



Full wwPDB EM Validation Report ⓘ

Mar 26, 2026 – 05:23 PM UTC

PDB ID : 6O7V / pdb_00006o7v
EMDB ID : EMD-0646
Title : Saccharomyces cerevisiae V-ATPase Stv1-V1VO State 1
Authors : Vasanthakumar, T.; Bueler, S.A.; Wu, D.; Beilsten-Edmands, V.; Robinson, C.V.; Rubinstein, J.L.
Deposited on : 2019-03-08
Resolution : 6.60 Å(reported)

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

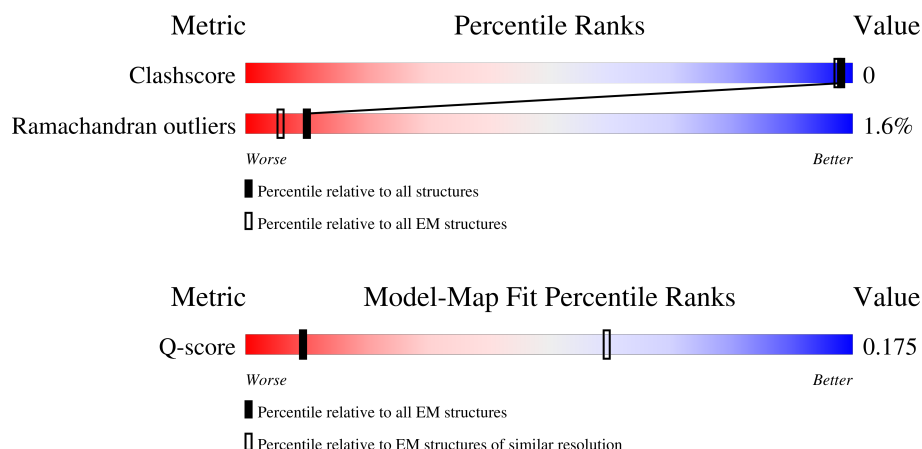
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 6.60 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.





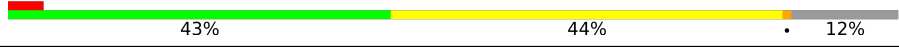




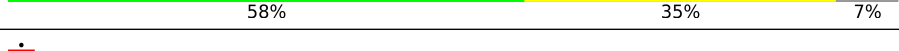
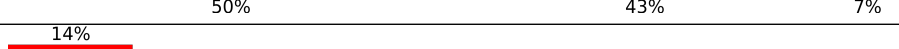
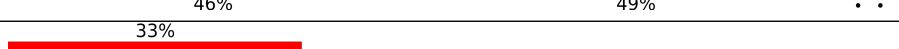
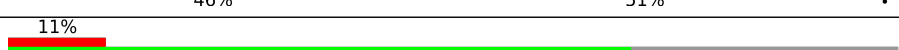

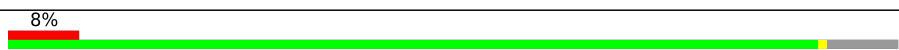
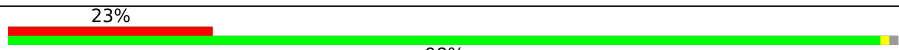
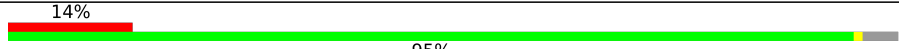

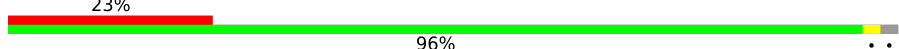
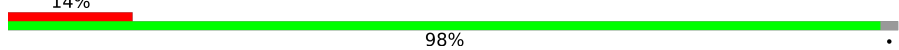
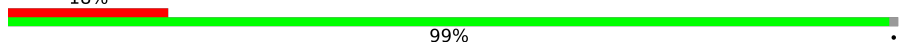
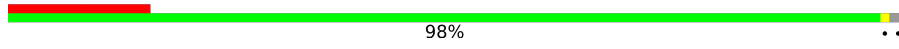
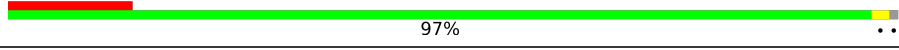
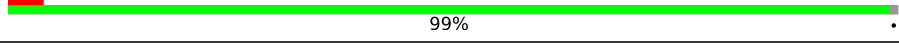
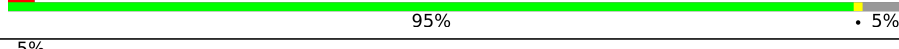


Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	531 (6.10 - 7.10)

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	M	256	
2	N	118	
3	A	639	
3	C	639	
3	E	639	


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Mol	Chain	Length	Quality of chain
4	B	517	
4	D	517	
4	F	517	
5	H	114	
5	J	114	
5	L	114	
6	G	233	
6	I	233	
6	K	233	
7	P	478	
8	O	392	
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	 A horizontal bar chart showing the quality of chain 16f. The bar is divided into two segments: a green segment representing 71% and a grey segment representing 28%. A small yellow dot is located at the end of the green segment, indicating a specific quality threshold or data point. <div>71%•28%</div>

2 Entry composition

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 D.

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

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

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

- Molecule 3 is a protein called Vacuolar ATP synthase catalytic subunit A.

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

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Chain	Residue	Modelled	Actual	Comment	Reference
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
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
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
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

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Chain	Residue	Modelled	Actual	Comment	Reference
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

- Molecule 4 is a protein called V-type proton ATPase subunit B.

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

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

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

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

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

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Mol	Chain	Residues	Atoms				AltConf	Trace
6	I	217	Total	C	N	O	0	0
			1078	644	217	217		

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

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

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

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

- 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		
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		

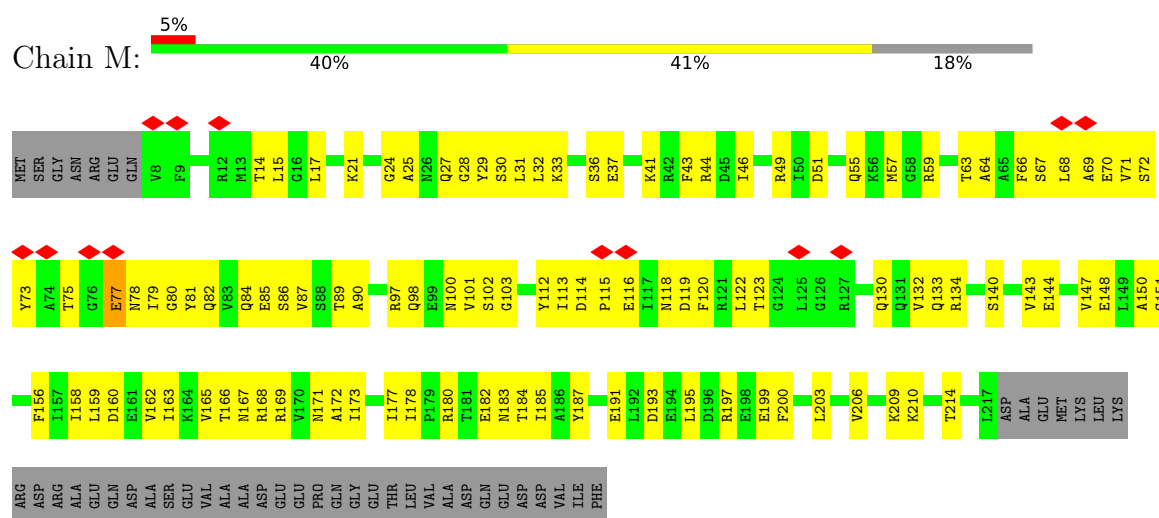
- Molecule 16 is a protein called Putative protein YPR170W-B.

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

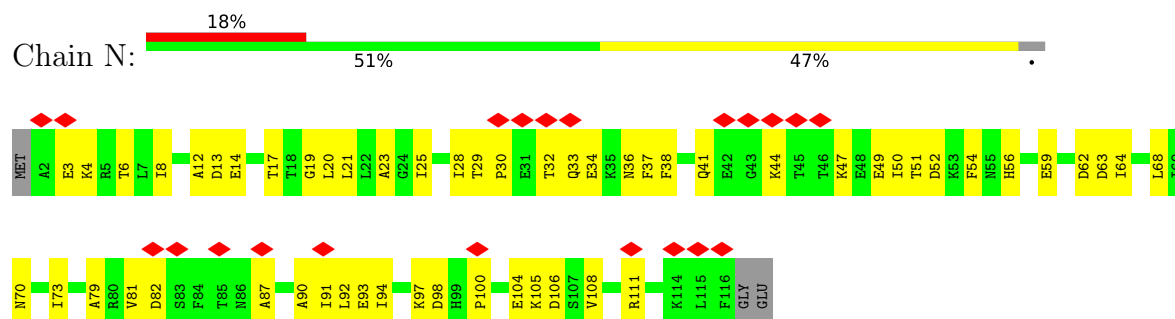
3 Residue-property plots

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.

