



Full wwPDB EM Validation Report ⓘ

Mar 5, 2026 – 08:10 PM UTC

PDB ID : 5NZR / pdb_00005nzh
EMDB ID : EMD-3720
Title : The structure of the COPI coat leaf
Authors : Dodonova, S.O.; Aderhold, P.; Kopp, J.; Ganeva, I.; Roehling, S.; Hagen, W.J.H.; Sinning, I.; Wieland, F.; Briggs, J.A.G.
Deposited on : 2017-05-15
Resolution : 9.20 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:

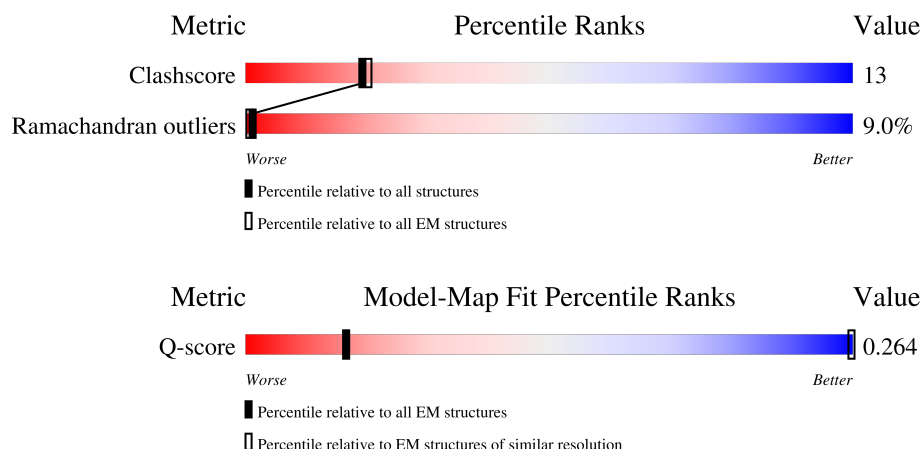
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 9.20 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	239 (8.70 - 9.70)

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	1262	
2	B	968	
3	C	905	
4	D	511	
5	F	181	

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Mol	Chain	Length	Quality of chain
5	M	181	42%37%8%12%
5	R	181	22%51%13%12%
6	G	874	8%39%46%6%9%
6	K	874	7%23%36%5%36%
7	L	177	22%51%5%21%
7	Z	177	8%29%48%21%

2 Entry composition

There are 7 unique types of molecules in this entry. The entry contains 18970 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 Coatomer subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	A	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
A	1225	LEU	-	expression tag	UNP Q8CIE6
A	1226	GLU	-	expression tag	UNP Q8CIE6
A	1227	VAL	-	expression tag	UNP Q8CIE6
A	1228	LEU	-	expression tag	UNP Q8CIE6
A	1229	PHE	-	expression tag	UNP Q8CIE6
A	1230	GLN	-	expression tag	UNP Q8CIE6
A	1231	GLY	-	expression tag	UNP Q8CIE6
A	1232	PRO	-	expression tag	UNP Q8CIE6
A	1233	SER	-	expression tag	UNP Q8CIE6
A	1234	ALA	-	expression tag	UNP Q8CIE6
A	1235	TRP	-	expression tag	UNP Q8CIE6
A	1236	SER	-	expression tag	UNP Q8CIE6
A	1237	HIS	-	expression tag	UNP Q8CIE6
A	1238	PRO	-	expression tag	UNP Q8CIE6
A	1239	GLN	-	expression tag	UNP Q8CIE6
A	1240	PHE	-	expression tag	UNP Q8CIE6
A	1241	GLU	-	expression tag	UNP Q8CIE6
A	1242	LYS	-	expression tag	UNP Q8CIE6
A	1243	GLY	-	expression tag	UNP Q8CIE6
A	1244	GLY	-	expression tag	UNP Q8CIE6
A	1245	GLY	-	expression tag	UNP Q8CIE6
A	1246	SER	-	expression tag	UNP Q8CIE6
A	1247	GLY	-	expression tag	UNP Q8CIE6
A	1248	GLY	-	expression tag	UNP Q8CIE6
A	1249	GLY	-	expression tag	UNP Q8CIE6
A	1250	SER	-	expression tag	UNP Q8CIE6
A	1251	GLY	-	expression tag	UNP Q8CIE6
A	1252	GLY	-	expression tag	UNP Q8CIE6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	1253	SER	-	expression tag	UNP Q8CIE6
A	1254	ALA	-	expression tag	UNP Q8CIE6
A	1255	TRP	-	expression tag	UNP Q8CIE6
A	1256	SER	-	expression tag	UNP Q8CIE6
A	1257	HIS	-	expression tag	UNP Q8CIE6
A	1258	PRO	-	expression tag	UNP Q8CIE6
A	1259	GLN	-	expression tag	UNP Q8CIE6
A	1260	PHE	-	expression tag	UNP Q8CIE6
A	1261	GLU	-	expression tag	UNP Q8CIE6
A	1262	LYS	-	expression tag	UNP Q8CIE6

- Molecule 2 is a protein called Coatomer subunit beta.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	B	800	Total	C	N	O	0	0
			3198	1600	800	798		

There are 15 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	1	MET	-	initiating methionine	UNP Q9JIF7
B	2	HIS	-	expression tag	UNP Q9JIF7
B	3	HIS	-	expression tag	UNP Q9JIF7
B	4	HIS	-	expression tag	UNP Q9JIF7
B	5	HIS	-	expression tag	UNP Q9JIF7
B	6	HIS	-	expression tag	UNP Q9JIF7
B	7	HIS	-	expression tag	UNP Q9JIF7
B	8	GLU	-	expression tag	UNP Q9JIF7
B	9	ASN	-	expression tag	UNP Q9JIF7
B	10	LEU	-	expression tag	UNP Q9JIF7
B	11	TYR	-	expression tag	UNP Q9JIF7
B	12	PHE	-	expression tag	UNP Q9JIF7
B	13	GLN	-	expression tag	UNP Q9JIF7
B	14	GLY	-	expression tag	UNP Q9JIF7
B	15	HIS	-	expression tag	UNP Q9JIF7

- Molecule 3 is a protein called Coatomer subunit beta'.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	C	843	Total	C	N	O	0	0
			3371	1686	843	842		

- Molecule 4 is a protein called Coatomer subunit delta.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	D	177	Total	C	N	O	0	0
			706	354	177	175		

- Molecule 5 is a protein called ADP-ribosylation factor 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	F	159	Total	C	N	O	0	0
			635	318	159	158		
5	R	159	Total	C	N	O	0	0
			635	318	159	158		
5	M	159	Total	C	N	O	0	0
			635	318	159	158		

- Molecule 6 is a protein called Coatomer subunit gamma-1.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	G	798	Total	C	N	O	0	0
			3190	1596	798	796		
6	K	560	Total	C	N	O	0	0
			2239	1120	560	559		

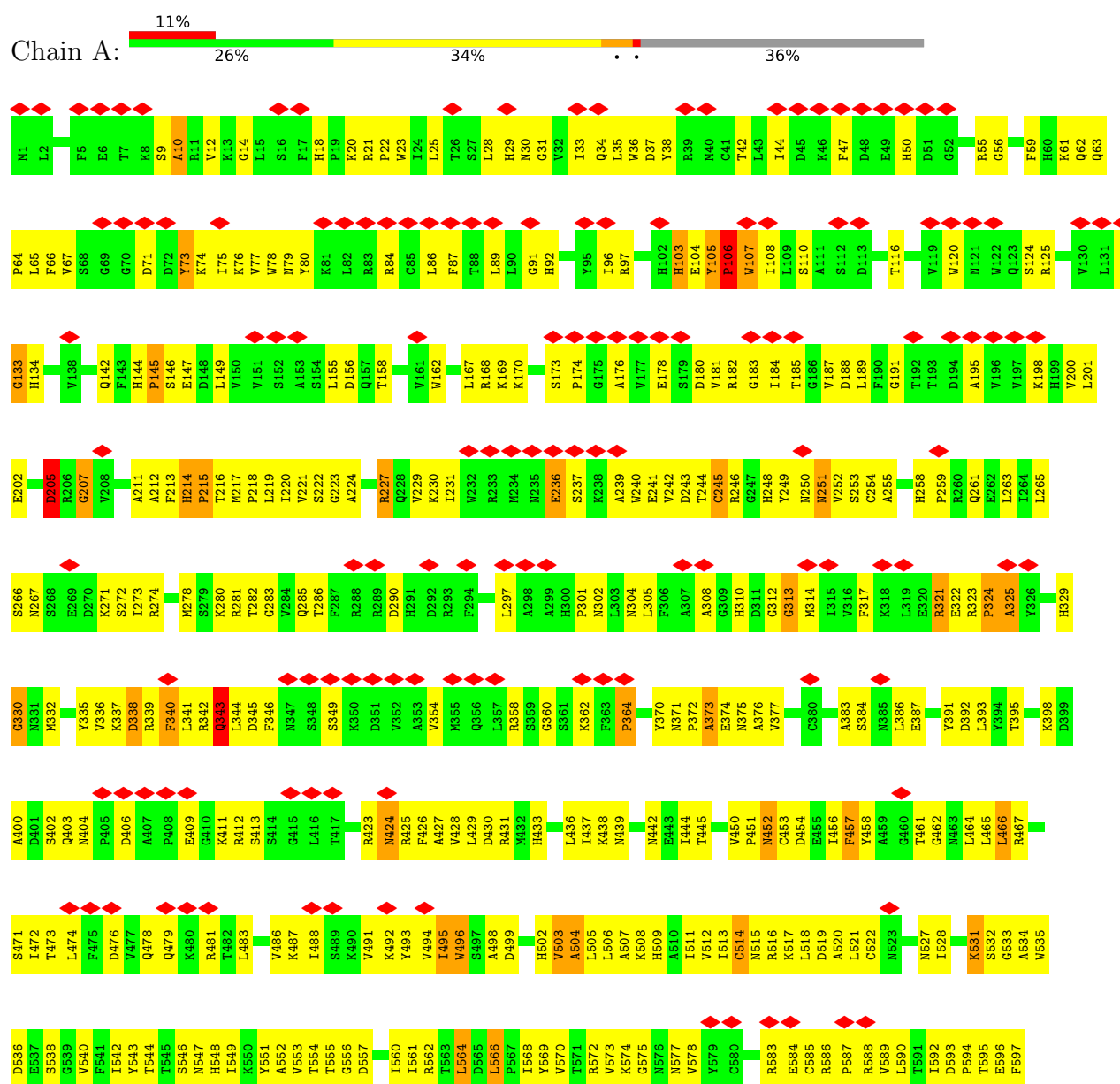
- Molecule 7 is a protein called Coatomer subunit zeta-1.

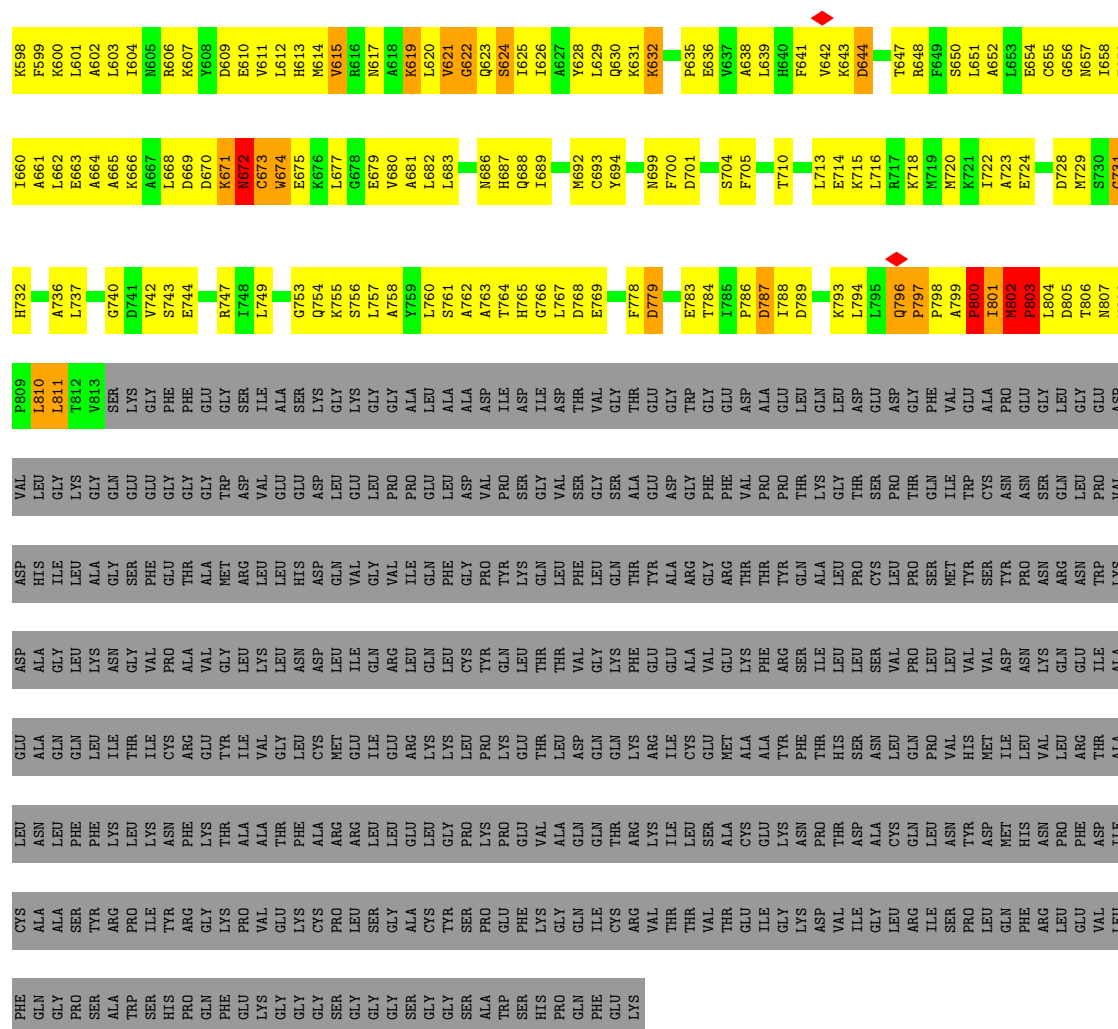
Mol	Chain	Residues	Atoms				AltConf	Trace
7	Z	139	Total	C	N	O	0	0
			555	278	139	138		
7	L	139	Total	C	N	O	0	0
			555	278	139	138		

3 Residue-property plots

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.

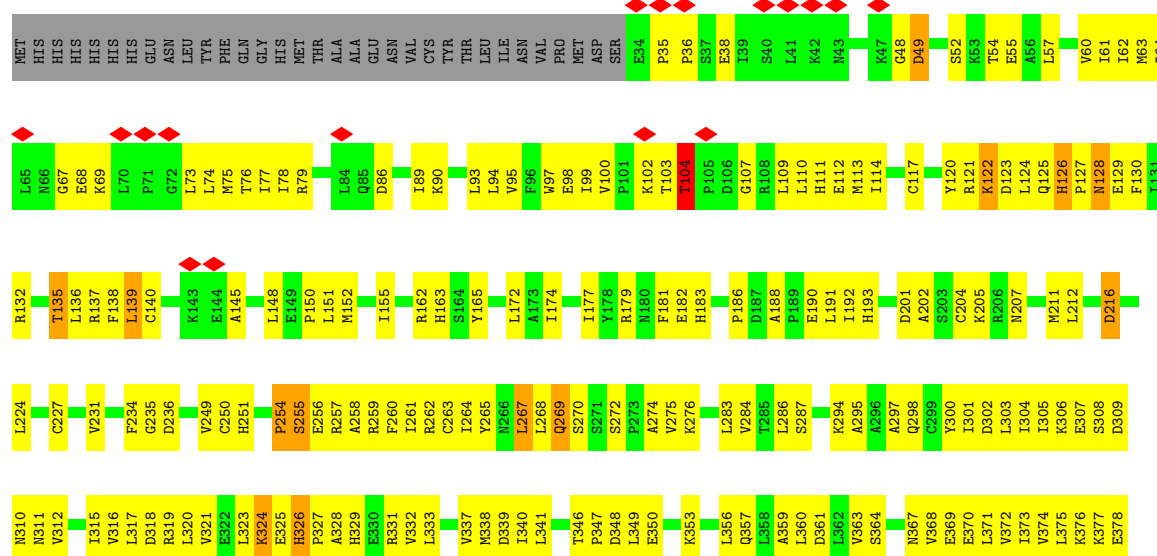
• Molecule 1: Coatomer subunit alpha





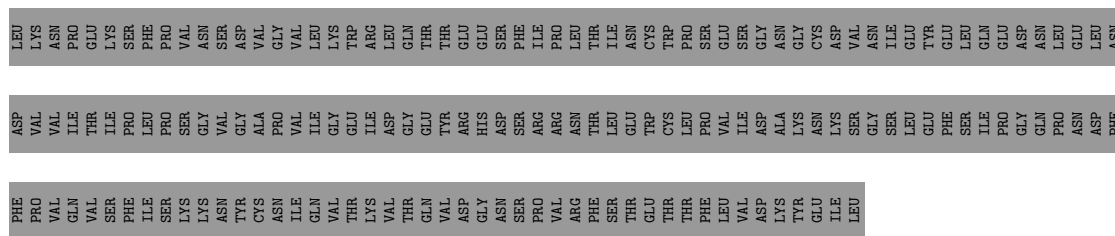
• Molecule 2: Coatomer subunit beta

Chain B: 34% 43% 5% 17%

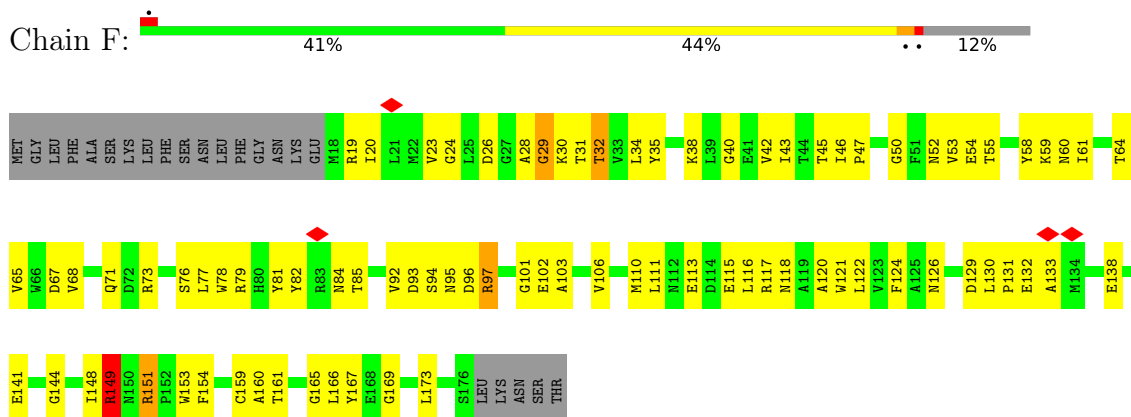








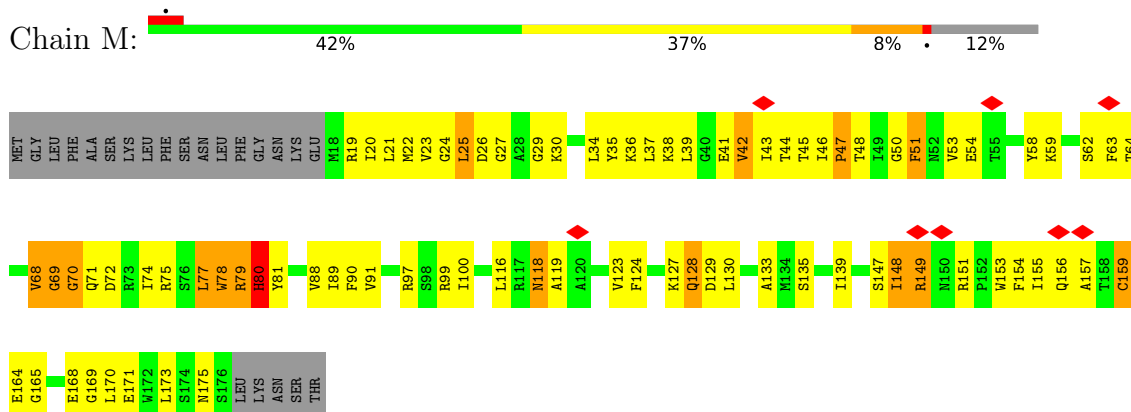
- Molecule 5: ADP-ribosylation factor 1



- Molecule 5: ADP-ribosylation factor 1



- Molecule 5: ADP-ribosylation factor 1

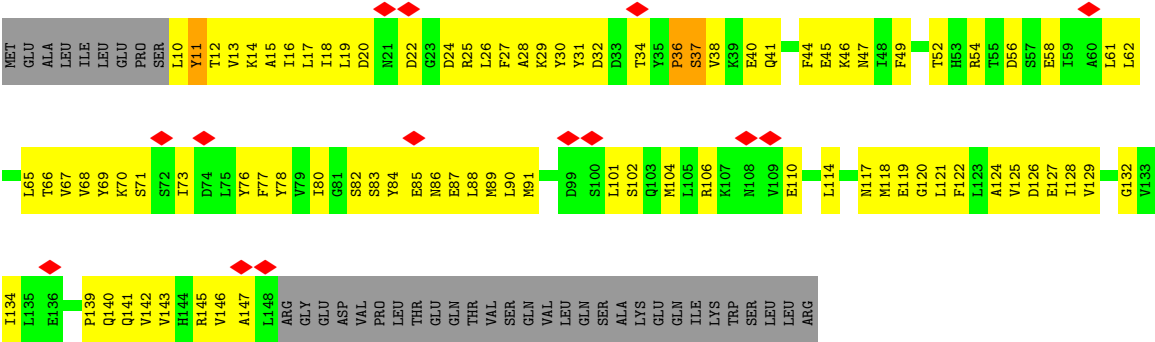


[illegible]

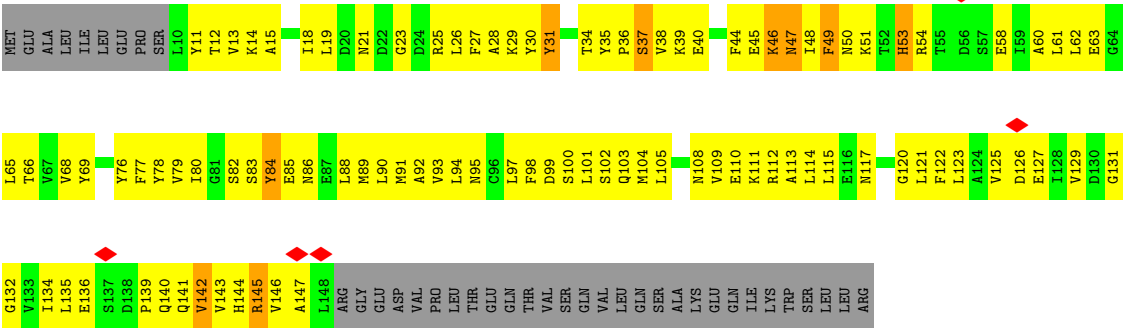
- Molecule 6: Coatomer subunit gamma-1

- Molecule 7: Coatomer subunit zeta-1





● Molecule 7: Coatomer subunit zeta-1



4 Experimental information

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of subtomograms used	38498	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY; CTF-determination for each individual tilt image was performed using CTFFIND4. Strip-based CTF-correction and tomogram reconstruction was performed in Imod.	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	2	Depositor
Minimum defocus (nm)	2500	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	Not provided	
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	0.555	Depositor
Minimum map value	-0.408	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.060	Depositor
Recommended contour level	0.12	Depositor
Map size ($\text{\AA}$)	227.84, 227.84, 227.84	wwPDB
Map dimensions	128, 128, 128	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.78, 1.78, 1.78	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	2.75	265/3250 (8.2%)	3.10	407/4061 (10.0%)
2	B	3.09	371/3193 (11.6%)	2.84	293/3983 (7.4%)
3	C	3.11	363/3370 (10.8%)	2.84	375/4211 (8.9%)
4	D	3.04	76/704 (10.8%)	2.97	74/877 (8.4%)
5	F	2.69	40/634 (6.3%)	3.03	72/791 (9.1%)
5	M	2.74	49/634 (7.7%)	2.80	58/791 (7.3%)
5	R	3.27	89/634 (14.0%)	3.00	73/791 (9.2%)
6	G	2.93	310/3188 (9.7%)	2.98	351/3982 (8.8%)
6	K	3.08	249/2237 (11.1%)	3.04	270/2793 (9.7%)
7	L	3.65	106/554 (19.1%)	2.95	64/691 (9.3%)
7	Z	3.34	85/554 (15.3%)	2.79	59/691 (8.5%)
All	All	3.02	2003/18952 (10.6%)	2.95	2096/23662 (8.9%)

