



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 29, 2026 – 10:08 AM UTC

PDB ID : 4V99 / pdb_00004v99
Title : The Crystallographic Structure of Panicum Mosaic Virus
Authors : Makino, D.L.; Larson, S.B.; McPherson, A.
Deposited on : 2012-07-04
Resolution : 2.90 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity	:	FAILED
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
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)	:	2.49

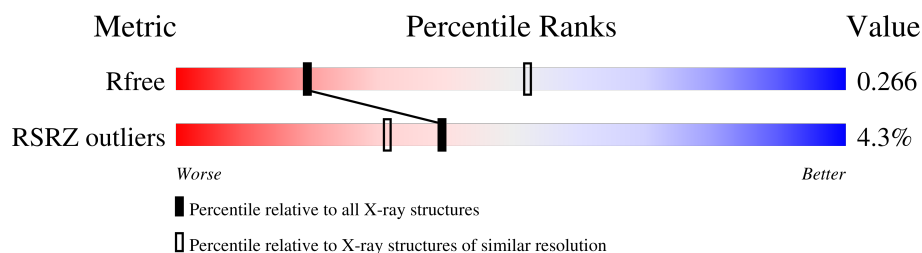
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.90 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	2481 (2.90-2.90)
RSRZ outliers	180081	2481 (2.90-2.90)

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

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 588120 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 protein called Capsid protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	AB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	AC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	AF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	AG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	AH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	AK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	AL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	AM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	AP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	AQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	AR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	AU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	AV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	AW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	AZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Aa	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ab	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ae	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Af	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ag	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Aj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ak	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Al	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ao	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ap	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Aq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	At	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Au	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Av	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ay	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Az	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	A1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	A4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	A5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	A6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	BB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ba	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Be	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Bk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	By	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	B1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	B4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	B5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	B6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	CL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ca	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ce	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Cj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ck	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Co	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ct	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Cu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Cy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	C1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	C4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	C5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	C6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	DV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Da	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Db	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	De	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Df	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Do	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Du	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	D1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	D4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	D5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	D6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	ER	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ea	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ee	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ef	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ej	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ek	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	El	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Eo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ep	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Et	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Eu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ev	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ey	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ez	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	E1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	E4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	E5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	E6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	FG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fa	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fe	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ff	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Fp	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Fq	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Ft	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Fu	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Fv	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Fy	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Fz	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	F1	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	F4	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	F5	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	F6	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GA	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	GB	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	GC	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GF	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	GG	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	GH	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GK	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	GL	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	GM	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GP	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	GQ	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	GR	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GU	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	GV	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	GW	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	GZ	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Ga	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Gb	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Ge	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Gf	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Gg	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Gj	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Gk	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Gl	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Go	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Gp	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Gq	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Gt	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	Gu	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	Gv	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	Gy	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Gz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	G1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	G4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	G5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	G6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ha	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	He	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Hj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hi	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ho	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ht	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Hy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hx	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	H1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	H4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	H5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	H6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	IB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ia	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ib	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ie	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	If	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ig	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ij	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ik	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Il	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Io	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ip	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Iq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	It	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Iu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Iv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Iy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Iz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	I1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	I4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	I5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	I6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	JL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ja	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Je	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ju	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	J1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	J4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	J5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	J6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			

- Molecule 2 is a RNA chain called 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AD	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AI	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AN	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AS	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AX	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ac	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ah	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Am	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ar	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Aw	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	A2	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	A7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	BD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	BI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	BN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	BS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	BX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Bc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Bh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Bm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Br	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Bw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	B2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	B7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	CD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	CI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	CN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	CS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	CX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Cc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Ch	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Cm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	Cr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Cw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	C2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	C7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	DD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	DI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	DN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	DS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	DX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Dc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Dh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Dm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Dr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Dw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	D2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	D7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	ED	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	EI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	EN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	ES	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	EX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	Ec	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Eh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Em	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Er	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Ew	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	E2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	E7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	FD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	FI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	FN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	FS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	FX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Fc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Fh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Fm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Fr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Fw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	F2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	F7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	GN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	G2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	G7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	H2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	H7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	ID	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	II	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	IN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	IS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	IX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Ic	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Ih	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Im	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Ir	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Iw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	I2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	I7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	JD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	JI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	JN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	JS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	JX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Jc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Jh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Jm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	Jr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Jw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	J2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	J7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

- Molecule 3 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	AA	1	Total 1	Ca 1	0	0
3	AF	1	Total 1	Ca 1	0	0
3	AL	1	Total 1	Ca 1	0	0
3	AP	1	Total 1	Ca 1	0	0
3	AU	1	Total 1	Ca 1	0	0
3	AZ	1	Total 1	Ca 1	0	0
3	Af	1	Total 1	Ca 1	0	0
3	Aj	1	Total 1	Ca 1	0	0
3	Ao	1	Total 1	Ca 1	0	0
3	At	1	Total 1	Ca 1	0	0
3	A1	1	Total 1	Ca 1	0	0
3	A4	1	Total 1	Ca 1	0	0
3	BB	1	Total 1	Ca 1	0	0
3	BF	1	Total 1	Ca 1	0	0
3	BK	1	Total 1	Ca 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	BQ	1	Total	Ca	0	0
			1	1		
3	BU	1	Total	Ca	0	0
			1	1		
3	BZ	1	Total	Ca	0	0
			1	1		
3	Be	1	Total	Ca	0	0
			1	1		
3	Bk	1	Total	Ca	0	0
			1	1		
3	Bo	1	Total	Ca	0	0
			1	1		
3	Bt	1	Total	Ca	0	0
			1	1		
3	By	1	Total	Ca	0	0
			1	1		
3	B5	1	Total	Ca	0	0
			1	1		
3	CA	1	Total	Ca	0	0
			1	1		
3	CG	1	Total	Ca	0	0
			1	1		
3	CK	1	Total	Ca	0	0
			1	1		
3	CP	1	Total	Ca	0	0
			1	1		
3	CU	1	Total	Ca	0	0
			1	1		
3	CZ	1	Total	Ca	0	0
			1	1		
3	Ce	1	Total	Ca	0	0
			1	1		
3	Cj	1	Total	Ca	0	0
			1	1		
3	Co	1	Total	Ca	0	0
			1	1		
3	Ct	1	Total	Ca	0	0
			1	1		
3	Cy	1	Total	Ca	0	0
			1	1		
3	C4	1	Total	Ca	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	DA	1	Total 1	Ca 1	0	0
3	DF	1	Total 1	Ca 1	0	0
3	DK	1	Total 1	Ca 1	0	0
3	DP	1	Total 1	Ca 1	0	0
3	DU	1	Total 1	Ca 1	0	0
3	DZ	1	Total 1	Ca 1	0	0
3	Df	1	Total 1	Ca 1	0	0
3	Dj	1	Total 1	Ca 1	0	0
3	Do	1	Total 1	Ca 1	0	0
3	Dt	1	Total 1	Ca 1	0	0
3	Dy	1	Total 1	Ca 1	0	0
3	D4	1	Total 1	Ca 1	0	0
3	EC	1	Total 1	Ca 1	0	0
3	EF	1	Total 1	Ca 1	0	0
3	EK	1	Total 1	Ca 1	0	0
3	EP	1	Total 1	Ca 1	0	0
3	EU	1	Total 1	Ca 1	0	0
3	EZ	1	Total 1	Ca 1	0	0
3	Ee	1	Total 1	Ca 1	0	0
3	Ek	1	Total 1	Ca 1	0	0
3	Eo	1	Total 1	Ca 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	Et	1	Total 1	Ca 1	0	0
3	Ey	1	Total 1	Ca 1	0	0
3	E4	1	Total 1	Ca 1	0	0
3	FA	1	Total 1	Ca 1	0	0
3	FF	1	Total 1	Ca 1	0	0
3	FK	1	Total 1	Ca 1	0	0
3	FP	1	Total 1	Ca 1	0	0
3	FU	1	Total 1	Ca 1	0	0
3	FZ	1	Total 1	Ca 1	0	0
3	Fe	1	Total 1	Ca 1	0	0
3	Fk	1	Total 1	Ca 1	0	0
3	Fo	1	Total 1	Ca 1	0	0
3	Ft	1	Total 1	Ca 1	0	0
3	F1	1	Total 1	Ca 1	0	0
3	F4	1	Total 1	Ca 1	0	0
3	GA	1	Total 1	Ca 1	0	0
3	GF	1	Total 1	Ca 1	0	0
3	GK	1	Total 1	Ca 1	0	0
3	GP	1	Total 1	Ca 1	0	0
3	GU	1	Total 1	Ca 1	0	0
3	GZ	1	Total 1	Ca 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	Ge	1	Total 1	Ca 1	0	0
3	Gj	1	Total 1	Ca 1	0	0
3	Go	1	Total 1	Ca 1	0	0
3	Gt	1	Total 1	Ca 1	0	0
3	G1	1	Total 1	Ca 1	0	0
3	G4	1	Total 1	Ca 1	0	0
3	HA	1	Total 1	Ca 1	0	0
3	HF	1	Total 1	Ca 1	0	0
3	HK	1	Total 1	Ca 1	0	0
3	HP	1	Total 1	Ca 1	0	0
3	HU	1	Total 1	Ca 1	0	0
3	HZ	1	Total 1	Ca 1	0	0
3	Hg	1	Total 1	Ca 1	0	0
3	Hj	1	Total 1	Ca 1	0	0
3	Ho	1	Total 1	Ca 1	0	0
3	Ht	1	Total 1	Ca 1	0	0
3	Hy	1	Total 1	Ca 1	0	0
3	H4	1	Total 1	Ca 1	0	0
3	IA	1	Total 1	Ca 1	0	0
3	IF	1	Total 1	Ca 1	0	0
3	IK	1	Total 1	Ca 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	IR	1	Total 1	Ca 1	0	0
3	IU	1	Total 1	Ca 1	0	0
3	IZ	1	Total 1	Ca 1	0	0
3	If	1	Total 1	Ca 1	0	0
3	Ij	1	Total 1	Ca 1	0	0
3	Io	1	Total 1	Ca 1	0	0
3	It	1	Total 1	Ca 1	0	0
3	I1	1	Total 1	Ca 1	0	0
3	I4	1	Total 1	Ca 1	0	0
3	JA	1	Total 1	Ca 1	0	0
3	JF	1	Total 1	Ca 1	0	0
3	JL	1	Total 1	Ca 1	0	0
3	JP	1	Total 1	Ca 1	0	0
3	JU	1	Total 1	Ca 1	0	0
3	JZ	1	Total 1	Ca 1	0	0
3	Je	1	Total 1	Ca 1	0	0
3	Jj	1	Total 1	Ca 1	0	0
3	Jo	1	Total 1	Ca 1	0	0
3	Jt	1	Total 1	Ca 1	0	0
3	Jy	1	Total 1	Ca 1	0	0
3	J4	1	Total 1	Ca 1	0	0

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

3 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	411.74Å 403.90Å 412.46Å 90.00° 89.65° 90.00°	Depositor
Resolution (Å)	50.01 – 2.90 50.01 – 2.90	Depositor EDS
% Data completeness (in resolution range)	74.9 (50.01-2.90) 74.9 (50.01-2.90)	Depositor EDS
R_{merge}	0.14	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.99 (at 2.91Å)	Xtriage
Refinement program	CNS 1.3	Depositor
R, R_{free}	0.251 , 0.285 0.233 , 0.266	Depositor DCC
R_{free} test set	221945 reflections (10.01%)	wwPDB-VP
Wilson B-factor (Å ²)	45.5	Xtriage
Anisotropy	0.138	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.30 , 67.8	EDS
L-test for twinning ²	$\langle L \rangle = 0.39$, $\langle L^2 \rangle = 0.22$	Xtriage
Estimated twinning fraction	0.025 for -l,k,h 0.034 for -h,-l,-k 0.024 for -h,l,k 0.044 for -k,-h,-l 0.024 for k,h,-l 0.017 for -l,-h,k 0.030 for -k,l,-h 0.038 for l,h,k 0.027 for k,-l,-h 0.035 for h,-k,-l 0.030 for -l,-k,-h	Xtriage
F_o, F_c correlation	0.88	EDS
Total number of atoms	588120	wwPDB-VP
Average B, all atoms (Å ²)	73.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

4 Model quality [i](#)

4.1 Standard geometry [i](#)

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

4.2 Too-close contacts [i](#)

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

4.3 Torsion angles [i](#)

4.3.1 Protein backbone [i](#)

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

4.3.2 Protein sidechains [i](#)

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

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](#)

Of 120 ligands modelled in this entry, 120 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

4.7 Other polymers

There are no such residues in this entry.

4.8 Polymer linkage issues

There are no chain breaks in this entry.

