2699	A
1	1	2700	G
1	1	2701	U
1	1	2724	U
1	1	2725	G
1	1	2734	A
1	1	2745	C
1	1	2749	G
1	1	2750	G
1	1	2768	G
1	1	2771	A
1	1	2772	G
1	1	2773	A
1	1	2774	A
1	1	2782	C
1	1	2786	G
1	1	2789	A
1	1	2790	U
1	1	2814	U
1	1	2815	U

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Mol	Chain	Res	Type
1	1	2817	A
1	1	2833	U
1	1	2839	C
1	1	2843	G
1	1	2844	A
1	1	2847	U
1	1	2859	A
1	1	2861	C
1	1	2866	C
1	1	2870	G
1	1	2871	C
1	1	2886	G
1	1	2895	U
1	1	2900	C
1	1	2907	U
1	1	2908	A
1	1	2911	G
1	1	2914	C
1	1	2919	G
1	1	2920	C
1	1	2923	G
1	1	2926	U
1	1	2943	A
1	1	2955	C
1	1	2962	G
1	1	2969	G
1	1	2984	A
1	1	3021	A
1	1	3028	U
1	1	3031	G
1	1	3050	A
1	1	3051	C
1	1	3052	G
1	1	3058	A
1	1	3064	C
1	1	3073	G
1	1	3094	A
1	1	3101	A
1	1	3102	A
1	1	3103	U
1	1	3114	A
1	1	3115	C

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Mol	Chain	Res	Type
1	1	3127	U
1	1	3134	C
1	1	3143	G
1	1	3144	A
1	1	3146	G
1	1	3149	U
1	1	3151	C
1	1	3157	A
1	1	3161	U
1	1	3162	U
1	1	3163	U
1	1	3164	U
1	1	3165	U
1	1	3166	A
1	1	3167	G
1	1	3171	C
1	1	3172	U
1	1	3182	C
1	1	3183	A
1	1	3184	G
1	1	3194	G
1	1	3208	A
1	1	3210	A
1	1	3212	G
1	1	3214	U
1	1	3221	G
1	1	3224	U
1	1	3228	G
1	1	3235	A
1	1	3241	G
1	1	3246	C
1	1	3252	C
1	1	3259	A
1	1	3260	A
1	1	3268	G
1	1	3269	C
1	1	3272	A
1	1	3278	U
1	1	3281	A
1	1	3284	U
1	1	3285	A
1	1	3306	U

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Mol	Chain	Res	Type
1	1	3307	A
1	1	3309	A
1	1	3310	G
1	1	3316	U
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	U
1	1	3321	G
1	1	3334	G
1	1	3343	C
1	1	3351	G
1	1	3361	U
2	3	7	G
2	3	22	A
2	3	54	U
2	3	55	A
2	3	65	G
2	3	73	C
2	3	76	A
2	3	102	A
2	3	112	G
3	4	23	U
3	4	34	U
3	4	35	C
3	4	59	A
3	4	62	C
3	4	63	G
3	4	81	A
3	4	84	C
3	4	85	G
3	4	86	U
3	4	87	G
3	4	92	A
3	4	95	G
3	4	102	U
3	4	104	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A

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Mol	Chain	Res	Type
3	4	148	G
3	4	152	G
45	B	17	C
45	B	25	C
45	B	26	A
45	B	27	U
45	B	34	G
45	B	47	A
45	B	57	G
45	B	66	U
45	B	74	U
45	B	75	U
45	B	76	A
45	B	78	A
45	B	79	C
45	B	81	G
45	B	84	A
45	B	93	A
45	B	104	A
45	B	114	C
45	B	115	G
45	B	123	G
45	B	126	A
45	B	127	G
45	B	128	U
45	B	129	A
45	B	130	C
45	B	138	C
45	B	139	U
45	B	142	G
45	B	143	A
45	B	150	U
45	B	151	G
45	B	152	G
45	B	154	A
45	B	159	U
45	B	166	A
45	B	168	U
45	B	173	G
45	B	174	C
45	B	176	U
45	B	177	A

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Mol	Chain	Res	Type
45	B	179	A
45	B	190	U
45	B	191	U
45	B	193	G
45	B	199	G
45	B	200	A
45	B	202	G
45	B	206	U
45	B	211	A
45	B	213	A
45	B	214	U
45	B	215	A
45	B	216	A
45	B	217	A
45	B	218	A
45	B	220	A
45	B	221	U
45	B	222	C
45	B	226	G
45	B	229	U
45	B	230	U
45	B	231	C
45	B	236	U
45	B	237	C
45	B	238	U
45	B	247	U
45	B	255	A
45	B	259	U
45	B	260	U
45	B	261	C
45	B	262	G
45	B	266	C
45	B	269	A
45	B	270	U
45	B	274	C
45	B	276	U
45	B	277	G
45	B	278	U
45	B	279	G
45	B	283	G
45	B	285	G
45	B	297	A

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Mol	Chain	Res	Type
45	B	312	C
45	B	314	A
45	B	318	U
45	B	319	C
45	B	320	G
45	B	335	G
45	B	336	C
45	B	350	A
45	B	357	A
45	B	358	A
45	B	359	C
45	B	388	G
45	B	398	A
45	B	400	C
45	B	402	G
45	B	414	A
45	B	416	G
45	B	421	G
45	B	422	C
45	B	423	A
45	B	424	G
45	B	432	G
45	B	437	U
45	B	442	C
45	B	446	C
45	B	452	A
45	B	458	A
45	B	466	A
45	B	475	A
45	B	480	U
45	B	482	C
45	B	483	A
45	B	485	G
45	B	487	C
45	B	490	U
45	B	491	U
45	B	498	C
45	B	499	U
45	B	503	A
45	B	505	U
45	B	506	U
45	B	509	A

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Mol	Chain	Res	Type
45	B	512	G
45	B	513	A
45	B	515	U
45	B	518	A
45	B	519	A
45	B	525	A
45	B	530	U
45	B	534	C
45	B	536	A
45	B	537	G
45	B	539	A
45	B	540	A
45	B	547	G
45	B	553	A
45	B	554	A
45	B	556	U
45	B	557	C
45	B	563	C
45	B	566	G
45	B	575	G
45	B	576	U
45	B	580	U
45	B	592	A
45	B	593	G
45	B	604	A
45	B	609	U
45	B	617	A
45	B	618	A
45	B	620	A
45	B	621	A
45	B	633	A
45	B	639	G
45	B	645	G
45	B	647	C
45	B	648	U
45	B	649	G
45	B	650	G
45	B	651	C
45	B	652	C
45	B	653	G
45	B	657	C
45	B	670	C

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Mol	Chain	Res	Type
45	B	671	G
45	B	672	U
45	B	673	A
45	B	674	C
45	B	675	U
45	B	676	G
45	B	677	G
45	B	678	A
45	B	679	C
45	B	680	C
45	B	681	C
45	B	682	A
45	B	695	C
45	B	696	U
45	B	697	U
45	B	698	C
45	B	700	G
45	B	701	G
45	B	702	G
45	B	703	U
45	B	721	C
45	B	723	G
45	B	727	U
45	B	728	U
45	B	729	U
45	B	739	A
45	B	740	A
45	B	741	A
45	B	750	G
45	B	751	U
45	B	756	A
45	B	759	A
45	B	760	G
45	B	762	C
45	B	764	U
45	B	765	U
45	B	766	U
45	B	767	G
45	B	768	C
45	B	770	C
45	B	771	G
45	B	773	A

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Mol	Chain	Res	Type
45	B	775	A
45	B	778	U
45	B	779	U
45	B	796	A
45	B	798	A
45	B	799	G
45	B	802	C
45	B	803	G
45	B	804	U
45	B	805	U
45	B	807	U
45	B	808	G
45	B	813	U
45	B	815	U
45	B	816	U
45	B	819	G
45	B	820	U
45	B	821	U
45	B	823	G
45	B	824	U
45	B	825	U
45	B	826	U
45	B	828	U
45	B	829	A
45	B	831	G
45	B	840	A
45	B	842	U
45	B	847	A
45	B	848	A
45	B	856	G
45	B	857	G
45	B	869	A
45	B	871	U
45	B	875	C
45	B	877	G
45	B	878	U
45	B	879	U
45	B	881	U
45	B	891	A
45	B	909	A
45	B	910	G
45	B	911	A

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Mol	Chain	Res	Type
45	B	918	A
45	B	920	U
45	B	927	G
45	B	945	U
45	B	951	A
45	B	973	A
45	B	975	C
45	B	977	A
45	B	988	A
45	B	989	U
45	B	990	A
45	B	997	U
45	B	998	A
45	B	1004	A
45	B	1005	A
45	B	1011	A
45	B	1013	C
45	B	1017	G
45	B	1024	A
45	B	1025	G
45	B	1039	U
45	B	1042	U
45	B	1043	U
45	B	1044	U
45	B	1047	U
45	B	1055	A
45	B	1056	U
45	B	1057	C
45	B	1058	G
45	B	1059	G
45	B	1060	C
45	B	1061	A
45	B	1067	C
45	B	1077	A
45	B	1081	C
45	B	1085	G
45	B	1123	A
45	B	1135	G
45	B	1143	C
45	B	1145	A
45	B	1152	G
45	B	1168	A

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Mol	Chain	Res	Type
45	B	1169	A
45	B	1170	U
45	B	1179	A
45	B	1181	A
45	B	1184	G
45	B	1185	G
45	B	1187	A
45	B	1193	A
45	B	1202	A
45	B	1203	G
45	B	1206	A
45	B	1207	C
45	B	1212	A
45	B	1215	A
45	B	1219	A
45	B	1220	C
45	B	1221	A
45	B	1229	A
45	B	1230	G
45	B	1231	C
45	B	1236	U
45	B	1243	U
45	B	1250	G
45	B	1270	U
45	B	1299	U
45	B	1300	U
45	B	1301	G
45	B	1306	A
45	B	1325	U
45	B	1330	A
45	B	1336	G
45	B	1339	G
45	B	1342	A
45	B	1343	G
45	B	1345	A
45	B	1346	U
45	B	1348	U
45	B	1349	G
45	B	1352	G
45	B	1355	A
45	B	1356	U
45	B	1357	A

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Mol	Chain	Res	Type
45	B	1359	U
45	B	1360	C
45	B	1364	U
45	B	1369	G
45	B	1370	A
45	B	1376	U
45	B	1380	G
45	B	1381	A
45	B	1382	U
45	B	1384	U
45	B	1385	C
45	B	1392	A
45	B	1397	A
45	B	1398	G
45	B	1399	U
45	B	1400	U
45	B	1401	U
45	B	1410	A
45	B	1413	A
45	B	1414	G
45	B	1415	G
45	B	1422	A
45	B	1431	G
45	B	1433	C
45	B	1445	C
45	B	1446	A
45	B	1455	A
45	B	1457	A
45	B	1458	C
45	B	1461	A
45	B	1462	C
45	B	1463	G
45	B	1468	C
45	B	1476	A
45	B	1477	U
45	B	1480	G
45	B	1483	U
45	B	1485	G
45	B	1491	G
45	B	1502	A
45	B	1503	A
45	B	1508	G

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Mol	Chain	Res	Type
45	B	1510	G
45	B	1511	A
45	B	1523	G
45	B	1524	C
45	B	1529	G
45	B	1530	A
45	B	1541	U
45	B	1544	U
45	B	1546	G
45	B	1560	A
45	B	1561	G
45	B	1571	G
45	B	1574	A
45	B	1575	G
45	B	1577	G
45	B	1580	A
45	B	1582	U
45	B	1584	A
45	B	1588	G
45	B	1621	C
45	B	1644	U
45	B	1645	G
45	B	1665	C
45	B	1667	G
45	B	1670	U
45	B	1671	G
45	B	1672	G
45	B	1673	U
45	B	1705	G
45	B	1737	A
45	B	1742	A
45	B	1747	G
45	B	1749	A
45	B	1753	A
45	B	1756	U
45	B	1767	G
45	B	1770	C
45	B	1779	G
45	B	1780	G
45	B	1781	A
45	B	1782	U
45	B	1783	C

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Mol	Chain	Res	Type
1	AS	24	U
1	AS	25	A
1	AS	29	G
1	AS	39	A
1	AS	42	A
1	AS	48	A
1	AS	56	A
1	AS	58	G
1	AS	59	A
1	AS	64	A
1	AS	65	A
1	AS	91	G
1	AS	98	A
1	AS	104	C
1	AS	108	A
1	AS	109	G
1	AS	110	C
1	AS	121	A
1	AS	134	U
1	AS	135	G
1	AS	155	A
1	AS	156	A
1	AS	164	U
1	AS	169	G
1	AS	172	C
1	AS	173	C
1	AS	175	G
1	AS	186	A
1	AS	189	U
1	AS	190	U
1	AS	199	C
1	AS	205	G
1	AS	209	C
1	AS	212	A
1	AS	217	G
1	AS	218	A
1	AS	219	G
1	AS	230	G
1	AS	236	A
1	AS	239	A
1	AS	240	C
1	AS	243	G

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Mol	Chain	Res	Type
1	AS	245	G
1	AS	249	G
1	AS	250	U
1	AS	251	G
1	AS	269	G
1	AS	286	U
1	AS	295	A
1	AS	305	U
1	AS	311	C
1	AS	323	A
1	AS	329	U
1	AS	337	G
1	AS	338	A
1	AS	339	C
1	AS	343	U
1	AS	349	A
1	AS	350	C
1	AS	376	G
1	AS	377	A
1	AS	395	A
1	AS	398	A
1	AS	402	A
1	AS	403	C
1	AS	404	G
1	AS	420	G
1	AS	421	G
1	AS	422	A
1	AS	438	A
1	AS	439	C
1	AS	442	G
1	AS	445	A
1	AS	447	U
1	AS	448	U
1	AS	449	U
1	AS	483	U
1	AS	486	C
1	AS	487	C
1	AS	488	G
1	AS	506	A
1	AS	517	A
1	AS	519	U
1	AS	531	G

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Mol	Chain	Res	Type
1	AS	532	U
1	AS	538	G
1	AS	539	G
1	AS	545	G
1	AS	546	C
1	AS	555	A
1	AS	556	U
1	AS	557	A
1	AS	564	G
1	AS	576	A
1	AS	577	G
1	AS	589	G
1	AS	590	A
1	AS	598	U
1	AS	600	U
1	AS	601	U
1	AS	602	A
1	AS	609	A
1	AS	618	U
1	AS	619	A
1	AS	620	A
1	AS	635	C
1	AS	647	A
1	AS	658	A
1	AS	675	A
1	AS	679	U
1	AS	688	A
1	AS	703	A
1	AS	710	G
1	AS	713	A
1	AS	717	A
1	AS	723	G
1	AS	730	A
1	AS	732	U
1	AS	760	U
1	AS	763	U
1	AS	772	U
1	AS	773	U
1	AS	776	A
1	AS	777	G
1	AS	780	A
1	AS	781	G

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Mol	Chain	Res	Type
1	AS	802	A
1	AS	813	A
1	AS	826	A
1	AS	845	C
1	AS	857	C
1	AS	861	U
1	AS	870	U
1	AS	875	U
1	AS	893	U
1	AS	903	G
1	AS	904	G
1	AS	910	A
1	AS	912	G
1	AS	913	A
1	AS	917	A
1	AS	919	C
1	AS	921	A
1	AS	933	G
1	AS	940	C
1	AS	949	G
1	AS	955	C
1	AS	956	U
1	AS	959	G
1	AS	976	A
1	AS	977	U
1	AS	990	G
1	AS	991	U
1	AS	996	C
1	AS	997	G
1	AS	998	A
1	AS	1006	G
1	AS	1011	C
1	AS	1012	U
1	AS	1014	G
1	AS	1019	U
1	AS	1020	G
1	AS	1030	U
1	AS	1033	C
1	AS	1043	A
1	AS	1045	C
1	AS	1060	A
1	AS	1061	A

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Mol	Chain	Res	Type
1	AS	1068	G
1	AS	1077	U
1	AS	1078	U
1	AS	1089	A
1	AS	1090	A
1	AS	1091	U
1	AS	1092	U
1	AS	1094	A
1	AS	1099	A
1	AS	1100	G
1	AS	1113	G
1	AS	1127	G
1	AS	1140	U
1	AS	1149	A
1	AS	1150	A
1	AS	1151	C
1	AS	1155	A
1	AS	1156	C
1	AS	1164	U
1	AS	1174	G
1	AS	1176	A
1	AS	1177	U
1	AS	1178	G
1	AS	1188	C
1	AS	1189	A
1	AS	1192	C
1	AS	1197	C
1	AS	1204	U
1	AS	1205	G
1	AS	1303	G
1	AS	1304	A
1	AS	1305	U
1	AS	1309	G
1	AS	1326	A
1	AS	1346	U
1	AS	1347	U
1	AS	1348	U
1	AS	1382	A
1	AS	1395	U
1	AS	1415	A
1	AS	1417	G
1	AS	1421	U

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Mol	Chain	Res	Type
1	AS	1427	G
1	AS	1430	G
1	AS	1433	C
1	AS	1442	A
1	AS	1446	G
1	AS	1465	C
1	AS	1471	A
1	AS	1477	A
1	AS	1484	G
1	AS	1498	C
1	AS	1504	C
1	AS	1520	A
1	AS	1523	C
1	AS	1532	G
1	AS	1535	A
1	AS	1552	C
1	AS	1556	G
1	AS	1558	G
1	AS	1559	C
1	AS	1560	U
1	AS	1561	U
1	AS	1562	G
1	AS	1563	A
1	AS	1564	U
1	AS	1565	U
1	AS	1566	U
1	AS	1567	U
1	AS	1568	U
1	AS	1569	C
1	AS	1571	G
1	AS	1572	G
1	AS	1574	C
1	AS	1576	A
1	AS	1577	C
1	AS	1585	A
1	AS	1589	A
1	AS	1601	A
1	AS	1603	U
1	AS	1624	C
1	AS	1625	U
1	AS	1635	C
1	AS	1638	A

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Mol	Chain	Res	Type
1	AS	1639	A
1	AS	1641	U
1	AS	1648	G
1	AS	1654	G
1	AS	1679	A
1	AS	1720	U
1	AS	1721	C
1	AS	1732	G
1	AS	1746	A
1	AS	1747	G
1	AS	1755	U
1	AS	1756	A
1	AS	1757	A
1	AS	1758	U
1	AS	1761	U
1	AS	1762	G
1	AS	1763	C
1	AS	1776	G
1	AS	1793	A
1	AS	1804	G
1	AS	1809	A
1	AS	1810	A
1	AS	1811	U
1	AS	1812	A
1	AS	1814	U
1	AS	1815	U
1	AS	1816	U
1	AS	1817	U
1	AS	1835	A
1	AS	1838	A
1	AS	1842	C
1	AS	1845	C
1	AS	1862	C
1	AS	1874	G
1	AS	1882	A
1	AS	1889	A
1	AS	1902	G
1	AS	1944	G
1	AS	1949	G
1	AS	2070	A
1	AS	2071	A
1	AS	2078	A

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Mol	Chain	Res	Type
1	AS	2088	G
1	AS	2089	G
1	AS	2091	A
1	AS	2092	C
1	AS	2099	G
1	AS	2100	G
1	AS	2109	A
1	AS	2118	U
1	AS	2122	A
1	AS	2136	A
1	AS	2147	G
1	AS	2149	G
1	AS	2183	U
1	AS	2184	G
1	AS	2185	A
1	AS	2186	A
1	AS	2187	U
1	AS	2188	G
1	AS	2201	A
1	AS	2222	A
1	AS	2227	G
1	AS	2233	A
1	AS	2234	A
1	AS	2250	G
1	AS	2251	G
1	AS	2257	A
1	AS	2259	A
1	AS	2260	U
1	AS	2276	U
1	AS	2285	G
1	AS	2286	C
1	AS	2288	U
1	AS	2291	A
1	AS	2292	U
1	AS	2293	G
1	AS	2312	U
1	AS	2313	G
1	AS	2314	U
1	AS	2341	A
1	AS	2351	A
1	AS	2352	C
1	AS	2353	G

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Mol	Chain	Res	Type
1	AS	2363	G
1	AS	2366	U
1	AS	2371	G
1	AS	2372	G
1	AS	2375	A
1	AS	2380	A
1	AS	2381	G
1	AS	2382	A
1	AS	2389	U
1	AS	2396	G
1	AS	2397	A
1	AS	2413	G
1	AS	2415	G
1	AS	2489	A
1	AS	2492	U
1	AS	2493	A
1	AS	2510	U
1	AS	2511	G
1	AS	2513	A
1	AS	2515	G
1	AS	2516	U
1	AS	2517	C
1	AS	2518	A
1	AS	2519	A
1	AS	2520	A
1	AS	2521	C
1	AS	2529	U
1	AS	2530	C
1	AS	2533	G
1	AS	2536	U
1	AS	2538	A
1	AS	2545	C
1	AS	2546	U
1	AS	2554	C
1	AS	2557	G
1	AS	2565	A
1	AS	2566	C
1	AS	2578	G
1	AS	2579	G
1	AS	2586	G
1	AS	2598	A
1	AS	2623	G

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Mol	Chain	Res	Type
1	AS	2624	U
1	AS	2628	A
1	AS	2646	A
1	AS	2649	G
1	AS	2661	A
1	AS	2662	G
1	AS	2663	A
1	AS	2666	A
1	AS	2676	A
1	AS	2677	A
1	AS	2686	G
1	AS	2699	A
1	AS	2700	G
1	AS	2701	U
1	AS	2724	U
1	AS	2725	G
1	AS	2734	A
1	AS	2745	C
1	AS	2749	G
1	AS	2750	G
1	AS	2768	G
1	AS	2771	A
1	AS	2772	G
1	AS	2773	A
1	AS	2774	A
1	AS	2782	C
1	AS	2786	G
1	AS	2789	A
1	AS	2790	U
1	AS	2814	U
1	AS	2815	U
1	AS	2817	A
1	AS	2833	U
1	AS	2839	C
1	AS	2843	G
1	AS	2844	A
1	AS	2847	U
1	AS	2859	A
1	AS	2861	C
1	AS	2866	C
1	AS	2870	G
1	AS	2871	C

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Mol	Chain	Res	Type
1	AS	2886	G
1	AS	2895	U
1	AS	2907	U
1	AS	2908	A
1	AS	2911	G
1	AS	2914	C
1	AS	2919	G
1	AS	2920	C
1	AS	2923	G
1	AS	2926	U
1	AS	2943	A
1	AS	2955	C
1	AS	2960	C
1	AS	2962	G
1	AS	2969	G
1	AS	2984	A
1	AS	3021	A
1	AS	3028	U
1	AS	3031	G
1	AS	3050	A
1	AS	3051	C
1	AS	3052	G
1	AS	3058	A
1	AS	3064	C
1	AS	3076	U
1	AS	3094	A
1	AS	3101	A
1	AS	3102	A
1	AS	3103	U
1	AS	3114	A
1	AS	3115	C
1	AS	3134	C
1	AS	3143	G
1	AS	3144	A
1	AS	3146	G
1	AS	3149	U
1	AS	3151	C
1	AS	3157	A
1	AS	3160	C
1	AS	3161	U
1	AS	3163	U
1	AS	3164	U

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Mol	Chain	Res	Type
1	AS	3165	U
1	AS	3166	A
1	AS	3167	G
1	AS	3171	C
1	AS	3172	U
1	AS	3182	C
1	AS	3183	A
1	AS	3184	G
1	AS	3194	G
1	AS	3208	A
1	AS	3210	A
1	AS	3212	G
1	AS	3214	U
1	AS	3224	U
1	AS	3228	G
1	AS	3235	A
1	AS	3241	G
1	AS	3246	C
1	AS	3252	C
1	AS	3259	A
1	AS	3260	A
1	AS	3268	G
1	AS	3269	C
1	AS	3272	A
1	AS	3278	U
1	AS	3281	A
1	AS	3284	U
1	AS	3285	A
1	AS	3306	U
1	AS	3307	A
1	AS	3309	A
1	AS	3310	G
1	AS	3316	U
1	AS	3317	U
1	AS	3318	G
1	AS	3319	U
1	AS	3320	U
1	AS	3321	G
1	AS	3334	G
1	AS	3343	C
1	AS	3351	G
1	AS	3361	U

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Mol	Chain	Res	Type
2	AT	7	G
2	AT	22	A
2	AT	54	U
2	AT	55	A
2	AT	65	G
2	AT	73	C
2	AT	76	A
2	AT	102	A
2	AT	112	G
3	AU	23	U
3	AU	34	U
3	AU	35	C
3	AU	59	A
3	AU	62	C
3	AU	63	G
3	AU	81	A
3	AU	84	C
3	AU	85	G
3	AU	86	U
3	AU	87	G
3	AU	92	A
3	AU	95	G
3	AU	102	U
3	AU	104	A
3	AU	106	C
3	AU	111	A
3	AU	113	U
3	AU	125	U
3	AU	126	A
3	AU	152	G
45	CM	2	A
45	CM	17	C
45	CM	25	C
45	CM	26	A
45	CM	27	U
45	CM	34	G
45	CM	47	A
45	CM	57	G
45	CM	66	U
45	CM	74	U
45	CM	75	U
45	CM	76	A

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Mol	Chain	Res	Type
45	CM	78	A
45	CM	79	C
45	CM	81	G
45	CM	84	A
45	CM	104	A
45	CM	114	C
45	CM	115	G
45	CM	123	G
45	CM	126	A
45	CM	127	G
45	CM	128	U
45	CM	130	C
45	CM	131	C
45	CM	132	U
45	CM	133	U
45	CM	134	A
45	CM	135	C
45	CM	138	C
45	CM	139	U
45	CM	141	G
45	CM	142	G
45	CM	143	A
45	CM	150	U
45	CM	151	G
45	CM	152	G
45	CM	154	A
45	CM	159	U
45	CM	166	A
45	CM	168	U
45	CM	173	G
45	CM	176	U
45	CM	177	A
45	CM	190	U
45	CM	193	G
45	CM	199	G
45	CM	200	A
45	CM	202	G
45	CM	206	U
45	CM	211	A
45	CM	213	A
45	CM	214	U
45	CM	215	A

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Mol	Chain	Res	Type
45	CM	216	A
45	CM	217	A
45	CM	218	A
45	CM	219	A
45	CM	220	A
45	CM	221	U
45	CM	222	C
45	CM	226	G
45	CM	229	U
45	CM	230	U
45	CM	231	C
45	CM	232	G
45	CM	236	U
45	CM	237	C
45	CM	238	U
45	CM	239	U
45	CM	240	U
45	CM	247	U
45	CM	255	A
45	CM	259	U
45	CM	260	U
45	CM	261	C
45	CM	262	G
45	CM	266	C
45	CM	269	A
45	CM	270	U
45	CM	273	C
45	CM	274	C
45	CM	276	U
45	CM	277	G
45	CM	278	U
45	CM	279	G
45	CM	283	G
45	CM	285	G
45	CM	297	A
45	CM	312	C
45	CM	314	A
45	CM	318	U
45	CM	319	C
45	CM	320	G
45	CM	335	G
45	CM	336	C

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Mol	Chain	Res	Type
45	CM	350	A
45	CM	357	A
45	CM	358	A
45	CM	359	C
45	CM	388	G
45	CM	398	A
45	CM	400	C
45	CM	402	G
45	CM	414	A
45	CM	416	G
45	CM	421	G
45	CM	422	C
45	CM	423	A
45	CM	424	G
45	CM	432	G
45	CM	437	U
45	CM	442	C
45	CM	446	C
45	CM	452	A
45	CM	458	A
45	CM	462	A
45	CM	466	A
45	CM	475	A
45	CM	481	A
45	CM	490	U
45	CM	491	U
45	CM	495	G
45	CM	498	C
45	CM	499	U
45	CM	503	A
45	CM	504	A
45	CM	505	U
45	CM	506	U
45	CM	509	A
45	CM	512	G
45	CM	513	A
45	CM	515	U
45	CM	518	A
45	CM	519	A
45	CM	525	A
45	CM	530	U
45	CM	534	C

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Mol	Chain	Res	Type
45	CM	536	A
45	CM	537	G
45	CM	539	A
45	CM	540	A
45	CM	547	G
45	CM	553	A
45	CM	554	A
45	CM	556	U
45	CM	557	C
45	CM	563	C
45	CM	566	G
45	CM	575	G
45	CM	576	U
45	CM	592	A
45	CM	593	G
45	CM	604	A
45	CM	609	U
45	CM	617	A
45	CM	618	A
45	CM	620	A
45	CM	621	A
45	CM	639	G
45	CM	648	U
45	CM	649	G
45	CM	650	G
45	CM	652	C
45	CM	653	G
45	CM	654	G
45	CM	655	U
45	CM	657	C
45	CM	668	U
45	CM	670	C
45	CM	671	G
45	CM	672	U
45	CM	673	A
45	CM	674	C
45	CM	675	U
45	CM	676	G
45	CM	678	A
45	CM	679	C
45	CM	680	C
45	CM	681	C

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Mol	Chain	Res	Type
45	CM	682	A
45	CM	688	G
45	CM	691	U
45	CM	694	C
45	CM	695	C
45	CM	696	U
45	CM	700	G
45	CM	701	G
45	CM	702	G
45	CM	703	U
45	CM	704	A
45	CM	705	G
45	CM	706	C
45	CM	707	C
45	CM	709	U
45	CM	711	U
45	CM	712	A
45	CM	713	U
45	CM	714	G
45	CM	715	G
45	CM	716	C
45	CM	717	G
45	CM	718	A
45	CM	719	A
45	CM	720	C
45	CM	722	A
45	CM	723	G
45	CM	724	G
45	CM	729	U
45	CM	739	A
45	CM	740	A
45	CM	741	A
45	CM	750	G
45	CM	751	U
45	CM	756	A
45	CM	759	A
45	CM	760	G
45	CM	762	C
45	CM	764	U
45	CM	765	U
45	CM	766	U
45	CM	767	G

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Mol	Chain	Res	Type
45	CM	768	C
45	CM	770	C
45	CM	771	G
45	CM	773	A
45	CM	775	A
45	CM	778	U
45	CM	779	U
45	CM	796	A
45	CM	798	A
45	CM	799	G
45	CM	802	C
45	CM	803	G
45	CM	804	U
45	CM	805	U
45	CM	807	U
45	CM	808	G
45	CM	814	A
45	CM	815	U
45	CM	816	U
45	CM	818	U
45	CM	819	G
45	CM	820	U
45	CM	821	U
45	CM	822	G
45	CM	823	G
45	CM	824	U
45	CM	825	U
45	CM	826	U
45	CM	827	C
45	CM	828	U
45	CM	829	A
45	CM	840	A
45	CM	842	U
45	CM	848	A
45	CM	856	G
45	CM	857	G
45	CM	869	A
45	CM	871	U
45	CM	875	C
45	CM	877	G
45	CM	878	U
45	CM	879	U

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Mol	Chain	Res	Type
45	CM	881	U
45	CM	891	A
45	CM	909	A
45	CM	910	G
45	CM	911	A
45	CM	918	A
45	CM	920	U
45	CM	927	G
45	CM	945	U
45	CM	949	U
45	CM	951	A
45	CM	973	A
45	CM	975	C
45	CM	977	A
45	CM	988	A
45	CM	989	U
45	CM	990	A
45	CM	997	U
45	CM	998	A
45	CM	1004	A
45	CM	1005	A
45	CM	1011	A
45	CM	1013	C
45	CM	1017	G
45	CM	1024	A
45	CM	1025	G
45	CM	1039	U
45	CM	1042	U
45	CM	1043	U
45	CM	1044	U
45	CM	1047	U
45	CM	1055	A
45	CM	1056	U
45	CM	1057	C
45	CM	1058	G
45	CM	1059	G
45	CM	1060	C
45	CM	1061	A
45	CM	1067	C
45	CM	1074	U
45	CM	1077	A
45	CM	1081	C

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Mol	Chain	Res	Type
45	CM	1085	G
45	CM	1123	A
45	CM	1135	G
45	CM	1143	C
45	CM	1145	A
45	CM	1152	G
45	CM	1168	A
45	CM	1169	A
45	CM	1170	U
45	CM	1179	A
45	CM	1181	A
45	CM	1184	G
45	CM	1185	G
45	CM	1186	G
45	CM	1187	A
45	CM	1193	A
45	CM	1202	A
45	CM	1203	G
45	CM	1206	A
45	CM	1207	C
45	CM	1212	A
45	CM	1215	A
45	CM	1219	A
45	CM	1220	C
45	CM	1221	A
45	CM	1229	A
45	CM	1230	G
45	CM	1231	C
45	CM	1236	U
45	CM	1243	U
45	CM	1250	G
45	CM	1270	U
45	CM	1284	G
45	CM	1299	U
45	CM	1300	U
45	CM	1301	G
45	CM	1306	A
45	CM	1325	U
45	CM	1330	A
45	CM	1336	G
45	CM	1339	G
45	CM	1342	A

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Mol	Chain	Res	Type
45	CM	1343	G
45	CM	1345	A
45	CM	1346	U
45	CM	1348	U
45	CM	1349	G
45	CM	1352	G
45	CM	1355	A
45	CM	1356	U
45	CM	1357	A
45	CM	1358	G
45	CM	1359	U
45	CM	1360	C
45	CM	1364	U
45	CM	1365	C
45	CM	1369	G
45	CM	1370	A
45	CM	1376	U
45	CM	1380	G
45	CM	1381	A
45	CM	1382	U
45	CM	1384	U
45	CM	1385	C
45	CM	1392	A
45	CM	1397	A
45	CM	1398	G
45	CM	1399	U
45	CM	1400	U
45	CM	1401	U
45	CM	1410	A
45	CM	1413	A
45	CM	1414	G
45	CM	1415	G
45	CM	1422	A
45	CM	1431	G
45	CM	1433	C
45	CM	1445	C
45	CM	1446	A
45	CM	1455	A
45	CM	1457	A
45	CM	1458	C
45	CM	1461	A
45	CM	1462	C

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Mol	Chain	Res	Type
45	CM	1463	G
45	CM	1468	C
45	CM	1476	A
45	CM	1477	U
45	CM	1480	G
45	CM	1483	U
45	CM	1491	G
45	CM	1502	A
45	CM	1503	A
45	CM	1508	G
45	CM	1510	G
45	CM	1511	A
45	CM	1523	G
45	CM	1524	C
45	CM	1529	G
45	CM	1530	A
45	CM	1541	U
45	CM	1544	U
45	CM	1546	G
45	CM	1556	A
45	CM	1560	A
45	CM	1561	G
45	CM	1571	G
45	CM	1574	A
45	CM	1575	G
45	CM	1577	G
45	CM	1580	A
45	CM	1582	U
45	CM	1584	A
45	CM	1588	G
45	CM	1621	C
45	CM	1644	U
45	CM	1645	G
45	CM	1665	C
45	CM	1667	G
45	CM	1670	U
45	CM	1671	G
45	CM	1673	U
45	CM	1675	U
45	CM	1677	G
45	CM	1678	G
45	CM	1680	A

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Mol	Chain	Res	Type
45	CM	1685	G
45	CM	1686	G
45	CM	1687	C
45	CM	1688	A
45	CM	1689	A
45	CM	1691	C
45	CM	1692	U
45	CM	1693	C
45	CM	1697	C
45	CM	1699	G
45	CM	1700	G
45	CM	1702	A
45	CM	1737	A
45	CM	1741	A
45	CM	1742	A
45	CM	1743	A
45	CM	1744	G
45	CM	1747	G
45	CM	1749	A
45	CM	1753	A
45	CM	1756	U
45	CM	1767	G
45	CM	1769	A
45	CM	1770	C
45	CM	1779	G
45	CM	1780	G
45	CM	1781	A
45	CM	1782	U
45	CM	1783	C

All (180) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	172	C
1	1	403	C
1	1	538	G
1	1	563	U
1	1	601	U
1	1	759	G
1	1	912	G
1	1	1012	U
1	1	1029	U

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Mol	Chain	Res	Type
1	1	1060	A
1	1	1099	A
1	1	1559	C
1	1	1561	U
1	1	1762	G
1	1	1815	U
1	1	2090	U
1	1	2182	C
1	1	2183	U
1	1	2184	G
1	1	2432	G
1	1	2441	G
1	1	2442	U
1	1	2455	G
1	1	2465	U
1	1	2515	G
1	1	2519	A
1	1	2545	C
1	1	2663	A
1	1	2789	A
1	1	2790	U
1	1	3093	U
1	1	3164	U
1	1	3165	U
1	1	3193	C
1	1	3234	U
1	1	3240	U
1	1	3284	U
1	1	3309	A
1	1	3317	U
3	4	85	G
3	4	125	U
45	B	25	C
45	B	78	A
45	B	137	A
45	B	151	G
45	B	176	U
45	B	235	C
45	B	259	U
45	B	265	U
45	B	278	U
45	B	415	A

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Mol	Chain	Res	Type
45	B	450	A
45	B	451	C
45	B	452	A
45	B	505	U
45	B	514	G
45	B	518	A
45	B	529	C
45	B	533	A
45	B	553	A
45	B	638	U
45	B	695	C
45	B	740	A
45	B	763	C
45	B	769	U
45	B	814	A
45	B	855	C
45	B	874	U
45	B	876	A
45	B	1168	A
45	B	1335	U
45	B	1369	G
45	B	1396	A
45	B	1398	G
45	B	1457	A
45	B	1467	C
45	B	1479	A
45	B	1484	U
45	B	1523	G
45	B	1573	A
45	B	1579	A
45	B	1581	G
45	B	1704	C
1	AS	172	C
1	AS	403	C
1	AS	447	U
1	AS	487	C
1	AS	538	G
1	AS	563	U
1	AS	601	U
1	AS	759	G
1	AS	912	G
1	AS	1029	U

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Mol	Chain	Res	Type
1	AS	1060	A
1	AS	1099	A
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C
1	AS	1576	A
1	AS	1762	G
1	AS	1815	U
1	AS	1943	G
1	AS	2090	U
1	AS	2182	C
1	AS	2183	U
1	AS	2234	A
1	AS	2515	G
1	AS	2519	A
1	AS	2545	C
1	AS	2789	A
1	AS	2790	U
1	AS	3093	U
1	AS	3159	A
1	AS	3160	C
1	AS	3193	C
1	AS	3234	U
1	AS	3240	U
1	AS	3284	U
1	AS	3309	A
1	AS	3315	C
1	AS	3317	U
3	AU	85	G
3	AU	125	U
45	CM	1	U
45	CM	25	C
45	CM	65	A
45	CM	78	A
45	CM	133	U
45	CM	137	A
45	CM	151	G
45	CM	176	U
45	CM	214	U
45	CM	216	A
45	CM	237	C
45	CM	238	U

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Mol	Chain	Res	Type
45	CM	239	U
45	CM	259	U
45	CM	265	U
45	CM	278	U
45	CM	415	A
45	CM	451	C
45	CM	505	U
45	CM	514	G
45	CM	518	A
45	CM	529	C
45	CM	533	A
45	CM	553	A
45	CM	555	G
45	CM	556	U
45	CM	638	U
45	CM	678	A
45	CM	681	C
45	CM	690	C
45	CM	695	C
45	CM	702	G
45	CM	711	U
45	CM	740	A
45	CM	763	C
45	CM	769	U
45	CM	814	A
45	CM	817	U
45	CM	823	G
45	CM	855	C
45	CM	874	U
45	CM	876	A
45	CM	1168	A
45	CM	1335	U
45	CM	1359	U
45	CM	1369	G
45	CM	1396	A
45	CM	1398	G
45	CM	1457	A
45	CM	1467	C
45	CM	1479	A
45	CM	1523	G
45	CM	1555	C
45	CM	1573	A

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Mol	Chain	Res	Type
45	CM	1579	A
45	CM	1581	G
45	CM	1741	A

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1074 ligands modelled in this entry, 1018 are monoatomic - leaving 56 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	$\#\|Z\| > 2$
81	PAR	1	3418	-	45,45,45	0.71	1 (2%)	64,67,67	1.08	6 (9%)
81	PAR	CM	1804	-	45,45,45	0.45	0	64,67,67	0.90	2 (3%)
81	PAR	1	3406	-	45,45,45	0.63	1 (2%)	64,67,67	1.14	5 (7%)
81	PAR	AS	3413	-	45,45,45	0.64	1 (2%)	64,67,67	1.09	5 (7%)
81	PAR	1	3425	-	45,45,45	0.46	0	64,67,67	0.91	3 (4%)
81	PAR	AS	3410	-	45,45,45	0.53	0	64,67,67	0.95	4 (6%)
81	PAR	AS	3412	-	45,45,45	0.47	0	64,67,67	0.99	4 (6%)
81	PAR	1	3408	-	45,45,45	0.46	0	64,67,67	0.79	3 (4%)
81	PAR	B	1805	-	45,45,45	0.45	0	64,67,67	0.96	4 (6%)
81	PAR	AS	3409	-	45,45,45	0.47	0	64,67,67	0.74	2 (3%)
81	PAR	1	3422	-	45,45,45	0.66	1 (2%)	64,67,67	1.72	10 (15%)
81	PAR	1	3429	-	45,45,45	0.52	0	64,67,67	0.94	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
81	PAR	CM	1805	-	45,45,45	0.75	1 (2%)	64,67,67	1.11	3 (4%)
81	PAR	AS	3406	-	45,45,45	0.50	0	64,67,67	1.00	5 (7%)
81	PAR	1	3423	-	45,45,45	0.46	0	64,67,67	1.07	4 (6%)
81	PAR	AS	3401	-	45,45,45	0.48	0	64,67,67	1.31	5 (7%)
81	PAR	AS	3404	-	45,45,45	0.53	0	64,67,67	0.70	2 (3%)
81	PAR	1	3402	-	45,45,45	0.48	0	64,67,67	0.67	2 (3%)
81	PAR	B	1804	-	45,45,45	0.49	0	64,67,67	0.99	4 (6%)
81	PAR	AS	3407	-	45,45,45	0.53	0	64,67,67	1.05	4 (6%)
81	PAR	CM	1802	-	45,45,45	0.46	0	64,67,67	0.80	2 (3%)
81	PAR	1	3403	-	45,45,45	0.49	0	64,67,67	0.91	2 (3%)
81	PAR	AS	3403	-	45,45,45	0.51	0	64,67,67	0.61	1 (1%)
80	3K5	1	3401	-	62,63,63	2.87	28 (45%)	82,95,95	1.72	21 (25%)
81	PAR	1	3405	-	45,45,45	0.80	1 (2%)	64,67,67	1.11	5 (7%)
81	PAR	AS	3405	-	45,45,45	0.47	0	64,67,67	0.70	1 (1%)
81	PAR	CM	1801	-	45,45,45	0.61	1 (2%)	64,67,67	1.05	4 (6%)
81	PAR	1	3416	-	45,45,45	0.43	0	64,67,67	0.94	2 (3%)
81	PAR	1	3410	-	45,45,45	0.56	0	64,67,67	0.82	2 (3%)
81	PAR	4	202	-	45,45,45	0.51	0	64,67,67	1.26	3 (4%)
81	PAR	1	3409	-	45,45,45	0.47	0	64,67,67	0.94	3 (4%)
81	PAR	1	3427	-	45,45,45	0.60	0	64,67,67	0.93	3 (4%)
81	PAR	B	1802	-	45,45,45	0.46	0	64,67,67	1.21	6 (9%)
81	PAR	1	3421	-	45,45,45	0.45	0	64,67,67	0.76	2 (3%)
81	PAR	AS	3408	-	45,45,45	0.57	0	64,67,67	0.90	4 (6%)
81	PAR	1	3417	82	45,45,45	0.60	1 (2%)	64,67,67	1.23	6 (9%)
81	PAR	1	3404	-	45,45,45	0.50	0	64,67,67	0.87	3 (4%)
81	PAR	1	3415	-	45,45,45	0.49	0	64,67,67	0.83	3 (4%)
81	PAR	1	3424	-	45,45,45	0.58	1 (2%)	64,67,67	1.02	4 (6%)
81	PAR	B	1803	-	45,45,45	0.49	0	64,67,67	1.09	4 (6%)
81	PAR	1	3411	-	45,45,45	0.47	0	64,67,67	1.05	6 (9%)
81	PAR	CM	1803	-	45,45,45	0.44	0	64,67,67	0.71	2 (3%)
81	PAR	CM	1806	-	45,45,45	0.66	1 (2%)	64,67,67	0.84	1 (1%)
81	PAR	1	3430	-	45,45,45	0.61	1 (2%)	64,67,67	1.47	10 (15%)
81	PAR	AS	3411	-	45,45,45	0.45	0	64,67,67	1.12	4 (6%)
81	PAR	1	3420	-	45,45,45	0.46	0	64,67,67	0.77	2 (3%)
81	PAR	1	3428	-	45,45,45	0.50	0	64,67,67	0.85	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
81	PAR	1	3412	-	45,45,45	0.47	0	64,67,67	0.70	1 (1%)
81	PAR	1	3426	-	45,45,45	0.55	0	64,67,67	1.03	4 (6%)
81	PAR	1	3407	-	45,45,45	0.49	0	64,67,67	0.88	2 (3%)
81	PAR	1	3414	-	45,45,45	0.50	0	64,67,67	0.91	4 (6%)
81	PAR	4	201	-	45,45,45	0.74	2 (4%)	64,67,67	0.99	5 (7%)
81	PAR	AS	3402	-	45,45,45	0.45	0	64,67,67	0.81	2 (3%)
81	PAR	B	1801	-	45,45,45	0.47	0	64,67,67	0.85	5 (7%)
81	PAR	1	3413	-	45,45,45	0.67	1 (2%)	64,67,67	1.48	8 (12%)
81	PAR	1	3419	-	45,45,45	0.45	0	64,67,67	0.66	2 (3%)

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
81	PAR	1	3418	-	-	7/18/94/94	0/4/4/4
81	PAR	CM	1804	-	-	9/18/94/94	0/4/4/4
81	PAR	1	3406	-	-	8/18/94/94	0/4/4/4
81	PAR	AS	3413	-	-	9/18/94/94	0/4/4/4
81	PAR	1	3425	-	-	10/18/94/94	0/4/4/4
81	PAR	AS	3410	-	-	7/18/94/94	0/4/4/4
81	PAR	AS	3412	-	-	6/18/94/94	0/4/4/4
81	PAR	1	3408	-	-	4/18/94/94	0/4/4/4
81	PAR	B	1805	-	-	11/18/94/94	0/4/4/4
81	PAR	AS	3409	-	-	9/18/94/94	0/4/4/4
81	PAR	1	3422	-	-	5/18/94/94	0/4/4/4
81	PAR	1	3429	-	-	4/18/94/94	0/4/4/4
81	PAR	CM	1805	-	-	7/18/94/94	0/4/4/4
81	PAR	AS	3406	-	-	9/18/94/94	0/4/4/4
81	PAR	1	3423	-	-	3/18/94/94	0/4/4/4
81	PAR	AS	3401	-	-	1/18/94/94	0/4/4/4
81	PAR	AS	3404	-	-	7/18/94/94	0/4/4/4
81	PAR	1	3402	-	-	3/18/94/94	0/4/4/4
81	PAR	B	1804	-	-	7/18/94/94	0/4/4/4
81	PAR	AS	3407	-	-	5/18/94/94	1/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
81	PAR	CM	1802	-	-	6/18/94/94	0/4/4/4
81	PAR	1	3403	-	-	10/18/94/94	1/4/4/4
81	PAR	AS	3403	-	-	3/18/94/94	0/4/4/4
80	3K5	1	3401	-	-	9/29/121/121	0/7/7/7
81	PAR	1	3405	-	-	9/18/94/94	0/4/4/4
81	PAR	AS	3405	-	-	1/18/94/94	1/4/4/4
81	PAR	CM	1801	-	-	5/18/94/94	0/4/4/4
81	PAR	1	3416	-	-	3/18/94/94	0/4/4/4
81	PAR	1	3410	-	-	9/18/94/94	1/4/4/4
81	PAR	4	202	-	-	5/18/94/94	0/4/4/4
81	PAR	1	3409	-	-	7/18/94/94	0/4/4/4
81	PAR	1	3427	-	-	6/18/94/94	0/4/4/4
81	PAR	B	1802	-	-	5/18/94/94	0/4/4/4
81	PAR	1	3421	-	-	4/18/94/94	0/4/4/4
81	PAR	AS	3408	-	-	8/18/94/94	0/4/4/4
81	PAR	1	3417	82	-	11/18/94/94	0/4/4/4
81	PAR	1	3404	-	-	8/18/94/94	1/4/4/4
81	PAR	1	3415	-	-	3/18/94/94	0/4/4/4
81	PAR	1	3424	-	-	9/18/94/94	0/4/4/4
81	PAR	B	1803	-	-	7/18/94/94	0/4/4/4
81	PAR	1	3411	-	-	10/18/94/94	0/4/4/4
81	PAR	CM	1803	-	-	2/18/94/94	0/4/4/4
81	PAR	CM	1806	-	-	6/18/94/94	0/4/4/4
81	PAR	1	3430	-	-	9/18/94/94	0/4/4/4
81	PAR	AS	3411	-	-	9/18/94/94	1/4/4/4
81	PAR	1	3420	-	-	6/18/94/94	0/4/4/4
81	PAR	1	3428	-	-	8/18/94/94	0/4/4/4
81	PAR	1	3412	-	-	6/18/94/94	0/4/4/4
81	PAR	1	3426	-	-	2/18/94/94	0/4/4/4
81	PAR	1	3407	-	-	7/18/94/94	0/4/4/4
81	PAR	1	3414	-	-	8/18/94/94	0/4/4/4
81	PAR	4	201	-	-	5/18/94/94	0/4/4/4
81	PAR	AS	3402	-	-	8/18/94/94	0/4/4/4
81	PAR	B	1801	-	-	3/18/94/94	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
81	PAR	1	3413	-	-	8/18/94/94	0/4/4/4
81	PAR	1	3419	-	-	6/18/94/94	0/4/4/4

All (42) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
80	1	3401	3K5	C17-C22	-9.21	1.36	1.53
80	1	3401	3K5	O4-C22	7.32	1.59	1.43
80	1	3401	3K5	C21-C22	5.86	1.63	1.52
80	1	3401	3K5	O6-C23	4.96	1.45	1.34
80	1	3401	3K5	C20-C23	4.61	1.62	1.51
80	1	3401	3K5	O12-C36	4.61	1.55	1.44
80	1	3401	3K5	O1-C6	4.50	1.43	1.34
80	1	3401	3K5	O-C2	4.30	1.49	1.43
81	1	3405	PAR	C64-C54	-4.30	1.46	1.52
80	1	3401	3K5	C37-C36	-4.22	1.41	1.51
80	1	3401	3K5	O7-C28	4.04	1.54	1.44
80	1	3401	3K5	C29-C28	-3.91	1.42	1.51
81	CM	1805	PAR	C64-C54	-3.81	1.46	1.52
80	1	3401	3K5	O4-C3	-3.72	1.33	1.42
80	1	3401	3K5	C18-C17	3.68	1.59	1.53
80	1	3401	3K5	C7-C6	3.52	1.56	1.48
80	1	3401	3K5	O9-C30	3.34	1.42	1.35
81	1	3418	PAR	C64-C54	-3.31	1.47	1.52
80	1	3401	3K5	O9-C26	3.27	1.49	1.44
80	1	3401	3K5	C26-C25	-3.16	1.45	1.52
80	1	3401	3K5	C21-C20	-3.07	1.46	1.53
80	1	3401	3K5	O14-C38	3.05	1.42	1.35
81	4	201	PAR	C64-C54	-2.77	1.48	1.52
80	1	3401	3K5	C9-C8	2.72	1.55	1.47
81	1	3413	PAR	C64-C54	-2.65	1.48	1.52
80	1	3401	3K5	O-C3	2.55	1.45	1.42
81	CM	1806	PAR	C11-C21	-2.51	1.47	1.52
81	1	3406	PAR	C14-C24	2.47	1.57	1.52
80	1	3401	3K5	C1-C5	-2.36	1.47	1.52
80	1	3401	3K5	C2-C1	2.36	1.55	1.51
80	1	3401	3K5	C4-C3	2.33	1.56	1.52
80	1	3401	3K5	O14-C34	2.31	1.48	1.44
81	1	3430	PAR	C11-C21	-2.31	1.47	1.52
81	1	3417	PAR	C14-C24	-2.29	1.47	1.52
81	1	3424	PAR	C64-C54	-2.22	1.49	1.52
80	1	3401	3K5	C-C1	2.21	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	1	3422	PAR	C14-C24	2.15	1.56	1.52
81	4	201	PAR	C14-C24	-2.14	1.48	1.52
81	CM	1801	PAR	C64-C54	-2.14	1.49	1.52
80	1	3401	3K5	O12-C32	2.10	1.47	1.41
80	1	3401	3K5	O16-C33	2.06	1.47	1.43
81	AS	3413	PAR	C64-C54	-2.02	1.49	1.52

All (220) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	1	3422	PAR	O33-C14-C24	8.21	122.36	108.22
81	4	202	PAR	O11-C11-C21	7.46	121.07	108.22
81	CM	1805	PAR	O11-C11-C21	5.89	118.36	108.22
81	AS	3401	PAR	C32-C22-C12	5.59	122.67	111.18
81	1	3422	PAR	O11-C42-C52	5.56	121.61	107.48
81	1	3430	PAR	O52-C52-C42	5.50	121.46	107.48
81	1	3416	PAR	O11-C11-C21	5.36	117.44	108.22
81	1	3417	PAR	O33-C14-C24	-5.28	99.12	108.22
81	1	3425	PAR	O11-C11-C21	5.02	116.86	108.22
81	AS	3401	PAR	O11-C11-C21	4.89	116.64	108.22
81	AS	3413	PAR	C52-C42-C32	4.83	120.18	111.16
80	1	3401	3K5	O9-C30-C31	4.82	119.95	111.09
80	1	3401	3K5	O14-C38-C39	4.80	119.91	111.09
81	1	3405	PAR	O11-C11-C21	4.78	116.46	108.22
81	1	3406	PAR	O33-C14-C24	4.77	116.44	108.22
81	AS	3411	PAR	O54-C54-C64	4.74	114.83	106.01
81	AS	3406	PAR	O11-C11-C21	4.70	116.32	108.22
81	AS	3412	PAR	O54-C54-C64	4.69	114.74	106.01
81	1	3413	PAR	C13-C23-C33	-4.67	96.49	102.10
81	B	1805	PAR	O11-C11-C21	4.61	116.16	108.22
81	1	3417	PAR	O11-C11-C21	4.54	116.04	108.22
81	1	3429	PAR	O54-C54-C64	4.53	114.44	106.01
81	1	3430	PAR	O52-C52-C62	4.49	119.22	107.28
81	B	1802	PAR	O11-C11-C21	4.43	115.85	108.22
81	1	3409	PAR	O11-C11-C21	4.38	115.76	108.22
81	1	3413	PAR	C64-C54-C44	-4.37	104.50	113.10
81	AS	3409	PAR	O11-C11-C21	4.35	115.71	108.22
81	B	1802	PAR	O33-C33-C23	4.31	125.17	111.32
81	AS	3401	PAR	C52-C42-C32	4.31	119.20	111.16
81	B	1803	PAR	O11-C11-C21	4.29	115.60	108.22
81	1	3422	PAR	O51-C11-C21	4.28	119.69	110.06
81	4	202	PAR	O54-C54-C64	4.28	113.97	106.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	1	3428	PAR	O11-C11-C21	4.25	115.54	108.22
81	CM	1804	PAR	O51-C11-C21	4.23	119.58	110.06
81	CM	1801	PAR	O54-C14-C24	4.17	119.44	110.06
81	1	3421	PAR	O11-C11-C21	4.09	115.27	108.22
81	AS	3402	PAR	O11-C11-C21	4.06	115.21	108.22
81	CM	1802	PAR	O11-C11-C21	4.05	115.20	108.22
81	1	3413	PAR	C32-C22-C12	4.05	119.49	111.18
81	1	3413	PAR	O11-C42-C32	-4.04	99.53	109.18
81	1	3423	PAR	O11-C11-C21	4.03	115.15	108.22
81	1	3426	PAR	C32-C22-C12	4.00	119.40	111.18
81	1	3423	PAR	C13-C23-C33	-4.00	97.30	102.10
81	1	3403	PAR	O11-C11-C21	3.99	115.08	108.22
81	1	3427	PAR	O11-C11-C21	3.87	114.88	108.22
81	1	3404	PAR	O11-C11-C21	3.86	114.86	108.22
81	1	3406	PAR	O11-C11-C21	3.85	114.85	108.22
81	B	1802	PAR	O52-C52-C62	3.83	117.46	107.28
81	AS	3407	PAR	O54-C54-C64	3.80	113.09	106.01
81	1	3424	PAR	O11-C11-C21	3.67	114.54	108.22
81	1	3415	PAR	O11-C11-C21	3.66	114.51	108.22
81	1	3405	PAR	C64-C54-C44	-3.63	105.96	113.10
81	CM	1801	PAR	O51-C11-C21	3.61	118.19	110.06
81	1	3412	PAR	O11-C11-C21	3.61	114.43	108.22
81	CM	1805	PAR	C64-C54-C44	-3.57	106.07	113.10
80	1	3401	3K5	C32-O11-C25	-3.54	109.20	117.96
81	1	3430	PAR	O33-C14-C24	3.53	114.30	108.22
81	1	3411	PAR	O51-C11-C21	3.52	117.98	110.06
81	AS	3413	PAR	O11-C11-C21	3.52	114.27	108.22
81	1	3430	PAR	C13-O52-C52	3.51	126.65	117.96
81	AS	3410	PAR	O11-C11-C21	3.50	114.25	108.22
81	1	3413	PAR	O11-C11-C21	3.49	114.22	108.22
81	AS	3411	PAR	C13-C23-C33	-3.48	97.92	102.10
81	B	1803	PAR	O52-C52-C42	3.45	116.24	107.48
81	B	1804	PAR	O11-C42-C52	-3.44	98.74	107.48
80	1	3401	3K5	C9-C8-C7	-3.41	119.11	126.91
81	AS	3401	PAR	O54-C54-C64	3.38	112.30	106.01
81	1	3413	PAR	C62-C52-C42	3.36	119.34	111.66
80	1	3401	3K5	O6-C23-C20	3.36	119.27	111.83
81	CM	1806	PAR	O11-C11-C21	3.34	113.97	108.22
81	AS	3407	PAR	C13-C23-C33	-3.33	98.10	102.10
81	4	201	PAR	O11-C42-C32	-3.32	101.25	109.18
81	1	3418	PAR	C52-C42-C32	-3.29	105.01	111.16
81	1	3403	PAR	O33-C14-C24	3.22	113.77	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	1	3417	PAR	O51-C11-C21	3.22	117.30	110.06
81	1	3419	PAR	O11-C11-C21	3.21	113.75	108.22
81	AS	3413	PAR	C64-C54-C44	-3.17	106.87	113.10
81	AS	3405	PAR	O11-C11-C21	3.17	113.67	108.22
81	1	3414	PAR	C32-C22-C12	-3.14	104.74	111.18
81	1	3406	PAR	O54-C54-C64	3.12	111.81	106.01
81	1	3411	PAR	O54-C54-C64	3.11	111.79	106.01
81	1	3408	PAR	C64-C54-C44	-3.10	107.01	113.10
81	1	3422	PAR	O33-C14-O54	-3.09	102.03	110.67
81	1	3408	PAR	O11-C11-C21	3.09	113.54	108.22
81	1	3406	PAR	C64-C54-C44	-3.08	107.04	113.10
81	CM	1803	PAR	O11-C11-C21	3.08	113.52	108.22
81	AS	3408	PAR	O11-C42-C32	-3.07	101.85	109.18
81	B	1805	PAR	O54-C54-C64	3.06	111.70	106.01
80	1	3401	3K5	O1-C6-C7	3.04	118.27	111.38
81	1	3424	PAR	C32-C22-C12	-3.03	104.97	111.18
81	1	3429	PAR	O11-C11-C21	3.02	113.43	108.22
81	1	3426	PAR	O11-C11-C21	3.02	113.41	108.22
80	1	3401	3K5	C-C1-C5	-3.00	108.69	112.65
81	B	1803	PAR	O11-C42-C52	2.99	115.08	107.48
80	1	3401	3K5	O-C3-C4	2.98	113.85	110.76
81	1	3420	PAR	O51-C11-C21	2.92	116.64	110.06
81	1	3424	PAR	O54-C54-C64	2.92	111.44	106.01
81	B	1801	PAR	O11-C11-C21	2.89	113.19	108.22
80	1	3401	3K5	C18-C19-C20	2.86	115.97	111.18
81	4	201	PAR	C52-C42-C32	2.86	116.49	111.16
81	AS	3411	PAR	O11-C42-C52	2.85	114.72	107.48
81	1	3411	PAR	O52-C52-C62	2.85	114.86	107.28
81	1	3423	PAR	C64-C54-C44	-2.85	107.50	113.10
80	1	3401	3K5	C34-O14-C38	-2.84	113.33	117.72
81	1	3422	PAR	O52-C52-C42	2.83	114.67	107.48
81	AS	3408	PAR	O51-C11-C21	2.82	116.41	110.06
81	AS	3406	PAR	O51-C11-C21	2.81	116.39	110.06
81	1	3423	PAR	O33-C14-C24	2.80	113.05	108.22
81	1	3418	PAR	O11-C11-C21	2.80	113.03	108.22
81	AS	3412	PAR	O11-C11-C21	2.77	112.98	108.22
81	1	3430	PAR	C52-C42-C32	-2.75	106.02	111.16
81	B	1802	PAR	O23-C23-C33	2.75	118.99	111.17
81	AS	3407	PAR	O33-C14-C24	2.75	112.95	108.22
81	1	3409	PAR	O52-C52-C62	2.74	114.58	107.28
81	B	1805	PAR	C52-C42-C32	2.71	116.23	111.16
81	AS	3410	PAR	C13-C23-C33	-2.71	98.84	102.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	1	3409	PAR	O54-C54-C64	2.68	110.99	106.01
81	1	3426	PAR	C64-C54-C44	-2.67	107.84	113.10
81	1	3420	PAR	O54-C54-C64	2.67	110.98	106.01
81	AS	3403	PAR	O11-C11-C21	2.65	112.78	108.22
81	AS	3402	PAR	O54-C54-C64	2.65	110.93	106.01
81	1	3422	PAR	C41-C31-C21	2.64	115.60	111.07
81	1	3418	PAR	C32-C22-C12	-2.63	105.79	111.18
81	1	3407	PAR	O11-C42-C32	-2.60	102.99	109.18
80	1	3401	3K5	C21-C20-C19	2.59	113.35	109.86
80	1	3401	3K5	C26-C27-C28	2.59	115.74	110.12
81	1	3430	PAR	C13-O43-C43	-2.58	96.57	106.13
81	1	3418	PAR	O51-C11-C21	2.57	115.84	110.06
81	B	1802	PAR	O33-C14-C24	-2.56	103.81	108.22
81	1	3405	PAR	C52-C42-C32	-2.56	106.39	111.16
81	1	3406	PAR	C13-C23-C33	-2.55	99.03	102.10
81	1	3427	PAR	C32-C22-C12	-2.53	105.98	111.18
80	1	3401	3K5	O4-C22-C21	2.52	117.78	111.36
81	1	3428	PAR	O54-C54-C64	2.51	110.68	106.01
81	CM	1801	PAR	O11-C42-C32	-2.51	103.20	109.18
81	B	1804	PAR	C52-C42-C32	-2.51	106.49	111.16
81	1	3422	PAR	C13-C23-C33	2.50	105.11	102.10
81	1	3405	PAR	C32-C22-C12	2.50	116.31	111.18
81	B	1803	PAR	O51-C11-C21	-2.49	104.45	110.06
81	1	3418	PAR	O54-C14-C24	-2.49	104.45	110.06
81	1	3430	PAR	C32-C22-C12	2.49	116.29	111.18
80	1	3401	3K5	C26-O9-C30	-2.49	113.87	117.72
81	1	3413	PAR	O51-C11-C21	2.48	115.63	110.06
81	1	3422	PAR	C14-O33-C33	2.47	124.09	117.96
81	1	3421	PAR	C64-C54-C44	-2.47	108.25	113.10
81	1	3414	PAR	O51-C11-C21	2.46	115.60	110.06
81	AS	3410	PAR	C52-C42-C32	2.46	115.75	111.16
81	1	3413	PAR	O52-C13-C23	-2.45	102.87	107.96
81	1	3402	PAR	O11-C42-C32	-2.45	103.33	109.18
81	1	3405	PAR	O54-C54-C64	2.45	110.57	106.01
81	CM	1803	PAR	O54-C54-C64	2.45	110.56	106.01
81	CM	1802	PAR	C13-C23-C33	-2.44	99.17	102.10
81	B	1804	PAR	C32-C22-C12	2.43	116.18	111.18
81	AS	3404	PAR	C64-C54-C44	-2.43	108.32	113.10
81	1	3415	PAR	C64-C54-C44	-2.42	108.33	113.10
81	1	3414	PAR	O11-C11-C21	2.42	112.39	108.22
81	AS	3413	PAR	O11-C42-C32	-2.42	103.41	109.18
81	AS	3411	PAR	O51-C11-C21	2.41	115.48	110.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	CM	1805	PAR	O51-C11-C21	-2.40	104.64	110.06
81	1	3404	PAR	C64-C54-C44	-2.40	108.38	113.10
81	1	3419	PAR	O54-C54-C64	2.40	110.47	106.01
81	1	3425	PAR	O54-C54-C64	2.40	110.47	106.01
81	1	3407	PAR	O54-C54-C64	2.39	110.46	106.01
81	1	3430	PAR	O51-C11-C21	-2.38	104.69	110.06
81	B	1801	PAR	O33-C14-C24	-2.37	104.13	108.22
81	B	1804	PAR	O11-C42-C32	2.36	114.82	109.18
81	1	3426	PAR	C13-C23-C33	-2.35	99.27	102.10
80	1	3401	3K5	C4-C3-C15	-2.35	110.33	114.34
81	CM	1801	PAR	C13-C23-C33	-2.35	99.28	102.10
81	4	201	PAR	O54-C54-C64	2.35	110.38	106.01
81	B	1801	PAR	O11-C42-C32	-2.34	103.58	109.18
81	1	3410	PAR	C64-C54-C44	-2.33	108.52	113.10
81	AS	3408	PAR	C64-C54-C44	-2.32	108.55	113.10
81	AS	3406	PAR	C32-C22-C12	-2.31	106.43	111.18
81	1	3430	PAR	C14-O33-C33	-2.31	112.26	117.96
81	1	3411	PAR	O54-C14-C24	2.30	115.22	110.06
81	1	3424	PAR	C13-C23-C33	-2.29	99.34	102.10
80	1	3401	3K5	C37-C36-C35	-2.28	108.85	113.07
81	AS	3412	PAR	C64-C54-C44	-2.28	108.61	113.10
81	AS	3410	PAR	C32-C22-C12	-2.28	106.50	111.18
81	1	3422	PAR	C52-C42-C32	-2.28	106.91	111.16
81	AS	3406	PAR	C64-C54-C44	-2.27	108.64	113.10
81	4	201	PAR	C64-C54-C44	-2.26	108.65	113.10
81	1	3418	PAR	O11-C42-C52	2.26	113.22	107.48
81	B	1801	PAR	C64-C54-C44	-2.26	108.66	113.10
80	1	3401	3K5	O6-C23-O5	-2.25	119.73	123.94
81	1	3417	PAR	O11-C42-C52	2.24	113.17	107.48
81	CM	1804	PAR	C64-C54-C44	-2.23	108.72	113.10
80	1	3401	3K5	O1-C5-C4	2.21	113.43	108.48
81	4	201	PAR	C44-C34-C24	2.21	114.87	111.07
81	1	3411	PAR	C14-O54-C54	2.20	118.01	113.69
81	AS	3413	PAR	O33-C14-C24	-2.19	104.44	108.22
81	1	3402	PAR	O11-C11-C21	2.19	111.98	108.22
81	1	3425	PAR	C64-C54-C44	-2.18	108.81	113.10
81	AS	3406	PAR	C13-C23-C33	-2.18	99.48	102.10
81	1	3414	PAR	C64-C54-C44	-2.15	108.86	113.10
80	1	3401	3K5	C29-C28-C27	-2.15	109.10	113.07
80	1	3401	3K5	C2-O-C3	2.14	115.17	113.66
81	1	3430	PAR	O52-C13-O43	2.13	113.74	111.43
81	AS	3404	PAR	O11-C11-C21	2.13	111.89	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	1	3417	PAR	C32-C22-C12	2.12	115.54	111.18
81	1	3410	PAR	C13-C23-C33	-2.12	99.55	102.10
81	AS	3408	PAR	O11-C11-C21	2.10	111.84	108.22
81	1	3427	PAR	C13-C23-C33	-2.10	99.58	102.10
81	B	1805	PAR	O52-C52-C62	2.09	112.85	107.28
81	1	3411	PAR	C13-C23-C33	-2.09	99.59	102.10
81	1	3417	PAR	O52-C52-C42	2.09	112.78	107.48
81	1	3422	PAR	C11-O11-C42	2.09	123.13	117.96
81	AS	3407	PAR	O11-C42-C32	2.07	114.13	109.18
81	1	3416	PAR	O54-C54-C64	2.07	109.86	106.01
81	1	3408	PAR	O54-C54-C64	2.07	109.85	106.01
81	4	202	PAR	O54-C14-C24	2.06	114.70	110.06
81	AS	3409	PAR	C64-C54-C44	-2.06	109.05	113.10
81	1	3404	PAR	C13-C23-C33	-2.05	99.64	102.10
81	AS	3401	PAR	C13-C23-C33	-2.03	99.66	102.10
81	B	1802	PAR	C13-O52-C52	2.03	122.99	117.96
81	B	1801	PAR	C32-C22-C12	-2.03	107.02	111.18
80	1	3401	3K5	C24-O6-C23	-2.01	113.95	116.94
81	AS	3412	PAR	O11-C42-C32	-2.01	104.39	109.18
81	1	3415	PAR	O33-C14-C24	-2.01	104.76	108.22

There are no chirality outliers.

All (362) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
80	1	3401	3K5	C4-C5-O1-C6
80	1	3401	3K5	C7-C6-O1-C5
80	1	3401	3K5	O15-C38-O14-C34
80	1	3401	3K5	C39-C38-O14-C34
81	1	3403	PAR	O51-C11-O11-C42
81	1	3403	PAR	C23-C13-O52-C52
81	1	3403	PAR	O43-C13-O52-C52
81	1	3403	PAR	C43-C33-O33-C14
81	1	3403	PAR	C24-C14-O33-C33
81	1	3403	PAR	O54-C54-C64-N64
81	1	3404	PAR	C21-C11-O11-C42
81	1	3404	PAR	C32-C42-O11-C11
81	1	3404	PAR	C44-C54-C64-N64
81	1	3404	PAR	O54-C54-C64-N64
81	1	3405	PAR	C23-C13-O52-C52
81	1	3405	PAR	O43-C13-O52-C52
81	1	3405	PAR	O54-C14-O33-C33

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Mol	Chain	Res	Type	Atoms
81	1	3405	PAR	C44-C54-C64-N64
81	1	3405	PAR	O54-C54-C64-N64
81	1	3406	PAR	C23-C13-O52-C52
81	1	3406	PAR	O43-C13-O52-C52
81	1	3406	PAR	C43-C33-O33-C14
81	1	3406	PAR	C24-C14-O33-C33
81	1	3406	PAR	O54-C54-C64-N64
81	1	3407	PAR	C44-C54-C64-N64
81	1	3407	PAR	O54-C54-C64-N64
81	1	3408	PAR	C24-C14-O33-C33
81	1	3409	PAR	C24-C14-O33-C33
81	1	3409	PAR	O54-C14-O33-C33
81	1	3410	PAR	C23-C13-O52-C52
81	1	3410	PAR	O43-C13-O52-C52
81	1	3410	PAR	C23-C33-O33-C14
81	1	3410	PAR	C44-C54-C64-N64
81	1	3410	PAR	O54-C54-C64-N64
81	1	3411	PAR	C21-C11-O11-C42
81	1	3412	PAR	C24-C14-O33-C33
81	1	3414	PAR	C33-C43-C53-O53
81	1	3414	PAR	C44-C54-C64-N64
81	1	3414	PAR	O54-C54-C64-N64
81	1	3415	PAR	C23-C13-O52-C52
81	1	3415	PAR	O43-C13-O52-C52
81	1	3416	PAR	C21-C11-O11-C42
81	1	3417	PAR	C44-C54-C64-N64
81	1	3417	PAR	O54-C54-C64-N64
81	1	3418	PAR	C43-C33-O33-C14
81	1	3418	PAR	C44-C54-C64-N64
81	1	3418	PAR	O54-C54-C64-N64
81	1	3419	PAR	C32-C42-O11-C11
81	1	3419	PAR	C23-C13-O52-C52
81	1	3419	PAR	C43-C33-O33-C14
81	1	3420	PAR	C23-C13-O52-C52
81	1	3420	PAR	O43-C13-O52-C52
81	1	3420	PAR	C24-C14-O33-C33
81	1	3421	PAR	C23-C13-O52-C52
81	1	3422	PAR	C21-C11-O11-C42
81	1	3422	PAR	C24-C14-O33-C33
81	1	3423	PAR	C23-C13-O52-C52
81	1	3423	PAR	O43-C13-O52-C52
81	1	3424	PAR	C23-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
81	1	3424	PAR	O43-C13-O52-C52
81	1	3424	PAR	C43-C33-O33-C14
81	1	3425	PAR	C23-C13-O52-C52
81	1	3425	PAR	O43-C13-O52-C52
81	1	3425	PAR	C43-C33-O33-C14
81	1	3425	PAR	C24-C14-O33-C33
81	1	3425	PAR	C44-C54-C64-N64
81	1	3425	PAR	O54-C54-C64-N64
81	1	3427	PAR	C23-C13-O52-C52
81	1	3428	PAR	C23-C13-O52-C52
81	1	3428	PAR	O43-C13-O52-C52
81	1	3429	PAR	C23-C13-O52-C52
81	1	3429	PAR	O43-C13-O52-C52
81	1	3430	PAR	C23-C13-O52-C52
81	1	3430	PAR	O43-C13-O52-C52
81	4	201	PAR	O54-C54-C64-N64
81	B	1802	PAR	C23-C33-O33-C14
81	B	1803	PAR	C21-C11-O11-C42
81	B	1803	PAR	C44-C54-C64-N64
81	B	1803	PAR	O54-C54-C64-N64
81	B	1804	PAR	C23-C13-O52-C52
81	B	1805	PAR	C21-C11-O11-C42
81	B	1805	PAR	C23-C13-O52-C52
81	B	1805	PAR	O43-C13-O52-C52
81	B	1805	PAR	C24-C14-O33-C33
81	B	1805	PAR	O54-C54-C64-N64
81	AS	3401	PAR	O54-C54-C64-N64
81	AS	3402	PAR	C23-C13-O52-C52
81	AS	3402	PAR	O43-C13-O52-C52
81	AS	3402	PAR	C24-C14-O33-C33
81	AS	3402	PAR	C44-C54-C64-N64
81	AS	3403	PAR	C23-C13-O52-C52
81	AS	3403	PAR	O43-C13-O52-C52
81	AS	3404	PAR	C43-C33-O33-C14
81	AS	3406	PAR	C23-C13-O52-C52
81	AS	3406	PAR	O43-C13-O52-C52
81	AS	3406	PAR	C33-C43-C53-O53
81	AS	3406	PAR	O43-C43-C53-O53
81	AS	3406	PAR	C44-C54-C64-N64
81	AS	3406	PAR	O54-C54-C64-N64
81	AS	3407	PAR	C24-C14-O33-C33
81	AS	3408	PAR	C24-C14-O33-C33

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Mol	Chain	Res	Type	Atoms
81	AS	3408	PAR	O54-C54-C64-N64
81	AS	3409	PAR	C23-C13-O52-C52
81	AS	3409	PAR	C43-C33-O33-C14
81	AS	3409	PAR	C24-C14-O33-C33
81	AS	3409	PAR	C33-C43-C53-O53
81	AS	3409	PAR	O43-C43-C53-O53
81	AS	3410	PAR	C23-C13-O52-C52
81	AS	3410	PAR	O54-C54-C64-N64
81	AS	3411	PAR	C21-C11-O11-C42
81	AS	3411	PAR	C44-C54-C64-N64
81	AS	3411	PAR	O54-C54-C64-N64
81	AS	3412	PAR	C23-C13-O52-C52
81	AS	3412	PAR	C44-C54-C64-N64
81	AS	3413	PAR	C23-C13-O52-C52
81	AS	3413	PAR	O43-C13-O52-C52
81	AS	3413	PAR	C33-C43-C53-O53
81	AS	3413	PAR	O43-C43-C53-O53
81	AS	3413	PAR	C44-C54-C64-N64
81	AS	3413	PAR	O54-C54-C64-N64
81	CM	1801	PAR	O54-C54-C64-N64
81	CM	1802	PAR	C23-C13-O52-C52
81	CM	1803	PAR	C23-C13-O52-C52
81	CM	1804	PAR	C23-C13-O52-C52
81	CM	1804	PAR	O43-C13-O52-C52
81	CM	1804	PAR	O54-C14-O33-C33
81	CM	1805	PAR	C23-C13-O52-C52
81	CM	1805	PAR	O43-C13-O52-C52
81	CM	1805	PAR	C24-C14-O33-C33
81	CM	1805	PAR	O54-C54-C64-N64
81	CM	1806	PAR	C23-C13-O52-C52
81	CM	1806	PAR	O43-C13-O52-C52
81	CM	1806	PAR	C33-C43-C53-O53
81	1	3422	PAR	C52-C42-O11-C11
81	B	1802	PAR	C62-C52-O52-C13
81	1	3420	PAR	O51-C11-O11-C42
81	1	3425	PAR	O54-C14-O33-C33
81	AS	3406	PAR	O54-C14-O33-C33
81	CM	1801	PAR	O54-C14-O33-C33
80	1	3401	3K5	C31-C30-O9-C26
81	1	3411	PAR	C62-C52-O52-C13
81	B	1803	PAR	C52-C42-O11-C11
81	1	3407	PAR	O54-C14-O33-C33

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Mol	Chain	Res	Type	Atoms
81	1	3408	PAR	O54-C14-O33-C33
81	1	3420	PAR	O54-C14-O33-C33
81	1	3430	PAR	O54-C14-O33-C33
81	B	1805	PAR	O54-C14-O33-C33
81	AS	3407	PAR	O54-C14-O33-C33
81	1	3409	PAR	C62-C52-O52-C13
81	1	3425	PAR	C62-C52-O52-C13
81	1	3412	PAR	O54-C14-O33-C33
81	1	3414	PAR	O54-C14-O33-C33
81	1	3428	PAR	O54-C14-O33-C33
81	B	1801	PAR	O54-C14-O33-C33
81	B	1804	PAR	O54-C14-O33-C33
81	AS	3413	PAR	O54-C14-O33-C33
81	CM	1804	PAR	O51-C11-O11-C42
81	CM	1805	PAR	O54-C14-O33-C33
81	CM	1806	PAR	O54-C14-O33-C33
81	1	3411	PAR	O43-C43-C53-O53
81	1	3413	PAR	O43-C43-C53-O53
81	1	3414	PAR	O43-C43-C53-O53
81	CM	1806	PAR	O43-C43-C53-O53
81	1	3413	PAR	C33-C43-C53-O53
81	AS	3410	PAR	C33-C43-C53-O53
81	1	3427	PAR	O54-C14-O33-C33
81	B	1805	PAR	C62-C52-O52-C13
81	1	3402	PAR	O54-C14-O33-C33
81	4	202	PAR	O51-C11-O11-C42
81	AS	3410	PAR	O54-C14-O33-C33
81	AS	3404	PAR	C62-C52-O52-C13
81	AS	3411	PAR	C52-C42-O11-C11
81	AS	3411	PAR	C62-C52-O52-C13
81	AS	3410	PAR	O43-C43-C53-O53
81	1	3427	PAR	C41-C51-C61-O61
81	4	201	PAR	C33-C43-C53-O53
81	1	3404	PAR	O51-C11-O11-C42
81	CM	1804	PAR	O51-C51-C61-O61
81	AS	3402	PAR	O54-C14-O33-C33
81	AS	3409	PAR	C41-C51-C61-O61
81	1	3416	PAR	O43-C43-C53-O53
81	1	3425	PAR	O43-C43-C53-O53
80	1	3401	3K5	O10-C30-O9-C26
81	1	3429	PAR	C33-C43-C53-O53
81	1	3430	PAR	C33-C43-C53-O53

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Mol	Chain	Res	Type	Atoms
81	1	3406	PAR	O54-C14-O33-C33
81	B	1803	PAR	O51-C11-O11-C42
81	AS	3408	PAR	O51-C51-C61-O61
81	B	1803	PAR	O51-C51-C61-O61
81	CM	1804	PAR	C41-C51-C61-O61
81	1	3411	PAR	O51-C51-C61-O61
81	1	3427	PAR	O51-C51-C61-O61
81	1	3409	PAR	O43-C43-C53-O53
81	4	201	PAR	O43-C43-C53-O53
81	1	3417	PAR	O51-C51-C61-O61
81	1	3411	PAR	C33-C43-C53-O53
81	1	3417	PAR	C33-C43-C53-O53
80	1	3401	3K5	O2-C6-O1-C5
81	1	3424	PAR	O51-C51-C61-O61
81	B	1803	PAR	C41-C51-C61-O61
81	AS	3409	PAR	O51-C51-C61-O61
81	CM	1801	PAR	O51-C51-C61-O61
81	1	3414	PAR	O51-C51-C61-O61
81	4	202	PAR	C33-C43-C53-O53
81	CM	1802	PAR	C41-C51-C61-O61
81	1	3422	PAR	O54-C14-O33-C33
81	1	3429	PAR	O43-C43-C53-O53
81	1	3417	PAR	C41-C51-C61-O61
81	1	3418	PAR	O51-C51-C61-O61
81	AS	3408	PAR	C41-C51-C61-O61
81	CM	1801	PAR	C41-C51-C61-O61
81	1	3424	PAR	C41-C51-C61-O61
81	1	3424	PAR	O51-C11-O11-C42
81	1	3412	PAR	O51-C11-O11-C42
81	1	3414	PAR	C41-C51-C61-O61
81	1	3430	PAR	O43-C43-C53-O53
81	B	1805	PAR	O51-C51-C61-O61
81	1	3430	PAR	C52-C42-O11-C11
81	1	3417	PAR	O43-C43-C53-O53
81	1	3405	PAR	C33-C43-C53-O53
81	1	3409	PAR	C33-C43-C53-O53
81	CM	1802	PAR	O51-C51-C61-O61
81	1	3405	PAR	O43-C43-C53-O53
81	1	3418	PAR	C41-C51-C61-O61
81	1	3413	PAR	C62-C52-O52-C13
80	1	3401	3K5	O1-C6-C7-C8
81	B	1804	PAR	C52-C42-O11-C11

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Mol	Chain	Res	Type	Atoms
81	4	202	PAR	O43-C43-C53-O53
81	AS	3412	PAR	C41-C51-C61-O61
81	1	3426	PAR	O51-C51-C61-O61
81	AS	3408	PAR	O43-C43-C53-O53
81	1	3418	PAR	O51-C11-O11-C42
81	1	3430	PAR	C42-C52-O52-C13
81	1	3416	PAR	C33-C43-C53-O53
81	1	3411	PAR	C41-C51-C61-O61
81	AS	3408	PAR	O51-C11-O11-C42
81	AS	3409	PAR	O54-C14-O33-C33
80	1	3401	3K5	O2-C6-C7-C8
81	AS	3407	PAR	O51-C11-O11-C42
81	1	3412	PAR	O43-C13-O52-C52
81	1	3419	PAR	O43-C13-O52-C52
81	1	3421	PAR	O43-C13-O52-C52
81	1	3427	PAR	O43-C13-O52-C52
81	4	201	PAR	O43-C13-O52-C52
81	B	1804	PAR	O43-C13-O52-C52
81	AS	3409	PAR	O43-C13-O52-C52
81	AS	3410	PAR	O43-C13-O52-C52
81	AS	3412	PAR	O43-C13-O52-C52
81	CM	1802	PAR	O43-C13-O52-C52
81	CM	1803	PAR	O43-C13-O52-C52
81	1	3413	PAR	C42-C52-O52-C13
81	AS	3407	PAR	C41-C51-C61-O61
81	1	3410	PAR	C42-C52-O52-C13
81	B	1802	PAR	O51-C51-C61-O61
81	1	3404	PAR	O51-C51-C61-O61
81	B	1802	PAR	C41-C51-C61-O61
81	1	3407	PAR	O43-C43-C53-O53
81	1	3410	PAR	O51-C51-C61-O61
81	AS	3412	PAR	O51-C51-C61-O61
81	1	3404	PAR	O54-C14-O33-C33
81	1	3403	PAR	C44-C54-C64-N64
81	CM	1804	PAR	C44-C54-C64-N64
81	1	3410	PAR	C62-C52-O52-C13
81	1	3414	PAR	O51-C11-O11-C42
81	AS	3403	PAR	O54-C14-O33-C33
81	1	3417	PAR	O51-C11-O11-C42
81	1	3413	PAR	C52-C42-O11-C11
81	AS	3411	PAR	C42-C52-O52-C13
81	1	3413	PAR	C41-C51-C61-O61

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Mol	Chain	Res	Type	Atoms
81	1	3404	PAR	C52-C42-O11-C11
81	1	3417	PAR	O43-C13-O52-C52
81	1	3403	PAR	O54-C14-O33-C33
81	1	3419	PAR	C52-C42-O11-C11
81	1	3412	PAR	C23-C13-O52-C52
81	1	3417	PAR	C23-C13-O52-C52
81	4	201	PAR	C23-C13-O52-C52
81	1	3406	PAR	C42-C52-O52-C13
81	1	3411	PAR	O54-C54-C64-N64
81	1	3420	PAR	O54-C54-C64-N64
81	1	3428	PAR	O54-C54-C64-N64
81	B	1802	PAR	O54-C54-C64-N64
81	AS	3402	PAR	O54-C54-C64-N64
81	AS	3404	PAR	O54-C54-C64-N64
81	CM	1804	PAR	O54-C54-C64-N64
81	1	3425	PAR	C33-C43-C53-O53
81	AS	3408	PAR	C33-C43-C53-O53
81	1	3407	PAR	O51-C51-C61-O61
81	1	3402	PAR	C52-C42-O11-C11
81	1	3406	PAR	C62-C52-O52-C13
81	B	1805	PAR	C41-C51-C61-O61
81	1	3424	PAR	O43-C43-C53-O53
81	B	1801	PAR	C52-C42-O11-C11
81	CM	1801	PAR	O51-C11-O11-C42
81	1	3430	PAR	C62-C52-O52-C13
81	1	3427	PAR	C23-C33-O33-C14
81	B	1805	PAR	C44-C54-C64-N64
81	AS	3406	PAR	C23-C33-O33-C14
81	AS	3411	PAR	O43-C13-O52-C52
81	CM	1806	PAR	C23-C33-O33-C14
81	1	3403	PAR	C21-C11-O11-C42
81	1	3405	PAR	C24-C14-O33-C33
81	1	3413	PAR	C24-C14-O33-C33
81	1	3424	PAR	C24-C14-O33-C33
81	B	1804	PAR	C21-C11-O11-C42
81	AS	3404	PAR	C24-C14-O33-C33
81	AS	3406	PAR	C24-C14-O33-C33
81	AS	3404	PAR	C42-C52-O52-C13
81	AS	3412	PAR	O51-C11-O11-C42
81	1	3422	PAR	O43-C43-C53-O53
81	1	3407	PAR	C33-C43-C53-O53
81	1	3428	PAR	O43-C43-C53-O53

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Mol	Chain	Res	Type	Atoms
81	1	3424	PAR	C33-C43-C53-O53
81	1	3413	PAR	O51-C51-C61-O61
81	1	3409	PAR	O43-C13-O52-C52
81	4	202	PAR	O43-C13-O52-C52
81	1	3417	PAR	C52-C42-O11-C11
81	1	3409	PAR	C23-C13-O52-C52
81	1	3411	PAR	C23-C13-O52-C52
81	1	3418	PAR	C23-C13-O52-C52
81	1	3426	PAR	C23-C13-O52-C52
81	4	202	PAR	C23-C13-O52-C52
81	AS	3404	PAR	C23-C13-O52-C52
81	AS	3408	PAR	C23-C13-O52-C52
81	AS	3411	PAR	O51-C11-O11-C42
81	1	3430	PAR	C32-C42-O11-C11
81	AS	3407	PAR	O51-C51-C61-O61
81	1	3410	PAR	C52-C42-O11-C11
81	1	3402	PAR	C23-C33-O33-C14
81	1	3403	PAR	C23-C33-O33-C14
81	1	3405	PAR	C23-C33-O33-C14
81	1	3407	PAR	C23-C33-O33-C14
81	1	3408	PAR	C43-C33-O33-C14
81	1	3411	PAR	C23-C33-O33-C14
81	1	3411	PAR	C43-C33-O33-C14
81	1	3412	PAR	C23-C33-O33-C14
81	1	3415	PAR	C43-C33-O33-C14
81	1	3417	PAR	C23-C33-O33-C14
81	1	3421	PAR	C43-C33-O33-C14
81	1	3428	PAR	C23-C33-O33-C14
81	1	3428	PAR	C43-C33-O33-C14
81	1	3428	PAR	C44-C54-C64-N64
81	B	1801	PAR	C44-C54-C64-N64
81	B	1804	PAR	C43-C33-O33-C14
81	B	1804	PAR	C44-C54-C64-N64
81	B	1805	PAR	C23-C33-O33-C14
81	AS	3402	PAR	C43-C33-O33-C14
81	AS	3404	PAR	C44-C54-C64-N64
81	AS	3410	PAR	C23-C33-O33-C14
81	AS	3413	PAR	C23-C33-O33-C14
81	AS	3413	PAR	C43-C33-O33-C14
81	CM	1802	PAR	C23-C33-O33-C14
81	CM	1802	PAR	C44-C54-C64-N64
81	CM	1805	PAR	C23-C33-O33-C14

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Mol	Chain	Res	Type	Atoms
81	CM	1805	PAR	C43-C33-O33-C14
81	1	3421	PAR	O51-C11-O11-C42
81	1	3408	PAR	C21-C11-O11-C42
81	1	3419	PAR	C21-C11-O11-C42
81	1	3423	PAR	C24-C14-O33-C33
81	AS	3411	PAR	C24-C14-O33-C33
81	CM	1804	PAR	C24-C14-O33-C33
81	AS	3402	PAR	O51-C11-O11-C42
81	AS	3405	PAR	O51-C11-O11-C42

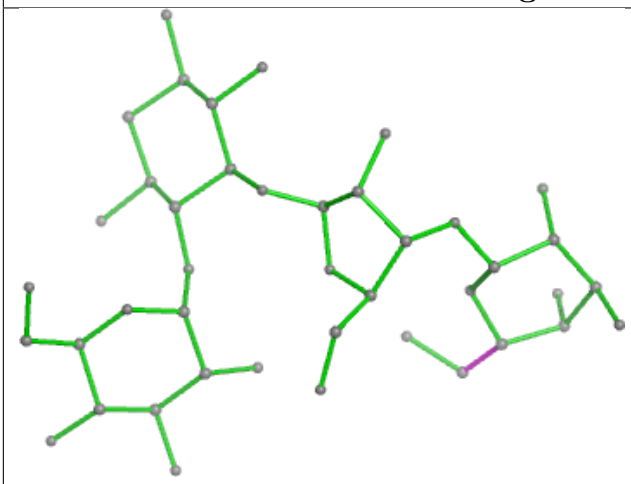
All (6) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
81	1	3410	PAR	C12-C22-C32-C42-C52-C62
81	AS	3407	PAR	C12-C22-C32-C42-C52-C62
81	1	3404	PAR	C12-C22-C32-C42-C52-C62
81	1	3403	PAR	C12-C22-C32-C42-C52-C62
81	AS	3405	PAR	C12-C22-C32-C42-C52-C62
81	AS	3411	PAR	C12-C22-C32-C42-C52-C62

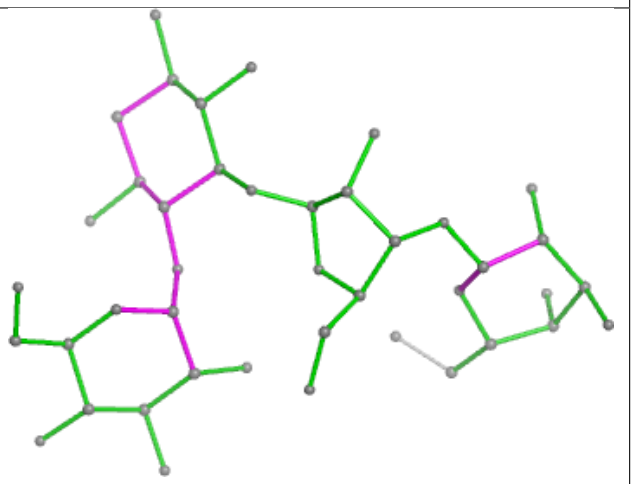
No monomer is involved in short contacts.

