



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 17, 2026 – 07:54 AM UTC

PDB ID : 4V4G / pdb_00004v4g
Title : Crystal structure of five 70s ribosomes from Escherichia Coli in complex with protein Y.
Authors : Vila-Sanjurjo, A.; Schuwirth, B.S.; Hau, C.W.; Cate, J.H.
Deposited on : 2004-10-06
Resolution : 11.50 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	:	FAILED
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.48.1

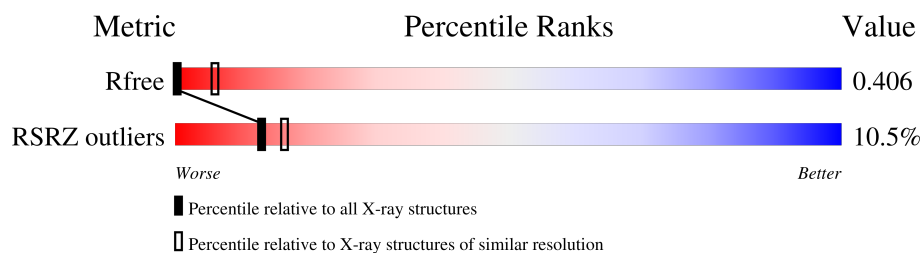
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 11.50 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	1107 (10.00-4.00)
RSRZ outliers	164620	1102 (10.00-4.00)

MolProbity failed to run properly - the sequence quality summary graphics cannot be shown.

2 Entry composition

There are 53 unique types of molecules in this entry. The entry contains 717805 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1526	Total	C	N	O	P	0	0	0
			32799	14601	6082	10590	1526			
1	CA	1526	Total	C	N	O	P	0	0	0
			32799	14601	6082	10590	1526			
1	EA	1526	Total	C	N	O	P	0	0	0
			32799	14601	6082	10590	1526			
1	GA	1526	Total	C	N	O	P	0	0	0
			32799	14601	6082	10590	1526			
1	IA	1526	Total	C	N	O	P	0	0	0
			32799	14601	6082	10590	1526			

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			
2	CB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			
2	EB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			
2	GB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			
2	IB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			
3	CC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	EC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			
3	GC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			
3	IC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			

- Molecule 4 is a protein called 30S ribosomal protein S4.

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

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	150	Total	C	N	O	S	0	0	0
			1147	724	217	202	4			
5	CE	150	Total	C	N	O	S	0	0	0
			1147	724	217	202	4			
5	EE	150	Total	C	N	O	S	0	0	0
			1147	724	217	202	4			
5	GE	150	Total	C	N	O	S	0	0	0
			1147	724	217	202	4			
5	IE	150	Total	C	N	O	S	0	0	0
			1147	724	217	202	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

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

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

- Molecule 7 is a protein called 30S ribosomal protein S7.

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

- Molecule 8 is a protein called 30S ribosomal protein S8.

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

- Molecule 9 is a protein called 30S ribosomal protein S9.

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

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	EI	127	Total	C	N	O	0	0	0
			1011	639	198	174			
9	GI	127	Total	C	N	O	0	0	0
			1011	639	198	174			
9	II	127	Total	C	N	O	0	0	0
			1011	639	198	174			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			
10	CJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			
10	EJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			
10	GJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			
10	IJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			

- Molecule 11 is a protein called 30S ribosomal protein S11.

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

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	124	Total	C	N	O	S	0	0	0
			971	611	195	164	1			
12	CL	124	Total	C	N	O	S	0	0	0
			971	611	195	164	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	EL	124	Total	C	N	O	S	0	0	0
			971	611	195	164	1			
12	GL	124	Total	C	N	O	S	0	0	0
			971	611	195	164	1			
12	IL	124	Total	C	N	O	S	0	0	0
			971	611	195	164	1			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	125	Total	C	N	O	S	0	0	0
			997	617	207	171	2			
13	CM	125	Total	C	N	O	S	0	0	0
			997	617	207	171	2			
13	EM	125	Total	C	N	O	S	0	0	0
			997	617	207	171	2			
13	GM	125	Total	C	N	O	S	0	0	0
			997	617	207	171	2			
13	IM	125	Total	C	N	O	S	0	0	0
			997	617	207	171	2			

- Molecule 14 is a protein called 30S ribosomal protein S14.

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

- Molecule 15 is a protein called 30S ribosomal protein S15.

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

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

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			
16	CP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			
16	EP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			
16	GP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			
16	IP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			
17	CQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			
17	EQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			
17	GQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			
17	IQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	73	Total	C	N	O	0	0	0
			597	380	118	99			
18	CR	73	Total	C	N	O	0	0	0
			597	380	118	99			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	ER	73	Total	C	N	O	0	0	0
			597	380	118	99			
18	GR	73	Total	C	N	O	0	0	0
			597	380	118	99			
18	IR	73	Total	C	N	O	0	0	0
			597	380	118	99			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	80	Total	C	N	O	S	0	0	0
			648	414	119	113	2			
19	CS	80	Total	C	N	O	S	0	0	0
			648	414	119	113	2			
19	ES	80	Total	C	N	O	S	0	0	0
			648	414	119	113	2			
19	GS	80	Total	C	N	O	S	0	0	0
			648	414	119	113	2			
19	IS	80	Total	C	N	O	S	0	0	0
			648	414	119	113	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			
20	ET	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			
20	GT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			
20	IT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			

- Molecule 21 is a protein called protein Y.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	Aa	90	Total	C	N	O	S	0	0	0
			719	452	131	133	3			
21	Ca	90	Total	C	N	O	S	0	0	0
			719	452	131	133	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	Ea	90	Total	C	N	O	S	0	0	0
			719	452	131	133	3			
21	Ga	90	Total	C	N	O	S	0	0	0
			719	452	131	133	3			
21	Ia	90	Total	C	N	O	S	0	0	0
			719	452	131	133	3			

- Molecule 22 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BB	2825	Total	C	N	O	P	0	0	0
			60635	27047	11190	19573	2825			
22	DB	2825	Total	C	N	O	P	0	0	0
			60635	27047	11190	19573	2825			
22	FB	2825	Total	C	N	O	P	0	0	0
			60635	27047	11190	19573	2825			
22	HB	2825	Total	C	N	O	P	0	0	0
			60635	27047	11190	19573	2825			
22	JB	2825	Total	C	N	O	P	0	0	0
			60635	27047	11190	19573	2825			

- Molecule 23 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BA	118	Total	C	N	O	P	0	0	0
			2519	1124	464	813	118			
23	DA	118	Total	C	N	O	P	0	0	0
			2519	1124	464	813	118			
23	FA	118	Total	C	N	O	P	0	0	0
			2519	1124	464	813	118			
23	HA	118	Total	C	N	O	P	0	0	0
			2519	1124	464	813	118			
23	JA	118	Total	C	N	O	P	0	0	0
			2519	1124	464	813	118			

- Molecule 24 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BD	270	Total	C	N	O	S	0	0	0
			2079	1294	417	365	3			
24	DD	270	Total	C	N	O	S	0	0	0
			2079	1294	417	365	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	FD	270	Total	C	N	O	S	0	0	0
			2079	1294	417	365	3			
24	HD	270	Total	C	N	O	S	0	0	0
			2079	1294	417	365	3			
24	JD	270	Total	C	N	O	S	0	0	0
			2079	1294	417	365	3			

- Molecule 25 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BE	205	Total	C	N	O	S	0	0	0
			1540	965	295	272	8			
25	DE	205	Total	C	N	O	S	0	0	0
			1540	965	295	272	8			
25	FE	205	Total	C	N	O	S	0	0	0
			1540	965	295	272	8			
25	HE	205	Total	C	N	O	S	0	0	0
			1540	965	295	272	8			
25	JE	205	Total	C	N	O	S	0	0	0
			1540	965	295	272	8			

- Molecule 26 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BF	197	Total	C	N	O	S	0	0	0
			1507	935	287	283	2			
26	DF	197	Total	C	N	O	S	0	0	0
			1507	935	287	283	2			
26	FF	197	Total	C	N	O	S	0	0	0
			1507	935	287	283	2			
26	HF	197	Total	C	N	O	S	0	0	0
			1507	935	287	283	2			
26	JF	197	Total	C	N	O	S	0	0	0
			1507	935	287	283	2			

- Molecule 27 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BG	178	Total	C	N	O	S	0	0	0
			1410	897	249	257	7			
27	DG	178	Total	C	N	O	S	0	0	0
			1410	897	249	257	7			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	FG	178	Total	C	N	O	S	0	0	0
			1410	897	249	257	7			
27	HG	178	Total	C	N	O	S	0	0	0
			1410	897	249	257	7			
27	JG	178	Total	C	N	O	S	0	0	0
			1410	897	249	257	7			

- Molecule 28 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BH	177	Total	C	N	O	S	0	0	0
			1316	828	243	244	1			
28	DH	177	Total	C	N	O	S	0	0	0
			1316	828	243	244	1			
28	FH	177	Total	C	N	O	S	0	0	0
			1316	828	243	244	1			
28	HH	177	Total	C	N	O	S	0	0	0
			1316	828	243	244	1			
28	JH	177	Total	C	N	O	S	0	0	0
			1316	828	243	244	1			

- Molecule 29 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BI	52	Total	C	N	O	S	0	0	0
			401	251	73	75	2			
29	DI	52	Total	C	N	O	S	0	0	0
			401	251	73	75	2			
29	FI	52	Total	C	N	O	S	0	0	0
			401	251	73	75	2			
29	HI	52	Total	C	N	O	S	0	0	0
			401	251	73	75	2			
29	JI	52	Total	C	N	O	S	0	0	0
			401	251	73	75	2			

- Molecule 30 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BJ	143	Total	C	N	O	S	0	0	0
			1039	660	178	196	5			
30	DJ	143	Total	C	N	O	S	0	0	0
			1039	660	178	196	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	FJ	143	Total	C	N	O	S	0	0	0
			1039	660	178	196	5			
30	HJ	143	Total	C	N	O	S	0	0	0
			1039	660	178	196	5			
30	JJ	143	Total	C	N	O	S	0	0	0
			1039	660	178	196	5			

- Molecule 31 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BK	143	Total	C	N	O	S	0	0	0
			1122	709	210	200	3			
31	DK	143	Total	C	N	O	S	0	0	0
			1122	709	210	200	3			
31	FK	143	Total	C	N	O	S	0	0	0
			1122	709	210	200	3			
31	HK	143	Total	C	N	O	S	0	0	0
			1122	709	210	200	3			
31	JK	143	Total	C	N	O	S	0	0	0
			1122	709	210	200	3			

- Molecule 32 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BL	132	Total	C	N	O	S	0	0	0
			981	603	196	178	4			
32	DL	132	Total	C	N	O	S	0	0	0
			981	603	196	178	4			
32	FL	132	Total	C	N	O	S	0	0	0
			981	603	196	178	4			
32	HL	132	Total	C	N	O	S	0	0	0
			981	603	196	178	4			
32	JL	132	Total	C	N	O	S	0	0	0
			981	603	196	178	4			

- Molecule 33 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
33	BM	141	Total	C	N	O	0	0	0
			1068	655	216	197			
33	DM	141	Total	C	N	O	0	0	0
			1068	655	216	197			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
33	FM	141	Total	C	N	O	0	0	0
			1068	655	216	197			
33	HM	141	Total	C	N	O	0	0	0
			1068	655	216	197			
33	JM	141	Total	C	N	O	0	0	0
			1068	655	216	197			

- Molecule 34 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BN	124	Total	C	N	O	S	0	0	0
			986	631	182	167	6			
34	DN	124	Total	C	N	O	S	0	0	0
			986	631	182	167	6			
34	FN	124	Total	C	N	O	S	0	0	0
			986	631	182	167	6			
34	HN	124	Total	C	N	O	S	0	0	0
			986	631	182	167	6			
34	JN	124	Total	C	N	O	S	0	0	0
			986	631	182	167	6			

- Molecule 35 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BO	114	Total	C	N	O	S	0	0	0
			886	546	179	159	2			
35	DO	114	Total	C	N	O	S	0	0	0
			886	546	179	159	2			
35	FO	114	Total	C	N	O	S	0	0	0
			886	546	179	159	2			
35	HO	114	Total	C	N	O	S	0	0	0
			886	546	179	159	2			
35	JO	114	Total	C	N	O	S	0	0	0
			886	546	179	159	2			

- Molecule 36 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	BP	111	Total	C	N	O	8	0	0
			834	512	168	154			
36	DP	111	Total	C	N	O	8	0	0
			834	512	168	154			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	FP	111	Total	C	N	O	8	0	0
			834	512	168	154			
36	HP	111	Total	C	N	O	8	0	0
			834	512	168	154			
36	JP	111	Total	C	N	O	8	0	0
			834	512	168	154			

- Molecule 37 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BQ	125	Total	C	N	O	S	0	0	0
			1008	625	204	178	1			
37	DQ	125	Total	C	N	O	S	0	0	0
			1008	625	204	178	1			
37	FQ	125	Total	C	N	O	S	0	0	0
			1008	625	204	178	1			
37	HQ	125	Total	C	N	O	S	0	0	0
			1008	625	204	178	1			
37	JQ	125	Total	C	N	O	S	0	0	0
			1008	625	204	178	1			

- Molecule 38 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BR	117	Total	C	N	O	S	16	0	0
			978	608	210	159	1			
38	DR	117	Total	C	N	O	S	16	0	0
			978	608	210	159	1			
38	FR	117	Total	C	N	O	S	16	0	0
			978	608	210	159	1			
38	HR	117	Total	C	N	O	S	16	0	0
			978	608	210	159	1			
38	JR	117	Total	C	N	O	S	16	0	0
			978	608	210	159	1			

- Molecule 39 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BS	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			
39	DS	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	FS	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			
39	HS	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			
39	JS	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			

- Molecule 40 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BT	130	Total	C	N	O	S	0	0	0
			1039	653	203	181	2			
40	DT	130	Total	C	N	O	S	0	0	0
			1039	653	203	181	2			
40	FT	130	Total	C	N	O	S	0	0	0
			1039	653	203	181	2			
40	HT	130	Total	C	N	O	S	0	0	0
			1039	653	203	181	2			
40	JT	130	Total	C	N	O	S	0	0	0
			1039	653	203	181	2			

- Molecule 41 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BU	93	Total	C	N	O	S	0	0	0
			727	458	136	131	2			
41	DU	93	Total	C	N	O	S	0	0	0
			727	458	136	131	2			
41	FU	93	Total	C	N	O	S	0	0	0
			727	458	136	131	2			
41	HU	93	Total	C	N	O	S	0	0	0
			727	458	136	131	2			
41	JU	93	Total	C	N	O	S	0	0	0
			727	458	136	131	2			

- Molecule 42 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BV	113	Total	C	N	O	S	0	0	0
			852	530	166	155	1			
42	DV	113	Total	C	N	O	S	0	0	0
			852	530	166	155	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	FV	113	Total	C	N	O	S	0	0	0
			852	530	166	155	1			
42	HV	113	Total	C	N	O	S	0	0	0
			852	530	166	155	1			
42	JV	113	Total	C	N	O	S	0	0	0
			852	530	166	155	1			

- Molecule 43 is a protein called general stress protein Ctc.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BW	173	Total	C	N	O	S	0	0	0
			1328	838	231	253	6			
43	DW	173	Total	C	N	O	S	0	0	0
			1328	838	231	253	6			
43	FW	173	Total	C	N	O	S	0	0	0
			1328	838	231	253	6			
43	HW	173	Total	C	N	O	S	0	0	0
			1328	838	231	253	6			
43	JW	173	Total	C	N	O	S	0	0	0
			1328	838	231	253	6			

- Molecule 44 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BX	86	Total	C	N	O	S	0	0	0
			642	402	124	115	1			
44	DX	86	Total	C	N	O	S	0	0	0
			642	402	124	115	1			
44	FX	86	Total	C	N	O	S	0	0	0
			642	402	124	115	1			
44	HX	86	Total	C	N	O	S	0	0	0
			642	402	124	115	1			
44	JX	86	Total	C	N	O	S	0	0	0
			642	402	124	115	1			

- Molecule 45 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BY	65	Total	C	N	O	S	0	0	0
			526	322	106	96	2			
45	DY	65	Total	C	N	O	S	0	0	0
			526	322	106	96	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	FY	65	Total	C	N	O	S	0	0	0
			526	322	106	96	2			
45	HY	65	Total	C	N	O	S	0	0	0
			526	322	106	96	2			
45	JY	65	Total	C	N	O	S	0	0	0
			526	322	106	96	2			

- Molecule 46 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BZ	55	Total	C	N	O	S	4	0	0
			424	264	82	76	2			
46	DZ	55	Total	C	N	O	S	4	0	0
			424	264	82	76	2			
46	FZ	55	Total	C	N	O	S	4	0	0
			424	264	82	76	2			
46	HZ	55	Total	C	N	O	S	4	0	0
			424	264	82	76	2			
46	JZ	55	Total	C	N	O	S	4	0	0
			424	264	82	76	2			

- Molecule 47 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	B1	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			
47	D1	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			
47	F1	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			
47	H1	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			
47	J1	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			

- Molecule 48 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B2	58	Total	C	N	O	S	0	0	0
			458	281	94	78	5			
48	D2	58	Total	C	N	O	S	0	0	0
			458	281	94	78	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	F2	58	Total	C	N	O	S	0	0	0
			458	281	94	78	5			
48	H2	58	Total	C	N	O	S	0	0	0
			458	281	94	78	5			
48	J2	58	Total	C	N	O	S	0	0	0
			458	281	94	78	5			

- Molecule 49 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B3	53	Total	C	N	O	S	0	0	0
			432	274	80	77	1			
49	D3	53	Total	C	N	O	S	0	0	0
			432	274	80	77	1			
49	F3	53	Total	C	N	O	S	0	0	0
			432	274	80	77	1			
49	H3	53	Total	C	N	O	S	0	0	0
			432	274	80	77	1			
49	J3	53	Total	C	N	O	S	0	0	0
			432	274	80	77	1			

- Molecule 50 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B4	46	Total	C	N	O	S	0	0	0
			384	230	91	61	2			
50	D4	46	Total	C	N	O	S	0	0	0
			384	230	91	61	2			
50	F4	46	Total	C	N	O	S	0	0	0
			384	230	91	61	2			
50	H4	46	Total	C	N	O	S	0	0	0
			384	230	91	61	2			
50	J4	46	Total	C	N	O	S	0	0	0
			384	230	91	61	2			

- Molecule 51 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B5	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			
51	D5	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	F5	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			
51	H5	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			
51	J5	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			

- Molecule 52 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B6	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			
52	D6	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			
52	F6	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			
52	H6	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			
52	J6	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			

- Molecule 53 is a protein called 50S ribosomal protein L1P.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
53	B7	217	Total	C	N	O	S	Se	0	0	0
			1720	1098	304	313	1	4			
53	D7	217	Total	C	N	O	S	Se	0	0	0
			1720	1098	304	313	1	4			
53	F7	217	Total	C	N	O	S	Se	0	0	0
			1720	1098	304	313	1	4			
53	H7	217	Total	C	N	O	S	Se	0	0	0
			1720	1098	304	313	1	4			
53	J7	217	Total	C	N	O	S	Se	0	0	0
			1720	1098	304	313	1	4			

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3 Data and refinement statistics

Property	Value	Source
Space group	I 4 2 2	Depositor
Cell constants a, b, c, α , β , γ	687.90Å 687.90Å 1933.30Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	500.00 – 11.50 500.00 – 11.53	Depositor EDS
% Data completeness (in resolution range)	93.9 (500.00-11.50) 76.2 (500.00-11.53)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.18	Depositor
$\langle I/\sigma(I) \rangle$	-	Xtrriage
Refinement program	CNS	Depositor
R, R_{free}	0.395 , 0.401 0.405 , 0.406	Depositor DCC
R_{free} test set	7421 reflections (10.12%)	wwPDB-VP
Wilson B-factor (Å ²)	(Not available)	Xtrriage
Anisotropy	(Not available)	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.22 , 999.0	EDS
L-test for twinning ¹	$\langle L \rangle =$ (Not available), $\langle L^2 \rangle =$ (Not available)	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	717805	wwPDB-VP
Average B, all atoms (Å ²)	803.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *(Not available)*

¹Theoretical 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.

4 Model quality [i](#)

4.1 Standard geometry [i](#)

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4.2 Too-close contacts [i](#)

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4.3 Torsion angles [i](#)

4.3.1 Protein backbone [i](#)

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4.3.2 Protein sidechains [i](#)

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4.3.3 RNA [i](#)

MolProbity failed to run properly - this section is therefore empty.

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

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

4.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

4.6 Ligand geometry [i](#)

There are no ligands in this entry.

4.7 Other polymers [i](#)

There are no such residues in this entry.

4.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
22	FB	56
22	HB	55
22	JB	52
22	DB	51
22	BB	51
1	EA	5
1	AA	4
1	CA	4
1	GA	4
1	IA	4
12	AL	3
12	GL	3
12	CL	3
12	IL	3
43	DW	2
43	JW	2
43	FW	2
43	BW	2
13	IM	2
13	EM	2
13	CM	2
43	HW	2
12	EL	2
13	GM	2
13	AM	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	373:A	O3'	387:A	P	28.29
1	HB	373:A	O3'	387:A	P	28.03
1	FB	373:A	O3'	387:A	P	28.01
1	DB	373:A	O3'	387:A	P	27.91
1	FB	248:A	O3'	292:A	P	27.80
1	DB	248:A	O3'	292:A	P	27.70
1	JB	248:A	O3'	292:A	P	27.63
1	BB	373:A	O3'	387:A	P	27.59
1	HB	248:A	O3'	292:A	P	27.38
1	BB	248:A	O3'	292:A	P	27.25
1	HB	2774:U	O3'	2778:U	P	20.37

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	2774:U	O3'	2778:U	P	20.28
1	BB	2774:U	O3'	2778:U	P	20.13
1	DB	2774:U	O3'	2778:U	P	19.33
1	FB	2774:U	O3'	2778:U	P	18.81
1	DW	89:GLY	C	90:GLU	N	9.81
1	JW	89:GLY	C	90:GLU	N	9.06
1	FW	89:GLY	C	90:GLU	N	7.78
1	BW	89:GLY	C	90:GLU	N	6.78
1	EA	1458:G	O3'	1460:A	P	6.65
1	AA	1458:G	O3'	1460:A	P	6.64
1	CA	1458:G	O3'	1460:A	P	6.64
1	GA	1458:G	O3'	1460:A	P	6.64
1	IA	1458:G	O3'	1460:A	P	6.64
1	FB	1119:U	O3'	1120:C	P	6.36
1	DB	891:A	O3'	892:A	P	6.35
1	IM	83:ASP	C	84:ILE	N	6.17
1	BB	891:A	O3'	892:A	P	5.97
1	EM	83:ASP	C	84:ILE	N	5.68
1	AL	22:SER	C	23:LYS	N	5.58
1	GL	16:GLU	C	17:LYS	N	5.49
1	CL	16:GLU	C	17:LYS	N	5.45
1	FB	891:A	O3'	892:A	P	5.31
1	AA	1443:G	O3'	1445:U	P	5.27
1	CA	1443:G	O3'	1445:U	P	5.27
1	EA	1443:G	O3'	1445:U	P	5.27
1	GA	1443:G	O3'	1445:U	P	5.27
1	IA	1443:G	O3'	1445:U	P	5.27
1	GL	22:SER	C	23:LYS	N	5.10
1	CM	89:GLY	C	90:LEU	N	4.97
1	FB	1062:G	O3'	1063:C	P	4.86
1	JW	88:TYR	C	89:GLY	N	4.69
1	HW	89:GLY	C	90:GLU	N	4.64
1	AM	89:GLY	C	90:LEU	N	4.55
1	HW	88:TYR	C	89:GLY	N	4.52
1	CL	22:SER	C	23:LYS	N	4.39
1	FB	2075:U	O3'	3093:C	P	4.30
1	JB	891:A	O3'	892:A	P	4.13
1	EL	16:GLU	C	17:LYS	N	4.00
1	DB	2075:U	O3'	3093:C	P	3.93
1	IM	89:GLY	C	90:LEU	N	3.92
1	BB	946:U	O3'	947:C	P	3.85
1	BB	857:U	O3'	858:G	P	3.84

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	DB	910:U	O3'	911:A	P	3.81
1	GL	19:ARG	C	20:LYS	N	3.80
1	JB	1119:U	O3'	1120:C	P	3.75
1	HB	1062:G	O3'	1063:C	P	3.73
1	GM	83:ASP	C	84:ILE	N	3.72
1	JB	910:U	O3'	911:A	P	3.67
1	BB	1062:G	O3'	1063:C	P	3.64
1	HB	891:A	O3'	892:A	P	3.62
1	DB	1119:U	O3'	1120:C	P	3.52
1	FB	910:U	O3'	911:A	P	3.47
1	DB	1912:G	O3'	1913:G	P	3.33
1	HB	2623:A	O3'	2624:G	P	3.31
1	BB	1698:C	O3'	1699:A	P	3.30
1	FB	1532:A	O3'	1533:G	P	3.29
1	EM	89:GLY	C	90:LEU	N	3.28
1	DB	1062:G	O3'	1063:C	P	3.26
1	CM	83:ASP	C	84:ILE	N	3.23
1	IL	19:ARG	C	20:LYS	N	3.22
1	AA	1393:U	O3'	1394:A	P	3.21
1	AA	919:A	O3'	920:U	P	3.20
1	HB	1119:U	O3'	1120:C	P	3.19
1	FW	88:TYR	C	89:GLY	N	3.08
1	HB	1912:G	O3'	1913:G	P	3.04
1	FB	1483:G	O3'	1484:G	P	3.03
1	IA	561:U	O3'	562:C	P	3.01
1	JB	1062:G	O3'	1063:C	P	3.00
1	BB	910:U	O3'	911:A	P	2.99
1	BB	1167:A	O3'	1168:G	P	2.98
1	BB	1752:U	O3'	1753:A	P	2.96
1	BB	2623:A	O3'	2624:G	P	2.96
1	BB	1912:G	O3'	1913:G	P	2.91
1	JB	1887:G	O3'	1888:C	P	2.82
1	DB	857:U	O3'	858:G	P	2.80
1	HB	946:U	O3'	947:C	P	2.74
1	JB	1888:C	O3'	1889:G	P	2.74
1	DB	946:U	O3'	947:C	P	2.72
1	FB	111:G	O3'	112:U	P	2.72
1	JB	2075:U	O3'	3093:C	P	2.68
1	HB	857:U	O3'	858:G	P	2.66
1	HB	2713:A	O3'	2714:A	P	2.66
1	BB	1586:A	O3'	1587:A	P	2.64
1	DB	1861:G	O3'	1862:C	P	2.63

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	1861:G	O3'	1862:C	P	2.62
1	BB	2075:U	O3'	3093:C	P	2.60
1	EA	561:U	O3'	562:C	P	2.58
1	JB	1483:G	O3'	1484:G	P	2.57
1	BB	1532:A	O3'	1533:G	P	2.52
1	BB	2745:A	O3'	2746:G	P	2.52
1	BB	1861:G	O3'	1862:C	P	2.51
1	JB	115:G	O3'	116:A	P	2.51
1	BB	156:G	O3'	157:G	P	2.49
1	CA	919:A	O3'	920:U	P	2.47
1	FB	1613:G	O3'	1614:C	P	2.47
1	FB	2713:A	O3'	2714:A	P	2.46
1	JB	1912:G	O3'	1913:G	P	2.46
1	HB	156:G	O3'	157:G	P	2.45
1	HB	1532:A	O3'	1533:G	P	2.44
1	CL	19:ARG	C	20:LYS	N	2.43
1	FB	1453:A	O3'	1454:U	P	2.41
1	BB	1566:G	O3'	1567:A	P	2.40
1	FB	857:U	O3'	858:G	P	2.40
1	HB	10:A	O3'	11:G	P	2.40
1	DB	1167:A	O3'	1168:G	P	2.39
1	FB	1861:G	O3'	1862:C	P	2.39
1	HB	2608:A	O3'	2609:G	P	2.38
1	HB	2745:A	O3'	2746:G	P	2.38
1	DB	1453:A	O3'	1454:U	P	2.37
1	HB	1698:C	O3'	1699:A	P	2.35
1	JB	2370:G	O3'	2371:A	P	2.35
1	JB	2431:C	O3'	2432:A	P	2.35
1	EL	19:ARG	C	20:LYS	N	2.34
1	IL	16:GLU	C	17:LYS	N	2.34
1	JB	156:G	O3'	157:G	P	2.34
1	DB	1698:C	O3'	1699:A	P	2.32
1	GA	1393:U	O3'	1394:A	P	2.31
1	HB	2431:C	O3'	2432:A	P	2.31
1	BB	2552:C	O3'	2553:G	P	2.30
1	CA	1393:U	O3'	1394:A	P	2.30
1	JB	2704:U	O3'	2705:A	P	2.30
1	HB	2203:G	O3'	2204:A	P	2.29
1	DB	3197:U	O3'	2181:A	P	2.28
1	DW	88:TYR	C	89:GLY	N	2.28
1	DB	487:G	O3'	488:A	P	2.27
1	FB	2608:A	O3'	2609:G	P	2.27

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	2471:U	O3'	2472:U	P	2.27
1	FB	69:G	O3'	70:A	P	2.26
1	DB	1197:U	O3'	1198:C	P	2.25
1	HB	1586:A	O3'	1587:A	P	2.25
1	DB	2713:A	O3'	2714:A	P	2.23
1	FB	10:A	O3'	11:G	P	2.23
1	FB	716:U	O3'	717:G	P	2.23
1	HB	716:U	O3'	717:G	P	2.23
1	BB	1197:U	O3'	1198:C	P	2.22
1	FB	115:G	O3'	116:A	P	2.22
1	FB	603:C	O3'	604:U	P	2.22
1	JB	2260:C	O3'	2261:G	P	2.22
1	JB	2524:G	O3'	2525:U	P	2.22
1	FB	1912:G	O3'	1913:G	P	2.21
1	HB	568:G	O3'	569:C	P	2.21
1	BB	69:G	O3'	70:A	P	2.20
1	DB	2370:G	O3'	2371:A	P	2.20
1	FB	1004:A	O3'	1005:U	P	2.20
1	BB	3877:A	O3'	1861:G	P	2.19
1	BB	2713:A	O3'	2714:A	P	2.18
1	DB	1483:G	O3'	1484:G	P	2.18
1	DB	1856:U	O3'	3865:A	P	2.18
1	GA	919:A	O3'	920:U	P	2.18
1	HB	1861:G	O3'	1862:C	P	2.18
1	AL	16:GLU	C	17:LYS	N	2.17
1	JB	2608:A	O3'	2609:G	P	2.17
1	JB	2655:C	O3'	2656:G	P	2.17
1	BB	539:A	O3'	540:G	P	2.16
1	BB	2471:U	O3'	2472:U	P	2.16
1	DB	69:G	O3'	70:A	P	2.16
1	FB	2471:U	O3'	2472:U	P	2.16
1	JB	2407:G	O3'	2408:G	P	2.16
1	FB	946:U	O3'	947:C	P	2.15
1	HB	2471:U	O3'	2472:U	P	2.15
1	BB	1119:U	O3'	1120:C	P	2.14
1	DB	539:A	O3'	540:G	P	2.14
1	EA	919:A	O3'	920:U	P	2.14
1	BB	677:G	O3'	678:G	P	2.13
1	DB	1566:G	O3'	1567:A	P	2.13
1	HB	737:C	O3'	738:G	P	2.13
1	HB	1887:G	O3'	1888:C	P	2.13
1	DB	2552:C	O3'	2553:G	P	2.12

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	HB	511:A	O3'	512:A	P	2.12
1	HB	2075:U	O3'	3093:C	P	2.12
1	JB	10:A	O3'	11:G	P	2.12
1	JB	716:U	O3'	717:G	P	2.12
1	JB	1453:A	O3'	1454:U	P	2.12
1	BB	2370:G	O3'	2371:A	P	2.11
1	JB	2492:G	O3'	2493:U	P	2.11
1	HB	3877:A	O3'	1861:G	P	2.10
1	JB	603:C	O3'	604:U	P	2.10
1	JB	69:G	O3'	70:A	P	2.09
1	BB	1047:G	O3'	1048:U	P	2.08
1	FB	2370:G	O3'	2371:A	P	2.08
1	HB	539:A	O3'	540:G	P	2.08
1	BB	487:G	O3'	488:A	P	2.07
1	FB	2623:A	O3'	2624:G	P	2.07
1	IA	1393:U	O3'	1394:A	P	2.07
1	FB	737:C	O3'	738:G	P	2.06
1	FB	2533:U	O3'	2534:U	P	2.05
1	HB	1752:U	O3'	1753:A	P	2.05
1	JB	511:A	O3'	512:A	P	2.05
1	JB	1698:C	O3'	1699:A	P	2.05
1	DB	2704:U	O3'	2705:A	P	2.04
1	BB	1127:C	O3'	1128:G	P	2.03
1	DB	568:G	O3'	569:C	P	2.03
1	HB	69:G	O3'	70:A	P	2.03
1	BB	2203:G	O3'	2204:A	P	2.02
1	JB	1827:G	O3'	1828:C	P	2.01
1	FB	1437:A	O3'	1438:G	P	2.00
1	HB	487:G	O3'	488:A	P	2.00
1	DB	677:G	O3'	678:G	P	1.99
1	JB	1437:A	O3'	1438:G	P	1.99
1	FB	3197:U	O3'	2181:A	P	1.98
1	HB	1036:G	O3'	1037:U	P	1.98
1	FB	677:G	O3'	678:G	P	1.97
1	BB	511:A	O3'	512:A	P	1.96
1	BB	2655:C	O3'	2656:G	P	1.96
1	JB	737:C	O3'	738:G	P	1.94
1	FB	2552:C	O3'	2553:G	P	1.93
1	HB	1145:C	O3'	1146:G	P	1.93
1	HB	2655:C	O3'	2656:G	P	1.93
1	IL	22:SER	C	23:LYS	N	1.93
1	FB	1566:G	O3'	1567:A	P	1.92

