



Full wwPDB EM Validation Report ⓘ

Mar 6, 2026 – 09:41 PM UTC

PDB ID : 6O7X / pdb_00006o7x
EMDB ID : EMD-0648
Title : Saccharomyces cerevisiae V-ATPase Stv1-V1VO State 3
Authors : Vasanthakumar, T.; Bueler, S.A.; Wu, D.; Beilsten-Edmands, V.; Robinson, C.V.; Rubinstein, J.L.
Deposited on : 2019-03-08
Resolution : 8.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

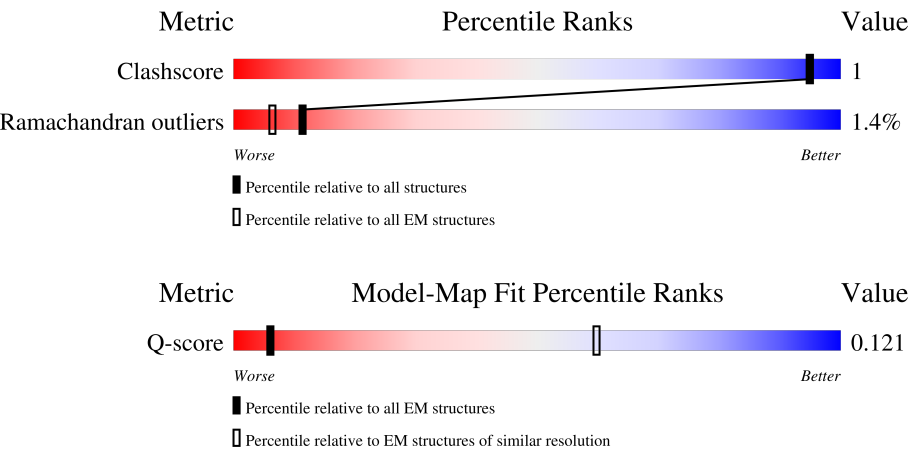
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance i

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

The reported resolution of this entry is 8.70 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.





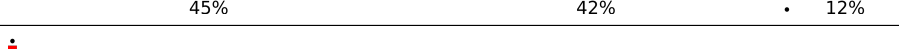
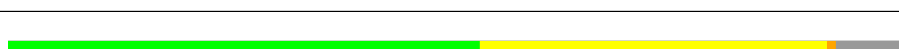


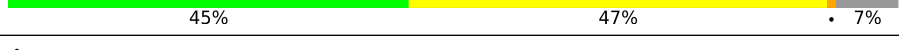
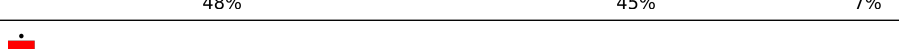
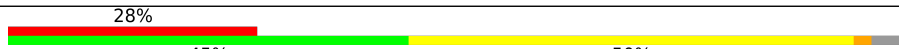


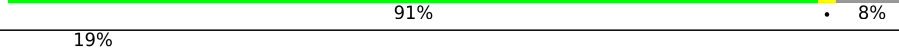
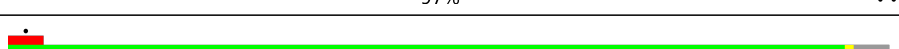
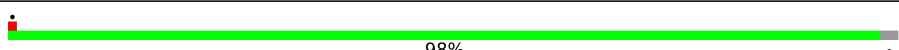
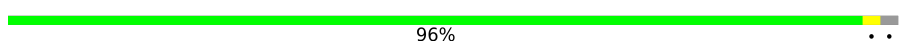
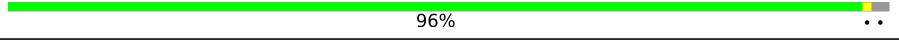
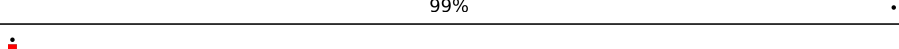

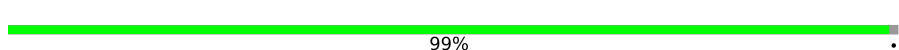
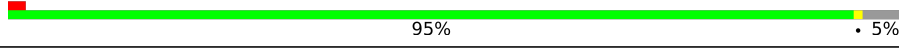




Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	282 (8.20 - 9.20)

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	O	392	<div><div>35%</div><div>49%</div><div>49%</div><div>.</div></div>
2	M	256	<div><div>38%</div><div>42%</div><div>18%</div><div>.</div></div>
3	N	118	<div><div>7%</div><div>47%</div><div>50%</div><div>.</div></div>
4	A	639	<div><div>48%</div><div>44%</div><div>7%</div><div>.</div></div>
4	C	639	<div><div>49%</div><div>43%</div><div>7%</div><div>.</div></div>

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Mol	Chain	Length	Quality of chain
4	E	639	
5	B	517	
5	D	517	
5	F	517	
6	H	114	
6	J	114	
6	L	114	
7	G	233	
7	I	233	
7	K	233	
8	P	478	
9	a	890	
10	b	265	
11	c	213	
12	d	345	
13	g	160	
13	h	160	
13	i	160	
13	j	160	
13	k	160	
13	l	160	
13	m	160	
13	n	160	
14	o	164	
15	e	73	

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Mol	Chain	Length	Quality of chain
16	f	85	<div><div></div><div>71%</div><div></div><div>28%</div></div>

2 Entry composition [i](#)

There are 16 unique types of molecules in this entry. The entry contains 39578 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 V-type proton ATPase subunit C.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	O	392	Total	C	N	O	0	0
			1947	1163	392	392		

- Molecule 2 is a protein called V-type proton ATPase subunit D.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	M	210	Total	C	N	O	0	0
			1039	619	210	210		

- Molecule 3 is a protein called V-type proton ATPase subunit F.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	N	115	Total	C	N	O	0	0
			571	341	115	115		

- Molecule 4 is a protein called Vacuolar ATP synthase catalytic subunit A.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	E	593	Total	C	N	O	0	0
			2915	1729	593	593		
4	A	593	Total	C	N	O	0	0
			2915	1729	593	593		
4	C	593	Total	C	N	O	0	0
			2915	1729	593	593		

There are 66 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
E	617	ASP	-	SEE REMARK 999	UNP B3LH69
E	618	TYR	-	SEE REMARK 999	UNP B3LH69
E	619	LYS	-	SEE REMARK 999	UNP B3LH69
E	620	ASP	-	SEE REMARK 999	UNP B3LH69
E	621	HIS	-	SEE REMARK 999	UNP B3LH69

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Chain	Residue	Modelled	Actual	Comment	Reference
E	622	ASP	-	SEE REMARK 999	UNP B3LH69
E	623	GLY	-	SEE REMARK 999	UNP B3LH69
E	624	ASP	-	SEE REMARK 999	UNP B3LH69
E	625	TYR	-	SEE REMARK 999	UNP B3LH69
E	626	LYS	-	SEE REMARK 999	UNP B3LH69
E	627	ASP	-	SEE REMARK 999	UNP B3LH69
E	628	HIS	-	SEE REMARK 999	UNP B3LH69
E	629	ASP	-	SEE REMARK 999	UNP B3LH69
E	630	ILE	-	SEE REMARK 999	UNP B3LH69
E	631	ASP	-	SEE REMARK 999	UNP B3LH69
E	632	TYR	-	SEE REMARK 999	UNP B3LH69
E	633	LYS	-	SEE REMARK 999	UNP B3LH69
E	634	ASP	-	SEE REMARK 999	UNP B3LH69
E	635	ASP	-	SEE REMARK 999	UNP B3LH69
E	636	ASP	-	SEE REMARK 999	UNP B3LH69
E	637	ASP	-	SEE REMARK 999	UNP B3LH69
E	638	LYS	-	SEE REMARK 999	UNP B3LH69
A	617	ASP	-	SEE REMARK 999	UNP B3LH69
A	618	TYR	-	SEE REMARK 999	UNP B3LH69
A	619	LYS	-	SEE REMARK 999	UNP B3LH69
A	620	ASP	-	SEE REMARK 999	UNP B3LH69
A	621	HIS	-	SEE REMARK 999	UNP B3LH69
A	622	ASP	-	SEE REMARK 999	UNP B3LH69
A	623	GLY	-	SEE REMARK 999	UNP B3LH69
A	624	ASP	-	SEE REMARK 999	UNP B3LH69
A	625	TYR	-	SEE REMARK 999	UNP B3LH69
A	626	LYS	-	SEE REMARK 999	UNP B3LH69
A	627	ASP	-	SEE REMARK 999	UNP B3LH69
A	628	HIS	-	SEE REMARK 999	UNP B3LH69
A	629	ASP	-	SEE REMARK 999	UNP B3LH69
A	630	ILE	-	SEE REMARK 999	UNP B3LH69
A	631	ASP	-	SEE REMARK 999	UNP B3LH69
A	632	TYR	-	SEE REMARK 999	UNP B3LH69
A	633	LYS	-	SEE REMARK 999	UNP B3LH69
A	634	ASP	-	SEE REMARK 999	UNP B3LH69
A	635	ASP	-	SEE REMARK 999	UNP B3LH69
A	636	ASP	-	SEE REMARK 999	UNP B3LH69
A	637	ASP	-	SEE REMARK 999	UNP B3LH69
A	638	LYS	-	SEE REMARK 999	UNP B3LH69
C	617	ASP	-	SEE REMARK 999	UNP B3LH69
C	618	TYR	-	SEE REMARK 999	UNP B3LH69
C	619	LYS	-	SEE REMARK 999	UNP B3LH69

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Chain	Residue	Modelled	Actual	Comment	Reference
C	620	ASP	-	SEE REMARK 999	UNP B3LH69
C	621	HIS	-	SEE REMARK 999	UNP B3LH69
C	622	ASP	-	SEE REMARK 999	UNP B3LH69
C	623	GLY	-	SEE REMARK 999	UNP B3LH69
C	624	ASP	-	SEE REMARK 999	UNP B3LH69
C	625	TYR	-	SEE REMARK 999	UNP B3LH69
C	626	LYS	-	SEE REMARK 999	UNP B3LH69
C	627	ASP	-	SEE REMARK 999	UNP B3LH69
C	628	HIS	-	SEE REMARK 999	UNP B3LH69
C	629	ASP	-	SEE REMARK 999	UNP B3LH69
C	630	ILE	-	SEE REMARK 999	UNP B3LH69
C	631	ASP	-	SEE REMARK 999	UNP B3LH69
C	632	TYR	-	SEE REMARK 999	UNP B3LH69
C	633	LYS	-	SEE REMARK 999	UNP B3LH69
C	634	ASP	-	SEE REMARK 999	UNP B3LH69
C	635	ASP	-	SEE REMARK 999	UNP B3LH69
C	636	ASP	-	SEE REMARK 999	UNP B3LH69
C	637	ASP	-	SEE REMARK 999	UNP B3LH69
C	638	LYS	-	SEE REMARK 999	UNP B3LH69

- Molecule 5 is a protein called V-type proton ATPase subunit B.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	F	457	Total	C	N	O	0	0
			2250	1336	457	457		
5	B	457	Total	C	N	O	0	0
			2250	1336	457	457		
5	D	457	Total	C	N	O	0	0
			2250	1336	457	457		

- Molecule 6 is a protein called V-type proton ATPase subunit G.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	J	105	Total	C	N	O	0	0
			519	309	105	105		
6	L	105	Total	C	N	O	0	0
			519	309	105	105		
6	H	105	Total	C	N	O	0	0
			519	309	105	105		

- Molecule 7 is a protein called V-type proton ATPase subunit E.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	I	217	Total	C	N	O	0	0
			1078	644	217	217		
7	K	217	Total	C	N	O	0	0
			1078	644	217	217		
7	G	217	Total	C	N	O	0	0
			1078	644	217	217		

- Molecule 8 is a protein called V-type proton ATPase subunit H.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	P	461	Total	C	N	O	0	0
			2292	1370	461	461		

- Molecule 9 is a protein called V-type proton ATPase subunit a, Golgi isoform.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	a	625	Total	C	N	O	0	0
			3092	1842	625	625		

- Molecule 10 is a protein called V0 assembly protein 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
10	b	44	Total	C	N	O	0	0
			218	130	44	44		

- Molecule 11 is a protein called V-type proton ATPase subunit c”.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	c	197	Total	C	N	O	0	0
			962	568	197	197		

- Molecule 12 is a protein called V-type proton ATPase subunit d.

Mol	Chain	Residues	Atoms				AltConf	Trace
12	d	343	Total	C	N	O	0	0
			1699	1013	343	343		

- Molecule 13 is a protein called V-type proton ATPase subunit c.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	g	153	Total	C	N	O	0	0
			743	437	153	153		

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Mol	Chain	Residues	Atoms				AltConf	Trace
13	h	157	Total	C	N	O	0	0
			763	449	157	157		
13	i	157	Total	C	N	O	0	0
			763	449	157	157		
13	j	156	Total	C	N	O	0	0
			758	446	156	156		
13	k	158	Total	C	N	O	0	0
			768	452	158	158		
13	l	157	Total	C	N	O	0	0
			763	449	157	157		
13	m	158	Total	C	N	O	0	0
			768	452	158	158		
13	n	158	Total	C	N	O	0	0
			768	452	158	158		

- Molecule 14 is a protein called V-type proton ATPase subunit c'.

Mol	Chain	Residues	Atoms				AltConf	Trace
14	o	156	Total	C	N	O	0	0
			758	446	156	156		

- Molecule 15 is a protein called V-type proton ATPase subunit e.

Mol	Chain	Residues	Atoms				AltConf	Trace
15	e	64	Total	C	N	O	0	0
			319	191	64	64		

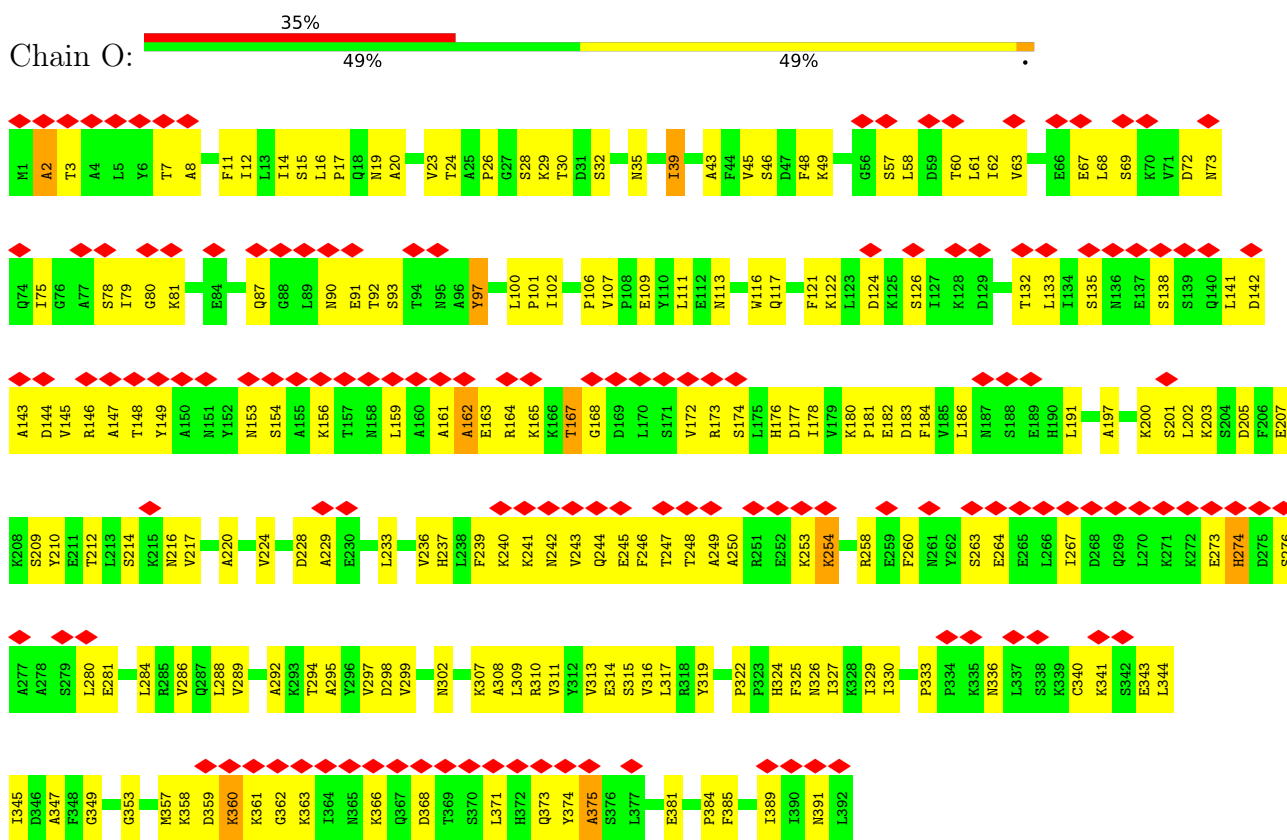
- Molecule 16 is a protein called Putative protein YPR170W-B.

Mol	Chain	Residues	Atoms				AltConf	Trace
16	f	61	Total	C	N	O	0	0
			301	179	61	61		

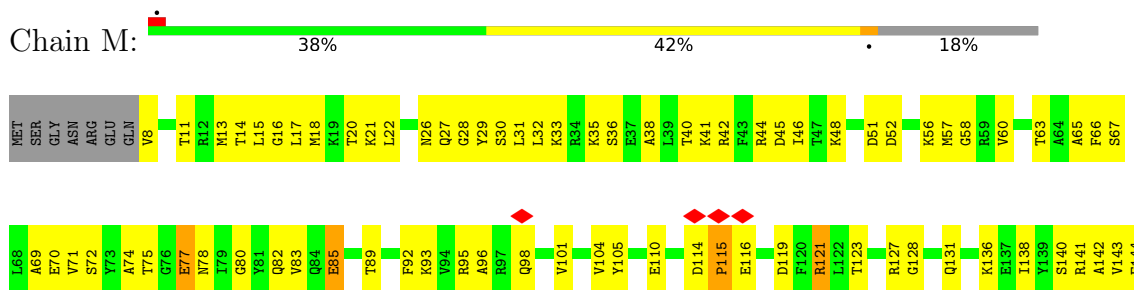
3 Residue-property plots

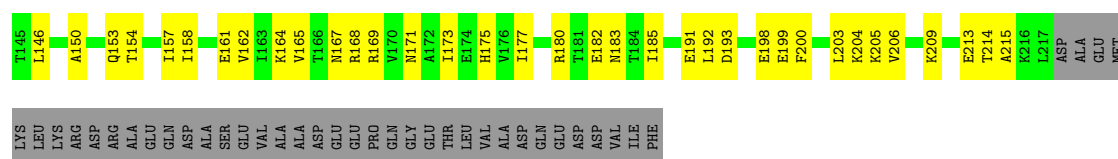
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: V-type proton ATPase subunit C

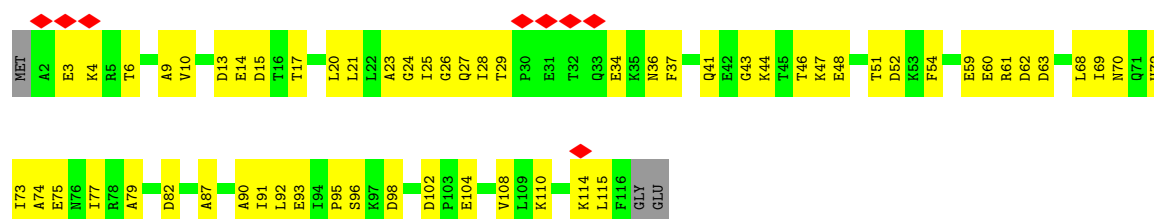


• Molecule 2: V-type proton ATPase subunit D

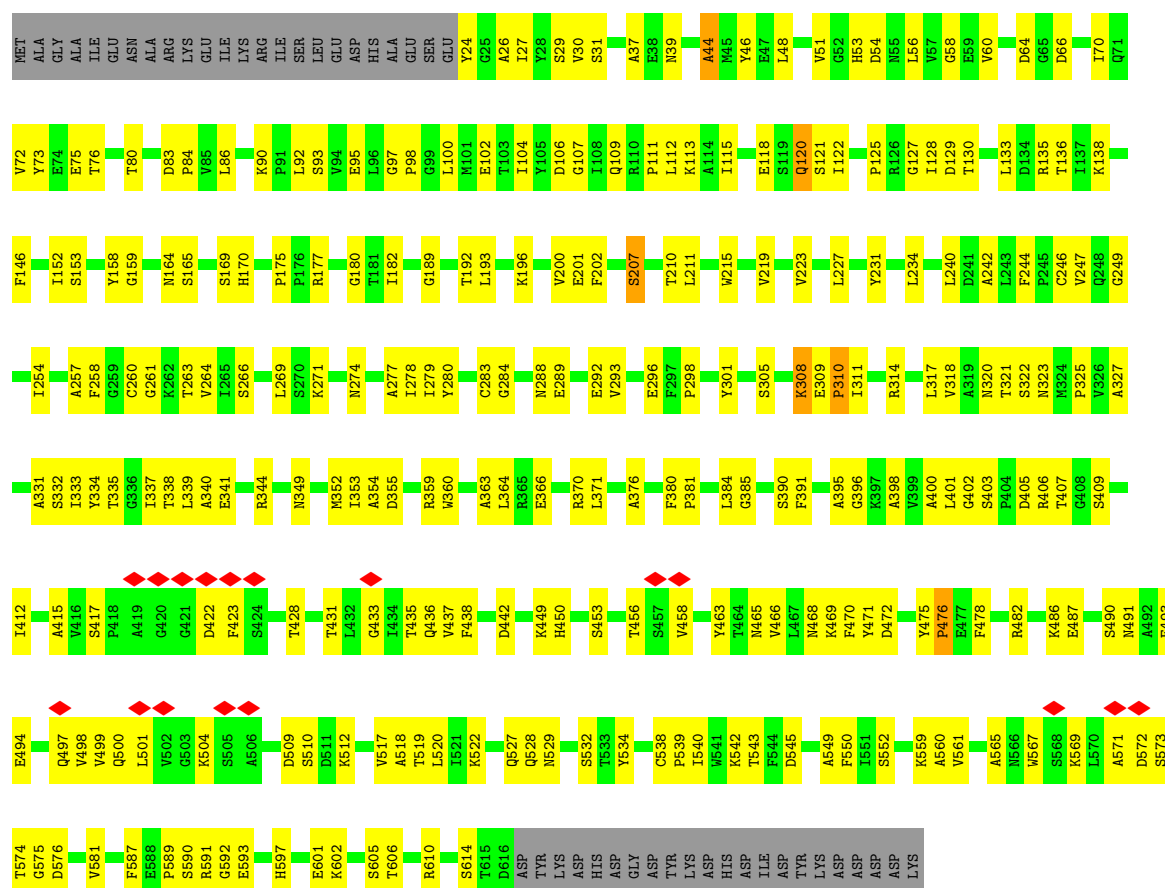




• Molecule 3: V-type proton ATPase subunit F

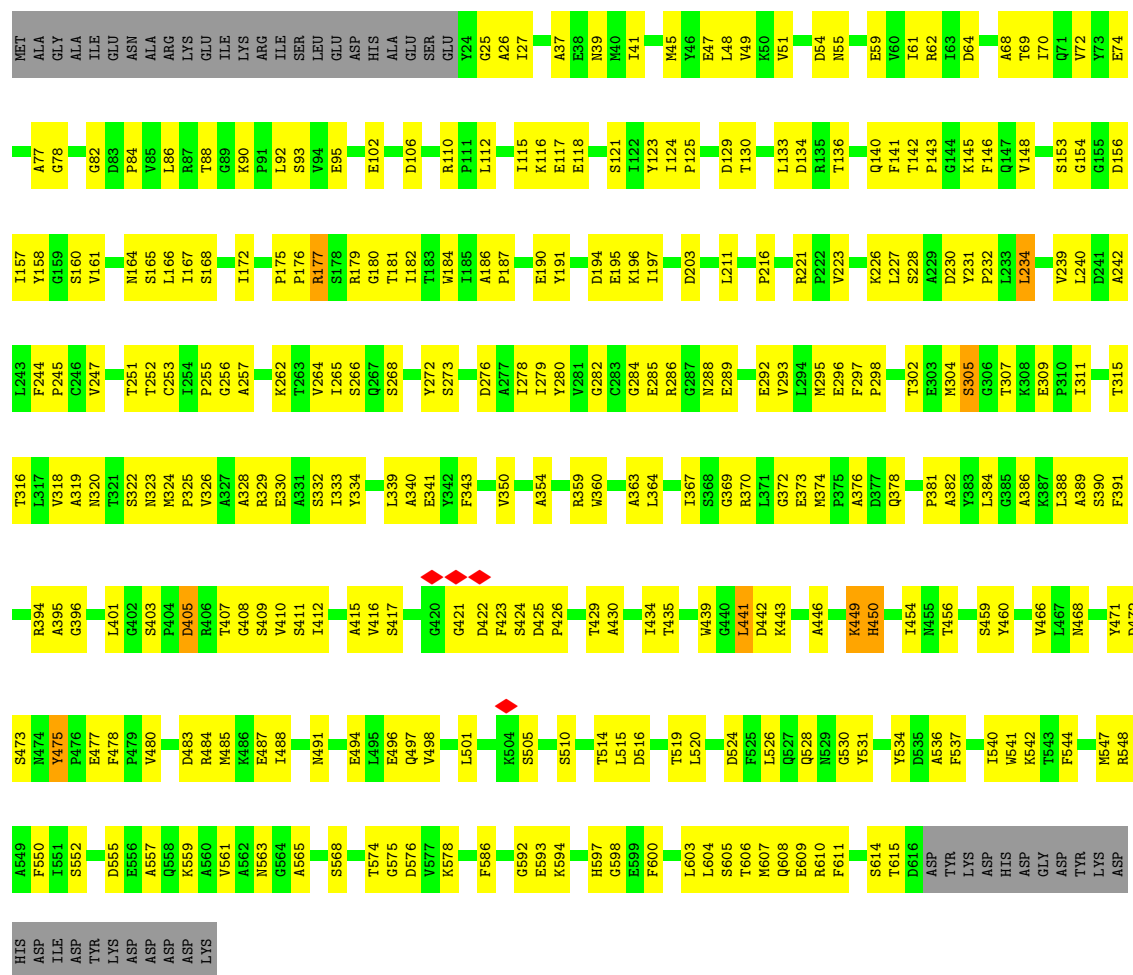


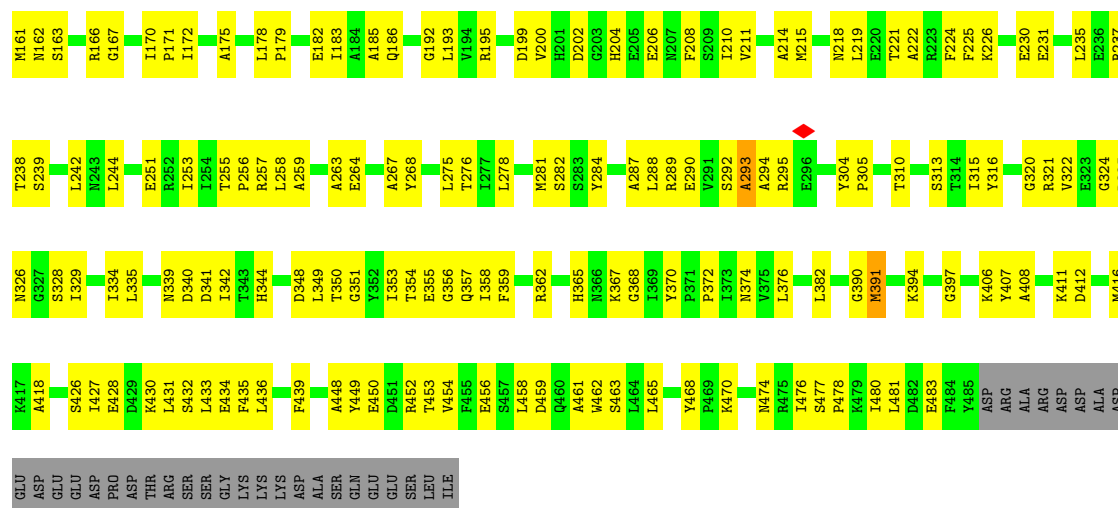
• Molecule 4: Vacuolar ATP synthase catalytic subunit A



• Molecule 4: Vacuolar ATP synthase catalytic subunit A

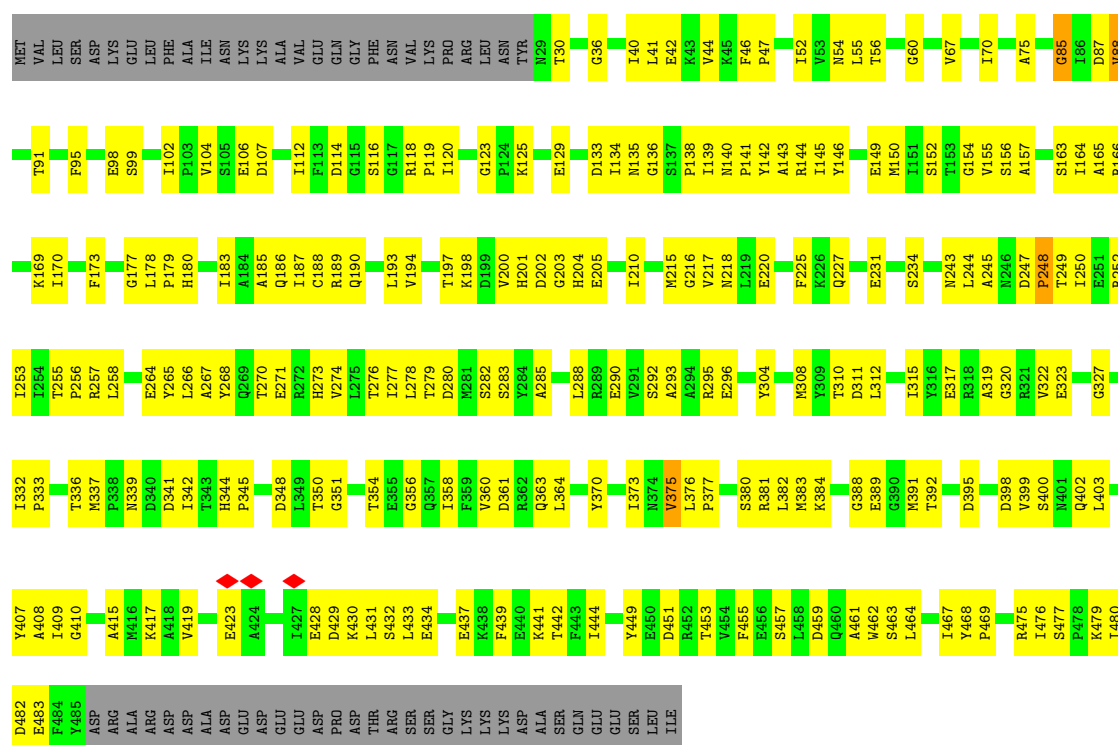






• Molecule 5: V-type proton ATPase subunit B

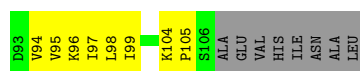
Chain D: 45% 42% 12%



• Molecule 6: V-type proton ATPase subunit G

Chain J: 54% 37% 8%

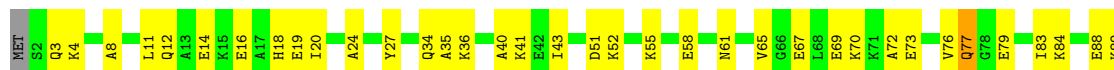




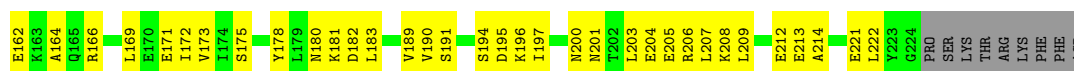
• Molecule 6: V-type proton ATPase subunit G



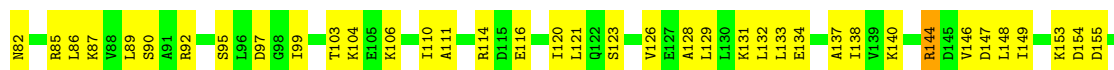
• Molecule 6: V-type proton ATPase subunit G



• Molecule 7: V-type proton ATPase subunit E

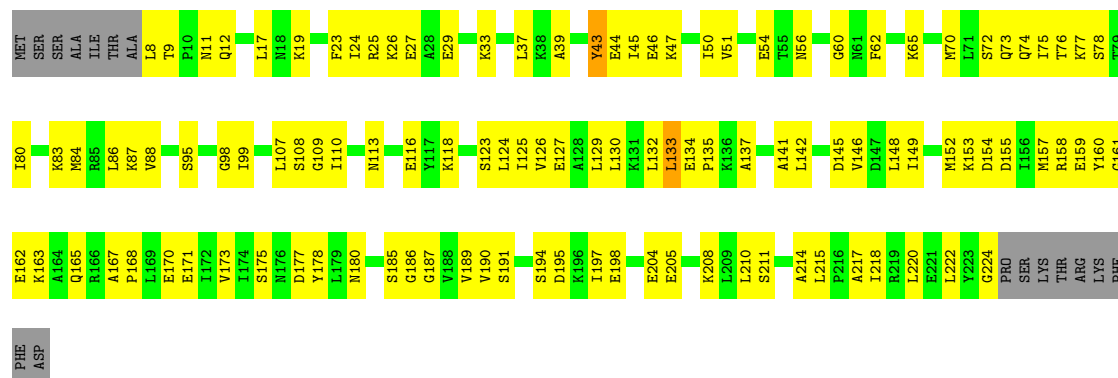


• Molecule 7: V-type proton ATPase subunit E

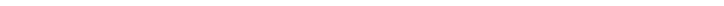


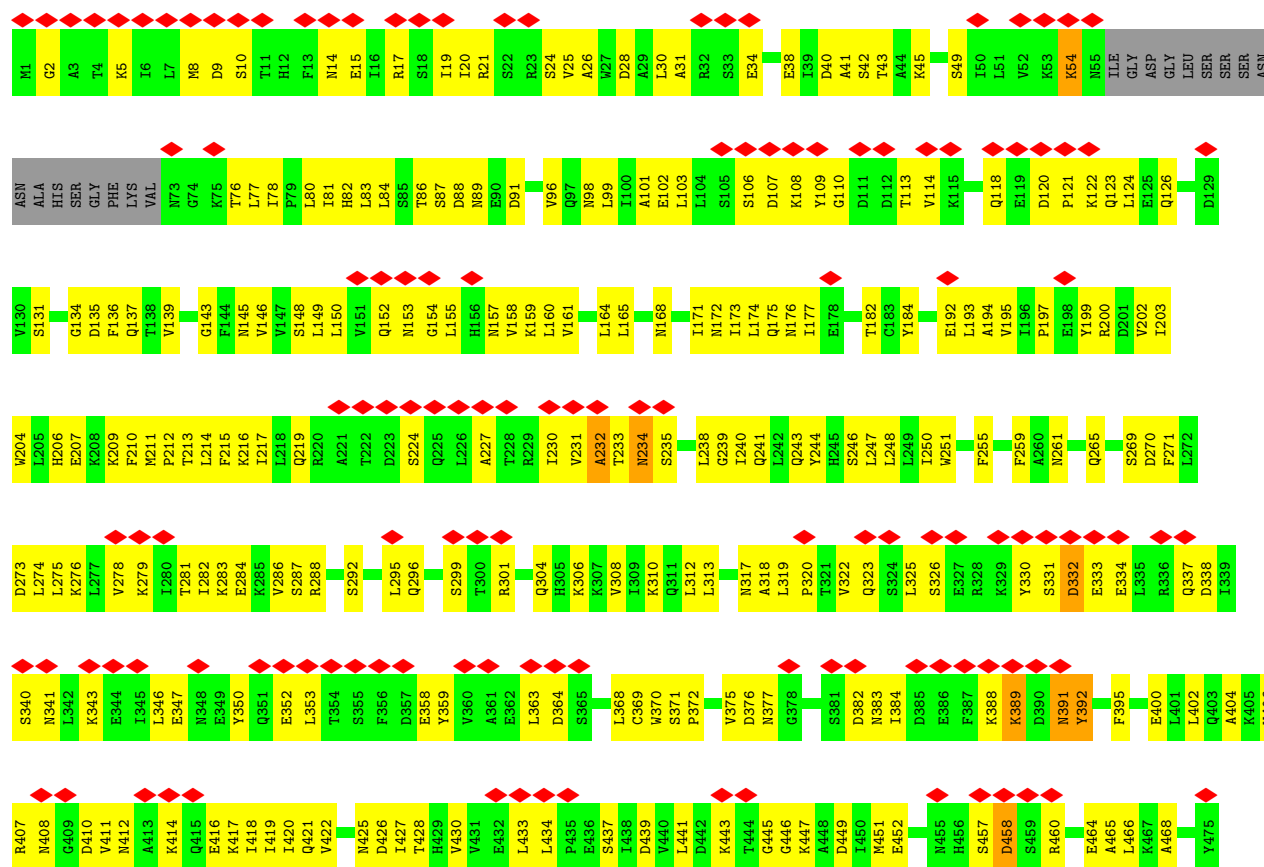
- Molecule 7: V-type proton ATPase subunit E

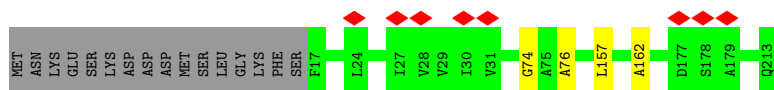
Chain G: 45% 47% • 7%



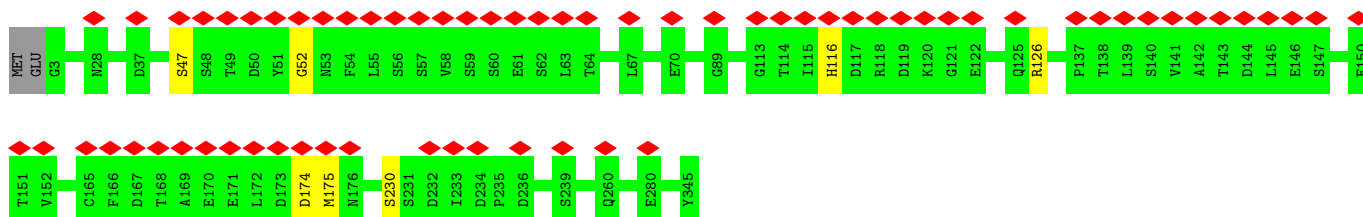
- Molecule 8: V-type proton ATPase subunit H

Chain P:  28% 45% 50% . .