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	B	0	3

All (2003) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	215	ILE	CA-C	-13.79	1.35	1.52
1	A	595	THR	CA-C	-13.66	1.43	1.52
3	C	572	ARG	CA-C	-13.55	1.35	1.52
5	R	35	TYR	CA-C	-13.51	1.33	1.52
3	C	416	LYS	CA-C	-13.07	1.37	1.52
3	C	378	TYR	CA-C	-13.03	1.37	1.52
3	C	384	ARG	CA-C	-12.80	1.37	1.52
6	K	211	VAL	CA-C	-12.79	1.36	1.52
4	D	55	ARG	CA-C	-12.73	1.36	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	839	ASP	CA-C	-12.47	1.36	1.52
6	K	839	ASP	CA-C	-12.42	1.36	1.52
3	C	377	ILE	CA-C	-12.30	1.38	1.52
6	K	214	MET	CA-C	-12.30	1.36	1.52
2	B	762	ASN	CA-C	-12.14	1.37	1.53
2	B	126	HIS	CA-C	-11.79	1.38	1.52
5	R	109	ARG	CA-C	-11.66	1.36	1.52
3	C	449	PHE	CA-C	-11.65	1.38	1.52
6	K	235	VAL	N-CA	-11.34	1.33	1.46
1	A	679	GLU	CA-C	-11.28	1.38	1.52
7	Z	19	LEU	CA-C	-11.26	1.39	1.52
1	A	594	PRO	CA-C	-11.24	1.39	1.52
3	C	223	GLN	CA-C	-11.23	1.39	1.52
3	C	8	LYS	CA-C	-11.17	1.39	1.52
4	D	56	TYR	CA-C	-11.16	1.39	1.52
6	G	442	PHE	CA-C	-11.15	1.38	1.52
3	C	573	LEU	CA-C	-10.96	1.39	1.52
6	K	165	HIS	CA-C	-10.95	1.38	1.52
2	B	378	GLU	CA-C	-10.95	1.38	1.52
2	B	938	VAL	CA-C	-10.81	1.39	1.52
6	K	771	ASN	CA-C	-10.73	1.42	1.53
5	F	148	ILE	CA-C	-10.72	1.43	1.52
6	G	771	ASN	CA-C	-10.70	1.42	1.53
7	L	49	PHE	CA-C	-10.68	1.39	1.52
2	B	940	GLY	CA-C	-10.66	1.42	1.51
3	C	415	PHE	CA-C	-10.64	1.39	1.52
6	G	112	ASP	CA-C	-10.64	1.39	1.52
1	A	612	LEU	N-CA	-10.61	1.33	1.46
2	B	749	VAL	CA-C	-10.60	1.39	1.52
5	R	105	GLU	CA-C	-10.59	1.39	1.52
1	A	612	LEU	CA-C	-10.58	1.39	1.52
2	B	440	ARG	CA-C	-10.56	1.39	1.52
5	R	96	ASP	CA-C	-10.55	1.39	1.52
4	D	81	GLU	CA-C	-10.55	1.39	1.52
2	B	940	GLY	N-CA	-10.51	1.34	1.45
2	B	783	LEU	CA-C	-10.51	1.39	1.52
2	B	799	ASN	CA-C	-10.43	1.40	1.52
3	C	470	TRP	CA-C	-10.38	1.40	1.52
1	A	242	VAL	CA-C	-10.35	1.44	1.52
3	C	213	ILE	CA-C	-10.29	1.40	1.52
5	R	90	PHE	CA-C	-10.27	1.40	1.52
3	C	367	VAL	CA-C	-10.22	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	314	ILE	CA-C	-10.21	1.39	1.52
7	Z	15	ALA	CA-C	-10.19	1.40	1.52
5	R	110	MET	CA-C	-10.17	1.39	1.52
1	A	243	ASP	CA-C	-10.16	1.40	1.52
6	G	174	VAL	CA-C	-10.16	1.39	1.52
3	C	529	TRP	CA-C	-10.16	1.40	1.52
2	B	300	TYR	CA-C	-10.14	1.40	1.52
3	C	553	THR	CA-C	-10.14	1.40	1.52
3	C	545	TYR	CA-C	-10.12	1.40	1.52
2	B	375	LEU	CA-C	-10.11	1.39	1.52
5	R	107	MET	CA-C	-10.09	1.39	1.52
2	B	317	LEU	CA-C	-10.09	1.39	1.52
2	B	941	HIS	CA-C	-10.09	1.40	1.52
6	G	693	VAL	CA-C	-10.07	1.41	1.52
1	A	600	LYS	CA-C	-10.07	1.38	1.52
7	L	142	VAL	CA-C	-10.06	1.40	1.52
2	B	753	ASP	CA-C	-10.02	1.40	1.52
7	L	65	LEU	CA-C	-10.01	1.40	1.52
6	G	774	ALA	N-CA	-10.01	1.34	1.46
7	Z	61	LEU	CA-C	-9.99	1.41	1.52
7	Z	65	LEU	CA-C	-9.96	1.40	1.52
6	K	774	ALA	N-CA	-9.95	1.34	1.46
6	K	234	ARG	CA-C	-9.92	1.39	1.52
2	B	379	VAL	CA-C	-9.91	1.40	1.52
2	B	349	LEU	CA-C	-9.87	1.40	1.52
3	C	414	ILE	CA-C	-9.84	1.40	1.52
3	C	221	CYS	CA-C	-9.83	1.40	1.52
3	C	201	TYR	CA-C	-9.83	1.40	1.52
6	G	225	SER	CA-C	-9.82	1.41	1.52
3	C	535	ILE	CA-C	-9.81	1.40	1.52
6	K	217	LYS	CA-C	-9.79	1.40	1.52
3	C	571	ASN	CA-C	-9.79	1.40	1.53
1	A	660	ILE	CA-C	-9.79	1.38	1.52
2	B	909	ASN	CA-C	-9.78	1.41	1.52
2	B	792	LEU	CA-C	-9.77	1.41	1.53
6	K	190	ILE	CA-C	-9.77	1.40	1.52
7	L	26	LEU	CA-C	-9.75	1.40	1.52
6	K	200	LEU	CA-C	-9.73	1.40	1.52
7	Z	30	TYR	CA-C	-9.70	1.40	1.52
3	C	244	ILE	CA-C	-9.68	1.40	1.52
6	K	773	GLU	CA-C	-9.67	1.40	1.52
6	G	235	VAL	N-CA	-9.66	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	Z	19	LEU	N-CA	-9.65	1.33	1.45
3	C	521	GLN	CA-C	-9.65	1.40	1.52
3	C	313	LYS	CA-C	-9.62	1.41	1.52
6	G	135	THR	CA-C	-9.62	1.40	1.52
1	A	596	GLU	N-CA	-9.62	1.34	1.46
3	C	283	SER	CA-C	-9.60	1.44	1.53
6	G	773	GLU	CA-C	-9.59	1.40	1.52
1	A	631	LYS	CA-C	-9.55	1.40	1.52
3	C	245	ILE	N-CA	-9.52	1.35	1.46
3	C	262	ARG	CA-C	-9.49	1.41	1.52
4	D	59	GLN	CA-C	-9.48	1.41	1.52
7	L	27	PHE	CA-C	-9.46	1.40	1.52
6	K	210	ALA	CA-C	-9.45	1.40	1.52
2	B	434	ASP	CA-C	-9.41	1.40	1.52
7	L	45	GLU	CA-C	-9.41	1.40	1.52
3	C	574	TYR	CA-C	-9.40	1.41	1.52
6	G	731	THR	CA-C	-9.40	1.41	1.52
6	K	731	THR	CA-C	-9.40	1.41	1.52
5	M	47	PRO	CA-C	-9.38	1.40	1.52
2	B	183	HIS	CA-C	-9.38	1.40	1.52
3	C	151	ASN	CA-C	-9.36	1.42	1.52
6	G	872	SER	CA-C	-9.35	1.40	1.52
5	M	35	TYR	CA-C	-9.35	1.39	1.52
5	R	58	TYR	CA-C	-9.35	1.41	1.52
6	K	872	SER	CA-C	-9.35	1.40	1.52
3	C	661	ALA	CA-C	-9.31	1.41	1.52
4	D	117	VAL	CA-C	-9.31	1.40	1.52
2	B	372	VAL	CA-C	-9.30	1.41	1.52
3	C	361	ASN	CA-C	-9.30	1.40	1.52
6	K	203	VAL	N-CA	-9.29	1.35	1.46
2	B	869	THR	CA-C	-9.29	1.41	1.52
3	C	256	TRP	CA-C	-9.26	1.41	1.52
7	L	89	MET	CA-C	-9.26	1.40	1.52
2	B	374	VAL	CA-C	-9.21	1.40	1.52
1	A	663	GLU	CA-C	-9.21	1.41	1.52
4	D	50	GLU	CA-C	-9.18	1.41	1.52
6	G	70	PHE	CA-C	-9.17	1.41	1.52
1	A	808	TRP	CA-C	-9.17	1.45	1.52
1	A	230	LYS	CA-C	-9.17	1.41	1.52
3	C	602	ASP	CA-C	-9.17	1.42	1.53
5	R	84	ASN	CA-C	-9.16	1.40	1.52
6	K	202	HIS	CA-C	-9.16	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	253	VAL	CA-C	-9.16	1.41	1.52
1	A	14	GLY	CA-C	-9.15	1.44	1.51
3	C	555	ALA	CA-C	-9.14	1.41	1.52
1	A	599	PHE	N-CA	-9.13	1.35	1.46
2	B	849	THR	C-N	9.11	1.44	1.33
6	G	827	THR	CA-C	-9.10	1.41	1.52
6	G	190	ILE	CA-C	-9.09	1.41	1.52
6	K	827	THR	CA-C	-9.09	1.41	1.52
6	K	142	ARG	CA-C	-9.07	1.41	1.52
4	D	52	GLU	CA-C	-9.06	1.41	1.53
2	B	870	VAL	CA-C	-9.04	1.42	1.52
5	M	90	PHE	CA-C	-9.04	1.41	1.52
1	A	74	LYS	CA-C	-9.02	1.40	1.52
2	B	373	ILE	CA-C	-9.02	1.41	1.52
2	B	398	LEU	CA-C	-9.02	1.41	1.52
1	A	519	ASP	CA-C	-9.00	1.42	1.52
6	K	109	LEU	CA-C	-8.99	1.41	1.52
6	K	201	TYR	CA-C	-8.99	1.41	1.52
4	D	54	VAL	CA-C	-8.97	1.41	1.52
6	G	232	MET	CA-C	-8.96	1.40	1.52
2	B	368	VAL	N-CA	-8.96	1.35	1.46
3	C	245	ILE	CA-C	-8.95	1.41	1.52
5	F	54	GLU	CA-C	-8.95	1.41	1.52
6	G	180	GLU	N-CA	-8.95	1.35	1.46
1	A	285	GLN	CA-C	-8.92	1.41	1.52
3	C	567	ILE	N-CA	-8.91	1.39	1.46
7	Z	69	TYR	CA-C	-8.91	1.41	1.52
5	R	112	ASN	CA-C	-8.90	1.40	1.52
2	B	760	VAL	CA-C	-8.88	1.41	1.52
3	C	453	GLU	CA-C	-8.88	1.41	1.52
3	C	459	ARG	CA-C	-8.88	1.41	1.52
6	K	251	LEU	CA-C	-8.87	1.41	1.52
3	C	630	PHE	CA-C	-8.87	1.44	1.53
5	R	33	VAL	N-CA	-8.87	1.36	1.46
6	G	89	TYR	CA-C	-8.85	1.41	1.52
6	K	291	VAL	N-CA	-8.85	1.36	1.46
6	G	90	LEU	CA-C	-8.84	1.41	1.52
1	A	674	TRP	CA-C	-8.84	1.41	1.52
1	A	610	GLU	N-CA	-8.84	1.35	1.46
5	M	38	LYS	CA-C	-8.83	1.41	1.52
1	A	506	LEU	CA-C	-8.80	1.41	1.52
3	C	315	ILE	N-CA	-8.78	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	R	90	PHE	N-CA	-8.78	1.35	1.46
5	R	106	VAL	N-CA	-8.77	1.36	1.46
6	K	722	CYS	CA-C	-8.77	1.42	1.52
7	L	30	TYR	CA-C	-8.75	1.41	1.52
7	L	140	GLN	CA-C	-8.75	1.41	1.52
6	K	204	ARG	CA-C	-8.73	1.40	1.52
1	A	611	VAL	CA-C	-8.73	1.41	1.52
7	L	100	SER	CA-C	-8.73	1.41	1.52
6	G	722	CYS	CA-C	-8.70	1.42	1.52
7	Z	62	LEU	CA-C	-8.70	1.41	1.52
3	C	289	GLY	CA-C	-8.70	1.46	1.52
6	G	163	SER	CA-C	-8.67	1.41	1.52
5	R	29	GLY	CA-C	-8.67	1.39	1.51
7	L	50	ASN	CA-C	-8.66	1.41	1.52
2	B	753	ASP	N-CA	-8.66	1.35	1.46
1	A	534	ALA	CA-C	-8.65	1.42	1.52
7	L	141	GLN	CA-C	-8.64	1.41	1.52
5	M	58	TYR	CA-C	-8.63	1.42	1.52
2	B	750	ASN	N-CA	-8.63	1.36	1.46
6	K	810	MET	CA-C	-8.62	1.41	1.52
1	A	505	LEU	CA-C	-8.61	1.42	1.52
3	C	778	SER	CA-C	-8.61	1.41	1.52
6	G	810	MET	CA-C	-8.60	1.41	1.52
2	B	742	TYR	CA-C	-8.59	1.41	1.52
6	G	234	ARG	CA-C	-8.59	1.41	1.52
2	B	468	LYS	CA-C	-8.57	1.42	1.52
6	K	232	MET	CA-C	-8.57	1.41	1.52
3	C	546	TYR	CA-C	-8.56	1.42	1.52
7	L	13	VAL	CA-C	-8.56	1.42	1.52
3	C	534	PHE	CA-C	-8.55	1.42	1.52
2	B	923	ASN	CA-C	-8.54	1.42	1.52
2	B	332	VAL	CA-C	-8.53	1.41	1.52
7	L	103	GLN	CA-C	-8.52	1.41	1.52
3	C	550	GLU	CA-C	-8.52	1.42	1.52
6	G	92	ILE	CA-C	-8.52	1.42	1.52
2	B	60	VAL	CA-C	-8.51	1.42	1.52
7	Z	65	LEU	N-CA	-8.50	1.35	1.45
6	G	726	CYS	CA-C	-8.50	1.42	1.52
6	G	214	MET	CA-C	-8.49	1.41	1.52
3	C	71	TRP	CA-C	-8.48	1.42	1.52
2	B	801	LYS	CA-C	-8.47	1.42	1.52
6	G	441	GLU	CA-C	-8.47	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	836	ASP	CA-C	-8.46	1.41	1.53
6	K	163	SER	CA-C	-8.46	1.41	1.52
1	A	514	CYS	CA-C	-8.45	1.42	1.52
6	K	726	CYS	CA-C	-8.45	1.42	1.52
2	B	759	LEU	N-CA	-8.44	1.35	1.46
2	B	369	GLU	CA-C	-8.44	1.42	1.52
6	G	211	VAL	CA-C	-8.44	1.42	1.52
3	C	530	VAL	CA-C	-8.43	1.43	1.52
7	L	129	VAL	CA-C	-8.43	1.42	1.52
3	C	84	PHE	CA-C	-8.42	1.42	1.52
6	K	168	LYS	CA-C	-8.42	1.42	1.52
1	A	596	GLU	CA-C	-8.39	1.41	1.52
1	A	613	HIS	CA-C	-8.38	1.42	1.52
2	B	754	ILE	N-CA	-8.37	1.35	1.46
3	C	150	ILE	CA-C	-8.37	1.42	1.52
1	A	413	SER	CA-C	-8.36	1.42	1.52
6	G	91	THR	N-CA	-8.35	1.36	1.46
1	A	391	TYR	CA-C	-8.35	1.42	1.52
2	B	374	VAL	N-CA	-8.34	1.36	1.46
2	B	380	ILE	CA-C	-8.33	1.42	1.52
2	B	371	LEU	N-CA	-8.32	1.36	1.46
7	Z	142	VAL	CA-C	-8.32	1.42	1.52
2	B	418	PRO	CA-C	-8.32	1.39	1.52
3	C	494	LYS	CA-C	-8.31	1.42	1.52
3	C	379	THR	N-CA	-8.31	1.35	1.46
6	G	74	THR	CA-C	-8.31	1.41	1.52
6	G	72	ALA	N-CA	-8.31	1.36	1.46
5	R	103	ALA	CA-C	-8.31	1.42	1.52
3	C	80	GLN	CA-C	-8.29	1.42	1.52
3	C	760	THR	CA-C	-8.29	1.42	1.52
1	A	588	ARG	CA-C	8.28	1.62	1.52
7	L	48	ILE	N-CA	-8.28	1.36	1.46
2	B	908	ALA	CA-C	-8.28	1.42	1.52
6	G	476	ILE	CA-C	-8.26	1.42	1.52
2	B	61	ILE	CA-C	-8.25	1.42	1.52
2	B	76	THR	CA-C	-8.25	1.42	1.52
6	K	211	VAL	N-CA	-8.25	1.36	1.46
4	D	61	MET	CA-C	-8.24	1.43	1.52
1	A	56	GLY	CA-C	-8.23	1.44	1.51
2	B	477	LEU	CA-C	-8.23	1.42	1.52
6	K	203	VAL	CA-C	-8.23	1.42	1.52
7	L	48	ILE	CA-C	-8.22	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	456	LYS	CA-C	-8.21	1.42	1.52
7	Z	129	VAL	CA-C	-8.21	1.43	1.52
2	B	417	ILE	CA-C	-8.21	1.45	1.52
1	A	602	ALA	CA-C	-8.20	1.42	1.52
3	C	154	ASP	CA-C	-8.20	1.42	1.53
4	D	51	THR	CA-C	-8.19	1.42	1.52
1	A	598	LYS	CA-C	-8.19	1.42	1.52
5	M	34	LEU	CA-C	-8.18	1.42	1.52
3	C	552	VAL	CA-C	-8.17	1.42	1.52
5	M	171	GLU	CA-C	-8.15	1.42	1.52
2	B	275	VAL	CA-C	-8.15	1.42	1.52
1	A	21	ARG	CA-C	-8.13	1.43	1.52
3	C	383	LEU	CA-C	-8.13	1.42	1.53
6	K	105	VAL	N-CA	-8.12	1.34	1.46
2	B	373	ILE	N-CA	-8.12	1.36	1.46
6	G	143	TYR	CA-C	-8.11	1.42	1.52
2	B	457	MET	N-CA	-8.10	1.36	1.46
6	G	173	VAL	N-CA	-8.09	1.37	1.46
6	K	869	ILE	CA-C	-8.09	1.42	1.52
6	G	254	PHE	CA-C	-8.09	1.42	1.52
1	A	715	LYS	CA-C	-8.08	1.42	1.52
7	L	18	ILE	CA-C	-8.08	1.42	1.52
2	B	810	GLU	CA-C	-8.08	1.42	1.52
5	R	38	LYS	CA-C	-8.08	1.42	1.52
2	B	440	ARG	N-CA	-8.07	1.36	1.46
6	G	233	ILE	CA-C	-8.07	1.42	1.52
5	R	154	PHE	CA-C	-8.05	1.42	1.52
1	A	659	GLU	CA-C	-8.04	1.42	1.52
1	A	675	GLU	CA-C	-8.04	1.42	1.52
2	B	339	ASP	CA-C	-8.04	1.42	1.52
3	C	169	VAL	CA-C	-8.03	1.43	1.52
6	G	173	VAL	CA-C	-8.03	1.42	1.52
3	C	601	ARG	CA-C	-8.03	1.42	1.52
6	G	843	ARG	CA-C	-8.03	1.42	1.52
2	B	460	VAL	CA-C	-8.01	1.43	1.52
1	A	191	GLY	CA-C	-8.01	1.40	1.51
1	A	673	CYS	N-CA	-8.00	1.36	1.46
7	Z	134	ILE	CA-C	-8.00	1.43	1.52
6	G	869	ILE	CA-C	-8.00	1.42	1.52
6	K	843	ARG	CA-C	-8.00	1.42	1.52
6	G	730	PHE	CA-C	-7.98	1.43	1.52
3	C	419	LYS	CA-C	-7.98	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	R	23	VAL	CA-C	-7.98	1.43	1.52
6	K	730	PHE	CA-C	-7.97	1.43	1.52
6	K	84	LEU	CA-C	-7.96	1.42	1.52
3	C	544	ASN	CA-C	-7.95	1.42	1.52
6	K	191	MET	CA-C	-7.93	1.42	1.52
3	C	85	ASN	N-CA	-7.93	1.35	1.46
1	A	213	PHE	CA-C	-7.93	1.43	1.52
2	B	758	VAL	CA-C	-7.93	1.43	1.52
3	C	360	HIS	CA-C	-7.93	1.42	1.53
7	L	143	VAL	CA-C	-7.93	1.43	1.52
6	G	484	HIS	CA-C	-7.92	1.42	1.52
2	B	453	ILE	N-CA	-7.92	1.37	1.46
6	G	499	GLY	CA-C	-7.92	1.43	1.52
3	C	359	GLN	CA-C	-7.91	1.42	1.52
6	G	530	PHE	CA-C	-7.91	1.42	1.52
6	G	258	CYS	CA-C	-7.91	1.42	1.52
3	C	535	ILE	N-CA	-7.90	1.36	1.46
7	L	44	PHE	CA-C	-7.90	1.42	1.52
2	B	379	VAL	N-CA	-7.89	1.37	1.46
3	C	379	THR	CA-C	-7.88	1.43	1.52
6	G	141	GLU	N-CA	-7.88	1.36	1.46
5	M	90	PHE	N-CA	-7.87	1.36	1.46
1	A	659	GLU	N-CA	-7.86	1.36	1.46
6	K	166	LEU	CA-C	-7.85	1.42	1.52
3	C	385	ASN	CA-C	-7.85	1.42	1.52
2	B	318	ASP	CA-C	-7.84	1.42	1.52
2	B	770	ASN	CA-C	-7.84	1.43	1.52
2	B	820	TYR	CA-C	-7.84	1.42	1.52
7	L	113	ALA	CA-C	-7.84	1.42	1.52
5	M	159	CYS	CA-C	-7.84	1.43	1.52
6	G	237	SER	CA-C	-7.83	1.43	1.52
3	C	730	MET	CA-C	-7.82	1.42	1.52
6	K	182	GLN	CA-C	-7.82	1.42	1.52
1	A	681	ALA	CA-C	-7.82	1.42	1.52
1	A	428	VAL	N-CA	-7.81	1.37	1.46
6	K	306	ALA	CA-C	-7.81	1.42	1.52
5	R	31	THR	CA-C	-7.81	1.42	1.52
5	R	121	TRP	CA-C	-7.80	1.43	1.52
6	G	165	HIS	CA-C	-7.80	1.42	1.52
7	L	101	LEU	CA-C	-7.80	1.42	1.52
1	A	631	LYS	N-CA	-7.80	1.36	1.46
3	C	442	ARG	CA-C	-7.78	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	R	100	ILE	N-CA	-7.77	1.37	1.46
1	A	321	ARG	CA-C	-7.76	1.42	1.53
2	B	77	ILE	CA-C	-7.76	1.43	1.52
7	Z	16	ILE	N-CA	-7.76	1.37	1.46
2	B	833	VAL	CA-C	-7.76	1.43	1.52
2	B	777	THR	CA-C	-7.75	1.43	1.52
6	G	178	VAL	N-CA	-7.75	1.37	1.46
6	K	775	ALA	CA-C	-7.75	1.42	1.52
3	C	573	LEU	N-CA	-7.74	1.36	1.46
2	B	447	ASP	CA-C	-7.74	1.42	1.52
7	L	105	LEU	CA-C	-7.74	1.42	1.52
2	B	177	ILE	CA-C	-7.74	1.42	1.52
2	B	94	LEU	CA-C	-7.74	1.42	1.52
6	G	775	ALA	CA-C	-7.74	1.42	1.52
3	C	774	ARG	CA-C	-7.72	1.42	1.52
5	R	106	VAL	CA-C	-7.72	1.43	1.52
3	C	484	SER	CA-C	-7.71	1.42	1.52
2	B	457	MET	CA-C	-7.71	1.42	1.52
3	C	566	TYR	CA-C	-7.71	1.43	1.52
1	A	675	GLU	N-CA	-7.70	1.37	1.46
1	A	520	ALA	CA-C	-7.70	1.43	1.52
2	B	761	VAL	N-CA	-7.69	1.37	1.46
3	C	380	ALA	CA-C	-7.69	1.43	1.52
2	B	393	LYS	CA-C	-7.68	1.42	1.52
3	C	588	LEU	N-CA	-7.67	1.36	1.46
6	K	215	ILE	CA-C	-7.66	1.43	1.52
2	B	870	VAL	N-CA	-7.66	1.37	1.46
3	C	326	ASN	CA-C	-7.66	1.42	1.52
4	D	235	VAL	CA-C	-7.66	1.43	1.52
6	G	168	LYS	CA-C	-7.66	1.43	1.52
6	K	220	ARG	CA-C	-7.64	1.43	1.52
7	L	83	SER	CA-C	-7.63	1.43	1.53
6	K	105	VAL	CA-C	-7.63	1.41	1.52
1	A	486	VAL	CA-C	-7.63	1.43	1.52
3	C	690	LEU	CA-C	-7.62	1.43	1.52
6	G	69	ALA	CA-C	-7.62	1.42	1.52
2	B	450	ARG	CA-C	-7.62	1.42	1.52
7	L	51	LYS	CA-C	-7.62	1.43	1.52
5	F	73	ARG	CA-C	-7.62	1.43	1.52
7	Z	68	VAL	CA-C	-7.61	1.43	1.52
4	D	84	ARG	CA-C	-7.61	1.42	1.52
6	G	475	PHE	CA-C	-7.61	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	Z	29	LYS	CA-C	-7.60	1.43	1.52
2	B	272	SER	CA-C	-7.59	1.42	1.52
6	K	55	ILE	N-CA	-7.59	1.37	1.46
6	K	164	LEU	CA-C	-7.59	1.43	1.52
5	R	31	THR	N-CA	-7.57	1.37	1.46
3	C	691	HIS	CA-C	-7.56	1.43	1.52
6	K	77	PHE	CA-C	-7.56	1.44	1.53
5	R	108	GLN	CA-C	-7.55	1.43	1.52
5	R	37	LEU	N-CA	-7.55	1.37	1.46
5	M	89	ILE	CA-C	-7.55	1.43	1.52
5	R	69	GLY	CA-C	-7.54	1.44	1.52
7	L	112	ARG	CA-C	-7.54	1.43	1.52
1	A	23	TRP	CA-C	-7.54	1.43	1.52
4	D	64	LEU	CA-C	-7.54	1.43	1.52
5	R	153	TRP	CA-C	-7.53	1.43	1.52
2	B	761	VAL	CA-C	-7.52	1.43	1.52
6	G	144	MET	CA-C	-7.52	1.43	1.52
3	C	222	VAL	N-CA	-7.52	1.37	1.46
2	B	507	GLU	CA-C	-7.52	1.43	1.52
7	Z	25	ARG	CA-C	-7.52	1.43	1.52
3	C	495	VAL	N-CA	-7.51	1.37	1.46
7	L	101	LEU	N-CA	-7.50	1.37	1.46
4	D	236	ASP	CA-C	-7.48	1.43	1.52
1	A	595	THR	N-CA	-7.48	1.35	1.45
7	L	46	LYS	CA-C	-7.47	1.43	1.52
1	A	538	SER	CA-C	-7.47	1.42	1.52
2	B	341	LEU	CA-C	-7.47	1.42	1.52
2	B	759	LEU	CA-C	-7.47	1.43	1.52
2	B	303	LEU	CA-C	-7.47	1.43	1.52
6	G	108	SER	N-CA	-7.46	1.37	1.46
3	C	205	GLY	CA-C	-7.45	1.45	1.52
5	M	169	GLY	CA-C	-7.45	1.44	1.52
5	R	42	VAL	C-N	7.45	1.43	1.33
6	K	774	ALA	CA-C	-7.44	1.43	1.52
3	C	202	LEU	CA-C	-7.44	1.43	1.52
5	R	98	SER	CA-C	-7.44	1.42	1.52
6	G	366	SER	CA-C	-7.44	1.43	1.52
2	B	452	LEU	CA-C	-7.43	1.43	1.52
6	K	215	ILE	N-CA	-7.43	1.37	1.46
6	K	121	ARG	N-CA	-7.43	1.37	1.46
6	G	255	ILE	CA-C	-7.42	1.43	1.52
6	G	525	ARG	CA-C	-7.42	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	745	ALA	CA-C	-7.42	1.43	1.52
6	G	251	LEU	CA-C	-7.42	1.43	1.52
3	C	181	LEU	CA-C	-7.42	1.43	1.52
1	A	322	GLU	CA-C	-7.41	1.42	1.52
1	A	673	CYS	CA-C	-7.41	1.43	1.52
3	C	69	LYS	CA-C	-7.41	1.42	1.52
7	Z	46	LYS	CA-C	-7.40	1.43	1.52
6	G	774	ALA	CA-C	-7.40	1.43	1.52
6	K	107	SER	N-CA	-7.37	1.37	1.46
6	K	707	TYR	CA-C	-7.37	1.43	1.52
7	Z	91	MET	CA-C	-7.37	1.43	1.52
3	C	450	TYR	CA-C	-7.37	1.43	1.52
3	C	81	ILE	CA-C	-7.37	1.43	1.52
6	K	36	GLU	CA-C	-7.36	1.43	1.52
6	K	219	THR	CA-C	-7.36	1.43	1.52
6	G	707	TYR	CA-C	-7.36	1.43	1.52
5	R	26	ASP	N-CA	-7.36	1.37	1.46
6	G	80	ASN	CA-C	-7.35	1.43	1.52
6	K	675	GLU	CA-C	-7.35	1.43	1.52
2	B	125	GLN	CA-C	-7.34	1.42	1.52
3	C	575	LEU	CA-C	-7.34	1.43	1.52
6	G	675	GLU	CA-C	-7.34	1.43	1.52
1	A	683	LEU	N-CA	-7.34	1.37	1.46
5	M	74	ILE	CA-C	-7.33	1.43	1.52
3	C	717	GLU	N-CA	-7.33	1.37	1.46
6	K	106	THR	CA-C	-7.33	1.43	1.52
3	C	276	CYS	CA-C	-7.32	1.43	1.52
6	G	611	GLU	CA-C	-7.32	1.43	1.52
1	A	543	TYR	N-CA	-7.32	1.36	1.45
6	G	177	TRP	CA-C	-7.32	1.42	1.52
6	G	182	GLN	CA-C	-7.32	1.43	1.52
7	L	121	LEU	CA-C	-7.32	1.43	1.52
6	G	471	LYS	CA-C	-7.31	1.43	1.52
3	C	155	ASN	CA-C	-7.31	1.43	1.52
6	G	93	LYS	CA-C	-7.31	1.42	1.52
2	B	461	PHE	N-CA	-7.30	1.37	1.46
3	C	563	LEU	CA-C	-7.30	1.43	1.52
1	A	603	LEU	CA-C	-7.29	1.43	1.52
4	D	100	ASN	CA-C	-7.29	1.43	1.52
5	R	64	THR	CA-C	-7.29	1.43	1.52
2	B	406	SER	CA-C	-7.28	1.42	1.52
6	K	611	GLU	CA-C	-7.28	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	94	CYS	CA-C	-7.27	1.43	1.52
6	K	89	TYR	CA-C	-7.27	1.43	1.52
5	F	77	LEU	CA-C	-7.27	1.44	1.52
1	A	427	ALA	CA-C	-7.27	1.44	1.52
6	G	179	ASN	CA-C	-7.26	1.43	1.52
1	A	35	LEU	CA-C	-7.26	1.44	1.52
6	G	174	VAL	N-CA	-7.26	1.37	1.46
6	G	88	CYS	CA-C	-7.25	1.43	1.52
5	F	149	ARG	CA-C	-7.25	1.43	1.52
7	Z	77	PHE	CA-C	-7.25	1.44	1.52
1	A	472	ILE	CA-C	-7.25	1.43	1.52
6	G	148	ILE	CA-C	-7.25	1.43	1.52
5	M	128	GLN	CA-C	-7.25	1.42	1.52
2	B	771	CYS	N-CA	-7.25	1.36	1.46
5	R	36	LYS	N-CA	-7.25	1.37	1.46
2	B	182	GLU	CA-C	-7.24	1.43	1.52
3	C	316	TRP	CA-C	-7.24	1.43	1.52
6	K	70	PHE	CA-C	-7.24	1.43	1.52
1	A	551	TYR	CA-C	-7.24	1.43	1.52
3	C	260	THR	CA-C	-7.24	1.43	1.53
7	L	91	MET	CA-C	-7.24	1.43	1.52
7	L	93	VAL	N-CA	-7.23	1.37	1.46
6	G	845	ARG	CA-C	-7.23	1.43	1.52
5	M	36	LYS	CA-C	-7.23	1.43	1.52
6	G	306	ALA	CA-C	-7.22	1.43	1.52
5	F	60	ASN	CA-C	-7.22	1.43	1.53
5	R	171	GLU	N-CA	-7.22	1.37	1.46
4	D	80	LEU	CA-C	-7.22	1.43	1.52
5	R	155	ILE	N-CA	-7.22	1.37	1.46
1	A	766	GLY	CA-C	-7.21	1.41	1.51
7	L	95	ASN	N-CA	-7.21	1.37	1.46
3	C	641	PRO	CA-C	-7.20	1.41	1.52
1	A	244	THR	N-CA	-7.20	1.37	1.46
7	Z	45	GLU	CA-C	-7.20	1.43	1.52
6	K	309	ARG	CA-C	-7.20	1.44	1.52
2	B	948	SER	CA-C	-7.20	1.43	1.52
2	B	310	ASN	CA-C	-7.19	1.43	1.52
2	B	804	VAL	N-CA	-7.18	1.37	1.46
2	B	227	CYS	CA-C	-7.18	1.42	1.52
3	C	776	ASN	CA-C	-7.18	1.43	1.52
2	B	370	GLU	CA-C	-7.18	1.43	1.52
7	Z	87	GLU	CA-C	-7.18	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	M	46	ILE	CA-C	-7.18	1.47	1.53
6	K	143	TYR	CA-C	-7.17	1.43	1.52
3	C	315	ILE	CA-C	-7.16	1.44	1.52
6	G	750	GLU	CA-C	-7.16	1.44	1.52
6	K	845	ARG	CA-C	-7.16	1.44	1.52
2	B	400	ARG	CA-C	-7.16	1.43	1.52
2	B	837	ILE	N-CA	-7.16	1.37	1.46
3	C	215	ASP	CA-C	-7.15	1.44	1.52
6	K	218	PHE	CA-C	-7.15	1.42	1.52
6	G	460	GLY	CA-C	-7.15	1.43	1.51
1	A	243	ASP	N-CA	-7.14	1.37	1.46
2	B	817	ASN	CA-C	-7.14	1.43	1.52
5	R	36	LYS	CA-C	-7.14	1.43	1.52
2	B	363	VAL	N-CA	-7.13	1.38	1.46
2	B	943	ARG	CA-C	-7.13	1.44	1.52
6	K	263	HIS	CA-C	-7.13	1.45	1.53
5	R	85	THR	CA-C	-7.12	1.43	1.52
5	M	153	TRP	CA-C	-7.12	1.44	1.52
5	M	29	GLY	CA-C	-7.11	1.42	1.51
1	A	578	VAL	CA-C	-7.10	1.44	1.52
3	C	367	VAL	N-CA	-7.10	1.37	1.46
2	B	800	ILE	CA-C	-7.09	1.44	1.52
3	C	327	LEU	CA-C	-7.09	1.43	1.52
3	C	471	SER	CA-C	-7.09	1.43	1.53
6	K	268	TYR	CA-C	-7.09	1.43	1.52
1	A	66	PHE	CA-C	-7.08	1.44	1.52
6	K	750	GLU	CA-C	-7.08	1.44	1.52
2	B	435	VAL	CA-C	-7.07	1.44	1.52
5	F	166	LEU	CA-C	-7.06	1.43	1.52
4	D	57	VAL	CA-C	-7.06	1.44	1.52
6	G	284	GLU	CA-C	-7.06	1.43	1.52
3	C	543	LEU	CA-C	-7.06	1.44	1.52
3	C	840	LYS	CA-C	-7.05	1.43	1.52
4	D	61	MET	N-CA	-7.05	1.38	1.46
1	A	672	ASN	CA-C	-7.05	1.43	1.52
5	R	43	ILE	CA-C	7.05	1.61	1.52
2	B	381	LYS	N-CA	-7.05	1.37	1.46
1	A	21	ARG	N-CA	-7.05	1.41	1.46
6	G	397	LEU	CA-C	-7.04	1.43	1.52
2	B	181	PHE	CA-C	-7.04	1.43	1.52
7	L	122	PHE	CA-C	-7.04	1.43	1.52
7	Z	102	SER	N-CA	-7.04	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	567	ILE	CA-C	-7.04	1.47	1.53
3	C	188	VAL	CA-C	-7.03	1.43	1.52
6	G	522	ASN	CA-C	-7.03	1.43	1.52
7	Z	27	PHE	CA-C	-7.03	1.43	1.52
5	M	77	LEU	CA-C	-7.03	1.43	1.52
2	B	437	GLU	CA-C	-7.03	1.43	1.52
3	C	407	GLU	CA-C	-7.02	1.43	1.52
3	C	534	PHE	N-CA	-7.02	1.37	1.46
3	C	165	ARG	CA-C	-7.01	1.43	1.52
5	F	53	VAL	CA-C	-7.01	1.44	1.52
6	G	72	ALA	CA-C	-7.01	1.44	1.52
5	F	167	TYR	N-CA	-7.01	1.37	1.46
6	G	390	TYR	N-CA	-7.01	1.40	1.46
7	Z	104	MET	CA-C	-7.00	1.44	1.52
3	C	15	SER	CA-C	-7.00	1.47	1.53
7	Z	18	ILE	CA-C	-7.00	1.43	1.52
3	C	257	HIS	N-CA	-7.00	1.37	1.46
6	G	347	THR	CA-C	-7.00	1.43	1.52
2	B	340	ILE	N-CA	-7.00	1.38	1.46
6	G	248	ASP	N-CA	-7.00	1.37	1.46
2	B	850	CYS	CA-C	7.00	1.61	1.52
7	L	123	LEU	CA-C	-7.00	1.43	1.52
3	C	190	CYS	CA-C	-6.99	1.43	1.52
6	K	290	SER	CA-C	-6.99	1.44	1.52
6	G	526	ASP	CA-C	-6.99	1.43	1.52
2	B	261	ILE	CA-C	-6.98	1.44	1.52
6	K	79	SER	CA-C	-6.98	1.44	1.52
7	Z	27	PHE	N-CA	-6.97	1.37	1.46
2	B	371	LEU	CA-C	-6.96	1.44	1.52
1	A	757	LEU	CA-C	-6.95	1.43	1.52
2	B	409	PHE	CA-C	-6.95	1.44	1.52
3	C	177	PRO	CA-C	-6.95	1.45	1.52
3	C	493	GLU	CA-C	-6.95	1.43	1.52
1	A	569	TYR	N-CA	-6.94	1.37	1.46
7	Z	78	TYR	N-CA	-6.94	1.37	1.46
3	C	386	LYS	N-CA	-6.94	1.38	1.46
5	R	111	LEU	N-CA	-6.94	1.37	1.46
3	C	439	LEU	CA-C	-6.94	1.43	1.52
6	G	255	ILE	N-CA	-6.93	1.38	1.46
2	B	399	VAL	N-CA	-6.92	1.38	1.46
6	K	54	LEU	CA-C	-6.92	1.43	1.52
6	K	200	LEU	N-CA	-6.92	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	L	99	ASP	CA-C	-6.92	1.44	1.52
6	K	825	THR	C-N	6.91	1.42	1.33
7	L	134	ILE	CA-C	-6.91	1.44	1.52
1	A	554	THR	CA-C	6.91	1.60	1.52
4	D	236	ASP	N-CA	-6.91	1.38	1.46
3	C	384	ARG	N-CA	-6.91	1.37	1.45
3	C	533	CYS	CA-C	-6.91	1.43	1.52
3	C	382	ALA	N-CA	-6.90	1.37	1.46
2	B	763	GLN	CA-C	-6.90	1.42	1.52
3	C	593	GLU	CA-C	-6.90	1.43	1.52
6	G	210	ALA	CA-C	-6.90	1.43	1.52
3	C	119	ASP	CA-C	-6.89	1.42	1.52
5	F	68	VAL	CA-C	-6.89	1.44	1.52
4	D	100	ASN	N-CA	-6.89	1.38	1.46
3	C	716	ALA	CA-C	-6.88	1.43	1.52
7	L	53	HIS	N-CA	-6.88	1.37	1.46
1	A	630	GLN	CA-C	-6.88	1.42	1.52
3	C	154	ASP	N-CA	-6.88	1.37	1.46
7	L	108	ASN	CA-C	-6.88	1.44	1.52
6	G	379	VAL	N-CA	-6.87	1.38	1.46
7	L	141	GLN	N-CA	-6.87	1.38	1.46
3	C	347	ASP	CA-C	-6.87	1.43	1.53
1	A	568	ILE	CA-C	-6.86	1.44	1.52
5	M	70	GLY	CA-C	-6.86	1.42	1.51
2	B	378	GLU	N-CA	-6.86	1.38	1.46
3	C	138	PHE	CA-C	-6.86	1.44	1.52
6	G	680	GLN	CA-C	-6.86	1.43	1.52
5	F	151	ARG	CA-C	-6.86	1.44	1.52
6	G	239	GLN	N-CA	-6.86	1.38	1.46
7	Z	69	TYR	N-CA	-6.86	1.37	1.45
2	B	782	LYS	CA-C	-6.86	1.44	1.52
3	C	477	VAL	CA-C	-6.85	1.44	1.52
6	G	825	THR	C-N	6.85	1.42	1.33
6	K	234	ARG	C-N	-6.85	1.25	1.33
7	L	104	MET	CA-C	-6.85	1.44	1.52
2	B	435	VAL	N-CA	-6.84	1.38	1.46
6	K	680	GLN	CA-C	-6.84	1.43	1.52
5	M	88	VAL	CA-C	-6.83	1.43	1.52
2	B	416	VAL	CA-C	-6.83	1.44	1.52
2	B	163	HIS	CA-C	-6.82	1.44	1.52
6	G	45	ALA	CA-C	-6.82	1.44	1.52
7	L	23	GLY	CA-C	-6.82	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	M	168	GLU	CA-C	-6.82	1.43	1.52
2	B	755	VAL	N-CA	-6.81	1.38	1.46
2	B	958	LYS	CA-C	-6.81	1.44	1.52
3	C	438	LEU	CA-C	-6.80	1.44	1.52
4	D	85	LEU	CA-C	-6.80	1.44	1.52
6	G	706	CYS	CA-C	-6.80	1.44	1.52
6	K	706	CYS	CA-C	-6.80	1.44	1.52
2	B	190	GLU	CA-C	-6.80	1.44	1.52
2	B	319	ARG	CA-C	-6.80	1.44	1.52
4	D	27	THR	CA-C	-6.80	1.43	1.52
3	C	263	LEU	CA-C	-6.80	1.44	1.52
7	L	27	PHE	N-CA	-6.80	1.37	1.46
1	A	629	LEU	CA-C	-6.79	1.43	1.52
5	F	64	THR	CA-C	-6.79	1.44	1.52
1	A	590	LEU	CA-C	-6.79	1.44	1.52
3	C	202	LEU	N-CA	-6.79	1.37	1.45
1	A	615	VAL	N-CA	-6.79	1.37	1.46
3	C	478	CYS	CA-C	-6.79	1.44	1.52
1	A	665	ALA	CA-C	-6.78	1.44	1.52
3	C	390	SER	CA-C	-6.78	1.44	1.52
7	L	54	ARG	CA-C	-6.78	1.44	1.52
2	B	151	LEU	CA-C	-6.78	1.43	1.52
5	M	39	LEU	CA-C	-6.77	1.43	1.52
3	C	554	ILE	CA-C	-6.77	1.44	1.52
1	A	672	ASN	N-CA	-6.77	1.37	1.46
6	G	356	SER	CA-C	-6.77	1.44	1.52
6	K	80	ASN	N-CA	-6.77	1.37	1.46
5	R	65	VAL	N-CA	-6.77	1.38	1.46
1	A	336	VAL	CA-C	-6.76	1.44	1.52
7	L	134	ILE	N-CA	-6.75	1.38	1.46
4	D	53	SER	CA-C	-6.75	1.43	1.53
2	B	437	GLU	N-CA	-6.75	1.38	1.46
3	C	368	VAL	CA-C	-6.75	1.44	1.52
3	C	439	LEU	N-CA	-6.75	1.37	1.46
1	A	342	ARG	CA-C	-6.75	1.43	1.52
1	A	77	VAL	CA-C	-6.75	1.44	1.52
2	B	407	VAL	CA-C	-6.74	1.44	1.52
3	C	403	TYR	N-CA	-6.74	1.37	1.45
7	Z	77	PHE	N-CA	-6.74	1.37	1.46
1	A	628	TYR	CA-C	-6.74	1.43	1.52
1	A	687	HIS	CA-C	-6.74	1.43	1.52
7	L	31	TYR	N-CA	-6.74	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	202	GLU	CA-C	-6.74	1.44	1.52
1	A	632	LYS	CA-C	-6.74	1.43	1.52
6	G	860	SER	CA-C	-6.74	1.44	1.52
7	L	90	LEU	N-CA	-6.73	1.38	1.46
3	C	293	GLY	CA-C	-6.73	1.42	1.51
6	K	304	ARG	N-CA	-6.72	1.38	1.46
6	K	860	SER	CA-C	-6.72	1.44	1.52
7	L	109	VAL	N-CA	-6.72	1.38	1.46
6	G	176	ARG	CA-C	-6.71	1.43	1.52
6	G	236	ALA	CA-C	-6.71	1.43	1.52
6	K	255	ILE	CA-C	-6.71	1.44	1.52
6	G	22	LEU	CA-C	-6.71	1.44	1.52
1	A	620	LEU	N-CA	-6.70	1.37	1.46
3	C	455	THR	CA-C	-6.70	1.43	1.52
1	A	305	LEU	CA-C	-6.70	1.44	1.52
2	B	964	LYS	CA-C	-6.70	1.43	1.53
7	L	143	VAL	N-CA	-6.70	1.38	1.46
4	D	60	PRO	CA-C	-6.69	1.44	1.52
6	G	259	LEU	N-CA	-6.69	1.38	1.46
3	C	244	ILE	N-CA	-6.69	1.38	1.46
2	B	752	TYR	CA-C	-6.68	1.43	1.52
6	G	436	LEU	CA-C	-6.68	1.44	1.52
3	C	293	GLY	N-CA	-6.68	1.39	1.45
6	K	110	THR	CA-C	-6.68	1.44	1.52
6	G	175	LYS	N-CA	-6.68	1.38	1.46
1	A	465	LEU	N-CA	-6.67	1.37	1.46
6	G	233	ILE	N-CA	-6.67	1.38	1.46
2	B	469	ILE	CA-C	-6.67	1.44	1.52
6	G	623	PHE	CA-C	-6.66	1.43	1.52
6	K	623	PHE	CA-C	-6.65	1.43	1.52
2	B	363	VAL	CA-C	-6.65	1.45	1.53
3	C	257	HIS	CA-C	-6.65	1.44	1.52
2	B	744	GLU	CA-C	-6.65	1.44	1.52
6	K	731	THR	N-CA	-6.65	1.38	1.46
7	L	104	MET	N-CA	-6.65	1.38	1.46
1	A	569	TYR	CA-C	-6.64	1.44	1.52
4	D	148	ARG	CA-C	-6.64	1.44	1.52
2	B	89	ILE	CA-C	-6.64	1.44	1.52
2	B	850	CYS	N-CA	6.64	1.54	1.46
7	Z	134	ILE	N-CA	-6.64	1.38	1.46
2	B	475	TRP	CA-C	-6.63	1.44	1.52
6	G	783	PHE	CA-C	-6.63	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	495	VAL	CA-C	-6.63	1.44	1.52
6	G	145	LYS	CA-C	-6.63	1.44	1.52
6	G	358	ASP	CA-C	-6.63	1.44	1.52
3	C	476	LEU	CA-C	-6.63	1.44	1.52
1	A	597	PHE	CA-C	-6.62	1.44	1.52
6	G	731	THR	N-CA	-6.62	1.38	1.46
3	C	243	ILE	CA-C	-6.62	1.44	1.52
6	G	107	SER	N-CA	-6.62	1.38	1.46
6	K	307	ALA	N-CA	-6.62	1.38	1.46
5	M	54	GLU	CA-C	-6.62	1.44	1.52
3	C	232	VAL	CA-C	-6.61	1.44	1.52
4	D	65	TYR	CA-C	-6.61	1.44	1.52
3	C	418	PHE	CA-C	-6.61	1.44	1.53
5	M	41	GLU	CA-C	-6.61	1.44	1.52
3	C	272	GLU	N-CA	-6.61	1.37	1.46
6	G	119	ASN	N-CA	-6.61	1.38	1.46
2	B	402	LEU	CA-C	-6.61	1.44	1.52
3	C	432	SER	CA-C	-6.61	1.44	1.52
2	B	338	MET	CA-C	-6.60	1.44	1.52
7	Z	140	GLN	CA-C	-6.60	1.44	1.52
1	A	699	ASN	CA-C	-6.60	1.44	1.52
6	K	181	ALA	CA-C	-6.59	1.44	1.52
6	K	266	VAL	CA-C	-6.59	1.44	1.52
6	K	201	TYR	N-CA	-6.58	1.38	1.46
2	B	894	THR	C-N	6.58	1.41	1.33
1	A	661	ALA	N-CA	-6.58	1.38	1.46
7	L	47	ASN	CA-C	-6.58	1.44	1.52
2	B	415	ASN	CA-C	-6.58	1.44	1.52
6	K	63	THR	CA-C	-6.57	1.44	1.52
5	M	22	MET	CA-C	-6.57	1.44	1.52
1	A	286	THR	CA-C	-6.57	1.44	1.52
2	B	376	LYS	N-CA	-6.56	1.38	1.46
3	C	69	LYS	N-CA	-6.56	1.37	1.46
3	C	376	ILE	N-CA	-6.56	1.38	1.46
4	D	84	ARG	N-CA	-6.56	1.38	1.46
7	L	62	LEU	CA-C	-6.56	1.44	1.52
2	B	392	ASP	CA-C	-6.55	1.44	1.52
3	C	261	TYR	CA-C	-6.55	1.43	1.53
6	G	237	SER	N-CA	-6.55	1.38	1.46
6	K	783	PHE	CA-C	-6.55	1.44	1.52
6	G	54	LEU	CA-C	-6.54	1.44	1.52
2	B	859	TRP	CA-C	-6.54	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	818	ILE	N-CA	-6.53	1.38	1.46
5	R	104	ARG	CA-C	-6.53	1.44	1.52
1	A	266	SER	CA-C	-6.53	1.44	1.52
1	A	688	GLN	CA-C	-6.53	1.44	1.52
3	C	571	ASN	N-CA	-6.52	1.37	1.46
3	C	441	VAL	CA-C	-6.52	1.44	1.52
6	G	167	LEU	CA-C	-6.52	1.43	1.52
3	C	187	GLY	CA-C	-6.52	1.44	1.51
3	C	778	SER	N-CA	-6.51	1.38	1.46
5	F	124	PHE	CA-C	-6.51	1.44	1.52
6	G	84	LEU	N-CA	-6.51	1.38	1.46
7	Z	25	ARG	N-CA	-6.51	1.38	1.46
2	B	750	ASN	CA-C	-6.51	1.44	1.52
5	R	54	GLU	CA-C	-6.51	1.44	1.52
3	C	546	TYR	N-CA	-6.51	1.38	1.46
6	G	648	ILE	CA-C	-6.50	1.44	1.52
1	A	610	GLU	CA-C	-6.50	1.44	1.52
3	C	458	ILE	CA-C	-6.50	1.43	1.52
1	A	619	LYS	CA-C	-6.49	1.44	1.52
4	D	105	HIS	CA-C	-6.49	1.44	1.52
7	Z	28	ALA	CA-C	-6.49	1.44	1.52
6	K	177	TRP	CA-C	-6.49	1.41	1.52
7	L	11	TYR	CA-C	-6.48	1.44	1.52
3	C	669	LYS	CA-C	-6.48	1.44	1.52
6	G	249	SER	CA-C	-6.48	1.45	1.52
2	B	754	ILE	CA-C	-6.48	1.44	1.52
6	K	648	ILE	CA-C	-6.48	1.44	1.52
2	B	370	GLU	N-CA	-6.47	1.38	1.46
7	Z	46	LYS	N-CA	-6.47	1.38	1.46
6	K	139	ALA	CA-C	-6.47	1.44	1.52
1	A	518	LEU	CA-C	-6.47	1.44	1.52
2	B	414	ALA	CA-C	-6.47	1.44	1.52
6	K	242	GLU	CA-C	-6.47	1.44	1.52
2	B	823	SER	CA-C	-6.47	1.44	1.52
3	C	642	GLU	CA-C	-6.47	1.44	1.52
3	C	765	GLN	CA-C	-6.47	1.43	1.52
3	C	574	TYR	N-CA	-6.46	1.38	1.46
6	G	91	THR	CA-C	-6.46	1.44	1.52
3	C	519	GLU	CA-C	-6.46	1.44	1.52
7	Z	15	ALA	N-CA	-6.46	1.37	1.46
1	A	245	CYS	CA-C	-6.46	1.44	1.52
5	F	19	ARG	CA-C	-6.45	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	Z	121	LEU	CA-C	-6.45	1.44	1.52
2	B	760	VAL	N-CA	-6.45	1.38	1.46
2	B	844	TYR	CA-C	-6.44	1.44	1.52
3	C	547	VAL	N-CA	-6.44	1.38	1.46
3	C	668	GLN	CA-C	-6.44	1.44	1.52
4	D	102	ILE	N-CA	-6.44	1.38	1.46
3	C	115	LEU	CA-C	-6.44	1.45	1.52
6	K	209	LEU	CA-C	-6.44	1.44	1.52
7	L	145	ARG	CA-C	-6.44	1.44	1.52
5	M	23	VAL	CA-C	-6.44	1.45	1.52
1	A	36	TRP	CA-C	-6.43	1.44	1.52
1	A	573	VAL	CA-C	-6.43	1.44	1.52
5	M	154	PHE	N-CA	-6.43	1.38	1.46
3	C	378	TYR	N-CA	-6.43	1.38	1.45
1	A	664	ALA	CA-C	-6.42	1.44	1.52
2	B	854	GLU	CA-C	-6.42	1.44	1.52
1	A	613	HIS	N-CA	-6.42	1.38	1.46
6	G	144	MET	N-CA	-6.42	1.38	1.46
6	G	176	ARG	N-CA	-6.42	1.38	1.46
6	K	840	ILE	N-CA	-6.42	1.38	1.46
3	C	568	PRO	CA-C	-6.42	1.41	1.52
3	C	231	ASN	CA-C	-6.42	1.44	1.52
1	A	134	HIS	N-CA	-6.42	1.38	1.46
4	D	118	ALA	N-CA	-6.41	1.38	1.46
6	G	487	VAL	CA-C	-6.41	1.44	1.52
4	D	68	LEU	CA-C	-6.41	1.44	1.52
6	K	167	LEU	N-CA	-6.41	1.38	1.46
3	C	306	MET	CA-C	-6.41	1.44	1.52
7	Z	120	GLY	CA-C	-6.41	1.45	1.52
6	G	175	LYS	CA-C	-6.41	1.44	1.52
1	A	807	ASN	CA-C	-6.40	1.44	1.52
2	B	152	MET	N-CA	-6.40	1.40	1.46
6	G	840	ILE	N-CA	-6.40	1.38	1.46
2	B	122	LYS	CA-C	-6.40	1.44	1.52
3	C	9	ARG	N-CA	-6.40	1.38	1.46
2	B	472	GLY	CA-C	-6.40	1.45	1.52
1	A	473	THR	N-CA	-6.39	1.38	1.46
6	K	612	ILE	CA-C	-6.39	1.44	1.52
2	B	763	GLN	N-CA	-6.38	1.38	1.46
2	B	778	LEU	N-CA	-6.38	1.38	1.46
5	R	55	THR	CA-C	-6.38	1.45	1.52
2	B	394	TYR	CA-C	-6.38	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	L	99	ASP	N-CA	-6.37	1.38	1.46
3	C	446	GLY	CA-C	-6.37	1.46	1.52
1	A	535	TRP	CA-C	-6.37	1.45	1.52
6	G	612	ILE	CA-C	-6.37	1.44	1.52
3	C	76	ALA	CA-C	-6.37	1.44	1.52
7	Z	142	VAL	N-CA	-6.37	1.39	1.46
1	A	134	HIS	CA-C	-6.37	1.44	1.52
2	B	297	ALA	CA-C	-6.37	1.44	1.52
5	F	103	ALA	CA-C	-6.37	1.44	1.52
6	K	65	GLU	N-CA	-6.37	1.38	1.46
1	A	274	ARG	CA-C	-6.36	1.45	1.52
1	A	574	LYS	N-CA	-6.36	1.38	1.46
5	R	168	GLU	CA-C	-6.36	1.44	1.52
6	G	844	SER	CA-C	-6.36	1.45	1.52
6	K	828	LEU	CA-C	-6.36	1.45	1.52
4	D	151	GLN	CA-C	-6.36	1.44	1.52
5	R	32	THR	CA-C	-6.36	1.44	1.52
3	C	391	ALA	CA-C	-6.35	1.44	1.53
7	Z	17	LEU	CA-C	-6.35	1.45	1.52
4	D	239	VAL	CA-C	-6.35	1.45	1.52
1	A	200	VAL	CA-C	-6.34	1.45	1.52
6	K	844	SER	CA-C	-6.34	1.45	1.52
3	C	761	TYR	CA-C	-6.34	1.45	1.53
6	G	149	VAL	N-CA	-6.34	1.39	1.46
7	L	46	LYS	N-CA	-6.34	1.38	1.46
1	A	654	GLU	CA-C	-6.33	1.44	1.52
2	B	438	PHE	CA-C	-6.33	1.44	1.52
1	A	329	HIS	CA-C	-6.33	1.45	1.52
2	B	439	VAL	CA-C	-6.33	1.45	1.52
4	D	14	LYS	N-CA	-6.33	1.38	1.46
5	R	19	ARG	CA-C	-6.33	1.45	1.52
6	G	828	LEU	CA-C	-6.33	1.45	1.52
6	K	83	THR	CA-C	-6.33	1.44	1.52
3	C	255	ILE	CA-C	-6.32	1.44	1.52
5	F	61	ILE	N-CA	-6.32	1.38	1.46
1	A	346	PHE	CA-C	-6.32	1.44	1.52
4	D	99	GLU	CA-C	-6.31	1.44	1.52
6	G	521	ASP	CA-C	-6.31	1.45	1.53
2	B	174	ILE	CA-C	-6.31	1.44	1.52
2	B	453	ILE	CA-C	-6.31	1.44	1.52
3	C	272	GLU	CA-C	-6.31	1.44	1.52
1	A	487	LYS	CA-C	-6.31	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	401	LEU	CA-C	-6.31	1.44	1.52
6	G	76	LEU	N-CA	-6.30	1.38	1.46
2	B	207	ASN	CA-C	-6.30	1.44	1.52
5	R	39	LEU	CA-C	-6.29	1.43	1.52
6	K	252	PHE	N-CA	-6.29	1.38	1.46
1	A	644	ASP	CA-C	-6.29	1.44	1.52
3	C	588	LEU	CA-C	-6.29	1.44	1.52
7	L	51	LYS	N-CA	-6.29	1.38	1.46
5	F	116	LEU	N-CA	-6.29	1.38	1.46
1	A	464	LEU	CA-C	-6.28	1.45	1.53
2	B	307	GLU	CA-C	-6.28	1.45	1.52
6	G	398	MET	CA-C	-6.28	1.44	1.52
3	C	711	MET	CA-C	-6.28	1.44	1.52
6	G	610	GLN	N-CA	-6.28	1.38	1.46
6	K	189	ASN	CA-C	-6.28	1.44	1.52
6	K	828	LEU	N-CA	-6.28	1.38	1.46
5	M	78	TRP	CA-C	-6.27	1.43	1.52
2	B	397	LEU	CA-C	-6.27	1.44	1.52
2	B	411	ASP	CA-C	-6.27	1.47	1.53
4	D	115	GLU	CA-C	-6.27	1.45	1.52
2	B	941	HIS	N-CA	-6.27	1.38	1.46
6	G	509	ILE	N-CA	-6.26	1.38	1.46
6	K	292	LEU	CA-C	-6.26	1.44	1.52
6	G	432	LYS	CA-C	-6.26	1.44	1.52
2	B	474	LEU	CA-C	-6.25	1.44	1.52
6	G	118	ASP	N-CA	-6.25	1.38	1.46
5	M	170	LEU	CA-C	-6.24	1.44	1.52
4	D	117	VAL	N-CA	-6.24	1.38	1.46
1	A	360	GLY	CA-C	-6.24	1.43	1.51
6	G	456	LEU	CA-C	-6.24	1.45	1.52
6	G	73	MET	CA-C	-6.23	1.44	1.52
5	R	43	ILE	C-N	6.23	1.42	1.33
3	C	377	ILE	N-CA	-6.23	1.39	1.46
6	K	610	GLN	N-CA	-6.23	1.38	1.46
2	B	135	THR	CA-C	-6.23	1.44	1.52
1	A	343	GLN	CA-C	-6.23	1.44	1.52
2	B	896	GLU	CA-C	-6.22	1.45	1.52
6	G	778	GLU	CA-C	-6.22	1.44	1.52
7	Z	40	GLU	CA-C	-6.22	1.44	1.52
3	C	274	VAL	CA-C	-6.22	1.45	1.52
6	G	142	ARG	CA-C	-6.22	1.45	1.52
6	G	289	VAL	CA-C	-6.22	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	828	LEU	N-CA	-6.22	1.38	1.46
6	G	82	PRO	CA-C	-6.22	1.43	1.52
5	R	86	GLU	N-CA	-6.22	1.38	1.46
6	G	294	LEU	CA-C	-6.22	1.45	1.52
1	A	37	ASP	CA-C	-6.21	1.45	1.53
2	B	298	GLN	CA-C	-6.21	1.45	1.52
6	G	71	PHE	CA-C	-6.21	1.44	1.52
7	L	97	LEU	N-CA	-6.21	1.39	1.46
1	A	614	MET	CA-C	-6.21	1.44	1.52
7	Z	101	LEU	CA-C	-6.21	1.44	1.52
6	K	778	GLU	CA-C	-6.21	1.44	1.52
5	R	126	ASN	CA-C	-6.21	1.44	1.53
3	C	586	SER	CA-C	-6.21	1.44	1.52
5	F	26	ASP	CA-C	-6.21	1.44	1.52
1	A	451	PRO	CA-C	-6.21	1.45	1.52
6	K	116	LYS	CA-C	-6.21	1.44	1.52
6	G	854	MET	CA-C	-6.21	1.44	1.52
7	Z	14	LYS	CA-C	-6.20	1.44	1.52
6	K	174	VAL	N-CA	-6.20	1.39	1.46
3	C	498	ALA	CA-C	-6.20	1.44	1.52
3	C	559	ARG	N-CA	-6.20	1.37	1.45
7	L	93	VAL	CA-C	-6.20	1.44	1.52
7	Z	26	LEU	CA-C	-6.20	1.44	1.52
6	K	199	LEU	CA-C	-6.20	1.45	1.52
6	G	80	ASN	N-CA	-6.20	1.39	1.46
7	Z	89	MET	CA-C	-6.19	1.44	1.52
2	B	264	ILE	CA-C	-6.19	1.45	1.52
1	A	601	LEU	N-CA	-6.18	1.38	1.46
5	R	108	GLN	N-CA	-6.18	1.38	1.46
3	C	275	TRP	CA-C	-6.18	1.45	1.53
6	G	235	VAL	CA-C	-6.18	1.45	1.52
2	B	834	LEU	CA-C	-6.18	1.44	1.52
6	G	779	VAL	N-CA	-6.18	1.39	1.46
6	K	152	VAL	N-CA	-6.18	1.42	1.46
6	K	303	LEU	CA-C	-6.17	1.44	1.52
6	G	169	CYS	N-CA	-6.17	1.39	1.46
3	C	715	LEU	CA-C	-6.17	1.44	1.52
6	K	854	MET	CA-C	-6.17	1.45	1.52
2	B	858	MET	N-CA	-6.16	1.38	1.46
7	Z	125	VAL	CA-C	-6.16	1.45	1.52
7	L	142	VAL	N-CA	-6.16	1.39	1.46
5	R	99	ARG	CA-C	-6.16	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	779	VAL	N-CA	-6.16	1.39	1.46
3	C	775	GLU	CA-C	-6.16	1.44	1.52
1	A	542	ILE	CA-C	-6.16	1.45	1.52
6	K	206	ASN	N-CA	-6.16	1.38	1.46
2	B	117	CYS	CA-C	-6.16	1.44	1.52
3	C	352	GLU	N-CA	-6.15	1.38	1.46
2	B	473	ALA	CA-C	-6.15	1.45	1.52
1	A	10	ALA	CA-C	-6.15	1.44	1.52
6	K	844	SER	N-CA	-6.15	1.39	1.46
2	B	212	LEU	CA-C	-6.14	1.45	1.52
6	G	307	ALA	CA-C	-6.14	1.44	1.52
6	G	417	ILE	CA-C	-6.14	1.45	1.52
6	G	484	HIS	N-CA	-6.14	1.38	1.46
3	C	454	ASN	CA-C	-6.14	1.44	1.52
5	R	26	ASP	CA-C	-6.14	1.44	1.52
6	K	109	LEU	N-CA	-6.14	1.38	1.46
5	F	110	MET	CA-C	-6.14	1.44	1.52
6	G	252	PHE	N-CA	-6.13	1.39	1.46
6	K	167	LEU	CA-C	-6.13	1.44	1.52
2	B	818	ILE	CA-C	-6.13	1.45	1.52
2	B	139	LEU	N-CA	-6.13	1.38	1.46
6	G	67	THR	CA-C	-6.13	1.44	1.52