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(Å ²)	Q<0.9
1	A1	217/242 (89%)	0.19	9 (4%) 41 33	26, 56, 111, 194	0
1	A4	185/242 (76%)	0.15	5 (2%) 56 47	23, 52, 88, 132	0
1	A5	189/242 (78%)	0.12	7 (3%) 45 37	18, 52, 92, 153	0
1	A6	217/242 (89%)	0.14	7 (3%) 50 41	20, 53, 107, 200	0
1	AA	185/242 (76%)	0.11	4 (2%) 62 53	29, 54, 87, 113	0
1	AB	189/242 (78%)	-0.08	5 (2%) 57 48	25, 49, 90, 154	0
1	AC	217/242 (89%)	0.10	7 (3%) 50 41	21, 50, 108, 201	0
1	AF	185/242 (76%)	0.04	2 (1%) 78 71	22, 48, 85, 115	0
1	AG	189/242 (78%)	-0.03	3 (1%) 70 62	17, 42, 85, 140	0
1	AH	217/242 (89%)	0.22	10 (4%) 37 29	21, 50, 114, 203	0
1	AK	185/242 (76%)	0.13	3 (1%) 70 62	17, 51, 88, 123	0
1	AL	189/242 (78%)	-0.02	2 (1%) 78 71	24, 47, 91, 137	0
1	AM	217/242 (89%)	0.14	6 (2%) 55 46	19, 48, 106, 200	0
1	AP	185/242 (76%)	0.02	3 (1%) 70 62	21, 47, 87, 124	0
1	AQ	189/242 (78%)	-0.02	4 (2%) 63 54	17, 47, 87, 127	0
1	AR	217/242 (89%)	0.02	5 (2%) 61 52	17, 48, 103, 199	0
1	AU	185/242 (76%)	0.22	4 (2%) 62 53	36, 61, 96, 124	0
1	AV	189/242 (78%)	0.21	7 (3%) 45 37	35, 58, 91, 154	0
1	AW	217/242 (89%)	0.21	14 (6%) 25 20	27, 58, 108, 201	0
1	AZ	185/242 (76%)	-0.15	2 (1%) 78 71	14, 38, 69, 107	0
1	Aa	189/242 (78%)	-0.20	4 (2%) 63 54	14, 37, 79, 138	0
1	Ab	217/242 (89%)	-0.07	7 (3%) 50 41	16, 43, 107, 197	0
1	Ae	185/242 (76%)	-0.00	4 (2%) 62 53	17, 48, 92, 113	0
1	Af	189/242 (78%)	0.04	5 (2%) 57 48	19, 44, 87, 140	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	Ag	217/242 (89%)	0.04	4 (1%)	67	59	18, 48, 95, 199	0
1	Aj	185/242 (76%)	-0.05	3 (1%)	70	62	15, 48, 82, 114	0
1	Ak	189/242 (78%)	-0.09	2 (1%)	78	71	21, 47, 85, 136	0
1	Al	217/242 (89%)	0.09	5 (2%)	61	52	19, 44, 104, 191	0
1	Ao	185/242 (76%)	0.09	6 (3%)	50	41	20, 46, 79, 105	0
1	Ap	189/242 (78%)	-0.03	2 (1%)	78	71	19, 44, 80, 137	0
1	Aq	217/242 (89%)	0.10	7 (3%)	50	41	16, 46, 100, 197	0
1	At	185/242 (76%)	-0.10	5 (2%)	56	47	19, 45, 81, 112	0
1	Au	189/242 (78%)	-0.14	3 (1%)	70	62	9, 41, 85, 128	0
1	Av	217/242 (89%)	0.13	10 (4%)	37	29	10, 45, 106, 196	0
1	Ay	185/242 (76%)	0.15	4 (2%)	62	53	26, 57, 89, 119	0
1	Az	189/242 (78%)	-0.03	1 (0%)	87	83	27, 54, 96, 132	0
1	B1	217/242 (89%)	-0.02	7 (3%)	50	41	18, 44, 101, 188	0
1	B4	185/242 (76%)	0.23	2 (1%)	78	71	36, 61, 85, 117	0
1	B5	189/242 (78%)	0.08	4 (2%)	63	54	29, 55, 93, 145	0
1	B6	217/242 (89%)	0.15	12 (5%)	30	24	26, 54, 116, 209	0
1	BA	185/242 (76%)	0.22	2 (1%)	78	71	17, 56, 91, 116	0
1	BB	189/242 (78%)	0.13	4 (2%)	63	54	22, 50, 92, 146	0
1	BC	217/242 (89%)	0.19	7 (3%)	50	41	8, 50, 108, 193	0
1	BF	185/242 (76%)	-0.02	1 (0%)	87	83	18, 45, 81, 116	0
1	BG	189/242 (78%)	-0.25	3 (1%)	70	62	10, 38, 85, 127	0
1	BH	217/242 (89%)	-0.04	5 (2%)	61	52	13, 40, 95, 200	0
1	BK	185/242 (76%)	0.13	4 (2%)	62	53	12, 48, 87, 133	0
1	BL	189/242 (78%)	-0.01	1 (0%)	87	83	17, 47, 86, 130	0
1	BM	217/242 (89%)	0.22	11 (5%)	33	26	21, 48, 107, 209	0
1	BP	185/242 (76%)	-0.07	2 (1%)	78	71	22, 48, 84, 109	0
1	BQ	189/242 (78%)	0.03	3 (1%)	70	62	27, 48, 84, 139	0
1	BR	217/242 (89%)	-0.07	5 (2%)	61	52	15, 46, 101, 202	0
1	BU	185/242 (76%)	0.22	5 (2%)	56	47	29, 59, 97, 130	0
1	BV	189/242 (78%)	0.06	3 (1%)	70	62	26, 54, 93, 137	0
1	BW	217/242 (89%)	0.27	9 (4%)	41	33	27, 59, 110, 219	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	BZ	185/242 (76%)	-0.03	4 (2%)	62	53	15, 43, 81, 120	0
1	Ba	189/242 (78%)	-0.09	3 (1%)	70	62	22, 46, 88, 121	0
1	Bb	217/242 (89%)	0.04	8 (3%)	45	37	19, 45, 111, 192	0
1	Be	185/242 (76%)	-0.03	2 (1%)	78	71	17, 44, 83, 112	0
1	Bf	189/242 (78%)	-0.04	6 (3%)	50	41	14, 41, 86, 119	0
1	Bg	217/242 (89%)	0.01	6 (2%)	55	46	18, 45, 105, 176	0
1	Bj	185/242 (76%)	-0.05	2 (1%)	78	71	19, 46, 79, 117	0
1	Bk	189/242 (78%)	-0.01	1 (0%)	87	83	18, 47, 88, 127	0
1	Bl	217/242 (89%)	0.05	7 (3%)	50	41	16, 48, 101, 206	0
1	Bo	185/242 (76%)	0.07	2 (1%)	78	71	20, 50, 77, 121	0
1	Bp	189/242 (78%)	0.03	3 (1%)	70	62	21, 46, 92, 129	0
1	Bq	217/242 (89%)	0.08	6 (2%)	55	46	26, 48, 106, 189	0
1	Bt	185/242 (76%)	0.36	7 (3%)	44	36	33, 60, 94, 120	0
1	Bu	189/242 (78%)	0.12	4 (2%)	63	54	20, 51, 94, 133	0
1	Bv	217/242 (89%)	0.27	11 (5%)	33	26	25, 56, 111, 187	0
1	By	185/242 (76%)	0.03	5 (2%)	56	47	14, 46, 84, 123	0
1	Bz	189/242 (78%)	-0.16	4 (2%)	63	54	14, 40, 80, 139	0
1	C1	217/242 (89%)	-0.05	9 (4%)	41	33	12, 39, 104, 212	0
1	C4	185/242 (76%)	0.19	4 (2%)	62	53	19, 55, 92, 112	0
1	C5	189/242 (78%)	0.10	7 (3%)	45	37	23, 51, 89, 164	0
1	C6	217/242 (89%)	0.24	9 (4%)	41	33	24, 52, 109, 189	0
1	CA	185/242 (76%)	0.17	8 (4%)	40	31	28, 52, 94, 114	0
1	CB	189/242 (78%)	0.12	6 (3%)	50	41	18, 50, 81, 123	0
1	CC	217/242 (89%)	0.21	12 (5%)	30	24	22, 51, 107, 181	0
1	CF	185/242 (76%)	-0.14	5 (2%)	56	47	15, 37, 79, 119	0
1	CG	189/242 (78%)	-0.11	6 (3%)	50	41	9, 36, 82, 131	0
1	CH	217/242 (89%)	-0.09	6 (2%)	55	46	15, 35, 90, 195	0
1	CK	185/242 (76%)	0.16	5 (2%)	56	47	23, 53, 82, 125	0
1	CL	189/242 (78%)	0.05	2 (1%)	78	71	13, 47, 84, 149	0
1	CM	217/242 (89%)	0.27	7 (3%)	50	41	16, 50, 108, 206	0
1	CP	185/242 (76%)	-0.04	5 (2%)	56	47	23, 49, 77, 129	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	CQ	189/242 (78%)	-0.05	7 (3%)	45	37	16, 44, 92, 126	0
1	CR	217/242 (89%)	-0.01	6 (2%)	55	46	24, 50, 106, 195	0
1	CU	185/242 (76%)	0.19	4 (2%)	62	53	28, 56, 91, 117	0
1	CV	189/242 (78%)	0.11	4 (2%)	63	54	21, 52, 92, 144	0
1	CW	217/242 (89%)	0.09	8 (3%)	45	37	21, 51, 107, 194	0
1	CZ	185/242 (76%)	0.11	4 (2%)	62	53	26, 55, 91, 108	0
1	Ca	189/242 (78%)	0.04	1 (0%)	87	83	22, 53, 93, 141	0
1	Cb	217/242 (89%)	0.15	6 (2%)	55	46	15, 50, 106, 197	0
1	Ce	185/242 (76%)	0.03	2 (1%)	78	71	17, 49, 82, 117	0
1	Cf	189/242 (78%)	-0.03	2 (1%)	78	71	20, 46, 96, 130	0
1	Cg	217/242 (89%)	0.13	10 (4%)	37	29	16, 50, 104, 215	0
1	Cj	185/242 (76%)	0.09	6 (3%)	50	41	20, 48, 84, 109	0
1	Ck	189/242 (78%)	0.04	6 (3%)	50	41	20, 49, 98, 146	0
1	Cl	217/242 (89%)	0.14	13 (5%)	27	21	20, 46, 105, 204	0
1	Co	185/242 (76%)	0.06	4 (2%)	62	53	24, 49, 77, 110	0
1	Cp	189/242 (78%)	0.00	7 (3%)	45	37	16, 47, 90, 145	0
1	Cq	217/242 (89%)	0.19	8 (3%)	45	37	27, 52, 109, 204	0
1	Ct	185/242 (76%)	-0.03	3 (1%)	70	62	21, 45, 78, 116	0
1	Cu	189/242 (78%)	-0.25	3 (1%)	70	62	11, 39, 89, 136	0
1	Cv	217/242 (89%)	-0.11	7 (3%)	50	41	19, 42, 99, 199	0
1	Cy	185/242 (76%)	-0.22	1 (0%)	87	83	13, 38, 78, 107	0
1	Cz	189/242 (78%)	-0.16	5 (2%)	57	48	12, 34, 82, 123	0
1	D1	217/242 (89%)	-0.01	5 (2%)	61	52	14, 42, 106, 203	0
1	D4	185/242 (76%)	-0.05	2 (1%)	78	71	19, 41, 85, 110	0
1	D5	189/242 (78%)	-0.19	4 (2%)	63	54	12, 35, 78, 121	0
1	D6	217/242 (89%)	-0.06	6 (2%)	55	46	15, 38, 95, 205	0
1	DA	185/242 (76%)	-0.02	4 (2%)	62	53	20, 49, 83, 111	0
1	DB	189/242 (78%)	0.09	6 (3%)	50	41	16, 47, 85, 130	0
1	DC	217/242 (89%)	0.18	11 (5%)	33	26	17, 48, 103, 188	0
1	DF	185/242 (76%)	0.16	4 (2%)	62	53	25, 54, 85, 123	0
1	DG	189/242 (78%)	0.09	5 (2%)	57	48	25, 51, 89, 164	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	DH	217/242 (89%)	0.10	4 (1%)	67	59	22, 53, 106, 186	0
1	DK	185/242 (76%)	-0.09	4 (2%)	62	53	18, 45, 78, 105	0
1	DL	189/242 (78%)	-0.13	2 (1%)	78	71	13, 40, 84, 129	0
1	DM	217/242 (89%)	-0.05	6 (2%)	55	46	15, 43, 105, 207	0
1	DP	185/242 (76%)	0.01	5 (2%)	56	47	26, 52, 91, 123	0
1	DQ	189/242 (78%)	-0.01	4 (2%)	63	54	19, 47, 86, 137	0
1	DR	217/242 (89%)	0.02	5 (2%)	61	52	17, 46, 102, 190	0
1	DU	185/242 (76%)	0.30	6 (3%)	50	41	26, 63, 95, 128	0
1	DV	189/242 (78%)	0.14	5 (2%)	57	48	27, 57, 94, 149	0
1	DW	217/242 (89%)	0.29	11 (5%)	33	26	32, 60, 111, 195	0
1	DZ	185/242 (76%)	0.13	4 (2%)	62	53	22, 50, 94, 123	0
1	Da	189/242 (78%)	0.06	3 (1%)	70	62	18, 46, 89, 134	0
1	Db	217/242 (89%)	0.21	11 (5%)	33	26	19, 49, 102, 207	0
1	De	185/242 (76%)	0.24	5 (2%)	56	47	31, 62, 93, 116	0
1	Df	189/242 (78%)	0.06	6 (3%)	50	41	22, 54, 92, 139	0
1	Dg	217/242 (89%)	0.18	5 (2%)	61	52	24, 56, 108, 184	0
1	Dj	185/242 (76%)	0.04	4 (2%)	62	53	22, 48, 84, 115	0
1	Dk	189/242 (78%)	-0.07	5 (2%)	57	48	14, 41, 88, 147	0
1	Dl	217/242 (89%)	0.08	5 (2%)	61	52	21, 47, 102, 192	0
1	Do	185/242 (76%)	0.22	5 (2%)	56	47	32, 59, 96, 120	0
1	Dp	189/242 (78%)	0.17	6 (3%)	50	41	26, 57, 97, 164	0
1	Dq	217/242 (89%)	0.20	9 (4%)	41	33	24, 56, 111, 193	0
1	Dt	185/242 (76%)	0.08	3 (1%)	70	62	16, 48, 80, 132	0
1	Du	189/242 (78%)	0.12	7 (3%)	45	37	23, 47, 90, 143	0
1	Dv	217/242 (89%)	0.26	5 (2%)	61	52	18, 50, 101, 190	0
1	Dy	185/242 (76%)	-0.18	1 (0%)	87	83	7, 38, 76, 98	0
1	Dz	189/242 (78%)	-0.18	4 (2%)	63	54	16, 38, 75, 130	0
1	E1	217/242 (89%)	-0.04	7 (3%)	50	41	14, 43, 102, 207	0
1	E4	185/242 (76%)	-0.02	3 (1%)	70	62	18, 46, 87, 114	0
1	E5	189/242 (78%)	-0.05	3 (1%)	70	62	15, 43, 84, 124	0
1	E6	217/242 (89%)	0.02	6 (2%)	55	46	16, 44, 106, 194	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	EA	185/242 (76%)	-0.11	2 (1%)	78	71	12, 43, 74, 108	0
1	EB	189/242 (78%)	-0.18	1 (0%)	87	83	12, 41, 81, 122	0
1	EC	217/242 (89%)	0.06	6 (2%)	55	46	18, 43, 98, 186	0
1	EF	185/242 (76%)	0.05	5 (2%)	56	47	22, 52, 90, 126	0
1	EG	189/242 (78%)	0.04	9 (4%)	35	28	21, 51, 92, 151	0
1	EH	217/242 (89%)	0.22	10 (4%)	37	29	24, 55, 114, 189	0
1	EK	185/242 (76%)	0.14	4 (2%)	62	53	25, 54, 89, 122	0
1	EL	189/242 (78%)	0.09	7 (3%)	45	37	27, 53, 95, 126	0
1	EM	217/242 (89%)	0.09	8 (3%)	45	37	21, 52, 108, 195	0
1	EP	185/242 (76%)	-0.04	4 (2%)	62	53	17, 45, 86, 118	0
1	EQ	189/242 (78%)	0.02	2 (1%)	78	71	15, 43, 78, 131	0
1	ER	217/242 (89%)	0.23	14 (6%)	25	20	15, 46, 105, 192	0
1	EU	185/242 (76%)	0.08	3 (1%)	70	62	22, 52, 83, 128	0
1	EV	189/242 (78%)	0.02	5 (2%)	57	48	16, 46, 89, 135	0
1	EW	217/242 (89%)	0.16	6 (2%)	55	46	21, 50, 103, 200	0
1	EZ	185/242 (76%)	0.14	5 (2%)	56	47	30, 53, 85, 118	0
1	Ea	189/242 (78%)	-0.03	3 (1%)	70	62	20, 48, 90, 143	0
1	Eb	217/242 (89%)	0.21	9 (4%)	41	33	16, 50, 105, 190	0
1	Ee	185/242 (76%)	0.16	3 (1%)	70	62	33, 59, 88, 116	0
1	Ef	189/242 (78%)	-0.02	1 (0%)	87	83	21, 54, 93, 136	0
1	Eg	217/242 (89%)	0.20	10 (4%)	37	29	24, 60, 113, 203	0
1	Ej	185/242 (76%)	0.26	6 (3%)	50	41	22, 58, 90, 113	0
1	Ek	189/242 (78%)	0.13	9 (4%)	35	28	29, 57, 94, 139	0
1	El	217/242 (89%)	0.20	9 (4%)	41	33	30, 56, 107, 191	0
1	Eo	185/242 (76%)	-0.01	2 (1%)	78	71	25, 54, 84, 113	0
1	Ep	189/242 (78%)	-0.08	4 (2%)	63	54	20, 46, 89, 162	0
1	Eq	217/242 (89%)	0.05	5 (2%)	61	52	23, 52, 112, 190	0
1	Et	185/242 (76%)	-0.20	4 (2%)	62	53	17, 38, 77, 114	0
1	Eu	189/242 (78%)	-0.20	3 (1%)	70	62	13, 37, 80, 134	0
1	Ev	217/242 (89%)	-0.01	8 (3%)	45	37	12, 38, 97, 197	0
1	Ey	185/242 (76%)	-0.11	2 (1%)	78	71	24, 48, 79, 120	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Ez	189/242 (78%)	-0.15	2 (1%) 78 71	19, 43, 84, 139	0
1	F1	217/242 (89%)	0.65	19 (8%) 15 13	49, 80, 118, 186	0
1	F4	185/242 (76%)	0.25	5 (2%) 56 47	26, 57, 86, 112	0
1	F5	189/242 (78%)	0.21	7 (3%) 45 37	28, 57, 94, 140	0
1	F6	217/242 (89%)	0.45	14 (6%) 25 20	31, 64, 117, 195	0
1	FA	185/242 (76%)	0.20	5 (2%) 56 47	22, 59, 95, 134	0
1	FB	189/242 (78%)	0.06	5 (2%) 57 48	20, 47, 90, 148	0
1	FC	217/242 (89%)	0.43	14 (6%) 25 20	29, 62, 110, 205	0
1	FF	185/242 (76%)	0.21	4 (2%) 62 53	30, 55, 92, 114	0
1	FG	189/242 (78%)	0.05	4 (2%) 63 54	20, 51, 92, 133	0
1	FH	217/242 (89%)	0.26	7 (3%) 50 41	24, 60, 106, 197	0
1	FK	185/242 (76%)	0.27	6 (3%) 50 41	28, 59, 90, 131	0
1	FL	189/242 (78%)	0.27	7 (3%) 45 37	24, 59, 100, 150	0
1	FM	217/242 (89%)	0.25	9 (4%) 41 33	22, 54, 101, 200	0
1	FP	185/242 (76%)	0.66	10 (5%) 31 24	24, 62, 101, 112	0
1	FQ	189/242 (78%)	0.43	4 (2%) 63 54	23, 61, 94, 134	0
1	FR	217/242 (89%)	0.30	13 (5%) 27 21	26, 55, 118, 222	0
1	FU	185/242 (76%)	0.20	5 (2%) 56 47	32, 55, 86, 119	0
1	FV	189/242 (78%)	0.04	4 (2%) 63 54	21, 48, 87, 130	0
1	FW	217/242 (89%)	0.32	8 (3%) 45 37	19, 52, 105, 190	0
1	FZ	185/242 (76%)	0.53	9 (4%) 35 27	42, 78, 106, 129	0
1	Fa	189/242 (78%)	0.46	10 (5%) 32 25	34, 70, 104, 156	0
1	Fb	217/242 (89%)	0.43	11 (5%) 33 26	41, 70, 117, 212	0
1	Fe	185/242 (76%)	1.16	33 (17%) 4 3	63, 97, 124, 151	0
1	Ff	189/242 (78%)	0.99	27 (14%) 6 5	52, 93, 121, 163	0
1	Fg	217/242 (89%)	1.06	36 (16%) 4 3	58, 92, 134, 190	0
1	Fj	185/242 (76%)	0.84	15 (8%) 18 15	38, 74, 107, 128	0
1	Fk	189/242 (78%)	0.82	16 (8%) 16 14	35, 75, 111, 141	0
1	Fl	217/242 (89%)	0.95	28 (12%) 7 6	41, 79, 127, 203	0
1	Fo	185/242 (76%)	0.24	7 (3%) 44 36	26, 54, 92, 120	0
1	Fp	189/242 (78%)	0.22	6 (3%) 50 41	14, 49, 93, 134	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Fq	217/242 (89%)	0.14	7 (3%) 50 41	11, 50, 103, 203	0
1	Ft	185/242 (76%)	0.21	2 (1%) 78 71	27, 55, 92, 127	0
1	Fu	189/242 (78%)	0.05	4 (2%) 63 54	24, 51, 88, 140	0
1	Fv	217/242 (89%)	0.17	9 (4%) 41 33	20, 53, 102, 187	0
1	Fy	185/242 (76%)	0.78	15 (8%) 18 15	59, 90, 117, 135	0
1	Fz	189/242 (78%)	0.34	9 (4%) 35 28	40, 76, 113, 150	0
1	G1	217/242 (89%)	0.45	16 (7%) 20 17	34, 66, 116, 201	0
1	G4	185/242 (76%)	0.93	19 (10%) 12 10	57, 89, 114, 148	0
1	G5	189/242 (78%)	0.84	18 (9%) 14 11	45, 83, 114, 159	0
1	G6	217/242 (89%)	0.77	21 (9%) 13 11	38, 73, 126, 187	0
1	GA	185/242 (76%)	0.32	7 (3%) 44 36	20, 57, 92, 118	0
1	GB	189/242 (78%)	0.27	4 (2%) 63 54	28, 59, 96, 125	0
1	GC	217/242 (89%)	0.24	4 (1%) 67 59	23, 58, 113, 202	0
1	GF	185/242 (76%)	0.31	6 (3%) 50 41	20, 56, 83, 116	0
1	GG	189/242 (78%)	0.23	8 (4%) 40 32	22, 53, 94, 132	0
1	GH	217/242 (89%)	0.15	8 (3%) 45 37	25, 54, 105, 188	0
1	GK	185/242 (76%)	0.80	13 (7%) 22 18	61, 90, 117, 142	0
1	GL	189/242 (78%)	0.77	13 (6%) 23 18	52, 84, 119, 165	0
1	GM	217/242 (89%)	0.52	11 (5%) 33 26	42, 77, 118, 205	0
1	GP	185/242 (76%)	0.23	8 (4%) 40 31	20, 55, 91, 125	0
1	GQ	189/242 (78%)	0.37	7 (3%) 45 37	26, 58, 93, 117	0
1	GR	217/242 (89%)	0.38	12 (5%) 30 24	25, 55, 106, 199	0
1	GU	185/242 (76%)	0.12	5 (2%) 56 47	26, 55, 87, 128	0
1	GV	189/242 (78%)	-0.02	5 (2%) 57 48	15, 46, 88, 131	0
1	GW	217/242 (89%)	0.10	5 (2%) 61 52	23, 48, 102, 194	0
1	GZ	185/242 (76%)	0.55	8 (4%) 40 31	26, 67, 96, 131	0
1	Ga	189/242 (78%)	0.28	7 (3%) 45 37	20, 55, 99, 172	0
1	Gb	217/242 (89%)	0.29	10 (4%) 37 29	32, 61, 109, 200	0
1	Ge	185/242 (76%)	0.69	9 (4%) 35 27	33, 67, 100, 126	0
1	Gf	189/242 (78%)	0.95	25 (13%) 7 6	28, 70, 108, 147	0
1	Gg	217/242 (89%)	0.72	14 (6%) 25 20	34, 69, 117, 199	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Gj	185/242 (76%)	0.98	27 (14%) 6 4	51, 89, 118, 144	0
1	Gk	189/242 (78%)	0.73	18 (9%) 14 11	53, 82, 114, 143	0
1	Gl	217/242 (89%)	0.61	10 (4%) 37 29	38, 75, 119, 194	0
1	Go	185/242 (76%)	1.00	17 (9%) 14 12	62, 92, 120, 144	0
1	Gp	189/242 (78%)	0.92	17 (8%) 15 13	56, 95, 124, 162	0
1	Gq	217/242 (89%)	0.96	27 (12%) 8 7	57, 91, 129, 191	0
1	Gt	185/242 (76%)	0.26	3 (1%) 70 62	25, 56, 90, 118	0
1	Gu	189/242 (78%)	0.12	5 (2%) 57 48	24, 51, 89, 145	0
1	Gv	217/242 (89%)	0.19	8 (3%) 45 37	24, 53, 105, 199	0
1	Gy	185/242 (76%)	0.44	9 (4%) 35 27	35, 64, 98, 129	0
1	Gz	189/242 (78%)	0.23	1 (0%) 87 83	34, 63, 97, 153	0
1	H1	217/242 (89%)	0.62	14 (6%) 25 20	32, 69, 116, 189	0
1	H4	185/242 (76%)	0.92	14 (7%) 20 16	56, 91, 125, 144	0
1	H5	189/242 (78%)	1.04	23 (12%) 8 7	57, 93, 122, 143	0
1	H6	217/242 (89%)	1.02	22 (10%) 12 10	55, 92, 133, 193	0
1	HA	185/242 (76%)	0.35	6 (3%) 50 41	41, 71, 100, 130	0
1	HB	189/242 (78%)	0.36	7 (3%) 45 37	34, 67, 106, 131	0
1	HC	217/242 (89%)	0.69	20 (9%) 14 12	46, 78, 133, 205	0
1	HF	185/242 (76%)	0.49	9 (4%) 35 27	40, 70, 98, 130	0
1	HG	189/242 (78%)	0.22	6 (3%) 50 41	32, 58, 99, 136	0
1	HH	217/242 (89%)	0.31	8 (3%) 45 37	26, 60, 105, 206	0
1	HK	185/242 (76%)	0.30	4 (2%) 62 53	30, 62, 97, 119	0
1	HL	189/242 (78%)	0.15	2 (1%) 78 71	24, 52, 93, 141	0
1	HM	217/242 (89%)	0.41	12 (5%) 30 24	25, 64, 112, 190	0
1	HP	185/242 (76%)	0.67	14 (7%) 20 16	23, 66, 103, 127	0
1	HQ	189/242 (78%)	0.20	5 (2%) 57 48	21, 54, 99, 137	0
1	HR	217/242 (89%)	0.48	14 (6%) 25 20	24, 62, 118, 186	0
1	HU	185/242 (76%)	0.29	4 (2%) 62 53	27, 60, 89, 126	0
1	HV	189/242 (78%)	0.33	8 (4%) 40 32	31, 60, 104, 142	0
1	HW	217/242 (89%)	0.42	11 (5%) 33 26	38, 67, 112, 183	0
1	HZ	185/242 (76%)	0.37	4 (2%) 62 53	36, 66, 93, 130	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Ha	189/242 (78%)	0.16	5 (2%) 57 48	26, 57, 95, 154	0
1	Hb	217/242 (89%)	0.40	11 (5%) 33 26	33, 65, 107, 199	0
1	He	185/242 (76%)	1.11	29 (15%) 5 4	55, 96, 127, 153	0
1	Hf	189/242 (78%)	1.00	23 (12%) 8 7	50, 88, 122, 171	0
1	Hg	217/242 (89%)	0.94	24 (11%) 10 9	54, 94, 131, 203	0
1	Hj	185/242 (76%)	0.67	8 (4%) 40 31	51, 88, 110, 134	0
1	Hk	189/242 (78%)	0.45	8 (4%) 40 32	35, 73, 112, 169	0
1	Hl	217/242 (89%)	0.57	12 (5%) 30 24	39, 71, 121, 178	0
1	Ho	185/242 (76%)	0.29	5 (2%) 56 47	37, 65, 100, 127	0
1	Hp	189/242 (78%)	0.16	4 (2%) 63 54	32, 61, 96, 139	0
1	Hq	217/242 (89%)	0.26	7 (3%) 50 41	31, 62, 106, 201	0
1	Ht	185/242 (76%)	0.64	14 (7%) 20 16	27, 67, 98, 131	0
1	Hu	189/242 (78%)	0.51	11 (5%) 29 22	23, 62, 106, 162	0
1	Hv	217/242 (89%)	0.42	14 (6%) 25 20	25, 57, 111, 205	0
1	Hy	185/242 (76%)	0.47	9 (4%) 35 27	37, 68, 108, 132	0
1	Hx	189/242 (78%)	0.40	10 (5%) 32 25	25, 62, 101, 141	0
1	I1	217/242 (89%)	0.47	15 (6%) 23 18	23, 63, 112, 193	0
1	I4	185/242 (76%)	0.69	9 (4%) 35 27	29, 67, 97, 116	0
1	I5	189/242 (78%)	0.29	8 (4%) 40 32	31, 58, 97, 146	0
1	I6	217/242 (89%)	0.66	15 (6%) 23 18	30, 69, 117, 212	0
1	IA	185/242 (76%)	0.88	12 (6%) 25 20	67, 98, 122, 151	0
1	IB	189/242 (78%)	0.84	22 (11%) 9 8	53, 89, 127, 196	0
1	IC	217/242 (89%)	1.04	28 (12%) 7 6	56, 98, 138, 201	0
1	IF	185/242 (76%)	0.32	8 (4%) 40 31	34, 68, 102, 130	0
1	IG	189/242 (78%)	0.44	10 (5%) 32 25	46, 73, 104, 142	0
1	IH	217/242 (89%)	0.45	13 (5%) 27 21	42, 71, 118, 184	0
1	IK	185/242 (76%)	0.21	2 (1%) 78 71	35, 60, 90, 127	0
1	IL	189/242 (78%)	0.10	7 (3%) 45 37	22, 50, 90, 138	0
1	IM	217/242 (89%)	0.24	6 (2%) 55 46	27, 58, 112, 188	0
1	IP	185/242 (76%)	0.28	7 (3%) 44 36	36, 68, 101, 128	0
1	IQ	189/242 (78%)	0.29	4 (2%) 63 54	39, 65, 102, 162	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	IR	217/242 (89%)	0.41	10 (4%) 37 29	40, 69, 111, 186	0
1	IU	185/242 (76%)	0.30	8 (4%) 40 31	21, 55, 88, 116	0
1	IV	189/242 (78%)	0.02	3 (1%) 70 62	18, 48, 81, 134	0
1	IW	217/242 (89%)	0.34	13 (5%) 27 21	21, 52, 107, 195	0
1	IZ	185/242 (76%)	0.26	4 (2%) 62 53	21, 58, 87, 123	0
1	Ia	189/242 (78%)	0.05	6 (3%) 50 41	17, 46, 86, 144	0
1	Ib	217/242 (89%)	0.21	10 (4%) 37 29	23, 50, 105, 194	0
1	Ie	185/242 (76%)	0.71	11 (5%) 28 22	53, 85, 115, 136	0
1	If	189/242 (78%)	0.48	10 (5%) 32 25	37, 71, 116, 154	0
1	Ig	217/242 (89%)	0.50	11 (5%) 33 26	34, 70, 116, 193	0
1	Ij	185/242 (76%)	1.00	20 (10%) 11 9	56, 89, 121, 143	0
1	Ik	189/242 (78%)	0.87	21 (11%) 10 9	34, 76, 114, 152	0
1	Il	217/242 (89%)	0.95	28 (12%) 7 6	40, 85, 123, 212	0
1	Io	185/242 (76%)	0.27	10 (5%) 31 24	26, 56, 94, 123	0
1	Ip	189/242 (78%)	0.09	4 (2%) 63 54	21, 51, 90, 140	0
1	Iq	217/242 (89%)	0.37	13 (5%) 27 21	26, 58, 112, 189	0
1	It	185/242 (76%)	0.21	5 (2%) 56 47	29, 59, 94, 132	0
1	Iu	189/242 (78%)	0.20	7 (3%) 45 37	21, 53, 102, 135	0
1	Iv	217/242 (89%)	0.16	5 (2%) 61 52	26, 54, 103, 186	0
1	Iy	185/242 (76%)	0.35	3 (1%) 70 62	44, 73, 104, 132	0
1	Iz	189/242 (78%)	0.34	7 (3%) 45 37	37, 67, 105, 162	0
1	J1	217/242 (89%)	0.67	16 (7%) 20 17	23, 66, 107, 195	0
1	J4	185/242 (76%)	1.04	26 (14%) 6 5	43, 83, 113, 139	0
1	J5	189/242 (78%)	0.90	22 (11%) 9 8	27, 73, 118, 145	0
1	J6	217/242 (89%)	0.88	22 (10%) 12 10	34, 74, 126, 198	0
1	JA	185/242 (76%)	0.88	14 (7%) 20 16	35, 70, 105, 127	0
1	JB	189/242 (78%)	0.73	15 (7%) 18 15	32, 65, 110, 139	0
1	JC	217/242 (89%)	0.89	22 (10%) 12 10	31, 74, 118, 188	0
1	JF	185/242 (76%)	0.75	14 (7%) 20 16	39, 73, 109, 134	0
1	JG	189/242 (78%)	0.58	10 (5%) 32 25	24, 70, 109, 153	0
1	JH	217/242 (89%)	0.85	25 (11%) 9 8	42, 77, 115, 192	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	JK	185/242 (76%)	1.04	25 (13%) 7 5	63, 97, 126, 150	0
1	JL	189/242 (78%)	0.72	12 (6%) 26 20	52, 87, 125, 168	0
1	JM	217/242 (89%)	0.95	17 (7%) 19 16	62, 98, 136, 192	0
1	JP	185/242 (76%)	0.92	22 (11%) 9 7	58, 90, 114, 148	0
1	JQ	189/242 (78%)	0.46	9 (4%) 35 28	44, 77, 116, 137	0
1	JR	217/242 (89%)	0.73	13 (5%) 27 21	47, 85, 125, 215	0
1	JU	185/242 (76%)	0.39	9 (4%) 35 27	38, 69, 105, 133	0
1	JV	189/242 (78%)	0.51	4 (2%) 63 54	35, 67, 102, 152	0
1	JW	217/242 (89%)	0.56	12 (5%) 30 24	42, 79, 121, 215	0
1	JZ	185/242 (76%)	0.41	6 (3%) 50 41	38, 68, 101, 131	0
1	Ja	189/242 (78%)	0.56	9 (4%) 35 28	41, 76, 108, 163	0
1	Jb	217/242 (89%)	0.51	16 (7%) 20 17	36, 69, 115, 195	0
1	Je	185/242 (76%)	0.24	4 (2%) 62 53	29, 57, 92, 124	0
1	Jf	189/242 (78%)	0.28	6 (3%) 50 41	28, 58, 98, 135	0
1	Jg	217/242 (89%)	0.23	8 (3%) 45 37	19, 51, 99, 197	0
1	Jj	185/242 (76%)	0.07	5 (2%) 56 47	22, 49, 80, 117	0
1	Jk	189/242 (78%)	0.05	6 (3%) 50 41	14, 44, 91, 123	0
1	Jl	217/242 (89%)	0.06	5 (2%) 61 52	17, 44, 92, 208	0
1	Jo	185/242 (76%)	0.22	4 (2%) 62 53	31, 59, 91, 124	0
1	Jp	189/242 (78%)	0.17	1 (0%) 87 83	31, 62, 101, 130	0
1	Jq	217/242 (89%)	0.21	7 (3%) 50 41	24, 54, 108, 199	0
1	Jt	185/242 (76%)	0.55	11 (5%) 28 22	36, 73, 106, 129	0
1	Ju	189/242 (78%)	0.56	9 (4%) 35 28	34, 69, 102, 152	0
1	Jv	217/242 (89%)	0.53	15 (6%) 23 18	34, 68, 121, 185	0
1	Jy	185/242 (76%)	0.74	15 (8%) 18 15	36, 71, 108, 126	0
1	Jz	189/242 (78%)	0.87	20 (10%) 11 9	34, 73, 110, 141	0
2	A2	17/17 (100%)	1.26	1 (5%) 28 22	159, 199, 279, 304	0
2	A7	17/17 (100%)	1.40	2 (11%) 9 7	154, 204, 269, 286	0
2	AD	17/17 (100%)	1.02	1 (5%) 28 22	157, 204, 281, 286	0
2	AI	17/17 (100%)	1.17	1 (5%) 28 22	164, 188, 256, 267	0
2	AN	17/17 (100%)	1.06	1 (5%) 28 22	159, 190, 274, 277	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	AS	17/17 (100%)	0.94	0 100 100	154, 202, 274, 275	0
2	AX	17/17 (100%)	0.88	0 100 100	164, 193, 269, 273	0
2	Ac	17/17 (100%)	1.13	1 (5%) 28 22	141, 188, 262, 275	0
2	Ah	17/17 (100%)	0.85	0 100 100	154, 193, 271, 272	0
2	Am	17/17 (100%)	1.19	1 (5%) 28 22	137, 213, 264, 277	0
2	Ar	17/17 (100%)	1.29	2 (11%) 9 7	149, 198, 271, 283	0
2	Aw	17/17 (100%)	1.27	2 (11%) 9 7	163, 197, 284, 286	0
2	B2	17/17 (100%)	1.15	2 (11%) 9 7	162, 190, 261, 267	0
2	B7	17/17 (100%)	1.00	1 (5%) 28 22	177, 200, 254, 265	0
2	BD	17/17 (100%)	1.07	2 (11%) 9 7	160, 209, 274, 279	0
2	BI	17/17 (100%)	1.11	1 (5%) 28 22	156, 207, 280, 280	0
2	BN	17/17 (100%)	1.22	1 (5%) 28 22	156, 200, 262, 264	0
2	BS	17/17 (100%)	1.15	1 (5%) 28 22	159, 208, 260, 270	0
2	BX	17/17 (100%)	0.88	0 100 100	174, 199, 274, 277	0
2	Bc	17/17 (100%)	0.96	1 (5%) 28 22	165, 199, 272, 280	0
2	Bh	17/17 (100%)	1.06	1 (5%) 28 22	163, 199, 271, 273	0
2	Bm	17/17 (100%)	1.14	1 (5%) 28 22	154, 202, 276, 289	0
2	Br	17/17 (100%)	1.06	1 (5%) 28 22	144, 200, 289, 290	0
2	Bw	17/17 (100%)	0.94	1 (5%) 28 22	154, 195, 277, 282	0
2	C2	17/17 (100%)	1.34	4 (23%) 2 2	144, 205, 267, 273	0
2	C7	17/17 (100%)	1.22	0 100 100	164, 209, 267, 273	0
2	CD	17/17 (100%)	1.07	0 100 100	158, 202, 277, 281	0
2	CI	17/17 (100%)	1.24	1 (5%) 28 22	159, 206, 278, 289	0
2	CN	17/17 (100%)	1.44	4 (23%) 2 2	168, 187, 268, 276	0
2	CS	17/17 (100%)	0.91	1 (5%) 28 22	157, 199, 273, 276	0
2	CX	17/17 (100%)	1.14	0 100 100	162, 189, 274, 293	0
2	Cc	17/17 (100%)	1.13	1 (5%) 28 22	161, 205, 260, 270	0
2	Ch	17/17 (100%)	1.18	1 (5%) 28 22	151, 201, 273, 279	0
2	Cm	17/17 (100%)	1.14	1 (5%) 28 22	152, 201, 267, 268	0
2	Cr	17/17 (100%)	1.05	1 (5%) 28 22	152, 206, 261, 272	0
2	Cw	17/17 (100%)	1.13	1 (5%) 28 22	160, 193, 274, 284	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	D2	17/17 (100%)	1.32	2 (11%) 9 7	152, 201, 267, 269	0
2	D7	17/17 (100%)	1.21	1 (5%) 28 22	152, 194, 266, 269	0
2	DD	17/17 (100%)	1.14	2 (11%) 9 7	161, 204, 270, 283	0
2	DI	17/17 (100%)	1.16	2 (11%) 9 7	164, 212, 272, 278	0
2	DN	17/17 (100%)	1.25	2 (11%) 9 7	162, 207, 268, 275	0
2	DS	17/17 (100%)	1.09	1 (5%) 28 22	168, 199, 259, 264	0
2	DX	17/17 (100%)	0.94	0 100 100	176, 203, 267, 271	0
2	Dc	17/17 (100%)	1.20	3 (17%) 4 3	159, 209, 267, 279	0
2	Dh	17/17 (100%)	1.35	4 (23%) 2 2	164, 208, 269, 280	0
2	Dm	17/17 (100%)	1.24	1 (5%) 28 22	148, 199, 269, 272	0
2	Dr	17/17 (100%)	1.15	1 (5%) 28 22	157, 207, 277, 281	0
2	Dw	17/17 (100%)	1.09	1 (5%) 28 22	152, 191, 275, 293	0
2	E2	17/17 (100%)	1.19	1 (5%) 28 22	156, 193, 283, 293	0
2	E7	17/17 (100%)	1.12	0 100 100	156, 195, 271, 287	0
2	ED	17/17 (100%)	1.05	1 (5%) 28 22	152, 188, 275, 277	0
2	EI	17/17 (100%)	0.99	0 100 100	160, 206, 260, 264	0
2	EN	17/17 (100%)	1.15	1 (5%) 28 22	156, 192, 258, 286	0
2	ES	17/17 (100%)	1.18	2 (11%) 9 7	162, 204, 265, 279	0
2	EX	17/17 (100%)	1.28	2 (11%) 9 7	158, 195, 272, 273	0
2	Ec	17/17 (100%)	0.99	0 100 100	157, 196, 258, 270	0
2	Eh	17/17 (100%)	1.31	3 (17%) 4 3	172, 198, 263, 268	0
2	Em	17/17 (100%)	0.94	1 (5%) 28 22	147, 194, 261, 261	0
2	Er	17/17 (100%)	0.97	0 100 100	159, 202, 272, 280	0
2	Ew	17/17 (100%)	0.91	0 100 100	150, 183, 263, 264	0
2	F2	17/17 (100%)	1.03	0 100 100	194, 214, 267, 274	0
2	F7	17/17 (100%)	1.25	3 (17%) 4 3	159, 205, 277, 288	0
2	FD	17/17 (100%)	1.15	1 (5%) 28 22	167, 208, 268, 288	0
2	FI	17/17 (100%)	1.10	0 100 100	170, 198, 262, 266	0
2	FN	17/17 (100%)	1.25	0 100 100	163, 208, 292, 304	0
2	FS	17/17 (100%)	1.23	1 (5%) 28 22	174, 204, 274, 289	0
2	FX	17/17 (100%)	1.30	2 (11%) 9 7	158, 198, 284, 293	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	Fc	17/17 (100%)	1.18	1 (5%) 28 22	179, 218, 269, 281	0
2	Fh	17/17 (100%)	1.20	1 (5%) 28 22	180, 240, 287, 293	0
2	Fm	17/17 (100%)	1.10	1 (5%) 28 22	181, 216, 278, 291	0
2	Fr	17/17 (100%)	1.13	0 100 100	167, 200, 274, 280	0
2	Fw	17/17 (100%)	1.24	1 (5%) 28 22	165, 214, 286, 290	0
2	G2	17/17 (100%)	1.21	2 (11%) 9 7	170, 212, 259, 261	0
2	G7	17/17 (100%)	1.20	3 (17%) 4 3	189, 209, 259, 271	0
2	GD	17/17 (100%)	1.15	0 100 100	168, 211, 280, 286	0
2	GI	17/17 (100%)	1.15	0 100 100	163, 209, 263, 277	0
2	GN	17/17 (100%)	1.11	1 (5%) 28 22	185, 217, 288, 291	0
2	GS	17/17 (100%)	1.05	1 (5%) 28 22	184, 209, 263, 275	0
2	GX	17/17 (100%)	1.24	1 (5%) 28 22	166, 203, 273, 303	0
2	Gc	17/17 (100%)	1.13	2 (11%) 9 7	165, 211, 270, 276	0
2	Gh	17/17 (100%)	1.29	2 (11%) 9 7	162, 216, 260, 260	0
2	Gm	17/17 (100%)	1.03	1 (5%) 28 22	191, 213, 278, 289	0
2	Gr	17/17 (100%)	1.15	0 100 100	192, 219, 275, 295	0
2	Gw	17/17 (100%)	1.19	2 (11%) 9 7	165, 218, 280, 284	0
2	H2	17/17 (100%)	1.10	1 (5%) 28 22	173, 207, 289, 293	0
2	H7	17/17 (100%)	1.07	2 (11%) 9 7	195, 214, 276, 279	0
2	HD	17/17 (100%)	1.20	2 (11%) 9 7	177, 229, 281, 286	0
2	HI	17/17 (100%)	1.21	1 (5%) 28 22	173, 194, 258, 289	0
2	HN	17/17 (100%)	1.42	2 (11%) 9 7	167, 214, 281, 292	0
2	HS	17/17 (100%)	1.15	1 (5%) 28 22	174, 213, 281, 294	0
2	HX	17/17 (100%)	1.19	1 (5%) 28 22	158, 206, 276, 283	0
2	Hc	17/17 (100%)	1.15	1 (5%) 28 22	173, 208, 274, 293	0
2	Hh	17/17 (100%)	1.08	2 (11%) 9 7	196, 227, 270, 292	0
2	Hm	17/17 (100%)	1.31	2 (11%) 9 7	191, 215, 278, 297	0
2	Hr	17/17 (100%)	1.54	3 (17%) 4 3	170, 214, 284, 291	0
2	Hw	17/17 (100%)	1.41	4 (23%) 2 2	170, 214, 272, 286	0
2	I2	17/17 (100%)	1.07	0 100 100	173, 227, 265, 269	0
2	I7	17/17 (100%)	1.29	2 (11%) 9 7	169, 209, 277, 284	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	ID	17/17 (100%)	1.03	1 (5%) 28 22	197, 230, 270, 282	0
2	II	17/17 (100%)	1.29	1 (5%) 28 22	181, 209, 283, 298	0
2	IN	17/17 (100%)	1.33	1 (5%) 28 22	170, 195, 279, 286	0
2	IS	17/17 (100%)	1.17	1 (5%) 28 22	180, 207, 271, 276	0
2	IX	17/17 (100%)	1.42	2 (11%) 9 7	168, 215, 279, 286	0
2	Ic	17/17 (100%)	1.05	2 (11%) 9 7	165, 214, 265, 278	0
2	Ih	17/17 (100%)	1.13	0 100 100	176, 208, 264, 275	0
2	Im	17/17 (100%)	1.09	1 (5%) 28 22	193, 215, 278, 294	0
2	Ir	17/17 (100%)	1.03	1 (5%) 28 22	175, 206, 269, 274	0
2	Iw	17/17 (100%)	0.78	0 100 100	167, 208, 273, 276	0
2	J2	17/17 (100%)	1.29	2 (11%) 9 7	187, 220, 287, 302	0
2	J7	17/17 (100%)	1.26	2 (11%) 9 7	181, 227, 279, 294	0
2	JD	17/17 (100%)	1.19	0 100 100	169, 211, 260, 265	0
2	JI	17/17 (100%)	1.27	2 (11%) 9 7	179, 213, 269, 274	0
2	JN	17/17 (100%)	1.02	0 100 100	193, 227, 264, 264	0
2	JS	17/17 (100%)	1.18	2 (11%) 9 7	203, 222, 276, 276	0
2	JX	17/17 (100%)	1.02	0 100 100	175, 221, 275, 281	0
2	Jc	17/17 (100%)	1.21	1 (5%) 28 22	177, 215, 290, 291	0
2	Jh	17/17 (100%)	1.10	1 (5%) 28 22	156, 200, 280, 285	0
2	Jm	17/17 (100%)	1.23	2 (11%) 9 7	165, 207, 294, 298	0
2	Jr	17/17 (100%)	1.09	0 100 100	165, 208, 270, 278	0
2	Jw	17/17 (100%)	1.24	2 (11%) 9 7	180, 215, 280, 291	0
All	All	72960/89160 (81%)	0.29	3113 (4%) 40 31	7, 58, 123, 304	0

