



Full wwPDB X-ray Structure Validation Report ⓘ

Sep 24, 2024 – 09:46 am BST

PDB ID : 8OH6
Title : Crystal structure of the Candida albicans 80S ribosome in complex with Paromomycin (500umol)
Authors : Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on : 2023-03-20
Resolution : 3.35 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)
Xtrriage (Phenix) : 1.13
EDS : 3.0
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4 : 9.0.002 (Gargrove)
Density-Fitness : 1.0.11
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.38.2

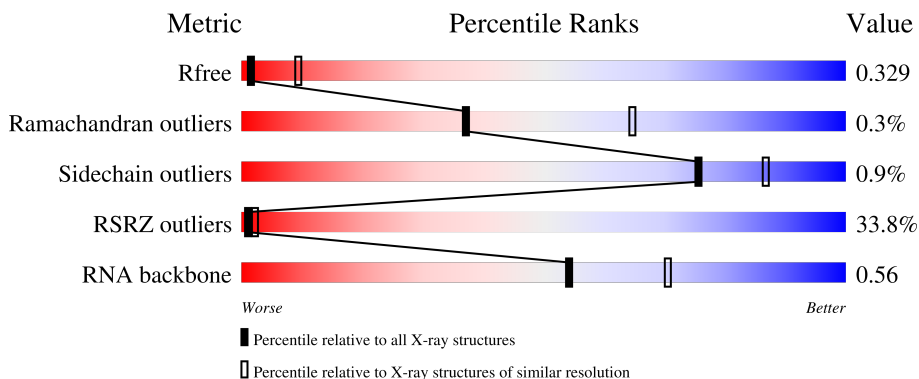
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.35 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	1012 (3.40-3.32)
Ramachandran outliers	177936	1037 (3.40-3.32)
Sidechain outliers	177891	1037 (3.40-3.32)
RSRZ outliers	164620	1012 (3.40-3.32)
RNA backbone	3690	1010 (3.74-2.98)

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

Mol	Chain	Length	Quality of chain
1	1	3359	
1	AS	3359	
2	3	121	
2	AT	121	
3	4	158	

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Mol	Chain	Length	Quality of chain
3	AU	158	44% 86% 13%
4	AW	254	58% 98%
4	j	254	21% 97%
5	AX	389	35% 98%
5	k	389	23% 99%
6	AY	363	51% 98%
6	l	363	20% 99%
7	AZ	298	58% 96%
7	m	298	27% 98%
8	BA	176	41% 87% 13%
8	n	176	24% 89% 11%
9	BB	241	31% 93% 6%
9	o	241	12% 93% 5%
10	BC	262	57% 85% 14%
10	p	262	21% 90% 10%
11	BD	191	37% 98%
11	q	191	19% 99%
12	BE	220	16% 94% 6%
12	r	220	26% 94% 5%
13	BF	174	36% 97%
13	s	174	41% 97%
14	BG	202	69% 96%
14	t	202	24% 99%
15	BH	131	49% 97%
15	u	131	17% 98%

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Mol	Chain	Length	Quality of chain
16	BI	204	87% 98%
16	v	204	29% 99%
17	BJ	200	32% 98%
17	w	200	25% 99%
18	BK	185	52% 92% 6%
18	x	185	25% 93% 7%
19	BL	186	51% 99%
19	y	186	32% 99%
20	BM	190	53% 88% 10%
20	z	190	23% 94% 6%
21	0	172	12% 99%
21	BN	172	36% 98%
22	2	160	29% 99%
22	BO	160	64% 99%
23	5	124	22% 82% 17%
23	BP	124	31% 77% 5% 18%
24	6	137	23% 96%
24	BQ	137	39% 96%
25	7	155	21% 75% 24%
25	BR	155	28% 70% 28%
26	8	142	15% 85% 15%
26	BS	142	63% 83% 17%
27	9	127	36% 98%
27	BT	127	65% 97%
28	AA	136	28% 99%

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Mol	Chain	Length	Quality of chain
28	BU	136	50% 99%
29	AB	149	25% 99%
29	BV	149	64% 99%
30	AC	63	32% 95%
30	BW	63	68% 94% 5%
31	AD	106	25% 92% 7%
31	BX	106	48% 91% 9%
32	AE	112	25% 97%
32	BY	112	29% 97%
33	AF	131	21% 95% 5%
33	BZ	131	48% 94% 5%
34	AG	107	23% 97%
34	CA	107	34% 99%
35	AH	122	38% 90% 9%
35	CB	122	67% 91% 8%
36	AI	120	38% 100%
36	CC	120	80% 97%
37	AJ	99	15% 97%
37	CD	99	53% 98%
38	AK	90	19% 96%
38	CE	90	64% 96%
39	AL	78	22% 99%
39	CF	78	38% 97%
40	AM	51	35% 96%
40	CG	51	71% 94%

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Mol	Chain	Length	Quality of chain
41	AN	52	21% 98%
41	CH	52	25% 100%
42	AO	25	40% 100%
42	CI	25	84% 96%
43	AP	106	26% 96%
43	CJ	106	47% 95%
44	AQ	92	22% 99%
44	CK	92	43% 98%
45	CL	267	19% 37% 60%
45	i	267	19% 42% 55%
46	B	1787	15% 71% 25%
46	CM	1787	34% 70% 25% 5%
47	C	261	23% 80% 20%
47	CN	261	29% 79% 20%
48	CO	256	39% 81% 16%
48	D	256	14% 84% 16%
49	CP	249	31% 87% 13%
49	E	249	25% 87% 13%
50	CQ	251	53% 88% 11%
50	F	251	40% 88% 11%
51	CR	262	26% 99%
51	G	262	28% 98%
52	CS	225	64% 92% 8%
52	H	225	36% 91% 8%
53	CT	236	43% 98%

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Mol	Chain	Length	Quality of chain
53	I	236	27% 93%
54	CU	186	51% 96%
54	J	186	39% 98%
55	CV	206	53% 98%
55	K	206	14% 98%
56	CW	189	44% 94%
56	L	189	41% 93%
57	CX	118	35% 78%
57	M	118	31% 80%
58	CY	155	47% 88%
58	N	155	14% 92%
59	CZ	143	29% 80%
59	O	143	32% 75%
60	DA	151	64% 99%
60	P	151	23% 99%
61	DB	132	50% 96%
61	Q	132	20% 95%
62	DC	142	66% 82%
62	R	142	42% 89%
63	DD	142	84% 99%
63	S	142	44% 98%
64	DE	137	51% 89%
64	T	137	42% 89%
65	DF	145	78% 92%
65	U	145	37% 98%

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Mol	Chain	Length	Quality of chain
66	DG	145	77% 97%
66	V	145	37% 94%
67	DH	119	55% 81% 16%
67	W	119	47% 83% 14%
68	DI	87	32% 100%
68	X	87	17% 100%
69	DJ	130	41% 98%
69	Y	130	24% 99%
70	DK	145	60% 97%
70	Z	145	23% 98%
71	DL	135	19% 97%
71	a	135	30% 99%
72	DM	105	36% 69% 31%
72	b	105	13% 68% 32%
73	DN	119	55% 80% 18%
73	c	119	30% 82% 18%
74	DO	82	56% 99%
74	d	82	20% 99%
75	DP	67	40% 93% 7%
75	e	67	43% 93% 7%
76	DQ	56	73% 98%
76	f	56	54% 96%
77	DR	63	49% 89% 11%
77	g	63	33% 95% 5%
78	DS	193	17% 35% 64%

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Mol	Chain	Length	Quality of chain
78	h	193	
79	AR	317	
79	DT	317	
80	l1	217	
81	12	165	

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	3569	-	-	-	X
82	MG	1	3667	-	-	-	X
82	MG	1	3690	-	-	-	X
82	MG	1	3718	-	-	-	X
82	MG	1	3791	-	-	-	X
82	MG	1	3882	-	-	-	X
82	MG	1	3959	-	-	-	X
82	MG	1	3978	-	-	-	X
82	MG	1	3983	-	-	-	X
82	MG	1	3984	-	-	-	X
82	MG	1	4036	-	-	-	X
82	MG	1	4046	-	-	-	X
82	MG	1	4064	-	-	-	X
82	MG	1	4073	-	-	-	X
82	MG	1	4076	-	-	-	X
82	MG	1	4083	-	-	-	X
82	MG	AS	3407	-	-	-	X
82	MG	AS	3409	-	-	-	X
82	MG	AS	3410	-	-	-	X
82	MG	AS	3418	-	-	-	X
82	MG	AS	3422	-	-	-	X
82	MG	AS	3472	-	-	-	X
82	MG	AS	3516	-	-	-	X
82	MG	AS	3558	-	-	-	X
82	MG	AS	3580	-	-	-	X
82	MG	AS	3671	-	-	-	X
82	MG	AS	3672	-	-	-	X
82	MG	AS	3681	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
82	MG	AS	3756	-	-	-	X
82	MG	AS	3852	-	-	-	X
82	MG	AS	3895	-	-	-	X
82	MG	AS	3937	-	-	-	X
82	MG	B	1866	-	-	-	X

2 Entry composition [i](#)

There are 85 unique types of molecules in this entry. The entry contains 401103 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 (gene name XR_002086444.1).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	1	3219	Total 68814	C 30741	N 12370	O 22484	P 3219	0	0	0
1	AS	3061	Total 65432	C 29231	N 11756	O 21384	P 3061	0	0	0

- Molecule 2 is a RNA chain called 5S.

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

- Molecule 3 is a RNA chain called 5.8S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
3	4	157	Total 3333	C 1491	N 583	O 1102	P 157	0	0	0
3	AU	156	Total 3313	C 1482	N 581	O 1094	P 156	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	j	249	Total 1888	C 1180	N 376	O 330	S 2	0	0	0
4	AW	248	Total 1879	C 1175	N 374	O 328	S 2	0	0	0

- 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	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			
6	AY	359	Total	C	N	O	S	0	0	0
			2737	1722	526	486	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	228	Total	C	N	O	S	0	0	0
			1834	1176	336	321	1			
9	BB	227	Total	C	N	O	S	0	0	0
			1825	1171	335	318	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	237	Total	C	N	O	S	0	0	0
			1831	1171	325	332	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	BC	226	1766	1132	313	318	3	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	q	190	1519	958	276	281	4	0	0	0
11	BD	189	1510	953	275	278	4	0	0	0

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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
			Total	C	N	O	S			
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
			Total	C	N	O			
18	x	172	Total	C	N	O	0	0	0
			1380	852	279	249			
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
			Total	C	N	O			
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
			Total	C	N	O	S			
20	z	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			
20	BM	171	Total	C	N	O	S	0	0	0
			1386	859	293	231	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
			832	540	137	155			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	118	Total	C	N	O	S	0	0	0
			945	591	192	161	1			
25	BR	111	Total	C	N	O	S	0	0	0
			896	560	183	152	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	118	Total	C	N	O	S	0	0	0
			952	607	171	173	1			

- Molecule 27 is a protein called Ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	9	126	Total	C	N	O	0	0	0
			989	618	190	181			
27	BT	124	Total	C	N	O	0	0	0
			975	610	188	177			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	AC	62	Total	C	N	O	0	0	0	
			493	307	105	81				
30	BW	60	Total	C	N	O	S	0	1	0
			489	305	105	78	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	AD	99	Total	C	N	O	S	0	0	0
			755	483	126	144	2			
31	BX	96	Total	C	N	O	S	0	0	0
			729	469	121	137	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	AE	110	Total 894	C 565	N 168	O 159	S 2	0	0	0
32	BY	109	Total 889	C 562	N 167	O 158	S 2	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	AF	124	Total 1000	C 638	N 194	O 167	S 1	0	0	0
33	BZ	124	Total 1006	C 643	N 195	O 167	S 1	0	1	0

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	AH	111	Total 878	C 541	N 180	O 153	S 4	0	0	0
35	CB	112	Total 913	C 567	N 188	O 154	S 4	0	4	0

- Molecule 36 is a protein called Ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	AI	120	Total 992	C 629	N 195	O 167	S 1	0	0	0
36	CC	117	Total 970	C 615	N 191	O 164		0	0	0

- 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	98	Total	C	N	O	S	0	1	0
			772	481	158	131	2			

- 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	76	Total	C	N	O	0	1	0
			618	395	115	108			

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	i	121	Total	C	N	O	0	0	0
			930	563	166	201			
45	CL	107	Total	C	N	O	0	0	0
			815	490	150	175			

- Molecule 46 is a RNA chain called 18S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B	1730	Total	C	N	O	P	0	0	0
			36889	16490	6552	12117	1730			
46	CM	1704	Total	C	N	O	P	0	0	0
			36345	16246	6466	11929	1704			

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

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

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

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

- Molecule 49 is a protein called Ribosomal protein S5.

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

- Molecule 50 is a protein called Ribosomal protein S3.

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

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

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

- Molecule 52 is a protein called Ribosomal protein S7.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
53	I	226	Total 1820	C 1133	N 351	O 330	S 6	0	0	0
53	CT	235	Total 1895	C 1180	N 367	O 342	S 6	0	0	0

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

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

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

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

- Molecule 56 is a protein called Ribosomal protein S4.

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	R	129	Total	C	N	O	S	0	0	0
			1018	649	185	177	7			
62	DC	118	Total	C	N	O	S	0	0	0
			935	598	169	162	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	S	139	Total	C	N	O	S	0	0	0
			1085	697	197	190	1			
63	DD	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
64	T	123	Total 991	C 625	N 182	O 183	S 1	0	0	0
64	DE	125	Total 1002	C 631	N 184	O 186	S 1	0	0	0

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

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

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

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

- Molecule 67 is a protein called Ribosomal protein S10.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
79	AR	310	2389	1514	410	460	5	0	0	0
79	DT	311	2398	1519	412	462	5	0	0	0

- Molecule 80 is a protein called Ribosomal protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
80	11	217	1711	1096	294	312	9	0	0	0

- Molecule 81 is a protein called 60S ribosomal protein L12-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
81	12	14	97	60	16	21	0	0	0

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	1	684	Total 684	Mg 684	0	0
82	3	4	Total 4	Mg 4	0	0
82	4	4	Total 4	Mg 4	0	0
82	j	1	Total 1	Mg 1	0	0
82	k	2	Total 2	Mg 2	0	0
82	o	3	Total 3	Mg 3	0	0
82	v	1	Total 1	Mg 1	0	0
82	w	1	Total 1	Mg 1	0	0
82	x	1	Total 1	Mg 1	0	0
82	y	1	Total 1	Mg 1	0	0
82	z	1	Total 1	Mg 1	0	0
82	2	1	Total 1	Mg 1	0	0
82	6	1	Total 1	Mg 1	0	0
82	9	1	Total 1	Mg 1	0	0
82	AA	1	Total 1	Mg 1	0	0

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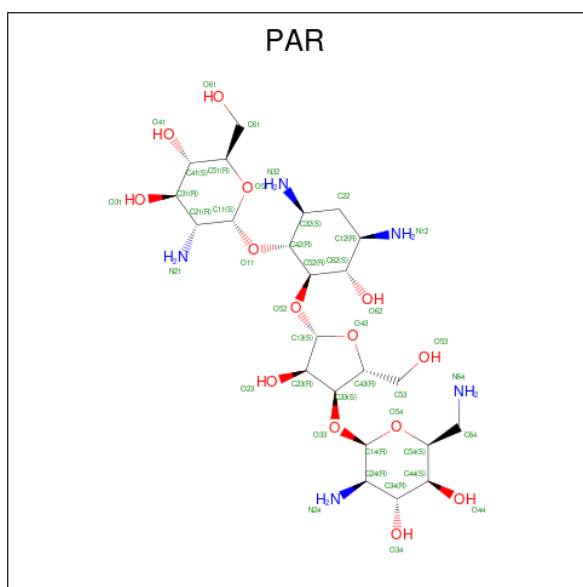
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	AB	2	Total Mg 2 2	0	0
82	AD	1	Total Mg 1 1	0	0
82	AF	1	Total Mg 1 1	0	0
82	AH	1	Total Mg 1 1	0	0
82	AI	1	Total Mg 1 1	0	0
82	AK	2	Total Mg 2 2	0	0
82	AN	1	Total Mg 1 1	0	0
82	AP	2	Total Mg 2 2	0	0
82	i	1	Total Mg 1 1	0	0
82	B	69	Total Mg 69 69	0	0
82	E	1	Total Mg 1 1	0	0
82	F	1	Total Mg 1 1	0	0
82	L	1	Total Mg 1 1	0	0
82	Q	1	Total Mg 1 1	0	0
82	R	1	Total Mg 1 1	0	0
82	U	1	Total Mg 1 1	0	0
82	Y	3	Total Mg 3 3	0	0
82	Z	1	Total Mg 1 1	0	0
82	c	1	Total Mg 1 1	0	0
82	AR	1	Total Mg 1 1	0	0
82	AS	542	Total Mg 542 542	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	AT	3	Total Mg 3 3	0	0
82	AU	2	Total Mg 2 2	0	0
82	AW	1	Total Mg 1 1	0	0
82	AX	1	Total Mg 1 1	0	0
82	AZ	1	Total Mg 1 1	0	0
82	BB	3	Total Mg 3 3	0	0
82	BE	1	Total Mg 1 1	0	0
82	BJ	1	Total Mg 1 1	0	0
82	BK	1	Total Mg 1 1	0	0
82	BO	1	Total Mg 1 1	0	0
82	BP	1	Total Mg 1 1	0	0
82	BQ	2	Total Mg 2 2	0	0
82	BZ	1	Total Mg 1 1	0	0
82	CB	1	Total Mg 1 1	0	0
82	CE	1	Total Mg 1 1	0	0
82	CH	1	Total Mg 1 1	0	0
82	CM	25	Total Mg 25 25	0	0
82	DK	1	Total Mg 1 1	0	0

- Molecule 83 is PAROMOMYCIN (three-letter code: PAR) (formula: C₂₃H₄₅N₅O₁₄) (labeled as "Ligand of Interest" by depositor).



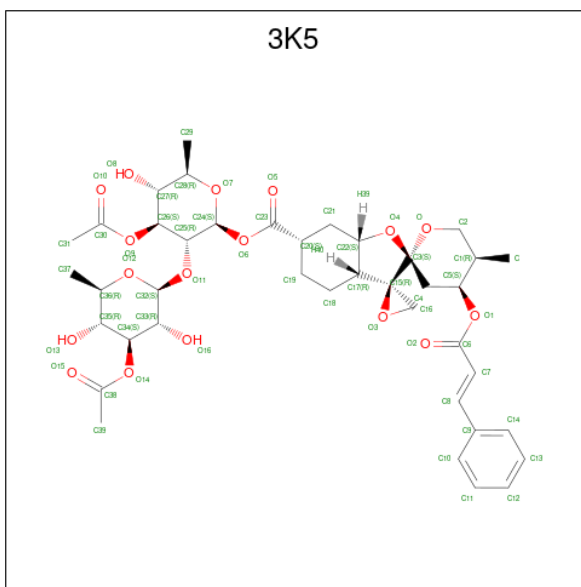
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	1	1	42	23	5	14	0	0
83	4	1	42	23	5	14	0	0
83	B	1	42	23	5	14	0	0
83	B	1	42	23	5	14	0	0
83	B	1	42	23	5	14	0	0

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

- Molecule 84 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: C₄₀H₅₂O₁₇).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
84	1	1	Total	C	O	0	0
			57	40	17		
84	AS	1	Total	C	O	0	0
			57	40	17		

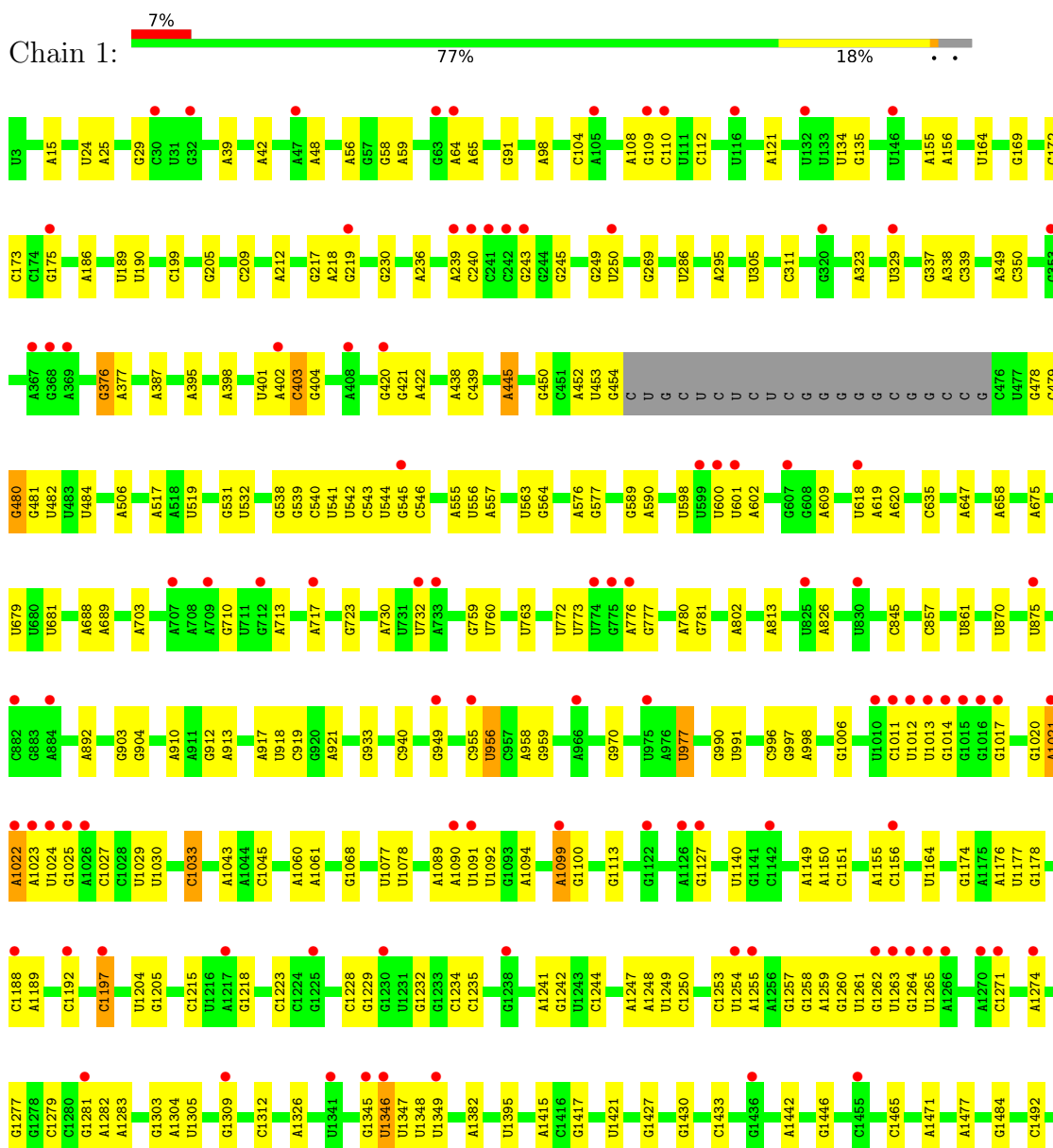
- Molecule 85 is ZINC ION (three-letter code: ZN) (formula: Zn).

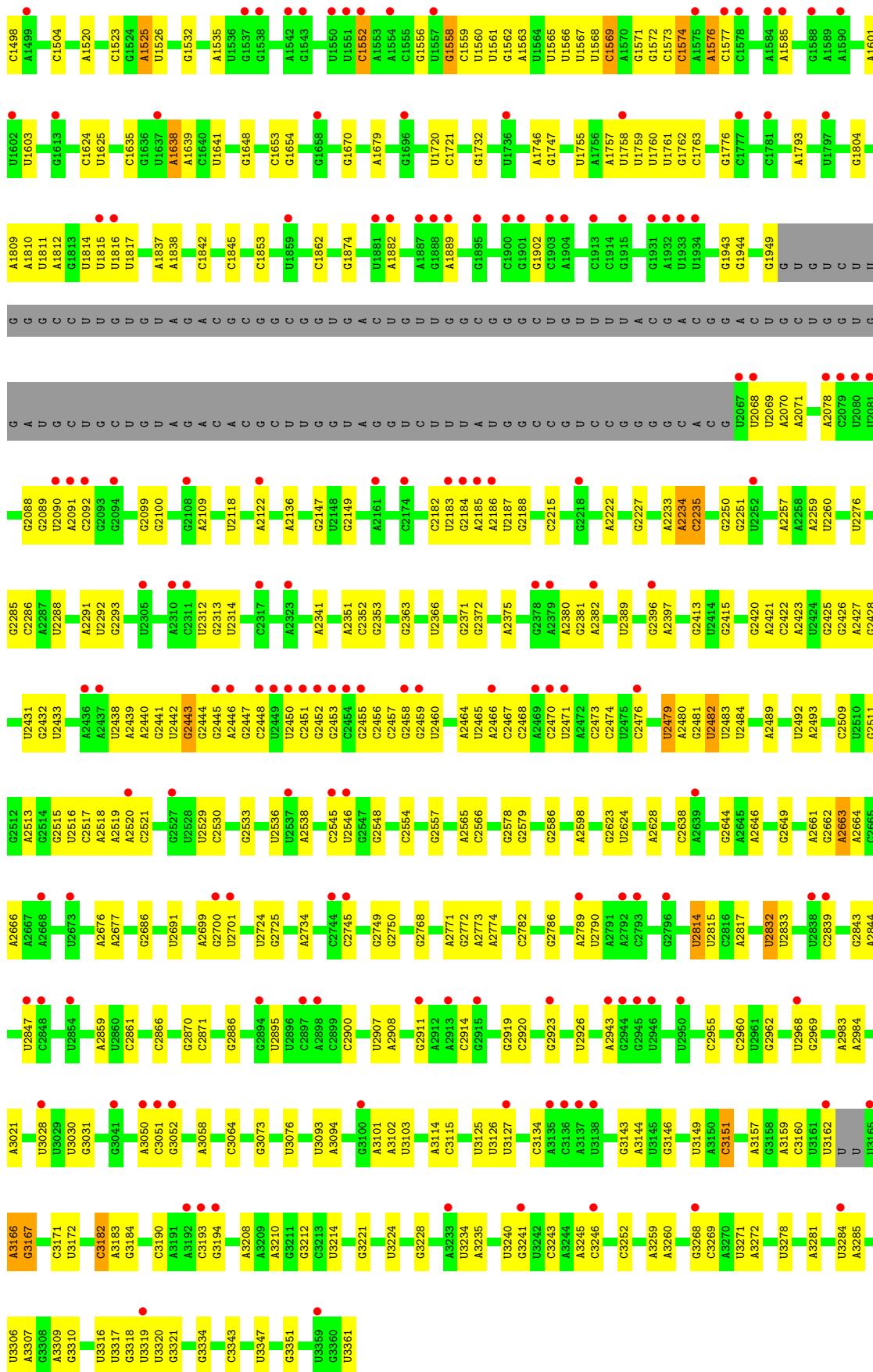
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	AH	1	Total Zn 1 1	0	0
85	AK	1	Total Zn 1 1	0	0
85	AN	1	Total Zn 1 1	0	0
85	AP	1	Total Zn 1 1	0	0
85	AQ	1	Total Zn 1 1	0	0
85	c	1	Total Zn 1 1	0	0
85	f	1	Total Zn 1 1	0	0
85	h	1	Total Zn 1 1	0	0
85	CB	1	Total Zn 1 1	0	0
85	CE	1	Total Zn 1 1	0	0
85	CH	1	Total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

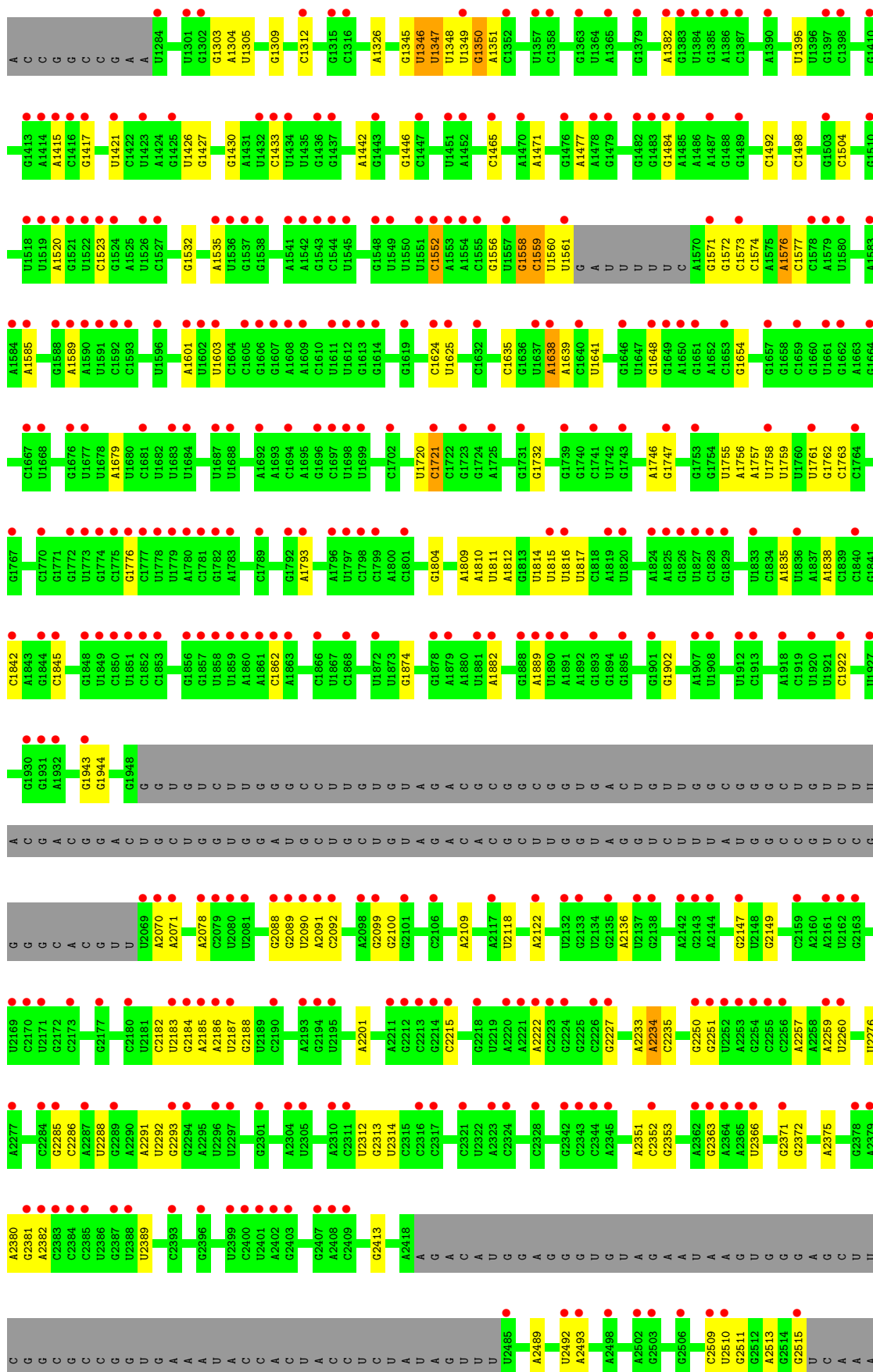
3 Residue-property plots [i](#)

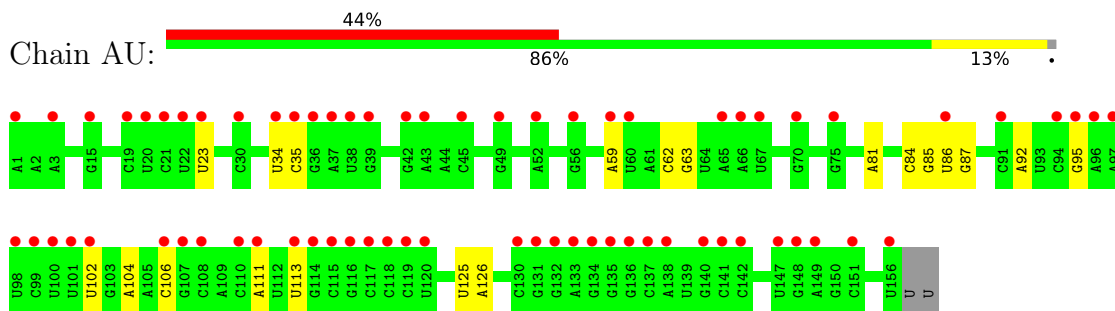
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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 (gene name XR_002086444.1)

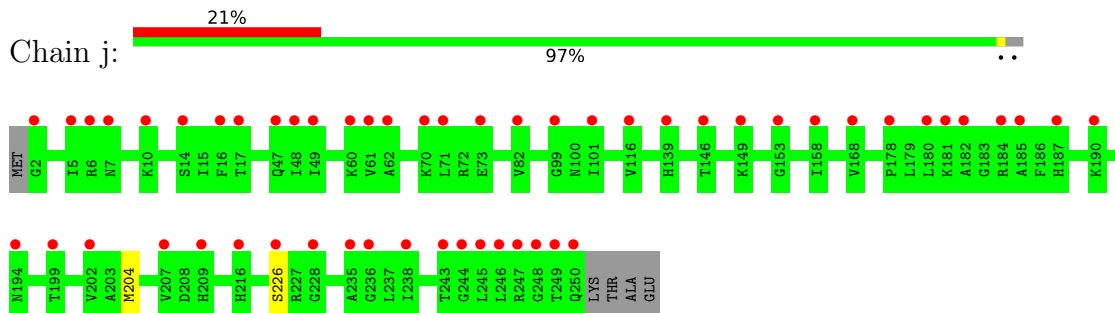




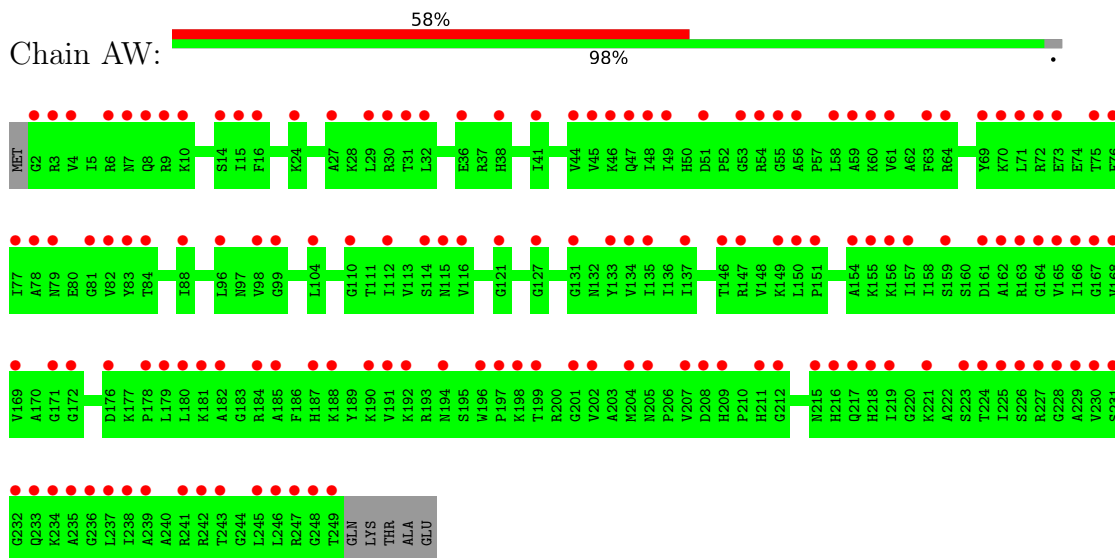




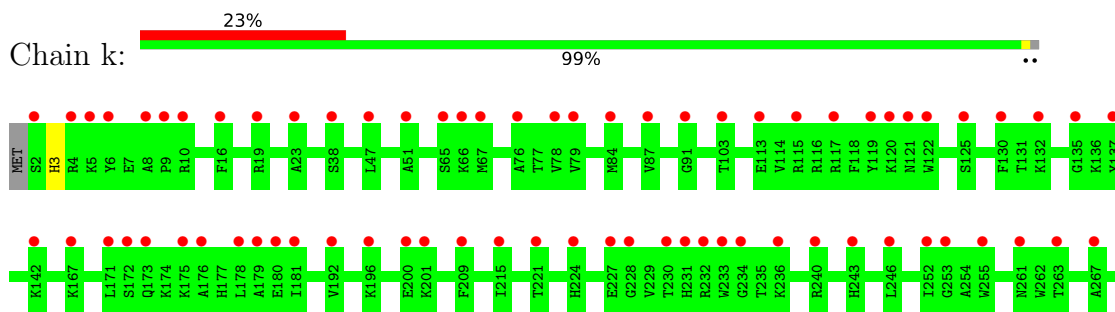
- Molecule 4: 60S ribosomal protein L2-B

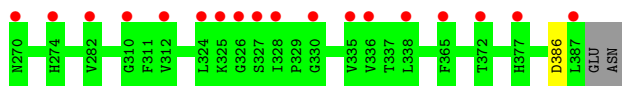


- Molecule 4: 60S ribosomal protein L2-B

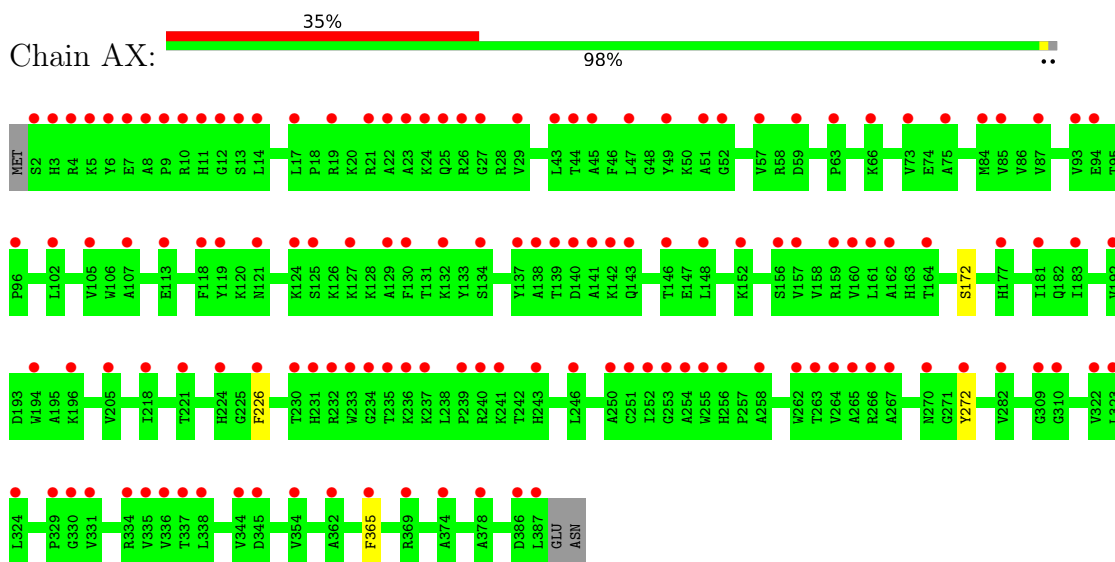


- Molecule 5: 60S ribosomal protein L3

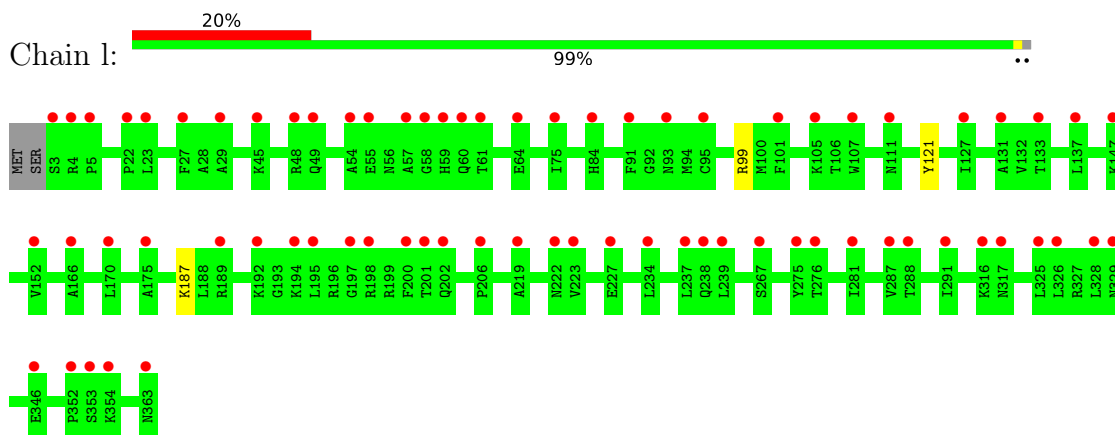




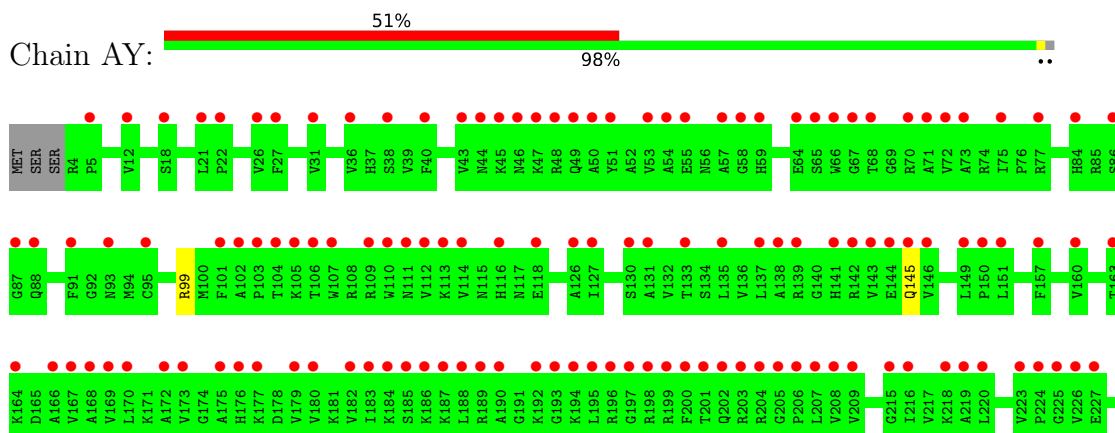
- Molecule 5: 60S ribosomal protein L3



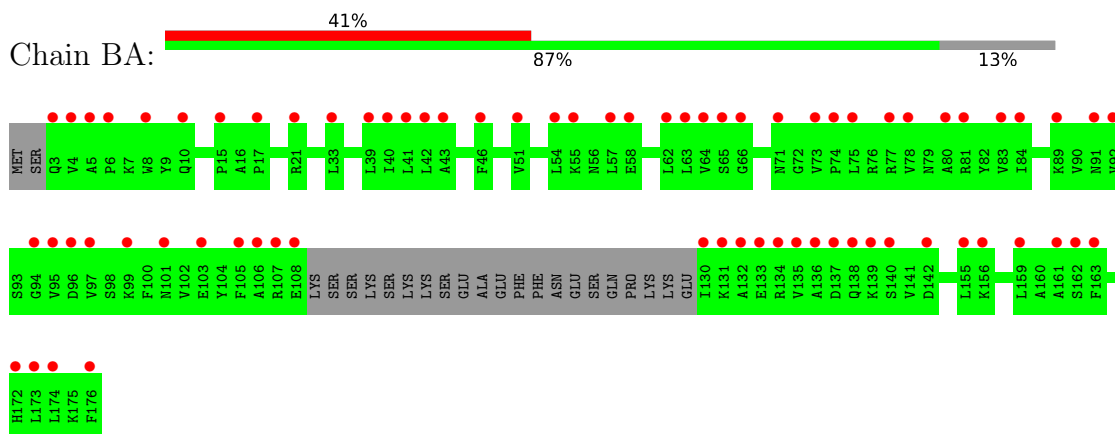
- Molecule 6: 60S ribosomal protein L4-B



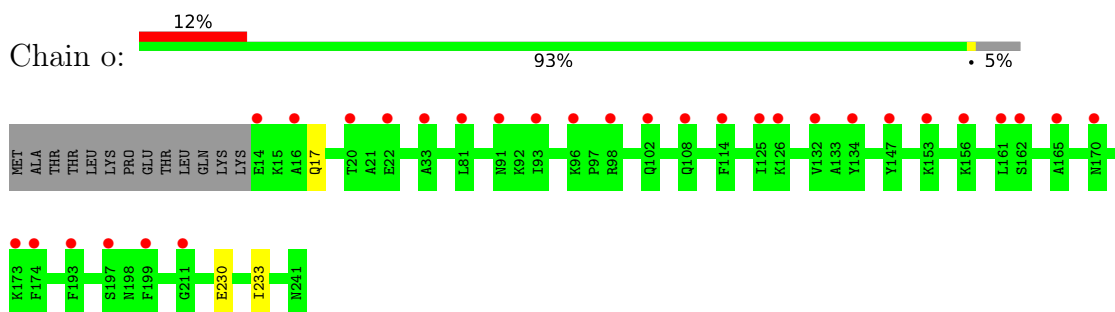
- Molecule 6: 60S ribosomal protein L4-B



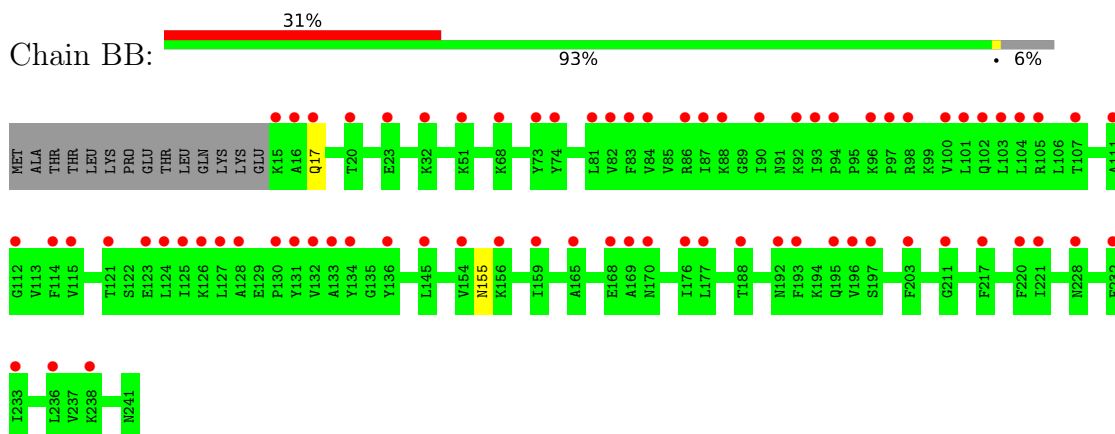
- Molecule 8: 60S ribosomal protein L6



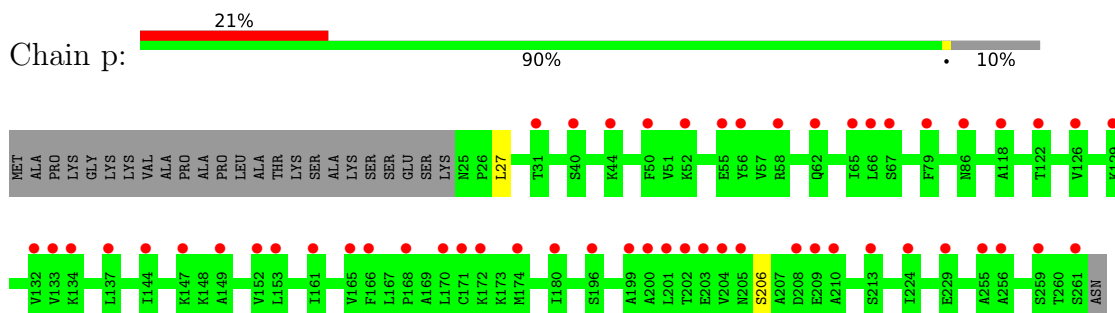
- Molecule 9: 60S ribosomal protein L7-A



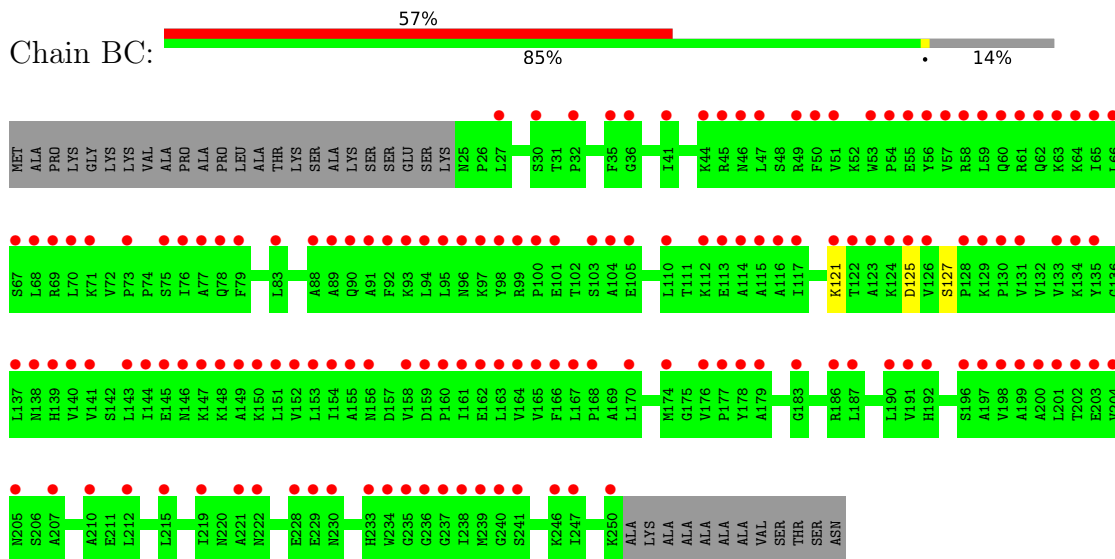
- Molecule 9: 60S ribosomal protein L7-A



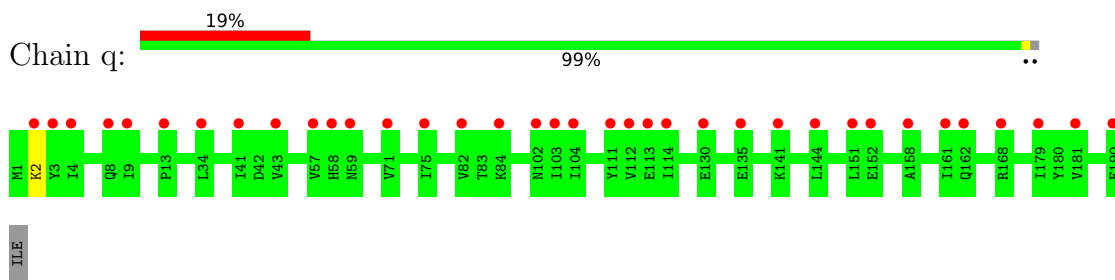
- Molecule 10: 60S ribosomal protein L8



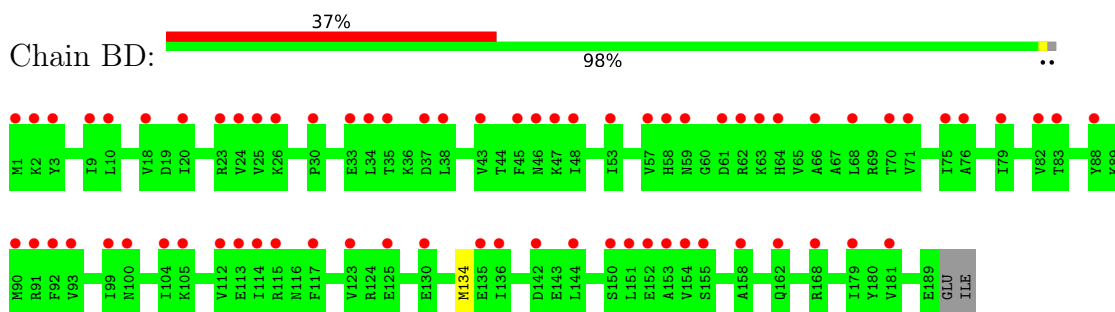
- Molecule 10: 60S ribosomal protein L8



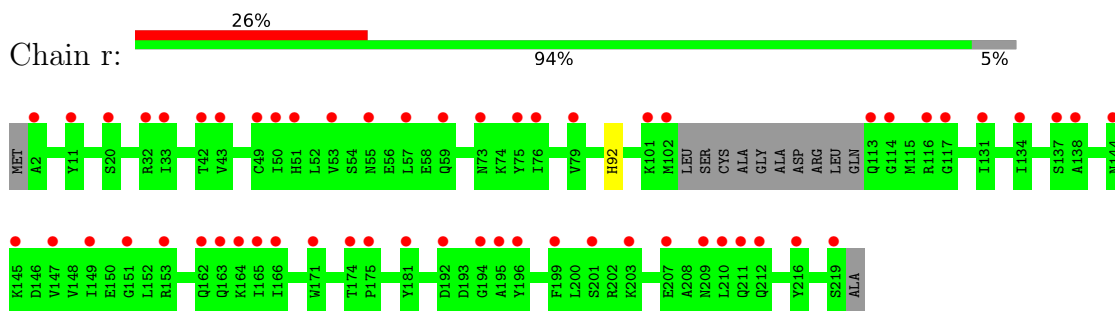
- Molecule 11: 60S ribosomal protein L9-B



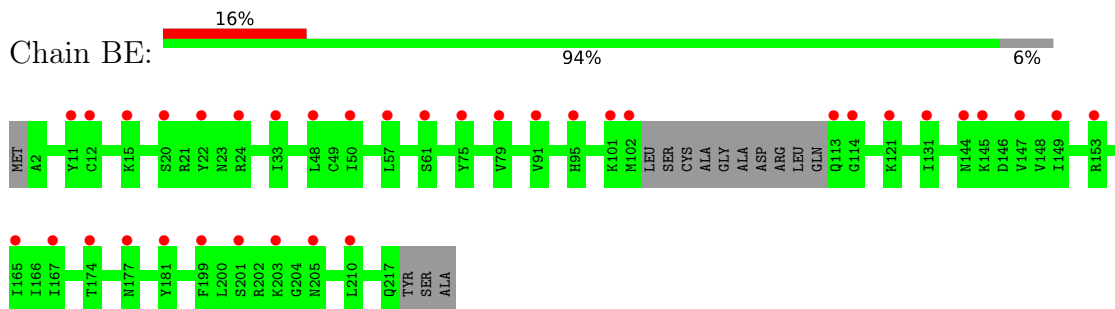
- Molecule 11: 60S ribosomal protein L9-B



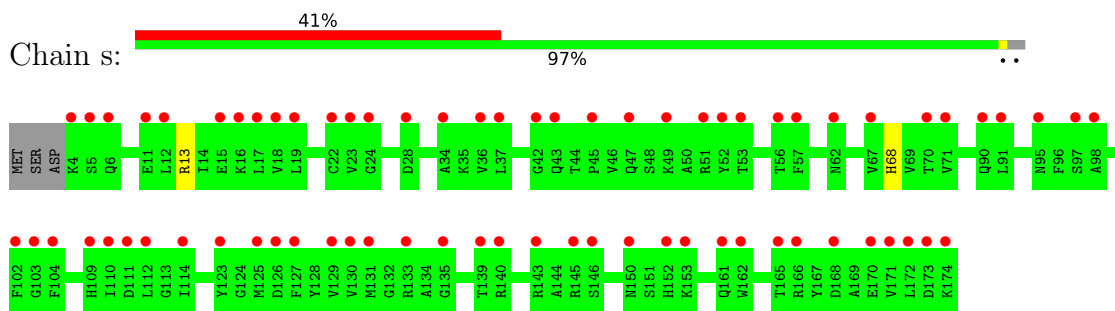
- Molecule 12: 60S ribosomal protein L10



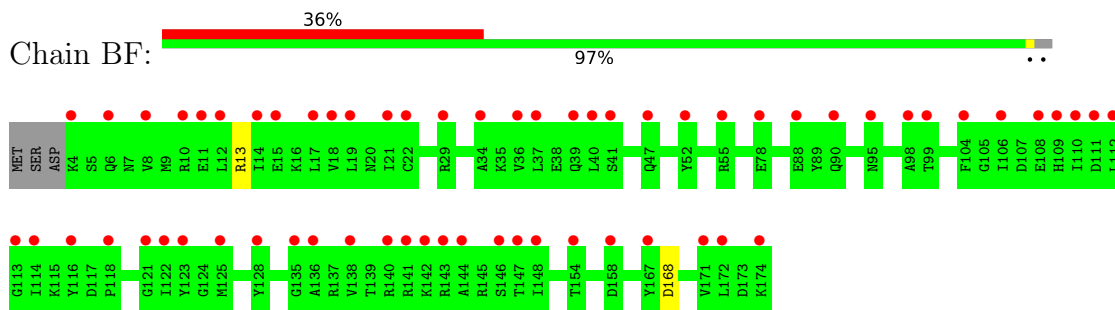
- Molecule 12: 60S ribosomal protein L10



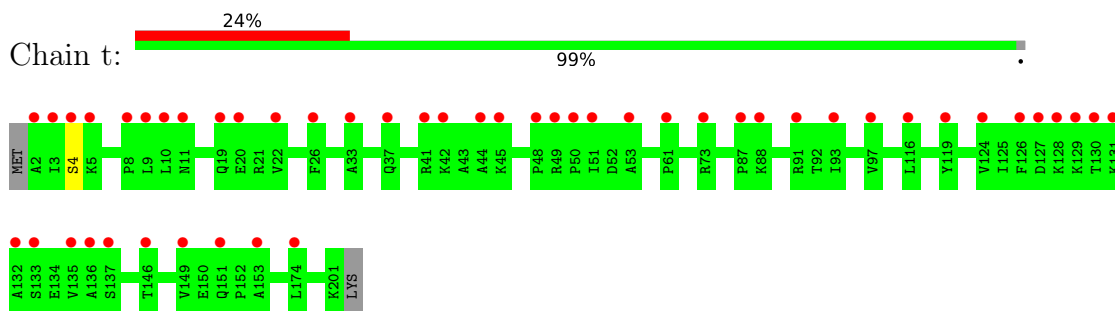
- Molecule 13: 60S ribosomal protein L11-B



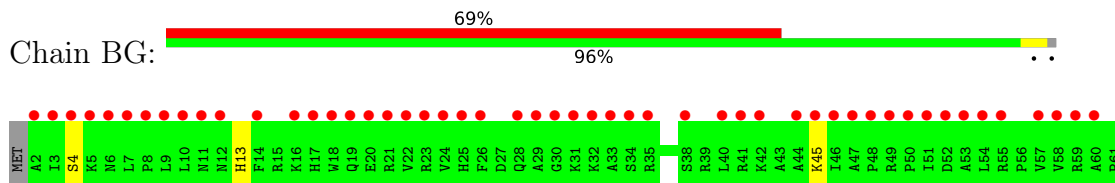
- Molecule 13: 60S ribosomal protein L11-B

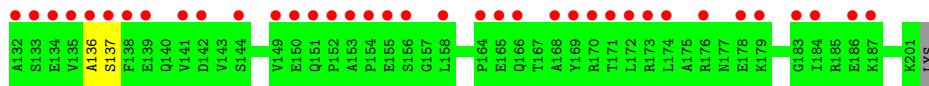
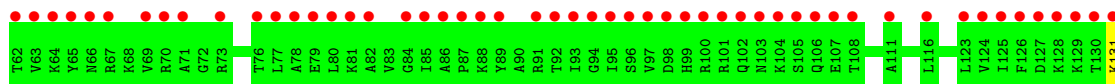


- Molecule 14: 60S ribosomal protein L13

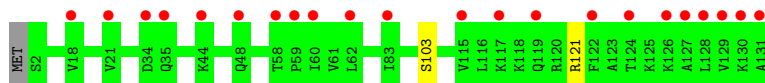


- Molecule 14: 60S ribosomal protein L13

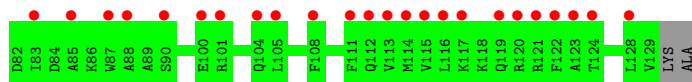
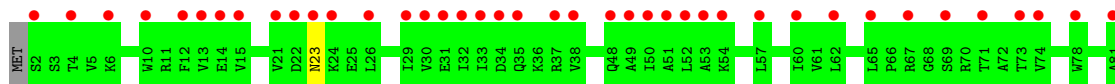




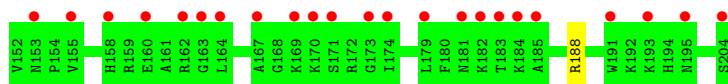
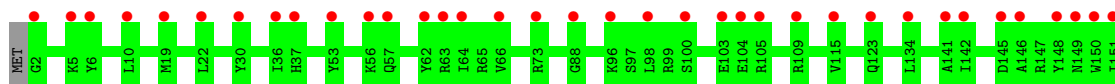
- Molecule 15: 60S ribosomal protein L14-B



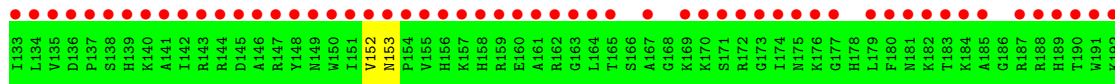
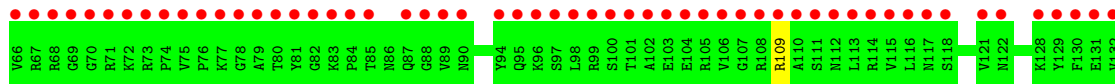
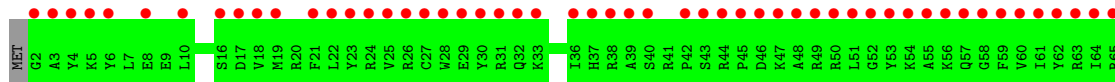
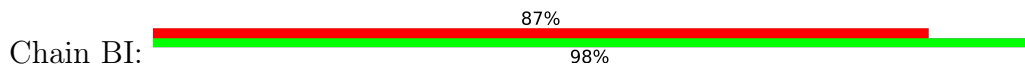
- Molecule 15: 60S ribosomal protein L14-B

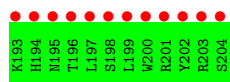


- Molecule 16: 60S ribosomal protein L15-A

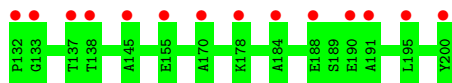
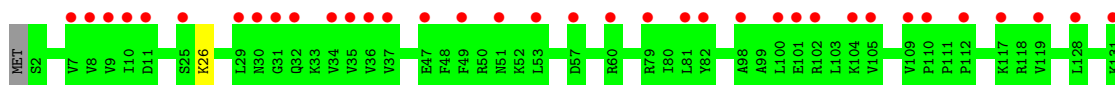


- Molecule 16: 60S ribosomal protein L15-A

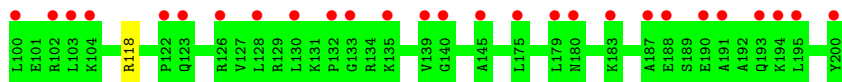
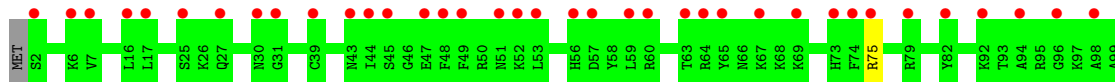




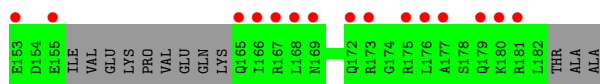
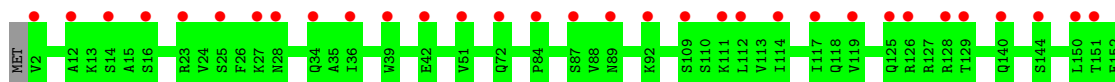
- Molecule 17: Ribosomal protein L13



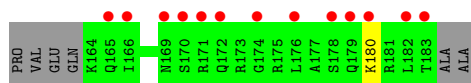
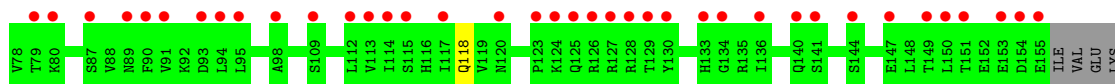
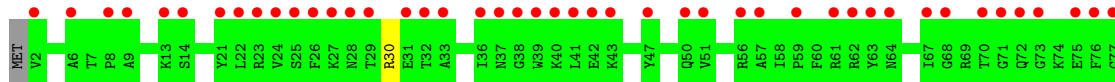
- Molecule 17: Ribosomal protein L13



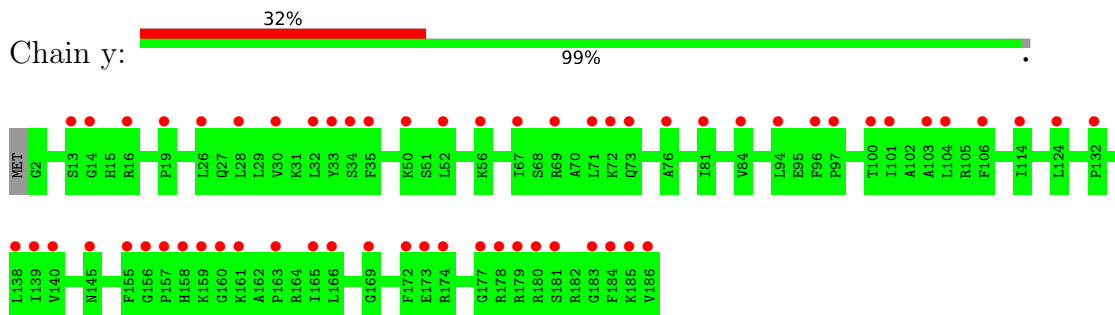
- Molecule 18: Ribosomal protein L22



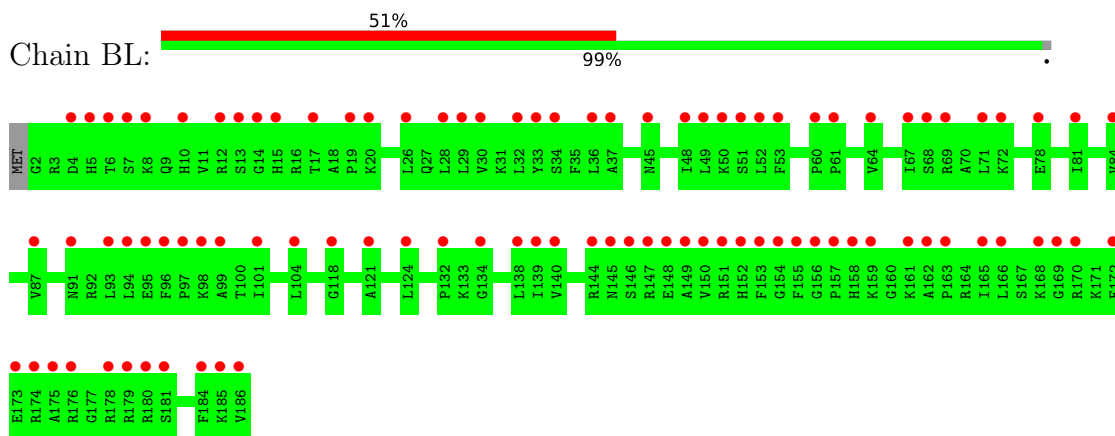
- Molecule 18: Ribosomal protein L22



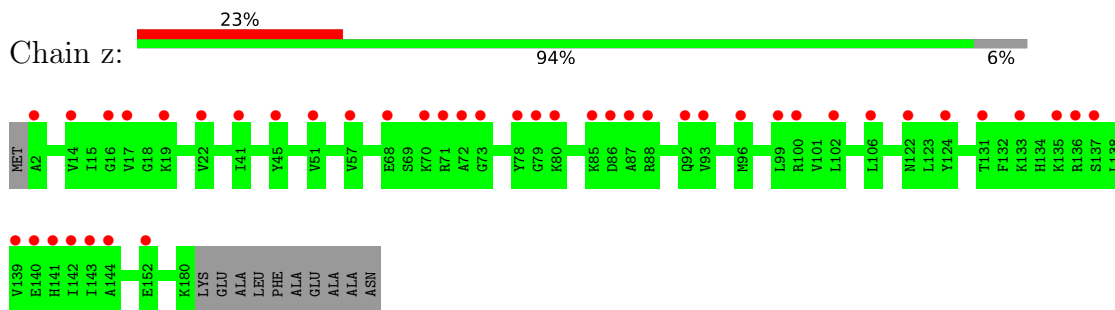
- Molecule 19: 60S ribosomal protein L18-A



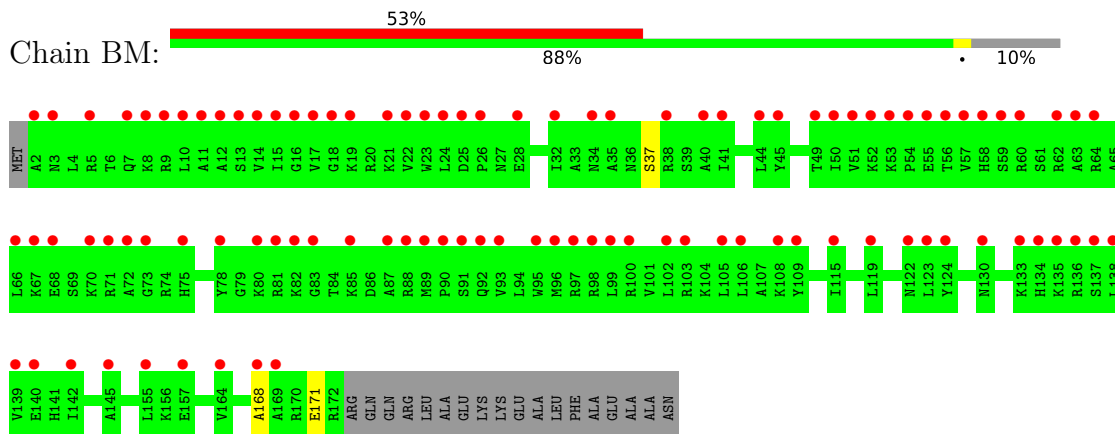
- Molecule 19: 60S ribosomal protein L18-A



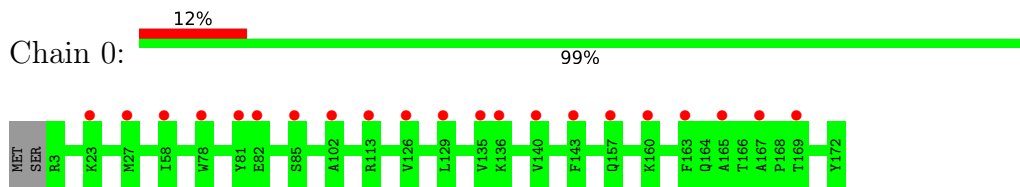
- Molecule 20: 60S ribosomal protein L19-A



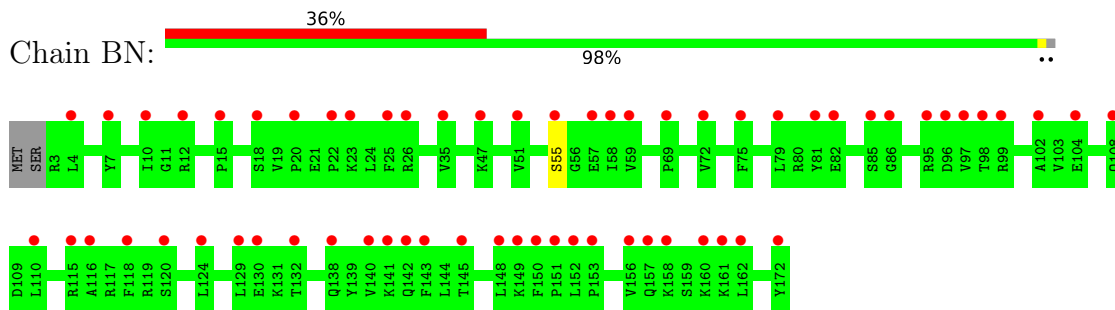
- Molecule 20: 60S ribosomal protein L19-A



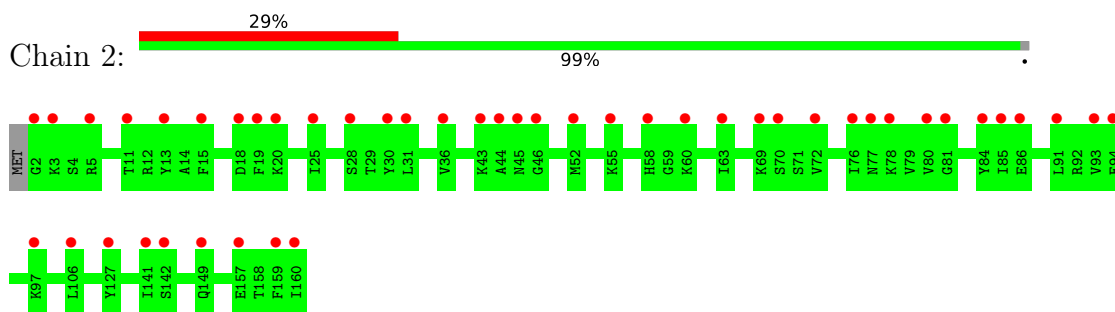
- Molecule 21: 60S ribosomal protein L20



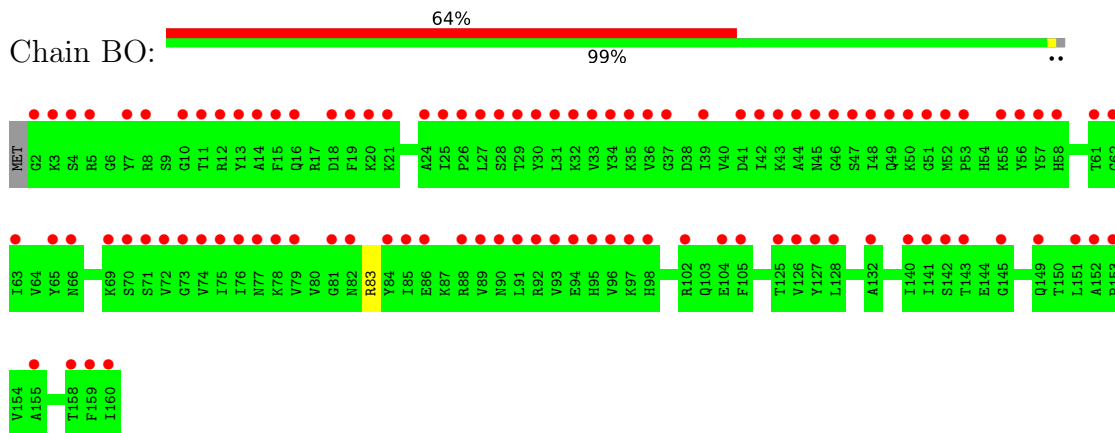
- Molecule 21: 60S ribosomal protein L20



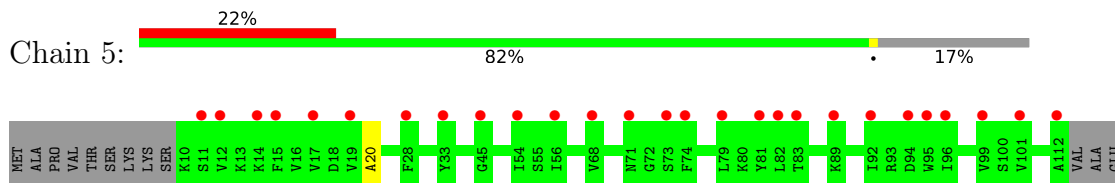
- Molecule 22: 60S ribosomal protein L21-A



- Molecule 22: 60S ribosomal protein L21-A



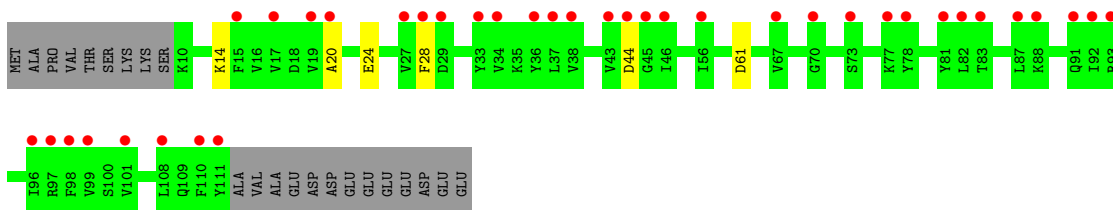
- Molecule 23: 60S ribosomal protein L22-B



ASP
ASP
GLU
GLU
GLU
GLU
ASP
GLU
GLU

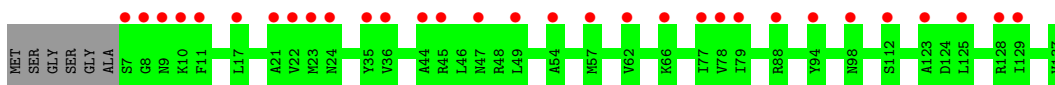
- Molecule 23: 60S ribosomal protein L22-B

Chain BP:



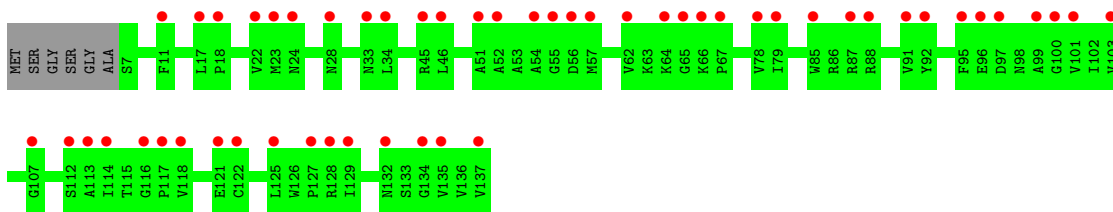
- Molecule 24: 60S ribosomal protein L23-A

Chain 6:



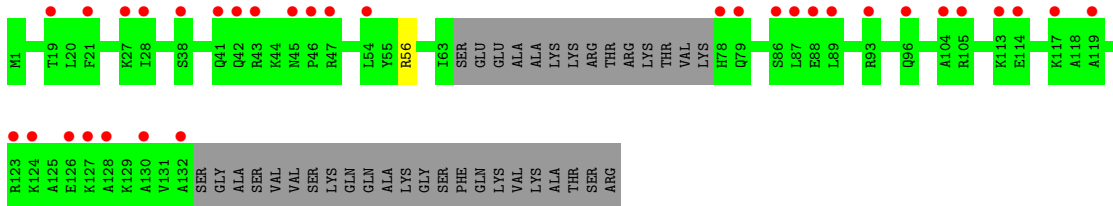
- Molecule 24: 60S ribosomal protein L23-A

Chain BQ:



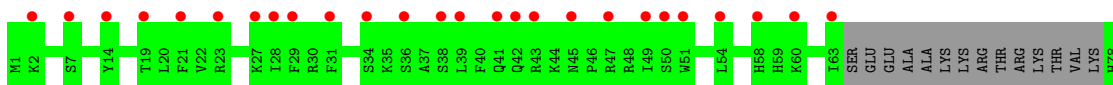
- Molecule 25: 60S ribosomal protein L24-A

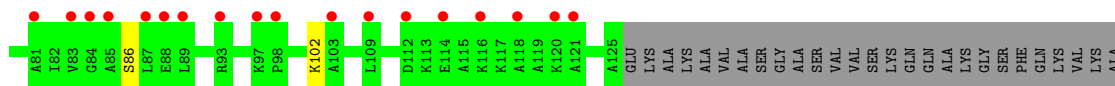
Chain 7:



- Molecule 25: 60S ribosomal protein L24-A

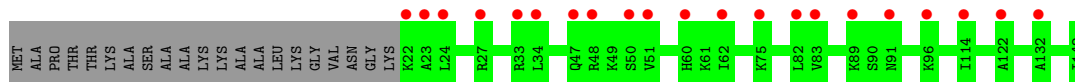
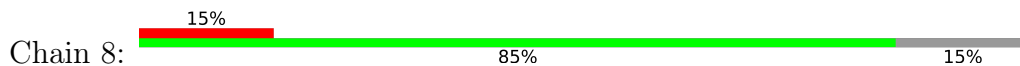
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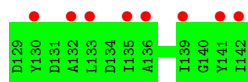
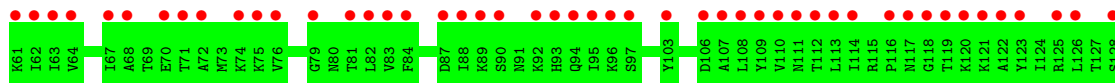
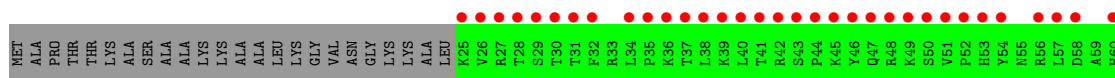
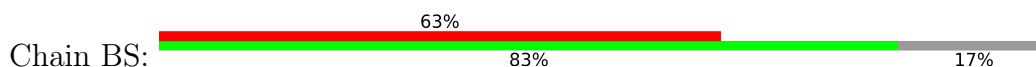


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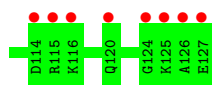
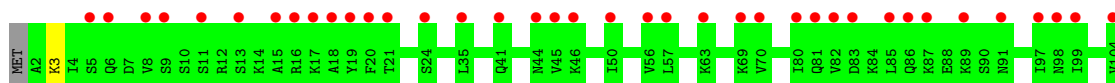
- Molecule 26: 60S ribosomal protein L25



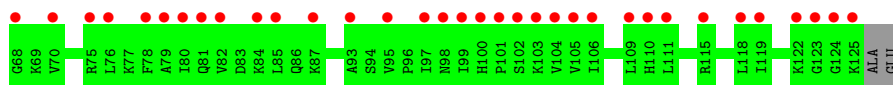
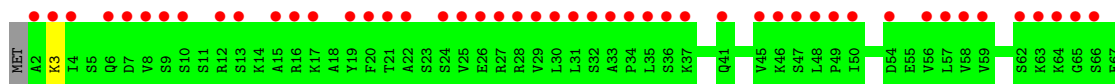
- Molecule 26: 60S ribosomal protein L25



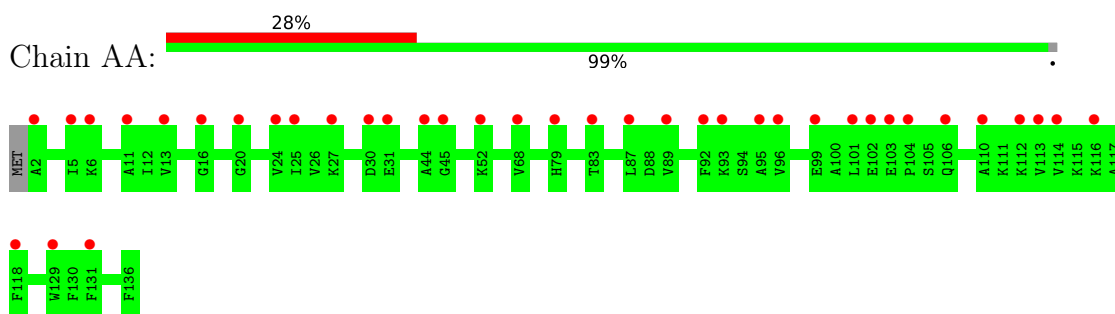
- Molecule 27: Ribosomal protein L24



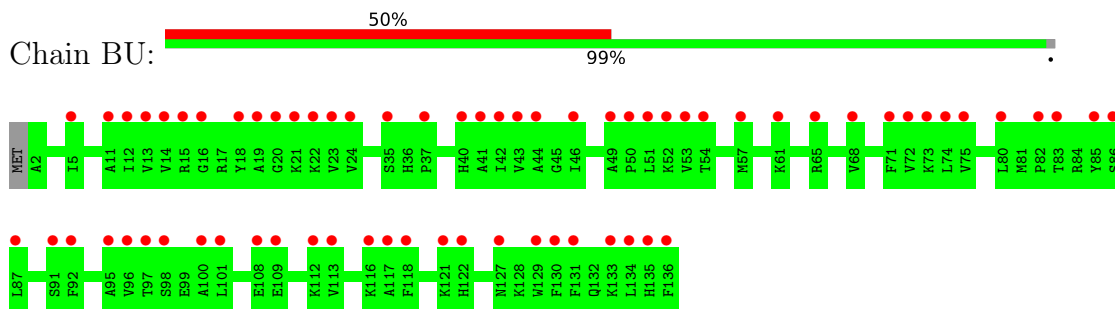
- Molecule 27: Ribosomal protein L24



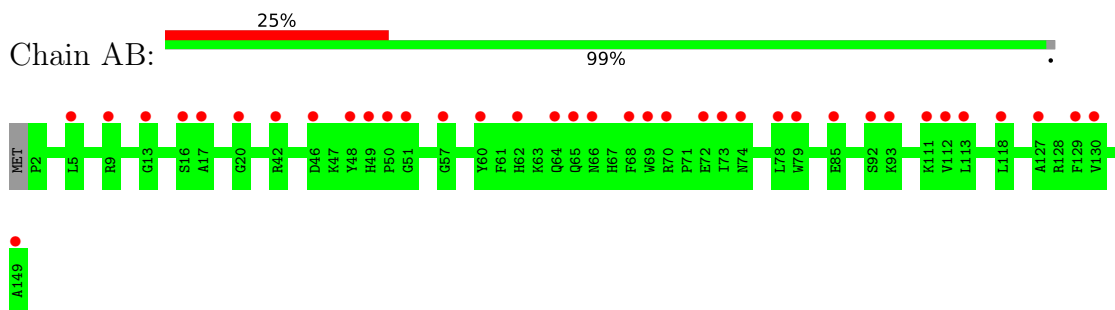
- Molecule 28: 60S ribosomal protein L27



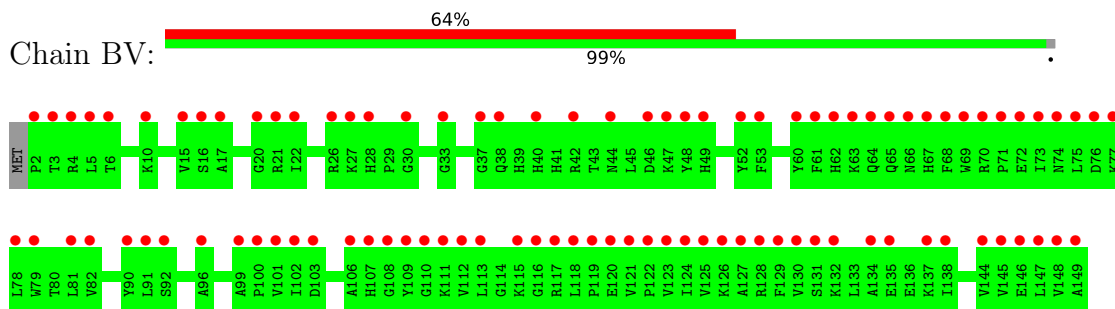
- Molecule 28: 60S ribosomal protein L27



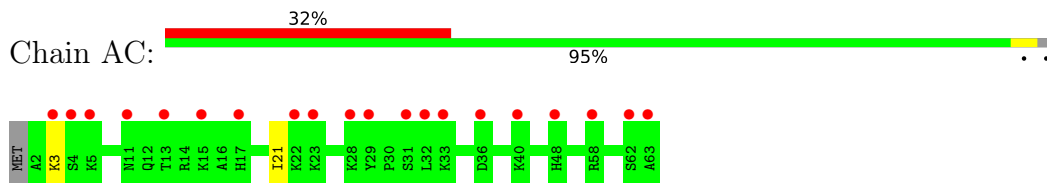
- Molecule 29: 60S ribosomal protein L28



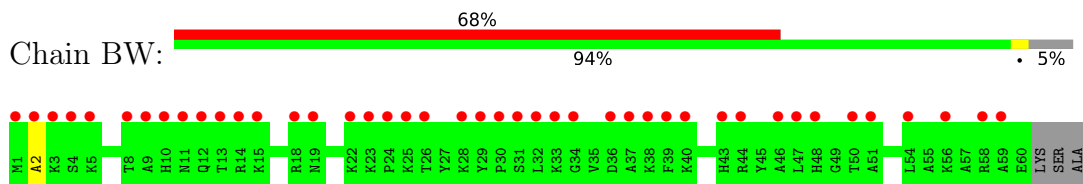
- Molecule 29: 60S ribosomal protein L28



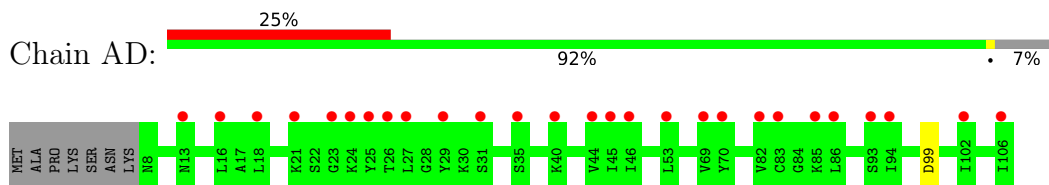
- Molecule 30: 60S ribosomal protein L29



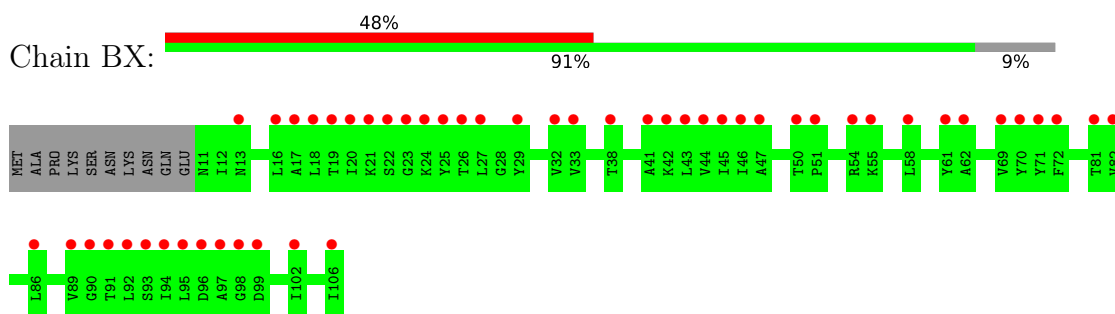
- Molecule 30: 60S ribosomal protein L29



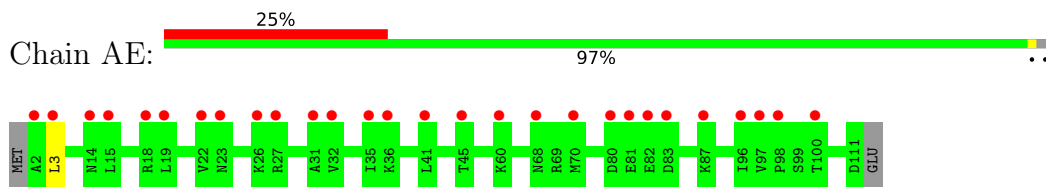
- Molecule 31: 60S ribosomal protein L30



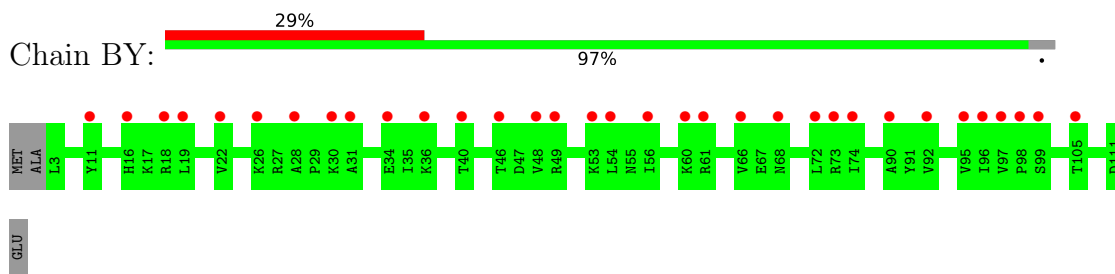
- Molecule 31: 60S ribosomal protein L30



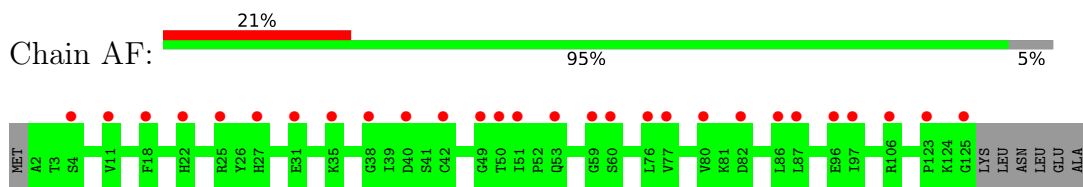
- Molecule 32: 60S ribosomal protein L31-B



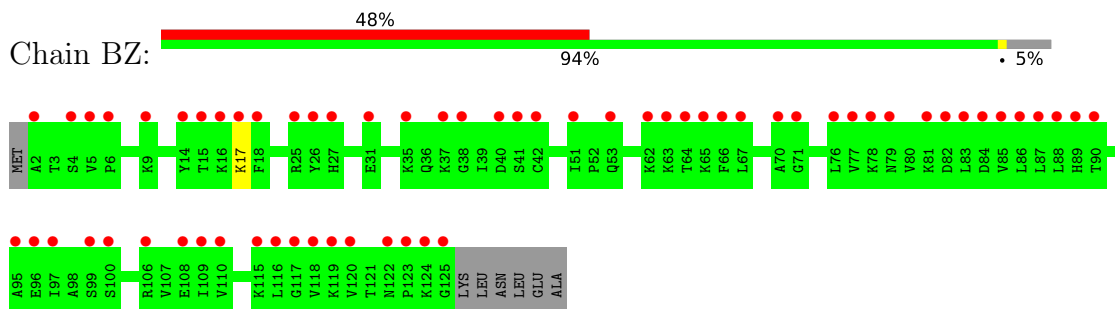
- Molecule 32: 60S ribosomal protein L31-B



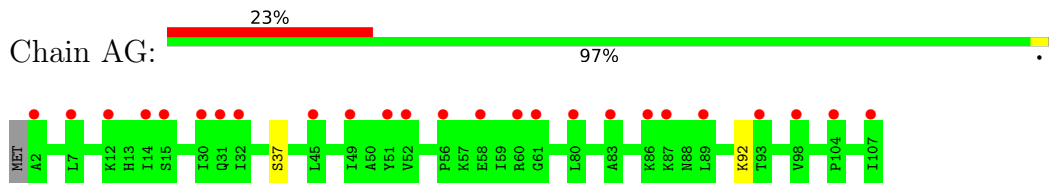
- Molecule 33: 60S ribosomal protein L32



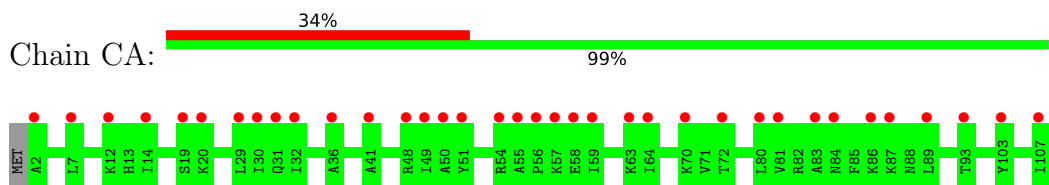
- Molecule 33: 60S ribosomal protein L32



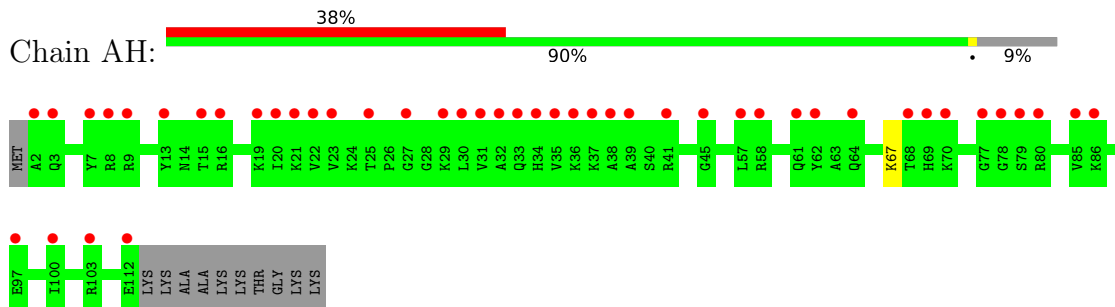
- Molecule 34: 60S ribosomal protein L33-A



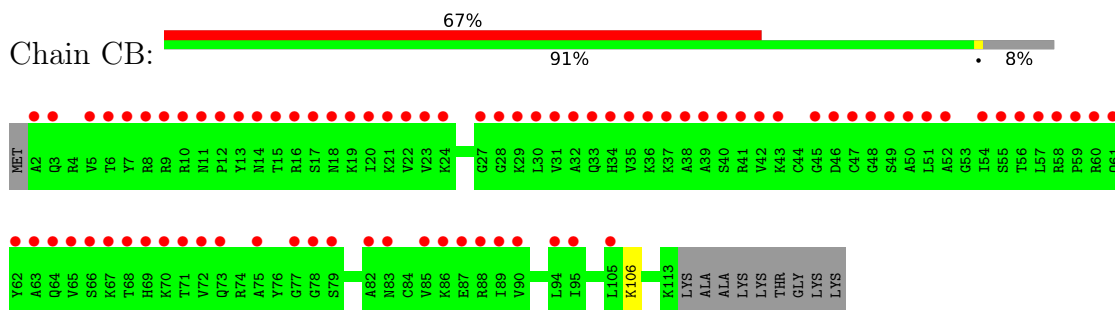
- Molecule 34: 60S ribosomal protein L33-A



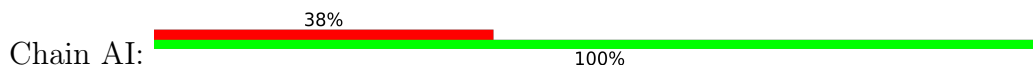
- Molecule 35: 60S ribosomal protein L34-B

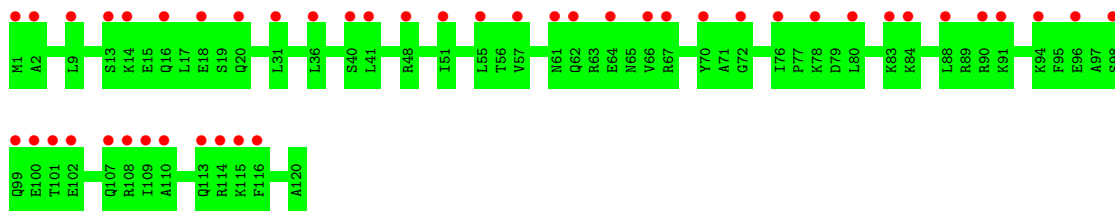


- Molecule 35: 60S ribosomal protein L34-B

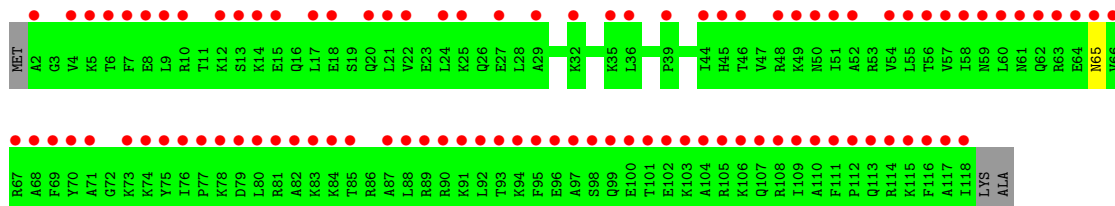
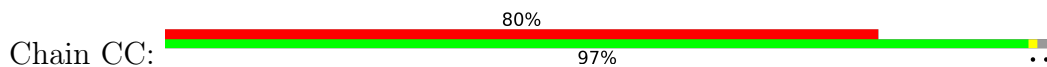


- Molecule 36: Ribosomal protein L29

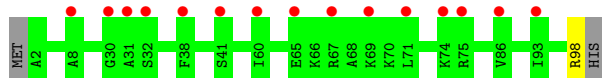




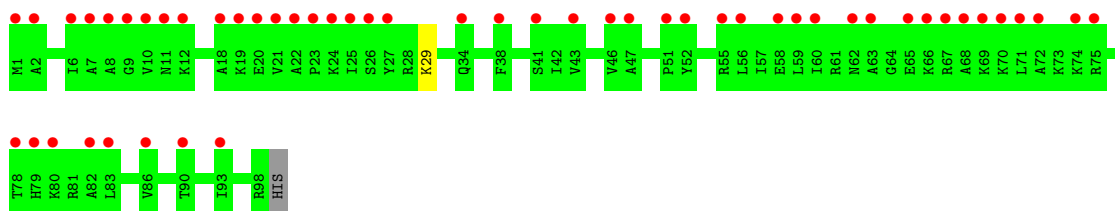
- Molecule 36: Ribosomal protein L29



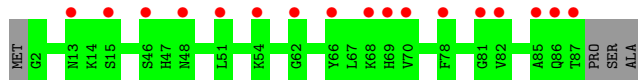
- Molecule 37: 60S ribosomal protein L36



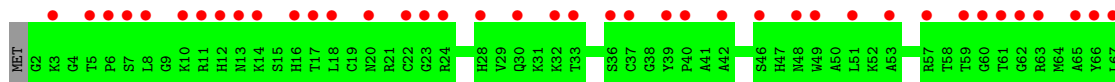
- Molecule 37: 60S ribosomal protein L36

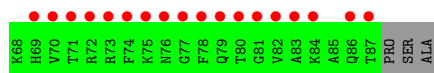


- Molecule 38: 60S ribosomal protein L37-B

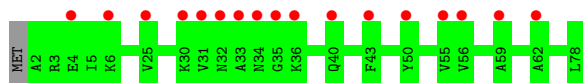


- Molecule 38: 60S ribosomal protein L37-B

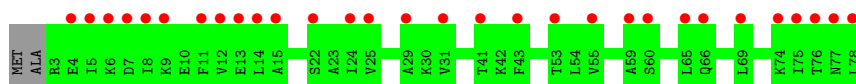
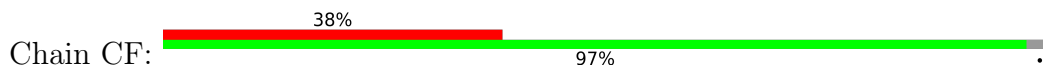




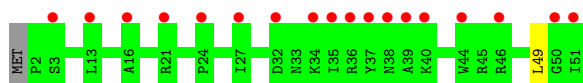
- Molecule 39: 60S ribosomal protein L38



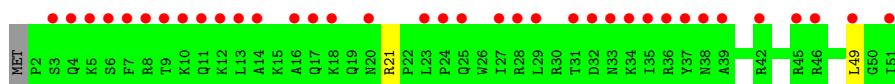
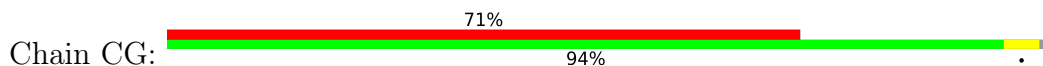
- Molecule 39: 60S ribosomal protein L38



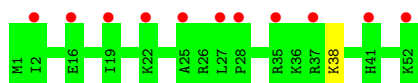
- Molecule 40: 60S ribosomal protein L39



- Molecule 40: 60S ribosomal protein L39



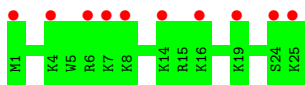
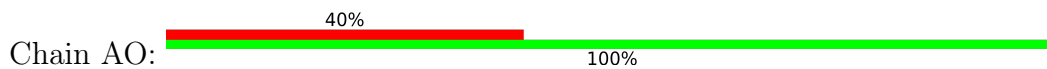
- Molecule 41: 60S ribosomal protein L40-B



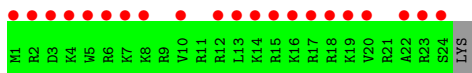
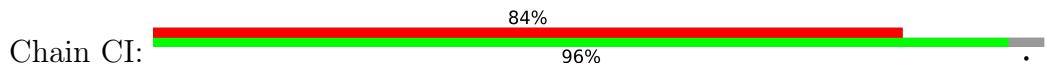
- Molecule 41: 60S ribosomal protein L40-B



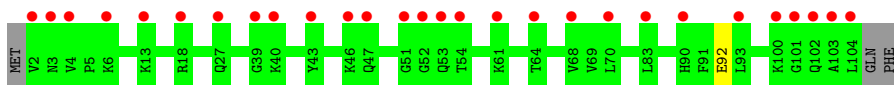
- Molecule 42: 60S ribosomal protein L41



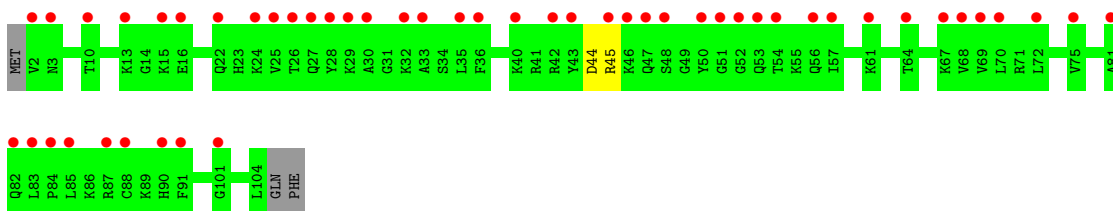
- Molecule 42: 60S ribosomal protein L41



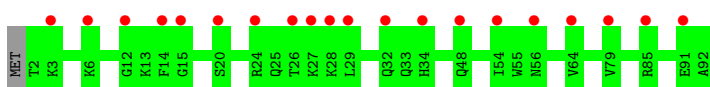
- Molecule 43: 60S ribosomal protein L42-B



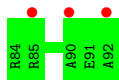
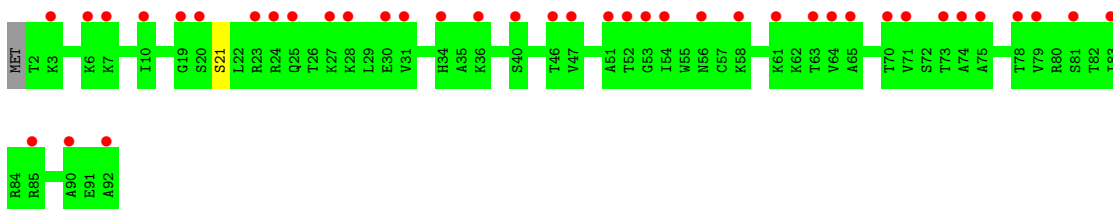
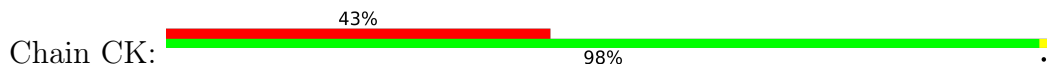
- Molecule 43: 60S ribosomal protein L42-B



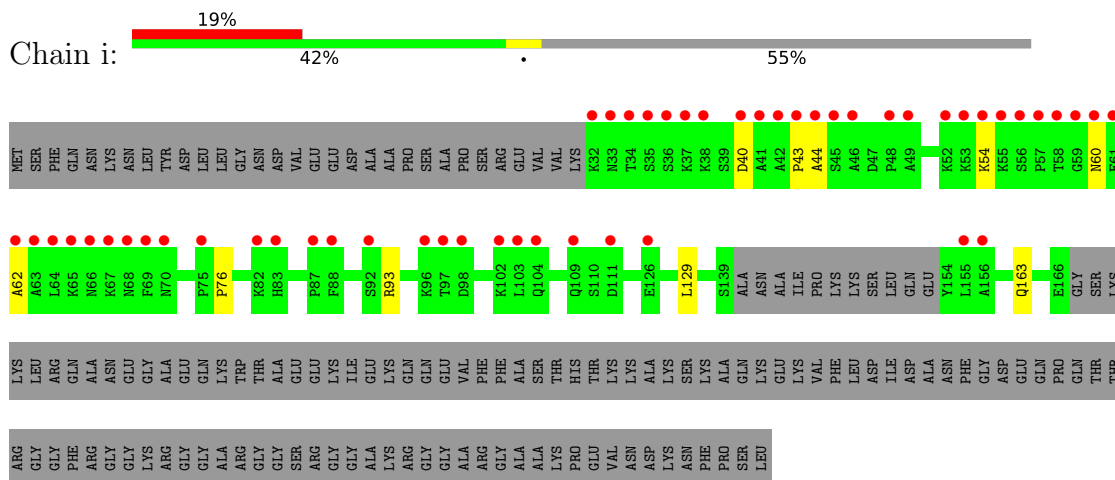
- Molecule 44: 60S ribosomal protein L43-A



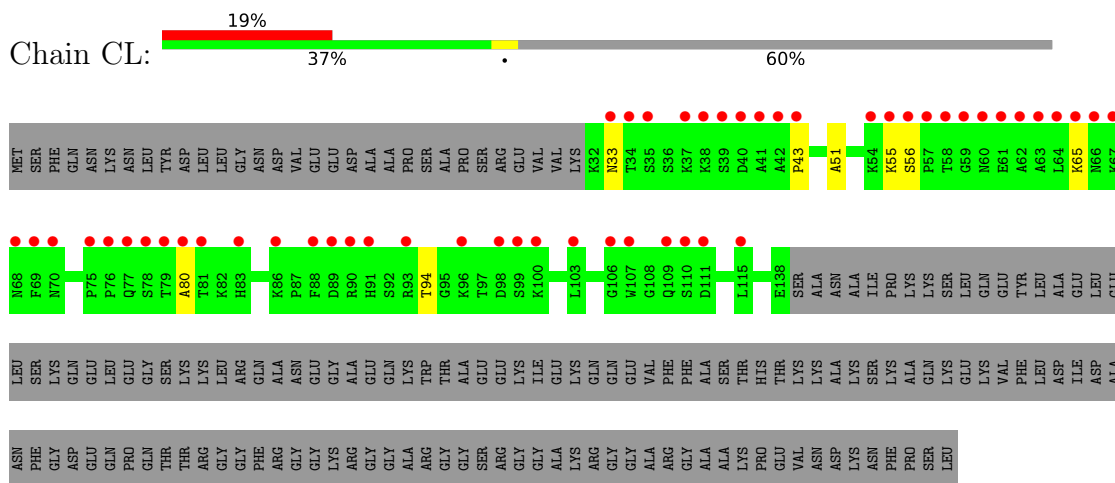
- Molecule 44: 60S ribosomal protein L43-A



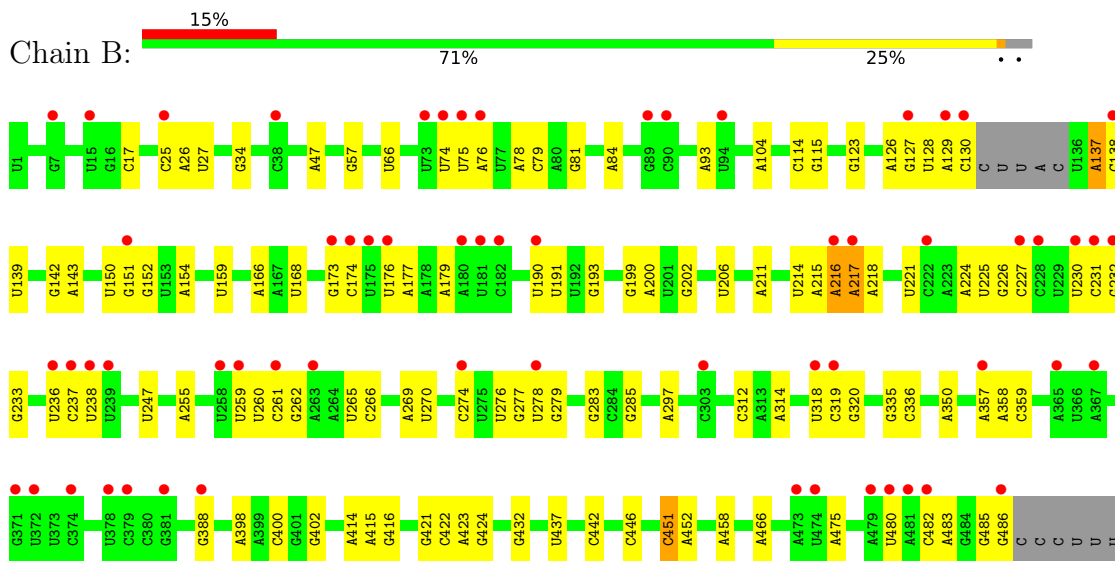
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