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

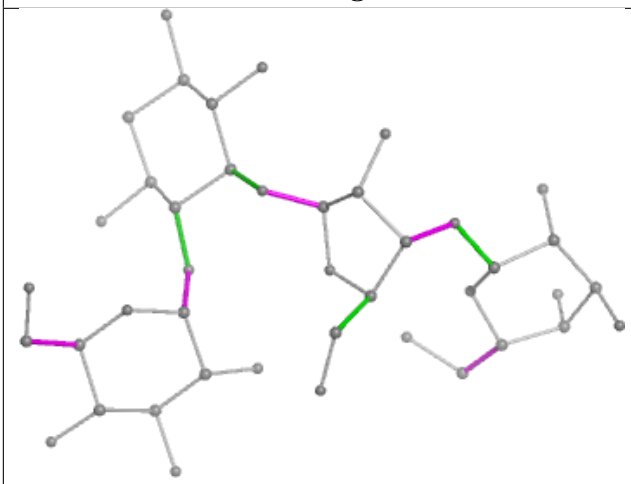
Ligand PAR 1 3418



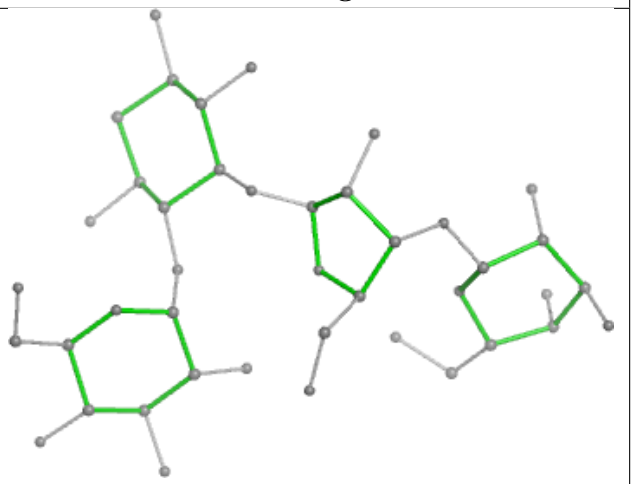
Bond lengths



Bond angles

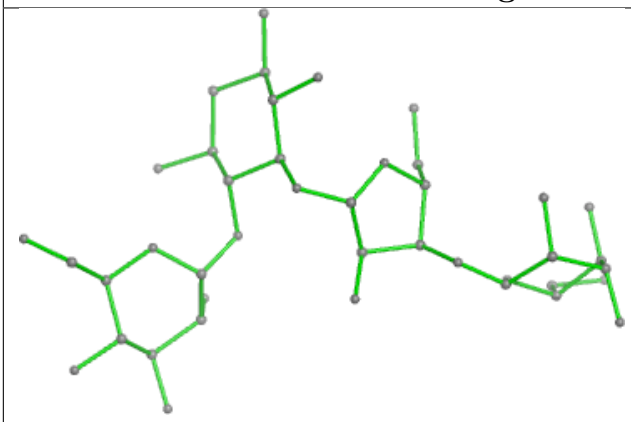


Torsions

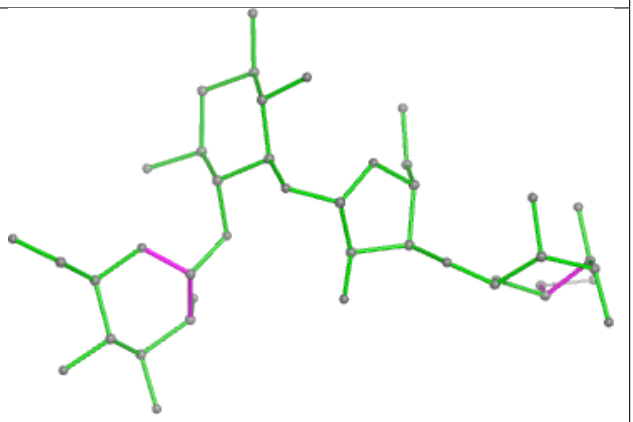


Rings

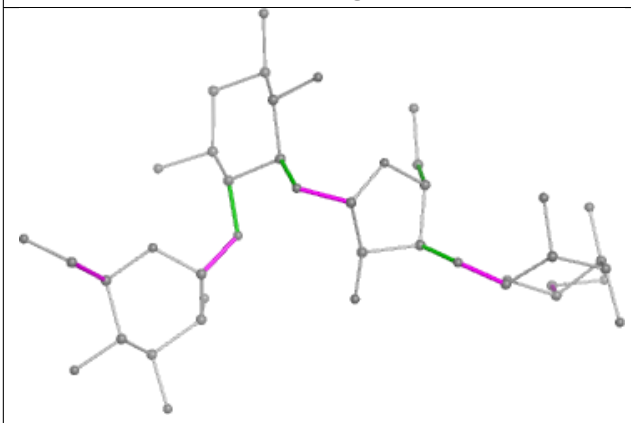
Ligand PAR CM 1804



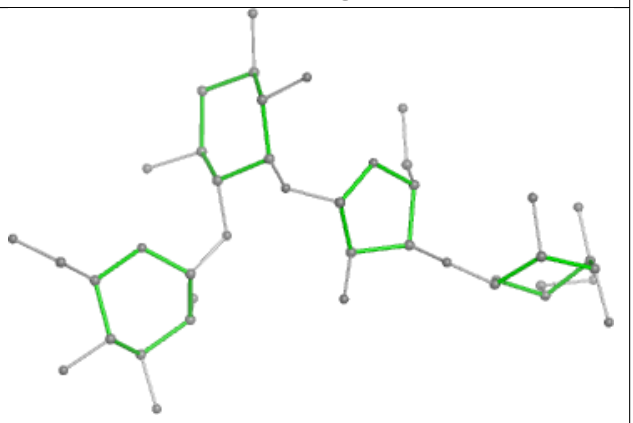
Bond lengths



Bond angles

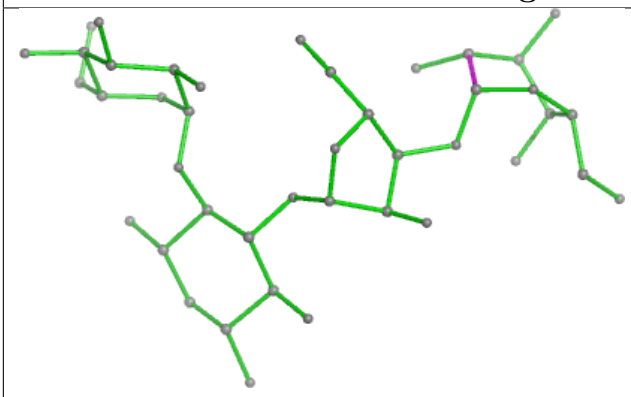


Torsions

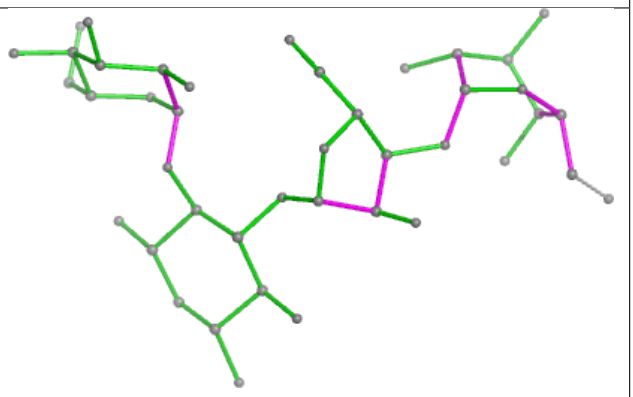


Rings

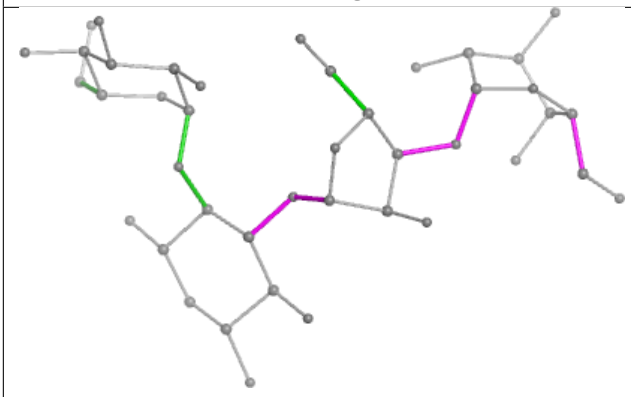
Ligand PAR 1 3406



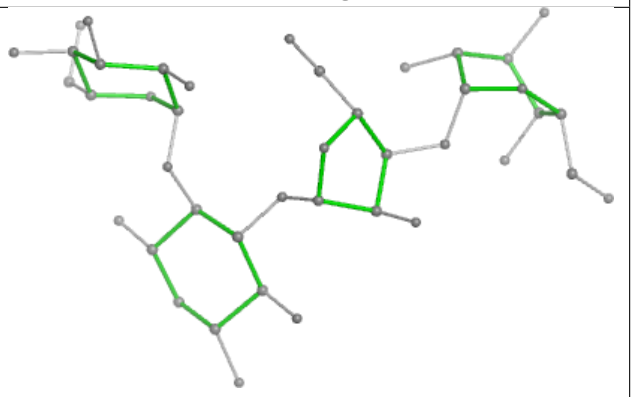
Bond lengths



Bond angles

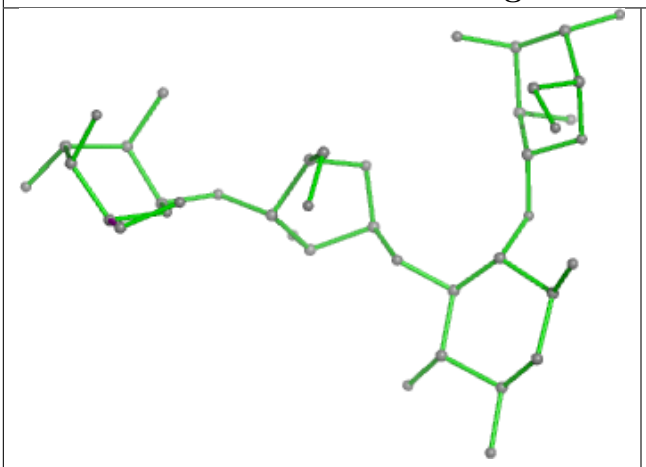


Torsions

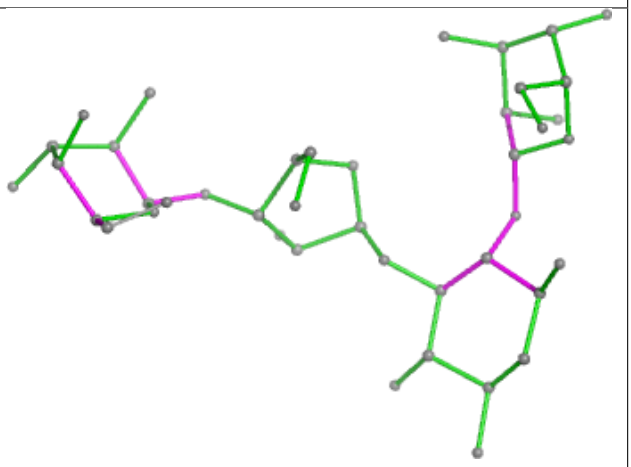


Rings

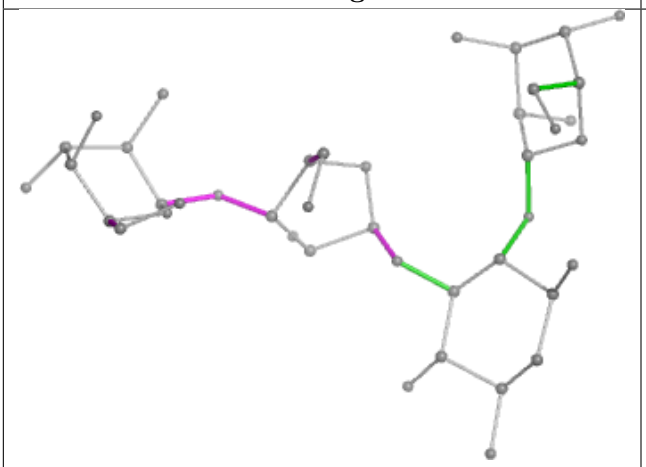
Ligand PAR AS 3413



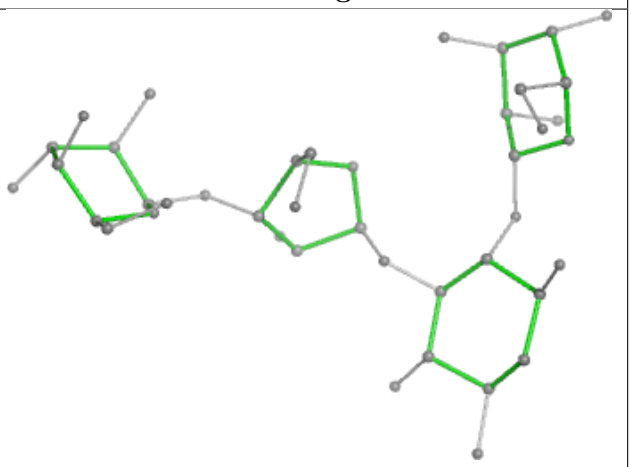
Bond lengths



Bond angles

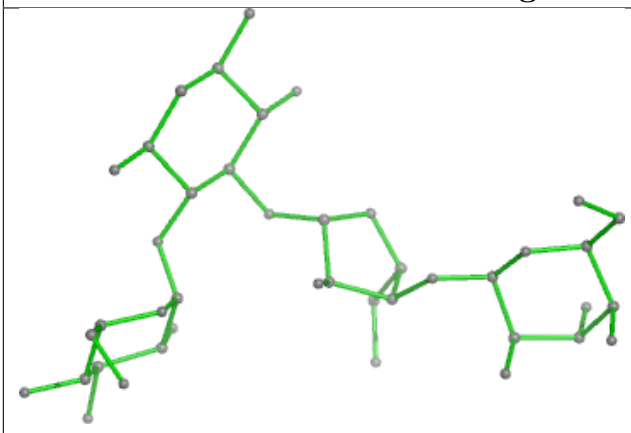


Torsions

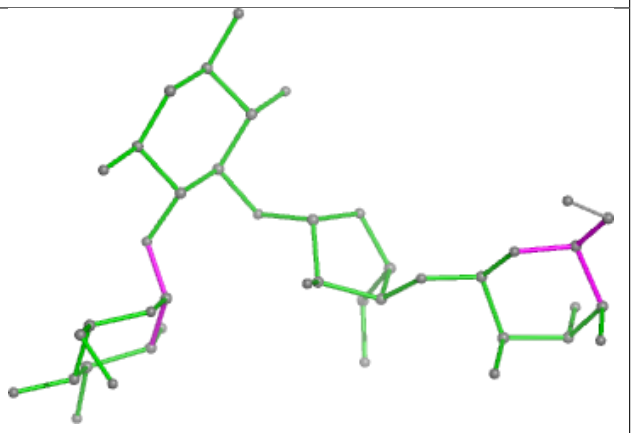


Rings

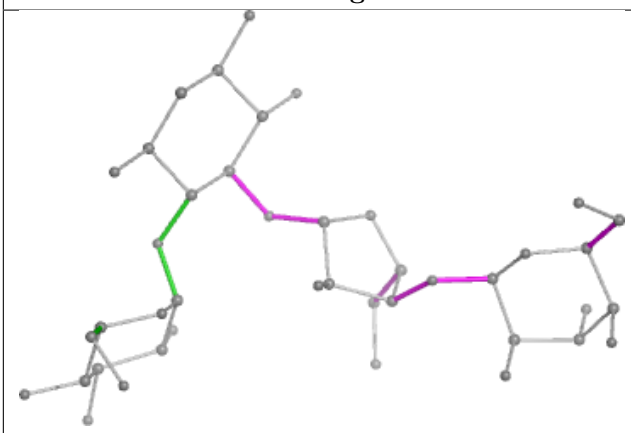
Ligand PAR 1 3425



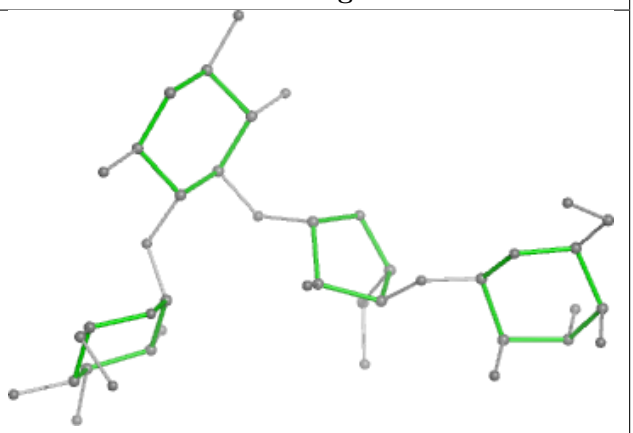
Bond lengths



Bond angles

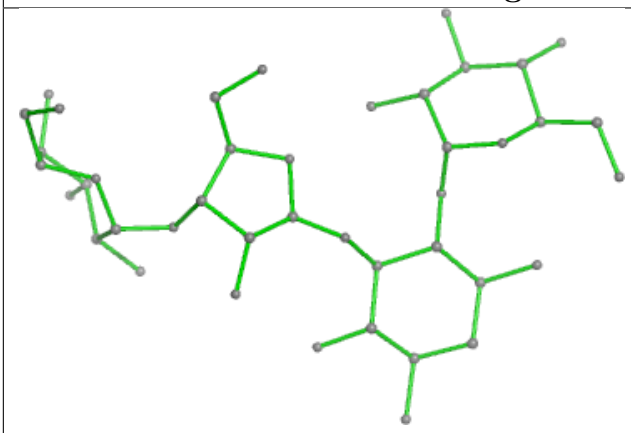


Torsions



Rings

Ligand PAR AS 3410



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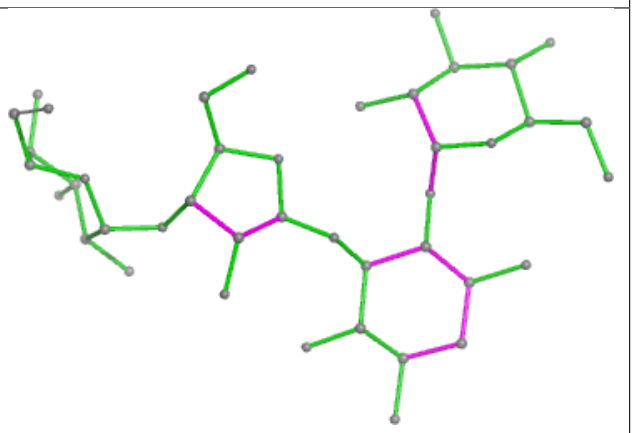
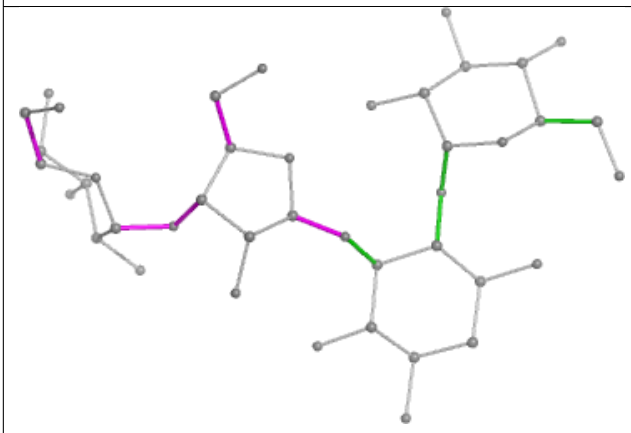


Bond angles



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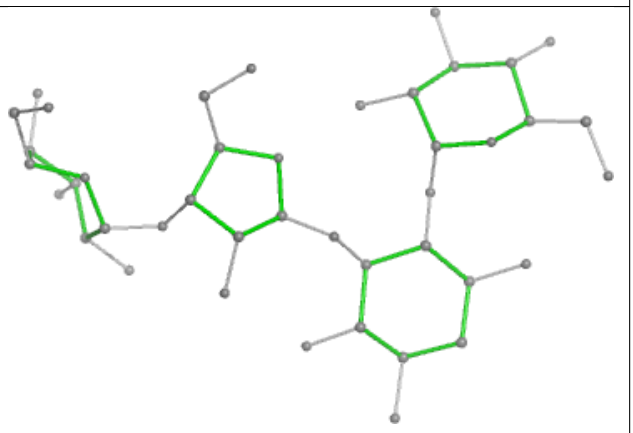
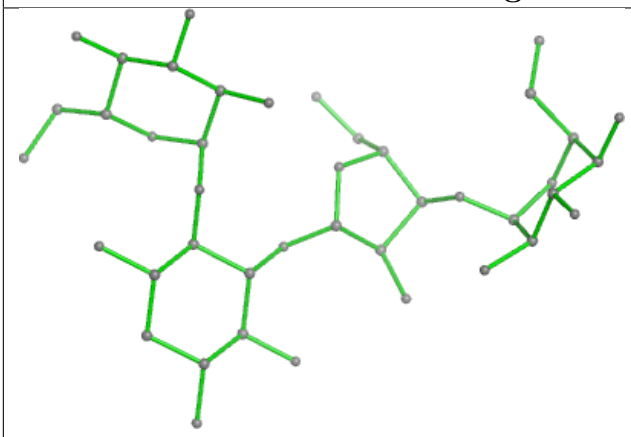
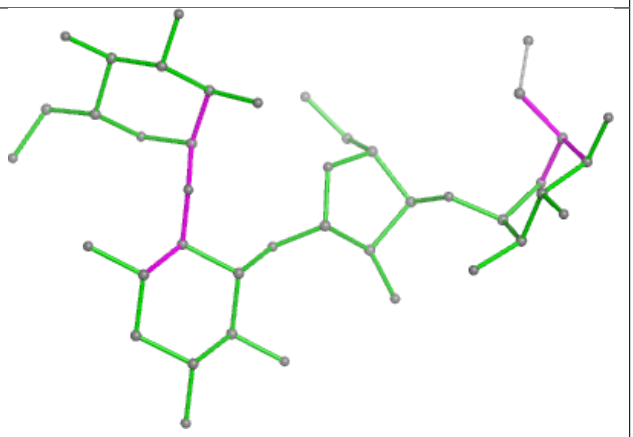


Rings

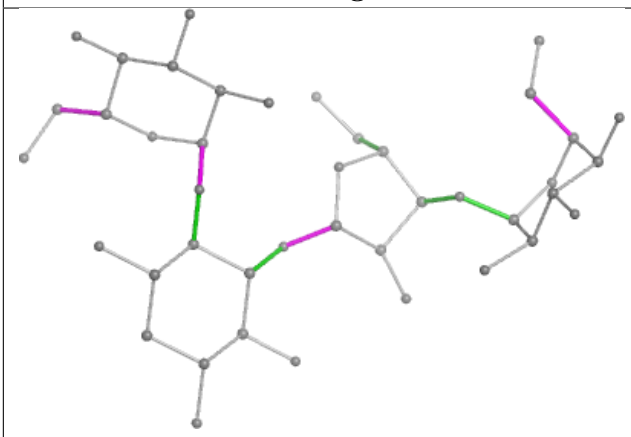
Ligand PAR AS 3412



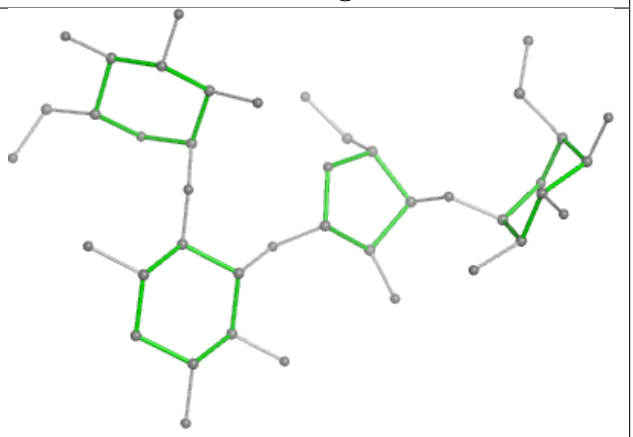
Bond lengths



Bond angles

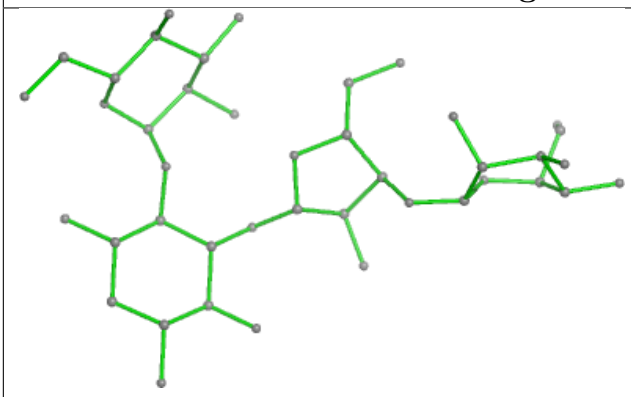


Torsions

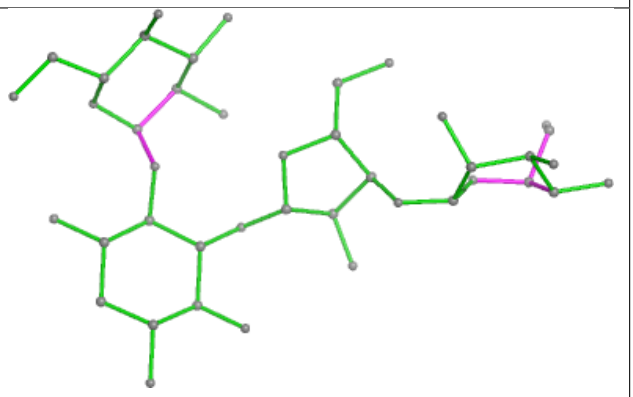


Rings

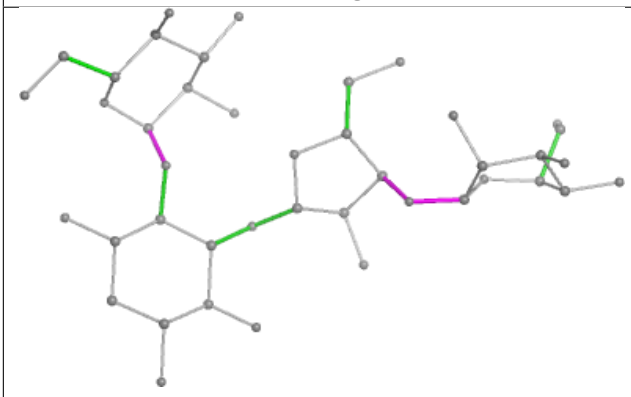
Ligand PAR 1 3408



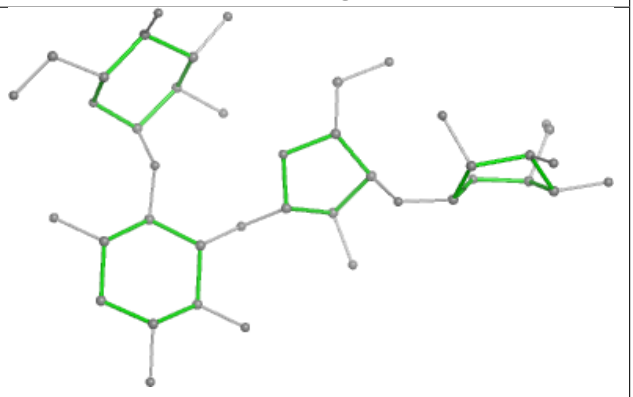
Bond lengths



Bond angles

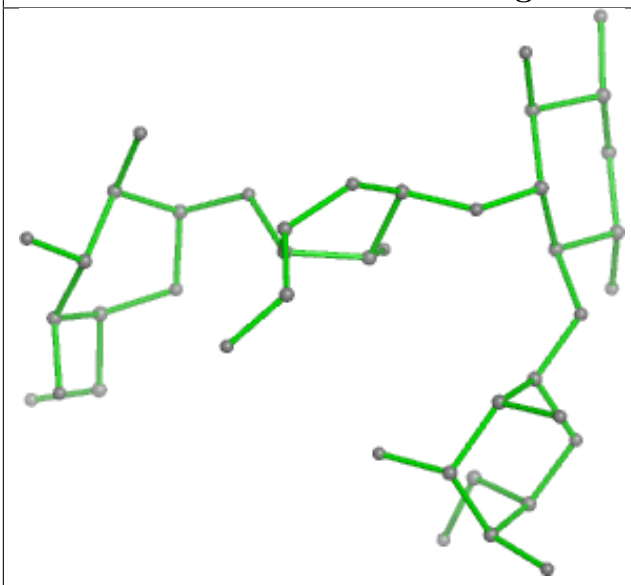


Torsions

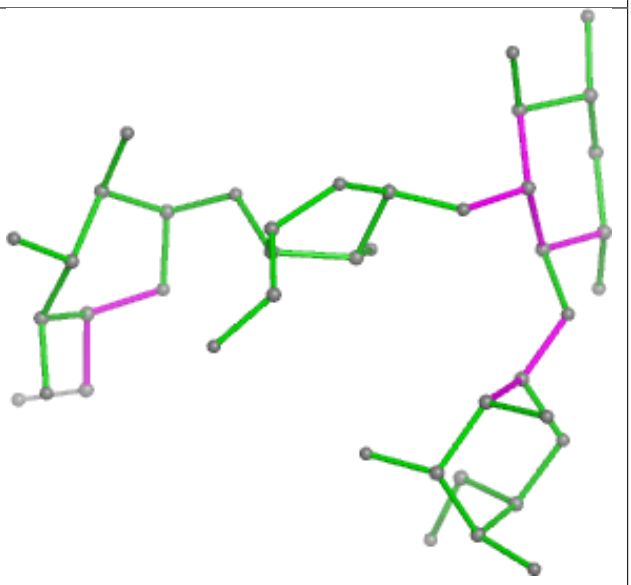


Rings

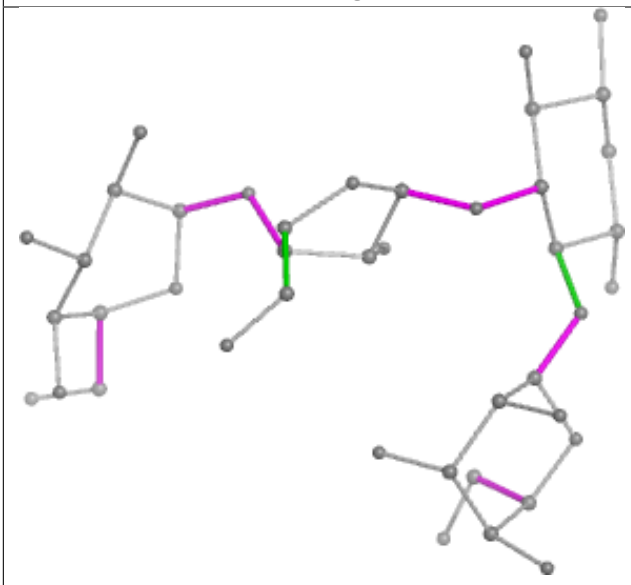
Ligand PAR B 1805



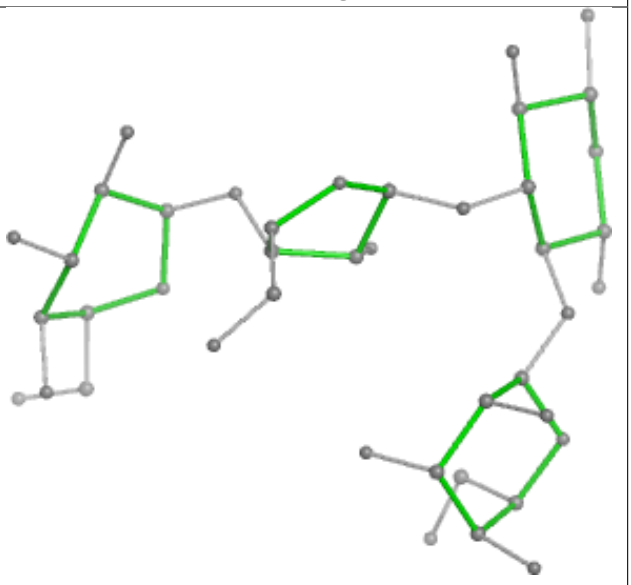
Bond lengths



Bond angles

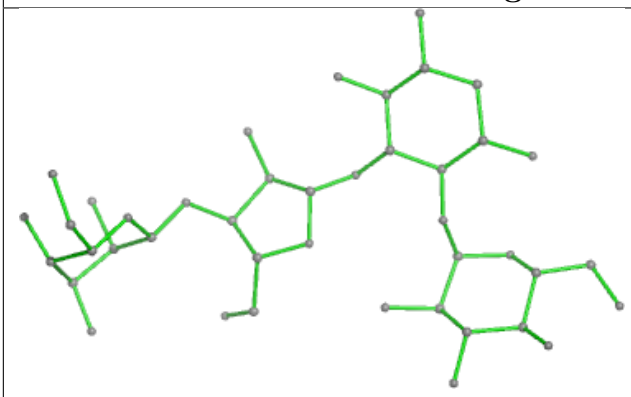


Torsions



Rings

Ligand PAR AS 3409



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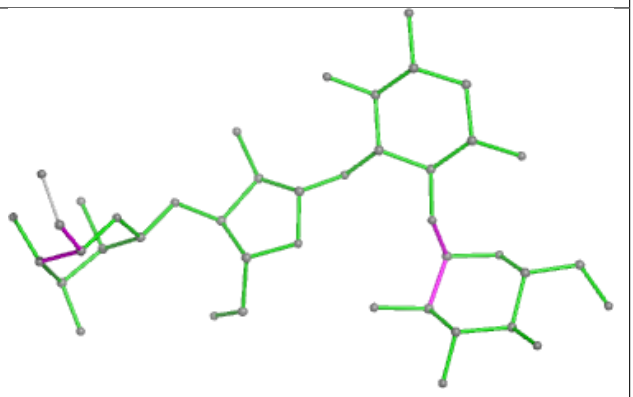
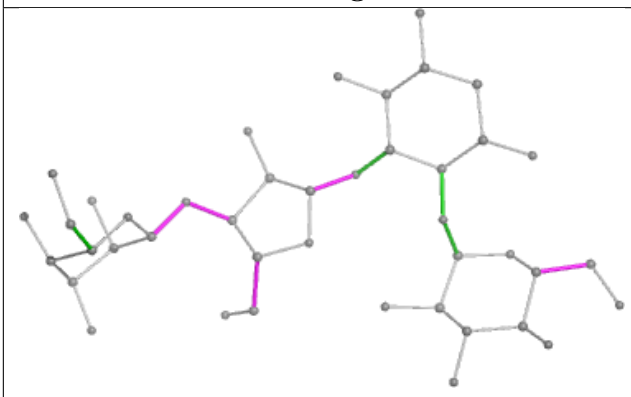
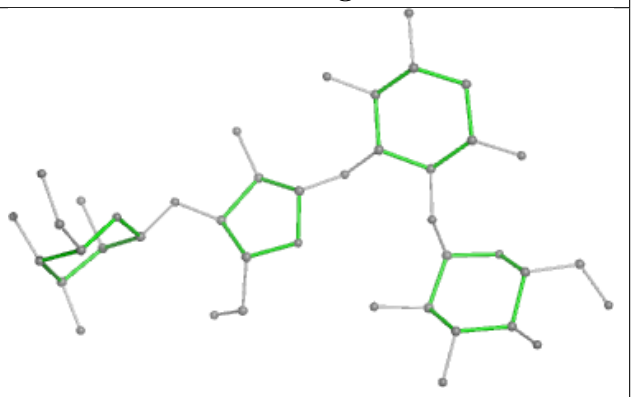


Bond angles

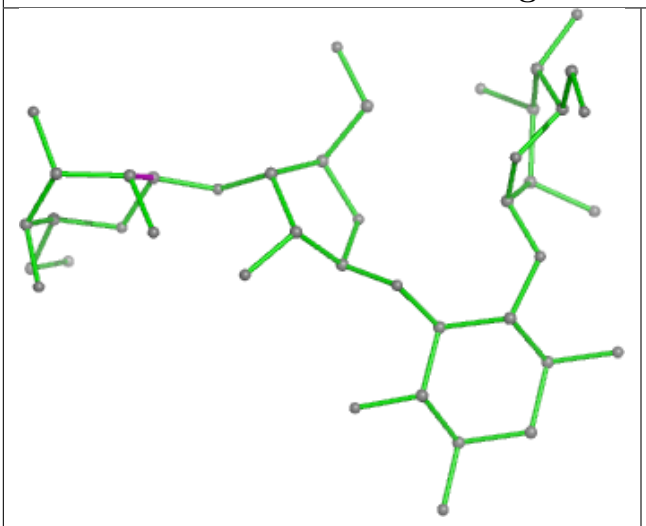


Torsions



Rings

Ligand PAR 1 3422



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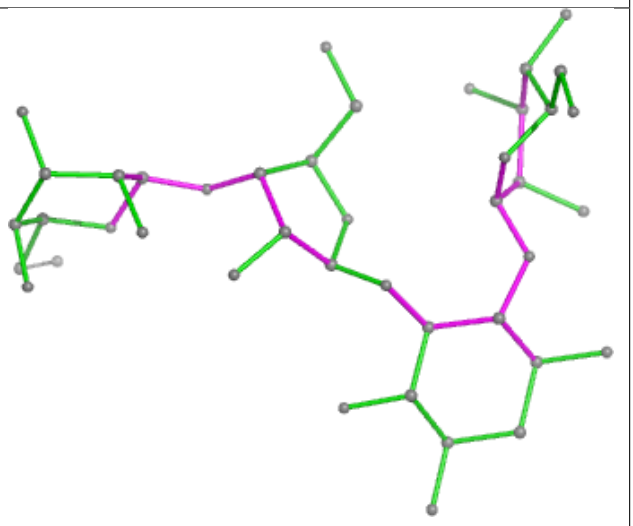
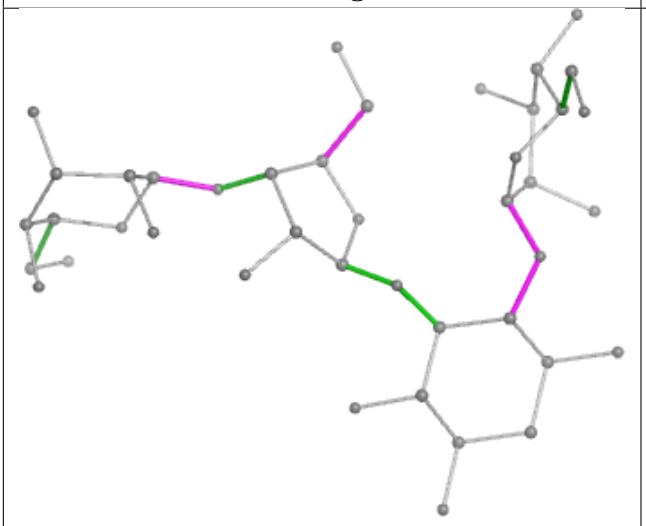
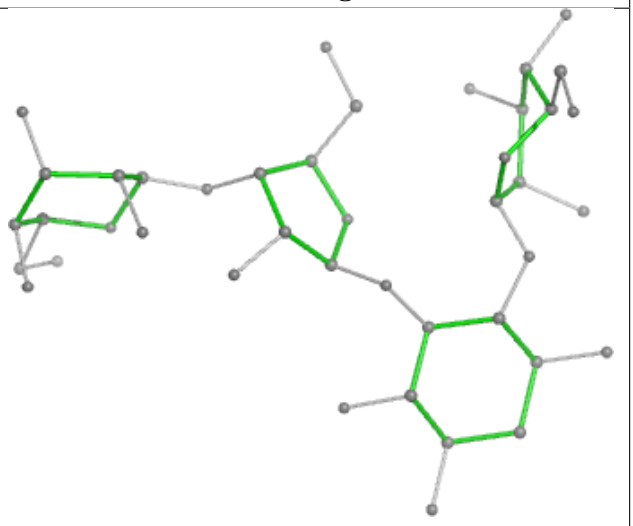


Bond angles

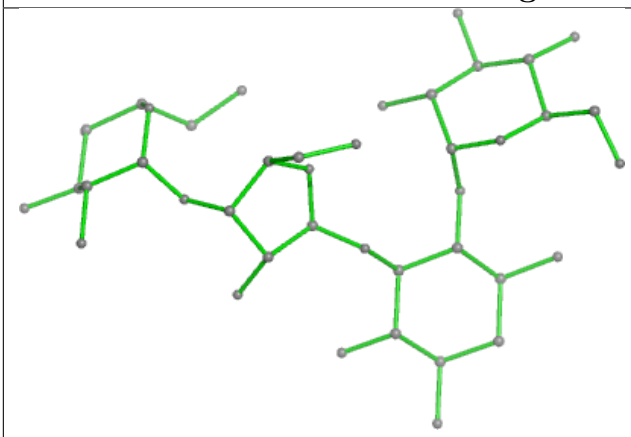


Torsions



Rings

Ligand PAR 1 3429



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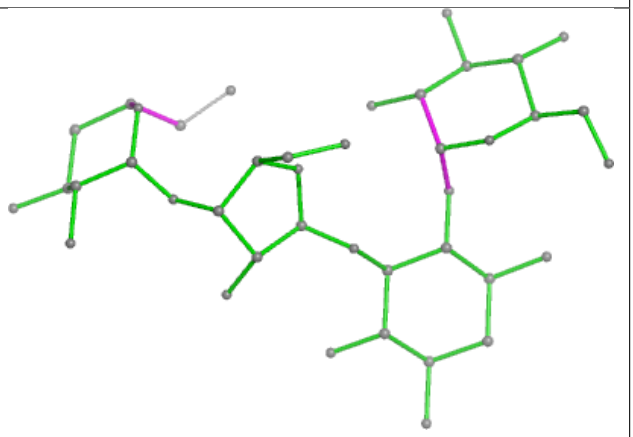
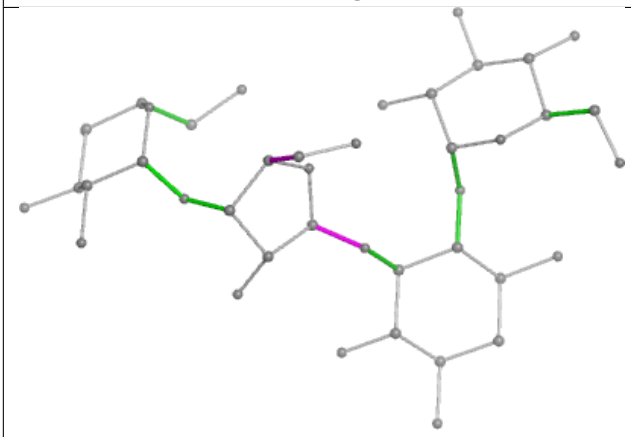


Bond angles



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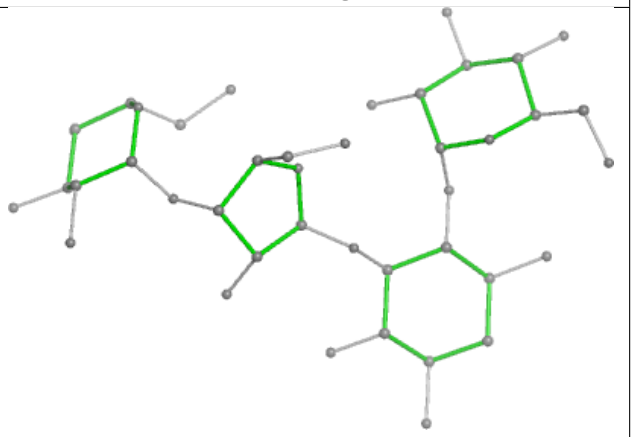
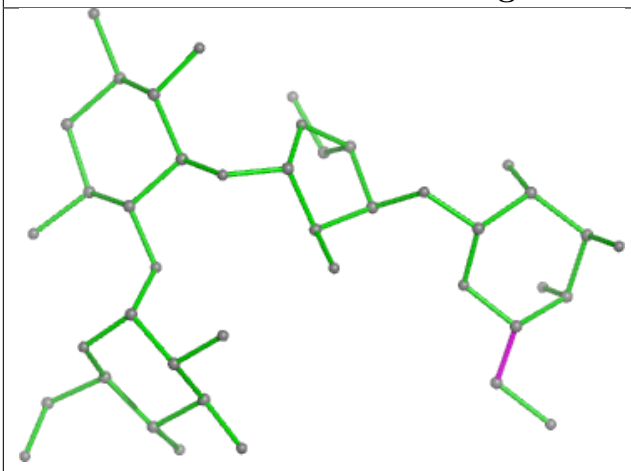


Rings

Ligand PAR CM 1805



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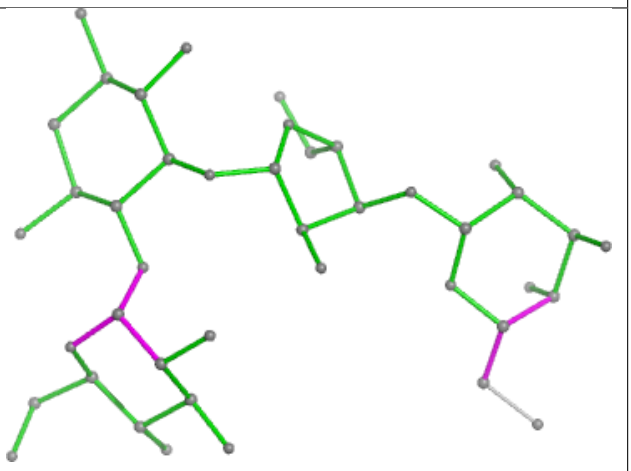
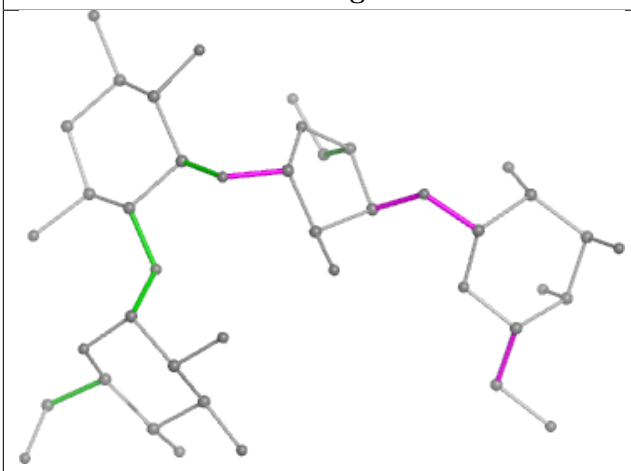


Bond angles



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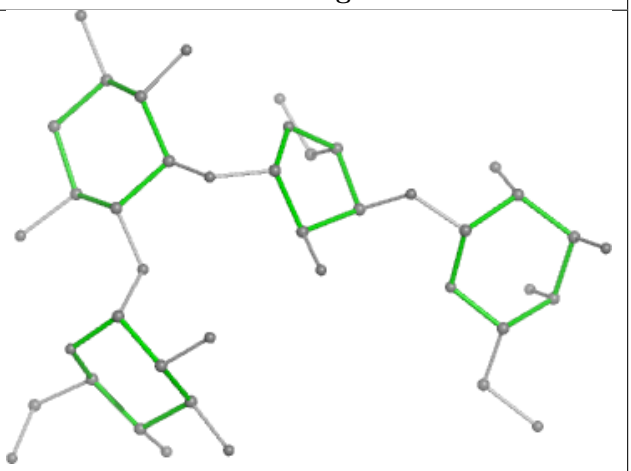
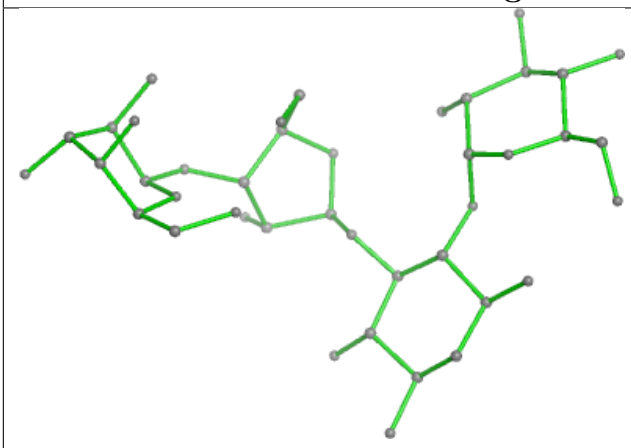


Rings

Ligand PAR AS 3406



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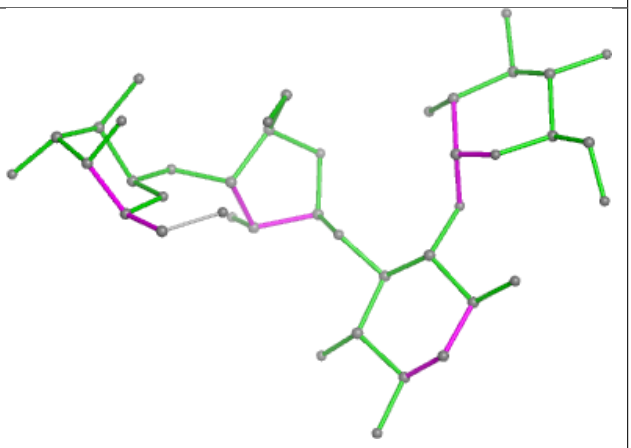
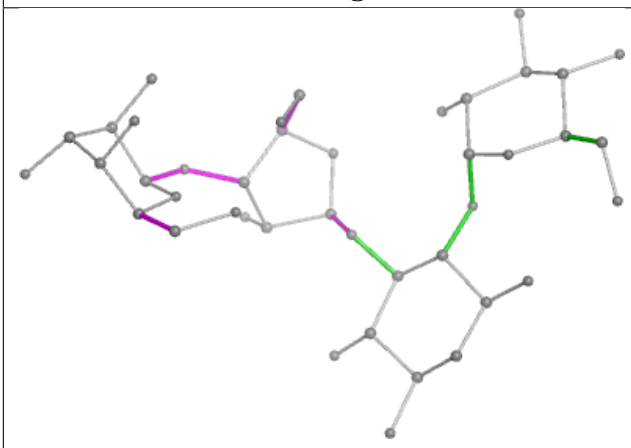


Bond angles



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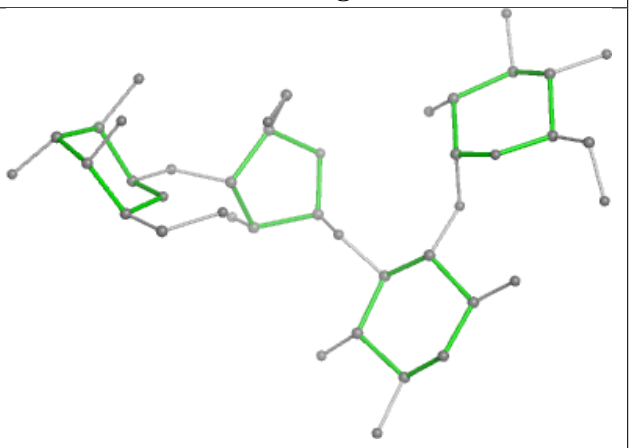
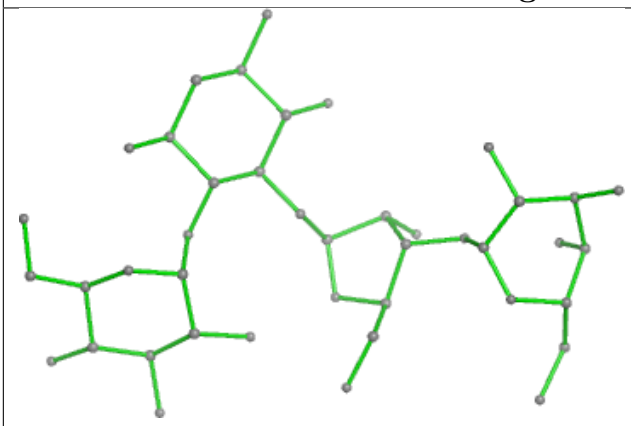


Rings

Ligand PAR 1 3423



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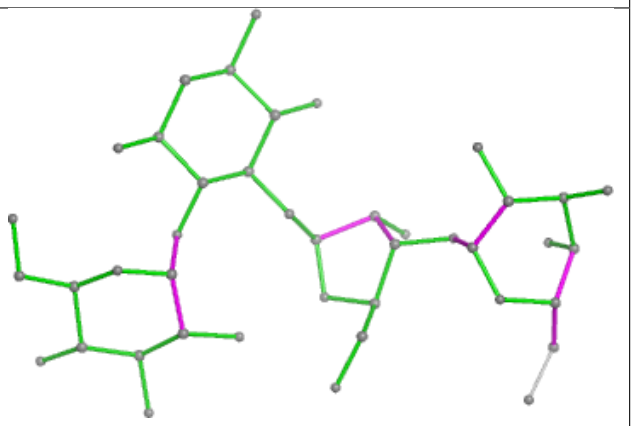
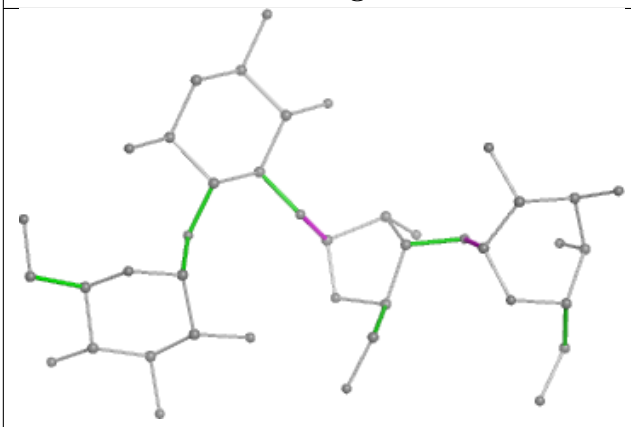


Bond angles



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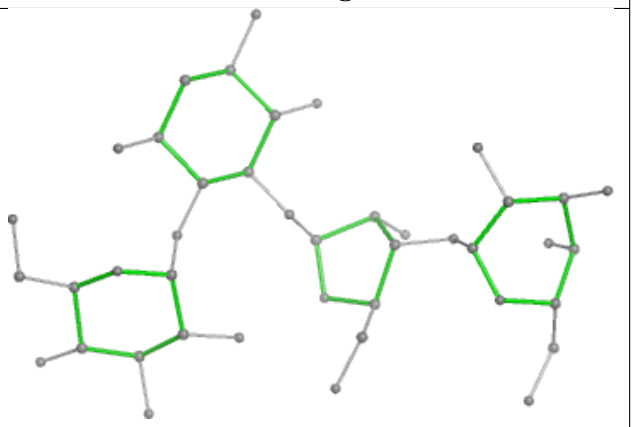
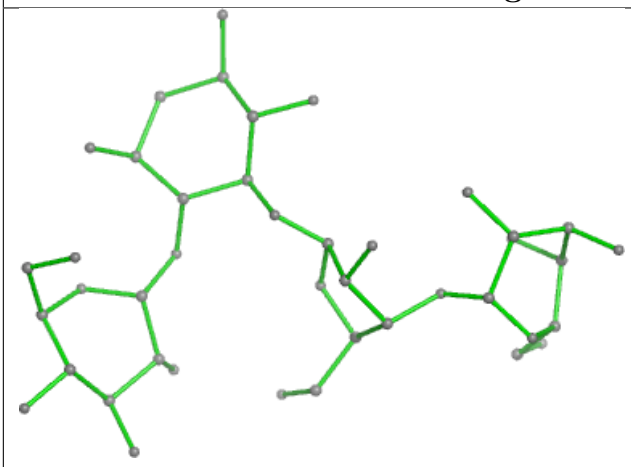


Rings

Ligand PAR AS 3401



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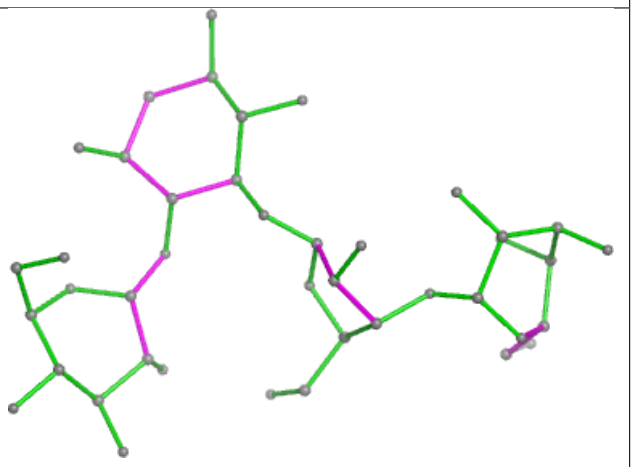
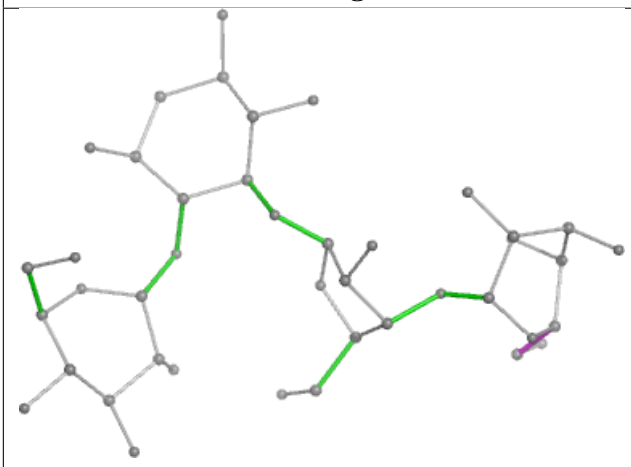
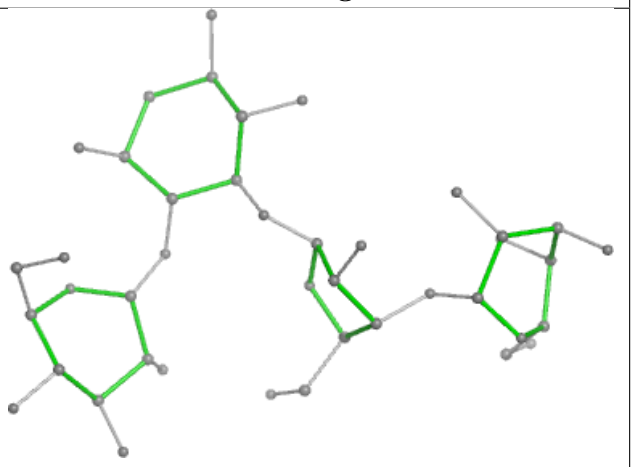


Bond angles

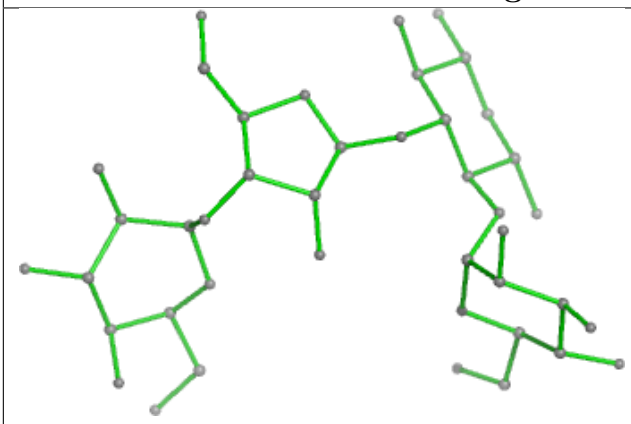


Torsions

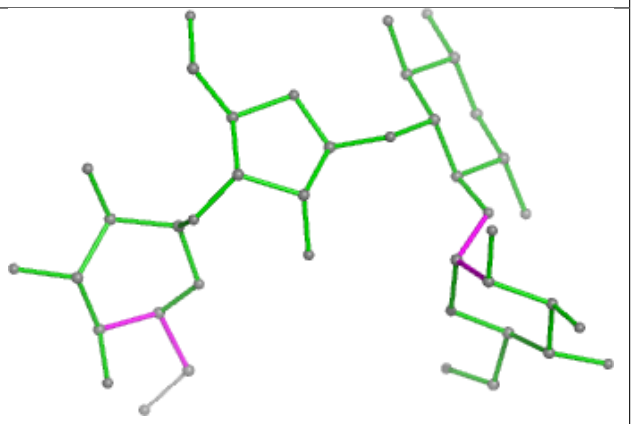


Rings

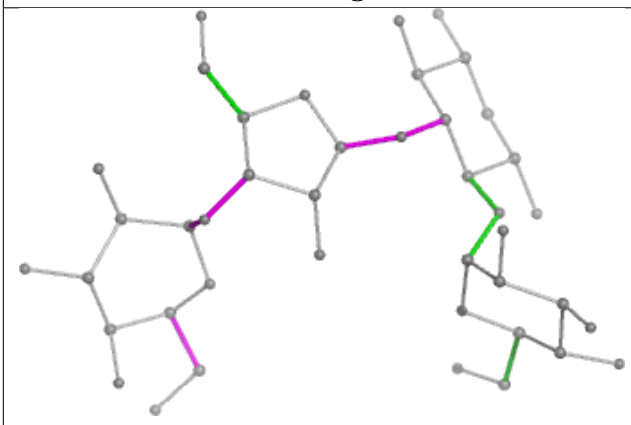
Ligand PAR AS 3404



Bond lengths



Bond angles



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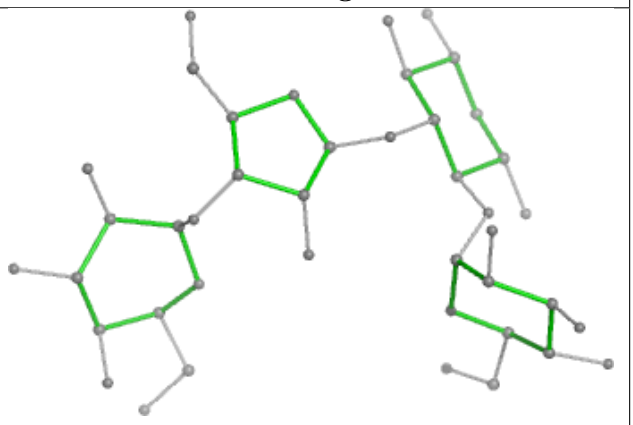
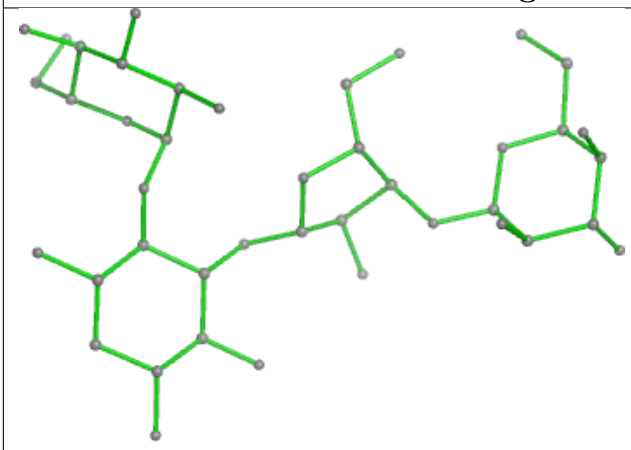


Rings

Ligand PAR 1 3402



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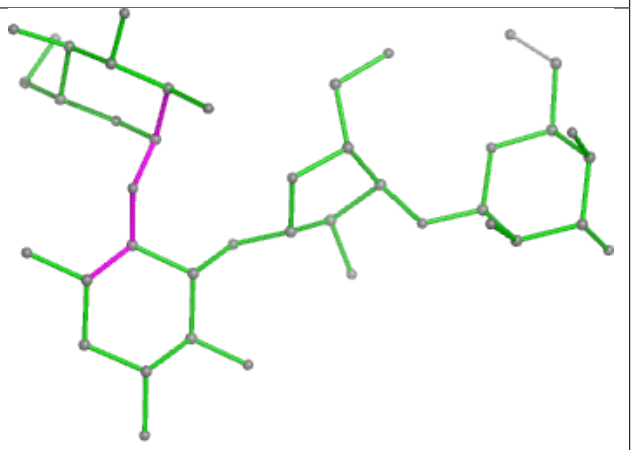
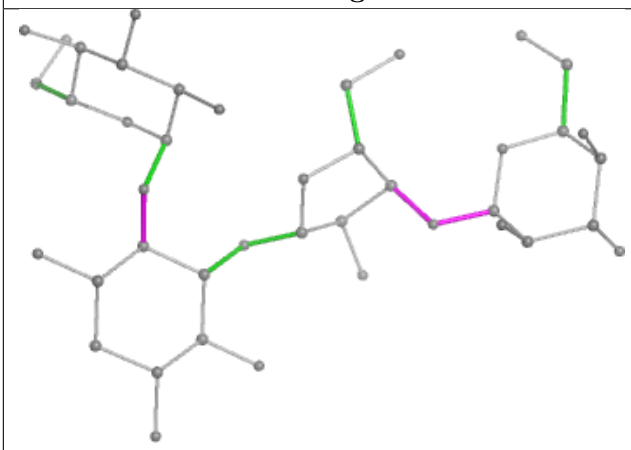
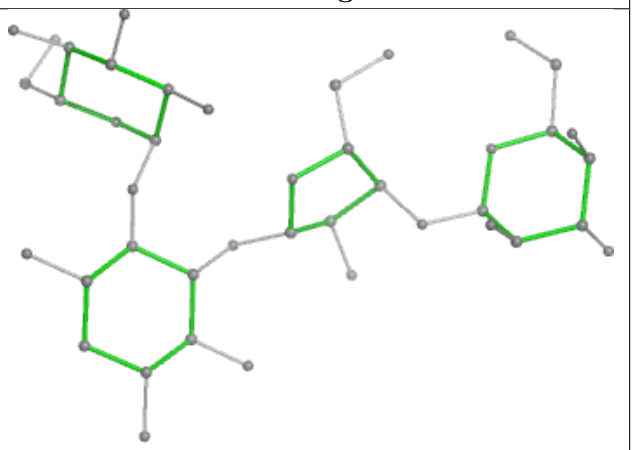


Bond angles

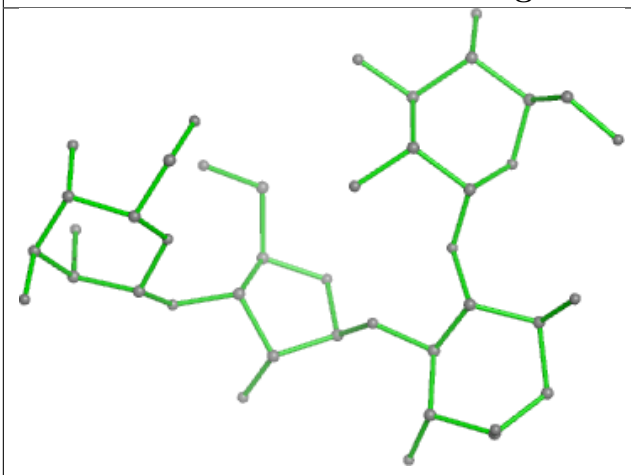


Torsions



Rings

Ligand PAR B 1804



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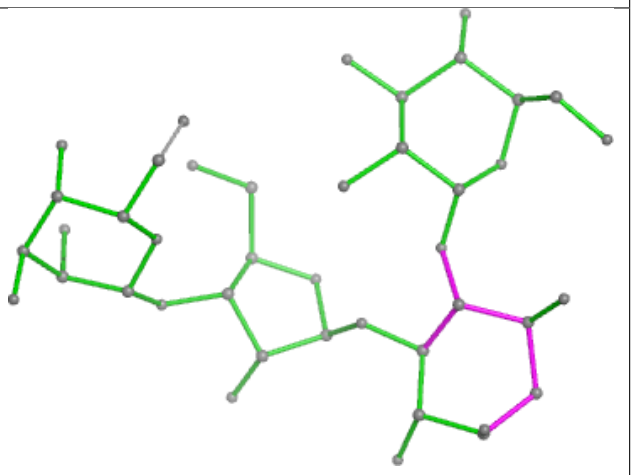
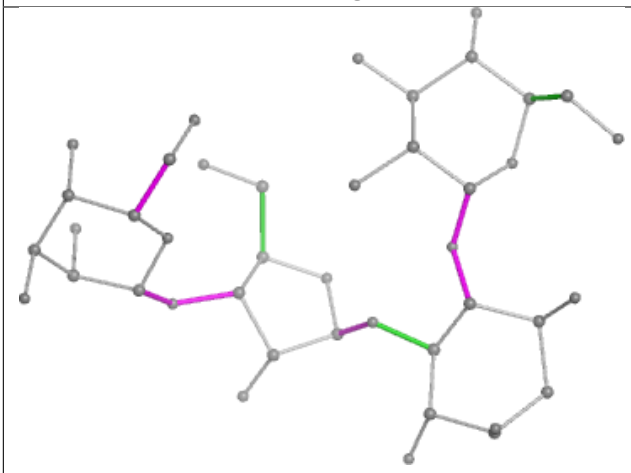
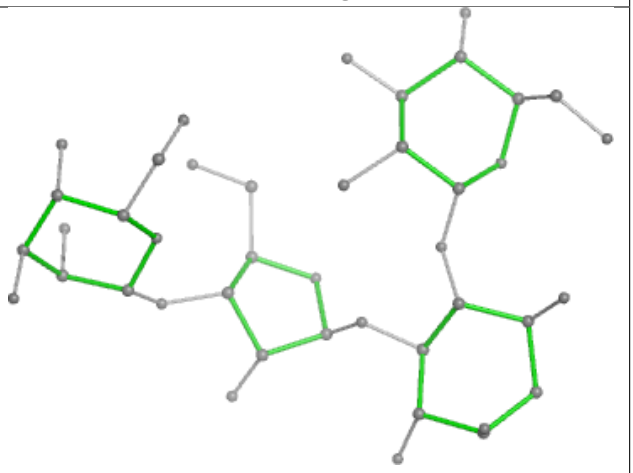


Bond angles

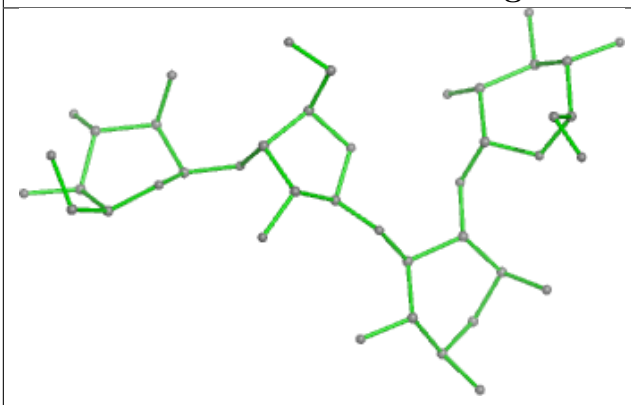


Torsions



Rings

Ligand PAR AS 3407



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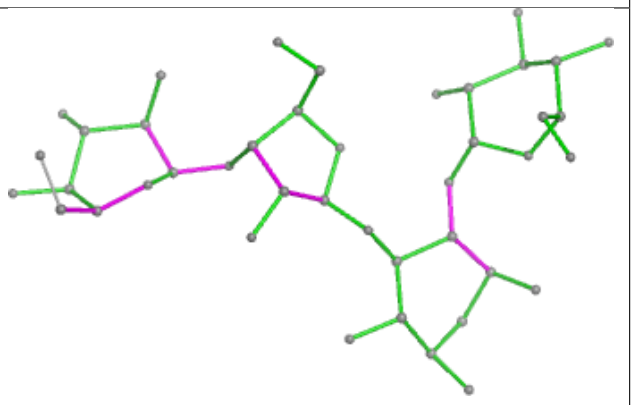
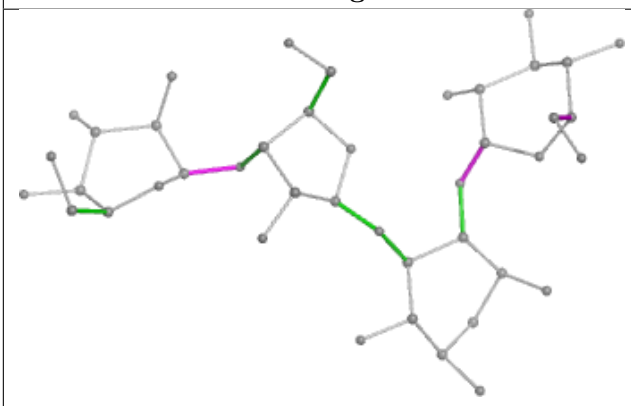
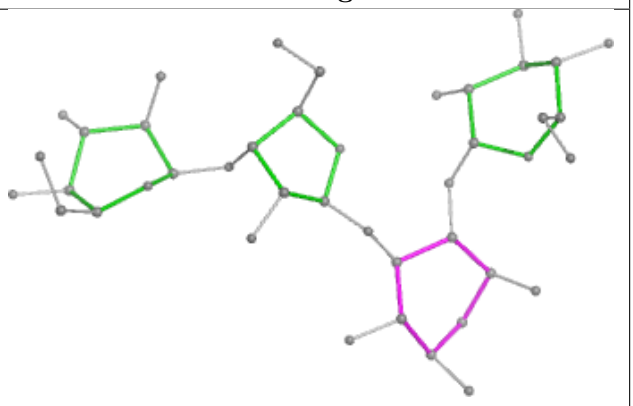


Bond angles

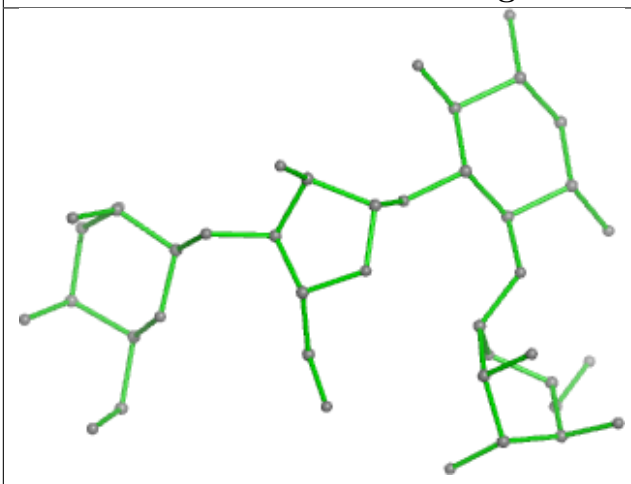


Torsions

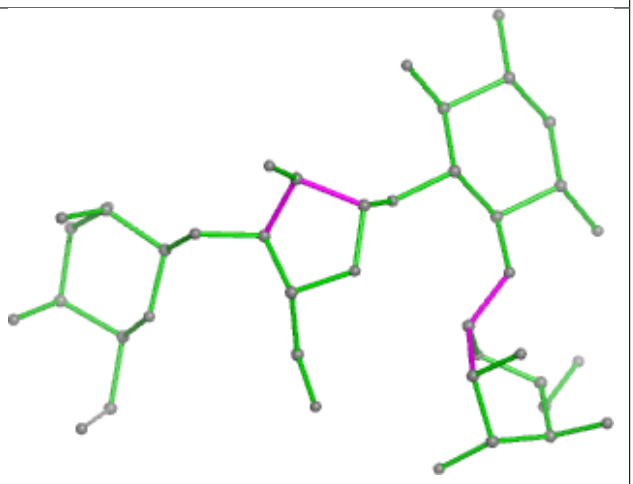


Rings

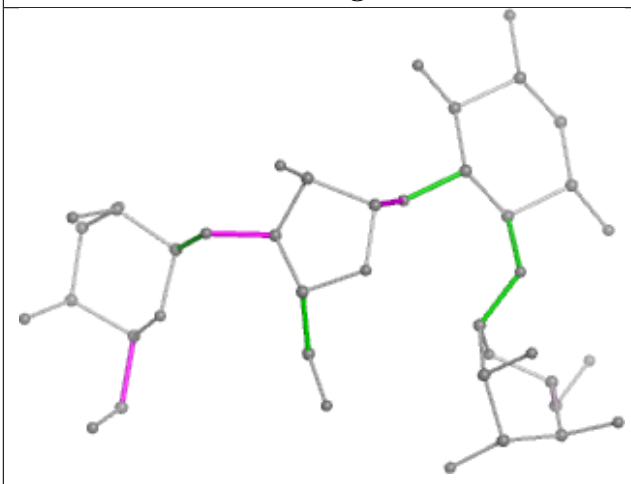
Ligand PAR CM 1802



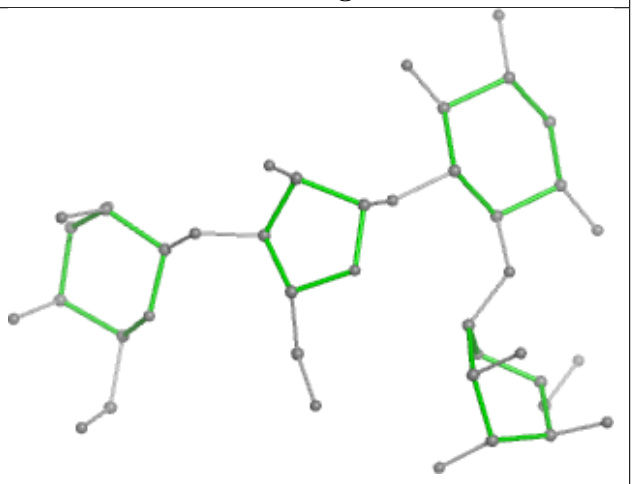
Bond lengths



Bond angles

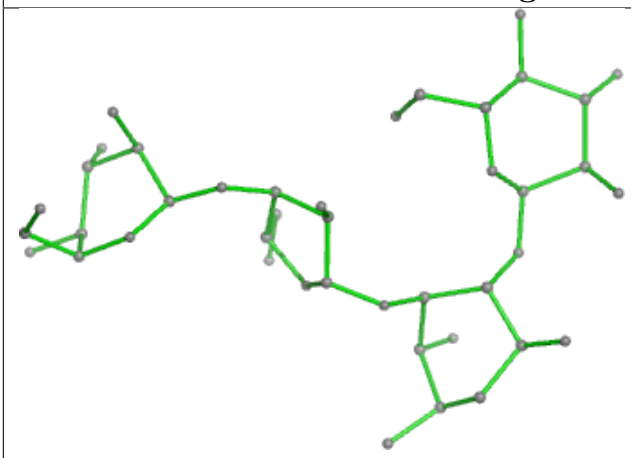


Torsions

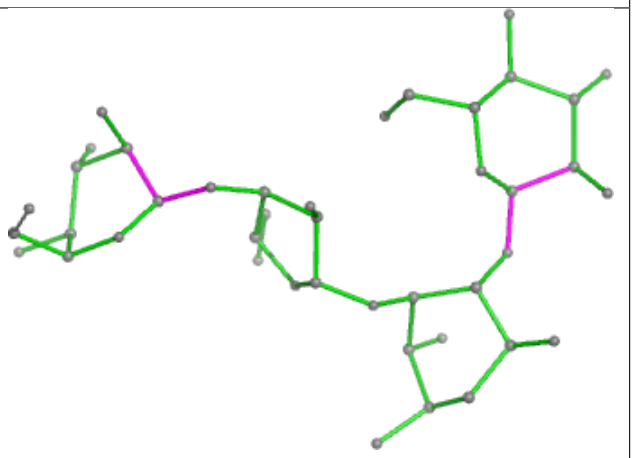


Rings

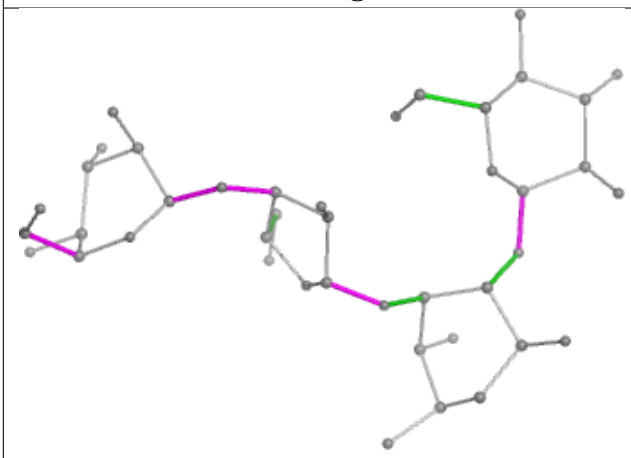
Ligand PAR 1 3403



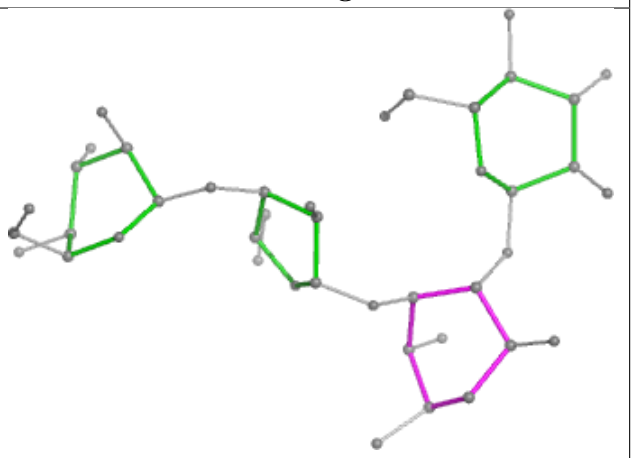
Bond lengths



Bond angles

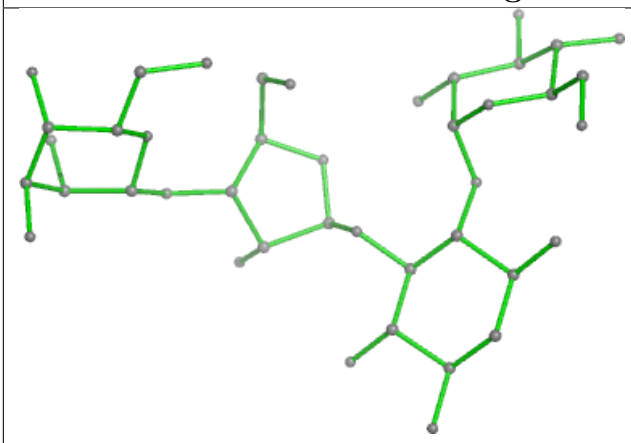


Torsions

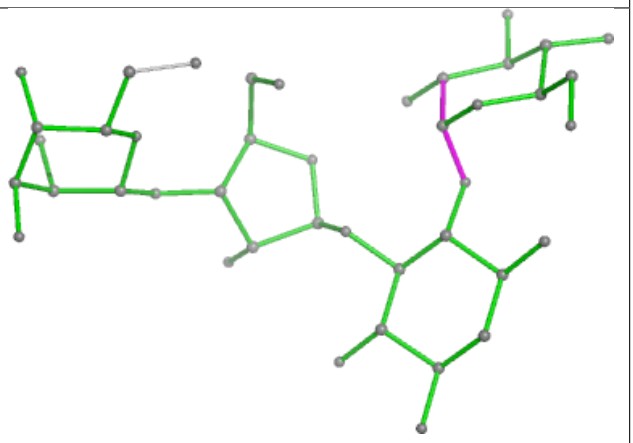


Rings

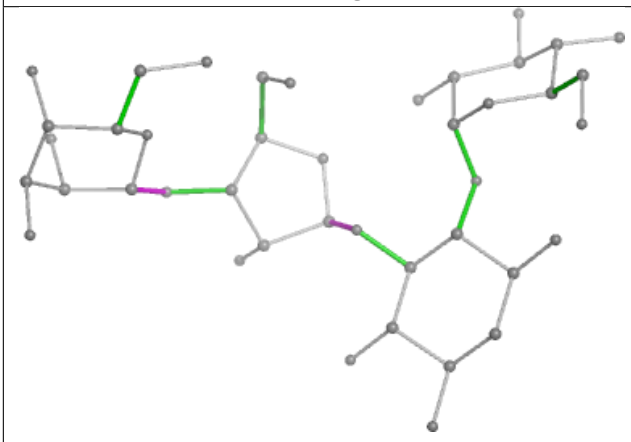
Ligand PAR AS 3403



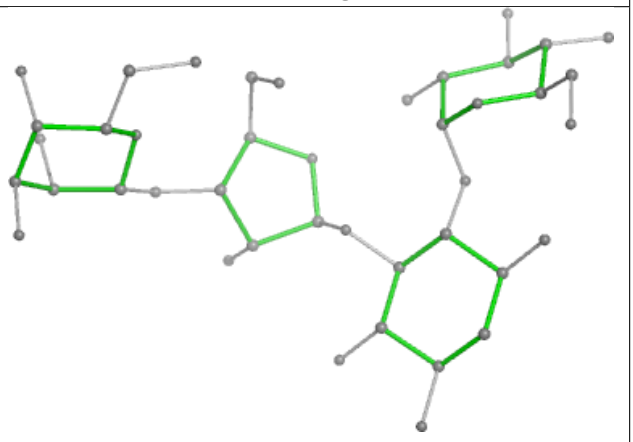
Bond lengths



Bond angles

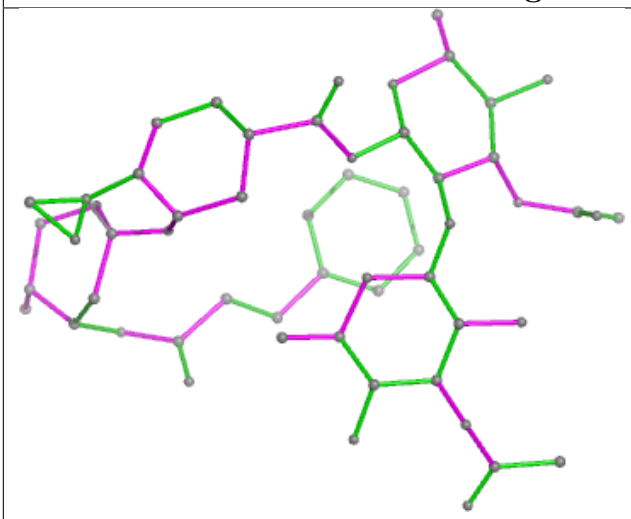


Torsions



Rings

Ligand 3K5 1 3401



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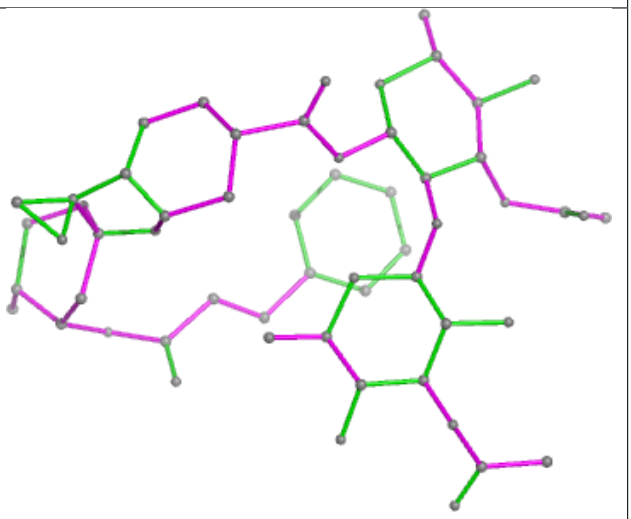

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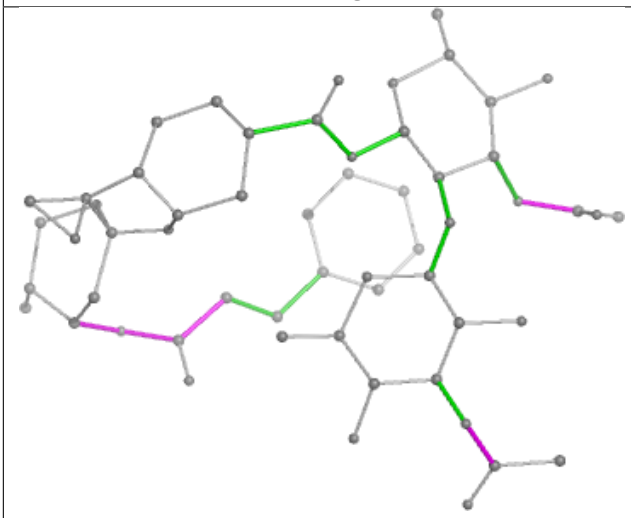

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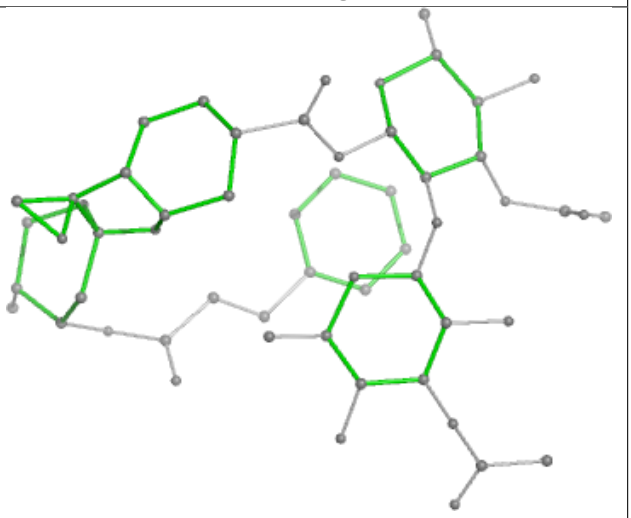
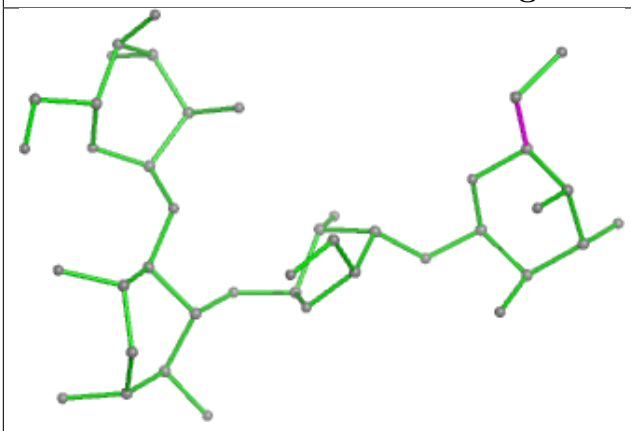


Rings

Ligand PAR 1 3405



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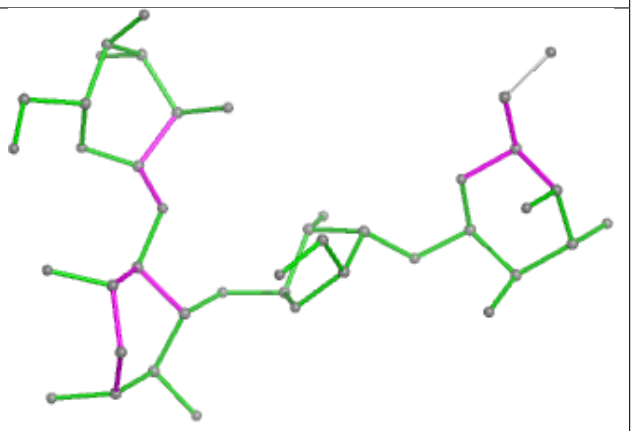
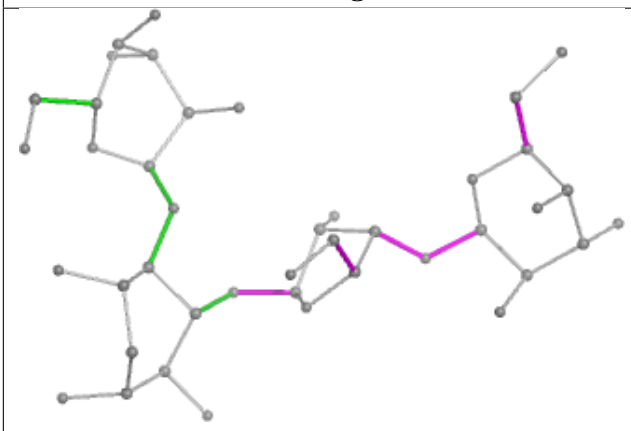


Bond angles



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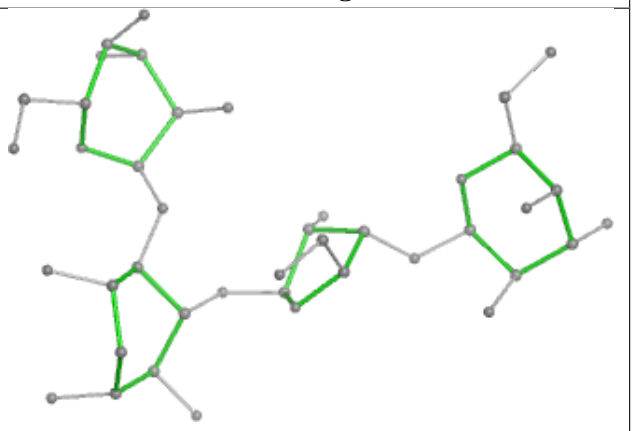

Rings

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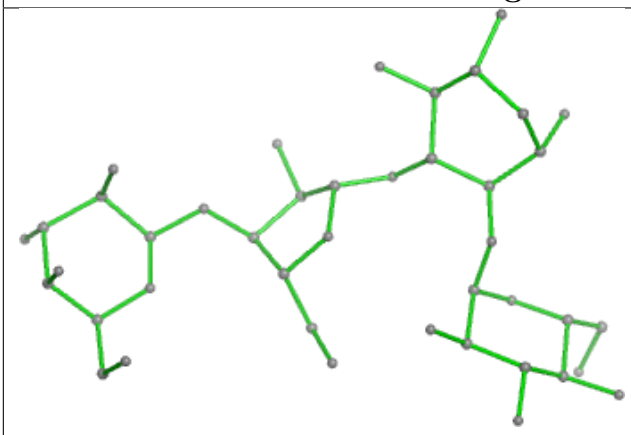

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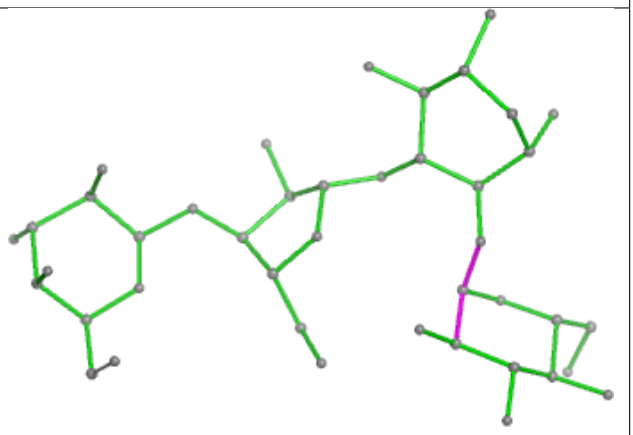
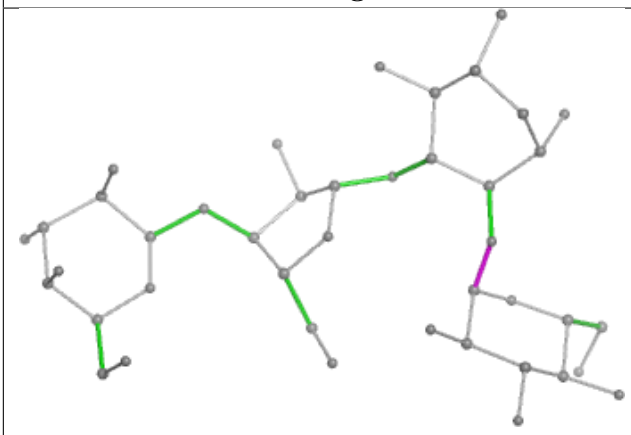


Bond angles



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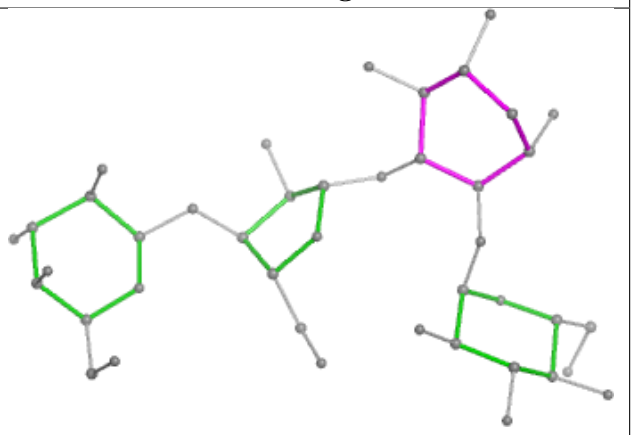
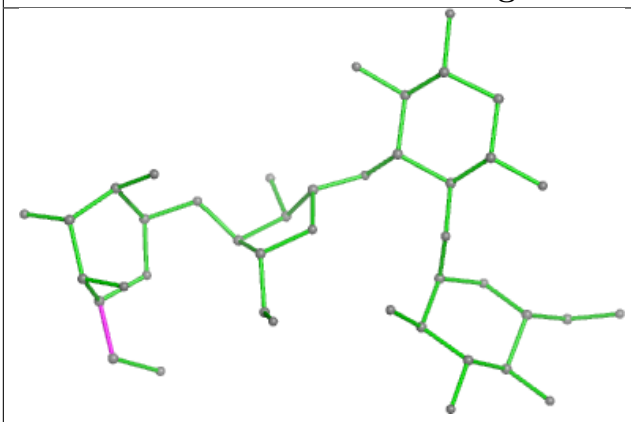


Rings

Ligand PAR CM 1801



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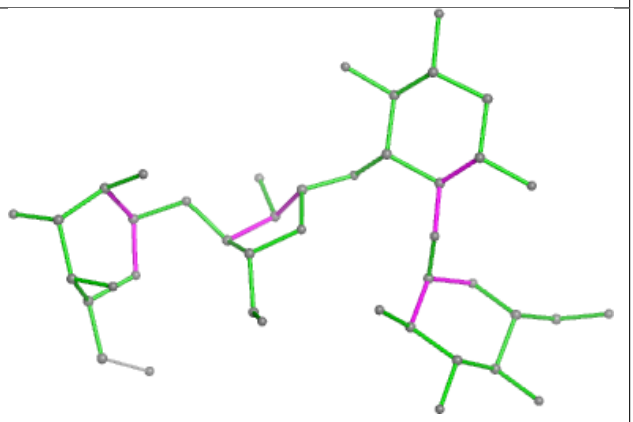

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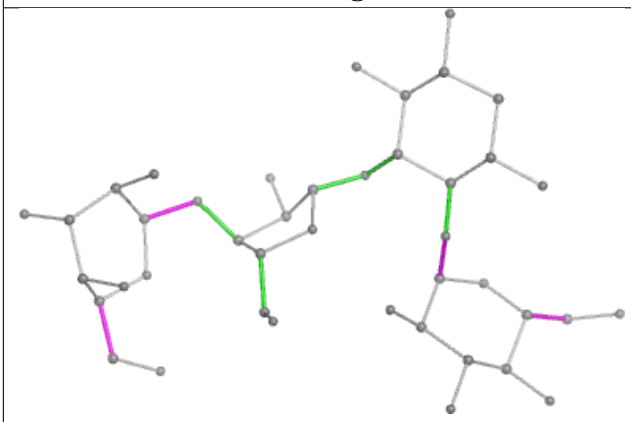

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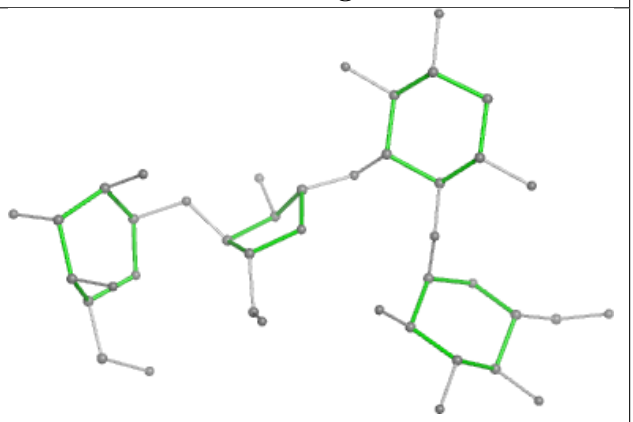
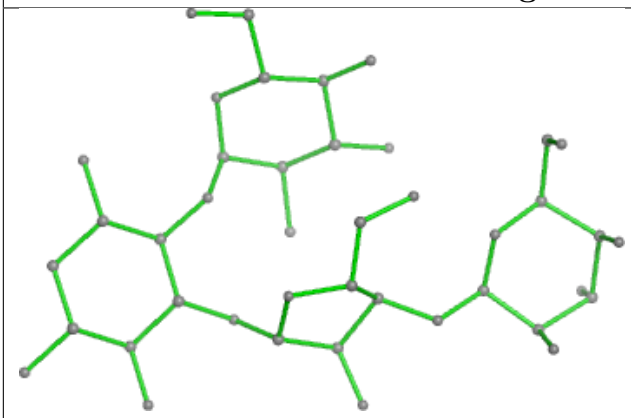


Rings

Ligand PAR 1 3416



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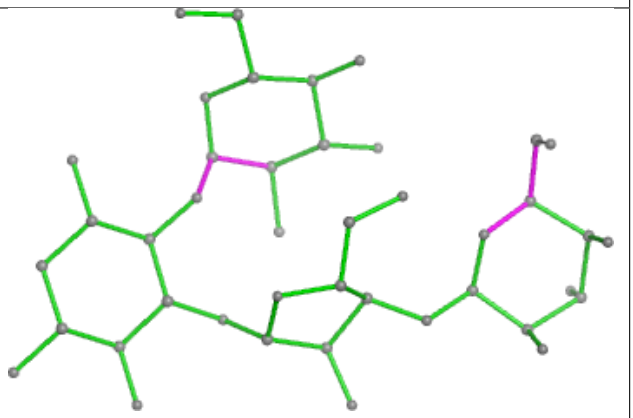
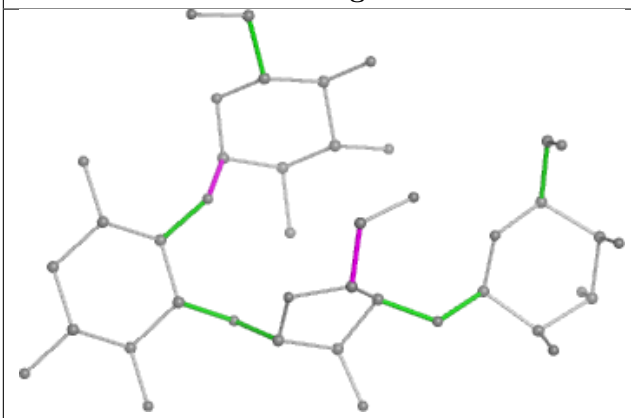


Bond angles



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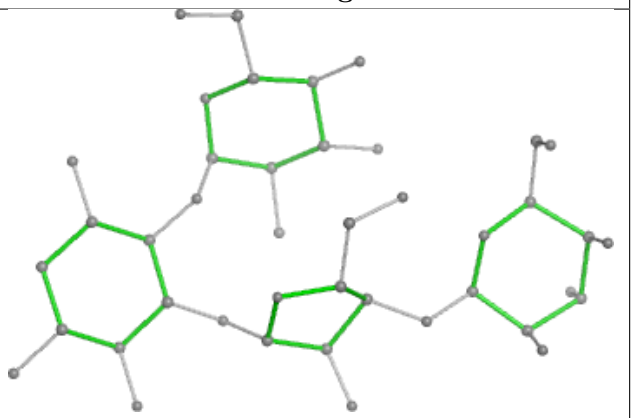
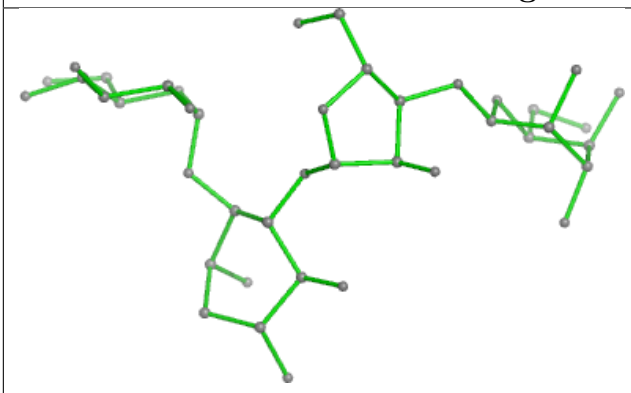


Rings

Ligand PAR 1 3410



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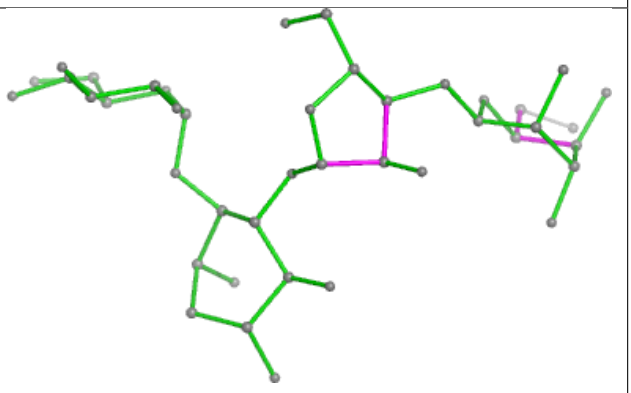
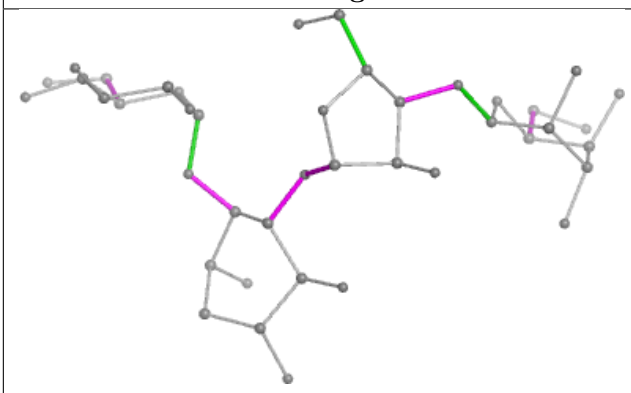


Bond angles



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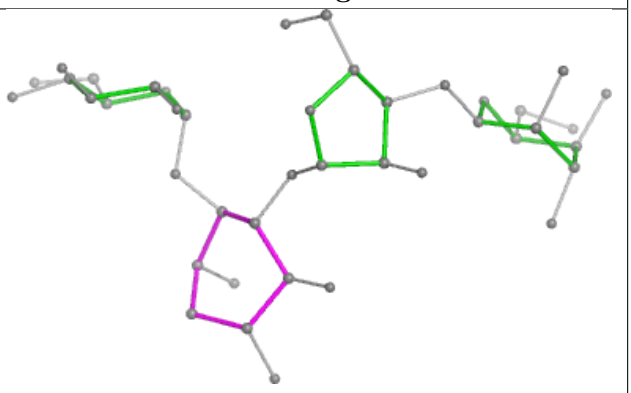
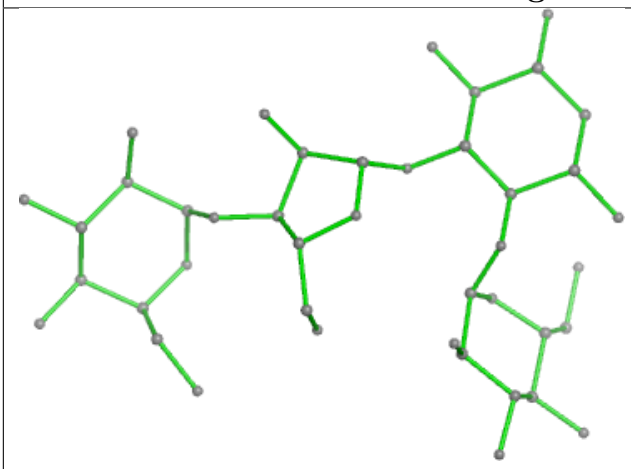


Rings

Ligand PAR 4 202



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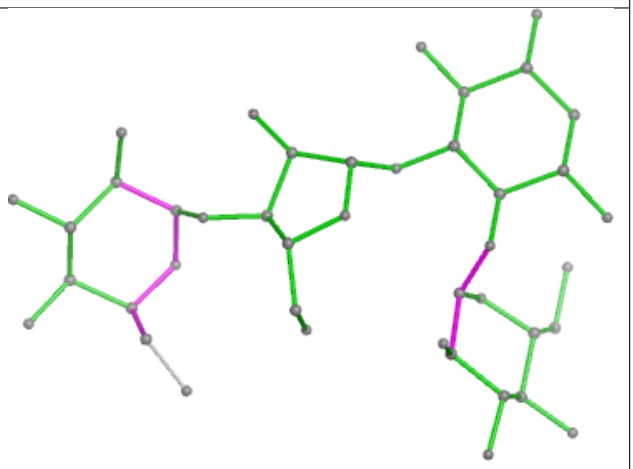
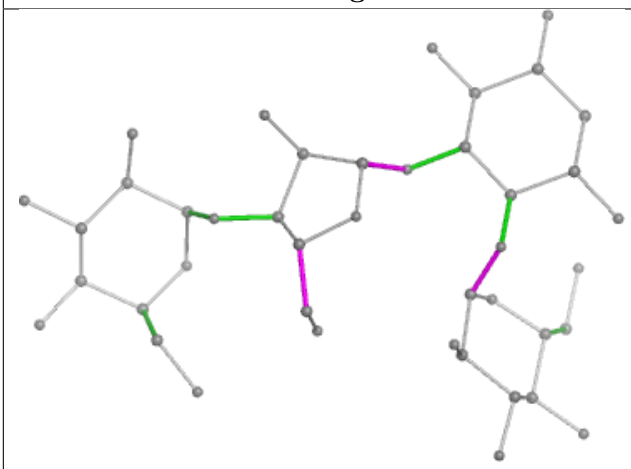


Bond angles



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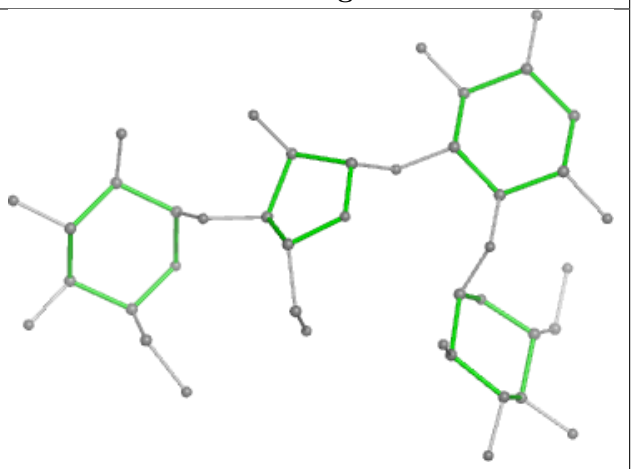
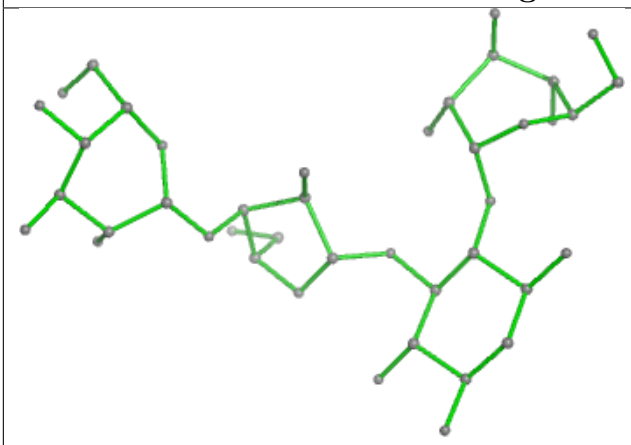


Rings

Ligand PAR 1 3409



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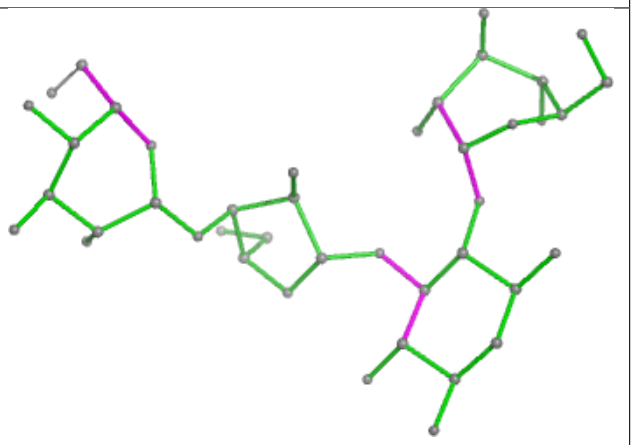
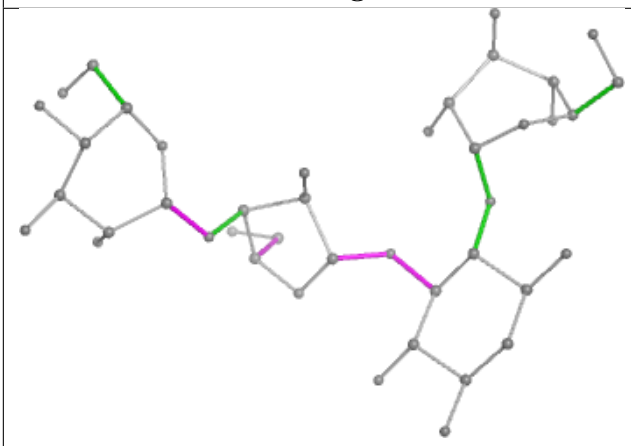


Bond angles



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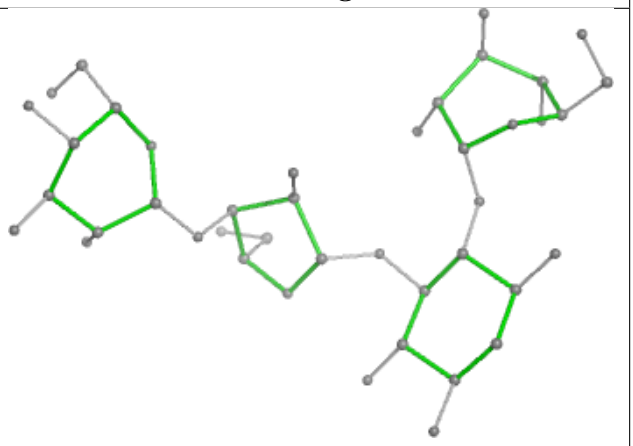
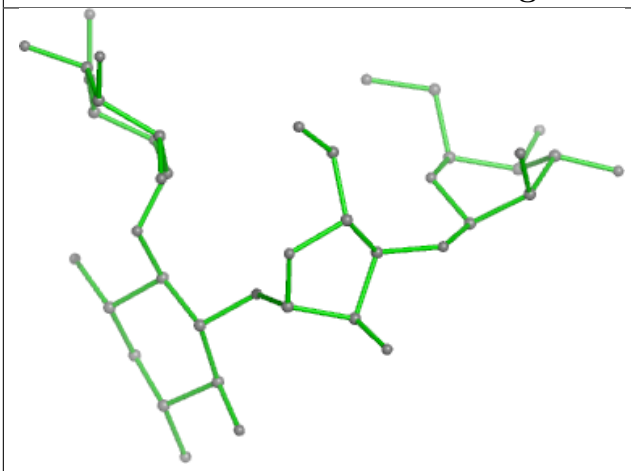