All (3113) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	If	52	GLN	8.5
1	Cz	52	GLN	7.5
1	BM	237	ILE	7.0
1	Av	25	ALA	6.8
1	IW	25	ALA	6.6
1	IH	27	GLY	6.6
1	GR	237	ILE	6.5

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Mol	Chain	Res	Type	RSRZ
1	B6	237	ILE	6.4
1	J5	91	GLY	6.3
1	DC	237	ILE	6.3
1	AH	237	ILE	6.2
1	Db	27	GLY	6.0
1	EH	237	ILE	5.9
1	G6	217	VAL	5.9
1	Dv	237	ILE	5.7
1	BW	47	ARG	5.7
1	H6	186	ILE	5.7
1	JF	143	SER	5.7
1	JH	217	VAL	5.7
1	Af	53	GLY	5.6
1	Eg	23	ARG	5.6
1	Af	52	GLN	5.6
1	EW	217	VAL	5.6
1	Gl	25	ALA	5.6
1	Ev	237	ILE	5.6
1	AH	54	GLN	5.6
1	HW	175	GLU	5.5
1	H5	175	GLU	5.5
1	AW	237	ILE	5.5
1	El	25	ALA	5.5
1	CC	237	ILE	5.5
1	JV	52	GLN	5.4
1	J6	217	VAL	5.4
1	Fe	234	ALA	5.3
1	Eq	237	ILE	5.3
1	Hl	26	ARG	5.3
1	C6	237	ILE	5.3
1	Cg	237	ILE	5.3
1	H5	147	PRO	5.2
1	Gq	70	SER	5.2
1	Ag	237	ILE	5.2
1	CM	175	GLU	5.2
1	Iz	175	GLU	5.2
1	BU	178	GLY	5.2
1	Fg	237	ILE	5.2
1	JM	217	VAL	5.1
1	Aq	237	ILE	5.1
1	Jb	47	ARG	5.1
1	CW	237	ILE	5.1

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Mol	Chain	Res	Type	RSRZ
1	F5	51	GLY	5.0
1	JK	55	GLY	5.0
1	Gq	181	PRO	5.0
1	Hg	217	VAL	5.0
1	JR	217	VAL	5.0
1	DC	25	ALA	5.0
1	Gf	156	SER	5.0
1	ER	237	ILE	4.9
1	JH	25	ALA	4.9
1	AM	237	ILE	4.9
1	AV	52	GLN	4.9
1	BU	175	GLU	4.9
1	DB	178	GLY	4.9
1	Jb	25	ALA	4.9
1	Bv	237	ILE	4.9
1	H4	210	GLY	4.9
1	Fb	34	SER	4.9
1	Jz	212	SER	4.9
1	I6	237	ILE	4.9
1	Gg	217	VAL	4.8
1	H1	217	VAL	4.8
1	D1	237	ILE	4.8
1	JR	237	ILE	4.8
1	HL	52	GLN	4.8
1	DW	237	ILE	4.8
1	El	23	ARG	4.8
1	Bb	237	ILE	4.7
1	CH	237	ILE	4.7
1	C5	53	GLY	4.7
1	E1	237	ILE	4.7
1	F1	237	ILE	4.7
1	JC	237	ILE	4.7
1	DW	27	GLY	4.7
1	El	237	ILE	4.7
1	Fa	53	GLY	4.6
1	Al	237	ILE	4.6
1	EW	237	ILE	4.6
1	Jv	237	ILE	4.6
1	Fu	148	LYS	4.6
1	EC	25	ALA	4.6
1	Gg	181	PRO	4.6
1	JH	27	GLY	4.6

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Mol	Chain	Res	Type	RSRZ
1	BH	27	GLY	4.6
1	AC	237	ILE	4.6
1	F1	237	ILE	4.6
1	H5	54	GLN	4.6
1	G1	34	SER	4.6
1	Gq	126	CYS	4.5
1	Gq	237	ILE	4.5
1	EV	178	GLY	4.5
1	HC	54	GLN	4.5
1	JK	86	LEU	4.5
1	Dg	237	ILE	4.5
1	BC	175	GLU	4.5
1	HR	23	ARG	4.5
1	CR	237	ILE	4.5
1	Ab	25	ALA	4.5
1	F1	25	ALA	4.5
1	Ha	52	GLN	4.5
1	J1	35	THR	4.4
1	Cg	25	ALA	4.4
1	AR	237	ILE	4.4
1	DM	237	ILE	4.4
1	GP	143	SER	4.4
1	JR	175	GLU	4.4
1	Cq	237	ILE	4.4
1	Cb	237	ILE	4.4
1	EV	179	ASN	4.4
1	CQ	178	GLY	4.4
1	JL	52	GLN	4.4
1	Hp	52	GLN	4.3
1	It	54	GLN	4.3
1	Fg	120	PHE	4.3
1	G1	175	GLU	4.3
1	HV	175	GLU	4.3
1	Hp	54	GLN	4.3
1	Eg	237	ILE	4.3
1	H1	237	ILE	4.3
1	Ju	53	GLY	4.3
1	Cp	52	GLN	4.3
1	G1	217	VAL	4.3
1	IC	217	VAL	4.3
1	GR	27	GLY	4.3
1	IH	173	LYS	4.3

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Mol	Chain	Res	Type	RSRZ
1	Cb	238	SER	4.3
1	HC	237	ILE	4.3
1	IH	237	ILE	4.3
1	IA	226	ARG	4.3
1	G5	52	GLN	4.2
1	Eb	237	ILE	4.2
1	Ik	182	GLU	4.2
1	Jy	143	SER	4.2
1	IH	25	ALA	4.2
1	Il	25	ALA	4.2
1	Gv	27	GLY	4.2
1	Jf	53	GLY	4.2
1	Cz	54	GLN	4.2
1	FZ	54	GLN	4.2
1	J6	237	ILE	4.2
1	BH	237	ILE	4.2
1	GW	237	ILE	4.2
1	HW	35	THR	4.2
1	JP	54	GLN	4.2
1	CW	27	GLY	4.2
1	IW	237	ILE	4.2
1	JK	65	ILE	4.2
1	J4	54	GLN	4.1
1	EG	238	SER	4.1
1	Et	175	GLU	4.1
1	CM	237	ILE	4.1
1	Ht	54	GLN	4.1
1	JQ	53	GLY	4.1
1	Fo	92	ASP	4.1
1	HZ	54	GLN	4.1
1	He	150	LEU	4.1
1	AW	217	VAL	4.1
1	HC	89	PRO	4.1
1	IF	55	GLY	4.1
1	B1	237	ILE	4.1
1	DZ	175	GLU	4.1
1	EU	175	GLU	4.1
1	FW	28	LYS	4.1
1	IC	237	ILE	4.1
1	Ij	62	GLU	4.1
1	Jg	237	ILE	4.1
1	JP	177	ARG	4.1

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Mol	Chain	Res	Type	RSRZ
1	Bq	237	ILE	4.1
1	Gg	237	ILE	4.1
1	Ig	237	ILE	4.1
1	J5	106	ILE	4.1
1	Ca	238	SER	4.1
1	Fl	184	ARG	4.1
1	C1	237	ILE	4.0
1	Jj	177	ARG	4.0
1	A1	217	VAL	4.0
1	J5	89	PRO	4.0
1	GK	106	ILE	4.0
1	Hg	237	ILE	4.0
1	Hl	237	ILE	4.0
1	HC	238	SER	4.0
1	Ep	51	GLY	4.0
1	Do	143	SER	4.0
1	GZ	54	GLN	4.0
1	HF	54	GLN	4.0
1	J1	25	ALA	4.0
1	Eg	27	GLY	4.0
1	FF	179	ASN	4.0
1	Gk	52	GLN	4.0
1	F1	217	VAL	4.0
1	JK	237	ILE	3.9
1	AV	51	GLY	3.9
1	Bf	53	GLY	3.9
1	IC	27	GLY	3.9
1	CV	52	GLN	3.9
1	HU	54	GLN	3.9
1	F6	217	VAL	3.9
1	J1	237	ILE	3.9
1	BV	53	GLY	3.9
1	Il	223	LEU	3.9
1	Ij	70	SER	3.9
1	D6	237	ILE	3.9
1	I5	226	ARG	3.9
1	IF	54	GLN	3.9
1	FC	237	ILE	3.9
1	G4	70	SER	3.9
1	G1	27	GLY	3.9
1	Ja	120	PHE	3.9
1	Ig	115	TRP	3.9