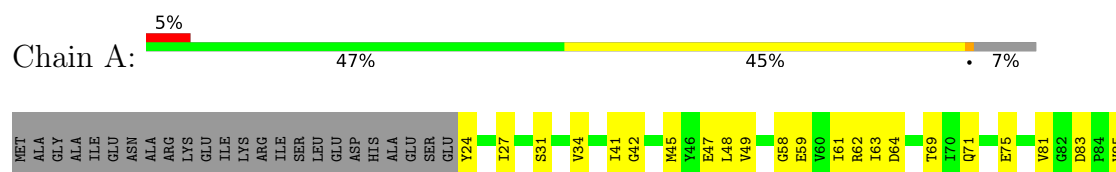
• Molecule 1: V-type proton ATPase subunit D

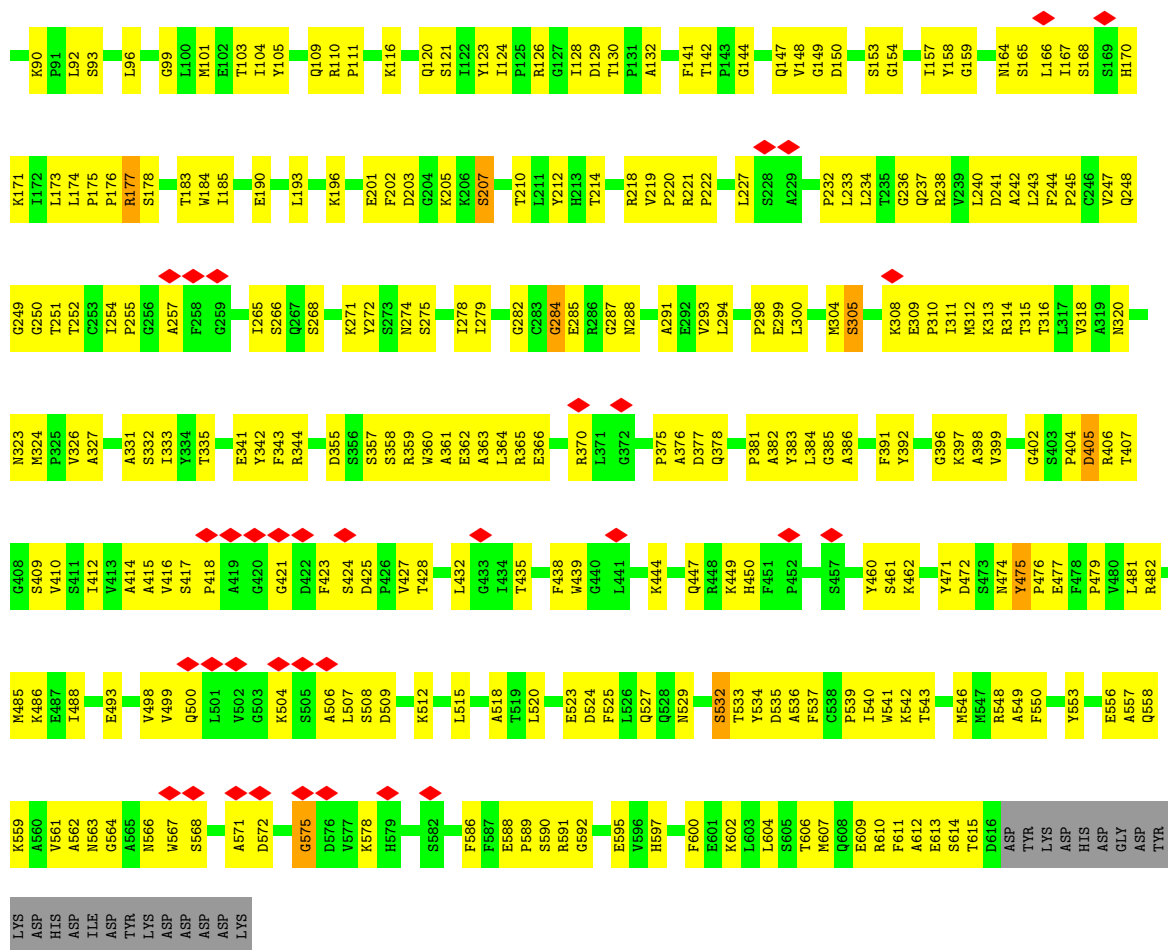


• Molecule 2: V-type proton ATPase subunit F



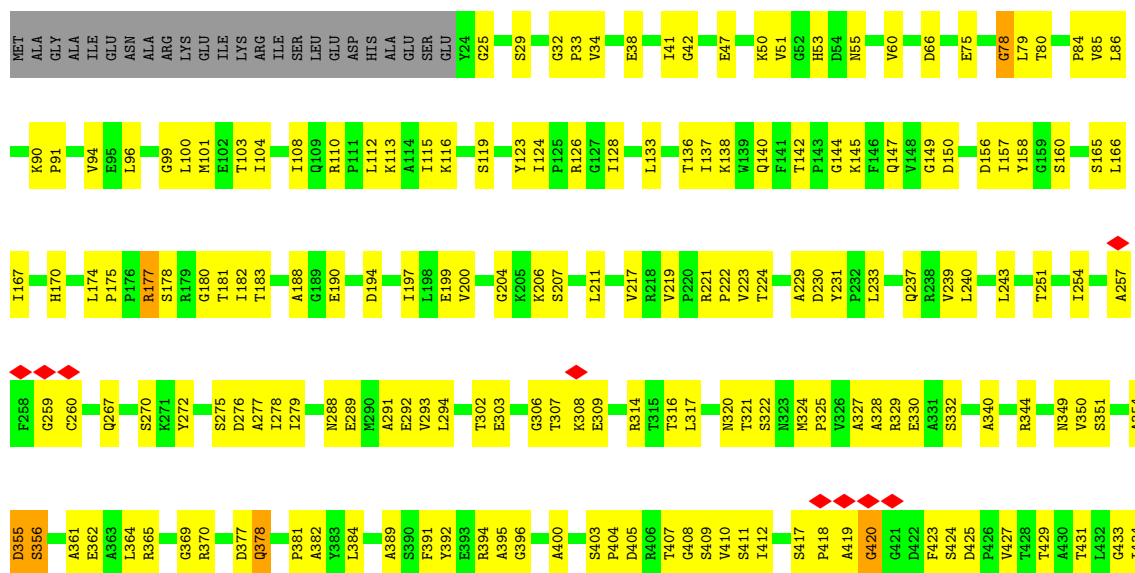
• Molecule 3: Vacuolar ATP synthase catalytic subunit A

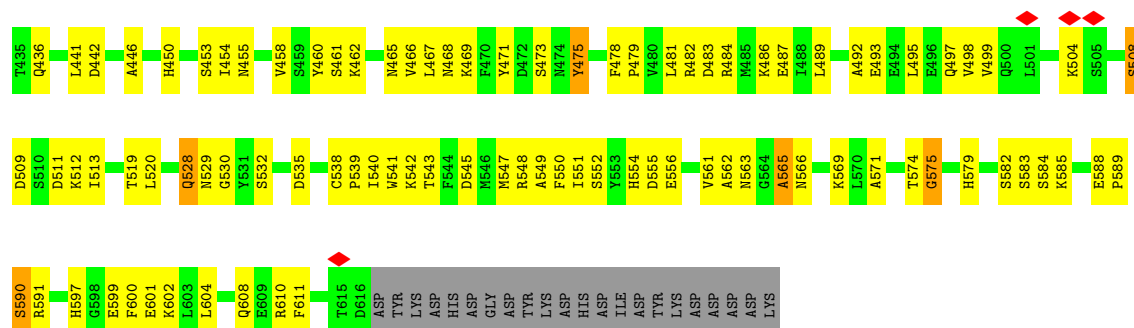




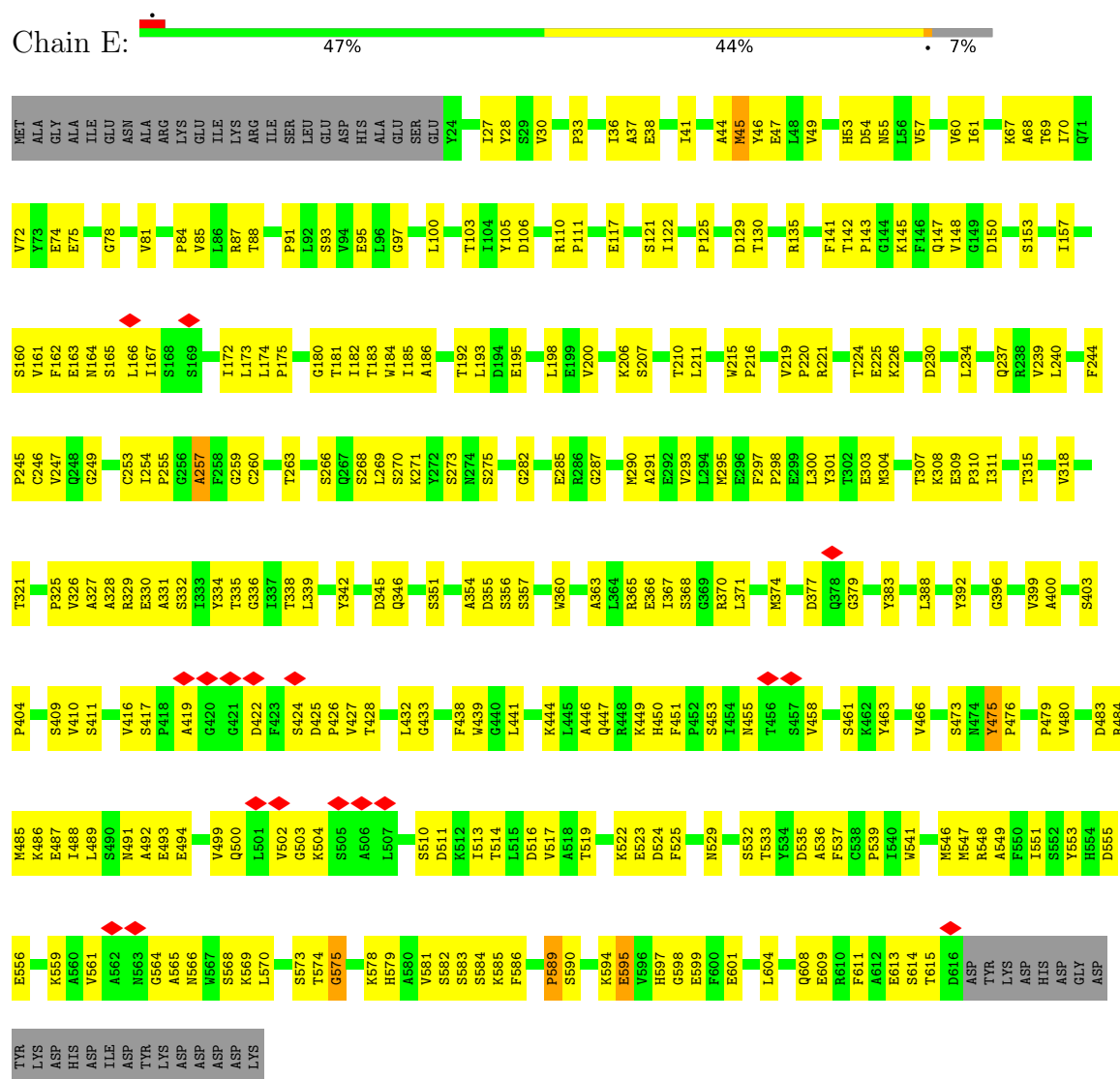
• Molecule 3: Vacuolar ATP synthase catalytic subunit A