6	G	470	SER	CA-C	-6.13	1.44	1.52
7	L	50	ASN	N-CA	-6.13	1.39	1.46
7	Z	31	TYR	CA-C	-6.12	1.45	1.52
3	C	417	ASN	CA-C	-6.12	1.44	1.53
5	M	48	THR	CA-C	-6.12	1.45	1.52
3	C	358	ILE	N-CA	-6.12	1.39	1.46
2	B	259	ARG	CA-C	-6.11	1.44	1.52
5	M	37	LEU	N-CA	-6.11	1.39	1.46
6	G	348	LEU	N-CA	-6.11	1.38	1.46
7	L	90	LEU	CA-C	-6.11	1.45	1.52
2	B	804	VAL	CA-C	-6.11	1.45	1.52
3	C	264	GLU	N-CA	-6.10	1.38	1.46
6	G	473	ILE	CA-C	-6.10	1.45	1.52
7	L	77	PHE	N-CA	-6.10	1.38	1.46
6	G	670	ASN	C-N	6.10	1.41	1.33
4	D	54	VAL	N-CA	-6.10	1.39	1.46
6	G	141	GLU	CA-C	-6.09	1.44	1.52
6	K	140	VAL	N-CA	-6.09	1.38	1.46
2	B	78	ILE	N-CA	-6.09	1.39	1.46
5	F	102	GLU	N-CA	-6.09	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	54	THR	CA-C	-6.08	1.44	1.52
2	B	55	GLU	CA-C	-6.08	1.45	1.52
1	A	431	ARG	CA-C	-6.08	1.45	1.53
6	G	254	PHE	N-CA	-6.08	1.39	1.46
1	A	599	PHE	CA-C	-6.08	1.45	1.52
3	C	5	LEU	CA-C	-6.08	1.45	1.52
2	B	924	VAL	N-CA	-6.08	1.39	1.46
3	C	719	ALA	CA-C	-6.08	1.44	1.52
2	B	377	LYS	CA-C	-6.08	1.44	1.52
6	K	259	LEU	N-CA	-6.08	1.39	1.46
1	A	244	THR	CA-C	-6.07	1.45	1.52
3	C	185	GLU	CA-C	-6.07	1.45	1.52
3	C	224	THR	N-CA	-6.07	1.38	1.46
6	G	486	GLU	N-CA	-6.07	1.39	1.46
1	A	464	LEU	N-CA	-6.07	1.40	1.46
6	G	529	THR	CA-C	-6.07	1.45	1.52
7	Z	66	THR	N-CA	-6.06	1.38	1.46
1	A	453	CYS	N-CA	-6.06	1.39	1.46
2	B	155	ILE	CA-C	-6.06	1.45	1.52
6	G	46	HIS	CA-C	-6.06	1.45	1.52
6	K	188	ASP	CA-C	-6.06	1.45	1.53
6	G	108	SER	CA-C	-6.06	1.45	1.52
6	G	211	VAL	N-CA	-6.05	1.39	1.46
6	G	844	SER	N-CA	-6.05	1.39	1.46
2	B	402	LEU	N-CA	-6.05	1.39	1.46
3	C	312	GLY	CA-C	-6.05	1.43	1.51
2	B	458	LEU	CA-C	-6.04	1.45	1.52
5	F	85	THR	CA-C	-6.04	1.44	1.53
2	B	826	ALA	CA-C	-6.04	1.44	1.52
5	R	46	ILE	N-CA	-6.04	1.41	1.47
3	C	131	LYS	CA-C	-6.03	1.44	1.52
3	C	134	CYS	CA-C	-6.03	1.45	1.52
3	C	472	ASP	N-CA	-6.03	1.38	1.46
6	K	191	MET	N-CA	-6.03	1.39	1.46
1	A	246	ARG	CA-C	-6.03	1.45	1.52
2	B	743	ALA	CA-C	-6.03	1.45	1.52
6	G	143	TYR	N-CA	-6.03	1.39	1.46
3	C	499	GLN	CA-C	-6.03	1.45	1.52
2	B	392	ASP	N-CA	-6.03	1.39	1.46
2	B	398	LEU	N-CA	-6.03	1.39	1.46
1	A	648	ARG	CA-C	-6.02	1.45	1.52
2	B	784	VAL	N-CA	-6.02	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	620	ARG	CA-C	-6.02	1.45	1.52
1	A	722	ILE	CA-C	-6.01	1.45	1.52
3	C	590	SER	CA-C	-6.01	1.45	1.52
6	G	250	PRO	CA-C	-6.01	1.43	1.52
6	K	670	ASN	C-N	6.01	1.41	1.33
5	F	60	ASN	N-CA	-6.01	1.37	1.46
7	Z	141	GLN	N-CA	-6.01	1.39	1.46
1	A	47	PHE	CA-C	-6.01	1.45	1.52
6	G	864	LEU	N-CA	-6.01	1.40	1.46
4	D	83	LEU	CA-C	-6.00	1.45	1.52
6	G	75	LYS	N-CA	-6.00	1.38	1.46
1	A	283	GLY	CA-C	-6.00	1.43	1.51
6	G	136	MET	N-CA	-6.00	1.38	1.46
1	A	544	THR	CA-C	-6.00	1.45	1.52
2	B	764	THR	CA-C	-6.00	1.44	1.52
6	G	151	LYS	CA-C	-6.00	1.44	1.52
3	C	618	ARG	CA-C	-5.99	1.45	1.52
1	A	628	TYR	N-CA	-5.99	1.38	1.46
2	B	305	ILE	N-CA	-5.99	1.39	1.46
6	G	138	GLN	CA-C	-5.99	1.45	1.52
5	R	28	ALA	CA-C	-5.99	1.45	1.52
1	A	254	CYS	CA-C	-5.99	1.45	1.52
2	B	467	VAL	CA-C	-5.98	1.45	1.52
7	L	84	TYR	N-CA	-5.98	1.38	1.46
2	B	406	SER	N-CA	-5.98	1.38	1.46
6	G	79	SER	CA-C	-5.98	1.44	1.53
2	B	459	GLU	N-CA	-5.98	1.39	1.46
6	G	857	THR	CA-C	-5.98	1.45	1.52
7	Z	143	VAL	CA-C	-5.97	1.45	1.52
2	B	121	ARG	CA-C	-5.97	1.45	1.52
2	B	856	ARG	CA-C	-5.97	1.45	1.52
7	L	29	LYS	CA-C	-5.97	1.45	1.52
7	L	38	VAL	CA-C	-5.97	1.45	1.52
2	B	137	ARG	CA-C	-5.96	1.45	1.52
2	B	405	CYS	CA-C	-5.96	1.45	1.52
1	A	267	ASN	N-CA	-5.96	1.38	1.45
2	B	388	HIS	CA-C	-5.96	1.45	1.52
2	B	839	ILE	CA-C	-5.96	1.45	1.52
3	C	105	ILE	CA-C	-5.96	1.45	1.52
6	K	857	THR	CA-C	-5.96	1.45	1.52
2	B	845	ILE	CA-C	-5.96	1.45	1.52
3	C	575	LEU	N-CA	-5.96	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	539	GLN	CA-C	-5.96	1.44	1.52
5	M	171	GLU	N-CA	-5.96	1.39	1.46
3	C	736	GLY	CA-C	-5.96	1.43	1.51
6	G	292	LEU	N-CA	-5.96	1.39	1.46
5	R	107	MET	N-CA	-5.96	1.38	1.46
6	K	179	ASN	N-CA	-5.96	1.39	1.46
6	G	215	ILE	N-CA	-5.95	1.39	1.46
1	A	146	SER	CA-C	-5.95	1.44	1.52
2	B	863	GLU	CA-C	-5.95	1.45	1.52
4	D	55	ARG	N-CA	-5.95	1.38	1.46
6	G	231	MET	CA-C	-5.95	1.45	1.52
1	A	680	VAL	N-CA	-5.95	1.39	1.46
6	K	864	LEU	N-CA	-5.95	1.40	1.46
3	C	81	ILE	N-CA	-5.95	1.39	1.46
3	C	562	TYR	CA-C	-5.95	1.45	1.52
2	B	79	ARG	CA-C	-5.94	1.45	1.52
2	B	357	GLN	CA-C	-5.94	1.45	1.52
6	K	289	VAL	N-CA	-5.94	1.39	1.46
7	Z	16	ILE	CA-C	-5.94	1.45	1.52
6	K	52	LEU	CA-C	-5.94	1.45	1.52
6	K	174	VAL	CA-C	-5.93	1.45	1.52
1	A	36	TRP	N-CA	-5.93	1.38	1.46
2	B	834	LEU	N-CA	-5.93	1.38	1.45
6	K	732	VAL	N-CA	-5.93	1.39	1.46
2	B	123	ASP	CA-C	-5.93	1.45	1.52
3	C	316	TRP	N-CA	-5.93	1.38	1.45
3	C	236	SER	CA-C	-5.93	1.45	1.52
3	C	556	HIS	N-CA	-5.93	1.38	1.46
6	G	191	MET	N-CA	-5.93	1.39	1.46
7	Z	37	SER	CA-C	-5.93	1.44	1.52
2	B	100	VAL	CA-C	-5.92	1.46	1.52
1	A	231	ILE	CA-C	-5.92	1.45	1.52
2	B	191	LEU	CA-C	-5.92	1.45	1.52
6	G	732	VAL	N-CA	-5.92	1.39	1.46
2	B	138	PHE	N-CA	-5.92	1.39	1.46
6	K	139	ALA	N-CA	-5.91	1.39	1.46
4	D	159	MET	CA-C	-5.91	1.45	1.52
3	C	809	GLU	CA-C	-5.90	1.45	1.52
6	G	249	SER	C-O	-5.90	1.19	1.24
6	G	136	MET	CA-C	-5.90	1.44	1.52
6	G	622	GLU	CA-C	-5.90	1.44	1.52
2	B	140	CYS	CA-C	-5.90	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	399	VAL	CA-C	-5.90	1.45	1.52
2	B	204	CYS	N-CA	-5.90	1.39	1.46
2	B	762	ASN	N-CA	-5.89	1.39	1.46
6	G	508	SER	CA-C	-5.89	1.45	1.52
6	K	92	ILE	CA-C	-5.89	1.45	1.52
1	A	589	VAL	CA-C	-5.89	1.45	1.52
7	Z	47	ASN	CA-C	-5.89	1.45	1.52
6	K	241	GLU	CA-C	-5.89	1.44	1.52
6	K	83	THR	N-CA	-5.89	1.38	1.46
5	F	67	ASP	CA-C	-5.88	1.45	1.52
3	C	109	PRO	CA-C	-5.88	1.44	1.52
6	K	640	THR	CA-C	-5.88	1.45	1.52
5	R	145	LEU	CA-C	-5.88	1.44	1.52
5	R	105	GLU	N-CA	-5.88	1.39	1.46
5	R	47	PRO	CA-C	-5.88	1.44	1.52
7	Z	129	VAL	N-CA	-5.88	1.39	1.46
3	C	550	GLU	N-CA	-5.87	1.38	1.45
3	C	780	VAL	CA-C	-5.87	1.45	1.52
6	G	162	SER	N-CA	-5.87	1.39	1.46
5	R	33	VAL	CA-C	-5.87	1.45	1.52
3	C	15	SER	N-CA	-5.87	1.40	1.46
6	K	622	GLU	CA-C	-5.87	1.44	1.52
7	L	14	LYS	CA-C	-5.87	1.45	1.52
2	B	315	ILE	CA-C	-5.87	1.45	1.52
6	G	640	THR	CA-C	-5.87	1.45	1.52
4	D	118	ALA	CA-C	-5.86	1.45	1.52
6	K	707	TYR	N-CA	-5.86	1.38	1.45
7	L	117	ASN	CA-C	-5.86	1.45	1.52
6	G	707	TYR	N-CA	-5.86	1.38	1.45
7	Z	143	VAL	N-CA	-5.86	1.39	1.46
6	G	81	ASP	CA-C	-5.86	1.45	1.52
6	G	442	PHE	N-CA	-5.86	1.39	1.46
3	C	369	VAL	N-CA	-5.86	1.39	1.46
6	G	164	LEU	CA-C	-5.85	1.45	1.52
2	B	234	PHE	CA-C	-5.85	1.45	1.52
3	C	551	ILE	N-CA	-5.85	1.39	1.46
2	B	441	GLU	CA-C	-5.85	1.45	1.52
2	B	75	MET	N-CA	-5.84	1.39	1.46
6	K	176	ARG	CA-C	-5.84	1.44	1.52
1	A	224	ALA	CA-C	-5.84	1.45	1.52
2	B	851	THR	CA-C	-5.84	1.45	1.52
6	G	531	TYR	CA-C	-5.84	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	683	LEU	CA-C	-5.84	1.45	1.52
2	B	283	LEU	CA-C	-5.84	1.45	1.52
2	B	286	LEU	N-CA	-5.84	1.39	1.46
2	B	395	ARG	CA-C	-5.84	1.45	1.52
3	C	322	VAL	CA-C	-5.84	1.46	1.53
6	K	46	HIS	CA-C	-5.84	1.45	1.52
1	A	212	ALA	CA-C	-5.83	1.45	1.52
4	D	6	ALA	CA-C	-5.83	1.45	1.52
2	B	428	ASN	CA-C	-5.83	1.45	1.52
4	D	81	GLU	N-CA	-5.83	1.39	1.46
6	G	662	GLN	CA-C	-5.83	1.45	1.52
3	C	587	LEU	CA-C	-5.83	1.45	1.52
2	B	321	VAL	N-CA	-5.83	1.39	1.46
2	B	263	CYS	CA-C	-5.83	1.45	1.52
3	C	603	PHE	N-CA	-5.83	1.39	1.46
1	A	682	LEU	CA-C	-5.82	1.45	1.52
6	G	751	TYR	CA-C	-5.82	1.45	1.52
6	K	155	VAL	N-CA	-5.82	1.39	1.46
7	L	139	PRO	CA-C	-5.82	1.42	1.52
6	G	443	ILE	CA-C	-5.82	1.45	1.52
6	K	233	ILE	CA-C	-5.82	1.45	1.52
2	B	61	ILE	N-CA	-5.82	1.39	1.46
6	G	769	LYS	CA-C	-5.82	1.45	1.52
7	Z	119	GLU	CA-C	-5.81	1.45	1.52
1	A	620	LEU	CA-C	-5.81	1.45	1.52
2	B	802	ALA	CA-C	-5.81	1.45	1.52
5	R	122	LEU	N-CA	-5.81	1.39	1.46
6	K	184	ALA	N-CA	-5.80	1.39	1.46
6	K	662	GLN	CA-C	-5.80	1.45	1.52
7	L	83	SER	N-CA	-5.80	1.38	1.46
1	A	679	GLU	N-CA	-5.80	1.39	1.46
6	K	769	LYS	CA-C	-5.80	1.45	1.52
6	K	732	VAL	CA-C	-5.79	1.45	1.52
2	B	136	LEU	CA-C	-5.79	1.45	1.52
6	G	137	LEU	N-CA	-5.79	1.39	1.46
3	C	625	LEU	CA-C	-5.79	1.45	1.52
2	B	262	ARG	N-CA	-5.79	1.39	1.46
2	B	267	LEU	CA-C	-5.79	1.44	1.52
6	G	234	ARG	C-N	-5.79	1.26	1.33
6	G	732	VAL	CA-C	-5.79	1.45	1.52
7	Z	62	LEU	N-CA	-5.79	1.38	1.46
5	F	38	LYS	CA-C	-5.79	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	92	VAL	CA-C	-5.79	1.45	1.52
7	Z	146	VAL	CA-C	-5.79	1.46	1.52
6	K	674	LEU	CA-C	-5.78	1.45	1.52
2	B	372	VAL	C-N	-5.78	1.26	1.33
5	R	25	LEU	CA-C	-5.78	1.45	1.53
1	A	630	GLN	N-CA	-5.78	1.38	1.46
3	C	836	MET	CA-C	-5.78	1.45	1.52
6	G	378	VAL	CA-C	-5.78	1.45	1.52
6	G	650	CYS	CA-C	-5.78	1.45	1.52
6	K	650	CYS	CA-C	-5.78	1.45	1.52
6	G	674	LEU	CA-C	-5.77	1.45	1.52
2	B	855	PHE	CA-C	-5.77	1.45	1.52
6	K	202	HIS	N-CA	-5.77	1.39	1.46
1	A	564	LEU	CA-C	-5.77	1.45	1.52
3	C	521	GLN	N-CA	-5.77	1.39	1.46
4	D	82	THR	N-CA	-5.77	1.39	1.46
2	B	172	LEU	CA-C	-5.77	1.45	1.52
3	C	182	GLU	CA-C	-5.77	1.45	1.53
6	K	727	VAL	CA-C	-5.77	1.45	1.52
7	Z	44	PHE	CA-C	-5.76	1.45	1.52
5	M	25	LEU	CA-C	-5.76	1.45	1.53
1	A	325	ALA	C-N	5.76	1.41	1.33
2	B	376	LYS	CA-C	-5.76	1.45	1.52
5	F	71	GLN	CA-C	-5.76	1.45	1.53
6	G	721	ALA	CA-C	-5.76	1.45	1.52
3	C	298	LYS	CA-C	-5.75	1.45	1.52
3	C	783	LYS	CA-C	-5.75	1.45	1.52
6	K	683	PRO	C-N	5.75	1.41	1.33
6	G	104	ILE	CA-C	-5.75	1.45	1.52
3	C	249	GLU	CA-C	-5.75	1.45	1.53
5	R	110	MET	N-CA	-5.75	1.39	1.46
5	R	122	LEU	CA-C	-5.75	1.45	1.52
7	Z	124	ALA	CA-C	-5.75	1.45	1.52
1	A	586	ARG	C-N	5.75	1.40	1.33
7	Z	70	LYS	N-CA	-5.74	1.38	1.46
6	K	194	TYR	N-CA	-5.74	1.39	1.46
1	A	521	LEU	CA-C	-5.74	1.45	1.52
3	C	737	LYS	CA-C	-5.74	1.45	1.52
6	K	64	THR	CA-C	-5.74	1.45	1.52
6	K	776	TRP	N-CA	-5.74	1.39	1.46
6	K	231	MET	CA-C	-5.73	1.45	1.52
7	L	39	LYS	CA-C	-5.73	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	391	THR	CA-C	-5.73	1.44	1.52
2	B	258	ALA	CA-C	-5.73	1.45	1.52
3	C	259	SER	CA-C	-5.72	1.45	1.52
3	C	510	ILE	CA-C	-5.72	1.45	1.52
1	A	201	LEU	CA-C	-5.72	1.46	1.52
1	A	536	ASP	CA-C	-5.72	1.45	1.52
6	G	683	PRO	C-N	5.72	1.41	1.33
6	K	162	SER	CA-C	-5.72	1.45	1.52
6	K	256	GLU	CA-C	-5.72	1.45	1.52
7	L	144	HIS	CA-C	-5.72	1.45	1.52
2	B	953	LEU	CA-C	-5.72	1.45	1.52
2	B	188	ALA	N-CA	-5.72	1.41	1.46
2	B	414	ALA	C-O	-5.72	1.17	1.24
7	L	98	PHE	CA-C	-5.72	1.45	1.52
3	C	7	ILE	N-CA	-5.71	1.39	1.46
6	K	217	LYS	N-CA	-5.71	1.39	1.46
6	K	721	ALA	CA-C	-5.71	1.45	1.52
3	C	402	GLU	CA-C	-5.71	1.45	1.52
6	K	67	THR	CA-C	-5.71	1.45	1.52
2	B	94	LEU	N-CA	-5.71	1.39	1.46
3	C	406	ARG	CA-C	-5.71	1.45	1.52
7	L	144	HIS	N-CA	-5.71	1.39	1.46
4	D	144	PHE	CA-C	-5.71	1.45	1.52
1	A	594	PRO	C-N	-5.71	1.26	1.34
6	G	383	ILE	CA-C	-5.71	1.45	1.52
6	K	154	SER	CA-C	-5.71	1.45	1.52
6	G	727	VAL	CA-C	-5.70	1.45	1.52
5	M	100	ILE	N-CA	-5.70	1.39	1.46
4	D	102	ILE	CA-C	-5.70	1.45	1.52
6	K	107	SER	CA-C	-5.70	1.45	1.52
7	L	92	ALA	CA-C	-5.70	1.45	1.52
1	A	38	TYR	CA-C	-5.70	1.45	1.52
3	C	214	TRP	CA-C	-5.70	1.45	1.52
6	G	76	LEU	CA-C	-5.70	1.45	1.52
6	G	776	TRP	N-CA	-5.70	1.39	1.46
5	R	113	GLU	N-CA	-5.70	1.38	1.46
1	A	658	ILE	CA-C	-5.70	1.43	1.52
6	G	309	ARG	CA-C	-5.70	1.45	1.52
2	B	124	LEU	CA-C	-5.69	1.45	1.52
6	G	243	GLU	CA-C	-5.69	1.45	1.52
3	C	644	ARG	CA-C	-5.69	1.45	1.52
1	A	436	LEU	N-CA	-5.69	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	361	ASP	N-CA	-5.69	1.39	1.46
4	D	57	VAL	N-CA	-5.69	1.39	1.46
6	K	212	SER	N-CA	-5.69	1.39	1.46
7	L	40	GLU	CA-C	-5.69	1.45	1.52
2	B	415	ASN	N-CA	-5.69	1.39	1.46
3	C	841	GLY	CA-C	-5.69	1.45	1.51
6	G	256	GLU	CA-C	-5.69	1.45	1.52
6	G	249	SER	C-N	-5.68	1.26	1.33
6	G	840	ILE	CA-C	-5.68	1.45	1.52
2	B	374	VAL	C-O	-5.68	1.17	1.24
4	D	147	VAL	CA-C	-5.68	1.46	1.52
1	A	660	ILE	N-CA	-5.68	1.39	1.46
6	K	632	SER	CA-C	-5.68	1.45	1.52
4	D	77	LEU	CA-C	-5.67	1.45	1.52
4	D	132	THR	CA-C	-5.67	1.45	1.52
7	Z	28	ALA	N-CA	-5.67	1.39	1.46
1	A	506	LEU	N-CA	-5.67	1.39	1.45
1	A	663	GLU	N-CA	-5.67	1.39	1.46
2	B	793	ALA	C-N	-5.67	1.26	1.33
2	B	303	LEU	N-CA	-5.67	1.39	1.46
3	C	542	ARG	CA-C	-5.67	1.46	1.52
7	Z	49	PHE	CA-C	-5.67	1.45	1.52
7	L	49	PHE	N-CA	-5.67	1.39	1.46
2	B	778	LEU	CA-C	-5.67	1.45	1.52
3	C	433	ILE	CA-C	-5.66	1.45	1.52
1	A	496	TRP	CA-C	-5.66	1.46	1.52
1	A	681	ALA	N-CA	-5.66	1.39	1.46
5	F	93	ASP	CA-C	-5.66	1.45	1.52
3	C	241	LEU	CA-C	-5.66	1.45	1.52
3	C	536	TYR	CA-C	-5.66	1.45	1.52
3	C	610	LEU	N-CA	-5.66	1.40	1.46
6	G	638	ALA	CA-C	-5.66	1.45	1.52
2	B	95	VAL	CA-C	-5.66	1.45	1.52
2	B	310	ASN	N-CA	-5.66	1.39	1.46
7	Z	82	SER	CA-C	-5.66	1.45	1.52
6	K	155	VAL	CA-C	-5.66	1.45	1.52
6	K	752	VAL	CA-C	-5.66	1.45	1.52
6	K	638	ALA	CA-C	-5.65	1.45	1.52
3	C	538	SER	CA-C	-5.65	1.45	1.52
6	K	91	THR	CA-C	-5.65	1.45	1.52
5	F	42	VAL	CA-C	-5.65	1.47	1.52
1	A	145	PRO	CA-C	-5.64	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	445	THR	CA-C	-5.64	1.45	1.52
2	B	781	LEU	N-CA	-5.64	1.39	1.46
3	C	193	TYR	CA-C	-5.64	1.46	1.52
5	R	172	TRP	CA-C	-5.64	1.45	1.52
6	K	751	TYR	CA-C	-5.64	1.45	1.52
1	A	80	TYR	CA-C	-5.64	1.45	1.52
6	G	152	VAL	CA-C	-5.64	1.47	1.52
6	K	840	ILE	CA-C	-5.64	1.45	1.52
7	Z	126	ASP	CA-C	-5.64	1.45	1.52
6	G	93	LYS	N-CA	-5.64	1.39	1.46
5	F	141	GLU	CA-C	-5.63	1.45	1.52
6	G	804	ILE	C-N	5.63	1.41	1.33
1	A	560	ILE	CA-C	-5.63	1.45	1.52
2	B	422	GLU	N-CA	-5.63	1.39	1.46
3	C	291	ASP	CA-C	-5.63	1.45	1.52
3	C	677	ALA	CA-C	-5.63	1.45	1.52
6	K	216	SER	CA-C	-5.63	1.45	1.52
6	G	92	ILE	N-CA	-5.63	1.39	1.46
6	G	632	SER	CA-C	-5.63	1.45	1.52
5	F	19	ARG	N-CA	-5.62	1.39	1.46
7	L	82	SER	CA-C	-5.62	1.46	1.52
4	D	49	VAL	CA-C	-5.62	1.45	1.52
2	B	871	ASN	N-CA	-5.62	1.39	1.46
2	B	835	SER	CA-C	-5.62	1.46	1.52
3	C	825	PRO	C-N	5.62	1.40	1.33
7	Z	145	ARG	CA-C	-5.62	1.45	1.52
3	C	612	THR	N-CA	-5.61	1.39	1.46
2	B	439	VAL	N-CA	-5.61	1.40	1.46
1	A	692	MET	CA-C	-5.61	1.45	1.52
2	B	57	LEU	CA-C	-5.61	1.45	1.52
2	B	413	ALA	CA-C	-5.61	1.45	1.52
3	C	458	ILE	N-CA	-5.61	1.39	1.46
7	L	14	LYS	N-CA	-5.61	1.39	1.46
5	R	127	LYS	CA-C	-5.61	1.46	1.53
6	K	52	LEU	N-CA	-5.61	1.39	1.46
1	A	609	ASP	CA-C	-5.60	1.45	1.52
5	R	109	ARG	N-CA	-5.60	1.38	1.46
2	B	148	LEU	CA-C	-5.60	1.45	1.52
6	G	374	GLU	CA-C	-5.60	1.48	1.53
1	A	570	VAL	C-O	-5.59	1.18	1.24
6	K	192	VAL	N-CA	-5.59	1.39	1.46
3	C	555	ALA	N-CA	-5.59	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	99	ILE	CA-C	-5.59	1.45	1.52
2	B	138	PHE	CA-C	-5.59	1.45	1.52
6	G	421	ILE	CA-C	-5.59	1.46	1.52
5	R	34	LEU	CA-C	-5.59	1.45	1.52
1	A	744	GLU	CA-C	-5.59	1.45	1.52
6	G	403	THR	CA-C	-5.59	1.45	1.52
6	K	44	CYS	N-CA	-5.59	1.39	1.46
3	C	232	VAL	N-CA	-5.58	1.39	1.46
7	Z	30	TYR	N-CA	-5.58	1.39	1.46
1	A	452	ASN	CA-C	-5.58	1.45	1.52
6	G	215	ILE	C-O	-5.58	1.17	1.24
6	G	88	CYS	N-CA	-5.58	1.39	1.46
1	A	220	ILE	CA-C	-5.58	1.46	1.52
3	C	398	HIS	CA-C	-5.58	1.44	1.52
6	K	106	THR	N-CA	-5.58	1.39	1.46
3	C	110	THR	CA-C	-5.58	1.45	1.52
3	C	655	LYS	CA-C	-5.58	1.45	1.52
6	K	804	ILE	C-N	5.58	1.40	1.33
2	B	803	ASN	N-CA	-5.57	1.38	1.45
3	C	357	THR	CA-C	-5.57	1.45	1.52
5	R	101	GLY	CA-C	-5.57	1.45	1.52
7	L	110	GLU	CA-C	-5.57	1.45	1.53
2	B	326	HIS	N-CA	-5.57	1.40	1.46
3	C	254	ARG	CA-C	-5.57	1.45	1.52
3	C	556	HIS	CA-C	-5.57	1.45	1.52
3	C	688	GLU	CA-C	-5.57	1.45	1.52
3	C	777	LEU	CA-C	-5.57	1.45	1.52
6	K	265	MET	N-CA	-5.57	1.39	1.46
5	R	123	VAL	N-CA	-5.57	1.39	1.46
5	M	89	ILE	N-CA	-5.56	1.39	1.46
2	B	356	LEU	CA-C	-5.56	1.45	1.52
6	K	302	ALA	N-CA	-5.56	1.39	1.46
1	A	680	VAL	CA-C	-5.56	1.45	1.52
6	G	188	ASP	CA-C	-5.56	1.46	1.53
1	A	147	GLU	N-CA	-5.55	1.39	1.46
1	A	253	SER	CA-C	-5.55	1.45	1.52
5	R	22	MET	CA-C	-5.55	1.45	1.52
6	K	111	LYS	N-CA	-5.55	1.39	1.46
7	L	28	ALA	CA-C	-5.55	1.45	1.52
6	K	702	GLN	CA-C	-5.55	1.45	1.52
6	K	56	ASN	CA-C	-5.54	1.45	1.52
3	C	207	ASP	CA-C	-5.54	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	705	PHE	CA-C	-5.54	1.45	1.52
1	A	578	VAL	C-N	5.54	1.41	1.33
2	B	353	LYS	N-CA	-5.54	1.39	1.46
6	G	192	VAL	N-CA	-5.54	1.40	1.46
6	G	55	ILE	N-CA	-5.54	1.39	1.46
6	G	682	GLU	CA-C	5.54	1.59	1.52
2	B	302	ASP	CA-C	-5.53	1.45	1.52
2	B	312	VAL	CA-C	-5.53	1.45	1.52
2	B	857	GLN	N-CA	-5.53	1.39	1.46
6	G	532	LEU	N-CA	-5.53	1.39	1.46
1	A	623	GLN	N-CA	-5.53	1.39	1.46
1	A	794	LEU	CA-C	-5.53	1.47	1.53
4	D	240	ASP	CA-C	-5.53	1.45	1.52
7	Z	41	GLN	N-CA	-5.53	1.39	1.46
1	A	718	LYS	CA-C	-5.52	1.45	1.52
2	B	333	LEU	CA-C	-5.52	1.45	1.52
6	G	178	VAL	CA-C	-5.52	1.45	1.52
6	G	191	MET	CA-C	-5.52	1.45	1.52
6	K	147	ALA	CA-C	-5.52	1.45	1.52
6	K	148	ILE	CA-C	-5.52	1.45	1.52
6	G	543	ASN	CA-C	-5.52	1.45	1.52
2	B	304	ILE	CA-C	-5.52	1.45	1.52
2	B	408	ARG	N-CA	-5.52	1.39	1.46
1	A	439	ASN	CA-C	-5.51	1.45	1.52
3	C	506	THR	CA-C	-5.51	1.46	1.52
4	D	78	GLU	N-CA	-5.51	1.39	1.46
1	A	313	GLY	CA-C	-5.51	1.44	1.52
1	A	716	LEU	N-CA	-5.51	1.39	1.46
3	C	440	GLY	CA-C	-5.51	1.48	1.52
6	G	84	LEU	CA-C	-5.51	1.45	1.52
2	B	98	GLU	CA-C	-5.51	1.45	1.52
2	B	350	GLU	N-CA	-5.51	1.39	1.46
2	B	950	GLY	CA-C	-5.51	1.46	1.52
3	C	436	GLY	CA-C	-5.50	1.45	1.52
7	Z	17	LEU	N-CA	-5.50	1.39	1.45
6	K	102	VAL	N-CA	-5.50	1.39	1.46
2	B	337	VAL	N-CA	-5.50	1.40	1.46
6	G	647	VAL	CA-C	-5.50	1.46	1.52
2	B	476	ILE	CA-C	-5.50	1.45	1.52
3	C	203	ILE	N-CA	-5.50	1.39	1.46
5	R	134	MET	C-N	5.50	1.41	1.33
6	G	160	LEU	CA-C	-5.50	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	431	ALA	CA-C	-5.49	1.45	1.52
2	B	910	LEU	CA-C	-5.49	1.46	1.52
5	F	29	GLY	N-CA	-5.49	1.37	1.45
7	Z	76	TYR	CA-C	-5.49	1.46	1.52
6	K	772	PHE	CA-C	-5.49	1.46	1.52
7	Z	66	THR	CA-C	-5.49	1.45	1.52
7	L	120	GLY	CA-C	-5.49	1.46	1.52
2	B	796	ASP	CA-C	-5.49	1.46	1.52
3	C	248	SER	CA-C	-5.49	1.45	1.52
3	C	522	GLU	CA-C	-5.49	1.46	1.52
5	R	65	VAL	CA-C	-5.49	1.45	1.52
3	C	218	ASN	CA-C	-5.48	1.45	1.52
6	G	691	SER	C-N	5.48	1.40	1.33
6	K	104	ILE	CA-C	-5.48	1.45	1.52
1	A	285	GLN	N-CA	-5.48	1.39	1.46
1	A	694	TYR	N-CA	-5.48	1.39	1.46
2	B	461	PHE	CA-C	-5.48	1.45	1.52
3	C	400	SER	CA-C	-5.48	1.45	1.52
6	K	133	ASP	CA-C	-5.48	1.45	1.52
7	L	123	LEU	N-CA	-5.48	1.39	1.46
1	A	75	ILE	N-CA	-5.47	1.39	1.46
3	C	570	ASP	CA-C	-5.47	1.45	1.52
6	K	682	GLU	CA-C	5.47	1.59	1.52
1	A	595	THR	C-N	-5.47	1.26	1.34
2	B	192	ILE	CA-C	-5.47	1.46	1.52
2	B	274	ALA	CA-C	-5.47	1.45	1.52
3	C	554	ILE	N-CA	-5.47	1.40	1.46
2	B	318	ASP	N-CA	-5.47	1.39	1.46
6	K	258	CYS	CA-C	-5.47	1.45	1.52
5	M	20	ILE	CA-C	-5.47	1.45	1.52
2	B	287	SER	CA-C	-5.46	1.45	1.52
2	B	326	HIS	CA-C	-5.46	1.46	1.52
7	Z	122	PHE	N-CA	-5.46	1.39	1.46
5	F	65	VAL	N-CA	-5.46	1.39	1.46
3	C	607	ASP	CA-C	-5.46	1.45	1.52
1	A	229	VAL	N-CA	-5.46	1.39	1.46
1	A	598	LYS	N-CA	-5.46	1.39	1.46
3	C	718	GLY	CA-C	-5.46	1.46	1.52
6	K	198	GLY	CA-C	-5.46	1.46	1.52
5	M	91	VAL	CA-C	-5.46	1.46	1.52
7	L	28	ALA	N-CA	-5.46	1.39	1.46
2	B	276	LYS	N-CA	-5.45	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	176	SER	N-CA	-5.45	1.41	1.46
3	C	323	GLN	CA-C	-5.45	1.46	1.52
3	C	756	PHE	CA-C	-5.45	1.45	1.52
6	G	68	GLU	N-CA	-5.45	1.39	1.46
6	K	771	ASN	N-CA	-5.45	1.39	1.46
6	G	365	SER	CA-C	-5.45	1.45	1.52
1	A	512	VAL	CA-C	-5.45	1.46	1.52
2	B	421	MET	CA-C	-5.45	1.45	1.52
2	B	852	ASP	N-CA	-5.45	1.39	1.46
3	C	537	THR	CA-C	-5.45	1.45	1.52
5	R	55	THR	N-CA	-5.44	1.39	1.46
1	A	499	ASP	CA-C	-5.44	1.45	1.52
6	K	166	LEU	C-O	-5.44	1.17	1.24
3	C	483	GLU	CA-C	-5.44	1.45	1.52
6	K	691	SER	C-N	5.44	1.40	1.33
1	A	701	ASP	CA-C	-5.44	1.45	1.52
2	B	311	ASN	CA-C	-5.43	1.45	1.52
6	G	230	CYS	CA-C	-5.43	1.46	1.52
6	K	180	GLU	CA-C	-5.43	1.45	1.52
1	A	651	LEU	CA-C	-5.42	1.45	1.52
2	B	340	ILE	CA-C	-5.42	1.45	1.52
2	B	359	ALA	N-CA	-5.42	1.39	1.46
1	A	722	ILE	N-CA	-5.42	1.39	1.46
4	D	114	ASP	CA-C	-5.42	1.45	1.52
6	G	478	ASN	CA-C	-5.42	1.45	1.52
6	K	859	ARG	CA-C	-5.42	1.46	1.52
2	B	97	TRP	CA-C	-5.42	1.45	1.52
7	Z	91	MET	N-CA	-5.42	1.39	1.46
3	C	181	LEU	N-CA	-5.42	1.39	1.45
2	B	755	VAL	CA-C	-5.41	1.46	1.52
3	C	213	ILE	N-CA	-5.41	1.39	1.46
6	K	148	ILE	N-CA	-5.41	1.40	1.46
6	G	249	SER	N-CA	-5.41	1.42	1.46
4	D	58	TYR	CA-C	-5.41	1.46	1.52
6	G	137	LEU	CA-C	-5.41	1.45	1.52
7	L	15	ALA	CA-C	-5.41	1.46	1.52
6	G	262	LYS	CA-C	-5.41	1.45	1.52
6	G	771	ASN	N-CA	-5.41	1.39	1.46
1	A	444	ILE	CA-C	-5.40	1.47	1.53
7	Z	128	ILE	CA-C	-5.40	1.46	1.52
3	C	642	GLU	N-CA	-5.40	1.39	1.46
6	K	90	LEU	N-CA	-5.40	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	772	PHE	CA-C	-5.40	1.46	1.52
6	G	859	ARG	CA-C	-5.40	1.46	1.52
1	A	428	VAL	CA-C	-5.40	1.46	1.52
2	B	819	VAL	N-CA	-5.39	1.39	1.46
3	C	27	GLU	CA-C	-5.39	1.46	1.52
2	B	316	VAL	CA-C	-5.39	1.44	1.52
5	F	77	LEU	N-CA	-5.39	1.39	1.46
7	Z	127	GLU	N-CA	-5.39	1.39	1.46
1	A	133	GLY	CA-C	-5.39	1.44	1.51
3	C	662	VAL	CA-C	-5.39	1.46	1.52
4	D	149	GLU	N-CA	-5.39	1.40	1.46
6	K	723	THR	CA-C	-5.39	1.46	1.52
2	B	77	ILE	N-CA	-5.39	1.40	1.46
3	C	70	ASN	CA-C	-5.39	1.46	1.52
2	B	449	LEU	CA-C	-5.38	1.45	1.52
3	C	143	HIS	N-CA	-5.38	1.40	1.46
6	G	800	ALA	CA-C	-5.38	1.45	1.52
3	C	781	ASN	CA-C	-5.38	1.45	1.52
2	B	126	HIS	C-N	-5.38	1.25	1.33
6	G	68	GLU	CA-C	-5.38	1.45	1.52
2	B	305	ILE	CA-C	-5.38	1.45	1.52
3	C	83	VAL	CA-C	-5.38	1.46	1.52
3	C	478	CYS	N-CA	-5.38	1.39	1.46
6	K	250	PRO	CA-C	-5.38	1.45	1.52
2	B	369	GLU	C-N	-5.38	1.26	1.33
4	D	3	LEU	CA-C	-5.38	1.46	1.52
1	A	677	LEU	CA-C	-5.37	1.45	1.52
2	B	454	VAL	N-CA	-5.37	1.40	1.46
3	C	143	HIS	CA-C	-5.37	1.46	1.52
2	B	810	GLU	N-CA	-5.37	1.38	1.46
3	C	640	ASP	CA-C	-5.37	1.46	1.52
6	G	848	LEU	CA-C	-5.37	1.46	1.52
1	A	626	ILE	N-CA	-5.37	1.39	1.46
3	C	90	GLU	CA-C	-5.36	1.46	1.52
1	A	107	TRP	C-N	5.36	1.41	1.33
1	A	669	ASP	N-CA	-5.36	1.39	1.46
3	C	262	ARG	N-CA	-5.36	1.39	1.45
3	C	459	ARG	N-CA	-5.36	1.39	1.46
6	G	520	ASP	CA-C	-5.36	1.45	1.52
7	Z	29	LYS	N-CA	-5.36	1.39	1.46
2	B	35	PRO	CA-C	5.36	1.57	1.52
3	C	122	LEU	CA-C	-5.36	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	163	ALA	CA-C	-5.36	1.46	1.52
6	G	212	SER	CA-C	-5.36	1.46	1.52
6	K	751	TYR	N-CA	-5.36	1.39	1.46
6	G	723	THR	CA-C	-5.36	1.46	1.52
1	A	255	ALA	N-CA	-5.35	1.40	1.46
2	B	922	ALA	CA-C	-5.35	1.46	1.52
7	L	114	LEU	N-CA	-5.35	1.40	1.46
1	A	662	LEU	C-N	-5.35	1.26	1.33
6	K	305	TYR	CA-C	-5.35	1.46	1.52
2	B	130	PHE	CA-C	-5.35	1.45	1.52
3	C	505	VAL	CA-C	-5.35	1.46	1.52
7	Z	78	TYR	CA-C	-5.35	1.46	1.52
6	K	169	CYS	N-CA	-5.35	1.40	1.46
1	A	689	ILE	N-CA	-5.34	1.40	1.46
2	B	235	GLY	CA-C	-5.34	1.47	1.52
6	G	399	ASN	CA-C	-5.34	1.46	1.52
7	L	25	ARG	CA-C	-5.34	1.46	1.52
3	C	337	ASP	CA-C	-5.34	1.45	1.52
3	C	761	TYR	N-CA	-5.34	1.40	1.46
5	R	119	ALA	CA-C	-5.34	1.46	1.52
5	M	26	ASP	CA-C	-5.34	1.45	1.52
1	A	267	ASN	CA-C	-5.34	1.46	1.52
2	B	74	LEU	CA-C	-5.34	1.45	1.52
7	Z	24	ASP	N-CA	-5.34	1.38	1.45
6	K	295	PHE	CA-C	-5.33	1.45	1.52
6	K	856	VAL	CA-C	-5.33	1.46	1.52
5	R	116	LEU	CA-C	-5.33	1.45	1.52
6	K	800	ALA	CA-C	-5.33	1.45	1.52
5	M	53	VAL	CA-C	-5.33	1.46	1.52
3	C	57	ASP	CA-C	-5.33	1.46	1.52
6	G	477	TYR	N-CA	-5.33	1.40	1.46
7	L	66	THR	CA-C	-5.33	1.46	1.52
3	C	237	PHE	CA-C	-5.32	1.46	1.52
6	G	532	LEU	CA-C	-5.32	1.46	1.52
3	C	424	PHE	N-CA	-5.32	1.39	1.46
6	K	848	LEU	CA-C	-5.32	1.46	1.52
3	C	734	LEU	CA-C	-5.32	1.45	1.52
6	K	108	SER	CA-C	-5.32	1.45	1.52
7	L	94	LEU	N-CA	-5.32	1.40	1.46
3	C	773	TRP	CA-C	-5.32	1.46	1.52
6	G	293	GLN	CA-C	-5.32	1.46	1.52
6	G	291	VAL	CA-C	-5.31	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	668	LEU	CA-C	-5.31	1.45	1.52
2	B	193	HIS	N-CA	-5.31	1.40	1.46
3	C	810	TRP	N-CA	-5.31	1.40	1.46
2	B	317	LEU	C-N	-5.30	1.26	1.34
3	C	437	PHE	CA-C	-5.30	1.45	1.52
6	K	683	PRO	CA-C	5.30	1.58	1.52
2	B	151	LEU	N-CA	-5.30	1.39	1.46
6	G	480	VAL	N-CA	-5.30	1.40	1.46
3	C	469	PHE	N-CA	-5.29	1.39	1.46
7	L	146	VAL	CA-C	-5.29	1.46	1.53
2	B	771	CYS	CA-C	-5.29	1.45	1.52
3	C	368	VAL	N-CA	-5.29	1.40	1.46
2	B	381	LYS	CA-C	-5.29	1.46	1.52
7	L	91	MET	N-CA	-5.29	1.39	1.46
6	K	237	SER	CA-C	-5.28	1.46	1.52
1	A	442	ASN	CA-C	-5.28	1.45	1.53
3	C	273	ARG	N-CA	-5.28	1.39	1.46
6	K	40	ASN	CA-C	-5.28	1.46	1.52
7	L	80	ILE	CA-C	-5.28	1.46	1.52
1	A	265	LEU	CA-C	-5.28	1.46	1.52
2	B	62	ILE	N-CA	-5.28	1.40	1.46
2	B	419	VAL	N-CA	-5.28	1.40	1.46
6	K	163	SER	N-CA	-5.28	1.40	1.46
1	A	147	GLU	CA-C	-5.28	1.46	1.52
2	B	817	ASN	N-CA	-5.28	1.39	1.46
6	G	533	ASN	N-CA	-5.28	1.39	1.46
6	G	637	VAL	CA-C	-5.28	1.46	1.52
6	K	84	LEU	N-CA	-5.28	1.40	1.46
2	B	93	LEU	CA-C	-5.27	1.46	1.52
2	B	268	LEU	CA-C	-5.27	1.45	1.53
4	D	7	ALA	CA-C	-5.27	1.46	1.52
2	B	800	ILE	N-CA	-5.27	1.40	1.46
1	A	392	ASP	N-CA	-5.27	1.39	1.46
1	A	120	TRP	C-N	5.27	1.40	1.33
3	C	632	GLN	CA-C	-5.27	1.46	1.52
6	G	210	ALA	N-CA	-5.27	1.40	1.46
5	M	72	ASP	CA-C	-5.27	1.45	1.52
6	K	237	SER	N-CA	-5.27	1.39	1.46
6	K	637	VAL	CA-C	-5.27	1.46	1.52
5	F	76	SER	CA-C	-5.27	1.45	1.52
3	C	376	ILE	CA-C	-5.26	1.46	1.52
6	G	683	PRO	CA-C	5.26	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	519	ASP	N-CA	-5.26	1.40	1.46
3	C	153	LYS	CA-C	-5.26	1.46	1.52
2	B	301	ILE	N-CA	-5.26	1.40	1.46
3	C	292	GLU	CA-C	-5.26	1.45	1.52
6	G	856	VAL	CA-C	-5.26	1.46	1.52
1	A	657	ASN	CA-C	-5.26	1.45	1.52
2	B	382	THR	CA-C	-5.26	1.45	1.52
7	L	89	MET	N-CA	-5.26	1.39	1.46
3	C	512	ASP	CA-C	-5.25	1.47	1.53
7	L	139	PRO	N-CA	-5.25	1.40	1.47
3	C	647	LEU	CA-C	-5.25	1.46	1.52
7	L	39	LYS	N-CA	-5.25	1.40	1.46
6	G	56	ASN	CA-C	-5.25	1.46	1.52
1	A	429	LEU	CA-C	-5.25	1.46	1.52
1	A	438	LYS	CA-C	-5.25	1.46	1.52
1	A	587	PRO	C-N	5.25	1.40	1.33
1	A	641	PHE	CA-C	-5.25	1.46	1.52
2	B	394	TYR	N-CA	-5.25	1.40	1.46
2	B	966	THR	CA-C	5.25	1.59	1.52
3	C	450	TYR	N-CA	-5.25	1.39	1.45
3	C	557	LEU	CA-C	-5.25	1.46	1.52
7	Z	124	ALA	N-CA	-5.25	1.40	1.46
1	A	430	ASP	CA-C	-5.25	1.46	1.52
3	C	186	LYS	N-CA	-5.25	1.39	1.46
3	C	481	THR	CA-C	-5.25	1.47	1.53
6	G	63	THR	CA-C	-5.25	1.46	1.52
5	F	138	GLU	CA-C	-5.25	1.46	1.52
3	C	425	LYS	CA-C	-5.24	1.46	1.52
4	D	162	LYS	CA-C	-5.24	1.46	1.52
6	G	113	MET	N-CA	-5.24	1.40	1.46
7	L	38	VAL	N-CA	-5.24	1.40	1.46
1	A	639	LEU	N-CA	-5.24	1.40	1.46
6	K	830	LEU	C-N	5.24	1.40	1.33
1	A	91	GLY	CA-C	-5.24	1.47	1.52
7	Z	110	GLU	CA-C	-5.24	1.46	1.52
5	M	159	CYS	N-CA	-5.24	1.39	1.46
1	A	471	SER	CA-C	-5.24	1.45	1.52
3	C	317	ALA	CA-C	-5.24	1.46	1.52
6	G	73	MET	N-CA	-5.24	1.40	1.46
6	G	297	SER	CA-C	-5.24	1.45	1.52
5	R	30	LYS	N-CA	-5.24	1.40	1.46
3	C	678	ILE	N-CA	-5.24	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	725	SER	CA-C	-5.24	1.46	1.52
3	C	271	MET	CA-C	-5.23	1.44	1.52
4	D	106	CYS	CA-C	-5.23	1.46	1.52
5	R	40	GLY	CA-C	-5.23	1.44	1.51
6	K	202	HIS	C-N	-5.23	1.27	1.33
6	K	216	SER	N-CA	-5.23	1.39	1.46
6	K	233	ILE	N-CA	-5.23	1.40	1.46
2	B	192	ILE	N-CA	-5.23	1.40	1.46
3	C	468	ILE	CA-C	-5.23	1.46	1.52
6	G	146	GLN	N-CA	-5.23	1.40	1.46
7	L	94	LEU	CA-C	-5.23	1.46	1.52
6	G	294	LEU	N-CA	-5.23	1.40	1.46
2	B	375	LEU	N-CA	-5.23	1.40	1.46
3	C	739	ASP	N-CA	-5.23	1.40	1.46
2	B	938	VAL	N-CA	-5.22	1.39	1.46
1	A	615	VAL	CA-C	-5.22	1.46	1.52
2	B	52	SER	N-CA	-5.22	1.40	1.46
6	G	34	PHE	CA-C	-5.22	1.45	1.52
6	G	830	LEU	C-N	5.22	1.40	1.33
6	G	145	LYS	N-CA	-5.22	1.40	1.46
1	A	466	LEU	N-CA	-5.21	1.39	1.46
2	B	202	ALA	CA-C	-5.21	1.46	1.52
3	C	443	SER	CA-C	-5.21	1.45	1.52
6	G	440	CYS	CA-C	-5.21	1.46	1.52
7	L	95	ASN	CA-C	-5.21	1.46	1.52
5	M	78	TRP	N-CA	-5.21	1.39	1.46
2	B	959	ILE	N-CA	-5.21	1.40	1.46
2	B	474	LEU	N-CA	-5.21	1.40	1.46
3	C	782	GLN	CA-C	-5.21	1.45	1.52
6	G	174	VAL	C-N	-5.21	1.27	1.33
6	K	85	ARG	N-CA	-5.21	1.40	1.46
1	A	391	TYR	N-CA	-5.21	1.39	1.46
3	C	492	SER	CA-C	-5.21	1.46	1.52
3	C	656	ILE	N-CA	-5.21	1.40	1.46
5	M	48	THR	N-CA	-5.21	1.39	1.46
7	L	15	ALA	N-CA	-5.21	1.39	1.46
1	A	476	ASP	CA-C	5.21	1.55	1.52
2	B	284	VAL	CA-C	-5.20	1.45	1.52
2	B	782	LYS	N-CA	-5.20	1.39	1.45
6	G	27	VAL	N-CA	-5.20	1.40	1.46
6	G	872	SER	C-O	-5.20	1.18	1.24
5	M	35	TYR	N-CA	-5.20	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	811	ASN	N-CA	-5.20	1.39	1.46
5	M	20	ILE	N-CA	-5.20	1.40	1.46
3	C	194	TYR	CA-C	-5.20	1.46	1.52
6	G	751	TYR	N-CA	-5.20	1.39	1.45
1	A	693	CYS	CA-C	-5.20	1.46	1.52
2	B	272	SER	C-N	-5.20	1.27	1.34
3	C	340	ARG	C-N	5.20	1.39	1.32
5	R	128	GLN	CA-C	-5.20	1.46	1.52
1	A	661	ALA	CA-C	-5.19	1.46	1.52
2	B	181	PHE	N-CA	-5.19	1.39	1.46
3	C	815	HIS	N-CA	-5.19	1.40	1.46
1	A	286	THR	N-CA	-5.19	1.39	1.46
1	A	211	ALA	CA-C	-5.19	1.46	1.52
2	B	201	ASP	CA-C	-5.19	1.46	1.52
2	B	205	LYS	CA-C	-5.19	1.46	1.52
3	C	258	SER	N-CA	-5.19	1.40	1.46
6	G	147	ALA	N-CA	-5.19	1.40	1.46
6	K	86	ARG	CA-C	-5.19	1.45	1.52
6	G	48	LEU	CA-C	-5.18	1.46	1.52
5	R	35	TYR	N-CA	-5.18	1.39	1.46
6	K	725	SER	CA-C	-5.18	1.46	1.52
1	A	263	LEU	CA-C	-5.18	1.46	1.52
1	A	704	SER	CA-C	-5.18	1.46	1.52
2	B	117	CYS	N-CA	-5.18	1.40	1.46
2	B	304	ILE	N-CA	-5.18	1.40	1.46
2	B	855	PHE	N-CA	-5.18	1.40	1.46
6	G	850	ASP	CA-C	-5.18	1.45	1.52
1	A	465	LEU	CA-C	-5.18	1.45	1.52
6	K	51	ILE	CA-C	-5.18	1.46	1.52
6	K	639	LEU	CA-C	-5.18	1.45	1.52
1	A	162	TRP	CA-C	-5.17	1.46	1.52
4	D	79	ASP	N-CA	-5.17	1.40	1.46
5	F	31	THR	N-CA	-5.17	1.40	1.46
6	K	88	CYS	N-CA	-5.17	1.40	1.46
6	K	227	PHE	N-CA	-5.17	1.39	1.46
1	A	553	VAL	C-N	5.17	1.40	1.33
4	D	241	LYS	CA-C	-5.17	1.46	1.52
7	Z	80	ILE	CA-C	-5.17	1.46	1.52
1	A	758	ALA	N-CA	-5.17	1.40	1.46
2	B	471	ARG	N-CA	-5.17	1.40	1.46
6	G	227	PHE	N-CA	-5.17	1.40	1.46
1	A	344	LEU	N-CA	-5.17	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	474	LEU	C-N	5.17	1.40	1.33
6	G	75	LYS	CA-C	-5.17	1.45	1.52
3	C	144	TYR	CA-C	-5.17	1.46	1.52
6	G	483	GLU	CA-C	-5.17	1.46	1.53
1	A	412	ARG	CA-C	-5.16	1.46	1.52
7	Z	88	LEU	N-CA	-5.16	1.40	1.46
6	K	872	SER	C-O	-5.16	1.18	1.24
1	A	626	ILE	CA-C	-5.16	1.46	1.52
1	A	681	ALA	C-O	-5.16	1.18	1.24
2	B	190	GLU	N-CA	-5.16	1.40	1.46
6	G	90	LEU	N-CA	-5.16	1.40	1.46
7	L	135	LEU	N-CA	-5.16	1.39	1.46
1	A	65	LEU	CA-C	-5.16	1.46	1.52
2	B	776	ALA	CA-C	-5.16	1.45	1.52
6	K	34	PHE	CA-C	-5.16	1.46	1.52
2	B	90	LYS	CA-C	-5.15	1.46	1.52
4	D	129	GLN	N-CA	-5.15	1.40	1.46
2	B	403	HIS	CA-C	-5.15	1.46	1.52
3	C	179	PHE	CA-C	-5.15	1.46	1.52
3	C	530	VAL	N-CA	-5.15	1.39	1.46
6	G	639	LEU	CA-C	-5.15	1.45	1.52
6	K	683	PRO	N-CA	5.15	1.52	1.46
3	C	156	ASN	N-CA	-5.15	1.39	1.46
6	G	534	VAL	CA-C	-5.15	1.46	1.52
2	B	963	GLN	CA-C	-5.15	1.46	1.52
3	C	529	TRP	N-CA	-5.15	1.39	1.46
6	K	44	CYS	CA-C	-5.15	1.46	1.52
1	A	561	ILE	CA-C	-5.14	1.46	1.52
6	G	683	PRO	N-CA	5.14	1.52	1.46
6	K	119	ASN	N-CA	-5.14	1.40	1.46
2	B	52	SER	CA-C	-5.14	1.46	1.52
5	F	28	ALA	CA-C	-5.14	1.45	1.52
4	D	9	CYS	CA-C	-5.14	1.46	1.52
7	L	125	VAL	N-CA	-5.14	1.40	1.46
3	C	51	LYS	CA-C	-5.14	1.46	1.52
5	R	154	PHE	N-CA	-5.14	1.39	1.46
6	K	301	ALA	CA-C	-5.14	1.45	1.52
1	A	552	ALA	N-CA	-5.14	1.40	1.46
3	C	817	ASP	CA-C	-5.14	1.45	1.52
7	L	109	VAL	CA-C	-5.14	1.45	1.52
1	A	34	GLN	CA-C	-5.13	1.46	1.52
2	B	473	ALA	N-CA	-5.13	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	27	THR	C-O	-5.13	1.17	1.24
7	Z	45	GLU	N-CA	-5.13	1.40	1.46
6	G	239	GLN	CA-C	-5.13	1.46	1.52
6	K	197	LEU	CA-C	-5.13	1.45	1.52
5	M	75	ARG	N-CA	-5.13	1.40	1.46
1	A	638	ALA	CA-C	-5.12	1.46	1.52
4	D	9	CYS	N-CA	-5.12	1.39	1.45
3	C	65	PHE	CA-C	-5.12	1.46	1.52
2	B	260	PHE	CA-C	-5.12	1.46	1.52
3	C	420	GLU	CA-C	-5.12	1.46	1.52
3	C	621	VAL	N-CA	-5.12	1.40	1.46
5	R	97	ARG	N-CA	-5.12	1.39	1.46
3	C	644	ARG	N-CA	-5.12	1.40	1.46
5	R	85	THR	N-CA	-5.12	1.39	1.45
3	C	397	ALA	N-CA	-5.12	1.40	1.46
1	A	110	SER	CA-C	-5.12	1.46	1.52
4	D	162	LYS	N-CA	-5.12	1.40	1.46
6	G	798	GLU	CA-C	-5.12	1.46	1.52
6	K	300	LYS	CA-C	-5.12	1.45	1.53
1	A	629	LEU	N-CA	-5.11	1.39	1.46
3	C	325	ALA	N-CA	-5.11	1.39	1.46
4	D	128	ALA	CA-C	-5.11	1.46	1.52
6	K	850	ASP	CA-C	-5.11	1.46	1.52
1	A	658	ILE	N-CA	-5.11	1.39	1.46
3	C	646	GLU	CA-C	-5.11	1.46	1.52
4	D	129	GLN	CA-C	-5.11	1.46	1.52
6	K	43	LYS	CA-C	-5.11	1.46	1.52
6	G	156	SER	N-CA	-5.11	1.40	1.46
2	B	319	ARG	N-CA	-5.11	1.40	1.46
6	K	658	HIS	CA-C	-5.11	1.46	1.52
6	K	798	GLU	CA-C	-5.11	1.46	1.52
6	G	868	ILE	CA-C	-5.10	1.46	1.52
2	B	845	ILE	N-CA	-5.10	1.40	1.46
7	Z	125	VAL	N-CA	-5.10	1.40	1.46
3	C	506	THR	N-CA	-5.10	1.40	1.46
7	L	66	THR	N-CA	-5.10	1.39	1.46
5	F	96	ASP	CA-C	-5.09	1.46	1.52
6	K	144	MET	CA-C	-5.09	1.46	1.52
7	L	30	TYR	N-CA	-5.09	1.39	1.46
3	C	111	GLN	CA-C	-5.09	1.45	1.52
1	A	521	LEU	N-CA	-5.09	1.40	1.46
5	R	125	ALA	CA-C	-5.09	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	121	ARG	N-CA	-5.09	1.40	1.46
6	G	658	HIS	CA-C	-5.09	1.46	1.52
2	B	165	TYR	CA-C	-5.09	1.46	1.52
6	K	255	ILE	N-CA	-5.08	1.40	1.46
3	C	399	ASP	N-CA	-5.08	1.40	1.46
6	K	835	ARG	CA-C	-5.08	1.46	1.52
5	R	61	ILE	CA-C	-5.08	1.46	1.52
7	L	105	LEU	N-CA	-5.08	1.39	1.46
6	G	214	MET	N-CA	-5.08	1.40	1.46
1	A	314	MET	C-N	5.08	1.40	1.33
6	G	307	ALA	N-CA	-5.08	1.40	1.46
3	C	544	ASN	N-CA	-5.08	1.39	1.45
2	B	269	GLN	N-CA	-5.08	1.39	1.46
2	B	295	ALA	CA-C	-5.08	1.46	1.52
1	A	74	LYS	N-CA	-5.07	1.39	1.46
7	Z	141	GLN	CA-C	-5.07	1.46	1.52
3	C	314	ILE	N-CA	-5.07	1.40	1.46
6	G	309	ARG	N-CA	-5.07	1.39	1.46
2	B	371	LEU	C-O	-5.07	1.18	1.24
3	C	9	ARG	CA-C	-5.07	1.46	1.52
6	G	175	LYS	C-N	-5.07	1.27	1.34
6	K	228	ALA	CA-C	-5.07	1.46	1.52
3	C	259	SER	N-CA	-5.07	1.39	1.46
5	M	47	PRO	N-CA	-5.07	1.41	1.47
1	A	508	LYS	CA-C	-5.06	1.46	1.52
1	A	561	ILE	N-CA	-5.06	1.40	1.46
3	C	780	VAL	N-CA	-5.06	1.40	1.46
5	M	19	ARG	N-CA	-5.06	1.40	1.46
6	G	835	ARG	CA-C	-5.06	1.46	1.52
2	B	434	ASP	C-N	-5.06	1.27	1.33
6	G	509	ILE	CA-C	-5.06	1.45	1.52
7	L	145	ARG	N-CA	-5.06	1.39	1.46
2	B	375	LEU	C-N	-5.06	1.27	1.33
2	B	417	ILE	N-CA	-5.06	1.40	1.46
3	C	457	LEU	CA-C	-5.06	1.46	1.52
2	B	746	TYR	CA-C	-5.05	1.46	1.52
6	K	766	LYS	CA-C	-5.05	1.46	1.52
1	A	413	SER	N-CA	-5.05	1.40	1.46
3	C	361	ASN	N-CA	-5.05	1.38	1.45
6	G	39	ILE	N-CA	-5.05	1.41	1.46
2	B	385	VAL	CA-C	-5.05	1.46	1.52
1	A	542	ILE	N-CA	-5.05	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	166	LEU	N-CA	-5.05	1.39	1.46
1	A	304	ASN	CA-C	-5.04	1.46	1.52
3	C	616	GLU	N-CA	-5.04	1.40	1.46
2	B	104	THR	CA-C	-5.04	1.46	1.52
2	B	265	TYR	N-CA	-5.04	1.40	1.46
2	B	535	THR	C-N	5.04	1.40	1.33
6	G	146	GLN	CA-C	-5.04	1.46	1.52
6	G	479	ARG	CA-C	-5.04	1.46	1.52
6	K	868	ILE	CA-C	-5.04	1.46	1.52
2	B	124	LEU	N-CA	-5.04	1.39	1.46
3	C	125	LEU	CA-C	-5.04	1.46	1.52
5	R	84	ASN	N-CA	-5.04	1.39	1.46
5	R	103	ALA	N-CA	-5.04	1.40	1.46
6	K	287	PRO	CA-C	-5.04	1.45	1.52
1	A	149	LEU	CA-C	-5.04	1.46	1.52
6	G	70	PHE	N-CA	-5.04	1.40	1.46
5	M	130	LEU	CA-C	-5.04	1.47	1.52
1	A	543	TYR	CA-C	-5.03	1.46	1.52
1	A	682	LEU	N-CA	-5.03	1.40	1.46
2	B	337	VAL	CA-C	-5.03	1.46	1.52
3	C	38	SER	CA-C	-5.03	1.46	1.52
6	K	126	ARG	N-CA	-5.03	1.40	1.46
6	K	839	ASP	N-CA	-5.03	1.39	1.45
3	C	11	LEU	CA-C	-5.03	1.46	1.52
6	G	766	LYS	CA-C	-5.03	1.46	1.52
3	C	242	PRO	N-CA	-5.03	1.40	1.47
5	R	157	ALA	CA-C	-5.03	1.46	1.52
2	B	832	VAL	CA-C	-5.03	1.46	1.52
2	B	835	SER	N-CA	-5.03	1.39	1.45
2	B	224	LEU	CA-C	-5.03	1.46	1.52
2	B	745	ALA	N-CA	-5.03	1.39	1.46
3	C	689	CYS	CA-C	-5.03	1.46	1.52
6	K	69	ALA	CA-C	-5.03	1.46	1.52
4	D	66	MET	CA-C	-5.03	1.46	1.52
6	G	401	LEU	N-CA	-5.03	1.40	1.46
3	C	334	GLU	C-N	5.02	1.40	1.33
5	F	111	LEU	CA-C	-5.02	1.45	1.52
6	K	141	GLU	CA-C	-5.02	1.46	1.52
6	K	176	ARG	N-CA	-5.02	1.40	1.46
6	K	306	ALA	N-CA	-5.02	1.40	1.46
1	A	624	SER	CA-C	-5.02	1.46	1.52
6	G	451	LEU	CA-C	-5.02	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	314	ILE	C-N	-5.01	1.27	1.33
3	C	68	ARG	CA-C	-5.01	1.46	1.52
3	C	354	TYR	CA-C	-5.01	1.46	1.52
3	C	432	SER	N-CA	-5.01	1.40	1.46
2	B	294	LYS	N-CA	-5.01	1.40	1.46
2	B	308	SER	N-CA	-5.01	1.39	1.46
6	G	285	LEU	N-CA	-5.01	1.40	1.46
2	B	306	LYS	N-CA	-5.01	1.40	1.46
6	G	668	THR	CA-C	-5.01	1.46	1.52
7	Z	18	ILE	N-CA	-5.01	1.40	1.46
1	A	84	ARG	CA-C	-5.01	1.46	1.52
4	D	20	GLN	N-CA	-5.01	1.40	1.46
4	D	65	TYR	N-CA	-5.01	1.39	1.46
4	D	90	ILE	CA-C	-5.01	1.47	1.52
7	L	146	VAL	N-CA	-5.01	1.39	1.45
2	B	946	ALA	CA-C	-5.00	1.46	1.52
5	F	118	ASN	CA-C	-5.00	1.47	1.53
6	G	296	CYS	CA-C	-5.00	1.46	1.52
5	R	113	GLU	CA-C	-5.00	1.46	1.52
2	B	211	MET	N-CA	-5.00	1.40	1.46