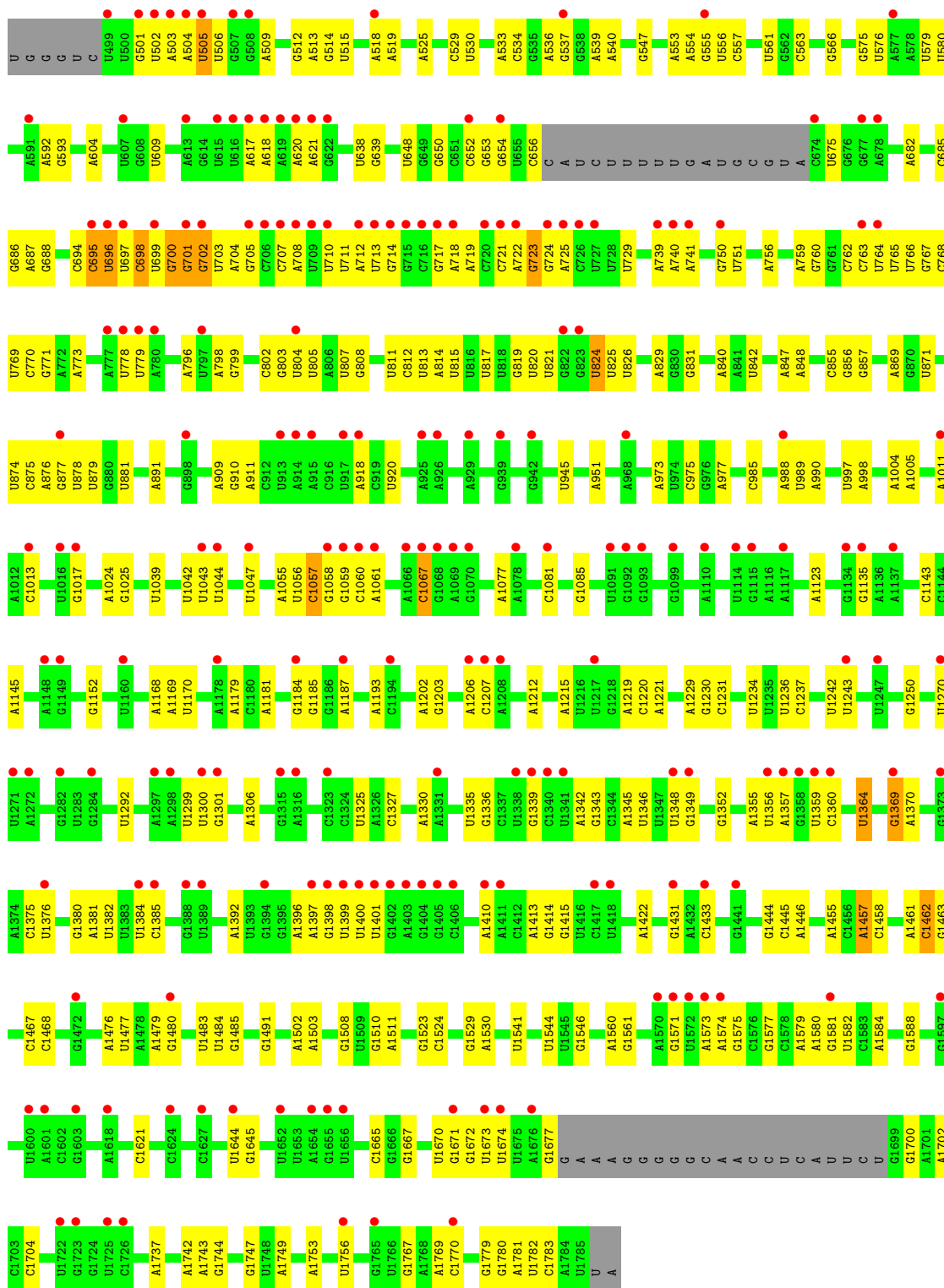


• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

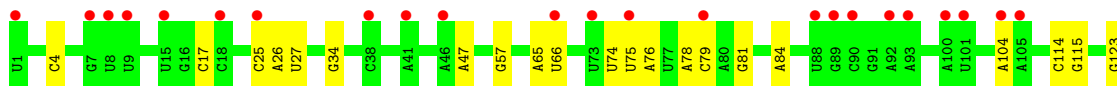


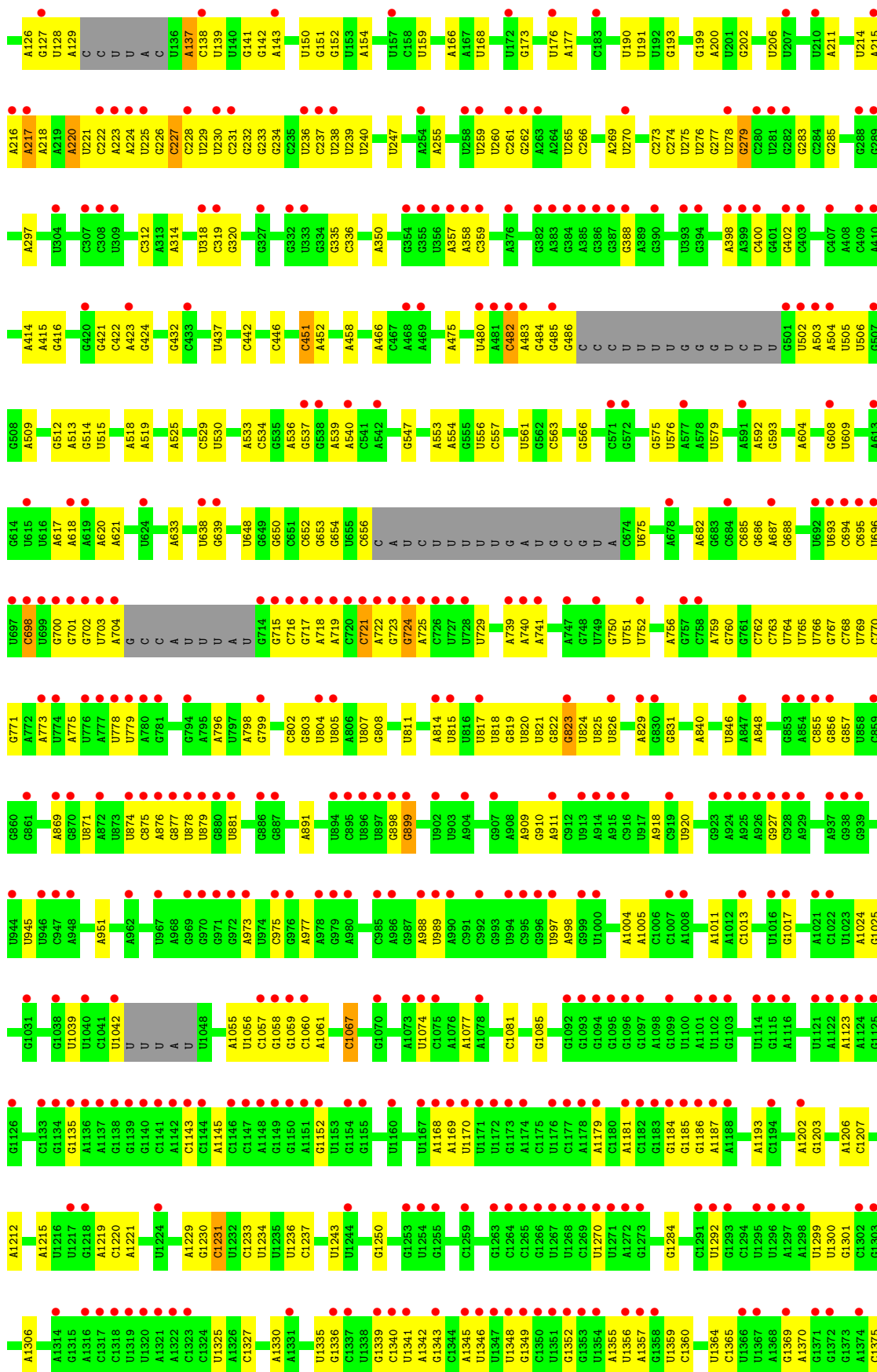
• Molecule 46: 18S

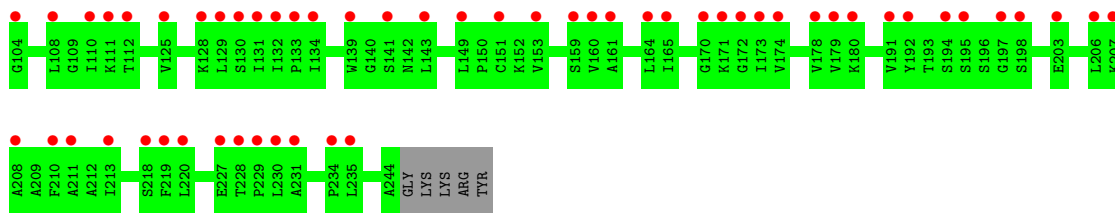




• Molecule 46: 18S

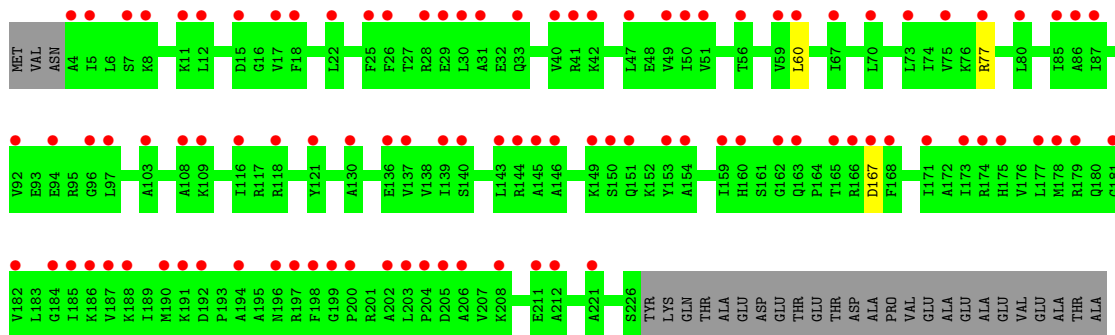






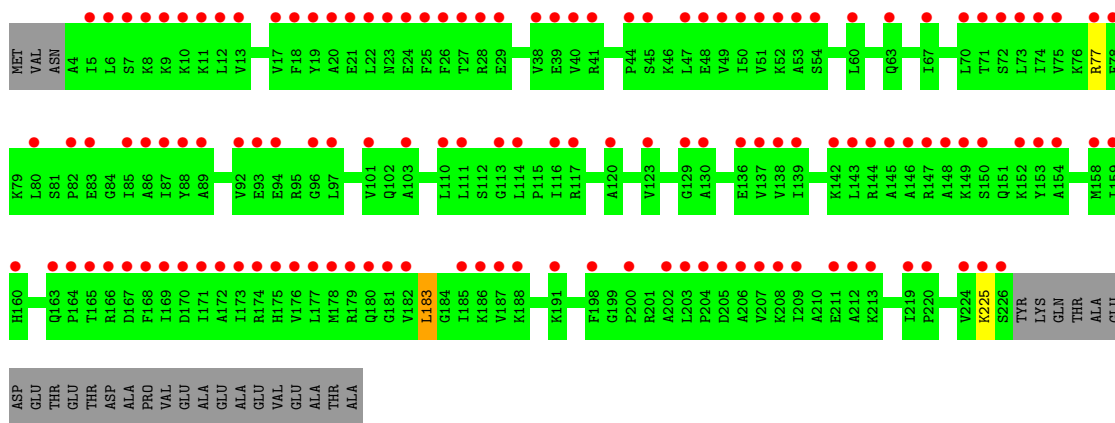
- Molecule 50: Ribosomal protein S3

Chain F: 40% 88% 11%



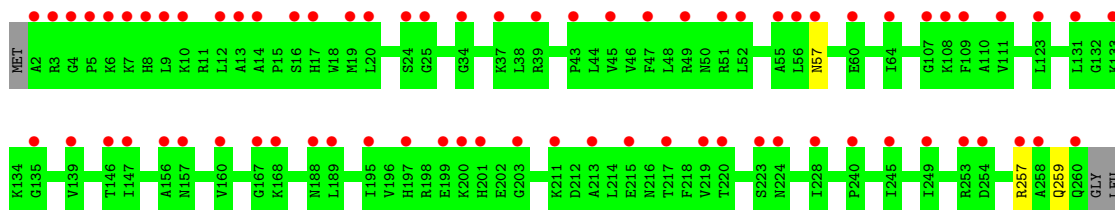
- Molecule 50: Ribosomal protein S3

Chain CQ: 53% 88% 11%

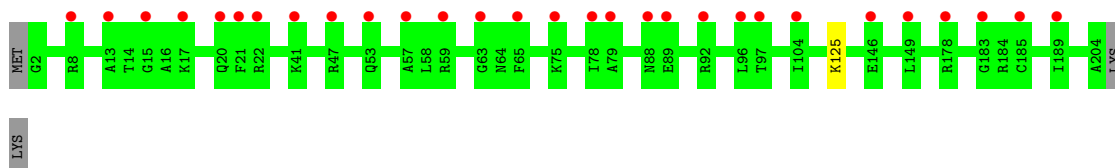


- Molecule 51: 40S ribosomal protein S4

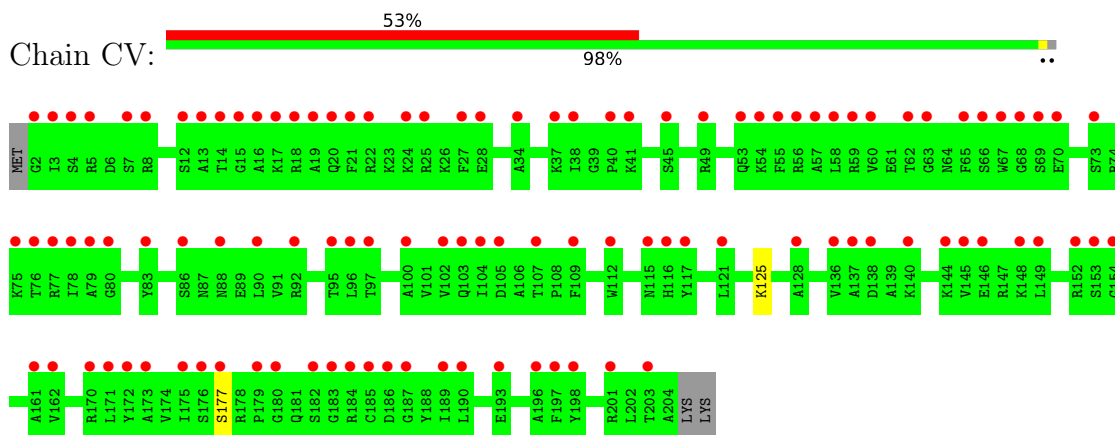
Chain G: 28% 98% 99%



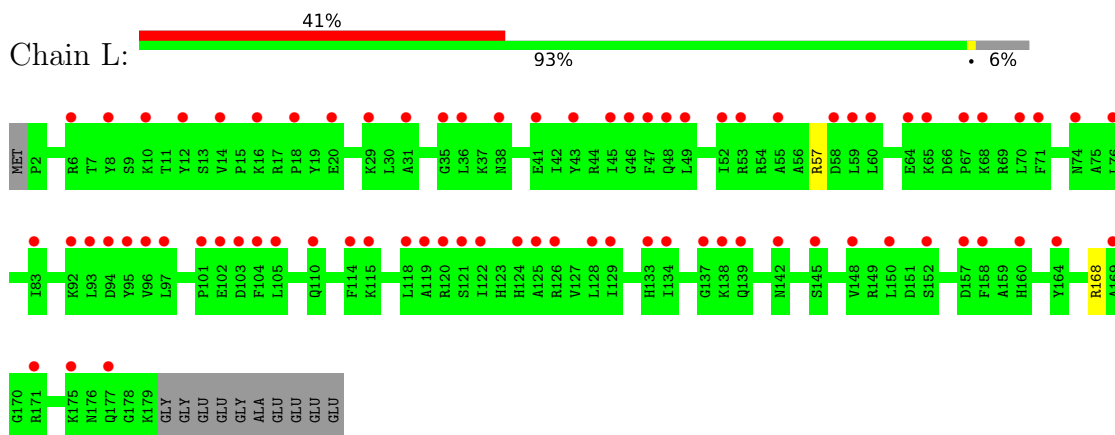
- Molecule 51: 40S ribosomal protein S4



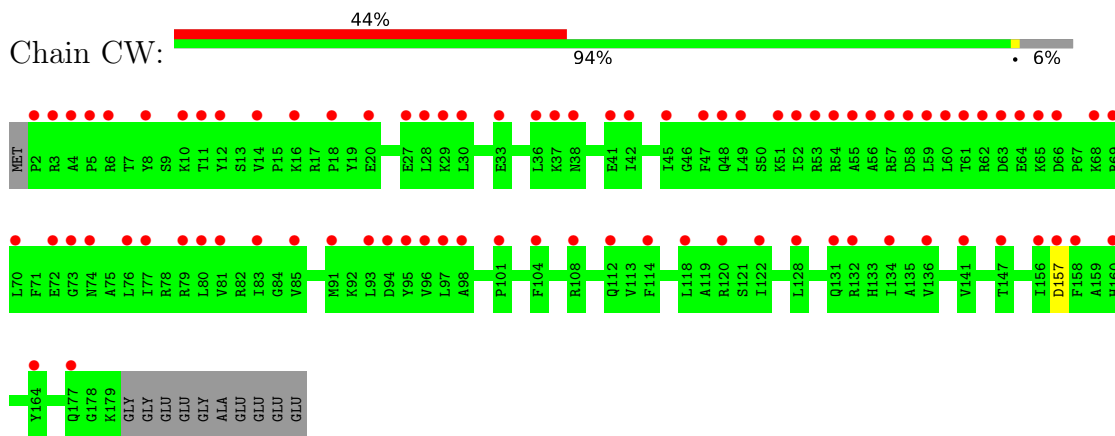
- Molecule 55: 40S ribosomal protein S8



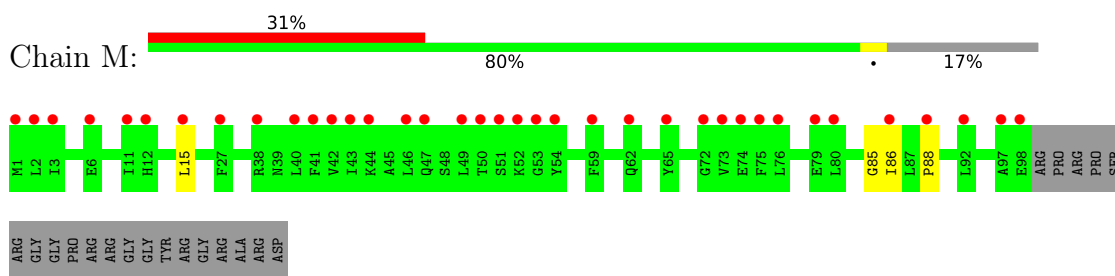
- Molecule 56: Ribosomal protein S4



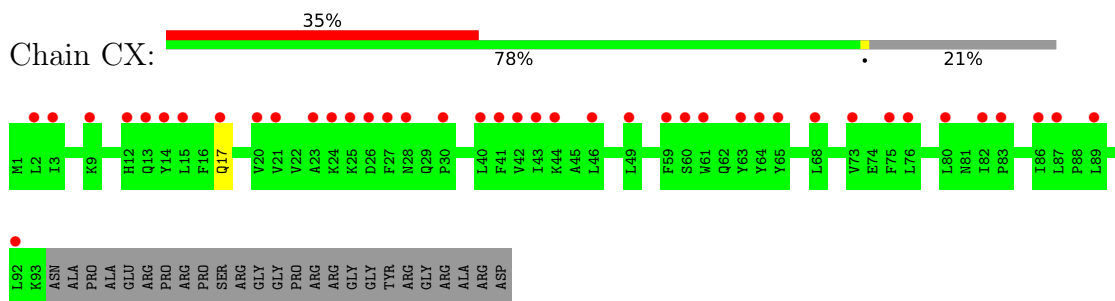
- Molecule 56: Ribosomal protein S4



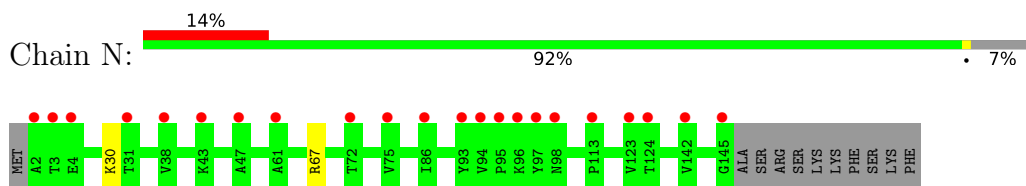
- Molecule 57: 40S ribosomal protein S10-A



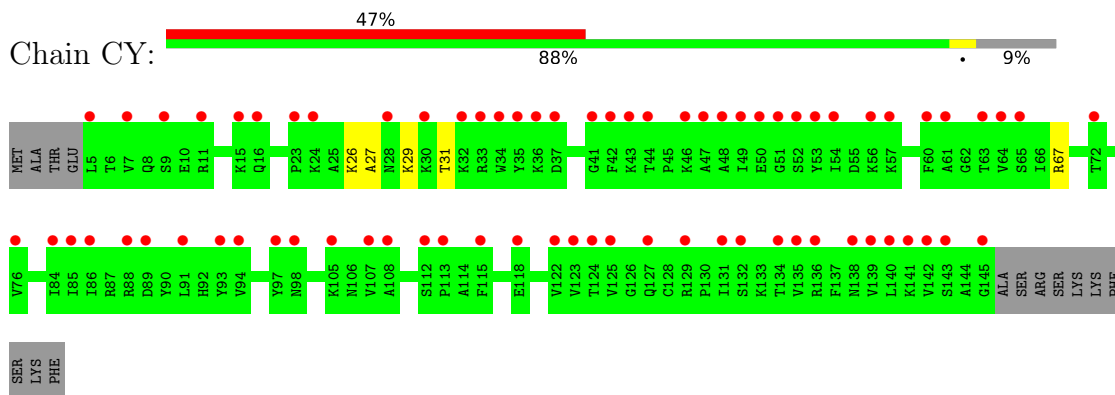
- Molecule 57: 40S ribosomal protein S10-A



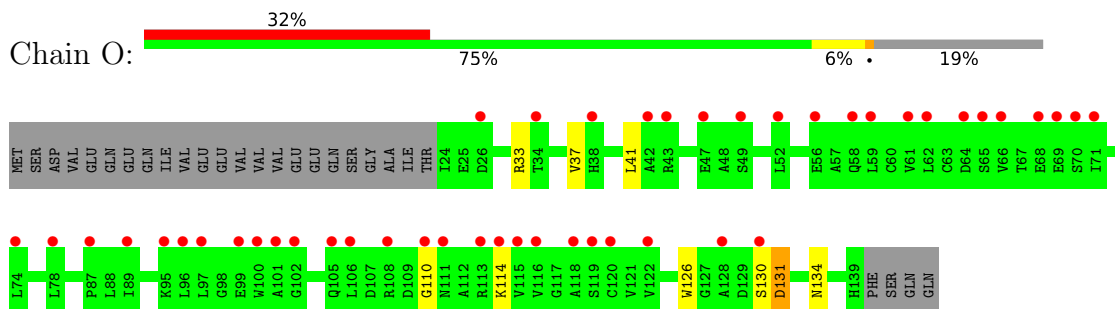
- Molecule 58: 40S ribosomal protein S11A



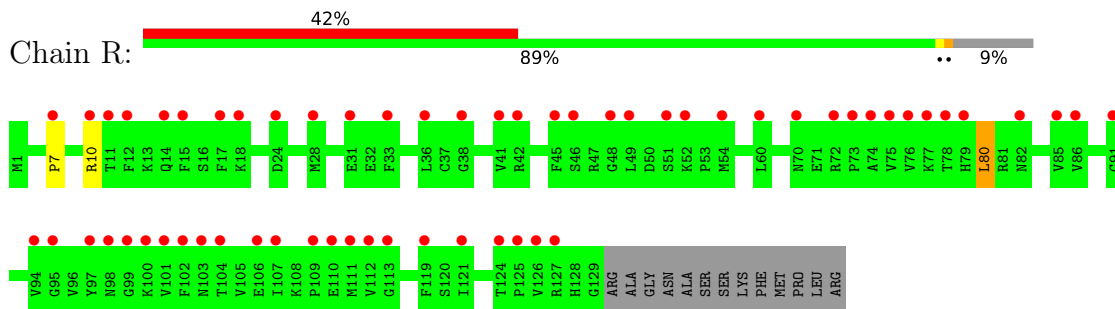
- Molecule 58: 40S ribosomal protein S11A



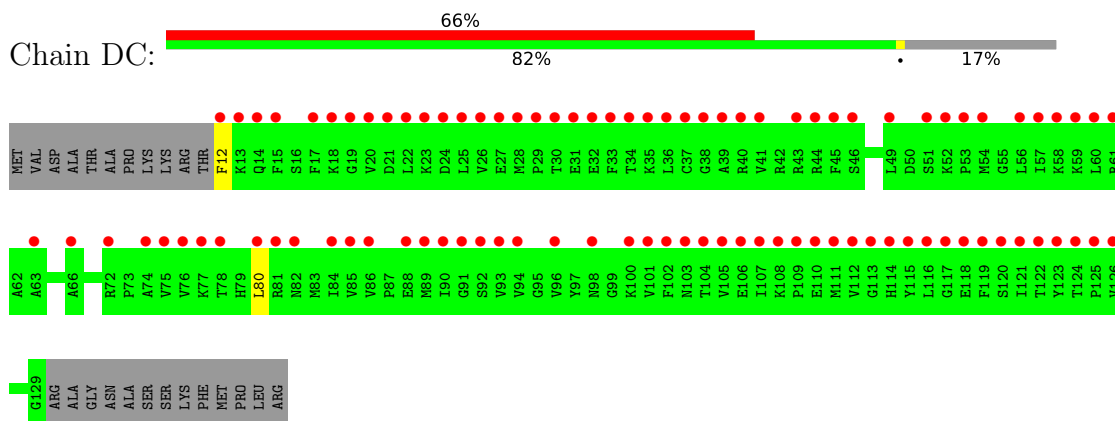
- Molecule 59: 40S ribosomal protein S12



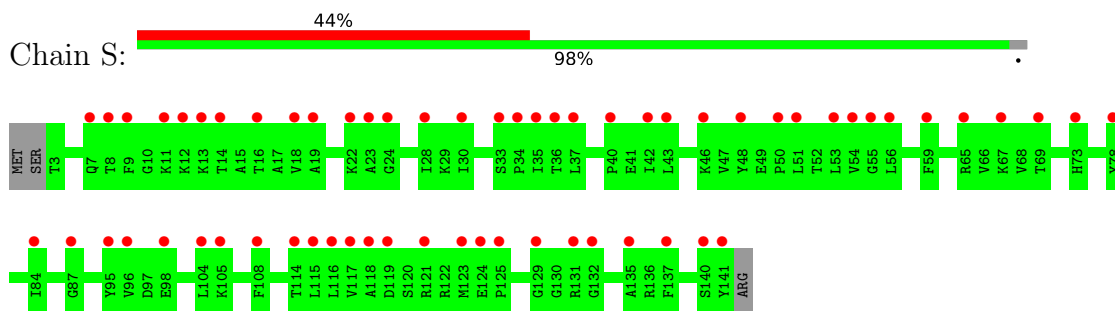
- Molecule 62: 40S ribosomal protein S15



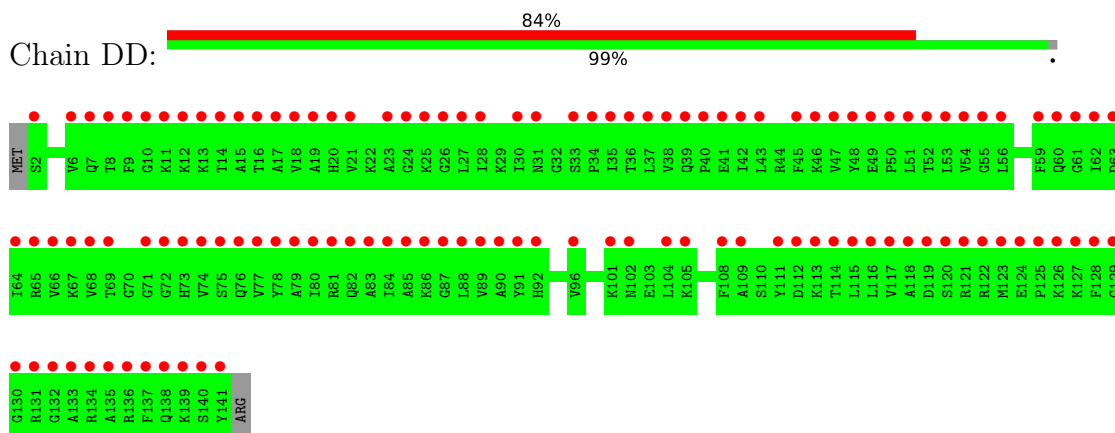
- Molecule 62: 40S ribosomal protein S15



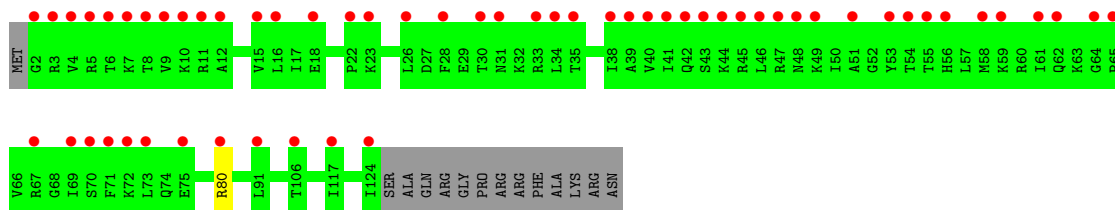
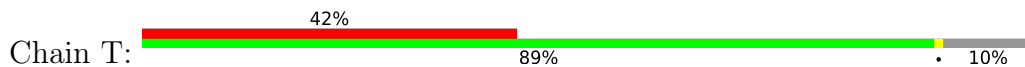
- Molecule 63: 40S ribosomal protein S16



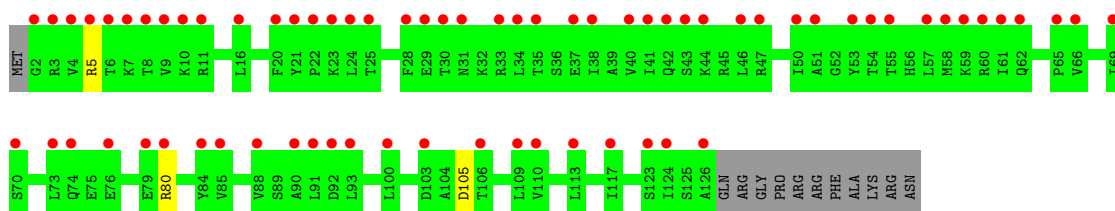
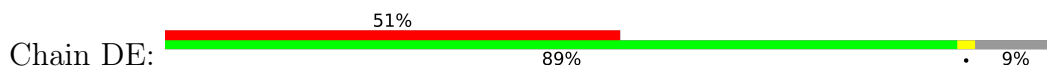
- Molecule 63: 40S ribosomal protein S16



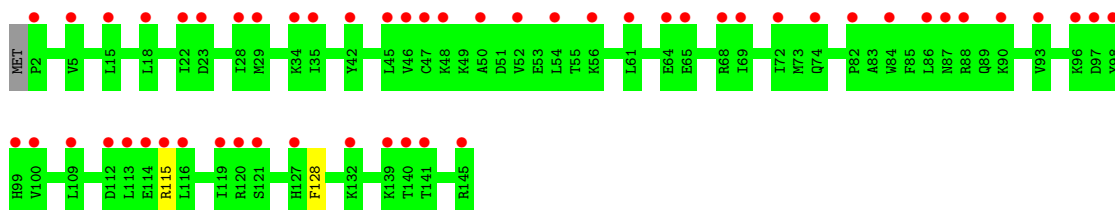
• Molecule 64: 40S ribosomal protein S17-B



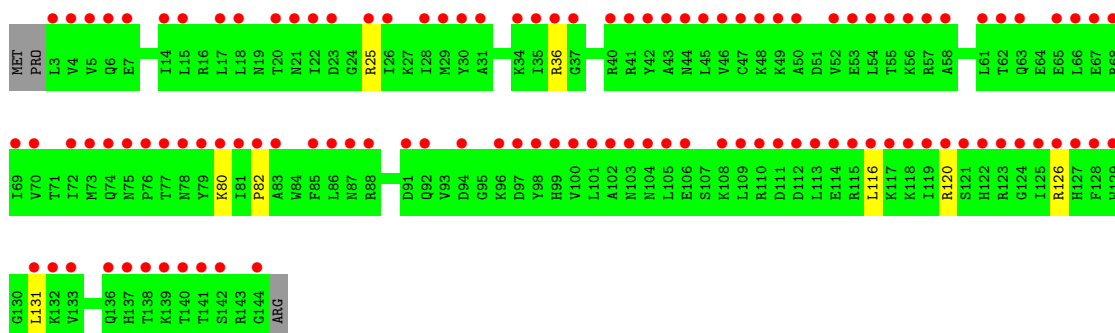
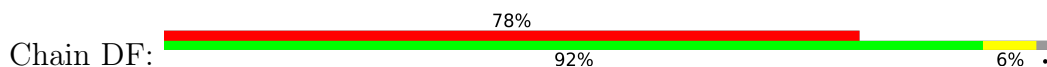
• Molecule 64: 40S ribosomal protein S17-B



• Molecule 65: 40S ribosomal protein S18-B

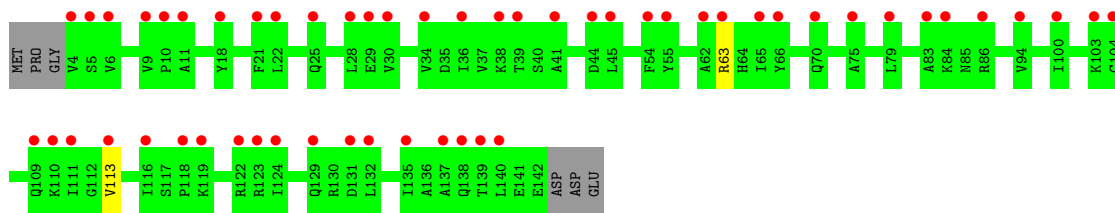


• Molecule 65: 40S ribosomal protein S18-B

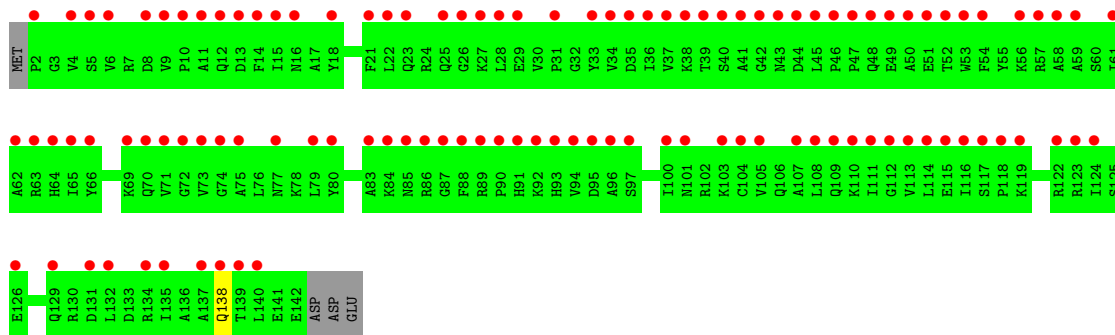
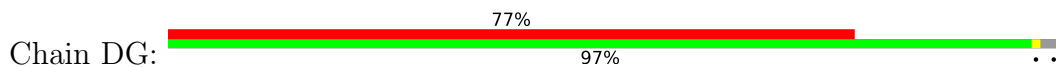


• Molecule 66: 40S ribosomal protein S19-A

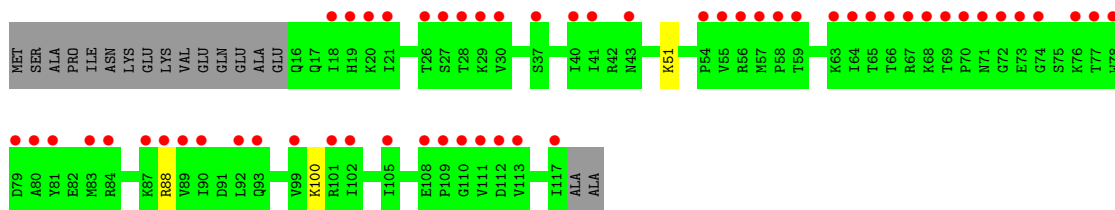
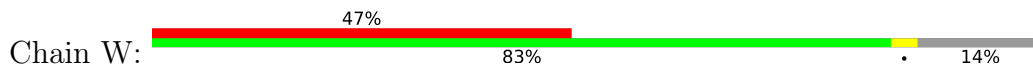




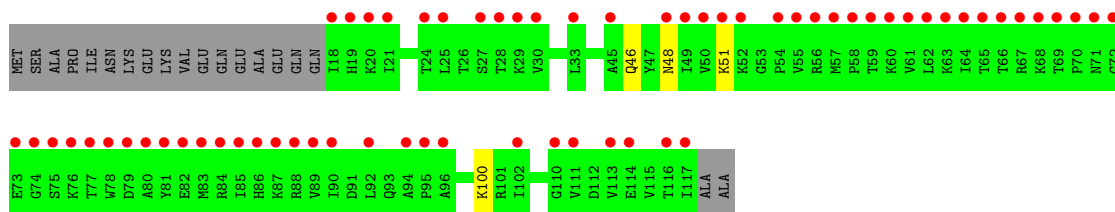
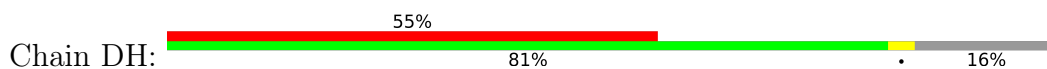
- Molecule 66: 40S ribosomal protein S19-A



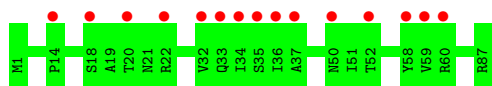
- Molecule 67: Ribosomal protein S10



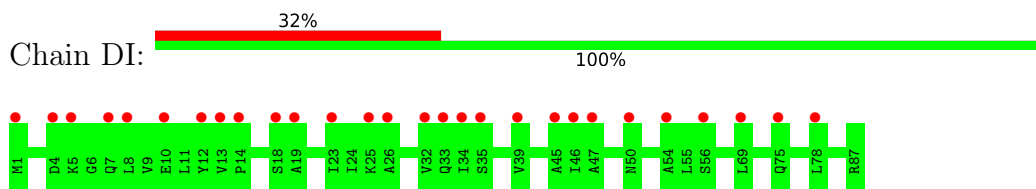
- Molecule 67: Ribosomal protein S10



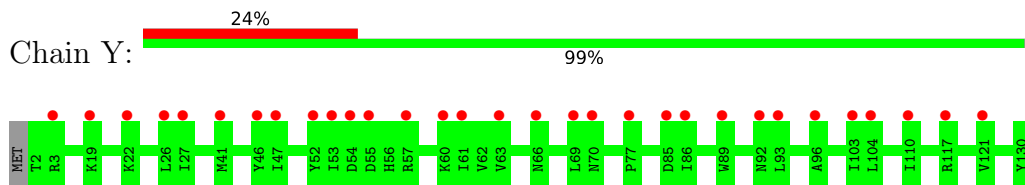
- Molecule 68: 40S ribosomal protein S21



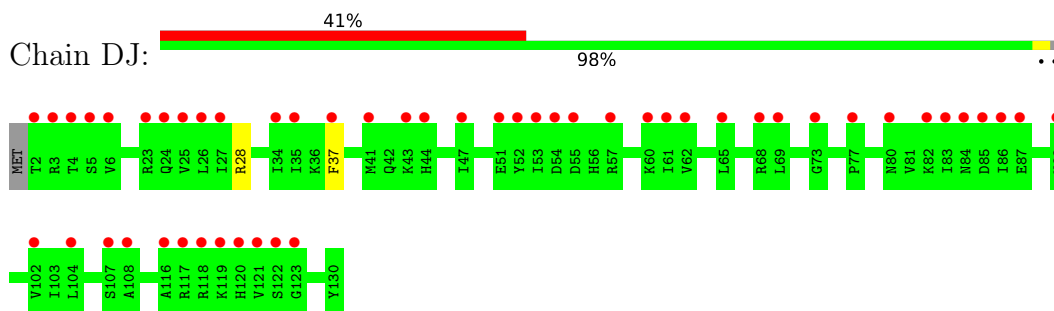
- Molecule 68: 40S ribosomal protein S21



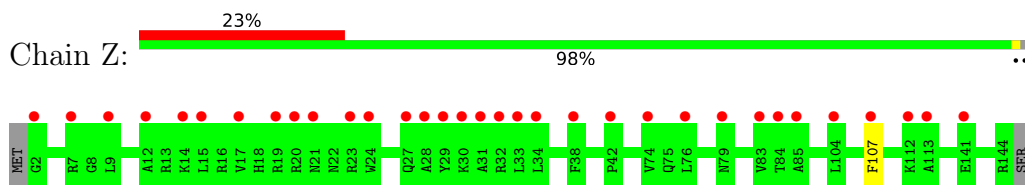
- Molecule 69: 40S ribosomal protein S22-A



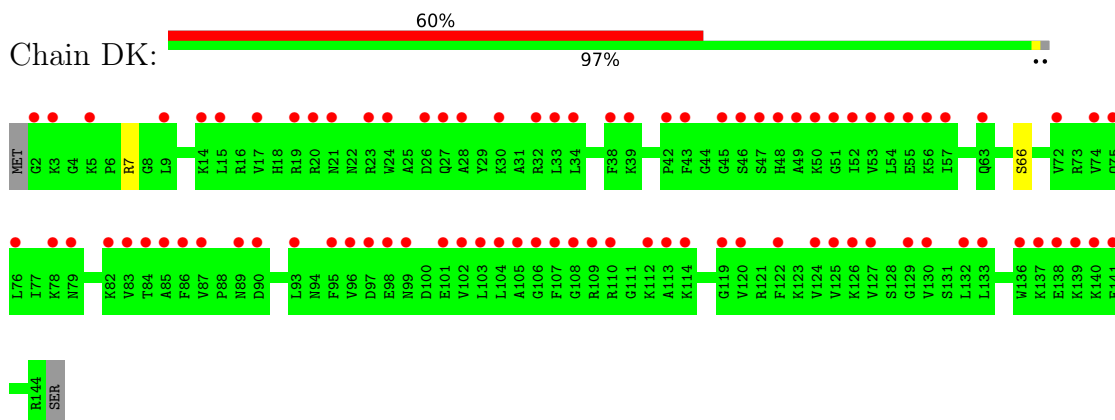
- Molecule 69: 40S ribosomal protein S22-A



- Molecule 70: Ribosomal protein S23 (S12)

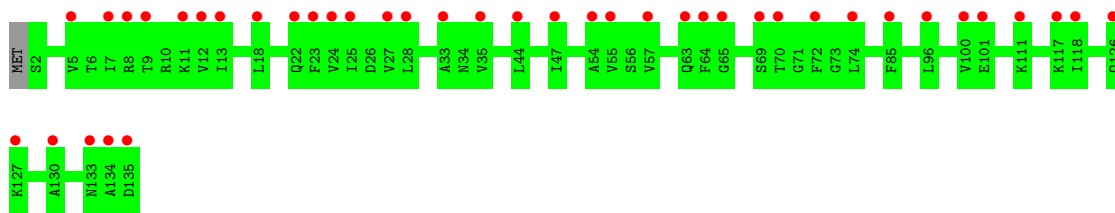


- Molecule 70: Ribosomal protein S23 (S12)

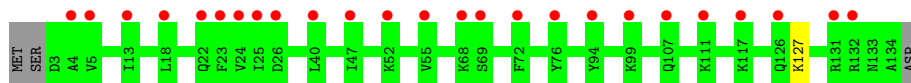


- Molecule 71: 40S ribosomal protein S24

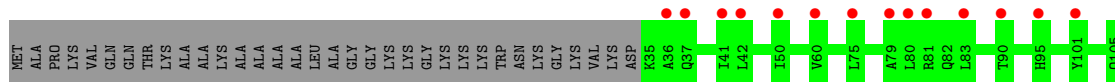




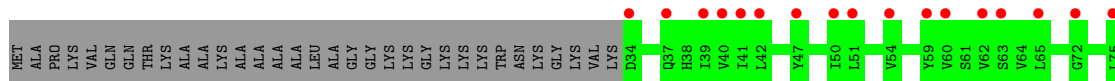
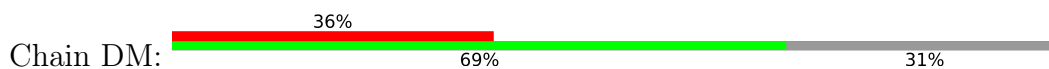
- Molecule 71: 40S ribosomal protein S24



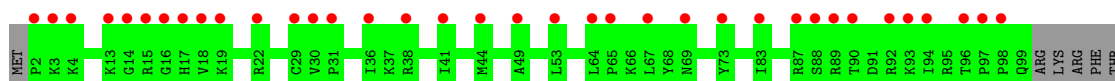
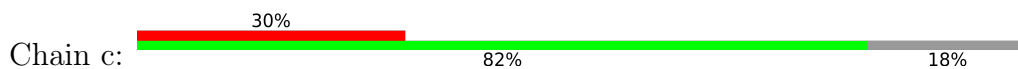
- Molecule 72: 40S ribosomal protein S25



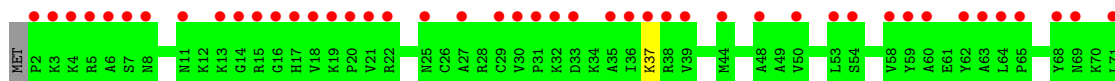
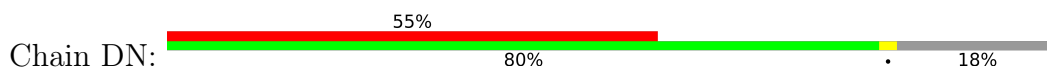
- Molecule 72: 40S ribosomal protein S25

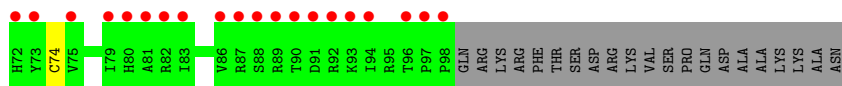


- Molecule 73: 40S ribosomal protein S26

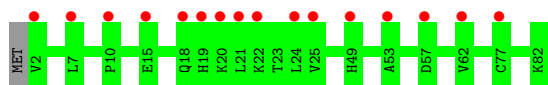


- Molecule 73: 40S ribosomal protein S26

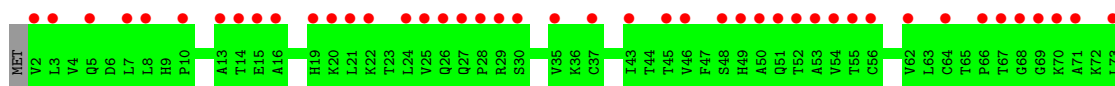




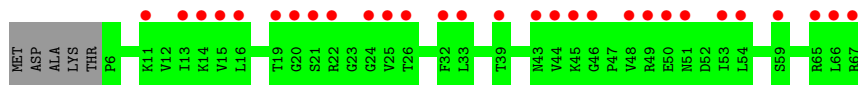
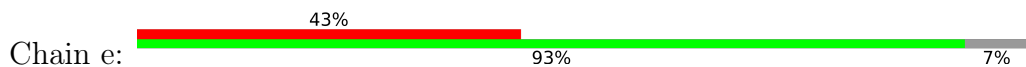
- Molecule 74: 40S ribosomal protein S27



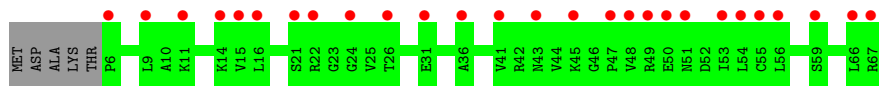
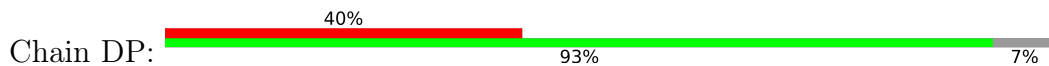
- Molecule 74: 40S ribosomal protein S27



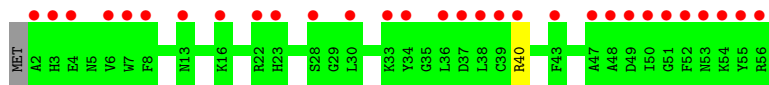
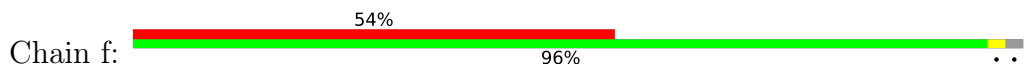
- Molecule 75: 40S ribosomal protein S28-B



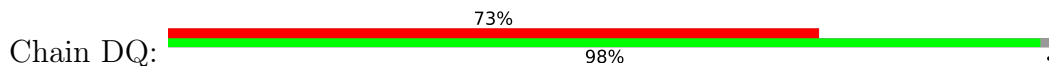
- Molecule 75: 40S ribosomal protein S28-B



- Molecule 76: 40S ribosomal protein S29A



- Molecule 76: 40S ribosomal protein S29A



PHE	L125	S138	VAL	VAL
GLY	A126		GLY	GLY
LYS	S127		CYS	CYS
ASN	V128		ARG	ARG
	S129		VAL	VAL
	K130		ASP	ASP
	E131		GLY	GLY
	I132		LYS	LYS
	I133		ASN	ASN
			PRO	PRO
			HIS	HIS
			ASP	ASP
			ILE	ILE
			ILE	ILE
			ASP	ASP
			ALA	ALA
			ILE	ILE
			ASN	ASN
			ALA	ALA
			GLY	GLY
			GLU	GLU
			ILE	ILE
			ASP	ASP
			VAL	VAL
			PRO	PRO
			GLU	GLU
			ASN	ASN

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	296.89Å 293.38Å 443.00Å 90.00° 99.39° 90.00°	Depositor
Resolution (Å)	175.26 – 3.35 175.26 – 3.35	Depositor EDS
% Data completeness (in resolution range)	99.3 (175.26-3.35) 89.9 (175.26-3.35)	Depositor EDS
R_{merge}	1.16	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.01 (at 3.07Å)	Xtrriage
Refinement program	PHENIX (1.19rc4_4035: ???)	Depositor
R, R_{free}	0.284 , 0.328 0.285 , 0.329	Depositor DCC
R_{free} test set	1585 reflections (0.15%)	wwPDB-VP
Wilson B-factor (Å ²)	35.6	Xtrriage
Anisotropy	0.233	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.20 , 17.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.38$, $\langle L^2 \rangle = 0.21$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.80	EDS
Total number of atoms	401103	wwPDB-VP
Average B, all atoms (Å ²)	86.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.28% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

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

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	0.29	0/77018	0.90	79/120068 (0.1%)
1	AS	0.27	2/73229 (0.0%)	0.90	78/114152 (0.1%)
2	3	0.23	0/2884	0.78	0/4492
2	AT	0.23	0/2884	0.81	0/4492
3	4	0.24	0/3724	0.83	1/5798 (0.0%)
3	AU	0.23	0/3702	0.81	0/5764
4	AW	0.26	0/1913	0.58	0/2569
4	j	0.27	0/1922	0.58	0/2581
5	AX	0.26	0/3145	0.57	0/4231
5	k	0.27	0/3156	0.57	0/4246
6	AY	0.25	0/2785	0.55	0/3758
6	l	0.27	0/2799	0.56	0/3777
7	AZ	0.26	0/2447	0.54	0/3294
7	m	0.27	0/2479	0.52	0/3337
8	BA	0.27	0/1231	0.56	0/1662
8	n	0.28	0/1263	0.57	0/1703
9	BB	0.26	0/1858	0.51	0/2496
9	o	0.28	0/1867	0.53	0/2508
10	BC	0.27	0/1796	0.53	0/2419
10	p	0.27	0/1861	0.52	0/2508
11	BD	0.26	0/1528	0.55	0/2055
11	q	0.28	0/1537	0.57	0/2067
12	BE	0.26	0/1705	0.57	0/2288
12	r	0.26	0/1724	0.56	0/2314
13	BF	0.26	0/1390	0.58	0/1861
13	s	0.27	0/1390	0.58	0/1861
14	BG	0.26	0/1637	0.58	0/2195
14	t	0.26	0/1637	0.57	0/2195
15	BH	0.26	0/1030	0.54	0/1389
15	u	0.26	0/1044	0.55	0/1407
16	BI	0.25	0/1753	0.61	0/2347
16	v	0.27	0/1753	0.60	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	BJ	0.26	0/1620	0.52	0/2167
17	w	0.26	0/1620	0.52	0/2167
18	BK	0.26	0/1419	0.56	0/1906
18	x	0.26	0/1403	0.58	0/1885
19	BL	0.26	0/1482	0.59	0/1985
19	y	0.26	0/1482	0.60	0/1985
20	BM	0.24	0/1404	0.60	0/1868
20	z	0.25	0/1475	0.59	0/1961
21	0	0.26	0/1457	0.55	0/1962
21	BN	0.26	0/1457	0.54	0/1962
22	2	0.26	0/1285	0.54	0/1723
22	BO	0.26	0/1285	0.52	0/1723
23	5	0.26	0/846	0.49	0/1140
23	BP	0.31	0/850	0.61	0/1145
24	6	0.27	0/993	0.57	0/1339
24	BQ	0.27	0/993	0.56	0/1339
25	7	0.25	0/958	0.54	0/1267
25	BR	0.27	0/909	0.56	0/1202
26	8	0.25	0/990	0.52	0/1337
26	BS	0.25	0/968	0.52	0/1308
27	9	0.25	0/999	0.54	0/1334
27	BT	0.26	0/985	0.56	0/1315
28	AA	0.27	0/1112	0.49	0/1488
28	BU	0.26	0/1112	0.51	0/1488
29	AB	0.25	0/1199	0.54	0/1607
29	BV	0.25	0/1199	0.56	0/1607
30	AC	0.24	0/503	0.60	0/668
30	BW	0.25	0/502	0.58	0/666
31	AD	0.27	0/764	0.48	0/1029
31	BX	0.26	0/738	0.49	0/994
32	AE	0.26	0/907	0.59	1/1219 (0.1%)
32	BY	0.24	0/902	0.56	0/1212
33	AF	0.26	0/1021	0.55	0/1368
33	BZ	0.25	0/1030	0.55	0/1379
34	AG	0.27	0/866	0.53	0/1165
34	CA	0.28	0/895	0.55	0/1201
35	AH	0.25	0/887	0.58	0/1184
35	CB	0.25	0/934	0.59	0/1242
36	AI	0.25	0/1003	0.56	0/1336
36	CC	0.25	0/981	0.57	0/1308
37	AJ	0.25	0/763	0.59	0/1012
37	CD	0.26	0/780	0.62	0/1033
38	AK	0.26	0/690	0.61	0/916

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	CE	0.26	0/690	0.63	0/916
39	AL	0.26	0/623	0.52	0/831
39	CF	0.26	0/627	0.52	0/835
40	AM	0.26	0/447	0.59	0/594
40	CG	0.24	0/447	0.63	0/594
41	AN	0.27	0/425	0.61	0/563
41	CH	0.27	0/436	0.58	0/577
42	AO	0.27	0/237	0.75	0/304
42	CI	0.28	0/228	0.78	0/293
43	AP	0.27	0/840	0.55	0/1110
43	CJ	0.27	0/860	0.55	0/1136
44	AQ	0.27	0/705	0.59	0/940
44	CK	0.26	0/705	0.59	0/940
45	CL	0.34	0/826	0.76	0/1104
45	i	0.31	0/941	0.79	2/1257 (0.2%)
46	B	0.29	0/41264	0.92	43/64298 (0.1%)
46	CM	0.28	0/40656	0.93	55/63348 (0.1%)
47	C	0.26	0/1666	0.51	0/2273
47	CN	0.25	0/1666	0.52	0/2273
48	CO	0.26	0/1750	0.66	1/2354 (0.0%)
48	D	0.25	0/1750	0.54	0/2354
49	CP	0.26	0/1648	0.53	0/2237
49	E	0.26	0/1657	0.52	0/2248
50	CQ	0.28	0/1731	0.60	1/2324 (0.0%)
50	F	0.27	0/1731	0.63	1/2324 (0.0%)
51	CR	0.27	0/2096	0.56	0/2822
51	G	0.26	0/2092	0.56	0/2817
52	CS	0.25	0/1631	0.53	0/2199
52	H	0.26	0/1631	0.58	0/2199
53	CT	0.26	0/1920	0.56	0/2560
53	I	0.26	0/1845	0.58	0/2464
54	CU	0.27	0/1490	0.57	0/2004
54	J	0.26	0/1516	0.57	1/2039 (0.0%)
55	CV	0.27	0/1606	0.60	0/2150
55	K	0.26	0/1606	0.58	0/2150
56	CW	0.25	0/1478	0.57	0/1978
56	L	0.26	0/1478	0.56	0/1978
57	CX	0.28	0/801	0.56	0/1081
57	M	0.30	0/836	0.69	1/1130 (0.1%)
58	CY	0.28	0/1154	0.62	0/1553
58	N	0.27	0/1175	0.58	0/1582
59	CZ	0.26	0/892	0.61	0/1203
59	O	0.32	0/892	0.83	0/1203

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
60	DA	0.25	0/1210	0.53	0/1631
60	P	0.25	0/1210	0.53	0/1631
61	DB	0.26	0/953	0.64	0/1279
61	Q	0.26	0/953	0.61	0/1279
62	DC	0.27	0/954	0.61	0/1282
62	R	0.30	0/1038	0.63	1/1395 (0.1%)
63	DD	0.25	0/1109	0.55	0/1486
63	S	0.26	0/1103	0.55	0/1478
64	DE	0.26	0/1014	0.61	0/1361
64	T	0.27	0/1003	0.64	0/1346
65	DF	0.26	0/1186	0.64	1/1590 (0.1%)
65	U	0.26	0/1205	0.57	0/1615
66	DG	0.26	0/1120	0.56	0/1508
66	V	0.26	0/1108	0.61	0/1492
67	DH	0.24	0/800	0.53	0/1082
67	W	0.26	0/818	0.57	0/1106
68	DI	0.27	0/683	0.59	0/918
68	X	0.27	0/683	0.59	0/918
69	DJ	0.26	0/1049	0.57	0/1412
69	Y	0.27	0/1049	0.55	0/1412
70	DK	0.26	0/1128	0.58	0/1505
70	Z	0.26	0/1128	0.63	0/1505
71	DL	0.27	0/1086	0.58	0/1447
71	a	0.26	0/1100	0.59	0/1466
72	DM	0.24	0/585	0.55	0/789
72	b	0.25	0/577	0.53	0/778
73	DN	0.27	0/782	0.64	0/1048
73	c	0.27	0/791	0.63	0/1060
74	DO	0.25	0/624	0.55	0/843
74	d	0.25	0/624	0.54	0/843
75	DP	0.26	0/489	0.71	0/654
75	e	0.27	0/489	0.72	0/654
76	DQ	0.27	0/466	0.56	0/620
76	f	0.28	0/466	0.57	0/620
77	DR	0.27	0/451	0.60	0/601
77	g	0.26	0/482	0.63	0/642
78	DS	0.26	0/585	0.65	0/778
78	h	0.34	0/585	0.81	1/778 (0.1%)
79	AR	0.25	0/2442	0.57	0/3325
79	DT	0.28	0/2451	0.63	3/3337 (0.1%)
80	l1	0.25	0/1737	0.54	0/2335
81	l2	0.22	0/96	0.43	0/128
All	All	0.27	2/427866 (0.0%)	0.79	270/627439 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	1	0	1
9	o	0	1
11	BD	0	1
52	H	0	1
57	M	0	1
61	Q	0	1
79	DT	0	1
All	All	0	7

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AS	3101	A	N9-C4	-6.09	1.34	1.37
1	AS	3163	U	P-OP1	5.42	1.58	1.49

All (270) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	3163	U	O5'-P-OP1	13.93	127.42	110.70
1	1	2479	U	C5-C4-O4	12.62	133.47	125.90
46	CM	1340	C	OP1-P-O3'	-11.32	80.30	105.20
1	1	2479	U	N3-C4-O4	-10.09	112.34	119.40
46	CM	1340	C	OP2-P-O3'	-9.93	83.36	105.20
1	AS	3163	U	O5'-P-OP2	-8.88	97.70	105.70
46	B	217	A	O4'-C1'-N9	8.59	115.07	108.20
50	F	60	LEU	CA-CB-CG	8.53	134.91	115.30
1	AS	1576	A	O4'-C1'-N9	8.34	114.88	108.20
46	CM	451	C	N1-C2-O2	8.34	123.90	118.90
1	AS	3163	U	O5'-C5'-C4'	8.23	127.33	111.70
1	1	2814	U	C2-N1-C1'	8.21	127.55	117.70
1	AS	3163	U	O4'-C1'-N1	8.03	114.63	108.20
46	B	451	C	N1-C2-O2	8.00	123.70	118.90
1	AS	2215	C	N3-C2-O2	-7.79	116.45	121.90
46	CM	1341	U	OP1-P-OP2	7.74	131.21	119.60
1	1	1576	A	O4'-C1'-N9	7.69	114.35	108.20
1	1	3347	U	C2-N1-C1'	7.63	126.86	117.70
1	1	3126	U	C2-N1-C1'	7.52	126.73	117.70
1	AS	1024	U	O4'-C1'-N1	-7.46	102.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	401	U	O4'-C1'-N1	7.46	114.17	108.20
46	B	451	C	C2-N1-C1'	7.36	126.90	118.80
1	AS	2814	U	C2-N1-C1'	7.35	126.52	117.70
1	AS	977	U	C2-N1-C1'	7.33	126.50	117.70
1	AS	3101	A	O4'-C1'-N9	-7.33	102.34	108.20
46	CM	1375	C	C2-N1-C1'	7.27	126.80	118.80
46	CM	823	G	C4-N9-C1'	7.26	135.94	126.50
46	B	1457	A	C8-N9-C4	-7.16	102.94	105.80
1	1	977	U	C2-N1-C1'	7.15	126.28	117.70
46	CM	898	G	OP2-P-O3'	7.14	120.91	105.20
46	B	700	G	P-O3'-C3'	7.11	128.23	119.70
46	B	1375	C	C2-N1-C1'	7.05	126.56	118.80
46	B	723	G	N3-C4-N9	-7.04	121.78	126.00
1	AS	2235	C	C2-N1-C1'	7.02	126.52	118.80
1	1	3167	G	N3-C4-N9	6.99	130.19	126.00
46	CM	451	C	C2-N1-C1'	6.96	126.46	118.80
1	AS	1026	A	O4'-C1'-N9	-6.93	102.66	108.20
1	AS	3182	C	C2-N1-C1'	6.92	126.41	118.80
1	AS	3126	U	C2-N1-C1'	6.89	125.97	117.70
79	DT	92	LEU	CA-CB-CG	6.88	131.13	115.30
1	AS	2215	C	N1-C2-O2	6.87	123.02	118.90
1	AS	1026	A	C4-N9-C1'	6.81	138.56	126.30
46	CM	846	U	C2-N1-C1'	6.80	125.86	117.70
46	CM	721	C	N3-C2-O2	-6.80	117.14	121.90
3	4	39	G	O4'-C1'-N9	6.78	113.63	108.20
1	1	2479	U	C2-N3-C4	6.78	131.07	127.00
1	1	445	A	O4'-C1'-N9	6.75	113.60	108.20
1	1	3167	G	C4-N9-C1'	6.70	135.21	126.50
1	AS	1026	A	C8-N9-C1'	-6.70	115.64	127.70
1	AS	1638	A	O4'-C1'-N9	-6.70	102.84	108.20
1	1	401	U	C2-N1-C1'	6.69	125.73	117.70
46	CM	1234	U	C2-N1-C1'	6.67	125.70	117.70
32	AE	3	LEU	CA-CB-CG	6.65	130.60	115.30
1	1	3182	C	C2-N1-C1'	6.62	126.09	118.80
1	AS	2814	U	N1-C2-O2	6.61	127.43	122.80
46	CM	721	C	C6-N1-C2	-6.58	117.67	120.30
46	CM	1457	A	C8-N9-C4	-6.57	103.17	105.80
1	1	2443	G	N3-C4-N9	-6.55	122.07	126.00
46	CM	451	C	N3-C2-O2	-6.53	117.33	121.90
46	CM	899	G	O5'-P-OP1	-6.53	99.82	105.70
1	AS	1347	U	P-O3'-C3'	6.52	127.53	119.70
1	1	1558	G	N3-C4-N9	6.52	129.91	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	1638	A	O4'-C1'-N9	-6.42	103.07	108.20
1	AS	918	U	C2-N1-C1'	6.40	125.38	117.70
48	CO	96	LEU	CA-CB-CG	6.37	129.95	115.30
62	R	80	LEU	CA-CB-CG	6.35	129.91	115.30
1	AS	480	G	O4'-C1'-N9	6.33	113.27	108.20
46	CM	227	C	C2-N1-C1'	6.33	125.76	118.80
1	AS	1576	A	C4-N9-C1'	6.31	137.65	126.30
1	AS	2234	A	C8-N9-C4	-6.30	103.28	105.80
1	1	2423	A	N1-C6-N6	-6.29	114.82	118.60
1	1	403	C	C6-N1-C2	-6.29	117.79	120.30
46	B	579	U	C2-N1-C1'	6.27	125.23	117.70
46	B	451	C	N3-C2-O2	-6.27	117.51	121.90
1	1	918	U	C2-N1-C1'	6.25	125.20	117.70
46	CM	217	A	O4'-C1'-N9	6.24	113.19	108.20
46	B	1242	U	C2-N1-C1'	6.22	125.17	117.70
46	CM	579	U	C2-N1-C1'	6.21	125.16	117.70
1	AS	976	A	C8-N9-C4	-6.20	103.32	105.80
78	h	159	LEU	CA-CB-CG	6.20	129.56	115.30
1	AS	3163	U	OP1-P-OP2	-6.20	110.30	119.60
1	1	1492	C	C2-N1-C1'	6.19	125.61	118.80
46	CM	721	C	C5-C4-N4	6.16	124.51	120.20
46	CM	698	C	C2-N1-C1'	6.15	125.57	118.80
1	1	2215	C	N3-C2-O2	-6.13	117.61	121.90
1	1	2814	U	N1-C2-O2	6.11	127.08	122.80
1	1	2814	U	C6-N1-C1'	-6.09	112.68	121.20
1	1	2832	U	O4'-C1'-N1	6.06	113.05	108.20
46	B	1444	G	N3-C4-N9	6.06	129.64	126.00
46	B	1364	U	C2-N1-C1'	6.03	124.93	117.70
46	CM	823	G	C8-N9-C1'	-6.02	119.17	127.00
1	1	3243	C	N1-C2-O2	6.02	122.51	118.90
1	1	3167	G	C8-N9-C1'	-6.02	119.18	127.00
46	B	1327	C	N1-C2-O2	6.00	122.50	118.90
46	CM	752	U	C6-N1-C2	-5.99	117.41	121.00
46	CM	279	G	C8-N9-C1'	-5.96	119.25	127.00
1	1	1576	A	C4-N9-C1'	5.95	137.01	126.30
1	1	1573	C	C2-N1-C1'	5.95	125.34	118.80
1	AS	1492	C	C2-N1-C1'	5.95	125.34	118.80
1	AS	1558	G	C8-N9-C1'	-5.93	119.29	127.00
46	CM	752	U	N3-C2-O2	-5.93	118.05	122.20
65	DF	131	LEU	CA-CB-CG	5.92	128.91	115.30
1	1	3182	C	N1-C2-O2	5.91	122.45	118.90
1	AS	2651	A	O4'-C1'-N9	5.90	112.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	1346	U	P-O3'-C3'	5.89	126.77	119.70
1	AS	1025	G	C4-N9-C1'	5.86	134.12	126.50
46	CM	846	U	C6-N1-C1'	-5.85	113.01	121.20
1	1	1670	G	C5'-C4'-C3'	5.84	125.35	116.00
1	1	2482	U	N1-C2-O2	5.84	126.89	122.80
46	B	696	U	C5-C6-N1	5.84	125.62	122.70
1	AS	1349	U	C2-N1-C1'	5.84	124.71	117.70
1	1	3347	U	N1-C2-O2	5.82	126.88	122.80
45	i	129	LEU	CA-CB-CG	5.82	128.68	115.30
1	1	2234	A	C2-N3-C4	5.81	113.50	110.60
54	J	30	LEU	CA-CB-CG	5.80	128.65	115.30
46	CM	279	G	C4-N9-C1'	5.80	134.04	126.50
1	AS	1025	G	P-O3'-C3'	5.78	126.63	119.70
46	B	1237	C	C2-N1-C1'	5.77	125.15	118.80
1	AS	478	G	N3-C4-C5	-5.77	125.72	128.60
1	1	1525	A	C8-N9-C1'	-5.77	117.32	127.70
46	CM	1327	C	N1-C2-O2	5.77	122.36	118.90
46	CM	561	U	N3-C2-O2	-5.76	118.17	122.20
46	B	700	G	P-O5'-C5'	5.75	130.10	120.90
1	AS	956	U	C2-N1-C1'	5.74	124.59	117.70
1	AS	2943	A	C2-N3-C4	5.74	113.47	110.60
46	CM	1462	C	C2-N1-C1'	5.74	125.11	118.80
79	DT	120	LEU	CA-CB-CG	5.73	128.49	115.30
1	1	376	G	O4'-C1'-N9	5.72	112.77	108.20
1	AS	3243	C	N1-C2-O2	5.71	122.33	118.90
1	1	3167	G	N3-C4-C5	-5.71	125.75	128.60
1	AS	1026	A	C6-C5-N7	-5.71	128.30	132.30
46	CM	220	A	O4'-C1'-N9	5.70	112.76	108.20
1	1	1552	C	C2-N1-C1'	5.70	125.06	118.80
46	B	695	C	OP2-P-O3'	5.69	117.71	105.20
1	AS	1558	G	C4-N9-C1'	5.68	133.88	126.50
1	1	1574	C	C2-N1-C1'	5.67	125.04	118.80
1	AS	1552	C	C2-N1-C1'	5.66	125.03	118.80
1	1	2235	C	C2-N1-C1'	5.66	125.03	118.80
1	AS	1558	G	N3-C4-N9	5.65	129.39	126.00
1	1	3347	U	C6-N1-C1'	-5.64	113.30	121.20
1	AS	2509	C	N1-C2-O2	5.64	122.28	118.90
1	AS	831	G	O4'-C1'-N9	5.63	112.71	108.20
1	AS	479	C	P-O3'-C3'	5.63	126.45	119.70
46	B	1067	C	C2-N1-C1'	5.63	124.99	118.80
57	M	85	GLY	N-CA-C	-5.62	99.05	113.10
46	CM	1231	C	C2-N1-C1'	5.61	124.97	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	CM	1444	G	C4-N9-C1'	5.61	133.79	126.50
46	CM	1067	C	C2-N1-C1'	5.59	124.95	118.80
46	B	1444	G	C4-N9-C1'	5.58	133.76	126.50
46	CM	220	A	N9-C4-C5	5.57	108.03	105.80
1	1	1346	U	P-O3'-C3'	5.57	126.39	119.70
46	B	723	G	N9-C4-C5	5.57	107.63	105.40
46	B	137	A	P-O3'-C3'	5.57	126.39	119.70
1	1	956	U	C2-N1-C1'	5.55	124.36	117.70
1	1	2509	C	N1-C2-O2	5.54	122.22	118.90
1	AS	976	A	N7-C8-N9	5.54	116.57	113.80
46	B	1234	U	C2-N1-C1'	5.52	124.32	117.70
1	1	3030	U	C2-N1-C1'	5.52	124.32	117.70
46	B	1444	G	N3-C4-C5	-5.50	125.85	128.60
46	CM	1400	U	C2-N1-C1'	5.50	124.30	117.70
79	DT	121	ARG	CA-CB-CG	5.50	125.49	113.40
46	CM	721	C	O4'-C1'-N1	5.49	112.59	108.20
1	1	2215	C	N1-C2-O2	5.47	122.18	118.90
1	1	2482	U	N3-C2-O2	-5.46	118.38	122.20
46	B	698	C	C6-N1-C2	-5.46	118.11	120.30
46	CM	725	A	C8-N9-C4	-5.46	103.62	105.80
1	AS	1576	A	C8-N9-C1'	-5.46	117.88	127.70
1	AS	620	A	N1-C6-N6	5.45	121.87	118.60
1	1	1021	A	C8-N9-C4	-5.45	103.62	105.80
1	1	1033	C	C2-N1-C1'	5.44	124.78	118.80
46	B	451	C	C6-N1-C1'	-5.44	114.27	120.80
1	AS	3151	C	C2-N1-C1'	5.43	124.77	118.80
1	AS	2814	U	N3-C2-O2	-5.42	118.41	122.20
1	AS	1197	C	C2-N1-C1'	5.42	124.76	118.80
46	CM	725	A	N7-C8-N9	5.41	116.51	113.80
46	B	1364	U	O4'-C1'-N1	5.40	112.52	108.20
1	1	1099	A	OP2-P-O3'	5.40	117.08	105.20
46	B	1462	C	C2-N1-C1'	5.39	124.73	118.80
1	1	480	G	OP1-P-O3'	5.39	117.05	105.20
1	1	403	C	P-O3'-C3'	5.38	126.16	119.70
1	1	401	U	C6-N1-C1'	-5.38	113.67	121.20
1	AS	484	U	C5-C6-N1	5.38	125.39	122.70
46	CM	1375	C	C6-N1-C1'	-5.37	114.35	120.80
46	CM	1292	U	C2-N1-C1'	5.37	124.14	117.70
1	1	3166	A	O4'-C1'-N9	5.37	112.50	108.20
1	1	3167	G	C6-C5-N7	-5.37	127.18	130.40
45	i	44	ALA	CB-CA-C	5.35	118.13	110.10
1	1	3243	C	N3-C2-O2	-5.34	118.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	1558	G	N9-C4-C5	-5.34	103.26	105.40
46	CM	608	G	C4-N9-C1'	5.34	133.44	126.50
1	1	480	G	N3-C4-C5	-5.33	125.93	128.60
1	1	1576	A	C8-N9-C1'	-5.33	118.11	127.70
1	AS	3134	C	C2-N1-C1'	5.31	124.64	118.80
1	1	2663	A	P-O3'-C3'	5.30	126.06	119.70
46	CM	137	A	P-O3'-C3'	5.30	126.06	119.70
46	CM	1234	U	C6-N1-C1'	-5.30	113.78	121.20
1	AS	1347	U	N1-C2-O2	5.29	126.50	122.80
46	CM	1237	C	C2-N1-C1'	5.28	124.60	118.80
46	B	1057	C	C2-N1-C1'	5.27	124.60	118.80
1	AS	3317	U	P-O3'-C3'	5.26	126.01	119.70
1	AS	315	C	C2-N1-C1'	5.25	124.58	118.80
1	1	3126	U	C6-N1-C1'	-5.25	113.85	121.20
46	B	723	G	O4'-C1'-N9	5.25	112.40	108.20
1	AS	2234	A	C2-N3-C4	5.25	113.22	110.60
1	AS	2814	U	C6-N1-C1'	-5.25	113.85	121.20
46	B	824	U	P-O3'-C3'	5.25	126.00	119.70
1	AS	112	C	C2-N1-C1'	5.25	124.57	118.80
1	AS	977	U	C6-N1-C1'	-5.25	113.86	121.20
1	AS	3030	U	C2-N1-C1'	5.24	123.99	117.70
46	CM	1233	C	C6-N1-C2	-5.24	118.20	120.30
50	CQ	183	LEU	CA-CB-CG	5.23	127.33	115.30
1	AS	1347	U	N3-C2-O2	-5.23	118.54	122.20
1	1	918	U	N1-C2-O2	5.22	126.45	122.80
46	CM	451	C	C6-N1-C1'	-5.22	114.54	120.80
46	B	1242	U	N3-C2-O2	-5.21	118.56	122.20
1	1	918	U	N3-C2-O2	-5.20	118.56	122.20
46	B	1369	G	P-O3'-C3'	5.20	125.94	119.70
1	AS	1721	C	O4'-C1'-N1	5.20	112.36	108.20
46	CM	4	C	C2-N1-C1'	5.20	124.52	118.80
46	CM	752	U	C2-N1-C1'	5.20	123.93	117.70
1	AS	918	U	N1-C2-O2	5.19	126.43	122.80
46	B	227	C	C2-N1-C1'	5.18	124.50	118.80
1	1	1197	C	C2-N1-C1'	5.18	124.49	118.80
1	AS	3182	C	C6-N1-C1'	-5.15	114.62	120.80
46	B	561	U	N3-C2-O2	-5.15	118.60	122.20
1	1	977	U	C6-N1-C1'	-5.15	114.00	121.20
1	AS	1558	G	C6-C5-N7	-5.14	127.31	130.40
46	B	702	G	OP1-P-O3'	5.14	116.51	105.20
46	B	985	C	C6-N1-C2	-5.14	118.24	120.30
1	AS	3100	G	C8-N9-C4	-5.14	104.34	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	1558	G	C4-N9-C1'	5.14	133.18	126.50
1	AS	3243	C	N3-C2-O2	-5.14	118.30	121.90
1	AS	1099	A	OP2-P-O3'	5.13	116.49	105.20
46	B	985	C	C2-N1-C1'	5.13	124.44	118.80
1	1	1525	A	C4-N9-C1'	5.12	135.52	126.30
1	1	3151	C	C2-N1-C1'	5.12	124.43	118.80
1	AS	1573	C	C2-N1-C1'	5.12	124.43	118.80
46	CM	1444	G	C8-N9-C1'	-5.11	120.35	127.00
1	1	1573	C	C6-N1-C1'	-5.11	114.67	120.80
1	1	3271	U	C2-N1-C1'	5.11	123.83	117.70
46	CM	579	U	N1-C2-O2	5.11	126.38	122.80
46	B	1067	C	N1-C2-O2	5.11	121.96	118.90
46	B	700	G	C5'-C4'-C3'	5.10	124.16	116.00
1	1	1279	C	N3-C2-O2	-5.09	118.33	121.90
1	AS	1559	C	C2-N1-C1'	5.09	124.39	118.80
46	CM	222	C	C2-N1-C1'	5.08	124.39	118.80
46	CM	700	G	C5-C6-O6	5.08	131.65	128.60
46	CM	724	G	O4'-C1'-N9	5.08	112.26	108.20
1	AS	478	G	C2-N3-C4	5.08	114.44	111.90
46	CM	482	C	C6-N1-C2	-5.08	118.27	120.30
46	B	505	U	P-O3'-C3'	5.07	125.79	119.70
46	B	1292	U	C2-N1-C1'	5.07	123.78	117.70
1	AS	3126	U	N1-C2-O2	5.07	126.35	122.80
1	AS	2968	U	N1-C2-O2	5.07	126.35	122.80
1	1	1853	C	C2-N1-C1'	5.07	124.37	118.80
1	1	112	C	C2-N1-C1'	5.06	124.36	118.80
1	AS	1350	G	OP2-P-O3'	5.06	116.33	105.20
46	B	216	A	P-O3'-C3'	5.06	125.77	119.70
1	1	1569	C	C2-N1-C1'	5.04	124.35	118.80
1	1	2423	A	N1-C2-N3	-5.04	126.78	129.30
46	CM	484	G	C4-N9-C1'	5.04	133.05	126.50
1	1	2968	U	C2-N1-C1'	5.03	123.74	117.70
1	AS	376	G	O4'-C1'-N9	5.02	112.22	108.20
1	1	1022	A	C8-N9-C4	-5.02	103.79	105.80
1	AS	401	U	C2-N1-C1'	5.02	123.72	117.70
1	1	2443	G	C5-C6-O6	5.01	131.61	128.60
1	1	3182	C	C6-N1-C1'	-5.01	114.79	120.80
1	1	3245	A	O4'-C1'-N9	5.01	112.21	108.20
46	B	701	G	C8-N9-C1'	-5.01	120.48	127.00
1	AS	2509	C	N3-C2-O2	-5.01	118.39	121.90

There are no chirality outliers.

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	2832	U	Sidechain
11	BD	134	MET	Mainchain
79	DT	120	LEU	Mainchain
52	H	153	GLY	Mainchain
57	M	15	LEU	Mainchain
61	Q	119	ASP	Peptide
9	o	233	ILE	Mainchain

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	246/254 (97%)	239 (97%)	7 (3%)	0	100	100
4	j	247/254 (97%)	238 (96%)	9 (4%)	0	100	100
5	AX	384/389 (99%)	372 (97%)	12 (3%)	0	100	100
5	k	385/389 (99%)	373 (97%)	12 (3%)	0	100	100
6	AY	357/363 (98%)	347 (97%)	10 (3%)	0	100	100
6	l	359/363 (99%)	347 (97%)	12 (3%)	0	100	100
7	AZ	290/298 (97%)	278 (96%)	12 (4%)	0	100	100
7	m	294/298 (99%)	282 (96%)	11 (4%)	1 (0%)	37	65
8	BA	149/176 (85%)	146 (98%)	3 (2%)	0	100	100
8	n	153/176 (87%)	149 (97%)	4 (3%)	0	100	100
9	BB	225/241 (93%)	218 (97%)	6 (3%)	1 (0%)	30	59
9	o	226/241 (94%)	220 (97%)	5 (2%)	1 (0%)	30	59

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	BC	224/262 (86%)	211 (94%)	11 (5%)	2 (1%)	14	41
10	p	235/262 (90%)	228 (97%)	6 (3%)	1 (0%)	30	59
11	BD	187/191 (98%)	182 (97%)	5 (3%)	0	100	100
11	q	188/191 (98%)	183 (97%)	5 (3%)	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%)	161 (95%)	8 (5%)	0	100	100
13	s	169/174 (97%)	161 (95%)	8 (5%)	0	100	100
14	BG	198/202 (98%)	190 (96%)	6 (3%)	2 (1%)	13	39
14	t	198/202 (98%)	196 (99%)	2 (1%)	0	100	100
15	BH	126/131 (96%)	122 (97%)	4 (3%)	0	100	100
15	u	128/131 (98%)	125 (98%)	3 (2%)	0	100	100
16	BI	201/204 (98%)	194 (96%)	6 (3%)	1 (0%)	25	53
16	v	201/204 (98%)	197 (98%)	4 (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	168/185 (91%)	165 (98%)	3 (2%)	0	100	100
19	BL	183/186 (98%)	178 (97%)	5 (3%)	0	100	100
19	y	183/186 (98%)	179 (98%)	4 (2%)	0	100	100
20	BM	169/190 (89%)	164 (97%)	3 (2%)	2 (1%)	11	34
20	z	177/190 (93%)	174 (98%)	3 (2%)	0	100	100
21	0	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
21	BN	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
22	2	157/160 (98%)	153 (98%)	4 (2%)	0	100	100
22	BO	157/160 (98%)	154 (98%)	3 (2%)	0	100	100
23	5	101/124 (82%)	94 (93%)	6 (6%)	1 (1%)	13	39
23	BP	101/124 (82%)	88 (87%)	11 (11%)	2 (2%)	6	25
24	6	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
24	BQ	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
25	7	114/155 (74%)	108 (95%)	6 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
25	BR	107/155 (69%)	101 (94%)	6 (6%)	0	100	100
26	8	119/142 (84%)	119 (100%)	0	0	100	100
26	BS	116/142 (82%)	115 (99%)	1 (1%)	0	100	100
27	9	124/127 (98%)	122 (98%)	2 (2%)	0	100	100
27	BT	122/127 (96%)	121 (99%)	1 (1%)	0	100	100
28	AA	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
28	BU	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
29	AB	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
29	BV	146/149 (98%)	138 (94%)	8 (6%)	0	100	100
30	AC	60/63 (95%)	57 (95%)	1 (2%)	2 (3%)	3	17
30	BW	59/63 (94%)	57 (97%)	1 (2%)	1 (2%)	7	27
31	AD	97/106 (92%)	95 (98%)	1 (1%)	1 (1%)	13	39
31	BX	94/106 (89%)	92 (98%)	2 (2%)	0	100	100
32	AE	108/112 (96%)	105 (97%)	3 (3%)	0	100	100
32	BY	107/112 (96%)	103 (96%)	4 (4%)	0	100	100
33	AF	122/131 (93%)	122 (100%)	0	0	100	100
33	BZ	123/131 (94%)	122 (99%)	1 (1%)	0	100	100
34	AG	104/107 (97%)	101 (97%)	3 (3%)	0	100	100
34	CA	107/107 (100%)	104 (97%)	3 (3%)	0	100	100
35	AH	109/122 (89%)	107 (98%)	2 (2%)	0	100	100
35	CB	114/122 (93%)	111 (97%)	3 (3%)	0	100	100
36	AI	118/120 (98%)	114 (97%)	4 (3%)	0	100	100
36	CC	115/120 (96%)	113 (98%)	2 (2%)	0	100	100
37	AJ	95/99 (96%)	94 (99%)	1 (1%)	0	100	100
37	CD	97/99 (98%)	95 (98%)	1 (1%)	1 (1%)	13	39
38	AK	84/90 (93%)	81 (96%)	3 (4%)	0	100	100
38	CE	84/90 (93%)	80 (95%)	4 (5%)	0	100	100
39	AL	75/78 (96%)	69 (92%)	6 (8%)	0	100	100
39	CF	75/78 (96%)	71 (95%)	4 (5%)	0	100	100
40	AM	48/51 (94%)	46 (96%)	1 (2%)	1 (2%)	5	24
40	CG	48/51 (94%)	45 (94%)	2 (4%)	1 (2%)	5	24

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
41	AN	50/52 (96%)	50 (100%)	0	0	100	100
41	CH	51/52 (98%)	51 (100%)	0	0	100	100
42	AO	23/25 (92%)	22 (96%)	1 (4%)	0	100	100
42	CI	22/25 (88%)	22 (100%)	0	0	100	100
43	AP	101/106 (95%)	99 (98%)	2 (2%)	0	100	100
43	CJ	103/106 (97%)	102 (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
45	CL	105/267 (39%)	76 (72%)	24 (23%)	5 (5%)	2	11
45	i	117/267 (44%)	81 (69%)	30 (26%)	6 (5%)	1	10
47	C	206/261 (79%)	201 (98%)	5 (2%)	0	100	100
47	CN	206/261 (79%)	201 (98%)	5 (2%)	0	100	100
48	CO	212/256 (83%)	199 (94%)	11 (5%)	2 (1%)	14	41
48	D	212/256 (83%)	207 (98%)	5 (2%)	0	100	100
49	CP	214/249 (86%)	207 (97%)	7 (3%)	0	100	100
49	E	215/249 (86%)	209 (97%)	6 (3%)	0	100	100
50	CQ	221/251 (88%)	214 (97%)	7 (3%)	0	100	100
50	F	221/251 (88%)	212 (96%)	9 (4%)	0	100	100
51	CR	258/262 (98%)	252 (98%)	6 (2%)	0	100	100
51	G	257/262 (98%)	251 (98%)	5 (2%)	1 (0%)	30	59
52	CS	204/225 (91%)	197 (97%)	7 (3%)	0	100	100
52	H	204/225 (91%)	190 (93%)	14 (7%)	0	100	100
53	CT	233/236 (99%)	226 (97%)	6 (3%)	1 (0%)	30	59
53	I	224/236 (95%)	219 (98%)	5 (2%)	0	100	100
54	CU	180/186 (97%)	169 (94%)	9 (5%)	2 (1%)	12	37
54	J	183/186 (98%)	173 (94%)	9 (5%)	1 (0%)	25	53
55	CV	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
55	K	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
56	CW	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
56	L	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
57	CX	91/118 (77%)	85 (93%)	5 (6%)	1 (1%)	12	37

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
57	M	96/118 (81%)	81 (84%)	13 (14%)	2 (2%)	5	24
58	CY	139/155 (90%)	131 (94%)	5 (4%)	3 (2%)	5	23
58	N	142/155 (92%)	134 (94%)	7 (5%)	1 (1%)	19	47
59	CZ	114/143 (80%)	97 (85%)	17 (15%)	0	100	100
59	O	114/143 (80%)	90 (79%)	19 (17%)	5 (4%)	2	13
60	DA	148/151 (98%)	142 (96%)	5 (3%)	1 (1%)	19	47
60	P	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
61	DB	125/132 (95%)	121 (97%)	4 (3%)	0	100	100
61	Q	125/132 (95%)	120 (96%)	5 (4%)	0	100	100
62	DC	116/142 (82%)	105 (90%)	11 (10%)	0	100	100
62	R	127/142 (89%)	112 (88%)	14 (11%)	1 (1%)	16	44
63	DD	138/142 (97%)	134 (97%)	4 (3%)	0	100	100
63	S	137/142 (96%)	132 (96%)	5 (4%)	0	100	100
64	DE	123/137 (90%)	120 (98%)	3 (2%)	0	100	100
64	T	121/137 (88%)	117 (97%)	4 (3%)	0	100	100
65	DF	140/145 (97%)	133 (95%)	5 (4%)	2 (1%)	9	30
65	U	142/145 (98%)	136 (96%)	6 (4%)	0	100	100
66	DG	139/145 (96%)	136 (98%)	3 (2%)	0	100	100
66	V	137/145 (94%)	133 (97%)	3 (2%)	1 (1%)	19	47
67	DH	98/119 (82%)	95 (97%)	3 (3%)	0	100	100
67	W	100/119 (84%)	96 (96%)	4 (4%)	0	100	100
68	DI	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
68	X	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
69	DJ	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
69	Y	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
70	DK	141/145 (97%)	138 (98%)	3 (2%)	0	100	100
70	Z	141/145 (97%)	137 (97%)	4 (3%)	0	100	100
71	DL	130/135 (96%)	130 (100%)	0	0	100	100
71	a	132/135 (98%)	130 (98%)	2 (2%)	0	100	100
72	DM	70/105 (67%)	67 (96%)	3 (4%)	0	100	100
72	b	69/105 (66%)	68 (99%)	1 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
73	DN	95/119 (80%)	93 (98%)	2 (2%)	0	100	100
73	c	96/119 (81%)	94 (98%)	2 (2%)	0	100	100
74	DO	79/82 (96%)	72 (91%)	7 (9%)	0	100	100
74	d	79/82 (96%)	75 (95%)	4 (5%)	0	100	100
75	DP	60/67 (90%)	55 (92%)	5 (8%)	0	100	100
75	e	60/67 (90%)	57 (95%)	3 (5%)	0	100	100
76	DQ	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
76	f	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
77	DR	54/63 (86%)	52 (96%)	2 (4%)	0	100	100
77	g	58/63 (92%)	54 (93%)	4 (7%)	0	100	100
78	DS	68/193 (35%)	61 (90%)	7 (10%)	0	100	100
78	h	68/193 (35%)	53 (78%)	13 (19%)	2 (3%)	3	19
79	AR	308/317 (97%)	285 (92%)	22 (7%)	1 (0%)	37	65
79	DT	309/317 (98%)	286 (93%)	22 (7%)	1 (0%)	37	65
80	l1	215/217 (99%)	132 (61%)	74 (34%)	9 (4%)	2	14
81	12	12/165 (7%)	12 (100%)	0	0	100	100
All	All	22290/24658 (90%)	21374 (96%)	847 (4%)	69 (0%)	37	65

All (69) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
10	p	206	SER
45	i	54	LYS
54	J	162	LEU
59	O	37	VAL
59	O	130	SER
59	O	131	ASP
62	R	7	PRO
78	h	134	LYS
78	h	161	ARG
9	BB	17	GLN
10	BC	125	ASP
14	BG	136	ALA
20	BM	168	ALA
30	BW	2	ALA
37	CD	29	LYS

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Mol	Chain	Res	Type
48	CO	75	GLY
58	CY	27	ALA
58	CY	31	THR
65	DF	80	LYS
65	DF	82	PRO
79	DT	291	TRP
80	l1	43	PRO
80	l1	80	LEU
80	l1	88	ASP
80	l1	95	LYS
45	CL	43	PRO
45	CL	80	ALA
45	CL	94	THR
40	AM	49	LEU
45	i	43	PRO
45	i	62	ALA
45	i	76	PRO
57	M	88	PRO
66	V	113	VAL
16	BI	152	VAL
40	CG	49	LEU
53	CT	122	GLU
80	l1	180	VAL
9	o	230	GLU
23	5	20	ALA
58	N	30	LYS
20	BM	171	GLU
31	AD	99	ASP
51	G	259	GLN
23	BP	20	ALA
23	BP	24	GLU
80	l1	87	VAL
45	CL	51	ALA
45	i	60	ASN
54	CU	156	THR
60	DA	12	SER
7	m	44	TYR
30	AC	3	LYS
45	i	40	ASP
59	O	41	LEU
14	BG	137	SER
48	CO	29	TRP

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Mol	Chain	Res	Type
57	CX	17	GLN
58	CY	29	LYS
80	11	176	GLU
59	O	110	GLY
79	AR	147	GLY
30	AC	21	ILE
10	BC	127	SER
54	CU	141	GLY
80	11	36	VAL
57	M	86	ILE
80	11	167	VAL
45	CL	56	SER

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	189/194 (97%)	189 (100%)	0	100	100
4	j	190/194 (98%)	188 (99%)	2 (1%)	70	82
5	AX	325/328 (99%)	321 (99%)	4 (1%)	67	80
5	k	326/328 (99%)	324 (99%)	2 (1%)	84	91
6	AY	288/292 (99%)	286 (99%)	2 (1%)	81	89
6	l	290/292 (99%)	287 (99%)	3 (1%)	73	84
7	AZ	247/252 (98%)	242 (98%)	5 (2%)	50	71
7	m	250/252 (99%)	247 (99%)	3 (1%)	67	80
8	BA	132/154 (86%)	132 (100%)	0	100	100
8	n	136/154 (88%)	135 (99%)	1 (1%)	81	89
9	BB	191/204 (94%)	190 (100%)	1 (0%)	86	92
9	o	192/204 (94%)	191 (100%)	1 (0%)	86	92
10	BC	192/216 (89%)	191 (100%)	1 (0%)	86	92
10	p	197/216 (91%)	196 (100%)	1 (0%)	86	92

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	BD	168/170 (99%)	168 (100%)	0	100	100
11	q	169/170 (99%)	168 (99%)	1 (1%)	84	91
12	BE	176/186 (95%)	176 (100%)	0	100	100
12	r	178/186 (96%)	177 (99%)	1 (1%)	84	91
13	BF	146/149 (98%)	144 (99%)	2 (1%)	62	78
13	s	146/149 (98%)	144 (99%)	2 (1%)	62	78
14	BG	166/168 (99%)	162 (98%)	4 (2%)	44	67
14	t	166/168 (99%)	165 (99%)	1 (1%)	84	91
15	BH	107/109 (98%)	106 (99%)	1 (1%)	75	87
15	u	108/109 (99%)	106 (98%)	2 (2%)	52	72
16	BI	177/178 (99%)	175 (99%)	2 (1%)	70	82
16	v	177/178 (99%)	176 (99%)	1 (1%)	84	91
17	BJ	166/167 (99%)	164 (99%)	2 (1%)	67	80
17	w	166/167 (99%)	165 (99%)	1 (1%)	84	91
18	BK	145/154 (94%)	142 (98%)	3 (2%)	48	69
18	x	143/154 (93%)	143 (100%)	0	100	100
19	BL	153/154 (99%)	153 (100%)	0	100	100
19	y	153/154 (99%)	153 (100%)	0	100	100
20	BM	139/153 (91%)	138 (99%)	1 (1%)	81	89
20	z	146/153 (95%)	146 (100%)	0	100	100
21	0	155/157 (99%)	155 (100%)	0	100	100
21	BN	155/157 (99%)	154 (99%)	1 (1%)	84	91
22	2	133/134 (99%)	133 (100%)	0	100	100
22	BO	133/134 (99%)	132 (99%)	1 (1%)	79	88
23	5	93/112 (83%)	93 (100%)	0	100	100
23	BP	94/112 (84%)	90 (96%)	4 (4%)	25	51
24	6	101/104 (97%)	101 (100%)	0	100	100
24	BQ	101/104 (97%)	101 (100%)	0	100	100
25	7	97/127 (76%)	96 (99%)	1 (1%)	73	84
25	BR	93/127 (73%)	91 (98%)	2 (2%)	47	68
26	8	108/121 (89%)	108 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
26	BS	106/121 (88%)	106 (100%)	0	100	100
27	9	111/112 (99%)	110 (99%)	1 (1%)	75	87
27	BT	110/112 (98%)	109 (99%)	1 (1%)	75	87
28	AA	117/118 (99%)	117 (100%)	0	100	100
28	BU	117/118 (99%)	117 (100%)	0	100	100
29	AB	120/121 (99%)	120 (100%)	0	100	100
29	BV	120/121 (99%)	120 (100%)	0	100	100
30	AC	48/49 (98%)	48 (100%)	0	100	100
30	BW	48/49 (98%)	48 (100%)	0	100	100
31	AD	84/90 (93%)	84 (100%)	0	100	100
31	BX	81/90 (90%)	81 (100%)	0	100	100
32	AE	98/100 (98%)	98 (100%)	0	100	100
32	BY	98/100 (98%)	98 (100%)	0	100	100
33	AF	109/115 (95%)	109 (100%)	0	100	100
33	BZ	110/115 (96%)	108 (98%)	2 (2%)	54	73
34	AG	91/92 (99%)	89 (98%)	2 (2%)	47	68
34	CA	94/92 (102%)	94 (100%)	0	100	100
35	AH	94/102 (92%)	93 (99%)	1 (1%)	70	82
35	CB	99/102 (97%)	97 (98%)	2 (2%)	50	71
36	AI	106/106 (100%)	106 (100%)	0	100	100
36	CC	104/106 (98%)	103 (99%)	1 (1%)	73	84
37	AJ	77/79 (98%)	76 (99%)	1 (1%)	65	79
37	CD	79/79 (100%)	79 (100%)	0	100	100
38	AK	70/73 (96%)	70 (100%)	0	100	100
38	CE	70/73 (96%)	70 (100%)	0	100	100
39	AL	68/69 (99%)	68 (100%)	0	100	100
39	CF	69/69 (100%)	69 (100%)	0	100	100
40	AM	46/47 (98%)	46 (100%)	0	100	100
40	CG	46/47 (98%)	45 (98%)	1 (2%)	47	68
41	AN	47/47 (100%)	46 (98%)	1 (2%)	48	69
41	CH	48/47 (102%)	48 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
42	AO	24/24 (100%)	24 (100%)	0	100	100
42	CI	23/24 (96%)	23 (100%)	0	100	100
43	AP	88/91 (97%)	87 (99%)	1 (1%)	70	82
43	CJ	90/91 (99%)	88 (98%)	2 (2%)	47	68
44	AQ	72/73 (99%)	72 (100%)	0	100	100
44	CK	72/73 (99%)	71 (99%)	1 (1%)	62	78
45	CL	86/212 (41%)	83 (96%)	3 (4%)	31	57
45	i	99/212 (47%)	97 (98%)	2 (2%)	50	71
47	C	176/215 (82%)	176 (100%)	0	100	100
47	CN	176/215 (82%)	174 (99%)	2 (1%)	70	82
48	CO	194/229 (85%)	190 (98%)	4 (2%)	48	69
48	D	194/229 (85%)	194 (100%)	0	100	100
49	CP	174/198 (88%)	174 (100%)	0	100	100
49	E	175/198 (88%)	175 (100%)	0	100	100
50	CQ	174/196 (89%)	171 (98%)	3 (2%)	56	74
50	F	174/196 (89%)	172 (99%)	2 (1%)	70	82
51	CR	218/220 (99%)	217 (100%)	1 (0%)	86	92
51	G	218/220 (99%)	216 (99%)	2 (1%)	75	87
52	CS	178/197 (90%)	178 (100%)	0	100	100
52	H	178/197 (90%)	177 (99%)	1 (1%)	84	91
53	CT	203/204 (100%)	200 (98%)	3 (2%)	60	76
53	I	195/204 (96%)	188 (96%)	7 (4%)	30	56
54	CU	163/167 (98%)	162 (99%)	1 (1%)	84	91
54	J	166/167 (99%)	166 (100%)	0	100	100
55	CV	157/160 (98%)	155 (99%)	2 (1%)	65	79
55	K	157/160 (98%)	156 (99%)	1 (1%)	84	91
56	CW	153/160 (96%)	152 (99%)	1 (1%)	81	89
56	L	153/160 (96%)	151 (99%)	2 (1%)	65	79
57	CX	87/104 (84%)	87 (100%)	0	100	100
57	M	90/104 (86%)	90 (100%)	0	100	100
58	CY	122/134 (91%)	120 (98%)	2 (2%)	58	75

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
58	N	124/134 (92%)	123 (99%)	1 (1%)	79	88
59	CZ	98/123 (80%)	96 (98%)	2 (2%)	50	71
59	O	98/123 (80%)	93 (95%)	5 (5%)	20	46
60	DA	129/130 (99%)	129 (100%)	0	100	100
60	P	129/130 (99%)	129 (100%)	0	100	100
61	DB	97/102 (95%)	97 (100%)	0	100	100
61	Q	97/102 (95%)	96 (99%)	1 (1%)	73	84
62	DC	102/121 (84%)	100 (98%)	2 (2%)	50	71
62	R	111/121 (92%)	109 (98%)	2 (2%)	54	73
63	DD	114/116 (98%)	114 (100%)	0	100	100
63	S	113/116 (97%)	113 (100%)	0	100	100
64	DE	112/122 (92%)	109 (97%)	3 (3%)	40	64
64	T	111/122 (91%)	110 (99%)	1 (1%)	75	87
65	DF	126/129 (98%)	121 (96%)	5 (4%)	27	52
65	U	128/129 (99%)	126 (98%)	2 (2%)	58	75
66	DG	113/117 (97%)	112 (99%)	1 (1%)	75	87
66	V	112/117 (96%)	111 (99%)	1 (1%)	75	87
67	DH	90/105 (86%)	86 (96%)	4 (4%)	24	51
67	W	92/105 (88%)	89 (97%)	3 (3%)	33	59
68	DI	71/71 (100%)	71 (100%)	0	100	100
68	X	71/71 (100%)	71 (100%)	0	100	100
69	DJ	112/113 (99%)	110 (98%)	2 (2%)	54	73
69	Y	112/113 (99%)	112 (100%)	0	100	100
70	DK	116/118 (98%)	114 (98%)	2 (2%)	56	74
70	Z	116/118 (98%)	115 (99%)	1 (1%)	75	87
71	DL	109/112 (97%)	108 (99%)	1 (1%)	75	87
71	a	111/112 (99%)	111 (100%)	0	100	100
72	DM	64/85 (75%)	64 (100%)	0	100	100
72	b	63/85 (74%)	63 (100%)	0	100	100
73	DN	83/102 (81%)	81 (98%)	2 (2%)	44	67
73	c	84/102 (82%)	84 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
74	DO	72/73 (99%)	72 (100%)	0	100	100
74	d	72/73 (99%)	72 (100%)	0	100	100
75	DP	54/58 (93%)	54 (100%)	0	100	100
75	e	54/58 (93%)	54 (100%)	0	100	100
76	DQ	47/48 (98%)	47 (100%)	0	100	100
76	f	47/48 (98%)	46 (98%)	1 (2%)	48	69
77	DR	48/54 (89%)	48 (100%)	0	100	100
77	g	51/54 (94%)	51 (100%)	0	100	100
78	DS	62/175 (35%)	60 (97%)	2 (3%)	34	60
78	h	62/175 (35%)	61 (98%)	1 (2%)	58	75
79	AR	258/263 (98%)	258 (100%)	0	100	100
79	DT	259/263 (98%)	256 (99%)	3 (1%)	67	80
80	l1	196/196 (100%)	188 (96%)	8 (4%)	26	52
81	l2	11/137 (8%)	11 (100%)	0	100	100
All	All	19118/20781 (92%)	18947 (99%)	171 (1%)	75	87

All (171) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	j	204	MET
4	j	226	SER
5	k	3	HIS
5	k	386	ASP
6	l	99	ARG
6	l	121	TYR
6	l	187	LYS
7	m	7	PHE
7	m	81	HIS
7	m	221	SER
8	n	104	TYR
9	o	17	GLN
10	p	27	LEU
11	q	2	LYS
12	r	92	HIS
13	s	13	ARG
13	s	68	HIS
14	t	4	SER

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Mol	Chain	Res	Type
15	u	103	SER
15	u	121	ARG
16	v	188	ARG
17	w	26	LYS
25	7	56	ARG
27	9	3	LYS
34	AG	37	SER
34	AG	92	LYS
35	AH	67	LYS
37	AJ	98	ARG
41	AN	38	LYS
43	AP	92	GLU
45	i	93	ARG
45	i	163	GLN
50	F	77	ARG
50	F	167	ASP
51	G	57	ASN
51	G	257	ARG
52	H	116	HIS
53	I	25	ARG
53	I	81	HIS
53	I	116	GLN
53	I	119	ASN
53	I	161	GLU
53	I	193	LYS
53	I	223	ARG
55	K	125	LYS
56	L	57	ARG
56	L	168	ARG
58	N	67	ARG
59	O	33	ARG
59	O	114	LYS
59	O	126	TRP
59	O	131	ASP
59	O	134	ASN
61	Q	119	ASP
62	R	10	ARG
62	R	80	LEU
64	T	80	ARG
65	U	115	ARG
65	U	128	PHE
66	V	63	ARG

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Mol	Chain	Res	Type
67	W	51	LYS
67	W	88	ARG
67	W	100	LYS
70	Z	107	PHE
76	f	40	ARG
78	h	168	CYS
5	AX	172	SER
5	AX	226	PHE
5	AX	272	TYR
5	AX	365	PHE
6	AY	99	ARG
6	AY	145	GLN
7	AZ	4	GLN
7	AZ	81	HIS
7	AZ	136	GLU
7	AZ	142	PHE
7	AZ	244	HIS
9	BB	155	ASN
10	BC	121	LYS
13	BF	13	ARG
13	BF	168	ASP
14	BG	4	SER
14	BG	13	HIS
14	BG	45	LYS
14	BG	131	LYS
15	BH	23	ASN
16	BI	109	ARG
16	BI	153	ASN
17	BJ	75	ARG
17	BJ	118	ARG
18	BK	30	ARG
18	BK	118	GLN
18	BK	180	LYS
20	BM	37	SER
21	BN	55	SER
22	BO	83	ARG
23	BP	14	LYS
23	BP	28	PHE
23	BP	44	ASP
23	BP	61	ASP
25	BR	86	SER
25	BR	102	LYS

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Mol	Chain	Res	Type
27	BT	3	LYS
33	BZ	17[A]	LYS
33	BZ	17[B]	LYS
35	CB	106[A]	LYS
35	CB	106[B]	LYS
36	CC	65	ASN
40	CG	21	ARG
43	CJ	44	ASP
43	CJ	45	ARG
44	CK	21	SER
47	CN	79	ARG
47	CN	168	HIS
48	CO	31	ASP
48	CO	74	GLN
48	CO	92	GLN
48	CO	200	SER
50	CQ	77	ARG
50	CQ	183	LEU
50	CQ	225	LYS
51	CR	113	ARG
53	CT	93	LYS
53	CT	215	ARG
53	CT	228	LYS
54	CU	30	LEU
55	CV	125	LYS
55	CV	177	SER
56	CW	157	ASP
58	CY	26	LYS
58	CY	67	ARG
59	CZ	99	GLU
59	CZ	139	HIS
62	DC	12	PHE
62	DC	80	LEU
64	DE	5	ARG
64	DE	80	ARG
64	DE	105	ASP
65	DF	25	ARG
65	DF	36	ARG
65	DF	116	LEU
65	DF	120	ARG
65	DF	126	ARG
66	DG	138	GLN

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Mol	Chain	Res	Type
67	DH	46	GLN
67	DH	48	ASN
67	DH	51	LYS
67	DH	100	LYS
69	DJ	28	ARG
69	DJ	37	PHE
70	DK	7	ARG
70	DK	66	SER
71	DL	127	LYS
73	DN	37	LYS
73	DN	74	CYS
78	DS	122	ARG
78	DS	161	ARG
79	DT	55	TYR
79	DT	80	TYR
79	DT	141	CYS
80	l1	1	MET
80	l1	3	LYS
80	l1	47	LYS
80	l1	122	ARG
80	l1	145	TYR
80	l1	161	LYS
80	l1	197	ASN
80	l1	215	ARG
45	CL	33	ASN
45	CL	55	LYS
45	CL	65	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (43) such sidechains are listed below:

Mol	Chain	Res	Type
10	p	192	HIS
19	y	9	GLN
23	5	30	GLN
23	5	62	ASN
29	AB	40	HIS
29	AB	62	HIS
32	AE	68	ASN
51	G	36	HIS
51	G	197	HIS
51	G	209	HIS
52	H	63	GLN

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Mol	Chain	Res	Type
69	Y	80	ASN
76	f	23	HIS
79	AR	53	ASN
79	AR	102	GLN
4	AW	187	HIS
9	BB	218	GLN
11	BD	163	GLN
13	BF	109	HIS
18	BK	118	GLN
18	BK	120	ASN
20	BM	130	ASN
21	BN	164	GLN
22	BO	66	ASN
22	BO	95	HIS
27	BT	120	GLN
30	BW	43	HIS
36	CC	50	ASN
47	CN	33	ASN
47	CN	49	ASN
48	CO	74	GLN
48	CO	149	GLN
54	CU	27	GLN
54	CU	48	ASN
63	DD	76	GLN
68	DI	21	ASN
68	DI	33	GLN
74	DO	51	GLN
79	DT	53	ASN
79	DT	102	GLN
80	11	57	GLN
80	11	108	ASN
80	11	182	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3215/3359 (95%)	617 (19%)	37 (1%)
1	AS	3054/3359 (90%)	502 (16%)	34 (1%)
2	3	120/121 (99%)	9 (7%)	0
2	AT	120/121 (99%)	9 (7%)	0
3	4	156/158 (98%)	23 (14%)	3 (1%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
3	AU	155/158 (98%)	20 (12%)	2 (1%)
46	B	1725/1787 (96%)	426 (24%)	48 (2%)
46	CM	1697/1787 (94%)	420 (24%)	45 (2%)
All	All	10242/10850 (94%)	2026 (19%)	169 (1%)

All (2026) 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
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

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Mol	Chain	Res	Type
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	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
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	450	G
1	1	452	A
1	1	453	U
1	1	454	G

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Mol	Chain	Res	Type
1	1	478	G
1	1	479	C
1	1	480	G
1	1	481	G
1	1	482	U
1	1	484	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	600	U
1	1	601	U
1	1	602	A
1	1	609	A
1	1	618	U
1	1	619	A
1	1	620	A
1	1	635	C
1	1	647	A
1	1	658	A
1	1	675	A
1	1	679	U
1	1	681	U

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Mol	Chain	Res	Type
1	1	688	A
1	1	689	A
1	1	703	A
1	1	710	G
1	1	713	A
1	1	717	A
1	1	723	G
1	1	730	A
1	1	732	U
1	1	760	U
1	1	763	U
1	1	772	U
1	1	773	U
1	1	776	A
1	1	777	G
1	1	780	A
1	1	781	G
1	1	802	A
1	1	813	A
1	1	826	A
1	1	845	C
1	1	857	C
1	1	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
1	1	921	A
1	1	933	G
1	1	940	C
1	1	949	G
1	1	955	C
1	1	956	U
1	1	958	A
1	1	959	G
1	1	970	G

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Mol	Chain	Res	Type
1	1	977	U
1	1	990	G
1	1	991	U
1	1	996	C
1	1	997	G
1	1	998	A
1	1	1006	G
1	1	1011	C
1	1	1012	U
1	1	1013	U
1	1	1014	G
1	1	1017	G
1	1	1020	G
1	1	1021	A
1	1	1022	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
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

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Mol	Chain	Res	Type
1	1	1156	C
1	1	1164	U
1	1	1174	G
1	1	1176	A
1	1	1177	U
1	1	1178	G
1	1	1188	C
1	1	1189	A
1	1	1192	C
1	1	1197	C
1	1	1204	U
1	1	1205	G
1	1	1215	C
1	1	1218	G
1	1	1223	C
1	1	1228	C
1	1	1229	G
1	1	1232	G
1	1	1234	C
1	1	1235	C
1	1	1241	A
1	1	1242	G
1	1	1244	C
1	1	1247	A
1	1	1248	A
1	1	1249	U
1	1	1250	C
1	1	1253	C
1	1	1254	U
1	1	1255	A
1	1	1257	G
1	1	1258	G
1	1	1259	A
1	1	1260	G
1	1	1261	U
1	1	1262	G
1	1	1263	U
1	1	1264	G
1	1	1265	U
1	1	1271	C
1	1	1274	A
1	1	1277	G

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Mol	Chain	Res	Type
1	1	1281	G
1	1	1282	A
1	1	1283	A
1	1	1303	G
1	1	1304	A
1	1	1305	U
1	1	1309	G
1	1	1312	C
1	1	1326	A
1	1	1345	G
1	1	1346	U
1	1	1347	U
1	1	1348	U
1	1	1349	U
1	1	1382	A
1	1	1395	U
1	1	1415	A
1	1	1417	G
1	1	1421	U
1	1	1427	G
1	1	1430	G
1	1	1433	C
1	1	1442	A
1	1	1446	G
1	1	1465	C
1	1	1471	A
1	1	1477	A
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

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Mol	Chain	Res	Type
1	1	1562	G
1	1	1563	A
1	1	1565	U
1	1	1566	U
1	1	1567	U
1	1	1568	U
1	1	1569	C
1	1	1571	G
1	1	1572	G
1	1	1574	C
1	1	1576	A
1	1	1577	C
1	1	1585	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	1654	G
1	1	1679	A
1	1	1720	U
1	1	1721	C
1	1	1732	G
1	1	1746	A
1	1	1747	G
1	1	1755	U
1	1	1757	A
1	1	1758	U
1	1	1759	U
1	1	1760	U
1	1	1761	U
1	1	1762	G
1	1	1763	C
1	1	1776	G
1	1	1793	A
1	1	1804	G
1	1	1809	A

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Mol	Chain	Res	Type
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
1	1	2088	G
1	1	2089	G
1	1	2091	A
1	1	2092	C
1	1	2099	G
1	1	2100	G
1	1	2109	A
1	1	2118	U
1	1	2122	A
1	1	2136	A
1	1	2147	G
1	1	2149	G
1	1	2183	U
1	1	2184	G
1	1	2185	A
1	1	2186	A
1	1	2187	U
1	1	2188	G
1	1	2222	A

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Mol	Chain	Res	Type
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
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	2421	A
1	1	2422	C
1	1	2425	G
1	1	2426	G
1	1	2427	A

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Mol	Chain	Res	Type
1	1	2428	G
1	1	2431	U
1	1	2432	G
1	1	2433	U
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	2450	U
1	1	2451	C
1	1	2452	G
1	1	2453	G
1	1	2455	G
1	1	2456	C
1	1	2457	C
1	1	2458	G
1	1	2459	G
1	1	2460	U
1	1	2464	A
1	1	2465	U
1	1	2466	A
1	1	2467	C
1	1	2468	C
1	1	2470	C
1	1	2471	U
1	1	2473	C
1	1	2474	C
1	1	2476	C
1	1	2479	U
1	1	2480	A
1	1	2481	G
1	1	2482	U
1	1	2483	U
1	1	2484	U
1	1	2489	A

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Mol	Chain	Res	Type
1	1	2492	U
1	1	2493	A
1	1	2511	G
1	1	2513	A
1	1	2515	G
1	1	2516	U
1	1	2517	C
1	1	2518	A
1	1	2519	A
1	1	2520	A
1	1	2521	C
1	1	2529	U
1	1	2530	C
1	1	2533	G
1	1	2536	U
1	1	2538	A
1	1	2545	C
1	1	2546	U
1	1	2548	G
1	1	2554	C
1	1	2557	G
1	1	2565	A
1	1	2566	C
1	1	2578	G
1	1	2579	G
1	1	2586	G
1	1	2598	A
1	1	2623	G
1	1	2624	U
1	1	2628	A
1	1	2638	C
1	1	2644	G
1	1	2646	A
1	1	2649	G
1	1	2661	A
1	1	2662	G
1	1	2663	A
1	1	2664	A
1	1	2666	A
1	1	2676	A
1	1	2677	A
1	1	2686	G

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
1	1	2926	U
1	1	2943	A
1	1	2955	C
1	1	2960	C
1	1	2962	G
1	1	2969	G
1	1	2983	A
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	3076	U
1	1	3094	A
1	1	3101	A
1	1	3102	A
1	1	3103	U
1	1	3114	A
1	1	3115	C
1	1	3125	U
1	1	3127	U
1	1	3134	C
1	1	3143	G
1	1	3144	A
1	1	3146	G
1	1	3149	U
1	1	3151	C
1	1	3157	A
1	1	3159	A
1	1	3160	C
1	1	3162	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

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

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Mol	Chain	Res	Type
2	3	73	C
2	3	76	A
2	3	102	A
2	3	112	G
3	4	23	U
3	4	34	U
3	4	35	C
3	4	59	A
3	4	62	C
3	4	63	G
3	4	81	A
3	4	84	C
3	4	85	G
3	4	86	U
3	4	87	G
3	4	92	A
3	4	95	G
3	4	102	U
3	4	104	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	148	G
3	4	152	G
3	4	157	U
46	B	17	C
46	B	25	C
46	B	26	A
46	B	27	U
46	B	34	G
46	B	47	A
46	B	57	G
46	B	66	U
46	B	74	U
46	B	75	U
46	B	76	A
46	B	78	A
46	B	79	C
46	B	81	G
46	B	84	A

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Mol	Chain	Res	Type
46	B	93	A
46	B	104	A
46	B	114	C
46	B	115	G
46	B	123	G
46	B	126	A
46	B	127	G
46	B	128	U
46	B	129	A
46	B	130	C
46	B	138	C
46	B	139	U
46	B	142	G
46	B	143	A
46	B	150	U
46	B	151	G
46	B	152	G
46	B	154	A
46	B	159	U
46	B	166	A
46	B	168	U
46	B	173	G
46	B	174	C
46	B	176	U
46	B	177	A
46	B	179	A
46	B	190	U
46	B	191	U
46	B	193	G
46	B	199	G
46	B	200	A
46	B	202	G
46	B	206	U
46	B	211	A
46	B	214	U
46	B	215	A
46	B	216	A
46	B	217	A
46	B	218	A
46	B	221	U
46	B	224	A
46	B	225	U

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Mol	Chain	Res	Type
46	B	226	G
46	B	230	U
46	B	231	C
46	B	232	G
46	B	233	G
46	B	236	U
46	B	237	C
46	B	238	U
46	B	247	U
46	B	255	A
46	B	259	U
46	B	260	U
46	B	261	C
46	B	262	G
46	B	266	C
46	B	269	A
46	B	270	U
46	B	274	C
46	B	276	U
46	B	277	G
46	B	278	U
46	B	279	G
46	B	283	G
46	B	285	G
46	B	297	A
46	B	312	C
46	B	314	A
46	B	318	U
46	B	319	C
46	B	320	G
46	B	335	G
46	B	336	C
46	B	350	A
46	B	357	A
46	B	358	A
46	B	359	C
46	B	388	G
46	B	398	A
46	B	400	C
46	B	402	G
46	B	414	A
46	B	416	G

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Mol	Chain	Res	Type
46	B	421	G
46	B	422	C
46	B	423	A
46	B	424	G
46	B	432	G
46	B	437	U
46	B	442	C
46	B	446	C
46	B	452	A
46	B	458	A
46	B	466	A
46	B	475	A
46	B	480	U
46	B	482	C
46	B	483	A
46	B	485	G
46	B	486	G
46	B	501	G
46	B	502	U
46	B	503	A
46	B	504	A
46	B	505	U
46	B	506	U
46	B	509	A
46	B	512	G
46	B	513	A
46	B	515	U
46	B	518	A
46	B	519	A
46	B	525	A
46	B	530	U
46	B	534	C
46	B	536	A
46	B	537	G
46	B	539	A
46	B	540	A
46	B	547	G
46	B	553	A
46	B	554	A
46	B	555	G
46	B	556	U
46	B	557	C

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Mol	Chain	Res	Type
46	B	563	C
46	B	566	G
46	B	575	G
46	B	576	U
46	B	580	U
46	B	592	A
46	B	593	G
46	B	604	A
46	B	609	U
46	B	617	A
46	B	618	A
46	B	620	A
46	B	621	A
46	B	639	G
46	B	648	U
46	B	650	G
46	B	652	C
46	B	653	G
46	B	654	G
46	B	656	C
46	B	675	U
46	B	682	A
46	B	686	G
46	B	687	A
46	B	688	G
46	B	694	C
46	B	695	C
46	B	696	U
46	B	697	U
46	B	698	C
46	B	699	U
46	B	700	G
46	B	701	G
46	B	702	G
46	B	703	U
46	B	704	A
46	B	705	G
46	B	707	C
46	B	708	A
46	B	710	U
46	B	711	U
46	B	712	A