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Mol	Chain	Res	Type	RSRZ
1	HW	179	ASN	3.9
1	Ay	54	GLN	3.9
1	Bg	237	ILE	3.9
1	B6	25	ALA	3.9
1	H4	164	SER	3.9
1	Ik	165	LEU	3.8
1	EH	179	ASN	3.8
1	EU	54	GLN	3.8
1	FR	237	ILE	3.8
1	G6	39	TYR	3.8
1	HR	237	ILE	3.8
1	F5	193	ALA	3.8
1	JP	138	PHE	3.8
1	AQ	52	GLN	3.8
1	Ab	237	ILE	3.8
1	DG	179	ASN	3.8
1	GC	237	ILE	3.8
1	DW	226	ARG	3.8
1	IF	58	LYS	3.8
1	A6	27	GLY	3.8
1	Dv	27	GLY	3.8
1	Ep	53	GLY	3.8
1	FQ	53	GLY	3.8
1	BB	175	GLU	3.8
1	Ba	175	GLU	3.8
1	Cl	237	ILE	3.8
1	Gp	52	GLN	3.8
1	IC	52	GLN	3.8
1	Gp	179	ASN	3.8
1	G6	25	ALA	3.8
1	HI	25	ALA	3.8
1	EB	51	GLY	3.8
1	Ga	50	MET	3.8
1	JL	53	GLY	3.8
1	AF	62	GLU	3.7
1	DU	175	GLU	3.7
1	Bv	236	SER	3.7
1	CB	226	ARG	3.7
1	Gj	217	VAL	3.7
1	Gq	184	ARG	3.7
1	IB	226	ARG	3.7
1	Db	237	ILE	3.7

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Mol	Chain	Res	Type	RSRZ
1	EC	237	ILE	3.7
1	Do	54	GLN	3.7
1	JF	141	ASN	3.7
1	I4	177	ARG	3.7
1	Fg	217	VAL	3.7
1	DH	237	ILE	3.7
1	Db	238	SER	3.7
1	JK	208	VAL	3.7
1	E6	237	ILE	3.7
1	DP	54	GLN	3.7
1	Iv	25	ALA	3.7
1	Jv	25	ALA	3.7
1	AC	27	GLY	3.7
1	Fj	138	PHE	3.7
1	I1	178	GLY	3.7
1	Bg	175	GLU	3.7
1	Gv	175	GLU	3.7
1	Bl	226	ARG	3.7
1	FM	237	ILE	3.7
1	Gq	217	VAL	3.7
1	Gv	217	VAL	3.7
1	G1	237	ILE	3.7
1	Ig	217	VAL	3.7
1	JR	186	ILE	3.7
1	BM	238	SER	3.7
1	Fe	211	SER	3.7
1	Fl	172	PRO	3.7
1	IP	54	GLN	3.7
1	AC	25	ALA	3.7
1	HR	25	ALA	3.7
1	C1	27	GLY	3.7
1	Il	237	ILE	3.7
1	JA	237	ILE	3.7
1	Fa	52	GLN	3.7
1	HR	54	GLN	3.7
1	Ga	53	GLY	3.7
1	J6	233	GLY	3.7
1	FP	62	GLU	3.7
1	IB	186	ILE	3.7
1	FK	54	GLN	3.6
1	Jo	54	GLN	3.6
1	Cz	173	LYS	3.6

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Mol	Chain	Res	Type	RSRZ
1	BB	179	ASN	3.6
1	Dq	179	ASN	3.6
1	HZ	82	ILE	3.6
1	Hb	237	ILE	3.6
1	GP	54	GLN	3.6
1	I4	54	GLN	3.6
1	CZ	238	SER	3.6
1	El	184	ARG	3.6
1	Al	27	GLY	3.6
1	Cf	53	GLY	3.6
1	E1	27	GLY	3.6
1	GF	178	GLY	3.6
1	A1	237	ILE	3.6
1	BC	237	ILE	3.6
1	HH	237	ILE	3.6
1	Ag	217	VAL	3.6
1	Gv	47	ARG	3.6
1	Fl	115	TRP	3.6
1	He	218	ILE	3.6
1	Jv	179	ASN	3.6
1	BK	54	GLN	3.6
1	Ff	234	ALA	3.6
1	Fk	219	GLN	3.6
1	D5	238	SER	3.6
1	Jt	70	SER	3.6
1	F1	182	GLU	3.6
1	HM	175	GLU	3.6
1	I1	217	VAL	3.6
1	JC	175	GLU	3.6
1	JA	115	TRP	3.6
1	JK	217	VAL	3.6
1	Ff	202	TYR	3.6
2	G2	6	A	3.6
1	AV	54	GLN	3.5
1	DG	52	GLN	3.5
1	Ev	54	GLN	3.5
1	FW	23	ARG	3.5
1	Iq	52	GLN	3.5
1	At	178	GLY	3.5
1	Ev	27	GLY	3.5
1	H6	82	ILE	3.5
1	JC	34	SER	3.5

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Mol	Chain	Res	Type	RSRZ
1	EM	217	VAL	3.5
1	E5	175	GLU	3.5
1	Fj	217	VAL	3.5
1	Gb	175	GLU	3.5
1	CG	92	ASP	3.5
1	BW	32	ARG	3.5
1	AP	54	GLN	3.5
1	DM	25	ALA	3.5
1	Go	229	ALA	3.5
1	IM	25	ALA	3.5
1	AB	53	GLY	3.5
1	G6	178	GLY	3.5
1	Ha	53	GLY	3.5
1	H6	237	ILE	3.5
1	Jl	27	GLY	3.5
1	Fe	70	SER	3.5
1	BH	175	GLU	3.5
1	CW	217	VAL	3.5
1	Jz	70	SER	3.5
1	Ff	230	GLU	3.5
1	BW	179	ASN	3.5
1	IA	181	PRO	3.5
1	IW	23	ARG	3.5
1	C1	25	ALA	3.5
1	Fz	52	GLN	3.5
1	Gq	38	GLN	3.5
1	Iq	237	ILE	3.5
1	JM	237	ILE	3.5
1	Ho	55	GLY	3.5
1	Av	217	VAL	3.5
1	HH	217	VAL	3.5
1	CA	175	GLU	3.5
1	GV	175	GLU	3.5
1	G4	197	GLU	3.5
1	Jy	62	GLU	3.5
1	CF	238	SER	3.5
1	EH	238	SER	3.5
1	Eb	238	SER	3.5
1	Ae	179	ASN	3.5
1	Ba	52	GLN	3.5
1	DL	52	GLN	3.5
1	Hu	54	GLN	3.5

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Mol	Chain	Res	Type	RSRZ
1	IC	120	PHE	3.5
1	B6	27	GLY	3.5
1	Ij	217	VAL	3.5
1	Iv	217	VAL	3.5
1	Du	93	LYS	3.5
1	Ht	62	GLU	3.5
1	Ab	23	ARG	3.5
1	FH	23	ARG	3.5
1	He	115	TRP	3.5
1	FC	25	ALA	3.5
1	GF	179	ASN	3.5
1	FF	54	GLN	3.4
1	F1	54	GLN	3.4
1	HV	52	GLN	3.4
1	Jj	54	GLN	3.4
1	Aq	217	VAL	3.4
1	JL	165	LEU	3.4
1	GL	175	GLU	3.4
1	Cb	236	SER	3.4
1	Gp	70	SER	3.4
1	HA	143	SER	3.4
1	JC	97	SER	3.4
1	FW	25	ALA	3.4
1	HM	35	THR	3.4
1	GU	54	GLN	3.4
1	HW	237	ILE	3.4
1	Jb	237	ILE	3.4
1	IB	53	GLY	3.4
1	JQ	58	LYS	3.4
1	Ek	226	ARG	3.4
1	Fo	94	PRO	3.4
1	Bt	238	SER	3.4
1	FP	238	SER	3.4
1	Cb	25	ALA	3.4
1	IA	54	GLN	3.4
1	H5	178	GLY	3.4
1	H6	217	VAL	3.4
1	Hv	175	GLU	3.4
1	A1	23	ARG	3.4
1	Bv	238	SER	3.4
1	J4	156	SER	3.4
1	F6	237	ILE	3.4

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Mol	Chain	Res	Type	RSRZ
1	AU	54	GLN	3.4
1	Hv	28	LYS	3.4
1	Jk	52	GLN	3.4
1	Au	179	ASN	3.4
1	G6	179	ASN	3.4
1	Fq	27	GLY	3.4
1	CP	177	ARG	3.4
1	Fg	175	GLU	3.4
1	GR	175	GLU	3.4
1	CH	25	ALA	3.4
1	EH	28	LYS	3.4
1	I6	97	SER	3.4
1	Hb	35	THR	3.4
1	Ij	115	TRP	3.4
1	CU	54	GLN	3.4
1	FV	52	GLN	3.4
1	Ht	67	GLN	3.4
1	AH	179	ASN	3.3
1	Go	179	ASN	3.3
1	Hf	88	VAL	3.3
1	FG	53	GLY	3.3
1	Jk	51	GLY	3.3
1	J5	226	ARG	3.3
1	EU	62	GLU	3.3
1	Fj	62	GLU	3.3
1	GF	175	GLU	3.3
1	Hj	62	GLU	3.3
1	Ie	62	GLU	3.3
1	IC	124	PRO	3.3
1	GZ	61	HIS	3.3
1	Hf	90	ALA	3.3
1	FB	50	MET	3.3
1	Et	54	GLN	3.3
1	Fe	54	GLN	3.3
1	AB	92	ASP	3.3
1	Hg	202	TYR	3.3
1	Bb	27	GLY	3.3
1	Bz	53	GLY	3.3
1	DC	47	ARG	3.3
1	EG	53	GLY	3.3
1	Gu	53	GLY	3.3
1	H1	27	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
1	JC	33	GLY	3.3
1	Gf	175	GLU	3.3
1	Gj	62	GLU	3.3
1	JC	84	PRO	3.3
1	BH	25	ALA	3.3
1	Ct	54	GLN	3.3
1	Fj	54	GLN	3.3
1	HG	52	GLN	3.3
1	JA	54	GLN	3.3
1	Fa	162	VAL	3.3
1	Fg	97	SER	3.3
1	JC	184	ARG	3.3
1	Cl	27	GLY	3.3
1	J6	133	ASN	3.3
1	CF	175	GLU	3.3
1	Fb	175	GLU	3.3
1	JV	175	GLU	3.3
1	Hf	58	LYS	3.3
1	Ii	58	LYS	3.3
1	EG	50	MET	3.3
1	JL	231	MET	3.3
1	Bl	25	ALA	3.3
1	C6	25	ALA	3.3
1	Hb	25	ALA	3.3
1	Dj	54	GLN	3.3
1	Fg	23	ARG	3.3
1	GA	54	GLN	3.3
1	JU	54	GLN	3.3
1	BC	238	SER	3.3
1	Ff	115	TRP	3.3
1	Ba	53	GLY	3.3
1	EH	178	GLY	3.3
1	GC	238	SER	3.3
1	GQ	53	GLY	3.3
1	Ga	233	GLY	3.3
1	Il	34	SER	3.3
1	Jz	53	GLY	3.3
1	JA	179	ASN	3.3
1	Hb	181	PRO	3.3
1	HM	237	ILE	3.3
1	Fk	215	ALA	3.3
1	Da	226	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
1	IC	47	ARG	3.3
1	Au	52	GLN	3.3
1	BC	178	GLY	3.3
1	DB	53	GLY	3.3
1	IC	91	GLY	3.3
1	IQ	53	GLY	3.3
1	AW	97	SER	3.3
1	Be	62	GLU	3.2
1	ER	175	GLU	3.2
1	Gj	175	GLU	3.2
1	Jf	92	ASP	3.2
1	Gg	140	PRO	3.2
1	BR	237	ILE	3.2
1	BW	237	ILE	3.2
1	Gb	237	ILE	3.2
1	Fg	25	ALA	3.2
1	Gy	66	LEU	3.2
1	Ep	52	GLN	3.2
1	HW	217	VAL	3.2
1	Ij	54	GLN	3.2
1	Je	54	GLN	3.2
1	GL	53	GLY	3.2
1	Gk	53	GLY	3.2
1	Iq	27	GLY	3.2
1	Hg	115	TRP	3.2
1	EP	62	GLU	3.2
1	Fj	139	TYR	3.2
1	Gf	157	GLU	3.2
1	Gj	119	SER	3.2
1	Gp	142	TYR	3.2
1	HR	236	SER	3.2
1	IR	175	GLU	3.2
1	JK	62	GLU	3.2
1	Dk	50	MET	3.2
1	GH	237	ILE	3.2
1	FM	26	ARG	3.2
1	Fe	226	ARG	3.2
1	EH	54	GLN	3.2
1	Io	54	GLN	3.2
1	JK	54	GLN	3.2
1	A4	178	GLY	3.2
1	Hq	27	GLY	3.2

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Mol	Chain	Res	Type	RSRZ
1	Ht	55	GLY	3.2
1	Fe	122	TRP	3.2
1	I6	115	TRP	3.2
1	FV	50	MET	3.2
1	GG	238	SER	3.2
1	Ij	181	PRO	3.2
1	Bl	237	ILE	3.2
1	GM	237	ILE	3.2
1	G6	92	ASP	3.2
1	I6	186	ILE	3.2
1	Eg	25	ALA	3.2
1	G6	90	ALA	3.2
1	Ht	153	LEU	3.2
1	Ib	25	ALA	3.2
1	Ju	61	HIS	3.2
1	GW	217	VAL	3.2
1	CA	54	GLN	3.2
1	Cq	28	LYS	3.2
1	Fg	57	GLN	3.2
1	F5	52	GLN	3.2
1	Fl	175	GLU	3.2
1	F6	175	GLU	3.2
1	G6	50	MET	3.2
1	Il	50	MET	3.2
1	Dl	237	ILE	3.2
1	It	143	SER	3.2
1	CF	92	ASP	3.2
1	Gp	152	ASP	3.2
1	El	24	ARG	3.2
1	GK	153	LEU	3.2
1	Gq	183	LEU	3.2
1	H1	165	LEU	3.2
1	Bb	217	VAL	3.2
1	GM	217	VAL	3.2
1	BA	54	GLN	3.2
1	H4	54	GLN	3.2
1	DG	53	GLY	3.2
1	Ej	221	GLY	3.2
1	Hv	27	GLY	3.2
1	Jg	27	GLY	3.2
1	He	225	MET	3.2
1	H5	146	THR	3.2

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Mol	Chain	Res	Type	RSRZ
1	DV	175	GLU	3.2
1	Ig	175	GLU	3.2
1	H5	101	PRO	3.2
1	Il	82	ILE	3.2
1	Av	23	ARG	3.1
1	DW	238	SER	3.1
1	EC	23	ARG	3.1
1	Ff	226	ARG	3.1
1	Hv	238	SER	3.1
1	Jo	143	SER	3.1
1	IR	25	ALA	3.1
1	Fk	67	GLN	3.1
1	Eu	53	GLY	3.1
1	Hu	50	MET	3.1
1	Fk	175	GLU	3.1
1	EM	237	ILE	3.1
1	IH	112	ILE	3.1
1	JW	237	ILE	3.1
1	A6	226	ARG	3.1
1	GC	23	ARG	3.1
1	Bb	28	LYS	3.1
1	B6	238	SER	3.1
1	CC	236	SER	3.1
1	Ev	25	ALA	3.1
1	Gj	58	LYS	3.1
1	HC	28	LYS	3.1
1	F6	179	ASN	3.1
1	Du	52	GLN	3.1
1	GL	52	GLN	3.1
1	Ge	54	GLN	3.1
1	Gz	52	GLN	3.1
1	Da	53	GLY	3.1
1	CU	175	GLU	3.1
1	Dq	237	ILE	3.1
1	Ek	175	GLU	3.1
1	EM	181	PRO	3.1
1	Jv	172	PRO	3.1
1	EM	28	LYS	3.1
1	HC	90	ALA	3.1
1	JR	25	ALA	3.1
1	Hz	52	GLN	3.1
1	HR	27	GLY	3.1

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Mol	Chain	Res	Type	RSRZ
2	Ir	9	U	3.1
1	D1	47	ARG	3.1
1	Hf	89	PRO	3.1
1	Gk	139	TYR	3.1
1	A6	217	VAL	3.1
1	BC	217	VAL	3.1
1	JC	217	VAL	3.1
1	AC	238	SER	3.1
1	Ij	212	SER	3.1
1	CW	179	ASN	3.1
1	Co	54	GLN	3.1
1	Fv	27	GLY	3.1
1	Gt	54	GLN	3.1
1	G5	214	GLN	3.1
1	HH	27	GLY	3.1
1	HR	53	GLY	3.1
1	IW	27	GLY	3.1
1	Iu	53	GLY	3.1
1	Cv	237	ILE	3.1
1	IB	237	ILE	3.1
2	DI	9	U	3.1
2	Dc	9	U	3.1
2	EX	9	U	3.1
1	AV	175	GLU	3.1
1	Ab	175	GLU	3.1
1	Al	26	ARG	3.1
1	Ay	175	GLU	3.1
1	BL	175	GLU	3.1
1	CH	175	GLU	3.1
1	C5	226	ARG	3.1
1	Hf	197	GLU	3.1
1	JM	175	GLU	3.1
1	Jq	175	GLU	3.1
1	J6	47	ARG	3.1
1	DC	28	LYS	3.1
1	Fb	25	ALA	3.0
1	Bp	50	MET	3.0
1	Bq	179	ASN	3.0
1	EG	179	ASN	3.0
1	E1	179	ASN	3.0
1	J6	212	SER	3.0
1	Aa	53	GLY	3.0

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Mol	Chain	Res	Type	RSRZ
1	Az	53	GLY	3.0
1	CG	51	GLY	3.0
1	Cz	51	GLY	3.0
1	De	55	GLY	3.0
1	Ez	53	GLY	3.0
1	GM	54	GLN	3.0
1	H5	52	GLN	3.0
1	I4	233	GLY	3.0
1	CR	23	ARG	3.0
1	E1	23	ARG	3.0
1	JH	237	ILE	3.0
1	J1	184	ARG	3.0
1	FZ	62	GLU	3.0
1	Bl	217	VAL	3.0
1	GK	110	PHE	3.0
1	Ga	110	PHE	3.0
1	IB	138	PHE	3.0
1	Dv	50	MET	3.0
1	Hu	202	TYR	3.0
1	JK	139	TYR	3.0
1	Fg	238	SER	3.0
1	Aq	33	GLY	3.0
1	BZ	54	GLN	3.0
1	Bf	141	ASN	3.0
1	HH	238	SER	3.0
1	Dk	52	GLN	3.0
1	GF	54	GLN	3.0
1	HK	69	ASN	3.0
1	Hb	179	ASN	3.0
1	Dp	226	ARG	3.0
1	Du	51	GLY	3.0
1	HF	55	GLY	3.0
1	H6	27	GLY	3.0
1	Gl	28	LYS	3.0
1	HC	23	ARG	3.0
1	He	186	ILE	3.0
1	I1	54	GLN	3.0
1	I5	52	GLN	3.0
1	F6	177	ARG	3.0
1	JA	55	GLY	3.0
1	J4	178	GLY	3.0
1	AC	175	GLU	3.0

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Mol	Chain	Res	Type	RSRZ
1	G4	62	GLU	3.0
2	Bw	9	U	3.0
1	Cp	50	MET	3.0
1	HM	217	VAL	3.0
1	Iy	191	PHE	3.0
1	J4	56	TRP	3.0
1	AR	57	GLN	3.0
1	Cl	23	ARG	3.0
1	DK	54	GLN	3.0
1	Df	53	GLY	3.0
1	Ff	186	ILE	3.0
1	G5	226	ARG	3.0
1	G6	177	ARG	3.0
1	IG	226	ARG	3.0
1	JM	27	GLY	3.0
1	JZ	54	GLN	3.0
1	Jq	237	ILE	3.0
1	D6	238	SER	3.0
1	Go	70	SER	3.0
1	IB	156	SER	3.0
1	Ie	70	SER	3.0
1	J4	223	LEU	3.0
1	Cp	175	GLU	3.0
1	DR	25	ALA	3.0
1	EH	25	ALA	3.0
1	IC	25	ALA	3.0
2	Gw	9	U	3.0
1	FM	28	LYS	3.0
1	Fe	139	TYR	3.0
1	Fg	139	TYR	3.0
1	A6	237	ILE	3.0
1	G4	186	ILE	3.0
1	Hv	47	ARG	3.0
1	JF	184	ARG	3.0
1	Ek	53	GLY	3.0
1	FG	52	GLN	3.0
1	Go	159	LEU	3.0
1	Hf	210	GLY	3.0
1	CK	70	SER	3.0
1	Gy	238	SER	3.0
1	He	238	SER	3.0
1	IF	70	SER	3.0

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Mol	Chain	Res	Type	RSRZ
1	Ik	152	ASP	3.0
1	JK	238	SER	3.0
1	JR	143	SER	3.0
1	GP	62	GLU	3.0
1	He	157	GLU	3.0
1	Hg	140	PRO	3.0
1	J4	181	PRO	3.0
1	F6	176	THR	3.0
1	Ie	216	VAL	3.0
1	JR	122	TRP	2.9
1	Hy	82	ILE	2.9
1	H4	237	ILE	2.9
1	Bv	53	GLY	2.9
1	CB	53	GLY	2.9
1	GL	220	LEU	2.9
1	Gj	118	LEU	2.9
1	IC	39	TYR	2.9
1	CP	54	GLN	2.9
1	D6	54	GLN	2.9
1	EZ	54	GLN	2.9
1	Gj	54	GLN	2.9
1	CB	175	GLU	2.9
1	DW	179	ASN	2.9
1	E4	62	GLU	2.9
1	FB	175	GLU	2.9
1	GG	179	ASN	2.9
1	GM	179	ASN	2.9
1	JK	181	PRO	2.9
1	He	70	SER	2.9
1	IC	70	SER	2.9
1	Ib	50	MET	2.9
1	Cl	25	ALA	2.9
1	JM	25	ALA	2.9
1	Hb	217	VAL	2.9
1	G4	58	LYS	2.9
1	FR	184	ARG	2.9
1	FZ	226	ARG	2.9
2	GS	9	U	2.9
1	Fl	65	ILE	2.9
1	GB	51	GLY	2.9
1	BP	54	GLN	2.9
1	DU	54	GLN	2.9