All (2096) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	693	VAL	CA-C-N	-22.66	91.52	119.84
6	G	693	VAL	C-N-CA	-22.66	91.52	119.84
1	A	586	ARG	CA-C-N	21.43	141.32	120.31
1	A	586	ARG	C-N-CA	21.43	141.32	120.31
6	G	277	LEU	CA-C-N	-19.06	96.02	119.84
6	G	277	LEU	C-N-CA	-19.06	96.02	119.84
2	B	933	GLY	CA-C-N	-18.98	96.12	119.84
2	B	933	GLY	C-N-CA	-18.98	96.12	119.84
6	K	117	GLU	CA-C-N	18.18	146.10	120.29
6	K	117	GLU	C-N-CA	18.18	146.10	120.29
2	B	326	HIS	N-CA-C	-16.42	85.12	108.76
6	K	225	SER	CA-C-N	16.09	139.95	119.84
6	K	225	SER	C-N-CA	16.09	139.95	119.84
2	B	841	ILE	N-CA-C	15.46	126.34	110.72
1	A	338	ASP	N-CA-C	-15.34	91.45	111.24
6	G	804	ILE	N-CA-C	15.12	124.74	110.53
6	K	804	ILE	N-CA-C	15.04	124.67	110.53
6	K	277	LEU	CA-C-N	-14.89	101.23	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	277	LEU	C-N-CA	-14.89	101.23	119.84
1	A	595	THR	CA-C-O	14.87	130.24	119.68
2	B	325	GLU	CA-C-N	14.78	136.11	122.37
2	B	325	GLU	C-N-CA	14.78	136.11	122.37
1	A	214	HIS	CA-C-N	14.60	138.09	119.84
1	A	214	HIS	C-N-CA	14.60	138.09	119.84
2	B	760	VAL	N-CA-C	-14.46	87.86	108.11
1	A	229	VAL	N-CA-C	-14.46	87.87	108.11
1	A	227	ARG	N-CA-C	-14.23	95.84	111.07
6	G	665	CYS	N-CA-C	14.17	127.86	107.88
5	F	121	TRP	N-CA-C	14.16	130.09	109.69
5	F	59	LYS	CA-C-N	14.15	142.41	122.46
5	F	59	LYS	C-N-CA	14.15	142.41	122.46
6	G	609	ARG	CA-C-N	14.15	139.24	120.28
6	G	609	ARG	C-N-CA	14.15	139.24	120.28
6	K	609	ARG	CA-C-N	14.12	139.20	120.28
6	K	609	ARG	C-N-CA	14.12	139.20	120.28
5	R	88	VAL	N-CA-C	14.09	126.09	108.06
1	A	630	GLN	N-CA-C	-13.99	96.69	114.04
1	A	797	PRO	CA-C-N	-13.91	102.45	119.84
1	A	797	PRO	C-N-CA	-13.91	102.45	119.84
6	G	178	VAL	N-CA-C	13.83	126.38	110.62
7	Z	58	GLU	N-CA-C	-13.67	95.86	111.03
3	C	416	LYS	N-CA-C	-13.44	87.00	108.90
1	A	736	ALA	N-CA-C	13.26	125.81	111.36
6	K	629	LEU	CA-C-N	13.15	138.33	120.44
6	K	629	LEU	C-N-CA	13.15	138.33	120.44
6	G	629	LEU	CA-C-N	13.12	138.29	120.44
6	G	629	LEU	C-N-CA	13.12	138.29	120.44
1	A	768	ASP	CA-C-N	13.06	137.42	120.44
1	A	768	ASP	C-N-CA	13.06	137.42	120.44
2	B	414	ALA	CA-C-N	12.89	137.55	120.28
2	B	414	ALA	C-N-CA	12.89	137.55	120.28
2	B	940	GLY	N-CA-C	-12.80	90.52	111.38
5	R	159	CYS	N-CA-C	-12.70	90.63	108.54
2	B	926	ILE	N-CA-C	12.59	126.25	108.12
6	K	665	CYS	N-CA-C	12.44	127.58	108.42
1	A	343	GLN	N-CA-C	-12.40	84.38	110.80
5	F	61	ILE	N-CA-C	-12.28	90.80	108.36
1	A	504	ALA	N-CA-C	-12.25	89.43	109.40
3	C	246	THR	CA-C-N	12.23	133.94	121.35
3	C	246	THR	C-N-CA	12.23	133.94	121.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	441	VAL	N-CA-C	-12.19	90.30	108.46
6	G	225	SER	CA-C-O	-12.17	111.38	119.29
7	L	58	GLU	N-CA-C	-12.16	97.53	111.03
2	B	257	ARG	N-CA-C	12.13	125.66	111.11
6	G	459	LEU	CA-C-N	12.10	133.67	119.99
6	G	459	LEU	C-N-CA	12.10	133.67	119.99
2	B	759	LEU	N-CA-C	-12.09	89.20	108.90
1	A	242	VAL	N-CA-C	-12.03	93.33	106.21
3	C	559	ARG	N-CA-C	-12.01	91.24	109.14
2	B	145	ALA	N-CA-C	11.91	124.26	111.28
6	K	247	ARG	N-CA-C	-11.87	96.92	111.40
6	K	240	LEU	CA-C-N	11.74	136.47	120.38
6	K	240	LEU	C-N-CA	11.74	136.47	120.38
2	B	761	VAL	N-CA-C	-11.72	91.60	108.48
6	K	24	LYS	N-CA-C	11.65	124.06	111.36
6	G	96	SER	N-CA-C	11.62	135.56	110.80
6	G	205	LYS	N-CA-C	-11.59	98.63	111.14
4	D	19	ARG	CA-C-N	11.50	137.79	122.84
4	D	19	ARG	C-N-CA	11.50	137.79	122.84
4	D	61	MET	N-CA-C	-11.46	87.97	107.80
3	C	653	GLU	N-CA-C	-11.44	92.67	109.15
1	A	547	ASN	N-CA-C	-11.39	99.74	112.72
6	G	95	MET	N-CA-C	11.39	126.43	112.54
1	A	339	ARG	N-CA-C	-11.38	92.11	109.41
6	G	829	LEU	N-CA-C	-11.36	89.89	108.41
6	K	829	LEU	N-CA-C	-11.35	89.91	108.41
1	A	554	THR	N-CA-C	11.34	127.09	108.26
1	A	528	ILE	N-CA-C	-11.33	92.74	108.27
4	D	56	TYR	N-CA-C	-11.31	89.65	108.76
4	D	14	LYS	CA-C-N	11.29	138.09	121.72
4	D	14	LYS	C-N-CA	11.29	138.09	121.72
6	K	131	ILE	N-CA-C	11.26	125.17	111.09
3	C	113	PHE	N-CA-C	11.24	127.83	109.95
4	D	36	PHE	CA-C-N	11.14	130.56	118.97
4	D	36	PHE	C-N-CA	11.14	130.56	118.97
6	G	117	GLU	N-CA-C	-11.10	90.87	108.63
1	A	207	GLY	N-CA-C	-11.07	101.43	111.95
7	L	14	LYS	N-CA-C	-11.06	97.90	111.40
2	B	749	VAL	N-CA-C	-11.05	91.42	107.77
6	G	141	GLU	N-CA-C	11.03	124.67	111.33
1	A	302	ASN	N-CA-C	-10.99	100.36	113.88
2	B	234	PHE	CA-C-N	10.95	130.43	119.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	234	PHE	C-N-CA	10.95	130.43	119.92
1	A	321	ARG	N-CA-C	-10.95	90.43	108.49
2	B	750	ASN	N-CA-C	-10.91	90.44	108.34
1	A	86	LEU	N-CA-C	10.88	122.71	111.07
4	D	118	ALA	N-CA-C	-10.82	90.88	108.52
2	B	905	PHE	CA-C-N	10.79	136.93	121.50
2	B	905	PHE	C-N-CA	10.79	136.93	121.50
5	R	122	LEU	N-CA-C	-10.78	88.91	107.99
1	A	491	VAL	CA-C-N	10.77	142.10	121.54
1	A	491	VAL	C-N-CA	10.77	142.10	121.54
6	G	693	VAL	N-CA-C	10.77	118.81	108.15
2	B	894	THR	O-C-N	10.73	129.36	121.85
1	A	802	MET	CA-C-N	10.72	133.24	119.84
1	A	802	MET	C-N-CA	10.72	133.24	119.84
5	M	62	SER	CA-C-N	10.72	137.31	122.19
5	M	62	SER	C-N-CA	10.72	137.31	122.19
3	C	176	SER	N-CA-C	-10.69	98.56	108.07
6	K	120	TYR	CA-C-N	10.69	134.33	120.44
6	K	120	TYR	C-N-CA	10.69	134.33	120.44
5	R	78	TRP	N-CA-C	-10.66	99.20	111.03
2	B	256	GLU	N-CA-C	10.64	125.78	113.01
6	G	815	ARG	N-CA-C	-10.62	97.40	111.74
1	A	656	GLY	N-CA-C	-10.60	99.63	115.32
6	K	814	GLU	N-CA-C	-10.55	96.47	111.56
6	K	838	HIS	CA-C-N	10.55	137.50	120.94
6	K	838	HIS	C-N-CA	10.55	137.50	120.94
6	G	838	HIS	CA-C-N	10.54	137.49	120.94
6	G	838	HIS	C-N-CA	10.54	137.49	120.94
2	B	444	GLN	N-CA-C	10.54	122.77	111.28
6	G	813	CYS	N-CA-C	10.53	122.14	108.24
5	M	155	ILE	N-CA-C	-10.51	93.46	108.17
6	G	435	GLY	CA-C-N	10.51	134.36	120.28
6	G	435	GLY	C-N-CA	10.51	134.36	120.28
6	G	535	LEU	CA-C-N	10.49	134.08	120.44
6	G	535	LEU	C-N-CA	10.49	134.08	120.44
6	K	152	VAL	N-CA-C	-10.49	98.01	107.56
6	G	207	ASP	N-CA-C	10.47	127.33	108.48
1	A	243	ASP	N-CA-C	-10.40	92.44	109.40
5	M	41	GLU	CA-C-N	10.38	140.65	121.97
5	M	41	GLU	C-N-CA	10.38	140.65	121.97
1	A	216	THR	N-CA-C	-10.36	100.64	113.38
3	C	567	ILE	N-CA-C	-10.34	97.31	107.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	631	LYS	N-CA-C	-10.31	88.84	110.80
2	B	928	LYS	CA-C-N	10.29	132.70	119.84
2	B	928	LYS	C-N-CA	10.29	132.70	119.84
7	L	61	LEU	CA-C-N	-10.27	106.92	122.74
7	L	61	LEU	C-N-CA	-10.27	106.92	122.74
5	F	24	GLY	N-CA-C	-10.27	101.56	112.04
2	B	754	ILE	N-CA-C	-10.24	93.72	108.36
1	A	589	VAL	N-CA-C	-10.23	93.69	108.53
1	A	317	PHE	CA-C-N	10.21	137.73	122.93
1	A	317	PHE	C-N-CA	10.21	137.73	122.93
3	C	4	ARG	N-CA-C	-10.16	98.85	112.26
6	K	283	LYS	CA-C-N	10.16	133.89	120.28
6	K	283	LYS	C-N-CA	10.16	133.89	120.28
1	A	104	GLU	N-CA-C	-10.12	99.79	111.03
5	M	72	ASP	N-CA-C	10.08	123.21	111.11
1	A	36	TRP	N-CA-C	-10.07	92.42	109.24
2	B	811	ASN	N-CA-C	-10.00	92.06	109.06
6	G	828	LEU	N-CA-C	-9.98	93.00	109.07
6	K	828	LEU	N-CA-C	-9.97	93.02	109.07
5	M	63	PHE	N-CA-C	9.95	125.97	109.46
3	C	396	TRP	N-CA-C	-9.92	94.55	110.32
3	C	379	THR	N-CA-C	-9.91	93.20	108.96
2	B	483	THR	N-CA-C	-9.91	99.56	112.24
3	C	204	SER	CA-C-N	-9.91	115.34	122.18
3	C	204	SER	C-N-CA	-9.91	115.34	122.18
5	R	30	LYS	CA-C-N	9.91	133.56	120.28
5	R	30	LYS	C-N-CA	9.91	133.56	120.28
1	A	59	PHE	CA-C-N	9.90	133.31	120.44
1	A	59	PHE	C-N-CA	9.90	133.31	120.44
1	A	430	ASP	N-CA-C	-9.89	92.78	108.90
3	C	221	CYS	N-CA-C	-9.89	91.29	108.20
2	B	255	SER	CA-C-N	9.88	140.74	121.18
2	B	255	SER	C-N-CA	9.88	140.74	121.18
6	K	129	CYS	N-CA-C	9.86	123.26	111.82
6	G	693	VAL	CA-C-O	-9.86	114.17	120.88
1	A	272	SER	N-CA-C	9.83	125.38	109.85
6	G	536	GLU	N-CA-C	-9.83	100.56	111.07
1	A	301	PRO	N-CA-C	-9.82	102.11	114.68
2	B	369	GLU	CA-C-N	9.79	133.39	120.28
2	B	369	GLU	C-N-CA	9.79	133.39	120.28
3	C	92	VAL	N-CA-C	9.77	119.72	110.53
3	C	151	ASN	N-CA-C	-9.77	94.97	109.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	120	TYR	CA-C-N	9.74	133.33	120.28
2	B	120	TYR	C-N-CA	9.74	133.33	120.28
3	C	315	ILE	N-CA-C	-9.72	94.57	108.17
3	C	269	TYR	N-CA-C	-9.69	98.20	111.87
1	A	587	PRO	N-CA-C	9.69	126.30	111.57
6	G	498	PHE	N-CA-C	9.69	121.84	111.28
3	C	311	ASN	N-CA-C	-9.62	100.75	111.14
1	A	519	ASP	N-CA-C	-9.60	91.62	108.13
3	C	551	ILE	N-CA-C	-9.59	94.68	108.11
5	F	166	LEU	CA-C-N	9.58	134.87	120.31
5	F	166	LEU	C-N-CA	9.58	134.87	120.31
5	F	95	ASN	N-CA-C	-9.57	101.72	113.97
1	A	241	GLU	CA-C-N	9.52	130.60	121.65
1	A	241	GLU	C-N-CA	9.52	130.60	121.65
4	D	235	VAL	CA-C-N	9.50	132.79	120.44
4	D	235	VAL	C-N-CA	9.50	132.79	120.44
1	A	337	LYS	N-CA-C	9.49	123.99	110.23
1	A	803	PRO	N-CA-C	9.49	132.02	112.47
6	G	274	ILE	N-CA-C	9.48	125.55	111.89
5	F	97	ARG	N-CA-C	-9.45	90.67	110.80
3	C	245	ILE	N-CA-C	-9.44	94.89	108.11
4	D	89	VAL	N-CA-C	9.44	119.40	110.53
5	M	130	LEU	N-CA-C	-9.39	97.81	109.65
3	C	554	ILE	N-CA-C	-9.34	101.75	110.53
3	C	808	GLU	N-CA-C	9.33	121.06	111.07
3	C	412	VAL	N-CA-C	9.33	121.20	108.89
1	A	198	LYS	N-CA-C	-9.31	90.96	110.80
6	G	201	TYR	N-CA-C	-9.30	100.83	110.97
1	A	625	ILE	N-CA-C	-9.29	103.63	112.83
7	Z	62	LEU	N-CA-C	-9.28	93.28	109.06
2	B	414	ALA	O-C-N	9.27	131.73	122.09
1	A	429	LEU	N-CA-C	-9.26	95.26	109.24
2	B	821	ASP	N-CA-C	9.26	124.41	108.76
1	A	599	PHE	CA-C-O	-9.24	111.12	120.82
1	A	108	ILE	N-CA-C	9.24	122.23	108.46
5	M	53	VAL	N-CA-C	-9.23	94.83	108.12
1	A	496	TRP	N-CA-C	-9.22	95.27	109.85
1	A	600	LYS	N-CA-C	-9.20	101.82	113.23
1	A	588	ARG	N-CA-C	9.18	123.46	109.23
1	A	453	CYS	N-CA-C	-9.18	100.98	112.72
4	D	136	MET	N-CA-C	-9.16	91.29	110.80
6	G	523	GLU	N-CA-C	-9.13	100.94	112.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	216	ASP	CA-C-N	9.13	132.51	120.28
2	B	216	ASP	C-N-CA	9.13	132.51	120.28
1	A	467	ARG	N-CA-C	-9.10	98.03	110.68
1	A	240	TRP	CA-C-N	9.08	138.89	121.54
1	A	240	TRP	C-N-CA	9.08	138.89	121.54
3	C	85	ASN	N-CA-C	-9.07	94.41	109.46
6	K	736	ASP	N-CA-C	-9.05	94.92	109.40
1	A	598	LYS	N-CA-C	-9.05	101.42	111.28
6	G	736	ASP	N-CA-C	-9.04	94.94	109.40
6	G	831	ALA	N-CA-C	9.04	123.25	109.23
3	C	546	TYR	N-CA-C	-9.03	93.80	108.52
5	F	106	VAL	CA-C-N	9.02	134.02	120.31
5	F	106	VAL	C-N-CA	9.02	134.02	120.31
6	K	831	ALA	N-CA-C	9.02	123.21	109.23
1	A	714	GLU	N-CA-C	9.02	120.72	111.07
2	B	67	GLY	N-CA-C	-9.01	91.83	113.18
6	K	120	TYR	CA-C-O	9.01	129.97	120.42
2	B	331	ARG	CA-C-N	8.99	133.21	120.53
2	B	331	ARG	C-N-CA	8.99	133.21	120.53
6	K	749	ASP	N-CA-C	-8.99	95.41	109.07
5	R	61	ILE	N-CA-C	-8.98	95.51	108.36
7	L	88	LEU	N-CA-C	8.98	121.07	111.28
6	G	749	ASP	N-CA-C	-8.97	95.43	109.07
6	G	462	GLU	N-CA-C	8.97	120.82	111.14
1	A	511	ILE	N-CA-C	-8.96	94.55	108.44
3	C	170	TRP	CA-C-N	8.95	136.86	122.81
3	C	170	TRP	C-N-CA	8.95	136.86	122.81
1	A	779	ASP	N-CA-C	-8.94	90.04	109.81
5	F	161	THR	N-CA-C	-8.94	100.69	113.21
2	B	35	PRO	N-CA-C	8.94	121.61	110.70
1	A	67	VAL	N-CA-C	-8.93	95.63	108.48
6	K	836	GLY	N-CA-C	-8.93	102.85	115.43
6	G	836	GLY	N-CA-C	-8.92	102.86	115.43
2	B	269	GLN	N-CA-C	-8.91	91.81	110.80
1	A	606	ARG	CA-C-N	8.91	133.38	120.82
1	A	606	ARG	C-N-CA	8.91	133.38	120.82
2	B	748	HIS	N-CA-C	-8.90	95.43	109.50
1	A	507	ALA	N-CA-C	-8.89	95.56	109.07
5	M	79	ARG	N-CA-C	-8.89	101.56	111.07
3	C	722	ASP	N-CA-C	8.88	121.92	111.71
5	F	165	GLY	CA-C-N	8.88	131.98	120.44
5	F	165	GLY	C-N-CA	8.88	131.98	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	731	THR	N-CA-C	-8.87	94.78	109.07
6	K	731	THR	N-CA-C	-8.88	94.78	109.07
1	A	740	GLY	N-CA-C	-8.86	92.17	113.18
5	R	166	LEU	N-CA-C	8.86	120.63	110.97
1	A	522	CYS	N-CA-C	-8.84	95.69	108.60
6	K	244	ASP	N-CA-C	-8.84	91.98	110.80
2	B	49	ASP	N-CA-C	-8.82	92.01	110.80
2	B	843	ASP	N-CA-C	8.80	120.49	111.07
6	G	134	SER	N-CA-C	8.80	120.87	111.28
1	A	249	TYR	N-CA-C	-8.77	97.47	110.46
6	K	853	THR	N-CA-C	-8.74	95.69	109.50
5	M	91	VAL	CA-C-N	8.73	135.08	122.94
5	M	91	VAL	C-N-CA	8.73	135.08	122.94
2	B	792	LEU	N-CA-C	-8.73	93.50	109.56
6	G	853	THR	N-CA-C	-8.72	95.72	109.50
2	B	840	ASP	CA-C-N	8.72	132.80	120.42
2	B	840	ASP	C-N-CA	8.72	132.80	120.42
5	R	161	THR	N-CA-C	-8.71	101.86	111.36
2	B	871	ASN	N-CA-C	-8.71	92.25	110.80
7	Z	129	VAL	N-CA-C	-8.67	94.65	108.95
3	C	202	LEU	N-CA-C	-8.66	96.10	109.52
1	A	77	VAL	N-CA-C	-8.65	95.66	108.12
5	R	99	ARG	N-CA-C	-8.64	102.44	113.16
1	A	406	ASP	N-CA-C	-8.62	99.62	112.04
6	K	609	ARG	CA-C-O	8.62	129.69	120.55
7	L	60	ALA	CA-C-N	8.62	135.14	122.99
7	L	60	ALA	C-N-CA	8.62	135.14	122.99
5	R	71	GLN	N-CA-C	-8.62	94.85	108.63
6	G	640	THR	N-CA-C	-8.61	94.86	109.24
2	B	804	VAL	N-CA-C	-8.61	95.56	108.99
6	K	640	THR	N-CA-C	-8.59	94.90	109.24
6	G	609	ARG	CA-C-O	8.58	129.64	120.55
1	A	647	THR	CA-C-N	8.57	131.77	120.28
1	A	647	THR	C-N-CA	8.57	131.77	120.28
5	R	150	ASN	CA-C-N	8.57	142.71	121.80
5	R	150	ASN	C-N-CA	8.57	142.71	121.80
2	B	893	LEU	N-CA-C	8.56	120.39	111.14
1	A	236	GLU	N-CA-C	-8.53	92.63	110.80
1	A	509	HIS	N-CA-C	-8.53	95.50	109.40
1	A	371	ASN	N-CA-C	-8.52	90.02	108.93
1	A	105	TYR	CA-C-N	-8.49	109.22	119.84
1	A	105	TYR	C-N-CA	-8.49	109.22	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	837	ILE	N-CA-C	-8.49	91.68	109.34
2	B	740	PRO	N-CA-C	-8.47	95.02	112.47
2	B	850	CYS	N-CA-C	8.47	121.46	108.42
1	A	515	ASN	N-CA-C	-8.47	97.24	110.36
6	K	858	ALA	N-CA-C	-8.45	95.12	109.24
6	G	858	ALA	N-CA-C	-8.45	95.13	109.24
5	R	96	ASP	N-CA-C	-8.45	94.96	108.73
1	A	132	THR	N-CA-C	-8.45	96.21	109.72
3	C	682	GLN	CA-C-N	8.43	131.58	120.28
3	C	682	GLN	C-N-CA	8.43	131.58	120.28
6	K	762	ASP	N-CA-C	-8.43	102.78	113.23
6	G	762	ASP	N-CA-C	-8.42	102.78	113.23
3	C	262	ARG	N-CA-C	-8.41	96.58	109.95
6	G	368	MET	N-CA-C	8.40	120.44	111.28
6	G	150	ASP	CA-C-N	8.39	137.57	121.54
6	G	150	ASP	C-N-CA	8.39	137.57	121.54
3	C	807	VAL	N-CA-C	8.38	119.25	111.45
5	R	42	VAL	CA-C-N	8.38	137.06	121.97
5	R	42	VAL	C-N-CA	8.38	137.06	121.97
5	R	130	LEU	CA-C-N	8.38	130.32	119.84
5	R	130	LEU	C-N-CA	8.38	130.32	119.84
4	D	131	ARG	CA-C-N	8.37	131.84	120.38
4	D	131	ARG	C-N-CA	8.37	131.84	120.38
2	B	103	THR	N-CA-C	-8.36	104.11	112.97
2	B	800	ILE	N-CA-C	-8.36	96.00	108.46
7	Z	29	LYS	N-CA-C	-8.34	93.92	108.69
3	C	446	GLY	N-CA-C	-8.34	98.53	110.96
6	G	197	LEU	N-CA-C	8.34	120.37	111.28
2	B	554	ARG	CA-C-N	8.32	128.96	120.38
2	B	554	ARG	C-N-CA	8.32	128.96	120.38
3	C	110	THR	N-CA-C	-8.32	100.88	112.45
5	F	159	CYS	N-CA-C	-8.31	93.09	110.80
4	D	50	GLU	N-CA-C	-8.31	94.72	108.76
7	Z	16	ILE	N-CA-C	-8.30	96.17	108.12
5	R	106	VAL	N-CA-C	8.30	118.39	110.42
7	L	48	ILE	N-CA-C	8.30	118.33	110.53
3	C	155	ASN	CA-C-N	8.28	137.36	121.54
3	C	155	ASN	C-N-CA	8.28	137.36	121.54
6	K	797	LEU	CA-C-N	8.28	131.38	120.28
6	K	797	LEU	C-N-CA	8.28	131.38	120.28
2	B	446	PHE	N-CA-C	-8.27	103.33	113.50
3	C	233	SER	N-CA-C	-8.27	102.35	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	Z	11	TYR	N-CA-C	-8.26	93.20	110.80
7	L	35	TYR	N-CA-C	-8.26	97.64	109.62
1	A	87	PHE	N-CA-C	-8.24	95.74	108.76
3	C	793	GLU	CA-C-N	8.24	131.32	120.28
3	C	793	GLU	C-N-CA	8.24	131.32	120.28
6	G	797	LEU	CA-C-N	8.24	131.32	120.28
6	G	797	LEU	C-N-CA	8.24	131.32	120.28
1	A	457	PHE	N-CA-C	-8.23	93.27	110.80
5	R	58	TYR	N-CA-C	-8.23	94.60	108.26
3	C	442	ARG	N-CA-C	-8.22	95.83	109.07
3	C	492	SER	N-CA-C	8.22	120.32	111.36
6	K	667	ASN	N-CA-C	-8.21	93.32	110.80
2	B	744	GLU	N-CA-C	-8.20	96.54	109.50
6	G	667	ASN	N-CA-C	-8.20	93.33	110.80
5	R	144	GLY	N-CA-C	-8.20	93.75	113.18
1	A	387	GLU	N-CA-C	-8.18	102.31	111.14
6	K	242	GLU	N-CA-C	-8.18	103.32	113.38
5	M	100	ILE	N-CA-C	8.17	118.21	110.53
6	K	74	THR	N-CA-C	8.16	120.18	111.28
6	K	645	GLU	N-CA-C	-8.16	102.33	111.71
6	K	695	ALA	N-CA-C	-8.16	95.27	108.41
6	G	215	ILE	N-CA-C	-8.16	102.86	110.53
7	Z	22	ASP	N-CA-C	-8.16	103.42	112.72
6	K	693	VAL	CA-C-N	8.15	130.03	119.84
6	K	693	VAL	C-N-CA	8.15	130.03	119.84
1	A	392	ASP	N-CA-C	-8.15	94.99	108.76
6	K	831	ALA	CA-C-N	8.14	133.82	121.04
6	K	831	ALA	C-N-CA	8.14	133.82	121.04
3	C	327	LEU	N-CA-C	-8.14	96.21	108.99
6	G	831	ALA	CA-C-N	8.14	133.82	121.04
6	G	831	ALA	C-N-CA	8.14	133.82	121.04
2	B	795	HIS	CA-C-N	8.13	136.46	122.64
2	B	795	HIS	C-N-CA	8.13	136.46	122.64
1	A	436	LEU	N-CA-C	-8.12	97.03	109.95
3	C	522	GLU	CA-C-N	8.11	133.67	123.12
3	C	522	GLU	C-N-CA	8.11	133.67	123.12
3	C	106	ALA	N-CA-C	-8.11	96.68	109.50
1	A	493	TYR	CA-C-N	8.11	133.56	123.10
1	A	493	TYR	C-N-CA	8.11	133.56	123.10
1	A	409	GLU	N-CA-C	-8.11	102.42	112.88
6	G	298	SER	CA-C-N	8.11	129.97	119.84
6	G	298	SER	C-N-CA	8.11	129.97	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	L	30	TYR	N-CA-C	-8.10	94.34	108.20
1	A	329	HIS	N-CA-C	-8.09	96.69	109.23
6	K	845	ARG	N-CA-C	-8.09	95.34	108.52
1	A	596	GLU	N-CA-C	8.08	121.00	111.71
6	K	96	SER	N-CA-C	8.07	127.99	110.80
6	G	845	ARG	N-CA-C	-8.07	95.37	108.52
6	K	849	LEU	N-CA-C	-8.06	93.63	110.80
1	A	636	GLU	N-CA-C	-8.05	102.48	111.82
6	G	849	LEU	N-CA-C	-8.05	93.65	110.80
7	Z	25	ARG	N-CA-C	-8.05	94.45	108.69
2	B	829	ARG	N-CA-C	-8.04	104.07	114.04
1	A	413	SER	N-CA-C	-8.04	97.53	108.38
6	G	485	GLU	N-CA-C	-8.04	102.47	111.07
1	A	664	ALA	CA-C-N	8.03	131.04	120.28
1	A	664	ALA	C-N-CA	8.03	131.04	120.28
6	G	510	LEU	N-CA-C	-8.02	102.49	111.07
5	M	154	PHE	N-CA-C	-8.02	96.10	108.76
6	K	817	ASP	CA-C-N	8.01	132.09	120.71
6	K	817	ASP	C-N-CA	8.01	132.09	120.71
6	G	189	ASN	CA-C-N	8.01	130.81	120.56
6	G	189	ASN	C-N-CA	8.01	130.81	120.56
3	C	530	VAL	N-CA-C	-8.00	95.49	106.85
6	G	817	ASP	CA-C-N	8.00	132.06	120.71
6	G	817	ASP	C-N-CA	8.00	132.06	120.71
1	A	655	CYS	N-CA-C	-7.99	101.86	111.69
6	G	484	HIS	N-CA-C	-7.98	93.80	110.80
6	K	206	ASN	N-CA-C	-7.98	93.94	107.99
1	A	532	SER	CA-C-N	7.97	132.59	121.26
1	A	532	SER	C-N-CA	7.97	132.59	121.26
1	A	622	GLY	N-CA-C	-7.97	94.28	113.18
2	B	385	VAL	CA-C-N	7.97	136.77	121.54
2	B	385	VAL	C-N-CA	7.97	136.77	121.54
6	G	682	GLU	CA-C-N	7.96	130.55	120.51
6	G	682	GLU	C-N-CA	7.96	130.55	120.51
1	A	767	LEU	CA-C-N	7.96	132.41	120.31
1	A	767	LEU	C-N-CA	7.96	132.41	120.31
2	B	822	VAL	N-CA-C	-7.96	96.97	108.11
6	K	682	GLU	CA-C-N	7.95	130.53	120.51
6	K	682	GLU	C-N-CA	7.95	130.53	120.51
5	R	30	LYS	CA-C-O	7.95	128.97	120.55
3	C	549	GLY	N-CA-C	-7.95	104.59	114.92
6	G	120	TYR	CA-C-N	7.95	130.77	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	120	TYR	C-N-CA	7.95	130.77	120.44
7	Z	30	TYR	N-CA-C	-7.94	94.62	108.20
5	M	149	ARG	N-CA-C	-7.92	93.93	110.80
3	C	178	ASN	N-CA-C	-7.92	102.73	111.36
2	B	816	GLY	N-CA-C	-7.91	97.50	110.95
3	C	546	TYR	O-C-N	7.91	132.60	123.27
1	A	553	VAL	CA-C-N	7.90	134.08	122.39
1	A	553	VAL	C-N-CA	7.90	134.08	122.39
3	C	254	ARG	N-CA-C	-7.90	97.02	109.50
3	C	348	MET	N-CA-C	-7.90	97.72	108.86
3	C	517	LEU	N-CA-C	7.89	121.03	111.40
1	A	55	ARG	CA-C-N	-7.88	115.54	121.61
1	A	55	ARG	C-N-CA	-7.88	115.54	121.61
1	A	543	TYR	N-CA-C	-7.87	97.36	109.24
3	C	103	ARG	N-CA-C	7.87	121.00	111.40
2	B	908	ALA	CA-C-N	-7.86	112.15	123.00
2	B	908	ALA	C-N-CA	-7.86	112.15	123.00
1	A	73	TYR	N-CA-C	-7.86	94.06	110.80
1	A	50	HIS	CA-C-N	7.85	131.13	120.54
1	A	50	HIS	C-N-CA	7.85	131.13	120.54
5	F	79	ARG	N-CA-C	7.85	121.95	112.38
3	C	839	ALA	N-CA-C	7.82	119.44	111.07
6	G	506	LEU	N-CA-C	7.80	127.05	109.81
7	Z	85	GLU	CA-C-N	7.79	132.91	121.31
7	Z	85	GLU	C-N-CA	7.79	132.91	121.31
7	Z	56	ASP	N-CA-C	-7.78	97.33	108.07
1	A	97	ARG	N-CA-C	7.78	121.26	111.69
6	G	178	VAL	CA-C-O	-7.78	112.96	121.05
2	B	390	ASP	N-CA-C	-7.77	102.85	113.18
1	A	149	LEU	N-CA-C	-7.77	98.10	110.14
2	B	878	ASN	N-CA-C	-7.77	99.00	111.04
6	G	253	ASP	CA-C-N	7.76	130.53	120.44
6	G	253	ASP	C-N-CA	7.76	130.53	120.44
2	B	550	LYS	N-CA-C	-7.76	103.65	113.43
5	M	59	LYS	N-CA-C	-7.75	102.01	113.40
6	K	215	ILE	N-CA-C	-7.75	103.25	110.53
2	B	928	LYS	N-CA-C	7.74	126.92	109.81
3	C	175	SER	CA-C-N	7.74	133.28	122.06
3	C	175	SER	C-N-CA	7.74	133.28	122.06
3	C	316	TRP	N-CA-C	-7.73	97.98	109.81
1	A	797	PRO	N-CA-C	7.73	120.13	110.70
2	B	370	GLU	N-CA-C	-7.71	102.87	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	536	TYR	N-CA-C	-7.71	102.81	111.07
2	B	758	VAL	N-CA-C	-7.71	96.32	108.81
5	R	41	GLU	CA-C-N	7.71	135.84	121.97
5	R	41	GLU	C-N-CA	7.71	135.84	121.97
7	L	111	LYS	N-CA-C	-7.69	102.89	111.28
6	G	129	CYS	N-CA-C	7.68	120.54	111.71
7	Z	86	ASN	CA-C-N	7.68	130.57	120.28
7	Z	86	ASN	C-N-CA	7.68	130.57	120.28
1	A	737	LEU	N-CA-C	7.68	119.73	111.36
4	D	147	VAL	N-CA-C	7.68	117.79	110.42
3	C	27	GLU	N-CA-C	-7.68	92.84	109.81
1	A	562	ARG	N-CA-C	-7.66	97.41	108.60
3	C	538	SER	N-CA-C	-7.66	97.64	109.52
5	F	30	LYS	N-CA-C	-7.66	102.93	111.28
5	F	96	ASP	N-CA-C	-7.66	97.09	109.96
1	A	78	TRP	N-CA-C	-7.66	96.04	109.06
3	C	574	TYR	N-CA-C	-7.65	96.93	109.40
3	C	569	LYS	CA-C-N	7.65	133.49	120.72
3	C	569	LYS	C-N-CA	7.65	133.49	120.72
6	K	63	THR	N-CA-C	7.65	119.25	111.07
1	A	617	ASN	N-CA-C	7.61	121.99	112.03
6	K	777	ASP	CA-C-N	7.60	130.47	120.28
6	K	777	ASP	C-N-CA	7.60	130.47	120.28
1	A	221	VAL	N-CA-C	-7.60	97.14	108.46
6	G	218	PHE	N-CA-C	-7.60	102.94	111.07
6	K	104	ILE	CA-C-O	7.60	128.85	120.95
5	M	169	GLY	N-CA-C	-7.59	103.69	112.50
1	A	200	VAL	N-CA-C	-7.59	97.51	108.36
6	G	419	ASP	N-CA-C	7.59	119.19	111.07
3	C	237	PHE	N-CA-C	-7.58	96.87	109.46
6	G	772	PHE	CA-C-O	-7.58	112.89	120.70
3	C	472	ASP	N-CA-C	-7.58	96.16	108.52
1	A	487	LYS	CA-C-N	7.57	135.60	121.97
1	A	487	LYS	C-N-CA	7.57	135.60	121.97
1	A	602	ALA	CA-C-N	7.57	130.43	120.28
1	A	602	ALA	C-N-CA	7.57	130.43	120.28
6	G	777	ASP	CA-C-N	7.57	130.43	120.28
6	G	777	ASP	C-N-CA	7.57	130.43	120.28
6	K	673	THR	N-CA-C	-7.57	96.19	109.06
6	K	772	PHE	CA-C-O	-7.57	112.91	120.70
6	G	498	PHE	CA-C-N	7.56	128.18	119.94
6	G	498	PHE	C-N-CA	7.56	128.18	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	673	THR	N-CA-C	-7.55	96.22	109.06
3	C	8	LYS	N-CA-C	-7.55	97.53	109.23
7	L	13	VAL	N-CA-C	-7.54	96.69	108.23
4	D	56	TYR	CA-C-N	-7.54	112.66	123.06
4	D	56	TYR	C-N-CA	-7.54	112.66	123.06
5	M	69	GLY	N-CA-C	-7.53	95.33	113.18
4	D	24	MET	CA-C-N	7.53	135.93	121.54
4	D	24	MET	C-N-CA	7.53	135.93	121.54
6	G	433	GLU	CA-C-N	7.53	130.23	120.44
6	G	433	GLU	C-N-CA	7.53	130.23	120.44
1	A	557	ASP	N-CA-C	7.53	122.08	110.42
5	M	156	GLN	CA-C-N	7.53	131.49	120.95
5	M	156	GLN	C-N-CA	7.53	131.49	120.95
3	C	424	PHE	N-CA-C	-7.52	94.78	110.80
2	B	782	LYS	N-CA-C	-7.52	97.19	108.99
4	D	77	LEU	CA-C-N	7.51	130.21	120.44
4	D	77	LEU	C-N-CA	7.51	130.21	120.44
6	K	132	THR	N-CA-C	7.51	121.52	110.17
2	B	927	GLU	N-CA-C	7.51	123.69	111.37
3	C	594	TYR	N-CA-C	-7.51	103.04	111.07
6	G	39	ILE	N-CA-C	-7.50	97.10	107.75
2	B	414	ALA	CA-C-O	-7.50	112.88	120.90
1	A	245	CYS	N-CA-C	-7.50	97.02	109.24
7	Z	69	TYR	N-CA-C	-7.50	97.67	109.07
2	B	48	GLY	N-CA-C	-7.50	95.42	113.18
6	G	54	LEU	CA-C-N	7.49	131.06	120.42
6	G	54	LEU	C-N-CA	7.49	131.06	120.42
6	K	80	ASN	N-CA-C	-7.49	94.84	110.80
1	A	540	VAL	CA-C-N	-7.49	112.57	123.05
1	A	540	VAL	C-N-CA	-7.49	112.57	123.05
2	B	504	VAL	N-CA-C	7.48	124.90	109.34
1	A	324	PRO	CA-C-N	7.47	135.81	121.54
1	A	324	PRO	C-N-CA	7.47	135.81	121.54
5	F	35	TYR	CA-C-N	7.47	130.15	120.44
5	F	35	TYR	C-N-CA	7.47	130.15	120.44
3	C	58	LEU	N-CA-C	-7.47	99.98	110.29
3	C	456	GLU	CA-C-N	-7.46	112.49	122.42
3	C	456	GLU	C-N-CA	-7.46	112.49	122.42
3	C	174	SER	N-CA-C	-7.46	94.91	110.80
1	A	325	ALA	N-CA-C	7.46	126.69	110.80
3	C	7	ILE	N-CA-C	-7.46	97.28	108.17
4	D	29	ILE	N-CA-C	-7.46	93.83	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	76	ILE	N-CA-C	7.44	117.56	110.42
3	C	368	VAL	N-CA-C	-7.44	97.69	108.11
2	B	410	PRO	N-CA-C	-7.44	97.15	112.47
1	A	437	ILE	N-CA-C	-7.43	97.59	108.89
3	C	78	ASP	N-CA-C	-7.43	103.95	113.16
3	C	88	THR	N-CA-C	-7.43	94.98	110.80
6	G	319	PRO	CA-C-N	7.43	130.23	120.28
6	G	319	PRO	C-N-CA	7.43	130.23	120.28
3	C	407	GLU	N-CA-C	-7.41	98.53	110.32
3	C	526	THR	N-CA-C	-7.41	97.92	108.96
6	G	525	ARG	CA-C-N	7.40	130.20	120.28
6	G	525	ARG	C-N-CA	7.40	130.20	120.28
3	C	290	TYR	N-CA-C	-7.40	98.17	109.41
6	G	414	LYS	CA-C-N	7.40	130.05	120.44
6	G	414	LYS	C-N-CA	7.40	130.05	120.44
6	G	683	PRO	N-CA-C	7.40	125.62	112.01
2	B	851	THR	CA-C-N	7.39	130.18	120.28
2	B	851	THR	C-N-CA	7.39	130.18	120.28
6	G	616	GLN	CA-C-N	7.39	130.18	120.28
6	G	616	GLN	C-N-CA	7.39	130.18	120.28
2	B	833	VAL	N-CA-C	-7.39	97.77	108.11
1	A	423	ARG	CA-C-N	7.38	135.64	121.54
1	A	423	ARG	C-N-CA	7.38	135.64	121.54
5	R	151	ARG	N-CA-C	7.38	126.12	109.81
3	C	683	PHE	N-CA-C	7.38	119.33	111.28
7	L	18	ILE	O-C-N	7.38	130.85	123.18
5	R	146	HIS	N-CA-C	-7.38	104.25	113.18
6	K	616	GLN	CA-C-N	7.38	130.16	120.28
6	K	616	GLN	C-N-CA	7.38	130.16	120.28
6	K	683	PRO	N-CA-C	7.38	125.58	112.01
6	G	494	ALA	CA-C-O	7.37	128.37	120.55
6	K	37	THR	CA-C-N	7.37	129.05	119.84
6	K	37	THR	C-N-CA	7.37	129.05	119.84
6	G	800	ALA	CA-C-N	7.36	130.55	120.46
6	G	800	ALA	C-N-CA	7.36	130.55	120.46
1	A	155	LEU	N-CA-C	-7.35	104.34	112.72
6	K	800	ALA	CA-C-N	7.35	130.52	120.46
6	K	800	ALA	C-N-CA	7.35	130.52	120.46
1	A	280	LYS	N-CA-C	-7.34	103.29	114.16
3	C	218	ASN	N-CA-C	-7.34	102.44	111.40
1	A	426	PHE	N-CA-C	-7.34	99.04	110.42
5	M	148	ILE	CA-C-N	7.34	135.56	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	M	148	ILE	C-N-CA	7.34	135.56	121.54
3	C	661	ALA	N-CA-C	-7.33	103.22	111.07
1	A	105	TYR	N-CA-C	-7.33	93.50	109.11
3	C	314	ILE	N-CA-C	-7.33	97.29	107.99
6	G	300	LYS	N-CA-C	-7.32	95.20	110.80
7	L	102	SER	CA-C-N	7.32	130.09	120.28
7	L	102	SER	C-N-CA	7.32	130.09	120.28
3	C	575	LEU	N-CA-C	-7.31	98.29	109.85
1	A	386	LEU	N-CA-C	-7.30	98.77	108.19
3	C	726	ASN	N-CA-C	7.30	119.23	111.28
1	A	332	MET	CA-C-N	7.30	132.89	122.09
1	A	332	MET	C-N-CA	7.30	132.89	122.09
1	A	89	LEU	N-CA-C	-7.28	97.55	108.99
6	G	107	SER	CA-C-N	7.27	130.03	120.28
6	G	107	SER	C-N-CA	7.27	130.03	120.28
1	A	188	ASP	CA-C-N	7.27	133.16	120.87
1	A	188	ASP	C-N-CA	7.27	133.16	120.87
2	B	807	ALA	N-CA-C	-7.27	103.59	114.64
3	C	36	ASN	N-CA-C	-7.27	101.57	112.04
3	C	545	TYR	N-CA-C	-7.27	97.96	109.23
3	C	469	PHE	N-CA-C	-7.26	97.11	109.24
3	C	630	PHE	N-CA-C	-7.26	99.47	109.71
1	A	516	ARG	CA-C-N	7.26	135.40	121.54
1	A	516	ARG	C-N-CA	7.26	135.40	121.54
6	G	796	THR	CA-C-N	7.25	130.59	120.29
6	G	796	THR	C-N-CA	7.25	130.59	120.29
6	G	844	SER	N-CA-C	-7.25	96.44	108.34
6	K	796	THR	CA-C-N	7.25	130.58	120.29
6	K	796	THR	C-N-CA	7.25	130.58	120.29
1	A	636	GLU	CA-C-N	7.24	130.70	120.42
1	A	636	GLU	C-N-CA	7.24	130.70	120.42
5	M	26	ASP	N-CA-C	-7.24	100.29	110.50
5	M	159	CYS	N-CA-C	-7.24	97.60	109.40
3	C	244	ILE	N-CA-C	-7.24	97.68	108.46
6	G	851	THR	N-CA-C	-7.23	101.20	110.53
3	C	651	LEU	N-CA-C	7.23	119.24	111.36
6	G	529	THR	CA-C-N	7.23	130.55	120.29
6	G	529	THR	C-N-CA	7.23	130.55	120.29
1	A	393	LEU	N-CA-C	-7.22	97.96	109.59
6	K	844	SER	N-CA-C	-7.22	96.49	108.34
6	K	851	THR	N-CA-C	-7.22	101.22	110.53
4	D	98	GLU	N-CA-C	-7.22	95.43	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	80	ASN	N-CA-C	-7.22	103.78	112.59
3	C	397	ALA	N-CA-C	-7.21	97.49	108.67
3	C	56	CYS	N-CA-C	-7.21	97.72	107.88
1	A	548	HIS	N-CA-C	-7.20	98.12	109.50
6	K	263	HIS	CA-C-N	7.19	129.91	120.28
6	K	263	HIS	C-N-CA	7.19	129.91	120.28
5	R	25	LEU	N-CA-C	7.19	119.84	110.43
6	G	859	ARG	N-CA-C	-7.18	98.09	109.23
6	G	838	HIS	CA-C-O	7.18	128.77	120.80
3	C	774	ARG	N-CA-C	-7.17	103.47	111.28
6	K	859	ARG	N-CA-C	-7.17	98.12	109.23
2	B	821	ASP	CA-C-N	7.16	132.52	123.14
2	B	821	ASP	C-N-CA	7.16	132.52	123.14
6	G	431	SER	N-CA-C	-7.16	102.98	112.72
7	L	127	GLU	N-CA-C	7.16	119.16	111.36
3	C	507	GLU	N-CA-C	-7.15	103.57	111.36
5	R	93	ASP	N-CA-C	7.15	119.92	108.41
5	M	64	THR	N-CA-C	7.15	120.38	108.73
1	A	395	THR	CA-C-N	7.14	124.74	120.24
1	A	395	THR	C-N-CA	7.14	124.74	120.24
4	D	233	LYS	CA-C-N	7.14	129.72	120.44
4	D	233	LYS	C-N-CA	7.14	129.72	120.44
6	K	177	TRP	N-CA-C	7.13	121.68	113.19
6	G	704	GLY	N-CA-C	-7.11	97.31	110.97
3	C	686	ALA	CA-C-N	7.11	129.81	120.28
3	C	686	ALA	C-N-CA	7.11	129.81	120.28
6	K	704	GLY	N-CA-C	-7.11	97.32	110.97
1	A	31	GLY	N-CA-C	-7.10	105.28	115.64
2	B	249	VAL	N-CA-C	7.09	117.86	110.62
3	C	693	ALA	CA-C-N	7.09	132.21	122.07
3	C	693	ALA	C-N-CA	7.09	132.21	122.07
1	A	766	GLY	N-CA-C	-7.09	96.37	113.18
6	G	242	GLU	N-CA-C	-7.09	104.78	113.50
2	B	853	ALA	CA-C-N	7.09	131.08	120.31
2	B	853	ALA	C-N-CA	7.09	131.08	120.31
6	K	248	ASP	CA-C-N	-7.09	110.99	119.78
6	K	248	ASP	C-N-CA	-7.09	110.99	119.78
6	G	132	THR	N-CA-C	7.08	125.89	110.80
6	G	768	MET	N-CA-C	-7.08	98.31	109.50
2	B	251	HIS	N-CA-C	-7.08	103.64	111.36
1	A	570	VAL	O-C-N	-7.07	114.91	122.83
6	K	768	MET	N-CA-C	-7.07	98.33	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	670	ASN	N-CA-C	-7.07	104.63	113.18
3	C	365	ARG	N-CA-C	7.06	125.85	110.80
1	A	724	GLU	N-CA-C	-7.06	103.51	111.07
3	C	293	GLY	N-CA-C	-7.06	100.76	111.42
6	K	670	ASN	N-CA-C	-7.06	104.64	113.18
1	A	568	ILE	N-CA-C	-7.05	97.51	108.44
2	B	479	GLU	N-CA-C	7.05	118.61	111.07
6	G	116	LYS	N-CA-C	7.05	125.81	110.80
6	G	706	CYS	N-CA-C	-7.04	98.61	109.24
2	B	806	VAL	N-CA-C	7.04	123.98	109.34
6	G	721	ALA	N-CA-C	-7.04	97.74	109.07
2	B	763	GLN	CA-C-N	7.03	134.97	121.54
2	B	763	GLN	C-N-CA	7.03	134.97	121.54
1	A	391	TYR	N-CA-C	-7.03	97.50	109.24
7	Z	15	ALA	N-CA-C	-7.03	97.60	108.42
3	C	213	ILE	CA-C-N	-7.02	111.36	122.73
3	C	213	ILE	C-N-CA	-7.02	111.36	122.73
7	L	29	LYS	N-CA-C	-7.02	96.26	108.69
2	B	526	VAL	CA-C-N	7.02	129.69	120.28
2	B	526	VAL	C-N-CA	7.02	129.69	120.28
6	K	258	CYS	CA-C-N	7.02	129.56	120.44
6	K	258	CYS	C-N-CA	7.02	129.56	120.44
3	C	698	GLY	CA-C-N	7.02	129.69	120.28
3	C	698	GLY	C-N-CA	7.02	129.69	120.28
6	K	846	LEU	N-CA-C	-7.02	97.80	109.24
6	K	706	CYS	N-CA-C	-7.02	98.64	109.24
5	F	40	GLY	N-CA-C	-7.01	106.34	114.69
3	C	540	VAL	N-CA-C	-7.01	105.89	112.83
6	K	721	ALA	N-CA-C	-7.00	97.79	109.07
1	A	383	ALA	CA-C-N	7.00	134.91	121.54
1	A	383	ALA	C-N-CA	7.00	134.91	121.54
6	G	846	LEU	N-CA-C	-7.00	97.83	109.24
7	L	136	GLU	N-CA-C	7.00	119.77	110.53
1	A	444	ILE	N-CA-C	-6.99	96.45	107.15
5	F	154	PHE	N-CA-C	-6.99	99.58	110.42
1	A	340	PHE	CA-C-N	6.98	134.87	121.54
1	A	340	PHE	C-N-CA	6.98	134.87	121.54
1	A	428	VAL	N-CA-C	-6.98	97.49	108.86
3	C	788	LEU	N-CA-C	6.98	121.04	108.48
2	B	428	ASN	N-CA-C	6.97	118.96	111.36
6	G	794	ILE	N-CA-C	-6.96	99.16	108.35
6	K	210	ALA	CA-C-N	6.96	130.00	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	210	ALA	C-N-CA	6.96	130.00	120.46
2	B	819	VAL	CA-C-N	6.96	134.01	122.73
2	B	819	VAL	C-N-CA	6.96	134.01	122.73
1	A	178	GLU	N-CA-C	-6.96	99.14	108.74
2	B	742	TYR	N-CA-C	-6.96	97.62	109.24
3	C	546	TYR	CA-C-N	6.96	133.34	122.70
3	C	546	TYR	C-N-CA	6.96	133.34	122.70
6	K	794	ILE	N-CA-C	-6.95	99.17	108.35
7	Z	65	LEU	N-CA-C	-6.95	98.60	109.72
2	B	482	SER	N-CA-C	6.94	125.58	110.80
6	G	240	LEU	N-CA-C	6.93	119.68	111.71
1	A	464	LEU	N-CA-C	-6.93	101.84	112.99
3	C	397	ALA	CA-C-N	6.93	130.49	120.38
3	C	397	ALA	C-N-CA	6.93	130.49	120.38
7	L	80	ILE	CA-C-N	6.92	134.98	121.41
7	L	80	ILE	C-N-CA	6.92	134.98	121.41
2	B	407	VAL	N-CA-C	-6.92	103.77	110.42
1	A	76	LYS	N-CA-C	-6.91	98.58	109.50
5	F	29	GLY	N-CA-C	-6.91	105.33	115.63
5	M	147	SER	N-CA-C	-6.91	104.82	113.18
6	G	539	GLN	N-CA-C	-6.91	99.67	109.96
2	B	63	MET	CA-C-N	6.90	130.22	120.42
2	B	63	MET	C-N-CA	6.90	130.22	120.42
3	C	213	ILE	CA-C-O	-6.90	112.86	120.72
3	C	377	ILE	CA-C-N	-6.90	111.98	122.81
3	C	377	ILE	C-N-CA	-6.90	111.98	122.81
3	C	593	GLU	CA-C-N	6.90	129.41	120.44
3	C	593	GLU	C-N-CA	6.90	129.41	120.44
5	R	91	VAL	CA-C-N	6.90	132.53	122.94
5	R	91	VAL	C-N-CA	6.90	132.53	122.94
3	C	535	ILE	N-CA-C	-6.89	98.50	108.36
2	B	828	ASP	N-CA-C	-6.89	96.13	110.80
1	A	597	PHE	CA-C-N	6.89	129.51	120.28
1	A	597	PHE	C-N-CA	6.89	129.51	120.28
2	B	250	CYS	N-CA-C	6.89	119.63	111.71
7	L	37	SER	CA-C-N	6.88	130.19	120.42
7	L	37	SER	C-N-CA	6.88	130.19	120.42
1	A	312	GLY	N-CA-C	-6.88	106.13	114.66
3	C	89	LEU	N-CA-C	-6.88	96.15	110.80
6	G	23	GLU	CA-C-N	6.88	130.05	120.29
6	G	23	GLU	C-N-CA	6.88	130.05	120.29
5	F	26	ASP	N-CA-C	6.88	121.42	112.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	865	PRO	N-CA-C	6.87	122.92	113.65
3	C	246	THR	N-CA-C	-6.86	98.67	109.50
6	G	865	PRO	N-CA-C	6.85	122.90	113.65
3	C	9	ARG	N-CA-C	-6.85	95.94	107.99
3	C	795	GLU	N-CA-C	-6.85	98.91	109.52
7	Z	139	PRO	N-CA-C	6.84	122.53	113.57
3	C	509	GLY	N-CA-C	-6.84	99.83	112.62
3	C	474	GLY	CA-C-N	6.84	134.60	121.54
3	C	474	GLY	C-N-CA	6.84	134.60	121.54
3	C	322	VAL	N-CA-C	-6.83	102.49	110.21
3	C	747	ARG	N-CA-C	6.83	118.38	111.07
3	C	301	ARG	N-CA-C	-6.83	99.86	110.17
6	G	703	PRO	CA-C-N	6.83	133.02	121.47
6	G	703	PRO	C-N-CA	6.83	133.02	121.47
1	A	799	ALA	CA-C-O	-6.83	113.36	120.87
3	C	394	PHE	N-CA-C	6.82	119.81	109.23
3	C	282	GLY	N-CA-C	-6.82	104.88	115.73
1	A	747	ARG	CA-C-N	6.82	129.80	120.46
1	A	747	ARG	C-N-CA	6.82	129.80	120.46
1	A	189	LEU	N-CA-C	6.81	119.35	110.43
3	C	383	LEU	N-CA-C	-6.81	102.79	111.92
5	R	146	HIS	CA-C-N	6.81	134.55	121.54
5	R	146	HIS	C-N-CA	6.81	134.55	121.54
6	K	703	PRO	CA-C-N	6.81	132.97	121.47
6	K	703	PRO	C-N-CA	6.81	132.97	121.47
6	K	838	HIS	CA-C-O	6.80	128.75	120.92
5	R	92	VAL	N-CA-C	6.80	118.60	108.46
1	A	370	TYR	N-CA-C	-6.80	100.42	110.48
5	R	25	LEU	CA-C-N	6.80	131.58	121.72
5	R	25	LEU	C-N-CA	6.80	131.58	121.72
6	G	686	ALA	N-CA-C	6.80	125.28	110.80
2	B	788	SER	N-CA-C	6.79	121.99	112.75
6	G	296	CYS	CA-C-N	6.79	134.51	121.54
6	G	296	CYS	C-N-CA	6.79	134.51	121.54
6	G	292	LEU	N-CA-C	6.79	118.33	111.07
2	B	259	ARG	N-CA-C	-6.78	103.89	111.28
3	C	323	GLN	CA-C-N	6.78	131.45	120.60
3	C	323	GLN	C-N-CA	6.78	131.45	120.60
6	K	686	ALA	N-CA-C	6.78	125.24	110.80
2	B	936	ALA	N-CA-C	-6.78	102.08	112.99
5	R	46	ILE	CA-C-N	6.77	128.30	119.84
5	R	46	ILE	C-N-CA	6.77	128.30	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	939	THR	N-CA-C	-6.77	96.38	110.80
5	R	37	LEU	N-CA-C	6.77	118.31	111.07
6	G	382	ALA	CA-C-N	6.76	129.72	120.46
6	G	382	ALA	C-N-CA	6.76	129.72	120.46
2	B	757	ASP	N-CA-C	-6.74	98.63	109.96
1	A	687	HIS	N-CA-C	-6.74	104.95	113.72
5	F	46	ILE	CA-C-N	6.74	128.27	119.84
5	F	46	ILE	C-N-CA	6.74	128.27	119.84
6	G	25	SER	N-CA-C	6.74	118.62	111.28
6	K	220	ARG	N-CA-C	-6.73	98.95	109.25
5	F	58	TYR	N-CA-C	6.72	119.42	108.26
6	G	264	GLU	N-CA-C	6.72	118.61	111.28
6	G	542	LEU	CA-C-N	6.72	129.18	120.44
6	G	542	LEU	C-N-CA	6.72	129.18	120.44
6	K	834	PHE	CA-C-N	6.72	130.26	120.71
6	K	834	PHE	C-N-CA	6.72	130.26	120.71
6	G	61	LEU	CA-C-N	6.72	126.72	120.34
6	G	61	LEU	C-N-CA	6.72	126.72	120.34
6	G	118	ASP	CA-C-O	6.72	127.54	120.42
5	R	171	GLU	N-CA-C	6.72	118.48	111.03
2	B	857	GLN	N-CA-C	-6.71	103.96	111.28
3	C	65	PHE	N-CA-C	-6.71	98.78	109.59
3	C	661	ALA	O-C-N	6.71	128.99	122.07
4	D	57	VAL	N-CA-C	-6.71	98.81	108.48
6	G	533	ASN	CA-C-N	6.71	129.95	120.42
6	G	533	ASN	C-N-CA	6.71	129.95	120.42
6	K	297	SER	N-CA-C	6.71	125.09	110.80
1	A	793	LYS	N-CA-C	6.70	119.20	108.41
3	C	150	ILE	N-CA-C	-6.69	98.74	108.71
6	G	136	MET	N-CA-C	-6.69	104.60	112.89
6	G	834	PHE	CA-C-N	6.69	130.21	120.71
6	G	834	PHE	C-N-CA	6.69	130.21	120.71
7	Z	140	GLN	N-CA-C	6.69	118.65	111.36
6	G	54	LEU	N-CA-C	-6.68	104.08	111.36
2	B	323	LEU	CA-C-N	6.68	129.90	120.28
2	B	323	LEU	C-N-CA	6.68	129.90	120.28
1	A	760	LEU	CA-C-N	6.68	129.53	120.44
1	A	760	LEU	C-N-CA	6.68	129.53	120.44
7	Z	18	ILE	CA-C-O	6.68	127.02	120.27
6	K	78	GLN	N-CA-C	-6.68	103.59	113.61
6	K	283	LYS	N-CA-C	6.67	119.16	111.02
3	C	711	MET	N-CA-C	-6.67	104.01	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	917	GLY	N-CA-C	6.67	124.23	115.36
3	C	111	GLN	CA-C-N	6.66	128.17	119.84
3	C	111	GLN	C-N-CA	6.66	128.17	119.84
3	C	650	GLN	CA-C-N	6.65	129.74	120.29
3	C	650	GLN	C-N-CA	6.65	129.74	120.29
6	G	812	PRO	CA-C-O	-6.64	113.34	121.31
6	G	700	TYR	N-CA-C	6.64	119.91	109.96
1	A	25	LEU	N-CA-C	-6.63	98.91	109.59
6	G	250	PRO	CA-C-N	6.63	129.06	120.44
6	G	250	PRO	C-N-CA	6.63	129.06	120.44
6	G	119	ASN	CA-C-N	6.63	129.70	120.29
6	G	119	ASN	C-N-CA	6.63	129.70	120.29
1	A	96	ILE	N-CA-C	6.63	117.39	107.51
6	G	871	ALA	CA-C-N	6.62	129.15	120.28
6	G	871	ALA	C-N-CA	6.62	129.15	120.28
3	C	715	LEU	CA-C-N	6.62	129.15	120.28
3	C	715	LEU	C-N-CA	6.62	129.15	120.28
1	A	28	LEU	N-CA-C	-6.62	99.89	110.14
6	K	740	GLY	N-CA-C	6.62	123.18	111.73
6	K	812	PRO	CA-C-O	-6.61	113.38	121.31
5	R	42	VAL	N-CA-C	6.61	123.09	109.34
6	K	871	ALA	CA-C-N	6.61	129.14	120.28
6	K	871	ALA	C-N-CA	6.61	129.14	120.28
2	B	753	ASP	CA-C-O	6.61	127.63	120.43
1	A	273	ILE	O-C-N	-6.61	116.12	123.26
6	G	740	GLY	N-CA-C	6.61	123.16	111.73
6	K	150	ASP	CA-C-N	6.60	134.15	121.54
6	K	150	ASP	C-N-CA	6.60	134.15	121.54
5	F	45	THR	N-CA-C	-6.60	98.69	108.79
6	G	247	ARG	N-CA-C	-6.60	104.95	112.87
7	L	62	LEU	CA-C-N	6.59	134.14	121.54
7	L	62	LEU	C-N-CA	6.59	134.14	121.54
2	B	863	GLU	CA-C-N	6.59	129.10	120.28
2	B	863	GLU	C-N-CA	6.59	129.10	120.28
6	K	168	LYS	N-CA-C	-6.59	103.79	110.97
6	K	756	LEU	N-CA-C	-6.59	98.66	109.40
6	G	263	HIS	CA-C-N	6.58	129.09	120.28
6	G	263	HIS	C-N-CA	6.58	129.09	120.28
2	B	755	VAL	N-CA-C	-6.58	98.16	108.81
1	A	595	THR	CA-C-N	6.58	129.75	120.28
1	A	595	THR	C-N-CA	6.58	129.75	120.28
3	C	640	ASP	O-C-N	-6.57	117.25	121.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	494	ALA	CA-C-N	6.57	129.09	120.28
6	G	494	ALA	C-N-CA	6.57	129.09	120.28
1	A	71	ASP	CA-C-N	6.57	128.98	120.44
1	A	71	ASP	C-N-CA	6.57	128.98	120.44
3	C	736	GLY	N-CA-C	-6.57	97.61	113.18
5	R	41	GLU	N-CA-C	-6.57	100.56	110.28
3	C	697	GLY	N-CA-C	6.57	120.12	112.50
2	B	524	GLY	CA-C-N	6.56	126.80	119.32
2	B	524	GLY	C-N-CA	6.56	126.80	119.32
6	G	756	LEU	N-CA-C	-6.56	98.70	109.40
3	C	426	PRO	N-CA-C	-6.56	102.04	111.22
3	C	802	LYS	N-CA-C	6.56	124.77	110.80
5	R	155	ILE	N-CA-C	-6.56	98.99	108.17
4	D	83	LEU	CA-C-N	6.56	129.07	120.28
4	D	83	LEU	C-N-CA	6.56	129.07	120.28
3	C	335	ILE	CA-C-N	6.55	130.65	120.75
3	C	335	ILE	C-N-CA	6.55	130.65	120.75
6	G	318	HIS	N-CA-C	6.55	121.66	112.75
3	C	803	GLU	N-CA-C	6.55	124.75	110.80
3	C	724	LYS	N-CA-C	-6.55	98.31	109.24
7	L	110	GLU	CA-C-N	6.55	129.05	120.28
7	L	110	GLU	C-N-CA	6.55	129.05	120.28
3	C	419	LYS	N-CA-C	-6.54	98.31	109.24
6	K	220	ARG	CA-C-N	6.54	134.03	121.54
6	K	220	ARG	C-N-CA	6.54	134.03	121.54
3	C	708	ASN	CA-C-N	6.54	129.04	120.28
3	C	708	ASN	C-N-CA	6.54	129.04	120.28
3	C	411	ILE	N-CA-C	-6.53	95.75	109.34
1	A	144	HIS	CA-C-N	6.53	128.00	119.84
1	A	144	HIS	C-N-CA	6.53	128.00	119.84
5	F	82	TYR	N-CA-C	-6.53	98.57	108.96
6	G	217	LYS	N-CA-C	-6.52	104.00	112.68
6	K	178	VAL	CA-C-O	6.52	127.75	120.64
3	C	185	GLU	N-CA-C	-6.52	103.94	112.41
6	K	785	LYS	N-CA-C	-6.51	99.41	109.24
6	G	785	LYS	N-CA-C	-6.51	99.41	109.24
6	G	161	VAL	CA-C-O	6.50	127.53	120.57
1	A	402	SER	N-CA-C	-6.50	96.78	108.48
3	C	696	TYR	N-CA-C	6.49	118.36	111.28
2	B	364	SER	N-CA-C	-6.49	102.47	111.81
3	C	133	SER	CA-C-O	-6.49	114.49	121.56
4	D	53	SER	N-CA-C	-6.49	104.67	112.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	405	CYS	CA-C-N	6.48	129.62	120.28
2	B	405	CYS	C-N-CA	6.48	129.62	120.28
6	G	111	LYS	N-CA-C	-6.48	104.22	111.28
1	A	731	GLY	CA-C-N	6.48	131.54	120.72
1	A	731	GLY	C-N-CA	6.48	131.54	120.72
6	K	813	CYS	N-CA-C	6.47	124.59	110.80
1	A	758	ALA	CA-C-O	-6.47	113.69	120.55
6	K	273	ALA	N-CA-C	6.47	118.41	111.36
5	M	22	MET	CA-C-N	-6.47	113.61	122.92
5	M	22	MET	C-N-CA	-6.47	113.61	122.92
6	K	40	ASN	N-CA-C	-6.46	95.52	109.81
6	K	670	ASN	CA-C-N	6.46	129.26	120.54
6	K	670	ASN	C-N-CA	6.46	129.26	120.54
6	K	288	ALA	CA-C-N	6.45	128.69	120.56
6	K	288	ALA	C-N-CA	6.45	128.69	120.56
7	L	85	GLU	CA-C-N	6.45	133.86	121.54
7	L	85	GLU	C-N-CA	6.45	133.86	121.54
3	C	202	LEU	O-C-N	6.45	131.53	123.15
1	A	621	VAL	CA-C-N	6.44	134.04	121.41
1	A	621	VAL	C-N-CA	6.44	134.04	121.41
3	C	111	GLN	N-CA-C	-6.44	100.59	110.32
3	C	176	SER	O-C-N	-6.44	115.18	121.56
3	C	588	LEU	N-CA-C	-6.44	97.08	110.80
2	B	803	ASN	N-CA-C	-6.44	100.95	110.48
3	C	105	ILE	N-CA-C	-6.43	98.87	108.46
6	G	670	ASN	CA-C-N	6.43	129.23	120.54
6	G	670	ASN	C-N-CA	6.43	129.23	120.54
1	A	400	ALA	CA-C-N	6.43	128.90	120.28
1	A	400	ALA	C-N-CA	6.43	128.90	120.28
2	B	849	THR	N-CA-C	6.43	119.18	109.41
3	C	602	ASP	CA-C-N	6.43	128.79	120.44
3	C	602	ASP	C-N-CA	6.43	128.79	120.44
1	A	424	ASN	N-CA-C	6.42	124.48	110.80
3	C	615	LYS	CA-C-N	6.42	128.88	120.28
3	C	615	LYS	C-N-CA	6.42	128.88	120.28
6	K	183	GLU	CA-C-O	6.42	127.22	120.42
1	A	611	VAL	CA-C-N	6.42	128.88	120.28
1	A	611	VAL	C-N-CA	6.42	128.88	120.28
1	A	732	HIS	CA-C-N	6.41	128.87	120.28
1	A	732	HIS	C-N-CA	6.41	128.87	120.28
2	B	935	ASP	N-CA-C	6.41	124.45	110.80
3	C	661	ALA	CA-C-N	6.41	133.51	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	661	ALA	C-N-CA	6.41	133.51	121.97
5	M	62	SER	N-CA-C	6.41	119.67	107.75
2	B	528	LYS	CA-C-N	6.40	128.86	120.28
2	B	528	LYS	C-N-CA	6.40	128.86	120.28
2	B	914	SER	CA-C-N	6.40	131.26	120.64
2	B	914	SER	C-N-CA	6.40	131.26	120.64
3	C	662	VAL	N-CA-C	-6.40	96.03	109.34
6	G	104	ILE	CA-C-O	6.39	127.60	120.95
1	A	629	LEU	N-CA-C	-6.39	104.64	112.88
7	L	141	GLN	CA-C-N	6.39	128.61	120.56
7	L	141	GLN	C-N-CA	6.39	128.61	120.56
6	G	130	GLN	N-CA-C	-6.38	104.40	111.36
3	C	184	HIS	N-CA-C	6.38	118.79	110.43
6	G	355	SER	CA-C-N	6.38	128.74	120.44
6	G	355	SER	C-N-CA	6.38	128.74	120.44
3	C	488	LEU	N-CA-C	6.38	119.93	109.85
5	F	32	THR	CA-C-N	6.38	128.82	120.60
5	F	32	THR	C-N-CA	6.38	128.82	120.60
6	G	103	ILE	N-CA-C	6.38	119.02	111.05
6	K	189	ASN	N-CA-C	-6.38	98.59	109.24
6	G	484	HIS	CA-C-N	6.37	128.72	120.44
6	G	484	HIS	C-N-CA	6.37	128.72	120.44
2	B	236	ASP	N-CA-C	6.37	118.22	111.28
3	C	100	ASP	CA-C-N	6.37	132.98	121.97
3	C	100	ASP	C-N-CA	6.37	132.98	121.97
3	C	151	ASN	CA-C-O	-6.36	114.56	119.46
1	A	574	LYS	CA-C-N	6.36	133.88	121.41
1	A	574	LYS	C-N-CA	6.36	133.88	121.41
6	K	156	SER	N-CA-C	-6.36	104.35	111.28
2	B	64	ILE	CA-C-N	6.36	128.80	120.28
2	B	64	ILE	C-N-CA	6.36	128.80	120.28
6	G	509	ILE	CA-C-N	6.36	128.71	120.44
6	G	509	ILE	C-N-CA	6.36	128.71	120.44
4	D	54	VAL	CA-C-N	6.35	130.50	121.42
4	D	54	VAL	C-N-CA	6.35	130.50	121.42
6	G	811	HIS	CA-C-N	6.35	126.11	119.76
6	G	811	HIS	C-N-CA	6.35	126.11	119.76
3	C	524	VAL	CA-C-N	-6.35	111.81	120.44
3	C	524	VAL	C-N-CA	-6.35	111.81	120.44
3	C	164	ASP	N-CA-C	-6.34	105.64	113.19
6	G	537	GLN	CA-C-O	-6.34	113.70	120.42
1	A	173	SER	N-CA-C	6.34	113.93	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	367	VAL	CA-C-N	-6.34	114.84	123.14
3	C	367	VAL	C-N-CA	-6.34	114.84	123.14
6	K	811	HIS	CA-C-N	6.34	126.10	119.76
6	K	811	HIS	C-N-CA	6.34	126.10	119.76
1	A	677	LEU	N-CA-C	6.33	118.26	111.36
1	A	80	TYR	N-CA-C	-6.33	104.01	111.03
1	A	578	VAL	CA-C-O	-6.33	114.46	121.23
3	C	43	ASN	CA-C-N	6.33	129.39	120.28
3	C	43	ASN	C-N-CA	6.33	129.39	120.28
1	A	519	ASP	CA-C-N	-6.32	114.01	122.42
1	A	519	ASP	C-N-CA	-6.32	114.01	122.42
3	C	414	ILE	CA-C-O	-6.32	113.59	120.67
2	B	896	GLU	N-CA-C	-6.32	98.08	108.76
1	A	116	THR	CA-C-N	6.31	131.77	122.99
1	A	116	THR	C-N-CA	6.31	131.77	122.99
3	C	629	GLY	N-CA-C	-6.31	105.97	115.32
2	B	557	LEU	N-CA-C	-6.31	104.40	111.28
1	A	158	THR	CA-C-N	6.31	131.71	122.94
1	A	158	THR	C-N-CA	6.31	131.71	122.94
1	A	20	LYS	N-CA-C	-6.30	106.22	114.04
6	K	222	GLY	N-CA-C	-6.30	98.24	113.18