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Mol	Chain	Res	Type
46	B	713	U
46	B	714	G
46	B	717	G
46	B	718	A
46	B	719	A
46	B	721	C
46	B	722	A
46	B	723	G
46	B	724	G
46	B	725	A
46	B	729	U
46	B	739	A
46	B	740	A
46	B	741	A
46	B	750	G
46	B	751	U
46	B	756	A
46	B	759	A
46	B	760	G
46	B	762	C
46	B	764	U
46	B	765	U
46	B	766	U
46	B	767	G
46	B	768	C
46	B	770	C
46	B	771	G
46	B	773	A
46	B	778	U
46	B	779	U
46	B	796	A
46	B	798	A
46	B	799	G
46	B	802	C
46	B	803	G
46	B	804	U
46	B	805	U
46	B	807	U
46	B	808	G
46	B	811	U
46	B	812	C
46	B	813	U

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Mol	Chain	Res	Type
46	B	815	U
46	B	817	U
46	B	819	G
46	B	820	U
46	B	821	U
46	B	824	U
46	B	825	U
46	B	826	U
46	B	829	A
46	B	831	G
46	B	840	A
46	B	842	U
46	B	847	A
46	B	848	A
46	B	856	G
46	B	857	G
46	B	869	A
46	B	871	U
46	B	875	C
46	B	877	G
46	B	878	U
46	B	879	U
46	B	881	U
46	B	891	A
46	B	909	A
46	B	910	G
46	B	911	A
46	B	918	A
46	B	920	U
46	B	945	U
46	B	951	A
46	B	973	A
46	B	975	C
46	B	977	A
46	B	988	A
46	B	989	U
46	B	990	A
46	B	997	U
46	B	998	A
46	B	1004	A
46	B	1005	A
46	B	1011	A

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Mol	Chain	Res	Type
46	B	1013	C
46	B	1017	G
46	B	1024	A
46	B	1025	G
46	B	1039	U
46	B	1042	U
46	B	1043	U
46	B	1044	U
46	B	1047	U
46	B	1055	A
46	B	1056	U
46	B	1057	C
46	B	1058	G
46	B	1059	G
46	B	1060	C
46	B	1061	A
46	B	1067	C
46	B	1077	A
46	B	1081	C
46	B	1085	G
46	B	1123	A
46	B	1135	G
46	B	1143	C
46	B	1145	A
46	B	1152	G
46	B	1168	A
46	B	1169	A
46	B	1170	U
46	B	1179	A
46	B	1181	A
46	B	1184	G
46	B	1185	G
46	B	1187	A
46	B	1193	A
46	B	1202	A
46	B	1203	G
46	B	1206	A
46	B	1207	C
46	B	1212	A
46	B	1215	A
46	B	1219	A
46	B	1220	C

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Mol	Chain	Res	Type
46	B	1221	A
46	B	1229	A
46	B	1230	G
46	B	1231	C
46	B	1236	U
46	B	1243	U
46	B	1250	G
46	B	1270	U
46	B	1299	U
46	B	1300	U
46	B	1301	G
46	B	1306	A
46	B	1325	U
46	B	1330	A
46	B	1336	G
46	B	1339	G
46	B	1342	A
46	B	1343	G
46	B	1345	A
46	B	1346	U
46	B	1348	U
46	B	1349	G
46	B	1352	G
46	B	1355	A
46	B	1356	U
46	B	1357	A
46	B	1359	U
46	B	1360	C
46	B	1364	U
46	B	1369	G
46	B	1370	A
46	B	1376	U
46	B	1380	G
46	B	1381	A
46	B	1382	U
46	B	1384	U
46	B	1385	C
46	B	1392	A
46	B	1397	A
46	B	1398	G
46	B	1399	U
46	B	1400	U

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Mol	Chain	Res	Type
46	B	1401	U
46	B	1410	A
46	B	1413	A
46	B	1414	G
46	B	1415	G
46	B	1422	A
46	B	1431	G
46	B	1433	C
46	B	1445	C
46	B	1446	A
46	B	1455	A
46	B	1457	A
46	B	1458	C
46	B	1461	A
46	B	1462	C
46	B	1463	G
46	B	1468	C
46	B	1476	A
46	B	1477	U
46	B	1480	G
46	B	1483	U
46	B	1485	G
46	B	1491	G
46	B	1502	A
46	B	1503	A
46	B	1508	G
46	B	1510	G
46	B	1511	A
46	B	1523	G
46	B	1524	C
46	B	1529	G
46	B	1530	A
46	B	1541	U
46	B	1544	U
46	B	1546	G
46	B	1560	A
46	B	1561	G
46	B	1571	G
46	B	1574	A
46	B	1575	G
46	B	1577	G
46	B	1580	A

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Mol	Chain	Res	Type
46	B	1582	U
46	B	1584	A
46	B	1588	G
46	B	1621	C
46	B	1644	U
46	B	1645	G
46	B	1665	C
46	B	1667	G
46	B	1670	U
46	B	1671	G
46	B	1672	G
46	B	1673	U
46	B	1674	U
46	B	1677	G
46	B	1700	G
46	B	1702	A
46	B	1704	C
46	B	1737	A
46	B	1742	A
46	B	1743	A
46	B	1744	G
46	B	1747	G
46	B	1749	A
46	B	1753	A
46	B	1756	U
46	B	1767	G
46	B	1769	A
46	B	1770	C
46	B	1779	G
46	B	1780	G
46	B	1781	A
46	B	1782	U
46	B	1783	C
1	AS	24	U
1	AS	25	A
1	AS	29	G
1	AS	39	A
1	AS	42	A
1	AS	48	A
1	AS	56	A
1	AS	58	G
1	AS	59	A

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Mol	Chain	Res	Type
1	AS	64	A
1	AS	65	A
1	AS	91	G
1	AS	98	A
1	AS	104	C
1	AS	108	A
1	AS	109	G
1	AS	110	C
1	AS	120	A
1	AS	121	A
1	AS	134	U
1	AS	135	G
1	AS	155	A
1	AS	156	A
1	AS	164	U
1	AS	169	G
1	AS	172	C
1	AS	173	C
1	AS	175	G
1	AS	186	A
1	AS	189	U
1	AS	190	U
1	AS	199	C
1	AS	205	G
1	AS	209	C
1	AS	212	A
1	AS	217	G
1	AS	218	A
1	AS	219	G
1	AS	230	G
1	AS	236	A
1	AS	239	A
1	AS	240	C
1	AS	243	G
1	AS	245	G
1	AS	249	G
1	AS	250	U
1	AS	251	G
1	AS	269	G
1	AS	286	U
1	AS	295	A
1	AS	305	U

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Mol	Chain	Res	Type
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	441	U
1	AS	443	G
1	AS	445	A
1	AS	479	C
1	AS	480	G
1	AS	481	G
1	AS	506	A
1	AS	517	A
1	AS	519	U
1	AS	531	G
1	AS	532	U
1	AS	538	G
1	AS	539	G
1	AS	541	U
1	AS	542	U
1	AS	543	C
1	AS	544	U
1	AS	545	G
1	AS	546	C
1	AS	555	A
1	AS	556	U

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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	970	G
1	AS	976	A
1	AS	977	U
1	AS	990	G
1	AS	991	U
1	AS	996	C
1	AS	997	G
1	AS	998	A
1	AS	1006	G
1	AS	1011	C
1	AS	1012	U
1	AS	1014	G
1	AS	1019	U
1	AS	1020	G
1	AS	1022	A
1	AS	1023	A
1	AS	1024	U
1	AS	1025	G
1	AS	1026	A
1	AS	1027	C
1	AS	1030	U
1	AS	1033	C
1	AS	1043	A
1	AS	1045	C
1	AS	1060	A
1	AS	1061	A

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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	1312	C
1	AS	1326	A
1	AS	1345	G
1	AS	1346	U
1	AS	1347	U
1	AS	1348	U
1	AS	1350	G
1	AS	1351	A
1	AS	1382	A

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Mol	Chain	Res	Type
1	AS	1395	U
1	AS	1415	A
1	AS	1417	G
1	AS	1421	U
1	AS	1426	U
1	AS	1427	G
1	AS	1430	G
1	AS	1433	C
1	AS	1442	A
1	AS	1446	G
1	AS	1465	C
1	AS	1471	A
1	AS	1477	A
1	AS	1484	G
1	AS	1498	C
1	AS	1504	C
1	AS	1520	A
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	1571	G
1	AS	1572	G
1	AS	1574	C
1	AS	1576	A
1	AS	1577	C
1	AS	1585	A
1	AS	1589	A
1	AS	1601	A
1	AS	1603	U
1	AS	1624	C
1	AS	1625	U
1	AS	1635	C
1	AS	1638	A
1	AS	1639	A
1	AS	1641	U
1	AS	1648	G

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Mol	Chain	Res	Type
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	1759	U
1	AS	1761	U
1	AS	1762	G
1	AS	1763	C
1	AS	1776	G
1	AS	1793	A
1	AS	1804	G
1	AS	1809	A
1	AS	1810	A
1	AS	1811	U
1	AS	1812	A
1	AS	1814	U
1	AS	1815	U
1	AS	1816	U
1	AS	1817	U
1	AS	1835	A
1	AS	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	1922	C
1	AS	1944	G
1	AS	2070	A
1	AS	2071	A
1	AS	2078	A
1	AS	2088	G
1	AS	2089	G

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Mol	Chain	Res	Type
1	AS	2091	A
1	AS	2092	C
1	AS	2099	G
1	AS	2100	G
1	AS	2109	A
1	AS	2118	U
1	AS	2122	A
1	AS	2136	A
1	AS	2147	G
1	AS	2149	G
1	AS	2183	U
1	AS	2184	G
1	AS	2185	A
1	AS	2186	A
1	AS	2187	U
1	AS	2188	G
1	AS	2201	A
1	AS	2222	A
1	AS	2227	G
1	AS	2233	A
1	AS	2234	A
1	AS	2250	G
1	AS	2251	G
1	AS	2257	A
1	AS	2259	A
1	AS	2260	U
1	AS	2276	U
1	AS	2285	G
1	AS	2286	C
1	AS	2288	U
1	AS	2291	A
1	AS	2292	U
1	AS	2293	G
1	AS	2312	U
1	AS	2313	G
1	AS	2314	U
1	AS	2351	A
1	AS	2352	C
1	AS	2353	G
1	AS	2363	G
1	AS	2366	U
1	AS	2371	G

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Mol	Chain	Res	Type
1	AS	2372	G
1	AS	2375	A
1	AS	2380	A
1	AS	2381	G
1	AS	2382	A
1	AS	2389	U
1	AS	2413	G
1	AS	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	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
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

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Mol	Chain	Res	Type
1	AS	2700	G
1	AS	2701	U
1	AS	2724	U
1	AS	2725	G
1	AS	2734	A
1	AS	2745	C
1	AS	2749	G
1	AS	2750	G
1	AS	2768	G
1	AS	2770	C
1	AS	2771	A
1	AS	2772	G
1	AS	2773	A
1	AS	2774	A
1	AS	2782	C
1	AS	2786	G
1	AS	2789	A
1	AS	2790	U
1	AS	2814	U
1	AS	2815	U
1	AS	2817	A
1	AS	2833	U
1	AS	2839	C
1	AS	2843	G
1	AS	2844	A
1	AS	2847	U
1	AS	2859	A
1	AS	2861	C
1	AS	2866	C
1	AS	2870	G
1	AS	2871	C
1	AS	2886	G
1	AS	2895	U
1	AS	2907	U
1	AS	2908	A
1	AS	2911	G
1	AS	2914	C
1	AS	2919	G
1	AS	2920	C
1	AS	2923	G
1	AS	2926	U
1	AS	2943	A

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Mol	Chain	Res	Type
1	AS	2955	C
1	AS	2960	C
1	AS	2962	G
1	AS	2969	G
1	AS	2983	A
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	3159	A
1	AS	3160	C
1	AS	3161	U
1	AS	3163	U
1	AS	3164	U
1	AS	3165	U
1	AS	3171	C
1	AS	3172	U
1	AS	3182	C
1	AS	3183	A
1	AS	3184	G
1	AS	3194	G
1	AS	3208	A
1	AS	3210	A

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
46	CM	17	C
46	CM	25	C
46	CM	26	A
46	CM	27	U
46	CM	34	G
46	CM	47	A
46	CM	57	G
46	CM	65	A
46	CM	66	U
46	CM	74	U
46	CM	75	U
46	CM	76	A
46	CM	78	A
46	CM	79	C
46	CM	81	G
46	CM	84	A
46	CM	104	A
46	CM	114	C
46	CM	115	G
46	CM	123	G
46	CM	126	A
46	CM	127	G
46	CM	128	U
46	CM	129	A

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Mol	Chain	Res	Type
46	CM	138	C
46	CM	139	U
46	CM	141	G
46	CM	142	G
46	CM	143	A
46	CM	150	U
46	CM	151	G
46	CM	152	G
46	CM	154	A
46	CM	159	U
46	CM	166	A
46	CM	168	U
46	CM	173	G
46	CM	176	U
46	CM	177	A
46	CM	190	U
46	CM	191	U
46	CM	193	G
46	CM	199	G
46	CM	200	A
46	CM	202	G
46	CM	206	U
46	CM	211	A
46	CM	214	U
46	CM	215	A
46	CM	216	A
46	CM	217	A
46	CM	218	A
46	CM	220	A
46	CM	221	U
46	CM	223	A
46	CM	224	A
46	CM	225	U
46	CM	226	G
46	CM	227	C
46	CM	228	C
46	CM	229	U
46	CM	230	U
46	CM	231	C
46	CM	232	G
46	CM	233	G
46	CM	234	G

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Mol	Chain	Res	Type
46	CM	236	U
46	CM	237	C
46	CM	238	U
46	CM	239	U
46	CM	240	U
46	CM	247	U
46	CM	255	A
46	CM	259	U
46	CM	260	U
46	CM	261	C
46	CM	262	G
46	CM	266	C
46	CM	269	A
46	CM	270	U
46	CM	273	C
46	CM	274	C
46	CM	275	U
46	CM	276	U
46	CM	277	G
46	CM	278	U
46	CM	279	G
46	CM	283	G
46	CM	285	G
46	CM	297	A
46	CM	312	C
46	CM	314	A
46	CM	318	U
46	CM	319	C
46	CM	320	G
46	CM	335	G
46	CM	336	C
46	CM	350	A
46	CM	357	A
46	CM	358	A
46	CM	359	C
46	CM	388	G
46	CM	398	A
46	CM	400	C
46	CM	402	G
46	CM	414	A
46	CM	416	G
46	CM	421	G

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Mol	Chain	Res	Type
46	CM	422	C
46	CM	423	A
46	CM	424	G
46	CM	432	G
46	CM	437	U
46	CM	442	C
46	CM	446	C
46	CM	452	A
46	CM	458	A
46	CM	466	A
46	CM	475	A
46	CM	480	U
46	CM	482	C
46	CM	483	A
46	CM	485	G
46	CM	486	G
46	CM	502	U
46	CM	503	A
46	CM	504	A
46	CM	505	U
46	CM	506	U
46	CM	509	A
46	CM	512	G
46	CM	513	A
46	CM	515	U
46	CM	518	A
46	CM	519	A
46	CM	525	A
46	CM	530	U
46	CM	534	C
46	CM	536	A
46	CM	537	G
46	CM	539	A
46	CM	540	A
46	CM	547	G
46	CM	553	A
46	CM	554	A
46	CM	556	U
46	CM	557	C
46	CM	563	C
46	CM	566	G
46	CM	575	G

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Mol	Chain	Res	Type
46	CM	576	U
46	CM	592	A
46	CM	593	G
46	CM	604	A
46	CM	609	U
46	CM	617	A
46	CM	618	A
46	CM	620	A
46	CM	621	A
46	CM	633	A
46	CM	639	G
46	CM	648	U
46	CM	650	G
46	CM	652	C
46	CM	653	G
46	CM	654	G
46	CM	656	C
46	CM	675	U
46	CM	682	A
46	CM	686	G
46	CM	687	A
46	CM	688	G
46	CM	693	U
46	CM	694	C
46	CM	695	C
46	CM	696	U
46	CM	698	C
46	CM	701	G
46	CM	702	G
46	CM	703	U
46	CM	704	A
46	CM	715	G
46	CM	716	C
46	CM	717	G
46	CM	718	A
46	CM	719	A
46	CM	721	C
46	CM	722	A
46	CM	723	G
46	CM	724	G
46	CM	729	U
46	CM	739	A

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Mol	Chain	Res	Type
46	CM	740	A
46	CM	741	A
46	CM	750	G
46	CM	751	U
46	CM	756	A
46	CM	759	A
46	CM	760	G
46	CM	762	C
46	CM	764	U
46	CM	765	U
46	CM	766	U
46	CM	767	G
46	CM	768	C
46	CM	770	C
46	CM	771	G
46	CM	773	A
46	CM	775	A
46	CM	778	U
46	CM	779	U
46	CM	796	A
46	CM	798	A
46	CM	799	G
46	CM	802	C
46	CM	803	G
46	CM	804	U
46	CM	805	U
46	CM	807	U
46	CM	808	G
46	CM	811	U
46	CM	814	A
46	CM	815	U
46	CM	817	U
46	CM	818	U
46	CM	819	G
46	CM	820	U
46	CM	821	U
46	CM	822	G
46	CM	823	G
46	CM	824	U
46	CM	825	U
46	CM	826	U
46	CM	829	A

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Mol	Chain	Res	Type
46	CM	831	G
46	CM	840	A
46	CM	848	A
46	CM	856	G
46	CM	857	G
46	CM	869	A
46	CM	871	U
46	CM	875	C
46	CM	877	G
46	CM	878	U
46	CM	879	U
46	CM	881	U
46	CM	891	A
46	CM	899	G
46	CM	909	A
46	CM	910	G
46	CM	911	A
46	CM	918	A
46	CM	920	U
46	CM	927	G
46	CM	945	U
46	CM	951	A
46	CM	973	A
46	CM	975	C
46	CM	977	A
46	CM	988	A
46	CM	989	U
46	CM	997	U
46	CM	998	A
46	CM	1004	A
46	CM	1005	A
46	CM	1011	A
46	CM	1013	C
46	CM	1017	G
46	CM	1024	A
46	CM	1025	G
46	CM	1039	U
46	CM	1042	U
46	CM	1055	A
46	CM	1056	U
46	CM	1057	C
46	CM	1058	G

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Mol	Chain	Res	Type
46	CM	1059	G
46	CM	1060	C
46	CM	1061	A
46	CM	1067	C
46	CM	1074	U
46	CM	1077	A
46	CM	1081	C
46	CM	1085	G
46	CM	1123	A
46	CM	1135	G
46	CM	1143	C
46	CM	1145	A
46	CM	1152	G
46	CM	1168	A
46	CM	1169	A
46	CM	1170	U
46	CM	1179	A
46	CM	1181	A
46	CM	1184	G
46	CM	1185	G
46	CM	1186	G
46	CM	1187	A
46	CM	1193	A
46	CM	1202	A
46	CM	1203	G
46	CM	1206	A
46	CM	1207	C
46	CM	1212	A
46	CM	1215	A
46	CM	1219	A
46	CM	1220	C
46	CM	1221	A
46	CM	1229	A
46	CM	1230	G
46	CM	1231	C
46	CM	1236	U
46	CM	1243	U
46	CM	1250	G
46	CM	1270	U
46	CM	1284	G
46	CM	1299	U
46	CM	1300	U

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Mol	Chain	Res	Type
46	CM	1301	G
46	CM	1306	A
46	CM	1325	U
46	CM	1330	A
46	CM	1336	G
46	CM	1339	G
46	CM	1342	A
46	CM	1343	G
46	CM	1345	A
46	CM	1346	U
46	CM	1348	U
46	CM	1349	G
46	CM	1352	G
46	CM	1355	A
46	CM	1356	U
46	CM	1357	A
46	CM	1359	U
46	CM	1360	C
46	CM	1364	U
46	CM	1365	C
46	CM	1369	G
46	CM	1370	A
46	CM	1376	U
46	CM	1380	G
46	CM	1381	A
46	CM	1382	U
46	CM	1384	U
46	CM	1385	C
46	CM	1392	A
46	CM	1397	A
46	CM	1398	G
46	CM	1399	U
46	CM	1400	U
46	CM	1401	U
46	CM	1410	A
46	CM	1413	A
46	CM	1414	G
46	CM	1415	G
46	CM	1422	A
46	CM	1431	G
46	CM	1433	C
46	CM	1445	C

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Mol	Chain	Res	Type
46	CM	1446	A
46	CM	1455	A
46	CM	1457	A
46	CM	1458	C
46	CM	1461	A
46	CM	1462	C
46	CM	1463	G
46	CM	1468	C
46	CM	1476	A
46	CM	1477	U
46	CM	1480	G
46	CM	1483	U
46	CM	1491	G
46	CM	1502	A
46	CM	1503	A
46	CM	1508	G
46	CM	1510	G
46	CM	1511	A
46	CM	1523	G
46	CM	1524	C
46	CM	1529	G
46	CM	1530	A
46	CM	1541	U
46	CM	1544	U
46	CM	1546	G
46	CM	1556	A
46	CM	1560	A
46	CM	1561	G
46	CM	1571	G
46	CM	1574	A
46	CM	1575	G
46	CM	1577	G
46	CM	1580	A
46	CM	1582	U
46	CM	1584	A
46	CM	1588	G
46	CM	1621	C
46	CM	1644	U
46	CM	1645	G
46	CM	1665	C
46	CM	1667	G
46	CM	1670	U

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Mol	Chain	Res	Type
46	CM	1671	G
46	CM	1672	G
46	CM	1673	U
46	CM	1737	A
46	CM	1743	A
46	CM	1744	G
46	CM	1747	G
46	CM	1749	A
46	CM	1753	A
46	CM	1756	U
46	CM	1767	G
46	CM	1769	A
46	CM	1770	C
46	CM	1779	G
46	CM	1780	G
46	CM	1781	A
46	CM	1782	U
46	CM	1783	C

All (169) 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	1029	U
1	1	1060	A
1	1	1099	A
1	1	1346	U
1	1	1347	U
1	1	1559	C
1	1	1561	U
1	1	1576	A
1	1	1762	G
1	1	1815	U
1	1	1943	G
1	1	2090	U
1	1	2182	C

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Mol	Chain	Res	Type
1	1	2183	U
1	1	2441	G
1	1	2442	U
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	3193	C
1	1	3234	U
1	1	3240	U
1	1	3284	U
1	1	3309	A
1	1	3317	U
3	4	85	G
3	4	125	U
3	4	156	U
46	B	25	C
46	B	78	A
46	B	137	A
46	B	151	G
46	B	176	U
46	B	216	A
46	B	259	U
46	B	265	U
46	B	278	U
46	B	415	A
46	B	451	C
46	B	502	U
46	B	504	A
46	B	505	U
46	B	514	G
46	B	518	A
46	B	529	C
46	B	533	A
46	B	553	A
46	B	556	U
46	B	638	U
46	B	685	C

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Mol	Chain	Res	Type
46	B	695	C
46	B	698	C
46	B	702	G
46	B	711	U
46	B	740	A
46	B	763	C
46	B	769	U
46	B	814	A
46	B	824	U
46	B	855	C
46	B	874	U
46	B	876	A
46	B	1168	A
46	B	1335	U
46	B	1355	A
46	B	1369	G
46	B	1396	A
46	B	1398	G
46	B	1457	A
46	B	1467	C
46	B	1479	A
46	B	1484	U
46	B	1523	G
46	B	1573	A
46	B	1579	A
46	B	1581	G
1	AS	172	C
1	AS	403	C
1	AS	442	G
1	AS	538	G
1	AS	563	U
1	AS	601	U
1	AS	759	G
1	AS	912	G
1	AS	1029	U
1	AS	1060	A
1	AS	1099	A
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C
1	AS	1576	A
1	AS	1762	G

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Mol	Chain	Res	Type
1	AS	1815	U
1	AS	1943	G
1	AS	2090	U
1	AS	2182	C
1	AS	2183	U
1	AS	2545	C
1	AS	2789	A
1	AS	2790	U
1	AS	3093	U
1	AS	3159	A
1	AS	3163	U
1	AS	3193	C
1	AS	3234	U
1	AS	3240	U
1	AS	3284	U
1	AS	3309	A
1	AS	3315	C
1	AS	3317	U
3	AU	85	G
3	AU	125	U
46	CM	25	C
46	CM	65	A
46	CM	78	A
46	CM	137	A
46	CM	151	G
46	CM	176	U
46	CM	237	C
46	CM	259	U
46	CM	265	U
46	CM	278	U
46	CM	415	A
46	CM	451	C
46	CM	502	U
46	CM	504	A
46	CM	505	U
46	CM	514	G
46	CM	518	A
46	CM	529	C
46	CM	533	A
46	CM	553	A
46	CM	556	U
46	CM	638	U

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Mol	Chain	Res	Type
46	CM	685	C
46	CM	695	C
46	CM	740	A
46	CM	763	C
46	CM	769	U
46	CM	817	U
46	CM	855	C
46	CM	874	U
46	CM	876	A
46	CM	1168	A
46	CM	1335	U
46	CM	1359	U
46	CM	1369	G
46	CM	1396	A
46	CM	1398	G
46	CM	1457	A
46	CM	1467	C
46	CM	1479	A
46	CM	1523	G
46	CM	1555	C
46	CM	1573	A
46	CM	1579	A
46	CM	1581	G

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 1429 ligands modelled in this entry, 1406 are monoatomic - leaving 23 for Mogul analysis.

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
83	PAR	1	3458	-	45,45,45	0.47	0	64,67,67	0.99	3 (4%)
83	PAR	B	1801	-	45,45,45	0.43	0	64,67,67	0.83	1 (1%)
83	PAR	CM	1803	-	45,45,45	0.43	0	64,67,67	0.88	2 (3%)
83	PAR	1	3456	-	45,45,45	0.43	0	64,67,67	0.74	2 (3%)
83	PAR	4	201	-	45,45,45	0.44	0	64,67,67	1.02	2 (3%)
83	PAR	AS	3402	-	45,45,45	0.47	0	64,67,67	0.96	4 (6%)
83	PAR	1	3457	82	45,45,45	0.46	0	64,67,67	0.76	1 (1%)
83	PAR	1	3459	-	45,45,45	0.46	0	64,67,67	0.81	1 (1%)
83	PAR	AS	3403	-	45,45,45	0.48	0	64,67,67	0.80	2 (3%)
83	PAR	1	3461	-	45,45,45	0.44	0	64,67,67	0.77	1 (1%)
83	PAR	1	3460	-	45,45,45	0.43	0	64,67,67	0.98	4 (6%)
83	PAR	1	3465	-	45,45,45	0.51	0	64,67,67	0.98	3 (4%)
83	PAR	AS	3401	-	45,45,45	0.49	0	64,67,67	0.66	1 (1%)
84	3K5	1	3463	-	62,63,63	0.21	0	82,95,95	0.53	1 (1%)
83	PAR	B	1803	-	45,45,45	0.45	0	64,67,67	0.76	1 (1%)
83	PAR	AS	3404	-	45,45,45	0.45	0	64,67,67	0.84	2 (3%)
83	PAR	CM	1802	-	45,45,45	0.43	0	64,67,67	0.81	3 (4%)
83	PAR	1	3462	-	45,45,45	0.45	0	64,67,67	0.68	2 (3%)
83	PAR	1	3464	-	45,45,45	0.45	0	64,67,67	0.98	2 (3%)
83	PAR	B	1802	-	45,45,45	0.45	0	64,67,67	0.99	4 (6%)
83	PAR	AS	3406	-	45,45,45	0.48	0	64,67,67	1.26	6 (9%)
84	3K5	AS	3405	-	62,63,63	0.28	0	82,95,95	0.97	4 (4%)
83	PAR	1	3466	-	45,45,45	0.45	0	64,67,67	1.00	3 (4%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
83	PAR	1	3458	-	-	7/18/94/94	0/4/4/4
83	PAR	B	1801	-	-	3/18/94/94	0/4/4/4
83	PAR	CM	1803	-	-	6/18/94/94	0/4/4/4
83	PAR	1	3456	-	-	3/18/94/94	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
83	PAR	4	201	-	-	4/18/94/94	0/4/4/4
83	PAR	AS	3402	-	-	8/18/94/94	1/4/4/4
83	PAR	1	3457	82	-	11/18/94/94	1/4/4/4
83	PAR	1	3459	-	-	7/18/94/94	0/4/4/4
83	PAR	AS	3403	-	-	5/18/94/94	0/4/4/4
83	PAR	1	3461	-	-	7/18/94/94	0/4/4/4
83	PAR	1	3460	-	-	5/18/94/94	0/4/4/4
83	PAR	1	3465	-	-	7/18/94/94	0/4/4/4
83	PAR	AS	3401	-	-	4/18/94/94	0/4/4/4
84	3K5	1	3463	-	-	2/29/121/121	0/7/7/7
83	PAR	B	1803	-	-	4/18/94/94	0/4/4/4
83	PAR	AS	3404	-	-	4/18/94/94	0/4/4/4
83	PAR	CM	1802	-	-	4/18/94/94	0/4/4/4
83	PAR	1	3462	-	-	4/18/94/94	0/4/4/4
83	PAR	1	3464	-	-	9/18/94/94	0/4/4/4
83	PAR	B	1802	-	-	4/18/94/94	1/4/4/4
83	PAR	AS	3406	-	-	7/18/94/94	0/4/4/4
84	3K5	AS	3405	-	-	9/29/121/121	0/7/7/7
83	PAR	1	3466	-	-	6/18/94/94	0/4/4/4

There are no bond length outliers.

All (55) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	1	3466	PAR	O11-C11-C21	5.67	117.99	108.22
83	4	201	PAR	O11-C11-C21	5.33	117.39	108.22
83	AS	3406	PAR	O54-C54-C64	4.99	115.30	106.01
83	AS	3406	PAR	C52-C42-C32	4.96	120.42	111.16
84	AS	3405	3K5	O14-C34-C33	4.62	118.23	107.70
83	1	3464	PAR	O11-C11-C21	4.59	116.12	108.22
83	AS	3404	PAR	O11-C11-C21	4.55	116.06	108.22
83	1	3458	PAR	O54-C54-C64	4.52	114.43	106.01
83	B	1803	PAR	O11-C11-C21	4.48	115.94	108.22
83	1	3461	PAR	O11-C11-C21	4.38	115.76	108.22
83	B	1801	PAR	O11-C11-C21	4.29	115.61	108.22
84	AS	3405	3K5	C34-O14-C38	4.26	124.31	117.72
83	1	3457	PAR	O11-C11-C21	4.25	115.54	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	1	3459	PAR	O11-C11-C21	4.21	115.47	108.22
83	CM	1803	PAR	O11-C11-C21	4.15	115.36	108.22
83	1	3460	PAR	O11-C11-C21	4.10	115.28	108.22
83	1	3465	PAR	O54-C54-C64	3.92	113.30	106.01
83	4	201	PAR	O54-C54-C64	3.78	113.04	106.01
83	1	3462	PAR	O11-C11-C21	3.77	114.72	108.22
83	CM	1802	PAR	O11-C11-C21	3.77	114.72	108.22
83	1	3460	PAR	O54-C54-C64	3.70	112.90	106.01
83	1	3456	PAR	O11-C11-C21	3.66	114.52	108.22
83	AS	3406	PAR	O11-C11-C21	3.55	114.33	108.22
83	AS	3402	PAR	O11-C11-C21	3.54	114.31	108.22
83	1	3458	PAR	O11-C11-C21	3.53	114.29	108.22
83	B	1802	PAR	C13-C23-C33	-3.50	97.89	102.10
83	AS	3403	PAR	O11-C11-C21	3.38	114.03	108.22
84	AS	3405	3K5	O14-C34-C35	3.37	115.40	107.70
83	AS	3401	PAR	O11-C11-C21	3.06	113.48	108.22
83	B	1802	PAR	O11-C11-C21	3.02	113.41	108.22
83	AS	3402	PAR	O11-C42-C32	-2.89	102.28	109.18
84	AS	3405	3K5	O1-C5-C1	2.89	111.32	107.23
83	AS	3406	PAR	C62-C52-C42	2.83	118.13	111.66
83	1	3465	PAR	O11-C11-C21	2.74	112.94	108.22
83	AS	3406	PAR	O11-C42-C32	-2.73	102.66	109.18
83	1	3465	PAR	C13-C23-C33	-2.69	98.86	102.10
83	AS	3402	PAR	C64-C54-C44	-2.55	108.08	113.10
83	AS	3402	PAR	O54-C54-C64	2.54	110.75	106.01
83	1	3466	PAR	O52-C52-C42	2.53	113.92	107.48
83	CM	1803	PAR	O51-C11-C21	2.50	115.68	110.06
83	1	3460	PAR	C32-C22-C12	2.49	116.29	111.18
83	AS	3406	PAR	C32-C22-C12	-2.38	106.30	111.18
83	B	1802	PAR	O52-C13-C23	2.35	112.83	107.96
83	1	3458	PAR	O33-C14-C24	2.34	112.25	108.22
83	1	3456	PAR	O54-C54-C64	2.33	110.35	106.01
83	1	3460	PAR	C52-C42-C32	2.30	115.46	111.16
83	1	3466	PAR	O54-C54-C64	2.29	110.27	106.01
84	1	3463	3K5	O1-C5-C1	-2.27	104.01	107.23
83	1	3464	PAR	C13-O52-C52	2.25	123.53	117.96
83	AS	3403	PAR	O54-C54-C64	2.18	110.07	106.01
83	B	1802	PAR	C64-C54-C44	-2.12	108.94	113.10
83	AS	3404	PAR	O54-C54-C64	2.08	109.87	106.01
83	1	3462	PAR	O54-C54-C64	2.07	109.85	106.01
83	CM	1802	PAR	C64-C54-C44	-2.06	109.06	113.10
83	CM	1802	PAR	O54-C54-C64	2.03	109.80	106.01

There are no chirality outliers.

All (130) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
83	1	3457	PAR	C43-C33-O33-C14
83	1	3458	PAR	C23-C13-O52-C52
83	1	3458	PAR	O43-C13-O52-C52
83	1	3458	PAR	C43-C33-O33-C14
83	1	3458	PAR	C24-C14-O33-C33
83	1	3458	PAR	O54-C54-C64-N64
83	1	3459	PAR	C24-C14-O33-C33
83	1	3459	PAR	O54-C54-C64-N64
83	1	3460	PAR	C23-C13-O52-C52
83	1	3460	PAR	O43-C13-O52-C52
83	1	3460	PAR	C24-C14-O33-C33
83	1	3461	PAR	C23-C13-O52-C52
83	1	3461	PAR	C43-C33-O33-C14
83	1	3461	PAR	C24-C14-O33-C33
83	1	3462	PAR	C23-C13-O52-C52
83	1	3462	PAR	O43-C13-O52-C52
83	1	3462	PAR	C43-C33-O33-C14
83	1	3464	PAR	C23-C13-O52-C52
83	1	3464	PAR	O43-C13-O52-C52
83	1	3465	PAR	C23-C13-O52-C52
83	1	3465	PAR	O43-C13-O52-C52
83	1	3465	PAR	C44-C54-C64-N64
83	1	3465	PAR	O54-C54-C64-N64
83	1	3466	PAR	C23-C13-O52-C52
83	1	3466	PAR	O43-C13-O52-C52
83	4	201	PAR	C23-C13-O52-C52
83	B	1801	PAR	C43-C33-O33-C14
83	B	1802	PAR	O54-C54-C64-N64
83	B	1803	PAR	O54-C54-C64-N64
83	AS	3401	PAR	C23-C13-O52-C52
83	AS	3401	PAR	O43-C13-O52-C52
83	AS	3402	PAR	C23-C13-O52-C52
83	AS	3402	PAR	C24-C14-O33-C33
83	AS	3403	PAR	C23-C13-O52-C52
83	AS	3403	PAR	O43-C13-O52-C52
83	AS	3403	PAR	C24-C14-O33-C33
83	AS	3403	PAR	O54-C54-C64-N64
83	AS	3404	PAR	C24-C14-O33-C33
83	CM	1803	PAR	C23-C13-O52-C52
83	CM	1803	PAR	O43-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
83	CM	1803	PAR	O54-C54-C64-N64
83	1	3459	PAR	O54-C14-O33-C33
83	B	1802	PAR	O54-C14-O33-C33
83	AS	3402	PAR	O54-C14-O33-C33
83	AS	3403	PAR	O54-C14-O33-C33
83	CM	1803	PAR	O54-C14-O33-C33
83	1	3459	PAR	C62-C52-O52-C13
83	1	3465	PAR	C62-C52-O52-C13
83	1	3456	PAR	O54-C14-O33-C33
83	1	3464	PAR	O51-C11-O11-C42
83	4	201	PAR	O51-C11-O11-C42
83	B	1801	PAR	C42-C52-O52-C13
83	1	3466	PAR	O51-C11-O11-C42
83	AS	3406	PAR	C42-C52-O52-C13
83	AS	3406	PAR	C41-C51-C61-O61
83	1	3457	PAR	O43-C43-C53-O53
83	1	3457	PAR	C33-C43-C53-O53
84	1	3463	3K5	C39-C38-O14-C34
84	AS	3405	3K5	C31-C30-O9-C26
83	AS	3406	PAR	C52-C42-O11-C11
84	AS	3405	3K5	C39-C38-O14-C34
83	1	3465	PAR	C52-C42-O11-C11
84	1	3463	3K5	O15-C38-O14-C34
84	AS	3405	3K5	O15-C38-O14-C34
84	AS	3405	3K5	O10-C30-O9-C26
83	1	3460	PAR	O51-C51-C61-O61
83	1	3464	PAR	O51-C51-C61-O61
83	1	3466	PAR	C42-C52-O52-C13
83	AS	3406	PAR	O51-C51-C61-O61
83	1	3464	PAR	C41-C51-C61-O61
83	AS	3402	PAR	C62-C52-O52-C13
83	1	3464	PAR	O54-C14-O33-C33
83	1	3460	PAR	C41-C51-C61-O61
83	1	3464	PAR	C62-C52-O52-C13
83	AS	3402	PAR	C42-C52-O52-C13
83	1	3457	PAR	O51-C11-O11-C42
83	B	1803	PAR	O54-C14-O33-C33
83	1	3464	PAR	C42-C52-O52-C13
83	1	3457	PAR	O43-C13-O52-C52
83	4	201	PAR	O43-C13-O52-C52
83	AS	3402	PAR	O43-C13-O52-C52
83	AS	3406	PAR	O43-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
83	CM	1802	PAR	O43-C43-C53-O53
83	1	3457	PAR	O51-C51-C61-O61
83	1	3465	PAR	O51-C51-C61-O61
83	1	3459	PAR	O43-C43-C53-O53
83	AS	3404	PAR	O51-C11-O11-C42
83	1	3461	PAR	O51-C51-C61-O61
83	CM	1802	PAR	C33-C43-C53-O53
83	4	201	PAR	C24-C14-O33-C33
83	AS	3402	PAR	O43-C43-C53-O53
84	AS	3405	3K5	C33-C34-O14-C38
83	1	3457	PAR	C52-C42-O11-C11
83	1	3466	PAR	C62-C52-O52-C13
83	1	3461	PAR	O54-C14-O33-C33
83	1	3458	PAR	O54-C14-O33-C33
84	AS	3405	3K5	C21-C20-C23-O6
83	CM	1802	PAR	O43-C13-O52-C52
83	AS	3402	PAR	C33-C43-C53-O53
83	CM	1802	PAR	C23-C13-O52-C52
83	AS	3406	PAR	C32-C42-O11-C11
83	1	3457	PAR	O54-C54-C64-N64
83	1	3462	PAR	O54-C54-C64-N64
83	1	3466	PAR	O54-C54-C64-N64
83	AS	3404	PAR	O54-C54-C64-N64
83	B	1803	PAR	O51-C11-O11-C42
84	AS	3405	3K5	C35-C34-O14-C38
83	1	3456	PAR	C23-C33-O33-C14
83	1	3457	PAR	C44-C54-C64-N64
83	1	3457	PAR	C24-C14-O33-C33
83	CM	1803	PAR	O51-C11-O11-C42
83	1	3457	PAR	C62-C52-O52-C13
84	AS	3405	3K5	C21-C20-C23-O5
83	1	3456	PAR	O51-C11-O11-C42
83	1	3461	PAR	O51-C11-O11-C42
83	AS	3401	PAR	O54-C14-O33-C33
83	1	3459	PAR	C23-C13-O52-C52
83	B	1803	PAR	C23-C13-O52-C52
83	1	3459	PAR	C23-C33-O33-C14
83	1	3461	PAR	C23-C33-O33-C14
83	1	3464	PAR	C43-C33-O33-C14
83	AS	3401	PAR	C23-C33-O33-C14
83	AS	3404	PAR	C23-C33-O33-C14
83	1	3458	PAR	C42-C52-O52-C13

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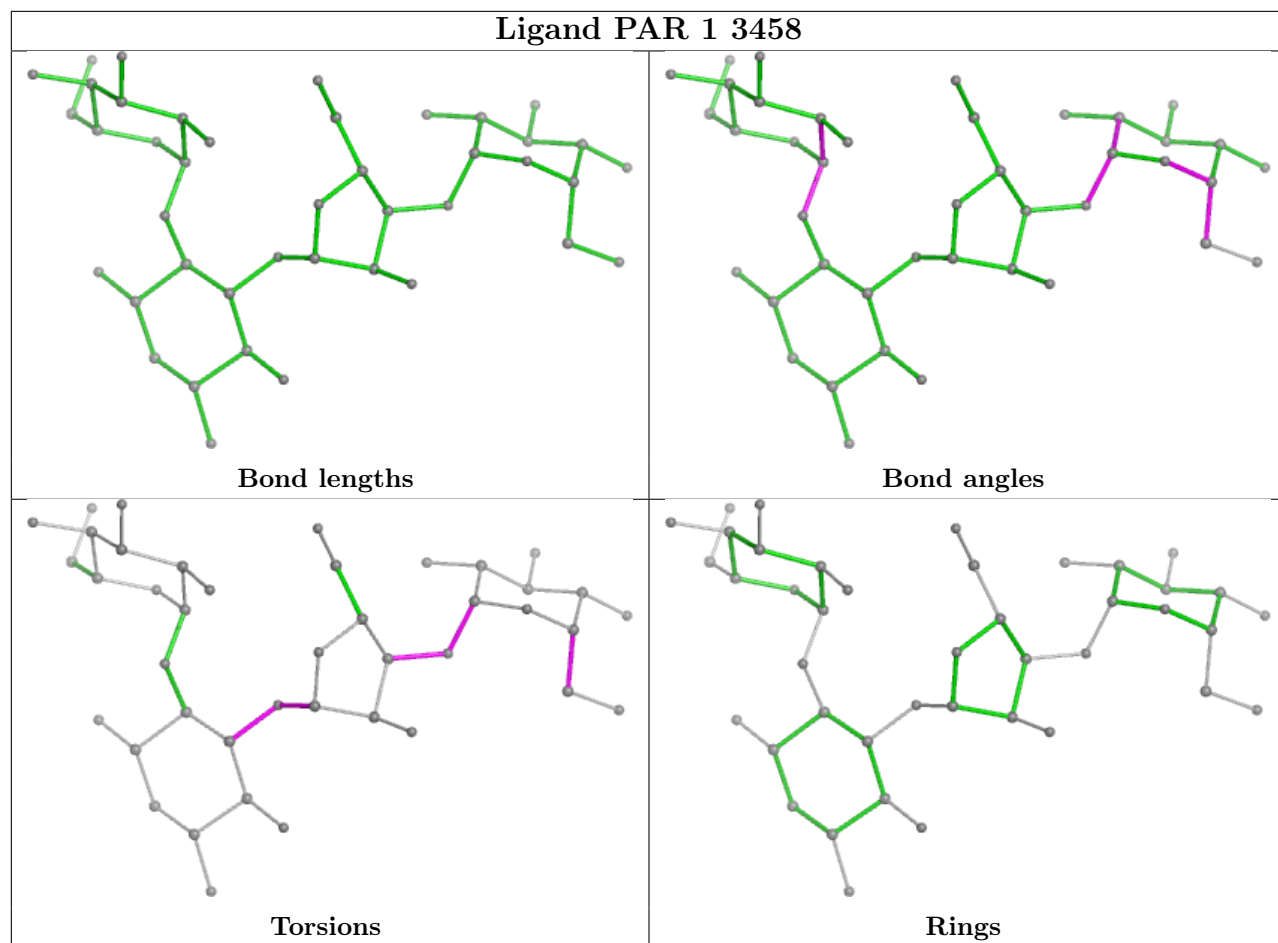
Mol	Chain	Res	Type	Atoms
83	B	1802	PAR	C21-C11-O11-C42
83	B	1802	PAR	C24-C14-O33-C33
83	AS	3406	PAR	C21-C11-O11-C42
83	CM	1803	PAR	C24-C14-O33-C33
84	AS	3405	3K5	C19-C20-C23-O6
83	B	1801	PAR	C62-C52-O52-C13

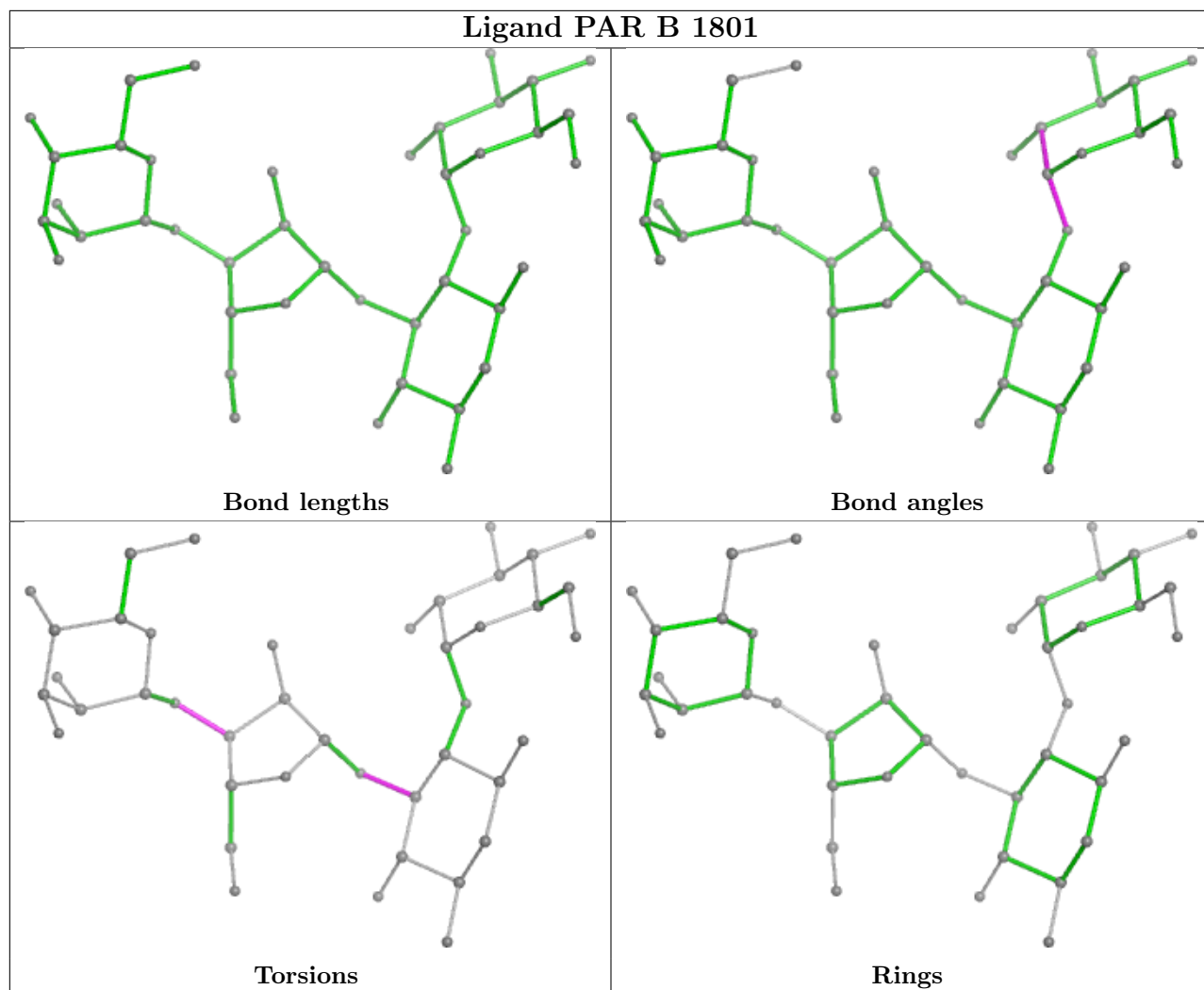
All (3) ring outliers are listed below:

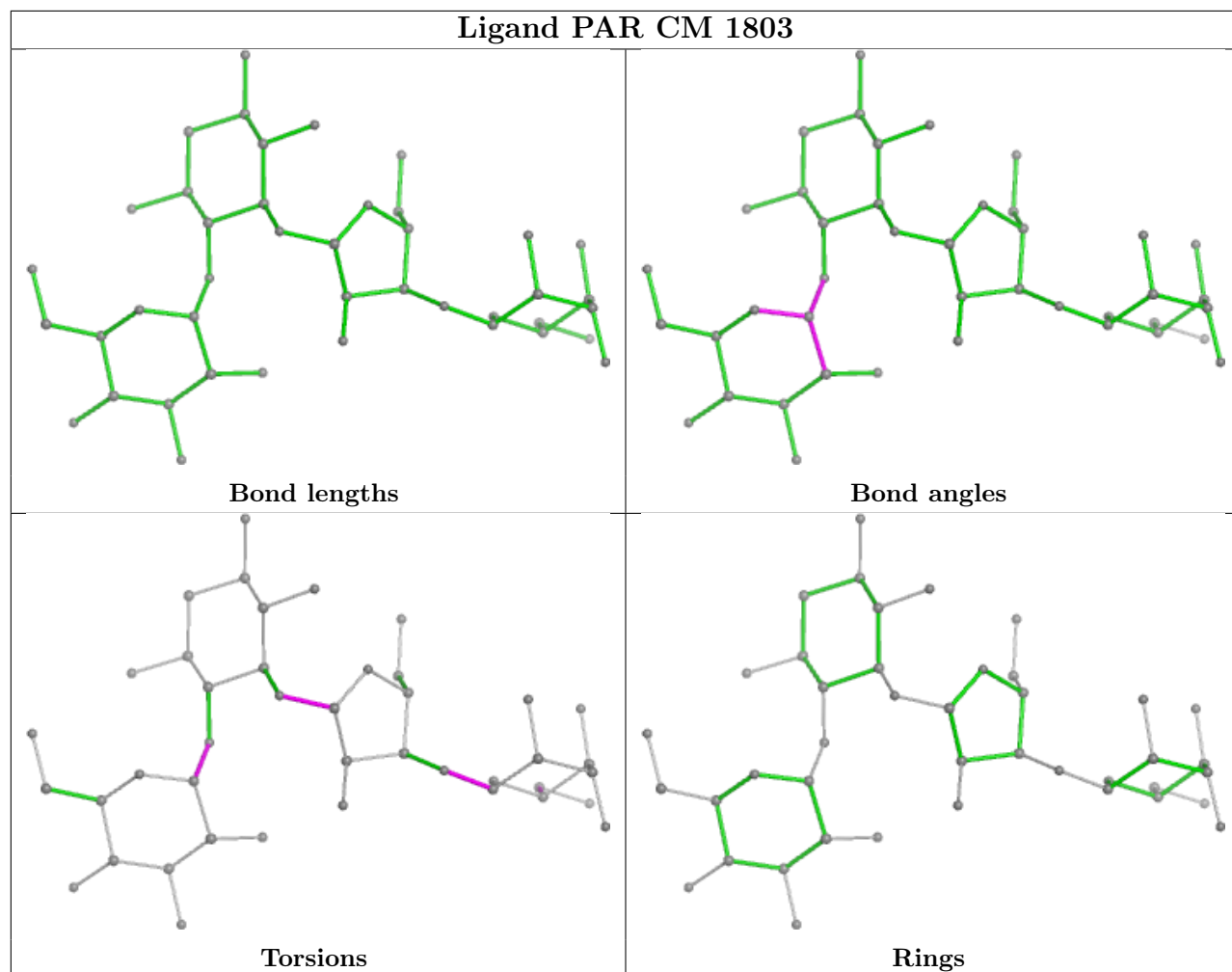
Mol	Chain	Res	Type	Atoms
83	B	1802	PAR	C12-C22-C32-C42-C52-C62
83	1	3457	PAR	C12-C22-C32-C42-C52-C62
83	AS	3402	PAR	C12-C22-C32-C42-C52-C62

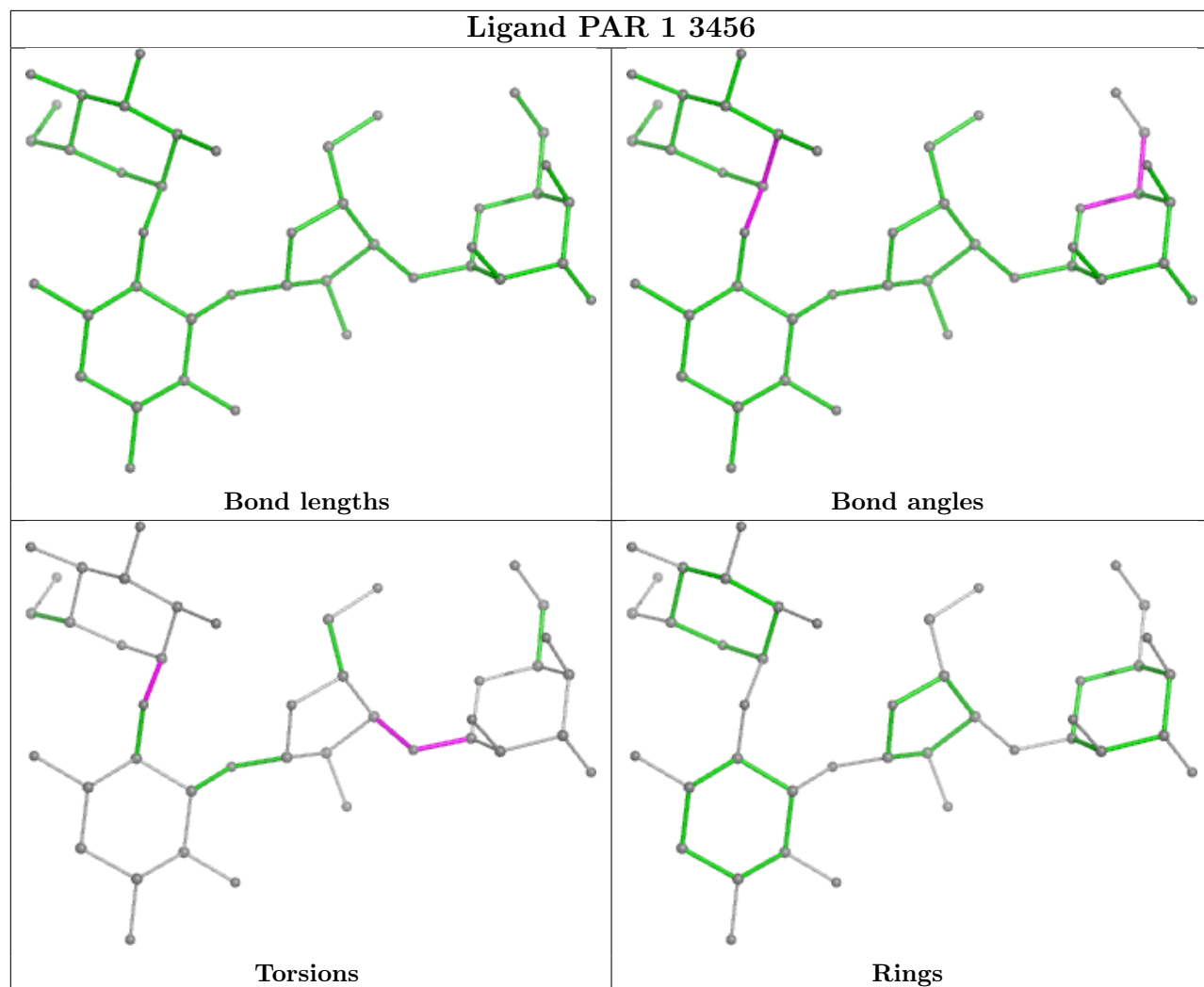
No monomer is involved in short contacts.

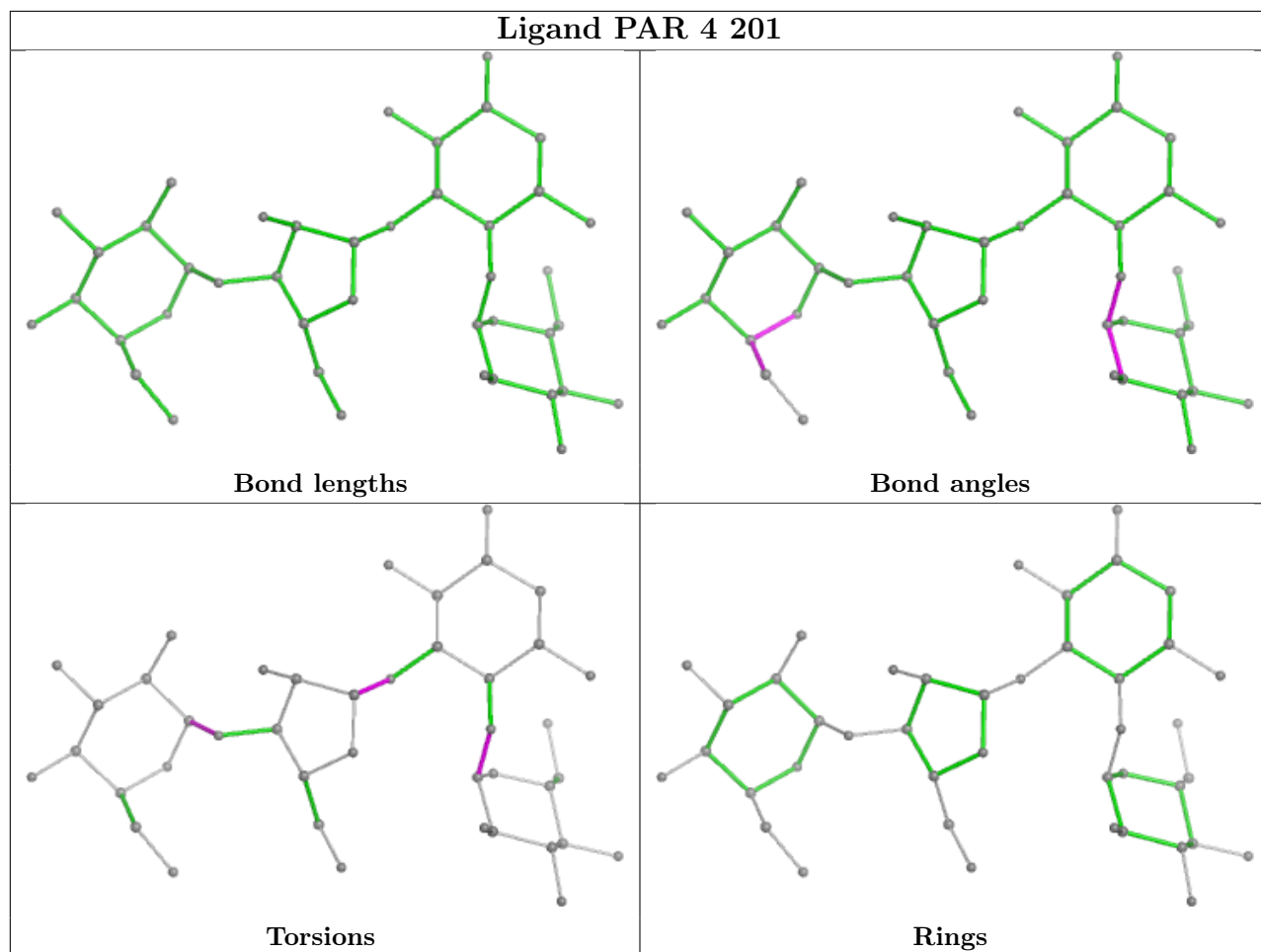
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