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Mol	Chain	Res	Type	RSRZ
1	He	54	GLN	2.9
1	FM	175	GLU	2.9
1	CA	238	SER	2.9
1	DZ	143	SER	2.9
1	Fy	97	SER	2.9
1	J6	125	SER	2.9
1	Cq	25	ALA	2.9
1	Hq	217	VAL	2.9
1	FG	173	LYS	2.9
1	HH	23	ARG	2.9
1	He	237	ILE	2.9
1	Ju	186	ILE	2.9
1	HW	37	LEU	2.9
2	Hw	9	U	2.9
1	Ig	107	GLY	2.9
1	Jz	51	GLY	2.9
1	Ff	54	GLN	2.9
1	Gp	78	GLN	2.9
1	G4	54	GLN	2.9
1	F6	180	PRO	2.9
1	J4	94	PRO	2.9
1	AU	175	GLU	2.9
1	CC	175	GLU	2.9
1	Gq	175	GLU	2.9
1	G5	175	GLU	2.9
1	If	175	GLU	2.9
1	JP	182	GLU	2.9
1	BC	179	ASN	2.9
1	HC	92	ASP	2.9
1	AW	238	SER	2.9
1	Fe	166	SER	2.9
1	GA	238	SER	2.9
1	DH	217	VAL	2.9
1	Dp	215	ALA	2.9
1	EF	143	SER	2.9
1	G1	25	ALA	2.9
1	Ij	97	SER	2.9
1	JC	70	SER	2.9
1	ER	177	ARG	2.9
1	IW	177	ARG	2.9
1	JA	184	ARG	2.9
1	Gj	64	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
1	I1	237	ILE	2.9
1	JF	237	ILE	2.9
1	JM	218	ILE	2.9
1	Ap	51	GLY	2.9
1	EK	178	GLY	2.9
1	H1	33	GLY	2.9
1	H5	210	GLY	2.9
1	Ip	53	GLY	2.9
1	Ea	52	GLN	2.9
1	Ej	54	GLN	2.9
1	Fk	115	TRP	2.9
1	F6	115	TRP	2.9
2	Aw	9	U	2.9
2	Bm	9	U	2.9
2	HN	9	U	2.9
2	Jw	9	U	2.9
1	G1	54	GLN	2.9
1	IB	54	GLN	2.9
1	Fg	172	PRO	2.9
1	HV	50	MET	2.9
1	H5	139	TYR	2.9
1	Fe	62	GLU	2.9
1	Bl	28	LYS	2.9
1	FH	173	LYS	2.9
1	G6	58	LYS	2.9
1	JH	141	ASN	2.9
1	Fe	229	ALA	2.9
1	Iz	193	ALA	2.9
1	Jt	217	VAL	2.9
1	B5	238	SER	2.9
1	GL	143	SER	2.9
1	Gk	70	SER	2.9
1	JH	23	ARG	2.9
1	JH	70	SER	2.9
1	JP	232	ARG	2.9
1	IH	169	THR	2.9
1	G5	106	ILE	2.9
1	He	136	LEU	2.9
1	A5	51	GLY	2.8
1	Db	178	GLY	2.8
1	FU	178	GLY	2.8
1	Fb	27	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
1	Ik	53	GLY	2.8
1	J5	200	GLY	2.8
1	JM	50	MET	2.8
1	Ja	52	GLN	2.8
2	F7	9	U	2.8
1	A4	175	GLU	2.8
1	B1	28	LYS	2.8
1	EL	175	GLU	2.8
1	FC	28	LYS	2.8
1	F1	202	TYR	2.8
1	Jf	175	GLU	2.8
1	AV	216	VAL	2.8
1	Bq	25	ALA	2.8
1	Jq	217	VAL	2.8
1	Cl	179	ASN	2.8
1	Jy	141	ASN	2.8
1	Dt	238	SER	2.8
1	JK	223	LEU	2.8
2	Dc	12	A	2.8
1	AG	50	MET	2.8
1	Bz	51	GLY	2.8
1	C1	178	GLY	2.8
1	El	27	GLY	2.8
1	Fe	210	GLY	2.8
1	G5	53	GLY	2.8
1	HV	53	GLY	2.8
1	I5	50	MET	2.8
1	I5	53	GLY	2.8
1	I6	27	GLY	2.8
1	JL	50	MET	2.8
1	Ft	54	GLN	2.8
1	Gf	180	PRO	2.8
1	Ho	54	GLN	2.8
1	Hy	94	PRO	2.8
1	H5	181	PRO	2.8
1	JQ	57	GLN	2.8
1	Jz	84	PRO	2.8
1	C6	28	LYS	2.8
1	CP	175	GLU	2.8
1	EQ	175	GLU	2.8
1	Ge	62	GLU	2.8
1	G5	115	TRP	2.8

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Mol	Chain	Res	Type	RSRZ
1	H5	115	TRP	2.8
1	J1	39	TYR	2.8
2	Jm	9	U	2.8
1	CW	25	ALA	2.8
1	Fo	177	ARG	2.8
1	GK	226	ARG	2.8
1	Go	184	ARG	2.8
1	HG	226	ARG	2.8
1	Hu	184	ARG	2.8
1	IM	217	VAL	2.8
1	Jj	226	ARG	2.8
1	Gg	141	ASN	2.8
1	I1	179	ASN	2.8
1	Gk	82	ILE	2.8
1	Jb	43	LEU	2.8
1	He	97	SER	2.8
1	Ia	236	SER	2.8
1	JL	238	SER	2.8
1	CA	55	GLY	2.8
1	Fe	55	GLY	2.8
1	Bo	54	GLN	2.8
1	Ey	54	GLN	2.8
1	Gu	52	GLN	2.8
1	IK	54	GLN	2.8
1	Jz	147	PRO	2.8
1	DP	175	GLU	2.8
1	EC	217	VAL	2.8
1	FW	217	VAL	2.8
1	Fe	216	VAL	2.8
1	HC	217	VAL	2.8
1	H4	96	TYR	2.8
1	H6	22	ARG	2.8
1	JP	217	VAL	2.8
1	FR	188	ALA	2.8
1	Hg	193	ALA	2.8
2	Jm	10	U	2.8
1	Il	138	PHE	2.8
1	FH	237	ILE	2.8
1	IA	61	HIS	2.8
1	DP	179	ASN	2.8
1	It	141	ASN	2.8
1	Hg	70	SER	2.8

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Mol	Chain	Res	Type	RSRZ
1	IZ	119	SER	2.8
1	IZ	143	SER	2.8
1	Ik	70	SER	2.8
1	FC	50	MET	2.8
1	Df	178	GLY	2.8
1	E5	51	GLY	2.8
1	He	178	GLY	2.8
1	IC	48	PRO	2.8
1	Fa	54	GLN	2.8
1	J6	126	CYS	2.8
1	CQ	175	GLU	2.8
1	Cv	175	GLU	2.8
1	EG	175	GLU	2.8
1	FH	175	GLU	2.8
1	GB	175	GLU	2.8
1	It	62	GLU	2.8
1	EG	177	ARG	2.8
1	GR	26	ARG	2.8
1	HC	22	ARG	2.8
1	Ik	115	TRP	2.8
1	Jt	226	ARG	2.8
1	DC	217	VAL	2.8
1	H4	217	VAL	2.8
1	Ie	217	VAL	2.8
1	Ik	162	VAL	2.8
1	Hg	25	ALA	2.8
1	Hj	74	ALA	2.8
1	Fv	237	ILE	2.8
1	Hj	118	LEU	2.8
1	Je	179	ASN	2.8
1	FC	198	ASP	2.8
1	El	28	LYS	2.8
1	Ff	50	MET	2.8
1	JH	173	LYS	2.8
1	Bb	34	SER	2.8
1	GM	34	SER	2.8
1	GR	60	SER	2.8
1	HF	238	SER	2.8
1	AU	55	GLY	2.8
1	AV	53	GLY	2.8
1	Cu	53	GLY	2.8
1	Cv	27	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
1	FP	221	GLY	2.8
1	FZ	55	GLY	2.8
1	Ff	53	GLY	2.8
1	HZ	178	GLY	2.8
1	IL	53	GLY	2.8
1	I1	51	GLY	2.8
1	C4	54	GLN	2.7
1	FL	52	GLN	2.7
1	Gu	54	GLN	2.7
1	Cj	177	ARG	2.7
1	Cz	226	ARG	2.7
1	Fk	226	ARG	2.7
1	GH	184	ARG	2.7
1	IB	182	GLU	2.7
1	HP	216	VAL	2.7
1	EZ	82	ILE	2.7
1	Fq	237	ILE	2.7
1	Go	186	ILE	2.7
1	Iv	237	ILE	2.7
1	JG	202	TYR	2.7
1	JM	96	TYR	2.7
1	Gp	61	HIS	2.7
2	BD	9	U	2.7
2	Hr	14	U	2.7
1	BM	28	LYS	2.7
1	CM	28	LYS	2.7
1	Jz	58	LYS	2.7
1	AM	238	SER	2.7
1	FC	27	GLY	2.7
1	FL	143	SER	2.7
1	HR	238	SER	2.7
1	Hk	53	GLY	2.7
1	Ht	70	SER	2.7
1	H4	55	GLY	2.7
1	JB	53	GLY	2.7
1	JG	53	GLY	2.7
1	EV	180	PRO	2.7
1	CB	52	GLN	2.7
1	DV	52	GLN	2.7
1	EA	54	GLN	2.7
1	EG	226	ARG	2.7
1	EK	226	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
1	Ev	23	ARG	2.7
1	Gf	54	GLN	2.7
1	G1	23	ARG	2.7
1	IB	214	GLN	2.7
1	Ck	175	GLU	2.7
1	D5	175	GLU	2.7
1	FZ	157	GLU	2.7
1	CR	217	VAL	2.7
1	Eg	217	VAL	2.7
1	J1	217	VAL	2.7
1	AW	25	ALA	2.7
1	Aq	25	ALA	2.7
1	Fy	229	ALA	2.7
1	F6	25	ALA	2.7
1	Ht	215	ALA	2.7
1	JP	229	ALA	2.7
1	FK	82	ILE	2.7
1	Hf	237	ILE	2.7
1	IR	237	ILE	2.7
1	Gq	202	TYR	2.7
1	JR	202	TYR	2.7
1	CL	50	MET	2.7
1	FL	58	LYS	2.7
1	Gq	173	LYS	2.7
1	Il	28	LYS	2.7
2	Dm	9	U	2.7
1	Gf	179	ASN	2.7
1	If	179	ASN	2.7
1	Au	53	GLY	2.7
1	B1	27	GLY	2.7
1	Hx	53	GLY	2.7
1	Dg	60	SER	2.7
1	E6	47	ARG	2.7
1	Fg	22	ARG	2.7
1	Gk	140	PRO	2.7
1	Gg	70	SER	2.7
1	JK	70	SER	2.7
1	J4	125	SER	2.7
1	E4	54	GLN	2.7
1	HC	57	GLN	2.7
1	Hg	38	GLN	2.7
1	Hu	52	GLN	2.7

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Mol	Chain	Res	Type	RSRZ
1	IB	52	GLN	2.7
1	EA	175	GLU	2.7
1	Ej	175	GLU	2.7
1	Fe	157	GLU	2.7
1	Gt	62	GLU	2.7
1	IC	175	GLU	2.7
1	Fy	237	ILE	2.7
1	F1	112	ILE	2.7
1	GW	25	ALA	2.7
1	Gj	193	ALA	2.7
1	Gu	237	ILE	2.7
1	He	223	LEU	2.7
1	Hv	25	ALA	2.7
1	H5	82	ILE	2.7
1	JC	165	LEU	2.7
1	Fg	28	LYS	2.7
1	Fg	173	LYS	2.7
1	Fl	28	LYS	2.7
1	G5	93	LYS	2.7
1	GZ	179	ASN	2.7
1	AW	23	ARG	2.7
1	DG	178	GLY	2.7
1	Dq	53	GLY	2.7
1	EL	53	GLY	2.7
1	E5	53	GLY	2.7
1	FR	27	GLY	2.7
1	HB	53	GLY	2.7
1	Hb	184	ARG	2.7
1	IH	184	ARG	2.7
1	IR	24	ARG	2.7
1	IR	177	ARG	2.7
1	IV	53	GLY	2.7
1	JK	98	GLY	2.7
2	CN	9	U	2.7
2	Gc	9	U	2.7
2	Hr	13	U	2.7
1	Fp	92	ASP	2.7
1	Ao	175	GLU	2.7
1	DU	192	SER	2.7
1	EK	70	SER	2.7
1	Ek	52	GLN	2.7
1	Fl	143	SER	2.7

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Mol	Chain	Res	Type	RSRZ
1	Fo	54	GLN	2.7
1	Fp	54	GLN	2.7
1	Fv	238	SER	2.7
1	GR	238	SER	2.7
1	Cl	217	VAL	2.7
1	C6	217	VAL	2.7
1	GZ	62	GLU	2.7
1	Gb	52	GLN	2.7
1	Go	54	GLN	2.7
1	Gq	238	SER	2.7
1	Hg	52	GLN	2.7
1	IH	175	GLU	2.7
1	Ib	54	GLN	2.7
1	JM	182	GLU	2.7
1	Jp	175	GLU	2.7
1	Jt	71	SER	2.7
1	FM	217	VAL	2.7
1	Fe	135	VAL	2.7
1	CC	25	ALA	2.7
1	DR	237	ILE	2.7
1	Du	106	ILE	2.7
1	G5	59	LEU	2.7
1	Ik	65	ILE	2.7
1	JC	223	LEU	2.7
1	Eb	110	PHE	2.7
1	Gk	109	ALA	2.7
1	HW	25	ALA	2.7
1	Jl	112	ILE	2.7
1	Fa	173	LYS	2.7
1	Ja	50	MET	2.7
1	J4	61	HIS	2.7
1	Fl	126	CYS	2.7
1	CM	47	ARG	2.7
1	Ce	184	ARG	2.7
1	F6	184	ARG	2.7
1	Hz	184	ARG	2.7
1	Aa	179	ASN	2.7
1	DV	53	GLY	2.7
1	EL	179	ASN	2.7
1	FF	55	GLY	2.7
1	F1	181	PRO	2.7
1	Gb	27	GLY	2.7

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Mol	Chain	Res	Type	RSRZ
1	HQ	53	GLY	2.7
1	IH	179	ASN	2.7
1	JU	81	PRO	2.7
1	J4	98	GLY	2.7
2	Br	9	U	2.7
2	ES	9	U	2.7
1	AW	54	GLN	2.7
1	Af	175	GLU	2.7
1	A1	175	GLU	2.7
1	BB	52	GLN	2.7
1	HA	54	GLN	2.7
1	HK	54	GLN	2.7
1	CK	216	VAL	2.7
1	ER	217	VAL	2.7
1	HI	175	GLU	2.7
1	IR	217	VAL	2.7
1	JA	62	GLU	2.7
1	JK	216	VAL	2.7
1	AK	143	SER	2.7
1	DH	70	SER	2.7
1	ER	238	SER	2.7
1	Fe	136	LEU	2.7
1	Av	28	LYS	2.6
1	F1	186	ILE	2.6
1	F1	82	ILE	2.6
1	GQ	238	SER	2.7
1	G6	71	SER	2.7
1	IM	237	ILE	2.6
1	I6	70	SER	2.7
1	Ja	173	LYS	2.6
1	J5	202	TYR	2.6
1	Bt	177	ARG	2.6
1	Cv	23	ARG	2.6
1	Do	184	ARG	2.6
1	D6	47	ARG	2.6
1	FC	26	ARG	2.6
1	GQ	226	ARG	2.6
1	HR	26	ARG	2.6
1	Ab	27	GLY	2.6
1	CG	53	GLY	2.6
1	Hf	81	PRO	2.6
1	IG	53	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
1	G5	72	THR	2.6
1	Hf	235	THR	2.6
1	Hg	35	THR	2.6
1	Ik	141	ASN	2.6
1	JF	179	ASN	2.6
1	Jb	179	ASN	2.6
1	BA	62	GLU	2.6
1	Bt	62	GLU	2.6
1	Eq	175	GLU	2.6
1	FP	217	VAL	2.6
1	Fe	118	LEU	2.6
1	Gp	58	LYS	2.6
1	Hk	214	GLN	2.6
1	H1	38	GLN	2.6
1	G4	83	ILE	2.6
1	IG	58	LYS	2.6
1	IU	217	VAL	2.6
1	Ib	175	GLU	2.6
1	I4	216	VAL	2.6
1	JF	216	VAL	2.6
1	JP	59	LEU	2.6
1	Iu	82	ILE	2.6
1	I6	28	LYS	2.6
1	J6	175	GLU	2.6
1	CM	82	ILE	2.6
1	Cg	82	ILE	2.6
1	BW	238	SER	2.6
1	Bl	238	SER	2.6
1	FQ	50	MET	2.6
1	FR	50	MET	2.6
1	GL	50	MET	2.6
1	Ge	156	SER	2.6
1	H1	236	SER	2.6
1	IB	190	ALA	2.6
1	IG	212	SER	2.6
1	JF	61	HIS	2.6
1	AB	226	ARG	2.6
1	EH	177	ARG	2.6
1	Eg	22	ARG	2.6
1	Gt	177	ARG	2.6
1	He	227	TYR	2.6
1	H6	47	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
1	I1	22	ARG	2.6
1	BM	53	GLY	2.6
1	FB	200	GLY	2.6
1	FH	27	GLY	2.6
1	JB	147	PRO	2.6
1	FR	28	LYS	2.6
1	H5	176	THR	2.6
1	C4	217	VAL	2.6
1	Fa	216	VAL	2.6
1	Fg	207	LEU	2.6
1	Ij	133	ASN	2.6
1	Fg	186	ILE	2.6
1	F1	175	GLU	2.6
1	Gg	82	ILE	2.6
1	JG	175	GLU	2.6
1	JW	52	GLN	2.6
1	Eq	50	MET	2.6
1	JW	198	ASP	2.6
1	Ij	138	PHE	2.6
2	IX	9	U	2.6
1	AH	238	SER	2.6
1	CM	236	SER	2.6
1	Du	143	SER	2.6
1	Gq	236	SER	2.6
1	HI	236	SER	2.6
1	JA	238	SER	2.6
2	EX	12	A	2.6
1	EV	171	ARG	2.6
1	JM	184	ARG	2.6
1	Hb	39	TYR	2.6
1	Cp	51	GLY	2.6
1	FQ	132	GLY	2.6
1	FZ	178	GLY	2.6
1	Fk	98	GLY	2.6
1	GB	53	GLY	2.6
1	Go	210	GLY	2.6
1	HU	107	GLY	2.6
1	Hg	27	GLY	2.6
1	Ig	27	GLY	2.6
1	JU	91	GLY	2.6
1	Dq	28	LYS	2.6
1	Fe	58	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
1	Ff	160	VAL	2.6
1	GH	35	THR	2.6
1	JG	165	LEU	2.6
1	Gb	95	ILE	2.6
1	Gk	186	ILE	2.6
1	AA	54	GLN	2.6
1	CG	52	GLN	2.6
1	CZ	175	GLU	2.6
1	DU	62	GLU	2.6
1	I1	182	GLU	2.6
1	JB	218	ILE	2.6
1	IA	67	GLN	2.6
1	Ip	52	GLN	2.6
1	I5	54	GLN	2.6
1	JP	62	GLU	2.6
1	Jt	54	GLN	2.6
1	CR	25	ALA	2.6
1	Eq	25	ALA	2.6
1	Fq	25	ALA	2.6
1	JQ	110	PHE	2.6
2	Gh	9	U	2.6
2	Gh	14	U	2.6
2	IS	9	U	2.6
1	CM	238	SER	2.6
1	Fg	29	SER	2.6
1	H4	70	SER	2.6
1	I6	71	SER	2.6
1	JC	238	SER	2.6
1	J1	238	SER	2.6
1	DR	171	ARG	2.6
1	FV	184	ARG	2.6
1	HP	115	TRP	2.6
1	CZ	213	LYS	2.6
1	CP	55	GLY	2.6
1	Gk	233	GLY	2.6
1	Gp	53	GLY	2.6
1	Hy	170	TYR	2.6
1	Iz	221	GLY	2.6
1	JA	150	LEU	2.6
1	Db	217	VAL	2.6
1	Fj	82	ILE	2.6
1	Gb	217	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
1	H5	106	ILE	2.6
1	JG	50	MET	2.6
1	AH	38	GLN	2.6
1	Aq	175	GLU	2.6
1	Bv	54	GLN	2.6
1	Bz	52	GLN	2.6
1	B1	175	GLU	2.6
1	C6	175	GLU	2.6
1	DQ	52	GLN	2.6
1	Ee	62	GLU	2.6
1	Eg	31	GLU	2.6
1	FQ	52	GLN	2.6
1	Fg	182	GLU	2.6
1	GH	175	GLU	2.6
1	HW	38	GLN	2.6
1	IL	175	GLU	2.6
1	Il	175	GLU	2.6
1	Ja	54	GLN	2.6
1	CA	90	ALA	2.6
1	HV	179	ASN	2.6
1	Hz	74	ALA	2.6
1	I5	193	ALA	2.6
1	FM	201	ASP	2.6
1	GM	92	ASP	2.6
1	G4	196	ASP	2.6
1	Bf	226	ARG	2.5
1	Fy	171	ARG	2.5
1	Hv	226	ARG	2.5
1	H4	226	ARG	2.5
2	Ar	10	U	2.5
1	G1	70	SER	2.5
1	Jy	97	SER	2.5
1	J5	236	SER	2.5
1	AM	28	LYS	2.5
1	EC	28	LYS	2.5
1	Go	178	GLY	2.5
1	Gq	124	PRO	2.5
1	IL	51	GLY	2.5
1	JA	147	PRO	2.5
1	Fe	223	LEU	2.5
1	J6	202	TYR	2.5
1	CC	217	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
1	Fe	217	VAL	2.5
1	Fl	174	ILE	2.5
1	F1	50	MET	2.5
1	GL	162	VAL	2.5
1	GQ	216	VAL	2.5
1	Gv	237	ILE	2.5
1	Hu	237	ILE	2.5
1	Hy	218	ILE	2.5
1	AK	62	GLU	2.5
1	CC	54	GLN	2.5
1	De	54	GLN	2.5
1	EZ	62	GLU	2.5
1	FC	35	THR	2.5
1	F5	54	GLN	2.5
1	IL	149	THR	2.5
1	Bg	234	ALA	2.5
1	Gq	138	PHE	2.5
1	Gv	25	ALA	2.5
1	Jz	191	PHE	2.5
1	Bb	179	ASN	2.5
1	CG	179	ASN	2.5
1	CV	179	ASN	2.5
1	Fk	69	ASN	2.5
1	Fv	179	ASN	2.5
1	Hy	179	ASN	2.5
1	FC	177	ARG	2.5
1	Fg	104	ARG	2.5
1	HM	184	ARG	2.5
1	IL	226	ARG	2.5
1	Ie	177	ARG	2.5
1	JM	47	ARG	2.5
1	Jv	177	ARG	2.5
1	Cl	238	SER	2.5
1	C6	236	SER	2.5
1	Dg	236	SER	2.5
1	F1	238	SER	2.5
1	G5	70	SER	2.5
1	IP	238	SER	2.5
1	Jf	70	SER	2.5
1	AH	27	GLY	2.5
1	EL	178	GLY	2.5
1	Fa	222	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
1	Ij	180	PRO	2.5
1	Hz	51	GLY	2.5
1	Jb	27	GLY	2.5
1	Dp	50	MET	2.5
1	BR	217	VAL	2.5
1	Dq	217	VAL	2.5
1	ER	40	VAL	2.5
1	FW	237	ILE	2.5
1	Fg	82	ILE	2.5
1	Fu	50	MET	2.5
1	Go	217	VAL	2.5
1	HR	186	ILE	2.5
1	Hf	204	VAL	2.5
1	BG	175	GLU	2.5
1	Cl	175	GLU	2.5
1	Cq	175	GLU	2.5
1	Cv	35	THR	2.5
1	Dq	175	GLU	2.5
1	Ft	62	GLU	2.5
1	Ht	63	GLU	2.5
1	IF	175	GLU	2.5
1	JF	62	GLU	2.5
1	Ae	54	GLN	2.5
1	FC	38	GLN	2.5
1	JB	52	GLN	2.5
1	JC	54	GLN	2.5
1	AQ	193	ALA	2.5
1	GA	193	ALA	2.5
1	Bu	141	ASN	2.5
1	HQ	179	ASN	2.5
1	A1	28	LYS	2.5
1	Gk	58	LYS	2.5
1	Hg	28	LYS	2.5
1	I1	201	ASP	2.5
1	JB	58	LYS	2.5
1	AW	236	SER	2.5
1	DM	238	SER	2.5
1	G5	71	SER	2.5
2	AD	9	U	2.5
2	Bc	9	U	2.5
2	Bh	9	U	2.5
2	Hc	9	U	2.5