Chain C: 51% 40% 7%



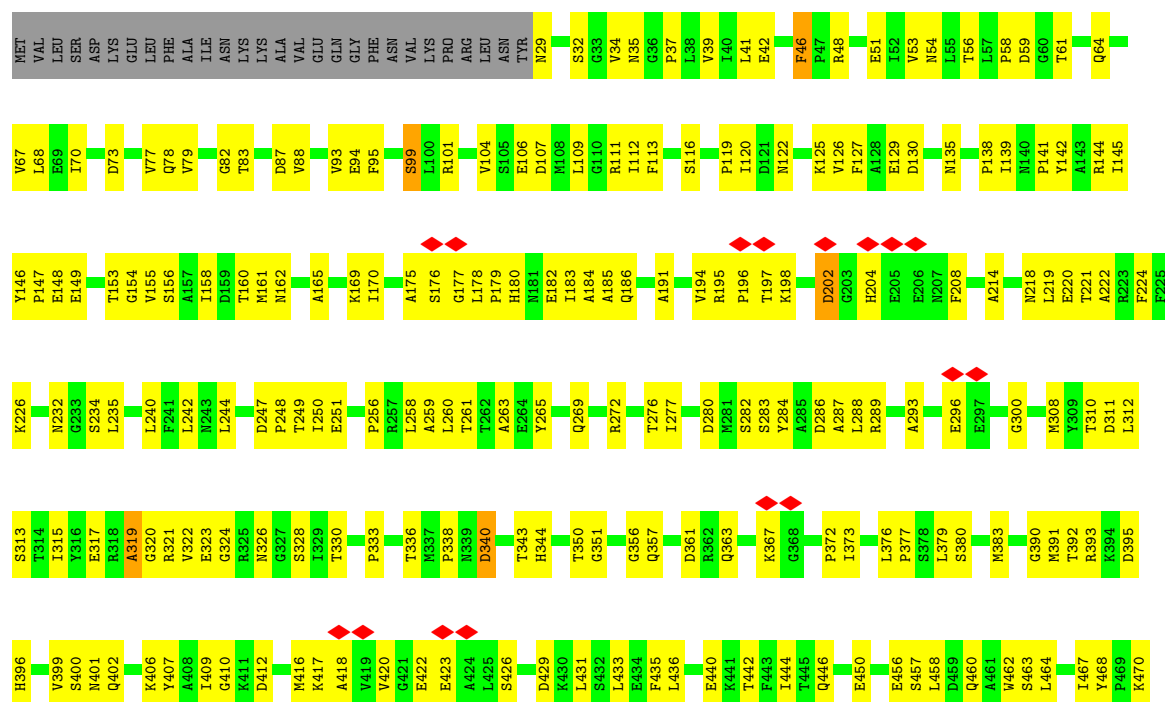


• Molecule 3: Vacuolar ATP synthase catalytic subunit A



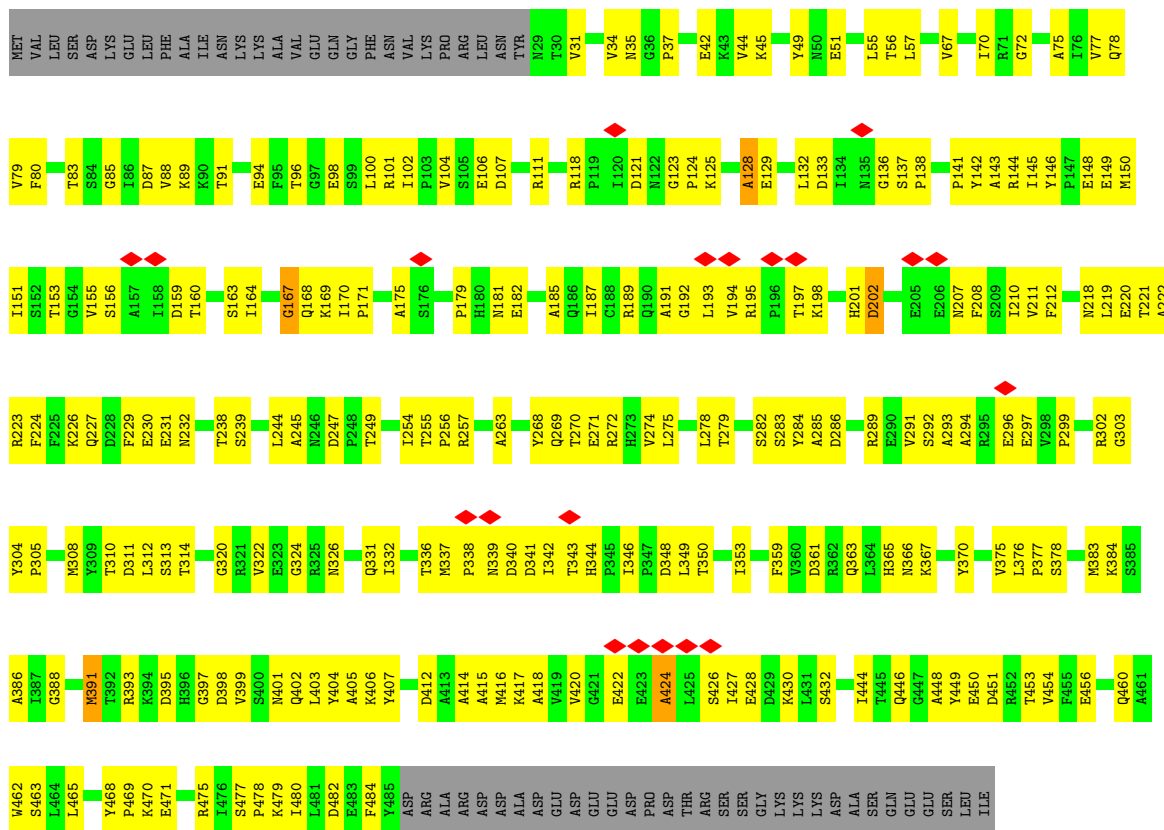
• Molecule 4: V-type proton ATPase subunit B





- Molecule 4: V-type proton ATPase subunit B

Chain F: 43% 44% 12%



- Molecule 5: V-type proton ATPase subunit G

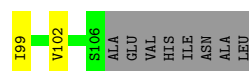
Chain L: 51% 41% 8%



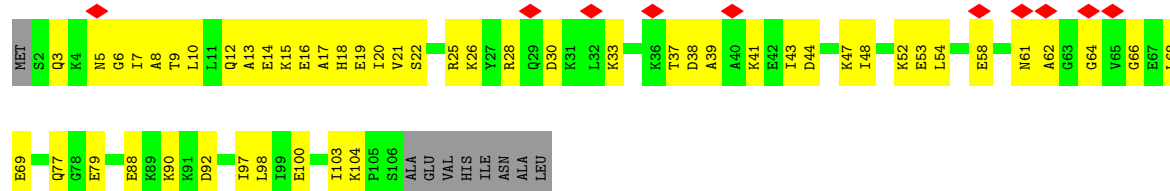
- Molecule 5: V-type proton ATPase subunit G

Chain H:

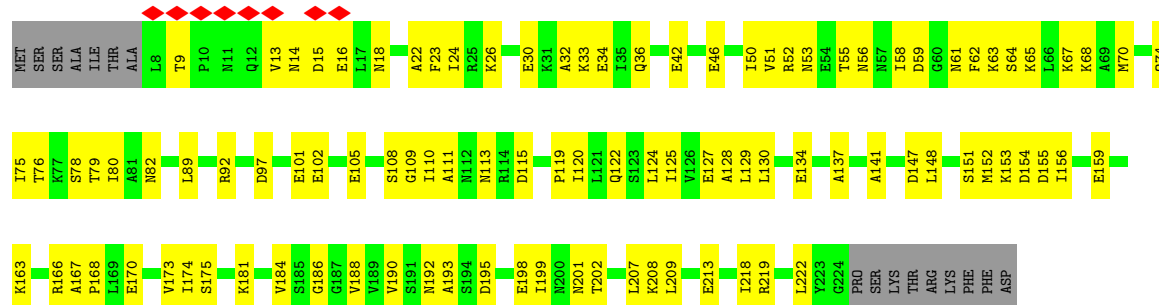




• Molecule 5: V-type proton ATPase subunit G



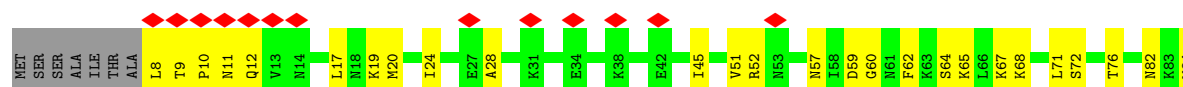
• Molecule 6: V-type proton ATPase subunit E