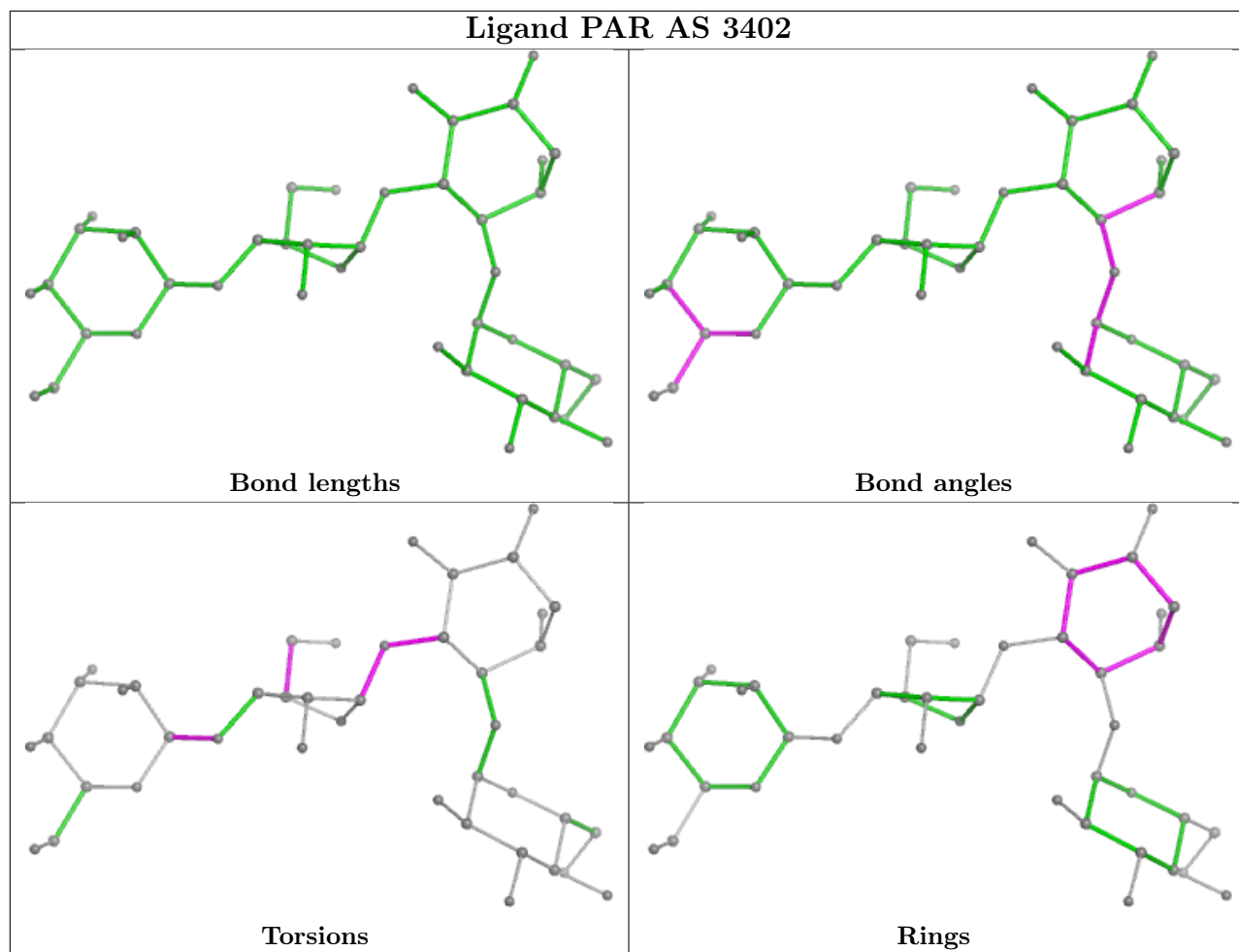


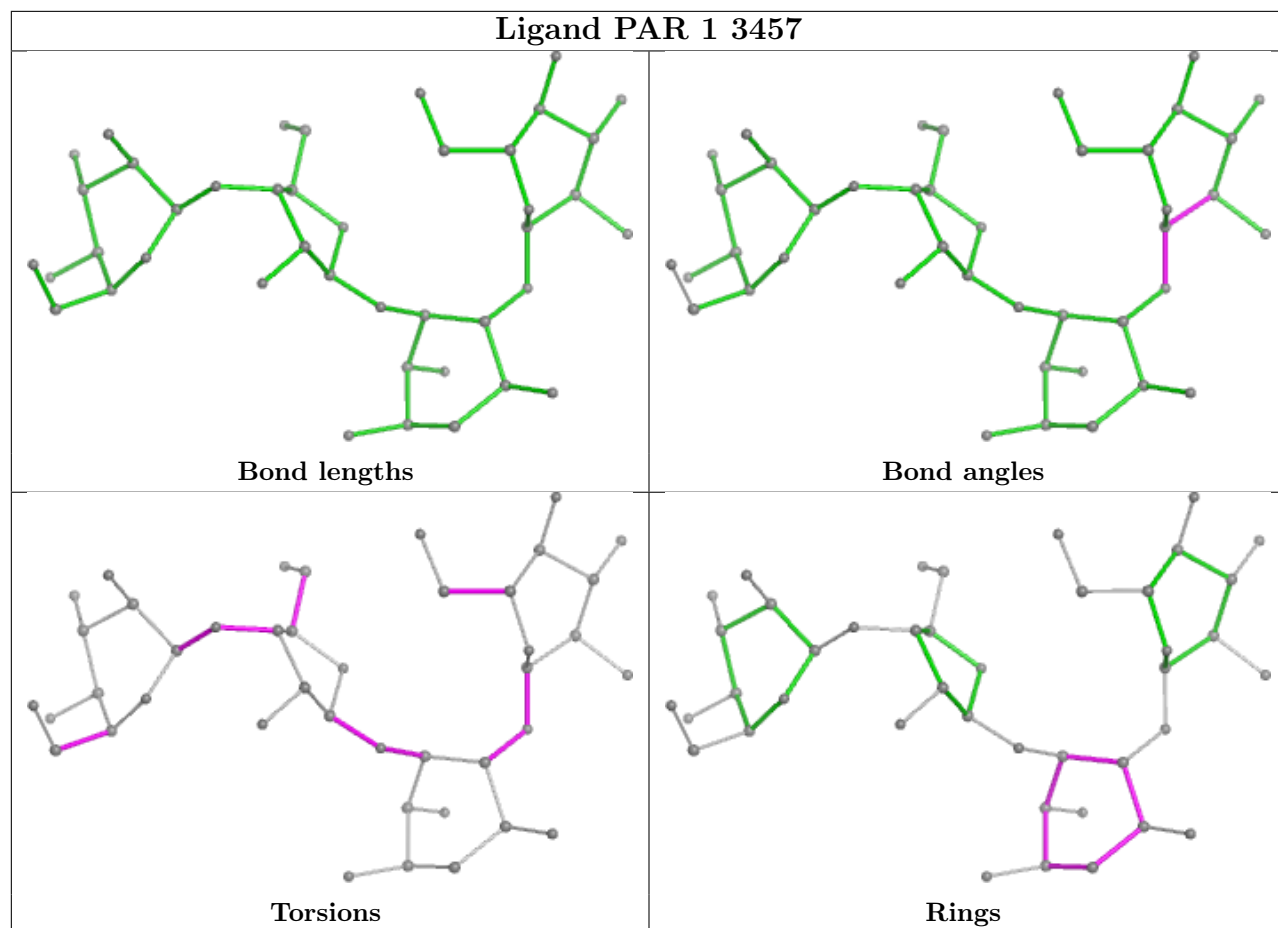


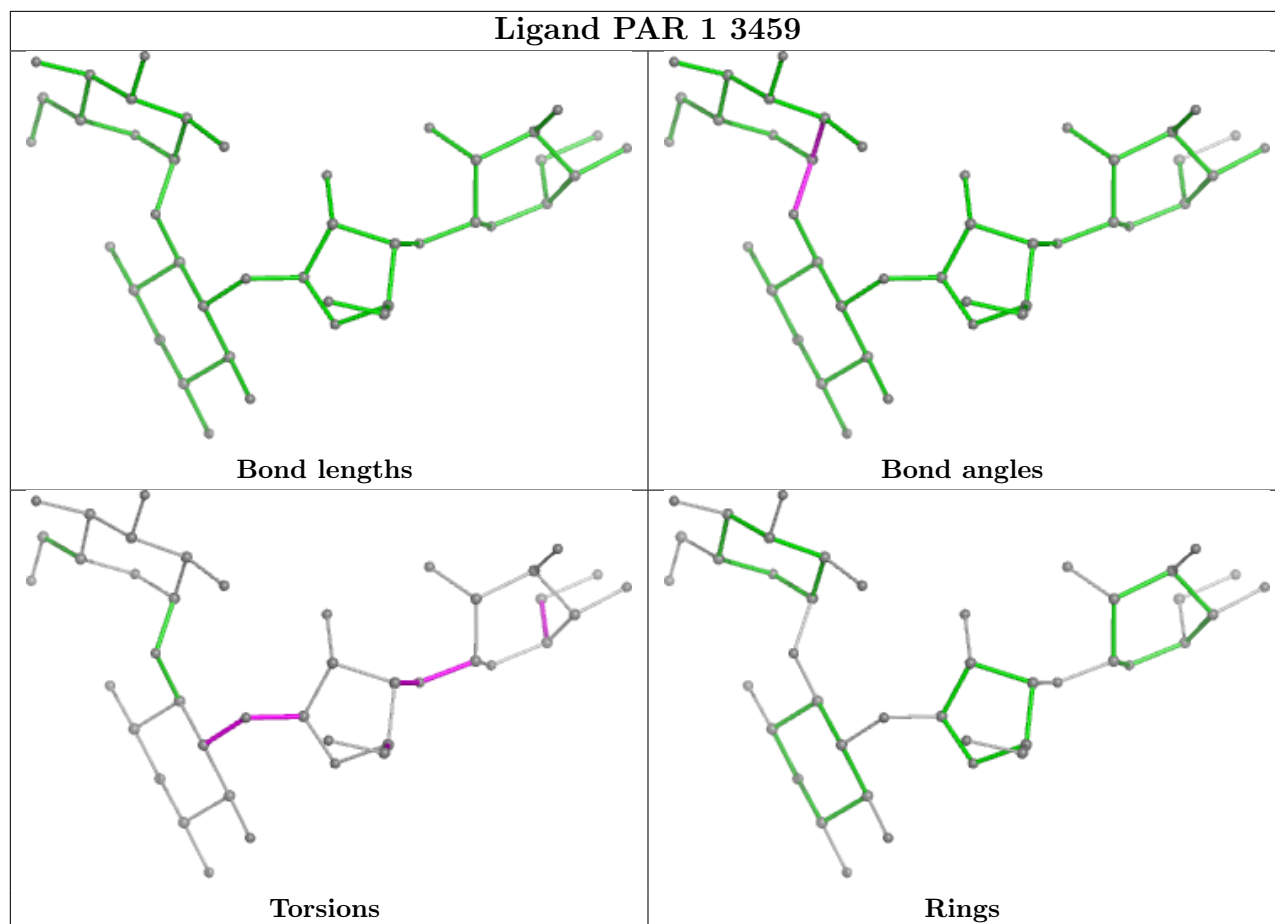


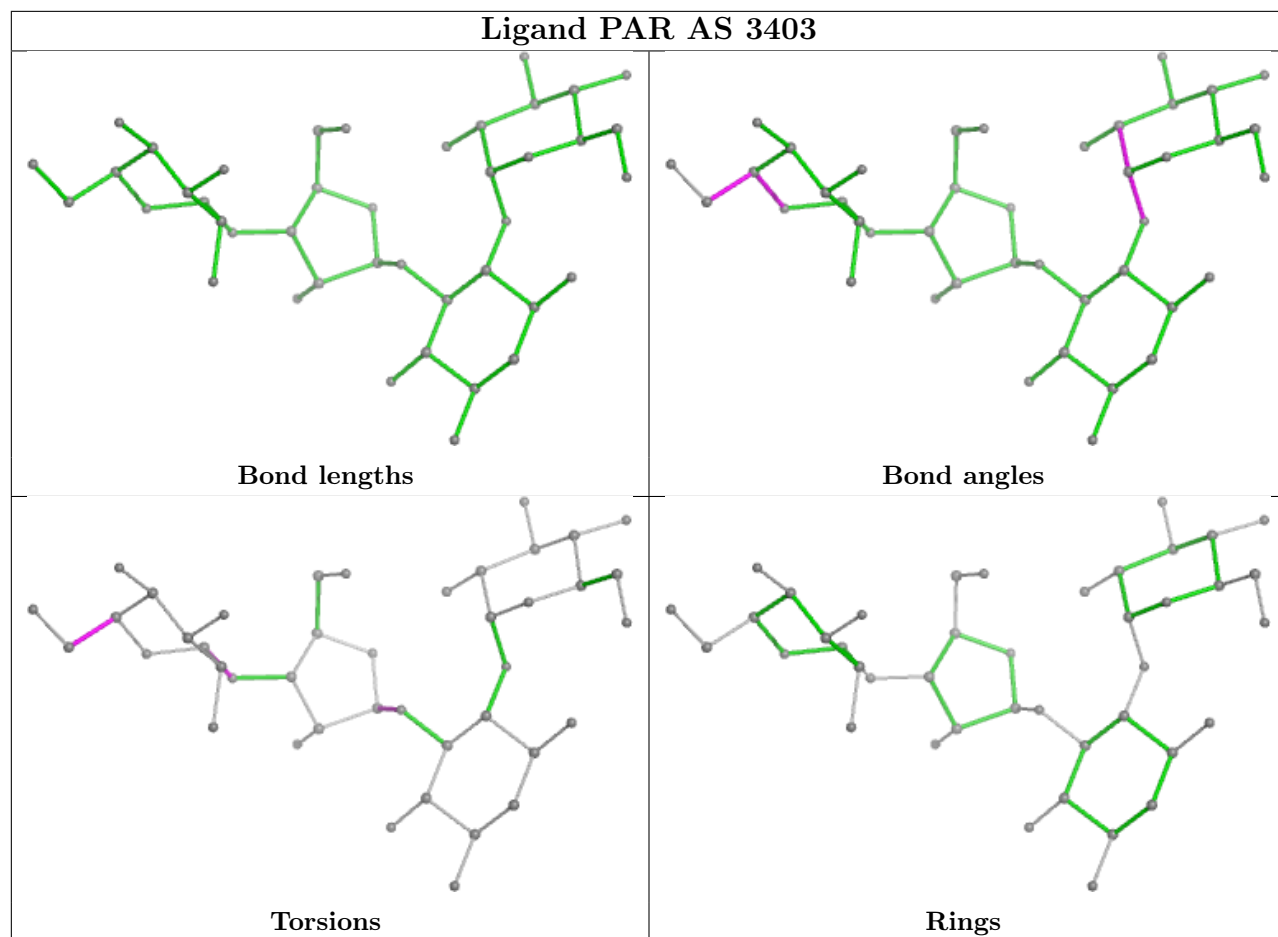


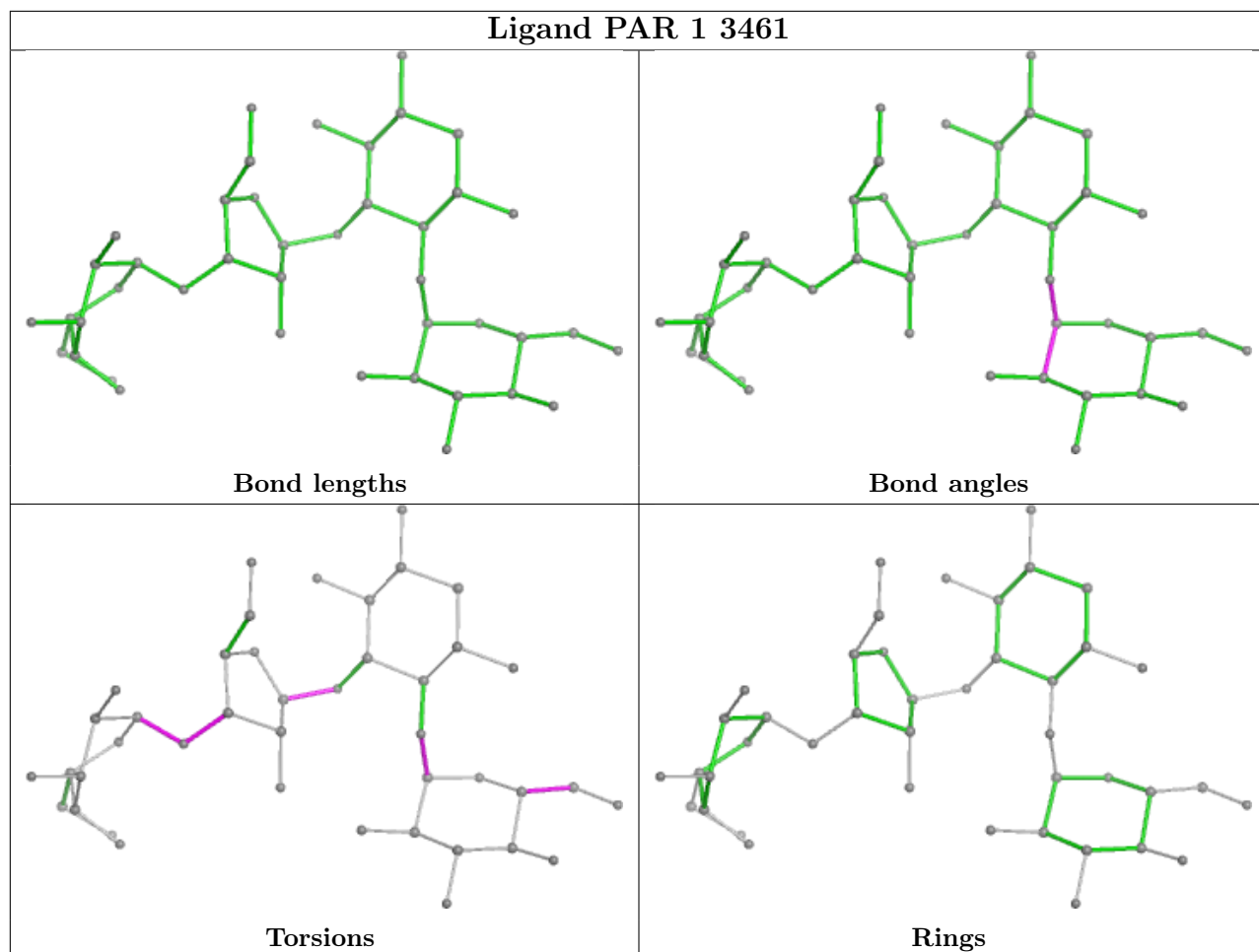


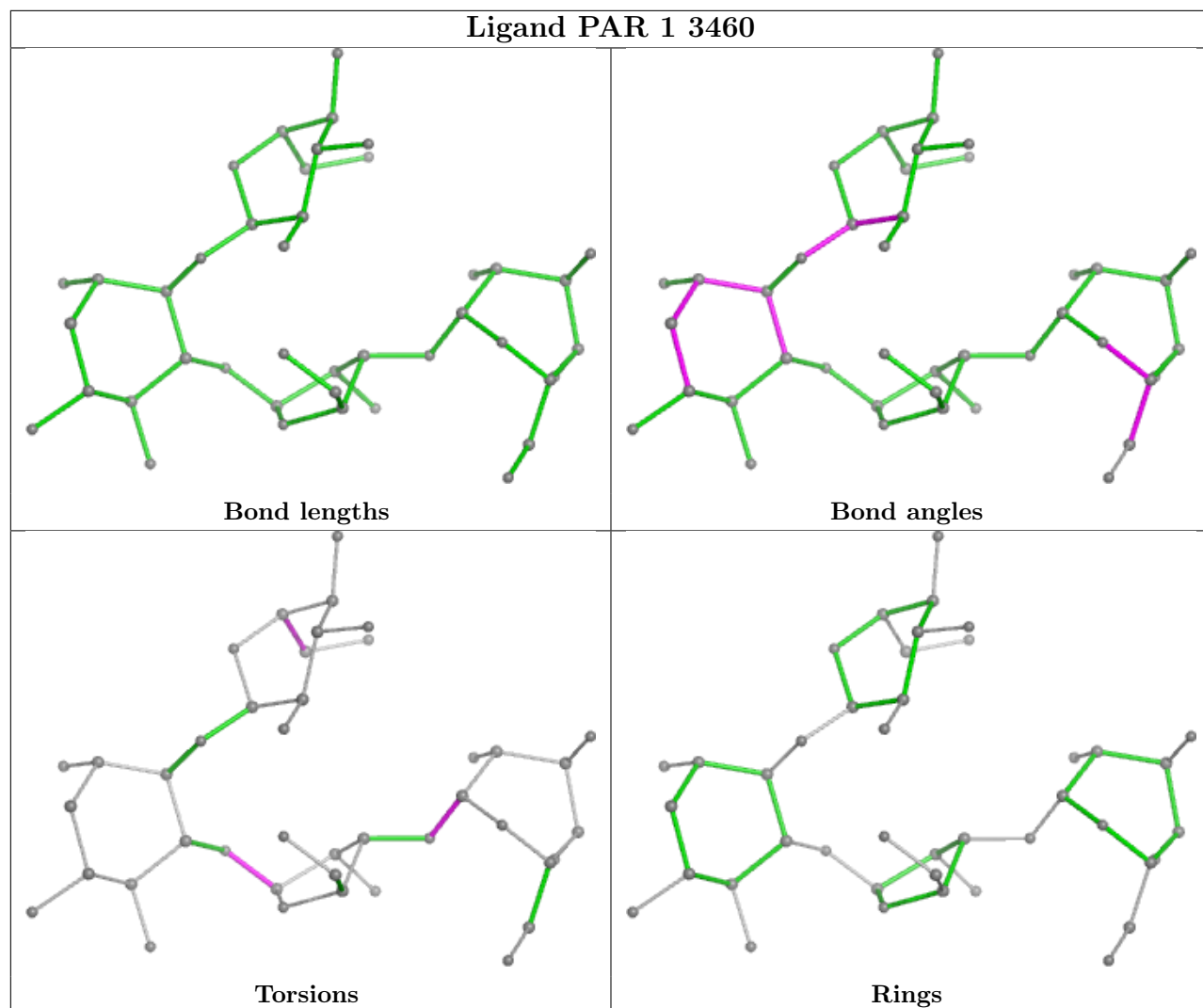


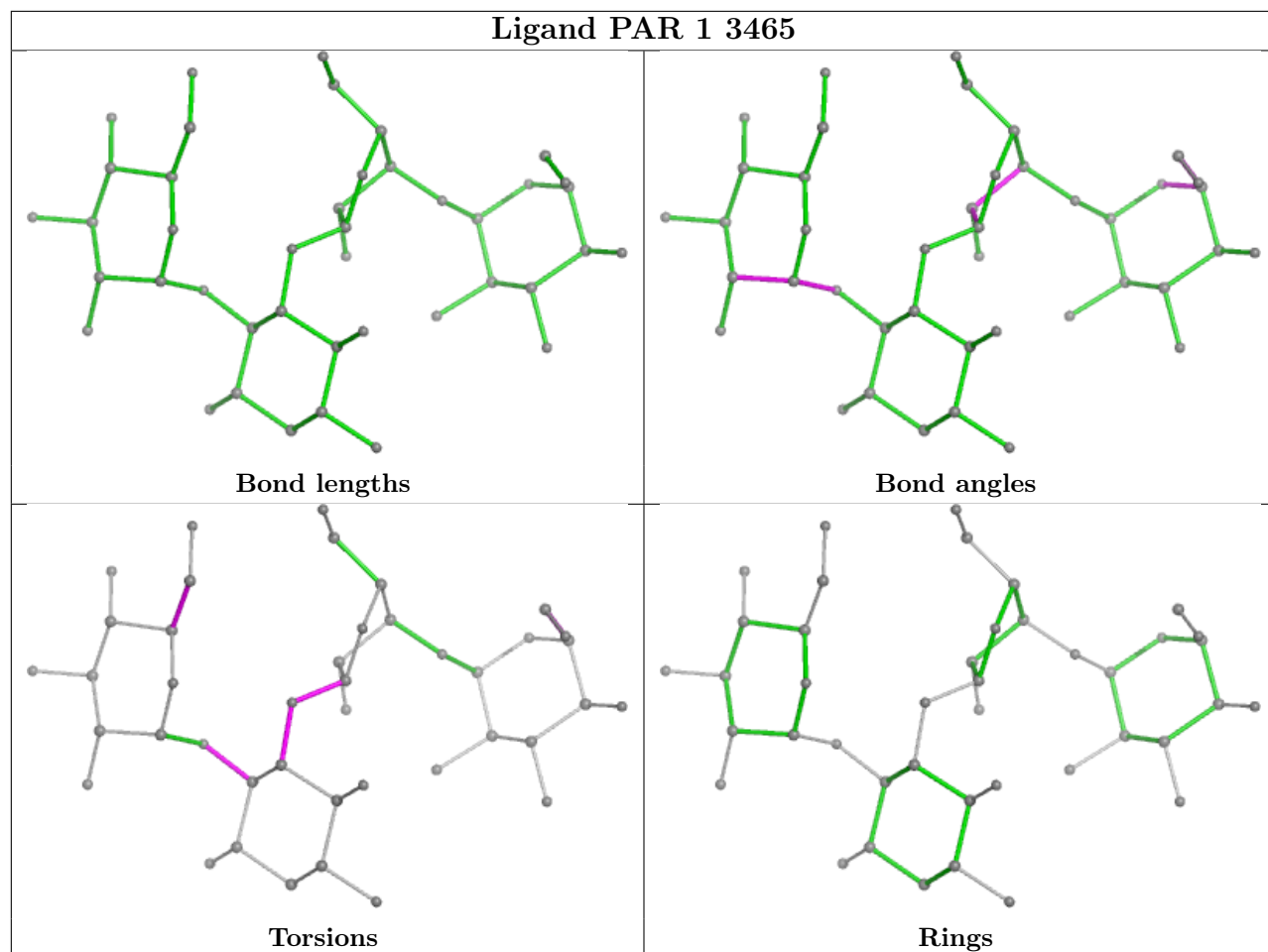


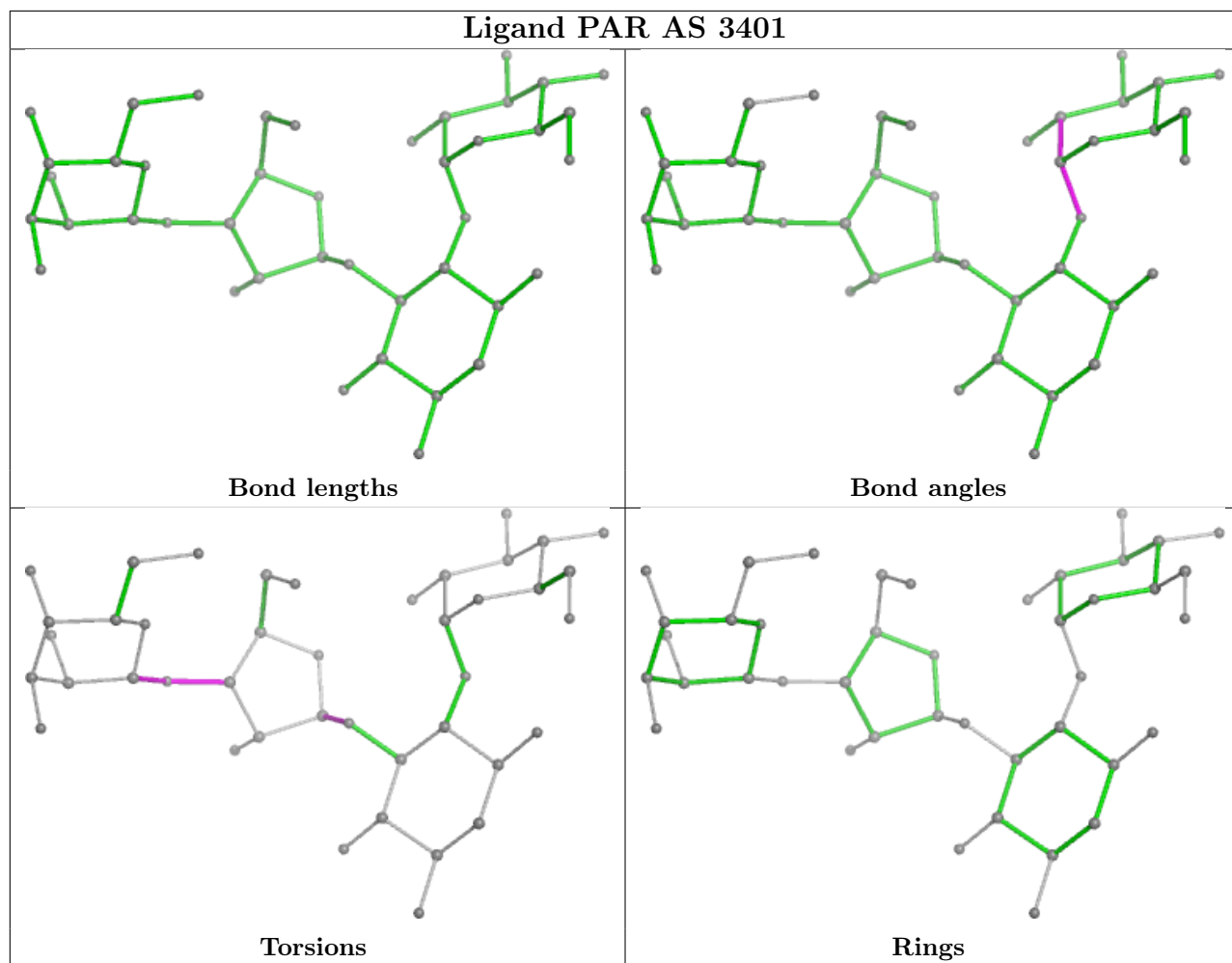


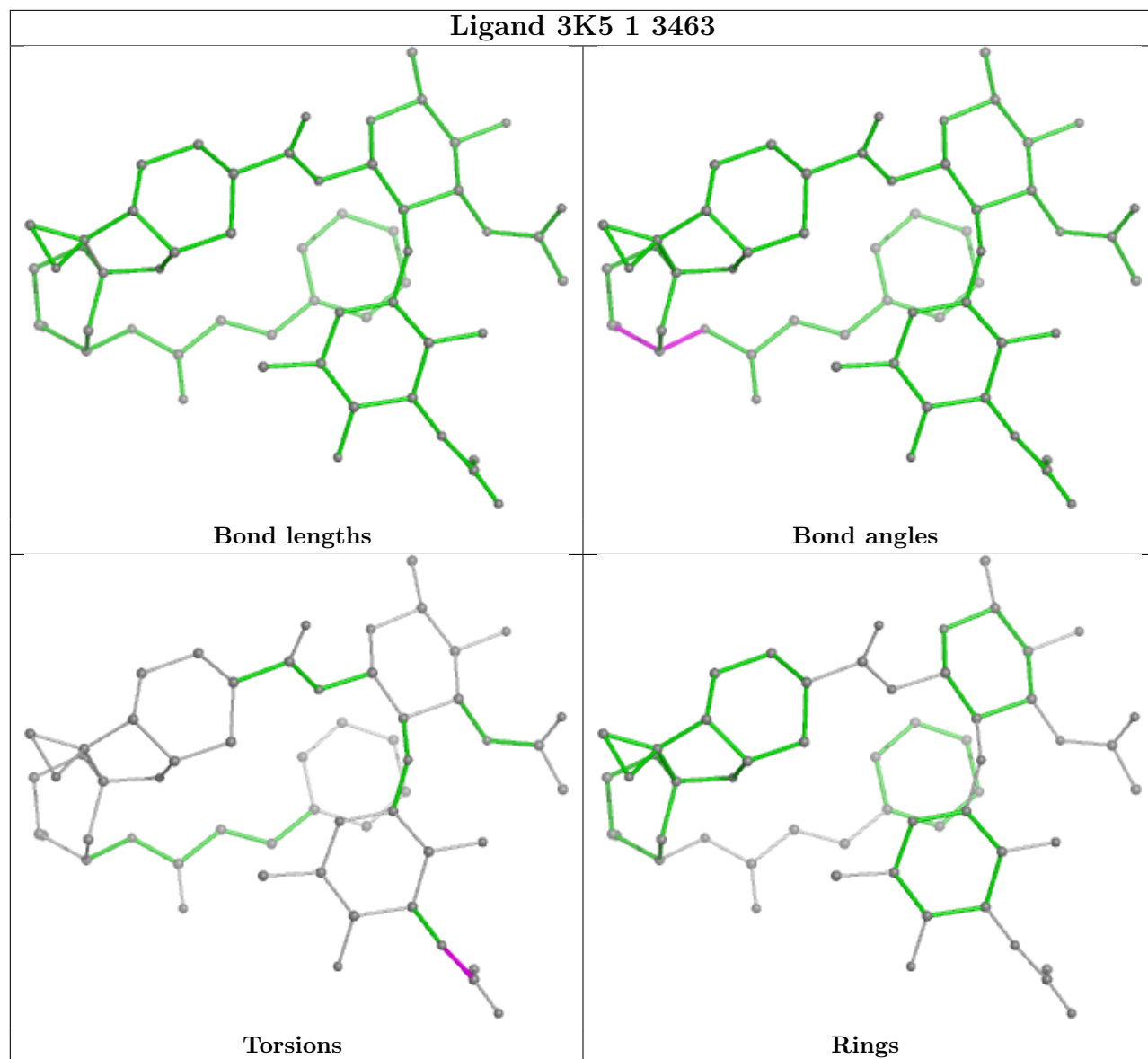


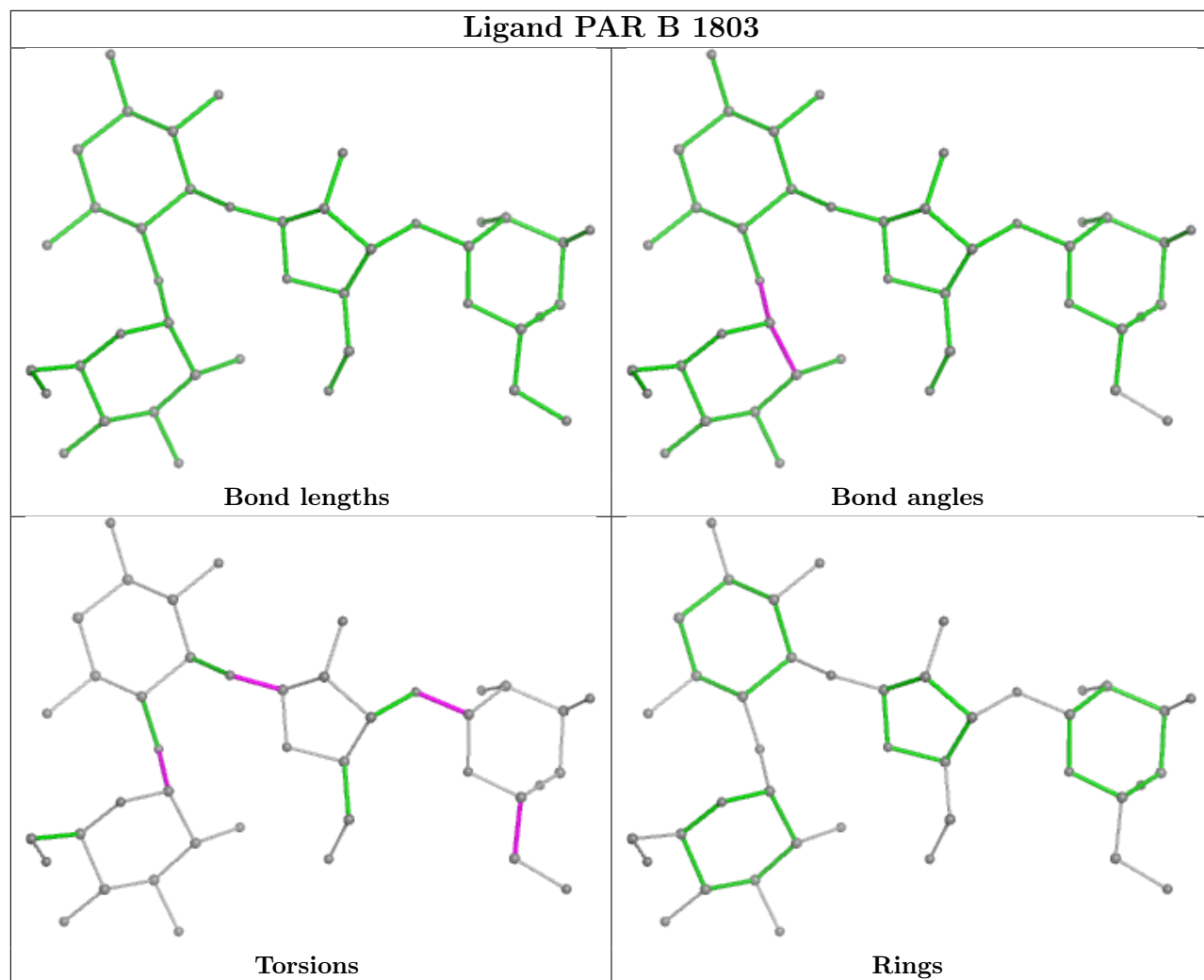


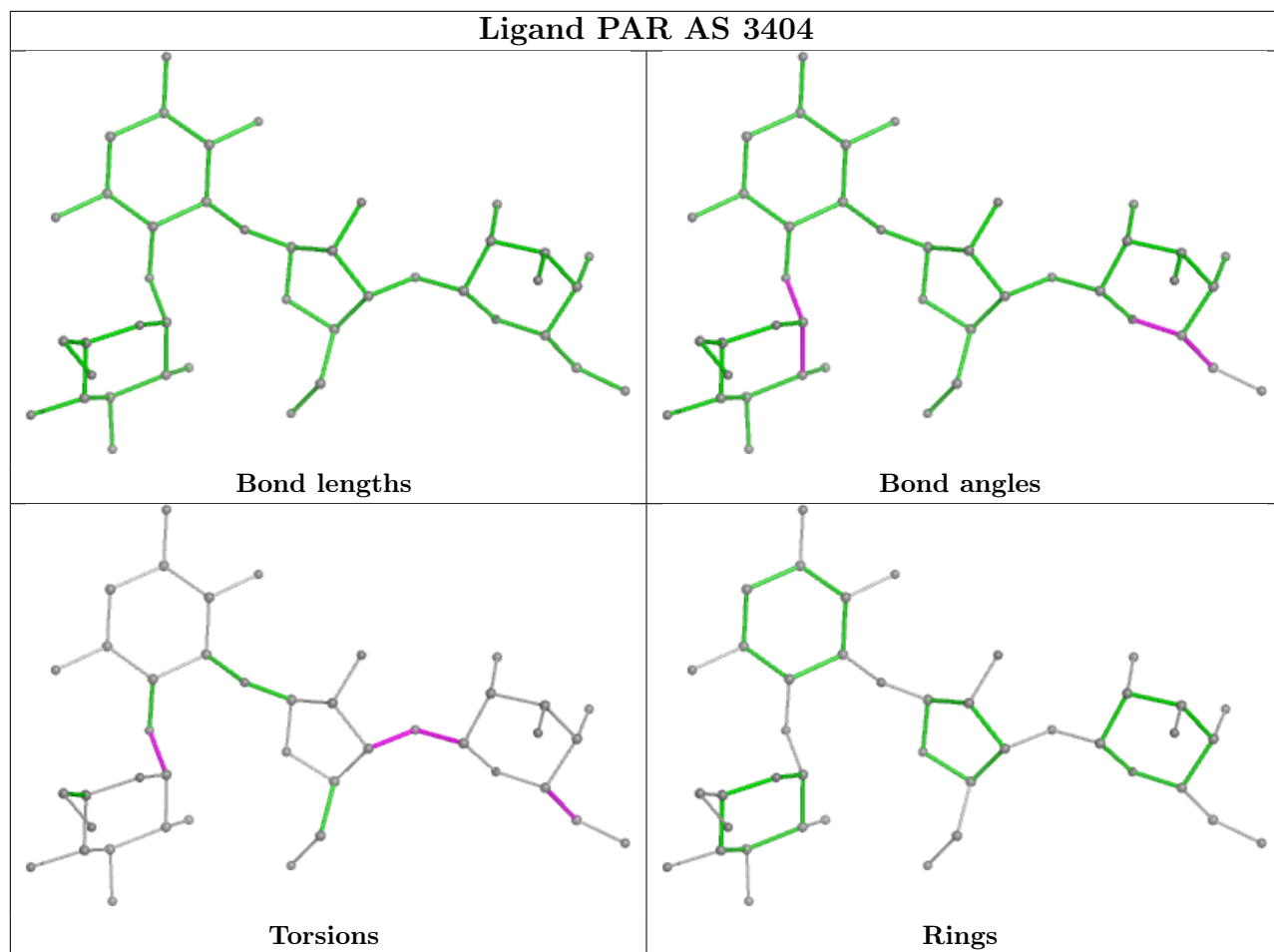


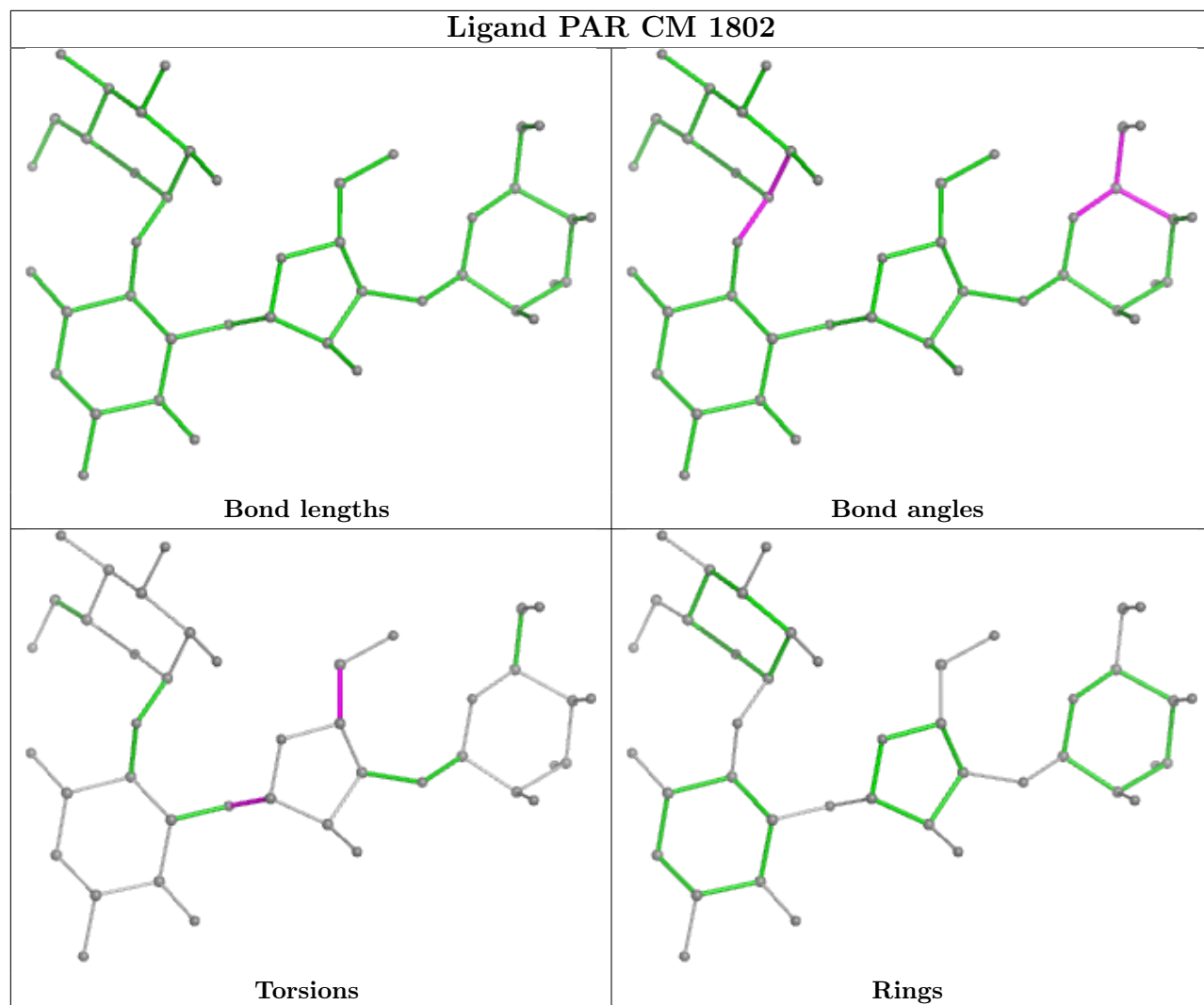


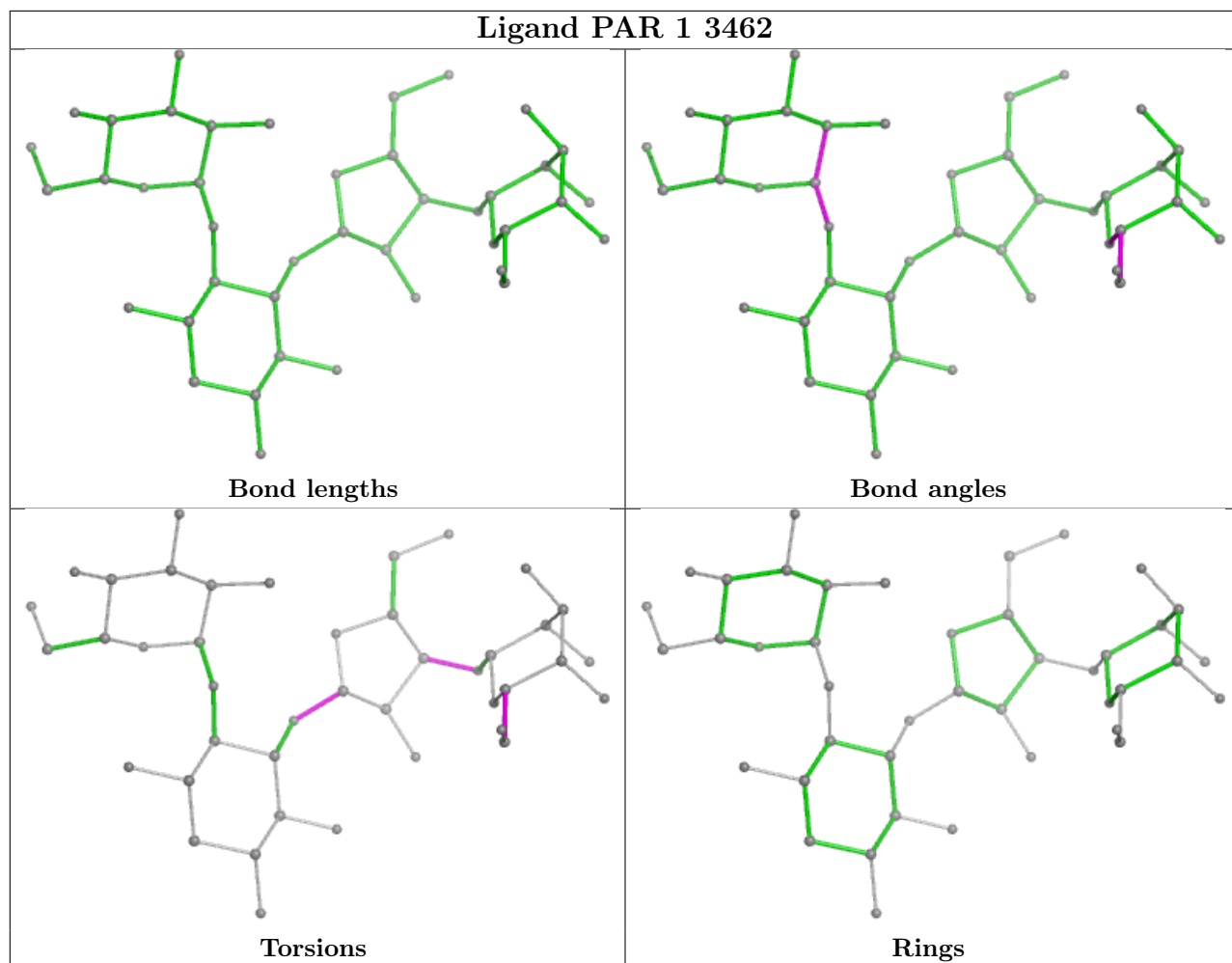


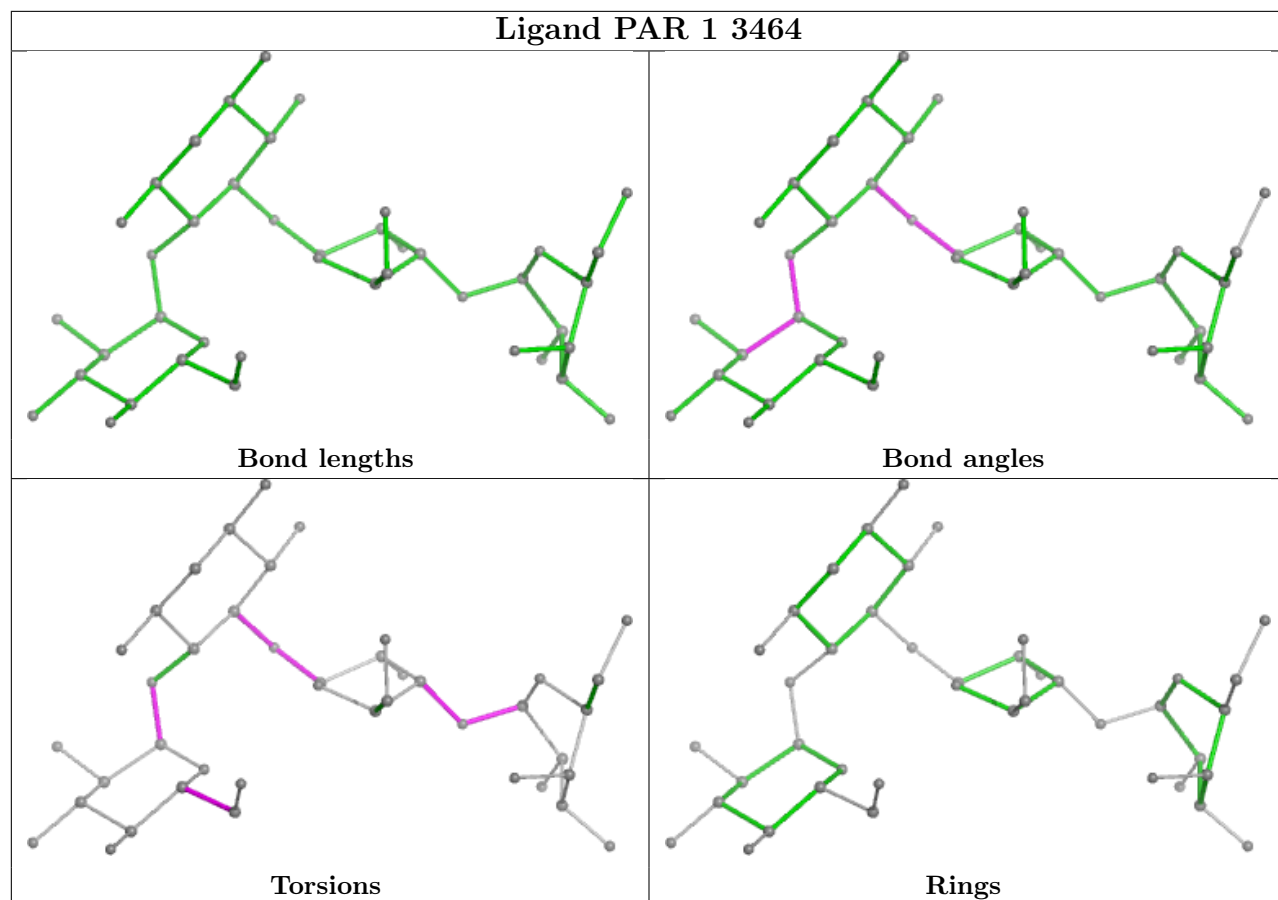


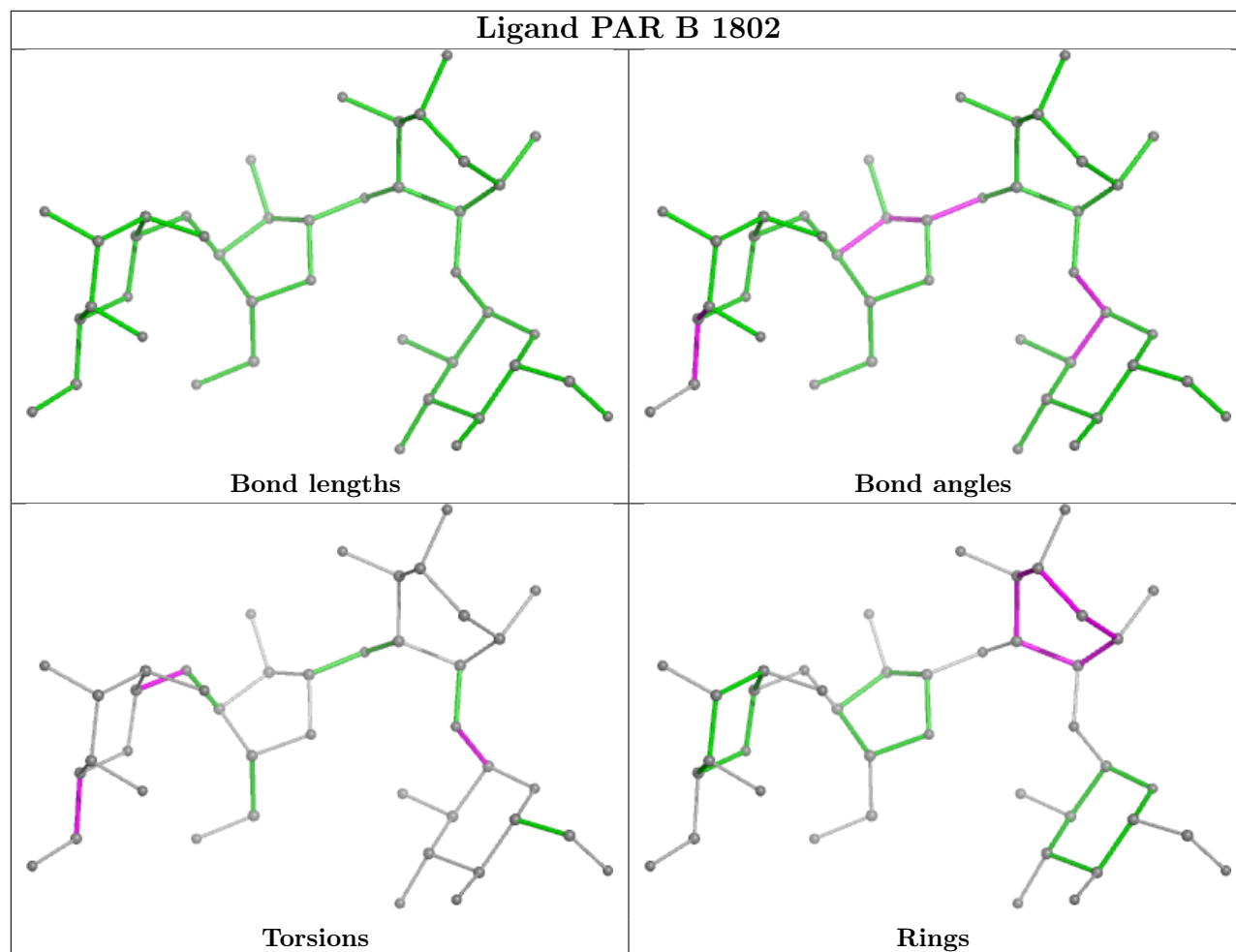


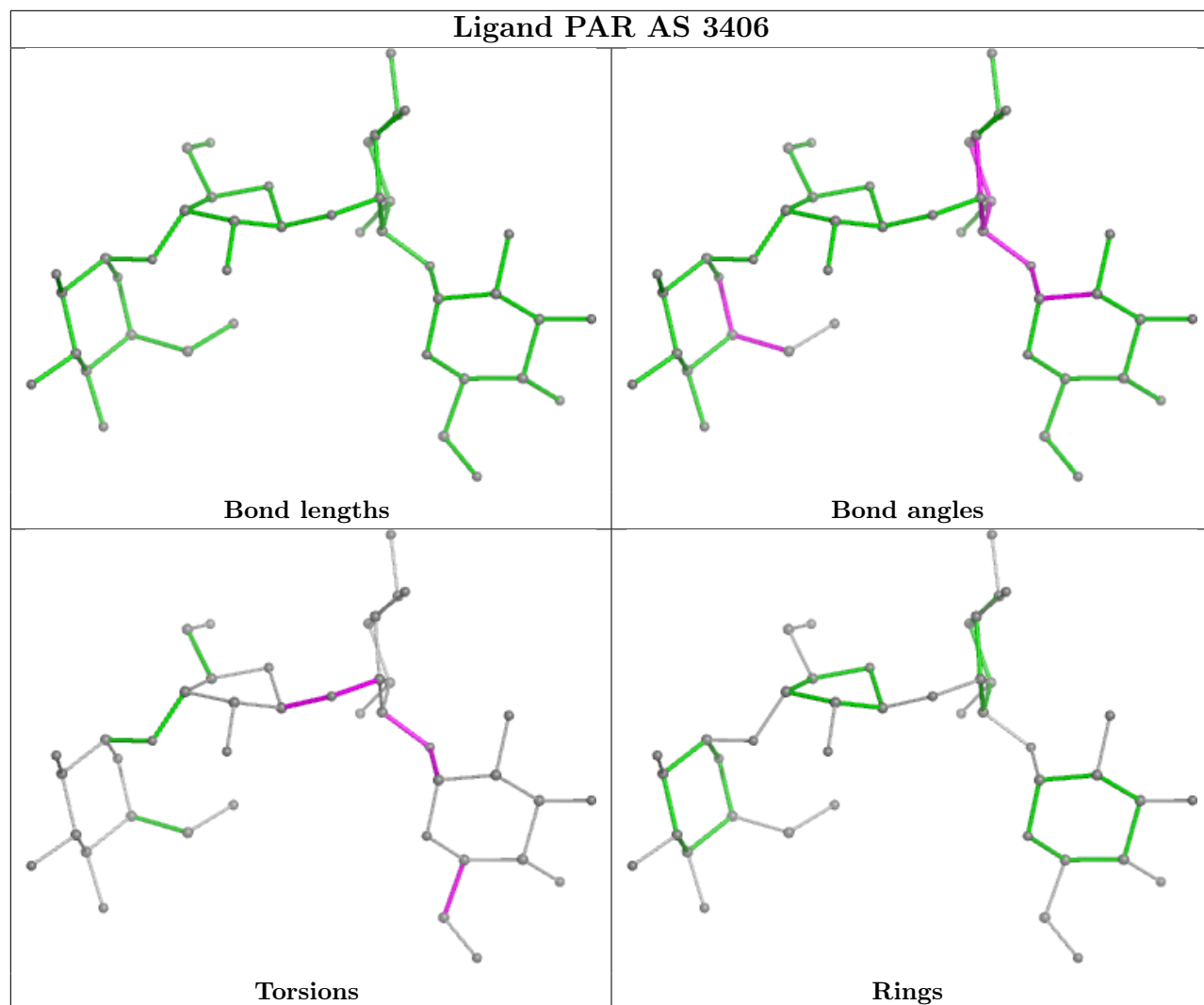


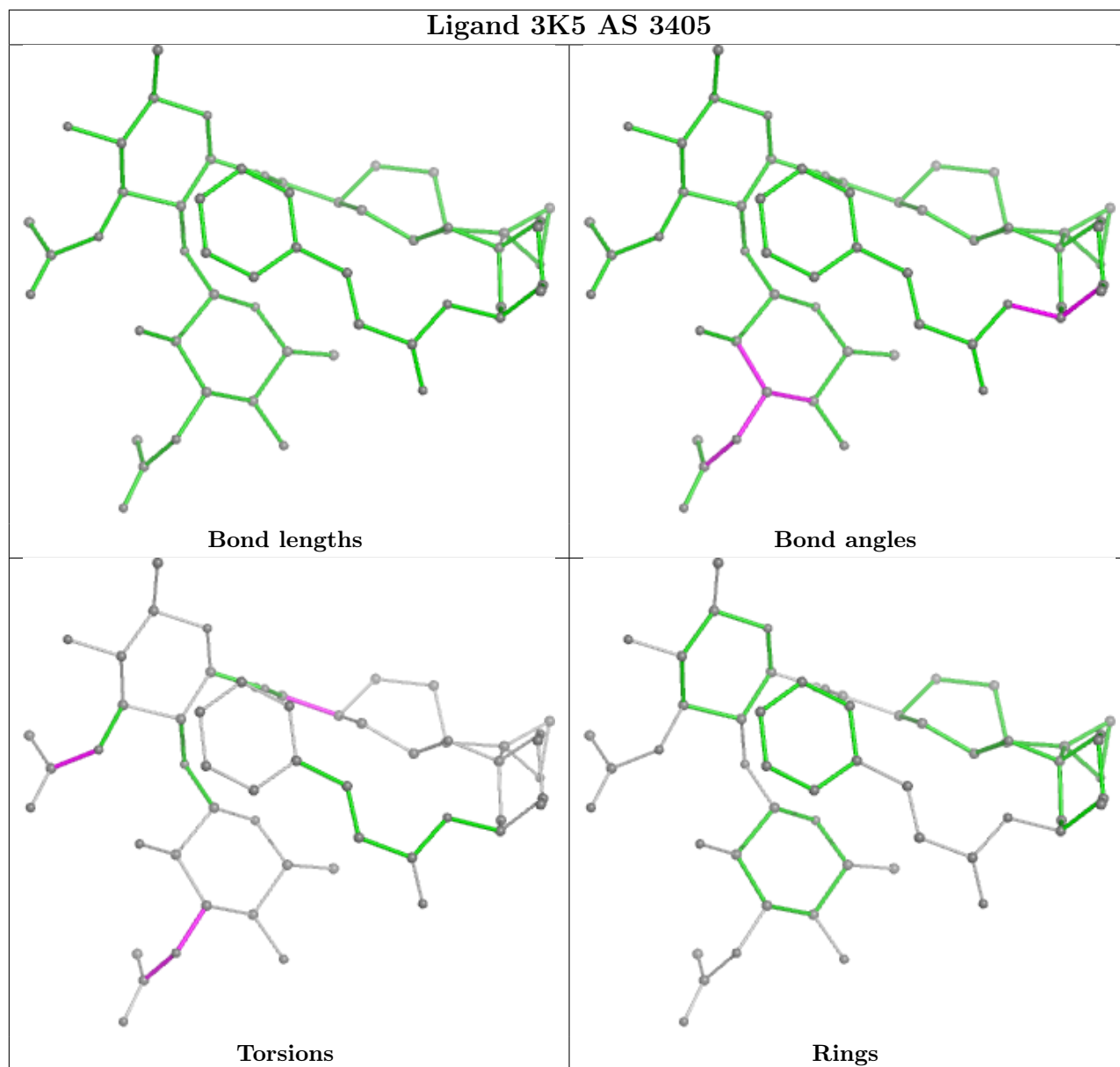


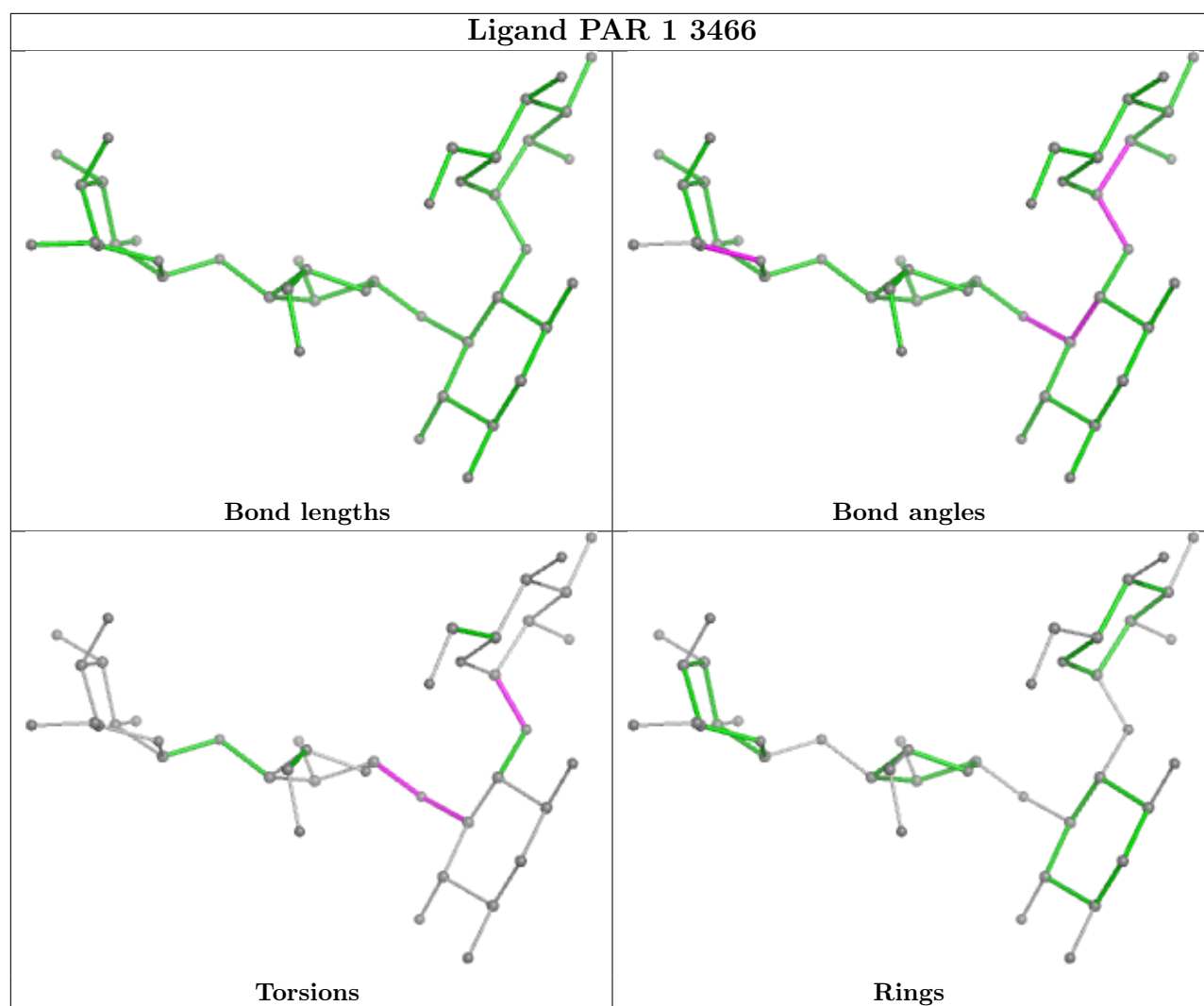












5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1	3219/3359 (95%)	0.89	250 (7%) 20 20	16, 47, 179, 355	0
1	AS	3061/3359 (91%)	1.55	849 (27%) 2 3	38, 85, 181, 329	0
2	3	121/121 (100%)	0.72	3 (2%) 58 49	27, 70, 89, 129	0
2	AT	121/121 (100%)	1.15	17 (14%) 7 10	40, 98, 127, 132	0
3	4	157/158 (99%)	0.83	12 (7%) 21 21	28, 47, 130, 207	0
3	AU	156/158 (98%)	2.26	69 (44%) 1 1	63, 114, 159, 213	0
4	AW	248/254 (97%)	2.57	147 (59%) 0 0	48, 92, 123, 139	0
4	j	249/254 (98%)	1.30	54 (21%) 3 5	13, 33, 54, 89	0
5	AX	386/389 (99%)	1.91	137 (35%) 1 1	33, 72, 107, 187	0
5	k	386/389 (99%)	1.36	89 (23%) 2 5	19, 45, 69, 111	1 (0%)
6	AY	359/363 (98%)	2.37	186 (51%) 0 0	41, 84, 111, 137	0
6	l	361/363 (99%)	1.32	72 (19%) 3 6	18, 46, 81, 124	0
7	AZ	292/298 (97%)	2.67	173 (59%) 0 0	66, 116, 146, 177	0
7	m	296/298 (99%)	1.50	81 (27%) 2 3	36, 81, 114, 144	0
8	BA	153/176 (86%)	2.21	72 (47%) 0 1	54, 80, 109, 165	0
8	n	157/176 (89%)	1.49	43 (27%) 2 3	33, 61, 101, 142	0
9	BB	227/241 (94%)	1.76	74 (32%) 1 2	40, 65, 92, 112	0
9	o	228/241 (94%)	1.03	30 (13%) 8 11	21, 44, 87, 122	0
10	BC	226/262 (86%)	2.86	150 (66%) 0 0	101, 138, 165, 196	0
10	p	237/262 (90%)	1.35	54 (22%) 2 5	28, 56, 112, 156	0
11	BD	189/191 (98%)	1.81	71 (37%) 1 1	58, 88, 119, 137	0
11	q	190/191 (99%)	1.28	36 (18%) 4 6	36, 53, 81, 99	0
12	BE	206/220 (93%)	1.22	36 (17%) 5 7	39, 65, 110, 143	0
12	r	208/220 (94%)	1.54	57 (27%) 2 3	24, 51, 104, 135	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	BF	171/174 (98%)	1.76	62 (36%) 1 1	74, 102, 126, 146	0
13	s	171/174 (98%)	1.96	71 (41%) 1 1	46, 86, 113, 146	0
14	BG	200/202 (99%)	2.90	140 (70%) 0 0	49, 111, 147, 171	0
14	t	200/202 (99%)	1.35	49 (24%) 2 4	20, 58, 113, 141	0
15	BH	128/131 (97%)	2.07	64 (50%) 0 0	57, 88, 108, 134	0
15	u	130/131 (99%)	1.25	22 (16%) 5 7	20, 54, 81, 113	0
16	BI	203/204 (99%)	3.70	177 (87%) 0 0	58, 109, 134, 149	0
16	v	203/204 (99%)	1.57	59 (29%) 1 3	19, 36, 49, 73	0
17	BJ	199/200 (99%)	1.69	64 (32%) 1 2	36, 60, 106, 125	0
17	w	199/200 (99%)	1.52	50 (25%) 2 4	16, 42, 85, 108	0
18	BK	174/185 (94%)	2.44	96 (55%) 0 0	49, 80, 112, 135	0
18	x	172/185 (92%)	1.52	47 (27%) 2 3	18, 45, 143, 168	0
19	BL	185/186 (99%)	2.29	95 (51%) 0 0	53, 83, 111, 131	0
19	y	185/186 (99%)	1.57	60 (32%) 1 2	25, 47, 64, 79	0
20	BM	171/190 (90%)	2.82	100 (58%) 0 0	66, 100, 123, 136	0
20	z	179/190 (94%)	1.47	43 (24%) 2 4	30, 53, 94, 115	0
21	0	170/172 (98%)	1.09	21 (12%) 9 12	24, 43, 71, 120	0
21	BN	170/172 (98%)	1.84	62 (36%) 1 1	43, 69, 104, 120	0
22	2	159/160 (99%)	1.65	46 (28%) 1 3	29, 49, 115, 157	0
22	BO	159/160 (99%)	2.78	102 (64%) 0 0	48, 84, 118, 170	0
23	5	103/124 (83%)	1.44	27 (26%) 2 4	55, 92, 126, 139	0
23	BP	102/124 (82%)	1.92	38 (37%) 1 1	108, 141, 177, 201	1 (0%)
24	6	131/137 (95%)	1.50	31 (23%) 2 4	17, 39, 61, 82	0
24	BQ	131/137 (95%)	1.97	53 (40%) 1 1	31, 55, 77, 85	0
25	7	118/155 (76%)	1.47	33 (27%) 2 3	25, 61, 144, 161	0
25	BR	111/155 (71%)	1.96	44 (39%) 1 1	51, 87, 138, 179	0
26	8	121/142 (85%)	1.22	21 (17%) 5 7	26, 49, 74, 124	0
26	BS	118/142 (83%)	3.04	89 (75%) 0 0	56, 104, 131, 153	0
27	9	126/127 (99%)	1.87	46 (36%) 1 1	26, 56, 93, 133	0
27	BT	124/127 (97%)	2.81	82 (66%) 0 0	54, 103, 134, 154	0
28	AA	135/136 (99%)	1.62	38 (28%) 2 3	30, 57, 91, 107	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	BU	135/136 (99%)	2.36	68 (50%) 0 0	92, 124, 146, 157	0
29	AB	148/149 (99%)	1.46	37 (25%) 2 4	16, 47, 71, 82	0
29	BV	148/149 (99%)	2.89	95 (64%) 0 0	46, 95, 118, 131	0
30	AC	62/63 (98%)	1.88	20 (32%) 1 2	26, 59, 116, 143	0
30	BW	60/63 (95%)	2.83	43 (71%) 0 0	50, 103, 122, 131	1 (1%)
31	AD	99/106 (93%)	1.52	27 (27%) 2 3	35, 55, 88, 100	0
31	BX	96/106 (90%)	2.31	51 (53%) 0 0	79, 112, 136, 158	0
32	AE	110/112 (98%)	1.41	28 (25%) 2 4	27, 56, 135, 154	0
32	BY	109/112 (97%)	1.92	33 (30%) 1 3	43, 88, 131, 154	0
33	AF	124/131 (94%)	1.34	28 (22%) 3 5	21, 42, 57, 73	0
33	BZ	124/131 (94%)	2.33	63 (50%) 0 0	40, 62, 94, 113	1 (0%)
34	AG	106/107 (99%)	1.40	25 (23%) 2 4	21, 36, 72, 111	0
34	CA	106/107 (99%)	1.81	36 (33%) 1 2	35, 58, 99, 119	3 (2%)
35	AH	111/122 (90%)	2.00	46 (41%) 1 1	25, 51, 99, 120	0
35	CB	112/122 (91%)	3.57	82 (73%) 0 0	69, 115, 152, 186	4 (3%)
36	AI	120/120 (100%)	1.93	46 (38%) 1 1	31, 53, 86, 120	0
36	CC	117/120 (97%)	3.55	96 (82%) 0 0	78, 111, 131, 140	0
37	AJ	97/99 (97%)	1.14	15 (15%) 6 8	43, 60, 88, 110	0
37	CD	98/99 (98%)	2.58	52 (53%) 0 0	75, 126, 159, 163	1 (1%)
38	AK	86/90 (95%)	1.25	17 (19%) 3 6	19, 29, 75, 109	0
38	CE	86/90 (95%)	2.69	58 (67%) 0 0	52, 80, 129, 160	0
39	AL	77/78 (98%)	1.54	17 (22%) 3 5	44, 75, 121, 178	0
39	CF	76/78 (97%)	2.05	30 (39%) 1 1	88, 145, 194, 210	1 (1%)
40	AM	50/51 (98%)	1.78	18 (36%) 1 1	19, 47, 67, 81	0
40	CG	50/51 (98%)	2.96	36 (72%) 0 0	57, 87, 113, 125	0
41	AN	52/52 (100%)	1.08	11 (21%) 3 5	28, 46, 69, 104	0
41	CH	52/52 (100%)	1.55	13 (25%) 2 4	41, 62, 107, 122	1 (1%)
42	AO	25/25 (100%)	2.06	10 (40%) 1 1	38, 56, 72, 80	0
42	CI	24/25 (96%)	3.13	21 (87%) 0 0	56, 78, 94, 98	0
43	AP	103/106 (97%)	1.54	28 (27%) 2 3	28, 53, 85, 98	0
43	CJ	103/106 (97%)	2.03	50 (48%) 0 0	50, 97, 145, 170	2 (1%)

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	AQ	91/92 (98%)	1.40	20 (21%) 3 5	24, 34, 69, 99	0
44	CK	91/92 (98%)	2.04	40 (43%) 1 1	45, 90, 107, 119	0
45	CL	107/267 (40%)	2.09	52 (48%) 0 0	71, 110, 149, 174	0
45	i	121/267 (45%)	2.20	52 (42%) 1 1	48, 87, 128, 163	0
46	B	1730/1787 (96%)	1.15	266 (15%) 6 8	17, 66, 198, 403	0
46	CM	1704/1787 (95%)	1.90	608 (35%) 1 1	37, 105, 207, 346	0
47	C	208/261 (79%)	1.61	59 (28%) 1 3	45, 84, 117, 185	0
47	CN	208/261 (79%)	1.85	75 (36%) 1 1	65, 121, 160, 180	0
48	CO	214/256 (83%)	2.09	99 (46%) 1 1	89, 136, 180, 202	0
48	D	214/256 (83%)	1.17	36 (16%) 5 7	42, 71, 101, 120	0
49	CP	216/249 (86%)	1.82	77 (35%) 1 1	52, 82, 118, 138	0
49	E	217/249 (87%)	1.51	63 (29%) 1 3	34, 57, 92, 121	0
50	CQ	223/251 (88%)	2.57	134 (60%) 0 0	92, 134, 178, 204	0
50	F	223/251 (88%)	2.11	100 (44%) 1 1	37, 80, 139, 164	0
51	CR	260/262 (99%)	1.42	67 (25%) 2 4	45, 66, 104, 145	0
51	G	259/262 (98%)	1.47	73 (28%) 1 3	35, 59, 91, 135	0
52	CS	206/225 (91%)	3.02	143 (69%) 0 0	102, 164, 185, 206	0
52	H	206/225 (91%)	2.06	82 (39%) 1 1	53, 90, 128, 172	0
53	CT	235/236 (99%)	1.99	101 (42%) 1 1	53, 94, 124, 154	0
53	I	226/236 (95%)	1.65	63 (27%) 2 3	50, 84, 136, 181	0
54	CU	182/186 (97%)	2.16	95 (52%) 0 0	66, 125, 174, 199	0
54	J	185/186 (99%)	1.91	73 (39%) 1 1	40, 90, 142, 231	0
55	CV	203/206 (98%)	2.28	109 (53%) 0 0	48, 76, 131, 154	0
55	K	203/206 (98%)	1.14	29 (14%) 7 10	35, 54, 120, 151	0
56	CW	178/189 (94%)	2.31	84 (47%) 0 1	58, 90, 119, 148	0
56	L	178/189 (94%)	2.02	77 (43%) 1 1	41, 70, 102, 120	0
57	CX	93/118 (78%)	2.01	41 (44%) 1 1	107, 157, 193, 218	0
57	M	98/118 (83%)	1.77	37 (37%) 1 1	52, 91, 129, 176	0
58	CY	141/155 (90%)	2.08	73 (51%) 0 0	27, 60, 102, 155	0
58	N	144/155 (92%)	1.22	22 (15%) 6 8	24, 47, 102, 133	0
59	CZ	116/143 (81%)	1.78	41 (35%) 1 1	156, 200, 230, 249	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
59	O	116/143 (81%)	1.90	46 (39%) 1 1	112, 154, 189, 202	0
60	DA	150/151 (99%)	2.65	97 (64%) 0 0	62, 104, 129, 143	0
60	P	150/151 (99%)	1.39	34 (22%) 3 5	26, 56, 73, 88	0
61	DB	127/132 (96%)	2.46	66 (51%) 0 0	78, 141, 165, 191	0
61	Q	127/132 (96%)	1.26	26 (20%) 3 5	23, 61, 90, 99	0
62	DC	118/142 (83%)	3.23	94 (79%) 0 0	94, 148, 166, 189	0
62	R	129/142 (90%)	2.00	60 (46%) 0 1	40, 85, 140, 173	0
63	DD	140/142 (98%)	3.67	119 (85%) 0 0	111, 156, 187, 203	0
63	S	139/142 (97%)	2.06	62 (44%) 1 1	48, 93, 127, 139	0
64	DE	125/137 (91%)	2.34	70 (56%) 0 0	94, 136, 170, 193	0
64	T	123/137 (89%)	2.15	58 (47%) 0 1	58, 99, 146, 158	0
65	DF	142/145 (97%)	3.33	113 (79%) 0 0	100, 145, 184, 200	0
65	U	144/145 (99%)	1.75	53 (36%) 1 1	41, 75, 111, 159	0
66	DG	141/145 (97%)	3.22	111 (78%) 0 0	116, 155, 177, 210	0
66	V	139/145 (95%)	1.93	54 (38%) 1 1	58, 92, 129, 143	0
67	DH	100/119 (84%)	3.43	65 (65%) 0 0	101, 140, 166, 184	0
67	W	102/119 (85%)	2.30	56 (54%) 0 0	39, 94, 139, 153	0
68	DI	87/87 (100%)	1.70	28 (32%) 1 2	60, 94, 129, 173	0
68	X	87/87 (100%)	1.21	15 (17%) 5 7	35, 71, 109, 130	0
69	DJ	129/130 (99%)	1.94	53 (41%) 1 1	49, 75, 95, 104	0
69	Y	129/130 (99%)	1.63	31 (24%) 2 4	28, 51, 69, 78	0
70	DK	143/145 (98%)	2.33	87 (60%) 0 0	40, 69, 104, 112	0
70	Z	143/145 (98%)	1.46	33 (23%) 2 5	30, 52, 73, 121	0
71	DL	132/135 (97%)	1.54	25 (18%) 4 6	63, 90, 119, 131	0
71	a	134/135 (99%)	1.60	41 (30%) 1 3	52, 79, 114, 136	0
72	DM	72/105 (68%)	2.37	38 (52%) 0 0	138, 173, 196, 208	0
72	b	71/105 (67%)	1.28	14 (19%) 3 6	73, 96, 137, 151	0
73	DN	97/119 (81%)	2.71	65 (67%) 0 0	62, 104, 154, 168	0
73	c	98/119 (82%)	1.86	36 (36%) 1 1	33, 55, 107, 119	0
74	DO	81/82 (98%)	2.29	46 (56%) 0 0	70, 113, 149, 174	0
74	d	81/82 (98%)	1.34	16 (19%) 3 6	43, 64, 130, 161	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
75	DP	62/67 (92%)	2.18	27 (43%)	1	1	120, 160, 182, 199	0
75	e	62/67 (92%)	1.97	29 (46%)	0	1	77, 100, 125, 139	0
76	DQ	55/56 (98%)	3.18	41 (74%)	0	0	106, 131, 173, 202	0
76	f	55/56 (98%)	2.16	30 (54%)	0	0	48, 66, 94, 118	0
77	DR	56/63 (88%)	2.50	31 (55%)	0	0	76, 103, 164, 198	0
77	g	60/63 (95%)	1.78	21 (35%)	1	2	51, 81, 136, 166	0
78	DS	70/193 (36%)	2.68	33 (47%)	0	1	131, 203, 236, 256	0
78	h	70/193 (36%)	2.19	37 (52%)	0	0	94, 130, 155, 171	0
79	AR	310/317 (97%)	2.02	129 (41%)	1	1	75, 132, 174, 198	0
79	DT	311/317 (98%)	2.35	172 (55%)	0	0	136, 182, 213, 224	0
80	l1	217/217 (100%)	1.49	53 (24%)	2	4	94, 150, 201, 233	0
81	l2	14/165 (8%)	1.74	7 (50%)	0	0	129, 177, 198, 221	0
All	All	32865/35508 (92%)	1.76	11107 (33%)	1	2	13, 78, 169, 403	16 (0%)

All (11107) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
67	DH	79	ASP	24.6
52	H	152	SER	24.3
46	CM	726	C	15.3
20	BM	16	GLY	15.0
65	DF	100	VAL	14.3
35	CB	64	GLN	14.1
63	DD	130	GLY	14.1
67	DH	80	ALA	13.6
33	BZ	125	GLY	13.5
7	AZ	49	TYR	12.4
1	AS	219	G	11.9
52	CS	152	SER	11.8
36	CC	96	GLU	11.7
7	AZ	47	PRO	11.5
30	BW	31	SER	11.3
4	AW	47	GLN	11.3
46	CM	1270	U	11.2
7	AZ	46	SER	11.2
67	DH	65	THR	11.1
63	DD	137	PHE	11.1
35	CB	34	HIS	11.0

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Mol	Chain	Res	Type	RSRZ
16	BI	149	ASN	10.9
73	DN	14	GLY	10.8
52	CS	112	ARG	10.8
46	CM	1590	U	10.7
63	DD	127	LYS	10.7
67	DH	63	LYS	10.5
46	CM	1404	G	10.4
20	BM	51	VAL	10.3
3	AU	91	C	10.2
52	H	150	GLY	10.0
46	CM	1571	G	10.0
56	CW	62	ARG	10.0
7	AZ	150	LEU	9.9
67	DH	81	TYR	9.9
45	i	36	SER	9.9
46	CM	258	U	9.8
67	DH	28	THR	9.8
67	DH	61	VAL	9.8
6	AY	70	ARG	9.7
62	DC	119	PHE	9.6
78	DS	128	THR	9.5
46	CM	727	U	9.4
40	CG	11	GLN	9.4
63	DD	134	ARG	9.4
35	CB	38	ALA	9.4
15	u	130	LYS	9.3
14	BG	21	ARG	9.3
52	CS	70	VAL	9.2
3	AU	100	U	9.1
35	CB	21	LYS	9.1
14	BG	169	TYR	9.1
53	I	83	CYS	9.1
62	DC	14	GLN	9.0
5	AX	263	THR	9.0
63	DD	129	GLY	9.0
49	CP	191	VAL	9.0
10	BC	62	GLN	9.0
15	u	131	ALA	8.9
6	AY	197	GLY	8.9
14	BG	20	GLU	8.9
52	H	151	SER	8.9
16	BI	144	ARG	8.8

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Mol	Chain	Res	Type	RSRZ
36	CC	90	ARG	8.8
26	BS	50	SER	8.8
63	DD	141	TYR	8.8
28	BU	91	SER	8.8
60	DA	65	VAL	8.7
65	DF	5	VAL	8.7
50	F	205	ASP	8.7
45	i	33	ASN	8.6
61	DB	12	ALA	8.6
1	AS	1021	A	8.6
14	BG	2	ALA	8.5
16	BI	108	ARG	8.5
22	BO	86	GLU	8.5
30	AC	31	SER	8.5
6	l	353	SER	8.5
63	DD	131	ARG	8.4
66	DG	27	LYS	8.4
52	CS	106	LYS	8.4
79	AR	100	THR	8.4
1	AS	2396	G	8.4
7	AZ	39	GLN	8.4
71	a	135	ASP	8.4
16	BI	146	ALA	8.4
13	BF	143	ARG	8.3
63	DD	133	ALA	8.3
37	CD	9	GLY	8.3
65	DF	101	LEU	8.2
18	BK	42	GLU	8.2
29	BV	72	GLU	8.2
6	AY	202	GLN	8.2
36	CC	78	LYS	8.2
72	DM	97	LYS	8.2
36	CC	102	GLU	8.1
20	BM	45	TYR	8.1
4	AW	229	ALA	8.1
78	DS	123	LYS	8.1
46	CM	1137	A	8.1
5	AX	4	ARG	8.0
20	BM	67	LYS	8.0
46	CM	725	A	8.0
19	BL	169	GLY	8.0
14	BG	17	HIS	8.0

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Mol	Chain	Res	Type	RSRZ
10	BC	144	ILE	7.9
8	BA	136	ALA	7.9
61	DB	112	ASP	7.9
32	BY	95	VAL	7.9
67	DH	78	TRP	7.9
1	AS	402	A	7.9
27	BT	79	ALA	7.9
67	DH	66	THR	7.9
54	J	130	GLU	7.9
33	BZ	17[A]	LYS	7.9
63	DD	126	LYS	7.9
35	CB	14	ASN	7.8
37	CD	8	ALA	7.8
4	AW	228	GLY	7.8
78	DS	130	PRO	7.8
29	BV	109	TYR	7.8
5	AX	236	LYS	7.8
18	BK	125	GLN	7.8
8	BA	139	LYS	7.8
52	CS	71	SER	7.8
16	BI	136	ASP	7.8
35	CB	22	VAL	7.8
45	i	64	LEU	7.8
46	CM	1144	C	7.8
36	CC	80	LEU	7.7
47	C	127	ARG	7.7
46	CM	1184	G	7.7
62	DC	117	GLY	7.7
14	BG	96	SER	7.7
35	CB	24	LYS	7.7
1	AS	1825	A	7.6
1	AS	146	U	7.6
52	H	153	GLY	7.6
35	CB	35	VAL	7.6
46	CM	1570	A	7.6
34	CA	83	ALA	7.6
46	B	726	C	7.6
10	BC	236	GLY	7.6
50	F	186	LYS	7.6
52	CS	79	SER	7.6
16	BI	184	LYS	7.6
66	DG	92	LYS	7.6

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Mol	Chain	Res	Type	RSRZ
65	DF	123	ARG	7.6
46	CM	697	U	7.5
79	DT	32	LEU	7.5
30	AC	33	LYS	7.5
54	J	180	GLU	7.5
65	DF	121	SER	7.5
16	BI	45	PRO	7.5
45	CL	60	ASN	7.5
63	DD	136	ARG	7.5
70	DK	21	ASN	7.5
10	BC	65	ILE	7.5
35	CB	36[A]	LYS	7.5
15	BH	112	GLN	7.5
66	DG	91	HIS	7.4
46	CM	1672	G	7.4
70	DK	85	ALA	7.4
7	m	289	LYS	7.4
53	I	164	LYS	7.4
9	BB	98	ARG	7.4
50	CQ	186	LYS	7.4
65	DF	74	GLN	7.4
67	DH	60	LYS	7.4
55	CV	79	ALA	7.4
1	AS	240	C	7.4
1	AS	1862	C	7.4
35	CB	3	GLN	7.3
6	l	197	GLY	7.3
73	DN	90	THR	7.3
61	DB	85	LYS	7.3
20	BM	25	ASP	7.3
36	CC	113	GLN	7.3
35	CB	30	LEU	7.3
46	B	725	A	7.3
16	BI	137	PRO	7.3
49	E	80	SER	7.3
14	BG	149	VAL	7.3
20	BM	12	ALA	7.3
60	DA	5	HIS	7.3
16	BI	28	TRP	7.3
46	CM	1581	G	7.3
54	CU	64	GLN	7.3
7	AZ	42	ALA	7.3

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Mol	Chain	Res	Type	RSRZ
6	l	363	ASN	7.3
20	BM	14	VAL	7.2
14	BG	133	SER	7.2
20	BM	73	GLY	7.2
43	CJ	51	GLY	7.2
46	B	1673	U	7.2
1	AS	826	A	7.2
52	CS	28	THR	7.2
6	l	55	GLU	7.2
35	AH	36	LYS	7.2
46	B	1359	U	7.2
46	CM	1348	U	7.2
31	BX	96	ASP	7.2
11	BD	113	GLU	7.2
26	BS	123	TYR	7.2
5	AX	12	GLY	7.2
63	DD	128	PHE	7.2
16	BI	143	ARG	7.2
7	AZ	55	PHE	7.2
79	DT	167	ILE	7.2
10	BC	66	LEU	7.2
1	AS	1612	U	7.2
1	AS	1849	U	7.2
29	BV	111	LYS	7.1
50	CQ	185	ILE	7.1
1	AS	2079	C	7.1
3	AU	118	C	7.1
6	AY	189	ARG	7.1
15	BH	104	GLN	7.1
47	C	97	ALA	7.1
10	BC	68	LEU	7.1
16	BI	171	SER	7.1
16	BI	195	ASN	7.1
7	AZ	38	THR	7.1
61	DB	11	VAL	7.1
62	R	127	ARG	7.1
35	CB	33	GLN	7.1
46	B	1725	U	7.0
26	BS	132	ALA	7.0
79	AR	80	TYR	7.0
50	CQ	202	ALA	7.0
66	DG	112	GLY	7.0

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Mol	Chain	Res	Type	RSRZ
46	CM	989	U	7.0
16	BI	155	VAL	7.0
10	BC	199	ALA	7.0
16	BI	191	TRP	7.0
1	AS	1557	U	6.9
1	AS	775	G	6.9
60	P	7	SER	6.9
68	DI	5	LYS	6.9
73	c	90	THR	6.9
10	BC	163	LEU	6.9
52	CS	109	LYS	6.9
22	BO	34	TYR	6.9
22	BO	32	LYS	6.9
76	DQ	54	LYS	6.9
80	ll	67	ILE	6.9
79	DT	17	ASN	6.9
4	AW	248	GLY	6.9
5	AX	25	GLN	6.9
56	CW	64	GLU	6.9
3	AU	38	U	6.9
27	9	125	LYS	6.9
30	BW	33	LYS	6.9
46	B	1348	U	6.9
48	CO	152	LYS	6.9
29	BV	71	PRO	6.8
16	BI	153	ASN	6.8
20	BM	83	GLY	6.8
79	DT	257	ILE	6.8
79	DT	271	LEU	6.8
64	T	47	ARG	6.8
18	x	172	GLN	6.8
63	DD	125	PRO	6.8
62	DC	118	GLU	6.8
16	BI	107	GLY	6.8
4	AW	247	ARG	6.8
4	AW	246	LEU	6.8
28	BU	82	PRO	6.8
38	CE	13	ASN	6.8
15	u	128	LEU	6.8
63	S	104	LEU	6.8
52	CS	102	ARG	6.8
22	BO	94	GLU	6.8

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Mol	Chain	Res	Type	RSRZ
65	DF	4	VAL	6.7
4	AW	48	ILE	6.7
52	CS	76	LYS	6.7
1	AS	1478	A	6.7
52	CS	104	ASN	6.7
35	CB	61	GLN	6.7
53	CT	196	LYS	6.7
46	CM	694	C	6.7
56	CW	58	ASP	6.7
27	9	45	VAL	6.7
38	CE	73	ARG	6.7
1	AS	1852	C	6.7
52	CS	113	ILE	6.7
26	BS	122	ALA	6.7
19	BL	71	LEU	6.7
65	DF	56	LYS	6.7
66	DG	118	PRO	6.7
36	CC	68	ALA	6.6
3	AU	21	C	6.6
22	BO	72	VAL	6.6
50	CQ	10	LYS	6.6
6	AY	175	ALA	6.6
39	AL	33	ALA	6.6
63	DD	132	GLY	6.6
79	DT	76	ALA	6.6
72	DM	92	VAL	6.6
61	DB	86	THR	6.6
6	AY	55	GLU	6.6
37	CD	65	GLU	6.6
46	B	1135	G	6.6
46	CM	1453	C	6.6
4	AW	7	ASN	6.6
26	BS	111	ASN	6.6
56	CW	104	PHE	6.6
14	BG	51	ILE	6.5
49	CP	173	ILE	6.5
66	DG	135	ILE	6.5
1	AS	2382	A	6.5
63	DD	122	ARG	6.5
67	DH	62	LEU	6.5
45	i	62	ALA	6.5
50	F	162	GLY	6.5

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Mol	Chain	Res	Type	RSRZ
20	BM	19	LYS	6.5
21	BN	143	PHE	6.5
45	i	65	LYS	6.5
79	DT	258	LYS	6.5
24	BQ	55	GLY	6.5
29	BV	68	PHE	6.5
19	BL	68	SER	6.5
1	AS	2847	U	6.5
4	AW	184	ARG	6.4
18	BK	23	ARG	6.4
63	DD	119	ASP	6.4
7	AZ	82	GLU	6.4
4	AW	2	GLY	6.4
46	CM	1399	U	6.4
18	x	14	SER	6.4
15	u	119	GLN	6.4
78	DS	131	LYS	6.4
8	n	1	MET	6.4
8	n	51	VAL	6.4
18	BK	128	ARG	6.4
29	BV	74	ASN	6.4
29	BV	110	GLY	6.4
52	CS	153	GLY	6.4
28	AA	103	GLU	6.4
6	l	107	TRP	6.4
55	CV	103	GLN	6.4
60	DA	144	ALA	6.4
79	AR	101	THR	6.4
65	DF	127	HIS	6.3
40	CG	37	TYR	6.3
67	W	81	TYR	6.3
46	CM	1569	U	6.3
50	CQ	12	LEU	6.3
79	AR	260	PHE	6.3
10	p	261	SER	6.3
36	CC	98	SER	6.3
52	CS	116	HIS	6.3
4	AW	78	ALA	6.3
20	BM	17	VAL	6.3
20	BM	88	ARG	6.3
50	CQ	188	LYS	6.3
46	CM	1615	U	6.3

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Mol	Chain	Res	Type	RSRZ
10	BC	198	VAL	6.3
7	AZ	198	TYR	6.3
16	BI	193	LYS	6.3
17	BJ	122	PRO	6.3
30	AC	32	LEU	6.3
6	AY	66	TRP	6.3
35	AH	34	HIS	6.3
50	F	166	ARG	6.3
79	DT	309	VAL	6.3
7	AZ	143	LYS	6.3
35	CB	60	ARG	6.3
45	i	42	ALA	6.3
66	DG	62	ALA	6.3
63	DD	124	GLU	6.2
76	DQ	56	ARG	6.2
65	U	56	LYS	6.2
52	H	79	SER	6.2
9	BB	102	GLN	6.2
46	B	75	U	6.2
37	AJ	65	GLU	6.2
22	2	160	ILE	6.2
27	9	86	GLN	6.2
14	BG	54	LEU	6.2
7	AZ	26	GLY	6.2
22	BO	37	GLY	6.2
16	BI	57	GLN	6.2
58	N	97	TYR	6.2
6	AY	199	ARG	6.2
14	BG	4	SER	6.2
27	BT	10	SER	6.2
42	CI	1	MET	6.2
4	AW	249	THR	6.2
6	AY	48	ARG	6.2
18	BK	144	SER	6.2
51	G	24	SER	6.2
4	AW	245	LEU	6.2
53	CT	79	LYS	6.1
16	BI	32	GLN	6.1
16	BI	53	TYR	6.1
1	1	1021	A	6.1
46	CM	1297	A	6.1
78	h	128	THR	6.1

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Mol	Chain	Res	Type	RSRZ
1	AS	827	G	6.1
70	DK	39	LYS	6.1
66	V	118	PRO	6.1
14	BG	89	TYR	6.1
12	r	102	MET	6.1
21	BN	156	VAL	6.1
61	Q	112	ASP	6.1
7	m	92	LEU	6.1
46	CM	719	A	6.1
52	CS	73	THR	6.1
4	AW	234	LYS	6.1
7	AZ	201	GLY	6.1
35	CB	19	LYS	6.1
45	i	43	PRO	6.1
16	BI	30	TYR	6.1
35	CB	7	TYR	6.1
36	CC	92	LEU	6.1
22	BO	160	ILE	6.1
56	CW	65	LYS	6.1
64	DE	23	LYS	6.1
1	1	2185	A	6.1
46	CM	1403	A	6.1
56	CW	14	VAL	6.1
25	BR	28	ILE	6.1
35	CB	9	ARG	6.1
1	AS	1851	U	6.1
1	AS	2080	U	6.1
6	AY	200	PHE	6.1
6	AY	176	HIS	6.1
3	AU	99	C	6.1
4	AW	194	ASN	6.0
19	BL	145	ASN	6.0
23	BP	28	PHE	6.0
38	AK	87	THR	6.0
62	R	124	THR	6.0
3	AU	148	G	6.0
46	CM	701	G	6.0
44	CK	28	LYS	6.0
70	Z	32	ARG	6.0
7	AZ	78	ALA	6.0
10	BC	149	ALA	6.0
20	BM	87	ALA	6.0

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Mol	Chain	Res	Type	RSRZ
10	BC	67	SER	6.0
48	CO	86	LEU	6.0
77	DR	39	LEU	6.0
48	CO	140	ILE	6.0
50	F	165	THR	6.0
1	1	1024	U	6.0
46	CM	1320	U	6.0
7	AZ	92	LEU	6.0
6	AY	109	ARG	6.0
16	BI	109	ARG	6.0
67	DH	76	LYS	6.0
79	DT	166	VAL	6.0
75	e	21	SER	6.0
31	BX	25	TYR	6.0
29	BV	65	GLN	6.0
73	DN	16	GLY	6.0
14	BG	91	ARG	6.0
36	CC	9	LEU	6.0
36	CC	84	LYS	6.0
16	BI	103	GLU	6.0
16	BI	175	ASN	5.9
17	BJ	49	PHE	5.9
46	CM	1318	C	5.9
56	CW	47	PHE	5.9
17	BJ	133	GLY	5.9
14	BG	77	LEU	5.9
32	BY	26	LYS	5.9
36	CC	108	ARG	5.9
40	CG	34	LYS	5.9
56	CW	49	LEU	5.9
18	BK	2	VAL	5.9
78	h	156	VAL	5.9
1	1	1934	U	5.9
52	H	154	THR	5.9
63	DD	42	ILE	5.9
59	O	111	ASN	5.9
36	CC	83	LYS	5.9
78	DS	125	LYS	5.9
35	CB	94	LEU	5.9
27	BT	25	VAL	5.9
46	CM	1398	G	5.9
10	BC	56	TYR	5.9

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Mol	Chain	Res	Type	RSRZ
45	i	60	ASN	5.9
66	DG	119	LYS	5.9
5	AX	47	LEU	5.9
14	BG	102	GLN	5.9
9	BB	132	VAL	5.9
66	DG	113	VAL	5.9
75	DP	15	VAL	5.9
33	BZ	123	PRO	5.9
52	CS	130	ILE	5.9
38	CE	69	HIS	5.9
46	CM	1592	G	5.9
38	CE	78	PHE	5.9
52	CS	177	ILE	5.9
16	BI	104	GLU	5.9
38	CE	10	LYS	5.9
76	DQ	44	ARG	5.9
6	AY	188	LEU	5.9
58	CY	5	LEU	5.9
1	1	1552	C	5.9
3	AU	101	U	5.9
31	AD	106	ILE	5.8
24	BQ	54	ALA	5.8
15	BH	117	LYS	5.8
30	BW	25	LYS	5.8
61	DB	77	LYS	5.8
8	BA	133	GLU	5.8
46	CM	1568	C	5.8
34	CA	57	LYS	5.8
46	B	318	U	5.8
46	CM	1644	U	5.8
67	DH	68	LYS	5.8
7	AZ	68	HIS	5.8
6	AY	237	LEU	5.8
22	BO	91	LEU	5.8
55	CV	197	PHE	5.8
56	CW	93	LEU	5.8
70	DK	27	GLN	5.8
65	DF	54	LEU	5.8
72	DM	75	LEU	5.8
79	DT	34	LEU	5.8
52	CS	91	GLU	5.8
54	CU	21	PHE	5.8

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Mol	Chain	Res	Type	RSRZ
16	BI	187	ARG	5.8
29	BV	149	ALA	5.8
11	BD	92	PHE	5.8
6	AY	201	THR	5.8
36	CC	18	GLU	5.8
52	H	28	THR	5.8
1	1	1188	C	5.8
40	AM	40	LYS	5.8
53	I	79	LYS	5.8
54	J	169	TYR	5.8
71	DL	99	LYS	5.8
67	DH	84	ARG	5.8
17	BJ	98	ALA	5.8
45	i	35	SER	5.8
59	O	66	VAL	5.8
50	CQ	165	THR	5.8
65	DF	114	GLU	5.8
4	j	248	GLY	5.8
6	AY	186	LYS	5.8
9	BB	131	TYR	5.7
59	CZ	71	ILE	5.7
65	DF	115	ARG	5.7
78	DS	127	TYR	5.7
10	BC	100	PRO	5.7
46	B	778	U	5.7
63	DD	40	PRO	5.7
16	BI	167	ALA	5.7
35	CB	39	ALA	5.7
58	N	2	ALA	5.7
79	DT	233	ALA	5.7
8	n	2	SER	5.7
35	CB	18	ASN	5.7
79	DT	260	PHE	5.7
4	AW	156	LYS	5.7
14	BG	48	PRO	5.7
29	BV	127	ALA	5.7
64	DE	24	LEU	5.7
8	n	4	VAL	5.7
62	R	103	ASN	5.7
66	DG	73	VAL	5.7
10	BC	150	LYS	5.7
78	DS	129	THR	5.7

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Mol	Chain	Res	Type	RSRZ
16	BI	179	LEU	5.7
47	CN	87	LEU	5.7
47	CN	97	ALA	5.7
48	D	54	LEU	5.7
79	DT	28	ALA	5.7
53	CT	200	GLN	5.7
22	BO	15	PHE	5.7
49	CP	210	PHE	5.7
5	AX	335	VAL	5.7
46	CM	503	A	5.7
73	DN	86	VAL	5.7
79	DT	168	SER	5.7
36	CC	114	ARG	5.7
54	CU	118	HIS	5.7
79	AR	77	ASP	5.7
6	l	64	GLU	5.7
60	DA	53	ILE	5.7
67	DH	77	THR	5.7
9	BB	134	TYR	5.7
36	AI	80	LEU	5.7
61	DB	132	LEU	5.7
66	DG	104	CYS	5.7
17	w	8	VAL	5.7
16	BI	198	SER	5.7
5	AX	27	GLY	5.7
57	M	11	ILE	5.7
61	Q	119	ASP	5.7
35	CB	6	THR	5.7
60	DA	135	LEU	5.7
63	DD	43	LEU	5.7
28	BU	44	ALA	5.7
50	F	130	ALA	5.7
64	DE	4	VAL	5.7
77	g	4	VAL	5.7
74	d	15	GLU	5.6
37	CD	7	ALA	5.6
63	DD	67	LYS	5.6
27	BT	45	VAL	5.6
49	E	79	ARG	5.6
50	CQ	73	LEU	5.6
35	CB	15	THR	5.6
47	CN	74	ALA	5.6

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Mol	Chain	Res	Type	RSRZ
52	CS	74	ALA	5.6
62	DC	103	ASN	5.6
65	DF	78	ASN	5.6
22	BO	84	TYR	5.6
5	AX	73	VAL	5.6
7	m	201	GLY	5.6
74	DO	7	LEU	5.6
5	AX	132	LYS	5.6
6	AY	187	LYS	5.6
16	BI	111	SER	5.6
18	BK	43	LYS	5.6
75	DP	50	GLU	5.6
54	CU	143	ASN	5.6
64	DE	22	PRO	5.6
19	BL	172	PHE	5.6
79	DT	299	PHE	5.6
7	AZ	236	VAL	5.6
67	DH	64	ILE	5.6
18	BK	71	GLY	5.6
10	BC	70	LEU	5.6
19	BL	152	HIS	5.6
10	BC	197	ALA	5.6
26	BS	90	SER	5.6
53	CT	74	ARG	5.6
45	i	34	THR	5.6
36	CC	70	TYR	5.6
8	n	3	GLN	5.6
29	BV	67	HIS	5.6
20	z	136	ARG	5.6
1	AS	1415	A	5.6
1	AS	2943	A	5.6
16	BI	76	PRO	5.6
20	BM	68	GLU	5.6
8	BA	51	VAL	5.6
22	BO	30	TYR	5.6
35	CB	62	TYR	5.6
40	CG	35	ILE	5.5
49	CP	78	ILE	5.5
4	AW	232	GLY	5.5
10	BC	134	LYS	5.5
17	BJ	123	GLN	5.5
27	BT	81	GLN	5.5

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Mol	Chain	Res	Type	RSRZ
46	CM	723	G	5.5
16	BI	24	ARG	5.5
62	DC	111	MET	5.5
46	CM	1582	U	5.5
25	BR	7	SER	5.5
8	BA	130	ILE	5.5
56	L	45	ILE	5.5
48	CO	108	ASP	5.5
39	AL	6	LYS	5.5
50	F	188	LYS	5.5
78	DS	124	LYS	5.5
17	w	133	GLY	5.5
57	M	53	GLY	5.5
76	DQ	51	GLY	5.5
26	BS	60	HIS	5.5
53	CT	89	THR	5.5
46	CM	1346	U	5.5
50	F	185	ILE	5.5
14	BG	10	LEU	5.5
7	AZ	59	ASP	5.5
34	AG	2	ALA	5.5
43	CJ	81	ALA	5.5
16	BI	121	VAL	5.5
78	DS	164	PRO	5.5
16	BI	56	LYS	5.5
46	CM	1471	C	5.5
56	L	120	ARG	5.5
46	CM	898	G	5.5
58	CY	98	ASN	5.5
53	I	166	ASP	5.5
62	DC	24	ASP	5.5
10	BC	200	ALA	5.5
40	AM	39	ALA	5.5
43	CJ	29	LYS	5.5
79	AR	249	LEU	5.5
26	BS	54	TYR	5.5
6	AY	143	VAL	5.5
20	BM	70	LYS	5.4
36	CC	106	LYS	5.4
46	CM	1575	G	5.4
52	CS	214	LYS	5.4
22	2	86	GLU	5.4

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Mol	Chain	Res	Type	RSRZ
54	J	184	GLU	5.4
58	CY	97	TYR	5.4
61	DB	125	GLY	5.4
10	BC	166	PHE	5.4
22	BO	149	GLN	5.4
60	DA	87	ASP	5.4
66	DG	71	VAL	5.4
3	AU	151	C	5.4
79	DT	259	ILE	5.4
1	AS	2381	G	5.4
46	CM	1618	A	5.4
22	BO	159	PHE	5.4
50	CQ	40	VAL	5.4
54	J	179	PHE	5.4
66	DG	37	VAL	5.4
4	AW	58	LEU	5.4
12	BE	57	LEU	5.4
45	i	57	PRO	5.4
51	CR	254	ASP	5.4
79	DT	269	ASP	5.4
46	CM	1323	C	5.4
46	CM	692	U	5.4
12	r	114	GLY	5.4
52	CS	154	THR	5.4
14	BG	63	VAL	5.4
43	AP	100	LYS	5.4
61	DB	116	VAL	5.4
73	DN	29	CYS	5.4
7	AZ	63	GLN	5.4
7	AZ	66	SER	5.4
45	CL	64	LEU	5.4
54	J	125	LEU	5.4
33	AF	97	ILE	5.4
56	CW	45	ILE	5.4
78	DS	122	ARG	5.4
1	1	1091	U	5.4
1	1	1197	C	5.4
29	BV	77	LYS	5.4
46	CM	1514	C	5.4
50	CQ	17	VAL	5.4
78	DS	144	VAL	5.4
29	BV	75	LEU	5.4

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Mol	Chain	Res	Type	RSRZ
16	BI	61	ILE	5.4
1	AS	1861	A	5.4
6	AY	87	GLY	5.4
9	BB	126	LYS	5.4
25	BR	84	GLY	5.4
46	CM	1405	G	5.4
8	BA	132	ALA	5.4
55	CV	97	THR	5.4
66	DG	18	TYR	5.4
36	CC	55	LEU	5.3
46	B	502	U	5.3
46	CM	1591	U	5.3
19	BL	67	ILE	5.3
55	CV	38	ILE	5.3
22	2	81	GLY	5.3
50	CQ	13	VAL	5.3
67	W	108	GLU	5.3
79	AR	76	ALA	5.3
1	AS	239	A	5.3
7	AZ	226	TYR	5.3
7	AZ	141	PRO	5.3
1	1	2090	U	5.3
71	a	126	GLN	5.3
63	DD	120	SER	5.3
46	CM	695	C	5.3
6	AY	44	ASN	5.3
12	r	147	VAL	5.3
16	BI	132	VAL	5.3
37	CD	82	ALA	5.3
47	CN	119	ARG	5.3
62	DC	76	VAL	5.3
17	BJ	190	GLU	5.3
26	BS	108	LEU	5.3
29	BV	113	LEU	5.3
36	CC	88	LEU	5.3
72	DM	84	GLU	5.3
79	AR	137	THR	5.3
1	1	2091	A	5.3
6	AY	45	LYS	5.3
54	J	186	HIS	5.3
55	CV	20	GLN	5.3
57	M	52	LYS	5.3

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Mol	Chain	Res	Type	RSRZ
1	AS	1602	U	5.3
6	AY	353	SER	5.3
6	AY	204	ARG	5.3
10	BC	141	VAL	5.3
49	E	204	ASN	5.3
7	AZ	147	ASP	5.3
78	DS	145	LEU	5.3
45	CL	81	THR	5.3
35	CB	37	LYS	5.3
37	CD	80	LYS	5.3
6	AY	111	ASN	5.3
3	AU	23	U	5.3
46	B	727	U	5.3
17	BJ	188	GLU	5.3
28	BU	46	ILE	5.3
35	CB	20	ILE	5.3
63	S	42	ILE	5.3
28	BU	129	TRP	5.3
16	BI	189	HIS	5.3
29	BV	82	VAL	5.3
55	CV	63	GLY	5.3
52	CS	191	ALA	5.3
54	J	165	PHE	5.2
62	DC	36	LEU	5.3
65	DF	116	LEU	5.3
46	CM	1136	A	5.2
26	8	62	ILE	5.2
36	AI	18	GLU	5.2
37	CD	58	GLU	5.2
29	BV	115	LYS	5.2
52	CS	115	LYS	5.2
18	x	125	GLN	5.2
17	BJ	100	LEU	5.2
63	S	56	LEU	5.2
16	BI	3	ALA	5.2
66	V	21	PHE	5.2
6	AY	185	SER	5.2
31	BX	46	ILE	5.2
60	DA	119	GLU	5.2
40	CG	32	ASP	5.2
65	U	68	ARG	5.2
1	AS	1859	U	5.2

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Mol	Chain	Res	Type	RSRZ
46	B	1270	U	5.2
66	DG	9	VAL	5.2
7	AZ	145	PHE	5.2
46	CM	1480	G	5.2
76	f	55	TYR	5.2
78	DS	148	TYR	5.2
69	Y	54	ASP	5.2
16	BI	22	LEU	5.2
59	CZ	121	VAL	5.2
9	BB	112	GLY	5.2
10	BC	192	HIS	5.2
16	BI	161	ALA	5.2
53	CT	156	PHE	5.2
21	BN	158	LYS	5.2
29	BV	63	LYS	5.2
29	BV	73	ILE	5.2
38	CE	24	ARG	5.2
37	CD	62	ASN	5.2
46	CM	1621	C	5.2
62	DC	124	THR	5.2
4	AW	211	HIS	5.2
10	BC	50	PHE	5.2
7	AZ	4	GLN	5.2
14	BG	42	LYS	5.2
19	y	159	LYS	5.2
32	BY	30	LYS	5.2
78	DS	132	LYS	5.2
79	DT	157	ILE	5.2
46	B	779	U	5.2
65	DF	120	ARG	5.2
55	CV	45	SER	5.2
8	BA	42	LEU	5.2
48	CO	153	THR	5.2
50	F	73	LEU	5.2
62	R	111	MET	5.2
26	BS	89	LYS	5.1
39	CF	7	ASP	5.1
49	E	210	PHE	5.1
74	DO	13	ALA	5.1
14	BG	93	ILE	5.1
50	CQ	171	ILE	5.1
59	O	105	GLN	5.1

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Mol	Chain	Res	Type	RSRZ
1	AS	1584	A	5.1
46	CM	270	U	5.1
46	CM	1673	U	5.1
31	AD	70	TYR	5.1
73	DN	2	PRO	5.1
4	j	199	THR	5.1
16	BI	204	SER	5.1
28	BU	14	VAL	5.1
19	BL	158	HIS	5.1
33	BZ	53	GLN	5.1
35	CB	16	ARG	5.1
52	H	148	ARG	5.1
69	DJ	118	ARG	5.1
1	AS	173	C	5.1
46	CM	1627	C	5.1
52	CS	77	TYR	5.1
62	DC	109	PRO	5.1
36	CC	57	VAL	5.1
65	DF	46	VAL	5.1
7	AZ	167	SER	5.1
42	CI	24	SER	5.1
46	CM	1452	G	5.1
16	BI	117	ASN	5.1
26	BS	88	ILE	5.1
40	CG	20	ASN	5.1
80	ll	183	ILE	5.1
16	BI	26	ARG	5.1
48	CO	47	LEU	5.1
29	BV	27	LYS	5.1
45	i	54	LYS	5.1
1	AS	28	C	5.1
37	CD	10	VAL	5.1
27	BT	33	ALA	5.1
56	CW	56	ALA	5.1
79	AR	250	ALA	5.1
11	BD	179	ILE	5.1
20	BM	50	ILE	5.1
76	f	56	ARG	5.1
16	v	153	ASN	5.1
1	AS	1483	G	5.1
46	CM	700	G	5.1
75	e	66	LEU	5.1

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Mol	Chain	Res	Type	RSRZ
63	DD	46	LYS	5.1
14	BG	135	VAL	5.1
35	CB	23	VAL	5.1
69	Y	52	TYR	5.1
76	DQ	34	TYR	5.1
16	BI	160	GLU	5.1
14	BG	171	THR	5.1
16	BI	183	THR	5.1
40	CG	42	ARG	5.1
50	F	184	GLY	5.1
46	CM	1567	C	5.1
32	BY	68	ASN	5.1
10	BC	153	LEU	5.1
19	BL	4	ASP	5.1
53	CT	76	LEU	5.1
70	DK	33	LEU	5.1
37	CD	1	MET	5.1
46	B	503	A	5.1
46	CM	1411	A	5.1
46	CM	1574	A	5.1
54	CU	10	PRO	5.0
62	DC	15	PHE	5.0
27	9	126	ALA	5.0
53	I	161	GLU	5.0
53	CT	161	GLU	5.0
68	DI	54	ALA	5.0
5	AX	139	THR	5.0
7	AZ	40	HIS	5.0
22	BO	77	ASN	5.0
52	CS	44	ASN	5.0
56	CW	51	LYS	5.0
52	CS	86	GLN	5.0
66	DG	6	VAL	5.0
46	CM	75	U	5.0
28	BU	15	ARG	5.0
76	DQ	32	ARG	5.0
35	CB	63	ALA	5.0
50	CQ	172	ALA	5.0
5	AX	330	GLY	5.0
10	BC	235	GLY	5.0
60	DA	139	TRP	5.0
43	CJ	54	THR	5.0

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Mol	Chain	Res	Type	RSRZ
32	AE	26	LYS	5.0
56	L	138	LYS	5.0
64	T	7	LYS	5.0
1	1	1264	G	5.0
49	E	108	LEU	5.0
62	DC	89	MET	5.0
14	BG	24	VAL	5.0
19	BL	139	ILE	5.0
53	I	224	ALA	5.0
46	CM	1401	U	5.0
78	DS	171	GLY	5.0
10	BC	145	GLU	5.0
1	AS	707	A	5.0
1	AS	1585	A	5.0
65	DF	122	HIS	5.0
53	CT	158	VAL	5.0
19	BL	178	ARG	5.0
61	Q	123	ARG	5.0
27	BT	78	PHE	5.0
28	BU	11	ALA	5.0
46	CM	1134	G	5.0
62	DC	84	ILE	5.0
6	AY	362	LYS	5.0
25	7	127	LYS	5.0
44	CK	6	LYS	5.0
66	V	119	LYS	5.0
1	AS	2782	C	5.0
79	DT	151	TRP	5.0
1	AS	134	U	5.0
79	AR	97	THR	5.0
24	BQ	135	VAL	5.0
55	CV	69	SER	5.0
47	C	144	ILE	5.0
56	L	119	ALA	5.0
19	BL	156	GLY	5.0
63	DD	13	LYS	5.0
64	T	2	GLY	5.0
76	DQ	55	TYR	5.0
35	CB	57	LEU	5.0
46	B	714	G	5.0
46	CM	1349	G	5.0
46	CM	1431	G	5.0

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Mol	Chain	Res	Type	RSRZ
63	DD	123	MET	5.0
1	AS	1798	C	4.9
1	AS	1850	C	4.9
52	CS	72	HIS	4.9
64	DE	9	VAL	4.9
33	BZ	97	ILE	4.9
35	AH	64	GLN	4.9
66	DG	36	ILE	4.9
1	AS	743	A	4.9
8	BA	99	LYS	4.9
26	BS	36	LYS	4.9
55	CV	173	ALA	4.9
71	DL	117	LYS	4.9
10	BC	170	LEU	4.9
48	CO	225	LEU	4.9
62	R	106	GLU	4.9
29	BV	26	ARG	4.9
63	DD	69	THR	4.9
25	BR	29	PHE	4.9
1	1	2450	U	4.9
1	AS	32	G	4.9
1	AS	1613	G	4.9
16	BI	176	LYS	4.9
65	DF	81	ILE	4.9
61	DB	10	GLY	4.9
31	BX	58	LEU	4.9
79	DT	33	LEU	4.9
29	BV	48	TYR	4.9
46	B	740	A	4.9
46	CM	704	A	4.9
36	AI	96	GLU	4.9
60	P	83	GLU	4.9
22	BO	36	VAL	4.9
36	CC	66	VAL	4.9
64	DE	30	THR	4.9
69	DJ	121	VAL	4.9
6	l	84	HIS	4.9
63	DD	45	PHE	4.9
22	BO	141	ILE	4.9
66	DG	107	ALA	4.9
66	DG	109	GLN	4.9
4	AW	127	GLY	4.9

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Mol	Chain	Res	Type	RSRZ
22	BO	46	GLY	4.9
1	AS	3320	U	4.9
35	CB	40	SER	4.9
26	BS	125	ARG	4.9
47	C	113	ARG	4.9
51	G	157	ASN	4.9
16	BI	29	GLU	4.9
19	BL	30	VAL	4.9
32	BY	97	VAL	4.9
7	AZ	76	THR	4.9
36	CC	25	LYS	4.9
60	DA	9	LYS	4.9
69	DJ	120	HIS	4.9
5	AX	181	ILE	4.9
5	AX	252	ILE	4.9
66	DG	111	ILE	4.9
28	AA	95	ALA	4.9
56	CW	101	PRO	4.9
24	BQ	116	GLY	4.9
60	DA	130	ARG	4.9
76	DQ	53	ASN	4.9
36	AI	66	VAL	4.9
14	t	88	LYS	4.9
33	BZ	82	ASP	4.9
44	AQ	6	LYS	4.9
36	CC	118	ILE	4.9
46	CM	1586	C	4.9
66	DG	116	ILE	4.9
1	1	2453	G	4.9
34	CA	36	ALA	4.9
46	CM	1767	G	4.9
47	CN	65	ALA	4.9
73	DN	81	ALA	4.9
1	AS	2792	A	4.9
1	AS	3050	A	4.9
35	CB	45	GLY	4.9
68	DI	7	GLN	4.9
21	BN	97	VAL	4.8
22	BO	90	ASN	4.8
1	AS	310	U	4.8
79	AR	138	ILE	4.8
66	DG	35	ASP	4.8

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Mol	Chain	Res	Type	RSRZ
10	BC	47	LEU	4.8
10	BC	201	LEU	4.8
60	DA	57	ALA	4.8
42	CI	23	ARG	4.8
1	1	1345	G	4.8
46	B	739	A	4.8
10	BC	164	VAL	4.8
20	BM	22	VAL	4.8
26	BS	120	LYS	4.8
46	CM	288	G	4.8
49	CP	81	VAL	4.8
63	DD	78	TYR	4.8
18	BK	37	ASN	4.8
36	CC	64	GLU	4.8
36	CC	100	GLU	4.8
36	CC	109	ILE	4.8
62	DC	106	GLU	4.8
80	11	120	ILE	4.8
28	BU	87	LEU	4.8
34	CA	7	LEU	4.8
44	CK	63	THR	4.8
56	CW	63	ASP	4.8
69	Y	55	ASP	4.8
1	AS	133	U	4.8
50	CQ	63	GLN	4.8
7	AZ	65	VAL	4.8
59	CZ	61	VAL	4.8
62	DC	112	VAL	4.8
46	CM	1602	C	4.8
1	AS	2161	A	4.8
22	BO	76	ILE	4.8
76	DQ	8	PHE	4.8
52	CS	174	LEU	4.8
65	DF	103	ASN	4.8
1	AS	545	G	4.8
5	k	240	ARG	4.8
73	DN	22	ARG	4.8
48	CO	46	THR	4.8
42	CI	3	ASP	4.8
67	DH	74	GLY	4.8
1	1	1557	U	4.8
31	BX	42	LYS	4.8

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Mol	Chain	Res	Type	RSRZ
36	AI	115	LYS	4.8
46	CM	1	U	4.8
26	BS	51	VAL	4.8
66	V	70	GLN	4.8
7	AZ	79	TYR	4.8
49	E	64	ILE	4.8
80	ll	206	ILE	4.8
13	s	5	SER	4.8
31	BX	18	LEU	4.8
56	L	49	LEU	4.8
10	BC	162	GLU	4.8
18	BK	6	ALA	4.8
6	AY	59	HIS	4.8
8	n	6	PRO	4.8
10	p	168	PRO	4.8
5	AX	52	GLY	4.8
15	u	117	LYS	4.8
20	BM	52	LYS	4.8
70	Z	2	GLY	4.8
19	BL	81	ILE	4.8
27	BT	50	ILE	4.8
37	CD	60	ILE	4.8
5	AX	233	TRP	4.8
22	BO	56	TYR	4.8
31	BX	70	TYR	4.8
38	CE	57	ARG	4.8
62	DC	80	LEU	4.8
79	DT	207	LEU	4.8
51	G	13	ALA	4.8
30	AC	62	SER	4.8
60	DA	7	SER	4.8
77	DR	25	GLU	4.8
18	x	169	ASN	4.8
29	BV	66	ASN	4.8
50	F	149	LYS	4.8
50	CQ	11	LYS	4.8
73	c	19	LYS	4.8
31	BX	23	GLY	4.8
1	AS	1523	C	4.8
35	AH	35	VAL	4.7
6	AY	198	ARG	4.7
6	AY	248	PHE	4.7

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Mol	Chain	Res	Type	RSRZ
22	BO	88	ARG	4.7
27	BT	12	ARG	4.7
33	BZ	86	LEU	4.7
36	CC	111	PHE	4.7
60	DA	84	ILE	4.7
50	F	12	LEU	4.7
55	CV	149	LEU	4.7
74	DO	24	LEU	4.7
80	ll	34	LEU	4.7
21	BN	172	TYR	4.7
41	CH	31	ALA	4.7
46	CM	502	U	4.7
46	CM	1765	G	4.7
73	c	4	LYS	4.7
10	p	67	SER	4.7
16	BI	43	SER	4.7
20	BM	122	ASN	4.7
27	BT	65	GLY	4.7
77	g	30	PRO	4.7
11	BD	123	VAL	4.7
54	J	151	ASP	4.7
1	AS	131	C	4.7
19	y	73	GLN	4.7
22	2	5	ARG	4.7
30	BW	14[A]	ARG	4.7
18	BK	41	LEU	4.7
20	BM	10	LEU	4.7
30	BW	47	LEU	4.7
34	AG	14	ILE	4.7
35	AH	57	LEU	4.7
60	DA	72	LEU	4.7
46	CM	357	A	4.7
42	AO	19	LYS	4.7
46	CM	776	U	4.7
48	CO	90	GLU	4.7
55	CV	193	GLU	4.7
35	AH	45	GLY	4.7
67	DH	75	SER	4.7
4	AW	4	VAL	4.7
10	BC	158	VAL	4.7
15	BH	13	VAL	4.7
63	DD	47	VAL	4.7

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Mol	Chain	Res	Type	RSRZ
1	AS	828	G	4.7
1	AS	980	G	4.7
36	CC	63	ARG	4.7
19	BL	155	PHE	4.7
34	AG	30	ILE	4.7
49	E	235	LEU	4.7
61	DB	34	ILE	4.7
27	BT	54	ASP	4.7
12	BE	203	LYS	4.7
67	W	68	LYS	4.7
51	CR	2	ALA	4.7
3	AU	137	C	4.7
46	B	25	C	4.7
46	CM	1576	C	4.7
14	t	20	GLU	4.7
27	BT	104	VAL	4.7
63	S	36	THR	4.7
56	CW	69	ARG	4.7
67	DH	67	ARG	4.7
75	e	49	ARG	4.7
65	DF	75	ASN	4.7
79	DT	223	ASN	4.7
22	BO	75	ILE	4.7
8	BA	176	PHE	4.7
62	DC	17	PHE	4.7
76	DQ	43	PHE	4.7
43	CJ	27	GLN	4.7
60	DA	140	LYS	4.7
4	AW	176	ASP	4.7
70	DK	26	ASP	4.7
46	CM	282	G	4.7
63	DD	135	ALA	4.7
56	L	8	TYR	4.7
30	BW	1	MET	4.7
77	DR	36	MET	4.7
4	AW	202	VAL	4.7
10	BC	165	VAL	4.7
13	s	11	GLU	4.7
6	AY	247	ARG	4.7
46	CM	721	C	4.7
52	H	83	ARG	4.7
61	DB	114	THR	4.7

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Mol	Chain	Res	Type	RSRZ
10	BC	161	ILE	4.7
23	5	73	SER	4.7
32	BY	96	ILE	4.7
46	CM	722	A	4.7
80	ll	157	PHE	4.7
1	AS	3319	U	4.7
8	BA	80	ALA	4.7
79	AR	79	ALA	4.7
10	BC	69	ARG	4.6
16	BI	60	VAL	4.6
26	BS	118	GLY	4.6
32	BY	98	PRO	4.6
49	CP	178	VAL	4.6
77	DR	21	VAL	4.6
79	DT	30	PRO	4.6
1	AS	1607	G	4.6
1	AS	2577	G	4.6
30	BW	32	LEU	4.6
46	CM	402	G	4.6
51	CR	56	LEU	4.6
56	CW	61	THR	4.6
80	ll	190	LEU	4.6
58	CY	131	ILE	4.6
14	BG	138	PHE	4.6
66	DG	38	LYS	4.6
21	BN	120	SER	4.6
64	T	48	ASN	4.6
1	AS	1858	U	4.6
20	BM	100	ARG	4.6
10	BC	160	PRO	4.6
52	CS	88	PRO	4.6
53	CT	70	PRO	4.6
61	DB	108	GLY	4.6
67	DH	110	GLY	4.6
7	m	292	GLU	4.6
19	y	52	LEU	4.6
33	BZ	78	LYS	4.6
50	CQ	175	HIS	4.6
39	CF	5	ILE	4.6
52	H	109	LYS	4.6
57	CX	44	LYS	4.6
62	DC	121	ILE	4.6

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Mol	Chain	Res	Type	RSRZ
66	V	84	LYS	4.6
40	CG	9	THR	4.6
45	i	58	THR	4.6
3	AU	116	G	4.6
6	AY	50	ALA	4.6
66	V	25	GLN	4.6
20	BM	96	MET	4.6
62	DC	28	MET	4.6
1	AS	369	A	4.6
26	BS	109	TYR	4.6
46	B	718	A	4.6
46	CM	1736	A	4.6
63	S	54	VAL	4.6
35	CB	12	PRO	4.6
20	BM	102	LEU	4.6
27	BT	30	LEU	4.6
46	CM	696	U	4.6
50	CQ	203	LEU	4.6
73	DN	3	LYS	4.6
19	BL	95	GLU	4.6
50	F	159	ILE	4.6
55	K	21	PHE	4.6
64	T	70	SER	4.6
68	DI	47	ALA	4.6
10	BC	58	ARG	4.6
16	BI	201	ARG	4.6
18	BK	64	ASN	4.6
28	BU	127	ASN	4.6
50	CQ	174	ARG	4.6
53	I	185	GLN	4.6
55	CV	170	ARG	4.6
69	DJ	68	ARG	4.6
14	BG	88	LYS	4.6
16	BI	6	TYR	4.6
22	BO	50	LYS	4.6
54	J	43	LYS	4.6
58	N	93	TYR	4.6
64	T	23	LYS	4.6
18	BK	136	ILE	4.6
10	BC	35	PHE	4.6
19	BL	148	GLU	4.6
65	DF	53	GLU	4.6

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Mol	Chain	Res	Type	RSRZ
66	DG	51	GLU	4.6
56	CW	6	ARG	4.6
56	CW	53	ARG	4.6
24	BQ	112	SER	4.6
52	CS	151	SER	4.6
63	DD	140	SER	4.6
7	AZ	94	ASN	4.6
16	BI	115	VAL	4.6
27	BT	98	ASN	4.6
33	BZ	77	VAL	4.6
57	CX	28	ASN	4.6
80	ll	201	VAL	4.6
49	CP	206	LEU	4.6
60	DA	149	LEU	4.6
61	DB	126	GLY	4.6
61	DB	110	ILE	4.6
73	c	94	ILE	4.6
8	BA	163	PHE	4.6
17	BJ	48	PHE	4.6
16	BI	139	HIS	4.6
20	BM	55	GLU	4.6
20	BM	157	GLU	4.6
67	DH	114	GLU	4.6
46	B	504	A	4.6
46	B	1726	C	4.6
65	DF	77	THR	4.6
35	CB	8	ARG	4.6
46	CM	638	U	4.6
75	DP	22	ARG	4.6
78	h	170	ALA	4.6
79	DT	293	ALA	4.6
46	CM	1402	G	4.6
6	AY	192	LYS	4.5
14	BG	57	VAL	4.5
28	AA	93	LYS	4.5
34	CA	86[A]	LYS	4.5
75	e	15	VAL	4.5
5	AX	43	LEU	4.5
19	BL	166	LEU	4.5
43	CJ	85	LEU	4.5
56	L	128	LEU	4.5
56	CW	36	LEU	4.5

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Mol	Chain	Res	Type	RSRZ
9	o	91	ASN	4.5
26	BS	116	PRO	4.5
31	BX	106	ILE	4.5
30	BW	48	HIS	4.5
36	AI	64	GLU	4.5
29	BV	70	ARG	4.5
33	BZ	106	ARG	4.5
6	l	61	THR	4.5
62	DC	104	THR	4.5
79	DT	300	ALA	4.5
5	AX	237	LYS	4.5
13	BF	36	VAL	4.5
1	AS	895	U	4.5
7	m	194	LEU	4.5
35	CB	47	CYS	4.5
77	DR	45	VAL	4.5
56	L	36	LEU	4.5
56	CW	60	LEU	4.5
1	AS	1828	C	4.5
22	2	46	GLY	4.5
52	CS	170	GLN	4.5
74	DO	27	GLN	4.5
53	CT	86	PRO	4.5
69	DJ	35	ILE	4.5
1	AS	1848	G	4.5
7	m	226	TYR	4.5
22	BO	7	TYR	4.5
36	CC	65	ASN	4.5
16	BI	156	HIS	4.5
55	K	57	ALA	4.5
66	DG	95	ASP	4.5
79	AR	251	ALA	4.5
18	BK	124	LYS	4.5
34	CA	87	LYS	4.5
35	CB	43	LYS	4.5
50	CQ	9	LYS	4.5
61	DB	113	VAL	4.5
48	CO	110	LEU	4.5
76	DQ	30	LEU	4.5
16	BI	58	GLY	4.5
9	BB	130	PRO	4.5
1	AS	875	U	4.5

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Mol	Chain	Res	Type	RSRZ
1	AS	894	U	4.5
46	CM	1459	U	4.5
17	w	51	ASN	4.5
46	CM	1142	A	4.5
53	CT	87	ARG	4.5
65	DF	99	HIS	4.5
48	CO	141	ALA	4.5
52	CS	84	LYS	4.5
56	L	10	LYS	4.5
1	1	2396	G	4.5
1	AS	368	G	4.5
46	CM	1185	G	4.5
23	BP	87	LEU	4.5
33	BZ	87	LEU	4.5
38	CE	5	THR	4.5
53	CT	128	THR	4.5
62	R	76	VAL	4.5
10	p	144	ILE	4.5
27	BT	49	PRO	4.5
38	CE	30	GLN	4.5
28	BU	92	PHE	4.5
38	CE	74	PHE	4.5
65	DF	128	PHE	4.5
36	CC	105	ARG	4.5
58	CY	53	TYR	4.5
70	Z	19	ARG	4.5
3	AU	113	U	4.5
7	AZ	48	LYS	4.5
46	B	1341	U	4.5
14	BG	25	HIS	4.5
45	i	49	ALA	4.5
52	CS	210	ALA	4.5
55	K	79	ALA	4.5
73	DN	80	HIS	4.5
6	AY	64	GLU	4.5
46	CM	1410	A	4.5
15	BH	105	LEU	4.5
27	BT	48	LEU	4.5
46	CM	1578	C	4.5
46	CM	1605	C	4.5
50	F	17	VAL	4.5
79	AR	134	VAL	4.5

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Mol	Chain	Res	Type	RSRZ
5	AX	310	GLY	4.5
11	BD	104	ILE	4.5
14	BG	85	ILE	4.5
62	DC	91	GLY	4.5
9	o	174	PHE	4.5
46	CM	1138	G	4.5
51	G	257	ARG	4.5
63	DD	121	ARG	4.5
65	U	145	ARG	4.5
67	W	54	PRO	4.5
78	h	164	PRO	4.5
73	c	29	CYS	4.5
14	t	129	LYS	4.5
20	BM	82	LYS	4.5
56	CW	68	LYS	4.5
55	CV	12	SER	4.5
5	AX	254	ALA	4.4
25	BR	85	ALA	4.4
36	AI	2	ALA	4.4
10	BC	126	VAL	4.4
22	BO	31	LEU	4.4
64	T	34	LEU	4.4
1	AS	1881	U	4.4
28	AA	102	GLU	4.4
46	CM	1454	U	4.4
26	BS	81	THR	4.4
32	BY	40	THR	4.4
1	AS	1589	A	4.4
4	AW	112	ILE	4.4
46	CM	1322	A	4.4
59	CZ	39	ASP	4.4
65	DF	26	ILE	4.4
1	AS	1842	C	4.4
22	BO	92	ARG	4.4
42	CI	12	ARG	4.4
54	J	67	ARG	4.4
52	CS	43	PHE	4.4
10	BC	63	LYS	4.4
50	F	33	GLN	4.4
75	e	14	LYS	4.4
78	DS	139	LYS	4.4
39	CF	29	ALA	4.4

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Mol	Chain	Res	Type	RSRZ
69	DJ	5	SER	4.4
71	a	134	ALA	4.4
79	AR	81	ALA	4.4
4	AW	71	LEU	4.4
14	BG	124	VAL	4.4
27	BT	100	HIS	4.4
27	BT	109	LEU	4.4
46	CM	501	G	4.4
46	CM	1472	G	4.4
26	BS	117	ASN	4.4
38	CE	20	ASN	4.4
50	F	160	HIS	4.4
62	DC	82	ASN	4.4
28	AA	31	GLU	4.4
4	AW	31	THR	4.4
7	AZ	60	ILE	4.4
13	s	70	THR	4.4
16	BI	88	GLY	4.4
44	AQ	15	GLY	4.4
7	AZ	75	PHE	4.4
65	DF	117	LYS	4.4
4	AW	233	GLN	4.4
46	CM	1122	A	4.4
46	CM	1622	A	4.4
9	BB	103	LEU	4.4
14	BG	116	LEU	4.4
36	AI	88	LEU	4.4
50	F	177	LEU	4.4
57	M	49	LEU	4.4
64	DE	58	MET	4.4
66	V	83	ALA	4.4
28	BU	75	VAL	4.4
75	DP	48	VAL	4.4
37	CD	79	HIS	4.4
45	i	45	SER	4.4
48	CO	211	HIS	4.4
10	BC	46	ASN	4.4
65	DF	44	ASN	4.4
7	AZ	69	ILE	4.4
19	BL	179	ARG	4.4
20	BM	15	ILE	4.4
45	CL	90	ARG	4.4

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Mol	Chain	Res	Type	RSRZ
64	DE	69	ILE	4.4
64	T	6	THR	4.4
76	f	51	GLY	4.4
1	AS	1521	G	4.4
9	BB	232	PHE	4.4
10	BC	129	LYS	4.4
24	BQ	66	LYS	4.4
46	CM	387	G	4.4
46	CM	939	G	4.4
46	CM	1115	G	4.4
53	CT	50	PHE	4.4
53	CT	187	LYS	4.4
45	i	48	PRO	4.4
78	h	130	PRO	4.4
1	AS	2252	U	4.4
43	AP	27	GLN	4.4
15	BH	57	LEU	4.4
31	BX	95	LEU	4.4
47	CN	60	ALA	4.4
61	DB	59	ALA	4.4
62	DC	74	ALA	4.4
79	AR	92	LEU	4.4
50	CQ	138	VAL	4.4
19	y	158	HIS	4.4
46	B	76	A	4.4
46	B	1272	A	4.4
14	BG	134	GLU	4.4
79	AR	96	GLU	4.4
6	AY	193	GLY	4.4
7	AZ	149	GLY	4.4
37	CD	70	LYS	4.4
59	O	102	GLY	4.4
50	F	15	ASP	4.4
6	AY	245	LEU	4.4
31	AD	18	LEU	4.4
52	CS	37	GLN	4.4
57	CX	2	LEU	4.4
62	DC	116	LEU	4.4
35	AH	38	ALA	4.4
1	AS	1826	G	4.4
46	B	1047	U	4.4
46	CM	724	G	4.4

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Mol	Chain	Res	Type	RSRZ
50	CQ	88	TYR	4.4
52	H	77	TYR	4.4
52	CS	61	TYR	4.4
49	CP	79	ARG	4.4
17	w	10	ILE	4.4
76	DQ	50	ILE	4.4
55	CV	185	CYS	4.4
60	DA	109	LYS	4.4
75	DP	45	LYS	4.4
76	DQ	16	LYS	4.4
1	AS	703	A	4.4
1	AS	824	A	4.4
5	AX	234	GLY	4.4
8	BA	108	GLU	4.4
4	AW	115	ASN	4.4
17	BJ	180	ASN	4.4
46	CM	988	A	4.4
50	CQ	181	GLY	4.4
64	T	28	PHE	4.4
22	BO	143	THR	4.4
46	CM	1147	C	4.4
46	CM	1624	C	4.4
46	CM	1626	C	4.4
61	DB	81	THR	4.4
20	BM	23	TRP	4.3
37	CD	71	LEU	4.3
52	H	31	LEU	4.3
59	O	106	LEU	4.3
79	AR	34	LEU	4.3
8	BA	135	VAL	4.3
51	G	14	ALA	4.3
66	V	62	ALA	4.3
70	DK	72	VAL	4.3
73	DN	15	ARG	4.3
7	m	288	LYS	4.3
10	BC	93	LYS	4.3
10	BC	238	ILE	4.3
44	CK	58	LYS	4.3
46	CM	699	U	4.3
46	CM	1572	U	4.3
61	DB	87	LYS	4.3
64	T	69	ILE	4.3

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Mol	Chain	Res	Type	RSRZ
78	DS	133	ILE	4.3
27	9	127	GLU	4.3
28	BU	118	PHE	4.3
29	AB	20	GLY	4.3
66	DG	21	PHE	4.3
1	AS	750	G	4.3
65	U	47	CYS	4.3
53	I	168	THR	4.3
66	DG	39	THR	4.3
1	AS	1554	A	4.3
26	BS	57	LEU	4.3
46	B	180	A	4.3
52	CS	175	LEU	4.3
14	BG	29	ALA	4.3
46	CM	1770	C	4.3
47	CN	143	VAL	4.3
65	DF	102	ALA	4.3
4	j	250	GLN	4.3
55	CV	18	ARG	4.3
74	DO	26	GLN	4.3
79	AR	91	ARG	4.3
79	AR	263	GLN	4.3
6	AY	177	LYS	4.3
22	BO	69	LYS	4.3
65	DF	132	LYS	4.3
40	CG	51	ILE	4.3
67	W	19	HIS	4.3
6	AY	67	GLY	4.3
29	BV	129	PHE	4.3
76	f	43	PHE	4.3
76	DQ	35	GLY	4.3
46	CM	1565	U	4.3
15	BH	128	LEU	4.3
31	BX	16	LEU	4.3
49	E	206	LEU	4.3
63	DD	50	PRO	4.3
62	DC	122	THR	4.3
5	AX	262	TRP	4.3
20	BM	63	ALA	4.3
49	CP	90	ARG	4.3
55	CV	59	ARG	4.3
14	t	45	LYS	4.3

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Mol	Chain	Res	Type	RSRZ
30	BW	3	LYS	4.3
1	AS	1542	A	4.3
47	CN	144	ILE	4.3
50	CQ	167	ASP	4.3
69	Y	85	ASP	4.3
79	DT	294	ASP	4.3
66	DG	64	HIS	4.3
76	DQ	52	PHE	4.3
7	AZ	245	GLU	4.3
10	p	170	LEU	4.3
17	w	190	GLU	4.3
21	BN	82	GLU	4.3
37	CD	20	GLU	4.3
50	CQ	136	GLU	4.3
51	CR	44	LEU	4.3
6	l	352	PRO	4.3
45	CL	39	SER	4.3
4	AW	64	ARG	4.3
20	BM	57	VAL	4.3
26	BS	83	VAL	4.3
32	AE	23	ASN	4.3
32	BY	22	VAL	4.3
36	CC	101	THR	4.3
38	CE	82	VAL	4.3
46	CM	1519	U	4.3
36	CC	104	ALA	4.3
56	L	38	ASN	4.3
59	O	120	CYS	4.3
4	AW	10	LYS	4.3
58	N	43	LYS	4.3
63	DD	12	LYS	4.3
11	q	104	ILE	4.3
23	BP	36	TYR	4.3
36	CC	107	GLN	4.3
64	T	42	GLN	4.3
66	DG	100	ILE	4.3
56	CW	12	TYR	4.3
7	AZ	168	ASP	4.3
65	DF	94	ASP	4.3
31	BX	72	PHE	4.3
57	CX	27	PHE	4.3
46	CM	104	A	4.3

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Mol	Chain	Res	Type	RSRZ
6	AY	361	LEU	4.3
63	DD	116	LEU	4.3
70	DK	15	LEU	4.3
1	AS	30	C	4.3
1	AS	2383	C	4.3
22	2	94	GLU	4.3
46	CM	1143	C	4.3
28	BU	57	MET	4.3
63	DD	41	GLU	4.3
5	AX	13	SER	4.3
14	t	149	VAL	4.3
14	BG	16	LYS	4.3
24	BQ	137	VAL	4.3
35	CB	31	VAL	4.3
18	BK	70	THR	4.3
45	CL	55	LYS	4.3
50	CQ	206	ALA	4.3
56	L	121	SER	4.3
64	T	8	THR	4.3
64	T	51	ALA	4.3
65	DF	48	LYS	4.3
65	DF	50	ALA	4.3
66	V	103	LYS	4.3
67	W	63	LYS	4.3
5	k	270	ASN	4.3
22	2	45	ASN	4.3
52	CS	169	ASN	4.3
46	B	1399	U	4.3
66	DG	66	TYR	4.3
79	DT	183	TYR	4.3
53	I	156	PHE	4.3
4	AW	110	GLY	4.3
19	BL	26	LEU	4.3
79	DT	231	LEU	4.3
7	m	197	LYS	4.2
20	BM	54	PRO	4.2
48	CO	122	GLU	4.2
53	CT	114	VAL	4.2
65	DF	118	LYS	4.2
1	1	2943	A	4.2
1	AS	1382	A	4.2
66	DG	41	ALA	4.2

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Mol	Chain	Res	Type	RSRZ
1	AS	27	C	4.2
1	AS	1527	C	4.2
1	AS	1543	G	4.2
1	AS	2527	G	4.2
67	DH	69	THR	4.2
3	4	21	C	4.2
29	BV	79	TRP	4.2
46	CM	1583	C	4.2
46	CM	1606	C	4.2
14	BG	11	ASN	4.2
50	CQ	219	ILE	4.2
10	BC	60	GLN	4.2
27	9	41	GLN	4.2
3	AU	22	U	4.2
4	AW	63	PHE	4.2
54	CU	165	PHE	4.2
56	L	104	PHE	4.2
8	BA	174	LEU	4.2
47	CN	182	LEU	4.2
65	DF	45	LEU	4.2
66	DG	114	LEU	4.2
25	BR	93	ARG	4.2
7	AZ	204	VAL	4.2
22	BO	89	VAL	4.2
45	i	75	PRO	4.2
5	AX	258	ALA	4.2
32	BY	28	ALA	4.2
7	AZ	278	THR	4.2
18	BK	36	ILE	4.2
48	CO	106	THR	4.2
67	W	66	THR	4.2
1	AS	47	A	4.2
1	AS	1075	A	4.2
1	AS	1824	A	4.2
46	CM	1587	A	4.2
16	BI	90	ASN	4.2
46	CM	319	C	4.2
64	T	53	TYR	4.2
64	DE	42	GLN	4.2
9	BB	81	LEU	4.2
77	DR	35	TYR	4.2
4	AW	236	GLY	4.2

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Mol	Chain	Res	Type	RSRZ
16	BI	163	GLY	4.2
19	BL	154	GLY	4.2
46	CM	1603	G	4.2
67	W	84	ARG	4.2
7	AZ	203	HIS	4.2
1	1	3138	U	4.2
52	H	155	VAL	4.2
64	T	9	VAL	4.2
65	DF	70	VAL	4.2
67	W	55	VAL	4.2
77	DR	27	PRO	4.2
66	DG	52	THR	4.2
16	BI	180	PHE	4.2
50	CQ	25	PHE	4.2
65	DF	105	LEU	4.2
13	s	43	GLN	4.2
19	BL	161	LYS	4.2
20	BM	7	GLN	4.2
40	AM	37	TYR	4.2
1	AS	1860	A	4.2
4	j	228	GLY	4.2
33	AF	125	GLY	4.2
64	DE	2	GLY	4.2
4	AW	82	VAL	4.2
19	BL	149	ALA	4.2
50	F	194	ALA	4.2
52	CS	26	ALA	4.2
54	CU	90	ALA	4.2
63	DD	118	ALA	4.2
65	U	2	PRO	4.2
66	DG	2	PRO	4.2
73	DN	35	ALA	4.2
79	AR	58	PRO	4.2
13	BF	158	ASP	4.2
1	1	3127	U	4.2
1	AS	1138	G	4.2
46	B	713	U	4.2
46	CM	356	U	4.2
52	H	113	ILE	4.2
54	J	131	ILE	4.2
60	DA	83	GLU	4.2
5	AX	221	THR	4.2

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Mol	Chain	Res	Type	RSRZ
31	BX	19	THR	4.2
61	DB	88	THR	4.2
4	j	247	ARG	4.2
23	BP	15	PHE	4.2
26	BS	38	LEU	4.2
29	BV	126	LYS	4.2
34	AG	87	LYS	4.2
66	DG	40	SER	4.2
60	DA	49	GLN	4.2
10	BC	174	MET	4.2
33	BZ	118	VAL	4.2
35	AH	69	HIS	4.2
63	DD	66	VAL	4.2
1	AS	704	A	4.2
1	AS	2967	A	4.2
9	o	165	ALA	4.2
20	BM	72	ALA	4.2
35	CB	2	ALA	4.2
50	CQ	173	ILE	4.2
56	CW	66	ASP	4.2
63	DD	28	ILE	4.2
10	p	229	GLU	4.2
27	BT	26	GLU	4.2
1	1	2454	C	4.2
1	AS	825	U	4.2
5	AX	44	THR	4.2
38	CE	80	THR	4.2
46	B	1644	U	4.2
46	CM	1400	U	4.2
53	CT	190	LEU	4.2
63	S	131	ARG	4.2
20	BM	135	LYS	4.2
26	BS	32	PHE	4.2
76	DQ	36	LEU	4.2
7	m	198	TYR	4.1
22	2	70	SER	4.1
22	BO	2	GLY	4.1
46	CM	1671	G	4.1
47	C	110	TYR	4.1
73	DN	88	SER	4.1
7	AZ	151	GLN	4.1
72	DM	98	GLN	4.1

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Mol	Chain	Res	Type	RSRZ
47	C	75	VAL	4.1
63	DD	68	VAL	4.1
7	AZ	109	ALA	4.1
16	BI	55	ALA	4.1
16	BI	185	ALA	4.1
45	CL	75	PRO	4.1
56	CW	18	PRO	4.1
4	AW	49	ILE	4.1
34	CA	107	ILE	4.1
39	CF	75	ILE	4.1
17	w	102	ARG	4.1
29	AB	72	GLU	4.1
73	c	89	ARG	4.1
1	1	1099	A	4.1
3	AU	111	A	4.1
20	z	135	LYS	4.1
66	DG	53	TRP	4.1
71	DL	72	PHE	4.1
5	k	263	THR	4.1
1	AS	2968	U	4.1
19	BL	34	SER	4.1
36	CC	99	GLN	4.1
76	DQ	18	SER	4.1
77	g	47	VAL	4.1
8	BA	101	ASN	4.1
16	BI	141	ALA	4.1
35	CB	82	ALA	4.1
38	CE	83	ALA	4.1
70	Z	21	ASN	4.1
73	DN	83	ILE	4.1
1	1	3194	G	4.1
1	AS	1857	G	4.1
5	AX	159	ARG	4.1
22	BO	5	ARG	4.1
32	AE	27	ARG	4.1
36	AI	48	ARG	4.1
64	T	45	ARG	4.1
74	DO	29	ARG	4.1
79	AR	103	ARG	4.1
20	z	19	LYS	4.1
6	AY	227	GLU	4.1
52	CS	108	LEU	4.1

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Mol	Chain	Res	Type	RSRZ
65	DF	112	ASP	4.1
4	AW	199	THR	4.1
56	CW	147	THR	4.1
7	m	26	GLY	4.1
46	CM	777	A	4.1
50	CQ	129	GLY	4.1
6	l	287	VAL	4.1
47	C	158	VAL	4.1
48	CO	68	VAL	4.1
53	I	153	VAL	4.1
50	CQ	19	TYR	4.1
1	AS	1797	U	4.1
5	k	51	ALA	4.1
6	AY	84	HIS	4.1
8	BA	5	ALA	4.1
22	BO	24	ALA	4.1
1	AS	2848	C	4.1
7	m	290	ILE	4.1
63	DD	84	ILE	4.1
73	DN	69	ASN	4.1
5	AX	5	LYS	4.1
27	BT	125	LYS	4.1
33	BZ	62	LYS	4.1
53	CT	92	ARG	4.1
56	L	65	LYS	4.1
60	P	112	LYS	4.1
53	CT	75	LEU	4.1
57	CX	40	LEU	4.1
59	O	62	LEU	4.1
64	DE	57	LEU	4.1
70	DK	93	LEU	4.1
79	DT	145	LEU	4.1
1	AS	245	G	4.1
11	BD	61	ASP	4.1
46	CM	1135	G	4.1
46	CM	1460	G	4.1
47	CN	96	THR	4.1
14	BG	97	VAL	4.1
28	BU	24	VAL	4.1
39	AL	31	VAL	4.1
77	DR	6	GLY	4.1
13	s	52	TYR	4.1

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Mol	Chain	Res	Type	RSRZ
33	BZ	14	TYR	4.1
64	DE	53	TYR	4.1
5	AX	265	ALA	4.1
14	BG	151	GLN	4.1
37	CD	72	ALA	4.1
55	CV	53	GLN	4.1
63	DD	85	ALA	4.1
70	Z	85	ALA	4.1
10	BC	247	ILE	4.1
14	BG	5	LYS	4.1
16	BI	138	SER	4.1
20	BM	38	ARG	4.1
36	CC	51	ILE	4.1
36	CC	76	ILE	4.1
46	CM	383	A	4.1
63	DD	73	HIS	4.1
4	AW	114	SER	4.1
5	k	120	LYS	4.1
27	BT	62	SER	4.1
70	DK	112	LYS	4.1
76	f	30	LEU	4.1
46	CM	1057	C	4.1
76	f	52	PHE	4.1
79	DT	189	PHE	4.1
11	BD	33	GLU	4.1
16	BI	19	MET	4.1
79	DT	220	TRP	4.1
7	m	204	VAL	4.1
14	BG	69	VAL	4.1
18	x	2	VAL	4.1
28	BU	20	GLY	4.1
43	CJ	68	VAL	4.1
53	CT	180	THR	4.1
78	h	126	VAL	4.1
79	DT	191	GLY	4.1
4	AW	72	ARG	4.1
5	AX	143	GLN	4.1
6	AY	238	GLN	4.1
9	BB	238	LYS	4.1
13	BF	142	LYS	4.1
16	BI	148	TYR	4.1
24	BQ	92	TYR	4.1

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Mol	Chain	Res	Type	RSRZ
52	H	149	ILE	4.1
53	I	95	LYS	4.1
64	DE	117	ILE	4.1
73	c	87	ARG	4.1
7	AZ	19	PRO	4.1
19	BL	163	PRO	4.1
50	CQ	204	PRO	4.1
53	I	200	GLN	4.1
25	BR	58	HIS	4.1
53	CT	181	PRO	4.1
16	BI	51	LEU	4.1
79	DT	268	LEU	4.1
18	BK	141	SER	4.1
59	O	70	SER	4.1
79	DT	255	SER	4.1
1	AS	1590	A	4.1
1	AS	2304	A	4.1
8	n	105	PHE	4.1
27	BT	20	PHE	4.1
1	1	1933	U	4.0
1	AS	1625	U	4.0
1	AS	2366	U	4.0
13	s	125	MET	4.0
51	G	60	GLU	4.0
52	CS	218	GLU	4.0
62	DC	32	GLU	4.0
65	DF	47	CYS	4.0
5	k	253	GLY	4.0
7	AZ	73	VAL	4.0
39	CF	55	VAL	4.0
52	CS	75	GLY	4.0
66	DG	4	VAL	4.0
70	DK	119	GLY	4.0
7	AZ	70	THR	4.0
7	AZ	153	THR	4.0
28	BU	83	THR	4.0
46	CM	1619	C	4.0
63	DD	36	THR	4.0
16	BI	71	ARG	4.0
29	BV	103	ASP	4.0
4	AW	235	ALA	4.0
10	p	149	ALA	4.0

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Mol	Chain	Res	Type	RSRZ
37	CD	22	ALA	4.0
43	AP	13	LYS	4.0
62	DC	90	ILE	4.0
65	DF	83	ALA	4.0
67	W	21	ILE	4.0
18	x	179	GLN	4.0
18	BK	22	LEU	4.0
50	F	47	LEU	4.0
62	DC	114	HIS	4.0
9	BB	217	PHE	4.0
36	CC	116	PHE	4.0
45	i	88	PHE	4.0
47	C	106	ASN	4.0
1	AS	282	G	4.0
1	AS	1606	G	4.0
6	AY	359	GLU	4.0
22	BO	33	VAL	4.0
38	CE	70	VAL	4.0
43	CJ	75	VAL	4.0
46	CM	1149	G	4.0
67	DH	111	VAL	4.0
63	S	129	GLY	4.0
14	BG	108	THR	4.0
14	BG	179	LYS	4.0
17	w	117	LYS	4.0
20	BM	71	ARG	4.0
34	AG	60	ARG	4.0
35	CB	71	THR	4.0
49	CP	86	ARG	4.0
58	CY	141	LYS	4.0
63	DD	139	LYS	4.0
69	Y	60	LYS	4.0
77	DR	41	THR	4.0
16	BI	110	ALA	4.0
19	y	103	ALA	4.0
31	BX	94	ILE	4.0
43	AP	104	LEU	4.0
3	4	91	C	4.0
3	AU	119	C	4.0
50	F	204	PRO	4.0
62	DC	125	PRO	4.0
77	DR	30	PRO	4.0

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Mol	Chain	Res	Type	RSRZ
38	CE	12	HIS	4.0
16	BI	130	PHE	4.0
57	M	41	PHE	4.0
20	BM	137	SER	4.0
4	AW	45	VAL	4.0
22	BO	74	VAL	4.0
47	CN	28	ASN	4.0
48	CO	124	ASN	4.0
50	F	49	VAL	4.0
6	AY	355	GLY	4.0
16	BI	52	GLY	4.0
19	y	180	ARG	4.0
20	BM	62	ARG	4.0
55	CV	37	LYS	4.0
67	W	67	ARG	4.0
6	l	54	ALA	4.0
7	m	70	THR	4.0
7	AZ	62	ALA	4.0
14	BG	47	ALA	4.0
16	BI	102	ALA	4.0
20	z	72	ALA	4.0
56	CW	77	ILE	4.0
63	DD	19	ALA	4.0
70	DK	84	THR	4.0
17	BJ	128	LEU	4.0
26	BS	82	LEU	4.0
79	DT	82	LEU	4.0
1	1	709	A	4.0
10	BC	177	PRO	4.0
46	B	1357	A	4.0
65	DF	76	PRO	4.0
26	BS	47	GLN	4.0
23	BP	98	PHE	4.0
1	AS	487	C	4.0
1	AS	1853	C	4.0
22	BO	52	MET	4.0
4	AW	231	SER	4.0
6	AY	354	LYS	4.0
10	BC	140	VAL	4.0
11	BD	93	VAL	4.0
13	s	51	ARG	4.0
14	BG	144	SER	4.0

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Mol	Chain	Res	Type	RSRZ
15	u	129	VAL	4.0
29	BV	128	ARG	4.0
36	AI	90	ARG	4.0
38	CE	72	ARG	4.0
58	N	94	VAL	4.0
58	CY	7	VAL	4.0
65	DF	40	ARG	4.0
67	DH	87	LYS	4.0
17	BJ	31	GLY	4.0
39	AL	35	GLY	4.0
51	CR	25	GLY	4.0
66	DG	74	GLY	4.0
5	AX	113	GLU	4.0
79	AR	140	GLU	4.0
6	l	291	ILE	4.0
14	BG	95	ILE	4.0
21	o	129	LEU	4.0
27	BT	57	LEU	4.0
47	C	74	ALA	4.0
52	CS	142	ALA	4.0
64	DE	16	LEU	4.0
68	DI	8	LEU	4.0
16	BI	42	PRO	4.0
36	CC	112	PRO	4.0
1	AS	18	U	4.0
1	AS	1519	U	4.0
8	n	10	GLN	4.0
46	CM	1176	U	4.0
54	CU	70	GLN	4.0
63	DD	138	GLN	4.0
66	DG	44	ASP	4.0
1	1	717	A	4.0
1	AS	1541	A	4.0
46	CM	1168	A	4.0
6	AY	72	VAL	4.0
11	BD	168	ARG	4.0
1	AS	281	G	4.0
1	AS	860	G	4.0
28	BU	72	VAL	4.0
37	CD	86	VAL	4.0
42	AO	8	LYS	4.0
46	CM	717	G	4.0

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Mol	Chain	Res	Type	RSRZ
46	CM	1616	G	4.0
54	CU	58	VAL	4.0
59	O	43	ARG	4.0
64	DE	5	ARG	4.0
14	t	4	SER	4.0
28	BU	35	SER	4.0
55	K	15	GLY	4.0
64	DE	43	SER	4.0
22	BO	151	LEU	4.0
26	BS	67	ILE	4.0
28	BU	95	ALA	4.0
37	CD	11	ASN	4.0
40	CG	14	ALA	4.0
49	CP	235	LEU	4.0
72	DM	93	LEU	4.0
5	k	230	THR	4.0
26	BS	112	THR	4.0
61	DB	121	THR	4.0
13	s	45	PRO	4.0
58	N	113	PRO	4.0
43	CJ	28	TYR	3.9
49	E	157	CYS	3.9
55	CV	109	PHE	3.9
60	DA	141	TYR	3.9
7	AZ	81	HIS	3.9
10	p	62	GLN	3.9
37	CD	34	GLN	3.9
54	J	64	GLN	3.9
63	DD	39	GLN	3.9
65	U	74	GLN	3.9
7	AZ	54	ARG	3.9
10	BC	71	LYS	3.9
18	BK	62	ARG	3.9
20	z	71	ARG	3.9
21	BN	160	LYS	3.9
29	BV	76	ASP	3.9
33	BZ	63	LYS	3.9
44	AQ	24	ARG	3.9
50	F	11	LYS	3.9
56	L	157	ASP	3.9
56	CW	16	LYS	3.9
71	a	8	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
77	g	36	MET	3.9
6	AY	287	VAL	3.9
17	w	9	VAL	3.9
17	w	37	VAL	3.9
22	BO	93	VAL	3.9
50	F	40	VAL	3.9
57	M	42	VAL	3.9
60	DA	150	VAL	3.9
67	DH	30	VAL	3.9
1	1	1012	U	3.9
3	AU	149	A	3.9
29	BV	20	GLY	3.9
8	n	130	ILE	3.9
10	BC	151	LEU	3.9
12	r	166	ILE	3.9
12	r	210	LEU	3.9
16	BI	64	ILE	3.9
47	CN	160	ILE	3.9
49	CP	132	ILE	3.9
50	F	150	SER	3.9
50	CQ	67	ILE	3.9
7	AZ	25	GLU	3.9
20	z	87	ALA	3.9
50	CQ	177	LEU	3.9
51	CR	42	LEU	3.9
52	CS	96	SER	3.9
55	CV	171	LEU	3.9
22	BO	82	ASN	3.9
1	AS	2251	G	3.9
14	BG	76	THR	3.9
46	CM	996	G	3.9
46	CM	1649	G	3.9
61	DB	89	PRO	3.9
63	S	8	THR	3.9
64	T	106	THR	3.9
1	AS	9	C	3.9
46	CM	482	C	3.9
62	R	12	PHE	3.9
5	AX	152	LYS	3.9
40	CG	18	LYS	3.9
77	DR	29	LYS	3.9
13	s	90	GLN	3.9

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Mol	Chain	Res	Type	RSRZ
24	BQ	22	VAL	3.9
48	CO	91	VAL	3.9
45	i	111	ASP	3.9
38	CE	62	GLY	3.9
45	i	59	GLY	3.9
7	AZ	163	LEU	3.9
8	BA	63	LEU	3.9
14	t	10	LEU	3.9
47	CN	172	LEU	3.9
49	CP	230	LEU	3.9
50	CQ	87	ILE	3.9
79	AR	157	ILE	3.9
1	1	1346	U	3.9
1	1	1637	U	3.9
6	AY	54	ALA	3.9
6	AY	107	TRP	3.9
26	BS	72	ALA	3.9
27	BT	15	ALA	3.9
46	CM	101	U	3.9
46	CM	997	U	3.9
52	H	85	ALA	3.9
55	CV	16	ALA	3.9
79	AR	290	ALA	3.9
52	CS	140	SER	3.9
54	J	185	SER	3.9
67	DH	82	GLU	3.9
1	AS	70	A	3.9
1	AS	2966	A	3.9
6	l	5	PRO	3.9
48	CO	105	PHE	3.9
19	BL	170	ARG	3.9
36	AI	1	MET	3.9
62	R	97	TYR	3.9
4	AW	209	HIS	3.9
7	m	151	GLN	3.9
19	y	30	VAL	3.9
63	DD	74	VAL	3.9
66	DG	94	VAL	3.9
1	AS	80	C	3.9
1	AS	135	G	3.9
1	AS	277	G	3.9
1	AS	2089	G	3.9

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Mol	Chain	Res	Type	RSRZ
1	AS	2737	C	3.9
2	AT	73	C	3.9
46	B	381	G	3.9
46	B	1431	G	3.9
46	CM	923	G	3.9
46	CM	1096	G	3.9
7	AZ	61	ILE	3.9
47	CN	120	LEU	3.9
34	CA	50	ALA	3.9
52	CS	195	ALA	3.9
16	BI	150	TRP	3.9
10	p	55	GLU	3.9
50	F	136	GLU	3.9
8	BA	65	SER	3.9
7	AZ	180	PHE	3.9
10	BC	64	LYS	3.9
48	CO	119	SER	3.9
19	BL	96	PHE	3.9
46	CM	225	U	3.9
56	CW	5	PRO	3.9
62	R	18	LYS	3.9
52	CS	103	ASN	3.9
71	a	72	PHE	3.9
1	1	2078	A	3.9
24	6	22	VAL	3.9
34	AG	98	VAL	3.9
50	CQ	38	VAL	3.9
50	CQ	182	VAL	3.9
73	DN	73	TYR	3.9
74	DO	25	VAL	3.9
76	f	23	HIS	3.9
11	BD	162	GLN	3.9
36	CC	62	GLN	3.9
53	CT	185	GLN	3.9
4	AW	180	LEU	3.9
64	DE	34	LEU	3.9
74	d	24	LEU	3.9
78	h	145	LEU	3.9
79	AR	82	LEU	3.9
6	AY	225	GLY	3.9
22	BO	25	ILE	3.9
37	AJ	60	ILE	3.9

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Mol	Chain	Res	Type	RSRZ
65	DF	144	GLY	3.9
11	q	158	ALA	3.9
14	BG	82	ALA	3.9
32	BY	31	ALA	3.9
63	S	23	ALA	3.9
46	B	227	C	3.9
18	BK	40	LYS	3.9
34	AG	86	LYS	3.9
40	AM	34	LYS	3.9
42	CI	19	LYS	3.9
52	H	45	LYS	3.9
63	S	105	LYS	3.9
4	j	73	GLU	3.9
14	BG	139	GLU	3.9
62	DC	44	ARG	3.9
76	DQ	45	GLU	3.9
36	CC	95	PHE	3.9
45	i	56	SER	3.9
52	CS	164	PRO	3.9
60	DA	17	PRO	3.9
7	m	118	THR	3.9
71	a	133	ASN	3.9
79	AR	254	THR	3.9
19	BL	140	VAL	3.9
22	BO	79	VAL	3.9
62	DC	94	VAL	3.9
38	CE	28	HIS	3.9
16	BI	87	GLN	3.9
17	BJ	53	LEU	3.9
50	CQ	60	LEU	3.9
51	CR	68	GLN	3.9
52	CS	165	LEU	3.9
59	O	89	ILE	3.9
60	DA	62	GLN	3.9
65	DF	18	LEU	3.9
4	AW	225	ILE	3.9
12	r	50	ILE	3.9
43	CJ	52	GLY	3.9
1	AS	747	A	3.9
46	CM	1345	A	3.9
50	CQ	89	ALA	3.9
52	CS	87	CYS	3.9

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Mol	Chain	Res	Type	RSRZ
66	V	104	CYS	3.9
16	v	5	LYS	3.9
33	BZ	124	LYS	3.9
36	CC	79	ASP	3.9
50	CQ	8	LYS	3.9
51	CR	6	LYS	3.9
52	CS	212	LYS	3.9
78	DS	136	LYS	3.9
63	DD	81	ARG	3.9
64	T	3	ARG	3.9
17	w	49	PHE	3.8
45	CL	61	GLU	3.8
30	BW	24	PRO	3.8
56	L	101	PRO	3.8
66	DG	90	PRO	3.8
19	y	186	VAL	3.8
20	BM	13	SER	3.8
20	BM	93	VAL	3.8
25	BR	38	SER	3.8
35	CB	17	SER	3.8
62	DC	120	SER	3.8
70	DK	53	VAL	3.8
7	AZ	31	TYR	3.8
30	AC	11	ASN	3.8
31	AD	13	ASN	3.8
56	CW	74	ASN	3.8
10	BC	137	LEU	3.8
16	BI	37	HIS	3.8
43	CJ	83	LEU	3.8
49	CP	64	ILE	3.8
53	I	226	ILE	3.8
56	CW	52	ILE	3.8
69	DJ	61	ILE	3.8
46	CM	318	U	3.8
4	AW	46	LYS	3.8
14	t	42	LYS	3.8
19	BL	168	LYS	3.8
20	BM	168	ALA	3.8
27	BT	63	LYS	3.8
35	AH	32	ALA	3.8
48	CO	216	LYS	3.8
75	DP	14	LYS	3.8

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Mol	Chain	Res	Type	RSRZ
16	BI	31	ARG	3.8
20	z	88	ARG	3.8
1	AS	776	A	3.8
1	AS	1414	A	3.8
45	CL	40	ASP	3.8
47	C	107	PHE	3.8
79	DT	77	ASP	3.8
63	S	124	GLU	3.8
79	DT	27	PRO	3.8
18	BK	24	VAL	3.8
62	DC	101	VAL	3.8
69	DJ	25	VAL	3.8
8	BA	62	LEU	3.8
16	v	204	SER	3.8
16	BI	118	SER	3.8
20	z	137	SER	3.8
24	6	17	LEU	3.8
25	BR	87	LEU	3.8
29	BV	118	LEU	3.8
36	CC	21	LEU	3.8
40	CG	13	LEU	3.8
51	CR	48	LEU	3.8
51	CR	91	THR	3.8
58	CY	91	LEU	3.8
76	f	36	LEU	3.8
7	AZ	231	ILE	3.8
10	p	205	ASN	3.8
14	BG	103	ASN	3.8
26	BS	93	HIS	3.8
36	CC	75	TYR	3.8
28	BU	12	ILE	3.8
44	CK	83	ILE	3.8
57	M	3	ILE	3.8
60	DA	71	ILE	3.8
1	1	2476	C	3.8
2	3	73	C	3.8
3	AU	141	C	3.8
12	r	211	GLN	3.8
15	BH	49	ALA	3.8
16	BI	33	LYS	3.8
21	BN	108	GLN	3.8
28	AA	106	GLN	3.8

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Mol	Chain	Res	Type	RSRZ
35	CB	73	GLN	3.8
44	CK	61	LYS	3.8
52	H	76	LYS	3.8
56	L	177	GLN	3.8
16	BI	38	ARG	3.8
19	BL	174	ARG	3.8
41	AN	37	ARG	3.8
52	CS	92	ARG	3.8
1	1	775	G	3.8
1	AS	170	G	3.8
1	AS	3164	U	3.8
46	CM	999	G	3.8
46	CM	1609	G	3.8
51	G	45	VAL	3.8
61	DB	23	VAL	3.8
62	R	73	PRO	3.8
65	U	46	VAL	3.8
73	DN	30	VAL	3.8
74	DO	28	PRO	3.8
25	7	126	GLU	3.8
1	AS	72	A	3.8
1	AS	1099	A	3.8
1	AS	1470	A	3.8
1	AS	1487	A	3.8
18	BK	112	LEU	3.8
37	CD	59	LEU	3.8
46	B	620	A	3.8
46	CM	1461	A	3.8
54	CU	149	LEU	3.8
56	L	93	LEU	3.8
18	BK	14	SER	3.8
31	BX	20	ILE	3.8
45	CL	58	THR	3.8
48	D	52	THR	3.8
63	S	114	THR	3.8
5	k	236	LYS	3.8
6	AY	316	LYS	3.8
9	BB	96	LYS	3.8
31	BX	61	TYR	3.8
69	Y	53	ILE	3.8
72	DM	41	ILE	3.8
70	DK	50	LYS	3.8