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Mol	Chain	Res	Type	RSRZ
1	CA	180	PRO	2.5
1	Fl	37	LEU	2.5
1	Gg	180	PRO	2.5
1	BB	53	GLY	2.5
1	Bf	51	GLY	2.5
1	B5	53	GLY	2.5
1	CQ	53	GLY	2.5
1	C5	50	MET	2.5
1	IC	140	PRO	2.5
1	If	223	LEU	2.5
1	DC	27	GLY	2.5
1	Dk	178	GLY	2.5
1	Du	53	GLY	2.5
1	EW	27	GLY	2.5
1	FP	65	ILE	2.5
1	Fb	82	ILE	2.5
1	Ff	178	GLY	2.5
1	JZ	55	GLY	2.5
1	FA	217	VAL	2.5
1	Fg	115	TRP	2.5
1	Gj	115	TRP	2.5
1	H4	115	TRP	2.5
1	Il	115	TRP	2.5
1	J5	115	TRP	2.5
1	He	170	TYR	2.5
1	BV	175	GLU	2.5
1	Gk	175	GLU	2.5
1	HK	62	GLU	2.5
1	IG	175	GLU	2.5
1	A4	54	GLN	2.5
1	Dg	25	ALA	2.5
1	EW	23	ARG	2.5
1	E1	24	ARG	2.5
1	IU	184	ARG	2.5
1	JW	23	ARG	2.5
1	IR	126	CYS	2.5
1	B5	50	MET	2.5
1	Eu	50	MET	2.5
1	A1	238	SER	2.5
1	A6	34	SER	2.5
1	Bv	106	ILE	2.5
1	Fj	237	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
1	F1	236	SER	2.5
1	GA	180	PRO	2.5
1	Gg	50	MET	2.5
1	Gq	127	PRO	2.5
1	Gf	107	GLY	2.5
1	HP	70	SER	2.5
1	Hg	186	ILE	2.5
1	Hq	237	ILE	2.5
1	I4	192	SER	2.5
1	JW	70	SER	2.5
1	Jq	27	GLY	2.5
1	J4	65	ILE	2.5
2	Am	9	U	2.5
2	A7	9	U	2.5
2	A7	10	U	2.5
2	DN	9	U	2.5
2	E2	9	U	2.5
1	Je	217	VAL	2.5
1	Jv	217	VAL	2.5
1	Fy	115	TRP	2.5
1	J4	115	TRP	2.5
1	Co	175	GLU	2.5
1	DM	175	GLU	2.5
1	HP	175	GLU	2.5
1	IW	175	GLU	2.5
1	I4	62	GLU	2.5
1	Jb	120	PHE	2.5
1	Jl	175	GLU	2.5
1	AK	193	ALA	2.5
1	Cb	52	GLN	2.5
1	DC	26	ARG	2.5
1	D6	22	ARG	2.5
1	EF	177	ARG	2.5
1	ER	57	GLN	2.5
1	Gy	184	ARG	2.5
1	IU	54	GLN	2.5
1	Iq	47	ARG	2.5
1	Aj	149	THR	2.5
1	Dq	176	THR	2.5
1	G6	35	THR	2.5
1	CG	93	LYS	2.5
1	CH	58	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
1	Eb	28	LYS	2.5
1	F4	58	LYS	2.5
1	Jb	28	LYS	2.5
1	FL	141	ASN	2.5
1	Iz	179	ASN	2.5
2	Cm	6	A	2.5
1	Cf	50	MET	2.4
1	DQ	92	ASP	2.4
1	Ge	201	ASP	2.4
1	Gk	207	LEU	2.4
1	Hv	43	LEU	2.4
1	Io	223	LEU	2.4
1	JH	50	MET	2.4
1	JZ	103	LEU	2.4
1	Av	237	ILE	2.4
1	CK	82	ILE	2.4
1	EG	180	PRO	2.4
1	Fg	181	PRO	2.4
1	Fl	140	PRO	2.4
1	Ha	84	PRO	2.4
1	H6	112	ILE	2.4
1	Bq	27	GLY	2.4
1	B5	216	VAL	2.4
1	CQ	51	GLY	2.4
1	Cb	27	GLY	2.4
1	DU	55	GLY	2.4
1	FU	97	SER	2.4
1	Fe	160	VAL	2.4
1	GH	27	GLY	2.4
1	GQ	178	GLY	2.4
1	GV	53	GLY	2.4
1	Gl	27	GLY	2.4
1	Hp	53	GLY	2.4
1	IP	55	GLY	2.4
1	Fy	238	SER	2.4
1	GM	70	SER	2.4
1	GM	238	SER	2.4
1	GR	236	SER	2.4
1	Hf	70	SER	2.4
1	IK	192	SER	2.4
1	JP	236	SER	2.4
1	Jy	216	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
2	CS	9	U	2.4
2	Ch	9	U	2.4
2	Dr	9	U	2.4
2	Em	9	U	2.4
1	C4	197	GLU	2.4
1	FA	226	ARG	2.4
1	Gj	122	TRP	2.4
1	IA	115	TRP	2.4
1	IP	62	GLU	2.4
1	Ja	175	GLU	2.4
1	J4	62	GLU	2.4
1	Do	234	ALA	2.4
1	Ev	52	GLN	2.4
1	GG	54	GLN	2.4
1	H6	96	TYR	2.4
1	Ij	139	TYR	2.4
1	Iy	54	GLN	2.4
1	JH	39	TYR	2.4
1	JR	96	TYR	2.4
1	JW	25	ALA	2.4
1	Jb	96	TYR	2.4
1	J6	39	TYR	2.4
1	Db	149	THR	2.4
1	DK	179	ASN	2.4
1	Df	179	ASN	2.4
1	A4	223	LEU	2.4
1	Ek	50	MET	2.4
1	Fo	141	ASN	2.4
1	G5	223	LEU	2.4
1	Hf	50	MET	2.4
1	Hf	141	ASN	2.4
1	JU	179	ASN	2.4
1	Ju	50	MET	2.4
1	Jy	179	ASN	2.4
1	Fl	66	LEU	2.4
1	HF	223	LEU	2.4
1	FP	196	ASP	2.4
1	Gl	237	ILE	2.4
1	HH	181	PRO	2.4
1	JA	82	ILE	2.4
1	JA	180	PRO	2.4
1	Bv	107	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
1	DL	51	GLY	2.4
1	Dk	51	GLY	2.4
1	Dl	51	GLY	2.4
1	FC	107	GLY	2.4
1	Fy	217	VAL	2.4
1	GR	107	GLY	2.4
1	Gj	160	VAL	2.4
1	HB	216	VAL	2.4
1	Iz	53	GLY	2.4
1	JK	204	VAL	2.4
1	Jj	178	GLY	2.4
1	AW	177	ARG	2.4
1	Bl	24	ARG	2.4
1	B4	143	SER	2.4
1	CA	226	ARG	2.4
1	Cj	238	SER	2.4
1	Cl	26	ARG	2.4
1	DV	226	ARG	2.4
1	Fg	228	SER	2.4
1	Fo	70	SER	2.4
1	GR	47	ARG	2.4
1	Gb	70	SER	2.4
1	Gf	226	ARG	2.4
1	Gj	192	SER	2.4
1	G4	71	SER	2.4
1	HL	226	ARG	2.4
1	HM	23	ARG	2.4
1	HP	211	SER	2.4
1	Hg	24	ARG	2.4
1	Iu	226	ARG	2.4
1	JW	47	ARG	2.4
1	AM	175	GLU	2.4
1	Cu	175	GLU	2.4
1	DP	62	GLU	2.4
1	DZ	62	GLU	2.4
1	Dy	62	GLU	2.4
1	Fk	173	LYS	2.4
1	Jb	175	GLU	2.4
1	J1	28	LYS	2.4
1	J4	175	GLU	2.4
1	J5	175	GLU	2.4
2	BS	9	U	2.4

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Mol	Chain	Res	Type	RSRZ
2	DS	9	U	2.4
2	Dh	9	U	2.4
2	Gm	9	U	2.4
2	Hm	7	U	2.4
1	Db	25	ALA	2.4
1	GH	25	ALA	2.4
1	Ff	142	TYR	2.4
1	GA	202	TYR	2.4
1	GK	54	GLN	2.4
1	Hf	139	TYR	2.4
1	Hz	54	GLN	2.4
1	H1	25	ALA	2.4
1	Ik	214	GLN	2.4
1	Io	193	ALA	2.4
1	Jy	96	TYR	2.4
1	FB	149	THR	2.4
1	JG	169	THR	2.4
1	Dj	61	HIS	2.4
1	GL	113	HIS	2.4
1	Ay	223	LEU	2.4
1	Fb	103	LEU	2.4
1	Fz	50	MET	2.4
1	Ge	223	LEU	2.4
1	HC	50	MET	2.4
1	Il	37	LEU	2.4
1	A5	179	ASN	2.4
1	ER	179	ASN	2.4
1	Fb	179	ASN	2.4
1	Il	179	ASN	2.4
1	AC	186	ILE	2.4
1	Ik	94	PRO	2.4
1	Ik	186	ILE	2.4
1	A1	126	CYS	2.4
1	Io	180	PRO	2.4
1	J5	181	PRO	2.4
1	J6	140	PRO	2.4
1	BZ	55	GLY	2.4
1	CW	216	VAL	2.4
1	EF	178	GLY	2.4
1	Ga	51	GLY	2.4
1	G4	217	VAL	2.4
1	H6	167	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
1	IB	162	VAL	2.4
1	IR	27	GLY	2.4
1	Ij	132	GLY	2.4
1	I5	51	GLY	2.4
2	G7	6	A	2.4
1	Aa	226	ARG	2.4
1	Df	226	ARG	2.4
1	Dt	226	ARG	2.4
1	EP	226	ARG	2.4
1	F5	213	LYS	2.4
1	G4	224	ARG	2.4
1	He	177	ARG	2.4
1	He	213	LYS	2.4
1	Ij	58	LYS	2.4
1	Io	177	ARG	2.4
1	JL	226	ARG	2.4
1	Jb	184	ARG	2.4
1	Jv	47	ARG	2.4
1	J4	177	ARG	2.4
1	AG	175	GLU	2.4
1	AH	175	GLU	2.4
1	Av	175	GLU	2.4
1	B6	175	GLU	2.4
1	CC	238	SER	2.4
1	Eg	238	SER	2.4
1	EO	143	SER	2.4
1	FP	143	SER	2.4
1	FR	145	GLU	2.4
1	GU	70	SER	2.4
1	Gq	125	SER	2.4
1	G6	70	SER	2.4
1	HV	238	SER	2.4
1	Io	175	GLU	2.4
1	Ju	175	GLU	2.4
1	Jy	238	SER	2.4
1	Ck	52	GLN	2.4
1	DB	52	GLN	2.4
1	Db	115	TRP	2.4
1	GG	52	GLN	2.4
1	Gy	54	GLN	2.4
1	JF	54	GLN	2.4
2	DN	10	U	2.4

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Mol	Chain	Res	Type	RSRZ
2	Eh	9	U	2.4
2	HD	9	U	2.4
2	HN	11	U	2.4
2	I7	7	U	2.4
1	Fz	142	TYR	2.4
1	IC	202	TYR	2.4
1	Cl	35	THR	2.4
1	GM	35	THR	2.4
1	JB	149	THR	2.4
1	Du	50	MET	2.4
1	FV	61	HIS	2.4
1	Fg	50	MET	2.4
1	Hp	50	MET	2.4
1	F1	186	ILE	2.4
1	GQ	186	ILE	2.4
1	JM	186	ILE	2.4
1	Ae	180	PRO	2.4
1	De	179	ASN	2.4
1	Fy	179	ASN	2.4
1	Gy	179	ASN	2.4
1	G6	89	PRO	2.4
1	H6	94	PRO	2.4
1	IU	179	ASN	2.4
1	Jk	179	ASN	2.4
1	AH	28	LYS	2.4
1	BW	33	GLY	2.4
1	CV	51	GLY	2.4
1	Ef	53	GLY	2.4
1	BH	23	ARG	2.4
1	Cg	26	ARG	2.4
1	Ct	177	ARG	2.4
1	Dv	126	CYS	2.4
1	Ff	168	LYS	2.4
1	Fk	53	GLY	2.4
1	G5	107	GLY	2.4
1	Gl	23	ARG	2.4
1	IC	92	ASP	2.4
1	JK	184	ARG	2.4
1	JW	126	CYS	2.4
1	AF	175	GLU	2.4
1	AR	175	GLU	2.4
1	Iq	175	GLU	2.4

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Mol	Chain	Res	Type	RSRZ
2	D2	6	A	2.4
1	A1	100	ALA	2.4
1	E1	25	ALA	2.4
1	GP	229	ALA	2.4
1	I6	25	ALA	2.4
1	Jz	229	ALA	2.4
1	Ak	52	GLN	2.4
1	Bt	70	SER	2.4
1	B6	236	SER	2.4
1	CQ	54	GLN	2.4
1	C5	70	SER	2.4
1	F1	38	GLN	2.4
1	Gf	52	GLN	2.4
1	Gf	71	SER	2.4
1	Gk	236	SER	2.4
1	HB	236	SER	2.4
1	HM	54	GLN	2.4
1	Hz	166	SER	2.4
1	IZ	54	GLN	2.4
1	Ie	54	GLN	2.4
1	Iq	34	SER	2.4
1	JM	219	GLN	2.4
1	JP	70	SER	2.4
1	Bf	176	THR	2.4
1	Fp	50	MET	2.4
1	IB	50	MET	2.4
1	Ja	96	TYR	2.4
1	Jk	202	TYR	2.4
2	J2	9	U	2.4
1	Eb	37	LEU	2.4
1	Fg	161	LEU	2.4
1	Hf	86	LEU	2.4
1	Hj	66	LEU	2.4
1	Ht	61	HIS	2.4
1	Ik	183	LEU	2.4
1	JB	66	LEU	2.4
1	FL	237	ILE	2.4
1	He	106	ILE	2.4
1	Il	186	ILE	2.4
1	I5	237	ILE	2.4
1	AH	107	GLY	2.3
1	Av	24	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
1	B6	23	ARG	2.3
1	CU	55	GLY	2.3
1	D4	178	GLY	2.3
1	EH	27	GLY	2.3
1	Fg	177	ARG	2.3
1	Gk	148	LYS	2.3
1	Gk	217	VAL	2.3
1	G5	184	ARG	2.3
1	HA	58	LYS	2.3
1	Hg	185	ASN	2.3
1	Hu	173	LYS	2.3
1	Hv	217	VAL	2.3
1	Il	217	VAL	2.3
1	I4	184	ARG	2.3
1	JH	204	VAL	2.3
1	J4	216	VAL	2.3
1	HF	178	GLY	2.3
1	F1	201	ASP	2.3
1	IC	201	ASP	2.3
1	AQ	175	GLU	2.3
1	GU	62	GLU	2.3
1	Gp	117	ALA	2.3
1	Jt	62	GLU	2.3
1	FP	54	GLN	2.3
1	Iu	52	GLN	2.3
1	JC	219	GLN	2.3
1	JR	52	GLN	2.3
1	Fe	212	SER	2.3
1	Ff	156	SER	2.3
1	Fj	70	SER	2.3
1	F1	236	SER	2.3
1	Gf	115	TRP	2.3
1	G6	97	SER	2.3
1	Hv	50	MET	2.3
1	Hz	156	SER	2.3
1	H6	56	TRP	2.3
1	IW	50	MET	2.3
1	Ij	211	SER	2.3
1	I1	97	SER	2.3
1	JB	70	SER	2.3
1	JP	115	TRP	2.3
1	Jv	236	SER	2.3

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Mol	Chain	Res	Type	RSRZ
1	Aq	35	THR	2.3
1	Fb	37	LEU	2.3
1	Gf	223	LEU	2.3
1	Gq	118	LEU	2.3
1	IB	96	TYR	2.3
1	Ik	150	LEU	2.3
1	JZ	118	LEU	2.3
2	C2	9	U	2.3
2	FX	9	U	2.3
2	H7	9	U	2.3
1	Fg	64	ILE	2.3
1	Ja	186	ILE	2.3
1	J4	83	ILE	2.3
1	Il	147	PRO	2.3
1	BW	217	VAL	2.3
1	Cp	216	VAL	2.3
1	DW	217	VAL	2.3
1	EC	171	ARG	2.3
1	ER	171	ARG	2.3
1	GK	116	ARG	2.3
1	Gq	30	VAL	2.3
1	HG	171	ARG	2.3
1	HR	22	ARG	2.3
1	Ha	226	ARG	2.3
1	Hq	171	ARG	2.3
1	IC	30	VAL	2.3
1	IW	24	ARG	2.3
1	Ij	184	ARG	2.3
1	Jv	104	ARG	2.3
1	B1	179	ASN	2.3
1	DQ	51	GLY	2.3
1	Dk	53	GLY	2.3
1	Eu	51	GLY	2.3
1	GA	55	GLY	2.3
1	GV	51	GLY	2.3
1	Gj	178	GLY	2.3
1	Gj	210	GLY	2.3
1	G6	91	GLY	2.3
1	Hf	53	GLY	2.3
1	H5	55	GLY	2.3
1	I6	179	ASN	2.3
1	BP	62	GLU	2.3

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Mol	Chain	Res	Type	RSRZ
1	DA	175	GLU	2.3
1	GC	25	ALA	2.3
1	GK	175	GLU	2.3
1	Ga	109	ALA	2.3
1	HF	73	ALA	2.3
1	Ik	63	GLU	2.3
1	Iu	175	GLU	2.3
1	IC	126	CYS	2.3
1	JQ	193	ALA	2.3
1	AB	50	MET	2.3
1	Ab	57	GLN	2.3
1	BQ	54	GLN	2.3
1	C6	50	MET	2.3
1	Df	52	GLN	2.3
1	Dg	50	MET	2.3
1	EP	54	GLN	2.3
1	GL	115	TRP	2.3
1	Gj	70	SER	2.3
1	G4	143	SER	2.3
1	HC	56	TRP	2.3
1	H1	70	SER	2.3
1	IA	238	SER	2.3
1	IC	165	LEU	2.3
1	Il	238	SER	2.3
1	JM	70	SER	2.3
1	JM	238	SER	2.3
1	Jl	238	SER	2.3
1	FH	105	THR	2.3
1	Fe	83	ILE	2.3
1	Ff	169	THR	2.3
1	Fj	83	ILE	2.3
1	GG	106	ILE	2.3
1	Go	106	ILE	2.3
1	G6	202	TYR	2.3
1	IG	169	THR	2.3
1	Ju	96	TYR	2.3
2	D2	12	A	2.3
1	Fl	173	LYS	2.3
1	Gq	168	LYS	2.3
1	G1	28	LYS	2.3
1	BM	23	ARG	2.3
1	B6	47	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
1	F1	177	ARG	2.3
1	Hg	32	ARG	2.3
1	Hq	26	ARG	2.3
1	Jb	224	ARG	2.3
2	B2	17	U	2.3
2	CN	1	U	2.3
2	C2	13	U	2.3
2	Fc	9	U	2.3
2	H2	9	U	2.3
1	J4	84	PRO	2.3
1	Fz	216	VAL	2.3
1	Iq	217	VAL	2.3
1	Ag	27	GLY	2.3
1	BR	27	GLY	2.3
1	Cq	27	GLY	2.3
1	DM	27	GLY	2.3
1	Ea	53	GLY	2.3
1	Fe	233	GLY	2.3
1	Fg	53	GLY	2.3
1	HB	210	GLY	2.3
1	Ig	167	GLY	2.3
1	JR	27	GLY	2.3
1	FC	179	ASN	2.3
1	HP	179	ASN	2.3
1	Aj	175	GLU	2.3
1	BQ	175	GLU	2.3
1	By	62	GLU	2.3
1	Db	117	ALA	2.3
1	Dl	175	GLU	2.3
1	FL	175	GLU	2.3
1	Go	62	GLU	2.3
1	Hy	62	GLU	2.3
1	IB	234	ALA	2.3
1	GR	50	MET	2.3
1	Gl	201	ASP	2.3
1	H6	50	MET	2.3
1	Bv	52	GLN	2.3
1	B6	183	LEU	2.3
1	DF	54	GLN	2.3
1	DK	165	LEU	2.3
1	Dp	52	GLN	2.3
1	Gf	214	GLN	2.3