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	2203:G	O3'	2204:A	P	1.91
1	BB	2431:C	O3'	2432:A	P	1.90
1	DB	511:A	O3'	512:A	P	1.90
1	DB	2203:G	O3'	2204:A	P	1.90
1	HB	1167:A	O3'	1168:G	P	1.89
1	JB	2623:A	O3'	2624:G	P	1.89
1	BB	10:A	O3'	11:G	P	1.88
1	FB	2260:C	O3'	2261:G	P	1.88
1	FB	2407:G	O3'	2408:G	P	1.88
1	BB	716:U	O3'	717:G	P	1.85
1	DB	1752:U	O3'	1753:A	P	1.85
1	HB	1952:A	O3'	1953:A	P	1.85
1	HB	2552:C	O3'	2553:G	P	1.85
1	DB	2655:C	O3'	2656:G	P	1.84
1	EA	1393:U	O3'	1394:A	P	1.84
1	JB	1127:C	O3'	1128:G	P	1.84
1	BB	2608:A	O3'	2609:G	P	1.83
1	DB	111:G	O3'	112:U	P	1.83
1	DB	1004:A	O3'	1005:U	P	1.82
1	HB	1888:C	O3'	1889:G	P	1.82
1	DB	1586:A	O3'	1587:A	P	1.81
1	FB	568:G	O3'	569:C	P	1.81
1	FB	2492:G	O3'	2493:U	P	1.81
1	BB	1004:A	O3'	1005:U	P	1.80
1	HB	2370:G	O3'	2371:A	P	1.80
1	FB	487:G	O3'	488:A	P	1.78
1	FB	1856:U	O3'	3865:A	P	1.78
1	DB	603:C	O3'	604:U	P	1.77
1	JB	111:G	O3'	112:U	P	1.77
1	JB	1566:G	O3'	1567:A	P	1.77
1	JB	2713:A	O3'	2714:A	P	1.77
1	JB	1532:A	O3'	1533:G	P	1.76
1	DB	1532:A	O3'	1533:G	P	1.75
1	FB	1698:C	O3'	1699:A	P	1.75
1	JB	1004:A	O3'	1005:U	P	1.75
1	AL	19:ARG	C	20:LYS	N	1.64
1	HB	2492:G	O3'	2493:U	P	1.40
1	DB	1127:C	O3'	1128:G	P	1.38
1	HB	1856:U	O3'	3865:A	P	1.37
1	DB	1036:G	O3'	1037:U	P	1.36
1	DB	2524:G	O3'	2525:U	P	1.36
1	FB	1036:G	O3'	1037:U	P	1.36

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	HB	1309:G	O3'	1310:C	P	1.36
1	HB	1566:G	O3'	1567:A	P	1.36
1	JB	1856:U	O3'	3865:A	P	1.36
1	HB	677:G	O3'	678:G	P	1.35
1	HB	1827:G	O3'	1828:C	P	1.34
1	HB	2524:G	O3'	2525:U	P	1.34
1	BB	568:G	O3'	569:C	P	1.33
1	BB	1952:A	O3'	1953:A	P	1.33
1	HB	1437:A	O3'	1438:G	P	1.33
1	JB	1197:U	O3'	1198:C	P	1.33
1	JB	1309:G	O3'	1310:C	P	1.32
1	DB	1047:G	O3'	1048:U	P	1.31
1	FB	2745:A	O3'	2746:G	P	1.31
1	HB	2533:U	O3'	2534:U	P	1.31
1	BB	1887:G	O3'	1888:C	P	1.30
1	DB	115:G	O3'	116:A	P	1.30
1	FB	1127:C	O3'	1128:G	P	1.30
1	FB	1145:C	O3'	1146:G	P	1.30
1	JB	1047:G	O3'	1048:U	P	1.29
1	FB	1411:C	O3'	1412:C	P	1.26
1	FB	1167:A	O3'	1168:G	P	1.25
1	HB	910:U	O3'	911:A	P	1.25
1	FB	1952:A	O3'	1953:A	P	1.23
1	JB	2552:C	O3'	2553:G	P	1.21
1	DB	1613:G	O3'	1614:C	P	1.20
1	FB	1827:G	O3'	1828:C	P	1.20
1	HB	115:G	O3'	116:A	P	1.20
1	JB	2533:U	O3'	2534:U	P	1.20
1	JB	3877:A	O3'	1861:G	P	1.19
1	BB	1856:U	O3'	3865:A	P	1.16
1	FB	3877:A	O3'	1861:G	P	1.16
1	DB	1887:G	O3'	1888:C	P	1.15
1	HB	111:G	O3'	112:U	P	1.15
1	DB	2623:A	O3'	2624:G	P	1.14
1	HB	1453:A	O3'	1454:U	P	1.14
1	BW	88:TYR	C	89:GLY	N	1.13
1	FB	1887:G	O3'	1888:C	P	1.12
1	HB	1613:G	O3'	1614:C	P	1.11
1	BB	111:G	O3'	112:U	P	1.09
1	FB	156:G	O3'	157:G	P	1.09
1	DB	1827:G	O3'	1828:C	P	1.08
1	BB	1437:A	O3'	1438:G	P	1.07

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	JB	539:A	O3'	540:G	P	1.07
1	BB	115:G	O3'	116:A	P	1.06
1	JB	857:U	O3'	858:G	P	1.06
1	BB	1483:G	O3'	1484:G	P	1.04
1	BB	1453:A	O3'	1454:U	P	1.02
1	GM	89:GLY	C	90:LEU	N	1.01
1	DB	1888:C	O3'	1889:G	P	0.98
1	FB	1752:U	O3'	1753:A	P	0.97
1	DB	2745:A	O3'	2746:G	P	0.95
1	FB	1586:A	O3'	1587:A	P	0.94
1	DB	1437:A	O3'	1438:G	P	0.90
1	DB	1411:C	O3'	1412:C	P	0.86
1	FB	1047:G	O3'	1048:U	P	0.86
1	BB	1888:C	O3'	1889:G	P	0.56

5 Fit of model and data ⓘ

5.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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(Å²)	Q<0.9	
1	AA	1526/1526 (100%)	0.05	105 (6%)	24	24	521, 521, 521, 521	0
1	CA	1526/1526 (100%)	-0.01	102 (6%)	25	24	607, 607, 607, 607	0
1	EA	1526/1526 (100%)	0.05	111 (7%)	22	23	628, 628, 628, 628	0
1	GA	1526/1526 (100%)	0.09	114 (7%)	22	23	669, 669, 669, 669	0
1	IA	1526/1526 (100%)	0.07	108 (7%)	23	24	743, 743, 743, 743	0
2	AB	234/234 (100%)	1.69	69 (29%)	1	5	521, 521, 521, 521	0
2	CB	234/234 (100%)	1.57	57 (24%)	2	7	607, 607, 607, 607	0
2	EB	234/234 (100%)	2.06	54 (23%)	2	7	628, 628, 628, 628	0
2	GB	234/234 (100%)	2.14	62 (26%)	2	6	669, 669, 669, 669	0
2	IB	234/234 (100%)	2.50	53 (22%)	3	7	743, 743, 743, 743	0
3	AC	206/206 (100%)	0.92	41 (19%)	3	8	521, 521, 521, 521	0
3	CC	206/206 (100%)	0.81	33 (16%)	6	11	607, 607, 607, 607	0
3	EC	206/206 (100%)	1.27	48 (23%)	2	7	628, 628, 628, 628	0
3	GC	206/206 (100%)	1.24	52 (25%)	2	6	669, 669, 669, 669	0
3	IC	206/206 (100%)	1.47	50 (24%)	2	7	743, 743, 743, 743	0
4	AD	208/208 (100%)	0.59	34 (16%)	5	10	521, 521, 521, 521	0
4	CD	208/208 (100%)	0.26	22 (10%)	13	16	607, 607, 607, 607	0
4	ED	208/208 (100%)	0.50	33 (15%)	6	11	628, 628, 628, 628	0
4	GD	208/208 (100%)	1.00	50 (24%)	2	7	669, 669, 669, 669	0
4	ID	208/208 (100%)	1.11	40 (19%)	4	9	743, 743, 743, 743	0
5	AE	150/150 (100%)	0.22	15 (10%)	14	17	521, 521, 521, 521	0
5	CE	150/150 (100%)	0.09	8 (5%)	33	30	607, 607, 607, 607	0
5	EE	150/150 (100%)	0.65	19 (12%)	9	14	628, 628, 628, 628	0
5	GE	150/150 (100%)	0.52	22 (14%)	7	12	669, 669, 669, 669	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9
5	IE	150/150 (100%)	0.90	27 (18%)	4 9	743, 743, 743, 743	0
6	AF	101/101 (100%)	0.92	20 (19%)	3 9	521, 521, 521, 521	0
6	CF	101/101 (100%)	0.74	16 (15%)	6 11	607, 607, 607, 607	0
6	EF	101/101 (100%)	0.96	19 (18%)	4 9	628, 628, 628, 628	0
6	GF	101/101 (100%)	1.14	21 (20%)	3 8	669, 669, 669, 669	0
6	IF	101/101 (100%)	0.87	14 (13%)	7 13	743, 743, 743, 743	0
7	AG	155/155 (100%)	0.76	20 (12%)	9 13	521, 521, 521, 521	0
7	CG	155/155 (100%)	0.61	17 (10%)	12 16	607, 607, 607, 607	0
7	EG	155/155 (100%)	0.91	27 (17%)	5 10	628, 628, 628, 628	0
7	GG	155/155 (100%)	0.67	27 (17%)	5 10	669, 669, 669, 669	0
7	IG	155/155 (100%)	0.90	29 (18%)	4 9	743, 743, 743, 743	0
8	AH	138/138 (100%)	0.41	12 (8%)	17 19	521, 521, 521, 521	0
8	CH	138/138 (100%)	-0.03	8 (5%)	30 28	607, 607, 607, 607	0
8	EH	138/138 (100%)	0.32	16 (11%)	11 15	628, 628, 628, 628	0
8	GH	138/138 (100%)	0.27	8 (5%)	30 28	669, 669, 669, 669	0
8	IH	138/138 (100%)	0.03	10 (7%)	23 23	743, 743, 743, 743	0
9	AI	127/127 (100%)	0.31	14 (11%)	12 16	521, 521, 521, 521	0
9	CI	127/127 (100%)	0.18	14 (11%)	12 16	607, 607, 607, 607	0
9	EI	127/127 (100%)	0.37	15 (11%)	10 15	628, 628, 628, 628	0
9	GI	127/127 (100%)	0.82	21 (16%)	5 10	669, 669, 669, 669	0
9	II	127/127 (100%)	0.61	16 (12%)	9 14	743, 743, 743, 743	0
10	AJ	98/98 (100%)	0.08	4 (4%)	42 35	521, 521, 521, 521	0
10	CJ	98/98 (100%)	0.13	6 (6%)	28 27	607, 607, 607, 607	0
10	EJ	98/98 (100%)	0.44	13 (13%)	8 13	628, 628, 628, 628	0
10	GJ	98/98 (100%)	0.29	10 (10%)	13 16	669, 669, 669, 669	0
10	IJ	98/98 (100%)	0.41	10 (10%)	13 16	743, 743, 743, 743	0
11	AK	119/119 (100%)	0.86	23 (19%)	4 9	521, 521, 521, 521	0
11	CK	119/119 (100%)	0.59	15 (12%)	9 14	607, 607, 607, 607	0
11	EK	119/119 (100%)	0.49	11 (9%)	16 18	628, 628, 628, 628	0
11	GK	119/119 (100%)	0.99	32 (26%)	2 6	669, 669, 669, 669	0
11	IK	119/119 (100%)	1.09	25 (21%)	3 8	743, 743, 743, 743	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
12	AL	124/124 (100%)	1.23	21 (16%) 5 10	521, 521, 521, 521	0
12	CL	124/124 (100%)	0.56	13 (10%) 13 16	607, 607, 607, 607	0
12	EL	124/124 (100%)	0.74	14 (11%) 11 15	628, 628, 628, 628	0
12	GL	124/124 (100%)	1.07	29 (23%) 2 7	669, 669, 669, 669	0
12	IL	124/124 (100%)	0.98	24 (19%) 4 9	743, 743, 743, 743	0
13	AM	125/125 (100%)	0.84	26 (20%) 3 8	521, 521, 521, 521	0
13	CM	125/125 (100%)	0.94	19 (15%) 6 12	607, 607, 607, 607	0
13	EM	125/125 (100%)	1.29	27 (21%) 3 8	628, 628, 628, 628	0
13	GM	125/125 (100%)	0.84	23 (18%) 4 9	669, 669, 669, 669	0
13	IM	125/125 (100%)	1.06	24 (19%) 4 9	743, 743, 743, 743	0
14	AN	60/60 (100%)	0.46	8 (13%) 8 13	521, 521, 521, 521	0
14	CN	60/60 (100%)	0.61	9 (15%) 6 12	607, 607, 607, 607	0
14	EN	60/60 (100%)	1.11	12 (20%) 3 8	628, 628, 628, 628	0
14	GN	60/60 (100%)	0.73	8 (13%) 8 13	669, 669, 669, 669	0
14	IN	60/60 (100%)	0.95	10 (16%) 5 10	743, 743, 743, 743	0
15	AO	88/88 (100%)	0.76	17 (19%) 4 9	521, 521, 521, 521	0
15	CO	88/88 (100%)	1.24	17 (19%) 4 9	607, 607, 607, 607	0
15	EO	88/88 (100%)	1.86	16 (18%) 4 9	628, 628, 628, 628	0
15	GO	88/88 (100%)	0.83	14 (15%) 6 11	669, 669, 669, 669	0
15	IO	88/88 (100%)	1.39	13 (14%) 7 12	743, 743, 743, 743	0
16	AP	83/83 (100%)	0.40	8 (9%) 15 17	521, 521, 521, 521	0
16	CP	83/83 (100%)	0.98	12 (14%) 7 12	607, 607, 607, 607	0
16	EP	83/83 (100%)	0.12	9 (10%) 12 16	628, 628, 628, 628	0
16	GP	83/83 (100%)	0.35	9 (10%) 12 16	669, 669, 669, 669	0
16	IP	83/83 (100%)	0.27	9 (10%) 12 16	743, 743, 743, 743	0
17	AQ	104/104 (100%)	0.46	13 (12%) 9 14	521, 521, 521, 521	0
17	CQ	104/104 (100%)	-0.09	5 (4%) 36 33	607, 607, 607, 607	0
17	EQ	104/104 (100%)	-0.10	5 (4%) 36 33	628, 628, 628, 628	0
17	GQ	104/104 (100%)	0.08	5 (4%) 36 33	669, 669, 669, 669	0
17	IQ	104/104 (100%)	-0.12	6 (5%) 30 28	743, 743, 743, 743	0
18	AR	73/73 (100%)	0.48	7 (9%) 15 17	521, 521, 521, 521	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
18	CR	73/73 (100%)	0.19	6 (8%) 19 20	607, 607, 607, 607	0
18	ER	73/73 (100%)	0.52	9 (12%) 9 14	628, 628, 628, 628	0
18	GR	73/73 (100%)	0.77	15 (20%) 3 8	669, 669, 669, 669	0
18	IR	73/73 (100%)	0.82	9 (12%) 9 14	743, 743, 743, 743	0
19	AS	80/80 (100%)	0.10	6 (7%) 22 23	521, 521, 521, 521	0
19	CS	80/80 (100%)	0.37	9 (11%) 11 15	607, 607, 607, 607	0
19	ES	80/80 (100%)	-0.14	3 (3%) 44 37	628, 628, 628, 628	0
19	GS	80/80 (100%)	0.28	7 (8%) 17 19	669, 669, 669, 669	0
19	IS	80/80 (100%)	0.07	8 (10%) 14 17	743, 743, 743, 743	0
20	AT	99/99 (100%)	0.71	16 (16%) 5 11	521, 521, 521, 521	0
20	CT	99/99 (100%)	0.66	14 (14%) 7 13	607, 607, 607, 607	0
20	ET	99/99 (100%)	0.55	13 (13%) 8 13	628, 628, 628, 628	0
20	GT	99/99 (100%)	1.07	23 (23%) 2 7	669, 669, 669, 669	0
20	IT	99/99 (100%)	0.32	10 (10%) 14 16	743, 743, 743, 743	0
21	Aa	90/90 (100%)	0.98	14 (15%) 6 11	0, 0, 0, 0	90 (100%)
21	Ca	90/90 (100%)	0.82	17 (18%) 4 9	0, 0, 0, 0	90 (100%)
21	Ea	90/90 (100%)	0.64	17 (18%) 4 9	0, 0, 0, 0	90 (100%)
21	Ga	90/90 (100%)	1.08	23 (25%) 2 6	0, 0, 0, 0	90 (100%)
21	Ia	90/90 (100%)	1.23	15 (16%) 5 10	0, 0, 0, 0	90 (100%)
22	BB	2825/2825 (100%)	0.11	221 (7%) 20 21	849, 855, 857, 859	0
22	DB	2825/2825 (100%)	0.18	241 (8%) 18 20	895, 902, 903, 904	0
22	FB	2825/2825 (100%)	0.22	254 (8%) 17 19	896, 902, 905, 905	0
22	HB	2825/2825 (100%)	0.07	210 (7%) 22 23	894, 902, 903, 903	0
22	JB	2825/2825 (100%)	0.08	204 (7%) 23 23	897, 902, 906, 908	0
23	BA	118/119 (99%)	0.10	8 (6%) 25 24	809, 846, 846, 846	0
23	DA	118/119 (99%)	-0.08	6 (5%) 34 30	854, 893, 893, 893	0
23	FA	118/119 (99%)	-0.38	5 (4%) 41 35	857, 896, 896, 896	0
23	HA	118/119 (99%)	0.02	7 (5%) 29 28	855, 894, 894, 894	0
23	JA	118/119 (99%)	-0.14	8 (6%) 25 24	855, 894, 894, 894	0
24	BD	270/270 (100%)	0.30	31 (11%) 11 15	904, 904, 904, 904	0
24	DD	270/270 (100%)	0.50	38 (14%) 7 13	950, 950, 950, 950	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
24	FD	270/270 (100%)	0.80	39 (14%) 7 12	950, 950, 950, 950	0
24	HD	270/270 (100%)	0.66	37 (13%) 8 13	950, 950, 950, 950	0
24	JD	270/270 (100%)	0.18	26 (9%) 15 17	950, 950, 950, 950	0
25	BE	205/205 (100%)	0.64	25 (12%) 10 15	904, 904, 904, 904	0
25	DE	205/205 (100%)	0.05	13 (6%) 27 27	950, 950, 950, 950	0
25	FE	205/205 (100%)	0.47	21 (10%) 13 16	950, 950, 950, 950	0
25	HE	205/205 (100%)	0.95	34 (16%) 5 10	950, 950, 950, 950	0
25	JE	205/205 (100%)	1.52	42 (20%) 3 8	950, 950, 950, 950	0
26	BF	197/198 (99%)	0.06	11 (5%) 31 28	904, 904, 904, 904	0
26	DF	197/198 (99%)	0.29	18 (9%) 16 18	950, 950, 950, 950	0
26	FF	197/198 (99%)	0.43	20 (10%) 13 16	950, 950, 950, 950	0
26	HF	197/198 (99%)	0.25	14 (7%) 23 24	950, 950, 950, 950	0
26	JF	197/198 (99%)	0.44	19 (9%) 15 17	950, 950, 950, 950	0
27	BG	178/178 (100%)	0.97	22 (12%) 9 14	904, 904, 904, 904	0
27	DG	178/178 (100%)	0.21	11 (6%) 28 27	950, 950, 950, 950	0
27	FG	178/178 (100%)	0.46	9 (5%) 34 30	950, 950, 950, 950	0
27	HG	178/178 (100%)	2.00	31 (17%) 5 10	950, 950, 950, 950	0
27	JG	178/178 (100%)	1.02	26 (14%) 7 12	950, 950, 950, 950	0
28	BH	177/177 (100%)	2.13	70 (39%) 1 4	904, 904, 904, 904	0
28	DH	177/177 (100%)	1.42	38 (21%) 3 8	950, 950, 950, 950	0
28	FH	177/177 (100%)	0.89	23 (12%) 9 13	950, 950, 950, 950	0
28	HH	177/177 (100%)	2.53	66 (37%) 1 4	950, 950, 950, 950	0
28	JH	177/177 (100%)	1.70	41 (23%) 2 7	950, 950, 950, 950	0
29	BI	52/52 (100%)	0.59	5 (9%) 15 17	904, 904, 904, 904	0
29	DI	52/52 (100%)	0.81	8 (15%) 6 11	950, 950, 950, 950	0
29	FI	52/52 (100%)	0.84	7 (13%) 8 13	950, 950, 950, 950	0
29	HI	52/52 (100%)	0.47	2 (3%) 44 37	950, 950, 950, 950	0
29	JI	52/52 (100%)	0.22	4 (7%) 21 22	950, 950, 950, 950	0
30	BJ	143/143 (100%)	-0.10	9 (6%) 27 27	904, 904, 904, 904	0
30	DJ	143/143 (100%)	0.16	7 (4%) 36 32	950, 950, 950, 950	0
30	FJ	143/143 (100%)	0.31	9 (6%) 27 27	950, 950, 950, 950	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9
30	HJ	143/143 (100%)	-0.04	15 (10%)	13 16	950, 950, 950, 950	0
30	JJ	143/143 (100%)	0.02	7 (4%)	36 32	950, 950, 950, 950	0
31	BK	143/143 (100%)	0.52	15 (10%)	13 16	904, 904, 904, 904	0
31	DK	143/143 (100%)	0.42	14 (9%)	14 17	950, 950, 950, 950	0
31	FK	143/143 (100%)	1.15	20 (13%)	7 13	950, 950, 950, 950	0
31	HK	143/143 (100%)	0.93	18 (12%)	9 14	950, 950, 950, 950	0
31	JK	143/143 (100%)	2.42	34 (23%)	2 7	950, 950, 950, 950	0
32	BL	132/132 (100%)	0.65	20 (15%)	6 12	904, 904, 904, 904	0
32	DL	132/132 (100%)	0.23	12 (9%)	16 18	950, 950, 950, 950	0
32	FL	132/132 (100%)	0.34	13 (9%)	14 17	950, 950, 950, 950	0
32	HL	132/132 (100%)	0.75	21 (15%)	6 11	950, 950, 950, 950	0
32	JL	132/132 (100%)	0.37	16 (12%)	10 15	950, 950, 950, 950	0
33	BM	141/141 (100%)	1.31	15 (10%)	13 16	904, 904, 904, 904	0
33	DM	141/141 (100%)	1.39	11 (7%)	20 21	950, 950, 950, 950	0
33	FM	141/141 (100%)	1.70	13 (9%)	16 18	950, 950, 950, 950	0
33	HM	141/141 (100%)	0.90	14 (9%)	14 17	950, 950, 950, 950	0
33	JM	141/141 (100%)	1.17	16 (11%)	11 15	950, 950, 950, 950	0
34	BN	124/124 (100%)	-0.32	3 (2%)	59 49	904, 904, 904, 904	0
34	DN	124/124 (100%)	-0.39	1 (0%)	82 71	950, 950, 950, 950	0
34	FN	124/124 (100%)	0.33	10 (8%)	19 21	950, 950, 950, 950	0
34	HN	124/124 (100%)	-0.14	7 (5%)	31 28	950, 950, 950, 950	0
34	JN	124/124 (100%)	0.14	8 (6%)	26 26	950, 950, 950, 950	0
35	BO	114/114 (100%)	-0.05	2 (1%)	67 56	904, 904, 904, 904	0
35	DO	114/114 (100%)	-0.29	1 (0%)	81 69	950, 950, 950, 950	0
35	FO	114/114 (100%)	-0.30	2 (1%)	67 56	950, 950, 950, 950	0
35	HO	114/114 (100%)	-0.25	2 (1%)	67 56	950, 950, 950, 950	0
35	JO	114/114 (100%)	-0.52	0	100 100	950, 950, 950, 950	0
36	BP	111/111 (100%)	-0.28	0	100 100	678, 904, 904, 904	7 (6%)
36	DP	111/111 (100%)	-0.40	2 (1%)	67 56	712, 950, 950, 950	7 (6%)
36	FP	111/111 (100%)	-0.21	6 (5%)	32 29	712, 950, 950, 950	7 (6%)
36	HP	111/111 (100%)	-0.14	3 (2%)	56 45	712, 950, 950, 950	7 (6%)

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
36	JP	111/111 (100%)	-0.35	4 (3%)	46	38	712, 950, 950, 950	7 (6%)
37	BQ	125/125 (100%)	0.83	15 (12%)	10	15	904, 904, 904, 904	0
37	DQ	125/125 (100%)	0.90	20 (16%)	6	11	950, 950, 950, 950	0
37	FQ	125/125 (100%)	0.78	18 (14%)	7	12	950, 950, 950, 950	0
37	HQ	125/125 (100%)	0.55	12 (9%)	15	17	950, 950, 950, 950	0
37	JQ	125/125 (100%)	-0.08	8 (6%)	27	26	950, 950, 950, 950	0
38	BR	117/117 (100%)	0.41	14 (11%)	10	15	678, 904, 904, 904	9 (7%)
38	DR	117/117 (100%)	-0.15	6 (5%)	34	30	712, 950, 950, 950	9 (7%)
38	FR	117/117 (100%)	-0.34	7 (5%)	29	27	712, 950, 950, 950	9 (7%)
38	HR	117/117 (100%)	0.40	11 (9%)	15	17	712, 950, 950, 950	9 (7%)
38	JR	117/117 (100%)	-0.07	8 (6%)	25	24	712, 950, 950, 950	9 (7%)
39	BS	100/100 (100%)	0.94	20 (20%)	3	8	904, 904, 904, 904	0
39	DS	100/100 (100%)	0.83	16 (16%)	6	11	950, 950, 950, 950	0
39	FS	100/100 (100%)	0.47	13 (13%)	9	13	950, 950, 950, 950	0
39	HS	100/100 (100%)	1.25	18 (18%)	4	9	950, 950, 950, 950	0
39	JS	100/100 (100%)	0.89	20 (20%)	3	8	950, 950, 950, 950	0
40	BT	130/130 (100%)	-0.19	9 (6%)	24	24	904, 904, 904, 904	0
40	DT	130/130 (100%)	0.63	18 (13%)	8	13	950, 950, 950, 950	0
40	FT	130/130 (100%)	1.37	20 (15%)	6	11	950, 950, 950, 950	0
40	HT	130/130 (100%)	-0.36	3 (2%)	61	50	950, 950, 950, 950	0
40	JT	130/130 (100%)	0.71	9 (6%)	24	24	950, 950, 950, 950	0
41	BU	93/93 (100%)	-0.18	2 (2%)	62	51	904, 904, 904, 904	0
41	DU	93/93 (100%)	-0.31	1 (1%)	77	65	950, 950, 950, 950	0
41	FU	93/93 (100%)	-0.35	1 (1%)	77	65	950, 950, 950, 950	0
41	HU	93/93 (100%)	-0.34	1 (1%)	77	65	950, 950, 950, 950	0
41	JU	93/93 (100%)	-0.10	2 (2%)	62	51	950, 950, 950, 950	0
42	BV	113/113 (100%)	0.87	21 (18%)	4	9	904, 904, 904, 904	0
42	DV	113/113 (100%)	0.25	10 (8%)	17	19	950, 950, 950, 950	0
42	FV	113/113 (100%)	-0.14	7 (6%)	28	27	950, 950, 950, 950	0
42	HV	113/113 (100%)	1.06	22 (19%)	4	9	950, 950, 950, 950	0
42	JV	113/113 (100%)	0.19	11 (9%)	15	17	950, 950, 950, 950	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
43	BW	173/173 (100%)	-0.09	5 (2%) 54 43	904, 904, 904, 904	0
43	DW	173/173 (100%)	0.17	15 (8%) 17 19	950, 950, 950, 950	0
43	FW	173/173 (100%)	0.02	0 100 100	950, 950, 950, 950	0
43	HW	173/173 (100%)	0.22	10 (5%) 30 28	950, 950, 950, 950	0
43	JW	173/173 (100%)	0.31	13 (7%) 22 23	950, 950, 950, 950	0
44	BX	86/86 (100%)	0.39	7 (8%) 19 21	904, 904, 904, 904	0
44	DX	86/86 (100%)	0.26	7 (8%) 19 21	950, 950, 950, 950	0
44	FX	86/86 (100%)	0.57	7 (8%) 19 21	950, 950, 950, 950	0
44	HX	86/86 (100%)	0.27	7 (8%) 19 21	950, 950, 950, 950	0
44	JX	86/86 (100%)	1.27	12 (13%) 7 13	950, 950, 950, 950	0
45	BY	65/65 (100%)	0.04	3 (4%) 38 34	904, 904, 904, 904	0
45	DY	65/65 (100%)	0.39	7 (10%) 12 16	950, 950, 950, 950	0
45	FY	65/65 (100%)	0.16	4 (6%) 28 27	950, 950, 950, 950	0
45	HY	65/65 (100%)	-0.35	5 (7%) 21 22	950, 950, 950, 950	0
45	JY	65/65 (100%)	-0.20	5 (7%) 21 22	950, 950, 950, 950	0
46	BZ	55/55 (100%)	-0.49	0 100 100	791, 904, 904, 904	3 (5%)
46	DZ	55/55 (100%)	-0.47	0 100 100	831, 950, 950, 950	3 (5%)
46	FZ	55/55 (100%)	-0.68	0 100 100	831, 950, 950, 950	3 (5%)
46	HZ	55/55 (100%)	-0.19	2 (3%) 46 38	831, 950, 950, 950	3 (5%)
46	JZ	55/55 (100%)	-0.40	0 100 100	831, 950, 950, 950	3 (5%)
47	B1	73/73 (100%)	0.30	4 (5%) 32 29	904, 904, 904, 904	0
47	D1	73/73 (100%)	0.18	4 (5%) 32 29	950, 950, 950, 950	0
47	F1	73/73 (100%)	0.41	6 (8%) 19 20	950, 950, 950, 950	0
47	H1	73/73 (100%)	-0.05	5 (6%) 25 24	950, 950, 950, 950	0
47	J1	73/73 (100%)	0.15	7 (9%) 15 17	950, 950, 950, 950	0
48	B2	58/58 (100%)	0.47	7 (12%) 10 15	904, 904, 904, 904	0
48	D2	58/58 (100%)	0.73	8 (13%) 8 13	950, 950, 950, 950	0
48	F2	58/58 (100%)	0.76	10 (17%) 5 10	950, 950, 950, 950	0
48	H2	58/58 (100%)	0.16	2 (3%) 48 39	950, 950, 950, 950	0
48	J2	58/58 (100%)	-0.13	4 (6%) 24 24	950, 950, 950, 950	0
49	B3	53/53 (100%)	1.63	14 (26%) 2 6	904, 904, 904, 904	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
49	D3	53/53 (100%)	2.29	18 (33%) 1 5	950, 950, 950, 950	0
49	F3	53/53 (100%)	1.07	10 (18%) 4 9	950, 950, 950, 950	0
49	H3	53/53 (100%)	1.42	10 (18%) 4 9	950, 950, 950, 950	0
49	J3	53/53 (100%)	0.25	3 (5%) 30 28	950, 950, 950, 950	0
50	B4	46/46 (100%)	-0.65	0 100 100	904, 904, 904, 904	0
50	D4	46/46 (100%)	-0.70	0 100 100	950, 950, 950, 950	0
50	F4	46/46 (100%)	-0.58	0 100 100	950, 950, 950, 950	0
50	H4	46/46 (100%)	-0.53	0 100 100	950, 950, 950, 950	0
50	J4	46/46 (100%)	-0.54	0 100 100	950, 950, 950, 950	0
51	B5	63/63 (100%)	-0.51	1 (1%) 70 58	904, 904, 904, 904	0
51	D5	63/63 (100%)	-0.60	1 (1%) 70 58	950, 950, 950, 950	0
51	F5	63/63 (100%)	-0.99	0 100 100	950, 950, 950, 950	0
51	H5	63/63 (100%)	-0.37	1 (1%) 70 58	950, 950, 950, 950	0
51	J5	63/63 (100%)	-0.73	0 100 100	950, 950, 950, 950	0
52	B6	35/35 (100%)	0.23	3 (8%) 18 19	904, 904, 904, 904	0
52	D6	35/35 (100%)	-0.48	0 100 100	950, 950, 950, 950	0
52	F6	35/35 (100%)	-0.35	1 (2%) 54 43	950, 950, 950, 950	0
52	H6	35/35 (100%)	0.07	0 100 100	950, 950, 950, 950	0
52	J6	35/35 (100%)	-0.12	2 (5%) 30 28	950, 950, 950, 950	0
53	B7	213/217 (98%)	1.14	50 (23%) 2 7	904, 904, 904, 904	0
53	D7	213/217 (98%)	1.10	31 (14%) 7 12	950, 950, 950, 950	0
53	F7	213/217 (98%)	1.34	53 (24%) 2 7	950, 950, 950, 950	0
53	H7	213/217 (98%)	0.87	37 (17%) 5 10	950, 950, 950, 950	0
53	J7	213/217 (98%)	0.84	36 (16%) 5 10	950, 950, 950, 950	0
All	All	52580/52610 (99%)	0.39	5533 (10%) 13 16	0, 900, 950, 950	545 (1%)