Rings

Ligand PAR 1 3427



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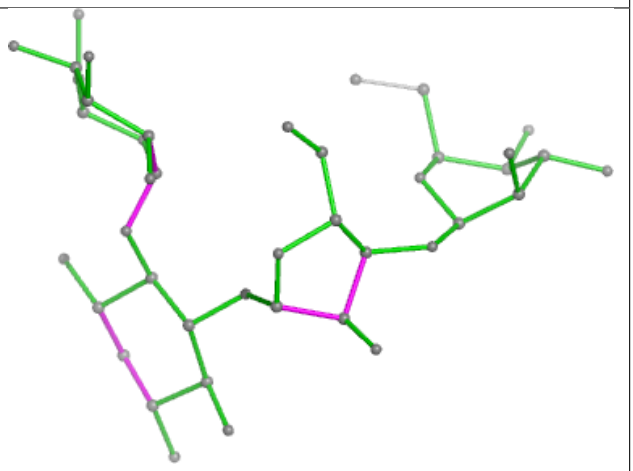

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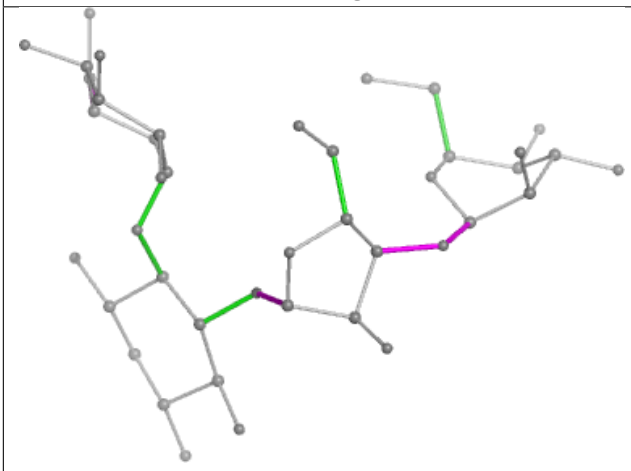

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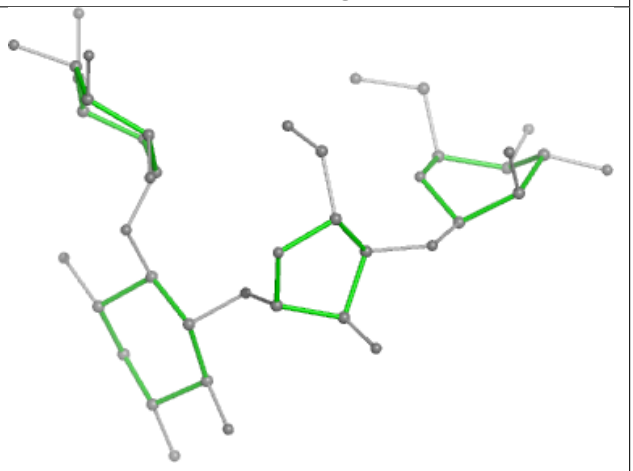
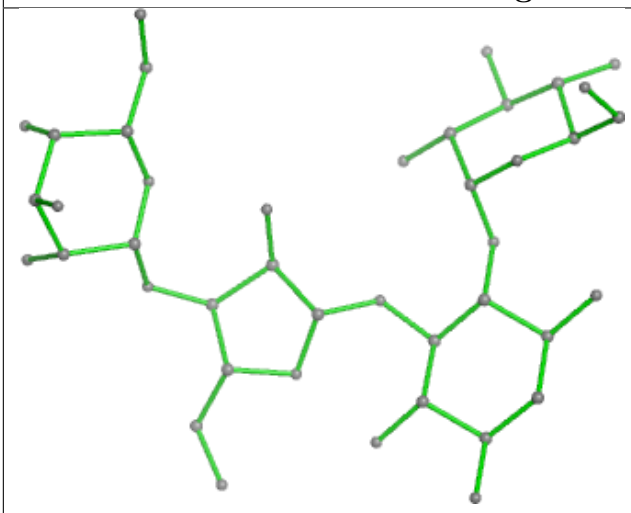


Rings

Ligand PAR B 1802



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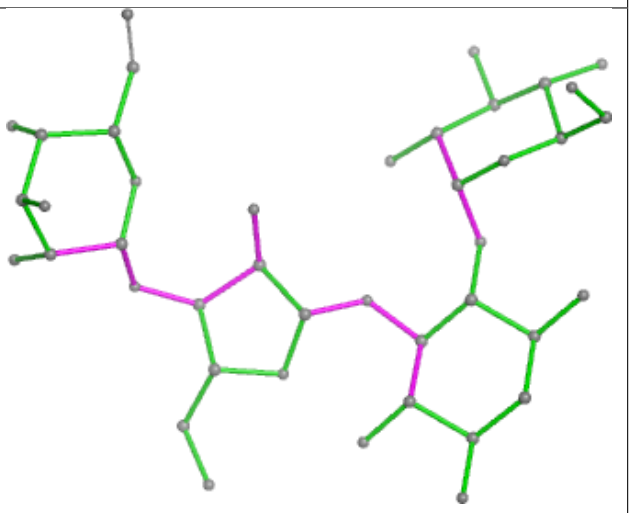
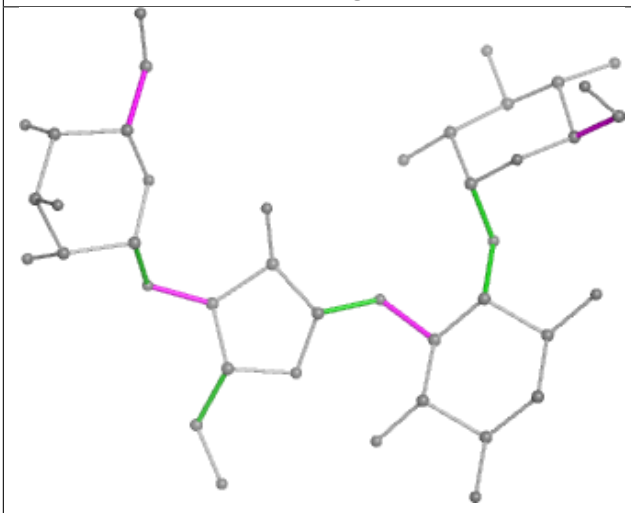


Bond angles



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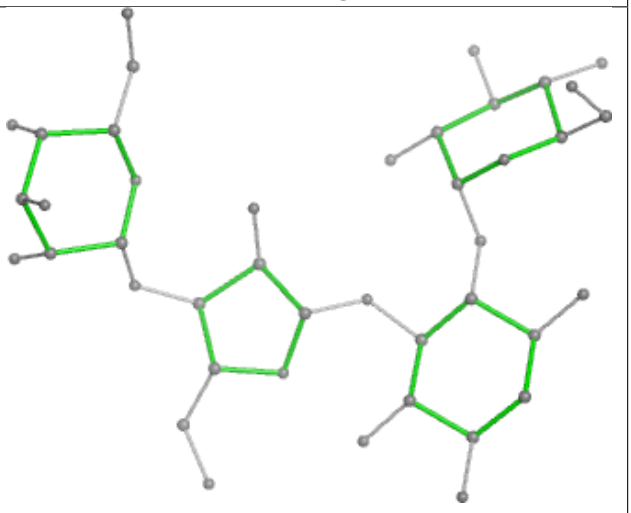
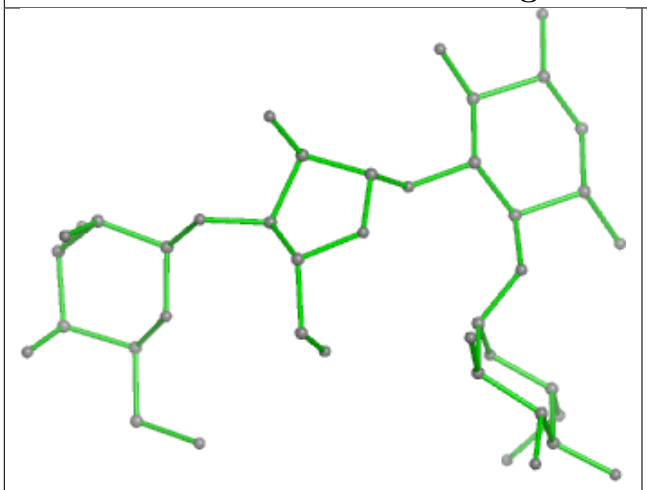


Rings

Ligand PAR 1 3421



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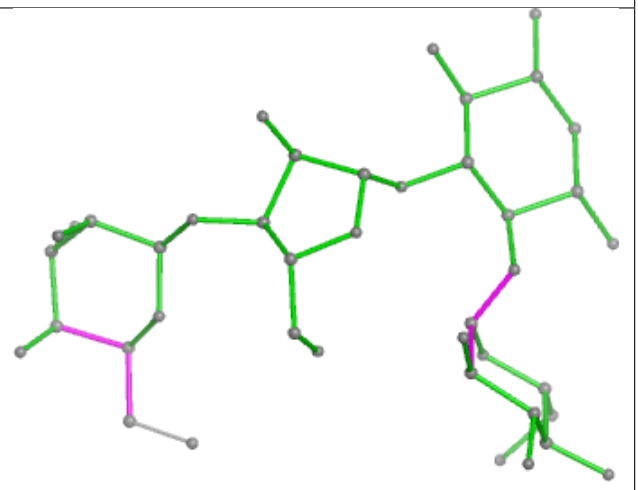
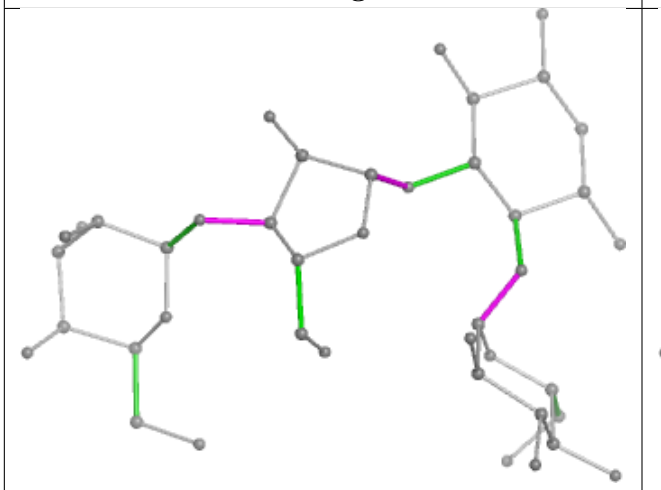
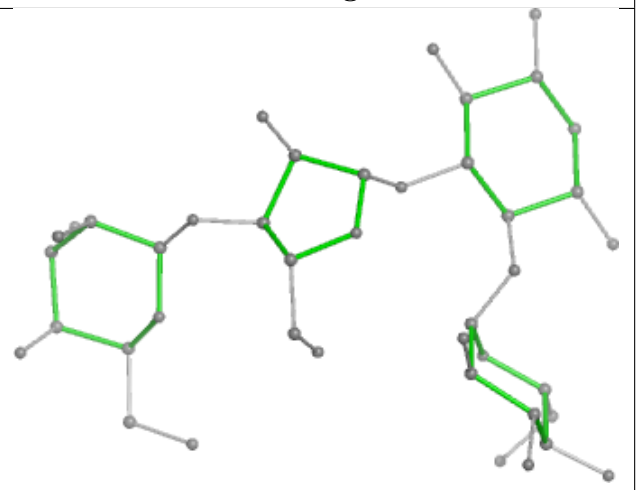


Bond angles

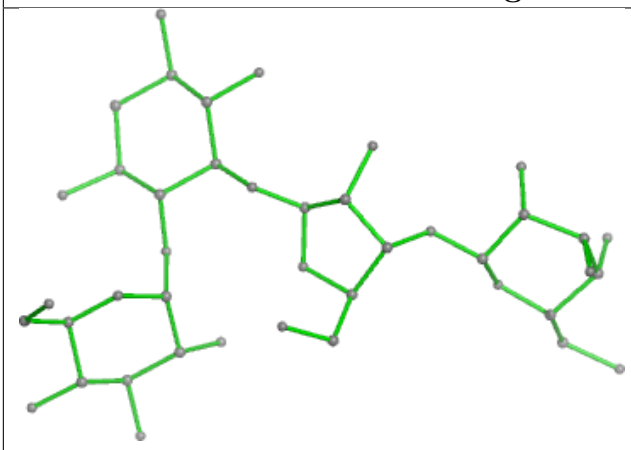


Torsions



Rings

Ligand PAR AS 3408



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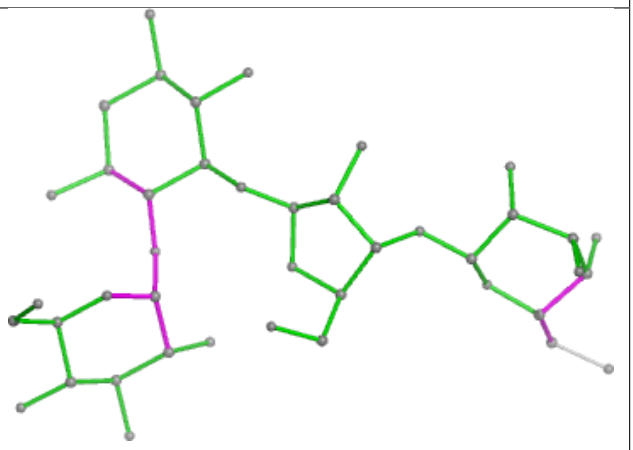
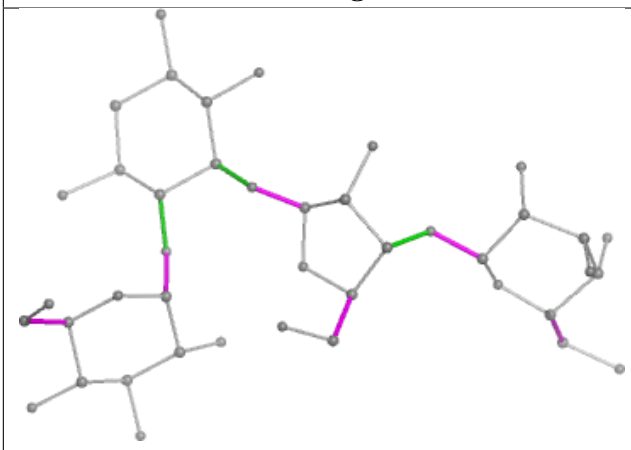
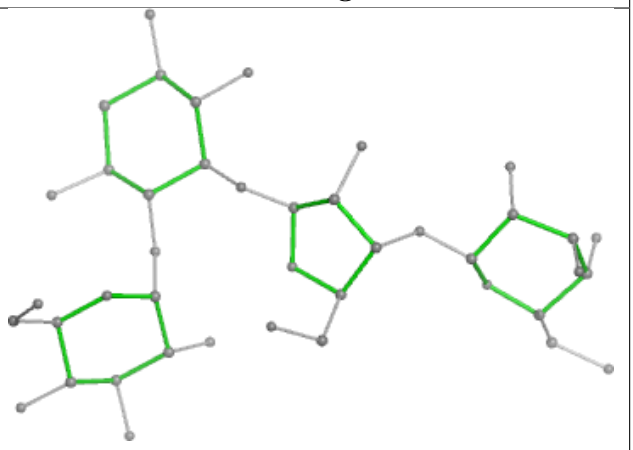


Bond angles

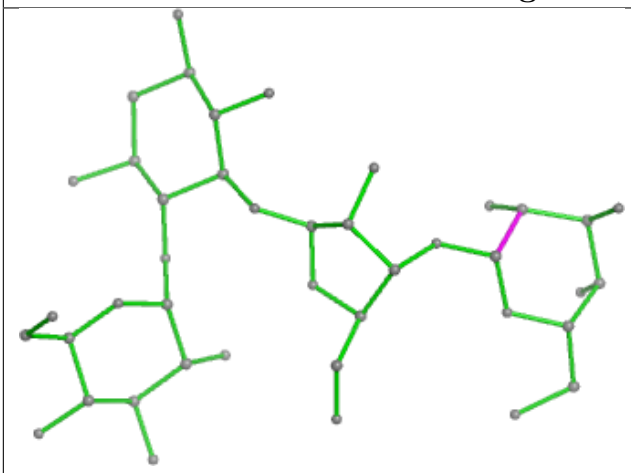


Torsions

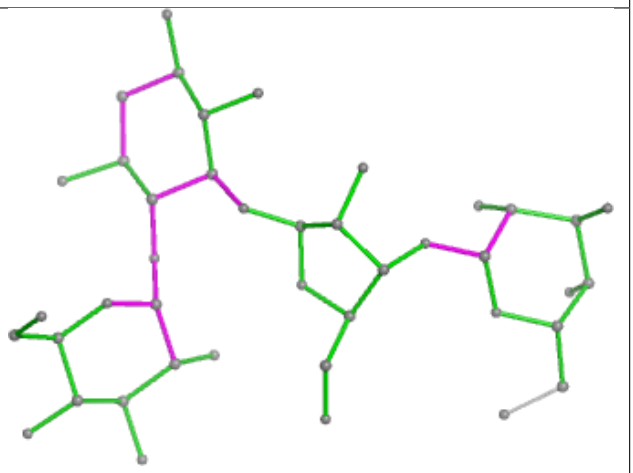


Rings

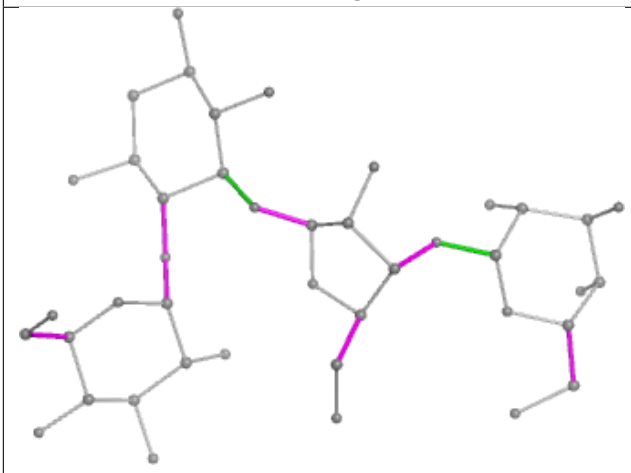
Ligand PAR 1 3417



Bond lengths



Bond angles



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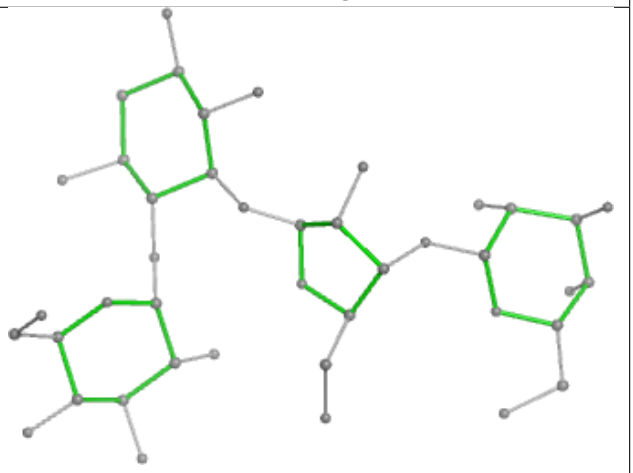
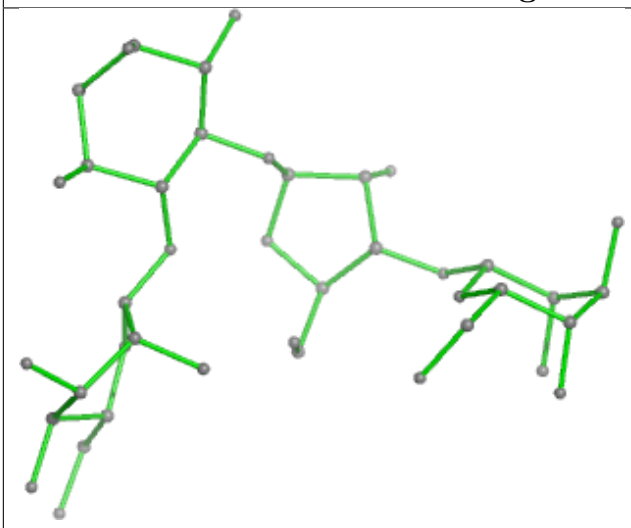


Rings

Ligand PAR 1 3404



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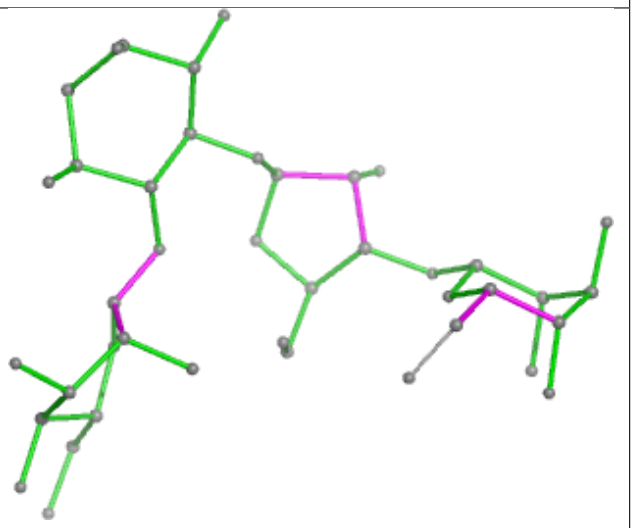
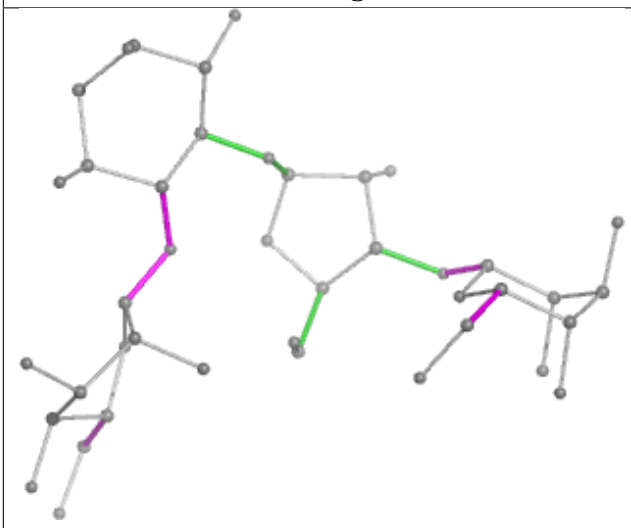
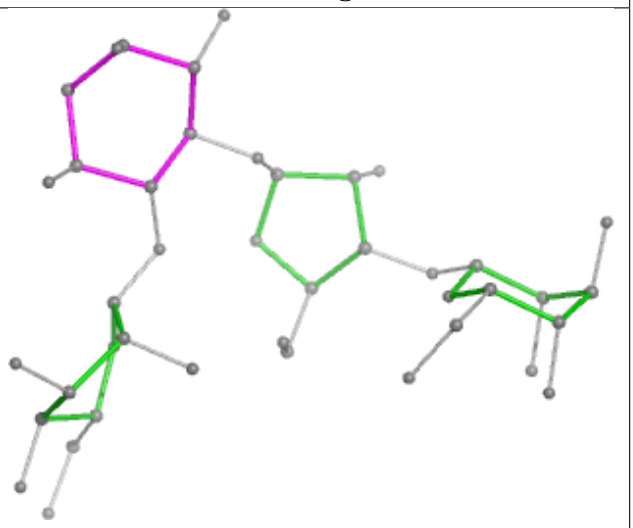


Bond angles

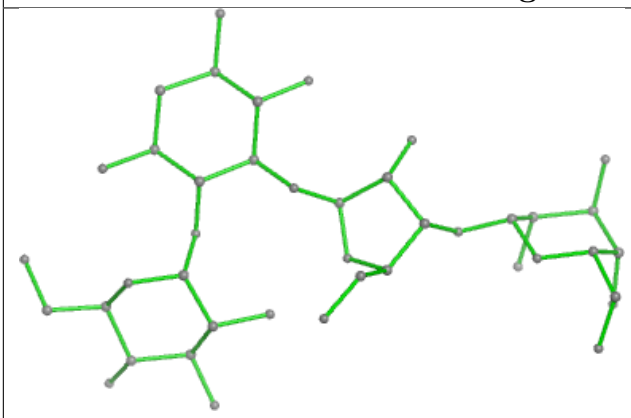


Torsions

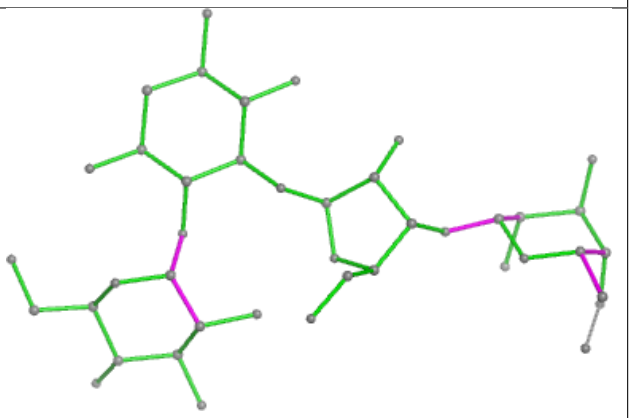


Rings

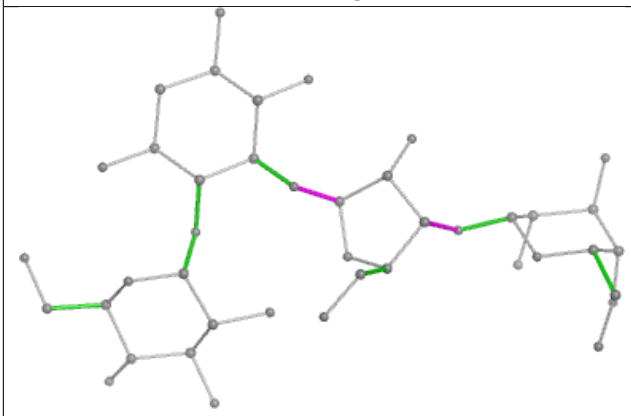
Ligand PAR 1 3415



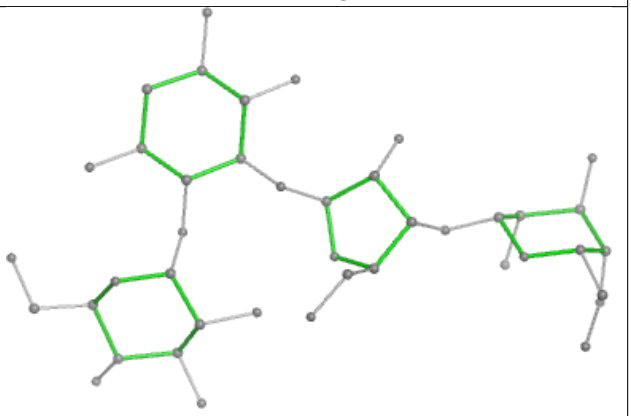
Bond lengths



Bond angles

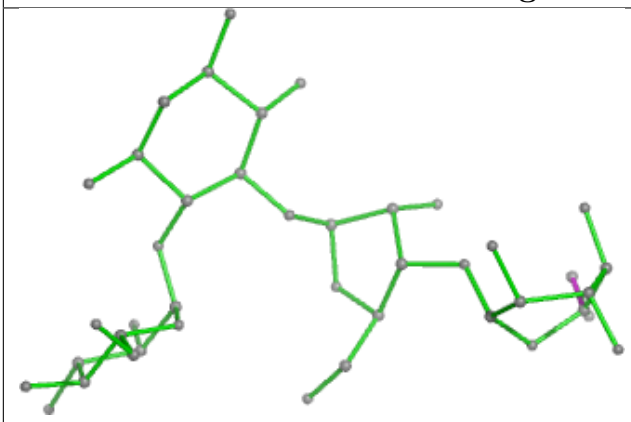


Torsions



Rings

Ligand PAR 1 3424



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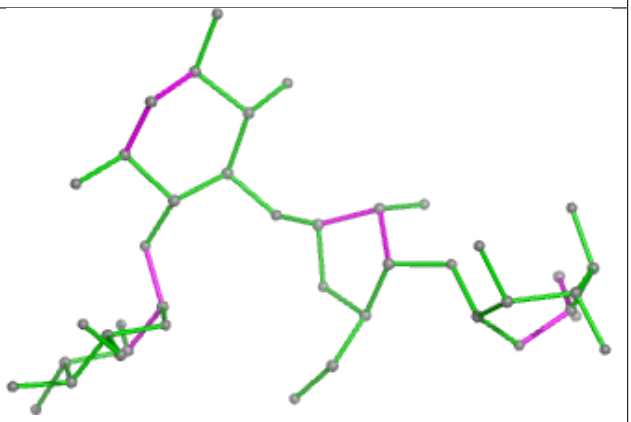
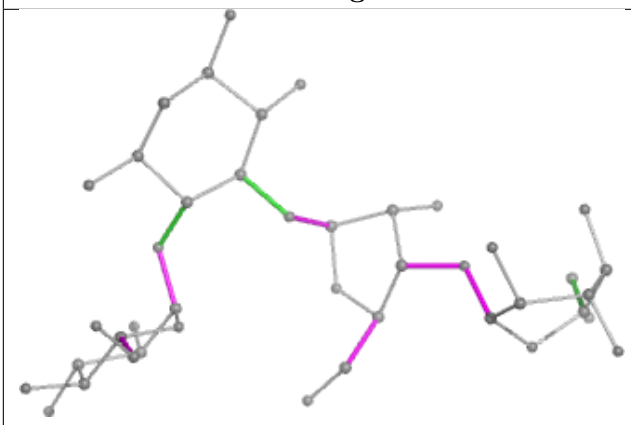
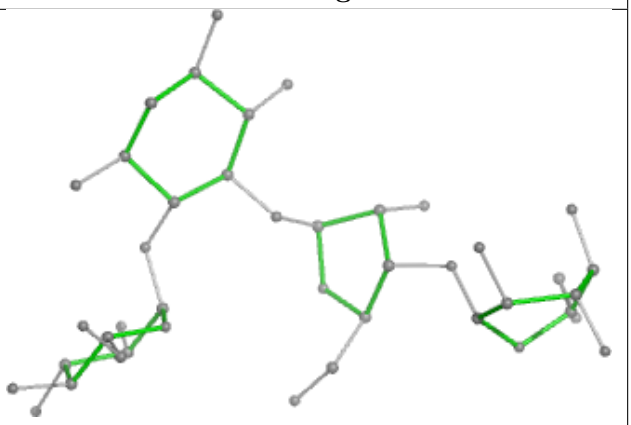


Bond angles

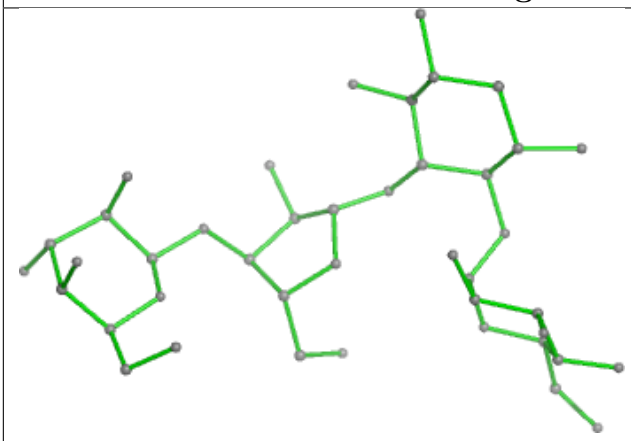


Torsions



Rings

Ligand PAR B 1803



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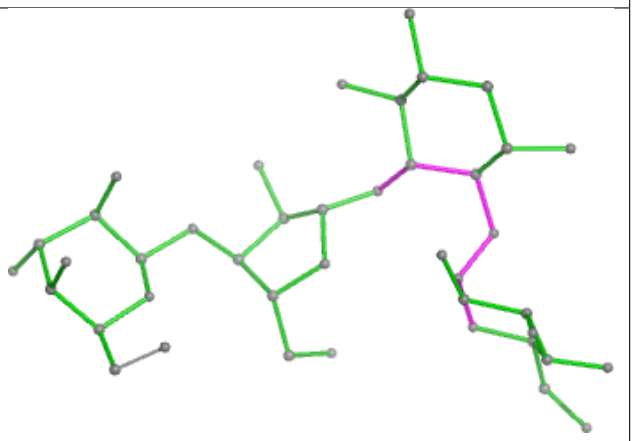
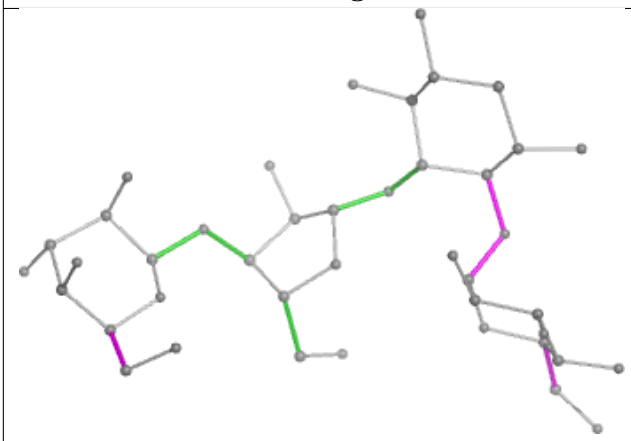
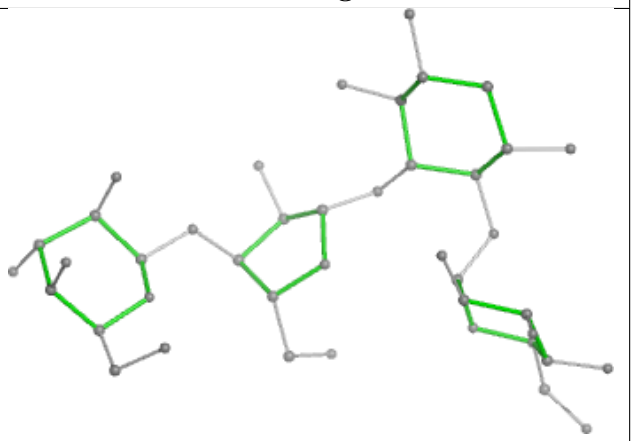


Bond angles

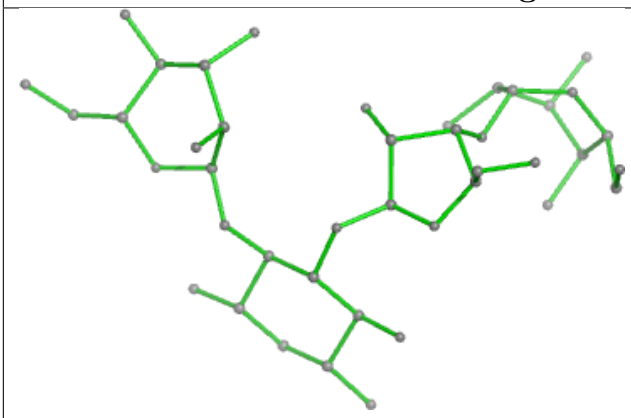


Torsions



Rings

Ligand PAR 1 3411



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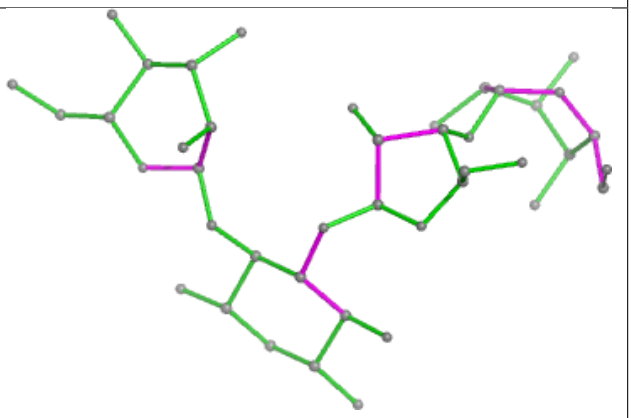
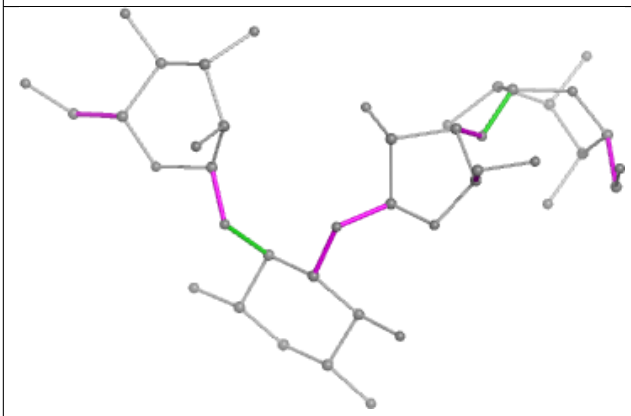


Bond angles



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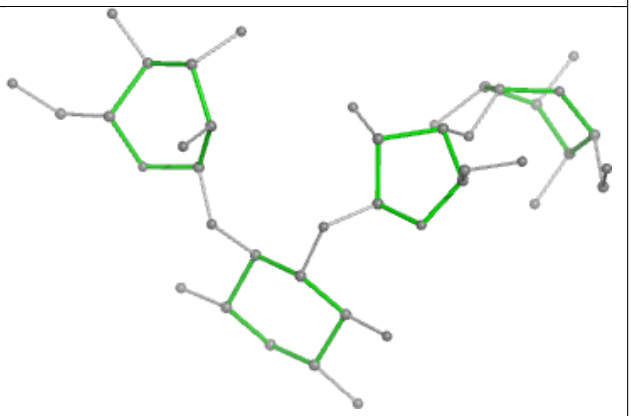
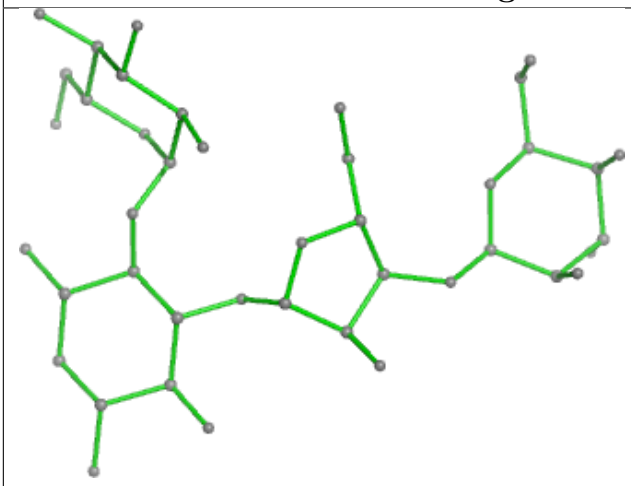


Rings

Ligand PAR CM 1803



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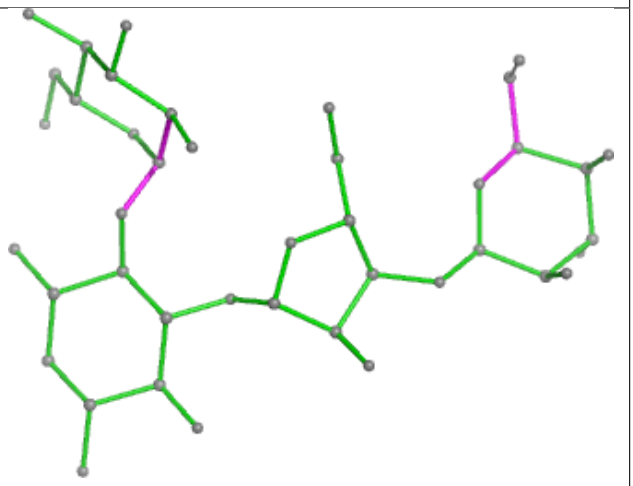
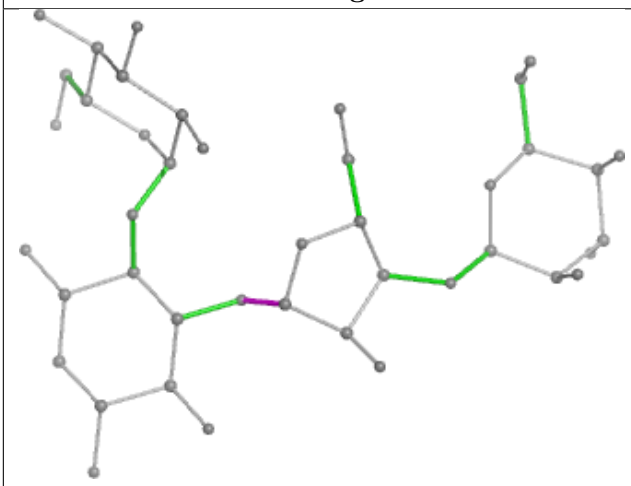


Bond angles



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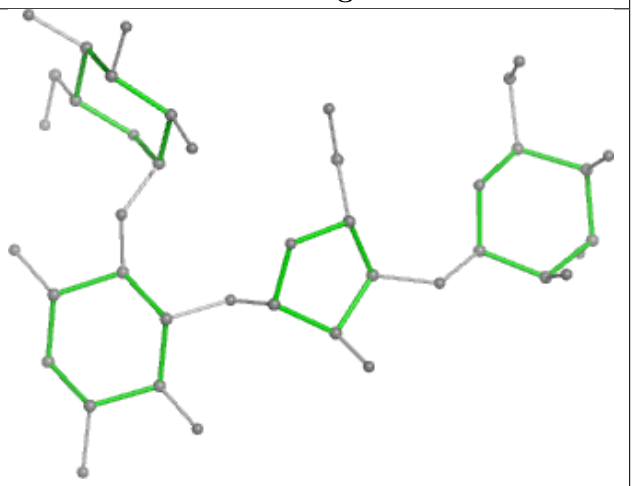
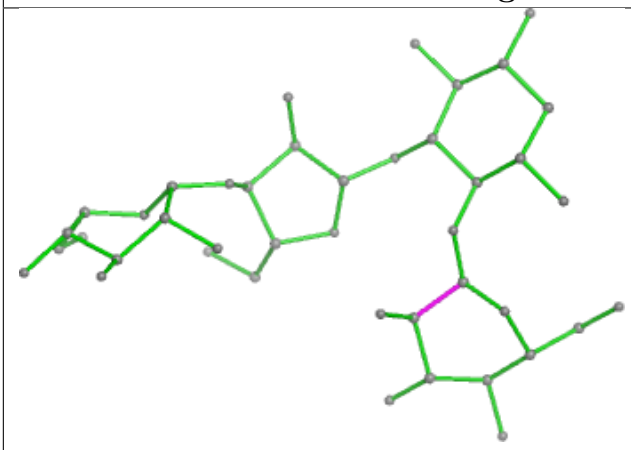


Rings

Ligand PAR CM 1806



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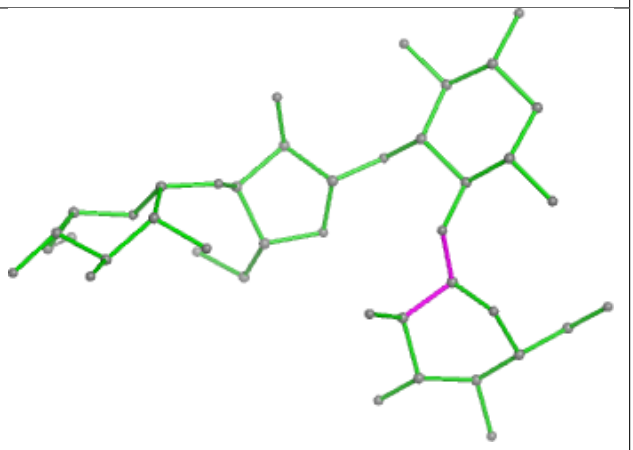
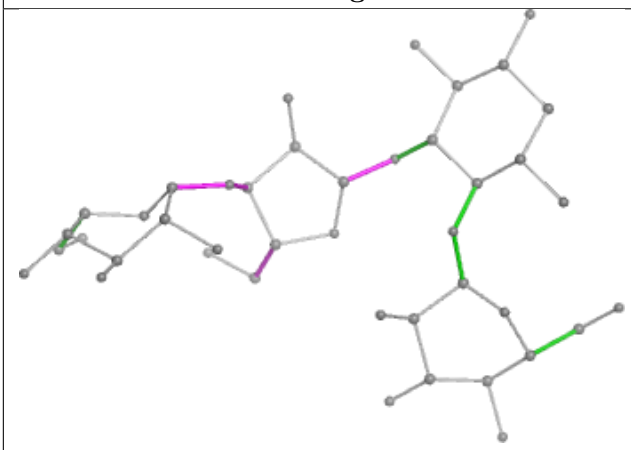


Bond angles



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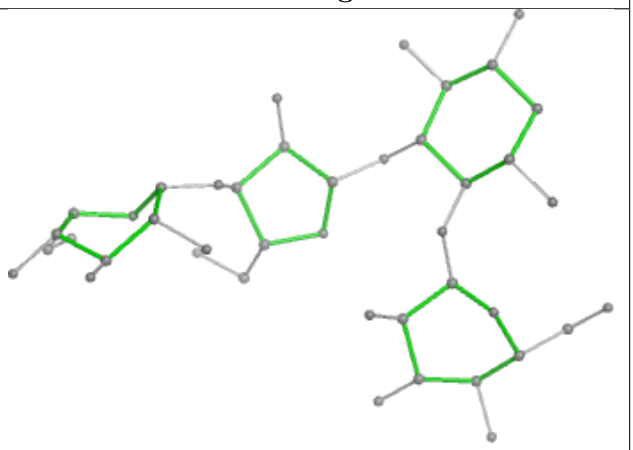
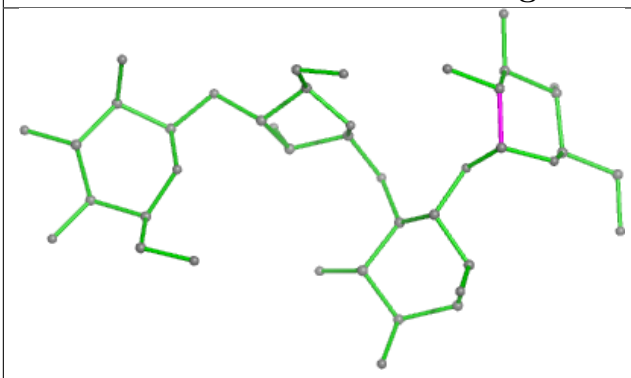


Rings

Ligand PAR 1 3430



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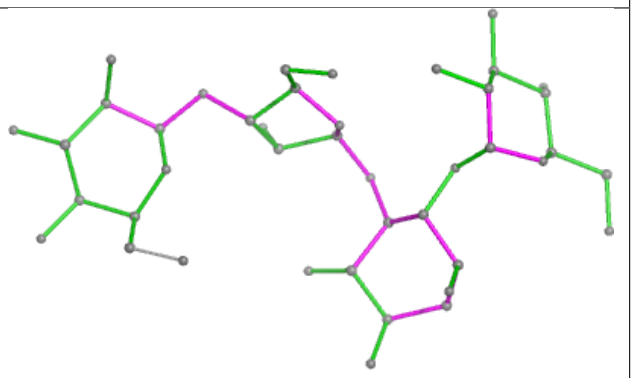
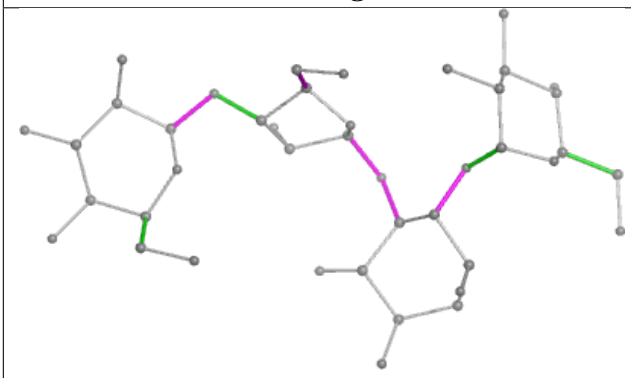


Bond angles



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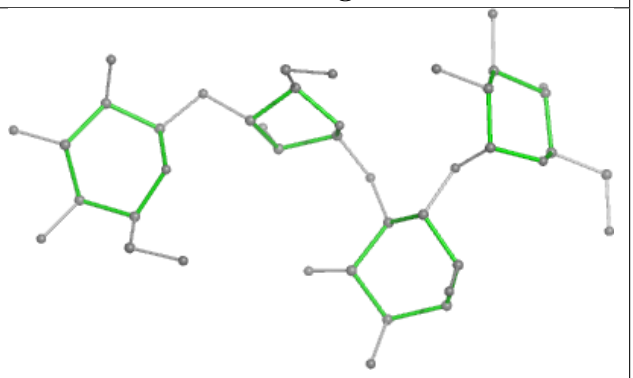
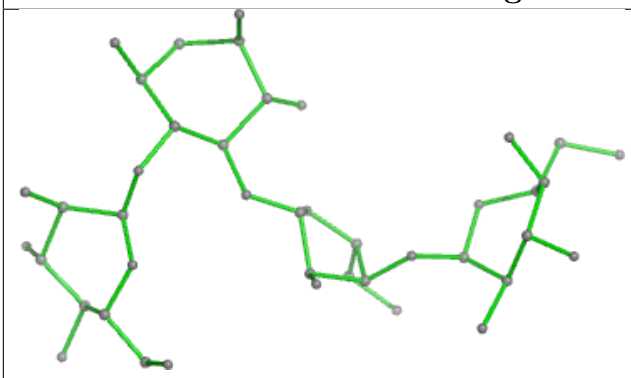


Rings

Ligand PAR AS 3411



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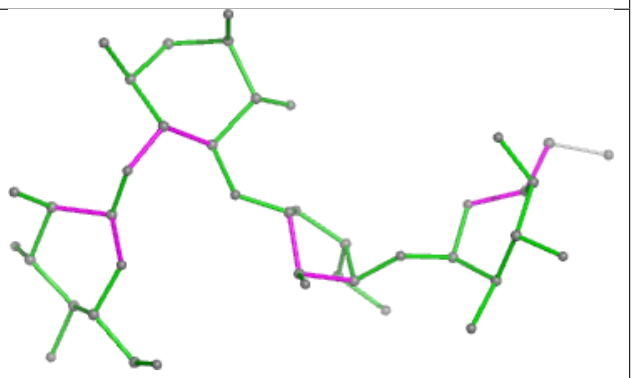
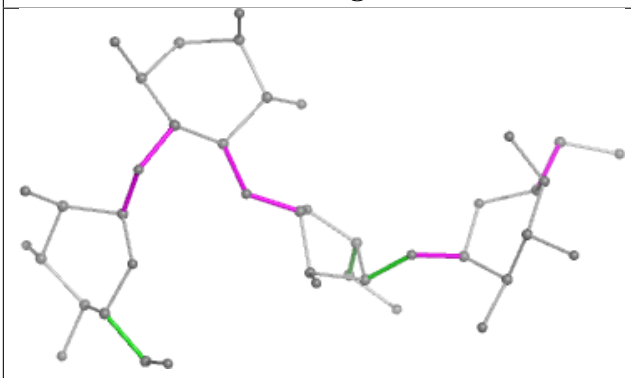


Bond angles



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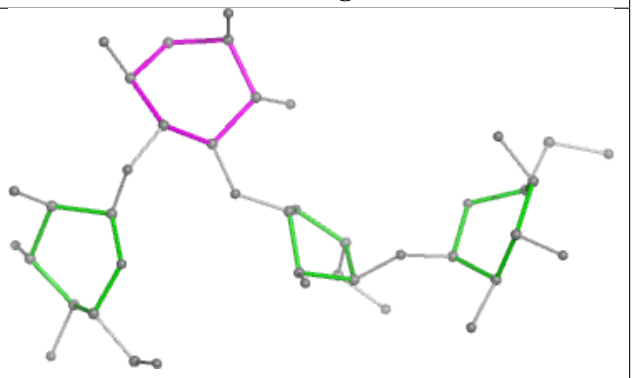
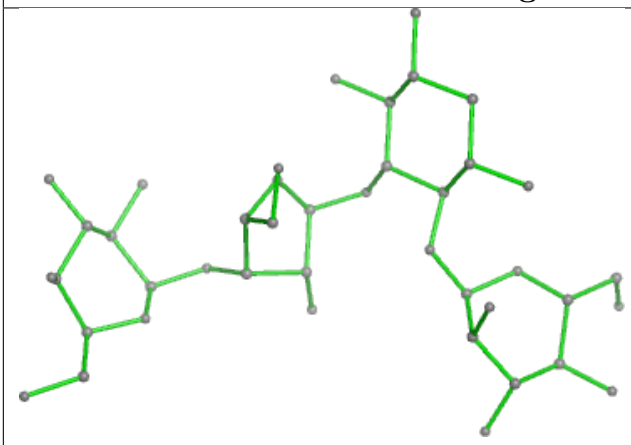


Rings

Ligand PAR 1 3420



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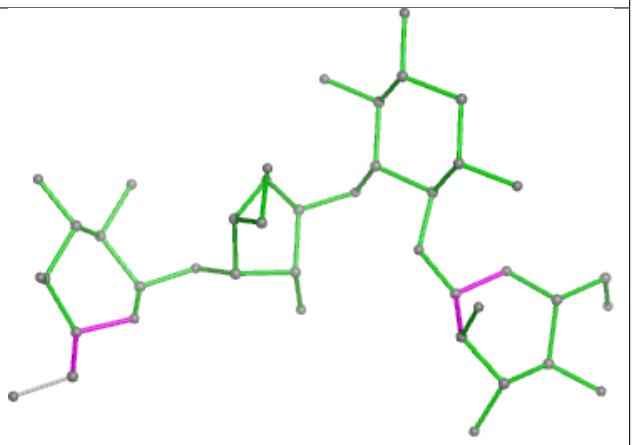
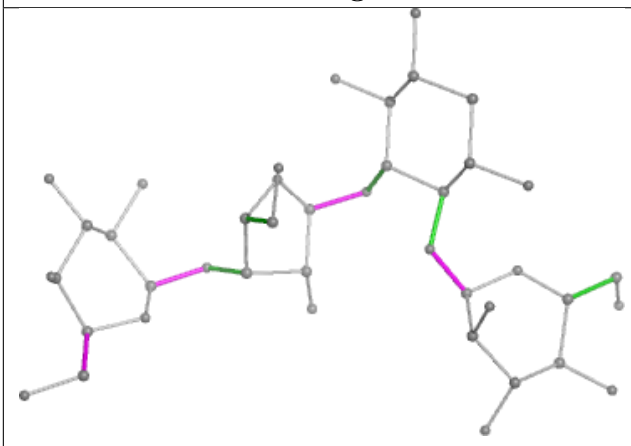


Bond angles



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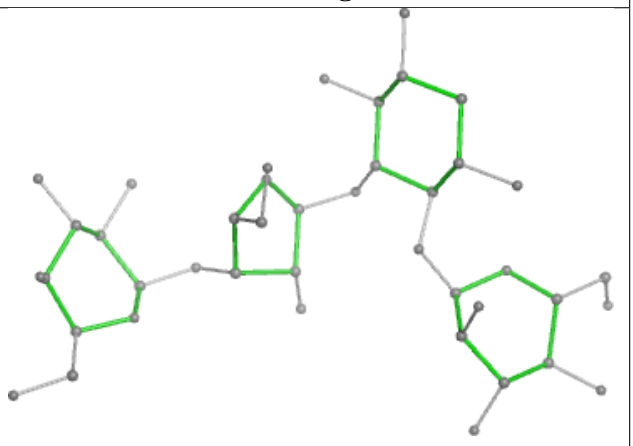
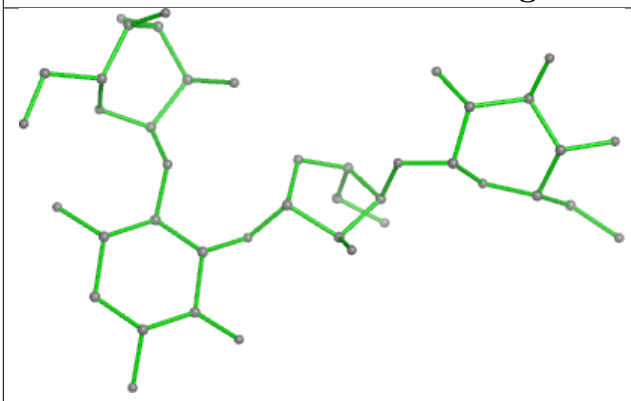


Rings

Ligand PAR 1 3428



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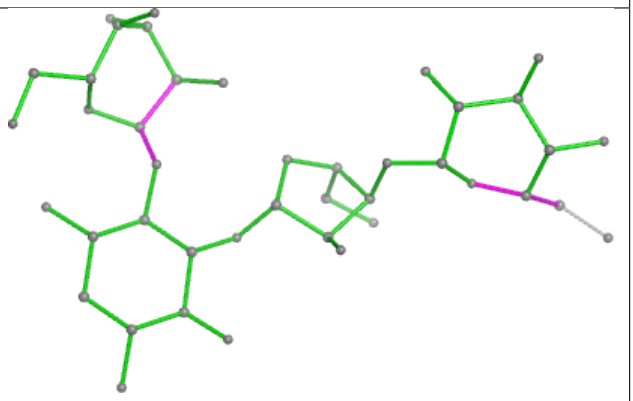

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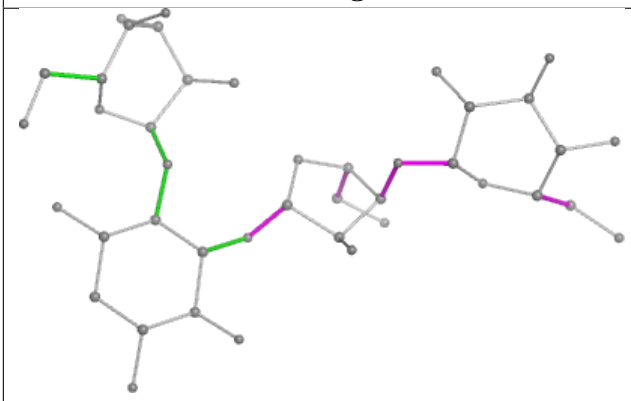
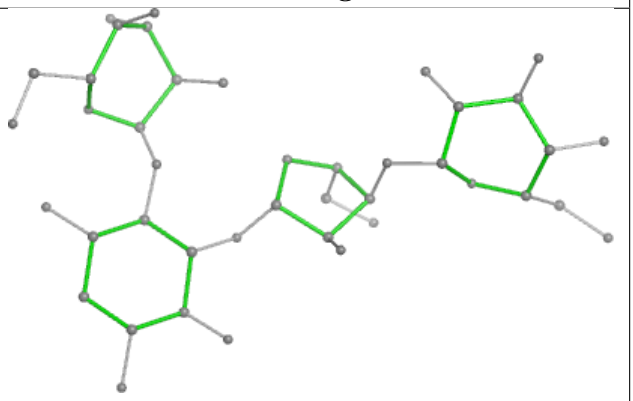
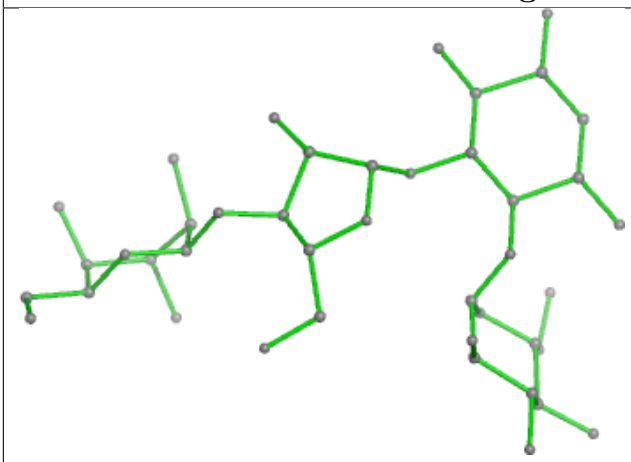


Torsions



Rings

Ligand PAR 1 3412



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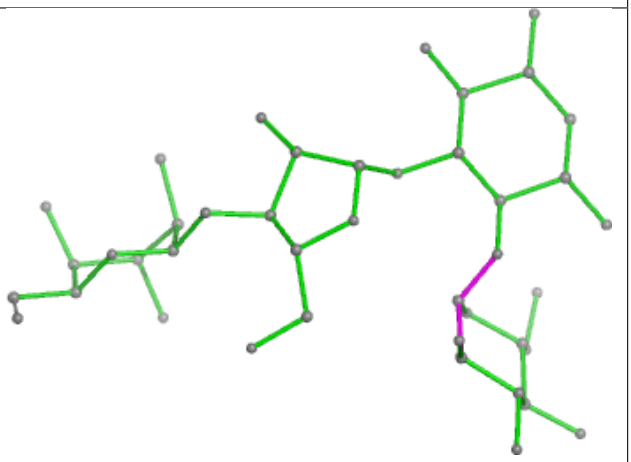
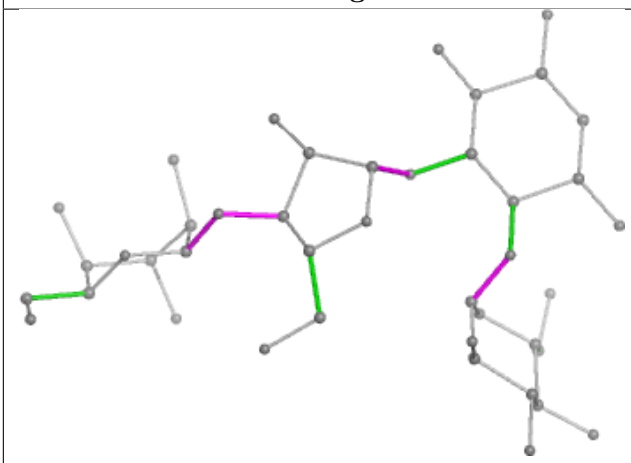
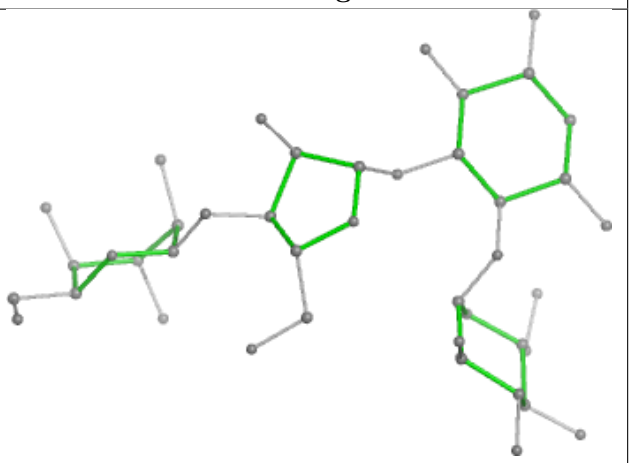


Bond angles

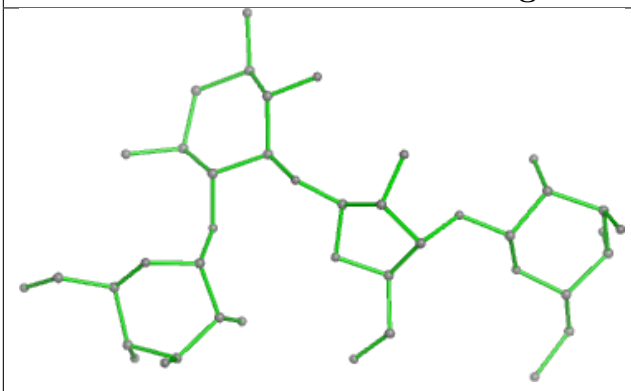


Torsions



Rings

Ligand PAR 1 3426



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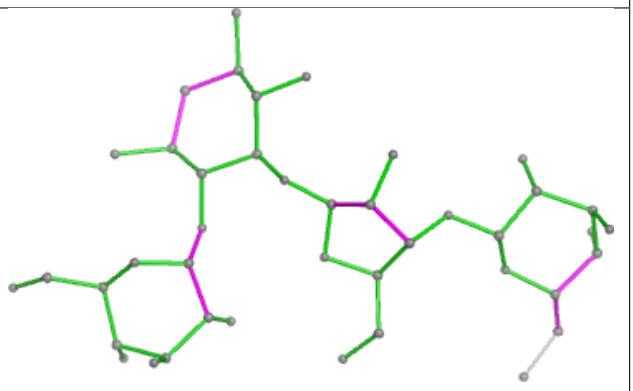
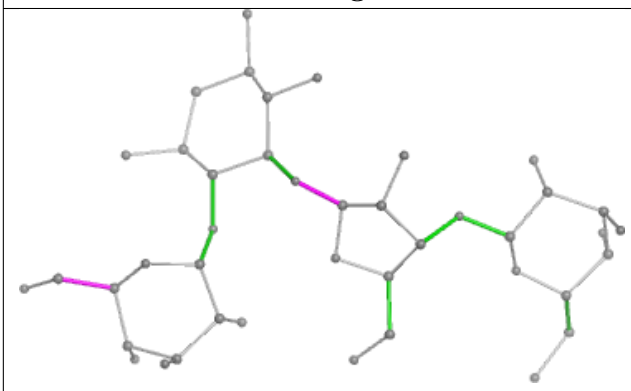


Bond angles



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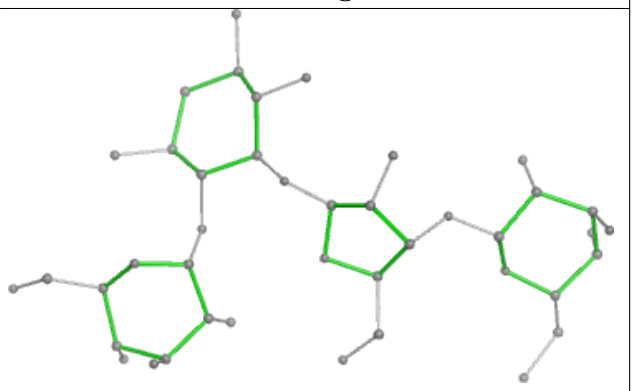
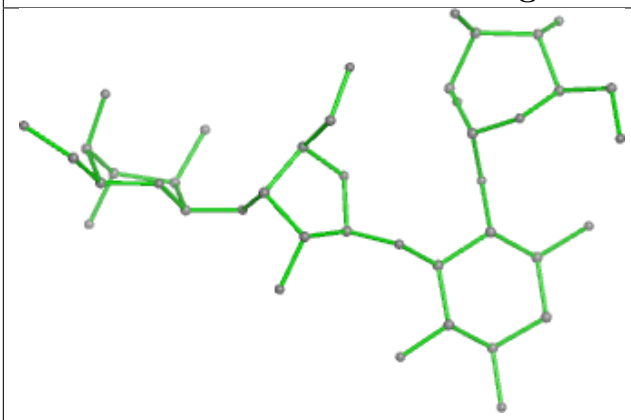
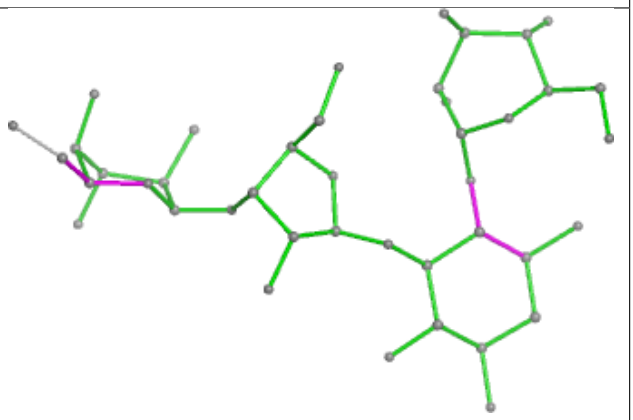


Rings

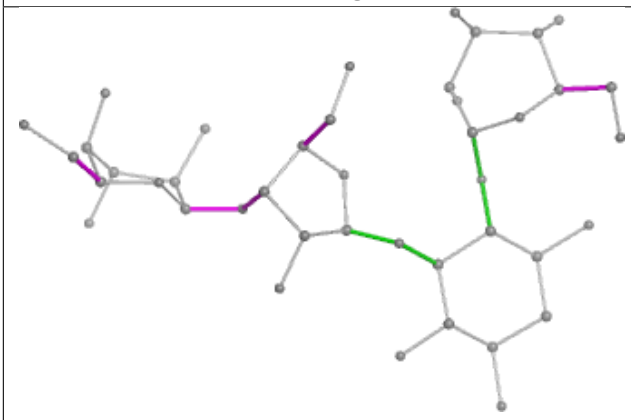
Ligand PAR 1 3407



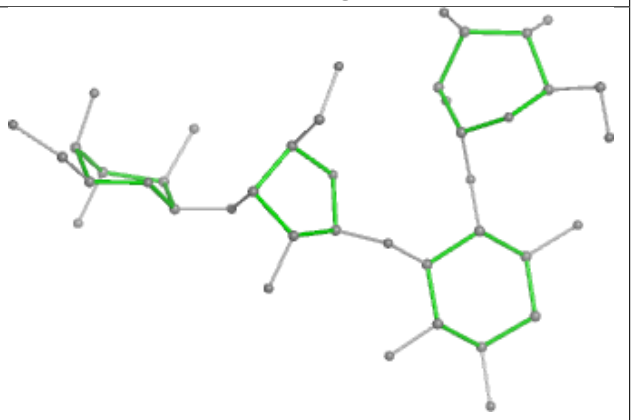
Bond lengths



Bond angles

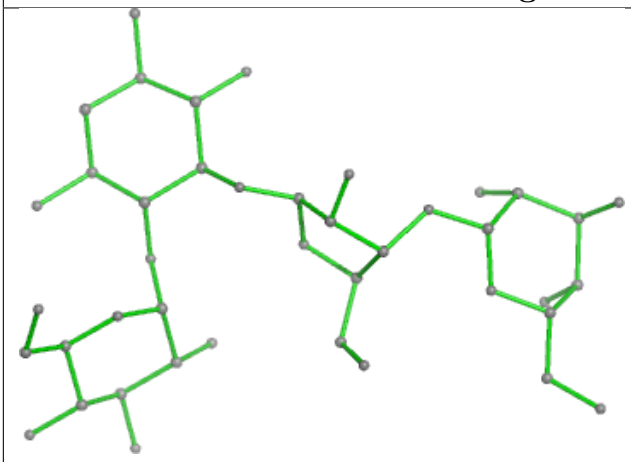


Torsions

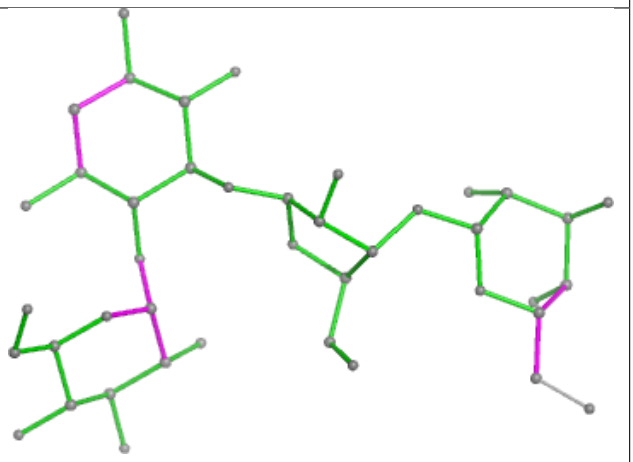


Rings

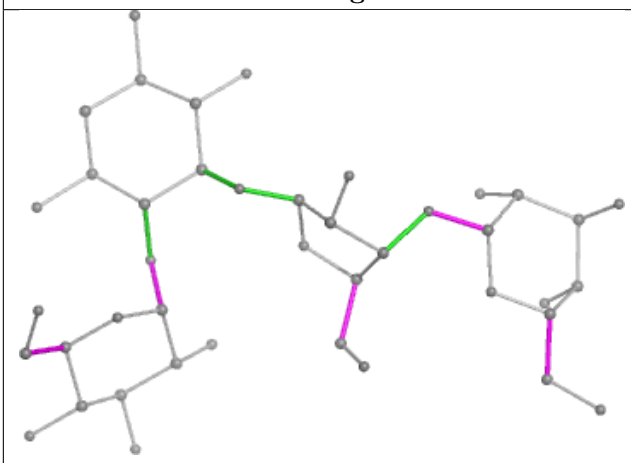
Ligand PAR 1 3414



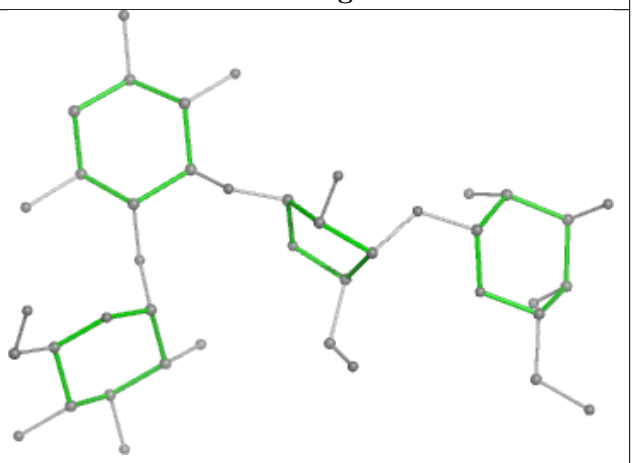
Bond lengths



Bond angles

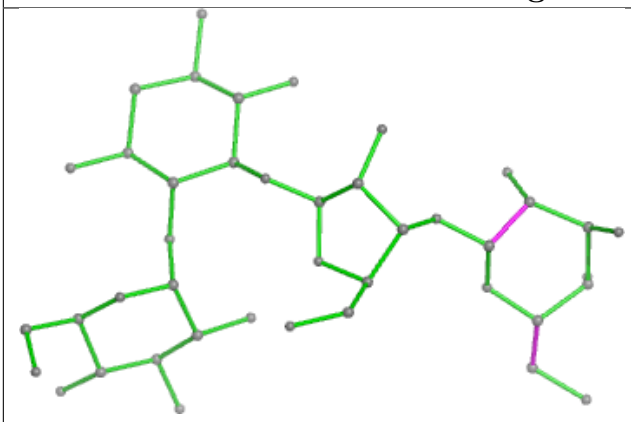


Torsions

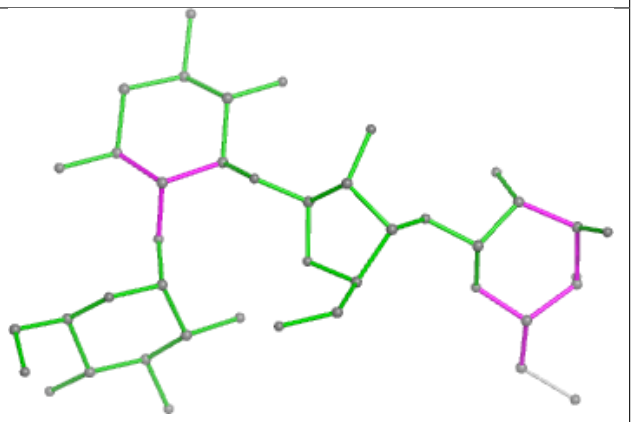


Rings

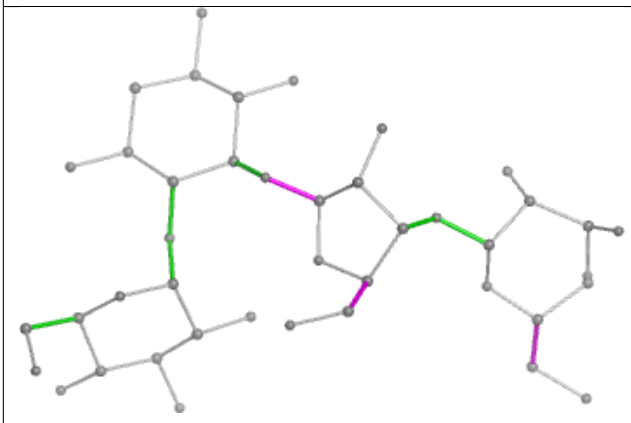
Ligand PAR 4 201



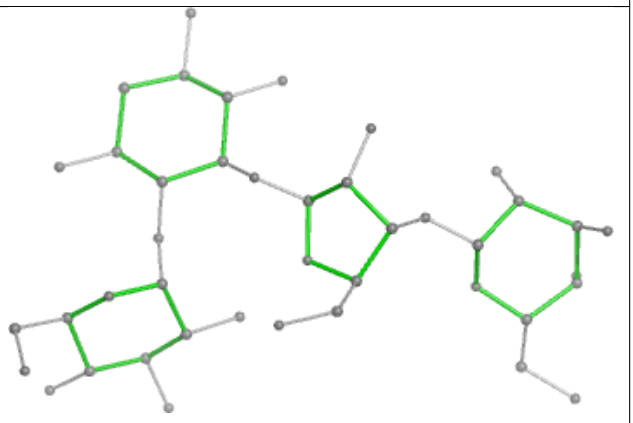
Bond lengths



Bond angles

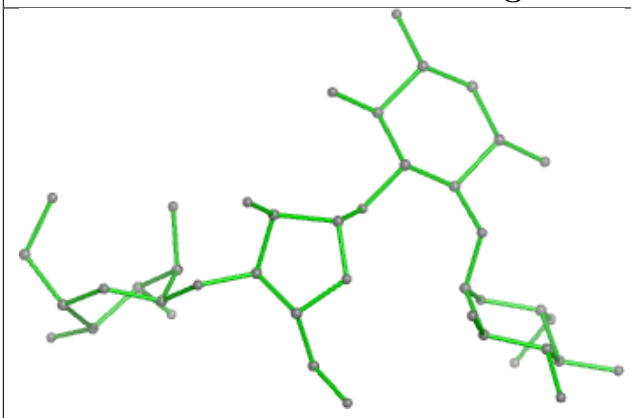


Torsions

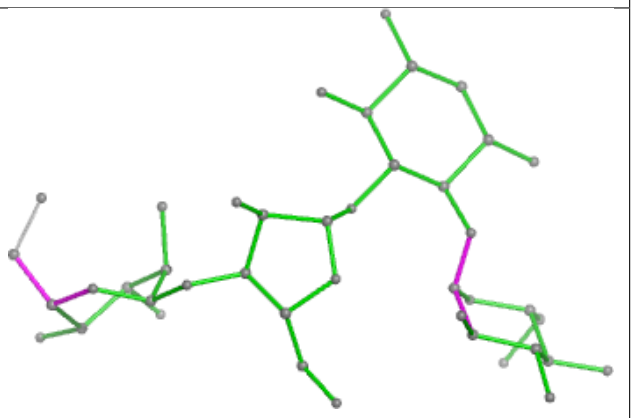


Rings

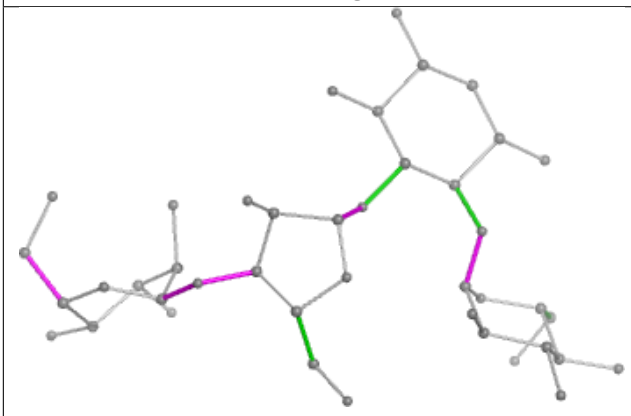
Ligand PAR AS 3402



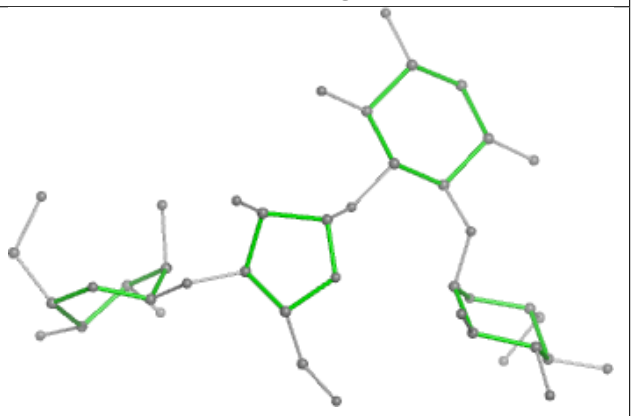
Bond lengths



Bond angles

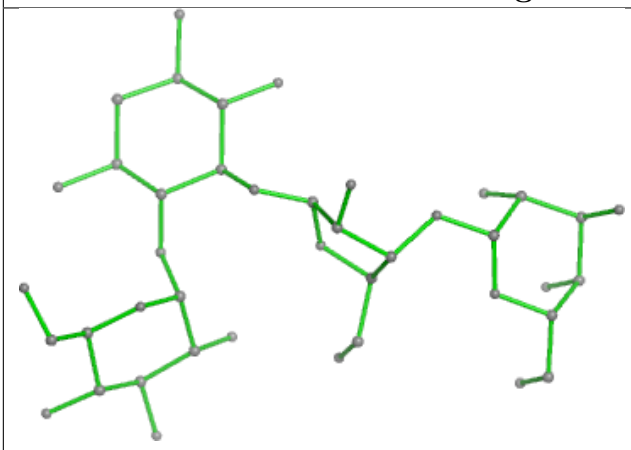


Torsions

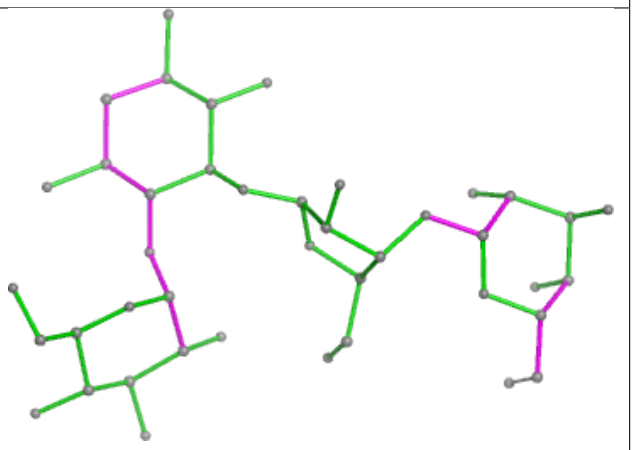


Rings

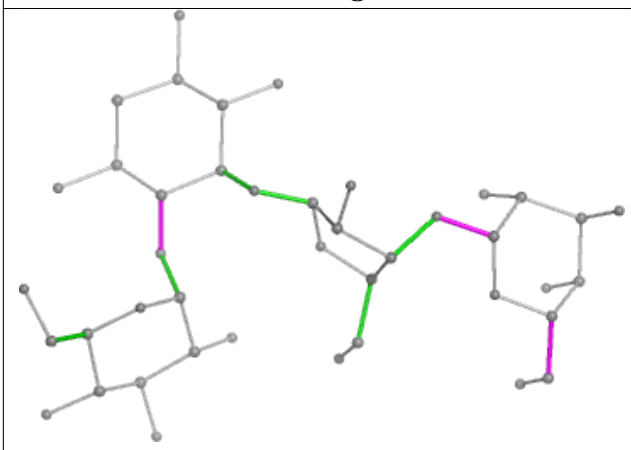
Ligand PAR B 1801



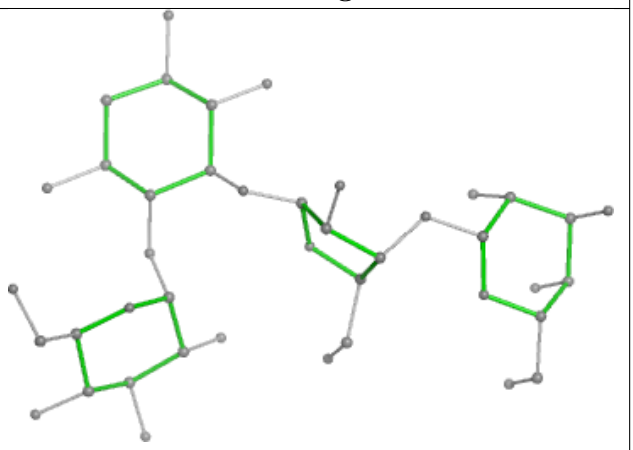
Bond lengths



Bond angles

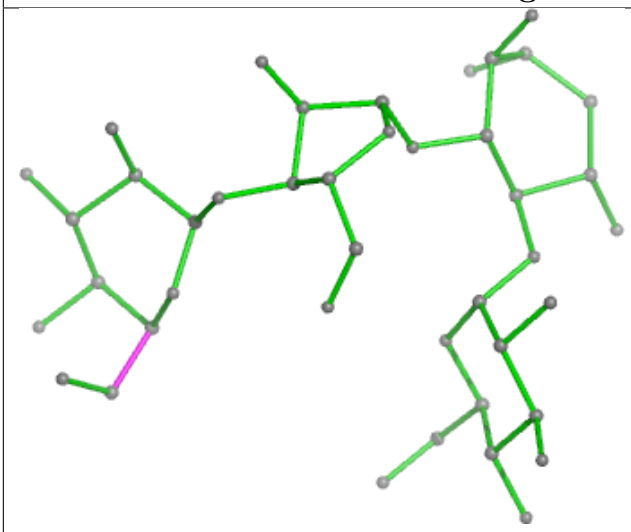


Torsions

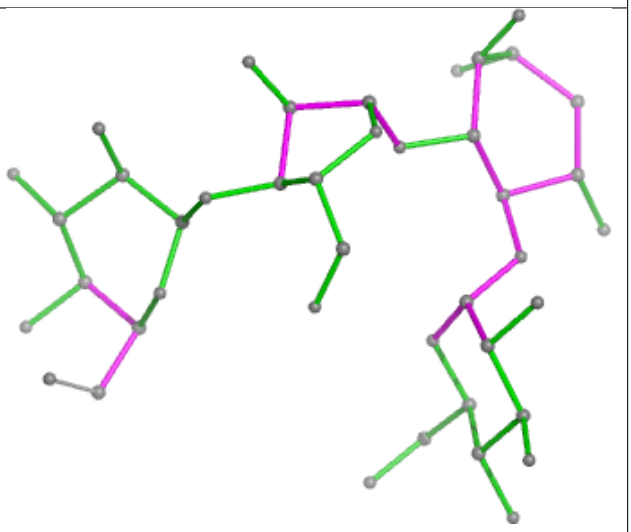


Rings

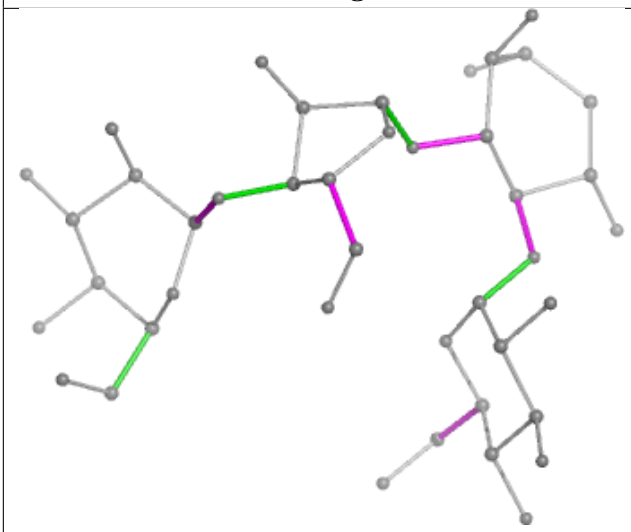
Ligand PAR 1 3413



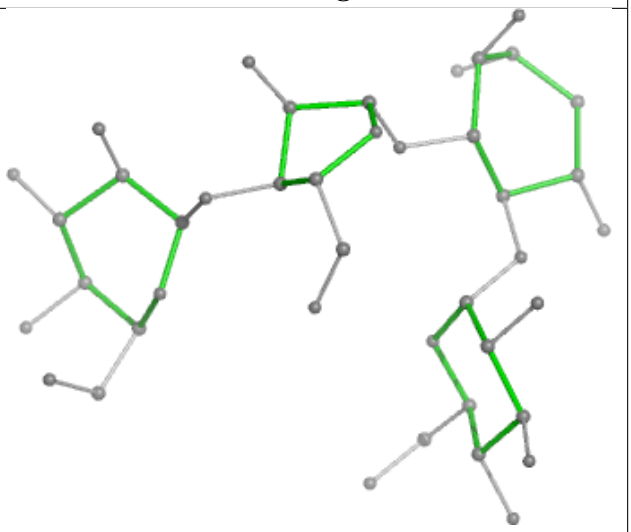
Bond lengths



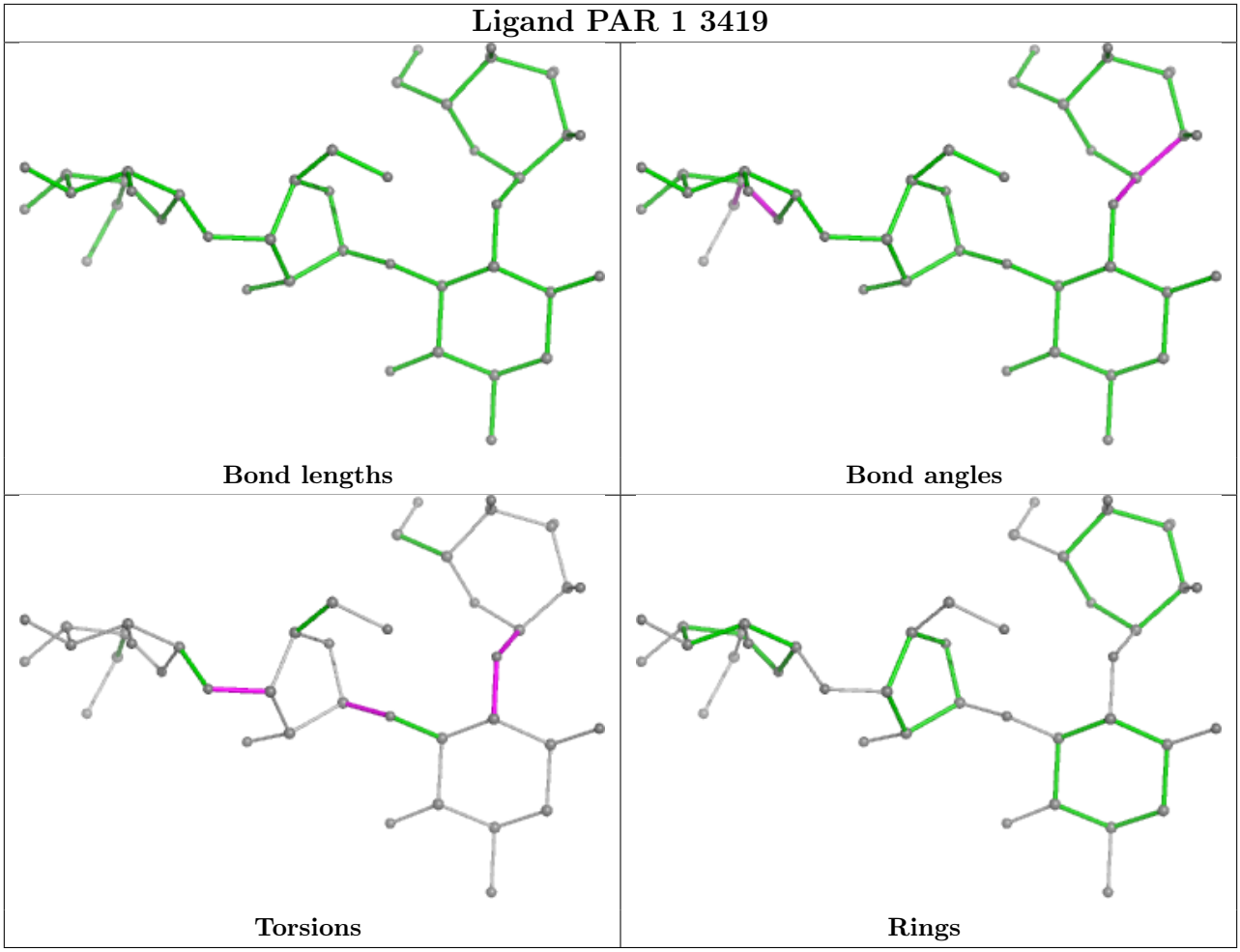
Bond angles



Torsions



Rings



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1	3171/3359 (94%)	0.79	193 (6%) 28 24	29, 57, 169, 366	0
1	AS	3065/3359 (91%)	1.12	356 (11%) 11 9	38, 74, 167, 281	0
2	3	121/121 (100%)	0.64	1 (0%) 82 78	43, 75, 101, 132	0
2	AT	121/121 (100%)	0.83	4 (3%) 49 43	45, 80, 104, 137	0
3	4	156/158 (98%)	0.64	6 (3%) 44 38	39, 57, 131, 172	0
3	AU	156/158 (98%)	1.61	47 (30%) 1 1	57, 96, 147, 192	0
4	AW	249/254 (98%)	1.79	83 (33%) 1 1	44, 76, 102, 117	1 (0%)
4	j	249/254 (98%)	1.03	25 (10%) 14 12	27, 43, 67, 90	1 (0%)
5	AX	386/389 (99%)	1.31	73 (18%) 4 3	36, 67, 90, 165	0
5	k	386/389 (99%)	1.11	49 (12%) 9 8	32, 59, 82, 128	1 (0%)
6	AY	361/363 (99%)	1.83	139 (38%) 1 1	46, 75, 104, 131	0
6	l	360/363 (99%)	1.23	50 (13%) 7 6	29, 59, 94, 136	0
7	AZ	292/298 (97%)	2.07	134 (45%) 1 0	64, 99, 127, 136	0
7	m	296/298 (99%)	1.43	71 (23%) 2 2	54, 86, 114, 126	0
8	BA	153/176 (86%)	1.48	31 (20%) 3 3	50, 70, 98, 145	0
8	n	157/176 (89%)	1.17	22 (14%) 7 6	51, 70, 106, 139	0
9	BB	234/241 (97%)	1.05	22 (9%) 15 13	34, 58, 101, 154	0
9	o	234/241 (97%)	1.00	24 (10%) 13 12	41, 56, 120, 160	0
10	BC	231/262 (88%)	2.48	147 (63%) 0 0	87, 117, 150, 179	0
10	p	230/262 (87%)	1.17	33 (14%) 7 6	43, 64, 106, 129	0
11	BD	190/191 (99%)	1.42	50 (26%) 2 2	54, 75, 107, 140	0
11	q	190/191 (99%)	1.22	33 (17%) 5 4	51, 68, 89, 123	0
12	BE	206/220 (93%)	1.15	23 (11%) 11 10	44, 64, 101, 125	0
12	r	208/220 (94%)	1.24	35 (16%) 5 4	37, 63, 103, 117	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å^2)	Q<0.9
13	BF	171/174 (98%)	1.54	46 (26%)	2	65, 87, 107, 121	0
13	s	171/174 (98%)	1.77	55 (32%)	1	67, 88, 110, 129	0
14	BG	200/202 (99%)	2.26	108 (54%)	0	50, 95, 130, 151	0
14	t	200/202 (99%)	1.12	26 (13%)	9	35, 66, 107, 146	0
15	BH	130/131 (99%)	1.15	21 (16%)	5	49, 65, 93, 117	0
15	u	128/131 (97%)	1.11	14 (10%)	12	45, 65, 85, 100	0
16	BI	203/204 (99%)	2.78	145 (71%)	0	57, 88, 107, 121	0
16	v	203/204 (99%)	1.30	38 (18%)	4	27, 47, 59, 82	0
17	BJ	199/200 (99%)	1.13	27 (13%)	8	40, 55, 89, 104	0
17	w	199/200 (99%)	1.04	21 (10%)	13	35, 52, 82, 102	0
18	BK	174/185 (94%)	1.81	73 (41%)	1	48, 74, 102, 124	0
18	x	171/185 (92%)	1.29	29 (16%)	5	39, 57, 122, 141	0
19	BL	185/186 (99%)	1.67	65 (35%)	1	47, 74, 90, 106	0
19	y	185/186 (99%)	1.24	30 (16%)	5	44, 58, 76, 88	0
20	BM	179/190 (94%)	2.32	88 (49%)	0	59, 86, 144, 167	0
20	z	179/190 (94%)	1.25	32 (17%)	4	44, 62, 121, 136	0
21	0	170/172 (98%)	1.05	14 (8%)	19	41, 56, 81, 121	0
21	BN	170/172 (98%)	1.24	27 (15%)	6	40, 60, 86, 107	0
22	2	159/160 (99%)	1.35	30 (18%)	4	41, 60, 111, 137	0
22	BO	159/160 (99%)	1.78	54 (33%)	1	47, 69, 116, 143	0
23	5	103/124 (83%)	1.75	38 (36%)	1	72, 112, 132, 156	0
23	BP	102/124 (82%)	2.03	52 (50%)	0	97, 129, 154, 178	1 (0%)
24	6	131/137 (95%)	1.14	14 (10%)	12	37, 51, 73, 102	0
24	BQ	131/137 (95%)	1.41	31 (23%)	2	39, 54, 71, 113	0
25	7	77/155 (49%)	0.97	8 (10%)	13	43, 60, 120, 137	0
25	BR	109/155 (70%)	1.74	42 (38%)	1	50, 82, 109, 124	0
26	8	121/142 (85%)	1.12	16 (13%)	8	38, 59, 83, 121	0
26	BS	119/142 (83%)	2.63	75 (63%)	0	64, 96, 114, 119	0
27	9	125/127 (98%)	1.64	34 (27%)	2	45, 72, 97, 116	0
27	BT	126/127 (99%)	2.72	81 (64%)	0	65, 96, 120, 140	0
28	AA	135/136 (99%)	1.49	42 (31%)	1	46, 72, 105, 121	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
28	BU	135/136 (99%)	2.31	76 (56%)	0	0	92, 119, 177, 219	0
29	AB	148/149 (99%)	1.45	25 (16%)	5	4	33, 56, 86, 111	0
29	BV	148/149 (99%)	2.02	64 (43%)	1	1	42, 79, 103, 118	0
30	AC	61/63 (96%)	1.75	17 (27%)	2	2	42, 71, 117, 139	0
30	BW	61/63 (96%)	2.29	36 (59%)	0	0	50, 84, 123, 141	0
31	AD	96/106 (90%)	1.10	15 (15%)	6	5	47, 62, 87, 101	0
31	BX	96/106 (90%)	1.74	33 (34%)	1	1	76, 103, 127, 134	0
32	AE	110/112 (98%)	1.22	15 (13%)	8	7	50, 67, 125, 135	0
32	BY	110/112 (98%)	1.84	38 (34%)	1	1	53, 84, 122, 133	0
33	AF	124/131 (94%)	1.40	26 (20%)	3	3	36, 57, 74, 87	0
33	BZ	124/131 (94%)	1.67	36 (29%)	1	2	40, 64, 85, 109	0
34	AG	106/107 (99%)	1.10	17 (16%)	6	5	40, 54, 84, 99	0
34	CA	106/107 (99%)	1.31	17 (16%)	6	5	41, 58, 78, 87	0
35	AH	112/122 (91%)	1.61	31 (27%)	2	2	38, 60, 104, 143	0
35	CB	112/122 (91%)	2.74	66 (58%)	0	0	61, 96, 135, 161	0
36	AI	117/120 (97%)	1.51	27 (23%)	2	2	46, 67, 99, 114	1 (0%)
36	CC	118/120 (98%)	2.67	70 (59%)	0	0	71, 103, 126, 132	1 (0%)
37	AJ	97/99 (97%)	0.91	9 (9%)	16	14	45, 62, 99, 142	0
37	CD	97/99 (97%)	2.26	54 (55%)	0	0	83, 104, 137, 147	0
38	AK	86/90 (95%)	1.19	13 (15%)	6	5	32, 45, 92, 128	0
38	CE	86/90 (95%)	2.21	51 (59%)	0	0	52, 73, 107, 135	0
39	AL	77/78 (98%)	1.58	25 (32%)	1	1	63, 87, 125, 151	0
39	CF	77/78 (98%)	2.13	37 (48%)	0	0	93, 121, 152, 173	0
40	AM	50/51 (98%)	1.52	13 (26%)	2	2	41, 56, 86, 90	0
40	CG	50/51 (98%)	2.44	31 (62%)	0	0	52, 82, 97, 102	1 (2%)
41	AN	52/52 (100%)	2.02	27 (51%)	0	0	60, 83, 107, 111	0
41	CH	51/52 (98%)	2.19	24 (47%)	0	0	63, 88, 108, 120	0
42	AO	25/25 (100%)	1.61	7 (28%)	2	2	49, 60, 84, 85	0
42	CI	25/25 (100%)	2.02	10 (40%)	1	1	51, 66, 79, 83	0
43	AP	103/106 (97%)	1.05	12 (11%)	10	9	35, 57, 90, 114	0
43	CJ	103/106 (97%)	1.39	24 (23%)	2	2	57, 81, 108, 121	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	AQ	91/92 (98%)	0.92	8 (8%) 17 15	34, 47, 80, 104	0
44	CK	91/92 (98%)	1.56	24 (26%) 2 2	52, 76, 106, 127	0
45	B	1725/1787 (96%)	1.14	222 (12%) 9 7	41, 78, 165, 331	0
45	CM	1778/1787 (99%)	1.26	264 (14%) 7 6	47, 92, 191, 459	0
46	C	208/261 (79%)	1.73	66 (31%) 1 1	72, 104, 130, 157	0
46	CN	208/261 (79%)	1.68	75 (36%) 1 1	73, 106, 137, 154	0
47	CO	214/256 (83%)	2.05	100 (46%) 0 0	88, 119, 143, 157	0
47	D	214/256 (83%)	1.28	41 (19%) 4 3	57, 84, 104, 112	0
48	CP	217/249 (87%)	1.55	53 (24%) 2 2	50, 81, 109, 128	0
48	E	217/249 (87%)	1.52	63 (29%) 1 2	44, 79, 109, 125	0
49	CQ	223/251 (88%)	1.63	69 (30%) 1 1	70, 99, 147, 166	0
49	F	223/251 (88%)	1.81	89 (39%) 1 1	62, 93, 147, 169	0
50	CR	260/262 (99%)	1.30	51 (19%) 4 3	53, 75, 102, 147	0
50	G	259/262 (98%)	1.71	77 (29%) 1 1	57, 84, 105, 144	0
51	CS	206/225 (91%)	2.04	99 (48%) 0 0	97, 120, 148, 194	0
51	H	206/225 (91%)	1.68	63 (30%) 1 1	64, 97, 131, 170	0
52	CT	236/236 (100%)	2.06	94 (39%) 1 1	59, 90, 123, 159	0
52	I	222/236 (94%)	1.72	71 (31%) 1 1	59, 97, 131, 165	0
53	CU	183/186 (98%)	1.83	77 (42%) 1 1	65, 125, 161, 174	0
53	J	181/186 (97%)	1.82	66 (36%) 1 1	60, 111, 145, 150	0
54	CV	203/206 (98%)	1.58	55 (27%) 2 2	40, 74, 132, 159	0
54	K	202/206 (98%)	1.35	40 (19%) 3 3	42, 69, 120, 137	0
55	CW	178/189 (94%)	1.77	64 (35%) 1 1	64, 88, 121, 152	0
55	L	178/189 (94%)	2.20	99 (55%) 0 0	67, 91, 119, 138	0
56	CX	94/118 (79%)	1.34	21 (22%) 3 2	78, 111, 138, 148	0
56	M	98/118 (83%)	1.73	35 (35%) 1 1	70, 105, 135, 141	0
57	CY	141/155 (90%)	1.70	43 (30%) 1 1	43, 64, 100, 155	0
57	N	141/155 (90%)	1.28	27 (19%) 4 3	43, 60, 94, 121	0
58	CZ	119/143 (83%)	1.80	44 (36%) 1 1	137, 165, 181, 188	0
58	O	116/143 (81%)	2.30	65 (56%) 0 0	141, 174, 191, 198	0
59	DA	150/151 (99%)	1.99	70 (46%) 0 0	63, 95, 117, 125	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
59	P	150/151 (99%)	1.66	41 (27%)	2	2	43, 74, 94, 109	0
60	DB	127/132 (96%)	1.66	48 (37%)	1	1	68, 108, 129, 138	0
60	Q	127/132 (96%)	1.34	27 (21%)	3	3	36, 76, 93, 105	0
61	DC	122/142 (85%)	2.13	62 (50%)	0	0	82, 109, 129, 154	0
61	R	129/142 (90%)	1.45	33 (25%)	2	2	66, 84, 133, 148	0
62	DD	135/142 (95%)	2.47	84 (62%)	0	0	89, 119, 141, 150	0
62	S	140/142 (98%)	1.93	55 (39%)	1	1	66, 99, 134, 157	0
63	DE	124/137 (90%)	2.17	58 (46%)	0	0	88, 123, 158, 180	0
63	T	124/137 (90%)	2.42	74 (59%)	0	0	79, 115, 158, 172	0
64	DF	141/145 (97%)	1.96	59 (41%)	1	1	70, 108, 132, 153	0
64	U	144/145 (99%)	1.34	23 (15%)	6	5	63, 83, 119, 146	0
65	DG	139/145 (95%)	2.56	93 (66%)	0	0	94, 116, 133, 144	0
65	V	141/145 (97%)	1.72	48 (34%)	1	1	69, 92, 123, 148	0
66	DH	97/119 (81%)	2.13	47 (48%)	0	0	81, 113, 136, 142	0
66	W	99/119 (83%)	2.07	43 (43%)	1	1	63, 112, 137, 143	0
67	DI	87/87 (100%)	1.30	14 (16%)	5	5	72, 93, 116, 140	0
67	X	87/87 (100%)	1.56	21 (24%)	2	2	63, 91, 113, 127	0
68	DJ	129/130 (99%)	1.62	38 (29%)	1	1	56, 73, 90, 97	0
68	Y	129/130 (99%)	1.51	29 (22%)	3	2	50, 68, 84, 94	0
69	DK	143/145 (98%)	1.49	32 (22%)	3	2	49, 62, 81, 102	0
69	Z	143/145 (98%)	1.30	28 (19%)	4	3	49, 64, 80, 115	0
70	DL	132/135 (97%)	1.47	31 (23%)	2	2	66, 95, 119, 153	0
70	a	134/135 (99%)	1.87	53 (39%)	1	1	66, 104, 125, 151	0
71	DM	68/105 (64%)	1.99	33 (48%)	0	0	109, 134, 148, 159	0
71	b	72/105 (68%)	1.30	11 (15%)	6	5	82, 107, 132, 143	0
72	DN	98/119 (82%)	2.19	48 (48%)	0	0	63, 88, 131, 137	0
72	c	98/119 (82%)	1.79	36 (36%)	1	1	50, 70, 109, 150	0
73	DO	81/82 (98%)	1.79	26 (32%)	1	1	75, 107, 156, 178	0
73	d	81/82 (98%)	1.77	30 (37%)	1	1	64, 85, 145, 164	0
74	DP	61/67 (91%)	1.90	23 (37%)	1	1	105, 125, 140, 151	0
74	e	62/67 (92%)	1.55	15 (24%)	2	2	84, 105, 132, 136	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
75	DQ	54/56 (96%)	1.80	22 (40%)	1	1	72, 91, 110, 125	0
75	f	55/56 (98%)	1.62	16 (29%)	1	2	57, 73, 101, 112	0
76	DR	58/63 (92%)	2.19	34 (58%)	0	0	65, 96, 154, 163	0
76	g	54/63 (85%)	2.14	23 (42%)	1	1	73, 97, 128, 136	0
77	h	70/193 (36%)	2.82	47 (67%)	0	0	122, 160, 179, 191	0
78	AR	311/317 (98%)	2.01	138 (44%)	1	1	101, 149, 177, 189	0
79	CL	121/267 (45%)	1.85	45 (37%)	1	1	68, 103, 129, 138	0
79	i	120/267 (44%)	2.39	62 (51%)	0	0	71, 104, 136, 146	0
All	All	32248/34616 (93%)	1.45	7858 (24%)	2	2	27, 79, 147, 459	7 (0%)