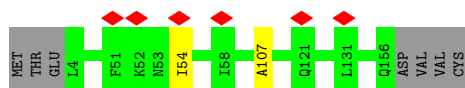




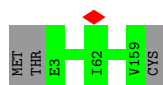
- Molecule 12: V-type proton ATPase subunit d



- Molecule 13: V-type proton ATPase subunit c



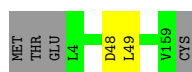
- Molecule 13: V-type proton ATPase subunit c



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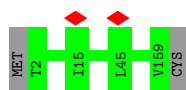


- Molecule 13: V-type proton ATPase subunit c

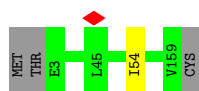


- Molecule 13: V-type proton ATPase subunit c

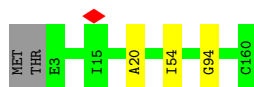




- Molecule 13: V-type proton ATPase subunit c



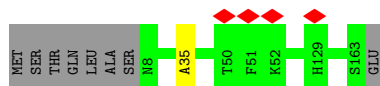
- Molecule 13: V-type proton ATPase subunit c



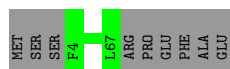
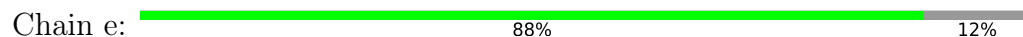
- Molecule 13: V-type proton ATPase subunit c



- Molecule 14: V-type proton ATPase subunit c'



- Molecule 15: V-type proton ATPase subunit e



- Molecule 16: Putative protein YPR170W-B



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	7283	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	35	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.402	Depositor
Minimum map value	-0.100	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.038	Depositor
Recommended contour level	0.12	Depositor
Map size (\AA)	371.2, 371.2, 371.2	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.45, 1.45, 1.45	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	O	2.58	111/1946 (5.7%)	2.79	217/2715 (8.0%)
2	M	2.58	58/1038 (5.6%)	3.03	131/1445 (9.1%)
3	N	2.63	26/570 (4.6%)	2.78	63/794 (7.9%)
4	A	2.53	148/2914 (5.1%)	2.74	288/4048 (7.1%)
4	C	2.55	140/2914 (4.8%)	2.78	285/4048 (7.0%)
4	E	2.51	139/2914 (4.8%)	2.71	254/4048 (6.3%)
5	B	2.45	94/2249 (4.2%)	2.77	233/3126 (7.5%)
5	D	2.52	103/2249 (4.6%)	2.83	243/3126 (7.8%)
5	F	2.56	120/2249 (5.3%)	2.78	211/3126 (6.7%)
6	H	2.47	25/518 (4.8%)	2.71	39/720 (5.4%)
6	J	2.41	22/518 (4.2%)	2.77	49/720 (6.8%)
6	L	2.40	20/518 (3.9%)	2.73	43/720 (6.0%)
7	G	2.49	52/1077 (4.8%)	2.87	130/1502 (8.7%)
7	I	2.57	70/1077 (6.5%)	2.77	104/1502 (6.9%)
7	K	2.49	53/1077 (4.9%)	2.71	99/1502 (6.6%)
8	P	2.60	115/2290 (5.0%)	3.04	306/3195 (9.6%)
9	a	0.21	0/3085	0.58	0/4288
10	b	0.20	0/217	0.47	0/301
11	c	0.24	0/961	0.59	0/1330
12	d	0.21	0/1698	0.54	0/2366
13	g	0.30	0/742	0.64	2/1024 (0.2%)
13	h	0.23	0/762	0.59	0/1052
13	i	0.27	0/762	0.69	2/1052 (0.2%)
13	j	0.23	0/757	0.56	0/1045
13	k	0.23	0/767	0.56	0/1059
13	l	0.24	0/762	0.67	2/1052 (0.2%)
13	m	0.24	0/767	0.65	2/1059 (0.2%)
13	n	0.24	0/767	0.61	0/1059
14	o	0.24	0/757	0.61	0/1045
15	e	0.20	0/318	0.52	0/443
16	f	0.20	0/300	0.58	1/416 (0.2%)
All	All	2.06	1296/39540 (3.3%)	2.31	2704/54928 (4.9%)

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
5	B	0	1

All (1296) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	132	LEU	CA-C	-14.45	1.42	1.52
2	M	140	SER	CA-C	-11.12	1.38	1.52
3	N	26	GLY	CA-C	-10.47	1.41	1.52
4	E	27	ILE	CA-CB	-10.41	1.42	1.54
8	P	304	GLN	CA-CB	10.21	1.68	1.53
7	G	191	SER	CA-C	-9.73	1.40	1.52
1	O	177	ASP	C-N	9.61	1.45	1.33
5	F	462	TRP	CA-C	-9.56	1.39	1.52
4	C	169	SER	CA-C	-9.53	1.43	1.53
5	F	376	LEU	C-N	9.40	1.43	1.34
5	D	476	ILE	CA-C	9.32	1.63	1.52
7	K	131	LYS	CA-C	9.32	1.65	1.52
4	C	507	LEU	C-N	9.30	1.46	1.33
8	P	460	ARG	CA-CB	9.23	1.68	1.53
5	F	267	ALA	N-CA	-9.21	1.35	1.46
5	B	219	LEU	CA-C	-9.18	1.41	1.52
5	F	424	ALA	N-CA	-9.08	1.38	1.46
4	A	48	LEU	CA-C	-9.04	1.41	1.52
8	P	246	SER	CA-CB	9.02	1.67	1.53
7	I	37	LEU	CA-C	-8.92	1.40	1.52
4	C	291	ALA	CA-C	-8.91	1.41	1.52
5	F	188	CYS	N-CA	-8.90	1.35	1.46
1	O	297	VAL	CA-C	-8.89	1.41	1.52
2	M	17	LEU	N-CA	-8.87	1.35	1.46
4	C	142	THR	CA-C	-8.86	1.43	1.52
1	O	324	HIS	CA-C	-8.85	1.41	1.52
4	A	607	MET	CA-C	-8.82	1.41	1.52
4	E	182	ILE	N-CA	-8.78	1.35	1.46
1	O	385	PHE	CA-C	-8.77	1.41	1.52
4	C	329	ARG	C-N	8.73	1.45	1.33
4	C	402	GLY	N-CA	-8.70	1.36	1.45
5	F	278	LEU	CA-C	-8.67	1.42	1.52
4	E	576	ASP	C-N	8.66	1.44	1.33
4	C	408	GLY	CA-C	-8.62	1.44	1.52
1	O	309	LEU	N-CA	-8.60	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	538	CYS	CA-CB	8.59	1.61	1.53
8	P	276	LYS	N-CA	-8.55	1.36	1.46
4	C	177	ARG	CA-C	-8.55	1.42	1.53
5	F	332	ILE	CA-C	-8.54	1.43	1.52
6	J	5	ASN	N-CA	-8.52	1.35	1.46
4	A	231	TYR	C-O	-8.51	1.13	1.24
4	A	442	ASP	CA-C	-8.51	1.42	1.52
8	P	173	ILE	CA-C	8.46	1.63	1.52
5	B	278	LEU	CA-C	-8.45	1.42	1.52
8	P	219	GLN	CA-CB	8.45	1.66	1.53
4	E	58	GLY	CA-C	-8.44	1.42	1.51
4	A	425	ASP	CA-C	-8.39	1.43	1.53
1	O	340	CYS	CA-C	-8.38	1.41	1.52
4	A	64	ASP	CA-C	-8.35	1.43	1.53
4	E	433	GLY	N-CA	-8.35	1.35	1.45
8	P	216	LYS	CA-C	-8.34	1.42	1.52
4	E	266	SER	C-N	8.33	1.45	1.34
1	O	263	SER	CA-C	-8.30	1.42	1.52
5	D	449	TYR	C-N	8.29	1.44	1.33
5	D	170	ILE	CA-C	-8.27	1.46	1.52
3	N	104	GLU	CA-CB	8.27	1.64	1.53
4	A	319	ALA	CA-C	-8.27	1.43	1.52
7	G	43	TYR	CA-CB	8.27	1.66	1.53
4	C	213	HIS	CA-C	-8.26	1.42	1.52
5	F	96	THR	CA-C	-8.25	1.42	1.52
4	C	466	VAL	C-N	8.20	1.44	1.33
5	B	376	LEU	CA-C	-8.17	1.43	1.52
4	E	512	LYS	N-CA	-8.14	1.36	1.46
4	C	252	THR	CA-C	-8.12	1.42	1.52
4	C	450	HIS	CA-C	-8.04	1.42	1.52
7	K	133	LEU	CA-CB	8.03	1.65	1.53
6	L	99	ILE	C-N	8.03	1.44	1.33
4	E	471	TYR	CA-C	-8.00	1.42	1.52
7	K	12	GLN	CA-C	7.98	1.63	1.52
8	P	408	ASN	N-CA	-7.95	1.36	1.46
4	C	272	TYR	CA-C	-7.95	1.41	1.52
5	D	468	TYR	C-N	7.92	1.43	1.33
7	I	204	GLU	N-CA	-7.92	1.36	1.46
7	G	220	LEU	N-CA	-7.92	1.36	1.46
4	E	534	TYR	N-CA	-7.92	1.35	1.46
4	E	412	ILE	N-CA	-7.91	1.36	1.46
5	B	178	LEU	N-CA	-7.90	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	386	ALA	C-N	7.90	1.40	1.33
4	A	555	ASP	CA-CB	7.88	1.65	1.53
4	A	153	SER	C-N	7.87	1.40	1.33
5	D	91	THR	C-N	7.87	1.43	1.33
4	A	68	ALA	N-CA	-7.86	1.36	1.46
5	D	140	ASN	C-O	-7.85	1.20	1.23
5	D	41	LEU	CA-C	-7.84	1.43	1.52
5	F	123	GLY	N-CA	-7.80	1.34	1.44
1	O	381	GLU	C-N	7.79	1.43	1.33
8	P	233	THR	N-CA	7.78	1.54	1.46
7	I	183	LEU	N-CA	7.73	1.56	1.46
5	D	268	TYR	N-CA	-7.73	1.37	1.46
5	D	169	LYS	C-N	7.72	1.39	1.33
7	K	37	LEU	C-N	7.70	1.45	1.33
4	E	189	GLY	N-CA	-7.70	1.37	1.45
5	F	198	LYS	CA-C	-7.70	1.42	1.52
8	P	437	SER	C-N	7.70	1.43	1.33
4	C	201	GLU	C-N	7.69	1.43	1.33
2	M	58	GLY	CA-C	-7.67	1.43	1.52
2	M	66	PHE	C-N	7.65	1.44	1.33
7	I	138	ILE	CA-C	-7.65	1.43	1.52
5	F	477	SER	CA-C	-7.64	1.45	1.53
2	M	96	ALA	CA-C	-7.64	1.43	1.52
4	E	219	VAL	CA-CB	-7.63	1.45	1.54
5	D	30	THR	CA-C	-7.60	1.42	1.53
4	C	41	ILE	CA-C	-7.58	1.43	1.52
4	A	272	TYR	N-CA	-7.58	1.36	1.46
4	A	27	ILE	CA-C	-7.55	1.44	1.53
5	D	469	PRO	CA-C	-7.55	1.45	1.53
6	J	46	TYR	CA-CB	7.54	1.65	1.53
7	G	214	ALA	CA-C	-7.53	1.42	1.52
4	E	412	ILE	CA-CB	-7.53	1.45	1.54
4	A	597	HIS	CA-C	-7.51	1.43	1.52
4	A	160	SER	CA-C	-7.50	1.43	1.52
1	O	326	ASN	C-N	7.49	1.43	1.33
4	C	146	PHE	CA-C	-7.49	1.44	1.52
6	H	24	ALA	N-CA	-7.48	1.36	1.46
4	A	487	GLU	CA-CB	7.47	1.65	1.53
8	P	194	ALA	C-N	7.47	1.43	1.34
5	D	135	ASN	C-N	7.47	1.44	1.33
5	D	245	ALA	CA-C	-7.47	1.42	1.52
8	P	233	THR	CA-C	7.46	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	239	VAL	CA-C	-7.45	1.43	1.52
4	A	136	THR	C-N	7.44	1.44	1.33
4	E	200	VAL	CA-C	-7.44	1.43	1.52
5	D	382	LEU	CA-C	-7.43	1.43	1.52
8	P	54	LYS	CA-CB	7.42	1.66	1.53
4	A	537	PHE	N-CA	-7.40	1.37	1.46
5	F	214	ALA	CA-C	-7.40	1.43	1.52
4	C	473	SER	C-N	7.40	1.44	1.33
5	D	201	HIS	CA-C	-7.39	1.42	1.52
5	B	329	ILE	CA-C	-7.38	1.43	1.52
7	G	187	GLY	CA-C	-7.38	1.42	1.52
2	M	209	LYS	C-O	-7.38	1.15	1.24
7	G	98	GLY	CA-C	-7.38	1.41	1.51
5	D	150	MET	CA-C	-7.37	1.43	1.52
4	C	214	THR	CA-C	-7.36	1.44	1.52
5	B	133	ASP	CA-C	-7.36	1.43	1.52
4	C	331	ALA	C-N	7.35	1.43	1.33
7	I	70	MET	C-N	7.35	1.44	1.33
7	G	130	LEU	C-N	7.35	1.43	1.33
8	P	172	ASN	CA-C	-7.34	1.43	1.52
4	E	170	HIS	CA-C	-7.34	1.43	1.53
5	B	171	PRO	C-N	7.34	1.43	1.33
4	A	95	GLU	C-N	7.33	1.43	1.33
4	E	501	LEU	C-N	7.33	1.43	1.33
4	E	331	ALA	CA-C	7.32	1.62	1.52
5	D	216	GLY	C-N	7.32	1.43	1.33
5	F	335	LEU	CA-C	-7.31	1.43	1.52
4	C	234	LEU	N-CA	-7.30	1.36	1.46
4	A	86	LEU	CA-CB	7.30	1.63	1.53
4	A	197	ILE	C-N	7.29	1.43	1.33
2	M	199	GLU	N-CA	-7.28	1.37	1.46
4	E	415	ALA	N-CA	-7.26	1.36	1.46
4	E	573	SER	CA-CB	7.25	1.64	1.53
4	C	292	GLU	C-N	7.24	1.43	1.33
4	E	152	ILE	N-CA	-7.23	1.38	1.46
5	B	341	ASP	CA-C	7.23	1.61	1.52
2	M	33	LYS	C-N	7.23	1.43	1.33
4	C	189	GLY	CA-C	-7.23	1.44	1.51
7	I	28	ALA	N-CA	-7.23	1.37	1.46
5	D	356	GLY	CA-C	-7.21	1.44	1.52
8	P	383	ASN	C-N	7.20	1.42	1.33
7	I	136	LYS	N-CA	-7.20	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	327	ILE	N-CA	-7.20	1.37	1.46
4	A	389	ALA	N-CA	-7.20	1.37	1.46
8	P	146	VAL	C-N	7.19	1.42	1.33
5	D	215	MET	CA-C	-7.19	1.43	1.52
4	E	549	ALA	CA-C	-7.19	1.43	1.52
6	J	30	ASP	N-CA	-7.17	1.37	1.46
6	J	71	LYS	C-N	7.16	1.44	1.33
8	P	382	ASP	CA-CB	7.14	1.64	1.53
4	A	421	GLY	CA-C	-7.13	1.41	1.51
4	A	191	TYR	CA-C	-7.13	1.43	1.52
4	C	194	ASP	N-CA	-7.13	1.37	1.46
3	N	24	GLY	C-N	7.13	1.39	1.33
7	I	164	ALA	N-CA	-7.13	1.37	1.46
5	B	199	ASP	N-CA	-7.13	1.37	1.46
5	B	172	ILE	CA-C	-7.12	1.43	1.52
7	G	17	LEU	C-N	7.12	1.43	1.33
7	K	190	VAL	CA-C	-7.11	1.44	1.52
4	A	568	SER	C-N	7.11	1.43	1.33
8	P	78	ILE	N-CA	7.11	1.55	1.46
2	M	213	GLU	N-CA	-7.08	1.37	1.46
7	K	154	ASP	N-CA	-7.07	1.38	1.46
5	F	38	LEU	CA-C	-7.07	1.43	1.52
4	C	527	GLN	CA-C	-7.07	1.44	1.52
3	N	25	ILE	N-CA	7.06	1.52	1.46
4	C	231	TYR	C-N	7.06	1.43	1.33
5	F	282	SER	C-N	7.06	1.43	1.33
4	A	459	SER	CA-C	7.05	1.61	1.52
4	A	231	TYR	N-CA	-7.05	1.37	1.45
8	P	78	ILE	CA-C	7.04	1.59	1.52
5	F	63	ARG	CA-C	-7.04	1.44	1.52
5	B	427	ILE	CA-CB	-7.03	1.45	1.54
1	O	68	LEU	CA-C	-7.03	1.43	1.52
4	A	516	ASP	C-N	7.03	1.42	1.33
4	C	615	THR	N-CA	-7.02	1.38	1.46
1	O	39	ILE	C-N	7.02	1.42	1.33
5	B	117	GLY	CA-C	-7.00	1.42	1.51
5	F	285	ALA	CA-C	-6.99	1.43	1.52
4	C	260	CYS	CA-C	-6.99	1.43	1.52
5	F	180	HIS	CA-C	-6.99	1.43	1.52
5	D	463	SER	CA-CB	6.98	1.64	1.53
4	C	587	PHE	N-CA	6.98	1.55	1.46
4	E	127	GLY	CA-C	-6.98	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	J	73	GLU	N-CA	-6.98	1.37	1.46
8	P	392	TYR	N-CA	6.97	1.55	1.46
4	A	164	ASN	N-CA	-6.96	1.37	1.45
5	B	390	GLY	CA-C	-6.96	1.41	1.51
1	O	174	SER	CA-C	-6.96	1.44	1.52
5	B	237	ARG	C-N	6.96	1.43	1.33
5	D	243	ASN	CA-C	-6.96	1.44	1.52
4	C	395	ALA	N-CA	-6.95	1.37	1.45
5	D	332	ILE	CA-C	-6.94	1.45	1.52
4	A	501	LEU	N-CA	-6.94	1.39	1.46
7	G	134	GLU	C-N	6.94	1.39	1.33
4	A	140	GLN	CA-C	-6.93	1.44	1.52
4	C	258	PHE	CA-C	-6.93	1.43	1.52
4	E	95	GLU	CA-C	-6.92	1.44	1.52
6	L	83	ILE	N-CA	-6.92	1.38	1.46
5	F	400	SER	N-CA	-6.91	1.37	1.46
4	C	117	GLU	CA-C	-6.91	1.44	1.52
7	I	72	SER	N-CA	-6.91	1.37	1.46
4	C	491	ASN	C-N	6.90	1.43	1.33
7	I	195	ASP	CA-CB	6.89	1.64	1.53
8	P	25	VAL	CA-CB	6.88	1.61	1.54
2	M	183	ASN	N-CA	-6.88	1.38	1.46
1	O	373	GLN	CA-CB	6.87	1.62	1.52
5	D	186	GLN	N-CA	6.87	1.54	1.46
8	P	227	ALA	N-CA	-6.86	1.40	1.46
4	A	484	ARG	C-N	6.85	1.42	1.33
4	C	81	VAL	CA-CB	6.85	1.62	1.54
5	D	44	VAL	CA-CB	-6.85	1.47	1.54
5	D	402	GLN	C-N	6.84	1.42	1.33
1	O	15	SER	CA-C	-6.83	1.44	1.52
5	B	292	SER	CA-C	-6.82	1.43	1.52
4	A	203	ASP	CA-C	-6.81	1.44	1.53
8	P	168	ASN	C-N	6.79	1.42	1.33
4	A	168	SER	CA-C	-6.79	1.44	1.52
6	L	81	ALA	N-CA	-6.78	1.37	1.46
5	F	297	GLU	C-N	6.77	1.39	1.33
4	A	158	TYR	CA-C	-6.77	1.43	1.52
5	F	159	ASP	C-N	6.76	1.43	1.33
4	A	292	GLU	C-N	6.76	1.42	1.33
5	B	53	VAL	CA-C	-6.76	1.44	1.52
5	D	442	THR	CA-C	-6.75	1.43	1.52
1	O	122	LYS	CA-C	-6.74	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	217	ILE	CA-CB	-6.74	1.46	1.54
5	B	321	ARG	CA-C	-6.74	1.44	1.52
8	P	154	GLY	C-N	6.74	1.42	1.33
8	P	101	ALA	C-N	6.73	1.42	1.33
7	G	78	SER	C-N	6.73	1.43	1.34
5	D	345	PRO	C-N	6.72	1.41	1.33
4	C	558	GLN	CA-CB	6.72	1.63	1.53
4	E	406	ARG	C-N	6.72	1.42	1.33
7	K	144	ARG	C-N	6.71	1.43	1.33
6	H	20	ILE	CA-C	-6.70	1.44	1.52
5	F	215	MET	C-N	6.70	1.41	1.33
5	F	328	SER	C-N	6.70	1.41	1.33
2	M	29	TYR	CA-C	-6.70	1.44	1.52
5	F	255	THR	N-CA	6.70	1.52	1.46
7	G	215	LEU	CA-C	6.70	1.60	1.52
5	D	88	VAL	N-CA	-6.70	1.38	1.46
4	E	231	TYR	CA-CB	6.70	1.64	1.53
5	D	205	GLU	N-CA	-6.69	1.41	1.47
1	O	164	ARG	N-CA	-6.69	1.38	1.46
4	E	591	ARG	N-CA	-6.69	1.38	1.46
5	F	157	ALA	C-O	-6.69	1.16	1.24
7	I	190	VAL	N-CA	-6.69	1.38	1.46
8	P	109	TYR	C-N	6.69	1.40	1.33
7	I	45	ILE	CA-C	-6.68	1.44	1.52
5	F	175	ALA	C-N	6.67	1.43	1.33
4	C	172	ILE	CA-C	-6.67	1.44	1.52
2	M	93	LYS	CA-C	-6.67	1.44	1.53
4	A	378	GLN	CA-C	6.67	1.61	1.53
4	E	352	MET	N-CA	-6.66	1.38	1.46
4	A	118	GLU	N-CA	-6.65	1.38	1.46
5	D	227	GLN	C-N	6.65	1.43	1.33
5	F	401	ASN	CA-CB	6.65	1.63	1.53
7	G	175	SER	N-CA	-6.64	1.38	1.45
5	B	38	LEU	CA-C	-6.64	1.44	1.52
4	C	96	LEU	CA-C	-6.64	1.44	1.52
7	G	177	ASP	N-CA	-6.64	1.38	1.46
7	K	78	SER	CA-C	-6.63	1.44	1.52
6	J	14	GLU	CA-C	-6.63	1.44	1.52
4	A	70	ILE	CA-C	-6.63	1.44	1.52
5	D	252	ARG	CA-C	-6.63	1.44	1.52
6	J	97	ILE	CA-C	-6.63	1.44	1.52
1	O	156	LYS	N-CA	6.62	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	B	221	THR	N-CA	6.62	1.54	1.46
4	E	412	ILE	C-N	6.62	1.42	1.33
4	E	159	GLY	CA-C	-6.61	1.43	1.51
4	C	570	LEU	CA-C	-6.61	1.44	1.52
4	E	334	TYR	N-CA	-6.60	1.38	1.46
4	A	412	ILE	CA-C	-6.60	1.44	1.52
5	F	286	ASP	C-N	6.59	1.42	1.33
5	D	107	ASP	CA-CB	6.59	1.64	1.53
5	F	197	THR	C-O	-6.58	1.16	1.24
8	P	299	SER	C-N	6.58	1.42	1.33
7	G	177	ASP	CA-C	-6.57	1.44	1.52
5	D	341	ASP	CA-C	-6.57	1.44	1.52
5	D	439	PHE	N-CA	-6.57	1.38	1.46
5	D	200	VAL	C-N	6.57	1.43	1.33
4	A	251	THR	C-N	6.56	1.42	1.33
1	O	317	LEU	CA-C	-6.55	1.44	1.52
5	B	355	GLU	CA-C	-6.55	1.44	1.53
5	F	392	THR	N-CA	-6.54	1.37	1.46
7	I	122	GLN	CA-CB	6.54	1.63	1.53
4	A	515	LEU	N-CA	-6.53	1.38	1.46
4	E	353	ILE	CA-C	-6.53	1.44	1.52
5	D	441	LYS	CA-C	-6.53	1.43	1.52
5	B	328	SER	C-N	6.53	1.41	1.33
4	E	417	SER	CA-C	6.53	1.61	1.52
7	I	99	ILE	CA-CB	6.52	1.62	1.54
6	H	65	VAL	N-CA	-6.52	1.39	1.46
2	M	15	LEU	C-N	6.52	1.42	1.33
5	F	56	THR	N-CA	-6.52	1.38	1.46
5	F	131	TYR	CA-C	-6.52	1.44	1.52
5	B	431	LEU	CA-C	-6.52	1.44	1.52
4	E	246	CYS	CA-C	6.52	1.61	1.52
5	F	67	VAL	N-CA	-6.52	1.39	1.46
4	E	29	SER	CA-C	-6.51	1.44	1.52
5	F	370	TYR	CA-C	-6.51	1.46	1.53
1	O	295	ALA	CA-C	6.51	1.61	1.52
4	C	72	VAL	CA-CB	-6.51	1.46	1.53
7	I	44	GLU	CA-CB	6.50	1.63	1.53
8	P	213	THR	C-N	6.50	1.42	1.33
1	O	341	LYS	CA-C	-6.49	1.44	1.52
1	O	153	ASN	C-N	6.49	1.43	1.34
6	L	32	LEU	C-N	6.47	1.42	1.33
3	N	59	GLU	C-N	6.47	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	219	LEU	C-O	-6.47	1.16	1.24
4	C	339	LEU	CA-C	6.47	1.61	1.52
4	E	590	SER	C-N	6.47	1.42	1.33
4	E	395	ALA	C-N	6.47	1.41	1.32
4	E	494	GLU	N-CA	-6.46	1.38	1.46
5	B	183	ILE	CA-CB	-6.46	1.46	1.54
7	I	47	LYS	N-CA	-6.46	1.38	1.46
5	B	275	LEU	C-O	-6.46	1.16	1.24
1	O	102	ILE	CA-CB	-6.45	1.46	1.54
5	D	169	LYS	N-CA	-6.45	1.38	1.46
4	C	295	MET	CA-C	-6.45	1.44	1.52
5	D	165	ALA	N-CA	-6.45	1.37	1.45
4	E	146	PHE	CA-C	-6.42	1.44	1.52
5	B	100	LEU	CA-CB	6.41	1.63	1.53
6	H	52	LYS	CA-CB	6.41	1.63	1.53
7	I	91	ALA	CA-C	-6.41	1.44	1.52
4	A	540	ILE	CA-C	6.41	1.60	1.52
5	D	54	ASN	CA-C	-6.40	1.44	1.52
5	F	275	LEU	CA-C	-6.40	1.44	1.52
4	A	473	SER	CA-CB	6.40	1.64	1.53
7	G	73	GLN	N-CA	-6.40	1.38	1.46
4	E	107	GLY	CA-C	-6.40	1.42	1.51
4	A	326	VAL	C-N	6.40	1.42	1.33
8	P	422	VAL	CA-CB	-6.39	1.47	1.54
4	E	109	GLN	CA-C	-6.39	1.44	1.52
7	I	145	ASP	CA-C	-6.38	1.44	1.52
4	C	525	PHE	CA-C	-6.38	1.45	1.53
7	K	111	ALA	C-N	6.38	1.43	1.33
1	O	361	LYS	CA-C	-6.38	1.44	1.52
5	D	52	ILE	CA-C	-6.37	1.45	1.52
4	E	27	ILE	CA-C	-6.37	1.45	1.52
4	E	70	ILE	C-N	6.37	1.42	1.33
4	E	277	ALA	CA-C	-6.37	1.44	1.52
7	K	66	LEU	CA-C	-6.37	1.44	1.52
4	C	202	PHE	CA-C	-6.36	1.45	1.52
5	F	228	ASP	C-N	6.36	1.42	1.34
4	A	268	SER	N-CA	-6.36	1.38	1.46
5	F	318	ARG	C-N	6.36	1.41	1.33
4	C	227	LEU	CA-C	-6.35	1.44	1.52
5	D	475	ARG	C-N	-6.35	1.26	1.33
4	C	216	PRO	N-CA	-6.34	1.39	1.47
8	P	41	ALA	N-CA	-6.34	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	K	198	GLU	CA-C	-6.34	1.44	1.52
8	P	284	GLU	C-N	6.34	1.42	1.33
1	O	101	PRO	C-O	6.34	1.32	1.24
5	B	450	GLU	CA-C	-6.34	1.44	1.53
7	K	197	ILE	C-O	6.33	1.30	1.24
5	F	46	PHE	N-CA	-6.33	1.37	1.46
5	F	461	ALA	CA-C	-6.33	1.44	1.52
4	C	247	VAL	N-CA	-6.33	1.39	1.46
4	C	391	PHE	C-N	6.33	1.42	1.33
4	C	164	ASN	N-CA	-6.33	1.38	1.45
4	C	280	TYR	CA-C	-6.32	1.45	1.52
5	D	210	ILE	C-O	-6.32	1.17	1.24
4	A	325	PRO	C-N	6.32	1.41	1.34
6	H	72	ALA	CA-C	-6.31	1.43	1.52
4	E	261	GLY	CA-C	-6.31	1.43	1.51
4	C	235	THR	CA-C	6.30	1.60	1.52
7	K	69	ALA	N-CA	-6.30	1.37	1.46
5	D	129	GLU	C-N	6.30	1.41	1.33
8	P	49	SER	C-N	6.30	1.41	1.33
4	E	115	ILE	CA-C	6.29	1.60	1.52
5	F	52	ILE	C-N	6.29	1.43	1.33
5	D	479	LYS	CA-C	-6.29	1.44	1.52
6	L	3	GLN	C-N	6.29	1.42	1.33
5	B	109	LEU	C-N	6.28	1.42	1.33
1	O	292	ALA	C-N	6.28	1.42	1.33
6	L	5	ASN	C-N	6.28	1.41	1.33
4	A	26	ALA	C-N	6.27	1.39	1.33
2	M	173	ILE	CA-C	-6.27	1.44	1.52
5	F	324	GLY	CA-C	-6.27	1.43	1.51
8	P	417	LYS	CA-C	-6.27	1.44	1.52
4	C	491	ASN	CA-C	6.27	1.60	1.52
8	P	452	GLU	C-N	6.27	1.42	1.33
2	M	164	LYS	C-N	6.26	1.41	1.33
5	B	55	LEU	CA-C	-6.26	1.45	1.52
5	D	384	LYS	N-CA	-6.26	1.38	1.46
8	P	96	VAL	CA-C	-6.26	1.45	1.52
6	H	12	GLN	N-CA	-6.25	1.38	1.46
6	H	34	GLN	N-CA	6.25	1.54	1.46
8	P	211	MET	C-O	-6.25	1.18	1.24
7	I	86	LEU	CA-C	-6.25	1.44	1.52
7	K	92	ARG	C-N	6.24	1.43	1.33
2	M	104	VAL	C-N	6.24	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	220	ALA	CA-C	-6.24	1.45	1.53
7	G	47	LYS	CA-C	-6.24	1.44	1.52
4	E	407	THR	C-N	6.23	1.42	1.33
5	F	53	VAL	C-O	6.23	1.30	1.24
4	E	552	SER	CA-C	-6.23	1.44	1.52
5	F	380	SER	N-CA	-6.23	1.38	1.46
4	C	546	MET	N-CA	-6.23	1.38	1.46
7	K	199	ILE	C-N	6.23	1.42	1.33
5	D	270	THR	N-CA	-6.23	1.39	1.46
4	A	304	MET	CA-C	-6.22	1.45	1.52
4	C	595	GLU	CA-C	-6.21	1.45	1.53
6	H	61	ASN	C-N	6.21	1.42	1.33
4	E	339	LEU	C-O	-6.20	1.16	1.24
5	D	344	HIS	CA-C	6.20	1.59	1.53
7	G	23	PHE	CA-C	-6.20	1.44	1.52
7	G	51	VAL	N-CA	-6.20	1.39	1.46
4	A	276	ASP	C-N	6.19	1.42	1.33
1	O	146	ARG	CA-CB	6.19	1.63	1.53
1	O	362	GLY	C-N	6.18	1.41	1.33
5	D	373	ILE	CA-CB	-6.18	1.46	1.54
5	D	389	GLU	C-N	6.17	1.42	1.33
7	K	41	GLN	CA-CB	6.17	1.63	1.53
3	N	59	GLU	CA-C	-6.17	1.43	1.52
8	P	282	ILE	CA-CB	-6.16	1.47	1.54
4	A	559	LYS	C-N	6.16	1.41	1.33
2	M	31	LEU	CA-C	-6.16	1.44	1.52
4	E	80	THR	C-N	6.16	1.41	1.33
3	N	96	SER	CA-C	-6.16	1.44	1.52
1	O	336	ASN	CA-C	-6.15	1.45	1.52
2	M	116	GLU	C-N	6.15	1.42	1.33
4	C	402	GLY	CA-C	-6.15	1.45	1.52
4	C	110	ARG	N-CA	-6.14	1.36	1.45
8	P	428	THR	C-N	6.14	1.41	1.33
2	M	56	LYS	CA-C	-6.14	1.45	1.52
7	G	148	LEU	C-N	6.14	1.41	1.33
4	C	128	ILE	CA-C	-6.14	1.46	1.52
4	C	26	ALA	C-N	6.14	1.40	1.33
4	A	154	GLY	N-CA	-6.13	1.39	1.45
4	A	295	MET	CA-C	6.13	1.60	1.52
7	G	161	GLY	N-CA	6.13	1.53	1.45
4	E	280	TYR	CA-CB	6.13	1.61	1.53
4	C	392	TYR	CA-CB	6.13	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	D	139	ILE	CA-C	-6.13	1.46	1.52
4	A	434	ILE	C-N	6.13	1.41	1.33
8	P	427	ILE	CA-C	6.13	1.60	1.52
1	O	135	SER	N-CA	-6.13	1.39	1.46
4	C	363	ALA	C-N	6.13	1.42	1.33
5	D	408	ALA	N-CA	-6.13	1.39	1.46
6	J	36	LYS	N-CA	-6.12	1.38	1.46
1	O	247	THR	CA-C	-6.12	1.44	1.52
7	G	26	LYS	CA-CB	6.12	1.62	1.53
7	I	62	PHE	CA-CB	6.12	1.63	1.53
8	P	209	LYS	N-CA	-6.12	1.38	1.46
4	A	305	SER	CA-C	-6.12	1.44	1.52
4	C	337	ILE	CA-CB	-6.12	1.46	1.54
7	G	84	MET	CA-C	-6.11	1.45	1.52
4	E	288	ASN	CA-CB	6.11	1.63	1.53
7	I	140	LYS	CA-C	-6.11	1.45	1.52
8	P	312	LEU	CA-C	-6.11	1.45	1.52
2	M	185	ILE	C-N	6.10	1.42	1.33
4	E	113	LYS	CA-C	-6.09	1.44	1.52
5	D	342	ILE	CA-CB	-6.09	1.46	1.54
5	F	459	ASP	C-N	6.09	1.42	1.34
8	P	143	GLY	CA-C	-6.09	1.45	1.52
4	E	305	SER	C-N	6.09	1.40	1.33
5	F	346	ILE	C-N	6.09	1.41	1.34
6	H	88	GLU	C-N	6.08	1.41	1.33
1	O	67	GLU	CA-C	-6.08	1.45	1.52
6	L	57	PHE	CA-CB	6.08	1.62	1.53
6	L	78	GLY	CA-C	-6.08	1.44	1.51
2	M	20	THR	N-CA	-6.08	1.38	1.46
6	H	89	LYS	N-CA	-6.08	1.39	1.46
5	F	355	GLU	CA-C	-6.08	1.47	1.53
1	O	357	MET	CA-CB	6.08	1.61	1.53
1	O	258	ARG	CA-C	-6.07	1.45	1.52
4	E	314	ARG	C-N	6.07	1.42	1.33
5	F	327	GLY	N-CA	-6.07	1.39	1.45
4	C	481	LEU	C-N	6.07	1.42	1.34
8	P	146	VAL	CA-CB	-6.07	1.46	1.54
8	P	54	LYS	CA-C	-6.06	1.44	1.52
4	A	394	ARG	CA-CB	6.06	1.63	1.53
4	E	29	SER	C-N	6.06	1.41	1.33
4	C	181	THR	C-N	6.06	1.41	1.33
7	K	194	SER	C-N	6.06	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	113	THR	C-N	6.06	1.41	1.33
5	F	34	VAL	CA-C	-6.06	1.45	1.52
4	C	304	MET	C-N	6.06	1.42	1.33
7	I	190	VAL	CA-C	-6.06	1.45	1.52
1	O	81	LYS	CA-CB	6.06	1.62	1.53
4	E	169	SER	CA-CB	6.06	1.63	1.53
1	O	73	ASN	CA-C	-6.05	1.45	1.52
5	D	249	THR	C-N	-6.05	1.26	1.33
8	P	10	SER	N-CA	-6.05	1.38	1.46
7	K	54	GLU	C-O	-6.05	1.16	1.24
1	O	177	ASP	CA-CB	6.05	1.63	1.53
4	C	536	ALA	N-CA	-6.05	1.37	1.46
1	O	237	HIS	N-CA	-6.04	1.38	1.46
2	M	95	ARG	CA-C	-6.04	1.45	1.52
5	D	112	ILE	N-CA	-6.04	1.39	1.46
8	P	159	LYS	N-CA	-6.04	1.39	1.46
3	N	51	THR	N-CA	-6.04	1.39	1.46
5	B	171	PRO	CA-C	-6.04	1.43	1.52
4	C	87	ARG	N-CA	-6.04	1.38	1.46
3	N	10	VAL	C-O	-6.03	1.18	1.24
4	A	156	ASP	CA-CB	6.03	1.63	1.53
5	D	116	SER	CA-CB	6.03	1.62	1.53
4	A	145	LYS	CA-CB	6.02	1.62	1.53
4	C	64	ASP	CA-CB	6.02	1.63	1.53
4	E	571	ALA	CA-C	-6.02	1.45	1.52
2	M	123	THR	C-N	6.01	1.42	1.33
4	E	504	LYS	CA-CB	6.01	1.63	1.53
4	C	189	GLY	N-CA	-6.01	1.39	1.45
7	G	23	PHE	N-CA	6.01	1.53	1.46
1	O	358	LYS	CA-C	-6.01	1.45	1.52
4	A	280	TYR	N-CA	-6.01	1.38	1.46
4	C	107	GLY	C-N	6.01	1.40	1.34
5	D	201	HIS	N-CA	-6.01	1.38	1.46
8	P	25	VAL	C-N	6.01	1.43	1.33
5	F	295	ARG	CA-CB	6.01	1.63	1.53
1	O	62	ILE	N-CA	-6.01	1.39	1.46
7	I	221	GLU	C-N	6.01	1.42	1.33
8	P	375	VAL	CA-CB	-6.00	1.46	1.54
5	D	389	GLU	N-CA	-6.00	1.39	1.46
7	K	104	LYS	N-CA	-6.00	1.38	1.46
5	F	277	ILE	CA-CB	6.00	1.61	1.54
7	G	88	VAL	N-CA	6.00	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	204	GLU	C-N	6.00	1.41	1.33
5	F	223	ARG	CA-C	-6.00	1.45	1.52
5	F	268	TYR	CA-C	-6.00	1.45	1.52
5	B	397	GLY	CA-C	-6.00	1.45	1.52
4	A	544	PHE	C-O	-5.99	1.17	1.24
3	N	61	ARG	CA-C	-5.99	1.45	1.52
4	E	422	ASP	C-N	5.99	1.41	1.33
4	E	493	GLU	N-CA	-5.99	1.39	1.46
4	C	264	VAL	N-CA	-5.99	1.39	1.46
5	D	257	ARG	CA-CB	5.99	1.62	1.53
7	I	74	GLN	C-N	5.99	1.41	1.33
3	N	15	ASP	C-N	5.99	1.41	1.33
7	I	125	ILE	CA-C	-5.98	1.45	1.52
4	A	422	ASP	C-N	5.98	1.42	1.33
5	F	400	SER	CA-C	-5.98	1.44	1.52
1	O	326	ASN	CA-C	-5.98	1.45	1.52
4	E	274	ASN	CA-CB	5.98	1.61	1.53
5	D	104	VAL	CA-CB	-5.98	1.47	1.54
7	I	43	TYR	CA-C	-5.98	1.45	1.52
7	I	209	LEU	CA-C	5.98	1.60	1.52
5	F	458	LEU	N-CA	-5.97	1.39	1.46
5	B	436	LEU	C-N	5.97	1.42	1.33
7	K	189	VAL	CA-C	-5.97	1.45	1.52
4	C	121	SER	CA-C	-5.97	1.45	1.52
8	P	457	SER	C-N	5.97	1.42	1.33
5	F	193	LEU	C-N	5.96	1.41	1.33
8	P	43	THR	N-CA	5.96	1.53	1.46
1	O	78	SER	CA-C	-5.96	1.45	1.52
2	M	51	ASP	CA-C	-5.96	1.45	1.52
8	P	341	ASN	C-N	5.96	1.41	1.33
2	M	11	THR	N-CA	-5.95	1.38	1.46
8	P	426	ASP	N-CA	-5.95	1.39	1.46
5	B	408	ALA	N-CA	-5.95	1.39	1.46
5	D	273	HIS	CA-C	-5.95	1.45	1.52
5	F	398	ASP	C-N	5.95	1.41	1.33
5	D	106	GLU	CA-C	-5.95	1.45	1.52
2	M	35	LYS	CA-CB	5.95	1.62	1.53
4	E	207	SER	CA-CB	5.95	1.63	1.53
6	L	20	ILE	CA-C	5.95	1.60	1.52
4	A	265	ILE	C-N	5.94	1.42	1.33
4	C	585	LYS	CA-C	-5.94	1.44	1.52
2	M	89	THR	N-CA	-5.94	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	528	GLN	N-CA	-5.94	1.38	1.46
7	G	218	ILE	CA-CB	-5.94	1.46	1.54
4	A	72	VAL	CA-CB	-5.93	1.47	1.54
1	O	156	LYS	C-N	5.93	1.41	1.33
7	K	106	LYS	N-CA	-5.93	1.39	1.46
4	E	360	TRP	N-CA	-5.93	1.39	1.46
1	O	144	ASP	CA-CB	5.93	1.62	1.53
4	A	528	GLN	CA-C	-5.92	1.46	1.52
4	A	510	SER	CA-C	-5.92	1.45	1.52
4	E	436	GLN	C-N	5.92	1.42	1.33
4	C	350	VAL	CA-C	-5.92	1.45	1.52
5	D	451	ASP	C-N	5.92	1.41	1.33
4	E	293	VAL	CA-CB	-5.92	1.46	1.54
4	C	220	PRO	CA-C	-5.92	1.45	1.52
5	B	141	PRO	CA-CB	5.91	1.60	1.54
4	A	415	ALA	N-CA	-5.91	1.38	1.46
4	C	211	LEU	CA-C	-5.91	1.45	1.52
5	F	200	VAL	C-N	5.91	1.42	1.33
5	B	175	ALA	CA-C	5.91	1.60	1.52
7	K	43	TYR	CA-CB	5.91	1.62	1.53
4	C	552	SER	C-N	5.90	1.41	1.33
1	O	49	LYS	N-CA	-5.90	1.38	1.46
4	C	608	GLN	N-CA	-5.90	1.39	1.46
2	M	121	ARG	C-N	5.90	1.43	1.33