1	A	604	ILE	N-CA-C	-6.30	104.36	110.72
7	Z	141	GLN	N-CA-C	-6.30	104.33	111.07
1	A	487	LYS	O-C-N	6.30	130.40	123.22
3	C	153	LYS	N-CA-C	-6.30	104.33	111.07
4	D	123	GLU	N-CA-C	6.29	117.93	111.14
3	C	504	GLY	N-CA-C	6.29	128.08	113.18
3	C	835	VAL	CA-C-N	6.28	128.61	120.44
3	C	835	VAL	C-N-CA	6.28	128.61	120.44
1	A	42	THR	CA-C-N	6.28	129.74	120.95
1	A	42	THR	C-N-CA	6.28	129.74	120.95
6	K	292	LEU	N-CA-C	6.28	118.93	111.33
2	B	532	GLU	N-CA-C	6.28	117.78	111.07
7	L	21	ASN	N-CA-C	-6.28	104.54	111.82
6	G	279	GLY	N-CA-C	-6.27	103.11	114.46
7	Z	141	GLN	CA-C-N	6.27	128.46	120.56
7	Z	141	GLN	C-N-CA	6.27	128.46	120.56
2	B	110	LEU	N-CA-C	-6.26	104.55	111.82
6	G	226	PRO	CA-C-N	6.26	128.58	120.44
6	G	226	PRO	C-N-CA	6.26	128.58	120.44
2	B	842	MET	CA-C-N	6.26	128.58	120.44
2	B	842	MET	C-N-CA	6.26	128.58	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	871	ALA	N-CA-C	6.26	117.90	111.14
5	M	48	THR	CA-C-O	6.26	128.18	121.55
6	G	369	SER	N-CA-C	6.25	118.90	111.71
2	B	894	THR	CA-C-N	6.25	127.47	120.66
2	B	894	THR	C-N-CA	6.25	127.47	120.66
1	A	804	LEU	CA-C-N	6.24	133.47	121.54
1	A	804	LEU	C-N-CA	6.24	133.47	121.54
1	A	239	ALA	CA-C-N	6.24	133.46	121.54
1	A	239	ALA	C-N-CA	6.24	133.46	121.54
6	K	169	CYS	N-CA-C	-6.24	104.40	111.07
3	C	569	LYS	N-CA-C	-6.23	104.40	111.07
5	M	68	VAL	N-CA-C	6.23	117.09	107.99
6	G	871	ALA	N-CA-C	6.23	117.87	111.14
2	B	743	ALA	N-CA-C	-6.23	98.84	109.24
1	A	800	PRO	CA-C-N	6.23	133.18	121.97
1	A	800	PRO	C-N-CA	6.23	133.18	121.97
2	B	460	VAL	CA-C-N	6.22	128.53	120.44
2	B	460	VAL	C-N-CA	6.22	128.53	120.44
3	C	602	ASP	N-CA-C	-6.22	100.19	109.83
7	L	143	VAL	N-CA-C	-6.22	104.68	110.53
1	A	297	LEU	N-CA-C	-6.22	99.85	109.24
5	R	52	ASN	N-CA-C	6.22	118.43	107.61
4	D	101	GLU	CA-C-N	6.21	128.97	120.46
4	D	101	GLU	C-N-CA	6.21	128.97	120.46
7	L	38	VAL	CA-C-N	6.21	128.52	120.44
7	L	38	VAL	C-N-CA	6.21	128.52	120.44
3	C	718	GLY	CA-C-N	6.21	128.60	120.28
3	C	718	GLY	C-N-CA	6.21	128.60	120.28
6	K	750	GLU	N-CA-C	-6.21	99.61	109.23
1	A	249	TYR	CA-C-N	6.20	133.39	121.54
1	A	249	TYR	C-N-CA	6.20	133.39	121.54
1	A	438	LYS	N-CA-C	-6.20	98.28	108.76
6	K	308	VAL	CA-C-N	-6.20	114.25	122.99
6	K	308	VAL	C-N-CA	-6.20	114.25	122.99
2	B	321	VAL	N-CA-C	-6.20	104.30	110.62
7	L	46	LYS	CA-C-N	-6.20	112.47	120.65
7	L	46	LYS	C-N-CA	-6.20	112.47	120.65
1	A	666	LYS	N-CA-C	-6.20	104.53	111.28
2	B	784	VAL	CA-C-O	-6.19	113.04	120.78
7	L	115	LEU	CA-C-N	6.19	128.58	120.28
7	L	115	LEU	C-N-CA	6.19	128.58	120.28
6	G	750	GLU	N-CA-C	-6.19	99.64	109.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	727	VAL	CA-C-N	6.18	128.57	120.28
3	C	727	VAL	C-N-CA	6.18	128.57	120.28
3	C	567	ILE	CA-C-O	6.18	123.95	119.25
6	K	746	GLY	CA-C-O	-6.18	115.05	121.91
6	K	624	GLN	N-CA-C	-6.18	100.25	109.83
2	B	433	ALA	CA-C-N	6.18	128.47	120.44
2	B	433	ALA	C-N-CA	6.18	128.47	120.44
7	L	38	VAL	N-CA-C	-6.18	104.48	110.72
3	C	145	VAL	CA-C-N	6.17	129.06	120.29
3	C	145	VAL	C-N-CA	6.17	129.06	120.29
2	B	262	ARG	N-CA-C	-6.17	104.47	111.07
5	R	57	GLN	N-CA-C	-6.17	99.15	108.96
2	B	349	LEU	CA-C-N	6.17	128.55	120.28
2	B	349	LEU	C-N-CA	6.17	128.55	120.28
6	G	624	GLN	N-CA-C	-6.17	100.27	109.83
3	C	716	ALA	N-CA-C	-6.17	104.56	111.28
1	A	662	LEU	CA-C-N	6.16	129.04	120.29
1	A	662	LEU	C-N-CA	6.16	129.04	120.29
6	G	746	GLY	CA-C-O	-6.16	115.07	121.91
2	B	412	MET	N-CA-C	6.16	115.57	108.49
6	K	169	CYS	O-C-N	6.16	128.41	122.07
1	A	78	TRP	CA-C-N	6.15	130.86	122.19
1	A	78	TRP	C-N-CA	6.15	130.86	122.19
1	A	611	VAL	O-C-N	6.15	128.17	121.83
7	L	34	THR	N-CA-C	-6.15	107.61	114.62
1	A	267	ASN	N-CA-C	-6.14	99.35	108.99
3	C	84	PHE	N-CA-C	-6.14	100.00	109.52
3	C	824	TYR	CA-C-O	-6.14	111.75	120.16
5	M	171	GLU	CA-C-N	6.14	128.79	120.38
5	M	171	GLU	C-N-CA	6.14	128.79	120.38
7	Z	19	LEU	N-CA-C	-6.13	99.90	109.72
6	K	646	TYR	N-CA-C	-6.13	99.72	109.23
3	C	378	TYR	O-C-N	6.13	131.16	123.19
7	Z	67	VAL	N-CA-C	-6.13	98.80	107.75
3	C	572	ARG	N-CA-C	-6.13	99.99	109.24
7	Z	31	TYR	N-CA-C	-6.13	104.52	111.14
1	A	533	GLY	N-CA-C	-6.12	99.58	111.03
1	A	35	LEU	N-CA-C	-6.12	98.92	108.90
3	C	626	GLU	N-CA-C	-6.12	104.61	111.28
6	K	208	ARG	CA-C-O	6.12	127.00	120.70
1	A	458	TYR	N-CA-C	-6.11	100.23	109.95
2	B	434	ASP	CA-C-N	6.11	128.26	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	434	ASP	C-N-CA	6.11	128.26	120.56
2	B	49	ASP	CA-C-N	6.11	128.83	120.46
2	B	49	ASP	C-N-CA	6.11	128.83	120.46
6	G	679	VAL	N-CA-C	6.11	116.67	107.75
7	Z	32	ASP	N-CA-C	-6.11	99.95	109.72
3	C	738	LEU	CA-C-N	6.11	128.38	120.44
3	C	738	LEU	C-N-CA	6.11	128.38	120.44
4	D	55	ARG	N-CA-C	-6.10	100.56	110.20
7	Z	18	ILE	N-CA-C	-6.10	98.74	107.77
6	K	679	VAL	N-CA-C	6.10	116.66	107.75
2	B	90	LYS	N-CA-C	-6.10	104.72	111.36
6	K	782	GLU	N-CA-C	-6.09	103.98	112.45
6	K	68	GLU	N-CA-C	-6.09	104.64	111.28
3	C	361	ASN	N-CA-C	-6.09	101.25	110.39
1	A	18	HIS	CA-C-N	6.09	125.79	119.82
1	A	18	HIS	C-N-CA	6.09	125.79	119.82
6	K	261	ASN	N-CA-C	6.09	118.63	110.35
2	B	73	LEU	CA-C-N	6.09	128.72	120.38
2	B	73	LEU	C-N-CA	6.09	128.72	120.38
2	B	258	ALA	N-CA-C	6.09	117.92	111.28
1	A	30	ASN	N-CA-C	-6.08	105.71	113.01
6	G	175	LYS	CA-C-N	6.08	129.04	120.28
6	G	175	LYS	C-N-CA	6.08	129.04	120.28
6	K	732	VAL	N-CA-C	-6.08	99.65	108.17
1	A	635	PRO	N-CA-C	-6.08	99.94	112.47
6	G	732	VAL	N-CA-C	-6.08	99.66	108.17
2	B	412	MET	CA-C-O	6.08	124.57	120.19
6	K	54	LEU	N-CA-C	-6.08	104.73	111.36
5	F	81	TYR	N-CA-C	-6.08	105.52	113.17
5	R	45	THR	N-CA-C	-6.08	106.22	113.21
5	F	132	GLU	CA-C-N	6.07	132.18	121.80
5	F	132	GLU	C-N-CA	6.07	132.18	121.80
1	A	376	ALA	CA-C-N	6.07	131.45	122.71
1	A	376	ALA	C-N-CA	6.07	131.45	122.71
2	B	456	LYS	CA-C-N	6.07	128.41	120.28
2	B	456	LYS	C-N-CA	6.07	128.41	120.28
6	K	685	GLU	N-CA-C	-6.07	98.39	108.34
1	A	156	ASP	N-CA-C	-6.06	104.39	112.94
2	B	815	PHE	CA-C-N	6.06	127.26	120.42
2	B	815	PHE	C-N-CA	6.06	127.26	120.42
3	C	278	ALA	N-CA-C	-6.06	99.48	108.99
7	Z	36	PRO	CA-C-N	6.06	133.11	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	Z	36	PRO	C-N-CA	6.06	133.11	121.54
5	F	52	ASN	N-CA-C	-6.06	99.53	109.40
2	B	231	VAL	CA-C-N	6.05	129.00	120.28
2	B	231	VAL	C-N-CA	6.05	129.00	120.28
3	C	573	LEU	CA-C-N	6.05	132.02	122.94
3	C	573	LEU	C-N-CA	6.05	132.02	122.94
6	G	685	GLU	N-CA-C	-6.05	98.41	108.34
6	G	782	GLU	N-CA-C	-6.05	104.04	112.45
3	C	381	MET	CA-C-N	6.05	128.88	120.29
3	C	381	MET	C-N-CA	6.05	128.88	120.29
1	A	806	THR	N-CA-C	-6.05	104.25	111.69
4	D	62	GLU	CA-C-N	6.05	133.09	121.54
4	D	62	GLU	C-N-CA	6.05	133.09	121.54
2	B	132	ARG	CA-C-N	6.04	126.69	119.98
2	B	132	ARG	C-N-CA	6.04	126.69	119.98
6	G	372	SER	CA-C-N	6.04	133.08	121.54
6	G	372	SER	C-N-CA	6.04	133.08	121.54
5	M	90	PHE	CA-C-N	-6.04	114.58	122.37
5	M	90	PHE	C-N-CA	-6.04	114.58	122.37
2	B	256	GLU	CA-C-O	6.04	126.89	119.05
2	B	460	VAL	O-C-N	6.03	127.82	121.91
6	G	208	ARG	N-CA-C	6.03	119.11	111.69
1	A	744	GLU	N-CA-C	-6.02	104.78	111.71
6	G	224	LYS	N-CA-C	6.02	120.71	112.04
1	A	599	PHE	N-CA-C	6.02	117.52	111.07
3	C	352	GLU	N-CA-C	-6.02	97.97	110.80
1	A	765	HIS	N-CA-C	-6.02	105.89	113.18
4	D	26	ARG	CA-C-N	6.02	130.23	120.60
4	D	26	ARG	C-N-CA	6.02	130.23	120.60
1	A	251	ASN	CA-C-N	6.02	132.80	121.97
1	A	251	ASN	C-N-CA	6.02	132.80	121.97
5	F	106	VAL	N-CA-C	6.02	116.76	110.62
1	A	79	ASN	CA-C-O	-6.01	113.75	120.54
4	D	60	PRO	N-CA-C	-6.01	101.05	111.32
7	Z	76	TYR	CA-C-O	6.01	126.85	120.36
2	B	436	LEU	N-CA-C	-6.01	104.64	111.07
3	C	402	GLU	N-CA-C	-6.01	100.01	108.96
6	G	805	VAL	O-C-N	6.00	127.79	121.91
6	K	805	VAL	O-C-N	6.00	127.79	121.91
1	A	720	MET	N-CA-C	-6.00	104.82	111.36
3	C	573	LEU	N-CA-C	-6.00	99.94	109.59
6	G	531	TYR	N-CA-C	-6.00	104.82	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	207	ASP	CA-C-N	6.00	130.83	120.58
6	G	207	ASP	C-N-CA	6.00	130.83	120.58
6	G	396	VAL	N-CA-C	-5.99	104.67	110.72
5	R	54	GLU	N-CA-C	-5.99	99.94	109.23
6	K	118	ASP	CA-C-O	5.99	126.77	120.42
3	C	277	VAL	N-CA-C	-5.99	99.16	108.44
1	A	29	HIS	N-CA-C	-5.98	105.90	112.72
7	L	129	VAL	N-CA-C	-5.98	99.55	108.46
2	B	181	PHE	CA-C-N	5.98	132.96	121.54
2	B	181	PHE	C-N-CA	5.98	132.96	121.54
1	A	607	LYS	CA-C-N	5.98	131.22	122.08
1	A	607	LYS	C-N-CA	5.98	131.22	122.08
1	A	789	ASP	N-CA-C	-5.98	89.67	107.37
6	K	255	ILE	N-CA-C	5.98	116.16	110.42
4	D	68	LEU	CA-C-N	-5.97	113.74	122.58
4	D	68	LEU	C-N-CA	-5.97	113.74	122.58
2	B	150	PRO	N-CA-C	-5.97	104.60	114.75
3	C	143	HIS	CA-C-N	5.97	129.32	120.90
3	C	143	HIS	C-N-CA	5.97	129.32	120.90
3	C	707	GLY	CA-C-O	-5.97	117.22	121.88
2	B	448	ASN	CA-C-N	5.97	128.55	120.38
2	B	448	ASN	C-N-CA	5.97	128.55	120.38
3	C	90	GLU	N-CA-C	-5.96	99.52	109.24
3	C	154	ASP	N-CA-C	-5.96	93.82	107.48
6	K	711	ALA	N-CA-C	-5.96	100.48	109.95
3	C	812	LYS	CA-C-N	5.95	128.26	120.28
3	C	812	LYS	C-N-CA	5.95	128.26	120.28
6	G	711	ALA	N-CA-C	-5.95	100.48	109.95
4	D	11	LYS	N-CA-C	5.95	119.37	111.75
1	A	729	MET	N-CA-C	-5.95	107.26	114.75
6	G	371	ILE	N-CA-C	-5.95	99.60	108.46
1	A	310	HIS	CA-C-N	5.95	128.53	120.44
1	A	310	HIS	C-N-CA	5.95	128.53	120.44
3	C	410	SER	N-CA-C	-5.95	98.14	110.80
2	B	258	ALA	CA-C-N	5.94	128.24	120.28
2	B	258	ALA	C-N-CA	5.94	128.24	120.28
6	G	120	TYR	CA-C-O	5.94	126.71	120.42
6	G	434	THR	N-CA-C	5.94	117.42	111.07
6	K	54	LEU	CA-C-N	5.94	128.16	120.56
6	K	54	LEU	C-N-CA	5.94	128.16	120.56
5	F	144	GLY	CA-C-N	5.93	128.83	120.28
5	F	144	GLY	C-N-CA	5.93	128.83	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	M	80	HIS	N-CA-C	5.93	123.44	110.80
1	A	75	ILE	N-CA-C	-5.93	99.20	107.80
2	B	428	ASN	CA-C-N	5.93	128.51	120.38
2	B	428	ASN	C-N-CA	5.93	128.51	120.38
2	B	559	GLY	N-CA-C	5.93	119.38	112.50
2	B	360	LEU	CA-C-N	5.92	128.81	120.28
2	B	360	LEU	C-N-CA	5.92	128.81	120.28
7	Z	80	ILE	O-C-N	5.92	129.58	123.18
6	G	135	THR	CA-C-O	5.92	126.83	120.55
3	C	134	CYS	N-CA-C	-5.92	97.57	107.99
6	G	181	ALA	N-CA-C	5.92	117.40	111.07
6	K	154	SER	CA-C-N	5.91	128.81	120.42
6	K	154	SER	C-N-CA	5.91	128.81	120.42
5	F	55	THR	N-CA-C	-5.91	100.08	109.59
5	R	113	GLU	N-CA-C	-5.91	100.87	110.20
1	A	744	GLU	CA-C-N	5.90	128.19	120.28
1	A	744	GLU	C-N-CA	5.90	128.19	120.28
6	K	861	SER	N-CA-C	-5.90	105.27	112.88
1	A	330	GLY	CA-C-N	5.90	130.75	122.08
1	A	330	GLY	C-N-CA	5.90	130.75	122.08
6	G	686	ALA	CA-C-N	5.90	132.81	121.54
6	G	686	ALA	C-N-CA	5.90	132.81	121.54
6	K	686	ALA	CA-C-N	5.90	132.81	121.54
6	K	686	ALA	C-N-CA	5.90	132.81	121.54
2	B	889	ASN	N-CA-C	-5.89	103.32	111.28
1	A	335	TYR	N-CA-C	-5.89	100.34	109.24
2	B	306	LYS	CA-C-N	5.89	129.48	120.82
2	B	306	LYS	C-N-CA	5.89	129.48	120.82
7	L	126	ASP	CA-C-N	-5.89	111.92	120.29
7	L	126	ASP	C-N-CA	-5.89	111.92	120.29
5	F	115	GLU	CA-C-N	5.89	132.69	122.32
5	F	115	GLU	C-N-CA	5.89	132.69	122.32
3	C	721	ARG	N-CA-C	5.89	117.69	111.28
6	G	62	GLY	CA-C-N	5.89	128.17	120.28
6	G	62	GLY	C-N-CA	5.89	128.17	120.28
6	G	168	LYS	N-CA-C	-5.89	103.84	111.02
7	Z	71	SER	N-CA-C	-5.89	100.37	109.14
6	K	661	PHE	N-CA-C	-5.89	98.92	108.52
3	C	476	LEU	N-CA-C	-5.88	100.11	109.76
2	B	369	GLU	N-CA-C	5.88	117.77	111.36
6	K	263	HIS	N-CA-C	-5.88	97.59	108.24
3	C	782	GLN	N-CA-C	-5.88	98.27	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	631	LYS	N-CA-C	-5.88	99.20	108.14
3	C	44	HIS	CA-C-N	5.88	128.43	120.38
3	C	44	HIS	C-N-CA	5.88	128.43	120.38
2	B	401	THR	CA-C-N	5.88	128.15	120.28
2	B	401	THR	C-N-CA	5.88	128.15	120.28
7	Z	118	MET	N-CA-C	5.88	119.63	112.23
2	B	421	MET	CA-C-N	5.87	128.07	120.44
2	B	421	MET	C-N-CA	5.87	128.07	120.44
6	G	283	LYS	CA-C-N	5.87	128.15	120.28
6	G	283	LYS	C-N-CA	5.87	128.15	120.28
6	K	95	MET	N-CA-C	5.87	119.70	112.54
6	G	661	PHE	N-CA-C	-5.87	98.95	108.52
3	C	154	ASP	CA-C-N	5.87	130.52	121.19
3	C	154	ASP	C-N-CA	5.87	130.52	121.19
5	F	130	LEU	O-C-N	5.87	126.64	121.18
6	G	179	ASN	CA-C-O	5.87	126.98	120.82
6	G	631	LYS	N-CA-C	-5.87	99.22	108.14
7	Z	140	GLN	CA-C-N	5.87	128.06	120.44
7	Z	140	GLN	C-N-CA	5.87	128.06	120.44
1	A	47	PHE	N-CA-C	-5.86	99.09	109.06
5	R	23	VAL	N-CA-C	-5.86	100.24	108.80
6	G	29	GLN	CA-C-N	5.86	129.98	120.60
6	G	29	GLN	C-N-CA	5.86	129.98	120.60
4	D	115	GLU	N-CA-C	-5.86	104.81	111.14
3	C	152	PRO	CA-C-N	5.86	128.06	120.44
3	C	152	PRO	C-N-CA	5.86	128.06	120.44
6	G	861	SER	N-CA-C	-5.86	105.32	112.88
6	K	279	GLY	N-CA-C	-5.86	99.30	113.18
5	F	121	TRP	CA-C-N	5.85	131.25	123.00
5	F	121	TRP	C-N-CA	5.85	131.25	123.00
7	L	27	PHE	N-CA-C	-5.84	98.76	108.75
5	F	116	LEU	CA-C-N	5.84	132.69	121.54
5	F	116	LEU	C-N-CA	5.84	132.69	121.54
1	A	65	LEU	N-CA-C	-5.84	99.86	108.79
5	F	160	ALA	N-CA-C	-5.84	103.59	112.99
5	R	83	ARG	CA-C-N	5.84	132.69	121.54
5	R	83	ARG	C-N-CA	5.84	132.69	121.54
6	K	608	THR	CA-C-N	5.84	128.10	120.28
6	K	608	THR	C-N-CA	5.84	128.10	120.28
2	B	923	ASN	N-CA-C	-5.83	98.78	108.34
5	R	122	LEU	CA-C-O	5.83	126.69	120.46
6	K	221	HIS	CA-C-N	5.82	132.82	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	221	HIS	C-N-CA	5.82	132.82	121.41
3	C	82	ARG	N-CA-C	-5.82	100.30	109.50
5	F	20	ILE	N-CA-C	-5.82	100.10	108.48
2	B	129	GLU	N-CA-C	5.82	117.70	111.36
6	G	293	GLN	CA-C-N	5.82	128.00	120.44
6	G	293	GLN	C-N-CA	5.82	128.00	120.44
3	C	571	ASN	CA-C-N	-5.82	112.79	122.21
3	C	571	ASN	C-N-CA	-5.82	112.79	122.21
3	C	256	TRP	N-CA-C	-5.81	100.42	109.72
6	G	608	THR	CA-C-N	5.81	128.06	120.28
6	G	608	THR	C-N-CA	5.81	128.06	120.28
1	A	670	ASP	N-CA-C	-5.81	106.01	112.57
5	F	169	GLY	N-CA-C	-5.81	105.76	112.50
1	A	120	TRP	N-CA-C	5.80	118.86	109.40
1	A	531	LYS	CA-C-N	5.80	131.72	121.80
1	A	531	LYS	C-N-CA	5.80	131.72	121.80
1	A	181	VAL	N-CA-C	-5.80	104.70	110.62
2	B	849	THR	CA-C-O	-5.80	114.85	121.58
6	G	428	ASN	CA-C-N	5.80	129.34	120.82
6	G	428	ASN	C-N-CA	5.80	129.34	120.82
6	G	843	ARG	N-CA-C	-5.80	98.96	108.76
6	G	867	ASP	CA-C-N	5.80	127.86	120.56
6	G	867	ASP	C-N-CA	5.80	127.86	120.56
2	B	384	ASN	N-CA-C	5.79	123.14	110.80
1	A	577	ASN	N-CA-C	-5.79	98.46	110.80
1	A	784	THR	N-CA-C	-5.79	99.92	108.79
6	K	843	ARG	N-CA-C	-5.79	98.97	108.76
7	L	104	MET	N-CA-C	-5.79	104.88	111.07
7	L	110	GLU	N-CA-C	-5.79	100.76	108.34
2	B	916	PHE	N-CA-C	-5.78	104.89	112.41
3	C	801	LEU	CA-C-O	-5.78	114.81	122.44
1	A	258	HIS	CA-C-N	5.78	127.06	119.84
1	A	258	HIS	C-N-CA	5.78	127.06	119.84
3	C	375	TYR	N-CA-C	5.77	117.93	108.52
1	A	374	GLU	N-CA-C	-5.77	106.63	113.38
6	K	867	ASP	CA-C-N	5.77	127.83	120.56
6	K	867	ASP	C-N-CA	5.77	127.83	120.56
6	K	306	ALA	N-CA-C	-5.77	105.07	111.36
3	C	533	CYS	CA-C-N	-5.77	114.97	123.05
3	C	533	CYS	C-N-CA	-5.77	114.97	123.05
5	R	117	ARG	N-CA-C	-5.77	105.50	112.54
3	C	300	GLY	N-CA-C	5.77	121.61	111.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	248	HIS	N-CA-C	-5.76	98.52	110.80
5	R	62	SER	CA-C-N	5.76	130.32	122.19
5	R	62	SER	C-N-CA	5.76	130.32	122.19
6	K	26	ALA	CA-C-N	5.76	128.36	120.46
6	K	26	ALA	C-N-CA	5.76	128.36	120.46
6	G	675	GLU	N-CA-C	-5.76	100.54	109.24
2	B	512	ALA	N-CA-C	5.76	117.23	111.07
3	C	228	HIS	N-CA-C	5.76	123.06	110.80
3	C	504	GLY	CA-C-N	5.75	130.33	123.19
3	C	504	GLY	C-N-CA	5.75	130.33	123.19
2	B	770	ASN	CA-C-N	5.75	132.53	121.54
2	B	770	ASN	C-N-CA	5.75	132.53	121.54
5	M	30	LYS	CA-C-N	5.75	127.99	120.28
5	M	30	LYS	C-N-CA	5.75	127.99	120.28
6	G	373	ASP	N-CA-C	-5.75	98.56	110.80
5	R	26	ASP	N-CA-C	-5.75	100.46	109.25
1	A	796	GLN	CA-C-N	-5.75	114.46	120.38
1	A	796	GLN	C-N-CA	-5.75	114.46	120.38
3	C	261	TYR	N-CA-C	-5.75	105.57	112.58
3	C	508	ASP	N-CA-C	-5.74	105.93	113.17
6	K	675	GLU	N-CA-C	-5.74	100.57	109.24
6	G	104	ILE	N-CA-C	5.74	116.47	110.62
1	A	638	ALA	N-CA-C	-5.74	105.02	111.28
6	K	290	SER	CA-C-O	5.74	126.84	120.82
1	A	681	ALA	N-CA-C	-5.73	104.94	111.07
2	B	130	PHE	CA-C-N	5.73	127.78	120.56
2	B	130	PHE	C-N-CA	5.73	127.78	120.56
7	Z	83	SER	N-CA-C	-5.73	98.38	108.23
2	B	937	ALA	N-CA-C	-5.72	98.61	110.80
3	C	456	GLU	CA-C-O	-5.72	113.68	120.43
1	A	450	VAL	CA-C-N	5.72	126.05	119.93
1	A	450	VAL	C-N-CA	5.72	126.05	119.93
3	C	567	ILE	CA-C-N	5.72	125.57	119.28
3	C	567	ILE	C-N-CA	5.72	125.57	119.28
2	B	110	LEU	CA-C-N	5.71	132.45	121.54
2	B	110	LEU	C-N-CA	5.71	132.45	121.54
3	C	529	TRP	N-CA-C	-5.71	99.93	109.24
1	A	549	ILE	CA-C-O	-5.71	114.45	120.39
2	B	799	ASN	CA-C-N	-5.71	115.00	122.94
2	B	799	ASN	C-N-CA	-5.71	115.00	122.94
3	C	784	ALA	N-CA-C	-5.71	105.05	111.28
1	A	106	PRO	CA-C-N	5.71	132.35	122.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	106	PRO	C-N-CA	5.71	132.35	122.64
1	A	554	THR	CA-C-N	5.71	132.44	121.54
1	A	554	THR	C-N-CA	5.71	132.44	121.54
3	C	522	GLU	N-CA-C	5.70	118.06	109.23
2	B	127	PRO	CA-C-N	5.69	132.41	121.54
2	B	127	PRO	C-N-CA	5.69	132.41	121.54
6	K	208	ARG	N-CA-C	5.69	117.29	111.14
3	C	368	VAL	CA-C-O	5.69	126.37	120.39
6	K	135	THR	N-CA-C	5.69	122.92	110.80
2	B	447	ASP	N-CA-C	5.69	122.91	110.80
1	A	180	ASP	N-CA-C	-5.68	106.69	113.97
6	G	325	CYS	N-CA-C	5.68	117.47	111.28
2	B	327	PRO	N-CA-C	-5.68	106.60	114.27
3	C	768	ARG	N-CA-C	5.68	117.15	111.07
6	K	830	LEU	N-CA-C	5.68	118.47	109.50
6	G	692	TYR	CA-C-N	-5.68	117.01	123.25
6	G	692	TYR	C-N-CA	-5.68	117.01	123.25
5	R	46	ILE	N-CA-C	-5.68	103.74	109.02
1	A	12	VAL	N-CA-C	5.67	115.76	107.37
6	G	830	LEU	N-CA-C	5.67	118.46	109.50
7	L	19	LEU	CA-C-O	-5.67	114.71	121.11
2	B	926	ILE	O-C-N	-5.67	117.08	123.20
2	B	865	GLU	N-CA-C	5.66	122.86	110.80
3	C	227	GLY	CA-C-N	5.66	132.36	121.54
3	C	227	GLY	C-N-CA	5.66	132.36	121.54
1	A	803	PRO	CA-C-N	5.66	132.35	121.54
1	A	803	PRO	C-N-CA	5.66	132.35	121.54
3	C	268	ASN	N-CA-C	5.66	117.93	108.02
1	A	650	SER	CA-C-N	5.66	127.86	120.28
1	A	650	SER	C-N-CA	5.66	127.86	120.28
3	C	840	LYS	CA-C-N	5.66	126.38	119.99
3	C	840	LYS	C-N-CA	5.66	126.38	119.99
1	A	245	CYS	O-C-N	5.65	129.66	123.27
2	B	809	THR	CA-C-N	-5.65	113.72	122.09
2	B	809	THR	C-N-CA	-5.65	113.72	122.09
6	G	506	LEU	CA-C-O	-5.65	112.42	120.16
3	C	433	ILE	N-CA-C	-5.65	100.04	108.46
5	M	124	PHE	CA-C-N	5.65	129.93	122.42
5	M	124	PHE	C-N-CA	5.65	129.93	122.42
5	F	34	LEU	N-CA-C	5.65	117.44	111.28
6	G	358	ASP	CA-C-N	5.65	127.78	120.44
6	G	358	ASP	C-N-CA	5.65	127.78	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	49	VAL	N-CA-C	-5.64	100.35	108.42
2	B	474	LEU	N-CA-C	5.64	117.11	111.07
1	A	586	ARG	O-C-N	5.64	127.81	121.32
2	B	412	MET	O-C-N	-5.64	118.88	123.11
4	D	66	MET	N-CA-C	-5.64	100.51	109.59
3	C	252	THR	N-CA-C	-5.63	100.52	109.59
6	G	120	TYR	N-CA-C	5.63	117.50	111.36
6	K	193	GLN	N-CA-C	-5.63	105.15	111.28
7	L	68	VAL	N-CA-C	5.63	117.51	108.85
1	A	478	GLN	CA-C-N	5.62	132.28	121.54
1	A	478	GLN	C-N-CA	5.62	132.28	121.54
2	B	791	THR	N-CA-C	-5.62	100.81	109.52
2	B	254	PRO	CA-C-N	5.62	132.27	121.54
2	B	254	PRO	C-N-CA	5.62	132.27	121.54
3	C	367	VAL	N-CA-C	-5.62	100.35	108.89
1	A	38	TYR	N-CA-C	5.61	118.17	111.71
1	A	146	SER	N-CA-C	-5.61	101.34	109.59
6	G	312	ASN	CA-C-N	5.61	129.75	120.94
6	G	312	ASN	C-N-CA	5.61	129.75	120.94
1	A	124	SER	CA-C-N	5.61	132.25	121.54
1	A	124	SER	C-N-CA	5.61	132.25	121.54
3	C	187	GLY	N-CA-C	-5.61	102.08	110.38
4	D	12	ALA	N-CA-C	5.61	122.75	110.80
6	K	190	ILE	N-CA-C	5.61	115.80	110.53
1	A	37	ASP	N-CA-C	-5.61	97.33	107.75
3	C	412	VAL	CA-C-O	-5.61	114.46	120.85
6	G	379	VAL	CA-C-O	-5.61	115.12	120.95
6	G	765	GLN	N-CA-C	-5.61	100.05	109.07
6	G	827	THR	CA-C-N	-5.61	115.26	123.00
6	G	827	THR	C-N-CA	-5.61	115.26	123.00
6	K	81	ASP	CA-C-N	5.61	125.27	119.05
6	K	81	ASP	C-N-CA	5.61	125.27	119.05
7	L	84	TYR	N-CA-C	-5.61	98.86	110.80
2	B	842	MET	CA-C-O	5.60	126.49	120.55
6	K	647	VAL	N-CA-C	5.60	115.93	107.75
6	K	765	GLN	N-CA-C	-5.60	100.05	109.07
6	K	827	THR	CA-C-N	-5.60	115.27	123.00
6	K	827	THR	C-N-CA	-5.60	115.27	123.00
3	C	461	ILE	CA-C-N	5.60	132.24	121.54
3	C	461	ILE	C-N-CA	5.60	132.24	121.54
6	K	176	ARG	CA-C-N	5.60	134.63	121.52
6	K	176	ARG	C-N-CA	5.60	134.63	121.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	828	THR	CA-C-N	5.60	126.38	120.11
3	C	828	THR	C-N-CA	5.60	126.38	120.11
6	G	139	ALA	N-CA-C	5.60	122.72	110.80
1	A	769	GLU	N-CA-C	5.60	117.06	111.07
7	Z	70	LYS	CA-C-N	5.60	131.31	122.36
7	Z	70	LYS	C-N-CA	5.60	131.31	122.36
1	A	611	VAL	CA-C-O	5.59	126.78	120.85
6	G	610	GLN	N-CA-C	-5.59	105.18	111.28
1	A	107	TRP	N-CA-C	5.59	119.17	110.17
1	A	184	ILE	CA-C-N	5.59	132.22	121.54
1	A	184	ILE	C-N-CA	5.59	132.22	121.54
6	G	251	LEU	N-CA-C	-5.59	105.09	111.07
2	B	515	LEU	N-CA-C	-5.59	101.02	108.34
1	A	372	PRO	CA-C-O	-5.58	115.24	121.32
4	D	111	PHE	N-CA-C	-5.58	105.20	111.28
6	G	499	GLY	N-CA-C	-5.58	105.74	112.49
3	C	238	HIS	CA-C-O	-5.58	114.80	119.76
1	A	44	ILE	N-CA-C	-5.57	105.42	110.82
6	G	382	ALA	N-CA-C	-5.57	105.11	111.07
2	B	324	LYS	CA-C-N	5.57	130.45	122.21
2	B	324	LYS	C-N-CA	5.57	130.45	122.21
2	B	535	THR	CA-C-N	5.57	127.68	120.44
2	B	535	THR	C-N-CA	5.57	127.68	120.44
2	B	121	ARG	N-CA-C	-5.57	105.21	111.28
2	B	448	ASN	CA-C-O	5.57	126.43	120.70
3	C	818	LEU	CA-C-O	-5.56	114.52	120.42
4	D	13	GLY	N-CA-C	-5.56	107.96	115.36
6	G	457	HIS	N-CA-C	-5.56	105.12	111.07
7	L	61	LEU	CA-C-O	-5.56	114.35	120.36
1	A	274	ARG	N-CA-C	-5.56	100.82	109.72
6	K	610	GLN	N-CA-C	-5.56	105.22	111.28
1	A	173	SER	CA-C-O	-5.56	114.98	120.26
3	C	444	VAL	CA-C-N	5.56	130.30	122.46
3	C	444	VAL	C-N-CA	5.56	130.30	122.46
6	G	118	ASP	CA-C-N	5.55	127.66	120.44
6	G	118	ASP	C-N-CA	5.55	127.66	120.44
7	Z	20	ASP	N-CA-C	-5.55	103.58	110.41
1	A	452	ASN	N-CA-C	-5.55	98.98	110.80
1	A	763	ALA	N-CA-C	5.55	117.33	111.28
2	B	437	GLU	CA-C-N	5.55	128.03	120.54
2	B	437	GLU	C-N-CA	5.55	128.03	120.54
3	C	432	SER	N-CA-C	-5.55	100.89	108.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	826	ALA	CA-C-N	5.55	132.13	121.54
2	B	826	ALA	C-N-CA	5.55	132.13	121.54
2	B	834	LEU	CA-C-N	5.55	131.80	122.87
2	B	834	LEU	C-N-CA	5.55	131.80	122.87
5	R	100	ILE	N-CA-C	-5.55	105.32	110.53
6	G	612	ILE	N-CA-C	-5.54	104.97	110.62
6	K	149	VAL	CA-C-N	-5.54	114.38	122.19
6	K	149	VAL	C-N-CA	-5.54	114.38	122.19
2	B	103	THR	CA-C-N	5.54	135.31	121.80
2	B	103	THR	C-N-CA	5.54	135.31	121.80
6	K	612	ILE	N-CA-C	-5.54	104.97	110.62
1	A	33	ILE	N-CA-C	-5.53	100.51	108.48
3	C	203	ILE	N-CA-C	-5.53	99.85	108.86
3	C	663	GLU	N-CA-C	-5.53	101.46	109.59
6	G	142	ARG	N-CA-C	-5.53	105.17	111.14
7	Z	80	ILE	CA-C-N	5.53	132.24	121.41
7	Z	80	ILE	C-N-CA	5.53	132.24	121.41
6	G	259	LEU	CA-C-O	-5.53	115.02	120.82
5	R	35	TYR	N-CA-C	5.52	119.74	112.89
2	B	954	SER	N-CA-C	-5.52	105.27	111.28
3	C	100	ASP	N-CA-C	-5.52	101.02	109.41
6	K	234	ARG	CA-C-O	5.52	126.40	120.55
1	A	713	LEU	N-CA-C	5.52	120.50	113.55
6	G	546	TYR	N-CA-C	5.52	116.97	111.07
2	B	360	LEU	CA-C-O	5.51	126.33	120.10
4	D	21	PHE	N-CA-C	-5.51	104.67	111.40
3	C	222	VAL	CA-C-N	-5.51	112.38	121.80
3	C	222	VAL	C-N-CA	-5.51	112.38	121.80
6	G	400	PHE	CA-C-N	5.51	127.66	120.28
6	G	400	PHE	C-N-CA	5.51	127.66	120.28
6	G	459	LEU	O-C-N	5.51	127.96	122.12
6	K	771	ASN	CA-C-N	-5.51	112.95	120.44
6	K	771	ASN	C-N-CA	-5.51	112.95	120.44
6	G	463	GLY	N-CA-C	5.51	123.57	112.34
6	K	825	THR	CA-C-O	-5.51	115.02	121.46
1	A	223	GLY	N-CA-C	-5.50	100.72	111.12
1	A	167	LEU	N-CA-C	-5.50	99.08	110.80
1	A	261	GLN	CA-C-N	5.50	132.05	121.54
1	A	261	GLN	C-N-CA	5.50	132.05	121.54
2	B	745	ALA	N-CA-C	-5.50	100.37	108.79
6	K	790	THR	CA-C-N	5.50	130.50	122.85
6	K	790	THR	C-N-CA	5.50	130.50	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	483	LEU	N-CA-C	-5.50	105.20	111.14
6	G	296	CYS	O-C-N	5.50	127.95	122.12
6	G	825	THR	CA-C-O	-5.50	115.03	121.46
1	A	743	SER	CA-C-N	5.50	128.19	120.28
1	A	743	SER	C-N-CA	5.50	128.19	120.28
6	K	719	ALA	N-CA-C	5.50	120.90	113.21
1	A	103	HIS	N-CA-C	5.49	122.50	110.80
1	A	180	ASP	CA-C-N	5.49	127.98	120.46
1	A	180	ASP	C-N-CA	5.49	127.98	120.46
2	B	868	VAL	N-CA-C	-5.49	100.38	108.23
3	C	534	PHE	CA-C-O	5.49	126.36	120.32
5	F	71	GLN	N-CA-C	-5.49	103.45	110.53
6	G	443	ILE	N-CA-C	-5.49	104.60	110.36
6	G	771	ASN	CA-C-N	-5.49	112.98	120.44
6	G	771	ASN	C-N-CA	-5.49	112.98	120.44
6	G	790	THR	CA-C-N	5.49	130.47	122.85
6	G	790	THR	C-N-CA	5.49	130.47	122.85
6	G	811	HIS	CA-C-O	-5.49	113.47	119.61
3	C	452	TRP	N-CA-C	-5.48	105.59	114.09
6	K	51	ILE	CA-C-N	5.48	127.63	120.28
6	K	51	ILE	C-N-CA	5.48	127.63	120.28
6	K	267	VAL	N-CA-C	-5.48	105.16	110.42
7	Z	70	LYS	N-CA-C	-5.48	101.18	108.74
1	A	688	GLN	N-CA-C	-5.48	105.21	111.07
2	B	128	ASN	CA-C-N	5.48	128.07	120.29
2	B	128	ASN	C-N-CA	5.48	128.07	120.29
6	G	547	ILE	CA-C-N	5.48	127.62	120.28
6	G	547	ILE	C-N-CA	5.48	127.62	120.28
3	C	18	VAL	N-CA-C	-5.48	99.27	107.37
2	B	952	ALA	N-CA-C	5.47	117.25	111.28
7	L	26	LEU	CA-C-N	-5.47	112.32	121.94
7	L	26	LEU	C-N-CA	-5.47	112.32	121.94
3	C	25	PRO	CA-C-N	5.46	131.98	121.54
3	C	25	PRO	C-N-CA	5.46	131.98	121.54
5	F	130	LEU	N-CA-C	-5.46	99.55	109.44
5	R	175	ASN	N-CA-C	5.46	122.44	110.80
1	A	599	PHE	CA-C-N	-5.46	112.04	121.66
1	A	599	PHE	C-N-CA	-5.46	112.04	121.66
3	C	572	ARG	O-C-N	5.46	129.78	123.17
7	L	76	TYR	CA-C-O	5.46	126.94	120.66
6	K	811	HIS	CA-C-O	-5.46	113.50	119.61
5	M	123	VAL	CA-C-N	5.46	129.93	122.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	M	123	VAL	C-N-CA	5.46	129.93	122.84
6	G	719	ALA	N-CA-C	5.45	120.84	113.21
2	B	328	ALA	CA-C-N	5.45	131.95	121.54
2	B	328	ALA	C-N-CA	5.45	131.95	121.54
6	G	503	GLU	CA-C-N	5.45	131.95	121.54
6	G	503	GLU	C-N-CA	5.45	131.95	121.54
7	Z	77	PHE	N-CA-C	-5.45	100.82	109.59
6	K	117	GLU	CA-C-O	5.45	128.19	121.87
6	G	406	ARG	CA-C-N	5.45	127.52	120.44
6	G	406	ARG	C-N-CA	5.45	127.52	120.44
5	M	21	LEU	CA-C-N	5.45	130.68	123.05
5	M	21	LEU	C-N-CA	5.45	130.68	123.05
2	B	309	ASP	CA-C-O	5.45	128.30	120.51
2	B	808	SER	N-CA-C	5.45	122.40	110.80
3	C	417	ASN	CA-C-N	5.44	130.30	122.35
3	C	417	ASN	C-N-CA	5.44	130.30	122.35
3	C	385	ASN	N-CA-C	-5.44	101.59	109.59
3	C	366	PHE	CA-C-N	-5.44	114.52	122.68
3	C	366	PHE	C-N-CA	-5.44	114.52	122.68
1	A	723	ALA	CA-C-N	5.44	127.51	120.44
1	A	723	ALA	C-N-CA	5.44	127.51	120.44
3	C	260	THR	N-CA-C	-5.44	104.21	112.04
3	C	625	LEU	CA-C-N	5.44	127.56	120.28
3	C	625	LEU	C-N-CA	5.44	127.56	120.28
4	D	235	VAL	O-C-N	5.44	127.24	121.91
6	G	852	VAL	N-CA-C	-5.44	100.61	108.71
1	A	205	ASP	N-CA-C	-5.43	99.23	110.80
6	K	284	GLU	CA-C-N	5.43	127.56	120.28
6	K	284	GLU	C-N-CA	5.43	127.56	120.28
7	L	146	VAL	N-CA-C	-5.43	101.58	109.29
6	K	852	VAL	N-CA-C	-5.43	100.62	108.71
5	F	102	GLU	CA-C-N	5.42	127.49	120.44
5	F	102	GLU	C-N-CA	5.42	127.49	120.44
2	B	938	VAL	N-CA-C	-5.42	98.07	109.34
3	C	479	ILE	CA-C-N	5.42	130.20	122.72
3	C	479	ILE	C-N-CA	5.42	130.20	122.72
3	C	604	SER	CA-C-N	5.42	127.54	120.28
3	C	604	SER	C-N-CA	5.42	127.54	120.28
7	Z	86	ASN	N-CA-C	5.42	117.94	110.35
3	C	307	SER	N-CA-C	-5.42	100.49	108.99
6	G	757	GLU	N-CA-C	-5.42	100.57	109.40
1	A	569	TYR	CA-C-N	-5.41	114.22	121.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	569	TYR	C-N-CA	-5.41	114.22	121.80
6	K	296	CYS	CA-C-N	5.41	131.88	121.54
6	K	296	CYS	C-N-CA	5.41	131.88	121.54
6	K	757	GLU	N-CA-C	-5.41	100.58	109.40
6	G	209	LEU	CA-C-O	5.41	126.29	120.55
2	B	320	LEU	CA-C-N	5.41	127.87	120.46
2	B	320	LEU	C-N-CA	5.41	127.87	120.46
2	B	934	PRO	N-CA-C	5.40	123.60	112.47
6	K	83	THR	N-CA-C	-5.40	105.55	111.82
3	C	506	THR	N-CA-C	-5.40	106.17	114.16
5	R	29	GLY	N-CA-C	-5.40	100.38	113.18
3	C	572	ARG	CA-C-N	5.40	130.76	122.93
3	C	572	ARG	C-N-CA	5.40	130.76	122.93
3	C	692	HIS	N-CA-C	-5.40	105.40	111.28
5	F	122	LEU	N-CA-C	5.40	117.21	108.41
6	G	325	CYS	CA-C-N	5.40	127.46	120.44
6	G	325	CYS	C-N-CA	5.40	127.46	120.44
6	K	213	LYS	CA-C-N	5.40	127.51	120.28
6	K	213	LYS	C-N-CA	5.40	127.51	120.28
6	G	632	SER	N-CA-C	-5.39	101.16	109.52
6	K	178	VAL	CA-C-N	5.39	127.51	120.28
6	K	178	VAL	C-N-CA	5.39	127.51	120.28
6	K	632	SER	N-CA-C	-5.39	101.16	109.52
2	B	529	LEU	CA-C-N	5.39	127.35	120.56
2	B	529	LEU	C-N-CA	5.39	127.35	120.56
3	C	265	SER	N-CA-C	5.39	117.04	108.79
3	C	697	GLY	CA-C-N	5.39	125.93	120.00
3	C	697	GLY	C-N-CA	5.39	125.93	120.00
1	A	149	LEU	CA-C-N	-5.39	115.45	122.51
1	A	149	LEU	C-N-CA	-5.39	115.45	122.51
1	A	568	ILE	CA-C-N	5.39	131.46	122.73
1	A	568	ILE	C-N-CA	5.39	131.46	122.73
6	K	220	ARG	CA-C-O	-5.39	114.24	120.49
3	C	652	GLY	N-CA-C	5.39	123.20	114.90
1	A	219	LEU	N-CA-C	-5.38	102.91	110.50
3	C	524	VAL	N-CA-C	5.38	115.83	107.28
2	B	538	THR	CA-C-N	5.38	127.49	120.28
2	B	538	THR	C-N-CA	5.38	127.49	120.28
5	M	42	VAL	CA-C-N	5.38	131.65	121.97
5	M	42	VAL	C-N-CA	5.38	131.65	121.97
3	C	759	ARG	N-CA-C	5.38	116.94	111.14
4	D	124	ASN	CA-C-N	5.37	131.64	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	124	ASN	C-N-CA	5.37	131.64	121.97
6	G	169	CYS	N-CA-C	-5.37	105.11	110.97
7	Z	44	PHE	N-CA-C	-5.37	105.50	111.36
1	A	76	LYS	CA-C-N	-5.37	115.52	122.99
1	A	76	LYS	C-N-CA	-5.37	115.52	122.99
3	C	431	GLU	N-CA-C	-5.37	99.37	110.80
5	F	113	GLU	CA-C-N	5.37	130.66	122.24
5	F	113	GLU	C-N-CA	5.37	130.66	122.24
7	Z	68	VAL	N-CA-C	-5.36	100.60	108.11
1	A	220	ILE	N-CA-C	-5.36	100.12	108.86
5	F	94	SER	N-CA-C	-5.36	106.93	112.93
2	B	794	PRO	CA-C-O	-5.36	115.50	121.23
3	C	314	ILE	CA-C-N	-5.36	116.55	123.19
3	C	314	ILE	C-N-CA	-5.36	116.55	123.19
6	G	222	GLY	N-CA-C	-5.35	104.26	111.54
1	A	810	LEU	CA-C-N	5.35	131.76	121.54
1	A	810	LEU	C-N-CA	5.35	131.76	121.54
6	G	148	ILE	N-CA-C	-5.34	105.17	110.62
6	G	99	ALA	CA-C-N	5.34	131.74	121.54
6	G	99	ALA	C-N-CA	5.34	131.74	121.54
3	C	22	ASP	N-CA-C	-5.34	100.61	108.99
5	M	19	ARG	N-CA-C	-5.34	99.81	108.41
5	M	97	ARG	N-CA-C	-5.34	106.44	113.17
2	B	836	ASP	N-CA-C	-5.34	102.56	110.46
1	A	377	VAL	N-CA-C	5.33	116.34	108.45
1	A	222	SER	N-CA-C	5.33	117.50	109.23
6	G	514	LYS	CA-C-N	5.33	127.86	120.29
6	G	514	LYS	C-N-CA	5.33	127.86	120.29
6	K	147	ALA	CA-C-N	5.33	127.77	120.46
6	K	147	ALA	C-N-CA	5.33	127.77	120.46
5	F	115	GLU	O-C-N	5.33	127.77	122.12
2	B	794	PRO	N-CA-C	5.33	119.23	111.03
3	C	11	LEU	N-CA-C	-5.33	100.34	108.76
6	G	412	GLU	CA-C-N	5.33	127.42	120.28
6	G	412	GLU	C-N-CA	5.33	127.42	120.28
1	A	623	GLN	N-CA-C	-5.33	101.19	108.38
3	C	421	LYS	CA-C-O	5.33	126.16	120.46
4	D	55	ARG	CA-C-N	-5.32	114.54	122.74
4	D	55	ARG	C-N-CA	-5.32	114.54	122.74
6	G	56	ASN	N-CA-C	-5.32	105.48	111.28
1	A	86	LEU	CA-C-N	5.32	131.84	121.63
1	A	86	LEU	C-N-CA	5.32	131.84	121.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	811	LEU	CA-C-N	5.32	127.41	120.28
1	A	811	LEU	C-N-CA	5.32	127.41	120.28
6	G	177	TRP	CA-C-N	5.32	128.03	120.53
6	G	177	TRP	C-N-CA	5.32	128.03	120.53
3	C	231	ASN	CA-C-N	-5.31	115.73	122.37
3	C	231	ASN	C-N-CA	-5.31	115.73	122.37
1	A	779	ASP	CA-C-N	5.31	125.61	119.92
1	A	779	ASP	C-N-CA	5.31	125.61	119.92
4	D	51	THR	CA-C-N	5.31	129.90	122.36
4	D	51	THR	C-N-CA	5.31	129.90	122.36
1	A	513	ILE	CA-C-O	5.31	126.11	120.48
3	C	717	GLU	CA-C-N	5.31	125.87	119.98
3	C	717	GLU	C-N-CA	5.31	125.87	119.98
1	A	494	VAL	N-CA-C	-5.31	100.83	108.53
4	D	6	ALA	N-CA-C	-5.31	100.25	108.90
6	G	527	ARG	N-CA-C	-5.31	105.39	111.07
6	K	663	PHE	CA-C-N	5.31	130.04	122.72
6	K	663	PHE	C-N-CA	5.31	130.04	122.72
7	Z	106	ARG	N-CA-C	-5.30	102.17	113.20
7	L	79	VAL	CA-C-O	-5.30	114.73	120.67
3	C	299	LEU	N-CA-C	5.30	119.30	112.41
3	C	65	PHE	CA-C-O	-5.30	115.09	120.71
1	A	487	LYS	N-CA-C	-5.30	100.09	108.73
6	G	410	GLY	N-CA-C	-5.30	100.62	113.18
5	R	22	MET	N-CA-C	-5.30	99.88	108.52
1	A	764	THR	N-CA-C	5.30	119.00	112.54
2	B	825	ALA	N-CA-C	5.30	122.09	110.80
3	C	386	LYS	CA-C-O	-5.30	115.24	120.70
6	G	242	GLU	CA-C-N	5.30	131.66	121.54
6	G	242	GLU	C-N-CA	5.30	131.66	121.54
6	G	288	ALA	CA-C-N	5.29	127.23	120.56
6	G	288	ALA	C-N-CA	5.29	127.23	120.56
1	A	403	GLN	CA-C-N	5.29	128.40	120.83
1	A	403	GLN	C-N-CA	5.29	128.40	120.83
1	A	461	THR	CA-C-N	5.29	129.43	120.86
1	A	461	THR	C-N-CA	5.29	129.43	120.86
3	C	542	ARG	N-CA-C	-5.29	101.07	109.59
4	D	53	SER	CA-C-N	-5.29	115.64	122.99
4	D	53	SER	C-N-CA	-5.29	115.64	122.99
5	F	23	VAL	O-C-N	5.29	128.82	123.00
6	G	209	LEU	CA-C-N	5.28	127.36	120.28
6	G	209	LEU	C-N-CA	5.28	127.36	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	122	GLY	CA-C-N	5.28	124.91	119.05
6	K	122	GLY	C-N-CA	5.28	124.91	119.05
6	G	740	GLY	CA-C-N	5.28	131.63	121.54
6	G	740	GLY	C-N-CA	5.28	131.63	121.54
7	Z	114	LEU	N-CA-C	-5.28	105.42	111.07
6	K	62	GLY	CA-C-N	5.28	127.30	120.44
6	K	62	GLY	C-N-CA	5.28	127.30	120.44
3	C	476	LEU	CA-C-N	-5.28	114.34	122.68
3	C	476	LEU	C-N-CA	-5.28	114.34	122.68
3	C	763	PRO	CA-C-N	5.28	130.85	122.61
3	C	763	PRO	C-N-CA	5.28	130.85	122.61
5	F	110	MET	N-CA-C	-5.28	105.61	111.36
5	F	133	ALA	CA-C-N	5.28	132.00	122.02
5	F	133	ALA	C-N-CA	5.28	132.00	122.02
5	F	101	GLY	CA-C-O	5.28	126.18	120.75
1	A	191	GLY	N-CA-C	-5.27	100.68	113.18
2	B	778	LEU	CA-C-N	5.27	131.74	121.41
2	B	778	LEU	C-N-CA	5.27	131.74	121.41
5	F	115	GLU	N-CA-C	-5.27	105.53	111.28
2	B	750	ASN	CA-C-N	5.27	131.61	121.54
2	B	750	ASN	C-N-CA	5.27	131.61	121.54
6	G	663	PHE	CA-C-N	5.27	129.99	122.72
6	G	663	PHE	C-N-CA	5.27	129.99	122.72
7	L	11	TYR	CA-C-N	5.27	131.61	121.54
7	L	11	TYR	C-N-CA	5.27	131.61	121.54
6	G	403	THR	O-C-N	5.27	127.70	122.12
5	M	139	ILE	N-CA-C	5.27	115.99	110.62
3	C	712	VAL	CA-C-O	-5.27	115.47	120.95
1	A	566	LEU	N-CA-C	-5.26	98.18	109.81
4	D	67	VAL	CA-C-O	5.26	126.57	120.67
2	B	453	ILE	CA-C-N	5.26	127.67	120.46
2	B	453	ILE	C-N-CA	5.26	127.67	120.46
5	R	65	VAL	CA-C-N	5.26	129.68	122.84
5	R	65	VAL	C-N-CA	5.26	129.68	122.84
3	C	503	GLU	CA-C-N	5.26	131.72	121.41
3	C	503	GLU	C-N-CA	5.26	131.72	121.41
2	B	387	GLU	N-CA-C	-5.26	99.31	109.24
2	B	906	MET	N-CA-C	5.26	118.12	109.76
6	K	740	GLY	CA-C-N	5.26	131.58	121.54
6	K	740	GLY	C-N-CA	5.26	131.58	121.54
3	C	790	ASP	CA-C-O	-5.25	112.96	120.16
5	R	105	GLU	CA-C-N	-5.25	113.94	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	R	105	GLU	C-N-CA	-5.25	113.94	120.56
5	M	89	ILE	CA-C-N	-5.25	115.65	123.11
5	M	89	ILE	C-N-CA	-5.25	115.65	123.11
6	G	223	LEU	N-CA-C	5.25	118.23	110.46
5	R	145	LEU	N-CA-C	5.25	121.98	110.80
4	D	51	THR	N-CA-C	-5.24	101.10	109.23
1	A	358	ARG	N-CA-C	-5.24	104.23	110.41
1	A	495	ILE	CA-C-O	5.24	125.89	120.39
3	C	672	GLN	CA-C-O	5.24	126.10	120.55
6	K	702	GLN	N-CA-C	5.24	121.39	109.81
6	K	615	GLU	CA-C-N	5.24	127.30	120.28
6	K	615	GLU	C-N-CA	5.24	127.30	120.28
3	C	637	VAL	O-C-N	5.23	127.22	121.83
6	G	615	GLU	CA-C-N	5.23	127.29	120.28
6	G	615	GLU	C-N-CA	5.23	127.29	120.28
6	G	859	ARG	O-C-N	-5.22	117.21	123.27
1	A	635	PRO	CA-C-N	5.22	128.24	120.31
1	A	635	PRO	C-N-CA	5.22	128.24	120.31
1	A	230	LYS	N-CA-C	-5.22	100.90	109.40
1	A	761	SER	CA-C-N	5.21	127.22	120.44
1	A	761	SER	C-N-CA	5.21	127.22	120.44
6	G	141	GLU	CA-C-O	-5.21	115.00	120.63
6	G	446	CYS	CA-C-N	5.21	131.49	121.54
6	G	446	CYS	C-N-CA	5.21	131.49	121.54
3	C	459	ARG	N-CA-C	-5.21	100.40	108.42
3	C	391	ALA	O-C-N	5.21	128.80	122.14
5	F	102	GLU	N-CA-C	-5.20	105.69	111.36
5	R	142	LYS	N-CA-C	-5.20	105.69	111.36
6	K	859	ARG	O-C-N	-5.20	117.23	123.27
1	A	662	LEU	CA-C-O	5.20	126.06	120.55
1	A	710	THR	N-CA-C	5.20	119.33	112.89
6	K	118	ASP	N-CA-C	-5.19	105.70	111.36
6	K	609	ARG	N-CA-C	-5.19	105.62	111.28
5	M	22	MET	N-CA-C	-5.19	100.06	108.52
1	A	364	PRO	CA-C-N	5.19	128.82	121.66
1	A	364	PRO	C-N-CA	5.19	128.82	121.66
1	A	308	ALA	CA-C-N	5.19	127.39	122.36
1	A	308	ALA	C-N-CA	5.19	127.39	122.36
6	G	86	ARG	N-CA-C	5.19	116.62	111.07
6	K	150	ASP	N-CA-C	5.19	118.07	109.46
1	A	762	ALA	N-CA-C	5.18	116.62	111.07
7	L	80	ILE	O-C-N	5.18	128.78	123.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	67	VAL	CA-C-N	5.18	130.70	122.62
4	D	67	VAL	C-N-CA	5.18	130.70	122.62
7	Z	117	ASN	CA-C-N	5.18	129.49	120.68
7	Z	117	ASN	C-N-CA	5.18	129.49	120.68
6	K	153	PRO	CA-C-N	5.18	127.17	120.44
6	K	153	PRO	C-N-CA	5.18	127.17	120.44
6	G	647	VAL	N-CA-C	5.18	115.92	108.93
3	C	634	ALA	N-CA-C	-5.18	105.64	111.28
3	C	827	VAL	CA-C-N	5.18	134.43	121.80
3	C	827	VAL	C-N-CA	5.18	134.43	121.80
5	F	126	ASN	N-CA-C	-5.17	102.50	109.95
5	F	129	ASP	N-CA-C	-5.17	105.64	111.28
5	M	99	ARG	CA-C-O	5.17	125.40	119.35
6	G	815	ARG	CA-C-N	-5.17	113.88	122.92
6	G	815	ARG	C-N-CA	-5.17	113.88	122.92
5	F	120	ALA	N-CA-C	-5.17	99.37	108.20
6	G	609	ARG	N-CA-C	-5.16	105.65	111.28
3	C	828	THR	N-CA-C	-5.16	98.40	109.81
6	K	114	THR	N-CA-C	-5.16	106.49	112.89
1	A	280	LYS	CA-C-N	5.16	131.39	121.54
1	A	280	LYS	C-N-CA	5.16	131.39	121.54
3	C	555	ALA	N-CA-C	-5.16	100.48	108.42
2	B	390	ASP	CA-C-O	5.16	126.38	119.47
6	G	607	ALA	CA-C-N	5.16	131.39	121.54
6	G	607	ALA	C-N-CA	5.16	131.39	121.54
6	G	758	VAL	CA-C-N	5.15	132.38	122.03
6	G	758	VAL	C-N-CA	5.15	132.38	122.03
5	R	97	ARG	N-CA-C	-5.15	106.39	113.30
6	K	127	ALA	CA-C-O	5.15	125.88	120.42
3	C	58	LEU	CA-C-N	5.15	125.15	119.90
3	C	58	LEU	C-N-CA	5.15	125.15	119.90
6	K	758	VAL	CA-C-N	5.15	132.38	122.03
6	K	758	VAL	C-N-CA	5.15	132.38	122.03
6	K	802	GLY	N-CA-C	-5.15	106.18	112.77
1	A	578	VAL	N-CA-C	5.15	116.22	109.58
6	K	607	ALA	CA-C-N	5.15	131.37	121.54
6	K	607	ALA	C-N-CA	5.15	131.37	121.54
6	G	213	LYS	N-CA-C	-5.15	105.85	111.82
1	A	742	VAL	CA-C-N	5.14	130.44	122.26
1	A	742	VAL	C-N-CA	5.14	130.44	122.26
3	C	633	GLN	N-CA-C	-5.14	105.75	111.36
6	K	309	ARG	CA-C-N	5.14	131.36	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	309	ARG	C-N-CA	5.14	131.36	121.54
5	M	78	TRP	CA-C-O	5.14	125.71	119.49
1	A	456	ILE	CA-C-N	5.14	131.36	121.54
1	A	456	ILE	C-N-CA	5.14	131.36	121.54
1	A	578	VAL	CA-C-N	-5.14	115.24	122.94
1	A	578	VAL	C-N-CA	-5.14	115.24	122.94
2	B	464	ILE	CA-C-N	5.14	131.02	121.62
2	B	464	ILE	C-N-CA	5.14	131.02	121.62
6	G	802	GLY	N-CA-C	-5.13	106.20	112.77
6	K	64	THR	CA-C-O	5.13	126.21	120.82
2	B	333	LEU	N-CA-C	-5.13	105.77	111.36
5	M	41	GLU	O-C-N	5.13	129.41	123.30
3	C	405	ILE	CA-C-N	5.13	130.23	123.05
3	C	405	ILE	C-N-CA	5.13	130.23	123.05
1	A	700	PHE	CA-C-N	5.13	127.15	120.28
1	A	700	PHE	C-N-CA	5.13	127.15	120.28
6	G	96	SER	O-C-N	-5.13	115.77	122.59
7	Z	90	LEU	CA-C-N	5.13	127.15	120.28
7	Z	90	LEU	C-N-CA	5.13	127.15	120.28
5	F	173	LEU	N-CA-C	5.13	116.56	111.07
6	K	664	ASP	O-C-N	-5.12	117.48	123.27
3	C	171	GLN	N-CA-C	-5.12	101.52	109.72
5	R	133	ALA	N-CA-C	-5.12	99.89	110.80
4	D	81	GLU	N-CA-C	-5.12	105.70	111.28
5	R	102	GLU	CA-C-O	5.12	125.84	120.42
3	C	241	LEU	N-CA-C	-5.12	98.50	109.81
6	G	317	LYS	N-CA-C	-5.11	101.30	109.23
1	A	652	ALA	N-CA-C	-5.11	105.71	111.28
6	K	257	SER	CA-C-N	5.10	127.12	120.28
6	K	257	SER	C-N-CA	5.10	127.12	120.28
1	A	787	ASP	CA-C-N	5.10	131.15	121.97
1	A	787	ASP	C-N-CA	5.10	131.15	121.97
2	B	38	GLU	N-CA-C	-5.10	105.72	111.28
6	K	236	ALA	CA-C-O	5.10	125.84	119.97
1	A	427	ALA	N-CA-C	-5.10	101.15	108.60
6	G	790	THR	N-CA-C	-5.10	100.10	108.41
6	G	23	GLU	N-CA-C	-5.10	99.95	110.80
1	A	602	ALA	N-CA-C	-5.09	105.64	111.14
6	K	38	PRO	N-CA-C	5.09	122.97	112.47
7	L	45	GLU	N-CA-C	-5.09	105.73	111.28
6	K	148	ILE	N-CA-C	-5.09	105.43	110.62
6	K	307	ALA	N-CA-C	-5.09	105.62	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	364	ILE	CA-C-N	5.09	127.61	120.28
6	G	364	ILE	C-N-CA	5.09	127.61	120.28
3	C	336	LYS	N-CA-C	5.09	117.27	110.35
4	D	78	GLU	CA-C-O	5.09	126.16	120.82
2	B	445	ARG	N-CA-C	5.08	121.63	110.80
6	G	332	LEU	N-CA-C	-5.08	105.74	111.28
7	Z	52	THR	CA-C-N	5.08	131.25	121.54
7	Z	52	THR	C-N-CA	5.08	131.25	121.54
6	K	790	THR	N-CA-C	-5.08	100.12	108.41
7	L	37	SER	CA-C-O	5.08	127.78	120.51
1	A	778	PHE	O-C-N	5.08	127.37	122.09
2	B	107	GLY	N-CA-C	-5.08	101.14	113.18
2	B	346	THR	N-CA-C	-5.08	98.58	109.81
3	C	835	VAL	N-CA-C	5.08	115.70	110.36
5	M	51	PHE	N-CA-C	5.08	121.62	110.80
6	K	72	ALA	N-CA-C	5.08	116.50	111.07
2	B	777	THR	N-CA-C	-5.08	102.87	110.23
5	R	73	ARG	N-CA-C	-5.08	105.82	111.36
6	G	247	ARG	CA-C-N	-5.08	111.84	121.54
6	G	247	ARG	C-N-CA	-5.08	111.84	121.54
2	B	179	ARG	N-CA-C	5.07	116.62	111.14
6	K	151	LYS	CA-C-N	-5.07	119.15	122.60
6	K	151	LYS	C-N-CA	-5.07	119.15	122.60
6	K	792	SER	N-CA-C	5.07	120.10	113.30
2	B	424	LEU	CA-C-N	5.07	131.23	121.54
2	B	424	LEU	C-N-CA	5.07	131.23	121.54
2	B	776	ALA	CA-C-N	5.07	127.91	120.71
2	B	776	ALA	C-N-CA	5.07	127.91	120.71
5	M	54	GLU	N-CA-C	-5.07	101.37	109.07
4	D	137	ASP	N-CA-C	-5.06	102.67	108.49
6	K	167	LEU	CA-C-N	5.06	127.33	120.65
6	K	167	LEU	C-N-CA	5.06	127.33	120.65
7	L	78	TYR	N-CA-C	5.06	117.67	109.06
7	L	89	MET	CA-C-O	5.06	125.78	120.42
6	K	212	SER	N-CA-C	-5.06	105.66	111.07
2	B	234	PHE	N-CA-C	5.06	118.26	110.42
6	G	87	MET	CA-C-N	5.05	127.05	120.28
6	G	87	MET	C-N-CA	5.05	127.05	120.28
5	M	157	ALA	N-CA-C	5.05	117.54	109.96
1	A	732	HIS	CA-C-O	5.05	125.59	119.38
4	D	26	ARG	N-CA-C	-5.05	101.73	108.86
7	Z	45	GLU	N-CA-C	-5.05	105.85	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	679	GLU	N-CA-C	-5.05	105.69	111.14
4	D	98	GLU	CA-C-N	5.05	127.05	120.28
4	D	98	GLU	C-N-CA	5.05	127.05	120.28
4	D	129	GLN	N-CA-C	-5.05	105.77	111.28
6	G	792	SER	N-CA-C	5.05	120.07	113.30
7	Z	14	LYS	N-CA-C	-5.05	105.24	111.40
2	B	546	ARG	N-CA-C	5.05	118.05	109.06
6	K	742	ILE	N-CA-C	-5.05	100.26	107.78
2	B	440	ARG	CA-C-N	5.05	127.04	120.28
2	B	440	ARG	C-N-CA	5.05	127.04	120.28
5	F	50	GLY	CA-C-N	5.05	127.94	120.82
5	F	50	GLY	C-N-CA	5.05	127.94	120.82
3	C	719	ALA	N-CA-C	-5.04	105.78	111.28
1	A	431	ARG	N-CA-C	-5.04	102.01	109.83
3	C	588	LEU	CA-C-N	5.04	127.37	120.46
3	C	588	LEU	C-N-CA	5.04	127.37	120.46
3	C	808	GLU	CA-C-N	5.04	127.04	120.28
3	C	808	GLU	C-N-CA	5.04	127.04	120.28
6	G	742	ILE	N-CA-C	-5.04	100.27	107.78
5	R	66	TRP	N-CA-C	5.04	116.82	108.20
3	C	203	ILE	CA-C-N	5.04	130.60	122.29
3	C	203	ILE	C-N-CA	5.04	130.60	122.29
3	C	765	GLN	N-CA-C	-5.04	106.40	112.54
1	A	404	ASN	CA-C-N	5.03	126.04	120.45
1	A	404	ASN	C-N-CA	5.03	126.04	120.45
2	B	188	ALA	N-CA-C	5.03	119.79	113.25
3	C	16	ASP	CA-C-N	5.03	130.32	122.17
3	C	16	ASP	C-N-CA	5.03	130.32	122.17
6	G	66	ALA	CA-C-N	5.03	127.02	120.28
6	G	66	ALA	C-N-CA	5.03	127.02	120.28
1	A	142	GLN	CA-C-N	5.03	129.74	121.39
1	A	142	GLN	C-N-CA	5.03	129.74	121.39
3	C	565	GLY	CA-C-N	-5.03	116.01	123.05
3	C	565	GLY	C-N-CA	-5.03	116.01	123.05
7	Z	140	GLN	CA-C-O	5.03	125.75	120.42
3	C	684	SER	CA-C-O	5.03	126.10	120.82
3	C	777	LEU	CA-C-N	5.03	127.01	120.28
3	C	777	LEU	C-N-CA	5.03	127.01	120.28
3	C	790	ASP	O-C-N	-5.03	115.54	121.32
2	B	182	GLU	CA-C-N	5.02	131.13	121.54
2	B	182	GLU	C-N-CA	5.02	131.13	121.54
6	K	862	GLU	CA-C-N	5.02	127.42	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	862	GLU	C-N-CA	5.02	127.42	120.29
1	A	462	GLY	CA-C-O	-5.02	116.86	121.63
3	C	312	GLY	N-CA-C	-5.02	101.29	113.18
6	K	182	GLN	N-CA-C	5.02	116.75	111.28
3	C	168	LYS	N-CA-C	-5.02	100.72	108.90
3	C	672	GLN	CA-C-N	5.02	127.41	120.29
3	C	672	GLN	C-N-CA	5.02	127.41	120.29
7	L	47	ASN	CA-C-N	-5.02	114.14	120.56
7	L	47	ASN	C-N-CA	-5.02	114.14	120.56
6	K	286	ALA	CA-C-N	5.01	124.19	118.97
6	K	286	ALA	C-N-CA	5.01	124.19	118.97
3	C	362	PRO	CA-C-N	5.01	131.11	121.54
3	C	362	PRO	C-N-CA	5.01	131.11	121.54
3	C	817	ASP	N-CA-C	-5.01	105.27	111.33
1	A	438	LYS	O-C-N	-5.01	117.45	123.31
3	C	528	LEU	N-CA-C	5.00	116.85	108.99
6	G	121	ARG	N-CA-C	-5.00	105.72	111.07
7	Z	38	VAL	N-CA-C	-5.00	105.67	110.72
3	C	552	VAL	CA-C-O	-5.00	115.48	121.28
5	R	21	LEU	N-CA-C	5.00	117.12	109.07