All (7858) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
6	AY	363	ASN	14.5
6	l	363	ASN	12.5
36	CC	120	ALA	11.3
52	CT	80	GLY	10.3
51	H	152	SER	10.3
45	CM	1686	G	10.0
59	P	151	ALA	9.9
6	AY	197	GLY	9.6
27	BT	76	LEU	8.8
52	CT	78	SER	8.6
72	DN	86	VAL	8.6
36	CC	96	GLU	8.4
7	AZ	134	ALA	8.3
14	BG	137	SER	8.2
27	BT	79	ALA	8.2
8	n	1	MET	8.1
40	CG	21[A]	ARG	7.9
52	CT	81	HIS	7.9
16	BI	146	ALA	7.9
35	CB	34	HIS	7.9
6	AY	70	ARG	7.8
45	CM	1270	U	7.7
10	BC	149	ALA	7.7
5	AX	139	THR	7.6
20	BM	16	GLY	7.6
59	DA	2	GLY	7.6

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Mol	Chain	Res	Type	RSRZ
16	BI	28	TRP	7.5
7	AZ	122	VAL	7.4
45	CM	726	C	7.4
45	CM	725	A	7.3
45	CM	1685	G	7.3
6	l	353	SER	7.2
63	T	22	PRO	7.2
65	DG	124	ILE	7.2
6	AY	353	SER	7.1
35	CB	30	LEU	7.0
79	CL	64	LEU	7.0
59	P	144	ALA	7.0
70	a	64	PHE	7.0
52	CT	76	LEU	7.0
14	BG	2	ALA	6.9
1	AS	240	C	6.9
52	CT	74	ARG	6.8
65	DG	66	TYR	6.8
45	CM	1678	G	6.8
10	BC	123	ALA	6.7
52	CT	79	LYS	6.7
14	BG	89	TYR	6.7
72	DN	73	TYR	6.7
72	c	88	SER	6.6
45	CM	1690	C	6.6
10	BC	134	LYS	6.6
72	DN	90	THR	6.6
20	BM	51	VAL	6.6
55	CW	62	ARG	6.5
45	B	726	C	6.5
10	BC	122	THR	6.5
48	E	87	ALA	6.5
74	e	66	LEU	6.5
39	CF	7	ASP	6.5
63	DE	4	VAL	6.5
27	9	86	GLN	6.5
35	CB	7	TYR	6.5
7	AZ	149	GLY	6.5
78	AR	101	THR	6.4
10	BC	162	GLU	6.4
35	AH	28	GLY	6.4
47	CO	140	ILE	6.4

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Mol	Chain	Res	Type	RSRZ
55	CW	61	THR	6.4
14	BG	48	PRO	6.4
26	BS	123	TYR	6.4
65	DG	62	ALA	6.4
50	G	107	GLY	6.3
36	CC	106	LYS	6.3
49	F	194	ALA	6.3
16	BI	198	SER	6.3
66	DH	80	ALA	6.3
20	BM	72	ALA	6.3
35	CB	38	ALA	6.3
14	BG	51	ILE	6.3
65	DG	118	PRO	6.3
79	i	33	ASN	6.2
77	h	170	ALA	6.2
72	DN	14	GLY	6.2
8	n	4	VAL	6.2
27	BT	81	GLN	6.2
14	BG	149	VAL	6.1
76	g	4	VAL	6.1
45	CM	722	A	6.1
13	s	47	GLN	6.1
25	7	87	LEU	6.1
16	BI	153	ASN	6.1
35	CB	16	ARG	6.1
7	AZ	4	GLN	6.0
18	x	172	GLN	6.0
58	CZ	121	VAL	6.0
79	i	40	ASP	6.0
7	AZ	150	LEU	6.0
14	BG	77	LEU	6.0
79	i	60	ASN	6.0
27	BT	78	PHE	5.9
79	i	104	GLN	5.9
20	BM	122	ASN	5.9
27	BT	98	ASN	5.9
30	BW	14	ARG	5.9
16	BI	87	GLN	5.9
33	BZ	87	LEU	5.9
79	i	64	LEU	5.9
63	T	7	LYS	5.9
68	Y	52	TYR	5.9

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Mol	Chain	Res	Type	RSRZ
23	5	38	VAL	5.9
38	AK	87	THR	5.8
58	O	59	LEU	5.8
36	CC	91	LYS	5.8
62	DD	141	TYR	5.8
1	AS	239	A	5.8
7	AZ	7	PHE	5.8
35	CB	60	ARG	5.8
43	CJ	51	GLY	5.8
55	L	74	ASN	5.8
14	BG	133	SER	5.8
63	DE	123	SER	5.8
74	DP	20	GLY	5.8
15	BH	128	LEU	5.8
62	S	22	LYS	5.8
16	BI	183	THR	5.8
7	AZ	49	TYR	5.8
35	CB	28	GLY	5.8
63	T	70	SER	5.8
58	O	122	VAL	5.8
64	DF	100	VAL	5.8
76	g	2	GLY	5.7
4	AW	250	GLN	5.7
65	DG	123	ARG	5.7
45	CM	777	A	5.7
65	DG	114	LEU	5.7
4	AW	164	GLY	5.7
51	H	151	SER	5.7
20	BM	7	GLN	5.7
52	I	83	CYS	5.7
36	CC	84[A]	LYS	5.7
52	I	79	LYS	5.7
78	AR	249	LEU	5.7
79	i	61	GLU	5.7
26	BS	132	ALA	5.7
62	S	23	ALA	5.7
20	BM	67	LYS	5.7
33	BZ	126	LYS	5.7
36	CC	102	GLU	5.7
35	CB	22	VAL	5.6
50	G	157	ASN	5.6
45	CM	1691	C	5.6

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Mol	Chain	Res	Type	RSRZ
45	CM	1703	C	5.6
20	BM	64	ARG	5.6
62	DD	139	LYS	5.6
20	BM	12	ALA	5.6
20	BM	23	TRP	5.6
14	BG	93	ILE	5.6
65	V	70	GLN	5.6
45	CM	1679	A	5.6
29	BV	126	LYS	5.6
28	BU	41	ALA	5.5
76	g	30	PRO	5.5
12	BE	114	GLY	5.5
16	BI	204	SER	5.5
78	AR	243	SER	5.5
78	AR	260	PHE	5.5
5	AX	144	VAL	5.5
28	BU	95	ALA	5.5
49	F	205	ASP	5.5
36	CC	98	SER	5.5
62	DD	131	ARG	5.5
7	AZ	55	PHE	5.5
78	AR	207	LEU	5.5
1	1	2476	C	5.5
35	CB	19	LYS	5.5
4	AW	249	THR	5.5
79	i	79	THR	5.5
16	BI	149	ASN	5.5
15	u	119	GLN	5.4
36	CC	107	GLN	5.4
26	BS	26	VAL	5.4
6	l	352	PRO	5.4
45	CM	1684	G	5.4
51	CS	152	SER	5.4
57	CY	7	VAL	5.4
13	s	45	PRO	5.4
4	AW	72	ARG	5.4
20	BM	9	ARG	5.4
27	BT	2	ALA	5.4
30	AC	33	LYS	5.4
50	G	55	ALA	5.4
63	T	55	THR	5.3
28	BU	118	PHE	5.3

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Mol	Chain	Res	Type	RSRZ
4	AW	168	VAL	5.3
45	B	740	A	5.3
41	CH	31	ALA	5.3
26	BS	111	ASN	5.3
79	i	84	SER	5.3
26	BS	119	THR	5.3
10	BC	198	VAL	5.3
51	CS	70	VAL	5.3
76	DR	4	VAL	5.3
16	BI	161	ALA	5.3
77	h	162	GLU	5.3
28	BU	51	LEU	5.3
23	5	111	TYR	5.3
45	CM	724	G	5.3
45	B	672	U	5.3
10	BC	47	LEU	5.3
50	CR	27	TYR	5.3
37	CD	6	ILE	5.3
36	CC	92	LEU	5.3
46	C	138	TYR	5.2
52	I	95	LYS	5.2
15	u	129	VAL	5.2
52	I	138	ALA	5.2
52	CT	92	ARG	5.2
60	Q	119	ASP	5.2
66	W	78	TRP	5.2
51	H	79	SER	5.2
53	J	63	LEU	5.2
7	AZ	26	GLY	5.2
23	5	72	GLY	5.2
43	AP	51	GLY	5.2
26	BS	32	PHE	5.2
29	BV	103	ASP	5.2
16	BI	112	ASN	5.2
77	h	148	TYR	5.2
16	v	141	ALA	5.2
27	BT	65	GLY	5.2
31	BX	25	TYR	5.2
66	W	81	TYR	5.2
35	AH	30	LEU	5.2
19	y	177	GLY	5.2
20	BM	50	ILE	5.2

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Mol	Chain	Res	Type	RSRZ
12	BE	102	MET	5.1
18	BK	126	ARG	5.1
45	B	1726	C	5.1
45	CM	721	C	5.1
62	S	40	PRO	5.1
27	BT	30	LEU	5.1
8	n	2	SER	5.1
10	BC	197	ALA	5.1
73	DO	50	ALA	5.1
55	CW	51	LYS	5.1
72	DN	29	CYS	5.1
32	BY	95	VAL	5.1
14	BG	21	ARG	5.1
30	AC	14	ARG	5.1
37	CD	40	ARG	5.1
16	BI	167	ALA	5.1
16	BI	59	PHE	5.1
62	DD	128	PHE	5.1
16	BI	45	PRO	5.1
35	CB	18	ASN	5.1
40	CG	35	ILE	5.1
16	BI	115	VAL	5.1
63	DE	3	ARG	5.1
26	BS	24	LEU	5.1
52	CT	103	ALA	5.1
63	DE	12	ALA	5.1
6	l	64	GLU	5.1
30	BW	10	HIS	5.1
53	CU	114	LEU	5.1
20	BM	19	LYS	5.0
33	BZ	123	PRO	5.0
35	CB	62	TYR	5.0
20	BM	17	VAL	5.0
60	DB	11	VAL	5.0
50	G	7	LYS	5.0
10	BC	161	ILE	5.0
57	N	37	ASP	5.0
63	T	48	ASN	5.0
18	x	168	LEU	5.0
50	G	24	SER	5.0
77	h	156	VAL	5.0
79	i	43	PRO	5.0

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Mol	Chain	Res	Type	RSRZ
50	G	14	ALA	5.0
63	T	51	ALA	5.0
78	AR	241	ALA	5.0
55	L	117	GLY	5.0
48	CP	79	ARG	5.0
66	DH	65	THR	5.0
45	CM	1692	U	5.0
36	CC	82	ALA	5.0
52	CT	206	ALA	5.0
62	DD	84	ILE	5.0
16	BI	130	PHE	5.0
6	AY	109	ARG	5.0
7	AZ	127	GLY	5.0
63	DE	2	GLY	5.0
35	CB	21	LYS	5.0
29	BV	113	LEU	5.0
35	CB	31	VAL	5.0
25	7	81	ALA	4.9
52	CT	68	MET	4.9
19	y	184	PHE	4.9
49	CQ	186	LYS	4.9
64	DF	144	GLY	4.9
63	DE	66	VAL	4.9
65	DG	64	HIS	4.9
26	BS	50	SER	4.9
6	AY	89	ALA	4.9
63	DE	124	ILE	4.9
38	CE	10	LYS	4.9
55	CW	65	LYS	4.9
10	BC	153	LEU	4.9
20	BM	18	GLY	4.9
35	AH	27	GLY	4.9
16	BI	142	ILE	4.9
4	AW	14	SER	4.9
16	BI	100	SER	4.9
30	BW	4	SER	4.9
61	DC	44	ARG	4.9
61	DC	45	PHE	4.9
72	DN	15	ARG	4.9
52	CT	77	LEU	4.9
55	L	166	GLY	4.9
78	AR	248	TRP	4.9

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Mol	Chain	Res	Type	RSRZ
57	CY	97	TYR	4.9
47	CO	211	HIS	4.9
51	H	28	THR	4.9
48	CP	83	LYS	4.9
51	CS	79	SER	4.9
79	i	45	SER	4.9
61	DC	91	GLY	4.9
20	BM	14	VAL	4.9
29	BV	109	TYR	4.9
76	DR	25	GLU	4.9
62	DD	42	ILE	4.9
79	i	111	ASP	4.9
14	BG	138	PHE	4.8
27	BT	10	SER	4.8
36	CC	116	PHE	4.8
10	BC	204	VAL	4.8
8	n	128	LYS	4.8
30	BW	37	ALA	4.8
64	DF	50	ALA	4.8
70	a	134	ALA	4.8
13	s	28	ASP	4.8
52	CT	75	LEU	4.8
73	d	63	LEU	4.8
63	T	28	PHE	4.8
16	BI	107	GLY	4.8
7	AZ	124	GLU	4.8
63	DE	53	TYR	4.8
26	BS	37	THR	4.8
63	T	124	ILE	4.8
26	BS	61	LYS	4.8
28	BU	44	ALA	4.8
36	CC	87	ALA	4.8
78	AR	79	ALA	4.8
79	i	49	ALA	4.8
43	CJ	36	PHE	4.8
1	AS	219	G	4.8
45	CM	1184	G	4.8
35	CB	35	VAL	4.8
67	X	32	VAL	4.8
77	h	171	GLY	4.8
76	DR	27	PRO	4.8
28	BU	11	ALA	4.8

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Mol	Chain	Res	Type	RSRZ
63	T	90	ALA	4.8
78	AR	286	ALA	4.8
4	AW	71	LEU	4.8
62	S	56	LEU	4.8
27	BT	82	VAL	4.8
70	a	67	GLY	4.8
1	1	1264	G	4.8
16	BI	144	ARG	4.8
27	BT	33	ALA	4.8
29	BV	127	ALA	4.8
12	r	162	GLN	4.8
35	CB	3	GLN	4.8
1	AS	1584	A	4.7
42	CI	1	MET	4.7
36	AI	84[A]	LYS	4.7
51	H	77	TYR	4.7
35	CB	15	THR	4.7
37	CD	7	ALA	4.7
39	CF	2	ALA	4.7
1	1	1218	G	4.7
35	CB	72	VAL	4.7
16	BI	184	LYS	4.7
20	BM	135	LYS	4.7
48	E	80	SER	4.7
31	BX	18	LEU	4.7
38	CE	57	ARG	4.7
55	CW	8	TYR	4.7
27	9	81	GLN	4.7
6	AY	72	VAL	4.7
18	BK	2	VAL	4.7
27	BT	45	VAL	4.7
28	BU	24	VAL	4.7
51	H	33	VAL	4.7
52	CT	83	CYS	4.7
72	c	29	CYS	4.7
45	B	671	G	4.7
23	5	92	ILE	4.7
13	BF	29	ARG	4.7
51	CS	102	ARG	4.7
51	CS	112	ARG	4.7
16	v	146	ALA	4.7
19	BL	175	ALA	4.7

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Mol	Chain	Res	Type	RSRZ
52	CT	84	TYR	4.7
10	BC	121	LYS	4.7
78	AR	78	GLY	4.7
47	CO	86	LEU	4.7
16	BI	43	SER	4.7
58	O	42	ALA	4.7
63	DE	125	SER	4.7
52	I	168	THR	4.7
53	J	129	THR	4.7
35	CB	24	LYS	4.7
59	P	150	VAL	4.7
10	BC	66	LEU	4.6
26	BS	40	LEU	4.6
48	CP	86	ARG	4.6
34	AG	2	ALA	4.6
78	AR	76	ALA	4.6
1	1	2427	A	4.6
23	5	73	SER	4.6
45	CM	723	G	4.6
39	CF	9	LYS	4.6
55	L	95	TYR	4.6
65	DG	113	VAL	4.6
69	DK	27	GLN	4.6
52	I	146	GLY	4.6
10	BC	117	ILE	4.6
27	BT	99	ILE	4.6
52	CT	70	PRO	4.6
77	h	164	PRO	4.6
48	E	235	LEU	4.6
52	I	92	ARG	4.6
58	O	106	LEU	4.6
65	DG	122	ARG	4.6
77	h	159	LEU	4.6
79	CL	103	LEU	4.6
6	AY	66	TRP	4.6
55	L	104	PHE	4.6
53	J	66	TYR	4.6
51	CS	86	GLN	4.6
16	BI	163	GLY	4.6
26	BS	88	ILE	4.6
60	DB	108	GLY	4.6
4	AW	32	LEU	4.6

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Mol	Chain	Res	Type	RSRZ
29	BV	107	HIS	4.6
16	v	153	ASN	4.6
39	CF	4	GLU	4.6
58	O	56	GLU	4.6
7	AZ	168	ASP	4.6
10	p	149	ALA	4.6
31	BX	99	ASP	4.6
37	CD	38	PHE	4.6
24	BQ	137	VAL	4.6
58	O	121	VAL	4.6
63	DE	43	SER	4.6
27	BT	80	ILE	4.6
36	CC	88	LEU	4.6
45	CM	695	C	4.6
62	S	20	HIS	4.6
22	BO	90	ASN	4.6
52	I	220	LYS	4.6
13	s	48	SER	4.6
28	BU	91	SER	4.6
66	DH	74	GLY	4.6
7	AZ	92	LEU	4.5
10	BC	59	LEU	4.5
49	CQ	22	LEU	4.5
72	c	89	ARG	4.5
79	i	115	LEU	4.5
45	B	725	A	4.5
77	h	123	LYS	4.5
48	E	117	ALA	4.5
50	CR	2	ALA	4.5
62	DD	133	ALA	4.5
78	AR	251	ALA	4.5
41	CH	43	ASN	4.5
48	E	64	ILE	4.5
54	K	15	GLY	4.5
76	g	41	THR	4.5
48	CP	80	SER	4.5
14	BG	81	LYS	4.5
66	DH	76	LYS	4.5
28	BU	92	PHE	4.5
14	BG	134	GLU	4.5
28	AA	102	GLU	4.5
1	1	1275	C	4.5

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Mol	Chain	Res	Type	RSRZ
4	j	249	THR	4.5
63	T	53	TYR	4.5
6	AY	279	SER	4.5
7	m	7	PHE	4.5
45	B	1270	U	4.5
4	AW	62	ALA	4.5
50	G	13	ALA	4.5
45	B	695	C	4.5
48	E	86	ARG	4.5
77	h	158	ARG	4.5
14	BG	130	THR	4.5
51	CS	28	THR	4.5
59	DA	4	MET	4.5
16	BI	56	LYS	4.5
63	T	125	SER	4.5
4	AW	48	ILE	4.5
55	L	96	VAL	4.5
32	BY	19	LEU	4.5
36	AI	17	LEU	4.5
71	DM	75	LEU	4.5
16	BI	195	ASN	4.5
19	BL	14	GLY	4.5
72	DN	89	ARG	4.5
28	BU	28	PRO	4.5
41	CH	44	GLN	4.5
50	CR	26	THR	4.5
71	DM	97	LYS	4.5
75	f	55	TYR	4.5
1	1	1578	C	4.5
23	BP	73	SER	4.4
27	BT	56	VAL	4.4
52	CT	158	VAL	4.4
59	DA	139	TRP	4.4
8	n	3	GLN	4.4
47	CO	108	ASP	4.4
45	B	739	A	4.4
45	CM	694	C	4.4
7	AZ	123	GLU	4.4
10	BC	55	GLU	4.4
29	AB	72	GLU	4.4
35	CB	42	VAL	4.4
36	AI	96	GLU	4.4

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Mol	Chain	Res	Type	RSRZ
6	l	23	LEU	4.4
16	BI	199	LEU	4.4
4	AW	215	ASN	4.4
7	AZ	203	HIS	4.4
53	CU	21	PHE	4.4
6	AY	219	ALA	4.4
49	F	189	ILE	4.4
74	DP	66	LEU	4.4
29	AB	47	LYS	4.4
27	BT	101	PRO	4.4
64	U	2	PRO	4.4
76	g	32	GLY	4.4
44	CK	46	THR	4.4
66	DH	79	ASP	4.4
35	CB	2	ALA	4.4
10	BC	131	VAL	4.4
20	BM	10	LEU	4.4
45	B	217	A	4.4
55	CW	49	LEU	4.4
64	DF	86	LEU	4.4
70	a	24	VAL	4.4
71	DM	92	VAL	4.4
52	I	112	SER	4.4
63	T	49	LYS	4.4
8	n	6	PRO	4.4
27	9	124	GLY	4.4
54	K	53	GLN	4.4
56	M	62	GLN	4.4
23	5	57	THR	4.4
39	AL	11	PHE	4.4
7	AZ	226	TYR	4.3
20	BM	78	TYR	4.3
36	CC	68	ALA	4.3
37	CD	8	ALA	4.3
16	BI	134	LEU	4.3
56	M	2	LEU	4.3
57	CY	49	ILE	4.3
62	DD	43	LEU	4.3
8	BA	4	VAL	4.3
61	DC	93	VAL	4.3
20	BM	55	GLU	4.3
49	F	136	GLU	4.3

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Mol	Chain	Res	Type	RSRZ
28	BU	35	SER	4.3
62	DD	120	SER	4.3
35	CB	12	PRO	4.3
71	DM	87	GLY	4.3
1	1	1012	U	4.3
1	AS	241	C	4.3
12	r	113	GLN	4.3
40	CG	11	GLN	4.3
10	BC	221	ALA	4.3
40	AM	39	ALA	4.3
29	AB	113	LEU	4.3
53	J	169	TYR	4.3
55	L	122	ILE	4.3
59	P	9	LYS	4.3
66	W	76	LYS	4.3
6	AY	352	PRO	4.3
33	BZ	125	GLY	4.3
45	B	673	A	4.3
1	AS	243	G	4.3
23	BP	28	PHE	4.3
29	AB	65	GLN	4.3
54	CV	109	PHE	4.3
45	B	727	U	4.3
51	CS	46	TRP	4.3
13	s	70	THR	4.3
1	1	2467	C	4.3
49	F	212	ALA	4.3
58	CZ	128	ALA	4.3
76	DR	36	MET	4.3
79	CL	33	ASN	4.3
10	BC	126	VAL	4.3
15	BH	34	ASP	4.3
19	y	186	VAL	4.3
52	I	208	TYR	4.3
55	L	120	ARG	4.3
65	DG	37	VAL	4.3
66	W	111	VAL	4.3
52	CT	100	CYS	4.3
12	r	114	GLY	4.3
24	BQ	116	GLY	4.3
33	AF	123	PRO	4.3
45	CM	1689	A	4.3

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Mol	Chain	Res	Type	RSRZ
32	BY	59	TRP	4.3
64	U	15	LEU	4.3
60	DB	12	ALA	4.3
45	B	1115	G	4.3
45	CM	705	G	4.3
45	CM	1672	G	4.3
68	DJ	88	ARG	4.3
75	f	56	ARG	4.3
7	AZ	135	VAL	4.3
20	BM	22	VAL	4.3
64	DF	5	VAL	4.3
1	AS	3051	C	4.3
28	AA	98	SER	4.3
59	P	12	SER	4.3
39	CF	51	GLN	4.3
53	CU	99	ALA	4.3
6	l	231	VAL	4.2
8	BA	97	VAL	4.2
28	BU	96	VAL	4.2
32	BY	106	VAL	4.2
63	T	6	THR	4.3
45	CM	776	U	4.2
34	AG	26	ASN	4.2
35	CB	14	ASN	4.2
52	CT	236	ASN	4.2
12	r	11	TYR	4.2
50	G	54	TYR	4.2
57	N	97	TYR	4.2
51	H	150	GLY	4.2
52	I	90	GLY	4.2
3	AU	99	C	4.2
26	BS	36	LYS	4.2
48	CP	156	LYS	4.2
36	CC	80	LEU	4.2
4	j	250	GLN	4.2
6	AY	282	ILE	4.2
55	L	128	LEU	4.2
77	h	142	LEU	4.2
27	BT	110	HIS	4.2
66	W	32	GLN	4.2
29	BV	69	TRP	4.2
46	C	65	ALA	4.2

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Mol	Chain	Res	Type	RSRZ
6	AY	69	GLY	4.2
1	1	1188	C	4.2
1	AS	173	C	4.2
45	B	657	C	4.2
49	F	166	ARG	4.2
20	BM	63	ALA	4.2
62	DD	19	ALA	4.2
16	BI	66	VAL	4.2
45	CM	497	U	4.2
1	1	402	A	4.2
45	B	504	A	4.2
14	BG	127	ASP	4.2
10	BC	124	LYS	4.2
49	CQ	188	LYS	4.2
50	CR	22	LYS	4.2
51	CS	80	LYS	4.2
29	BV	81	LEU	4.2
47	CO	188	LEU	4.2
55	CW	93	LEU	4.2
65	V	116	ILE	4.2
27	BT	73	VAL	4.2
27	BT	126	ALA	4.2
59	P	148	ALA	4.2
65	DG	59	ALA	4.2
79	i	36	SER	4.2
1	AS	1548	G	4.2
52	I	89	THR	4.2
79	CL	97	THR	4.2
1	AS	1557	U	4.2
20	BM	104	LYS	4.2
26	8	22	LYS	4.2
36	CC	103	LYS	4.2
55	L	92	LYS	4.2
62	DD	13	LYS	4.2
62	DD	123	MET	4.2
14	BG	10	LEU	4.2
14	BG	126	PHE	4.2
45	CM	504	A	4.2
45	CM	704	A	4.2
52	CT	190	LEU	4.2
59	P	149	LEU	4.2
59	DA	72	LEU	4.2

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Mol	Chain	Res	Type	RSRZ
61	DC	102	PHE	4.2
67	X	4	ASP	4.2
27	BT	4	ILE	4.2
47	D	197	ILE	4.2
13	BF	98	ALA	4.2
22	2	14	ALA	4.2
22	2	71	SER	4.2
29	AB	69	TRP	4.2
35	CB	25	THR	4.1
77	h	189	THR	4.1
45	CM	25	C	4.1
12	r	102	MET	4.1
16	BI	193	LYS	4.1
53	J	43	LYS	4.1
72	c	14	GLY	4.1
29	BV	133	LEU	4.1
61	DC	15	PHE	4.1
64	U	28	ILE	4.1
11	BD	166	ARG	4.1
1	AS	2943	A	4.1
45	B	216	A	4.1
30	BW	7	HIS	4.1
76	DR	5	HIS	4.1
9	BB	69	ALA	4.1
15	BH	131	ALA	4.1
26	BS	51	VAL	4.1
51	CS	78	ALA	4.1
53	J	164	SER	4.1
53	CU	26	SER	4.1
13	BF	45	PRO	4.1
36	CC	119	LYS	4.1
6	AY	87	GLY	4.1
16	BI	58	GLY	4.1
6	AY	55	GLU	4.1
7	AZ	79	TYR	4.1
7	AZ	160	PHE	4.1
10	BC	166	PHE	4.1
16	BI	30	TYR	4.1
18	BK	130	TYR	4.1
30	BW	32	LEU	4.1
48	CP	210	PHE	4.1
49	F	18	PHE	4.1

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Mol	Chain	Res	Type	RSRZ
52	CT	144	PHE	4.1
18	BK	114	ILE	4.1
20	BM	32	ILE	4.1
14	BG	173	ARG	4.1
45	B	501	G	4.1
4	AW	202	VAL	4.1
10	BC	118	ALA	4.1
17	BJ	98	ALA	4.1
44	CK	47	VAL	4.1
53	J	86	VAL	4.1
77	h	181	GLN	4.1
79	i	102	LYS	4.1
6	l	61	THR	4.1
57	N	3	THR	4.1
58	O	49	SER	4.1
78	AR	97	THR	4.1
10	BC	163	LEU	4.1
24	BQ	93	LEU	4.1
22	BO	159	PHE	4.1
20	BM	45	TYR	4.1
23	BP	36	TYR	4.1
40	CG	51	ILE	4.1
51	CS	83	ARG	4.1
72	DN	87	ARG	4.1
6	AY	54	ALA	4.1
7	m	67	ALA	4.1
26	BS	110	VAL	4.1
31	BX	97	ALA	4.1
78	AR	290	ALA	4.1
10	BC	130	PRO	4.1
45	B	1272	A	4.1
66	W	69	THR	4.1
48	CP	88	GLY	4.1
17	BJ	49	PHE	4.1
54	K	21	PHE	4.1
10	BC	238	ILE	4.1
13	s	140	ARG	4.1
20	BM	41	ILE	4.1
35	CB	8	ARG	4.1
53	J	67	ARG	4.1
28	BU	75	VAL	4.1
37	CD	10	VAL	4.1

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Mol	Chain	Res	Type	RSRZ
30	BW	2	ALA	4.1
51	H	26	ALA	4.1
1	AS	1188	C	4.1
7	AZ	5	LYS	4.1
70	a	68	LYS	4.1
55	L	2	PRO	4.1
4	AW	58	LEU	4.0
20	BM	24	LEU	4.0
58	O	45	LEU	4.0
5	AX	12	GLY	4.0
22	2	2	GLY	4.0
45	B	777	A	4.0
1	AS	1730	G	4.0
35	CB	9	ARG	4.0
59	DA	71	ILE	4.0
7	m	30	TYR	4.0
22	BO	84	TYR	4.0
10	BC	165	VAL	4.0
12	BE	13	LYS	4.0
14	BG	60	ALA	4.0
62	DD	17	ALA	4.0
1	1	2471	U	4.0
13	BF	47	GLN	4.0
26	BS	35	PRO	4.0
76	DR	60	PRO	4.0
19	BL	124	LEU	4.0
30	BW	47	LEU	4.0
11	BD	92	PHE	4.0
35	AH	68	THR	4.0
39	AL	24	ILE	4.0
65	DG	111	ILE	4.0
1	1	1217	A	4.0
55	L	12	TYR	4.0
77	h	127	TYR	4.0
1	AS	1826	G	4.0
7	m	43	LYS	4.0
30	BW	22	LYS	4.0
76	g	47	VAL	4.0
10	BC	77	ALA	4.0
20	z	2	ALA	4.0
51	CS	85	ALA	4.0
48	CP	89	GLN	4.0

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Mol	Chain	Res	Type	RSRZ
55	L	48	GLN	4.0
6	AY	188	LEU	4.0
7	AZ	147	ASP	4.0
38	CE	67	LEU	4.0
50	CR	9	LEU	4.0
7	AZ	145	PHE	4.0
14	BG	70	ARG	4.0
47	CO	213	ARG	4.0
62	DD	45	PHE	4.0
62	DD	137	PHE	4.0
71	DM	88	ILE	4.0
38	CE	71	THR	4.0
79	CL	34	THR	4.0
62	S	2	SER	4.0
59	DA	65	VAL	4.0
63	DE	44	LYS	4.0
79	CL	100	LYS	4.0
16	BI	119	TYR	4.0
1	AS	1825	A	4.0
10	BC	114	ALA	4.0
29	BV	39	HIS	4.0
32	BY	68	ASN	4.0
56	CX	2	LEU	4.0
60	DB	132	LEU	4.0
77	h	145	LEU	4.0
77	h	188	LEU	4.0
79	CL	111	ASP	4.0
21	BN	143	PHE	4.0
25	BR	47	ARG	4.0
37	CD	25	ILE	4.0
47	CO	48	ILE	4.0
47	CO	169	ILE	4.0
50	CR	3	ARG	4.0
48	CP	155	GLY	4.0
43	CJ	54	THR	4.0
46	C	174	TRP	4.0
63	T	106	THR	4.0
63	DE	8	THR	4.0
19	y	168	LYS	4.0
75	f	54	LYS	4.0
45	B	498	C	4.0
47	CO	91	VAL	4.0

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Mol	Chain	Res	Type	RSRZ
26	BS	90	SER	4.0
6	AY	84	HIS	4.0
49	CQ	86	ALA	4.0
50	G	2	ALA	4.0
79	CL	62	ALA	4.0
26	BS	62	ILE	4.0
36	CC	118	ILE	4.0
51	CS	177	ILE	4.0
66	W	84	ARG	4.0
3	AU	100	U	4.0
16	BI	173	GLY	4.0
35	CB	45	GLY	4.0
68	Y	51	GLU	3.9
10	BC	133	VAL	3.9
28	AA	89	VAL	3.9
34	CA	71	VAL	3.9
54	K	185	CYS	3.9
57	CY	58	CYS	3.9
61	DC	2	VAL	3.9
64	U	100	VAL	3.9
50	G	84	ALA	3.9
79	i	51	ALA	3.9
15	BH	2	SER	3.9
54	K	7	SER	3.9
55	L	8	TYR	3.9
59	DA	6	SER	3.9
20	BM	66	LEU	3.9
26	BS	38	LEU	3.9
53	CU	24	LEU	3.9
63	DE	100	LEU	3.9
71	DM	93	LEU	3.9
78	AR	32	LEU	3.9
7	m	24	GLN	3.9
47	D	202	GLN	3.9
1	1	1274	A	3.9
14	BG	85	ILE	3.9
20	BM	15	ILE	3.9
25	BR	28	ILE	3.9
50	G	50	ASN	3.9
62	S	122	ARG	3.9
10	BC	183	GLY	3.9
22	2	46	GLY	3.9

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Mol	Chain	Res	Type	RSRZ
1	AS	1637	U	3.9
13	BF	142	LYS	3.9
42	AO	25	LYS	3.9
6	AY	107	TRP	3.9
11	q	189	GLU	3.9
14	BG	139	GLU	3.9
55	L	81	VAL	3.9
63	DE	122	VAL	3.9
27	9	126	ALA	3.9
45	B	1705	G	3.9
46	C	19	ALA	3.9
65	DG	41	ALA	3.9
33	AF	87	LEU	3.9
58	O	52	LEU	3.9
77	h	147	TYR	3.9
28	BU	50	PRO	3.9
46	C	199	PRO	3.9
16	BI	109	ARG	3.9
59	P	11	ILE	3.9
66	W	67	ARG	3.9
27	9	91	ASN	3.9
17	BJ	31	GLY	3.9
62	DD	129	GLY	3.9
67	DI	5	LYS	3.9
1	1	2943	A	3.9
14	BG	20	GLU	3.9
27	BT	25	VAL	3.9
66	DH	77	THR	3.9
78	AR	151	TRP	3.9
35	CB	82	ALA	3.9
79	i	42	ALA	3.9
32	AE	3	LEU	3.9
53	CU	95	LEU	3.9
11	BD	165	CYS	3.9
76	DR	35	TYR	3.9
25	BR	42	GLN	3.9
63	T	74	GLN	3.9
51	CS	84	LYS	3.9
66	DH	63	LYS	3.9
31	BX	23	GLY	3.9
57	CY	145	GLY	3.9
78	AR	15	GLY	3.9

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Mol	Chain	Res	Type	RSRZ
76	g	36	MET	3.9
3	AU	91	C	3.9
10	BC	51	VAL	3.9
28	BU	14	VAL	3.9
52	CT	161	GLU	3.9
25	BR	51	TRP	3.9
63	T	30	THR	3.9
59	DA	135	LEU	3.9
77	h	190	LEU	3.9
78	AR	250	ALA	3.9
25	BR	98	PRO	3.9
44	CK	45	ARG	3.9
58	O	89	ILE	3.9
78	AR	80	TYR	3.9
11	q	117	PHE	3.9
30	BW	5	LYS	3.9
35	CB	67	LYS	3.9
54	CV	103	GLN	3.9
64	DF	121	SER	3.9
72	c	19	LYS	3.9
74	DP	59	SER	3.9
1	AS	1020	G	3.9
50	G	102	VAL	3.8
7	AZ	171	LEU	3.8
26	BS	113	LEU	3.8
30	BW	8	THR	3.8
36	CC	101	THR	3.8
44	CK	70	THR	3.8
61	R	122	THR	3.8
61	DC	116	LEU	3.8
58	O	100	TRP	3.8
58	O	118	ALA	3.8
66	DH	78	TRP	3.8
45	B	1725	U	3.8
6	AY	103	PRO	3.8
58	O	55	ARG	3.8
63	T	5	ARG	3.8
46	CN	50	ILE	3.8
63	DE	117	ILE	3.8
64	DF	81	ILE	3.8
24	BQ	94	TYR	3.8
47	CO	100	PHE	3.8

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Mol	Chain	Res	Type	RSRZ
79	i	88	PHE	3.8
33	AF	53	GLN	3.8
58	O	58	GLN	3.8
25	BR	7	SER	3.8
61	DC	117	GLY	3.8
13	s	95	ASN	3.8
28	BU	72	VAL	3.8
65	DG	77	ASN	3.8
69	Z	9	LEU	3.8
73	DO	73	LEU	3.8
4	AW	27	ALA	3.8
8	BA	132	ALA	3.8
33	AF	95	ALA	3.8
37	AJ	82	ALA	3.8
51	H	85	ALA	3.8
1	AS	443	G	3.8
20	BM	62	ARG	3.8
27	BT	27	ARG	3.8
36	CC	90	ARG	3.8
45	B	1672	G	3.8
49	F	118	ARG	3.8
4	AW	66	PRO	3.8
13	s	49	LYS	3.8
16	BI	64	ILE	3.8
16	BI	176	LYS	3.8
45	B	1481	C	3.8
47	CO	204	ILE	3.8
78	AR	138	ILE	3.8
29	BV	129	PHE	3.8
29	AB	90	TYR	3.8
51	CS	37	GLN	3.8
79	i	59	GLY	3.8
7	AZ	46	SER	3.8
24	BQ	7	SER	3.8
32	BY	99	SER	3.8
47	CO	21	VAL	3.8
47	CO	210	VAL	3.8
49	F	38	VAL	3.8
41	CH	45	LEU	3.8
47	CO	47	LEU	3.8
47	CO	122	GLU	3.8
54	K	34	ALA	3.8

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Mol	Chain	Res	Type	RSRZ
55	CW	55	ALA	3.8
26	8	30	THR	3.8
46	C	113	ARG	3.8
70	a	61	ARG	3.8
77	h	129	THR	3.8
79	i	81	THR	3.8
8	BA	130	ILE	3.8
28	BU	21	LYS	3.8
51	CS	106	LYS	3.8
78	AR	291	TRP	3.8
1	1	732	U	3.8
26	BS	84	PHE	3.8
52	CT	50	PHE	3.8
1	AS	1614	G	3.8
4	AW	232	GLY	3.8
6	AY	81	GLY	3.8
14	BG	169	TYR	3.8
26	BS	54	TYR	3.8
62	DD	111	TYR	3.8
7	AZ	65	VAL	3.8
10	BC	67	SER	3.8
14	BG	57	VAL	3.8
16	BI	111	SER	3.8
65	DG	4	VAL	3.8
70	a	35	VAL	3.8
28	AA	87	LEU	3.8
40	CG	29	LEU	3.8
10	BC	46	ASN	3.8
48	E	204	ASN	3.8
32	BY	28	ALA	3.8
64	DF	48	LYS	3.8
64	DF	68	ARG	3.8
72	c	94	ILE	3.8
77	h	146	THR	3.8
29	BV	46	ASP	3.8
36	CC	111	PHE	3.8
70	a	72	PHE	3.8
45	B	75	U	3.8
45	CM	1346	U	3.8
63	DE	52	GLY	3.8
76	g	40	TYR	3.8
1	AS	1523	C	3.8

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Mol	Chain	Res	Type	RSRZ
4	AW	4	VAL	3.8
13	s	130	VAL	3.8
35	CB	57	LEU	3.8
45	CM	1687	C	3.8
63	DE	40	VAL	3.8
78	AR	34	LEU	3.8
78	AR	268	LEU	3.8
1	1	1014	G	3.8
1	AS	2184	G	3.8
49	F	42	LYS	3.7
49	CQ	10	LYS	3.7
51	CS	103	ASN	3.7
52	I	88	ARG	3.7
52	CT	87	ARG	3.7
72	c	12	LYS	3.7
79	i	85	LYS	3.7
67	X	50	ASN	3.7
19	BL	139	ILE	3.7
27	BT	100	HIS	3.7
79	i	83	HIS	3.7
20	BM	49	THR	3.7
26	BS	31	THR	3.7
58	CZ	126	TRP	3.7
20	BM	25	ASP	3.7
28	AA	106	GLN	3.7
45	CM	727	U	3.7
45	CM	1673	U	3.7
59	P	62	GLN	3.7
79	i	109	GLN	3.7
65	DG	18	TYR	3.7
10	BC	137	LEU	3.7
14	BG	63	VAL	3.7
25	7	83	VAL	3.7
36	CC	41	LEU	3.7
72	DN	64	LEU	3.7
79	CL	54	LYS	3.7
1	1	733	A	3.7
1	AS	402	A	3.7
3	4	91	C	3.7
16	BI	26	ARG	3.7
20	BM	100	ARG	3.7
26	8	23	ALA	3.7

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Mol	Chain	Res	Type	RSRZ
37	CD	31	ALA	3.7
37	CD	82	ALA	3.7
45	B	1357	A	3.7
50	G	258	ALA	3.7
69	Z	28	ALA	3.7
10	p	224	ILE	3.7
23	5	56	ILE	3.7
28	BU	82	PRO	3.7
38	CE	13	ASN	3.7
59	DA	5	HIS	3.7
23	BP	83	THR	3.7
45	CM	717	G	3.7
50	G	47	PHE	3.7
55	CW	47	PHE	3.7
63	DE	28	PHE	3.7
7	AZ	169	GLY	3.7
66	DH	110	GLY	3.7
48	CP	84	GLN	3.7
78	AR	145	LEU	3.7
7	m	90	TYR	3.7
13	s	52	TYR	3.7
22	BO	80	VAL	3.7
49	CQ	138	VAL	3.7
50	G	219	VAL	3.7
52	I	153	VAL	3.7
74	e	15	VAL	3.7
49	F	149	LYS	3.7
50	CR	10	LYS	3.7
9	o	16	ALA	3.7
20	BM	2	ALA	3.7
33	BZ	70	ALA	3.7
47	D	193	ILE	3.7
48	CP	87	ALA	3.7
53	CU	32	ALA	3.7
78	AR	208	CYS	3.7
36	CC	109	ILE	3.7
64	U	119	ILE	3.7
37	CD	96	SER	3.7
39	CF	13	GLU	3.7
41	CH	3	GLU	3.7
78	AR	14	GLU	3.7
38	CE	6	PRO	3.7

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Mol	Chain	Res	Type	RSRZ
45	B	1476	A	3.7
45	CM	1680	A	3.7
51	CS	43	PHE	3.7
53	J	127	PHE	3.7
70	a	23	PHE	3.7
46	CN	80	THR	3.7
46	CN	103	THR	3.7
79	i	58	THR	3.7
29	BV	75	LEU	3.7
31	AD	86	LEU	3.7
36	CC	9	LEU	3.7
45	B	1480	G	3.7
4	AW	45	VAL	3.7
27	BT	105	VAL	3.7
62	DD	21	VAL	3.7
65	DG	70	GLN	3.7
36	CC	94	LYS	3.7
46	CN	165	LYS	3.7
52	CT	228	LYS	3.7
59	P	106	ARG	3.7
10	BC	154	ILE	3.7
41	CH	2	ILE	3.7
51	CS	74	ALA	3.7
63	DE	69	ILE	3.7
49	CQ	200	PRO	3.7
52	CT	112	SER	3.7
78	AR	244	PRO	3.7
27	BT	21	THR	3.7
48	CP	85	THR	3.7
1	1	1021	A	3.7
54	CV	149	LEU	3.7
61	R	91	GLY	3.7
54	CV	105	ASP	3.7
55	L	136	VAL	3.7
62	DD	11	LYS	3.7
13	BF	143	ARG	3.7
27	BT	115	ARG	3.7
1	AS	442	G	3.7
1	AS	1729	G	3.7
1	AS	599	U	3.7
1	AS	1761	U	3.7
48	E	126	ILE	3.7

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Mol	Chain	Res	Type	RSRZ
10	BC	199	ALA	3.7
30	BW	16	ALA	3.7
39	CF	15	ALA	3.7
46	C	97	ALA	3.7
57	N	12	ALA	3.7
5	AX	11	HIS	3.6
20	BM	68	GLU	3.6
22	BO	86	GLU	3.6
26	BS	66	PRO	3.6
33	AF	27	HIS	3.6
60	Q	68	GLU	3.6
72	DN	80	HIS	3.6
46	C	115	PHE	3.6
26	BS	112	THR	3.6
47	CO	124	ASN	3.6
77	h	176	ASN	3.6
18	x	176	LEU	3.6
41	CH	6	LEU	3.6
49	CQ	58	GLY	3.6
4	AW	207	VAL	3.6
27	BT	8	VAL	3.6
45	CM	1411	A	3.6
63	T	66	VAL	3.6
71	DM	62	VAL	3.6
77	h	126	VAL	3.6
1	AS	1552	C	3.6
66	W	79	ASP	3.6
11	q	9	ILE	3.6
22	BO	75	ILE	3.6
22	BO	14	ALA	3.6
58	O	27	ALA	3.6
10	BC	192	HIS	3.6
11	q	190	GLU	3.6
63	T	71	PHE	3.6
45	CM	701	G	3.6
35	AH	81	CYS	3.6
19	BL	146	SER	3.6
20	z	137	SER	3.6
27	BT	35	LEU	3.6
28	BU	101	LEU	3.6
11	BD	121	LYS	3.6
16	v	193	LYS	3.6

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Mol	Chain	Res	Type	RSRZ
16	BI	140	LYS	3.6
27	9	125	LYS	3.6
35	CB	71	THR	3.6
53	J	54	LEU	3.6
55	L	70	LEU	3.6
56	M	87	LEU	3.6
65	DG	5	SER	3.6
36	AI	94	LYS	3.6
41	CH	38	LYS	3.6
66	DH	66	THR	3.6
62	DD	132	GLY	3.6
74	DP	48	VAL	3.6
36	CC	113	GLN	3.6
63	DE	11	ARG	3.6
76	g	31	GLN	3.6
23	5	94	ASP	3.6
45	B	169	A	3.6
45	B	719	A	3.6
45	CM	988	A	3.6
71	b	34	ASP	3.6
19	BL	165	ILE	3.6
56	M	11	ILE	3.6
63	T	69	ILE	3.6
77	h	133	ILE	3.6
13	s	98	ALA	3.6
14	t	2	ALA	3.6
16	BI	102	ALA	3.6
36	CC	110	ALA	3.6
45	B	721	C	3.6
51	H	210	ALA	3.6
70	DL	134	ALA	3.6
10	BC	35	PHE	3.6
16	BI	180	PHE	3.6
16	BI	131	GLU	3.6
45	B	278	U	3.6
64	DF	53	GLU	3.6
64	DF	67	GLU	3.6
20	BM	70	LYS	3.6
42	CI	25	LYS	3.6
48	E	66	LEU	3.6
59	DA	88	LEU	3.6
67	DI	8	LEU	3.6

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Mol	Chain	Res	Type	RSRZ
18	BK	32	THR	3.6
36	CC	93	THR	3.6
59	DA	67	THR	3.6
70	a	69	SER	3.6
14	BG	97	VAL	3.6
16	BI	155	VAL	3.6
32	BY	66	VAL	3.6
45	CM	976	G	3.6
45	CM	1352	G	3.6
50	G	105	VAL	3.6
76	g	33	ARG	3.6
12	BE	113	GLN	3.6
26	BS	142	ILE	3.6
63	T	41	ILE	3.6
68	DJ	110	ILE	3.6
72	DN	36	ILE	3.6
10	BC	115	ALA	3.6
10	BC	155	ALA	3.6
25	BR	85	ALA	3.6
37	CD	63	ALA	3.6
62	S	17	ALA	3.6
1	AS	2078	A	3.6
45	CM	1410	A	3.6
53	J	179	PHE	3.6
5	k	274	HIS	3.6
16	BI	156	HIS	3.6
3	4	21	C	3.6
16	BI	113	LEU	3.6
27	BT	77	LYS	3.6
41	CH	7	LYS	3.6
50	G	133	LYS	3.6
52	I	193	LYS	3.6
26	BS	28	THR	3.6
46	CN	44	GLY	3.6
49	CQ	165	THR	3.6
20	BM	71	ARG	3.6
28	BU	65	ARG	3.6
29	BV	112	VAL	3.6
46	CN	158	VAL	3.6
49	F	150	SER	3.6
64	DF	4	VAL	3.6
65	DG	9	VAL	3.6

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Mol	Chain	Res	Type	RSRZ
18	x	140	GLN	3.6
58	O	86	ILE	3.6
60	DB	34	ILE	3.6
1	1	2426	G	3.6
1	1	2428	G	3.6
14	BG	78	ALA	3.6
16	v	167	ALA	3.6
19	y	103	ALA	3.6
45	CM	1682	G	3.6
71	b	99	ALA	3.6
65	DG	46	PRO	3.6
53	J	85	HIS	3.6
5	AX	387	LEU	3.6
7	m	92	LEU	3.6
37	CD	83	LEU	3.6
51	H	80	LYS	3.6
53	J	44	GLU	3.5
53	J	95	LEU	3.6
62	DD	126	LYS	3.6
59	P	83	GLU	3.5
64	DF	54	LEU	3.6
45	B	318	U	3.5
45	B	1348	U	3.5
4	AW	2	GLY	3.5
16	BI	67	ARG	3.5
65	DG	34	VAL	3.5
18	BK	136	ILE	3.5
63	DE	13	SER	3.5
67	DI	18	SER	3.5
79	i	110	SER	3.5
43	AP	47	GLN	3.5
46	C	131	GLN	3.5
61	DC	82	ASN	3.5
62	DD	60	GLN	3.5
5	AX	45	ALA	3.5
6	AY	57	ALA	3.5
35	CB	52	ALA	3.5
49	F	145	ALA	3.5
62	S	19	ALA	3.5
62	DD	79	ALA	3.5
78	AR	252	ALA	3.5
22	BO	15	PHE	3.5

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Mol	Chain	Res	Type	RSRZ
27	BT	20	PHE	3.5
63	T	65	PRO	3.5
68	DJ	37	PHE	3.5
13	s	153	LYS	3.5
19	y	159	LYS	3.5
27	BT	46	LYS	3.5
28	BU	73	LYS	3.5
53	J	24	LEU	3.5
56	CX	65	TYR	3.5
10	BC	203	GLU	3.5
27	BT	127	GLU	3.5
61	DC	54	MET	3.5
21	BN	56	GLY	3.5
23	BP	17	VAL	3.5
33	AF	125	GLY	3.5
46	C	31	VAL	3.5
51	CS	155	VAL	3.5
59	DA	10	GLY	3.5
64	DF	120	ARG	3.5
69	DK	51	GLY	3.5
6	AY	68	THR	3.5
79	CL	79	THR	3.5
16	BI	151	ILE	3.5
7	AZ	151	GLN	3.5
18	x	125	GLN	3.5
66	W	75	SER	3.5
6	AY	348	ALA	3.5
19	BL	37	ALA	3.5
27	BT	15	ALA	3.5
28	BU	117	ALA	3.5
29	BV	96	ALA	3.5
57	CY	25	ALA	3.5
79	i	46	ALA	3.5
79	CL	63	ALA	3.5
29	BV	68	PHE	3.5
53	J	182	PRO	3.5
66	W	20	LYS	3.5
7	AZ	81	HIS	3.5
8	n	33	LEU	3.5
13	BF	37	LEU	3.5
19	BL	94	LEU	3.5
20	z	155	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
26	BS	60	HIS	3.5
28	BU	87	LEU	3.5
35	AH	34	HIS	3.5
46	CN	177	LEU	3.5
55	L	36	LEU	3.5
66	DH	62	LEU	3.5
7	m	172	TYR	3.5
54	CV	138	ASP	3.5
5	k	4	ARG	3.5
7	AZ	201	GLY	3.5
7	AZ	202	GLY	3.5
14	BG	124	VAL	3.5
14	BG	135	VAL	3.5
16	BI	88	GLY	3.5
22	BO	2	GLY	3.5
50	G	129	VAL	3.5
58	O	116	VAL	3.5
59	DA	66	VAL	3.5
66	W	110	GLY	3.5
1	1	1013	U	3.5
1	1	1266	A	3.5
1	1	2396	G	3.5
1	1	2455	G	3.5
1	1	2475	U	3.5
26	BS	81	THR	3.5
36	AI	109	ILE	3.5
37	CD	36	THR	3.5
44	CK	63	THR	3.5
58	O	71	ILE	3.5
61	DC	57	ILE	3.5
68	Y	4	THR	3.5
52	I	210	GLN	3.5
4	AW	46	LYS	3.5
14	t	4	SER	3.5
36	CC	74	LYS	3.5
36	CC	78	LYS	3.5
38	CE	35	SER	3.5
22	2	90	ASN	3.5
39	CF	21	LYS	3.5
46	CN	76	CYS	3.5
47	CO	152	LYS	3.5
53	CU	55	ALA	3.5

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Mol	Chain	Res	Type	RSRZ
45	CM	706	C	3.5
50	G	240	PRO	3.5
51	CS	104	ASN	3.5
61	DC	119	PHE	3.5
62	DD	135	ALA	3.5
65	DG	38	LYS	3.5
25	BR	29	PHE	3.5
28	BU	131	PHE	3.5
36	CC	7	PHE	3.5
65	DG	58	ALA	3.5
55	L	18	PRO	3.5
62	DD	50	PRO	3.5
77	h	173	PHE	3.5
26	BS	82	LEU	3.5
37	CD	56	LEU	3.5
52	I	77	LEU	3.5
62	S	104	LEU	3.5
65	DG	132	LEU	3.5
78	AR	82	LEU	3.5
16	BI	81	TYR	3.5
41	AN	24	TYR	3.5
71	DM	101	TYR	3.5
63	T	76	GLU	3.5
32	BY	92	VAL	3.5
37	CD	9	GLY	3.5
47	CO	20	VAL	3.5
52	CT	102	VAL	3.5
55	CW	117	GLY	3.5
62	DD	117	VAL	3.5
63	T	2	GLY	3.5
65	DG	94	VAL	3.5
41	AN	19	ILE	3.5
62	DD	28	ILE	3.5
65	DG	135	ILE	3.5
16	v	183	THR	3.5
66	DH	69	THR	3.5
6	AY	105	LYS	3.5
22	BO	32	LYS	3.5
45	B	1359	U	3.5
65	DG	92	LYS	3.5
66	DH	60	LYS	3.5
76	g	3	LYS	3.5

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Mol	Chain	Res	Type	RSRZ
77	h	136	LYS	3.5
48	E	82	GLN	3.5
7	AZ	62	ALA	3.5
8	BA	6	PRO	3.5
20	BM	35	ALA	3.5
23	5	98	PHE	3.5
32	BY	39	ALA	3.5
35	AH	50	ALA	3.5
35	CB	50	ALA	3.5
47	CO	38	PHE	3.5
49	CQ	154	ALA	3.5
53	J	165	PHE	3.5
55	L	169	ALA	3.5
56	M	75	PHE	3.5
26	8	24	LEU	3.5
47	CO	158	SER	3.5
51	CS	71	SER	3.5
54	CV	69	SER	3.5
79	i	103	LEU	3.5
14	BG	66	ASN	3.5
5	k	377[A]	HIS	3.5
3	AU	118	C	3.5
7	AZ	198	TYR	3.5
48	CP	138	TYR	3.5
55	L	164	TYR	3.5
64	DF	123	ARG	3.5
5	AX	158	VAL	3.4
29	BV	108	GLY	3.4
29	BV	141	VAL	3.4
39	CF	55	VAL	3.4
46	CN	86	VAL	3.4
54	CV	68	GLY	3.4
69	DK	53	VAL	3.4
7	AZ	290	ILE	3.4
32	BY	35	ILE	3.4
51	CS	113	ILE	3.4
65	V	36	ILE	3.4
67	X	51	ILE	3.4
7	AZ	93	THR	3.4
19	BL	161	LYS	3.4
47	CO	153	THR	3.4
70	DL	99	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
1	1	601	U	3.4
1	1	3163	U	3.4
7	m	55	PHE	3.4
8	BA	5	ALA	3.4
20	BM	102	LEU	3.4
23	5	74	PHE	3.4
28	AA	118	PHE	3.4
30	AC	32	LEU	3.4
45	B	1341	U	3.4
47	CO	54	LEU	3.4
49	F	22	LEU	3.4
49	CQ	206	ALA	3.4
52	I	86	PRO	3.4
54	CV	65	PHE	3.4
63	T	34	LEU	3.4
63	T	73	LEU	3.4
65	DG	28	LEU	3.4
76	g	58	PRO	3.4
79	i	155	LEU	3.4
13	BF	131	MET	3.4
40	CG	6	SER	3.4
45	CM	1688	A	3.4
53	CU	2	SER	3.4
63	T	56	HIS	3.4
68	DJ	92	ASN	3.4
79	CL	90	ARG	3.4
6	AY	227	GLU	3.4
7	AZ	272	TYR	3.4
40	AM	37	TYR	3.4
59	P	89	TYR	3.4
22	2	93	VAL	3.4
33	BZ	77	VAL	3.4
39	CF	12	VAL	3.4
30	AC	21	ILE	3.4
33	AF	97	ILE	3.4
53	CU	45	ILE	3.4
55	CW	45	ILE	3.4
61	DC	121	ILE	3.4
65	DG	112	GLY	3.4
70	a	7	ILE	3.4
71	DM	100	ILE	3.4
74	DP	13	ILE	3.4

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Mol	Chain	Res	Type	RSRZ
7	AZ	58	LYS	3.4
10	BC	63	LYS	3.4
19	BL	168	LYS	3.4
63	T	72	LYS	3.4
51	H	154	THR	3.4
51	CS	94	THR	3.4
14	BG	116	LEU	3.4
16	BI	21	PHE	3.4
22	BO	151	LEU	3.4
35	CB	61	GLN	3.4
39	CF	29	ALA	3.4
46	C	107	PHE	3.4
49	F	172	ALA	3.4
53	J	53	ALA	3.4
55	CW	18	PRO	3.4
75	DQ	52	PHE	3.4
78	AR	117	ALA	3.4
5	AX	262	TRP	3.4
1	AS	1816	U	3.4
18	BK	133	HIS	3.4
18	BK	137	ASN	3.4
36	CC	114	ARG	3.4
49	CQ	226	SER	3.4
53	CU	143	ASN	3.4
79	CL	84	SER	3.4
45	CM	216	A	3.4
16	BI	60	VAL	3.4
46	C	123	VAL	3.4
52	CT	97	VAL	3.4
4	AW	49	ILE	3.4
6	AY	355	GLY	3.4
18	BK	38	GLY	3.4
38	AK	60	GLY	3.4
41	AN	2	ILE	3.4
64	DF	79	TYR	3.4
66	DH	81	TYR	3.4
78	AR	247	TYR	3.4
12	r	169	LYS	3.4
14	t	64	LYS	3.4
66	W	63	LYS	3.4
1	AS	245	G	3.4
45	CM	823	G	3.4

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Mol	Chain	Res	Type	RSRZ
33	BZ	86	LEU	3.4
39	CF	14	LEU	3.4
47	CO	135	LEU	3.4
73	DO	21	LEU	3.4
46	C	99	ALA	3.4
46	CN	65	ALA	3.4
48	E	76	MET	3.4
55	L	114	PHE	3.4
66	W	65	THR	3.4
75	f	14	PHE	3.4
78	AR	303	THR	3.4
20	z	154	ALA	3.4
52	CT	138	ALA	3.4
58	O	48	ALA	3.4
63	DE	51	ALA	3.4
10	BC	62	GLN	3.4
13	s	43	GLN	3.4
16	BI	57	GLN	3.4
16	BI	200	TRP	3.4
16	BI	114	ARG	3.4
20	BM	97	ARG	3.4
39	AL	3	ARG	3.4
40	CG	42	ARG	3.4
49	CQ	175	HIS	3.4
21	BN	120	SER	3.4
66	DH	75	SER	3.4
79	i	66	ASN	3.4
7	AZ	125	VAL	3.4
13	BF	18	VAL	3.4
14	BG	22	VAL	3.4
16	BI	36	ILE	3.4
19	BL	30	VAL	3.4
36	CC	57	VAL	3.4
37	CD	86	VAL	3.4
52	CT	113	ILE	3.4
58	O	123	VAL	3.4
60	DB	110	ILE	3.4
61	DC	106	GLU	3.4
1	AS	2186	A	3.4
10	BC	112	LYS	3.4
13	BF	4	LYS	3.4
35	CB	78	GLY	3.4

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Mol	Chain	Res	Type	RSRZ
38	CE	43	LYS	3.4
47	D	233	GLY	3.4
49	F	188	LYS	3.4
52	CT	66	GLY	3.4
55	CW	95	TYR	3.4
75	DQ	54	LYS	3.4
7	m	131	LEU	3.4
23	BP	82	LEU	3.4
32	BY	72	LEU	3.4
46	CN	172	LEU	3.4
53	J	150	LEU	3.4
62	S	37	LEU	3.4
79	i	69	PHE	3.4
5	AX	103	THR	3.4
10	BC	168	PRO	3.4
31	AD	81	THR	3.4
40	CG	47	THR	3.4
61	DC	74	ALA	3.4
79	i	57	PRO	3.4
79	i	62	ALA	3.4
1	1	3194	G	3.4
1	AS	1527	C	3.4
41	CH	37	ARG	3.4
65	V	123	ARG	3.4
1	1	1024	U	3.4
1	AS	1625	U	3.4
11	BD	57	VAL	3.4
53	J	87	VAL	3.4
58	O	24	ILE	3.4
62	S	42	ILE	3.4
66	DH	64	ILE	3.4
70	DL	35	VAL	3.4
77	h	144	VAL	3.4
16	BI	138	SER	3.4
18	BK	124	LYS	3.4
26	BS	25	LYS	3.4
42	CI	8	LYS	3.4
64	U	56	LYS	3.4
71	b	97	LYS	3.4
18	BK	134	GLY	3.4
43	CJ	39	GLY	3.4
60	DB	125	GLY	3.4

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Mol	Chain	Res	Type	RSRZ
12	BE	22	TYR	3.3
12	BE	216	TYR	3.3
16	BI	6	TYR	3.3
1	AS	3050	A	3.3
10	BC	70	LEU	3.3
50	CR	20	LEU	3.3
53	CU	6	LEU	3.3
65	V	140	LEU	3.3
76	DR	56	MET	3.3
23	BP	15	PHE	3.3
10	BC	73	PRO	3.3
13	s	76	ALA	3.3
30	BW	51	ALA	3.3
46	CN	97	ALA	3.3
61	DC	4	ALA	3.3
73	d	53	ALA	3.3
5	k	139	THR	3.3
19	y	73	GLN	3.3
48	E	84	GLN	3.3
13	s	51	ARG	3.3
26	BS	27	ARG	3.3
39	CF	3	ARG	3.3
50	G	11	ARG	3.3
50	G	257	ARG	3.3
69	Z	23	ARG	3.3
69	Z	32	ARG	3.3
78	AR	65	HIS	3.3
1	1	3220	C	3.3
1	AS	1569	C	3.3
4	AW	10	LYS	3.3
10	BC	144	ILE	3.3
22	BO	3	LYS	3.3
27	9	45	VAL	3.3
28	AA	25	ILE	3.3
29	BV	101	VAL	3.3
47	CO	150	ILE	3.3
55	L	68	LYS	3.3
55	CW	96	VAL	3.3
58	CZ	86	ILE	3.3
61	R	126	VAL	3.3
64	U	4	VAL	3.3
72	DN	79	ILE	3.3

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Mol	Chain	Res	Type	RSRZ
79	CL	96	LYS	3.3
1	AS	32	G	3.3
1	AS	805	G	3.3
1	AS	1797	U	3.3
27	BT	124	GLY	3.3
5	AX	2	SER	3.3
9	BB	71	ASN	3.3
27	BT	94	SER	3.3
40	AM	38	ASN	3.3
50	CR	107	GLY	3.3
33	AF	86	LEU	3.3
36	AI	41	LEU	3.3
51	CS	97	LEU	3.3
55	CW	59	LEU	3.3
61	DC	56	LEU	3.3
62	S	115	LEU	3.3
73	d	21	LEU	3.3
13	s	104	PHE	3.3
28	BU	130	PHE	3.3
1	AS	2967	A	3.3
16	BI	79	ALA	3.3
26	BS	122	ALA	3.3
36	CC	97	ALA	3.3
51	CS	191	ALA	3.3
52	CT	86	PRO	3.3
70	a	135	ASP	3.3
77	h	143	ALA	3.3
5	AX	159	ARG	3.3
16	BI	201	ARG	3.3
26	BS	48	ARG	3.3
32	BY	18	ARG	3.3
36	AI	93	THR	3.3
48	E	85	THR	3.3
55	L	3	ARG	3.3
65	DG	57	ARG	3.3
75	f	12	ARG	3.3
76	DR	33	ARG	3.3
79	CL	77	GLN	3.3
75	DQ	3	HIS	3.3
14	BG	104	LYS	3.3
16	BI	83	LYS	3.3
40	AM	40	LYS	3.3

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Mol	Chain	Res	Type	RSRZ
50	CR	246	LYS	3.3
65	DG	84	LYS	3.3
79	i	54	LYS	3.3
23	5	67	VAL	3.3
38	CE	29	VAL	3.3
47	CO	137	VAL	3.3
53	J	131	ILE	3.3
1	1	2474	C	3.3
1	1	3051	C	3.3
62	DD	130	GLY	3.3
4	AW	194	ASN	3.3
16	BI	90	ASN	3.3
31	BX	53	LEU	3.3
36	CC	55	LEU	3.3
41	CH	27	LEU	3.3
43	CJ	35	LEU	3.3
45	B	175	U	3.3
46	CN	87	LEU	3.3
48	CP	143	LEU	3.3
50	CR	44	LEU	3.3
6	l	86	SER	3.3
49	F	161	SER	3.3
16	BI	202	TYR	3.3
21	0	7	TYR	3.3
40	CG	37	TYR	3.3
1	1	1281	G	3.3
1	1	2459	G	3.3
1	AS	79	G	3.3
45	CM	1581	G	3.3
35	AH	63	ALA	3.3
37	CD	2	ALA	3.3
7	m	8	ARG	3.3
21	BN	28	ARG	3.3
42	CI	12	ARG	3.3
55	L	157	ASP	3.3
37	CD	34	GLN	3.3
53	CU	156	THR	3.3
4	AW	209	HIS	3.3
5	k	24	LYS	3.3
29	AB	111	LYS	3.3
45	B	167	A	3.3
50	CR	6	LYS	3.3

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Mol	Chain	Res	Type	RSRZ
59	DA	112	LYS	3.3
60	DB	124	LYS	3.3
65	DG	119	LYS	3.3
74	DP	14	LYS	3.3
77	h	124	LYS	3.3
79	i	86	LYS	3.3
55	L	134	ILE	3.3
58	CZ	71	ILE	3.3
70	a	25	ILE	3.3
15	u	13	VAL	3.3
23	5	68	VAL	3.3
46	CN	58	VAL	3.3
66	W	55	VAL	3.3
58	CZ	127	GLY	3.3
78	AR	98	GLY	3.3
20	z	152	GLU	3.3
46	CN	24	LEU	3.3
49	F	94	GLU	3.3
50	CR	131	LEU	3.3
1	1	1551	U	3.3
1	AS	1013	U	3.3
51	H	104	ASN	3.3
79	i	68	ASN	3.3
7	AZ	207	TYR	3.3
10	BC	135	TYR	3.3
17	w	49	PHE	3.3
22	2	70	SER	3.3
24	6	7	SER	3.3
31	AD	93	SER	3.3
32	BY	24	PHE	3.3
47	CO	119	SER	3.3
51	CS	77	TYR	3.3
51	CS	82	PHE	3.3
62	DD	5	SER	3.3
10	BC	100	PRO	3.3
48	CP	166	PRO	3.3
66	DH	54	PRO	3.3
13	s	34	ALA	3.3
13	BF	136	ALA	3.3
20	BM	87	ALA	3.3
35	CB	41	ARG	3.3
51	H	83	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
55	CW	120	ARG	3.3
66	DH	84	ARG	3.3
69	DK	20	ARG	3.3
1	AS	238	G	3.3
14	BG	64	LYS	3.3
22	2	3	LYS	3.3
26	BS	96	LYS	3.3
78	AR	261	LYS	3.3
17	BJ	123	GLN	3.3
18	x	165	GLN	3.3
32	BY	46	THR	3.3
40	AM	25	GLN	3.3
50	CR	166	THR	3.3
62	DD	36	THR	3.3
77	h	167	THR	3.3
47	CO	193	ILE	3.3
66	DH	40	ILE	3.3
78	AR	259	ILE	3.3
36	CC	4	VAL	3.3
56	M	22	VAL	3.3
45	B	503	A	3.3
45	CM	215	A	3.3
46	CN	174	TRP	3.3
28	BU	134	LEU	3.3
54	CV	183	GLY	3.3
59	P	16	LEU	3.3
63	DE	46	LEU	3.3
65	DG	108	LEU	3.3
74	DP	17	GLY	3.3
10	BC	50	PHE	3.2
23	BP	74	PHE	3.2
48	CP	219	PHE	3.2
49	F	198	PHE	3.2
53	J	21	PHE	3.2
55	CW	104	PHE	3.2
65	DG	14	PHE	3.2
1	1	449	U	3.2
1	AS	1612	U	3.2
1	AS	2252	U	3.2
16	BI	42	PRO	3.2
44	CK	56	ASN	3.2
45	B	497	U	3.2

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Mol	Chain	Res	Type	RSRZ
45	B	1673	U	3.2
47	D	206	PRO	3.2
79	CL	60	ASN	3.2
7	m	291	ALA	3.2
13	BF	41	SER	3.2
14	BG	4	SER	3.2
57	CY	53	TYR	3.2
65	DG	80	TYR	3.2
16	v	185	ALA	3.2
19	BL	174	ARG	3.2
38	CE	65	ALA	3.2
1	AS	1610	C	3.2
35	CB	36	LYS	3.2
45	B	182	C	3.2
59	P	109	LYS	3.2
6	AY	88	GLN	3.2
14	t	19	GLN	3.2
18	BK	140	GLN	3.2
26	BS	30	THR	3.2
27	BT	86	GLN	3.2
28	BU	29	HIS	3.2
33	AF	109	ILE	3.2
38	CE	30	GLN	3.2
38	CE	87	THR	3.2
41	AN	42	THR	3.2
51	CS	149	ILE	3.2
54	CV	38	ILE	3.2
62	S	73	HIS	3.2
71	DM	41	ILE	3.2
11	BD	27	VAL	3.2
22	BO	33	VAL	3.2
27	9	82	VAL	3.2
34	CA	52	VAL	3.2
48	CP	81	VAL	3.2
62	S	54	VAL	3.2
63	DE	9	VAL	3.2
73	DO	46	VAL	3.2
76	DR	47	VAL	3.2
4	AW	179	LEU	3.2
10	BC	170	LEU	3.2
19	BL	93	LEU	3.2
20	z	106	LEU	3.2

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Mol	Chain	Res	Type	RSRZ
29	BV	105	LEU	3.2
31	BX	95	LEU	3.2
37	CD	76	LEU	3.2
45	B	972	G	3.2
50	CR	23	LEU	3.2
52	I	75	LEU	3.2
53	CU	30	LEU	3.2
78	AR	19	TRP	3.2
79	i	107	TRP	3.2
22	BO	81	GLY	3.2
25	BR	62	GLY	3.2
51	CS	75	GLY	3.2
39	CF	11	PHE	3.2
40	CG	46	ARG	3.2
55	L	5	PRO	3.2
10	BC	178	TYR	3.2
14	BG	29	ALA	3.2
34	CA	2	ALA	3.2
39	CF	23	ALA	3.2
51	CS	61	TYR	3.2
53	CU	90	ALA	3.2
55	CW	164	TYR	3.2
62	DD	12	LYS	3.2
64	DF	75	ASN	3.2
72	c	4	LYS	3.2
73	DO	53	ALA	3.2
79	i	44	ALA	3.2
79	i	70	ASN	3.2
28	BU	105	SER	3.2
47	CO	186	SER	3.2
60	DB	120	SER	3.2
67	X	18	SER	3.2
7	AZ	61	ILE	3.2
8	n	130	ILE	3.2
11	q	4	ILE	3.2
37	CD	93	ILE	3.2
51	H	64	ILE	3.2
26	BS	93	HIS	3.2
31	BX	50	THR	3.2
35	CB	33	GLN	3.2
35	CB	56	THR	3.2
51	H	94	THR	3.2

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Mol	Chain	Res	Type	RSRZ
52	CT	185	GLN	3.2
51	CS	51	VAL	3.2
51	CS	147	THR	3.2
72	c	99	GLN	3.2
1	1	2468	C	3.2
1	AS	1828	C	3.2
1	AS	2545	C	3.2
6	AY	78	VAL	3.2
45	B	274	C	3.2
45	CM	1318	C	3.2
53	CU	86	VAL	3.2
77	h	137	HIS	3.2
14	BG	98	ASP	3.2
67	DI	1	MET	3.2
8	BA	42	LEU	3.2
10	BC	215	LEU	3.2
16	BI	164	LEU	3.2
31	AD	18	LEU	3.2
32	BY	50	LEU	3.2
47	CO	61	LEU	3.2
58	O	74	LEU	3.2
73	d	24	LEU	3.2
4	AW	81	GLY	3.2
48	E	170	GLY	3.2
52	CT	33	GLY	3.2
18	BK	42	GLU	3.2
6	AY	91	PHE	3.2
19	y	35	PHE	3.2
1	1	1022	A	3.2
1	1	1222	G	3.2
1	AS	226	G	3.2
6	l	5	PRO	3.2
6	AY	351	LYS	3.2
14	BG	42	LYS	3.2
14	BG	91	ARG	3.2
35	CB	26	PRO	3.2
35	CB	29	LYS	3.2
36	CC	48	ARG	3.2
37	CD	28	ARG	3.2
45	B	724	G	3.2
45	CM	1186	G	3.2
45	CM	1407	A	3.2

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Mol	Chain	Res	Type	RSRZ
45	CM	1683	G	3.2
52	I	87	ARG	3.2
53	CU	101	LYS	3.2
55	CW	68	LYS	3.2
55	CW	92	LYS	3.2
57	CY	95	PRO	3.2
58	CZ	108	ARG	3.2
61	DC	127	ARG	3.2
63	DE	47	ARG	3.2
74	e	64	ARG	3.2
74	DP	45	LYS	3.2
20	BM	178	ALA	3.2
27	BT	18	ALA	3.2
36	AI	120	ALA	3.2
53	J	65	ALA	3.2
54	K	57	ALA	3.2
62	DD	109	ALA	3.2
63	T	39	ALA	3.2
70	a	88	ALA	3.2
23	BP	33	TYR	3.2
78	AR	245	ASN	3.2
11	BD	104	ILE	3.2
18	x	36	ILE	3.2
45	B	699	U	3.2
54	K	43	ILE	3.2
56	M	86	ILE	3.2
62	DD	107	ILE	3.2
64	DF	142	SER	3.2
74	DP	53	ILE	3.2
7	AZ	3	MET	3.2
10	BC	181	VAL	3.2
12	r	197	VAL	3.2
13	s	18	VAL	3.2
28	BU	43	VAL	3.2
35	CB	5	VAL	3.2
43	CJ	56	GLN	3.2
46	C	143	VAL	3.2
47	CO	192	VAL	3.2
70	a	27	VAL	3.2
72	DN	74	CYS	3.2
78	AR	122	GLN	3.2
7	m	153	THR	3.2

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Mol	Chain	Res	Type	RSRZ
7	AZ	76	THR	3.2
8	n	29	LEU	3.2
9	o	188	THR	3.2
16	BI	51	LEU	3.2
22	BO	11	THR	3.2
29	BV	104	THR	3.2
46	CN	176	LEU	3.2
62	DD	53	LEU	3.2
70	a	28	LEU	3.2
78	AR	180	LEU	3.2
78	AR	201	LEU	3.2
78	AR	222	LEU	3.2
29	BV	76	ASP	3.2
48	CP	140	GLY	3.2
51	CS	105	GLY	3.2
1	AS	174	C	3.2
45	CM	1697	C	3.2
48	CP	139	TRP	3.2
38	CE	78	PHE	3.2
5	k	167	LYS	3.2
6	AY	45	LYS	3.2
6	AY	48	ARG	3.2
16	BI	33	LYS	3.2
16	BI	147	ARG	3.2
61	DC	73	PRO	3.2
69	DK	32	ARG	3.2
76	g	42	ARG	3.2
79	CL	43	PRO	3.2
9	o	69	ALA	3.2
10	BC	116	ALA	3.2
57	N	2	ALA	3.2
70	a	54	ALA	3.2
1	1	1023	A	3.2
1	1	3045	A	3.2
46	CN	98	ILE	3.2
49	F	209	ILE	3.2
50	G	27	TYR	3.2
65	DG	36	ILE	3.2
72	DN	8	ASN	3.2
1	AS	808	G	3.2
61	R	54	MET	3.2
5	AX	72	VAL	3.2

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Mol	Chain	Res	Type	RSRZ
46	CN	143	VAL	3.2
50	G	45	VAL	3.2
59	DA	7	SER	3.2
62	DD	138	GLN	3.2
63	DE	56	HIS	3.2
79	CL	110	SER	3.2
6	AY	290	LEU	3.2
27	BT	111	LEU	3.2
39	CF	78	LEU	3.2
49	F	70	LEU	3.2
50	G	260	GLN	3.2
47	CO	143	THR	3.2
64	U	47	CYS	3.2
7	AZ	87	GLY	3.2
12	r	194	GLY	3.2
60	DB	112	ASP	3.2
62	S	119	ASP	3.2
70	a	65	GLY	3.2
16	BI	150	TRP	3.2
58	O	126	TRP	3.2
8	BA	139	LYS	3.2
14	t	187	LYS	3.2
20	BM	52	LYS	3.2
28	BU	27	LYS	3.2
49	F	77	ARG	3.2
51	CS	76	LYS	3.2
68	DJ	118	ARG	3.2
71	DM	77	ARG	3.2
78	AR	99	GLU	3.2
1	AS	2079	C	3.2
3	AU	21	C	3.2
45	CM	1467	C	3.2
53	CU	182	PRO	3.2
62	DD	125	PRO	3.2
5	AX	162	ALA	3.1
7	m	98	ALA	3.1
7	AZ	249	ALA	3.1
12	r	2	ALA	3.1
15	u	127	ALA	3.1
22	BO	100	ALA	3.1
37	CD	68	ALA	3.1
49	F	206	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
51	H	78	ALA	3.1
5	AX	181	ILE	3.1
14	BG	46	ILE	3.1
71	DM	89	ILE	3.1
26	BS	103	TYR	3.1
26	BS	109	TYR	3.1
39	CF	52	TYR	3.1
46	C	155	TYR	3.1
46	CN	110	TYR	3.1
50	G	19	MET	3.1
73	DO	33	MET	3.1
1	1	2436	A	3.1
10	BC	83	LEU	3.1
18	BK	112	LEU	3.1
23	BP	27	VAL	3.1
31	AD	11	ASN	3.1
27	BT	48	LEU	3.1
45	B	215	A	3.1
47	D	188	LEU	3.1
49	CQ	177	LEU	3.1
52	I	212	LEU	3.1
55	L	86	LEU	3.1
65	DG	71	VAL	3.1
62	DD	20	HIS	3.1
70	a	44	LEU	3.1
1	1	1758	U	3.1
1	AS	146	U	3.1
35	AH	64	GLN	3.1
45	CM	75	U	3.1
51	H	140	SER	3.1
62	DD	140	SER	3.1
63	T	42	GLN	3.1
4	AW	31	THR	3.1
39	AL	76	THR	3.1
48	CP	154	THR	3.1
19	y	160	GLY	3.1
48	CP	157	CYS	3.1
1	AS	775	G	3.1
2	AT	5	G	3.1
4	j	16	PHE	3.1
14	BG	32	LYS	3.1
20	BM	21	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
26	BS	39	LYS	3.1
28	AA	64	LYS	3.1
49	CQ	25	PHE	3.1
55	L	138	LYS	3.1
4	AW	64	ARG	3.1
16	BI	73	ARG	3.1
44	AQ	24	ARG	3.1
77	h	180	ARG	3.1
52	CT	91	GLU	3.1
55	CW	64	GLU	3.1
73	d	10	PRO	3.1
4	AW	59	ALA	3.1
16	BI	110	ALA	3.1
52	CT	172	ALA	3.1
58	CZ	48	ALA	3.1
4	AW	77	ILE	3.1
4	AW	157	ILE	3.1
73	DO	43	ILE	3.1
1	1	1552	C	3.1
1	AS	1027	C	3.1
1	AS	1352	C	3.1
1	AS	1842	C	3.1
45	CM	1144	C	3.1
10	BC	141	VAL	3.1
24	BQ	36	VAL	3.1
37	CD	92	VAL	3.1
44	CK	16	VAL	3.1
47	CO	218	LEU	3.1
48	CP	217	TYR	3.1
52	I	36	VAL	3.1
52	I	169	TYR	3.1
58	CZ	103	LEU	3.1
59	DA	150	VAL	3.1
70	a	96	LEU	3.1
78	AR	6	VAL	3.1
54	CV	116	HIS	3.1
35	CB	64	GLN	3.1
79	CL	109	GLN	3.1
1	AS	441	U	3.1
1	AS	2418	A	3.1
21	BN	55	SER	3.1
35	CB	40	SER	3.1

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Mol	Chain	Res	Type	RSRZ
45	CM	278	U	3.1
45	CM	1345	A	3.1
63	T	36	SER	3.1
4	AW	13	GLY	3.1
16	BI	78	GLY	3.1
52	CT	11	GLY	3.1
53	J	101	LYS	3.1
79	i	112	LYS	3.1
6	l	91	PHE	3.1
7	m	293	PHE	3.1
7	AZ	293	PHE	3.1
10	BC	186	ARG	3.1
19	y	155	PHE	3.1
35	CB	10	ARG	3.1
47	CO	115	ARG	3.1
47	CO	165	ARG	3.1
52	I	156	PHE	3.1
61	R	43	ARG	3.1
63	T	47	ARG	3.1
74	e	65	ARG	3.1
78	AR	62	PHE	3.1
10	BC	113	GLU	3.1
14	BG	87	PRO	3.1
21	BN	6	GLU	3.1
28	BU	104	PRO	3.1
1	1	79	G	3.1
1	AS	119	G	3.1
5	k	219	ALA	3.1
10	BC	200	ALA	3.1
12	BE	6	ALA	3.1
26	BS	68	ALA	3.1
45	CM	496	G	3.1
29	BV	102	ILE	3.1
31	BX	46	ILE	3.1
35	CB	20	ILE	3.1
35	CB	54	ILE	3.1
49	CQ	169	ILE	3.1
51	CS	199	ILE	3.1
9	o	10	LEU	3.1
10	BC	143	LEU	3.1
18	x	52	LEU	3.1
27	BT	118	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
36	CC	31	LEU	3.1
46	CN	184	LEU	3.1
47	CO	120	LEU	3.1
52	I	76	LEU	3.1
53	J	13	LEU	3.1
7	m	52	VAL	3.1
7	m	236	VAL	3.1
8	BA	135	VAL	3.1
32	BY	48	VAL	3.1
35	AH	22	VAL	3.1
50	G	111	VAL	3.1
51	CS	68	VAL	3.1
55	L	148	VAL	3.1
61	DC	26	VAL	3.1
65	DG	105	VAL	3.1
66	DH	61	VAL	3.1
67	X	39	VAL	3.1
69	Z	124	VAL	3.1
72	c	18	VAL	3.1
7	AZ	90	TYR	3.1
27	BT	19	TYR	3.1
28	BU	18	TYR	3.1
52	I	84	TYR	3.1
52	CT	69	HIS	3.1
62	S	91	TYR	3.1
76	g	35	TYR	3.1
1	1	2448	C	3.1
1	AS	242	C	3.1
1	AS	1798	C	3.1
29	BV	65	GLN	3.1
20	z	114	LYS	3.1
50	G	10	LYS	3.1
51	H	84	LYS	3.1
7	m	118	THR	3.1
52	CT	71	THR	3.1
54	CV	154	GLY	3.1
60	Q	120	SER	3.1
62	DD	114	THR	3.1
67	DI	6	GLY	3.1
8	BA	147	SER	3.1
73	DO	45	THR	3.1
1	1	618	U	3.1

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Mol	Chain	Res	Type	RSRZ
3	AU	101	U	3.1
40	AM	36	ARG	3.1
45	B	502	U	3.1
50	G	51	ARG	3.1
55	L	79	ARG	3.1
62	S	59	PHE	3.1
63	DE	5	ARG	3.1
63	DE	67	ARG	3.1
72	c	22	ARG	3.1
1	1	1932	A	3.1
7	AZ	141	PRO	3.1
10	BC	160	PRO	3.1
13	s	125	MET	3.1
16	BI	133	ILE	3.1
28	BU	42	ILE	3.1
28	BU	124	ALA	3.1
46	CN	14	ALA	3.1
50	G	94	ALA	3.1
53	CU	102	ALA	3.1
58	O	101	ALA	3.1
67	X	26	ALA	3.1
69	DK	25	ALA	3.1
70	a	80	ALA	3.1
71	b	41	ILE	3.1
26	BS	126	LEU	3.1
30	AC	54	LEU	3.1
46	C	184	LEU	3.1
50	CR	247	LEU	3.1
52	I	211	LEU	3.1
55	L	93	LEU	3.1
58	O	78	LEU	3.1
61	R	49	LEU	3.1
4	AW	98	VAL	3.1
38	CE	70	VAL	3.1
33	BZ	27	HIS	3.1
52	I	81	HIS	3.1
20	BM	85	LYS	3.1
22	BO	69	LYS	3.1
26	BS	141	TYR	3.1
50	G	149	TYR	3.1
4	AW	47	GLN	3.1
39	CF	40	GLN	3.1

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Mol	Chain	Res	Type	RSRZ
4	AW	7	ASN	3.1
5	k	15	GLY	3.1
7	AZ	170	GLY	3.1
79	CL	68	ASN	3.1
18	x	128	ARG	3.1
25	BR	105	ARG	3.1
28	BU	15	ARG	3.1
28	BU	107	ARG	3.1
36	CC	105	ARG	3.1
40	CG	41	ARG	3.1
58	O	46	ARG	3.1
6	AY	106	THR	3.1
45	CM	498	C	3.1
63	DE	6	THR	3.1
65	V	139	THR	3.1
57	CY	52	SER	3.1
79	i	56	SER	3.1
1	AS	3	U	3.1
24	6	84	PRO	3.1
37	CD	23	PRO	3.1
45	CM	1271	U	3.1
45	CM	1399	U	3.1
6	AY	64	GLU	3.1
10	BC	101	GLU	3.1
51	CS	181	GLU	3.1
52	CT	35	GLU	3.1
52	CT	225	GLU	3.1
57	N	4	GLU	3.1
1	1	2078	A	3.1
10	BC	253	ALA	3.1
15	BH	53	ALA	3.1
22	BO	76	ILE	3.1
25	7	90	ILE	3.1
28	BU	110	ALA	3.1
35	CB	89	ILE	3.1
45	B	367	A	3.1
47	CO	139	ALA	3.1
48	CP	95	ALA	3.1
55	L	135	ALA	3.1
63	T	12	ALA	3.1
72	DN	35	ALA	3.1
78	AR	74	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
79	i	47	ASP	3.1
17	BJ	100	LEU	3.0
36	AI	80	LEU	3.0
46	C	87	LEU	3.0
46	CN	182	LEU	3.0
47	CO	110	LEU	3.0
47	CO	225	LEU	3.0
50	G	44	LEU	3.0
53	J	34	LEU	3.0
61	R	116	LEU	3.0
78	AR	262	LEU	3.0
47	CO	134	VAL	3.0
58	O	115	VAL	3.0
4	j	70[A]	LYS	3.0
4	AW	156	LYS	3.0
7	AZ	197	LYS	3.0
16	v	140	LYS	3.0
20	z	104	LYS	3.0
27	BT	17	LYS	3.0
27	BT	116	LYS	3.0
43	AP	15	LYS	3.0
47	CO	167	LYS	3.0
51	CS	109	LYS	3.0
55	CW	16	LYS	3.0
77	h	125	LYS	3.0
77	h	185	LYS	3.0
13	s	123	TYR	3.0
16	v	62	TYR	3.0
22	2	13	TYR	3.0
23	BP	81	TYR	3.0
59	DA	89	TYR	3.0
62	S	95	TYR	3.0
65	V	80	TYR	3.0
7	AZ	32	GLN	3.0
16	BI	143	ARG	3.0
36	CC	3	GLY	3.0
41	AN	37	ARG	3.0
41	AN	44	GLN	3.0
52	CT	65	GLN	3.0
65	V	129	GLN	3.0
20	BM	48	GLY	3.0
6	AY	111	ASN	3.0

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Mol	Chain	Res	Type	RSRZ
6	AY	115	ASN	3.0
50	G	224	ASN	3.0
1	1	2444	G	3.0
1	AS	1482	G	3.0
11	BD	56	THR	3.0
36	CC	85	THR	3.0
45	B	1671	G	3.0
45	CM	1700	G	3.0
62	DD	16	THR	3.0
5	AX	67	MET	3.0
46	CN	104	PRO	3.0
55	L	101	PRO	3.0
60	DB	115	PRO	3.0
19	BL	167	SER	3.0
75	DQ	28	SER	3.0
1	1	2068	U	3.0
1	AS	1862	C	3.0
6	AY	281	ILE	3.0
7	AZ	60	ILE	3.0
45	B	797	U	3.0
45	B	1356	U	3.0
45	CM	1675	U	3.0
46	C	160	ILE	3.0
47	CO	212	ILE	3.0
50	G	249	ILE	3.0
55	L	140	ILE	3.0
55	CW	72	GLU	3.0
35	CB	47	CYS	3.0
53	CU	89	LEU	3.0
61	DC	80	LEU	3.0
65	V	114	LEU	3.0
68	DJ	126	LEU	3.0
1	1	1283	A	3.0
1	AS	1554	A	3.0
1	AS	1590	A	3.0
6	AY	350	VAL	3.0
22	BO	89	VAL	3.0
45	B	1407	A	3.0
45	CM	1681	A	3.0
52	CT	162	VAL	3.0
14	BG	180	LYS	3.0
54	K	17	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
59	P	112	LYS	3.0
66	DH	68	LYS	3.0
72	c	93	LYS	3.0
28	BU	135	HIS	3.0
38	CE	69	HIS	3.0
7	m	49	TYR	3.0
15	u	121	ARG	3.0
4	AW	201	GLY	3.0
16	BI	148	TYR	3.0
26	BS	56	ARG	3.0
13	s	102	PHE	3.0
29	AB	23	GLY	3.0
29	BV	48	TYR	3.0
29	BV	90	TYR	3.0
35	CB	58	ARG	3.0
61	R	127	ARG	3.0
75	DQ	55	TYR	3.0
77	h	122	ARG	3.0
23	BP	76	GLY	3.0
50	G	144	GLY	3.0
56	M	27	PHE	3.0
61	R	129	GLY	3.0
69	Z	2	GLY	3.0
78	AR	275	PHE	3.0
6	AY	228	THR	3.0
8	BA	71	ASN	3.0
22	2	45	ASN	3.0
7	m	141	PRO	3.0
10	BC	128	PRO	3.0
14	BG	50	PRO	3.0
27	BT	49	PRO	3.0
34	CA	72	THR	3.0
51	H	125	THR	3.0
66	DH	116	THR	3.0
77	h	174	MET	3.0
62	DD	40	PRO	3.0
6	l	291	ILE	3.0
10	BC	65	ILE	3.0
19	BL	57	ILE	3.0
34	CA	67	ILE	3.0
78	AR	287	ILE	3.0
14	BG	33	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
19	BL	21	SER	3.0
22	BO	70	SER	3.0
30	AC	2	ALA	3.0
43	AP	104	LEU	3.0
44	AQ	29	LEU	3.0
52	CT	96	SER	3.0
53	J	168	LEU	3.0
57	CY	5	LEU	3.0
60	Q	96	ALA	3.0
61	DC	46	SER	3.0
75	DQ	30	LEU	3.0
1	1	1277	G	3.0
1	1	2450	U	3.0
1	1	3197	G	3.0
1	AS	178	U	3.0
1	AS	251	G	3.0
1	AS	949	G	3.0
1	AS	1524	G	3.0
3	AU	116	G	3.0
45	B	701	G	3.0
45	B	703	U	3.0
45	B	1301	G	3.0
45	B	1339	G	3.0
45	CM	697	U	3.0
45	CM	1185	G	3.0
45	CM	1644	U	3.0
1	AS	172	C	3.0
3	AU	115	C	3.0
4	j	190	LYS	3.0
8	BA	96	ASP	3.0
10	BC	129	LYS	3.0
10	BC	158	VAL	3.0
23	BP	43	VAL	3.0
25	BR	117	LYS	3.0
45	B	827	C	3.0
45	CM	1412	C	3.0
51	CS	213	LYS	3.0
57	CY	139	VAL	3.0
72	DN	21	VAL	3.0
6	AY	116	HIS	3.0
16	v	139	HIS	3.0
55	L	123	HIS	3.0

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Mol	Chain	Res	Type	RSRZ
45	B	126	A	3.0
52	CT	94	ARG	3.0
65	DG	86	ARG	3.0
8	BA	3	GLN	3.0
16	BI	53	TYR	3.0
20	z	92	GLN	3.0
24	BQ	134	GLY	3.0
43	AP	53	GLN	3.0
54	K	180	GLY	3.0
57	CY	60	PHE	3.0
61	R	45	PHE	3.0
61	DC	129	GLY	3.0
65	V	18	TYR	3.0
10	BC	43	PRO	3.0
7	m	94	ASN	3.0
14	BG	125	ILE	3.0
16	v	195	ASN	3.0
18	BK	183	THR	3.0
51	CS	154	THR	3.0
59	P	136	PRO	3.0
27	BT	119	ILE	3.0
34	AG	30	ILE	3.0
62	S	69	THR	3.0
63	T	117	ILE	3.0
64	DF	141	THR	3.0
13	s	17	LEU	3.0
19	BL	129	LEU	3.0
19	BL	166	LEU	3.0
29	AB	5	LEU	3.0
35	CB	51	LEU	3.0
51	H	108	LEU	3.0
54	CV	121	LEU	3.0
55	CW	97	LEU	3.0
63	DE	91	LEU	3.0
64	DF	17	LEU	3.0
66	DH	33	LEU	3.0
71	DM	51	LEU	3.0
8	n	108	GLU	3.0
9	o	22	GLU	3.0
35	CB	63	ALA	3.0
46	CN	61	ALA	3.0
65	DG	107	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
69	DK	28	ALA	3.0
76	g	61	ALA	3.0
10	BC	103	SER	3.0
10	BC	196	SER	3.0
16	v	204	SER	3.0
25	BR	60	LYS	3.0
32	BY	26	LYS	3.0
32	BY	33	LYS	3.0
34	CA	92	LYS	3.0
35	CB	37	LYS	3.0
48	CP	94	LYS	3.0
59	DA	9	LYS	3.0
67	X	5	LYS	3.0
70	DL	102	LYS	3.0
1	AS	875	U	3.0
9	o	189	VAL	3.0
27	BT	58	VAL	3.0
45	B	259	U	3.0
45	B	500	U	3.0
45	B	1399	U	3.0
45	CM	318	U	3.0
51	CS	111	VAL	3.0
58	CZ	116	VAL	3.0
59	DA	132	VAL	3.0
60	Q	37	VAL	3.0
65	DG	6	VAL	3.0
73	DO	62	VAL	3.0
1	AS	169	G	3.0
1	AS	1483	G	3.0
4	AW	241	ARG	3.0
28	BU	40	HIS	3.0
45	B	670	C	3.0
45	B	1498	G	3.0
45	CM	657	C	3.0
52	I	74	ARG	3.0
57	N	11	ARG	3.0
62	DD	122	ARG	3.0
6	AY	67	GLY	3.0
23	BP	70	GLY	3.0
50	CR	135	GLY	3.0
78	AR	299	PHE	3.0
45	CM	739	A	3.0

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Mol	Chain	Res	Type	RSRZ
64	DF	89	GLN	3.0
49	F	153	TYR	3.0
65	DG	33	TYR	3.0
78	AR	55	TYR	3.0
7	AZ	139	PRO	3.0
14	BG	61	PRO	3.0
64	DF	82	PRO	3.0
66	DH	70	PRO	3.0
28	BU	46	ILE	3.0
59	P	38	ILE	3.0
16	BI	179	LEU	3.0
38	AK	8	LEU	3.0
39	AL	78	LEU	3.0
47	CO	25	THR	3.0
48	E	56	LEU	3.0
54	K	58	LEU	3.0
61	DC	36	LEU	3.0
68	DJ	4	THR	3.0
6	l	192	LYS	3.0
15	u	6	LYS	3.0
16	BI	141	ALA	3.0
18	BK	12	ALA	3.0
21	0	37	ALA	3.0
47	CO	214	LYS	3.0
52	I	196	LYS	3.0
54	K	157	ALA	3.0
55	L	125	ALA	3.0
63	DE	39	ALA	3.0
78	AR	209	ALA	3.0
33	AF	96	GLU	3.0
53	J	130	GLU	3.0
66	W	108	GLU	3.0
12	r	147	VAL	3.0
16	v	89	VAL	3.0
19	BL	13	SER	3.0
21	BN	9	VAL	3.0
47	CO	65	VAL	3.0
51	CS	114	VAL	3.0
52	CT	67	VAL	3.0
62	DD	47	VAL	3.0
62	DD	68	VAL	3.0
74	DP	15	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
74	DP	41	VAL	3.0
45	B	238	U	2.9
45	B	1047	U	2.9
45	B	1346	U	2.9
14	BG	52	ASP	2.9
63	T	80	ARG	2.9
65	V	8	ASP	2.9
50	G	109	PHE	2.9
38	CE	77	GLY	2.9
51	CS	153	GLY	2.9
52	CT	55	GLY	2.9
1	AS	224	C	2.9
7	m	32	GLN	2.9
1	AS	154	G	2.9
4	AW	5	ILE	2.9
7	AZ	185	ILE	2.9
10	BC	54	PRO	2.9
16	BI	129	TYR	2.9
17	BJ	89	ILE	2.9
26	BS	46	TYR	2.9
34	CA	49	ILE	2.9
36	CC	44	ILE	2.9
45	B	669	G	2.9
45	CM	1349	G	2.9
46	C	110	TYR	2.9
53	J	160	TYR	2.9
54	CV	104	ILE	2.9
56	M	65	TYR	2.9
58	CZ	89	ILE	2.9
66	DH	21	ILE	2.9
6	l	361	LEU	2.9
7	AZ	146	LEU	2.9
25	BR	109	LEU	2.9
29	BV	91	LEU	2.9
45	B	76	A	2.9
49	CQ	143	LEU	2.9
50	CR	12	LEU	2.9
64	DF	18	LEU	2.9
4	AW	17	THR	2.9
14	BG	62	THR	2.9
15	BH	125	LYS	2.9
26	BS	41	THR	2.9