All (5533) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
31	JK	156	HIS	71.0
2	IB	240	GLN	56.3
33	HM	7	LYS	54.9
33	BM	7	LYS	54.7
33	DM	4	HIS	54.5

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Mol	Chain	Res	Type	RSRZ
33	FM	8	PRO	52.6
33	JM	6	LEU	51.7
40	FT	5	GLU	51.3
33	FM	4	HIS	48.6
2	EB	237	ALA	48.0
33	JM	7	LYS	46.5
33	DM	6	LEU	46.5
27	HG	75	SER	42.8
2	EB	239	VAL	42.5
33	FM	6	LEU	41.1
40	FT	6	GLN	41.0
2	IB	239	VAL	40.6
31	JK	154	GLU	40.2
33	FM	7	LYS	38.5
27	BG	75	SER	38.5
33	BM	6	LEU	38.0
2	EB	238	LEU	37.5
44	JX	7	VAL	36.7
33	DM	7	LYS	36.6
2	EB	240	GLN	36.2
40	JT	5	GLU	35.2
33	DM	8	PRO	34.7
27	HG	76	ASN	34.5
2	IB	236	TYR	34.3
15	IO	83	GLU	34.3
2	IB	229	VAL	34.2
2	IB	235	SER	34.1
31	JK	155	THR	33.7
33	JM	4	HIS	33.6
39	HS	31	ASP	33.1
2	EB	236	TYR	32.4
33	JM	8	PRO	32.4
31	FK	156	HIS	32.3
2	IB	237	ALA	32.1
2	GB	240	GLN	32.0
33	BM	8	PRO	31.9
31	HK	156	HIS	31.7
33	HM	6	LEU	31.3
2	IB	238	LEU	30.7
22	JB	2773	G	30.7
39	BS	31	ASP	30.7
33	BM	4	HIS	30.6

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Mol	Chain	Res	Type	RSRZ
2	EB	231	GLU	30.5
22	FB	2778	U	29.9
12	AL	76	ASN	28.8
25	HE	69	LYS	28.8
28	HH	20	GLN	28.6
21	Ia	56	PRO	28.6
22	JB	555	U	28.3
53	B7	25	ASN	28.2
12	EL	76	ASN	27.9
31	FK	154	GLU	27.9
21	Aa	58	GLY	27.9
28	HH	27	LYS	27.8
22	FB	555	U	27.4
2	IB	228	GLY	27.3
2	IB	230	VAL	27.2
22	HB	554	U	26.6
49	H3	7	ARG	26.6
22	FB	554	U	26.3
2	CB	240	GLN	26.3
22	FB	2808	U	25.9
22	HB	555	U	25.9
22	HB	2773	G	25.9
2	IB	231	GLU	25.8
44	JX	6	GLY	25.5
22	FB	1897	C	25.4
22	JB	2778	U	25.3
24	FD	137	PRO	25.3
15	EO	83	GLU	25.2
22	BB	2773	G	24.8
22	DB	2874	A	24.7
22	BB	1897	C	24.7
22	DB	2808	U	24.6
2	CB	237	ALA	24.6
33	FM	5	ASP	24.5
22	JB	2808	U	24.5
3	IC	98	ASN	24.5
2	CB	234	PRO	24.2
44	FX	5	LYS	24.1
44	BX	5	LYS	24.0
22	FB	1224	A	24.0
44	JX	3	HIS	23.8
2	GB	231	GLU	23.5

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Mol	Chain	Res	Type	RSRZ
40	DT	5	GLU	23.4
22	JB	2774	U	23.1
22	DB	556	A	23.1
25	JE	67	PHE	23.0
31	JK	167	LYS	23.0
31	JK	165	VAL	23.0
33	HM	8	PRO	22.9
2	CB	239	VAL	22.5
28	JH	99	THR	22.5
27	FG	76	ASN	22.4
27	JG	76	ASN	22.4
44	JX	5	LYS	22.3
22	HB	2774	U	22.3
33	FM	9	THR	22.3
22	DB	555	U	22.3
22	HB	2772	U	22.3
44	HX	5	LYS	22.2
22	DB	1897	C	22.2
2	AB	240	GLN	22.2
39	DS	31	ASP	22.1
22	DB	554	U	22.0
22	DB	2873	G	21.9
22	JB	554	U	21.8
22	FB	2773	G	21.8
31	HK	154	GLU	21.8
27	DG	75	SER	21.8
22	DB	2782	G	21.7
22	BB	2772	U	21.6
44	DX	5	LYS	21.6
22	FB	2874	A	21.6
2	GB	239	VAL	21.6
22	JB	2772	U	21.5
49	D3	7	ARG	21.4
44	BX	6	GLY	21.4
27	HG	45	GLU	21.3
2	GB	237	ALA	21.2
31	FK	155	THR	21.0
27	HG	44	LYS	21.0
31	BK	156	HIS	20.9
22	DB	1224	A	20.9
44	FX	6	GLY	20.8
25	JE	71	GLY	20.8

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Mol	Chain	Res	Type	RSRZ
15	EO	84	LYS	20.8
31	DK	155	THR	20.7
22	HB	2808	U	20.7
44	FX	7	VAL	20.6
31	HK	167	LYS	20.6
33	JM	9	THR	20.5
13	GM	51	ALA	20.4
16	GP	54	GLU	20.3
22	FB	2873	G	20.3
22	FB	1187	A	20.3
31	JK	157	PRO	20.3
31	DK	156	HIS	20.2
27	FG	75	SER	20.1
22	BB	2783	U	20.1
40	DT	9	ARG	19.9
25	JE	86	PRO	19.9
22	JB	556	A	19.9
28	DH	116	GLU	19.5
3	GC	79	ARG	19.5
27	BG	76	ASN	19.4
22	FB	556	A	19.4
25	FE	56	GLU	19.3
27	JG	75	SER	19.3
40	FT	7	THR	19.2
22	BB	2782	G	19.2
2	EB	234	PRO	19.2
2	IB	234	PRO	19.2
15	IO	84	LYS	19.1
15	GO	83	GLU	19.0
22	DB	2773	G	18.9
22	FB	2782	G	18.8
15	EO	86	GLY	18.8
22	BB	554	U	18.8
44	BX	7	VAL	18.8
22	DB	2783	U	18.7
2	CB	231	GLU	18.6
22	BB	2808	U	18.6
2	GB	234	PRO	18.5
25	JE	70	ALA	18.5
49	D3	6	PRO	18.5
27	HG	147	ASP	18.3
44	DX	6	GLY	18.3

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Mol	Chain	Res	Type	RSRZ
27	JG	45	GLU	18.2
2	AB	231	GLU	18.2
27	HG	46	ASP	18.2
2	EB	232	PRO	18.1
3	IC	79	ARG	18.1
22	HB	2782	G	18.1
27	HG	48	LYS	18.0
31	DK	167	LYS	17.8
2	GB	236	TYR	17.8
22	DB	1898	U	17.7
2	AB	237	ALA	17.7
26	FF	113	GLU	17.6
18	IR	17	SER	17.6
33	HM	4	HIS	17.5
25	BE	69	LYS	17.4
33	BM	9	THR	17.3
5	CE	68	GLU	17.2
16	CP	81	ARG	17.1
33	FM	10	PRO	17.1
31	BK	169	GLN	17.1
26	FF	145	THR	17.1
15	EO	44	LYS	17.1
38	BR	107	LYS	17.1
22	JB	2782	G	17.0
33	DM	9	THR	17.0
16	IP	54	GLU	17.0
22	FB	1892	C	16.9
22	FB	2875	C	16.9
16	CP	46	PRO	16.8
5	IE	6	PHE	16.8
22	BB	2774	U	16.8
2	AB	129	GLU	16.7
33	HM	9	THR	16.7
22	DB	2778	U	16.7
28	JH	116	GLU	16.6
22	FB	2772	U	16.6
25	HE	67	PHE	16.6
2	GB	232	PRO	16.5
53	D7	25	ASN	16.5
21	Ca	56	PRO	16.5
33	DM	5	ASP	16.4
22	BB	555	U	16.3

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Mol	Chain	Res	Type	RSRZ
31	BK	167	LYS	16.3
27	BG	45	GLU	16.2
33	BM	10	PRO	16.2
4	ID	186	LEU	16.2
13	IM	38	GLY	16.2
9	GI	91	ASP	16.2
44	DX	7	VAL	16.1
2	EB	235	SER	16.1
22	BB	2874	A	16.1
2	CB	238	LEU	16.0
25	JE	72	VAL	16.0
27	BG	78	LYS	16.0
22	HB	2771	C	16.0
22	HB	556	A	15.9
24	HD	126	LYS	15.9
22	FB	2783	U	15.9
27	BG	46	ASP	15.9
1	GA	1338	G	15.9
31	HK	155	THR	15.9
31	HK	169	GLN	15.8
3	AC	79	ARG	15.8
28	HH	21	ASP	15.8
27	FG	46	ASP	15.7
15	GO	84	LYS	15.7
27	HG	80	ARG	15.7
12	AL	74	GLY	15.6
4	ID	190	ASP	15.4
2	GB	230	VAL	15.4
22	BB	556	A	15.3
16	GP	82	GLN	15.3
16	AP	81	ARG	15.3
5	IE	5	ASP	15.2
22	BB	1898	U	15.2
22	HB	2779	C	15.2
2	CB	235	SER	15.2
27	JG	48	LYS	15.1
9	II	91	ASP	15.0
28	JH	101	LYS	15.0
22	HB	2778	U	14.9
12	GL	76	ASN	14.9
28	HH	116	GLU	14.9
22	FB	2872	U	14.8

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Mol	Chain	Res	Type	RSRZ
2	CB	129	GLU	14.8
12	CL	76	ASN	14.8
4	GD	27	TYR	14.8
27	JG	46	ASP	14.7
3	EC	98	ASN	14.7
22	JB	553	C	14.7
13	CM	38	GLY	14.6
2	GB	229	VAL	14.6
27	BG	80	ARG	14.6
9	AI	91	ASP	14.6
22	HB	2874	A	14.6
22	DB	1524	C	14.5
22	DB	2859	U	14.4
28	BH	27	LYS	14.4
5	GE	153	LYS	14.3
40	DT	6	GLN	14.3
28	HH	99	THR	14.3
13	GM	38	GLY	14.3
22	JB	1897	C	14.3
22	BB	2778	U	14.3
22	HB	2783	U	14.1
28	BH	20	GLN	14.1
31	JK	166	LEU	14.1
13	IM	51	ALA	14.1
13	GM	55	ARG	14.1
22	DB	2772	U	14.1
22	FB	2774	U	14.1
22	FB	2871	U	14.1
2	AB	234	PRO	14.1
15	CO	84	LYS	14.0
22	JB	2873	G	14.0
22	DB	1186	G	14.0
27	HG	43	SER	13.9
28	JH	20	GLN	13.9
22	FB	1898	U	13.9
31	FK	157	PRO	13.9
15	IO	44	LYS	13.8
22	HB	1897	C	13.7
2	IB	232	PRO	13.7
44	HX	6	GLY	13.7
38	HR	104	GLU	13.7
2	GB	129	GLU	13.7

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Mol	Chain	Res	Type	RSRZ
22	HB	553	C	13.6
3	IC	96	GLY	13.6
13	AM	51	ALA	13.6
2	GB	123	ALA	13.6
27	HG	78	LYS	13.6
22	JB	1224	A	13.6
27	HG	52	LYS	13.5
5	EE	68	GLU	13.5
22	JB	1892	C	13.5
38	HR	107	LYS	13.5
13	AM	55	ARG	13.4
2	AB	239	VAL	13.4
39	FS	47	PHE	13.4
25	BE	67	PHE	13.3
40	FT	9	ARG	13.3
47	F1	21	VAL	13.3
22	JB	1187	A	13.3
40	JT	6	GLN	13.2
28	BH	126	PRO	13.2
49	B3	7	ARG	13.2
18	IR	19	LYS	13.1
24	HD	268	ARG	13.0
22	DB	1892	C	13.0
22	JB	2780	A	13.0
22	FB	1893	G	13.0
22	HB	2780	A	13.0
22	DB	2875	C	13.0
2	GB	235	SER	13.0
2	GB	238	LEU	13.0
49	H3	6	PRO	12.9
2	AB	128	GLU	12.9
31	JK	37	ASP	12.9
9	CI	90	PRO	12.8
25	DE	56	GLU	12.8
22	JB	2874	A	12.8
37	BQ	22	ARG	12.7
27	BG	44	LYS	12.7
25	BE	72	VAL	12.7
25	JE	87	ASP	12.7
28	DH	101	LYS	12.6
22	DB	1907	C	12.6
33	FM	11	GLY	12.6

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Mol	Chain	Res	Type	RSRZ
7	IG	143	ARG	12.6
49	F3	7	ARG	12.6
15	EO	79	ARG	12.6
2	GB	228	GLY	12.5
25	JE	69	LYS	12.4
49	F3	6	PRO	12.4
34	JN	81	GLU	12.4
28	JH	100	GLY	12.4
1	AA	129(A)	G	12.4
33	DM	10	PRO	12.4
25	JE	56	GLU	12.4
24	FD	125	PRO	12.4
22	JB	2875	C	12.3
22	DB	2872	U	12.2
15	EO	85	LEU	12.2
22	JB	2771	C	12.2
25	BE	179	GLU	12.2
22	JB	1186	G	12.2
22	DB	1187	A	12.2
2	EB	230	VAL	12.1
33	JM	5	ASP	12.1
13	AM	38	GLY	12.0
31	FK	167	LYS	12.0
22	FB	317	U	12.0
22	JB	2872	U	12.0
28	FH	113	VAL	11.9
22	JB	1893	G	11.9
4	ID	168	ARG	11.9
2	EB	128	GLU	11.8
31	JK	164	GLN	11.8
38	HR	71	LEU	11.8
22	JB	2783	U	11.7
28	HH	28	GLY	11.7
26	JF	145	THR	11.7
28	HH	102	ALA	11.7
13	EM	124	PRO	11.7
2	EB	157	ARG	11.7
1	EA	701	C	11.7
39	JS	47	PHE	11.7
22	DB	1899	A	11.7
15	CO	83	GLU	11.6
22	FB	1907	C	11.6

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Mol	Chain	Res	Type	RSRZ
39	FS	31	ASP	11.6
7	EG	62	PHE	11.6
24	DD	125	PRO	11.6
12	GL	111	LYS	11.5
2	CB	236	TYR	11.5
31	FK	165	VAL	11.5
15	IO	79	ARG	11.5
22	FB	553	C	11.5
24	DD	122	GLU	11.5
27	FG	45	GLU	11.5
16	EP	54	GLU	11.5
11	IK	48	ILE	11.5
24	FD	136	VAL	11.4
15	GO	79	ARG	11.4
1	IA	701	C	11.4
31	BK	155	THR	11.4
16	GP	81	ARG	11.4
31	HK	168	THR	11.3
22	FB	1245	G	11.3
2	IB	129	GLU	11.3
25	JE	66	HIS	11.3
1	IA	700	G	11.3
40	DT	7	THR	11.3
13	EM	38	GLY	11.3
2	IB	157	ARG	11.2
1	GA	129(A)	G	11.2
22	HB	1186	G	11.2
22	BB	2771	C	11.1
49	J3	7	ARG	11.1
15	GO	75	PRO	11.1
28	HH	23	VAL	11.1
15	IO	37	ASN	11.0
10	IJ	22	LYS	11.0
3	AC	47	LEU	11.0
22	DB	2854	G	11.0
38	DR	107	LYS	11.0
33	BM	5	ASP	11.0
22	FB	2779	C	11.0
22	JB	1907	C	10.9
22	HB	2770	A	10.9
4	ID	195	ALA	10.9
22	JB	1909	U	10.9

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Mol	Chain	Res	Type	RSRZ
25	BE	71	GLY	10.9
2	IB	79	ASP	10.9
38	JR	107	LYS	10.9
1	AA	1338	G	10.8
22	JB	2871	U	10.8
31	JK	153	GLY	10.8
22	FB	1186	G	10.8
28	FH	114	ILE	10.8
28	FH	116	GLU	10.8
27	DG	46	ASP	10.8
22	HB	2875	C	10.8
29	DI	32	GLN	10.8
13	EM	123	ALA	10.8
3	AC	46	GLU	10.8
7	IG	129	GLU	10.8
2	IB	156	LYS	10.7
21	Ia	1	THR	10.7
3	GC	80	GLY	10.7
5	AE	68	GLU	10.7
15	CO	79	ARG	10.7
25	HE	71	GLY	10.7
15	AO	85	LEU	10.7
22	BB	1224	A	10.7
2	GB	122	PHE	10.7
22	DB	1245	G	10.6
33	BM	11	GLY	10.6
26	JF	113	GLU	10.6
22	DB	1893	G	10.6
7	IG	62	PHE	10.6
25	HE	68	ALA	10.6
22	BB	2770	A	10.6
33	FM	13	ARG	10.6
31	FK	37	ASP	10.6
20	GT	94	ALA	10.6
3	GC	89	GLU	10.6
24	DD	135	PHE	10.5
42	HV	71	GLN	10.5
22	BB	1186	G	10.5
31	JK	169	GLN	10.5
33	DM	11	GLY	10.5
3	EC	96	GLY	10.5
1	IA	1164	G	10.5

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Mol	Chain	Res	Type	RSRZ
5	GE	146	ALA	10.4
47	F1	26	SER	10.4
27	HG	49	ALA	10.4
38	JR	108	ALA	10.4
24	HD	110	GLY	10.4
44	JX	4	LYS	10.4
18	IR	20	ALA	10.4
25	FE	72	VAL	10.4
39	DS	30	GLY	10.4
44	HX	7	VAL	10.4
25	BE	56	GLU	10.3
4	AD	27	TYR	10.3
22	JB	557	U	10.3
22	BB	2873	G	10.3
5	IE	146	ALA	10.3
22	JB	2779	C	10.3
22	DB	2774	U	10.3
22	FB	2859	U	10.3
28	HH	18	ASN	10.3
28	HH	101	LYS	10.3
39	JS	31	ASP	10.3
28	BH	101	LYS	10.2
2	GB	125	PRO	10.2
28	HH	16	THR	10.2
1	EA	700	G	10.2
2	AB	123	ALA	10.2
25	HE	70	ALA	10.2
15	EO	37	ASN	10.2
16	AP	46	PRO	10.2
13	EM	125	ARG	10.2
28	BH	16	THR	10.2
22	BB	2634	G	10.1
10	GJ	22	LYS	10.1
22	HB	1187	A	10.1
24	BD	266	SER	10.1
3	IC	85	ARG	10.1
31	HK	165	VAL	10.1
15	GO	86	GLY	10.1
22	FB	1188	A	10.1
15	CO	85	LEU	10.0
22	FB	557	U	10.0
2	GB	156	LYS	10.0

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Mol	Chain	Res	Type	RSRZ
8	GH	22	GLU	10.0
14	IN	12	ARG	10.0
3	CC	79	ARG	10.0
4	ID	187	ARG	10.0
22	JB	1898	U	10.0
21	Ca	58	GLY	10.0
22	BB	553	C	10.0
3	IC	91	LEU	9.9
9	II	88	TYR	9.9
3	CC	47	LEU	9.9
12	GL	59	ARG	9.9
33	JM	10	PRO	9.9
22	JB	1908	C	9.9
28	DH	20	GLN	9.9
53	D7	175	LYS	9.9
49	D3	5	GLY	9.9
29	FI	14	THR	9.8
4	ID	165	MET	9.8
31	DK	169	GLN	9.8
3	IC	81	GLY	9.8
2	EB	79	ASP	9.8
1	GA	188	C	9.8
9	EI	90	PRO	9.8
28	HH	126	PRO	9.7
31	JK	47	SER	9.7
13	IM	115	LYS	9.7
4	ID	192	GLU	9.7
27	HG	47	SER	9.7
31	BK	154	GLU	9.7
2	IB	128	GLU	9.7
22	HB	2862	G	9.7
28	HH	100	GLY	9.7
24	FD	8	PRO	9.7
22	DB	2809	A	9.6
22	JB	2865	G	9.6
32	JL	62	GLY	9.6
15	EO	87	ILE	9.6
4	ID	27	TYR	9.6
22	BB	2875	C	9.6
30	JJ	93	LYS	9.5
2	IB	87	ARG	9.5
15	CO	37	ASN	9.5

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Mol	Chain	Res	Type	RSRZ
1	CA	1031	C	9.5
2	AB	131	PRO	9.5
9	CI	91	ASP	9.5
4	AD	28	SER	9.5
47	D1	26	SER	9.5
39	HS	30	GLY	9.5
25	BE	68	ALA	9.4
22	FB	1899	A	9.4
3	EC	43	LEU	9.4
15	IO	86	GLY	9.4
27	BG	147	ASP	9.4
38	HR	111	ASP	9.4
12	AL	111	LYS	9.4
27	JG	44	LYS	9.4
40	JT	84	GLU	9.4
13	CM	55	ARG	9.4
27	FG	48	LYS	9.4
28	HH	30	LYS	9.4
5	IE	149	GLU	9.3
25	HE	179	GLU	9.3
3	AC	44	GLU	9.3
28	HH	13	SER	9.3
2	GB	128	GLU	9.3
21	Ia	44	PRO	9.3
3	GC	98	ASN	9.3
4	ID	193	ASP	9.3
22	JB	2781	G	9.3
38	BR	71	LEU	9.3
42	DV	52	ASN	9.3
42	HV	52	ASN	9.3
22	DB	1551	U	9.2
2	EB	76	GLN	9.2
38	FR	107	LYS	9.2
15	IO	41	GLU	9.2
1	IA	1338	G	9.2
22	FB	1244	U	9.2
22	DB	553	C	9.2
28	DH	99	THR	9.2
53	F7	93	LEU	9.2
15	AO	86	GLY	9.2
42	BV	52	ASN	9.2
38	JR	111	ASP	9.2

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Mol	Chain	Res	Type	RSRZ
39	FS	65	ARG	9.2
26	FF	141	GLY	9.2
22	DB	1906	U	9.2
28	BH	21	ASP	9.1
22	BB	2861	A	9.1
7	EG	52	GLU	9.1
22	DB	498	C	9.1
22	FB	2870	C	9.1
15	CO	44	LYS	9.1
5	GE	68	GLU	9.1
15	AO	83	GLU	9.1
22	HB	558	G	9.1
28	FH	99	THR	9.1
31	BK	168	THR	9.1
39	BS	30	GLY	9.1
39	DS	45	THR	9.1
1	CA	1409	C	9.1
22	HB	1224	A	9.1
47	B1	26	SER	9.0
5	EE	6	PHE	9.0
39	DS	47	PHE	9.0
15	CO	86	GLY	9.0
25	HE	178	GLY	9.0
22	FB	1551	U	9.0
12	IL	61	THR	9.0
13	EM	126	LYS	9.0
7	CG	63	LYS	9.0
1	IA	787	A	9.0
2	EB	233	SER	9.0
22	JB	1	G	9.0
4	ID	184	LYS	9.0
2	AB	122	PHE	9.0
28	JH	30	LYS	9.0
37	DQ	18	GLN	9.0
7	CG	82	GLY	9.0
1	IA	687	A	9.0
2	GB	131	PRO	8.9
2	CB	123	ALA	8.9
3	IC	97	LYS	8.9
31	JK	40	ASN	8.9
22	FB	316	C	8.9
24	DD	137	PRO	8.9

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Mol	Chain	Res	Type	RSRZ
28	JH	126	PRO	8.9
22	DB	1244	U	8.9
31	FK	169	GLN	8.9
22	DB	316	C	8.9
22	JB	1188	A	8.8
22	FB	2716	G	8.8
39	HS	98	ILE	8.8
2	EB	87	ARG	8.8
18	IR	18	ARG	8.8
3	IC	86	VAL	8.8
2	GB	233	SER	8.8
22	BB	2859	U	8.8
16	AP	54	GLU	8.8
22	BB	2768	C	8.8
18	ER	17	SER	8.8
1	GA	1155	G	8.8
22	JB	552	C	8.8
28	HH	29	PRO	8.8
3	GC	82	GLU	8.7
39	JS	45	THR	8.7
2	AB	87	ARG	8.7
7	GG	143	ARG	8.7
42	BV	36	VAL	8.7
21	Ea	17	GLN	8.7
22	BB	2259	G	8.7
3	AC	43	LEU	8.7
24	HD	125	PRO	8.7
22	JB	1906	U	8.6
28	JH	32	GLU	8.6
1	EA	789	U	8.6
24	DD	136	VAL	8.6
24	BD	125	PRO	8.6
11	AK	129	SER	8.6
28	FH	112	PRO	8.6
22	HB	2461	G	8.6
37	DQ	19	ASP	8.6
9	AI	90	PRO	8.6
22	HB	2768	C	8.6
28	JH	114	ILE	8.5
22	FB	1906	U	8.5
39	HS	45	THR	8.5
25	FE	86	PRO	8.5

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Mol	Chain	Res	Type	RSRZ
47	J1	26	SER	8.5
22	HB	2861	A	8.5
22	FB	898	C	8.5
22	DB	2634	G	8.5
22	JB	1831	G	8.5
22	HB	2769	C	8.5
27	DG	45	GLU	8.5
9	AI	127	LYS	8.5
24	BD	268	ARG	8.5
1	EA	1031	C	8.5
2	EB	158	LEU	8.5
28	JH	27	LYS	8.5
22	HB	896	C	8.4
3	IC	90	GLU	8.4
20	GT	93	GLU	8.4
1	IA	688	G	8.4
22	FB	514	G	8.4
3	GC	83	ARG	8.4
16	EP	81	ARG	8.4
27	JG	47	SER	8.4
1	CA	412	A	8.4
4	ED	20	TYR	8.4
1	GA	1164	G	8.4
22	DB	2715	C	8.4
22	DB	2714	A	8.4
39	FS	45	THR	8.4
38	BR	104	GLU	8.4
1	GA	687	A	8.4
7	EG	82	GLY	8.4
39	DS	29	ALA	8.4
21	Ca	27	GLU	8.4
22	JB	2861	A	8.3
5	IE	8	GLU	8.3
20	ET	93	GLU	8.3
22	JB	2809	A	8.3
53	B7	27	THR	8.3
13	IM	52	GLU	8.3
2	GB	124	SER	8.3
22	BB	1907	C	8.3
24	HD	266	SER	8.3
25	JE	63	MET	8.3
53	F7	92	LYS	8.3

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Mol	Chain	Res	Type	RSRZ
21	Ia	27	GLU	8.2
4	ID	20	TYR	8.2
8	AH	22	GLU	8.2
28	DH	114	ILE	8.2
2	CB	128	GLU	8.2
16	AP	82	GLN	8.2
5	EE	146	ALA	8.2
28	DH	21	ASP	8.2
22	DB	1185	C	8.2
25	JE	88	GLY	8.2
22	FB	1908	C	8.2
22	HB	2865	G	8.2
22	DB	22	C	8.1
11	CK	129	SER	8.1
15	IO	40	SER	8.1
7	CG	62	PHE	8.1
1	GA	1154	G	8.1
9	EI	88	TYR	8.1
22	FB	507	A	8.1
22	DB	317	U	8.1
7	AG	82	GLY	8.1
22	HB	2873	G	8.1
26	DF	145	THR	8.1
40	JT	7	THR	8.1
22	FB	1550	C	8.1
1	AA	687	A	8.1
3	IC	80	GLY	8.1
31	JK	158	HIS	8.1
1	AA	1155	G	8.0
1	IA	1212	U	8.0
2	CB	233	SER	8.0
22	JB	1243	G	8.0
2	EB	129	GLU	8.0
25	BE	84	PHE	8.0
4	GD	168	ARG	8.0
39	BS	32	LYS	8.0
22	BB	22	C	8.0
1	IA	685	G	8.0
24	BD	265	THR	8.0
26	BF	155	GLU	8.0
40	HT	5	GLU	8.0
7	AG	22	LEU	8.0

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Mol	Chain	Res	Type	RSRZ
22	BB	2779	C	8.0
22	DB	1908	C	8.0
28	JH	97	LYS	8.0
28	DH	100	GLY	7.9
53	J7	91	GLN	7.9
27	BG	48	LYS	7.9
1	AA	412	A	7.9
22	FB	2780	A	7.9
12	IL	62	SER	7.9
2	AB	130	ARG	7.9
37	DQ	22	ARG	7.9
22	HB	2809	A	7.9
22	DB	2770	A	7.9
22	DB	2817	A	7.9
27	DG	76	ASN	7.9
40	DT	10	ASN	7.9
22	FB	2809	A	7.9
22	DB	2716	G	7.9
25	JE	85	ALA	7.9
1	EA	1133	G	7.8
16	CP	52	ASP	7.8
13	GM	40	ASN	7.8
22	BB	2769	C	7.8
3	CC	46	GLU	7.8
53	F7	146	GLU	7.8
1	IA	696	A	7.8
22	HB	1184	G	7.8
39	HS	32	LYS	7.8
16	CP	82	GLN	7.8
22	FB	1891	C	7.8
53	D7	140	ASN	7.8
19	IS	59	PRO	7.8
13	GM	52	GLU	7.8
1	IA	1165	C	7.8
22	FB	1524	C	7.8
1	CA	1161	C	7.8
25	JE	68	ALA	7.8
21	Ia	13	PRO	7.8
22	JB	317	U	7.8
22	BB	558	G	7.8
22	DB	551	A	7.7
1	GA	688	G	7.7

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Mol	Chain	Res	Type	RSRZ
15	AO	79	ARG	7.7
22	FB	550	C	7.7
25	JE	64	GLN	7.7
22	DB	2631	C	7.7
22	DB	2861	A	7.7
22	HB	1188	A	7.7
2	CB	125	PRO	7.7
4	ID	28	SER	7.7
22	DB	2259	G	7.7
42	HV	49	GLU	7.7
5	GE	150	ARG	7.7
21	Ga	1	THR	7.7
49	B3	8	ILE	7.7
24	BD	126	LYS	7.6
4	CD	28	SER	7.6
12	AL	75	HIS	7.6
22	BB	2641	A	7.6
2	CB	87	ARG	7.6
3	EC	81	GLY	7.6
24	FD	7	ARG	7.6
34	FN	88	LYS	7.6
27	HG	83	MET	7.6
25	JE	95	ILE	7.6
28	JH	102	ALA	7.6
22	JB	2768	C	7.6
2	GB	130	ARG	7.6
3	IC	88	ARG	7.6
22	BB	2809	A	7.6
28	DH	115	ILE	7.6
13	EM	116	THR	7.6
28	BH	18	ASN	7.6
13	IM	55	ARG	7.6
33	BM	13	ARG	7.6
12	IL	104	VAL	7.6
31	DK	154	GLU	7.6
22	FB	551	A	7.5
3	AC	89	GLU	7.5
9	II	90	PRO	7.5
28	FH	110	SER	7.5
1	CA	129(A)	G	7.5
2	AB	65	GLY	7.5
26	DF	140	ASN	7.5

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Mol	Chain	Res	Type	RSRZ
22	DB	2810	A	7.5
9	EI	2	GLU	7.5
22	FB	2861	A	7.5
1	IA	1155	G	7.5
22	DB	1243	G	7.5
22	JB	1245	G	7.5
22	DB	1891	C	7.5
4	ED	197	PRO	7.5
21	Ia	17	GLN	7.5
31	JK	38	GLU	7.4
22	DB	2860	C	7.4
22	FB	1905	G	7.4
1	EA	787	A	7.4
4	GD	18	LYS	7.4
53	B7	74	GLU	7.4
48	F2	36	CYS	7.4
49	F3	5	GLY	7.4
27	HG	145	MET	7.4
28	BH	116	GLU	7.4
17	AQ	82	MET	7.4
28	FH	102	ALA	7.4
12	CL	64	TYR	7.4
53	D7	149	ASN	7.4
22	BB	1899	A	7.4
22	HB	1245	G	7.4
53	D7	146	GLU	7.4
39	FS	1	MET	7.4
27	DG	80	ARG	7.4
42	JV	52	ASN	7.4
22	BB	23	G	7.4
1	GA	701	C	7.4
1	IA	789	U	7.3
22	FB	1243	G	7.3
53	H7	25	ASN	7.3
26	FF	144	GLY	7.3
12	IL	111	LYS	7.3
22	DB	1184	G	7.3
22	FB	2461	G	7.3
28	JH	127	GLU	7.3
34	JN	80	ALA	7.3
24	DD	7	ARG	7.3
7	EG	56	GLN	7.3