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Mol	Chain	Res	Type	RSRZ
76	f	54	LYS	3.8
15	BH	81	ALA	3.8
22	BO	44	ALA	3.8
64	DE	51	ALA	3.8
66	DG	89	ARG	3.8
50	CQ	180	GLN	3.8
7	m	7	PHE	3.8
46	CM	280	C	3.8
47	C	174	TRP	3.8
79	AR	142	MET	3.8
33	BZ	6	PRO	3.8
35	CB	5	VAL	3.8
36	AI	57	VAL	3.8
36	CC	54	VAL	3.8
46	CM	693	U	3.8
46	CM	1356	U	3.8
62	DC	93	VAL	3.8
70	DK	127	VAL	3.8
6	AY	239	LEU	3.8
11	BD	37	ASP	3.8
22	2	91	LEU	3.8
47	C	87	LEU	3.8
59	CZ	36	LEU	3.8
1	1	2455	G	3.8
1	AS	175	G	3.8
6	l	105	LYS	3.8
14	BG	104	LYS	3.8
14	BG	128	LYS	3.8
36	AI	109	ILE	3.8
46	B	1480	G	3.8
46	CM	1140	G	3.8
46	CM	1186	G	3.8
50	CQ	50	ILE	3.8
50	CQ	139	ILE	3.8
61	DB	124	LYS	3.8
66	V	135	ILE	3.8
44	CK	46	THR	3.8
67	DH	59	THR	3.8
76	f	33	LYS	3.8
16	BI	162	ARG	3.8
61	DB	13	ARG	3.8
43	AP	52	GLY	3.8

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Mol	Chain	Res	Type	RSRZ
44	CK	92	ALA	3.8
62	R	95	GLY	3.8
68	DI	56	SER	3.8
1	AS	1023	A	3.8
1	AS	2078	A	3.8
74	DO	53	ALA	3.8
8	BA	71	ASN	3.8
12	BE	205	ASN	3.8
52	CS	100	ASN	3.8
66	DG	85	ASN	3.8
68	DI	50	ASN	3.8
54	J	21	PHE	3.8
62	DC	12	PHE	3.8
62	DC	102	PHE	3.8
73	DN	44	MET	3.8
50	F	187	VAL	3.8
63	S	40	PRO	3.8
70	DK	125	VAL	3.8
71	a	27	VAL	3.8
7	AZ	194	LEU	3.8
1	AS	1192	C	3.8
3	AU	117	C	3.8
7	m	25	GLU	3.8
46	CM	1182	C	3.8
46	CM	1451	C	3.8
3	AU	98	U	3.8
4	AW	219	ILE	3.8
23	BP	96	ILE	3.8
29	BV	124	ILE	3.8
30	BW	5	LYS	3.8
33	BZ	35	LYS	3.8
35	AH	70	LYS	3.8
43	CJ	61	LYS	3.8
45	CL	98	ASP	3.8
52	H	80	LYS	3.8
56	CW	27	GLU	3.8
57	M	44	LYS	3.8
57	CX	3	ILE	3.8
62	DC	107	ILE	3.8
6	l	48	ARG	3.8
24	BQ	87	ARG	3.8
6	AY	102	ALA	3.8

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Mol	Chain	Res	Type	RSRZ
10	BC	237	GLY	3.8
16	BI	4	TYR	3.8
16	BI	82	GLY	3.8
18	BK	63	TYR	3.8
26	BS	79	GLY	3.8
37	CD	18	ALA	3.8
40	CG	39	ALA	3.8
52	CS	117	ALA	3.8
56	L	35	GLY	3.8
72	DM	79	ALA	3.8
17	BJ	45	SER	3.7
19	BL	13	SER	3.7
60	DA	6	SER	3.7
60	DA	13	SER	3.7
65	DF	142	SER	3.7
1	AS	2254	G	3.7
10	p	86	ASN	3.7
34	AG	31	GLN	3.7
36	CC	61	ASN	3.7
46	B	508	G	3.7
46	CM	1266	G	3.7
79	AR	17	ASN	3.7
55	CV	65	PHE	3.7
1	1	1585	A	3.7
1	AS	19	A	3.7
1	AS	1783	A	3.7
46	CM	469	A	3.7
46	CM	718	A	3.7
63	DD	18	VAL	3.7
6	AY	170	LEU	3.7
7	AZ	174	PRO	3.7
14	BG	80	LEU	3.7
50	F	203	LEU	3.7
50	CQ	70	LEU	3.7
54	CU	125	LEU	3.7
56	CW	59	LEU	3.7
70	Z	15	LEU	3.7
73	DN	53	LEU	3.7
74	DO	21	LEU	3.7
79	AR	248	TRP	3.7
6	AY	47	LYS	3.7
28	AA	116	LYS	3.7

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Mol	Chain	Res	Type	RSRZ
36	CC	103	LYS	3.7
51	G	168	LYS	3.7
52	CS	80	LYS	3.7
33	BZ	96	GLU	3.7
51	CR	249	ILE	3.7
65	DF	110	ARG	3.7
80	ll	65	ILE	3.7
1	AS	2170	C	3.7
1	AS	2328	C	3.7
4	AW	201	GLY	3.7
7	AZ	80	ALA	3.7
16	BI	94	TYR	3.7
17	w	31	GLY	3.7
26	BS	31	THR	3.7
45	i	156	ALA	3.7
45	CL	34	THR	3.7
46	CM	308	C	3.7
46	CM	1589	C	3.7
52	H	147	THR	3.7
60	DA	90	TYR	3.7
63	DD	109	ALA	3.7
70	Z	28	ALA	3.7
79	AR	78	GLY	3.7
79	DT	250	ALA	3.7
1	AS	542	U	3.7
46	CM	1725	U	3.7
12	BE	199	PHE	3.7
13	s	6	GLN	3.7
13	s	47	GLN	3.7
21	BN	18	SER	3.7
29	BV	131	SER	3.7
50	CQ	163	GLN	3.7
70	Z	27	GLN	3.7
69	Y	70	ASN	3.7
7	AZ	122	VAL	3.7
33	BZ	85	VAL	3.7
39	CF	14	LEU	3.7
49	E	36	LEU	3.7
49	CP	66	LEU	3.7
49	CP	174	VAL	3.7
50	F	22	LEU	3.7
52	CS	111	VAL	3.7

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Mol	Chain	Res	Type	RSRZ
63	DD	77	VAL	3.7
77	g	49	LEU	3.7
6	AY	105	LYS	3.7
50	F	191	LYS	3.7
58	CY	46	LYS	3.7
60	P	107	LYS	3.7
71	a	127	LYS	3.7
76	DQ	46	LYS	3.7
8	BA	81	ARG	3.7
1	AS	1081	A	3.7
3	AU	3	A	3.7
34	CA	30	ILE	3.7
49	E	134	ILE	3.7
50	F	171	ILE	3.7
52	H	130	ILE	3.7
64	T	5	ARG	3.7
66	DG	123	ARG	3.7
46	CM	1521	G	3.7
46	CM	1737	A	3.7
73	DN	79	ILE	3.7
6	l	346	GLU	3.7
8	BA	103	GLU	3.7
13	BF	22	CYS	3.7
23	5	94	ASP	3.7
30	BW	51	ALA	3.7
36	CC	82	ALA	3.7
63	S	19	ALA	3.7
5	k	6	TYR	3.7
66	V	18	TYR	3.7
69	DJ	2	THR	3.7
37	AJ	38	PHE	3.7
50	F	168	PHE	3.7
61	DB	9	PHE	3.7
79	DT	142	MET	3.7
1	AS	3163	U	3.7
7	AZ	111	GLN	3.7
19	BL	64	VAL	3.7
26	8	47	GLN	3.7
6	AY	351	LYS	3.7
14	t	128	LYS	3.7
16	BI	72	LYS	3.7
27	BT	118	LEU	3.7

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Mol	Chain	Res	Type	RSRZ
46	B	190	U	3.7
46	CM	875	C	3.7
46	CM	1292	U	3.7
46	CM	1599	U	3.7
47	CN	9	LEU	3.7
50	CQ	176	VAL	3.7
52	H	96	SER	3.7
52	H	160	VAL	3.7
50	CQ	191	LYS	3.7
54	CU	95	LEU	3.7
60	DA	66	VAL	3.7
62	DC	86	VAL	3.7
70	DK	102	VAL	3.7
73	DN	7	SER	3.7
31	BX	13	ASN	3.7
54	CU	107	LYS	3.7
65	DF	139	LYS	3.7
17	BJ	132	PRO	3.7
47	CN	126	PRO	3.7
66	V	123	ARG	3.7
76	DQ	11	PRO	3.7
16	BI	142	ILE	3.7
27	BT	97	ILE	3.7
28	BU	5	ILE	3.7
29	BV	135	GLU	3.7
58	CY	50	GLU	3.7
11	BD	66	ALA	3.7
36	CC	52	ALA	3.7
52	CS	85	ALA	3.7
55	CV	100	ALA	3.7
79	DT	209	ALA	3.7
1	1	1889	A	3.7
6	AY	106	THR	3.7
32	BY	16	HIS	3.7
69	DJ	4	THR	3.7
1	AS	2549	G	3.7
46	B	127	G	3.7
46	CM	1095	G	3.7
46	CM	1775	G	3.7
51	CR	47	PHE	3.7
5	k	5	LYS	3.7
7	AZ	173	VAL	3.7

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Mol	Chain	Res	Type	RSRZ
10	p	152	VAL	3.7
16	BI	98	LEU	3.7
16	BI	152	VAL	3.7
18	BK	150	LEU	3.7
19	BL	94	LEU	3.7
21	BN	148	LEU	3.7
26	BS	49	LYS	3.7
27	BT	82	VAL	3.7
36	CC	74	LYS	3.7
38	CE	8	LEU	3.7
47	CN	158	VAL	3.7
65	DF	52	VAL	3.7
79	DT	95	LEU	3.7
44	CK	25	GLN	3.7
5	AX	19	ARG	3.7
18	x	128	ARG	3.7
64	T	43	SER	3.7
1	AS	2492	U	3.7
6	AY	46	ASN	3.7
6	AY	291	ILE	3.7
27	BT	4	ILE	3.7
46	B	1044	U	3.7
46	CM	1121	U	3.7
47	CN	50	ILE	3.7
51	G	57	ASN	3.7
46	CM	698	C	3.7
27	BT	124	GLY	3.7
28	BU	41	ALA	3.7
29	BV	108	GLY	3.7
31	BX	97	ALA	3.7
51	G	107	GLY	3.7
55	CV	15	GLY	3.7
65	DF	37	GLY	3.7
6	AY	51	TYR	3.7
16	BI	21	PHE	3.7
21	BN	118	PHE	3.7
47	C	96	THR	3.7
50	F	198	PHE	3.7
53	I	27	PHE	3.7
53	I	81	HIS	3.7
58	N	3	THR	3.7
58	CY	134	THR	3.7

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Mol	Chain	Res	Type	RSRZ
61	DB	15	PHE	3.7
9	BB	104	LEU	3.7
9	BB	124	LEU	3.7
10	BC	246	LYS	3.7
20	BM	155	LEU	3.7
28	BU	133	LYS	3.7
31	BX	21	LYS	3.7
53	I	143	LYS	3.7
55	K	96	LEU	3.7
57	M	2	LEU	3.7
57	CX	24	LYS	3.7
59	CZ	62	LEU	3.7
63	DD	117	VAL	3.7
64	DE	91	LEU	3.7
73	DN	91	ASP	3.7
78	DS	190	LEU	3.7
79	AR	207	LEU	3.7
1	1	402	A	3.7
1	AS	2379	A	3.7
4	AW	6	ARG	3.7
35	AH	9	ARG	3.7
66	DG	86	ARG	3.7
16	v	57	GLN	3.7
68	DI	33	GLN	3.7
71	DL	22	GLN	3.7
27	BT	101	PRO	3.7
49	CP	130	SER	3.7
1	AS	238	G	3.7
1	AS	2965	G	3.7
45	CL	68	ASN	3.7
1	1	1736	U	3.6
9	o	211	GLY	3.6
14	BG	33	ALA	3.6
46	B	710	U	3.6
46	CM	1224	U	3.6
54	J	133	GLY	3.6
65	DF	43	ALA	3.6
73	c	16	GLY	3.6
1	1	1900	C	3.6
46	CM	1433	C	3.6
6	AY	194	LYS	3.6
7	AZ	112	LYS	3.6

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Mol	Chain	Res	Type	RSRZ
15	BH	24	LYS	3.6
22	BO	55	LYS	3.6
43	CJ	15	LYS	3.6
65	DF	96	LYS	3.6
16	BI	164	LEU	3.6
26	BS	37	THR	3.6
28	BU	85	TYR	3.6
29	BV	78	LEU	3.6
5	AX	331	VAL	3.6
15	BH	30	VAL	3.6
20	BM	9	ARG	3.6
29	AB	112	VAL	3.6
29	BV	112	VAL	3.6
32	BY	46	THR	3.6
63	S	69	THR	3.6
63	DD	56	LEU	3.6
39	AL	55	VAL	3.6
78	h	127	TYR	3.6
50	F	197	ARG	3.6
64	DE	47	ARG	3.6
65	DF	88	ARG	3.6
79	DT	174	THR	3.6
40	AM	32	ASP	3.6
13	BF	47	GLN	3.6
19	BL	101	ILE	3.6
21	0	157	GLN	3.6
66	DG	23	GLN	3.6
67	DH	85	ILE	3.6
74	DO	5	GLN	3.6
66	DG	46	PRO	3.6
75	DP	53	ILE	3.6
22	BO	70	SER	3.6
46	CM	1407	A	3.6
10	BC	179	ALA	3.6
55	CV	19	ALA	3.6
64	T	12	ALA	3.6
27	9	124	GLY	3.6
55	K	183	GLY	3.6
60	DA	2	GLY	3.6
65	DF	124	GLY	3.6
75	DP	24	GLY	3.6
18	BK	153	GLU	3.6

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Mol	Chain	Res	Type	RSRZ
35	CB	86	LYS	3.6
47	CN	56	LYS	3.6
54	CU	104	LYS	3.6
56	CW	20	GLU	3.6
5	AX	365	PHE	3.6
52	CS	82	PHE	3.6
63	S	37	LEU	3.6
72	DM	80	LEU	3.6
79	DT	249	LEU	3.6
1	AS	20	G	3.6
1	AS	2212	G	3.6
32	AE	32	VAL	3.6
36	CC	4	VAL	3.6
40	CG	46	ARG	3.6
44	CK	31	VAL	3.6
46	CM	1577	G	3.6
52	CS	114	VAL	3.6
61	DB	122	ARG	3.6
65	DF	133	VAL	3.6
76	DQ	22	ARG	3.6
79	DT	114	VAL	3.6
13	BF	116	TYR	3.6
22	BO	29	THR	3.6
38	CE	66	TYR	3.6
60	P	18	TYR	3.6
75	e	19	THR	3.6
79	AR	280	THR	3.6
1	AS	241	C	3.6
46	B	1207	C	3.6
46	CM	1704	C	3.6
6	l	281	ILE	3.6
7	AZ	199	ILE	3.6
14	BG	98	ASP	3.6
27	BT	106	ILE	3.6
28	AA	25	ILE	3.6
68	X	34	ILE	3.6
36	AI	62	GLN	3.6
45	CL	77	GLN	3.6
65	DF	82	PRO	3.6
10	BC	103	SER	3.6
27	9	5	SER	3.6
38	CE	46	SER	3.6

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Mol	Chain	Res	Type	RSRZ
59	O	49	SER	3.6
5	AX	45	ALA	3.6
51	CR	22	LYS	3.6
55	CV	17	LYS	3.6
62	DC	39	ALA	3.6
9	BB	211	GLY	3.6
18	BK	28	ASN	3.6
75	DP	51	ASN	3.6
1	1	2466	A	3.6
4	j	184	ARG	3.6
7	m	3	MET	3.6
7	AZ	21	ARG	3.6
8	BA	173	LEU	3.6
10	p	153	LEU	3.6
20	BM	140	GLU	3.6
22	2	157	GLU	3.6
25	BR	43	ARG	3.6
29	BV	146	GLU	3.6
32	BY	19	LEU	3.6
46	CM	1101	A	3.6
46	CM	1116	A	3.6
50	CQ	110	LEU	3.6
52	CS	99	MET	3.6
63	DD	51	LEU	3.6
66	V	45	LEU	3.6
76	DQ	38	LEU	3.6
79	AR	285	GLU	3.6
10	BC	57	VAL	3.6
26	BS	26	VAL	3.6
52	CS	134	VAL	3.6
56	CW	96	VAL	3.6
62	R	94	VAL	3.6
66	V	9	VAL	3.6
66	V	34	VAL	3.6
70	DK	74	VAL	3.6
78	DS	126	VAL	3.6
23	BP	78	TYR	3.6
1	1	3319	U	3.6
1	AS	2950	U	3.6
35	CB	68	THR	3.6
46	CM	1613	U	3.6
46	CM	1614	U	3.6

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Mol	Chain	Res	Type	RSRZ
8	BA	84	ILE	3.6
54	J	132	ILE	3.6
72	DM	50	ILE	3.6
43	AP	102	GLN	3.6
66	DG	25	GLN	3.6
67	W	79	ASP	3.6
69	Y	77	PRO	3.6
1	1	2448	C	3.6
70	Z	24	TRP	3.6
10	p	172	LYS	3.6
14	BG	131	LYS	3.6
17	BJ	194	LYS	3.6
20	BM	80	LYS	3.6
40	CG	5	LYS	3.6
47	CN	76	CYS	3.6
48	CO	45	LYS	3.6
54	J	153	LYS	3.6
65	DF	108	LYS	3.6
58	CY	108	ALA	3.6
59	CZ	128	ALA	3.6
44	CK	20	SER	3.6
44	CK	81	SER	3.6
51	G	16	SER	3.6
52	CS	105	GLY	3.6
79	AR	83	SER	3.6
9	BB	203	PHE	3.6
10	BC	167	LEU	3.6
25	BR	89	LEU	3.6
26	8	34	LEU	3.6
34	CA	54	ARG	3.6
50	CQ	97	LEU	3.6
52	CS	31	LEU	3.6
54	J	63	LEU	3.6
61	DB	28	LEU	3.6
79	DT	7	LEU	3.6
39	AL	34	ASN	3.6
7	AZ	52	VAL	3.6
16	BI	135	VAL	3.6
33	BZ	120	VAL	3.6
52	H	24	GLU	3.6
69	DJ	6	VAL	3.6
77	DR	22	GLU	3.6

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Mol	Chain	Res	Type	RSRZ
1	1	1126	A	3.6
1	1	1590	A	3.6
46	CM	1148	A	3.6
46	CM	1321	A	3.6
47	CN	110	TYR	3.6
57	CX	12	HIS	3.6
36	CC	58	ILE	3.6
65	DF	55	THR	3.6
10	BC	73	PRO	3.6
29	BV	2	PRO	3.6
1	AS	1013	U	3.6
1	AS	2852	U	3.6
5	AX	142	LYS	3.6
43	AP	53	GLN	3.6
65	DF	92	GLN	3.6
67	W	29	LYS	3.6
73	DN	13	LYS	3.6
13	s	28	ASP	3.6
54	CU	65	ALA	3.6
63	S	118	ALA	3.6
72	DM	76	ALA	3.6
7	AZ	195	LEU	3.6
14	t	91	ARG	3.6
20	BM	81	ARG	3.6
28	BU	101	LEU	3.6
31	BX	90	GLY	3.6
49	CP	170	GLY	3.6
58	CY	33	ARG	3.6
60	DA	16	LEU	3.6
66	DG	28	LEU	3.6
66	DG	45	LEU	3.6
18	x	25	SER	3.6
23	BP	34	VAL	3.6
27	9	13	SER	3.6
45	CL	78	SER	3.6
1	AS	101	C	3.6
1	AS	172	C	3.6
1	AS	805	G	3.6
1	AS	1524	G	3.6
2	AT	8	G	3.6
46	CM	1520	C	3.6
65	U	93	VAL	3.6

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Mol	Chain	Res	Type	RSRZ
79	DT	124	VAL	3.6
80	ll	205	VAL	3.6
13	BF	108	GLU	3.6
18	BK	31	GLU	3.6
27	BT	99	ILE	3.6
58	CY	49	ILE	3.6
73	c	36	ILE	3.6
79	DT	138	ILE	3.6
36	CC	93	THR	3.6
52	CS	27	THR	3.6
4	AW	190	LYS	3.6
12	r	175	PRO	3.6
22	BO	78	LYS	3.6
26	BS	44	PRO	3.6
27	9	69	LYS	3.6
45	i	67	LYS	3.6
62	DC	100	LYS	3.6
66	DG	47	PRO	3.6
1	AS	2186	A	3.5
46	CM	1188	A	3.5
14	BG	166	GLN	3.5
4	AW	54	ARG	3.5
5	AX	10	ARG	3.5
5	AX	51	ALA	3.5
14	BG	18	TRP	3.5
16	BI	159	ARG	3.5
18	BK	126	ARG	3.5
29	BV	17	ALA	3.5
52	CS	180	ARG	3.5
70	DK	24	TRP	3.5
79	DT	79	ALA	3.5
4	AW	237	LEU	3.5
7	AZ	146	LEU	3.5
16	BI	134	LEU	3.5
46	B	697	U	3.5
46	CM	230	U	3.5
76	DQ	29	GLY	3.5
50	CQ	168	PHE	3.5
6	AY	36	VAL	3.5
27	9	8	VAL	3.5
27	BT	58	VAL	3.5
29	BV	101	VAL	3.5

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Mol	Chain	Res	Type	RSRZ
50	CQ	7	SER	3.5
52	H	71	SER	3.5
75	DP	59	SER	3.5
67	DH	71	ASN	3.5
69	DJ	87	GLU	3.5
14	t	93	ILE	3.5
50	CQ	169	ILE	3.5
52	CS	64	ILE	3.5
52	CS	199	ILE	3.5
29	BV	62	HIS	3.5
4	j	10	LYS	3.5
5	AX	337	THR	3.5
7	m	5	LYS	3.5
7	AZ	27	LYS	3.5
10	BC	112	LYS	3.5
16	BI	96	LYS	3.5
20	z	133	LYS	3.5
26	BS	92	LYS	3.5
31	BX	71	TYR	3.5
57	CX	65	TYR	3.5
60	DA	123	HIS	3.5
34	CA	70	LYS	3.5
39	CF	76	THR	3.5
52	CS	107	LYS	3.5
64	T	35	THR	3.5
65	DF	141	THR	3.5
1	AS	243	G	3.5
16	BI	154	PRO	3.5
28	AA	104	PRO	3.5
46	CM	757	G	3.5
46	CM	1588	G	3.5
10	BC	61	ARG	3.5
13	s	145	ARG	3.5
16	BI	105	ARG	3.5
52	H	112	ARG	3.5
52	CS	143	ARG	3.5
65	DF	57	ARG	3.5
6	AY	73	ALA	3.5
6	AY	290	LEU	3.5
20	BM	123	LEU	3.5
25	BR	39	LEU	3.5
38	CE	42	ALA	3.5

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Mol	Chain	Res	Type	RSRZ
56	CW	70	LEU	3.5
75	DP	9	LEU	3.5
24	6	57	MET	3.5
48	D	93	GLY	3.5
67	DH	72	GLY	3.5
13	s	18	VAL	3.5
13	BF	111	ASP	3.5
27	9	56	VAL	3.5
27	BT	56	VAL	3.5
46	CM	925	A	3.5
46	CM	1473	A	3.5
72	DM	34	ASP	3.5
1	1	1263	U	3.5
1	AS	705	U	3.5
43	CJ	88	CYS	3.5
5	k	113	GLU	3.5
55	CV	78	ILE	3.5
55	CV	104	ILE	3.5
59	O	68	GLU	3.5
60	P	84	ILE	3.5
64	DE	41	ILE	3.5
65	U	65	GLU	3.5
67	DH	49	ILE	3.5
67	DH	73	GLU	3.5
6	AY	184	LYS	3.5
6	AY	320	LYS	3.5
24	BQ	28	ASN	3.5
49	CP	180	LYS	3.5
70	Z	30	LYS	3.5
72	DM	95	HIS	3.5
4	AW	133	TYR	3.5
56	L	164	TYR	3.5
73	DN	62	TYR	3.5
10	BC	122	THR	3.5
13	s	143	ARG	3.5
50	CQ	200	PRO	3.5
52	CS	176	THR	3.5
53	CT	85	ARG	3.5
10	BC	95	LEU	3.5
13	BF	34	ALA	3.5
24	BQ	34	LEU	3.5
30	BW	9	ALA	3.5

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Mol	Chain	Res	Type	RSRZ
33	BZ	116	LEU	3.5
35	AH	30	LEU	3.5
48	CO	96	LEU	3.5
51	CR	23	LEU	3.5
62	DC	60	LEU	3.5
63	DD	23	ALA	3.5
72	DM	42	LEU	3.5
1	1	2745	C	3.5
1	AS	2311	C	3.5
6	AY	49	GLN	3.5
46	CM	995	C	3.5
46	CM	1412	C	3.5
57	CX	61	TRP	3.5
35	CB	78	GLY	3.5
55	CV	21	PHE	3.5
57	M	59	PHE	3.5
73	c	14	GLY	3.5
5	AX	336	VAL	3.5
22	BO	96	VAL	3.5
24	BQ	91	VAL	3.5
31	BX	33	VAL	3.5
1	AS	478	G	3.5
1	AS	1614	G	3.5
1	AS	1930	G	3.5
17	w	11	ASP	3.5
53	CT	152	ASP	3.5
65	U	97	ASP	3.5
70	DK	97	ASP	3.5
9	BB	125	ILE	3.5
12	BE	165	ILE	3.5
18	BK	114	ILE	3.5
33	BZ	115	LYS	3.5
54	CU	144	LYS	3.5
65	DF	119	ILE	3.5
2	3	17	A	3.5
79	DT	96	GLU	3.5
1	AS	132	U	3.5
3	4	23	U	3.5
46	CM	1167	U	3.5
16	v	73	ARG	3.5
69	Y	117	ARG	3.5
29	AB	113	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
49	E	154	THR	3.5
55	CV	96	LEU	3.5
63	DD	16	THR	3.5
77	DR	49	LEU	3.5
15	BH	123	ALA	3.5
7	AZ	202	GLY	3.5
9	o	132	VAL	3.5
33	AF	38	GLY	3.5
34	AG	61	GLY	3.5
54	CU	87	VAL	3.5
1	1	1903	C	3.5
1	AS	486	C	3.5
1	AS	1416	C	3.5
1	AS	1697	C	3.5
4	AW	155	LYS	3.5
46	CM	1406	C	3.5
46	CM	1610	C	3.5
10	BC	76	ILE	3.5
12	BE	33	ILE	3.5
16	v	151	ILE	3.5
48	CO	169	ILE	3.5
54	CU	101	LYS	3.5
58	CY	30	LYS	3.5
55	CV	138	ASP	3.5
14	BG	70	ARG	3.5
50	CQ	166	ARG	3.5
53	CT	207	GLU	3.5
54	CU	14	GLU	3.5
62	DC	72	ARG	3.5
75	e	50	GLU	3.5
76	DQ	40	ARG	3.5
1	AS	54	G	3.5
1	AS	91	G	3.5
5	k	172	SER	3.5
27	BT	32	SER	3.5
46	B	1115	G	3.5
46	CM	702	G	3.5
55	CV	176	SER	3.5
5	AX	148	LEU	3.5
6	AY	241	PRO	3.5
7	AZ	90	TYR	3.5
48	CO	120	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
65	DF	98	TYR	3.5
70	DK	133	LEU	3.5
1	AS	50	A	3.5
1	AS	2253	A	3.5
1	AS	3165	U	3.5
5	AX	146	THR	3.5
5	AX	162	ALA	3.5
30	BW	50	THR	3.5
46	CM	990	A	3.5
40	CG	16	ALA	3.5
67	W	28	THR	3.5
62	DC	54	MET	3.5
7	AZ	144	VAL	3.5
19	y	183	GLY	3.5
20	BM	164	VAL	3.5
28	AA	13	VAL	3.5
52	CS	90	VAL	3.5
62	R	126	VAL	3.5
62	DC	33	PHE	3.5
62	DC	85	VAL	3.5
7	m	39	GLN	3.5
10	BC	250	LYS	3.5
26	BS	96	LYS	3.5
43	CJ	40	LYS	3.5
58	CY	57	LYS	3.5
6	AY	249	ILE	3.5
22	BO	48	ILE	3.5
65	DF	28	ILE	3.5
67	DH	18	ILE	3.5
16	BI	99	ARG	3.5
64	DE	33	ARG	3.5
29	BV	46	ASP	3.5
1	1	240	C	3.4
24	BQ	96	GLU	3.4
29	AB	49	HIS	3.4
46	B	237	C	3.4
10	BC	54	PRO	3.4
14	BG	50	PRO	3.4
16	BI	62	TYR	3.4
24	6	7	SER	3.4
54	J	182	PRO	3.4
60	DA	128	TYR	3.4

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Mol	Chain	Res	Type	RSRZ
6	AY	57	ALA	3.4
6	AY	172	ALA	3.4
10	p	199	ALA	3.4
6	l	133	THR	3.4
17	BJ	63	THR	3.4
24	6	98	ASN	3.4
65	DF	73	MET	3.4
66	DG	83	ALA	3.4
78	h	146	THR	3.4
7	AZ	135	VAL	3.4
15	u	18	VAL	3.4
16	BI	66	VAL	3.4
25	BR	83	VAL	3.4
27	BT	8	VAL	3.4
44	CK	47	VAL	3.4
58	CY	142	VAL	3.4
66	DG	34	VAL	3.4
16	v	163	GLY	3.4
24	BQ	100	GLY	3.4
50	CQ	113	GLY	3.4
1	1	1537	G	3.4
1	AS	813	A	3.4
8	n	128	LYS	3.4
13	s	174	LYS	3.4
16	BI	140	LYS	3.4
17	BJ	104	LYS	3.4
43	CJ	82	GLN	3.4
46	B	715	G	3.4
46	B	898	G	3.4
46	B	1011	A	3.4
46	CM	1756	U	3.4
63	DD	11	LYS	3.4
1	AS	1484	G	3.4
13	BF	6	GLN	3.4
53	CT	113	ILE	3.4
71	a	25	ILE	3.4
81	12	132	ILE	3.4
5	AX	369	ARG	3.4
19	y	178	ARG	3.4
32	BY	18	ARG	3.4
53	I	88	ARG	3.4
55	K	47	ARG	3.4

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Mol	Chain	Res	Type	RSRZ
5	k	47	LEU	3.4
20	z	106	LEU	3.4
26	BS	40	LEU	3.4
27	BT	76	LEU	3.4
27	BT	111	LEU	3.4
28	BU	51	LEU	3.4
39	CF	65	LEU	3.4
47	CN	16	LEU	3.4
50	CQ	22	LEU	3.4
63	DD	53	LEU	3.4
44	CK	30	GLU	3.4
55	CV	70	GLU	3.4
79	DT	270	GLU	3.4
21	0	165	ALA	3.4
38	CE	65	ALA	3.4
49	CP	80	SER	3.4
53	CT	1	MET	3.4
72	DM	99	ALA	3.4
16	BI	59	PHE	3.4
18	BK	149	THR	3.4
22	2	15	PHE	3.4
26	BS	29	SER	3.4
27	BT	13	SER	3.4
9	BB	196	VAL	3.4
13	s	36	VAL	3.4
5	k	196	LYS	3.4
5	AX	164	THR	3.4
24	6	36	VAL	3.4
4	AW	81	GLY	3.4
8	BA	66	GLY	3.4
16	BI	2	GLY	3.4
35	AH	37	LYS	3.4
41	CH	7	LYS	3.4
46	B	706	C	3.4
46	CM	38	C	3.4
46	CM	1141	C	3.4
46	CM	1259	C	3.4
52	CS	147	THR	3.4
63	DD	114	THR	3.4
18	x	166	ILE	3.4
23	5	92	ILE	3.4
36	CC	67	ARG	3.4

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Mol	Chain	Res	Type	RSRZ
66	DG	70	GLN	3.4
67	W	90	ILE	3.4
70	Z	20	ARG	3.4
79	DT	57	ILE	3.4
1	1	599	U	3.4
1	AS	86	U	3.4
46	CM	259	U	3.4
1	AS	69	A	3.4
1	AS	156	A	3.4
1	AS	803	A	3.4
1	AS	806	A	3.4
1	AS	1180	A	3.4
46	CM	217	A	3.4
5	k	178	LEU	3.4
9	BB	236	LEU	3.4
10	BC	143	LEU	3.4
38	CE	67	LEU	3.4
1	AS	337	G	3.4
1	AS	2788	G	3.4
46	CM	289	G	3.4
46	CM	1594	G	3.4
46	CM	1641	G	3.4
9	BB	123	GLU	3.4
20	z	140	GLU	3.4
24	BQ	121	GLU	3.4
5	AX	141	ALA	3.4
7	AZ	134	ALA	3.4
14	t	44	ALA	3.4
45	CL	89	ASP	3.4
61	DB	115	PRO	3.4
66	DG	131	ASP	3.4
77	DR	60	PRO	3.4
5	k	78	VAL	3.4
14	BG	81	LYS	3.4
16	v	56	LYS	3.4
22	BO	57	TYR	3.4
28	BU	13	VAL	3.4
32	AE	22	VAL	3.4
37	CD	38	PHE	3.4
45	i	37	LYS	3.4
53	I	191	LYS	3.4
53	CT	136	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
63	S	137	PHE	3.4
66	V	94	VAL	3.4
79	DT	312	VAL	3.4
27	9	24	SER	3.4
58	CY	51	GLY	3.4
79	DT	73	THR	3.4
14	BG	12	ASN	3.4
59	CZ	120	CYS	3.4
6	AY	75	ILE	3.4
15	u	60	ILE	3.4
17	BJ	126	ARG	3.4
18	BK	166	ILE	3.4
19	BL	12	ARG	3.4
27	BT	27	ARG	3.4
35	CB	88	ARG	3.4
51	G	249	ILE	3.4
52	CS	137	ILE	3.4
65	U	22	ILE	3.4
66	DG	15	ILE	3.4
71	DL	25	ILE	3.4
7	AZ	24	GLN	3.4
56	CW	48	GLN	3.4
66	DG	138	GLN	3.4
1	AS	2942	C	3.4
3	AU	142	C	3.4
46	B	1417	C	3.4
46	CM	1291	C	3.4
6	AY	137	LEU	3.4
19	BL	138	LEU	3.4
65	DF	109	LEU	3.4
80	ll	80	LEU	3.4
1	AS	212	A	3.4
1	AS	709	A	3.4
1	AS	1608	A	3.4
5	AX	9	PRO	3.4
7	AZ	6	GLU	3.4
9	o	173	LYS	3.4
10	BC	123	ALA	3.4
11	BD	1	MET	3.4
13	s	15	GLU	3.4
21	BN	102	ALA	3.4
25	BR	118	ALA	3.4

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Mol	Chain	Res	Type	RSRZ
23	BP	38	VAL	3.4
29	BV	107	HIS	3.4
37	CD	12	LYS	3.4
46	B	129	A	3.4
46	CM	1598	A	3.4
48	D	122	GLU	3.4
60	DA	4	MET	3.4
66	DG	84	LYS	3.4
73	DN	31	PRO	3.4
5	k	365	PHE	3.4
9	BB	100	VAL	3.4
14	BG	52	ASP	3.4
14	BG	126	PHE	3.4
16	v	30	TYR	3.4
18	BK	51	VAL	3.4
29	BV	53	PHE	3.4
43	CJ	2	VAL	3.4
60	DA	89	TYR	3.4
63	DD	59	PHE	3.4
71	DL	24	VAL	3.4
35	CB	48	GLY	3.4
77	g	2	GLY	3.4
1	AS	777	G	3.4
6	AY	65	SER	3.4
7	AZ	56	THR	3.4
18	BK	29	THR	3.4
6	AY	250	ILE	3.4
12	r	149	ILE	3.4
35	CB	89	ILE	3.4
46	CM	1339	G	3.4
48	D	186	SER	3.4
49	CP	110	ILE	3.4
67	W	64	ILE	3.4
71	DL	69	SER	3.4
13	s	150	ASN	3.4
47	CN	49	ASN	3.4
13	s	161	GLN	3.4
27	9	81	GLN	3.4
36	CC	20	GLN	3.4
7	AZ	36	LEU	3.4
52	CS	93	LEU	3.4
46	CM	1462	C	3.4

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Mol	Chain	Res	Type	RSRZ
46	CM	1593	C	3.4
54	J	144	LYS	3.4
60	P	151	ALA	3.4
62	R	54	MET	3.4
67	W	20	LYS	3.4
70	DK	140	LYS	3.4
8	BA	6	PRO	3.4
14	BG	87	PRO	3.4
17	w	145	ALA	3.4
19	BL	175	ALA	3.4
60	DA	47	PRO	3.4
65	DF	58	ALA	3.4
80	ll	1	MET	3.4
19	BL	87	VAL	3.4
25	BR	98	PRO	3.4
9	BB	168	GLU	3.4
10	BC	105	GLU	3.4
20	z	68	GLU	3.4
28	BU	71	PHE	3.4
32	BY	34	GLU	3.4
38	AK	82	VAL	3.4
48	CO	206	PRO	3.4
43	AP	90	HIS	3.4
44	AQ	91	GLU	3.4
49	E	160	VAL	3.4
67	DH	113	VAL	3.4
77	g	58	PRO	3.4
73	DN	72	HIS	3.4
79	AR	299	PHE	3.4
1	AS	401	U	3.4
1	AS	1912	U	3.4
3	AU	60	U	3.4
18	BK	21	TYR	3.4
46	B	480	U	3.4
46	CM	1347	U	3.4
7	AZ	169	GLY	3.4
20	z	79	GLY	3.4
28	BU	65	ARG	3.4
62	DC	115	TYR	3.4
72	DM	59	TYR	3.4
63	DD	112	ASP	3.4
73	c	22	ARG	3.4

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Mol	Chain	Res	Type	RSRZ
77	DR	32	GLY	3.4
3	AU	59	A	3.4
5	AX	230	THR	3.4
11	BD	83	THR	3.4
27	BT	119	ILE	3.4
46	B	216	A	3.4
47	CN	98	ILE	3.4
50	CQ	85	ILE	3.4
67	W	105	ILE	3.4
67	DH	102	ILE	3.4
60	DA	14	SER	3.4
14	BG	19	GLN	3.3
22	BO	66	ASN	3.3
24	BQ	46	LEU	3.3
30	BW	19	ASN	3.3
43	CJ	72	LEU	3.3
50	CQ	47	LEU	3.3
57	M	46	LEU	3.3
72	DM	105	GLN	3.3
74	d	18	GLN	3.3
80	ll	200	ASN	3.3
1	1	1888	G	3.3
1	AS	320	G	3.3
1	AS	420	G	3.3
1	AS	866	G	3.3
1	AS	1302	G	3.3
1	AS	1829	G	3.3
2	AT	52	G	3.3
3	AU	140	G	3.3
46	CM	1094	G	3.3
65	DF	49	LYS	3.3
6	AY	182	VAL	3.3
8	BA	4	VAL	3.3
10	BC	88	ALA	3.3
4	AW	76	PHE	3.3
13	BF	138	VAL	3.3
39	CF	12	VAL	3.3
45	CL	62	ALA	3.3
47	C	31	VAL	3.3
62	R	119	PHE	3.3
63	DD	38	VAL	3.3
73	DN	39	VAL	3.3

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Mol	Chain	Res	Type	RSRZ
79	AR	124	VAL	3.3
9	BB	86	ARG	3.3
70	Z	23	ARG	3.3
70	DK	48	HIS	3.3
77	DR	43	ARG	3.3
4	AW	171	GLY	3.3
22	2	84	TYR	3.3
50	CQ	153	TYR	3.3
55	CV	183	GLY	3.3
33	BZ	51	ILE	3.3
49	E	132	ILE	3.3
50	F	87	ILE	3.3
73	DN	36	ILE	3.3
1	1	601	U	3.3
1	1	732	U	3.3
1	AS	216	U	3.3
1	AS	1301	U	3.3
46	B	505	U	3.3
55	CV	105	ASP	3.3
66	DG	8	ASP	3.3
26	BS	28	THR	3.3
55	CV	95	THR	3.3
64	DE	6	THR	3.3
5	AX	246	LEU	3.3
9	BB	101	LEU	3.3
17	BJ	130	LEU	3.3
21	BN	129	LEU	3.3
27	BT	31	LEU	3.3
27	BT	35	LEU	3.3
49	CP	108	LEU	3.3
52	CS	97	LEU	3.3
27	BT	24	SER	3.3
1	AS	98	A	3.3
1	AS	2675	A	3.3
10	BC	97	LYS	3.3
19	BL	159	LYS	3.3
25	7	41	GLN	3.3
46	CM	215	A	3.3
46	CM	1174	A	3.3
24	6	23	MET	3.3
4	AW	168	VAL	3.3
7	AZ	77	ALA	3.3

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Mol	Chain	Res	Type	RSRZ
7	AZ	142	PHE	3.3
9	BB	115	VAL	3.3
13	BF	144	ALA	3.3
15	u	122	PHE	3.3
17	w	35	VAL	3.3
22	2	44	ALA	3.3
45	CL	63	ALA	3.3
49	E	81	VAL	3.3
52	H	43	PHE	3.3
62	R	112	VAL	3.3
65	U	100	VAL	3.3
16	BI	84	PRO	3.3
20	BM	136	ARG	3.3
25	BR	47	ARG	3.3
68	DI	14	PRO	3.3
79	AR	104	PHE	3.3
4	AW	135	ILE	3.3
9	o	125	ILE	3.3
12	BE	149	ILE	3.3
13	BF	21	ILE	3.3
16	BI	177	GLY	3.3
18	x	36	ILE	3.3
18	BK	147	GLU	3.3
50	CQ	24	GLU	3.3
51	CR	64	ILE	3.3
54	CU	94	ILE	3.3
56	L	137	GLY	3.3
56	CW	73	GLY	3.3
63	DD	61	GLY	3.3
66	DG	126	GLU	3.3
74	DO	15	GLU	3.3
1	AS	443	G	3.3
1	AS	949	G	3.3
1	AS	2533	G	3.3
3	AU	134	G	3.3
37	CD	27	TYR	3.3
46	B	724	G	3.3
46	CM	1705	G	3.3
63	DD	111	TYR	3.3
6	l	137	LEU	3.3
11	q	34	LEU	3.3
11	BD	10	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
15	BH	73	THR	3.3
59	CZ	74	LEU	3.3
65	DF	140	THR	3.3
72	DM	90	THR	3.3
78	h	142	LEU	3.3
29	BV	69	TRP	3.3
1	1	618	U	3.3
1	1	2470	C	3.3
1	AS	3246	C	3.3
3	AU	108	C	3.3
16	BI	192	LYS	3.3
31	AD	21	LYS	3.3
44	AQ	3	LYS	3.3
60	P	109	LYS	3.3
22	BO	4	SER	3.3
23	BP	73	SER	3.3
49	E	130	SER	3.3
54	J	105	GLN	3.3
81	12	129	SER	3.3
13	s	62	ASN	3.3
17	BJ	30	ASN	3.3
45	i	66	ASN	3.3
62	DC	98	ASN	3.3
4	AW	163	ARG	3.3
6	AY	243	ALA	3.3
11	BD	24	VAL	3.3
15	u	21	VAL	3.3
16	v	109	ARG	3.3
17	w	170	ALA	3.3
17	BJ	191	ALA	3.3
22	BO	126	VAL	3.3
23	BP	97	ARG	3.3
37	CD	21	VAL	3.3
39	CF	25	VAL	3.3
47	CN	123	VAL	3.3
56	CW	54	ARG	3.3
60	DA	106	ARG	3.3
65	DF	41	ARG	3.3
66	V	6	VAL	3.3
1	AS	42	A	3.3
1	AS	2502	A	3.3
45	CL	69	PHE	3.3

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Mol	Chain	Res	Type	RSRZ
10	BC	32	PRO	3.3
19	BL	157	PRO	3.3
45	CL	76	PRO	3.3
46	B	1331	A	3.3
46	CM	1178	A	3.3
79	DT	203	PRO	3.3
4	AW	77	ILE	3.3
14	BG	3	ILE	3.3
48	CO	150	ILE	3.3
60	DA	92	ILE	3.3
63	DD	80	ILE	3.3
64	T	56	HIS	3.3
6	l	227	GLU	3.3
17	w	101	GLU	3.3
33	AF	96	GLU	3.3
58	N	4	GLU	3.3
62	DC	110	GLU	3.3
12	r	75	TYR	3.3
26	BS	141	TYR	3.3
54	CU	66	TYR	3.3
63	S	78	TYR	3.3
69	DJ	52	TYR	3.3
77	g	40	TYR	3.3
5	AX	14	LEU	3.3
28	BU	74	LEU	3.3
66	V	79	LEU	3.3
42	CI	16	LYS	3.3
53	I	89	THR	3.3
53	I	167	LYS	3.3
55	CV	75	LYS	3.3
22	BO	18	ASP	3.3
1	1	219	G	3.3
1	1	2094	G	3.3
1	AS	171	G	3.3
3	AU	107	G	3.3
16	BI	172	ARG	3.3
20	BM	60	ARG	3.3
26	8	50	SER	3.3
36	CC	48	ARG	3.3
46	B	1571	G	3.3
46	CM	979	G	3.3
46	CM	1173	G	3.3

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Mol	Chain	Res	Type	RSRZ
46	CM	1707	G	3.3
49	CP	194	SER	3.3
50	CQ	28	ARG	3.3
54	CU	105	GLN	3.3
56	L	48	GLN	3.3
56	CW	3	ARG	3.3
57	M	62	GLN	3.3
58	CY	136	ARG	3.3
74	DO	30	SER	3.3
14	BG	66	ASN	3.3
17	w	36	VAL	3.3
20	BM	34	ASN	3.3
22	BO	45	ASN	3.3
46	CM	176	U	3.3
46	CM	1515	U	3.3
50	CQ	86	ALA	3.3
55	CV	60	VAL	3.3
79	DT	134	VAL	3.3
1	AS	23	C	3.3
1	AS	1840	C	3.3
1	AS	2344	C	3.3
1	AS	2400	C	3.3
1	AS	2744	C	3.3
29	BV	61	PHE	3.3
53	CT	144	PHE	3.3
14	BG	8	PRO	3.3
7	AZ	161	GLY	3.3
15	BH	32	ILE	3.3
16	BI	174	ILE	3.3
20	BM	58	HIS	3.3
22	BO	145	GLY	3.3
54	CU	174	GLY	3.3
57	CX	82	ILE	3.3
36	CC	45	HIS	3.3
1	AS	717	A	3.3
6	AY	346	GLU	3.3
7	AZ	83	LEU	3.3
8	n	58	GLU	3.3
8	n	129	GLU	3.3
13	BF	52	TYR	3.3
23	BP	33	TYR	3.3
36	AI	102	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
15	u	126	LYS	3.3
27	BT	17	LYS	3.3
37	CD	52	TYR	3.3
39	CF	13	GLU	3.3
46	B	777	A	3.3
62	DC	49	LEU	3.3
70	DK	54	LEU	3.3
79	AR	258	LYS	3.3
79	DT	80	TYR	3.3
79	DT	180	LEU	3.3
38	CE	84	LYS	3.3
44	CK	3	LYS	3.3
56	L	92	LYS	3.3
67	W	76	LYS	3.3
6	AY	133	THR	3.3
30	BW	13	THR	3.3
49	CP	91	THR	3.3
55	CV	203	THR	3.3
58	CY	72	THR	3.3
63	DD	52	THR	3.3
67	W	69	THR	3.3
79	AR	25	THR	3.3
26	BS	42	ARG	3.3
52	H	145	ASP	3.3
61	DB	79	ARG	3.3
77	g	33	ARG	3.3
4	AW	27	ALA	3.3
12	r	113	GLN	3.3
14	t	22	VAL	3.3
31	AD	44	VAL	3.3
40	CG	17	GLN	3.3
47	CN	75	VAL	3.3
50	CQ	187	VAL	3.3
52	CS	138	VAL	3.3
54	J	86	VAL	3.3
54	CU	53	ALA	3.3
66	DG	75	ALA	3.3
67	W	80	ALA	3.3
67	DH	50	VAL	3.3
79	DT	175	VAL	3.3
81	12	126	ALA	3.3
16	BI	181	ASN	3.3

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Mol	Chain	Res	Type	RSRZ
22	2	77	ASN	3.3
36	CC	59	ASN	3.3
37	CD	23	PRO	3.3
19	y	67	ILE	3.3
21	BN	10	ILE	3.3
27	9	99	ILE	3.3
34	CA	49	ILE	3.3
36	AI	76	ILE	3.3
47	C	63	ILE	3.3
49	E	173	ILE	3.3
56	CW	83	ILE	3.3
66	V	124	ILE	3.3
72	DM	88	ILE	3.3
1	AS	2536	U	3.3
10	BC	183	GLY	3.3
44	CK	19	GLY	3.3
46	B	1674	U	3.3
46	CM	1766	U	3.3
1	AS	488	G	3.3
1	AS	1071	G	3.3
1	AS	1489	G	3.3
1	AS	2557	G	3.3
1	AS	2846	G	3.3
1	1	1577	C	3.2
9	BB	51	LYS	3.2
14	BG	123	LEU	3.3
21	0	160	LYS	3.2
26	BS	121	LYS	3.2
29	BV	147	LEU	3.3
44	CK	27	LYS	3.2
46	B	702	G	3.3
46	CM	1353	G	3.3
46	CM	1441	G	3.3
46	CM	1780	G	3.3
54	J	118	HIS	3.3
60	DA	75	LEU	3.3
71	a	117	LYS	3.2
72	b	75	LEU	3.3
75	DP	16	LEU	3.3
79	AR	67	HIS	3.3
79	AR	90	LEU	3.3
7	m	82	GLU	3.2

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Mol	Chain	Res	Type	RSRZ
46	B	695	C	3.2
20	z	124	TYR	3.2
47	C	138	TYR	3.2
63	DD	48	TYR	3.2
77	DR	40	TYR	3.2
79	AR	183	TYR	3.2
1	1	2436	A	3.2
45	CL	93	ARG	3.2
46	B	617	A	3.2
22	2	93	VAL	3.2
50	CQ	51	VAL	3.2
9	BB	169	ALA	3.2
14	BG	86	ALA	3.2
24	6	44	ALA	3.2
27	BT	41	GLN	3.2
29	BV	134	ALA	3.2
37	CD	47	ALA	3.2
51	G	109	PHE	3.2
57	M	27	PHE	3.2
57	CX	17	GLN	3.2
80	ll	73	ASP	3.2
11	q	114	ILE	3.2
15	BH	29	ILE	3.2
18	BK	109	SER	3.2
22	BO	140	ILE	3.2
44	CK	54	ILE	3.2
48	CO	212	ILE	3.2
53	I	173	PRO	3.2
56	CW	42	ILE	3.2
60	P	12	SER	3.2
69	Y	27	ILE	3.2
76	f	28	SER	3.2
78	h	133	ILE	3.2
79	AR	199	ILE	3.2
79	DT	116	ILE	3.2
79	DT	190	ILE	3.2
5	AX	121	ASN	3.2
6	l	23	LEU	3.2
6	l	329	ASN	3.2
35	CB	67	LYS	3.2
49	CP	88	GLY	3.2
52	CS	150	GLY	3.2

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Mol	Chain	Res	Type	RSRZ
52	CS	194	LEU	3.2
57	M	72	GLY	3.2
59	O	114	LYS	3.2
64	T	16	LEU	3.2
64	T	73	LEU	3.2
69	DJ	84	ASN	3.2
69	DJ	104	LEU	3.2
6	l	95	CYS	3.2
60	P	5	HIS	3.2
1	AS	168	U	3.2
1	AS	2090	U	3.2
8	n	9	TYR	3.2
46	B	1016	U	3.2
52	CS	119	GLU	3.2
60	DA	103	GLU	3.2
37	CD	67	ARG	3.2
42	CI	15	ARG	3.2
50	F	174	ARG	3.2
1	AS	174	C	3.2
1	AS	2352	C	3.2
1	l	1014	G	3.2
1	AS	52	G	3.2
1	AS	1020	G	3.2
1	AS	2944	G	3.2
4	AW	207	VAL	3.2
6	AY	179	VAL	3.2
10	BC	152	VAL	3.2
19	BL	186	VAL	3.2
23	5	99	VAL	3.2
31	BX	50	THR	3.2
43	AP	64	THR	3.2
46	B	274	C	3.2
46	B	1013	C	3.2
46	B	1360	C	3.2
54	CU	158	VAL	3.2
62	R	101	VAL	3.2
62	DC	30	THR	3.2
14	BG	26	PHE	3.2
28	BU	131	PHE	3.2
36	CC	97	ALA	3.2
36	CC	110	ALA	3.2
50	F	86	ALA	3.2

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Mol	Chain	Res	Type	RSRZ
53	CT	138	ALA	3.2
61	DB	63	ALA	3.2
63	DD	83	ALA	3.2
46	CM	924	A	3.2
46	CM	1408	A	3.2
56	L	139	GLN	3.2
4	j	181	LYS	3.2
5	k	181	ILE	3.2
6	l	192	LYS	3.2
7	m	48	LYS	3.2
11	BD	48	ILE	3.2
12	BE	145	LYS	3.2
19	y	157	PRO	3.2
22	2	141	ILE	3.2
5	k	65	SER	3.2
5	k	125	SER	3.2
6	l	326	LEU	3.2
13	BF	19	LEU	3.2
20	z	102	LEU	3.2
20	BM	66	LEU	3.2
27	BT	46	LYS	3.2
47	C	134	LYS	3.2
47	CN	63	ILE	3.2
54	CU	121	ILE	3.2
42	CI	13	LEU	3.2
50	CQ	143	LEU	3.2
60	DA	61	SER	3.2
61	DB	100	LEU	3.2
62	DC	77	LYS	3.2
66	V	28	LEU	3.2
67	DH	92	LEU	3.2
69	Y	19	LYS	3.2
69	Y	104	LEU	3.2
79	AR	63	LYS	3.2
27	9	9	SER	3.2
29	BV	33	GLY	3.2
33	BZ	4	SER	3.2
79	DT	106	GLY	3.2
79	DT	153	SER	3.2
4	j	194	ASN	3.2
9	BB	192	ASN	3.2
11	q	59	ASN	3.2

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Mol	Chain	Res	Type	RSRZ
18	x	89	ASN	3.2
30	BW	11	ASN	3.2
66	DG	77	ASN	3.2
13	BF	109	HIS	3.2
30	BW	10	HIS	3.2
49	CP	54	HIS	3.2
10	p	58	ARG	3.2
16	BI	202	TYR	3.2
18	BK	47	TYR	3.2
21	BN	57	GLU	3.2
42	CI	18	ARG	3.2
50	CQ	144	ARG	3.2
64	DE	76	GLU	3.2
1	1	830	U	3.2
1	AS	893	U	3.2
1	AS	1611	U	3.2
1	AS	1687	U	3.2
16	BI	75	VAL	3.2
16	BI	200	TRP	3.2
27	BT	70	VAL	3.2
29	BV	123	VAL	3.2
46	B	1572	U	3.2
46	CM	1730	U	3.2
7	AZ	7	PHE	3.2
13	s	127	PHE	3.2
13	BF	136	ALA	3.2
16	v	183	THR	3.2
19	y	172	PHE	3.2
26	BS	84	PHE	3.2
28	BU	130	PHE	3.2
37	CD	68	ALA	3.2
45	CL	79	THR	3.2
49	CP	161	ALA	3.2
55	CV	107	THR	3.2
62	R	11	THR	3.2
64	DE	25	THR	3.2
73	DN	27	ALA	3.2
78	h	129	THR	3.2
79	AR	241	ALA	3.2
80	ll	214	PHE	3.2
1	AS	199	C	3.2
1	AS	585	C	3.2

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Mol	Chain	Res	Type	RSRZ
1	AS	2793	C	3.2
1	AS	2914	C	3.2
2	AT	6	C	3.2
7	m	199	ILE	3.2
13	BF	110	ILE	3.2
14	t	37	GLN	3.2
22	2	69	LYS	3.2
22	2	78	LYS	3.2
26	BS	61	LYS	3.2
4	j	246	LEU	3.2
5	AX	338	LEU	3.2
8	n	63	LEU	3.2
13	s	19	LEU	3.2
24	BQ	18	PRO	3.2
26	BS	113	LEU	3.2
33	AF	53	GLN	3.2
51	G	245	ILE	3.2
56	CW	29	LYS	3.2
60	DA	64	LYS	3.2
63	DD	113	LYS	3.2
65	U	72	ILE	3.2
76	DQ	31	ILE	3.2
48	CO	190	PRO	3.2
51	CR	9	LEU	3.2
50	F	192	ASP	3.2
54	CU	59	PRO	3.2
64	T	22	PRO	3.2
66	V	132	LEU	3.2
79	DT	298	LEU	3.2
3	AU	75	G	3.2
3	AU	131	G	3.2
13	s	103	GLY	3.2
13	BF	135	GLY	3.2
19	y	169	GLY	3.2
46	CM	1099	G	3.2
50	F	199	GLY	3.2
62	DC	113	GLY	3.2
1	1	1023	A	3.2
1	AS	1139	A	3.2
1	AS	1485	A	3.2
1	AS	2844	A	3.2
21	0	85	SER	3.2

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Mol	Chain	Res	Type	RSRZ
36	AI	13	SER	3.2
46	B	619	A	3.2
46	B	678	A	3.2
46	B	1078	A	3.2
46	CM	481	A	3.2
46	CM	978	A	3.2
46	CM	1741	A	3.2
68	X	18	SER	3.2
5	AX	177	HIS	3.2
16	BI	122	ASN	3.2
36	AI	61	ASN	3.2
49	E	90	ARG	3.2
56	CW	120	ARG	3.2
64	T	33	ARG	3.2
9	o	22	GLU	3.2
11	q	135	GLU	3.2
20	z	45	TYR	3.2
54	CU	130	GLU	3.2
55	CV	28	GLU	3.2
70	DK	98	GLU	3.2
20	z	51	VAL	3.2
26	8	51	VAL	3.2
50	CQ	207	VAL	3.2
52	CS	56	VAL	3.2
62	DC	41	VAL	3.2
52	H	46	TRP	3.2
65	DF	129	TRP	3.2
79	DT	310	TRP	3.2
5	AX	138	ALA	3.2
7	m	55	PHE	3.2
47	CN	115	PHE	3.2
53	I	198	ALA	3.2
5	AX	24	LYS	3.2
22	2	55	LYS	3.2
29	BV	47	LYS	3.2
34	CA	72	THR	3.2
37	CD	69[A]	LYS	3.2
39	CF	74	LYS	3.2
45	CL	100	LYS	3.2
71	DL	111	LYS	3.2
1	AS	250	U	3.2
1	AS	2081	U	3.2

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Mol	Chain	Res	Type	RSRZ
1	AS	2845	U	3.2
3	AU	147	U	3.2
10	p	65	ILE	3.2
11	BD	136	ILE	3.2
19	y	165	ILE	3.2
29	BV	81	LEU	3.2
46	B	258	U	3.2
46	CM	779	U	3.2
49	E	78	ILE	3.2
50	F	60	LEU	3.2
54	J	149	LEU	3.2
65	U	119	ILE	3.2
65	DF	86	LEU	3.2
66	DG	61	ILE	3.2
67	DH	117	ILE	3.2
70	Z	34	LEU	3.2
12	BE	113	GLN	3.2
63	S	7	GLN	3.2
73	DN	98	PRO	3.2
13	s	42	GLY	3.2
35	AH	27	GLY	3.2
48	CO	63	GLY	3.2
24	BQ	97	ASP	3.2
29	BV	4	ARG	3.2
40	CG	8	ARG	3.2
1	AS	742	C	3.2
18	BK	133	HIS	3.2
46	B	1081	C	3.2
46	CM	307	C	3.2
46	CM	1177	C	3.2
46	CM	1390	C	3.2
46	CM	1443	C	3.2
46	CM	1487	C	3.2
70	DK	47	SER	3.2
14	BG	6	ASN	3.2
60	DA	21	ASN	3.2
64	T	58	MET	3.2
79	DT	119	ASN	3.2
5	AX	119	TYR	3.2
1	1	1932	A	3.2
1	AS	75	G	3.2
1	AS	1650	A	3.2

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Mol	Chain	Res	Type	RSRZ
1	AS	1943	G	3.2
1	AS	2218	G	3.2
1	AS	2403	G	3.2
1	AS	2780	A	3.2
10	BC	133	VAL	3.2
14	BG	141	VAL	3.2
35	CB	65	VAL	3.2
54	J	177	VAL	3.2
63	DD	54	VAL	3.2
79	AR	99	GLU	3.2
46	B	622	G	3.2
46	CM	1070	G	3.2
4	AW	181	LYS	3.2
7	AZ	166	ALA	3.2
9	o	199	PHE	3.2
14	t	131	LYS	3.2
20	z	2	ALA	3.2
26	BS	68	ALA	3.2
32	BY	53	LYS	3.2
34	AG	83	ALA	3.2
42	AO	25	LYS	3.2
43	CJ	33	ALA	3.2
44	AQ	14	PHE	3.2
45	i	46	ALA	3.2
52	CS	78	ALA	3.2
60	DA	151	ALA	3.2
61	Q	59	ALA	3.2
79	DT	235	ALA	3.2
4	j	48	ILE	3.2
4	AW	32	LEU	3.2
7	AZ	88	ILE	3.2
9	BB	177	LEU	3.2
11	q	9	ILE	3.2
13	BF	154	THR	3.2
19	y	138	LEU	3.2
29	AB	118	LEU	3.2
36	CC	17	LEU	3.2
37	AJ	71	LEU	3.2
40	CG	23	LEU	3.2
43	AP	83	LEU	3.2
44	CK	10	ILE	3.2
48	D	73	LEU	3.2

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Mol	Chain	Res	Type	RSRZ
52	CS	187	ILE	3.2
54	CU	13	LEU	3.2
54	CU	114	LEU	3.2
57	CX	87	LEU	3.2
63	DD	14	THR	3.2
67	W	18	ILE	3.2
70	DK	34	LEU	3.2
75	e	54	LEU	3.2
10	BC	130	PRO	3.1
45	CL	57	PRO	3.1
62	R	109	PRO	3.1
65	U	82	PRO	3.1
67	DH	70	PRO	3.1
6	l	4	ARG	3.1
12	r	151	GLY	3.1
15	BH	35	GLN	3.1
15	BH	120	ARG	3.1
19	y	160	GLY	3.1
20	BM	18	GLY	3.1
20	BM	103	ARG	3.1
27	BT	28	ARG	3.1
29	BV	30	GLY	3.1
69	DJ	123	GLY	3.1
73	DN	82	ARG	3.1
75	DP	67	ARG	3.1
79	AR	139	GLY	3.1
1	1	1013	U	3.1
1	AS	13	U	3.1
46	B	175	U	3.1
50	F	167	ASP	3.1
30	AC	48	HIS	3.1
11	BD	150	SER	3.1
16	BI	100	SER	3.1
18	BK	170	SER	3.1
80	l1	79	SER	3.1
7	m	44	TYR	3.1
7	m	52	VAL	3.1
12	r	79	VAL	3.1
49	E	125	VAL	3.1
49	E	77	LYS	3.1
49	CP	207	LYS	3.1
54	J	66	TYR	3.1

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Mol	Chain	Res	Type	RSRZ
54	J	158	VAL	3.1
56	L	95	TYR	3.1
64	T	40	VAL	3.1
70	DK	17	VAL	3.1
71	a	55	VAL	3.1
10	p	147	LYS	3.1
27	9	116	LYS	3.1
28	BU	52	LYS	3.1
36	CC	32	LYS	3.1
61	Q	65	LYS	3.1
63	DD	86	LYS	3.1
74	DO	20	LYS	3.1
75	e	45	LYS	3.1
76	DQ	4	GLU	3.1
77	g	35	TYR	3.1
79	DT	234	LYS	3.1
80	ll	217	TYR	3.1
1	AS	652	C	3.1
3	AU	30	C	3.1
20	BM	169	ALA	3.1
33	BZ	70	ALA	3.1
46	CM	1607	C	3.1
46	CM	1611	C	3.1
46	CM	1623	C	3.1
47	CN	95	ALA	3.1
47	CN	203	PHE	3.1
52	CS	182	ALA	3.1
55	K	65	PHE	3.1
58	CY	47	ALA	3.1
61	DB	80	ALA	3.1
79	DT	276	ALA	3.1
6	AY	251	TRP	3.1
6	AY	207	LEU	3.1
11	BD	144	LEU	3.1
12	r	165	ILE	3.1
14	t	116	LEU	3.1
16	v	36	ILE	3.1
19	y	32	LEU	3.1
19	BL	32	LEU	3.1
19	BL	52	LEU	3.1
19	BL	165	ILE	3.1
24	BQ	79	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
29	BV	22	ILE	3.1
31	AD	16	LEU	3.1
32	BY	56	ILE	3.1
44	AQ	54	ILE	3.1
64	T	38	ILE	3.1
75	DP	66	LEU	3.1
79	AR	32	LEU	3.1
1	1	884	A	3.1
1	AS	506	A	3.1
1	AS	779	A	3.1
6	l	201	THR	3.1
18	BK	32	THR	3.1
46	CM	263	A	3.1
46	CM	1123	A	3.1
64	T	30	THR	3.1
6	AY	22	PRO	3.1
22	BO	8	ARG	3.1
26	BS	56	ARG	3.1
64	T	11	ARG	3.1
64	T	65	PRO	3.1
73	c	2	PRO	3.1
1	AS	2582	G	3.1
4	j	244	GLY	3.1
35	AH	33	GLN	3.1
45	i	104	GLN	3.1
46	CM	127	G	3.1
46	CM	1139	G	3.1
65	DF	136	GLN	3.1
67	W	93	GLN	3.1
19	BL	15	HIS	3.1
20	z	96	MET	3.1
20	BM	75	HIS	3.1
46	B	1376	U	3.1
46	CM	1296	U	3.1
54	J	85	HIS	3.1
56	L	58	ASP	3.1
73	DN	33	ASP	3.1
76	f	3	HIS	3.1
4	AW	60	LYS	3.1
7	AZ	197	LYS	3.1
9	o	156	LYS	3.1
10	BC	191	VAL	3.1

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Mol	Chain	Res	Type	RSRZ
16	BI	77	LYS	3.1
22	BO	20	LYS	3.1
27	BT	103	LYS	3.1
28	BU	22	LYS	3.1
36	CC	91	LYS	3.1
48	CO	55	LYS	3.1
52	CS	133	VAL	3.1
57	CX	25	LYS	3.1
58	CY	32	LYS	3.1
64	T	49	LYS	3.1
18	BK	87	SER	3.1
19	y	34	SER	3.1
26	BS	103	TYR	3.1
45	i	92	SER	3.1
50	CQ	226	SER	3.1
39	CF	4	GLU	3.1
45	CL	41	ALA	3.1
48	CO	67	GLU	3.1
50	F	211	GLU	3.1
50	CQ	130	ALA	3.1
55	CV	27	PHE	3.1
63	DD	108	PHE	3.1
65	DF	30	TYR	3.1
4	AW	59	ALA	3.1
7	m	97	ALA	3.1
10	BC	155	ALA	3.1
11	BD	100	ASN	3.1
18	x	12	ALA	3.1
25	BR	121	ALA	3.1
30	AC	63	ALA	3.1
5	AX	161	LEU	3.1
13	s	162	TRP	3.1
15	BH	52	LEU	3.1
47	CN	184	LEU	3.1
53	CT	133	LEU	3.1
66	DG	140	LEU	3.1
75	DP	54	LEU	3.1
76	f	38	LEU	3.1
50	CQ	159	ILE	3.1
62	R	107	ILE	3.1
63	S	28	ILE	3.1
4	AW	227	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
51	G	49	ARG	3.1
61	DB	127	ARG	3.1
4	AW	75	THR	3.1
64	T	55	THR	3.1
78	DS	146	THR	3.1
79	DT	137	THR	3.1
1	AS	2213	C	3.1
20	BM	26	PRO	3.1
46	B	374	C	3.1
46	CM	1060	C	3.1
46	CM	1194	C	3.1
66	DG	10	PRO	3.1
29	BV	116	GLY	3.1
66	DG	72	GLY	3.1
75	e	24	GLY	3.1
79	DT	215	GLY	3.1
11	q	8	GLN	3.1
23	BP	91	GLN	3.1
12	BE	102	MET	3.1
21	BN	23	LYS	3.1
28	BU	121	LYS	3.1
37	CD	24	LYS	3.1
54	J	134	LYS	3.1
5	AX	3	HIS	3.1
11	q	112	VAL	3.1
16	v	158	HIS	3.1
23	BP	27	VAL	3.1
28	BU	23	VAL	3.1
49	E	179	VAL	3.1
62	DC	126	VAL	3.1
1	AS	251	G	3.1
1	AS	1425	G	3.1
1	AS	1649	G	3.1
1	AS	1767	G	3.1
8	BA	96	ASP	3.1
46	CM	1597	G	3.1
69	DJ	85	ASP	3.1
79	AR	94	ASP	3.1
7	AZ	160	PHE	3.1
66	DG	14	PHE	3.1
8	n	42	LEU	3.1
8	n	57	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
9	BB	145	LEU	3.1
10	BC	114	ALA	3.1
26	BS	34	LEU	3.1
28	AA	87	LEU	3.1
51	G	2	ALA	3.1
52	H	78	ALA	3.1
52	CS	173	ALA	3.1
56	L	12	TYR	3.1
59	O	69	GLU	3.1
62	DC	31	GLU	3.1
65	DF	3	LEU	3.1
74	d	21	LEU	3.1
75	e	33	LEU	3.1
79	AR	145	LEU	3.1
79	DT	229	TYR	3.1
1	1	600	U	3.1
1	1	3284	U	3.1
1	AS	1827	U	3.1
46	CM	210	U	3.1
46	CM	896	U	3.1
46	CM	1271	U	3.1
54	J	44	GLU	3.1
79	DT	232	GLU	3.1
80	ll	2	SER	3.1
11	q	103	ILE	3.1
34	CA	64	ILE	3.1
37	CD	6	ILE	3.1
37	CD	93	ILE	3.1
67	DH	21	ILE	3.1
7	AZ	35	ARG	3.1
7	AZ	50	ARG	3.1
10	BC	156	ASN	3.1
13	BF	29	ARG	3.1
19	y	69	ARG	3.1
33	AF	106	ARG	3.1
39	AL	32	ASN	3.1
54	CU	72	ARG	3.1
55	K	92	ARG	3.1
67	W	78	TRP	3.1
77	g	42	ARG	3.1
78	h	122	ARG	3.1
7	m	174	PRO	3.1

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Mol	Chain	Res	Type	RSRZ
14	t	130	THR	3.1
35	AH	15	THR	3.1
60	DA	82	PRO	3.1
65	U	140	THR	3.1
68	X	20	THR	3.1
4	AW	121	GLY	3.1
5	k	330	GLY	3.1
7	AZ	182	GLY	3.1
53	I	165	GLY	3.1
22	BO	16	GLN	3.1
54	CU	38	GLN	3.1
56	CW	112	GLN	3.1
64	DE	62	GLN	3.1
10	BC	44	LYS	3.1
29	AB	111	LYS	3.1
50	CQ	142	LYS	3.1
65	DF	29	MET	3.1
65	DF	34	LYS	3.1
68	DI	1	MET	3.1
78	h	149	LYS	3.1
1	AS	1781	C	3.1
2	AT	10	C	3.1
3	AU	115	C	3.1
6	AY	26	VAL	3.1
8	n	73	VAL	3.1
11	q	71	VAL	3.1
16	BI	89	VAL	3.1
46	B	720	C	3.1
50	CQ	92	VAL	3.1
74	DO	46	VAL	3.1
1	AS	48	A	3.1
1	AS	689	A	3.1
1	AS	780	A	3.1
1	AS	2310	A	3.1
9	BB	114	PHE	3.1
10	BC	91	ALA	3.1
13	BF	98	ALA	3.1
16	BI	197	LEU	3.1
20	BM	99	LEU	3.1
27	BT	85	LEU	3.1
32	BY	72	LEU	3.1
36	CC	36	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
38	CE	18	LEU	3.1
46	CM	224	A	3.1
46	CM	678	A	3.1
50	F	143	LEU	3.1
50	F	146	ALA	3.1
52	H	108	LEU	3.1
54	J	150	LEU	3.1
73	DN	6	ALA	3.1
75	DP	36	ALA	3.1
67	W	40	ILE	3.1
69	DJ	55	ASP	3.1
79	DT	181	ALA	3.1
10	BC	154	ILE	3.1
13	BF	55	ARG	3.1
14	BG	176	ARG	3.1
35	AH	7	TYR	3.1
44	CK	23	ARG	3.1
62	DC	61	ARG	3.1
64	T	80	ARG	3.1
70	DK	110	ARG	3.1
74	DO	81	ARG	3.1
78	DS	161	ARG	3.1
14	BG	38	SER	3.1
18	BK	155	GLU	3.1
7	m	95	TRP	3.1
20	BM	91	SER	3.1
49	E	203	GLU	3.1
60	DA	19	SER	3.1
61	DB	120	SER	3.1
64	DE	123	SER	3.1
5	AX	270	ASN	3.1
19	y	145	ASN	3.1
27	9	44	ASN	3.1
1	AS	1518	U	3.1
46	B	709	U	3.1
46	B	1400	U	3.1
1	1	1901	G	3.1
1	AS	1113	G	3.1
1	AS	1417	G	3.1
7	m	38	THR	3.1
31	AD	23	GLY	3.1
46	B	939	G	3.1

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Mol	Chain	Res	Type	RSRZ
46	B	1398	G	3.1
46	CM	927	G	3.1
46	CM	976	G	3.1
46	CM	1466	G	3.1
49	CP	85	THR	3.1
53	CT	80	GLY	3.1
59	CZ	127	GLY	3.1
73	c	97	PRO	3.1
17	w	104	LYS	3.1
18	BK	27	LYS	3.1
24	6	10	LYS	3.1
42	CI	8	LYS	3.1
50	F	8	LYS	3.1
58	CY	15	LYS	3.1
62	R	77	LYS	3.1
62	DC	108	LYS	3.1
5	AX	84	MET	3.1
17	BJ	27	GLN	3.1
38	CE	86	GLN	3.1
49	CP	89	GLN	3.1
70	DK	63	GLN	3.1
72	b	37	GLN	3.1
79	AR	122	GLN	3.1
79	DT	122	GLN	3.1
79	DT	313	MET	3.1
6	AY	114	VAL	3.1
8	BA	83	VAL	3.1
31	BX	69	VAL	3.1
50	F	92	VAL	3.1
79	DT	6	VAL	3.1
4	AW	16	PHE	3.1
6	AY	101	PHE	3.1
39	CF	78	LEU	3.1
41	CH	6	LEU	3.1
41	CH	27	LEU	3.1
41	CH	45	LEU	3.1
48	CO	54	LEU	3.1
62	R	49	LEU	3.1
65	DF	113	LEU	3.1
9	o	33	ALA	3.1
16	BI	67	ARG	3.1
27	BT	2	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
28	BU	19	ALA	3.1
29	AB	42	ARG	3.1
35	CB	10	ARG	3.1
36	CC	71	ALA	3.1
44	CK	51	ALA	3.1
47	C	95	ALA	3.1
8	BA	40	ILE	3.1
16	BI	133	ILE	3.1
34	CA	32	ILE	3.1
50	F	139	ILE	3.1
54	CU	131	ILE	3.1
55	CV	92	ARG	3.1
65	U	28	ILE	3.1
80	ll	155	ILE	3.1
1	1	1578	C	3.1
1	AS	1352	C	3.1
1	AS	1770	C	3.1
9	BB	73	TYR	3.1
46	CM	720	C	3.1
51	CR	27	TYR	3.1
55	CV	198	TYR	3.1
56	CW	95	TYR	3.1
15	BH	31	GLU	3.0
36	CC	15	GLU	3.0
51	CR	215	GLU	3.0
56	CW	33	GLU	3.0
1	AS	854	A	3.0
1	AS	900	A	3.0
6	AY	110	TRP	3.0
46	CM	358	A	3.0
46	CM	773	A	3.0
46	CM	915	A	3.0
46	CM	1743	A	3.0
67	DH	27	SER	3.0
76	DQ	28	SER	3.0
79	DT	125	SER	3.0
79	DT	291	TRP	3.0
5	k	234	GLY	3.0
17	w	132	PRO	3.0
19	y	14	GLY	3.0
20	z	122	ASN	3.0
14	BG	32	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
20	BM	21	LYS	3.0
23	5	45	GLY	3.0
32	AE	14	ASN	3.0
51	G	240	PRO	3.0
58	CY	41	GLY	3.0
67	W	70	PRO	3.0
35	CB	29[A]	LYS	3.0
36	AI	84	LYS	3.0
55	CV	41	LYS	3.0
6	AY	68	THR	3.0
18	BK	79	THR	3.0
31	BX	26	THR	3.0
44	AQ	26	THR	3.0
58	N	124	THR	3.0
1	1	3162	U	3.0
1	AS	257	U	3.0
1	AS	774	U	3.0
1	AS	2926	U	3.0
46	CM	874	U	3.0
46	CM	1435	U	3.0
78	h	174	MET	3.0
16	v	155	VAL	3.0
21	BN	51	VAL	3.0
56	L	14	VAL	3.0
64	DE	66	VAL	3.0
68	DI	13	VAL	3.0
14	BG	7	LEU	3.0
14	BG	14	PHE	3.0
18	BK	95	LEU	3.0
26	8	24	LEU	3.0
33	AF	86	LEU	3.0
40	CG	49	LEU	3.0
43	CJ	35	LEU	3.0
45	CL	115	LEU	3.0
47	CN	177	LEU	3.0
51	G	52	LEU	3.0
63	DD	104	LEU	3.0
66	DG	54	PHE	3.0
67	W	92	LEU	3.0
78	DS	159	LEU	3.0
1	1	1016	G	3.0
1	AS	1482	G	3.0

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Mol	Chain	Res	Type	RSRZ
1	AS	2547	G	3.0
1	AS	2894	G	3.0
2	AT	7	G	3.0
7	AZ	107	ARG	3.0
16	BI	63	ARG	3.0
35	AH	8	ARG	3.0
48	CO	213	ARG	3.0
50	F	144	ARG	3.0
53	CT	31	ARG	3.0
55	CV	8	ARG	3.0
71	DL	131	ARG	3.0
73	DN	89	ARG	3.0
11	BD	53	ILE	3.0
12	BE	95	HIS	3.0
13	BF	114	ILE	3.0
14	t	132	ALA	3.0
14	BG	99	HIS	3.0
16	BI	151	ILE	3.0
49	CP	134	ILE	3.0
50	CQ	146	ALA	3.0
52	CS	202	ALA	3.0
54	CU	132	ILE	3.0
58	N	61	ALA	3.0
59	O	101	ALA	3.0
61	DB	75	HIS	3.0
66	DG	93	HIS	3.0
78	h	140	HIS	3.0
79	AR	259	ILE	3.0
79	AR	287	ILE	3.0
17	BJ	65	TYR	3.0
49	E	61	TYR	3.0
14	t	127	ASP	3.0
15	BH	22	ASP	3.0
16	BI	131	GLU	3.0
33	BZ	84	ASP	3.0
59	O	26	ASP	3.0
8	BA	156	LYS	3.0
11	BD	2	LYS	3.0
22	2	97	LYS	3.0
30	AC	22	LYS	3.0
49	CP	83	LYS	3.0
52	H	84	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
60	P	39	LYS	3.0
60	P	43	LYS	3.0
64	DE	44	LYS	3.0
1	AS	715	C	3.0
1	AS	1398	C	3.0
1	AS	1552	C	3.0
1	AS	1764	C	3.0
5	AX	2	SER	3.0
8	n	94	GLY	3.0
39	CF	22	SER	3.0
43	CJ	84	PRO	3.0
46	B	319	C	3.0
60	DA	10	GLY	3.0
63	DD	24	GLY	3.0
74	DO	10	PRO	3.0
10	BC	222	ASN	3.0
38	AK	48	ASN	3.0
45	i	70	ASN	3.0
55	K	88	ASN	3.0
1	AS	11	A	3.0
1	AS	1022	A	3.0
1	AS	1692	A	3.0
1	AS	2287	A	3.0
6	AY	104	THR	3.0
25	BR	19	THR	3.0
26	BS	41	THR	3.0
35	AH	68	THR	3.0
46	CM	814	A	3.0
52	H	94	THR	3.0
4	AW	191	VAL	3.0
4	AW	230	VAL	3.0
6	AY	43	VAL	3.0
8	n	64	VAL	3.0
24	BQ	62	VAL	3.0
28	BU	96	VAL	3.0
13	s	12	LEU	3.0
22	BO	27	LEU	3.0
34	CA	31	GLN	3.0
35	AH	3	GLN	3.0
36	AI	16	GLN	3.0
41	CH	37	ARG	3.0
48	CO	157	GLN	3.0

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Mol	Chain	Res	Type	RSRZ
50	F	97	LEU	3.0
52	H	34	GLN	3.0
53	CT	111	LEU	3.0
54	J	122	LEU	3.0
56	CW	79	ARG	3.0
69	Y	69	LEU	3.0
69	DJ	65	LEU	3.0
73	DN	87	ARG	3.0
79	AR	219	LEU	3.0
1	AS	1927	U	3.0
3	AU	86	U	3.0
19	y	184	PHE	3.0
46	CM	480	U	3.0
46	CM	1319	U	3.0
50	F	18	PHE	3.0
6	AY	166	ALA	3.0
33	BZ	95	ALA	3.0
34	AG	32	ILE	3.0
47	C	145	ALA	3.0
57	CX	23	ALA	3.0
62	DC	57	ILE	3.0
73	c	17	HIS	3.0
4	j	190	LYS	3.0
5	k	119	TYR	3.0
8	BA	55	LYS	3.0
10	BC	148	LYS	3.0
17	BJ	67	LYS	3.0
27	9	89	LYS	3.0
35	AH	19	LYS	3.0
43	AP	61	LYS	3.0
62	DC	123	TYR	3.0
66	V	66	TYR	3.0
73	c	93	LYS	3.0
19	y	173	GLU	3.0
41	AN	16	GLU	3.0
1	AS	102	G	3.0
1	AS	706	G	3.0
1	AS	1548	G	3.0
7	AZ	87	GLY	3.0
10	BC	128	PRO	3.0
12	r	192	ASP	3.0
18	BK	154	ASP	3.0

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Mol	Chain	Res	Type	RSRZ
46	B	1339	G	3.0
46	B	1404	G	3.0
46	CM	420	G	3.0
33	BZ	117	GLY	3.0
57	CX	83	PRO	3.0
70	Z	42	PRO	3.0
72	DM	72	GLY	3.0
6	AY	130	SER	3.0
10	BC	75	SER	3.0
14	BG	105	SER	3.0
14	BG	137	SER	3.0
55	CV	7	SER	3.0
4	j	116	VAL	3.0
5	AX	29	VAL	3.0
6	AY	112	VAL	3.0
7	m	56	THR	3.0
28	BU	53	VAL	3.0
43	AP	2	VAL	3.0
47	C	73	VAL	3.0
47	CN	86	VAL	3.0
48	D	20	VAL	3.0
48	CO	185	THR	3.0
59	CZ	123	VAL	3.0
64	DE	106	THR	3.0
69	DJ	92	ASN	3.0
76	DQ	6	VAL	3.0
79	AR	132	VAL	3.0
4	AW	242	ARG	3.0
6	l	198	ARG	3.0
9	o	81	LEU	3.0
10	BC	27	LEU	3.0
49	E	66	LEU	3.0
61	DB	109	ARG	3.0
64	DE	80	ARG	3.0
71	a	74	LEU	3.0
1	AS	2223	C	3.0
1	AS	2255	C	3.0
1	AS	2284	C	3.0
1	AS	2545	C	3.0
3	AU	94	C	3.0
10	BC	90	GLN	3.0
38	AK	78	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
46	B	716	C	3.0
46	CM	1013	C	3.0
50	F	151	GLN	3.0
50	CQ	26	PHE	3.0
51	CR	99	PHE	3.0
54	CU	106	GLN	3.0
66	V	109	GLN	3.0
1	1	2310	A	3.0
1	AS	690	A	3.0
4	AW	238	ILE	3.0
7	m	291	ALA	3.0
9	BB	176	ILE	3.0
16	BI	48	ALA	3.0
22	BO	63	ILE	3.0
27	9	97	ILE	3.0
46	CM	1357	A	3.0
46	CM	1476	A	3.0
47	C	133	ILE	3.0
51	CR	90	ILE	3.0
52	CS	89	ILE	3.0
53	CT	49	ILE	3.0
61	DB	76	ILE	3.0
63	DD	79	ALA	3.0
63	DD	90	ALA	3.0
79	AR	143	ALA	3.0
79	DT	143	ALA	3.0
29	BV	49	HIS	3.0
77	g	5	HIS	3.0
79	DT	29	HIS	3.0
31	AD	83	CYS	3.0
74	DO	64	CYS	3.0
1	AS	1024	U	3.0
1	AS	1545	U	3.0
1	AS	3234	U	3.0
11	BD	63	LYS	3.0
37	CD	74	LYS	3.0
46	CM	778	U	3.0
48	D	167	LYS	3.0
62	DC	52	LYS	3.0
65	U	34	LYS	3.0
70	DK	137	LYS	3.0
20	BM	78	TYR	3.0

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Mol	Chain	Res	Type	RSRZ
53	CT	7	TYR	3.0
57	CX	14	TYR	3.0
11	q	130	GLU	3.0
14	BG	186	GLU	3.0
16	v	160	GLU	3.0
25	BR	51	TRP	3.0
53	I	222	GLU	3.0
56	L	41	GLU	3.0
65	U	114	GLU	3.0
4	AW	167	GLY	3.0
5	k	9	PRO	3.0
11	BD	30	PRO	3.0
55	K	63	GLY	3.0
61	DB	83	GLY	3.0
63	DD	87	GLY	3.0
79	DT	295	GLY	3.0
63	S	123	MET	3.0
4	AW	51	ASP	3.0
4	AW	98	VAL	3.0
4	AW	161	ASP	3.0
11	BD	57	VAL	3.0
11	BD	142	ASP	3.0
15	u	115	VAL	3.0
16	BI	106	VAL	3.0
22	2	72	VAL	3.0
23	BP	17	VAL	3.0
24	BQ	101	VAL	3.0
31	BX	99	ASP	3.0
45	i	40	ASP	3.0
13	BF	41	SER	3.0
16	BI	101	THR	3.0
17	BJ	16	LEU	3.0
18	BK	176	LEU	3.0
20	BM	106	LEU	3.0
29	BV	117	ARG	3.0
34	CA	48[A]	ARG	3.0
51	CR	194	VAL	3.0
38	CE	59	THR	3.0
49	E	129	LEU	3.0
51	CR	80	THR	3.0
53	CT	234	LEU	3.0
54	J	24	LEU	3.0

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Mol	Chain	Res	Type	RSRZ
54	J	135	ARG	3.0
61	DB	123	ARG	3.0
63	S	18	VAL	3.0
63	S	116	LEU	3.0
73	DN	38	ARG	3.0
7	m	278	THR	3.0
31	BX	81	THR	3.0
38	CE	17	THR	3.0
66	V	139	THR	3.0
78	h	159	LEU	3.0
79	AR	303	THR	3.0
6	AY	157	PHE	3.0
48	D	24	PHE	3.0
52	CS	139	ASN	3.0
62	R	102	PHE	3.0
70	Z	38	PHE	3.0
1	1	2184	G	3.0
1	AS	550	G	3.0
1	AS	712	G	3.0
1	AS	770	G	3.0
1	AS	1776	G	3.0
3	AU	39	G	3.0
5	k	179	ALA	3.0
6	AY	183	ILE	3.0
8	n	5	ALA	3.0
12	r	134	ILE	3.0
15	BH	53	ALA	3.0
40	CG	4	GLN	3.0
46	CM	870	G	3.0
46	CM	880	G	3.0
46	CM	1549	G	3.0
51	G	258	ALA	3.0
69	DJ	83	ILE	3.0
69	DJ	86	ILE	3.0
79	AR	276	ALA	3.0
10	BC	121	LYS	3.0
20	BM	53	LYS	3.0
20	BM	85	LYS	3.0
22	BO	43	LYS	3.0
22	BO	95	HIS	3.0
22	BO	97	LYS	3.0
27	BT	37	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
33	BZ	81	LYS	3.0
67	DH	19	HIS	3.0
1	AS	1312	C	3.0
1	AS	3051	C	3.0
3	AU	35	C	3.0
46	B	721	C	3.0
46	B	763	C	3.0
46	CM	261	C	3.0
3	4	59	A	3.0
5	AX	251	CYS	3.0
46	CM	914	A	3.0
46	CM	986	A	3.0
46	CM	1078	A	3.0
59	CZ	60	CYS	3.0
79	DT	208	CYS	3.0
35	CB	13	TYR	3.0
70	Z	29	TYR	3.0
1	AS	2485	U	3.0
6	AY	224	PRO	3.0
12	r	117	GLY	3.0
19	BL	173	GLU	3.0
20	z	16	GLY	3.0
45	CL	107	TRP	3.0
24	BQ	127	PRO	3.0
46	CM	878	U	3.0
46	CM	879	U	3.0
60	DA	44	GLY	3.0
62	R	91	GLY	3.0
63	S	50	PRO	3.0
73	DN	97	PRO	3.0
6	AY	350	VAL	3.0
12	BE	147	VAL	3.0
13	BF	171	VAL	3.0
16	BI	147	ARG	3.0
18	BK	56	ARG	3.0
13	s	17	LEU	3.0
20	z	139	VAL	3.0
29	AB	78	LEU	3.0
29	BV	121	VAL	3.0
29	BV	148	VAL	3.0
32	BY	48	VAL	3.0
35	AH	23	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
35	AH	31	VAL	3.0
43	CJ	42	ARG	3.0
47	C	86	VAL	3.0
52	CS	148	ARG	3.0
36	CC	60	LEU	3.0
51	CR	247	LEU	3.0
52	CS	198	LEU	3.0
54	CU	89	LEU	3.0
55	CV	121	LEU	3.0
57	CX	49	LEU	3.0
60	DA	102	LEU	3.0
62	DC	105	VAL	3.0
5	AX	140	ASP	3.0
7	AZ	72	ASP	3.0
79	DT	304	ASP	3.0
7	AZ	252	SER	3.0
8	BA	162	SER	3.0
28	AA	92	PHE	3.0
41	CH	5	SER	3.0
53	CT	53	THR	3.0
67	DH	116	THR	3.0
79	AR	62	PHE	3.0
6	AY	321	ASN	3.0
10	p	118	ALA	3.0
19	BL	99	ALA	3.0
24	6	24	ASN	3.0
31	BX	102	ILE	3.0
47	C	173	ILE	3.0
52	H	142	ALA	3.0
53	CT	189	ALA	3.0
54	J	28	ALA	3.0
5	AX	196	LYS	2.9
7	AZ	58	LYS	2.9
25	7	27	LYS	2.9
36	CC	14	LYS	2.9
59	O	58	GLN	2.9
78	h	125	LYS	2.9
7	AZ	13	HIS	2.9
47	CN	92	HIS	2.9
1	1	2459	G	2.9
1	AS	1437	G	2.9
1	AS	2135	G	2.9

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Mol	Chain	Res	Type	RSRZ
12	r	11	TYR	2.9
27	BT	19	TYR	2.9
46	B	1671	G	2.9
46	CM	7	G	2.9
46	CM	714	G	2.9
60	DA	129	TYR	2.9
6	AY	330	PRO	2.9
11	q	168	ARG	2.9
22	BO	81	GLY	2.9
34	CA	56	PRO	2.9
42	CI	5	TRP	2.9
59	CZ	46	ARG	2.9
76	f	22	ARG	2.9
1	1	2311	C	2.9
1	AS	1181	C	2.9
1	AS	1197	C	2.9
5	k	87	VAL	2.9
6	l	170	LEU	2.9
6	l	325	LEU	2.9
8	BA	57	LEU	2.9
10	BC	131	VAL	2.9
15	BH	115	VAL	2.9
20	BM	44	LEU	2.9
31	AD	69	VAL	2.9
32	AE	19	LEU	2.9
36	CC	24	LEU	2.9
45	i	61	GLU	2.9
45	CL	103	LEU	2.9
46	CM	1340	C	2.9
46	CM	1628	C	2.9
47	CN	31	VAL	2.9
50	F	80	LEU	2.9
53	I	77	LEU	2.9
57	M	6	GLU	2.9
59	O	99	GLU	2.9
59	CZ	59	LEU	2.9
61	Q	97	LEU	2.9
61	DB	74	VAL	2.9
62	R	75	VAL	2.9
62	DC	75	VAL	2.9
64	DE	88	VAL	2.9
1	AS	823	A	2.9

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Mol	Chain	Res	Type	RSRZ
1	AS	878	A	2.9
1	AS	1907	A	2.9
1	AS	2221	A	2.9
3	AU	96	A	2.9
46	B	479	A	2.9
46	CM	926	A	2.9
1	1	3165	U	2.9
1	AS	1699	U	2.9
1	AS	1836	U	2.9
46	B	699	U	2.9
48	CO	142	PHE	2.9
50	F	25	PHE	2.9
57	CX	59	PHE	2.9
6	l	75	ILE	2.9
10	BC	159	ASP	2.9
20	BM	142	ILE	2.9
30	BW	36	ASP	2.9
31	AD	46	ILE	2.9
32	AE	35	ILE	2.9
48	CO	204	ILE	2.9
49	E	213	ILE	2.9
38	CE	53	ALA	2.9
39	AL	62	ALA	2.9
50	CQ	149	LYS	2.9
51	CR	234	LYS	2.9
52	H	221	ALA	2.9
54	CU	68	LYS	2.9
55	K	97	THR	2.9
56	L	122	ILE	2.9
57	CX	43	ILE	2.9
75	e	13	ILE	2.9
6	l	3	SER	2.9
13	s	49	LYS	2.9
16	BI	97	SER	2.9
22	BO	28	SER	2.9
25	BR	60	LYS	2.9
26	BS	107	ALA	2.9
34	CA	12	LYS	2.9
58	CY	65	SER	2.9
71	DL	68	LYS	2.9
14	BG	28	GLN	2.9
24	BQ	33	ASN	2.9

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Mol	Chain	Res	Type	RSRZ
25	BR	41	GLN	2.9
33	BZ	79	ASN	2.9
43	CJ	47	GLN	2.9
52	H	169	ASN	2.9
58	CY	138	ASN	2.9
62	R	82	ASN	2.9
64	T	31	ASN	2.9
53	CT	81	HIS	2.9
76	DQ	27	HIS	2.9
14	t	41	ARG	2.9
16	BI	65	ARG	2.9
30	BW	44	ARG	2.9
50	F	178	MET	2.9
54	CU	135	ARG	2.9
67	DH	83	MET	2.9
69	DJ	117	ARG	2.9
79	DT	308	ARG	2.9
4	AW	164	GLY	2.9
19	y	177	GLY	2.9
24	BQ	107	GLY	2.9
53	I	169	TYR	2.9
66	DG	87	GLY	2.9
70	DK	45	GLY	2.9
78	h	148	TYR	2.9
79	DT	247	TYR	2.9
8	BA	41	LEU	2.9
13	BF	118	PRO	2.9
16	v	179	LEU	2.9
18	x	112	LEU	2.9
19	y	71	LEU	2.9
20	z	57	VAL	2.9
21	BN	152	LEU	2.9
22	2	31	LEU	2.9
25	BR	109	LEU	2.9
44	AQ	64	VAL	2.9
50	CQ	80	LEU	2.9
53	CT	179	VAL	2.9
54	CU	34	LEU	2.9
70	Z	83	VAL	2.9
78	h	166	PRO	2.9
79	AR	244	PRO	2.9
32	AE	82	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
65	DF	7	GLU	2.9
5	AX	130	PHE	2.9
6	AY	91	PHE	2.9
11	q	2	LYS	2.9
11	BD	26	LYS	2.9
12	r	101	LYS	2.9
13	s	4	LYS	2.9
13	s	16	LYS	2.9
21	0	58	ILE	2.9
27	BT	3	LYS	2.9
32	BY	36	LYS	2.9
40	CG	12	LYS	2.9
45	CL	88	PHE	2.9
41	AN	19	ILE	2.9
66	DG	103	LYS	2.9
73	DN	94	ILE	2.9
79	DT	123	ILE	2.9
1	1	545	G	2.9
1	AS	154	G	2.9
1	AS	877	C	2.9
1	AS	1383	G	2.9
1	AS	1893	G	2.9
1	AS	2177	G	2.9
1	AS	2765	G	2.9
6	l	57	ALA	2.9
9	BB	111	ALA	2.9
44	CK	52	THR	2.9
45	i	63	ALA	2.9
46	B	138	C	2.9
46	B	1092	G	2.9
46	CM	971	G	2.9
46	CM	972	G	2.9
1	1	1217	A	2.9
1	AS	309	U	2.9
1	AS	1780	A	2.9
32	BY	105	THR	2.9
46	CM	975	C	2.9
50	CQ	154	ALA	2.9
46	B	1137	A	2.9
53	I	148	THR	2.9
58	N	72	THR	2.9
66	DG	50	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
3	4	22	U	2.9
46	CM	1409	U	2.9
46	CM	1479	A	2.9
46	CM	1727	A	2.9
46	CM	1753	A	2.9
62	DC	21	ASP	2.9
27	BT	47	SER	2.9
50	CQ	150	SER	2.9
62	DC	51	SER	2.9
80	ll	203	SER	2.9
6	AY	93	ASN	2.9
12	r	209	ASN	2.9
50	F	163	GLN	2.9
56	CW	38	ASN	2.9
75	e	51	ASN	2.9
8	BA	77	ARG	2.9
14	BG	59	ARG	2.9
19	BL	151	ARG	2.9
33	AF	27	HIS	2.9
60	DA	124	ARG	2.9
74	d	19	HIS	2.9
75	e	65	ARG	2.9
4	AW	172	GLY	2.9
5	k	324	LEU	2.9
5	AX	192	VAL	2.9
6	AY	146	VAL	2.9
7	AZ	125	VAL	2.9
10	BC	98	TYR	2.9
11	BD	181	VAL	2.9
17	w	128	LEU	2.9
19	y	124	LEU	2.9
14	BG	154	PRO	2.9
19	y	33	TYR	2.9
28	BU	16	GLY	2.9
41	AN	27	LEU	2.9
50	CQ	111	LEU	2.9
51	G	123	LEU	2.9
56	CW	30	LEU	2.9
59	CZ	122	VAL	2.9
68	DI	12	TYR	2.9
71	a	65	GLY	2.9
71	a	100	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
72	DM	60	VAL	2.9
73	c	73	TYR	2.9
74	DO	2	VAL	2.9
79	DT	147	GLY	2.9
10	BC	53	TRP	2.9
19	BL	19	PRO	2.9
23	5	95	TRP	2.9
45	CL	43	PRO	2.9
53	CT	62	PRO	2.9
63	DD	34	PRO	2.9
64	DE	65	PRO	2.9
79	AR	291	TRP	2.9
10	p	44	LYS	2.9
5	k	328	ILE	2.9
10	p	50	PHE	2.9
17	w	131	LYS	2.9
23	BP	110	PHE	2.9
28	AA	27	LYS	2.9
31	AD	24	LYS	2.9
31	BX	24	LYS	2.9
45	CL	67	LYS	2.9
49	E	236	GLU	2.9
49	CP	203	GLU	2.9
63	DD	105	LYS	2.9
65	U	139	LYS	2.9
69	DJ	60	LYS	2.9
61	DB	14	ILE	2.9
64	DE	50	ILE	2.9
6	AY	138	ALA	2.9
18	BK	33	ALA	2.9
20	z	144	ALA	2.9
28	AA	2	ALA	2.9
45	CL	80	ALA	2.9
55	CV	128	ALA	2.9
59	O	118	ALA	2.9
79	AR	24	ALA	2.9
7	AZ	9	THR	2.9
27	BT	21	THR	2.9
38	CE	87	THR	2.9
43	CJ	10	THR	2.9
52	H	73	THR	2.9
58	CY	124	THR	2.9

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Mol	Chain	Res	Type	RSRZ
63	DD	8	THR	2.9
8	BA	3	GLN	2.9
17	BJ	25	SER	2.9
22	BO	47	SER	2.9
43	CJ	22	GLN	2.9
48	CO	115	ARG	2.9
65	U	115	ARG	2.9
71	DL	132	ARG	2.9
1	1	1022	A	2.9
1	1	1554	A	2.9
1	1	1602	U	2.9
1	1	2092	C	2.9
1	AS	82	U	2.9
1	AS	110	C	2.9
1	1	2894	G	2.9
1	1	2898	A	2.9
1	1	3137	A	2.9
1	AS	26	C	2.9
1	AS	311	C	2.9
1	AS	126	G	2.9
1	AS	419	G	2.9
1	AS	663	A	2.9
1	AS	751	A	2.9
1	AS	839	A	2.9
1	AS	1702	C	2.9
1	AS	1775	C	2.9
3	AU	34	U	2.9
1	AS	1792	G	2.9
1	AS	2552	A	2.9
8	BA	172	HIS	2.9
10	BC	138	ASN	2.9
13	s	95	ASN	2.9
46	B	674	C	2.9
46	B	1385	C	2.9
46	B	1652	U	2.9
46	CM	715	G	2.9
46	CM	1187	A	2.9
46	CM	1467	C	2.9
46	B	1402	G	2.9
50	CQ	178	MET	2.9
51	CR	17	HIS	2.9
63	DD	20	HIS	2.9

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Mol	Chain	Res	Type	RSRZ
67	W	71	ASN	2.9
79	DT	297	ASN	2.9
1	AS	3088	G	2.9
3	AU	42	G	2.9
3	AU	56	G	2.9
12	BE	48	LEU	2.9
13	BF	172	LEU	2.9
18	x	168	LEU	2.9
19	BL	29	LEU	2.9
21	BN	79	LEU	2.9
33	AF	76	LEU	2.9
36	AI	41	LEU	2.9
65	DF	131	LEU	2.9
70	Z	104	LEU	2.9
78	h	190	LEU	2.9
6	AY	58	GLY	2.9
7	AZ	74	VAL	2.9
14	BG	30	GLY	2.9
17	w	119	VAL	2.9
29	BV	37	GLY	2.9
29	BV	125	VAL	2.9
63	DD	6	VAL	2.9
67	DH	55	VAL	2.9
69	Y	63	VAL	2.9
23	BP	111	TYR	2.9
28	BU	37	PRO	2.9
14	BG	129	LYS	2.9
19	y	56	LYS	2.9
29	BV	90	TYR	2.9
58	CY	35	TYR	2.9
66	V	38	LYS	2.9
66	DG	33	TYR	2.9
67	DH	54	PRO	2.9
33	BZ	16	LYS	2.9
42	AO	14	LYS	2.9
66	DG	110	LYS	2.9
69	DJ	43	LYS	2.9
73	c	13	LYS	2.9
73	DN	37	LYS	2.9
79	AR	247	TYR	2.9
79	DT	135	TRP	2.9
11	BD	75	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
16	v	103	GLU	2.9
20	BM	32	ILE	2.9
25	7	28	ILE	2.9
49	CP	219	PHE	2.9
50	F	116	ILE	2.9
51	G	215	GLU	2.9
54	CU	179	PHE	2.9
56	L	134	ILE	2.9
62	DC	27	GLU	2.9
62	DC	88	GLU	2.9
79	AR	123	ILE	2.9
7	m	98	ALA	2.9
14	BG	71	ALA	2.9
45	CL	42	ALA	2.9
50	F	212	ALA	2.9
60	DA	15	ALA	2.9
61	Q	101	ALA	2.9
62	DC	63	ALA	2.9
76	DQ	47	ALA	2.9
9	BB	20	THR	2.9
16	BI	80	THR	2.9
30	BW	8	THR	2.9
36	AI	101	THR	2.9
36	CC	56	THR	2.9
16	BI	188	ARG	2.9
26	BS	48	ARG	2.9
50	CQ	179	ARG	2.9
58	CY	129	ARG	2.9
61	Q	98	ARG	2.9
68	X	22	ARG	2.9
4	AW	226	SER	2.9
5	AX	17	LEU	2.9
10	p	259	SER	2.9
14	t	151	GLN	2.9
17	w	32	GLN	2.9
21	BN	138	GLN	2.9
52	H	86	GLN	2.9
57	CX	26	ASP	2.9
63	DD	7	GLN	2.9
64	DE	103	ASP	2.9
76	f	37	ASP	2.9
13	BF	12	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
16	v	19	MET	2.9
17	w	100	LEU	2.9
20	z	99	LEU	2.9
21	BN	110	LEU	2.9
28	BU	98	SER	2.9
32	BY	54	LEU	2.9
37	AJ	32	SER	2.9
48	CO	101	HIS	2.9
53	CT	77	LEU	2.9
66	V	140	LEU	2.9
67	W	27	SER	2.9
79	AR	197	SER	2.9
80	l1	20	SER	2.9
80	l1	103	LEU	2.9
7	AZ	37	VAL	2.9
14	BG	22	VAL	2.9
23	5	12	VAL	2.9
23	BP	45	GLY	2.9
24	BQ	65	GLY	2.9
36	CC	50	ASN	2.9
44	CK	56	ASN	2.9
53	I	114	VAL	2.9
60	DA	33	VAL	2.9
62	R	99	GLY	2.9
70	DK	83	VAL	2.9
5	k	66	LYS	2.9
7	AZ	43	LYS	2.9
1	1	2183	U	2.9
1	AS	329	U	2.9
1	AS	861	U	2.9
1	AS	1816	U	2.9
18	BK	59	PRO	2.9
46	B	1043	U	2.9
46	B	1656	U	2.9
46	CM	157	U	2.9
46	CM	703	U	2.9
46	CM	1418	U	2.9
50	CQ	164	PRO	2.9
63	S	13	LYS	2.9
75	DP	6	PRO	2.9
1	1	110	C	2.9
1	1	239	A	2.9

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Mol	Chain	Res	Type	RSRZ
1	1	3135	A	2.9
1	AS	1082	C	2.9
1	AS	1447	C	2.9
1	AS	1555	C	2.9
1	AS	1922	C	2.9
3	AU	97	A	2.9
11	BD	3	TYR	2.9
12	r	196	TYR	2.9
13	BF	123	TYR	2.9
16	BI	36	ILE	2.9
19	y	139	ILE	2.9
19	BL	153	PHE	2.9
24	BQ	85	TRP	2.9
46	B	367	A	2.9
46	CM	400	C	2.9
46	CM	403	C	2.9
46	CM	855	C	2.9
46	CM	1502	A	2.9
46	CM	1726	C	2.9
46	CM	1742	A	2.9
48	CO	117	TRP	2.9
57	CX	63	TYR	2.9
7	AZ	185	ILE	2.9
32	BY	74	ILE	2.9
33	BZ	109	ILE	2.9
69	DJ	34	ILE	2.9
72	DM	39	ILE	2.9
1	1	320	G	2.8
1	1	1613	G	2.8
1	AS	1190	G	2.8
1	AS	2936	G	2.8
2	AT	5	G	2.8
11	q	190	GLU	2.8
21	BN	104	GLU	2.8
36	CC	27	GLU	2.8
46	CM	1293	G	2.8
52	CS	197	GLU	2.8
5	k	8	ALA	2.8
25	7	119	ALA	2.8
53	I	205	ALA	2.8
72	b	36	ALA	2.8
44	CK	85	ARG	2.8

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Mol	Chain	Res	Type	RSRZ
53	CT	88	ARG	2.8
54	CU	108	ARG	2.8
56	L	126	ARG	2.8
13	s	165	THR	2.8
26	BS	30	THR	2.8
52	CS	94	THR	2.8
54	CU	173	THR	2.8
15	BH	65	LEU	2.8
29	BV	5	LEU	2.8
49	E	149	LEU	2.8
53	I	111	LEU	2.8
54	CU	172	LEU	2.8
55	CV	90	LEU	2.8
56	CW	97	LEU	2.8
57	M	80	LEU	2.8
60	DA	117	LEU	2.8
65	U	86	LEU	2.8
67	DH	33	LEU	2.8
5	AX	241	LYS	2.8
6	AY	169	VAL	2.8
7	m	137	ASP	2.8
25	7	42	GLN	2.8
8	BA	73	VAL	2.8
9	BB	82	VAL	2.8
10	p	134	LYS	2.8
12	r	53	VAL	2.8
12	r	164	LYS	2.8
16	v	37	HIS	2.8
16	BI	54	LYS	2.8
21	BN	35	VAL	2.8
22	2	58	HIS	2.8
22	BO	58	HIS	2.8
27	9	82	VAL	2.8
27	BT	7	ASP	2.8
55	K	20	GLN	2.8
29	BV	132	LYS	2.8
29	BV	145	VAL	2.8
31	AD	82	VAL	2.8
42	CI	14	LYS	2.8
48	CO	192	VAL	2.8
54	CU	164	SER	2.8
58	CY	135	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
64	DE	10	LYS	2.8
74	DO	22	LYS	2.8
79	AR	155	VAL	2.8
79	DT	59	LYS	2.8
16	BI	112	ASN	2.8
18	BK	123	PRO	2.8
19	BL	97	PRO	2.8
33	AF	123	PRO	2.8
49	E	215	ASN	2.8
7	AZ	44	TYR	2.8
12	r	33	ILE	2.8
16	v	191	TRP	2.8
18	BK	130	TYR	2.8
21	0	81	TYR	2.8
39	CF	24	ILE	2.8
54	J	39	PHE	2.8
56	L	47	PHE	2.8
56	L	83	ILE	2.8
56	CW	156	ILE	2.8
58	CY	86	ILE	2.8
1	1	1551	U	2.8
1	1	2305	U	2.8
1	AS	278	U	2.8
1	AS	1661	U	2.8
1	AS	2162	U	2.8
1	AS	2510	U	2.8
1	AS	3127	U	2.8
6	AY	219	ALA	2.8
7	AZ	67	ALA	2.8
14	BG	44	ALA	2.8
35	CB	52	ALA	2.8
41	AN	25	ALA	2.8
46	B	804	U	2.8
46	B	1756	U	2.8
46	CM	1545	U	2.8
46	CM	1729	U	2.8
48	CO	34	ALA	2.8
49	CP	87	ALA	2.8
56	L	55	ALA	2.8
56	CW	4	ALA	2.8
66	DG	58	ALA	2.8
1	1	955	C	2.8

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Mol	Chain	Res	Type	RSRZ
1	1	1192	C	2.8
1	AS	932	A	2.8
1	AS	1889	A	2.8
1	AS	2226	C	2.8
1	AS	2259	A	2.8
5	AX	232	ARG	2.8
16	BI	73	ARG	2.8
24	6	128	ARG	2.8
46	B	130	C	2.8
46	B	988	A	2.8
46	CM	92	A	2.8
46	CM	410	A	2.8
46	CM	423	A	2.8
46	CM	1169	A	2.8
65	U	120	ARG	2.8
66	DG	134	ARG	2.8
76	DQ	12	ARG	2.8
46	CM	1265	C	2.8
46	CM	1337	C	2.8
5	AX	102	LEU	2.8
6	l	195	LEU	2.8
7	m	153	THR	2.8
9	o	20	THR	2.8
9	BB	107	THR	2.8
21	BN	124	LEU	2.8
23	5	82	LEU	2.8
27	9	57	LEU	2.8
29	AB	5	LEU	2.8
29	BV	91	LEU	2.8
43	CJ	70	LEU	2.8
48	CO	61	LEU	2.8
51	G	9	LEU	2.8
52	H	97	LEU	2.8
52	CS	118	LEU	2.8
61	DB	84	THR	2.8
62	DC	78	THR	2.8
65	DF	17	LEU	2.8
67	W	57	MET	2.8
70	DK	104	LEU	2.8
71	DL	40	LEU	2.8
77	DR	50	THR	2.8
79	DT	230	THR	2.8

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Mol	Chain	Res	Type	RSRZ
1	AS	1136	G	2.8
1	AS	2214	G	2.8
3	AU	114	G	2.8
5	k	79	VAL	2.8
5	AX	93	VAL	2.8
6	AY	53	VAL	2.8
8	BA	64	VAL	2.8
17	w	109	VAL	2.8
19	y	72	LYS	2.8
29	BV	137	LYS	2.8
30	AC	5	LYS	2.8
33	BZ	110	VAL	2.8
34	CA	63	LYS	2.8
42	CI	10	VAL	2.8
46	B	1655	G	2.8
46	CM	382	G	2.8
46	CM	572	G	2.8
46	CM	861	G	2.8
46	CM	1097	G	2.8
46	CM	1650	G	2.8
47	C	122	VAL	2.8
50	F	208	LYS	2.8
52	H	168	VAL	2.8
55	CV	102	VAL	2.8
58	CY	139	VAL	2.8
60	DA	70	LYS	2.8
64	DE	110	VAL	2.8
72	b	60	VAL	2.8
72	DM	40	VAL	2.8
72	DM	94	LYS	2.8
74	DO	35	VAL	2.8
79	DT	216	VAL	2.8
79	DT	282	LYS	2.8
35	AH	61	GLN	2.8
4	j	153	GLY	2.8
6	AY	246	GLY	2.8
7	AZ	29	ASP	2.8
8	BA	137	ASP	2.8
18	BK	73	GLY	2.8
45	i	98	ASP	2.8
50	CQ	96	GLY	2.8
55	CV	116	HIS	2.8

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Mol	Chain	Res	Type	RSRZ
53	CT	151	ASP	2.8
63	DD	10	GLY	2.8
65	U	112	ASP	2.8
65	DF	97	ASP	2.8
6	AY	5	PRO	2.8
18	x	87	SER	2.8
28	BU	50	PRO	2.8
33	BZ	99	SER	2.8
53	CT	6	SER	2.8
59	O	119	SER	2.8
4	AW	41	ILE	2.8
7	AZ	290	ILE	2.8
11	BD	99	ILE	2.8
15	BH	60	ILE	2.8
15	BH	122	PHE	2.8
20	BM	3	ASN	2.8
22	BO	19	PHE	2.8
24	6	129	ILE	2.8
29	AB	74	ASN	2.8
36	CC	44	ILE	2.8
50	F	67	ILE	2.8
53	I	175	ILE	2.8
54	CU	57	PHE	2.8
56	L	114	PHE	2.8
59	O	71	ILE	2.8
60	DA	11	ILE	2.8
61	DB	71	ILE	2.8
64	T	41	ILE	2.8
69	DJ	27	ILE	2.8
70	DK	99	ASN	2.8
76	f	50	ILE	2.8
4	AW	69	TYR	2.8
5	k	233	TRP	2.8
7	AZ	240	TYR	2.8
49	CP	192	TYR	2.8
54	CU	169	TYR	2.8
4	AW	9	ARG	2.8
18	x	167	ARG	2.8
21	BN	95	ARG	2.8
25	7	123	ARG	2.8
38	AK	85	ALA	2.8
48	CO	82	ARG	2.8

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Mol	Chain	Res	Type	RSRZ
49	CP	92	ARG	2.8
54	CU	18	ALA	2.8
56	L	171	ARG	2.8
68	DI	26	ALA	2.8
10	BC	55	GLU	2.8
28	AA	99	GLU	2.8
53	CT	225	GLU	2.8
1	1	2067	U	2.8
1	AS	441	U	2.8
1	AS	1522	U	2.8
1	AS	1890	U	2.8
1	AS	2838	U	2.8
1	AS	2952	U	2.8
2	AT	16	U	2.8
46	CM	281	U	2.8
46	CM	1267	U	2.8
46	CM	1758	U	2.8
4	j	71	LEU	2.8
16	BI	199	LEU	2.8
21	BN	4	LEU	2.8
26	BS	126	LEU	2.8
79	AR	262	LEU	2.8
11	q	141	LYS	2.8
16	BI	157	LYS	2.8
28	AA	112	LYS	2.8
31	AD	85	LYS	2.8
42	AO	1	MET	2.8
48	CO	83	LYS	2.8
48	CO	160	LYS	2.8
54	CU	43	LYS	2.8
67	DH	29	LYS	2.8
74	d	22	LYS	2.8
12	r	174	THR	2.8
1	1	242	C	2.8
1	1	1542	A	2.8
1	1	2437	A	2.8
1	1	3136	C	2.8
1	AS	99	A	2.8
1	AS	220	A	2.8
1	AS	321	C	2.8
1	AS	955	C	2.8
1	AS	3233	A	2.8

