



Full wwPDB EM Validation Report ⓘ

Mar 22, 2026 – 08:51 PM UTC

PDB ID : 5A1U / pdb_00005a1u
EMDB ID : EMD-2985
Title : The structure of the COPI coat triad
Authors : Dodonova, S.O.; Diestelkoetter-Bachert, P.; von Appen, A.; Hagen, W.J.H.; Beck, R.; Beck, M.; Wieland, F.; Briggs, J.A.G.
Deposited on : 2015-05-06
Resolution : 13.00 Å(reported)

This is a Full wwPDB EM 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/EMValidationReportHelp>
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:

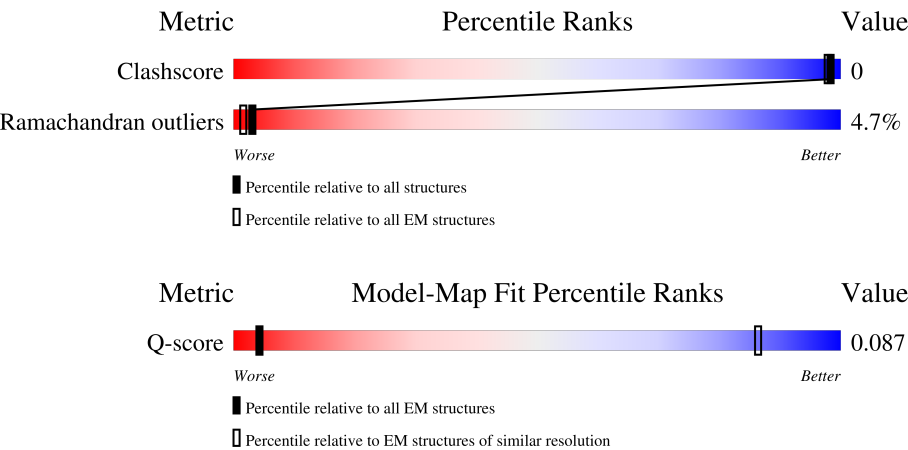
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 13.00 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)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	65 (12.50 - 13.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	181	86% 12%
1	B	181	36% 86% 12%
2	C	1262	11% 33% 31% 36%
3	D	905	44% 43% 11%
4	E	874	6% 47% 46% 6%

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Mol	Chain	Length	Quality of chain
5	F	177	5%37%40%21%
6	G	968	5%40%41%16%
7	H	511	15%12%74%

2 Entry composition

There are 7 unique types of molecules in this entry. The entry contains 15372 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 ADP-RIBOSYLATION FACTOR 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	A	159	Total	C	N	O	0	0
			636	318	159	159		
1	B	159	Total	C	N	O	0	0
			636	318	159	159		

- Molecule 2 is a protein called COATOMER SUBUNIT ALPHA.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	C	813	Total	C	N	O	0	0
			3251	1626	813	812		

There are 38 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	1225	LEU	-	expression tag	UNP Q8CIE6
C	1226	GLU	-	expression tag	UNP Q8CIE6
C	1227	VAL	-	expression tag	UNP Q8CIE6
C	1228	LEU	-	expression tag	UNP Q8CIE6
C	1229	PHE	-	expression tag	UNP Q8CIE6
C	1230	GLN	-	expression tag	UNP Q8CIE6
C	1231	GLY	-	expression tag	UNP Q8CIE6
C	1232	PRO	-	expression tag	UNP Q8CIE6
C	1233	SER	-	expression tag	UNP Q8CIE6
C	1234	ALA	-	expression tag	UNP Q8CIE6
C	1235	TRP	-	expression tag	UNP Q8CIE6
C	1236	SER	-	expression tag	UNP Q8CIE6
C	1237	HIS	-	expression tag	UNP Q8CIE6
C	1238	PRO	-	expression tag	UNP Q8CIE6
C	1239	GLN	-	expression tag	UNP Q8CIE6
C	1240	PHE	-	expression tag	UNP Q8CIE6
C	1241	GLU	-	expression tag	UNP Q8CIE6
C	1242	LYS	-	expression tag	UNP Q8CIE6
C	1243	GLY	-	expression tag	UNP Q8CIE6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1244	GLY	-	expression tag	UNP Q8CIE6
C	1245	GLY	-	expression tag	UNP Q8CIE6
C	1246	SER	-	expression tag	UNP Q8CIE6
C	1247	GLY	-	expression tag	UNP Q8CIE6
C	1248	GLY	-	expression tag	UNP Q8CIE6
C	1249	GLY	-	expression tag	UNP Q8CIE6
C	1250	SER	-	expression tag	UNP Q8CIE6
C	1251	GLY	-	expression tag	UNP Q8CIE6
C	1252	GLY	-	expression tag	UNP Q8CIE6
C	1253	SER	-	expression tag	UNP Q8CIE6
C	1254	ALA	-	expression tag	UNP Q8CIE6
C	1255	TRP	-	expression tag	UNP Q8CIE6
C	1256	SER	-	expression tag	UNP Q8CIE6
C	1257	HIS	-	expression tag	UNP Q8CIE6
C	1258	PRO	-	expression tag	UNP Q8CIE6
C	1259	GLN	-	expression tag	UNP Q8CIE6
C	1260	PHE	-	expression tag	UNP Q8CIE6
C	1261	GLU	-	expression tag	UNP Q8CIE6
C	1262	LYS	-	expression tag	UNP Q8CIE6

- Molecule 3 is a protein called COATOMER SUBUNIT BETA'.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	D	803	Total	C	N	O	0	0
			3211	1606	803	802		

- Molecule 4 is a protein called COATOMER SUBUNIT GAMMA-1.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	E	824	Total	C	N	O	0	0
			3294	1648	824	822		

- Molecule 5 is a protein called COATOMER SUBUNIT ZETA-1.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	F	139	Total	C	N	O	0	0
			555	278	139	138		

- Molecule 6 is a protein called COATOMER SUBUNIT BETA.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	G	813	Total	C	N	O	0	0
			3250	1626	813	811		

There are 15 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
G	-14	MET	-	expression tag	UNP Q9JIF7
G	-13	HIS	-	expression tag	UNP Q9JIF7
G	-12	HIS	-	expression tag	UNP Q9JIF7
G	-11	HIS	-	expression tag	UNP Q9JIF7
G	-10	HIS	-	expression tag	UNP Q9JIF7
G	-9	HIS	-	expression tag	UNP Q9JIF7
G	-8	HIS	-	expression tag	UNP Q9JIF7
G	-7	GLU	-	expression tag	UNP Q9JIF7
G	-6	ASN	-	expression tag	UNP Q9JIF7
G	-5	LEU	-	expression tag	UNP Q9JIF7
G	-4	TYR	-	expression tag	UNP Q9JIF7
G	-3	PHE	-	expression tag	UNP Q9JIF7
G	-2	GLN	-	expression tag	UNP Q9JIF7
G	-1	GLY	-	expression tag	UNP Q9JIF7
G	0	HIS	-	expression tag	UNP Q9JIF7

- Molecule 7 is a protein called COATOMER SUBUNIT DELTA.

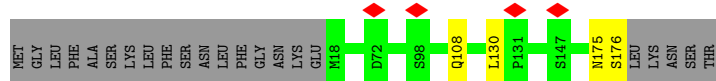
Mol	Chain	Residues	Atoms				AltConf	Trace
7	H	135	Total	C	N	O	0	0
			539	270	135	134		

3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

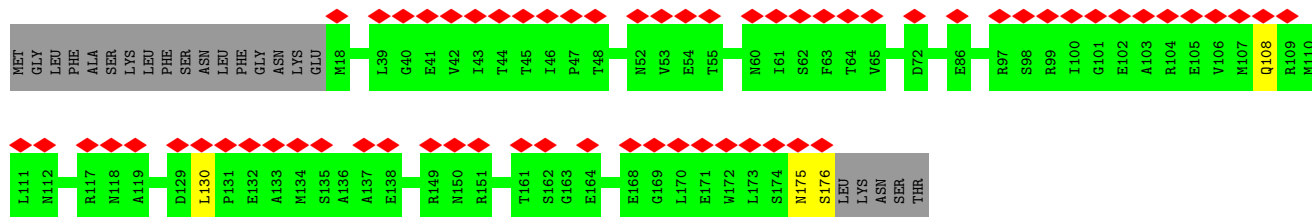
• Molecule 1: ADP-RIBOSYLATION FACTOR 1

Chain A: 

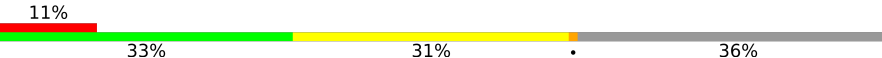


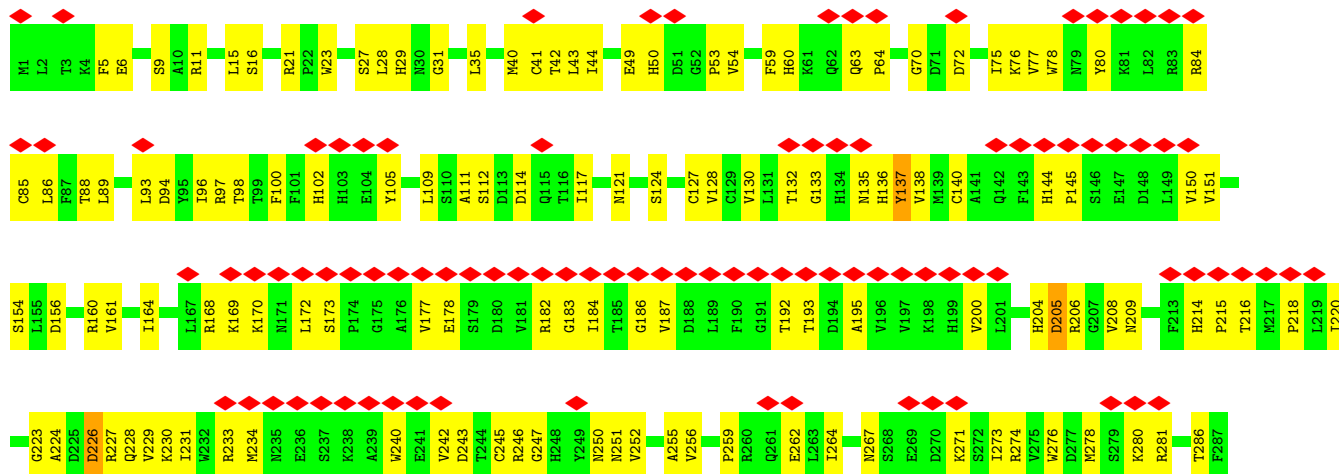
• Molecule 1: ADP-RIBOSYLATION FACTOR 1

Chain B: 



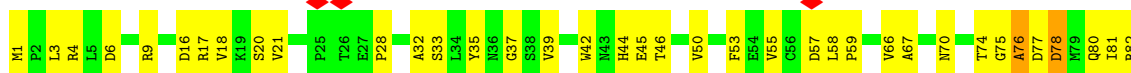
• Molecule 2: COATOMER SUBUNIT ALPHA

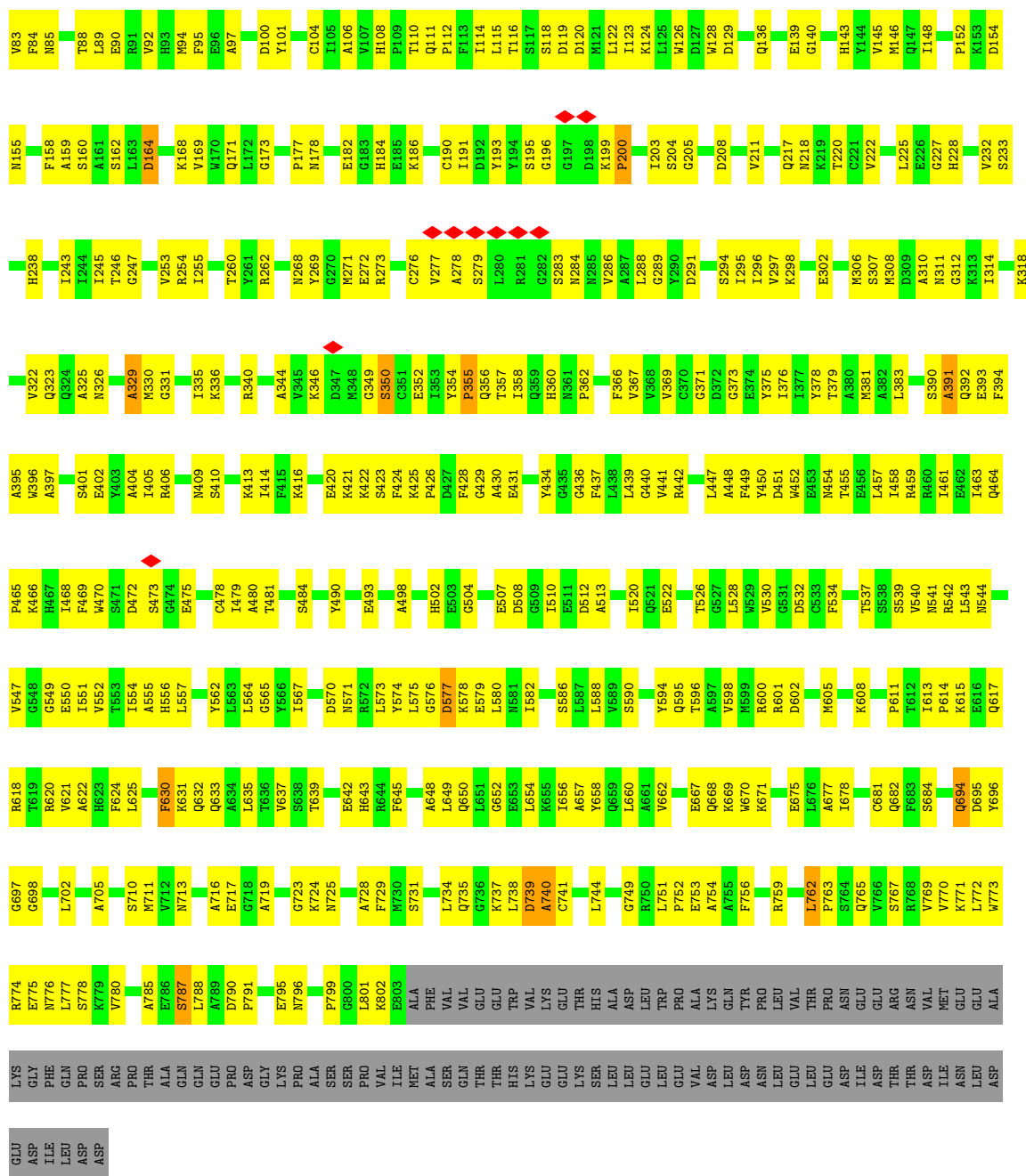
Chain C: 





Frequency	Percentage
Often	44%
Sometimes	43%
Rarely	11%









● Molecule 7: COATOMER SUBUNIT DELTA



M1	V2	L3	A6	T10	K11	A15	S18	R19	Q20	F21	V22	R28	I29	E30	G31	M41	K44	Q45	H46	T47	F48	V49	Y56	V57	Y58	M61	E62	K63	L64	M66	V67	L68	I69	T70	T71	K72	N75	I76	L77	E78	L83	F86	S87	R88	V89	I90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
P91	E92	Y93	C94	R95	E98	E101	I102	S103	D108	L109	I110	F111	A112	F113	D114	E115	V117	A118	Y121	L127	R131	T132	E135	MET	ASP	SER	HIS	GLU	GLU	LYS	VAL	PHE	ARG	ALA	VAL	ARG	GLU	THR	GLN	GLU	ARG	GLU	ALA	ALA	GLU	MET	ARG	ARG	LYS	ALA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
LYS	GLU	LEU	LYS	GLN	ALA	LYS	LYS	ALA	GLU	GLU	GLY	LYS	VAL	ASP	LYS	PHE	GLY	PHE	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY

4 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	POINT, C3	Depositor
Number of tilted images used	13186	Depositor
Resolution determination method	Not provided	
CTF correction method	PHASE FLIPPING OF INDIVIDUAL TILTS	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	45	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	42000	Depositor
Image detector	GATAN MULTISCAN	Depositor
Maximum voxel value	8.795	Depositor
Minimum voxel value	-4.604	Depositor
Average voxel value	0.059	Depositor
Voxel value standard deviation	0.825	Depositor
Recommended contour level	2	Depositor
Tomogram size ($\text{\AA}$)	403.80002, 403.80002, 403.80002	wwPDB
Tomogram dimensions	200, 200, 200	wwPDB
Tomogram angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Grid spacing ($\text{\AA}$)	2.019, 2.019, 2.019	Depositor

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.69	0/635	1.31	3/792 (0.4%)
1	B	0.69	0/635	1.31	3/792 (0.4%)
2	C	2.64	200/3250 (6.2%)	2.89	331/4061 (8.2%)
3	D	2.71	223/3210 (6.9%)	2.89	341/4011 (8.5%)
4	E	2.63	197/3292 (6.0%)	3.05	399/4112 (9.7%)
5	F	2.72	41/554 (7.4%)	2.99	72/691 (10.4%)
6	G	2.57	178/3248 (5.5%)	3.09	419/4057 (10.3%)
7	H	2.54	23/538 (4.3%)	3.12	65/671 (9.7%)
All	All	2.53	862/15362 (5.6%)	2.89	1633/19187 (8.5%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	C	0	4
3	D	0	2
4	E	0	4
5	F	0	1
6	G	0	14
All	All	0	25