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Mol	Chain	Res	Type	RSRZ
1	He	59	LEU	2.3
1	JP	219	GLN	2.3
1	Jq	54	GLN	2.3
1	Ge	102	HIS	2.3
1	Al	238	SER	2.3
1	Ao	143	SER	2.3
1	BM	236	SER	2.3
1	FR	236	SER	2.3
1	Fg	71	SER	2.3
1	Fg	236	SER	2.3
1	Fj	238	SER	2.3
1	Fk	70	SER	2.3
1	Fy	166	SER	2.3
1	GK	164	SER	2.3
1	Go	108	SER	2.3
1	HB	237	ILE	2.3
1	Hv	237	ILE	2.3
1	I4	70	SER	2.3
1	JC	82	ILE	2.3
1	JQ	238	SER	2.3
1	J6	236	SER	2.3
1	FM	35	THR	2.3
1	Fp	169	THR	2.3
1	HB	72	THR	2.3
1	AH	184	ARG	2.3
1	AZ	177	ARG	2.3
1	Ao	184	ARG	2.3
1	BM	177	ARG	2.3
1	BM	226	ARG	2.3
1	Bg	177	ARG	2.3
1	Cq	226	ARG	2.3
1	Gf	184	ARG	2.3
1	HB	202	TYR	2.3
1	HF	177	ARG	2.3
1	HM	171	ARG	2.3
1	HV	184	ARG	2.3
1	Jg	23	ARG	2.3
1	J6	177	ARG	2.3
1	At	216	VAL	2.3
1	Bq	217	VAL	2.3
1	B1	217	VAL	2.3
1	Fq	217	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
1	Gp	84	PRO	2.3
1	Hy	217	VAL	2.3
1	IB	84	PRO	2.3
1	IC	89	PRO	2.3
1	J6	48	PRO	2.3
2	DD	9	U	2.3
2	Dh	10	U	2.3
2	GN	9	U	2.3
2	Hr	12	A	2.3
2	JI	6	A	2.3
1	A5	53	GLY	2.3
1	Bp	53	GLY	2.3
1	Bu	51	GLY	2.3
1	Ez	55	GLY	2.3
1	FW	27	GLY	2.3
1	Hu	51	GLY	2.3
1	GV	179	ASN	2.3
1	HM	179	ASN	2.3
1	Io	179	ASN	2.3
1	At	62	GLU	2.3
1	Bz	50	MET	2.3
1	DF	175	GLU	2.3
1	Dj	175	GLU	2.3
1	Dl	25	ALA	2.3
1	Gb	25	ALA	2.3
1	Gf	50	MET	2.3
1	Gj	234	ALA	2.3
1	Hl	50	MET	2.3
1	IQ	175	GLU	2.3
1	Ao	54	GLN	2.3
1	Cg	198	ASP	2.3
1	Dp	78	GLN	2.3
1	Ff	52	GLN	2.3
1	Ge	165	LEU	2.3
1	Gj	214	GLN	2.3
1	HV	198	ASP	2.3
1	JH	57	GLN	2.3
1	E1	173	LYS	2.3
1	Fz	173	LYS	2.3
1	HZ	58	LYS	2.3
1	IP	58	LYS	2.3
1	EZ	174	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
1	FL	186	ILE	2.3
1	G6	237	ILE	2.3
1	Hz	186	ILE	2.3
1	IA	237	ILE	2.3
1	JH	218	ILE	2.3
1	JP	61	HIS	2.3
1	BV	226	ARG	2.3
1	By	177	ARG	2.3
1	B6	24	ARG	2.3
1	GL	226	ARG	2.3
1	Gb	143	SER	2.3
1	HR	97	SER	2.3
1	He	87	SER	2.3
1	Ik	184	ARG	2.3
1	Iv	23	ARG	2.3
1	I1	238	SER	2.3
1	JH	26	ARG	2.3
1	J1	24	ARG	2.3
1	Gb	39	TYR	2.3
1	Fe	208	VAL	2.3
1	Ff	217	VAL	2.3
1	Fk	216	VAL	2.3
1	GA	217	VAL	2.3
1	Gf	162	VAL	2.3
1	Gf	181	PRO	2.3
1	He	140	PRO	2.3
1	Hl	172	PRO	2.3
1	Hv	140	PRO	2.3
1	H6	181	PRO	2.3
1	J1	94	PRO	2.3
1	EM	27	GLY	2.3
2	Ar	9	U	2.3
2	Dh	17	U	2.3
2	Fm	9	U	2.3
2	F7	7	U	2.3
2	Gc	10	U	2.3
1	Ig	110	PHE	2.2
2	Eh	12	A	2.2
2	Hw	6	A	2.2
1	Ag	50	MET	2.2
1	AL	141	ASN	2.2
1	BM	175	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
1	CA	62	GLU	2.2
1	Cj	62	GLU	2.2
1	DB	179	ASN	2.2
1	Ey	175	GLU	2.2
1	Fv	175	GLU	2.2
1	Gl	145	GLU	2.2
1	Gq	179	ASN	2.2
1	Hu	175	GLU	2.2
1	IL	117	ALA	2.2
1	Ig	25	ALA	2.2
1	G4	165	LEU	2.2
1	Af	54	GLN	2.2
1	A5	52	GLN	2.2
1	D5	54	GLN	2.2
1	EG	52	GLN	2.2
1	Fy	54	GLN	2.2
1	Fz	54	GLN	2.2
1	Go	58	LYS	2.2
1	Hf	52	GLN	2.2
1	Ia	58	LYS	2.2
1	Ib	28	LYS	2.2
1	JH	38	GLN	2.2
1	CB	92	ASP	2.2
1	FK	174	ILE	2.2
1	G1	82	ILE	2.2
1	H5	186	ILE	2.2
1	Il	106	ILE	2.2
1	JL	237	ILE	2.2
1	AP	177	ARG	2.2
1	Cp	226	ARG	2.2
1	Fv	22	ARG	2.2
1	F4	184	ARG	2.2
1	HQ	226	ARG	2.2
1	Hg	184	ARG	2.2
1	Ib	23	ARG	2.2
1	JP	224	ARG	2.2
1	JC	176	THR	2.2
1	JZ	115	TRP	2.2
1	Av	236	SER	2.2
1	Ck	162	VAL	2.2
1	Cv	217	VAL	2.2
1	FB	202	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
1	Ff	238	SER	2.2
1	Fk	162	VAL	2.2
1	Fl	217	VAL	2.2
1	H6	124	PRO	2.2
1	IU	216	VAL	2.2
1	Ig	70	SER	2.2
1	Il	71	SER	2.2
1	Io	238	SER	2.2
1	JF	236	SER	2.2
1	Jg	217	VAL	2.2
1	Jg	238	SER	2.2
1	Jy	140	PRO	2.2
1	J5	172	PRO	2.2
1	J5	142	TYR	2.2
1	Aa	51	GLY	2.2
1	BG	53	GLY	2.2
1	CH	27	GLY	2.2
1	CQ	55	GLY	2.2
1	CR	27	GLY	2.2
1	Ck	55	GLY	2.2
1	C1	53	GLY	2.2
1	C6	27	GLY	2.2
1	DR	27	GLY	2.2
1	Gp	51	GLY	2.2
1	HC	53	GLY	2.2
1	Ib	27	GLY	2.2
1	Ib	178	GLY	2.2
1	J5	55	GLY	2.2
1	BQ	50	MET	2.2
1	E6	50	MET	2.2
1	Fl	50	MET	2.2
1	IA	138	PHE	2.2
1	J5	138	PHE	2.2
2	Ac	9	U	2.2
2	BN	7	U	2.2
2	D7	9	U	2.2
2	FD	9	U	2.2
1	AL	175	GLU	2.2
1	BZ	175	GLU	2.2
1	C1	175	GLU	2.2
1	Fv	25	ALA	2.2
1	HK	175	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
1	Il	229	ALA	2.2
1	Iu	90	ALA	2.2
1	Jv	175	GLU	2.2
1	Jy	229	ALA	2.2
1	Ao	179	ASN	2.2
1	Fa	58	LYS	2.2
1	Fg	118	LEU	2.2
1	Fj	118	LEU	2.2
1	F1	173	LYS	2.2
1	IG	133	ASN	2.2
1	JP	69	ASN	2.2
2	Jc	12	A	2.2
1	BF	54	GLN	2.2
1	CC	52	GLN	2.2
1	CK	219	GLN	2.2
1	EF	54	GLN	2.2
1	G1	112	ILE	2.2
1	If	186	ILE	2.2
1	Jz	82	ILE	2.2
1	El	177	ARG	2.2
1	F6	171	ARG	2.2
1	IG	85	ARG	2.2
1	IH	26	ARG	2.2
1	Il	177	ARG	2.2
1	Iq	23	ARG	2.2
1	CV	216	VAL	2.2
1	Cq	30	VAL	2.2
1	Ek	169	THR	2.2
1	Ev	35	THR	2.2
1	FC	217	VAL	2.2
1	Fb	217	VAL	2.2
1	Gf	140	PRO	2.2
1	HF	216	VAL	2.2
1	HU	216	VAL	2.2
1	He	122	TRP	2.2
1	Hk	162	VAL	2.2
1	H5	149	THR	2.2
1	IB	115	TRP	2.2
1	Ik	151	THR	2.2
1	Iq	35	THR	2.2
1	JA	216	VAL	2.2
1	JP	84	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
1	Jy	160	VAL	2.2
1	BK	238	SER	2.2
1	Bv	70	SER	2.2
1	FW	29	SER	2.2
1	Fe	156	SER	2.2
1	GF	156	SER	2.2
1	GK	170	TYR	2.2
1	Gg	202	TYR	2.2
1	Gp	119	SER	2.2
1	Hf	143	SER	2.2
1	Ho	238	SER	2.2
1	IH	70	SER	2.2
1	JG	238	SER	2.2
1	JP	166	SER	2.2
1	Jb	238	SER	2.2
1	Je	236	SER	2.2
1	J6	99	SER	2.2
1	BG	51	GLY	2.2
1	CB	51	GLY	2.2
1	Cg	27	GLY	2.2
1	Dq	27	GLY	2.2
1	D6	27	GLY	2.2
1	FK	55	GLY	2.2
1	J4	167	GLY	2.2
1	Cv	50	MET	2.2
1	Eg	50	MET	2.2
1	Ep	50	MET	2.2
1	Jb	50	MET	2.2
1	A6	25	ALA	2.2
1	Bo	175	GLU	2.2
1	Bu	229	ALA	2.2
1	Cg	28	LYS	2.2
1	Cg	175	GLU	2.2
1	DW	25	ALA	2.2
1	D1	28	LYS	2.2
1	FU	117	ALA	2.2
1	Fj	173	LYS	2.2
1	Fl	199	LYS	2.2
1	F5	175	GLU	2.2
1	Gj	66	LEU	2.2
1	HP	229	ALA	2.2
1	Hg	136	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
1	Ht	223	LEU	2.2
1	H4	62	GLU	2.2
1	H5	183	LEU	2.2
1	H6	28	LYS	2.2
1	IR	100	ALA	2.2
1	Ij	229	ALA	2.2
1	JM	150	LEU	2.2
1	JR	90	ALA	2.2
2	B7	9	U	2.2
2	DD	14	U	2.2
1	CQ	179	ASN	2.2
1	Hf	133	ASN	2.2
1	IP	179	ASN	2.2
1	Ip	179	ASN	2.2
1	Aq	23	ARG	2.2
1	A4	177	ARG	2.2
1	CC	23	ARG	2.2
1	CF	54	GLN	2.2
1	Cy	184	ARG	2.2
1	DC	184	ARG	2.2
1	Db	54	GLN	2.2
1	ER	184	ARG	2.2
1	EV	226	ARG	2.2
1	Eb	184	ARG	2.2
1	Ff	224	ARG	2.2
1	Fp	184	ARG	2.2
1	Gg	38	GLN	2.2
1	Gg	177	ARG	2.2
1	G4	214	GLN	2.2
1	HH	47	ARG	2.2
1	Ie	226	ARG	2.2
1	Iz	52	GLN	2.2
1	JC	186	ILE	2.2
1	Jk	226	ARG	2.2
1	Jq	24	ARG	2.2
1	Jz	226	ARG	2.2
1	J1	82	ILE	2.2
1	He	61	HIS	2.2
2	AI	6	A	2.2
2	Dh	12	A	2.2
2	FX	6	A	2.2
2	F7	6	A	2.2

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Mol	Chain	Res	Type	RSRZ
1	Dl	217	VAL	2.2
1	GZ	162	VAL	2.2
1	JL	162	VAL	2.2
1	JW	217	VAL	2.2
1	FK	115	TRP	2.2
1	G5	151	THR	2.2
1	Ig	176	THR	2.2
1	AR	27	GLY	2.2
1	A6	50	MET	2.2
1	Eb	50	MET	2.2
1	Fk	50	MET	2.2
1	EM	238	SER	2.2
1	Fl	97	SER	2.2
1	F6	132	GLY	2.2
1	Gf	96	TYR	2.2
1	If	50	MET	2.2
1	Gp	212	SER	2.2
1	G1	202	TYR	2.2
1	Ik	55	GLY	2.2
1	I1	50	MET	2.2
1	JV	50	MET	2.2
1	G5	156	SER	2.2
1	Hf	87	SER	2.2
1	Io	143	SER	2.2
1	JC	29	SER	2.2
1	JU	238	SER	2.2
1	Jb	70	SER	2.2
1	BK	58	LYS	2.2
1	E6	28	LYS	2.2
1	GM	28	LYS	2.2
1	Iq	28	LYS	2.2
1	JC	28	LYS	2.2
1	BW	183	LEU	2.2
1	Fe	222	LEU	2.2
1	Hk	223	LEU	2.2
1	JH	183	LEU	2.2
1	JP	183	LEU	2.2
1	AP	175	GLU	2.2
1	CF	193	ALA	2.2
1	DH	182	GLU	2.2
1	Dt	62	GLU	2.2
1	ER	25	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
1	Eb	25	ALA	2.2
1	GU	193	ALA	2.2
1	Gj	63	GLU	2.2
1	Gq	25	ALA	2.2
1	JV	234	ALA	2.2
1	Bg	47	ARG	2.2
1	Ck	184	ARG	2.2
1	DR	23	ARG	2.2
1	Et	171	ARG	2.2
1	FR	186	ILE	2.2
1	Ff	237	ILE	2.2
1	F1	184	ARG	2.2
1	Gl	186	ILE	2.2
1	Gq	82	ILE	2.2
1	HG	177	ARG	2.2
1	Hl	82	ILE	2.2
1	Ap	52	GLN	2.2
1	C5	179	ASN	2.2
1	DA	54	GLN	2.2
1	D4	54	GLN	2.2
1	EK	54	GLN	2.2
1	Ek	54	GLN	2.2
1	FA	54	GLN	2.2
1	HA	179	ASN	2.2
1	IW	179	ASN	2.2
2	CI	9	U	2.2
2	Dc	13	U	2.2
2	Fh	9	U	2.2
2	Gw	10	U	2.2
2	Ic	9	U	2.2
2	JI	9	U	2.2
1	AW	201	ASP	2.2
1	Bf	204	VAL	2.2
1	B6	217	VAL	2.2
1	Fe	68	VAL	2.2
1	GL	140	PRO	2.2
1	IA	217	VAL	2.2
1	Il	198	ASP	2.2
1	JH	216	VAL	2.2
1	Jz	217	VAL	2.2
1	J1	181	PRO	2.2
1	Ak	50	MET	2.2

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Mol	Chain	Res	Type	RSRZ
1	Cu	50	MET	2.2
1	Dl	176	THR	2.2
1	EM	50	MET	2.2
1	F5	50	MET	2.2
1	CR	28	LYS	2.2
1	C1	28	LYS	2.2
1	DP	178	GLY	2.2
1	ER	51	GLY	2.2
1	Ea	51	GLY	2.2
1	Ek	213	LYS	2.2
1	Ff	55	GLY	2.2
1	Fu	53	GLY	2.2
1	GG	53	GLY	2.2
1	GG	178	GLY	2.2
1	HP	58	LYS	2.2
1	Ia	55	GLY	2.2
1	JB	51	GLY	2.2
1	Jz	205	GLY	2.2
1	J5	51	GLY	2.2
1	J5	199	LYS	2.2
1	Fk	142	TYR	2.2
1	Ib	170	TYR	2.2
1	Ij	202	TYR	2.2
1	I6	96	TYR	2.2
1	J1	202	TYR	2.2
1	BU	238	SER	2.2
1	Cg	238	SER	2.2
1	FU	238	SER	2.2
1	Ff	70	SER	2.2
1	Fl	166	SER	2.2
1	GH	238	SER	2.2
1	GZ	97	SER	2.2
1	Gq	211	SER	2.2
1	Hb	34	SER	2.2
1	He	153	LEU	2.2
1	H6	70	SER	2.2
1	H6	183	LEU	2.2
1	IC	29	SER	2.2
1	JK	103	LEU	2.2
1	Jo	70	SER	2.2
1	BR	175	GLU	2.2
1	BZ	62	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
1	Cj	234	ALA	2.2
1	DU	117	ALA	2.2
1	GR	25	ALA	2.2
1	HQ	175	GLU	2.2
1	Hb	175	GLU	2.2
1	Ht	74	ALA	2.2
1	DW	224	ARG	2.1
1	Db	26	ARG	2.1
1	FZ	184	ARG	2.1
1	Fq	22	ARG	2.1
1	Go	226	ARG	2.1
1	Gy	237	ILE	2.1
1	HA	177	ARG	2.1
1	HR	24	ARG	2.1
1	IC	186	ILE	2.1
1	IU	226	ARG	2.1
1	IW	226	ARG	2.1
1	Ip	226	ARG	2.1
1	JG	184	ARG	2.1
1	Jt	218	ILE	2.1
1	AW	52	GLN	2.1
1	BU	54	GLN	2.1
1	Cj	54	GLN	2.1
1	DZ	54	GLN	2.1
1	FU	54	GLN	2.1
1	Jb	54	GLN	2.1
1	At	179	ASN	2.1
1	CL	179	ASN	2.1
1	EP	69	ASN	2.1
1	IZ	69	ASN	2.1
2	B2	9	U	2.1
2	CN	17	U	2.1
2	C2	10	U	2.1
2	ED	9	U	2.1
2	ID	9	U	2.1
2	Im	9	U	2.1
2	JS	1	U	2.1
1	Et	180	PRO	2.1
1	GQ	147	PRO	2.1
1	Gj	140	PRO	2.1
1	HQ	181	PRO	2.1
1	I6	216	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
1	BW	50	MET	2.1
1	Dz	50	MET	2.1
1	Ff	187	ASP	2.1
1	HW	50	MET	2.1
1	H1	50	MET	2.1
1	Jz	50	MET	2.1
1	Ff	58	LYS	2.1
1	Fy	58	LYS	2.1
1	Hl	58	LYS	2.1
1	IB	151	THR	2.1
1	Ie	58	LYS	2.1
1	If	76	THR	2.1
1	Jf	173	LYS	2.1
1	AW	27	GLY	2.1
1	JB	98	GLY	2.1
1	DB	138	PHE	2.1
1	EL	115	TRP	2.1
1	H4	165	LEU	2.1
1	H6	120	PHE	2.1
1	JF	115	TRP	2.1
1	De	103	LEU	2.1
1	GZ	150	LEU	2.1
1	Jz	153	LEU	2.1
1	Fb	142	TYR	2.1
1	HC	96	TYR	2.1
1	Hj	139	TYR	2.1
1	JL	202	TYR	2.1
1	Jt	202	TYR	2.1
1	C4	143	SER	2.1
1	EM	236	SER	2.1
1	HP	71	SER	2.1
1	H1	215	ALA	2.1
1	IB	236	SER	2.1
1	Iy	156	SER	2.1
1	JK	126	CYS	2.1
1	Ff	90	ALA	2.1
1	GB	234	ALA	2.1
1	GF	117	ALA	2.1
1	Gf	229	ALA	2.1
1	AA	175	GLU	2.1
1	Aj	62	GLU	2.1
1	B6	31	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
1	CH	24	ARG	2.1
1	DW	184	ARG	2.1
1	EF	62	GLU	2.1
1	EW	26	ARG	2.1
1	Ff	114	ARG	2.1
1	Ge	197	GLU	2.1
1	Gj	85	ARG	2.1
1	IC	226	ARG	2.1
1	Il	184	ARG	2.1
1	JL	184	ARG	2.1
1	JM	177	ARG	2.1
1	JW	177	ARG	2.1
1	J6	184	ARG	2.1
1	Ff	106	ILE	2.1
1	Go	83	ILE	2.1
1	Go	237	ILE	2.1
1	IU	82	ILE	2.1
1	JG	112	ILE	2.1
1	Jt	82	ILE	2.1
1	Jz	237	ILE	2.1
1	J5	237	ILE	2.1
1	Bt	54	GLN	2.1
1	C5	52	GLN	2.1
1	Eo	54	GLN	2.1
1	Jz	54	GLN	2.1
1	EL	61	HIS	2.1
1	IQ	61	HIS	2.1
1	DK	141	ASN	2.1
1	Ej	69	ASN	2.1
1	FR	179	ASN	2.1
1	Fl	179	ASN	2.1
1	Hl	179	ASN	2.1
1	Hu	141	ASN	2.1
1	Hy	141	ASN	2.1
1	If	141	ASN	2.1
1	Bt	68	VAL	2.1
1	He	147	PRO	2.1
1	Hl	217	VAL	2.1
1	H4	216	VAL	2.1
1	Al	50	MET	2.1
1	Fa	50	MET	2.1
1	Il	180	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
1	JH	89	PRO	2.1
2	BI	9	U	2.1
2	Cr	9	U	2.1
2	Dw	9	U	2.1
2	G7	9	U	2.1
2	HS	7	U	2.1
2	HX	9	U	2.1
2	Hh	9	U	2.1
2	J2	8	U	2.1
1	Co	58	LYS	2.1
1	JH	28	LYS	2.1
1	Gf	198	ASP	2.1
1	G1	201	ASP	2.1
1	Bu	53	GLY	2.1
1	C5	178	GLY	2.1
1	FP	210	GLY	2.1
1	GW	27	GLY	2.1
1	Gp	98	GLY	2.1
1	HC	35	THR	2.1
1	H5	53	GLY	2.1
1	Il	27	GLY	2.1
1	JQ	55	GLY	2.1
1	It	223	LEU	2.1
1	G4	115	TRP	2.1
1	BC	25	ALA	2.1
1	BM	25	ALA	2.1
1	Bv	184	ARG	2.1
1	By	226	ARG	2.1
1	CW	22	ARG	2.1
1	EQ	142	TYR	2.1
1	El	47	ARG	2.1
1	Eq	184	ARG	2.1
1	FM	25	ALA	2.1
1	Fl	96	TYR	2.1
1	GM	202	TYR	2.1
1	HU	177	ARG	2.1
1	Hg	74	ALA	2.1
1	Hl	171	ARG	2.1
1	H1	171	ARG	2.1
1	H6	39	TYR	2.1
1	Ib	26	ARG	2.1
1	Iq	39	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
1	JF	90	ALA	2.1
1	Ju	215	ALA	2.1
1	Jv	202	TYR	2.1
1	J5	96	TYR	2.1
1	J6	23	ARG	2.1
2	HD	12	A	2.1
1	BU	62	GLU	2.1
1	Do	82	ILE	2.1
1	Eb	175	GLU	2.1
1	Fg	70	SER	2.1
1	F4	238	SER	2.1
1	F6	97	SER	2.1
1	GP	175	GLU	2.1
1	Gf	64	ILE	2.1
1	HG	175	GLU	2.1
1	HP	62	GLU	2.1
1	HW	70	SER	2.1
1	Ho	175	GLU	2.1
1	Hv	126	CYS	2.1
1	IH	238	SER	2.1
1	IP	97	SER	2.1
1	IV	175	GLU	2.1
1	I6	175	GLU	2.1
1	JH	236	SER	2.1
1	JQ	175	GLU	2.1
1	J6	238	SER	2.1
1	CZ	54	GLN	2.1
1	Eg	38	GLN	2.1
1	Fq	52	GLN	2.1
1	IL	52	GLN	2.1
1	Ia	52	GLN	2.1
1	If	54	GLN	2.1
1	AW	179	ASN	2.1
1	A5	50	MET	2.1
1	Bj	216	VAL	2.1
1	Co	216	VAL	2.1
1	Cq	217	VAL	2.1
1	C6	179	ASN	2.1
1	DF	179	ASN	2.1
1	Dz	216	VAL	2.1
1	FA	179	ASN	2.1
1	FZ	208	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
1	Fe	162	VAL	2.1
1	Fy	216	VAL	2.1
1	Gp	133	ASN	2.1
1	Gp	141	ASN	2.1
1	Gu	141	ASN	2.1
1	G6	216	VAL	2.1
1	Hg	50	MET	2.1
1	Hk	216	VAL	2.1
1	Ho	216	VAL	2.1
1	Ht	216	VAL	2.1
1	H5	50	MET	2.1
1	IW	217	VAL	2.1
1	JB	217	VAL	2.1
1	Fe	81	PRO	2.1
1	Fj	81	PRO	2.1
1	Gj	180	PRO	2.1
1	IC	181	PRO	2.1
2	Aw	11	U	2.1
2	A2	9	U	2.1
2	Cw	8	U	2.1
2	Ic	10	U	2.1
2	I7	9	U	2.1
2	Jh	9	U	2.1
1	AG	53	GLY	2.1
1	AQ	53	GLY	2.1
1	Ae	198	ASP	2.1
1	Av	27	GLY	2.1
1	Cl	178	GLY	2.1
1	Cp	53	GLY	2.1
1	DW	178	GLY	2.1
1	Df	183	LEU	2.1
1	D5	53	GLY	2.1
1	F1	152	ASP	2.1
1	Gj	201	ASP	2.1
1	Hb	27	GLY	2.1
1	Hq	178	GLY	2.1
1	JC	53	GLY	2.1
1	JP	221	GLY	2.1
1	JW	27	GLY	2.1
1	G4	76	THR	2.1
1	Hq	176	THR	2.1
1	IA	191	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
1	JR	35	THR	2.1
1	AU	184	ARG	2.1
1	Ab	26	ARG	2.1
1	Af	184	ARG	2.1
1	A5	226	ARG	2.1
1	Bj	177	ARG	2.1
1	Ej	85	ARG	2.1
1	GG	226	ARG	2.1
1	GZ	177	ARG	2.1
1	Gv	184	ARG	2.1
1	HC	226	ARG	2.1
1	HM	24	ARG	2.1
1	He	184	ARG	2.1
1	H1	104	ARG	2.1
1	IW	26	ARG	2.1
1	Jv	23	ARG	2.1
1	Jy	184	ARG	2.1
1	AA	229	ALA	2.1
1	Bv	25	ALA	2.1
1	E4	229	ALA	2.1
1	HF	62	GLU	2.1
1	HZ	237	ILE	2.1
1	Hj	186	ILE	2.1
1	Ht	186	ILE	2.1
1	JA	65	ILE	2.1
1	JB	229	ALA	2.1
1	Bb	175	GLU	2.1
1	CU	62	GLU	2.1
1	Fz	175	GLU	2.1
1	Gk	202	TYR	2.1
1	H5	182	GLU	2.1
1	IB	175	GLU	2.1
1	Ik	202	TYR	2.1
1	I1	175	GLU	2.1
1	JU	182	GLU	2.1
1	Jk	237	ILE	2.1
1	J4	63	GLU	2.1
1	J6	227	TYR	2.1
1	AA	238	SER	2.1
1	AM	236	SER	2.1
1	Ay	143	SER	2.1
1	Ct	238	SER	2.1