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Mol	Chain	Res	Type	RSRZ
38	CE	5	THR	2.9
47	CO	46	THR	2.9
61	DC	124	THR	2.9
63	DE	106	THR	2.9
69	Z	30	LYS	2.9
70	a	99	LYS	2.9
72	DN	19	LYS	2.9
79	CL	67	LYS	2.9
18	BK	132	ALA	2.9
35	AH	52	ALA	2.9
46	C	132	ALA	2.9
65	V	50	ALA	2.9
65	V	62	ALA	2.9
38	CE	76	ASN	2.9
58	O	47	GLU	2.9
58	O	125	ASN	2.9
22	BO	126	VAL	2.9
23	BP	67	VAL	2.9
26	BS	64	VAL	2.9
48	E	81	VAL	2.9
49	F	187	VAL	2.9
51	H	155	VAL	2.9
68	Y	102	VAL	2.9
6	AY	221	ARG	2.9
13	BF	137	ARG	2.9
27	BT	28	ARG	2.9
28	AA	7	SER	2.9
47	CO	107	SER	2.9
58	O	43	ARG	2.9
66	W	27	SER	2.9
78	AR	163	SER	2.9
62	DD	92	HIS	2.9
1	1	2968	U	2.9
1	AS	3320	U	2.9
23	5	15	PHE	2.9
23	BP	94	ASP	2.9
45	CM	1170	U	2.9
47	CO	30	PHE	2.9
47	CO	105	PHE	2.9
54	CV	21	PHE	2.9
75	DQ	14	PHE	2.9
79	CL	69	PHE	2.9

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Mol	Chain	Res	Type	RSRZ
6	l	191	GLY	2.9
50	CR	25	GLY	2.9
58	O	120	CYS	2.9
19	BL	19	PRO	2.9
35	AH	33	GLN	2.9
57	N	95	PRO	2.9
69	Z	27	GLN	2.9
7	AZ	194	LEU	2.9
10	BC	190	LEU	2.9
14	t	51	ILE	2.9
39	CF	24	ILE	2.9
51	H	89	ILE	2.9
53	CU	42	ILE	2.9
58	CZ	32	LEU	2.9
62	DD	64	ILE	2.9
62	DD	116	LEU	2.9
65	DG	116	ILE	2.9
14	t	131	LYS	2.9
16	v	176	LYS	2.9
46	CN	38	TYR	2.9
52	I	164	LYS	2.9
60	DB	85	LYS	2.9
65	V	66	TYR	2.9
77	h	132	LYS	2.9
1	1	1276	C	2.9
1	1	2545	C	2.9
1	AS	1498	C	2.9
6	AY	61	THR	2.9
36	CC	104	ALA	2.9
45	B	1586	C	2.9
52	CT	192	ALA	2.9
53	CU	28	ALA	2.9
54	CV	128	ALA	2.9
59	DA	63	ALA	2.9
60	Q	58	ALA	2.9
73	DO	23	THR	2.9
10	BC	34	ASN	2.9
15	u	115	VAL	2.9
20	z	122	ASN	2.9
22	2	80	VAL	2.9
22	BO	72	VAL	2.9
23	BP	64	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
35	AH	23	VAL	2.9
45	B	1349	G	2.9
45	CM	658	A	2.9
45	CM	1431	G	2.9
48	CP	75	VAL	2.9
55	L	64	GLU	2.9
58	O	134	ASN	2.9
71	DM	84	GLU	2.9
74	e	41	VAL	2.9
7	m	21	ARG	2.9
19	BL	176	ARG	2.9
20	BM	88	ARG	2.9
25	BR	56	ARG	2.9
62	S	131	ARG	2.9
72	DN	10	ARG	2.9
12	BE	115	MET	2.9
44	CK	59	SER	2.9
6	AY	200	PHE	2.9
47	CO	205	PHE	2.9
49	CQ	168	PHE	2.9
51	H	43	PHE	2.9
51	H	82	PHE	2.9
53	J	39	PHE	2.9
54	K	65	PHE	2.9
57	CY	20	PHE	2.9
1	1	2438	U	2.9
1	AS	1602	U	2.9
45	CM	1615	U	2.9
45	CM	1698	U	2.9
55	CW	63	ASP	2.9
55	CW	66	ASP	2.9
58	O	127	GLY	2.9
6	AY	271	ILE	2.9
16	BI	27	CYS	2.9
10	BC	201	LEU	2.9
13	BF	84	LEU	2.9
18	BK	95	LEU	2.9
19	BL	67	ILE	2.9
22	2	101	CYS	2.9
48	E	157	CYS	2.9
27	9	96	PRO	2.9
31	BX	43	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
39	AL	14	LEU	2.9
47	CO	73	LEU	2.9
49	F	143	LEU	2.9
51	H	170	GLN	2.9
52	I	135	PRO	2.9
52	I	176	GLN	2.9
52	CT	101	ILE	2.9
55	L	77	ILE	2.9
56	M	46	LEU	2.9
59	DA	85	PRO	2.9
64	U	63	GLN	2.9
64	U	66	LEU	2.9
76	DR	24	GLN	2.9
78	AR	58	PRO	2.9
10	BC	44	LYS	2.9
13	s	142	LYS	2.9
29	BV	47	LYS	2.9
56	CX	63	TYR	2.9
68	Y	130	TYR	2.9
6	AY	172	ALA	2.9
7	m	100	ALA	2.9
9	BB	214	ALA	2.9
48	CP	161	ALA	2.9
51	CS	173	ALA	2.9
60	DB	35	ALA	2.9
65	DG	83	ALA	2.9
11	BD	70	THR	2.9
65	V	52	THR	2.9
74	e	19	THR	2.9
5	AX	312	VAL	2.9
6	l	114	VAL	2.9
14	BG	58	VAL	2.9
24	6	22	VAL	2.9
24	6	36	VAL	2.9
29	BV	72	GLU	2.9
62	DD	66	VAL	2.9
63	T	9	VAL	2.9
1	AS	1192	C	2.9
5	AX	10	ARG	2.9
18	BK	56	ARG	2.9
20	z	71	ARG	2.9
24	6	33	ASN	2.9

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Mol	Chain	Res	Type	RSRZ
1	1	2480	A	2.9
32	AE	43	MET	2.9
37	CD	89	MET	2.9
38	CE	73	ARG	2.9
45	B	1207	C	2.9
45	B	1337	C	2.9
49	F	28	ARG	2.9
59	DA	69	ASN	2.9
63	DE	45	ARG	2.9
77	h	161	ARG	2.9
45	B	1411	A	2.9
18	BK	39	TRP	2.9
10	BC	79	PHE	2.9
14	BG	17	HIS	2.9
53	CU	88	PHE	2.9
53	CU	118	HIS	2.9
1	1	2184	G	2.9
1	1	3088	G	2.9
1	AS	171	G	2.9
1	AS	695	G	2.9
1	AS	904	G	2.9
1	AS	906	G	2.9
45	B	723	G	2.9
56	M	59	PHE	2.9
20	BM	13	SER	2.9
52	I	6	SER	2.9
4	AW	167	GLY	2.9
16	BI	168	GLY	2.9
27	BT	68	GLY	2.9
37	CD	64	GLY	2.9
60	DB	10	GLY	2.9
63	T	68	GLY	2.9
10	p	201	LEU	2.9
10	BC	76	ILE	2.9
1	AS	1849	U	2.9
10	BC	95	LEU	2.9
13	s	4	LYS	2.9
19	y	52	LEU	2.9
19	BL	26	LEU	2.9
33	BZ	54	PRO	2.9
33	BZ	78	LYS	2.9
34	AG	87	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
45	CM	778	U	2.9
48	E	143	LEU	2.9
49	CQ	12	LEU	2.9
51	CS	172	ILE	2.9
55	CW	36	LEU	2.9
57	N	40	LEU	2.9
62	DD	35	ILE	2.9
62	DD	56	LEU	2.9
63	T	91	LEU	2.9
63	DE	22	PRO	2.9
64	DF	23	ASP	2.9
64	DF	101	LEU	2.9
65	DG	133	ASP	2.9
66	W	54	PRO	2.9
74	e	16	LEU	2.9
18	BK	55	GLN	2.9
18	BK	125	GLN	2.9
39	AL	40	GLN	2.9
52	CT	34	GLN	2.9
41	AN	10	ALA	2.9
49	CQ	172	ALA	2.9
62	S	118	ALA	2.9
69	Z	29	TYR	2.9
69	Z	31	ALA	2.9
6	AY	226	VAL	2.9
8	BA	92	VAL	2.9
9	BB	75	VAL	2.9
14	t	135	VAL	2.9
18	x	78	VAL	2.9
24	BQ	103	VAL	2.9
28	BU	26	VAL	2.9
32	BY	7	VAL	2.9
46	C	103	THR	2.9
47	CO	127	VAL	2.9
51	H	123	VAL	2.9
53	CU	58	VAL	2.9
63	T	8	THR	2.9
70	a	12	VAL	2.9
6	AY	198	ARG	2.9
7	AZ	273	ARG	2.9
14	BG	36	ARG	2.9
16	BI	104	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
17	BJ	79	ARG	2.9
38	CE	72	ARG	2.9
52	I	91	GLU	2.9
72	c	92	ARG	2.9
75	DQ	40	ARG	2.9
35	CB	11	ASN	2.9
51	CS	169	ASN	2.9
1	1	1280	C	2.8
1	AS	199	C	2.8
29	BV	61	PHE	2.8
39	AL	43	PHE	2.8
45	B	694	C	2.8
47	CO	223	PHE	2.8
52	CT	22	HIS	2.8
61	DC	17	PHE	2.8
65	V	54	PHE	2.8
65	DG	21	PHE	2.8
1	AS	220	A	2.8
1	AS	1415	A	2.8
45	CM	708	A	2.8
5	AX	60	LEU	2.8
6	l	197	GLY	2.8
7	AZ	182	GLY	2.8
7	AZ	294	LYS	2.8
8	BA	156	LYS	2.8
8	BA	162	SER	2.8
10	BC	36	GLY	2.8
11	BD	10	LEU	2.8
14	BG	84	GLY	2.8
17	BJ	25	SER	2.8
18	x	166	ILE	2.8
22	BO	55	LYS	2.8
23	5	45	GLY	2.8
23	BP	96	ILE	2.8
25	BR	63	ILE	2.8
30	BW	25	LYS	2.8
31	BX	22	SER	2.8
33	BZ	109	ILE	2.8
36	CC	83	LYS	2.8
39	CF	20	ILE	2.8
43	CJ	100	LYS	2.8
49	F	47	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
49	CQ	189	ILE	2.8
50	G	53	LYS	2.8
51	H	153	GLY	2.8
51	CS	25	LEU	2.8
53	J	125	LEU	2.8
56	M	15	LEU	2.8
57	N	86	ILE	2.8
62	S	53	LEU	2.8
63	T	46	LEU	2.8
64	DF	116	LEU	2.8
66	DH	117	ILE	2.8
71	DM	69	LEU	2.8
76	DR	38	LEU	2.8
78	AR	116	ILE	2.8
53	CU	10	PRO	2.8
55	CW	101	PRO	2.8
63	DE	65	PRO	2.8
1	1	2425	G	2.8
1	AS	1591	U	2.8
1	AS	2396	G	2.8
3	AU	148	G	2.8
45	CM	221	U	2.8
45	CM	1358	G	2.8
45	CM	1699	G	2.8
62	DD	119	ASP	2.8
67	DI	4	ASP	2.8
4	AW	229	ALA	2.8
5	AX	23	ALA	2.8
19	BL	103	ALA	2.8
59	P	133	ALA	2.8
60	Q	101	ALA	2.8
79	CL	80	ALA	2.8
6	AY	12	VAL	2.8
6	AY	231	VAL	2.8
17	w	109	VAL	2.8
21	BN	72	VAL	2.8
22	BO	36	VAL	2.8
26	8	123	TYR	2.8
37	CD	52	TYR	2.8
43	CJ	43	TYR	2.8
55	L	127	VAL	2.8
58	O	66	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
63	T	122	VAL	2.8
67	DI	39	VAL	2.8
6	AY	161	THR	2.8
9	BB	188	THR	2.8
16	BI	162	ARG	2.8
18	BK	135	ARG	2.8
22	2	12	ARG	2.8
29	BV	42	ARG	2.8
35	AH	16	ARG	2.8
47	CO	64	ARG	2.8
53	J	92	ARG	2.8
54	K	203	THR	2.8
55	L	61	THR	2.8
60	Q	21	THR	2.8
78	AR	121	ARG	2.8
79	i	113	ARG	2.8
53	J	180	GLU	2.8
59	DA	103	GLU	2.8
66	DH	82	GLU	2.8
7	AZ	223	PHE	2.8
30	AC	11	ASN	2.8
55	L	38	ASN	2.8
66	W	19	HIS	2.8
6	AY	349	LYS	2.8
14	BG	129	LYS	2.8
41	CH	48	LYS	2.8
63	DE	7	LYS	2.8
79	CL	107	TRP	2.8
4	AW	237	LEU	2.8
5	AX	183	ILE	2.8
6	AY	225	GLY	2.8
6	AY	237	LEU	2.8
11	q	114	ILE	2.8
12	r	36	LEU	2.8
17	BJ	53	LEU	2.8
20	BM	44	LEU	2.8
22	BO	91	LEU	2.8
31	BX	12	ILE	2.8
37	CD	5	GLY	2.8
41	AN	9	LEU	2.8
47	CO	189	ILE	2.8
50	G	56	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
53	J	30	LEU	2.8
57	N	140	LEU	2.8
58	CZ	45	LEU	2.8
62	S	107	ILE	2.8
65	DG	42	GLY	2.8
66	W	72	GLY	2.8
70	a	47	ILE	2.8
76	DR	32	GLY	2.8
78	AR	123	ILE	2.8
6	AY	5	PRO	2.8
29	AB	2	PRO	2.8
51	CS	30	PRO	2.8
1	1	1192	C	2.8
1	1	1267	A	2.8
1	AS	540	C	2.8
1	AS	1478	A	2.8
1	AS	1520	A	2.8
3	AU	81	A	2.8
20	BM	137	SER	2.8
24	BQ	112	SER	2.8
45	B	1479	A	2.8
45	CM	674	C	2.8
45	CM	1337	C	2.8
45	CM	1451	C	2.8
53	J	62	SER	2.8
27	BT	6	GLN	2.8
64	DF	136	GLN	2.8
1	1	1760	U	2.8
6	AY	29	ALA	2.8
11	BD	52	ALA	2.8
14	BG	168	ALA	2.8
45	B	1477	U	2.8
45	CM	805	U	2.8
45	CM	1400	U	2.8
45	CM	1590	U	2.8
49	CQ	210	ALA	2.8
63	T	104	ALA	2.8
4	j	168	VAL	2.8
5	k	331	VAL	2.8
38	AK	82	VAL	2.8
68	DJ	102	VAL	2.8
11	q	168	ARG	2.8

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Mol	Chain	Res	Type	RSRZ
18	x	173	ARG	2.8
20	BM	81	ARG	2.8
22	BO	92	ARG	2.8
25	BR	80	ARG	2.8
37	CD	55	ARG	2.8
46	CN	155	TYR	2.8
53	CU	84	ARG	2.8
55	L	54	ARG	2.8
55	CW	6	ARG	2.8
57	CY	33	ARG	2.8
67	X	62	ARG	2.8
76	g	54	ARG	2.8
2	AT	1	G	2.8
3	AU	107	G	2.8
10	p	55	GLU	2.8
48	E	205	THR	2.8
52	CT	168	THR	2.8
55	L	7	THR	2.8
55	L	33	GLU	2.8
65	DG	39	THR	2.8
73	d	15	GLU	2.8
79	CL	81	THR	2.8
7	AZ	142	PHE	2.8
46	CN	203	PHE	2.8
51	CS	69	PHE	2.8
59	DA	113	PHE	2.8
70	a	60	PHE	2.8
73	d	47	PHE	2.8
76	DR	44	PHE	2.8
7	m	68	HIS	2.8
10	p	129	LYS	2.8
49	F	186	LYS	2.8
53	CU	107	LYS	2.8
55	CW	160	HIS	2.8
6	AY	249	ILE	2.8
7	m	61	ILE	2.8
16	v	181	ASN	2.8
7	AZ	156	GLY	2.8
10	BC	234	TRP	2.8
13	BF	110	ILE	2.8
16	BI	61	ILE	2.8
25	BR	89	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
31	AD	95	LEU	2.8
32	AE	15	LEU	2.8
49	CQ	85	ILE	2.8
53	CU	34	LEU	2.8
54	K	158	ILE	2.8
58	O	117	GLY	2.8
65	V	135	ILE	2.8
65	DG	79	LEU	2.8
66	W	33	LEU	2.8
68	Y	125	ILE	2.8
78	AR	17	ASN	2.8
23	BP	72	GLY	2.8
28	BU	32	GLY	2.8
38	CE	38	GLY	2.8
65	DG	81	GLY	2.8
72	DN	2	PRO	2.8
6	AY	202	GLN	2.8
10	BC	81	GLN	2.8
28	BU	98	SER	2.8
38	CE	79	GLN	2.8
58	CZ	49	SER	2.8
66	DH	27	SER	2.8
70	a	14	SER	2.8
78	AR	115	SER	2.8
1	AS	311	C	2.8
1	AS	369	A	2.8
5	AX	51	ALA	2.8
7	m	11	ALA	2.8
7	AZ	59	ASP	2.8
24	BQ	44	ALA	2.8
43	CJ	81	ALA	2.8
45	B	847	A	2.8
45	CM	718	A	2.8
45	CM	1702	A	2.8
54	CV	204	ALA	2.8
5	k	10	ARG	2.8
7	AZ	35	ARG	2.8
14	t	97	VAL	2.8
14	BG	67	ARG	2.8
16	BI	99	ARG	2.8
18	BK	91	VAL	2.8
29	BV	125	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
70	a	3	ASP	2.8
51	CS	148	ARG	2.8
73	d	54	VAL	2.8
78	AR	111	VAL	2.8
1	1	1736	U	2.8
45	B	290	U	2.8
45	B	1243	U	2.8
7	m	198	TYR	2.8
9	BB	131	TYR	2.8
22	BO	101	CYS	2.8
38	CE	39	TYR	2.8
51	H	61	TYR	2.8
41	AN	32	THR	2.8
44	CK	30	GLU	2.8
50	G	40	GLU	2.8
53	CU	74	THR	2.8
65	DG	126	GLU	2.8
68	Y	2	THR	2.8
73	DO	67	THR	2.8
4	AW	76	PHE	2.8
7	m	48	LYS	2.8
28	BU	34	LYS	2.8
43	CJ	58	PHE	2.8
50	CR	7	LYS	2.8
52	I	145	PHE	2.8
65	V	119	LYS	2.8
27	9	85	LEU	2.8
33	AF	76	LEU	2.8
36	AI	21	LEU	2.8
53	J	37	LEU	2.8
63	T	16	LEU	2.8
72	c	17	HIS	2.8
1	1	1278	G	2.8
1	AS	249	G	2.8
22	BO	160	ILE	2.8
45	CM	1521	G	2.8
45	CM	1629	G	2.8
53	J	45	ILE	2.8
68	Y	35	ILE	2.8
12	BE	205	ASN	2.8
22	BO	46	GLY	2.8
37	CD	77	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
40	CG	50	GLY	2.8
50	G	203	GLY	2.8
65	V	85	ASN	2.8
65	DG	74	GLY	2.8
7	AZ	47	PRO	2.8
28	BU	37	PRO	2.8
55	CW	144	PRO	2.8
61	R	73	PRO	2.8
68	Y	77	PRO	2.8
79	CL	87	PRO	2.8
7	m	4	GLN	2.8
23	5	91	GLN	2.8
36	CC	99	GLN	2.8
38	AK	86	GLN	2.8
53	CU	105	GLN	2.8
62	S	39	GLN	2.8
6	l	26	VAL	2.8
6	AY	50	ALA	2.8
10	BC	132	VAL	2.8
10	BC	140	VAL	2.8
15	BH	74	VAL	2.8
19	BL	128	ALA	2.8
23	BP	41	VAL	2.8
26	8	122	ALA	2.8
36	CC	40	SER	2.8
40	CG	14	ALA	2.8
43	AP	48	SER	2.8
47	CO	112	SER	2.8
48	E	118	SER	2.8
58	CZ	53	SER	2.8
59	DA	13	SER	2.8
59	DA	151	ALA	2.8
67	DI	47	ALA	2.8
69	Z	46	SER	2.8
68	DJ	3	ARG	2.8
70	a	4	ALA	2.8
78	AR	164	SER	2.8
43	CJ	75	VAL	2.8
47	D	20	VAL	2.8
54	CV	152	ARG	2.8
63	T	119	VAL	2.8
64	DF	133	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
7	AZ	29	ASP	2.8
27	BT	112	ASP	2.8
40	CG	32	ASP	2.8
42	AO	3	ASP	2.8
1	AS	1589	A	2.8
45	B	988	A	2.8
1	1	1279	C	2.8
1	1	2465	U	2.8
1	1	2657	C	2.8
1	AS	1827	U	2.8
2	3	73	C	2.8
23	BP	78	TYR	2.8
45	B	25	C	2.8
45	CM	1	U	2.8
45	CM	1627	C	2.8
54	CV	172	TYR	2.8
59	DA	141	TYR	2.8
68	DJ	46	TYR	2.8
71	DM	59	TYR	2.8
7	AZ	48	LYS	2.8
14	t	134	GLU	2.8
20	BM	146	LYS	2.8
25	BR	2	LYS	2.8
33	BZ	81	LYS	2.8
48	CP	77	LYS	2.8
50	G	6	LYS	2.8
53	CU	33	GLU	2.8
55	L	10	LYS	2.8
59	DA	70	LYS	2.8
62	S	8	THR	2.8
77	h	128	THR	2.8
23	BP	98	PHE	2.8
50	CR	47	PHE	2.8
56	CX	27	PHE	2.8
70	a	85	PHE	2.8
70	DL	64	PHE	2.8
8	BA	54	LEU	2.8
10	BC	68	LEU	2.8
34	CA	7	LEU	2.8
43	AP	35	LEU	2.8
46	C	172	LEU	2.8
49	CQ	183	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
50	CR	56	LEU	2.8
52	I	178	LEU	2.8
58	CZ	137	LEU	2.8
65	DG	76	LEU	2.8
4	AW	211	HIS	2.8
7	AZ	148	ILE	2.8
13	s	114	ILE	2.8
28	BU	12	ILE	2.8
34	AG	59	ILE	2.8
39	CF	5	ILE	2.8
49	F	159	ILE	2.8
50	G	169	ILE	2.8
55	L	45	ILE	2.8
55	L	133	HIS	2.8
55	CW	123	HIS	2.8
58	O	135	ILE	2.8
64	DF	14	ILE	2.8
65	DG	93	HIS	2.8
78	AR	190	ILE	2.8
79	CL	83	HIS	2.8
63	T	114	GLY	2.8
16	BI	137	PRO	2.7
20	BM	54	PRO	2.7
26	BS	116	PRO	2.7
58	CZ	134	ASN	2.7
59	DA	25	TRP	2.7
63	T	31	ASN	2.7
1	AS	170	G	2.7
1	AS	337	G	2.7
1	AS	1821	G	2.7
16	BI	95	GLN	2.7
40	CG	4	GLN	2.7
45	B	823	G	2.7
46	C	178	ALA	2.7
47	D	26	ARG	2.7
47	CO	125	VAL	2.7
48	E	96	VAL	2.7
49	F	40	VAL	2.7
49	F	138	VAL	2.7
51	H	92	ARG	2.7
53	CU	53	ALA	2.7
59	DA	49	GLN	2.7

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Mol	Chain	Res	Type	RSRZ
59	DA	106	ARG	2.7
74	e	67	ARG	2.7
76	DR	31	GLN	2.7
5	AX	192	VAL	2.7
6	AY	26	VAL	2.7
18	BK	119	VAL	2.7
23	BP	38	VAL	2.7
28	BU	68	VAL	2.7
54	K	145	VAL	2.7
62	DD	77	VAL	2.7
66	DH	111	VAL	2.7
72	DN	39	VAL	2.7
5	AX	204	SER	2.7
6	AY	86	SER	2.7
14	BG	96	SER	2.7
20	BM	69	SER	2.7
27	BT	24	SER	2.7
31	BX	93	SER	2.7
58	O	53	SER	2.7
10	p	125	ASP	2.7
16	BI	54	LYS	2.7
16	BI	136	ASP	2.7
27	BT	83	ASP	2.7
40	CG	18	LYS	2.7
51	H	45	LYS	2.7
65	DG	35	ASP	2.7
70	a	26	ASP	2.7
7	m	44	TYR	2.7
12	r	196	TYR	2.7
14	t	89	TYR	2.7
31	BX	71	TYR	2.7
37	CD	27	TYR	2.7
45	B	1331	A	2.7
48	E	193	THR	2.7
49	F	168	PHE	2.7
51	H	147	THR	2.7
53	CU	168	LEU	2.7
55	L	146	PHE	2.7
61	DC	123	TYR	2.7
1	AS	3142	A	2.7
7	m	146	LEU	2.7
11	BD	83	THR	2.7

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Mol	Chain	Res	Type	RSRZ
18	BK	79	THR	2.7
27	BT	31	LEU	2.7
56	M	92	LEU	2.7
66	W	82	GLU	2.7
38	CE	80	THR	2.7
66	W	26	THR	2.7
79	CL	165	LEU	2.7
25	BR	90	ILE	2.7
27	BT	106	ILE	2.7
1	1	241	C	2.7
4	AW	216	HIS	2.7
30	AC	7	HIS	2.7
36	CC	58	ILE	2.7
46	CN	64	ILE	2.7
49	F	5	ILE	2.7
59	P	84	ILE	2.7
67	X	34	ILE	2.7
71	b	89	ILE	2.7
71	b	100	ILE	2.7
45	B	261	C	2.7
13	BF	118	PRO	2.7
47	CO	63	GLY	2.7
61	DC	95	GLY	2.7
73	DO	28	PRO	2.7
72	c	44	MET	2.7
51	H	44	ASN	2.7
55	L	142	ASN	2.7
4	AW	247	ARG	2.7
6	AY	77	ARG	2.7
19	BL	69	ARG	2.7
36	CC	108	ARG	2.7
52	CT	159	ARG	2.7
54	CV	184	ARG	2.7
68	DJ	68	ARG	2.7
6	l	211	ALA	2.7
7	AZ	204	VAL	2.7
13	BF	76	ALA	2.7
16	BI	11	GLN	2.7
16	BI	135	VAL	2.7
20	z	127	ALA	2.7
22	BO	152	ALA	2.7
26	BS	105	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
28	AA	96	VAL	2.7
31	BX	44	VAL	2.7
35	CB	65	VAL	2.7
47	CO	58	ALA	2.7
48	E	160	VAL	2.7
58	O	30	VAL	2.7
60	DB	69	VAL	2.7
63	T	4	VAL	2.7
66	DH	55	VAL	2.7
22	BO	97	LYS	2.7
28	BU	61	LYS	2.7
60	DB	44	LYS	2.7
65	DG	27	LYS	2.7
76	g	55	LYS	2.7
30	BW	62	SER	2.7
65	V	117	SER	2.7
1	1	876	G	2.7
1	AS	2099	G	2.7
3	AU	39	G	2.7
45	B	89	G	2.7
45	CM	501	G	2.7
45	CM	715	G	2.7
45	CM	1059	G	2.7
4	AW	208	ASP	2.7
24	BQ	15	LEU	2.7
24	BQ	89	ASP	2.7
28	AA	130	PHE	2.7
29	AB	118	LEU	2.7
47	CO	96	LEU	2.7
51	H	31	LEU	2.7
53	J	151	ASP	2.7
58	CZ	28	LEU	2.7
60	DB	28	LEU	2.7
61	DC	50	ASP	2.7
6	AY	51	TYR	2.7
13	BF	78	GLU	2.7
11	q	103	ILE	2.7
18	BK	63	TYR	2.7
27	BT	74	TYR	2.7
46	C	50	ILE	2.7
46	CN	173	ILE	2.7
47	CO	81	TYR	2.7

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Mol	Chain	Res	Type	RSRZ
53	CU	44	GLU	2.7
13	s	165	THR	2.7
29	BV	73	ILE	2.7
36	CC	6	THR	2.7
36	CC	51	ILE	2.7
40	CG	31	THR	2.7
43	CJ	57	ILE	2.7
47	CO	154	THR	2.7
49	F	67	ILE	2.7
49	F	171	ILE	2.7
51	CS	121	ILE	2.7
59	DA	128	TYR	2.7
52	I	170	THR	2.7
1	AS	444	U	2.7
51	CS	72	HIS	2.7
1	AS	816	A	2.7
1	AS	900	A	2.7
1	AS	3247	A	2.7
6	AY	92	GLY	2.7
28	AA	104	PRO	2.7
29	AB	57	GLY	2.7
29	BV	116	GLY	2.7
34	AG	95	GLY	2.7
45	B	479	A	2.7
46	C	171	GLY	2.7
47	CO	60	GLY	2.7
65	DG	10	PRO	2.7
68	DJ	29	PRO	2.7
69	DK	111	GLY	2.7
70	DL	65	GLY	2.7
1	AS	1839	C	2.7
1	AS	1852	C	2.7
45	B	1360	C	2.7
14	BG	23	ARG	2.7
18	BK	131	ARG	2.7
28	BU	129	TRP	2.7
24	BQ	9	ASN	2.7
32	BY	9	ARG	2.7
38	CE	63	ARG	2.7
72	DN	69	ASN	2.7
6	AY	63	ALA	2.7
11	q	82	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
11	BD	181	VAL	2.7
13	s	129	VAL	2.7
16	v	66	VAL	2.7
18	x	88	VAL	2.7
23	5	65	VAL	2.7
25	BR	110	ALA	2.7
27	BT	104	VAL	2.7
28	AA	113	VAL	2.7
35	CB	85	VAL	2.7
38	CE	53	ALA	2.7
43	CJ	4	VAL	2.7
48	CP	160	VAL	2.7
52	CT	195	VAL	2.7
58	O	75	VAL	2.7
62	DD	15	ALA	2.7
62	DD	54	VAL	2.7
71	b	40	VAL	2.7
74	e	48	VAL	2.7
52	I	194	LYS	2.7
61	DC	108	LYS	2.7
73	DO	51	GLN	2.7
4	j	71	LEU	2.7
13	s	112	LEU	2.7
14	BG	123	LEU	2.7
16	BI	98	LEU	2.7
23	BP	108	LEU	2.7
29	AB	129	PHE	2.7
34	AG	89	LEU	2.7
51	CS	184	PHE	2.7
59	P	80	LEU	2.7
64	U	3	LEU	2.7
74	DP	16	LEU	2.7
27	9	9	SER	2.7
27	BT	13	SER	2.7
60	Q	6	SER	2.7
72	DN	76	SER	2.7
12	r	99	ILE	2.7
13	BF	122	ILE	2.7
23	BP	46	ILE	2.7
28	AA	47	GLU	2.7
46	C	111	ILE	2.7
58	CZ	135	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
59	DA	53	ILE	2.7
64	U	72	ILE	2.7
71	DM	50	ILE	2.7
30	BW	27	TYR	2.7
39	CF	50	TYR	2.7
42	CI	3	ASP	2.7
11	BD	80	THR	2.7
15	BH	4	THR	2.7
16	BI	139	HIS	2.7
19	y	158	HIS	2.7
43	CJ	7	THR	2.7
56	M	90	THR	2.7
66	DH	28	THR	2.7
78	AR	89	THR	2.7
1	1	243	G	2.7
1	1	1091	U	2.7
1	1	1930	G	2.7
1	1	2443	G	2.7
1	1	3103	U	2.7
1	1	3319	U	2.7
1	AS	135	G	2.7
1	AS	213	G	2.7
1	AS	3185	G	2.7
3	AU	38	U	2.7
5	k	330	GLY	2.7
26	BS	118	GLY	2.7
33	BZ	117	GLY	2.7
35	CB	27	GLY	2.7
37	CD	30	GLY	2.7
45	B	976	G	2.7
45	B	1764	G	2.7
45	CM	817	U	2.7
47	CO	233	GLY	2.7
50	G	83	PRO	2.7
51	CS	141	GLY	2.7
63	T	58	MET	2.7
66	DH	109	PRO	2.7
46	C	76	CYS	2.7
1	AS	105	A	2.7
1	AS	156	A	2.7
1	AS	1907	A	2.7
1	AS	2614	A	2.7

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Mol	Chain	Res	Type	RSRZ
5	AX	369	ARG	2.7
45	B	577	A	2.7
45	CM	367	A	2.7
45	CM	712	A	2.7
45	CM	740	A	2.7
51	CS	81	ARG	2.7
55	L	53	ARG	2.7
60	DB	127	ARG	2.7
63	T	11	ARG	2.7
70	DL	131	ARG	2.7
7	m	95	TRP	2.7
40	CG	26	TRP	2.7
5	AX	24	LYS	2.7
7	m	5	LYS	2.7
10	BC	104	ALA	2.7
20	BM	8	LYS	2.7
25	BR	113	LYS	2.7
27	BT	122	LYS	2.7
34	CA	83	ALA	2.7
36	AI	4	VAL	2.7
37	CD	21	VAL	2.7
1	1	486	C	2.7
1	AS	30	C	2.7
1	AS	67	C	2.7
1	AS	1592	C	2.7
1	AS	2284	C	2.7
24	6	9	ASN	2.7
38	CE	42	ALA	2.7
38	CE	85	ALA	2.7
46	C	165	LYS	2.7
46	CN	134	LYS	2.7
49	F	210	ALA	2.7
52	I	167	LYS	2.7
54	K	13	ALA	2.7
56	CX	25	LYS	2.7
58	CZ	118	ALA	2.7
62	DD	18	VAL	2.7
62	DD	89	VAL	2.7
64	DF	46	VAL	2.7
68	Y	121	VAL	2.7
72	DN	6	ALA	2.7
78	AR	118	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
79	CL	86	LYS	2.7
45	CM	237	C	2.7
59	DA	62	GLN	2.7
62	S	7	GLN	2.7
73	DO	26	GLN	2.7
78	AR	53	ASN	2.7
10	BC	27	LEU	2.7
23	5	82	LEU	2.7
32	BY	15	LEU	2.7
38	CE	18	LEU	2.7
47	D	73	LEU	2.7
49	F	177	LEU	2.7
50	G	52	LEU	2.7
61	DC	60	LEU	2.7
70	DL	17	LEU	2.7
47	CO	138	PHE	2.7
55	L	158	PHE	2.7
73	d	32	PHE	2.7
21	BN	63	ILE	2.7
23	BP	56	ILE	2.7
33	BZ	97	ILE	2.7
48	E	51	ILE	2.7
49	F	219	ILE	2.7
16	BI	103	GLU	2.7
16	BI	171	SER	2.7
18	BK	170	SER	2.7
50	G	202	GLU	2.7
7	AZ	240	TYR	2.7
9	o	20	THR	2.7
17	BJ	73	HIS	2.7
22	BO	156	TYR	2.7
35	CB	13	TYR	2.7
52	CT	169	TYR	2.7
64	DF	122	HIS	2.7
68	DJ	52	TYR	2.7
78	AR	280	THR	2.7
4	AW	99	GLY	2.7
55	L	144	PRO	2.7
55	CW	2	PRO	2.7
62	S	125	PRO	2.7
63	DE	68	GLY	2.7
66	DH	72	GLY	2.7

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Mol	Chain	Res	Type	RSRZ
67	DI	14	PRO	2.7
72	c	97	PRO	2.7
72	DN	20	PRO	2.7
1	AS	1817	U	2.7
1	AS	2187	U	2.7
1	AS	2486	U	2.7
13	s	32	ARG	2.6
28	BU	17	ARG	2.6
33	BZ	106	ARG	2.6
41	CH	30	ARG	2.6
45	B	270	U	2.7
45	B	778	U	2.7
45	CM	693	U	2.7
45	CM	1569	U	2.7
45	CM	1582	U	2.7
58	CZ	104	CYS	2.6
60	DB	109	ARG	2.6
62	DD	134	ARG	2.6
6	AY	194	LYS	2.6
33	AF	12	LYS	2.6
35	AH	24	LYS	2.6
44	CK	28	LYS	2.6
61	R	8	LYS	2.6
76	DR	55	LYS	2.6
11	q	132	VAL	2.6
24	BQ	135	VAL	2.6
43	CJ	2	VAL	2.6
44	CK	31	VAL	2.6
51	CS	138	VAL	2.6
52	I	162	VAL	2.6
52	CT	129	VAL	2.6
65	V	94	VAL	2.6
1	1	1015	G	2.6
1	AS	102	G	2.6
1	AS	2254	G	2.6
1	AS	2547	G	2.6
1	AS	3041	G	2.6
1	AS	3313	G	2.6
3	4	85	G	2.6
5	AX	149	ALA	2.6
6	AY	52	ALA	2.6
14	BG	53	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
15	u	123	ALA	2.6
41	CH	8	ALA	2.6
45	B	1070	G	2.6
49	F	202	ALA	2.6
57	N	25	ALA	2.6
59	P	63	ALA	2.6
79	CL	46	ALA	2.6
1	AS	929	A	2.6
1	AS	2844	A	2.6
15	BH	48	GLN	2.6
28	BU	132	GLN	2.6
45	CM	217	A	2.6
45	CM	847	A	2.6
39	CF	32	ASN	2.6
63	DE	48	ASN	2.6
16	BI	197	LEU	2.6
18	BK	150	LEU	2.6
26	BS	102	LEU	2.6
41	AN	45	LEU	2.6
46	CN	201	LEU	2.6
48	CP	220	LEU	2.6
56	CX	15	LEU	2.6
62	DD	115	LEU	2.6
78	AR	92	LEU	2.6
28	AA	92	PHE	2.6
49	F	26	PHE	2.6
54	CV	27	PHE	2.6
1	1	1220	C	2.6
1	AS	104	C	2.6
22	BO	25	ILE	2.6
27	9	106	ILE	2.6
29	BV	124	ILE	2.6
45	B	231	C	2.6
45	B	1704	C	2.6
45	CM	1182	C	2.6
45	CM	1417	C	2.6
45	CM	1693	C	2.6
45	CM	1770	C	2.6
56	CX	86	ILE	2.6
18	BK	153	GLU	2.6
18	BK	115	SER	2.6
27	BT	102	SER	2.6

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Mol	Chain	Res	Type	RSRZ
28	AA	105	SER	2.6
65	DG	40	SER	2.6
5	k	123	TYR	2.6
5	AX	310	GLY	2.6
7	m	79	TYR	2.6
11	BD	13	PRO	2.6
14	BG	65	TYR	2.6
11	BD	142	ASP	2.6
18	BK	8	PRO	2.6
22	2	81	GLY	2.6
22	2	145	GLY	2.6
40	CG	9	THR	2.6
48	CP	170	GLY	2.6
49	CQ	134	GLY	2.6
50	CR	254	ASP	2.6
56	M	96	PRO	2.6
61	DC	30	THR	2.6
62	S	16	THR	2.6
62	S	141	TYR	2.6
66	W	112	ASP	2.6
72	c	2	PRO	2.6
7	AZ	22	ARG	2.6
10	BC	45	ARG	2.6
11	q	69	ARG	2.6
14	BG	49	ARG	2.6
25	BR	23	ARG	2.6
53	CU	92	ARG	2.6
65	DG	89	ARG	2.6
76	g	37	ARG	2.6
19	y	185	LYS	2.6
28	BU	22	LYS	2.6
30	BW	15	LYS	2.6
35	CB	43	LYS	2.6
36	AI	115	LYS	2.6
53	CU	43	LYS	2.6
79	i	38	LYS	2.6
79	i	53	LYS	2.6
1	1	1216	U	2.6
1	1	1265	U	2.6
1	1	1550	U	2.6
1	1	2477	U	2.6
1	1	2479	U	2.6

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Mol	Chain	Res	Type	RSRZ
1	AS	134	U	2.6
1	AS	152	U	2.6
1	AS	3338	U	2.6
8	n	102	VAL	2.6
11	q	18	VAL	2.6
11	BD	18	VAL	2.6
16	BI	152	VAL	2.6
28	AA	68	VAL	2.6
31	BX	89	VAL	2.6
35	AH	35	VAL	2.6
55	L	172	VAL	2.6
71	DM	40	VAL	2.6
73	d	35	VAL	2.6
78	AR	277	VAL	2.6
6	AY	337	ALA	2.6
8	BA	160	ALA	2.6
10	BC	207	ALA	2.6
19	y	76	ALA	2.6
19	BL	162	ALA	2.6
22	BO	24	ALA	2.6
37	CD	22	ALA	2.6
37	CD	72	ALA	2.6
46	CN	99	ALA	2.6
49	F	89	ALA	2.6
52	I	192	ALA	2.6
67	DI	26	ALA	2.6
14	t	10	LEU	2.6
15	u	20	LEU	2.6
15	BH	119	GLN	2.6
16	BI	123	GLN	2.6
18	x	50	GLN	2.6
21	BN	14	LEU	2.6
44	AQ	48	GLN	2.6
48	CP	66	LEU	2.6
52	CT	109	LEU	2.6
53	CU	54	LEU	2.6
55	CW	48	GLN	2.6
55	CW	76	LEU	2.6
62	S	4	GLN	2.6
63	DE	24	LEU	2.6
66	DH	25	LEU	2.6
29	BV	74	ASN	2.6

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Mol	Chain	Res	Type	RSRZ
1	1	2437	A	2.6
1	1	2472	A	2.6
7	m	239	ILE	2.6
8	n	46	PHE	2.6
10	BC	224	ILE	2.6
32	AE	35	ILE	2.6
38	CE	74	PHE	2.6
51	CS	44	ASN	2.6
45	B	129	A	2.6
45	B	829	A	2.6
45	CM	973	A	2.6
53	J	88	PHE	2.6
60	Q	15	PHE	2.6
60	DB	15	PHE	2.6
62	DD	108	PHE	2.6
66	W	71	ASN	2.6
63	DE	41	ILE	2.6
70	DL	25	ILE	2.6
1	1	238	G	2.6
1	AS	818	G	2.6
1	AS	1138	G	2.6
45	B	289	G	2.6
45	B	1765	G	2.6
45	CM	1452	G	2.6
47	CO	172	MET	2.6
13	BF	15	GLU	2.6
1	AS	537	C	2.6
1	AS	1697	C	2.6
16	v	37	HIS	2.6
32	BY	16	HIS	2.6
35	AH	69	HIS	2.6
45	CM	280	C	2.6
45	CM	1621	C	2.6
47	CO	101	HIS	2.6
51	H	116	HIS	2.6
64	DF	127	HIS	2.6
12	r	214	PRO	2.6
44	AQ	12	GLY	2.6
47	CO	23	PRO	2.6
50	G	34	GLY	2.6
55	L	163	PRO	2.6
56	M	83	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
56	M	88	PRO	2.6
61	DC	53	PRO	2.6
65	V	2	PRO	2.6
6	l	18	SER	2.6
6	AY	62	SER	2.6
7	AZ	12	TYR	2.6
10	BC	98	TYR	2.6
16	BI	62	TYR	2.6
22	2	65	TYR	2.6
23	BP	111	TYR	2.6
27	BT	123	GLY	2.6
28	BU	85	TYR	2.6
33	BZ	75	TYR	2.6
41	AN	11	SER	2.6
47	CO	106	THR	2.6
49	F	121	TYR	2.6
55	CW	13	SER	2.6
55	CW	19	TYR	2.6
63	T	35	THR	2.6
66	W	53	GLY	2.6
59	DA	109	LYS	2.6
62	DD	127	LYS	2.6
63	T	67	ARG	2.6
66	W	77	THR	2.6
66	W	88	ARG	2.6
69	DK	36	THR	2.6
73	d	76	GLY	2.6
7	m	59	ASP	2.6
10	BC	109	ARG	2.6
16	BI	65	ARG	2.6
16	BI	108	ARG	2.6
20	z	85	LYS	2.6
20	BM	80	LYS	2.6
21	0	113	ARG	2.6
27	9	12	ARG	2.6
28	BU	48	ARG	2.6
49	F	197	ARG	2.6
49	CQ	8	LYS	2.6
51	H	76	LYS	2.6
53	J	104	LYS	2.6
54	K	11	ARG	2.6
55	L	126	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
79	i	34	THR	2.6
30	BW	33	LYS	2.6
35	AH	67	LYS	2.6
16	BI	106	VAL	2.6
21	0	9	VAL	2.6
26	BS	76	VAL	2.6
33	AF	120	VAL	2.6
48	CP	191	VAL	2.6
49	CQ	92	VAL	2.6
50	CR	45	VAL	2.6
51	H	68	VAL	2.6
65	V	30	VAL	2.6
65	V	113	VAL	2.6
1	1	1761	U	2.6
1	AS	1758	U	2.6
6	AY	90	ALA	2.6
6	AY	166	ALA	2.6
10	p	207	ALA	2.6
45	B	1376	U	2.6
45	CM	1674	U	2.6
49	F	119	ALA	2.6
49	CQ	195	ALA	2.6
59	DA	148	ALA	2.6
23	5	79	LEU	2.6
48	E	149	LEU	2.6
49	CQ	73	LEU	2.6
50	G	42	LEU	2.6
50	CR	153	LEU	2.6
53	J	77	LEU	2.6
53	CU	172	LEU	2.6
79	CL	158	LEU	2.6
16	v	150	TRP	2.6
14	BG	140	GLN	2.6
33	BZ	53	GLN	2.6
53	CU	106	GLN	2.6
55	L	112	GLN	2.6
63	DE	74	GLN	2.6
73	d	18	GLN	2.6
7	m	145	PHE	2.6
11	q	92	PHE	2.6
11	q	104	ILE	2.6
28	BU	5	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
46	C	203	PHE	2.6
47	CO	66	PHE	2.6
48	E	134	ILE	2.6
49	CQ	171	ILE	2.6
55	L	156	ILE	2.6
56	M	82	ILE	2.6
65	V	124	ILE	2.6
78	AR	157	ILE	2.6
18	x	169	ASN	2.6
36	CC	59	ASN	2.6
52	CT	4	ASN	2.6
59	P	69	ASN	2.6
1	1	105	A	2.6
1	AS	374	A	2.6
1	AS	2382	A	2.6
3	AU	92	A	2.6
8	BA	108	GLU	2.6
45	B	1654	A	2.6
45	CM	218	A	2.6
45	CM	1272	A	2.6
45	CM	1574	A	2.6
45	CM	1701	A	2.6
51	CS	91	GLU	2.6
58	O	99	GLU	2.6
65	V	126	GLU	2.6
75	DQ	45	GLU	2.6
21	BN	69	PRO	2.6
49	F	204	PRO	2.6
52	CT	173	PRO	2.6
57	CY	23	PRO	2.6
5	k	115	ARG	2.6
6	AY	272	LYS	2.6
10	BC	148	LYS	2.6
11	BD	115	ARG	2.6
16	BI	96	LYS	2.6
22	2	102	ARG	2.6
29	BV	110	GLY	2.6
32	BY	60	LYS	2.6
41	AN	52	LYS	2.6
44	CK	36	LYS	2.6
47	CO	162	ARG	2.6
48	CP	171	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
49	F	10	LYS	2.6
52	I	131	LYS	2.6
62	S	67	LYS	2.6
63	T	3	ARG	2.6
72	c	70	LYS	2.6
73	d	20	LYS	2.6
77	h	191	LYS	2.6
1	AS	368	G	2.6
1	AS	1606	G	2.6
1	AS	2147	G	2.6
6	AY	201	THR	2.6
7	AZ	99	TYR	2.6
10	BC	195	THR	2.6
19	BL	100	THR	2.6
45	B	1358	G	2.6
45	B	1388	G	2.6
45	CM	830	G	2.6
45	CM	1666	G	2.6
47	D	200	SER	2.6
48	E	61	TYR	2.6
50	CR	54	TYR	2.6
55	CW	7	THR	2.6
25	BR	34	SER	2.6
26	BS	29	SER	2.6
27	BT	72	SER	2.6
28	BU	7	SER	2.6
37	CD	32	SER	2.6
54	CV	7	SER	2.6
60	Q	53	TYR	2.6
76	DR	40	TYR	2.6
45	B	135	C	2.6
45	B	319	C	2.6
45	B	477	C	2.6
45	B	1385	C	2.6
45	CM	707	C	2.6
63	T	105	ASP	2.6
5	AX	335	VAL	2.6
6	AY	223	VAL	2.6
15	BH	13	VAL	2.6
44	AQ	16	VAL	2.6
47	D	127	VAL	2.6
50	G	140	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
52	CT	73	VAL	2.6
55	CW	127	VAL	2.6
57	CY	94	VAL	2.6
58	CZ	61	VAL	2.6
58	CZ	91	VAL	2.6
73	d	25	VAL	2.6
78	AR	124	VAL	2.6
4	AW	78	ALA	2.6
10	p	68	LEU	2.6
22	2	24	ALA	2.6
27	9	30	LEU	2.6
31	BX	103	LEU	2.6
41	AN	6	LEU	2.6
48	E	95	ALA	2.6
50	G	110	ALA	2.6
55	CW	70	LEU	2.6
58	O	57	ALA	2.6
58	O	112	ALA	2.6
59	P	135	LEU	2.6
69	DK	132	LEU	2.6
78	AR	239	ALA	2.6
1	AS	3030	U	2.6
9	o	93	ILE	2.6
11	q	41	ILE	2.6
12	BE	131	ILE	2.6
13	BF	22	CYS	2.6
16	v	142	ILE	2.6
28	AA	129	TRP	2.6
45	CM	1418	U	2.6
28	AA	131	PHE	2.6
47	D	24	PHE	2.6
49	F	151	GLN	2.6
49	F	180	GLN	2.6
50	CR	259	GLN	2.6
51	CS	48	PHE	2.6
52	I	50	PHE	2.6
53	CU	132	ILE	2.6
54	CV	185	CYS	2.6
58	O	105	GLN	2.6
60	Q	14	ILE	2.6
60	DB	107	ILE	2.6
63	T	38	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
64	DF	26	ILE	2.6
69	DK	92	CYS	2.6
78	AR	68	ILE	2.6
78	AR	135	TRP	2.6
78	AR	198	CYS	2.6
28	BU	81	MET	2.6
55	L	91	MET	2.6
30	AC	19	ASN	2.6
55	L	161	ASN	2.6
65	DG	43	ASN	2.6
70	a	133	ASN	2.6
11	BD	141	LYS	2.6
16	BI	37	HIS	2.6
17	w	132	PRO	2.6
17	w	190	GLU	2.6
17	BJ	190	GLU	2.6
23	BP	40	HIS	2.6
33	BZ	124	LYS	2.6
34	CA	91	PRO	2.6
36	CC	45	HIS	2.6
46	CN	56	LYS	2.6
50	CR	221	ARG	2.6
51	H	122	HIS	2.6
53	CU	82	PRO	2.6
55	L	51	LYS	2.6
59	DA	83	GLU	2.6
72	c	72	HIS	2.6
74	DP	47	PRO	2.6
76	DR	28	LYS	2.6
37	AJ	64	GLY	2.6
47	CO	50	ARG	2.6
52	I	55	GLY	2.6
54	K	51	GLY	2.6
55	CW	3	ARG	2.6
57	CY	129	ARG	2.6
58	O	44	GLY	2.6
72	DN	92	ARG	2.6
75	f	51	GLY	2.6
1	1	2439	A	2.6
1	AS	2567	A	2.6
45	B	1574	A	2.6
45	CM	129	A	2.6

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Mol	Chain	Res	Type	RSRZ
45	CM	832	A	2.6
13	BF	139	THR	2.6
23	5	33	TYR	2.6
24	BQ	35	TYR	2.6
26	8	119	THR	2.6
26	BS	71	THR	2.6
28	BU	66	THR	2.6
52	CT	170	THR	2.6
52	CT	183	THR	2.6
59	DA	129	TYR	2.6
65	V	55	TYR	2.6
66	DH	24	THR	2.6
7	m	46	SER	2.6
10	p	132	VAL	2.6
16	BI	89	VAL	2.6
27	9	95	VAL	2.6
31	BX	33	VAL	2.6
33	BZ	120	VAL	2.6
46	C	181	VAL	2.6
49	CQ	218	VAL	2.6
49	CQ	224	VAL	2.6
51	CS	140	SER	2.6
63	T	43	SER	2.6
64	U	121	SER	2.6
68	DJ	33	VAL	2.6
69	DK	131	SER	2.6
70	DL	100	VAL	2.6
79	i	73	VAL	2.6
6	AY	21	LEU	2.6
6	AY	102	ALA	2.5
7	m	194	LEU	2.6
7	AZ	42	ALA	2.5
8	n	106	ALA	2.5
10	BC	187	LEU	2.6
19	y	124	LEU	2.6
21	BN	24	LEU	2.6
23	BP	61	ASP	2.6
20	BM	107	ALA	2.5
27	9	109	LEU	2.6
28	BU	49	ALA	2.5
41	AN	27	LEU	2.6
46	C	159	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
47	CO	141	ALA	2.5
50	G	9	LEU	2.6
52	I	190	LEU	2.6
58	O	128	ALA	2.5
60	DB	100	LEU	2.6
61	R	6	ALA	2.5
63	DE	93	LEU	2.6
65	V	67	LEU	2.6
69	Z	33	LEU	2.6
71	b	67	ASP	2.6
71	DM	65	LEU	2.6
78	AR	95	LEU	2.6
78	AR	300	ALA	2.5
1	1	750	G	2.5
1	1	2458	G	2.5
1	AS	144	G	2.5
45	B	496	G	2.5
45	B	819	G	2.5
45	CM	1468	C	2.5
45	CM	1487	C	2.5
45	CM	1575	G	2.5
45	CM	1705	G	2.5
4	AW	63	PHE	2.5
14	BG	14	PHE	2.5
19	BL	155	PHE	2.5
21	0	121	ILE	2.5
30	BW	21	ILE	2.5
32	BY	13	ILE	2.5
41	AN	1	MET	2.5
48	CP	132	ILE	2.5
70	DL	119	PHE	2.5
29	BV	64	GLN	2.5
55	CW	153	GLN	2.5
70	a	22	GLN	2.5
1	1	3138	U	2.5
1	AS	168	U	2.5
1	AS	600	U	2.5
1	AS	1561	U	2.5
1	AS	3319	U	2.5
3	AU	22	U	2.5
3	AU	60	U	2.5
45	B	1644	U	2.5

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Mol	Chain	Res	Type	RSRZ
45	CM	1766	U	2.5
60	DB	66	CYS	2.5
10	BC	71	LYS	2.5
12	r	164	LYS	2.5
19	BL	45	ASN	2.5
46	C	134	LYS	2.5
48	E	114	LYS	2.5
50	G	127	LYS	2.5
62	DD	31	ASN	2.5
65	V	69	LYS	2.5
77	h	134	LYS	2.5
7	AZ	8	ARG	2.5
10	p	203	GLU	2.5
10	BC	139	HIS	2.5
10	BC	177	PRO	2.5
12	r	156	ARG	2.5
24	6	88	ARG	2.5
46	C	79	ARG	2.5
54	K	49	ARG	2.5
54	CV	129	HIS	2.5
60	DB	123	ARG	2.5
62	S	103	GLU	2.5
62	DD	73	HIS	2.5
78	AR	273	PRO	2.5
32	BY	65	GLY	2.5
49	F	156	GLY	2.5
62	DD	24	GLY	2.5
68	DJ	45	GLY	2.5
78	AR	56	GLY	2.5
4	AW	83	TYR	2.5
5	AX	285	VAL	2.5
7	AZ	144	VAL	2.5
10	BC	218	THR	2.5
13	s	53	THR	2.5
13	BF	69	VAL	2.5
13	BF	71	VAL	2.5
16	v	196	THR	2.5
24	BQ	22	VAL	2.5
28	AA	14	VAL	2.5
30	AC	8	THR	2.5
46	CN	123	VAL	2.5
49	F	137	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
53	CU	158	VAL	2.5
50	G	23	LEU	2.5
51	H	174	LEU	2.5
53	CU	169	TYR	2.5
55	L	113	VAL	2.5
57	CY	78	THR	2.5
60	Q	8	VAL	2.5
63	T	40	VAL	2.5
64	DF	33	THR	2.5
64	DF	93	VAL	2.5
68	Y	63	VAL	2.5
74	DP	19	THR	2.5
78	AR	100	THR	2.5
1	AS	51	A	2.5
1	AS	1099	A	2.5
1	AS	2379	A	2.5
4	AW	246	LEU	2.5
6	AY	220	LEU	2.5
7	AZ	195	LEU	2.5
8	n	57	LEU	2.5
27	9	31	LEU	2.5
34	CA	45	LEU	2.5
39	CF	73	LEU	2.5
45	CM	1322	A	2.5
45	CM	1403	A	2.5
48	E	220	LEU	2.5
54	K	149	LEU	2.5
55	CW	24	LEU	2.5
63	DE	57	LEU	2.5
64	U	131	LEU	2.5
6	l	73	ALA	2.5
14	BG	90	ALA	2.5
16	v	100	SER	2.5
16	BI	97	SER	2.5
26	8	132	ALA	2.5
28	AA	44	ALA	2.5
46	C	78	SER	2.5
47	CO	57	ALA	2.5
49	CQ	212	ALA	2.5
55	L	121	SER	2.5
55	CW	87	SER	2.5
65	V	5	SER	2.5

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Mol	Chain	Res	Type	RSRZ
11	BD	61	ASP	2.5
14	t	127	ASP	2.5
70	DL	26	ASP	2.5
7	AZ	180	PHE	2.5
7	AZ	231	ILE	2.5
8	BA	149	ILE	2.5
9	o	220	PHE	2.5
13	s	148	ILE	2.5
40	CG	27	ILE	2.5
49	F	50	ILE	2.5
54	K	104	ILE	2.5
57	CY	131	ILE	2.5
61	R	12	PHE	2.5
75	DQ	31	ILE	2.5
78	AR	257	ILE	2.5
5	k	233	TRP	2.5
16	BI	120	TRP	2.5
25	BR	41	GLN	2.5
64	DF	74	GLN	2.5
68	DJ	42	GLN	2.5
72	DN	99	GLN	2.5
1	1	1011	C	2.5
1	1	1577	C	2.5
45	B	674	C	2.5
1	1	244	G	2.5
1	1	483	U	2.5
1	AS	1620	G	2.5
1	AS	1760	U	2.5
1	AS	1762	G	2.5
1	AS	2832	U	2.5
3	AU	86	U	2.5
9	o	13	LYS	2.5
15	u	126	LYS	2.5
18	BK	43	LYS	2.5
29	BV	24	LYS	2.5
45	B	750	G	2.5
45	B	1038	G	2.5
45	B	1044	U	2.5
45	B	1247	U	2.5
45	B	1271	U	2.5
45	CM	271	G	2.5
45	CM	1649	G	2.5

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Mol	Chain	Res	Type	RSRZ
53	J	80	LYS	2.5
57	CY	57	LYS	2.5
62	S	13	LYS	2.5
65	V	84	LYS	2.5
22	BO	88	ARG	2.5
23	BP	22	PRO	2.5
27	BT	34	PRO	2.5
46	C	35	PRO	2.5
48	E	79	ARG	2.5
48	CP	168	PRO	2.5
49	CQ	28	ARG	2.5
49	CQ	166	ARG	2.5
52	I	219	ARG	2.5
53	J	84	ARG	2.5
55	L	160	HIS	2.5
55	CW	5	PRO	2.5
63	T	45	ARG	2.5
79	i	75	PRO	2.5
10	BC	96	ASN	2.5
10	BC	120	GLY	2.5
16	BI	2	GLY	2.5
16	BI	160	GLU	2.5
16	BI	175	ASN	2.5
28	AA	31	GLU	2.5
37	CD	88	GLU	2.5
46	CN	51	GLY	2.5
48	CP	203	GLU	2.5
49	F	184	GLY	2.5
69	DK	80	GLY	2.5
70	a	66	GLY	2.5
78	AR	186	ASN	2.5
5	k	312	VAL	2.5
5	k	337	THR	2.5
6	l	7	VAL	2.5
11	q	43	VAL	2.5
11	BD	34	LEU	2.5
14	BG	9	LEU	2.5
16	BI	25	VAL	2.5
17	BJ	175	LEU	2.5
20	z	131	THR	2.5
26	BS	57	LEU	2.5
27	9	70	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
28	BU	113	VAL	2.5
36	CC	24	LEU	2.5
37	CD	71	LEU	2.5
38	CE	17	THR	2.5
38	CE	33	THR	2.5
44	CK	64	VAL	2.5
46	CN	112	THR	2.5
47	CO	201	THR	2.5
49	F	51	VAL	2.5
50	G	222	LEU	2.5
51	H	22	VAL	2.5
51	CS	20	LEU	2.5
51	CS	165	LEU	2.5
55	L	24	LEU	2.5
62	S	43	LEU	2.5
62	DD	37	LEU	2.5
64	DF	55	THR	2.5
65	DG	67	LEU	2.5
66	W	99	VAL	2.5
68	DJ	65	LEU	2.5
68	DJ	121	VAL	2.5
70	a	40	LEU	2.5
72	c	90	THR	2.5
73	DO	54	VAL	2.5
78	AR	240	LEU	2.5
7	AZ	31	TYR	2.5
21	BN	7	TYR	2.5
22	2	127	TYR	2.5
30	BW	29	TYR	2.5
56	CX	64	TYR	2.5
68	DJ	130	TYR	2.5
27	9	18	ALA	2.5
51	CS	210	ALA	2.5
52	I	189	ALA	2.5
53	CU	65	ALA	2.5
57	CY	109	ALA	2.5
60	DB	101	ALA	2.5
20	BM	76	MET	2.5
11	q	182	SER	2.5
18	BK	67	ILE	2.5
30	AC	62	SER	2.5
31	BX	106	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
39	CF	18	SER	2.5
46	C	151	SER	2.5
48	E	165	ILE	2.5
55	CW	50	SER	2.5
69	Z	40	SER	2.5
69	DK	40	SER	2.5
76	DR	16	SER	2.5
1	AS	10	A	2.5
1	AS	115	A	2.5
1	AS	1585	A	2.5
1	AS	2612	A	2.5
1	AS	3042	A	2.5
3	AU	1	A	2.5
11	q	11	ASP	2.5
18	BK	26	PHE	2.5
45	B	722	A	2.5
45	B	738	A	2.5
45	B	741	A	2.5
45	CM	577	A	2.5
78	AR	242	PHE	2.5
28	AA	52	LYS	2.5
31	AD	85	LYS	2.5
36	AI	107	GLN	2.5
37	CD	85	LYS	2.5
43	CJ	38	GLN	2.5
50	CR	260	GLN	2.5
55	L	65	LYS	2.5
57	CY	32	LYS	2.5
63	T	83	GLN	2.5
76	g	29	LYS	2.5
76	DR	26	LYS	2.5
78	AR	282	LYS	2.5
6	AY	74	ARG	2.5
40	CG	45	ARG	2.5
48	CP	92	ARG	2.5
72	c	87	ARG	2.5
1	AS	2613	U	2.5
7	AZ	181	PRO	2.5
8	BA	35	PRO	2.5
36	CC	39	PRO	2.5
41	AN	47	PRO	2.5
41	CH	47	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
45	B	221	U	2.5
45	CM	239	U	2.5
45	CM	258	U	2.5
45	CM	713	U	2.5
45	CM	1267	U	2.5
58	O	87	PRO	2.5
61	DC	69	PRO	2.5
65	DG	47	PRO	2.5
1	1	2457	C	2.5
1	AS	225	C	2.5
1	AS	2736	C	2.5
1	AS	3314	C	2.5
38	CE	28	HIS	2.5
4	j	2	GLY	2.5
7	AZ	25	GLU	2.5
29	AB	30	GLY	2.5
30	BW	34	GLY	2.5
45	B	488	C	2.5
45	B	647	C	2.5
45	CM	656	C	2.5
45	CM	1057	C	2.5
45	CM	1586	C	2.5
19	BL	145	ASN	2.5
37	AJ	65	GLU	2.5
49	F	211	GLU	2.5
51	H	75	GLY	2.5
52	I	165	GLY	2.5
60	DB	129	GLY	2.5
63	T	75	GLU	2.5
67	X	77	GLY	2.5
38	CE	48	ASN	2.5
40	CG	33	ASN	2.5
63	DE	97	ASN	2.5
67	X	21	ASN	2.5
1	1	2432	G	2.5
1	1	3221	G	2.5
1	AS	147	G	2.5
1	AS	1437	G	2.5
1	AS	1571	G	2.5
1	AS	2503	G	2.5
5	AX	93	VAL	2.5
7	AZ	115	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
10	BC	191	VAL	2.5
11	BD	154	VAL	2.5
13	s	171	VAL	2.5
13	BF	112	LEU	2.5
16	BI	35	VAL	2.5
17	w	53	LEU	2.5
45	B	272	G	2.5
45	B	1099	G	2.5
45	B	1336	G	2.5
45	B	1402	G	2.5
45	CM	898	G	2.5
45	CM	1115	G	2.5
46	CN	17	LEU	2.5
53	J	158	VAL	2.5
53	CU	77	LEU	2.5
53	CU	126	VAL	2.5
55	L	109	LEU	2.5
55	CW	14	VAL	2.5
56	CX	87	LEU	2.5
57	N	38	VAL	2.5
58	O	136	LEU	2.5
58	CZ	75	VAL	2.5
62	DD	88	LEU	2.5
63	T	57	LEU	2.5
65	V	79	LEU	2.5
65	DG	140	LEU	2.5
69	DK	15	LEU	2.5
70	DL	96	LEU	2.5
71	DM	60	VAL	2.5
72	c	39	VAL	2.5
73	d	62	VAL	2.5
7	AZ	153	THR	2.5
29	AB	8	THR	2.5
10	BC	255	ALA	2.5
11	q	134	MET	2.5
13	s	154	THR	2.5
13	BF	70	THR	2.5
46	C	108	THR	2.5
11	BD	158	ALA	2.5
16	BI	55	ALA	2.5
18	BK	21	TYR	2.5
27	9	2	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
28	AA	110	ALA	2.5
30	AC	37	ALA	2.5
49	F	35	TYR	2.5
49	CQ	88	TYR	2.5
55	L	56	ALA	2.5
56	M	23	ALA	2.5
57	CY	27	ALA	2.5
59	P	146	ALA	2.5
68	Y	8	ALA	2.5
72	DN	63	ALA	2.5
78	AR	293	ALA	2.5
11	BD	187	ILE	2.5
16	v	151	ILE	2.5
31	AD	94	ILE	2.5
32	AE	74	ILE	2.5
37	CD	60	ILE	2.5
49	CQ	159	ILE	2.5
59	P	116	ILE	2.5
65	V	65	ILE	2.5
72	DN	94	ILE	2.5
11	BD	117	PHE	2.5
14	t	126	PHE	2.5
50	CR	99	PHE	2.5
54	K	109	PHE	2.5
60	DB	18	PHE	2.5
74	DP	32	PHE	2.5
6	AY	3	SER	2.5
6	AY	269	LYS	2.5
8	BA	131	LYS	2.5
10	BC	147	LYS	2.5
29	BV	111	LYS	2.5
31	AD	35	SER	2.5
36	AI	13	SER	2.5
52	CT	136	LYS	2.5
54	K	75	LYS	2.5
59	P	13	SER	2.5
59	P	147	SER	2.5
59	DA	29	SER	2.5
61	DC	120	SER	2.5
66	W	68	LYS	2.5
78	AR	66	SER	2.5
18	x	154	ASP	2.5

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Mol	Chain	Res	Type	RSRZ
79	i	37	LYS	2.5
27	9	120	GLN	2.5
35	CB	73	GLN	2.5
51	CS	170	GLN	2.5
55	CW	177	GLN	2.5
1	AS	1638	A	2.5
1	AS	1875	A	2.5
1	AS	2675	A	2.5
7	AZ	54	ARG	2.5
13	s	29	ARG	2.5
16	v	108	ARG	2.5
22	BO	12	ARG	2.5
23	BP	95[A]	TRP	2.5
38	AK	49	TRP	2.5
41	AN	21	ARG	2.5
46	C	127	ARG	2.5
46	CN	54	TRP	2.5
52	CT	31	ARG	2.5
53	CU	93	ARG	2.5
54	K	8	ARG	2.5
55	L	132	ARG	2.5
72	DN	82	ARG	2.5
5	AX	33	PRO	2.5
14	BG	56	PRO	2.5
29	BV	71	PRO	2.5
30	BW	30	PRO	2.5
59	DA	17	PRO	2.5
16	BI	158	HIS	2.5
1	1	1934	U	2.5
1	1	2832	U	2.5
1	1	2847	U	2.5
1	AS	2968	U	2.5
1	AS	3141	U	2.5
16	BI	186	GLY	2.5
29	AB	18	GLY	2.5
29	AB	51	GLY	2.5
34	AG	34	GLY	2.5
45	B	1400	U	2.5
45	CM	1401	U	2.5
55	L	73	GLY	2.5
58	CZ	102	GLY	2.5
69	Z	119	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
78	AR	238	HIS	2.5
65	DG	104	CYS	2.5
6	AY	23	LEU	2.5
13	s	40	LEU	2.5
14	BG	40	LEU	2.5
17	BJ	17	LEU	2.5
19	BL	52	LEU	2.5
22	BO	27	LEU	2.5
27	9	35	LEU	2.5
27	BT	39	LEU	2.5
29	BV	78	LEU	2.5
38	CE	51	LEU	2.5
47	D	61	LEU	2.5
47	CO	97	LEU	2.5
47	CO	184	LEU	2.5
58	O	103	LEU	2.5
5	k	114	VAL	2.5
7	AZ	94	ASN	2.5
18	BK	37	ASN	2.5
23	BP	34	VAL	2.5
31	BX	11	ASN	2.5
41	CH	33	ASN	2.5
52	CT	157	VAL	2.5
56	CX	42	VAL	2.5
58	O	31	VAL	2.5
61	DC	101	VAL	2.5
66	DH	89	VAL	2.5
77	h	150	VAL	2.5
1	1	3193	C	2.5
6	AY	94	MET	2.5
45	CM	995	C	2.5
45	CM	1567	C	2.5
45	CM	1704	C	2.5
5	k	22	ALA	2.5
13	BF	147	THR	2.5
16	BI	185	ALA	2.5
20	z	145	ALA	2.5
28	BU	25	ILE	2.5
32	BY	45	THR	2.5
39	AL	72	THR	2.5
46	CN	193	THR	2.5
49	F	146	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
51	CS	26	ALA	2.5
51	CS	182	ALA	2.5
53	J	94	ILE	2.5
53	CU	20	ALA	2.5
54	CV	151	ALA	2.5
57	CY	114	ALA	2.5
58	CZ	77	ALA	2.5
59	DA	22	ALA	2.5
60	DB	33	THR	2.5
60	DB	86	THR	2.5
65	DG	65	ILE	2.5
70	a	62	THR	2.5
71	DM	99	ALA	2.5
78	AR	143	ALA	2.5
7	AZ	16	PHE	2.5
12	r	213	PHE	2.5
22	BO	30	TYR	2.5
23	5	36	TYR	2.5
33	BZ	66	PHE	2.5
36	CC	95	PHE	2.5
47	CO	142	PHE	2.5
53	CU	66	TYR	2.5
53	CU	179	PHE	2.5
54	CV	117	TYR	2.5
67	DI	53	TYR	2.5
68	Y	50	PHE	2.5
70	DL	89	TYR	2.5
3	AU	132	G	2.4
7	m	143	LYS	2.4
10	BC	150	LYS	2.4
13	s	16	LYS	2.4
16	BI	170	LYS	2.4
22	BO	50	LYS	2.4
26	8	25	LYS	2.4
44	CK	62	LYS	2.4
45	B	226	G	2.4
45	B	381	G	2.4
45	B	508	G	2.4
45	CM	282	G	2.4
45	CM	1404	G	2.4
47	CO	45	LYS	2.4
50	CR	133	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
58	O	124	LYS	2.4
7	m	29	ASP	2.4
16	BI	40	SER	2.4
20	z	37	SER	2.4
20	BM	59	SER	2.4
55	L	152	SER	2.4
68	DJ	9	ASP	2.4
79	CL	92	SER	2.4
4	AW	30	ARG	2.4
10	BC	69	ARG	2.4
14	t	176	ARG	2.4
16	BI	32	GLN	2.4
21	BN	3	ARG	2.4
25	7	94	ARG	2.4
25	BR	48	ARG	2.4
27	BT	120	GLN	2.4
35	AH	3	GLN	2.4
36	CC	89	ARG	2.4
40	AM	46	ARG	2.4
53	CU	64	GLN	2.4
54	CV	170	ARG	2.4
62	DD	136	ARG	2.4
61	R	7	PRO	2.4
65	DG	53	TRP	2.4
1	AS	218	A	2.4
1	AS	813	A	2.4
1	AS	823	A	2.4
45	B	143	A	2.4
45	B	218	A	2.4
6	AY	98	GLY	2.4
12	BE	172	GLY	2.4
13	BF	132	GLY	2.4
16	BI	177	GLY	2.4
24	BQ	90	GLY	2.4
65	DG	120	GLY	2.4
65	DG	121	GLY	2.4
69	DK	106	GLY	2.4
76	DR	6	GLY	2.4
5	AX	43	LEU	2.4
6	AY	361	LEU	2.4
10	BC	94	LEU	2.4
18	BK	155	GLU	2.4

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Mol	Chain	Res	Type	RSRZ
20	z	4	LEU	2.4
20	BM	4	LEU	2.4
21	0	6	GLU	2.4
23	BP	87	LEU	2.4
28	AA	51	LEU	2.4
33	BZ	96	GLU	2.4
34	AG	45	LEU	2.4
39	AL	13	GLU	2.4
39	AL	73	LEU	2.4
41	AN	51	LEU	2.4
41	CH	9	LEU	2.4
60	DB	97	LEU	2.4
76	DR	8	LEU	2.4
1	1	598	U	2.4
1	AS	1851	U	2.4
1	AS	3164	U	2.4
6	AY	114	VAL	2.4
12	r	190	VAL	2.4
14	t	22	VAL	2.4
14	t	141	VAL	2.4
15	BH	129	VAL	2.4
21	BN	35	VAL	2.4
29	BV	145	VAL	2.4
37	AJ	10	VAL	2.4
38	AK	29	VAL	2.4
45	B	505	U	2.4
45	B	826	U	2.4
45	B	1100	U	2.4
45	B	1300	U	2.4
47	CO	176	VAL	2.4
61	DC	1	MET	2.4
61	DC	83	MET	2.4
71	b	92	VAL	2.4
11	BD	169	ASN	2.4
12	r	73	ASN	2.4
22	BO	77	ASN	2.4
30	AC	6	ASN	2.4
39	AL	32	ASN	2.4
51	CS	66	ASN	2.4
65	DG	101	ASN	2.4
4	j	182	ALA	2.4
5	AX	138	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
6	AY	298	ALA	2.4
9	o	176	ILE	2.4
10	BC	88	ALA	2.4
26	BS	139	ILE	2.4
29	BV	35	ALA	2.4
33	BZ	39	ILE	2.4
35	AH	54	ILE	2.4
37	CD	57	ILE	2.4
46	C	74	ALA	2.4
46	CN	74	ALA	2.4
46	CN	160	ILE	2.4
48	E	78	ILE	2.4
56	CX	23	ALA	2.4
57	N	114	ALA	2.4
62	DD	80	ILE	2.4
78	AR	199	ILE	2.4
5	AX	333	LYS	2.4
13	BF	102	PHE	2.4
20	BM	53	LYS	2.4
25	BR	40	PHE	2.4
26	BS	89	LYS	2.4
31	BX	26	THR	2.4
37	CD	78	THR	2.4
48	CP	111	LYS	2.4
64	U	132	LYS	2.4
67	X	27	LYS	2.4
71	DM	90	THR	2.4
1	AS	9	C	2.4
30	BW	45	TYR	2.4
45	B	222	C	2.4
45	B	379	C	2.4
45	B	1417	C	2.4
45	CM	222	C	2.4
45	CM	274	C	2.4
45	CM	1177	C	2.4
62	DD	48	TYR	2.4
64	U	42	TYR	2.4
78	AR	183	TYR	2.4
17	BJ	60	ARG	2.4
30	AC	41	ARG	2.4
55	CW	53	ARG	2.4
61	DC	72	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
63	DE	33	ARG	2.4
8	BA	11	SER	2.4
13	s	5	SER	2.4
14	t	133	SER	2.4
18	x	170	SER	2.4
20	BM	37	SER	2.4
48	CP	82	GLN	2.4
51	H	34	GLN	2.4
51	H	86	GLN	2.4
45	CM	972	G	2.4
45	CM	1671	G	2.4
45	CM	1677	G	2.4
46	CN	207	PRO	2.4
55	L	103	ASP	2.4
1	1	2461	G	2.4
1	AS	1613	G	2.4
1	AS	1619	G	2.4
1	AS	1888	G	2.4
1	AS	3189	G	2.4
61	DC	109	PRO	2.4
63	DE	118	PRO	2.4
5	AX	161	LEU	2.4
8	BA	173	LEU	2.4
9	BB	236	LEU	2.4
19	y	14	GLY	2.4
22	BO	128	LEU	2.4
24	BQ	8	GLY	2.4
28	AA	32	GLY	2.4
30	BW	54	LEU	2.4
31	AD	79	LEU	2.4
40	CG	49	LEU	2.4
47	D	54	LEU	2.4
47	D	225	LEU	2.4
47	D	229	LEU	2.4
50	G	101	LEU	2.4
51	CS	175	LEU	2.4
54	K	96	LEU	2.4
56	CX	40	LEU	2.4
56	CX	85	GLY	2.4
58	CZ	117	GLY	2.4
62	S	27	LEU	2.4
65	V	132	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
65	DG	22	LEU	2.4
69	Z	104	LEU	2.4
69	DK	133	LEU	2.4
71	DM	80	LEU	2.4
73	d	7	LEU	2.4
75	DQ	27	HIS	2.4
76	g	5	HIS	2.4
5	k	72	VAL	2.4
5	k	84	MET	2.4
6	AY	360	VAL	2.4
14	BG	24	VAL	2.4
16	BI	29	GLU	2.4
18	x	119	VAL	2.4
47	D	134	VAL	2.4
48	E	237	VAL	2.4
52	I	179	VAL	2.4
52	CT	36	VAL	2.4
65	DG	73	VAL	2.4
71	b	64	VAL	2.4
1	1	239	A	2.4
1	AS	208	A	2.4
1	AS	212	A	2.4
1	AS	1601	A	2.4
45	B	1101	A	2.4
45	CM	1676	A	2.4
45	CM	1769	A	2.4
1	1	1933	U	2.4
1	AS	216	U	2.4
1	AS	1550	U	2.4
1	AS	1596	U	2.4
4	AW	15	ILE	2.4
32	BY	58	ILE	2.4
45	B	88	U	2.4
72	c	36	ILE	2.4
4	j	7	ASN	2.4
7	AZ	166	ALA	2.4
9	BB	111	ALA	2.4
10	BC	252	LYS	2.4
13	s	35	LYS	2.4
17	BJ	33	LYS	2.4
18	BK	81	ALA	2.4
18	BK	169	ASN	2.4

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Mol	Chain	Res	Type	RSRZ
20	z	80	LYS	2.4
21	BN	47	LYS	2.4
22	2	69	LYS	2.4
23	5	52	ASN	2.4
24	BQ	104	ASN	2.4
28	AA	95	ALA	2.4
29	AB	74	ASN	2.4
36	AI	82	ALA	2.4
40	CG	34	LYS	2.4
46	CN	19	ALA	2.4
48	E	119	ALA	2.4
51	CS	115	LYS	2.4
52	CT	231	ALA	2.4
57	CY	98	ASN	2.4
62	DD	67	LYS	2.4
65	DG	19	ALA	2.4
73	d	13	ALA	2.4
7	m	16	PHE	2.4
9	BB	217	PHE	2.4
16	v	180	PHE	2.4
46	CN	102	PHE	2.4
28	BU	33	THR	2.4
36	CC	46	THR	2.4
54	CV	107	THR	2.4
60	DB	121	THR	2.4
62	S	114	THR	2.4
18	x	47	TYR	2.4
26	8	141	TYR	2.4
5	k	275	ARG	2.4
7	AZ	21	ARG	2.4
7	AZ	282	ARG	2.4
9	o	31	ARG	2.4
16	v	144	ARG	2.4
19	y	178	ARG	2.4
54	K	22	ARG	2.4
61	R	47	ARG	2.4
67	X	87	ARG	2.4
1	1	2454	C	2.4
1	1	2745	C	2.4
1	AS	1850	C	2.4
45	B	1113	C	2.4
6	AY	238	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
9	BB	17	GLN	2.4
26	BS	85	GLN	2.4
29	BV	38	GLN	2.4
49	F	33	GLN	2.4
62	DD	39	GLN	2.4
70	a	126	GLN	2.4
14	BG	152	PRO	2.4
33	AF	54	PRO	2.4
41	CH	29	PRO	2.4
47	CO	190	PRO	2.4
59	DA	137	PRO	2.4
73	d	12	PRO	2.4
5	AX	327	SER	2.4
14	BG	105	SER	2.4
27	9	11	SER	2.4
27	BT	32	SER	2.4
4	AW	180	LEU	2.4
9	BB	10	LEU	2.4
12	BE	57	LEU	2.4
17	w	29	LEU	2.4
23	5	108	LEU	2.4
23	BP	44	ASP	2.4
59	P	61	SER	2.4
23	BP	79	LEU	2.4
39	AL	69	LEU	2.4
59	DA	108	ASP	2.4
5	AX	274	HIS	2.4
7	m	170	GLY	2.4
8	n	8	TRP	2.4
59	DA	117	LEU	2.4
62	DD	57	ASP	2.4
72	DN	7	SER	2.4
76	DR	59	SER	2.4
46	C	24	LEU	2.4
49	F	60	LEU	2.4
49	F	73	LEU	2.4
66	W	62	LEU	2.4
71	DM	42	LEU	2.4
20	BM	83	GLY	2.4
24	6	55	GLY	2.4
24	BQ	107	GLY	2.4
38	CE	2	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
49	CQ	160	HIS	2.4
50	G	25	GLY	2.4
54	K	50	GLY	2.4
61	R	1	MET	2.4
61	DC	55	GLY	2.4
73	DO	19	HIS	2.4
75	f	35	GLY	2.4
78	AR	278	GLY	2.4
5	AX	90	VAL	2.4
7	AZ	37	VAL	2.4
10	BC	57	VAL	2.4
11	q	14	GLU	2.4
14	BG	143	VAL	2.4
21	BN	97	VAL	2.4
22	2	72	VAL	2.4
23	BP	66	VAL	2.4
44	AQ	64	VAL	2.4
47	D	21	VAL	2.4
50	G	136	VAL	2.4
50	CR	129	VAL	2.4
57	CY	50	GLU	2.4
1	1	524	G	2.4
1	1	2435	G	2.4
1	1	2441	G	2.4
1	AS	267	G	2.4
1	AS	1572	G	2.4
1	AS	1930	G	2.4
1	AS	2579	G	2.4
3	AU	42	G	2.4
7	m	88	ILE	2.4
10	p	238	ILE	2.4
10	BC	41	ILE	2.4
10	BC	173	LYS	2.4
11	q	128	ILE	2.4
15	u	60	ILE	2.4
18	BK	117	ILE	2.4
25	BR	49	ILE	2.4
45	B	702	G	2.4
45	CM	1135	G	2.4
27	9	69	LYS	2.4
37	AJ	74	LYS	2.4
37	CD	24	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
48	E	132	ILE	2.4
63	DE	23	LYS	2.4
64	DF	34	LYS	2.4
73	d	17	LYS	2.4
4	AW	35	ALA	2.4
6	AY	73	ALA	2.4
7	AZ	97	ALA	2.4
10	p	254	ALA	2.4
39	AL	33	ALA	2.4
41	AN	31	ALA	2.4
41	CH	10	ALA	2.4
46	CN	130	ALA	2.4
47	CO	156	ALA	2.4
60	DB	45	ALA	2.4
62	DD	90	ALA	2.4
69	DK	12	ALA	2.4
70	a	50	ALA	2.4
70	a	129	ALA	2.4
1	1	253	A	2.4
1	1	976	A	2.4
1	1	1815	U	2.4
1	1	2466	A	2.4
1	AS	82	U	2.4
1	AS	149	A	2.4
1	AS	894	U	2.4
1	AS	901	U	2.4
1	AS	1032	A	2.4
1	AS	1579	A	2.4
1	AS	2536	U	2.4
1	AS	2972	A	2.4
7	m	142	PHE	2.4
45	B	1570	A	2.4
45	CM	88	U	2.4
45	CM	738	A	2.4
46	C	102	PHE	2.4
47	D	100	PHE	2.4
49	CQ	198	PHE	2.4
61	DC	33	PHE	2.4
65	DG	54	PHE	2.4
70	a	58	PHE	2.4
75	f	43	PHE	2.4
77	h	163	CYS	2.4

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Mol	Chain	Res	Type	RSRZ
6	AY	280	ASN	2.4
9	BB	241	ASN	2.4
21	BN	5	ASN	2.4
32	AE	68	ASN	2.4
69	DK	79	ASN	2.4
74	DP	51	ASN	2.4
6	l	201	THR	2.4
10	BC	111	THR	2.4
21	0	169	THR	2.4
22	2	150	THR	2.4
46	C	112	THR	2.4
60	Q	121	THR	2.4
62	S	3	THR	2.4
78	AR	137	THR	2.4
6	AY	301	ARG	2.4
7	m	226	TYR	2.4
7	AZ	152	ARG	2.4
11	BD	168	ARG	2.4
14	t	169	TYR	2.4
14	BG	176	ARG	2.4
18	x	126	ARG	2.4
24	6	48	ARG	2.4
27	9	16	ARG	2.4
42	CI	2	ARG	2.4
43	CJ	42	ARG	2.4
55	CW	69	ARG	2.4
65	DG	134	ARG	2.4
70	DL	94	TYR	2.4
72	c	28	ARG	2.4
72	DN	59	TYR	2.4
75	DQ	44	ARG	2.4
13	s	6	GLN	2.4
14	BG	28	GLN	2.4
18	BK	143	PRO	2.4
36	AI	16	GLN	2.4
36	CC	20	GLN	2.4
51	H	30	PRO	2.4
51	CS	67	PRO	2.4
54	CV	53	GLN	2.4
64	U	74	GLN	2.4
73	d	51	GLN	2.4
8	BA	63	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
26	BS	108	LEU	2.4
26	BS	133	LEU	2.4
39	AL	54	LEU	2.4
47	D	207	LEU	2.4
53	CU	149	LEU	2.4
54	CV	96	LEU	2.4
55	CW	60	LEU	2.4
58	CZ	59	LEU	2.4
58	CZ	74	LEU	2.4
59	DA	115	LEU	2.4
60	Q	28	LEU	2.4
62	DD	104	LEU	2.4
63	DE	113	LEU	2.4
1	AS	1465	C	2.4
1	AS	1547	C	2.4
1	AS	2942	C	2.4
3	AU	129	C	2.4
4	AW	248	GLY	2.4
5	AX	52	GLY	2.4
6	AY	110	TRP	2.4
14	BG	156	SER	2.4
16	BI	69	GLY	2.4
18	x	19	GLY	2.4
26	8	90	SER	2.4
30	BW	36	ASP	2.4
38	CE	46	SER	2.4
38	CE	62	GLY	2.4
41	AN	41	HIS	2.4
45	B	273	C	2.4
45	B	720	C	2.4
45	B	1081	C	2.4
45	CM	1583	C	2.4
47	CO	89	ASP	2.4
52	I	82	SER	2.4
53	J	124	ASP	2.4
54	K	183	GLY	2.4
54	CV	122	GLY	2.4
54	CV	176	SER	2.4
57	CY	51	GLY	2.4
59	DA	30	SER	2.4
60	Q	93	GLY	2.4
61	R	117	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
61	DC	92	SER	2.4
64	U	129	TRP	2.4
65	DG	82	GLY	2.4
77	h	154	GLY	2.4
79	i	117	GLY	2.4
5	AX	73	VAL	2.4
5	AX	336	VAL	2.4
10	p	176	VAL	2.4
11	BD	93	VAL	2.4
13	s	71	VAL	2.4
20	BM	57	VAL	2.4
22	2	36	VAL	2.4
23	BP	101	VAL	2.4
27	BT	29	VAL	2.4
28	BU	13	VAL	2.4
44	CK	71	VAL	2.4
46	C	29	VAL	2.4
48	E	106	VAL	2.4
49	F	59	VAL	2.4
49	CQ	187	VAL	2.4
51	H	160	VAL	2.4
52	I	195	VAL	2.4
54	CV	46	VAL	2.4
55	L	14	VAL	2.4
55	L	141	VAL	2.4
60	DB	43	VAL	2.4
63	T	15	VAL	2.4
6	l	194	LYS	2.4
6	AY	184	LYS	2.4
9	BB	8	GLU	2.4
10	BC	194	LYS	2.4
18	BK	75	GLU	2.4
11	BD	9	ILE	2.4
23	BP	92	ILE	2.4
27	BT	3	LYS	2.4
37	CD	80	LYS	2.4
42	CI	16	LYS	2.4
49	F	48	GLU	2.4
50	G	134	LYS	2.4
51	H	24	GLU	2.4
51	CS	89	ILE	2.4
52	I	175	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
53	J	40	LYS	2.4
53	J	181	ILE	2.4
55	L	29	LYS	2.4
56	M	18	GLU	2.4
62	S	41	GLU	2.4
55	L	83	ILE	2.4
79	i	65	LYS	2.4
6	l	166	ALA	2.4
6	l	219	ALA	2.4
13	s	127	PHE	2.4
20	BM	154	ALA	2.4
26	8	84	PHE	2.4
26	BS	136	ALA	2.4
31	BX	17	ALA	2.4
31	BX	41	ALA	2.4
46	C	60	ALA	2.4
49	F	132	ALA	2.4
49	CQ	89	ALA	2.4
55	L	119	ALA	2.4
55	CW	114	PHE	2.4
58	CZ	27	ALA	2.4
60	Q	63	ALA	2.4
67	DI	54	ALA	2.4
78	AR	281	ALA	2.4
1	1	545	G	2.4
1	1	2838	U	2.4
1	1	3215	U	2.4
16	BI	165	THR	2.4
16	BI	196	THR	2.4
17	w	60	ARG	2.4
19	BL	58	ASN	2.4
29	AB	12	ARG	2.4
30	BW	11	ASN	2.4
36	AI	48	ARG	2.4
41	CH	15	CYS	2.4
21	0	98	THR	2.4
1	1	1099	A	2.4
1	1	2186	A	2.4
1	AS	175	G	2.4
1	AS	1558	G	2.4
3	4	80	U	2.4
3	AU	90	U	2.4

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Mol	Chain	Res	Type	RSRZ
3	AU	131	G	2.4
3	AU	147	U	2.4
4	j	199	THR	2.4
5	AX	28	ARG	2.4
46	CN	119	ARG	2.4
50	CR	257	ARG	2.4
51	H	148	ARG	2.4
51	CS	193	CYS	2.4
45	B	171	A	2.4
45	B	1098	A	2.4
45	B	1276	G	2.4
45	B	1404	G	2.4
45	CM	1405	G	2.4
54	CV	88	ASN	2.4
54	CV	97	THR	2.4
57	N	44	THR	2.4
66	W	59	THR	2.4
66	DH	59	THR	2.4
68	DJ	2	THR	2.4
78	AR	119	ASN	2.4
79	CL	66	ASN	2.4
45	CM	1570	A	2.4
7	AZ	119	TYR	2.3
18	BK	47	TYR	2.3
22	BO	13	TYR	2.3
23	BP	86	TYR	2.3
33	BZ	14	TYR	2.3
34	CA	51	TYR	2.3
48	E	217	TYR	2.3
56	M	63	TYR	2.3
72	c	73	TYR	2.3
4	j	180	LEU	2.3
18	x	123	PRO	2.3
25	BR	39	LEU	2.3
27	BT	109	LEU	2.3
29	BV	5	LEU	2.3
31	BX	36	LEU	2.3
31	BX	58	LEU	2.3
36	CC	42	PRO	2.3
38	CE	40	PRO	2.3
4	AW	204	MET	2.3
6	AY	49	GLN	2.3

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Mol	Chain	Res	Type	RSRZ
7	m	39	GLN	2.3
7	AZ	51	LEU	2.3
14	BG	54	LEU	2.3
16	v	134	LEU	2.3
16	BI	10	LEU	2.3
46	CN	9	LEU	2.3
59	DA	149	LEU	2.3
61	R	53	PRO	2.3
65	DG	90	PRO	2.3
69	DK	135	LEU	2.3
73	DO	7	LEU	2.3
73	DO	41	LEU	2.3
74	DP	9	LEU	2.3
28	AA	57	MET	2.3
61	R	111	MET	2.3
10	p	233	HIS	2.3
11	BD	119	GLY	2.3
12	r	188	GLY	2.3
16	v	189	HIS	2.3
16	BI	52	GLY	2.3
19	BL	169	GLY	2.3
54	CV	80	GLY	2.3
61	DC	113	GLY	2.3
71	DM	73	GLY	2.3
78	AR	36	GLY	2.3
78	AR	191	GLY	2.3
5	k	336	VAL	2.3
6	l	320	LYS	2.3
7	AZ	95	TRP	2.3
8	n	51	VAL	2.3
10	BC	52	LYS	2.3
10	BC	53	TRP	2.3
10	BC	125	ASP	2.3
10	BC	172	LYS	2.3
12	BE	190	VAL	2.3
17	BJ	105	VAL	2.3
20	BM	61	SER	2.3
23	BP	75	SER	2.3
27	BT	36	SER	2.3
35	AH	72	VAL	2.3
35	CB	23	VAL	2.3
41	CH	22	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
42	CI	5	TRP	2.3
43	CJ	46	LYS	2.3
47	D	29	TRP	2.3
55	CW	81	VAL	2.3
55	CW	141	VAL	2.3
57	N	135	VAL	2.3
58	O	119	SER	2.3
61	R	75	VAL	2.3
61	DC	86	VAL	2.3
62	S	120	SER	2.3
63	DE	10	LYS	2.3
65	DG	117	SER	2.3
67	X	35	SER	2.3
70	a	57	VAL	2.3
70	a	79	VAL	2.3
76	DR	21	VAL	2.3
77	h	179	ASP	2.3
79	CL	98	ASP	2.3
5	k	7	GLU	2.3
6	AY	216	ILE	2.3
13	s	110	ILE	2.3
13	BF	120	ILE	2.3
13	BF	148	ILE	2.3
27	9	50	ILE	2.3
28	BU	90	GLU	2.3
36	AI	100	GLU	2.3
37	CD	53	GLU	2.3
40	AM	27	ILE	2.3
48	E	124	ILE	2.3
55	CW	42	ILE	2.3
58	CZ	72	ILE	2.3
70	a	75	ILE	2.3
70	a	118	ILE	2.3
70	DL	101	GLU	2.3
79	i	114	GLU	2.3
1	AS	110	C	2.3
45	B	138	C	2.3
45	B	1651	C	2.3
45	CM	1365	C	2.3
4	AW	240	ALA	2.3
12	BE	94	PHE	2.3
13	BF	34	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
14	BG	86	ALA	2.3
14	BG	147	PHE	2.3
19	BL	121	ALA	2.3
20	BM	159	ALA	2.3
25	BR	119	ALA	2.3
32	AE	28	ALA	2.3
43	AP	103	ALA	2.3
54	CV	79	ALA	2.3
62	S	133	ALA	2.3
62	DD	85	ALA	2.3
73	DO	13	ALA	2.3
5	k	369	ARG	2.3
26	BS	125	ARG	2.3
38	CE	24	ARG	2.3
42	AO	15	ARG	2.3
46	CN	179	ARG	2.3
53	CU	100	ARG	2.3
54	CV	77	ARG	2.3
5	AX	261	ASN	2.3
6	AY	93	ASN	2.3
10	BC	189	THR	2.3
17	w	137	THR	2.3
31	AD	13	ASN	2.3
36	CC	11	THR	2.3
39	CF	76	THR	2.3
46	C	53	THR	2.3
46	C	164	ASN	2.3
54	CV	203	THR	2.3
64	U	87	ASN	2.3
65	DG	85	ASN	2.3
74	DP	26	THR	2.3
78	AR	200	THR	2.3
45	B	258	U	2.3
45	B	697	U	2.3
45	B	779	U	2.3
45	B	1325	U	2.3
45	CM	176	U	2.3
5	AX	133	TYR	2.3
13	s	12	LEU	2.3
1	1	1576	A	2.3
1	1	2071	A	2.3
1	AS	1608	A	2.3

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Mol	Chain	Res	Type	RSRZ
16	BI	74	PRO	2.3
20	z	138	LEU	2.3
24	BQ	67	PRO	2.3
33	AF	93	TYR	2.3
36	AI	28	LEU	2.3
50	G	103	TYR	2.3
52	CT	111	LEU	2.3
55	L	116	LEU	2.3
55	L	118	LEU	2.3
60	Q	78	LEU	2.3
60	DB	117	PRO	2.3
64	DF	42	TYR	2.3
68	Y	93	LEU	2.3
76	DR	49	LEU	2.3
78	AR	228	LEU	2.3
45	B	1410	A	2.3
45	CM	1587	A	2.3
1	1	478	G	2.3
1	1	2453	G	2.3
1	AS	1804	G	2.3
2	AT	49	G	2.3
7	AZ	39	GLN	2.3
45	CM	538	G	2.3
45	CM	1765	G	2.3
52	CT	176	GLN	2.3
4	AW	228	GLY	2.3
5	k	120	LYS	2.3
7	m	27	LYS	2.3
9	BB	96	LYS	2.3
9	BB	211	GLY	2.3
10	BC	235	GLY	2.3
14	BG	131	LYS	2.3
16	BI	169	LYS	2.3
18	BK	68	GLY	2.3
19	BL	15	HIS	2.3
20	z	129	GLY	2.3
20	z	135	LYS	2.3
23	5	13	LYS	2.3
25	BR	58	HIS	2.3
25	BR	84	GLY	2.3
29	AB	20	GLY	2.3
32	BY	53	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
35	CB	70	LYS	2.3
35	CB	86	LYS	2.3
36	CC	5	LYS	2.3
37	CD	74	LYS	2.3
42	AO	16	LYS	2.3
46	C	168	HIS	2.3
46	CN	92	HIS	2.3
47	D	194	GLY	2.3
56	CX	24	LYS	2.3
58	O	54	LYS	2.3
58	O	95	LYS	2.3
59	P	2	GLY	2.3
65	DG	72	GLY	2.3
67	X	57	GLY	2.3
5	AX	87	VAL	2.3
6	l	287	VAL	2.3
11	BD	167	VAL	2.3
12	r	79	VAL	2.3
14	BG	69	VAL	2.3
15	u	18	VAL	2.3
23	5	12	VAL	2.3
23	5	19	VAL	2.3
36	CC	47	VAL	2.3
37	CD	39	VAL	2.3
48	E	125	VAL	2.3
49	CQ	38	VAL	2.3
50	G	76	VAL	2.3
50	G	237	VAL	2.3
63	DE	15	VAL	2.3
66	W	115	VAL	2.3
72	c	30	VAL	2.3
5	k	328	ILE	2.3
28	AA	5	ILE	2.3
49	F	185	ILE	2.3
49	CQ	185	ILE	2.3
52	CT	141	ILE	2.3
61	DC	84	ILE	2.3
64	DF	69	ILE	2.3
66	DH	102	ILE	2.3
4	j	14	SER	2.3
4	AW	195	SER	2.3
8	n	11	SER	2.3

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Mol	Chain	Res	Type	RSRZ
16	v	97	SER	2.3
17	BJ	101	GLU	2.3
18	BK	109	SER	2.3
20	z	59	SER	2.3
28	AA	90	GLU	2.3
34	AG	58	GLU	2.3
35	AH	66	SER	2.3
38	AK	46	SER	2.3
46	C	43	ASP	2.3
63	T	103	ASP	2.3
72	c	52	ASP	2.3
75	DQ	25	SER	2.3
6	l	131	ALA	2.3
6	AY	358	ALA	2.3
10	p	28	PHE	2.3
10	BC	210	ALA	2.3
18	BK	9	ALA	2.3
20	BM	147	ALA	2.3
20	BM	168	ALA	2.3
24	BQ	21	ALA	2.3
24	BQ	95	PHE	2.3
28	BU	136	PHE	2.3
49	CQ	53	ALA	2.3
59	DA	144	ALA	2.3
60	Q	9	PHE	2.3
60	Q	54	ALA	2.3
5	AX	240	ARG	2.3
6	AY	247	ARG	2.3
18	x	181	ARG	2.3
19	BL	178	ARG	2.3
35	AH	41	ARG	2.3
42	CI	15	ARG	2.3
52	CT	223	ARG	2.3
59	DA	124	ARG	2.3
64	DF	88	ARG	2.3
78	AR	246	ARG	2.3
1	AS	3134	C	2.3
45	CM	130	C	2.3
45	CM	1344	C	2.3
7	AZ	261	THR	2.3
10	BC	202	THR	2.3
14	BG	171	THR	2.3