All (862) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	330	MET	N-CA	-10.78	1.32	1.46
2	C	98	THR	CA-C	10.51	1.65	1.52
3	D	537	THR	N-CA	-10.03	1.33	1.45
4	E	198	GLY	CA-C	-9.82	1.41	1.52
3	D	378	TYR	N-CA	-9.69	1.33	1.45
4	E	536	GLU	CA-C	-9.69	1.40	1.52
5	F	116	GLU	CA-C	-9.58	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	538	ASP	CA-C	-9.55	1.48	1.53
6	G	539	ARG	C-N	9.49	1.44	1.33
4	E	645	GLU	CA-C	-9.39	1.44	1.52
2	C	130	VAL	C-N	9.36	1.45	1.33
2	C	204	HIS	N-CA	-9.31	1.34	1.46
2	C	27	SER	CA-C	-9.25	1.41	1.52
6	G	892	CYS	C-N	9.14	1.43	1.33
5	F	29	LYS	CA-C	-9.12	1.41	1.52
6	G	118	GLY	CA-C	-9.04	1.41	1.52
2	C	631	LYS	N-CA	-9.02	1.34	1.46
4	E	813	CYS	CA-C	-9.02	1.41	1.52
4	E	662	GLN	CA-C	-9.00	1.41	1.52
6	G	351	ARG	CA-C	-9.00	1.40	1.52
2	C	509	HIS	CA-C	-8.97	1.42	1.52
6	G	761	VAL	CA-C	-8.90	1.41	1.52
6	G	879	ASP	CA-C	8.82	1.64	1.52
4	E	613	PHE	N-CA	-8.79	1.35	1.46
6	G	348	VAL	CA-C	-8.76	1.41	1.52
3	D	716	ALA	CA-C	-8.74	1.41	1.52
3	D	543	LEU	CA-C	-8.68	1.42	1.52
6	G	447	HIS	CA-C	-8.65	1.41	1.52
6	G	304	ARG	CA-C	-8.65	1.42	1.52
6	G	19	GLU	N-CA	-8.64	1.38	1.46
3	D	289	GLY	CA-C	-8.59	1.46	1.52
2	C	224	ALA	CA-C	-8.58	1.42	1.52
3	D	799	PRO	C-N	8.56	1.44	1.33
6	G	857	GLN	N-CA	-8.53	1.36	1.46
2	C	455	GLU	CA-C	-8.52	1.41	1.53
3	D	695	ASP	C-N	8.50	1.45	1.33
4	E	233	ILE	CA-C	-8.50	1.42	1.52
6	G	160	TYR	N-CA	-8.46	1.35	1.46
6	G	565	ALA	N-CA	-8.44	1.36	1.46
4	E	303	LEU	CA-C	-8.44	1.41	1.52
3	D	464	GLN	N-CA	-8.44	1.34	1.45
7	H	31	GLY	C-N	8.42	1.44	1.33
3	D	466	LYS	N-CA	-8.39	1.35	1.46
2	C	223	GLY	CA-C	-8.36	1.44	1.52
3	D	111	GLN	N-CA	-8.35	1.40	1.46
3	D	645	PHE	N-CA	-8.32	1.36	1.46
3	D	598	VAL	CA-C	-8.29	1.42	1.52
3	D	298	LYS	CA-C	-8.28	1.42	1.52
2	C	621	VAL	C-N	8.23	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	25	ARG	CA-C	-8.21	1.42	1.52
6	G	374	GLU	C-N	8.21	1.44	1.33
3	D	74	THR	C-O	-8.19	1.13	1.23
6	G	329	LEU	CA-C	-8.15	1.42	1.52
6	G	148	HIS	CA-C	-8.13	1.42	1.52
4	E	455	ILE	C-N	8.12	1.44	1.33
4	E	828	LEU	CA-C	-8.12	1.43	1.52
2	C	550	LYS	CA-C	-8.11	1.42	1.52
5	F	68	VAL	CA-C	-8.11	1.42	1.52
3	D	555	ALA	CA-C	-8.11	1.43	1.52
4	E	83	THR	CA-C	-8.10	1.42	1.52
2	C	341	LEU	CA-C	8.06	1.60	1.53
2	C	154	SER	CA-C	-8.05	1.42	1.52
2	C	297	LEU	CA-C	-8.03	1.42	1.52
2	C	137	TYR	C-N	7.99	1.42	1.33
2	C	252	VAL	CA-C	-7.97	1.43	1.52
6	G	145	GLU	C-N	7.96	1.44	1.33
2	C	353	ALA	N-CA	-7.94	1.36	1.45
3	D	159	ALA	CA-C	-7.93	1.43	1.52
2	C	652	ALA	C-N	7.91	1.44	1.34
2	C	77	VAL	CA-C	-7.89	1.43	1.52
2	C	584	GLU	C-N	7.89	1.44	1.33
6	G	773	LEU	CA-C	-7.88	1.43	1.52
4	E	123	PRO	N-CA	-7.88	1.37	1.47
2	C	631	LYS	C-N	7.83	1.44	1.33
6	G	329	LEU	C-N	7.83	1.44	1.33
3	D	562	TYR	CA-C	-7.83	1.43	1.52
4	E	693	VAL	N-CA	-7.82	1.39	1.46
2	C	85	CYS	CA-C	-7.81	1.43	1.52
4	E	696	ARG	N-CA	-7.80	1.37	1.46
3	D	191	ILE	CA-C	-7.80	1.42	1.52
2	C	525	HIS	N-CA	-7.77	1.36	1.46
7	H	132	THR	CA-C	7.75	1.62	1.52
3	D	621	VAL	N-CA	-7.74	1.37	1.46
3	D	550	GLU	CA-C	-7.73	1.43	1.52
3	D	276	CYS	CA-C	-7.73	1.42	1.52
3	D	451	ASP	CA-C	-7.70	1.42	1.52
2	C	127	CYS	CA-C	-7.68	1.43	1.52
5	F	19	LEU	CA-C	-7.68	1.43	1.52
6	G	472	ILE	N-CA	-7.68	1.37	1.46
4	E	765	GLN	CA-C	-7.64	1.43	1.52
3	D	122	LEU	CA-C	-7.60	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	560	ILE	CA-C	-7.60	1.43	1.52
6	G	580	SER	CA-C	-7.60	1.43	1.52
2	C	220	ILE	CA-C	-7.59	1.43	1.52
4	E	846	LEU	CA-C	-7.58	1.43	1.52
3	D	586	SER	N-CA	-7.57	1.36	1.46
4	E	741	GLU	CA-C	-7.57	1.42	1.52
3	D	468	ILE	CA-C	-7.57	1.43	1.52
6	G	920	ALA	CA-C	-7.57	1.43	1.52
3	D	414	ILE	CA-C	-7.55	1.43	1.52
5	F	117	ASN	CA-C	-7.55	1.44	1.53
3	D	33	SER	N-CA	-7.54	1.36	1.46
6	G	433	ASN	CA-C	-7.53	1.42	1.53
4	E	99	ALA	N-CA	-7.53	1.36	1.46
5	F	12	THR	C-N	7.53	1.43	1.33
4	E	728	MET	CA-C	-7.53	1.43	1.52
4	E	542	LEU	N-CA	-7.53	1.37	1.46
2	C	505	LEU	CA-C	-7.51	1.43	1.52
4	E	124	ALA	CA-C	-7.50	1.43	1.52
3	D	296	ILE	CA-C	-7.44	1.43	1.52
3	D	310	ALA	N-CA	-7.43	1.36	1.46
3	D	16	ASP	C-N	7.42	1.44	1.33
7	H	61	MET	CA-C	-7.42	1.44	1.52
4	E	530	PHE	N-CA	-7.41	1.37	1.46
4	E	208	ARG	CA-C	-7.39	1.43	1.52
3	D	50	VAL	C-N	7.39	1.42	1.33
2	C	471	SER	C-N	7.38	1.42	1.33
2	C	172	LEU	CA-C	-7.38	1.43	1.52
3	D	295	ILE	N-CA	-7.37	1.37	1.46
4	E	602	PRO	CA-C	-7.37	1.44	1.52
3	D	567	ILE	CA-C	-7.37	1.47	1.53
3	D	366	PHE	CA-C	-7.35	1.43	1.52
3	D	126	TRP	CA-C	-7.35	1.43	1.52
7	H	93	TYR	C-N	7.35	1.44	1.33
2	C	792	ALA	CA-C	-7.33	1.43	1.52
3	D	228	HIS	CA-C	-7.32	1.43	1.52
3	D	186	LYS	C-N	7.31	1.43	1.32
3	D	772	LEU	C-N	7.31	1.43	1.33
4	E	53	TYR	C-O	-7.30	1.15	1.24
3	D	767	SER	N-CA	-7.30	1.37	1.46
3	D	595	GLN	C-N	7.29	1.43	1.33
5	F	129	VAL	CA-C	-7.28	1.44	1.52
2	C	661	ALA	CA-C	-7.28	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	508	ASP	CA-C	-7.26	1.43	1.52
4	E	638	ALA	N-CA	-7.24	1.37	1.46
2	C	782	LYS	CA-C	-7.21	1.43	1.52
3	D	3	LEU	C-N	7.19	1.43	1.33
6	G	289	ILE	CA-C	-7.19	1.43	1.52
3	D	184	HIS	CA-C	-7.19	1.44	1.52
2	C	517	LYS	CA-C	7.17	1.62	1.52
4	E	370	GLU	N-CA	-7.17	1.37	1.46
3	D	575	LEU	CA-C	-7.17	1.44	1.52
4	E	263	HIS	N-CA	-7.17	1.36	1.46
4	E	412	GLU	C-N	7.17	1.43	1.33
3	D	208	ASP	C-N	7.16	1.43	1.33
6	G	467	SER	C-N	7.16	1.43	1.33
6	G	898	ALA	C-N	7.16	1.43	1.33
6	G	510	PRO	C-N	7.15	1.43	1.33
6	G	792	LEU	N-CA	-7.15	1.36	1.46
6	G	745	ALA	N-CA	-7.14	1.37	1.46
4	E	561	ALA	CA-C	7.14	1.62	1.52
3	D	723	GLY	CA-C	-7.13	1.41	1.51
2	C	694	TYR	C-N	7.12	1.43	1.33
4	E	540	LYS	CA-C	-7.11	1.43	1.52
2	C	650	SER	N-CA	-7.11	1.37	1.46
4	E	252	PHE	N-CA	-7.11	1.38	1.46
5	F	28	ALA	N-CA	-7.10	1.37	1.46
3	D	340	ARG	CA-C	-7.10	1.43	1.52
6	G	394	PHE	CA-C	-7.10	1.45	1.52
2	C	763	ALA	CA-C	-7.09	1.43	1.52
4	E	613	PHE	CA-C	-7.09	1.43	1.52
5	F	28	ALA	CA-C	-7.09	1.43	1.52
3	D	667	GLU	N-CA	7.08	1.55	1.46
2	C	216	THR	C-N	7.06	1.41	1.33
2	C	524	ILE	CA-C	-7.05	1.44	1.52
2	C	511	ILE	N-CA	-7.04	1.38	1.46
2	C	579	TYR	CA-C	-7.04	1.44	1.52
2	C	737	LEU	CA-C	-7.04	1.43	1.52
4	E	492	VAL	CA-C	-7.02	1.43	1.52
2	C	420	TRP	C-N	7.02	1.42	1.33
4	E	731	THR	C-N	7.02	1.43	1.33
2	C	714	GLU	C-O	7.02	1.32	1.24
4	E	432	LYS	C-N	7.02	1.43	1.33
2	C	140	CYS	CA-C	-7.02	1.43	1.52
4	E	136	MET	C-N	7.01	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	132	LEU	N-CA	-7.01	1.37	1.46
2	C	531	LYS	CA-C	-7.00	1.44	1.52
6	G	117	ARG	CA-C	-7.00	1.43	1.52
4	E	559	GLU	CA-C	-6.99	1.43	1.52
2	C	259	PRO	CA-C	-6.98	1.42	1.52
2	C	748	ILE	N-CA	6.98	1.54	1.46
2	C	644	ASP	CA-C	-6.97	1.43	1.52
4	E	633	SER	C-N	-6.96	1.28	1.33
2	C	740	GLY	CA-C	-6.96	1.43	1.52
2	C	392	ASP	CA-C	-6.95	1.44	1.52
6	G	61	THR	CA-C	-6.94	1.44	1.52
2	C	495	ILE	CA-C	-6.93	1.44	1.52
6	G	767	THR	C-N	6.93	1.44	1.33
5	F	87	GLU	CA-C	-6.93	1.43	1.52
3	D	114	ILE	CA-C	-6.92	1.44	1.52
4	E	264	GLU	CA-C	-6.92	1.43	1.52
4	E	845	ARG	CA-C	-6.91	1.44	1.52
3	D	507	GLU	CA-C	-6.91	1.44	1.53
7	H	86	PHE	N-CA	-6.91	1.38	1.46
3	D	90	GLU	CA-C	-6.88	1.44	1.52
7	H	10	THR	CA-C	-6.88	1.44	1.52
3	D	694	GLN	CA-C	6.88	1.61	1.52
6	G	93	ARG	CA-C	-6.88	1.46	1.52
2	C	525	HIS	CA-C	-6.87	1.44	1.52
6	G	220	GLY	C-N	6.87	1.43	1.33
2	C	298	ALA	C-N	6.87	1.44	1.33
4	E	64	THR	CA-C	-6.85	1.44	1.52
4	E	95	MET	C-N	6.85	1.42	1.33
4	E	843	ARG	CA-C	-6.85	1.44	1.52
2	C	694	TYR	N-CA	-6.83	1.37	1.46
3	D	624	PHE	N-CA	-6.83	1.38	1.46
3	D	74	THR	N-CA	-6.82	1.37	1.45
3	D	502	HIS	CA-C	-6.79	1.44	1.53
4	E	121	ARG	C-O	-6.79	1.16	1.24
6	G	409	LEU	N-CA	-6.79	1.38	1.46
2	C	533	GLY	N-CA	-6.79	1.39	1.45
6	G	759	LEU	N-CA	-6.78	1.37	1.46
5	F	14	LYS	CA-C	-6.78	1.44	1.52
3	D	205	GLY	CA-C	-6.77	1.46	1.51
4	E	788	THR	CA-C	-6.77	1.44	1.52
2	C	410	GLY	C-N	6.76	1.42	1.33
6	G	217	GLN	CA-C	-6.76	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	499	ASP	N-CA	-6.75	1.37	1.46
2	C	464	LEU	N-CA	-6.74	1.39	1.46
3	D	769	VAL	CA-C	-6.73	1.44	1.52
6	G	518	MET	N-CA	-6.73	1.38	1.46
3	D	660	LEU	N-CA	-6.73	1.38	1.46
3	D	479	ILE	N-CA	-6.72	1.38	1.46
2	C	510	ALA	N-CA	-6.71	1.38	1.47
3	D	139	GLU	CA-C	-6.70	1.44	1.52
4	E	483	GLU	CA-C	-6.70	1.44	1.52
6	G	229	GLU	C-N	6.69	1.43	1.33
2	C	623	GLN	CA-C	-6.68	1.45	1.53
3	D	331	GLY	CA-C	-6.68	1.42	1.51
2	C	288	ARG	CA-C	-6.67	1.44	1.52
4	E	404	MET	C-N	6.67	1.42	1.33
2	C	111	ALA	C-N	6.67	1.42	1.33
2	C	226	ASP	CA-C	-6.66	1.43	1.52
2	C	723	ALA	CA-C	-6.66	1.42	1.52
3	D	288	LEU	C-N	6.65	1.39	1.33
7	H	58	TYR	N-CA	-6.65	1.38	1.46
2	C	121	ASN	CA-C	-6.65	1.44	1.52
6	G	853	ALA	C-N	6.65	1.43	1.33
3	D	83	VAL	N-CA	-6.64	1.38	1.46
4	E	337	ASN	N-CA	-6.64	1.37	1.46
3	D	749	GLY	C-N	6.63	1.40	1.33
3	D	46	THR	CA-C	-6.63	1.43	1.52
4	E	170	SER	N-CA	-6.62	1.38	1.46
6	G	196	MET	N-CA	-6.62	1.38	1.46
6	G	380	ARG	CA-C	-6.62	1.44	1.52
3	D	199	LYS	CA-C	-6.62	1.45	1.52
2	C	741	ASP	CA-C	-6.61	1.45	1.52
3	D	53	PHE	N-CA	-6.61	1.37	1.46
2	C	463	ASN	N-CA	-6.61	1.37	1.46
4	E	351	THR	CA-C	6.61	1.61	1.52
4	E	838	HIS	CA-C	-6.61	1.44	1.52
2	C	602	ALA	C-N	6.59	1.42	1.33
4	E	294	LEU	CA-C	-6.59	1.44	1.52
6	G	741	VAL	N-CA	-6.58	1.38	1.46
3	D	649	LEU	C-N	6.57	1.42	1.33
6	G	460	TRP	C-N	6.57	1.42	1.33
5	F	52	THR	N-CA	-6.57	1.38	1.46
4	E	49	THR	CA-C	-6.57	1.44	1.52
2	C	42	THR	CA-C	-6.56	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	456	ARG	CA-C	-6.56	1.44	1.52
6	G	386	THR	C-N	6.55	1.42	1.33
2	C	229	VAL	N-CA	-6.55	1.38	1.46
6	G	914	SER	CA-C	-6.55	1.44	1.52
6	G	121	LEU	CA-C	-6.53	1.44	1.52
6	G	122	ARG	N-CA	-6.53	1.38	1.46
3	D	227	GLY	CA-C	-6.53	1.42	1.51
4	E	423	SER	N-CA	-6.52	1.38	1.46
3	D	541	ASN	CA-C	-6.52	1.44	1.53
4	E	229	TYR	CA-C	-6.50	1.44	1.52
3	D	697	GLY	CA-C	-6.50	1.45	1.52
4	E	431	SER	CA-C	-6.50	1.44	1.52
3	D	404	ALA	N-CA	-6.50	1.37	1.45
3	D	297	VAL	CA-C	-6.49	1.44	1.52
5	F	89	MET	CA-C	-6.49	1.44	1.52
3	D	81	ILE	CA-C	-6.47	1.45	1.52
6	G	884	ILE	C-N	6.46	1.42	1.34
2	C	218	PRO	N-CA	-6.45	1.39	1.47
2	C	433	HIS	C-N	6.45	1.42	1.33
2	C	521	LEU	C-O	-6.45	1.16	1.24
4	E	551	LEU	N-CA	-6.44	1.37	1.46
2	C	436	LEU	N-CA	-6.44	1.38	1.45
5	F	101	LEU	CA-C	-6.44	1.44	1.52
7	H	110	ILE	N-CA	-6.44	1.38	1.46
3	D	123	ILE	N-CA	-6.43	1.38	1.46
3	D	283	SER	C-N	6.43	1.42	1.33
3	D	80	GLN	N-CA	-6.43	1.37	1.45
4	E	608	THR	C-N	6.43	1.42	1.33
3	D	116	THR	CA-C	-6.42	1.44	1.52
3	D	510	ILE	CA-C	-6.42	1.45	1.52
6	G	431	PHE	N-CA	-6.41	1.37	1.46
4	E	614	GLN	CA-C	-6.41	1.44	1.52
6	G	364	VAL	CA-C	-6.41	1.46	1.53
4	E	101	ASP	C-N	6.40	1.41	1.34
3	D	671	LYS	CA-C	-6.40	1.44	1.52
3	D	796	ASN	C-N	6.39	1.41	1.33
4	E	79	SER	CA-C	-6.39	1.45	1.52
2	C	231	ILE	CA-C	-6.39	1.45	1.52
4	E	745	GLU	CA-C	6.38	1.60	1.52
2	C	300	HIS	CA-C	-6.38	1.45	1.52
3	D	116	THR	N-CA	-6.38	1.37	1.45
3	D	76	ALA	N-CA	-6.38	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	102	HIS	CA-C	-6.36	1.44	1.52
4	E	564	GLN	N-CA	-6.33	1.38	1.46
6	G	422	GLU	CA-C	-6.33	1.44	1.52
3	D	431	GLU	C-N	6.32	1.41	1.33
6	G	509	GLY	CA-C	-6.32	1.42	1.51
2	C	614	MET	N-CA	-6.32	1.38	1.46
6	G	780	ASP	N-CA	-6.32	1.37	1.46
6	G	922	ALA	CA-C	-6.30	1.45	1.52
6	G	18	SER	CA-C	-6.30	1.44	1.52
3	D	222	VAL	N-CA	-6.29	1.39	1.46
3	D	654	LEU	CA-C	-6.29	1.44	1.52
6	G	173	ALA	N-CA	-6.28	1.37	1.46
2	C	135	ASN	C-N	6.27	1.41	1.33
2	C	374	GLU	CA-C	-6.27	1.44	1.52
4	E	301	ALA	C-N	6.27	1.42	1.34
6	G	278	ILE	CA-C	-6.27	1.45	1.52
2	C	535	TRP	C-N	6.27	1.42	1.33
3	D	114	ILE	N-CA	-6.26	1.38	1.46
4	E	60	HIS	C-N	6.26	1.41	1.33
4	E	632	SER	C-N	6.26	1.42	1.33
7	H	91	PRO	C-N	6.26	1.42	1.33
6	G	85	VAL	C-N	6.26	1.43	1.33
4	E	364	ILE	N-CA	-6.26	1.38	1.46
4	E	797	LEU	CA-C	-6.26	1.44	1.52
3	D	774	ARG	C-N	6.26	1.42	1.33
6	G	748	HIS	N-CA	-6.25	1.38	1.45
2	C	135	ASN	CA-C	-6.25	1.44	1.52
6	G	756	LEU	CA-C	-6.25	1.45	1.52
5	F	98	PHE	CA-C	-6.25	1.45	1.52
3	D	711	MET	CA-C	-6.24	1.46	1.53
3	D	104	CYS	CA-C	-6.24	1.44	1.52
4	E	480	VAL	CA-C	-6.23	1.44	1.52
6	G	907	ALA	N-CA	-6.23	1.38	1.46
4	E	378	VAL	N-CA	-6.23	1.39	1.46
2	C	723	ALA	C-N	6.23	1.41	1.33
5	F	45	GLU	N-CA	-6.22	1.39	1.46
2	C	672	ASN	CA-C	-6.22	1.44	1.52
6	G	774	GLU	CA-C	-6.22	1.45	1.52
3	D	80	GLN	CA-C	-6.21	1.45	1.52
2	C	449	GLN	C-N	6.21	1.40	1.33
2	C	124	SER	C-N	6.21	1.43	1.33
5	F	30	TYR	C-N	6.20	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	266	GLY	CA-C	-6.20	1.45	1.52
3	D	376	ILE	CA-C	-6.19	1.45	1.52
4	E	114	THR	C-N	6.19	1.39	1.33
3	D	414	ILE	N-CA	-6.19	1.39	1.46
6	G	36	LYS	CA-C	-6.18	1.44	1.52
7	H	108	ASP	CA-C	-6.18	1.45	1.52
4	E	520	ASP	CA-C	-6.17	1.46	1.53
2	C	691	GLU	CA-C	-6.17	1.44	1.52
4	E	863	GLU	CA-C	6.17	1.60	1.52
6	G	57	GLY	N-CA	6.17	1.53	1.45
6	G	255	SER	C-N	6.17	1.42	1.33
6	G	962	SER	N-CA	-6.16	1.38	1.46
6	G	903	CYS	CA-C	-6.16	1.45	1.52
2	C	286	THR	N-CA	-6.15	1.38	1.46
4	E	783	PHE	C-N	6.15	1.41	1.33
3	D	255	ILE	N-CA	-6.15	1.39	1.46
3	D	330	MET	CA-C	-6.15	1.45	1.52
4	E	280	CYS	N-CA	-6.14	1.38	1.46
2	C	378	LEU	N-CA	-6.13	1.38	1.46
6	G	535	LYS	CA-C	-6.13	1.44	1.52
3	D	520	ILE	CA-C	-6.12	1.44	1.52
3	D	542	ARG	CA-C	-6.12	1.45	1.52
6	G	403	PRO	C-N	6.12	1.41	1.34
4	E	86	ARG	C-N	6.12	1.42	1.33
4	E	841	LEU	CA-C	-6.11	1.45	1.52
2	C	274	ARG	CA-C	-6.11	1.45	1.52
3	D	391	ALA	C-N	6.11	1.42	1.33
2	C	84	ARG	N-CA	-6.10	1.38	1.45
6	G	417	ALA	CA-C	-6.10	1.44	1.52
3	D	441	VAL	C-O	6.09	1.30	1.24
6	G	575	LYS	CA-C	-6.09	1.46	1.53
3	D	622	ALA	N-CA	-6.09	1.39	1.46
2	C	784	THR	C-N	6.09	1.40	1.33
2	C	485	SER	CA-C	-6.08	1.45	1.52
2	C	605	ASN	C-N	6.07	1.41	1.33
4	E	341	ALA	CA-C	-6.07	1.44	1.52
4	E	382	ALA	CA-C	-6.05	1.45	1.52
5	F	16	ILE	CA-C	-6.05	1.45	1.52
4	E	290	SER	N-CA	-6.05	1.37	1.45
4	E	384	SER	C-N	-6.04	1.25	1.33
6	G	358	ILE	CA-C	-6.03	1.45	1.52
2	C	487	LYS	CA-C	-6.03	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	82	PRO	N-CA	-6.03	1.39	1.47
3	D	308	MET	N-CA	-6.03	1.38	1.46
2	C	183	GLY	N-CA	6.03	1.52	1.45
2	C	49	GLU	C-N	6.02	1.41	1.33
6	G	214	ASP	N-CA	-6.02	1.39	1.46
4	E	319	PRO	C-N	6.01	1.41	1.33
3	D	124	LYS	CA-C	-6.01	1.45	1.52
6	G	766	ASP	CA-C	-6.01	1.45	1.53
2	C	132	THR	CA-C	-6.00	1.45	1.52
3	D	613	ILE	CA-C	-6.00	1.46	1.52
3	D	724	LYS	N-CA	-6.00	1.38	1.46
6	G	374	GLU	CA-C	6.00	1.59	1.52
3	D	741	CYS	C-O	-6.00	1.17	1.24
2	C	701	ASP	CA-C	6.00	1.60	1.52
6	G	251	ASN	C-N	5.99	1.41	1.33
2	C	97	ARG	CA-C	-5.99	1.45	1.52
2	C	689	ILE	C-N	5.99	1.41	1.33
2	C	614	MET	C-N	5.99	1.41	1.33
4	E	278	PRO	N-CA	-5.98	1.39	1.47
3	D	440	GLY	CA-C	-5.98	1.48	1.52
4	E	228	ALA	CA-C	-5.98	1.45	1.52
4	E	163	SER	C-N	5.97	1.42	1.33
3	D	178	ASN	C-N	5.97	1.40	1.33
3	D	448	ALA	CA-C	-5.97	1.45	1.52
4	E	91	THR	C-N	5.97	1.41	1.33
5	F	133	VAL	CA-C	-5.97	1.45	1.52
7	H	98	GLU	C-N	5.97	1.41	1.33
4	E	326	ASN	CA-C	-5.96	1.45	1.52
2	C	6	GLU	N-CA	-5.96	1.38	1.46
2	C	358	ARG	C-N	5.96	1.42	1.33
3	D	397	ALA	CA-C	-5.96	1.44	1.52
4	E	825	THR	CA-C	-5.95	1.45	1.52
6	G	744	GLU	N-CA	-5.95	1.38	1.45
4	E	856	VAL	N-CA	-5.95	1.39	1.46
4	E	840	ILE	N-CA	-5.94	1.39	1.46
6	G	857	GLN	CA-C	-5.94	1.45	1.52
4	E	455	ILE	C-O	-5.93	1.17	1.24
3	D	405	ILE	N-CA	-5.93	1.39	1.46
5	F	98	PHE	N-CA	-5.93	1.39	1.46
3	D	430	ALA	CA-C	-5.92	1.45	1.52
3	D	254	ARG	CA-C	-5.91	1.45	1.52
5	F	57	SER	CA-C	-5.91	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	281	ARG	C-N	5.91	1.40	1.33
3	D	168	LYS	N-CA	-5.91	1.38	1.46
5	F	69	TYR	CA-C	5.90	1.59	1.52
2	C	735	ASN	N-CA	-5.90	1.39	1.46
4	E	50	LYS	C-N	5.90	1.41	1.33
3	D	752	PRO	CA-C	-5.89	1.43	1.52
4	E	556	PRO	CA-C	5.89	1.60	1.52
4	E	119	ASN	N-CA	5.89	1.53	1.46
4	E	665	CYS	C-N	5.89	1.42	1.33
6	G	160	TYR	C-N	5.89	1.41	1.34
2	C	561	ILE	C-N	-5.89	1.26	1.33
6	G	547	LEU	CA-C	-5.89	1.44	1.52
2	C	109	LEU	CA-C	-5.88	1.45	1.52
2	C	663	GLU	CA-C	-5.88	1.45	1.52
4	E	78	GLN	C-N	5.88	1.41	1.33
6	G	53	GLU	CA-C	-5.88	1.45	1.52
4	E	500	ALA	N-CA	-5.87	1.39	1.46
3	D	439	LEU	CA-C	-5.87	1.45	1.52
6	G	905	PHE	CA-C	-5.87	1.45	1.52
2	C	389	SER	CA-C	-5.86	1.48	1.53
4	E	213	LYS	C-N	5.86	1.41	1.33
2	C	641	PHE	CA-C	-5.85	1.45	1.52
5	F	120	GLY	CA-C	-5.85	1.45	1.52
6	G	910	LEU	CA-C	-5.84	1.45	1.52
3	D	145	VAL	CA-C	-5.84	1.47	1.53
5	F	24	ASP	C-N	5.83	1.41	1.33
3	D	108	HIS	CA-C	-5.83	1.45	1.52
6	G	199	HIS	CA-C	-5.83	1.45	1.52
3	D	262	ARG	N-CA	-5.83	1.39	1.46
7	H	103	SER	C-N	5.82	1.42	1.34
3	D	413	LYS	CA-C	-5.82	1.45	1.52
6	G	501	LYS	C-N	-5.82	1.27	1.34
6	G	140	ILE	CA-C	5.82	1.58	1.52
4	E	242	GLU	N-CA	-5.81	1.39	1.46
3	D	630	PHE	CA-C	-5.81	1.45	1.52
3	D	596	THR	C-O	-5.81	1.17	1.24
4	E	494	ALA	CA-C	-5.81	1.45	1.52
2	C	70	GLY	CA-C	-5.81	1.46	1.52
2	C	333	LEU	CA-C	-5.80	1.45	1.52
3	D	600	ARG	N-CA	-5.80	1.38	1.46
4	E	61	LEU	C-N	5.80	1.37	1.33
4	E	431	SER	C-O	-5.80	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	496	TRP	CA-C	-5.80	1.45	1.52
2	C	80	TYR	C-N	5.79	1.42	1.33
6	G	218	THR	CA-C	5.79	1.60	1.52
3	D	635	LEU	C-N	5.79	1.41	1.33
4	E	57	GLN	N-CA	-5.79	1.39	1.46
4	E	411	PHE	N-CA	-5.78	1.39	1.46
6	G	333	ASP	C-N	5.78	1.41	1.33
2	C	647	THR	CA-C	-5.78	1.45	1.52
2	C	267	ASN	CA-C	-5.77	1.45	1.52
2	C	396	ILE	CA-C	-5.77	1.47	1.52
2	C	603	LEU	C-N	5.77	1.41	1.33
3	D	55	VAL	N-CA	-5.77	1.39	1.46
4	E	610	GLN	CA-C	-5.77	1.45	1.52
6	G	537	GLU	C-N	5.76	1.37	1.33
3	D	297	VAL	C-N	5.76	1.41	1.33
3	D	371	GLY	CA-C	-5.76	1.43	1.51
3	D	362	PRO	N-CA	-5.76	1.40	1.47
5	F	26	LEU	C-N	5.75	1.41	1.33
6	G	477	THR	C-N	5.75	1.41	1.33
6	G	132	LEU	CA-C	-5.75	1.45	1.52
2	C	507	ALA	CA-C	5.75	1.60	1.52
7	H	95	ARG	CA-C	-5.75	1.48	1.53
4	E	691	SER	CA-C	-5.74	1.45	1.52
6	G	864	TRP	CA-C	-5.74	1.44	1.52
4	E	618	ALA	CA-C	-5.74	1.44	1.52
6	G	556	SER	CA-C	-5.73	1.45	1.52
4	E	765	GLN	N-CA	-5.73	1.39	1.46
6	G	936	ALA	CA-C	-5.72	1.46	1.53
2	C	64	PRO	C-N	5.72	1.40	1.33
2	C	215	PRO	CA-C	-5.72	1.44	1.52
3	D	595	GLN	N-CA	-5.72	1.39	1.46
2	C	596	GLU	N-CA	-5.71	1.39	1.46
2	C	401	ASP	CA-C	-5.71	1.45	1.52
6	G	369	ASN	CA-C	-5.71	1.45	1.52
3	D	139	GLU	C-O	-5.71	1.17	1.24
4	E	482	LEU	CA-C	-5.70	1.45	1.52
6	G	324	ASP	C-N	5.70	1.41	1.33
4	E	725	SER	C-N	5.70	1.41	1.33
3	D	448	ALA	N-CA	-5.70	1.39	1.46
3	D	737	LYS	N-CA	-5.70	1.39	1.45
6	G	324	ASP	N-CA	-5.70	1.39	1.46
6	G	540	PRO	C-O	-5.69	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	294	SER	CA-C	-5.69	1.45	1.52
2	C	672	ASN	C-O	-5.68	1.17	1.24
3	D	84	PHE	N-CA	-5.68	1.38	1.45
4	E	471	LYS	CA-C	-5.68	1.45	1.52
2	C	192	THR	C-N	5.68	1.41	1.33
2	C	23	TRP	C-N	5.68	1.41	1.33
4	E	821	GLU	CA-C	-5.68	1.45	1.52
3	D	677	ALA	C-O	-5.68	1.17	1.24
3	D	136	GLN	N-CA	-5.67	1.38	1.45
3	D	225	LEU	CA-C	-5.67	1.46	1.52
3	D	203	ILE	N-CA	-5.67	1.39	1.46
4	E	744	GLU	C-N	5.67	1.41	1.33
2	C	614	MET	CA-C	-5.66	1.45	1.52
3	D	286	VAL	C-O	-5.66	1.18	1.23
3	D	160	SER	CA-C	-5.66	1.45	1.52
6	G	838	HIS	C-N	5.65	1.41	1.33
2	C	64	PRO	CA-C	-5.65	1.44	1.52
3	D	101	TYR	N-CA	-5.65	1.38	1.45
3	D	547	VAL	N-CA	-5.65	1.39	1.46
5	F	36	PRO	C-N	5.65	1.41	1.33
3	D	312	GLY	C-N	5.65	1.41	1.33
2	C	88	THR	CA-C	-5.64	1.45	1.52
4	E	491	ALA	CA-C	-5.63	1.45	1.52
7	H	56	TYR	N-CA	-5.63	1.39	1.46
2	C	315	ILE	C-N	5.62	1.40	1.33
4	E	96	SER	C-N	5.62	1.42	1.33
4	E	672	GLN	CA-C	-5.62	1.46	1.52
6	G	839	ILE	CA-C	-5.62	1.45	1.52
6	G	843	ASP	CA-C	-5.62	1.45	1.52
3	D	756	PHE	N-CA	-5.61	1.39	1.46
4	E	537	GLN	CA-C	-5.61	1.45	1.52
6	G	849	THR	N-CA	-5.61	1.38	1.45
2	C	445	THR	N-CA	-5.61	1.39	1.46
3	D	744	LEU	CA-C	-5.60	1.45	1.52
2	C	781	GLU	CA-C	-5.60	1.45	1.52
6	G	399	ALA	N-CA	-5.60	1.39	1.46
4	E	717	PRO	CA-C	-5.60	1.44	1.52
6	G	418	ALA	CA-C	-5.60	1.45	1.52
3	D	466	LYS	CA-C	-5.59	1.45	1.52
6	G	73	THR	N-CA	5.59	1.53	1.46
2	C	230	LYS	N-CA	-5.59	1.39	1.46
2	C	40	MET	N-CA	5.59	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	245	PHE	C-N	5.58	1.40	1.33
5	F	74	ASP	N-CA	-5.58	1.40	1.46
6	G	282	ALA	N-CA	-5.58	1.39	1.46
6	G	281	ALA	C-N	5.58	1.41	1.33
4	E	255	ILE	C-N	5.57	1.41	1.33
2	C	600	LYS	C-N	5.57	1.41	1.33
2	C	251	ASN	C-O	-5.56	1.17	1.24
4	E	432	LYS	CA-C	-5.56	1.45	1.52
3	D	428	PHE	CA-C	-5.56	1.46	1.53
3	D	233	SER	CA-C	-5.56	1.45	1.52
3	D	9	ARG	CA-C	-5.55	1.46	1.53
3	D	594	TYR	CA-C	-5.55	1.45	1.52
5	F	30	TYR	CA-C	-5.55	1.45	1.52
6	G	149	SER	C-N	5.55	1.41	1.33
2	C	735	ASN	CA-C	-5.55	1.45	1.52
3	D	85	ASN	C-N	5.55	1.41	1.33
4	E	199	LEU	CA-C	-5.55	1.45	1.52
3	D	164	ASP	C-O	-5.55	1.16	1.24
4	E	761	ALA	CA-C	-5.54	1.45	1.52
2	C	529	ARG	CA-C	-5.54	1.45	1.52
6	G	80	VAL	CA-C	-5.53	1.45	1.52
4	E	437	SER	C-N	5.53	1.41	1.33
3	D	379	THR	C-N	5.53	1.41	1.33
4	E	855	GLN	CA-C	-5.53	1.46	1.52
4	E	830	LEU	CA-C	-5.53	1.46	1.52
4	E	553	VAL	C-N	5.52	1.40	1.33
3	D	437	PHE	N-CA	5.52	1.52	1.46
3	D	424	PHE	N-CA	-5.52	1.39	1.46
5	F	126	ASP	N-CA	5.52	1.53	1.46
4	E	217	LYS	CA-C	-5.51	1.45	1.52
6	G	314	HIS	C-N	5.51	1.41	1.33
3	D	253	VAL	CA-C	-5.51	1.46	1.52
3	D	675	GLU	CA-C	-5.51	1.45	1.52
4	E	829	LEU	C-N	5.51	1.41	1.33
2	C	670	ASP	N-CA	-5.50	1.39	1.46
3	D	95	PHE	CA-C	-5.50	1.45	1.52
2	C	592	ILE	CA-C	-5.50	1.46	1.52
4	E	277	LEU	N-CA	-5.50	1.41	1.46
6	G	162	ILE	C-N	5.50	1.41	1.33
2	C	86	LEU	C-N	5.50	1.40	1.33
5	F	88	LEU	CA-C	-5.49	1.45	1.52
3	D	632	GLN	CA-C	-5.49	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	474	LEU	CA-C	-5.48	1.46	1.52
4	E	733	LYS	CA-C	-5.48	1.45	1.52
4	E	649	ARG	CA-C	-5.48	1.46	1.52
4	E	810	MET	CA-C	-5.48	1.45	1.52
6	G	556	SER	C-N	5.48	1.41	1.33
6	G	277	ALA	N-CA	-5.48	1.39	1.46
2	C	111	ALA	CA-C	-5.47	1.46	1.52
2	C	441	LYS	CA-C	-5.47	1.45	1.52
3	D	200	PRO	CA-C	-5.47	1.44	1.52
4	E	546	TYR	N-CA	-5.47	1.39	1.46
2	C	318	LYS	N-CA	-5.46	1.39	1.46
4	E	83	THR	C-N	5.46	1.41	1.33
6	G	423	PHE	C-N	5.46	1.40	1.33
3	D	83	VAL	CA-C	-5.46	1.46	1.52
4	E	669	LEU	N-CA	-5.46	1.39	1.46
3	D	357	THR	C-N	5.46	1.40	1.33
6	G	947	LYS	C-N	5.46	1.42	1.34
4	E	758	VAL	N-CA	-5.46	1.40	1.46
5	F	111	LYS	N-CA	-5.46	1.39	1.46
2	C	514	CYS	CA-C	-5.46	1.46	1.52
2	C	177	VAL	CA-C	-5.45	1.44	1.52
2	C	344	LEU	C-N	5.44	1.41	1.33
2	C	35	LEU	CA-C	-5.44	1.46	1.52
7	H	87	SER	C-N	5.44	1.41	1.33
3	D	97	ALA	N-CA	-5.43	1.39	1.46
3	D	302	GLU	CA-C	-5.42	1.45	1.52
4	E	78	GLN	N-CA	-5.42	1.39	1.46
4	E	276	ASN	CA-C	5.42	1.59	1.52
6	G	41	ALA	CA-C	-5.42	1.46	1.52
6	G	97	GLU	N-CA	-5.42	1.39	1.46
2	C	480	LYS	C-N	5.41	1.40	1.33
6	G	856	ARG	CA-C	5.41	1.59	1.52
3	D	567	ILE	N-CA	-5.41	1.42	1.46
4	E	271	ALA	CA-C	5.41	1.59	1.52
6	G	949	GLN	CA-C	-5.41	1.46	1.53
2	C	164	ILE	CA-C	-5.41	1.47	1.52
2	C	41	CYS	CA-C	-5.41	1.45	1.52
2	C	465	LEU	CA-C	-5.41	1.45	1.52
3	D	459	ARG	CA-C	-5.41	1.46	1.52
4	E	801	VAL	C-N	5.40	1.41	1.33
2	C	209	ASN	N-CA	-5.40	1.39	1.46
3	D	120	ASP	C-N	5.40	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	127	GLU	C-N	5.40	1.40	1.33
3	D	4	ARG	N-CA	-5.40	1.39	1.46
3	D	605	MET	N-CA	-5.40	1.39	1.46
2	C	367	ASN	N-CA	-5.40	1.39	1.45
3	D	470	TRP	CA-C	-5.40	1.46	1.52
3	D	576	GLY	N-CA	5.40	1.53	1.45
2	C	634	TYR	N-CA	-5.39	1.40	1.46
3	D	375	TYR	CA-C	-5.39	1.46	1.52
4	E	193	GLN	N-CA	-5.39	1.39	1.46
4	E	750	GLU	CA-C	-5.39	1.46	1.52
3	D	329	ALA	CA-C	-5.39	1.45	1.52
5	F	65	LEU	CA-C	5.39	1.59	1.52
4	E	148	ILE	C-N	5.39	1.40	1.34
6	G	243	ALA	C-N	5.38	1.41	1.33
3	D	307	SER	CA-C	-5.38	1.45	1.52
7	H	83	LEU	CA-C	-5.38	1.45	1.52
6	G	842	MET	C-N	5.38	1.41	1.33
2	C	416	LEU	CA-C	-5.37	1.46	1.52
2	C	604	ILE	C-N	5.37	1.40	1.33
4	E	416	ALA	CA-C	-5.37	1.45	1.52
6	G	368	ASN	CA-C	-5.37	1.46	1.53
2	C	761	SER	N-CA	-5.37	1.40	1.46
4	E	177	TRP	CA-C	-5.37	1.45	1.52
4	E	375	PHE	CA-C	-5.37	1.45	1.52
6	G	504	GLU	CA-C	-5.36	1.45	1.52
4	E	615	GLU	C-N	5.36	1.40	1.33
6	G	902	TYR	N-CA	-5.36	1.39	1.46
6	G	886	LYS	N-CA	-5.36	1.39	1.46
5	F	142	VAL	CA-C	-5.35	1.46	1.52
2	C	245	CYS	N-CA	-5.35	1.39	1.46
3	D	279	SER	C-N	5.35	1.40	1.33
3	D	684	SER	C-N	5.35	1.41	1.33
4	E	764	ILE	CA-C	-5.35	1.46	1.52
7	H	57	VAL	CA-C	-5.35	1.46	1.52
6	G	764	THR	N-CA	-5.35	1.39	1.45
3	D	42	TRP	CA-C	-5.34	1.46	1.52
6	G	83	GLU	CA-C	-5.34	1.45	1.52
6	G	56	PRO	C-N	5.34	1.41	1.33
6	G	380	ARG	C-N	5.34	1.40	1.33
2	C	262	GLU	C-N	-5.33	1.27	1.33
3	D	778	SER	C-N	5.33	1.41	1.33
3	D	801	LEU	CA-C	-5.33	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	421	LYS	C-N	-5.33	1.26	1.33
3	D	449	PHE	CA-C	-5.33	1.46	1.52
3	D	193	TYR	CA-C	-5.32	1.46	1.52
6	G	565	ALA	CA-C	-5.32	1.46	1.52
7	H	22	VAL	N-CA	-5.32	1.40	1.46
6	G	590	ALA	N-CA	-5.32	1.39	1.46
3	D	773	TRP	N-CA	-5.32	1.39	1.46
4	E	441	GLU	N-CA	5.31	1.53	1.46
2	C	680	VAL	C-N	5.31	1.40	1.33
3	D	46	THR	N-CA	5.30	1.53	1.46
6	G	183	ASN	N-CA	5.30	1.52	1.46
4	E	327	LEU	C-O	-5.29	1.18	1.24
3	D	504	GLY	N-CA	5.29	1.53	1.45
4	E	168	LYS	CA-C	-5.29	1.46	1.52
7	H	15	ALA	CA-C	-5.29	1.46	1.52
7	H	94	CYS	CA-C	-5.29	1.45	1.52
2	C	206	ARG	CA-C	5.29	1.59	1.53
6	G	32	LYS	CA-C	-5.28	1.45	1.52
2	C	170	LYS	CA-C	-5.28	1.46	1.52
6	G	831	CYS	CA-C	5.28	1.58	1.52
2	C	379	LEU	C-O	-5.27	1.18	1.24
6	G	939	THR	CA-C	-5.27	1.45	1.52
4	E	456	LEU	C-N	-5.27	1.27	1.33
4	E	698	LEU	C-O	-5.27	1.18	1.24
3	D	155	ASN	CA-C	5.26	1.60	1.52
3	D	472	ASP	CA-C	-5.26	1.45	1.52
6	G	887	SER	C-N	5.26	1.39	1.33
3	D	311	ASN	N-CA	5.26	1.52	1.46
3	D	458	ILE	CA-C	-5.26	1.46	1.52
4	E	790	THR	CA-C	-5.26	1.46	1.52
2	C	54	VAL	N-CA	-5.26	1.39	1.46
2	C	278	MET	C-N	5.25	1.41	1.33
2	C	419	VAL	C-O	-5.25	1.18	1.23
4	E	213	LYS	CA-C	-5.25	1.46	1.52
4	E	831	ALA	N-CA	-5.25	1.39	1.45
4	E	643	GLU	C-N	5.25	1.41	1.33
6	G	753	ASP	CA-C	-5.24	1.46	1.52
4	E	646	TYR	C-N	5.24	1.40	1.33
2	C	59	PHE	CA-C	-5.24	1.46	1.52
2	C	337	LYS	C-N	5.24	1.40	1.33
6	G	141	ARG	N-CA	-5.24	1.39	1.46
4	E	638	ALA	C-N	5.23	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	421	ILE	CA-C	-5.23	1.46	1.52
4	E	568	GLU	CA-C	5.23	1.58	1.52
5	F	79	VAL	N-CA	-5.23	1.40	1.46
2	C	589	VAL	N-CA	-5.23	1.40	1.46
2	C	580	CYS	C-N	5.22	1.40	1.33
5	F	55	THR	CA-C	-5.22	1.45	1.52
3	D	383	LEU	CA-C	-5.22	1.46	1.53
6	G	68	PRO	CA-C	-5.22	1.45	1.52
6	G	934	PRO	CA-C	-5.22	1.47	1.52
3	D	556	HIS	C-N	5.21	1.40	1.33
3	D	756	PHE	CA-C	-5.21	1.46	1.52
6	G	537	GLU	C-O	-5.21	1.17	1.24
6	G	862	PHE	C-N	5.21	1.40	1.33
4	E	47	ILE	CA-C	5.21	1.59	1.52
2	C	333	LEU	N-CA	-5.20	1.39	1.46
4	E	858	ALA	CA-C	-5.20	1.46	1.52
4	E	453	THR	C-N	5.20	1.40	1.33
6	G	393	ARG	N-CA	-5.19	1.40	1.46
6	G	758	VAL	N-CA	-5.19	1.40	1.46
6	G	465	TYR	N-CA	-5.19	1.38	1.46
6	G	497	ALA	CA-C	-5.19	1.46	1.52
6	G	535	LYS	C-O	-5.19	1.17	1.23
3	D	696	TYR	N-CA	-5.19	1.40	1.46
6	G	489	VAL	C-N	5.18	1.40	1.33
3	D	442	ARG	CA-C	-5.18	1.46	1.52
6	G	179	ASP	C-O	-5.18	1.17	1.23
2	C	385	ASN	C-N	5.17	1.41	1.33
4	E	665	CYS	CA-C	-5.17	1.46	1.52
4	E	92	ILE	CA-C	-5.17	1.46	1.52
4	E	734	ASP	N-CA	-5.17	1.39	1.45
2	C	331	ASN	C-N	5.17	1.40	1.33
2	C	397	PRO	C-N	5.17	1.40	1.33
6	G	316	ARG	C-N	5.17	1.40	1.33
2	C	16	SER	C-N	5.17	1.40	1.33
4	E	705	THR	CA-C	-5.17	1.46	1.52
2	C	250	ASN	CA-C	-5.16	1.46	1.52
4	E	657	ASP	N-CA	-5.16	1.39	1.46
3	D	556	HIS	CA-C	-5.16	1.46	1.52
4	E	436	LEU	CA-C	-5.16	1.46	1.52
2	C	186	GLY	N-CA	-5.16	1.37	1.45
3	D	649	LEU	N-CA	5.16	1.52	1.46
4	E	496	ALA	N-CA	-5.16	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	H	68	LEU	CA-C	-5.16	1.46	1.52
2	C	765	HIS	C-O	-5.15	1.17	1.24
6	G	567	ARG	CA-C	-5.15	1.46	1.52
6	G	845	ILE	CA-C	-5.15	1.46	1.52
6	G	99	ILE	C-O	-5.15	1.18	1.24
2	C	755	LYS	N-CA	-5.15	1.40	1.46
4	E	452	ALA	CA-C	-5.15	1.46	1.52
2	C	114	ASP	N-CA	-5.14	1.40	1.46
2	C	301	PRO	C-O	-5.14	1.17	1.24
3	D	42	TRP	N-CA	-5.14	1.39	1.46
3	D	528	LEU	C-N	5.14	1.40	1.33
3	D	306	MET	C-N	5.13	1.40	1.33
6	G	303	ASP	C-O	-5.13	1.19	1.24
3	D	314	ILE	CA-C	-5.13	1.46	1.52
4	E	525	ARG	N-CA	-5.12	1.40	1.46
4	E	785	LYS	C-N	5.12	1.41	1.33
4	E	712	LEU	C-N	5.12	1.39	1.33
2	C	787	ASP	C-N	5.12	1.40	1.33
5	F	130	ASP	C-N	5.12	1.39	1.33
6	G	477	THR	CA-C	-5.11	1.45	1.52
3	D	373	GLY	N-CA	-5.11	1.37	1.45
3	D	325	ALA	CA-C	-5.11	1.46	1.52
5	F	107	LYS	C-N	5.11	1.40	1.33
4	E	292	LEU	C-N	5.11	1.40	1.33
4	E	46	HIS	C-O	-5.11	1.18	1.24
6	G	251	ASN	N-CA	-5.11	1.40	1.46
4	E	560	LYS	C-N	5.11	1.40	1.33
3	D	35	TYR	N-CA	-5.10	1.39	1.46
6	G	341	LEU	C-N	5.10	1.40	1.33
3	D	211	VAL	C-N	5.10	1.40	1.33
3	D	648	ALA	C-N	5.10	1.40	1.33
2	C	144	HIS	C-N	-5.10	1.27	1.33
3	D	512	ASP	CA-C	5.10	1.58	1.52
4	E	850	ASP	CA-C	-5.10	1.45	1.52
2	C	494	VAL	C-N	5.09	1.40	1.33
3	D	787	SER	CA-C	-5.09	1.46	1.52
4	E	465	LYS	N-CA	-5.09	1.38	1.45
2	C	529	ARG	C-N	5.09	1.44	1.33
3	D	269	TYR	C-N	5.09	1.40	1.33
6	G	746	TYR	C-N	5.09	1.40	1.33
6	G	912	ALA	N-CA	-5.09	1.40	1.46
6	G	186	ASP	CA-C	-5.08	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	515	ARG	CA-C	-5.08	1.46	1.52
4	E	823	LYS	CA-C	-5.08	1.46	1.52
5	F	132	GLY	N-CA	-5.08	1.38	1.45
2	C	633	GLY	C-N	5.08	1.41	1.34
3	D	729	PHE	C-N	5.08	1.40	1.33
6	G	271	LEU	C-N	5.07	1.39	1.33
7	H	111	PHE	C-N	5.07	1.40	1.33
2	C	317	PHE	N-CA	-5.07	1.39	1.45
4	E	862	GLU	CA-C	-5.07	1.46	1.52
6	G	925	SER	C-O	-5.07	1.17	1.24
4	E	725	SER	CA-C	-5.07	1.46	1.52
4	E	451	LEU	N-CA	-5.06	1.40	1.46
2	C	572	ARG	N-CA	5.06	1.52	1.46
2	C	673	CYS	C-O	-5.06	1.18	1.24
3	D	739	ASP	C-N	5.05	1.40	1.33
4	E	452	ALA	N-CA	-5.05	1.40	1.46
2	C	345	ASP	N-CA	-5.05	1.39	1.46
3	D	479	ILE	CA-C	-5.05	1.46	1.52
4	E	103	ILE	C-N	5.05	1.40	1.34
6	G	101	VAL	CA-C	-5.04	1.46	1.53
4	E	866	VAL	C-O	-5.04	1.18	1.24
6	G	490	GLU	CA-C	-5.04	1.46	1.52
2	C	28	LEU	C-N	5.04	1.41	1.33
2	C	50	HIS	CA-C	-5.04	1.46	1.52
6	G	890	MET	CA-C	-5.04	1.46	1.52
2	C	145	PRO	C-N	5.03	1.40	1.33
6	G	241	GLU	CA-C	-5.03	1.46	1.52
3	D	478	CYS	CA-C	-5.03	1.46	1.52
4	E	57	GLN	C-N	5.03	1.40	1.33
6	G	532	PRO	N-CA	-5.03	1.42	1.46
3	D	355	PRO	CA-C	-5.03	1.45	1.52
6	G	116	ILE	N-CA	-5.03	1.40	1.46
2	C	369	SER	CA-C	-5.03	1.46	1.52
3	D	498	ALA	CA-C	-5.03	1.46	1.52
3	D	633	GLN	C-N	5.02	1.40	1.33
7	H	28	ARG	C-N	5.02	1.40	1.33
3	D	55	VAL	CA-C	-5.02	1.46	1.52
2	C	758	ALA	CA-C	-5.02	1.46	1.52
4	E	499	GLY	C-N	5.02	1.40	1.33
6	G	301	VAL	C-N	5.02	1.40	1.33
3	D	18	VAL	N-CA	-5.02	1.40	1.46
3	D	115	LEU	CA-C	-5.02	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	435	GLY	C-N	5.02	1.40	1.33
3	D	308	MET	CA-C	-5.01	1.46	1.52
2	C	349	SER	CA-C	-5.01	1.46	1.52
6	G	746	TYR	C-O	-5.01	1.17	1.23
3	D	565	GLY	CA-C	-5.01	1.46	1.51
6	G	145	GLU	N-CA	-5.01	1.39	1.46
4	E	837	GLY	N-CA	-5.01	1.37	1.45
5	F	61	LEU	C-O	-5.01	1.18	1.24
2	C	479	GLN	CA-C	-5.00	1.46	1.52
3	D	186	LYS	CA-C	-5.00	1.45	1.52
3	D	552	VAL	N-CA	-5.00	1.40	1.46
3	D	725	ASN	N-CA	-5.00	1.40	1.46
4	E	489	ALA	N-CA	5.00	1.52	1.46
4	E	652	LYS	CA-C	-5.00	1.46	1.52
4	E	809	GLY	C-N	5.00	1.41	1.33