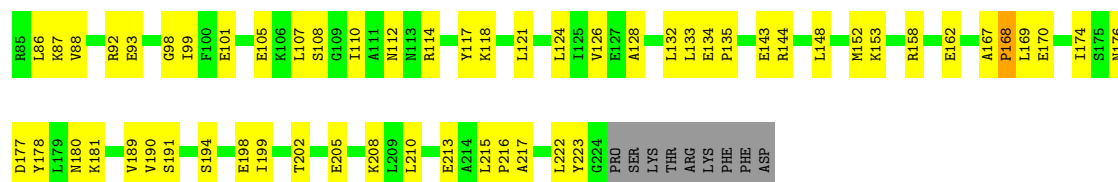


• Molecule 6: V-type proton ATPase subunit E

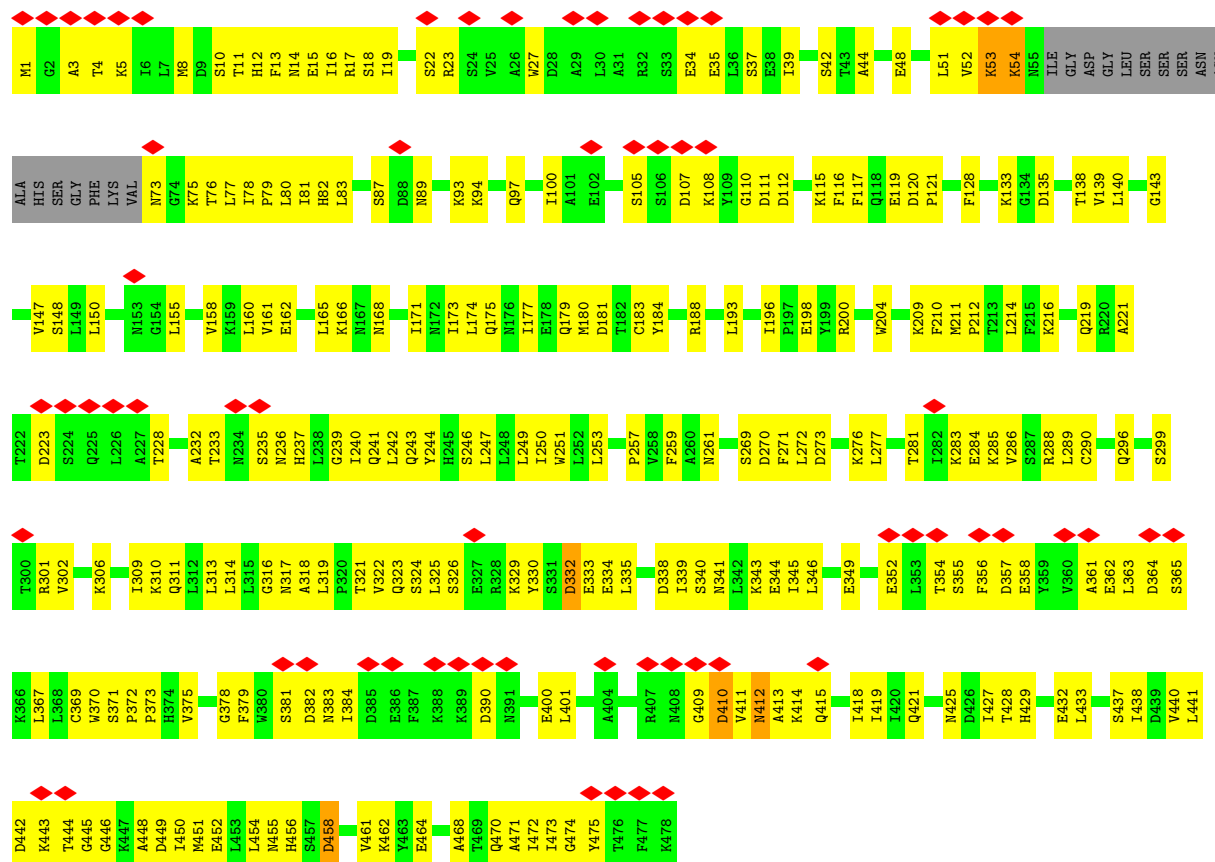


• Molecule 6: V-type proton ATPase subunit E

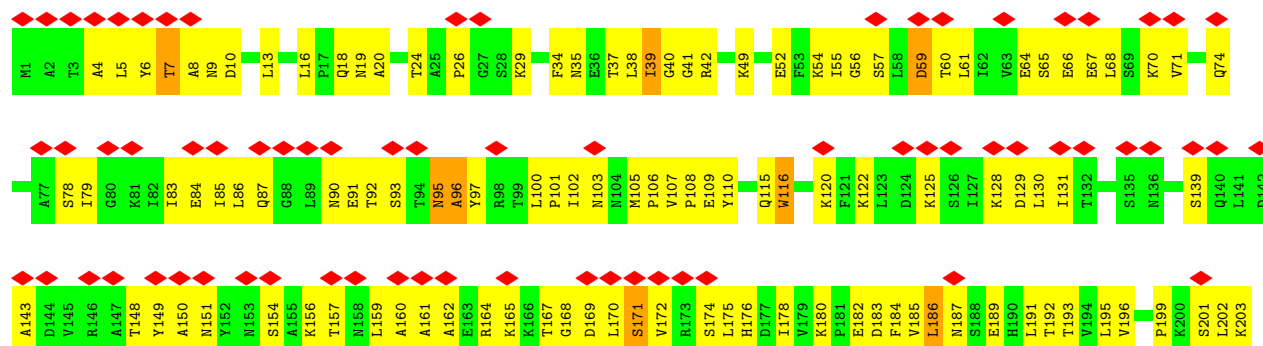


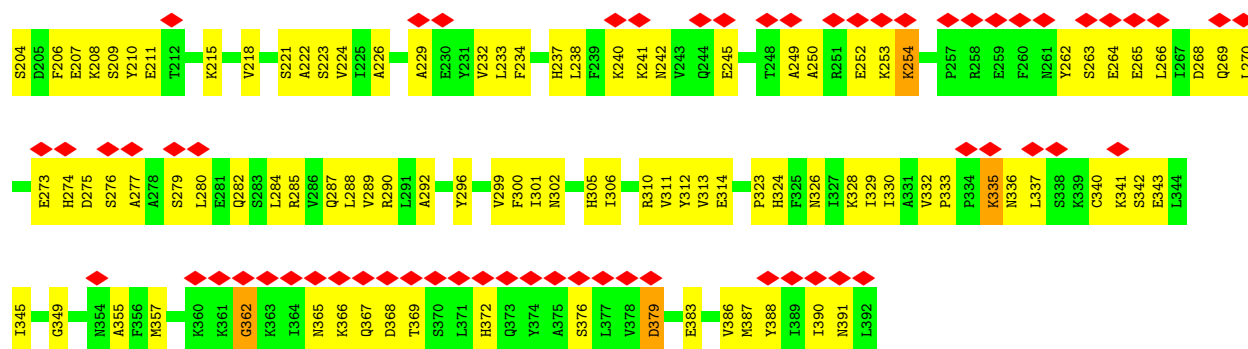


• Molecule 7: V-type proton ATPase subunit H

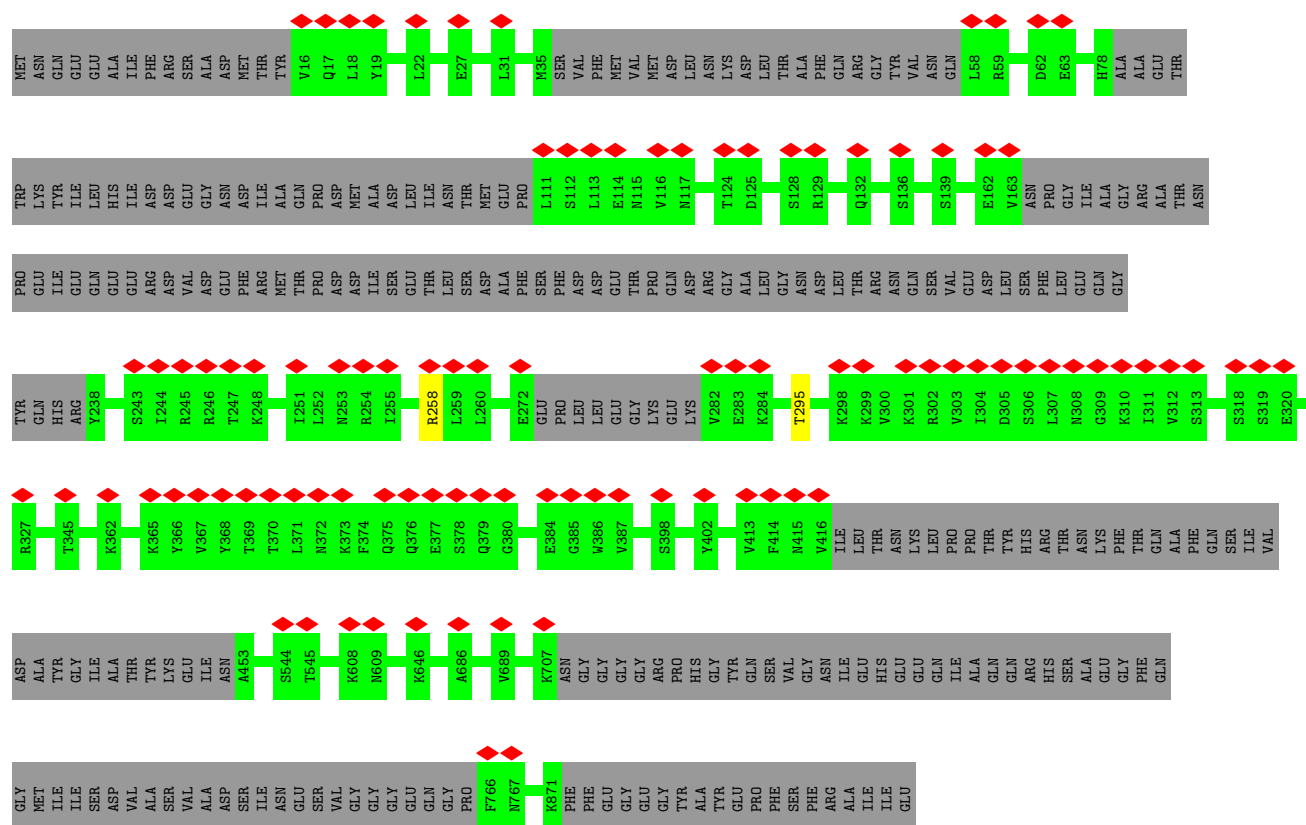


• Molecule 8: V-type proton ATPase subunit C

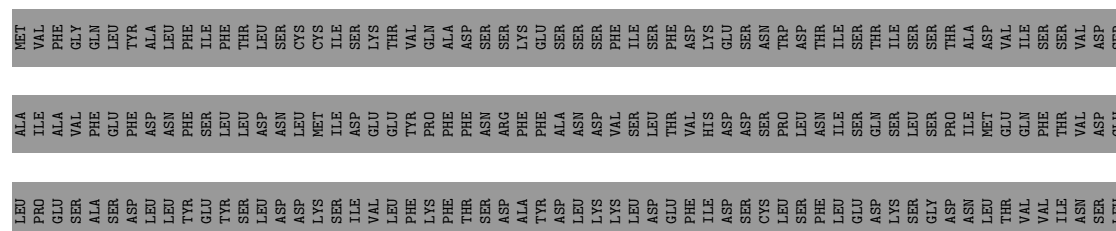


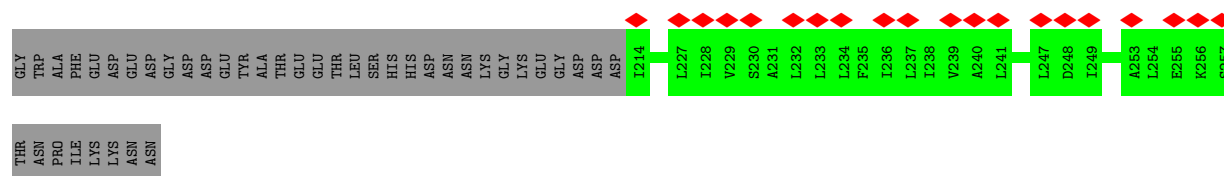


• Molecule 9: V-type proton ATPase subunit a, Golgi isoform

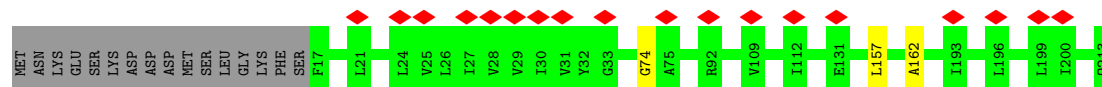


• Molecule 10: V0 assembly protein 1

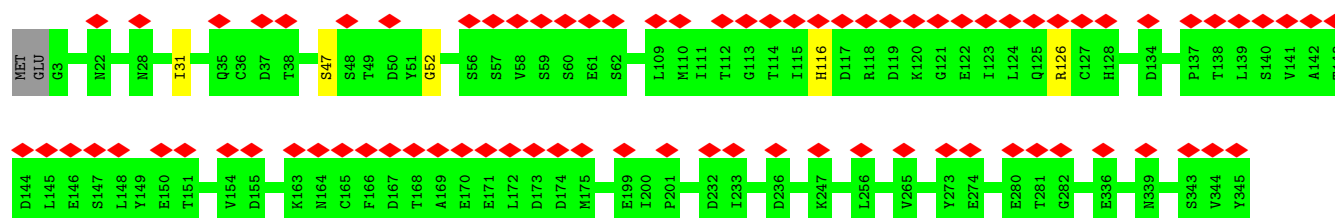




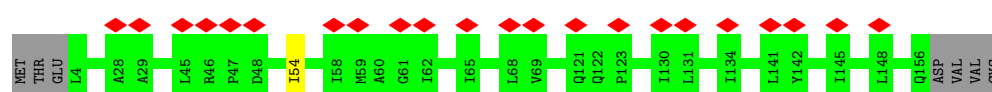
- Molecule 11: V-type proton ATPase subunit c'



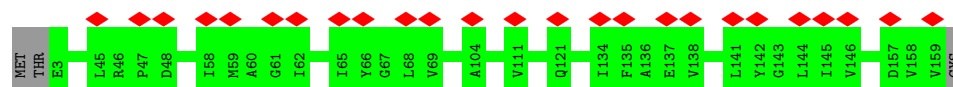
- Molecule 12: V-type proton ATPase subunit d



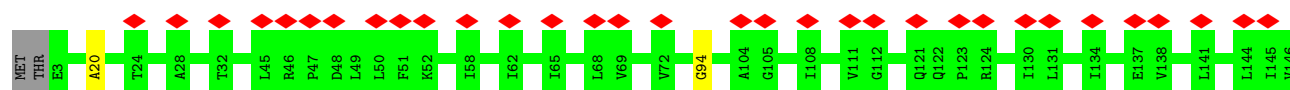
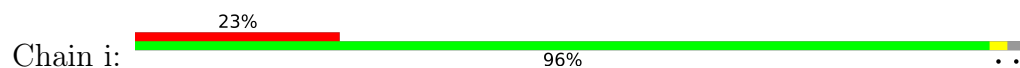
- Molecule 13: V-type proton ATPase subunit c

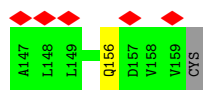


- Molecule 13: V-type proton ATPase subunit c

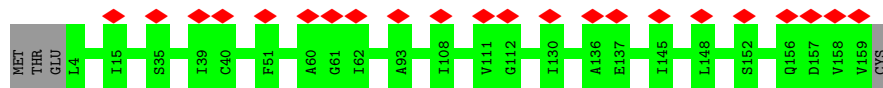


- Molecule 13: V-type proton ATPase subunit c

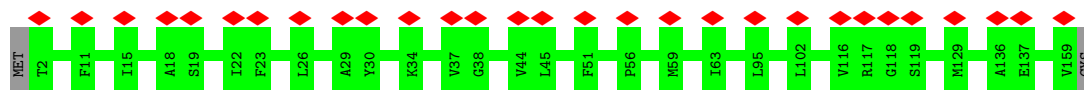




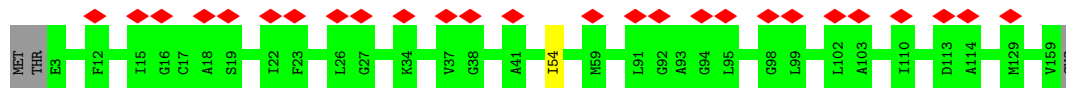
- Molecule 13: V-type proton ATPase subunit c



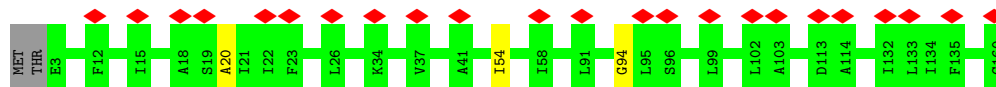
- Molecule 13: V-type proton ATPase subunit c



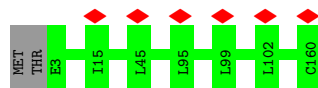
- Molecule 13: V-type proton ATPase subunit c



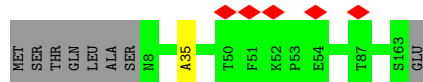
- Molecule 13: V-type proton ATPase subunit c