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Mol	Chain	Res	Type	RSRZ
33	BZ	64	THR	2.3
48	E	112	THR	2.3
51	CS	176	THR	2.3
53	J	74	THR	2.3
78	AR	146	THR	2.3
5	k	270	ASN	2.3
6	AY	56	ASN	2.3
22	2	27	LEU	2.3
22	2	128	LEU	2.3
26	BS	91	ASN	2.3
27	BT	57	LEU	2.3
27	BT	85	LEU	2.3
47	D	217	LEU	2.3
48	CP	129	LEU	2.3
50	CR	19	MET	2.3
57	N	5	LEU	2.3
64	DF	109	LEU	2.3
68	DJ	7	LEU	2.3
1	1	1272	U	2.3
1	1	2449	U	2.3
1	1	3354	U	2.3
1	AS	252	U	2.3
1	AS	928	U	2.3
1	AS	1908	U	2.3
3	AU	34	U	2.3
18	BK	123	PRO	2.3
35	AH	26	PRO	2.3
45	CM	270	U	2.3
45	CM	804	U	2.3
45	CM	824	U	2.3
59	DA	82	PRO	2.3
63	T	118	PRO	2.3
9	BB	74	TYR	2.3
24	BQ	92	TYR	2.3
29	BV	52	TYR	2.3
49	CQ	153	TYR	2.3
57	CY	35	TYR	2.3
78	AR	302	TYR	2.3
4	AW	234	LYS	2.3
10	p	147	LYS	2.3
18	BK	164	LYS	2.3
29	BV	77	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
31	BX	73	GLN	2.3
35	AH	70	LYS	2.3
41	CH	52	LYS	2.3
42	CI	7	LYS	2.3
51	H	37	GLN	2.3
52	CT	210	GLN	2.3
52	CT	229	LYS	2.3
56	CX	58	GLN	2.3
56	CX	93	LYS	2.3
73	d	26	GLN	2.3
73	DO	27	GLN	2.3
75	DQ	16	LYS	2.3
1	AS	11	A	2.3
1	AS	150	A	2.3
1	AS	351	A	2.3
1	AS	797	A	2.3
1	AS	910	A	2.3
1	AS	1692	A	2.3
1	AS	2185	A	2.3
6	AY	43	VAL	2.3
6	AY	143	VAL	2.3
10	BC	164	VAL	2.3
12	r	96	VAL	2.3
18	BK	113	VAL	2.3
20	BM	134	HIS	2.3
22	BO	145	GLY	2.3
23	5	43	VAL	2.3
23	5	99	VAL	2.3
26	BS	79	GLY	2.3
29	BV	67	HIS	2.3
29	BV	82	VAL	2.3
38	AK	23	GLY	2.3
38	CE	23	GLY	2.3
39	CF	56	VAL	2.3
43	CJ	94	GLY	2.3
45	B	1413	A	2.3
45	CM	673	A	2.3
52	I	158	VAL	2.3
63	DE	114	GLY	2.3
66	DH	115	VAL	2.3
70	a	92	VAL	2.3
70	DL	27	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
4	j	77	ILE	2.3
17	BJ	44	ILE	2.3
27	BT	97	ILE	2.3
51	CS	130	ILE	2.3
68	DJ	27	ILE	2.3
68	DJ	86	ILE	2.3
68	DJ	103	ILE	2.3
51	H	46	TRP	2.3
58	CZ	100	TRP	2.3
78	AR	86	TRP	2.3
1	1	2445	G	2.3
1	AS	74	G	2.3
1	AS	126	G	2.3
1	AS	1510	G	2.3
1	AS	1607	G	2.3
3	AU	114	G	2.3
16	BI	8	GLU	2.3
25	BR	88	GLU	2.3
4	AW	122	ASP	2.3
4	AW	159	SER	2.3
5	AX	345	ASP	2.3
6	l	279	SER	2.3
6	AY	190	ALA	2.3
7	m	147	ASP	2.3
9	o	214	ALA	2.3
10	BC	248	ALA	2.3
13	BF	66	ALA	2.3
23	BP	58	ALA	2.3
24	BQ	97	ASP	2.3
45	B	1246	G	2.3
45	CM	1038	G	2.3
45	CM	1470	G	2.3
45	CM	1594	G	2.3
50	CR	205	PHE	2.3
53	CU	165	PHE	2.3
60	DB	16	ALA	2.3
60	DB	29	SER	2.3
65	DG	95	ASP	2.3
70	DL	72	PHE	2.3
28	BU	19	ALA	2.3
28	BU	59	ALA	2.3
31	AD	97	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
32	BY	90	ALA	2.3
37	AJ	68	ALA	2.3
48	CP	218	SER	2.3
48	CP	244	ALA	2.3
51	CS	171	ALA	2.3
11	q	166	ARG	2.3
16	v	201	ARG	2.3
16	BI	159	ARG	2.3
17	BJ	50	ARG	2.3
19	y	66	ARG	2.3
29	BV	4	ARG	2.3
49	F	144	ARG	2.3
55	CW	126	ARG	2.3
63	T	78	ARG	2.3
72	DN	85	ARG	2.3
14	BG	174	LEU	2.3
18	BK	22	LEU	2.3
19	BL	49	LEU	2.3
19	BL	71	LEU	2.3
20	BM	177	LEU	2.3
21	BN	45	LEU	2.3
38	CE	8	LEU	2.3
48	CP	108	LEU	2.3
50	G	189	LEU	2.3
51	CS	174	LEU	2.3
52	CT	124	LEU	2.3
59	DA	16	LEU	2.3
68	DJ	93	LEU	2.3
78	AR	271	LEU	2.3
35	CB	68	THR	2.3
57	CY	134	THR	2.3
62	S	36	THR	2.3
65	V	39	THR	2.3
1	1	2076	C	2.3
1	1	2473	C	2.3
1	AS	27	C	2.3
1	AS	546	C	2.3
1	AS	1578	C	2.3
33	BZ	6	PRO	2.3
45	B	237	C	2.3
52	I	130	PRO	2.3
55	L	15	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
76	g	60	PRO	2.3
78	AR	30	PRO	2.3
6	l	333	LYS	2.3
6	AY	362	LYS	2.3
14	BG	16	LYS	2.3
16	BI	128	LYS	2.3
20	z	156	LYS	2.3
20	BM	36	ASN	2.3
29	AB	19	LYS	2.3
30	BW	23	LYS	2.3
33	BZ	19	LYS	2.3
40	CG	20	ASN	2.3
57	CY	28	ASN	2.3
59	P	70	LYS	2.3
59	DA	140	LYS	2.3
60	Q	31	LYS	2.3
63	DE	116	LYS	2.3
64	DF	80	LYS	2.3
1	1	1816	U	2.3
1	1	2183	U	2.3
1	1	2442	U	2.3
1	1	3214	U	2.3
1	AS	302	U	2.3
3	AU	125	U	2.3
3	AU	128	U	2.3
7	AZ	86	TYR	2.3
13	BF	52	TYR	2.3
16	BI	23	TYR	2.3
16	BI	94	TYR	2.3
33	BZ	26	TYR	2.3
70	a	48	TYR	2.3
71	b	101	TYR	2.3
73	d	77	CYS	2.3
79	CL	52	LYS	2.3
79	CL	82	LYS	2.3
44	AQ	25	GLN	2.3
45	CM	696	U	2.3
45	CM	1244	U	2.3
45	CM	1347	U	2.3
61	DC	115	TYR	2.3
48	E	89	GLN	2.3
4	AW	55	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
4	AW	88	ILE	2.3
15	BH	33	ILE	2.3
19	BL	87	VAL	2.3
19	BL	142	GLY	2.3
20	z	93	VAL	2.3
23	BP	45	GLY	2.3
24	BQ	101	VAL	2.3
28	BU	89	VAL	2.3
33	BZ	80	VAL	2.3
34	AG	52	VAL	2.3
43	CJ	52	GLY	2.3
26	8	62	ILE	2.3
44	CK	8	VAL	2.3
44	CK	83	ILE	2.3
47	D	210	VAL	2.3
48	E	213	ILE	2.3
53	CU	181	ILE	2.3
55	L	52	ILE	2.3
64	U	22	ILE	2.3
66	W	64	ILE	2.3
68	Y	33	VAL	2.3
69	Z	57	ILE	2.3
72	c	86	VAL	2.3
74	DP	30	VAL	2.3
1	1	2291	A	2.3
1	AS	1542	A	2.3
5	AX	106	TRP	2.3
29	AB	53	PHE	2.3
33	BZ	47	PHE	2.3
45	B	1478	A	2.3
45	CM	134	A	2.3
45	CM	1297	A	2.3
56	CX	59	PHE	2.3
6	l	255	ALA	2.3
7	AZ	267	ALA	2.3
39	CF	10	GLU	2.3
40	AM	26	TRP	2.3
13	s	137	ARG	2.3
23	BP	93	ARG	2.3
28	AA	117	ALA	2.3
36	CC	10	ARG	2.3
39	AL	2	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
39	CF	59	ALA	2.3
59	P	81	ALA	2.3
63	T	37	GLU	2.3
69	Z	24	TRP	2.3
43	CJ	103	ALA	2.3
70	a	39	GLU	2.3
74	e	49	ARG	2.3
78	AR	28	ALA	2.3
78	AR	236	GLU	2.3
79	CL	61	GLU	2.3
50	G	3	ARG	2.3
56	M	91	ARG	2.3
60	DB	130	ARG	2.3
66	DH	67	ARG	2.3
22	2	9	SER	2.3
26	BS	106	ASP	2.3
27	BT	62	SER	2.3
35	CB	49	SER	2.3
39	CF	22	SER	2.3
49	CQ	170	ASP	2.3
53	CU	164	SER	2.3
54	CV	86	SER	2.3
70	DL	14	SER	2.3
78	AR	61	SER	2.3
78	AR	255	SER	2.3
76	g	56	MET	2.3
1	1	450	G	2.3
1	AS	63	G	2.3
1	AS	300	G	2.3
1	AS	1469	G	2.3
1	AS	1516	G	2.3
1	AS	1562	G	2.3
1	AS	2089	G	2.3
1	AS	2100	G	2.3
1	AS	2944	G	2.3
3	AU	136	G	2.3
13	BF	19	LEU	2.3
32	BY	88	LEU	2.3
45	B	394	G	2.3
45	CM	1228	G	2.3
48	CP	235	LEU	2.3
55	CW	118	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
57	CY	140	LEU	2.3
69	DK	33	LEU	2.3
72	DN	53	LEU	2.3
4	AW	178	PRO	2.3
5	AX	242	THR	2.3
6	AY	47	LYS	2.3
16	BI	80	THR	2.3
17	w	104	LYS	2.3
17	w	115	LYS	2.3
19	BL	50	LYS	2.3
27	9	89	LYS	2.3
33	AF	64	THR	2.3
50	G	146	THR	2.3
52	CT	93	LYS	2.3
52	CT	167	LYS	2.3
55	L	67	PRO	2.3
57	N	30	LYS	2.3
62	DD	22	LYS	2.3
63	T	63	LYS	2.3
70	DL	83	LYS	2.3
77	h	166	PRO	2.3
13	BF	150	ASN	2.2
37	CD	62	ASN	2.2
40	CG	38	ASN	2.2
54	K	52	ASN	2.2
73	DO	42	ASN	2.2
7	m	99	TYR	2.2
7	m	114	GLY	2.2
10	BC	56	TYR	2.2
11	q	165	CYS	2.2
12	r	75	TYR	2.2
11	BD	48	ILE	2.2
13	BF	152	HIS	2.2
14	BG	30	GLY	2.2
14	BG	151	GLN	2.2
16	v	129	TYR	2.2
1	1	2079	C	2.2
1	AS	309	U	2.2
1	AS	1077	U	2.2
1	AS	1627	C	2.2
1	AS	1686	C	2.2
1	AS	2744	C	2.2

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Mol	Chain	Res	Type	RSRZ
3	AU	23	U	2.2
5	AX	252	ILE	2.2
18	x	136	ILE	2.2
20	z	41	ILE	2.2
22	BO	23	GLY	2.2
22	BO	64	VAL	2.2
22	BO	149	GLN	2.2
26	BS	53	HIS	2.2
26	BS	63	ILE	2.2
27	9	6	GLN	2.2
28	AA	72	VAL	2.2
32	BY	107	VAL	2.2
33	BZ	118	VAL	2.2
34	AG	81	VAL	2.2
39	AL	35	GLY	2.2
39	AL	50	TYR	2.2
44	AQ	71	VAL	2.2
45	B	130	C	2.2
46	C	37	VAL	2.2
46	C	86	VAL	2.2
45	B	260	U	2.2
45	B	1317	C	2.2
45	CM	1611	C	2.2
47	D	204	ILE	2.2
49	CQ	59	VAL	2.2
50	CR	194	VAL	2.2
51	CS	64	ILE	2.2
52	I	199	GLN	2.2
57	CY	84	ILE	2.2
59	DA	44	GLY	2.2
60	DB	70	GLY	2.2
62	S	18	VAL	2.2
69	DK	4	GLY	2.2
69	DK	17	VAL	2.2
70	DL	48	TYR	2.2
72	DN	62	TYR	2.2
21	0	88	HIS	2.2
41	CH	19	ILE	2.2
62	S	35	ILE	2.2
65	V	100	ILE	2.2
70	DL	118	ILE	2.2
75	f	17	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
79	i	119	VAL	2.2
24	6	11	PHE	2.2
25	BR	31	PHE	2.2
49	F	78	PHE	2.2
57	N	42	PHE	2.2
4	AW	106	ALA	2.2
6	l	198	ARG	2.2
6	AY	229	ALA	2.2
7	AZ	291	ALA	2.2
13	s	61	ARG	2.2
13	s	143	ARG	2.2
14	t	173	ARG	2.2
14	BG	71	ALA	2.2
16	BI	188	ARG	2.2
18	x	177	ALA	2.2
20	BM	145	ALA	2.2
23	5	95	TRP	2.2
24	6	44	ALA	2.2
25	BR	81	ALA	2.2
26	BS	65	ALA	2.2
27	BT	12	ARG	2.2
30	BW	58	ARG	2.2
32	AE	2	ALA	2.2
39	AL	16	ARG	2.2
40	CG	36	ARG	2.2
46	CN	26	ALA	2.2
46	CN	175	TRP	2.2
48	E	90	ARG	2.2
48	E	244	ALA	2.2
50	CR	255	ARG	2.2
50	CR	256	ARG	2.2
51	CS	202	ALA	2.2
52	I	161	GLU	2.2
58	O	77	ALA	2.2
59	DA	99	ARG	2.2
62	DD	118	ALA	2.2
65	DG	11	ALA	2.2
69	Z	25	ALA	2.2
69	Z	138	GLU	2.2
70	DL	132	ARG	2.2
72	DN	28	ARG	2.2
75	f	22	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
1	1	1918	A	2.2
1	1	2091	A	2.2
1	AS	1843	A	2.2
45	CM	1694	A	2.2
6	l	11	SER	2.2
6	AY	137	LEU	2.2
17	w	2	SER	2.2
17	w	25	SER	2.2
17	BJ	59	LEU	2.2
21	0	162	LEU	2.2
28	AA	134	LEU	2.2
31	BX	16	LEU	2.2
33	AF	82	ASP	2.2
47	D	172	MET	2.2
49	F	178	MET	2.2
50	G	65	MET	2.2
66	W	91	ASP	2.2
68	DJ	85	ASP	2.2
72	DN	44	MET	2.2
33	AF	83	LEU	2.2
36	AI	88	LEU	2.2
36	CC	28	LEU	2.2
48	E	108	LEU	2.2
49	F	111	LEU	2.2
50	CR	38	LEU	2.2
50	CR	48	LEU	2.2
51	CS	96	SER	2.2
59	DA	61	SER	2.2
78	AR	75	SER	2.2
78	AR	168	SER	2.2
79	i	99	SER	2.2
20	BM	46	LYS	2.2
35	AH	29	LYS	2.2
41	AN	7	LYS	2.2
47	D	160	LYS	2.2
63	T	32	LYS	2.2
74	e	11	LYS	2.2
76	DR	29	LYS	2.2
79	i	100	LYS	2.2
29	BV	2	PRO	2.2
29	BV	119	PRO	2.2
40	CG	2	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
58	CZ	87	PRO	2.2
76	DR	30	PRO	2.2
76	DR	58	PRO	2.2
8	BA	152	THR	2.2
10	p	202	THR	2.2
10	BC	102	THR	2.2
16	BI	126	THR	2.2
21	BN	98	THR	2.2
22	BO	29	THR	2.2
49	F	71	THR	2.2
60	DB	84	THR	2.2
76	DR	48	THR	2.2
1	1	443	G	2.2
1	AS	157	G	2.2
1	AS	796	G	2.2
1	AS	1350	G	2.2
1	AS	1425	G	2.2
1	AS	2102	G	2.2
1	AS	2163	G	2.2
1	AS	2372	G	2.2
5	AX	25	GLN	2.2
6	l	356	GLN	2.2
6	AY	58	GLY	2.2
13	s	120	ILE	2.2
7	m	86	TYR	2.2
9	o	211	GLY	2.2
18	BK	28	ASN	2.2
18	BK	36	ILE	2.2
18	BK	118	GLN	2.2
27	BT	50	ILE	2.2
29	BV	60	TYR	2.2
29	BV	142	GLY	2.2
31	AD	106	ILE	2.2
33	AF	80	VAL	2.2
39	AL	5	ILE	2.2
45	B	127	G	2.2
45	B	1655	G	2.2
45	CM	669	G	2.2
45	CM	1150	G	2.2
45	CM	1472	G	2.2
46	CN	188	ILE	2.2
47	CO	215	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
48	E	107	GLY	2.2
48	CP	51	ILE	2.2
48	CP	173	ILE	2.2
49	F	129	GLY	2.2
49	F	139	ILE	2.2
50	G	195	ILE	2.2
50	CR	90	ILE	2.2
50	CR	169	ILE	2.2
52	CT	114	VAL	2.2
53	J	22	VAL	2.2
55	L	85	VAL	2.2
57	N	94	VAL	2.2
57	CY	117	VAL	2.2
61	DC	112	VAL	2.2
62	S	64	ILE	2.2
64	U	81	ILE	2.2
65	DG	100	ILE	2.2
64	DF	99	HIS	2.2
65	V	121	GLY	2.2
71	DM	71	ILE	2.2
78	AR	237	VAL	2.2
18	BK	139	TYR	2.2
31	AD	70	TYR	2.2
51	H	72	HIS	2.2
51	CS	209	TYR	2.2
65	DG	55	TYR	2.2
1	1	2252	U	2.2
1	1	2460	U	2.2
1	1	2546	U	2.2
1	AS	401	U	2.2
1	AS	1568	U	2.2
1	AS	2537	U	2.2
1	AS	3127	U	2.2
1	AS	3227	C	2.2
1	AS	3246	C	2.2
3	AU	142	C	2.2
5	k	117	ARG	2.2
5	AX	334	ARG	2.2
6	AY	101	PHE	2.2
10	BC	92	PHE	2.2
13	s	145	ARG	2.2
14	BG	15	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
14	BG	26	PHE	2.2
45	CM	502	U	2.2
1	1	543	C	2.2
1	1	1033	C	2.2
1	1	1215	C	2.2
1	1	1352	C	2.2
1	AS	927	C	2.2
1	AS	1215	C	2.2
1	AS	1640	C	2.2
22	2	5	ARG	2.2
24	BQ	88	ARG	2.2
45	B	4	C	2.2
45	CM	1350	C	2.2
45	CM	1442	C	2.2
45	CM	1514	C	2.2
46	CN	79	ARG	2.2
49	F	117	ARG	2.2
53	CU	127	PHE	2.2
65	V	21	PHE	2.2
68	Y	128	PHE	2.2
69	Z	43	PHE	2.2
75	DQ	12	ARG	2.2
5	k	378	ALA	2.2
6	AY	138	ALA	2.2
7	AZ	11	ALA	2.2
7	AZ	98	ALA	2.2
7	AZ	157	ALA	2.2
8	n	129	GLU	2.2
11	BD	153	ALA	2.2
13	BF	108	GLU	2.2
23	5	112	ALA	2.2
34	AG	96	ALA	2.2
36	AI	52	ALA	2.2
39	CF	33	ALA	2.2
46	CN	60	ALA	2.2
53	CU	14	GLU	2.2
58	CZ	94	ALA	2.2
61	DC	39	ALA	2.2
68	DJ	96	ALA	2.2
72	c	60	ALA	2.2
76	DR	61	ALA	2.2
78	AR	235	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
5	AX	233	TRP	2.2
6	l	107	TRP	2.2
7	AZ	183	TRP	2.2
21	BN	42	TRP	2.2
59	P	4	MET	2.2
10	p	47	LEU	2.2
12	r	206	LEU	2.2
12	BE	200	LEU	2.2
20	BM	155	LEU	2.2
31	BX	86	LEU	2.2
34	CA	80	LEU	2.2
34	CA	89	LEU	2.2
36	CC	21	LEU	2.2
47	CO	103	LEU	2.2
60	Q	132	LEU	2.2
75	f	36	LEU	2.2
5	k	201	LYS	2.2
8	BA	59	ASP	2.2
9	o	156	LYS	2.2
10	BC	182	LYS	2.2
14	BG	88	LYS	2.2
24	BQ	124	ASP	2.2
26	8	75	LYS	2.2
33	BZ	65	LYS	2.2
35	AH	36	LYS	2.2
43	CJ	13	LYS	2.2
46	C	150	ASP	2.2
47	CO	216	LYS	2.2
54	CV	148	LYS	2.2
55	CW	58	ASP	2.2
62	DD	112	ASP	2.2
78	AR	226	LYS	2.2
79	CL	37	LYS	2.2
1	1	1917	A	2.2
1	1	2464	A	2.2
1	AS	804	A	2.2
3	AU	149	A	2.2
7	AZ	66	SER	2.2
10	BC	127	SER	2.2
12	r	20	SER	2.2
18	BK	144	SER	2.2
21	BN	85	SER	2.2

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Mol	Chain	Res	Type	RSRZ
33	BZ	100	SER	2.2
45	B	539	A	2.2
45	B	542	A	2.2
45	B	1314	A	2.2
45	B	1329	A	2.2
45	CM	1476	A	2.2
48	CP	130	SER	2.2
63	DE	36	SER	2.2
65	DG	125	SER	2.2
7	AZ	177	PRO	2.2
46	C	126	PRO	2.2
70	DL	16	PRO	2.2
79	i	48	PRO	2.2
7	m	76	THR	2.2
29	BV	43	THR	2.2
52	CT	12	THR	2.2
52	CT	128	THR	2.2
61	R	11	THR	2.2
62	S	52	THR	2.2
64	DF	140	THR	2.2
66	W	116	THR	2.2
66	DH	26	THR	2.2
4	j	230	VAL	2.2
6	AY	7	VAL	2.2
7	AZ	239	ILE	2.2
9	BB	233	ILE	2.2
11	q	20	ILE	2.2
12	BE	99	ILE	2.2
15	BH	32	ILE	2.2
8	n	168	GLY	2.2
9	o	75	VAL	2.2
12	r	117	GLY	2.2
17	w	7	VAL	2.2
19	y	101	ILE	2.2
19	y	140	VAL	2.2
20	BM	73	GLY	2.2
20	BM	164	VAL	2.2
36	AI	66	VAL	2.2
38	CE	9	GLY	2.2
39	AL	45	VAL	2.2
43	AP	57	ILE	2.2
48	E	188	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
51	CS	134	VAL	2.2
51	CS	116	HIS	2.2
55	L	32	GLY	2.2
56	M	55	VAL	2.2
59	DA	84	ILE	2.2
63	T	61	ILE	2.2
63	DE	119	VAL	2.2
66	DH	99	VAL	2.2
68	Y	34	ILE	2.2
69	DK	117	ILE	2.2
72	c	41	ILE	2.2
69	DK	2	GLY	2.2
74	DP	12	VAL	2.2
19	BL	152	HIS	2.2
25	BR	96	GLN	2.2
28	BU	122	HIS	2.2
29	BV	62	HIS	2.2
38	CE	47	HIS	2.2
52	I	182	GLN	2.2
54	K	20	GLN	2.2
58	O	139	HIS	2.2
59	DA	123	HIS	2.2
69	DK	75	GLN	2.2
10	BC	205	ASN	2.2
24	6	94	TYR	2.2
26	8	111	ASN	2.2
30	AC	27	TYR	2.2
38	CE	66	TYR	2.2
74	e	43	ASN	2.2
75	f	13	ASN	2.2
5	k	150	ARG	2.2
18	BK	76	PHE	2.2
23	5	28	PHE	2.2
46	CN	81	PHE	2.2
48	CP	90	ARG	2.2
54	CV	59	ARG	2.2
55	L	47	PHE	2.2
60	DB	9	PHE	2.2
62	S	9	PHE	2.2
70	DL	84	ARG	2.2
1	1	775	G	2.2
1	1	1349	U	2.2

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Mol	Chain	Res	Type	RSRZ
1	1	3204	G	2.2
1	AS	214	G	2.2
1	AS	250	U	2.2
1	AS	1551	U	2.2
1	AS	2546	U	2.2
1	AS	2582	G	2.2
3	AU	70	G	2.2
4	AW	26	ALA	2.2
7	AZ	77	ALA	2.2
10	p	114	ALA	2.2
10	BC	179	ALA	2.2
14	BG	82	ALA	2.2
19	BL	110	ALA	2.2
38	AK	50	ALA	2.2
38	AK	85	ALA	2.2
45	B	190	U	2.2
45	B	1347	U	2.2
45	B	1499	G	2.2
45	CM	637	U	2.2
45	CM	675	U	2.2
45	CM	821	U	2.2
45	CM	989	U	2.2
45	CM	1339	G	2.2
45	CM	1441	G	2.2
45	CM	1767	G	2.2
46	CN	91	ALA	2.2
49	F	158	MET	2.2
57	N	144	ALA	2.2
59	DA	146	ALA	2.2
67	X	30	ALA	2.2
69	Z	12	ALA	2.2
75	DQ	48	ALA	2.2
79	i	63	ALA	2.2
10	p	209	GLU	2.2
53	CU	8	GLU	2.2
68	DJ	114	GLU	2.2
79	i	116	GLU	2.2
4	AW	150	LEU	2.2
5	AX	338	LEU	2.2
6	AY	251	TRP	2.2
8	BA	8	TRP	2.2
37	AJ	76	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
40	CG	23	LEU	2.2
46	C	175	TRP	2.2
47	CO	113	LEU	2.2
49	CQ	47	LEU	2.2
50	G	247	LEU	2.2
59	DA	102	LEU	2.2
66	W	25	LEU	2.2
75	DQ	38	LEU	2.2
78	AR	267	LEU	2.2
1	AS	68	C	2.2
1	AS	1011	C	2.2
1	AS	1573	C	2.2
1	AS	1694	C	2.2
1	AS	3039	C	2.2
2	AT	6	C	2.2
3	AU	57	C	2.2
5	k	175	LYS	2.2
6	l	349	LYS	2.2
6	AY	354	LYS	2.2
10	p	44	LYS	2.2
14	BG	68	LYS	2.2
17	w	68	LYS	2.2
19	BL	159	LYS	2.2
21	BN	50	LYS	2.2
26	BS	120	LYS	2.2
30	AC	15	LYS	2.2
33	AF	78	LYS	2.2
34	CA	70	LYS	2.2
41	AN	38	LYS	2.2
45	B	753	C	2.2
45	B	1182	C	2.2
48	E	111	LYS	2.2
60	DB	77	LYS	2.2
72	c	3	LYS	2.2
7	m	137	ASP	2.2
19	BL	143	PRO	2.2
31	BX	96	ASP	2.2
50	CR	170	ASP	2.2
51	CS	164	PRO	2.2
53	CU	23	ASP	2.2
72	DN	98	PRO	2.2
78	AR	52	ASP	2.2

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Mol	Chain	Res	Type	RSRZ
10	BC	48	SER	2.2
12	r	219	SER	2.2
28	BU	86	SER	2.2
30	AC	31	SER	2.2
38	CE	36	SER	2.2
52	CT	82	SER	2.2
54	CV	45	SER	2.2
62	DD	2	SER	2.2
63	T	123	SER	2.2
68	DJ	58	SER	2.2
1	1	2446	A	2.2
1	AS	1414	A	2.2
1	AS	1805	A	2.2
1	AS	1861	A	2.2
1	AS	2502	A	2.2
1	AS	2520	A	2.2
3	AU	59	A	2.2
4	j	207	VAL	2.2
5	AX	278	ILE	2.2
6	AY	182	VAL	2.2
7	AZ	227	ILE	2.2
11	q	71	VAL	2.2
11	BD	99	ILE	2.2
12	BE	91	VAL	2.2
13	BF	171	VAL	2.2
18	BK	58	ILE	2.2
22	2	48	ILE	2.2
24	BQ	114	ILE	2.2
35	AH	31	VAL	2.2
39	AL	12	VAL	2.2
45	CM	1008	A	2.2
45	CM	1736	A	2.2
46	C	122	VAL	2.2
46	CN	156	VAL	2.2
47	D	201	THR	2.2
47	CO	43	VAL	2.2
48	E	178	VAL	2.2
52	CT	52	ILE	2.2
52	CT	89	THR	2.2
55	L	42	ILE	2.2
55	L	130	THR	2.2
57	N	131	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
60	DB	76	ILE	2.2
68	Y	86	ILE	2.2
68	Y	90	THR	2.2
74	e	53	ILE	2.2
79	i	97	THR	2.2
6	AY	97	GLY	2.2
7	m	169	GLY	2.2
7	AZ	121	GLY	2.2
13	s	24	GLY	2.2
32	AE	65	GLY	2.2
48	E	88	GLY	2.2
48	E	140	GLY	2.2
54	CV	15	GLY	2.2
77	h	169	GLY	2.2
9	o	17	GLN	2.2
16	BI	189	HIS	2.2
18	BK	99	GLN	2.2
19	y	27	GLN	2.2
19	BL	9	GLN	2.2
37	CD	91	GLN	2.2
46	CN	131	GLN	2.2
52	CT	59	GLN	2.2
56	M	58	GLN	2.2
57	CY	18	HIS	2.2
75	DQ	23	HIS	2.2
4	AW	133	TYR	2.2
10	BC	146	ASN	2.2
24	BQ	32	ARG	2.2
28	AA	15	ARG	2.2
29	AB	42	ARG	2.2
30	BW	41	ARG	2.2
36	CC	86	ARG	2.2
37	CD	75	ARG	2.2
44	CK	85	ARG	2.2
49	CQ	26	PHE	2.2
50	G	175	PHE	2.2
51	CS	185	ARG	2.2
55	CW	132	ARG	2.2
59	P	138	ASN	2.2
59	DA	42	ARG	2.2
61	R	97	TYR	2.2
68	Y	3	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
69	Z	7	ARG	2.2
22	BO	52	MET	2.2
28	AA	81	MET	2.2
67	X	1	MET	2.2
4	AW	56	ALA	2.2
5	AX	107	ALA	2.2
12	BE	25	ALA	2.2
25	BR	104	ALA	2.2
35	AH	2	ALA	2.2
48	CP	242	ALA	2.2
51	H	74	ALA	2.2
54	CV	156	ALA	2.2
66	W	96	ALA	2.2
5	AX	47	LEU	2.2
6	AY	95	CYS	2.2
1	1	731	U	2.2
1	AS	298	U	2.2
1	AS	1012	U	2.2
5	AX	120	LYS	2.2
5	AX	236	LYS	2.2
7	AZ	43	LYS	2.2
10	BC	64	LYS	2.2
10	BC	167	LEU	2.2
11	BD	176	LEU	2.2
14	BG	150	GLU	2.2
17	w	101	GLU	2.2
18	BK	48	LEU	2.2
20	z	177	LEU	2.2
22	BO	87	LYS	2.2
23	BP	50	LEU	2.2
29	AB	63	LYS	2.2
32	BY	30	LYS	2.2
39	AL	74	LYS	2.2
39	CF	6	LYS	2.2
40	AM	18	LYS	2.2
43	AP	16	GLU	2.2
45	CM	33	U	2.2
45	CM	709	U	2.2
47	CO	144	LYS	2.2
51	CS	35	GLU	2.2
51	CS	119	GLU	2.2
52	CT	221	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
53	J	144	LYS	2.2
53	CU	125	LEU	2.2
56	CX	79	GLU	2.2
58	O	28	LEU	2.2
58	O	36	LEU	2.2
58	O	96	LEU	2.2
59	P	107	LYS	2.2
59	DA	28	LEU	2.2
60	DB	31	LYS	2.2
62	DD	46	LYS	2.2
62	DD	86	LYS	2.2
73	DO	22	LYS	2.2
78	AR	7	LEU	2.2
78	AR	46	LYS	2.2
64	DF	84	TRP	2.2
69	DK	24	TRP	2.2
78	AR	93	TRP	2.2
1	1	2429	G	2.2
1	1	2452	G	2.2
1	AS	17	G	2.2
1	AS	20	G	2.2
1	AS	1521	G	2.2
1	AS	1534	G	2.2
1	AS	1642	G	2.2
1	AS	1747	G	2.2
1	AS	1841	G	2.2
1	AS	1949	G	2.2
1	AS	2251	G	2.2
45	B	142	G	2.2
45	B	507	G	2.2
45	CM	226	G	2.2
45	CM	819	G	2.2
45	CM	822	G	2.2
45	CM	831	G	2.2
45	CM	999	G	2.2
45	CM	1353	G	2.2
45	CM	1707	G	2.2
50	CR	240	PRO	2.2
53	CU	59	PRO	2.2
72	DN	65	PRO	2.2
75	DQ	11	PRO	2.2
1	1	240	C	2.2

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Mol	Chain	Res	Type	RSRZ
1	1	2470	C	2.2
1	AS	71	C	2.2
45	B	1259	C	2.2
45	CM	1619	C	2.2
49	CQ	214	ASP	2.2
58	CZ	39	ASP	2.2
72	DN	91	ASP	2.2
4	AW	114	SER	2.2
6	AY	18	SER	2.2
10	p	117	ILE	2.2
13	BF	26	SER	2.2
14	BG	95	ILE	2.2
16	v	64	ILE	2.2
17	BJ	2	SER	2.2
18	BK	87	SER	2.2
27	9	4	ILE	2.2
35	CB	66	SER	2.2
38	CE	15	SER	2.2
49	F	173	ILE	2.2
51	H	130	ILE	2.2
51	CS	151	SER	2.2
59	P	92	ILE	2.2
61	R	46	SER	2.2
62	S	75	SER	2.2
66	DH	49	ILE	2.2
6	AY	53	VAL	2.2
9	BB	154	VAL	2.2
19	BL	186	VAL	2.2
22	BO	79	VAL	2.2
31	BX	69	VAL	2.2
36	AI	54	VAL	2.2
47	D	164	VAL	2.2
52	I	41	VAL	2.2
52	CT	179	VAL	2.2
54	K	81	VAL	2.2
54	CV	81	VAL	2.2
57	CY	75	VAL	2.2
62	S	117	VAL	2.2
68	DJ	25	VAL	2.2
5	AX	245	GLY	2.1
6	l	97	GLY	2.1
6	AY	163	THR	2.1

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Mol	Chain	Res	Type	RSRZ
10	p	122	THR	2.1
11	BD	44	THR	2.1
14	BG	94	GLY	2.1
16	BI	82	GLY	2.1
27	BT	107	THR	2.1
32	AE	100	THR	2.1
46	C	80	THR	2.1
47	CO	194	GLY	2.1
50	G	26	THR	2.1
56	M	57	THR	2.1
58	CZ	110	GLY	2.1
68	Y	39	THR	2.1
66	DH	86	HIS	2.1
1	1	780	A	2.1
1	AS	1570	A	2.1
1	AS	3192	A	2.1
3	AU	40	A	2.1
4	j	184	ARG	2.1
10	p	58	ARG	2.1
16	BI	49	ARG	2.1
23	BP	97	ARG	2.1
29	BV	128	ARG	2.1
45	CM	65	A	2.1
45	CM	540	A	2.1
45	CM	962	A	2.1
45	CM	1331	A	2.1
53	CU	67	ARG	2.1
54	K	42	ARG	2.1
55	L	62	ARG	2.1
61	DC	43	ARG	2.1
71	DM	98	GLN	2.1
5	AX	119	TYR	2.1
7	m	12	TYR	2.1
16	v	202	TYR	2.1
18	x	130	TYR	2.1
20	z	120	TYR	2.1
20	BM	124	TYR	2.1
21	BN	172	TYR	2.1
22	BO	127	TYR	2.1
32	BY	11	TYR	2.1
55	L	34	TYR	2.1
59	P	18	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
68	Y	111	MET	2.1
72	c	59	TYR	2.1
4	j	102	LEU	2.1
6	l	234	LEU	2.1
7	AZ	103	LEU	2.1
8	n	5	ALA	2.1
9	o	106	LEU	2.1
9	BB	103	LEU	2.1
10	p	200	ALA	2.1
11	q	95	ALA	2.1
13	s	66	ALA	2.1
14	t	29	ALA	2.1
14	BG	45	LYS	2.1
15	BH	62	LEU	2.1
18	BK	35	ALA	2.1
18	BK	80	LYS	2.1
19	BL	20	LYS	2.1
19	BL	70	ALA	2.1
20	z	150	LEU	2.1
22	BO	113	ALA	2.1
33	BZ	122	ASN	2.1
31	AD	58	LEU	2.1
31	BX	21	LYS	2.1
33	AF	2	ALA	2.1
41	AN	43	ASN	2.1
46	C	14	ALA	2.1
47	D	40	ASN	2.1
49	CQ	36	ALA	2.1
54	K	87	ASN	2.1
46	CN	15	LYS	2.1
47	D	86	LEU	2.1
47	D	103	LEU	2.1
47	CO	207	LEU	2.1
48	E	128	LYS	2.1
49	CQ	114	LEU	2.1
54	K	133	ALA	2.1
58	O	111	ASN	2.1
65	DG	127	ASN	2.1
57	N	43	LYS	2.1
57	CY	46	LYS	2.1
58	CZ	62	LEU	2.1
58	CZ	101	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
70	DL	133	ASN	2.1
25	BR	87	LEU	2.1
25	BR	116	LYS	2.1
26	BS	75	LYS	2.1
27	9	84	LYS	2.1
27	BT	63	LYS	2.1
56	M	24	LYS	2.1
56	M	52	LYS	2.1
59	P	104	LYS	2.1
60	Q	97	LEU	2.1
63	T	44	LYS	2.1
64	DF	139	LYS	2.1
70	a	91	LEU	2.1
72	c	35	ALA	2.1
76	DR	34	ALA	2.1
78	AR	44	LYS	2.1
78	AR	90	LEU	2.1
78	AR	154	ALA	2.1
79	i	52	LYS	2.1
79	CL	49	ALA	2.1
6	AY	359	GLU	2.1
7	AZ	281	GLU	2.1
9	BB	168	GLU	2.1
21	0	57	GLU	2.1
22	2	104	GLU	2.1
46	CN	154	GLU	2.1
53	J	78	GLU	2.1
12	r	49	CYS	2.1
57	CY	128	CYS	2.1
1	1	1019	U	2.1
1	1	2067	U	2.1
1	1	2537	U	2.1
1	1	3284	U	2.1
1	AS	18	U	2.1
1	AS	257	U	2.1
1	AS	1091	U	2.1
1	AS	1626	U	2.1
1	AS	1736	U	2.1
45	B	817	U	2.1
45	B	828	U	2.1
45	B	1043	U	2.1
45	CM	259	U	2.1

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Mol	Chain	Res	Type	RSRZ
45	CM	655	U	2.1
7	m	84	PRO	2.1
11	BD	30	PRO	2.1
46	CN	42	PRO	2.1
51	H	164	PRO	2.1
52	I	173	PRO	2.1
58	O	82	PRO	2.1
61	R	109	PRO	2.1
69	Z	6	PRO	2.1
71	DM	91	PRO	2.1
4	j	238	ILE	2.1
7	m	185	ILE	2.1
7	AZ	64	ILE	2.1
14	t	46	ILE	2.1
21	BN	58	ILE	2.1
26	BS	124	ILE	2.1
33	AF	51	ILE	2.1
34	AG	67	ILE	2.1
36	CC	76	ILE	2.1
47	CO	32	ILE	2.1
51	H	187	ILE	2.1
60	Q	76	ILE	2.1
63	T	102	ILE	2.1
65	V	111	ILE	2.1
65	DG	15	ILE	2.1
66	W	49	ILE	2.1
67	DI	23	ILE	2.1
5	k	335	VAL	2.1
5	AX	29	VAL	2.1
6	AY	9	VAL	2.1
6	AY	31	VAL	2.1
12	BE	26	VAL	2.1
20	BM	93	VAL	2.1
23	5	44	ASP	2.1
23	BP	29	ASP	2.1
28	BU	30	ASP	2.1
29	BV	56	VAL	2.1
32	AE	48	VAL	2.1
34	AG	66	VAL	2.1
36	CC	22	VAL	2.1
49	CQ	40	VAL	2.1
49	CQ	207	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
51	H	32	ASP	2.1
51	H	161	ASP	2.1
52	I	166	ASP	2.1
53	J	126	VAL	2.1
58	CZ	123	VAL	2.1
60	DB	116	VAL	2.1
61	R	2	VAL	2.1
70	a	100	VAL	2.1
72	c	33	ASP	2.1
73	DO	35	VAL	2.1
74	e	12	VAL	2.1
78	AR	132	VAL	2.1
4	j	138	GLY	2.1
7	AZ	233	SER	2.1
12	BE	62	SER	2.1
13	s	41	SER	2.1
14	BG	144	SER	2.1
18	BK	65	SER	2.1
19	BL	75	GLY	2.1
27	9	92	GLY	2.1
1	1	251	G	2.1
1	1	1197	C	2.1
1	1	2447	G	2.1
1	1	2456	C	2.1
1	1	3355	G	2.1
1	AS	91	G	2.1
1	AS	136	G	2.1
1	AS	297	G	2.1
1	AS	761	G	2.1
1	AS	820	C	2.1
1	AS	1593	C	2.1
1	AS	1866	C	2.1
1	AS	2229	G	2.1
3	AU	56	G	2.1
6	l	204	ARG	2.1
7	AZ	68	HIS	2.1
14	t	91	ARG	2.1
32	BY	40	THR	2.1
34	AG	61	GLY	2.1
48	E	43	GLY	2.1
56	M	60	SER	2.1
61	R	48	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
65	V	26	GLY	2.1
68	DJ	5	SER	2.1
60	DB	122	ARG	2.1
63	T	19	ARG	2.1
65	DG	139	THR	2.1
72	DN	16	GLY	2.1
18	x	56	ARG	2.1
18	BK	128	ARG	2.1
25	BR	57	ARG	2.1
34	CA	18	ARG	2.1
45	B	227	C	2.1
45	B	656	C	2.1
45	B	698	C	2.1
45	B	1134	G	2.1
45	B	1467	C	2.1
45	B	1571	G	2.1
45	B	1581	G	2.1
45	B	1723	G	2.1
45	CM	34	G	2.1
45	CM	833	C	2.1
45	CM	927	G	2.1
45	CM	1180	C	2.1
45	CM	1443	C	2.1
46	CN	101	ARG	2.1
47	CO	82	ARG	2.1
73	d	19	HIS	2.1
7	AZ	264	GLN	2.1
10	BC	60	GLN	2.1
14	BG	102	GLN	2.1
16	v	87	GLN	2.1
23	BP	30	GLN	2.1
23	BP	110	PHE	2.1
25	7	42	GLN	2.1
38	AK	74	PHE	2.1
46	C	7	PHE	2.1
48	E	93	MET	2.1
49	CQ	180	GLN	2.1
50	G	130	GLN	2.1
52	CT	199	GLN	2.1
60	DB	22	PHE	2.1
73	d	79	PHE	2.1
5	AX	248	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
23	5	10	LYS	2.1
28	BU	56	LYS	2.1
1	1	1026	A	2.1
1	1	2185	A	2.1
1	AS	253	A	2.1
1	AS	485	A	2.1
1	AS	525	A	2.1
1	AS	802	A	2.1
1	AS	826	A	2.1
1	AS	1502	A	2.1
1	AS	1854	A	2.1
1	AS	2193	A	2.1
3	AU	52	A	2.1
4	AW	239	ALA	2.1
6	AY	210	TYR	2.1
9	o	15	LYS	2.1
10	BC	151	LEU	2.1
10	BC	169	ALA	2.1
10	BC	185	ALA	2.1
12	r	218	TYR	2.1
13	BF	80	LEU	2.1
13	BF	123	TYR	2.1
14	BG	128	LYS	2.1
14	BG	172	LEU	2.1
16	v	197	LEU	2.1
36	CC	70	TYR	2.1
41	AN	36	LYS	2.1
41	AN	48	LYS	2.1
44	CK	35	ALA	2.1
45	B	180	A	2.1
45	B	1168	A	2.1
45	B	1727	A	2.1
45	CM	829	A	2.1
45	CM	1187	A	2.1
45	CM	1573	A	2.1
46	C	36	TYR	2.1
46	CN	204	TYR	2.1
49	F	8	LYS	2.1
49	CQ	60	LEU	2.1
49	CQ	225	LYS	2.1
54	CV	54	LYS	2.1
56	M	25	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
50	G	28	ALA	2.1
51	H	97	LEU	2.1
56	CX	76	LEU	2.1
57	CY	30	LYS	2.1
58	O	114	LYS	2.1
59	DA	91	LEU	2.1
64	DF	45	LEU	2.1
65	V	27	LYS	2.1
67	X	58	TYR	2.1
68	Y	60	LYS	2.1
67	DI	19	ALA	2.1
69	Z	15	LEU	2.1
70	a	76	TYR	2.1
70	DL	37	LYS	2.1
72	DN	4	LYS	2.1
18	x	132	ALA	2.1
19	BL	18	ALA	2.1
23	5	20	ALA	2.1
62	S	85	ALA	2.1
69	DK	113	ALA	2.1
10	p	46	ASN	2.1
10	BC	138	ASN	2.1
21	0	13	ASN	2.1
48	CP	204	ASN	2.1
10	p	229	GLU	2.1
10	BC	108	GLU	2.1
19	BL	173	GLU	2.1
48	E	236	GLU	2.1
50	CR	215	GLU	2.1
55	L	20	GLU	2.1
76	DR	22	GLU	2.1
5	k	122	TRP	2.1
48	E	30	TRP	2.1
1	1	1557	U	2.1
1	AS	1567	U	2.1
3	4	86	U	2.1
45	B	1244	U	2.1
45	B	1338	U	2.1
45	CM	132	U	2.1
49	F	220	PRO	2.1
51	H	67	PRO	2.1
53	J	128	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
53	CU	96	PRO	2.1
4	j	48	ILE	2.1
6	AY	75	ILE	2.1
7	m	222	ILE	2.1
9	o	125	ILE	2.1
10	p	76	ILE	2.1
11	BD	79	ILE	2.1
12	r	134	ILE	2.1
15	BH	29	ILE	2.1
18	x	67	ILE	2.1
19	y	114	ILE	2.1
33	AF	10	ILE	2.1
49	CQ	116	ILE	2.1
51	CS	29	ILE	2.1
52	CT	175	ILE	2.1
6	AY	146	VAL	2.1
6	AY	167	VAL	2.1
9	BB	82	VAL	2.1
10	p	198	VAL	2.1
11	q	123	VAL	2.1
13	BF	67	VAL	2.1
17	BJ	127	VAL	2.1
23	BP	19	VAL	2.1
27	9	73	VAL	2.1
28	BU	10	VAL	2.1
34	CA	66	VAL	2.1
37	CD	37	VAL	2.1
39	CF	45	VAL	2.1
46	C	156	VAL	2.1
49	CQ	49	VAL	2.1
50	G	183	VAL	2.1
53	CU	69	VAL	2.1
54	K	91	VAL	2.1
58	CZ	37	VAL	2.1
61	DC	41	VAL	2.1
68	DJ	63	VAL	2.1
75	DQ	6	VAL	2.1
78	AR	8	VAL	2.1
4	AW	54	ARG	2.1
5	k	349	ARG	2.1
5	AX	4	ARG	2.1
7	AZ	102	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
13	s	42	GLY	2.1
20	z	110	ARG	2.1
30	BW	49	GLY	2.1
32	BY	61	ARG	2.1
37	AJ	28	ARG	2.1
46	C	72	ASP	2.1
47	D	75	GLY	2.1
48	E	181	ARG	2.1
49	F	141	GLY	2.1
49	F	174	ARG	2.1
50	G	30	ARG	2.1
50	G	58	GLY	2.1
50	CR	144	GLY	2.1
51	CS	92	ARG	2.1
53	CU	110	ARG	2.1
54	K	59	ARG	2.1
56	M	19	GLY	2.1
58	CZ	131	ASP	2.1
59	P	79	GLY	2.1
59	DA	8	GLY	2.1
61	R	50	ASP	2.1
62	DD	32	GLY	2.1
58	CZ	139	HIS	2.1
64	DF	73	MET	2.1
68	DJ	21	GLY	2.1
69	DK	97	ASP	2.1
79	CL	40	ASP	2.1
79	CL	113	ARG	2.1
5	AX	163	HIS	2.1
7	m	160	PHE	2.1
8	BA	176	PHE	2.1
15	u	122	PHE	2.1
17	BJ	185	SER	2.1
19	BL	53	PHE	2.1
20	BM	6	THR	2.1
26	8	50	SER	2.1
27	BT	9	SER	2.1
28	AA	136	PHE	2.1
46	CN	136	SER	2.1
48	E	219	PHE	2.1
48	CP	201	THR	2.1
49	F	223	THR	2.1

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Mol	Chain	Res	Type	RSRZ
50	G	17	HIS	2.1
53	CU	57	PHE	2.1
55	CW	111	THR	2.1
59	DA	120	SER	2.1
60	DB	6	SER	2.1
64	DF	77	THR	2.1
68	DJ	30	SER	2.1
73	DO	44	THR	2.1
77	h	140	HIS	2.1
10	BC	249	LYS	2.1
11	BD	162	GLN	2.1
27	BT	87	LYS	2.1
28	BU	52	LYS	2.1
28	BU	55	LYS	2.1
28	BU	111	LYS	2.1
29	BV	19	LYS	2.1
36	AI	83	LYS	2.1
40	AM	19	GLN	2.1
43	AP	13	LYS	2.1
53	CU	40	LYS	2.1
55	L	177	GLN	2.1
61	DC	59	LYS	2.1
66	W	93	GLN	2.1
5	k	178	LEU	2.1
5	k	324	LEU	2.1
6	AY	245	LEU	2.1
11	BD	68	LEU	2.1
16	v	179	LEU	2.1
16	BI	7	LEU	2.1
17	BJ	128	LEU	2.1
44	CK	89	LEU	2.1
46	C	201	LEU	2.1
47	D	47	LEU	2.1
49	F	12	LEU	2.1
49	CQ	70	LEU	2.1
50	G	48	LEU	2.1
53	J	73	LEU	2.1
56	M	76	LEU	2.1
62	S	88	LEU	2.1
70	a	74	LEU	2.1
73	d	3	LEU	2.1
79	i	160	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
4	j	162	ALA	2.1
6	AY	255	ALA	2.1
7	m	280	ALA	2.1
10	BC	251	ALA	2.1
11	q	67	ALA	2.1
24	6	130	ALA	2.1
28	AA	2	ALA	2.1
45	B	359	C	2.1
45	B	380	C	2.1
45	CM	698	C	2.1
48	E	243	ALA	2.1
55	L	159	ALA	2.1
55	CW	119	ALA	2.1
57	N	47	ALA	2.1
58	CZ	57	ALA	2.1
60	DB	54	ALA	2.1
65	V	75	ALA	2.1
66	DH	94	ALA	2.1
73	d	71	ALA	2.1
78	AR	84	ALA	2.1
4	AW	69	TYR	2.1
9	o	131	TYR	2.1
11	BD	88	TYR	2.1
13	BF	116	TYR	2.1
18	BK	4	TYR	2.1
31	BX	29	TYR	2.1
54	CV	198	TYR	2.1
70	DL	76	TYR	2.1
1	1	100	G	2.1
1	1	1020	G	2.1
1	1	2547	G	2.1
1	AS	55	G	2.1
1	AS	142	G	2.1
1	AS	538	G	2.1
1	AS	1014	G	2.1
1	AS	1102	G	2.1
1	AS	1113	G	2.1
1	AS	2378	G	2.1
45	B	1096	G	2.1
45	B	1228	G	2.1
45	B	1371	G	2.1
45	B	1707	G	2.1

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Mol	Chain	Res	Type	RSRZ
45	CM	649	G	2.1
45	CM	864	G	2.1
45	CM	1764	G	2.1
6	AY	321	ASN	2.1
7	m	6	GLU	2.1
7	AZ	225	ASN	2.1
14	BG	79	GLU	2.1
19	y	173	GLU	2.1
20	BM	31	GLU	2.1
23	5	71	ASN	2.1
36	CC	61	ASN	2.1
51	H	95	ASN	2.1
52	CT	232	GLU	2.1
59	DA	86	GLU	2.1
64	DF	78	ASN	2.1
66	DH	48	ASN	2.1
68	DJ	87	GLU	2.1
69	DK	10	ASN	2.1
70	a	34	ASN	2.1
1	1	717	A	2.1
1	AS	50	A	2.1
1	AS	120	A	2.1
1	AS	198	A	2.1
1	AS	317	A	2.1
1	AS	398	A	2.1
3	AU	2	A	2.1
45	B	269	A	2.1
45	B	1298	A	2.1
45	B	1345	A	2.1
45	CM	219	A	2.1
45	CM	737	A	2.1
45	CM	1333	A	2.1
7	AZ	174	PRO	2.1
36	AI	39	PRO	2.1
53	CU	60	PRO	2.1
53	CU	128	PRO	2.1
73	DO	66	PRO	2.1
5	AX	194	TRP	2.1
21	0	78	TRP	2.1
4	AW	41	ILE	2.1
12	r	191	ILE	2.1
19	BL	101	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
23	5	96	ILE	2.1
32	AE	56	ILE	2.1
41	AN	20	CYS	2.1
78	AR	310	TRP	2.1
47	D	171	ILE	2.1
59	P	71	ILE	2.1
59	DA	38	ILE	2.1
68	Y	75	ILE	2.1
1	AS	825	U	2.1
1	AS	1526	U	2.1
1	AS	3317	U	2.1
45	B	811	U	2.1
45	B	1722	U	2.1
45	CM	1599	U	2.1
6	l	31	VAL	2.1
7	m	37	VAL	2.1
11	q	65	VAL	2.1
11	BD	25	VAL	2.1
15	BH	18	VAL	2.1
29	BV	123	VAL	2.1
49	F	135	VAL	2.1
49	CQ	51	VAL	2.1
53	J	17	VAL	2.1
56	M	73	VAL	2.1
58	O	61	VAL	2.1
63	DE	88	VAL	2.1
64	DF	52	VAL	2.1
69	DK	125	VAL	2.1
76	g	45	VAL	2.1
6	AY	189	ARG	2.1
7	AZ	196	ARG	2.1
11	q	1	MET	2.1
11	BD	91	ARG	2.1
13	BF	9	MET	2.1
14	t	41	ARG	2.1
20	BM	170	ARG	2.1
29	BV	139	ARG	2.1
33	BZ	71	GLY	2.1
44	CK	50	GLY	2.1
47	CO	44	GLY	2.1
48	E	92	ARG	2.1
48	E	109	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
51	H	101	GLY	2.1
52	I	42	GLY	2.1
54	CV	50	GLY	2.1
55	L	137	GLY	2.1
57	N	145	GLY	2.1
63	T	33	ARG	2.1
68	Y	23	ARG	2.1
4	AW	16	PHE	2.1
5	k	365	PHE	2.1
6	AY	357	PHE	2.1
7	m	13	HIS	2.1
11	BD	170	LYS	2.1
17	w	178	LYS	2.1
22	BO	54	HIS	2.1
28	AA	71	PHE	2.1
37	CD	70	LYS	2.1
47	CO	160	LYS	2.1
49	CQ	213	LYS	2.1
55	CW	138	LYS	2.1
58	O	38	HIS	2.1
62	S	108	PHE	2.1
65	DG	88	PHE	2.1
58	O	39	ASP	2.1
59	DA	76	LYS	2.1
71	DM	95	HIS	2.1
72	DN	12	LYS	2.1
73	DO	32	PHE	2.1
5	AX	104	THR	2.1
6	AY	83	THR	2.1
7	AZ	278	THR	2.1
30	BW	13	THR	2.1
6	l	267	SER	2.1
10	BC	212	LEU	2.1
13	s	91	LEU	2.1
32	BY	3	LEU	2.1
35	AH	15	THR	2.1
39	CF	58	ASP	2.1
16	BI	116	LEU	2.1
17	w	20	LEU	2.1
19	BL	27	GLN	2.1
19	BL	104	LEU	2.1
20	z	105	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
25	BR	54	LEU	2.1
39	CF	72	THR	2.1
56	CX	26	ASP	2.1
60	Q	33	THR	2.1
68	Y	85	ASP	2.1
69	Z	116	ASP	2.1
78	AR	12	THR	2.1
78	AR	77	ASP	2.1
78	AR	269	ASP	2.1
78	AR	283	ASP	2.1
35	CB	55	SER	2.1
38	CE	86	GLN	2.1
39	AL	51	GLN	2.1
46	C	136	SER	2.1
47	D	231	LEU	2.1
47	CO	173	GLN	2.1
50	CR	214	LEU	2.1
52	I	184	LEU	2.1
52	I	185	GLN	2.1
52	CT	233	SER	2.1
53	CU	122	LEU	2.1
54	K	176	SER	2.1
55	L	30	LEU	2.1
55	L	131	GLN	2.1
57	CY	14	GLN	2.1
59	P	14	SER	2.1
62	DD	51	LEU	2.1
64	DF	61	LEU	2.1
72	DN	88	SER	2.1
74	e	33	LEU	2.1
78	AR	162	GLN	2.1
79	i	78	SER	2.1
6	l	52	ALA	2.1
6	l	57	ALA	2.1
6	l	358	ALA	2.1
7	m	295	ALA	2.1
14	BG	132	ALA	2.1
14	BG	175	ALA	2.1
18	BK	15	ALA	2.1
18	BK	138	ALA	2.1
20	BM	169	ALA	2.1
23	BP	21	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
46	C	95	ALA	2.1
46	CN	145	ALA	2.1
49	F	100	ALA	2.1
50	G	156	ALA	2.1
51	H	179	ALA	2.1
53	J	55	ALA	2.1
55	CW	169	ALA	2.1
70	a	103	ALA	2.1
72	DN	48	ALA	2.1
5	k	154	TYR	2.1
9	o	147	TYR	2.1
22	2	156	TYR	2.1
23	5	86	TYR	2.1
46	CN	36	TYR	2.1
61	R	123	TYR	2.1
78	AR	229	TYR	2.1
1	AS	1033	C	2.1
1	AS	1555	C	2.1
3	4	84	C	2.1
11	BD	189	GLU	2.1
45	B	1770	C	2.1
45	CM	488	C	2.1
45	CM	1265	C	2.1
45	CM	1269	C	2.1
45	CM	1471	C	2.1
47	D	122	GLU	2.1
73	d	75	GLU	2.1
12	r	14	ASN	2.1
13	s	101	ASN	2.1
16	v	175	ASN	2.1
20	z	36	ASN	2.1
53	CU	9	ASN	2.1
68	DJ	84	ASN	2.1
75	DQ	13	ASN	2.1
78	AR	225	ASN	2.1
6	AY	206	PRO	2.1
18	BK	59	PRO	2.1
34	AG	56	PRO	2.1
46	CN	126	PRO	2.1
48	E	234	PRO	2.1
65	V	46	PRO	2.1
67	X	14	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
77	h	130	PRO	2.1
4	j	5	ILE	2.1
16	BI	174	ILE	2.1
25	7	63	ILE	2.1
50	G	210	ILE	2.1
52	CT	226	ILE	2.1
53	CU	94	ILE	2.1
57	N	49	ILE	2.1
60	Q	110	ILE	2.1
63	DE	17	ILE	2.1
64	DF	28	ILE	2.1
66	W	40	ILE	2.1
1	1	1888	G	2.1
1	1	2420	G	2.1
1	AS	21	G	2.1
1	AS	269	G	2.1
1	AS	445	A	2.1
1	AS	909	A	2.1
1	AS	988	A	2.1
1	AS	1772	G	2.1
1	AS	1874	G	2.1
1	AS	2128	G	2.1
1	AS	3088	G	2.1
3	AU	58	G	2.1
5	k	255	TRP	2.1
45	B	219	A	2.1
45	B	220	A	2.1
45	B	263	A	2.1
45	B	1068	G	2.1
45	B	1397	A	2.1
45	CM	987	G	2.1
45	CM	1202	A	2.1
45	CM	1480	G	2.1
45	CM	1491	G	2.1
45	CM	1775	G	2.1
5	k	73	VAL	2.1
7	m	159	VAL	2.1
7	m	162	VAL	2.1
8	BA	95	VAL	2.1
10	p	126	VAL	2.1
19	y	62	VAL	2.1
46	CN	75	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
48	CP	162	VAL	2.1
51	CS	53	VAL	2.1
56	M	42	VAL	2.1
57	CY	38	VAL	2.1
68	Y	129	VAL	2.1
70	DL	92	VAL	2.1
1	1	977	U	2.1
1	AS	116	U	2.1
1	AS	237	U	2.1
1	AS	2137	U	2.1
3	AU	98	U	2.1
3	AU	156	U	2.1
14	t	21	ARG	2.1
19	y	3	ARG	2.1
21	BN	26	ARG	2.1
45	B	176	U	2.1
45	B	236	U	2.1
45	CM	190	U	2.1
45	CM	825	U	2.1
45	CM	1376	U	2.1
45	CM	1435	U	2.1
72	DN	22	ARG	2.1
4	AW	190	LYS	2.1
5	k	174	LYS	2.1
6	l	147	LYS	2.1
15	BH	130	LYS	2.1
23	5	70	GLY	2.1
23	5	84	LYS	2.1
28	AA	61	LYS	2.1
30	BW	3	LYS	2.1
42	AO	14	LYS	2.1
44	CK	58	LYS	2.1
55	L	35	GLY	2.1
66	W	52	LYS	2.1
71	DM	46	LYS	2.1
9	o	217	PHE	2.1
19	BL	35	PHE	2.1
5	k	387	LEU	2.0
6	AY	195	LEU	2.0
7	AZ	36	LEU	2.0
7	AZ	131	LEU	2.0
12	BE	206	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
14	t	123	LEU	2.0
17	w	59	LEU	2.0
19	BL	36	LEU	2.0
19	BL	54	LEU	2.0
30	BW	43	HIS	2.1
30	BW	48	HIS	2.1
39	CF	54	LEU	2.0
41	CH	41	HIS	2.1
47	CO	228	LEU	2.0
47	CO	229	LEU	2.0
49	CQ	124	LEU	2.0
54	CV	84	HIS	2.1
59	DA	80	LEU	2.0
61	DC	25	LEU	2.0
61	DC	79	HIS	2.1
69	Z	122	PHE	2.1
75	f	52	PHE	2.1
65	V	22	LEU	2.0
65	V	28	LEU	2.0
68	DJ	69	LEU	2.0
72	DN	67	LEU	2.0
78	AR	67	HIS	2.1
5	k	263	THR	2.0
7	m	56	THR	2.0
12	BE	211	GLN	2.0
19	BL	137	THR	2.0
22	BO	125	THR	2.0
29	AB	3	THR	2.0
51	CS	34	GLN	2.0
51	CS	125	THR	2.0
51	CS	145	ASP	2.0
69	Z	75	GLN	2.0
71	DM	56	THR	2.0
4	j	195	SER	2.0
6	AY	243	ALA	2.0
7	m	134	ALA	2.0
10	p	67	SER	2.0
10	p	123	ALA	2.0
12	BE	20	SER	2.0
15	BH	3	SER	2.0
16	v	79	ALA	2.0
17	w	191	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
17	BJ	84	ALA	2.0
18	BK	85	ALA	2.0
20	BM	39	SER	2.0
20	BM	91	SER	2.0
20	BM	149	ALA	2.0
30	BW	55	ALA	2.0
37	CD	33	SER	2.0
38	CE	7	SER	2.0
42	AO	24	SER	2.0
46	CN	132	ALA	2.0
47	D	51	SER	2.0
49	F	154	ALA	2.0
51	H	146	SER	2.0
54	K	12	SER	2.0
54	CV	182	SER	2.0
55	L	31	ALA	2.0
57	CY	61	ALA	2.0
59	DA	147	SER	2.0
65	DG	75	ALA	2.0
76	DR	7	SER	2.0
4	j	69	TYR	2.0
5	k	137	TYR	2.0
17	w	82	TYR	2.0
35	AH	13	TYR	2.0
54	K	198	TYR	2.0
62	DD	78	TYR	2.0
63	T	21	TYR	2.0
6	l	359	GLU	2.0
7	AZ	6	GLU	2.0
7	AZ	268	GLU	2.0
16	BI	9	GLU	2.0
52	I	150	GLU	2.0
61	DC	110	GLU	2.0
70	DL	98	GLU	2.0
9	o	91	ASN	2.0
11	q	50	ASN	2.0
11	BD	149	ASN	2.0
14	BG	184	ILE	2.0
15	BH	83	ILE	2.0
32	AE	58	ILE	2.0
32	BY	98	PRO	2.0
46	CN	47	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
46	CN	106	ASN	2.0
49	F	87	ILE	2.0
49	F	200	PRO	2.0
49	CQ	222	PRO	2.0
50	G	15	PRO	2.0
51	CS	62	ILE	2.0
53	J	5	ILE	2.0
53	J	36	PRO	2.0
53	J	145	ILE	2.0
56	M	3	ILE	2.0
56	CX	88	PRO	2.0
57	CY	66	ILE	2.0
61	DC	90	ILE	2.0
61	DC	125	PRO	2.0
65	DG	31	PRO	2.0
16	BI	117	ASN	2.0
29	BV	14	ASN	2.0
37	CD	11	ASN	2.0
66	W	117	ILE	2.0
79	CL	70	ASN	2.0
1	1	487	C	2.0
1	1	3198	C	2.0
3	AU	137	C	2.0
3	AU	141	C	2.0
5	AX	122	TRP	2.0
11	BD	51	ARG	2.0
14	BG	73	ARG	2.0
16	BI	63	ARG	2.0
23	BP	23	VAL	2.0
29	BV	130	VAL	2.0
32	AE	76	ARG	2.0
33	AF	85	VAL	2.0
38	CE	49	TRP	2.0
39	AL	55	VAL	2.0
42	AO	1	MET	2.0
40	AM	45	ARG	2.0
43	CJ	25	VAL	2.0
45	CM	720	C	2.0
45	CM	1220	C	2.0
45	CM	1453	C	2.0
45	CM	1589	C	2.0
47	D	91	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
47	CO	29	TRP	2.0
47	CO	26	ARG	2.0
49	CQ	174	ARG	2.0
51	H	138	VAL	2.0
51	CS	23	VAL	2.0
51	CS	56	VAL	2.0
52	CT	153	VAL	2.0
53	J	56	VAL	2.0
64	DF	129	TRP	2.0
53	J	103	ARG	2.0
54	CV	56	ARG	2.0
55	CW	79	ARG	2.0
61	R	81	ARG	2.0
61	DC	130	ARG	2.0
64	U	120	ARG	2.0
64	DF	110	ARG	2.0
71	DM	64	VAL	2.0
72	c	45	VAL	2.0
76	DR	42	ARG	2.0
78	AR	69	VAL	2.0
5	k	30	LYS	2.0
9	BB	99	LYS	2.0
10	BC	246	LYS	2.0
11	q	63	LYS	2.0
14	BG	5	LYS	2.0
14	BG	201	LYS	2.0
24	6	63	LYS	2.0
33	AF	19	LYS	2.0
33	AF	124	LYS	2.0
38	CE	32	LYS	2.0
47	CO	116	LYS	2.0
53	CU	97	LYS	2.0
55	L	16	LYS	2.0
61	DC	18	LYS	2.0
72	DN	32	LYS	2.0
78	AR	272	LYS	2.0
79	CL	102	LYS	2.0
1	1	1221	A	2.0
1	1	3327	A	2.0
1	AS	806	A	2.0
1	AS	1835	A	2.0
1	AS	1860	A	2.0

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Mol	Chain	Res	Type	RSRZ
1	AS	1889	A	2.0
3	AU	66	A	2.0
3	AU	111	A	2.0
17	BJ	70	GLY	2.0
19	y	183	GLY	2.0
28	AA	8	GLY	2.0
5	k	14	LEU	2.0
5	AX	16	PHE	2.0
6	l	193	GLY	2.0
7	AZ	129	PHE	2.0
7	AZ	138	GLY	2.0
10	p	236	GLY	2.0
44	CK	67	GLY	2.0
45	B	509	A	2.0
45	B	1742	A	2.0
45	CM	1455	A	2.0
8	n	42	LEU	2.0
14	BG	75	PHE	2.0
43	CJ	104	LEU	2.0
46	CN	115	PHE	2.0
52	I	33	GLY	2.0
61	R	102	PHE	2.0
61	R	119	PHE	2.0
62	S	137	PHE	2.0
62	DD	70	GLY	2.0
63	DE	98	GLY	2.0
1	1	542	U	2.0
1	1	3127	U	2.0
1	AS	1683	U	2.0
1	AS	1830	U	2.0
11	BD	64	HIS	2.0
12	r	87	LEU	2.0
17	w	130	LEU	2.0
19	y	93	LEU	2.0
19	y	94	LEU	2.0
26	BS	34	LEU	2.0
45	CM	133	U	2.0
45	CM	672	U	2.0
45	CM	779	U	2.0
51	CS	194	LEU	2.0
52	I	216	LEU	2.0
53	CU	63	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
55	L	150	LEU	2.0
70	DL	28	LEU	2.0
73	d	9	HIS	2.0
74	DP	33	LEU	2.0
1	1	249	G	2.0
1	1	1016	G	2.0
1	AS	896	G	2.0
1	AS	1539	G	2.0
1	AS	2101	G	2.0
1	AS	2143	G	2.0
1	AS	2285	G	2.0
1	AS	2381	G	2.0
45	B	1431	G	2.0
45	CM	923	G	2.0
45	CM	1058	G	2.0
45	CM	1099	G	2.0
45	CM	1336	G	2.0
45	CM	1510	G	2.0
5	k	104	THR	2.0
5	k	269	GLN	2.0
6	AY	123	THR	2.0
6	AY	356	GLN	2.0
7	AZ	9	THR	2.0
7	AZ	28	THR	2.0
13	s	99	THR	2.0
18	BK	129	THR	2.0
20	BM	29	THR	2.0
12	r	138	ALA	2.0
40	CG	25	GLN	2.0
43	AP	7	THR	2.0
52	I	148	THR	2.0
52	CT	53	THR	2.0
54	CV	120	THR	2.0
47	D	89	ASP	2.0
48	CP	231	ALA	2.0
49	F	214	ASP	2.0
49	CQ	103	ALA	2.0
50	CR	258	ALA	2.0
53	J	28	ALA	2.0
53	J	64	GLN	2.0
63	DE	35	THR	2.0
65	V	11	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
65	V	12	GLN	2.0
71	DM	102	THR	2.0
25	BR	100	ASP	2.0
27	9	83	ASP	2.0
33	BZ	40	ASP	2.0
49	F	170	ASP	2.0
53	CU	46	ASP	2.0
65	V	35	ASP	2.0
65	DG	8	ASP	2.0
65	DG	131	ASP	2.0
69	DK	26	ASP	2.0
72	c	27	ALA	2.0
16	BI	118	SER	2.0
19	BL	7	SER	2.0
21	0	39	SER	2.0
23	BP	55	SER	2.0
25	7	34	SER	2.0
54	CV	73	SER	2.0
54	CV	168	SER	2.0
57	N	132	SER	2.0
58	O	130	SER	2.0
67	X	84	SER	2.0
78	AR	83	SER	2.0
79	CL	45	SER	2.0
79	CL	56	SER	2.0
4	AW	80	GLU	2.0
6	l	148	GLU	2.0
16	v	36	ILE	2.0
19	y	139	ILE	2.0
19	BL	148	GLU	2.0
31	BX	70	TYR	2.0
19	BL	163	PRO	2.0
25	BR	82	ILE	2.0
26	BS	114	ILE	2.0
46	CN	63	ILE	2.0
46	CN	68	PRO	2.0
49	CQ	204	PRO	2.0
50	CR	249	ILE	2.0
52	I	8	PRO	2.0
52	I	121	ILE	2.0
52	I	221	GLU	2.0
53	J	82	PRO	2.0

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Mol	Chain	Res	Type	RSRZ
56	M	98	GLU	2.0
59	DA	116	ILE	2.0
64	DF	119	ILE	2.0
68	Y	110	ILE	2.0
75	f	50	ILE	2.0
78	AR	167	ILE	2.0
78	AR	284	PRO	2.0
5	AX	121	ASN	2.0
6	AY	44	ASN	2.0
7	AZ	57	ASN	2.0
10	BC	239	MET	2.0
16	BI	122	ASN	2.0
19	y	45	ASN	2.0
26	BS	73	MET	2.0
30	BW	19	ASN	2.0
62	S	123	MET	2.0
75	f	53	ASN	2.0
5	AX	244	ARG	2.0
5	AX	349	ARG	2.0
6	l	12	VAL	2.0
7	AZ	162	VAL	2.0
8	BA	51	VAL	2.0
11	BD	105	LYS	2.0
13	BF	55	ARG	2.0
15	u	36	LYS	2.0
15	BH	126	LYS	2.0
20	z	19	LYS	2.0
21	BN	99	ARG	2.0
26	BS	83	VAL	2.0
27	9	113	LYS	2.0
27	BT	59	VAL	2.0
27	BT	103	LYS	2.0
28	AA	26	VAL	2.0
28	AA	34	LYS	2.0
33	BZ	29	VAL	2.0
36	AI	90	ARG	2.0
36	AI	108	ARG	2.0
37	AJ	75	ARG	2.0
39	CF	25	VAL	2.0
40	AM	28	ARG	2.0
44	CK	24	ARG	2.0
47	D	50	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
49	F	224	VAL	2.0
49	CQ	123	VAL	2.0
50	CR	237	VAL	2.0
51	CS	123	VAL	2.0
52	CT	95	LYS	2.0
52	CT	227	LYS	2.0
57	CY	122	VAL	2.0
61	R	77	LYS	2.0
61	DC	20	VAL	2.0
61	DC	58	LYS	2.0
62	S	134	ARG	2.0
64	DF	49	LYS	2.0
64	DF	108	LYS	2.0
65	DG	69	LYS	2.0
68	Y	19	LYS	2.0
70	a	131	ARG	2.0
72	DN	18	VAL	2.0
73	d	2	VAL	2.0
74	DP	18	ARG	2.0
74	DP	22	ARG	2.0
75	f	40	ARG	2.0
46	C	195	TRP	2.0
5	AX	14	LEU	2.0
6	l	325	LEU	2.0
7	m	20	PHE	2.0
7	AZ	113	LEU	2.0
7	AZ	277	LEU	2.0
8	n	63	LEU	2.0
11	q	185	GLY	2.0
11	BD	148	GLY	2.0
12	r	199	PHE	2.0
17	BJ	195	LEU	2.0
18	BK	71	GLY	2.0
19	BL	32	LEU	2.0
20	BM	77	GLY	2.0
20	BM	150	LEU	2.0
24	BQ	100	GLY	2.0
32	AE	24	PHE	2.0
40	CG	7	PHE	2.0
46	C	18	LEU	2.0
46	C	81	PHE	2.0
49	F	37	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
49	CQ	203	LEU	2.0
52	CT	184	LEU	2.0
53	J	81	PHE	2.0
58	CZ	136	LEU	2.0
59	P	102	LEU	2.0
64	U	124	GLY	2.0
66	DH	92	LEU	2.0
69	Z	38	PHE	2.0
73	d	69	GLY	2.0
75	DQ	43	PHE	2.0
79	i	106	GLY	2.0
1	1	3263	C	2.0
3	AU	117	C	2.0
4	AW	50	HIS	2.0
7	AZ	13	HIS	2.0
38	AK	69	HIS	2.0
41	AN	34	CYS	2.0
45	CM	679	C	2.0
50	CR	197	HIS	2.0
60	Q	66	CYS	2.0