All (1633) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	496	GLU	N-CA-C	19.04	132.11	111.36
7	H	90	ILE	CA-C-O	-14.62	108.90	118.69
4	E	302	ALA	CA-C-N	13.23	139.33	120.28
4	E	302	ALA	C-N-CA	13.23	139.33	120.28
6	G	472	ILE	N-CA-C	13.01	123.89	110.62
4	E	450	VAL	N-CA-C	12.92	123.80	110.62
4	E	206	ASN	N-CA-C	-12.76	98.67	114.75
6	G	64	ARG	N-CA-C	12.63	125.05	111.28
3	D	431	GLU	N-CA-C	-12.54	100.33	114.62
7	H	132	THR	N-CA-C	-11.86	98.35	111.28
2	C	732	HIS	CA-C-N	11.69	135.95	120.28
2	C	732	HIS	C-N-CA	11.69	135.95	120.28
4	E	203	VAL	N-CA-C	11.47	121.31	110.53
6	G	486	ILE	O-C-N	-11.34	108.18	121.10
2	C	164	ILE	N-CA-C	-11.32	102.73	111.90
3	D	642	GLU	CA-C-O	-10.95	108.81	120.42
5	F	26	LEU	N-CA-C	-10.91	99.35	111.14
2	C	54	VAL	N-CA-C	-10.55	92.35	107.75
4	E	766	LYS	CA-C-N	10.36	133.71	122.11
4	E	766	LYS	C-N-CA	10.36	133.71	122.11
3	D	461	ILE	N-CA-C	-10.27	93.69	108.48
6	G	563	LYS	CA-C-N	10.25	133.68	120.56
6	G	563	LYS	C-N-CA	10.25	133.68	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	697	THR	N-CA-C	-10.17	100.62	113.23
6	G	869	THR	N-CA-C	-10.15	92.85	109.40
4	E	756	LEU	N-CA-C	-10.14	92.87	109.40
3	D	78	ASP	CA-C-N	10.04	137.19	122.74
3	D	78	ASP	C-N-CA	10.04	137.19	122.74
4	E	542	LEU	CA-C-N	10.01	133.46	120.44
4	E	542	LEU	C-N-CA	10.01	133.46	120.44
6	G	544	GLY	CA-C-N	9.91	133.32	120.44
6	G	544	GLY	C-N-CA	9.91	133.32	120.44
4	E	429	SER	N-CA-C	9.79	122.86	111.11
6	G	873	ASN	N-CA-C	-9.78	98.07	111.56
3	D	204	SER	N-CA-C	-9.76	94.10	109.23
6	G	63	ILE	N-CA-C	9.66	120.48	110.62
4	E	503	GLU	CA-C-N	9.64	133.58	120.38
4	E	503	GLU	C-N-CA	9.64	133.58	120.38
4	E	254	PHE	N-CA-C	-9.63	93.70	109.40
4	E	465	LYS	N-CA-C	-9.61	98.70	113.89
3	D	429	GLY	N-CA-C	-9.55	99.33	112.13
3	D	286	VAL	N-CA-C	-9.51	93.40	108.81
3	D	469	PHE	N-CA-C	-9.49	94.50	109.50
3	D	573	LEU	N-CA-C	-9.49	94.31	109.59
4	E	356	SER	CA-C-N	9.49	133.46	120.46
4	E	356	SER	C-N-CA	9.49	133.46	120.46
6	G	106	ARG	N-CA-C	-9.45	100.52	112.90
4	E	736	ASP	CA-C-O	-9.44	108.75	119.32
3	D	490	TYR	N-CA-C	-9.41	93.08	108.41
2	C	395	THR	CA-C-N	9.33	126.11	120.24
2	C	395	THR	C-N-CA	9.33	126.11	120.24
3	D	642	GLU	O-C-N	9.30	132.76	122.15
4	E	746	GLY	CA-C-O	-9.28	112.66	121.38
4	E	759	THR	N-CA-C	-9.25	95.66	109.81
7	H	131	ARG	CA-C-N	9.23	132.65	120.28
7	H	131	ARG	C-N-CA	9.23	132.65	120.28
7	H	66	MET	N-CA-C	-9.23	94.21	109.07
2	C	407	ALA	CA-C-N	9.22	128.97	119.56
2	C	407	ALA	C-N-CA	9.22	128.97	119.56
4	E	411	PHE	N-CA-C	-9.18	102.20	112.57
6	G	42	LEU	CA-C-N	9.13	132.30	120.44
6	G	42	LEU	C-N-CA	9.13	132.30	120.44
6	G	170	ILE	CA-C-N	9.09	128.83	119.56
6	G	170	ILE	C-N-CA	9.09	128.83	119.56
2	C	276	TRP	CA-C-N	9.07	133.65	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	276	TRP	C-N-CA	9.07	133.65	120.95
5	F	110	GLU	N-CA-C	-9.06	96.24	108.74
6	G	560	THR	CA-C-N	9.05	132.40	120.28
6	G	560	THR	C-N-CA	9.05	132.40	120.28
6	G	507	THR	N-CA-C	-9.01	104.35	114.62
4	E	386	LEU	N-CA-C	-9.00	101.42	111.14
2	C	291	HIS	N-CA-C	-8.97	99.66	113.02
3	D	717	GLU	CA-C-N	8.96	129.93	119.98
3	D	717	GLU	C-N-CA	8.96	129.93	119.98
6	G	130	ALA	N-CA-C	-8.91	102.14	113.72
4	E	208	ARG	CA-C-N	8.90	132.01	120.44
4	E	208	ARG	C-N-CA	8.90	132.01	120.44
4	E	709	LEU	N-CA-C	-8.90	95.27	109.59
5	F	80	ILE	N-CA-C	-8.89	95.67	108.48
2	C	435	LEU	CA-C-O	8.86	129.76	120.54
1	B	108	GLN	N-CA-C	8.84	122.02	111.33
2	C	423	ARG	CA-C-N	8.84	134.65	122.19
2	C	423	ARG	C-N-CA	8.84	134.65	122.19
2	C	440	LEU	N-CA-C	-8.83	104.55	114.62
6	G	952	ALA	CA-C-N	8.81	132.09	120.28
6	G	952	ALA	C-N-CA	8.81	132.09	120.28
1	A	108	GLN	N-CA-C	8.81	121.99	111.33
4	E	426	GLU	N-CA-C	-8.81	101.36	112.90
3	D	423	SER	N-CA-C	-8.81	102.24	113.16
4	E	193	GLN	N-CA-C	8.77	120.84	111.28
6	G	451	SER	CA-C-N	8.77	131.78	120.56
6	G	451	SER	C-N-CA	8.77	131.78	120.56
2	C	649	PHE	CA-C-N	8.76	132.01	120.28
2	C	649	PHE	C-N-CA	8.76	132.01	120.28
4	E	509	ILE	N-CA-C	-8.76	102.01	110.42
6	G	410	SER	CA-C-N	8.74	132.34	120.54
6	G	410	SER	C-N-CA	8.74	132.34	120.54
7	H	116	ILE	N-CA-C	8.66	119.47	110.72
6	G	549	GLY	O-C-N	8.65	130.50	122.19
7	H	56	TYR	N-CA-C	-8.64	94.80	109.24
2	C	767	LEU	CA-C-N	8.64	133.44	120.31
2	C	767	LEU	C-N-CA	8.64	133.44	120.31
5	F	120	GLY	O-C-N	8.57	130.50	122.19
2	C	431	ARG	N-CA-C	-8.55	99.39	113.50
3	D	21	VAL	N-CA-C	-8.52	97.10	108.35
4	E	435	GLY	CA-C-N	8.51	131.68	120.28
4	E	435	GLY	C-N-CA	8.51	131.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	394	PHE	CA-C-N	8.50	128.11	118.85
6	G	394	PHE	C-N-CA	8.50	128.11	118.85
3	D	657	ALA	CA-C-N	8.49	131.48	120.44
3	D	657	ALA	C-N-CA	8.49	131.48	120.44
6	G	89	THR	CA-C-O	-8.49	112.20	119.76
6	G	78	LEU	CA-C-N	8.47	131.63	120.28
6	G	78	LEU	C-N-CA	8.47	131.63	120.28
6	G	860	ALA	CA-C-N	8.46	131.62	120.28
6	G	860	ALA	C-N-CA	8.46	131.62	120.28
6	G	818	ILE	N-CA-C	-8.44	95.89	108.46
4	E	455	ILE	O-C-N	8.43	130.05	121.87
5	F	69	TYR	CA-C-O	-8.40	112.26	121.33
6	G	79	LEU	CA-C-N	8.39	131.95	120.46
6	G	79	LEU	C-N-CA	8.39	131.95	120.46
2	C	611	VAL	CA-C-O	-8.39	111.41	120.47
6	G	376	THR	N-CA-C	-8.38	95.08	108.73
4	E	621	PRO	N-CA-C	8.37	124.54	113.57
3	D	115	LEU	N-CA-C	-8.36	96.34	109.72
2	C	15	LEU	N-CA-C	-8.35	95.88	108.99
2	C	273	ILE	N-CA-C	-8.34	96.44	108.11
5	F	69	TYR	O-C-N	8.33	132.75	123.25
6	G	100	LEU	CA-C-N	8.32	133.36	121.55
6	G	100	LEU	C-N-CA	8.32	133.36	121.55
6	G	165	ASN	CA-C-N	8.31	134.30	122.08
6	G	165	ASN	C-N-CA	8.31	134.30	122.08
3	D	104	CYS	CA-C-N	8.28	134.45	122.94
3	D	104	CYS	C-N-CA	8.28	134.45	122.94
6	G	239	PRO	CA-C-N	8.28	131.58	120.65
6	G	239	PRO	C-N-CA	8.28	131.58	120.65
6	G	352	ASN	CA-C-N	8.25	130.96	120.56
6	G	352	ASN	C-N-CA	8.25	130.96	120.56
2	C	645	GLU	CA-C-N	8.22	131.97	120.29
2	C	645	GLU	C-N-CA	8.22	131.97	120.29
2	C	743	SER	N-CA-C	-8.22	105.25	114.62
2	C	208	VAL	CA-C-N	8.21	131.95	120.29
2	C	208	VAL	C-N-CA	8.21	131.95	120.29
2	C	618	ALA	N-CA-C	-8.20	101.31	113.61
2	C	704	SER	CA-C-N	8.20	131.10	120.44
2	C	704	SER	C-N-CA	8.20	131.10	120.44
7	H	49	VAL	N-CA-C	-8.20	96.70	108.42
7	H	102	ILE	O-C-N	8.19	129.81	121.87
7	H	19	ARG	CA-C-N	8.15	134.68	123.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	H	19	ARG	C-N-CA	8.15	134.68	123.11
6	G	304	ARG	CA-C-N	8.13	131.01	120.44
6	G	304	ARG	C-N-CA	8.13	131.01	120.44
3	D	268	ASN	N-CA-C	-8.13	97.06	109.41
3	D	352	GLU	N-CA-C	-8.13	104.51	114.75
6	G	449	ILE	O-C-N	-8.10	115.42	123.19
4	E	455	ILE	CA-C-O	-8.09	112.53	120.95
4	E	324	ALA	N-CA-C	8.09	128.03	110.80
4	E	847	LEU	N-CA-C	-8.07	96.25	109.40
6	G	792	LEU	N-CA-C	-8.05	93.65	110.80
6	G	775	LEU	N-CA-C	-8.05	97.15	109.95
4	E	543	ASN	O-C-N	8.04	130.35	122.07
4	E	374	GLU	CA-C-N	8.03	131.84	120.28
4	E	374	GLU	C-N-CA	8.03	131.84	120.28
6	G	424	VAL	CA-C-N	8.02	130.86	120.44
6	G	424	VAL	C-N-CA	8.02	130.86	120.44
3	D	473	SER	N-CA-C	-8.01	104.39	114.56
3	D	578	LYS	CA-C-N	8.01	132.24	120.87
3	D	578	LYS	C-N-CA	8.01	132.24	120.87
4	E	535	LEU	CA-C-N	7.99	131.49	120.63
4	E	535	LEU	C-N-CA	7.99	131.49	120.63
2	C	526	GLU	CA-C-N	7.98	130.81	120.44
2	C	526	GLU	C-N-CA	7.98	130.81	120.44
6	G	338	LYS	O-C-N	7.95	130.68	122.09
6	G	71	ASP	N-CA-C	-7.94	97.71	109.15
3	D	441	VAL	N-CA-C	-7.93	96.71	108.45
4	E	720	VAL	N-CA-C	-7.92	104.99	112.83
2	C	723	ALA	N-CA-C	-7.91	104.51	114.56
2	C	447	LYS	CA-C-N	7.89	131.71	120.98
2	C	447	LYS	C-N-CA	7.89	131.71	120.98
6	G	66	VAL	CA-C-O	-7.88	112.27	120.71
5	F	25	ARG	CA-C-O	7.88	129.12	120.92
6	G	540	PRO	O-C-N	-7.88	112.16	121.46
3	D	556	HIS	CA-C-O	7.86	129.04	120.71
6	G	441	LYS	CA-C-N	7.86	131.59	120.28
6	G	441	LYS	C-N-CA	7.86	131.59	120.28
6	G	207	ASP	CA-C-N	7.86	130.81	120.28
6	G	207	ASP	C-N-CA	7.86	130.81	120.28
4	E	733	LYS	N-CA-C	-7.84	96.14	109.24
3	D	705	ALA	N-CA-C	-7.84	103.27	112.92
6	G	805	LYS	N-CA-C	-7.82	97.41	109.52
6	G	790	LEU	N-CA-C	-7.81	98.69	109.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	400	ALA	N-CA-C	-7.81	94.16	110.80
3	D	232	VAL	CA-C-N	7.80	131.05	120.44
3	D	232	VAL	C-N-CA	7.80	131.05	120.44
5	F	141	GLN	CA-C-N	7.78	130.37	120.56
5	F	141	GLN	C-N-CA	7.78	130.37	120.56
4	E	364	ILE	CA-C-N	7.78	130.56	120.44
4	E	364	ILE	C-N-CA	7.78	130.56	120.44
4	E	266	VAL	CA-C-N	7.77	130.35	120.56
4	E	266	VAL	C-N-CA	7.77	130.35	120.56
3	D	631	LYS	CA-C-N	7.76	130.53	120.44
3	D	631	LYS	C-N-CA	7.76	130.53	120.44
5	F	49	PHE	CA-C-O	-7.74	112.69	120.82
3	D	759	ARG	CA-C-N	7.74	130.50	120.44
3	D	759	ARG	C-N-CA	7.74	130.50	120.44
6	G	287	ASP	N-CA-C	7.73	119.71	111.28
3	D	532	ASP	N-CA-C	-7.73	103.87	113.38
2	C	138	VAL	CA-C-N	7.73	132.06	120.31
2	C	138	VAL	C-N-CA	7.73	132.06	120.31
4	E	403	THR	CA-C-N	7.72	130.63	120.28
4	E	403	THR	C-N-CA	7.72	130.63	120.28
6	G	868	VAL	N-CA-C	-7.72	97.19	108.23
4	E	530	PHE	N-CA-C	7.72	119.33	111.07
7	H	118	ALA	CA-C-N	7.71	133.09	122.07
7	H	118	ALA	C-N-CA	7.71	133.09	122.07
6	G	966	THR	CA-C-O	-7.71	113.20	121.45
3	D	110	THR	N-CA-C	-7.70	103.91	113.38
4	E	235	VAL	CA-C-N	7.70	132.01	120.31
4	E	235	VAL	C-N-CA	7.70	132.01	120.31
4	E	545	GLY	CA-C-N	7.68	130.43	120.44
4	E	545	GLY	C-N-CA	7.68	130.43	120.44
6	G	53	GLU	CA-C-N	7.68	132.03	121.05
6	G	53	GLU	C-N-CA	7.68	132.03	121.05
6	G	857	GLN	O-C-N	7.68	129.98	122.07
5	F	38	VAL	O-C-N	7.68	129.32	121.87
6	G	325	ILE	CA-C-O	7.67	128.93	120.95
4	E	678	THR	N-CA-C	-7.67	97.66	109.24
4	E	861	SER	N-CA-C	-7.67	103.82	113.02
4	E	189	ASN	N-CA-C	-7.66	98.68	110.10
6	G	857	GLN	CA-C-O	-7.66	112.77	120.82
6	G	377	ASP	N-CA-C	7.66	119.71	111.36
6	G	466	CYS	N-CA-C	7.66	120.60	111.33
3	D	20	SER	CA-C-N	7.66	134.27	122.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	20	SER	C-N-CA	7.66	134.27	122.25
6	G	387	LEU	CA-C-N	7.64	130.52	120.28
6	G	387	LEU	C-N-CA	7.64	130.52	120.28
6	G	333	ASP	CA-C-N	7.61	130.81	120.38
6	G	333	ASP	C-N-CA	7.61	130.81	120.38
4	E	647	VAL	N-CA-C	-7.61	96.64	107.75
4	E	541	ALA	N-CA-C	-7.60	103.08	111.36
5	F	46	LYS	CA-C-N	7.60	130.32	120.44
5	F	46	LYS	C-N-CA	7.60	130.32	120.44
6	G	420	VAL	CA-C-N	7.60	130.46	120.28
6	G	420	VAL	C-N-CA	7.60	130.46	120.28
6	G	350	SER	N-CA-C	-7.59	101.11	112.04
7	H	86	PHE	O-C-N	7.59	130.17	122.12
4	E	850	ASP	N-CA-C	-7.59	104.92	114.56
3	D	543	LEU	O-C-N	-7.58	114.58	123.22
2	C	72	ASP	N-CA-C	-7.58	104.01	113.18
7	H	86	PHE	CA-C-O	-7.58	112.52	120.55
6	G	837	ILE	CA-C-N	7.57	131.45	120.71
6	G	837	ILE	C-N-CA	7.57	131.45	120.71
2	C	724	GLU	O-C-N	7.56	129.86	122.07
2	C	375	ASN	N-CA-C	-7.54	106.02	114.62
4	E	147	ALA	N-CA-C	7.54	119.58	111.36
3	D	799	PRO	CA-C-N	7.53	128.28	120.00
3	D	799	PRO	C-N-CA	7.53	128.28	120.00
3	D	740	ALA	CA-C-N	7.52	130.22	120.44
3	D	740	ALA	C-N-CA	7.52	130.22	120.44
6	G	513	LYS	N-CA-C	-7.52	103.08	111.28
3	D	493	GLU	CA-C-N	7.50	130.34	120.28
3	D	493	GLU	C-N-CA	7.50	130.34	120.28
2	C	668	LEU	N-CA-C	-7.50	104.16	113.38
3	D	114	ILE	N-CA-C	-7.49	97.30	108.46
4	E	384	SER	CA-C-N	7.49	130.92	120.29
4	E	384	SER	C-N-CA	7.49	130.92	120.29
4	E	550	GLY	CA-C-N	7.48	135.83	121.54
4	E	550	GLY	C-N-CA	7.48	135.83	121.54
2	C	453	CYS	CA-C-O	-7.48	113.26	121.33
2	C	709	ILE	CA-C-N	7.47	134.22	121.14
2	C	709	ILE	C-N-CA	7.47	134.22	121.14
3	D	278	ALA	CA-C-O	-7.47	113.26	121.33
4	E	286	ALA	CA-C-N	7.47	129.17	119.84
4	E	286	ALA	C-N-CA	7.47	129.17	119.84
7	H	48	PHE	N-CA-C	-7.46	97.06	109.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	457	LEU	CA-C-N	7.46	130.11	120.56
3	D	457	LEU	C-N-CA	7.46	130.11	120.56
2	C	748	ILE	CA-C-N	7.45	130.87	120.29
2	C	748	ILE	C-N-CA	7.45	130.87	120.29
4	E	62	GLY	O-C-N	-7.45	117.84	123.35
6	G	576	LYS	N-CA-C	-7.45	103.32	113.30
4	E	460	GLY	CA-C-N	7.44	130.85	120.29
4	E	460	GLY	C-N-CA	7.44	130.85	120.29
6	G	902	TYR	N-CA-C	-7.44	105.38	114.75
2	C	264	ILE	N-CA-C	-7.43	97.77	108.48
4	E	329	LEU	N-CA-C	7.43	119.46	111.36
4	E	561	ALA	N-CA-C	7.42	119.37	111.28
3	D	129	ASP	N-CA-C	7.42	120.43	111.82
4	E	845	ARG	N-CA-C	-7.42	96.43	108.52
3	D	111	GLN	CA-C-O	-7.39	113.48	120.94
2	C	231	ILE	N-CA-C	-7.38	97.83	108.53
4	E	211	VAL	CA-C-N	7.38	130.17	120.28
4	E	211	VAL	C-N-CA	7.38	130.17	120.28
6	G	287	ASP	CA-C-N	7.37	130.03	120.44
6	G	287	ASP	C-N-CA	7.37	130.03	120.44
6	G	797	PHE	N-CA-C	-7.37	97.39	109.40
2	C	757	LEU	CA-C-N	7.36	130.15	120.28
2	C	757	LEU	C-N-CA	7.36	130.15	120.28
4	E	738	ASN	N-CA-C	-7.36	95.12	110.80
4	E	55	ILE	N-CA-C	7.35	117.44	110.53
4	E	670	ASN	CA-C-O	-7.35	112.62	120.42
3	D	684	SER	N-CA-C	7.34	118.92	111.07
3	D	744	LEU	O-C-N	7.33	129.90	122.12
5	F	67	VAL	CA-C-O	7.33	128.09	120.39
5	F	121	LEU	CA-C-N	7.32	129.95	120.44
5	F	121	LEU	C-N-CA	7.32	129.95	120.44
4	E	319	PRO	CA-C-N	7.32	130.08	120.28
4	E	319	PRO	C-N-CA	7.32	130.08	120.28
4	E	295	PHE	N-CA-C	7.31	119.25	111.28
6	G	788	SER	CA-C-O	-7.31	110.15	120.16
3	D	401	SER	CA-C-O	7.30	126.60	119.08
3	D	682	GLN	CA-C-N	7.30	130.07	120.28
3	D	682	GLN	C-N-CA	7.30	130.07	120.28
2	C	223	GLY	N-CA-C	-7.30	98.42	111.19
2	C	694	TYR	CA-C-N	7.29	130.65	120.29
2	C	694	TYR	C-N-CA	7.29	130.65	120.29
4	E	772	PHE	CA-C-O	-7.29	112.69	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	195	MET	N-CA-C	-7.29	96.16	108.26
4	E	543	ASN	CA-C-O	-7.28	113.17	120.82
2	C	98	THR	N-CA-C	-7.27	97.57	108.99
6	G	499	GLU	N-CA-C	7.26	126.26	110.80
6	G	459	LEU	CA-C-O	-7.25	112.86	120.55
4	E	330	GLU	N-CA-C	7.24	119.25	111.36
3	D	771	LYS	N-CA-C	7.24	118.82	111.07
6	G	105	TYR	N-CA-C	-7.21	103.57	112.88
6	G	496	GLU	CA-C-O	-7.21	112.78	120.42
2	C	534	ALA	CA-C-N	7.21	132.95	123.00
2	C	534	ALA	C-N-CA	7.21	132.95	123.00
6	G	561	LEU	CA-C-N	7.21	129.94	120.28
6	G	561	LEU	C-N-CA	7.21	129.94	120.28
4	E	386	LEU	CA-C-O	-7.20	113.28	120.70
2	C	571	THR	N-CA-C	-7.20	103.52	111.36
2	C	144	HIS	N-CA-C	-7.17	101.70	110.31
4	E	62	GLY	CA-C-N	7.17	129.88	120.28
4	E	62	GLY	C-N-CA	7.17	129.88	120.28
6	G	784	VAL	N-CA-C	-7.17	105.73	112.83
4	E	171	PHE	CA-C-N	7.15	129.87	120.28
4	E	171	PHE	C-N-CA	7.15	129.87	120.28
3	D	422	LYS	N-CA-C	-7.15	103.72	113.30
3	D	394	PHE	N-CA-C	-7.14	96.92	109.06
6	G	587	LEU	CA-C-O	-7.14	112.98	120.55
6	G	479	VAL	N-CA-C	7.13	117.93	110.72
6	G	586	MET	CA-C-O	-7.13	112.86	120.42
7	H	78	GLU	N-CA-C	7.13	119.05	111.28
3	D	171	GLN	CA-C-N	7.13	129.83	120.28
3	D	171	GLN	C-N-CA	7.13	129.83	120.28
2	C	296	VAL	CA-C-N	7.11	133.73	122.21
2	C	296	VAL	C-N-CA	7.11	133.73	122.21
2	C	718	LYS	CA-C-N	7.11	130.39	120.29
2	C	718	LYS	C-N-CA	7.11	130.39	120.29
3	D	656	ILE	CA-C-N	7.11	129.81	120.28
3	D	656	ILE	C-N-CA	7.11	129.81	120.28
2	C	647	THR	CA-C-N	7.11	129.80	120.28
2	C	647	THR	C-N-CA	7.11	129.80	120.28
3	D	155	ASN	CA-C-O	7.10	128.11	119.38
4	E	698	LEU	O-C-N	-7.10	114.86	121.32
3	D	326	ASN	N-CA-C	-7.10	98.80	109.94
4	E	181	ALA	CA-C-N	7.10	129.79	120.28
4	E	181	ALA	C-N-CA	7.10	129.79	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	240	SER	CA-C-N	7.08	129.77	120.28
6	G	240	SER	C-N-CA	7.08	129.77	120.28
2	C	806	THR	N-CA-C	-7.08	104.64	113.28
2	C	322	GLU	CA-C-O	-7.07	113.19	121.46
3	D	118	SER	N-CA-C	-7.07	98.61	109.14
6	G	862	PHE	CA-C-N	7.07	131.43	120.75
6	G	862	PHE	C-N-CA	7.07	131.43	120.75
2	C	482	THR	CA-C-N	7.06	132.65	120.58
2	C	482	THR	C-N-CA	7.06	132.65	120.58
4	E	632	SER	N-CA-C	-7.06	98.58	109.52
4	E	857	THR	N-CA-C	-7.06	97.89	109.40
2	C	195	ALA	N-CA-C	-7.05	103.02	111.69
5	F	38	VAL	CA-C-O	-7.05	113.62	120.95
3	D	195	SER	N-CA-C	7.04	120.43	110.50
2	C	128	VAL	N-CA-C	7.04	117.83	110.72
3	D	465	PRO	CA-C-N	7.04	132.46	120.71
3	D	465	PRO	C-N-CA	7.04	132.46	120.71
3	D	652	GLY	N-CA-C	-7.03	105.37	115.64
3	D	128	TRP	CA-C-O	7.02	127.99	120.55
2	C	173	SER	CA-C-N	7.02	128.62	119.84
2	C	173	SER	C-N-CA	7.02	128.62	119.84
3	D	66	VAL	CA-C-N	7.02	129.68	120.28
3	D	66	VAL	C-N-CA	7.02	129.68	120.28
6	G	42	LEU	O-C-N	-7.02	114.68	122.12
3	D	630	PHE	CA-C-N	7.01	130.25	120.29
3	D	630	PHE	C-N-CA	7.01	130.25	120.29
4	E	267	VAL	CA-C-N	7.00	129.54	120.44
4	E	267	VAL	C-N-CA	7.00	129.54	120.44
6	G	320	ASP	CA-C-N	6.99	129.52	120.44
6	G	320	ASP	C-N-CA	6.99	129.52	120.44
6	G	318	LEU	CA-C-N	6.98	129.64	120.28
6	G	318	LEU	C-N-CA	6.98	129.64	120.28
2	C	396	ILE	N-CA-C	6.97	122.72	112.61
4	E	131	ILE	CA-C-N	6.97	130.77	120.87
4	E	131	ILE	C-N-CA	6.97	130.77	120.87
3	D	526	THR	N-CA-C	-6.96	98.58	108.96
6	G	503	GLU	N-CA-C	-6.96	95.97	110.80
6	G	419	ASP	CA-C-O	6.96	127.93	120.55
6	G	952	ALA	CA-C-O	6.95	127.92	120.55
3	D	621	VAL	CA-C-N	6.95	129.59	120.28
3	D	621	VAL	C-N-CA	6.95	129.59	120.28
6	G	47	ILE	CA-C-O	-6.95	113.72	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	280	LYS	CA-C-O	6.95	126.47	118.55
2	C	117	ILE	N-CA-C	-6.94	98.12	108.12
4	E	663	PHE	N-CA-C	-6.94	97.09	108.41
2	C	323	ARG	CA-C-N	6.94	127.11	120.31
2	C	323	ARG	C-N-CA	6.94	127.11	120.31