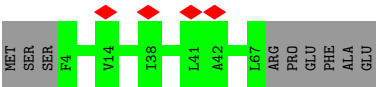
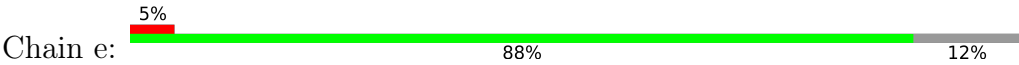
- Molecule 13: V-type proton ATPase subunit c



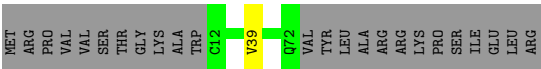
- Molecule 14: V-type proton ATPase subunit c'



- 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	25045	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	0.522	Depositor
Minimum map value	-0.126	Depositor
Average map value	0.004	Depositor
Map value standard deviation	0.044	Depositor
Recommended contour level	0.18	Depositor
Map size (Å)	371.2, 371.2, 371.2	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	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	M	2.56	45/1038 (4.3%)	2.86	128/1445 (8.9%)
2	N	2.49	27/570 (4.7%)	2.69	59/794 (7.4%)
3	A	2.56	153/2914 (5.3%)	2.77	287/4048 (7.1%)
3	C	2.55	144/2914 (4.9%)	2.64	259/4048 (6.4%)
3	E	2.60	162/2914 (5.6%)	2.78	296/4048 (7.3%)
4	B	2.58	131/2249 (5.8%)	2.75	229/3126 (7.3%)
4	D	2.51	108/2249 (4.8%)	2.76	214/3126 (6.8%)
4	F	2.55	125/2249 (5.6%)	2.73	202/3126 (6.5%)
5	H	2.43	16/518 (3.1%)	2.66	35/720 (4.9%)
5	J	2.51	28/518 (5.4%)	2.75	58/720 (8.1%)
5	L	2.46	27/518 (5.2%)	2.70	49/720 (6.8%)
6	G	2.61	59/1077 (5.5%)	2.74	96/1502 (6.4%)
6	I	2.50	51/1077 (4.7%)	2.67	97/1502 (6.5%)
6	K	2.51	52/1077 (4.8%)	2.77	118/1502 (7.9%)
7	P	2.58	123/2290 (5.4%)	2.94	285/3195 (8.9%)
8	O	2.60	118/1946 (6.1%)	2.78	211/2715 (7.8%)
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	2.08	1369/39540 (3.5%)	2.27	2632/54928 (4.8%)

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
3	A	0	1
4	F	0	1
All	All	0	2