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Mol	Chain	Res	Type	RSRZ
17	w	34	VAL	2.8
18	BK	91	VAL	2.8
35	CB	90	VAL	2.8
37	CD	46	VAL	2.8
55	CV	62	THR	2.8
46	B	618	A	2.8
46	B	621	A	2.8
46	CM	385	A	2.8
46	CM	398	A	2.8
46	CM	409	C	2.8
46	CM	571	C	2.8
55	CV	145	VAL	2.8
57	M	50	THR	2.8
63	S	16	THR	2.8
67	W	113	VAL	2.8
71	a	9	THR	2.8
5	AX	309	GLY	2.8
7	m	283	GLN	2.8
11	BD	64	HIS	2.8
19	BL	118	GLY	2.8
27	9	120	GLN	2.8
61	DB	70	GLY	2.8
4	j	101	ILE	2.8
6	AY	150	PRO	2.8
10	BC	79	PHE	2.8
13	s	110	ILE	2.8
23	BP	46	ILE	2.8
26	BS	95	ILE	2.8
26	BS	114	ILE	2.8
30	BW	30	PRO	2.8
33	BZ	66	PHE	2.8
36	AI	51	ILE	2.8
56	L	71	PHE	2.8
57	CX	75	PHE	2.8
60	P	11	ILE	2.8
62	DC	29	PRO	2.8
65	DF	35	ILE	2.8
66	DG	31	PRO	2.8
79	AR	27	PRO	2.8
16	v	171	SER	2.8
23	5	11	SER	2.8
31	AD	35	SER	2.8

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Mol	Chain	Res	Type	RSRZ
72	DM	63	SER	2.8
6	AY	142	ARG	2.8
8	BA	107	ARG	2.8
6	AY	190	ALA	2.8
6	AY	294	ALA	2.8
7	m	94	ASN	2.8
9	BB	128	ALA	2.8
10	p	56	TYR	2.8
10	BC	146	ASN	2.8
12	r	116	ARG	2.8
33	BZ	25	ARG	2.8
35	CB	41	ARG	2.8
42	CI	2	ARG	2.8
1	1	3268	G	2.8
1	AS	442	G	2.8
1	AS	863	G	2.8
1	AS	1127	G	2.8
1	AS	2163	G	2.8
1	AS	2787	G	2.8
1	AS	2849	G	2.8
14	BG	136	ALA	2.8
46	B	1441	G	2.8
46	CM	355	G	2.8
46	CM	386	G	2.8
46	CM	1038	G	2.8
57	CX	64	TYR	2.8
60	DA	126	ALA	2.8
68	X	58	TYR	2.8
8	BA	58	GLU	2.8
55	CV	146	GLU	2.8
5	AX	324	LEU	2.8
6	l	234	LEU	2.8
10	p	137	LEU	2.8
13	BF	37	LEU	2.8
16	BI	5	LYS	2.8
16	BI	170	LYS	2.8
19	BL	36	LEU	2.8
20	BM	138	LEU	2.8
23	BP	77	LYS	2.8
25	BR	54	LEU	2.8
32	AE	3	LEU	2.8
38	AK	54	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
40	CG	29	LEU	2.8
48	CO	113	LEU	2.8
53	CT	109	LEU	2.8
56	CW	28	LEU	2.8
57	CX	80	LEU	2.8
65	U	45	LEU	2.8
66	DG	79	LEU	2.8
69	Y	26	LEU	2.8
69	DJ	26	LEU	2.8
80	ll	90	LEU	2.8
51	CR	19	MET	2.8
4	AW	116	VAL	2.8
4	AW	165	VAL	2.8
10	p	204	VAL	2.8
28	BU	43	VAL	2.8
48	CO	164	VAL	2.8
50	CQ	75	VAL	2.8
52	H	70	VAL	2.8
56	L	96	VAL	2.8
73	c	18	VAL	2.8
75	e	48	VAL	2.8
23	BP	83	THR	2.8
1	1	2252	U	2.8
1	AS	78	U	2.8
1	AS	815	U	2.8
3	AU	102	U	2.8
24	6	8	GLY	2.8
49	E	140	GLY	2.8
52	CS	101	GLY	2.8
55	CV	68	GLY	2.8
62	DC	38	GLY	2.8
7	m	4	GLN	2.8
10	BC	92	PHE	2.8
11	BD	79	ILE	2.8
16	BI	158	HIS	2.8
18	x	165	GLN	2.8
45	i	87	PRO	2.8
48	CO	24	PHE	2.8
54	CU	45	ILE	2.8
63	S	59	PHE	2.8
63	DD	35	ILE	2.8
67	DH	90	ILE	2.8

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Mol	Chain	Res	Type	RSRZ
79	DT	162	GLN	2.8
25	BR	21	PHE	2.8
77	DR	44	PHE	2.8
1	1	733	A	2.8
1	AS	2211	A	2.8
1	1	2848	C	2.8
1	AS	1667	C	2.8
1	AS	1845	C	2.8
1	AS	3182	C	2.8
11	BD	91	ARG	2.8
13	s	140	ARG	2.8
15	BH	37	ARG	2.8
18	x	126	ARG	2.8
32	AE	18	ARG	2.8
46	CM	829	A	2.8
46	CM	872	A	2.8
46	CM	1008	A	2.8
46	CM	1573	A	2.8
49	E	92	ARG	2.8
72	DM	77	ARG	2.8
4	AW	208	ASP	2.8
5	AX	386	ASP	2.8
15	BH	34	ASP	2.8
16	BI	79	ALA	2.8
24	BQ	113	ALA	2.8
26	BS	106	ASP	2.8
27	BT	36	SER	2.8
28	BU	86	SER	2.8
29	BV	16	SER	2.8
35	CB	46	ASP	2.8
50	CQ	205	ASP	2.8
7	m	30	TYR	2.8
22	2	30	TYR	2.8
51	CR	24	SER	2.8
59	O	128	ALA	2.8
60	P	13	SER	2.8
63	DD	15	ALA	2.8
69	DJ	107	SER	2.8
73	c	88	SER	2.8
4	AW	79	ASN	2.8
39	CF	77	ASN	2.8
4	j	70	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
5	k	387	LEU	2.8
6	AY	218	LYS	2.8
11	BD	105	LYS	2.8
15	BH	14	GLU	2.8
15	BH	62	LEU	2.8
19	y	94	LEU	2.8
20	z	152	GLU	2.8
28	AA	101	LEU	2.8
30	BW	28	LYS	2.8
31	BX	55	LYS	2.8
34	AG	58	GLU	2.8
47	C	154	GLU	2.8
48	D	120	LEU	2.8
49	CP	149	LEU	2.8
60	DA	45	LEU	2.8
60	DA	94	LYS	2.8
64	DE	79	GLU	2.8
65	DF	66	LEU	2.8
71	a	28	LEU	2.8
78	h	123	LYS	2.8
79	DT	240	LEU	2.8
10	p	174	MET	2.8
13	BF	125	MET	2.8
41	CH	1	MET	2.8
14	t	135	VAL	2.8
44	CK	71	VAL	2.8
53	CT	102	VAL	2.8
56	CW	81	VAL	2.8
71	a	24	VAL	2.8
74	d	62	VAL	2.8
1	1	2923	G	2.8
1	1	3052	G	2.8
1	AS	29	G	2.8
1	AS	335	G	2.8
1	AS	1537	G	2.8
1	AS	2611	G	2.8
46	B	89	G	2.8
46	CM	969	G	2.8
46	CM	1183	G	2.8
21	BN	145	THR	2.8
63	S	14	THR	2.8
67	W	65	THR	2.8

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Mol	Chain	Res	Type	RSRZ
4	AW	55	GLY	2.8
66	DG	42	GLY	2.8
79	AR	11	GLY	2.8
4	AW	147	ARG	2.7
6	AY	40	PHE	2.8
7	m	158	ARG	2.7
7	AZ	15	ARG	2.7
11	q	179	ILE	2.8
12	r	131	ILE	2.8
14	BG	46	ILE	2.8
15	BH	83	ILE	2.8
14	BG	106	GLN	2.7
15	u	48	GLN	2.7
19	BL	5	HIS	2.7
21	BN	115	ARG	2.7
33	AF	18	PHE	2.8
36	AI	114	ARG	2.7
36	CC	7	PHE	2.8
50	CQ	5	ILE	2.8
52	CS	83	ARG	2.7
54	J	42	ILE	2.8
54	CU	88	PHE	2.8
65	DF	22	ILE	2.8
65	DF	68	ARG	2.7
65	DF	85	PHE	2.8
66	V	54	PHE	2.8
1	1	146	U	2.7
1	1	2546	U	2.7
1	AS	1536	U	2.7
2	AT	12	U	2.7
46	B	499	U	2.7
46	B	607	U	2.7
46	B	616	U	2.7
63	S	34	PRO	2.7
73	DN	65	PRO	2.7
74	DO	66	PRO	2.7
75	DP	47	PRO	2.7
77	DR	58	PRO	2.7
62	DC	37	CYS	2.7
5	AX	107	ALA	2.7
16	v	185	ALA	2.7
29	AB	17	ALA	2.7

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Mol	Chain	Res	Type	RSRZ
59	CZ	101	ALA	2.7
4	AW	149	LYS	2.7
10	BC	30	SER	2.7
10	BC	147	LYS	2.7
16	BI	129	TYR	2.7
13	s	146	SER	2.7
19	BL	185	LYS	2.7
21	BN	96	ASP	2.7
22	2	142	SER	2.7
25	7	124	LYS	2.7
29	AB	46	ASP	2.7
31	AD	40	LYS	2.7
35	AH	21	LYS	2.7
47	CN	165	LYS	2.7
52	H	161	ASP	2.7
54	CU	175	LYS	2.7
55	CV	117	TYR	2.7
69	DJ	82	LYS	2.7
73	DN	68	TYR	2.7
56	L	145	SER	2.7
59	CZ	49	SER	2.7
79	DT	182	ASP	2.7
1	AS	843	A	2.7
6	AY	220	LEU	2.7
6	AY	326	LEU	2.7
16	v	134	LEU	2.7
16	BI	10	LEU	2.7
17	BJ	179	LEU	2.7
36	AI	55	LEU	2.7
46	B	1410	A	2.7
46	CM	962	A	2.7
46	CM	1316	A	2.7
46	CM	1752	A	2.7
56	L	60	LEU	2.7
63	S	51	LEU	2.7
63	DD	88	LEU	2.7
65	U	116	LEU	2.7
9	BB	228	ASN	2.7
35	CB	11	ASN	2.7
46	B	174	C	2.7
46	CM	25	C	2.7
52	H	100	ASN	2.7

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Mol	Chain	Res	Type	RSRZ
62	R	98	ASN	2.7
63	DD	31	ASN	2.7
79	AR	245	ASN	2.7
10	BC	203	GLU	2.7
11	BD	125	GLU	2.7
17	BJ	47	GLU	2.7
19	BL	78	GLU	2.7
21	0	27	MET	2.7
53	CT	122	GLU	2.7
61	Q	68	GLU	2.7
78	h	157	GLU	2.7
6	l	152	VAL	2.7
8	BA	97	VAL	2.7
13	BF	18	VAL	2.7
16	BI	18	VAL	2.7
54	J	136	VAL	2.7
70	DK	120	VAL	2.7
72	DM	62	VAL	2.7
79	DT	105	VAL	2.7
5	k	91	GLY	2.7
13	BF	121	GLY	2.7
14	BG	170	ARG	2.7
17	w	137	THR	2.7
18	BK	129	THR	2.7
19	BL	134	GLY	2.7
11	BD	117	PHE	2.7
15	BH	111	PHE	2.7
21	BN	25	PHE	2.7
27	9	20	PHE	2.7
27	BT	16	ARG	2.7
43	AP	54	THR	2.7
45	CL	59	GLY	2.7
50	CQ	77	ARG	2.7
53	I	85	ARG	2.7
55	K	8	ARG	2.7
55	CV	22	ARG	2.7
57	M	75	PHE	2.7
57	CX	86	ILE	2.7
60	DA	67	THR	2.7
62	R	113	GLY	2.7
63	S	30	ILE	2.7
65	DF	20	THR	2.7

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Mol	Chain	Res	Type	RSRZ
66	V	36	ILE	2.7
70	DK	2	GLY	2.7
71	a	13	ILE	2.7
76	DQ	15	GLY	2.7
4	j	178	PRO	2.7
7	AZ	177	PRO	2.7
8	BA	74	PRO	2.7
8	BA	138	GLN	2.7
20	BM	134	HIS	2.7
29	AB	62	HIS	2.7
50	CQ	44	PRO	2.7
53	CT	135	PRO	2.7
55	CV	179	PRO	2.7
60	DA	136	PRO	2.7
69	DJ	77	PRO	2.7
73	c	98	PRO	2.7
74	DO	19	HIS	2.7
1	AS	249	G	2.7
1	AS	489	G	2.7
1	AS	539	G	2.7
1	AS	607	G	2.7
1	AS	719	G	2.7
1	AS	1662	G	2.7
1	AS	1772	G	2.7
1	AS	2578	G	2.7
1	AS	2579	G	2.7
5	AX	8	ALA	2.7
6	AY	337	ALA	2.7
14	BG	168	ALA	2.7
23	5	112	ALA	2.7
28	AA	44	ALA	2.7
35	CB	75	ALA	2.7
46	CM	538	G	2.7
46	CM	781	G	2.7
46	CM	794	G	2.7
46	CM	1155	G	2.7
46	CM	1273	G	2.7
46	CM	1388	G	2.7
47	C	159	ALA	2.7
50	CQ	103	ALA	2.7
65	U	50	ALA	2.7
7	m	41	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
16	BI	47	LYS	2.7
17	BJ	69	LYS	2.7
32	AE	36	LYS	2.7
50	CQ	52	LYS	2.7
70	DK	30	LYS	2.7
78	h	139	LYS	2.7
16	v	22	LEU	2.7
24	6	125	LEU	2.7
27	9	85	LEU	2.7
28	BU	134	LEU	2.7
34	CA	29	LEU	2.7
46	CM	1295	U	2.7
46	CM	1652	U	2.7
51	CR	92	LEU	2.7
61	Q	132	LEU	2.7
66	DG	132	LEU	2.7
75	e	16	LEU	2.7
79	AR	267	LEU	2.7
29	BV	92	SER	2.7
30	AC	4	SER	2.7
32	BY	99	SER	2.7
48	D	119	SER	2.7
49	E	196	SER	2.7
60	DA	147	SER	2.7
70	DK	90	ASP	2.7
79	AR	266	SER	2.7
79	DT	113	SER	2.7
4	AW	134	VAL	2.7
13	BF	78	GLU	2.7
40	CG	38	ASN	2.7
45	i	126	GLU	2.7
50	CQ	93	GLU	2.7
53	CT	91	GLU	2.7
56	CW	41	GLU	2.7
61	DB	25	VAL	2.7
62	DC	26	VAL	2.7
1	1	1266	A	2.7
1	1	1584	A	2.7
1	AS	718	A	2.7
1	AS	1520	A	2.7
1	AS	2185	A	2.7
3	AU	65	A	2.7

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Mol	Chain	Res	Type	RSRZ
3	AU	133	A	2.7
46	B	1298	A	2.7
46	CM	1778	A	2.7
1	1	2545	C	2.7
1	1	2897	C	2.7
1	AS	749	C	2.7
1	AS	927	C	2.7
1	AS	2745	C	2.7
22	BO	102	ARG	2.7
36	CC	89	ARG	2.7
55	CV	152	ARG	2.7
6	AY	282	ILE	2.7
7	AZ	18	THR	2.7
7	AZ	253	PHE	2.7
11	BD	114	ILE	2.7
14	t	126	PHE	2.7
15	BH	33	ILE	2.7
38	CE	81	GLY	2.7
39	CF	8	ILE	2.7
46	CM	1488	C	2.7
47	CN	133	ILE	2.7
48	CO	189	ILE	2.7
49	CP	131	ILE	2.7
52	CS	62	ILE	2.7
52	CS	149	ILE	2.7
55	CV	154	GLY	2.7
10	BC	202	THR	2.7
16	BI	196	THR	2.7
22	BO	11	THR	2.7
22	BO	158	THR	2.7
29	AB	68	PHE	2.7
57	CX	41	PHE	2.7
66	DG	88	PHE	2.7
72	b	50	ILE	2.7
54	CU	74	THR	2.7
5	k	377[A]	HIS	2.7
24	BQ	117	PRO	2.7
27	BT	34	PRO	2.7
52	H	164	PRO	2.7
6	l	131	ALA	2.7
6	AY	131	ALA	2.7
9	BB	92	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
20	BM	8	LYS	2.7
21	BN	116	ALA	2.7
21	BN	142	GLN	2.7
23	BP	20	ALA	2.7
26	BS	94	GLN	2.7
36	CC	117	ALA	2.7
43	CJ	53	GLN	2.7
47	CN	99	ALA	2.7
50	F	31	ALA	2.7
52	H	210	ALA	2.7
62	DC	18	LYS	2.7
63	DD	17	ALA	2.7
64	DE	7	LYS	2.7
79	DT	40	LYS	2.7
4	AW	104	LEU	2.7
4	AW	150	LEU	2.7
5	AX	323	LEU	2.7
10	BC	83	LEU	2.7
11	BD	34	LEU	2.7
12	BE	210	LEU	2.7
13	s	112	LEU	2.7
33	BZ	88	LEU	2.7
34	CA	89	LEU	2.7
49	E	143	LEU	2.7
53	I	178	LEU	2.7
57	M	40	LEU	2.7
59	O	96	LEU	2.7
61	DB	78	LEU	2.7
64	T	91	LEU	2.7
66	DG	22	LEU	2.7
79	AR	240	LEU	2.7
10	BC	178	TYR	2.7
23	BP	81	TYR	2.7
32	BY	11	TYR	2.7
5	k	84	MET	2.7
4	j	202	VAL	2.7
6	l	223	VAL	2.7
6	l	267	SER	2.7
6	AY	223	VAL	2.7
26	BS	110	VAL	2.7
35	CB	66	SER	2.7
35	CB	72	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
48	CO	215	VAL	2.7
51	G	219	VAL	2.7
52	CS	168	VAL	2.7
56	CW	141	VAL	2.7
59	O	122	VAL	2.7
60	P	14	SER	2.7
70	DK	87	VAL	2.7
78	h	144	VAL	2.7
1	AS	194	U	2.7
1	AS	1668	U	2.7
46	B	696	U	2.7
46	B	917	U	2.7
46	CM	236	U	2.7
46	CM	815	U	2.7
46	CM	944	U	2.7
46	CM	1114	U	2.7
79	DT	31	ASP	2.7
1	AS	79	G	2.7
1	AS	303	G	2.7
1	AS	1397	G	2.7
1	AS	1664	G	2.7
6	AY	329	ASN	2.7
10	BC	230	ASN	2.7
13	BF	15	GLU	2.7
25	BR	88	GLU	2.7
30	BW	18	ARG	2.7
46	CM	394	G	2.7
46	CM	1625	G	2.7
52	H	81	ARG	2.7
66	DG	101	ASN	2.7
16	BI	173	GLY	2.7
27	BT	80	ILE	2.7
35	CB	28	GLY	2.7
35	CB	54	ILE	2.7
39	CF	11	PHE	2.7
51	G	4	GLY	2.7
51	CR	195	ILE	2.7
59	CZ	89	ILE	2.7
22	2	159	PHE	2.7
60	DA	79	GLY	2.7
63	DD	55	GLY	2.7
1	1	367	A	2.7

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Mol	Chain	Res	Type	RSRZ
1	AS	336	A	2.7
1	AS	909	A	2.7
1	AS	913	A	2.7
1	AS	2098	A	2.7
4	j	149	LYS	2.7
7	AZ	181	PRO	2.7
17	w	178	LYS	2.7
22	2	3	LYS	2.7
22	BO	26	PRO	2.7
28	BU	116	LYS	2.7
44	AQ	27	LYS	2.7
48	CO	143	THR	2.7
46	B	722	A	2.7
46	B	780	A	2.7
46	B	968	A	2.7
46	B	1061	A	2.7
46	CM	613	A	2.7
49	CP	171	LYS	2.7
52	CS	129	PRO	2.7
52	CS	213	LYS	2.7
59	CZ	34	THR	2.7
60	DA	76	LYS	2.7
66	DG	139	THR	2.7
68	X	14	PRO	2.7
4	AW	56	ALA	2.7
5	k	224	HIS	2.7
5	AX	378	ALA	2.7
6	AY	145	GLN	2.7
10	BC	115	ALA	2.7
1	1	2451	C	2.7
1	AS	889	C	2.7
1	AS	2385	C	2.7
3	4	84	C	2.7
3	4	137	C	2.7
9	o	161	LEU	2.7
12	r	212	GLN	2.7
18	BK	72	GLN	2.7
20	z	92	GLN	2.7
34	CA	55	ALA	2.7
36	CC	2	ALA	2.7
39	CF	15	ALA	2.7
44	CK	90	ALA	2.7

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Mol	Chain	Res	Type	RSRZ
46	B	1624	C	2.7
46	CM	222	C	2.7
46	CM	1317	C	2.7
47	C	177	LEU	2.7
52	H	37	GLN	2.7
56	CW	76	LEU	2.7
59	O	52	LEU	2.7
60	P	135	LEU	2.7
63	DD	27	LEU	2.7
63	DD	82	GLN	2.7
76	f	48	ALA	2.7
79	AR	281	ALA	2.7
25	7	54	LEU	2.7
53	I	212	LEU	2.7
56	L	70	LEU	2.7
63	DD	115	LEU	2.7
71	a	96	LEU	2.7
79	AR	23	LEU	2.7
80	ll	38	LEU	2.7
22	BO	13	TYR	2.7
33	BZ	26	TYR	2.7
54	J	138	TYR	2.7
5	AX	87	VAL	2.7
6	AY	167	VAL	2.7
6	AY	360	VAL	2.7
9	BB	84	VAL	2.7
13	s	71	VAL	2.7
14	BG	58	VAL	2.7
19	y	140	VAL	2.7
23	BP	43	VAL	2.7
34	CA	81	VAL	2.7
35	AH	22	VAL	2.7
39	AL	25	VAL	2.7
43	AP	68	VAL	2.7
47	C	123	VAL	2.7
67	W	89	VAL	2.7
6	l	189	ARG	2.7
7	m	279	ARG	2.7
16	BI	44	ARG	2.7
16	BI	49	ARG	2.7
35	AH	58	ARG	2.7
51	G	39	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
68	X	60	ARG	2.7
5	k	327	SER	2.7
15	BH	69	SER	2.7
26	BS	87	ASP	2.7
50	F	29	GLU	2.7
50	CQ	170	ASP	2.7
58	CY	143	SER	2.7
63	S	98	GLU	2.7
63	DD	2	SER	2.7
10	BC	205	ASN	2.7
16	v	64	ILE	2.7
45	CL	33	ASN	2.7
47	C	49	ASN	2.7
64	DE	124	ILE	2.7
66	DG	16	ASN	2.7
66	DG	65	ILE	2.7
78	h	155	ASN	2.7
1	1	1265	U	2.7
1	AS	793	U	2.7
1	AS	1432	U	2.7
1	AS	1580	U	2.7
8	n	48	GLY	2.7
43	AP	51	GLY	2.7
43	CJ	101	GLY	2.7
46	CM	881	U	2.7
46	CM	1367	U	2.7
53	CT	45	PHE	2.7
54	J	127	PHE	2.7
60	DA	113	PHE	2.7
4	AW	221	LYS	2.7
5	k	142	LYS	2.7
7	AZ	41	LYS	2.7
16	BI	169	LYS	2.7
20	z	85	LYS	2.7
25	BR	116	LYS	2.7
40	CG	10	LYS	2.7
62	DC	58	LYS	2.7
63	S	46	LYS	2.7
70	DK	82	LYS	2.7
6	AY	352	PRO	2.7
14	t	87	PRO	2.7
14	BG	130	THR	2.7

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Mol	Chain	Res	Type	RSRZ
18	BK	8	PRO	2.7
18	BK	183	THR	2.7
20	BM	90	PRO	2.7
36	CC	6	THR	2.7
38	CE	71	THR	2.7
43	CJ	64	THR	2.7
53	CT	12	THR	2.7
60	DA	46	THR	2.7
62	R	7	PRO	2.7
79	DT	25	THR	2.7
1	1	1238	G	2.7
1	AS	1385	G	2.7
1	AS	1479	G	2.7
1	AS	1753	G	2.7
1	AS	3342	G	2.7
5	k	246	LEU	2.7
8	BA	39	LEU	2.7
13	s	109	HIS	2.7
14	t	2	ALA	2.7
14	BG	40	LEU	2.7
15	BH	26	LEU	2.7
15	BH	51	ALA	2.7
19	BL	162	ALA	2.7
39	CF	59	ALA	2.7
43	CJ	90[A]	HIS	2.7
46	B	705	G	2.7
46	B	1284	G	2.7
46	CM	1150	G	2.7
46	CM	1434	G	2.7
52	H	110	ALA	2.7
53	CT	106	LEU	2.7
56	L	118	LEU	2.7
57	M	76	LEU	2.7
64	DE	100	LEU	2.7
66	DG	59	ALA	2.7
70	DK	76	LEU	2.7
79	DT	201	LEU	2.7
20	BM	92	GLN	2.7
36	AI	20	GLN	2.7
36	AI	107	GLN	2.7
54	J	146	GLN	2.7
1	1	1255	A	2.7

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Mol	Chain	Res	Type	RSRZ
1	AS	2222	A	2.7
24	BQ	57	MET	2.7
46	B	473	A	2.7
46	CM	105	A	2.7
52	CS	98	MET	2.7
8	n	97	VAL	2.7
10	p	126	VAL	2.7
12	BE	22	TYR	2.7
13	s	171	VAL	2.7
24	BQ	118	VAL	2.7
48	D	114	VAL	2.7
49	E	96	VAL	2.7
49	CP	125	VAL	2.7
51	CR	139	VAL	2.7
52	CS	162	VAL	2.7
54	J	87	VAL	2.7
66	DG	80	TYR	2.7
69	DJ	62	VAL	2.7
80	ll	167	VAL	2.7
1	AS	2317	C	2.7
1	AS	2321	C	2.7
1	AS	2594	C	2.7
18	x	173	ARG	2.7
46	CM	758	C	2.7
51	CR	3	ARG	2.7
67	W	56	ARG	2.7
67	W	101	ARG	2.7
13	s	22	CYS	2.7
4	AW	137	ILE	2.6
7	AZ	64	ILE	2.6
20	BM	41	ILE	2.6
26	BS	142	ILE	2.6
50	CQ	74	ILE	2.6
52	H	89	ILE	2.6
5	AX	156	SER	2.6
7	AZ	223	PHE	2.6
8	BA	142	ASP	2.6
13	s	24	GLY	2.6
14	BG	127	ASP	2.6
15	BH	108	PHE	2.6
18	BK	180	LYS	2.6
21	BN	55	SER	2.6

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Mol	Chain	Res	Type	RSRZ
21	BN	150	PHE	2.6
22	BO	3	LYS	2.6
30	BW	23	LYS	2.6
38	AK	46	SER	2.6
52	CS	181	GLU	2.6
43	AP	6	LYS	2.6
44	AQ	20	SER	2.6
45	CL	96	LYS	2.6
47	C	115	PHE	2.6
48	D	53	GLY	2.6
53	CT	78	SER	2.6
56	CW	72	GLU	2.6
53	CT	146	GLY	2.6
62	R	17	PHE	2.6
63	DD	9	PHE	2.6
65	U	23	ASP	2.6
65	U	96	LYS	2.6
71	a	23	PHE	2.6
74	DO	70	LYS	2.6
78	DS	191	LYS	2.6
79	AR	98	GLY	2.6
79	AR	161	ASP	2.6
79	DT	288	SER	2.6
7	m	57	ASN	2.6
52	H	66	ASN	2.6
73	c	69	ASN	2.6
7	AZ	110	LEU	2.6
9	BB	97	PRO	2.6
1	1	1341	U	2.6
1	1	2471	U	2.6
1	1	2838	U	2.6
1	AS	181	U	2.6
1	AS	2069	U	2.6
10	BC	116	ALA	2.6
12	BE	174	THR	2.6
17	w	29	LEU	2.6
26	8	132	ALA	2.6
44	CK	78	THR	2.6
46	B	238	U	2.6
46	B	764	U	2.6
46	CM	15	U	2.6
46	CM	817	U	2.6

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Mol	Chain	Res	Type	RSRZ
46	CM	1483	U	2.6
49	E	202	THR	2.6
51	CR	12	LEU	2.6
51	CR	220	THR	2.6
53	I	138	ALA	2.6
54	J	36	PRO	2.6
26	BS	119	THR	2.6
58	N	47	ALA	2.6
60	DA	148	ALA	2.6
61	Q	33	THR	2.6
64	DE	35	THR	2.6
67	W	26	THR	2.6
69	DJ	108	ALA	2.6
73	DN	60	ALA	2.6
74	DO	45	THR	2.6
74	DO	50	ALA	2.6
79	DT	48	THR	2.6
79	DT	251	ALA	2.6
79	DT	254	THR	2.6
33	AF	22	HIS	2.6
38	AK	69	HIS	2.6
12	r	163	GLN	2.6
53	CT	59	GLN	2.6
6	AY	173	VAL	2.6
6	AY	180	VAL	2.6
6	AY	226	VAL	2.6
11	q	43	VAL	2.6
13	BF	8	VAL	2.6
18	BK	113	VAL	2.6
19	BL	144	ARG	2.6
20	BM	64	ARG	2.6
27	BT	95	VAL	2.6
27	BT	115	ARG	2.6
43	CJ	25	VAL	2.6
47	C	143	VAL	2.6
50	F	137	VAL	2.6
50	F	179	ARG	2.6
52	CS	166	ARG	2.6
54	CU	117	VAL	2.6
55	CV	56	ARG	2.6
58	CY	122	VAL	2.6
61	DB	130	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
66	V	4	VAL	2.6
66	DG	105	VAL	2.6
76	f	40	ARG	2.6
77	DR	37	ARG	2.6
77	DR	42	ARG	2.6
12	BE	11	TYR	2.6
16	BI	81	TYR	2.6
26	BS	46	TYR	2.6
28	BU	18	TYR	2.6
55	CV	172	TYR	2.6
76	f	34	TYR	2.6
1	1	1025	G	2.6
1	AS	1646	G	2.6
1	AS	1648	G	2.6
1	AS	1739	G	2.6
1	AS	2133	G	2.6
1	AS	2378	G	2.6
2	3	91	G	2.6
3	4	15	G	2.6
46	B	1070	G	2.6
46	B	1358	G	2.6
46	B	1388	G	2.6
46	CM	327	G	2.6
46	CM	1372	G	2.6
46	CM	1518	G	2.6
1	1	1090	A	2.6
1	AS	1579	A	2.6
1	AS	1601	A	2.6
1	AS	2117	A	2.6
1	AS	2408	A	2.6
1	AS	2774	A	2.6
3	AU	66	A	2.6
5	AX	127	LYS	2.6
6	l	194	LYS	2.6
7	m	231	ILE	2.6
15	BH	50	ILE	2.6
16	v	169	LYS	2.6
16	v	182	LYS	2.6
17	BJ	6	LYS	2.6
18	BK	80	LYS	2.6
29	BV	138	ILE	2.6
39	CF	9	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
46	B	929	A	2.6
46	B	1316	A	2.6
46	CM	740	A	2.6
49	CP	213	ILE	2.6
52	CS	29	ILE	2.6
53	I	174	LYS	2.6
54	CU	40	LYS	2.6
62	DC	59	LYS	2.6
68	DI	34	ILE	2.6
79	AR	43	ILE	2.6
4	AW	99	GLY	2.6
7	AZ	281	GLU	2.6
14	BG	178	GLU	2.6
16	BI	70	GLY	2.6
25	7	114	GLU	2.6
33	BZ	42	CYS	2.6
43	AP	101	GLY	2.6
48	CO	205	PHE	2.6
50	CQ	78	PHE	2.6
52	H	91	GLU	2.6
52	CS	216	GLU	2.6
56	L	20	GLU	2.6
57	M	98	GLU	2.6
60	DA	68	GLY	2.6
79	AR	264	GLU	2.6
1	1	1156	C	2.6
1	AS	1799	C	2.6
2	AT	116	C	2.6
5	AX	345	ASP	2.6
19	BL	7	SER	2.6
24	BQ	56	ASP	2.6
31	AD	93	SER	2.6
31	BX	22	SER	2.6
40	CG	3	SER	2.6
46	B	1060	C	2.6
46	CM	895	C	2.6
46	CM	1133	C	2.6
46	CM	1269	C	2.6
46	CM	1417	C	2.6
53	CT	233	SER	2.6
60	DA	12	SER	2.6
20	BM	24	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
7	m	100	ALA	2.6
11	BD	153	ALA	2.6
14	BG	53	ALA	2.6
14	BG	132	ALA	2.6
16	BI	74	PRO	2.6
22	BO	14	ALA	2.6
23	5	71	ASN	2.6
39	CF	69	LEU	2.6
48	CO	73	LEU	2.6
48	CO	218	LEU	2.6
50	CQ	6	LEU	2.6
53	I	75	LEU	2.6
53	CT	24	LEU	2.6
68	DI	78	LEU	2.6
76	DQ	5	ASN	2.6
79	DT	262	LEU	2.6
29	BV	100	PRO	2.6
53	CT	192	ALA	2.6
54	J	90	ALA	2.6
66	V	137	ALA	2.6
71	a	130	ALA	2.6
71	DL	4	ALA	2.6
5	k	103	THR	2.6
7	AZ	120	THR	2.6
15	u	58	THR	2.6
21	BN	98	THR	2.6
54	CU	129	THR	2.6
56	CW	11	THR	2.6
58	CY	44	THR	2.6
80	ll	63	MET	2.6
19	BL	147	ARG	2.6
30	BW	12	GLN	2.6
37	AJ	75	ARG	2.6
46	B	176	U	2.6
46	CM	1585	U	2.6
47	CN	121	VAL	2.6
48	CO	21	VAL	2.6
49	CP	84	GLN	2.6
64	DE	60	ARG	2.6
71	DL	126	GLN	2.6
76	DQ	19	ARG	2.6
1	1	2080	U	2.6

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Mol	Chain	Res	Type	RSRZ
1	AS	125	U	2.6
1	AS	1451	U	2.6
1	AS	2399	U	2.6
1	AS	2927	U	2.6
4	j	82	VAL	2.6
6	AY	31	VAL	2.6
7	m	73	VAL	2.6
51	G	160	VAL	2.6
52	H	111	VAL	2.6
53	CT	195	VAL	2.6
62	R	41	VAL	2.6
62	DC	20	VAL	2.6
75	e	25	VAL	2.6
79	DT	19	TRP	2.6
4	j	60	LYS	2.6
16	v	6	TYR	2.6
16	BI	182	LYS	2.6
19	BL	33	TYR	2.6
20	z	80	LYS	2.6
20	BM	133	LYS	2.6
25	BR	97	LYS	2.6
29	BV	60	TYR	2.6
30	AC	28	LYS	2.6
58	CY	43	LYS	2.6
70	DK	56	LYS	2.6
79	DT	44	LYS	2.6
20	BM	115	ILE	2.6
29	BV	102	ILE	2.6
37	CD	25	ILE	2.6
64	DE	38	ILE	2.6
65	U	69	ILE	2.6
8	BA	46	PHE	2.6
50	CQ	18	PHE	2.6
6	AY	215	GLY	2.6
7	AZ	263	GLU	2.6
13	s	170	GLU	2.6
16	v	104	GLU	2.6
16	BI	78	GLY	2.6
18	BK	174	GLY	2.6
50	CQ	21	GLU	2.6
6	AY	95	CYS	2.6
19	BL	49	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
32	AE	15	LEU	2.6
49	CP	129	LEU	2.6
64	DE	73	LEU	2.6
1	AS	76	A	2.6
1	AS	929	A	2.6
1	AS	2323	A	2.6
5	k	38	SER	2.6
5	k	176	ALA	2.6
22	BO	53	PRO	2.6
31	BX	41	ALA	2.6
36	CC	13	SER	2.6
42	AO	24	SER	2.6
46	CM	254	A	2.6
46	CM	540	A	2.6
46	CM	847	A	2.6
46	CM	1181	A	2.6
46	CM	1272	A	2.6
46	CM	1396	A	2.6
46	CM	1601	A	2.6
46	B	1765	G	2.6
46	CM	877	G	2.6
46	CM	1058	G	2.6
47	C	72	ASP	2.6
49	CP	229	PRO	2.6
51	CR	13	ALA	2.6
53	I	70	PRO	2.6
54	J	20	ALA	2.6
59	O	87	PRO	2.6
70	Z	31	ALA	2.6
79	DT	169	ALA	2.6
79	DT	210	SER	2.6
1	1	2108	G	2.6
1	AS	226	G	2.6
1	AS	304	G	2.6
1	AS	595	G	2.6
1	AS	818	G	2.6
1	AS	1657	G	2.6
1	AS	1901	G	2.6
1	AS	2919	G	2.6
1	AS	3031	G	2.6
2	AT	49	G	2.6
3	AU	95	G	2.6

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Mol	Chain	Res	Type	RSRZ
3	AU	136	G	2.6
27	9	98	ASN	2.6
54	J	143	ASN	2.6
1	AS	67	C	2.6
1	AS	2180	C	2.6
6	AY	116	HIS	2.6
9	o	98	ARG	2.6
10	BC	233	HIS	2.6
11	BD	58	HIS	2.6
14	BG	23	ARG	2.6
14	BG	62	THR	2.6
23	BP	93	ARG	2.6
29	BV	21	ARG	2.6
38	CE	63	ARG	2.6
47	CN	185	ARG	2.6
50	F	56	THR	2.6
50	CQ	71	THR	2.6
53	I	163	THR	2.6
54	CU	71	THR	2.6
55	CV	5	ARG	2.6
65	DF	126	ARG	2.6
70	DK	32	ARG	2.6
73	c	96	THR	2.6
9	BB	154	VAL	2.6
13	s	23	VAL	2.6
35	CB	85	VAL	2.6
49	CP	58	VAL	2.6
50	CQ	224	VAL	2.6
60	P	65	VAL	2.6
61	Q	69	VAL	2.6
62	R	85	VAL	2.6
65	U	52	VAL	2.6
66	V	30	VAL	2.6
70	Z	74	VAL	2.6
81	12	128	VAL	2.6
53	CT	176	GLN	2.6
8	BA	131	LYS	2.6
26	8	89	LYS	2.6
30	BW	56	LYS	2.6
48	CO	144	LYS	2.6
56	L	29	LYS	2.6
70	DK	78	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
81	12	130	LYS	2.6
1	AS	77	U	2.6
3	AU	67	U	2.6
11	q	41	ILE	2.6
12	r	76	ILE	2.6
16	BI	23	TYR	2.6
24	6	35	TYR	2.6
25	BR	49	ILE	2.6
46	B	1300	U	2.6
46	CM	88	U	2.6
46	CM	804	U	2.6
47	CN	173	ILE	2.6
49	CP	52	TYR	2.6
60	P	90	TYR	2.6
69	Y	47	ILE	2.6
13	s	104	PHE	2.6
48	D	38	PHE	2.6
69	DJ	37	PHE	2.6
27	BT	68	GLY	2.6
75	e	46	GLY	2.6
11	q	151	LEU	2.6
19	y	104	LEU	2.6
33	BZ	83	LEU	2.6
35	CB	51	LEU	2.6
48	D	207	LEU	2.6
49	CP	143	LEU	2.6
51	G	56	LEU	2.6
59	O	78	LEU	2.6
60	DA	28	LEU	2.6
79	AR	95	LEU	2.6
80	ll	144	LEU	2.6
39	AL	4	GLU	2.6
51	G	199	GLU	2.6
5	k	76	ALA	2.6
5	AX	374	ALA	2.6
6	AY	103	PRO	2.6
10	BC	104	ALA	2.6
15	BH	85	ALA	2.6
26	BS	52	PRO	2.6
27	BT	93	ALA	2.6
35	CB	32	ALA	2.6
37	CD	51	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
44	CK	74	ALA	2.6
47	CN	145	ALA	2.6
40	CG	36	ARG	2.6
44	CK	24	ARG	2.6
49	CP	151	CYS	2.6
54	CU	98	PRO	2.6
55	CV	196	ALA	2.6
58	CY	48	ALA	2.6
61	DB	35	ALA	2.6
73	DN	48	ALA	2.6
50	F	140	SER	2.6
51	CR	171	ASP	2.6
52	CS	206	SER	2.6
53	CT	83	CYS	2.6
74	d	10	PRO	2.6
5	k	115	ARG	2.6
7	AZ	33	ARG	2.6
11	BD	115	ARG	2.6
12	r	32	ARG	2.6
14	BG	100	ARG	2.6
11	BD	90	MET	2.6
20	BM	59	SER	2.6
57	CX	60	SER	2.6
61	DB	119	ASP	2.6
66	DG	63	ARG	2.6
66	DG	97	SER	2.6
4	j	139	HIS	2.6
5	AX	205	VAL	2.6
9	BB	170	ASN	2.6
11	BD	70	THR	2.6
12	r	144	ASN	2.6
19	BL	150	VAL	2.6
28	AA	24	VAL	2.6
28	BU	135	HIS	2.6
44	AQ	56	ASN	2.6
47	CN	193	THR	2.6
51	G	17	HIS	2.6
59	CZ	134	ASN	2.6
66	DG	43	ASN	2.6
79	DT	314	THR	2.6
1	1	1499	A	2.6
1	AS	1891	A	2.6

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Mol	Chain	Res	Type	RSRZ
1	AS	2764	A	2.6
13	BF	4	LYS	2.6
26	BS	74	LYS	2.6
43	CJ	13	LYS	2.6
45	i	32	LYS	2.6
46	B	1654	A	2.6
46	CM	504	A	2.6
46	CM	1455	A	2.6
46	CM	1750	A	2.6
50	F	109	LYS	2.6
50	CQ	152	LYS	2.6
55	K	75	LYS	2.6
61	Q	87	LYS	2.6
73	DN	93	LYS	2.6
78	h	134	LYS	2.6
7	AZ	275	GLN	2.6
12	r	59	GLN	2.6
18	x	34	GLN	2.6
39	CF	66	GLN	2.6
52	CS	34	GLN	2.6
57	CX	13	GLN	2.6
1	1	2218	G	2.6
1	1	3246	C	2.6
1	AS	57	G	2.6
1	AS	71	C	2.6
1	AS	74	G	2.6
1	AS	147	G	2.6
1	AS	746	G	2.6
12	r	171	TRP	2.6
46	CM	830	G	2.6
46	CM	907	G	2.6
46	CM	1358	G	2.6
47	CN	175	TRP	2.6
1	AS	1544	C	2.6
1	AS	2106	C	2.6
12	BE	50	ILE	2.6
18	BK	67	ILE	2.6
46	CM	1481	C	2.6
47	C	98	ILE	2.6
50	F	50	ILE	2.6
51	G	195	ILE	2.6
58	CY	84	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
63	S	35	ILE	2.6
69	Y	86	ILE	2.6
7	AZ	99	TYR	2.6
10	BC	135	TYR	2.6
22	BO	65	TYR	2.6
29	AB	60	TYR	2.6
35	AH	13	TYR	2.6
40	CG	7	PHE	2.6
52	CS	209	TYR	2.6
56	CW	8	TYR	2.6
72	DM	47	TYR	2.6
80	ll	68	PHE	2.6
13	s	91	LEU	2.6
14	BG	84	GLY	2.6
16	BI	113	LEU	2.6
20	z	73	GLY	2.6
26	8	82	LEU	2.6
27	BT	123	GLY	2.6
29	AB	51	GLY	2.6
33	AF	87	LEU	2.6
33	BZ	67	LEU	2.6
34	AG	89	LEU	2.6
43	AP	39	GLY	2.6
49	CP	56	LEU	2.6
49	CP	220	LEU	2.6
51	CR	20	LEU	2.6
51	CR	261	GLY	2.6
59	CZ	137	LEU	2.6
62	DC	56	LEU	2.6
64	T	26	LEU	2.6
65	U	15	LEU	2.6
65	U	109	LEU	2.6
70	DK	129	GLY	2.6
78	h	188	LEU	2.6
79	AR	298	LEU	2.6
1	1	1550	U	2.6
1	AS	599	U	2.6
1	AS	1526	U	2.6
1	AS	1779	U	2.6
1	AS	1920	U	2.6
1	AS	2568	U	2.6
46	B	1600	U	2.6

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Mol	Chain	Res	Type	RSRZ
46	CM	897	U	2.6
46	CM	1630	U	2.6
4	AW	36	GLU	2.6
5	k	200	GLU	2.6
6	AY	203	ARG	2.6
12	BE	153	ARG	2.6
17	BJ	102	ARG	2.6
24	BQ	99	ALA	2.6
28	BU	100	ALA	2.6
53	CT	94	ARG	2.6
55	CV	13	ALA	2.6
65	U	64	GLU	2.6
65	DF	67	GLU	2.6
66	V	29	GLU	2.6
76	f	4	GLU	2.6
78	h	162	GLU	2.6
36	AI	108	ARG	2.6
36	CC	39	PRO	2.6
56	CW	132	ARG	2.6
66	DG	122	ARG	2.6
32	AE	70	MET	2.6
5	AX	322	VAL	2.6
6	l	45	LYS	2.6
12	BE	91	VAL	2.6
17	w	25	SER	2.6
17	BJ	92	LYS	2.6
25	BR	2	LYS	2.6
29	BV	15	VAL	2.6
30	AC	3	LYS	2.6
30	BW	4	SER	2.6
33	BZ	40	ASP	2.6
36	AI	98	SER	2.6
37	CD	66	LYS	2.6
43	CJ	46	LYS	2.6
45	i	53	LYS	2.6
52	CS	40	VAL	2.6
53	I	136	LYS	2.6
56	CW	157	ASP	2.6
58	CY	9	SER	2.6
58	CY	52	SER	2.6
62	DC	46	SER	2.6
63	DD	33	SER	2.6

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Mol	Chain	Res	Type	RSRZ
64	T	44	LYS	2.6
65	U	121	SER	2.6
69	Y	121	VAL	2.6
6	l	59	HIS	2.6
8	n	101	ASN	2.6
24	BQ	24	ASN	2.6
28	BU	40	HIS	2.6
45	CL	83	HIS	2.6
64	T	54	THR	2.6
67	W	112	ASP	2.6
79	AR	65	HIS	2.6
13	BF	148	ILE	2.5
16	BI	95	GLN	2.5
18	x	140	GLN	2.5
19	y	101	ILE	2.5
20	z	142	ILE	2.5
22	2	63	ILE	2.5
22	2	76	ILE	2.5
22	BO	49	GLN	2.5
25	7	79	GLN	2.5
36	AI	113	GLN	2.5
57	M	47	GLN	2.5
28	AA	129	TRP	2.5
29	AB	69	TRP	2.5
63	DD	30	ILE	2.5
64	DE	61	ILE	2.5
70	DK	136	TRP	2.5
1	AS	108	A	2.5
1	AS	200	A	2.5
1	AS	254	A	2.5
1	AS	708	A	2.5
1	AS	2345	A	2.5
5	AX	137	TYR	2.5
9	BB	220	PHE	2.5
6	AY	325	LEU	2.5
7	m	190	LEU	2.5
7	AZ	119	TYR	2.5
14	t	26	PHE	2.5
24	BQ	125	LEU	2.5
29	BV	52	TYR	2.5
46	CM	929	A	2.5
46	CM	1179	A	2.5

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Mol	Chain	Res	Type	RSRZ
46	CM	1298	A	2.5
48	D	205	PHE	2.5
57	CX	15	LEU	2.5
60	P	89	TYR	2.5
66	V	55	TYR	2.5
71	DL	94	TYR	2.5
72	DM	83	LEU	2.5
10	BC	36	GLY	2.5
22	2	2	GLY	2.5
51	G	25	GLY	2.5
55	CV	187	GLY	2.5
1	1	1011	C	2.5
1	AS	124	C	2.5
1	AS	1592	C	2.5
1	AS	1653	C	2.5
1	AS	1777	C	2.5
1	AS	2597	C	2.5
4	j	182	ALA	2.5
7	m	21	ARG	2.5
16	v	167	ALA	2.5
37	CD	55	ARG	2.5
42	AO	6	ARG	2.5
46	CM	1007	C	2.5
46	CM	1516	C	2.5
44	CK	75	ALA	2.5
45	i	41	ALA	2.5
60	DA	121	ARG	2.5
63	S	135	ALA	2.5
67	DH	45	ALA	2.5
1	1	2944	G	2.5
1	AS	215	G	2.5
1	AS	500	G	2.5
1	AS	906	G	2.5
1	AS	1068	G	2.5
1	AS	1503	G	2.5
1	AS	1510	G	2.5
1	AS	2285	G	2.5
1	AS	2721	G	2.5
10	p	203	GLU	2.5
14	t	50	PRO	2.5
16	BI	8	GLU	2.5
21	0	82	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
25	BR	114	GLU	2.5
35	CB	59	PRO	2.5
38	CE	40	PRO	2.5
46	B	1405	G	2.5
46	CM	354	G	2.5
46	CM	938	G	2.5
46	CM	1093	G	2.5
46	CM	1103	G	2.5
46	CM	1546	G	2.5
49	CP	234	PRO	2.5
53	I	150	GLU	2.5
60	DA	23	PRO	2.5
65	DF	65	GLU	2.5
70	Z	141	GLU	2.5
72	DM	91	PRO	2.5
1	AS	444	U	2.5
1	AS	1596	U	2.5
1	AS	2260	U	2.5
1	AS	3284	U	2.5
5	k	192	VAL	2.5
7	AZ	270	LYS	2.5
8	n	83	VAL	2.5
15	BH	74	VAL	2.5
16	v	184	LYS	2.5
16	BI	83	LYS	2.5
19	y	84	VAL	2.5
23	BP	88	LYS	2.5
23	BP	99	VAL	2.5
27	BT	59	VAL	2.5
30	AC	40	LYS	2.5
32	AE	97	VAL	2.5
46	B	94	U	2.5
46	CM	8	U	2.5
46	CM	1016	U	2.5
47	CN	58	VAL	2.5
48	CO	187	LYS	2.5
54	CU	126	VAL	2.5
56	L	68	LYS	2.5
56	CW	37	LYS	2.5
57	CX	21	VAL	2.5
58	N	142	VAL	2.5
58	CY	56	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
59	O	115	VAL	2.5
61	DB	69	VAL	2.5
64	T	15	VAL	2.5
67	DH	89	VAL	2.5
70	DK	124	VAL	2.5
80	ll	32	VAL	2.5
5	AX	134	SER	2.5
33	AF	40	ASP	2.5
35	CB	79	SER	2.5
45	i	83	HIS	2.5
48	CO	158	SER	2.5
49	CP	218	SER	2.5
51	G	223	SER	2.5
79	AR	208	CYS	2.5
79	DT	158	SER	2.5
6	AY	317	ASN	2.5
9	o	170	ASN	2.5
17	BJ	43	ASN	2.5
50	CQ	116	ILE	2.5
53	CT	139	ASN	2.5
75	e	53	ILE	2.5
76	f	13	ASN	2.5
18	BK	179	GLN	2.5
21	BN	157	GLN	2.5
6	AY	234	LEU	2.5
7	m	180	PHE	2.5
11	BD	151	LEU	2.5
16	v	10	LEU	2.5
17	BJ	59	LEU	2.5
18	BK	90	PHE	2.5
47	CN	54	TRP	2.5
51	G	47	PHE	2.5
52	H	82	PHE	2.5
79	DT	178	TRP	2.5
31	BX	92	LEU	2.5
32	AE	41	LEU	2.5
52	H	174	LEU	2.5
54	J	95	LEU	2.5
54	CU	24	LEU	2.5
54	CU	168	LEU	2.5
70	DK	132	LEU	2.5
5	AX	6	TYR	2.5

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Mol	Chain	Res	Type	RSRZ
21	BN	81	TYR	2.5
24	6	94	TYR	2.5
35	CB	77	GLY	2.5
52	H	75	GLY	2.5
60	DA	8	GLY	2.5
63	S	55	GLY	2.5
63	DD	72	GLY	2.5
70	DK	108	GLY	2.5
12	BE	24	ARG	2.5
19	y	179	ARG	2.5
30	AC	58	ARG	2.5
56	L	53	ARG	2.5
63	S	65	ARG	2.5
4	AW	182	ALA	2.5
12	r	2	ALA	2.5
16	v	146	ALA	2.5
30	BW	59	ALA	2.5
35	CB	50	ALA	2.5
49	E	87	ALA	2.5
49	E	208	ALA	2.5
50	F	154	ALA	2.5
50	CQ	20	ALA	2.5
50	CQ	53	ALA	2.5
51	G	213	ALA	2.5
52	H	74	ALA	2.5
55	K	13	ALA	2.5
59	O	42	ALA	2.5
76	DQ	48	ALA	2.5
80	ll	112	ALA	2.5
1	1	47	A	2.5
1	1	3192	A	2.5
1	AS	2193	A	2.5
1	AS	2532	A	2.5
46	B	217	A	2.5
46	B	481	A	2.5
46	B	918	A	2.5
46	CM	1202	A	2.5
6	AY	144	GLU	2.5
11	BD	135	GLU	2.5
26	BS	35	PRO	2.5
29	AB	93	LYS	2.5
33	BZ	9	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
38	CE	3	LYS	2.5
40	AM	24	PRO	2.5
45	i	38	LYS	2.5
47	C	118	PRO	2.5
55	K	41	LYS	2.5
57	M	88	PRO	2.5
59	CZ	76	GLU	2.5
71	a	111	LYS	2.5
77	g	27	PRO	2.5
11	BD	71	VAL	2.5
11	BD	154	VAL	2.5
14	t	124	VAL	2.5
38	AK	70	VAL	2.5
53	CT	157	VAL	2.5
56	CW	85	VAL	2.5
58	CY	64	VAL	2.5
59	O	116	VAL	2.5
63	DD	21	VAL	2.5
64	T	4	VAL	2.5
80	ll	151	VAL	2.5
1	1	1913	C	2.5
1	AS	1465	C	2.5
1	AS	1632	C	2.5
1	AS	2572	C	2.5
1	AS	2698	C	2.5
46	B	1340	C	2.5
46	CM	90	C	2.5
46	CM	1558	C	2.5
1	1	2068	U	2.5
1	1	2968	U	2.5
1	AS	1683	U	2.5
1	AS	2305	U	2.5
1	AS	3140	U	2.5
6	AY	127	ILE	2.5
7	m	203	HIS	2.5
14	t	137	SER	2.5
14	t	146	THR	2.5
17	BJ	2	SER	2.5
31	AD	26	THR	2.5
46	CM	1376	U	2.5
46	CM	1522	U	2.5
47	CN	187	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
48	CO	52	THR	2.5
60	DA	131	THR	2.5
65	U	127	HIS	2.5
1	1	1017	G	2.5
1	1	1895	G	2.5
1	1	1931	G	2.5
1	1	2527	G	2.5
1	1	3100	G	2.5
1	AS	1723	G	2.5
1	AS	1782	G	2.5
1	AS	2580	G	2.5
35	CB	49	SER	2.5
49	CP	141	SER	2.5
55	CV	66	SER	2.5
66	V	116	ILE	2.5
68	DI	46	ILE	2.5
69	DJ	53	ILE	2.5
70	DK	52	ILE	2.5
75	DP	21	SER	2.5
79	AR	255	SER	2.5
79	DT	200	THR	2.5
30	AC	36	ASP	2.5
45	CL	111	ASP	2.5
46	B	555	G	2.5
46	CM	388	G	2.5
46	CM	1773	G	2.5
5	AX	194	TRP	2.5
6	AY	151	LEU	2.5
14	t	9	LEU	2.5
14	BG	174	LEU	2.5
16	v	164	LEU	2.5
17	w	53	LEU	2.5
17	BJ	51	ASN	2.5
18	BK	94	LEU	2.5
19	BL	28	LEU	2.5
27	9	6	GLN	2.5
36	CC	69	PHE	2.5
70	Z	79	ASN	2.5
70	Z	107	PHE	2.5
76	f	49	ASP	2.5
43	AP	47	GLN	2.5
45	i	103	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
48	CO	97	LEU	2.5
52	H	170	GLN	2.5
56	L	74	ASN	2.5
59	CZ	111	ASN	2.5
65	DF	104	ASN	2.5
80	ll	27	ASN	2.5
4	j	6	ARG	2.5
5	AX	49	TYR	2.5
7	AZ	279	ARG	2.5
12	BE	181	TYR	2.5
14	BG	35	ARG	2.5
14	BG	41	ARG	2.5
19	BL	14	GLY	2.5
21	BN	99	ARG	2.5
32	BY	73	ARG	2.5
51	CR	203	GLY	2.5
53	CT	66	GLY	2.5
59	CZ	117	GLY	2.5
66	DG	57	ARG	2.5
72	b	81	ARG	2.5
5	AX	250	ALA	2.5
7	m	287	ALA	2.5
10	p	256	ALA	2.5
15	BH	88	ALA	2.5
17	BJ	145	ALA	2.5
25	7	128	ALA	2.5
25	BR	103	ALA	2.5
26	8	22	LYS	2.5
29	AB	149	ALA	2.5
38	CE	14	LYS	2.5
42	AO	16	LYS	2.5
49	E	244	ALA	2.5
52	CS	110	ALA	2.5
78	h	191	LYS	2.5
69	DJ	41	MET	2.5
5	k	336	VAL	2.5
6	AY	160	VAL	2.5
12	r	43	VAL	2.5
20	z	14	VAL	2.5
49	E	178	VAL	2.5
52	CS	132	VAL	2.5
53	CT	173	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
33	AF	31	GLU	2.5
36	AI	100	GLU	2.5
55	K	146	GLU	2.5
55	CV	162	VAL	2.5
60	P	132	VAL	2.5
63	DD	89	VAL	2.5
65	DF	106	GLU	2.5
70	DK	55	GLU	2.5
1	1	369	A	2.5
1	AS	22	A	2.5
1	AS	958	A	2.5
1	AS	2612	A	2.5
46	B	925	A	2.5
46	CM	483	A	2.5
46	CM	876	A	2.5
46	CM	1124	A	2.5
4	AW	88	ILE	2.5
11	q	75	ILE	2.5
22	BO	98	HIS	2.5
26	BS	62	ILE	2.5
26	BS	135	ILE	2.5
32	AE	96	ILE	2.5
47	C	187	ILE	2.5
48	D	197	ILE	2.5
52	H	199	ILE	2.5
52	CS	122	HIS	2.5
60	DA	122	ILE	2.5
61	Q	110	ILE	2.5
63	S	84	ILE	2.5
65	DF	72	ILE	2.5
66	V	100	ILE	2.5
66	V	111	ILE	2.5
66	DG	124	ILE	2.5
8	n	46	PHE	2.5
8	BA	105	PHE	2.5
11	BD	45	PHE	2.5
13	s	139	THR	2.5
13	BF	40	LEU	2.5
17	BJ	74	PHE	2.5
20	BM	56	THR	2.5
21	BN	162	LEU	2.5
24	6	11	PHE	2.5

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Mol	Chain	Res	Type	RSRZ
25	7	19	THR	2.5
33	BZ	90	THR	2.5
50	CQ	27	THR	2.5
54	J	114	LEU	2.5
54	J	129	THR	2.5
54	CU	139	LEU	2.5
58	CY	115	PHE	2.5
58	CY	140	LEU	2.5
59	CZ	28	LEU	2.5
62	R	78	THR	2.5
63	S	115	LEU	2.5
65	DF	15	LEU	2.5
70	DK	9	LEU	2.5
1	1	3051	C	2.5
1	AS	104	C	2.5
1	AS	584	C	2.5
1	AS	2316	C	2.5
1	AS	3252	C	2.5
5	k	232	ARG	2.5
15	BH	119	GLN	2.5
16	v	150	TRP	2.5
16	BI	50	ARG	2.5
25	7	86	SER	2.5
31	AD	31	SER	2.5
34	AG	15	SER	2.5
60	DA	24	SER	2.5
79	DT	202	SER	2.5
80	ll	189	PHE	2.5
1	1	1859	U	2.5
1	1	2449	U	2.5
1	AS	1551	U	2.5
1	AS	2297	U	2.5
1	AS	2388	U	2.5
1	AS	2779	U	2.5
2	AT	4	U	2.5
10	BC	234	TRP	2.5
42	CI	6	ARG	2.5
46	CM	1458	C	2.5
18	x	28	ASN	2.5
29	BV	38	GLN	2.5
38	AK	86	GLN	2.5
43	AP	3	ASN	2.5

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Mol	Chain	Res	Type	RSRZ
46	CM	9	U	2.5
46	CM	1170	U	2.5
46	CM	1596	U	2.5
46	CM	1782	U	2.5
49	E	82	GLN	2.5
54	CU	100	ARG	2.5
55	CV	67	TRP	2.5
62	DC	81	ARG	2.5
64	DE	92	ASP	2.5
66	V	86	ARG	2.5
62	R	70	ASN	2.5
66	DG	48	GLN	2.5
79	AR	53	ASN	2.5
79	DT	311	GLN	2.5
18	BK	134	GLY	2.5
14	t	33	ALA	2.5
17	w	98	ALA	2.5
18	BK	98	ALA	2.5
19	y	185	LYS	2.5
19	BL	20	LYS	2.5
26	BS	130	TYR	2.5
27	BT	87	LYS	2.5
30	BW	29	TYR	2.5
53	I	80	GLY	2.5
39	AL	36	LYS	2.5
43	CJ	43	TYR	2.5
58	CY	145	GLY	2.5
63	DD	71	GLY	2.5
62	DC	23	LYS	2.5
62	DC	66	ALA	2.5
63	S	22	LYS	2.5
65	DF	42	TYR	2.5
74	DO	68	GLY	2.5
12	r	195	ALA	2.5
30	BW	38	LYS	2.5
30	BW	46	ALA	2.5
31	BX	47	ALA	2.5
44	CK	65	ALA	2.5
48	CO	167	LYS	2.5
50	F	206	ALA	2.5
51	G	37	LYS	2.5
74	d	53	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
78	h	143	ALA	2.5
79	AR	233	ALA	2.5
1	l	1309	G	2.5
1	AS	90	G	2.5
1	AS	548	G	2.5
1	AS	1747	G	2.5
7	AZ	3	MET	2.5
13	s	131	MET	2.5
46	B	7	G	2.5
46	B	717	G	2.5
46	B	877	G	2.5
46	CM	390	G	2.5
46	CM	1450	G	2.5
5	AX	105	VAL	2.5
6	l	22	PRO	2.5
7	m	286	VAL	2.5
8	BA	92	VAL	2.5
16	BI	25	VAL	2.5
26	BS	76	VAL	2.5
47	CN	189	PRO	2.5
50	F	200	PRO	2.5
53	CT	41	VAL	2.5
66	V	113	VAL	2.5
77	DR	14	VAL	2.5
80	ll	82	VAL	2.5
80	ll	115	VAL	2.5
8	n	133	GLU	2.5
14	BG	155	GLU	2.5
47	CN	12	GLU	2.5
63	DD	49	GLU	2.5
79	AR	14	GLU	2.5
7	m	69	ILE	2.5
9	BB	233	ILE	2.5
10	BC	117	ILE	2.5
11	BD	9	ILE	2.5
64	T	117	ILE	2.5
7	m	163	LEU	2.5
34	AG	80	LEU	2.5
41	AN	41	HIS	2.5
52	H	165	LEU	2.5
59	CZ	52	LEU	2.5
62	DC	22	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
66	DG	108	LEU	2.5
4	AW	224	THR	2.5
4	AW	241	ARG	2.5
5	k	19	ARG	2.5
14	t	73	ARG	2.5
19	BL	184	PHE	2.5
35	CB	56	THR	2.5
37	CD	90	THR	2.5
55	K	178	ARG	2.5
55	CV	201	ARG	2.5
64	DE	8	THR	2.5
65	U	88	ARG	2.5
73	DN	96	THR	2.5
1	AS	10	A	2.5
1	AS	2142	A	2.5
4	AW	159	SER	2.5
6	AY	38	SER	2.5
6	AY	279	SER	2.5
7	AZ	274	GLN	2.5
9	BB	197	SER	2.5
18	BK	39	TRP	2.5
46	B	1178	A	2.5
46	CM	223	A	2.5
46	CM	468	A	2.5
46	CM	904	A	2.5
13	BF	113	GLY	2.5
18	BK	178	SER	2.5
29	AB	13	GLY	2.5
29	AB	64	GLN	2.5
36	AI	40	SER	2.5
36	AI	99	GLN	2.5
69	Y	22	LYS	2.5
71	DL	107	GLN	2.5
79	DT	248	TRP	2.5
25	BR	112	ASP	2.5
36	CC	12	LYS	2.5
37	CD	19	LYS	2.5
42	AO	4	LYS	2.5
51	G	7	LYS	2.5
56	CW	94	ASP	2.5
59	O	64	ASP	2.5
63	DD	25	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
64	DE	59	LYS	2.5
77	g	29	LYS	2.5
79	DT	224	LYS	2.5
4	AW	205	ASN	2.5
5	k	121	ASN	2.5
10	p	200	ALA	2.5
11	q	111	TYR	2.5
38	AK	13	ASN	2.5
39	AL	50	TYR	2.5
45	i	68	ASN	2.5
60	P	144	ALA	2.5
60	P	146	ALA	2.5
63	S	48	TYR	2.5
67	W	43	ASN	2.5
24	BQ	51	ALA	2.5
52	CS	136	ALA	2.5
54	CU	99	ALA	2.5
54	CU	102	ALA	2.5
56	L	31	ALA	2.5
74	DO	16	ALA	2.5
78	DS	143	ALA	2.5
1	1	1781	C	2.5
1	1	2854	U	2.5
1	AS	53	C	2.5
1	AS	193	U	2.5
1	AS	1188	C	2.5
1	AS	2409	C	2.5
1	AS	2781	C	2.5
1	AS	3193	C	2.5
46	B	230	U	2.5
46	B	1338	U	2.5
46	B	1770	C	2.5
46	CM	237	C	2.5
46	CM	309	U	2.5
46	CM	826	U	2.5
73	c	44	MET	2.5
6	AY	208	VAL	2.5
7	m	37	VAL	2.5
11	BD	82	VAL	2.5
61	DB	37	VAL	2.5
68	DI	32	VAL	2.5
71	a	57	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
76	f	6	VAL	2.5
7	AZ	139	PRO	2.5
9	BB	94	PRO	2.5
14	BG	152	PRO	2.5
19	y	163	PRO	2.5
19	BL	61	PRO	2.5
25	7	46	PRO	2.5
56	L	18	PRO	2.5
10	BC	101	GLU	2.5
15	BH	100	GLU	2.5
26	BS	70	GLU	2.5
58	CY	118	GLU	2.5
59	O	47	GLU	2.5
70	DK	101	GLU	2.5
79	DT	236	GLU	2.5
12	BE	131	ILE	2.4
19	BL	48	ILE	2.4
20	z	41	ILE	2.4
33	AF	51	ILE	2.4
40	AM	35	ILE	2.4
79	DT	287	ILE	2.4
7	AZ	113	LEU	2.4
8	BA	33	LEU	2.4
17	w	81	LEU	2.4
31	AD	86	LEU	2.4
31	BX	43	LEU	2.4
54	J	37	LEU	2.4
56	CW	118	LEU	2.4
73	c	53	LEU	2.4
1	AS	136	G	2.4
1	AS	290	G	2.4
1	AS	637	G	2.4
1	AS	765	G	2.4
1	AS	795	G	2.4
1	AS	933	G	2.4
1	AS	1410	G	2.4
1	AS	1844	G	2.4
4	AW	3	ARG	2.4
5	k	117	ARG	2.4
7	AZ	152	ARG	2.4
8	BA	134	ARG	2.4
10	BC	45	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
15	BH	101	ARG	2.4
17	w	60	ARG	2.4
20	z	100	ARG	2.4
24	BQ	88	ARG	2.4
24	BQ	128	ARG	2.4
4	j	209	HIS	2.4
27	BT	110	HIS	2.4
29	BV	28	HIS	2.4
30	AC	17	HIS	2.4
30	BW	39	PHE	2.4
46	B	173	G	2.4
46	B	507	G	2.4
46	B	537	G	2.4
46	B	1068	G	2.4
46	B	1099	G	2.4
46	B	1349	G	2.4
46	CM	89	G	2.4
46	CM	1526	G	2.4
46	CM	1561	G	2.4
50	CQ	198	PHE	2.4
52	CS	81	ARG	2.4
54	J	88	PHE	2.4
55	CV	77	ARG	2.4
60	DA	114	ARG	2.4
61	DB	128	ARG	2.4
63	S	9	PHE	2.4
64	T	71	PHE	2.4
70	DK	23	ARG	2.4
70	DK	122	PHE	2.4
73	c	92	ARG	2.4
7	AZ	155	THR	2.4
9	BB	121	THR	2.4
9	BB	188	THR	2.4
15	BH	54	LYS	2.4
17	w	138	THR	2.4
17	BJ	52	LYS	2.4
19	y	161	LYS	2.4
36	AI	94	LYS	2.4
48	CO	219	LYS	2.4
51	G	200	LYS	2.4
54	CU	97	LYS	2.4
55	CV	148	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
5	AX	255	TRP	2.4
9	BB	17	GLN	2.4
10	BC	78	GLN	2.4
35	CB	27	GLY	2.4
38	AK	81	GLY	2.4
48	D	202	GLN	2.4
56	L	46	GLY	2.4
61	Q	93	GLY	2.4
65	U	84	TRP	2.4
63	DD	60	GLN	2.4
66	DG	26	GLY	2.4
70	DK	106	GLY	2.4
76	DQ	7	TRP	2.4
8	BA	43	ALA	2.4
10	p	40	SER	2.4
12	r	20	SER	2.4
20	BM	2	ALA	2.4
21	0	167	ALA	2.4
22	BO	142	SER	2.4
43	CJ	30	ALA	2.4
45	CL	35	SER	2.4
48	CO	51	SER	2.4
49	CP	198	SER	2.4
66	V	5	SER	2.4
68	DI	18	SER	2.4
10	p	208	ASP	2.4
15	BH	23	ASN	2.4
21	BN	7	TYR	2.4
22	2	127	TYR	2.4
43	CJ	50	TYR	2.4
49	E	76	MET	2.4
79	AR	154	ALA	2.4
1	AS	51	A	2.4
1	AS	56	A	2.4
1	AS	891	A	2.4
1	AS	2122	A	2.4
1	AS	2493	A	2.4
5	k	282	VAL	2.4
23	BP	19	VAL	2.4
24	BQ	132	ASN	2.4
54	CU	23	ASP	2.4
33	AF	11	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
39	CF	31	VAL	2.4
45	CL	66	ASN	2.4
46	CM	948	A	2.4
51	G	111	VAL	2.4
51	G	139	VAL	2.4
53	I	41	VAL	2.4
53	CT	129	VAL	2.4
54	CU	69	VAL	2.4
67	DH	48	ASN	2.4
71	a	5	VAL	2.4
10	BC	168	PRO	2.4
19	y	19	PRO	2.4
56	L	67	PRO	2.4
1	AS	1908	U	2.4
1	AS	2137	U	2.4
3	AU	156	U	2.4
46	CM	278	U	2.4
46	CM	615	U	2.4
46	CM	1217	U	2.4
46	CM	1244	U	2.4
46	CM	1354	U	2.4
1	1	3193	C	2.4
1	AS	112	C	2.4
7	AZ	222	ILE	2.4
13	BF	17	LEU	2.4
13	BF	88	GLU	2.4
13	BF	122	ILE	2.4
8	n	62	LEU	2.4
15	BH	121	ARG	2.4
16	v	98	LEU	2.4
16	BI	116	LEU	2.4
17	w	79	ARG	2.4
19	BL	93	LEU	2.4
19	BL	124	LEU	2.4
27	9	16	ARG	2.4
34	CA	58	GLU	2.4
34	CA	80	LEU	2.4
35	AH	112	GLU	2.4
36	CC	8	GLU	2.4
46	B	379	C	2.4
46	B	482	C	2.4
46	B	1194	C	2.4

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Mol	Chain	Res	Type	RSRZ
46	B	1406	C	2.4
46	CM	433	C	2.4
46	CM	684	C	2.4
49	E	126	ILE	2.4
52	CS	190	ILE	2.4
53	I	141	ILE	2.4
54	CU	145	ILE	2.4
57	M	79	GLU	2.4
65	U	35	ILE	2.4
67	W	102	ILE	2.4
71	a	7	ILE	2.4
73	c	41	ILE	2.4
51	G	131	LEU	2.4
59	CZ	78	LEU	2.4
60	P	20	ARG	2.4
71	DL	18	LEU	2.4
72	b	42	LEU	2.4
73	DN	92	ARG	2.4
5	k	16	PHE	2.4
7	AZ	200	PHE	2.4
10	p	166	PHE	2.4
19	BL	53	PHE	2.4
23	5	15	PHE	2.4
24	BQ	11	PHE	2.4
39	CF	43	PHE	2.4
45	i	69	PHE	2.4
55	CV	55	PHE	2.4
70	DK	38	PHE	2.4
4	AW	24	LYS	2.4
4	AW	188	LYS	2.4
4	AW	198	LYS	2.4
5	k	274	HIS	2.4
10	BC	139	HIS	2.4
15	BH	6	LYS	2.4
16	v	170	LYS	2.4
23	5	14	LYS	2.4
33	AF	35	LYS	2.4
55	K	17	LYS	2.4
55	CV	24	LYS	2.4
56	L	115	LYS	2.4
56	CW	10	LYS	2.4
65	U	48	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
66	DG	69	LYS	2.4
67	W	87	LYS	2.4
67	DH	51	LYS	2.4
69	DJ	44	HIS	2.4
73	DN	19	LYS	2.4
6	AY	288	THR	2.4
11	BD	35	THR	2.4
15	BH	71	THR	2.4
16	BI	190	THR	2.4
23	5	83	THR	2.4
27	9	21	THR	2.4
49	E	201	THR	2.4
54	J	173	THR	2.4
55	CV	14	THR	2.4
77	g	48	THR	2.4
4	j	99	GLY	2.4
14	BG	94	GLY	2.4
16	v	2	GLY	2.4
20	BM	95	TRP	2.4
22	BO	10	GLY	2.4
30	BW	34	GLY	2.4
35	AH	78	GLY	2.4
58	N	145	GLY	2.4
58	CY	34	TRP	2.4
80	ll	202	GLY	2.4
5	k	267	ALA	2.4
6	l	219	ALA	2.4
6	AY	126	ALA	2.4
17	BJ	193	GLN	2.4
25	7	96	GLN	2.4
41	CH	10	ALA	2.4
47	C	65	ALA	2.4
54	CU	55	ALA	2.4
56	CW	98	ALA	2.4
62	R	74	ALA	2.4
66	DG	137	ALA	2.4
67	DH	96	ALA	2.4
71	a	22	GLN	2.4
74	DO	51	GLN	2.4
1	1	1915	G	2.4
1	AS	85	G	2.4
1	AS	809	G	2.4

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Mol	Chain	Res	Type	RSRZ
1	AS	1141	G	2.4
1	AS	1588	G	2.4
1	AS	2088	G	2.4
1	AS	2224	G	2.4
1	AS	2945	G	2.4
4	j	168	VAL	2.4
5	AX	160	VAL	2.4
11	q	3	TYR	2.4
12	r	201	SER	2.4
12	r	219	SER	2.4
16	BI	16	SER	2.4
17	w	7	VAL	2.4
18	x	109	SER	2.4
22	BO	71	SER	2.4
23	5	101	VAL	2.4
24	6	78	VAL	2.4
27	BT	9	SER	2.4
27	BT	105	VAL	2.4
28	AA	89	VAL	2.4
28	AA	113	VAL	2.4
28	BU	113	VAL	2.4
29	AB	48	TYR	2.4
33	AF	77	VAL	2.4
46	B	1603	G	2.4
46	CM	899	G	2.4
46	CM	1017	G	2.4
46	CM	1152	G	2.4
46	CM	1419	G	2.4
46	CM	1629	G	2.4
46	CM	1764	G	2.4
49	E	40	VAL	2.4
50	F	182	VAL	2.4
57	CX	73	VAL	2.4
60	P	19	SER	2.4
67	W	30	VAL	2.4
68	DI	35	SER	2.4
68	DI	39	VAL	2.4
71	DL	55	VAL	2.4
73	DN	18	VAL	2.4
80	ll	169	VAL	2.4
7	m	235	ASP	2.4
16	v	149	ASN	2.4

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Mol	Chain	Res	Type	RSRZ
19	y	97	PRO	2.4
24	BQ	67	PRO	2.4
29	AB	66	ASN	2.4
32	AE	98	PRO	2.4
33	BZ	122	ASN	2.4
41	CH	43	ASN	2.4
53	CT	19	ASP	2.4
56	L	94	ASP	2.4
57	CX	30	PRO	2.4
58	N	98	ASN	2.4
69	DJ	54	ASP	2.4
36	CC	77	PRO	2.4
77	DR	57	ASN	2.4
74	DO	77	CYS	2.4
4	j	238	ILE	2.4
5	k	171	LEU	2.4
5	AX	387	LEU	2.4
7	m	185	ILE	2.4
10	p	180	ILE	2.4
10	BC	59	LEU	2.4
18	x	181	ARG	2.4
19	BL	180	ARG	2.4
22	BO	39	ILE	2.4
26	BS	139	ILE	2.4
31	AD	94	ILE	2.4
31	AD	102	ILE	2.4
31	BX	45	ILE	2.4
35	AH	100	ILE	2.4
36	CC	81	ARG	2.4
37	CD	83	LEU	2.4
43	AP	70	LEU	2.4
43	CJ	57	ILE	2.4
45	i	155	LEU	2.4
47	CN	111	ILE	2.4
48	CO	32	ILE	2.4
50	F	30	LEU	2.4
51	G	3	ARG	2.4
55	K	22	ARG	2.4
57	M	38	ARG	2.4
57	CX	89	LEU	2.4
69	DJ	3	ARG	2.4
70	Z	76	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
72	b	83	LEU	2.4
1	1	3050	A	2.4
1	AS	771	A	2.4
1	AS	2362	A	2.4
1	AS	2364	A	2.4
4	AW	73	GLU	2.4
13	BF	11	GLU	2.4
46	B	708	A	2.4
46	B	1206	A	2.4
46	CM	619	A	2.4
46	CM	780	A	2.4
1	1	2081	U	2.4
1	AS	116	U	2.4
1	AS	1091	U	2.4
3	4	125	U	2.4
9	o	126	LYS	2.4
21	0	143	PHE	2.4
23	5	89	LYS	2.4
25	BR	27	LYS	2.4
26	BS	25	LYS	2.4
26	BS	39	LYS	2.4
28	BU	73	LYS	2.4
36	AI	83	LYS	2.4
42	CI	7	LYS	2.4
45	CL	38	LYS	2.4
48	CO	66	PHE	2.4
46	B	278	U	2.4
47	CN	15	LYS	2.4
64	DE	20	PHE	2.4
73	DN	32	LYS	2.4
4	AW	187	HIS	2.4
5	AX	11	HIS	2.4
17	BJ	56	HIS	2.4
26	BS	53	HIS	2.4
1	1	882	C	2.4
1	1	2079	C	2.4
1	AS	639	C	2.4
1	AS	1358	C	2.4
1	AS	2190	C	2.4
5	AX	235	THR	2.4
5	AX	253	GLY	2.4
6	AY	163	THR	2.4

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Mol	Chain	Res	Type	RSRZ
13	s	135	GLY	2.4
13	BF	147	THR	2.4
16	BI	85	THR	2.4
16	BI	165	THR	2.4
17	BJ	140	GLY	2.4
19	BL	6	THR	2.4
20	BM	49	THR	2.4
22	BO	62	GLY	2.4
26	BS	71	THR	2.4
29	BV	3	THR	2.4
33	AF	49	GLY	2.4
74	DO	67	THR	2.4
75	e	26	THR	2.4
77	DR	12	GLY	2.4
4	AW	239	ALA	2.4
10	BC	89	ALA	2.4
13	s	34	ALA	2.4
14	BG	78	ALA	2.4
19	y	76	ALA	2.4
20	BM	89	MET	2.4
28	AA	11	ALA	2.4
34	CA	41	ALA	2.4
47	C	132	ALA	2.4
47	CN	91	ALA	2.4
48	CO	139	ALA	2.4
55	CV	57	ALA	2.4
70	DK	105	ALA	2.4
10	p	133	VAL	2.4
23	5	68	VAL	2.4
24	BQ	78	VAL	2.4
49	E	89	GLN	2.4
49	E	188	VAL	2.4
52	CS	53	VAL	2.4
52	CS	63	GLN	2.4
53	I	36	VAL	2.4
74	DO	54	VAL	2.4
20	BM	109	TYR	2.4
31	AD	29	TYR	2.4
43	AP	43	TYR	2.4
47	C	155	TYR	2.4
63	DD	91	TYR	2.4
64	DE	84	TYR	2.4

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Mol	Chain	Res	Type	RSRZ
6	AY	278	PRO	2.4
10	p	213	SER	2.4
37	CD	41	SER	2.4
40	CG	6	SER	2.4
44	CK	40	SER	2.4
58	CY	113	PRO	2.4
63	S	125	PRO	2.4
67	DH	58	PRO	2.4
5	k	215	ILE	2.4
6	AY	196	ARG	2.4
11	BD	46	ASN	2.4
11	BD	68	LEU	2.4
13	BF	10	ARG	2.4
17	w	30	ASN	2.4
17	BJ	64	ARG	2.4
17	BJ	195	LEU	2.4
18	x	176	LEU	2.4
18	BK	120	ASN	2.4
20	BM	119	LEU	2.4
25	7	47	ARG	2.4
28	AA	5	ILE	2.4
31	AD	27	LEU	2.4
43	AP	18	ARG	2.4
44	AQ	29	LEU	2.4
47	C	9	LEU	2.4
48	D	209	ASN	2.4
50	CQ	147	ARG	2.4
51	CR	52	LEU	2.4
52	H	156	ARG	2.4
52	CS	121	ILE	2.4
53	I	147	LEU	2.4
55	K	149	LEU	2.4
58	CY	28	ASN	2.4
63	DD	62	ILE	2.4
65	U	54	LEU	2.4
67	W	117	ILE	2.4
69	DJ	47	ILE	2.4
77	DR	38	LEU	2.4
79	AR	116	ILE	2.4
79	AR	119	ASN	2.4
6	l	147	LYS	2.4
22	2	20	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
22	2	60	LYS	2.4
27	BT	64	LYS	2.4
43	CJ	24[A]	LYS	2.4
44	CK	7	LYS	2.4
45	i	82	LYS	2.4
48	CO	94	LYS	2.4
51	G	6	LYS	2.4
51	CR	7	LYS	2.4
76	f	16	LYS	2.4
80	ll	207	LYS	2.4
1	1	1281	G	2.4
1	1	1696	G	2.4
1	1	2445	G	2.4
1	AS	142	G	2.4
1	AS	1025	G	2.4
1	AS	1888	G	2.4
1	AS	2184	G	2.4
1	AS	2293	G	2.4
1	AS	2342	G	2.4
18	x	42	GLU	2.4
46	B	501	G	2.4
46	B	701	G	2.4
46	B	1369	G	2.4
46	CM	1371	G	2.4
46	CM	1444	G	2.4
46	CM	1470	G	2.4
46	CM	1510	G	2.4
46	CM	1724	G	2.4
48	CO	38	PHE	2.4
51	CR	199	GLU	2.4
53	CT	35	GLU	2.4
64	DE	28	PHE	2.4
71	a	85	PHE	2.4
79	AR	275	PHE	2.4
1	AS	61	A	2.4
1	AS	306	A	2.4
1	AS	327	A	2.4
1	AS	485	A	2.4
1	AS	1386	A	2.4
1	AS	2220	A	2.4
1	AS	2791	A	2.4
3	AU	43	A	2.4

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Mol	Chain	Res	Type	RSRZ
29	BV	40	HIS	2.4
46	B	577	A	2.4
46	CM	399	A	2.4
46	CM	739	A	2.4
46	CM	1331	A	2.4
46	CM	1733	A	2.4
53	I	22	HIS	2.4
1	1	1758	U	2.4
1	1	1815	U	2.4
1	AS	328	U	2.4
1	AS	2171	U	2.4
3	4	86	U	2.4
3	AU	120	U	2.4
4	j	2	GLY	2.4
44	CK	53	GLY	2.4
46	B	1271	U	2.4
46	CM	1102	U	2.4
46	CM	1268	U	2.4
46	CM	1548	U	2.4
51	G	135	GLY	2.4
4	j	62	ALA	2.4
4	AW	146	THR	2.4
4	AW	196	TRP	2.4
6	l	29	ALA	2.4
6	AY	298	ALA	2.4
7	AZ	97	ALA	2.4
18	x	177	ALA	2.4
19	y	100	THR	2.4
24	6	123	ALA	2.4
26	BS	136	ALA	2.4
30	BW	37	ALA	2.4
36	CC	29	ALA	2.4
36	CC	85	THR	2.4
36	CC	87	ALA	2.4
47	CN	132	ALA	2.4
47	CN	198	MET	2.4
51	G	55	ALA	2.4
51	CR	18	TRP	2.4
52	CS	179	ALA	2.4
58	CY	61	ALA	2.4
65	U	141	THR	2.4
69	Y	41	MET	2.4

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Mol	Chain	Res	Type	RSRZ
79	AR	19	TRP	2.4
79	AR	209	ALA	2.4
79	AR	279	ALA	2.4
79	DT	239	ALA	2.4
6	AY	12	VAL	2.4
11	BD	112	VAL	2.4
21	BN	140	VAL	2.4
22	2	36	VAL	2.4
24	6	62	VAL	2.4
28	AA	68	VAL	2.4
29	BV	130	VAL	2.4
44	AQ	79	VAL	2.4
48	CO	43	VAL	2.4
53	I	158	VAL	2.4
53	CT	26	VAL	2.4
59	CZ	75	VAL	2.4
60	DA	134	VAL	2.4
79	AR	166	VAL	2.4
79	AR	237	VAL	2.4
9	o	102	GLN	2.4
18	BK	140	GLN	2.4
25	BR	42	GLN	2.4
29	BV	64	GLN	2.4
68	X	33	GLN	2.4
79	AR	102	GLN	2.4
1	AS	266	C	2.4
1	AS	923	C	2.4
1	AS	1866	C	2.4
1	AS	1913	C	2.4
1	AS	2215	C	2.4
8	n	76	ARG	2.4
9	o	134	TYR	2.4
9	o	147	TYR	2.4
14	BG	65	TYR	2.4
16	BI	114	ARG	2.4
17	BJ	200	TYR	2.4
20	BM	124	TYR	2.4
32	BY	49	ARG	2.4
38	CE	39	TYR	2.4
46	B	231	C	2.4
55	CV	83	TYR	2.4
47	C	50	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
48	D	188	LEU	2.4
49	E	131	ILE	2.4
53	CT	130	PRO	2.4
59	CZ	24	ILE	2.4
59	CZ	106	LEU	2.4
62	DC	53	PRO	2.4
63	S	121	ARG	2.4
69	DJ	23	ARG	2.4
73	c	38	ARG	2.4
4	AW	179	LEU	2.4
10	BC	110	LEU	2.4
12	BE	20	SER	2.4
19	y	81	ILE	2.4
22	2	85	ILE	2.4
23	5	56	ILE	2.4
30	BW	54	LEU	2.4
50	F	7	SER	2.4
54	J	145	ILE	2.4
55	K	189	ILE	2.4
69	Y	110	ILE	2.4
72	DM	65	LEU	2.4
79	AR	33	LEU	2.4
79	AR	35	SER	2.4
79	AR	289	LEU	2.4
79	DT	42	LEU	2.4
79	DT	228	LEU	2.4
5	k	201	LYS	2.4
7	m	72	ASP	2.4
7	AZ	285	LYS	2.4
10	p	129	LYS	2.4
13	BF	174	LYS	2.4
17	BJ	135	LYS	2.4
21	BN	161	LYS	2.4
28	BU	112	LYS	2.4
42	CI	4	LYS	2.4
43	CJ	67	LYS	2.4
45	CL	86	LYS	2.4
51	CR	200	LYS	2.4
53	CT	194	LYS	2.4
57	CX	9	LYS	2.4
58	CY	36	LYS	2.4
63	S	11	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
75	e	11	LYS	2.4
78	h	132	LYS	2.4
12	BE	177	ASN	2.4
14	t	11	ASN	2.4
73	DN	8	ASN	2.4
5	AX	118	PHE	2.4
15	BH	12	PHE	2.4
48	CO	223	PHE	2.4
70	DK	95	PHE	2.4
66	DG	29	GLU	2.4
79	AR	232	GLU	2.4
28	BU	122	HIS	2.4
56	CW	160	HIS	2.4
74	DO	49	HIS	2.4
4	AW	53	GLY	2.4
7	AZ	127	GLY	2.4
16	v	173	GLY	2.4
4	j	235	ALA	2.4
7	AZ	287	ALA	2.4
16	v	141	ALA	2.4
16	BI	39	ALA	2.4
21	0	102	ALA	2.4
22	BO	132	ALA	2.4
33	BZ	2	ALA	2.4
39	AL	59	ALA	2.4
47	C	130	ALA	2.4
48	CO	168	MET	2.4
51	CR	258	ALA	2.4
57	M	1	MET	2.4
66	DG	11	ALA	2.4
70	DK	113	ALA	2.4
6	AY	231	VAL	2.4
1	1	243	G	2.4
1	1	949	G	2.4
1	AS	144	G	2.4
1	AS	829	G	2.4
1	AS	838	G	2.4
1	AS	1538	G	2.4
1	AS	1743	G	2.4
1	AS	2772	G	2.4
1	AS	2843	G	2.4
1	AS	2922	G	2.4

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Mol	Chain	Res	Type	RSRZ
1	AS	2938	G	2.4
1	AS	3033	G	2.4
8	n	61	THR	2.4
15	BH	4	THR	2.4
15	BH	113	VAL	2.4
21	0	140	VAL	2.4
50	CQ	49	VAL	2.4
52	CS	22	VAL	2.4
54	CU	56	VAL	2.4
58	CY	107	VAL	2.4
46	CM	384	G	2.4
64	DE	54	THR	2.4
1	1	1904	A	2.4
1	1	2668	A	2.4
1	AS	3	U	2.4
1	AS	45	U	2.4
1	AS	107	A	2.4
1	AS	662	U	2.4
1	AS	1549	U	2.4
1	AS	1561	U	2.4
1	AS	1637	U	2.4
1	AS	1793	A	2.4
1	AS	1796	A	2.4
1	AS	1820	U	2.4
1	AS	2573	A	2.4
5	AX	240	ARG	2.4
6	AY	88	GLN	2.4
10	BC	99	ARG	2.4
14	BG	67	ARG	2.4
18	BK	172	GLN	2.4
25	BR	23	ARG	2.4
44	AQ	48	GLN	2.4
46	B	73	U	2.4
46	B	74	U	2.4
46	B	615	U	2.4
46	B	1243	U	2.4
46	B	1401	U	2.4
46	CM	902	U	2.4
46	CM	1021	A	2.4
46	CM	1151	A	2.4
46	CM	1722	U	2.4
46	CM	1769	A	2.4

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Mol	Chain	Res	Type	RSRZ
49	CP	82	GLN	2.4
50	F	77	ARG	2.4
56	L	110	GLN	2.4
60	P	42	ARG	2.4
62	R	14	GLN	2.4
66	V	129	GLN	2.4
66	DG	129	GLN	2.4
67	W	88	ARG	2.4
70	DK	75	GLN	2.4
76	DQ	20	GLN	2.4
5	k	137	TYR	2.3
5	AX	218	ILE	2.3
6	l	206	PRO	2.3
6	AY	164	LYS	2.3
7	AZ	265	TYR	2.3
9	BB	156	LYS	2.3
9	BB	221	ILE	2.3
10	BC	190	LEU	2.3
16	v	148	TYR	2.3
17	w	82	TYR	2.3
23	5	79	LEU	2.3
23	5	81	TYR	2.3
23	BP	82	LEU	2.3
25	7	89	LEU	2.3
26	8	114	ILE	2.3
28	AA	6	LYS	2.3
28	BU	42	ILE	2.3
48	D	225	LEU	2.3
43	AP	40	LYS	2.3
45	i	102	LYS	2.3
48	CO	81	TYR	2.3
48	CO	116	LYS	2.3
49	E	51	ILE	2.3
49	CP	128	LYS	2.3
51	CR	210	ILE	2.3
53	CT	169	TYR	2.3
54	J	54	LEU	2.3
56	L	59	LEU	2.3
61	Q	107	ILE	2.3
65	U	18	LEU	2.3
63	S	67	LYS	2.3
66	V	65	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
69	Y	61	ILE	2.3
69	DJ	93	LEU	2.3
73	c	83	ILE	2.3
73	DN	59	TYR	2.3
77	DR	8	LEU	2.3
78	DS	142	LEU	2.3
80	l1	29	LEU	2.3
34	AG	12	LYS	2.3
38	AK	68	LYS	2.3
9	o	162	SER	2.3
12	BE	201	SER	2.3
25	7	38	SER	2.3
27	BT	102	SER	2.3
47	CN	153	SER	2.3
50	CQ	54	SER	2.3
46	CM	359	C	2.3
46	CM	1302	C	2.3
46	CM	1456	C	2.3
47	C	81	PHE	2.3
58	CY	42	PHE	2.3
58	CY	132	SER	2.3
62	R	46	SER	2.3
63	S	108	PHE	2.3
67	W	37	SER	2.3
71	DL	23	PHE	2.3
73	DN	54	SER	2.3
76	f	8	PHE	2.3
80	l1	213	SER	2.3
81	12	127	SER	2.3
1	1	30	C	2.3
1	1	241	C	2.3
1	AS	864	C	2.3
1	AS	1387	C	2.3
1	AS	2521	C	2.3
5	k	261	ASN	2.3
8	n	13	ASP	2.3
16	v	145	ASP	2.3
16	v	181	ASN	2.3
22	2	18	ASP	2.3
32	AE	80	ASP	2.3
34	CA	84	ASN	2.3
38	CE	48	ASN	2.3

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Mol	Chain	Res	Type	RSRZ
48	CO	59	ASP	2.3
48	CO	89	ASP	2.3
51	G	224	ASN	2.3
20	BM	28	GLU	2.3
33	AF	42	CYS	2.3
35	AH	97	GLU	2.3
35	CB	87	GLU	2.3
52	CS	193	CYS	2.3
64	DE	29	GLU	2.3
12	r	194	GLY	2.3
20	BM	40	ALA	2.3
30	BW	2	ALA	2.3
30	BW	43	HIS	2.3
37	AJ	30	GLY	2.3
55	CV	2	GLY	2.3
58	CY	123	VAL	2.3
60	DA	22	ALA	2.3
60	DA	63	ALA	2.3
64	DE	126	ALA	2.3
65	DF	137	HIS	2.3
67	W	72	GLY	2.3
6	AY	209	VAL	2.3
7	m	236	VAL	2.3
11	q	82	VAL	2.3
47	CN	73	VAL	2.3
70	DK	96	VAL	2.3
71	a	35	VAL	2.3
4	AW	243	THR	2.3
8	BA	21	ARG	2.3
15	BH	67	ARG	2.3
15	BH	87	TRP	2.3
33	AF	25	ARG	2.3
33	BZ	15	THR	2.3
36	CC	46	THR	2.3
38	CE	11	ARG	2.3
45	i	97	THR	2.3
47	C	185	ARG	2.3
49	CP	228	THR	2.3
56	CW	57	ARG	2.3
60	DA	25	TRP	2.3
60	DA	73	ARG	2.3
79	AR	12	THR	2.3

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Mol	Chain	Res	Type	RSRZ
4	AW	96	LEU	2.3
8	n	7	LYS	2.3
9	BB	127	LEU	2.3
10	BC	187	LEU	2.3
25	7	87	LEU	2.3
27	9	80	ILE	2.3
27	9	87	LYS	2.3
27	BT	84	LYS	2.3
35	CB	70	LYS	2.3
36	AI	9	LEU	2.3
4	AW	217	GLN	2.3
35	AH	20	ILE	2.3
36	CC	5	LYS	2.3
48	D	86	LEU	2.3
40	CG	27	ILE	2.3
53	CT	193	LYS	2.3
55	CV	58	LEU	2.3
57	M	15	LEU	2.3
70	Z	33	LEU	2.3
71	a	44	LEU	2.3
67	W	41	ILE	2.3
67	DH	20	LYS	2.3
79	DT	267	LEU	2.3
55	K	104	ILE	2.3
55	CV	189	ILE	2.3
56	L	129	ILE	2.3
56	CW	122	ILE	2.3
63	DD	64	ILE	2.3
64	T	62	GLN	2.3
13	BF	167	TYR	2.3
16	v	62	TYR	2.3
17	w	200	TYR	2.3
19	BL	132	PRO	2.3
22	BO	127	TYR	2.3
1	1	707	A	2.3
1	1	1026	A	2.3
1	1	1881	U	2.3
1	1	2913	A	2.3
1	AS	44	A	2.3
1	AS	155	A	2.3
1	AS	601	U	2.3
1	AS	664	A	2.3

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Mol	Chain	Res	Type	RSRZ
1	AS	837	A	2.3
1	AS	1688	U	2.3
1	AS	1778	U	2.3
1	AS	2195	U	2.3
1	AS	2790	U	2.3
2	AT	64	A	2.3
10	p	79	PHE	2.3
12	r	199	PHE	2.3
22	2	19	PHE	2.3
46	B	1091	U	2.3
46	B	1187	A	2.3
46	B	1411	A	2.3
46	CM	624	U	2.3
46	CM	973	A	2.3
50	F	26	PHE	2.3
62	R	15	PHE	2.3
62	R	45	PHE	2.3
1	1	32	G	2.3
1	1	175	G	2.3
1	1	607	G	2.3
1	1	1230	G	2.3
1	1	1543	G	2.3
1	AS	722	G	2.3
1	AS	897	G	2.3
1	AS	2147	G	2.3
1	AS	2407	G	2.3
1	AS	2503	G	2.3
1	AS	2558	G	2.3
1	AS	2749	G	2.3
1	AS	3251	G	2.3
46	B	1134	G	2.3
46	CM	853	G	2.3
46	CM	1125	G	2.3
46	CM	1154	G	2.3
4	AW	14	SER	2.3
5	k	2	SER	2.3
18	BK	25	SER	2.3
21	BN	85	SER	2.3
29	AB	92	SER	2.3
33	BZ	41	SER	2.3
38	AK	15	SER	2.3
45	CL	56	SER	2.3

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Mol	Chain	Res	Type	RSRZ
47	C	136	SER	2.3
54	J	164	SER	2.3
55	CV	153	SER	2.3
79	DT	292	SER	2.3
48	CO	42	ASN	2.3
48	CO	104	ASP	2.3
52	CS	66	ASN	2.3
54	J	29	ASP	2.3
65	DF	21	ASN	2.3
66	V	44	ASP	2.3
1	1	2174	C	2.3
1	AS	224	C	2.3
1	AS	914	C	2.3
1	AS	1573	C	2.3
1	AS	1801	C	2.3
1	AS	1868	C	2.3
1	AS	2550	C	2.3
1	AS	2839	C	2.3
1	AS	3136	C	2.3
3	AU	130	C	2.3
5	k	228	GLY	2.3
4	AW	30	ARG	2.3
5	k	10	ARG	2.3
5	AX	57	VAL	2.3
5	AX	256	HIS	2.3
5	AX	264	VAL	2.3
7	m	68	HIS	2.3
8	n	102	VAL	2.3
10	BC	176	VAL	2.3
11	BD	158	ALA	2.3
12	BE	79	VAL	2.3
13	s	98	ALA	2.3
24	6	21	ALA	2.3
25	7	132	ALA	2.3
27	9	15	ALA	2.3
27	9	115	ARG	2.3
28	AA	96	VAL	2.3
33	BZ	27	HIS	2.3
33	BZ	38	GLY	2.3
43	AP	103	ALA	2.3
46	B	182	C	2.3
46	B	707	C	2.3

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Mol	Chain	Res	Type	RSRZ
46	B	1433	C	2.3
49	E	191	VAL	2.3
52	H	171	ALA	2.3
53	I	146	GLY	2.3
55	K	185	CYS	2.3
16	BI	203	ARG	2.3
18	BK	127	ARG	2.3
29	AB	9	ARG	2.3
33	BZ	89	HIS	2.3
35	AH	16	ARG	2.3
50	CQ	117	ARG	2.3
51	CR	111	VAL	2.3
59	CZ	31	VAL	2.3
60	DA	42	ARG	2.3
65	DF	25	ARG	2.3
70	DK	20	ARG	2.3
71	DL	5	VAL	2.3
74	DO	62	VAL	2.3
75	e	67	ARG	2.3
79	AR	277	VAL	2.3
7	m	150	LEU	2.3
7	AZ	258	LYS	2.3
14	BG	172	LEU	2.3
17	BJ	183	LYS	2.3
19	y	28	LEU	2.3
19	BL	98	LYS	2.3
21	0	78	TRP	2.3
21	BN	47	LYS	2.3
23	BP	108	LEU	2.3
30	BW	15	LYS	2.3
13	s	53	THR	2.3
15	BH	124	THR	2.3
21	BN	132	THR	2.3
31	BX	86	LEU	2.3
34	AG	7	LEU	2.3
40	AM	13	LEU	2.3
44	AQ	28	LYS	2.3
52	CS	45	LYS	2.3
49	CP	112	THR	2.3
49	CP	164	LEU	2.3
54	CU	54	LEU	2.3
59	O	100	TRP	2.3

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Mol	Chain	Res	Type	RSRZ
60	DA	80	LEU	2.3
62	DC	25	LEU	2.3
71	a	70	THR	2.3
74	d	7	LEU	2.3
77	g	39	LEU	2.3
79	AR	261	LYS	2.3
79	DT	41	THR	2.3
5	k	252	ILE	2.3
9	BB	87	ILE	2.3
10	BC	219	ILE	2.3
18	x	114	ILE	2.3
24	BQ	129	ILE	2.3
29	AB	73	ILE	2.3
50	CQ	209	ILE	2.3
52	CS	120	ILE	2.3
62	R	121	ILE	2.3
68	DI	23	ILE	2.3
5	k	173	GLN	2.3
9	BB	195	GLN	2.3
14	t	48	PRO	2.3
18	BK	165	GLN	2.3
38	CE	79	GLN	2.3
53	I	86	PRO	2.3
56	CW	177	GLN	2.3
9	BB	136	TYR	2.3
57	M	54	TYR	2.3
53	CT	27	PHE	2.3
1	1	2946	U	2.3
1	AS	1349	U	2.3
1	AS	1603	U	2.3
1	AS	1698	U	2.3
1	AS	1773	U	2.3
1	AS	2187	U	2.3
7	AZ	221	SER	2.3
13	s	97	SER	2.3
18	x	16	SER	2.3
19	BL	181	SER	2.3
33	AF	4	SER	2.3
35	AH	79	SER	2.3
46	B	1356	U	2.3
46	B	1384	U	2.3
46	CM	1000	U	2.3

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Mol	Chain	Res	Type	RSRZ
46	CM	1366	U	2.3
46	CM	1648	U	2.3
50	CQ	45	SER	2.3
1	1	105	A	2.3
1	AS	158	A	2.3
1	AS	1452	A	2.3
1	AS	3045	A	2.3
3	AU	1	A	2.3
3	AU	37	A	2.3
4	AW	61	VAL	2.3
4	AW	185	ALA	2.3
6	l	58	GLY	2.3
6	AY	205	GLY	2.3
8	BA	78	VAL	2.3
11	q	57	VAL	2.3
12	r	153	ARG	2.3
16	BI	145	ASP	2.3
14	BG	183	GLY	2.3
16	v	66	VAL	2.3
17	w	105	VAL	2.3
17	BJ	60	ARG	2.3
17	BJ	94	ALA	2.3
18	x	175	ARG	2.3
23	BP	29	ASP	2.3
50	CQ	23	ASN	2.3
54	J	123	GLU	2.3
54	CU	123	GLU	2.3
55	CV	186	ASP	2.3
38	CE	60	GLY	2.3
40	AM	50	GLY	2.3
44	AQ	85	ARG	2.3
45	CL	70	ASN	2.3
46	CM	100	A	2.3
46	CM	577	A	2.3
46	CM	911	A	2.3
46	CM	937	A	2.3
46	CM	1387	A	2.3
46	CM	1557	A	2.3
46	CM	1620	A	2.3
46	CM	1768	A	2.3
56	L	103	ASP	2.3
62	R	24	ASP	2.3

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Mol	Chain	Res	Type	RSRZ
62	R	38	GLY	2.3
62	DC	40	ARG	2.3
65	DF	23	ASP	2.3
66	V	63	ARG	2.3
66	DG	13	ASP	2.3
67	DH	57	MET	2.3
67	DH	56	ARG	2.3
71	DL	26	ASP	2.3
75	e	43	ASN	2.3
77	DR	56	MET	2.3
21	BN	86	GLY	2.3
24	BQ	45	ARG	2.3
49	CP	208	ALA	2.3
50	F	41	ARG	2.3
50	F	108	ALA	2.3
50	F	181	GLY	2.3
50	F	221	ALA	2.3
50	CQ	145	ALA	2.3
51	CR	11	ARG	2.3
79	DT	225	ASN	2.3
80	ll	188	ASN	2.3
29	AB	57	GLY	2.3
52	CS	59	VAL	2.3
54	J	178	VAL	2.3
69	DJ	116	ALA	2.3
70	Z	17	VAL	2.3
74	DO	71	ALA	2.3
79	AR	293	ALA	2.3
80	ll	187	ALA	2.3
1	1	1122	G	2.3
1	AS	264	G	2.3
1	AS	1571	G	2.3
1	AS	1696	G	2.3
1	AS	2227	G	2.3
1	AS	2250	G	2.3
1	AS	2301	G	2.3
3	AU	15	G	2.3
4	AW	38	HIS	2.3
5	k	325	LYS	2.3
6	AY	141	HIS	2.3
7	AZ	5	LYS	2.3
16	v	193	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
19	BL	72	LYS	2.3
21	0	136	LYS	2.3
26	BS	75	LYS	2.3
36	CC	73	LYS	2.3
45	i	52	LYS	2.3
45	i	55	LYS	2.3
46	B	1058	G	2.3
46	CM	856	G	2.3
46	CM	1255	G	2.3
46	CM	1394	G	2.3
46	CM	1414	G	2.3
48	D	160	LYS	2.3
50	CQ	160	HIS	2.3
49	E	56	LEU	2.3
52	H	87	CYS	2.3
53	CT	149	LYS	2.3
63	S	12	LYS	2.3
64	T	10	LYS	2.3
65	U	132	LYS	2.3
67	DH	52	LYS	2.3
73	DN	17	HIS	2.3
6	l	239	LEU	2.3
15	BH	116	LEU	2.3
18	x	150	LEU	2.3
38	CE	22	CYS	2.3
56	L	97	LEU	2.3
73	c	64	LEU	2.3
74	d	77	CYS	2.3
75	DP	55	CYS	2.3
79	AR	120	LEU	2.3
79	AR	231	LEU	2.3
80	ll	99	LEU	2.3
6	AY	281	ILE	2.3
9	o	93	ILE	2.3
9	BB	93	ILE	2.3
10	p	224	ILE	2.3
18	BK	117	ILE	2.3
27	9	50	ILE	2.3
61	DB	107	ILE	2.3
79	AR	196	ILE	2.3
1	AS	661	C	2.3
1	AS	2384	C	2.3

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Mol	Chain	Res	Type	RSRZ
1	AS	2509	C	2.3
1	AS	2542	C	2.3
1	AS	2566	C	2.3
4	j	17	THR	2.3
14	BG	92	THR	2.3
34	AG	93	THR	2.3
38	CE	33	THR	2.3
46	CM	859	C	2.3
46	CM	992	C	2.3
48	D	185	THR	2.3
51	G	217	THR	2.3
58	N	31	THR	2.3
74	DO	14	THR	2.3
79	DT	12	THR	2.3
6	l	60	GLN	2.3
8	BA	17	PRO	2.3
29	AB	50	PRO	2.3
47	CN	4	PRO	2.3
53	I	135	PRO	2.3
62	R	125	PRO	2.3
6	AY	27	PHE	2.3
13	s	123	TYR	2.3
18	BK	76	PHE	2.3
38	AK	66	TYR	2.3
63	S	141	TYR	2.3
64	DE	74	GLN	2.3
72	b	101	TYR	2.3
72	DM	37	GLN	2.3
6	AY	77	ARG	2.3
7	m	8	ARG	2.3
10	BC	239	MET	2.3
11	BD	62	ARG	2.3
14	BG	101	ARG	2.3
14	BG	173	ARG	2.3
18	BK	61	ARG	2.3
42	CI	17	ARG	2.3
43	CJ	45	ARG	2.3
50	F	118	ARG	2.3
53	I	154	ARG	2.3
55	CV	49	ARG	2.3
69	DJ	57	ARG	2.3
5	AX	7	GLU	2.3

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Mol	Chain	Res	Type	RSRZ
5	AX	22	ALA	2.3
5	AX	282	VAL	2.3
6	AY	18	SER	2.3
6	AY	324	VAL	2.3
7	m	14	SER	2.3
10	BC	113	GLU	2.3
10	BC	221	ALA	2.3
15	u	44	LYS	2.3
15	u	127	ALA	2.3
18	BK	68	GLY	2.3
21	BN	59	VAL	2.3
24	BQ	52	ALA	2.3
27	BT	29	VAL	2.3
33	BZ	100	SER	2.3
49	CP	159	SER	2.3
50	F	202	ALA	2.3
40	CG	33	ASN	2.3
42	AO	7	LYS	2.3
42	CI	22	ALA	2.3
61	Q	118	SER	2.3
64	DE	70	SER	2.3
68	X	35	SER	2.3
71	a	12	VAL	2.3
72	DM	54	VAL	2.3
72	DM	96	SER	2.3
75	e	59	SER	2.3
77	g	61	ALA	2.3
79	AR	164	SER	2.3
79	DT	266	SER	2.3
4	AW	215	ASN	2.3
10	BC	96	ASN	2.3
11	BD	47	LYS	2.3
12	BE	15	LYS	2.3
12	BE	101	LYS	2.3
19	BL	91	ASN	2.3
21	BN	141	LYS	2.3
25	7	113	LYS	2.3
28	AA	45	GLY	2.3
33	BZ	108	GLU	2.3
48	CO	49	ASN	2.3
55	CV	54	LYS	2.3
60	DA	105	ASN	2.3

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Mol	Chain	Res	Type	RSRZ
62	DC	13	LYS	2.3
62	DC	19	GLY	2.3
63	DD	101	LYS	2.3
66	DG	56	LYS	2.3
79	DT	274	GLU	2.3
79	DT	285	GLU	2.3
32	AE	68	ASN	2.3
68	X	50	ASN	2.3
80	11	78	LYS	2.3
1	1	3359	U	2.3
1	AS	821	U	2.3
1	AS	881	U	2.3
1	AS	1423	U	2.3
1	AS	1684	U	2.3
1	AS	1872	U	2.3
1	AS	3141	U	2.3
6	AY	244	HIS	2.3
7	AZ	171	LEU	2.3
11	q	144	LEU	2.3
46	CM	774	U	2.3
51	G	197	HIS	2.3
69	DJ	69	LEU	2.3
72	b	80	LEU	2.3
74	DO	8	LEU	2.3
79	AR	201	LEU	2.3
1	1	2446	A	2.3
1	AS	948	A	2.3
1	AS	966	A	2.3
1	AS	2277	A	2.3
1	AS	2402	A	2.3
1	AS	2789	A	2.3
4	AW	157	ILE	2.3
25	BR	63	ILE	2.3
46	B	1208	A	2.3
46	CM	1580	A	2.3
48	CO	48	ILE	2.3
53	CT	52	ILE	2.3
57	M	86	ILE	2.3
58	CY	85	ILE	2.3
71	DL	47	ILE	2.3
79	AR	57	ILE	2.3
79	DT	171	TRP	2.3

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Mol	Chain	Res	Type	RSRZ
4	j	249	THR	2.3
21	BN	151	PRO	2.3
22	BO	153	PRO	2.3
30	AC	13	THR	2.3
48	CO	23	PRO	2.3
51	CR	15	PRO	2.3
52	H	27	THR	2.3
54	CU	82	PRO	2.3
56	CW	2	PRO	2.3
66	V	10	PRO	2.3
68	X	52	THR	2.3
70	DK	42	PRO	2.3
79	AR	203	PRO	2.3
13	s	102	PHE	2.3
19	y	96	PHE	2.3
19	y	155	PHE	2.3
24	BQ	95	PHE	2.3
25	BR	31	PHE	2.3
28	AA	118	PHE	2.3
51	CR	71	GLN	2.3
54	J	70	GLN	2.3
54	CU	39	PHE	2.3
58	CY	16	GLN	2.3
62	R	33	PHE	2.3
1	1	1225	G	2.3
1	1	1588	G	2.3
1	AS	363	G	2.3
1	AS	808	G	2.3
1	AS	1443	G	2.3
1	AS	1731	G	2.3
1	AS	2548	G	2.3
1	AS	2556	G	2.3
1	AS	2850	G	2.3
30	AC	29	TYR	2.3
65	DF	79	TYR	2.3
80	ll	35	GLN	2.3
46	B	654	G	2.3
46	B	750	G	2.3
46	B	1394	G	2.3
46	CM	639	G	2.3
46	CM	1253	G	2.3
46	CM	1439	G	2.3

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Mol	Chain	Res	Type	RSRZ
1	1	2744	C	2.3
1	AS	741	C	2.3
1	AS	873	C	2.3
1	AS	957	C	2.3
1	AS	1195	C	2.3
1	AS	1640	C	2.3
1	AS	2159	C	2.3
46	B	38	C	2.3
46	B	303	C	2.3
46	B	1323	C	2.3
46	CM	138	C	2.3
46	CM	716	C	2.3
46	CM	1505	C	2.3
7	m	152	ARG	2.3
7	AZ	85	ARG	2.3
13	s	133	ARG	2.3
17	BJ	79	ARG	2.3
25	7	93	ARG	2.3
27	BT	75	ARG	2.3
29	BV	42	ARG	2.3
51	G	253	ARG	2.3
52	H	166	ARG	2.3
58	CY	11	ARG	2.3
60	DA	3	ARG	2.3
62	R	28	MET	2.3
64	DE	3	ARG	2.3
67	W	83	MET	2.3
69	Y	3	ARG	2.3
5	k	132	LYS	2.3
5	k	175	LYS	2.3
5	AX	157	VAL	2.3
7	m	67	ALA	2.3
7	AZ	105	VAL	2.3
10	BC	210	ALA	2.3
16	v	115	VAL	2.3
25	7	130	ALA	2.3
29	BV	144	VAL	2.3
39	AL	56	VAL	2.3
41	AN	52	LYS	2.3
48	D	55	LYS	2.3
48	D	164	VAL	2.3
51	CR	55	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
52	H	133	VAL	2.3
53	CT	9	ALA	2.3
53	CT	97	VAL	2.3
56	L	169	ALA	2.3
58	CY	94	VAL	2.3
59	O	61	VAL	2.3
61	DB	8	VAL	2.3
65	DF	31	ALA	2.3
67	W	111	VAL	2.3
22	BO	51	GLY	2.3
53	CT	55	GLY	2.3
76	f	47	ALA	2.3
8	n	54	LEU	2.3
10	p	209	GLU	2.3
19	BL	104	LEU	2.3
20	BM	105	LEU	2.3
22	BO	104	GLU	2.3
47	C	137	SER	2.3
50	CQ	114	LEU	2.3
54	CU	111	SER	2.3
56	L	102	GLU	2.3
56	CW	80	LEU	2.3
57	M	74	GLU	2.3
63	S	43	LEU	2.3
63	S	140	SER	2.3
66	DG	5	SER	2.3
68	DI	10	GLU	2.3
71	a	101	GLU	2.3
79	DT	120	LEU	2.3
4	j	187	HIS	2.2
5	AX	59	ASP	2.2
5	AX	224	HIS	2.2
5	AX	243	HIS	2.2
8	n	84	ILE	2.2
15	u	34	ASP	2.2
17	BJ	57	ASP	2.2
22	2	25	ILE	2.2
22	BO	42	ILE	2.2
23	BP	44	ASP	2.2
26	8	91	ASN	2.2
27	9	83	ASP	2.2
27	9	114	ASP	2.2