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Mol	Chain	Res	Type	RSRZ
24	FD	138	VAL	7.3
3	EC	85	ARG	7.3
2	GB	87	ARG	7.3
48	F2	35	GLN	7.3
1	GA	700	G	7.3
25	FE	71	GLY	7.3
33	JM	13	ARG	7.3
31	DK	165	VAL	7.3
9	II	93	ARG	7.3
1	CA	1338	G	7.3
9	II	94	ALA	7.3
21	Ea	27	GLU	7.3
1	GA	189	A	7.3
22	DB	2632	U	7.3
39	DS	32	LYS	7.3
26	DF	113	GLU	7.3
4	GD	195	ALA	7.2
22	FB	1831	G	7.2
22	JB	2862	G	7.2
49	D3	11	LYS	7.2
1	EA	1410	G	7.2
40	FT	8	PHE	7.2
2	AB	233	SER	7.2
1	GA	412	A	7.2
2	AB	236	TYR	7.2
1	AA	1031	C	7.2
13	CM	51	ALA	7.2
2	GB	157	ARG	7.2
12	IL	79	GLU	7.2
37	BQ	11	GLU	7.2
38	FR	104	GLU	7.2
1	CA	701	C	7.2
1	IA	695	A	7.2
28	HH	19	ALA	7.2
4	ID	29	PRO	7.2
12	AL	78	GLN	7.2
5	EE	150	ARG	7.2
5	IE	153	LYS	7.2
37	FQ	19	ASP	7.2
2	IB	227	GLY	7.2
34	FN	91	VAL	7.2
53	D7	78	LYS	7.2

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Mol	Chain	Res	Type	RSRZ
22	DB	1831	G	7.2
2	EB	160	ASP	7.2
42	HV	36	VAL	7.1
13	EM	52	GLU	7.1
39	FS	46	VAL	7.1
22	FB	1246	G	7.1
22	FB	2862	G	7.1
22	HB	2767	C	7.1
23	HA	37	C	7.1
20	GT	105	SER	7.1
25	BE	70	ALA	7.1
22	HB	2863	U	7.1
22	DB	1293	A	7.1
1	IA	1297	C	7.1
7	IG	146	GLU	7.1
13	IM	47	ASP	7.1
1	CA	687	A	7.1
22	DB	2768	C	7.1
40	DT	17	GLN	7.1
22	FB	558	G	7.1
34	FN	81	GLU	7.1
1	AA	1409	C	7.1
22	BB	2807	U	7.1
9	GI	94	ALA	7.1
1	EA	687	A	7.1
22	FB	2876	C	7.1
13	CM	122	LYS	7.1
2	CB	76	GLN	7.1
5	IE	40	ARG	7.1
28	FH	100	GLY	7.0
49	H3	8	ILE	7.0
10	EJ	76	ASN	7.0
21	Ga	3	ASN	7.0
28	BH	99	THR	7.0
33	DM	13	ARG	7.0
22	BB	1296	G	7.0
22	HB	723	C	7.0
31	BK	157	PRO	7.0
20	CT	101	GLY	7.0
3	EC	79	ARG	7.0
21	Ia	16	ARG	7.0
1	IA	1410	G	7.0

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Mol	Chain	Res	Type	RSRZ
22	JB	1244	U	7.0
1	AA	1162	C	7.0
22	JB	2870	C	7.0
14	AN	52	GLN	7.0
22	FB	2631	C	7.0
33	HM	10	PRO	7.0
28	HH	32	GLU	7.0
7	EG	81	GLY	7.0
42	BV	71	GLN	7.0
22	JB	2785	A	7.0
7	IG	125	MET	7.0
12	AL	73	GLU	7.0
22	DB	2871	U	7.0
1	IA	1300	G	6.9
22	DB	2647	G	6.9
13	CM	35	GLU	6.9
22	FB	318	G	6.9
22	HB	1520	G	6.9
22	JB	2863	U	6.9
1	EA	190	A	6.9
22	FB	552	C	6.9
22	FB	2581	A	6.9
37	BQ	19	ASP	6.9
22	DB	558	G	6.9
25	HE	56	GLU	6.9
22	FB	2768	C	6.9
31	HK	166	LEU	6.9
24	HD	108	PRO	6.9
3	IC	89	GLU	6.9
22	BB	1908	C	6.9
39	JS	1	MET	6.9
13	AM	37	THR	6.9
22	DB	23	G	6.9
27	HG	77	PHE	6.9
42	HV	70	GLU	6.9
8	AH	70	GLN	6.9
2	AB	238	LEU	6.9
20	AT	94	ALA	6.8
44	JX	2	ALA	6.8
9	CI	127	LYS	6.8
25	BE	178	GLY	6.8
31	BK	153	GLY	6.8

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Mol	Chain	Res	Type	RSRZ
38	BR	111	ASP	6.8
22	HB	2785	A	6.8
12	CL	78	GLN	6.8
2	AB	132	LYS	6.8
22	DB	1296	G	6.8
22	DB	1905	G	6.8
6	GF	63	TYR	6.8
28	BH	124	ALA	6.8
1	EA	1212	U	6.8
1	EA	790	A	6.8
16	CP	54	GLU	6.8
35	BO	114	GLU	6.8
48	D2	37	HIS	6.8
22	FB	1909	U	6.8
33	HM	13	ARG	6.8
47	F1	27	THR	6.8
3	CC	43	LEU	6.8
25	DE	84	PHE	6.8
3	IC	92	ALA	6.8
25	HE	177	ALA	6.8
13	EM	55	ARG	6.8
22	BB	1831	G	6.8
22	JB	508	G	6.8
9	II	2	GLU	6.8
30	FJ	19	PRO	6.8
22	HB	1892	C	6.8
22	DB	1294	G	6.8
22	JB	507	A	6.7
1	EA	1165	C	6.7
1	CA	1410	G	6.7
4	AD	29	PRO	6.7
53	F7	149	ASN	6.7
5	EE	40	ARG	6.7
28	DH	112	PRO	6.7
44	BX	4	LYS	6.7
22	BB	1187	A	6.7
2	AB	235	SER	6.7
28	BH	29	PRO	6.7
21	Aa	27	GLU	6.7
28	HH	14	GLY	6.7
31	FK	38	GLU	6.7
1	EA	129(A)	G	6.7

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Mol	Chain	Res	Type	RSRZ
24	JD	9	TYR	6.7
53	F7	70	SER	6.7
1	GA	787	A	6.7
7	IG	61	VAL	6.7
13	AM	40	ASN	6.7
3	GC	43	LEU	6.7
16	IP	81	ARG	6.7
2	AB	208	ILE	6.6
11	GK	129	SER	6.6
15	AO	84	LYS	6.6
3	EC	86	VAL	6.6
4	ID	164	ALA	6.6
22	BB	2461	G	6.6
26	HF	156	ASN	6.6
22	BB	2714	A	6.6
31	BK	165	VAL	6.6
22	DB	2581	A	6.6
3	EC	83	ARG	6.6
26	FF	140	ASN	6.6
28	FH	115	ILE	6.6
31	DK	37	ASP	6.6
22	BB	2854	G	6.6
4	AD	18	LYS	6.6
40	DT	19	LYS	6.6
53	B7	56	LYS	6.6
31	JK	87	GLN	6.6
32	JL	63	ALA	6.6
27	FG	78	LYS	6.6
28	HH	25	LYS	6.6
4	AD	20	TYR	6.6
18	AR	76	LEU	6.6
48	F2	37	HIS	6.6
9	EI	91	ASP	6.6
4	AD	26	CYS	6.6
25	DE	72	VAL	6.6
22	BB	2860	C	6.6
22	HB	2790	C	6.6
34	HN	79	PRO	6.6
22	FB	2854	G	6.6
22	HB	2634	G	6.6
1	CA	1162	C	6.6
22	JB	2876	C	6.6

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Mol	Chain	Res	Type	RSRZ
4	ID	197	PRO	6.5
22	FB	1894	U	6.5
7	EG	61	VAL	6.5
24	JD	112	THR	6.5
28	JH	115	ILE	6.5
21	Ea	14	ALA	6.5
38	BR	103	PRO	6.5
4	CD	20	TYR	6.5
22	DB	2648	G	6.5
22	FB	1298	G	6.5
22	FB	2865	G	6.5
21	Ca	24	ALA	6.5
13	EM	35	GLU	6.5
22	JB	551	A	6.5
25	JE	60	ASN	6.5
49	F3	4	ASP	6.5
22	HB	1185	C	6.5
5	IE	68	GLU	6.5
7	EG	129	GLU	6.5
9	GI	88	TYR	6.5
22	BB	2715	C	6.5
22	BB	2862	G	6.5
4	GD	17	VAL	6.5
5	CE	70	PRO	6.5
22	BB	498	C	6.5
22	FB	1552	C	6.5
7	IG	53	LYS	6.5
26	FF	138	LYS	6.5
22	JB	550	C	6.5
2	CB	158	LEU	6.5
27	HG	82	GLY	6.4
28	JH	112	PRO	6.4
27	FG	80	ARG	6.4
22	HB	1	G	6.4
22	HB	557	U	6.4
22	JB	1891	C	6.4
12	AL	77	LEU	6.4
1	AA	1154	G	6.4
1	AA	1493	A	6.4
2	EB	182	ILE	6.4
28	DH	110	SER	6.4
20	CT	97	ALA	6.4

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Mol	Chain	Res	Type	RSRZ
3	GC	78	GLY	6.4
22	FB	2810	A	6.4
9	CI	35	GLU	6.4
28	BH	134	SER	6.4
1	GA	1032	G	6.4
22	FB	506	G	6.4
24	JD	111	LEU	6.4
26	BF	21	GLU	6.4
3	EC	88	ARG	6.4
16	CP	78	GLY	6.4
1	IA	1163	C	6.4
22	HB	496	C	6.4
2	CB	132	LYS	6.4
24	HD	109	GLU	6.4
22	BB	2784	A	6.4
22	JB	1899	A	6.4
1	EA	1161	C	6.4
24	JD	126	LYS	6.4
20	GT	95	ALA	6.4
27	JG	147	ASP	6.4
22	JB	1185	C	6.3
24	FD	9	TYR	6.3
22	JB	2860	C	6.3
22	BB	1245	G	6.3
6	IF	40	VAL	6.3
26	HF	127	ASP	6.3
22	FB	2785	A	6.3
22	HB	2462	C	6.3
12	IL	105	TYR	6.3
22	FB	2715	C	6.3
22	FB	2784	A	6.3
4	AD	17	VAL	6.3
11	AK	43	SER	6.3
25	BE	177	ALA	6.3
13	EM	40	ASN	6.3
2	IB	76	GLN	6.3
4	GD	184	LYS	6.3
10	EJ	22	LYS	6.3
1	EA	696	A	6.3
31	HK	153	GLY	6.3
10	CJ	100	THR	6.3
30	FJ	18	THR	6.3

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Mol	Chain	Res	Type	RSRZ
13	AM	60	VAL	6.3
22	FB	499	G	6.3
30	DJ	86	LYS	6.3
39	BS	45	THR	6.3
22	FB	508	G	6.3
28	HH	80	SER	6.3
53	B7	145	SER	6.3
24	FD	135	PHE	6.3
3	IC	75	VAL	6.2
1	AA	688	G	6.2
22	HB	2872	U	6.2
30	FJ	93	LYS	6.2
9	CI	98	PRO	6.2
24	DD	8	PRO	6.2
27	HG	73	SER	6.2
28	BH	13	SER	6.2
40	BT	9	ARG	6.2
2	EB	37	ASN	6.2
28	HH	97	LYS	6.2
21	Ga	27	GLU	6.2
21	Ia	24	ALA	6.2
22	DB	1246	G	6.2
5	AE	146	ALA	6.2
22	BB	1892	C	6.2
22	FB	498	C	6.2
3	IC	83	ARG	6.2
12	GL	74	GLY	6.2
28	HH	114	ILE	6.2
37	FQ	20	HIS	6.2
1	IA	1411	C	6.2
11	GK	99	GLN	6.2
22	DB	2784	A	6.2
24	HD	111	LEU	6.2
9	GI	90	PRO	6.2
34	JN	79	PRO	6.2
22	BB	2785	A	6.2
14	CN	52	GLN	6.2
20	CT	90	GLN	6.2
21	Ga	13	PRO	6.2
1	GA	1174	G	6.2
22	BB	2258	G	6.2
4	ED	17	VAL	6.2

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Mol	Chain	Res	Type	RSRZ
28	DH	23	VAL	6.2
13	IM	118	ALA	6.1
22	DB	496	C	6.1
22	DB	499	G	6.1
22	DB	1468	A	6.1
22	HB	2641	A	6.1
14	EN	55	GLY	6.1
25	HE	87	ASP	6.1
3	IC	95	THR	6.1
53	H7	78	LYS	6.1
31	DK	157	PRO	6.1
1	EA	695	A	6.1
22	JB	1905	G	6.1
16	AP	52	ASP	6.1
28	JH	21	ASP	6.1
22	HB	722	C	6.1
12	EL	111	LYS	6.1
22	DB	315	G	6.1
42	BV	61	SER	6.1
25	HE	72	VAL	6.1
3	GC	96	GLY	6.1
3	IC	78	GLY	6.1
22	FB	1184	G	6.1
22	HB	2784	A	6.1
53	H7	69	SER	6.0
22	DB	2785	A	6.0
3	IC	82	GLU	6.0
25	HE	84	PHE	6.0
7	IG	55	GLY	6.0
21	Ca	57	ASN	6.0
1	AA	1164	G	6.0
1	CA	1155	G	6.0
1	IA	708	C	6.0
22	BB	1891	C	6.0
2	IB	154	LEU	6.0
3	GC	81	GLY	6.0
20	AT	101	GLY	6.0
53	D7	141	THR	6.0
45	BY	32	ALA	6.0
7	CG	143	ARG	6.0
37	HQ	22	ARG	6.0
6	EF	83	ASP	6.0

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Mol	Chain	Res	Type	RSRZ
10	GJ	18	ALA	6.0
1	EA	1411	C	6.0
1	EA	1134	G	6.0
4	CD	29	PRO	6.0
28	FH	20	GLN	6.0
12	IL	112	ASP	6.0
24	HD	140	ALA	6.0
20	ET	89	ARG	6.0
42	HV	69	GLN	6.0
48	D2	35	GLN	6.0
1	GA	1339	A	6.0
22	DB	21	A	6.0
22	DB	2649	A	6.0
39	DS	1	MET	6.0
22	DB	2769	C	6.0
39	DS	65	ARG	6.0
1	CA	1133	G	6.0
22	FB	315	G	6.0
22	JB	2859	U	6.0
28	BH	28	GLY	6.0
11	GK	30	VAL	6.0
22	BB	2767	C	6.0
15	EO	40	SER	6.0
13	CM	39	ILE	5.9
1	CA	700	G	5.9
34	FN	79	PRO	5.9
22	BB	21	A	5.9
21	Ea	34	ILE	5.9
53	H7	27	THR	5.9
28	BH	30	LYS	5.9
3	IC	99	VAL	5.9
13	AM	54	VAL	5.9
22	JB	2767	C	5.9
53	H7	173	ASP	5.9
7	IG	52	GLU	5.9
27	JG	43	SER	5.9
1	EA	1164	G	5.9
7	CG	81	GLY	5.9
22	DB	552	C	5.9
2	IB	37	ASN	5.9
3	AC	83	ARG	5.9
5	CE	40	ARG	5.9

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Mol	Chain	Res	Type	RSRZ
14	CN	53	LEU	5.9
1	EA	791	G	5.9
22	JB	2854	G	5.9
28	JH	113	VAL	5.9
5	IE	150	ARG	5.9
22	BB	1185	C	5.9
53	B7	26	PHE	5.9
22	DB	1900	U	5.9
4	GD	150	GLU	5.9
1	IA	703	G	5.9
8	IH	70	GLN	5.9
13	IM	125	ARG	5.9
22	HB	1908	C	5.9
24	HD	127	LEU	5.9
38	JR	104	GLU	5.9
49	B3	6	PRO	5.9
1	GA	1409	C	5.9
21	Aa	24	ALA	5.9
1	EA	1257	U	5.9
24	HD	27	LYS	5.9
28	FH	101	LYS	5.9
49	D3	34	LYS	5.9
4	GD	28	SER	5.9
9	EI	127	LYS	5.9
45	BY	36	GLN	5.9
4	ID	189	PRO	5.8
19	GS	30	LEU	5.8
22	JB	318	G	5.8
26	HF	145	THR	5.8
7	GG	22	LEU	5.8
22	DB	1909	U	5.8
22	JB	1550	C	5.8
22	JB	2790	C	5.8
31	BK	171	LEU	5.8
31	FK	40	ASN	5.8
1	GA	1300	G	5.8
21	Ga	17	GLN	5.8
53	H7	70	SER	5.8
18	ER	55	ARG	5.8
28	HH	44	ARG	5.8
20	CT	98	PRO	5.8
22	FB	2632	U	5.8

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Mol	Chain	Res	Type	RSRZ
23	HA	38	C	5.8
39	HS	62	GLU	5.8
1	IA	786	G	5.8
22	JB	2634	G	5.8
13	CM	37	THR	5.8
3	IC	43	LEU	5.8
20	AT	54	LYS	5.8
22	DB	507	A	5.8
1	AA	701	C	5.8
27	BG	145	MET	5.8
15	CO	87	ILE	5.8
1	GA	1410	G	5.8
22	DB	1298	G	5.8
7	EG	143	ARG	5.8
28	BH	114	ILE	5.8
39	HS	96	LEU	5.8
27	HG	74	ILE	5.8
28	BH	100	GLY	5.8
26	JF	146	GLU	5.8
32	HL	122	ARG	5.8
22	DB	2807	U	5.8
22	FB	2860	C	5.8
3	EC	90	GLU	5.8
18	IR	55	ARG	5.8
22	DB	514	G	5.8
43	DW	109	GLN	5.8
33	HM	5	ASP	5.7
1	AA	188	C	5.7
21	Aa	13	PRO	5.7
3	GC	86	VAL	5.7
6	GF	8	ILE	5.7
22	BB	496	C	5.7
23	BA	37	C	5.7
4	GD	37	PRO	5.7
8	EH	72	PRO	5.7
15	AO	75	PRO	5.7
42	FV	52	ASN	5.7
12	AL	40	VAL	5.7
22	BB	1893	G	5.7
22	FB	2259	G	5.7
22	DB	2771	C	5.7
13	EM	47	ASP	5.7

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Mol	Chain	Res	Type	RSRZ
5	IE	63	ARG	5.7
13	AM	35	GLU	5.7
1	AA	1165	C	5.7
1	IA	683	G	5.7
1	IA	1002	G	5.7
22	DB	2258	G	5.7
22	HB	2714	A	5.7
23	BA	38	C	5.7
39	BS	57	GLN	5.7
7	EG	19	GLY	5.7
1	EA	1155	G	5.7
22	BB	1243	G	5.7
22	FB	324	C	5.7
31	DK	38	GLU	5.7
39	BS	34	GLU	5.7
1	EA	1409	C	5.7
13	CM	52	GLU	5.7
22	JB	1184	G	5.7
24	JD	184	ARG	5.7
45	HY	32	ALA	5.7
15	GO	85	LEU	5.7
9	EI	4	TYR	5.7
31	FK	158	HIS	5.7
1	IA	1031	C	5.7
22	DB	1233	A	5.7
22	JB	898	C	5.7
22	BB	1906	U	5.7
22	BB	1909	U	5.7
22	JB	558	G	5.7
22	FB	22	C	5.7
22	JB	2864	C	5.7
3	GC	87	LEU	5.6
30	HJ	18	THR	5.6
9	CI	2	GLU	5.6
22	FB	2634	G	5.6
24	FD	110	GLY	5.6
53	D7	9	ILE	5.6
1	IA	684	A	5.6
2	GB	117	GLU	5.6
53	D7	74	GLU	5.6
3	IC	39	ILE	5.6
9	AI	94	ALA	5.6

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Mol	Chain	Res	Type	RSRZ
3	EC	82	GLU	5.6
30	DJ	93	LYS	5.6
22	DB	1550	C	5.6
22	FB	496	C	5.6
28	DH	32	GLU	5.6
22	HB	2807	U	5.6
22	HB	1907	C	5.6
1	CA	1493	A	5.6
53	F7	96	GLN	5.6
22	FB	1181	C	5.6
4	ID	17	VAL	5.6
9	CI	95	LYS	5.6
9	GI	33	PHE	5.6
44	HX	4	LYS	5.6
1	GA	1177	G	5.6
14	EN	44	LEU	5.6
22	HB	552	C	5.6
22	HB	2860	C	5.6
12	IL	63	GLY	5.5
37	HQ	42	GLY	5.5
24	DD	132	PRO	5.5
28	BH	44	ARG	5.5
22	BB	531	G	5.5
22	DB	2574	G	5.5
13	EM	115	LYS	5.5
3	IC	62	ASP	5.5
10	IJ	24	VAL	5.5
4	ED	196	LEU	5.5
7	AG	81	GLY	5.5
38	HR	103	PRO	5.5
1	GA	685	G	5.5
3	EC	39	ILE	5.5
22	FB	1185	C	5.5
13	GM	115	LYS	5.5
22	DB	1946	U	5.5
20	IT	99	LEU	5.5
25	FE	88	GLY	5.5
2	AB	125	PRO	5.5
22	JB	896	C	5.5
1	CA	1164	G	5.5
22	FB	2714	A	5.5
22	HB	2789	U	5.5

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Mol	Chain	Res	Type	RSRZ
4	ED	195	ALA	5.5
26	JF	144	GLY	5.5
12	CL	111	LYS	5.5
1	GA	633	G	5.5
1	IA	709	G	5.5
16	IP	82	GLN	5.5
21	Ca	17	GLN	5.5
22	BB	2649	A	5.5
22	JB	2770	A	5.5
20	IT	97	ALA	5.5
22	BB	1184	G	5.5
26	BF	127	ASP	5.5
7	CG	132	GLY	5.5
24	JD	114	GLY	5.5
30	BJ	18	THR	5.5
2	CB	131	PRO	5.5
22	JB	2784	A	5.5
22	BB	1520	G	5.5
7	IG	20	ASP	5.5
30	DJ	18	THR	5.4
1	AA	801	U	5.4
22	FB	2863	U	5.4
9	GI	93	ARG	5.4
40	FT	14	ARG	5.4
1	AA	1156	G	5.4
1	EA	1338	G	5.4
51	B5	33	ASN	5.4
1	GA	1165	C	5.4
1	IA	697	U	5.4
49	D3	4	ASP	5.4
1	CA	1165	C	5.4
22	HB	1909	U	5.4
13	IM	124	PRO	5.4
24	BD	138	VAL	5.4
28	BH	127	GLU	5.4
22	DB	2779	C	5.4
22	BB	2810	A	5.4
33	HM	87	THR	5.4
22	DB	898	C	5.4
22	FB	2769	C	5.4
42	BV	49	GLU	5.4
4	ID	196	LEU	5.4

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Mol	Chain	Res	Type	RSRZ
2	AB	230	VAL	5.4
3	CC	44	GLU	5.4
28	HH	12	PRO	5.4
1	AA	189	A	5.4
1	EA	189	A	5.4
12	CL	80	HIS	5.4
22	DB	2260	C	5.4
24	BD	185	VAL	5.4
4	GD	164	ALA	5.4
2	GB	37	ASN	5.4
37	DQ	45	THR	5.4
38	HR	115	ASN	5.4
43	HW	109	GLN	5.4
1	IA	1133	G	5.4
1	AA	1161	C	5.3
2	GB	227	GLY	5.3
11	IK	49	GLY	5.3
53	B7	114	GLN	5.3
22	BB	2716	G	5.3
15	EO	41	GLU	5.3
38	JR	71	LEU	5.3
33	JM	11	GLY	5.3
22	JB	2632	U	5.3
22	FB	1233	A	5.3
28	HH	104	GLU	5.3
3	EC	87	LEU	5.3
3	GC	93	LYS	5.3
28	DH	113	VAL	5.3
2	GB	63	MET	5.3
13	EM	49	THR	5.3
4	GD	29	PRO	5.3
9	GI	2	GLU	5.3
7	EG	63	LYS	5.3
22	BB	2462	C	5.3
25	JE	31	CYS	5.3
48	D2	36	CYS	5.3
28	JH	104	GLU	5.3
12	CL	28	LYS	5.3
22	HB	2305	C	5.3
22	HB	2631	C	5.3
28	JH	23	VAL	5.3
26	DF	141	GLY	5.3

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Mol	Chain	Res	Type	RSRZ
22	DB	557	U	5.3
1	CA	791	G	5.3
1	IA	1174	G	5.3
2	CB	130	ARG	5.3
3	IC	87	LEU	5.3
16	EP	52	ASP	5.3
42	HV	29	HIS	5.3
33	HM	90	ARG	5.3
1	GA	1335	C	5.3
22	BB	2631	C	5.3
22	JB	2807	U	5.3
12	GL	112	ASP	5.3
1	AA	787	A	5.2
1	IA	1339	A	5.2
1	AA	700	G	5.2
1	CA	1120	G	5.2
1	CA	1160	G	5.2
25	JE	73	ALA	5.2
13	IM	116	THR	5.2
21	Ca	54	ASN	5.2
34	HN	12	LYS	5.2
1	IA	519	C	5.2
22	BB	528	G	5.2
28	BH	23	VAL	5.2
22	BB	2260	C	5.2
6	CF	100	ASN	5.2
9	CI	93	ARG	5.2
53	B7	173	ASP	5.2
1	CA	1156	G	5.2
1	GA	1156	G	5.2
2	AB	124	SER	5.2
5	AE	65	ASN	5.2
6	AF	100	ASN	5.2
3	AC	55	VAL	5.2
22	FB	1189	G	5.2
28	DH	30	LYS	5.2
53	F7	78	LYS	5.2
2	CB	37	ASN	5.2
22	BB	529	U	5.2
22	BB	552	C	5.2
22	DB	550	C	5.2
1	AA	671	G	5.2

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Mol	Chain	Res	Type	RSRZ
13	EM	119	GLY	5.2
16	IP	57	ARG	5.2
1	IA	790	A	5.2
22	HB	2766	U	5.2
8	GH	70	GLN	5.2
7	EG	20	ASP	5.2
12	EL	62	SER	5.2
3	IC	100	ALA	5.2
6	CF	94	GLN	5.2
22	DB	2287	G	5.2
22	HB	2806	G	5.2
28	BH	132	ASP	5.2
5	EE	8	GLU	5.2
10	GJ	25	GLU	5.2
22	FB	2807	U	5.2
36	FP	81	GLU	5.2
4	GD	20	TYR	5.2
11	EK	129	SER	5.2
20	ET	106	ALA	5.1
4	ED	29	PRO	5.1
8	CH	70	GLN	5.1
22	BB	530	G	5.1
2	AB	127	ILE	5.1
2	CB	224	GLN	5.1
24	FD	111	LEU	5.1
22	HB	2716	G	5.1
42	JV	70	GLU	5.1
3	GC	132	ARG	5.1
24	HD	7	ARG	5.1
1	GA	638	G	5.1
22	DB	2461	G	5.1
22	FB	1842	G	5.1
22	HB	1243	G	5.1
13	GM	47	ASP	5.1
53	B7	78	LYS	5.1
2	AB	13	ALA	5.1
3	GC	90	GLU	5.1
28	BH	102	ALA	5.1
49	D3	33	ALA	5.1
24	BD	112	THR	5.1
2	IB	63	MET	5.1
3	CC	170	GLN	5.1

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Mol	Chain	Res	Type	RSRZ
3	EC	80	GLY	5.1
24	FD	167	GLY	5.1
1	EA	688	G	5.1
22	JB	1910	A	5.1
28	HH	127	GLU	5.1
40	FT	130	GLU	5.1
22	BB	1900	U	5.1
22	JB	1894	U	5.1
22	DB	497	C	5.1
22	FB	1925	C	5.1
39	DS	34	GLU	5.1
48	F2	48	ASN	5.1
5	EE	70	PRO	5.1
2	AB	227	GLY	5.1
40	DT	8	PHE	5.1
43	JW	121	GLN	5.1
21	Ga	24	ALA	5.1
22	FB	896	C	5.1
22	JB	1520	G	5.1
22	JB	2769	C	5.1
22	BB	1244	U	5.1
21	Aa	17	GLN	5.1
24	BD	186	HIS	5.1
44	FX	3	HIS	5.1
1	EA	1160	G	5.1
14	EN	53	LEU	5.1
22	FB	1296	G	5.1
11	CK	36	ASP	5.0
31	JK	45	ASP	5.0
13	CM	121	LYS	5.0
27	DG	78	LYS	5.0
25	FE	70	ALA	5.0
25	HE	201	ALA	5.0
31	JK	120	SER	5.0
22	DB	2818	G	5.0
9	GI	127	LYS	5.0
28	DH	126	PRO	5.0
2	CB	79	ASP	5.0
12	CL	74	GLY	5.0
20	AT	102	GLY	5.0
34	JN	11	ARG	5.0
45	BY	37	LEU	5.0

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Mol	Chain	Res	Type	RSRZ
22	BB	1524	C	5.0
22	FB	2771	C	5.0
13	IM	123	ALA	5.0
13	GM	58	GLU	5.0
22	BB	20	C	5.0
3	AC	170	GLN	5.0
22	BB	2858	A	5.0
13	CM	60	VAL	5.0
4	ID	35	ARG	5.0
25	JE	174	GLU	5.0
38	DR	104	GLU	5.0
1	GA	1299	A	5.0
16	EP	82	GLN	5.0
42	BV	63	THR	5.0
22	JB	1296	G	5.0
5	AE	140	ARG	5.0
15	IO	85	LEU	5.0
24	FD	122	GLU	5.0
25	FE	174	GLU	5.0
26	BF	113	GLU	5.0
3	EC	97	LYS	5.0
5	EE	5	ASP	5.0
22	FB	2573	C	5.0
26	HF	126	ALA	5.0
7	CG	97	GLN	5.0
22	BB	2865	G	5.0
2	GB	106	LYS	5.0
4	ID	167	GLY	5.0
28	BH	177	GLY	5.0
38	HR	112	ALA	5.0
15	GO	71	GLN	5.0
22	JB	1551	U	4.9
13	IM	40	ASN	4.9
22	HB	2854	G	4.9
25	BE	37	LYS	4.9
20	ET	97	ALA	4.9
38	HR	108	ALA	4.9
6	AF	94	GLN	4.9
3	GC	85	ARG	4.9
24	DD	271	VAL	4.9
47	F1	22	MET	4.9
53	H7	68	PRO	4.9

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Mol	Chain	Res	Type	RSRZ
22	HB	1296	G	4.9
27	JG	78	LYS	4.9
8	EH	138	TRP	4.9
53	D7	139	PRO	4.9
2	GB	127	ILE	4.9
25	FE	95	ILE	4.9
1	CA	790	A	4.9
3	AC	82	GLU	4.9
21	Ia	10	GLU	4.9
22	HB	507	A	4.9
24	HD	169	GLU	4.9
37	FQ	6	LYS	4.9
1	CA	1479	C	4.9
7	IG	81	GLY	4.9
22	DB	2816	C	4.9
4	AD	199	ASN	4.9
4	GD	179	GLU	4.9
4	ID	24	GLU	4.9
7	IG	56	GLN	4.9
7	AG	112	PRO	4.9
8	EH	73	ASP	4.9
11	AK	128	ALA	4.9
1	AA	672	U	4.9
22	DB	2402	U	4.9
13	IM	122	LYS	4.9
40	DT	133	ASN	4.9
53	H7	72	GLN	4.9
20	AT	100	ILE	4.9
37	DQ	42	GLY	4.9
1	EA	703	G	4.9
22	DB	1297	A	4.9
37	FQ	45	THR	4.9
53	F7	86	THR	4.9
20	GT	103	GLY	4.9
39	HS	97	GLY	4.9
1	CA	789	U	4.9
2	IB	36	ARG	4.9
15	EO	43	LEU	4.9
20	GT	104	LEU	4.9
25	HE	97	ALA	4.9
3	IC	93	LYS	4.9
12	EL	61	THR	4.9

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Mol	Chain	Res	Type	RSRZ
27	HG	104	ILE	4.8
22	HB	1891	C	4.8
2	AB	228	GLY	4.8
1	EA	1132	C	4.8
22	DB	1552	C	4.8
22	FB	1183	C	4.8
12	GL	63	GLY	4.8
24	BD	273	ARG	4.8
6	EF	40	VAL	4.8
22	JB	2810	A	4.8
27	BG	43	SER	4.8
38	BR	112	ALA	4.8
39	JS	16	GLU	4.8
53	H7	177	GLU	4.8
1	EA	1297	C	4.8
22	JB	316	C	4.8
2	CB	232	PRO	4.8
40	DT	134	LYS	4.8
53	F7	73	LEU	4.8
13	AM	42	ALA	4.8
22	FB	1840	A	4.8
24	BD	271	VAL	4.8
40	FT	10	ASN	4.8
1	CA	1491	G	4.8
4	GD	165	MET	4.8
1	AA	686	U	4.8
13	GM	37	THR	4.8
22	JB	2789	U	4.8
30	HJ	16	LYS	4.8
31	JK	168	THR	4.8
21	Ea	13	PRO	4.8
21	Ga	44	PRO	4.8
27	HG	81	GLN	4.8
1	IA	1299	A	4.8
3	EC	100	ALA	4.8
22	HB	2810	A	4.8
22	HB	2630	C	4.8
28	FH	30	LYS	4.8
3	EC	66	VAL	4.8
10	IJ	18	ALA	4.8
1	GA	1178	G	4.8
22	DB	2573	C	4.8