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	898	ALA	Peptide
2	B	903	CYS	Peptide
2	B	938	VAL	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	3251	0	869	39	0
2	B	3198	0	810	60	0
3	C	3371	0	919	29	0
4	D	706	0	182	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	F	635	0	181	3	0
5	M	635	0	181	21	0
5	R	635	0	181	38	0
6	G	3190	0	822	64	0
6	K	2239	0	572	42	0
7	L	555	0	148	4	0
7	Z	555	0	147	15	0
All	All	18970	0	5012	304	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 13.

All (304) 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)
6:K:107:SER:N	5:M:50:GLY:HA3	1.28	1.43
6:G:107:SER:N	5:R:50:GLY:HA3	1.16	1.43
6:G:107:SER:H	5:R:50:GLY:CA	1.31	1.41
6:K:167:LEU:CA	6:K:170:SER:O	1.73	1.35
1:A:145:PRO:CA	1:A:215:PRO:O	1.80	1.30
5:R:143:LEU:C	5:R:145:LEU:H	1.23	1.30
1:A:503:VAL:O	1:A:514:CYS:O	1.53	1.26
3:C:269:TYR:O	3:C:271:MET:N	1.69	1.25
5:R:71:GLN:O	5:R:74:ILE:N	1.74	1.20
6:K:107:SER:H	5:M:50:GLY:CA	1.53	1.19
2:B:778:LEU:O	2:B:809:THR:O	1.58	1.17
4:D:13:GLY:HA2	4:D:38:LYS:CA	1.75	1.16
6:G:167:LEU:CA	6:G:170:SER:O	1.95	1.14
2:B:781:LEU:O	2:B:808:SER:O	1.63	1.14
2:B:778:LEU:O	2:B:809:THR:C	1.91	1.14
6:K:190:ILE:CA	6:K:225:SER:CA	2.26	1.13
5:R:143:LEU:C	5:R:145:LEU:N	1.99	1.12
7:L:31:TYR:CA	7:L:131:GLY:O	2.03	1.07
7:Z:11:TYR:CA	7:Z:132:GLY:HA3	1.84	1.06
2:B:526:VAL:CA	2:B:597:VAL:CA	2.35	1.04
5:R:159:CYS:O	5:R:162:SER:N	1.88	1.04
6:G:276:ASN:O	6:G:281:SER:O	1.75	1.03
5:R:130:LEU:O	5:R:132:GLU:N	1.92	1.02
7:Z:12:THR:H	7:Z:132:GLY:CA	1.72	1.02
6:K:167:LEU:C	6:K:170:SER:O	2.03	1.01
2:B:778:LEU:C	2:B:809:THR:O	2.04	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:K:190:ILE:C	6:K:225:SER:CA	2.34	1.00
5:R:126:ASN:CA	5:R:158:THR:O	2.10	0.99
6:K:677:VAL:O	6:K:694:PRO:CA	2.11	0.98
7:Z:11:TYR:CA	7:Z:132:GLY:CA	2.41	0.96
2:B:541:ALA:CA	2:B:624:ASP:N	2.29	0.96
2:B:766:ASP:O	2:B:768:LEU:N	2.00	0.95
7:Z:12:THR:N	7:Z:132:GLY:CA	2.30	0.94
2:B:824:GLY:CA	2:B:830:ASN:O	2.16	0.93
6:G:107:SER:N	5:R:50:GLY:CA	2.05	0.92
7:Z:12:THR:N	7:Z:132:GLY:O	2.02	0.92
1:A:105:TYR:O	1:A:106:PRO:C	2.08	0.92
1:A:495:ILE:O	1:A:502:HIS:O	1.87	0.90
6:G:301:ALA:C	6:G:303:LEU:H	1.79	0.90
5:R:125:ALA:O	5:R:158:THR:O	1.89	0.90
6:K:107:SER:CA	5:M:50:GLY:HA3	2.00	0.90
2:B:767:THR:CA	2:B:792:LEU:H	1.85	0.90
6:G:107:SER:H	5:R:50:GLY:C	1.79	0.89
1:A:503:VAL:O	1:A:514:CYS:C	2.15	0.89
2:B:781:LEU:CA	2:B:805:LYS:O	2.22	0.88
6:G:106:THR:C	5:R:50:GLY:HA3	1.98	0.88
5:R:130:LEU:C	5:R:132:GLU:H	1.82	0.88
6:K:167:LEU:O	6:K:170:SER:O	1.92	0.88
1:A:105:TYR:O	1:A:107:TRP:N	2.06	0.88
2:B:483:THR:O	2:B:484:LYS:C	2.18	0.87
1:A:671:LYS:O	1:A:674:TRP:N	2.08	0.86
6:G:198:GLY:O	6:G:201:TYR:N	2.07	0.86
6:K:190:ILE:O	6:K:225:SER:CA	2.23	0.86
2:B:767:THR:C	2:B:792:LEU:H	1.84	0.85
6:K:190:ILE:CA	6:K:225:SER:N	2.40	0.85
5:R:78:TRP:O	5:R:81:TYR:O	1.95	0.85
7:Z:11:TYR:C	7:Z:132:GLY:HA3	2.02	0.85
2:B:483:THR:O	2:B:487:ILE:N	2.09	0.84
1:A:671:LYS:O	1:A:673:CYS:N	2.11	0.84
2:B:824:GLY:HA2	2:B:830:ASN:O	1.78	0.84
1:A:214:HIS:O	1:A:217:MET:N	2.10	0.83
2:B:739:ASP:O	2:B:740:PRO:O	1.96	0.83
7:Z:12:THR:H	7:Z:132:GLY:C	1.86	0.83
4:D:41:ASN:O	4:D:43:GLY:N	2.12	0.82
5:M:79:ARG:O	5:M:81:TYR:N	2.13	0.82
1:A:496:TRP:CA	1:A:502:HIS:CA	2.59	0.81
2:B:740:PRO:O	2:B:741:VAL:C	2.18	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:766:ASP:C	2:B:768:LEU:H	1.89	0.80
6:K:107:SER:N	5:M:50:GLY:CA	2.24	0.80
4:D:13:GLY:CA	4:D:38:LYS:CA	2.60	0.79
7:Z:13:VAL:H	7:Z:132:GLY:HA2	1.46	0.79
1:A:749:LEU:O	1:A:753:GLY:N	2.15	0.78
6:G:301:ALA:C	6:G:303:LEU:N	2.41	0.78
2:B:483:THR:O	2:B:486:ASP:N	2.17	0.78
1:A:671:LYS:C	1:A:673:CYS:N	2.39	0.77
6:G:105:VAL:O	6:G:107:SER:N	2.17	0.77
6:G:247:ARG:O	6:G:248:ASP:C	2.24	0.77
3:C:637:VAL:O	3:C:638:SER:O	2.03	0.76
6:G:277:LEU:O	6:G:280:CYS:N	2.16	0.76
7:Z:12:THR:H	7:Z:132:GLY:HA2	1.51	0.76
7:Z:12:THR:N	7:Z:132:GLY:HA3	2.00	0.76
1:A:671:LYS:O	1:A:672:ASN:C	2.26	0.75
4:D:41:ASN:C	4:D:43:GLY:H	1.95	0.75
2:B:563:ASP:C	2:B:577:THR:C	2.55	0.74
6:G:167:LEU:C	6:G:170:SER:O	2.30	0.74
5:R:174:SER:O	5:R:176:SER:N	2.21	0.74
5:M:77:LEU:O	5:M:80:HIS:N	2.20	0.73
1:A:800:PRO:O	3:C:805:PHE:O	2.05	0.73
5:R:143:LEU:O	5:R:145:LEU:N	2.22	0.72
7:Z:12:THR:N	7:Z:132:GLY:C	2.44	0.72
2:B:928:LYS:O	2:B:934:PRO:O	2.08	0.71
7:Z:10:LEU:O	7:Z:11:TYR:C	2.32	0.71
1:A:496:TRP:CA	1:A:502:HIS:N	2.54	0.70
5:F:29:GLY:HA2	5:F:32:THR:H	1.56	0.70
4:D:39:LEU:C	4:D:41:ASN:H	2.00	0.70
2:B:766:ASP:C	2:B:768:LEU:N	2.45	0.70
1:A:214:HIS:O	1:A:217:MET:CA	2.40	0.70
6:G:337:ASN:O	6:G:340:ILE:N	2.25	0.69
1:A:801:ILE:O	3:C:805:PHE:N	2.24	0.69
5:R:71:GLN:C	5:R:74:ILE:H	2.00	0.69
3:C:269:TYR:C	3:C:271:MET:N	2.44	0.69
6:G:215:ILE:O	6:G:219:THR:N	2.22	0.69
6:K:135:THR:C	6:K:137:LEU:H	2.00	0.69
6:G:215:ILE:O	6:G:217:LYS:N	2.25	0.69
6:K:133:ASP:O	6:K:134:SER:O	2.10	0.68
6:G:247:ARG:O	6:G:248:ASP:O	2.12	0.68
6:G:172:ASP:O	6:G:175:LYS:N	2.26	0.68
3:C:269:TYR:C	3:C:271:MET:H	2.02	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:K:107:SER:CA	5:M:50:GLY:O	2.43	0.67
2:B:779:GLY:O	2:B:808:SER:O	2.14	0.66
2:B:929:PRO:CA	2:B:935:ASP:O	2.44	0.66
1:A:749:LEU:O	1:A:753:GLY:CA	2.44	0.66
6:G:277:LEU:CA	6:G:280:CYS:CA	2.74	0.66
7:Z:10:LEU:O	7:Z:11:TYR:O	2.13	0.66
1:A:214:HIS:O	1:A:217:MET:O	2.14	0.66
5:R:71:GLN:O	5:R:72:ASP:C	2.39	0.65
1:A:214:HIS:O	1:A:217:MET:C	2.40	0.65
1:A:754:GLN:C	1:A:756:SER:H	2.02	0.65
5:R:71:GLN:O	5:R:74:ILE:CA	2.44	0.65
2:B:112:GLU:O	2:B:114:ILE:N	2.30	0.64
6:G:167:LEU:O	6:G:170:SER:O	2.15	0.64
5:R:69:GLY:C	5:R:71:GLN:H	2.04	0.64
2:B:557:LEU:O	2:B:558:ARG:C	2.41	0.64
2:B:824:GLY:HA3	2:B:830:ASN:O	1.96	0.64
6:G:215:ILE:C	6:G:217:LYS:H	2.05	0.63
2:B:563:ASP:C	2:B:577:THR:CA	2.71	0.63
6:G:215:ILE:C	6:G:217:LYS:N	2.55	0.63
2:B:739:ASP:O	2:B:740:PRO:C	2.38	0.63
2:B:766:ASP:O	2:B:792:LEU:O	2.16	0.63
1:A:803:PRO:N	3:C:803:GLU:H	1.97	0.63
6:K:243:GLU:O	6:K:245:GLY:N	2.31	0.63
1:A:671:LYS:C	1:A:673:CYS:H	2.06	0.62
6:G:277:LEU:CA	6:G:280:CYS:C	2.72	0.62
5:M:116:LEU:O	5:M:118:ASN:N	2.32	0.62
5:M:24:GLY:O	5:M:68:VAL:O	2.17	0.62
1:A:227:ARG:O	1:A:245:CYS:O	2.17	0.62
2:B:563:ASP:C	2:B:577:THR:O	2.43	0.62
5:R:82:TYR:O	5:R:83:ARG:C	2.39	0.62
6:G:337:ASN:O	6:G:338:ARG:C	2.39	0.61
6:G:172:ASP:O	6:G:173:VAL:C	2.36	0.60
2:B:102:LYS:C	2:B:104:THR:H	2.09	0.60
6:G:198:GLY:C	6:G:201:TYR:H	2.07	0.60
6:K:135:THR:O	6:K:137:LEU:N	2.35	0.60
6:K:135:THR:C	6:K:137:LEU:N	2.58	0.60
2:B:899:LEU:O	2:B:900:SER:C	2.44	0.60
3:C:506:THR:C	3:C:509:GLY:H	2.10	0.60
7:Z:11:TYR:C	7:Z:132:GLY:CA	2.69	0.59
6:G:215:ILE:O	6:G:218:PHE:N	2.36	0.59
5:R:159:CYS:O	5:R:162:SER:CA	2.50	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:740:PRO:O	2:B:742:TYR:N	2.35	0.59
1:A:205:ASP:H	1:A:207:GLY:H	1.49	0.59
3:C:269:TYR:O	3:C:271:MET:CA	2.49	0.59
5:M:128:GLN:H	5:M:159:CYS:CA	2.16	0.58
2:B:112:GLU:C	2:B:114:ILE:H	2.12	0.58
5:M:25:LEU:C	5:M:69:GLY:HA2	2.29	0.58
5:M:47:PRO:C	5:M:69:GLY:HA3	2.29	0.58
3:C:174:SER:C	3:C:176:SER:H	2.12	0.58
2:B:767:THR:CA	2:B:792:LEU:N	2.65	0.57
2:B:526:VAL:CA	2:B:597:VAL:N	2.67	0.57
1:A:754:GLN:O	1:A:756:SER:N	2.38	0.57
2:B:504:VAL:O	2:B:507:GLU:N	2.37	0.57
5:R:135:SER:O	5:R:136:ALA:C	2.48	0.57
6:K:107:SER:CA	5:M:50:GLY:CA	2.75	0.57
6:G:387:CYS:O	6:G:391:PRO:CA	2.53	0.56
6:G:198:GLY:C	6:G:200:LEU:N	2.58	0.56
1:A:495:ILE:O	1:A:502:HIS:C	2.49	0.56
5:M:78:TRP:O	5:M:79:ARG:C	2.46	0.56
2:B:541:ALA:N	2:B:624:ASP:N	2.53	0.56
6:G:666:THR:O	6:G:667:ASN:C	2.49	0.56
5:R:71:GLN:C	5:R:73:ARG:N	2.60	0.56
6:K:274:ILE:O	6:K:276:ASN:N	2.39	0.56
2:B:779:GLY:HA2	2:B:811:ASN:H	1.70	0.56
6:G:274:ILE:O	6:G:275:VAL:C	2.48	0.56
5:R:69:GLY:O	5:R:71:GLN:N	2.34	0.56
2:B:324:LYS:C	2:B:326:HIS:H	2.15	0.55
2:B:767:THR:O	2:B:768:LEU:C	2.49	0.55
5:M:173:LEU:C	5:M:175:ASN:H	2.15	0.55
6:G:277:LEU:CA	6:G:280:CYS:N	2.69	0.55
5:R:69:GLY:C	5:R:71:GLN:N	2.65	0.55
1:A:754:GLN:C	1:A:756:SER:N	2.62	0.55
6:G:172:ASP:C	6:G:175:LYS:H	2.14	0.55
6:K:665:CYS:O	6:K:703:PRO:CA	2.55	0.54
6:G:277:LEU:C	6:G:280:CYS:N	2.66	0.54
6:G:726:CYS:O	6:G:753:LEU:O	2.25	0.54
4:D:39:LEU:C	4:D:41:ASN:N	2.66	0.54
4:D:42:THR:O	4:D:43:GLY:C	2.50	0.54
6:G:106:THR:CA	5:R:50:GLY:HA3	2.37	0.54
2:B:928:LYS:C	2:B:934:PRO:O	2.51	0.54
3:C:375:TYR:O	3:C:388:PHE:CA	2.56	0.54
2:B:779:GLY:N	2:B:809:THR:O	2.22	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:321:ARG:H	1:A:338:ASP:CA	2.22	0.53
1:A:343:GLN:CA	1:A:354:VAL:H	2.21	0.53
1:A:496:TRP:CA	1:A:502:HIS:H	2.20	0.53
6:G:198:GLY:O	6:G:199:LEU:C	2.49	0.53
6:G:246:SER:C	6:G:248:ASP:N	2.66	0.53
3:C:568:PRO:C	3:C:571:ASN:H	2.16	0.53
1:A:343:GLN:N	1:A:354:VAL:H	2.07	0.52
5:F:149:ARG:C	5:F:151:ARG:H	2.16	0.52
2:B:483:THR:O	2:B:484:LYS:O	2.28	0.52
6:G:665:CYS:O	6:G:703:PRO:CA	2.57	0.52
6:G:666:THR:O	6:G:668:THR:N	2.43	0.52
2:B:767:THR:CA	2:B:792:LEU:C	2.83	0.52
3:C:637:VAL:O	3:C:638:SER:C	2.52	0.52
5:R:71:GLN:O	5:R:73:ARG:N	2.43	0.52
4:D:41:ASN:C	4:D:43:GLY:N	2.60	0.51
2:B:767:THR:CA	2:B:793:ALA:N	2.73	0.51
3:C:86:TYR:C	3:C:88:THR:H	2.19	0.51
6:K:665:CYS:O	6:K:702:GLN:C	2.54	0.51
6:K:666:THR:O	6:K:667:ASN:C	2.53	0.51
5:M:77:LEU:O	5:M:80:HIS:CA	2.59	0.51
5:M:173:LEU:C	5:M:175:ASN:N	2.68	0.51
1:A:802:MET:O	3:C:804:ALA:CA	2.58	0.51
6:K:274:ILE:O	6:K:275:VAL:C	2.52	0.50
6:G:247:ARG:O	6:G:251:LEU:N	2.37	0.50
5:R:127:LYS:H	5:R:159:CYS:CA	2.24	0.50
6:G:211:VAL:O	6:G:215:ILE:N	2.45	0.50
6:K:133:ASP:O	6:K:134:SER:C	2.53	0.50
3:C:459:ARG:CA	3:C:509:GLY:HA3	2.42	0.49
5:R:159:CYS:C	5:R:161:THR:N	2.68	0.49
6:K:244:ASP:O	6:K:245:GLY:C	2.54	0.49
6:K:695:ALA:O	6:K:696:ARG:C	2.55	0.49
2:B:751:GLN:C	2:B:753:ASP:H	2.19	0.49
6:K:243:GLU:C	6:K:245:GLY:N	2.69	0.49
6:G:277:LEU:CA	6:G:280:CYS:H	2.26	0.49
6:G:172:ASP:C	6:G:174:VAL:N	2.66	0.49
6:K:273:ALA:C	6:K:275:VAL:H	2.21	0.49
6:K:172:ASP:O	6:K:175:LYS:N	2.46	0.48
2:B:762:ASN:C	2:B:764:THR:H	2.18	0.48
3:C:375:TYR:N	3:C:389:GLY:O	2.41	0.48
5:F:29:GLY:CA	5:F:32:THR:H	2.26	0.48
6:G:441:GLU:O	6:G:444:GLU:O	2.32	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:K:666:THR:O	6:K:668:THR:N	2.47	0.48
3:C:269:TYR:O	3:C:270:GLY:C	2.48	0.48
6:G:460:GLY:HA2	6:G:494:ALA:CA	2.44	0.48
6:K:135:THR:O	6:K:136:MET:C	2.54	0.47
6:G:301:ALA:O	6:G:303:LEU:N	2.48	0.47
6:G:116:LYS:O	6:G:118:ASP:N	2.48	0.47
6:G:726:CYS:O	6:G:753:LEU:N	2.44	0.47
5:R:130:LEU:C	5:R:132:GLU:N	2.51	0.47
6:G:176:ARG:C	6:G:178:VAL:H	2.21	0.47
6:G:276:ASN:O	6:G:281:SER:C	2.56	0.47
4:D:62:GLU:C	4:D:64:LEU:H	2.23	0.46
5:R:109:ARG:C	5:R:112:ASN:H	2.23	0.46
2:B:267:LEU:C	2:B:269:GLN:H	2.24	0.46
3:C:233:SER:H	3:C:248:SER:CA	2.29	0.46
2:B:112:GLU:C	2:B:114:ILE:N	2.72	0.46
2:B:842:MET:O	2:B:888:THR:O	2.34	0.46
6:G:665:CYS:O	6:G:703:PRO:N	2.48	0.46
2:B:779:GLY:O	2:B:808:SER:C	2.58	0.46
5:R:160:ALA:C	5:R:163:GLY:H	2.24	0.45
6:K:665:CYS:O	6:K:702:GLN:O	2.34	0.45
6:G:107:SER:N	5:R:50:GLY:C	2.59	0.45
5:R:25:LEU:C	5:R:70:GLY:H	2.24	0.45
1:A:321:ARG:N	1:A:338:ASP:O	2.50	0.45
6:G:298:SER:O	6:G:300:LYS:N	2.50	0.44
6:K:166:LEU:O	6:K:170:SER:N	2.42	0.44
6:K:107:SER:CA	5:M:50:GLY:C	2.91	0.44
6:K:181:ALA:O	6:K:185:ALA:N	2.51	0.44
1:A:9:SER:C	1:A:313:GLY:HA2	2.43	0.43
7:L:49:PHE:O	7:L:53:HIS:N	2.51	0.43
1:A:373:ALA:C	1:A:375:ASN:N	2.75	0.43
1:A:749:LEU:O	1:A:753:GLY:HA2	2.18	0.43
1:A:502:HIS:C	1:A:504:ALA:H	2.27	0.43
3:C:257:HIS:C	3:C:259:SER:H	2.26	0.43
6:G:529:THR:O	6:G:533:ASN:N	2.52	0.43
3:C:842:PHE:O	3:C:843:GLN:C	2.62	0.43
6:G:246:SER:C	6:G:248:ASP:H	2.27	0.43
2:B:482:SER:C	2:B:484:LYS:N	2.71	0.43
6:G:274:ILE:O	6:G:275:VAL:O	2.37	0.43
5:R:70:GLY:O	5:R:72:ASP:N	2.52	0.43
3:C:280:LEU:C	3:C:283:SER:H	2.27	0.42
3:C:484:SER:CA	3:C:522:GLU:H	2.32	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:K:107:SER:H	5:M:50:GLY:HA3	0.67	0.42
6:G:215:ILE:O	6:G:216:SER:C	2.60	0.42
2:B:135:THR:O	2:B:139:LEU:N	2.52	0.42
2:B:780:ASP:C	2:B:808:SER:N	2.78	0.42
6:K:226:PRO:O	6:K:229:TYR:N	2.51	0.42
7:L:46:LYS:O	7:L:47:ASN:C	2.59	0.42
2:B:767:THR:C	2:B:792:LEU:N	2.65	0.42
3:C:690:LEU:O	3:C:694:GLN:N	2.53	0.42
6:G:702:GLN:O	6:G:703:PRO:C	2.60	0.42
5:M:27:GLY:C	5:M:45:THR:O	2.63	0.42
3:C:510:ILE:C	3:C:512:ASP:H	2.27	0.42
3:C:715:LEU:O	3:C:719:ALA:N	2.51	0.42
6:G:430:GLU:C	6:G:432:LYS:H	2.26	0.42
6:K:171:PHE:O	6:K:174:VAL:N	2.52	0.41
2:B:866:ASN:O	2:B:944:ILE:O	2.39	0.41
6:G:277:LEU:C	6:G:280:CYS:H	2.24	0.41
6:G:522:ASN:C	6:G:525:ARG:H	2.28	0.41
6:G:107:SER:CA	5:R:50:GLY:CA	2.92	0.41
6:K:182:GLN:C	6:K:185:ALA:H	2.28	0.41
6:K:232:MET:O	6:K:236:ALA:N	2.53	0.41
5:R:125:ALA:C	5:R:158:THR:O	2.60	0.41
6:K:214:MET:C	6:K:217:LYS:H	2.29	0.41
3:C:637:VAL:C	3:C:638:SER:O	2.64	0.41
5:M:79:ARG:O	5:M:81:TYR:O	2.39	0.41
1:A:9:SER:N	1:A:313:GLY:HA3	2.36	0.40
7:L:142:VAL:C	7:L:145:ARG:H	2.30	0.40
2:B:122:LYS:O	2:B:126:HIS:N	2.54	0.40
7:Z:12:THR:N	7:Z:132:GLY:HA2	2.20	0.40
3:C:213:ILE:O	3:C:222:VAL:N	2.54	0.40
2:B:767:THR:CA	2:B:793:ALA:CA	2.99	0.40
2:B:782:LYS:N	2:B:805:LYS:O	2.55	0.40
3:C:163:LEU:C	3:C:165:ARG:N	2.78	0.40