All (1369) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	78	ILE	CA-CB	-15.11	1.46	1.54
3	E	175	PRO	CA-C	12.91	1.58	1.51
6	G	182	ASP	CA-C	-12.62	1.38	1.52
3	A	124	ILE	N-CA	-10.70	1.38	1.46
6	I	114	ARG	N-CA	-10.60	1.33	1.46
8	O	391	ASN	CA-C	-10.43	1.40	1.52
4	B	94	GLU	CA-C	-10.42	1.39	1.52
8	O	238	LEU	N-CA	-10.19	1.34	1.46
3	C	461	SER	CA-C	-10.14	1.40	1.52
4	B	215	MET	C-N	10.03	1.43	1.33
3	A	254	ILE	CA-C	9.90	1.61	1.52
4	D	322	VAL	CA-C	-9.79	1.44	1.52
8	O	372	HIS	CA-C	-9.65	1.40	1.53
3	E	67	LYS	CA-C	-9.59	1.40	1.52
4	B	484	PHE	CA-C	-9.56	1.41	1.52
3	A	254	ILE	N-CA	9.54	1.53	1.45
3	E	145	LYS	N-CA	-9.51	1.34	1.46
6	G	143	GLU	N-CA	-9.41	1.35	1.46
3	A	164	ASN	CA-C	-9.36	1.41	1.52
4	B	333	PRO	CA-C	9.33	1.64	1.52
7	P	455	ASN	CA-CB	9.18	1.68	1.53
8	O	59	ASP	CA-C	-9.03	1.41	1.52
1	M	178	ILE	C-O	-9.02	1.16	1.24
1	M	32	LEU	CA-C	-9.00	1.40	1.52
4	F	212	PHE	CA-C	-8.99	1.41	1.52
4	F	283	SER	CA-C	-8.98	1.40	1.52
6	K	184	VAL	CA-C	-8.96	1.41	1.52
5	J	37	THR	CA-C	-8.91	1.41	1.52
3	E	41	ILE	N-CA	-8.85	1.36	1.46
3	A	610	ARG	N-CA	-8.83	1.35	1.46
4	B	30	THR	CA-C	-8.82	1.42	1.52
3	E	537	PHE	CA-C	-8.79	1.42	1.52
3	C	167	ILE	N-CA	-8.78	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	125	ILE	CA-C	-8.72	1.42	1.52
3	C	588	GLU	CA-C	8.69	1.61	1.52
4	B	433	LEU	N-CA	-8.67	1.35	1.46
1	M	184	THR	C-N	8.67	1.44	1.34
4	F	232	ASN	C-N	8.65	1.43	1.33
3	E	49	VAL	CA-C	-8.57	1.42	1.52
5	J	12	GLN	N-CA	8.56	1.56	1.46
4	B	318	ARG	CA-C	-8.51	1.42	1.53
3	E	301	TYR	CA-C	-8.51	1.42	1.52
8	O	9	ASN	CA-C	-8.47	1.42	1.52
4	F	56	THR	CA-C	-8.46	1.42	1.52
4	D	53	VAL	CA-C	-8.44	1.42	1.52
4	D	113	PHE	CA-C	-8.39	1.42	1.52
4	F	322	VAL	CA-C	-8.38	1.42	1.52
3	E	268	SER	CA-CB	8.37	1.66	1.53
4	B	307	TYR	CA-CB	8.37	1.64	1.53
6	G	160	TYR	C-N	8.35	1.44	1.33
3	E	160	SER	CA-C	-8.29	1.42	1.52
4	F	465	LEU	N-CA	-8.26	1.35	1.46
4	D	319	ALA	C-N	8.25	1.39	1.33
3	A	427	VAL	C-N	8.23	1.45	1.33
3	E	81	VAL	CA-C	-8.21	1.43	1.52
3	E	211	LEU	CA-C	-8.21	1.42	1.52
4	D	61	THR	N-CA	-8.13	1.35	1.46
7	P	355	SER	N-CA	-8.12	1.36	1.46
3	E	46	TYR	CA-CB	8.11	1.65	1.53
3	A	247	VAL	N-CA	-8.10	1.36	1.46
4	B	393	ARG	CA-C	-8.07	1.42	1.52
3	A	171	LYS	CA-C	-8.03	1.42	1.52
3	C	499	VAL	CA-CB	-8.02	1.45	1.54
3	C	434	ILE	C-N	7.98	1.43	1.33
4	F	223	ARG	CA-C	-7.98	1.42	1.52
7	P	440	VAL	N-CA	-7.97	1.37	1.46
4	B	349	LEU	CA-C	-7.96	1.42	1.52
3	A	27	ILE	N-CA	-7.91	1.37	1.46
7	P	343	LYS	N-CA	7.91	1.55	1.46
7	P	155	LEU	CA-C	-7.91	1.43	1.52
3	C	495	LEU	C-N	7.90	1.44	1.33
3	A	45	MET	CA-C	-7.90	1.42	1.53
6	G	163	LYS	CA-CB	7.89	1.66	1.54
4	B	104	VAL	C-N	7.88	1.43	1.33
6	I	92	ARG	CA-C	7.87	1.63	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	167	ILE	C-N	7.85	1.45	1.33
8	O	169	ASP	CA-C	-7.84	1.43	1.52
4	B	426	SER	CA-C	-7.82	1.42	1.53
4	F	484	PHE	CA-C	-7.79	1.43	1.52
3	E	304	MET	N-CA	-7.79	1.40	1.47
3	A	272	TYR	N-CA	-7.79	1.36	1.46
3	A	592	GLY	CA-C	-7.79	1.41	1.51
7	P	379	PHE	N-CA	7.79	1.55	1.46
6	K	198	GLU	CA-C	-7.78	1.43	1.52
8	O	66	GLU	CA-C	-7.77	1.43	1.52
4	F	227	GLN	CA-CB	7.76	1.65	1.53
5	J	100	GLU	CA-C	-7.76	1.42	1.52
8	O	184	PHE	CA-C	-7.75	1.44	1.52
4	B	369	ILE	CA-CB	7.74	1.62	1.54
4	D	367	LYS	CA-C	-7.74	1.42	1.52
4	F	128	ALA	CA-C	-7.71	1.42	1.52
8	O	208	LYS	N-CA	-7.70	1.37	1.46
3	E	215	TRP	CA-C	-7.70	1.43	1.52
5	J	12	GLN	CA-C	-7.69	1.42	1.52
4	D	311	ASP	CA-C	-7.69	1.42	1.52
3	E	475	TYR	CA-CB	7.68	1.65	1.53
4	B	405	ALA	N-CA	-7.68	1.37	1.46
2	N	105	LYS	C-N	7.64	1.44	1.33
1	M	162	VAL	CA-C	-7.62	1.43	1.52
4	D	41	LEU	CA-CB	7.61	1.65	1.53
6	G	95	SER	C-N	7.60	1.43	1.33
3	A	418	PRO	CA-C	-7.59	1.43	1.52
3	C	157	ILE	C-O	-7.59	1.15	1.24
3	A	416	VAL	CA-C	-7.58	1.43	1.52
3	C	599	GLU	CA-CB	7.58	1.65	1.53
4	B	32	SER	CA-C	-7.58	1.43	1.52
8	O	266	LEU	C-N	7.56	1.43	1.33
3	C	29	SER	N-CA	-7.54	1.36	1.46
3	A	64	ASP	CA-C	-7.53	1.43	1.52
7	P	329	LYS	N-CA	-7.53	1.36	1.45
3	A	602	LYS	CA-C	-7.51	1.42	1.52
4	B	480	ILE	CA-C	-7.49	1.43	1.52
7	P	83	LEU	CA-C	-7.49	1.43	1.52
4	F	475	ARG	CA-C	-7.48	1.42	1.52
3	C	175	PRO	CA-C	7.46	1.59	1.52
2	N	82	ASP	N-CA	-7.46	1.37	1.46
6	G	136	LYS	C-N	7.44	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	515	LEU	CA-C	-7.44	1.43	1.52
6	K	122	GLN	CA-CB	7.44	1.64	1.53
4	B	202	ASP	CA-C	-7.44	1.42	1.52
7	P	183	CYS	CA-CB	7.43	1.64	1.53
3	C	206	LYS	CA-C	-7.43	1.43	1.52
3	A	251	THR	CA-C	7.42	1.61	1.52
3	E	173	LEU	CA-C	-7.42	1.44	1.52
7	P	319	LEU	CA-C	-7.42	1.43	1.52
6	G	215	LEU	N-CA	-7.41	1.39	1.46
4	D	77	VAL	CA-C	-7.41	1.43	1.52
3	A	123	TYR	C-N	7.41	1.40	1.33
3	C	497	GLN	C-N	7.40	1.43	1.33
4	D	73	ASP	C-N	7.40	1.42	1.33
4	D	422	GLU	CA-CB	7.39	1.63	1.53
3	C	350	VAL	CA-C	-7.39	1.44	1.52
1	M	25	ALA	N-CA	-7.38	1.37	1.46
4	F	211	VAL	CA-CB	-7.38	1.44	1.54
1	M	28	GLY	C-N	7.37	1.43	1.33
3	A	414	ALA	N-CA	-7.36	1.37	1.46
6	K	109	GLY	CA-C	-7.35	1.43	1.52
7	P	309	ILE	N-CA	-7.34	1.37	1.46
8	O	196	VAL	CA-C	-7.34	1.43	1.52
3	A	241	ASP	CA-C	7.33	1.62	1.52
4	F	31	VAL	CA-C	-7.33	1.44	1.52
4	F	393	ARG	CA-C	-7.33	1.43	1.53
3	E	529	ASN	C-N	7.33	1.44	1.33
8	O	249	ALA	CA-C	-7.32	1.43	1.52
4	F	363	GLN	CA-C	-7.32	1.43	1.52
4	D	224	PHE	C-N	7.30	1.43	1.33
4	B	374	ASN	CA-CB	7.30	1.64	1.53
3	E	68	ALA	CA-C	-7.29	1.44	1.52
8	O	68	LEU	CA-C	-7.29	1.43	1.52
6	G	113	ASN	N-CA	-7.29	1.37	1.46
3	C	233	LEU	CA-C	-7.28	1.43	1.52
3	C	272	TYR	C-N	7.28	1.43	1.33
4	B	354	THR	C-N	7.27	1.43	1.33
3	E	97	GLY	N-CA	7.26	1.54	1.44
3	E	547	MET	CA-C	-7.22	1.43	1.52
6	G	41	GLN	CA-CB	7.22	1.64	1.53
4	F	142	TYR	CA-C	-7.22	1.43	1.52
1	M	147	VAL	CA-CB	-7.22	1.45	1.54