4	A	74	GLU	C-N	5.90	1.41	1.33
7	I	47	LYS	CA-CB	5.89	1.62	1.53
4	A	552	SER	CA-CB	5.89	1.62	1.53
5	F	158	ILE	N-CA	-5.89	1.39	1.46
4	A	196	LYS	C-N	5.89	1.41	1.33
4	E	266	SER	N-CA	-5.89	1.39	1.46
4	C	103	THR	CA-C	-5.89	1.45	1.52
1	O	217	VAL	CA-C	-5.88	1.45	1.52
4	A	528	GLN	C-N	5.88	1.41	1.33
5	D	290	GLU	C-N	5.88	1.41	1.33
6	J	40	ALA	CA-C	5.88	1.60	1.52
4	E	569	LYS	C-N	5.88	1.41	1.33
2	M	92	PHE	CA-CB	5.88	1.60	1.53
5	F	223	ARG	CA-CB	5.88	1.62	1.53
4	E	31	SER	C-N	5.87	1.42	1.33
5	D	99	SER	CA-C	5.87	1.60	1.52
4	C	137	ILE	CA-CB	-5.87	1.46	1.54
4	E	298	PRO	C-N	5.86	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	M	175	HIS	CA-C	-5.86	1.45	1.52
5	B	129	GLU	N-CA	-5.86	1.39	1.46
4	C	332	SER	CA-C	-5.86	1.45	1.52
7	G	167	ALA	N-CA	-5.86	1.37	1.46
5	B	275	LEU	CA-C	-5.86	1.45	1.52
4	C	161	VAL	CA-C	-5.86	1.45	1.52
2	M	101	VAL	CA-C	-5.85	1.45	1.52
5	D	185	ALA	CA-C	-5.85	1.45	1.52
1	O	319	TYR	CA-C	-5.85	1.44	1.52
7	G	190	VAL	CA-C	-5.85	1.45	1.52
4	A	563	ASN	CA-C	5.85	1.60	1.52
7	G	51	VAL	C-O	-5.85	1.17	1.24
4	C	135	ARG	CA-CB	5.84	1.63	1.54
5	D	395	ASP	CA-C	-5.84	1.44	1.52
4	A	179	ARG	C-N	5.84	1.41	1.32
4	A	605	SER	C-N	5.84	1.41	1.33
1	O	145	VAL	C-N	5.83	1.41	1.33
5	F	128	ALA	N-CA	-5.83	1.38	1.45
4	A	505	SER	CA-C	-5.83	1.43	1.52
5	B	416	MET	C-N	5.83	1.41	1.33
4	E	353	ILE	N-CA	-5.82	1.39	1.46
7	I	212	GLU	CA-C	5.82	1.60	1.52
8	P	15	GLU	CA-CB	5.82	1.62	1.53
4	E	211	LEU	N-CA	-5.82	1.39	1.46
5	B	483	GLU	C-N	5.82	1.41	1.33
4	E	296	GLU	CA-CB	5.82	1.62	1.53
4	A	473	SER	C-N	5.81	1.42	1.33
5	F	325	ARG	CA-C	5.81	1.61	1.53
2	M	143	VAL	CA-C	-5.81	1.45	1.52
4	A	296	GLU	CA-C	-5.81	1.45	1.52
6	J	47	LYS	CA-CB	5.80	1.62	1.53
6	L	14	GLU	CA-CB	5.80	1.62	1.53
7	G	171	GLU	CA-C	-5.80	1.45	1.52
5	F	318	ARG	N-CA	-5.80	1.39	1.46
4	C	540	ILE	CA-CB	-5.80	1.47	1.54
4	E	39	ASN	C-N	5.80	1.42	1.33
5	B	175	ALA	N-CA	-5.80	1.38	1.45
8	P	134	GLY	C-N	5.80	1.41	1.33
5	D	102	ILE	CA-CB	-5.79	1.47	1.54
2	M	75	THR	N-CA	-5.79	1.38	1.46
5	F	281	MET	CA-CB	5.79	1.63	1.53
5	D	244	LEU	CA-C	-5.79	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	117	GLN	CA-C	-5.79	1.44	1.53
4	A	115	ILE	C-N	5.79	1.41	1.33
4	C	390	SER	N-CA	-5.79	1.39	1.46
4	E	258	PHE	C-N	5.78	1.40	1.33
4	E	610	ARG	C-N	5.78	1.42	1.34
8	P	204	TRP	C-O	-5.78	1.16	1.24
7	K	121	LEU	N-CA	-5.78	1.39	1.46
7	I	57	ASN	N-CA	-5.78	1.39	1.46
4	E	366	GLU	N-CA	-5.77	1.39	1.46
4	A	226	LYS	CA-C	-5.77	1.45	1.52
5	B	161	MET	CA-C	-5.77	1.45	1.52
8	P	26	ALA	CA-C	-5.77	1.45	1.53
7	G	95	SER	C-N	5.77	1.41	1.33
5	B	432	SER	C-N	5.77	1.41	1.33
6	J	41	LYS	CA-C	-5.76	1.44	1.52
2	M	29	TYR	CA-CB	5.76	1.62	1.53
4	E	376	ALA	C-N	5.76	1.41	1.33
4	C	265	ILE	N-CA	-5.76	1.38	1.46
8	P	82	HIS	C-O	-5.76	1.17	1.24
6	J	12	GLN	CA-C	5.75	1.60	1.52
5	F	145	ILE	C-N	5.75	1.41	1.33
2	M	200	PHE	CA-C	-5.75	1.45	1.52
5	F	115	GLY	C-N	5.75	1.43	1.33
7	I	16	GLU	CA-C	-5.75	1.44	1.52
2	M	214	THR	N-CA	-5.75	1.39	1.46
5	F	383	MET	C-N	5.75	1.41	1.33
8	P	317	ASN	C-N	5.75	1.41	1.33
4	E	371	LEU	C-N	5.74	1.40	1.33
1	O	281	GLU	CA-CB	5.73	1.62	1.53
3	N	25	ILE	CA-CB	-5.73	1.47	1.55
5	F	131	TYR	N-CA	-5.73	1.39	1.46
4	A	302	THR	C-N	5.73	1.41	1.33
8	P	40	ASP	C-N	5.73	1.41	1.33
7	G	65	LYS	C-N	5.73	1.41	1.33
7	G	153	LYS	C-N	5.73	1.41	1.33
7	K	200	ASN	CA-CB	5.73	1.60	1.52
4	A	230	ASP	C-N	5.72	1.43	1.33
5	F	258	LEU	C-N	5.72	1.41	1.33
4	C	280	TYR	C-N	5.72	1.40	1.33
4	E	177	ARG	N-CA	-5.72	1.38	1.46
1	O	32	SER	C-N	5.71	1.41	1.33
5	B	268	TYR	CA-CB	5.71	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	383	TYR	C-N	5.71	1.41	1.33
1	O	310	ARG	CA-C	-5.71	1.45	1.52
4	C	106	ASP	CA-CB	5.71	1.62	1.53
1	O	373	GLN	C-N	5.70	1.41	1.33
4	E	146	PHE	CA-CB	5.70	1.61	1.53
4	E	337	ILE	N-CA	-5.70	1.39	1.46
8	P	295	LEU	CA-C	-5.70	1.45	1.52
5	F	126	VAL	CA-C	-5.70	1.46	1.52
4	A	141	PHE	CA-C	-5.70	1.45	1.52
4	C	318	VAL	CA-C	-5.69	1.45	1.52
4	C	185	ILE	N-CA	-5.69	1.39	1.46
1	O	165	LYS	C-N	5.69	1.41	1.33
4	C	36	ILE	C-N	5.69	1.42	1.33
1	O	124	ASP	CA-CB	5.69	1.62	1.53
2	M	192	LEU	N-CA	-5.68	1.39	1.46
5	F	452	ARG	C-N	5.68	1.41	1.33
4	A	323	ASN	CA-C	-5.68	1.45	1.52
7	K	131	LYS	C-N	5.67	1.41	1.33
6	H	102	VAL	C-N	5.67	1.40	1.34
4	E	169	SER	N-CA	-5.67	1.38	1.46
4	E	93	SER	C-N	5.67	1.41	1.33
4	E	106	ASP	C-N	5.67	1.41	1.34
5	B	31	VAL	N-CA	-5.67	1.39	1.46
7	I	79	THR	C-N	5.66	1.41	1.33
4	C	234	LEU	CA-CB	5.66	1.61	1.53
7	K	19	LYS	CA-CB	5.66	1.62	1.53
8	P	283	LYS	CA-C	5.66	1.59	1.52
4	C	528	GLN	CA-CB	5.66	1.63	1.53
5	D	417	LYS	CA-CB	5.65	1.62	1.53
7	I	189	VAL	CA-C	-5.65	1.45	1.52
2	M	85	GLU	CA-CB	5.65	1.62	1.53
4	A	195	GLU	CA-CB	5.65	1.62	1.53
1	O	240	LYS	CA-CB	5.65	1.62	1.53
4	E	92	LEU	CA-CB	5.64	1.60	1.53
4	A	370	ARG	N-CA	-5.64	1.39	1.46
4	C	253	CYS	N-CA	5.64	1.52	1.46
4	A	519	THR	CA-C	-5.64	1.45	1.52
4	E	200	VAL	N-CA	-5.64	1.39	1.46
8	P	244	TYR	N-CA	-5.64	1.39	1.46
5	F	265	TYR	CA-C	5.63	1.59	1.52
6	L	28	ARG	N-CA	-5.63	1.39	1.46
4	C	399	VAL	C-N	5.63	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	569	LYS	N-CA	-5.63	1.39	1.46
4	E	341	GLU	N-CA	-5.62	1.39	1.46
4	A	62	ARG	CA-C	-5.62	1.45	1.52
6	L	25	ARG	C-N	5.62	1.41	1.33
5	F	87	ASP	CA-C	-5.62	1.45	1.52
5	F	240	LEU	CA-C	-5.62	1.45	1.52
8	P	234	ASN	N-CA	5.62	1.53	1.46
4	A	604	LEU	C-N	5.61	1.41	1.33
5	B	288	LEU	N-CA	-5.61	1.39	1.46
8	P	153	ASN	C-N	5.61	1.41	1.33
3	N	114	LYS	C-N	5.61	1.41	1.33
5	F	266	LEU	C-N	5.61	1.41	1.33
7	I	15	ASP	CA-C	-5.61	1.45	1.52
2	M	200	PHE	N-CA	-5.61	1.39	1.46
7	I	205	GLU	CA-C	-5.61	1.45	1.52
5	D	310	THR	C-O	-5.60	1.17	1.24
5	F	163	SER	CA-CB	5.60	1.62	1.53
5	F	353	ILE	CA-CB	-5.60	1.46	1.54
2	M	121	ARG	N-CA	-5.60	1.39	1.46
4	C	355	ASP	N-CA	-5.60	1.40	1.46
4	A	59	GLU	CA-C	-5.59	1.45	1.52
4	A	354	ALA	N-CA	-5.59	1.39	1.46
8	P	288	ARG	N-CA	-5.59	1.39	1.46
7	I	62	PHE	CA-C	-5.59	1.45	1.52
4	E	215	TRP	CA-CB	5.59	1.63	1.53
5	F	322	VAL	C-N	5.59	1.40	1.33
7	G	77	LYS	CA-CB	5.59	1.62	1.53
5	F	98	GLU	CA-C	-5.58	1.46	1.52
5	D	345	PRO	N-CA	-5.58	1.40	1.47
1	O	106	PRO	CA-C	5.58	1.60	1.52
5	D	475	ARG	N-CA	-5.58	1.40	1.46
5	D	431	LEU	CA-CB	5.58	1.62	1.53
1	O	39	ILE	CA-C	-5.58	1.45	1.52
4	E	478	PHE	N-CA	-5.58	1.40	1.46
5	F	354	THR	CA-C	-5.58	1.45	1.52
5	F	212	PHE	N-CA	-5.58	1.39	1.46
4	E	589	PRO	N-CA	-5.58	1.40	1.47
7	I	145	ASP	C-N	5.58	1.41	1.33
4	A	376	ALA	N-CA	-5.57	1.39	1.46
4	A	296	GLU	N-CA	-5.57	1.39	1.46
3	N	74	ALA	C-N	5.57	1.41	1.33
4	E	153	SER	CA-C	-5.57	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	F	138	PRO	CA-CB	5.56	1.63	1.53
5	B	335	LEU	CA-C	-5.56	1.46	1.52
6	H	98	LEU	N-CA	-5.56	1.39	1.46
4	A	221	ARG	CA-C	5.56	1.59	1.52
4	E	545	ASP	CA-C	5.56	1.60	1.52
7	G	47	LYS	N-CA	-5.56	1.39	1.46
1	O	267	ILE	C-N	5.55	1.41	1.33
8	P	88	ASP	C-N	5.55	1.41	1.33
1	O	61	LEU	C-N	5.55	1.40	1.33
5	D	95	PHE	C-N	5.55	1.41	1.33
4	C	29	SER	CA-C	-5.55	1.45	1.52
4	E	317	LEU	CA-C	-5.55	1.46	1.52
6	H	76	VAL	N-CA	-5.55	1.39	1.46
5	B	357	GLN	N-CA	-5.55	1.39	1.46
2	M	191	GLU	C-N	5.54	1.41	1.33
2	M	11	THR	C-N	5.54	1.41	1.33
5	B	322	VAL	C-O	-5.54	1.17	1.24
5	B	374	ASN	CA-CB	5.54	1.62	1.53
7	I	12	GLN	C-N	5.54	1.40	1.33
7	I	85	ARG	C-N	5.54	1.41	1.33
7	I	108	SER	C-N	5.54	1.40	1.33
7	K	87	LYS	N-CA	5.54	1.53	1.46
4	A	297	PHE	CA-CB	5.53	1.60	1.53
4	C	483	ASP	CA-C	-5.53	1.45	1.52
6	J	61	ASN	CA-CB	5.53	1.62	1.53
5	D	375	VAL	CA-CB	-5.53	1.47	1.54
6	J	53	GLU	CA-C	-5.53	1.45	1.52
6	L	70	LYS	N-CA	5.53	1.53	1.46
4	A	166	LEU	CA-C	-5.53	1.45	1.52
5	F	407	TYR	C-N	5.53	1.41	1.33
5	B	253	ILE	CA-CB	-5.53	1.46	1.54
5	D	333	PRO	C-N	5.53	1.40	1.33
4	E	561	VAL	C-N	5.52	1.41	1.34
6	H	19	GLU	CA-CB	5.52	1.62	1.53
1	O	14	ILE	CA-C	-5.52	1.46	1.52
4	A	364	LEU	C-N	5.52	1.41	1.33
4	A	323	ASN	N-CA	-5.52	1.38	1.46
8	P	231	VAL	CA-C	-5.52	1.45	1.52
4	E	133	LEU	N-CA	-5.52	1.39	1.45
4	A	48	LEU	CA-CB	5.51	1.61	1.53
8	P	439	ASP	N-CA	-5.51	1.39	1.46
7	K	173	VAL	C-N	5.51	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	54	GLU	CA-C	5.51	1.60	1.52
7	K	158	ARG	C-O	-5.51	1.17	1.24
2	M	22	LEU	CA-C	-5.51	1.45	1.52
6	H	12	GLN	CA-CB	5.51	1.61	1.53
5	F	145	ILE	N-CA	-5.50	1.39	1.46
7	I	143	GLU	CA-CB	5.50	1.62	1.53
4	C	459	SER	CA-C	-5.50	1.45	1.52
5	D	157	ALA	C-N	5.50	1.41	1.33
4	A	129	ASP	N-CA	-5.50	1.39	1.46
4	C	493	GLU	N-CA	-5.50	1.39	1.46
5	F	461	ALA	N-CA	-5.50	1.39	1.46
4	A	610	ARG	CA-C	-5.50	1.45	1.52
8	P	210	PHE	N-CA	5.50	1.53	1.46
4	A	172	ILE	CA-CB	-5.49	1.47	1.54
6	J	57	PHE	C-N	5.49	1.41	1.33
4	E	102	GLU	C-N	5.49	1.40	1.33
4	E	470	PHE	CA-CB	5.49	1.61	1.53
5	F	124	PRO	CA-CB	-5.49	1.46	1.53
5	F	240	LEU	N-CA	-5.49	1.39	1.46
6	H	100	GLU	CA-C	-5.49	1.45	1.52
4	C	358	SER	N-CA	-5.48	1.39	1.46
7	I	171	GLU	N-CA	5.48	1.52	1.45
1	O	329	ILE	CA-CB	-5.48	1.47	1.54
4	C	470	PHE	CA-C	-5.48	1.45	1.52
5	D	253	ILE	CA-CB	-5.48	1.46	1.54
7	I	101	GLU	CA-CB	5.48	1.61	1.53
1	O	203	LYS	CA-CB	5.47	1.61	1.53
4	A	350	VAL	C-N	5.47	1.41	1.33
7	K	137	ALA	N-CA	-5.47	1.39	1.46
4	C	460	TYR	CA-C	-5.47	1.45	1.52
4	C	500	GLN	CA-C	-5.47	1.46	1.52
8	P	193	LEU	CA-C	5.47	1.59	1.52
4	E	396	GLY	CA-C	5.47	1.57	1.51
5	F	196	PRO	C-N	5.47	1.41	1.33
1	O	241	LYS	CA-CB	5.47	1.61	1.53
4	E	320	ASN	CA-C	-5.46	1.46	1.52
4	A	411	SER	C-N	5.46	1.40	1.33
5	B	458	LEU	CA-CB	5.46	1.62	1.53
5	F	62	VAL	CA-CB	-5.46	1.47	1.54
7	K	212	GLU	CA-CB	5.46	1.61	1.53
5	B	448	ALA	CA-CB	5.46	1.62	1.53
6	H	52	LYS	N-CA	-5.46	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	B	219	LEU	CA-CB	5.45	1.61	1.53
4	E	244	PHE	CA-C	-5.45	1.45	1.52
1	O	197	ALA	N-CA	-5.45	1.39	1.46
4	C	210	THR	C-N	5.45	1.41	1.33
4	C	606	THR	CA-C	-5.45	1.45	1.52
2	M	182	GLU	CA-CB	5.44	1.61	1.53
8	P	182	THR	N-CA	5.44	1.52	1.46
4	A	286	ARG	CA-CB	5.44	1.61	1.53
2	M	168	ARG	CA-CB	5.44	1.61	1.53
4	E	158	TYR	C-N	5.44	1.38	1.33
5	F	293	ALA	CA-CB	5.44	1.62	1.53
5	B	357	GLN	C-N	5.43	1.40	1.33
4	E	279	ILE	C-N	5.43	1.41	1.33
4	E	527	GLN	CA-C	-5.43	1.46	1.52
5	D	42	GLU	C-N	5.43	1.40	1.33
4	E	271	LYS	CA-CB	5.43	1.61	1.53
1	O	138	SER	CA-C	-5.43	1.45	1.52
5	B	287	ALA	C-N	5.43	1.41	1.33
7	I	78	SER	CA-CB	5.43	1.62	1.53
4	E	107	GLY	C-N	5.42	1.41	1.34
4	E	435	THR	CA-C	-5.42	1.45	1.52
4	A	298	PRO	CA-CB	-5.42	1.45	1.53
4	E	463	TYR	C-N	5.42	1.41	1.33
5	D	155	VAL	CA-C	-5.42	1.46	1.52
6	J	16	GLU	C-N	5.42	1.40	1.33
1	O	237	HIS	C-N	5.42	1.40	1.33
2	M	205	LYS	N-CA	5.41	1.52	1.46
7	K	215	LEU	C-O	5.41	1.29	1.24
1	O	366	LYS	N-CA	-5.41	1.38	1.45
2	M	30	SER	CA-CB	5.41	1.61	1.53
3	N	59	GLU	N-CA	-5.41	1.38	1.46
2	M	198	GLU	C-O	-5.41	1.17	1.24
5	F	199	ASP	C-N	5.41	1.40	1.33
5	D	271	GLU	CA-C	-5.41	1.45	1.52
5	B	195	ARG	C-N	5.40	1.40	1.33
6	H	11	LEU	CA-CB	5.40	1.61	1.53
1	O	143	ALA	CA-CB	5.40	1.61	1.53
2	M	21	LYS	CA-C	-5.40	1.45	1.52
8	P	155	LEU	CA-C	-5.40	1.46	1.52
5	F	173	PHE	CA-CB	5.40	1.60	1.53
5	F	374	ASN	CA-C	-5.40	1.46	1.52
6	J	50	LYS	CA-CB	5.40	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	359	ASP	CA-C	-5.39	1.46	1.52
4	C	590	SER	N-CA	5.39	1.51	1.46
7	I	201	ASN	CA-CB	5.39	1.60	1.53
5	B	356	GLY	C-N	5.39	1.40	1.33
8	P	283	LYS	C-N	5.39	1.41	1.33
4	E	359	ARG	CA-C	-5.39	1.45	1.52
5	B	186	GLN	C-N	5.39	1.40	1.33
7	I	78	SER	C-N	5.39	1.41	1.34
8	P	292	SER	CA-C	-5.39	1.46	1.52
5	D	337	MET	CA-C	-5.39	1.47	1.52
6	L	95	VAL	N-CA	5.38	1.52	1.46
7	K	200	ASN	N-CA	5.38	1.53	1.46
1	O	330	ILE	CA-C	-5.38	1.45	1.52
5	B	367	LYS	N-CA	-5.38	1.39	1.46
7	K	50	ILE	CA-CB	-5.38	1.48	1.54
8	P	110	GLY	C-N	5.38	1.41	1.33
6	H	84	LYS	N-CA	-5.38	1.39	1.46
1	O	142	ASP	CA-CB	5.38	1.61	1.53
2	M	32	LEU	C-N	5.38	1.41	1.33
3	N	73	ILE	N-CA	-5.38	1.40	1.46
5	F	57	LEU	CA-C	-5.38	1.45	1.52
5	F	70	ILE	CA-C	5.37	1.59	1.52
5	F	174	SER	CA-C	-5.37	1.45	1.52
4	A	608	GLN	CA-CB	5.37	1.61	1.53
7	I	182	ASP	CA-CB	5.37	1.63	1.53
1	O	92	THR	CA-C	-5.37	1.46	1.52
5	B	146	TYR	CA-CB	5.37	1.61	1.53
4	C	104	ILE	CA-C	-5.37	1.46	1.52
5	B	157	ALA	C-N	5.37	1.40	1.33
8	P	232	ALA	N-CA	-5.37	1.39	1.46
5	B	362	ARG	C-N	5.37	1.41	1.33
4	C	520	LEU	C-N	5.37	1.40	1.33
5	F	318	ARG	CA-CB	5.36	1.60	1.52
8	P	168	ASN	CA-CB	5.36	1.61	1.53
5	F	441	LYS	N-CA	-5.36	1.39	1.46
5	D	186	GLN	CA-CB	5.36	1.61	1.53
7	I	194	SER	C-N	5.36	1.40	1.33
7	I	172	ILE	CA-C	-5.36	1.45	1.52
5	B	264	GLU	C-N	5.36	1.41	1.33
7	K	89	LEU	N-CA	-5.36	1.39	1.46
8	P	296	GLN	N-CA	-5.35	1.39	1.46
4	C	337	ILE	CA-C	-5.35	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	232	PRO	CA-CB	-5.35	1.46	1.53
1	O	343	GLU	N-CA	5.35	1.52	1.46
4	A	443	LYS	CA-C	5.35	1.59	1.52
4	A	88	THR	CA-C	-5.35	1.45	1.52
5	B	121	ASP	C-N	5.35	1.40	1.33
1	O	178	ILE	N-CA	-5.34	1.40	1.46
4	A	88	THR	C-N	5.34	1.40	1.33
4	A	422	ASP	CA-C	-5.34	1.46	1.52
1	O	233	LEU	N-CA	-5.34	1.39	1.46
4	A	441	LEU	CA-CB	5.34	1.62	1.53
7	K	103	THR	CA-C	-5.34	1.45	1.52
8	P	91	ASP	CA-CB	5.34	1.61	1.53
8	P	120	ASP	CA-CB	5.34	1.60	1.53
6	L	25	ARG	CA-CB	5.34	1.61	1.53
5	F	209	SER	C-N	5.34	1.40	1.33
4	A	372	GLY	N-CA	5.34	1.52	1.45
5	B	342	ILE	CA-C	-5.34	1.44	1.52
4	C	350	VAL	N-CA	-5.34	1.40	1.46
7	K	201	ASN	C-N	5.34	1.41	1.33
7	K	97	ASP	C-N	5.33	1.41	1.33
7	G	23	PHE	C-N	5.33	1.40	1.33
4	E	344	ARG	CA-C	5.33	1.59	1.52
8	P	255	PHE	N-CA	5.33	1.53	1.46
3	N	91	ILE	CA-C	-5.33	1.46	1.52
6	L	26	LYS	CA-CB	5.33	1.61	1.53
4	C	144	GLY	CA-C	-5.33	1.44	1.51
1	O	80	GLY	C-N	5.33	1.41	1.33
8	P	160	LEU	C-N	5.33	1.40	1.33
4	E	98	PRO	N-CA	-5.32	1.40	1.47
5	D	265	TYR	C-O	-5.32	1.18	1.24
4	C	103	THR	C-N	5.32	1.41	1.33
5	D	364	LEU	CA-C	-5.32	1.46	1.52
4	C	74	GLU	CA-C	-5.31	1.46	1.52
7	K	128	ALA	C-N	5.31	1.41	1.34
8	P	370	TRP	C-O	-5.31	1.17	1.23
4	E	422	ASP	CA-C	-5.31	1.46	1.52
5	B	182	GLU	C-N	5.31	1.40	1.33
7	G	211	SER	C-O	-5.31	1.17	1.24
1	O	43	ALA	C-N	5.31	1.41	1.33
5	F	244	LEU	N-CA	-5.31	1.39	1.45
4	E	136	THR	C-N	5.31	1.40	1.33
5	D	75	ALA	CA-C	-5.31	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	L	77	GLN	CA-C	-5.31	1.45	1.52
4	A	123	TYR	C-N	5.31	1.39	1.33
8	P	372	PRO	CA-C	5.31	1.57	1.52
8	P	240	ILE	C-N	5.30	1.41	1.33
8	P	389	LYS	CA-C	5.30	1.59	1.52
4	E	605	SER	CA-CB	5.30	1.61	1.53
8	P	395	PHE	CA-CB	5.30	1.61	1.53
5	B	276	THR	C-N	5.29	1.40	1.33
5	B	459	ASP	CA-C	-5.29	1.46	1.52
8	P	21	ARG	C-N	5.29	1.40	1.33
1	O	45	VAL	N-CA	5.29	1.52	1.46
1	O	212	THR	C-N	5.29	1.40	1.33
4	A	311	ILE	C-N	5.29	1.40	1.33
5	D	183	ILE	C-N	5.29	1.40	1.33
7	I	191	SER	CA-C	5.29	1.59	1.52
1	O	205	ASP	CA-C	5.29	1.59	1.52
4	C	112	LEU	C-N	5.29	1.41	1.34
7	G	74	GLN	N-CA	-5.29	1.39	1.46
2	M	28	GLY	CA-C	-5.29	1.46	1.52
5	D	282	SER	N-CA	-5.29	1.39	1.46
4	C	516	ASP	CA-CB	5.28	1.61	1.53
4	E	581	VAL	C-N	5.28	1.41	1.33
8	P	317	ASN	CA-C	-5.28	1.46	1.53
4	C	611	PHE	CA-C	-5.28	1.46	1.52
6	L	41	LYS	CA-C	-5.28	1.45	1.52
4	E	46	TYR	CA-CB	5.27	1.62	1.53
1	O	245	GLU	C-N	5.27	1.40	1.33
2	M	154	THR	N-CA	-5.27	1.39	1.46
4	A	497	GLN	C-N	5.27	1.40	1.33
5	B	60	GLY	C-N	5.27	1.41	1.33
3	N	91	ILE	N-CA	-5.27	1.40	1.46
4	A	116	LYS	CA-C	-5.27	1.46	1.52
7	G	152	MET	CA-CB	5.27	1.62	1.53
5	D	44	VAL	CA-C	-5.27	1.45	1.53
5	D	354	THR	CA-C	-5.27	1.45	1.53
6	J	11	LEU	N-CA	-5.27	1.39	1.46
7	I	181	LYS	CA-C	-5.27	1.44	1.52
5	F	32	SER	CA-CB	5.27	1.62	1.53
5	B	354	THR	CA-C	-5.27	1.46	1.53
7	G	98	GLY	C-N	5.26	1.40	1.33
5	F	435	PHE	C-O	-5.26	1.18	1.24
6	J	23	LYS	C-N	5.26	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	B	358	ILE	CA-C	-5.25	1.46	1.52
7	I	191	SER	C-N	5.25	1.41	1.33
4	A	256	GLY	CA-C	-5.25	1.45	1.51
7	K	62	PHE	CA-CB	5.25	1.61	1.53
4	A	328	ALA	N-CA	-5.25	1.40	1.46
4	C	74	GLU	C-N	5.25	1.41	1.33
4	E	592	GLY	C-N	5.25	1.41	1.33
3	N	90	ALA	CA-CB	-5.24	1.44	1.53
5	F	88	VAL	N-CA	-5.24	1.40	1.46
2	M	45	ASP	N-CA	-5.24	1.40	1.46
5	F	247	ASP	CA-CB	5.24	1.62	1.53
4	C	167	ILE	CA-C	-5.24	1.46	1.52
4	C	199	GLU	C-N	5.24	1.40	1.33
8	P	407	ARG	C-N	5.24	1.40	1.33
5	B	139	ILE	CA-C	-5.24	1.47	1.52
7	G	158	ARG	C-N	5.24	1.40	1.33
5	F	152	SER	CA-C	-5.24	1.46	1.52
7	K	12	GLN	C-N	5.24	1.40	1.33
8	P	126	GLN	CA-C	-5.24	1.46	1.52
5	F	413	ALA	CA-C	-5.23	1.45	1.52
4	A	319	ALA	N-CA	-5.23	1.40	1.46
4	C	412	ILE	CA-C	-5.23	1.46	1.52
8	P	281	THR	N-CA	-5.23	1.39	1.45
4	A	92	LEU	C-N	5.23	1.40	1.33
4	E	249	GLY	C-N	5.23	1.38	1.33
5	B	293	ALA	C-N	5.23	1.41	1.33
7	I	48	THR	C-N	5.23	1.40	1.33
7	G	44	GLU	CA-CB	5.23	1.61	1.53
6	H	3	GLN	C-N	5.23	1.41	1.33
1	O	317	LEU	CA-CB	5.22	1.61	1.53
5	D	315	ILE	C-N	5.22	1.41	1.33
2	M	213	GLU	CA-CB	5.22	1.61	1.53
5	F	41	LEU	N-CA	-5.22	1.39	1.46
7	I	118	LYS	CA-CB	5.22	1.61	1.53
3	N	98	ASP	CA-CB	5.22	1.61	1.53
1	O	16	LEU	N-CA	-5.22	1.41	1.45
6	L	99	ILE	CA-CB	-5.22	1.48	1.54
6	H	18	HIS	C-N	5.22	1.41	1.33
7	G	37	LEU	CA-CB	5.22	1.61	1.53
8	P	210	PHE	CA-CB	5.21	1.61	1.53
8	P	363	LEU	CA-C	-5.21	1.46	1.52
1	O	11	PHE	CA-C	-5.21	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	A	146	PHE	CA-CB	5.21	1.61	1.53
7	I	14	ASN	CA-CB	5.21	1.61	1.53
5	B	281	MET	C-N	5.21	1.40	1.33
4	C	424	SER	N-CA	-5.21	1.39	1.46
1	O	274	HIS	CA-C	-5.20	1.46	1.52
3	N	23	ALA	CA-C	-5.20	1.45	1.52
4	E	102	GLU	CA-CB	5.20	1.61	1.53
5	B	46	PHE	C-N	5.20	1.40	1.33
1	O	248	THR	C-N	5.20	1.40	1.33
4	A	359	ARG	CA-C	-5.20	1.45	1.52
5	B	351	GLY	N-CA	-5.20	1.38	1.45
1	O	333	PRO	CA-CB	-5.20	1.49	1.54
1	O	359	ASP	CA-CB	5.20	1.60	1.53
5	F	422	GLU	CA-C	5.20	1.59	1.53
7	K	20	MET	N-CA	-5.20	1.40	1.46
7	G	113	ASN	C-N	5.20	1.41	1.34
5	D	296	GLU	N-CA	-5.20	1.39	1.46
7	K	21	GLN	C-O	-5.20	1.17	1.24
5	F	185	ALA	N-CA	-5.20	1.40	1.46
4	A	307	THR	C-O	-5.20	1.17	1.23
8	P	8	MET	CA-C	-5.20	1.44	1.52
7	G	154	ASP	CA-C	-5.20	1.46	1.52
8	P	224	SER	C-N	5.20	1.40	1.33
8	P	376	ASP	CA-C	-5.20	1.46	1.52
5	B	68	LEU	C-N	5.19	1.40	1.33
7	K	190	VAL	C-N	5.19	1.40	1.33
8	P	406	VAL	CA-CB	-5.19	1.48	1.54
7	G	129	LEU	CA-C	-5.19	1.45	1.52
4	A	184	TRP	CA-CB	5.19	1.62	1.53
4	A	264	VAL	CA-C	-5.19	1.46	1.52
4	C	461	SER	CA-C	-5.19	1.46	1.52
4	C	207	SER	CA-C	-5.19	1.45	1.52
4	C	550	PHE	N-CA	5.19	1.52	1.46
6	H	36	LYS	C-N	5.19	1.40	1.33
4	C	169	SER	C-N	5.18	1.41	1.33
5	F	305	PRO	CA-C	5.18	1.58	1.52
4	A	106	ASP	CA-C	5.18	1.60	1.53
7	I	76	THR	C-N	5.18	1.40	1.33
8	P	247	LEU	C-N	5.18	1.41	1.33
6	H	14	GLU	N-CA	-5.18	1.40	1.46
4	E	189	GLY	CA-C	-5.18	1.46	1.51
7	I	214	ALA	N-CA	-5.18	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	251	TRP	CA-C	5.18	1.59	1.52
1	O	236	VAL	C-N	5.18	1.40	1.33
4	A	194	ASP	CA-C	-5.18	1.45	1.52
8	P	418	ILE	N-CA	-5.17	1.40	1.46
5	F	285	ALA	N-CA	5.17	1.52	1.46
4	A	297	PHE	N-CA	-5.17	1.41	1.46
1	O	216	ASN	C-N	5.17	1.40	1.33
4	A	190	GLU	N-CA	-5.17	1.39	1.46
4	A	526	LEU	N-CA	5.17	1.52	1.46
5	B	382	LEU	CA-CB	5.17	1.60	1.53
7	K	175	SER	CA-C	-5.17	1.46	1.52
7	I	20	MET	CA-C	-5.17	1.46	1.52
4	E	398	ALA	CA-C	-5.16	1.46	1.52
5	F	193	LEU	CA-C	-5.16	1.45	1.52
4	C	179	ARG	CA-C	-5.16	1.46	1.52
7	I	124	LEU	N-CA	5.16	1.52	1.46
5	F	195	ARG	CA-CB	5.16	1.60	1.53
2	M	83	VAL	CA-C	-5.16	1.46	1.52
7	I	58	ILE	N-CA	-5.16	1.40	1.46
5	D	408	ALA	C-N	-5.15	1.27	1.33
1	O	244	GLN	CA-C	-5.15	1.46	1.52
5	B	439	PHE	CA-C	5.15	1.59	1.52
3	N	47	LYS	C-N	5.15	1.40	1.33
4	E	349	ASN	CA-C	-5.15	1.46	1.52
7	G	162	GLU	N-CA	-5.15	1.39	1.46
2	M	46	ILE	C-N	5.15	1.40	1.33
3	N	68	LEU	C-N	5.15	1.39	1.33
5	D	360	VAL	C-N	5.15	1.40	1.33
7	K	76	THR	N-CA	-5.15	1.40	1.46
1	O	111	LEU	CA-C	5.14	1.59	1.52
1	O	347	ALA	CA-CB	5.14	1.61	1.53
4	A	330	GLU	C-N	5.14	1.41	1.33
7	I	25	ARG	C-N	5.14	1.40	1.33
4	E	83	ASP	CA-CB	5.14	1.60	1.53
4	A	86	LEU	C-N	5.14	1.40	1.33
4	A	125	PRO	N-CA	5.14	1.53	1.47
8	P	227	ALA	CA-C	-5.14	1.47	1.52
4	E	279	ILE	CA-C	-5.14	1.45	1.52
7	K	44	GLU	CA-C	-5.14	1.46	1.52
1	O	260	PHE	N-CA	-5.14	1.39	1.45
4	E	519	THR	CA-CB	-5.14	1.45	1.53
4	E	46	TYR	C-N	5.13	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	I	18	ASN	N-CA	5.13	1.52	1.46
1	O	288	LEU	C-N	5.13	1.40	1.33
4	A	497	GLN	CA-CB	5.13	1.61	1.53
1	O	20	ALA	C-N	-5.13	1.26	1.33
4	E	518	ALA	CA-CB	5.13	1.61	1.53
4	A	245	PRO	CA-C	-5.13	1.46	1.52
5	B	407	TYR	CA-C	5.13	1.59	1.52
6	J	78	GLY	CA-C	-5.13	1.44	1.51
7	K	123	SER	C-N	5.13	1.41	1.33
4	A	231	TYR	CA-C	-5.13	1.46	1.52
1	O	107	VAL	C-O	-5.12	1.20	1.24
8	P	322	VAL	CA-CB	-5.12	1.48	1.54
5	D	354	THR	C-N	5.12	1.39	1.33
4	E	590	SER	CA-C	-5.12	1.46	1.52
5	B	238	THR	CA-C	-5.12	1.46	1.52
4	C	559	LYS	CA-C	-5.12	1.46	1.52
4	E	70	ILE	CA-CB	-5.12	1.48	1.54
5	B	110	GLY	C-N	5.12	1.41	1.33
4	E	279	ILE	CA-CB	-5.11	1.47	1.54
8	P	402	LEU	C-N	5.11	1.40	1.33
7	G	129	LEU	C-N	5.11	1.41	1.33
4	C	96	LEU	N-CA	-5.11	1.40	1.46
5	D	444	ILE	CA-CB	-5.11	1.47	1.54
7	K	194	SER	CA-C	-5.11	1.45	1.52
8	P	273	ASP	C-N	5.11	1.40	1.33
4	E	370	ARG	CA-C	-5.11	1.46	1.52
4	A	460	TYR	CA-C	-5.11	1.46	1.52
7	K	114	ARG	C-N	5.11	1.40	1.33
5	B	328	SER	CA-C	-5.10	1.46	1.52
1	O	183	ASP	C-N	5.10	1.39	1.33
1	O	314	GLU	C-O	-5.10	1.18	1.24
4	A	232	PRO	CA-CB	5.10	1.60	1.53
4	A	407	THR	CA-C	-5.10	1.46	1.52
8	P	217	ILE	CA-C	5.10	1.59	1.52
3	N	52	ASP	CA-C	-5.10	1.46	1.52
4	A	401	LEU	C-N	5.10	1.37	1.33
1	O	181	PRO	CA-C	5.10	1.57	1.52
5	F	390	GLY	C-N	5.10	1.41	1.33
4	A	343	PHE	N-CA	-5.10	1.39	1.46
7	I	42	GLU	CA-C	-5.10	1.46	1.52
7	K	26	LYS	N-CA	-5.10	1.40	1.46
4	E	76	THR	C-N	5.09	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	220	LEU	CA-C	-5.09	1.46	1.52
1	O	253	LYS	C-N	5.09	1.40	1.33
1	O	90	ASN	CA-CB	5.09	1.61	1.53
5	F	273	HIS	N-CA	-5.09	1.39	1.46
8	P	265	GLN	C-O	-5.09	1.18	1.24
4	C	444	LYS	CA-CB	5.09	1.61	1.53
2	M	146	LEU	N-CA	-5.08	1.39	1.46
7	K	95	SER	N-CA	-5.08	1.39	1.46
5	B	225	PHE	C-O	5.08	1.30	1.24
8	P	165	LEU	N-CA	-5.08	1.40	1.46
5	D	320	GLY	CA-C	-5.08	1.45	1.51
3	N	77	ILE	C-O	5.08	1.30	1.24
4	E	339	LEU	CA-C	-5.07	1.46	1.52
6	H	55	LYS	C-N	5.07	1.40	1.33
7	I	209	LEU	C-N	5.07	1.40	1.33
4	E	58	GLY	C-N	5.07	1.40	1.33
4	E	210	THR	C-N	5.07	1.40	1.34
5	F	451	ASP	CA-C	-5.07	1.46	1.52
4	A	395	ALA	CA-C	-5.07	1.46	1.52
4	C	211	LEU	CA-CB	5.07	1.61	1.53
5	B	368	GLY	CA-C	-5.07	1.44	1.51
5	B	481	LEU	CA-C	-5.07	1.46	1.52
4	C	410	VAL	CA-C	-5.07	1.46	1.52
5	D	248	PRO	C-N	-5.06	1.27	1.33
5	D	295	ARG	CA-C	-5.06	1.46	1.53
8	P	5	LYS	C-O	5.06	1.30	1.24
4	E	332	SER	N-CA	-5.06	1.40	1.46
6	J	96	LYS	C-N	5.06	1.40	1.33
5	F	132	LEU	C-N	5.06	1.40	1.33
4	C	598	GLY	C-O	-5.06	1.17	1.24
7	I	118	LYS	C-N	5.06	1.40	1.33
8	P	244	TYR	CA-C	-5.06	1.46	1.52
4	A	41	ILE	CA-C	-5.05	1.46	1.52
5	B	88	VAL	N-CA	-5.05	1.39	1.46
4	C	290	MET	CA-C	5.05	1.59	1.52
6	L	38	ASP	CA-C	-5.05	1.45	1.52
1	O	239	PHE	C-O	5.05	1.30	1.23
5	F	178	LEU	N-CA	-5.05	1.39	1.46
4	A	253	CYS	N-CA	5.05	1.52	1.46
6	J	33	LYS	CA-C	-5.05	1.46	1.52
7	I	162	GLU	C-N	5.05	1.40	1.33
4	C	479	PRO	C-N	5.05	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	69	SER	N-CA	5.05	1.52	1.46
4	A	446	ALA	N-CA	-5.05	1.40	1.46
4	C	266	SER	N-CA	-5.05	1.40	1.46
4	A	424	SER	C-N	5.04	1.40	1.33
6	H	70	LYS	C-N	5.04	1.41	1.33
5	B	289	ARG	CA-CB	5.04	1.61	1.53
5	B	130	ASP	CA-C	-5.04	1.46	1.52
5	F	344	HIS	CA-C	-5.04	1.47	1.53
5	B	391	MET	CA-C	-5.03	1.46	1.52
5	D	476	ILE	C-N	5.03	1.40	1.33
7	I	172	ILE	CA-CB	5.03	1.60	1.54
3	N	20	LEU	N-CA	5.03	1.52	1.46
7	I	166	ARG	CA-C	-5.03	1.46	1.52
1	O	162	ALA	N-CA	-5.03	1.40	1.46
2	M	41	LYS	N-CA	-5.03	1.40	1.46
4	A	247	VAL	C-O	5.03	1.29	1.23
4	A	468	ASN	CA-C	-5.03	1.46	1.52
4	E	333	ILE	CA-C	-5.02	1.46	1.52
5	B	242	LEU	CA-C	-5.02	1.46	1.52
1	O	7	THR	CA-C	-5.02	1.46	1.52
1	O	117	GLN	C-N	5.02	1.40	1.33
4	A	51	VAL	C-O	-5.02	1.18	1.24
5	D	432	SER	N-CA	-5.02	1.39	1.46
5	B	214	ALA	N-CA	5.02	1.52	1.46
4	C	325	PRO	CA-CB	5.02	1.60	1.53
4	E	227	LEU	C-N	5.02	1.40	1.33
4	A	450	HIS	CA-C	-5.02	1.46	1.52
5	B	40	ILE	CA-C	-5.01	1.46	1.52
5	B	259	ALA	N-CA	-5.01	1.40	1.46
7	I	76	THR	C-O	-5.01	1.18	1.24
7	G	33	LYS	C-N	5.01	1.40	1.33
1	O	29	LYS	CA-C	-5.01	1.46	1.52
4	E	165	SER	CA-CB	5.01	1.61	1.53
5	B	148	GLU	N-CA	-5.01	1.39	1.46
4	C	307	THR	CA-C	-5.01	1.46	1.52
7	K	212	GLU	C-O	-5.01	1.18	1.24
5	D	41	LEU	N-CA	-5.01	1.40	1.46
5	D	336	THR	CA-C	-5.01	1.46	1.52
8	P	212	PRO	C-N	5.01	1.40	1.33
7	I	201	ASN	N-CA	-5.00	1.40	1.46
1	O	391	ASN	C-O	5.00	1.29	1.23
8	P	326	SER	N-CA	5.00	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	347	GLU	C-N	5.00	1.40	1.33