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

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3630	1/1	0.26	0.38	73,73,73,73	0
82	MG	1	3654	1/1	0.32	0.35	72,72,72,72	0
82	MG	AS	3720	1/1	0.40	0.22	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3460	1/1	0.42	0.37	75,75,75,75	0
82	MG	B	1937	1/1	0.44	0.30	72,72,72,72	0
82	MG	CM	1848	1/1	0.44	0.20	73,73,73,73	0
82	MG	B	1930	1/1	0.46	0.30	74,74,74,74	0
82	MG	B	1848	1/1	0.47	0.30	59,59,59,59	0
82	MG	B	1925	1/1	0.53	0.43	81,81,81,81	0
82	MG	CM	1839	1/1	0.54	0.17	96,96,96,96	0
82	MG	AS	3442	1/1	0.55	0.19	52,52,52,52	0
82	MG	B	1810	1/1	0.55	0.29	51,51,51,51	0
82	MG	B	1910	1/1	0.56	0.26	71,71,71,71	0
82	MG	1	3483	1/1	0.57	0.20	68,68,68,68	0
82	MG	CM	1812	1/1	0.57	0.32	73,73,73,73	0
82	MG	CM	1932	1/1	0.57	0.32	75,75,75,75	0
82	MG	AS	3716	1/1	0.58	0.28	51,51,51,51	0
82	MG	CM	1869	1/1	0.59	0.28	50,50,50,50	0
82	MG	AS	3669	1/1	0.59	0.30	80,80,80,80	0
82	MG	CM	1853	1/1	0.60	0.19	83,83,83,83	0
82	MG	AS	3738	1/1	0.60	0.25	64,64,64,64	0
82	MG	CM	1884	1/1	0.60	0.26	60,60,60,60	0
82	MG	AS	3414	1/1	0.60	0.20	57,57,57,57	0
82	MG	1	3471	1/1	0.61	0.21	50,50,50,50	0
82	MG	1	3501	1/1	0.61	0.15	65,65,65,65	0
82	MG	AS	3467	1/1	0.62	0.15	67,67,67,67	0
82	MG	CM	1851	1/1	0.62	0.29	80,80,80,80	0
82	MG	1	3762	1/1	0.62	0.17	60,60,60,60	0
82	MG	AS	3639	1/1	0.62	0.18	44,44,44,44	0
82	MG	AS	3655	1/1	0.62	0.18	41,41,41,41	0
81	PAR	CM	1806	42/42	0.62	0.16	54,78,92,94	0
82	MG	AS	3450	1/1	0.63	0.21	59,59,59,59	0
82	MG	CM	1900	1/1	0.63	0.20	63,63,63,63	0
82	MG	1	3498	1/1	0.63	0.41	64,64,64,64	0
82	MG	AS	3489	1/1	0.64	0.23	58,58,58,58	0
82	MG	AS	3620	1/1	0.64	0.25	73,73,73,73	0
82	MG	AS	3713	1/1	0.64	0.29	38,38,38,38	0
82	MG	AS	3424	1/1	0.64	0.26	65,65,65,65	0
82	MG	AS	3469	1/1	0.64	0.42	72,72,72,72	0
82	MG	B	1866	1/1	0.65	0.30	58,58,58,58	0
82	MG	AS	3728	1/1	0.65	0.15	44,44,44,44	0
82	MG	1	3584	1/1	0.65	0.18	44,44,44,44	0
81	PAR	AS	3413	42/42	0.66	0.16	20,20,20,20	0
82	MG	1	3479	1/1	0.66	0.20	66,66,66,66	0
82	MG	CR	301	1/1	0.66	0.23	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	B	1830	1/1	0.67	0.41	60,60,60,60	0
82	MG	1	3679	1/1	0.67	0.15	53,53,53,53	0
82	MG	AS	3628	1/1	0.67	0.20	52,52,52,52	0
82	MG	AS	3730	1/1	0.67	0.30	62,62,62,62	0
82	MG	AS	3420	1/1	0.67	0.25	55,55,55,55	0
82	MG	AS	3662	1/1	0.68	0.12	52,52,52,52	0
82	MG	B	1898	1/1	0.68	0.18	88,88,88,88	0
82	MG	AW	303	1/1	0.68	0.43	78,78,78,78	0
82	MG	CM	1883	1/1	0.68	0.36	67,67,67,67	0
82	MG	CM	1813	1/1	0.69	0.28	65,65,65,65	0
82	MG	AS	3493	1/1	0.69	0.17	55,55,55,55	0
82	MG	AS	3532	1/1	0.69	0.29	69,69,69,69	0
82	MG	AS	3564	1/1	0.69	0.27	60,60,60,60	0
82	MG	AS	3718	1/1	0.69	0.23	56,56,56,56	0
81	PAR	1	3407	42/42	0.69	0.24	63,82,96,104	0
82	MG	CM	1876	1/1	0.69	0.28	76,76,76,76	0
82	MG	B	1849	1/1	0.69	0.40	70,70,70,70	0
82	MG	AS	3461	1/1	0.69	0.26	55,55,55,55	0
82	MG	B	1815	1/1	0.69	0.22	49,49,49,49	0
82	MG	AS	3438	1/1	0.69	0.13	39,39,39,39	0
82	MG	1	3660	1/1	0.69	0.15	42,42,42,42	0
82	MG	1	3682	1/1	0.70	0.24	66,66,66,66	0
82	MG	1	3469	1/1	0.70	0.30	67,67,67,67	0
82	MG	AS	3732	1/1	0.70	0.33	70,70,70,70	0
81	PAR	AS	3405	42/42	0.71	0.18	67,82,94,100	42
82	MG	AS	3643	1/1	0.71	0.18	99,99,99,99	0
82	MG	1	3432	1/1	0.71	0.17	51,51,51,51	0
82	MG	1	3634	1/1	0.71	0.33	60,60,60,60	0
82	MG	1	3448	1/1	0.71	0.24	47,47,47,47	0
82	MG	AS	3670	1/1	0.71	0.19	77,77,77,77	0
82	MG	AS	3415	1/1	0.71	0.21	65,65,65,65	0
81	PAR	CM	1805	42/42	0.71	0.21	98,111,128,146	0
82	MG	CM	1831	1/1	0.71	0.26	68,68,68,68	0
82	MG	B	1822	1/1	0.71	0.29	68,68,68,68	0
83	ZN	d	101	1/1	0.71	0.14	257,257,257,257	0
83	ZN	DO	101	1/1	0.71	0.16	206,206,206,206	0
82	MG	1	3729	1/1	0.72	0.17	45,45,45,45	0
82	MG	CM	1842	1/1	0.72	0.26	56,56,56,56	0
82	MG	AS	3465	1/1	0.72	0.22	69,69,69,69	0
82	MG	B	1837	1/1	0.72	0.17	63,63,63,63	0
82	MG	1	3451	1/1	0.72	0.15	46,46,46,46	0
82	MG	CM	1862	1/1	0.72	0.21	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	1	3649	1/1	0.72	0.26	56,56,56,56	0
81	PAR	AS	3408	42/42	0.72	0.14	83,105,119,123	0
82	MG	CM	1881	1/1	0.72	0.29	62,62,62,62	0
82	MG	AS	3526	1/1	0.72	0.18	38,38,38,38	0
82	MG	AS	3453	1/1	0.72	0.18	52,52,52,52	0
82	MG	CM	1809	1/1	0.72	0.26	60,60,60,60	0
82	MG	CM	1810	1/1	0.72	0.16	90,90,90,90	0
82	MG	1	3683	1/1	0.72	0.24	56,56,56,56	0
82	MG	AS	3685	1/1	0.72	0.41	75,75,75,75	0
82	MG	AS	3598	1/1	0.72	0.19	39,39,39,39	0
82	MG	AS	3723	1/1	0.73	0.20	46,46,46,46	0
82	MG	AS	3447	1/1	0.73	0.24	55,55,55,55	0
82	MG	AS	3645	1/1	0.73	0.38	60,60,60,60	0
82	MG	B	1943	1/1	0.73	0.21	68,68,68,68	0
81	PAR	B	1805	42/42	0.73	0.18	60,85,96,102	0
82	MG	1	3434	1/1	0.73	0.12	36,36,36,36	0
82	MG	1	3437	1/1	0.73	0.16	54,54,54,54	0
82	MG	AS	3679	1/1	0.73	0.16	68,68,68,68	0
82	MG	AS	3463	1/1	0.73	0.12	46,46,46,46	0
81	PAR	1	3413	42/42	0.73	0.39	50,82,99,113	42
82	MG	B	1823	1/1	0.73	0.27	41,41,41,41	0
82	MG	B	1940	1/1	0.73	0.40	65,65,65,65	0
82	MG	CM	1840	1/1	0.73	0.32	51,51,51,51	0
82	MG	AS	3472	1/1	0.73	0.28	55,55,55,55	0
82	MG	AL	101	1/1	0.74	0.22	94,94,94,94	0
82	MG	AS	3482	1/1	0.74	0.28	72,72,72,72	0
81	PAR	1	3403	42/42	0.74	0.21	47,63,78,89	42
82	MG	1	3663	1/1	0.74	0.27	52,52,52,52	0
82	MG	CM	1854	1/1	0.74	0.31	65,65,65,65	0
82	MG	E	301	1/1	0.74	0.23	49,49,49,49	0
82	MG	B	1895	1/1	0.74	0.23	53,53,53,53	0
82	MG	1	3724	1/1	0.74	0.40	57,57,57,57	0
82	MG	AS	3567	1/1	0.74	0.23	60,60,60,60	0
82	MG	1	3668	1/1	0.74	0.21	37,37,37,37	0
82	MG	AS	3686	1/1	0.74	0.35	47,47,47,47	0
82	MG	AS	3711	1/1	0.74	0.23	53,53,53,53	0
82	MG	1	3754	1/1	0.74	0.36	59,59,59,59	0
82	MG	CM	1832	1/1	0.74	0.22	56,56,56,56	0
82	MG	AS	3428	1/1	0.74	0.29	56,56,56,56	0
82	MG	1	3535	1/1	0.74	0.17	34,34,34,34	0
82	MG	AS	3516	1/1	0.75	0.32	58,58,58,58	0
82	MG	1	3759	1/1	0.75	0.36	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	PAR	1	3408	42/42	0.75	0.27	64,90,104,113	42
81	PAR	AS	3401	42/42	0.75	0.21	59,75,88,93	42
82	MG	AS	3740	1/1	0.75	0.15	63,63,63,63	0
82	MG	CM	1890	1/1	0.75	0.28	62,62,62,62	0
82	MG	AS	3651	1/1	0.75	0.18	68,68,68,68	0
81	PAR	1	3414	42/42	0.75	0.20	51,85,92,99	0
82	MG	CM	1938	1/1	0.75	0.19	46,46,46,46	0
82	MG	B	1813	1/1	0.75	0.25	59,59,59,59	0
81	PAR	1	3422	42/42	0.75	0.24	56,73,85,89	42
82	MG	1	3458	1/1	0.75	0.22	56,56,56,56	0
82	MG	AS	3454	1/1	0.76	0.31	54,54,54,54	0
82	MG	AS	3519	1/1	0.76	0.18	47,47,47,47	0
82	MG	1	3541	1/1	0.76	0.18	43,43,43,43	0
82	MG	1	3746	1/1	0.76	0.16	48,48,48,48	0
82	MG	1	3750	1/1	0.76	0.18	60,60,60,60	0
81	PAR	1	3420	42/42	0.76	0.17	73,94,115,116	0
82	MG	AS	3466	1/1	0.76	0.17	62,62,62,62	0
82	MG	1	3485	1/1	0.76	0.22	64,64,64,64	0
82	MG	CM	1888	1/1	0.76	0.20	52,52,52,52	0
82	MG	AS	3627	1/1	0.76	0.40	77,77,77,77	0
82	MG	1	3439	1/1	0.76	0.16	41,41,41,41	0
82	MG	AS	3446	1/1	0.76	0.16	54,54,54,54	0
81	PAR	1	3405	42/42	0.76	0.29	41,67,84,99	42
82	MG	CM	1940	1/1	0.76	0.22	56,56,56,56	0
82	MG	CM	1942	1/1	0.76	0.15	64,64,64,64	0
82	MG	AS	3486	1/1	0.76	0.25	60,60,60,60	0
82	MG	1	3718	1/1	0.76	0.14	42,42,42,42	0
81	PAR	B	1804	42/42	0.76	0.20	76,105,123,126	0
82	MG	1	3706	1/1	0.77	0.21	46,46,46,46	0
82	MG	1	3637	1/1	0.77	0.15	50,50,50,50	0
81	PAR	1	3426	42/42	0.77	0.24	49,66,79,86	42
82	MG	1	3728	1/1	0.77	0.26	62,62,62,62	0
81	PAR	1	3409	42/42	0.77	0.18	45,81,100,109	42
82	MG	1	3521	1/1	0.77	0.17	56,56,56,56	0
82	MG	AS	3602	1/1	0.77	0.38	59,59,59,59	0
81	PAR	AS	3410	42/42	0.77	0.18	95,110,119,137	0
82	MG	B	1839	1/1	0.77	0.21	82,82,82,82	0
81	PAR	1	3416	42/42	0.77	0.21	47,71,83,85	42
82	MG	1	3755	1/1	0.77	0.21	46,46,46,46	0
82	MG	AS	3470	1/1	0.77	0.29	74,74,74,74	0
82	MG	1	3578	1/1	0.77	0.25	25,25,25,25	0
82	MG	AS	3744	1/1	0.77	0.22	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
81	PAR	1	3425	42/42	0.77	0.21	52,74,87,97	42
82	MG	CM	1892	1/1	0.77	0.30	67,67,67,67	0
82	MG	CM	1897	1/1	0.77	0.15	57,57,57,57	0
82	MG	AS	3440	1/1	0.77	0.17	55,55,55,55	0
81	PAR	AS	3403	42/42	0.77	0.20	60,83,97,102	0
82	MG	AS	3492	1/1	0.77	0.17	68,68,68,68	0
82	MG	B	1808	1/1	0.77	0.12	73,73,73,73	0
82	MG	CM	1818	1/1	0.77	0.39	70,70,70,70	0
82	MG	AS	3494	1/1	0.77	0.24	55,55,55,55	0
82	MG	B	1919	1/1	0.77	0.38	65,65,65,65	0
82	MG	CM	1835	1/1	0.77	0.17	64,64,64,64	0
81	PAR	AS	3409	42/42	0.78	0.21	51,66,89,100	42
82	MG	AS	3636	1/1	0.78	0.19	92,92,92,92	0
82	MG	AS	3638	1/1	0.78	0.16	71,71,71,71	0
82	MG	1	3490	1/1	0.78	0.42	58,58,58,58	0
82	MG	CM	1825	1/1	0.78	0.22	74,74,74,74	0
82	MG	B	1873	1/1	0.78	0.20	53,53,53,53	0
82	MG	AS	3474	1/1	0.78	0.28	43,43,43,43	0
82	MG	AS	3479	1/1	0.78	0.16	39,39,39,39	0
82	MG	1	3733	1/1	0.78	0.19	56,56,56,56	0
82	MG	AS	3432	1/1	0.78	0.20	52,52,52,52	0
82	MG	1	3675	1/1	0.78	0.31	63,63,63,63	0
82	MG	B	1816	1/1	0.78	0.35	60,60,60,60	0
82	MG	AS	3674	1/1	0.78	0.13	49,49,49,49	0
82	MG	AS	3441	1/1	0.78	0.40	55,55,55,55	0
82	MG	B	1914	1/1	0.78	0.15	47,47,47,47	0
82	MG	AS	3499	1/1	0.78	0.12	48,48,48,48	0
82	MG	AS	3703	1/1	0.78	0.26	59,59,59,59	0
82	MG	AS	3501	1/1	0.78	0.38	53,53,53,53	0
82	MG	1	3431	1/1	0.78	0.38	60,60,60,60	0
82	MG	B	1920	1/1	0.78	0.28	71,71,71,71	0
82	MG	1	3477	1/1	0.78	0.19	57,57,57,57	0
82	MG	CM	1887	1/1	0.78	0.21	59,59,59,59	0
82	MG	B	1928	1/1	0.78	0.14	49,49,49,49	0
82	MG	1	3513	1/1	0.78	0.24	75,75,75,75	0
82	MG	1	3457	1/1	0.78	0.31	57,57,57,57	0
82	MG	CM	1894	1/1	0.78	0.21	91,91,91,91	0
82	MG	AS	3586	1/1	0.78	0.25	67,67,67,67	0
82	MG	1	3532	1/1	0.78	0.12	37,37,37,37	0
82	MG	CM	1916	1/1	0.78	0.17	44,44,44,44	0
82	MG	CM	1924	1/1	0.78	0.27	57,57,57,57	0
82	MG	AS	3736	1/1	0.78	0.11	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	B	1840	1/1	0.78	0.30	78,78,78,78	0
82	MG	CM	1939	1/1	0.78	0.13	57,57,57,57	0
82	MG	AS	3614	1/1	0.78	0.16	54,54,54,54	0
82	MG	AS	3743	1/1	0.78	0.15	44,44,44,44	0
82	MG	B	1845	1/1	0.78	0.19	61,61,61,61	0
82	MG	G	301	1/1	0.78	0.15	56,56,56,56	0
81	PAR	AS	3404	42/42	0.78	0.23	59,90,101,107	42
82	MG	B	1913	1/1	0.79	0.20	59,59,59,59	0
82	MG	CM	1874	1/1	0.79	0.34	73,73,73,73	0
82	MG	B	1827	1/1	0.79	0.19	64,64,64,64	0
82	MG	B	1916	1/1	0.79	0.31	59,59,59,59	0
81	PAR	1	3419	42/42	0.79	0.23	34,60,71,89	42
82	MG	AS	3629	1/1	0.79	0.32	70,70,70,70	0
82	MG	CM	1885	1/1	0.79	0.40	60,60,60,60	0
82	MG	B	1836	1/1	0.79	0.30	53,53,53,53	0
82	MG	1	3657	1/1	0.79	0.20	61,61,61,61	0
82	MG	CM	1820	1/1	0.79	0.22	46,46,46,46	0
82	MG	AS	3524	1/1	0.79	0.33	67,67,67,67	0
82	MG	B	1926	1/1	0.79	0.22	54,54,54,54	0
82	MG	AS	3423	1/1	0.79	0.14	49,49,49,49	0
82	MG	AS	3724	1/1	0.79	0.28	51,51,51,51	0
82	MG	CM	1838	1/1	0.79	0.22	79,79,79,79	0
82	MG	AS	3727	1/1	0.79	0.16	67,67,67,67	0
82	MG	AS	3534	1/1	0.79	0.19	56,56,56,56	0
82	MG	1	3507	1/1	0.79	0.12	45,45,45,45	0
82	MG	AS	3426	1/1	0.79	0.30	71,71,71,71	0
82	MG	AS	3572	1/1	0.79	0.22	61,61,61,61	0
82	MG	AS	3488	1/1	0.79	0.13	69,69,69,69	0
82	MG	1	3742	1/1	0.79	0.23	56,56,56,56	0
82	MG	DG	201	1/1	0.79	0.31	74,74,74,74	0
82	MG	CM	1857	1/1	0.79	0.14	42,42,42,42	0
82	MG	1	3757	1/1	0.79	0.39	64,64,64,64	0
82	MG	AS	3505	1/1	0.80	0.22	64,64,64,64	0
82	MG	B	1901	1/1	0.80	0.19	57,57,57,57	0
82	MG	B	1906	1/1	0.80	0.17	55,55,55,55	0
82	MG	B	1831	1/1	0.80	0.15	46,46,46,46	0
82	MG	AS	3419	1/1	0.80	0.13	50,50,50,50	0
82	MG	1	3693	1/1	0.80	0.15	39,39,39,39	0
82	MG	AS	3667	1/1	0.80	0.21	39,39,39,39	0
81	PAR	CM	1802	42/42	0.80	0.19	71,86,101,105	0
82	MG	B	1812	1/1	0.80	0.38	65,65,65,65	0
82	MG	1	3600	1/1	0.80	0.10	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3427	1/1	0.80	0.24	46,46,46,46	0
82	MG	AS	3680	1/1	0.80	0.13	50,50,50,50	0
82	MG	B	1814	1/1	0.80	0.15	46,46,46,46	0
82	MG	CM	1895	1/1	0.80	0.19	76,76,76,76	0
82	MG	1	3531	1/1	0.80	0.31	53,53,53,53	0
81	PAR	1	3423	42/42	0.80	0.28	53,68,80,84	42
82	MG	B	1927	1/1	0.80	0.25	52,52,52,52	0
82	MG	AS	3619	1/1	0.80	0.20	59,59,59,59	0
82	MG	1	3447	1/1	0.80	0.16	66,66,66,66	0
82	MG	AS	3623	1/1	0.80	0.27	65,65,65,65	0
82	MG	B	1929	1/1	0.80	0.23	51,51,51,51	0
82	MG	1	3459	1/1	0.80	0.48	55,55,55,55	0
82	MG	CM	1941	1/1	0.80	0.12	52,52,52,52	0
82	MG	B	1891	1/1	0.80	0.12	47,47,47,47	0
82	MG	B	1892	1/1	0.80	0.30	79,79,79,79	0
82	MG	1	3771	1/1	0.80	0.13	49,49,49,49	0
82	MG	AS	3729	1/1	0.80	0.30	41,41,41,41	0
81	PAR	1	3427	42/42	0.80	0.17	53,67,80,88	0
82	MG	1	3749	1/1	0.81	0.23	51,51,51,51	0
82	MG	AU	201	1/1	0.81	0.24	71,71,71,71	0
82	MG	1	3701	1/1	0.81	0.14	50,50,50,50	0
82	MG	CM	1882	1/1	0.81	0.33	52,52,52,52	0
82	MG	1	3460	1/1	0.81	0.20	51,51,51,51	0
82	MG	AS	3690	1/1	0.81	0.20	19,19,19,19	0
82	MG	AS	3699	1/1	0.81	0.23	57,57,57,57	0
82	MG	AS	3702	1/1	0.81	0.14	50,50,50,50	0
82	MG	1	3454	1/1	0.81	0.16	52,52,52,52	0
82	MG	B	1853	1/1	0.81	0.29	55,55,55,55	0
81	PAR	1	3410	42/42	0.81	0.22	40,78,96,113	0
82	MG	B	1871	1/1	0.81	0.19	52,52,52,52	0
81	PAR	B	1802	42/42	0.81	0.19	55,81,98,105	0
82	MG	1	3440	1/1	0.81	0.23	50,50,50,50	0
82	MG	AS	3530	1/1	0.81	0.26	40,40,40,40	0
82	MG	CM	1905	1/1	0.81	0.23	75,75,75,75	0
82	MG	CM	1906	1/1	0.81	0.18	85,85,85,85	0
82	MG	CM	1912	1/1	0.81	0.20	98,98,98,98	0
82	MG	AS	3435	1/1	0.81	0.11	53,53,53,53	0
82	MG	CM	1919	1/1	0.81	0.28	46,46,46,46	0
82	MG	1	3765	1/1	0.81	0.16	38,38,38,38	0
82	MG	CM	1930	1/1	0.81	0.27	57,57,57,57	0
82	MG	1	3505	1/1	0.81	0.11	44,44,44,44	0
82	MG	CM	1937	1/1	0.81	0.20	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	CM	1844	1/1	0.81	0.09	83,83,83,83	0
82	MG	AS	3565	1/1	0.81	0.18	48,48,48,48	0
82	MG	4	203	1/1	0.81	0.13	77,77,77,77	0
82	MG	B	1835	1/1	0.81	0.22	59,59,59,59	0
82	MG	AS	3444	1/1	0.81	0.22	56,56,56,56	0
82	MG	CM	1943	1/1	0.81	0.14	61,61,61,61	0
82	MG	CM	1855	1/1	0.81	0.17	47,47,47,47	0
82	MG	1	3482	1/1	0.81	0.22	42,42,42,42	0
82	MG	1	3743	1/1	0.81	0.23	65,65,65,65	0
82	MG	1	3658	1/1	0.81	0.30	42,42,42,42	0
81	PAR	1	3418	42/42	0.82	0.19	67,85,93,97	42
82	MG	1	3722	1/1	0.82	0.18	41,41,41,41	0
82	MG	1	3653	1/1	0.82	0.26	51,51,51,51	0
82	MG	CM	1843	1/1	0.82	0.17	59,59,59,59	0
82	MG	1	3522	1/1	0.82	0.21	45,45,45,45	0
82	MG	CM	1845	1/1	0.82	0.31	73,73,73,73	0
82	MG	AS	3678	1/1	0.82	0.17	49,49,49,49	0
82	MG	AS	3430	1/1	0.82	0.37	63,63,63,63	0
82	MG	AS	3514	1/1	0.82	0.15	49,49,49,49	0
82	MG	AS	3681	1/1	0.82	0.14	26,26,26,26	0
82	MG	1	3656	1/1	0.82	0.18	62,62,62,62	0
82	MG	B	1902	1/1	0.82	0.19	63,63,63,63	0
81	PAR	B	1803	42/42	0.82	0.24	46,75,88,107	0
82	MG	CM	1864	1/1	0.82	0.18	79,79,79,79	0
82	MG	CM	1865	1/1	0.82	0.21	80,80,80,80	0
82	MG	AS	3693	1/1	0.82	0.12	77,77,77,77	0
82	MG	B	1908	1/1	0.82	0.14	48,48,48,48	0
82	MG	1	3735	1/1	0.82	0.18	34,34,34,34	0
82	MG	1	3495	1/1	0.82	0.10	28,28,28,28	0
81	PAR	CM	1801	42/42	0.82	0.23	72,86,93,103	42
82	MG	AS	3538	1/1	0.82	0.22	40,40,40,40	0
82	MG	1	3500	1/1	0.82	0.21	43,43,43,43	0
82	MG	1	3574	1/1	0.82	0.25	39,39,39,39	0
81	PAR	AS	3406	42/42	0.82	0.14	62,85,101,104	0
82	MG	1	3752	1/1	0.82	0.23	43,43,43,43	0
82	MG	AS	3580	1/1	0.82	0.21	42,42,42,42	0
82	MG	1	3677	1/1	0.82	0.15	43,43,43,43	0
82	MG	AS	3455	1/1	0.82	0.31	61,61,61,61	0
81	PAR	AS	3402	42/42	0.82	0.15	45,64,74,83	0
82	MG	1	3593	1/1	0.82	0.31	44,44,44,44	0
82	MG	AS	3615	1/1	0.82	0.11	86,86,86,86	0
82	MG	CM	1902	1/1	0.82	0.19	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3617	1/1	0.82	0.18	54,54,54,54	0
81	PAR	4	201	42/42	0.82	0.21	27,47,60,67	42
82	MG	1	3684	1/1	0.82	0.18	56,56,56,56	0
82	MG	B	1935	1/1	0.82	0.18	48,48,48,48	0
82	MG	AS	3626	1/1	0.82	0.21	59,59,59,59	0
82	MG	1	3510	1/1	0.82	0.23	55,55,55,55	0
82	MG	1	3767	1/1	0.82	0.25	48,48,48,48	0
82	MG	CM	1808	1/1	0.82	0.12	87,87,87,87	0
82	MG	CM	1933	1/1	0.82	0.20	84,84,84,84	0
82	MG	B	1942	1/1	0.82	0.17	56,56,56,56	0
82	MG	1	3697	1/1	0.82	0.30	49,49,49,49	0
82	MG	B	1858	1/1	0.82	0.14	64,64,64,64	0
82	MG	AS	3478	1/1	0.82	0.16	43,43,43,43	0
82	MG	1	3444	1/1	0.82	0.18	56,56,56,56	0
82	MG	B	1867	1/1	0.82	0.38	52,52,52,52	0
82	MG	j	301	1/1	0.82	0.09	24,24,24,24	0
82	MG	1	3642	1/1	0.82	0.18	57,57,57,57	0
82	MG	AS	3654	1/1	0.82	0.22	55,55,55,55	0
82	MG	B	1880	1/1	0.82	0.22	61,61,61,61	0
82	MG	B	1887	1/1	0.82	0.24	61,61,61,61	0
82	MG	1	3455	1/1	0.83	0.16	57,57,57,57	0
82	MG	AS	3621	1/1	0.83	0.21	54,54,54,54	0
82	MG	1	3770	1/1	0.83	0.17	42,42,42,42	0
82	MG	1	3630	1/1	0.83	0.30	56,56,56,56	0
81	PAR	1	3428	42/42	0.83	0.16	48,62,70,102	0
81	PAR	AS	3411	42/42	0.83	0.17	53,69,91,96	0
82	MG	AS	3742	1/1	0.83	0.29	42,42,42,42	0
82	MG	1	3539	1/1	0.83	0.18	49,49,49,49	0
82	MG	B	1874	1/1	0.83	0.26	50,50,50,50	0
82	MG	B	1876	1/1	0.83	0.28	41,41,41,41	0
82	MG	CM	1914	1/1	0.83	0.15	80,80,80,80	0
82	MG	1	3453	1/1	0.83	0.25	54,54,54,54	0
82	MG	CM	1918	1/1	0.83	0.13	70,70,70,70	0
82	MG	1	3651	1/1	0.83	0.16	28,28,28,28	0
82	MG	CM	1858	1/1	0.83	0.15	45,45,45,45	0
82	MG	CM	1929	1/1	0.83	0.21	52,52,52,52	0
82	MG	1	3516	1/1	0.83	0.10	49,49,49,49	0
82	MG	CM	1863	1/1	0.83	0.34	41,41,41,41	0
82	MG	AS	3710	1/1	0.83	0.17	57,57,57,57	0
82	MG	AS	3456	1/1	0.83	0.21	42,42,42,42	0
81	PAR	B	1801	42/42	0.83	0.17	62,87,108,112	0
82	MG	CM	1816	1/1	0.83	0.14	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3497	1/1	0.83	0.18	69,69,69,69	0
82	MG	1	3463	1/1	0.83	0.41	61,61,61,61	0
82	MG	AS	3656	1/1	0.83	0.12	50,50,50,50	0
82	MG	CM	1827	1/1	0.83	0.24	37,37,37,37	0
82	MG	1	3764	1/1	0.83	0.11	34,34,34,34	0
82	MG	B	1932	1/1	0.83	0.28	66,66,66,66	0
82	MG	1	3525	1/1	0.83	0.25	49,49,49,49	0
82	MG	B	1850	1/1	0.83	0.34	52,52,52,52	0
82	MG	1	3520	1/1	0.84	0.14	59,59,59,59	0
82	MG	1	3611	1/1	0.84	0.26	35,35,35,35	0
81	PAR	1	3411	42/42	0.84	0.23	43,64,77,84	0
82	MG	1	3751	1/1	0.84	0.32	54,54,54,54	0
81	PAR	1	3415	42/42	0.84	0.19	30,66,80,91	0
82	MG	AS	3481	1/1	0.84	0.12	42,42,42,42	0
81	PAR	CM	1804	42/42	0.84	0.23	40,67,81,91	0
82	MG	AS	3725	1/1	0.84	0.26	39,39,39,39	0
82	MG	1	3638	1/1	0.84	0.15	29,29,29,29	0
82	MG	AS	3487	1/1	0.84	0.38	50,50,50,50	0
82	MG	1	3499	1/1	0.84	0.14	36,36,36,36	0
82	MG	CM	1879	1/1	0.84	0.14	82,82,82,82	0
82	MG	1	3696	1/1	0.84	0.19	43,43,43,43	0
82	MG	AS	3490	1/1	0.84	0.24	73,73,73,73	0
82	MG	1	3761	1/1	0.84	0.19	54,54,54,54	0
81	PAR	1	3412	42/42	0.84	0.24	60,78,89,98	42
82	MG	B	1918	1/1	0.84	0.28	41,41,41,41	0
82	MG	1	3650	1/1	0.84	0.32	53,53,53,53	0
82	MG	1	3442	1/1	0.84	0.27	38,38,38,38	0
82	MG	1	3537	1/1	0.84	0.17	42,42,42,42	0
82	MG	AS	3504	1/1	0.84	0.11	46,46,46,46	0
82	MG	AS	3648	1/1	0.84	0.13	41,41,41,41	0
82	MG	CM	1807	1/1	0.84	0.26	49,49,49,49	0
82	MG	1	3768	1/1	0.84	0.17	59,59,59,59	0
82	MG	AS	3508	1/1	0.84	0.14	42,42,42,42	0
81	PAR	1	3417	42/42	0.84	0.16	49,70,84,91	0
81	PAR	AS	3412	42/42	0.84	0.15	37,60,77,90	0
82	MG	AS	3657	1/1	0.84	0.17	42,42,42,42	0
82	MG	CM	1815	1/1	0.84	0.15	50,50,50,50	0
82	MG	AS	3449	1/1	0.84	0.35	47,47,47,47	0
82	MG	1	3775	1/1	0.84	0.22	49,49,49,49	0
82	MG	3	201	1/1	0.84	0.18	36,36,36,36	0
82	MG	AS	3528	1/1	0.84	0.30	47,47,47,47	0
82	MG	1	3484	1/1	0.84	0.15	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	CM	1926	1/1	0.84	0.15	52,52,52,52	0
82	MG	CM	1829	1/1	0.84	0.24	53,53,53,53	0
82	MG	B	1933	1/1	0.84	0.12	44,44,44,44	0
82	MG	4	209	1/1	0.84	0.24	56,56,56,56	0
81	PAR	1	3404	42/42	0.84	0.18	28,57,75,84	0
82	MG	AS	3553	1/1	0.84	0.12	41,41,41,41	0
82	MG	AS	3682	1/1	0.84	0.10	31,31,31,31	0
82	MG	AS	3563	1/1	0.84	0.30	55,55,55,55	0
82	MG	x	201	1/1	0.84	0.18	26,26,26,26	0
82	MG	1	3579	1/1	0.84	0.10	46,46,46,46	0
82	MG	1	3488	1/1	0.84	0.22	47,47,47,47	0
82	MG	1	3740	1/1	0.84	0.42	57,57,57,57	0
82	MG	1	3664	1/1	0.84	0.23	48,48,48,48	0
82	MG	AS	3581	1/1	0.84	0.10	32,32,32,32	0
82	MG	CM	1852	1/1	0.84	0.18	73,73,73,73	0
82	MG	1	3518	1/1	0.84	0.27	30,30,30,30	0
82	MG	AS	3557	1/1	0.85	0.26	60,60,60,60	0
82	MG	1	3747	1/1	0.85	0.27	48,48,48,48	0
82	MG	CM	1866	1/1	0.85	0.30	70,70,70,70	0
82	MG	1	3614	1/1	0.85	0.20	37,37,37,37	0
82	MG	CM	1873	1/1	0.85	0.22	71,71,71,71	0
82	MG	AS	3660	1/1	0.85	0.21	55,55,55,55	0
82	MG	AS	3483	1/1	0.85	0.20	50,50,50,50	0
82	MG	1	3465	1/1	0.85	0.20	51,51,51,51	0
82	MG	1	3698	1/1	0.85	0.18	35,35,35,35	0
82	MG	AS	3578	1/1	0.85	0.17	46,46,46,46	0
82	MG	AS	3671	1/1	0.85	0.15	56,56,56,56	0
81	PAR	1	3424	42/42	0.85	0.26	56,76,83,87	42
82	MG	1	3661	1/1	0.85	0.22	42,42,42,42	0
82	MG	1	3452	1/1	0.85	0.15	46,46,46,46	0
82	MG	1	3555	1/1	0.85	0.25	36,36,36,36	0
82	MG	1	3503	1/1	0.85	0.23	50,50,50,50	0
82	MG	B	1885	1/1	0.85	0.29	54,54,54,54	0
82	MG	1	3725	1/1	0.85	0.16	29,29,29,29	0
82	MG	1	3726	1/1	0.85	0.18	32,32,32,32	0
82	MG	AS	3689	1/1	0.85	0.31	51,51,51,51	0
82	MG	1	3763	1/1	0.85	0.10	32,32,32,32	0
82	MG	AS	3691	1/1	0.85	0.12	19,19,19,19	0
82	MG	1	3648	1/1	0.85	0.14	52,52,52,52	0
82	MG	1	3472	1/1	0.85	0.15	37,37,37,37	0
82	MG	CM	1909	1/1	0.85	0.20	79,79,79,79	0
81	PAR	1	3430	42/42	0.85	0.16	40,63,77,121	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	CM	1833	1/1	0.85	0.32	48,48,48,48	0
82	MG	1	3530	1/1	0.85	0.26	50,50,50,50	0
82	MG	AS	3709	1/1	0.85	0.21	38,38,38,38	0
82	MG	AS	3464	1/1	0.85	0.23	35,35,35,35	0
82	MG	1	3736	1/1	0.85	0.14	41,41,41,41	0
82	MG	CM	1841	1/1	0.85	0.17	66,66,66,66	0
81	PAR	AS	3407	42/42	0.85	0.18	49,75,90,103	0
82	MG	1	3772	1/1	0.85	0.23	53,53,53,53	0
82	MG	AS	3717	1/1	0.85	0.33	53,53,53,53	0
82	MG	AS	3632	1/1	0.85	0.21	51,51,51,51	0
82	MG	AS	3719	1/1	0.85	0.15	48,48,48,48	0
82	MG	CM	1850	1/1	0.85	0.21	50,50,50,50	0
81	PAR	1	3406	42/42	0.85	0.20	37,53,72,86	0
82	MG	1	3692	1/1	0.85	0.19	50,50,50,50	0
82	MG	1	3745	1/1	0.85	0.14	38,38,38,38	0
82	MG	4	206	1/1	0.85	0.34	62,62,62,62	0
82	MG	AS	3536	1/1	0.85	0.11	39,39,39,39	0
82	MG	AS	3647	1/1	0.85	0.21	64,64,64,64	0
82	MG	1	3515	1/1	0.85	0.12	47,47,47,47	0
82	MG	AS	3552	1/1	0.85	0.18	53,53,53,53	0
82	MG	B	1852	1/1	0.85	0.18	54,54,54,54	0
82	MG	AS	3659	1/1	0.86	0.21	30,30,30,30	0
82	MG	AS	3475	1/1	0.86	0.15	37,37,37,37	0
82	MG	AS	3477	1/1	0.86	0.32	81,81,81,81	0
81	PAR	1	3402	42/42	0.86	0.13	46,71,82,93	0
82	MG	1	3609	1/1	0.86	0.16	42,42,42,42	0
82	MG	1	3572	1/1	0.86	0.21	35,35,35,35	0
82	MG	CM	1875	1/1	0.86	0.12	57,57,57,57	0
82	MG	1	3509	1/1	0.86	0.15	42,42,42,42	0
82	MG	AY	401	1/1	0.86	0.35	57,57,57,57	0
82	MG	AS	3434	1/1	0.86	0.25	83,83,83,83	0
82	MG	1	3756	1/1	0.86	0.17	45,45,45,45	0
82	MG	B	1861	1/1	0.86	0.27	33,33,33,33	0
82	MG	1	3776	1/1	0.86	0.23	63,63,63,63	0
82	MG	CM	1811	1/1	0.86	0.27	54,54,54,54	0
82	MG	AS	3592	1/1	0.86	0.17	50,50,50,50	0
82	MG	B	1820	1/1	0.86	0.16	53,53,53,53	0
82	MG	B	1870	1/1	0.86	0.10	30,30,30,30	0
82	MG	B	1821	1/1	0.86	0.18	55,55,55,55	0
82	MG	B	1872	1/1	0.86	0.18	50,50,50,50	0
82	MG	1	3615	1/1	0.86	0.23	34,34,34,34	0
82	MG	CM	1896	1/1	0.86	0.23	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	CM	1822	1/1	0.86	0.27	50,50,50,50	0
82	MG	1	3716	1/1	0.86	0.21	37,37,37,37	0
82	MG	AS	3692	1/1	0.86	0.16	40,40,40,40	0
82	MG	CM	1903	1/1	0.86	0.17	81,81,81,81	0
82	MG	1	3481	1/1	0.86	0.12	60,60,60,60	0
82	MG	CM	1830	1/1	0.86	0.18	55,55,55,55	0
82	MG	CM	1907	1/1	0.86	0.13	73,73,73,73	0
82	MG	AS	3452	1/1	0.86	0.12	78,78,78,78	0
82	MG	B	1828	1/1	0.86	0.26	48,48,48,48	0
82	MG	B	1884	1/1	0.86	0.31	54,54,54,54	0
82	MG	AS	3705	1/1	0.86	0.19	52,52,52,52	0
82	MG	1	3633	1/1	0.86	0.26	55,55,55,55	0
82	MG	B	1941	1/1	0.86	0.17	41,41,41,41	0
82	MG	1	3445	1/1	0.86	0.20	43,43,43,43	0
82	MG	B	1890	1/1	0.86	0.33	46,46,46,46	0
82	MG	CM	1928	1/1	0.86	0.12	60,60,60,60	0
82	MG	AS	3714	1/1	0.86	0.32	44,44,44,44	0
82	MG	AS	3521	1/1	0.86	0.15	60,60,60,60	0
82	MG	B	1834	1/1	0.86	0.12	43,43,43,43	0
82	MG	v	302	1/1	0.86	0.24	36,36,36,36	0
82	MG	v	305	1/1	0.86	0.12	39,39,39,39	0
81	PAR	4	202	42/42	0.86	0.14	44,60,80,87	0
82	MG	B	1838	1/1	0.86	0.20	59,59,59,59	0
82	MG	6	202	1/1	0.86	0.14	20,20,20,20	0
82	MG	1	3468	1/1	0.86	0.17	36,36,36,36	0
82	MG	AS	3650	1/1	0.86	0.13	49,49,49,49	0
82	MG	AS	3471	1/1	0.86	0.09	27,27,27,27	0
82	MG	AS	3540	1/1	0.86	0.25	69,69,69,69	0
82	MG	AS	3550	1/1	0.86	0.20	44,44,44,44	0
82	MG	1	3594	1/1	0.86	0.25	54,54,54,54	0
82	MG	B	1809	1/1	0.86	0.37	54,54,54,54	0
82	MG	AS	3568	1/1	0.87	0.17	41,41,41,41	0
82	MG	B	1912	1/1	0.87	0.20	42,42,42,42	0
82	MG	AS	3574	1/1	0.87	0.27	30,30,30,30	0
82	MG	AS	3577	1/1	0.87	0.33	45,45,45,45	0
82	MG	1	3461	1/1	0.87	0.21	37,37,37,37	0
82	MG	1	3491	1/1	0.87	0.20	48,48,48,48	0
82	MG	B	1842	1/1	0.87	0.22	45,45,45,45	0
82	MG	AS	3585	1/1	0.87	0.16	44,44,44,44	0
82	MG	F	301	1/1	0.87	0.17	39,39,39,39	0
82	MG	AS	3721	1/1	0.87	0.31	71,71,71,71	0
82	MG	AS	3589	1/1	0.87	0.23	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	B	1917	1/1	0.87	0.28	57,57,57,57	0
82	MG	1	3727	1/1	0.87	0.22	57,57,57,57	0
82	MG	B	1847	1/1	0.87	0.16	33,33,33,33	0
82	MG	AS	3603	1/1	0.87	0.20	43,43,43,43	0
82	MG	AS	3604	1/1	0.87	0.23	46,46,46,46	0
82	MG	AS	3480	1/1	0.87	0.14	28,28,28,28	0
82	MG	p	301	1/1	0.87	0.26	47,47,47,47	0
82	MG	CM	1847	1/1	0.87	0.13	38,38,38,38	0
82	MG	AS	3529	1/1	0.87	0.08	34,34,34,34	0
82	MG	1	3641	1/1	0.87	0.16	50,50,50,50	0
82	MG	1	3436	1/1	0.87	0.11	38,38,38,38	0
82	MG	CM	1917	1/1	0.87	0.21	58,58,58,58	0
82	MG	AS	3485	1/1	0.87	0.29	65,65,65,65	0
81	PAR	1	3421	42/42	0.87	0.14	53,69,76,90	42
82	MG	CM	1920	1/1	0.87	0.23	60,60,60,60	0
82	MG	1	3734	1/1	0.87	0.31	42,42,42,42	0
82	MG	AS	3745	1/1	0.87	0.31	49,49,49,49	0
82	MG	CM	1856	1/1	0.87	0.30	72,72,72,72	0
82	MG	AS	3687	1/1	0.87	0.13	38,38,38,38	0
82	MG	AW	301	1/1	0.87	0.13	50,50,50,50	0
82	MG	AS	3459	1/1	0.87	0.27	62,62,62,62	0
82	MG	AS	3542	1/1	0.87	0.22	26,26,26,26	0
82	MG	1	3719	1/1	0.87	0.28	59,59,59,59	0
82	MG	1	3753	1/1	0.87	0.35	58,58,58,58	0
82	MG	1	3721	1/1	0.87	0.24	39,39,39,39	0
82	MG	1	3737	1/1	0.87	0.31	44,44,44,44	0
82	MG	AS	3700	1/1	0.87	0.17	32,32,32,32	0
82	MG	AS	3433	1/1	0.87	0.25	49,49,49,49	0
82	MG	1	3739	1/1	0.87	0.14	46,46,46,46	0
82	MG	1	3603	1/1	0.87	0.20	23,23,23,23	0
82	MG	AS	3707	1/1	0.87	0.23	50,50,50,50	0
82	MG	CM	1880	1/1	0.87	0.25	54,54,54,54	0
83	ZN	CJ	201	1/1	0.87	0.09	187,187,187,187	0
82	MG	1	3511	1/1	0.87	0.33	52,52,52,52	0
82	MG	1	3446	1/1	0.88	0.07	31,31,31,31	0
82	MG	B	1829	1/1	0.88	0.26	36,36,36,36	0
82	MG	B	1875	1/1	0.88	0.10	53,53,53,53	0
80	3K5	1	3401	57/57	0.88	0.19	42,65,85,102	0
81	PAR	CM	1803	42/42	0.88	0.19	46,63,93,101	0
82	MG	CM	1877	1/1	0.88	0.10	53,53,53,53	0
82	MG	AX	401	1/1	0.88	0.28	43,43,43,43	0
82	MG	AS	3491	1/1	0.88	0.18	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	CJ	202	1/1	0.88	0.25	53,53,53,53	0
82	MG	1	3686	1/1	0.88	0.14	40,40,40,40	0
82	MG	AS	3448	1/1	0.88	0.17	25,25,25,25	0
82	MG	1	3731	1/1	0.88	0.13	50,50,50,50	0
82	MG	AS	3496	1/1	0.88	0.11	36,36,36,36	0
82	MG	1	3576	1/1	0.88	0.32	28,28,28,28	0
82	MG	AS	3601	1/1	0.88	0.32	41,41,41,41	0
82	MG	w	301	1/1	0.88	0.27	52,52,52,52	0
82	MG	CM	1891	1/1	0.88	0.16	49,49,49,49	0
82	MG	1	3626	1/1	0.88	0.11	32,32,32,32	0
82	MG	1	3695	1/1	0.88	0.12	36,36,36,36	0
82	MG	AS	3605	1/1	0.88	0.30	24,24,24,24	0
82	MG	AS	3606	1/1	0.88	0.12	33,33,33,33	0
82	MG	1	3450	1/1	0.88	0.10	32,32,32,32	0
82	MG	CM	1823	1/1	0.88	0.28	60,60,60,60	0
82	MG	B	1896	1/1	0.88	0.09	48,48,48,48	0
82	MG	AS	3509	1/1	0.88	0.19	44,44,44,44	0
82	MG	AS	3511	1/1	0.88	0.13	37,37,37,37	0
82	MG	B	1807	1/1	0.88	0.32	59,59,59,59	0
82	MG	B	1900	1/1	0.88	0.34	41,41,41,41	0
82	MG	1	3462	1/1	0.88	0.23	40,40,40,40	0
82	MG	AS	3462	1/1	0.88	0.14	54,54,54,54	0
82	MG	CM	1913	1/1	0.88	0.31	46,46,46,46	0
82	MG	AS	3522	1/1	0.88	0.12	52,52,52,52	0
82	MG	1	3738	1/1	0.88	0.15	55,55,55,55	0
82	MG	B	1904	1/1	0.88	0.14	59,59,59,59	0
82	MG	AS	3417	1/1	0.88	0.16	50,50,50,50	0
82	MG	1	3536	1/1	0.88	0.12	54,54,54,54	0
82	MG	B	1811	1/1	0.88	0.29	49,49,49,49	0
82	MG	CM	1922	1/1	0.88	0.21	45,45,45,45	0
82	MG	AS	3421	1/1	0.88	0.17	60,60,60,60	0
82	MG	1	3766	1/1	0.88	0.15	31,31,31,31	0
82	MG	1	3588	1/1	0.88	0.11	28,28,28,28	0
82	MG	1	3456	1/1	0.88	0.16	31,31,31,31	0
82	MG	AS	3473	1/1	0.88	0.39	65,65,65,65	0
82	MG	1	3464	1/1	0.88	0.09	28,28,28,28	0
82	MG	1	3665	1/1	0.88	0.12	54,54,54,54	0
82	MG	1	3667	1/1	0.88	0.10	35,35,35,35	0
82	MG	1	3595	1/1	0.88	0.20	26,26,26,26	0
82	MG	1	3647	1/1	0.88	0.09	30,30,30,30	0
82	MG	AS	3731	1/1	0.88	0.24	53,53,53,53	0
81	PAR	1	3429	42/42	0.88	0.14	37,61,77,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3735	1/1	0.88	0.10	35,35,35,35	0
82	MG	B	1923	1/1	0.88	0.29	49,49,49,49	0
82	MG	AS	3737	1/1	0.88	0.20	61,61,61,61	0
82	MG	AS	3436	1/1	0.88	0.28	48,48,48,48	0
82	MG	AS	3566	1/1	0.88	0.13	43,43,43,43	0
82	MG	AS	3437	1/1	0.88	0.20	63,63,63,63	0
82	MG	1	3542	1/1	0.88	0.33	40,40,40,40	0
82	MG	B	1826	1/1	0.89	0.18	64,64,64,64	0
82	MG	CM	1870	1/1	0.89	0.29	41,41,41,41	0
82	MG	AS	3575	1/1	0.89	0.16	47,47,47,47	0
82	MG	AS	3457	1/1	0.89	0.19	43,43,43,43	0
82	MG	v	303	1/1	0.89	0.10	39,39,39,39	0
82	MG	1	3680	1/1	0.89	0.19	25,25,25,25	0
82	MG	AS	3503	1/1	0.89	0.11	44,44,44,44	0
82	MG	B	1909	1/1	0.89	0.16	43,43,43,43	0
82	MG	B	1868	1/1	0.89	0.43	63,63,63,63	0
82	MG	1	3504	1/1	0.89	0.17	36,36,36,36	0
82	MG	1	3606	1/1	0.89	0.16	29,29,29,29	0
82	MG	AS	3595	1/1	0.89	0.23	60,60,60,60	0
82	MG	AS	3683	1/1	0.89	0.22	39,39,39,39	0
82	MG	AS	3684	1/1	0.89	0.13	85,85,85,85	0
82	MG	1	3659	1/1	0.89	0.18	45,45,45,45	0
82	MG	B	1915	1/1	0.89	0.16	43,43,43,43	0
82	MG	B	1832	1/1	0.89	0.24	41,41,41,41	0
82	MG	AS	3518	1/1	0.89	0.13	27,27,27,27	0
82	MG	1	3608	1/1	0.89	0.26	34,34,34,34	0
82	MG	AS	3520	1/1	0.89	0.17	70,70,70,70	0
82	MG	1	3467	1/1	0.89	0.33	48,48,48,48	0
82	MG	1	3662	1/1	0.89	0.10	48,48,48,48	0
82	MG	B	1879	1/1	0.89	0.26	51,51,51,51	0
82	MG	CM	1824	1/1	0.89	0.20	68,68,68,68	0
82	MG	CM	1901	1/1	0.89	0.12	39,39,39,39	0
82	MG	B	1921	1/1	0.89	0.17	38,38,38,38	0
82	MG	AS	3618	1/1	0.89	0.24	27,27,27,27	0
82	MG	1	3551	1/1	0.89	0.18	45,45,45,45	0
82	MG	B	1883	1/1	0.89	0.28	37,37,37,37	0
82	MG	1	3612	1/1	0.89	0.25	40,40,40,40	0
82	MG	1	3480	1/1	0.89	0.28	55,55,55,55	0
82	MG	B	1886	1/1	0.89	0.28	46,46,46,46	0
82	MG	1	3732	1/1	0.89	0.22	39,39,39,39	0
82	MG	CM	1837	1/1	0.89	0.21	62,62,62,62	0
82	MG	CM	1915	1/1	0.89	0.09	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	B	1888	1/1	0.89	0.12	49,49,49,49	0
82	MG	B	1931	1/1	0.89	0.14	52,52,52,52	0
82	MG	AS	3541	1/1	0.89	0.19	49,49,49,49	0
82	MG	1	3591	1/1	0.89	0.18	31,31,31,31	0
82	MG	AS	3544	1/1	0.89	0.22	30,30,30,30	0
82	MG	AS	3546	1/1	0.89	0.28	31,31,31,31	0
82	MG	1	3557	1/1	0.89	0.24	26,26,26,26	0
82	MG	4	205	1/1	0.89	0.11	36,36,36,36	0
82	MG	AS	3644	1/1	0.89	0.11	56,56,56,56	0
82	MG	1	3496	1/1	0.89	0.24	39,39,39,39	0
82	MG	CM	1849	1/1	0.89	0.10	58,58,58,58	0
82	MG	AS	3646	1/1	0.89	0.16	66,66,66,66	0
82	MG	B	1938	1/1	0.89	0.23	39,39,39,39	0
82	MG	CM	1935	1/1	0.89	0.16	53,53,53,53	0
82	MG	CM	1936	1/1	0.89	0.16	64,64,64,64	0
82	MG	AS	3560	1/1	0.89	0.15	65,65,65,65	0
82	MG	AS	3561	1/1	0.89	0.22	32,32,32,32	0
82	MG	B	1819	1/1	0.89	0.20	66,66,66,66	0
82	MG	AS	3653	1/1	0.89	0.12	28,28,28,28	0
82	MG	1	3715	1/1	0.89	0.12	43,43,43,43	0
82	MG	1	3527	1/1	0.89	0.12	22,22,22,22	0
82	MG	1	3717	1/1	0.89	0.32	53,53,53,53	0
82	MG	CM	1944	1/1	0.89	0.27	63,63,63,63	0
82	MG	CM	1945	1/1	0.89	0.19	74,74,74,74	0
82	MG	B	1944	1/1	0.89	0.23	30,30,30,30	0
82	MG	1	3438	1/1	0.89	0.14	35,35,35,35	0
82	MG	DK	201	1/1	0.89	0.20	44,44,44,44	0
82	MG	AS	3495	1/1	0.89	0.09	28,28,28,28	0
82	MG	AS	3741	1/1	0.89	0.11	31,31,31,31	0
82	MG	AS	3661	1/1	0.89	0.29	33,33,33,33	0
82	MG	AS	3594	1/1	0.90	0.16	32,32,32,32	0
82	MG	v	301	1/1	0.90	0.06	36,36,36,36	0
82	MG	1	3548	1/1	0.90	0.13	33,33,33,33	0
82	MG	1	3700	1/1	0.90	0.09	28,28,28,28	0
82	MG	AS	3422	1/1	0.90	0.12	56,56,56,56	0
82	MG	1	3760	1/1	0.90	0.21	49,49,49,49	0
82	MG	1	3629	1/1	0.90	0.09	52,52,52,52	0
82	MG	CM	1886	1/1	0.90	0.25	44,44,44,44	0
82	MG	AS	3425	1/1	0.90	0.17	44,44,44,44	0
82	MG	AS	3527	1/1	0.90	0.31	59,59,59,59	0
82	MG	AS	3609	1/1	0.90	0.15	57,57,57,57	0
82	MG	1	3704	1/1	0.90	0.08	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	1	3705	1/1	0.90	0.09	23,23,23,23	0
82	MG	1	3669	1/1	0.90	0.11	46,46,46,46	0
82	MG	AS	3531	1/1	0.90	0.17	72,72,72,72	0
82	MG	1	3710	1/1	0.90	0.09	37,37,37,37	0
82	MG	AS	3697	1/1	0.90	0.24	46,46,46,46	0
82	MG	CM	1898	1/1	0.90	0.18	56,56,56,56	0
82	MG	CM	1899	1/1	0.90	0.25	43,43,43,43	0
82	MG	B	1881	1/1	0.90	0.16	54,54,54,54	0
82	MG	1	3712	1/1	0.90	0.37	50,50,50,50	0
82	MG	AS	3622	1/1	0.90	0.33	38,38,38,38	0
82	MG	1	3558	1/1	0.90	0.22	52,52,52,52	0
82	MG	AS	3625	1/1	0.90	0.08	35,35,35,35	0
82	MG	1	3583	1/1	0.90	0.20	40,40,40,40	0
82	MG	AS	3708	1/1	0.90	0.25	38,38,38,38	0
82	MG	CM	1908	1/1	0.90	0.26	43,43,43,43	0
82	MG	1	3568	1/1	0.90	0.13	43,43,43,43	0
82	MG	CM	1910	1/1	0.90	0.13	67,67,67,67	0
82	MG	1	3635	1/1	0.90	0.33	70,70,70,70	0
82	MG	1	3586	1/1	0.90	0.25	30,30,30,30	0
82	MG	1	3569	1/1	0.90	0.16	35,35,35,35	0
82	MG	1	3590	1/1	0.90	0.11	35,35,35,35	0
82	MG	1	3550	1/1	0.90	0.14	21,21,21,21	0
82	MG	AS	3637	1/1	0.90	0.12	73,73,73,73	0
82	MG	B	1893	1/1	0.90	0.31	51,51,51,51	0
82	MG	AS	3554	1/1	0.90	0.27	36,36,36,36	0
82	MG	B	1851	1/1	0.90	0.10	49,49,49,49	0
82	MG	CM	1921	1/1	0.90	0.09	57,57,57,57	0
82	MG	1	3690	1/1	0.90	0.07	40,40,40,40	0
82	MG	CM	1923	1/1	0.90	0.31	58,58,58,58	0
82	MG	B	1939	1/1	0.90	0.14	41,41,41,41	0
82	MG	1	3646	1/1	0.90	0.13	38,38,38,38	0
82	MG	B	1857	1/1	0.90	0.17	39,39,39,39	0
82	MG	1	3489	1/1	0.90	0.24	34,34,34,34	0
82	MG	B	1859	1/1	0.90	0.36	38,38,38,38	0
82	MG	CM	1931	1/1	0.90	0.30	55,55,55,55	0
82	MG	B	1860	1/1	0.90	0.15	51,51,51,51	0
82	MG	AS	3652	1/1	0.90	0.13	48,48,48,48	0
82	MG	AS	3498	1/1	0.90	0.20	45,45,45,45	0
82	MG	B	1945	1/1	0.90	0.16	67,67,67,67	0
82	MG	AS	3734	1/1	0.90	0.28	49,49,49,49	0
82	MG	AS	3500	1/1	0.90	0.13	41,41,41,41	0
82	MG	C	301	1/1	0.90	0.36	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	B	1905	1/1	0.90	0.32	42,42,42,42	0
82	MG	AS	3458	1/1	0.90	0.18	40,40,40,40	0
82	MG	AS	3579	1/1	0.90	0.20	49,49,49,49	0
82	MG	4	207	1/1	0.90	0.15	35,35,35,35	0
82	MG	B	1863	1/1	0.90	0.17	74,74,74,74	0
82	MG	K	301	1/1	0.90	0.21	54,54,54,54	0
82	MG	1	3476	1/1	0.90	0.13	38,38,38,38	0
82	MG	1	3616	1/1	0.90	0.29	51,51,51,51	0
82	MG	AS	3747	1/1	0.90	0.13	41,41,41,41	0
82	MG	CL	301	1/1	0.90	0.14	87,87,87,87	0
82	MG	AS	3591	1/1	0.90	0.22	38,38,38,38	0
82	MG	AS	3673	1/1	0.90	0.19	44,44,44,44	0
82	MG	1	3666	1/1	0.90	0.24	41,41,41,41	0
82	MG	1	3493	1/1	0.91	0.22	50,50,50,50	0
82	MG	1	3441	1/1	0.91	0.26	41,41,41,41	0
82	MG	AS	3715	1/1	0.91	0.20	45,45,45,45	0
82	MG	1	3435	1/1	0.91	0.20	38,38,38,38	0
82	MG	1	3623	1/1	0.91	0.18	36,36,36,36	0
82	MG	AS	3590	1/1	0.91	0.24	26,26,26,26	0
82	MG	B	1899	1/1	0.91	0.13	42,42,42,42	0
82	MG	CM	1834	1/1	0.91	0.37	63,63,63,63	0
82	MG	B	1936	1/1	0.91	0.08	59,59,59,59	0
82	MG	1	3741	1/1	0.91	0.15	46,46,46,46	0
82	MG	1	3688	1/1	0.91	0.11	32,32,32,32	0
82	MG	AS	3596	1/1	0.91	0.17	65,65,65,65	0
82	MG	6	201	1/1	0.91	0.19	49,49,49,49	0
82	MG	1	3474	1/1	0.91	0.12	27,27,27,27	0
82	MG	AS	3664	1/1	0.91	0.17	45,45,45,45	0
82	MG	B	1833	1/1	0.91	0.22	38,38,38,38	0
82	MG	AB	201	1/1	0.91	0.15	26,26,26,26	0
82	MG	AS	3445	1/1	0.91	0.12	46,46,46,46	0
82	MG	1	3556	1/1	0.91	0.15	25,25,25,25	0
82	MG	1	3486	1/1	0.91	0.18	36,36,36,36	0
82	MG	1	3694	1/1	0.91	0.13	37,37,37,37	0
82	MG	AS	3677	1/1	0.91	0.10	59,59,59,59	0
82	MG	B	1911	1/1	0.91	0.18	58,58,58,58	0
82	MG	1	3632	1/1	0.91	0.12	15,15,15,15	0
82	MG	1	3517	1/1	0.91	0.13	36,36,36,36	0
82	MG	AS	3549	1/1	0.91	0.14	32,32,32,32	0
82	MG	1	3562	1/1	0.91	0.21	29,29,29,29	0
82	MG	AS	3551	1/1	0.91	0.16	32,32,32,32	0
82	MG	1	3670	1/1	0.91	0.18	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	f	102	1/1	0.91	0.11	55,55,55,55	0
82	MG	CM	1859	1/1	0.91	0.21	36,36,36,36	0
82	MG	AS	3746	1/1	0.91	0.07	40,40,40,40	0
82	MG	CM	1927	1/1	0.91	0.20	52,52,52,52	0
82	MG	B	1843	1/1	0.91	0.22	37,37,37,37	0
82	MG	1	3671	1/1	0.91	0.10	53,53,53,53	0
82	MG	B	1882	1/1	0.91	0.21	36,36,36,36	0
82	MG	AS	3418	1/1	0.91	0.14	35,35,35,35	0
82	MG	CM	1868	1/1	0.91	0.23	39,39,39,39	0
82	MG	B	1846	1/1	0.91	0.29	52,52,52,52	0
82	MG	4	204	1/1	0.91	0.17	51,51,51,51	0
82	MG	1	3673	1/1	0.91	0.09	22,22,22,22	0
82	MG	AS	3694	1/1	0.91	0.21	53,53,53,53	0
82	MG	B	1922	1/1	0.91	0.25	43,43,43,43	0
82	MG	1	3492	1/1	0.91	0.20	29,29,29,29	0
82	MG	1	3589	1/1	0.91	0.29	36,36,36,36	0
82	MG	CM	1878	1/1	0.91	0.25	42,42,42,42	0
82	MG	AS	3569	1/1	0.91	0.18	36,36,36,36	0
82	MG	1	3546	1/1	0.91	0.23	43,43,43,43	0
82	MG	AS	3704	1/1	0.91	0.10	61,61,61,61	0
82	MG	1	3709	1/1	0.91	0.16	29,29,29,29	0
82	MG	AS	3513	1/1	0.91	0.31	31,31,31,31	0
82	MG	AS	3468	1/1	0.91	0.18	56,56,56,56	0
82	MG	CM	1819	1/1	0.91	0.34	58,58,58,58	0
82	MG	1	3639	1/1	0.91	0.22	56,56,56,56	0
82	MG	B	1854	1/1	0.91	0.16	37,37,37,37	0
82	MG	AS	3429	1/1	0.91	0.10	38,38,38,38	0
82	MG	AS	3712	1/1	0.91	0.12	41,41,41,41	0
82	MG	1	3512	1/1	0.92	0.13	27,27,27,27	0
82	MG	AS	3635	1/1	0.92	0.08	43,43,43,43	0
82	MG	4	208	1/1	0.92	0.27	33,33,33,33	0
82	MG	1	3582	1/1	0.92	0.22	31,31,31,31	0
82	MG	CM	1821	1/1	0.92	0.12	61,61,61,61	0
82	MG	CM	1867	1/1	0.92	0.16	49,49,49,49	0
82	MG	1	3470	1/1	0.92	0.33	73,73,73,73	0
82	MG	1	3769	1/1	0.92	0.13	34,34,34,34	0
82	MG	AS	3641	1/1	0.92	0.13	29,29,29,29	0
82	MG	CM	1872	1/1	0.92	0.21	52,52,52,52	0
82	MG	AS	3642	1/1	0.92	0.18	49,49,49,49	0
82	MG	AS	3547	1/1	0.92	0.20	25,25,25,25	0
82	MG	AS	3688	1/1	0.92	0.22	45,45,45,45	0
82	MG	AS	3733	1/1	0.92	0.11	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3510	1/1	0.92	0.17	40,40,40,40	0
82	MG	1	3676	1/1	0.92	0.20	36,36,36,36	0
82	MG	AS	3512	1/1	0.92	0.16	36,36,36,36	0
82	MG	1	3475	1/1	0.92	0.17	25,25,25,25	0
82	MG	B	1878	1/1	0.92	0.16	41,41,41,41	0
82	MG	B	1924	1/1	0.92	0.24	32,32,32,32	0
82	MG	1	3599	1/1	0.92	0.18	20,20,20,20	0
82	MG	1	3478	1/1	0.92	0.06	44,44,44,44	0
82	MG	1	3601	1/1	0.92	0.15	43,43,43,43	0
82	MG	AS	3562	1/1	0.92	0.08	37,37,37,37	0
82	MG	B	1817	1/1	0.92	0.16	48,48,48,48	0
82	MG	CM	1934	1/1	0.92	0.25	53,53,53,53	0
82	MG	B	1907	1/1	0.92	0.35	48,48,48,48	0
82	MG	CM	1889	1/1	0.92	0.09	50,50,50,50	0
82	MG	1	3640	1/1	0.92	0.10	32,32,32,32	0
82	MG	1	3748	1/1	0.92	0.16	55,55,55,55	0
82	MG	1	3554	1/1	0.92	0.23	34,34,34,34	0
82	MG	B	1862	1/1	0.92	0.16	41,41,41,41	0
82	MG	B	1934	1/1	0.92	0.21	30,30,30,30	0
82	MG	1	3577	1/1	0.92	0.08	29,29,29,29	0
82	MG	1	3563	1/1	0.92	0.21	25,25,25,25	0
82	MG	B	1844	1/1	0.92	0.24	51,51,51,51	0
82	MG	B	1806	1/1	0.92	0.17	38,38,38,38	0
82	MG	AS	3535	1/1	0.92	0.18	39,39,39,39	0
82	MG	AS	3451	1/1	0.92	0.15	59,59,59,59	0
82	MG	DJ	201	1/1	0.92	0.14	38,38,38,38	0
82	MG	AS	3502	1/1	0.92	0.14	39,39,39,39	0
82	MG	AS	3676	1/1	0.92	0.07	43,43,43,43	0
83	ZN	AH	201	1/1	0.92	0.16	134,134,134,134	0
82	MG	CM	1904	1/1	0.92	0.10	43,43,43,43	0
83	ZN	h	201	1/1	0.92	0.10	165,165,165,165	0
82	MG	AS	3539	1/1	0.92	0.15	31,31,31,31	0
82	MG	AS	3584	1/1	0.92	0.23	29,29,29,29	0
82	MG	AS	3608	1/1	0.93	0.21	38,38,38,38	0
82	MG	1	3533	1/1	0.93	0.07	22,22,22,22	0
82	MG	AS	3612	1/1	0.93	0.08	51,51,51,51	0
82	MG	1	3534	1/1	0.93	0.16	16,16,16,16	0
82	MG	1	3514	1/1	0.93	0.23	45,45,45,45	0
82	MG	1	3559	1/1	0.93	0.21	16,16,16,16	0
82	MG	AP	202	1/1	0.93	0.17	61,61,61,61	0
82	MG	CM	1814	1/1	0.93	0.25	56,56,56,56	0
82	MG	1	3592	1/1	0.93	0.25	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	1	3613	1/1	0.93	0.25	30,30,30,30	0
82	MG	CM	1817	1/1	0.93	0.20	43,43,43,43	0
82	MG	1	3773	1/1	0.93	0.11	49,49,49,49	0
82	MG	1	3560	1/1	0.93	0.18	16,16,16,16	0
82	MG	1	3561	1/1	0.93	0.24	23,23,23,23	0
82	MG	AS	3624	1/1	0.93	0.13	34,34,34,34	0
82	MG	1	3644	1/1	0.93	0.11	34,34,34,34	0
82	MG	1	3581	1/1	0.93	0.10	16,16,16,16	0
82	MG	1	3617	1/1	0.93	0.22	26,26,26,26	0
82	MG	1	3466	1/1	0.93	0.12	24,24,24,24	0
82	MG	CM	1826	1/1	0.93	0.11	28,28,28,28	0
82	MG	1	3625	1/1	0.93	0.20	24,24,24,24	0
82	MG	CM	1828	1/1	0.93	0.18	29,29,29,29	0
82	MG	1	3730	1/1	0.93	0.24	42,42,42,42	0
82	MG	AS	3582	1/1	0.93	0.17	25,25,25,25	0
82	MG	AS	3634	1/1	0.93	0.09	42,42,42,42	0
82	MG	1	3473	1/1	0.93	0.21	59,59,59,59	0
82	MG	B	1818	1/1	0.93	0.43	58,58,58,58	0
82	MG	AS	3439	1/1	0.93	0.13	50,50,50,50	0
82	MG	1	3627	1/1	0.93	0.14	34,34,34,34	0
82	MG	1	3449	1/1	0.93	0.23	32,32,32,32	0
82	MG	1	3602	1/1	0.93	0.11	16,16,16,16	0
82	MG	AS	3506	1/1	0.93	0.13	35,35,35,35	0
82	MG	AS	3593	1/1	0.93	0.24	40,40,40,40	0
82	MG	1	3655	1/1	0.93	0.13	20,20,20,20	0
82	MG	1	3707	1/1	0.93	0.23	34,34,34,34	0
82	MG	CM	1893	1/1	0.93	0.15	51,51,51,51	0
82	MG	B	1824	1/1	0.93	0.20	25,25,25,25	0
82	MG	B	1825	1/1	0.93	0.25	44,44,44,44	0
82	MG	AS	3600	1/1	0.93	0.20	38,38,38,38	0
82	MG	CM	1846	1/1	0.93	0.07	44,44,44,44	0
82	MG	1	3708	1/1	0.93	0.23	25,25,25,25	0
82	MG	AT	201	1/1	0.93	0.12	37,37,37,37	0
82	MG	1	3678	1/1	0.93	0.11	50,50,50,50	0
82	MG	1	3523	1/1	0.93	0.08	28,28,28,28	0
82	MG	AS	3515	1/1	0.93	0.09	43,43,43,43	0
82	MG	1	3605	1/1	0.93	0.19	29,29,29,29	0
82	MG	AS	3517	1/1	0.93	0.09	34,34,34,34	0
82	MG	AS	3607	1/1	0.93	0.21	32,32,32,32	0
82	MG	1	3774	1/1	0.94	0.20	57,57,57,57	0
82	MG	1	3744	1/1	0.94	0.22	47,47,47,47	0
82	MG	1	3714	1/1	0.94	0.15	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	1	3543	1/1	0.94	0.21	20,20,20,20	0
82	MG	AS	3543	1/1	0.94	0.13	31,31,31,31	0
82	MG	1	3565	1/1	0.94	0.24	29,29,29,29	0
82	MG	AS	3599	1/1	0.94	0.38	59,59,59,59	0
82	MG	AS	3545	1/1	0.94	0.19	38,38,38,38	0
82	MG	1	3685	1/1	0.94	0.13	43,43,43,43	0
82	MG	1	3566	1/1	0.94	0.25	19,19,19,19	0
82	MG	AS	3726	1/1	0.94	0.37	53,53,53,53	0
82	MG	AS	3548	1/1	0.94	0.15	37,37,37,37	0
82	MG	1	3687	1/1	0.94	0.25	22,22,22,22	0
82	MG	AS	3663	1/1	0.94	0.21	47,47,47,47	0
82	MG	1	3544	1/1	0.94	0.12	26,26,26,26	0
82	MG	AS	3665	1/1	0.94	0.09	40,40,40,40	0
82	MG	AS	3666	1/1	0.94	0.09	73,73,73,73	0
82	MG	1	3620	1/1	0.94	0.21	25,25,25,25	0
82	MG	CM	1911	1/1	0.94	0.13	70,70,70,70	0
82	MG	B	1894	1/1	0.94	0.16	39,39,39,39	0
82	MG	1	3643	1/1	0.94	0.10	39,39,39,39	0
82	MG	1	3621	1/1	0.94	0.18	23,23,23,23	0
82	MG	AS	3555	1/1	0.94	0.09	34,34,34,34	0
82	MG	AS	3556	1/1	0.94	0.24	22,22,22,22	0
82	MG	B	1897	1/1	0.94	0.27	59,59,59,59	0
82	MG	AS	3616	1/1	0.94	0.18	71,71,71,71	0
82	MG	1	3645	1/1	0.94	0.23	22,22,22,22	0
82	MG	1	3585	1/1	0.94	0.07	33,33,33,33	0
82	MG	1	3443	1/1	0.94	0.10	36,36,36,36	0
82	MG	1	3604	1/1	0.94	0.26	24,24,24,24	0
82	MG	AS	3476	1/1	0.94	0.20	30,30,30,30	0
82	MG	CM	1861	1/1	0.94	0.08	46,46,46,46	0
82	MG	CM	1925	1/1	0.94	0.26	34,34,34,34	0
82	MG	v	304	1/1	0.94	0.22	50,50,50,50	0
82	MG	B	1864	1/1	0.94	0.22	30,30,30,30	0
82	MG	1	3570	1/1	0.94	0.08	38,38,38,38	0
82	MG	1	3547	1/1	0.94	0.17	42,42,42,42	0
82	MG	1	3607	1/1	0.94	0.21	29,29,29,29	0
82	MG	AS	3570	1/1	0.94	0.11	66,66,66,66	0
82	MG	AS	3571	1/1	0.94	0.17	23,23,23,23	0
82	MG	B	1869	1/1	0.94	0.21	38,38,38,38	0
82	MG	AS	3573	1/1	0.94	0.11	43,43,43,43	0
82	MG	1	3703	1/1	0.94	0.24	18,18,18,18	0
82	MG	AS	3633	1/1	0.94	0.10	28,28,28,28	0
82	MG	AS	3523	1/1	0.94	0.24	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3576	1/1	0.94	0.14	42,42,42,42	0
82	MG	AS	3698	1/1	0.94	0.22	42,42,42,42	0
82	MG	AS	3484	1/1	0.94	0.15	39,39,39,39	0
82	MG	1	3674	1/1	0.94	0.19	18,18,18,18	0
82	MG	AS	3701	1/1	0.94	0.20	34,34,34,34	0
82	MG	1	3652	1/1	0.94	0.14	35,35,35,35	0
82	MG	1	3631	1/1	0.94	0.07	37,37,37,37	0
82	MG	AS	3640	1/1	0.94	0.10	46,46,46,46	0
82	MG	1	3497	1/1	0.94	0.18	32,32,32,32	0
82	MG	AS	3706	1/1	0.94	0.38	49,49,49,49	0
82	MG	AP	203	1/1	0.94	0.15	33,33,33,33	0
82	MG	1	3549	1/1	0.94	0.17	39,39,39,39	0
82	MG	1	3524	1/1	0.94	0.15	32,32,32,32	0
82	MG	1	3508	1/1	0.94	0.16	27,27,27,27	0
82	MG	1	3711	1/1	0.94	0.07	40,40,40,40	0
82	MG	1	3553	1/1	0.94	0.18	25,25,25,25	0
82	MG	1	3713	1/1	0.94	0.15	21,21,21,21	0
82	MG	AS	3649	1/1	0.94	0.09	63,63,63,63	0
82	MG	AS	3696	1/1	0.95	0.21	42,42,42,42	0
82	MG	AS	3533	1/1	0.95	0.11	39,39,39,39	0
82	MG	CM	1836	1/1	0.95	0.19	56,56,56,56	0
82	MG	1	3672	1/1	0.95	0.27	27,27,27,27	0
82	MG	1	3597	1/1	0.95	0.17	26,26,26,26	0
82	MG	B	1877	1/1	0.95	0.25	42,42,42,42	0
82	MG	1	3622	1/1	0.95	0.28	25,25,25,25	0
82	MG	AS	3443	1/1	0.95	0.10	18,18,18,18	0
82	MG	AS	3675	1/1	0.95	0.06	38,38,38,38	0
82	MG	1	3487	1/1	0.95	0.04	24,24,24,24	0
82	MG	1	3723	1/1	0.95	0.22	27,27,27,27	0
82	MG	1	3691	1/1	0.95	0.10	36,36,36,36	0
82	MG	1	3610	1/1	0.95	0.21	41,41,41,41	0
82	MG	AS	3597	1/1	0.95	0.23	33,33,33,33	0
82	MG	1	3528	1/1	0.95	0.15	31,31,31,31	0
82	MG	B	1903	1/1	0.95	0.15	48,48,48,48	0
82	MG	1	3540	1/1	0.95	0.23	25,25,25,25	0
82	MG	1	3529	1/1	0.95	0.16	28,28,28,28	0
82	MG	1	3506	1/1	0.95	0.10	33,33,33,33	0
82	MG	1	3571	1/1	0.95	0.25	18,18,18,18	0
82	MG	AS	3431	1/1	0.95	0.21	25,25,25,25	0
82	MG	1	3526	1/1	0.95	0.20	22,22,22,22	0
82	MG	B	1889	1/1	0.95	0.07	32,32,32,32	0
82	MG	1	3699	1/1	0.95	0.08	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	1	3564	1/1	0.95	0.18	29,29,29,29	0
82	MG	1	3575	1/1	0.95	0.12	33,33,33,33	0
82	MG	B	1855	1/1	0.95	0.16	27,27,27,27	0
82	MG	AW	302	1/1	0.95	0.11	31,31,31,31	0
83	ZN	CB	201	1/1	0.95	0.06	159,159,159,159	0
82	MG	AS	3722	1/1	0.95	0.06	39,39,39,39	0
82	MG	AS	3416	1/1	0.95	0.13	55,55,55,55	0
82	MG	AS	3739	1/1	0.96	0.06	36,36,36,36	0
82	MG	1	3587	1/1	0.96	0.10	23,23,23,23	0
82	MG	1	3702	1/1	0.96	0.16	23,23,23,23	0
82	MG	1	3573	1/1	0.96	0.18	31,31,31,31	0
82	MG	1	3758	1/1	0.96	0.14	27,27,27,27	0
82	MG	1	3567	1/1	0.96	0.12	16,16,16,16	0
82	MG	AS	3507	1/1	0.96	0.18	48,48,48,48	0
82	MG	AS	3558	1/1	0.96	0.22	26,26,26,26	0
82	MG	AS	3559	1/1	0.96	0.17	39,39,39,39	0
82	MG	AS	3695	1/1	0.96	0.29	36,36,36,36	0
82	MG	B	1865	1/1	0.96	0.15	31,31,31,31	0
82	MG	1	3618	1/1	0.96	0.25	19,19,19,19	0
82	MG	AS	3672	1/1	0.96	0.10	34,34,34,34	0
82	MG	1	3619	1/1	0.96	0.31	22,22,22,22	0
82	MG	1	3596	1/1	0.96	0.04	11,11,11,11	0
82	MG	B	1841	1/1	0.96	0.16	40,40,40,40	0
82	MG	CM	1860	1/1	0.96	0.26	46,46,46,46	0
82	MG	1	3494	1/1	0.96	0.07	23,23,23,23	0
82	MG	B	1856	1/1	0.96	0.29	45,45,45,45	0
82	MG	1	3580	1/1	0.96	0.20	27,27,27,27	0
82	MG	AS	3587	1/1	0.96	0.09	20,20,20,20	0
82	MG	AS	3631	1/1	0.96	0.10	67,67,67,67	0
82	MG	AS	3588	1/1	0.96	0.17	20,20,20,20	0
83	ZN	AP	201	1/1	0.96	0.08	153,153,153,153	0
82	MG	1	3720	1/1	0.96	0.15	25,25,25,25	0
82	MG	AS	3611	1/1	0.96	0.12	45,45,45,45	0
82	MG	AS	3658	1/1	0.96	0.12	51,51,51,51	0
83	ZN	CE	101	1/1	0.96	0.06	68,68,68,68	0
82	MG	1	3502	1/1	0.96	0.17	36,36,36,36	0
83	ZN	CK	101	1/1	0.96	0.06	94,94,94,94	0
82	MG	AS	3613	1/1	0.96	0.10	55,55,55,55	0
82	MG	1	3538	1/1	0.97	0.11	52,52,52,52	0
82	MG	1	3552	1/1	0.97	0.05	19,19,19,19	0
82	MG	1	3628	1/1	0.97	0.10	34,34,34,34	0
82	MG	1	3433	1/1	0.97	0.15	35,35,35,35	0

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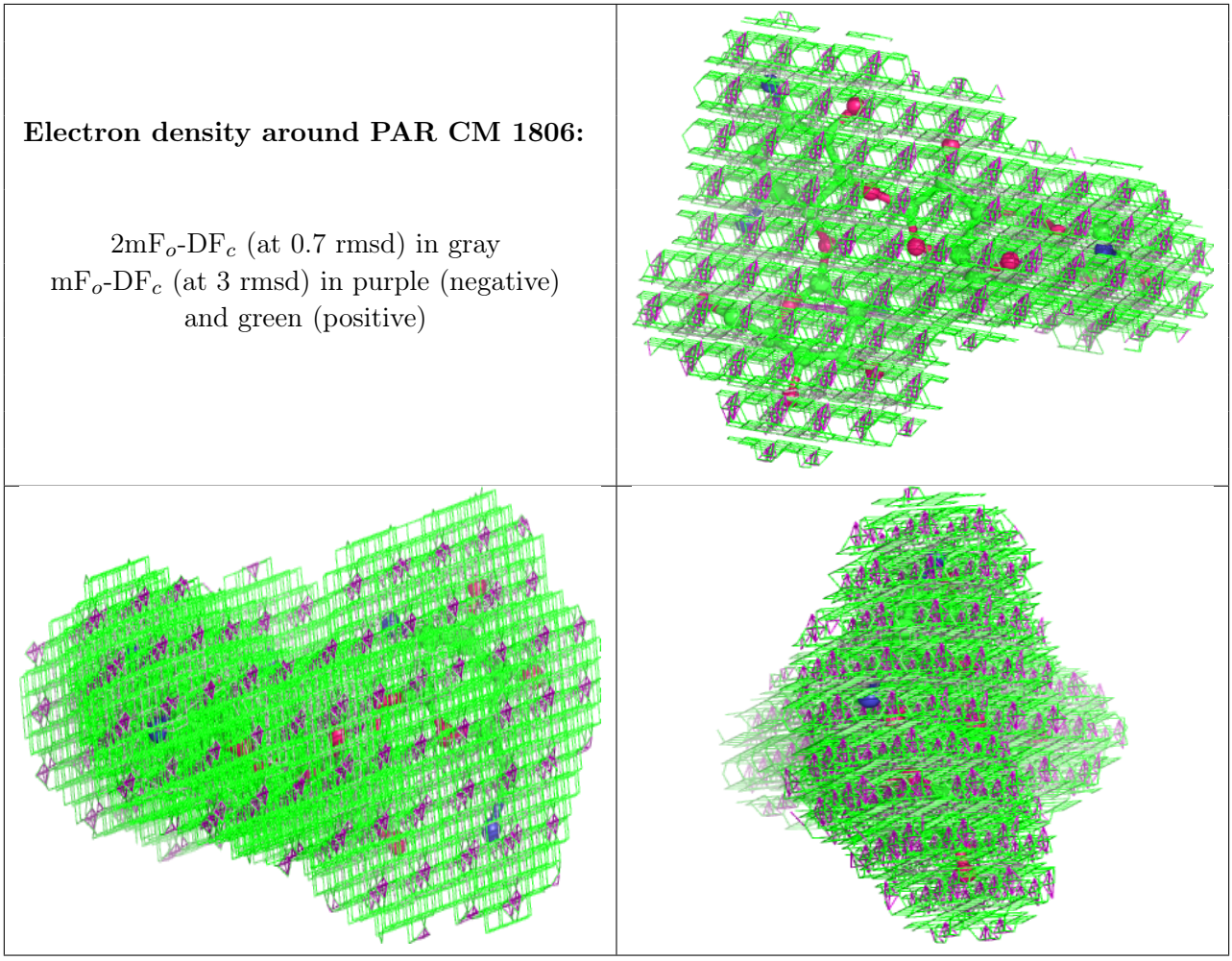
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	MG	AS	3583	1/1	0.97	0.15	17,17,17,17	0
83	ZN	AK	101	1/1	0.97	0.17	90,90,90,90	0
82	MG	1	3598	1/1	0.97	0.19	16,16,16,16	0
82	MG	AS	3525	1/1	0.97	0.11	52,52,52,52	0
82	MG	AS	3668	1/1	0.97	0.05	35,35,35,35	0
82	MG	1	3689	1/1	0.97	0.06	28,28,28,28	0
82	MG	1	3624	1/1	0.97	0.05	23,23,23,23	0
82	MG	AS	3610	1/1	0.97	0.09	33,33,33,33	0
82	MG	AS	3537	1/1	0.97	0.14	40,40,40,40	0
82	MG	1	3519	1/1	0.97	0.07	37,37,37,37	0
83	ZN	DQ	101	1/1	0.97	0.05	98,98,98,98	0
82	MG	1	3636	1/1	0.98	0.06	20,20,20,20	0
82	MG	1	3681	1/1	0.98	0.07	19,19,19,19	0
83	ZN	AQ	101	1/1	0.98	0.08	47,47,47,47	0
82	MG	1	3545	1/1	0.98	0.12	20,20,20,20	0
83	ZN	DN	201	1/1	0.98	0.05	98,98,98,98	0
83	ZN	f	101	1/1	0.98	0.05	55,55,55,55	0
82	MG	CM	1871	1/1	0.98	0.17	20,20,20,20	0
83	ZN	CH	101	1/1	0.99	0.09	68,68,68,68	0
83	ZN	c	201	1/1	0.99	0.04	73,73,73,73	0
83	ZN	AN	101	1/1	0.99	0.10	64,64,64,64	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.

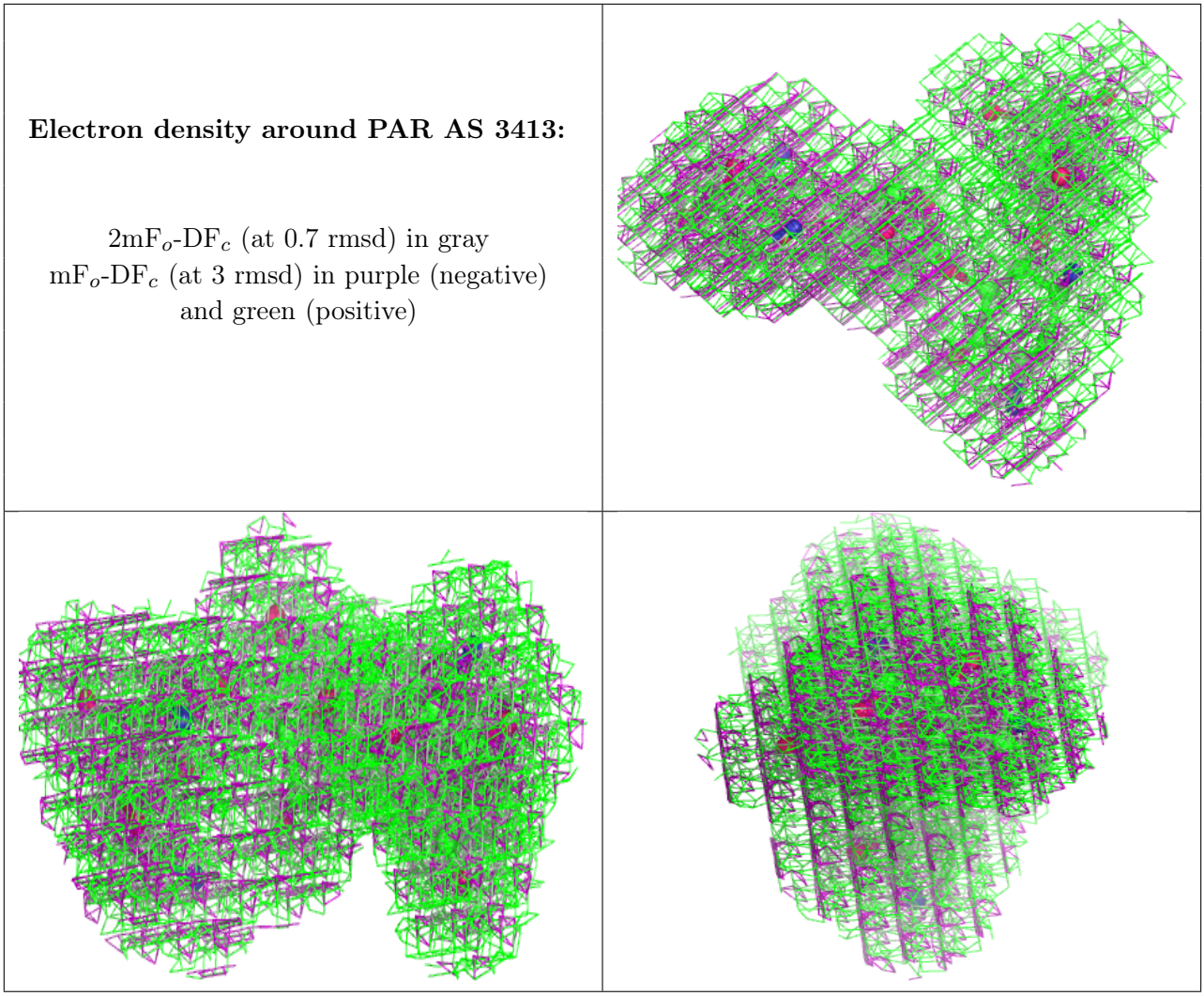
Electron density around PAR CM 1806:

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



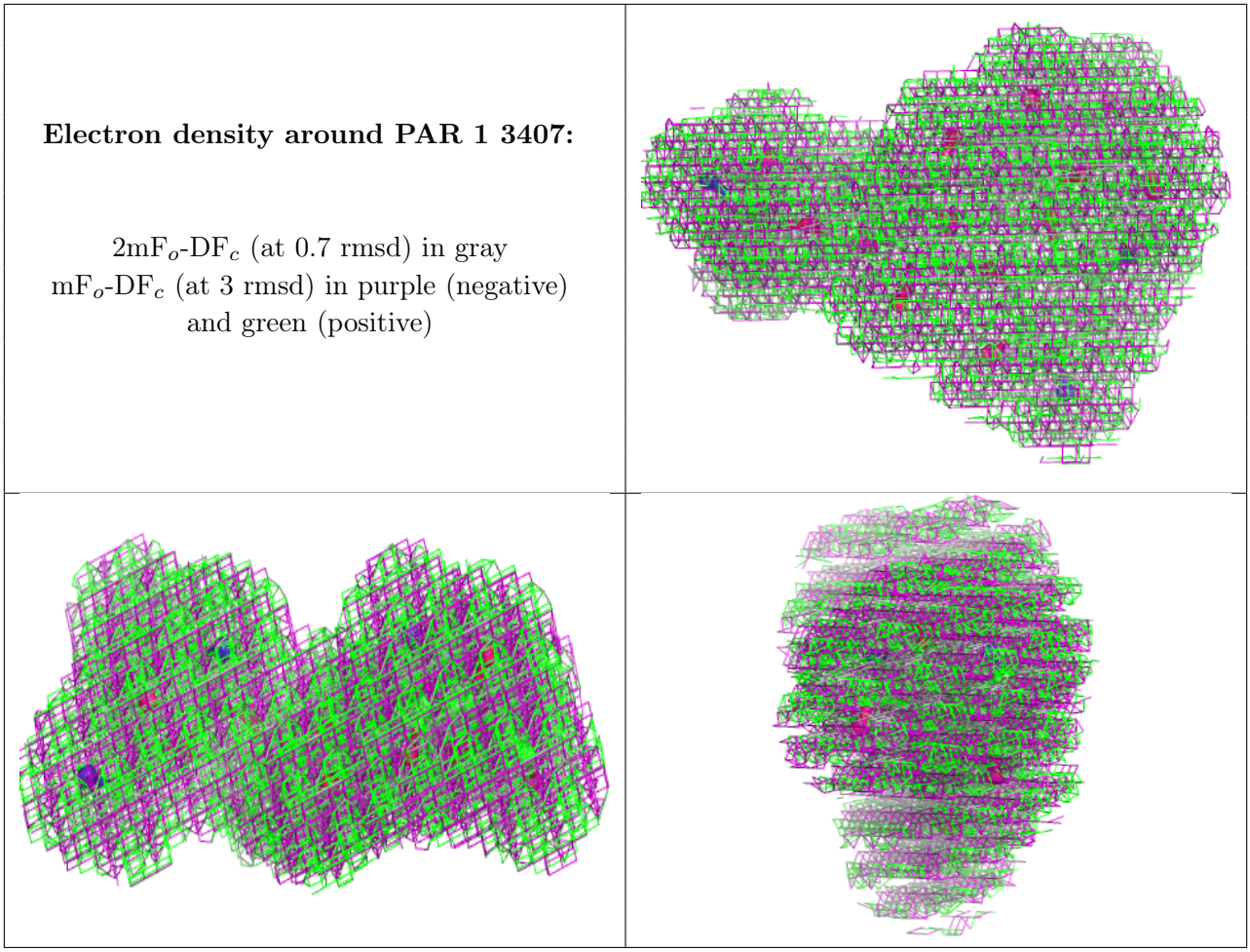
Electron density around PAR AS 3413:

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



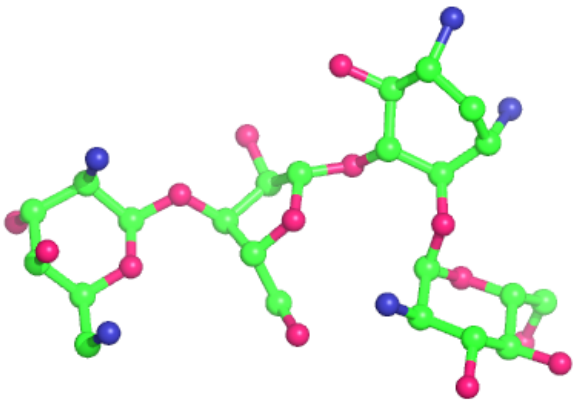
Electron density around PAR 1 3407:

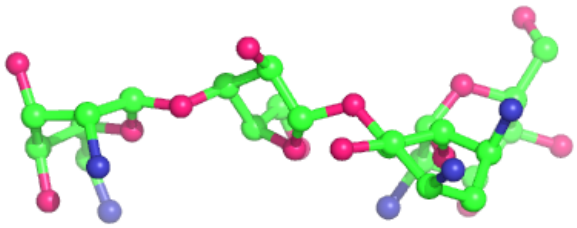
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

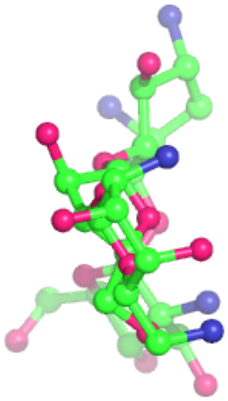


Electron density around PAR AS 3405:

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

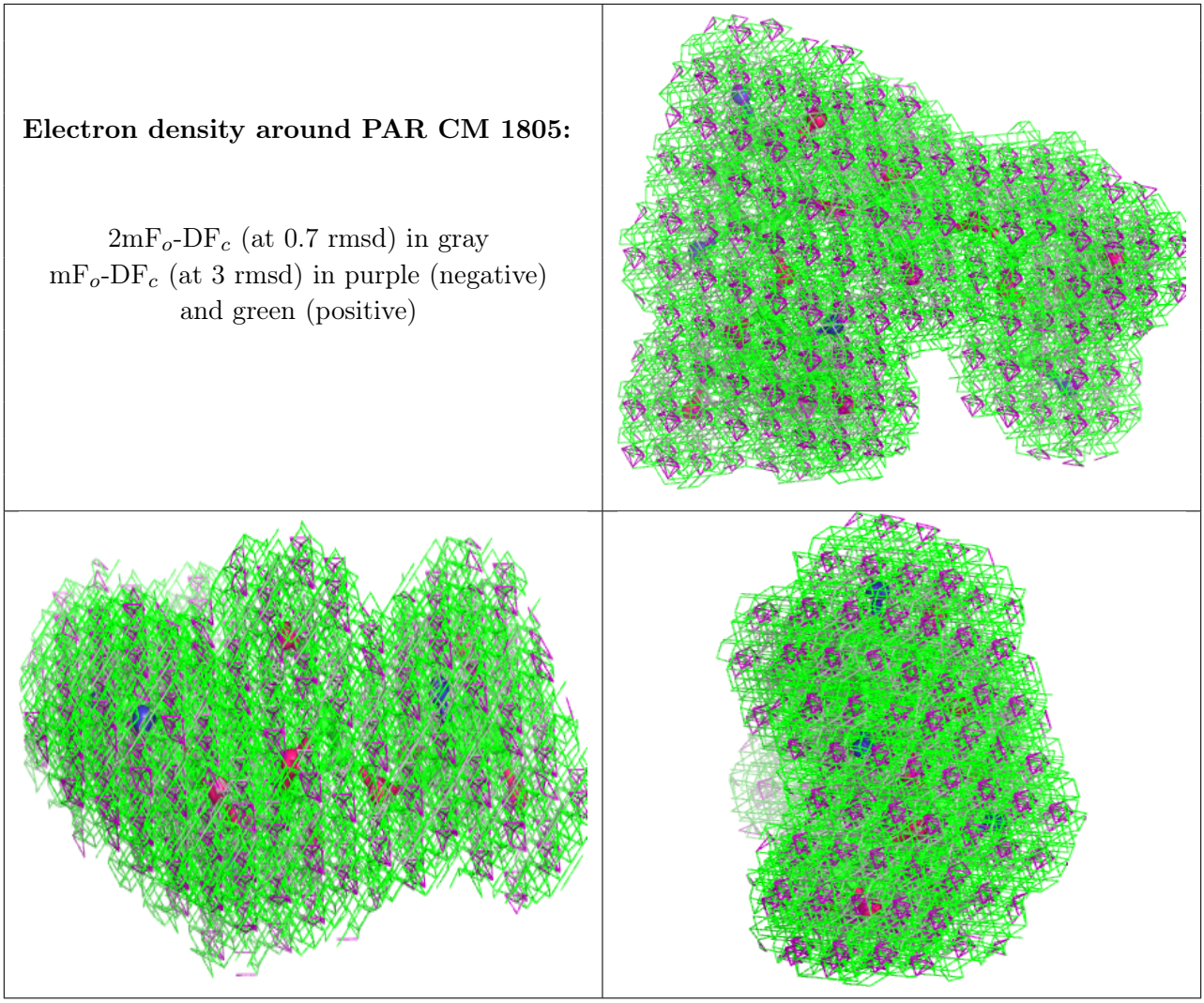






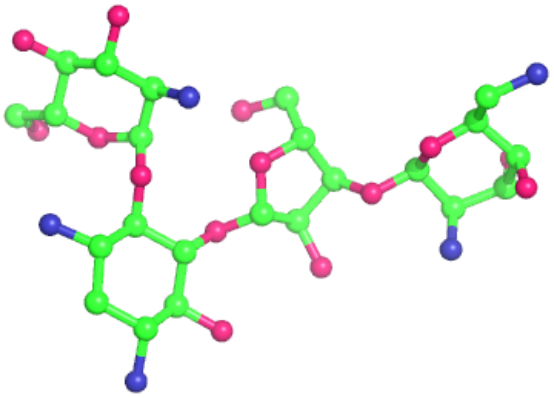
Electron density around PAR CM 1805:

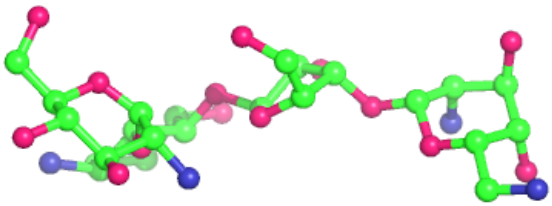
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

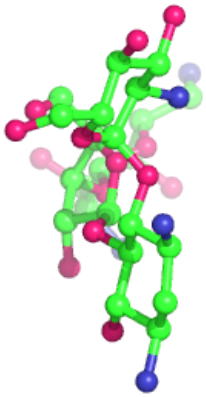


Electron density around PAR AS 3408:

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

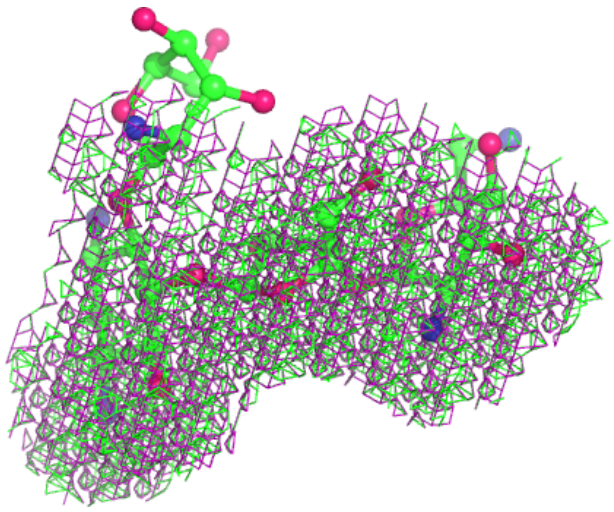


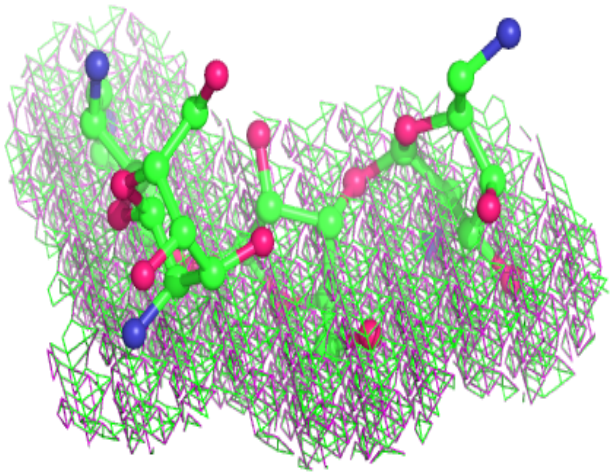


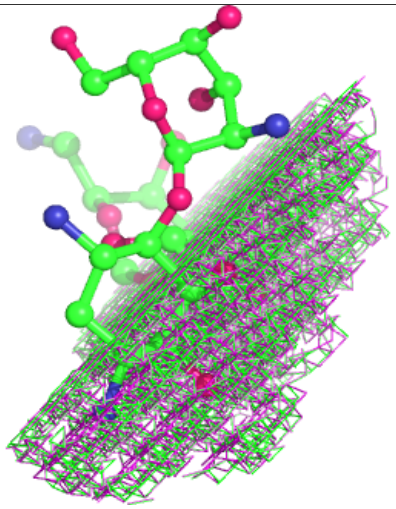


Electron density around PAR B 1805:

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

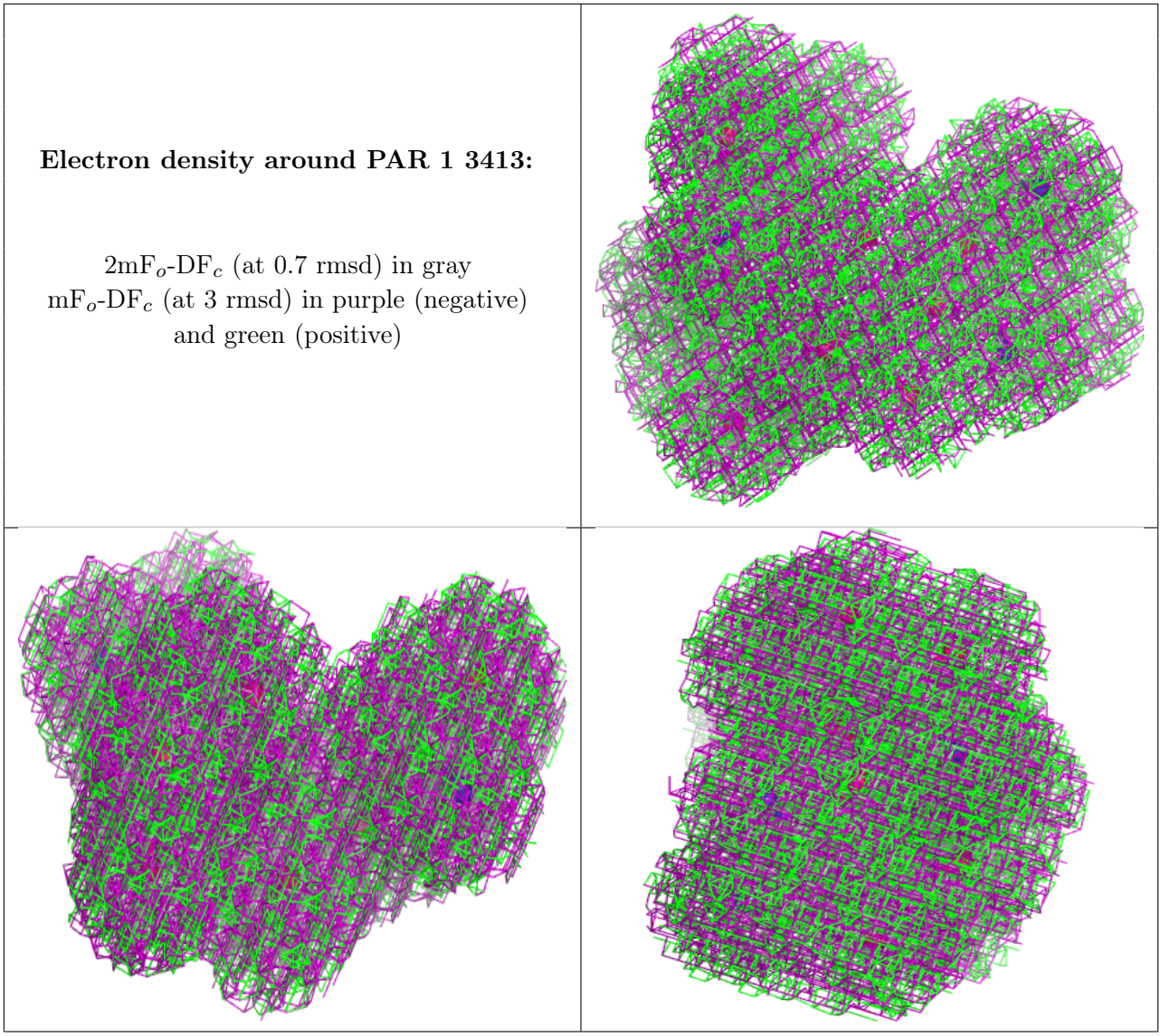






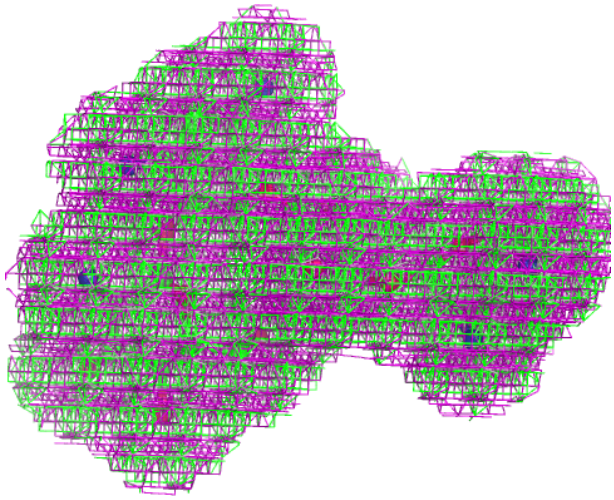
Electron density around PAR 1 3413:

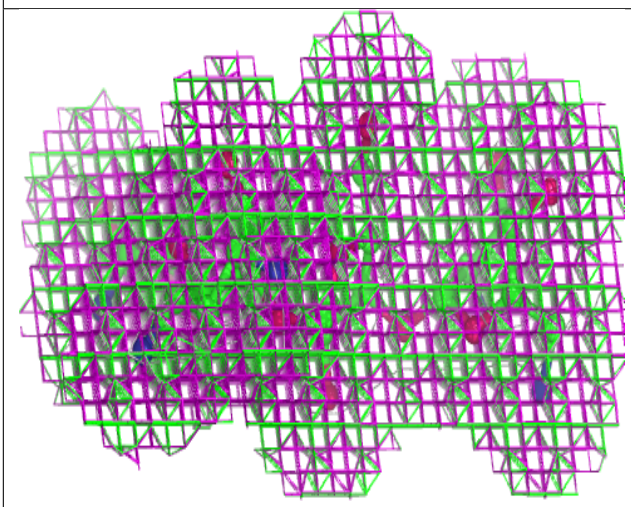
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

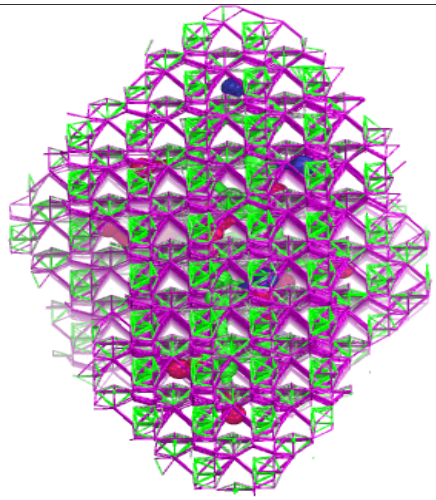


Electron density around PAR 1 3403:

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

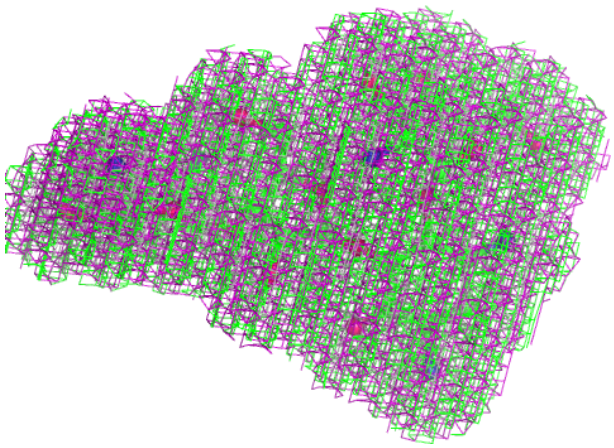


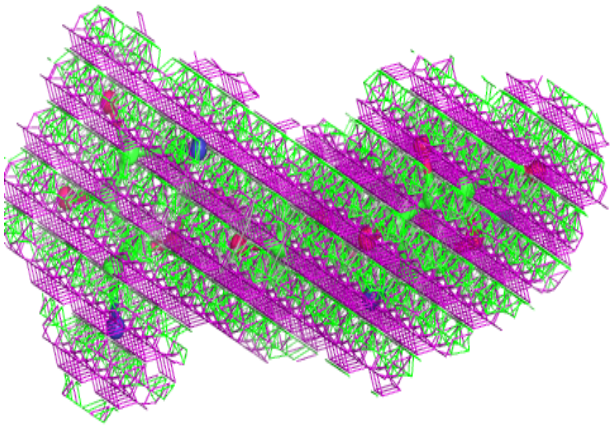


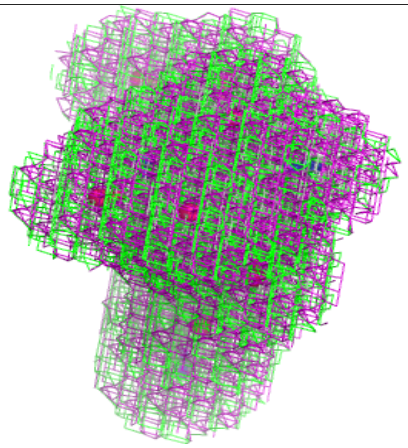


Electron density around PAR 1 3408:

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

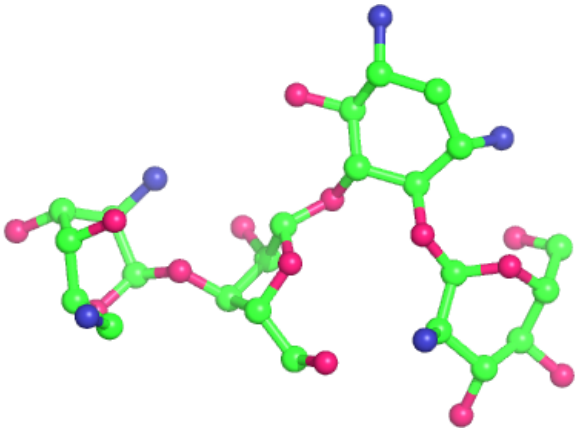


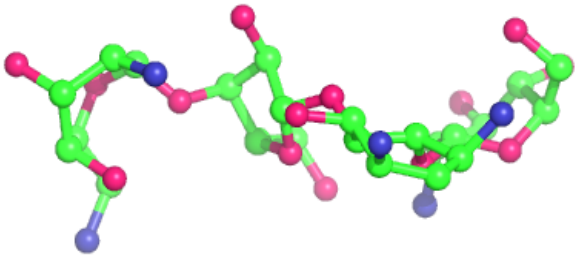


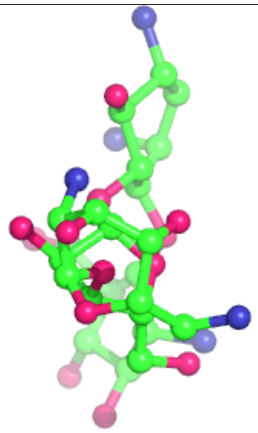


Electron density around PAR AS 3401:

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

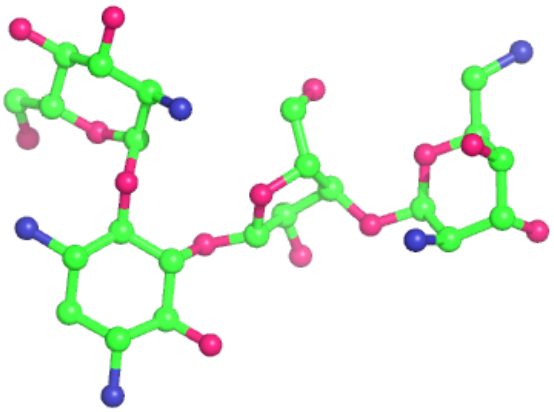


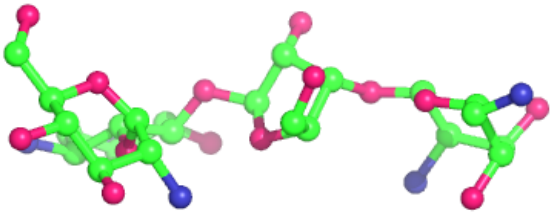


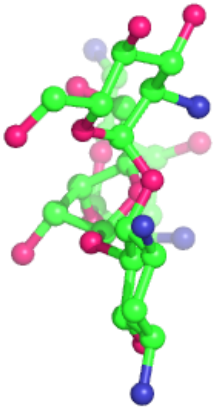


Electron density around PAR 1 3414:

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

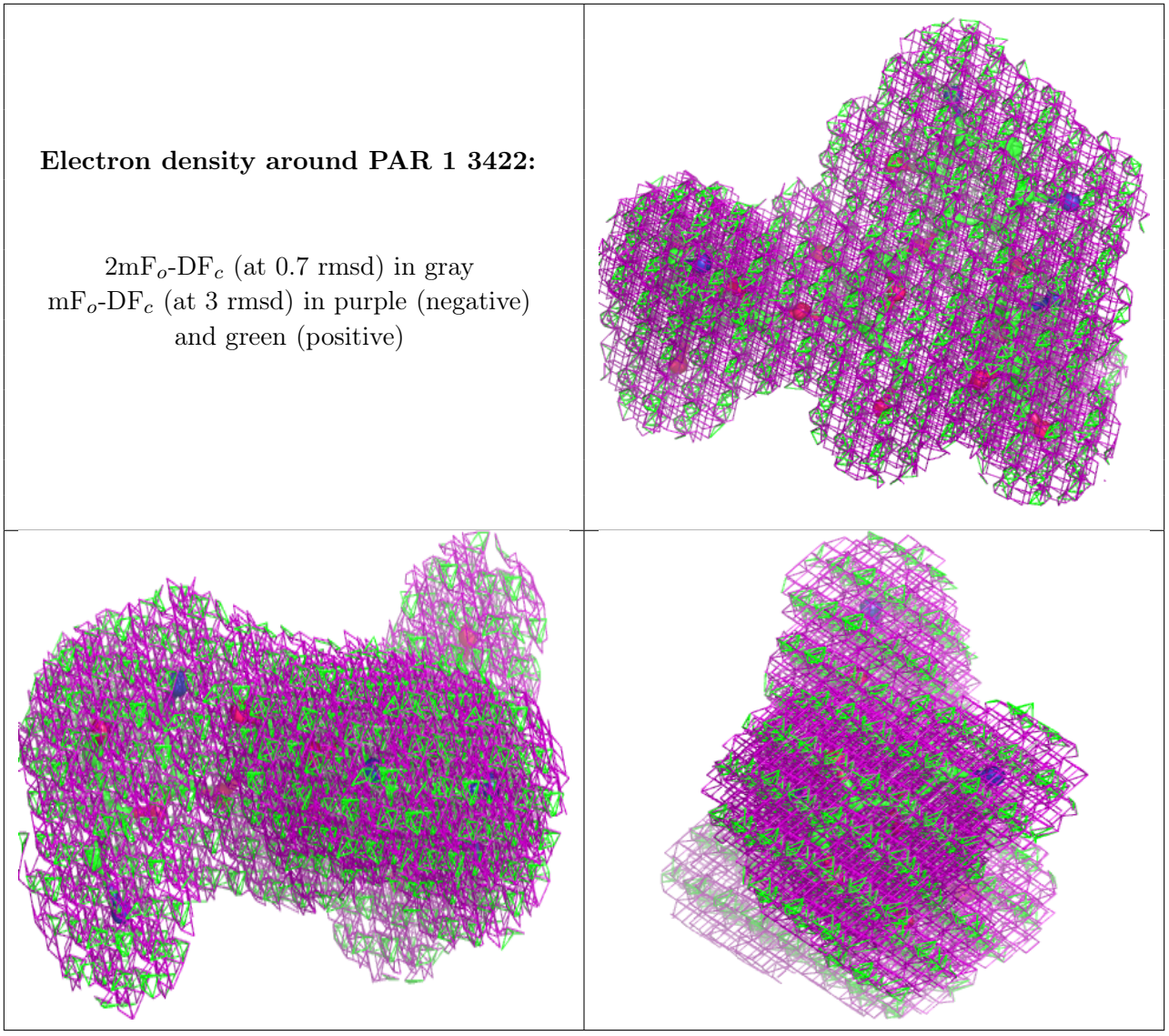






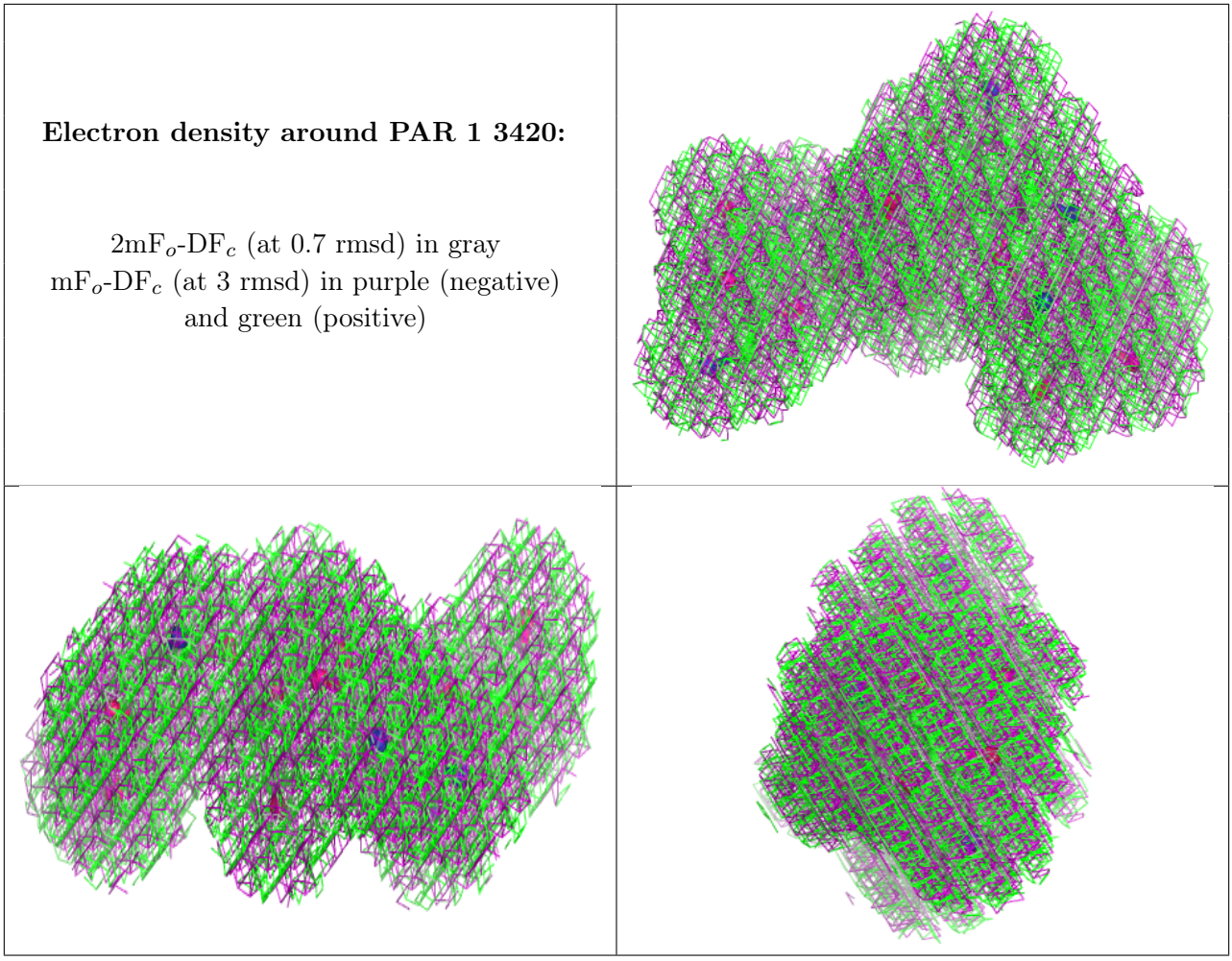
Electron density around PAR 1 3422:

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



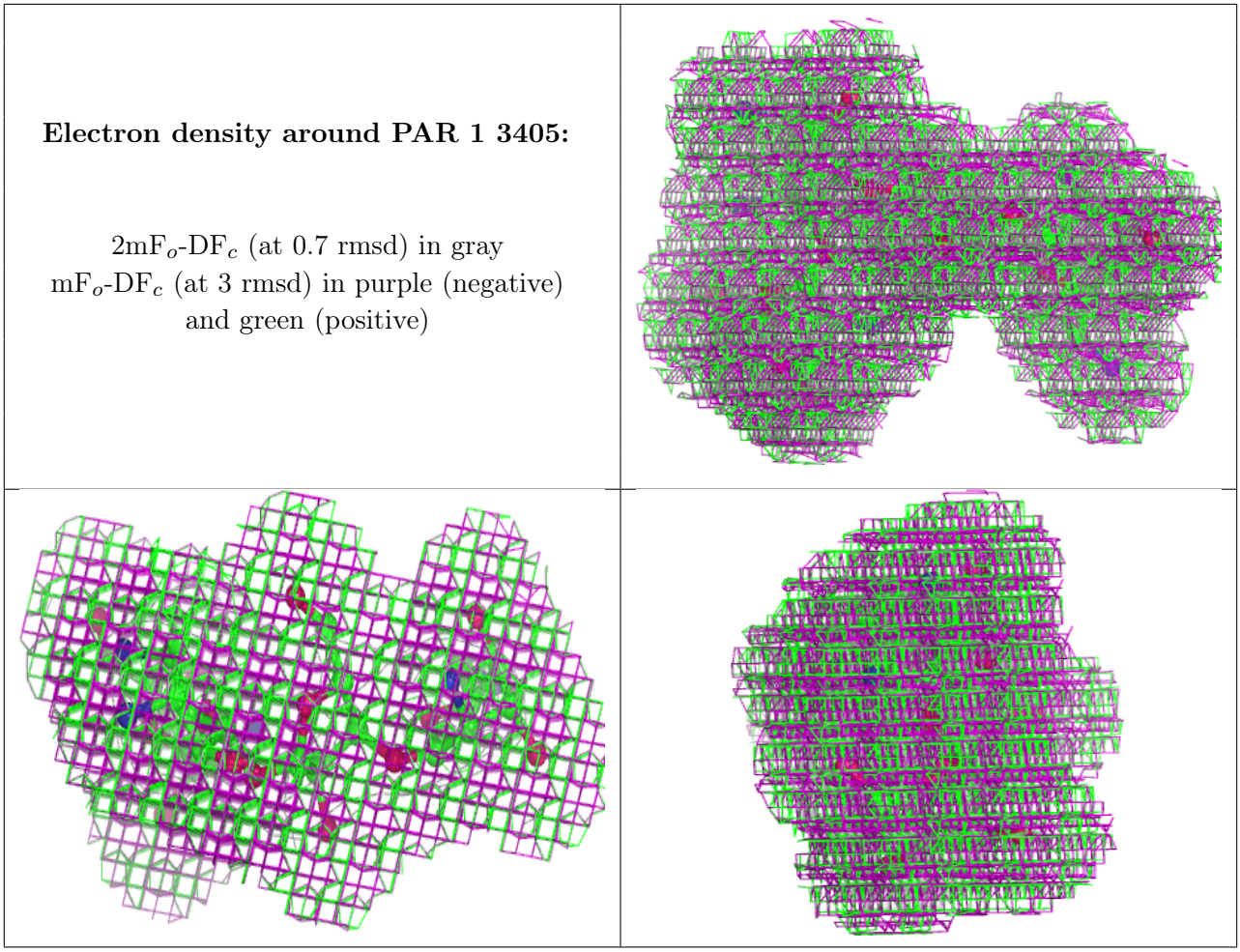
Electron density around PAR 1 3420:

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



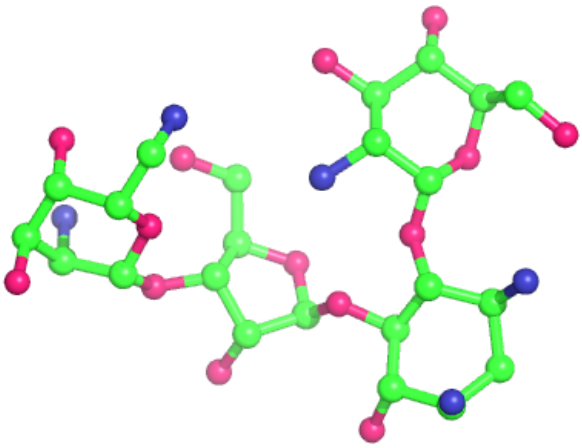
Electron density around PAR 1 3405:

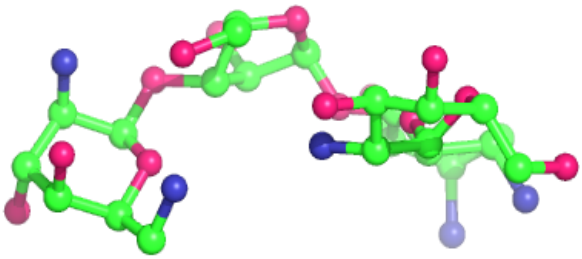
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

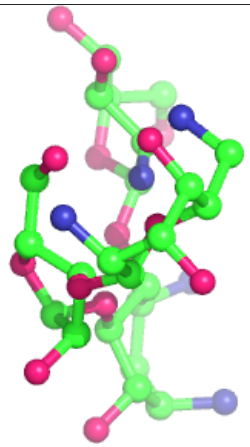


Electron density around PAR B 1804:

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

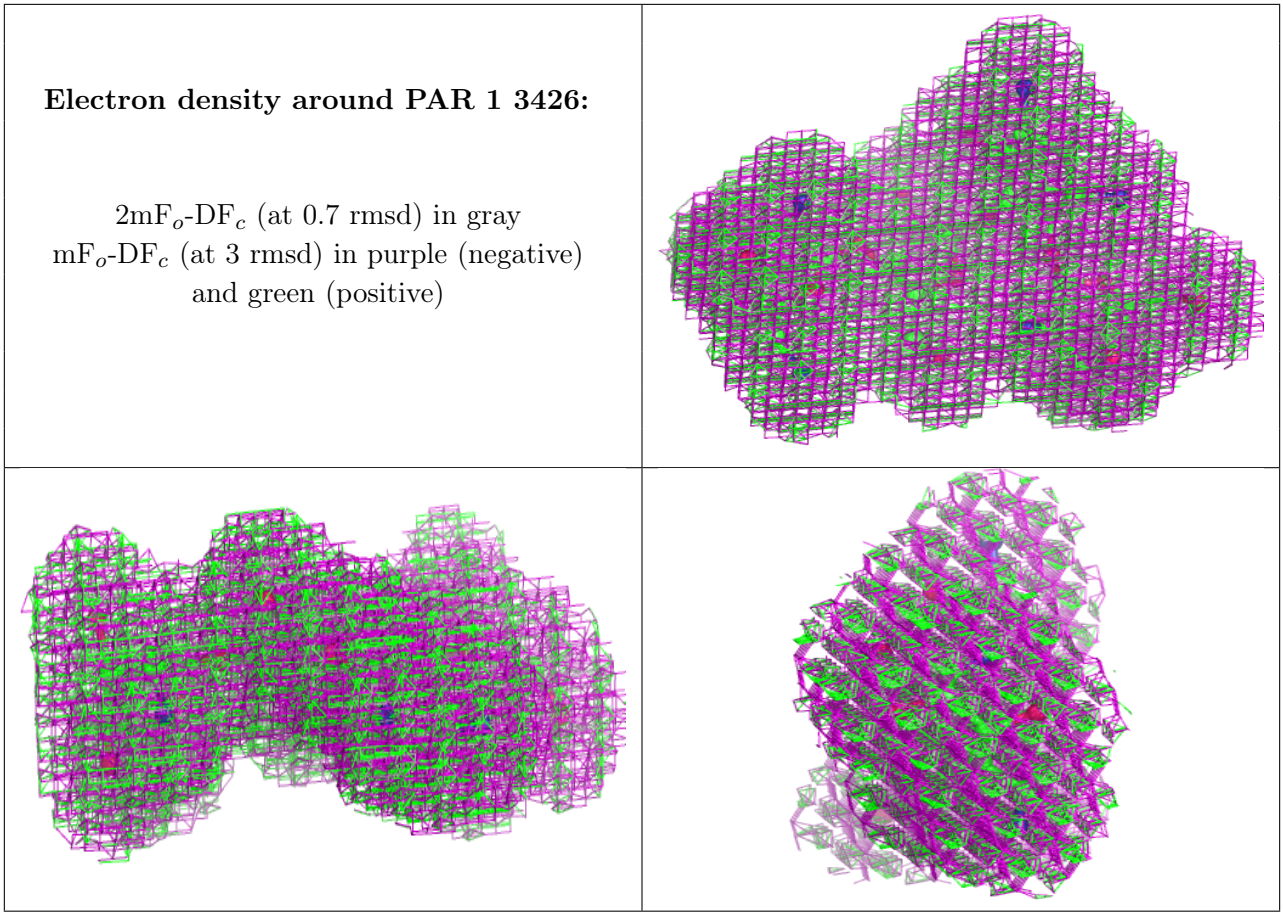






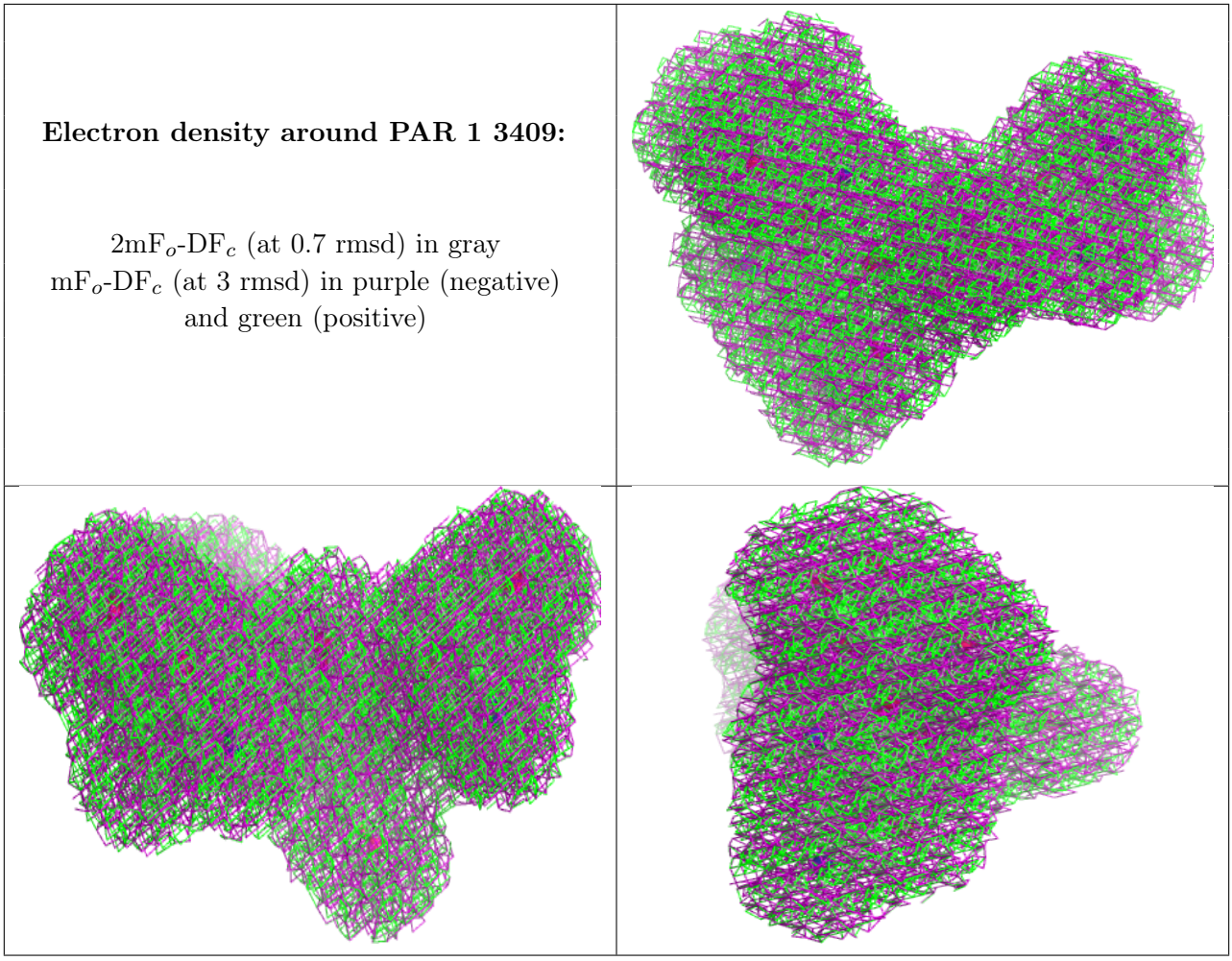
Electron density around PAR 1 3426:

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



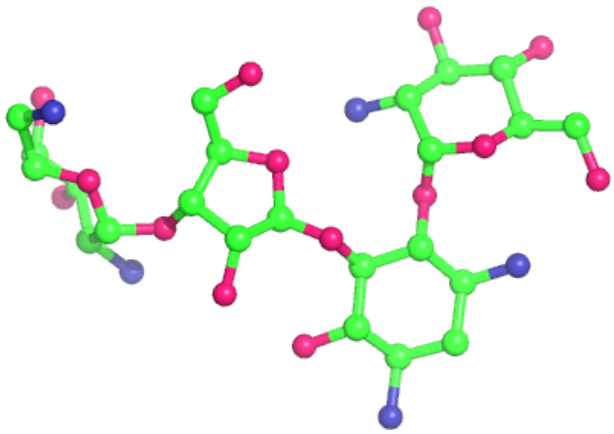
Electron density around PAR 1 3409:

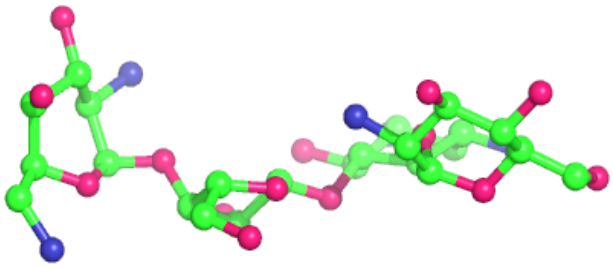
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

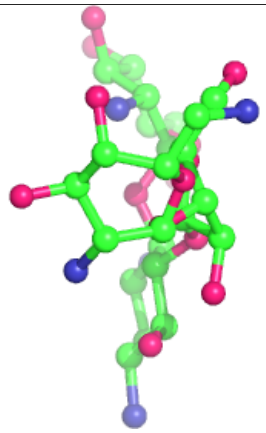


Electron density around PAR AS 3410:

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

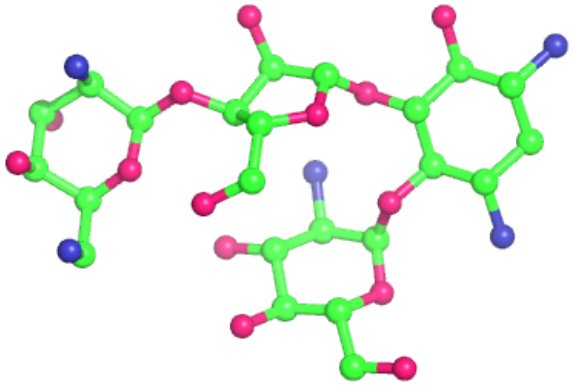


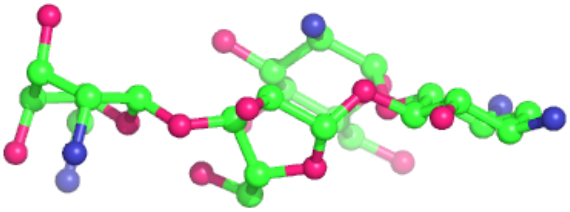


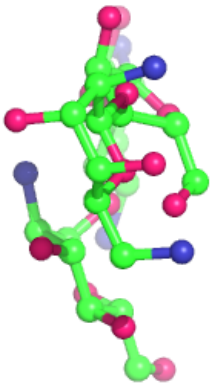


Electron density around PAR 1 3416:

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

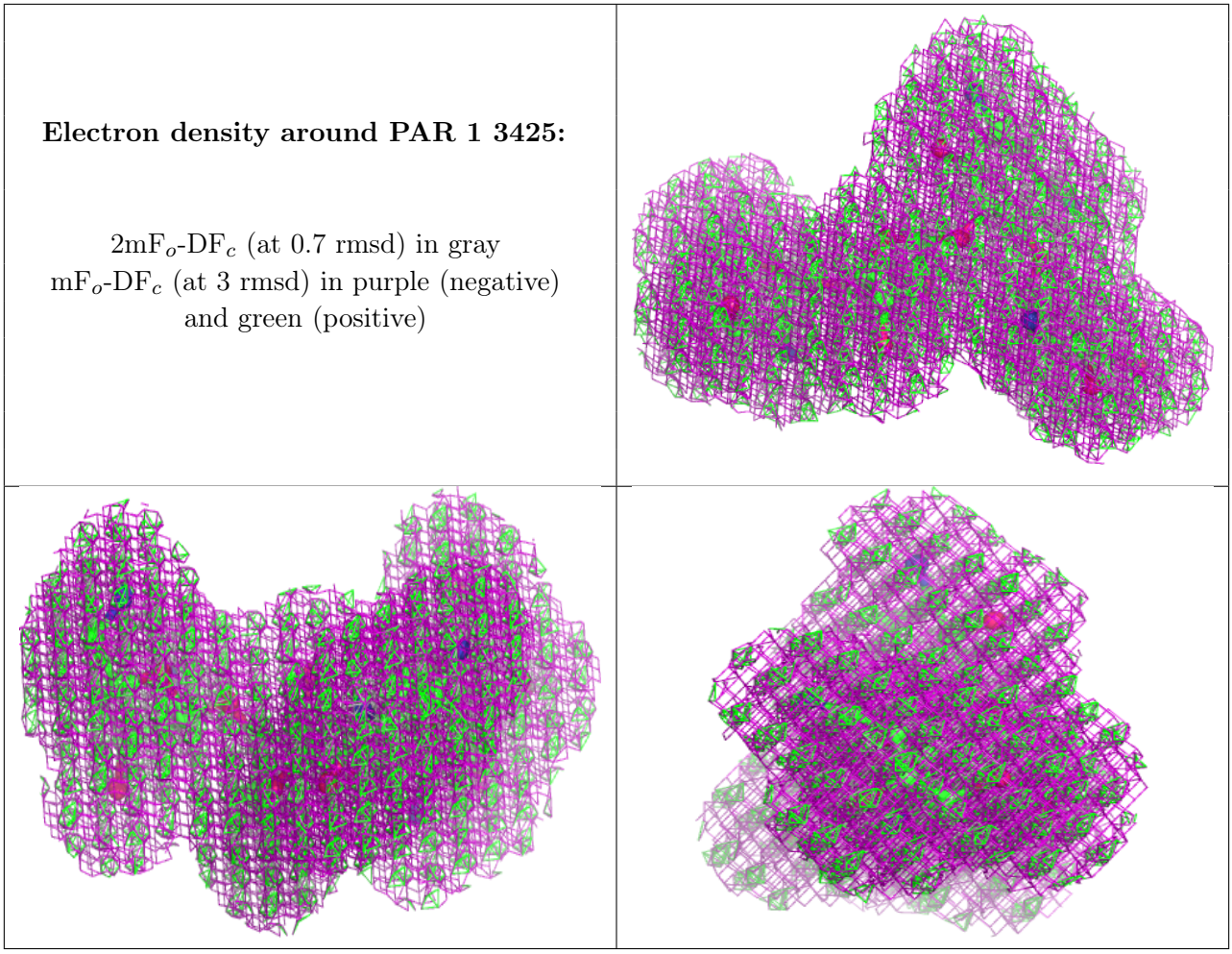






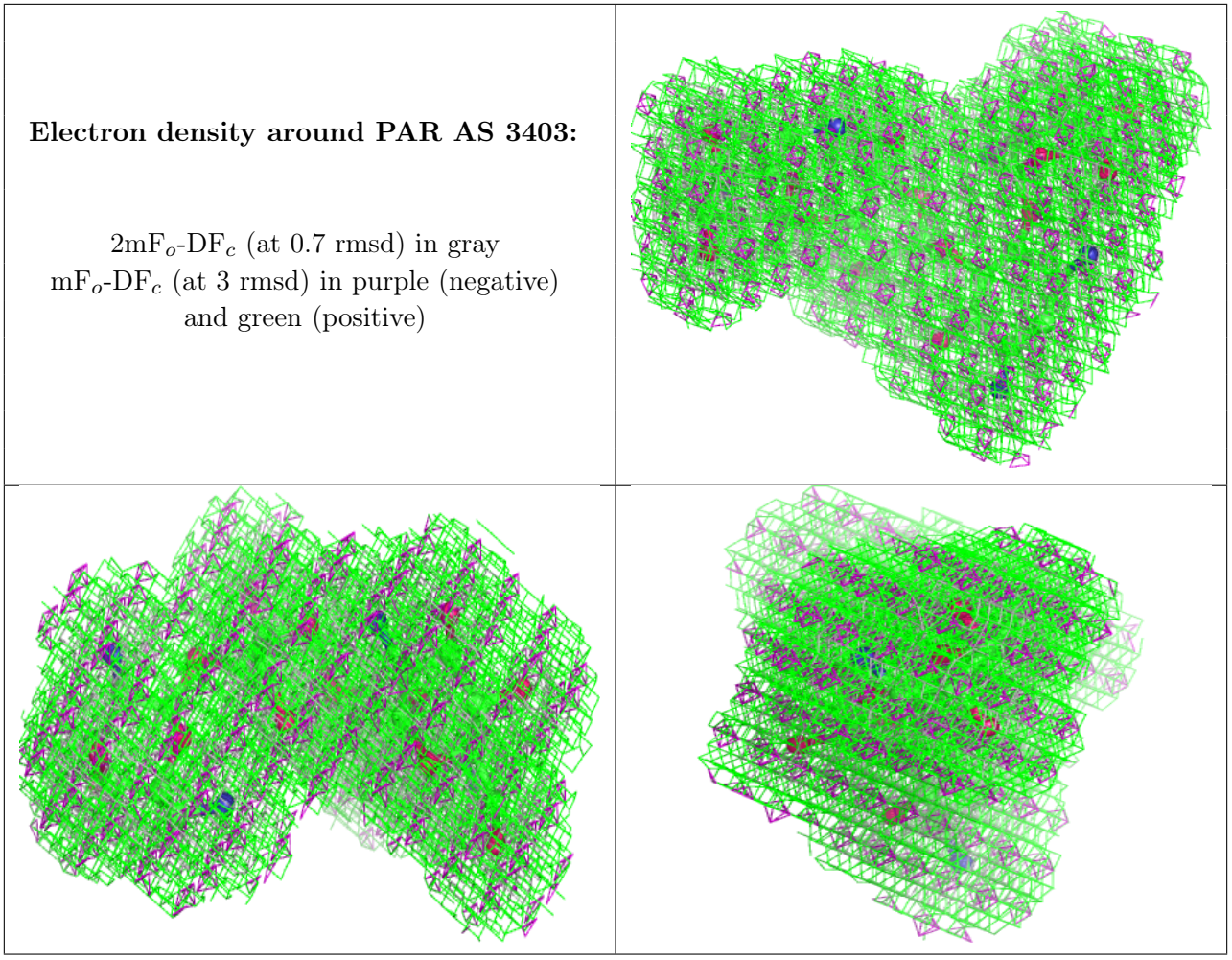
Electron density around PAR 1 3425:

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



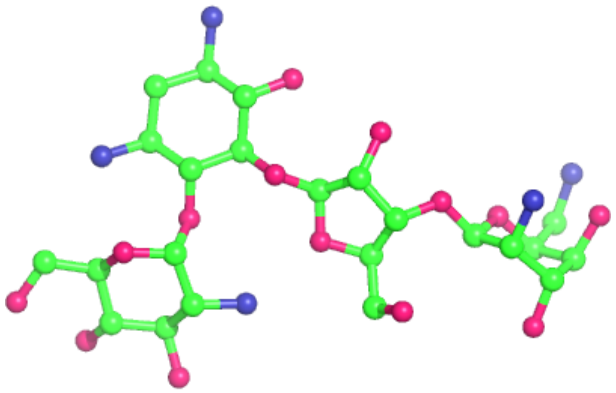
Electron density around PAR AS 3403:

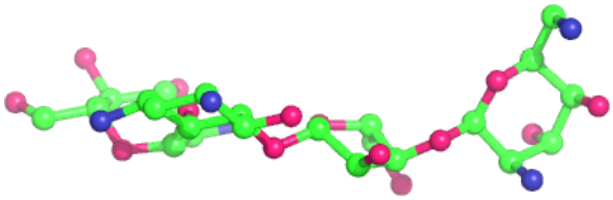
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

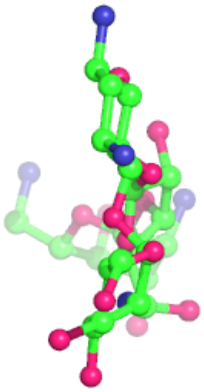


Electron density around PAR AS 3409:

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

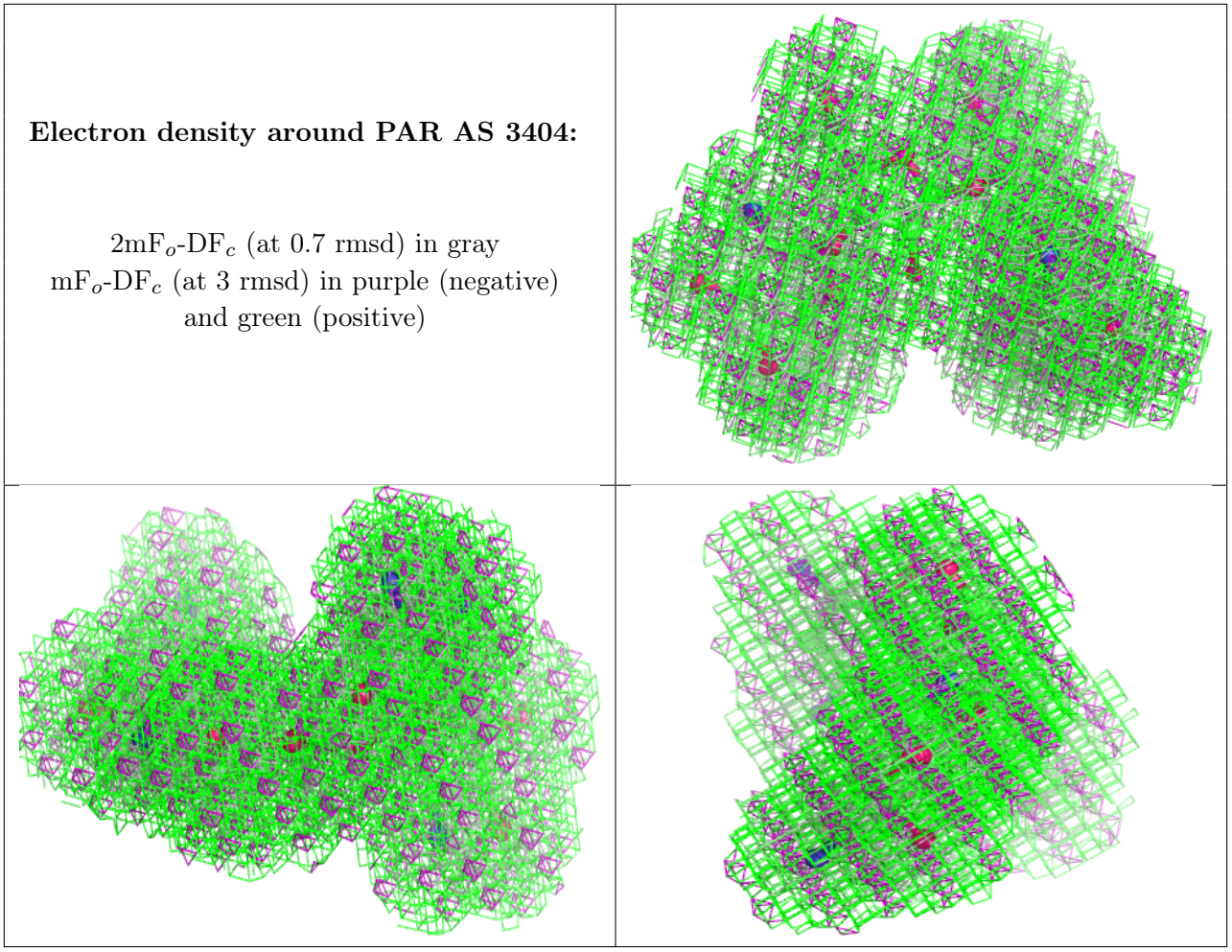






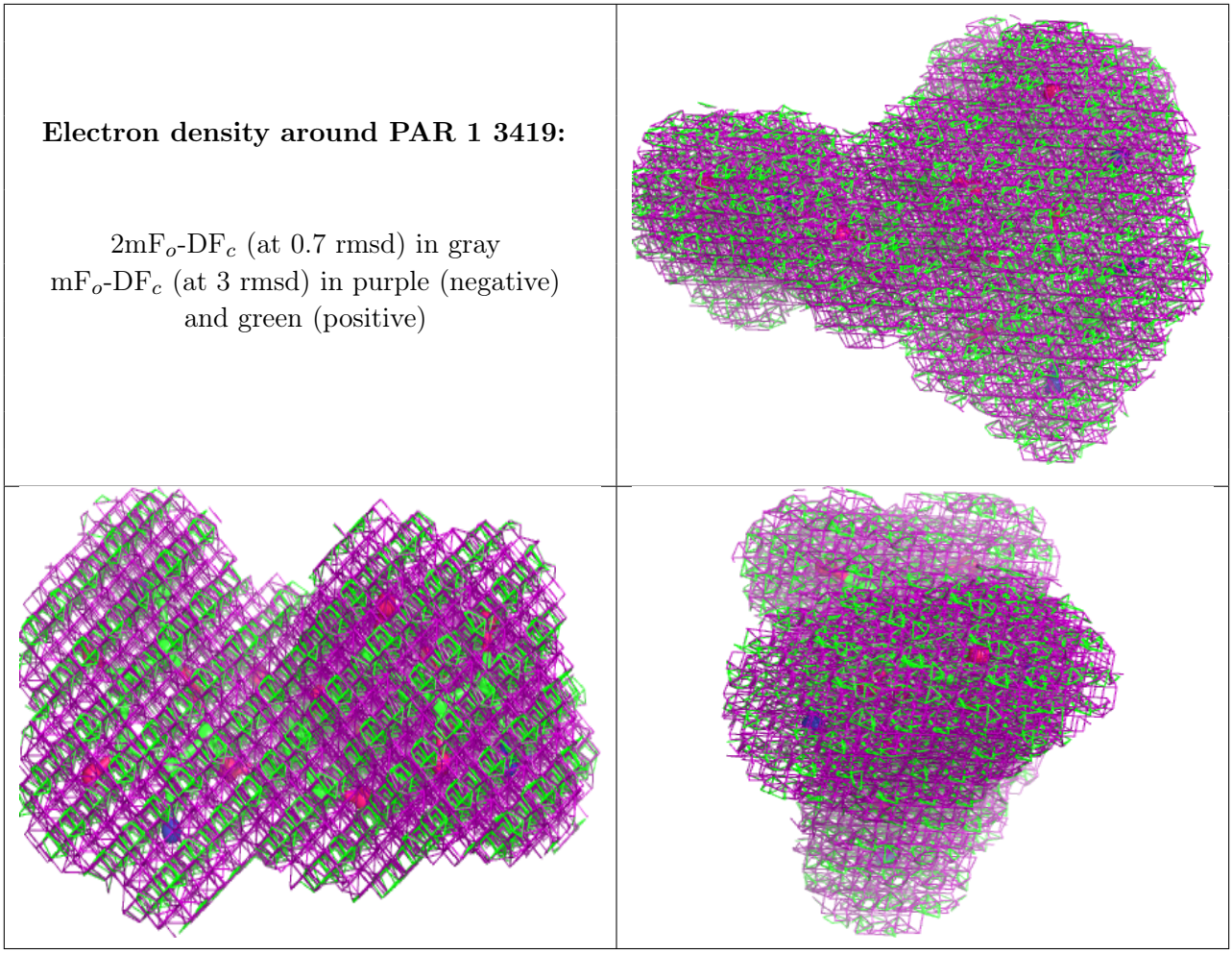
Electron density around PAR AS 3404:

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



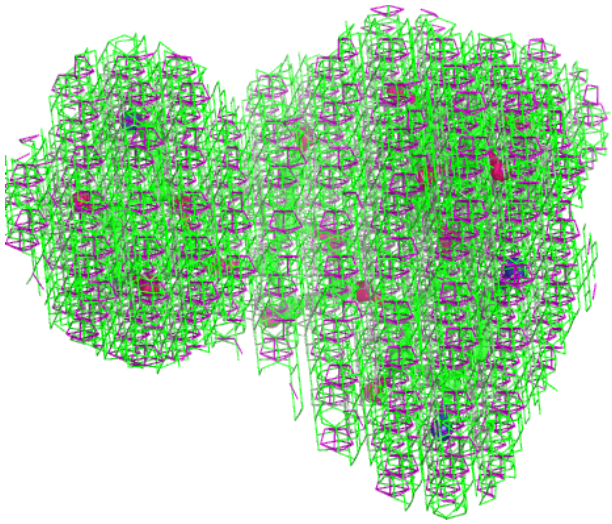
Electron density around PAR 1 3419:

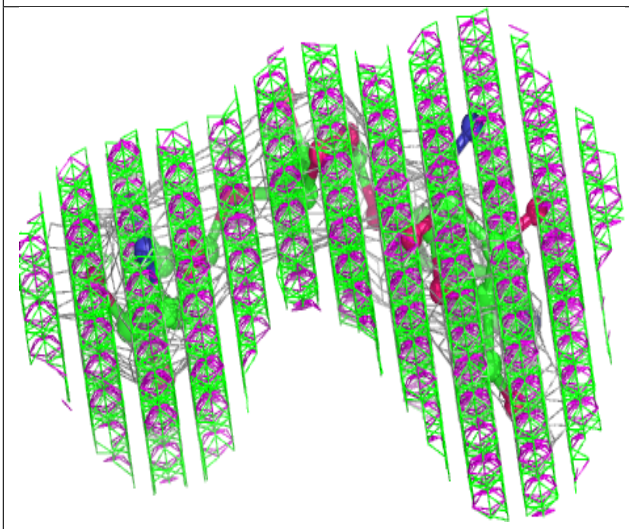
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

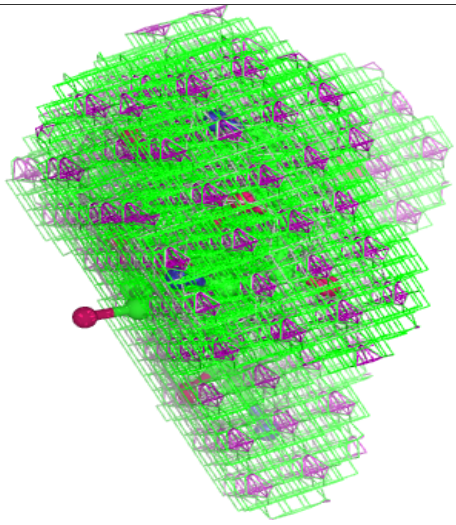


Electron density around PAR CM 1802:

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

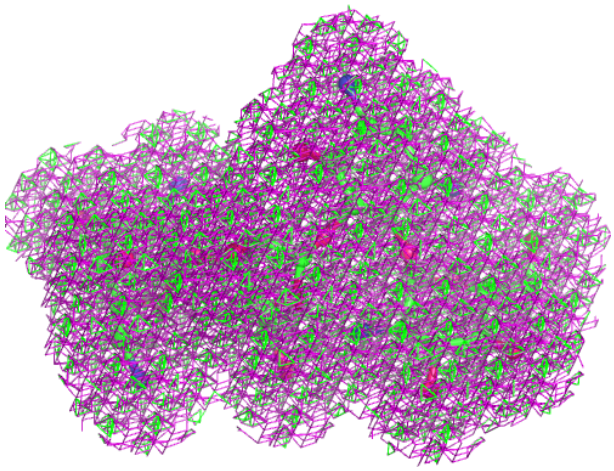


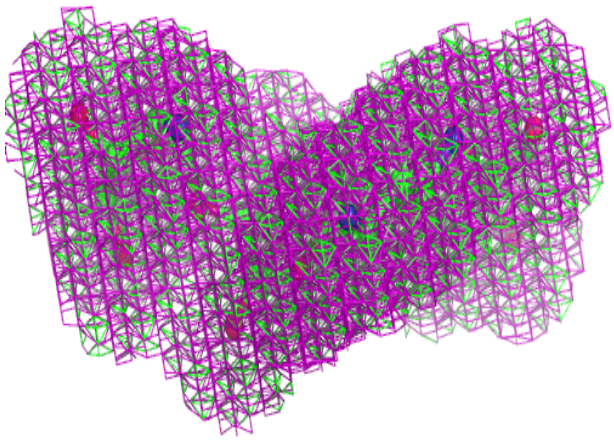


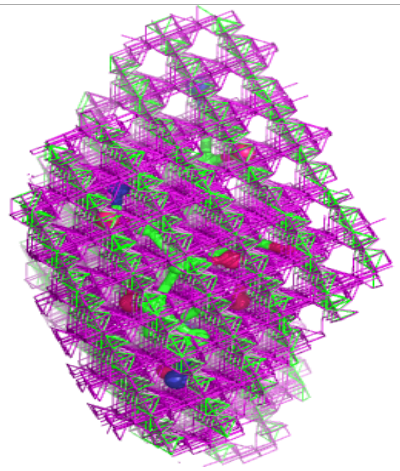


Electron density around PAR 1 3423:

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

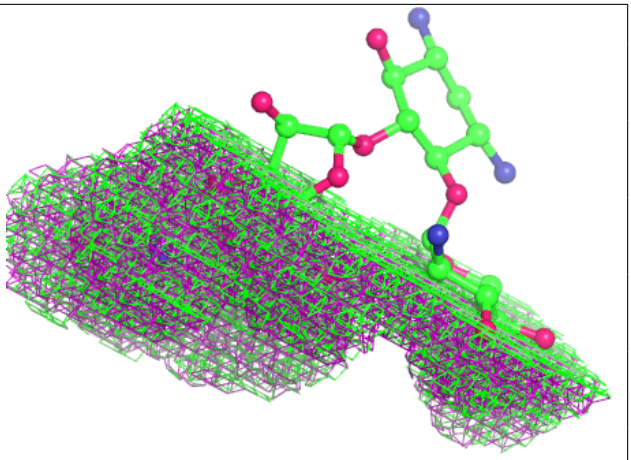


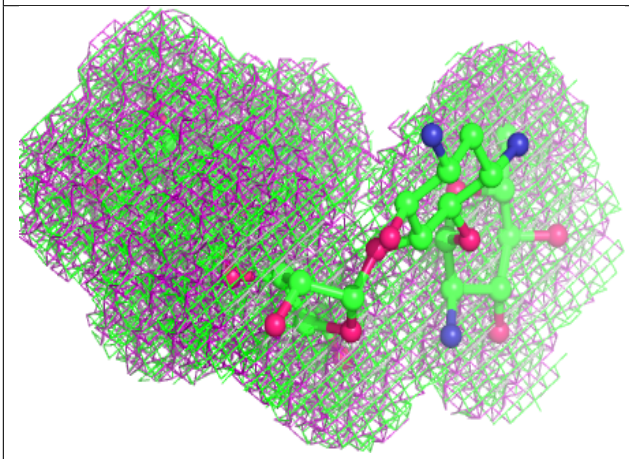


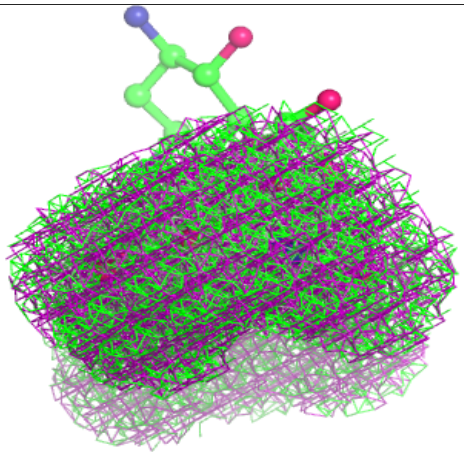


Electron density around PAR 1 3427:

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

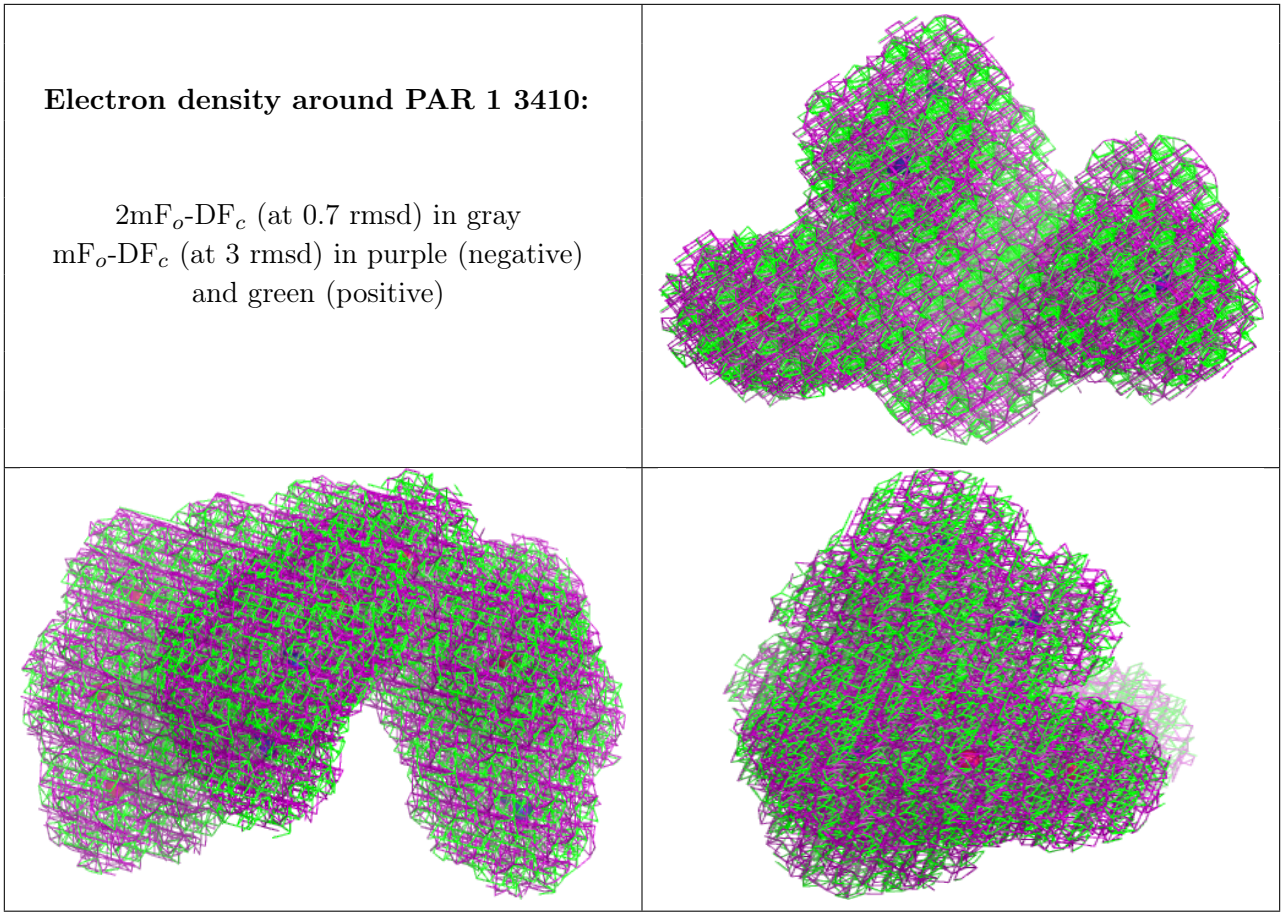






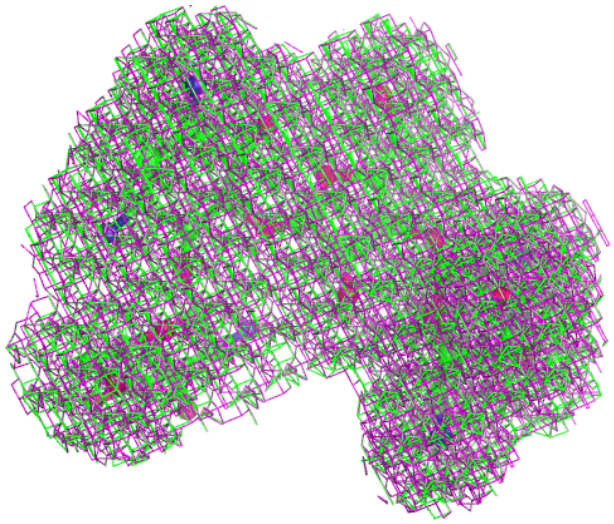
Electron density around PAR 1 3410:

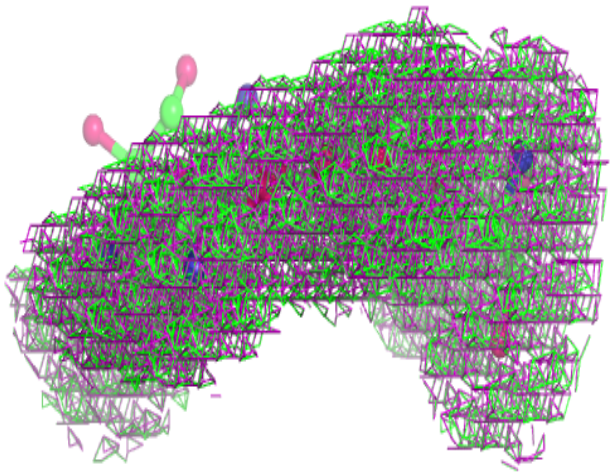
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

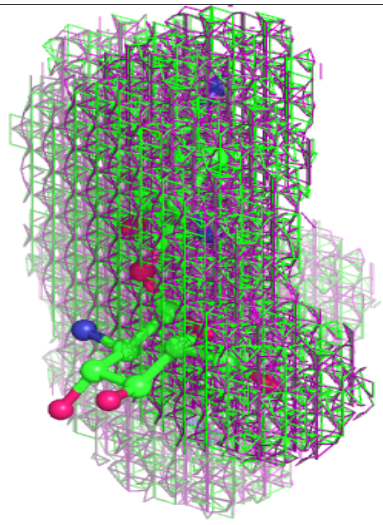


Electron density around PAR B 1802:

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

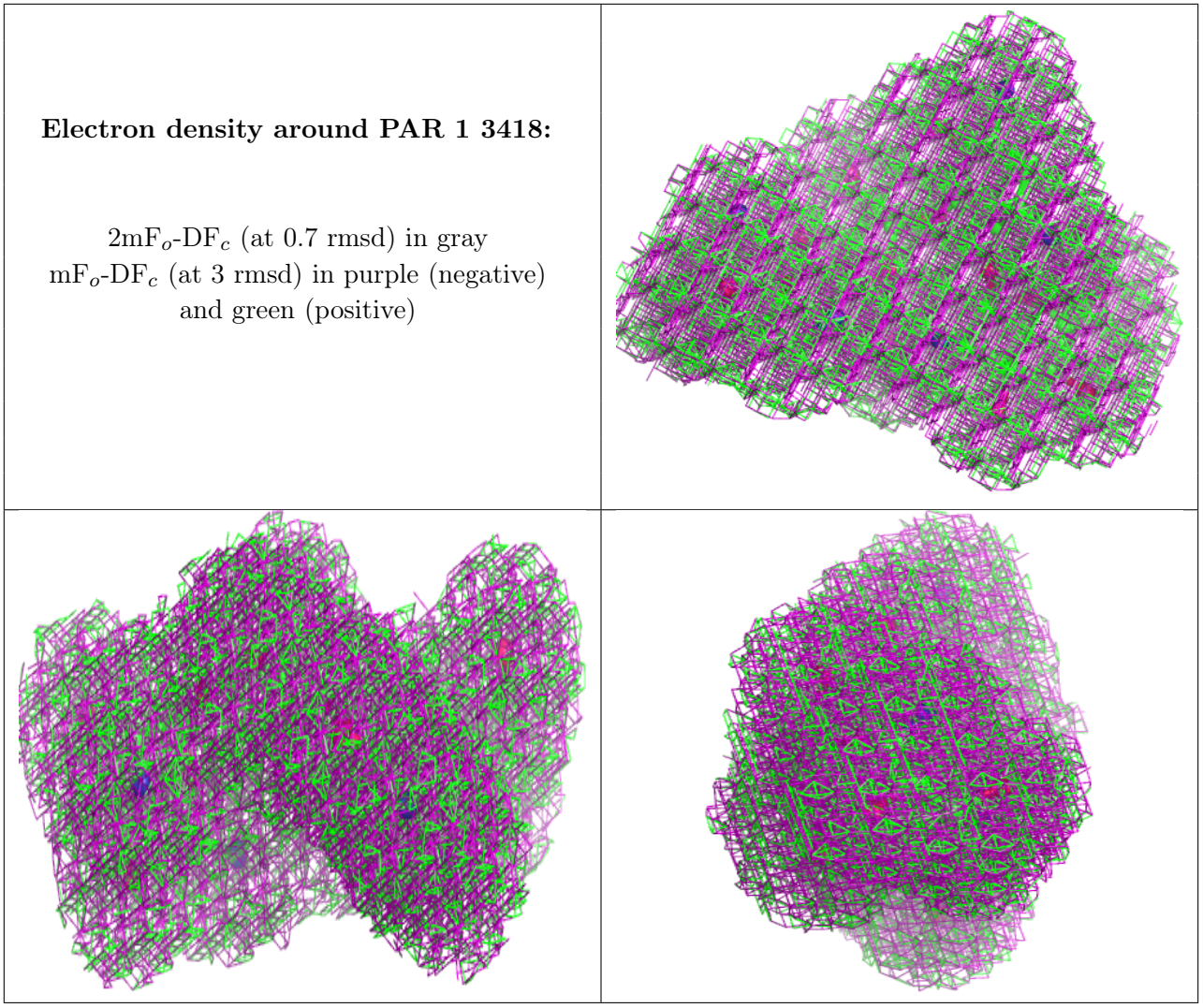






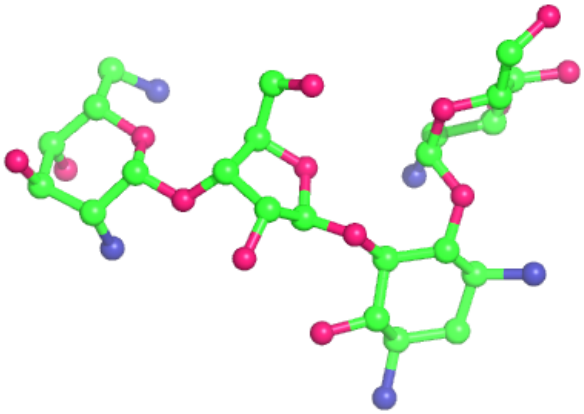
Electron density around PAR 1 3418:

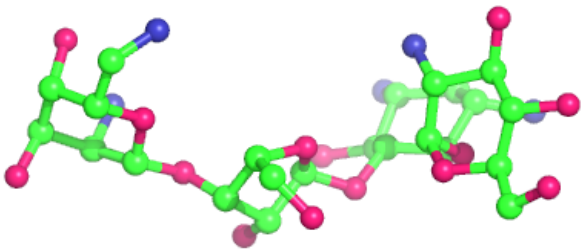
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

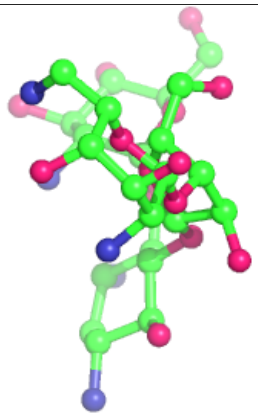


Electron density around PAR B 1803:

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

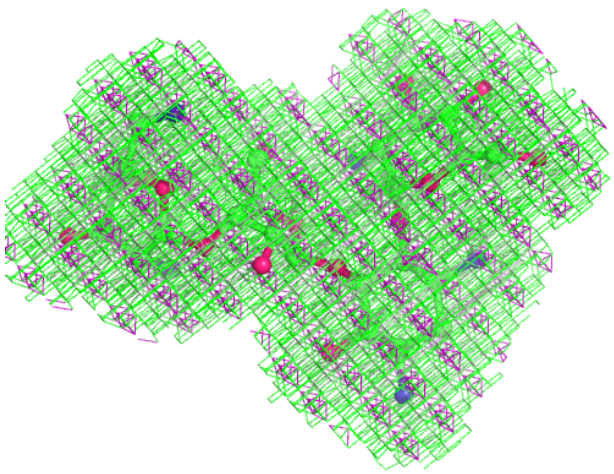


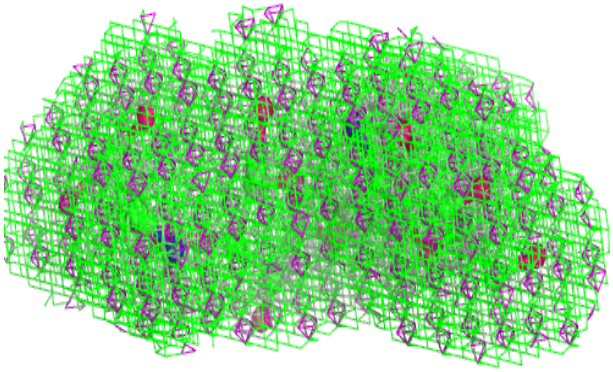


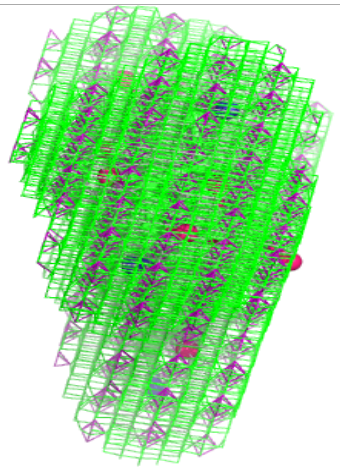


Electron density around PAR CM 1801:

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

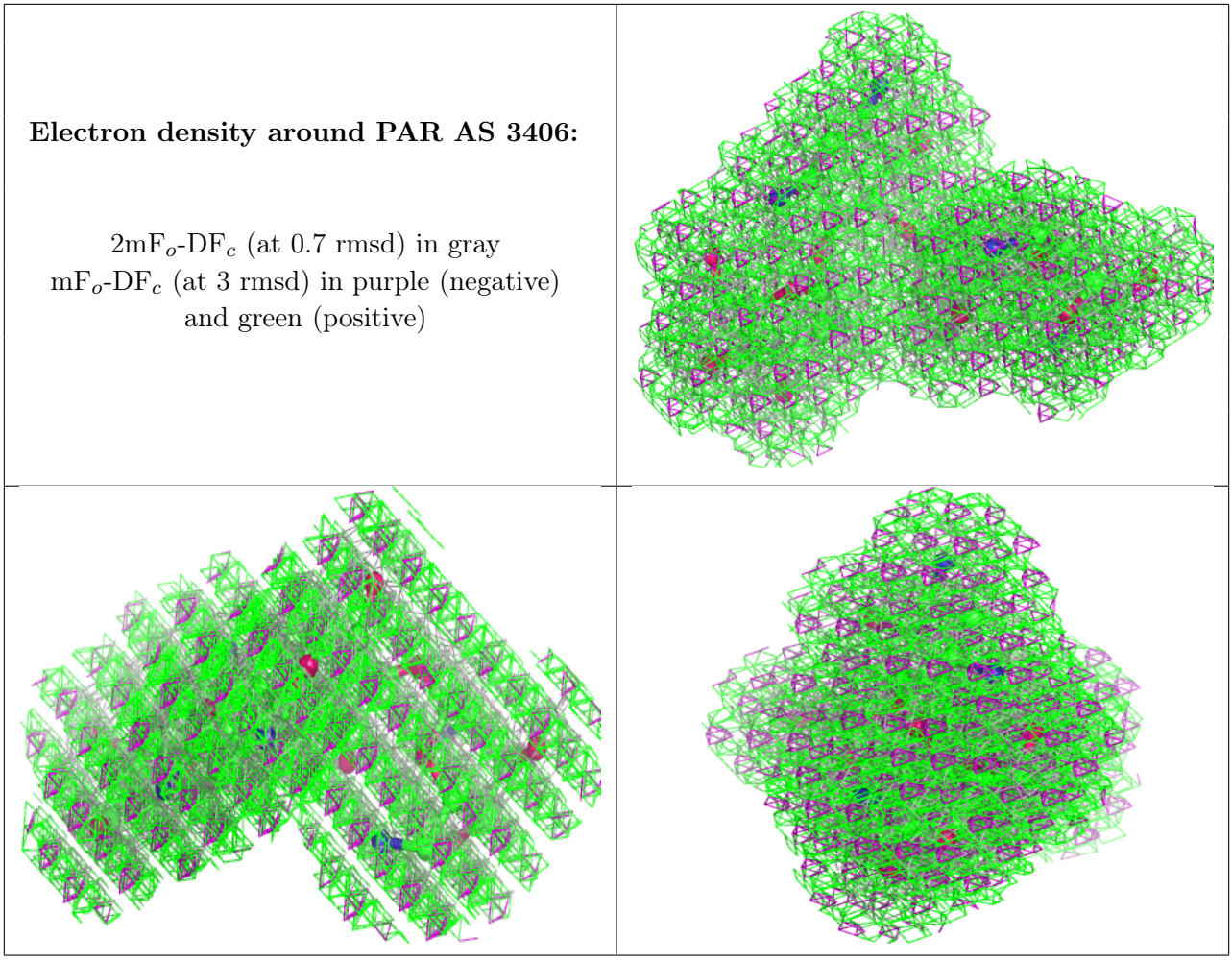






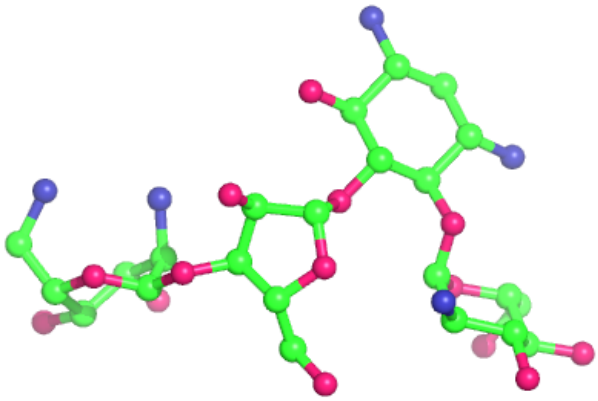
Electron density around PAR AS 3406:

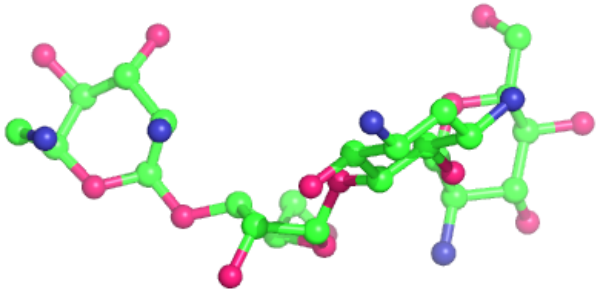
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

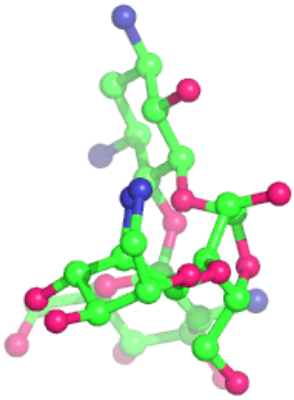


Electron density around PAR AS 3402:

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

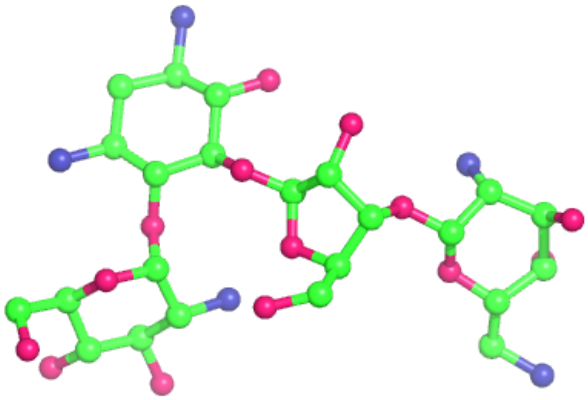


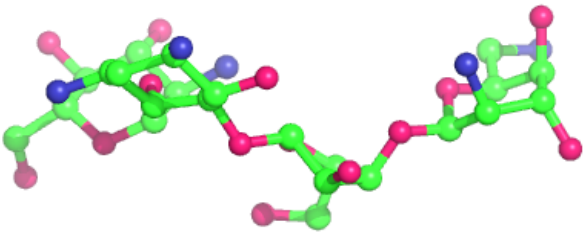


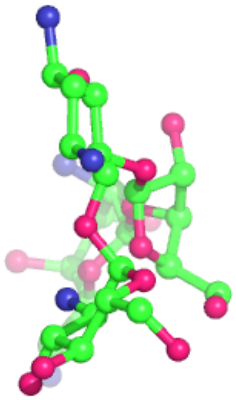


Electron density around PAR 4 201:

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

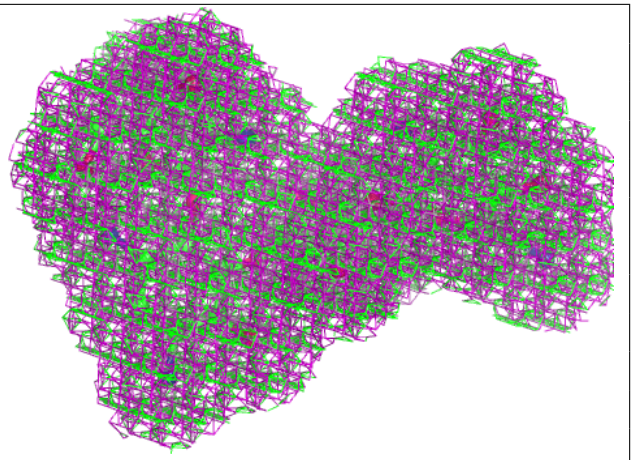


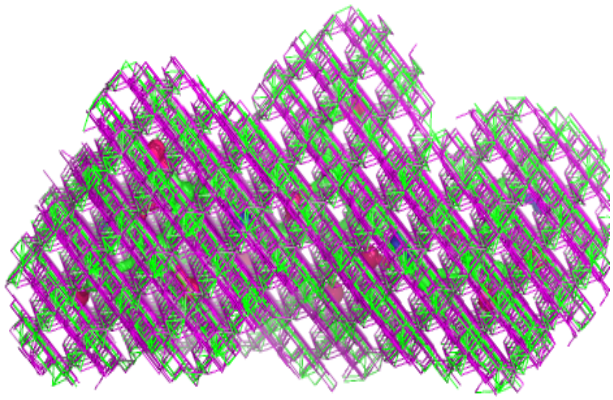


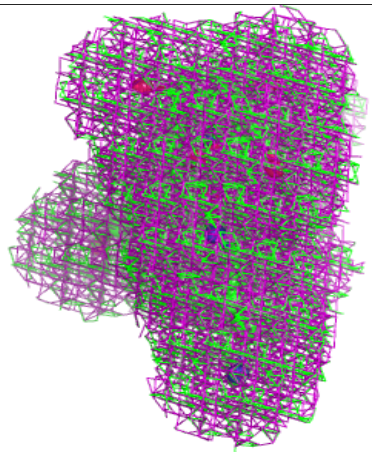


Electron density around PAR 1 3428:

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

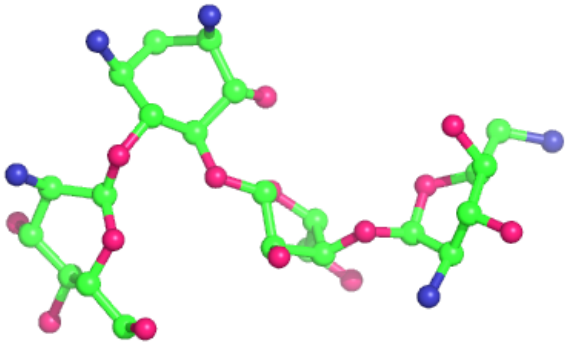


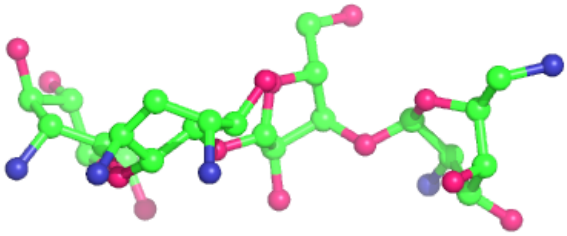


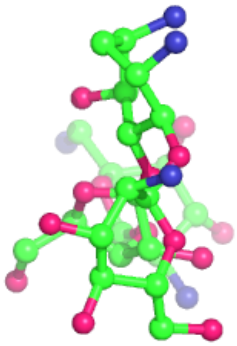


Electron density around PAR AS 3411:

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

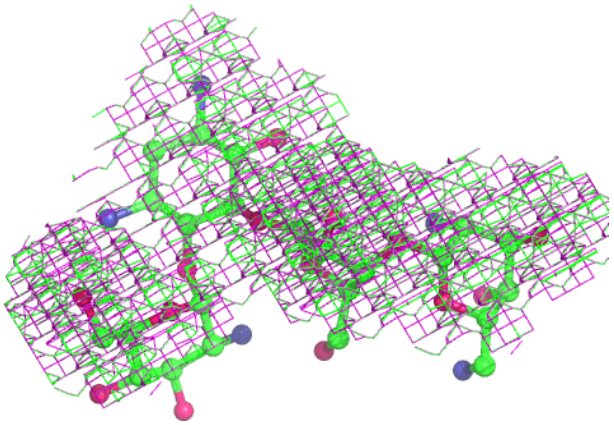


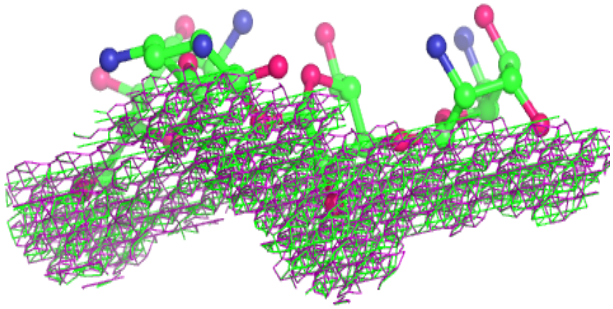


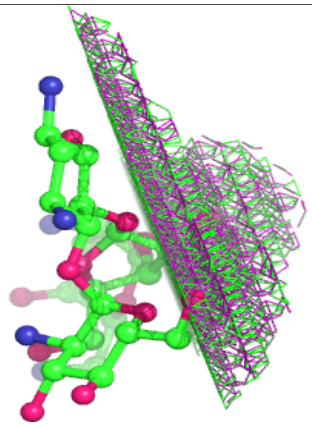


Electron density around PAR B 1801:

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

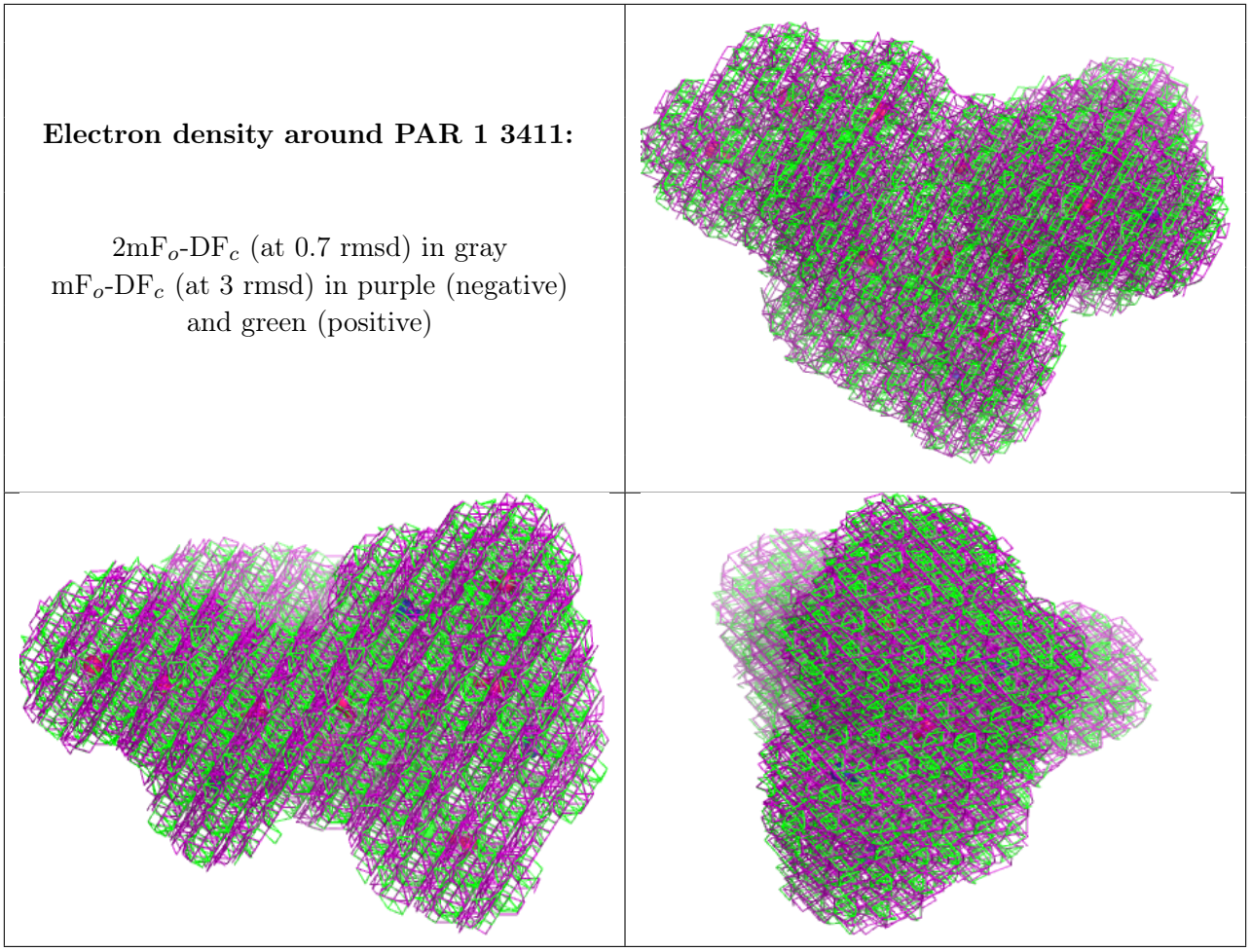






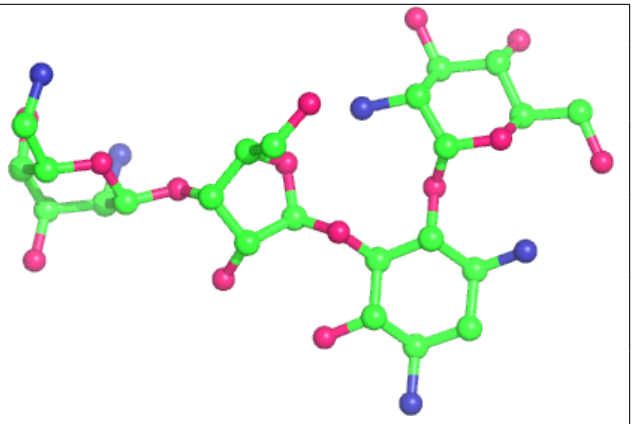
Electron density around PAR 1 3411:

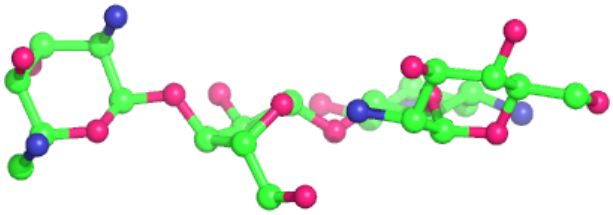
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

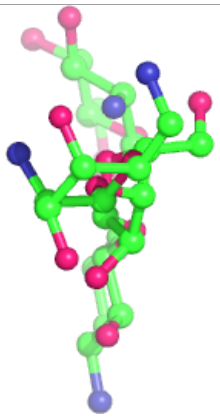


Electron density around PAR 1 3415:

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

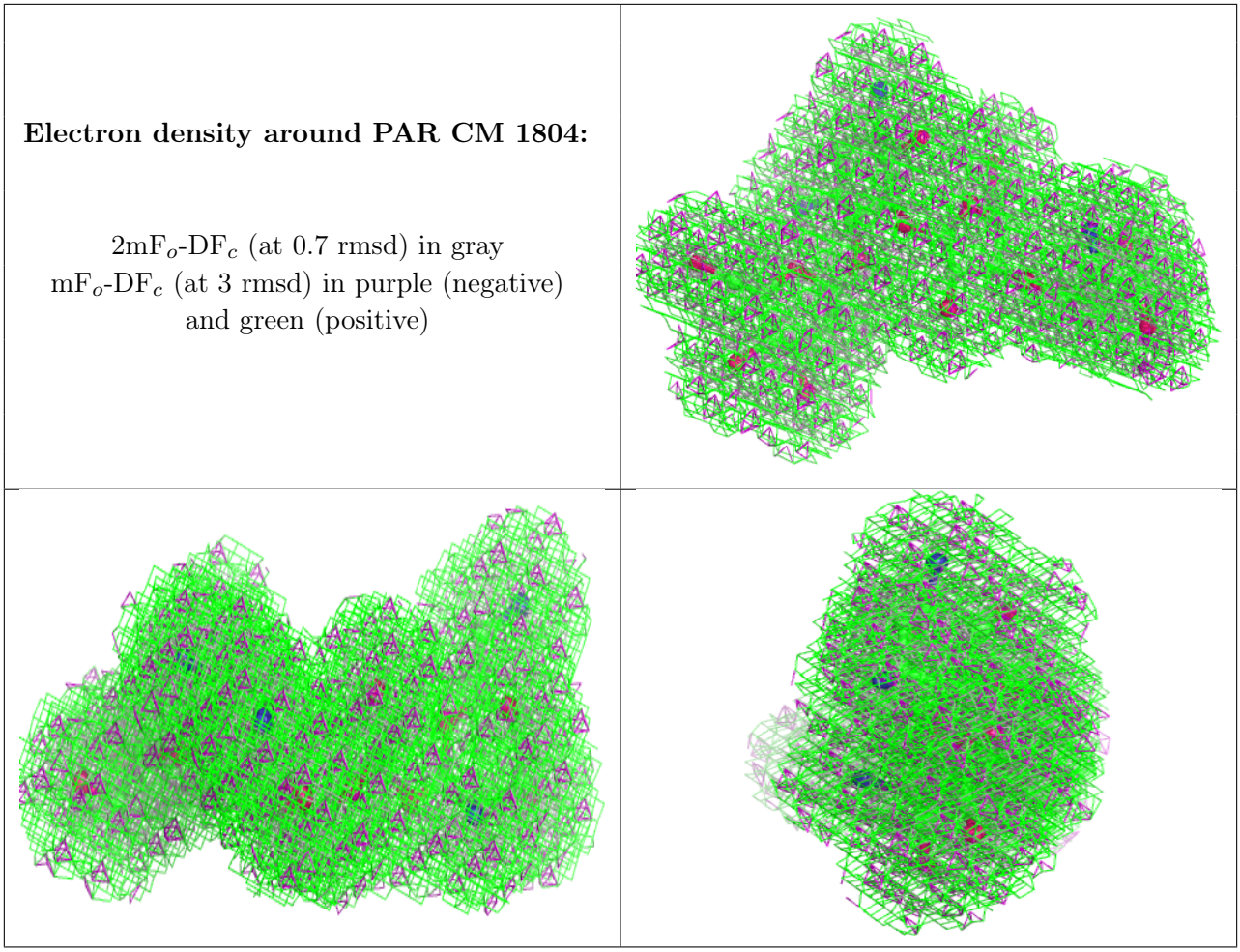






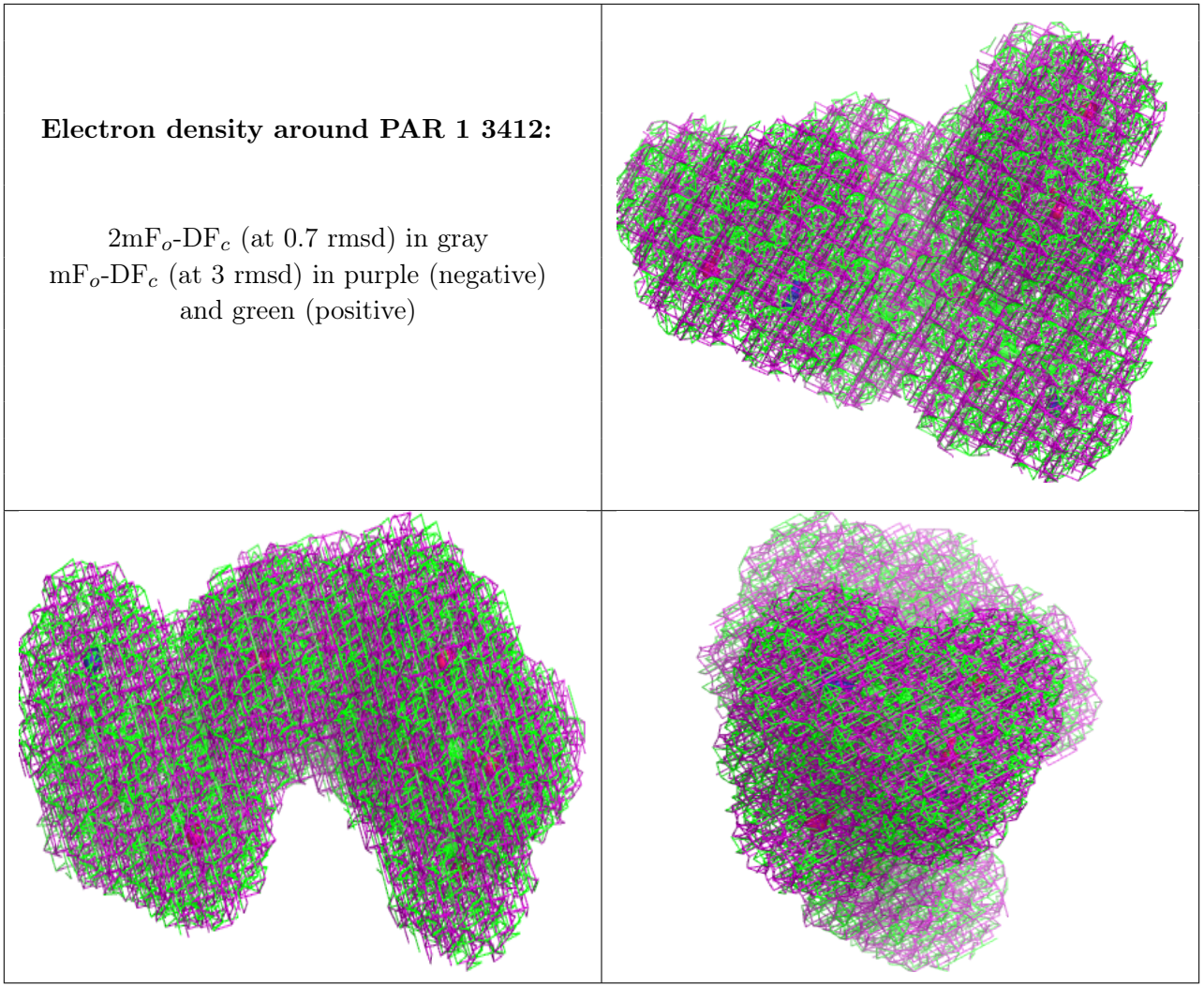
Electron density around PAR CM 1804:

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



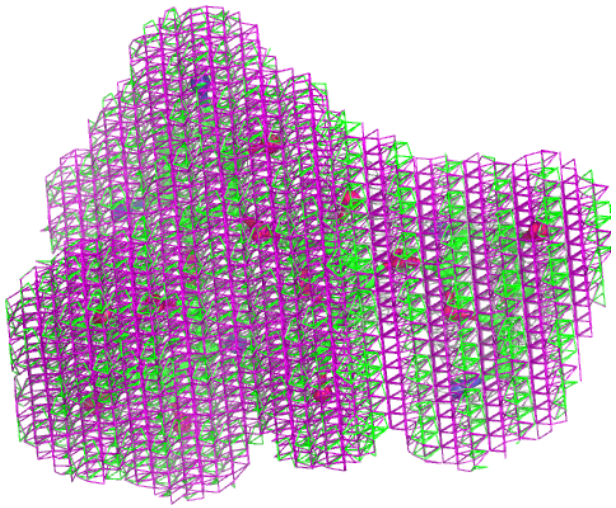
Electron density around PAR 1 3412:

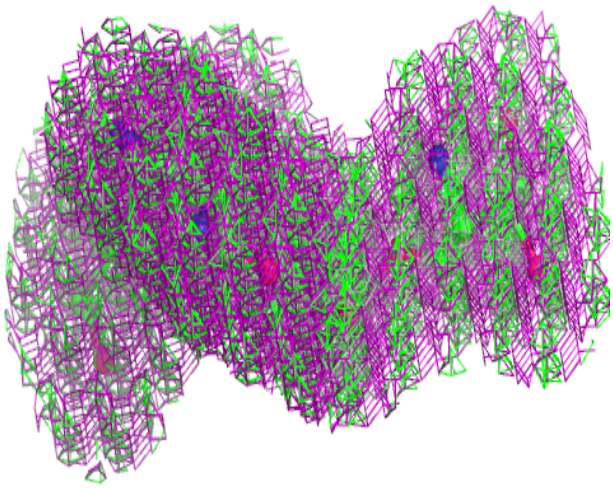
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

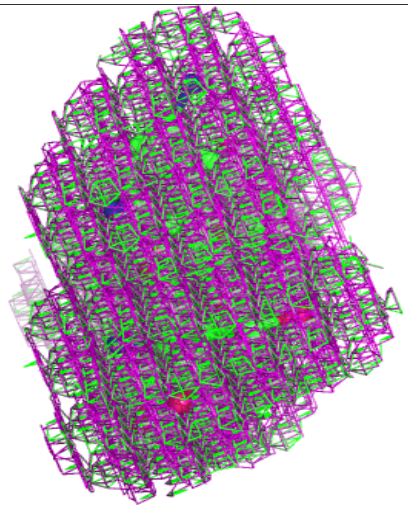


Electron density around PAR 1 3417:

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

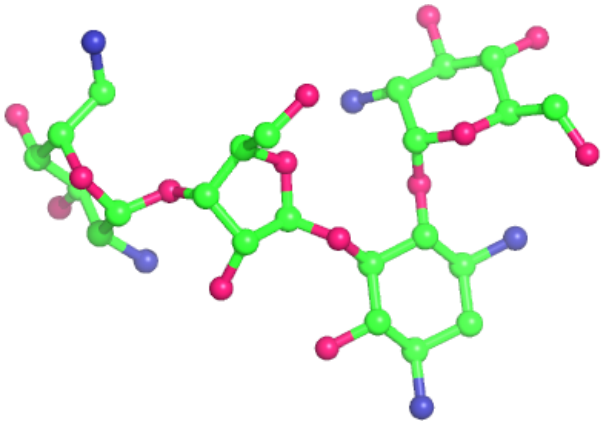


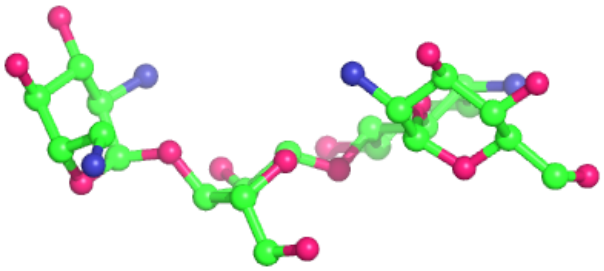


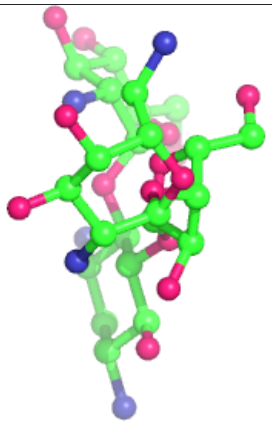


Electron density around PAR AS 3412:

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

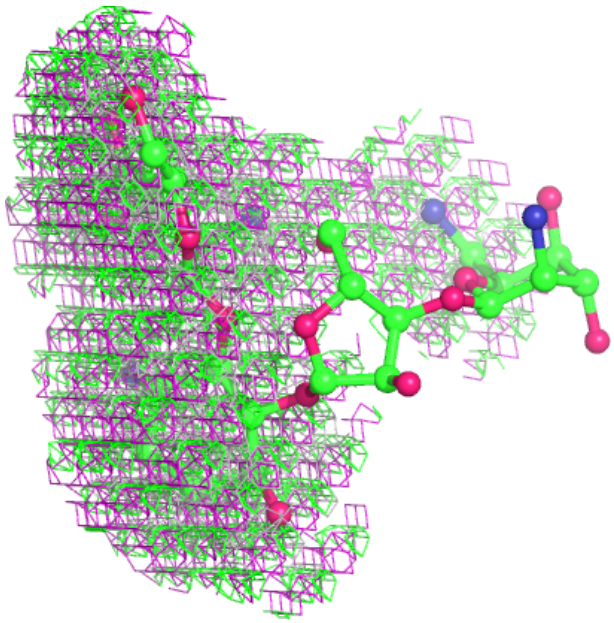


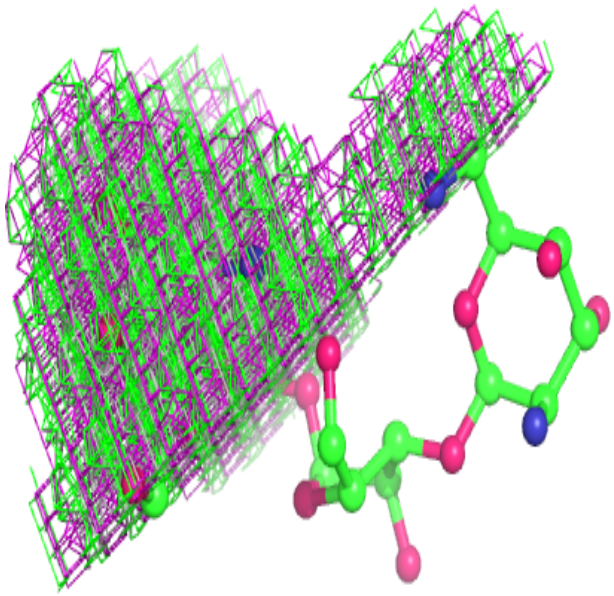


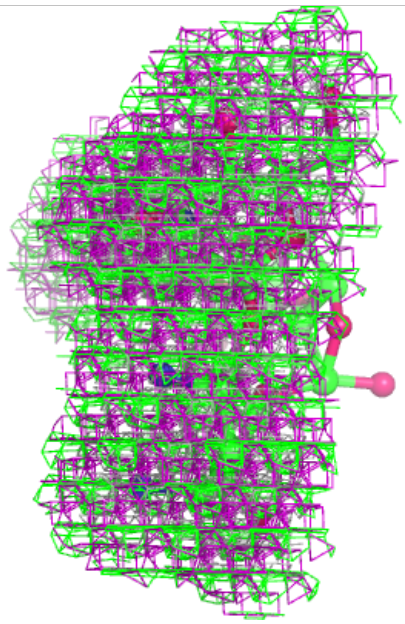


Electron density around PAR 1 3404:

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

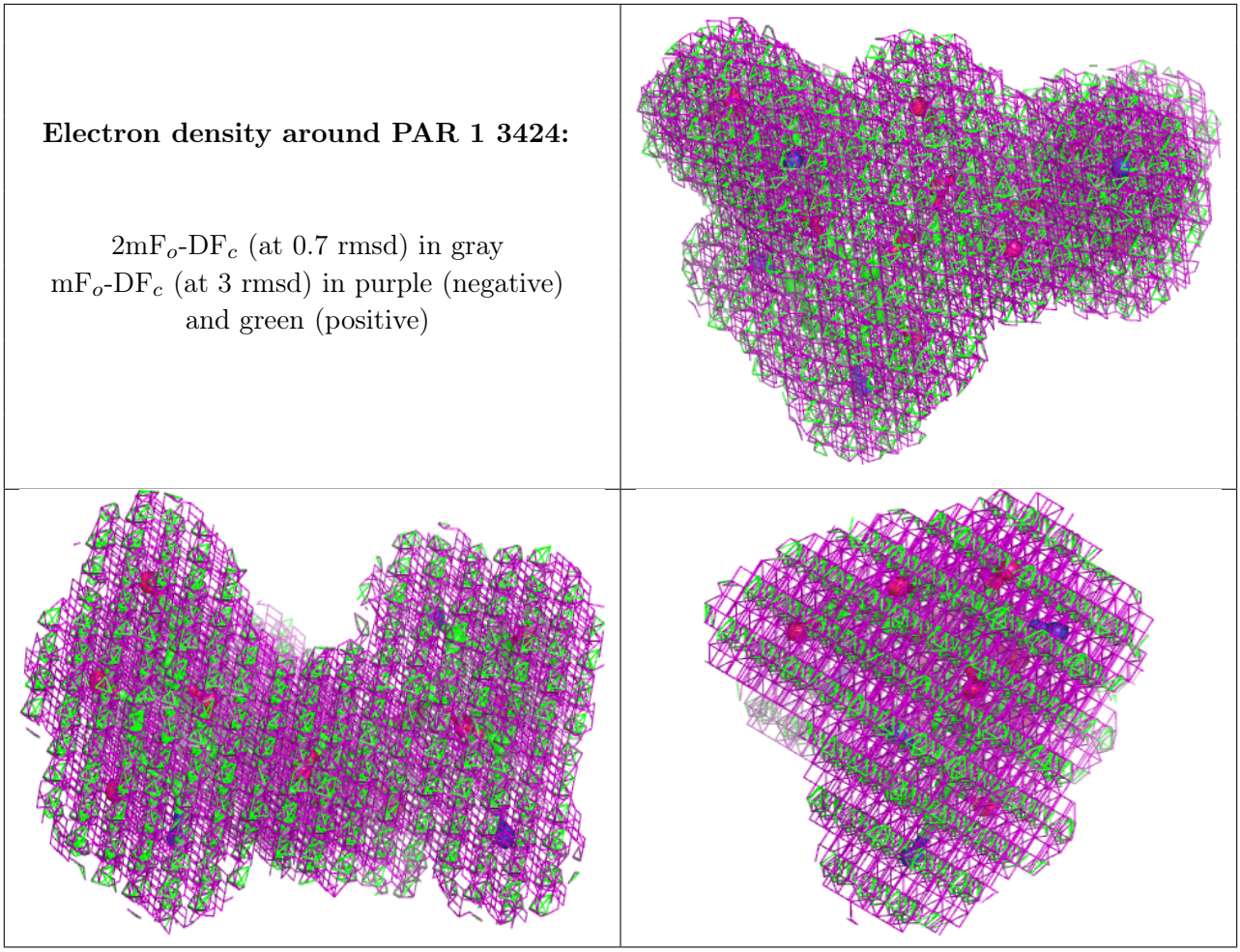






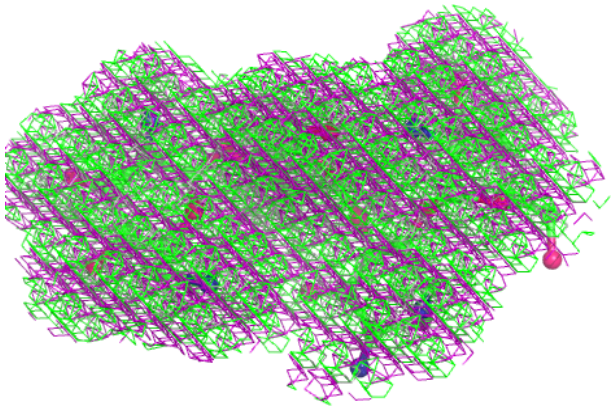
Electron density around PAR 1 3424:

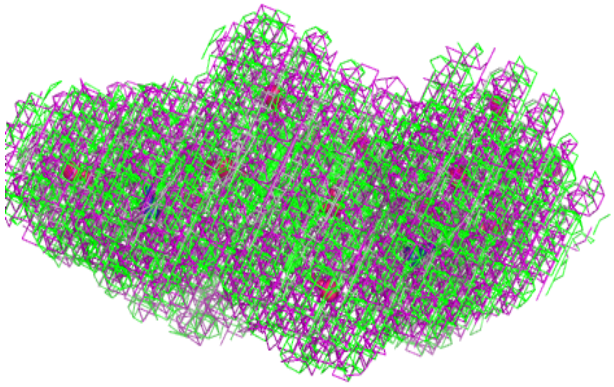
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

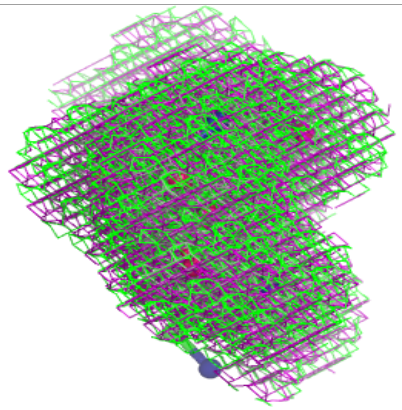


Electron density around PAR 1 3430:

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

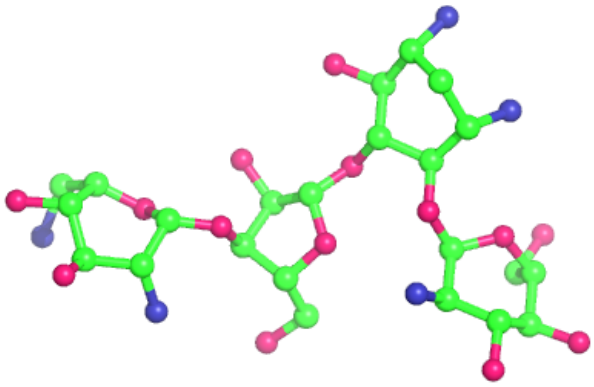


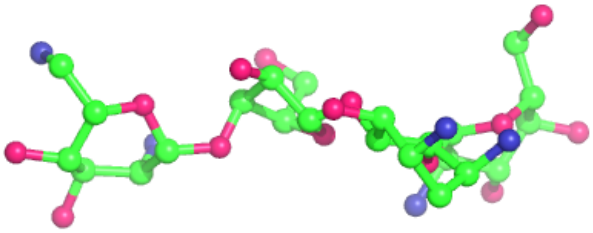


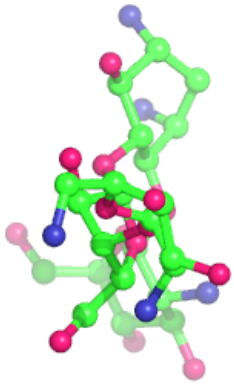


Electron density around PAR AS 3407:

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

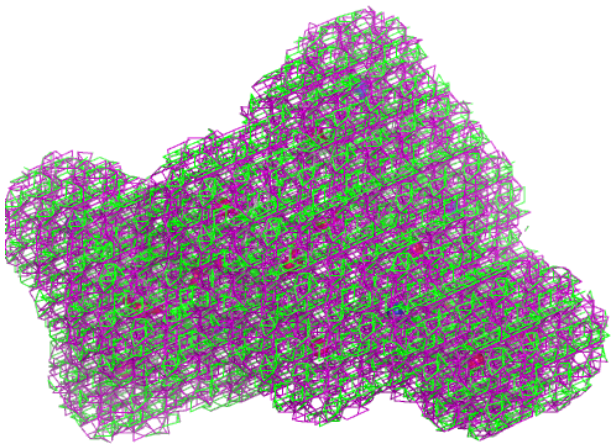


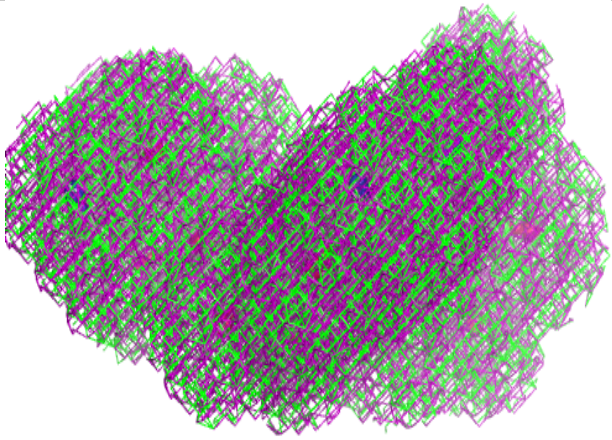


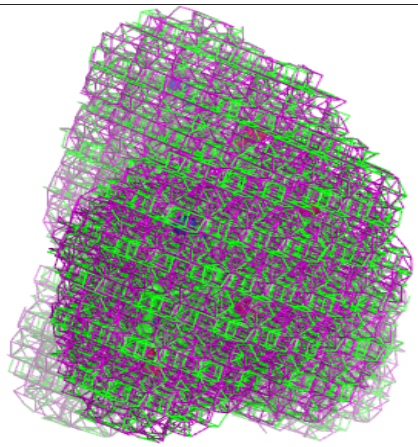


Electron density around PAR 1 3406:

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

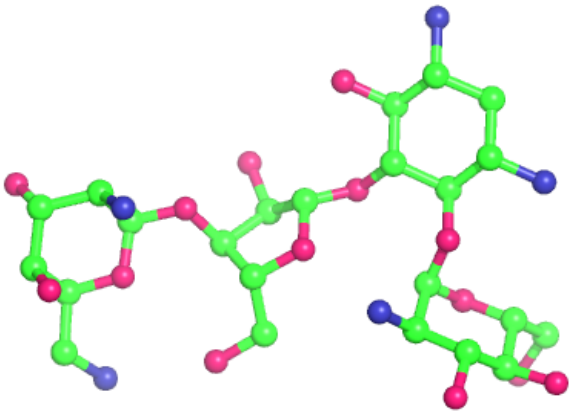


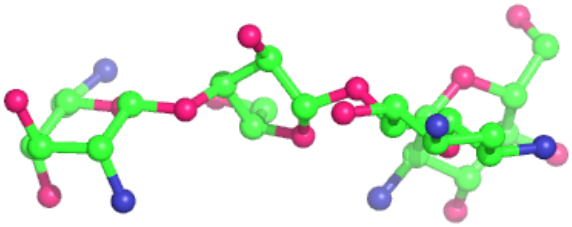


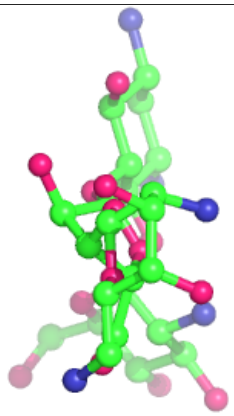


Electron density around PAR 1 3402:

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

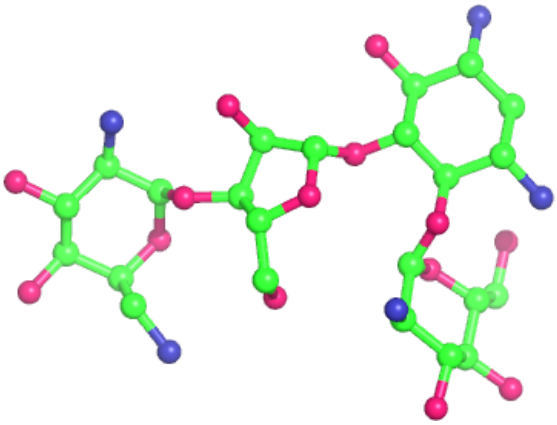


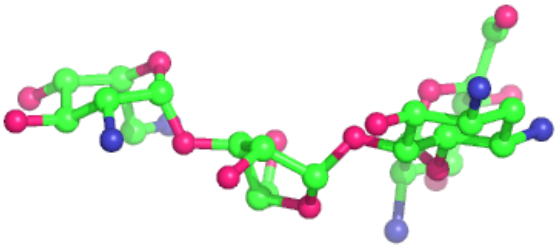


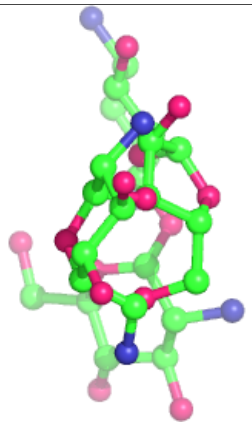


Electron density around PAR 4 202:

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

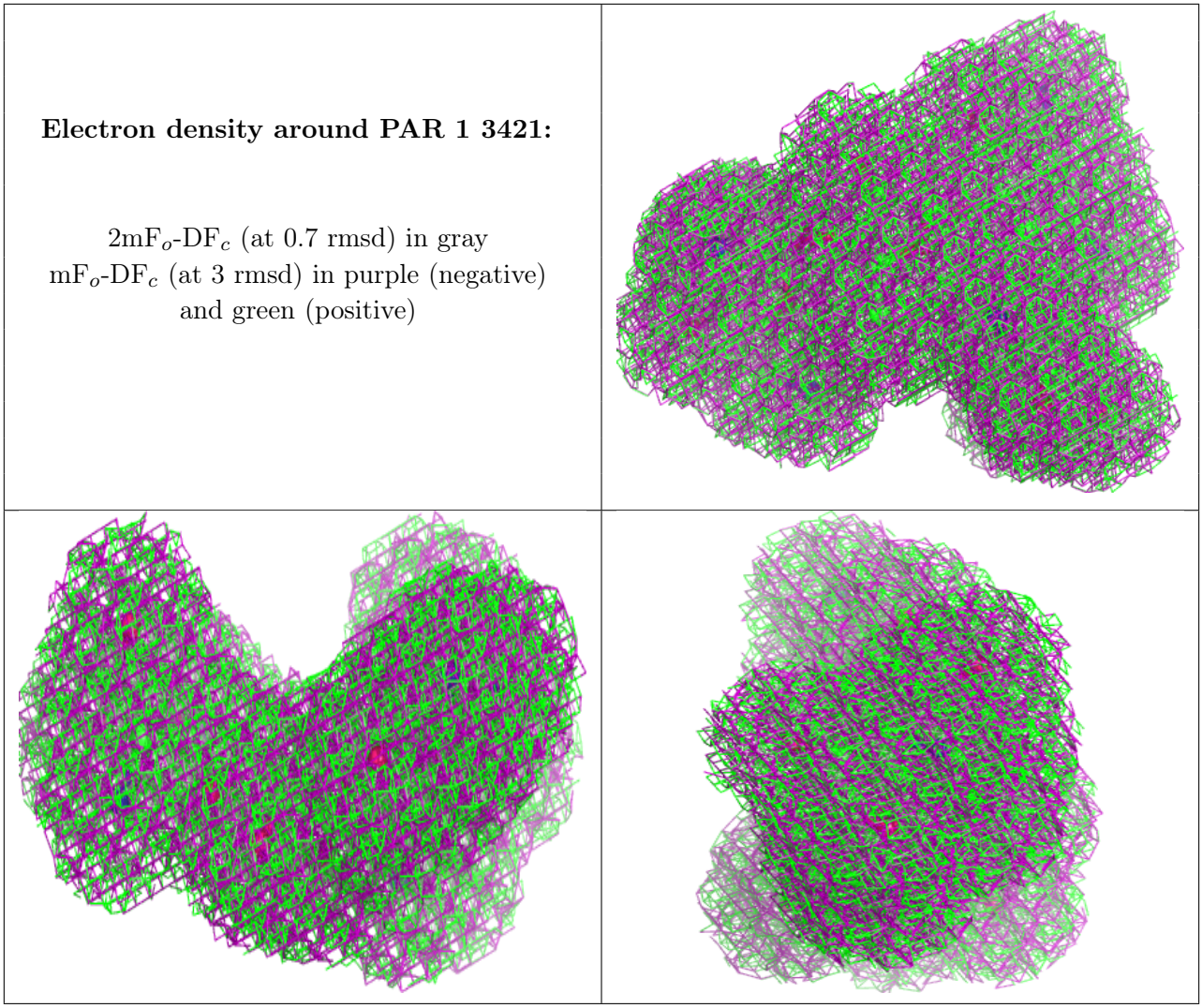






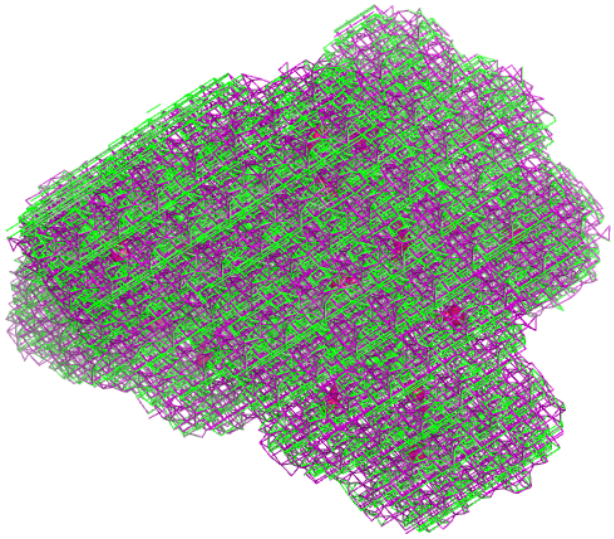
Electron density around PAR 1 3421:

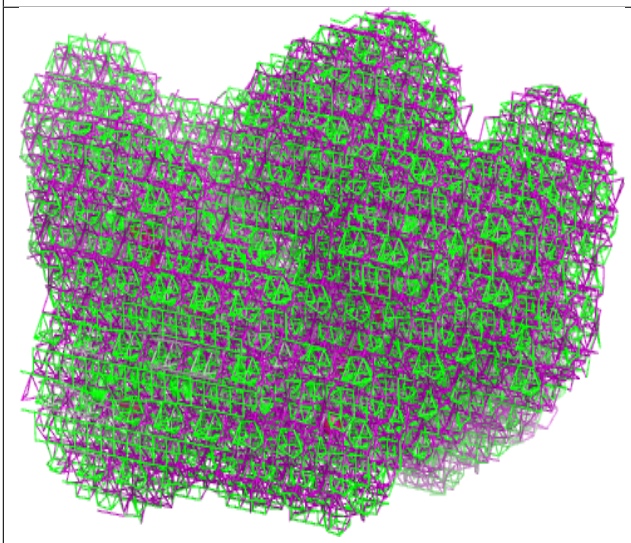
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

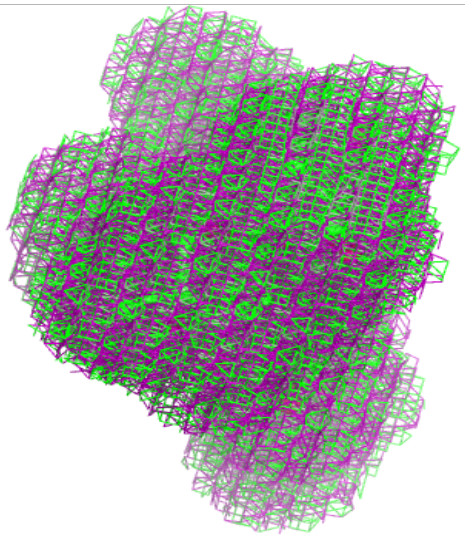


Electron density around 3K5 1 3401:

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

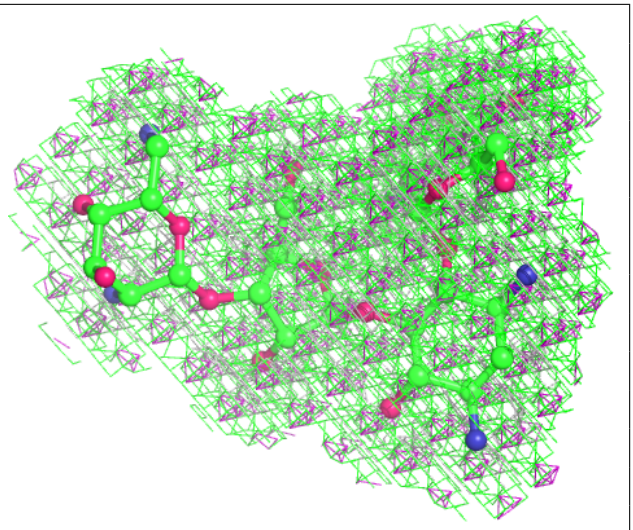


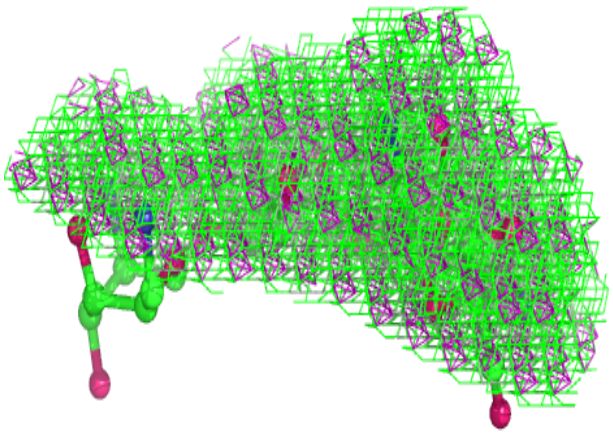


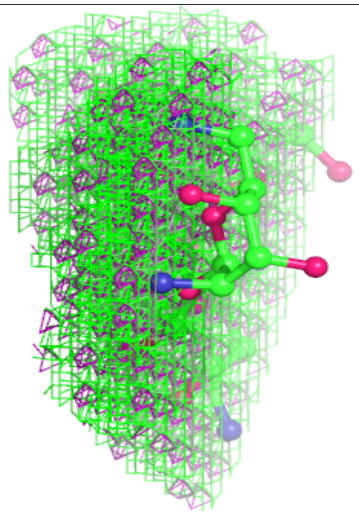


Electron density around PAR CM 1803:

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

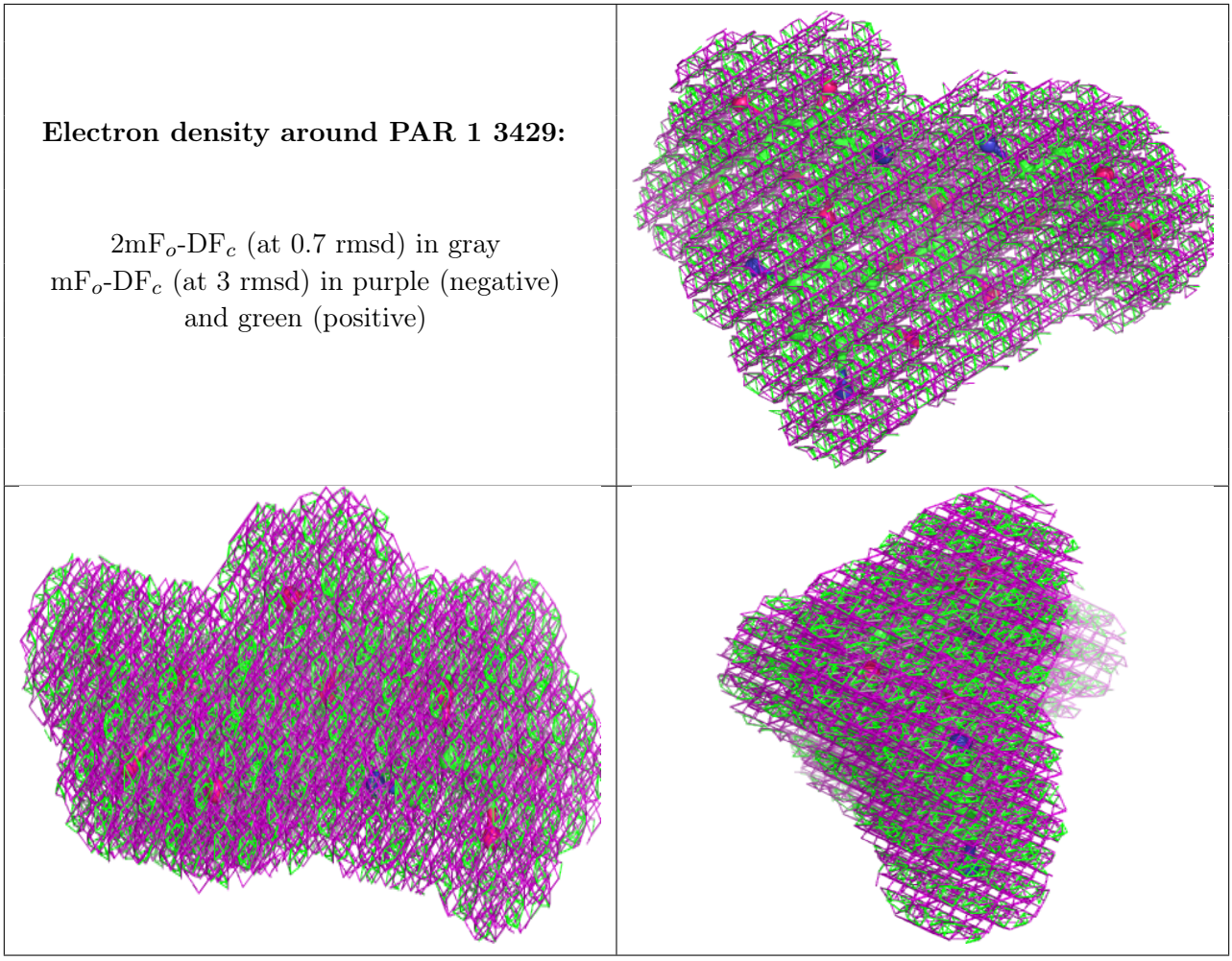






Electron density around PAR 1 3429:

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



6.5 Other polymers

There are no such residues in this entry.