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Mol	Chain	Res	Type	RSRZ
1	DV	238	SER	2.1
1	Ev	236	SER	2.1
1	E6	238	SER	2.1
1	Fe	87	SER	2.1
1	F4	70	SER	2.1
1	Gj	238	SER	2.1
1	HG	87	SER	2.1
1	IF	143	SER	2.1
1	JK	97	SER	2.1
1	JP	60	SER	2.1
1	J4	60	SER	2.1
2	G7	12	A	2.1
1	AZ	54	GLN	2.1
1	B4	54	GLN	2.1
1	Ee	54	GLN	2.1
1	Fp	52	GLN	2.1
1	F4	54	GLN	2.1
1	Ia	54	GLN	2.1
1	I6	52	GLN	2.1
1	Jf	54	GLN	2.1
1	BR	28	LYS	2.1
1	CC	50	MET	2.1
1	Gv	173	LYS	2.1
1	He	58	LYS	2.1
1	IM	28	LYS	2.1
1	IQ	50	MET	2.1
1	Dj	217	VAL	2.1
1	FZ	160	VAL	2.1
1	Fj	216	VAL	2.1
1	GL	216	VAL	2.1
1	If	58	LYS	2.1
1	Jl	58	LYS	2.1
1	HP	147	PRO	2.1
1	JH	140	PRO	2.1
1	JK	124	PRO	2.1
1	CC	179	ASN	2.1
1	CK	141	ASN	2.1
1	DA	179	ASN	2.1
1	Gg	185	ASN	2.1
1	Ht	141	ASN	2.1
1	Gf	66	LEU	2.1
1	G4	223	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
1	Iq	165	LEU	2.1
1	JK	66	LEU	2.1
1	J6	37	LEU	2.1
1	A5	178	GLY	2.1
1	Ek	51	GLY	2.1
1	E6	27	GLY	2.1
1	GK	178	GLY	2.1
1	Gj	191	PHE	2.1
1	Hg	33	GLY	2.1
1	IF	178	GLY	2.1
1	IG	167	GLY	2.1
1	J4	138	PHE	2.1
2	CN	14	U	2.1
2	EN	9	U	2.1
2	Fw	9	U	2.1
2	G2	7	U	2.1
2	Hm	9	U	2.1
2	Hw	7	U	2.1
1	AR	177	ARG	2.1
1	Bg	184	ARG	2.1
1	Bk	226	ARG	2.1
1	Bq	171	ARG	2.1
1	CP	201	ASP	2.1
1	Ce	177	ARG	2.1
1	Cj	184	ARG	2.1
1	FR	116	ARG	2.1
1	Fl	171	ARG	2.1
1	Fu	226	ARG	2.1
1	Fv	177	ARG	2.1
1	GP	177	ARG	2.1
1	GW	26	ARG	2.1
1	HM	201	ASP	2.1
1	HR	149	THR	2.1
1	Hg	155	ASP	2.1
1	H6	201	ASP	2.1
1	IH	22	ARG	2.1
1	IU	177	ARG	2.1
1	Iz	184	ARG	2.1
1	Jg	184	ARG	2.1
1	Jo	226	ARG	2.1
1	FA	234	ALA	2.1
1	FK	188	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
1	Fg	56	TRP	2.1
1	Gg	25	ALA	2.1
1	G1	111	ALA	2.1
1	G4	82	ILE	2.1
1	HW	82	ILE	2.1
1	IR	186	ILE	2.1
1	JG	215	ALA	2.1
1	JU	237	ILE	2.1
1	Jv	186	ILE	2.1
1	Jy	115	TRP	2.1
1	Jz	218	ILE	2.1
1	AM	145	GLU	2.1
1	Be	175	GLU	2.1
1	DW	175	GLU	2.1
1	Da	175	GLU	2.1
1	ER	31	GLU	2.1
1	HH	175	GLU	2.1
1	Ia	175	GLU	2.1
1	Dp	202	TYR	2.1
1	HC	39	TYR	2.1
1	AB	238	SER	2.0
1	A1	125	SER	2.0
1	Cl	28	LYS	2.0
1	DC	60	SER	2.0
1	DC	238	SER	2.0
1	FF	238	SER	2.0
1	Cl	57	GLN	2.0
1	Fq	28	LYS	2.0
1	F6	236	SER	2.0
1	GR	97	SER	2.0
1	Gf	70	SER	2.0
1	Gj	87	SER	2.0
1	G1	238	SER	2.0
1	G4	97	SER	2.0
1	G5	60	SER	2.0
1	G6	238	SER	2.0
1	HP	212	SER	2.0
1	Ha	50	MET	2.0
1	Hf	238	SER	2.0
1	Hu	214	GLN	2.0
1	H6	126	CYS	2.0
1	IB	58	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
1	IM	238	SER	2.0
1	IW	238	SER	2.0
1	Ie	97	SER	2.0
1	Ie	192	SER	2.0
1	Il	97	SER	2.0
1	Iu	58	LYS	2.0
1	JB	238	SER	2.0
1	JP	164	SER	2.0
1	JU	199	LYS	2.0
1	JZ	238	SER	2.0
1	Jg	236	SER	2.0
1	Jv	70	SER	2.0
1	J5	70	SER	2.0
1	J6	97	SER	2.0
1	Gk	54	GLN	2.0
1	IV	52	GLN	2.0
1	Dq	216	VAL	2.0
1	EH	217	VAL	2.0
1	GK	217	VAL	2.0
1	IC	216	VAL	2.0
2	ES	6	A	2.0
1	HC	181	PRO	2.0
1	He	181	PRO	2.0
1	Ie	140	PRO	2.0
1	Ju	84	PRO	2.0
1	GU	141	ASN	2.0
1	IA	223	LEU	2.0
1	Jj	223	LEU	2.0
1	Bp	226	ARG	2.0
1	B1	178	GLY	2.0
1	CC	107	GLY	2.0
1	C1	171	ARG	2.0
1	D1	27	GLY	2.0
1	Fe	120	PHE	2.0
1	Fv	23	ARG	2.0
1	Fz	51	GLY	2.0
1	F1	120	PHE	2.0
1	GP	171	ARG	2.0
1	G6	85	ARG	2.0
1	HM	27	GLY	2.0
1	H5	233	GLY	2.0
1	Jq	177	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
1	Jv	171	ARG	2.0
1	Jl	47	ARG	2.0
1	Bt	237	ILE	2.0
1	FG	174	ILE	2.0
1	FP	79	THR	2.0
1	Gk	149	THR	2.0
1	Ik	72	THR	2.0
1	JB	106	ILE	2.0
1	JF	186	ILE	2.0
1	JH	198	ASP	2.0
1	JK	218	ILE	2.0
1	Jl	237	ILE	2.0
2	AN	9	U	2.0
2	Cc	9	U	2.0
2	Eh	17	U	2.0
2	GX	9	U	2.0
2	Hh	10	U	2.0
2	Hw	11	U	2.0
2	JS	2	U	2.0
2	Jw	7	U	2.0
1	FR	25	ALA	2.0
1	Fl	201	ASP	2.0
1	JC	100	ALA	2.0
1	JW	90	ALA	2.0
1	J5	92	ASP	2.0
1	AW	175	GLU	2.0
1	BK	62	GLU	2.0
1	DA	62	GLU	2.0
1	DB	175	GLU	2.0
1	DG	175	GLU	2.0
1	De	62	GLU	2.0
1	Dz	175	GLU	2.0
1	EZ	175	GLU	2.0
1	Ee	175	GLU	2.0
1	Ej	157	GLU	2.0
1	FW	175	GLU	2.0
1	Fe	121	GLU	2.0
1	Fy	175	GLU	2.0
1	IF	62	GLU	2.0
1	AC	28	LYS	2.0
1	FH	28	LYS	2.0
1	Fo	93	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
1	Hg	173	LYS	2.0
1	JK	227	TYR	2.0
1	Jt	227	TYR	2.0
1	Jy	213	LYS	2.0
1	J4	199	LYS	2.0
1	DC	50	MET	2.0
1	EL	50	MET	2.0
1	GV	50	MET	2.0
1	Hk	50	MET	2.0
1	BM	34	SER	2.0
1	C1	238	SER	2.0
1	Dv	236	SER	2.0
1	Dz	52	GLN	2.0
1	FC	166	SER	2.0
1	GK	97	SER	2.0
1	GP	238	SER	2.0
1	Ga	216	VAL	2.0
1	Ge	99	SER	2.0
1	Gq	108	SER	2.0
1	HP	238	SER	2.0
1	Hj	54	GLN	2.0
1	Hk	71	SER	2.0
1	H1	61	HIS	2.0
1	H4	236	SER	2.0
1	IC	236	SER	2.0
1	Ij	238	SER	2.0
1	Ik	204	VAL	2.0
1	Il	212	SER	2.0
1	Iv	236	SER	2.0
1	JC	57	GLN	2.0
1	JL	217	VAL	2.0
1	Ja	216	VAL	2.0
1	Jt	192	SER	2.0
1	Ju	87	SER	2.0
1	J4	97	SER	2.0
1	Fg	140	PRO	2.0
1	Gf	172	PRO	2.0
1	HP	180	PRO	2.0
1	Hf	140	PRO	2.0
1	Il	84	PRO	2.0
1	Fg	159	LEU	2.0
1	Fj	136	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
1	Fk	165	LEU	2.0
1	Fy	222	LEU	2.0
1	Gy	223	LEU	2.0
1	Hy	103	LEU	2.0
2	FS	12	A	2.0
1	AV	177	ARG	2.0
1	At	141	ASN	2.0
1	By	179	ASN	2.0
1	CW	47	ARG	2.0
1	Ck	179	ASN	2.0
1	DF	177	ARG	2.0
1	DM	179	ASN	2.0
1	EW	179	ASN	2.0
1	FM	104	ARG	2.0
1	Fg	184	ARG	2.0
1	GH	22	ARG	2.0
1	Gl	177	ARG	2.0
1	Gl	184	ARG	2.0
1	Gq	24	ARG	2.0
1	HC	184	ARG	2.0
1	Iq	184	ARG	2.0
1	JH	47	ARG	2.0
1	Jg	171	ARG	2.0
1	Jz	116	ARG	2.0
1	By	178	GLY	2.0
1	DQ	178	GLY	2.0
1	Fl	200	GLY	2.0
1	GK	120	PHE	2.0
1	Gy	55	GLY	2.0
1	Hk	120	PHE	2.0
1	IB	191	PHE	2.0
1	Io	107	GLY	2.0
1	I1	53	GLY	2.0
1	JH	200	GLY	2.0
1	J1	27	GLY	2.0
1	J5	178	GLY	2.0
1	Fb	237	ILE	2.0
1	Fy	174	ILE	2.0
1	Fz	237	ILE	2.0
1	Gy	186	ILE	2.0
1	Ij	186	ILE	2.0
1	J4	82	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
1	J5	186	ILE	2.0
1	Av	229	ALA	2.0
1	Bb	25	ALA	2.0
1	ER	176	THR	2.0
1	Hj	90	ALA	2.0
1	Il	188	ALA	2.0
1	JQ	229	ALA	2.0
1	FR	198	ASP	2.0
1	Hv	121	GLU	2.0
1	H5	173	LYS	2.0
1	IM	175	GLU	2.0
1	I4	63	GLU	2.0
1	I6	93	LYS	2.0
1	JF	58	LYS	2.0
1	JH	182	GLU	2.0
1	JK	197	GLU	2.0
1	JU	198	ASP	2.0
1	Jz	182	GLU	2.0
1	J4	182	GLU	2.0
2	BD	17	U	2.0
2	C2	8	U	2.0
2	DI	10	U	2.0
2	HI	9	U	2.0
2	H7	11	U	2.0
2	II	7	U	2.0
2	IN	5	U	2.0
2	IX	13	U	2.0
2	J7	9	U	2.0
2	J7	11	U	2.0
1	Fa	168	LYS	2.0
1	Ao	115	TRP	2.0
1	Gq	50	MET	2.0
1	Hf	115	TRP	2.0
1	IC	50	MET	2.0
1	IG	122	TRP	2.0
1	GL	142	TYR	2.0
1	HA	96	TYR	2.0
1	Cg	217	VAL	2.0
1	JB	204	VAL	2.0
1	Jy	217	VAL	2.0

5.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
3	CA	Jt	301	1/1	0.64	0.23	154,154,154,154	0
3	CA	Hy	301	1/1	0.65	0.21	138,138,138,138	0
3	CA	I4	301	1/1	0.66	0.26	147,147,147,147	0
3	CA	If	301	1/1	0.73	0.19	124,124,124,124	0
3	CA	Ij	301	1/1	0.78	0.15	130,130,130,130	0
3	CA	JL	301	1/1	0.79	0.11	141,141,141,141	0
3	CA	Ce	301	1/1	0.80	0.30	113,113,113,113	0
3	CA	Eo	301	1/1	0.82	0.19	105,105,105,105	0
3	CA	C4	301	1/1	0.83	0.20	127,127,127,127	0
3	CA	Ge	301	1/1	0.83	0.28	121,121,121,121	0
3	CA	JP	301	1/1	0.84	0.29	143,143,143,143	0
3	CA	G1	301	1/1	0.85	0.14	103,103,103,103	0
3	CA	IF	301	1/1	0.85	0.14	111,111,111,111	0
3	CA	IR	301	1/1	0.86	0.18	119,119,119,119	0
3	CA	J4	301	1/1	0.86	0.10	110,110,110,110	0
3	CA	Fe	301	1/1	0.87	0.17	123,123,123,123	0
3	CA	G4	301	1/1	0.87	0.09	109,109,109,109	0
3	CA	F1	301	1/1	0.88	0.13	102,102,102,102	0
3	CA	I1	301	1/1	0.88	0.21	117,117,117,117	0
3	CA	EF	301	1/1	0.88	0.26	112,112,112,112	0
3	CA	JA	301	1/1	0.88	0.20	109,109,109,109	0
3	CA	Je	301	1/1	0.89	0.25	112,112,112,112	0
3	CA	Gt	301	1/1	0.89	0.09	92,92,92,92	0
3	CA	JU	301	1/1	0.89	0.14	100,100,100,100	0
3	CA	Ht	301	1/1	0.90	0.11	88,88,88,88	0
3	CA	Et	301	1/1	0.90	0.12	71,71,71,71	0
3	CA	JF	301	1/1	0.90	0.12	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	CA	H4	301	1/1	0.90	0.19	115,115,115,115	0
3	CA	Gj	301	1/1	0.90	0.20	126,126,126,126	0
3	CA	B5	301	1/1	0.90	0.17	95,95,95,95	0
3	CA	CU	301	1/1	0.90	0.11	96,96,96,96	0
3	CA	F4	301	1/1	0.90	0.12	95,95,95,95	0
3	CA	Ho	301	1/1	0.90	0.16	95,95,95,95	0
3	CA	Fk	301	1/1	0.91	0.13	96,96,96,96	0
3	CA	Do	301	1/1	0.91	0.14	87,87,87,87	0
3	CA	Ao	301	1/1	0.91	0.14	93,93,93,93	0
3	CA	IZ	301	1/1	0.91	0.18	94,94,94,94	0
3	CA	HZ	301	1/1	0.91	0.14	88,88,88,88	0
3	CA	JZ	301	1/1	0.91	0.16	109,109,109,109	0
3	CA	GF	301	1/1	0.91	0.21	105,105,105,105	0
3	CA	FA	301	1/1	0.91	0.15	94,94,94,94	0
3	CA	EU	301	1/1	0.91	0.18	109,109,109,109	0
3	CA	GA	301	1/1	0.92	0.12	90,90,90,90	0
3	CA	IK	301	1/1	0.92	0.16	105,105,105,105	0
3	CA	EC	301	1/1	0.92	0.17	90,90,90,90	0
3	CA	GP	301	1/1	0.92	0.10	91,91,91,91	0
3	CA	By	301	1/1	0.92	0.14	90,90,90,90	0
3	CA	AP	301	1/1	0.92	0.10	81,81,81,81	0
3	CA	Ee	301	1/1	0.92	0.13	102,102,102,102	0
3	CA	Af	301	1/1	0.92	0.17	105,105,105,105	0
3	CA	AF	301	1/1	0.92	0.16	92,92,92,92	0
3	CA	HK	301	1/1	0.92	0.14	88,88,88,88	0
3	CA	A4	301	1/1	0.92	0.14	81,81,81,81	0
3	CA	Hj	301	1/1	0.92	0.07	104,104,104,104	0
3	CA	DK	301	1/1	0.92	0.17	101,101,101,101	0
3	CA	DP	301	1/1	0.92	0.09	67,67,67,67	0
3	CA	DU	301	1/1	0.92	0.27	113,113,113,113	0
3	CA	Bk	301	1/1	0.92	0.12	90,90,90,90	0
3	CA	Jy	301	1/1	0.92	0.13	123,123,123,123	0
3	CA	IA	301	1/1	0.92	0.18	115,115,115,115	0
3	CA	Io	301	1/1	0.93	0.10	85,85,85,85	0
3	CA	EK	301	1/1	0.93	0.09	89,89,89,89	0
3	CA	Co	301	1/1	0.93	0.15	86,86,86,86	0
3	CA	Bo	301	1/1	0.93	0.11	74,74,74,74	0
3	CA	GZ	301	1/1	0.93	0.17	104,104,104,104	0
3	CA	DF	301	1/1	0.93	0.15	94,94,94,94	0
3	CA	Bt	301	1/1	0.93	0.08	90,90,90,90	0
3	CA	BB	301	1/1	0.93	0.21	114,114,114,114	0
3	CA	BF	301	1/1	0.93	0.12	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	CA	CP	301	1/1	0.93	0.14	71,71,71,71	0
3	CA	Jo	301	1/1	0.93	0.14	105,105,105,105	0
3	CA	BU	301	1/1	0.93	0.12	110,110,110,110	0
3	CA	AL	301	1/1	0.93	0.20	85,85,85,85	0
3	CA	Hg	301	1/1	0.93	0.09	102,102,102,102	0
3	CA	Df	301	1/1	0.94	0.06	74,74,74,74	0
3	CA	Cj	301	1/1	0.94	0.13	87,87,87,87	0
3	CA	CG	301	1/1	0.94	0.12	79,79,79,79	0
3	CA	CK	301	1/1	0.94	0.10	105,105,105,105	0
3	CA	AU	301	1/1	0.94	0.16	102,102,102,102	0
3	CA	HA	301	1/1	0.94	0.11	93,93,93,93	0
3	CA	HF	301	1/1	0.94	0.12	101,101,101,101	0
3	CA	AA	301	1/1	0.94	0.12	75,75,75,75	0
3	CA	CZ	301	1/1	0.94	0.12	84,84,84,84	0
3	CA	BK	301	1/1	0.94	0.21	96,96,96,96	0
3	CA	GU	301	1/1	0.94	0.13	84,84,84,84	0
3	CA	DZ	301	1/1	0.94	0.11	68,68,68,68	0
3	CA	Ft	301	1/1	0.95	0.10	88,88,88,88	0
3	CA	BZ	301	1/1	0.95	0.21	97,97,97,97	0
3	CA	It	301	1/1	0.95	0.06	102,102,102,102	0
3	CA	Be	301	1/1	0.95	0.07	53,53,53,53	0
3	CA	Dt	301	1/1	0.95	0.07	76,76,76,76	0
3	CA	Dy	301	1/1	0.95	0.13	65,65,65,65	0
3	CA	GK	301	1/1	0.95	0.08	97,97,97,97	0
3	CA	Ey	301	1/1	0.95	0.23	95,95,95,95	0
3	CA	E4	301	1/1	0.95	0.26	98,98,98,98	0
3	CA	BQ	301	1/1	0.95	0.13	93,93,93,93	0
3	CA	FF	301	1/1	0.95	0.15	100,100,100,100	0
3	CA	FK	301	1/1	0.95	0.11	91,91,91,91	0
3	CA	Jj	301	1/1	0.95	0.10	74,74,74,74	0
3	CA	FU	301	1/1	0.95	0.12	91,91,91,91	0
3	CA	Cy	301	1/1	0.95	0.12	78,78,78,78	0
3	CA	At	301	1/1	0.95	0.16	99,99,99,99	0
3	CA	Fo	301	1/1	0.95	0.07	96,96,96,96	0
3	CA	IU	301	1/1	0.96	0.13	88,88,88,88	0
3	CA	A1	301	1/1	0.96	0.14	106,106,106,106	0
3	CA	EP	301	1/1	0.96	0.19	84,84,84,84	0
3	CA	AZ	301	1/1	0.96	0.20	82,82,82,82	0
3	CA	EZ	301	1/1	0.96	0.15	88,88,88,88	0
3	CA	Ct	301	1/1	0.96	0.14	79,79,79,79	0
3	CA	Ek	301	1/1	0.96	0.09	74,74,74,74	0
3	CA	HU	301	1/1	0.96	0.13	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	CA	CA	301	1/1	0.96	0.10	93,93,93,93	0
3	CA	Go	301	1/1	0.96	0.12	102,102,102,102	0
3	CA	FZ	301	1/1	0.97	0.10	106,106,106,106	0
3	CA	Aj	301	1/1	0.97	0.12	70,70,70,70	0
3	CA	DA	301	1/1	0.97	0.08	67,67,67,67	0
3	CA	Dj	301	1/1	0.97	0.10	86,86,86,86	0
3	CA	FP	301	1/1	0.97	0.10	80,80,80,80	0
3	CA	D4	301	1/1	0.97	0.14	77,77,77,77	0
3	CA	HP	301	1/1	0.98	0.15	81,81,81,81	0

5.5 Other polymers [i](#)

There are no such residues in this entry.