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Mol	Chain	Res	Type	RSRZ
22	FB	1876	C	4.8
27	JG	80	ARG	4.8
39	JS	96	LEU	4.8
2	CB	159	PRO	4.8
6	AF	95	GLU	4.8
53	J7	50	GLU	4.8
22	BB	507	A	4.8
28	BH	19	ALA	4.8
3	EC	91	LEU	4.8
7	EG	53	LYS	4.8
14	EN	47	LEU	4.8
22	FB	23	G	4.8
6	CF	95	GLU	4.8
24	HD	138	VAL	4.8
11	CK	128	ALA	4.8
20	GT	106	ALA	4.8
31	FK	164	GLN	4.8
7	GG	55	GLY	4.7
22	BB	551	A	4.7
23	HA	36	A	4.7
1	EA	788	U	4.7
22	HB	1898	U	4.7
22	FB	2781	G	4.7
22	JB	1842	G	4.7
25	FE	87	ASP	4.7
43	JW	104	SER	4.7
7	GG	146	GLU	4.7
5	EE	153	LYS	4.7
22	BB	499	G	4.7
20	ET	94	ALA	4.7
7	AG	63	LYS	4.7
20	GT	54	LYS	4.7
28	JH	110	SER	4.7
48	B2	35	GLN	4.7
13	GM	49	THR	4.7
1	EA	1162	C	4.7
1	IA	1409	C	4.7
1	CA	1134	G	4.7
22	HB	2259	G	4.7
5	GE	154	GLY	4.7
28	BH	119	ALA	4.7
11	GK	16	SER	4.7

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Mol	Chain	Res	Type	RSRZ
13	AM	58	GLU	4.7
25	BE	82	ARG	4.7
42	JV	69	GLN	4.7
7	GG	62	PHE	4.7
22	FB	1225	G	4.7
22	HB	2781	G	4.7
3	GC	47	LEU	4.7
4	ED	64	LEU	4.7
6	EF	8	ILE	4.7
37	FQ	7	ILE	4.7
1	EA	708	C	4.7
22	BB	2630	C	4.7
34	FN	8	THR	4.7
1	AA	1177	G	4.7
1	AA	1410	G	4.7
3	EC	42	LEU	4.7
4	ID	188	LEU	4.7
29	BI	47	GLU	4.7
7	AG	62	PHE	4.7
13	GM	54	VAL	4.7
22	HB	1521	U	4.7
4	ID	194	LEU	4.7
20	GT	53	LEU	4.7
1	AA	1335	C	4.7
1	GA	1031	C	4.7
20	AT	93	GLU	4.7
23	JA	37	C	4.7
40	BT	5	GLU	4.7
12	GL	36	VAL	4.7
2	AB	37	ASN	4.7
7	EG	54	THR	4.7
22	DB	2865	G	4.6
22	FB	1993	G	4.6
45	JY	38	ALA	4.7
22	BB	2581	A	4.6
22	DB	1877	C	4.6
3	EC	89	GLU	4.6
4	ID	30	LYS	4.6
22	FB	1247	U	4.6
37	FQ	18	GLN	4.6
11	IK	129	SER	4.6
28	DH	18	ASN	4.6

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Mol	Chain	Res	Type	RSRZ
53	F7	145	SER	4.6
24	JD	115	ALA	4.6
14	AN	54	PRO	4.6
22	FB	1	G	4.6
28	BH	117	PRO	4.6
1	EA	1163	C	4.6
2	GB	181	PHE	4.6
22	BB	2872	U	4.6
11	IK	92	GLU	4.6
40	DT	13	GLN	4.6
1	GA	632	A	4.6
1	GA	1162	C	4.6
24	FD	27	LYS	4.6
27	BG	20	PHE	4.6
3	GC	91	LEU	4.6
28	JH	98	LEU	4.6
40	FT	13	GLN	4.6
44	BX	3	HIS	4.6
7	EG	80	VAL	4.6
23	DA	37	C	4.6
28	BH	123	PHE	4.6
2	IB	158	LEU	4.6
24	HD	107	ALA	4.6
26	DF	144	GLY	4.6
27	JG	49	ALA	4.6
38	BR	108	ALA	4.6
22	DB	1894	U	4.6
1	GA	1163	C	4.6
53	H7	26	PHE	4.6
4	CD	68	TYR	4.6
12	IL	60	LEU	4.6
25	BE	44	TYR	4.6
14	EN	12	ARG	4.6
5	EE	56	GLN	4.6
26	HF	155	GLU	4.6
53	F7	120	ALA	4.6
2	GB	139	LYS	4.6
3	AC	45	LYS	4.6
8	IH	72	PRO	4.6
1	CA	188	C	4.6
22	BB	2806	G	4.6
7	GG	79	ARG	4.6

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Mol	Chain	Res	Type	RSRZ
10	GJ	87	THR	4.6
37	JQ	19	ASP	4.6
1	IA	1335	C	4.6
28	BH	133	VAL	4.6
15	IO	43	LEU	4.6
7	AG	143	ARG	4.6
9	AI	128	ARG	4.6
22	BB	2640	G	4.6
22	DB	1225	G	4.6
53	D7	114	GLN	4.6
22	BB	497	C	4.5
5	EE	63	ARG	4.5
1	GA	709	G	4.5
27	FG	47	SER	4.5
28	DH	27	LYS	4.5
30	HJ	90	THR	4.5
7	CG	83	ALA	4.5
22	FB	1334	A	4.5
1	CA	1163	C	4.5
4	CD	26	CYS	4.5
39	JS	65	ARG	4.5
1	EA	786	G	4.5
22	HB	531	G	4.5
22	DB	1295	U	4.5
34	JN	88	LYS	4.5
4	ID	175	SER	4.5
6	GF	7	ASN	4.5
22	BB	1188	A	4.5
39	BS	60	VAL	4.5
22	BB	2642	G	4.5
22	HB	1946	U	4.5
10	AJ	18	ALA	4.5
1	CA	1408	A	4.5
2	CB	124	SER	4.5
33	FM	12	SER	4.5
2	IB	45	GLN	4.5
30	BJ	93	LYS	4.5
22	FB	2287	G	4.5
4	CD	168	ARG	4.5
22	FB	1877	C	4.5
33	HM	16	ARG	4.5
37	FQ	22	ARG	4.5

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Mol	Chain	Res	Type	RSRZ
37	JQ	22	ARG	4.5
42	DV	49	GLU	4.5
53	D7	177	GLU	4.5
30	HJ	93	LYS	4.5
22	HB	317	U	4.5
27	BG	144	ASP	4.5
1	GA	703	G	4.5
8	AH	71	GLY	4.5
48	J2	36	CYS	4.5
49	F3	29	ARG	4.5
6	GF	27	GLN	4.5
22	HB	2859	U	4.5
22	JB	1521	U	4.5
11	GK	32	ILE	4.5
48	F2	53	ASP	4.5
1	EA	709	G	4.5
2	CB	157	ARG	4.5
3	CC	83	ARG	4.5
13	AM	14	ARG	4.5
20	GT	102	GLY	4.5
1	IA	1030	U	4.5
22	FB	372	U	4.5
28	HH	39	THR	4.5
26	HF	113	GLU	4.5
40	DT	113	SER	4.5
26	FF	156	ASN	4.5
27	JG	105	ASN	4.5
1	CA	688	G	4.5
22	BB	1294	G	4.5
1	GA	708	C	4.5
13	EM	120	LYS	4.5
20	AT	48	LYS	4.5
22	DB	2646	C	4.5
22	FB	1926	U	4.5
8	EH	74	PRO	4.5
9	AI	98	PRO	4.5
24	FD	132	PRO	4.5
44	FX	87	GLU	4.4
27	HG	103	LEU	4.4
45	FY	38	ALA	4.4
22	HB	2258	G	4.4
22	JB	2716	G	4.4

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Mol	Chain	Res	Type	RSRZ
1	EA	632	A	4.4
1	GA	1411	C	4.4
24	FD	114	GLY	4.4
52	J6	21	GLY	4.4
1	GA	1030	U	4.4
22	FB	1182	U	4.4
2	AB	224	GLN	4.4
6	IF	18	GLN	4.4
28	HH	98	LEU	4.4
31	BK	166	LEU	4.4
53	F7	69	SER	4.4
4	GD	26	CYS	4.4
11	EK	49	GLY	4.4
22	HB	1519	G	4.4
26	JF	127	ASP	4.4
40	FT	84	GLU	4.4
10	EJ	20	ALA	4.4
28	BH	178	ALA	4.4
2	AB	14	GLY	4.4
22	DB	2853	U	4.4
22	HB	2791	C	4.4
44	BX	8	GLY	4.4
1	CA	1480	G	4.4
22	FB	562	G	4.4
21	Ia	57	ASN	4.4
27	JG	104	ILE	4.4
5	GE	50	GLU	4.4
14	CN	48	ALA	4.4
24	BD	259	THR	4.4
1	AA	1163	C	4.4
22	HB	1501	C	4.4
22	DB	1279	G	4.4
2	EB	159	PRO	4.4
9	II	89	ASN	4.4
13	GM	39	ILE	4.4
25	FE	31	CYS	4.4
36	FP	82	LYS	4.4
22	HB	2871	U	4.4
4	CD	27	TYR	4.4
22	DB	528	G	4.4
31	DK	47	SER	4.4
17	AQ	76	LEU	4.4

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Mol	Chain	Res	Type	RSRZ
4	GD	30	LYS	4.4
53	H7	113	ASN	4.4
2	IB	212	GLN	4.4
7	AG	90	GLU	4.4
1	IA	694	A	4.4
13	IM	49	THR	4.4
34	JN	8	THR	4.4
49	H3	5	GLY	4.4
30	FJ	16	LYS	4.4
49	H3	34	LYS	4.4
3	GC	75	VAL	4.4
22	JB	496	C	4.4
1	GA	1176	A	4.4
24	JD	169	GLU	4.4
32	BL	62	GLY	4.4
39	JS	30	GLY	4.4
29	DI	14	THR	4.4
18	ER	88	LYS	4.4
22	JB	549	G	4.4
22	JB	2259	G	4.4
49	B3	46	LYS	4.4
49	H3	29	ARG	4.4
22	BB	317	U	4.3
26	FF	127	ASP	4.3
27	HG	144	ASP	4.3
22	BB	2857	C	4.3
22	JB	2631	C	4.3
1	EA	694	A	4.3
22	JB	1630	A	4.3
15	AO	87	ILE	4.3
53	F7	90	LEU	4.3
1	GA	683	G	4.3
22	FB	2717	G	4.3
3	EC	68	VAL	4.3
28	JH	12	PRO	4.3
27	HG	42	SER	4.3
2	GB	13	ALA	4.3
5	EE	10	MET	4.3
22	DB	3142	C	4.3
25	HE	35	GLN	4.3
3	CC	89	GLU	4.3
6	EF	78	GLU	4.3

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Mol	Chain	Res	Type	RSRZ
7	GG	82	GLY	4.3
21	Ia	28	LYS	4.3
1	AA	1032	G	4.3
1	AA	1178	G	4.3
22	HB	895	G	4.3
1	CA	1132	C	4.3
22	FB	1221	C	4.3
18	CR	76	LEU	4.3
27	BG	103	LEU	4.3
7	GG	84	ASN	4.3
53	H7	115	GLU	4.3
22	FB	2647	G	4.3
39	JS	29	ALA	4.3
10	IJ	21	GLN	4.3
24	FD	166	GLN	4.3
1	IA	1154	G	4.3
22	FB	531	G	4.3
28	DH	39	THR	4.3
1	EA	188	C	4.3
23	JA	38	C	4.3
28	DH	124	ALA	4.3
4	CD	64	LEU	4.3
2	EB	130	ARG	4.3
4	ED	28	SER	4.3
7	IG	80	VAL	4.3
13	CM	40	ASN	4.3
42	HV	60	PRO	4.3
49	H3	30	ASN	4.3
22	BB	1519	G	4.3
9	CI	94	ALA	4.3
24	DD	182	LEU	4.3
1	GA	1408	A	4.3
3	AC	167	TRP	4.3
33	JM	16	ARG	4.3
37	DQ	34	ARG	4.3
22	JB	1334	A	4.3
2	CB	229	VAL	4.3
2	GB	79	ASP	4.3
24	BD	267	ASP	4.3
42	HV	61	SER	4.3
24	JD	138	VAL	4.3
3	EC	46	GLU	4.3

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Mol	Chain	Res	Type	RSRZ
5	GE	149	GLU	4.3
31	JK	121	LYS	4.3
1	AA	1300	G	4.3
1	IA	517	G	4.3
13	GM	42	ALA	4.3
28	JH	105	MET	4.3
7	GG	81	GLY	4.3
24	JD	110	GLY	4.3
26	HF	110	SER	4.3
53	F7	147	TYR	4.3
1	AA	1174	G	4.2
1	CA	409	G	4.2
1	GA	1002	G	4.2
5	CE	150	ARG	4.2
3	GC	77	ILE	4.2
22	BB	1	G	4.2
53	F7	148	ILE	4.2
53	F7	141	THR	4.2
9	II	4	TYR	4.2
44	DX	4	LYS	4.2
3	GC	44	GLU	4.2
1	CA	801	U	4.2
20	CT	89	ARG	4.2
22	DB	2767	C	4.2
22	FB	2630	C	4.2
20	GT	49	ALA	4.2
49	D3	29	ARG	4.2
22	JB	2461	G	4.2
28	BH	115	ILE	4.2
22	FB	1896	A	4.2
7	AG	84	ASN	4.2
26	BF	156	ASN	4.2
44	JX	8	GLY	4.2
42	JV	66	GLN	4.2
30	JJ	16	LYS	4.2
1	IA	788	U	4.2
2	IB	86	GLU	4.2
6	AF	96	PRO	4.2
20	CT	93	GLU	4.2
28	JH	13	SER	4.2
44	HX	3	HIS	4.2
13	EM	39	ILE	4.2

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Mol	Chain	Res	Type	RSRZ
1	IA	1134	G	4.2
6	EF	100	ASN	4.2
14	EN	52	GLN	4.2
20	ET	99	LEU	4.2
2	IB	233	SER	4.2
20	AT	51	GLU	4.2
20	ET	100	ILE	4.2
25	JE	89	ASP	4.2
22	DB	2781	G	4.2
31	FK	87	GLN	4.2
22	HB	2632	U	4.2
13	AM	39	ILE	4.2
48	D2	59	ALA	4.2
53	F7	74	GLU	4.2
8	GH	46	LYS	4.2
5	GE	140	ARG	4.2
21	Ea	1	THR	4.2
6	IF	100	ASN	4.2
3	GC	92	ALA	4.2
30	JJ	94	ALA	4.2
1	GA	236	G	4.2
22	FB	528	G	4.2
22	FB	2648	G	4.2
22	FB	2661	G	4.2
2	AB	36	ARG	4.2
2	EB	212	GLN	4.2
1	IA	707	C	4.2
28	BH	122	THR	4.2
21	Aa	35	ASN	4.2
4	ED	34	GLU	4.2
53	H7	71	GLU	4.2
7	AG	132	GLY	4.2
1	CA	1212	U	4.2
1	GA	1175	G	4.2
1	IA	1032	G	4.2
22	JB	531	G	4.2
22	JB	2806	G	4.2
45	JY	31	GLN	4.2
52	B6	29	ASN	4.1
14	CN	47	LEU	4.1
13	GM	44	ARG	4.1
46	HZ	32	ARG	4.1

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Mol	Chain	Res	Type	RSRZ
1	IA	698	G	4.1
22	BB	2287	G	4.1
22	DB	508	G	4.1
22	JB	528	G	4.1
22	FB	2767	C	4.1
48	H2	36	CYS	4.1
24	HD	112	THR	4.1
22	JB	2649	A	4.1
22	JB	509	U	4.1
28	DH	177	GLY	4.1
40	JT	9	ARG	4.1
22	HB	721	C	4.1
3	GC	135	LYS	4.1
42	HV	35	LYS	4.1
14	EN	54	PRO	4.1
53	F7	100	VAL	4.1
22	DB	1896	A	4.1
27	JG	103	LEU	4.1
28	HH	103	LEU	4.1
47	B1	27	THR	4.1
2	GB	21	ARG	4.1
2	AB	35	GLU	4.1
20	CT	96	GLY	4.1
25	FE	39	ALA	4.1
28	DH	102	ALA	4.1
30	HJ	89	SER	4.1
7	GG	129	GLU	4.1
32	HL	117	GLU	4.1
1	GA	277	C	4.1
3	IC	63	ASN	4.1
4	GD	199	ASN	4.1
22	JB	1631	C	4.1
22	DB	24	G	4.1
22	FB	2574	G	4.1
22	JB	1246	G	4.1
47	J1	25	MET	4.1
53	B7	76	ALA	4.1
6	GF	94	GLN	4.1
16	EP	46	PRO	4.1
20	ET	105	SER	4.1
9	AI	93	ARG	4.1
22	FB	2649	A	4.1

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Mol	Chain	Res	Type	RSRZ
4	AD	16	GLY	4.1
12	EL	127	GLU	4.1
26	FF	146	GLU	4.1
10	EJ	98	ILE	4.1
22	BB	896	C	4.1
22	DB	1993	G	4.1
22	JB	372	U	4.1
2	CB	122	PHE	4.1
1	AA	1408	A	4.1
28	HH	177	GLY	4.1
3	GC	46	GLU	4.1
12	GL	80	HIS	4.1
4	ED	168	ARG	4.1
24	JD	137	PRO	4.1
8	EH	71	GLY	4.1
1	AA	1175	G	4.1
22	HB	1502	G	4.1
25	DE	70	ALA	4.1
26	BF	126	ALA	4.1
53	D7	79	ALA	4.1
45	FY	8	ASN	4.1
36	JP	82	LYS	4.0
22	DB	2876	C	4.0
53	J7	51	ILE	4.0
1	IA	1000	U	4.0
22	HB	12	U	4.0
4	CD	24	GLU	4.0
7	IG	54	THR	4.0
37	FQ	34	ARG	4.0
44	JX	84	ALA	4.0
45	JY	32	ALA	4.0
22	BB	1298	G	4.0
24	DD	269	PHE	4.0
7	CG	131	LYS	4.0
18	IR	88	LYS	4.0
22	JB	494	A	4.0
24	HD	8	PRO	4.0
24	HD	171	ASP	4.0
30	BJ	86	LYS	4.0
1	CA	1400	C	4.0
37	DQ	20	HIS	4.0
47	J1	27	THR	4.0

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Mol	Chain	Res	Type	RSRZ
2	AB	181	PHE	4.0
11	AK	127	LYS	4.0
18	ER	19	LYS	4.0
20	GT	98	PRO	4.0
8	CH	54	ASP	4.0
21	Ga	85	ASN	4.0
22	FB	325	U	4.0
4	GD	24	GLU	4.0
11	CK	64	ALA	4.0
1	IA	987	G	4.0
22	DB	2713	A	4.0
23	HA	41	A	4.0
12	EL	78	GLN	4.0
20	IT	100	ILE	4.0
22	FB	1232	U	4.0
13	GM	14	ARG	4.0
14	EN	56	VAL	4.0
13	EM	122	LYS	4.0
19	GS	7	LYS	4.0
21	Ia	12	THR	4.0
22	BB	1293	A	4.0
7	EG	55	GLY	4.0
7	EG	130	GLY	4.0
22	DB	372	U	4.0
25	DE	71	GLY	4.0
22	BB	495	C	4.0
24	HD	267	ASP	4.0
2	EB	63	MET	4.0
39	JS	46	VAL	4.0
31	FK	121	LYS	4.0
34	HN	80	ALA	4.0
24	FD	269	PHE	4.0
1	CA	189	A	4.0
10	EJ	100	THR	4.0
18	IR	16	PRO	4.0
22	BB	2402	U	4.0
22	BB	2817	A	4.0
4	GD	23	GLY	4.0
8	EH	70	GLN	4.0
22	HB	759	C	4.0
2	IB	130	ARG	4.0
12	IL	59	ARG	4.0

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Mol	Chain	Res	Type	RSRZ
16	GP	52	ASP	4.0
39	BS	29	ALA	4.0
9	GI	34	ASN	4.0
15	AO	37	ASN	4.0
22	FB	2770	A	4.0
42	FV	70	GLU	4.0
1	AA	690	G	4.0
20	GT	101	GLY	4.0
3	EC	40	ARG	4.0
40	DT	14	ARG	4.0
29	BI	44	LYS	4.0
3	EC	92	ALA	4.0
49	F3	33	ALA	4.0
8	EH	81	HIS	4.0
22	FB	1900	U	4.0
22	DB	2858	A	4.0
2	AB	232	PRO	4.0
1	AA	691	G	3.9
1	AA	1153	C	3.9
22	HB	1234	C	3.9
28	DH	13	SER	4.0
1	CA	1154	G	3.9
11	AK	36	ASP	3.9
12	AL	80	HIS	3.9
38	HR	72	HIS	3.9
53	B7	73	LEU	3.9
24	DD	134	ARG	3.9
28	DH	117	PRO	3.9
28	HH	112	PRO	3.9
20	GT	96	GLY	3.9
1	CA	966	G	3.9
1	EA	685	G	3.9
22	DB	506	G	3.9
28	FH	13	SER	3.9
40	FT	113	SER	3.9
2	EB	168	THR	3.9
42	FV	69	GLN	3.9
2	GB	60	ASP	3.9
2	GB	154	LEU	3.9
22	FB	326	A	3.9
1	IA	1132	C	3.9
4	GD	182	LYS	3.9

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Mol	Chain	Res	Type	RSRZ
10	EJ	3	LYS	3.9
2	EB	229	VAL	3.9
7	GG	61	VAL	3.9
6	GF	100	ASN	3.9
29	DI	52	SER	3.9
1	IA	1211	U	3.9
12	AL	114	LYS	3.9
22	DB	1525	A	3.9
22	FB	21	A	3.9
14	CN	54	PRO	3.9
28	BH	14	GLY	3.9
1	AA	630	G	3.9
1	IA	1257	U	3.9
26	DF	156	ASN	3.9
26	DF	110	SER	3.9
38	FR	108	ALA	3.9
22	DB	2257	A	3.9
23	JA	90	C	3.9
26	JF	114	GLY	3.9
3	CC	82	GLU	3.9
1	EA	987	G	3.9
1	GA	1212	U	3.9
22	DB	1995	G	3.9
25	DE	68	ALA	3.9
21	Ga	55	THR	3.9
2	GB	226	ARG	3.9
22	DB	2780	A	3.9
53	H7	67	VAL	3.9
11	EK	92	GLU	3.9
53	J7	88	GLU	3.9
2	GB	120	ALA	3.9
4	ED	186	LEU	3.9
53	H7	116	SER	3.9
22	DB	1949	A	3.9
22	JB	527	C	3.9
4	ID	37	PRO	3.9
3	GC	167	TRP	3.9
5	IE	7	GLU	3.9
19	IS	7	LYS	3.9
2	GB	217	ARG	3.9
14	GN	52	GLN	3.9
33	BM	16	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
42	BV	66	GLN	3.9
23	BA	36	A	3.9
22	FB	1994	U	3.9
17	AQ	88	TYR	3.8
22	DB	318	G	3.8
53	B7	144	ILE	3.8
21	Ga	45	GLN	3.8
22	FB	2260	C	3.8
22	HB	2265	A	3.8
11	EK	56	GLY	3.8
37	BQ	42	GLY	3.8
27	DG	48	LYS	3.8
8	AH	52	ASP	3.8
22	FB	1222	G	3.8
44	HX	85	GLN	3.8
1	AA	1176	A	3.8
22	BB	2632	U	3.8
3	IC	94	LEU	3.8
44	FX	4	LYS	3.8
45	FY	37	LEU	3.8
3	IC	127	ARG	3.8
3	IC	132	ARG	3.8
1	AA	638	G	3.8
1	IA	361	G	3.8
22	FB	2258	G	3.8
22	JB	2449	G	3.8
13	CM	54	VAL	3.8
22	BB	2855	C	3.8
22	JB	2714	A	3.8
4	ED	18	LYS	3.8
7	IG	19	GLY	3.8
15	CO	75	PRO	3.8
17	GQ	82	MET	3.8
25	BE	83	GLY	3.8
25	HE	86	PRO	3.8
28	DH	16	THR	3.8
4	ID	191	ARG	3.8
8	GH	23	SER	3.8
6	CF	76	ALA	3.8
20	IT	106	ALA	3.8
28	JH	124	ALA	3.8
31	DK	158	HIS	3.8

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Mol	Chain	Res	Type	RSRZ
53	F7	123	ILE	3.8
2	GB	134	GLU	3.8
4	AD	24	GLU	3.8
6	GF	42	GLU	3.8
18	IR	46	GLU	3.8
39	JS	49	GLU	3.8
1	CA	926	G	3.8
1	GA	682	G	3.8
1	GA	786	G	3.8
2	GB	224	GLN	3.8
53	J7	119	LEU	3.8
17	GQ	80	GLY	3.8
5	GE	63	ARG	3.8
30	JJ	66	THR	3.8
53	F7	25	ASN	3.8
22	DB	1232	U	3.8
10	IJ	25	GLU	3.8
53	D7	88	GLU	3.8
2	AB	135	GLN	3.8
7	IG	79	ARG	3.8
2	AB	229	VAL	3.8
3	GC	76	VAL	3.8
3	GC	207	VAL	3.8
4	AD	30	LYS	3.8
4	ID	34	GLU	3.8
1	CA	1166	G	3.8
1	IA	286	G	3.8
22	HB	1246	G	3.8
22	HB	1298	G	3.8
49	B3	34	LYS	3.8
53	F7	124	LEU	3.8
53	B7	72	GLN	3.8
14	CN	55	GLY	3.8
19	CS	8	GLY	3.8
24	FD	134	ARG	3.8
24	HD	184	ARG	3.8
31	HK	157	PRO	3.8
42	HV	50	GLY	3.8
10	IJ	20	ALA	3.8
22	FB	1295	U	3.8
49	B3	18	THR	3.8
1	IA	1298	C	3.8

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Mol	Chain	Res	Type	RSRZ
12	AL	81	SER	3.8
24	HD	170	SER	3.8
30	BJ	89	SER	3.8
40	FT	19	LYS	3.8
49	F3	34	LYS	3.8
13	EM	48	LEU	3.8
1	GA	710	G	3.8
1	IA	682	G	3.8
22	BB	1279	G	3.8
23	JA	121	G	3.8
26	DF	127	ASP	3.8
24	JD	167	GLY	3.8
47	F1	25	MET	3.8
7	GG	93	PRO	3.8
20	AT	98	PRO	3.8
53	F7	99	PRO	3.8
24	DD	138	VAL	3.7
14	AN	53	LEU	3.7
2	AB	134	GLU	3.7
3	AC	161	GLU	3.7
20	CT	11	SER	3.7
53	D7	145	SER	3.7
1	CA	674	G	3.7
22	JB	2258	G	3.7
38	BR	115	ASN	3.7
7	AG	156	TRP	3.7
8	IH	71	GLY	3.7
1	EA	677	U	3.7
22	DB	1247	U	3.7
13	EM	51	ALA	3.7
7	AG	80	VAL	3.7
12	GL	64	TYR	3.7
24	HD	271	VAL	3.7
39	DS	46	VAL	3.7
22	HB	495	C	3.7
7	IG	139	GLU	3.7
31	FK	159	SER	3.7
9	GI	89	ASN	3.7
21	Ca	68	ASP	3.7
21	Ga	57	ASN	3.7
22	BB	1894	U	3.7
22	HB	1244	U	3.7

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Mol	Chain	Res	Type	RSRZ
40	FT	17	GLN	3.7
49	F3	32	GLN	3.7
30	HJ	19	PRO	3.7
53	F7	139	PRO	3.7
10	EJ	24	VAL	3.7
14	CN	56	VAL	3.7
24	FD	79	VAL	3.7
49	B3	45	LYS	3.7
53	D7	23	LYS	3.7
1	GA	1153	C	3.7
18	GR	25	THR	3.7
2	AB	63	MET	3.7
1	EA	1166	G	3.7
41	BU	2	SER	3.7
2	IB	75	LYS	3.7
11	IK	19	ALA	3.7
31	JK	43	VAL	3.7
37	FQ	115	ALA	3.7
49	F3	54	LYS	3.7
43	JW	98	VAL	3.7
1	IA	699	C	3.7
1	AA	1030	U	3.7
1	IA	1485	U	3.7
2	GB	14	GLY	3.7
15	GO	87	ILE	3.7
24	HD	193	ILE	3.7
39	BS	100	GLY	3.7
22	DB	1519	G	3.7
22	HB	514	G	3.7
6	EF	75	LEU	3.7
7	CG	80	VAL	3.7
15	AO	67	LEU	3.7
24	JD	113	VAL	3.7
1	GA	1161	C	3.7
2	GB	175	ARG	3.7
18	IR	54	ARG	3.7
33	JM	90	ARG	3.7
39	FS	30	GLY	3.7
1	AA	1166	G	3.7
22	DB	2717	G	3.7
22	FB	2449	G	3.7
17	AQ	22	LEU	3.7

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Mol	Chain	Res	Type	RSRZ
20	AT	95	ALA	3.7
24	JD	166	GLN	3.7
1	IA	1137	C	3.7
7	IG	156	TRP	3.7
18	CR	17	SER	3.7
22	FB	723	C	3.7
1	EA	684	A	3.7
1	GA	788	U	3.7
22	BB	1295	U	3.7
22	JB	2189	A	3.7
24	FD	126	LYS	3.7
28	FH	97	LYS	3.7
40	DT	132	GLY	3.7
5	CE	146	ALA	3.7
11	GK	128	ALA	3.7
15	EO	14	GLU	3.7
28	BH	32	GLU	3.7
37	DQ	75	GLU	3.7
45	HY	36	GLN	3.7
53	B7	177	GLU	3.7
22	FB	1190	C	3.7
26	JF	185	ARG	3.7
1	GA	1211	U	3.7
22	FB	2713	A	3.7
43	HW	147	ILE	3.7
2	CB	227	GLY	3.7
6	AF	49	ALA	3.7
20	ET	98	PRO	3.7
6	EF	94	GLN	3.7
22	HB	3127	G	3.7
37	BQ	18	GLN	3.7
53	H7	88	GLU	3.7
1	AA	1534	A	3.6
22	HB	2858	A	3.6
2	GB	132	LYS	3.6
3	AC	86	VAL	3.6
12	GL	66	VAL	3.6
26	JF	115	GLY	3.6
37	BQ	15	GLY	3.6
37	BQ	20	HIS	3.6
1	AA	633	G	3.6
13	IM	43	THR	3.6

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Mol	Chain	Res	Type	RSRZ
28	FH	32	GLU	3.6
37	HQ	41	GLU	3.6
22	BB	557	U	3.6
11	IK	70	LYS	3.6
24	DD	168	LYS	3.6
12	IL	106	ASP	3.6
33	JM	15	ASP	3.6
11	GK	98	LEU	3.6
12	EL	74	GLY	3.6
22	BB	722	C	3.6
22	FB	1946	U	3.6
22	JB	2791	C	3.6
1	CA	673	G	3.6
3	EC	170	GLN	3.6
22	BB	1890	G	3.6
11	CK	127	LYS	3.6
13	GM	43	THR	3.6
45	FY	66	GLN	3.6
49	D3	32	GLN	3.6
34	BN	12	LYS	3.6
1	EA	1299	A	3.6
2	CB	182	ILE	3.6
2	CB	160	ASP	3.6
2	EB	195	ASP	3.6
25	FE	89	ASP	3.6
31	FK	120	SER	3.6
33	DM	12	SER	3.6
22	DB	1994	U	3.6
22	FB	2462	C	3.6
22	JB	529	U	3.6
38	DR	108	ALA	3.6
22	JB	2573	C	3.6
2	IB	59	GLU	3.6
2	IB	224	GLN	3.6
3	IC	143	GLU	3.6
22	BB	508	G	3.6
27	JG	52	LYS	3.6
22	JB	1840	A	3.6
47	J1	67	TYR	3.6
53	F7	119	LEU	3.6
21	Ea	21	ASP	3.6
28	BH	121	VAL	3.6

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Mol	Chain	Res	Type	RSRZ
38	FR	111	ASP	3.6
42	JV	68	GLY	3.6
43	DW	111	GLY	3.6
53	D7	70	SER	3.6
22	FB	1234	C	3.6
28	JH	117	PRO	3.6
1	AA	1120	G	3.6
1	GA	275	G	3.6
22	FB	1992	G	3.6
22	JB	530	G	3.6
11	GK	31	THR	3.6
53	J7	48	LEU	3.6
11	IK	18	ARG	3.6
25	HE	82	ARG	3.6
22	BB	372	U	3.6
1	GA	1407	C	3.6
13	EM	118	ALA	3.6
17	IQ	52	LYS	3.6
18	GR	17	SER	3.6
19	AS	7	LYS	3.6
28	HH	124	ALA	3.6
53	J7	80	SER	3.6
21	Ca	13	PRO	3.6
1	AA	1133	G	3.6
2	EB	180	LEU	3.6
5	IE	83	GLU	3.6
6	GF	95	GLU	3.6
12	CL	127	GLU	3.6
15	IO	14	GLU	3.6
22	BB	1502	G	3.6
23	DA	23	G	3.6
39	BS	56	VAL	3.6
39	HS	100	GLY	3.6
26	FF	116	LYS	3.6
20	ET	11	SER	3.6
14	AN	47	LEU	3.6
1	EA	1120	G	3.6
1	IA	1213	A	3.6
3	EC	44	GLU	3.6
4	CD	199	ASN	3.6
21	Ea	57	ASN	3.6
21	Ga	35	ASN	3.6