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	811/1262 (64%)	590 (73%)	112 (14%)	109 (13%)	0	4
2	B	790/968 (82%)	648 (82%)	68 (9%)	74 (9%)	0	8
3	C	841/905 (93%)	681 (81%)	91 (11%)	69 (8%)	0	9
4	D	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	10
5	F	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	14
5	M	157/181 (87%)	126 (80%)	13 (8%)	18 (12%)	0	5
5	R	157/181 (87%)	120 (76%)	17 (11%)	20 (13%)	0	4
6	G	794/874 (91%)	678 (85%)	61 (8%)	55 (7%)	1	11
6	K	556/874 (64%)	475 (85%)	42 (8%)	39 (7%)	1	11
7	L	137/177 (77%)	117 (85%)	11 (8%)	9 (7%)	1	12
7	Z	137/177 (77%)	119 (87%)	11 (8%)	7 (5%)	1	15
All	All	4710/6291 (75%)	3832 (81%)	456 (10%)	422 (9%)	1	8

All (422) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	63	GLN
1	A	64	PRO
1	A	92	HIS
1	A	106	PRO
1	A	125	ARG
1	A	169	LYS
1	A	174	PRO
1	A	187	VAL
1	A	215	PRO
1	A	237	SER
1	A	250	ASN
1	A	252	VAL
1	A	271	LYS
1	A	278	MET
1	A	281	ARG
1	A	324	PRO
1	A	325	ALA
1	A	341	LEU
1	A	343	GLN