4	E	609	ARG	N-CA-C	-6.93	103.73	111.28
4	E	149	VAL	CA-C-N	6.92	130.65	120.90
4	E	149	VAL	C-N-CA	6.92	130.65	120.90
6	G	150	TYR	N-CA-C	-6.90	103.69	111.14
3	D	152	PRO	N-CA-C	-6.90	106.71	114.92
4	E	348	LEU	CA-C-N	6.90	129.52	120.28
4	E	348	LEU	C-N-CA	6.90	129.52	120.28
6	G	800	ILE	O-C-N	-6.90	115.72	123.10
6	G	945	ARG	CA-C-O	6.90	128.69	121.38
4	E	605	VAL	CA-C-N	6.90	131.77	120.94
4	E	605	VAL	C-N-CA	6.90	131.77	120.94
4	E	510	LEU	CA-C-O	-6.89	113.59	120.82
7	H	90	ILE	O-C-N	-6.89	116.01	120.42
2	C	559	GLY	CA-C-O	-6.88	114.93	121.19
3	D	369	VAL	N-CA-C	-6.87	98.49	108.11
5	F	121	LEU	CA-C-O	-6.87	113.61	120.82
4	E	391	PRO	N-CA-C	6.87	126.62	112.47
4	E	775	ALA	CA-C-N	6.87	129.36	120.44
4	E	775	ALA	C-N-CA	6.87	129.36	120.44
6	G	318	LEU	N-CA-C	6.86	125.42	110.80
6	G	953	LEU	CA-C-O	-6.86	113.28	120.55
2	C	608	TYR	CA-C-N	6.85	129.35	120.44
2	C	608	TYR	C-N-CA	6.85	129.35	120.44
2	C	630	GLN	N-CA-C	-6.84	96.23	110.80
2	C	652	ALA	N-CA-C	6.83	118.73	111.28
6	G	750	ASN	CA-C-N	6.83	131.82	122.19
6	G	750	ASN	C-N-CA	6.83	131.82	122.19
6	G	497	ALA	CA-C-O	-6.82	113.19	120.42
4	E	270	ALA	N-CA-C	6.81	118.50	111.14
4	E	853	THR	N-CA-C	-6.81	98.75	109.50
4	E	285	LEU	O-C-N	-6.80	114.15	122.25
4	E	354	GLU	CA-C-N	6.80	129.28	120.44
4	E	354	GLU	C-N-CA	6.80	129.28	120.44
6	G	943	ARG	N-CA-C	-6.80	98.16	109.24
2	C	739	LEU	N-CA-C	-6.79	99.89	110.42
3	D	396	TRP	N-CA-C	-6.78	99.53	110.32
6	G	229	GLU	CA-C-N	6.78	134.49	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	229	GLU	C-N-CA	6.78	134.49	121.54
2	C	228	GLN	CA-C-O	6.78	129.39	121.46
6	G	170	ILE	CA-C-O	-6.78	110.87	119.95
6	G	540	PRO	N-CA-C	6.78	118.97	110.70
6	G	851	THR	N-CA-C	-6.78	100.19	109.95
5	F	114	LEU	CA-C-O	-6.77	113.71	120.82
6	G	558	ALA	N-CA-C	-6.77	96.39	110.80
3	D	67	ALA	CA-C-N	6.76	129.34	120.28
3	D	67	ALA	C-N-CA	6.76	129.34	120.28
4	E	258	CYS	N-CA-C	-6.76	100.22	109.95
2	C	243	ASP	N-CA-C	-6.76	98.83	109.50
2	C	770	GLU	CA-C-N	6.76	129.33	120.28
2	C	770	GLU	C-N-CA	6.76	129.33	120.28
6	G	493	ILE	CA-C-O	-6.76	113.92	120.95
4	E	497	LYS	CA-C-N	6.75	129.33	120.28
4	E	497	LYS	C-N-CA	6.75	129.33	120.28
6	G	402	ILE	CA-C-O	-6.75	114.17	118.69
3	D	613	ILE	N-CA-C	-6.74	94.33	108.88
2	C	693	CYS	O-C-N	6.73	129.36	122.09
2	C	226	ASP	N-CA-C	-6.72	96.48	110.80
4	E	447	GLU	CA-C-N	6.71	134.37	121.54
4	E	447	GLU	C-N-CA	6.71	134.37	121.54
2	C	608	TYR	N-CA-C	-6.71	105.72	114.04
6	G	581	PHE	O-C-N	-6.71	115.56	123.41
7	H	70	THR	N-CA-C	-6.71	98.87	109.07
6	G	856	ARG	CA-C-N	6.71	129.16	120.44
6	G	856	ARG	C-N-CA	6.71	129.16	120.44
3	D	695	ASP	CA-C-N	6.71	129.27	120.28
3	D	695	ASP	C-N-CA	6.71	129.27	120.28
3	D	454	ASN	CA-C-N	6.70	131.91	122.46
3	D	454	ASN	C-N-CA	6.70	131.91	122.46
6	G	329	LEU	N-CA-C	-6.70	105.01	113.72
4	E	420	CYS	O-C-N	6.69	128.96	122.07
6	G	43	LYS	CA-C-O	-6.69	113.80	120.82
4	E	713	PRO	N-CA-C	-6.69	101.41	111.57
5	F	56	ASP	CA-C-O	6.69	127.92	120.43
2	C	323	ARG	O-C-N	-6.68	113.64	121.32
3	D	1	MET	O-C-N	-6.67	112.32	123.00
7	H	77	LEU	CA-C-N	6.67	129.22	120.28
7	H	77	LEU	C-N-CA	6.67	129.22	120.28
4	E	834	PHE	CA-C-O	-6.67	113.85	121.72
2	C	172	LEU	CA-C-N	6.67	129.66	120.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	172	LEU	C-N-CA	6.67	129.66	120.39
6	G	187	ALA	CA-C-N	6.67	130.06	120.79
6	G	187	ALA	C-N-CA	6.67	130.06	120.79
4	E	112	ASP	CA-C-N	6.65	129.20	120.28
4	E	112	ASP	C-N-CA	6.65	129.20	120.28
4	E	619	ALA	CA-C-O	6.65	127.60	120.55
6	G	314	HIS	N-CA-C	-6.64	105.74	114.31
2	C	96	ILE	N-CA-C	-6.64	97.62	107.51
6	G	747	VAL	N-CA-C	-6.63	98.91	108.53
4	E	92	ILE	CA-C-O	-6.63	113.82	120.85
6	G	859	TRP	CA-C-O	6.63	127.78	120.82
2	C	94	ASP	CA-C-N	6.62	131.89	121.56
2	C	94	ASP	C-N-CA	6.62	131.89	121.56
3	D	437	PHE	CA-C-O	-6.62	114.05	121.00
7	H	72	LYS	O-C-N	-6.62	115.49	123.10
6	G	388	HIS	CA-C-N	6.62	129.81	120.28
6	G	388	HIS	C-N-CA	6.62	129.81	120.28
5	F	66	THR	N-CA-C	-6.61	99.25	109.76
2	C	255	ALA	CA-C-O	6.61	128.20	120.14
6	G	520	THR	CA-C-N	6.60	129.13	120.28
6	G	520	THR	C-N-CA	6.60	129.13	120.28
2	C	319	LEU	CA-C-N	6.59	134.07	122.67
2	C	319	LEU	C-N-CA	6.59	134.07	122.67
2	C	754	GLN	CA-C-N	6.59	129.65	120.29
2	C	754	GLN	C-N-CA	6.59	129.65	120.29
3	D	58	LEU	CA-C-N	6.59	128.08	119.84
3	D	58	LEU	C-N-CA	6.59	128.08	119.84
3	D	557	LEU	N-CA-C	-6.59	98.95	109.76
4	E	41	PRO	CA-C-N	6.59	129.01	120.44
4	E	41	PRO	C-N-CA	6.59	129.01	120.44
6	G	381	GLN	CA-C-N	6.59	129.11	120.28
6	G	381	GLN	C-N-CA	6.59	129.11	120.28
6	G	449	ILE	CA-C-O	6.59	127.15	120.96
7	H	41	ASN	CA-C-N	6.58	134.12	121.54
7	H	41	ASN	C-N-CA	6.58	134.12	121.54
4	E	608	THR	CA-C-N	6.58	129.10	120.28
4	E	608	THR	C-N-CA	6.58	129.10	120.28
3	D	158	PHE	N-CA-C	-6.58	99.16	108.96
2	C	292	ASP	CA-C-N	6.57	134.09	121.54
2	C	292	ASP	C-N-CA	6.57	134.09	121.54
7	H	114	ASP	CA-C-N	6.57	129.37	120.44
7	H	114	ASP	C-N-CA	6.57	129.37	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	298	SER	N-CA-C	6.55	122.56	113.45
2	C	136	HIS	CA-C-N	6.54	134.04	121.54
2	C	136	HIS	C-N-CA	6.54	134.04	121.54
2	C	740	GLY	N-CA-C	6.54	121.81	113.24
4	E	441	GLU	CA-C-N	6.54	134.04	121.54
4	E	441	GLU	C-N-CA	6.54	134.04	121.54
6	G	234	VAL	CA-C-O	-6.54	113.79	121.05
3	D	698	GLY	CA-C-N	6.54	129.04	120.28
3	D	698	GLY	C-N-CA	6.54	129.04	120.28
4	E	415	ARG	CA-C-N	6.54	129.04	120.28
4	E	415	ARG	C-N-CA	6.54	129.04	120.28
4	E	322	VAL	CA-C-O	-6.53	113.58	120.57
6	G	881	LEU	O-C-N	6.53	128.80	122.07
4	E	614	GLN	O-C-N	-6.53	115.20	122.12
6	G	841	ILE	CA-C-N	6.52	129.67	120.28
6	G	841	ILE	C-N-CA	6.52	129.67	120.28
6	G	924	VAL	O-C-N	6.52	130.02	123.18
3	D	785	ALA	CA-C-N	6.51	129.01	120.28
3	D	785	ALA	C-N-CA	6.51	129.01	120.28
3	D	702	LEU	O-C-N	6.51	129.12	122.09
2	C	783	GLU	CA-C-N	6.51	133.97	121.54
2	C	783	GLU	C-N-CA	6.51	133.97	121.54
4	E	840	ILE	N-CA-C	-6.51	98.75	108.12
2	C	218	PRO	N-CA-C	-6.51	103.69	114.75
3	D	402	GLU	N-CA-C	-6.50	98.01	109.06
4	E	178	VAL	CA-C-N	6.50	129.28	120.44
4	E	178	VAL	C-N-CA	6.50	129.28	120.44
4	E	191	MET	O-C-N	6.50	129.11	122.09
4	E	255	ILE	CA-C-N	6.50	133.95	121.54
4	E	255	ILE	C-N-CA	6.50	133.95	121.54
5	F	18	ILE	N-CA-C	-6.49	98.16	107.77
6	G	105	TYR	CA-C-O	6.49	127.24	119.59
3	D	578	LYS	N-CA-C	-6.48	104.06	112.23
4	E	450	VAL	CA-C-O	-6.48	114.22	120.95
7	H	57	VAL	N-CA-C	-6.48	98.30	108.86
6	G	223	LEU	CA-C-O	-6.47	113.69	120.55
6	G	435	ARG	N-CA-C	-6.47	101.84	111.81
6	G	561	LEU	N-CA-C	-6.47	104.23	111.28
6	G	479	VAL	CA-C-N	6.46	130.13	120.31
6	G	479	VAL	C-N-CA	6.46	130.13	120.31
2	C	733	TYR	CA-C-N	6.46	128.84	120.44
2	C	733	TYR	C-N-CA	6.46	128.84	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	666	THR	N-CA-C	-6.46	98.45	109.24
3	D	617	GLN	CA-C-O	-6.46	113.70	120.55
4	E	424	ILE	N-CA-C	6.45	117.20	110.62
3	D	498	ALA	N-CA-C	6.45	117.97	111.07
6	G	338	LYS	CA-C-O	-6.44	114.06	120.70
3	D	45	GLU	N-CA-C	6.44	119.26	111.40
2	C	699	ASN	CA-C-N	6.43	129.42	120.29
2	C	699	ASN	C-N-CA	6.43	129.42	120.29
4	E	248	ASP	O-C-N	-6.43	114.62	122.34
4	E	649	ARG	N-CA-C	-6.43	98.42	108.90
7	H	83	LEU	CA-C-N	6.42	129.17	120.44
7	H	83	LEU	C-N-CA	6.42	129.17	120.44
3	D	196	GLY	CA-C-O	6.42	131.74	120.57
6	G	67	LEU	N-CA-C	6.42	124.00	109.81
2	C	628	TYR	N-CA-C	-6.41	104.94	112.89
2	C	105	TYR	N-CA-C	-6.41	95.65	109.81
3	D	544	ASN	N-CA-C	-6.40	99.68	109.41
2	C	693	CYS	CA-C-N	6.40	129.50	120.28
2	C	693	CYS	C-N-CA	6.40	129.50	120.28
6	G	169	LEU	N-CA-C	-6.40	97.17	110.80
4	E	138	GLN	CA-C-N	6.40	128.85	120.28
4	E	138	GLN	C-N-CA	6.40	128.85	120.28
5	F	84	TYR	CA-C-O	6.40	126.80	119.18
2	C	187	VAL	N-CA-C	-6.39	105.45	112.80
6	G	365	ILE	CA-C-O	-6.39	113.50	121.11
5	F	133	VAL	N-CA-C	-6.39	99.03	109.12
6	G	948	SER	N-CA-C	-6.39	103.61	112.30
6	G	953	LEU	CA-C-N	6.39	128.84	120.28
6	G	953	LEU	C-N-CA	6.39	128.84	120.28
5	F	138	ASP	N-CA-C	-6.38	98.49	109.15
3	D	637	VAL	O-C-N	-6.38	115.26	121.83
6	G	37	SER	CA-C-N	6.38	129.35	120.29
6	G	37	SER	C-N-CA	6.38	129.35	120.29
3	D	55	VAL	N-CA-C	6.38	116.53	110.53
3	D	82	ARG	N-CA-C	-6.38	99.00	109.40
5	F	51	LYS	O-C-N	6.38	128.98	122.09
3	D	148	ILE	O-C-N	6.38	129.92	123.10
4	E	360	LEU	CA-C-O	-6.37	113.80	120.55
6	G	264	ALA	CA-C-N	6.37	128.82	120.28
6	G	264	ALA	C-N-CA	6.37	128.82	120.28
6	G	517	GLU	CA-C-N	6.37	128.72	120.44
6	G	517	GLU	C-N-CA	6.37	128.72	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	77	PHE	CA-C-N	6.37	128.81	120.28
4	E	77	PHE	C-N-CA	6.37	128.81	120.28
6	G	860	ALA	O-C-N	6.37	128.87	122.12
3	D	78	ASP	N-CA-C	-6.36	105.34	113.23
6	G	218	THR	N-CA-C	6.36	118.22	111.28
2	C	700	PHE	N-CA-C	-6.36	104.43	111.36
2	C	762	ALA	CA-C-N	6.36	128.80	120.28
2	C	762	ALA	C-N-CA	6.36	128.80	120.28
3	D	392	GLN	N-CA-C	-6.36	104.22	112.23
2	C	43	LEU	CA-C-N	6.36	128.63	120.88
2	C	43	LEU	C-N-CA	6.36	128.63	120.88
3	D	354	TYR	N-CA-C	-6.36	101.52	110.29
4	E	446	CYS	N-CA-C	-6.36	105.46	113.72
2	C	168	ARG	N-CA-C	-6.35	97.27	110.80
5	F	76	TYR	N-CA-C	-6.35	98.63	109.24
4	E	207	ASP	N-CA-C	-6.35	99.33	108.60
3	D	775	GLU	O-C-N	6.34	128.84	122.12
4	E	664	ASP	N-CA-C	-6.34	98.40	108.73
2	C	432	MET	N-CA-C	-6.33	103.05	113.50
6	G	819	VAL	CA-C-O	-6.33	112.98	121.02
6	G	155	ALA	N-CA-C	6.33	117.84	111.07
4	E	487	VAL	N-CA-C	6.33	117.11	110.72
2	C	497	SER	CA-C-N	6.32	133.62	121.54
2	C	497	SER	C-N-CA	6.32	133.62	121.54
4	E	810	MET	CA-C-O	-6.32	113.39	120.66
6	G	128	LYS	CA-C-O	-6.32	112.17	119.56
6	G	395	PRO	CA-C-N	6.32	128.75	120.28
6	G	395	PRO	C-N-CA	6.32	128.75	120.28
2	C	571	THR	O-C-N	6.32	129.35	122.15
2	C	766	GLY	N-CA-C	-6.32	106.18	115.72
3	D	57	ASP	N-CA-C	-6.31	104.84	113.30
4	E	428	ASN	N-CA-C	6.31	120.44	112.87
6	G	196	MET	CA-C-N	6.31	133.59	121.54
6	G	196	MET	C-N-CA	6.31	133.59	121.54
6	G	118	GLY	CA-C-N	6.30	128.72	120.28
6	G	118	GLY	C-N-CA	6.30	128.72	120.28
2	C	214	HIS	N-CA-C	-6.30	102.12	109.93
4	E	670	ASN	O-C-N	6.29	129.32	122.15
2	C	206	ARG	N-CA-C	-6.29	102.79	111.28
2	C	574	LYS	N-CA-C	-6.29	98.14	108.76
6	G	316	ARG	O-C-N	-6.29	115.82	123.30
3	D	100	ASP	N-CA-C	-6.28	99.43	108.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	137	MET	O-C-N	-6.28	115.93	120.27
4	E	682	GLU	CA-C-O	-6.28	113.72	119.62
3	D	169	VAL	N-CA-C	-6.28	99.38	108.36
4	E	455	ILE	CA-C-N	6.28	128.60	120.44
4	E	455	ILE	C-N-CA	6.28	128.60	120.44
6	G	865	GLU	CA-C-N	6.28	130.02	121.05
6	G	865	GLU	C-N-CA	6.28	130.02	121.05
2	C	677	LEU	CA-C-O	-6.27	113.78	120.42
6	G	561	LEU	O-C-N	-6.26	115.48	122.12
6	G	934	PRO	CA-C-O	-6.26	113.89	122.15
6	G	497	ALA	N-CA-C	6.25	118.17	111.36
4	E	108	SER	CA-C-O	-6.25	113.93	120.55
5	F	58	GLU	N-CA-C	-6.24	105.42	113.16
2	C	584	GLU	N-CA-C	-6.24	105.16	112.89
3	D	58	LEU	N-CA-C	-6.24	100.72	110.14
2	C	716	LEU	CA-C-N	6.23	128.63	120.28
2	C	716	LEU	C-N-CA	6.23	128.63	120.28
4	E	694	PRO	N-CA-C	6.23	120.76	111.41
3	D	271	MET	O-C-N	6.23	129.60	122.25
3	D	741	CYS	CA-C-N	6.23	128.91	120.44
3	D	741	CYS	C-N-CA	6.23	128.91	120.44
4	E	27	VAL	N-CA-C	6.22	117.01	110.72
4	E	621	PRO	O-C-N	6.22	130.66	122.27
3	D	70	ASN	N-CA-C	-6.21	103.59	111.92
6	G	59	LEU	N-CA-C	6.21	118.85	111.33
4	E	259	LEU	N-CA-C	-6.21	101.18	110.06
4	E	758	VAL	N-CA-C	-6.21	99.54	108.48
4	E	702	GLN	CA-C-N	6.21	126.12	119.85
4	E	702	GLN	C-N-CA	6.21	126.12	119.85
3	D	88	THR	N-CA-C	-6.20	104.88	112.88
7	H	61	MET	CA-C-O	-6.20	112.43	120.25
4	E	463	GLY	CA-C-N	6.20	127.59	119.84
4	E	463	GLY	C-N-CA	6.20	127.59	119.84
2	C	75	ILE	N-CA-C	-6.20	99.49	108.17
4	E	548	LEU	N-CA-C	-6.20	104.31	113.61
5	F	142	VAL	O-C-N	6.20	127.99	121.91
2	C	29	HIS	N-CA-C	-6.20	105.20	112.89
4	E	837	GLY	CA-C-O	6.19	126.18	119.06
2	C	363	PHE	N-CA-C	-6.19	102.65	108.22
2	C	385	ASN	N-CA-C	-6.19	102.87	110.61
4	E	366	SER	CA-C-N	6.19	128.57	120.28
4	E	366	SER	C-N-CA	6.19	128.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	16	MET	CA-C-N	6.19	128.86	120.38
6	G	16	MET	C-N-CA	6.19	128.86	120.38
2	C	808	TRP	CA-C-O	-6.18	114.52	119.71
2	C	570	VAL	CA-C-N	6.17	129.05	120.29
2	C	570	VAL	C-N-CA	6.17	129.05	120.29
4	E	269	GLU	O-C-N	6.17	128.43	122.07
4	E	433	GLU	CA-C-N	6.17	128.54	120.28
4	E	433	GLU	C-N-CA	6.17	128.54	120.28
5	F	33	ASP	N-CA-C	-6.17	105.40	113.17
7	H	92	GLU	N-CA-C	-6.17	104.64	111.36
6	G	498	GLY	CA-C-N	6.16	133.31	121.54
6	G	498	GLY	C-N-CA	6.16	133.31	121.54
5	F	55	THR	N-CA-C	-6.16	97.68	110.80
6	G	430	ARG	CA-C-N	6.16	132.48	123.12
6	G	430	ARG	C-N-CA	6.16	132.48	123.12
3	D	302	GLU	N-CA-C	-6.16	105.56	114.12
6	G	115	PHE	N-CA-C	6.16	117.66	111.07
6	G	414	GLU	N-CA-C	-6.15	104.49	111.07
4	E	151	LYS	N-CA-C	-6.15	105.42	113.17
5	F	65	LEU	N-CA-C	-6.15	99.88	109.72
6	G	168	HIS	CA-C-O	-6.15	111.99	119.43
3	D	39	VAL	N-CA-C	-6.14	99.40	108.85
4	E	868	ILE	N-CA-C	6.14	116.31	110.42
3	D	668	GLN	CA-C-N	6.14	128.42	120.44
3	D	668	GLN	C-N-CA	6.14	128.42	120.44
6	G	19	GLU	O-C-N	-6.14	116.35	121.44
3	D	625	LEU	O-C-N	6.13	128.62	122.12
2	C	560	ILE	N-CA-C	-6.12	98.92	107.80
4	E	108	SER	O-C-N	6.12	128.61	122.12
6	G	55	LEU	CA-C-N	6.12	125.81	119.56
6	G	55	LEU	C-N-CA	6.12	125.81	119.56
2	C	317	PHE	CA-C-N	6.12	131.44	123.00
2	C	317	PHE	C-N-CA	6.12	131.44	123.00
4	E	275	VAL	N-CA-C	6.12	117.59	110.62
2	C	359	SER	N-CA-C	6.11	118.40	108.63
2	C	150	VAL	N-CA-C	-6.11	99.80	108.65
4	E	550	GLY	N-CA-C	-6.11	106.00	116.01
6	G	899	LEU	N-CA-C	6.11	123.80	110.80
3	D	751	LEU	O-C-N	-6.10	114.30	121.32
3	D	245	ILE	N-CA-C	-6.09	99.58	108.11
4	E	867	ASP	CA-C-N	6.09	128.24	120.56
4	E	867	ASP	C-N-CA	6.09	128.24	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	438	ILE	CA-C-N	6.09	128.46	120.60
6	G	438	ILE	C-N-CA	6.09	128.46	120.60
7	H	11	LYS	N-CA-C	-6.09	106.51	112.97
3	D	608	LYS	CA-C-N	6.09	130.09	120.47
3	D	608	LYS	C-N-CA	6.09	130.09	120.47
4	E	673	THR	N-CA-C	-6.08	99.08	109.24
4	E	502	ASN	CA-C-N	6.08	128.43	120.28
4	E	502	ASN	C-N-CA	6.08	128.43	120.28
4	E	24	LYS	O-C-N	-6.08	115.22	122.15
5	F	109	VAL	CA-C-O	6.08	128.31	120.95
3	D	765	GLN	CA-C-N	6.07	129.09	120.53
3	D	765	GLN	C-N-CA	6.07	129.09	120.53
6	G	153	ARG	CA-C-N	6.07	128.41	120.28
6	G	153	ARG	C-N-CA	6.07	128.41	120.28
3	D	366	PHE	N-CA-C	-6.07	100.11	109.52
5	F	60	ALA	N-CA-C	-6.07	99.17	108.76
6	G	224	GLN	CA-C-N	6.07	128.41	120.28
6	G	224	GLN	C-N-CA	6.07	128.41	120.28
6	G	219	PHE	N-CA-C	-6.07	104.58	111.07
7	H	90	ILE	CA-C-N	6.06	125.75	119.56
7	H	90	ILE	C-N-CA	6.06	125.75	119.56
6	G	507	THR	CA-C-N	6.06	132.88	121.97
6	G	507	THR	C-N-CA	6.06	132.88	121.97
2	C	657	ASN	N-CA-C	-6.06	98.53	108.41
4	E	180	GLU	CA-C-N	6.06	128.32	120.44
4	E	180	GLU	C-N-CA	6.06	128.32	120.44
3	D	710	SER	N-CA-C	6.06	118.85	111.82
4	E	396	VAL	CA-C-N	6.06	128.31	120.44
4	E	396	VAL	C-N-CA	6.06	128.31	120.44
6	G	126	LYS	N-CA-C	6.06	118.85	111.82
6	G	356	LEU	O-C-N	-6.06	115.24	122.15
6	G	488	ILE	CA-C-N	6.05	129.07	120.53
6	G	488	ILE	C-N-CA	6.05	129.07	120.53
6	G	217	GLN	N-CA-C	-6.05	98.41	108.34
7	H	29	ILE	CA-C-O	-6.05	114.76	121.17
3	D	143	HIS	CA-C-N	6.05	133.09	121.54
3	D	143	HIS	C-N-CA	6.05	133.09	121.54
3	D	367	VAL	N-CA-C	-6.04	99.45	108.46
2	C	352	VAL	O-C-N	-6.04	115.02	122.57
4	E	86	ARG	N-CA-C	6.04	117.86	111.28
6	G	562	THR	N-CA-C	-6.04	104.70	111.28
2	C	528	ILE	CA-C-N	6.03	129.33	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	528	ILE	C-N-CA	6.03	129.33	120.82
2	C	85	CYS	CA-C-O	-6.03	114.13	120.58
4	E	681	MET	N-CA-C	6.03	119.31	109.24
3	D	549	GLY	N-CA-C	-6.03	106.84	115.64
3	D	713	ASN	CA-C-N	6.03	128.84	120.29
3	D	713	ASN	C-N-CA	6.03	128.84	120.29
6	G	766	ASP	N-CA-C	6.03	118.48	110.53
2	C	200	VAL	O-C-N	6.02	130.92	122.97
5	F	87	GLU	CA-C-O	-6.02	114.17	120.55
3	D	670	TRP	N-CA-C	6.01	117.92	111.36
2	C	228	GLN	CA-C-N	6.01	131.02	123.14
2	C	228	GLN	C-N-CA	6.01	131.02	123.14
3	D	323	GLN	N-CA-C	-6.01	101.30	110.14
4	E	117	GLU	N-CA-C	-6.01	98.00	110.80
5	F	104	MET	CA-C-N	6.01	129.44	120.31
5	F	104	MET	C-N-CA	6.01	129.44	120.31
3	D	112	PRO	N-CA-C	-6.00	107.77	114.92
3	D	763	PRO	CA-C-N	6.00	131.10	122.40
3	D	763	PRO	C-N-CA	6.00	131.10	122.40
7	H	64	LEU	CA-C-O	6.00	128.13	121.11
4	E	129	CYS	CA-C-N	6.00	128.59	120.44
4	E	129	CYS	C-N-CA	6.00	128.59	120.44
6	G	946	ALA	N-CA-C	-5.99	100.47	108.74
2	C	531	LYS	N-CA-C	-5.99	104.38	111.03
2	C	503	VAL	O-C-N	-5.98	116.18	123.00
4	E	222	GLY	N-CA-C	-5.98	99.00	113.18
6	G	128	LYS	CA-C-N	5.98	129.62	120.82
6	G	128	LYS	C-N-CA	5.98	129.62	120.82
7	H	101	GLU	CA-C-O	-5.98	113.09	119.97
3	D	9	ARG	O-C-N	-5.98	115.33	122.63
6	G	232	TYR	N-CA-C	-5.98	106.15	113.50
4	E	562	LEU	CA-C-O	5.98	126.76	120.42
3	D	75	GLY	N-CA-C	-5.98	99.02	113.18
6	G	578	GLN	CA-C-N	5.98	130.62	122.07
6	G	578	GLN	C-N-CA	5.98	130.62	122.07
3	D	420	GLU	CA-C-N	5.97	131.59	123.11
3	D	420	GLU	C-N-CA	5.97	131.59	123.11
4	E	141	GLU	CA-C-O	-5.97	114.51	120.90