All (2704) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	458	VAL	N-CA-C	-15.31	97.63	112.17
5	D	129	GLU	N-CA-C	-12.95	98.44	114.75
5	F	103	PRO	O-C-N	-12.06	114.17	122.73
5	F	129	GLU	N-CA-C	-11.99	100.95	114.62
8	P	177	ILE	N-CA-C	-11.88	101.79	113.20
4	A	242	ALA	N-CA-C	11.69	123.71	110.97
1	O	368	ASP	N-CA-C	-11.08	101.99	114.62
4	A	429	THR	N-CA-C	11.02	123.29	111.28
5	F	193	LEU	N-CA-C	-10.97	100.01	113.50
4	E	391	PHE	CA-C-O	-10.87	109.50	120.70
1	O	228	ASP	CA-C-O	10.73	126.10	119.55
1	O	210	TYR	N-CA-C	10.73	122.97	111.28
5	F	123	GLY	CA-C-N	10.45	132.91	119.84
5	F	123	GLY	C-N-CA	10.45	132.91	119.84
7	I	24	ILE	CA-C-N	10.44	134.27	120.28
7	I	24	ILE	C-N-CA	10.44	134.27	120.28
7	G	24	ILE	O-C-N	10.41	132.11	121.91
1	O	333	PRO	O-C-N	-10.37	116.27	121.15
7	G	170	GLU	N-CA-C	-10.18	101.42	114.04
4	E	136	THR	N-CA-C	-10.18	100.15	111.14
7	G	215	LEU	CA-C-O	-10.18	109.27	118.63
5	B	478	PRO	CA-C-N	10.09	133.55	120.44
5	B	478	PRO	C-N-CA	10.09	133.55	120.44
1	O	107	VAL	O-C-N	-10.04	113.99	120.42
2	M	17	LEU	CA-C-N	10.01	134.70	120.28
2	M	17	LEU	C-N-CA	10.01	134.70	120.28
7	I	203	LEU	CA-C-N	9.97	133.64	120.28
7	I	203	LEU	C-N-CA	9.97	133.64	120.28
2	M	177	ILE	CA-C-N	9.95	128.29	120.33
2	M	177	ILE	C-N-CA	9.95	128.29	120.33
8	P	121	PRO	CA-C-N	9.91	133.56	120.28
8	P	121	PRO	C-N-CA	9.91	133.56	120.28
5	F	332	ILE	N-CA-CB	9.84	121.50	111.36
4	C	332	SER	N-CA-CB	9.82	124.25	110.01
1	O	78	SER	N-CA-C	9.79	122.03	111.36
7	G	8	LEU	CA-C-N	9.74	133.92	120.39
7	G	8	LEU	C-N-CA	9.74	133.92	120.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	H	11	LEU	CA-C-N	9.66	133.23	120.28
6	H	11	LEU	C-N-CA	9.66	133.23	120.28
1	O	366	LYS	O-C-N	-9.65	111.85	122.85
2	M	35	LYS	CA-C-N	9.63	133.19	120.28
2	M	35	LYS	C-N-CA	9.63	133.19	120.28
2	M	215	ALA	CA-C-N	9.57	133.88	120.29
2	M	215	ALA	C-N-CA	9.57	133.88	120.29
4	E	254	ILE	CA-C-N	9.55	129.62	119.78
4	E	254	ILE	C-N-CA	9.55	129.62	119.78
8	P	123	GLN	CA-C-N	9.53	133.40	120.44
8	P	123	GLN	C-N-CA	9.53	133.40	120.44
1	O	366	LYS	CA-C-O	9.49	133.01	121.81
5	B	295	ARG	CA-C-N	9.47	132.97	120.28
5	B	295	ARG	C-N-CA	9.47	132.97	120.28
5	F	247	ASP	N-CA-CB	9.47	121.49	110.03
5	B	178	LEU	O-C-N	-9.47	115.22	121.85
5	B	137	SER	O-C-N	-9.43	110.48	121.32
4	C	608	GLN	CA-C-N	9.37	133.60	120.29
4	C	608	GLN	C-N-CA	9.37	133.60	120.29
8	P	114	VAL	N-CA-C	-9.35	101.28	110.72
7	K	70	MET	N-CA-C	-9.33	101.32	112.89
4	C	324	MET	CA-C-N	9.32	131.50	119.84
4	C	324	MET	C-N-CA	9.32	131.50	119.84
4	E	263	THR	N-CA-C	-9.26	101.27	111.36
5	B	143	ALA	CA-C-N	9.23	135.65	120.23
5	B	143	ALA	C-N-CA	9.23	135.65	120.23
4	E	135	ARG	CA-C-N	9.20	132.95	120.44
4	E	135	ARG	C-N-CA	9.20	132.95	120.44
5	F	450	GLU	N-CA-C	-9.17	94.24	109.46
4	E	550	PHE	CA-C-O	-9.16	110.71	120.42
5	F	266	LEU	CA-C-O	9.15	130.13	120.70
5	D	350	THR	CA-C-N	9.07	129.98	120.00
5	D	350	THR	C-N-CA	9.07	129.98	120.00
4	C	522	LYS	N-CA-C	9.06	120.77	111.07
5	D	464	LEU	CA-C-N	9.05	135.08	120.60
5	D	464	LEU	C-N-CA	9.05	135.08	120.60
7	I	153	LYS	CA-C-N	9.04	132.19	120.44
7	I	153	LYS	C-N-CA	9.04	132.19	120.44
6	J	78	GLY	N-CA-C	-9.03	103.47	114.66
1	O	24	THR	N-CA-C	-9.01	102.42	113.50
1	O	167	THR	N-CA-CB	8.95	125.61	110.49
5	D	383	MET	N-CA-C	-8.90	104.47	114.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	C	434	ILE	CA-C-N	8.90	135.91	120.87
4	C	434	ILE	C-N-CA	8.90	135.91	120.87
7	G	197	ILE	N-CA-C	-8.88	95.67	108.11
5	B	151	ILE	N-CA-C	-8.87	95.35	108.12
5	D	104	VAL	CA-C-O	8.87	129.88	120.48
7	G	45	ILE	N-CA-C	8.86	118.92	110.42
5	D	320	GLY	CA-C-N	8.83	133.41	120.87
5	D	320	GLY	C-N-CA	8.83	133.41	120.87
5	B	39	VAL	CA-C-N	8.81	134.58	123.12
5	B	39	VAL	C-N-CA	8.81	134.58	123.12
6	J	67	GLU	CA-C-N	8.81	133.71	120.31
6	J	67	GLU	C-N-CA	8.81	133.71	120.31
3	N	46	THR	CA-C-N	8.79	132.06	120.28
3	N	46	THR	C-N-CA	8.79	132.06	120.28
8	P	243	GLN	CA-C-N	8.79	131.87	120.44
8	P	243	GLN	C-N-CA	8.79	131.87	120.44
5	B	370	TYR	CA-C-O	-8.78	109.60	120.23
5	D	104	VAL	O-C-N	-8.77	113.97	123.18
4	C	303	GLU	N-CA-C	-8.75	102.61	113.28
5	B	376	LEU	O-C-N	-8.74	113.47	120.38
5	B	324	GLY	N-CA-C	-8.73	104.31	114.69
6	L	88	GLU	CA-C-O	-8.70	111.20	120.42
4	E	289	GLU	CA-C-N	8.69	131.93	120.28
4	E	289	GLU	C-N-CA	8.69	131.93	120.28
7	K	153	LYS	CA-C-N	8.68	131.72	120.44
7	K	153	LYS	C-N-CA	8.68	131.72	120.44
4	A	175	PRO	N-CA-CB	8.67	108.04	103.19
5	B	72	GLY	CA-C-N	8.66	134.66	122.36
5	B	72	GLY	C-N-CA	8.66	134.66	122.36
8	P	239	GLY	O-C-N	8.64	130.57	122.19
7	K	71	LEU	N-CA-C	-8.62	101.61	112.90
5	D	320	GLY	N-CA-C	-8.61	101.73	111.63
8	P	137	GLN	CA-C-N	8.60	132.15	120.54
8	P	137	GLN	C-N-CA	8.60	132.15	120.54
5	D	337	MET	O-C-N	8.57	128.59	121.31
4	E	487	GLU	CA-C-N	8.55	131.34	120.56
4	E	487	GLU	C-N-CA	8.55	131.34	120.56
8	P	206	HIS	CA-C-N	8.55	132.08	120.54
8	P	206	HIS	C-N-CA	8.55	132.08	120.54
4	E	318	VAL	N-CA-C	-8.53	94.74	107.37
8	P	420	ILE	O-C-N	8.53	130.27	121.91
2	M	158	ILE	CA-C-N	8.52	131.70	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	158	ILE	C-N-CA	8.52	131.70	120.28
5	D	170	ILE	CA-C-O	-8.49	114.24	119.51
8	P	384	ILE	O-C-N	8.48	130.22	121.91
8	P	171	ILE	CA-C-N	8.48	131.64	120.28
8	P	171	ILE	C-N-CA	8.48	131.64	120.28
5	B	418	ALA	N-CA-C	8.45	120.12	111.07
4	C	56	LEU	CA-C-O	-8.45	111.75	121.47
5	F	159	ASP	O-C-N	-8.45	113.16	122.12
2	M	16	GLY	O-C-N	8.44	130.30	122.19
8	P	391	ASN	CB-CA-C	8.43	127.20	110.42
2	M	150	ALA	CA-C-N	8.42	131.57	120.28
2	M	150	ALA	C-N-CA	8.42	131.57	120.28
7	I	19	LYS	CA-C-N	8.40	131.87	120.44
7	I	19	LYS	C-N-CA	8.40	131.87	120.44
4	C	552	SER	CA-C-N	8.39	131.34	120.44
4	C	552	SER	C-N-CA	8.39	131.34	120.44
3	N	44	LYS	N-CA-C	-8.39	103.64	114.04
2	M	128	GLY	CA-C-N	8.38	130.61	120.14
2	M	128	GLY	C-N-CA	8.38	130.61	120.14
8	P	235	SER	CA-C-N	8.38	132.71	120.90
8	P	235	SER	C-N-CA	8.38	132.71	120.90
4	E	249	GLY	N-CA-C	-8.36	102.30	116.01
5	B	153	THR	N-CA-C	-8.35	104.23	114.75
1	O	333	PRO	CA-C-N	8.35	128.41	119.90
1	O	333	PRO	C-N-CA	8.35	128.41	119.90
5	F	421	GLY	N-CA-C	-8.32	101.22	111.45
4	C	519	THR	CA-C-N	8.32	131.43	120.28
4	C	519	THR	C-N-CA	8.32	131.43	120.28
7	I	23	PHE	CA-C-N	8.30	131.02	120.56
7	I	23	PHE	C-N-CA	8.30	131.02	120.56
5	D	152	SER	N-CA-C	-8.29	96.45	109.72
5	B	304	TYR	N-CA-C	-8.28	98.56	110.40
8	P	202	VAL	CA-C-N	8.25	131.76	120.46
8	P	202	VAL	C-N-CA	8.25	131.76	120.46
2	M	85	GLU	CA-C-O	8.24	129.29	120.55
4	C	111	PRO	CA-C-N	8.21	132.80	120.31
4	C	111	PRO	C-N-CA	8.21	132.80	120.31
4	A	153	SER	CA-C-N	8.20	127.79	119.92
4	A	153	SER	C-N-CA	8.20	127.79	119.92
5	F	308	MET	N-CA-C	-8.19	102.32	111.82
4	E	550	PHE	O-C-N	8.19	131.49	122.15
3	N	102	ASP	N-CA-C	-8.19	96.86	109.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	79	ILE	CA-C-N	8.17	129.01	119.94
1	O	79	ILE	C-N-CA	8.17	129.01	119.94
2	M	67	SER	CA-C-N	8.17	131.89	120.29
2	M	67	SER	C-N-CA	8.17	131.89	120.29
1	O	162	ALA	CA-C-N	8.16	131.22	120.28
1	O	162	ALA	C-N-CA	8.16	131.22	120.28
7	K	11	ASN	CA-C-N	8.14	131.19	120.28
7	K	11	ASN	C-N-CA	8.14	131.19	120.28
7	G	87	LYS	O-C-N	-8.12	113.51	122.12
13	l	54	ILE	CA-C-N	8.12	125.35	120.24
13	l	54	ILE	C-N-CA	8.12	125.35	120.24
5	B	316	TYR	CA-C-N	8.10	131.47	120.38
5	B	316	TYR	C-N-CA	8.10	131.47	120.38
4	C	347	GLY	CA-C-O	8.10	127.57	118.98
5	F	211	VAL	N-CA-CB	8.10	122.83	111.82
4	A	324	MET	N-CA-CB	8.09	120.96	110.04
5	D	134	ILE	N-CA-C	-8.08	105.31	113.47
7	I	121	LEU	CA-C-N	8.08	130.94	120.44
7	I	121	LEU	C-N-CA	8.08	130.94	120.44
8	P	19	ILE	O-C-N	8.06	129.69	121.87
4	E	121	SER	CB-CA-C	-8.04	97.05	109.99
4	C	97	GLY	CA-C-N	8.04	129.88	119.84
4	C	97	GLY	C-N-CA	8.04	129.88	119.84
8	P	120	ASP	CB-CA-C	-8.03	103.21	110.44
8	P	233	THR	N-CA-C	-8.04	102.27	114.16
5	F	462	TRP	CA-C-N	8.03	131.04	120.28
5	F	462	TRP	C-N-CA	8.03	131.04	120.28
5	D	186	GLN	CA-C-O	8.02	129.05	120.55
6	J	26	LYS	CA-C-N	8.01	130.86	120.44
6	J	26	LYS	C-N-CA	8.01	130.86	120.44
4	A	333	ILE	CA-C-O	8.01	129.12	120.47
5	B	179	PRO	CA-C-N	8.01	131.66	120.29
5	B	179	PRO	C-N-CA	8.01	131.66	120.29
6	H	104	LYS	CA-C-N	8.01	129.85	119.84
6	H	104	LYS	C-N-CA	8.01	129.85	119.84
7	K	86	LEU	N-CA-C	-8.01	102.63	111.36
8	P	340	SER	O-C-N	8.01	130.61	122.12
8	P	308	VAL	O-C-N	8.00	129.63	121.87
4	C	278	ILE	N-CA-C	-7.98	96.63	108.12
3	N	6	THR	N-CA-C	-7.98	104.42	114.56
4	C	561	VAL	O-C-N	7.98	130.05	121.83
4	E	260	CYS	N-CA-C	-7.98	101.69	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	63	THR	N-CA-CB	7.97	121.96	110.16
4	C	374	MET	CA-C-O	7.97	126.89	120.19
8	P	197	PRO	N-CA-C	7.97	124.61	113.53
2	M	58	GLY	CA-C-N	7.96	130.79	120.44
2	M	58	GLY	C-N-CA	7.96	130.79	120.44
1	O	258	ARG	CA-C-O	-7.95	112.05	120.40
8	P	250	ILE	CA-C-N	7.95	131.28	120.38
8	P	250	ILE	C-N-CA	7.95	131.28	120.38
4	A	130	THR	O-C-N	-7.94	113.86	121.57
3	N	10	VAL	N-CA-C	7.94	120.29	108.46
4	C	436	GLN	N-CA-C	-7.93	104.48	114.56
4	C	354	ALA	N-CA-C	-7.92	96.32	109.24
8	P	372	PRO	N-CA-C	7.91	120.34	110.70
4	C	163	GLU	O-C-N	7.90	129.19	121.85
8	P	400	GLU	CA-C-N	7.90	130.71	120.44
8	P	400	GLU	C-N-CA	7.90	130.71	120.44
7	G	12	GLN	N-CA-C	7.90	119.89	111.28
4	A	341	GLU	CA-C-O	-7.89	112.05	120.42
5	D	142	TYR	CA-C-N	7.89	136.62	121.54
5	D	142	TYR	C-N-CA	7.89	136.62	121.54
8	P	136	PHE	CA-C-N	7.89	130.70	120.44
8	P	136	PHE	C-N-CA	7.89	130.70	120.44
3	N	62	ASP	N-CA-C	-7.89	101.82	112.94
4	E	240	LEU	O-C-N	7.88	130.60	122.09
5	D	410	GLY	CA-C-N	7.86	131.45	120.29
5	D	410	GLY	C-N-CA	7.86	131.45	120.29
4	A	231	TYR	CA-C-O	-7.85	112.76	119.36
4	E	30	VAL	O-C-N	-7.82	115.05	123.18
5	F	247	ASP	CA-C-N	7.81	127.86	119.89
5	F	247	ASP	C-N-CA	7.81	127.86	119.89
8	P	122	LYS	N-CA-C	-7.81	102.77	111.28
5	D	285	ALA	CA-C-N	7.80	131.37	120.29
5	D	285	ALA	C-N-CA	7.80	131.37	120.29
7	G	165	GLN	N-CA-C	-7.79	103.36	113.17
2	M	60	VAL	CA-C-N	7.78	130.56	120.44
2	M	60	VAL	C-N-CA	7.78	130.56	120.44
3	N	110	LYS	CA-C-N	7.78	130.71	120.28
3	N	110	LYS	C-N-CA	7.78	130.71	120.28
7	G	186	GLY	N-CA-C	-7.77	102.69	111.63
6	J	35	ALA	CA-C-N	7.76	131.31	120.29
6	J	35	ALA	C-N-CA	7.76	131.31	120.29
4	A	514	THR	CA-C-N	7.76	130.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	514	THR	C-N-CA	7.76	130.68	120.28
4	A	161	VAL	N-CA-C	-7.74	97.50	108.80
4	A	460	TYR	CA-C-O	-7.74	112.95	121.23
7	K	202	THR	N-CA-C	-7.74	99.37	110.59
1	O	60	THR	CA-C-N	7.74	130.65	120.28
1	O	60	THR	C-N-CA	7.74	130.65	120.28
4	E	111	PRO	N-CA-CB	7.73	107.25	102.92
4	E	469	LYS	CA-C-N	7.72	130.48	120.44
4	E	469	LYS	C-N-CA	7.72	130.48	120.44
1	O	322	PRO	CA-C-N	7.71	127.35	119.56
1	O	322	PRO	C-N-CA	7.71	127.35	119.56
4	C	557	ALA	N-CA-C	7.71	119.77	111.36
5	D	409	ILE	CA-C-N	7.71	128.54	119.98
5	D	409	ILE	C-N-CA	7.71	128.54	119.98
4	E	499	VAL	N-CA-C	-7.71	102.76	110.62
5	F	168	GLN	N-CA-C	-7.71	97.70	109.95
4	C	264	VAL	N-CA-CB	7.71	120.43	110.57
4	E	340	ALA	CA-C-N	7.70	131.22	120.29
4	E	340	ALA	C-N-CA	7.70	131.22	120.29
4	A	510	SER	CA-C-O	-7.70	112.39	120.55
4	E	72	VAL	CB-CA-C	7.70	121.53	110.98
4	E	292	GLU	O-C-N	-7.69	113.97	122.12
6	J	99	ILE	O-C-N	7.68	129.44	121.91
1	O	78	SER	CB-CA-C	-7.68	97.79	110.85
5	D	155	VAL	CA-C-N	7.67	130.56	120.28
5	D	155	VAL	C-N-CA	7.67	130.56	120.28
4	C	305	SER	CA-C-N	7.67	129.20	120.53
4	C	305	SER	C-N-CA	7.67	129.20	120.53
4	C	455	ASN	CA-C-N	7.67	130.56	120.28
4	C	455	ASN	C-N-CA	7.67	130.56	120.28
5	F	187	ILE	CA-C-N	7.67	130.41	120.44
5	F	187	ILE	C-N-CA	7.67	130.41	120.44
5	D	149	GLU	N-CA-CB	7.66	122.59	110.57
5	D	432	SER	CA-C-N	7.65	130.39	120.44
5	D	432	SER	C-N-CA	7.65	130.39	120.44
6	J	27	TYR	CA-C-O	-7.65	112.79	120.82
5	D	188	CYS	CB-CA-C	-7.64	98.82	110.90
2	M	18	MET	CA-C-N	7.64	130.52	120.28
2	M	18	MET	C-N-CA	7.64	130.52	120.28
4	A	288	ASN	CA-C-N	7.63	130.51	120.28
4	A	288	ASN	C-N-CA	7.63	130.51	120.28
8	P	8	MET	N-CA-C	-7.63	104.86	114.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	96	VAL	CA-C-N	7.62	130.35	120.44
8	P	96	VAL	C-N-CA	7.62	130.35	120.44
8	P	288	ARG	O-C-N	7.61	129.91	122.07
5	B	313	SER	CA-C-N	7.61	130.47	120.28
5	B	313	SER	C-N-CA	7.61	130.47	120.28
8	P	102	GLU	CA-C-N	7.60	130.77	120.44
8	P	102	GLU	C-N-CA	7.60	130.77	120.44
4	C	596	VAL	N-CA-C	-7.60	97.18	108.12
6	L	51	ASP	CA-C-N	7.60	130.31	120.44
6	L	51	ASP	C-N-CA	7.60	130.31	120.44
8	P	446	GLY	CA-C-N	7.59	130.78	120.38
8	P	446	GLY	C-N-CA	7.59	130.78	120.38
8	P	419	ILE	CA-C-N	7.59	130.12	120.56
8	P	419	ILE	C-N-CA	7.59	130.12	120.56
8	P	20	ILE	N-CA-C	7.58	117.66	110.53
8	P	443	LYS	CA-C-N	7.57	130.28	120.44
8	P	443	LYS	C-N-CA	7.57	130.28	120.44
4	A	55	ASN	CA-C-O	-7.57	112.79	121.65
3	N	63	ASP	CA-C-O	-7.57	110.25	119.18
8	P	78	ILE	CA-C-N	7.56	127.44	119.05
8	P	78	ILE	C-N-CA	7.56	127.44	119.05
7	K	66	LEU	N-CA-C	-7.55	103.13	111.36
5	D	67	VAL	N-CA-CB	7.54	119.19	110.82
7	K	44	GLU	N-CA-C	7.54	119.14	111.07
1	O	289	VAL	CA-C-N	7.53	130.38	120.28
1	O	289	VAL	C-N-CA	7.53	130.38	120.28
6	L	39	ALA	N-CA-C	-7.53	104.22	113.41
5	D	459	ASP	N-CA-C	-7.53	102.43	111.69
4	E	572	ASP	CA-C-N	7.52	130.97	120.29
4	E	572	ASP	C-N-CA	7.52	130.97	120.29
5	F	279	THR	O-C-N	-7.52	114.51	123.31
5	F	289	ARG	CA-C-N	7.52	130.66	120.44
5	F	289	ARG	C-N-CA	7.52	130.66	120.44
5	B	284	TYR	CA-C-N	7.51	130.35	120.28
5	B	284	TYR	C-N-CA	7.51	130.35	120.28
5	D	183	ILE	CA-C-N	7.51	130.35	120.28
5	D	183	ILE	C-N-CA	7.51	130.35	120.28
1	O	243	VAL	CA-C-O	-7.51	113.14	120.95
4	C	590	SER	N-CA-C	-7.51	101.11	113.50
4	A	394	ARG	CA-C-N	7.50	132.15	121.42
4	A	394	ARG	C-N-CA	7.50	132.15	121.42
5	F	254	ILE	CA-C-N	7.49	130.30	120.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	254	ILE	C-N-CA	7.49	130.30	120.26
8	P	286	VAL	CA-C-N	7.49	130.18	120.44
8	P	286	VAL	C-N-CA	7.49	130.18	120.44
4	C	281	VAL	O-C-N	7.49	130.97	123.18
4	C	407	THR	N-CA-C	-7.49	97.19	109.40
1	O	61	LEU	CA-C-N	7.46	129.96	120.56
1	O	61	LEU	C-N-CA	7.46	129.96	120.56
7	I	76	THR	N-CA-CB	7.46	121.20	110.16
4	C	516	ASP	CA-C-N	7.45	131.00	120.42
4	C	516	ASP	C-N-CA	7.45	131.00	120.42
7	G	125	ILE	N-CA-C	-7.45	103.20	110.72
4	A	239	VAL	N-CA-C	7.45	118.22	110.62
8	P	371	SER	O-C-N	-7.44	116.64	121.85
4	A	609	GLU	CA-C-N	7.42	130.23	120.28
4	A	609	GLU	C-N-CA	7.42	130.23	120.28
4	E	54	ASP	N-CA-C	-7.41	103.20	112.90
5	B	255	THR	CA-C-N	7.40	127.03	119.19
5	B	255	THR	C-N-CA	7.40	127.03	119.19
4	A	494	GLU	CA-C-N	7.40	130.19	120.28
4	A	494	GLU	C-N-CA	7.40	130.19	120.28
5	D	197	THR	CA-C-N	7.39	130.92	120.28
5	D	197	THR	C-N-CA	7.39	130.92	120.28
7	G	118	LYS	CA-C-O	-7.39	111.49	118.73
1	O	299	VAL	N-CA-CB	7.39	121.66	110.58
4	A	320	ASN	CA-C-O	7.38	128.66	120.70
4	E	493	GLU	CA-C-N	7.37	130.16	120.28
4	E	493	GLU	C-N-CA	7.37	130.16	120.28
8	P	31	ALA	CA-C-O	-7.37	112.74	120.55
7	I	152	MET	CA-C-N	7.37	130.48	120.54
7	I	152	MET	C-N-CA	7.37	130.48	120.54
4	A	51	VAL	CA-C-O	7.36	128.61	120.59
4	A	332	SER	N-CA-C	7.36	120.00	111.02
4	E	364	LEU	N-CA-C	7.36	119.30	111.28
7	I	113	ASN	N-CA-C	-7.36	93.13	107.62
8	P	84	LEU	N-CA-C	7.35	119.29	111.28
3	N	41	GLN	N-CA-C	-7.34	96.58	109.06
2	M	58	GLY	N-CA-C	7.33	121.53	112.73
5	F	62	VAL	O-C-N	-7.33	114.90	123.03
4	A	164	ASN	O-C-N	-7.33	115.05	123.33
3	N	25	ILE	CB-CA-C	-7.32	103.75	110.63
5	F	150	MET	CA-C-N	7.32	133.16	123.06
5	F	150	MET	C-N-CA	7.32	133.16	123.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	149	ILE	CA-C-N	7.32	130.09	120.28
7	G	149	ILE	C-N-CA	7.32	130.09	120.28
7	K	111	ALA	CA-C-O	7.32	128.37	120.10
2	M	27	GLN	CA-C-N	7.31	128.09	119.98
2	M	27	GLN	C-N-CA	7.31	128.09	119.98
4	A	54	ASP	N-CA-C	-7.31	104.22	113.72
5	D	482	ASP	O-C-N	7.31	129.86	122.12
4	A	278	ILE	O-C-N	-7.30	115.28	123.10
7	I	66	LEU	CA-C-N	7.30	130.07	120.28
7	I	66	LEU	C-N-CA	7.30	130.07	120.28
2	M	157	ILE	O-C-N	-7.30	114.31	121.83
4	A	240	LEU	CA-C-N	7.30	130.66	120.29
4	A	240	LEU	C-N-CA	7.30	130.66	120.29
7	K	62	PHE	N-CA-C	-7.29	103.42	111.36
5	D	198	LYS	CA-C-N	7.29	130.63	120.29
5	D	198	LYS	C-N-CA	7.29	130.63	120.29
4	C	227	LEU	CA-C-N	7.28	131.72	121.24
4	C	227	LEU	C-N-CA	7.28	131.72	121.24
8	P	17	ARG	N-CA-CB	7.27	120.92	110.16
1	O	237	HIS	O-C-N	-7.27	113.98	123.21
1	O	243	VAL	CB-CA-C	-7.26	102.33	112.14
4	E	246	CYS	N-CA-CB	7.26	120.80	109.83
7	G	204	GLU	CA-C-N	7.26	130.31	120.44
7	G	204	GLU	C-N-CA	7.26	130.31	120.44
3	N	48	GLU	O-C-N	7.25	129.81	122.12
6	J	36	LYS	N-CA-CB	7.25	120.89	110.16
5	F	474	ASN	CA-C-O	7.25	127.83	119.35
4	A	133	LEU	N-CA-C	-7.25	98.64	108.86
4	A	272	TYR	N-CA-C	7.25	120.23	111.82
5	F	145	ILE	N-CA-C	-7.25	97.59	108.17
6	J	54	LEU	N-CA-C	-7.24	102.38	112.45
5	F	346	ILE	N-CA-CB	7.24	121.35	111.21
5	B	426	SER	CA-C-N	7.24	130.70	120.42
5	B	426	SER	C-N-CA	7.24	130.70	120.42
4	C	453	SER	CB-CA-C	-7.24	98.46	110.19
1	O	353	GLY	CA-C-O	-7.24	115.29	121.66
4	E	98	PRO	N-CA-CB	7.24	110.06	103.33
4	E	381	PRO	CA-C-N	7.24	130.56	120.29
4	E	381	PRO	C-N-CA	7.24	130.56	120.29
4	A	425	ASP	CA-C-O	-7.23	112.82	120.70
5	B	51	GLU	N-CA-CB	7.23	120.63	109.85
4	A	498	VAL	CA-C-N	7.23	130.37	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	498	VAL	C-N-CA	7.23	130.37	120.46
2	M	131	GLN	N-CA-C	7.23	119.24	111.36
4	C	60	VAL	CB-CA-C	7.23	119.71	110.96
4	E	437	VAL	CA-C-O	7.23	128.77	120.67
8	P	353	LEU	N-CA-CB	7.22	120.58	110.17
5	D	482	ASP	CA-C-O	-7.22	112.89	120.55
5	F	332	ILE	CA-C-O	-7.21	115.98	120.88
4	E	337	ILE	CA-C-N	7.20	129.93	120.28
4	E	337	ILE	C-N-CA	7.20	129.93	120.28
5	F	396	HIS	CB-CA-C	-7.20	98.84	110.79
5	B	88	VAL	N-CA-C	-7.20	103.95	111.58
5	B	320	GLY	CA-C-O	-7.19	115.73	122.13
8	P	270	ASP	CA-C-N	7.19	129.92	120.28
8	P	270	ASP	C-N-CA	7.19	129.92	120.28
4	E	380	PHE	CA-C-O	-7.19	114.15	120.19
4	A	429	THR	O-C-N	7.19	129.74	122.12
8	P	158	VAL	CA-C-N	7.19	129.91	120.28
8	P	158	VAL	C-N-CA	7.19	129.91	120.28
2	M	26	ASN	CA-C-O	-7.18	112.81	120.42
7	G	24	ILE	CA-C-O	-7.18	113.56	121.17
8	P	346	LEU	CA-C-N	7.18	130.23	120.54
8	P	346	LEU	C-N-CA	7.18	130.23	120.54
4	C	472	ASP	CA-C-N	7.17	130.21	120.38
4	C	472	ASP	C-N-CA	7.17	130.21	120.38
7	I	10	PRO	O-C-N	7.17	130.49	122.24
2	M	136	LYS	CA-C-N	7.17	130.47	120.29
2	M	136	LYS	C-N-CA	7.17	130.47	120.29
4	A	175	PRO	O-C-N	7.16	124.61	121.31
4	A	334	TYR	N-CA-C	7.16	118.88	111.14
1	O	100	LEU	O-C-N	7.16	127.94	121.35
7	G	11	ASN	CA-C-N	7.16	129.88	120.28
7	G	11	ASN	C-N-CA	7.16	129.88	120.28
4	E	405	ASP	N-CA-C	7.16	121.26	111.17
8	P	377	ASN	CA-C-N	7.16	127.92	119.98
8	P	377	ASN	C-N-CA	7.16	127.92	119.98
4	C	69	THR	N-CA-C	-7.15	97.59	109.46
4	E	175	PRO	CA-C-N	7.14	127.17	119.89
4	E	175	PRO	C-N-CA	7.14	127.17	119.89
6	L	47	LYS	CA-C-O	-7.14	112.85	120.42
5	F	79	VAL	N-CA-CB	7.13	118.30	110.53
5	D	144	ARG	N-CA-C	-7.13	104.05	114.39
5	D	205	GLU	CA-C-O	7.13	128.07	118.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	237	HIS	CA-C-O	7.13	128.26	120.71
5	D	437	GLU	CA-C-N	7.13	129.83	120.28
5	D	437	GLU	C-N-CA	7.13	129.83	120.28
5	D	398	ASP	N-CA-C	7.12	120.08	111.82
7	K	212	GLU	O-C-N	7.12	129.66	122.12
4	E	478	PHE	CA-C-N	7.11	127.42	119.32
4	E	478	PHE	C-N-CA	7.11	127.42	119.32
5	D	173	PHE	CB-CA-C	-7.11	98.53	110.19
4	A	396	GLY	N-CA-C	-7.11	101.64	111.09
6	J	97	ILE	N-CA-C	-7.11	103.85	110.53
8	P	176	ASN	CA-C-N	7.11	130.60	122.36
8	P	176	ASN	C-N-CA	7.11	130.60	122.36
5	B	32	SER	N-CA-C	-7.10	102.74	111.40
8	P	414	LYS	CA-C-N	7.10	129.67	120.44
8	P	414	LYS	C-N-CA	7.10	129.67	120.44
7	K	147	ASP	N-CA-C	-7.10	103.58	111.82
5	D	344	HIS	CA-C-N	7.09	126.92	119.05
5	D	344	HIS	C-N-CA	7.09	126.92	119.05
2	M	71	VAL	CA-C-N	7.08	129.65	120.44
2	M	71	VAL	C-N-CA	7.08	129.65	120.44
4	C	430	ALA	O-C-N	7.08	130.22	122.15
5	F	361	ASP	CA-C-N	7.07	131.06	120.31
5	F	361	ASP	C-N-CA	7.07	131.06	120.31
7	G	46	GLU	CA-C-N	7.07	129.76	120.28
7	G	46	GLU	C-N-CA	7.07	129.76	120.28
5	D	415	ALA	N-CA-CB	7.07	120.51	110.12
1	O	109	GLU	CA-C-N	7.07	129.75	120.28
1	O	109	GLU	C-N-CA	7.07	129.75	120.28
5	F	365	HIS	N-CA-C	7.07	118.98	111.28
6	J	61	ASN	N-CA-C	-7.06	105.85	114.75
1	O	308	ALA	CA-C-N	7.06	129.62	120.44
1	O	308	ALA	C-N-CA	7.06	129.62	120.44
2	M	80	GLY	CA-C-N	7.06	129.74	120.28
2	M	80	GLY	C-N-CA	7.06	129.74	120.28
2	M	143	VAL	N-CA-C	7.05	117.81	110.62
4	E	567	TRP	CA-C-N	7.05	130.31	120.29
4	E	567	TRP	C-N-CA	7.05	130.31	120.29
5	F	410	GLY	CA-C-N	7.05	129.61	120.44
5	F	410	GLY	C-N-CA	7.05	129.61	120.44
5	B	448	ALA	N-CA-C	-7.05	103.85	113.30
4	A	148	VAL	N-CA-CB	7.05	118.98	110.31
8	P	161	VAL	CA-C-N	7.05	129.73	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	161	VAL	C-N-CA	7.05	129.73	120.28
1	O	297	VAL	CA-C-N	7.05	129.60	120.44
1	O	297	VAL	C-N-CA	7.05	129.60	120.44
1	O	145	VAL	N-CA-CB	7.03	120.11	110.54
1	O	244	GLN	N-CA-C	7.03	118.94	111.28
7	K	72	SER	CA-C-N	7.02	130.97	120.31
7	K	72	SER	C-N-CA	7.02	130.97	120.31
7	I	50	ILE	O-C-N	-7.02	115.03	121.91
1	O	246	PHE	CA-C-O	-7.01	113.46	120.82
5	B	305	PRO	CB-CA-C	-7.01	102.08	111.12
4	C	545	ASP	N-CA-C	7.01	118.57	111.07
8	P	308	VAL	CA-C-O	-7.01	113.66	120.95
8	P	78	ILE	CA-C-O	-7.00	114.00	118.69
4	A	409	SER	N-CA-C	-7.00	98.43	109.07
4	E	542	LYS	CA-C-N	7.00	129.66	120.28
4	E	542	LYS	C-N-CA	7.00	129.66	120.28
4	A	266	SER	N-CA-CB	7.00	120.52	110.16
4	E	517	VAL	N-CA-CB	6.99	118.73	110.55
5	D	363	GLN	N-CA-C	-6.99	103.74	111.36
7	G	157	MET	CA-C-N	6.99	129.94	120.44
7	G	157	MET	C-N-CA	6.99	129.94	120.44
3	N	14	GLU	O-C-N	-6.98	114.83	122.09
7	I	151	SER	O-C-N	-6.98	113.43	122.37
3	N	79	ALA	O-C-N	6.98	129.35	122.09
4	E	338	THR	CA-C-O	-6.98	113.15	120.55
5	F	247	ASP	N-CA-C	-6.98	100.66	110.29
5	D	156	SER	CA-C-N	6.97	130.19	120.29
5	D	156	SER	C-N-CA	6.97	130.19	120.29
4	C	561	VAL	CA-C-O	-6.97	113.46	120.85
8	P	468	ALA	N-CA-CB	6.96	120.47	110.16
5	F	482	ASP	N-CA-CB	6.96	120.94	110.22
4	A	531	TYR	N-CA-CB	6.96	120.16	110.07
4	C	63	ILE	CA-C-O	-6.96	112.84	120.43
5	D	247	ASP	N-CA-C	-6.96	99.81	110.32
1	O	349	GLY	CA-C-N	6.96	130.30	120.28
1	O	349	GLY	C-N-CA	6.96	130.30	120.28
8	P	215	PHE	CA-C-N	6.95	129.60	120.28
8	P	215	PHE	C-N-CA	6.95	129.60	120.28
4	A	180	GLY	N-CA-C	-6.95	101.48	110.38
5	F	267	ALA	N-CA-C	6.95	118.50	111.07
6	H	79	GLU	N-CA-C	-6.95	102.79	112.45
4	E	436	GLN	CA-C-O	6.95	126.40	118.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	318	VAL	N-CA-C	-6.95	97.61	107.75
8	P	107	ASP	N-CA-C	-6.94	104.70	113.72
4	C	321	THR	N-CA-C	-6.93	98.89	109.85
5	F	172	ILE	N-CA-C	-6.93	97.75	107.80
5	F	221	THR	CA-C-N	6.93	129.56	120.28
5	F	221	THR	C-N-CA	6.93	129.56	120.28
4	E	180	GLY	CA-C-O	-6.92	114.82	121.05
4	E	385	GLY	CA-C-N	6.92	129.56	120.28
4	E	385	GLY	C-N-CA	6.92	129.56	120.28
1	O	201	SER	CA-C-O	6.92	128.08	120.82
5	B	328	SER	N-CA-C	-6.91	98.21	108.79
6	L	23	LYS	CA-C-O	6.91	127.75	120.42
1	O	16	LEU	CA-C-N	6.91	126.83	119.85
1	O	16	LEU	C-N-CA	6.91	126.83	119.85
1	O	154	SER	CA-C-N	6.91	129.54	120.28
1	O	154	SER	C-N-CA	6.91	129.54	120.28
3	N	48	GLU	CA-C-O	-6.91	113.23	120.55
6	L	11	LEU	CA-C-N	6.91	129.83	120.44
6	L	11	LEU	C-N-CA	6.91	129.83	120.44
4	E	327	ALA	CB-CA-C	-6.90	100.00	110.90
5	F	221	THR	CA-C-O	6.90	127.73	120.42
8	P	175	GLN	N-CA-CB	6.89	120.25	110.12
1	O	90	ASN	CA-C-O	-6.89	113.55	121.54
2	M	36	SER	N-CA-CB	6.89	120.25	110.12
3	N	41	GLN	O-C-N	-6.89	114.99	123.33
4	E	98	PRO	CA-C-O	-6.89	113.27	121.67
4	A	485	MET	CA-C-O	-6.89	113.59	120.82
5	F	176	SER	N-CA-C	-6.88	105.67	112.97
8	P	159	LYS	CA-C-N	6.88	129.39	120.44
8	P	159	LYS	C-N-CA	6.88	129.39	120.44
8	P	234	ASN	CA-C-N	6.88	130.19	120.28
8	P	234	ASN	C-N-CA	6.88	130.19	120.28
6	L	30	ASP	CA-C-N	6.88	130.19	120.28
6	L	30	ASP	C-N-CA	6.88	130.19	120.28
5	D	462	TRP	N-CA-C	-6.88	103.71	111.07
1	O	106	PRO	CA-C-N	6.88	125.83	120.33
1	O	106	PRO	C-N-CA	6.88	125.83	120.33
5	B	463	SER	CA-C-N	6.87	130.05	120.29
5	B	463	SER	C-N-CA	6.87	130.05	120.29
3	N	60	GLU	N-CA-C	-6.87	104.53	113.12
4	A	341	GLU	CA-C-N	6.87	129.49	120.28
4	A	341	GLU	C-N-CA	6.87	129.49	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	L	47	LYS	N-CA-C	-6.87	103.88	111.36
3	N	52	ASP	N-CA-C	6.87	118.42	111.07
5	F	343	THR	N-CA-CB	6.86	120.35	110.88
5	B	91	THR	N-CA-C	-6.86	100.36	110.52
8	P	250	ILE	N-CA-C	-6.86	104.08	110.53
7	K	155	ASP	CA-C-O	-6.86	113.28	120.55
5	F	288	LEU	CA-C-N	6.86	129.47	120.28
5	F	288	LEU	C-N-CA	6.86	129.47	120.28
5	F	316	TYR	CA-C-N	6.86	130.15	120.28
5	F	316	TYR	C-N-CA	6.86	130.15	120.28
7	I	30	GLU	CA-C-O	-6.85	113.62	120.82
5	B	365	HIS	O-C-N	6.85	129.13	122.07
7	G	142	LEU	CA-C-N	6.85	131.56	120.60
7	G	142	LEU	C-N-CA	6.85	131.56	120.60
7	K	120	ILE	O-C-N	-6.85	114.78	121.90
4	A	123	TYR	N-CA-C	-6.84	98.62	109.23
7	K	128	ALA	N-CA-CB	6.84	120.29	110.16
4	C	392	TYR	CA-C-O	-6.84	113.30	120.55
4	C	542	LYS	CA-C-N	6.84	130.01	120.29
4	C	542	LYS	C-N-CA	6.84	130.01	120.29
5	D	312	LEU	CA-C-N	6.84	130.13	120.28
5	D	312	LEU	C-N-CA	6.84	130.13	120.28
5	F	319	ALA	N-CA-C	-6.84	97.96	108.76
5	D	407	TYR	CA-C-N	6.83	129.73	120.44
5	D	407	TYR	C-N-CA	6.83	129.73	120.44
8	P	150	LEU	N-CA-CB	6.82	120.15	110.12
6	H	20	ILE	N-CA-C	6.82	117.58	110.62
4	A	449	LYS	N-CA-CB	6.82	122.02	110.49
7	G	62	PHE	N-CA-C	-6.82	103.78	111.14
8	P	425	ASN	CA-C-N	6.81	129.30	120.44
8	P	425	ASN	C-N-CA	6.81	129.30	120.44
4	C	185	ILE	N-CA-CB	6.81	120.49	111.64
8	P	192	GLU	N-CA-CB	6.80	120.12	110.12
7	I	58	ILE	CA-C-O	-6.80	113.88	120.95
4	C	70	ILE	N-CA-C	-6.80	98.59	108.11
8	P	416	GLU	O-C-N	6.80	130.63	122.27
4	E	587	PHE	CA-C-N	6.79	130.99	120.60
4	E	587	PHE	C-N-CA	6.79	130.99	120.60
5	D	308	MET	CA-C-N	6.79	129.27	120.44
5	D	308	MET	C-N-CA	6.79	129.27	120.44
5	D	348	ASP	CA-C-N	6.79	129.67	120.44
5	D	348	ASP	C-N-CA	6.79	129.67	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	H	61	ASN	N-CA-CB	6.78	120.72	110.95
5	B	480	ILE	N-CA-C	-6.78	103.87	110.72
8	P	203	ILE	N-CA-CB	6.78	119.76	110.54
7	G	86	LEU	CA-C-N	6.78	129.36	120.28
7	G	86	LEU	C-N-CA	6.78	129.36	120.28
5	B	211	VAL	N-CA-C	-6.77	97.75	107.77
5	B	226	LYS	CA-C-N	6.77	129.35	120.28
5	B	226	LYS	C-N-CA	6.77	129.35	120.28
2	M	57	MET	O-C-N	-6.77	115.10	122.07
4	A	603	LEU	CA-C-N	6.77	129.35	120.28
4	A	603	LEU	C-N-CA	6.77	129.35	120.28
4	C	565	ALA	N-CA-CB	6.77	121.93	110.49
6	J	19	GLU	CA-C-O	-6.77	113.25	120.42
4	E	390	SER	CA-C-N	6.76	129.64	120.44
4	E	390	SER	C-N-CA	6.76	129.64	120.44
4	E	498	VAL	CA-C-N	6.76	129.72	120.46
4	E	498	VAL	C-N-CA	6.76	129.72	120.46
4	A	231	TYR	CB-CA-C	6.76	116.86	110.17
7	G	60	GLY	O-C-N	-6.76	115.69	122.18
8	P	368	LEU	N-CA-CB	6.76	123.23	111.00
7	G	171	GLU	CA-C-N	6.76	131.44	122.93
7	G	171	GLU	C-N-CA	6.76	131.44	122.93
2	M	82	GLN	CA-C-N	6.75	130.01	120.42
2	M	82	GLN	C-N-CA	6.75	130.01	120.42
8	P	82	HIS	CA-C-N	6.75	129.32	120.28
8	P	82	HIS	C-N-CA	6.75	129.32	120.28
4	C	53	HIS	N-CA-C	-6.75	105.01	113.18
5	D	322	VAL	CA-C-N	6.75	134.43	121.54
5	D	322	VAL	C-N-CA	6.75	134.43	121.54
7	I	142	LEU	CA-C-N	6.74	129.62	120.38
7	I	142	LEU	C-N-CA	6.74	129.62	120.38
5	D	255	THR	CA-C-O	-6.74	112.43	118.63
7	G	23	PHE	N-CA-CB	6.74	120.03	110.12
5	F	251	GLU	N-CA-CB	6.74	120.02	110.12
2	M	44	ARG	CA-C-N	6.74	129.60	120.44
2	M	44	ARG	C-N-CA	6.74	129.60	120.44
4	A	388	LEU	CA-C-N	6.74	129.31	120.28
4	A	388	LEU	C-N-CA	6.74	129.31	120.28
5	B	477	SER	CA-C-N	6.73	126.43	119.56
5	B	477	SER	C-N-CA	6.73	126.43	119.56
5	B	46	PHE	O-C-N	-6.73	113.58	121.32
5	D	480	ILE	CA-C-N	6.72	129.28	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	480	ILE	C-N-CA	6.72	129.28	120.28
7	G	155	ASP	N-CA-C	6.71	118.60	111.28
2	M	21	LYS	CA-C-N	6.71	129.27	120.28
2	M	21	LYS	C-N-CA	6.71	129.27	120.28
7	G	135	PRO	N-CA-C	-6.70	105.20	114.98
2	M	177	ILE	N-CA-CB	6.70	118.68	110.64
5	B	465	LEU	CA-C-N	6.70	131.91	120.72
5	B	465	LEU	C-N-CA	6.70	131.91	120.72
4	C	461	SER	N-CA-C	-6.69	96.43	108.48