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Mol	Chain	Res	Type	RSRZ
29	BV	44	ASN	2.2
35	CB	95	ILE	2.2
41	CH	33	ASN	2.2
47	C	164	ASN	2.2
50	F	5	ILE	2.2
56	L	124	HIS	2.2
63	S	119	ASP	2.2
64	DE	31	ASN	2.2
65	DF	69	ILE	2.2
70	DK	89	ASN	2.2
73	DN	11	ASN	2.2
74	d	49	HIS	2.2
79	DT	74	ILE	2.2
5	k	122	TRP	2.2
1	AS	640	U	2.2
1	AS	792	U	2.2
1	AS	2546	U	2.2
46	B	378	U	2.2
4	AW	84	THR	2.2
7	m	28	THR	2.2
23	5	74	PHE	2.2
28	AA	131	PHE	2.2
36	AI	116	PHE	2.2
38	CE	61	THR	2.2
49	CP	133	PRO	2.2
54	CU	36	PRO	2.2
54	CU	128	PRO	2.2
61	Q	117	PRO	2.2
66	V	39	THR	2.2
71	a	64	PHE	2.2
79	DT	101	THR	2.2
1	1	776	A	2.2
1	1	2122	A	2.2
1	1	2520	A	2.2
1	AS	25	A	2.2
1	AS	2581	A	2.2
1	AS	3247	A	2.2
2	AT	118	A	2.2
6	l	238	GLN	2.2
11	q	162	GLN	2.2
12	r	162	GLN	2.2
14	t	119	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
44	AQ	32	GLN	2.2
46	CM	41	A	2.2
46	CM	46	A	2.2
46	CM	542	A	2.2
46	CM	687	A	2.2
46	CM	1314	A	2.2
46	CM	1397	A	2.2
46	CM	1532	A	2.2
51	G	260	GLN	2.2
51	CR	259	GLN	2.2
61	Q	94	GLN	2.2
79	DT	4	GLN	2.2
14	t	49	ARG	2.2
14	BG	73	ARG	2.2
19	y	16	ARG	2.2
35	AH	41	ARG	2.2
53	I	223	ARG	2.2
55	CV	184	ARG	2.2
64	T	67	ARG	2.2
5	k	167	LYS	2.2
5	AX	124	LYS	2.2
7	m	27	LYS	2.2
7	AZ	89	LYS	2.2
12	r	203	LYS	2.2
30	BW	40	LYS	2.2
33	BZ	37	LYS	2.2
33	BZ	65	LYS	2.2
39	CF	6	LYS	2.2
43	CJ	32	LYS	2.2
51	CR	10	LYS	2.2
53	CT	115	LYS	2.2
61	Q	124	LYS	2.2
61	DB	65	LYS	2.2
69	DJ	119	LYS	2.2
70	DK	114	LYS	2.2
78	h	136	LYS	2.2
11	q	181	VAL	2.2
11	BD	18	VAL	2.2
20	z	22	VAL	2.2
33	AF	80	VAL	2.2
52	H	22	VAL	2.2
52	CS	160	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
54	CU	148	VAL	2.2
59	CZ	116	VAL	2.2
75	e	44	VAL	2.2
4	j	185	ALA	2.2
4	j	236	GLY	2.2
6	AY	314	LEU	2.2
10	BC	207	ALA	2.2
14	t	136	ALA	2.2
14	t	153	ALA	2.2
14	BG	158	LEU	2.2
15	u	62	LEU	2.2
18	BK	57	ALA	2.2
22	BO	152	ALA	2.2
23	BP	70	GLY	2.2
25	BR	81	ALA	2.2
26	8	23	ALA	2.2
31	AD	53	LEU	2.2
37	AJ	8	ALA	2.2
37	AJ	31	ALA	2.2
47	CN	51	GLY	2.2
47	CN	66	ALA	2.2
49	CP	197	GLY	2.2
50	F	96	GLY	2.2
50	CQ	120	ALA	2.2
51	G	12	LEU	2.2
52	H	194	LEU	2.2
53	I	109	LEU	2.2
53	CT	124	LEU	2.2
54	CU	32	ALA	2.2
55	CV	161	ALA	2.2
61	Q	78	LEU	2.2
64	T	46	LEU	2.2
64	DE	46	LEU	2.2
69	Y	96	ALA	2.2
1	1	353	G	2.2
1	1	1436	G	2.2
1	1	2458	G	2.2
1	1	2839	C	2.2
1	AS	330	G	2.2
1	AS	421	G	2.2
1	AS	874	G	2.2
1	AS	904	G	2.2

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Mol	Chain	Res	Type	RSRZ
1	AS	1651	G	2.2
1	AS	2092	C	2.2
1	AS	2515	G	2.2
1	AS	2796	G	2.2
3	AU	106	C	2.2
3	AU	110	C	2.2
46	B	232	G	2.2
46	B	486	G	2.2
46	B	823	G	2.2
46	B	1017	G	2.2
46	CM	18	C	2.2
46	CM	332	G	2.2
46	CM	407	C	2.2
46	CM	1031	G	2.2
46	CM	1075	C	2.2
46	CM	1126	G	2.2
46	CM	1303	G	2.2
46	CM	1369	G	2.2
46	CM	1612	C	2.2
46	CM	1746	C	2.2
7	AZ	234	GLU	2.2
10	BC	229	GLU	2.2
14	BG	150	GLU	2.2
48	CO	191	GLU	2.2
53	CT	150	GLU	2.2
54	CU	180	GLU	2.2
64	DE	37	GLU	2.2
79	DT	14	GLU	2.2
4	AW	218	HIS	2.2
10	p	161	ILE	2.2
12	BE	167	ILE	2.2
13	s	114	ILE	2.2
14	t	3	ILE	2.2
16	v	174	ILE	2.2
23	5	54	ILE	2.2
24	BQ	114	ILE	2.2
34	AG	107	ILE	2.2
38	CE	16	HIS	2.2
38	CE	36	SER	2.2
40	AM	3	SER	2.2
45	CL	110	SER	2.2
47	CN	23	HIS	2.2

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Mol	Chain	Res	Type	RSRZ
50	F	173	ILE	2.2
52	H	187	ILE	2.2
56	L	52	ILE	2.2
59	O	65	SER	2.2
59	O	130	SER	2.2
62	R	79	HIS	2.2
65	U	99	HIS	2.2
65	DF	125	ILE	2.2
66	DG	117	SER	2.2
70	DK	57	ILE	2.2
79	DT	199	ILE	2.2
6	AY	284	ASN	2.2
11	BD	59	ASN	2.2
13	s	111	ASP	2.2
18	BK	89	ASN	2.2
32	AE	83	ASP	2.2
40	AM	38	ASN	2.2
76	f	53	ASN	2.2
76	DQ	13	ASN	2.2
48	D	117	TRP	2.2
79	AR	135	TRP	2.2
6	l	200	PHE	2.2
7	AZ	293	PHE	2.2
14	BG	164	PRO	2.2
21	BN	22	PRO	2.2
34	AG	56	PRO	2.2
41	AN	28	PRO	2.2
48	CO	35	PRO	2.2
51	CR	29	PRO	2.2
7	AZ	93	THR	2.2
10	p	202	THR	2.2
47	CN	40	THR	2.2
52	CS	207	THR	2.2
67	DH	24	THR	2.2
75	DP	26	THR	2.2
79	AR	73	THR	2.2
79	AR	200	THR	2.2
1	1	250	U	2.2
1	1	825	U	2.2
1	1	1010	U	2.2
1	AS	49	U	2.2
1	AS	1214	U	2.2

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Mol	Chain	Res	Type	RSRZ
1	AS	2951	U	2.2
4	j	47	GLN	2.2
6	l	49	GLN	2.2
10	BC	49	ARG	2.2
10	BC	186	ARG	2.2
13	s	166	ARG	2.2
16	v	105	ARG	2.2
17	BJ	75	ARG	2.2
19	y	174	ARG	2.2
26	8	48	ARG	2.2
29	AB	70	ARG	2.2
30	BW	58	ARG	2.2
32	BY	61	ARG	2.2
37	CD	75	ARG	2.2
40	AM	21	ARG	2.2
46	B	15	U	2.2
46	B	1418	U	2.2
46	B	1722	U	2.2
46	CM	73	U	2.2
52	CS	185	ARG	2.2
56	CW	131	GLN	2.2
61	Q	79	ARG	2.2
65	DF	36	ARG	2.2
70	DK	109	ARG	2.2
6	AY	275	TYR	2.2
13	s	153	LYS	2.2
18	x	111	LYS	2.2
38	CE	75	LYS	2.2
50	CQ	208	LYS	2.2
55	CV	140	LYS	2.2
66	V	110	LYS	2.2
71	a	11	LYS	2.2
73	c	3	LYS	2.2
5	AX	85	VAL	2.2
17	BJ	139	VAL	2.2
28	AA	114	VAL	2.2
28	BU	68	VAL	2.2
51	CR	70	VAL	2.2
58	CY	125	VAL	2.2
61	Q	116	VAL	2.2
67	W	99	VAL	2.2
1	AS	62	A	2.2

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Mol	Chain	Res	Type	RSRZ
1	AS	351	A	2.2
1	AS	1365	A	2.2
1	AS	1638	A	2.2
1	AS	2144	A	2.2
2	AT	63	A	2.2
5	k	23	ALA	2.2
6	AY	195	LEU	2.2
6	AY	259	LEU	2.2
7	AZ	157	ALA	2.2
8	n	29	LEU	2.2
8	BA	54	LEU	2.2
10	BC	94	LEU	2.2
22	BO	155	ALA	2.2
31	BX	27	LEU	2.2
37	CD	56	LEU	2.2
46	B	712	A	2.2
46	B	915	A	2.2
46	B	1069	A	2.2
46	B	1297	A	2.2
46	B	1403	A	2.2
46	B	1601	A	2.2
46	B	1676	A	2.2
46	CM	376	A	2.2
47	C	18	LEU	2.2
48	D	47	LEU	2.2
49	CP	211	ALA	2.2
52	H	58	LEU	2.2
53	I	216	LEU	2.2
55	CV	34	ALA	2.2
61	DB	105	LEU	2.2
81	12	133	LEU	2.2
16	BI	69	GLY	2.2
18	BK	77	GLY	2.2
44	AQ	12	GLY	2.2
67	W	74	GLY	2.2
67	W	110	GLY	2.2
69	DJ	73	GLY	2.2
13	BF	106	ILE	2.2
14	t	51	ILE	2.2
20	z	143	ILE	2.2
47	CN	64	ILE	2.2
49	CP	165	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
68	X	36	ILE	2.2
14	BG	165	GLU	2.2
25	7	88	GLU	2.2
43	CJ	16	GLU	2.2
51	CR	251	GLU	2.2
56	L	64	GLU	2.2
60	P	119	GLU	2.2
64	T	18	GLU	2.2
12	r	51	HIS	2.2
56	L	133	HIS	2.2
4	j	14	SER	2.2
4	j	226	SER	2.2
11	BD	155	SER	2.2
13	BF	146	SER	2.2
14	BG	156	SER	2.2
18	x	144	SER	2.2
19	BL	146	SER	2.2
27	9	11	SER	2.2
51	CR	250	SER	2.2
55	CV	182	SER	2.2
61	Q	95	SER	2.2
1	AS	479	C	2.2
1	AS	665	C	2.2
1	AS	1115	C	2.2
1	AS	1593	C	2.2
1	AS	1741	C	2.2
1	AS	2853	C	2.2
5	AX	63	PRO	2.2
6	l	101	PHE	2.2
6	l	111	ASN	2.2
8	n	59	ASP	2.2
8	BA	91	ASN	2.2
9	o	193	PHE	2.2
13	BF	95	ASN	2.2
15	BH	10	TRP	2.2
16	v	195	ASN	2.2
16	BI	46	ASP	2.2
17	w	110	PRO	2.2
21	BN	69	PRO	2.2
40	CG	24	PRO	2.2
43	CJ	91	PHE	2.2
46	CM	1264	C	2.2

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Mol	Chain	Res	Type	RSRZ
46	CM	1651	C	2.2
47	CN	104	PRO	2.2
65	DF	87	ASN	2.2
73	c	31	PRO	2.2
78	DS	176	ASN	2.2
5	k	4	ARG	2.2
5	AX	334	ARG	2.2
14	BG	49	ARG	2.2
19	BL	176	ARG	2.2
21	BN	12	ARG	2.2
48	CO	41	ARG	2.2
53	I	202	ARG	2.2
69	Y	57	ARG	2.2
73	c	15	ARG	2.2
73	DN	5	ARG	2.2
1	1	63	G	2.2
1	1	368	G	2.2
1	1	420	G	2.2
1	AS	494	G	2.2
1	AS	666	G	2.2
1	AS	766	G	2.2
1	AS	822	G	2.2
1	AS	943	G	2.2
1	AS	1413	G	2.2
1	AS	1774	G	2.2
1	AS	2099	G	2.2
1	AS	2194	G	2.2
1	AS	2551	G	2.2
3	AU	36	G	2.2
4	AW	70	LYS	2.2
5	k	221	THR	2.2
7	AZ	218	LYS	2.2
8	BA	89	LYS	2.2
9	BB	68	LYS	2.2
11	q	84	LYS	2.2
18	x	27	LYS	2.2
18	BK	151	THR	2.2
20	BM	108	LYS	2.2
25	7	117	LYS	2.2
27	9	46	LYS	2.2
30	AC	23	LYS	2.2
30	BW	26	THR	2.2

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Mol	Chain	Res	Type	RSRZ
34	CA	93	THR	2.2
35	AH	29	LYS	2.2
36	CC	49	LYS	2.2
46	B	1093	G	2.2
46	B	1315	G	2.2
46	CM	537	G	2.2
46	CM	1059	G	2.2
46	CM	1263	G	2.2
46	CM	1352	G	2.2
47	C	108	THR	2.2
51	G	133	LYS	2.2
59	O	95	LYS	2.2
60	DA	107	LYS	2.2
61	DB	33	THR	2.2
65	DF	62	THR	2.2
70	Z	112	LYS	2.2
70	DK	126	LYS	2.2
77	g	23	LYS	2.2
79	DT	21	THR	2.2
79	DT	144	THR	2.2
80	ll	154	THR	2.2
34	CA	51	TYR	2.2
50	F	190	MET	2.2
51	G	19	MET	2.2
53	I	210	GLN	2.2
58	CY	93	TYR	2.2
60	P	62	GLN	2.2
61	DB	41	MET	2.2
15	BH	21	VAL	2.2
24	BQ	103	VAL	2.2
34	AG	52	VAL	2.2
49	CP	179	VAL	2.2
50	F	59	VAL	2.2
57	M	73	VAL	2.2
58	N	75	VAL	2.2
60	P	150	VAL	2.2
60	DA	98	VAL	2.2
6	l	237	LEU	2.2
6	AY	135	LEU	2.2
54	CU	6	LEU	2.2
56	CW	128	LEU	2.2
60	DA	115	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
67	DH	25	LEU	2.2
69	Y	93	LEU	2.2
73	DN	64	LEU	2.2
73	DN	71	LEU	2.2
78	DS	188	LEU	2.2
79	AR	13	LEU	2.2
1	1	2701	U	2.2
1	AS	118	U	2.2
1	AS	1204	U	2.2
1	AS	2183	U	2.2
1	AS	2401	U	2.2
1	AS	2937	U	2.2
1	AS	3029	U	2.2
5	AX	362	ALA	2.2
9	o	16	ALA	2.2
17	BJ	187	ALA	2.2
29	BV	106	ALA	2.2
32	AE	2	ALA	2.2
46	B	181	U	2.2
46	B	372	U	2.2
46	B	474	U	2.2
46	CM	894	U	2.2
46	CM	1728	U	2.2
70	DK	49	ALA	2.2
80	ll	71	ALA	2.2
7	m	202	GLY	2.2
17	BJ	96	GLY	2.2
33	AF	59	GLY	2.2
48	CO	226	GLY	2.2
49	E	158	GLY	2.2
51	CR	58	GLY	2.2
55	CV	80	GLY	2.2
75	e	20	GLY	2.2
76	DQ	17	GLY	2.2
7	AZ	148	ILE	2.2
17	BJ	44	ILE	2.2
22	BO	85	ILE	2.2
24	6	79	ILE	2.2
34	CA	59	ILE	2.2
37	AJ	93	ILE	2.2
40	AM	51	ILE	2.2
52	CS	172	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
1	1	966	A	2.2
1	1	1575	A	2.2
1	1	2379	A	2.2
1	1	2789	A	2.2
1	AS	33	A	2.2
1	AS	149	A	2.2
1	AS	1932	A	2.2
1	AS	2071	A	2.2
3	AU	138	A	2.2
11	BD	152	GLU	2.2
17	w	47	GLU	2.2
18	x	153	GLU	2.2
29	BV	120	GLU	2.2
46	B	926	A	2.2
46	CM	216	A	2.2
46	CM	980	A	2.2
46	CM	1503	A	2.2
50	CQ	39	GLU	2.2
50	CQ	48	GLU	2.2
51	CR	93	GLU	2.2
59	O	56	GLU	2.2
59	CZ	69	GLU	2.2
62	R	110	GLU	2.2
67	W	73	GLU	2.2
5	AX	226	PHE	2.2
14	t	133	SER	2.2
14	BG	34	SER	2.2
19	y	106	PHE	2.2
21	0	113	ARG	2.2
26	8	33	ARG	2.2
26	BS	27	ARG	2.2
26	BS	97	SER	2.2
35	AH	80	ARG	2.2
37	CD	26	SER	2.2
39	AL	43	PHE	2.2
41	AN	35	ARG	2.2
41	CH	30[A]	ARG	2.2
43	CJ	48	SER	2.2
47	CN	101	ARG	2.2
47	CN	102	PHE	2.2
49	CP	139	TRP	2.2
50	CQ	72	SER	2.2

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Mol	Chain	Res	Type	RSRZ
56	CW	158	PHE	2.2
61	DB	18	PHE	2.2
62	R	72	ARG	2.2
62	DC	92	SER	2.2
63	S	33	SER	2.2
5	AX	96	PRO	2.2
6	AY	306	LYS	2.2
16	v	96	LYS	2.2
28	BU	21	LYS	2.2
29	BV	10	LYS	2.2
29	BV	122	PRO	2.2
36	CC	35	LYS	2.2
38	CE	6	PRO	2.2
38	CE	32	LYS	2.2
44	CK	36	LYS	2.2
51	G	211	LYS	2.2
56	L	175	LYS	2.2
58	N	96	LYS	2.2
60	P	21	ASN	2.2
62	DC	35	LYS	2.2
73	c	65	PRO	2.2
69	Y	92	ASN	2.2
69	DJ	80	ASN	2.2
70	DK	14	LYS	2.2
78	h	176	ASN	2.2
14	BG	142	ASP	2.2
47	C	43	ASP	2.2
47	CN	43	ASP	2.2
47	CN	129	ASP	2.2
65	DF	91	ASP	2.2
79	DT	204	ASP	2.2
5	k	372	THR	2.2
18	x	129	THR	2.2
21	0	169	THR	2.2
22	BO	125	THR	2.2
33	AF	50	THR	2.2
33	BZ	64	THR	2.2
47	C	10	THR	2.2
55	CV	76	THR	2.2
56	CW	91	MET	2.2
61	Q	88	THR	2.2
80	ll	85	MET	2.2

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Mol	Chain	Res	Type	RSRZ
1	1	2317	C	2.2
1	AS	1605	C	2.2
1	AS	1681	C	2.2
1	AS	2173	C	2.2
1	AS	2256	C	2.2
1	AS	2324	C	2.2
1	AS	3117	C	2.2
4	j	61	VAL	2.2
4	AW	8	GLN	2.2
6	l	202	GLN	2.2
7	m	65	VAL	2.2
10	p	201	LEU	2.2
10	BC	51	VAL	2.2
12	r	216	TYR	2.2
13	BF	112	LEU	2.2
20	z	17	VAL	2.2
26	8	83	VAL	2.2
31	AD	25	TYR	2.2
31	BX	82	VAL	2.2
36	AI	70	TYR	2.2
44	CK	79	VAL	2.2
46	B	90	C	2.2
46	CM	1445	C	2.2
48	D	157	GLN	2.2
48	CO	217	LEU	2.2
49	E	53	LEU	2.2
49	CP	160	VAL	2.2
50	CQ	137	VAL	2.2
53	CT	34	GLN	2.2
62	R	86	VAL	2.2
64	DE	40	VAL	2.2
64	DE	109	LEU	2.2
65	U	42	TYR	2.2
65	DF	6	GLN	2.2
70	DK	130	VAL	2.2
73	DN	21	VAL	2.2
74	DO	3	LEU	2.2
75	DP	41	VAL	2.2
6	l	166	ALA	2.2
8	BA	161	ALA	2.2
9	BB	133	ALA	2.2
10	p	171	CYS	2.2

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Mol	Chain	Res	Type	RSRZ
12	r	49	CYS	2.2
20	BM	11	ALA	2.2
20	BM	145	ALA	2.2
28	BU	49	ALA	2.2
34	CA	2	ALA	2.2
49	CP	95	ALA	2.2
50	F	4	ALA	2.2
54	J	55	ALA	2.2
55	CV	137	ALA	2.2
66	V	11	ALA	2.2
78	DS	170	ALA	2.2
79	DT	117	ALA	2.2
36	AI	72	GLY	2.2
47	CN	94	GLY	2.2
47	CN	171	GLY	2.2
48	CO	93	GLY	2.2
52	CS	178	GLY	2.2
74	DO	69	GLY	2.2
79	DT	11	GLY	2.2
1	1	109	G	2.2
1	1	2945	G	2.2
1	AS	157	G	2.2
1	AS	169	G	2.2
1	AS	582	G	2.2
1	AS	659	G	2.2
1	AS	686	G	2.2
1	AS	1476	G	2.2
1	AS	1856	G	2.2
1	AS	2101	G	2.2
1	AS	2294	G	2.2
1	AS	2750	G	2.2
46	B	1472	G	2.2
46	CM	262	G	2.2
46	CM	823	G	2.2
46	CM	970	G	2.2
46	CM	1218	G	2.2
46	CM	1528	G	2.2
52	H	64	ILE	2.2
54	J	45	ILE	2.2
56	CW	134	ILE	2.2
79	DT	43	ILE	2.2
1	1	329	U	2.2

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Mol	Chain	Res	Type	RSRZ
1	AS	24	U	2.2
1	AS	778	U	2.2
1	AS	2169	U	2.2
1	AS	2296	U	2.2
1	AS	2925	U	2.2
1	AS	3358	U	2.2
46	B	259	U	2.2
46	B	913	U	2.2
46	CM	752	U	2.2
46	CM	913	U	2.2
46	CM	994	U	2.2
46	CM	1351	U	2.2
6	AY	139	ARG	2.2
12	r	207	GLU	2.2
24	6	88	ARG	2.2
35	AH	103	ARG	2.2
45	CL	91	HIS	2.2
47	C	119	ARG	2.2
47	CN	107	PHE	2.2
51	G	8	HIS	2.2
51	G	51	ARG	2.2
51	CR	39	ARG	2.2
53	CT	222	GLU	2.2
55	CV	25	ARG	2.2
56	CW	114	PHE	2.2
58	CY	88	ARG	2.2
60	P	106	ARG	2.2
5	AX	66	LYS	2.2
6	AY	310	LYS	2.2
7	m	89	LYS	2.2
9	BB	32	LYS	2.2
10	BC	124	LYS	2.2
18	BK	13	LYS	2.2
21	0	23	LYS	2.2
21	BN	149	LYS	2.2
32	BY	60	LYS	2.2
36	AI	78	LYS	2.2
36	AI	91	LYS	2.2
50	F	42	LYS	2.2
52	H	107	LYS	2.2
65	DF	80	LYS	2.2
70	Z	14	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
70	DK	43	PHE	2.2
70	DK	86	PHE	2.2
4	AW	197	PRO	2.2
52	CS	30	PRO	2.2
78	DS	166	PRO	2.2
79	DT	244	PRO	2.2
1	1	2323	A	2.2
1	AS	862	A	2.2
1	AS	1918	A	2.2
1	AS	2365	A	2.2
1	AS	2615	A	2.2
1	AS	3156	A	2.2
16	BI	40	SER	2.2
46	B	263	A	2.2
46	B	613	A	2.2
46	B	1573	A	2.2
46	CM	591	A	2.2
46	CM	1513	A	2.2
55	CV	86	SER	2.2
57	M	51	SER	2.2
61	DB	118	SER	2.2
79	AR	153	SER	2.2
4	j	7	ASN	2.2
4	AW	204	MET	2.2
12	r	73	ASN	2.2
22	2	52	MET	2.2
43	CJ	3	ASN	2.2
51	G	188	ASN	2.2
56	L	142	ASN	2.2
65	U	87	ASN	2.2
75	DP	43	ASN	2.2
79	DT	305	ASN	2.2
4	AW	29	LEU	2.2
5	AX	344	VAL	2.2
6	l	328	LEU	2.2
6	AY	149	LEU	2.2
7	m	51	LEU	2.2
7	m	131	LEU	2.2
7	AZ	154	THR	2.2
8	n	33	LEU	2.2
8	BA	155	LEU	2.2
10	p	122	THR	2.2

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Mol	Chain	Res	Type	RSRZ
11	BD	25	VAL	2.2
13	s	126	ASP	2.2
13	s	130	VAL	2.2
15	BH	15	VAL	2.2
17	BJ	103	LEU	2.2
20	z	131	THR	2.2
22	2	11	THR	2.2
24	6	49	LEU	2.2
27	9	35	LEU	2.2
28	BU	97	THR	2.2
32	AE	45	THR	2.2
32	AE	100	THR	2.2
33	AF	82	ASP	2.2
44	CK	64	VAL	2.2
48	CO	88	VAL	2.2
48	CO	103	LEU	2.2
49	E	68	LEU	2.2
52	H	176	THR	2.2
54	J	113	THR	2.2
54	CU	37	LEU	2.2
54	CU	151	ASP	2.2
55	CV	136	VAL	2.2
56	L	76	LEU	2.2
57	CX	20	VAL	2.2
58	CY	37	ASP	2.2
62	DC	96	VAL	2.2
64	DE	55	THR	2.2
65	U	61	LEU	2.2
65	DF	111	ASP	2.2
73	DN	75	VAL	2.2
74	d	57	ASP	2.2
78	DS	179	ASP	2.2
79	AR	41	THR	2.2
79	AR	105	VAL	2.2
79	DT	132	VAL	2.2
80	l1	16	LEU	2.2
80	l1	75	ASP	2.2
12	BE	75	TYR	2.2
13	BF	39	GLN	2.2
13	BF	90	GLN	2.2
14	t	19	GLN	2.2
27	9	19	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
48	CO	155	TYR	2.2
50	F	121	TYR	2.2
56	CW	164	TYR	2.2
64	DE	21	TYR	2.2
9	BB	165	ALA	2.1
10	p	210	ALA	2.1
20	BM	35	ALA	2.1
24	6	54	ALA	2.1
32	AE	31	ALA	2.1
35	AH	2	ALA	2.1
64	T	39	ALA	2.1
66	V	138	GLN	2.2
4	AW	212	GLY	2.1
7	AZ	121	GLY	2.1
8	BA	94	GLY	2.1
12	BE	114	GLY	2.1
64	T	64	GLY	2.1
79	DT	78	GLY	2.1
4	AW	15	ILE	2.1
11	q	4	ILE	2.1
11	BD	20	ILE	2.1
13	BF	14	ILE	2.1
16	BI	27	CYS	2.1
21	BN	58	ILE	2.1
34	AG	49	ILE	2.1
51	G	147	ILE	2.1
71	a	118	ILE	2.1
1	1	1142	C	2.1
1	1	1271	C	2.1
1	AS	83	C	2.1
1	AS	184	C	2.1
1	AS	1133	C	2.1
1	AS	1137	C	2.1
1	AS	1316	C	2.1
1	AS	1789	C	2.1
46	CM	228	C	2.1
46	CM	919	C	2.1
46	CM	928	C	2.1
46	CM	1442	C	2.1
14	BG	55	ARG	2.1
25	7	105	ARG	2.1
53	I	92	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
64	DE	11	ARG	2.1
75	e	22	ARG	2.1
7	AZ	259	LYS	2.1
14	BG	31	LYS	2.1
14	BG	64	LYS	2.1
18	BK	26	PHE	2.1
19	BL	8	LYS	2.1
19	BL	50	LYS	2.1
20	z	70	LYS	2.1
21	BN	75	PHE	2.1
23	5	28	PHE	2.1
25	BR	120	LYS	2.1
28	AA	52	LYS	2.1
32	AE	60	LYS	2.1
36	CC	115	LYS	2.1
53	CT	23	LYS	2.1
53	CT	95	LYS	2.1
56	L	160	HIS	2.1
58	CY	60	PHE	2.1
62	R	100	LYS	2.1
62	DC	45	PHE	2.1
64	T	59	LYS	2.1
64	T	72	LYS	2.1
71	DL	52	LYS	2.1
78	DS	173	PHE	2.1
79	DT	118	LYS	2.1
6	AY	118	GLU	2.1
26	8	60	HIS	2.1
28	AA	79	HIS	2.1
48	D	67	GLU	2.1
66	DG	49	GLU	2.1
66	DG	115	GLU	2.1
1	1	1254	U	2.1
1	1	1816	U	2.1
1	1	2847	U	2.1
1	1	3028	U	2.1
1	AS	167	U	2.1
1	AS	962	U	2.1
1	AS	1421	U	2.1
1	AS	1591	U	2.1
1	AS	2537	U	2.1
1	1	1262	G	2.1

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Mol	Chain	Res	Type	RSRZ
1	1	2915	G	2.1
1	AS	17	G	2.1
1	AS	58	G	2.1
1	AS	287	G	2.1
1	AS	333	G	2.1
1	AS	716	G	2.1
1	AS	1315	G	2.1
1	AS	2387	G	2.1
3	AU	135	G	2.1
8	BA	15	PRO	2.1
15	u	59	PRO	2.1
46	B	1247	U	2.1
46	CM	172	U	2.1
46	CM	238	U	2.1
46	CM	946	U	2.1
46	CM	1172	U	2.1
46	CM	1531	U	2.1
29	AB	79	TRP	2.1
46	B	371	G	2.1
46	CM	1498	G	2.1
46	CM	1533	G	2.1
50	CQ	82	PRO	2.1
67	DH	95	PRO	2.1
73	DN	20	PRO	2.1
5	AX	125	SER	2.1
6	AY	21	LEU	2.1
7	AZ	131	LEU	2.1
8	BA	159	LEU	2.1
10	p	66	LEU	2.1
11	BD	38	LEU	2.1
13	s	67	VAL	2.1
17	w	195	LEU	2.1
18	BK	115	SER	2.1
22	2	28	SER	2.1
22	BO	128	LEU	2.1
23	BP	67	VAL	2.1
26	BS	43	SER	2.1
26	BS	128	SER	2.1
27	BT	66	SER	2.1
28	BU	80	LEU	2.1
32	BY	92	VAL	2.1
35	CB	55	SER	2.1

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Mol	Chain	Res	Type	RSRZ
37	CD	43	VAL	2.1
39	CF	60	SER	2.1
43	AP	93	LEU	2.1
47	C	181	VAL	2.1
48	CO	186	SER	2.1
49	CP	195	SER	2.1
50	F	70	LEU	2.1
52	CS	33	VAL	2.1
54	CU	77	LEU	2.1
55	CV	73	SER	2.1
56	L	105	LEU	2.1
56	CW	136	VAL	2.1
57	CX	68	LEU	2.1
70	DK	46	SER	2.1
70	DK	103	LEU	2.1
71	a	69	SER	2.1
73	DN	50	VAL	2.1
74	d	2	VAL	2.1
4	j	243	THR	2.1
12	BE	144	ASN	2.1
18	x	151	THR	2.1
24	6	47	ASN	2.1
25	7	45	ASN	2.1
28	AA	83	THR	2.1
38	CE	76	ASN	2.1
47	CN	93	THR	2.1
47	CN	147	THR	2.1
51	G	146	THR	2.1
52	CS	95	ASN	2.1
53	CT	183	THR	2.1
54	CU	115	THR	2.1
55	CV	115	ASN	2.1
69	Y	66	ASN	2.1
70	DK	79	ASN	2.1
72	b	90	THR	2.1
74	DO	55	THR	2.1
75	e	39	THR	2.1
79	DT	89	THR	2.1
6	l	275	TYR	2.1
10	BC	77	ALA	2.1
13	s	168	ASP	2.1
16	v	53	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
18	x	72	GLN	2.1
20	z	78	TYR	2.1
22	2	13	TYR	2.1
28	BU	117	ALA	2.1
34	CA	103	TYR	2.1
37	CD	2	ALA	2.1
37	CD	63	ALA	2.1
48	CO	72	ASP	2.1
40	CG	25	GLN	2.1
45	CL	109	GLN	2.1
50	CQ	148	ALA	2.1
56	CW	55	ALA	2.1
57	M	65	TYR	2.1
61	Q	96	ALA	2.1
63	S	95	TYR	2.1
63	DD	63	ASP	2.1
64	DE	90	ALA	2.1
68	DI	4	ASP	2.1
70	Z	12	ALA	2.1
70	Z	113	ALA	2.1
71	DL	76	TYR	2.1
72	DM	104	ALA	2.1
1	1	64	A	2.1
1	1	408	A	2.1
1	1	2161	A	2.1
1	1	2792	A	2.1
1	AS	319	A	2.1
1	AS	324	A	2.1
1	AS	1553	A	2.1
1	AS	1583	A	2.1
1	AS	1609	A	2.1
1	AS	1819	A	2.1
1	AS	2091	A	2.1
46	B	1066	A	2.1
46	CM	618	A	2.1
46	CM	1564	A	2.1
10	BC	240	GLY	2.1
14	BG	125	ILE	2.1
16	v	142	ILE	2.1
51	G	34	GLY	2.1
51	G	167	GLY	2.1
51	G	228	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
54	J	5	ILE	2.1
54	J	50	GLY	2.1
55	CV	180	GLY	2.1
63	DD	26	GLY	2.1
72	b	41	ILE	2.1
7	AZ	34	LYS	2.1
9	BB	15	LYS	2.1
12	r	145	LYS	2.1
12	BE	12	CYS	2.1
16	v	162	ARG	2.1
17	BJ	39	CYS	2.1
18	x	23	ARG	2.1
24	BQ	122	CYS	2.1
31	BX	54	ARG	2.1
36	AI	67	ARG	2.1
36	CC	10	ARG	2.1
48	D	26	ARG	2.1
52	H	92	ARG	2.1
54	J	92	ARG	2.1
56	CW	108	ARG	2.1
62	DC	43	ARG	2.1
70	Z	7	ARG	2.1
19	y	50	LYS	2.1
22	2	43	LYS	2.1
22	BO	35	LYS	2.1
26	BS	45	LYS	2.1
27	BT	122	LYS	2.1
32	AE	87	LYS	2.1
37	AJ	74	LYS	2.1
45	CL	65	LYS	2.1
49	E	128	LYS	2.1
49	CP	111	LYS	2.1
54	CU	134	LYS	2.1
56	L	16	LYS	2.1
58	CY	24	LYS	2.1
65	U	90	LYS	2.1
68	DI	25	LYS	2.1
70	DK	5	LYS	2.1
75	e	32	PHE	2.1
5	AX	231	HIS	2.1
7	AZ	244	HIS	2.1
14	BG	79	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
17	w	188	GLU	2.1
17	BJ	73	HIS	2.1
50	CQ	211	GLU	2.1
51	CR	202	GLU	2.1
57	M	12	HIS	2.1
60	DA	86	GLU	2.1
62	R	31	GLU	2.1
69	DJ	51	GLU	2.1
79	DT	238	HIS	2.1
1	1	1777	C	2.1
1	AS	798	C	2.1
1	AS	845	C	2.1
1	AS	1578	C	2.1
1	AS	2393	C	2.1
3	AU	45	C	2.1
5	AX	239	PRO	2.1
6	AY	206	PRO	2.1
14	t	61	PRO	2.1
17	w	112	PRO	2.1
19	y	132	PRO	2.1
21	BN	153	PRO	2.1
31	BX	51	PRO	2.1
46	CM	79	C	2.1
46	CM	183	C	2.1
46	CM	947	C	2.1
46	CM	1350	C	2.1
46	CM	1524	C	2.1
51	G	5	PRO	2.1
51	CR	5	PRO	2.1
79	DT	159	PRO	2.1
15	BH	78	TRP	2.1
4	j	180	LEU	2.1
4	j	245	LEU	2.1
7	AZ	103	LEU	2.1
8	n	41	LEU	2.1
17	BJ	175	LEU	2.1
24	BQ	23	MET	2.1
40	AM	44	TRP	2.1
59	CZ	100	TRP	2.1
36	AI	36	LEU	2.1
38	CE	51	LEU	2.1
47	C	120	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
59	CZ	32	LEU	2.1
60	DA	91	LEU	2.1
63	S	53	LEU	2.1
64	DE	113	LEU	2.1
77	g	38	LEU	2.1
6	AY	296	VAL	2.1
19	BL	84	VAL	2.1
20	z	93	VAL	2.1
22	2	80	VAL	2.1
27	9	104	VAL	2.1
32	BY	66	VAL	2.1
33	BZ	5	VAL	2.1
37	AJ	86	VAL	2.1
50	F	75	VAL	2.1
58	CY	76	VAL	2.1
63	DD	96	VAL	2.1
73	c	30	VAL	2.1
1	AS	763	U	2.1
1	AS	1384	U	2.1
1	AS	1758	U	2.1
1	AS	2585	U	2.1
1	AS	2696	U	2.1
46	B	1217	U	2.1
46	CM	66	U	2.1
46	CM	393	U	2.1
46	CM	728	U	2.1
46	CM	1254	U	2.1
46	CM	1544	U	2.1
46	CM	1617	U	2.1
46	CM	1757	U	2.1
7	m	66	SER	2.1
10	p	196	SER	2.1
12	r	137	SER	2.1
19	y	181	SER	2.1
45	CL	99	SER	2.1
49	E	233	SER	2.1
56	L	152	SER	2.1
58	CY	112	SER	2.1
59	CZ	70	SER	2.1
6	l	175	ALA	2.1
6	AY	71	ALA	2.1
6	AY	168	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
12	r	138	ALA	2.1
14	t	53	ALA	2.1
14	BG	153	ALA	2.1
26	8	122	ALA	2.1
28	BU	54	THR	2.1
35	AH	25	THR	2.1
56	L	125	ALA	2.1
60	P	63	ALA	2.1
71	a	54	ALA	2.1
73	DN	63	ALA	2.1
79	DT	253	THR	2.1
4	j	49	ILE	2.1
4	AW	83	TYR	2.1
5	AX	272	TYR	2.1
6	l	222	ASN	2.1
12	r	55	ASN	2.1
15	u	83	ILE	2.1
17	BJ	82	TYR	2.1
18	BK	169	ASN	2.1
19	BL	45	ASN	2.1
9	o	108	GLN	2.1
9	BB	159	ILE	2.1
49	E	110	ILE	2.1
50	F	153	TYR	2.1
1	1	1015	G	2.1
1	1	1127	G	2.1
1	1	3041	G	2.1
1	AS	119	G	2.1
1	AS	586	G	2.1
1	AS	887	G	2.1
1	AS	1676	G	2.1
1	AS	1895	G	2.1
1	AS	2289	G	2.1
1	AS	3184	G	2.1
3	4	85	G	2.1
10	BC	125	ASP	2.1
18	BK	93	ASP	2.1
33	BZ	71	GLY	2.1
38	AK	62	GLY	2.1
49	CP	172	GLY	2.1
52	CS	141	GLY	2.1
53	CT	13	GLN	2.1

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Mol	Chain	Res	Type	RSRZ
53	CT	155	ASP	2.1
53	CT	166	ASP	2.1
54	J	121	ILE	2.1
54	CU	119	ASP	2.1
54	CU	176	GLN	2.1
58	N	86	ILE	2.1
59	O	110	GLY	2.1
63	S	24	GLY	2.1
63	S	87	GLY	2.1
63	S	132	GLY	2.1
64	T	61	ILE	2.1
68	DI	75	GLN	2.1
69	DJ	24	GLN	2.1
77	g	52	GLY	2.1
79	AR	307	ILE	2.1
40	CG	28	ARG	2.1
40	CG	45	ARG	2.1
46	B	1301	G	2.1
46	B	1723	G	2.1
46	CM	507	G	2.1
46	CM	799	G	2.1
46	CM	886	G	2.1
79	DT	139	GLY	2.1
6	AY	113	LYS	2.1
7	m	143	LYS	2.1
24	BQ	64	LYS	2.1
30	BW	22	LYS	2.1
37	AJ	67	ARG	2.1
45	CL	37	LYS	2.1
50	CQ	41	ARG	2.1
55	CV	144	LYS	2.1
61	DB	42	LYS	2.1
61	DB	131	ARG	2.1
70	DK	3	LYS	2.1
70	DK	139	LYS	2.1
79	AR	226	LYS	2.1
79	DT	60	LYS	2.1
79	DT	261	LYS	2.1
1	1	1274	A	2.1
1	AS	34	A	2.1
1	AS	1076	A	2.1
1	AS	1863	A	2.1

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Mol	Chain	Res	Type	RSRZ
1	AS	1879	A	2.1
1	AS	2498	A	2.1
1	AS	2913	A	2.1
1	AS	3142	A	2.1
3	AU	52	A	2.1
9	BB	83	PHE	2.1
13	BF	104	PHE	2.1
43	CJ	36	PHE	2.1
46	B	518	A	2.1
46	B	591	A	2.1
46	B	741	A	2.1
46	B	914	A	2.1
46	B	1397	A	2.1
46	B	1570	A	2.1
46	CM	93	A	2.1
46	CM	143	A	2.1
46	CM	1560	A	2.1
46	CM	1784	A	2.1
70	DK	107	PHE	2.1
5	k	67	MET	2.1
7	AZ	251	PRO	2.1
11	BD	130	GLU	2.1
16	BI	194	HIS	2.1
18	x	155	GLU	2.1
47	CN	152	PRO	2.1
63	S	73	HIS	2.1
72	b	95	HIS	2.1
10	BC	212	LEU	2.1
13	s	37	LEU	2.1
13	s	172	LEU	2.1
23	BP	37	LEU	2.1
51	G	189	LEU	2.1
48	D	43	VAL	2.1
48	CO	121	VAL	2.1
49	E	58	VAL	2.1
51	CR	45	VAL	2.1
51	CR	237	VAL	2.1
52	CS	46	TRP	2.1
57	CX	92	LEU	2.1
59	O	59	LEU	2.1
59	O	74	LEU	2.1
63	DD	37	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
66	V	22	LEU	2.1
72	DM	51	LEU	2.1
75	DP	56	LEU	2.1
68	X	32	VAL	2.1
69	Y	89	TRP	2.1
79	DT	289	LEU	2.1
10	BC	204	VAL	2.1
14	t	97	VAL	2.1
17	BJ	7	VAL	2.1
18	x	119	VAL	2.1
21	BN	72	VAL	2.1
29	AB	130	VAL	2.1
54	CU	177	VAL	2.1
58	N	38	VAL	2.1
63	S	96	VAL	2.1
64	DE	85	VAL	2.1
1	AS	857	C	2.1
1	AS	1011	C	2.1
1	AS	1433	C	2.1
1	AS	3314	C	2.1
3	AU	19	C	2.1
4	AW	162	ALA	2.1
7	m	295	ALA	2.1
7	AZ	280	ALA	2.1
27	9	18	ALA	2.1
31	BX	62	ALA	2.1
36	AI	110	ALA	2.1
46	B	261	C	2.1
46	B	1627	C	2.1
46	CM	1146	C	2.1
47	CN	61	ALA	2.1
49	E	209	ALA	2.1
67	DH	94	ALA	2.1
73	c	49	ALA	2.1
79	DT	241	ALA	2.1
5	AX	183	ILE	2.1
8	BA	140	SER	2.1
15	u	124	THR	2.1
15	BH	2	SER	2.1
15	BH	90	SER	2.1
25	BR	34	SER	2.1
25	BR	50	SER	2.1

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Mol	Chain	Res	Type	RSRZ
29	AB	16	SER	2.1
34	AG	51	TYR	2.1
34	CA	14	ILE	2.1
37	AJ	41	SER	2.1
40	AM	27	ILE	2.1
43	CJ	26	THR	2.1
48	D	204	ILE	2.1
50	F	85	ILE	2.1
51	CR	26	THR	2.1
52	CS	146	SER	2.1
53	CT	71	THR	2.1
58	CY	54	ILE	2.1
59	O	34	THR	2.1
60	DA	74	ILE	2.1
62	DC	34	THR	2.1
63	DD	75	SER	2.1
64	T	124	ILE	2.1
65	DF	138	THR	2.1
67	W	59	THR	2.1
67	W	77	THR	2.1
72	DM	100	ILE	2.1
79	AR	115	SER	2.1
1	1	116	U	2.1
1	1	132	U	2.1
1	1	875	U	2.1
1	AS	1677	U	2.1
1	AS	1761	U	2.1
1	AS	2584	U	2.1
2	AT	114	U	2.1
3	AU	20	U	2.1
4	AW	131	GLY	2.1
4	AW	192	LYS	2.1
5	k	310	GLY	2.1
5	AX	26	ARG	2.1
6	AY	235	GLY	2.1
7	AZ	170	GLY	2.1
7	AZ	219	TYR	2.1
6	l	93	ASN	2.1
6	l	317	ASN	2.1
9	o	96	LYS	2.1
9	BB	74	TYR	2.1
12	r	181	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
11	q	102	ASN	2.1
12	BE	121	LYS	2.1
18	x	92	LYS	2.1
18	BK	38	GLY	2.1
22	BO	21	LYS	2.1
24	6	45	ARG	2.1
24	BQ	134	GLY	2.1
35	AH	77	GLY	2.1
41	AN	22	LYS	2.1
43	CJ	87	ARG	2.1
46	CM	333	U	2.1
46	CM	805	U	2.1
46	CM	1160	U	2.1
48	D	111	ARG	2.1
48	CO	222	LYS	2.1
50	CQ	213	LYS	2.1
51	G	203	GLY	2.1
52	H	115	LYS	2.1
53	I	220	LYS	2.1
54	J	183	GLY	2.1
60	DA	112	LYS	2.1
65	U	98	TYR	2.1
53	CT	65	GLN	2.1
55	CV	88	ASN	2.1
63	DD	76	GLN	2.1
63	DD	102	ASN	2.1
71	a	63	GLN	2.1
73	DN	25	ASN	2.1
74	d	20	LYS	2.1
77	g	46	ASN	2.1
77	DR	23	LYS	2.1
79	AR	136	ASN	2.1
79	DT	245	ASN	2.1
7	AZ	235	ASP	2.1
13	s	173	ASP	2.1
16	BI	17	ASP	2.1
17	w	57	ASP	2.1
51	G	254	ASP	2.1
58	CY	89	ASP	2.1
66	V	131	ASP	2.1
4	j	16	PHE	2.1
6	l	27	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
6	l	91	PHE	2.1
9	BB	193	PHE	2.1
28	BU	136	PHE	2.1
29	AB	129	PHE	2.1
47	C	7	PHE	2.1
52	CS	184	PHE	2.1
54	CU	81	PHE	2.1
69	DJ	99	PHE	2.1
79	DT	104	PHE	2.1
1	1	1658	G	2.1
1	1	2700	G	2.1
1	AS	100	G	2.1
1	AS	230	G	2.1
1	AS	1379	G	2.1
1	AS	1619	G	2.1
1	AS	1878	G	2.1
1	AS	2363	G	2.1
1	AS	2574	G	2.1
1	AS	3308	G	2.1
3	AU	49	G	2.1
3	AU	132	G	2.1
7	AZ	51	LEU	2.1
8	BA	75	LEU	2.1
10	BC	215	LEU	2.1
1	1	2382	A	2.1
1	1	3233	A	2.1
1	AS	844	A	2.1
4	j	207	VAL	2.1
5	k	312	VAL	2.1
5	k	335	VAL	2.1
8	BA	95	VAL	2.1
9	BB	23	GLU	2.1
11	q	13	PRO	2.1
13	s	152	HIS	2.1
14	t	174	LEU	2.1
19	y	26	LEU	2.1
19	y	166	LEU	2.1
20	z	141	HIS	2.1
22	2	106	LEU	2.1
26	BS	133	LEU	2.1
34	AG	104	PRO	2.1
36	AI	31	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
38	CE	37	CYS	2.1
41	CH	4	PRO	2.1
46	B	151	G	2.1
46	B	388	G	2.1
46	B	1149	G	2.1
46	CM	608	G	2.1
46	CM	1336	G	2.1
47	C	142	PRO	2.1
50	CQ	158	MET	2.1
52	CS	58	LEU	2.1
53	CT	147	LEU	2.1
43	AP	4	VAL	2.1
43	CJ	69	VAL	2.1
46	B	365	A	2.1
46	B	1110	A	2.1
46	B	1148	A	2.1
46	B	1574	A	2.1
46	CM	1073	A	2.1
50	F	94	GLU	2.1
50	CQ	29	GLU	2.1
51	G	201	HIS	2.1
56	L	150	LEU	2.1
57	CX	46	LEU	2.1
58	N	95	PRO	2.1
60	P	149	LEU	2.1
62	R	60	LEU	2.1
65	U	113	LEU	2.1
67	DH	86	HIS	2.1
73	c	67	LEU	2.1
74	DO	56	CYS	2.1
76	f	39	CYS	2.1
79	DT	90	LEU	2.1
10	p	132	VAL	2.1
11	BD	43	VAL	2.1
18	x	39	TRP	2.1
23	5	17	VAL	2.1
36	CC	22	VAL	2.1
50	CQ	123	VAL	2.1
52	H	68	VAL	2.1
53	I	157	VAL	2.1
53	I	162	VAL	2.1
54	CU	178	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
57	CX	42	VAL	2.1
59	CZ	68	GLU	2.1
63	S	117	VAL	2.1
64	T	75	GLU	2.1
65	U	5	VAL	2.1
68	X	59	VAL	2.1
69	DJ	102	VAL	2.1
70	DK	138	GLU	2.1
70	DK	141	GLU	2.1
10	p	255	ALA	2.1
18	BK	9	ALA	2.1
19	BL	121	ALA	2.1
28	AA	110	ALA	2.1
45	i	44	ALA	2.1
49	CP	231	ALA	2.1
50	F	103	ALA	2.1
51	G	156	ALA	2.1
57	M	97	ALA	2.1
61	DB	101	ALA	2.1
66	V	41	ALA	2.1
68	DI	45	ALA	2.1
76	f	2	ALA	2.1
79	DT	154	ALA	2.1
4	j	5	ILE	2.1
6	l	316	LYS	2.1
7	AZ	164	LYS	2.1
8	n	99	LYS	2.1
13	BF	140	ARG	2.1
14	BG	187	LYS	2.1
16	BI	128	LYS	2.1
20	BM	97	ARG	2.1
21	BN	26	ARG	2.1
22	BO	12	ARG	2.1
23	5	96	ILE	2.1
23	BP	92	ILE	2.1
26	8	27	ARG	2.1
26	BS	63	ILE	2.1
33	BZ	119	LYS	2.1
35	AH	86	LYS	2.1
39	AL	30	LYS	2.1
43	AP	46	LYS	2.1
45	CL	54	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
48	CO	197	ILE	2.1
49	E	152	LYS	2.1
50	F	28	ARG	2.1
51	G	64	ILE	2.1
54	J	104	LYS	2.1
58	CY	105	LYS	2.1
59	O	113	ARG	2.1
60	DA	118	ILE	2.1
62	R	52	LYS	2.1
67	DH	88	ARG	2.1
73	DN	4	LYS	2.1
7	m	31	TYR	2.1
10	p	31	THR	2.1
12	r	42	THR	2.1
13	s	56	THR	2.1
13	BF	99	THR	2.1
19	y	156	GLY	2.1
19	BL	17	THR	2.1
22	BO	73	GLY	2.1
29	BV	6	THR	2.1
31	BX	98	GLY	2.1
7	AZ	233	SER	2.1
9	o	197	SER	2.1
10	BC	196	SER	2.1
10	BC	241	SER	2.1
12	BE	61	SER	2.1
16	v	100	SER	2.1
19	y	13	SER	2.1
25	BR	36	SER	2.1
31	BX	93	SER	2.1
35	AH	62	TYR	2.1
39	CF	41	THR	2.1
44	CK	73	THR	2.1
48	CO	25	THR	2.1
53	CT	123	GLY	2.1
58	CY	63	THR	2.1
62	R	48	GLY	2.1
62	R	104	THR	2.1
79	AR	36	GLY	2.1
79	AR	89	THR	2.1
52	CS	208	SER	2.1
62	R	51	SER	2.1

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Mol	Chain	Res	Type	RSRZ
74	DO	48	SER	2.1
76	DQ	26	SER	2.1
79	DT	83	SER	2.1
8	BA	10	GLN	2.1
15	u	35	GLN	2.1
43	CJ	56	GLN	2.1
65	DF	63	GLN	2.1
77	DR	24	GLN	2.1
77	DR	31	GLN	2.1
7	AZ	45	ASN	2.1
20	BM	130	ASN	2.1
24	6	9	ASN	2.1
25	BR	45	ASN	2.1
1	1	2793	C	2.1
1	AS	179	C	2.1
1	AS	1103	C	2.1
1	AS	1721	C	2.1
1	AS	3054	C	2.1
1	AS	3065	C	2.1
1	1	774	U	2.1
1	1	975	U	2.1
1	1	1349	U	2.1
1	1	1797	U	2.1
1	1	2537	U	2.1
1	AS	942	U	2.1
1	AS	972	U	2.1
1	AS	1815	U	2.1
1	AS	2132	U	2.1
1	AS	2722	U	2.1
1	AS	2893	U	2.1
5	k	209	PHE	2.1
6	AY	357	PHE	2.1
13	s	57	PHE	2.1
21	0	163	PHE	2.1
26	BS	58	ASP	2.1
28	AA	30	ASP	2.1
33	BZ	18	PHE	2.1
46	B	222	C	2.1
46	B	1067	C	2.1
46	CM	1022	C	2.1
46	B	797	U	2.1
46	CM	967	U	2.1

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Mol	Chain	Res	Type	RSRZ
46	CM	1040	U	2.1
46	CM	1042	U	2.1
46	CM	1074	U	2.1
46	CM	1670	U	2.1
54	J	83	ASP	2.1
12	r	57	LEU	2.1
15	BH	114	MET	2.1
17	BJ	17	LEU	2.1
24	BQ	17	LEU	2.1
33	BZ	76	LEU	2.1
47	C	146	LEU	2.1
53	I	76	LEU	2.1
57	CX	76	LEU	2.1
59	O	97	LEU	2.1
59	CZ	41	LEU	2.1
68	DI	69	LEU	2.1
74	DO	73	LEU	2.1
4	j	216	HIS	2.1
4	AW	44	VAL	2.1
4	AW	151	PRO	2.1
4	AW	169	VAL	2.1
5	k	231	HIS	2.1
5	k	243	HIS	2.1
5	AX	354	VAL	2.1
11	q	58	HIS	2.1
14	t	8	PRO	2.1
20	BM	139	VAL	2.1
21	0	135	VAL	2.1
21	BN	20	PRO	2.1
23	5	19	VAL	2.1
27	9	70	VAL	2.1
31	BX	32	VAL	2.1
31	BX	44	VAL	2.1
31	BX	89	VAL	2.1
35	CB	69	HIS	2.1
47	CN	22	VAL	2.1
50	F	175	HIS	2.1
51	G	43	PRO	2.1
52	CS	68	VAL	2.1
58	N	123	VAL	2.1
58	CY	23	PRO	2.1
59	CZ	37	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
59	CZ	139	HIS	2.1
67	W	58	PRO	2.1
74	d	25	VAL	2.1
78	h	187	HIS	2.1
79	AR	114	VAL	2.1
79	DT	67	HIS	2.1
80	ll	172	VAL	2.1
5	k	180	GLU	2.1
5	k	227	GLU	2.1
7	AZ	229	GLU	2.1
9	o	14	GLU	2.1
11	q	113	GLU	2.1
11	q	152	GLU	2.1
14	BG	107	GLU	2.1
17	w	155	GLU	2.1
18	BK	75	GLU	2.1
47	C	76	CYS	2.1
48	CO	39	GLU	2.1
50	CQ	83	GLU	2.1
5	k	255	TRP	2.0
8	BA	8	TRP	2.0
55	CV	112	TRP	2.0
4	AW	154	ALA	2.0
5	AX	75	ALA	2.0
5	AX	129	ALA	2.0
5	AX	267	ALA	2.0
6	AY	216	ILE	2.0
6	AY	309	LYS	2.0
7	m	43	LYS	2.0
13	BF	141	ARG	2.0
14	BG	60	ALA	2.0
16	v	63	ARG	2.0
16	BI	68	ARG	2.0
9	BB	90	ILE	2.0
10	BC	41	ILE	2.0
18	x	180	LYS	2.0
18	BK	171	ARG	2.0
19	BL	37	ALA	2.0
20	BM	5	ARG	2.0
14	BG	184	ILE	2.0
19	y	114	ILE	2.0
24	6	66	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
24	6	77	ILE	2.0
25	7	104	ALA	2.0
29	BV	99	ALA	2.0
31	AD	45	ILE	2.0
31	BX	17	ALA	2.0
36	AI	14	LYS	2.0
40	AM	16	ALA	2.0
50	F	145	ALA	2.0
50	CQ	225	LYS	2.0
53	CT	110	ALA	2.0
53	CT	191	LYS	2.0
75	DP	49	ARG	2.0
55	CV	3	ILE	2.0
55	CV	175	ILE	2.0
69	Y	103	ILE	2.0
71	a	47	ILE	2.0
71	DL	13	ILE	2.0
72	b	79	ALA	2.0
74	DO	43	ILE	2.0
79	DT	307	ILE	2.0
1	1	1270	A	2.0
1	1	1882	A	2.0
1	AS	961	A	2.0
1	AS	1535	A	2.0
1	AS	1725	A	2.0
1	AS	2941	A	2.0
1	1	712	G	2.0
1	1	1538	G	2.0
1	1	2378	G	2.0
1	1	2452	G	2.0
1	1	2796	G	2.0
1	AS	188	G	2.0
1	AS	283	G	2.0
1	AS	538	G	2.0
1	AS	974	G	2.0
1	AS	1931	G	2.0
1	AS	2138	G	2.0
1	AS	2143	G	2.0
1	AS	2506	G	2.0
1	AS	3041	G	2.0
3	AU	70	G	2.0
7	m	127	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
28	AA	16	GLY	2.0
28	AA	20	GLY	2.0
46	B	1117	A	2.0
46	CM	741	A	2.0
46	CM	747	A	2.0
46	CM	1706	A	2.0
46	B	677	G	2.0
46	B	822	G	2.0
46	B	942	G	2.0
46	B	1059	G	2.0
46	B	1282	G	2.0
46	CM	485	G	2.0
46	CM	887	G	2.0
46	CM	1343	G	2.0
46	CM	1779	G	2.0
79	AR	15	GLY	2.0
80	ll	69	GLY	2.0
6	l	288	THR	2.0
13	BF	128	TYR	2.0
25	BR	14	TYR	2.0
31	BX	29	TYR	2.0
31	BX	38	THR	2.0
31	BX	91	THR	2.0
39	CF	53	THR	2.0
40	CG	31	THR	2.0
51	CR	54	TYR	2.0
53	I	208	TYR	2.0
69	Y	46	TYR	2.0
72	DM	101	TYR	2.0
74	DO	52	THR	2.0
79	DT	97	THR	2.0
4	AW	223	SER	2.0
6	AY	86	SER	2.0
22	2	149	GLN	2.0
24	6	112	SER	2.0
29	AB	65	GLN	2.0
38	CE	7	SER	2.0
39	AL	40	GLN	2.0
45	i	109	GLN	2.0
48	D	173	GLN	2.0
55	CV	177	SER	2.0
58	CY	127	GLN	2.0

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Mol	Chain	Res	Type	RSRZ
60	DA	143	SER	2.0
76	DQ	41	GLN	2.0
9	o	114	PHE	2.0
22	BO	105	PHE	2.0
56	L	158	PHE	2.0
35	CB	83	ASN	2.0
50	F	196	ASN	2.0
14	BG	9	LEU	2.0
20	z	86	ASP	2.0
34	AG	45	LEU	2.0
35	CB	105	LEU	2.0
38	AK	51	LEU	2.0
52	H	60	ASP	2.0
54	J	34	LEU	2.0
54	CU	122	LEU	2.0
55	CV	190	LEU	2.0
57	M	92	LEU	2.0
62	R	36	LEU	2.0
64	DE	93	LEU	2.0
65	DF	61	LEU	2.0
70	Z	9	LEU	2.0
65	U	29	MET	2.0
1	1	1455	C	2.0
1	1	2673	U	2.0
1	AS	111	U	2.0
1	AS	1357	U	2.0
1	AS	1624	C	2.0
1	AS	2610	C	2.0
1	AS	2736	C	2.0
1	AS	2743	U	2.0
3	4	157	U	2.0
4	AW	178	PRO	2.0
5	AX	329	PRO	2.0
13	s	129	VAL	2.0
15	BH	38	VAL	2.0
18	x	51	VAL	2.0
18	x	84	PRO	2.0
21	BN	15	PRO	2.0
23	BP	101	VAL	2.0
26	BS	64	VAL	2.0
35	CB	42	VAL	2.0
46	B	236	U	2.0

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Mol	Chain	Res	Type	RSRZ
49	E	153	VAL	2.0
50	CQ	101	VAL	2.0
52	H	23	VAL	2.0
52	CS	155	VAL	2.0
46	B	652	C	2.0
46	B	1114	U	2.0
46	CM	231	C	2.0
46	CM	304	U	2.0
46	CM	916	C	2.0
46	CM	985	C	2.0
46	CM	1171	U	2.0
46	CM	1504	U	2.0
46	CM	1608	U	2.0
46	CM	1640	C	2.0
46	CM	1664	C	2.0
55	CV	40	PRO	2.0
61	DB	117	PRO	2.0
73	DN	58	VAL	2.0
79	DT	20	VAL	2.0
79	DT	237	VAL	2.0
19	BL	10	HIS	2.0
63	DD	92	HIS	2.0
78	DS	137	HIS	2.0
6	l	354	LYS	2.0
7	m	217	GLU	2.0
8	n	108	GLU	2.0
9	BB	88	LYS	2.0
9	BB	105	ARG	2.0
14	t	5	LYS	2.0
26	8	96	LYS	2.0
27	9	17	LYS	2.0
27	9	63	LYS	2.0
28	BU	61	LYS	2.0
29	AB	85	GLU	2.0
32	AE	81	GLU	2.0
33	BZ	31	GLU	2.0
35	CB	58	ARG	2.0
37	AJ	69	LYS	2.0
38	CE	49	TRP	2.0
40	AM	46	ARG	2.0
45	i	96	LYS	2.0
48	D	175	GLU	2.0

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Mol	Chain	Res	Type	RSRZ
50	CQ	94	GLU	2.0
51	G	10	LYS	2.0
51	G	108	LYS	2.0
55	K	59	ARG	2.0
55	K	89	GLU	2.0
59	O	108	ARG	2.0
63	DD	65	ARG	2.0
70	DK	19	ARG	2.0
75	DP	11	LYS	2.0
75	DP	31	GLU	2.0
78	h	131	LYS	2.0
8	BA	106	ALA	2.0
11	BD	76	ALA	2.0
17	w	184	ALA	2.0
17	w	191	ALA	2.0
18	x	117	ILE	2.0
23	BP	56	ILE	2.0
29	AB	127	ALA	2.0
29	BV	96	ALA	2.0
41	AN	2	ILE	2.0
48	CO	57	ALA	2.0
50	CQ	212	ALA	2.0
52	H	191	ALA	2.0
55	K	78	ILE	2.0
57	M	43	ILE	2.0
68	X	37	ALA	2.0
74	DO	37	CYS	2.0
79	DT	187	ALA	2.0
5	k	326	GLY	2.0
16	v	88	GLY	2.0
38	CE	77	GLY	2.0
49	E	104	GLY	2.0
49	CP	104	GLY	2.0
4	j	146	THR	2.0
6	l	276	THR	2.0
7	m	49	TYR	2.0
7	AZ	118	THR	2.0
11	BD	88	TYR	2.0
22	BO	61	THR	2.0
23	5	33	TYR	2.0
37	CD	78	THR	2.0
44	CK	70	THR	2.0

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Mol	Chain	Res	Type	RSRZ
51	G	220	THR	2.0
54	CU	138	TYR	2.0
56	L	43	TYR	2.0
70	Z	84	THR	2.0
5	k	130	PHE	2.0
15	BH	48	GLN	2.0
16	v	123	GLN	2.0
18	BK	50	GLN	2.0
19	y	35	PHE	2.0
25	7	21	PHE	2.0
27	BT	6	GLN	2.0
48	CO	30	PHE	2.0
54	J	81	PHE	2.0
55	K	53	GLN	2.0
66	DG	12	GLN	2.0
79	DT	275	PHE	2.0
1	1	1887	A	2.0
1	1	2186	A	2.0
1	1	2469	A	2.0
1	1	2639	A	2.0
1	AS	236	A	2.0
1	AS	284	A	2.0
1	AS	1390	A	2.0
1	AS	1882	A	2.0
1	AS	2070	A	2.0
1	AS	2898	A	2.0
1	AS	3148	A	2.0
5	k	338	LEU	2.0
8	n	147	SER	2.0
18	BK	182	LEU	2.0
19	BL	51	SER	2.0
33	AF	60	SER	2.0
34	CA	19	SER	2.0
46	B	357	A	2.0
46	B	1618	A	2.0
46	CM	854	A	2.0
46	CM	869	A	2.0
46	CM	1374	A	2.0
46	CM	1543	A	2.0
46	CM	1579	A	2.0
51	G	20	LEU	2.0
52	H	206	SER	2.0

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Mol	Chain	Res	Type	RSRZ
54	J	73	LEU	2.0
54	CU	15	LEU	2.0
55	CV	4	SER	2.0
60	P	115	LEU	2.0
69	DJ	122	SER	2.0
71	a	18	LEU	2.0
79	AR	7	LEU	2.0
27	9	91	ASN	2.0
60	DA	78	ASN	2.0
1	1	2911	G	2.0
1	1	3241	G	2.0
1	AS	855	G	2.0
1	AS	1363	G	2.0
1	AS	1436	G	2.0
1	AS	2371	G	2.0
2	AT	110	G	2.0
7	AZ	159	VAL	2.0
10	p	165	VAL	2.0
21	0	126	VAL	2.0
22	BO	41	ASP	2.0
35	AH	85	VAL	2.0
42	CI	20	VAL	2.0
46	B	1184	G	2.0
46	B	1373	G	2.0
46	B	1581	G	2.0
46	B	1597	G	2.0
46	CM	1092	G	2.0
46	CM	1755	G	2.0
49	CP	153	VAL	2.0
50	F	51	VAL	2.0
52	CS	145	ASP	2.0
56	L	148	VAL	2.0
79	DT	214	ASP	2.0
19	BL	60	PRO	2.0
29	BV	119	PRO	2.0
49	E	168	PRO	2.0
50	CQ	220	PRO	2.0
51	CR	43	PRO	2.0
52	H	30	PRO	2.0
67	W	109	PRO	2.0
4	AW	216	HIS	2.0
5	AX	21	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
5	AX	266	ARG	2.0
7	AZ	23	ARG	2.0
7	AZ	248	ARG	2.0
8	n	55	LYS	2.0
8	n	107	ARG	2.0
9	o	153	LYS	2.0
10	p	52	LYS	2.0
11	BD	23	ARG	2.0
14	BG	45	LYS	2.0
19	BL	69	ARG	2.0
20	BM	98	ARG	2.0
25	7	43	ARG	2.0
25	7	78	HIS	2.0
26	8	75	LYS	2.0
30	AC	15	LYS	2.0
34	CA	20	LYS	2.0
36	CC	94	LYS	2.0
40	AM	36	ARG	2.0
44	AQ	34	HIS	2.0
44	CK	34	HIS	2.0
47	C	34	LYS	2.0
51	CR	161	LYS	2.0
52	H	222	LYS	2.0
54	CU	92	ARG	2.0
56	L	6	ARG	2.0
59	O	38	HIS	2.0
59	CZ	73	LYS	2.0
62	R	10	ARG	2.0
62	R	42	ARG	2.0
66	V	122	ARG	2.0
80	ll	91	LYS	2.0
1	1	2950	U	2.0
1	AS	1284	U	2.0
1	AS	1434	U	2.0
1	AS	1833	U	2.0
1	AS	2841	U	2.0
1	AS	2854	U	2.0
4	j	158	ILE	2.0
4	AW	166	ILE	2.0
5	AX	23	ALA	2.0
5	AX	94	GLU	2.0
6	l	127	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
9	BB	16	ALA	2.0
10	BC	228	GLU	2.0
11	q	161	ILE	2.0
14	BG	111	ALA	2.0
21	BN	130	GLU	2.0
27	BT	22	ALA	2.0
28	BU	108	GLU	2.0
28	BU	109	GLU	2.0
32	BY	90	ALA	2.0
35	AH	39	ALA	2.0
49	CP	227	GLU	2.0
60	P	15	ALA	2.0
60	DA	50	ILE	2.0
65	DF	14	ILE	2.0
66	V	75	ALA	2.0
66	DG	96	ALA	2.0
68	DI	19	ALA	2.0
70	DK	28	ALA	2.0
71	a	33	ALA	2.0
76	f	7	TRP	2.0
46	B	239	U	2.0
46	B	1160	U	2.0
46	B	1389	U	2.0
46	CM	207	U	2.0
46	CM	749	U	2.0
46	CM	1341	U	2.0
1	AS	242	C	2.0
1	AS	634	C	2.0
1	AS	1659	C	2.0
1	AS	1694	C	2.0
1	AS	2343	C	2.0
1	AS	2543	C	2.0
5	k	135	GLY	2.0
38	CE	23	GLY	2.0
45	CL	106	GLY	2.0
46	B	228	C	2.0
46	CM	1636	C	2.0
47	C	171	GLY	2.0
70	DK	51	GLY	2.0
78	h	169	GLY	2.0