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Mol	Chain	Res	Type	RSRZ
21	Ia	30	GLN	3.6
22	DB	1520	G	3.6
22	FB	371	G	3.6
22	HB	1332	G	3.6
22	HB	1899	A	3.6
12	GL	58	VAL	3.6
18	CR	55	ARG	3.6
22	JB	1900	U	3.6
2	AB	66	GLY	3.6
24	DD	123	ALA	3.6
1	GA	1033	G	3.5
2	GB	36	ARG	3.5
9	CI	128	ARG	3.5
22	FB	1291	G	3.5
39	BS	33	VAL	3.5
4	CD	18	LYS	3.5
45	DY	8	ASN	3.5
53	B7	175	LYS	3.5
42	BV	31	GLY	3.5
1	EA	519	C	3.5
7	EG	156	TRP	3.5
8	IH	138	TRP	3.5
22	BB	2816	C	3.5
22	JB	1181	C	3.5
9	II	50	LEU	3.5
28	HH	117	PRO	3.5
31	BK	47	SER	3.5
22	BB	858	G	3.5
45	DY	65	GLU	3.5
39	JS	100	GLY	3.5
31	JK	86	ALA	3.5
31	JK	163	PRO	3.5
8	EH	54	ASP	3.5
25	HE	205	SER	3.5
1	EA	683	G	3.5
2	GB	126	GLU	3.5
2	IB	181	PHE	3.5
24	HD	194	GLY	3.5
26	FF	115	GLY	3.5
22	HB	2857	C	3.5
28	DH	119	ALA	3.5
12	CL	77	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
38	JR	115	ASN	3.5
28	BH	12	PRO	3.5
43	JW	148	THR	3.5
4	AD	178	VAL	3.5
22	BB	1910	A	3.5
22	BB	1946	U	3.5
34	HN	11	ARG	3.5
13	AM	47	ASP	3.5
42	BV	29	HIS	3.5
7	AG	97	GLN	3.5
20	ET	90	GLN	3.5
13	IM	35	GLU	3.5
22	HB	2640	G	3.5
37	HQ	11	GLU	3.5
53	D7	80	SER	3.5
53	J7	181	GLU	3.5
22	BB	1878	C	3.5
22	HB	550	C	3.5
22	HB	898	C	3.5
22	JB	495	C	3.5
6	GF	61	LEU	3.5
7	CG	84	ASN	3.5
25	JE	32	PRO	3.5
1	AA	632	A	3.5
22	FB	1299	A	3.5
3	EC	31	HIS	3.5
6	IF	63	TYR	3.5
1	GA	899	C	3.5
5	EE	7	GLU	3.5
7	CG	130	GLY	3.5
13	GM	35	GLU	3.5
22	FB	327	C	3.5
22	HB	2449	G	3.5
22	JB	2574	G	3.5
20	IT	94	ALA	3.5
23	FA	90	C	3.5
27	BG	47	SER	3.5
38	DR	71	LEU	3.5
2	AB	217	ARG	3.5
2	EB	36	ARG	3.5
15	GO	82	ILE	3.5
4	ID	172	PRO	3.5

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Mol	Chain	Res	Type	RSRZ
8	AH	72	PRO	3.5
16	IP	55	ARG	3.5
22	DB	529	U	3.5
24	JD	132	PRO	3.5
1	EA	1339	A	3.5
43	HW	148	THR	3.5
8	IH	73	ASP	3.5
6	EF	18	GLN	3.5
4	ED	26	CYS	3.5
14	IN	55	GLY	3.5
22	HB	1831	G	3.5
24	BD	167	GLY	3.5
43	JW	106	GLY	3.5
44	JX	85	GLN	3.5
31	BK	38	GLU	3.5
53	F7	71	GLU	3.5
4	GD	86	LYS	3.5
8	AH	105	ARG	3.5
22	DB	1292	A	3.5
13	CM	49	THR	3.5
3	GC	170	GLN	3.5
4	GD	190	ASP	3.5
16	AP	68	ASP	3.5
22	DB	20	C	3.5
40	FT	112	GLY	3.5
1	AA	685	G	3.5
1	EA	966	G	3.5
1	IA	686	U	3.5
22	JB	315	G	3.5
2	EB	35	GLU	3.5
4	GD	34	GLU	3.5
37	HQ	34	ARG	3.5
53	J7	49	ARG	3.5
32	DL	128	SER	3.5
22	BB	2780	A	3.5
27	HG	173	MET	3.5
3	EC	47	LEU	3.4
31	DK	166	LEU	3.4
38	FR	71	LEU	3.4
1	IA	345	C	3.4
1	IA	1412	C	3.4
23	DA	38	C	3.4

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Mol	Chain	Res	Type	RSRZ
4	GD	187	ARG	3.4
7	IG	136	LYS	3.4
22	HB	372	U	3.4
37	BQ	34	ARG	3.4
7	GG	90	GLU	3.4
29	HI	47	GLU	3.4
26	BF	20	PRO	3.4
22	DB	2189	A	3.4
9	II	47	LEU	3.4
15	CO	43	LEU	3.4
25	DE	67	PHE	3.4
22	HB	498	C	3.4
22	HB	1925	C	3.4
23	JA	4	C	3.4
4	CD	169	LYS	3.4
9	GI	95	LYS	3.4
2	IB	60	ASP	3.4
11	EK	48	ILE	3.4
15	AO	71	GLN	3.4
53	H7	114	GLN	3.4
22	FB	505	G	3.4
1	IA	189	A	3.4
22	FB	2189	A	3.4
22	FB	2817	A	3.4
1	AA	182	U	3.4
1	CA	1257	U	3.4
1	CA	1490	C	3.4
8	GH	21	LYS	3.4
22	JB	2537	C	3.4
27	BG	49	ALA	3.4
29	FI	12	GLY	3.4
30	HJ	15	GLY	3.4
48	F2	38	GLY	3.4
1	AA	791	G	3.4
16	IP	52	ASP	3.4
22	DB	1992	G	3.4
22	HB	2804	G	3.4
26	HF	154	ASP	3.4
7	CG	129	GLU	3.4
53	J7	71	GLU	3.4
22	DB	1188	A	3.4
24	JD	182	LEU	3.4

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Mol	Chain	Res	Type	RSRZ
1	AA	1479	C	3.4
1	CA	1403	C	3.4
1	IA	287	U	3.4
1	IA	1196	U	3.4
22	DB	1878	C	3.4
22	DB	2538	C	3.4
22	FB	527	C	3.4
10	IJ	23	ILE	3.4
39	BS	58	ALA	3.4
24	FD	271	VAL	3.4
49	J3	32	GLN	3.4
9	EI	89	ASN	3.4
22	HB	2805	G	3.4
2	CB	35	GLU	3.4
5	EE	66	MET	3.4
32	FL	104	GLU	3.4
3	CC	87	LEU	3.4
4	ID	182	LYS	3.4
9	EI	95	LYS	3.4
22	HB	1906	U	3.4
16	GP	55	ARG	3.4
7	GG	65	ALA	3.4
11	AK	100	ALA	3.4
13	EM	37	THR	3.4
43	JW	168	VAL	3.4
20	GT	90	GLN	3.4
4	ID	199	ASN	3.4
11	GK	36	ASP	3.4
16	CP	83	GLU	3.4
21	Aa	44	PRO	3.4
22	BB	2257	A	3.4
22	HB	2593	A	3.4
28	DH	118	PRO	3.4
31	HK	38	GLU	3.4
48	D2	49	CYS	3.4
24	FD	184	ARG	3.4
33	FM	116	ARG	3.4
25	HE	95	ILE	3.4
13	AM	56	LEU	3.4
1	AA	793	U	3.4
1	EA	697	U	3.4
1	IA	702	A	3.4

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Mol	Chain	Res	Type	RSRZ
4	ID	169	LYS	3.4
17	GQ	24	GLU	3.4
39	FS	49	GLU	3.4
43	DW	114	ASP	3.4
44	DX	87	GLU	3.4
25	JE	57	ARG	3.4
1	GA	1297	C	3.4
1	GA	1400	C	3.4
22	BB	1877	C	3.4
27	JG	174	GLY	3.4
28	JH	103	LEU	3.4
1	AA	966	G	3.4
1	AA	1033	G	3.4
1	IA	1042	G	3.4
2	AB	21	ARG	3.4
3	AC	68	VAL	3.3
3	EC	99	VAL	3.3
5	GE	23	GLY	3.3
28	HH	26	VAL	3.3
48	B2	36	CYS	3.3
3	AC	87	LEU	3.3
1	CA	686	U	3.3
4	ED	165	MET	3.3
22	DB	2575	U	3.3
1	AA	790	A	3.3
1	CA	1492	A	3.3
1	CA	671	G	3.3
1	GA	690	G	3.3
1	IA	129(A)	G	3.3
1	IA	791	G	3.3
5	IE	70	PRO	3.3
22	FB	5	A	3.3
22	FB	2750	G	3.3
22	HB	1993	G	3.3
49	D3	18	THR	3.3
2	CB	86	GLU	3.3
22	DB	1183	C	3.3
22	JB	722	C	3.3
8	AH	54	ASP	3.3
8	IH	54	ASP	3.3
27	JG	51	ASP	3.3
6	EF	9	VAL	3.3

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Mol	Chain	Res	Type	RSRZ
11	CK	56	GLY	3.3
13	IM	48	LEU	3.3
22	DB	2841	U	3.3
18	ER	18	ARG	3.3
33	FM	16	ARG	3.3
22	FB	549	G	3.3
23	JA	35	C	3.3
30	BJ	90	THR	3.3
19	IS	64	GLU	3.3
4	GD	16	GLY	3.3
3	EC	93	LYS	3.3
24	FD	168	LYS	3.3
28	JH	106	ASN	3.3
2	GB	64	ARG	3.3
47	B1	69	ARG	3.3
49	D3	12	MET	3.3
1	GA	696	A	3.3
22	BB	532	A	3.3
11	AK	99	GLN	3.3
15	CO	40	SER	3.3
24	JD	8	PRO	3.3
27	BG	73	SER	3.3
37	HQ	18	GLN	3.3
42	HV	66	GLN	3.3
1	EA	1479	C	3.3
26	BF	145	THR	3.3
53	F7	89	GLU	3.3
7	IG	82	GLY	3.3
9	GI	47	LEU	3.3
24	FD	139	GLY	3.3
39	HS	64	GLY	3.3
3	AC	38	ARG	3.3
6	AF	63	TYR	3.3
49	B3	30	ASN	3.3
53	J7	113	ASN	3.3
1	GA	1493	A	3.3
22	DB	1231	A	3.3
22	HB	1878	C	3.3
26	JF	112	GLN	3.3
10	GJ	30	SER	3.3
23	BA	23	G	3.3
4	GD	171	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
7	GG	132	GLY	3.3
14	EN	48	ALA	3.3
18	CR	77	GLY	3.3
34	JN	49	GLU	3.3
41	JU	14	GLU	3.3
53	D7	143	ASP	3.3
7	EG	154	TYR	3.3
22	HB	532	A	3.3
22	JB	1233	A	3.3
34	FN	46	ASN	3.3
14	GN	50	LYS	3.3
28	FH	23	VAL	3.3
52	B6	28	SER	3.3
11	EK	128	ALA	3.3
6	GF	31	GLU	3.3
21	Ga	10	GLU	3.3
38	BR	102	GLU	3.3
29	DI	10	ARG	3.3
32	BL	61	ARG	3.3
22	FB	1297	A	3.3
1	GA	237	C	3.3
4	ED	199	ASN	3.3
53	F7	113	ASN	3.3
3	IC	101	LEU	3.3
6	AF	6	VAL	3.3
21	Ga	8	GLN	3.3
22	FB	1306	U	3.3
25	FE	40	GLN	3.3
45	DY	66	GLN	3.3
1	IA	1160	G	3.3
9	II	43	ALA	3.3
22	HB	11	G	3.3
8	AH	55	GLY	3.3
11	CK	43	SER	3.3
12	IL	50	SER	3.3
43	BW	110	GLY	3.3
18	GR	87	ARG	3.3
21	Ga	16	ARG	3.3
1	GA	702	A	3.3
12	AL	112	ASP	3.3
1	AA	1132	C	3.3
5	GE	145	LYS	3.3

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Mol	Chain	Res	Type	RSRZ
22	DB	2630	C	3.3
4	GD	194	LEU	3.3
22	FB	509	U	3.3
1	GA	691	G	3.2
4	AD	195	ALA	3.2
7	EG	83	ALA	3.2
21	Aa	14	ALA	3.2
20	IT	11	SER	3.2
2	GB	107	THR	3.2
4	AD	179	GLU	3.2
25	JE	98	GLU	3.2
49	F3	18	THR	3.2
22	HB	2649	A	3.2
22	HB	22	C	3.2
22	HB	1550	C	3.2
25	JE	175	ILE	3.2
3	GC	55	VAL	3.2
4	GD	170	VAL	3.2
7	IG	22	LEU	3.2
22	FB	1843	U	3.2
24	JD	173	VAL	3.2
25	HE	66	HIS	3.2
31	BK	68	PRO	3.2
32	BL	75	VAL	3.2
25	BE	73	ALA	3.2
44	JX	83	ALA	3.2
53	F7	91	GLN	3.2
2	EB	209	ARG	3.2
1	GA	276	G	3.2
22	BB	3193	G	3.2
32	HL	62	GLY	3.2
24	FD	272	THR	3.2
22	HB	551	A	3.2
24	FD	270	ILE	3.2
30	FJ	86	LYS	3.2
42	BV	54	ILE	3.2
53	B7	23	LYS	3.2
1	EA	1400	C	3.2
22	BB	2305	C	3.2
22	DB	896	C	3.2
53	J7	66	VAL	3.2
2	GB	76	GLN	3.2

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Mol	Chain	Res	Type	RSRZ
3	IC	170	GLN	3.2
29	DI	33	GLY	3.2
11	AK	38	ASN	3.2
22	BB	895	G	3.2
22	DB	1890	G	3.2
22	FB	1294	G	3.2
2	CB	63	MET	3.2
39	HS	1	MET	3.2
12	GL	65	GLU	3.2
37	JQ	75	GLU	3.2
53	J7	193	LYS	3.2
15	IO	87	ILE	3.2
22	DB	2765	C	3.2
22	FB	1949	A	3.2
22	HB	2876	C	3.2
22	JB	2866	A	3.2
26	BF	110	SER	3.2
26	FF	4	ILE	3.2
31	FK	166	LEU	3.2
53	B7	69	SER	3.2
4	CD	178	VAL	3.2
18	GR	16	PRO	3.2
24	BD	7	ARG	3.2
3	GC	168	ALA	3.2
18	ER	20	ALA	3.2
8	CH	55	GLY	3.2
1	CA	413	G	3.2
1	GA	1337	G	3.2
3	IC	45	LYS	3.2
22	HB	1893	G	3.2
4	GD	188	LEU	3.2
11	CK	92	GLU	3.2
11	GK	95	ILE	3.2
22	FB	2789	U	3.2
11	AK	44	SER	3.2
18	GR	86	VAL	3.2
21	Ca	63	SER	3.2
26	FF	110	SER	3.2
2	EB	131	PRO	3.2
3	GC	88	ARG	3.2
28	DH	36	PRO	3.2
30	BJ	19	PRO	3.2

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Mol	Chain	Res	Type	RSRZ
40	FT	111	ARG	3.2
2	AB	79	ASP	3.2
20	GT	97	ALA	3.2
28	HH	119	ALA	3.2
45	DY	32	ALA	3.2
2	AB	76	GLN	3.2
13	AM	121	LYS	3.2
1	EA	1002	G	3.2
22	DB	1222	G	3.2
27	BG	83	MET	3.2
22	BB	316	C	3.2
32	BL	74	VAL	3.2
42	BV	64	ASN	3.2
6	IF	82	ARG	3.2
31	HK	158	HIS	3.2
40	FT	132	GLY	3.2
1	CA	1121	U	3.2
1	AA	1160	G	3.2
6	EF	25	ILE	3.2
22	BB	1905	G	3.2
22	DB	371	G	3.2
1	EA	412	A	3.2
1	GA	684	A	3.2
22	HB	2765	C	3.2
22	JB	723	C	3.2
24	FD	113	VAL	3.2
27	BG	77	PHE	3.2
3	GC	45	LYS	3.2
19	IS	30	LEU	3.2
1	GA	637	G	3.2
22	DB	1234	C	3.2
22	FB	497	C	3.2
22	JB	371	G	3.2
2	AB	117	GLU	3.2
4	AD	34	GLU	3.2
4	ID	15	GLU	3.2
5	AE	7	GLU	3.2
25	HE	98	GLU	3.2
37	DQ	96	ARG	3.2
42	DV	70	GLU	3.2
24	JD	125	PRO	3.2
4	GD	169	LYS	3.2

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Mol	Chain	Res	Type	RSRZ
32	HL	63	ALA	3.2
39	FS	29	ALA	3.2
24	BD	187	SER	3.2
2	IB	182	ILE	3.1
10	EJ	21	GLN	3.1
28	JH	132	ASP	3.1
1	GA	790	A	3.1
22	DB	3147	C	3.1
22	FB	1235	C	3.1
32	FL	133	VAL	3.1
32	JL	61	ARG	3.1
3	CC	90	GLU	3.1
4	GD	145	GLU	3.1
7	GG	70	LYS	3.1
5	EE	65	ASN	3.1
6	AF	7	ASN	3.1
22	BB	2871	U	3.1
45	JY	37	LEU	3.1
24	DD	187	SER	3.1
39	BS	1	MET	3.1
1	AA	1407	C	3.1
22	BB	723	C	3.1
32	FL	85	ASP	3.1
1	CA	190	A	3.1
22	JB	248	A	3.1
42	HV	28	LYS	3.1
17	IQ	48	GLU	3.1
28	BH	112	PRO	3.1
36	JP	81	GLU	3.1
42	BV	70	GLU	3.1
53	H7	50	GLU	3.1
11	AK	66	LEU	3.1
13	GM	56	LEU	3.1
13	IM	119	GLY	3.1
37	FQ	21	THR	3.1
47	D1	25	MET	3.1
53	J7	112	ILE	3.1
3	CC	49	SER	3.1
4	GD	88	VAL	3.1
11	GK	82	VAL	3.1
22	DB	723	C	3.1
45	DY	36	GLN	3.1

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Mol	Chain	Res	Type	RSRZ
1	EA	958	A	3.1
7	GG	20	ASP	3.1
2	EB	132	LYS	3.1
13	IM	121	LYS	3.1
42	BV	60	PRO	3.1
20	CT	102	GLY	3.1
3	CC	76	VAL	3.1
22	JB	1183	C	3.1
15	CO	71	GLN	3.1
23	BA	41	A	3.1
24	BD	168	LYS	3.1
4	AD	177	ASP	3.1
1	AA	1000	U	3.1
22	BB	2863	U	3.1
22	FB	3152	G	3.1
22	JB	1295	U	3.1
6	GF	49	ALA	3.1
8	EH	136	GLU	3.1
13	IM	58	GLU	3.1
30	DJ	19	PRO	3.1
14	AN	55	GLY	3.1
15	CO	82	ILE	3.1
24	HD	139	GLY	3.1
25	JE	65	GLY	3.1
31	FK	153	GLY	3.1
43	DW	106	GLY	3.1
5	GE	69	VAL	3.1
22	BB	550	C	3.1
12	GL	6	THR	3.1
22	BB	1297	A	3.1
25	JE	84	PHE	3.1
1	GA	1029	U	3.1
22	DB	2234	G	3.1
25	HE	85	ALA	3.1
38	JR	112	ALA	3.1
39	BS	96	LEU	3.1
5	AE	70	PRO	3.1
15	CO	2	PRO	3.1
16	IP	46	PRO	3.1
2	AB	126	GLU	3.1
2	EB	86	GLU	3.1
4	GD	163	GLU	3.1

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Mol	Chain	Res	Type	RSRZ
11	GK	108	ILE	3.1
16	GP	83	GLU	3.1
19	ES	64	GLU	3.1
25	BE	95	ILE	3.1
37	DQ	11	GLU	3.1
2	IB	82	ARG	3.1
24	DD	273	ARG	3.1
27	JG	173	MET	3.1
28	BH	120	GLY	3.1
53	F7	95	GLY	3.1
1	GA	699	C	3.1
11	GK	71	LYS	3.1
17	IQ	50	LYS	3.1
22	FB	1924	C	3.1
22	JB	1925	C	3.1
22	DB	1895	A	3.1
22	FB	2190	A	3.1
22	FB	2658	A	3.1
22	HB	1997	A	3.1
22	HB	2581	A	3.1
1	AA	1029	U	3.1
3	EC	101	LEU	3.1
20	GT	92	LEU	3.1
1	AA	998	G	3.1
1	AA	1294	G	3.1
1	GA	1133	G	3.1
22	FB	530	G	3.1
32	FL	14	SER	3.1
24	FD	115	ALA	3.1
3	EC	206	GLU	3.1
6	CF	86	ARG	3.1
13	IM	39	ILE	3.1
25	JE	182	ILE	3.1
26	HF	21	GLU	3.1
28	BH	144	VAL	3.1
34	JN	89	GLY	3.1
1	CA	1335	C	3.1
1	GA	1336	C	3.1
22	DB	2233	C	3.1
24	HD	168	LYS	3.1
22	FB	529	U	3.1
22	HB	2441	U	3.1

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Mol	Chain	Res	Type	RSRZ
1	CA	410	G	3.1
28	DH	178	ALA	3.1
28	HH	48	ASP	3.1
53	B7	113	ASN	3.1
17	AQ	80	GLY	3.1
30	JJ	86	LYS	3.1
39	HS	46	VAL	3.1
1	CA	1411	C	3.1
17	CQ	86	GLU	3.1
22	FB	2765	C	3.1
22	HB	497	C	3.1
22	HB	2864	C	3.1
22	JB	1221	C	3.1
1	AA	802	A	3.0
12	EL	75	HIS	3.0
15	EO	13	GLN	3.0
37	BQ	12	LEU	3.0
25	HE	73	ALA	3.0
4	GD	191	ARG	3.0
10	GJ	98	ILE	3.0
11	GK	21	ILE	3.0
2	AB	139	LYS	3.0
19	GS	59	PRO	3.0
20	IT	98	PRO	3.0
22	JB	2867	G	3.0
53	J7	42	LYS	3.0
42	DV	31	GLY	3.0
13	AM	52	GLU	3.0
23	HA	54	U	3.0
32	JL	104	GLU	3.0
22	JB	532	A	3.0
53	F7	72	GLN	3.0
6	CF	49	ALA	3.0
34	FN	118	ALA	3.0
7	AG	131	LYS	3.0
28	BH	179	THR	3.0
40	FT	134	LYS	3.0
1	IA	1156	G	3.0
22	HB	2750	G	3.0
24	FD	165	VAL	3.0
2	EB	228	GLY	3.0
4	GD	193	ASP	3.0

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Mol	Chain	Res	Type	RSRZ
22	JB	1601	U	3.0
40	DT	112	GLY	3.0
42	BV	50	GLY	3.0
53	B7	140	ASN	3.0
4	ID	150	GLU	3.0
24	HD	269	PHE	3.0
1	EA	1408	A	3.0
22	BB	1840	A	3.0
22	FB	1468	A	3.0
31	HK	171	LEU	3.0
4	GD	201	GLN	3.0
20	AT	57	ARG	3.0
25	BE	66	HIS	3.0
28	BH	63	ALA	3.0
53	J7	194	ALA	3.0
5	GE	144	THR	3.0
28	BH	118	PRO	3.0
34	BN	79	PRO	3.0
1	CA	1407	C	3.0
22	BB	2790	C	3.0
23	FA	38	C	3.0
42	JV	31	GLY	3.0
2	CB	180	LEU	3.0
4	GD	154	ASN	3.0
20	GT	51	GLU	3.0
22	DB	1299	A	3.0
2	CB	36	ARG	3.0
4	ED	30	LYS	3.0
5	GE	25	ARG	3.0
18	CR	21	LYS	3.0
1	CA	1119	C	3.0
1	IA	1162	C	3.0
12	IL	74	GLY	3.0
13	EM	43	THR	3.0
22	BB	1246	G	3.0
22	FB	2646	C	3.0
22	HB	2788	C	3.0
27	HG	149	THR	3.0
28	BH	135	GLY	3.0
7	GG	59	LEU	3.0
1	CA	787	A	3.0
12	GL	106	ASP	3.0

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Mol	Chain	Res	Type	RSRZ
22	JB	1255	A	3.0
24	BD	171	ASP	3.0
32	BL	49	ASP	3.0
47	F1	23	GLU	3.0
53	B7	50	GLU	3.0
38	BR	30	LYS	3.0
28	DH	19	ALA	3.0
53	B7	148	ILE	3.0
4	AD	88	VAL	3.0
7	AG	23	VAL	3.0
53	J7	120	ALA	3.0
9	EI	98	PRO	3.0
1	GA	698	G	3.0
14	IN	44	LEU	3.0
22	BB	2781	G	3.0
34	HN	8	THR	3.0
22	JB	511	A	3.0
2	AB	111	ARG	3.0
37	FQ	113	LYS	3.0
49	D3	8	ILE	3.0
39	HS	99	GLN	3.0
4	ID	16	GLY	3.0
12	CL	125	PRO	3.0
24	FD	127	LEU	3.0
28	HH	5	GLY	3.0
9	AI	88	TYR	3.0
9	CI	88	TYR	3.0
22	JB	506	G	3.0
28	HH	123	PHE	3.0
13	AM	122	LYS	3.0
15	EO	4	THR	3.0
22	FB	1910	A	3.0
53	J7	47	LYS	3.0
4	ID	179	GLU	3.0
13	GM	50	GLU	3.0
38	HR	102	GLU	3.0
47	H1	47	GLU	3.0
47	H1	51	ASP	3.0
53	D7	89	GLU	3.0
32	FL	89	ILE	3.0
49	B3	44	ALA	3.0
6	CF	51	PRO	3.0

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Mol	Chain	Res	Type	RSRZ
6	GF	96	PRO	3.0
22	HB	316	C	3.0
22	HB	2715	C	3.0
7	GG	130	GLY	3.0
1	AA	800	G	3.0
1	CA	685	G	3.0
1	IA	1227	A	2.9
22	DB	2641	A	2.9
22	JB	1193	G	3.0
22	JB	1294	G	3.0
22	JB	2190	A	2.9
49	H3	46	LYS	3.0
1	CA	677	U	2.9
19	AS	64	GLU	2.9
19	CS	64	GLU	2.9
22	DB	3180	U	2.9
27	BG	74	ILE	2.9
27	JG	101	GLU	2.9
11	IK	15	ALA	2.9
33	BM	15	ASP	2.9
1	AA	689	C	2.9
1	EA	345	C	2.9
21	Ea	30	GLN	2.9
22	DB	1876	C	2.9
37	DQ	119	SER	2.9
53	H7	145	SER	2.9
8	CH	72	PRO	2.9
12	IL	80	HIS	2.9
25	JE	74	PRO	2.9
31	BK	170	PRO	2.9
43	BW	109	GLN	2.9
53	F7	94	GLN	2.9
37	DQ	112	GLY	2.9
2	AB	8	LYS	2.9
48	F2	39	LYS	2.9
1	AA	1299	A	2.9
22	FB	248	A	2.9
22	HB	506	G	2.9
22	DB	2850	U	2.9
39	JS	98	ILE	2.9
6	EF	95	GLU	2.9
26	DF	146	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
37	DQ	35	VAL	2.9
6	IF	49	ALA	2.9
11	AK	68	ALA	2.9
14	IN	5	ALA	2.9
16	CP	47	ASP	2.9
53	F7	79	ALA	2.9
1	CA	1378	C	2.9
4	AD	64	LEU	2.9
6	AF	18	GLN	2.9
7	IG	64	GLN	2.9
14	AN	51	GLY	2.9
32	BL	48	GLY	2.9
32	BL	128	SER	2.9
42	BV	35	LYS	2.9
42	BV	65	PRO	2.9
8	EH	75	ARG	2.9
1	AA	926	G	2.9
1	CA	278	G	2.9
1	CA	672	U	2.9
1	EA	1156	G	2.9
22	DB	1470	G	2.9
22	FB	1995	G	2.9
22	FB	2705	A	2.9
22	HB	1225	G	2.9
22	JB	858	G	2.9
53	B7	39	ILE	2.9
3	CC	86	VAL	2.9
4	CD	17	VAL	2.9
2	CB	168	THR	2.9
13	IM	37	THR	2.9
18	AR	25	THR	2.9
24	DD	112	THR	2.9
3	CC	206	GLU	2.9
7	AG	16	LEU	2.9
1	CA	841	C	2.9
22	FB	2537	C	2.9
32	BL	120	ASP	2.9
37	HQ	19	ASP	2.9
7	IG	63	LYS	2.9
15	GO	2	PRO	2.9
28	JH	29	PRO	2.9
32	FL	15	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
17	EQ	29	HIS	2.9
38	BR	29	SER	2.9
53	J7	70	SER	2.9
1	AA	1339	A	2.9
9	CI	4	TYR	2.9
12	AL	64	TYR	2.9
32	FL	13	ASN	2.9
22	FB	3153	G	2.9
22	JB	1225	G	2.9
22	JB	2750	G	2.9
47	J1	21	VAL	2.9
9	GI	50	LEU	2.9
37	DQ	115	ALA	2.9
33	JM	92	THR	2.9
1	AA	999	C	2.9
16	CP	50	LYS	2.9
22	DB	2855	C	2.9
22	FB	3147	C	2.9
36	DP	82	LYS	2.9
2	CB	65	GLY	2.9
2	CB	228	GLY	2.9
43	DW	110	GLY	2.9
22	FB	89	A	2.9
5	GE	65	ASN	2.9
6	IF	13	ASN	2.9
11	IK	21	ILE	2.9
1	EA	998	G	2.9
15	EO	45	VAL	2.9
21	Aa	57	ASN	2.9
22	DB	530	G	2.9
22	HB	23	G	2.9
22	HB	2460	G	2.9
2	EB	161	ALA	2.9
14	GN	6	LEU	2.9
53	F7	2	LEU	2.9
1	EA	999	C	2.9
22	FB	1991	C	2.9
39	HS	67	LYS	2.9
3	CC	161	GLU	2.9
6	GF	24	GLU	2.9
24	BD	272	THR	2.9
29	JI	47	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
39	DS	49	GLU	2.9
2	GB	111	ARG	2.9
3	GC	38	ARG	2.9
1	GA	789	U	2.9
14	GN	54	PRO	2.9
7	GG	13	GLN	2.9
22	BB	1521	U	2.9
24	BD	137	PRO	2.9
37	FQ	112	GLY	2.9
42	FV	31	GLY	2.9
28	HH	49	GLN	2.9
22	BB	1299	A	2.9
22	DB	248	A	2.9
42	DV	61	SER	2.9
53	J7	67	VAL	2.9
1	GA	187	G	2.9
22	HB	858	G	2.9
30	FJ	17	ALA	2.9
48	B2	59	ALA	2.9
22	BB	3142	C	2.9
22	BB	2263	C	2.9
25	JE	1	MET	2.9
1	GA	180	U	2.9
1	GA	192	U	2.9
4	GD	197	PRO	2.9
20	AT	103	GLY	2.9
22	BB	2663	U	2.9
28	BH	36	PRO	2.9
37	DQ	74	GLY	2.9
3	AC	17	ASP	2.9
10	CJ	12	ASP	2.9
1	IA	632	A	2.9
5	AE	56	GLN	2.9
11	GK	48	ILE	2.9
11	IK	13	GLN	2.9
17	IQ	93	GLN	2.9
21	Aa	45	GLN	2.9
44	BX	85	GLN	2.9
3	AC	42	LEU	2.9
3	CC	68	VAL	2.9
13	EM	60	VAL	2.9
26	DF	178	TYR	2.9

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Mol	Chain	Res	Type	RSRZ
1	CA	424	G	2.9
43	DW	104	SER	2.9
49	D3	54	LYS	2.9
53	H7	7	SER	2.9
32	JL	106	ARG	2.9
1	EA	1211	U	2.9
1	IA	516	U	2.9
28	HH	167	GLU	2.9
32	FL	62	GLY	2.9
33	BM	84	GLU	2.9
37	HQ	112	GLY	2.9
43	JW	97	PRO	2.9
22	BB	1525	A	2.9
2	CB	154	LEU	2.9
2	IB	160	ASP	2.9
4	ID	177	ASP	2.9
22	FB	2866	A	2.9
26	JF	184	ASP	2.9
28	JH	125	VAL	2.9
33	FM	15	ASP	2.9
42	DV	54	ILE	2.9
53	J7	72	GLN	2.9
11	GK	75	TYR	2.9
13	CM	34	LEU	2.9
27	HG	55	LYS	2.8
42	BV	28	LYS	2.8
1	CA	800	G	2.8
1	GA	423	G	2.8
22	BB	2818	G	2.8
4	AD	191	ARG	2.8
25	HE	60	ASN	2.8
25	FE	67	PHE	2.8
44	DX	8	GLY	2.8
1	IA	50	A	2.8
42	DV	63	THR	2.8
53	D7	2	LEU	2.8
53	F7	165	VAL	2.8
2	IB	195	ASP	2.8
40	BT	88	ASP	2.8
7	AG	83	ALA	2.8
20	AT	106	ALA	2.8
1	EA	1412	C	2.8