7	I	160	TYR	CA-C-N	6.69	128.50	120.14
7	I	160	TYR	C-N-CA	6.69	128.50	120.14
5	D	408	ALA	CA-C-N	6.69	129.63	120.46
5	D	408	ALA	C-N-CA	6.69	129.63	120.46
4	E	120	GLN	N-CA-CB	6.69	121.79	110.49
5	D	339	ASN	CA-C-O	6.68	127.07	119.18
4	A	548	ARG	O-C-N	6.68	129.20	122.12
5	B	102	ILE	CA-C-O	-6.68	114.85	119.19
7	I	22	ALA	O-C-N	6.68	129.30	122.09
8	P	282	ILE	N-CA-C	-6.68	105.00	113.22
1	O	75	ILE	CA-C-N	6.68	127.39	119.98
1	O	75	ILE	C-N-CA	6.68	127.39	119.98
5	D	88	VAL	CA-C-O	-6.68	112.44	120.78
8	P	288	ARG	CA-C-O	-6.68	113.81	120.82
4	C	100	LEU	N-CA-C	-6.67	103.93	111.14
2	M	82	GLN	N-CA-CB	6.67	120.04	110.16
3	N	37	PHE	N-CA-C	-6.67	98.93	109.07
4	A	221	ARG	CA-C-O	-6.67	113.45	119.59
4	A	77	ALA	CA-C-O	6.67	125.95	119.08
5	D	116	SER	N-CA-C	-6.67	103.23	112.30
3	N	21	LEU	CA-C-N	6.66	129.10	120.44
3	N	21	LEU	C-N-CA	6.66	129.10	120.44
1	O	180	LYS	N-CA-C	6.66	118.10	109.64
6	L	80	LEU	N-CA-C	-6.66	105.02	113.01
5	F	125	LYS	CA-C-N	6.65	129.01	120.70
5	F	125	LYS	C-N-CA	6.65	129.01	120.70
5	F	303	GLY	N-CA-C	-6.65	106.15	115.32
4	A	322	SER	N-CA-C	-6.64	104.99	113.23
5	F	456	GLU	CA-C-N	6.64	129.18	120.28
5	F	456	GLU	C-N-CA	6.64	129.18	120.28
8	P	275	LEU	CA-C-N	6.64	129.18	120.28
8	P	275	LEU	C-N-CA	6.64	129.18	120.28
5	D	204	HIS	CA-C-N	6.64	130.51	119.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	204	HIS	C-N-CA	6.64	130.51	119.35
4	E	520	LEU	CA-C-N	6.64	128.92	120.56
4	E	520	LEU	C-N-CA	6.64	128.92	120.56
7	G	146	VAL	N-CA-C	6.64	117.39	110.62
2	M	185	ILE	N-CA-CB	6.64	119.56	110.54
5	F	81	GLU	CA-C-N	6.64	131.06	121.44
5	F	81	GLU	C-N-CA	6.64	131.06	121.44
5	B	435	PHE	CA-C-N	6.64	129.17	120.28
5	B	435	PHE	C-N-CA	6.64	129.17	120.28
7	G	70	MET	N-CA-C	-6.63	105.19	113.28
4	A	530	GLY	CA-C-N	6.63	129.46	120.44
4	A	530	GLY	C-N-CA	6.63	129.46	120.44
6	L	49	GLN	N-CA-CB	6.63	119.97	110.16
4	E	401	LEU	CA-C-O	-6.63	113.74	121.16
5	F	362	ARG	CA-C-N	6.62	129.16	120.28
5	F	362	ARG	C-N-CA	6.62	129.16	120.28
2	M	144	GLU	CA-C-N	6.62	129.69	120.29
2	M	144	GLU	C-N-CA	6.62	129.69	120.29
4	E	125	PRO	N-CA-C	-6.62	98.65	111.69
7	I	125	ILE	N-CA-C	6.62	116.75	110.53
7	G	146	VAL	O-C-N	6.62	128.29	121.87
5	B	107	ASP	CA-C-O	6.62	127.47	120.33
4	C	417	SER	CA-C-N	6.61	126.56	120.21
4	C	417	SER	C-N-CA	6.61	126.56	120.21
4	C	423	PHE	N-CA-C	-6.61	103.81	112.41
5	D	317	GLU	N-CA-C	-6.61	104.08	111.28
8	P	164	LEU	N-CA-CB	-6.61	100.05	110.22
5	D	133	ASP	CA-C-N	6.61	129.47	122.14
5	D	133	ASP	C-N-CA	6.61	129.47	122.14
8	P	343	LYS	O-C-N	6.61	128.87	122.07
5	F	115	GLY	CA-C-N	6.60	132.59	122.23
5	F	115	GLY	C-N-CA	6.60	132.59	122.23
4	A	39	ASN	CB-CA-C	6.60	121.62	111.39
4	C	531	TYR	CA-C-O	6.60	126.53	119.34
7	K	58	ILE	CA-C-N	6.60	129.12	120.28
7	K	58	ILE	C-N-CA	6.60	129.12	120.28
5	B	476	ILE	N-CA-C	-6.60	98.12	108.81
6	H	76	VAL	O-C-N	-6.60	115.44	123.03
3	N	69	ILE	CA-C-N	6.59	130.12	120.82
3	N	69	ILE	C-N-CA	6.59	130.12	120.82
1	O	12	ILE	N-CA-C	-6.59	98.64	108.46
4	A	425	ASP	N-CA-C	6.59	119.18	110.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	190	GLN	CA-C-O	-6.59	112.02	119.79
4	A	25	GLY	CA-C-N	6.58	133.40	122.73
4	A	25	GLY	C-N-CA	6.58	133.40	122.73
5	F	358	ILE	N-CA-C	-6.58	98.89	108.11
7	K	76	THR	CA-C-N	6.58	129.09	120.28
7	K	76	THR	C-N-CA	6.58	129.09	120.28
1	O	325	PHE	N-CA-C	-6.58	99.46	109.85
2	M	14	THR	N-CA-C	-6.58	104.74	112.89
8	P	308	VAL	N-CA-CB	6.58	119.48	110.54
8	P	465	ALA	CA-C-N	6.57	129.62	120.29
8	P	465	ALA	C-N-CA	6.57	129.62	120.29
5	B	36	GLY	CA-C-N	6.57	126.20	119.56
5	B	36	GLY	C-N-CA	6.57	126.20	119.56
1	O	161	ALA	O-C-N	6.57	129.19	122.09
8	P	184	TYR	O-C-N	6.57	128.84	122.07
2	M	167	ASN	CA-C-N	6.57	129.08	120.28
2	M	167	ASN	C-N-CA	6.57	129.08	120.28
4	C	545	ASP	N-CA-CB	6.57	119.53	110.01
1	O	178	ILE	N-CA-C	-6.56	98.98	108.17
7	I	134	GLU	N-CA-C	-6.56	100.53	110.50
4	C	255	PRO	N-CA-C	-6.56	100.81	111.77
3	N	92	LEU	N-CA-C	-6.56	96.35	108.02
4	C	445	LEU	CA-C-N	6.56	129.72	120.28
4	C	445	LEU	C-N-CA	6.56	129.72	120.28
6	H	61	ASN	N-CA-C	-6.56	103.53	113.89
1	O	236	VAL	N-CA-C	-6.55	98.75	108.45
4	A	491	ASN	N-CA-C	-6.55	104.22	111.82
5	B	412	ASP	N-CA-CB	6.55	119.75	110.12
7	I	59	ASP	CA-C-N	6.55	127.21	119.94
7	I	59	ASP	C-N-CA	6.55	127.21	119.94
4	A	329	ARG	CB-CA-C	-6.55	99.92	110.79
4	C	249	GLY	N-CA-C	-6.54	105.28	116.01
5	B	435	PHE	CA-C-O	-6.54	113.49	120.42
7	I	213	GLU	N-CA-C	-6.54	105.60	113.97
4	E	333	ILE	N-CA-CB	6.54	120.38	110.58
8	P	9	ASP	CA-C-N	6.54	132.39	123.11
8	P	9	ASP	C-N-CA	6.54	132.39	123.11
8	P	310	LYS	CA-C-N	6.53	128.93	120.44
8	P	310	LYS	C-N-CA	6.53	128.93	120.44
5	F	326	ASN	N-CA-C	-6.53	102.88	113.19
4	A	381	PRO	CB-CA-C	-6.52	102.71	111.12
4	C	421	GLY	O-C-N	6.52	128.80	122.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	211	LEU	N-CA-CB	6.52	119.70	110.12
4	C	372	GLY	CA-C-O	-6.52	111.78	119.01
4	C	249	GLY	CA-C-O	-6.51	112.65	118.77
4	A	47	GLU	CA-C-N	6.51	130.81	121.50
4	A	47	GLU	C-N-CA	6.51	130.81	121.50
5	B	105	SER	CA-C-N	6.51	129.65	120.28
5	B	105	SER	C-N-CA	6.51	129.65	120.28
1	O	91	GLU	CA-C-N	6.50	133.56	122.37
1	O	91	GLU	C-N-CA	6.50	133.56	122.37
1	O	284	LEU	CA-C-N	6.50	128.99	120.28
1	O	284	LEU	C-N-CA	6.50	128.99	120.28
5	B	427	ILE	CA-C-N	6.50	128.90	120.44
5	B	427	ILE	C-N-CA	6.50	128.90	120.44
4	A	547	MET	CA-C-N	6.50	128.99	120.28
4	A	547	MET	C-N-CA	6.50	128.99	120.28
4	A	251	THR	N-CA-C	-6.50	98.01	109.06
5	D	118	ARG	CB-CA-C	-6.50	100.08	109.63
4	C	149	GLY	N-CA-C	-6.50	107.35	115.08
5	F	299	PRO	O-C-N	-6.49	116.02	123.23
6	H	69	GLU	N-CA-C	-6.49	105.01	113.12
5	D	164	ILE	N-CA-C	-6.48	99.14	108.48
4	E	86	LEU	CA-C-N	6.48	130.69	121.42
4	E	86	LEU	C-N-CA	6.48	130.69	121.42
4	E	614	SER	CB-CA-C	-6.48	100.66	110.90
4	E	334	TYR	CA-C-N	6.47	129.48	120.29
4	E	334	TYR	C-N-CA	6.47	129.48	120.29
7	K	111	ALA	N-CA-CB	6.47	120.19	110.22
4	C	185	ILE	CA-C-O	6.47	127.12	120.39
8	P	332	ASP	N-CA-CB	6.47	121.42	110.49
4	E	522	LYS	N-CA-C	6.47	117.99	111.07
4	A	110	ARG	CA-C-O	-6.47	112.62	119.22
4	C	271	LYS	N-CA-C	6.46	118.12	111.14
6	H	58	GLU	CA-C-N	6.46	130.13	120.31
6	H	58	GLU	C-N-CA	6.46	130.13	120.31
4	E	54	ASP	N-CA-CB	6.46	120.02	110.33
4	C	237	GLN	O-C-N	-6.46	115.86	123.22
4	C	343	PHE	CA-C-N	6.46	129.47	120.29
4	C	343	PHE	C-N-CA	6.46	129.47	120.29
1	O	87	GLN	CA-C-N	6.46	127.15	119.98
1	O	87	GLN	C-N-CA	6.46	127.15	119.98
3	N	108	VAL	N-CA-C	6.46	117.21	110.62
8	P	174	LEU	CA-C-N	6.46	128.93	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	174	LEU	C-N-CA	6.46	128.93	120.28
1	O	132	THR	CA-C-N	6.46	128.93	120.28
1	O	132	THR	C-N-CA	6.46	128.93	120.28
3	N	25	ILE	CA-C-N	-6.46	115.57	122.67
3	N	25	ILE	C-N-CA	-6.46	115.57	122.67
4	E	164	ASN	N-CA-C	-6.46	99.34	108.96
4	E	269	LEU	CA-C-N	6.46	128.83	120.44
4	E	269	LEU	C-N-CA	6.46	128.83	120.44
4	C	322	SER	CA-C-O	-6.45	113.71	120.55
7	I	195	ASP	N-CA-C	6.45	120.14	111.24
5	D	255	THR	CA-C-N	6.45	126.21	119.05
5	D	255	THR	C-N-CA	6.45	126.21	119.05
6	J	46	TYR	N-CA-C	-6.45	104.45	112.90
6	J	95	VAL	N-CA-C	6.45	117.13	110.36
5	F	363	GLN	N-CA-C	6.45	118.31	111.28
4	E	364	LEU	CA-C-N	6.45	128.92	120.28
4	E	364	LEU	C-N-CA	6.45	128.92	120.28
5	F	405	ALA	N-CA-C	6.45	118.31	111.28
4	C	201	GLU	CA-C-N	6.44	131.19	121.40
4	C	201	GLU	C-N-CA	6.44	131.19	121.40
5	D	402	GLN	CA-C-N	6.44	128.82	120.44
5	D	402	GLN	C-N-CA	6.44	128.82	120.44
7	I	9	THR	N-CA-CB	6.44	122.78	111.19
4	C	104	ILE	CA-C-O	6.44	128.20	120.67
1	O	23	VAL	N-CA-C	-6.43	106.06	112.17
1	O	317	LEU	N-CA-C	6.43	118.09	111.14
2	M	138	ILE	N-CA-CB	6.43	120.23	110.58
4	C	520	LEU	N-CA-C	-6.43	104.27	111.28
4	E	311	ILE	N-CA-C	-6.43	104.22	110.72
8	P	412	ASN	CA-C-N	6.43	132.06	122.99
8	P	412	ASN	C-N-CA	6.43	132.06	122.99
5	D	154	GLY	O-C-N	-6.43	114.35	122.32
4	C	50	LYS	N-CA-C	-6.43	98.72	109.07
4	A	316	THR	N-CA-C	-6.42	98.43	108.90
1	O	142	ASP	CA-C-N	6.42	128.88	120.28
1	O	142	ASP	C-N-CA	6.42	128.88	120.28
4	C	81	VAL	CA-C-N	6.42	131.40	122.29
4	C	81	VAL	C-N-CA	6.42	131.40	122.29
5	B	282	SER	CA-C-N	6.41	128.87	120.28
5	B	282	SER	C-N-CA	6.41	128.87	120.28
4	C	594	LYS	CA-C-N	6.41	130.93	120.23
4	C	594	LYS	C-N-CA	6.41	130.93	120.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	131	SER	N-CA-CB	6.41	119.39	109.97
4	C	587	PHE	CA-C-N	6.41	130.42	120.68
4	C	587	PHE	C-N-CA	6.41	130.42	120.68
4	C	300	LEU	N-CA-C	-6.41	101.47	110.50
4	A	466	VAL	N-CA-C	6.40	117.19	110.72
4	E	257	ALA	N-CA-CB	6.40	121.30	110.49
4	E	431	THR	CA-C-O	-6.40	113.14	120.24
4	C	588	GLU	N-CA-CB	6.39	119.44	110.11
8	P	182	THR	CA-C-N	6.39	128.85	120.28
8	P	182	THR	C-N-CA	6.39	128.85	120.28
4	A	536	ALA	CA-C-N	6.39	130.99	121.72
4	A	536	ALA	C-N-CA	6.39	130.99	121.72
7	K	128	ALA	CA-C-N	6.39	129.49	120.28
7	K	128	ALA	C-N-CA	6.39	129.49	120.28
8	P	14	ASN	CA-C-N	6.39	128.85	120.28
8	P	14	ASN	C-N-CA	6.39	128.85	120.28
4	C	410	VAL	N-CA-C	-6.39	98.31	107.77
5	D	400	SER	N-CA-CB	6.39	119.51	110.12
4	A	408	GLY	O-C-N	-6.39	116.68	123.45
5	D	180	HIS	O-C-N	6.39	128.89	122.12
8	P	145	ASN	CA-C-N	6.39	129.21	120.46
8	P	145	ASN	C-N-CA	6.39	129.21	120.46
3	N	36	ASN	N-CA-C	-6.38	103.83	112.26
4	E	201	GLU	CA-C-O	6.38	127.34	120.32
5	B	145	ILE	N-CA-C	-6.38	99.01	108.45
5	B	468	TYR	N-CA-C	-6.38	100.37	109.62
1	O	202	LEU	CA-C-N	6.38	129.15	120.54
1	O	202	LEU	C-N-CA	6.38	129.15	120.54
6	H	104	LYS	N-CA-C	-6.38	100.51	110.14
3	N	34	GLU	CA-C-N	6.37	130.37	120.75
3	N	34	GLU	C-N-CA	6.37	130.37	120.75
5	F	212	PHE	O-C-N	6.37	130.88	123.30
5	B	244	LEU	N-CA-C	-6.37	100.07	109.81
4	C	610	ARG	N-CA-C	6.36	118.22	111.28
5	F	348	ASP	CA-C-O	-6.36	114.15	120.70
4	A	324	MET	N-CA-C	-6.36	100.95	110.24
5	B	431	LEU	CA-C-N	6.36	129.32	120.29
5	B	431	LEU	C-N-CA	6.36	129.32	120.29
8	P	404	ALA	CA-C-N	6.36	128.80	120.28
8	P	404	ALA	C-N-CA	6.36	128.80	120.28
2	M	204	LYS	CA-C-N	6.36	128.80	120.28
2	M	204	LYS	C-N-CA	6.36	128.80	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	J	5	ASN	CA-C-N	6.36	126.99	120.00
6	J	5	ASN	C-N-CA	6.36	126.99	120.00
7	K	31	LYS	CA-C-N	6.36	129.97	120.31
7	K	31	LYS	C-N-CA	6.36	129.97	120.31
6	H	51	ASP	N-CA-CB	6.35	120.13	110.28
4	C	562	ALA	N-CA-C	6.35	119.01	111.71
5	D	423	GLU	CA-C-N	6.35	129.31	120.29
5	D	423	GLU	C-N-CA	6.35	129.31	120.29
7	G	72	SER	CA-C-N	6.35	129.31	120.29
7	G	72	SER	C-N-CA	6.35	129.31	120.29
4	A	117	GLU	CA-C-N	6.35	129.07	120.44
4	A	117	GLU	C-N-CA	6.35	129.07	120.44
5	B	257	ARG	N-CA-C	-6.35	104.44	111.36
5	B	239	SER	N-CA-C	-6.35	99.06	109.40
4	C	577	VAL	CA-C-O	-6.34	114.35	120.95
4	E	545	ASP	CA-C-O	-6.34	113.83	120.55
5	B	219	LEU	CA-C-O	-6.34	113.70	120.42
6	J	96	LYS	CA-C-N	6.34	128.67	120.56
6	J	96	LYS	C-N-CA	6.34	128.67	120.56
7	G	75	ILE	CA-C-N	6.34	129.29	120.29
7	G	75	ILE	C-N-CA	6.34	129.29	120.29
1	O	250	ALA	O-C-N	-6.33	115.41	122.12
8	P	99	LEU	N-CA-C	-6.33	104.45	111.36
8	P	434	LEU	CA-C-O	-6.33	113.19	120.03
4	E	308	LYS	N-CA-CB	6.33	121.19	110.49
5	F	350	THR	N-CA-C	-6.33	104.38	111.28
4	E	363	ALA	CA-C-O	6.33	127.26	120.55
4	A	45	MET	N-CA-C	-6.33	104.81	113.30
4	C	475	TYR	CA-C-N	6.33	126.35	119.89
4	C	475	TYR	C-N-CA	6.33	126.35	119.89
4	A	520	LEU	CA-C-N	6.33	128.53	120.56
4	A	520	LEU	C-N-CA	6.33	128.53	120.56
7	K	197	ILE	N-CA-C	-6.33	99.25	108.11
4	C	259	GLY	N-CA-C	-6.32	105.62	115.67
8	P	323	GLN	CA-C-O	6.32	127.46	120.82
2	M	29	TYR	CA-C-N	6.32	128.66	120.44
2	M	29	TYR	C-N-CA	6.32	128.66	120.44
2	M	52	ASP	O-C-N	6.32	128.58	122.07
5	D	364	LEU	N-CA-CB	6.32	119.17	110.01
7	I	201	ASN	N-CA-C	-6.31	102.09	111.81
2	M	180	ARG	O-C-N	6.31	129.34	122.15
7	I	122	GLN	CA-C-N	6.30	128.72	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	I	122	GLN	C-N-CA	6.30	128.72	120.28
7	I	154	ASP	CA-C-N	6.30	128.72	120.28
7	I	154	ASP	C-N-CA	6.30	128.72	120.28
4	A	134	ASP	N-CA-CB	6.30	119.23	109.85
4	A	182	ILE	N-CA-C	6.29	117.85	108.54
1	O	32	SER	N-CA-C	-6.29	104.50	111.36
4	E	491	ASN	CA-C-N	6.29	128.71	120.28
4	E	491	ASN	C-N-CA	6.29	128.71	120.28
5	B	111	ARG	CA-C-O	-6.29	113.75	121.11
4	C	130	THR	CA-C-O	-6.29	113.81	120.23
7	G	87	LYS	CA-C-O	6.29	127.22	120.55
4	A	84	PRO	CA-C-O	-6.29	114.32	122.12
7	K	206	ARG	N-CA-CB	6.29	119.36	110.12
6	H	43	ILE	O-C-N	6.29	128.31	121.83
5	F	133	ASP	O-C-N	6.29	130.06	122.96
1	O	126	SER	CA-C-N	6.29	129.34	120.42
1	O	126	SER	C-N-CA	6.29	129.34	120.42
7	I	56	ASN	CA-C-N	6.29	129.22	120.29
7	I	56	ASN	C-N-CA	6.29	129.22	120.29
4	A	191	TYR	N-CA-C	-6.28	99.60	108.96
3	N	52	ASP	N-CA-CB	6.28	119.12	110.01
5	F	440	GLU	O-C-N	-6.28	115.60	122.07
5	B	230	GLU	CA-C-N	6.28	128.69	120.28
5	B	230	GLU	C-N-CA	6.28	128.69	120.28
4	A	367	ILE	CA-C-N	6.28	128.69	120.28
4	A	367	ILE	C-N-CA	6.28	128.69	120.28
5	D	169	LYS	CA-C-N	-6.28	117.87	123.33
5	D	169	LYS	C-N-CA	-6.28	117.87	123.33
8	P	259	PHE	CA-C-N	6.28	128.69	120.28
8	P	259	PHE	C-N-CA	6.28	128.69	120.28
5	B	99	SER	CA-C-O	-6.28	114.25	121.47
1	O	249	ALA	O-C-N	-6.27	115.47	122.12
5	F	166	ARG	N-CA-CB	6.27	121.08	110.49
5	D	150	MET	N-CA-C	6.27	119.32	110.23
4	E	468	ASN	N-CA-CB	6.26	119.99	110.28
4	C	481	LEU	O-C-N	-6.26	115.01	122.15
4	C	576	ASP	CA-C-N	6.26	129.04	120.46
4	C	576	ASP	C-N-CA	6.26	129.04	120.46
4	A	475	TYR	CA-C-N	6.26	126.28	119.89
4	A	475	TYR	C-N-CA	6.26	126.28	119.89
4	E	606	THR	O-C-N	6.25	129.28	122.15
5	F	47	PRO	CA-C-O	-6.25	114.31	121.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	145	LYS	CA-C-O	6.25	127.03	119.78
8	P	364	ASP	CB-CA-C	-6.25	101.07	110.88
4	C	89	GLY	O-C-N	-6.25	115.14	122.45
4	C	235	THR	N-CA-C	-6.25	104.37	112.68
4	C	74	GLU	CA-C-N	6.24	133.47	121.54
4	C	74	GLU	C-N-CA	6.24	133.47	121.54
4	C	489	LEU	CA-C-O	-6.24	113.80	120.42
3	N	70	ASN	CA-C-N	6.24	128.97	120.54
3	N	70	ASN	C-N-CA	6.24	128.97	120.54
4	A	216	PRO	CB-CA-C	6.24	119.51	111.21
4	A	390	SER	N-CA-CB	6.24	119.40	110.16
5	B	172	ILE	CA-C-O	6.24	127.98	120.74
6	H	18	HIS	N-CA-C	-6.24	104.48	111.28
4	E	288	ASN	N-CA-C	-6.24	104.02	111.69
5	B	258	LEU	CA-C-N	6.24	129.15	120.29
5	B	258	LEU	C-N-CA	6.24	129.15	120.29
4	C	143	PRO	CA-C-O	-6.24	114.15	121.95
7	G	99	ILE	O-C-N	6.24	128.39	121.90
1	O	274	HIS	CA-C-N	6.24	128.63	120.28
1	O	274	HIS	C-N-CA	6.24	128.63	120.28
8	P	319	LEU	N-CA-CB	6.23	119.09	110.11
5	F	389	GLU	N-CA-C	-6.23	97.66	108.69
5	B	256	PRO	CA-C-N	6.23	129.14	120.29
5	B	256	PRO	C-N-CA	6.23	129.14	120.29
5	F	445	THR	N-CA-C	-6.23	99.08	109.24
4	A	37	ALA	CA-C-N	6.23	134.55	122.03
4	A	37	ALA	C-N-CA	6.23	134.55	122.03
5	B	79	VAL	CA-C-N	6.23	129.14	120.29
5	B	79	VAL	C-N-CA	6.23	129.14	120.29
4	E	298	PRO	CA-C-O	-6.23	110.28	119.00
5	D	327	GLY	CA-C-O	-6.23	114.84	120.94
1	O	91	GLU	N-CA-C	-6.23	105.63	113.72
4	A	93	SER	O-C-N	6.22	130.80	122.96
8	P	430	VAL	N-CA-C	6.22	116.97	110.62
6	J	3	GLN	CA-C-O	-6.22	114.29	120.82
2	M	74	ALA	CB-CA-C	-6.21	100.29	110.85
5	F	369	ILE	N-CA-CB	6.21	117.30	110.53
4	A	59	GLU	CA-C-N	6.21	130.26	122.43
4	A	59	GLU	C-N-CA	6.21	130.26	122.43
5	D	253	ILE	N-CA-CB	6.21	124.09	111.05
6	J	91	LYS	N-CA-C	-6.21	104.20	110.97
7	G	116	GLU	CB-CA-C	-6.21	97.19	109.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	125	PRO	N-CA-CB	6.21	109.44	102.67
4	A	568	SER	CA-C-N	6.21	129.11	120.29
4	A	568	SER	C-N-CA	6.21	129.11	120.29
5	D	70	ILE	N-CA-C	-6.21	99.54	108.48
4	E	450	HIS	O-C-N	6.20	130.29	123.22
4	A	172	ILE	N-CA-C	-6.20	98.74	108.23
5	D	376	LEU	CA-C-O	-6.20	111.66	120.16
8	P	319	LEU	CA-C-O	-6.20	113.19	119.08
2	M	199	GLU	CA-C-N	6.20	129.09	120.29
2	M	199	GLU	C-N-CA	6.20	129.09	120.29
6	J	77	GLN	CA-C-N	6.20	131.64	120.79
6	J	77	GLN	C-N-CA	6.20	131.64	120.79
4	C	602	LYS	CA-C-N	6.20	129.20	120.28
4	C	602	LYS	C-N-CA	6.20	129.20	120.28
8	P	161	VAL	CA-C-O	-6.20	114.17	121.05
8	P	164	LEU	N-CA-C	6.19	118.83	111.71
7	I	95	SER	CA-C-N	6.19	129.08	120.29
7	I	95	SER	C-N-CA	6.19	129.08	120.29
6	J	92	ASP	CB-CA-C	-6.19	99.18	110.63
8	P	416	GLU	CA-C-O	-6.19	112.85	119.97
7	I	58	ILE	CA-C-N	6.19	128.57	120.28
7	I	58	ILE	C-N-CA	6.19	128.57	120.28
3	N	102	ASP	CA-C-O	-6.18	112.00	119.67
4	A	454	ILE	N-CA-CB	6.18	121.50	111.36
4	C	89	GLY	CA-C-O	6.18	126.17	119.06
5	D	187	ILE	O-C-N	-6.18	115.85	121.91
5	D	278	LEU	N-CA-C	-6.18	97.20	108.02
7	K	138	ILE	N-CA-CB	6.18	118.41	110.99
5	F	443	PHE	N-CA-C	-6.18	105.90	113.50
4	E	335	THR	N-CA-C	-6.18	104.62	111.36
4	C	531	TYR	N-CA-C	-6.18	103.81	113.02
4	A	143	PRO	O-C-N	-6.18	115.35	123.13
8	P	261	ASN	N-CA-C	-6.18	104.63	111.36
1	O	313	VAL	N-CA-C	-6.17	104.73	110.53
4	C	387	LYS	N-CA-CB	6.17	119.19	110.12
5	F	285	ALA	CA-C-N	6.17	128.83	120.44
5	F	285	ALA	C-N-CA	6.17	128.83	120.44
4	A	289	GLU	N-CA-C	-6.17	104.55	111.28
5	B	326	ASN	N-CA-C	-6.17	99.67	109.23
4	E	152	ILE	N-CA-C	-6.17	98.78	108.95
5	B	349	LEU	O-C-N	6.17	129.18	122.15
4	C	409	SER	N-CA-CB	6.17	121.96	111.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	428	THR	O-C-N	6.16	129.17	122.15
4	A	561	VAL	CA-C-N	6.16	129.67	120.31
4	A	561	VAL	C-N-CA	6.16	129.67	120.31
1	O	173	ARG	CA-C-N	6.15	132.17	122.94
1	O	173	ARG	C-N-CA	6.15	132.17	122.94
6	J	104	LYS	CA-C-N	6.15	127.53	119.84
6	J	104	LYS	C-N-CA	6.15	127.53	119.84
8	P	443	LYS	N-CA-C	6.15	117.65	111.07
5	F	127	PHE	N-CA-CB	6.15	120.88	110.49
4	E	244	PHE	CA-C-N	6.15	127.52	119.84
4	E	244	PHE	C-N-CA	6.15	127.52	119.84
5	B	200	VAL	CA-C-N	6.15	130.99	120.72
5	B	200	VAL	C-N-CA	6.15	130.99	120.72
5	D	402	GLN	O-C-N	6.15	128.40	122.07
1	O	327	ILE	N-CA-CB	6.14	119.89	111.41
4	A	221	ARG	CA-C-N	6.14	127.52	119.84
4	A	221	ARG	C-N-CA	6.14	127.52	119.84
5	D	276	THR	N-CA-CB	6.14	120.22	110.57
5	B	71	ARG	N-CA-C	-6.14	100.27	108.74
1	O	107	VAL	N-CA-CB	6.14	115.24	110.45
8	P	306	LYS	CA-C-O	-6.14	114.04	120.55
8	P	86	THR	N-CA-CB	6.13	118.90	110.01
7	G	180	ASN	CB-CA-C	-6.13	97.66	109.37
2	M	213	GLU	CA-C-O	-6.13	114.05	120.55
4	E	381	PRO	N-CA-C	6.13	125.09	112.47
5	D	283	SER	CA-C-N	6.13	128.99	120.29
5	D	283	SER	C-N-CA	6.13	128.99	120.29
1	O	389	ILE	N-CA-C	-6.13	99.59	108.17
5	D	361	ASP	CA-C-O	6.12	126.97	120.36
2	M	214	THR	CA-C-N	6.12	131.05	120.58
2	M	214	THR	C-N-CA	6.12	131.05	120.58
8	P	103	LEU	CA-C-N	6.12	128.48	120.28
8	P	103	LEU	C-N-CA	6.12	128.48	120.28
8	P	171	ILE	N-CA-CB	6.12	119.76	110.58
4	C	166	LEU	CA-C-O	-6.11	111.77	120.51
4	E	196	LYS	N-CA-CB	6.11	119.18	110.44
4	C	560	ALA	CB-CA-C	-6.11	101.25	110.90
7	G	88	VAL	N-CA-CB	6.10	117.69	110.55
4	A	181	THR	CB-CA-C	6.10	121.34	109.33
7	I	180	ASN	CA-C-O	6.10	127.99	121.16
7	G	27	GLU	CA-C-N	6.10	128.95	120.29
7	G	27	GLU	C-N-CA	6.10	128.95	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	138	LYS	N-CA-C	-6.09	99.06	109.24
4	E	264	VAL	N-CA-CB	6.09	117.68	110.55
5	B	351	GLY	CA-C-N	6.09	128.44	120.28
5	B	351	GLY	C-N-CA	6.09	128.44	120.28
4	E	130	THR	CA-C-N	6.09	125.85	119.76
4	E	130	THR	C-N-CA	6.09	125.85	119.76
4	C	392	TYR	CA-C-N	6.09	130.34	120.60
4	C	392	TYR	C-N-CA	6.09	130.34	120.60
4	C	425	ASP	CA-C-N	6.09	126.26	119.32
4	C	425	ASP	C-N-CA	6.09	126.26	119.32
4	A	524	ASP	N-CA-C	6.09	119.90	112.23
7	I	196	LYS	O-C-N	-6.09	115.59	122.23
4	E	601	GLU	CA-C-N	6.09	130.89	120.72
4	E	601	GLU	C-N-CA	6.09	130.89	120.72
7	K	218	ILE	N-CA-C	6.09	116.83	110.62
8	P	149	LEU	N-CA-CB	6.09	119.17	110.16
4	E	202	PHE	N-CA-C	-6.09	96.90	107.49
5	F	409	ILE	CA-C-N	6.09	126.74	119.98
5	F	409	ILE	C-N-CA	6.09	126.74	119.98
5	F	450	GLU	CA-C-O	6.09	127.42	120.54
4	A	164	ASN	N-CA-C	-6.09	99.44	108.99
4	C	537	PHE	CA-C-N	6.08	128.95	122.26
4	C	537	PHE	C-N-CA	6.08	128.95	122.26
1	O	214	SER	N-CA-C	-6.08	100.24	109.85
5	B	52	ILE	CA-C-N	6.08	132.36	122.69
5	B	52	ILE	C-N-CA	6.08	132.36	122.69
5	B	204	HIS	N-CA-CB	6.08	120.31	110.77
4	A	164	ASN	CA-C-O	6.07	127.79	120.99
4	C	331	ALA	CA-C-N	6.07	128.33	120.44
4	C	331	ALA	C-N-CA	6.07	128.33	120.44
4	C	386	ALA	CA-C-N	6.07	128.41	120.28
4	C	386	ALA	C-N-CA	6.07	128.41	120.28
8	P	45	LYS	CA-C-O	6.07	126.98	120.55
8	P	45	LYS	N-CA-C	6.07	117.90	111.28
5	B	87	ASP	CA-C-O	-6.07	114.54	121.58
4	C	85	VAL	N-CA-C	-6.07	98.79	107.77
6	J	56	GLU	N-CA-C	-6.07	104.75	111.36
7	I	57	ASN	CA-C-N	6.07	128.77	120.46
7	I	57	ASN	C-N-CA	6.07	128.77	120.46
4	C	609	GLU	N-CA-C	-6.07	104.75	111.36
7	K	110	ILE	N-CA-C	6.07	116.85	110.72
6	H	16	GLU	N-CA-CB	6.07	119.14	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	I	173	VAL	O-C-N	6.06	130.82	122.88
5	B	199	ASP	CA-C-N	6.06	129.03	120.42
5	B	199	ASP	C-N-CA	6.06	129.03	120.42
8	P	352	GLU	N-CA-C	6.06	120.14	112.87
4	E	549	ALA	CA-C-O	-6.06	114.46	120.82
8	P	333	GLU	O-C-N	6.06	128.54	122.12
8	P	439	ASP	N-CA-C	6.06	117.89	111.28
5	F	429	ASP	CA-C-N	6.06	128.32	120.44
5	F	429	ASP	C-N-CA	6.06	128.32	120.44
4	A	373	GLU	CA-C-N	6.06	128.81	120.39
4	A	373	GLU	C-N-CA	6.06	128.81	120.39
4	C	546	MET	O-C-N	-6.06	115.70	122.12
5	B	59	ASP	CA-C-O	6.06	126.39	119.18
4	A	542	LYS	CA-C-N	6.05	128.39	120.28
4	A	542	LYS	C-N-CA	6.05	128.39	120.28
5	F	136	GLY	N-CA-C	-6.05	106.05	115.67
4	E	130	THR	CA-C-O	-6.05	114.94	120.50
1	O	264	GLU	O-C-N	-6.05	115.71	122.12
8	P	457	SER	N-CA-C	6.05	118.10	110.24
4	E	500	GLN	CA-C-O	-6.05	114.47	120.70
4	C	515	LEU	CA-C-N	6.05	128.30	120.44
4	C	515	LEU	C-N-CA	6.05	128.30	120.44
5	D	292	SER	N-CA-C	-6.04	107.73	114.62
1	O	107	VAL	CA-C-O	-6.04	114.64	118.69
4	E	193	LEU	CA-C-N	6.04	128.30	120.44
4	E	193	LEU	C-N-CA	6.04	128.30	120.44
4	E	100	LEU	CA-C-N	6.04	129.45	120.87
4	E	100	LEU	C-N-CA	6.04	129.45	120.87
8	P	330	TYR	CA-C-N	6.04	129.70	120.82
8	P	330	TYR	C-N-CA	6.04	129.70	120.82
4	A	54	ASP	CA-C-N	6.04	130.73	122.34
4	A	54	ASP	C-N-CA	6.04	130.73	122.34
5	B	412	ASP	CB-CA-C	-6.04	100.77	110.79
1	O	359	ASP	CA-C-N	6.03	133.06	121.54
1	O	359	ASP	C-N-CA	6.03	133.06	121.54
4	C	325	PRO	CA-C-N	6.03	130.66	120.64
4	C	325	PRO	C-N-CA	6.03	130.66	120.64
8	P	427	ILE	CB-CA-C	-6.03	103.89	112.22
5	F	409	ILE	N-CA-C	-6.03	104.63	110.72
8	P	449	ASP	N-CA-CB	6.03	118.99	110.12
1	O	224	VAL	N-CA-C	-6.03	98.53	107.51
4	C	127	GLY	N-CA-C	-6.03	106.77	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	177	ASP	CA-C-N	6.03	130.66	123.19
1	O	177	ASP	C-N-CA	6.03	130.66	123.19
5	D	277	ILE	O-C-N	6.03	129.44	122.99
2	M	115	PRO	CA-C-N	6.03	128.36	120.28
2	M	115	PRO	C-N-CA	6.03	128.36	120.28
5	B	462	TRP	CA-C-N	6.03	128.36	120.28
5	B	462	TRP	C-N-CA	6.03	128.36	120.28
4	C	454	ILE	CA-C-O	-6.03	115.52	121.67
4	C	606	THR	CA-C-N	6.02	128.84	120.29
4	C	606	THR	C-N-CA	6.02	128.84	120.29
4	C	98	PRO	N-CA-CB	6.02	109.57	103.25
1	O	97	TYR	N-CA-CB	6.02	120.66	110.49
5	F	70	ILE	N-CA-C	-6.02	99.69	108.11
5	B	411	LYS	CA-C-O	6.01	126.93	120.55
6	H	52	LYS	CA-C-O	-6.01	114.51	120.70
4	C	100	LEU	CB-CA-C	-6.01	101.40	110.90
4	C	605	SER	N-CA-C	6.01	117.83	111.28
5	B	359	PHE	CA-C-N	6.01	130.64	123.19
5	B	359	PHE	C-N-CA	6.01	130.64	123.19
8	P	233	THR	CA-C-O	6.00	125.13	118.52
4	A	153	SER	O-C-N	-6.00	116.20	123.10
5	D	348	ASP	CB-CA-C	-5.99	100.66	110.85
5	D	455	PHE	CA-C-N	5.99	128.31	120.28
5	D	455	PHE	C-N-CA	5.99	128.31	120.28
4	A	264	VAL	N-CA-C	5.99	116.77	110.72
1	O	43	ALA	N-CA-C	-5.99	101.55	110.23
4	A	216	PRO	N-CA-C	-5.99	101.79	111.19
5	F	70	ILE	N-CA-CB	5.98	119.67	111.41
4	C	337	ILE	N-CA-C	5.98	118.57	111.09
1	O	8	ALA	CA-C-N	5.98	129.60	121.05
1	O	8	ALA	C-N-CA	5.98	129.60	121.05
5	D	120	ILE	O-C-N	5.98	127.94	122.14
5	F	272	ARG	CA-C-O	-5.98	114.40	121.16
4	E	466	VAL	CA-C-N	5.98	128.21	120.44
4	E	466	VAL	C-N-CA	5.98	128.21	120.44
4	A	110	ARG	CB-CA-C	5.97	117.42	109.65
4	A	417	SER	N-CA-C	-5.97	96.60	109.81
5	F	311	ASP	CA-C-N	5.97	128.28	120.28
5	F	311	ASP	C-N-CA	5.97	128.28	120.28
6	L	3	GLN	N-CA-C	5.97	117.46	111.07
8	P	421	GLN	CA-C-N	5.97	128.08	120.56
8	P	421	GLN	C-N-CA	5.97	128.08	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	458	ASP	N-CA-CB	5.97	120.58	110.49
4	A	339	LEU	CB-CA-C	-5.97	100.70	110.85
5	F	385	SER	CA-C-N	5.97	128.56	120.44
5	F	385	SER	C-N-CA	5.97	128.56	120.44
5	F	400	SER	CA-C-O	-5.97	113.36	120.10
8	P	244	TYR	CA-C-N	5.97	128.76	120.29
8	P	244	TYR	C-N-CA	5.97	128.76	120.29
8	P	346	LEU	CA-C-O	5.97	127.08	120.82
4	A	374	MET	N-CA-C	5.96	117.22	109.64
1	O	316	VAL	O-C-N	-5.96	116.07	121.91
4	E	111	PRO	CA-C-N	5.96	128.87	120.28
4	E	111	PRO	C-N-CA	5.96	128.87	120.28
4	C	466	VAL	CB-CA-C	5.96	120.45	112.22
5	D	253	ILE	CA-C-N	5.96	128.88	120.42
5	D	253	ILE	C-N-CA	5.96	128.88	120.42
4	C	405	ASP	N-CA-CB	5.96	120.56	110.49
1	O	35	ASN	N-CA-C	5.96	117.57	111.14
5	D	243	ASN	N-CA-C	-5.95	99.30	109.24
2	M	13	MET	N-CA-C	5.95	119.56	111.17
5	B	461	ALA	CA-C-O	5.95	126.82	120.10
4	A	93	SER	N-CA-C	-5.95	100.28	109.14
8	P	149	LEU	CA-C-O	-5.95	114.12	120.42
5	B	67	VAL	O-C-N	5.95	129.50	122.66
6	H	67	GLU	N-CA-C	-5.95	105.29	112.54
5	F	302	ARG	CA-C-N	5.94	132.81	122.05
5	F	302	ARG	C-N-CA	5.94	132.81	122.05
8	P	124	LEU	N-CA-CB	5.94	118.69	110.07
5	B	411	LYS	CB-CA-C	-5.94	100.93	110.79
4	C	222	PRO	N-CA-C	5.94	120.55	111.34
4	C	281	VAL	CA-C-O	-5.94	114.27	120.27
5	D	231	GLU	N-CA-CB	5.94	118.85	110.12
5	B	231	GLU	O-C-N	5.94	128.41	122.12
1	O	57	SER	CA-C-N	5.93	128.72	120.29
1	O	57	SER	C-N-CA	5.93	128.72	120.29
7	K	192	ASN	CA-C-N	5.93	128.51	120.44
7	K	192	ASN	C-N-CA	5.93	128.51	120.44
4	E	384	LEU	N-CA-C	5.93	118.23	111.11
6	L	9	THR	CA-C-O	-5.93	114.13	120.42
5	B	418	ALA	CA-C-O	-5.93	114.59	120.82
2	M	141	ARG	CA-C-N	5.93	128.50	120.44
2	M	141	ARG	C-N-CA	5.93	128.50	120.44
7	G	161	GLY	CA-C-N	5.93	130.76	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	161	GLY	C-N-CA	5.93	130.76	120.68
4	C	572	ASP	N-CA-CB	5.93	118.93	110.16
8	P	340	SER	CA-C-N	5.92	128.14	120.44
8	P	340	SER	C-N-CA	5.92	128.14	120.44
7	G	224	GLY	N-CA-C	-5.92	96.12	113.30
4	A	74	GLU	N-CA-C	-5.92	100.34	109.52
4	C	337	ILE	O-C-N	-5.92	115.11	121.80
7	K	29	GLU	CA-C-N	5.92	128.70	120.29
7	K	29	GLU	C-N-CA	5.92	128.70	120.29
4	A	74	GLU	O-C-N	-5.92	115.45	123.15
4	A	557	ALA	N-CA-C	-5.92	104.91	111.36
5	B	222	ALA	CA-C-N	5.92	128.21	120.28
5	B	222	ALA	C-N-CA	5.92	128.21	120.28
4	C	224	THR	O-C-N	5.92	128.48	122.09
4	C	301	TYR	N-CA-C	-5.92	99.75	109.40
1	O	141	LEU	CA-C-N	5.92	128.13	120.44
1	O	141	LEU	C-N-CA	5.92	128.13	120.44
2	M	85	GLU	N-CA-C	5.92	117.73	111.28
4	C	383	TYR	CA-C-N	5.92	128.13	120.44
4	C	383	TYR	C-N-CA	5.92	128.13	120.44
7	K	195	ASP	N-CA-CB	5.92	120.49	110.49
4	A	384	LEU	N-CA-C	5.91	118.20	111.11
7	K	44	GLU	O-C-N	-5.91	115.98	122.07
8	P	24	SER	CA-C-N	5.91	129.67	120.34
8	P	24	SER	C-N-CA	5.91	129.67	120.34
8	P	109	TYR	N-CA-C	-5.91	100.36	109.52
8	P	447	LYS	CA-C-N	5.91	128.68	120.29
8	P	447	LYS	C-N-CA	5.91	128.68	120.29
2	M	175	HIS	N-CA-C	5.91	118.61	111.40
4	C	545	ASP	CB-CA-C	-5.91	101.61	110.88
5	D	429	ASP	O-C-N	-5.90	115.01	122.27
6	L	15	LYS	CA-C-N	5.90	128.19	120.28
6	L	15	LYS	C-N-CA	5.90	128.19	120.28
7	G	29	GLU	O-C-N	5.90	128.15	122.07
8	P	213	THR	N-CA-C	-5.90	104.77	111.14
5	D	95	PHE	CA-C-N	5.90	128.66	120.29
5	D	95	PHE	C-N-CA	5.90	128.66	120.29
5	B	474	ASN	O-C-N	5.89	127.33	121.85
4	C	356	SER	N-CA-CB	5.89	120.52	110.50
5	D	218	ASN	N-CA-CB	5.89	118.70	110.04
2	M	168	ARG	CA-C-O	5.89	126.80	120.55
5	B	204	HIS	N-CA-C	-5.89	98.68	108.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	327	ILE	N-CA-C	-5.89	99.86	108.11
4	E	384	LEU	CA-C-N	5.89	126.36	119.94
4	E	384	LEU	C-N-CA	5.89	126.36	119.94
7	G	123	SER	CA-C-N	5.89	128.65	120.29
7	G	123	SER	C-N-CA	5.89	128.65	120.29
4	A	534	TYR	CA-C-N	5.89	131.10	122.63
4	A	534	TYR	C-N-CA	5.89	131.10	122.63
5	F	30	THR	CA-C-N	5.88	128.98	120.98
5	F	30	THR	C-N-CA	5.88	128.98	120.98
4	A	578	LYS	CA-C-N	5.88	128.16	120.28
4	A	578	LYS	C-N-CA	5.88	128.16	120.28
5	D	220	GLU	CA-C-N	5.88	128.64	120.29
5	D	220	GLU	C-N-CA	5.88	128.64	120.29
8	P	176	ASN	CA-C-O	5.88	127.63	120.92