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Mol	Chain	Res	Type
1	A	384	SER
1	A	454	ASP
1	A	457	PHE
1	A	466	LEU
1	A	479	GLN
1	A	492	LYS
1	A	566	LEU
1	A	583	ARG
1	A	584	GLU
1	A	592	ILE
1	A	593	ASP
1	A	619	LYS
1	A	642	VAL
1	A	671	LYS
1	A	728	ASP
1	A	779	ASP
1	A	788	ILE
1	A	796	GLN
1	A	797	PRO
1	A	798	PRO
1	A	803	PRO
1	A	805	ASP
1	A	811	LEU
2	B	36	PRO
2	B	68	GLU
2	B	109	LEU
2	B	111	HIS
2	B	113	MET
2	B	254	PRO
2	B	255	SER
2	B	329	HIS
2	B	348	ASP
2	B	367	ASN
2	B	385	VAL
2	B	386	SER
2	B	466	SER
2	B	480	TYR
2	B	484	LYS
2	B	500	GLU
2	B	501	ILE
2	B	502	PRO
2	B	503	ILE

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Mol	Chain	Res	Type
2	B	505	GLU
2	B	521	ILE
2	B	522	THR
2	B	547	PRO
2	B	767	THR
2	B	771	CYS
2	B	826	ALA
2	B	831	CYS
2	B	865	GLU
2	B	899	LEU
2	B	929	PRO
2	B	930	VAL
2	B	934	PRO
2	B	935	ASP
2	B	938	VAL
3	C	27	GLU
3	C	89	LEU
3	C	200	PRO
3	C	228	HIS
3	C	270	GLY
3	C	273	ARG
3	C	325	ALA
3	C	326	ASN
3	C	328	LYS
3	C	329	ALA
3	C	332	ASP
3	C	350	SER
3	C	363	ASN
3	C	365	ARG
3	C	400	SER
3	C	410	SER
3	C	411	ILE
3	C	424	PHE
3	C	451	ASP
3	C	462	GLU
3	C	475	GLU
3	C	484	SER
3	C	502	HIS
3	C	614	PRO
3	C	615	LYS
3	C	638	SER
3	C	762	LEU

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Mol	Chain	Res	Type
3	C	781	ASN
3	C	782	GLN
3	C	789	ALA
3	C	790	ASP
3	C	806	VAL
3	C	825	PRO
3	C	833	ARG
4	D	12	ALA
4	D	44	LYS
4	D	73	ASN
4	D	96	ALA
5	F	97	ARG
5	F	117	ARG
5	F	131	PRO
6	G	77	PHE
6	G	100	GLU
6	G	106	THR
6	G	132	THR
6	G	151	LYS
6	G	171	PHE
6	G	243	GLU
6	G	261	ASN
6	G	275	VAL
6	G	277	LEU
6	G	283	LYS
6	G	299	PRO
6	G	373	ASP
6	G	394	HIS
6	G	446	CYS
6	G	484	HIS
6	G	608	THR
6	G	621	PRO
6	G	686	ALA
6	G	741	GLU
5	R	42	VAL
5	R	43	ILE
5	R	130	LEU
5	R	131	PRO
5	R	145	LEU
5	R	147	SER
5	R	151	ARG
5	R	175	ASN

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Mol	Chain	Res	Type
7	Z	36	PRO
7	Z	37	SER
7	Z	84	TYR
6	K	134	SER
6	K	135	THR
6	K	170	SER
6	K	171	PHE
6	K	207	ASP
6	K	221	HIS
6	K	225	SER
6	K	226	PRO
6	K	227	PHE
6	K	243	GLU
6	K	275	VAL
6	K	299	PRO
6	K	608	THR
6	K	621	PRO
6	K	686	ALA
6	K	741	GLU
6	K	813	CYS
7	L	37	SER
7	L	84	TYR
7	L	147	ALA
5	M	42	VAL
5	M	43	ILE
5	M	44	THR
5	M	51	PHE
5	M	71	GLN
5	M	80	HIS
5	M	118	ASN
5	M	149	ARG
1	A	10	ALA
1	A	185	THR
1	A	282	THR
1	A	290	ASP
1	A	345	ASP
1	A	373	ALA
1	A	425	ARG
1	A	498	ALA
1	A	546	SER
1	A	564	LEU
1	A	572	ARG

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Mol	Chain	Res	Type
1	A	622	GLY
1	A	624	SER
1	A	632	LYS
1	A	672	ASN
1	A	787	ASP
1	A	800	PRO
2	B	49	ASP
2	B	69	LYS
2	B	162	ARG
2	B	186	PRO
2	B	383	ASN
2	B	445	ARG
2	B	498	LEU
2	B	499	GLY
2	B	551	GLU
2	B	740	PRO
2	B	741	VAL
2	B	751	GLN
2	B	764	THR
2	B	828	ASP
2	B	838	HIS
2	B	862	PHE
2	B	873	ASN
2	B	939	THR
3	C	88	THR
3	C	219	LYS
3	C	428	PHE
3	C	465	PRO
3	C	503	GLU
3	C	504	GLY
3	C	558	ASP
3	C	665	GLU
3	C	787	SER
3	C	793	GLU
3	C	797	LEU
4	D	24	MET
4	D	25	THR
4	D	42	THR
4	D	98	GLU
4	D	136	MET
6	G	96	SER
6	G	98	ILE

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Mol	Chain	Res	Type
6	G	105	VAL
6	G	116	LYS
6	G	216	SER
6	G	278	PRO
6	G	310	THR
6	G	463	GLY
6	G	467	ASN
6	G	522	ASN
6	G	633	SER
6	G	718	THR
5	R	72	ASP
5	R	82	TYR
5	R	84	ASN
5	R	95	ASN
5	R	132	GLU
5	R	133	ALA
7	Z	73	ILE
6	K	38	PRO
6	K	116	LYS
6	K	245	GLY
6	K	297	SER
6	K	633	SER
6	K	718	THR
7	L	12	THR
7	L	69	TYR
7	L	132	GLY
5	M	70	GLY
5	M	129	ASP
5	M	164	GLU
1	A	61	LYS
1	A	62	GLN
1	A	168	ARG
1	A	176	ALA
1	A	183	GLY
1	A	218	PRO
1	A	251	ASN
1	A	323	ARG
1	A	340	PHE
1	A	349	SER
1	A	362	LYS
1	A	433	HIS
1	A	481	ARG

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Mol	Chain	Res	Type
1	A	527	ASN
1	A	555	THR
1	A	585	CYS
1	A	686	ASN
1	A	731	GLY
1	A	755	LYS
2	B	216	ASP
2	B	779	GLY
2	B	871	ASN
3	C	140	GLY
3	C	156	ASN
3	C	250	ASP
3	C	259	SER
3	C	351	CYS
3	C	408	SER
3	C	454	ASN
3	C	708	ASN
3	C	763	PRO
4	D	46	HIS
4	D	138	SER
5	F	47	PRO
5	F	84	ASN
5	F	149	ARG
6	G	170	SER
6	G	282	ALA
6	G	297	SER
6	G	391	PRO
6	G	393	LYS
6	G	445	ASP
6	G	447	GLU
6	G	504	GLU
6	G	505	MET
6	G	628	PRO
6	G	641	GLU
6	G	687	TYR
6	G	720	VAL
6	G	761	ALA
5	R	114	ASP
7	Z	147	ALA
6	K	96	SER
6	K	248	ASP
6	K	628	PRO

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Mol	Chain	Res	Type
6	K	641	GLU
6	K	687	TYR
6	K	720	VAL
6	K	761	ALA
7	L	36	PRO
5	M	127	LYS
5	M	135	SER
5	M	165	GLY
1	A	73	TYR
1	A	103	HIS
1	A	170	LYS
1	A	205	ASP
1	A	236	GLU
1	A	330	GLY
1	A	398	LYS
1	A	411	LYS
1	A	424	ASN
1	A	488	ILE
1	A	556	GLY
1	A	783	GLU
1	A	786	PRO
1	A	801	ILE
2	B	128	ASN
2	B	384	ASN
2	B	425	SER
2	B	447	ASP
2	B	481	CYS
2	B	504	VAL
2	B	752	TYR
2	B	768	LEU
2	B	780	ASP
2	B	827	SER
2	B	837	ILE
2	B	901	GLY
2	B	928	LYS
3	C	165	ARG
3	C	321	GLU
3	C	346	LYS
3	C	401	SER
3	C	409	ASN
3	C	431	GLU
3	C	662	VAL

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Mol	Chain	Res	Type
3	C	821	ALA
5	F	153	TRP
6	G	23	GLU
6	G	428	ASN
6	G	623	PHE
5	R	44	THR
5	R	129	ASP
7	Z	34	THR
6	K	76	LEU
6	K	623	PHE
7	L	86	ASN
5	M	119	ALA
5	M	133	ALA
1	A	182	ARG
1	A	195	ALA
1	A	364	PRO
1	A	452	ASN
1	A	517	LYS
1	A	531	LYS
1	A	621	VAL
1	A	644	ASP
1	A	810	LEU
2	B	270	SER
2	B	347	PRO
2	B	825	ALA
3	C	242	PRO
3	C	284	ASN
3	C	473	SER
3	C	737	LYS
4	D	40	MET
4	D	43	GLY
5	F	78	TRP
6	G	99	ALA
6	G	226	PRO
6	G	248	ASP
5	R	158	THR
6	K	40	ASN
6	K	81	ASP
7	L	63	GLU
5	M	151	ARG
1	A	643	LYS
1	A	802	MET

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Mol	Chain	Res	Type
2	B	86	ASP
2	B	104	THR
3	C	25	PRO
6	G	152	VAL
5	R	49	ILE
7	Z	54	ARG
6	K	37	THR
6	K	310	THR
6	K	694	PRO
3	C	312	GLY
6	K	274	ILE
1	A	22	PRO
1	A	503	VAL
1	A	615	VAL
3	C	112	PRO
5	R	163	GLY
5	M	148	ILE
1	A	133	GLY
1	A	259	PRO
5	F	43	ILE
6	G	820	PRO
6	K	820	PRO
6	G	694	PRO
1	A	575	GLY
2	B	516	LYS

5.3.2 Protein sidechains [i](#)

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 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3720. These allow visual inspection of the internal detail of the map and identification of artifacts.

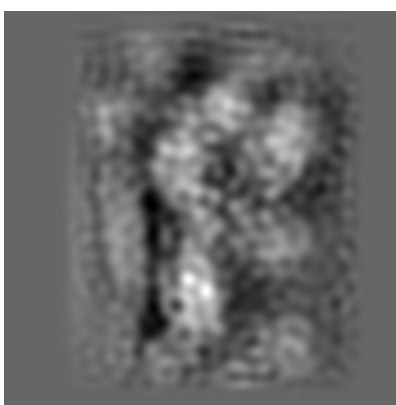
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

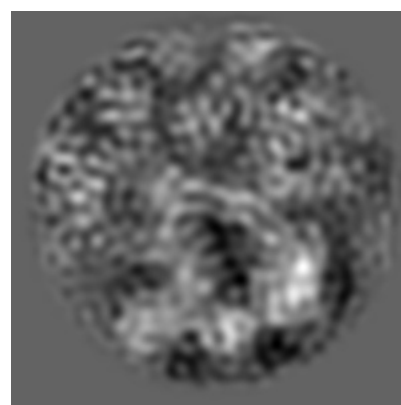
6.1.1 Primary map



X



Y



Z

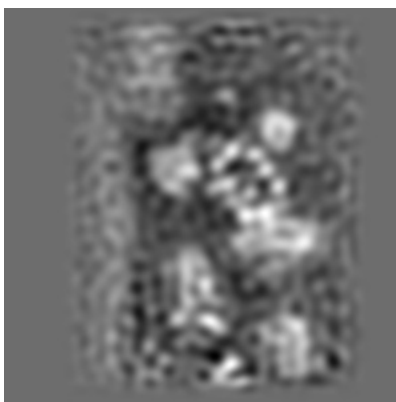
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

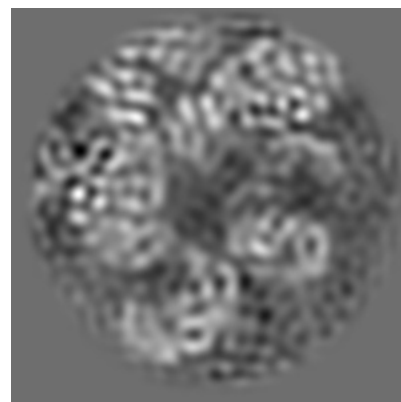
6.2.1 Primary map



X Index: 64



Y Index: 64



Z Index: 64

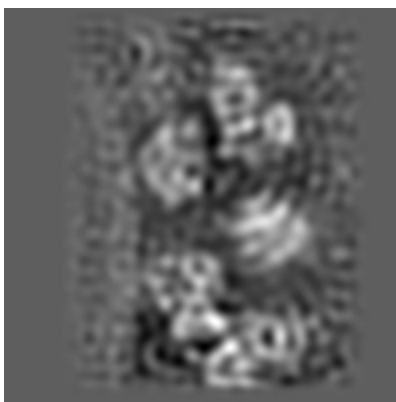
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 83



Y Index: 72

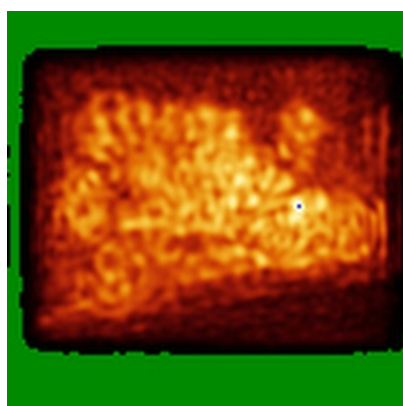


Z Index: 60

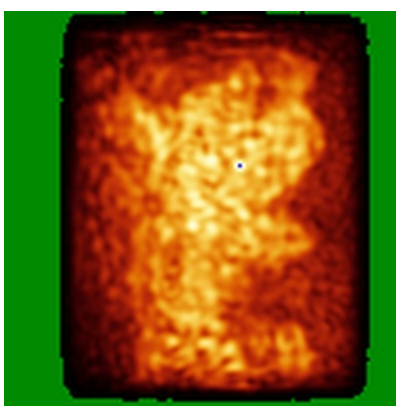
The images above show the largest variance slices of the map in three orthogonal directions.

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

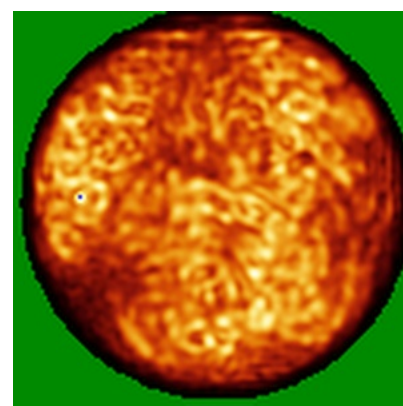
6.4.1 Primary map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.12. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

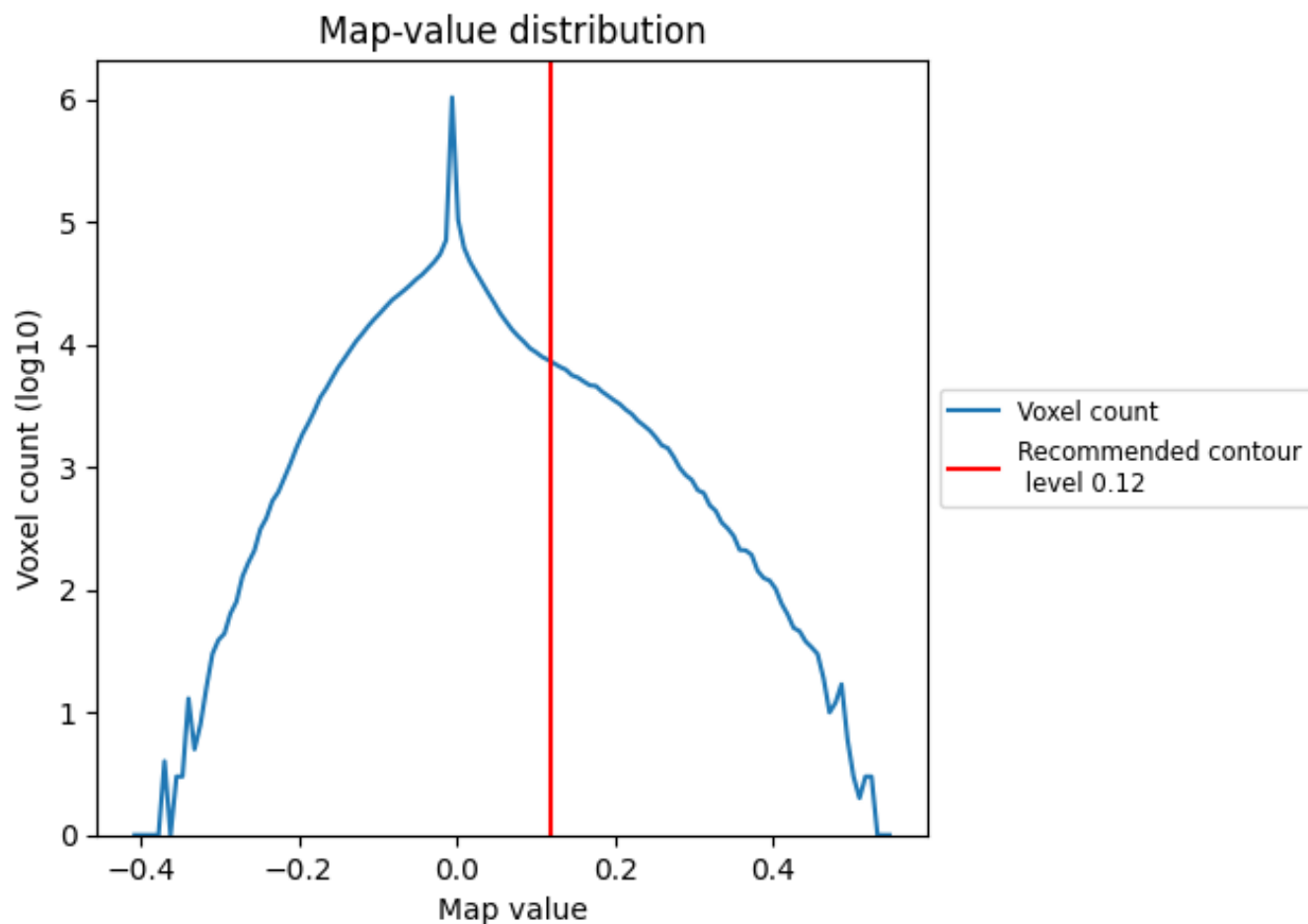
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

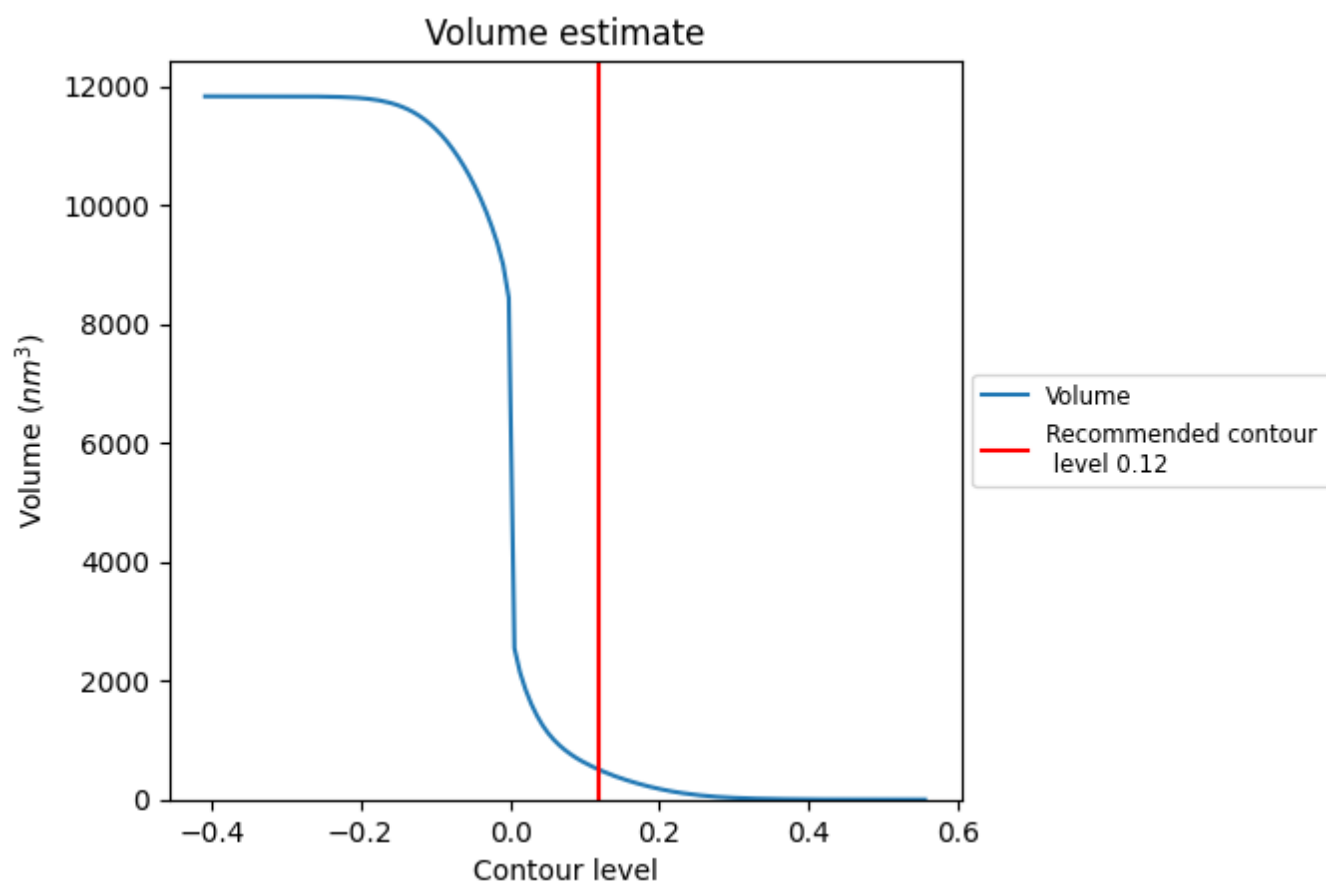
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

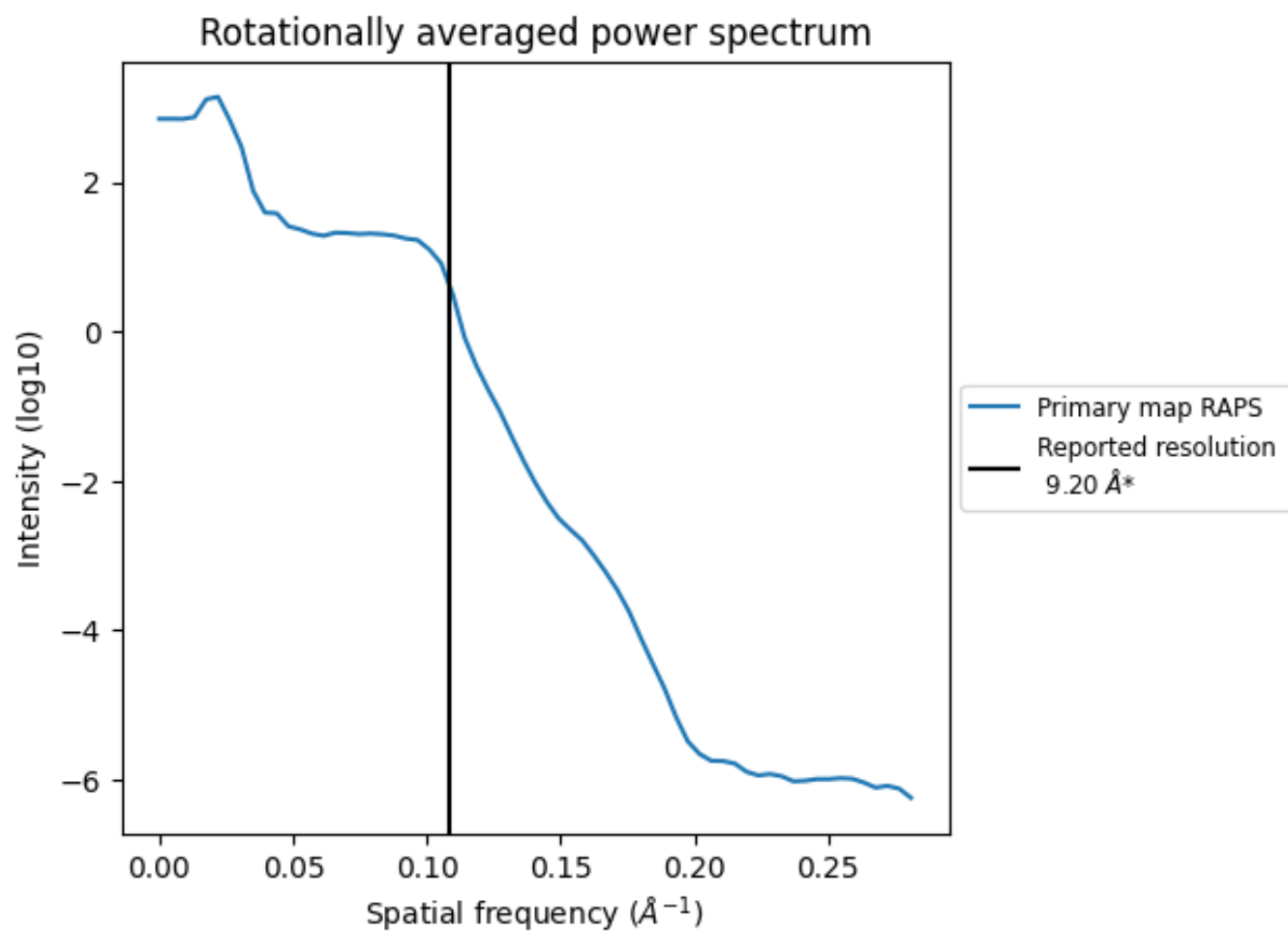
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 498 nm³; this corresponds to an approximate mass of 450 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ

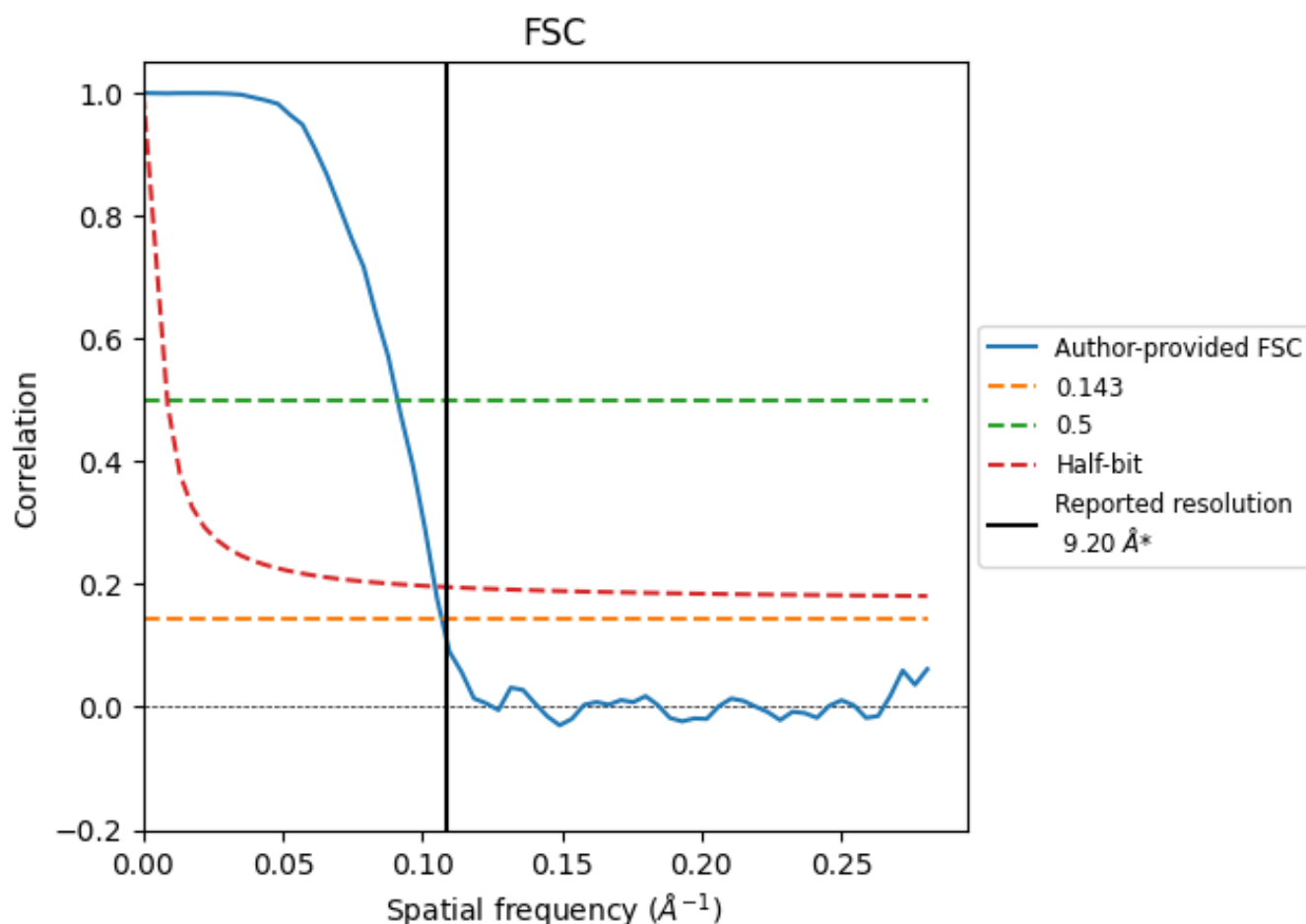


*Reported resolution corresponds to spatial frequency of 0.109 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.109 Å⁻¹

8.2 Resolution estimates [i](#)

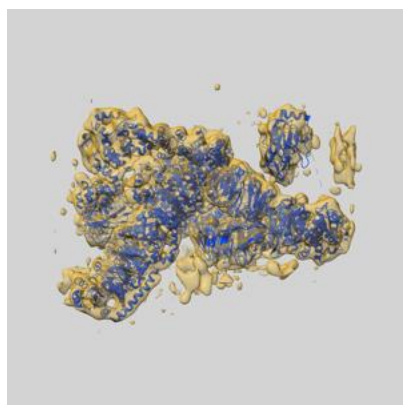
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	9.20	-	-
Author-provided FSC curve	9.34	10.98	9.56
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

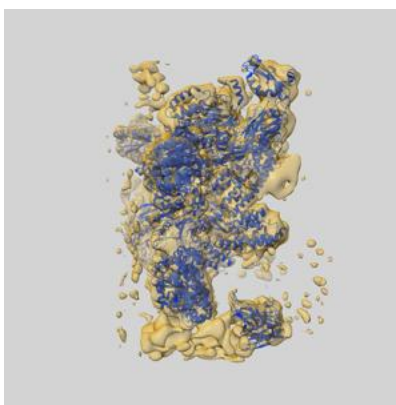
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3720 and PDB model 5NZR. Per-residue inclusion information can be found in section 3 on page 7.

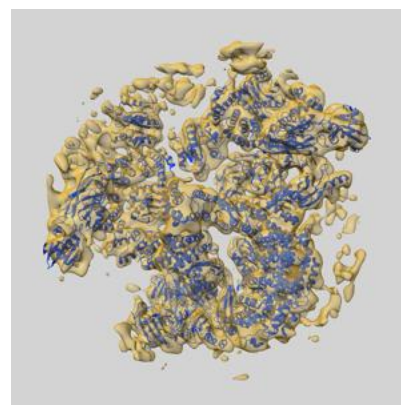
9.1 Map-model overlay [i](#)



X



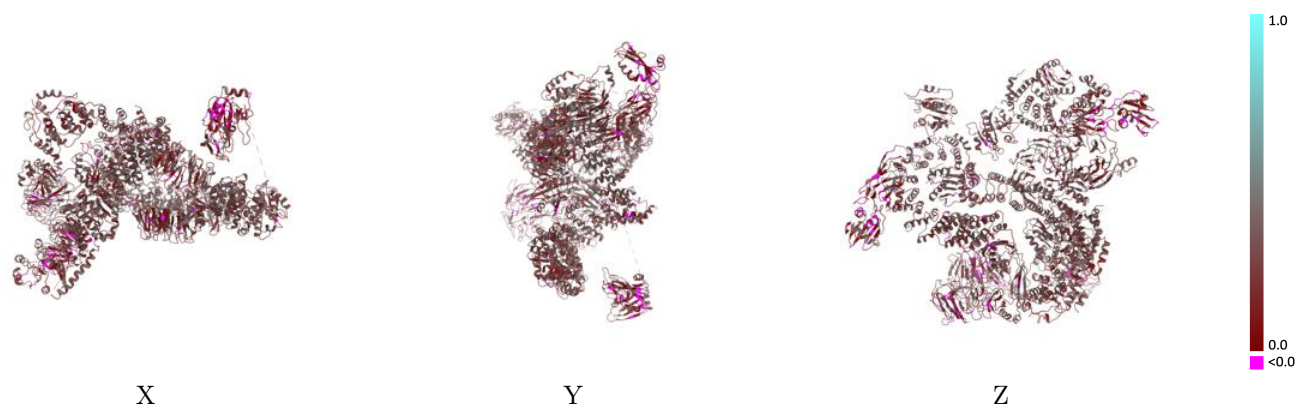
Y



Z

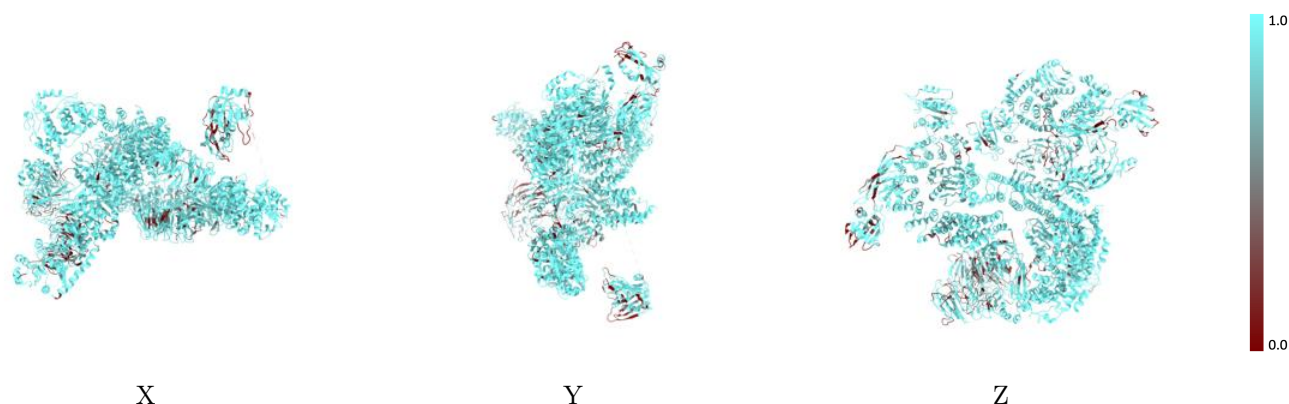
The images above show the 3D surface view of the map at the recommended contour level 0.12 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



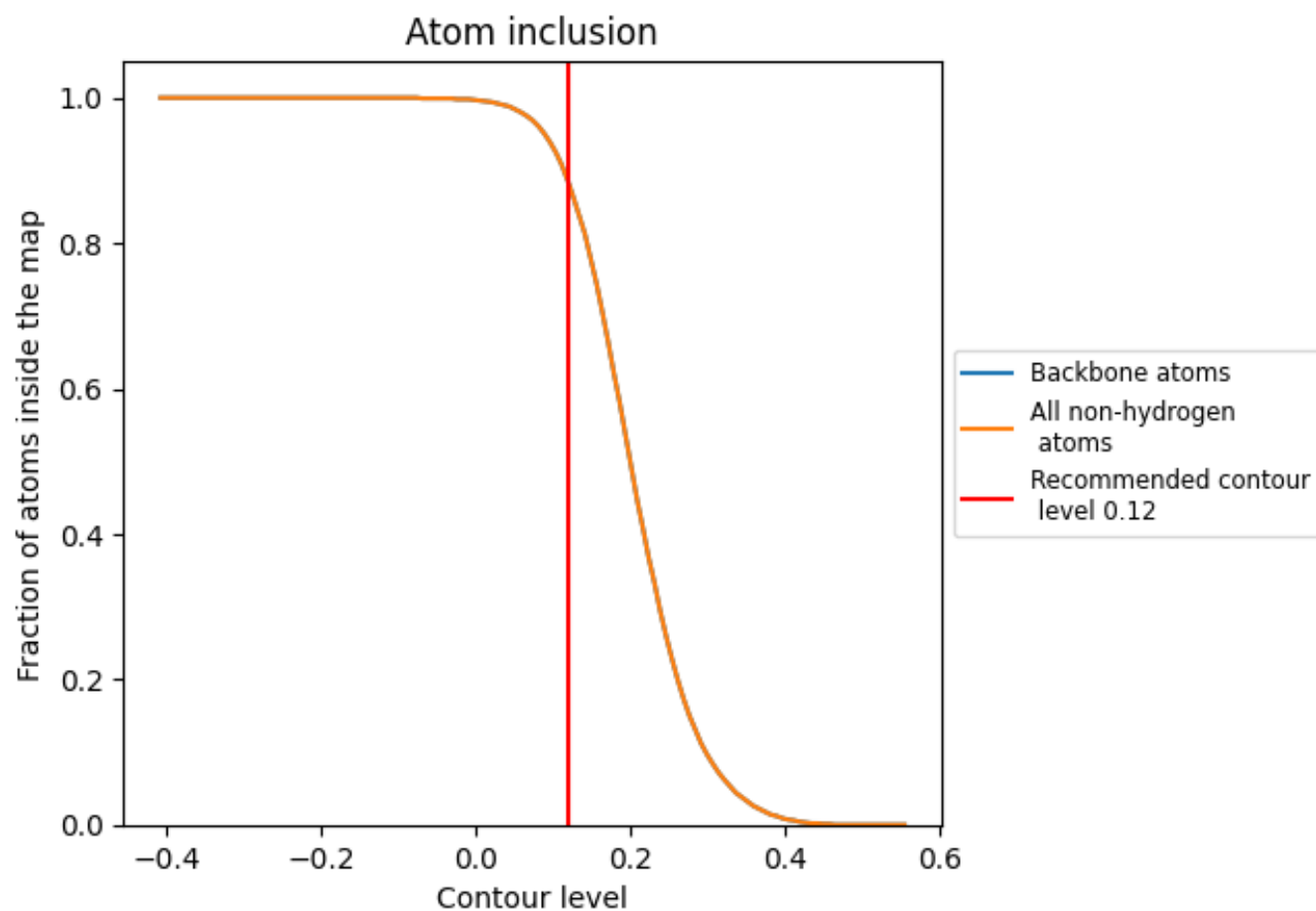
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.12).

9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 88% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.12) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8840	0.2640
A	0.7710	0.2060
B	0.9380	0.2980
C	0.9180	0.2750
D	0.9480	0.3160
F	0.9510	0.2430
G	0.8710	0.2650
K	0.8660	0.2500
L	0.9420	0.2920
M	0.9120	0.2750
R	0.9400	0.2820
Z	0.8490	0.2810

1.0

0.0

<0.0