2	C	458	TYR	CA-C-N	5.97	130.21	121.31
2	C	458	TYR	C-N-CA	5.97	130.21	121.31
3	D	614	PRO	CA-C-O	-5.97	114.62	121.96
6	G	874	MET	N-CA-C	-5.97	104.86	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	215	ILE	N-CA-C	5.97	116.75	110.72
3	D	379	THR	CA-C-N	5.96	132.92	121.54
3	D	379	THR	C-N-CA	5.96	132.92	121.54
6	G	258	PRO	N-CA-C	-5.96	105.77	113.57
6	G	743	ALA	CA-C-O	-5.95	114.14	121.11
3	D	37	GLY	N-CA-C	-5.95	107.54	115.40
4	E	267	VAL	O-C-N	-5.95	116.08	121.91
6	G	829	ARG	CA-C-N	5.95	128.25	120.28
6	G	829	ARG	C-N-CA	5.95	128.25	120.28
7	H	6	ALA	N-CA-C	-5.95	98.71	108.76
3	D	434	TYR	N-CA-C	-5.94	99.31	109.24
3	D	94	MET	N-CA-C	-5.94	98.96	109.06
4	E	796	THR	CA-C-N	5.94	128.72	120.29
4	E	796	THR	C-N-CA	5.94	128.72	120.29
7	H	121	TYR	CA-C-O	5.94	126.86	120.38
2	C	428	VAL	N-CA-C	-5.93	99.62	108.46
2	C	688	GLN	CA-C-N	5.93	128.85	120.42
2	C	688	GLN	C-N-CA	5.93	128.85	120.42
2	C	160	ARG	N-CA-C	-5.93	99.73	109.40
2	C	670	ASP	CA-C-N	5.93	128.71	120.29
2	C	670	ASP	C-N-CA	5.93	128.71	120.29
6	G	366	LYS	CA-C-N	5.93	132.32	122.54
6	G	366	LYS	C-N-CA	5.93	132.32	122.54
3	D	472	ASP	CA-C-N	5.93	131.15	122.08
3	D	472	ASP	C-N-CA	5.93	131.15	122.08
4	E	314	VAL	O-C-N	-5.93	116.19	122.83
6	G	568	TYR	CA-C-N	5.93	129.04	120.98
6	G	568	TYR	C-N-CA	5.93	129.04	120.98
6	G	888	THR	CA-C-N	5.92	132.85	121.54
6	G	888	THR	C-N-CA	5.92	132.85	121.54
6	G	292	GLU	N-CA-C	-5.92	97.66	108.02
5	F	87	GLU	O-C-N	5.91	128.39	122.12
6	G	206	LEU	O-C-N	5.91	128.39	122.12
2	C	707	TYR	N-CA-C	5.91	118.50	111.71
3	D	247	GLY	CA-C-O	5.90	126.78	121.47
4	E	815	ARG	CA-C-N	5.90	132.71	122.56
4	E	815	ARG	C-N-CA	5.90	132.71	122.56
2	C	438	LYS	O-C-N	5.90	130.18	123.27
4	E	164	LEU	N-CA-C	-5.90	104.93	111.36
3	D	452	TRP	N-CA-C	-5.90	106.00	112.72
6	G	150	TYR	CA-C-O	-5.89	114.63	120.70
6	G	254	GLN	N-CA-C	-5.89	106.09	113.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	751	GLN	CA-C-N	5.89	132.49	123.47
6	G	751	GLN	C-N-CA	5.89	132.49	123.47
4	E	224	LYS	N-CA-C	-5.89	103.43	111.56
6	G	134	GLU	CA-C-N	5.89	125.44	119.19
6	G	134	GLU	C-N-CA	5.89	125.44	119.19
6	G	926	ILE	O-C-N	5.89	129.44	123.20
2	C	787	ASP	N-CA-C	-5.89	106.05	113.18
3	D	772	LEU	CA-C-O	5.89	126.79	120.55
3	D	218	ASN	O-C-N	5.88	130.72	122.36
3	D	455	THR	N-CA-C	5.88	119.30	111.30
4	E	467	ASN	N-CA-C	-5.88	100.38	109.14
4	E	524	VAL	CA-C-N	5.88	128.44	120.44
4	E	524	VAL	C-N-CA	5.88	128.44	120.44
6	G	316	ARG	CA-C-N	5.88	132.28	121.70
6	G	316	ARG	C-N-CA	5.88	132.28	121.70
3	D	344	ALA	CA-C-N	5.88	128.38	120.50
3	D	344	ALA	C-N-CA	5.88	128.38	120.50
6	G	394	PHE	CA-C-O	-5.88	113.68	120.03
4	E	829	LEU	N-CA-C	-5.87	99.62	109.07
2	C	759	TYR	CA-C-O	-5.87	114.65	120.70
4	E	481	VAL	N-CA-C	5.87	116.06	110.42
2	C	475	PHE	O-C-N	5.87	130.46	123.24
3	D	393	GLU	N-CA-C	-5.87	100.13	109.23
5	F	115	LEU	CA-C-N	5.87	128.15	120.28
5	F	115	LEU	C-N-CA	5.87	128.15	120.28
2	C	605	ASN	CA-C-N	5.87	131.15	122.82
2	C	605	ASN	C-N-CA	5.87	131.15	122.82
4	E	729	LYS	CA-C-O	5.87	127.04	120.70
4	E	293	GLN	CA-C-N	5.86	128.41	120.44
4	E	293	GLN	C-N-CA	5.86	128.41	120.44
2	C	684	GLN	CA-C-N	5.85	132.88	121.41
2	C	684	GLN	C-N-CA	5.85	132.88	121.41
2	C	76	LYS	N-CA-C	-5.85	100.25	109.50
3	D	551	ILE	N-CA-C	-5.85	99.92	108.11
4	E	749	ASP	N-CA-C	-5.85	100.17	109.07
4	E	531	TYR	CA-C-N	5.85	128.04	120.44
4	E	531	TYR	C-N-CA	5.85	128.04	120.44
6	G	512	GLN	N-CA-C	5.85	117.65	111.28
3	D	32	ALA	N-CA-C	-5.84	99.48	109.24
4	E	234	ARG	N-CA-C	5.84	117.65	111.28
4	E	377	VAL	N-CA-C	-5.84	104.82	110.72
6	G	128	LYS	O-C-N	5.84	129.35	122.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	H	116	ILE	CA-C-N	-5.84	114.68	122.98
7	H	116	ILE	C-N-CA	-5.84	114.68	122.98
6	G	302	LEU	O-C-N	5.84	130.36	122.59
2	C	688	GLN	N-CA-C	-5.84	104.82	111.07
3	D	595	GLN	CA-C-N	5.83	128.02	120.44
3	D	595	GLN	C-N-CA	5.83	128.02	120.44
3	D	414	ILE	N-CA-C	-5.83	100.09	108.48
4	E	283	LYS	CA-C-N	5.82	129.16	120.31
4	E	283	LYS	C-N-CA	5.82	129.16	120.31
6	G	587	LEU	CA-C-N	5.82	128.67	120.28
6	G	587	LEU	C-N-CA	5.82	128.67	120.28
3	D	625	LEU	CA-C-N	5.82	128.08	120.28
3	D	625	LEU	C-N-CA	5.82	128.08	120.28
2	C	451	PRO	CA-C-O	-5.82	114.67	121.95
3	D	406	ARG	O-C-N	5.82	130.02	123.27
4	E	315	ALA	CA-C-N	5.82	131.82	121.75
4	E	315	ALA	C-N-CA	5.82	131.82	121.75
4	E	357	ILE	CA-C-N	5.82	128.01	120.44
4	E	357	ILE	C-N-CA	5.82	128.01	120.44
6	G	214	ASP	CA-C-O	-5.82	114.91	120.90
6	G	360	LEU	N-CA-C	5.82	117.62	111.28
3	D	416	LYS	O-C-N	-5.81	116.51	123.31
6	G	149	SER	CA-C-N	5.81	128.34	120.44
6	G	149	SER	C-N-CA	5.81	128.34	120.44
2	C	297	LEU	CA-C-O	-5.81	114.83	121.40
4	E	365	SER	CA-C-N	5.81	128.54	120.29
4	E	365	SER	C-N-CA	5.81	128.54	120.29
6	G	54	LYS	N-CA-C	5.81	118.78	110.24
2	C	344	LEU	CA-C-N	5.81	132.63	121.54
2	C	344	LEU	C-N-CA	5.81	132.63	121.54
4	E	310	THR	N-CA-C	-5.81	98.43	110.80
4	E	306	ALA	CA-C-N	5.80	127.98	120.44
4	E	306	ALA	C-N-CA	5.80	127.98	120.44
3	D	344	ALA	CA-C-O	-5.80	113.47	120.32
2	C	613	HIS	CA-C-N	5.80	128.63	120.28
2	C	613	HIS	C-N-CA	5.80	128.63	120.28
3	D	475	GLU	N-CA-C	-5.80	106.75	113.88
3	D	618	ARG	N-CA-C	5.80	117.60	111.28
6	G	196	MET	N-CA-C	-5.80	96.04	107.69
2	C	100	PHE	O-C-N	-5.79	116.55	123.27
4	E	459	LEU	CA-C-N	5.79	126.37	119.94
4	E	459	LEU	C-N-CA	5.79	126.37	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	655	PHE	CA-C-N	5.79	128.62	120.28
4	E	655	PHE	C-N-CA	5.79	128.62	120.28
6	G	216	VAL	CA-C-N	5.79	130.93	122.77
6	G	216	VAL	C-N-CA	5.79	130.93	122.77
4	E	349	LEU	CA-C-N	5.78	128.50	120.29
4	E	349	LEU	C-N-CA	5.78	128.50	120.29
3	D	350	SER	N-CA-C	5.78	123.11	110.80
3	D	614	PRO	CA-C-N	5.78	132.58	121.54
3	D	614	PRO	C-N-CA	5.78	132.58	121.54
3	D	744	LEU	CA-C-N	5.77	128.49	120.29
3	D	744	LEU	C-N-CA	5.77	128.49	120.29
2	C	53	PRO	CA-C-N	5.77	130.78	123.10
2	C	53	PRO	C-N-CA	5.77	130.78	123.10
4	E	344	ALA	CA-C-O	-5.77	114.43	120.55
7	H	76	ILE	N-CA-C	5.77	115.96	110.42
3	D	294	SER	N-CA-C	-5.77	100.53	109.24
4	E	304	ARG	CA-C-O	-5.77	113.58	120.10
4	E	793	THR	N-CA-C	-5.77	105.82	112.92
3	D	618	ARG	CA-C-N	5.77	128.01	120.28
3	D	618	ARG	C-N-CA	5.77	128.01	120.28
4	E	810	MET	O-C-N	5.77	130.31	123.27
2	C	316	VAL	N-CA-C	-5.76	100.10	108.17
5	F	103	GLN	CA-C-N	5.76	127.93	120.44
5	F	103	GLN	C-N-CA	5.76	127.93	120.44
6	G	924	VAL	N-CA-C	-5.76	100.10	108.17
4	E	511	VAL	CA-C-N	5.76	128.27	120.44
4	E	511	VAL	C-N-CA	5.76	128.27	120.44
4	E	645	GLU	N-CA-C	-5.75	104.25	112.13
3	D	542	ARG	N-CA-C	-5.75	100.81	109.95
3	D	697	GLY	CA-C-N	5.75	126.32	120.00
3	D	697	GLY	C-N-CA	5.75	126.32	120.00
4	E	624	GLN	N-CA-C	-5.75	106.61	113.97
4	E	653	HIS	CA-C-O	-5.75	114.49	120.70
4	E	106	THR	CA-C-N	5.74	127.91	120.44
4	E	106	THR	C-N-CA	5.74	127.91	120.44
6	G	55	LEU	O-C-N	-5.74	114.72	121.32
6	G	248	CYS	CA-C-N	5.74	128.56	120.42
6	G	248	CYS	C-N-CA	5.74	128.56	120.42
2	C	417	THR	N-CA-C	-5.73	100.59	109.24
3	D	762	LEU	N-CA-C	5.72	122.44	109.81
4	E	697	SER	O-C-N	-5.72	116.72	123.41
3	D	205	GLY	N-CA-C	-5.71	102.06	111.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	325	ILE	O-C-N	-5.71	116.33	121.87
6	G	521	TYR	N-CA-C	-5.71	105.05	111.28
2	C	184	ILE	CA-C-N	5.70	129.46	121.02
2	C	184	ILE	C-N-CA	5.70	129.46	121.02
2	C	662	LEU	O-C-N	5.70	128.16	122.12
5	F	118	MET	CA-C-N	5.70	127.85	120.44
5	F	118	MET	C-N-CA	5.70	127.85	120.44
6	G	787	PRO	N-CA-C	-5.70	102.24	111.19
3	D	481	THR	CA-C-O	-5.70	115.18	121.33
4	E	162	SER	CA-C-N	5.70	127.91	120.28
4	E	162	SER	C-N-CA	5.70	127.91	120.28
4	E	632	SER	CA-C-N	5.69	129.31	120.60
4	E	632	SER	C-N-CA	5.69	129.31	120.60
4	E	832	GLY	N-CA-C	-5.69	102.38	110.63
6	G	379	TYR	CA-C-O	5.69	126.58	120.55
2	C	313	GLY	N-CA-C	-5.68	102.91	110.58
4	E	400	PHE	CA-C-N	5.68	127.89	120.28
4	E	400	PHE	C-N-CA	5.68	127.89	120.28
4	E	602	PRO	CA-C-N	5.68	132.35	122.81
4	E	602	PRO	C-N-CA	5.68	132.35	122.81
7	H	61	MET	N-CA-C	-5.68	97.97	107.80
2	C	667	ALA	CA-C-N	5.68	132.08	122.26
2	C	667	ALA	C-N-CA	5.68	132.08	122.26
6	G	361	LYS	CA-C-N	5.68	128.35	120.29
6	G	361	LYS	C-N-CA	5.68	128.35	120.29
2	C	450	VAL	CA-C-N	5.68	125.99	119.92
2	C	450	VAL	C-N-CA	5.68	125.99	119.92
4	E	133	ASP	N-CA-C	-5.67	100.69	109.14
6	G	395	PRO	O-C-N	5.67	129.32	122.23
4	E	424	ILE	O-C-N	5.67	127.37	121.87
6	G	842	MET	CA-C-N	5.67	127.87	120.28
6	G	842	MET	C-N-CA	5.67	127.87	120.28
4	E	141	GLU	N-CA-C	5.66	117.90	111.11
3	D	681	CYS	N-CA-C	-5.65	106.33	113.23
2	C	359	SER	CA-C-O	-5.65	114.53	121.02
4	E	170	SER	CA-C-N	5.64	128.12	120.44
4	E	170	SER	C-N-CA	5.64	128.12	120.44
4	E	635	GLU	CA-C-N	5.64	125.41	119.76
4	E	635	GLU	C-N-CA	5.64	125.41	119.76
6	G	120	THR	N-CA-C	-5.64	105.21	111.36
2	C	330	GLY	O-C-N	5.64	130.04	122.70
7	H	29	ILE	O-C-N	5.64	127.44	121.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	658	TYR	CA-C-N	5.64	127.84	120.28
3	D	658	TYR	C-N-CA	5.64	127.84	120.28
3	D	577	ASP	CA-C-N	5.64	130.27	120.68
3	D	577	ASP	C-N-CA	5.64	130.27	120.68
2	C	161	VAL	N-CA-C	-5.63	100.28	108.17
4	E	160	LEU	CA-C-N	5.63	128.42	120.42
4	E	160	LEU	C-N-CA	5.63	128.42	120.42
6	G	284	CYS	O-C-N	5.63	127.87	122.07
2	C	89	LEU	CA-C-N	5.63	129.91	122.42
2	C	89	LEU	C-N-CA	5.63	129.91	122.42
2	C	309	GLY	CA-C-O	-5.63	115.80	120.92
5	F	140	GLN	CA-C-O	5.63	126.38	120.42
2	C	418	ALA	N-CA-C	-5.62	99.13	108.75
4	E	633	SER	O-C-N	5.62	127.73	121.43
6	G	288	LEU	O-C-N	5.62	127.86	122.07
6	G	274	ALA	CA-C-O	-5.62	114.18	119.80
2	C	545	THR	N-CA-C	-5.62	105.38	114.09
4	E	695	ALA	N-CA-C	-5.62	100.13	109.46
4	E	795	LYS	CA-C-O	-5.62	112.99	119.56
6	G	534	LYS	CA-C-O	-5.62	115.22	121.51
2	C	665	ALA	CA-C-N	5.62	127.80	120.28
2	C	665	ALA	C-N-CA	5.62	127.80	120.28
2	C	741	ASP	O-C-N	5.61	130.23	123.16
4	E	263	HIS	CA-C-N	5.61	127.80	120.28
4	E	263	HIS	C-N-CA	5.61	127.80	120.28
4	E	326	ASN	CA-C-N	5.61	128.07	120.44
4	E	326	ASN	C-N-CA	5.61	128.07	120.44
3	D	463	ILE	N-CA-C	-5.61	99.56	107.75
2	C	151	VAL	N-CA-C	-5.61	100.21	108.85
4	E	163	SER	CA-C-N	5.61	128.25	120.29
4	E	163	SER	C-N-CA	5.61	128.25	120.29
5	F	45	GLU	CA-C-N	5.61	127.79	120.28
5	F	45	GLU	C-N-CA	5.61	127.79	120.28
6	G	191	ARG	N-CA-C	5.61	119.63	112.34
6	G	855	PHE	CA-C-N	5.61	127.73	120.44
6	G	855	PHE	C-N-CA	5.61	127.73	120.44
6	G	268	LEU	N-CA-C	5.60	118.15	111.71
3	D	447	LEU	N-CA-C	-5.60	99.28	108.41
6	G	488	ILE	N-CA-C	5.60	119.96	111.89
6	G	595	LEU	N-CA-C	-5.60	104.80	111.69
4	E	659	LEU	N-CA-C	-5.60	99.89	109.24
5	F	84	TYR	N-CA-C	-5.60	106.45	113.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	658	ILE	O-C-N	5.60	127.13	122.09
3	D	614	PRO	O-C-N	5.59	129.44	123.23
6	G	743	ALA	O-C-N	5.59	130.12	123.24
2	C	517	LYS	N-CA-C	-5.59	98.89	110.80
2	C	659	GLU	N-CA-C	-5.59	105.27	111.36
4	E	410	GLY	O-C-N	5.59	129.97	122.70
4	E	420	CYS	CA-C-O	-5.59	114.95	120.82
7	H	44	LYS	N-CA-C	-5.58	104.11	112.54
6	G	157	LEU	CA-C-O	-5.58	114.50	120.42
6	G	213	ILE	CA-C-N	5.58	128.22	120.63
6	G	213	ILE	C-N-CA	5.58	128.22	120.63
7	H	46	HIS	CA-C-N	5.58	128.31	120.28
7	H	46	HIS	C-N-CA	5.58	128.31	120.28
7	H	63	LYS	N-CA-C	-5.58	106.36	112.72
4	E	526	ASP	O-C-N	5.57	127.81	122.07
2	C	93	LEU	N-CA-C	-5.57	105.08	112.94
5	F	134	ILE	CA-C-O	5.56	127.55	121.04
3	D	395	ALA	N-CA-C	-5.56	99.24	108.75
4	E	606	ALA	CA-C-N	5.56	129.76	120.70
4	E	606	ALA	C-N-CA	5.56	129.76	120.70
6	G	101	VAL	N-CA-C	-5.55	105.23	113.39
6	G	782	LYS	CA-C-N	5.55	129.36	121.42
6	G	782	LYS	C-N-CA	5.55	129.36	121.42
2	C	111	ALA	N-CA-C	-5.55	100.65	109.59
2	C	169	LYS	CA-C-O	-5.55	115.13	121.68
6	G	459	LEU	O-C-N	5.55	128.00	122.12
2	C	363	PHE	CA-C-O	-5.55	114.99	120.26
3	D	154	ASP	N-CA-C	-5.55	98.98	110.80
3	D	479	ILE	CA-C-N	5.55	130.37	122.72
3	D	479	ILE	C-N-CA	5.55	130.37	122.72
2	C	750	LYS	O-C-N	5.54	127.78	122.07
6	G	269	VAL	CA-C-O	-5.54	114.90	121.05
2	C	367	ASN	N-CA-C	-5.54	100.29	108.99
5	F	29	LYS	N-CA-C	-5.54	98.89	108.69
7	H	127	LEU	CA-C-O	-5.54	113.60	119.97
4	E	65	GLU	O-C-N	5.54	128.46	122.15
4	E	444	GLU	N-CA-C	5.54	118.24	111.82
3	D	283	SER	CA-C-N	5.53	132.11	121.54
3	D	283	SER	C-N-CA	5.53	132.11	121.54
4	E	634	PRO	N-CA-C	-5.53	107.60	114.68
2	C	756	SER	O-C-N	5.53	127.77	122.07
6	G	938	VAL	CA-C-N	5.53	132.10	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	938	VAL	C-N-CA	5.53	132.10	121.54
2	C	205	ASP	N-CA-C	-5.53	99.02	110.80
3	D	770	VAL	O-C-N	-5.53	116.51	121.87
6	G	28	ASN	CA-C-N	5.52	128.71	120.31
6	G	28	ASN	C-N-CA	5.52	128.71	120.31
2	C	685	GLY	O-C-N	5.52	129.88	122.70
3	D	120	ASP	CA-C-N	5.52	131.91	123.47
3	D	120	ASP	C-N-CA	5.52	131.91	123.47
2	C	178	GLU	CA-C-N	5.52	128.68	120.90
2	C	178	GLU	C-N-CA	5.52	128.68	120.90
4	E	457	HIS	CA-C-N	5.51	127.94	120.44
4	E	457	HIS	C-N-CA	5.51	127.94	120.44
6	G	490	GLU	CA-C-N	-5.51	113.27	120.44
6	G	490	GLU	C-N-CA	-5.51	113.27	120.44
5	F	31	TYR	N-CA-C	-5.51	106.14	112.92
3	D	271	MET	CA-C-N	5.51	132.06	121.54
3	D	271	MET	C-N-CA	5.51	132.06	121.54
6	G	345	LEU	CA-C-N	5.51	128.11	120.29
6	G	345	LEU	C-N-CA	5.51	128.11	120.29
6	G	864	TRP	N-CA-C	-5.51	104.81	112.03
3	D	291	ASP	O-C-N	5.51	128.43	122.15
3	D	590	SER	N-CA-C	5.50	117.28	111.28
3	D	620	ARG	N-CA-C	5.50	117.08	111.14
3	D	436	GLY	CA-C-N	5.50	127.91	120.65
3	D	436	GLY	C-N-CA	5.50	127.91	120.65
6	G	181	LEU	N-CA-C	-5.50	99.08	110.80
6	G	584	GLU	N-CA-C	-5.50	99.94	108.90
6	G	489	VAL	CA-C-N	5.50	127.59	120.44
6	G	489	VAL	C-N-CA	5.50	127.59	120.44
6	G	785	GLU	O-C-N	-5.50	115.28	122.59
4	E	542	LEU	CA-C-O	-5.50	115.04	120.70
3	D	728	ALA	N-CA-C	5.49	117.27	111.28
4	E	64	THR	CA-C-N	5.49	128.09	120.29
4	E	64	THR	C-N-CA	5.49	128.09	120.29
3	D	574	TYR	N-CA-C	-5.49	100.24	109.07
3	D	802	LYS	CA-C-O	-5.49	115.44	121.31
6	G	415	ALA	CA-C-N	5.49	127.63	120.28
6	G	415	ALA	C-N-CA	5.49	127.63	120.28
2	C	651	LEU	CA-C-N	5.48	127.63	120.28
2	C	651	LEU	C-N-CA	5.48	127.63	120.28
3	D	416	LYS	N-CA-C	-5.48	99.50	108.76
4	E	159	ALA	CA-C-N	5.48	127.56	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	159	ALA	C-N-CA	5.48	127.56	120.44
2	C	373	ALA	CA-C-N	5.47	132.00	121.54
2	C	373	ALA	C-N-CA	5.47	132.00	121.54
7	H	75	ASN	CA-C-N	5.47	127.46	120.56
7	H	75	ASN	C-N-CA	5.47	127.46	120.56
4	E	538	LYS	CA-C-N	5.47	127.61	120.28
4	E	538	LYS	C-N-CA	5.47	127.61	120.28
2	C	234	MET	N-CA-C	-5.47	106.28	113.17
3	D	106	ALA	N-CA-C	-5.47	100.11	109.24
3	D	421	LYS	CA-C-N	5.47	130.96	122.49
3	D	421	LYS	C-N-CA	5.47	130.96	122.49
3	D	753	GLU	CA-C-O	-5.47	114.62	120.42
4	E	49	THR	CA-C-N	5.46	127.60	120.28
4	E	49	THR	C-N-CA	5.46	127.60	120.28
3	D	534	PHE	CA-C-O	-5.46	114.52	120.36
5	F	68	VAL	CA-C-O	5.46	126.12	120.39
6	G	363	GLU	CA-C-N	5.46	128.76	120.95
6	G	363	GLU	C-N-CA	5.46	128.76	120.95
6	G	452	VAL	CA-C-N	5.46	127.59	120.28
6	G	452	VAL	C-N-CA	5.46	127.59	120.28
6	G	914	SER	O-C-N	-5.46	116.31	122.97
4	E	103	ILE	CA-C-N	5.46	129.09	120.47
4	E	103	ILE	C-N-CA	5.46	129.09	120.47
4	E	196	ALA	CA-C-N	5.46	128.04	120.29
4	E	196	ALA	C-N-CA	5.46	128.04	120.29
4	E	337	ASN	CA-C-N	-5.46	112.54	120.29
4	E	337	ASN	C-N-CA	-5.46	112.54	120.29
2	C	669	ASP	O-C-N	5.45	129.12	122.58
4	E	81	ASP	CA-C-N	5.45	124.79	118.85
4	E	81	ASP	C-N-CA	5.45	124.79	118.85
2	C	156	ASP	N-CA-C	-5.45	106.51	112.72
4	E	492	VAL	N-CA-C	5.45	116.22	110.72
3	D	145	VAL	O-C-N	5.45	129.00	122.62
4	E	668	THR	CA-C-O	-5.45	113.52	119.95
2	C	751	ASN	CA-C-N	5.45	128.59	120.31
2	C	751	ASN	C-N-CA	5.45	128.59	120.31
4	E	617	LEU	CA-C-N	5.44	128.11	120.28
4	E	617	LEU	C-N-CA	5.44	128.11	120.28
4	E	513	LEU	N-CA-C	5.44	118.13	111.82
6	G	914	SER	N-CA-C	5.44	117.91	110.24
7	H	68	LEU	N-CA-C	-5.44	100.16	109.24
3	D	243	ILE	CA-C-O	5.43	127.57	120.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	888	THR	N-CA-C	-5.43	104.86	112.25
4	E	23	GLU	CA-C-N	5.43	128.00	120.29
4	E	23	GLU	C-N-CA	5.43	128.00	120.29
4	E	292	LEU	N-CA-C	5.43	117.90	111.33
6	G	255	SER	CA-C-N	5.43	131.91	121.54
6	G	255	SER	C-N-CA	5.43	131.91	121.54
2	C	215	PRO	N-CA-C	5.43	123.65	112.47
3	D	440	GLY	N-CA-C	-5.43	101.05	110.71
4	E	836	GLY	N-CA-C	-5.43	108.16	115.21
3	D	190	CYS	O-C-N	5.42	129.56	123.27
6	G	352	ASN	N-CA-C	-5.42	107.92	114.75
3	D	390	SER	N-CA-C	-5.42	100.86	109.59
6	G	509	GLY	N-CA-C	-5.42	101.28	112.34
2	C	300	HIS	O-C-N	-5.42	115.68	121.42
2	C	523	ASN	CA-C-N	5.42	129.36	122.37
2	C	523	ASN	C-N-CA	5.42	129.36	122.37
3	D	633	GLN	N-CA-C	-5.42	105.46	111.36
2	C	5	PHE	O-C-N	-5.42	117.08	123.41
2	C	405	PRO	N-CA-C	-5.42	105.55	114.75
2	C	27	SER	N-CA-C	-5.41	100.08	108.90
3	D	596	THR	N-CA-C	-5.41	105.28	111.07
2	C	807	ASN	N-CA-C	-5.41	104.94	112.30
2	C	637	VAL	CA-C-N	5.41	127.53	120.28
2	C	637	VAL	C-N-CA	5.41	127.53	120.28
2	C	240	TRP	N-CA-C	-5.41	104.97	113.02
6	G	823	SER	N-CA-C	-5.41	101.19	109.41