4	A	430	ALA	CA-C-N	5.88	128.64	120.29
4	A	430	ALA	C-N-CA	5.88	128.64	120.29
4	C	412	ILE	N-CA-CB	5.88	118.05	110.99
8	P	148	SER	N-CA-C	5.88	118.17	111.11
5	B	365	HIS	N-CA-C	5.88	117.36	111.07
5	D	46	PHE	CA-C-N	5.88	125.90	119.90
5	D	46	PHE	C-N-CA	5.88	125.90	119.90
7	K	120	ILE	CA-C-N	5.88	128.16	120.28
7	K	120	ILE	C-N-CA	5.88	128.16	120.28
7	K	222	LEU	N-CA-C	-5.88	105.20	112.90
8	P	292	SER	CB-CA-C	5.88	120.11	110.88
5	B	477	SER	O-C-N	-5.88	115.40	121.28
2	M	42	ARG	CA-C-N	5.88	128.15	120.28
2	M	42	ARG	C-N-CA	5.88	128.15	120.28
5	D	163	SER	O-C-N	5.88	130.06	123.19
8	P	157	ASN	CA-C-N	5.88	128.76	120.42
8	P	157	ASN	C-N-CA	5.88	128.76	120.42
8	P	340	SER	CA-C-O	-5.88	114.32	120.55
4	E	24	TYR	CA-C-N	5.87	129.76	121.30
4	E	24	TYR	C-N-CA	5.87	129.76	121.30
7	I	22	ALA	CA-C-N	5.87	128.07	120.44
7	I	22	ALA	C-N-CA	5.87	128.07	120.44
7	G	160	TYR	CA-C-O	-5.87	114.20	120.42
4	E	610	ARG	CA-C-O	-5.87	114.20	120.42
8	P	219	GLN	CA-C-N	5.87	128.14	120.28
8	P	219	GLN	C-N-CA	5.87	128.14	120.28
1	O	327	ILE	CB-CA-C	-5.86	101.95	110.63
5	B	434	GLU	CA-C-N	5.86	128.62	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	B	434	GLU	C-N-CA	5.86	128.62	120.29
7	G	50	ILE	N-CA-C	5.86	116.60	110.62
8	P	420	ILE	CA-C-O	-5.86	114.96	121.17
5	B	315	ILE	CA-C-N	5.86	130.50	120.72
5	B	315	ILE	C-N-CA	5.86	130.50	120.72
5	F	287	ALA	O-C-N	5.86	128.33	122.12
4	A	410	VAL	N-CA-CB	5.86	119.79	111.82
7	I	166	ARG	N-CA-C	-5.86	98.32	110.80
6	L	37	THR	CA-C-O	-5.86	113.74	120.24
4	A	423	PHE	CA-C-O	5.86	126.20	119.35
5	D	253	ILE	CA-C-O	-5.85	112.59	119.85
4	A	279	ILE	O-C-N	-5.85	117.00	123.20
7	I	94	GLN	N-CA-C	5.85	118.44	111.71
8	P	108	LYS	N-CA-C	-5.85	106.48	113.97
5	D	140	ASN	CA-C-O	-5.85	115.97	120.48
8	P	43	THR	CA-C-N	5.85	128.60	120.29
8	P	43	THR	C-N-CA	5.85	128.60	120.29
4	E	192	THR	CA-C-N	5.85	128.12	120.28
4	E	192	THR	C-N-CA	5.85	128.12	120.28
5	B	284	TYR	N-CA-C	-5.84	104.99	111.36
6	J	28	ARG	CA-C-O	-5.84	114.68	120.82
1	O	72	ASP	CA-C-O	-5.84	114.36	120.55
1	O	360	LYS	N-CA-C	-5.84	98.36	110.80
7	I	105	GLU	N-CA-C	-5.84	104.51	111.69
3	N	95	PRO	CA-C-N	5.83	130.10	120.94
3	N	95	PRO	C-N-CA	5.83	130.10	120.94
4	A	510	SER	O-C-N	5.83	128.30	122.12
4	A	519	THR	CA-C-N	5.83	128.02	120.44
4	A	519	THR	C-N-CA	5.83	128.02	120.44
4	C	132	ALA	N-CA-C	-5.83	106.40	112.93
4	C	423	PHE	CA-C-N	5.83	132.01	121.92
4	C	423	PHE	C-N-CA	5.83	132.01	121.92
5	F	342	ILE	CB-CA-C	-5.83	104.54	111.65
4	E	90	LYS	CA-C-N	5.83	127.13	119.84
4	E	90	LYS	C-N-CA	5.83	127.13	119.84
3	N	72	HIS	CA-C-N	5.83	128.69	120.42
3	N	72	HIS	C-N-CA	5.83	128.69	120.42
4	E	469	LYS	CA-C-O	-5.83	114.37	120.55
4	E	29	SER	N-CA-CB	5.83	120.59	111.56
5	D	225	PHE	O-C-N	-5.83	115.40	122.22
2	M	162	VAL	N-CA-C	-5.82	104.84	110.72
3	N	17	THR	CA-C-N	5.82	128.01	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	N	17	THR	C-N-CA	5.82	128.01	120.44
7	K	64	SER	CA-C-N	5.82	129.16	120.31
7	K	64	SER	C-N-CA	5.82	129.16	120.31
7	K	132	LEU	CA-C-N	5.82	130.91	122.36
7	K	132	LEU	C-N-CA	5.82	130.91	122.36
5	D	399	VAL	CA-C-N	5.82	128.08	120.28
5	D	399	VAL	C-N-CA	5.82	128.08	120.28
3	N	87	ALA	N-CA-C	-5.82	105.77	112.92
4	E	355	ASP	N-CA-CB	5.82	119.61	110.71
6	L	52	LYS	N-CA-CB	5.82	118.44	110.01
4	E	219	VAL	N-CA-C	-5.82	101.55	107.89
5	F	87	ASP	N-CA-C	-5.82	100.92	109.18
4	C	292	GLU	N-CA-C	-5.82	104.86	111.14
4	C	355	ASP	CB-CA-C	-5.82	102.71	110.79
5	D	434	GLU	CA-C-N	5.82	128.00	120.44
5	D	434	GLU	C-N-CA	5.82	128.00	120.44
8	P	332	ASP	CA-C-N	5.82	128.07	120.28
8	P	332	ASP	C-N-CA	5.82	128.07	120.28
2	M	182	GLU	N-CA-CB	5.81	118.50	110.07
5	D	279	THR	N-CA-C	-5.81	99.53	109.24
8	P	275	LEU	N-CA-C	-5.81	104.94	111.28
7	G	45	ILE	N-CA-CB	-5.81	103.75	110.55
8	P	165	LEU	CA-C-O	5.81	126.71	120.55
4	A	593	GLU	N-CA-C	-5.81	98.42	110.80
7	I	62	PHE	N-CA-CB	5.81	118.49	110.07
13	m	54	ILE	CA-C-N	5.81	123.90	120.24
13	m	54	ILE	C-N-CA	5.81	123.90	120.24
2	M	173	ILE	CA-C-N	5.80	128.53	120.63
2	M	173	ILE	C-N-CA	5.80	128.53	120.63
4	C	203	ASP	O-C-N	5.80	130.13	122.47
6	J	87	ALA	CA-C-O	5.80	126.57	120.42
8	P	214	LEU	N-CA-CB	5.80	118.65	110.12
2	M	60	VAL	CB-CA-C	5.80	120.23	112.22
2	M	142	ALA	CA-C-N	5.80	128.41	120.46
2	M	142	ALA	C-N-CA	5.80	128.41	120.46
4	A	407	THR	N-CA-C	-5.80	99.94	109.40
5	B	304	TYR	CA-C-N	5.80	126.13	119.92
5	B	304	TYR	C-N-CA	5.80	126.13	119.92
1	O	207	GLU	CB-CA-C	-5.80	100.99	110.85
5	D	267	ALA	CA-C-N	5.80	128.51	120.63
5	D	267	ALA	C-N-CA	5.80	128.51	120.63
5	F	332	ILE	CA-C-N	5.79	126.28	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	332	ILE	C-N-CA	5.79	126.28	120.14
4	C	426	PRO	N-CA-CB	5.79	109.86	103.26
5	D	392	THR	N-CA-C	-5.79	100.49	109.24
1	O	113	ASN	CA-C-N	5.79	130.12	122.42
1	O	113	ASN	C-N-CA	5.79	130.12	122.42
4	A	90	LYS	O-C-N	5.79	126.98	121.71
2	M	153	GLN	CA-C-N	5.79	128.51	120.29
2	M	153	GLN	C-N-CA	5.79	128.51	120.29
4	E	247	VAL	N-CA-C	-5.79	99.93	108.85
4	C	258	PHE	N-CA-C	5.79	118.75	110.24
5	D	475	ARG	N-CA-C	-5.79	104.89	112.41
4	C	36	ILE	N-CA-C	-5.79	100.15	108.48
2	M	92	PHE	CB-CA-C	-5.78	101.53	110.78
8	P	25	VAL	N-CA-C	5.78	116.74	110.21
5	B	340	ASP	N-CA-CB	5.78	120.26	110.49
4	C	486	LYS	N-CA-CB	5.78	118.39	110.01
5	B	456	GLU	CB-CA-C	-5.78	101.20	110.79
1	O	35	ASN	CB-CA-C	-5.78	101.78	110.90
8	P	388	LYS	N-CA-C	5.77	118.70	110.10
4	E	423	PHE	CA-C-O	5.77	126.76	119.95
2	M	171	ASN	CA-C-N	5.77	128.01	120.28
2	M	171	ASN	C-N-CA	5.77	128.01	120.28
4	E	323	ASN	CA-C-N	5.77	128.41	120.39
4	E	323	ASN	C-N-CA	5.77	128.41	120.39
4	E	321	THR	N-CA-C	-5.77	102.23	110.59
6	H	99	ILE	CA-C-N	5.77	128.01	120.28
6	H	99	ILE	C-N-CA	5.77	128.01	120.28
4	A	136	THR	N-CA-C	-5.77	105.83	112.92
4	E	51	VAL	CA-C-N	5.76	129.64	120.07
4	E	51	VAL	C-N-CA	5.76	129.64	120.07
5	D	164	ILE	O-C-N	5.76	129.40	123.18
6	H	16	GLU	CA-C-N	5.76	127.93	120.44
6	H	16	GLU	C-N-CA	5.76	127.93	120.44
7	K	61	ASN	CA-C-N	5.76	128.47	120.29
7	K	61	ASN	C-N-CA	5.76	128.47	120.29
4	E	472	ASP	CA-C-N	5.76	128.27	120.38
4	E	472	ASP	C-N-CA	5.76	128.27	120.38
5	D	304	TYR	CA-C-O	-5.76	115.42	120.60
5	D	360	VAL	CA-C-O	5.76	126.43	120.39
4	A	282	GLY	CA-C-N	5.75	128.46	120.29
4	A	282	GLY	C-N-CA	5.75	128.46	120.29
5	B	295	ARG	N-CA-C	-5.75	101.49	110.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	451	MET	N-CA-CB	5.75	118.57	110.12
7	K	134	GLU	CA-C-N	5.75	125.61	119.28
7	K	134	GLU	C-N-CA	5.75	125.61	119.28
4	E	325	PRO	CA-C-N	5.75	130.18	120.64
4	E	325	PRO	C-N-CA	5.75	130.18	120.64
5	B	57	LEU	N-CA-C	-5.75	102.92	110.39
5	D	200	VAL	CA-C-O	5.75	126.94	120.85
4	E	339	LEU	O-C-N	5.75	128.70	122.15
5	F	412	ASP	CB-CA-C	-5.75	101.08	110.85
7	I	190	VAL	N-CA-C	-5.75	100.20	108.53
8	P	28	ASP	O-C-N	5.75	127.99	122.07
7	G	133	LEU	N-CA-CB	5.75	120.20	110.49
5	D	388	GLY	N-CA-C	-5.75	99.56	113.18
7	G	124	LEU	CA-C-N	5.75	128.58	120.42
7	G	124	LEU	C-N-CA	5.75	128.58	120.42
4	E	301	TYR	CA-C-N	5.74	129.02	120.87
4	E	301	TYR	C-N-CA	5.74	129.02	120.87
7	G	56	ASN	O-C-N	-5.74	115.50	122.22
1	O	161	ALA	CA-C-N	5.74	127.97	120.28
1	O	161	ALA	C-N-CA	5.74	127.97	120.28
2	M	15	LEU	N-CA-C	5.74	117.53	111.28
4	E	402	GLY	CA-C-N	5.74	127.95	120.26
4	E	402	GLY	C-N-CA	5.74	127.95	120.26
4	A	273	SER	N-CA-C	-5.74	101.13	110.20
4	C	238	ARG	CB-CA-C	-5.74	101.88	110.88
8	P	274	LEU	CA-C-N	5.74	127.97	120.28
8	P	274	LEU	C-N-CA	5.74	127.97	120.28
7	G	39	ALA	CA-C-N	5.74	128.24	120.44
7	G	39	ALA	C-N-CA	5.74	128.24	120.44
5	D	47	PRO	CA-C-O	-5.73	114.88	121.36
7	K	116	GLU	N-CA-C	-5.73	105.39	112.90
4	C	210	THR	CA-C-N	5.73	127.95	120.28
4	C	210	THR	C-N-CA	5.73	127.95	120.28
7	I	31	LYS	N-CA-C	5.73	117.60	111.36
7	K	148	LEU	N-CA-CB	5.72	118.63	110.16
4	A	179	ARG	CA-C-O	5.72	127.35	121.23
8	P	106	SER	N-CA-CB	5.72	119.15	110.45
4	A	424	SER	CA-C-N	5.72	129.38	120.68
4	A	424	SER	C-N-CA	5.72	129.38	120.68
5	B	450	GLU	O-C-N	5.72	130.45	123.01
7	I	31	LYS	CA-C-O	5.72	126.48	120.42
5	D	136	GLY	CA-C-N	5.72	128.61	120.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	136	GLY	C-N-CA	5.72	128.61	120.49
5	D	428	GLU	CA-C-N	5.72	129.00	120.31
5	D	428	GLU	C-N-CA	5.72	129.00	120.31
7	G	141	ALA	CA-C-N	5.72	129.38	120.75
7	G	141	ALA	C-N-CA	5.72	129.38	120.75
5	F	148	GLU	CB-CA-C	-5.72	101.57	110.37
5	B	433	LEU	CA-C-N	5.72	128.41	120.29
5	B	433	LEU	C-N-CA	5.72	128.41	120.29
5	D	317	GLU	N-CA-CB	5.72	118.52	110.12
4	E	223	VAL	CA-C-N	5.71	128.21	120.44
4	E	223	VAL	C-N-CA	5.71	128.21	120.44
5	B	215	MET	O-C-N	-5.71	116.18	123.26
5	F	406	LYS	N-CA-CB	5.71	118.61	110.16
5	B	235	LEU	CA-C-N	5.71	128.40	120.29
5	B	235	LEU	C-N-CA	5.71	128.40	120.29
8	P	410	ASP	CA-C-O	5.71	128.67	120.51
1	O	93	SER	N-CA-C	5.71	118.34	110.35
8	P	238	LEU	CA-C-N	5.71	126.28	120.00
8	P	238	LEU	C-N-CA	5.71	126.28	120.00
1	O	26	PRO	CA-C-O	-5.70	114.71	121.67
4	C	228	SER	CA-C-O	5.70	127.19	120.58
4	E	234	LEU	CA-C-N	5.70	128.24	120.54
4	E	234	LEU	C-N-CA	5.70	128.24	120.54
5	F	386	ALA	N-CA-C	-5.70	104.98	111.14
7	I	26	LYS	CA-C-N	5.70	128.39	120.29
7	I	26	LYS	C-N-CA	5.70	128.39	120.29
1	O	313	VAL	N-CA-CB	5.70	117.86	110.57
4	E	543	THR	CA-C-N	5.70	128.19	120.44
4	E	543	THR	C-N-CA	5.70	128.19	120.44
4	C	318	VAL	N-CA-C	-5.70	98.94	107.37
7	I	22	ALA	CA-C-O	-5.70	114.83	120.70
7	K	208	LYS	CA-C-O	5.69	126.59	120.55
4	A	142	THR	N-CA-C	-5.69	101.55	110.14
4	E	602	LYS	CA-C-N	5.69	127.91	120.28
4	E	602	LYS	C-N-CA	5.69	127.91	120.28
5	F	331	GLN	CA-C-N	5.69	129.51	123.25
5	F	331	GLN	C-N-CA	5.69	129.51	123.25
4	C	178	SER	N-CA-C	-5.69	99.77	108.76
4	C	525	PHE	O-C-N	5.69	128.86	122.32
8	P	350	TYR	O-C-N	5.69	128.23	122.09
4	A	328	ALA	CA-C-N	5.69	127.90	120.28
4	A	328	ALA	C-N-CA	5.69	127.90	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	478	PHE	N-CA-C	5.69	122.38	109.81
5	D	142	TYR	CA-C-O	-5.68	115.37	121.56
7	I	222	LEU	CB-CA-C	-5.68	99.37	110.11
1	O	126	SER	N-CA-CB	5.68	118.35	110.17
4	E	53	HIS	N-CA-CB	-5.68	101.61	110.98
4	E	309	GLU	CA-C-N	5.68	126.94	119.84
4	E	309	GLU	C-N-CA	5.68	126.94	119.84
5	F	146	TYR	N-CA-CB	5.68	118.90	109.98
8	P	325	LEU	CA-C-N	5.68	128.16	120.38
8	P	325	LEU	C-N-CA	5.68	128.16	120.38
1	O	254	LYS	N-CA-CB	5.68	120.09	110.49
7	K	131	LYS	CA-C-O	5.68	126.29	119.59
8	P	341	ASN	CA-C-O	-5.68	114.86	120.82
5	D	118	ARG	CA-C-N	5.67	125.43	119.76
5	D	118	ARG	C-N-CA	5.67	125.43	119.76
4	E	532	SER	N-CA-C	-5.67	100.79	109.41
7	K	199	ILE	N-CA-C	-5.67	98.26	107.28
8	P	31	ALA	O-C-N	5.67	128.13	122.12
8	P	255	PHE	CA-C-N	5.67	128.27	120.67
8	P	255	PHE	C-N-CA	5.67	128.27	120.67
8	P	139	VAL	CB-CA-C	-5.67	104.49	112.14
7	G	99	ILE	N-CA-CB	5.67	117.83	110.57
4	A	142	THR	CA-C-N	5.67	126.15	120.14
4	A	142	THR	C-N-CA	5.67	126.15	120.14
8	P	165	LEU	N-CA-CB	5.67	118.45	110.12
5	F	42	GLU	CB-CA-C	-5.67	98.84	109.72
4	C	483	ASP	CA-C-N	5.67	127.87	120.28
4	C	483	ASP	C-N-CA	5.67	127.87	120.28
4	C	607	MET	N-CA-CB	5.67	118.55	110.16
5	D	85	GLY	N-CA-C	-5.67	105.79	115.08
4	C	570	LEU	CA-C-N	5.66	128.33	120.29
4	C	570	LEU	C-N-CA	5.66	128.33	120.29
5	F	157	ALA	N-CA-C	5.66	117.45	111.28
5	D	264	GLU	N-CA-CB	5.66	119.02	110.30
5	D	107	ASP	N-CA-C	-5.66	105.96	112.92
4	E	120	GLN	CA-C-O	5.66	128.60	120.51
4	E	292	GLU	CA-C-N	5.66	128.46	120.42
4	E	292	GLU	C-N-CA	5.66	128.46	120.42
8	P	38	GLU	N-CA-C	5.66	118.22	111.71
5	B	89	LYS	CA-C-O	5.66	124.70	118.65
7	G	145	ASP	N-CA-C	-5.66	106.26	114.12
4	A	39	ASN	N-CA-C	-5.65	105.68	112.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	J	30	ASP	CA-C-N	5.65	128.90	120.31
6	J	30	ASP	C-N-CA	5.65	128.90	120.31
7	I	140	LYS	CA-C-N	-5.65	113.43	122.53
7	I	140	LYS	C-N-CA	-5.65	113.43	122.53
4	C	399	VAL	CA-C-N	5.65	128.87	120.90
4	C	399	VAL	C-N-CA	5.65	128.87	120.90
7	G	47	LYS	O-C-N	5.65	128.11	122.12
7	G	142	LEU	N-CA-CB	5.65	118.35	110.04
5	B	110	GLY	CA-C-N	5.65	131.43	122.62
5	B	110	GLY	C-N-CA	5.65	131.43	122.62
7	K	75	ILE	N-CA-CB	5.65	119.05	110.58
4	A	309	GLU	CA-C-N	5.65	126.90	119.84
4	A	309	GLU	C-N-CA	5.65	126.90	119.84
2	M	165	VAL	N-CA-CB	5.65	117.16	110.55
4	E	538	CYS	N-CA-CB	5.65	120.42	110.37
4	A	102	GLU	N-CA-C	-5.64	105.01	112.24
5	D	395	ASP	CB-CA-C	-5.64	98.67	110.17
5	B	39	VAL	O-C-N	-5.64	117.09	123.18
5	D	189	ARG	N-CA-C	5.64	117.50	111.36
7	G	110	ILE	CA-C-N	5.64	128.40	120.28
7	G	110	ILE	C-N-CA	5.64	128.40	120.28
7	G	194	SER	O-C-N	5.64	128.57	122.15
5	F	380	SER	N-CA-C	-5.63	99.10	108.34
6	L	100	GLU	N-CA-C	-5.63	105.22	111.36
8	P	143	GLY	CA-C-O	5.63	126.55	120.75
2	M	65	ALA	N-CA-CB	5.63	118.17	110.01
5	F	219	LEU	CA-C-N	5.63	128.28	120.29
5	F	219	LEU	C-N-CA	5.63	128.28	120.29
1	O	63	VAL	CA-C-N	5.63	127.82	120.28
1	O	63	VAL	C-N-CA	5.63	127.82	120.28
1	O	326	ASN	N-CA-C	-5.63	99.35	108.52
2	M	98	GLN	CA-C-O	-5.63	114.30	120.43
4	A	574	THR	N-CA-CB	5.63	118.23	110.07
5	B	452	ARG	CA-C-O	5.63	127.47	121.45
4	C	142	THR	CA-C-N	5.62	125.94	119.92
4	C	142	THR	C-N-CA	5.62	125.94	119.92
4	C	273	SER	N-CA-CB	5.62	118.31	110.04
6	J	33	LYS	CB-CA-C	-5.62	101.29	110.85
5	F	438	LYS	CA-C-N	5.62	127.75	120.44
5	F	438	LYS	C-N-CA	5.62	127.75	120.44
5	D	384	LYS	CB-CA-C	-5.62	102.41	111.18
8	P	89	ASN	CA-C-N	5.62	128.37	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	89	ASN	C-N-CA	5.62	128.37	120.28
6	H	77	GLN	N-CA-C	-5.62	98.83	110.80
4	E	92	LEU	CA-C-O	5.61	126.59	120.58
4	E	60	VAL	CB-CA-C	5.61	118.38	111.25
5	B	465	LEU	N-CA-C	5.61	119.23	112.38
5	B	284	TYR	CA-C-O	5.61	126.37	120.42
4	C	334	TYR	CA-C-N	5.61	128.26	120.29
4	C	334	TYR	C-N-CA	5.61	128.26	120.29
4	C	257	ALA	N-CA-C	-5.61	100.26	109.40
4	C	561	VAL	N-CA-CB	5.61	118.99	110.58
5	D	136	GLY	O-C-N	5.61	129.99	122.70
8	P	30	LEU	O-C-N	-5.61	116.18	122.12
7	G	129	LEU	CA-C-O	-5.61	113.76	120.10
4	A	468	ASN	CB-CA-C	5.61	120.38	110.85
5	B	350	THR	N-CA-C	5.61	117.47	111.36
1	O	286	VAL	CA-C-N	5.60	127.79	120.28
1	O	286	VAL	C-N-CA	5.60	127.79	120.28
3	N	59	GLU	N-CA-C	-5.60	107.09	114.04
4	E	476	PRO	N-CA-C	5.60	124.01	112.47
4	C	374	MET	N-CA-CB	5.60	117.85	110.29
5	D	87	ASP	N-CA-CB	5.60	118.97	110.45
6	L	28	ARG	CA-C-O	-5.60	114.94	120.82
5	D	88	VAL	O-C-N	5.60	129.57	122.57
5	D	225	PHE	CA-C-O	5.60	126.43	120.10
2	M	114	ASP	CA-C-O	-5.60	114.86	120.63
5	F	394	LYS	N-CA-C	5.60	119.37	112.54
4	A	240	LEU	N-CA-CB	5.60	118.44	110.16
5	B	456	GLU	O-C-N	5.60	128.05	122.12
8	P	77	LEU	CA-C-O	-5.60	114.94	120.82
2	M	48	LYS	CB-CA-C	-5.59	101.50	110.79
7	G	198	GLU	CB-CA-C	-5.59	98.27	109.35
8	P	120	ASP	CA-C-O	-5.59	115.18	119.71
7	K	50	ILE	CA-C-N	5.59	128.12	120.46
7	K	50	ILE	C-N-CA	5.59	128.12	120.46
1	O	345	ILE	CA-C-O	5.59	126.76	120.95
4	E	482	ARG	CA-C-N	5.59	127.77	120.28
4	E	482	ARG	C-N-CA	5.59	127.77	120.28
5	B	210	ILE	N-CA-C	-5.59	100.42	108.53
1	O	359	ASP	CA-C-O	5.58	126.46	120.32
5	F	384	LYS	CA-C-N	5.58	127.76	120.28
5	F	384	LYS	C-N-CA	5.58	127.76	120.28
5	B	358	ILE	CA-C-N	5.58	130.20	122.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	B	358	ILE	C-N-CA	5.58	130.20	122.77
7	I	147	ASP	CA-C-N	5.58	128.03	120.44
7	I	147	ASP	C-N-CA	5.58	128.03	120.44
7	G	62	PHE	CA-C-N	5.58	128.79	120.31
7	G	62	PHE	C-N-CA	5.58	128.79	120.31
2	M	40	THR	CA-C-N	5.58	128.03	120.44
2	M	40	THR	C-N-CA	5.58	128.03	120.44
4	E	390	SER	CB-CA-C	-5.58	101.53	110.79
5	F	120	ILE	CA-C-N	5.58	127.69	120.44
5	F	120	ILE	C-N-CA	5.58	127.69	120.44
5	F	433	LEU	CA-C-N	5.58	128.21	120.29
5	F	433	LEU	C-N-CA	5.58	128.21	120.29
5	B	54	ASN	CB-CA-C	5.58	119.07	110.14
5	B	208	PHE	N-CA-C	-5.58	99.92	109.24
5	D	146	TYR	CA-C-O	-5.58	114.37	120.17
7	K	212	GLU	N-CA-C	5.58	117.36	111.28
1	O	242	ASN	N-CA-C	5.58	119.70	113.01
1	O	371	LEU	CB-CA-C	-5.57	99.98	110.51
2	M	69	ALA	CA-C-O	-5.57	114.64	120.55
4	A	386	ALA	CA-C-N	5.57	127.75	120.28
4	A	386	ALA	C-N-CA	5.57	127.75	120.28
7	K	172	ILE	N-CA-C	-5.57	99.72	107.80
5	D	277	ILE	N-CA-C	-5.57	98.42	107.28
4	A	265	ILE	O-C-N	5.57	128.09	121.80
6	J	94	VAL	N-CA-C	-5.57	105.42	110.82
7	K	200	ASN	N-CA-CB	5.57	118.37	110.46
2	M	57	MET	CA-C-N	5.57	126.16	119.98
2	M	57	MET	C-N-CA	5.57	126.16	119.98
6	H	79	GLU	N-CA-CB	5.57	118.55	110.26
1	O	375	ALA	N-CA-C	-5.56	98.95	110.80
4	C	53	HIS	CA-C-N	5.56	130.09	120.58
4	C	53	HIS	C-N-CA	5.56	130.09	120.58
5	D	250	ILE	CA-C-O	-5.56	114.95	120.85
3	N	28	ILE	CA-C-N	5.56	128.12	120.39
3	N	28	ILE	C-N-CA	5.56	128.12	120.39
4	C	515	LEU	N-CA-CB	5.56	118.30	110.12
7	I	44	GLU	CB-CA-C	-5.56	102.15	110.88
8	P	269	SER	N-CA-CB	5.56	118.08	110.01
4	E	84	PRO	CA-C-O	-5.56	115.22	122.12
5	F	235	LEU	CA-C-N	5.56	128.29	120.28
5	F	235	LEU	C-N-CA	5.56	128.29	120.28
5	D	118	ARG	N-CA-CB	5.56	120.99	110.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	K	129	LEU	N-CA-CB	5.56	118.78	110.22
8	P	87	SER	N-CA-C	5.56	117.87	110.53
8	P	195	VAL	N-CA-CB	5.56	119.27	110.54
1	O	344	LEU	CB-CA-C	-5.56	101.56	110.79
5	F	82	GLY	O-C-N	-5.56	117.49	122.77
4	A	148	VAL	CA-C-O	5.56	127.38	121.04
8	P	460	ARG	CB-CA-C	-5.56	101.41	110.85
5	F	36	GLY	O-C-N	-5.55	116.22	121.77
5	F	86	ILE	O-C-N	-5.55	116.98	122.76
8	P	118	GLN	O-C-N	5.55	128.48	122.15
4	C	131	PRO	CA-C-N	5.55	131.86	122.65
4	C	131	PRO	C-N-CA	5.55	131.86	122.65
5	B	170	ILE	O-C-N	-5.55	116.42	121.41
5	F	278	LEU	N-CA-C	-5.55	98.31	108.02
8	P	199	TYR	CA-C-N	5.55	127.71	120.28
8	P	199	TYR	C-N-CA	5.55	127.71	120.28
2	M	143	VAL	CA-C-N	5.54	127.71	120.28
2	M	143	VAL	C-N-CA	5.54	127.71	120.28
4	E	242	ALA	N-CA-C	5.54	117.13	111.14
4	E	332	SER	CA-C-O	-5.54	114.97	120.90
4	C	297	PHE	CA-C-O	-5.54	113.30	118.73
8	P	134	GLY	CA-C-N	5.54	132.13	121.54
8	P	134	GLY	C-N-CA	5.54	132.13	121.54
5	F	458	LEU	N-CA-C	5.54	117.32	111.28
4	A	227	LEU	N-CA-C	-5.54	98.88	108.69
6	L	2	SER	N-CA-CB	5.54	119.92	110.50
7	G	152	MET	CA-C-N	5.54	127.64	120.44
7	G	152	MET	C-N-CA	5.54	127.64	120.44
3	N	29	THR	N-CA-CB	5.54	118.67	109.98
5	F	35	ASN	N-CA-CB	5.54	119.90	110.87
8	P	2	GLY	N-CA-C	-5.54	107.68	115.32
8	P	414	LYS	N-CA-C	5.54	117.75	111.11
4	C	346	GLN	N-CA-C	-5.53	106.03	112.89
5	D	67	VAL	CA-C-N	5.53	130.09	120.68
5	D	67	VAL	C-N-CA	5.53	130.09	120.68
16	f	39	VAL	N-CA-C	-5.53	108.11	113.53
6	L	83	ILE	N-CA-CB	5.53	117.65	110.57
7	G	83	LYS	CA-C-N	5.53	128.15	120.29
7	G	83	LYS	C-N-CA	5.53	128.15	120.29
1	O	69	SER	CA-C-N	5.53	127.96	120.44
1	O	69	SER	C-N-CA	5.53	127.96	120.44
5	F	205	GLU	N-CA-C	-5.53	105.15	113.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	206	VAL	CA-C-N	5.53	127.69	120.28
2	M	206	VAL	C-N-CA	5.53	127.69	120.28
5	D	42	GLU	N-CA-C	-5.53	100.17	108.96
7	I	207	LEU	CA-C-O	-5.53	114.69	120.55
5	F	303	GLY	CA-C-N	5.53	129.29	121.61
5	F	303	GLY	C-N-CA	5.53	129.29	121.61
4	A	41	ILE	N-CA-C	-5.53	99.73	108.90
5	B	192	GLY	CA-C-N	5.53	130.81	121.14
5	B	192	GLY	C-N-CA	5.53	130.81	121.14
4	C	547	MET	CA-C-N	5.53	127.68	120.28
4	C	547	MET	C-N-CA	5.53	127.68	120.28
7	K	168	PRO	CA-C-N	5.53	128.72	120.87
7	K	168	PRO	C-N-CA	5.53	128.72	120.87
4	C	266	SER	CA-C-N	5.52	127.68	120.28
4	C	266	SER	C-N-CA	5.52	127.68	120.28
5	D	403	LEU	O-C-N	5.52	127.76	122.07
6	L	63	GLY	O-C-N	-5.52	115.52	122.70
4	A	262	LYS	N-CA-C	-5.52	105.34	111.36
6	L	91	LYS	O-C-N	5.52	128.05	122.09
1	O	344	LEU	N-CA-C	5.52	117.29	111.28
6	J	3	GLN	O-C-N	5.52	127.75	122.07
8	P	241	GLN	CA-C-N	5.52	127.94	120.44
8	P	241	GLN	C-N-CA	5.52	127.94	120.44
7	G	163	LYS	O-C-N	5.52	129.24	122.34
1	O	186	LEU	N-CA-C	-5.51	100.35	108.79
5	D	177	GLY	N-CA-C	-5.51	107.50	115.27
4	E	403	SER	CA-C-O	-5.51	113.33	118.73
4	C	156	ASP	CA-C-O	-5.51	114.99	121.16
5	D	258	LEU	CA-C-N	5.51	127.67	120.28
5	D	258	LEU	C-N-CA	5.51	127.67	120.28
2	M	127	ARG	CB-CA-C	-5.51	102.23	110.88
8	P	269	SER	CA-C-N	5.51	128.68	120.31
8	P	269	SER	C-N-CA	5.51	128.68	120.31
7	G	222	LEU	N-CA-CB	5.51	118.47	110.26
5	F	346	ILE	CA-C-O	-5.51	112.57	119.95
4	E	338	THR	CA-C-N	5.50	128.10	120.29
4	E	338	THR	C-N-CA	5.50	128.10	120.29
5	F	60	GLY	O-C-N	5.50	129.05	122.34
4	A	403	SER	O-C-N	-5.50	114.99	121.32
6	H	96	LYS	CA-C-N	5.50	129.36	120.55
6	H	96	LYS	C-N-CA	5.50	129.36	120.55
7	G	129	LEU	O-C-N	5.50	128.66	122.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	97	GLY	CA-C-N	5.50	125.41	119.85
4	E	97	GLY	C-N-CA	5.50	125.41	119.85
5	D	106	GLU	CB-CA-C	5.50	119.93	111.02
8	P	334	GLU	N-CA-CB	5.50	118.69	110.22
5	F	189	ARG	O-C-N	-5.50	115.88	122.15
5	F	203	GLY	CA-C-N	5.50	131.21	122.74
5	F	203	GLY	C-N-CA	5.50	131.21	122.74
4	A	285	GLU	CA-C-N	5.50	128.10	120.29
4	A	285	GLU	C-N-CA	5.50	128.10	120.29
6	L	79	GLU	N-CA-CB	5.50	118.39	110.20
1	O	159	LEU	O-C-N	-5.49	115.89	122.15
5	B	162	ASN	N-CA-C	-5.49	106.63	113.55
5	B	430	LYS	CA-C-N	5.49	127.64	120.28
5	B	430	LYS	C-N-CA	5.49	127.64	120.28
5	F	33	GLY	O-C-N	-5.49	117.02	123.55
5	F	263	ALA	CA-C-N	5.49	128.09	120.29
5	F	263	ALA	C-N-CA	5.49	128.09	120.29
4	C	356	SER	CA-C-N	5.49	132.05	121.18
4	C	356	SER	C-N-CA	5.49	132.05	121.18
5	F	80	PHE	CB-CA-C	-5.49	100.47	110.63
5	B	428	GLU	CA-C-N	5.49	128.18	120.28
5	B	428	GLU	C-N-CA	5.49	128.18	120.28
5	D	55	LEU	N-CA-C	-5.49	100.30	109.24
4	A	576	ASP	CB-CA-C	-5.49	102.27	110.88
1	O	307	LYS	CA-C-N	5.48	127.57	120.44
1	O	307	LYS	C-N-CA	5.48	127.57	120.44
7	G	197	ILE	CA-C-O	-5.48	114.63	120.39
1	O	239	PHE	N-CA-CB	5.48	118.03	109.97
1	O	280	LEU	N-CA-CB	-5.48	102.06	110.01
5	D	293	ALA	O-C-N	5.48	128.40	122.15
7	G	88	VAL	CA-C-N	5.48	127.63	120.28
7	G	88	VAL	C-N-CA	5.48	127.63	120.28
1	O	191	LEU	CA-C-N	5.48	131.35	122.53
1	O	191	LEU	C-N-CA	5.48	131.35	122.53
2	M	8	VAL	CB-CA-C	5.48	121.81	111.40
4	A	405	ASP	CA-C-N	5.48	131.35	122.53
4	A	405	ASP	C-N-CA	5.48	131.35	122.53
8	P	430	VAL	CB-CA-C	-5.48	104.75	112.14
5	B	344	HIS	CA-C-N	5.48	125.56	119.32
5	B	344	HIS	C-N-CA	5.48	125.56	119.32
4	E	264	VAL	CB-CA-C	-5.47	104.96	111.97
1	O	273	GLU	CA-C-N	5.47	127.88	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	273	GLU	C-N-CA	5.47	127.88	120.44
3	N	54	PHE	O-C-N	5.47	127.92	122.12
4	C	610	ARG	CB-CA-C	-5.47	101.71	110.79
5	D	60	GLY	N-CA-C	-5.47	107.39	113.79
8	P	143	GLY	N-CA-C	5.47	119.29	112.73
8	P	441	LEU	CB-CA-C	-5.47	101.71	110.79
1	O	12	ILE	CA-C-O	5.47	126.79	120.67
4	E	499	VAL	O-C-N	-5.47	116.57	121.87
5	F	185	ALA	N-CA-C	5.47	117.24	111.28
5	B	263	ALA	CA-C-N	5.47	127.61	120.28
5	B	263	ALA	C-N-CA	5.47	127.61	120.28
5	D	430	LYS	CA-C-N	5.47	127.61	120.28
5	D	430	LYS	C-N-CA	5.47	127.61	120.28
1	O	200	LYS	CA-C-N	5.46	127.54	120.44
1	O	200	LYS	C-N-CA	5.46	127.54	120.44
4	A	244	PHE	O-C-N	-5.46	118.21	121.71
7	K	20	MET	N-CA-CB	5.46	117.99	110.07
2	M	162	VAL	CA-C-O	-5.46	115.06	120.85
8	P	76	THR	CA-C-N	5.46	127.54	120.44
8	P	76	THR	C-N-CA	5.46	127.54	120.44
5	F	313	SER	CA-C-N	5.46	127.59	120.28
5	F	313	SER	C-N-CA	5.46	127.59	120.28
4	C	497	GLN	CA-C-O	-5.46	114.76	120.55
5	D	123	GLY	CA-C-O	-5.46	113.72	121.52
4	A	186	ALA	CA-C-O	-5.46	114.36	120.25
4	A	541	TRP	CA-C-N	5.46	127.59	120.28
4	A	541	TRP	C-N-CA	5.46	127.59	120.28
8	P	320	PRO	O-C-N	5.46	128.52	122.24
1	O	236	VAL	O-C-N	5.46	129.10	123.05
5	B	112	ILE	CA-C-O	-5.45	114.66	120.39
5	D	42	GLU	O-C-N	-5.45	116.86	123.13
8	P	202	VAL	N-CA-CB	5.45	117.96	110.54
8	P	358	GLU	N-CA-C	5.45	116.90	111.07
8	P	313	LEU	CA-C-N	5.45	128.04	120.63
8	P	313	LEU	C-N-CA	5.45	128.04	120.63
6	H	61	ASN	CA-C-O	5.45	125.19	119.03
4	A	302	THR	CA-C-N	5.45	127.84	120.38
4	A	302	THR	C-N-CA	5.45	127.84	120.38
4	C	287	GLY	CA-C-N	5.45	128.03	120.29
4	C	287	GLY	C-N-CA	5.45	128.03	120.29
4	C	493	GLU	CA-C-N	5.45	127.58	120.28
4	C	493	GLU	C-N-CA	5.45	127.58	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	C	45	MET	N-CA-C	-5.45	106.49	114.39
1	O	30	THR	CA-C-N	5.44	127.58	120.28
1	O	30	THR	C-N-CA	5.44	127.58	120.28
5	D	479	LYS	N-CA-C	5.44	116.89	111.07
1	O	28	SER	CA-C-N	5.44	131.38	122.07
1	O	28	SER	C-N-CA	5.44	131.38	122.07
5	D	266	LEU	CA-C-O	5.44	126.32	120.55
6	J	98	LEU	CA-C-O	-5.44	114.78	120.55
7	I	178	TYR	N-CA-C	-5.44	100.90	109.50
8	P	152	GLN	N-CA-CB	5.44	118.69	110.42
7	G	107	LEU	N-CA-CB	5.44	118.12	110.12
7	G	19	LYS	CA-C-N	5.44	128.01	120.29
7	G	19	LYS	C-N-CA	5.44	128.01	120.29
1	O	163	GLU	N-CA-C	5.44	117.21	111.28
6	J	85	LYS	N-CA-CB	5.44	117.95	110.07
7	G	62	PHE	O-C-N	-5.44	116.22	122.09
5	D	381	ARG	CA-C-O	-5.44	114.76	120.63
4	E	497	GLN	CA-C-N	5.43	127.91	120.46
4	E	497	GLN	C-N-CA	5.43	127.91	120.46
7	I	194	SER	N-CA-C	-5.43	106.49	113.23
7	K	158	ARG	N-CA-CB	5.43	117.86	109.98
8	P	135	ASP	CA-C-N	5.43	127.56	120.28
8	P	135	ASP	C-N-CA	5.43	127.56	120.28
5	F	435	PHE	CA-C-N	5.43	127.56	120.28
5	F	435	PHE	C-N-CA	5.43	127.56	120.28
4	A	82	GLY	O-C-N	5.43	129.33	122.43
4	C	316	THR	N-CA-C	-5.43	100.17	109.24
4	E	66	ASP	N-CA-CB	5.43	118.75	110.44
4	C	492	ALA	N-CA-CB	5.43	118.10	110.12
5	D	433	LEU	N-CA-C	-5.43	105.26	111.07
4	E	175	PRO	CA-C-O	-5.43	112.69	120.56
4	E	292	GLU	N-CA-C	-5.43	105.36	111.28
5	F	466	ARG	CA-C-N	5.43	127.40	120.56
5	F	466	ARG	C-N-CA	5.43	127.40	120.56
4	E	113	LYS	CB-CA-C	-5.43	101.78	110.79
4	C	67	LYS	CA-C-O	-5.43	114.41	120.54
7	I	80	ILE	CA-C-O	5.43	127.07	121.05
8	P	301	ARG	CA-C-N	5.43	128.45	120.91
8	P	301	ARG	C-N-CA	5.43	128.45	120.91
4	C	191	TYR	N-CA-C	-5.42	101.05	109.24
5	B	206	GLU	N-CA-C	-5.42	101.52	109.81
4	A	69	THR	CA-C-O	-5.42	114.56	120.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	122	ASN	CA-C-N	5.42	130.38	121.87
5	F	122	ASN	C-N-CA	5.42	130.38	121.87
5	B	218	ASN	O-C-N	-5.42	116.61	122.79
5	D	380	SER	CA-C-N	5.42	127.80	120.38
5	D	380	SER	C-N-CA	5.42	127.80	120.38
7	K	146	VAL	N-CA-CB	5.42	118.71	110.58
4	E	400	ALA	N-CA-C	5.41	117.28	110.24
5	F	37	PRO	N-CA-C	5.41	121.66	113.81
4	C	487	GLU	CA-C-N	5.41	127.88	120.46
4	C	487	GLU	C-N-CA	5.41	127.88	120.46
5	B	118	ARG	CA-C-O	-5.41	115.06	120.63
5	B	305	PRO	N-CA-CB	5.41	108.48	103.39
4	C	592	GLY	CA-C-N	5.41	127.97	120.29
4	C	592	GLY	C-N-CA	5.41	127.97	120.29
4	C	566	ASN	CA-C-N	5.41	127.47	120.44
4	C	566	ASN	C-N-CA	5.41	127.47	120.44
5	D	431	LEU	CA-C-N	5.41	128.53	120.31
5	D	431	LEU	C-N-CA	5.41	128.53	120.31
7	I	200	ASN	N-CA-CB	5.41	118.08	110.24
8	P	42	SER	N-CA-C	-5.41	105.39	111.28
4	A	426	PRO	CA-C-N	5.41	127.37	120.56
4	A	426	PRO	C-N-CA	5.41	127.37	120.56
4	C	322	SER	O-C-N	5.41	127.85	122.12
4	A	363	ALA	N-CA-C	5.40	117.17	111.28
7	G	217	ALA	N-CA-C	5.40	117.17	111.28
4	E	104	ILE	CB-CA-C	5.40	118.62	110.63
5	D	145	ILE	N-CA-CB	5.40	118.66	111.64
5	B	287	ALA	N-CA-C	5.40	117.16	111.28
5	B	167	GLY	N-CA-C	-5.40	107.91	114.92
7	G	127	GLU	CA-C-N	5.40	127.95	120.29
7	G	127	GLU	C-N-CA	5.40	127.95	120.29
4	E	293	VAL	CA-C-O	5.39	126.57	120.85
7	I	115	ASP	CA-C-N	5.39	129.85	120.68
7	I	115	ASP	C-N-CA	5.39	129.85	120.68
5	F	205	GLU	CA-C-O	5.39	125.12	119.03
4	C	302	THR	N-CA-CB	5.39	118.64	110.45
8	P	338	ASP	N-CA-CB	5.39	118.04	110.12
6	J	72	ALA	N-CA-C	-5.39	105.84	112.90
8	P	203	ILE	CA-C-N	5.39	128.50	120.31
8	P	203	ILE	C-N-CA	5.39	128.50	120.31
4	A	360	TRP	CA-C-N	5.39	128.50	120.31
4	A	360	TRP	C-N-CA	5.39	128.50	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	I	118	LYS	CA-C-O	-5.39	112.78	120.16
1	O	344	LEU	N-CA-CB	5.38	118.04	110.12
4	E	118	GLU	CB-CA-C	-5.38	101.98	110.86
5	B	353	ILE	N-CA-CB	5.38	118.65	110.58
7	K	92	ARG	CA-C-N	5.38	129.83	120.68
7	K	92	ARG	C-N-CA	5.38	129.83	120.68
2	M	38	ALA	CA-C-N	5.38	127.93	120.29
2	M	38	ALA	C-N-CA	5.38	127.93	120.29
4	C	34	VAL	N-CA-C	-5.38	100.69	108.71
4	E	504	LYS	N-CA-C	-5.38	106.30	112.92
5	F	137	SER	CA-C-N	5.38	125.07	119.64
5	F	137	SER	C-N-CA	5.38	125.07	119.64
4	A	324	MET	CA-C-O	-5.38	115.10	120.64
8	P	358	GLU	CA-C-N	5.38	127.75	120.44
8	P	358	GLU	C-N-CA	5.38	127.75	120.44
8	P	445	GLY	CA-C-N	5.38	127.05	120.22
8	P	445	GLY	C-N-CA	5.38	127.05	120.22
1	O	315	SER	CA-C-N	5.37	127.33	120.56