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Mol	Chain	Res	Type	RSRZ
1	GA	689	C	2.8
1	GA	796	C	2.8
22	BB	19	C	2.8
22	DB	1221	C	2.8
22	DB	2659	C	2.8
22	HB	2287	G	2.8
22	HB	2402	U	2.8
22	HB	2537	C	2.8
22	JB	1878	C	2.8
23	DA	35	C	2.8
2	EB	38	GLY	2.8
28	BH	38	ASN	2.8
42	HV	68	GLY	2.8
8	IH	136	GLU	2.8
21	Ga	81	GLU	2.8
1	IA	412	A	2.8
22	DB	1300	A	2.8
22	FB	532	A	2.8
28	HH	125	VAL	2.8
42	DV	69	GLN	2.8
1	EA	1000	U	2.8
22	DB	2857	C	2.8
22	FB	1878	C	2.8
22	HB	2855	C	2.8
22	HB	2870	C	2.8
22	JB	1926	U	2.8
24	DD	184	ARG	2.8
28	BH	176	ALA	2.8
1	AA	673	G	2.8
1	EA	633	G	2.8
1	GA	191	G	2.8
1	IA	1295	G	2.8
22	JB	1995	G	2.8
19	GS	8	GLY	2.8
3	CC	45	LYS	2.8
1	GA	1534	A	2.8
2	AB	86	GLU	2.8
7	AG	67	GLU	2.8
7	GG	80	VAL	2.8
11	IK	30	VAL	2.8
12	EL	77	LEU	2.8
18	GR	88	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
24	DD	126	LYS	2.8
25	JE	33	ILE	2.8
28	HH	115	ILE	2.8
45	DY	37	LEU	2.8
53	D7	48	LEU	2.8
22	BB	1896	A	2.8
22	FB	1895	A	2.8
22	HB	2540	A	2.8
22	JB	2713	A	2.8
5	GE	56	GLN	2.8
17	AQ	20	THR	2.8
28	JH	59	GLN	2.8
10	CJ	18	ALA	2.8
11	CK	65	ALA	2.8
25	JE	177	ALA	2.8
1	AA	703	G	2.8
22	BB	2574	G	2.8
22	DB	2862	G	2.8
22	FB	2617	G	2.8
12	CL	126	LYS	2.8
13	AM	31	LYS	2.8
13	GM	122	LYS	2.8
24	HD	270	ILE	2.8
37	JQ	42	GLY	2.8
14	IN	54	PRO	2.8
41	FU	2	SER	2.8
42	BV	51	VAL	2.8
16	GP	57	ARG	2.8
24	DD	268	ARG	2.8
11	EK	87	THR	2.8
11	GK	41	THR	2.8
29	DI	49	GLN	2.8
39	JS	26	GLN	2.8
22	FB	1631	C	2.8
22	JB	1190	C	2.8
47	J1	22	MET	2.8
25	HE	18	ASP	2.8
1	AA	674	G	2.8
1	CA	690	G	2.8
1	CA	691	G	2.8
1	CA	998	G	2.8
2	AB	44	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
3	GC	42	LEU	2.8
3	IC	158	GLY	2.8
18	ER	76	LEU	2.8
22	BB	371	G	2.8
22	DB	1904	G	2.8
22	DB	2661	G	2.8
7	GG	19	GLY	2.8
39	BS	98	ILE	2.8
39	DS	100	GLY	2.8
38	FR	103	PRO	2.8
41	JU	2	SER	2.8
3	EC	143	GLU	2.8
4	AD	150	GLU	2.8
4	ED	47	ARG	2.8
9	EI	93	ARG	2.8
20	CT	51	GLU	2.8
39	HS	65	ARG	2.8
20	AT	90	GLN	2.8
22	HB	1183	C	2.8
49	B3	47	HIS	2.8
2	AB	60	ASP	2.8
3	AC	52	LEU	2.8
7	IG	59	LEU	2.8
53	B7	2	LEU	2.8
6	AF	8	ILE	2.8
11	AK	95	ILE	2.8
12	EL	29	GLY	2.8
22	FB	1890	G	2.8
22	HB	508	G	2.8
22	HB	1992	G	2.8
43	BW	138	VAL	2.8
43	HW	110	GLY	2.8
1	CA	1339	A	2.8
22	JB	1299	A	2.8
32	BL	131	PRO	2.8
1	GA	672	U	2.8
2	AB	175	ARG	2.8
3	AC	132	ARG	2.8
3	EC	38	ARG	2.8
29	BI	10	ARG	2.8
17	AQ	24	GLU	2.8
1	EA	1490	C	2.8

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Mol	Chain	Res	Type	RSRZ
11	AK	64	ALA	2.8
53	H7	75	TYR	2.8
19	IS	57	HIS	2.8
32	DL	13	ASN	2.8
2	EB	181	PHE	2.8
6	EF	26	ILE	2.8
6	IF	83	ASP	2.8
11	IK	56	GLY	2.8
13	IM	85	GLY	2.8
17	CQ	85	VAL	2.8
25	JE	25	VAL	2.8
53	B7	178	ASP	2.8
22	BB	24	G	2.8
1	EA	72	A	2.8
7	GG	72	ARG	2.8
11	IK	35	PRO	2.8
22	BB	2856	U	2.8
22	DB	1681	A	2.8
22	FB	561	U	2.8
28	FH	126	PRO	2.8
53	J7	55	PRO	2.8
22	JB	526	C	2.8
11	IK	25	TYR	2.7
6	IF	94	GLN	2.7
21	Ca	30	GLN	2.7
20	AT	53	LEU	2.7
27	HG	79	LEU	2.7
3	EC	95	THR	2.7
13	EM	45	VAL	2.7
28	BH	85	ILE	2.7
44	DX	86	THR	2.7
51	H5	33	ASN	2.7
1	EA	1121	U	2.7
1	GA	686	U	2.7
12	IL	103	GLY	2.7
28	JH	14	GLY	2.7
1	GA	1295	G	2.7
2	AB	226	ARG	2.7
22	DB	1189	G	2.7
22	DB	2852	G	2.7
22	FB	2867	G	2.7
32	HL	60	PRO	2.7

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Mol	Chain	Res	Type	RSRZ
37	HQ	96	ARG	2.7
1	IA	679	C	2.7
2	AB	156	LYS	2.7
2	CB	120	ALA	2.7
11	AK	65	ALA	2.7
12	EL	28	LYS	2.7
12	GL	108	ALA	2.7
22	JB	300	C	2.7
22	JB	1348	C	2.7
28	JH	119	ALA	2.7
7	IG	154	TYR	2.7
2	AB	95	GLN	2.7
6	GF	18	GLN	2.7
3	CC	39	ILE	2.7
3	IC	66	VAL	2.7
9	GI	63	ILE	2.7
26	HF	125	ILE	2.7
53	H7	9	ILE	2.7
3	AC	192	THR	2.7
9	EI	29	ASN	2.7
22	BB	2789	U	2.7
24	FD	273	ARG	2.7
37	HQ	43	ASN	2.7
51	D5	33	ASN	2.7
53	F7	150	ARG	2.7
1	EA	1023	G	2.7
1	GA	671	G	2.7
22	DB	1291	G	2.7
22	FB	2582	G	2.7
32	BL	60	PRO	2.7
21	Ia	14	ALA	2.7
22	BB	2195	C	2.7
28	BH	156	ALA	2.7
30	HJ	86	LYS	2.7
10	EJ	25	GLU	2.7
32	BL	34	LEU	2.7
53	D7	147	TYR	2.7
3	EC	103	VAL	2.7
3	GC	68	VAL	2.7
3	GC	84	ILE	2.7
2	EB	65	GLY	2.7
3	IC	126	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
5	EE	42	GLY	2.7
24	JD	183	ARG	2.7
32	HL	33	GLY	2.7
39	BS	65	ARG	2.7
22	DB	2540	A	2.7
22	HB	897	A	2.7
22	HB	1996	A	2.7
32	BL	36	THR	2.7
53	H7	171	THR	2.7
8	CH	52	ASP	2.7
49	H3	45	LYS	2.7
3	AC	168	ALA	2.7
21	Ga	14	ALA	2.7
25	BE	55	ALA	2.7
28	DH	176	ALA	2.7
28	JH	19	ALA	2.7
53	F7	187	LEU	2.7
53	J7	65	LEU	2.7
6	IF	95	GLU	2.7
7	AG	85	TYR	2.7
9	AI	2	GLU	2.7
28	HH	40	GLU	2.7
32	HL	89	ILE	2.7
46	HZ	33	GLU	2.7
24	BD	135	PHE	2.7
24	DD	185	VAL	2.7
39	BS	47	PHE	2.7
39	DS	57	GLN	2.7
48	H2	35	GLN	2.7
2	IB	175	ARG	2.7
2	IB	217	ARG	2.7
12	GL	81	SER	2.7
15	AO	64	ARG	2.7
18	GR	35	ARG	2.7
37	FQ	96	ARG	2.7
1	IA	1486	G	2.7
6	AF	51	PRO	2.7
22	FB	1338	G	2.7
22	JB	413	G	2.7
40	BT	7	THR	2.7
48	J2	28	PRO	2.7
1	IA	1112	C	2.7

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Mol	Chain	Res	Type	RSRZ
20	GT	9	ASN	2.7
22	DB	527	C	2.7
22	FB	2660	C	2.7
23	BA	35	C	2.7
23	HA	35	C	2.7
48	J2	29	ASN	2.7
2	CB	13	ALA	2.7
4	CD	195	ALA	2.7
53	J7	90	LEU	2.7
3	AC	206	GLU	2.7
6	IF	8	ILE	2.7
37	FQ	35	VAL	2.7
53	B7	75	TYR	2.7
11	IK	78	GLN	2.7
18	GR	18	ARG	2.7
3	CC	80	GLY	2.7
19	ES	8	GLY	2.7
43	DW	170	SER	2.7
1	CA	999	C	2.7
1	IA	1161	C	2.7
22	FB	2816	C	2.7
44	JX	86	THR	2.7
4	AD	48	ALA	2.7
26	DF	2	ALA	2.7
34	FN	80	ALA	2.7
53	F7	76	ALA	2.7
7	GG	23	VAL	2.7
22	HB	1247	U	2.7
22	HB	1926	U	2.7
53	D7	148	ILE	2.7
32	HL	18	GLU	2.7
32	JL	116	ARG	2.7
4	ED	23	GLY	2.7
24	DD	167	GLY	2.7
24	JD	168	LYS	2.7
28	BH	5	GLY	2.7
37	DQ	6	LYS	2.7
11	CK	16	SER	2.7
1	AA	1400	C	2.7
1	GA	797	C	2.7
2	AB	154	LEU	2.7
4	ID	19	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
12	EL	125	PRO	2.7
18	AR	17	SER	2.7
22	DB	2658	A	2.7
22	FB	373	A	2.7
22	DB	2660	C	2.7
24	BD	132	PRO	2.7
31	JK	171	LEU	2.7
32	DL	14	SER	2.7
33	BM	12	SER	2.7
53	J7	116	SER	2.7
2	IB	123	ALA	2.7
10	AJ	32	ALA	2.7
14	GN	5	ALA	2.7
22	DB	2460	G	2.7
23	JA	54	U	2.7
4	CD	191	ARG	2.7
11	CK	30	VAL	2.7
12	IL	82	VAL	2.7
33	HM	15	ASP	2.7
42	HV	51	VAL	2.7
53	B7	161	ASP	2.7
35	FO	30	ARG	2.7
2	EB	78	GLN	2.7
6	GF	69	GLU	2.7
11	GK	11	LYS	2.7
12	GL	57	LYS	2.7
15	AO	44	LYS	2.7
3	EC	41	GLY	2.7
21	Aa	8	GLN	2.7
25	JE	179	GLU	2.7
32	HL	102	GLN	2.7
42	BV	32	GLN	2.7
1	CA	792	A	2.7
22	BB	1949	A	2.7
22	JB	21	A	2.7
1	EA	1335	C	2.7
22	FB	2790	C	2.7
30	DJ	21	PRO	2.7
43	HW	170	SER	2.7
43	JW	170	SER	2.7
1	AA	1134	G	2.7
1	GA	1000	U	2.7

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Mol	Chain	Res	Type	RSRZ
2	AB	34	ALA	2.7
3	CC	50	ALA	2.7
22	FB	24	G	2.7
22	HB	1900	U	2.7
43	JW	149	ALA	2.7
2	CB	226	ARG	2.7
26	FF	185	ARG	2.7
31	JK	81	VAL	2.7
5	GE	147	ASP	2.6
27	JG	77	PHE	2.6
9	AI	95	LYS	2.6
49	D3	3	LYS	2.6
28	HH	82	GLY	2.6
40	BT	6	GLN	2.6
22	DB	1910	A	2.6
22	HB	1334	A	2.6
1	AA	1112	C	2.6
22	BB	2803	C	2.6
22	JB	22	C	2.6
48	F2	59	ALA	2.6
1	CA	1494	G	2.6
1	EA	1295	G	2.6
2	EB	208	ILE	2.6
4	AD	50	ARG	2.6
6	IF	26	ILE	2.6
11	EK	95	ILE	2.6
24	DD	270	ILE	2.6
28	BH	125	VAL	2.6
32	FL	83	ARG	2.6
52	B6	30	VAL	2.6
13	AM	43	THR	2.6
28	JH	48	ASP	2.6
9	GI	23	ASN	2.6
13	CM	56	LEU	2.6
42	HV	64	ASN	2.6
1	EA	676	A	2.6
1	GA	706	A	2.6
22	BB	1681	A	2.6
22	FB	1255	A	2.6
22	HB	1949	A	2.6
29	FI	49	GLN	2.6
39	DS	44	GLN	2.6

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Mol	Chain	Res	Type	RSRZ
1	CA	1030	U	2.6
1	IA	677	U	2.6
22	BB	1234	C	2.6
8	IH	74	PRO	2.6
13	AM	41	PRO	2.6
24	BD	140	ALA	2.6
25	DE	85	ALA	2.6
37	BQ	16	ILE	2.6
37	FQ	44	ARG	2.6
53	J7	76	ALA	2.6
1	EA	638	G	2.6
1	IA	638	G	2.6
9	II	33	PHE	2.6
9	II	127	LYS	2.6
22	BB	2804	G	2.6
22	DB	1842	G	2.6
22	FB	1332	G	2.6
30	BJ	16	LYS	2.6
53	F7	116	SER	2.6
31	DK	168	THR	2.6
37	DQ	21	THR	2.6
2	AB	89	GLY	2.6
14	CN	44	LEU	2.6
1	EA	801	U	2.6
2	GB	35	GLU	2.6
2	GB	135	GLN	2.6
22	DB	2190	A	2.6
22	FB	1869	A	2.6
22	HB	502	A	2.6
22	HB	724	C	2.6
22	HB	1994	U	2.6
2	IB	131	PRO	2.6
24	HD	195	ALA	2.6
25	FE	66	HIS	2.6
27	JG	109	PRO	2.6
38	BR	114	ARG	2.6
38	HR	114	ARG	2.6
43	HW	141	MET	2.6
43	HW	171	VAL	2.6
45	HY	33	ALA	2.6
53	F7	167	VAL	2.6
2	EB	75	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
12	GL	28	LYS	2.6
26	JF	138	LYS	2.6
39	FS	32	LYS	2.6
22	BB	2664	G	2.6
22	HB	894	G	2.6
2	AB	107	THR	2.6
11	AK	98	LEU	2.6
14	IN	6	LEU	2.6
26	FF	178	TYR	2.6
35	FO	36	THR	2.6
13	CM	47	ASP	2.6
22	BB	2189	A	2.6
22	BB	2613	A	2.6
5	IE	56	GLN	2.6
21	Ga	43	GLU	2.6
22	BB	1183	C	2.6
22	JB	721	C	2.6
23	DA	4	C	2.6
42	FV	66	GLN	2.6
6	CF	3	ARG	2.6
7	IG	84	ASN	2.6
8	EH	104	ARG	2.6
9	AI	34	ASN	2.6
3	AC	76	VAL	2.6
19	CS	42	PRO	2.6
19	ES	59	PRO	2.6
21	Ca	14	ALA	2.6
25	BE	1	MET	2.6
30	FJ	35	MET	2.6
40	JT	8	PHE	2.6
1	IA	671	G	2.6
22	BB	2805	G	2.6
22	FB	2536	G	2.6
22	HB	530	G	2.6
22	HB	2642	G	2.6
22	HB	2786	G	2.6
11	IK	16	SER	2.6
37	FQ	119	SER	2.6
14	GN	51	GLY	2.6
22	DB	1926	U	2.6
22	FB	1990	U	2.6
49	J3	18	THR	2.6

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Mol	Chain	Res	Type	RSRZ
1	AA	1378	C	2.6
1	AA	1492	A	2.6
1	CA	277	C	2.6
1	CA	696	A	2.6
22	BB	248	A	2.6
22	DB	1901	A	2.6
22	JB	2792	C	2.6
23	BA	101	A	2.6
24	JD	267	ASP	2.6
2	EB	217	ARG	2.6
9	CI	87	GLN	2.6
42	HV	32	GLN	2.6
5	AE	52	PRO	2.6
10	GJ	75	ILE	2.6
12	AL	104	VAL	2.6
13	GM	60	VAL	2.6
31	JK	83	ILE	2.6
39	JS	67	LYS	2.6
32	JL	123	PHE	2.6
1	GA	1120	G	2.6
22	BB	1992	G	2.6
22	HB	371	G	2.6
22	BB	1551	U	2.6
22	BB	2472	U	2.6
22	DB	2472	U	2.6
22	FB	1601	U	2.6
1	AA	841	C	2.6
1	GA	1132	C	2.6
5	IE	125	SER	2.6
22	DB	2537	C	2.6
31	FK	47	SER	2.6
5	EE	15	ARG	2.6
10	EJ	14	LYS	2.6
12	IL	34	ARG	2.6
20	CT	86	ARG	2.6
3	EC	76	VAL	2.6
6	CF	88	VAL	2.6
4	GD	189	PRO	2.6
13	CM	33	ALA	2.6
16	EP	83	GLU	2.6
24	DD	174	ILE	2.6
40	DT	18	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
32	DL	60	PRO	2.6
48	F2	27	ALA	2.6
53	H7	120	ALA	2.6
3	EC	102	ASN	2.6
7	CG	22	LEU	2.6
1	EA	1030	U	2.6
22	JB	2766	U	2.6
3	IC	74	GLY	2.6
8	GH	71	GLY	2.6
33	HM	11	GLY	2.6
5	CE	153	LYS	2.6
6	GF	2	ARG	2.6
12	CL	114	LYS	2.6
21	Ga	86	LYS	2.6
22	DB	495	C	2.6
23	FA	35	C	2.6
49	B3	28	ARG	2.6
5	IE	34	VAL	2.6
12	GL	104	VAL	2.6
14	GN	7	ILE	2.6
24	DD	105	ILE	2.6
28	BH	131	ILE	2.6
32	FL	128	SER	2.6
10	AJ	33	GLN	2.6
15	EO	75	PRO	2.6
18	GR	20	ALA	2.6
32	JL	124	MET	2.6
38	DR	111	ASP	2.6
53	H7	91	GLN	2.6
2	IB	155	LEU	2.6
53	B7	200	LEU	2.6
6	EF	7	ASN	2.5
49	D3	30	ASN	2.5
1	CA	1174	G	2.5
22	HB	1995	G	2.5
22	JB	2617	G	2.5
2	EB	226	ARG	2.5
3	IC	159	GLY	2.5
8	EH	68	ARG	2.5
53	J7	23	LYS	2.5
53	J7	150	ARG	2.5
53	J7	195	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
24	HD	173	VAL	2.5
3	AC	90	GLU	2.5
31	FK	163	PRO	2.5
4	ED	19	LEU	2.5
24	FD	182	LEU	2.5
31	HK	37	ASP	2.5
39	FS	96	LEU	2.5
40	FT	20	LEU	2.5
1	EA	1024	G	2.5
1	EA	1154	G	2.5
1	EA	1379	G	2.5
12	AL	123	LYS	2.5
1	AA	792	A	2.5
1	CA	676	A	2.5
1	EA	675	A	2.5
1	GA	1112	C	2.5
2	IB	151	GLY	2.5
3	AC	159	GLY	2.5
13	IM	64	TRP	2.5
22	FB	1904	G	2.5
22	FB	2460	G	2.5
22	JB	1298	G	2.5
24	JD	139	GLY	2.5
2	CB	208	ILE	2.5
2	AB	120	ALA	2.5
2	CB	171	ALA	2.5
20	ET	12	ALA	2.5
25	FE	73	ALA	2.5
3	IC	136	GLN	2.5
4	GD	186	LEU	2.5
11	IK	31	THR	2.5
27	JG	172	SER	2.5
31	JK	39	GLN	2.5
29	FI	47	GLU	2.5
31	JK	159	SER	2.5
48	F2	26	THR	2.5
53	B7	68	PRO	2.5
1	EA	1278	U	2.5
9	EI	48	GLU	2.5
34	HN	49	GLU	2.5
21	Ca	89	HIS	2.5
2	IB	106	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
3	AC	93	LYS	2.5
6	AF	3	ARG	2.5
7	EG	79	ARG	2.5
26	DF	138	LYS	2.5
28	BH	25	LYS	2.5
37	BQ	123	ARG	2.5
22	BB	2662	C	2.5
22	FB	2659	C	2.5
22	HB	1340	C	2.5
22	JB	1349	A	2.5
26	FF	114	GLY	2.5
30	HJ	97	GLY	2.5
7	IG	65	ALA	2.5
25	FE	85	ALA	2.5
29	FI	50	LEU	2.5
32	BL	130	ALA	2.5
36	JP	59	LEU	2.5
12	GL	5	PRO	2.5
17	EQ	28	PRO	2.5
10	IJ	87	THR	2.5
17	GQ	96	GLN	2.5
22	HB	529	U	2.5
53	F7	68	PRO	2.5
24	FD	112	THR	2.5
28	HH	164	PHE	2.5
33	BM	92	THR	2.5
10	CJ	14	LYS	2.5
26	HF	129	LYS	2.5
28	FH	21	ASP	2.5
18	GR	55	ARG	2.5
1	AA	280	C	2.5
22	DB	1991	C	2.5
23	FA	37	C	2.5
1	IA	1408	A	2.5
22	HB	248	A	2.5
22	HB	1241	G	2.5
28	HH	15	VAL	2.5
3	CC	42	LEU	2.5
4	AD	19	LEU	2.5
13	AM	34	LEU	2.5
1	CA	1000	U	2.5
22	FB	2850	U	2.5

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Mol	Chain	Res	Type	RSRZ
32	HL	66	ALA	2.5
53	B7	149	ASN	2.5
38	DR	103	PRO	2.5
18	GR	19	LYS	2.5
53	F7	114	GLN	2.5
2	EB	21	ARG	2.5
8	AH	50	ARG	2.5
20	GT	50	GLU	2.5
24	DD	272	THR	2.5
24	HD	265	THR	2.5
25	JE	82	ARG	2.5
37	JQ	41	GLU	2.5
4	ED	190	ASP	2.5
6	AF	93	SER	2.5
8	EH	82	HIS	2.5
28	BH	48	ASP	2.5
48	D2	53	ASP	2.5
5	IE	13	ILE	2.5
11	AK	30	VAL	2.5
14	IN	28	GLY	2.5
16	CP	79	VAL	2.5
20	CT	100	ILE	2.5
28	FH	14	GLY	2.5
34	FN	89	GLY	2.5
1	IA	1334	G	2.5
3	GC	94	LEU	2.5
17	IQ	15	MET	2.5
22	BB	318	G	2.5
22	DB	3153	G	2.5
24	DD	133	LEU	2.5
1	GA	697	U	2.5
1	IA	956	U	2.5
6	EF	49	ALA	2.5
13	AM	33	ALA	2.5
22	HB	1295	U	2.5
31	HK	152	ALA	2.5
6	CF	96	PRO	2.5
11	GK	35	PRO	2.5
25	HE	17	ASN	2.5
28	DH	123	PHE	2.5
31	JK	36	ASN	2.5
9	EI	87	GLN	2.5

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Mol	Chain	Res	Type	RSRZ
20	GT	57	ARG	2.5
17	GQ	78	GLU	2.5
1	IA	1400	C	2.5
1	EA	792	A	2.5
4	AD	170	VAL	2.5
5	AE	69	VAL	2.5
22	DB	2710	C	2.5
22	JB	1242	A	2.5
28	BH	17	VAL	2.5
53	B7	40	ASP	2.5
53	B7	45	ASP	2.5
53	B7	143	ASP	2.5
53	B7	129	GLY	2.5
53	J7	190	ILE	2.5
4	GD	19	LEU	2.5
3	EC	65	ALA	2.5
53	B7	127	ALA	2.5
2	EB	122	PHE	2.5
12	IL	13	LYS	2.5
4	AD	168	ARG	2.5
5	GE	40	ARG	2.5
7	EG	64	GLN	2.5
22	JB	1876	C	2.5
1	AA	1377	A	2.5
3	GC	17	ASP	2.5
6	CF	83	ASP	2.5
19	IS	13	ASP	2.5
21	Ia	89	HIS	2.5
43	HW	136	VAL	2.5
22	BB	1242	A	2.5
22	FB	512	A	2.5
22	FB	2616	U	2.5
22	HB	2856	U	2.5
32	HL	128	SER	2.5
43	BW	137	ASP	2.5
15	GO	78	TYR	2.5
43	JW	141	MET	2.5
1	GA	1134	G	2.5
1	IA	998	G	2.5
2	CB	225	ALA	2.5
11	IK	128	ALA	2.5
13	GM	121	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
22	BB	736	G	2.5
22	BB	3196	G	2.5
53	J7	78	LYS	2.5
4	AD	197	PRO	2.5
24	BD	260	ARG	2.5
32	DL	83	ARG	2.5
32	HL	61	ARG	2.5
32	JL	60	PRO	2.5
11	GK	13	GLN	2.5
48	J2	35	GLN	2.5
1	IA	689	C	2.5
11	IK	82	VAL	2.5
3	IC	42	LEU	2.4
4	ED	163	GLU	2.5
22	JB	2715	C	2.5
26	DF	155	GLU	2.5
32	HL	104	GLU	2.5
39	BS	46	VAL	2.5
3	CC	192	THR	2.4
22	BB	12	U	2.4
37	JQ	74	GLY	2.4
43	JW	120	LEU	2.4
44	FX	8	GLY	2.4
53	H7	119	LEU	2.4
22	DB	2633	A	2.4
22	JB	1293	A	2.4
25	BE	38	THR	2.4
3	EC	142	MET	2.4
3	IC	17	ASP	2.4
6	GF	93	SER	2.4
3	AC	169	ALA	2.4
4	ED	164	ALA	2.4
6	CF	101	ALA	2.4
28	JH	96	ALA	2.4
30	HJ	17	ALA	2.4
44	HX	2	ALA	2.4
45	JY	33	ALA	2.4
49	H3	44	ALA	2.4
53	D7	142	ALA	2.4
22	BB	2460	G	2.4
22	HB	1338	G	2.4
27	JG	176	PRO	2.4

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Mol	Chain	Res	Type	RSRZ
17	EQ	16	GLN	2.4
21	Ga	30	GLN	2.4
1	CA	842	U	2.4
6	EF	6	VAL	2.4
22	JB	2195	C	2.4
22	HB	760	U	2.4
26	DF	164	VAL	2.4
28	HH	168	GLN	2.4
28	BH	103	LEU	2.4
53	F7	67	VAL	2.4
4	GD	167	GLY	2.4
21	Ea	10	GLU	2.4
39	FS	16	GLU	2.4
5	IE	145	LYS	2.4
11	AK	106	LYS	2.4
28	DH	111	HIS	2.4
28	BH	57	ASP	2.4
36	FP	44	ASP	2.4
22	DB	3152	G	2.4
13	EM	64	TRP	2.4
3	CC	55	VAL	2.4
4	AD	196	LEU	2.4
11	GK	66	LEU	2.4
15	AO	82	ILE	2.4
15	CO	45	VAL	2.4
20	CT	99	LEU	2.4
22	DB	1230	C	2.4
1	AA	859	A	2.4
1	CA	684	A	2.4
22	FB	1290	A	2.4
22	HB	1667	A	2.4
23	JA	36	A	2.4
28	BH	97	LYS	2.4
28	BH	172	LYS	2.4
30	HJ	49	GLY	2.4
39	FS	67	LYS	2.4
21	Ea	54	ASN	2.4
11	EK	18	ARG	2.4
28	HH	122	THR	2.4
40	FT	105	ARG	2.4
53	J7	189	ALA	2.4
1	GA	1294	G	2.4

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Mol	Chain	Res	Type	RSRZ
22	BB	1332	G	2.4
22	FB	1223	G	2.4
1	EA	707	C	2.4
1	EA	1119	C	2.4
2	EB	80	ILE	2.4
3	AC	207	VAL	2.4
3	CC	91	LEU	2.4
3	GC	101	LEU	2.4
4	GD	178	VAL	2.4
15	CO	3	ILE	2.4
26	JF	164	VAL	2.4
30	DJ	29	GLN	2.4
1	CA	1245	A	2.4
5	IE	66	MET	2.4
8	IH	55	GLY	2.4
25	HE	1	MET	2.4
37	JQ	112	GLY	2.4
6	AF	69	GLU	2.4
19	GS	64	GLU	2.4
28	FH	104	GLU	2.4
53	D7	50	GLU	2.4
7	EG	84	ASN	2.4
12	GL	75	HIS	2.4
26	HF	128	ALA	2.4
32	JL	83	ARG	2.4
24	DD	259	THR	2.4
26	BF	64	THR	2.4
31	HK	32	TYR	2.4
1	AA	278	G	2.4
22	JB	510	G	2.4
26	HF	124	ASP	2.4
41	BU	5	ASP	2.4
22	JB	561	U	2.4
42	DV	65	PRO	2.4
42	JV	2	PRO	2.4
22	BB	721	C	2.4
22	HB	2792	C	2.4
35	HO	100	VAL	2.4
52	F6	8	LYS	2.4
1	AA	696	A	2.4
1	CA	845	A	2.4
1	IA	915	A	2.4

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Mol	Chain	Res	Type	RSRZ
3	CC	81	GLY	2.4
22	DB	532	A	2.4
22	FB	897	A	2.4
22	FB	1293	A	2.4
40	JT	13	GLN	2.4
5	IE	79	GLU	2.4
28	BH	62	ARG	2.4
42	JV	42	ARG	2.4
40	DT	114	ALA	2.4
42	JV	49	GLU	2.4
12	AL	42	THR	2.4
31	JK	84	ASN	2.4
32	HL	13	ASN	2.4
1	CA	425	G	2.4
1	EA	682	G	2.4
18	GR	76	LEU	2.4
21	Ea	50	ASP	2.4
22	BB	2541	U	2.4
22	DB	2642	G	2.4
22	DB	2766	U	2.4
22	FB	370	U	2.4
39	JS	7	THR	2.4
42	HV	21	THR	2.4
47	D1	27	THR	2.4
22	JB	1254	G	2.4
22	JB	2287	G	2.4
32	JL	85	ASP	2.4
47	B1	51	ASP	2.4
22	DB	1925	C	2.4
24	FD	170	SER	2.4
25	FE	90	SER	2.4
33	JM	12	SER	2.4
39	DS	98	ILE	2.4
5	IE	124	GLY	2.4
22	DB	3146	A	2.4
22	FB	1300	A	2.4
28	DH	174	GLY	2.4
30	BJ	85	GLY	2.4
42	BV	69	GLN	2.4
2	CB	34	ALA	2.4
18	AR	28	GLU	2.4
20	AT	97	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
20	IT	93	GLU	2.4
24	DD	109	GLU	2.4
32	JL	16	ALA	2.4
32	JL	18	GLU	2.4
2	AB	33	TYR	2.4
6	AF	97	PHE	2.4
1	CA	1295	G	2.4
1	EA	205	G	2.4
1	IA	1033	G	2.4
12	IL	83	VAL	2.4
2	GB	195	ASP	2.4
3	CC	147	LYS	2.4
4	CD	30	LYS	2.4
6	GF	9	VAL	2.4
4	GD	177	ASP	2.4
13	EM	121	LYS	2.4
22	DB	531	G	2.4
22	FB	1305	C	2.4
22	JB	2804	G	2.4
26	DF	18	PRO	2.4
27	JG	154	ILE	2.4
28	JH	39	THR	2.4
40	BT	133	ASN	2.4
42	FV	58	VAL	2.4
47	D1	8	LYS	2.4
47	H1	72	LYS	2.4
53	D7	13	LYS	2.4
53	J7	171	THR	2.4
10	IJ	19	SER	2.4
32	HL	14	SER	2.4
2	EB	30	ARG	2.4
4	AD	159	ARG	2.4
6	CF	18	GLN	2.4
7	EG	125	MET	2.4
8	AH	69	ARG	2.4
17	EQ	33	GLY	2.4
18	ER	54	ARG	2.4
10	AJ	25	GLU	2.4
13	AM	61	GLU	2.4
15	GO	73	GLU	2.4
4	CD	196	LEU	2.4
5	AE	139	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
14	EN	6	LEU	2.4
22	FB	2766	U	2.4
22	HB	2663	U	2.4
5	AE	153	LYS	2.4
11	EK	124	LYS	2.4
1	AA	1119	C	2.4
11	IK	32	ILE	2.4
24	JD	4	LYS	2.4
12	IL	48	PRO	2.4
42	HV	53	VAL	2.4
22	HB	2260	C	2.4
53	F7	112	ILE	2.4
1	CA	703	G	2.4
1	GA	278	G	2.4
1	IA	38	G	2.4
12	IL	6	THR	2.4
25	BE	24	THR	2.4
48	B2	49	CYS	2.4
1	EA	282	A	2.4
2	CB	21	ARG	2.4
4	CD	165	MET	2.4
9	GI	22	GLY	2.4
14	GN	55	GLY	2.4
22	BB	1468	A	2.4
22	HB	2401	A	2.4
22	JB	1996	A	2.4
32	HL	76	ARG	2.4
24	DD	266	SER	2.4
42	HV	31	GLY	2.4
42	JV	50	GLY	2.4
26	FF	192	ALA	2.3
49	B3	33	ALA	2.3
53	H7	94	GLN	2.3
1	IA	1278	U	2.3
22	DB	2840	U	2.3
24	BD	269	PHE	2.3
4	ED	68	TYR	2.3
21	Ca	10	GLU	2.3
24	DD	181	GLU	2.3
32	DL	132	GLU	2.3
36	DP	81	GLU	2.3
45	HY	37	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
25	JE	173	VAL	2.3
26	DF	4	ILE	2.3
43	DW	115	ILE	2.3
42	DV	60	PRO	2.3
1	AA	786	G	2.3
1	EA	1042	G	2.3
1	GA	674	G	2.3
22	HB	413	G	2.3
22	HB	1890	G	2.3
24	BD	263	ARG	2.3
25	HE	57	ARG	2.3
30	JJ	18	THR	2.3
1	EA	1413	A	2.3
1	GA	1227	A	2.3
18	AR	77	GLY	2.3
19	AS	8	GLY	2.3
22	DB	435	A	2.3
53	B7	192	ASN	2.3
22	DB	1601	U	2.3
24	FD	123	ALA	2.3
38	JR	118	GLN	2.3
39	HS	57	GLN	2.3
45	HY	31	GLN	2.3
3	EC	147	LYS	2.3
6	GF	92	LYS	2.3
2	CB	116	GLU	2.3
3	IC	31	HIS	2.3
4	ED	15	GLU	2.3
4	GD	15	GLU	2.3
28	HH	165	VAL	2.3
1	EA	681	C	2.3
22	FB	4	C	2.3
22	JB	1888	C	2.3
41	HU	64	ARG	2.3
22	DB	2612	G	2.3
22	HB	1193	G	2.3
1	EA	702	A	2.3
1	IA	190	A	2.3
8	AH	73	ASP	2.3
27	HG	51	ASP	2.3
32	HL	67	GLY	2.3
1	EA	672	U	2.3