6	G	520	THR	N-CA-C	5.40	117.17	111.28
2	C	392	ASP	CA-C-N	5.40	130.76	122.93
2	C	392	ASP	C-N-CA	5.40	130.76	122.93
4	E	452	ALA	CA-C-N	5.40	127.52	120.28
4	E	452	ALA	C-N-CA	5.40	127.52	120.28
3	D	540	VAL	O-C-N	5.40	127.07	122.16
4	E	154	SER	O-C-N	5.40	127.63	122.07
6	G	803	ASN	CA-C-O	-5.39	115.27	121.47
3	D	729	PHE	O-C-N	5.39	128.29	122.15
6	G	332	PRO	O-C-N	5.39	129.92	122.64
6	G	880	TYR	CA-C-N	5.39	127.45	120.44
6	G	880	TYR	C-N-CA	5.39	127.45	120.44
3	D	182	GLU	N-CA-C	-5.39	95.85	107.49
3	D	588	LEU	CA-C-N	5.39	127.84	120.46
3	D	588	LEU	C-N-CA	5.39	127.84	120.46
4	E	498	PHE	CA-C-N	5.38	125.92	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	498	PHE	C-N-CA	5.38	125.92	119.94
2	C	422	ALA	CA-C-N	5.38	131.82	121.54
2	C	422	ALA	C-N-CA	5.38	131.82	121.54
3	D	349	GLY	CA-C-N	5.38	131.81	121.54
3	D	349	GLY	C-N-CA	5.38	131.81	121.54
3	D	752	PRO	CA-C-N	5.38	127.93	120.29
3	D	752	PRO	C-N-CA	5.38	127.93	120.29
4	E	188	ASP	N-CA-C	-5.38	106.09	113.30
4	E	285	LEU	CA-C-O	5.38	125.93	119.59
3	D	582	ILE	CA-C-N	5.37	131.23	122.69
3	D	582	ILE	C-N-CA	5.37	131.23	122.69
4	E	402	PHE	CA-C-O	-5.37	114.86	120.55
4	E	607	ALA	N-CA-C	-5.37	106.21	114.16
6	G	475	VAL	N-CA-C	5.37	115.58	110.53
4	E	796	THR	O-C-N	-5.37	117.67	123.42
3	D	381	MET	CA-C-O	5.37	125.19	119.34
3	D	654	LEU	CA-C-N	5.37	127.47	120.28
3	D	654	LEU	C-N-CA	5.37	127.47	120.28
4	E	680	GLN	N-CA-C	5.37	118.42	110.48
4	E	785	LYS	N-CA-C	-5.37	100.91	109.23
6	G	953	LEU	O-C-N	5.37	127.81	122.12
2	C	700	PHE	CA-C-O	-5.36	114.73	120.42
6	G	749	VAL	CA-C-O	5.36	125.56	120.25
3	D	719	ALA	CA-C-N	5.36	128.86	120.82
3	D	719	ALA	C-N-CA	5.36	128.86	120.82
4	E	557	GLY	O-C-N	5.36	128.26	122.96
2	C	502	HIS	CA-C-N	-5.36	114.66	122.58
2	C	502	HIS	C-N-CA	-5.36	114.66	122.58
3	D	439	LEU	CA-C-N	-5.36	117.61	122.80
3	D	439	LEU	C-N-CA	-5.36	117.61	122.80
3	D	648	ALA	O-C-N	5.35	127.79	122.12
4	E	770	VAL	N-CA-C	-5.35	104.27	111.44
5	F	114	LEU	CA-C-N	5.35	127.89	120.29
5	F	114	LEU	C-N-CA	5.35	127.89	120.29
6	G	926	ILE	N-CA-C	-5.35	99.94	107.75
3	D	579	GLU	O-C-N	5.35	129.42	122.89
4	E	602	PRO	N-CA-C	-5.35	102.28	110.95
7	H	18	SER	CA-C-N	-5.35	113.34	122.33
7	H	18	SER	C-N-CA	-5.35	113.34	122.33
3	D	346	LYS	CA-C-N	5.34	128.30	120.71
3	D	346	LYS	C-N-CA	5.34	128.30	120.71
3	D	450	TYR	CA-C-N	5.34	129.05	121.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	450	TYR	C-N-CA	5.34	129.05	121.42
4	E	381	GLN	CA-C-N	5.34	127.38	120.44
4	E	381	GLN	C-N-CA	5.34	127.38	120.44
2	C	501	SER	O-C-N	-5.34	116.06	122.15
3	D	602	ASP	CA-C-N	5.34	127.38	120.44
3	D	602	ASP	C-N-CA	5.34	127.38	120.44
3	D	77	ASP	N-CA-C	-5.34	107.07	113.21
4	E	616	GLN	CA-C-N	5.34	127.43	120.28
4	E	616	GLN	C-N-CA	5.34	127.43	120.28
5	F	59	ILE	O-C-N	-5.34	117.43	123.03
2	C	658	ILE	CA-C-N	5.33	127.86	120.29
2	C	658	ILE	C-N-CA	5.33	127.86	120.29
3	D	360	HIS	CA-C-N	5.33	128.06	120.49
3	D	360	HIS	C-N-CA	5.33	128.06	120.49
2	C	205	ASP	CA-C-N	5.33	130.30	122.63
2	C	205	ASP	C-N-CA	5.33	130.30	122.63
4	E	503	GLU	CA-C-O	5.33	126.20	120.55
2	C	31	GLY	O-C-N	5.33	128.68	122.45
2	C	424	ASN	N-CA-C	5.33	118.93	111.74
3	D	493	GLU	N-CA-C	5.33	117.16	111.36
6	G	176	LEU	N-CA-C	-5.33	104.37	112.04
3	D	564	LEU	CA-C-O	5.32	126.18	120.70
3	D	608	LYS	O-C-N	5.32	128.82	122.27
4	E	68	GLU	CA-C-N	5.32	127.41	120.28
4	E	68	GLU	C-N-CA	5.32	127.41	120.28
5	F	87	GLU	CA-C-N	5.32	127.85	120.29
5	F	87	GLU	C-N-CA	5.32	127.85	120.29
6	G	212	CYS	CA-C-N	5.32	128.03	120.53
6	G	212	CYS	C-N-CA	5.32	128.03	120.53
3	D	92	VAL	CA-C-O	-5.32	115.14	121.05
2	C	40	MET	CA-C-N	5.32	131.70	121.54
2	C	40	MET	C-N-CA	5.32	131.70	121.54
3	D	184	HIS	N-CA-C	-5.32	100.83	108.60
4	E	619	ALA	O-C-N	-5.32	116.48	122.12
2	C	556	GLY	N-CA-C	-5.31	107.94	115.43
3	D	401	SER	CA-C-N	5.31	131.50	122.37
3	D	401	SER	C-N-CA	5.31	131.50	122.37
4	E	30	GLU	CA-C-N	5.31	129.09	120.60
4	E	30	GLU	C-N-CA	5.31	129.09	120.60
2	C	35	LEU	N-CA-C	-5.31	100.25	108.90
6	G	90	PRO	CA-C-O	-5.31	110.94	120.60
6	G	162	ILE	CA-C-N	5.31	127.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	162	ILE	C-N-CA	5.31	127.39	120.28
2	C	721	LYS	N-CA-C	5.31	117.14	111.36
4	E	822	ASN	O-C-N	-5.30	116.21	122.58
5	F	62	LEU	N-CA-C	-5.30	100.04	109.06
2	C	520	ALA	CA-C-N	5.30	127.65	120.44
2	C	520	ALA	C-N-CA	5.30	127.65	120.44
3	D	776	ASN	CA-C-N	-5.30	113.17	120.28
3	D	776	ASN	C-N-CA	-5.30	113.17	120.28
4	E	465	LYS	O-C-N	-5.30	116.45	122.23
2	C	60	HIS	O-C-N	-5.30	115.93	122.82
6	G	849	THR	CA-C-O	-5.30	115.42	121.40
3	D	238	HIS	CA-C-O	-5.29	114.53	120.25
4	E	454	ARG	N-CA-C	5.29	116.86	111.14
6	G	315	GLU	CA-C-N	5.29	130.46	122.99
6	G	315	GLU	C-N-CA	5.29	130.46	122.99
3	D	1	MET	CA-C-N	5.29	125.19	119.85
3	D	1	MET	C-N-CA	5.29	125.19	119.85
6	G	260	VAL	CA-C-N	5.29	128.22	120.71
6	G	260	VAL	C-N-CA	5.29	128.22	120.71
4	E	703	PRO	CA-C-N	5.29	128.77	121.26
4	E	703	PRO	C-N-CA	5.29	128.77	121.26
4	E	142	ARG	CA-C-O	5.29	126.37	120.82
4	E	46	HIS	CA-C-N	5.29	127.70	120.46
4	E	46	HIS	C-N-CA	5.29	127.70	120.46
3	D	468	ILE	O-C-N	-5.29	117.44	123.10
4	E	782	GLU	N-CA-C	-5.29	106.77	114.12
6	G	180	PHE	N-CA-C	-5.29	99.54	110.80
2	C	78	TRP	CA-C-N	5.28	129.64	122.19
2	C	78	TRP	C-N-CA	5.28	129.64	122.19
2	C	587	PRO	CA-C-N	-5.28	113.29	122.37
2	C	587	PRO	C-N-CA	-5.28	113.29	122.37
3	D	530	VAL	CA-C-N	5.28	127.95	119.98
3	D	530	VAL	C-N-CA	5.28	127.95	119.98
6	G	558	ALA	CA-C-O	-5.28	112.96	120.51
6	G	758	VAL	N-CA-C	-5.28	100.25	108.81
3	D	754	ALA	CA-C-N	5.28	127.35	120.28
3	D	754	ALA	C-N-CA	5.28	127.35	120.28
6	G	369	ASN	N-CA-C	-5.28	101.05	109.23
4	E	862	GLU	CA-C-O	-5.28	115.63	121.33
6	G	418	ALA	N-CA-C	5.28	116.72	111.07
3	D	409	ASN	N-CA-C	-5.28	105.70	113.61
4	E	566	THR	CA-C-N	5.28	127.35	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	566	THR	C-N-CA	5.28	127.35	120.28
4	E	714	THR	CA-C-O	5.27	125.69	120.32
6	G	581	PHE	N-CA-C	-5.27	99.74	108.75
3	D	268	ASN	CA-C-O	5.27	127.69	121.58
4	E	66	ALA	CA-C-N	5.27	127.34	120.28
4	E	66	ALA	C-N-CA	5.27	127.34	120.28
6	G	579	ASN	CA-C-N	-5.27	113.93	122.36
6	G	579	ASN	C-N-CA	-5.27	113.93	122.36
2	C	432	MET	O-C-N	5.27	128.05	121.84
5	F	139	PRO	CA-C-N	5.26	127.77	120.29
5	F	139	PRO	C-N-CA	5.26	127.77	120.29
6	G	225	LEU	CA-C-O	-5.26	114.97	120.55
2	C	44	ILE	N-CA-C	-5.26	105.95	110.74
5	F	62	LEU	CA-C-N	5.26	131.31	123.05
5	F	62	LEU	C-N-CA	5.26	131.31	123.05
6	G	461	ILE	CA-C-N	5.26	127.33	120.28
6	G	461	ILE	C-N-CA	5.26	127.33	120.28
5	F	50	ASN	N-CA-C	5.26	117.01	111.28
6	G	248	CYS	O-C-N	-5.26	116.54	122.12
6	G	558	ALA	O-C-N	5.26	129.59	122.59
2	C	797	PRO	CA-C-O	-5.26	112.94	120.56
3	D	678	ILE	CA-C-O	-5.26	115.28	120.85
4	E	706	CYS	N-CA-C	-5.26	101.37	109.52
6	G	551	PHE	N-CA-C	-5.26	104.04	111.56
2	C	512	VAL	CA-C-N	-5.26	116.25	123.14
2	C	512	VAL	C-N-CA	-5.26	116.25	123.14
2	C	703	LEU	O-C-N	5.26	127.69	122.12
4	E	158	SER	O-C-N	5.26	127.69	122.12
4	E	435	GLY	CA-C-O	5.26	126.17	120.75
4	E	535	LEU	N-CA-C	5.26	116.82	111.14
2	C	404	ASN	O-C-N	-5.25	117.73	121.83
6	G	487	PRO	CA-C-N	5.25	129.64	120.86
6	G	487	PRO	C-N-CA	5.25	129.64	120.86
6	G	35	VAL	CA-C-N	5.25	127.75	120.29
6	G	35	VAL	C-N-CA	5.25	127.75	120.29
3	D	425	LYS	CA-C-N	5.25	126.41	119.84
3	D	425	LYS	C-N-CA	5.25	126.41	119.84
6	G	230	LEU	CA-C-N	5.25	130.01	122.45
6	G	230	LEU	C-N-CA	5.25	130.01	122.45
3	D	208	ASP	N-CA-C	-5.25	107.05	112.93
3	D	428	PHE	N-CA-C	-5.25	101.72	109.86
2	C	699	ASN	O-C-N	5.24	129.56	122.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	530	VAL	N-CA-C	-5.24	99.61	107.37
4	E	219	THR	N-CA-C	5.24	116.99	111.28
2	C	548	HIS	CA-C-O	5.24	127.24	121.11
3	D	595	GLN	N-CA-C	5.24	117.07	111.36
3	D	177	PRO	N-CA-C	-5.24	101.68	112.47
4	E	231	MET	O-C-N	5.23	127.67	122.12
4	E	286	ALA	O-C-N	-5.23	115.30	121.32
2	C	396	ILE	CA-C-O	-5.23	114.41	118.85
4	E	392	ARG	N-CA-C	-5.23	105.61	112.41
6	G	413	ASN	N-CA-C	-5.23	102.78	110.52
7	H	89	VAL	N-CA-C	5.23	116.00	110.72
3	D	552	VAL	N-CA-C	-5.23	100.80	108.85
4	E	179	ASN	CA-C-N	5.23	127.71	120.29
4	E	179	ASN	C-N-CA	5.23	127.71	120.29
2	C	72	ASP	CA-C-N	5.23	131.52	121.54
2	C	72	ASP	C-N-CA	5.23	131.52	121.54
6	G	133	LEU	CA-C-N	5.23	127.26	120.26
6	G	133	LEU	C-N-CA	5.23	127.26	120.26
7	H	47	THR	CA-C-O	-5.22	114.20	120.10
3	D	356	GLN	O-C-N	5.22	128.10	122.15
2	C	664	ALA	CA-C-N	5.22	127.28	120.28
2	C	664	ALA	C-N-CA	5.22	127.28	120.28
3	D	669	LYS	CA-C-O	5.22	126.30	120.82
2	C	601	LEU	N-CA-C	-5.22	105.67	111.36
3	D	554	ILE	N-CA-C	-5.21	105.31	111.00
4	E	863	GLU	CA-C-O	5.21	125.94	120.42
7	H	112	ALA	O-C-N	-5.21	116.59	122.12
2	C	182	ARG	N-CA-C	-5.21	100.54	109.24
4	E	318	HIS	O-C-N	-5.21	115.33	121.32
4	E	379	VAL	CA-C-O	-5.21	115.33	120.85
6	G	856	ARG	O-C-N	-5.21	116.70	122.07
6	G	48	MET	CA-C-O	-5.21	114.90	120.42
6	G	252	LEU	N-CA-C	-5.21	103.44	110.68
6	G	512	GLN	O-C-N	5.21	127.64	122.12
2	C	679	GLU	CA-C-N	5.20	127.59	120.46
2	C	679	GLU	C-N-CA	5.20	127.59	120.46
6	G	967	SER	CA-C-N	5.20	131.06	121.70
6	G	967	SER	C-N-CA	5.20	131.06	121.70
5	F	79	VAL	N-CA-C	-5.20	100.71	108.46
2	C	751	ASN	O-C-N	-5.20	115.88	122.27
2	C	537	GLU	CA-C-N	5.20	131.46	121.54
2	C	537	GLU	C-N-CA	5.20	131.46	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	302	ASN	N-CA-C	-5.19	106.63	113.17
5	F	27	PHE	N-CA-C	5.19	117.63	108.75
2	C	796	GLN	CA-C-O	-5.19	113.95	120.23
2	C	9	SER	O-C-N	5.19	127.60	122.10
3	D	643	HIS	N-CA-C	-5.19	105.71	111.36
4	E	471	LYS	O-C-N	-5.19	116.62	122.12
6	G	154	ASN	N-CA-C	-5.19	105.62	111.28
7	H	62	GLU	N-CA-C	5.19	116.85	108.08
3	D	357	THR	N-CA-C	-5.19	100.24	109.06
6	G	371	SER	N-CA-C	-5.18	104.56	111.87
2	C	233	ARG	N-CA-C	-5.18	100.28	108.73
6	G	384	VAL	CA-C-O	-5.18	115.68	121.17
6	G	837	ILE	N-CA-C	5.18	120.11	109.34
4	E	661	PHE	N-CA-C	-5.17	100.74	109.07
6	G	344	ALA	N-CA-C	-5.17	105.53	111.07
1	B	130	LEU	CA-C-N	5.17	124.62	119.24
1	B	130	LEU	C-N-CA	5.17	124.62	119.24
4	E	743	ASP	CA-C-N	5.17	127.63	120.29
4	E	743	ASP	C-N-CA	5.17	127.63	120.29
4	E	457	HIS	CA-C-O	-5.17	115.39	120.82
6	G	525	SER	N-CA-C	-5.17	99.91	108.75
2	C	382	ARG	CA-C-N	5.17	131.41	121.54
2	C	382	ARG	C-N-CA	5.17	131.41	121.54
3	D	203	ILE	CA-C-O	-5.17	115.29	121.28
2	C	404	ASN	N-CA-C	-5.16	101.45	108.11
3	D	3	LEU	O-C-N	-5.16	117.60	123.48
3	D	639	THR	N-CA-C	-5.16	105.73	111.36
6	G	41	ALA	CA-C-N	5.16	127.20	120.28
6	G	41	ALA	C-N-CA	5.16	127.20	120.28
2	C	112	SER	CA-C-O	5.16	127.56	121.58
4	E	802	GLY	CA-C-O	-5.16	115.44	120.75
2	C	21	ARG	CA-C-O	-5.16	115.73	120.94
5	F	71	SER	CA-C-N	5.16	131.39	121.54
5	F	71	SER	C-N-CA	5.16	131.39	121.54
6	G	106	ARG	CA-C-N	5.16	127.19	120.28
6	G	106	ARG	C-N-CA	5.16	127.19	120.28
6	G	199	HIS	CA-C-O	-5.16	115.22	120.99
7	H	118	ALA	CA-C-O	-5.16	114.78	120.30
3	D	580	LEU	CA-C-N	5.15	132.80	123.27
3	D	580	LEU	C-N-CA	5.15	132.80	123.27
6	G	492	GLU	N-CA-C	5.15	116.98	111.36
6	G	950	GLY	N-CA-C	-5.15	100.97	113.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	441	LYS	CA-C-N	5.15	131.38	121.54
2	C	441	LYS	C-N-CA	5.15	131.38	121.54
6	G	95	LEU	CA-C-N	5.15	130.61	121.80
6	G	95	LEU	C-N-CA	5.15	130.61	121.80
7	H	20	GLN	N-CA-C	-5.15	98.87	107.99
3	D	116	THR	N-CA-C	-5.15	101.37	109.50
6	G	919	ASP	N-CA-C	-5.15	101.88	109.86
2	C	344	LEU	CA-C-O	5.14	127.87	120.51
6	G	128	LYS	N-CA-C	-5.14	106.59	112.92
1	A	130	LEU	CA-C-N	5.14	124.59	119.24
1	A	130	LEU	C-N-CA	5.14	124.59	119.24
2	C	242	VAL	CA-C-N	5.14	130.64	122.62
2	C	242	VAL	C-N-CA	5.14	130.64	122.62
6	G	951	MET	N-CA-C	-5.14	106.41	113.30
7	H	57	VAL	CA-C-N	-5.14	113.56	122.10
7	H	57	VAL	C-N-CA	-5.14	113.56	122.10
3	D	330	MET	N-CA-C	-5.14	100.93	108.79
6	G	323	MET	CA-C-N	5.14	127.68	120.28
6	G	323	MET	C-N-CA	5.14	127.68	120.28
4	E	256	GLU	N-CA-C	-5.14	99.86	110.80
6	G	244	ARG	CA-C-N	5.14	127.16	120.28
6	G	244	ARG	C-N-CA	5.14	127.16	120.28
3	D	637	VAL	CA-C-N	5.13	128.62	121.02
3	D	637	VAL	C-N-CA	5.13	128.62	121.02
4	E	81	ASP	N-CA-C	-5.13	100.49	109.48
3	D	217	GLN	CA-C-O	5.13	125.99	120.55
3	D	173	GLY	CA-C-O	5.13	125.94	120.30
6	G	576	LYS	CA-C-N	5.13	131.33	121.54
6	G	576	LYS	C-N-CA	5.13	131.33	121.54
3	D	611	PRO	O-C-N	5.12	129.10	122.24
3	D	695	ASP	O-C-N	-5.12	116.72	122.86
5	F	93	VAL	CA-C-N	5.12	127.13	120.28
5	F	93	VAL	C-N-CA	5.12	127.13	120.28
3	D	522	GLU	CA-C-N	5.11	127.46	120.35
3	D	522	GLU	C-N-CA	5.11	127.46	120.35
6	G	20	PRO	O-C-N	-5.11	115.43	121.46
3	D	283	SER	N-CA-C	5.11	121.68	110.80
3	D	539	SER	CA-C-N	5.11	130.31	122.69
3	D	539	SER	C-N-CA	5.11	130.31	122.69
3	D	777	LEU	N-CA-C	5.11	116.85	111.28
6	G	393	ARG	N-CA-C	5.11	116.66	111.14
4	E	758	VAL	O-C-N	-5.11	117.66	123.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	416	ALA	CA-C-N	5.11	127.13	120.28
6	G	416	ALA	C-N-CA	5.11	127.13	120.28
4	E	772	PHE	CA-C-N	5.11	127.12	120.28
4	E	772	PHE	C-N-CA	5.11	127.12	120.28
6	G	833	VAL	N-CA-C	-5.11	101.02	108.17
3	D	335	ILE	CA-C-N	5.10	131.29	121.54
3	D	335	ILE	C-N-CA	5.10	131.29	121.54
4	E	819	VAL	CA-C-N	5.10	125.26	119.90
4	E	819	VAL	C-N-CA	5.10	125.26	119.90
6	G	939	THR	N-CA-C	-5.10	99.94	110.80
3	D	358	ILE	N-CA-C	-5.10	100.73	108.17
4	E	68	GLU	N-CA-C	5.10	116.84	111.28
6	G	144	LEU	CA-C-O	5.10	125.81	119.79
3	D	598	VAL	CA-C-N	5.09	127.11	120.28
3	D	598	VAL	C-N-CA	5.09	127.11	120.28
3	D	731	SER	N-CA-C	5.09	116.83	111.28
6	G	263	GLU	N-CA-C	-5.09	106.66	112.92
2	C	758	ALA	CA-C-N	5.09	127.36	120.44
2	C	758	ALA	C-N-CA	5.09	127.36	120.44
6	G	759	LEU	N-CA-C	-5.09	100.16	108.76
3	D	228	HIS	CA-C-N	5.08	131.09	122.65
3	D	228	HIS	C-N-CA	5.08	131.09	122.65
2	C	85	CYS	O-C-N	5.08	129.02	122.93
6	G	296	ASN	O-C-N	5.08	128.33	121.83
4	E	42	ARG	N-CA-C	5.07	116.50	111.07
5	F	86	ASN	CA-C-N	5.07	127.08	120.28
5	F	86	ASN	C-N-CA	5.07	127.08	120.28
4	E	134	SER	CA-C-N	5.07	127.03	120.44
4	E	134	SER	C-N-CA	5.07	127.03	120.44
6	G	70	GLN	N-CA-C	-5.07	106.87	113.16
2	C	246	ARG	N-CA-C	-5.07	100.78	109.24
2	C	640	HIS	O-C-N	-5.06	116.85	122.07
2	C	771	ALA	CA-C-O	5.06	125.92	120.55
2	C	376	ALA	CA-C-N	5.06	129.97	122.94
2	C	376	ALA	C-N-CA	5.06	129.97	122.94
2	C	700	PHE	CA-C-N	5.06	127.06	120.28
2	C	700	PHE	C-N-CA	5.06	127.06	120.28
2	C	715	LYS	CA-C-N	5.06	127.06	120.28
2	C	715	LYS	C-N-CA	5.06	127.06	120.28
4	E	490	GLY	CA-C-N	5.06	127.47	120.29
4	E	490	GLY	C-N-CA	5.06	127.47	120.29
3	D	247	GLY	N-CA-C	-5.06	103.16	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	146	MET	CA-C-O	-5.05	115.06	120.42
3	D	756	PHE	CA-C-N	5.05	127.05	120.28
3	D	756	PHE	C-N-CA	5.05	127.05	120.28
2	C	136	HIS	N-CA-C	-5.05	100.83	108.46
6	G	903	CYS	O-C-N	-5.05	117.03	123.24
2	C	388	ASN	O-C-N	5.04	129.13	123.48
6	G	294	ASP	CA-C-O	-5.04	115.20	120.55
3	D	322	VAL	CA-C-O	-5.04	116.00	121.19
3	D	570	ASP	CA-C-N	5.04	131.16	121.54
3	D	570	ASP	C-N-CA	5.04	131.16	121.54
4	E	454	ARG	CA-C-O	-5.04	115.51	120.70
3	D	28	PRO	N-CA-C	-5.04	108.93	114.92
3	D	220	THR	N-CA-C	-5.04	103.01	110.46
2	C	256	VAL	O-C-N	-5.03	117.33	123.02
3	D	480	ALA	CA-C-O	5.03	125.92	120.43
6	G	432	ASP	CA-C-N	5.03	129.56	122.46
6	G	432	ASP	C-N-CA	5.03	129.56	122.46
6	G	759	LEU	CA-C-N	-5.03	116.55	123.14
6	G	759	LEU	C-N-CA	-5.03	116.55	123.14
2	C	803	PRO	N-CA-C	-5.03	102.11	112.47
6	G	194	PHE	N-CA-C	-5.03	100.09	110.80
2	C	109	LEU	N-CA-C	-5.03	101.50	109.59
2	C	389	SER	O-C-N	-5.03	119.34	123.11
4	E	771	ASN	N-CA-C	-5.03	99.92	108.26
6	G	858	MET	CA-C-N	5.03	126.97	120.44
6	G	858	MET	C-N-CA	5.03	126.97	120.44
7	H	3	LEU	CA-C-N	5.03	127.32	120.54
7	H	3	LEU	C-N-CA	5.03	127.32	120.54
4	E	146	GLN	CA-C-O	-5.02	115.53	120.70
2	C	568	ILE	CA-C-N	5.02	130.87	122.73
2	C	568	ILE	C-N-CA	5.02	130.87	122.73
3	D	650	GLN	CA-C-N	5.02	127.51	120.28
3	D	650	GLN	C-N-CA	5.02	127.51	120.28
3	D	780	VAL	CA-C-N	5.02	131.13	121.54
3	D	780	VAL	C-N-CA	5.02	131.13	121.54
5	F	56	ASP	O-C-N	-5.02	117.36	123.13
6	G	431	PHE	N-CA-C	5.02	116.77	107.73
4	E	316	MET	CA-C-O	5.02	126.75	121.33
3	D	246	THR	CA-C-N	5.01	126.22	121.46
3	D	246	THR	C-N-CA	5.01	126.22	121.46
4	E	78	GLN	O-C-N	5.01	127.44	122.12
6	G	564	ILE	N-CA-C	-5.01	105.82	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	746	VAL	CA-C-O	-5.01	115.86	121.17
6	G	829	ARG	N-CA-C	-5.01	99.77	109.24
4	E	483	GLU	CA-C-N	5.01	131.11	121.54
4	E	483	GLU	C-N-CA	5.01	131.11	121.54
2	C	576	ASN	CA-C-O	-5.01	115.11	120.42
7	H	93	TYR	CA-C-O	-5.01	115.54	120.70
2	C	677	LEU	O-C-N	5.00	127.86	122.15
4	E	668	THR	O-C-N	5.00	128.41	122.26
6	G	176	LEU	CA-C-O	5.00	126.56	120.31
2	C	552	ALA	N-CA-C	-5.00	105.72	111.07
2	C	664	ALA	O-C-N	5.00	127.85	122.15
3	D	277	VAL	N-CA-C	-5.00	100.60	108.90
3	D	738	LEU	N-CA-C	-5.00	106.49	112.59
4	E	127	ALA	O-C-N	-5.00	116.92	122.07