3	C	240	LEU	C-N	7.21	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	133	ASP	CA-C	-7.21	1.43	1.52
6	K	170	GLU	C-N	7.21	1.42	1.33
4	B	134	ILE	CA-CB	-7.21	1.46	1.54
4	B	207	ASN	N-CA	-7.20	1.36	1.45
8	O	388	TYR	CA-C	-7.20	1.43	1.52
1	M	51	ASP	N-CA	-7.20	1.37	1.46
7	P	340	SER	CA-C	-7.19	1.43	1.52
2	N	64	ILE	N-CA	-7.19	1.37	1.46
3	C	585	LYS	N-CA	-7.18	1.37	1.46
8	O	4	ALA	N-CA	-7.17	1.40	1.47
8	O	178	ILE	CA-C	7.17	1.62	1.53
6	G	127	GLU	C-N	7.16	1.44	1.33
4	F	153	THR	CA-C	-7.16	1.42	1.52
6	K	152	MET	N-CA	7.15	1.53	1.47
3	C	504	LYS	N-CA	-7.14	1.37	1.46
7	P	181	ASP	CA-C	-7.13	1.43	1.52
3	C	128	ILE	CA-C	-7.13	1.43	1.52
3	A	254	ILE	CA-CB	-7.13	1.49	1.54
8	O	279	SER	C-N	7.13	1.43	1.33
3	E	307	THR	N-CA	-7.13	1.37	1.46
4	F	88	VAL	N-CA	-7.13	1.37	1.46
8	O	329	ILE	CA-CB	-7.12	1.45	1.54
4	D	258	LEU	CA-CB	7.11	1.64	1.53
3	E	363	ALA	N-CA	-7.11	1.37	1.46
3	A	31	SER	CA-C	-7.11	1.44	1.52
4	B	348	ASP	CA-C	-7.11	1.43	1.52
7	P	349	GLU	CA-C	-7.11	1.43	1.52
3	C	579	HIS	N-CA	-7.10	1.37	1.46
5	J	88	GLU	N-CA	-7.10	1.37	1.46
7	P	269	SER	CA-C	7.10	1.62	1.52
4	D	221	THR	CA-C	-7.09	1.43	1.52
3	A	493	GLU	CA-C	-7.09	1.43	1.52
3	C	355	ASP	N-CA	-7.09	1.37	1.46
4	B	39	VAL	CA-C	-7.08	1.43	1.52
3	C	450	HIS	N-CA	-7.08	1.41	1.47
4	B	102	ILE	N-CA	-7.07	1.40	1.46
3	A	62	ARG	CA-C	-7.06	1.43	1.52
7	P	18	SER	CA-C	-7.06	1.43	1.52
4	D	458	LEU	N-CA	7.06	1.54	1.46
4	F	449	TYR	CA-C	-7.06	1.44	1.52
4	B	377	PRO	C-N	7.06	1.42	1.33
4	D	240	LEU	CA-C	-7.05	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	155	ASP	CA-C	-7.05	1.43	1.52
4	F	185	ALA	C-N	7.04	1.43	1.33
7	P	332	ASP	CA-CB	7.04	1.65	1.53
5	H	99	ILE	CA-C	-7.04	1.44	1.52
3	E	439	TRP	N-CA	-7.04	1.38	1.46
3	C	200	VAL	CA-CB	-7.04	1.45	1.54
8	O	241	LYS	CA-C	-7.03	1.43	1.52
3	C	377	ASP	CA-CB	7.01	1.62	1.53
4	D	320	GLY	CA-C	-7.01	1.44	1.52
8	O	365	ASN	C-N	7.00	1.42	1.33
4	B	405	ALA	C-N	6.99	1.43	1.33
6	I	134	GLU	CA-CB	6.99	1.63	1.54
3	C	254	ILE	CA-CB	-6.98	1.49	1.54
4	F	137	SER	CA-CB	6.98	1.62	1.53
6	G	126	VAL	C-N	6.98	1.43	1.33
3	E	516	ASP	C-N	6.98	1.42	1.33
6	G	78	SER	C-N	6.98	1.43	1.34
4	F	348	ASP	CA-CB	6.98	1.64	1.53
3	A	439	TRP	CA-C	-6.97	1.44	1.52
6	I	153	LYS	C-N	6.97	1.42	1.33
4	F	366	ASN	CA-CB	6.97	1.64	1.53
4	F	395	ASP	CA-CB	6.96	1.65	1.53
5	H	53	GLU	CA-C	-6.96	1.43	1.52
6	K	175	SER	CA-C	-6.95	1.43	1.52
4	F	171	PRO	N-CA	-6.95	1.40	1.46
8	O	149	TYR	N-CA	-6.95	1.37	1.46
3	E	325	PRO	N-CA	-6.95	1.38	1.47
4	D	315	ILE	CA-C	-6.95	1.43	1.52
4	D	401	ASN	CA-CB	6.94	1.64	1.53
7	P	322	VAL	C-N	6.94	1.43	1.33
3	E	45	MET	N-CA	-6.94	1.37	1.46
6	K	89	LEU	N-CA	-6.93	1.38	1.46
6	K	195	ASP	CA-CB	6.93	1.63	1.53
4	F	198	LYS	N-CA	-6.91	1.37	1.46
4	D	183	ILE	CA-CB	6.90	1.63	1.54
5	H	50	LYS	CA-C	-6.89	1.43	1.52
6	G	99	ILE	CA-CB	-6.88	1.46	1.54
8	O	386	VAL	N-CA	-6.88	1.39	1.46
4	B	171	PRO	N-CA	-6.87	1.40	1.46
3	A	165	SER	C-N	6.86	1.43	1.33
3	A	609	GLU	C-N	6.86	1.43	1.33
4	D	471	GLU	CA-C	-6.86	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	264	GLU	C-N	6.85	1.42	1.33
3	A	244	PHE	CA-CB	6.84	1.60	1.53
3	A	546	MET	C-N	6.84	1.43	1.34
3	C	436	GLN	CA-C	-6.84	1.43	1.52
3	E	282	GLY	CA-C	-6.84	1.46	1.51
7	P	281	THR	N-CA	-6.84	1.37	1.45
2	N	50	ILE	C-N	6.83	1.43	1.33
3	E	221	ARG	C-N	6.83	1.42	1.33
4	F	230	GLU	CA-C	-6.83	1.44	1.52
1	M	79	ILE	C-O	-6.82	1.16	1.24
8	O	8	ALA	CA-C	-6.82	1.43	1.52
8	O	252	GLU	CA-C	-6.81	1.44	1.52
3	E	574	THR	CA-C	-6.81	1.44	1.52
3	A	248	GLN	N-CA	-6.80	1.37	1.46
7	P	419	ILE	CA-C	6.80	1.61	1.52
7	P	97	GLN	CA-C	-6.80	1.44	1.52
6	I	210	LEU	N-CA	-6.80	1.38	1.46
8	O	388	TYR	C-N	6.80	1.42	1.33
4	D	377	PRO	N-CA	-6.79	1.39	1.47
6	K	198	GLU	C-O	-6.79	1.15	1.23
3	A	428	THR	CA-C	-6.79	1.44	1.52
4	B	206	GLU	C-N	6.78	1.42	1.33
3	C	579	HIS	CA-C	-6.78	1.44	1.52
3	C	409	SER	CA-C	-6.77	1.44	1.52
4	D	402	GLN	CA-CB	-6.77	1.42	1.53
4	F	169	LYS	CA-CB	6.77	1.63	1.53
3	E	301	TYR	C-N	6.76	1.42	1.33
3	E	345	ASP	N-CA	6.76	1.55	1.46
3	E	38	GLU	N-CA	-6.76	1.37	1.45
4	F	424	ALA	C-N	6.76	1.42	1.33
3	A	105	TYR	CA-C	-6.75	1.44	1.52
4	D	32	SER	C-N	6.75	1.42	1.33
4	B	131	TYR	CA-CB	6.75	1.62	1.53
8	O	265	GLU	CA-CB	6.74	1.64	1.53
4	D	478	PRO	C-N	6.73	1.42	1.33
1	M	14	THR	C-N	6.73	1.42	1.33
2	N	6	THR	C-N	6.73	1.43	1.33
5	H	27	TYR	CA-C	-6.73	1.44	1.52
7	P	325	LEU	C-N	6.72	1.42	1.33
3	C	183	THR	CA-C	-6.71	1.44	1.52
5	H	96	LYS	N-CA	-6.71	1.38	1.46
3	A	399	VAL	CA-C	-6.71	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	O	349	GLY	CA-C	-6.71	1.43	1.52
3	A	486	LYS	CA-C	-6.71	1.44	1.52
7	P	209	LYS	CA-C	-6.71	1.44	1.52
3	C	110	ARG	CA-C	-6.70	1.47	1.52
5	L	35	ALA	N-CA	-6.70	1.38	1.46
7	P	250	ILE	CA-CB	-6.69	1.46	1.54
2	N	105	LYS	N-CA	-6.68	1.38	1.46
7	P	37	SER	CA-C	-6.68	1.44	1.52
1	M	156	PHE	C-N	6.68	1.42	1.33
5	L	58	GLU	C-O	-6.67	1.15	1.24
8	O	125	LYS	CA-C	6.67	1.61	1.52
3	A	219	VAL	CA-C	-6.67	1.47	1.52
4	D	153	THR	CA-C	6.67	1.61	1.52
4	B	426	SER	CA-CB	6.67	1.64	1.53
3	E	363	ALA	CA-CB	6.67	1.63	1.53
4	F	384	LYS	CA-C	-6.67	1.44	1.52
4	F	70	ILE	CA-C	-6.66	1.44	1.52
4	B	309	TYR	CA-C	-6.66	1.44	1.52
4	B	393	ARG	C-N	6.66	1.42	1.34
3	E	141	PHE	CA-C	-6.65	1.44	1.52
3	E	585	LYS	CA-C	-6.65	1.43	1.52
7	P	1	MET	C-N	6.65	1.41	1.32
8	O	125	LYS	CA-CB	6.65	1.64	1.53
4	B	79	VAL	CA-C	-6.65	1.44	1.52
4	B	231	GLU	C-N	6.65	1.43	1.33
4	F	314	THR	CA-CB	6.64	1.63	1.53
7	P	5	LYS	CA-C	-6.64	1.43	1.52
4	B	281	MET	C-N	6.63	1.42	1.33
7	P	458	ASP	N-CA	-6.63	1.37	1.46
5	L	78	GLY	C-N	6.63	1.43	1.33
3	E	27	ILE	CA-C	-6.62	1.45	1.52
7	P	73	ASN	C-N	6.62	1.43	1.33