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Mol	Chain	Res	Type	RSRZ
22	HB	1500	U	2.3
2	AB	110	GLN	2.3
3	AC	135	LYS	2.3
3	GC	139	GLN	2.3
29	BI	32	GLN	2.3
30	HJ	94	ALA	2.3
40	JT	104	LYS	2.3
49	D3	2	ALA	2.3
4	ID	170	VAL	2.3
1	GA	1119	C	2.3
3	AC	48	TYR	2.3
8	AH	99	GLU	2.3
22	BB	533	C	2.3
22	BB	2815	C	2.3
22	HB	2459	C	2.3
22	HB	2803	C	2.3
32	DL	117	GLU	2.3
12	AL	5	PRO	2.3
37	BQ	96	ARG	2.3
22	DB	653	G	2.3
1	AA	789	U	2.3
1	GA	1196	U	2.3
1	IA	1340	A	2.3
22	DB	897	A	2.3
22	FB	1226	A	2.3
22	HB	318	G	2.3
22	DB	1304	U	2.3
22	DB	1500	U	2.3
23	DA	36	A	2.3
28	HH	166	GLY	2.3
3	GC	147	LYS	2.3
16	GP	68	ASP	2.3
27	FG	44	LYS	2.3
28	HH	132	ASP	2.3
31	JK	35	LYS	2.3
53	B7	198	THR	2.3
53	F7	111	LEU	2.3
39	BS	26	GLN	2.3
53	F7	140	ASN	2.3
29	DI	17	VAL	2.3
31	JK	44	VAL	2.3
3	IC	206	GLU	2.3

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Mol	Chain	Res	Type	RSRZ
5	GE	7	GLU	2.3
7	EG	139	GLU	2.3
9	GI	4	TYR	2.3
22	BB	1550	C	2.3
8	GH	84	ARG	2.3
16	EP	55	ARG	2.3
16	EP	57	ARG	2.3
17	CQ	78	GLU	2.3
18	GR	46	GLU	2.3
22	FB	724	C	2.3
24	DD	186	HIS	2.3
40	BT	81	HIS	2.3
40	DT	84	GLU	2.3
1	AA	1152	A	2.3
1	AA	1337	G	2.3
1	CA	1135	U	2.3
1	EA	1174	G	2.3
2	CB	14	GLY	2.3
22	BB	435	A	2.3
22	BB	1232	U	2.3
22	FB	665	A	2.3
22	JB	1500	U	2.3
2	CB	75	LYS	2.3
2	CB	169	LYS	2.3
2	IB	180	LEU	2.3
3	EC	158	GLY	2.3
28	HH	22	GLY	2.3
32	DL	129	LEU	2.3
40	JT	131	LYS	2.3
53	H7	42	LYS	2.3
19	AS	24	ALA	2.3
19	CS	24	ALA	2.3
21	Ea	49	ALA	2.3
28	JH	122	THR	2.3
29	JI	14	THR	2.3
32	FL	16	ALA	2.3
33	JM	87	THR	2.3
37	FQ	114	ALA	2.3
39	HS	29	ALA	2.3
53	B7	189	ALA	2.3
5	IE	141	GLN	2.3
1	CA	689	C	2.3

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Mol	Chain	Res	Type	RSRZ
1	EA	210	C	2.3
22	BB	2791	C	2.3
22	JB	1234	C	2.3
25	FE	128	SER	2.3
48	D2	51	TYR	2.3
6	AF	42	GLU	2.3
12	CL	79	GLU	2.3
24	DD	124	GLU	2.3
44	JX	82	GLU	2.3
12	AL	37	CYS	2.3
7	EG	136	LYS	2.3
11	IK	11	LYS	2.3
53	H7	48	LEU	2.3
2	AB	225	ALA	2.3
11	CK	74	ALA	2.3
11	CK	100	ALA	2.3
14	AN	48	ALA	2.3
28	BH	164	PHE	2.3
37	DQ	114	ALA	2.3
45	DY	33	ALA	2.3
5	IE	144	THR	2.3
28	HH	81	ASP	2.3
37	DQ	7	ILE	2.3
43	DW	108	VAL	2.3
2	CB	45	GLN	2.3
2	IB	78	GLN	2.3
19	GS	13	ASP	2.3
21	Ea	68	ASP	2.3
43	HW	137	ASP	2.3
43	JW	167	THR	2.3
53	B7	106	GLN	2.3
53	F7	85	ILE	2.3
3	AC	131	ARG	2.3
4	GD	35	ARG	2.3
22	BB	3870	C	2.3
22	BB	2537	C	2.3
22	DB	1305	C	2.3
22	DB	2195	C	2.3
22	JB	1877	C	2.3
28	HH	90	ARG	2.3
39	JS	13	ARG	2.3
48	B2	51	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
3	AC	143	GLU	2.3
3	IC	46	GLU	2.3
4	ED	98	GLU	2.3
5	GE	70	PRO	2.3
16	AP	83	GLU	2.3
22	HB	2493	U	2.3
22	HB	2592	U	2.3
22	JB	1505	U	2.3
15	GO	44	LYS	2.3
17	CQ	31	LEU	2.3
18	AR	78	LEU	2.3
22	DB	1840	A	2.3
22	HB	1242	A	2.3
22	HB	1998	A	2.3
22	JB	373	A	2.3
42	BV	62	MET	2.3
48	B2	54	GLY	2.3
49	D3	17	GLY	2.3
53	B7	38	GLY	2.3
6	AF	76	ALA	2.3
12	GL	37	CYS	2.3
22	BB	1225	G	2.3
22	HB	2612	G	2.3
9	GI	77	ILE	2.3
11	AK	48	ILE	2.3
35	DO	116	VAL	2.3
3	CC	88	ARG	2.3
3	GC	172	ARG	2.3
5	IE	140	ARG	2.3
12	GL	9	GLN	2.3
18	AR	87	ARG	2.3
22	HB	730	C	2.3
25	BE	89	ASP	2.3
26	FF	112	GLN	2.3
28	HH	62	ARG	2.3
32	DL	109	ARG	2.3
40	HT	7	THR	2.3
42	HV	63	THR	2.3
1	CA	788	U	2.3
28	BH	157	TYR	2.3
4	CD	197	PRO	2.3
14	EN	58	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
19	AS	42	PRO	2.3
28	BH	55	PRO	2.3
2	AB	12	GLU	2.3
16	IP	61	SER	2.3
17	AQ	86	GLU	2.3
18	GR	59	SER	2.3
21	Aa	10	GLU	2.3
25	DE	66	HIS	2.3
27	BG	32	GLU	2.3
22	BB	3146	A	2.3
22	FB	511	A	2.3
22	HB	1840	A	2.3
22	JB	1949	A	2.3
53	B7	70	SER	2.3
32	HL	15	GLY	2.3
32	JL	15	GLY	2.3
42	FV	68	GLY	2.3
1	EA	698	G	2.3
1	GA	926	G	2.3
3	IC	186	PHE	2.3
22	HB	501	G	2.3
26	BF	2	ALA	2.3
36	HP	40	ALA	2.3
53	J7	180	ALA	2.3
19	IS	58	VAL	2.2
25	JE	59	VAL	2.2
32	BL	47	VAL	2.2
53	B7	190	ILE	2.2
4	GD	47	ARG	2.2
5	AE	40	ARG	2.2
6	CF	2	ARG	2.2
1	AA	528	C	2.2
1	GA	519	C	2.2
1	AA	1211	U	2.2
2	AB	195	ASP	2.2
22	BB	509	U	2.2
24	DD	171	ASP	2.2
28	BH	39	THR	2.2
4	AD	169	LYS	2.2
7	EG	85	TYR	2.2
10	EJ	77	PRO	2.2
32	FL	129	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
3	IC	102	ASN	2.2
22	JB	1869	A	2.2
24	FD	109	GLU	2.2
24	HD	124	GLU	2.2
43	DW	141	MET	2.2
53	B7	199	ASN	2.2
4	ID	23	GLY	2.2
11	IK	79	SER	2.2
25	DE	43	GLY	2.2
29	FI	15	GLY	2.2
2	AB	163	PHE	2.2
3	AC	160	ALA	2.2
1	IA	15	G	2.2
1	IA	785	G	2.2
3	AC	77	ILE	2.2
10	GJ	23	ILE	2.2
11	GK	105	VAL	2.2
24	DD	175	VAL	2.2
24	JD	269	PHE	2.2
43	DW	113	VAL	2.2
22	BB	2612	G	2.2
22	BB	2650	G	2.2
22	DB	505	G	2.2
22	FB	1193	G	2.2
22	JB	1189	G	2.2
53	H7	51	ILE	2.2
1	CA	1153	C	2.2
1	EA	1112	C	2.2
1	IA	188	C	2.2
22	BB	898	C	2.2
22	DB	2462	C	2.2
22	FB	2864	C	2.2
22	JB	724	C	2.2
4	AD	86	LYS	2.2
6	EF	39	LYS	2.2
7	GG	63	LYS	2.2
10	CJ	22	LYS	2.2
25	HE	37	LYS	2.2
26	FF	139	GLN	2.2
19	GS	48	THR	2.2
53	H7	73	LEU	2.2
6	GF	62	TRP	2.2

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Mol	Chain	Res	Type	RSRZ
15	AO	2	PRO	2.2
22	BB	1998	A	2.2
29	DI	47	GLU	2.2
34	FN	49	GLU	2.2
2	GB	29	ALA	2.2
5	GE	73	ASN	2.2
39	JS	8	GLY	2.2
16	CP	51	VAL	2.2
17	CQ	11	VAL	2.2
24	JD	170	SER	2.2
32	BL	89	ILE	2.2
39	HS	33	VAL	2.2
9	II	51	ARG	2.2
14	EN	57	ARG	2.2
35	BO	33	ARG	2.2
37	FQ	116	ARG	2.2
53	B7	24	ARG	2.2
22	FB	510	G	2.2
22	FB	1279	G	2.2
22	FB	2657	G	2.2
1	AA	1212	U	2.2
1	CA	708	C	2.2
1	EA	1298	C	2.2
1	EA	1485	U	2.2
2	IB	169	LYS	2.2
11	GK	124	LYS	2.2
12	IL	124	LYS	2.2
13	AM	115	LYS	2.2
22	HB	20	C	2.2
22	HB	2662	C	2.2
23	BA	54	U	2.2
28	DH	175	LYS	2.2
3	EC	136	GLN	2.2
7	CG	56	GLN	2.2
12	IL	78	GLN	2.2
12	AL	6	THR	2.2
21	Ea	36	PRO	2.2
25	JE	62	PRO	2.2
29	HI	43	MET	2.2
32	FL	60	PRO	2.2
53	H7	159	THR	2.2
1	EA	965	A	2.2

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Mol	Chain	Res	Type	RSRZ
22	BB	2540	A	2.2
22	FB	1868	A	2.2
22	FB	2858	A	2.2
22	JB	1997	A	2.2
2	CB	38	GLY	2.2
3	GC	74	GLY	2.2
4	CD	23	GLY	2.2
4	ED	24	GLU	2.2
14	CN	49	HIS	2.2
28	BH	66	GLY	2.2
5	IE	15	ARG	2.2
24	BD	183	ARG	2.2
25	BE	57	ARG	2.2
27	BG	104	ILE	2.2
27	DG	20	PHE	2.2
36	FP	84	ILE	2.2
43	DW	169	VAL	2.2
53	H7	66	VAL	2.2
1	CA	1297	C	2.2
1	EA	686	U	2.2
1	GA	186	C	2.2
1	GA	673	G	2.2
1	GA	1334	G	2.2
3	EC	45	LYS	2.2
14	AN	50	LYS	2.2
22	BB	17	G	2.2
22	BB	501	G	2.2
22	DB	1182	U	2.2
29	JI	9	SER	2.2
30	HJ	92	ASN	2.2
22	DB	2640	G	2.2
22	FB	2195	C	2.2
22	JB	1841	G	2.2
22	JB	2305	C	2.2
22	JB	2805	G	2.2
37	BQ	122	SER	2.2
43	DW	112	LEU	2.2
10	GJ	21	GLN	2.2
11	IK	104	GLN	2.2
17	IQ	16	GLN	2.2
9	CI	92	TYR	2.2
28	HH	118	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
22	JB	731	A	2.2
33	BM	87	THR	2.2
53	D7	198	THR	2.2
3	CC	169	ALA	2.2
3	EC	13	GLY	2.2
3	GC	169	ALA	2.2
7	AG	19	GLY	2.2
17	AQ	21	VAL	2.2
19	IS	8	GLY	2.2
24	FD	80	ALA	2.2
25	BE	97	ALA	2.2
25	JE	3	GLY	2.2
32	DL	89	ILE	2.2
43	DW	171	VAL	2.2
6	CF	97	PHE	2.2
48	B2	37	HIS	2.2
28	DH	97	LYS	2.2
53	F7	214	LYS	2.2
1	CA	1112	C	2.2
22	BB	737	C	2.2
22	FB	1518	C	2.2
3	CC	52	LEU	2.2
4	ED	188	LEU	2.2
15	GO	37	ASN	2.2
17	AQ	31	LEU	2.2
22	BB	2388	G	2.2
22	BB	2449	G	2.2
22	BB	2661	G	2.2
22	DB	2851	G	2.2
53	D7	200	LEU	2.2
3	AC	162	GLN	2.2
3	IC	139	GLN	2.2
4	AD	68	TYR	2.2
2	CB	64	ARG	2.2
3	IC	76	VAL	2.2
4	ED	187	ARG	2.2
6	AF	47	ARG	2.2
22	FB	6	A	2.2
22	FB	1292	A	2.2
12	GL	67	THR	2.2
26	HF	144	GLY	2.2
32	JL	69	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
28	DH	173	ALA	2.2
34	BN	109	GLY	2.2
36	FP	47	ARG	2.2
37	JQ	34	ARG	2.2
39	DS	60	VAL	2.2
49	B3	43	VAL	2.2
49	B3	51	ARG	2.2
1	CA	182	U	2.2
1	GA	209	U	2.2
6	EF	76	ALA	2.2
2	CB	140	HIS	2.2
3	AC	147	LYS	2.2
6	EF	38	GLU	2.2
8	IH	81	HIS	2.2
18	CR	46	GLU	2.2
22	HB	2629	U	2.2
25	DE	69	LYS	2.2
26	JF	198	GLU	2.2
29	FI	16	GLU	2.2
53	F7	181	GLU	2.2
1	AA	634	C	2.2
22	FB	722	C	2.2
22	JB	324	C	2.2
23	HA	4	C	2.2
28	BH	98	LEU	2.2
53	F7	138	LEU	2.2
1	CA	138	G	2.2
1	GA	774	G	2.2
1	IA	637	G	2.2
1	IA	710	G	2.2
22	BB	2234	G	2.2
22	DB	3100	G	2.2
22	JB	1832	G	2.2
22	JB	3127	G	2.2
53	F7	107	ASN	2.2
21	Ea	2	MET	2.2
28	HH	59	GLN	2.2
1	AA	684	A	2.2
1	AA	828	A	2.2
4	ED	35	ARG	2.2
16	CP	57	ARG	2.2
22	BB	1334	A	2.2

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Mol	Chain	Res	Type	RSRZ
22	BB	1895	A	2.2
22	HB	1630	A	2.2
47	J1	20	VAL	2.2
53	D7	75	TYR	2.2
53	F7	75	TYR	2.2
1	GA	801	U	2.2
3	CC	186	PHE	2.2
3	GC	158	GLY	2.2
4	GD	127	THR	2.2
11	AK	97	ALA	2.2
11	CK	106	LYS	2.2
12	GL	7	ILE	2.2
16	AP	78	GLY	2.2
18	GR	21	LYS	2.2
21	Ga	34	ILE	2.2
49	D3	9	ILE	2.2
11	GK	19	ALA	2.2
28	HH	84	THR	2.2
32	DL	111	PHE	2.2
53	B7	86	THR	2.2
1	AA	1478	C	2.2
1	EA	1378	C	2.2
1	IA	681	C	2.2
5	EE	83	GLU	2.2
12	GL	73	GLU	2.2
17	AQ	74	LEU	2.2
19	CS	71	LEU	2.2
28	BH	158	HIS	2.2
1	GA	998	G	2.2
22	BB	315	G	2.2
22	HB	3196	G	2.2
22	HB	2304	G	2.2
22	JB	2811	G	2.2
6	AF	1	MET	2.2
11	GK	43	SER	2.2
16	EP	61	SER	2.2
20	CT	9	ASN	2.2
41	DU	2	SER	2.2
2	AB	64	ARG	2.2
2	GB	136	VAL	2.2
3	EC	126	ARG	2.2
2	AB	75	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
5	AE	13	ILE	2.2
9	AI	4	TYR	2.2
9	GI	44	VAL	2.2
9	GI	92	TYR	2.2
10	EJ	82	ILE	2.2
13	CM	15	VAL	2.2
22	DB	1242	A	2.2
22	DB	2613	A	2.2
22	FB	2402	U	2.2
22	FB	2704	U	2.2
22	HB	1601	U	2.2
22	HB	2787	A	2.2
24	DD	113	VAL	2.2
27	DG	111	ILE	2.2
36	HP	82	LYS	2.2
7	IG	130	GLY	2.2
30	HJ	85	GLY	2.2
31	HK	92	GLY	2.2
31	JK	46	ALA	2.2
32	HL	16	ALA	2.2
1	AA	1411	C	2.2
6	CF	75	LEU	2.2
3	GC	166	GLU	2.2
3	GC	206	GLU	2.2
10	GJ	17	ASP	2.2
22	DB	2815	C	2.2
24	BD	122	GLU	2.2
27	HG	101	GLU	2.2
28	BH	155	ASP	2.2
32	DL	108	THR	2.2
43	BW	114	ASP	2.2
22	FB	1668	G	2.1
22	HB	761	G	2.1
7	CG	79	ARG	2.1
8	GH	105	ARG	2.1
25	FE	57	ARG	2.1
27	HG	112	ARG	2.1
32	HL	83	ARG	2.1
1	CA	694	A	2.1
1	EA	915	A	2.1
1	IA	958	A	2.1
9	GI	17	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
2	GB	110	GLN	2.1
22	BB	2593	A	2.1
22	DB	3099	U	2.1
22	DB	2663	U	2.1
22	FB	2540	A	2.1
22	FB	2614	A	2.1
22	JB	1192	A	2.1
24	HD	175	VAL	2.1
27	DG	44	LYS	2.1
33	JM	14	LYS	2.1
53	J7	94	GLN	2.1
2	EB	77	ALA	2.1
53	H7	170	GLY	2.1
8	EH	135	CYS	2.1
1	EA	1137	C	2.1
21	Ga	84	LEU	2.1
22	BB	759	C	2.1
22	JB	2788	C	2.1
28	HH	171	LEU	2.1
11	IK	87	THR	2.1
28	BH	167	GLU	2.1
1	AA	631	G	2.1
6	AF	2	ARG	2.1
15	IO	38	ARG	2.1
22	DB	2707	G	2.1
22	HB	528	G	2.1
53	B7	49	ARG	2.1
11	GK	14	VAL	2.1
28	HH	133	VAL	2.1
3	CC	48	TYR	2.1
17	EQ	30	PRO	2.1
22	DB	5	A	2.1
2	EB	227	GLY	2.1
2	IB	38	GLY	2.1
4	AD	201	GLN	2.1
28	FH	59	GLN	2.1
43	DW	173	PRO	2.1
53	F7	55	PRO	2.1
9	II	46	ALA	2.1
11	AK	103	LEU	2.1
20	ET	96	GLY	2.1
24	FD	107	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
25	JE	55	ALA	2.1
32	JL	14	SER	2.1
38	FR	115	ASN	2.1
42	JV	11	ASN	2.1
48	D2	38	GLY	2.1
1	AA	277	C	2.1
1	IA	634	C	2.1
22	DB	19	C	2.1
2	EB	134	GLU	2.1
14	IN	43	CYS	2.1
53	D7	197	GLU	2.1
53	F7	115	GLU	2.1
8	CH	56	LYS	2.1
20	IT	58	LYS	2.1
22	DB	1469	U	2.1
25	FE	82	ARG	2.1
53	B7	77	LYS	2.1
1	AA	527	G	2.1
16	GP	53	VAL	2.1
22	BB	562	G	2.1
22	DB	2388	G	2.1
22	FB	858	G	2.1
22	JB	2536	G	2.1
28	HH	52	VAL	2.1
1	CA	602	A	2.1
1	CA	695	A	2.1
22	BB	494	A	2.1
22	DB	1869	A	2.1
22	HB	2189	A	2.1
24	FD	108	PRO	2.1
4	CD	97	LEU	2.1
15	AO	66	LEU	2.1
31	DK	92	GLY	2.1
36	FP	78	ALA	2.1
53	B7	48	LEU	2.1
22	BB	1274	C	2.1
26	DF	165	SER	2.1
32	BL	14	SER	2.1
1	AA	180	U	2.1
1	EA	1510	U	2.1
4	AD	49	ARG	2.1
4	AD	141	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
4	ED	169	LYS	2.1
8	CH	84	ARG	2.1
8	EH	84	ARG	2.1
9	EI	35	GLU	2.1
11	IK	67	ASP	2.1
21	Ea	12	THR	2.1
22	JB	3151	U	2.1
27	JG	112	ARG	2.1
53	B7	19	GLU	2.1
53	B7	115	GLU	2.1
22	BB	1838	G	2.1
22	DB	2742	G	2.1
22	FB	2640	G	2.1
24	BD	270	ILE	2.1
1	CA	1534	A	2.1
5	GE	96	PRO	2.1
10	CJ	91	PRO	2.1
22	FB	494	A	2.1
22	HB	13	A	2.1
22	HB	1468	A	2.1
22	JB	14	A	2.1
25	JE	183	LEU	2.1
2	CB	29	ALA	2.1
25	HE	55	ALA	2.1
25	HE	64	GLN	2.1
26	JF	178	TYR	2.1
31	HK	86	ALA	2.1
34	DN	109	GLY	2.1
36	JP	58	ALA	2.1
11	AK	24	SER	2.1
19	CS	38	SER	2.1
3	GC	131	ARG	2.1
5	IE	152	ARG	2.1
19	CS	65	ASN	2.1
25	JE	2	LYS	2.1
53	J7	77	LYS	2.1
5	AE	50	GLU	2.1
9	II	44	VAL	2.1
24	HD	40	THR	2.1
24	HD	141	VAL	2.1
25	HE	93	VAL	2.1
28	JH	167	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
29	BI	1	MET	2.1
36	HP	81	GLU	2.1
2	GB	208	ILE	2.1
24	HD	65	ILE	2.1
27	DG	154	ILE	2.1
1	CA	828	A	2.1
2	AB	11	LEU	2.1
13	CM	48	LEU	2.1
2	EB	194	PRO	2.1
2	IB	91	PRO	2.1
6	GF	51	PRO	2.1
3	GC	159	GLY	2.1
4	ED	27	TYR	2.1
7	GG	47	CYS	2.1
11	GK	113	PRO	2.1
22	BB	16	G	2.1
22	BB	1832	G	2.1
22	DB	2650	G	2.1
32	HL	34	LEU	2.1
12	EL	30	ALA	2.1
26	JF	141	GLY	2.1
28	BH	174	GLY	2.1
28	JH	58	ALA	2.1
22	FB	533	C	2.1
1	AA	1376	U	2.1
22	HB	2706	U	2.1
22	JB	1994	U	2.1
25	DE	54	LYS	2.1
11	CK	44	SER	2.1
17	AQ	79	SER	2.1
21	Aa	63	SER	2.1
28	BH	80	SER	2.1
3	AC	31	HIS	2.1
3	CC	143	GLU	2.1
13	GM	61	GLU	2.1
15	CO	73	GLU	2.1
19	CS	69	HIS	2.1
25	JE	26	VAL	2.1
26	DF	163	ASN	2.1
30	HJ	96	VAL	2.1
34	HN	91	VAL	2.1
35	HO	116	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
26	FF	194	GLU	2.1
52	J6	20	HIS	2.1
5	IE	12	LEU	2.1
19	AS	71	LEU	2.1
33	HM	92	THR	2.1
37	DQ	13	LEU	2.1
38	BR	18	LEU	2.1
1	AA	1173	G	2.1
1	EA	1245	A	2.1
1	GA	190	A	2.1
1	GA	775	G	2.1
22	BB	1300	A	2.1
22	DB	1832	G	2.1
22	HB	1279	G	2.1
22	HB	1299	A	2.1
22	JB	1332	G	2.1
22	JB	1896	A	2.1
26	JF	192	ALA	2.1
28	FH	12	PRO	2.1
31	JK	170	PRO	2.1
32	BL	111	PHE	2.1
22	BB	1501	C	2.1
22	BB	2765	C	2.1
22	DB	2645	C	2.1
37	HQ	97	GLY	2.1
9	EI	38	GLN	2.1
21	Ca	45	GLN	2.1
6	EF	3	ARG	2.1
13	AM	44	ARG	2.1
40	HT	9	ARG	2.1
11	AK	101	SER	2.1
20	GT	56	MET	2.1
28	DH	144	VAL	2.1
28	HH	17	VAL	2.1
4	GD	173	TRP	2.1
53	H7	172	GLU	2.1
1	CA	712	A	2.1
21	Ca	50	ASP	2.1
1	CA	280	C	2.1
1	IA	633	G	2.1
3	GC	100	ALA	2.1
22	DB	3154	G	2.1

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Mol	Chain	Res	Type	RSRZ
22	JB	1890	G	2.1
24	DD	107	ALA	2.1
25	HE	74	PRO	2.1
33	DM	86	THR	2.1
37	BQ	81	PHE	2.1
39	JS	18	ASP	2.1
23	FA	4	C	2.1
25	HE	83	GLY	2.1
29	JI	12	GLY	2.1
43	HW	173	PRO	2.1
22	BB	1235	C	2.1
30	FJ	3	LYS	2.1
3	IC	172	ARG	2.1
18	ER	87	ARG	2.1
38	BR	118	GLN	2.1
39	JS	99	GLN	2.1
42	HV	72	ARG	2.1
3	GC	66	VAL	2.0
13	EM	15	VAL	2.0
2	AB	180	LEU	2.0
7	EG	59	LEU	2.0
10	IJ	82	ILE	2.0
21	Aa	34	ILE	2.0
2	GB	150	SER	2.0
11	GK	38	ASN	2.0
12	GL	8	ASN	2.0
13	AM	50	GLU	2.0
17	AQ	78	GLU	2.0
22	BB	2705	A	2.0
26	JF	156	ASN	2.0
32	BL	132	GLU	2.0
39	BS	16	GLU	2.0
1	AA	384	G	2.0
1	EA	699	C	2.0
1	EA	800	G	2.0
1	EA	1465	C	2.0
1	GA	1210	C	2.0
2	GB	225	ALA	2.0
1	IA	1498	U	2.0
11	GK	106	LYS	2.0
12	EL	112	ASP	2.0
21	Ga	12	THR	2.0

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Mol	Chain	Res	Type	RSRZ
24	HD	123	ALA	2.0
22	FB	413	G	2.0
22	FB	501	G	2.0
22	FB	1841	G	2.0
22	FB	2662	C	2.0
22	JB	2647	G	2.0
26	JF	116	LYS	2.0
28	HH	57	ASP	2.0
40	BT	134	LYS	2.0
47	H1	70	GLY	2.0
7	IG	78	ARG	2.0
8	EH	69	ARG	2.0
20	GT	8	ARG	2.0
22	BB	2706	U	2.0
4	ED	198	VAL	2.0
12	GL	82	VAL	2.0
24	BD	175	VAL	2.0
43	JW	169	VAL	2.0
30	JJ	1	MET	2.0
32	BL	129	LEU	2.0
2	GB	141	GLU	2.0
6	IF	97	PHE	2.0
3	IC	65	ALA	2.0
12	AL	127	GLU	2.0
22	BB	524	A	2.0
22	DB	373	A	2.0
22	JB	897	A	2.0
25	DE	174	GLU	2.0
26	JF	110	SER	2.0
40	BT	113	SER	2.0
3	AC	80	GLY	2.0
5	AE	150	ARG	2.0
5	CE	154	GLY	2.0
8	CH	68	ARG	2.0
9	AI	89	ASN	2.0
11	GK	37	GLY	2.0
15	AO	20	GLY	2.0
22	JB	12	U	2.0
22	JB	2462	C	2.0
24	BD	139	GLY	2.0
30	DJ	85	GLY	2.0
53	B7	42	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
22	DB	1	G	2.0
22	HB	1248	G	2.0
22	JB	1602	G	2.0
53	H7	49	ARG	2.0
5	CE	56	GLN	2.0
11	AK	104	GLN	2.0
12	AL	7	ILE	2.0
2	EB	156	LYS	2.0
11	GK	125	PHE	2.0
12	IL	21	LYS	2.0
22	FB	435	A	2.0
1	EA	1244	C	2.0
1	IA	1336	C	2.0
2	GB	144	ARG	2.0
2	IB	21	ARG	2.0
5	EE	149	GLU	2.0
6	IF	78	GLU	2.0
7	CG	52	GLU	2.0
9	AI	35	GLU	2.0
14	IN	2	ALA	2.0
22	BB	1500	U	2.0
14	IN	3	ARG	2.0
22	DB	2033	C	2.0
22	FB	2535	C	2.0
22	HB	1086	C	2.0
28	BH	173	ALA	2.0
28	HH	58	ALA	2.0
32	BL	63	ALA	2.0
20	IT	96	GLY	2.0
21	Ca	64	GLY	2.0
30	BJ	97	GLY	2.0
1	CA	630	G	2.0
1	EA	1300	G	2.0
11	GK	111	ASP	2.0
15	AO	78	TYR	2.0
22	BB	653	G	2.0
22	JB	560	G	2.0
22	JB	2819	G	2.0
19	CS	13	ASP	2.0
47	H1	27	THR	2.0
28	DH	171	LEU	2.0
40	FT	103	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
2	IB	208	ILE	2.0
53	H7	112	ILE	2.0
3	AC	142	MET	2.0
3	EC	26	LYS	2.0
4	ED	166	LYS	2.0
1	IA	672	U	2.0
22	BB	1997	A	2.0
22	BB	2651	U	2.0
1	AA	519	C	2.0
1	EA	1403	C	2.0
1	EA	1484	C	2.0
1	GA	422	C	2.0
3	GC	127	ARG	2.0
4	GD	159	ARG	2.0
7	GG	83	ALA	2.0
10	EJ	18	ALA	2.0
11	EK	89	ALA	2.0
12	GL	107	ALA	2.0
16	IP	77	ALA	2.0
22	FB	495	C	2.0
22	FB	2751	C	2.0
28	FH	124	ALA	2.0
28	HH	158	HIS	2.0
37	BQ	115	ALA	2.0
37	HQ	115	ALA	2.0
30	FJ	22	PRO	2.0

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

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

5.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.4 Ligands [i](#)

There are no ligands in this entry.

5.5 Other polymers [i](#)

There are no such residues in this entry.