There are no chirality outliers.

All (25) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	C	317	PHE	Mainchain
2	C	380	CYS	Mainchain
2	C	559	GLY	Mainchain
2	C	63	GLN	Peptide
3	D	119	ASP	Mainchain
3	D	44	HIS	Mainchain
4	E	309	ARG	Peptide
4	E	323	THR	Peptide
4	E	442	PHE	Peptide
4	E	447	GLU	Peptide
5	F	59	ILE	Mainchain
6	G	235	CYS	Peptide
6	G	254	GLN	Peptide
6	G	274	ALA	Peptide
6	G	309	LYS	Peptide
6	G	311	HIS	Peptide
6	G	329	LEU	Peptide
6	G	331	THR	Peptide
6	G	348	VAL	Peptide
6	G	471	ASP	Peptide
6	G	499	GLU	Mainchain
6	G	581	PHE	Peptide
6	G	65	PHE	Mainchain

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Mol	Chain	Res	Type	Group
6	G	897	LYS	Peptide
6	G	91	ASP	Mainchain

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	636	0	181	1	0
1	B	636	0	181	1	0
2	C	3251	0	869	0	0
3	D	3211	0	880	2	0
4	E	3294	0	852	1	0
5	F	555	0	148	0	0
6	G	3250	0	833	0	0
7	H	539	0	142	0	0
All	All	15372	0	4086	5	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 0.