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

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

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3808	1/1	0.09	0.29	96,96,96,96	0
82	MG	1	3671	1/1	0.10	0.40	49,49,49,49	0
82	MG	AS	3842	1/1	0.11	0.17	94,94,94,94	0
82	MG	AS	3902	1/1	0.20	0.26	36,36,36,36	0
82	MG	AS	3596	1/1	0.21	0.23	50,50,50,50	0
82	MG	1	3948	1/1	0.25	0.17	53,53,53,53	0
82	MG	1	3984	1/1	0.25	0.44	40,40,40,40	0
82	MG	AS	3736	1/1	0.26	0.31	73,73,73,73	0
82	MG	AS	3418	1/1	0.27	0.60	84,84,84,84	0
82	MG	1	3919	1/1	0.27	0.16	38,38,38,38	0
82	MG	1	4029	1/1	0.27	0.22	98,98,98,98	0
82	MG	AS	3872	1/1	0.28	0.16	74,74,74,74	0
82	MG	AS	3521	1/1	0.28	0.25	47,47,47,47	0
82	MG	1	4046	1/1	0.29	0.46	66,66,66,66	0
82	MG	AS	3574	1/1	0.29	0.27	50,50,50,50	0
82	MG	1	3867	1/1	0.30	0.29	35,35,35,35	0
82	MG	AS	3859	1/1	0.33	0.37	47,47,47,47	0
82	MG	1	4047	1/1	0.33	0.38	57,57,57,57	0
82	MG	1	3858	1/1	0.33	0.29	58,58,58,58	0
82	MG	1	3659	1/1	0.35	0.31	52,52,52,52	0
82	MG	1	4016	1/1	0.35	0.19	75,75,75,75	0
82	MG	AS	3516	1/1	0.35	0.50	73,73,73,73	0
82	MG	AS	3631	1/1	0.36	0.27	58,58,58,58	0
82	MG	1	3968	1/1	0.37	0.14	67,67,67,67	0
82	MG	1	4013	1/1	0.37	0.28	55,55,55,55	0
82	MG	AS	3899	1/1	0.38	0.14	55,55,55,55	0
82	MG	1	3978	1/1	0.38	0.63	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	1	3946	1/1	0.39	0.23	41,41,41,41	0
82	MG	AS	3603	1/1	0.39	0.40	63,63,63,63	0
82	MG	1	3922	1/1	0.39	0.21	50,50,50,50	0
82	MG	AS	3858	1/1	0.39	0.28	64,64,64,64	0
82	MG	1	4076	1/1	0.40	0.55	52,52,52,52	0
82	MG	AS	3701	1/1	0.40	0.24	50,50,50,50	0
82	MG	AS	3921	1/1	0.41	0.21	107,107,107,107	0
82	MG	1	3916	1/1	0.42	0.29	82,82,82,82	0
82	MG	1	3917	1/1	0.42	0.23	64,64,64,64	0
82	MG	1	3685	1/1	0.42	0.25	52,52,52,52	0
82	MG	1	3697	1/1	0.42	0.22	26,26,26,26	0
82	MG	1	3760	1/1	0.44	0.25	45,45,45,45	0
82	MG	AS	3426	1/1	0.44	0.29	41,41,41,41	0
82	MG	1	3731	1/1	0.44	0.21	10,10,10,10	0
82	MG	AS	3930	1/1	0.44	0.20	57,57,57,57	0
82	MG	AS	3752	1/1	0.45	0.13	31,31,31,31	0
82	MG	AS	3642	1/1	0.45	0.25	61,61,61,61	0
82	MG	AS	3772	1/1	0.46	0.26	44,44,44,44	0
82	MG	AS	3633	1/1	0.46	0.31	49,49,49,49	0
82	MG	AS	3766	1/1	0.47	0.23	50,50,50,50	0
82	MG	AS	3676	1/1	0.47	0.17	24,24,24,24	0
82	MG	AS	3588	1/1	0.47	0.35	53,53,53,53	0
82	MG	AS	3822	1/1	0.47	0.20	98,98,98,98	0
82	MG	1	4009	1/1	0.47	0.26	72,72,72,72	0
82	MG	1	3530	1/1	0.47	0.26	54,54,54,54	0
82	MG	1	4058	1/1	0.48	0.32	56,56,56,56	0
82	MG	AS	3414	1/1	0.48	0.27	64,64,64,64	0
82	MG	AS	3681	1/1	0.48	0.42	54,54,54,54	0
82	MG	1	3902	1/1	0.49	0.19	49,49,49,49	0
82	MG	AS	3779	1/1	0.49	0.29	54,54,54,54	0
82	MG	AS	3947	1/1	0.49	0.16	25,25,25,25	0
82	MG	1	3840	1/1	0.50	0.28	37,37,37,37	1
82	MG	1	4014	1/1	0.50	0.24	62,62,62,62	0
82	MG	1	3730	1/1	0.50	0.20	24,24,24,24	0
82	MG	AS	3891	1/1	0.51	0.29	47,47,47,47	0
82	MG	AS	3617	1/1	0.51	0.17	57,57,57,57	0
82	MG	1	4064	1/1	0.51	0.51	55,55,55,55	0
82	MG	AS	3918	1/1	0.51	0.19	46,46,46,46	0
82	MG	1	4030	1/1	0.51	0.19	34,34,34,34	0
82	MG	AS	3715	1/1	0.51	0.18	8,8,8,8	0
82	MG	AS	3407	1/1	0.51	0.48	42,42,42,42	0
82	MG	AS	3937	1/1	0.52	0.47	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3908	1/1	0.52	0.12	55,55,55,55	0
82	MG	1	3769	1/1	0.53	0.12	9,9,9,9	0
82	MG	9	201	1/1	0.53	0.32	52,52,52,52	0
82	MG	AF	201	1/1	0.53	0.29	34,34,34,34	0
82	MG	1	4026	1/1	0.53	0.20	53,53,53,53	0
82	MG	AS	3830	1/1	0.53	0.15	69,69,69,69	0
82	MG	AS	3411	1/1	0.53	0.22	27,27,27,27	0
82	MG	1	3627	1/1	0.54	0.17	10,10,10,10	0
82	MG	1	3827	1/1	0.54	0.23	53,53,53,53	0
82	MG	AS	3643	1/1	0.54	0.37	35,35,35,35	0
82	MG	AS	3924	1/1	0.54	0.16	98,98,98,98	0
82	MG	1	3620	1/1	0.54	0.16	50,50,50,50	0
82	MG	AS	3844	1/1	0.54	0.17	65,65,65,65	0
82	MG	AS	3852	1/1	0.54	0.50	89,89,89,89	0
85	ZN	CB	201	1/1	0.54	0.25	327,327,327,327	0
82	MG	1	3631	1/1	0.55	0.16	28,28,28,28	0
82	MG	AS	3809	1/1	0.55	0.19	58,58,58,58	0
82	MG	1	3567	1/1	0.55	0.17	38,38,38,38	0
82	MG	AS	3909	1/1	0.56	0.21	56,56,56,56	0
82	MG	1	3664	1/1	0.56	0.21	32,32,32,32	0
82	MG	AS	3580	1/1	0.56	1.02	44,44,44,44	0
82	MG	1	4044	1/1	0.56	0.19	57,57,57,57	0
82	MG	AS	3751	1/1	0.57	0.14	25,25,25,25	0
82	MG	1	3653	1/1	0.57	0.27	45,45,45,45	0
82	MG	AS	3409	1/1	0.57	0.57	56,56,56,56	0
82	MG	1	3743	1/1	0.57	0.16	16,16,16,16	0
82	MG	AS	3611	1/1	0.57	0.38	80,80,80,80	0
82	MG	AS	3523	1/1	0.57	0.19	46,46,46,46	0
82	MG	1	3889	1/1	0.57	0.08	10,10,10,10	0
82	MG	AS	3729	1/1	0.57	0.24	56,56,56,56	0
82	MG	1	3669	1/1	0.57	0.19	35,35,35,35	0
82	MG	AS	3835	1/1	0.58	0.22	48,48,48,48	0
82	MG	AS	3874	1/1	0.58	0.17	29,29,29,29	0
82	MG	1	4052	1/1	0.58	0.20	23,23,23,23	0
82	MG	1	3589	1/1	0.58	0.34	47,47,47,47	0
82	MG	AS	3763	1/1	0.58	0.10	40,40,40,40	0
82	MG	1	4015	1/1	0.58	0.16	216,216,216,216	0
82	MG	AX	401	1/1	0.58	0.12	31,31,31,31	0
82	MG	CM	1801	1/1	0.58	0.18	42,42,42,42	0
82	MG	1	4005	1/1	0.58	0.16	48,48,48,48	0
82	MG	AS	3664	1/1	0.59	0.33	62,62,62,62	0
82	MG	AS	3719	1/1	0.59	0.23	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3764	1/1	0.59	0.19	65,65,65,65	0
82	MG	1	4008	1/1	0.59	0.12	43,43,43,43	0
82	MG	1	3718	1/1	0.59	0.43	32,32,32,32	0
82	MG	AS	3410	1/1	0.59	0.43	35,35,35,35	0
82	MG	AS	3883	1/1	0.59	0.13	24,24,24,24	0
82	MG	AS	3671	1/1	0.60	0.79	41,41,41,41	0
82	MG	AS	3461	1/1	0.60	0.17	26,26,26,26	0
82	MG	AS	3895	1/1	0.60	0.41	72,72,72,72	0
82	MG	AS	3857	1/1	0.60	0.20	45,45,45,45	0
82	MG	AS	3604	1/1	0.60	0.20	37,37,37,37	0
82	MG	AS	3797	1/1	0.60	0.21	37,37,37,37	0
82	MG	AS	3841	1/1	0.60	0.17	52,52,52,52	0
82	MG	1	4011	1/1	0.60	0.19	36,36,36,36	0
82	MG	AS	3612	1/1	0.61	0.17	47,47,47,47	0
82	MG	1	3938	1/1	0.61	0.33	36,36,36,36	0
82	MG	1	3683	1/1	0.61	0.25	40,40,40,40	0
82	MG	1	3592	1/1	0.61	0.37	27,27,27,27	0
82	MG	1	4036	1/1	0.61	0.42	50,50,50,50	0
82	MG	1	4040	1/1	0.61	0.35	50,50,50,50	0
82	MG	AS	3649	1/1	0.61	0.10	17,17,17,17	0
82	MG	1	3959	1/1	0.61	0.49	49,49,49,49	0
82	MG	1	3835	1/1	0.61	0.17	34,34,34,34	0
82	MG	AS	3672	1/1	0.61	0.44	26,26,26,26	0
83	PAR	AS	3404	42/42	0.61	0.17	94,112,135,146	0
82	MG	1	4020	1/1	0.61	0.18	27,27,27,27	0
82	MG	AS	3708	1/1	0.62	0.12	23,23,23,23	0
82	MG	1	3861	1/1	0.62	0.16	27,27,27,27	0
82	MG	1	3538	1/1	0.62	0.28	45,45,45,45	0
82	MG	AS	3897	1/1	0.62	0.18	42,42,42,42	0
82	MG	1	3933	1/1	0.62	0.35	27,27,27,27	0
82	MG	1	3824	1/1	0.62	0.15	56,56,56,56	0
82	MG	1	3945	1/1	0.62	0.32	33,33,33,33	0
82	MG	AS	3836	1/1	0.62	0.15	28,28,28,28	0
82	MG	AS	3791	1/1	0.62	0.28	44,44,44,44	0
82	MG	AS	3478	1/1	0.63	0.15	15,15,15,15	0
82	MG	AS	3632	1/1	0.63	0.17	34,34,34,34	0
82	MG	AS	3806	1/1	0.63	0.11	41,41,41,41	0
82	MG	1	3995	1/1	0.63	0.16	32,32,32,32	0
82	MG	1	3974	1/1	0.63	0.30	36,36,36,36	0
82	MG	AS	3422	1/1	0.63	0.42	139,139,139,139	0
82	MG	1	3555	1/1	0.63	0.20	16,16,16,16	0
82	MG	1	3754	1/1	0.63	0.12	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3584	1/1	0.63	0.20	41,41,41,41	0
82	MG	AS	3817	1/1	0.64	0.13	26,26,26,26	0
82	MG	AS	3731	1/1	0.64	0.17	32,32,32,32	0
82	MG	AS	3568	1/1	0.64	0.23	42,42,42,42	0
82	MG	AS	3592	1/1	0.64	0.14	14,14,14,14	0
82	MG	AT	203	1/1	0.64	0.21	33,33,33,33	0
82	MG	1	3911	1/1	0.64	0.28	24,24,24,24	0
82	MG	AI	201	1/1	0.64	0.22	43,43,43,43	0
82	MG	AS	3581	1/1	0.64	0.20	48,48,48,48	0
82	MG	1	3833	1/1	0.64	0.18	22,22,22,22	0
82	MG	AS	3475	1/1	0.65	0.17	40,40,40,40	0
82	MG	AS	3688	1/1	0.65	0.20	28,28,28,28	0
82	MG	1	3947	1/1	0.65	0.19	58,58,58,58	0
82	MG	AS	3893	1/1	0.65	0.12	15,15,15,15	0
82	MG	AP	202	1/1	0.65	0.26	24,24,24,24	0
82	MG	AS	3737	1/1	0.65	0.15	36,36,36,36	0
82	MG	B	1871	1/1	0.65	0.12	11,11,11,11	0
82	MG	1	3707	1/1	0.66	0.16	32,32,32,32	0
82	MG	AS	3767	1/1	0.66	0.17	57,57,57,57	0
82	MG	1	3763	1/1	0.66	0.18	30,30,30,30	0
82	MG	AS	3843	1/1	0.66	0.13	71,71,71,71	0
82	MG	E	301	1/1	0.66	0.22	24,24,24,24	0
82	MG	1	3424	1/1	0.66	0.17	12,12,12,12	0
82	MG	1	3864	1/1	0.66	0.14	12,12,12,12	0
82	MG	1	4065	1/1	0.66	0.13	31,31,31,31	0
82	MG	AS	3926	1/1	0.66	0.15	42,42,42,42	0
82	MG	1	3546	1/1	0.66	0.16	39,39,39,39	0
82	MG	AS	3869	1/1	0.66	0.20	67,67,67,67	0
82	MG	AS	3739	1/1	0.66	0.15	22,22,22,22	0
82	MG	AS	3815	1/1	0.66	0.12	51,51,51,51	0
82	MG	1	3630	1/1	0.66	0.15	40,40,40,40	0
82	MG	BE	301	1/1	0.66	0.14	27,27,27,27	0
82	MG	1	3690	1/1	0.66	0.42	35,35,35,35	0
82	MG	AS	3421	1/1	0.66	0.22	78,78,78,78	0
82	MG	1	3619	1/1	0.66	0.27	39,39,39,39	0
82	MG	AS	3756	1/1	0.67	0.42	44,44,44,44	0
82	MG	AS	3544	1/1	0.67	0.18	45,45,45,45	0
82	MG	1	3828	1/1	0.67	0.20	57,57,57,57	0
82	MG	AS	3896	1/1	0.67	0.18	42,42,42,42	0
82	MG	AS	3942	1/1	0.67	0.14	28,28,28,28	0
82	MG	AS	3509	1/1	0.67	0.13	18,18,18,18	0
82	MG	AS	3734	1/1	0.67	0.21	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AW	301	1/1	0.67	0.13	35,35,35,35	0
82	MG	AS	3575	1/1	0.67	0.13	18,18,18,18	0
82	MG	B	1867	1/1	0.67	0.18	43,43,43,43	0
82	MG	BZ	201	1/1	0.67	0.25	49,49,49,49	0
82	MG	AS	3609	1/1	0.67	0.11	41,41,41,41	0
82	MG	AS	3466	1/1	0.67	0.17	58,58,58,58	0
82	MG	AA	201	1/1	0.67	0.33	40,40,40,40	0
82	MG	AS	3625	1/1	0.68	0.24	37,37,37,37	0
82	MG	AS	3735	1/1	0.68	0.13	29,29,29,29	0
82	MG	AS	3628	1/1	0.68	0.17	29,29,29,29	0
82	MG	AS	3558	1/1	0.68	0.47	40,40,40,40	0
82	MG	1	3686	1/1	0.68	0.21	7,7,7,7	0
82	MG	1	4078	1/1	0.68	0.20	53,53,53,53	0
82	MG	AS	3703	1/1	0.68	0.23	39,39,39,39	0
82	MG	1	3656	1/1	0.68	0.15	36,36,36,36	0
82	MG	1	4060	1/1	0.68	0.14	35,35,35,35	0
82	MG	1	4061	1/1	0.68	0.23	40,40,40,40	0
82	MG	1	3853	1/1	0.68	0.23	30,30,30,30	0
83	PAR	1	3466	42/42	0.68	0.13	43,75,94,96	0
82	MG	1	3856	1/1	0.68	0.34	41,41,41,41	0
82	MG	AS	3879	1/1	0.68	0.21	32,32,32,32	0
82	MG	1	3485	1/1	0.69	0.24	5,5,5,5	0
82	MG	1	3900	1/1	0.69	0.18	20,20,20,20	0
82	MG	AS	3595	1/1	0.69	0.17	38,38,38,38	0
82	MG	AS	3570	1/1	0.69	0.27	66,66,66,66	0
82	MG	1	3520	1/1	0.69	0.23	33,33,33,33	0
82	MG	AS	3697	1/1	0.69	0.20	32,32,32,32	0
82	MG	1	3810	1/1	0.69	0.37	37,37,37,37	0
82	MG	1	4004	1/1	0.69	0.12	54,54,54,54	0
82	MG	AS	3707	1/1	0.69	0.23	47,47,47,47	0
82	MG	AS	3610	1/1	0.69	0.19	92,92,92,92	0
82	MG	2	201	1/1	0.69	0.15	14,14,14,14	0
82	MG	AS	3412	1/1	0.69	0.17	22,22,22,22	0
82	MG	AS	3665	1/1	0.69	0.19	66,66,66,66	0
82	MG	AS	3868	1/1	0.70	0.27	63,63,63,63	0
82	MG	1	3771	1/1	0.70	0.25	41,41,41,41	0
82	MG	AS	3419	1/1	0.70	0.17	65,65,65,65	0
82	MG	AS	3913	1/1	0.70	0.10	47,47,47,47	0
83	PAR	1	3457	42/42	0.70	0.22	30,63,83,97	0
82	MG	1	3989	1/1	0.70	0.12	45,45,45,45	0
82	MG	1	3559	1/1	0.70	0.14	17,17,17,17	0
83	PAR	AS	3406	42/42	0.70	0.14	89,116,138,142	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3847	1/1	0.70	0.18	14,14,14,14	0
82	MG	1	3811	1/1	0.71	0.36	22,22,22,22	0
82	MG	AS	3520	1/1	0.71	0.19	39,39,39,39	0
82	MG	AS	3870	1/1	0.71	0.25	54,54,54,54	0
82	MG	AS	3682	1/1	0.71	0.20	44,44,44,44	0
82	MG	AS	3585	1/1	0.71	0.24	43,43,43,43	0
82	MG	AS	3690	1/1	0.71	0.21	44,44,44,44	0
82	MG	AS	3823	1/1	0.71	0.16	65,65,65,65	0
82	MG	1	3706	1/1	0.71	0.20	25,25,25,25	0
82	MG	1	3857	1/1	0.71	0.28	33,33,33,33	0
82	MG	1	3602	1/1	0.71	0.10	22,22,22,22	0
82	MG	1	3527	1/1	0.71	0.15	32,32,32,32	0
82	MG	AS	3561	1/1	0.71	0.28	35,35,35,35	0
82	MG	1	3519	1/1	0.71	0.31	24,24,24,24	0
82	MG	1	3468	1/1	0.71	0.18	11,11,11,11	0
83	PAR	1	3460	42/42	0.71	0.21	49,74,88,100	42
82	MG	AS	3723	1/1	0.71	0.17	52,52,52,52	0
83	PAR	AS	3402	42/42	0.71	0.20	84,103,121,128	42
82	MG	1	3883	1/1	0.71	0.14	12,12,12,12	0
82	MG	1	3791	1/1	0.71	0.48	57,57,57,57	0
82	MG	1	3679	1/1	0.71	0.20	42,42,42,42	0
82	MG	1	3944	1/1	0.72	0.34	40,40,40,40	0
82	MG	1	3533	1/1	0.72	0.15	46,46,46,46	0
82	MG	1	3658	1/1	0.72	0.10	13,13,13,13	0
82	MG	1	3452	1/1	0.72	0.13	12,12,12,12	0
82	MG	AS	3831	1/1	0.72	0.14	54,54,54,54	0
82	MG	AS	3890	1/1	0.72	0.17	59,59,59,59	0
82	MG	1	3511	1/1	0.72	0.20	20,20,20,20	0
82	MG	AS	3771	1/1	0.72	0.26	54,54,54,54	0
82	MG	i	301	1/1	0.72	0.38	36,36,36,36	0
82	MG	AS	3773	1/1	0.72	0.35	40,40,40,40	0
82	MG	1	3955	1/1	0.72	0.20	22,22,22,22	0
82	MG	1	3808	1/1	0.72	0.18	12,12,12,12	0
82	MG	AS	3695	1/1	0.72	0.15	26,26,26,26	0
82	MG	1	3605	1/1	0.72	0.29	19,19,19,19	0
82	MG	1	3576	1/1	0.72	0.17	43,43,43,43	0
82	MG	1	4079	1/1	0.72	0.17	68,68,68,68	0
82	MG	AS	3915	1/1	0.72	0.16	48,48,48,48	0
82	MG	1	3676	1/1	0.72	0.32	69,69,69,69	0
82	MG	AS	3816	1/1	0.72	0.25	14,14,14,14	0
82	MG	1	3921	1/1	0.73	0.18	27,27,27,27	0
82	MG	1	3807	1/1	0.73	0.16	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3743	1/1	0.73	0.34	12,12,12,12	0
82	MG	AS	3939	1/1	0.73	0.21	35,35,35,35	0
82	MG	1	3885	1/1	0.73	0.28	40,40,40,40	0
83	PAR	1	3461	42/42	0.73	0.15	76,95,111,114	0
82	MG	AS	3943	1/1	0.73	0.18	22,22,22,22	0
82	MG	AS	3518	1/1	0.73	0.19	71,71,71,71	0
82	MG	1	3712	1/1	0.73	0.38	16,16,16,16	0
82	MG	AS	3867	1/1	0.73	0.28	43,43,43,43	0
82	MG	AS	3900	1/1	0.73	0.12	15,15,15,15	0
82	MG	1	3598	1/1	0.74	0.17	23,23,23,23	0
82	MG	AS	3728	1/1	0.74	0.26	37,37,37,37	0
82	MG	AS	3472	1/1	0.74	0.41	16,16,16,16	0
82	MG	AS	3569	1/1	0.74	0.14	119,119,119,119	0
82	MG	AS	3803	1/1	0.74	0.20	58,58,58,58	0
82	MG	AS	3673	1/1	0.74	0.27	16,16,16,16	0
82	MG	1	3991	1/1	0.74	0.12	28,28,28,28	0
82	MG	1	3758	1/1	0.74	0.15	26,26,26,26	0
82	MG	1	4048	1/1	0.74	0.35	51,51,51,51	0
82	MG	AS	3738	1/1	0.74	0.15	48,48,48,48	0
82	MG	B	1829	1/1	0.74	0.17	25,25,25,25	0
82	MG	B	1836	1/1	0.74	0.13	20,20,20,20	0
82	MG	AS	3744	1/1	0.74	0.17	47,47,47,47	0
82	MG	AS	3824	1/1	0.74	0.21	28,28,28,28	0
82	MG	B	1850	1/1	0.74	0.19	8,8,8,8	0
82	MG	1	3783	1/1	0.74	0.24	27,27,27,27	0
82	MG	AS	3699	1/1	0.74	0.33	35,35,35,35	0
82	MG	1	4031	1/1	0.74	0.20	17,17,17,17	0
82	MG	AS	3527	1/1	0.74	0.14	53,53,53,53	0
83	PAR	1	3465	42/42	0.74	0.18	50,82,98,106	0
82	MG	1	3952	1/1	0.74	0.15	12,12,12,12	0
82	MG	AS	3553	1/1	0.74	0.17	61,61,61,61	0
82	MG	AS	3655	1/1	0.74	0.18	33,33,33,33	0
82	MG	AS	3851	1/1	0.74	0.13	25,25,25,25	0
82	MG	1	3826	1/1	0.74	0.19	14,14,14,14	0
82	MG	1	3820	1/1	0.75	0.18	24,24,24,24	0
82	MG	AS	3653	1/1	0.75	0.19	27,27,27,27	0
82	MG	AS	3601	1/1	0.75	0.18	41,41,41,41	0
82	MG	AS	3662	1/1	0.75	0.12	32,32,32,32	0
82	MG	AS	3722	1/1	0.75	0.14	17,17,17,17	0
82	MG	1	3413	1/1	0.75	0.17	5,5,5,5	0
82	MG	AS	3492	1/1	0.75	0.16	51,51,51,51	0
82	MG	AS	3794	1/1	0.75	0.25	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3666	1/1	0.75	0.38	32,32,32,32	0
82	MG	1	3554	1/1	0.75	0.19	29,29,29,29	0
82	MG	AS	3804	1/1	0.75	0.14	39,39,39,39	0
82	MG	1	3756	1/1	0.75	0.19	31,31,31,31	0
82	MG	AS	3807	1/1	0.75	0.10	44,44,44,44	0
82	MG	1	3414	1/1	0.75	0.12	14,14,14,14	0
82	MG	1	3964	1/1	0.75	0.12	37,37,37,37	0
82	MG	1	3729	1/1	0.75	0.23	27,27,27,27	0
82	MG	AS	3435	1/1	0.75	0.15	50,50,50,50	0
82	MG	AS	3460	1/1	0.75	0.25	38,38,38,38	0
82	MG	AS	3740	1/1	0.75	0.14	15,15,15,15	0
82	MG	AS	3586	1/1	0.75	0.14	36,36,36,36	0
82	MG	1	3528	1/1	0.75	0.17	30,30,30,30	0
82	MG	1	3977	1/1	0.75	0.20	18,18,18,18	0
82	MG	AS	3594	1/1	0.75	0.24	44,44,44,44	0
82	MG	1	3639	1/1	0.75	0.16	28,28,28,28	0
82	MG	AS	3648	1/1	0.75	0.16	24,24,24,24	0
82	MG	AS	3838	1/1	0.75	0.11	18,18,18,18	0
82	MG	AS	3704	1/1	0.75	0.20	41,41,41,41	0
82	MG	AS	3551	1/1	0.76	0.21	51,51,51,51	0
82	MG	AS	3600	1/1	0.76	0.26	24,24,24,24	0
82	MG	AS	3661	1/1	0.76	0.21	27,27,27,27	0
82	MG	1	3886	1/1	0.76	0.22	31,31,31,31	0
82	MG	AS	3917	1/1	0.76	0.12	28,28,28,28	0
82	MG	1	3727	1/1	0.76	0.14	52,52,52,52	0
82	MG	R	201	1/1	0.76	0.25	45,45,45,45	0
82	MG	1	3600	1/1	0.76	0.28	37,37,37,37	0
82	MG	1	3869	1/1	0.76	0.14	23,23,23,23	0
82	MG	1	3904	1/1	0.76	0.18	62,62,62,62	0
82	MG	AS	3935	1/1	0.76	0.14	34,34,34,34	0
82	MG	1	3880	1/1	0.76	0.27	30,30,30,30	0
82	MG	1	3999	1/1	0.76	0.17	32,32,32,32	0
82	MG	B	1820	1/1	0.76	0.21	17,17,17,17	0
82	MG	AS	3513	1/1	0.76	0.11	42,42,42,42	0
82	MG	AS	3687	1/1	0.76	0.24	32,32,32,32	0
82	MG	AT	202	1/1	0.76	0.11	26,26,26,26	0
82	MG	AS	3812	1/1	0.76	0.09	20,20,20,20	0
82	MG	AS	3878	1/1	0.76	0.19	33,33,33,33	0
82	MG	AS	3416	1/1	0.76	0.22	111,111,111,111	0
82	MG	B	1827	1/1	0.76	0.17	4,4,4,4	0
82	MG	AS	3884	1/1	0.76	0.09	30,30,30,30	0
82	MG	AS	3888	1/1	0.76	0.18	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	CM	1816	1/1	0.76	0.13	45,45,45,45	0
82	MG	1	3829	1/1	0.76	0.17	45,45,45,45	0
82	MG	AS	3696	1/1	0.76	0.16	26,26,26,26	0
82	MG	AS	3639	1/1	0.76	0.14	49,49,49,49	0
82	MG	AS	3698	1/1	0.76	0.31	37,37,37,37	0
82	MG	1	3720	1/1	0.76	0.22	31,31,31,31	0
83	PAR	B	1803	42/42	0.76	0.17	60,88,102,111	0
82	MG	AS	3761	1/1	0.76	0.17	15,15,15,15	0
82	MG	1	4083	1/1	0.76	0.56	50,50,50,50	0
82	MG	AS	3425	1/1	0.76	0.18	23,23,23,23	0
82	MG	1	4085	1/1	0.76	0.18	33,33,33,33	0
82	MG	AS	3800	1/1	0.77	0.17	29,29,29,29	0
82	MG	k	401	1/1	0.77	0.16	15,15,15,15	0
82	MG	AS	3677	1/1	0.77	0.17	30,30,30,30	0
82	MG	AS	3865	1/1	0.77	0.23	40,40,40,40	0
82	MG	o	302	1/1	0.77	0.27	73,73,73,73	0
82	MG	w	301	1/1	0.77	0.09	6,6,6,6	0
82	MG	AS	3572	1/1	0.77	0.13	51,51,51,51	0
82	MG	1	3779	1/1	0.77	0.14	12,12,12,12	0
82	MG	AS	3811	1/1	0.77	0.16	73,73,73,73	0
82	MG	1	4056	1/1	0.77	0.20	18,18,18,18	0
82	MG	AS	3577	1/1	0.77	0.25	68,68,68,68	1
82	MG	1	4028	1/1	0.77	0.18	20,20,20,20	0
82	MG	AS	3880	1/1	0.77	0.23	58,58,58,58	0
82	MG	1	3759	1/1	0.77	0.14	27,27,27,27	0
82	MG	1	3914	1/1	0.77	0.14	52,52,52,52	0
82	MG	AS	3415	1/1	0.77	0.21	56,56,56,56	0
82	MG	1	3678	1/1	0.77	0.26	21,21,21,21	0
82	MG	AS	3417	1/1	0.77	0.18	53,53,53,53	0
82	MG	1	3445	1/1	0.77	0.28	26,26,26,26	0
82	MG	AS	3833	1/1	0.77	0.18	55,55,55,55	0
82	MG	1	3569	1/1	0.77	0.60	38,38,38,38	0
82	MG	1	3850	1/1	0.77	0.10	16,16,16,16	0
82	MG	1	3667	1/1	0.77	0.46	37,37,37,37	0
82	MG	AS	3548	1/1	0.77	0.26	44,44,44,44	0
82	MG	1	3929	1/1	0.77	0.17	16,16,16,16	0
83	PAR	B	1801	42/42	0.77	0.22	49,65,83,104	0
83	PAR	B	1802	42/42	0.77	0.18	63,92,109,117	0
82	MG	AS	3906	1/1	0.77	0.12	26,26,26,26	0
82	MG	1	3931	1/1	0.77	0.17	38,38,38,38	0
82	MG	4	203	1/1	0.77	0.12	11,11,11,11	0
82	MG	j	301	1/1	0.77	0.16	8,8,8,8	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3563	1/1	0.77	0.28	75,75,75,75	0
82	MG	AS	3636	1/1	0.78	0.24	45,45,45,45	0
82	MG	1	3986	1/1	0.78	0.13	18,18,18,18	0
82	MG	AS	3916	1/1	0.78	0.17	33,33,33,33	0
82	MG	1	3834	1/1	0.78	0.20	37,37,37,37	0
82	MG	AR	401	1/1	0.78	0.12	17,17,17,17	0
82	MG	AS	3780	1/1	0.78	0.12	17,17,17,17	0
82	MG	1	3612	1/1	0.78	0.10	15,15,15,15	0
82	MG	1	3503	1/1	0.78	0.39	34,34,34,34	0
82	MG	1	3996	1/1	0.78	0.20	28,28,28,28	0
82	MG	1	3895	1/1	0.78	0.24	29,29,29,29	0
82	MG	1	4073	1/1	0.78	0.41	33,33,33,33	0
82	MG	AS	3725	1/1	0.78	0.15	14,14,14,14	0
82	MG	AN	102	1/1	0.78	0.12	18,18,18,18	0
82	MG	AS	3663	1/1	0.78	0.37	45,45,45,45	0
82	MG	1	3844	1/1	0.78	0.19	15,15,15,15	0
82	MG	1	3962	1/1	0.78	0.18	46,46,46,46	0
82	MG	B	1804	1/1	0.78	0.16	14,14,14,14	0
82	MG	B	1807	1/1	0.78	0.36	13,13,13,13	0
82	MG	B	1811	1/1	0.78	0.18	5,5,5,5	0
82	MG	1	3637	1/1	0.78	0.30	32,32,32,32	0
82	MG	AS	3607	1/1	0.78	0.10	20,20,20,20	0
82	MG	1	4081	1/1	0.78	0.12	17,17,17,17	0
82	MG	1	3903	1/1	0.78	0.25	35,35,35,35	0
83	PAR	1	3456	42/42	0.78	0.14	54,79,95,95	0
82	MG	1	3777	1/1	0.78	0.10	23,23,23,23	0
83	PAR	1	3459	42/42	0.78	0.23	42,69,104,117	0
82	MG	AS	3432	1/1	0.78	0.12	23,23,23,23	0
82	MG	1	3548	1/1	0.78	0.16	20,20,20,20	0
82	MG	AS	3832	1/1	0.78	0.18	33,33,33,33	0
82	MG	AS	3622	1/1	0.78	0.19	48,48,48,48	0
82	MG	AS	3448	1/1	0.78	0.15	51,51,51,51	0
82	MG	B	1857	1/1	0.78	0.20	19,19,19,19	0
82	MG	1	3882	1/1	0.78	0.43	39,39,39,39	0
82	MG	1	3583	1/1	0.78	0.11	35,35,35,35	0
82	MG	AS	3468	1/1	0.78	0.23	35,35,35,35	0
82	MG	AS	3911	1/1	0.78	0.10	31,31,31,31	0
82	MG	AS	3912	1/1	0.78	0.10	27,27,27,27	0
82	MG	1	3860	1/1	0.79	0.18	37,37,37,37	0
82	MG	AS	3886	1/1	0.79	0.18	25,25,25,25	0
82	MG	AS	3940	1/1	0.79	0.19	43,43,43,43	0
82	MG	1	3819	1/1	0.79	0.19	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3511	1/1	0.79	0.21	75,75,75,75	0
82	MG	B	1860	1/1	0.79	0.21	24,24,24,24	0
82	MG	AS	3727	1/1	0.79	0.21	12,12,12,12	0
82	MG	AS	3840	1/1	0.79	0.14	30,30,30,30	0
82	MG	B	1866	1/1	0.79	0.50	21,21,21,21	0
82	MG	AS	3578	1/1	0.79	0.14	37,37,37,37	0
82	MG	1	3863	1/1	0.79	0.14	12,12,12,12	0
82	MG	BQ	201	1/1	0.79	0.10	12,12,12,12	0
82	MG	1	4032	1/1	0.79	0.12	8,8,8,8	0
82	MG	1	3469	1/1	0.79	0.17	28,28,28,28	0
82	MG	AS	3686	1/1	0.79	0.12	35,35,35,35	0
82	MG	AS	3428	1/1	0.79	0.19	17,17,17,17	0
82	MG	1	3934	1/1	0.79	0.31	31,31,31,31	0
82	MG	AS	3538	1/1	0.79	0.08	20,20,20,20	0
82	MG	AS	3540	1/1	0.79	0.16	9,9,9,9	0
82	MG	1	3722	1/1	0.79	0.15	31,31,31,31	0
82	MG	1	3660	1/1	0.79	0.16	41,41,41,41	0
82	MG	1	3877	1/1	0.79	0.15	22,22,22,22	0
82	MG	AS	3650	1/1	0.79	0.14	15,15,15,15	0
82	MG	1	3588	1/1	0.79	0.12	14,14,14,14	0
82	MG	1	3557	1/1	0.79	0.20	10,10,10,10	0
83	PAR	AS	3401	42/42	0.79	0.23	74,102,111,126	42
82	MG	1	4053	1/1	0.79	0.22	40,40,40,40	0
83	PAR	AS	3403	42/42	0.79	0.19	75,109,128,132	0
82	MG	1	3525	1/1	0.79	0.20	21,21,21,21	0
82	MG	1	3738	1/1	0.79	0.31	11,11,11,11	0
82	MG	1	3596	1/1	0.79	0.21	26,26,26,26	0
82	MG	AS	3692	1/1	0.80	0.17	38,38,38,38	0
82	MG	AS	3693	1/1	0.80	0.21	40,40,40,40	0
82	MG	AS	3549	1/1	0.80	0.20	51,51,51,51	0
82	MG	AS	3747	1/1	0.80	0.29	35,35,35,35	0
82	MG	1	3848	1/1	0.80	0.19	48,48,48,48	0
82	MG	1	3440	1/1	0.80	0.12	15,15,15,15	0
82	MG	AS	3885	1/1	0.80	0.14	18,18,18,18	0
82	MG	AS	3556	1/1	0.80	0.17	41,41,41,41	0
82	MG	1	3674	1/1	0.80	0.12	9,9,9,9	0
82	MG	B	1846	1/1	0.80	0.22	17,17,17,17	0
82	MG	1	3675	1/1	0.80	0.14	41,41,41,41	0
82	MG	AS	3660	1/1	0.80	0.26	48,48,48,48	0
82	MG	1	3638	1/1	0.80	0.22	6,6,6,6	0
82	MG	AS	3606	1/1	0.80	0.13	40,40,40,40	0
82	MG	AS	3710	1/1	0.80	0.16	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3751	1/1	0.80	0.20	28,28,28,28	0
82	MG	1	3565	1/1	0.80	0.29	10,10,10,10	0
82	MG	1	3650	1/1	0.80	0.19	17,17,17,17	0
82	MG	1	3681	1/1	0.80	0.20	22,22,22,22	0
82	MG	AS	3519	1/1	0.80	0.26	72,72,72,72	0
82	MG	1	4041	1/1	0.80	1.33	52,52,52,52	0
82	MG	AS	3855	1/1	0.80	0.40	20,20,20,20	0
82	MG	AS	3856	1/1	0.80	0.08	23,23,23,23	0
82	MG	F	301	1/1	0.80	0.10	35,35,35,35	0
82	MG	1	3415	1/1	0.80	0.21	16,16,16,16	0
82	MG	1	3668	1/1	0.80	0.12	23,23,23,23	0
82	MG	1	3983	1/1	0.80	0.44	27,27,27,27	0
82	MG	1	3818	1/1	0.80	0.23	35,35,35,35	0
82	MG	1	4092	1/1	0.80	0.19	24,24,24,24	0
82	MG	AS	3587	1/1	0.80	0.15	32,32,32,32	0
82	MG	1	3405	1/1	0.80	0.22	14,14,14,14	0
84	3K5	AS	3405	57/57	0.80	0.25	83,102,131,138	0
82	MG	AS	3641	1/1	0.80	0.28	8,8,8,8	0
82	MG	1	3719	1/1	0.81	0.13	7,7,7,7	0
82	MG	AS	3462	1/1	0.81	0.22	52,52,52,52	0
82	MG	1	3998	1/1	0.81	0.14	17,17,17,17	0
82	MG	AS	3827	1/1	0.81	0.20	80,80,80,80	0
82	MG	1	3960	1/1	0.81	0.10	31,31,31,31	0
82	MG	1	4002	1/1	0.81	0.34	40,40,40,40	0
82	MG	1	3736	1/1	0.81	0.30	58,58,58,58	0
82	MG	AS	3566	1/1	0.81	0.26	40,40,40,40	0
82	MG	B	1812	1/1	0.81	0.15	8,8,8,8	0
82	MG	1	3784	1/1	0.81	0.24	14,14,14,14	0
82	MG	AS	3721	1/1	0.81	0.14	19,19,19,19	0
82	MG	BJ	301	1/1	0.81	0.38	51,51,51,51	0
82	MG	1	3699	1/1	0.81	0.20	26,26,26,26	0
82	MG	1	3594	1/1	0.81	0.24	31,31,31,31	0
82	MG	AS	3724	1/1	0.81	0.23	27,27,27,27	0
82	MG	CM	1807	1/1	0.81	0.19	20,20,20,20	0
82	MG	CM	1808	1/1	0.81	0.25	11,11,11,11	0
82	MG	AS	3783	1/1	0.81	0.21	63,63,63,63	0
82	MG	1	4010	1/1	0.81	0.23	55,55,55,55	0
82	MG	1	3617	1/1	0.81	0.11	33,33,33,33	0
82	MG	1	3809	1/1	0.81	0.17	27,27,27,27	0
82	MG	1	3982	1/1	0.81	0.21	37,37,37,37	0
82	MG	AS	3802	1/1	0.81	0.08	15,15,15,15	0
82	MG	1	3830	1/1	0.81	0.15	13,13,13,13	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3590	1/1	0.81	0.16	19,19,19,19	0
83	PAR	4	201	42/42	0.81	0.23	43,75,89,97	0
82	MG	1	3918	1/1	0.81	0.21	27,27,27,27	0
82	MG	1	3572	1/1	0.81	0.13	13,13,13,13	0
82	MG	AS	3537	1/1	0.81	0.16	41,41,41,41	0
82	MG	1	3920	1/1	0.81	0.11	30,30,30,30	0
82	MG	1	3778	1/1	0.81	0.13	50,50,50,50	0
82	MG	AS	3589	1/1	0.81	0.22	65,65,65,65	0
82	MG	AS	3445	1/1	0.81	0.14	22,22,22,22	0
82	MG	1	4071	1/1	0.81	0.08	25,25,25,25	0
82	MG	Y	203	1/1	0.81	0.21	33,33,33,33	0
82	MG	AS	3936	1/1	0.81	0.13	26,26,26,26	0
82	MG	1	3927	1/1	0.82	0.15	32,32,32,32	0
82	MG	AS	3923	1/1	0.82	0.12	16,16,16,16	0
82	MG	1	4034	1/1	0.82	0.20	14,14,14,14	0
82	MG	AS	3674	1/1	0.82	0.10	21,21,21,21	0
82	MG	1	3545	1/1	0.82	0.16	34,34,34,34	0
82	MG	AS	3860	1/1	0.82	0.19	33,33,33,33	0
82	MG	1	3868	1/1	0.82	0.15	23,23,23,23	0
82	MG	AS	3866	1/1	0.82	0.29	67,67,67,67	0
82	MG	AS	3732	1/1	0.82	0.19	32,32,32,32	0
82	MG	1	3408	1/1	0.82	0.20	13,13,13,13	0
82	MG	AS	3455	1/1	0.82	0.19	8,8,8,8	0
82	MG	1	3873	1/1	0.82	0.31	19,19,19,19	0
82	MG	AS	3542	1/1	0.82	0.52	51,51,51,51	0
82	MG	AS	3810	1/1	0.82	0.15	29,29,29,29	0
82	MG	AS	3638	1/1	0.82	0.21	36,36,36,36	0
82	MG	1	3512	1/1	0.82	0.16	24,24,24,24	0
82	MG	1	3940	1/1	0.82	0.13	30,30,30,30	0
82	MG	AZ	301	1/1	0.82	0.21	60,60,60,60	0
82	MG	AS	3590	1/1	0.82	0.16	41,41,41,41	0
82	MG	AS	3465	1/1	0.82	0.25	35,35,35,35	0
82	MG	AS	3818	1/1	0.82	0.32	17,17,17,17	0
82	MG	AS	3820	1/1	0.82	0.13	75,75,75,75	0
82	MG	CB	202	1/1	0.82	0.18	36,36,36,36	0
82	MG	AS	3646	1/1	0.82	0.11	21,21,21,21	0
82	MG	CM	1805	1/1	0.82	0.24	7,7,7,7	0
82	MG	AS	3750	1/1	0.82	0.20	22,22,22,22	0
82	MG	1	3640	1/1	0.82	0.09	7,7,7,7	0
82	MG	CM	1812	1/1	0.82	0.23	20,20,20,20	0
82	MG	1	3915	1/1	0.82	0.13	17,17,17,17	0
82	MG	CM	1819	1/1	0.82	0.29	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3894	1/1	0.82	0.07	7,7,7,7	0
82	MG	AS	3753	1/1	0.82	0.09	11,11,11,11	0
82	MG	1	3696	1/1	0.82	0.22	33,33,33,33	0
82	MG	AS	3760	1/1	0.82	0.15	6,6,6,6	0
82	MG	1	3633	1/1	0.82	0.14	13,13,13,13	0
82	MG	1	3665	1/1	0.82	0.16	30,30,30,30	0
82	MG	AS	3656	1/1	0.82	0.18	21,21,21,21	0
82	MG	AS	3658	1/1	0.82	0.18	5,5,5,5	0
82	MG	AS	3483	1/1	0.82	0.19	28,28,28,28	0
82	MG	B	1853	1/1	0.82	0.13	26,26,26,26	0
82	MG	B	1854	1/1	0.82	0.28	22,22,22,22	0
82	MG	1	3994	1/1	0.82	0.16	14,14,14,14	0
82	MG	1	3635	1/1	0.82	0.12	17,17,17,17	0
82	MG	AS	3914	1/1	0.82	0.11	23,23,23,23	0
82	MG	AS	3846	1/1	0.82	0.22	46,46,46,46	0
82	MG	1	3655	1/1	0.82	0.18	47,47,47,47	0
82	MG	1	3894	1/1	0.82	0.17	26,26,26,26	0
82	MG	1	3805	1/1	0.82	0.19	24,24,24,24	0
85	ZN	DS	201	1/1	0.82	0.12	278,278,278,278	0
82	MG	1	3478	1/1	0.83	0.35	15,15,15,15	0
82	MG	1	3896	1/1	0.83	0.39	23,23,23,23	0
82	MG	AS	3946	1/1	0.83	0.14	15,15,15,15	0
82	MG	1	4072	1/1	0.83	0.14	33,33,33,33	0
82	MG	B	1810	1/1	0.83	0.15	11,11,11,11	0
82	MG	AS	3887	1/1	0.83	0.17	10,10,10,10	0
82	MG	1	3765	1/1	0.83	0.14	28,28,28,28	0
82	MG	1	3901	1/1	0.83	0.17	30,30,30,30	0
82	MG	1	3544	1/1	0.83	0.18	32,32,32,32	0
82	MG	AS	3670	1/1	0.83	0.19	31,31,31,31	0
82	MG	1	3942	1/1	0.83	0.07	37,37,37,37	0
82	MG	BO	201	1/1	0.83	0.12	38,38,38,38	0
82	MG	1	3741	1/1	0.83	0.13	12,12,12,12	0
82	MG	1	3776	1/1	0.83	0.06	18,18,18,18	0
82	MG	AS	3781	1/1	0.83	0.08	33,33,33,33	0
82	MG	1	3907	1/1	0.83	0.23	20,20,20,20	0
82	MG	AS	3675	1/1	0.83	0.19	31,31,31,31	0
82	MG	CM	1806	1/1	0.83	0.20	19,19,19,19	0
82	MG	1	3812	1/1	0.83	0.31	9,9,9,9	0
82	MG	AS	3795	1/1	0.83	0.09	46,46,46,46	0
82	MG	AS	3796	1/1	0.83	0.10	10,10,10,10	0
82	MG	3	201	1/1	0.83	0.14	28,28,28,28	0
82	MG	CM	1818	1/1	0.83	0.31	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	1	3450	1/1	0.83	0.10	20,20,20,20	0
82	MG	1	3846	1/1	0.83	0.26	16,16,16,16	0
82	MG	AS	3683	1/1	0.83	0.10	23,23,23,23	0
83	PAR	1	3458	42/42	0.83	0.19	35,50,61,65	0
82	MG	1	3491	1/1	0.83	0.47	17,17,17,17	0
82	MG	B	1861	1/1	0.83	0.25	12,12,12,12	0
82	MG	1	3728	1/1	0.83	0.09	34,34,34,34	0
83	PAR	1	3464	42/42	0.83	0.18	38,60,76,81	0
82	MG	AS	3863	1/1	0.83	0.24	27,27,27,27	0
82	MG	1	3823	1/1	0.83	0.14	11,11,11,11	0
82	MG	AS	3920	1/1	0.83	0.19	56,56,56,56	0
82	MG	1	3401	1/1	0.83	0.16	5,5,5,5	0
82	MG	AS	3457	1/1	0.83	0.10	34,34,34,34	0
82	MG	1	3884	1/1	0.83	0.34	26,26,26,26	0
82	MG	1	3521	1/1	0.83	0.10	18,18,18,18	0
82	MG	1	3970	1/1	0.83	0.14	24,24,24,24	0
82	MG	AS	3933	1/1	0.83	0.11	49,49,49,49	0
82	MG	1	3677	1/1	0.83	0.16	32,32,32,32	0
82	MG	1	3735	1/1	0.83	0.34	12,12,12,12	0
83	PAR	CM	1803	42/42	0.83	0.28	51,79,99,113	0
82	MG	1	3859	1/1	0.83	0.11	41,41,41,41	0
82	MG	AS	3754	1/1	0.83	0.15	117,117,117,117	0
82	MG	AS	3659	1/1	0.83	0.21	46,46,46,46	0
82	MG	1	3724	1/1	0.84	0.17	29,29,29,29	0
82	MG	AS	3626	1/1	0.84	0.11	24,24,24,24	0
82	MG	1	3892	1/1	0.84	0.15	23,23,23,23	0
82	MG	AS	3882	1/1	0.84	0.20	25,25,25,25	0
82	MG	AS	3477	1/1	0.84	0.24	10,10,10,10	0
82	MG	AS	3745	1/1	0.84	0.14	17,17,17,17	0
82	MG	o	301	1/1	0.84	0.30	16,16,16,16	0
82	MG	1	3951	1/1	0.84	0.14	45,45,45,45	0
82	MG	AS	3821	1/1	0.84	0.10	6,6,6,6	0
82	MG	AS	3689	1/1	0.84	0.15	47,47,47,47	0
82	MG	1	4006	1/1	0.84	0.13	24,24,24,24	0
82	MG	1	3432	1/1	0.84	0.16	16,16,16,16	0
82	MG	AS	3892	1/1	0.84	0.20	69,69,69,69	0
82	MG	1	3492	1/1	0.84	0.24	8,8,8,8	0
82	MG	B	1855	1/1	0.84	0.25	20,20,20,20	0
82	MG	AS	3757	1/1	0.84	0.09	27,27,27,27	0
82	MG	1	4038	1/1	0.84	0.15	29,29,29,29	0
82	MG	B	1859	1/1	0.84	0.26	16,16,16,16	0
82	MG	1	4039	1/1	0.84	0.32	50,50,50,50	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	0.84	0.17	18,18,18,18	0
82	MG	1	3985	1/1	0.84	0.25	4,4,4,4	0
82	MG	AK	103	1/1	0.84	0.28	15,15,15,15	0
82	MG	AS	3525	1/1	0.84	0.14	12,12,12,12	0
82	MG	AS	3433	1/1	0.84	0.17	16,16,16,16	0
82	MG	AS	3910	1/1	0.84	0.11	26,26,26,26	0
82	MG	1	3661	1/1	0.84	0.14	9,9,9,9	0
82	MG	AS	3778	1/1	0.84	0.12	23,23,23,23	0
82	MG	AS	3440	1/1	0.84	0.19	12,12,12,12	0
82	MG	1	3898	1/1	0.84	0.17	39,39,39,39	0
82	MG	AS	3541	1/1	0.84	0.10	12,12,12,12	0
83	PAR	1	3462	42/42	0.84	0.23	50,66,105,114	0
82	MG	1	3795	1/1	0.84	0.23	23,23,23,23	0
82	MG	AS	3453	1/1	0.84	0.29	7,7,7,7	0
82	MG	AS	3545	1/1	0.84	0.10	28,28,28,28	0
82	MG	AS	3919	1/1	0.84	0.08	67,67,67,67	0
82	MG	1	3963	1/1	0.84	0.19	27,27,27,27	0
82	MG	1	3817	1/1	0.84	0.23	14,14,14,14	0
82	MG	1	3797	1/1	0.84	0.10	21,21,21,21	0
82	MG	AS	3608	1/1	0.84	0.14	14,14,14,14	0
82	MG	1	3648	1/1	0.84	0.14	13,13,13,13	0
82	MG	1	3563	1/1	0.84	0.34	8,8,8,8	0
82	MG	AS	3464	1/1	0.84	0.22	30,30,30,30	0
82	MG	B	1815	1/1	0.84	0.35	20,20,20,20	0
82	MG	B	1818	1/1	0.84	0.18	6,6,6,6	0
82	MG	4	204	1/1	0.84	0.16	6,6,6,6	0
82	MG	AS	3624	1/1	0.84	0.12	38,38,38,38	0
82	MG	AS	3678	1/1	0.84	0.17	37,37,37,37	0
82	MG	B	1809	1/1	0.85	0.25	15,15,15,15	0
82	MG	1	3734	1/1	0.85	0.34	12,12,12,12	0
82	MG	Y	202	1/1	0.85	0.15	22,22,22,22	0
82	MG	1	4095	1/1	0.85	0.20	34,34,34,34	0
82	MG	AS	3456	1/1	0.85	0.12	29,29,29,29	0
82	MG	AS	3769	1/1	0.85	0.18	71,71,71,71	0
82	MG	1	4019	1/1	0.85	0.13	46,46,46,46	0
82	MG	1	3564	1/1	0.85	0.30	17,17,17,17	0
82	MG	1	4025	1/1	0.85	0.21	35,35,35,35	0
82	MG	AS	3898	1/1	0.85	0.07	23,23,23,23	0
82	MG	1	3966	1/1	0.85	0.15	42,42,42,42	0
82	MG	B	1825	1/1	0.85	0.21	17,17,17,17	0
82	MG	1	3433	1/1	0.85	0.07	5,5,5,5	0
82	MG	1	3666	1/1	0.85	0.14	12,12,12,12	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	B	1833	1/1	0.85	0.19	15,15,15,15	0
82	MG	AS	3850	1/1	0.85	0.23	23,23,23,23	0
82	MG	CM	1811	1/1	0.85	0.10	10,10,10,10	0
82	MG	AS	3786	1/1	0.85	0.09	11,11,11,11	0
82	MG	1	3786	1/1	0.85	0.12	20,20,20,20	0
82	MG	AS	3614	1/1	0.85	0.18	45,45,45,45	0
82	MG	v	301	1/1	0.85	0.16	13,13,13,13	0
82	MG	CM	1822	1/1	0.85	0.12	19,19,19,19	0
82	MG	AS	3618	1/1	0.85	0.09	36,36,36,36	0
82	MG	1	3787	1/1	0.85	0.14	10,10,10,10	0
82	MG	1	3684	1/1	0.85	0.32	7,7,7,7	0
82	MG	AS	3479	1/1	0.85	0.13	37,37,37,37	0
82	MG	1	3979	1/1	0.85	0.27	24,24,24,24	0
82	MG	AS	3487	1/1	0.85	0.13	12,12,12,12	0
82	MG	AS	3490	1/1	0.85	0.14	20,20,20,20	0
82	MG	1	4035	1/1	0.85	0.18	6,6,6,6	0
82	MG	1	3629	1/1	0.85	0.24	17,17,17,17	0
82	MG	1	3838	1/1	0.85	0.13	55,55,55,55	0
82	MG	1	3435	1/1	0.85	0.14	13,13,13,13	0
82	MG	1	3862	1/1	0.85	0.20	11,11,11,11	0
82	MG	AS	3430	1/1	0.85	0.17	14,14,14,14	0
82	MG	1	4080	1/1	0.85	0.11	16,16,16,16	0
82	MG	1	3523	1/1	0.85	0.13	12,12,12,12	0
82	MG	1	3961	1/1	0.85	0.33	21,21,21,21	0
82	MG	AS	3938	1/1	0.85	0.12	4,4,4,4	0
82	MG	1	3692	1/1	0.85	0.19	7,7,7,7	0
82	MG	AS	3755	1/1	0.85	0.15	26,26,26,26	0
82	MG	AS	3441	1/1	0.85	0.18	21,21,21,21	0
84	3K5	1	3463	57/57	0.85	0.26	47,66,95,131	0
82	MG	AS	3443	1/1	0.85	0.26	20,20,20,20	0
82	MG	AS	3758	1/1	0.85	0.19	44,44,44,44	0
82	MG	AS	3535	1/1	0.85	0.17	9,9,9,9	0
82	MG	1	3866	1/1	0.86	0.15	22,22,22,22	0
82	MG	1	3575	1/1	0.86	0.09	8,8,8,8	0
82	MG	1	4057	1/1	0.86	0.20	15,15,15,15	0
82	MG	1	3449	1/1	0.86	0.09	7,7,7,7	0
82	MG	1	3843	1/1	0.86	0.15	15,15,15,15	0
82	MG	1	3906	1/1	0.86	0.15	30,30,30,30	0
82	MG	B	1862	1/1	0.86	0.23	16,16,16,16	0
82	MG	B	1863	1/1	0.86	0.15	16,16,16,16	0
82	MG	AS	3881	1/1	0.86	0.22	12,12,12,12	0
82	MG	1	3742	1/1	0.86	0.21	5,5,5,5	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3529	1/1	0.86	0.14	34,34,34,34	0
82	MG	BB	302	1/1	0.86	0.30	17,17,17,17	0
82	MG	AS	3733	1/1	0.86	0.15	25,25,25,25	0
82	MG	AS	3533	1/1	0.86	0.17	14,14,14,14	0
82	MG	AK	102	1/1	0.86	0.08	11,11,11,11	0
82	MG	B	1868	1/1	0.86	0.14	5,5,5,5	0
82	MG	AS	3451	1/1	0.86	0.13	7,7,7,7	0
82	MG	AS	3452	1/1	0.86	0.16	29,29,29,29	0
82	MG	1	3579	1/1	0.86	0.17	16,16,16,16	0
82	MG	1	3913	1/1	0.86	0.12	10,10,10,10	0
82	MG	1	3748	1/1	0.86	0.17	15,15,15,15	0
82	MG	1	3750	1/1	0.86	0.14	17,17,17,17	0
82	MG	1	3556	1/1	0.86	0.26	14,14,14,14	0
82	MG	1	3753	1/1	0.86	0.28	7,7,7,7	0
82	MG	1	3420	1/1	0.86	0.18	18,18,18,18	0
82	MG	AS	3615	1/1	0.86	0.08	35,35,35,35	0
82	MG	1	3652	1/1	0.86	0.22	15,15,15,15	0
82	MG	AS	3554	1/1	0.86	0.17	8,8,8,8	0
82	MG	AS	3619	1/1	0.86	0.11	20,20,20,20	0
82	MG	1	3604	1/1	0.86	0.15	17,17,17,17	0
82	MG	1	3422	1/1	0.86	0.11	11,11,11,11	0
82	MG	1	3711	1/1	0.86	0.11	15,15,15,15	0
82	MG	1	4086	1/1	0.86	0.19	17,17,17,17	0
82	MG	1	3806	1/1	0.86	0.08	18,18,18,18	0
82	MG	AS	3630	1/1	0.86	0.18	33,33,33,33	0
82	MG	B	1824	1/1	0.86	0.10	14,14,14,14	0
82	MG	1	3965	1/1	0.86	0.16	23,23,23,23	0
82	MG	1	4043	1/1	0.86	0.07	10,10,10,10	0
82	MG	1	3928	1/1	0.86	0.13	30,30,30,30	0
82	MG	1	3570	1/1	0.86	0.15	18,18,18,18	0
82	MG	1	3717	1/1	0.86	0.17	21,21,21,21	0
82	MG	AS	3640	1/1	0.86	0.11	32,32,32,32	0
82	MG	1	3972	1/1	0.86	0.13	8,8,8,8	0
82	MG	AS	3776	1/1	0.86	0.10	22,22,22,22	0
82	MG	AS	3705	1/1	0.86	0.27	30,30,30,30	0
82	MG	AS	3496	1/1	0.86	0.27	35,35,35,35	0
82	MG	AS	3497	1/1	0.86	0.18	18,18,18,18	0
82	MG	AS	3709	1/1	0.86	0.15	10,10,10,10	0
82	MG	1	4051	1/1	0.86	0.13	7,7,7,7	0
82	MG	AS	3864	1/1	0.86	0.20	34,34,34,34	0
82	MG	AS	3714	1/1	0.86	0.12	59,59,59,59	0
82	MG	AS	3583	1/1	0.86	0.15	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	ZN	CJ	201	1/1	0.86	0.11	224,224,224,224	0
82	MG	1	3453	1/1	0.86	0.17	34,34,34,34	0
82	MG	AS	3854	1/1	0.87	0.09	29,29,29,29	0
82	MG	AS	3474	1/1	0.87	0.24	10,10,10,10	0
82	MG	AS	3934	1/1	0.87	0.19	40,40,40,40	0
82	MG	1	3721	1/1	0.87	0.08	11,11,11,11	0
82	MG	1	4084	1/1	0.87	0.10	195,195,195,195	0
82	MG	1	3402	1/1	0.87	0.29	16,16,16,16	0
82	MG	1	3580	1/1	0.87	0.16	36,36,36,36	0
82	MG	1	3687	1/1	0.87	0.23	4,4,4,4	0
82	MG	AS	3485	1/1	0.87	0.12	20,20,20,20	0
82	MG	1	3493	1/1	0.87	0.12	11,11,11,11	0
82	MG	B	1830	1/1	0.87	0.21	18,18,18,18	0
82	MG	1	3643	1/1	0.87	0.17	6,6,6,6	0
82	MG	AS	3493	1/1	0.87	0.12	35,35,35,35	0
82	MG	AS	3788	1/1	0.87	0.21	19,19,19,19	0
82	MG	1	3694	1/1	0.87	0.10	37,37,37,37	0
82	MG	B	1838	1/1	0.87	0.14	19,19,19,19	0
82	MG	AS	3720	1/1	0.87	0.19	13,13,13,13	0
82	MG	AS	3499	1/1	0.87	0.12	21,21,21,21	0
82	MG	AS	3651	1/1	0.87	0.12	31,31,31,31	0
82	MG	AS	3502	1/1	0.87	0.08	22,22,22,22	0
82	MG	AS	3503	1/1	0.87	0.12	22,22,22,22	0
82	MG	1	3814	1/1	0.87	0.22	21,21,21,21	0
82	MG	1	3615	1/1	0.87	0.11	20,20,20,20	0
82	MG	1	3888	1/1	0.87	0.13	25,25,25,25	0
82	MG	1	3499	1/1	0.87	0.15	5,5,5,5	0
82	MG	AS	3730	1/1	0.87	0.20	16,16,16,16	0
82	MG	1	3698	1/1	0.87	0.26	18,18,18,18	0
82	MG	AS	3593	1/1	0.87	0.12	53,53,53,53	0
82	MG	B	1856	1/1	0.87	0.20	14,14,14,14	0
82	MG	1	3473	1/1	0.87	0.40	9,9,9,9	0
82	MG	1	4054	1/1	0.87	0.16	21,21,21,21	0
82	MG	y	201	1/1	0.87	0.14	14,14,14,14	0
82	MG	CM	1814	1/1	0.87	0.07	14,14,14,14	0
82	MG	AS	3667	1/1	0.87	0.18	26,26,26,26	0
82	MG	1	3822	1/1	0.87	0.22	6,6,6,6	0
82	MG	1	3930	1/1	0.87	0.21	19,19,19,19	0
82	MG	1	3702	1/1	0.87	0.13	7,7,7,7	0
82	MG	1	4018	1/1	0.87	0.11	37,37,37,37	0
82	MG	1	3932	1/1	0.87	0.30	60,60,60,60	0
82	MG	1	3526	1/1	0.87	0.27	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3746	1/1	0.87	0.18	40,40,40,40	0
82	MG	AS	3901	1/1	0.87	0.10	17,17,17,17	0
82	MG	AS	3829	1/1	0.87	0.11	28,28,28,28	0
82	MG	AS	3454	1/1	0.87	0.33	17,17,17,17	0
82	MG	1	3568	1/1	0.87	0.26	11,11,11,11	0
82	MG	1	4070	1/1	0.87	0.18	8,8,8,8	0
82	MG	1	3549	1/1	0.87	0.15	17,17,17,17	0
82	MG	AS	3458	1/1	0.87	0.28	20,20,20,20	0
82	MG	1	3939	1/1	0.87	0.11	21,21,21,21	0
82	MG	AS	3837	1/1	0.87	0.09	23,23,23,23	0
82	MG	AS	3547	1/1	0.87	0.17	58,58,58,58	0
82	MG	AS	3839	1/1	0.87	0.10	31,31,31,31	0
82	MG	1	3504	1/1	0.87	0.17	14,14,14,14	0
82	MG	1	3438	1/1	0.87	0.20	28,28,28,28	0
82	MG	1	4077	1/1	0.87	0.10	16,16,16,16	0
82	MG	1	3467	1/1	0.87	0.28	8,8,8,8	0
82	MG	1	3412	1/1	0.87	0.10	17,17,17,17	0
82	MG	1	3603	1/1	0.87	0.28	16,16,16,16	0
82	MG	AS	3922	1/1	0.87	0.26	20,20,20,20	0
82	MG	AS	3470	1/1	0.87	0.14	26,26,26,26	0
82	MG	AS	3629	1/1	0.87	0.18	17,17,17,17	0
82	MG	1	3908	1/1	0.87	0.23	12,12,12,12	0
82	MG	AS	3562	1/1	0.88	0.27	52,52,52,52	0
82	MG	AB	202	1/1	0.88	0.12	9,9,9,9	0
82	MG	1	3628	1/1	0.88	0.18	23,23,23,23	0
82	MG	AS	3862	1/1	0.88	0.29	27,27,27,27	0
82	MG	1	3958	1/1	0.88	0.15	18,18,18,18	0
82	MG	1	4059	1/1	0.88	0.18	16,16,16,16	0
82	MG	1	3749	1/1	0.88	0.13	4,4,4,4	0
82	MG	1	3788	1/1	0.88	0.10	15,15,15,15	0
82	MG	1	4062	1/1	0.88	0.10	16,16,16,16	0
82	MG	1	3581	1/1	0.88	0.18	13,13,13,13	0
82	MG	1	3794	1/1	0.88	0.12	22,22,22,22	0
82	MG	1	4067	1/1	0.88	0.21	15,15,15,15	0
82	MG	AT	201	1/1	0.88	0.22	10,10,10,10	0
82	MG	AS	3871	1/1	0.88	0.34	87,87,87,87	0
82	MG	1	4069	1/1	0.88	0.23	20,20,20,20	0
82	MG	1	3876	1/1	0.88	0.08	30,30,30,30	0
82	MG	1	3542	1/1	0.88	0.13	7,7,7,7	0
82	MG	1	3691	1/1	0.88	0.11	13,13,13,13	0
82	MG	1	3802	1/1	0.88	0.13	25,25,25,25	0
82	MG	1	4075	1/1	0.88	0.07	11,11,11,11	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	B	1819	1/1	0.88	0.30	15,15,15,15	0
82	MG	1	3803	1/1	0.88	0.18	36,36,36,36	0
82	MG	1	3804	1/1	0.88	0.24	17,17,17,17	0
82	MG	1	3926	1/1	0.88	0.24	25,25,25,25	0
82	MG	AS	3813	1/1	0.88	0.20	44,44,44,44	0
82	MG	1	3483	1/1	0.88	0.20	9,9,9,9	0
82	MG	AS	3517	1/1	0.88	0.21	49,49,49,49	0
82	MG	1	3975	1/1	0.88	0.15	29,29,29,29	0
82	MG	1	3672	1/1	0.88	0.10	10,10,10,10	0
82	MG	1	3887	1/1	0.88	0.18	43,43,43,43	0
82	MG	1	3757	1/1	0.88	0.10	35,35,35,35	0
82	MG	AS	3439	1/1	0.88	0.24	67,67,67,67	0
82	MG	1	3431	1/1	0.88	0.12	13,13,13,13	0
82	MG	CM	1815	1/1	0.88	0.30	28,28,28,28	0
82	MG	1	3501	1/1	0.88	0.24	11,11,11,11	0
82	MG	AS	3528	1/1	0.88	0.18	14,14,14,14	0
82	MG	AS	3828	1/1	0.88	0.20	43,43,43,43	0
82	MG	1	4089	1/1	0.88	0.17	23,23,23,23	0
82	MG	AS	3531	1/1	0.88	0.16	72,72,72,72	0
82	MG	1	3614	1/1	0.88	0.16	24,24,24,24	0
82	MG	1	3560	1/1	0.88	0.22	8,8,8,8	0
82	MG	1	3854	1/1	0.88	0.23	40,40,40,40	0
82	MG	AS	3907	1/1	0.88	0.15	48,48,48,48	0
82	MG	1	3561	1/1	0.88	0.09	3,3,3,3	0
82	MG	1	3705	1/1	0.88	0.12	21,21,21,21	0
82	MG	1	3993	1/1	0.88	0.12	35,35,35,35	0
82	MG	1	3941	1/1	0.88	0.15	69,69,69,69	0
82	MG	1	3662	1/1	0.88	0.10	36,36,36,36	0
82	MG	1	3663	1/1	0.88	0.20	23,23,23,23	0
82	MG	1	3490	1/1	0.88	0.32	9,9,9,9	0
82	MG	B	1864	1/1	0.88	0.09	8,8,8,8	0
82	MG	1	3740	1/1	0.88	0.14	22,22,22,22	0
82	MG	x	201	1/1	0.88	0.21	8,8,8,8	0
82	MG	AS	3768	1/1	0.88	0.10	7,7,7,7	0
82	MG	AS	3848	1/1	0.88	0.09	35,35,35,35	0
82	MG	AS	3552	1/1	0.88	0.13	14,14,14,14	0
82	MG	1	3451	1/1	0.88	0.10	8,8,8,8	0
82	MG	1	3714	1/1	0.88	0.43	43,43,43,43	0
82	MG	1	3406	1/1	0.88	0.14	8,8,8,8	0
82	MG	1	3910	1/1	0.88	0.13	6,6,6,6	0
82	MG	AS	3925	1/1	0.88	0.09	26,26,26,26	0
82	MG	AS	3560	1/1	0.88	0.24	12,12,12,12	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	Q	201	1/1	0.88	0.39	16,16,16,16	0
82	MG	1	3746	1/1	0.89	0.16	17,17,17,17	0
82	MG	AS	3929	1/1	0.89	0.10	8,8,8,8	0
82	MG	B	1865	1/1	0.89	0.09	30,30,30,30	0
82	MG	B	1806	1/1	0.89	0.13	15,15,15,15	0
82	MG	1	3905	1/1	0.89	0.12	13,13,13,13	0
82	MG	AS	3711	1/1	0.89	0.11	30,30,30,30	0
82	MG	AS	3785	1/1	0.89	0.15	23,23,23,23	0
82	MG	1	3935	1/1	0.89	0.26	27,27,27,27	0
82	MG	AS	3446	1/1	0.89	0.20	45,45,45,45	0
82	MG	AS	3790	1/1	0.89	0.22	34,34,34,34	0
82	MG	1	3842	1/1	0.89	0.07	14,14,14,14	0
82	MG	AS	3792	1/1	0.89	0.10	158,158,158,158	0
82	MG	1	4012	1/1	0.89	0.13	28,28,28,28	0
82	MG	AS	3652	1/1	0.89	0.10	32,32,32,32	0
82	MG	AS	3522	1/1	0.89	0.10	17,17,17,17	0
82	MG	1	4090	1/1	0.89	0.12	5,5,5,5	0
82	MG	B	1813	1/1	0.89	0.22	16,16,16,16	0
82	MG	1	3636	1/1	0.89	0.18	16,16,16,16	0
82	MG	AS	3876	1/1	0.89	0.08	19,19,19,19	0
82	MG	AS	3877	1/1	0.89	0.12	28,28,28,28	0
82	MG	U	201	1/1	0.89	0.21	51,51,51,51	0
82	MG	Y	201	1/1	0.89	0.13	6,6,6,6	0
82	MG	1	3513	1/1	0.89	0.14	16,16,16,16	0
82	MG	1	3813	1/1	0.89	0.15	29,29,29,29	0
82	MG	1	3514	1/1	0.89	0.13	10,10,10,10	0
82	MG	1	3407	1/1	0.89	0.20	12,12,12,12	0
82	MG	1	3752	1/1	0.89	0.22	4,4,4,4	0
82	MG	1	3416	1/1	0.89	0.30	8,8,8,8	0
82	MG	CE	102	1/1	0.89	0.13	52,52,52,52	0
82	MG	AS	3605	1/1	0.89	0.22	26,26,26,26	0
82	MG	AS	3668	1/1	0.89	0.16	13,13,13,13	0
82	MG	1	3621	1/1	0.89	0.20	28,28,28,28	0
82	MG	1	3755	1/1	0.89	0.17	6,6,6,6	0
82	MG	AS	3413	1/1	0.89	0.18	16,16,16,16	0
82	MG	1	3486	1/1	0.89	0.10	10,10,10,10	0
82	MG	AS	3741	1/1	0.89	0.09	13,13,13,13	0
82	MG	1	3536	1/1	0.89	0.23	13,13,13,13	0
82	MG	1	3494	1/1	0.89	0.13	16,16,16,16	0
82	MG	B	1840	1/1	0.89	0.10	9,9,9,9	0
82	MG	1	3584	1/1	0.89	0.12	7,7,7,7	0
82	MG	1	3654	1/1	0.89	0.18	6,6,6,6	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3761	1/1	0.89	0.30	16,16,16,16	0
82	MG	CM	1824	1/1	0.89	0.13	35,35,35,35	0
82	MG	1	3897	1/1	0.89	0.09	5,5,5,5	0
82	MG	AS	3484	1/1	0.89	0.12	18,18,18,18	0
82	MG	AS	3684	1/1	0.89	0.08	14,14,14,14	0
82	MG	AS	3904	1/1	0.89	0.08	37,37,37,37	0
82	MG	AS	3905	1/1	0.89	0.16	48,48,48,48	0
82	MG	1	3688	1/1	0.89	0.19	14,14,14,14	0
82	MG	1	4037	1/1	0.89	0.28	5,5,5,5	0
82	MG	1	3439	1/1	0.89	0.18	31,31,31,31	0
82	MG	AS	3491	1/1	0.89	0.20	7,7,7,7	0
82	MG	AS	3627	1/1	0.89	0.38	82,82,82,82	0
82	MG	AS	3759	1/1	0.89	0.14	15,15,15,15	0
82	MG	AS	3691	1/1	0.89	0.08	16,16,16,16	0
82	MG	1	4003	1/1	0.89	0.17	37,37,37,37	0
82	MG	AS	3762	1/1	0.89	0.09	33,33,33,33	0
82	MG	1	3543	1/1	0.89	0.10	14,14,14,14	0
82	MG	AS	3431	1/1	0.89	0.34	32,32,32,32	0
82	MG	1	3558	1/1	0.89	0.13	19,19,19,19	0
82	MG	1	3693	1/1	0.89	0.12	22,22,22,22	0
82	MG	AS	3501	1/1	0.89	0.11	11,11,11,11	0
83	PAR	CM	1802	42/42	0.89	0.16	26,58,74,83	0
82	MG	AS	3635	1/1	0.89	0.08	35,35,35,35	0
82	MG	AS	3573	1/1	0.89	0.23	24,24,24,24	0
82	MG	1	4007	1/1	0.89	0.22	43,43,43,43	0
82	MG	AS	3853	1/1	0.89	0.23	20,20,20,20	0
82	MG	AS	3436	1/1	0.89	0.07	4,4,4,4	0
82	MG	AS	3437	1/1	0.89	0.18	19,19,19,19	0
82	MG	AS	3423	1/1	0.90	0.20	43,43,43,43	0
82	MG	1	3912	1/1	0.90	0.20	29,29,29,29	0
82	MG	AS	3571	1/1	0.90	0.19	4,4,4,4	0
82	MG	AS	3494	1/1	0.90	0.11	8,8,8,8	0
82	MG	AS	3495	1/1	0.90	0.19	12,12,12,12	0
82	MG	AS	3787	1/1	0.90	0.19	40,40,40,40	0
82	MG	AS	3716	1/1	0.90	0.08	28,28,28,28	0
82	MG	B	1834	1/1	0.90	0.21	8,8,8,8	0
82	MG	1	3618	1/1	0.90	0.10	13,13,13,13	0
82	MG	3	204	1/1	0.90	0.10	14,14,14,14	0
82	MG	1	3441	1/1	0.90	0.07	8,8,8,8	0
82	MG	1	3772	1/1	0.90	0.06	21,21,21,21	0
82	MG	1	3956	1/1	0.90	0.21	49,49,49,49	0
82	MG	1	3957	1/1	0.90	0.11	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3798	1/1	0.90	0.14	21,21,21,21	0
82	MG	1	3642	1/1	0.90	0.14	38,38,38,38	0
82	MG	AS	3875	1/1	0.90	0.18	22,22,22,22	0
82	MG	1	3426	1/1	0.90	0.19	16,16,16,16	0
82	MG	1	3647	1/1	0.90	0.09	11,11,11,11	0
82	MG	1	3446	1/1	0.90	0.15	12,12,12,12	0
82	MG	1	3780	1/1	0.90	0.10	4,4,4,4	0
82	MG	1	3781	1/1	0.90	0.10	8,8,8,8	0
82	MG	1	3622	1/1	0.90	0.12	22,22,22,22	0
82	MG	AS	3591	1/1	0.90	0.27	42,42,42,42	0
82	MG	1	3925	1/1	0.90	0.14	19,19,19,19	0
82	MG	1	3891	1/1	0.90	0.15	8,8,8,8	0
82	MG	1	3967	1/1	0.90	0.17	27,27,27,27	0
82	MG	1	3855	1/1	0.90	0.07	9,9,9,9	0
82	MG	AS	3814	1/1	0.90	0.20	21,21,21,21	0
82	MG	1	3969	1/1	0.90	0.22	23,23,23,23	0
82	MG	AS	3889	1/1	0.90	0.13	15,15,15,15	0
82	MG	1	4066	1/1	0.90	0.07	19,19,19,19	0
82	MG	1	4017	1/1	0.90	0.09	23,23,23,23	0
82	MG	1	3651	1/1	0.90	0.10	21,21,21,21	0
82	MG	AS	3819	1/1	0.90	0.30	46,46,46,46	0
82	MG	1	3971	1/1	0.90	0.13	27,27,27,27	0
82	MG	AP	203	1/1	0.90	0.13	8,8,8,8	0
82	MG	1	3436	1/1	0.90	0.09	9,9,9,9	0
82	MG	1	3726	1/1	0.90	0.23	8,8,8,8	0
82	MG	1	3517	1/1	0.90	0.13	8,8,8,8	0
82	MG	CM	1821	1/1	0.90	0.17	21,21,21,21	0
82	MG	1	4074	1/1	0.90	0.41	35,35,35,35	0
82	MG	1	4027	1/1	0.90	0.13	11,11,11,11	0
82	MG	1	3541	1/1	0.90	0.16	9,9,9,9	0
82	MG	1	3437	1/1	0.90	0.08	7,7,7,7	0
82	MG	AS	3903	1/1	0.90	0.14	30,30,30,30	0
82	MG	1	3482	1/1	0.90	0.25	8,8,8,8	0
82	MG	1	3421	1/1	0.90	0.04	7,7,7,7	0
82	MG	1	3799	1/1	0.90	0.20	6,6,6,6	0
82	MG	1	3419	1/1	0.90	0.13	10,10,10,10	0
82	MG	1	3410	1/1	0.90	0.26	16,16,16,16	0
82	MG	1	3507	1/1	0.90	0.34	20,20,20,20	0
82	MG	B	1822	1/1	0.90	0.22	11,11,11,11	0
82	MG	1	3710	1/1	0.90	0.22	13,13,13,13	0
82	MG	AS	3557	1/1	0.90	0.09	32,32,32,32	0
82	MG	AS	3482	1/1	0.90	0.16	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3765	1/1	0.90	0.14	10,10,10,10	0
82	MG	AS	3559	1/1	0.90	0.10	31,31,31,31	0
82	MG	1	3872	1/1	0.90	0.15	17,17,17,17	0
82	MG	1	3909	1/1	0.90	0.10	24,24,24,24	0
82	MG	B	1828	1/1	0.90	0.14	19,19,19,19	0
82	MG	AS	3849	1/1	0.90	0.12	29,29,29,29	0
82	MG	1	3510	1/1	0.90	0.09	9,9,9,9	0
82	MG	AS	3564	1/1	0.90	0.24	25,25,25,25	0
82	MG	AS	3634	1/1	0.90	0.21	48,48,48,48	0
82	MG	AS	3774	1/1	0.90	0.14	17,17,17,17	0
82	MG	AS	3565	1/1	0.90	0.27	64,64,64,64	0
82	MG	1	3839	1/1	0.90	0.11	16,16,16,16	0
82	MG	B	1831	1/1	0.90	0.09	5,5,5,5	0
82	MG	1	3703	1/1	0.91	0.28	16,16,16,16	0
82	MG	AS	3442	1/1	0.91	0.15	40,40,40,40	0
82	MG	AS	3944	1/1	0.91	0.16	9,9,9,9	0
82	MG	1	3704	1/1	0.91	0.11	16,16,16,16	0
82	MG	1	3624	1/1	0.91	0.09	18,18,18,18	0
82	MG	AS	3514	1/1	0.91	0.30	67,67,67,67	0
82	MG	B	1872	1/1	0.91	0.22	41,41,41,41	0
82	MG	1	4050	1/1	0.91	0.11	11,11,11,11	0
82	MG	AU	201	1/1	0.91	0.10	44,44,44,44	0
82	MG	AU	202	1/1	0.91	0.10	59,59,59,59	0
82	MG	AS	3449	1/1	0.91	0.31	3,3,3,3	0
82	MG	AS	3579	1/1	0.91	0.11	23,23,23,23	0
82	MG	1	3502	1/1	0.91	0.20	10,10,10,10	0
82	MG	BB	301	1/1	0.91	0.25	15,15,15,15	0
82	MG	AS	3702	1/1	0.91	0.10	55,55,55,55	0
82	MG	B	1814	1/1	0.91	0.16	13,13,13,13	0
82	MG	1	3488	1/1	0.91	0.15	25,25,25,25	0
82	MG	B	1817	1/1	0.91	0.18	4,4,4,4	0
82	MG	AS	3644	1/1	0.91	0.14	7,7,7,7	0
82	MG	1	3973	1/1	0.91	0.09	8,8,8,8	0
82	MG	1	3815	1/1	0.91	0.21	15,15,15,15	0
82	MG	3	202	1/1	0.91	0.25	20,20,20,20	0
82	MG	1	3516	1/1	0.91	0.17	4,4,4,4	0
82	MG	1	3849	1/1	0.91	0.28	12,12,12,12	0
82	MG	AS	3408	1/1	0.91	0.05	13,13,13,13	0
82	MG	AS	3532	1/1	0.91	0.18	16,16,16,16	0
82	MG	AS	3777	1/1	0.91	0.07	29,29,29,29	0
82	MG	AS	3717	1/1	0.91	0.05	26,26,26,26	0
82	MG	1	3474	1/1	0.91	0.21	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	CM	1813	1/1	0.91	0.11	7,7,7,7	0
82	MG	1	3607	1/1	0.91	0.16	22,22,22,22	0
82	MG	1	3792	1/1	0.91	0.20	12,12,12,12	0
82	MG	1	3793	1/1	0.91	0.18	23,23,23,23	0
82	MG	AS	3784	1/1	0.91	0.22	36,36,36,36	0
82	MG	1	3587	1/1	0.91	0.11	7,7,7,7	0
82	MG	AS	3599	1/1	0.91	0.18	23,23,23,23	0
82	MG	1	3890	1/1	0.91	0.12	19,19,19,19	0
82	MG	1	3531	1/1	0.91	0.14	64,64,64,64	0
82	MG	CM	1826	1/1	0.91	0.25	22,22,22,22	0
82	MG	1	3953	1/1	0.91	0.28	14,14,14,14	0
82	MG	1	3825	1/1	0.91	0.17	4,4,4,4	0
82	MG	1	3992	1/1	0.91	0.08	39,39,39,39	0
82	MG	1	3518	1/1	0.91	0.18	7,7,7,7	0
82	MG	B	1841	1/1	0.91	0.15	9,9,9,9	0
82	MG	1	3506	1/1	0.91	0.39	44,44,44,44	0
82	MG	AS	3861	1/1	0.91	0.46	41,41,41,41	0
82	MG	AB	201	1/1	0.91	0.20	17,17,17,17	0
82	MG	1	4033	1/1	0.91	0.13	5,5,5,5	0
82	MG	1	3923	1/1	0.91	0.07	19,19,19,19	0
82	MG	1	3924	1/1	0.91	0.29	18,18,18,18	0
82	MG	AS	3489	1/1	0.91	0.19	20,20,20,20	0
82	MG	1	3770	1/1	0.91	0.16	5,5,5,5	0
82	MG	1	3496	1/1	0.91	0.25	15,15,15,15	0
82	MG	AS	3928	1/1	0.91	0.25	17,17,17,17	0
82	MG	1	3539	1/1	0.91	0.30	20,20,20,20	0
82	MG	1	3774	1/1	0.91	0.22	11,11,11,11	0
82	MG	AS	3932	1/1	0.91	0.21	16,16,16,16	0
82	MG	1	3444	1/1	0.91	0.06	3,3,3,3	0
82	MG	1	3500	1/1	0.91	0.13	4,4,4,4	0
82	MG	1	3680	1/1	0.91	0.14	27,27,27,27	0
82	MG	1	4082	1/1	0.91	0.12	21,21,21,21	0
82	MG	AS	3748	1/1	0.91	0.06	13,13,13,13	0
82	MG	AS	3438	1/1	0.91	0.15	4,4,4,4	0
82	MG	1	3403	1/1	0.91	0.38	16,16,16,16	0
82	MG	B	1808	1/1	0.91	0.21	8,8,8,8	0
82	MG	1	4022	1/1	0.92	0.11	25,25,25,25	0
82	MG	AS	3506	1/1	0.92	0.23	11,11,11,11	0
82	MG	AS	3507	1/1	0.92	0.19	57,57,57,57	0
82	MG	AS	3941	1/1	0.92	0.61	38,38,38,38	0
82	MG	AS	3508	1/1	0.92	0.14	9,9,9,9	0
82	MG	AS	3726	1/1	0.92	0.11	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3796	1/1	0.92	0.12	8,8,8,8	0
82	MG	AS	3945	1/1	0.92	0.21	18,18,18,18	0
82	MG	AS	3801	1/1	0.92	0.12	23,23,23,23	0
82	MG	1	3551	1/1	0.92	0.25	15,15,15,15	0
82	MG	1	3851	1/1	0.92	0.10	46,46,46,46	0
82	MG	AS	3657	1/1	0.92	0.21	19,19,19,19	0
82	MG	1	3773	1/1	0.92	0.07	25,25,25,25	0
82	MG	1	3949	1/1	0.92	0.08	28,28,28,28	0
82	MG	1	3988	1/1	0.92	0.07	43,43,43,43	0
82	MG	1	3540	1/1	0.92	0.09	17,17,17,17	0
82	MG	1	3443	1/1	0.92	0.09	16,16,16,16	0
82	MG	1	3477	1/1	0.92	0.28	15,15,15,15	0
82	MG	1	3954	1/1	0.92	0.30	29,29,29,29	0
82	MG	1	3609	1/1	0.92	0.13	5,5,5,5	0
82	MG	BB	303	1/1	0.92	0.18	9,9,9,9	0
82	MG	1	3737	1/1	0.92	0.41	5,5,5,5	0
82	MG	1	3455	1/1	0.92	0.07	4,4,4,4	0
82	MG	1	3997	1/1	0.92	0.12	21,21,21,21	0
82	MG	1	3831	1/1	0.92	0.13	44,44,44,44	0
82	MG	1	3893	1/1	0.92	0.11	15,15,15,15	0
82	MG	1	4001	1/1	0.92	0.10	25,25,25,25	0
82	MG	1	3571	1/1	0.92	0.20	29,29,29,29	0
82	MG	CH	101	1/1	0.92	0.20	22,22,22,22	0
82	MG	1	3632	1/1	0.92	0.09	11,11,11,11	0
82	MG	CM	1804	1/1	0.92	0.24	12,12,12,12	0
82	MG	AS	3459	1/1	0.92	0.18	13,13,13,13	0
82	MG	AS	3536	1/1	0.92	0.11	48,48,48,48	0
82	MG	1	3479	1/1	0.92	0.17	8,8,8,8	0
82	MG	1	3535	1/1	0.92	0.20	13,13,13,13	0
82	MG	AS	3680	1/1	0.92	0.10	15,15,15,15	0
82	MG	AS	3539	1/1	0.92	0.07	16,16,16,16	0
82	MG	1	4094	1/1	0.92	0.13	11,11,11,11	0
82	MG	c	201	1/1	0.92	0.31	17,17,17,17	0
82	MG	1	3745	1/1	0.92	0.15	18,18,18,18	0
82	MG	1	4049	1/1	0.92	0.12	8,8,8,8	0
82	MG	CM	1817	1/1	0.92	0.18	29,29,29,29	0
82	MG	1	3899	1/1	0.92	0.20	12,12,12,12	0
82	MG	AS	3469	1/1	0.92	0.15	16,16,16,16	0
82	MG	B	1823	1/1	0.92	0.16	8,8,8,8	0
82	MG	3	203	1/1	0.92	0.30	12,12,12,12	0
82	MG	1	3764	1/1	0.92	0.09	27,27,27,27	0
82	MG	B	1826	1/1	0.92	0.11	8,8,8,8	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3623	1/1	0.92	0.17	33,33,33,33	0
82	MG	1	3841	1/1	0.92	0.14	11,11,11,11	0
82	MG	1	3790	1/1	0.92	0.24	12,12,12,12	0
82	MG	1	3472	1/1	0.92	0.24	9,9,9,9	0
82	MG	1	3767	1/1	0.92	0.16	23,23,23,23	0
82	MG	k	402	1/1	0.92	0.59	26,26,26,26	0
82	MG	B	1832	1/1	0.92	0.22	8,8,8,8	0
82	MG	1	3874	1/1	0.92	0.10	5,5,5,5	0
82	MG	AS	3420	1/1	0.92	0.10	21,21,21,21	0
82	MG	1	3875	1/1	0.92	0.16	16,16,16,16	0
82	MG	1	3547	1/1	0.92	0.18	18,18,18,18	0
82	MG	AS	3706	1/1	0.92	0.04	14,14,14,14	0
82	MG	B	1837	1/1	0.92	0.11	24,24,24,24	0
82	MG	1	3508	1/1	0.92	0.18	12,12,12,12	0
82	MG	1	3879	1/1	0.92	0.11	11,11,11,11	0
82	MG	1	3447	1/1	0.92	0.15	16,16,16,16	0
82	MG	B	1845	1/1	0.92	0.09	17,17,17,17	0
82	MG	1	3943	1/1	0.92	0.07	16,16,16,16	0
82	MG	B	1847	1/1	0.92	0.07	16,16,16,16	0
82	MG	AS	3931	1/1	0.92	0.17	6,6,6,6	0
82	MG	6	201	1/1	0.92	0.14	6,6,6,6	0
82	MG	AS	3500	1/1	0.92	0.07	11,11,11,11	0
82	MG	AS	3789	1/1	0.92	0.20	29,29,29,29	0
82	MG	1	3881	1/1	0.92	0.21	48,48,48,48	1
82	MG	1	4021	1/1	0.92	0.10	41,41,41,41	0
82	MG	AS	3576	1/1	0.92	0.17	11,11,11,11	0
82	MG	AS	3526	1/1	0.93	0.15	7,7,7,7	0
82	MG	1	3428	1/1	0.93	0.11	5,5,5,5	0
82	MG	1	3785	1/1	0.93	0.17	10,10,10,10	0
82	MG	AS	3467	1/1	0.93	0.23	39,39,39,39	0
82	MG	AS	3530	1/1	0.93	0.21	32,32,32,32	0
82	MG	1	3608	1/1	0.93	0.08	16,16,16,16	0
82	MG	AS	3834	1/1	0.93	0.07	5,5,5,5	0
82	MG	1	3591	1/1	0.93	0.14	13,13,13,13	0
82	MG	AS	3770	1/1	0.93	0.18	46,46,46,46	0
82	MG	BK	201	1/1	0.93	0.14	10,10,10,10	0
82	MG	B	1844	1/1	0.93	0.10	16,16,16,16	0
82	MG	AS	3534	1/1	0.93	0.06	11,11,11,11	0
82	MG	AS	3713	1/1	0.93	0.08	9,9,9,9	0
82	MG	1	3566	1/1	0.93	0.23	24,24,24,24	0
82	MG	1	3613	1/1	0.93	0.18	24,24,24,24	0
82	MG	1	3732	1/1	0.93	0.18	3,3,3,3	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3634	1/1	0.93	0.18	15,15,15,15	0
82	MG	B	1851	1/1	0.93	0.25	17,17,17,17	0
82	MG	1	3481	1/1	0.93	0.15	17,17,17,17	0
82	MG	1	3595	1/1	0.93	0.23	4,4,4,4	0
82	MG	AS	3782	1/1	0.93	0.23	12,12,12,12	0
82	MG	1	3505	1/1	0.93	0.31	16,16,16,16	0
82	MG	1	4042	1/1	0.93	0.09	14,14,14,14	0
82	MG	1	3766	1/1	0.93	0.31	16,16,16,16	0
82	MG	AS	3546	1/1	0.93	0.16	19,19,19,19	0
82	MG	1	3708	1/1	0.93	0.08	6,6,6,6	0
82	MG	1	4045	1/1	0.93	0.14	33,33,33,33	0
82	MG	1	4087	1/1	0.93	0.17	21,21,21,21	0
82	MG	1	3768	1/1	0.93	0.17	8,8,8,8	0
82	MG	1	3800	1/1	0.93	0.13	13,13,13,13	0
82	MG	1	3871	1/1	0.93	0.12	23,23,23,23	0
82	MG	CM	1820	1/1	0.93	0.20	11,11,11,11	0
82	MG	1	3709	1/1	0.93	0.11	16,16,16,16	0
82	MG	1	3582	1/1	0.93	0.07	8,8,8,8	0
82	MG	1	3599	1/1	0.93	0.19	6,6,6,6	0
82	MG	1	3475	1/1	0.93	0.28	17,17,17,17	0
82	MG	CM	1827	1/1	0.93	0.18	10,10,10,10	0
82	MG	B	1869	1/1	0.93	0.29	23,23,23,23	0
82	MG	B	1870	1/1	0.93	0.21	21,21,21,21	0
82	MG	1	3976	1/1	0.93	0.07	13,13,13,13	0
82	MG	AS	3679	1/1	0.93	0.10	68,68,68,68	0
82	MG	AS	3444	1/1	0.93	0.09	34,34,34,34	0
82	MG	1	3601	1/1	0.93	0.09	15,15,15,15	0
82	MG	AS	3742	1/1	0.93	0.12	10,10,10,10	0
82	MG	1	3550	1/1	0.93	0.35	16,16,16,16	0
82	MG	B	1821	1/1	0.93	0.21	13,13,13,13	0
82	MG	1	3775	1/1	0.93	0.11	9,9,9,9	0
82	MG	AS	3685	1/1	0.93	0.24	9,9,9,9	0
82	MG	AS	3567	1/1	0.93	0.12	20,20,20,20	0
82	MG	1	3981	1/1	0.93	0.25	15,15,15,15	0
82	MG	1	3689	1/1	0.93	0.13	11,11,11,11	0
82	MG	1	3404	1/1	0.93	0.15	9,9,9,9	0
82	MG	1	3625	1/1	0.93	0.11	11,11,11,11	0
82	MG	1	3649	1/1	0.93	0.19	7,7,7,7	0
82	MG	1	4023	1/1	0.93	0.16	30,30,30,30	0
82	MG	1	3670	1/1	0.93	0.18	8,8,8,8	0
82	MG	1	3484	1/1	0.93	0.14	25,25,25,25	0
82	MG	1	3782	1/1	0.93	0.16	8,8,8,8	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	AS	3637	1/1	0.93	0.17	18,18,18,18	0
82	MG	z	201	1/1	0.93	0.08	14,14,14,14	0
85	ZN	AK	101	1/1	0.93	0.15	60,60,60,60	0
82	MG	1	3990	1/1	0.93	0.12	9,9,9,9	0
82	MG	1	3852	1/1	0.93	0.22	24,24,24,24	0
82	MG	1	3427	1/1	0.93	0.07	3,3,3,3	0
82	MG	1	3657	1/1	0.94	0.19	19,19,19,19	0
82	MG	CM	1809	1/1	0.94	0.18	12,12,12,12	0
82	MG	1	3700	1/1	0.94	0.24	19,19,19,19	0
82	MG	1	3606	1/1	0.94	0.09	9,9,9,9	0
82	MG	1	3644	1/1	0.94	0.11	36,36,36,36	0
82	MG	1	3434	1/1	0.94	0.10	12,12,12,12	0
82	MG	AS	3669	1/1	0.94	0.14	7,7,7,7	0
82	MG	1	3739	1/1	0.94	0.26	15,15,15,15	0
82	MG	1	3418	1/1	0.94	0.07	5,5,5,5	0
82	MG	AS	3582	1/1	0.94	0.16	41,41,41,41	0
82	MG	AS	3543	1/1	0.94	0.20	34,34,34,34	0
82	MG	AS	3805	1/1	0.94	0.10	13,13,13,13	0
82	MG	AS	3424	1/1	0.94	0.18	10,10,10,10	0
82	MG	1	3509	1/1	0.94	0.30	17,17,17,17	0
82	MG	CM	1823	1/1	0.94	0.35	18,18,18,18	0
82	MG	1	3476	1/1	0.94	0.27	9,9,9,9	0
82	MG	CM	1825	1/1	0.94	0.12	42,42,42,42	0
82	MG	AS	3463	1/1	0.94	0.12	11,11,11,11	0
82	MG	1	3836	1/1	0.94	0.07	14,14,14,14	0
82	MG	1	3495	1/1	0.94	0.28	15,15,15,15	0
82	MG	B	1839	1/1	0.94	0.19	8,8,8,8	0
82	MG	1	3816	1/1	0.94	0.18	6,6,6,6	0
82	MG	o	303	1/1	0.94	0.23	12,12,12,12	0
82	MG	B	1843	1/1	0.94	0.15	5,5,5,5	0
82	MG	AS	3555	1/1	0.94	0.13	46,46,46,46	0
82	MG	1	3762	1/1	0.94	0.17	4,4,4,4	0
82	MG	AS	3471	1/1	0.94	0.15	16,16,16,16	0
82	MG	1	3626	1/1	0.94	0.20	4,4,4,4	0
82	MG	AS	3775	1/1	0.94	0.07	9,9,9,9	0
82	MG	AS	3473	1/1	0.94	0.10	16,16,16,16	0
82	MG	1	3409	1/1	0.94	0.20	16,16,16,16	0
82	MG	AS	3602	1/1	0.94	0.17	56,56,56,56	0
82	MG	1	3865	1/1	0.94	0.07	38,38,38,38	0
82	MG	1	3801	1/1	0.94	0.14	14,14,14,14	0
82	MG	1	3821	1/1	0.94	0.09	19,19,19,19	0
82	MG	B	1852	1/1	0.94	0.13	4,4,4,4	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3480	1/1	0.94	0.17	28,28,28,28	0
82	MG	1	3593	1/1	0.94	0.08	11,11,11,11	0
82	MG	1	3498	1/1	0.94	0.27	9,9,9,9	0
82	MG	1	4088	1/1	0.94	0.16	16,16,16,16	0
82	MG	1	4063	1/1	0.94	0.10	28,28,28,28	0
82	MG	1	3870	1/1	0.94	0.08	12,12,12,12	0
82	MG	B	1858	1/1	0.94	0.11	6,6,6,6	0
85	ZN	h	201	1/1	0.94	0.07	126,126,126,126	0
82	MG	AD	201	1/1	0.94	0.23	11,11,11,11	0
82	MG	1	3417	1/1	0.94	0.15	11,11,11,11	0
82	MG	1	3733	1/1	0.94	0.20	22,22,22,22	0
82	MG	1	3611	1/1	0.95	0.22	77,77,77,77	0
82	MG	B	1805	1/1	0.95	0.20	16,16,16,16	0
82	MG	1	3529	1/1	0.95	0.09	9,9,9,9	0
82	MG	AS	3476	1/1	0.95	0.15	31,31,31,31	0
82	MG	AS	3845	1/1	0.95	0.16	23,23,23,23	0
82	MG	1	3480	1/1	0.95	0.09	16,16,16,16	0
82	MG	1	3442	1/1	0.95	0.16	9,9,9,9	0
82	MG	AS	3447	1/1	0.95	0.16	15,15,15,15	0
82	MG	1	3936	1/1	0.95	0.10	17,17,17,17	0
82	MG	AS	3481	1/1	0.95	0.15	41,41,41,41	0
82	MG	1	3723	1/1	0.95	0.12	9,9,9,9	0
82	MG	AS	3598	1/1	0.95	0.15	35,35,35,35	0
82	MG	AS	3450	1/1	0.95	0.10	21,21,21,21	0
82	MG	1	3532	1/1	0.95	0.10	15,15,15,15	0
82	MG	1	3454	1/1	0.95	0.07	12,12,12,12	0
82	MG	AS	3486	1/1	0.95	0.12	17,17,17,17	0
82	MG	1	4000	1/1	0.95	0.21	12,12,12,12	0
82	MG	AS	3645	1/1	0.95	0.12	28,28,28,28	0
82	MG	1	3641	1/1	0.95	0.13	13,13,13,13	0
82	MG	1	3574	1/1	0.95	0.07	9,9,9,9	0
82	MG	B	1816	1/1	0.95	0.11	13,13,13,13	0
82	MG	1	3534	1/1	0.95	0.16	6,6,6,6	0
82	MG	1	3597	1/1	0.95	0.10	11,11,11,11	0
82	MG	1	3713	1/1	0.95	0.14	6,6,6,6	0
82	MG	B	1848	1/1	0.95	0.10	5,5,5,5	0
82	MG	B	1849	1/1	0.95	0.11	15,15,15,15	0
82	MG	1	3497	1/1	0.95	0.15	7,7,7,7	0
82	MG	AS	3613	1/1	0.95	0.12	14,14,14,14	0
82	MG	1	3715	1/1	0.95	0.09	8,8,8,8	0
82	MG	AS	3825	1/1	0.95	0.17	18,18,18,18	0
82	MG	1	3987	1/1	0.95	0.07	8,8,8,8	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	AS	3700	1/1	0.95	0.18	18,18,18,18	0
82	MG	AS	3434	1/1	0.95	0.15	5,5,5,5	0
82	MG	1	3716	1/1	0.95	0.11	9,9,9,9	0
82	MG	4	202	1/1	0.95	0.12	19,19,19,19	0
82	MG	AS	3505	1/1	0.95	0.20	19,19,19,19	0
82	MG	1	3578	1/1	0.95	0.20	11,11,11,11	0
82	MG	1	3950	1/1	0.95	0.10	24,24,24,24	0
82	MG	AS	3749	1/1	0.95	0.24	12,12,12,12	0
82	MG	4	205	1/1	0.95	0.12	12,12,12,12	0
85	ZN	AP	201	1/1	0.95	0.06	127,127,127,127	0
82	MG	1	4055	1/1	0.95	0.08	7,7,7,7	0
82	MG	AS	3793	1/1	0.95	0.14	129,129,129,129	0
82	MG	1	3673	1/1	0.95	0.07	20,20,20,20	0
82	MG	AS	3550	1/1	0.95	0.26	19,19,19,19	0
82	MG	1	3553	1/1	0.96	0.08	14,14,14,14	0
82	MG	AS	3718	1/1	0.96	0.07	20,20,20,20	0
82	MG	AS	3654	1/1	0.96	0.21	9,9,9,9	0
82	MG	1	3562	1/1	0.96	0.24	10,10,10,10	0
82	MG	Z	201	1/1	0.96	0.14	8,8,8,8	0
82	MG	AS	3429	1/1	0.96	0.13	17,17,17,17	0
82	MG	1	3411	1/1	0.96	0.29	20,20,20,20	0
82	MG	1	3487	1/1	0.96	0.16	21,21,21,21	0
82	MG	1	3701	1/1	0.96	0.04	5,5,5,5	0
82	MG	AS	3597	1/1	0.96	0.11	26,26,26,26	0
82	MG	AS	3512	1/1	0.96	0.07	21,21,21,21	0
82	MG	1	3747	1/1	0.96	0.16	15,15,15,15	0
82	MG	1	4024	1/1	0.96	0.11	14,14,14,14	0
82	MG	B	1842	1/1	0.96	0.16	19,19,19,19	0
82	MG	1	3586	1/1	0.96	0.12	12,12,12,12	0
82	MG	1	3429	1/1	0.96	0.12	8,8,8,8	0
82	MG	AS	3488	1/1	0.96	0.06	23,23,23,23	0
82	MG	1	3489	1/1	0.96	0.10	11,11,11,11	0
82	MG	AS	3799	1/1	0.96	0.10	10,10,10,10	0
82	MG	1	3430	1/1	0.96	0.14	5,5,5,5	0
82	MG	1	3425	1/1	0.96	0.24	26,26,26,26	0
82	MG	1	3537	1/1	0.96	0.22	8,8,8,8	0
82	MG	AS	3524	1/1	0.96	0.08	17,17,17,17	0
82	MG	CM	1810	1/1	0.96	0.19	17,17,17,17	0
82	MG	1	3837	1/1	0.96	0.25	8,8,8,8	0
82	MG	AS	3873	1/1	0.96	0.23	39,39,39,39	0
82	MG	1	3645	1/1	0.96	0.06	12,12,12,12	0
82	MG	1	4091	1/1	0.96	0.07	5,5,5,5	0

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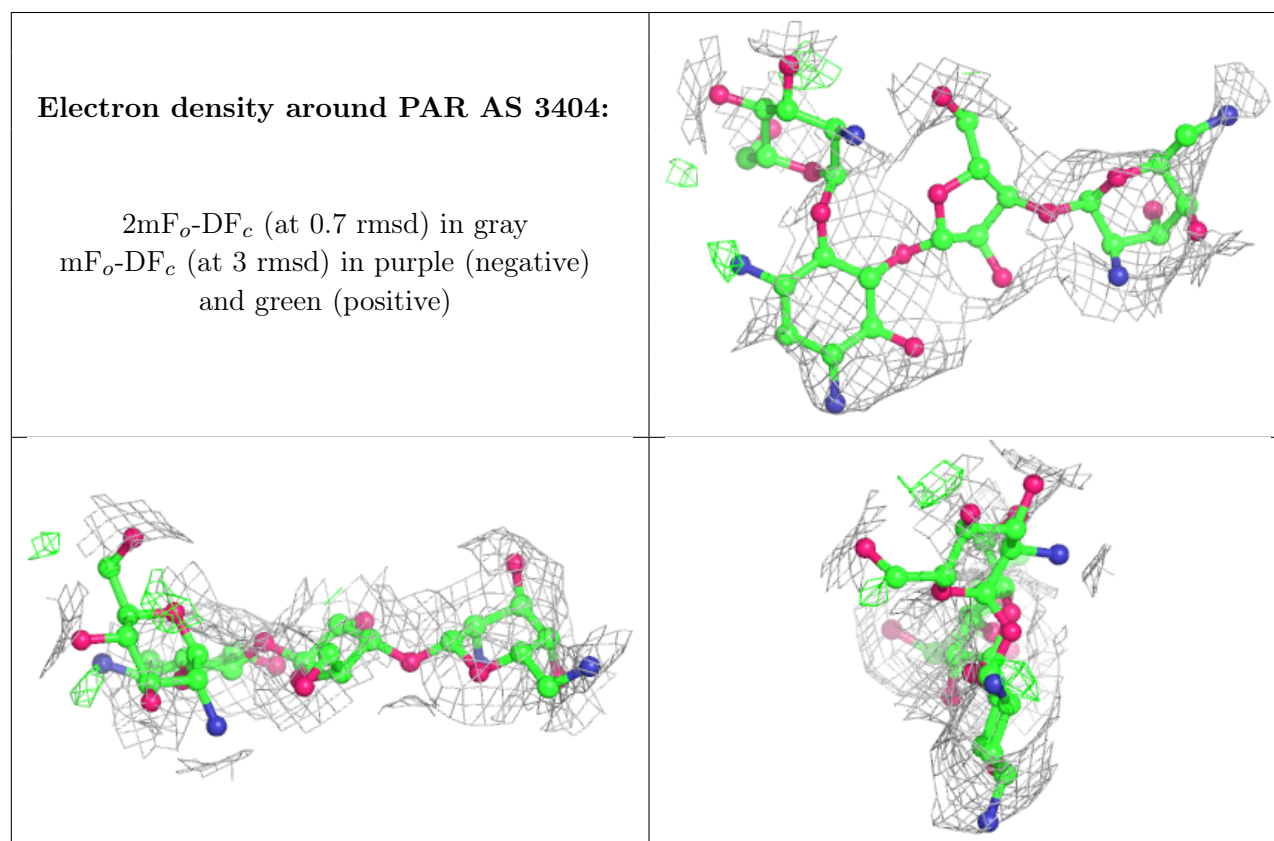
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
82	MG	1	3695	1/1	0.96	0.06	3,3,3,3	0
85	ZN	AH	202	1/1	0.96	0.06	75,75,75,75	0
82	MG	L	201	1/1	0.96	0.15	8,8,8,8	0
82	MG	1	4093	1/1	0.96	0.08	17,17,17,17	0
82	MG	AS	3616	1/1	0.96	0.07	50,50,50,50	0
82	MG	1	3646	1/1	0.96	0.11	25,25,25,25	0
82	MG	1	3980	1/1	0.96	0.07	6,6,6,6	0
85	ZN	DQ	101	1/1	0.96	0.09	120,120,120,120	0
82	MG	1	3725	1/1	0.96	0.10	16,16,16,16	0
82	MG	1	3573	1/1	0.97	0.07	11,11,11,11	0
82	MG	DK	201	1/1	0.97	0.05	9,9,9,9	0
82	MG	BP	201	1/1	0.97	0.11	16,16,16,16	0
82	MG	1	3616	1/1	0.97	0.14	6,6,6,6	0
82	MG	BQ	202	1/1	0.97	0.12	7,7,7,7	0
82	MG	1	3524	1/1	0.97	0.06	4,4,4,4	0
82	MG	1	3744	1/1	0.97	0.14	9,9,9,9	0
82	MG	1	3937	1/1	0.97	0.07	11,11,11,11	0
82	MG	1	3515	1/1	0.97	0.05	5,5,5,5	0
82	MG	1	3448	1/1	0.97	0.14	20,20,20,20	0
82	MG	B	1835	1/1	0.97	0.18	8,8,8,8	0
82	MG	AS	3498	1/1	0.97	0.09	8,8,8,8	0
82	MG	1	3577	1/1	0.97	0.09	15,15,15,15	0
82	MG	1	3471	1/1	0.97	0.12	8,8,8,8	0
82	MG	AS	3694	1/1	0.97	0.13	26,26,26,26	0
82	MG	1	4068	1/1	0.97	0.06	12,12,12,12	0
82	MG	1	3798	1/1	0.97	0.28	13,13,13,13	0
82	MG	1	3682	1/1	0.97	0.17	4,4,4,4	0
82	MG	AS	3948	1/1	0.97	0.14	12,12,12,12	0
82	MG	AS	3620	1/1	0.97	0.08	10,10,10,10	0
82	MG	AS	3621	1/1	0.97	0.06	6,6,6,6	0
82	MG	AS	3647	1/1	0.97	0.10	23,23,23,23	0
82	MG	AS	3504	1/1	0.97	0.22	9,9,9,9	0
82	MG	1	3522	1/1	0.97	0.05	19,19,19,19	0
82	MG	1	3623	1/1	0.97	0.36	25,25,25,25	0
82	MG	1	3845	1/1	0.97	0.07	10,10,10,10	0
82	MG	1	3878	1/1	0.97	0.07	13,13,13,13	0
82	MG	AS	3927	1/1	0.97	0.07	25,25,25,25	0
82	MG	1	3423	1/1	0.97	0.18	9,9,9,9	0
82	MG	AS	3510	1/1	0.97	0.19	19,19,19,19	0
82	MG	1	3789	1/1	0.97	0.06	9,9,9,9	0
82	MG	1	3832	1/1	0.97	0.10	6,6,6,6	0
82	MG	AS	3847	1/1	0.97	0.07	27,27,27,27	0

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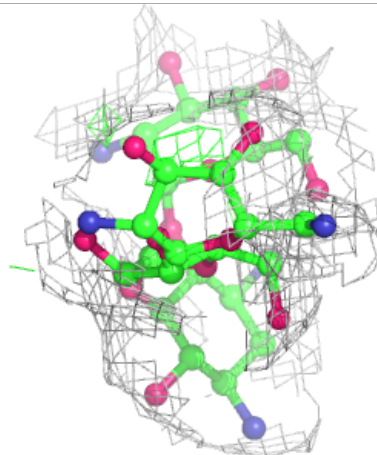
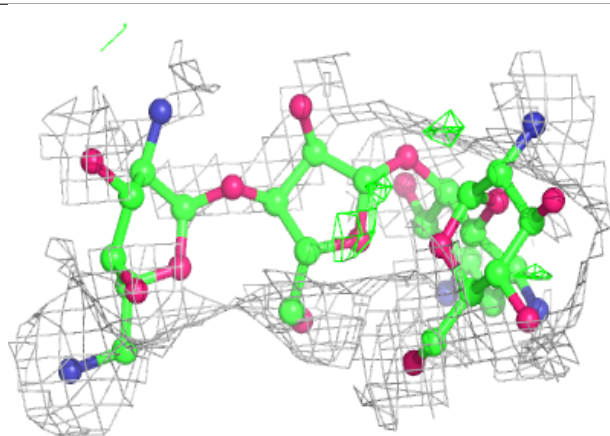
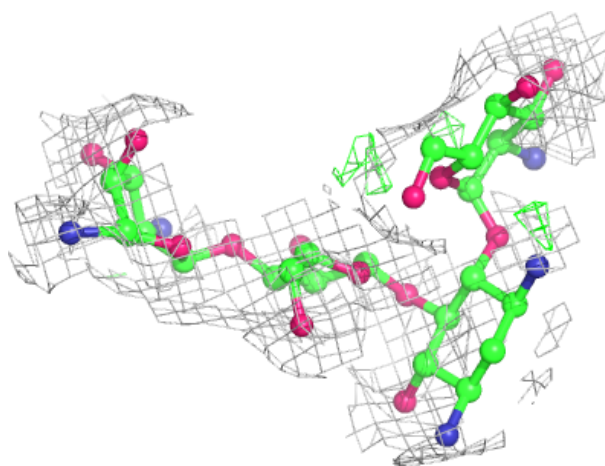
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
82	MG	1	3552	1/1	0.98	0.08	6,6,6,6	0
82	MG	1	3585	1/1	0.98	0.05	30,30,30,30	0
82	MG	1	3610	1/1	0.98	0.06	6,6,6,6	0
82	MG	AH	201	1/1	0.98	0.20	33,33,33,33	0
82	MG	AS	3712	1/1	0.98	0.08	8,8,8,8	0
82	MG	1	3470	1/1	0.98	0.42	17,17,17,17	0
85	ZN	DN	201	1/1	0.98	0.04	76,76,76,76	0
82	MG	AS	3826	1/1	0.98	0.09	24,24,24,24	0
82	MG	AS	3515	1/1	0.98	0.17	41,41,41,41	0
85	ZN	CH	102	1/1	0.99	0.07	53,53,53,53	0
85	ZN	f	101	1/1	0.99	0.06	51,51,51,51	0
85	ZN	CK	101	1/1	0.99	0.06	92,92,92,92	0
85	ZN	AQ	101	1/1	0.99	0.04	35,35,35,35	0
85	ZN	c	202	1/1	0.99	0.04	31,31,31,31	0
85	ZN	CE	101	1/1	0.99	0.03	59,59,59,59	0
85	ZN	AN	101	1/1	1.00	0.03	50,50,50,50	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.



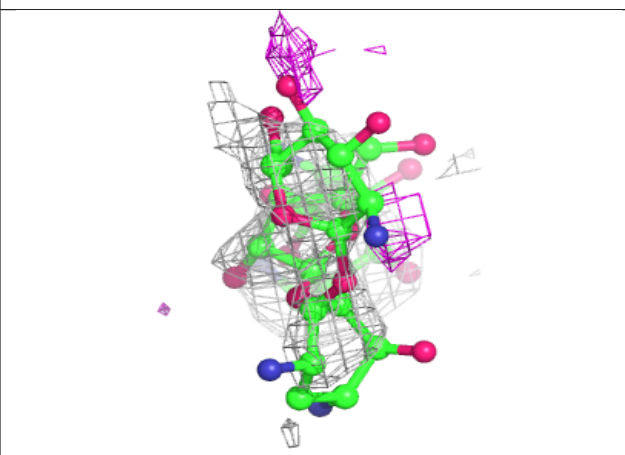
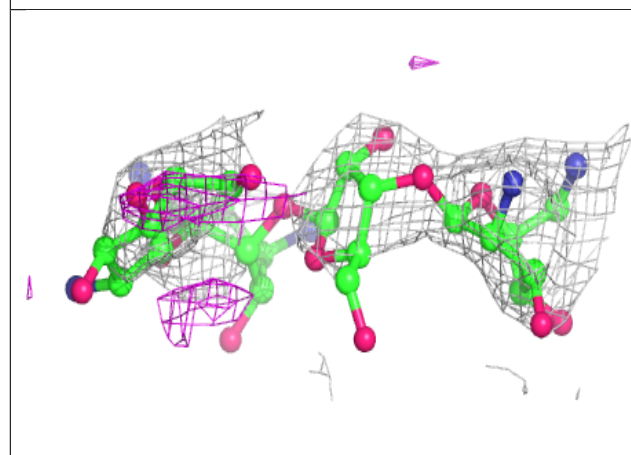
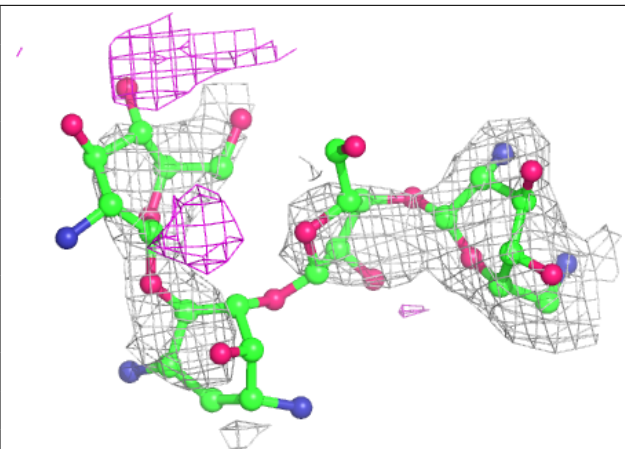
Electron density around PAR 1 3466:

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



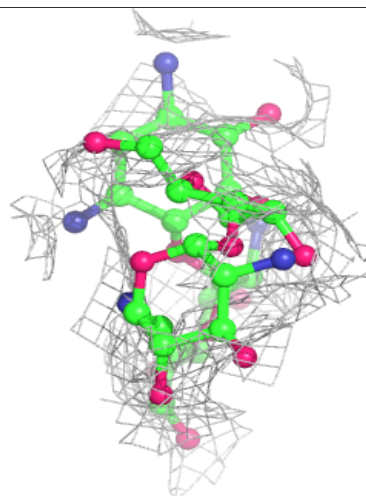
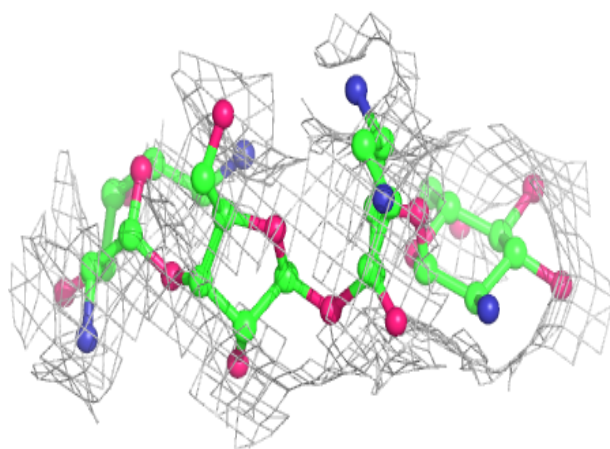
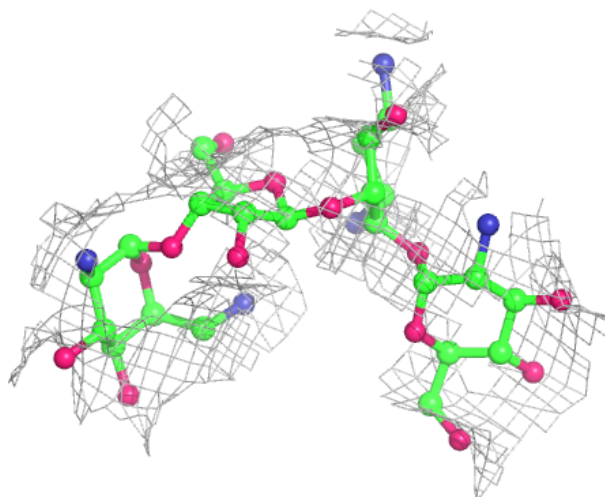
Electron density around PAR 1 3457:

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



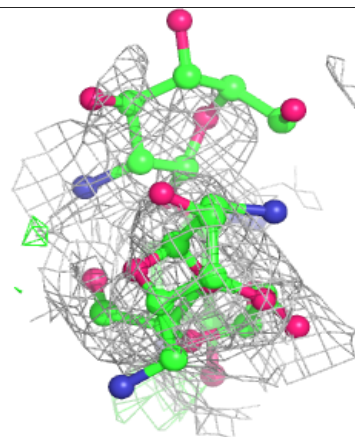
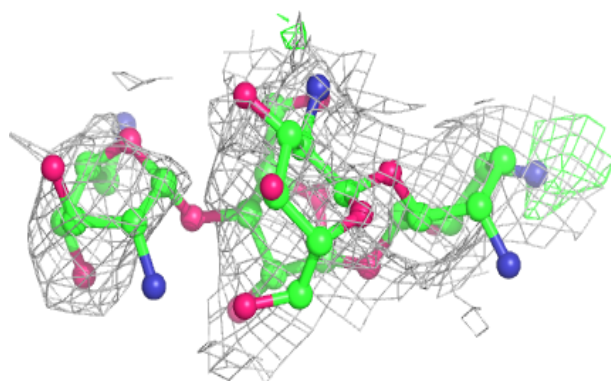
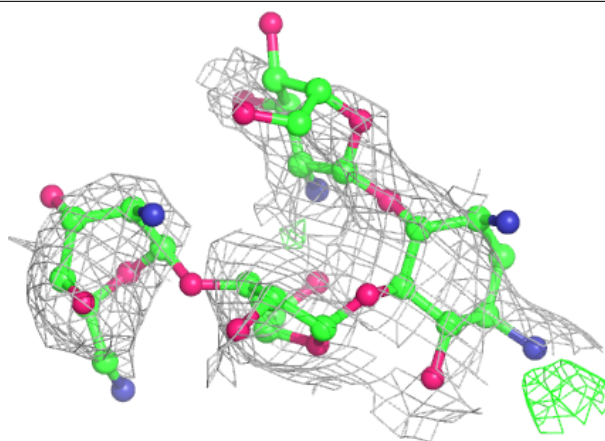
Electron density around PAR AS 3406:

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



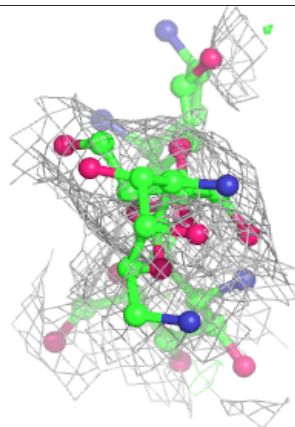
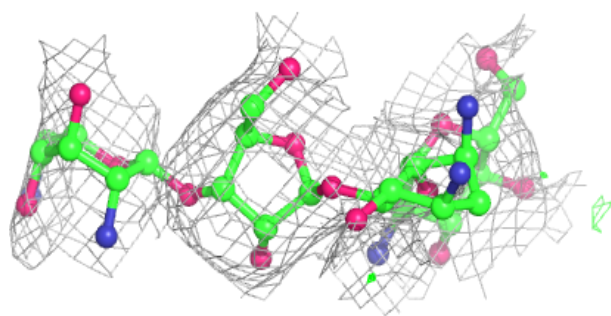
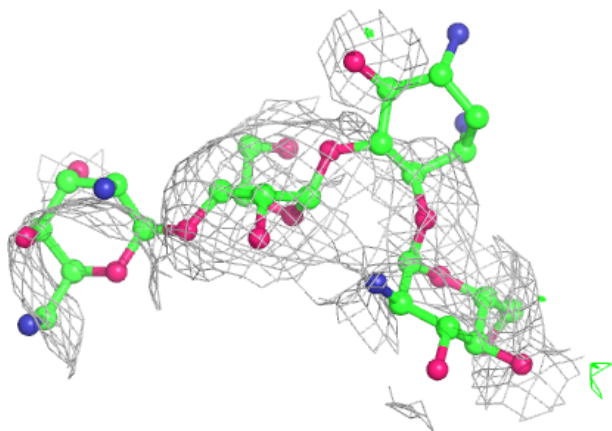
Electron density around PAR 1 3460:

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



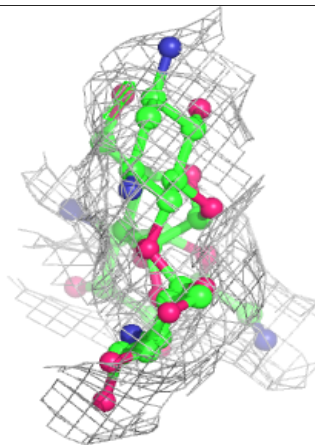
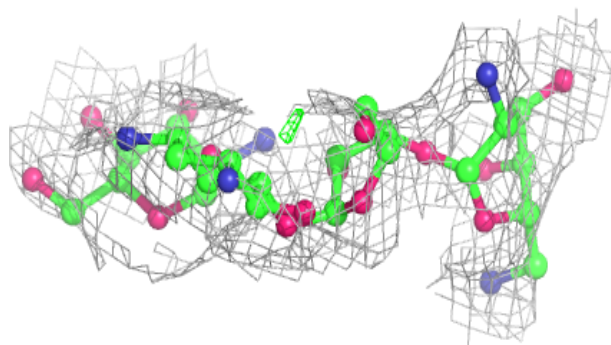
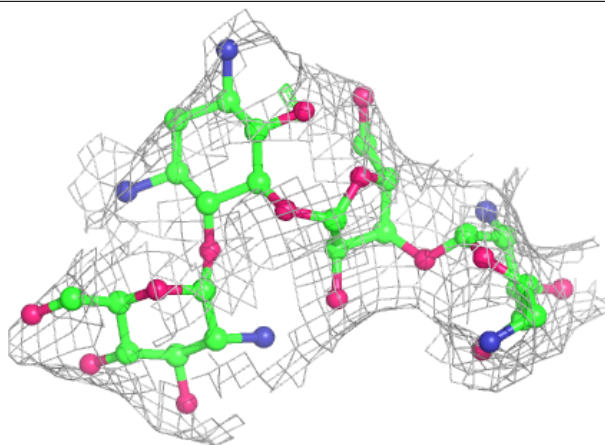
Electron density around PAR AS 3402:

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



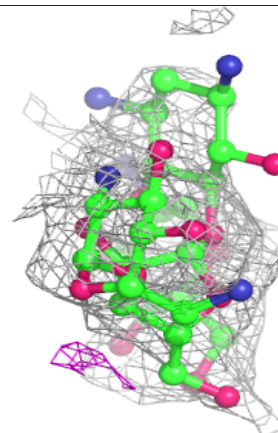
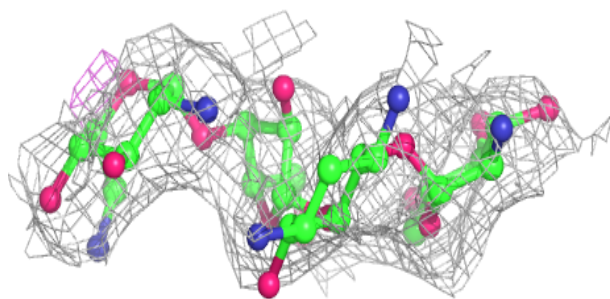
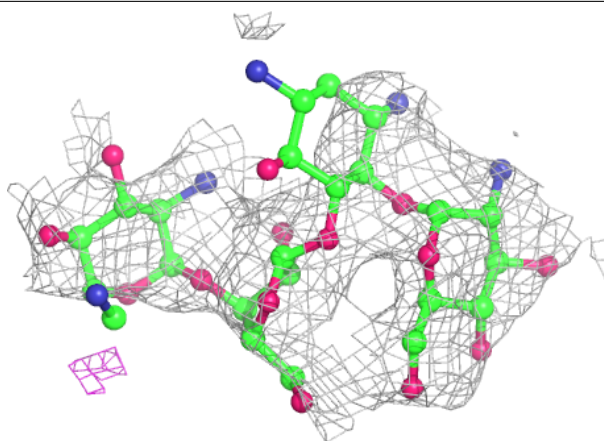
Electron density around PAR 1 3461:

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



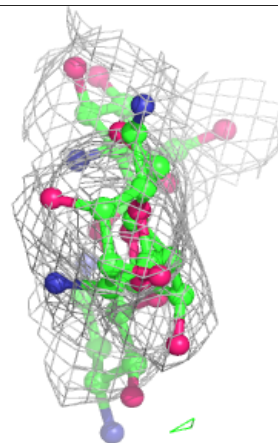
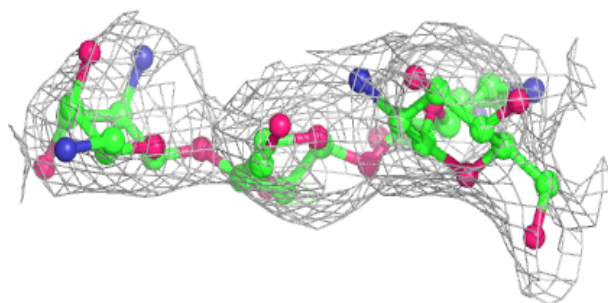
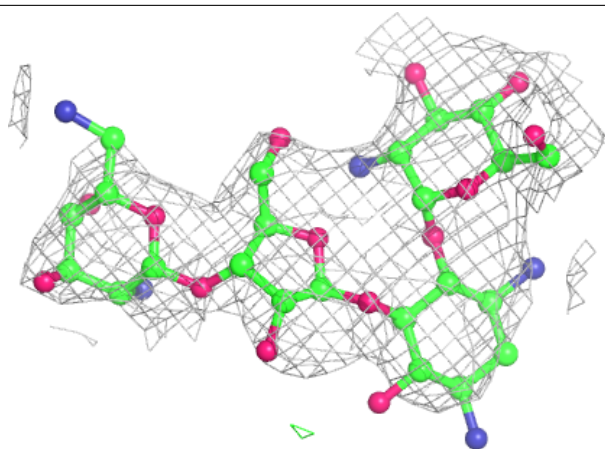
Electron density around PAR 1 3465:

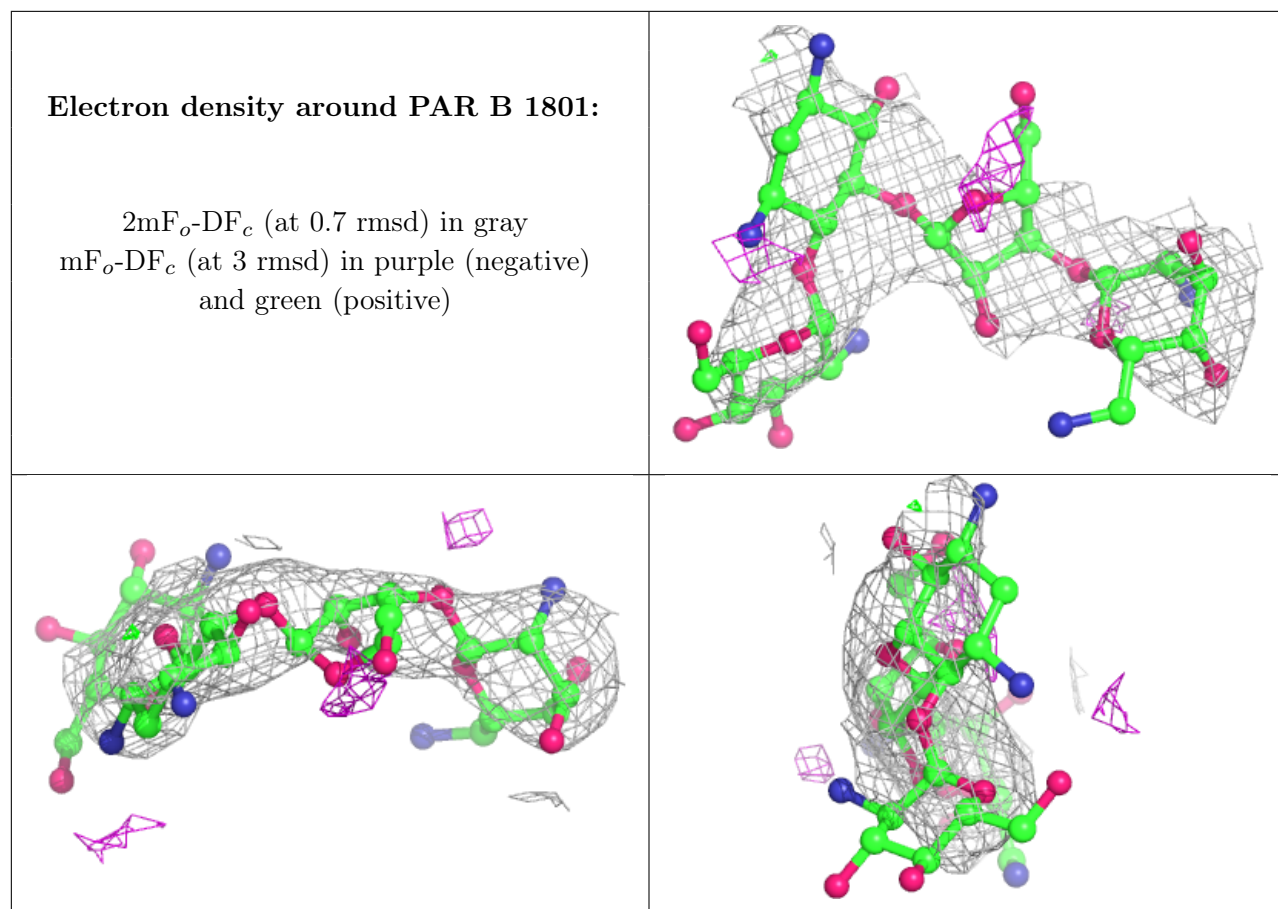
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around PAR B 1803:

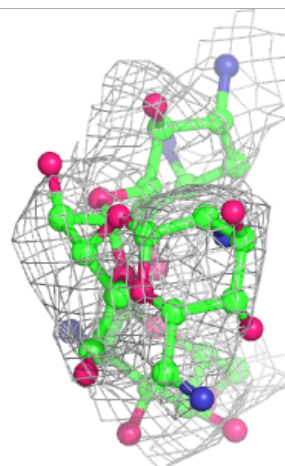
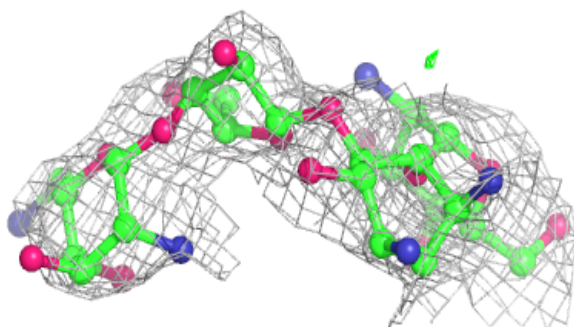
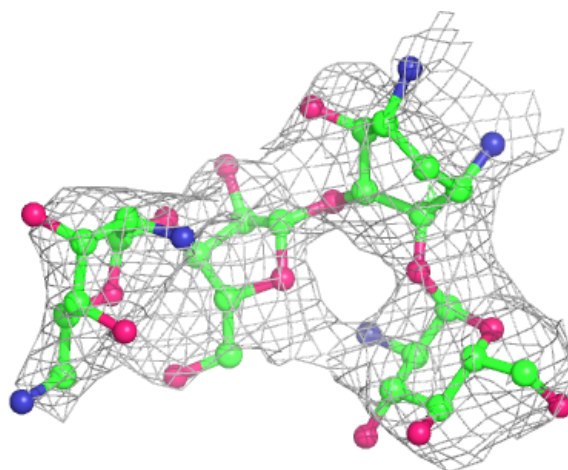
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





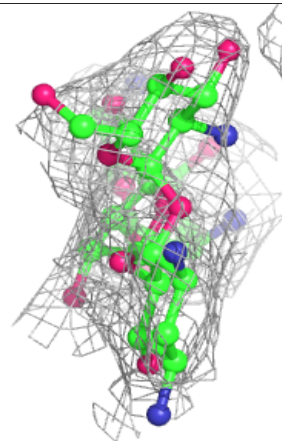
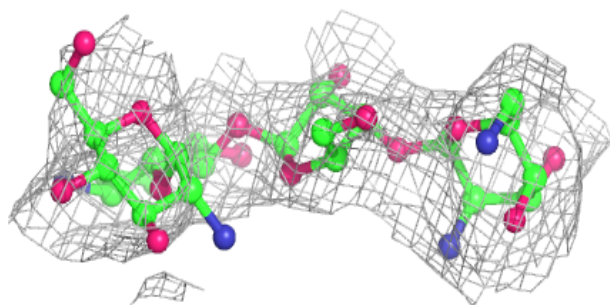
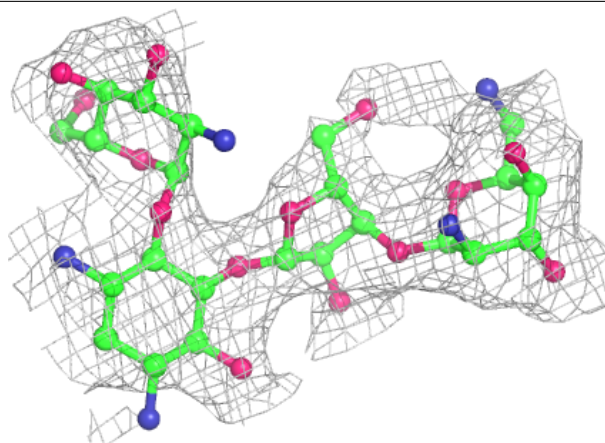
Electron density around PAR B 1802:

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



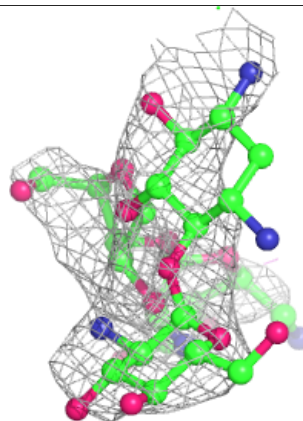
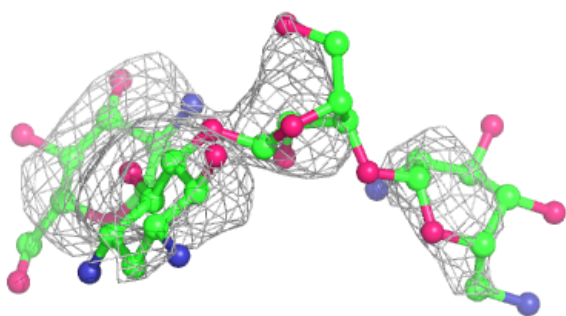
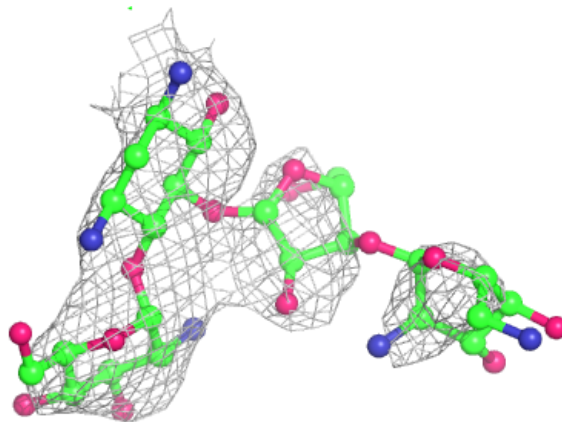
Electron density around PAR 1 3456:

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



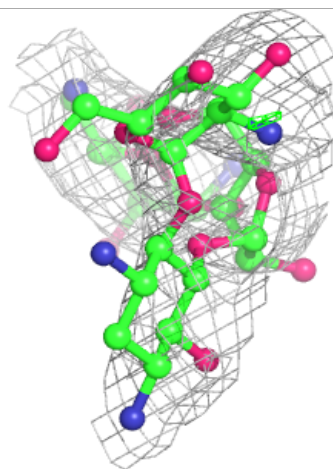
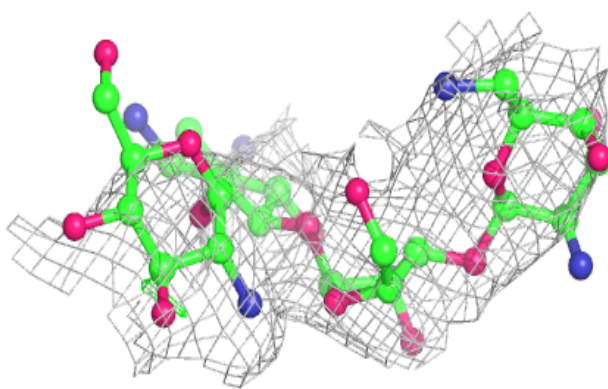
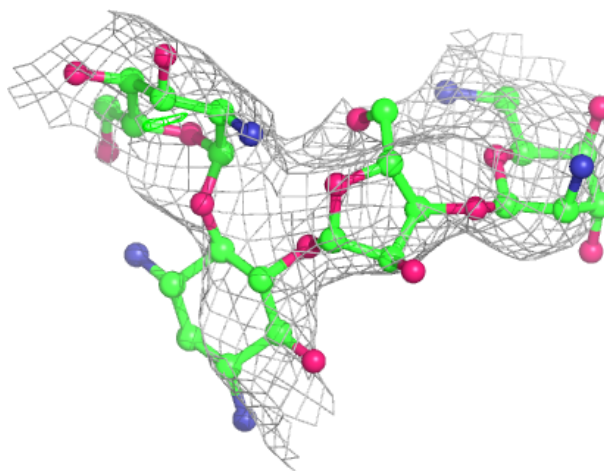
Electron density around PAR 1 3459:

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



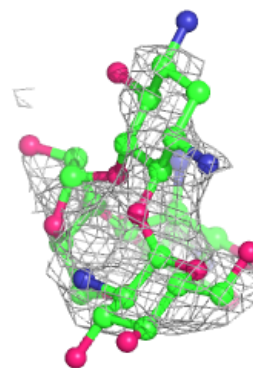
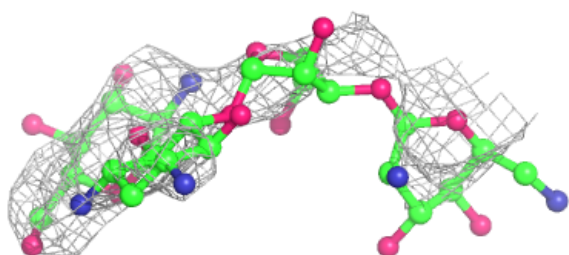
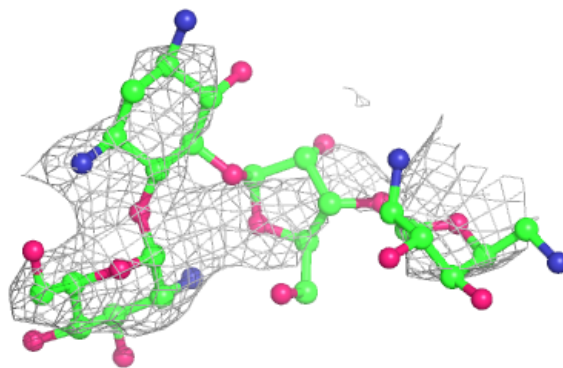
Electron density around PAR AS 3401:

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



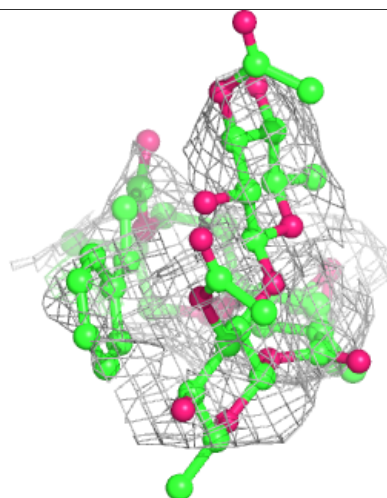
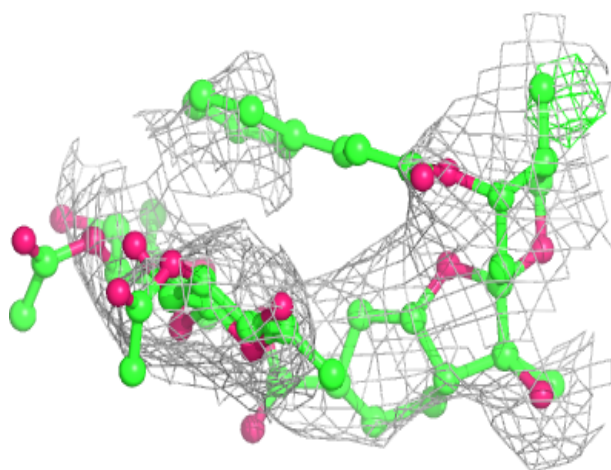
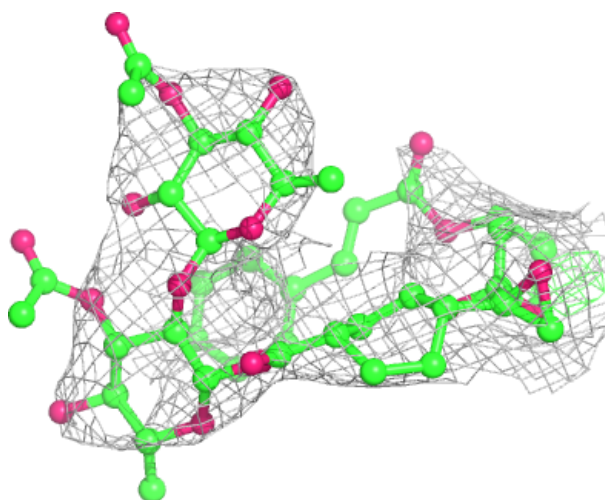
Electron density around PAR AS 3403:

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



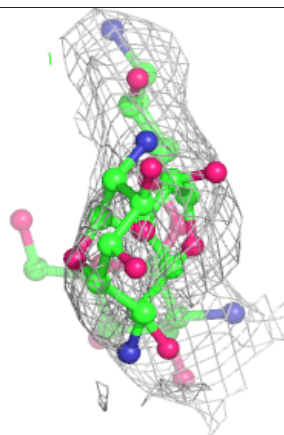
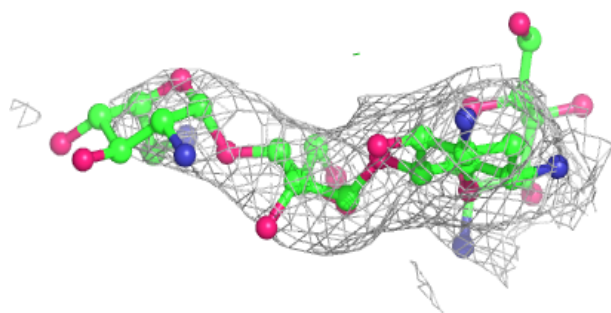
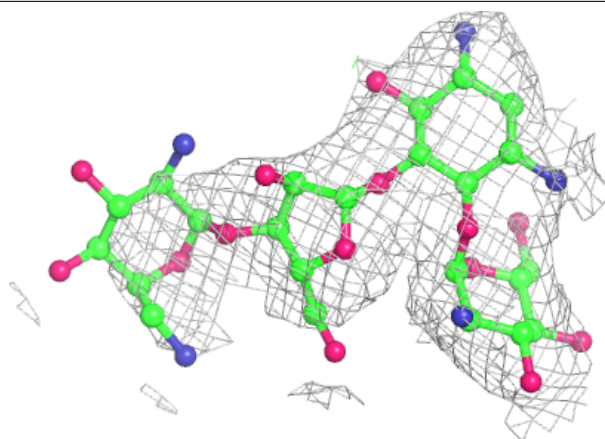
Electron density around 3K5 AS 3405:

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



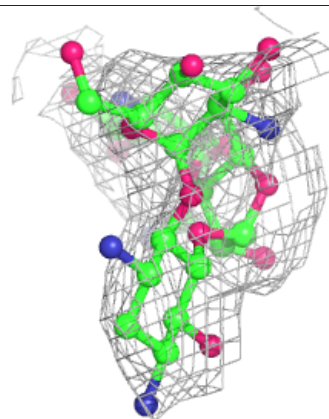
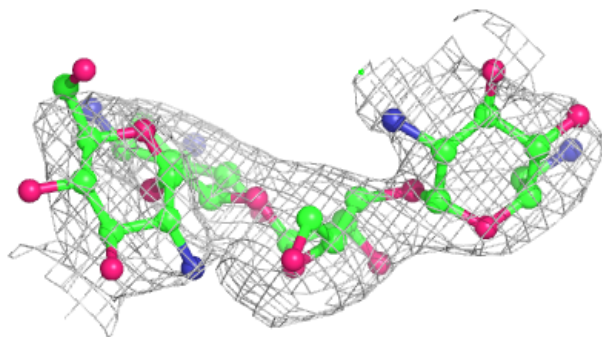
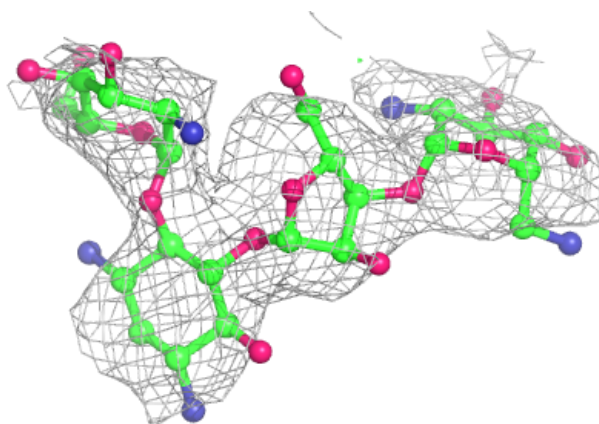
Electron density around PAR 4 201:

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

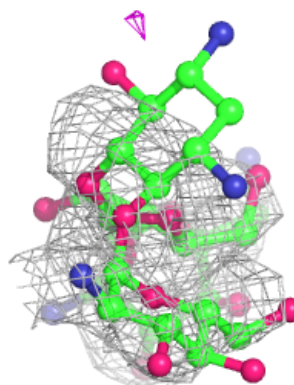
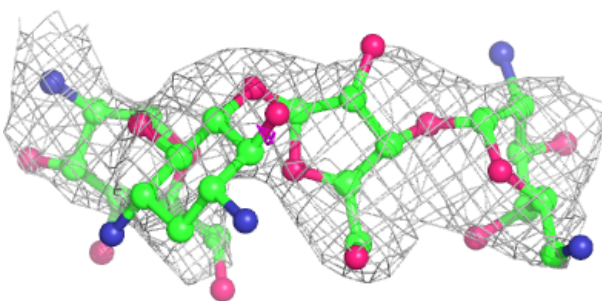
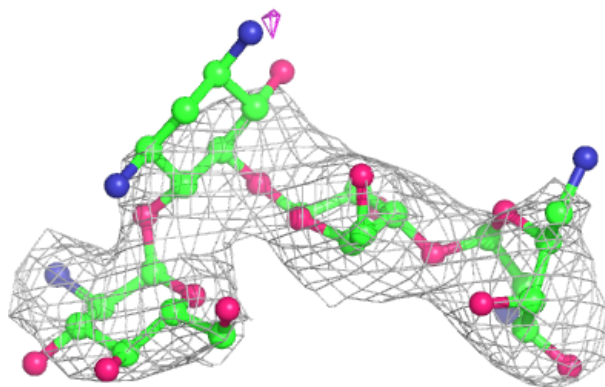


Electron density around PAR 1 3458:

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

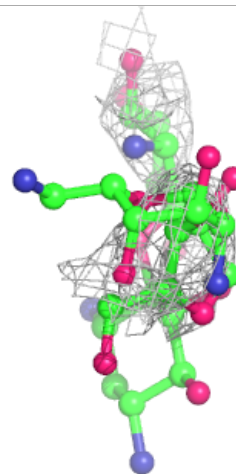
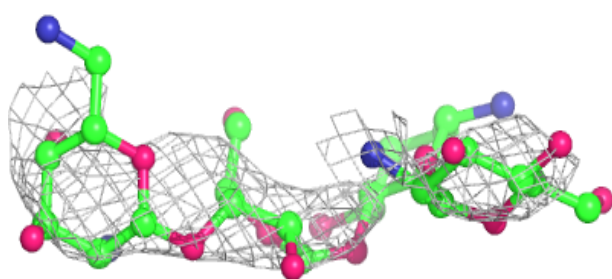
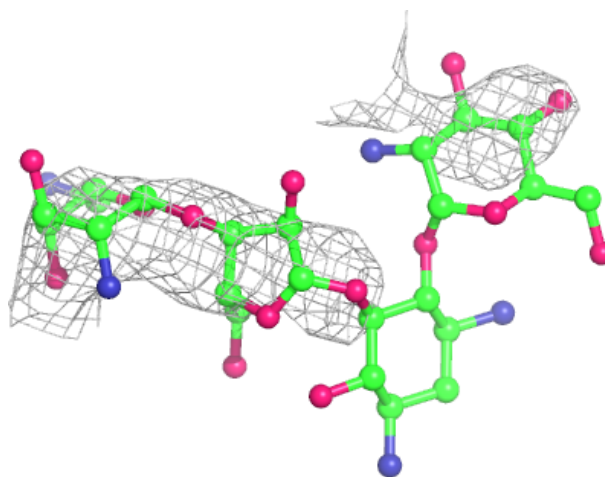
**Electron density around PAR 1 3464:**

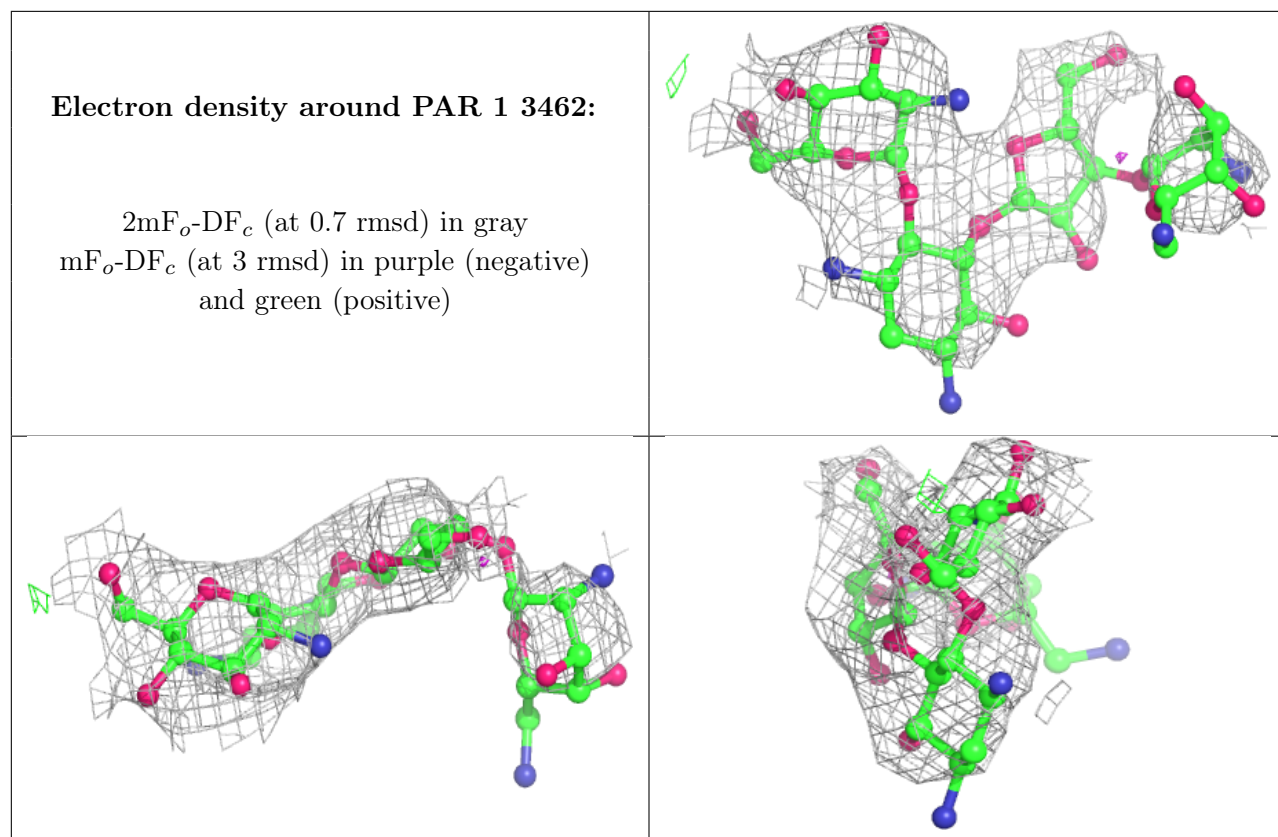
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around PAR CM 1803:

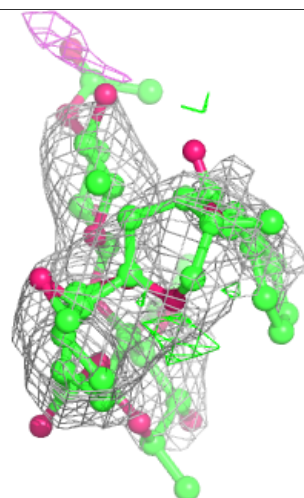
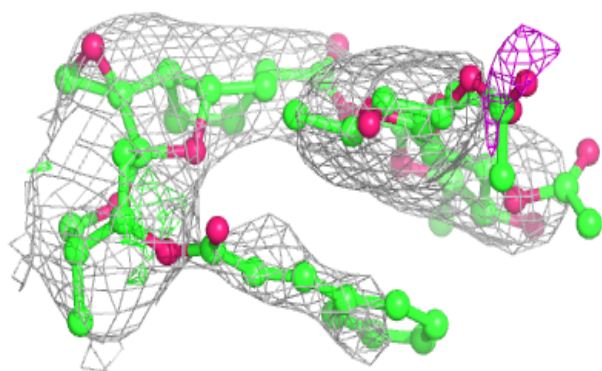
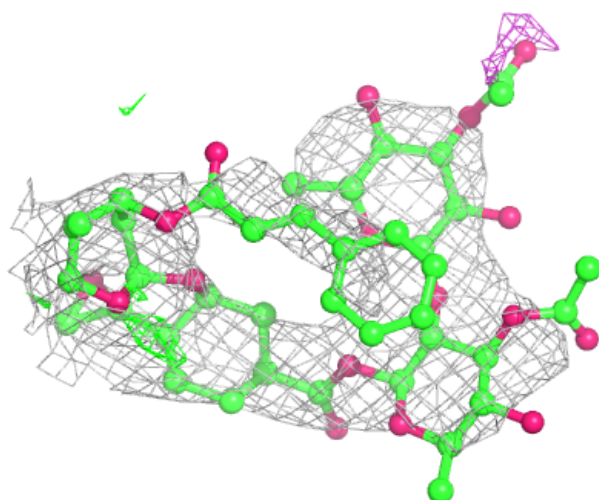
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

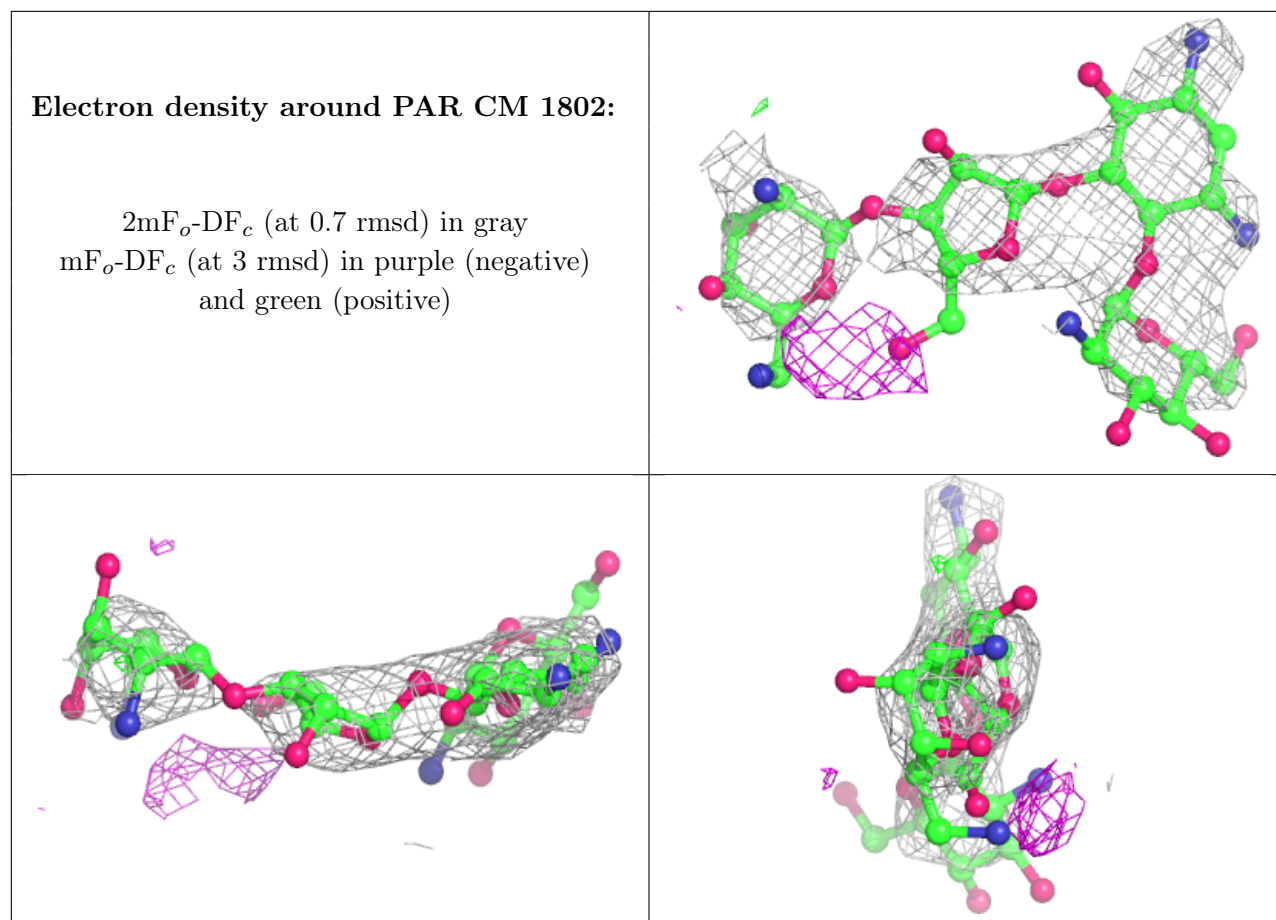




Electron density around 3K5 1 3463:

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





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

There are no such residues in this entry.