1	O	315	SER	C-N-CA	5.37	127.33	120.56
2	M	193	ASP	CA-C-N	5.37	127.48	120.28
2	M	193	ASP	C-N-CA	5.37	127.48	120.28
1	O	133	LEU	CB-CA-C	-5.37	101.88	110.79
5	D	461	ALA	CA-C-N	5.37	127.42	120.44
5	D	461	ALA	C-N-CA	5.37	127.42	120.44
5	F	456	GLU	CB-CA-C	-5.37	101.88	110.79
8	P	296	GLN	N-CA-CB	5.37	118.01	110.12
7	K	173	VAL	N-CA-CB	5.37	118.22	111.46
4	E	438	PHE	CA-C-O	-5.36	113.68	120.28
5	B	80	PHE	CB-CA-C	-5.36	101.73	110.85
8	P	427	ILE	N-CA-CB	5.36	118.62	110.58
1	O	111	LEU	CA-C-N	5.36	129.79	120.68
1	O	111	LEU	C-N-CA	5.36	129.79	120.68
5	B	251	GLU	CA-C-N	5.36	127.46	120.28
5	B	251	GLU	C-N-CA	5.36	127.46	120.28
5	B	411	LYS	CA-C-N	5.36	127.46	120.28
5	B	411	LYS	C-N-CA	5.36	127.46	120.28
6	J	98	LEU	N-CA-CB	5.36	118.00	110.12
7	G	29	GLU	CA-C-O	-5.36	115.19	120.82
4	C	370	ARG	O-C-N	5.36	128.26	122.15
2	M	52	ASP	CA-C-O	-5.36	115.20	120.82
5	D	204	HIS	CA-C-O	-5.35	114.99	120.99
5	D	311	ASP	N-CA-C	5.35	116.81	110.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	234	SER	N-CA-C	-5.35	104.54	111.71
5	D	277	ILE	N-CA-CB	5.35	118.64	111.90
7	G	26	LYS	N-CA-C	-5.35	105.44	111.28
7	G	110	ILE	N-CA-C	-5.35	105.28	110.42
7	G	113	ASN	CA-C-O	5.35	126.02	120.40
4	E	249	GLY	CA-C-O	5.35	123.80	118.77
8	P	113	THR	CA-C-N	5.35	128.01	120.42
8	P	113	THR	C-N-CA	5.35	128.01	120.42
4	A	228	SER	N-CA-C	5.35	117.83	110.35
6	L	82	GLU	CA-C-N	5.35	127.40	120.56
6	L	82	GLU	C-N-CA	5.35	127.40	120.56
4	A	340	ALA	O-C-N	-5.34	116.46	122.12
7	K	99	ILE	N-CA-CB	5.34	118.59	110.58
8	P	318	ALA	N-CA-C	5.34	116.79	111.07
3	N	17	THR	N-CA-C	5.34	116.78	111.07
4	A	297	PHE	N-CA-CB	5.34	118.25	110.30
4	A	578	LYS	N-CA-C	5.34	117.10	111.28
8	P	159	LYS	N-CA-C	5.34	117.10	111.28
6	H	73	GLU	N-CA-C	-5.34	105.12	111.69
4	A	160	SER	CB-CA-C	-5.34	98.97	110.45
1	O	209	SER	N-CA-C	5.34	119.85	113.23
1	O	212	THR	CA-C-N	5.34	127.43	120.28
1	O	212	THR	C-N-CA	5.34	127.43	120.28
4	E	322	SER	N-CA-C	-5.34	106.27	112.89
4	C	328	ALA	CA-C-N	5.34	127.70	120.44
4	C	328	ALA	C-N-CA	5.34	127.70	120.44
3	N	9	ALA	N-CA-C	5.33	118.69	110.42
4	A	121	SER	N-CA-C	-5.33	100.63	108.79
3	N	3	GLU	N-CA-CB	5.33	118.03	109.28
5	F	471	GLU	CA-C-O	5.33	125.53	119.18
5	D	119	PRO	CB-CA-C	5.33	118.30	111.21
6	L	73	GLU	CA-C-N	5.33	127.42	120.28
6	L	73	GLU	C-N-CA	5.33	127.42	120.28
13	g	54	ILE	CA-C-N	5.33	123.60	120.24
13	g	54	ILE	C-N-CA	5.33	123.60	120.24
4	E	112	LEU	N-CA-C	5.33	117.84	111.71
4	E	334	TYR	O-C-N	5.33	127.56	122.07
5	B	202	ASP	N-CA-CB	5.33	119.50	110.49
5	D	217	VAL	CA-C-N	5.33	128.80	120.75
5	D	217	VAL	C-N-CA	5.33	128.80	120.75
4	A	64	ASP	CA-C-N	5.33	126.44	120.42
4	A	64	ASP	C-N-CA	5.33	126.44	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	40	ASP	N-CA-C	-5.33	105.55	111.36
8	P	271	PHE	N-CA-C	-5.33	105.47	111.28
1	O	243	VAL	N-CA-CB	5.33	117.78	110.54
8	P	248	LEU	N-CA-C	-5.33	105.56	111.36
4	A	496	GLU	CB-CA-C	-5.32	101.95	110.79
8	P	160	LEU	N-CA-CB	5.32	117.73	110.01
4	E	37	ALA	CA-C-O	5.32	126.83	120.28
6	L	17	ALA	CB-CA-C	-5.32	101.95	110.79
2	M	161	GLU	CA-C-N	5.32	127.97	120.42
2	M	161	GLU	C-N-CA	5.32	127.97	120.42
5	F	146	TYR	CA-C-N	5.32	125.26	119.78
5	F	146	TYR	C-N-CA	5.32	125.26	119.78
5	B	449	TYR	N-CA-C	-5.32	104.72	113.50
7	I	157	MET	CA-C-N	5.32	127.87	120.63
7	I	157	MET	C-N-CA	5.32	127.87	120.63
1	O	311	VAL	CA-C-N	5.32	127.84	120.29
1	O	311	VAL	C-N-CA	5.32	127.84	120.29
4	C	30	VAL	O-C-N	-5.32	117.87	123.03
8	P	14	ASN	CB-CA-C	-5.32	101.96	110.79
8	P	80	LEU	N-CA-CB	5.32	117.94	110.12
1	O	147	ALA	CA-C-N	5.32	127.84	120.29
1	O	147	ALA	C-N-CA	5.32	127.84	120.29
4	A	615	THR	N-CA-CB	5.32	117.72	110.01
5	B	325	ARG	CB-CA-C	5.32	118.86	111.63
5	D	194	VAL	CA-C-N	5.32	126.73	120.09
5	D	194	VAL	C-N-CA	5.32	126.73	120.09
4	A	480	VAL	CB-CA-C	-5.31	104.97	112.14
4	C	232	PRO	N-CA-C	5.31	119.66	111.21
3	N	79	ALA	CA-C-O	-5.31	115.22	120.90
5	B	334	ILE	CA-C-N	5.31	130.48	122.99
5	B	334	ILE	C-N-CA	5.31	130.48	122.99
4	C	181	THR	N-CA-C	-5.31	100.37	109.24
1	O	276	SER	CB-CA-C	-5.31	100.47	110.67
5	B	339	ASN	O-C-N	5.31	127.88	122.09
5	D	264	GLU	CA-C-O	-5.31	113.52	119.79
8	P	433	LEU	N-CA-C	5.31	117.07	111.28
5	D	358	ILE	N-CA-CB	5.31	118.15	111.46
7	K	147	ASP	CA-C-N	5.31	127.83	120.29
7	K	147	ASP	C-N-CA	5.31	127.83	120.29
4	A	324	MET	CA-C-N	5.30	126.05	120.11
4	A	324	MET	C-N-CA	5.30	126.05	120.11
5	D	462	TRP	CA-C-O	-5.30	115.25	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	73	ASP	O-C-N	5.30	128.94	122.58
7	K	71	LEU	CA-C-N	5.30	127.92	120.28
7	K	71	LEU	C-N-CA	5.30	127.92	120.28
5	B	289	ARG	CA-C-N	5.30	127.65	120.44
5	B	289	ARG	C-N-CA	5.30	127.65	120.44
5	B	329	ILE	O-C-N	-5.30	116.90	123.10
1	O	294	THR	N-CA-CB	5.30	117.91	110.12
6	L	83	ILE	CB-CA-C	-5.30	105.08	112.02
2	M	16	GLY	N-CA-C	5.30	119.08	112.73
4	A	315	THR	CA-C-N	5.30	130.46	122.99
4	A	315	THR	C-N-CA	5.30	130.46	122.99
5	B	112	ILE	N-CA-C	-5.30	100.69	108.11
4	C	323	ASN	N-CA-C	-5.30	105.47	112.94
5	D	98	GLU	CA-C-N	5.30	129.25	120.94
5	D	98	GLU	C-N-CA	5.30	129.25	120.94
7	K	66	LEU	CA-C-N	5.30	127.38	120.28
7	K	66	LEU	C-N-CA	5.30	127.38	120.28
7	I	175	SER	CA-C-N	5.29	128.36	120.31
7	I	175	SER	C-N-CA	5.29	128.36	120.31
4	A	416	VAL	N-CA-C	-5.29	101.07	108.80
5	B	39	VAL	CA-C-O	5.29	126.86	120.67
8	P	212	PRO	CA-C-N	5.29	127.64	120.44
8	P	212	PRO	C-N-CA	5.29	127.64	120.44
1	O	164	ARG	CA-C-N	5.29	127.37	120.28
1	O	164	ARG	C-N-CA	5.29	127.37	120.28
4	E	540	ILE	O-C-N	5.29	127.28	121.83
4	A	223	VAL	CA-C-N	5.29	127.64	120.44
4	A	223	VAL	C-N-CA	5.29	127.64	120.44
8	P	464	GLU	N-CA-CB	5.29	117.90	110.12
1	O	273	GLU	CA-C-O	5.29	126.15	120.55
1	O	297	VAL	O-C-N	-5.29	116.74	121.87
4	E	442	ASP	N-CA-C	-5.29	100.07	109.06
5	B	348	ASP	CA-C-N	5.29	127.79	120.29
5	B	348	ASP	C-N-CA	5.29	127.79	120.29
5	B	426	SER	CA-C-O	-5.29	115.59	121.51
4	C	463	TYR	CA-C-N	5.29	127.68	120.54
4	C	463	TYR	C-N-CA	5.29	127.68	120.54
8	P	411	VAL	N-CA-C	-5.29	100.25	108.81
7	G	25	ARG	CA-C-N	5.29	127.36	120.28
7	G	25	ARG	C-N-CA	5.29	127.36	120.28
7	G	189	VAL	O-C-N	5.29	128.65	122.99
7	G	205	GLU	CA-C-N	5.29	127.36	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	205	GLU	C-N-CA	5.29	127.36	120.28
4	C	147	GLN	N-CA-C	-5.28	101.09	108.96
7	K	65	LYS	N-CA-CB	5.28	118.47	110.28
7	K	206	ARG	CB-CA-C	-5.28	102.02	110.79
5	B	126	VAL	O-C-N	5.28	129.17	122.57
7	K	15	ASP	CA-C-O	5.28	126.15	120.55
4	A	234	LEU	CA-C-N	5.28	130.77	122.11
4	A	234	LEU	C-N-CA	5.28	130.77	122.11
4	A	439	TRP	O-C-N	-5.28	117.13	123.31
4	C	207	SER	N-CA-C	-5.28	99.55	110.80
7	K	34	GLU	O-C-N	-5.28	116.13	122.15
7	G	168	PRO	N-CA-CB	5.28	108.27	103.15
4	E	565	ALA	N-CA-CB	5.28	120.43	111.57
5	F	239	SER	N-CA-C	-5.27	100.81	109.40
4	C	283	CYS	CA-C-N	5.27	131.75	121.41
4	C	283	CYS	C-N-CA	5.27	131.75	121.41
8	P	466	LEU	CA-C-N	5.27	127.78	120.29
8	P	466	LEU	C-N-CA	5.27	127.78	120.29
6	H	97	ILE	N-CA-C	-5.27	105.25	111.00
7	G	159	GLU	N-CA-C	5.27	117.03	111.28
6	J	5	ASN	N-CA-CB	5.27	118.48	110.42
5	F	337	MET	N-CA-CB	5.27	119.50	109.44
5	F	449	TYR	CB-CA-C	-5.27	102.96	111.28
4	A	435	THR	N-CA-CB	5.27	117.76	110.17
7	I	87	LYS	N-CA-C	5.27	117.02	111.28
8	P	49	SER	CA-C-O	-5.27	113.57	119.79
8	P	278	VAL	CB-CA-C	-5.27	105.03	112.14
4	C	35	VAL	N-CA-C	-5.27	100.61	108.46
4	E	597	HIS	CA-C-N	5.26	126.91	120.22
4	E	597	HIS	C-N-CA	5.26	126.91	120.22
5	F	83	THR	N-CA-CB	5.26	119.38	110.49
5	B	178	LEU	N-CA-C	-5.26	99.71	108.23
5	D	274	VAL	N-CA-C	-5.26	100.81	108.17
7	I	189	VAL	CA-C-N	5.26	129.89	123.10
7	I	189	VAL	C-N-CA	5.26	129.89	123.10
8	P	81	ILE	CA-C-N	5.26	127.28	120.44
8	P	81	ILE	C-N-CA	5.26	127.28	120.44
8	P	230	ILE	O-C-N	-5.26	116.97	122.81
7	G	178	TYR	N-CA-CB	5.26	118.83	110.57
4	A	483	ASP	O-C-N	-5.26	116.55	122.12
7	K	128	ALA	N-CA-C	-5.26	105.63	111.36
4	A	177	ARG	N-CA-CB	5.26	119.38	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	47	LYS	CA-C-O	-5.26	114.98	120.55
4	A	252	THR	CA-C-N	5.26	130.82	122.94
4	A	252	THR	C-N-CA	5.26	130.82	122.94
5	D	363	GLN	CA-C-O	5.25	125.99	120.42
5	B	128	ALA	N-CA-CB	5.25	120.29	110.99
6	L	88	GLU	CA-C-N	5.25	127.58	120.65
6	L	88	GLU	C-N-CA	5.25	127.58	120.65
5	B	193	LEU	CA-C-N	5.25	127.66	120.46
5	B	193	LEU	C-N-CA	5.25	127.66	120.46
8	P	337	GLN	CA-C-N	5.25	127.32	120.28
8	P	337	GLN	C-N-CA	5.25	127.32	120.28
5	D	477	SER	CA-C-N	5.25	125.05	119.28
5	D	477	SER	C-N-CA	5.25	125.05	119.28
5	B	453	THR	CA-C-N	5.25	127.65	120.46
5	B	453	THR	C-N-CA	5.25	127.65	120.46
5	D	449	TYR	O-C-N	5.25	128.50	121.99
7	G	160	TYR	CA-C-N	5.25	126.89	120.22
7	G	160	TYR	C-N-CA	5.25	126.89	120.22
8	P	41	ALA	CA-C-N	5.25	127.31	120.28
8	P	41	ALA	C-N-CA	5.25	127.31	120.28
4	E	560	ALA	N-CA-C	5.25	117.08	111.36
4	A	381	PRO	CA-C-N	5.25	127.31	120.28
4	A	381	PRO	C-N-CA	5.25	127.31	120.28
5	F	364	LEU	CA-C-O	5.24	125.98	120.42
5	F	405	ALA	O-C-N	5.24	127.68	122.12
4	C	272	TYR	N-CA-CB	5.24	118.38	110.30
2	M	70	GLU	CA-C-N	5.24	127.92	120.53
2	M	70	GLU	C-N-CA	5.24	127.92	120.53
5	F	74	ARG	N-CA-CB	5.24	119.34	110.49
1	O	298	ASP	CB-CA-C	-5.24	102.65	110.88
3	N	82	ASP	N-CA-C	5.24	117.07	111.36
5	F	34	VAL	CB-CA-C	5.24	118.56	110.28
5	D	361	ASP	CA-C-N	5.24	127.30	120.28
5	D	361	ASP	C-N-CA	5.24	127.30	120.28
1	O	46	SER	CA-C-N	5.24	128.31	120.87
1	O	46	SER	C-N-CA	5.24	128.31	120.87
4	A	471	TYR	N-CA-C	-5.24	105.75	111.82
4	C	338	THR	CA-C-N	5.24	127.30	120.28
4	C	338	THR	C-N-CA	5.24	127.30	120.28
4	E	75	GLU	O-C-N	5.23	129.04	122.86
6	J	36	LYS	CB-CA-C	-5.23	101.95	110.85
7	I	208	LYS	N-CA-CB	5.23	117.90	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	P	331	SER	N-CA-CB	5.23	118.29	109.92
8	P	406	VAL	O-C-N	-5.23	116.78	121.91
7	G	173	VAL	N-CA-CB	5.23	118.05	111.46
3	N	26	GLY	CA-C-O	-5.23	115.92	121.88
5	D	481	LEU	N-CA-C	5.23	116.98	111.28
2	M	66	PHE	CB-CA-C	-5.23	101.96	110.85
5	F	329	ILE	N-CA-C	-5.23	100.12	107.75
4	C	552	SER	N-CA-C	5.23	116.98	111.28
5	D	166	ARG	CA-C-N	5.23	130.00	122.63
5	D	166	ARG	C-N-CA	5.23	130.00	122.63
1	O	313	VAL	CA-C-N	5.22	127.28	120.28
1	O	313	VAL	C-N-CA	5.22	127.28	120.28
4	A	61	ILE	N-CA-C	-5.22	105.75	110.82
4	A	530	GLY	CA-C-O	-5.22	115.97	122.65
4	E	73	TYR	N-CA-C	5.22	119.28	113.02
6	L	19	GLU	CA-C-N	5.22	127.14	120.56
6	L	19	GLU	C-N-CA	5.22	127.14	120.56
2	M	169	ARG	N-CA-C	5.22	117.05	111.36
5	F	349	LEU	CA-C-N	5.22	127.27	120.28
5	F	349	LEU	C-N-CA	5.22	127.27	120.28
7	I	45	ILE	O-C-N	5.22	127.02	121.91
8	P	200	ARG	CA-C-N	5.22	127.22	120.44
8	P	200	ARG	C-N-CA	5.22	127.22	120.44
1	O	29	LYS	CA-C-O	-5.21	115.10	121.36
5	D	178	LEU	N-CA-CB	5.21	115.38	109.49
7	I	151	SER	CA-C-O	5.21	126.00	119.59
4	E	129	ASP	CA-C-O	-5.21	115.67	121.51
5	F	84	SER	CA-C-O	-5.21	115.34	121.44
7	I	206	ARG	O-C-N	5.21	127.44	122.07
7	K	140	LYS	O-C-N	-5.21	117.28	123.22
4	A	606	THR	CA-C-N	5.21	127.21	120.44
4	A	606	THR	C-N-CA	5.21	127.21	120.44
4	C	207	SER	N-CA-CB	5.21	119.30	110.49
5	D	417	LYS	CA-C-N	5.21	127.26	120.28
5	D	417	LYS	C-N-CA	5.21	127.26	120.28
5	F	214	ALA	N-CA-C	-5.21	100.41	108.90
4	C	46	TYR	CA-C-N	5.21	128.11	120.71
4	C	46	TYR	C-N-CA	5.21	128.11	120.71
8	P	434	LEU	CB-CA-C	5.21	117.02	109.20
4	E	518	ALA	N-CA-C	5.21	116.96	111.28
5	F	462	TRP	CA-C-O	-5.21	113.98	119.97
4	E	64	ASP	CA-C-O	-5.21	114.71	120.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	96	THR	O-C-N	5.21	128.09	122.15
4	C	110	ARG	O-C-N	-5.21	116.62	121.72
7	K	165	GLN	CA-C-N	5.21	128.61	120.75
7	K	165	GLN	C-N-CA	5.21	128.61	120.75
2	M	77	GLU	N-CA-CB	5.20	119.28	110.49
1	O	121	PHE	CA-C-O	-5.20	114.74	120.36
7	G	80	ILE	CA-C-O	5.20	126.68	121.17
5	B	211	VAL	CA-C-N	5.20	130.33	123.05
5	B	211	VAL	C-N-CA	5.20	130.33	123.05
4	C	98	PRO	N-CA-C	5.20	123.18	112.47
5	D	193	LEU	N-CA-C	-5.20	107.11	113.50
5	D	431	LEU	CB-CA-C	-5.20	102.16	110.79
4	A	177	ARG	N-CA-C	-5.20	99.73	110.80
4	A	293	VAL	N-CA-C	5.20	115.97	110.72
5	B	470	LYS	CA-C-O	5.20	125.97	120.10
4	C	99	GLY	N-CA-C	-5.20	107.62	114.95
5	D	40	ILE	N-CA-C	-5.20	100.40	107.99
5	D	351	GLY	N-CA-C	-5.20	106.12	112.77
4	A	384	LEU	CB-CA-C	-5.20	102.50	110.81
3	N	75	GLU	CA-C-O	-5.19	115.05	120.55
5	D	55	LEU	CB-CA-C	-5.19	101.18	109.75
2	M	70	GLU	O-C-N	5.19	127.62	122.12
5	F	40	ILE	CA-C-N	5.19	130.73	122.94
5	F	40	ILE	C-N-CA	5.19	130.73	122.94
4	A	456	THR	CA-C-O	-5.19	114.00	119.97
4	C	586	PHE	CA-C-N	5.19	128.84	121.42
4	C	586	PHE	C-N-CA	5.19	128.84	121.42
5	D	36	GLY	N-CA-C	-5.19	101.75	112.34
7	G	108	SER	O-C-N	-5.19	115.88	122.27
5	B	358	ILE	O-C-N	5.19	128.87	123.26
5	B	394	LYS	N-CA-CB	5.19	118.86	110.40
4	E	486	LYS	CA-C-N	5.19	127.19	120.44
4	E	486	LYS	C-N-CA	5.19	127.19	120.44
4	A	268	SER	CA-C-N	5.19	127.23	120.28
4	A	268	SER	C-N-CA	5.19	127.23	120.28
7	I	156	ILE	N-CA-C	-5.19	105.65	110.53
4	E	370	ARG	O-C-N	5.18	128.06	122.15
5	F	208	PHE	CA-C-O	-5.18	115.10	120.70
4	A	614	SER	CA-C-N	5.18	127.18	120.44
4	A	614	SER	C-N-CA	5.18	127.18	120.44
7	G	205	GLU	N-CA-CB	5.18	117.58	110.07
1	O	3	THR	CB-CA-C	-5.18	101.44	110.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	465	ASN	N-CA-C	5.18	116.61	111.07
5	F	431	LEU	CA-C-O	-5.18	114.93	120.42
7	I	145	ASP	CA-C-N	5.18	127.56	120.46
7	I	145	ASP	C-N-CA	5.18	127.56	120.46
5	F	379	LEU	O-C-N	5.18	129.28	123.48
4	A	488	ILE	CA-C-N	5.18	127.64	120.29
4	A	488	ILE	C-N-CA	5.18	127.64	120.29
5	B	125	LYS	CA-C-O	-5.18	114.75	120.24
4	C	428	THR	CA-C-N	5.18	127.22	120.28
4	C	428	THR	C-N-CA	5.18	127.22	120.28
7	I	197	ILE	O-C-N	-5.18	117.56	123.10
7	I	209	LEU	O-C-N	5.18	128.06	122.15
8	P	312	LEU	CA-C-N	5.18	127.17	120.44
8	P	312	LEU	C-N-CA	5.18	127.17	120.44
5	F	320	GLY	CA-C-O	-5.18	117.92	122.16
4	A	600	PHE	CA-C-N	5.18	127.22	120.28
4	A	600	PHE	C-N-CA	5.18	127.22	120.28
8	P	81	ILE	O-C-N	5.18	127.16	121.83
7	G	210	LEU	CA-C-N	5.18	127.73	120.28
7	G	210	LEU	C-N-CA	5.18	127.73	120.28
5	B	251	GLU	CA-C-O	-5.17	115.06	120.55
2	M	203	LEU	CA-C-N	5.17	127.16	120.44
2	M	203	LEU	C-N-CA	5.17	127.16	120.44
4	C	585	LYS	CA-C-O	-5.17	114.02	119.97
8	P	299	SER	N-CA-C	5.17	117.20	110.43
6	H	4	LYS	N-CA-CB	-5.17	102.53	110.44
4	A	559	LYS	CA-C-N	5.17	127.16	120.44
4	A	559	LYS	C-N-CA	5.17	127.16	120.44
4	E	354	ALA	CA-C-N	5.17	129.56	121.76
4	E	354	ALA	C-N-CA	5.17	129.56	121.76
1	O	67	GLU	CA-C-N	5.17	127.20	120.28
1	O	67	GLU	C-N-CA	5.17	127.20	120.28
5	D	288	LEU	CA-C-N	5.17	127.63	120.29
5	D	288	LEU	C-N-CA	5.17	127.63	120.29
7	I	65	LYS	N-CA-CB	5.17	118.29	110.28
7	I	180	ASN	O-C-N	-5.17	116.59	122.89
7	I	197	ILE	N-CA-C	-5.17	100.76	108.46
6	H	8	ALA	N-CA-C	5.17	116.91	111.28
1	O	182	GLU	N-CA-C	-5.17	107.01	113.72
1	O	264	GLU	N-CA-C	5.16	116.91	111.28
4	C	491	ASN	CB-CA-C	-5.16	102.07	110.85
5	F	137	SER	O-C-N	-5.16	115.38	121.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	B	357	GLN	N-CA-CB	5.16	119.56	111.56
7	G	185	SER	CA-C-N	5.16	131.48	122.92
7	G	185	SER	C-N-CA	5.16	131.48	122.92
5	B	103	PRO	O-C-N	5.16	126.39	122.73
4	C	244	PHE	CA-C-O	-5.16	116.16	121.32
7	K	90	SER	CA-C-O	5.16	125.71	119.11
5	B	99	SER	O-C-N	5.16	128.79	122.96
5	D	56	THR	N-CA-C	-5.16	100.11	108.52
1	O	15	SER	N-CA-C	-5.15	100.30	109.06
1	O	203	LYS	CA-C-N	5.15	127.19	120.28
1	O	203	LYS	C-N-CA	5.15	127.19	120.28
5	F	343	THR	N-CA-C	-5.15	106.96	114.12
8	P	80	LEU	CB-CA-C	-5.15	102.23	110.79
5	F	273	HIS	CA-C-N	-5.15	116.39	123.14
5	F	273	HIS	C-N-CA	-5.15	116.39	123.14
4	A	477	GLU	N-CA-C	-5.15	106.84	113.02
4	C	136	THR	CA-C-N	5.15	131.24	121.97
4	C	136	THR	C-N-CA	5.15	131.24	121.97
5	B	267	ALA	CB-CA-C	-5.15	102.76	110.90
6	J	36	LYS	CA-C-N	5.15	129.31	120.71
6	J	36	LYS	C-N-CA	5.15	129.31	120.71
3	N	93	GLU	O-C-N	-5.15	116.69	123.02
4	A	165	SER	N-CA-CB	5.15	117.75	110.13
4	A	586	PHE	N-CA-C	-5.15	105.74	112.23
6	L	102	VAL	CA-C-O	5.15	126.03	120.47
4	E	409	SER	O-C-N	-5.15	117.51	123.33
4	C	580	ALA	CA-C-O	-5.15	115.42	120.82
5	B	454	VAL	N-CA-C	5.15	115.87	110.62
6	J	71	LYS	CA-C-O	-5.15	112.52	119.11
4	E	129	ASP	N-CA-CB	5.14	119.95	111.62
5	B	110	GLY	N-CA-C	-5.14	108.18	115.43
7	I	45	ILE	CA-C-O	-5.14	115.72	121.17
7	K	149	ILE	CB-CA-C	-5.14	105.19	112.14
7	G	180	ASN	CA-C-N	5.14	132.23	121.94
7	G	180	ASN	C-N-CA	5.14	132.23	121.94
4	E	128	ILE	N-CA-C	-5.14	100.84	108.45
4	E	390	SER	N-CA-C	-5.14	105.67	111.28
5	D	292	SER	CA-C-N	5.14	127.59	120.29
5	D	292	SER	C-N-CA	5.14	127.59	120.29
6	L	6	GLY	CA-C-O	-5.14	115.21	120.66
1	O	149	TYR	CA-C-N	5.14	127.12	120.44
1	O	149	TYR	C-N-CA	5.14	127.12	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	K	175	SER	CA-C-O	-5.14	116.10	121.55
4	E	278	ILE	N-CA-CB	5.14	119.02	111.52
4	C	135	ARG	N-CA-C	-5.14	105.77	113.89
6	J	71	LYS	N-CA-C	-5.14	106.96	113.18
7	I	71	LEU	N-CA-C	-5.14	105.31	112.45
4	E	407	THR	N-CA-C	-5.14	101.32	109.59
5	B	85	GLY	N-CA-C	-5.14	107.60	115.00
5	B	310	THR	O-C-N	5.14	127.57	122.12
4	E	400	ALA	N-CA-CB	-5.14	101.70	109.92
4	A	491	ASN	CA-C-N	5.14	127.16	120.28
4	A	491	ASN	C-N-CA	5.14	127.16	120.28
4	C	108	ILE	CA-C-N	5.14	131.35	121.54
4	C	108	ILE	C-N-CA	5.14	131.35	121.54
4	C	512	LYS	O-C-N	5.13	128.00	122.15
4	C	221	ARG	CB-CA-C	-5.13	101.20	109.67
1	O	295	ALA	CB-CA-C	-5.13	102.12	110.85
3	N	13	ASP	CA-C-N	5.13	127.47	120.54
3	N	13	ASP	C-N-CA	5.13	127.47	120.54
5	B	122	ASN	N-CA-C	-5.13	101.61	109.41
1	O	299	VAL	CB-CA-C	-5.13	105.14	112.22
1	O	202	LEU	N-CA-CB	5.13	119.03	110.41
1	O	325	PHE	N-CA-CB	5.13	119.51	111.20
7	K	208	LYS	O-C-N	-5.13	116.68	122.12
5	F	126	VAL	CA-C-N	5.13	131.33	121.54
5	F	126	VAL	C-N-CA	5.13	131.33	121.54
8	P	312	LEU	CB-CA-C	-5.13	102.83	110.88
4	C	613	GLU	CB-CA-C	-5.12	102.14	110.85
5	B	125	LYS	CA-C-N	-5.12	112.75	121.97
5	B	125	LYS	C-N-CA	-5.12	112.75	121.97
4	E	56	LEU	CB-CA-C	-5.12	100.75	109.51
4	E	280	TYR	CA-C-O	-5.12	114.88	120.36
4	A	157	ILE	CB-CA-C	-5.12	104.75	111.25
1	O	310	ARG	N-CA-C	5.12	116.94	111.36
5	F	98	GLU	CA-C-N	5.12	130.28	120.97
5	F	98	GLU	C-N-CA	5.12	130.28	120.97
4	C	159	GLY	N-CA-C	-5.12	102.79	111.08
2	M	26	ASN	CA-C-N	5.12	127.14	120.28
2	M	26	ASN	C-N-CA	5.12	127.14	120.28
2	M	105	TYR	N-CA-C	-5.12	100.90	109.24
5	F	62	VAL	N-CA-CB	5.12	117.13	110.99
7	I	59	ASP	N-CA-CB	5.12	117.64	110.12
7	G	76	THR	N-CA-C	-5.12	105.78	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	B	166	ARG	N-CA-CB	5.12	117.52	109.69
5	B	224	PHE	N-CA-C	5.11	116.85	111.28
5	B	416	MET	N-CA-CB	5.11	118.21	110.28
4	E	540	ILE	N-CA-C	-5.11	105.56	110.72
5	B	107	ASP	CB-CA-C	-5.11	102.90	110.62
8	P	76	THR	CA-C-O	5.11	125.67	119.38
3	N	27	GLN	O-C-N	-5.11	117.52	122.99
3	N	43	GLY	O-C-N	-5.11	115.94	122.43
4	E	283	CYS	CA-C-O	-5.11	115.00	120.42
5	F	196	PRO	CA-C-O	-5.11	111.89	119.86
4	A	514	THR	N-CA-C	-5.11	105.60	111.07
7	G	9	THR	CB-CA-C	5.11	117.59	109.52
4	C	476	PRO	N-CA-C	5.11	119.23	111.11
4	C	479	PRO	O-C-N	5.11	128.11	122.24
8	P	273	ASP	O-C-N	5.11	128.19	122.22
3	N	61	ARG	CA-C-O	5.11	126.31	120.54
4	A	27	ILE	CA-C-N	5.11	129.24	120.71
4	A	27	ILE	C-N-CA	5.11	129.24	120.71
4	A	130	THR	CA-C-N	5.11	125.08	120.03
4	A	130	THR	C-N-CA	5.11	125.08	120.03
4	C	535	ASP	O-C-N	5.11	128.32	122.25
7	I	169	LEU	N-CA-CB	5.11	117.47	109.97
6	L	40	ALA	N-CA-C	5.11	117.74	111.82
4	E	509	ASP	CB-CA-C	-5.10	100.87	110.67
5	B	353	ILE	N-CA-C	-5.10	105.57	110.72
5	B	406	LYS	N-CA-CB	5.10	117.71	110.16
7	I	172	ILE	CA-C-N	-5.10	116.17	123.11
7	I	172	ILE	C-N-CA	-5.10	116.17	123.11
13	i	156	GLN	CA-C-N	5.10	131.28	121.54
13	i	156	GLN	C-N-CA	5.10	131.28	121.54
4	E	552	SER	N-CA-C	5.10	117.73	111.82
4	A	382	ALA	CA-C-N	5.10	130.06	121.14
4	A	382	ALA	C-N-CA	5.10	130.06	121.14
5	B	111	ARG	O-C-N	5.10	129.51	123.24
7	K	82	ASN	N-CA-C	-5.10	105.37	112.45
1	O	58	LEU	CA-C-N	5.09	127.10	120.28
1	O	58	LEU	C-N-CA	5.09	127.10	120.28
3	N	44	LYS	N-CA-CB	5.09	118.34	110.81
5	B	268	TYR	CA-C-O	5.09	126.00	120.55
8	P	207	GLU	N-CA-CB	5.09	117.52	109.94
4	A	255	PRO	CA-C-N	5.09	130.31	121.15
4	A	255	PRO	C-N-CA	5.09	130.31	121.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	205	ASP	CA-C-N	5.09	127.51	120.29
1	O	205	ASP	C-N-CA	5.09	127.51	120.29
4	E	539	PRO	CA-C-N	5.08	127.64	120.42
4	E	539	PRO	C-N-CA	5.08	127.64	120.42
4	E	574	THR	CB-CA-C	5.08	118.94	110.90
2	M	95	ARG	O-C-N	-5.08	117.25	123.30
5	F	476	ILE	CA-C-O	5.08	126.42	121.19
5	B	339	ASN	N-CA-C	-5.08	106.21	114.09
5	B	439	PHE	CA-C-N	5.08	127.51	120.29
5	B	439	PHE	C-N-CA	5.08	127.51	120.29
8	P	296	GLN	O-C-N	5.08	127.51	122.12
6	H	91	LYS	N-CA-C	5.08	116.51	111.07
4	A	167	ILE	N-CA-C	-5.08	102.33	108.53
5	B	130	ASP	CA-C-N	5.08	130.01	123.00
5	B	130	ASP	C-N-CA	5.08	130.01	123.00
5	B	185	ALA	CA-C-O	-5.08	115.03	120.42
6	H	83	ILE	O-C-N	-5.08	116.60	121.83
7	G	109	GLY	CA-C-N	5.08	126.96	120.56
7	G	109	GLY	C-N-CA	5.08	126.96	120.56
4	C	185	ILE	O-C-N	-5.08	117.81	123.20
5	D	370	TYR	CA-C-O	-5.08	113.20	120.16
7	G	78	SER	N-CA-CB	5.08	118.12	110.30
6	H	27	TYR	CA-C-N	5.08	127.04	120.44
6	H	27	TYR	C-N-CA	5.08	127.04	120.44
5	F	266	LEU	CA-C-N	5.08	127.04	120.44
5	F	266	LEU	C-N-CA	5.08	127.04	120.44
4	A	196	LYS	CA-C-O	5.08	126.93	121.55
8	P	369	CYS	CA-C-O	-5.08	115.85	121.33
6	H	104	LYS	CB-CA-C	5.08	116.49	108.88
1	O	17	PRO	N-CA-CB	-5.07	98.61	103.33
1	O	19	ASN	CA-C-N	5.07	131.23	121.54
1	O	19	ASN	C-N-CA	5.07	131.23	121.54
2	M	158	ILE	N-CA-C	-5.07	105.60	110.72
4	E	26	ALA	O-C-N	-5.07	117.08	123.27
5	B	143	ALA	N-CA-CB	5.07	117.49	109.83
5	B	344	HIS	CA-C-O	-5.07	114.77	120.25
5	D	186	GLN	CA-C-N	5.07	126.95	120.56
5	D	186	GLN	C-N-CA	5.07	126.95	120.56
8	P	359	TYR	CA-C-N	5.07	127.62	120.42
8	P	359	TYR	C-N-CA	5.07	127.62	120.42
5	F	213	ALA	N-CA-CB	5.07	119.57	110.80
4	C	179	ARG	N-CA-C	-5.07	101.20	108.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	C	424	SER	N-CA-C	-5.07	107.26	113.50
5	D	453	THR	N-CA-C	-5.07	101.61	109.72
8	P	98	ASN	CA-C-N	5.07	127.49	120.29
8	P	98	ASN	C-N-CA	5.07	127.49	120.29
4	E	510	SER	N-CA-C	-5.07	105.75	111.28
5	F	480	ILE	O-C-N	5.07	127.05	121.83
5	B	253	ILE	N-CA-C	5.07	117.43	111.09
4	C	548	ARG	CB-CA-C	-5.07	102.38	110.79
1	O	302	ASN	CB-CA-C	-5.07	102.38	110.79
4	E	471	TYR	CB-CA-C	-5.07	102.24	110.85
4	A	611	PHE	CA-C-N	5.07	127.33	120.44
4	A	611	PHE	C-N-CA	5.07	127.33	120.44
4	C	383	TYR	CB-CA-C	-5.07	99.83	110.17
5	D	256	PRO	O-C-N	5.07	128.31	122.23
5	D	483	GLU	N-CA-C	5.07	116.80	111.28
8	P	9	ASP	N-CA-C	-5.07	106.94	112.72
7	G	137	ALA	N-CA-CB	5.07	120.17	111.00
4	A	187	PRO	CA-C-O	-5.07	115.46	122.15
4	C	601	GLU	CA-C-N	5.07	129.29	120.68
4	C	601	GLU	C-N-CA	5.07	129.29	120.68
6	L	68	LEU	N-CA-C	-5.07	106.61	112.89
8	P	287	SER	CB-CA-C	-5.07	102.93	110.88
4	A	485	MET	CA-C-N	5.06	127.07	120.28
4	A	485	MET	C-N-CA	5.06	127.07	120.28
5	D	197	THR	CA-C-O	-5.06	115.05	120.42
4	E	48	LEU	CA-C-O	-5.06	115.10	120.92
4	C	529	ASN	N-CA-CB	-5.06	102.44	110.28
4	A	369	GLY	CA-C-N	5.06	127.32	120.44
4	A	369	GLY	C-N-CA	5.06	127.32	120.44
7	K	204	GLU	O-C-N	5.06	127.92	122.15
5	F	193	LEU	N-CA-CB	5.06	117.97	110.53
4	C	397	LYS	CA-C-O	-5.06	115.29	121.36
6	J	60	LYS	CA-C-N	5.06	130.32	121.52
6	J	60	LYS	C-N-CA	5.06	130.32	121.52
4	E	428	THR	CB-CA-C	-5.06	102.25	110.85
4	A	49	VAL	N-CA-C	-5.06	100.62	108.81
5	B	238	THR	CA-C-O	5.06	126.83	121.11
4	C	309	GLU	CA-C-N	5.06	126.16	119.84
4	C	309	GLU	C-N-CA	5.06	126.16	119.84
7	I	151	SER	CA-C-N	5.06	128.68	120.23
7	I	151	SER	C-N-CA	5.06	128.68	120.23
7	G	173	VAL	N-CA-C	-5.06	100.47	107.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	363	LYS	CA-C-O	-5.06	113.38	120.21
4	C	511	ASP	CA-C-N	5.06	127.47	120.29
4	C	511	ASP	C-N-CA	5.06	127.47	120.29
2	M	72	SER	O-C-N	5.05	127.28	122.07
5	D	419	VAL	N-CA-CB	-5.05	102.89	111.23
1	O	48	PHE	CA-C-N	5.05	128.04	120.87
1	O	48	PHE	C-N-CA	5.05	128.04	120.87
4	E	122	ILE	N-CA-C	-5.05	105.63	113.16
4	A	472	ASP	CA-C-N	5.05	127.99	120.31
4	A	472	ASP	C-N-CA	5.05	127.99	120.31
4	A	480	VAL	CA-C-O	5.05	126.20	120.95
8	P	281	THR	CA-C-N	5.05	129.04	121.77
8	P	281	THR	C-N-CA	5.05	129.04	121.77
5	B	334	ILE	N-CA-C	-5.05	100.38	107.75
4	C	99	GLY	CA-C-N	5.05	127.31	120.44
4	C	99	GLY	C-N-CA	5.05	127.31	120.44
5	D	215	MET	N-CA-C	-5.05	100.23	108.76
8	P	83	LEU	CB-CA-C	-5.05	102.41	110.79
7	G	25	ARG	N-CA-CB	5.05	117.54	110.12
3	N	17	THR	CB-CA-C	-5.05	102.96	110.88
4	E	44	ALA	CB-CA-C	-5.04	100.26	109.54
1	O	67	GLU	O-C-N	5.04	127.90	122.15
4	A	391	PHE	CA-C-N	5.04	127.97	120.31
4	A	391	PHE	C-N-CA	5.04	127.97	120.31
6	J	27	TYR	CA-C-N	5.04	127.00	120.44
6	J	27	TYR	C-N-CA	5.04	127.00	120.44
6	L	83	ILE	O-C-N	5.04	127.14	121.90
1	O	295	ALA	CA-C-N	5.04	127.03	120.28
1	O	295	ALA	C-N-CA	5.04	127.03	120.28
4	E	153	SER	N-CA-C	-5.04	101.45	108.96
4	A	112	LEU	N-CA-CB	5.04	117.62	110.16
5	D	457	SER	N-CA-C	5.04	116.77	111.28
2	M	110	GLU	N-CA-CB	5.04	118.68	110.77
4	E	559	LYS	CA-C-N	5.04	127.45	120.29
4	E	559	LYS	C-N-CA	5.04	127.45	120.29
4	E	590	SER	N-CA-C	-5.04	105.84	112.94
4	A	550	PHE	CB-CA-C	-5.04	102.28	110.85
5	D	114	ASP	O-C-N	5.04	128.45	122.20
4	C	377	ASP	CA-C-N	5.04	129.70	122.40
4	C	377	ASP	C-N-CA	5.04	129.70	122.40
8	P	375	VAL	O-C-N	-5.04	116.27	122.57
4	E	106	ASP	CB-CA-C	-5.04	100.99	110.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	278	LEU	CA-C-O	5.04	125.69	120.40
4	A	468	ASN	O-C-N	5.04	127.89	122.15
5	F	287	ALA	N-CA-C	5.03	116.77	111.28
4	A	510	SER	CA-C-N	5.03	127.96	120.31
4	A	510	SER	C-N-CA	5.03	127.96	120.31
5	F	113	PHE	N-CA-C	-5.03	101.76	109.41
4	A	176	PRO	CA-C-N	5.03	131.15	121.54
4	A	176	PRO	C-N-CA	5.03	131.15	121.54
4	E	433	GLY	CA-C-N	5.03	128.94	120.29
4	E	433	GLY	C-N-CA	5.03	128.94	120.29
5	D	145	ILE	N-CA-C	-5.03	100.41	107.75
6	H	41	LYS	N-CA-C	-5.03	107.00	113.23
1	O	374	TYR	N-CA-C	5.02	117.18	110.35
4	E	130	THR	N-CA-C	-5.02	100.71	108.55
5	B	99	SER	N-CA-CB	5.02	117.93	110.29
7	G	126	VAL	N-CA-CB	5.02	117.37	110.54
1	O	61	LEU	N-CA-CB	5.02	117.50	110.12
1	O	148	THR	CB-CA-C	5.02	119.38	110.85
7	K	126	VAL	CA-C-N	5.02	127.51	120.28
7	K	126	VAL	C-N-CA	5.02	127.51	120.28
7	G	210	LEU	CA-C-O	5.02	125.74	119.97
3	N	73	ILE	N-CA-CB	5.02	118.11	110.58
5	F	476	ILE	CA-C-N	5.02	127.61	120.49
5	F	476	ILE	C-N-CA	5.02	127.61	120.49
4	A	477	GLU	CA-C-N	5.02	134.04	121.80
4	A	477	GLU	C-N-CA	5.02	134.04	121.80
4	C	554	HIS	CA-C-N	5.02	127.42	120.29
4	C	554	HIS	C-N-CA	5.02	127.42	120.29
5	D	280	ASP	CA-C-N	5.02	127.00	120.28
5	D	280	ASP	C-N-CA	5.02	127.00	120.28
1	O	161	ALA	CA-C-O	-5.02	115.53	120.70
1	O	184	PHE	N-CA-C	-5.02	101.45	109.07
4	E	453	SER	CA-C-O	-5.01	116.60	122.37
4	A	547	MET	CB-CA-C	-5.01	102.47	110.79
7	K	85	ARG	CA-C-N	5.01	127.41	120.29
7	K	85	ARG	C-N-CA	5.01	127.41	120.29
1	O	183	ASP	N-CA-C	-5.01	106.58	113.30
5	F	432	SER	CA-C-N	5.01	127.26	120.44
5	F	432	SER	C-N-CA	5.01	127.26	120.44
5	B	290	GLU	CA-C-N	5.01	127.80	120.98
5	B	290	GLU	C-N-CA	5.01	127.80	120.98
4	E	490	SER	CA-C-N	5.01	127.41	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	490	SER	C-N-CA	5.01	127.41	120.29
4	E	310	PRO	N-CA-C	5.01	122.79	112.47
5	D	383	MET	CA-C-N	5.01	131.62	122.50
5	D	383	MET	C-N-CA	5.01	131.62	122.50
7	K	22	ALA	CA-C-N	5.01	126.99	120.28
7	K	22	ALA	C-N-CA	5.01	126.99	120.28
4	A	124	ILE	CA-C-N	5.01	125.00	119.89
4	A	124	ILE	C-N-CA	5.01	125.00	119.89
4	C	206	LYS	O-C-N	5.01	127.23	122.07
4	C	462	LYS	CA-C-N	5.01	129.08	120.72
4	C	462	LYS	C-N-CA	5.01	129.08	120.72
7	K	87	LYS	CA-C-N	5.01	126.87	120.56
7	K	87	LYS	C-N-CA	5.01	126.87	120.56
8	P	121	PRO	CB-CA-C	-5.01	104.74	111.85
1	O	168	GLY	O-C-N	5.00	129.21	122.70
8	P	215	PHE	N-CA-CB	5.00	117.57	110.16
6	H	40	ALA	CA-C-O	5.00	125.73	119.97
2	M	11	THR	N-CA-CB	5.00	117.65	110.20
6	L	27	TYR	CA-C-N	5.00	126.94	120.44
6	L	27	TYR	C-N-CA	5.00	126.94	120.44
7	G	208	LYS	CA-C-O	-5.00	115.25	120.55