All (5) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:249:SER:C	4:E:251:LEU:H	2.23	0.46
1:B:175:ASN:O	1:B:176:SER:C	2.60	0.44
1:A:175:ASN:O	1:A:176:SER:C	2.60	0.44
3:D:162:SER:C	3:D:164:ASP:H	2.27	0.43
3:D:76:ALA:C	3:D:78:ASP:H	2.28	0.41

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	157/181 (87%)	153 (98%)	4 (2%)	0	100	100
1	B	157/181 (87%)	153 (98%)	4 (2%)	0	100	100
2	C	811/1262 (64%)	671 (83%)	97 (12%)	43 (5%)	1	15
3	D	801/905 (88%)	700 (87%)	64 (8%)	37 (5%)	2	17
4	E	820/874 (94%)	749 (91%)	40 (5%)	31 (4%)	2	19
5	F	137/177 (77%)	128 (93%)	7 (5%)	2 (2%)	8	40
6	G	809/968 (84%)	658 (81%)	84 (10%)	67 (8%)	0	9
7	H	133/511 (26%)	116 (87%)	16 (12%)	1 (1%)	16	54
All	All	3825/5059 (76%)	3328 (87%)	316 (8%)	181 (5%)	3	16

All (181) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	C	11	ARG
2	C	227	ARG
2	C	526	GLU
2	C	572	ARG
2	C	686	ASN
3	D	6	ASP
3	D	284	ASN
3	D	329	ALA
3	D	336	LYS
3	D	350	SER
3	D	484	SER
3	D	513	ALA
3	D	615	LYS
3	D	791	PRO
3	D	795	GLU
4	E	117	GLU
4	E	280	CYS

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Mol	Chain	Res	Type
4	E	309	ARG
4	E	323	THR
4	E	324	ALA
4	E	391	PRO
4	E	393	LYS
4	E	413	TYR
4	E	448	PHE
4	E	549	ASN
5	F	36	PRO
6	G	55	LEU
6	G	69	LEU
6	G	85	VAL
6	G	90	PRO
6	G	173	ALA
6	G	181	LEU
6	G	197	LEU
6	G	237	ALA
6	G	253	LEU
6	G	275	PRO
6	G	331	THR
6	G	499	GLU
6	G	506	ILE
6	G	508	VAL
6	G	523	THR
6	G	543	ARG
6	G	770	ASN
6	G	785	GLU
6	G	792	LEU
6	G	814	ILE
6	G	826	ALA
6	G	939	THR
6	G	959	ILE
2	C	137	TYR
2	C	226	ASP
2	C	425	ARG
2	C	441	LYS
2	C	498	ALA
2	C	538	SER
2	C	546	SER
2	C	621	VAL
2	C	630	GLN
2	C	642	VAL

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Mol	Chain	Res	Type
3	D	17	ARG
3	D	59	PRO
3	D	273	ARG
3	D	410	SER
3	D	426	PRO
3	D	630	PHE
3	D	739	ASP
4	E	263	HIS
4	E	310	THR
4	E	313	LYS
4	E	373	ASP
4	E	442	PHE
4	E	484	HIS
4	E	551	LEU
4	E	739	THR
4	E	741	GLU
6	G	83	GLU
6	G	103	ASP
6	G	174	PRO
6	G	307	GLU
6	G	554	ALA
6	G	558	ALA
6	G	879	ASP
2	C	205	ASP
2	C	337	LYS
2	C	345	ASP
2	C	348	SER
2	C	349	SER
2	C	387	GLU
2	C	469	ALA
2	C	594	PRO
2	C	619	LYS
2	C	624	SER
2	C	627	ALA
2	C	790	PRO
3	D	140	GLY
3	D	260	THR
3	D	272	GLU
3	D	571	ASN
3	D	601	ARG
3	D	662	VAL
3	D	694	GLN

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Mol	Chain	Res	Type
3	D	735	GLN
4	E	256	GLU
4	E	353	SER
4	E	522	ASN
4	E	569	PRO
5	F	55	THR
6	G	18	SER
6	G	22	SER
6	G	194	PHE
6	G	257	SER
6	G	259	ALA
6	G	308	LEU
6	G	318	LEU
6	G	487	PRO
6	G	501	LYS
6	G	528	SER
6	G	817	ASN
6	G	904	GLY
7	H	45	GLN
2	C	133	GLY
2	C	193	THR
2	C	271	LYS
2	C	423	ARG
2	C	452	ASN
2	C	731	GLY
3	D	89	LEU
3	D	318	LYS
3	D	577	ASP
3	D	734	LEU
3	D	740	ALA
3	D	787	SER
3	D	788	LEU
4	E	40	ASN
4	E	251	LEU
4	E	464	PRO
6	G	332	PRO
6	G	446	PHE
6	G	537	GLU
6	G	583	ALA
6	G	876	ASP
6	G	916	PHE
2	C	470	ASP

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Mol	Chain	Res	Type
2	C	698	LYS
2	C	793	LYS
2	C	812	THR
4	E	221	HIS
4	E	311	LEU
4	E	410	GLY
6	G	32	LYS
6	G	99	ILE
6	G	262	TYR
6	G	330	SER
6	G	372	GLU
6	G	794	PRO
6	G	894	THR
6	G	898	ALA
6	G	900	SER
6	G	962	SER
2	C	442	ASN
2	C	781	GLU
3	D	391	ALA
6	G	21	PRO
6	G	102	CYS
6	G	230	LEU
6	G	503	GLU
3	D	790	ASP
6	G	216	VAL
6	G	238	ASN
2	C	780	PRO
2	C	799	ALA
3	D	355	PRO
6	G	540	PRO
3	D	762	LEU
4	E	278	PRO
6	G	531	ARG
4	E	556	PRO
6	G	317	VAL
2	C	247	GLY
2	C	488	ILE
3	D	200	PRO

5.3.2 Protein sidechains ⓘ

There are no protein residues with a non-rotameric sidechain to report in this entry.

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

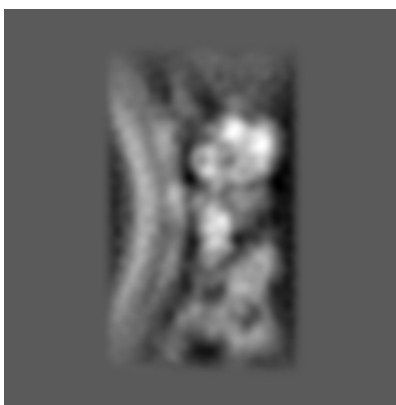
6 Tomogram visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2985. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

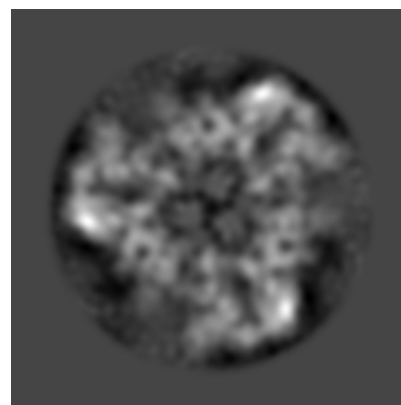
6.1 Orthogonal projections [i](#)



X



Y



Z

The images above show the tomogram projected in three orthogonal directions.

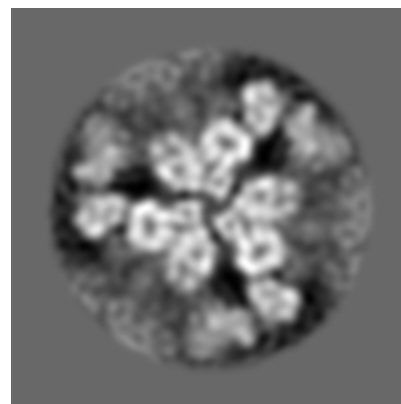
6.2 Central slices [i](#)



X Index: 100



Y Index: 100



Z Index: 100

The images above show central slices of the tomogram in three orthogonal directions.

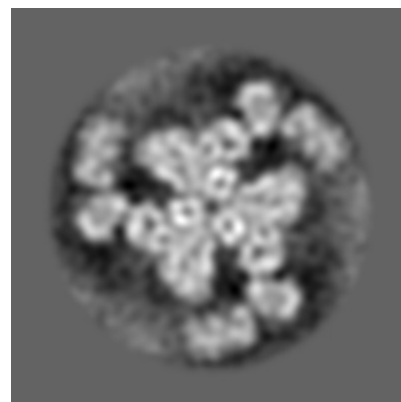
6.3 Largest variance slices [i](#)



X Index: 127



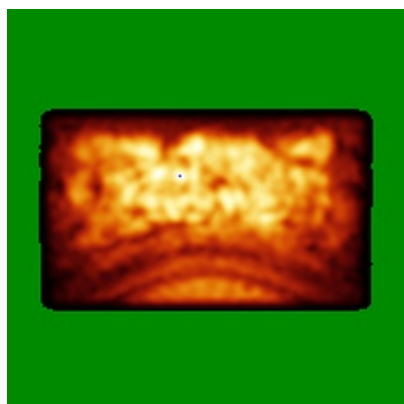
Y Index: 94



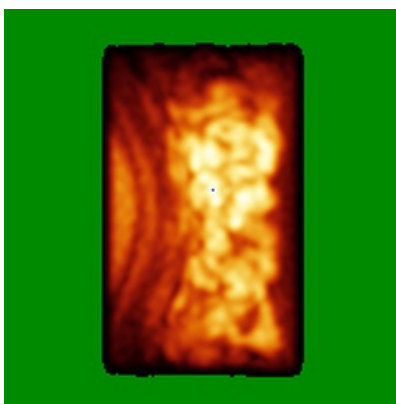
Z Index: 104

The images above show the largest variance slices of the tomogram in three orthogonal directions.

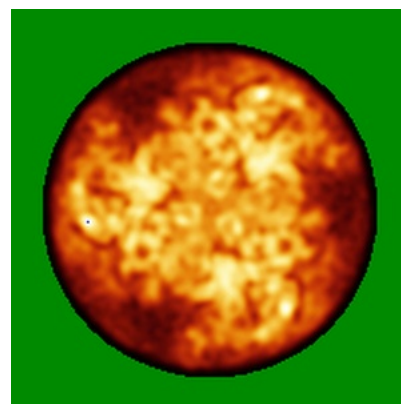
6.4 Orthogonal standard-deviation projections (False-color) [i](#)



X



Y



Z

The images above show the tomogram projected in three orthogonal directions.

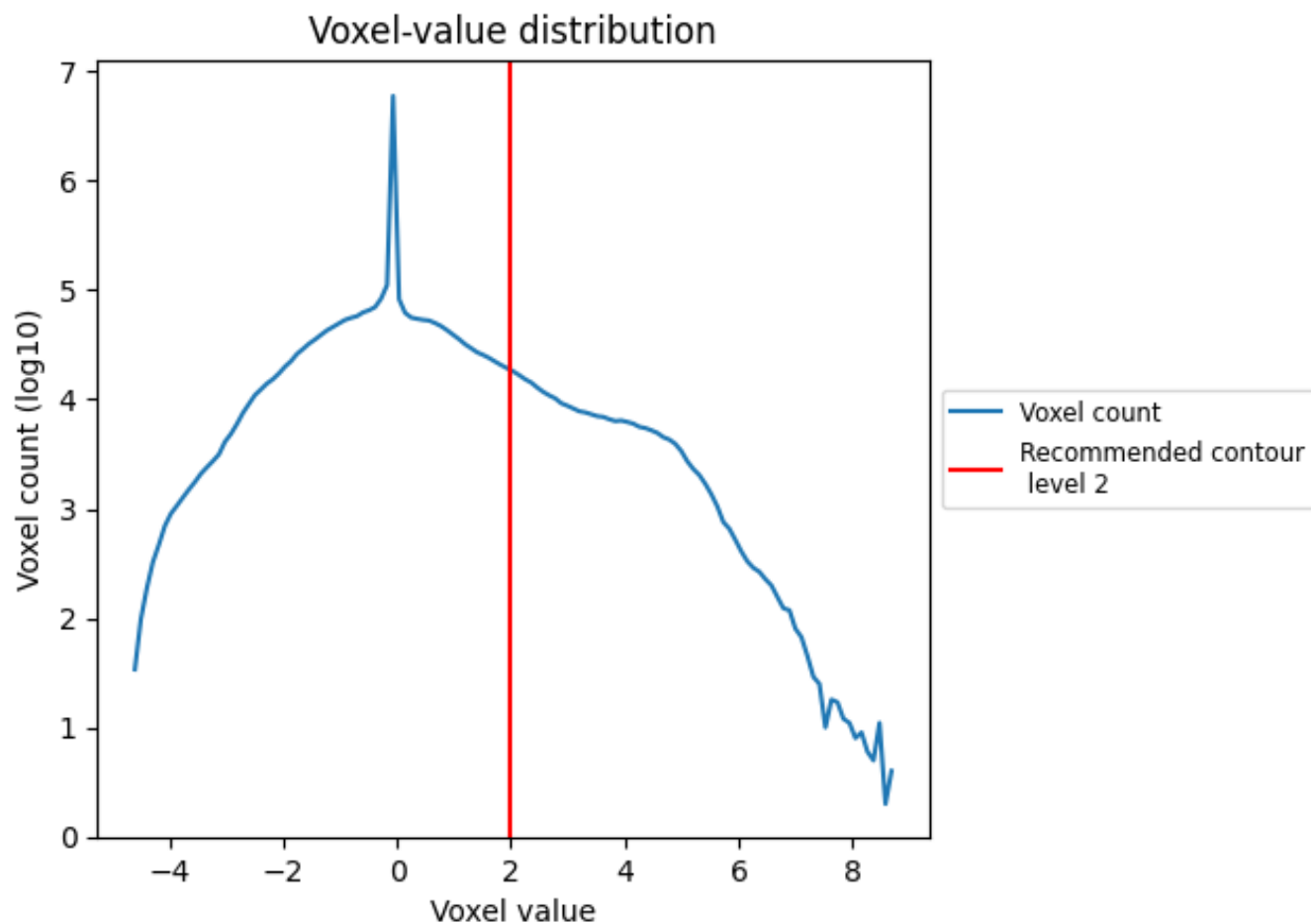
6.5 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Tomogram analysis [i](#)

This section contains the results of statistical analysis of the tomogram.

7.1 Voxel-value distribution [i](#)



The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.

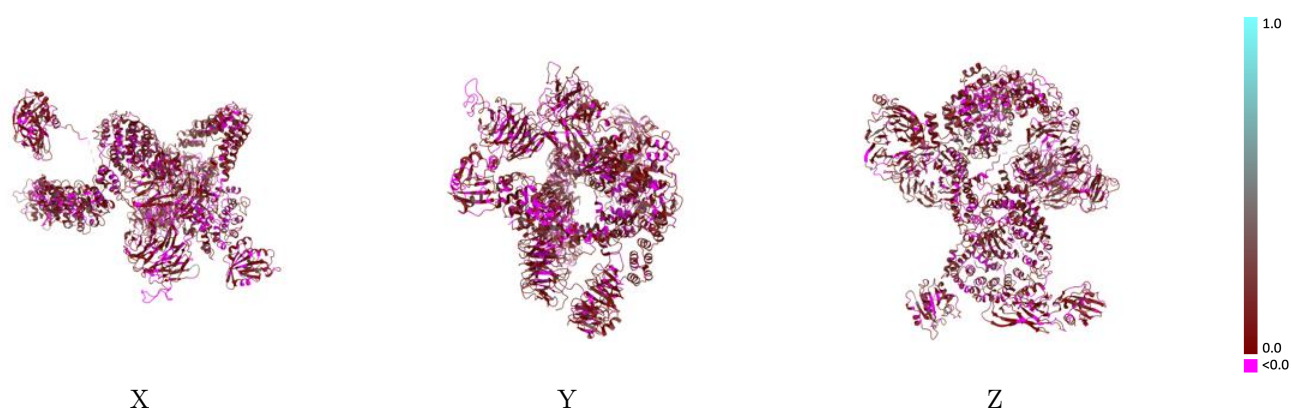
8 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-2985 and PDB model 5A1U. Per-residue inclusion information can be found in section 3 on page 7.

8.1 Map-model overlay [i](#)

This section was not generated.

8.2 Q-score mapped to coordinate model [i](#)

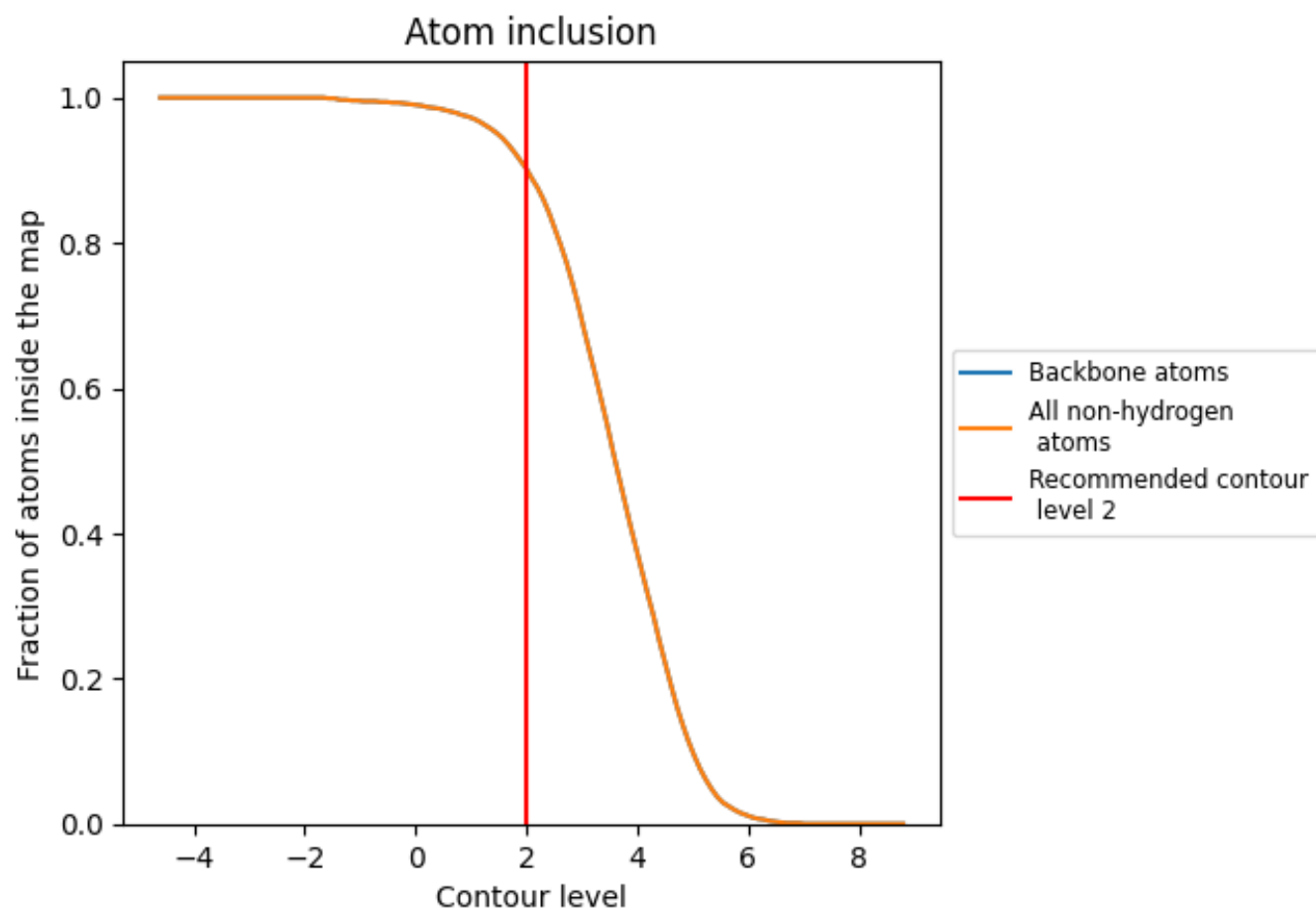


The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

8.3 Atom inclusion mapped to coordinate model [i](#)

This section was not generated.

8.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 90% of all non-hydrogen atoms, are inside the map.

8.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (2) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9020	0.0870
A	0.9640	0.1000
B	0.5520	0.0770
C	0.8190	0.0750
D	0.9760	0.0990
E	0.9190	0.0860
F	0.9240	0.0790
G	0.9330	0.0870
H	0.9890	0.0950

1.0

0.0

<0.0