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	B	147	PRO	Peptide

5.2 Too-close contacts [i](#)

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	O	1947	0	876	19	0
2	M	1039	0	475	27	0
3	N	571	0	255	0	0
4	A	2915	0	1343	1	0
4	C	2915	0	1343	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	E	2915	0	1343	1	0
5	B	2250	0	1016	0	0
5	D	2250	0	1016	1	0
5	F	2250	0	1016	0	0
6	H	519	0	250	1	0
6	J	519	0	250	1	0
6	L	519	0	250	1	0
7	G	1078	0	483	1	0
7	I	1078	0	483	0	0
7	K	1078	0	483	3	0
8	P	2292	0	993	1	0
9	a	3092	0	1352	6	0
10	b	218	0	98	0	0
11	c	962	0	477	3	0
12	d	1699	0	752	28	0
13	g	743	0	379	1	0
13	h	763	0	387	0	0
13	i	763	0	387	1	0
13	j	758	0	385	18	0
13	k	768	0	389	0	0
13	l	763	0	387	0	0
13	m	768	0	389	1	0
13	n	768	0	389	0	0
14	o	758	0	375	1	0
15	e	319	0	143	0	0
16	f	301	0	141	0	0
All	All	39578	0	18305	62	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 1.

All (62) 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)
2:M:119:ASP:CB	12:d:230:SER:CB	1.90	1.45
1:O:2:ALA:HA	13:j:48:ASP:CB	1.51	1.40
2:M:78:ASN:H	12:d:126:ARG:CB	1.35	1.38
2:M:78:ASN:N	12:d:126:ARG:CB	1.86	1.36
2:M:119:ASP:CB	12:d:230:SER:CA	2.05	1.32
7:K:20:MET:CB	9:a:409:GLU:HA	1.56	1.30
1:O:2:ALA:CB	13:j:48:ASP:CB	2.10	1.29

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:2:ALA:CB	13:j:49:LEU:N	1.98	1.26
1:O:2:ALA:CA	13:j:48:ASP:CB	2.14	1.26
1:O:2:ALA:CB	13:j:48:ASP:C	2.10	1.24
2:M:77:GLU:HA	12:d:126:ARG:C	1.62	1.23
2:M:77:GLU:CA	12:d:126:ARG:O	1.85	1.22
2:M:121:ARG:CB	12:d:174:ASP:C	2.11	1.22
2:M:77:GLU:HA	12:d:126:ARG:O	1.35	1.21
2:M:77:GLU:N	12:d:126:ARG:O	1.75	1.18
2:M:85:GLU:CB	12:d:116:HIS:CB	2.20	1.18
2:M:119:ASP:CB	12:d:230:SER:HA	1.68	1.17
1:O:2:ALA:HB1	13:j:49:LEU:N	1.55	1.14
2:M:77:GLU:HA	12:d:126:ARG:CB	1.79	1.12
1:O:2:ALA:HB2	13:j:48:ASP:C	1.75	1.09
2:M:77:GLU:CA	12:d:126:ARG:CB	2.30	1.09
2:M:77:GLU:HA	12:d:126:ARG:CA	1.84	1.07
2:M:121:ARG:CB	12:d:174:ASP:O	2.01	1.06
1:O:2:ALA:HB1	13:j:48:ASP:CA	1.88	1.02
1:O:2:ALA:HB1	13:j:48:ASP:C	1.78	1.01
1:O:2:ALA:CB	13:j:48:ASP:CA	2.40	1.00
2:M:77:GLU:C	12:d:126:ARG:CB	2.33	1.00
1:O:2:ALA:HB2	13:j:48:ASP:CB	1.92	0.99
1:O:2:ALA:HB1	13:j:49:LEU:H	1.29	0.92
2:M:85:GLU:CB	12:d:116:HIS:CA	2.48	0.91
7:K:20:MET:CB	9:a:409:GLU:CA	2.41	0.89
7:K:16:GLU:CB	9:a:404:GLU:CB	2.51	0.88
2:M:85:GLU:CB	12:d:116:HIS:HA	2.04	0.87
1:O:2:ALA:HB1	13:j:48:ASP:CB	2.07	0.84
2:M:77:GLU:CA	12:d:126:ARG:C	2.48	0.79
1:O:2:ALA:HB3	13:j:49:LEU:N	1.98	0.78
6:L:10:LEU:CB	9:a:411:SER:H	2.03	0.72
6:J:3:GLN:CB	9:a:163:VAL:C	2.63	0.72
2:M:121:ARG:CB	12:d:175:MET:N	2.59	0.66
1:O:2:ALA:CB	13:j:49:LEU:H	1.95	0.60
2:M:121:ARG:CB	12:d:174:ASP:CB	2.80	0.59
11:c:74:GLY:HA3	11:c:157:LEU:HA	1.85	0.58
1:O:2:ALA:HB1	13:j:48:ASP:N	2.18	0.57
13:i:20:ALA:HB2	13:i:94:GLY:HA2	1.88	0.55
2:M:77:GLU:CB	12:d:126:ARG:O	2.55	0.55
1:O:2:ALA:HB2	13:j:48:ASP:CA	2.20	0.54
2:M:121:ARG:CB	12:d:175:MET:HA	2.38	0.54
13:m:20:ALA:HB2	13:m:94:GLY:HA2	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:A:592:GLY:HA3	4:A:598:GLY:H	1.74	0.53
2:M:77:GLU:CB	12:d:126:ARG:CB	2.86	0.52
8:P:279:LYS:O	9:a:114:GLU:CB	2.58	0.52
2:M:119:ASP:CB	12:d:230:SER:N	2.70	0.52
6:H:35:ALA:HB2	7:G:43:TYR:HA	1.97	0.47
1:O:2:ALA:HB3	13:j:49:LEU:CB	2.45	0.46
2:M:121:ARG:CB	12:d:175:MET:CA	2.94	0.45
4:C:162:PHE:HA	4:C:168:SER:HA	2.00	0.44
1:O:162:ALA:HB1	1:O:274:HIS:HA	2.01	0.43
11:c:162:ALA:HB2	14:o:35:ALA:HB1	2.01	0.43
2:M:77:GLU:CB	12:d:126:ARG:C	2.93	0.41
12:d:47:SER:HA	12:d:52:GLY:HA2	2.01	0.41
11:c:76:ALA:HB1	13:g:107:ALA:HB2	2.03	0.41
4:E:44:ALA:HB1	5:D:85:GLY:HA2	2.02	0.41

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	O	390/392 (100%)	359 (92%)	19 (5%)	12 (3%)	3	22
2	M	208/256 (81%)	201 (97%)	6 (3%)	1 (0%)	24	63
3	N	113/118 (96%)	103 (91%)	8 (7%)	2 (2%)	6	34
4	A	591/639 (92%)	543 (92%)	34 (6%)	14 (2%)	4	27
4	C	591/639 (92%)	540 (91%)	35 (6%)	16 (3%)	4	25
4	E	591/639 (92%)	536 (91%)	43 (7%)	12 (2%)	6	31
5	B	455/517 (88%)	415 (91%)	32 (7%)	8 (2%)	6	34
5	D	455/517 (88%)	406 (89%)	34 (8%)	15 (3%)	3	21
5	F	455/517 (88%)	405 (89%)	39 (9%)	11 (2%)	4	27

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	H	103/114 (90%)	101 (98%)	0	2 (2%)	6	32
6	J	103/114 (90%)	99 (96%)	2 (2%)	2 (2%)	6	32
6	L	103/114 (90%)	99 (96%)	2 (2%)	2 (2%)	6	32
7	G	215/233 (92%)	205 (95%)	8 (4%)	2 (1%)	14	51
7	I	215/233 (92%)	209 (97%)	6 (3%)	0	100	100
7	K	215/233 (92%)	207 (96%)	5 (2%)	3 (1%)	9	40
8	P	457/478 (96%)	429 (94%)	19 (4%)	9 (2%)	6	31
9	a	611/890 (69%)	588 (96%)	23 (4%)	0	100	100
10	b	42/265 (16%)	42 (100%)	0	0	100	100
11	c	195/213 (92%)	189 (97%)	6 (3%)	0	100	100
12	d	341/345 (99%)	327 (96%)	14 (4%)	0	100	100
13	g	151/160 (94%)	149 (99%)	2 (1%)	0	100	100
13	h	155/160 (97%)	154 (99%)	1 (1%)	0	100	100
13	i	155/160 (97%)	153 (99%)	2 (1%)	0	100	100
13	j	154/160 (96%)	152 (99%)	2 (1%)	0	100	100
13	k	156/160 (98%)	154 (99%)	2 (1%)	0	100	100
13	l	155/160 (97%)	153 (99%)	2 (1%)	0	100	100
13	m	156/160 (98%)	154 (99%)	2 (1%)	0	100	100
13	n	156/160 (98%)	154 (99%)	2 (1%)	0	100	100
14	o	154/164 (94%)	152 (99%)	2 (1%)	0	100	100
15	e	62/73 (85%)	62 (100%)	0	0	100	100
16	f	59/85 (69%)	59 (100%)	0	0	100	100
All	All	7962/9068 (88%)	7499 (94%)	352 (4%)	111 (1%)	11	40

All (111) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	O	167	THR
1	O	172	VAL
4	E	475	TYR
5	F	125	LYS
5	F	207	ASN
5	F	293	ALA
4	A	475	TYR

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Mol	Chain	Res	Type
4	C	475	TYR
4	C	565	ALA
5	D	143	ALA
5	D	319	ALA
7	K	144	ARG
8	P	389	LYS
1	O	39	ILE
1	O	97	TYR
1	O	116	TRP
1	O	176	HIS
4	E	120	GLN
4	E	456	THR
4	E	575	GLY
4	E	593	GLU
5	F	340	ASP
4	A	177	ARG
4	A	234	LEU
4	A	449	LYS
4	A	450	HIS
4	A	565	ALA
4	A	575	GLY
5	B	163	SER
5	B	294	ALA
4	C	75	GLU
4	C	125	PRO
4	C	575	GLY
5	D	88	VAL
5	D	323	GLU
5	D	377	PRO
5	D	467	ILE
6	J	77	GLN
8	P	391	ASN
8	P	392	TYR
6	H	77	GLN
3	N	4	LYS
4	E	308	LYS
4	E	529	ASN
5	F	135	ASN
4	A	305	SER
4	A	405	ASP
4	A	441	LEU
5	B	83	THR

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Mol	Chain	Res	Type
5	B	293	ALA
4	C	325	PRO
5	D	141	PRO
5	D	203	GLY
6	L	63	GLY
7	K	192	ASN
8	P	234	ASN
8	P	332	ASP
1	O	2	ALA
1	O	229	ALA
1	O	360	LYS
1	O	375	ALA
3	N	115	LEU
4	E	207	SER
5	F	202	ASP
5	F	296	GLU
4	A	257	ALA
5	B	121	ASP
5	B	391	MET
4	C	230	ASP
4	C	405	ASP
4	C	449	LYS
5	D	179	PRO
8	P	34	GLU
8	P	232	ALA
8	P	458	ASP
7	G	195	ASP
1	O	254	LYS
4	E	449	LYS
4	E	476	PRO
5	F	372	PRO
4	A	594	LYS
4	C	126	ARG
4	C	207	SER
4	C	528	GLN
5	D	125	LYS
5	D	138	PRO
5	D	391	MET
6	L	62	ALA
7	K	195	ASP
7	G	133	LEU
5	F	124	PRO

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Mol	Chain	Res	Type
4	A	78	GLY
5	D	202	ASP
6	J	105	PRO
8	P	54	LYS
6	H	105	PRO
4	A	284	GLY
5	B	372	PRO
4	C	310	PRO
4	C	403	SER
4	E	284	GLY
1	O	384	PRO
2	M	115	PRO
5	F	137	SER
5	F	179	PRO
4	C	375	PRO
4	E	310	PRO
5	B	126	VAL
5	D	248	PRO
4	C	589	PRO
5	D	375	VAL

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.

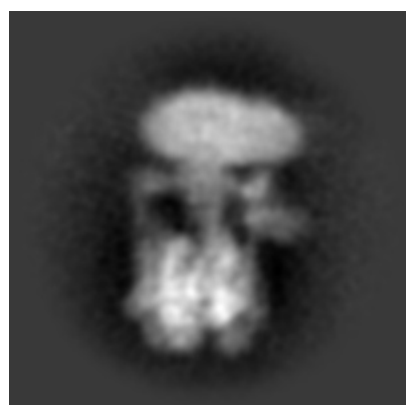
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-0648. These allow visual inspection of the internal detail of the map and identification of artifacts.

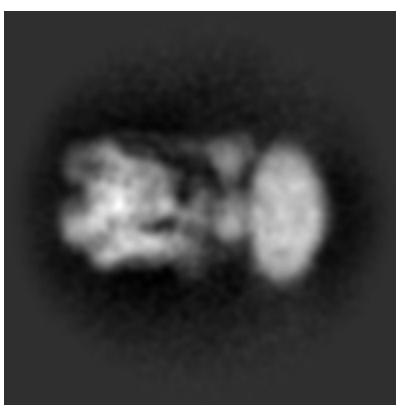
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

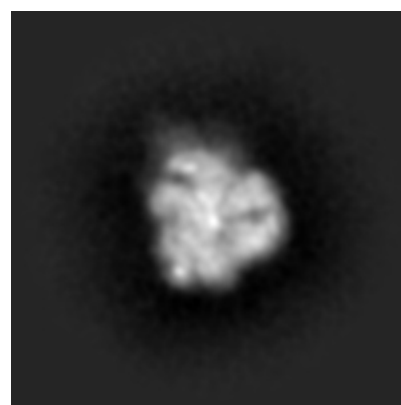
6.1.1 Primary map



X



Y

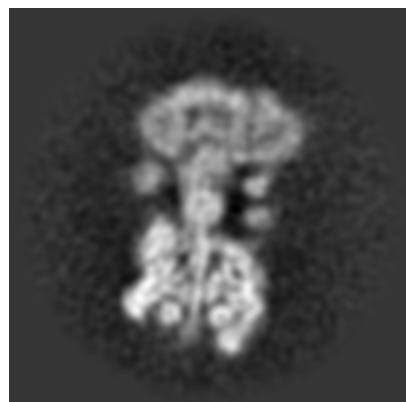


Z

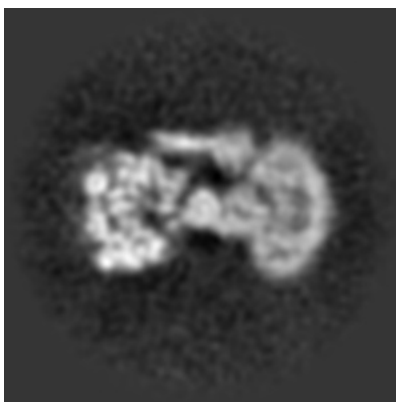
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

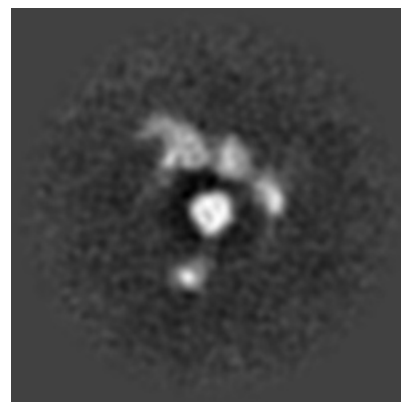
6.2.1 Primary map



X Index: 128



Y Index: 128

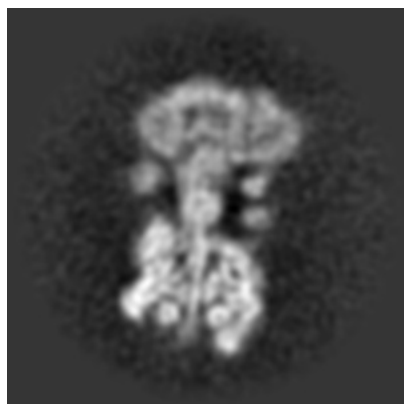


Z Index: 128

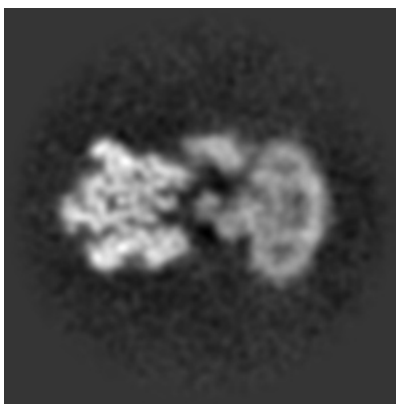
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

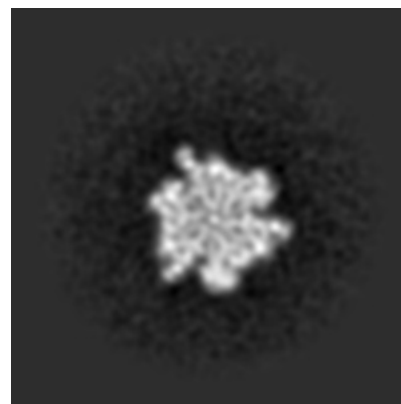
6.3.1 Primary map



X Index: 128



Y Index: 136

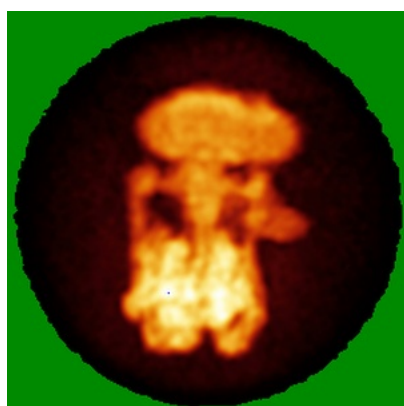


Z Index: 74

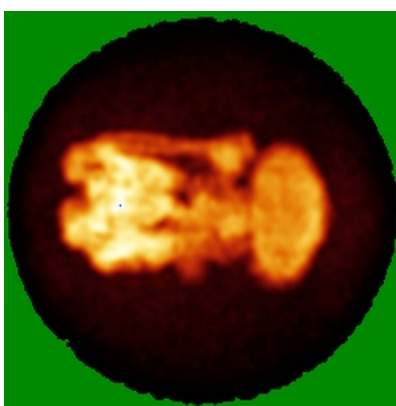
The images above show the largest variance slices of the map in three orthogonal directions.

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

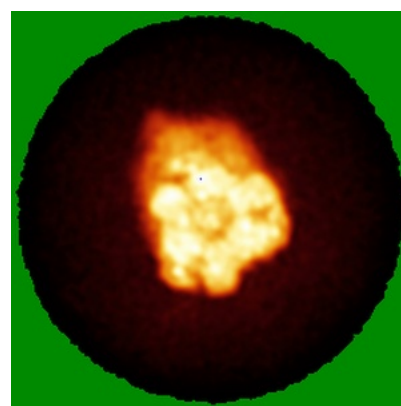
6.4.1 Primary map



X



Y

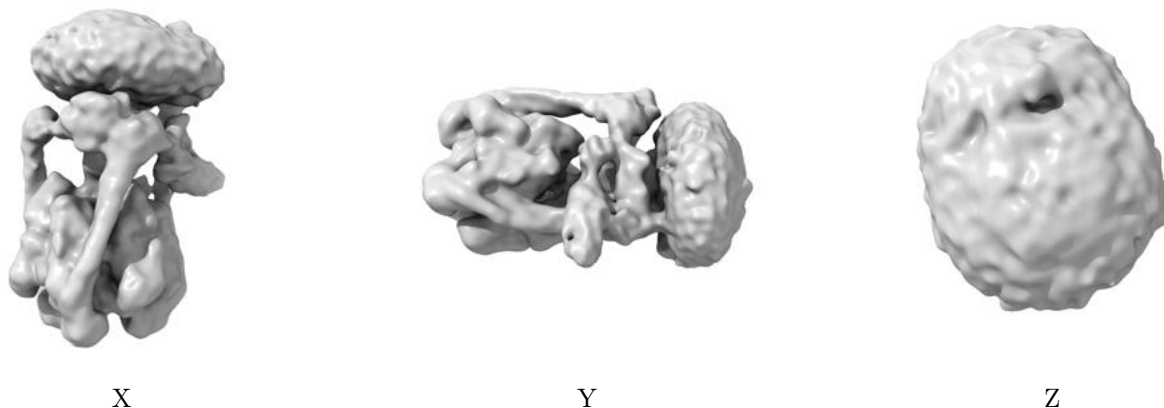


Z

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.

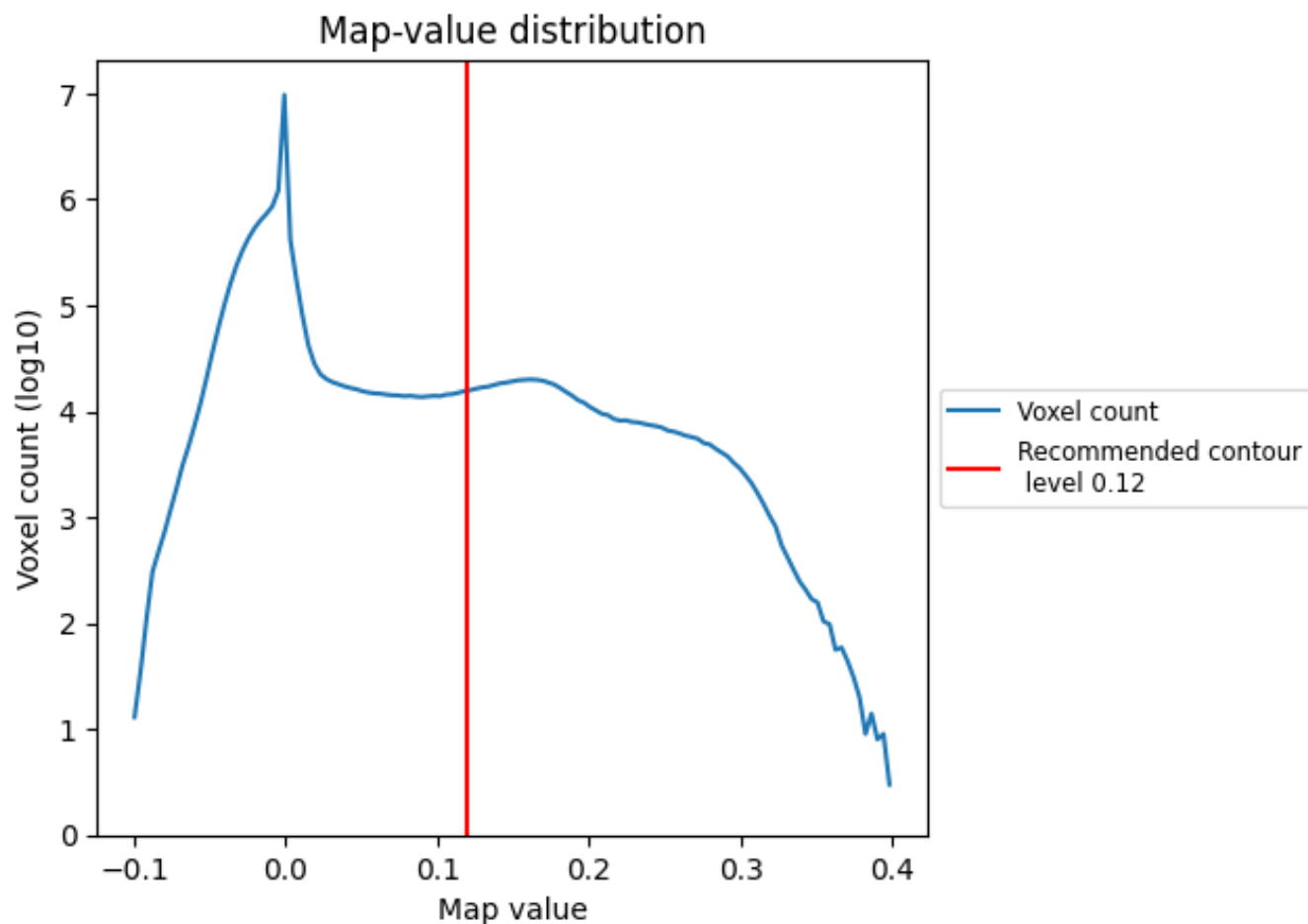
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

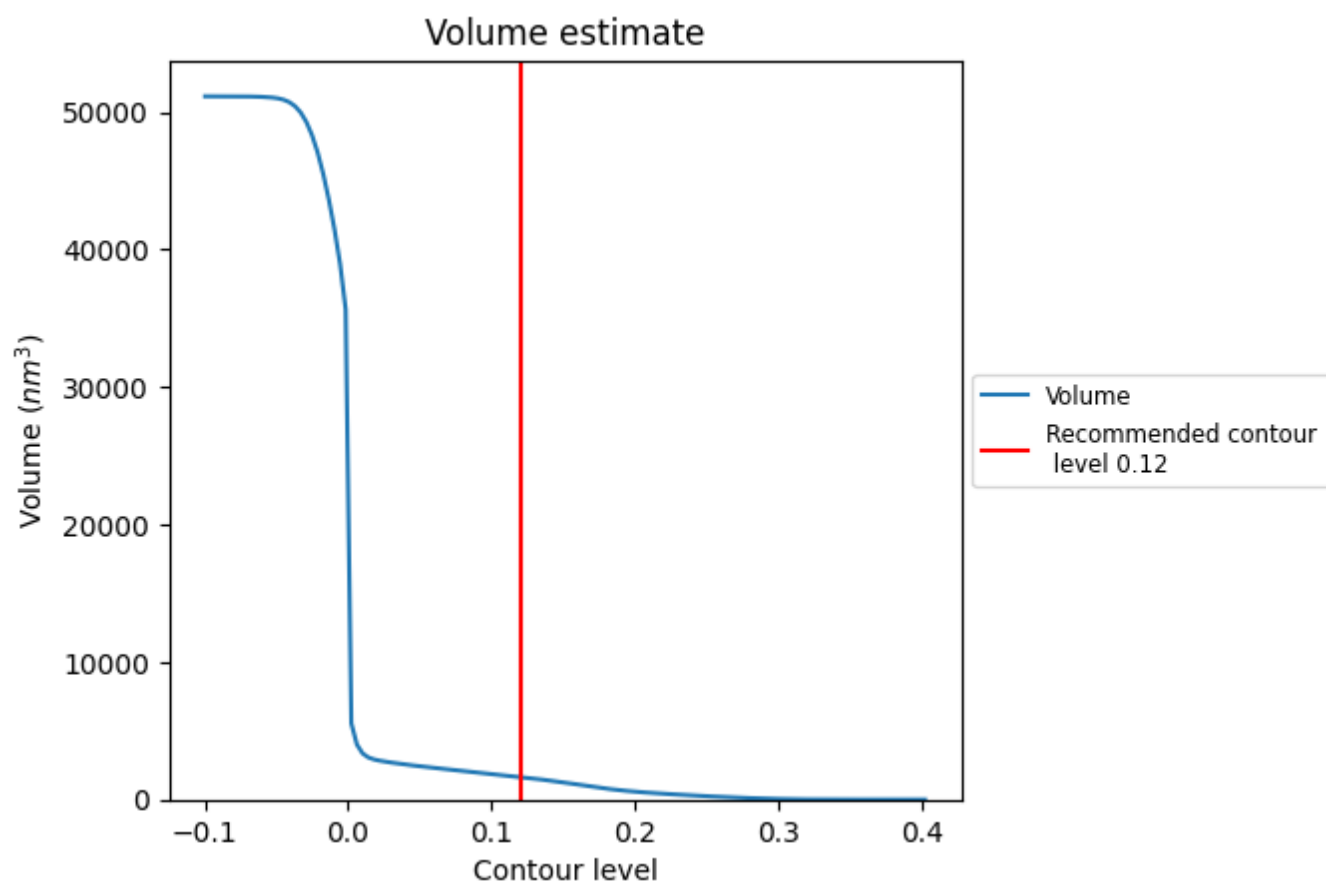
This section contains the results of statistical analysis of the map.

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.

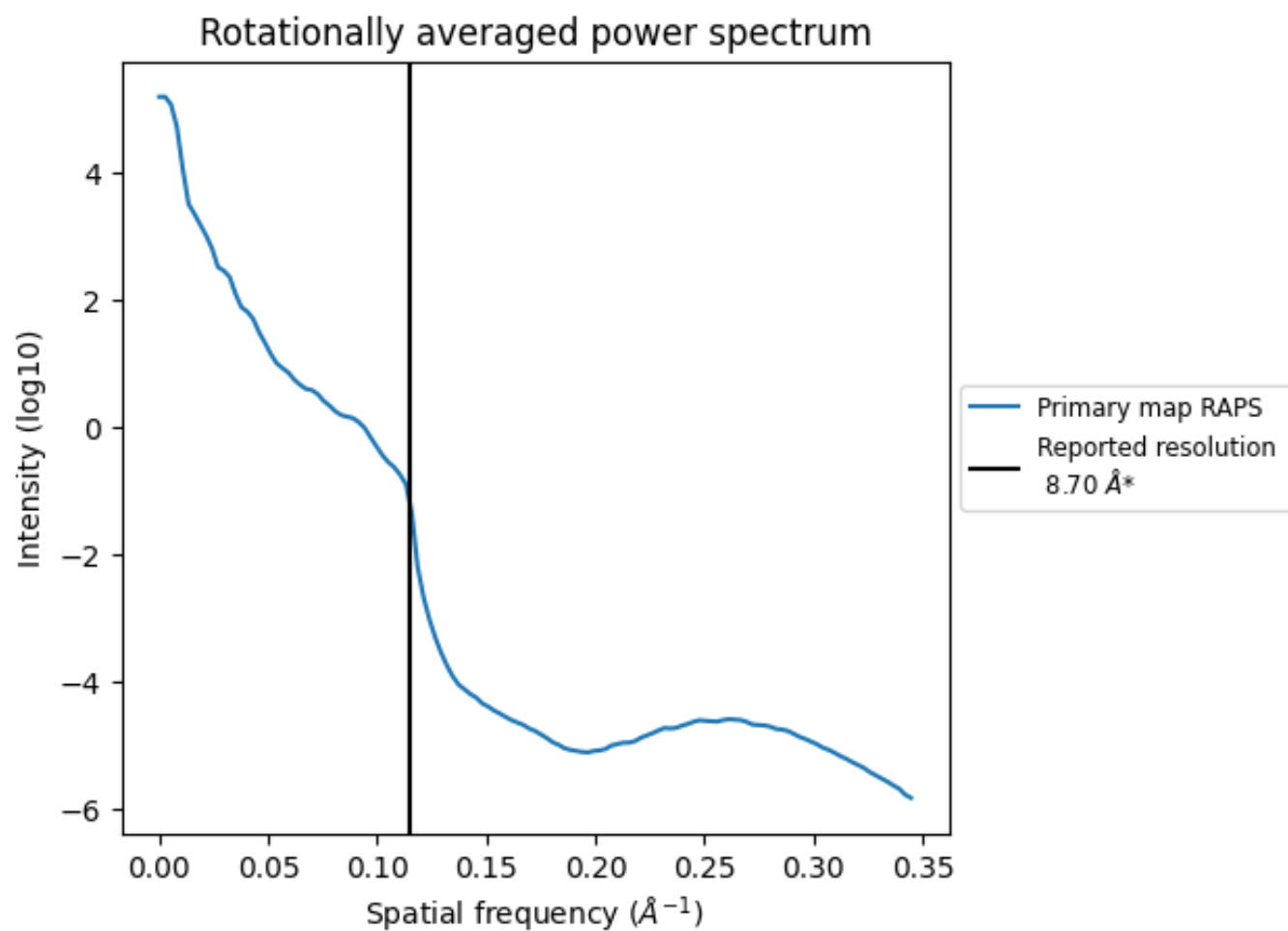
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1646 nm³; this corresponds to an approximate mass of 1487 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 0.115 Å⁻¹

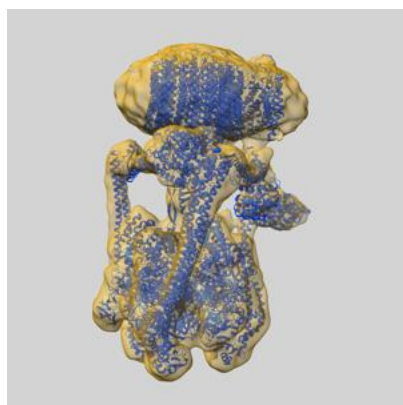
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

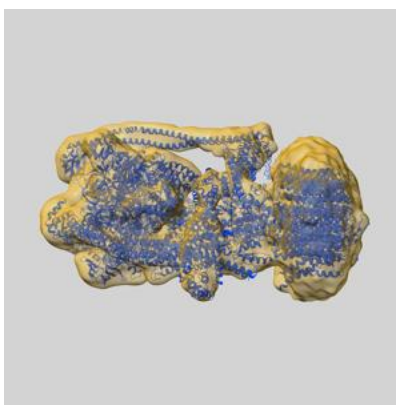
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-0648 and PDB model 6O7X. Per-residue inclusion information can be found in section 3 on page 10.

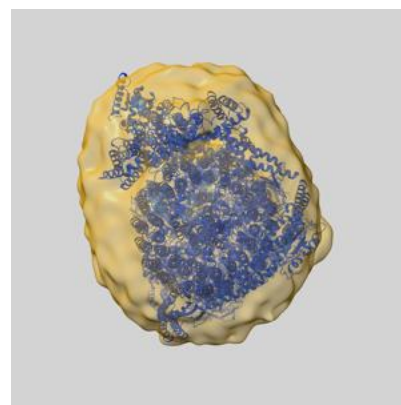
9.1 Map-model overlay [i](#)



X



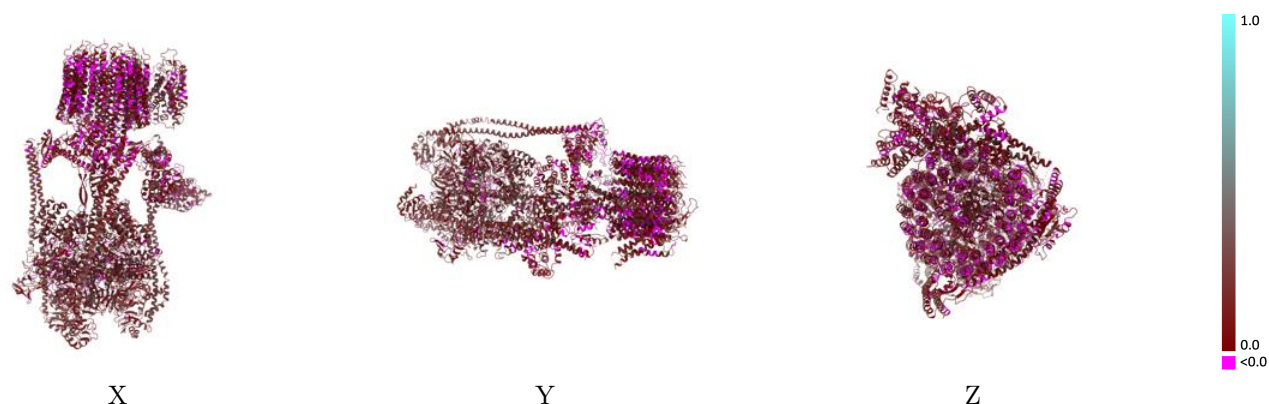
Y



Z

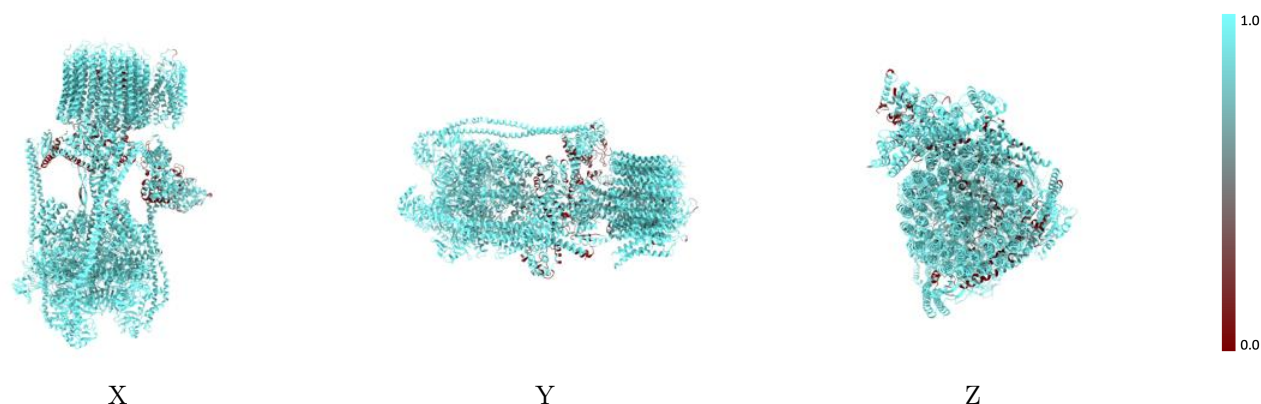
The images above show the 3D surface view of the map at the recommended contour level 0.12 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



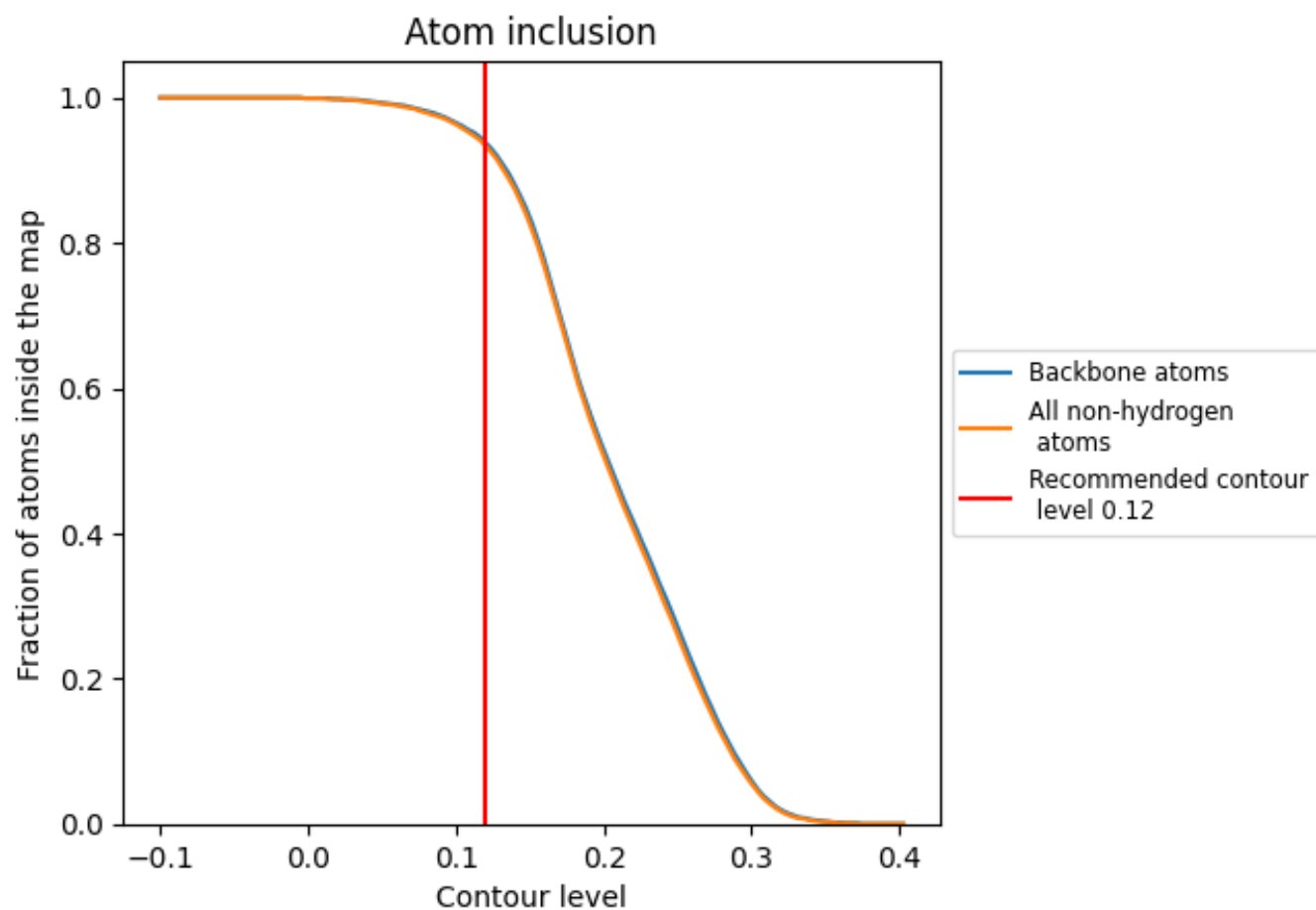
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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, 94% of all backbone atoms, 93% 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	 0.9340	 0.1210
A	 0.9910	 0.1540
B	 0.9930	 0.1560
C	 0.9860	 0.1510
D	 0.9900	 0.1510
E	 0.9700	 0.1300
F	 0.9890	 0.1400
G	 0.9870	 0.1810
H	 1.0000	 0.2020
I	 0.9850	 0.1850
J	 1.0000	 0.1680
K	 0.9720	 0.1840
L	 0.9360	 0.1850
M	 0.9790	 0.1610
N	 0.9160	 0.1320
O	 0.6490	 0.0650
P	 0.7090	 0.1100
a	 0.8890	 0.1030
b	 0.6380	 0.0370
c	 0.9570	 0.0610
d	 0.8120	 0.0890
e	 0.9910	 0.1100
f	 0.9970	 0.1270
g	 0.9660	 0.0720
h	 0.9840	 0.0670
i	 0.9960	 0.0510
j	 0.9890	 0.0480
k	 0.9790	 0.0480
l	 0.9860	 0.0760
m	 0.9880	 0.0670
n	 0.9970	 0.0730
o	 0.9700	 0.0490