3	C	370	ARG	CA-C	-6.61	1.44	1.52
3	C	307	THR	C-N	6.61	1.41	1.33
3	C	475	TYR	CA-CB	6.59	1.63	1.53
4	F	220	GLU	N-CA	-6.59	1.38	1.46
3	A	242	ALA	CA-C	-6.58	1.44	1.52
5	L	43	ILE	CA-CB	-6.56	1.45	1.54
4	B	355	GLU	CA-C	-6.56	1.46	1.53
6	I	51	VAL	CA-C	-6.56	1.44	1.52
3	E	336	GLY	C-N	6.56	1.41	1.33
1	M	59	ARG	N-CA	6.56	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	193	LEU	C-N	6.56	1.42	1.33
4	F	270	THR	CA-C	-6.55	1.44	1.52
3	E	461	SER	CA-CB	6.55	1.65	1.53
8	O	160	ALA	C-N	6.55	1.42	1.33
4	B	329	ILE	C-O	-6.54	1.17	1.24
4	B	90	LYS	N-CA	-6.54	1.38	1.46
4	F	156	SER	N-CA	-6.54	1.38	1.46
3	A	540	ILE	CA-CB	-6.53	1.46	1.54
7	P	352	GLU	N-CA	-6.53	1.37	1.46
3	C	328	ALA	N-CA	-6.53	1.38	1.46
8	O	95	ASN	CA-CB	6.53	1.64	1.53
3	C	138	LYS	C-N	6.52	1.42	1.33
4	D	317	GLU	CA-C	6.51	1.61	1.52
7	P	289	LEU	N-CA	-6.51	1.38	1.46
1	M	100	ASN	CA-CB	6.50	1.62	1.53
4	D	56	THR	CA-C	-6.50	1.44	1.52
3	E	226	LYS	CA-CB	6.50	1.63	1.53
4	F	310	THR	CA-C	-6.50	1.44	1.52
4	B	195	ARG	C-N	6.50	1.41	1.34
8	O	16	LEU	CA-CB	6.49	1.62	1.53
6	I	68	LYS	N-CA	-6.49	1.38	1.46
6	G	48	THR	N-CA	6.49	1.54	1.46
4	B	307	TYR	N-CA	-6.48	1.38	1.46
3	C	325	PRO	CA-CB	6.48	1.61	1.53
3	C	233	LEU	CA-CB	6.47	1.62	1.53
7	P	317	ASN	CA-C	-6.47	1.45	1.53
8	O	39	ILE	CA-C	-6.47	1.44	1.52
3	A	518	ALA	CA-CB	6.46	1.63	1.53
6	G	116	GLU	CA-C	6.46	1.61	1.52
4	D	479	LYS	N-CA	-6.46	1.38	1.46
1	M	98	GLN	CA-C	-6.46	1.45	1.52
4	B	218	ASN	N-CA	-6.45	1.38	1.45
6	I	8	LEU	N-CA	6.45	1.58	1.46
3	A	90	LYS	N-CA	-6.45	1.39	1.46
3	A	366	GLU	C-N	6.45	1.42	1.33
3	C	384	LEU	CA-CB	6.44	1.63	1.53
3	E	36	ILE	CA-C	-6.44	1.45	1.52
4	F	291	VAL	CA-CB	-6.43	1.45	1.54
5	L	32	LEU	N-CA	-6.43	1.38	1.46
6	I	65	LYS	C-N	6.43	1.42	1.33
4	D	321	ARG	N-CA	-6.43	1.37	1.46
4	D	106	GLU	N-CA	6.43	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	O	74	GLN	CA-C	-6.42	1.44	1.52
8	O	129	ASP	CA-C	-6.42	1.44	1.52
3	E	441	LEU	CA-C	-6.42	1.44	1.52
6	K	102	GLU	C-N	6.42	1.42	1.33
3	A	157	ILE	CA-C	-6.42	1.45	1.52
5	L	14	GLU	C-N	6.42	1.42	1.33
7	P	139	VAL	CA-CB	-6.41	1.46	1.54
1	M	119	ASP	C-N	6.41	1.42	1.33
1	M	68	LEU	C-N	6.41	1.42	1.33
4	B	120	ILE	CA-CB	-6.41	1.47	1.54
3	C	78	GLY	C-N	6.41	1.42	1.33
3	C	509	ASP	CA-C	-6.41	1.44	1.52
4	B	220	GLU	C-O	-6.40	1.16	1.24
3	C	251	THR	CA-C	-6.40	1.44	1.52
3	C	303	GLU	CA-CB	6.39	1.62	1.53
3	E	184	TRP	CA-C	-6.39	1.44	1.52
3	E	72	VAL	CA-CB	-6.38	1.46	1.54
4	B	428	GLU	CA-C	-6.38	1.44	1.52
4	B	256	PRO	N-CA	-6.38	1.39	1.47
6	I	121	LEU	CA-CB	6.37	1.63	1.53
4	B	38	LEU	N-CA	-6.37	1.38	1.46
4	F	294	ALA	C-N	6.36	1.42	1.33
4	F	450	GLU	CA-C	-6.36	1.44	1.52
5	L	17	ALA	C-O	-6.36	1.16	1.24
8	O	5	LEU	C-N	6.36	1.42	1.33
3	A	69	THR	CA-C	-6.36	1.45	1.52
3	E	357	SER	CA-C	-6.35	1.43	1.52
7	P	314	LEU	N-CA	6.35	1.53	1.46
8	O	305	HIS	C-N	6.34	1.41	1.33
3	A	499	VAL	C-O	6.34	1.31	1.24
3	C	149	GLY	CA-C	6.34	1.60	1.51
4	F	208	PHE	N-CA	-6.34	1.38	1.46
1	M	173	ILE	C-N	6.34	1.42	1.33
3	C	204	GLY	C-N	6.33	1.42	1.33
6	G	78	SER	CA-C	-6.33	1.44	1.52
4	D	178	LEU	N-CA	-6.33	1.40	1.45
4	D	130	ASP	CA-C	-6.33	1.44	1.52
8	O	157	THR	N-CA	-6.33	1.38	1.46
4	D	450	GLU	CA-CB	6.32	1.63	1.53
3	E	410	VAL	CA-CB	-6.32	1.46	1.54
3	E	180	GLY	C-N	6.32	1.42	1.33
6	K	222	LEU	CA-C	-6.31	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	165	ALA	N-CA	-6.31	1.38	1.45
7	P	455	ASN	N-CA	-6.31	1.38	1.46
3	A	158	TYR	C-N	6.30	1.39	1.33
3	A	218	ARG	C-N	6.30	1.38	1.32
7	P	375	VAL	CA-C	-6.30	1.44	1.52
3	E	581	VAL	C-O	-6.30	1.16	1.24
4	B	419	VAL	CA-CB	-6.29	1.47	1.54
7	P	369	CYS	CA-C	-6.29	1.44	1.52
4	D	83	THR	C-O	-6.29	1.17	1.24
3	E	485	MET	C-N	6.29	1.42	1.33
3	E	147	GLN	N-CA	-6.28	1.38	1.45
7	P	428	THR	CA-C	-6.28	1.44	1.52
6	G	83	LYS	CA-C	-6.28	1.44	1.52
3	C	391	PHE	CA-C	-6.28	1.44	1.52
4	B	476	ILE	CA-C	-6.28	1.44	1.52
4	D	196	PRO	CA-CB	6.28	1.62	1.53
3	A	396	GLY	CA-C	-6.27	1.45	1.51
8	O	387	MET	CA-C	-6.27	1.45	1.52
6	G	146	VAL	C-O	-6.27	1.16	1.24
6	I	112	ASN	CA-C	-6.27	1.43	1.52
4	B	266	LEU	CA-C	-6.27	1.44	1.52
4	D	406	LYS	CA-C	-6.26	1.44	1.52
3	A	571	ALA	N-CA	-6.26	1.38	1.46
3	C	140	GLN	CA-CB	6.26	1.61	1.53
6	G	86	LEU	CA-CB	6.26	1.63	1.53
3	C	199	GLU	C-N	6.26	1.42	1.33
6	K	101	GLU	C-N	6.25	1.42	1.33
3	A	130	THR	N-CA	-6.25	1.40	1.45
3	E	329	ARG	C-O	-6.25	1.16	1.24
7	P	249	LEU	CA-CB	6.25	1.63	1.53
3	E	458	VAL	N-CA	-6.25	1.38	1.46
1	M	159	LEU	CA-CB	6.24	1.63	1.53
4	B	51	GLU	C-N	6.24	1.41	1.33
4	F	132	LEU	N-CA	6.24	1.53	1.46
4	D	260	LEU	N-CA	-6.23	1.38	1.46
6	G	12	GLN	CA-C	-6.23	1.44	1.52
4	D	186	GLN	C-N	6.23	1.41	1.33
3	C	150	ASP	C-N	6.22	1.42	1.33
3	E	111	PRO	CA-C	-6.22	1.45	1.52
3	A	103	THR	C-N	6.22	1.41	1.33
3	C	115	ILE	C-N	6.21	1.42	1.33
3	C	591	ARG	N-CA	-6.21	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	545	ASP	CA-C	-6.21	1.44	1.52
3	C	454	ILE	CA-CB	-6.20	1.47	1.54
4	D	119	PRO	C-N	6.20	1.39	1.33
4	F	350	THR	C-O	-6.20	1.17	1.24
4	F	297	GLU	C-N	6.20	1.40	1.33
3	C	86	LEU	CA-C	-6.20	1.45	1.52
3	E	433	GLY	N-CA	-6.20	1.38	1.45
4	B	312	LEU	CA-C	-6.19	1.44	1.52
4	D	144	ARG	CA-CB	6.18	1.61	1.53
4	F	167	GLY	CA-C	-6.18	1.43	1.51
8	O	191	LEU	CA-C	-6.18	1.45	1.52
2	N	93	GLU	C-N	6.18	1.40	1.33
3	A	104	ILE	N-CA	-6.18	1.39	1.46
4	F	460	GLN	C-N	6.18	1.42	1.33
8	O	276	SER	CA-C	-6.18	1.44	1.52
7	P	54	LYS	C-N	6.17	1.42	1.33
3	A	170	HIS	CA-CB	6.17	1.60	1.53
3	A	129	ASP	C-N	-6.17	1.26	1.33
6	G	37	LEU	CA-CB	6.17	1.63	1.53
4	B	332	ILE	N-CA	-6.17	1.39	1.46
5	L	23	LYS	N-CA	-6.17	1.38	1.46
8	O	195	LEU	CA-C	-6.16	1.45	1.52
4	F	480	ILE	C-N	6.16	1.42	1.33
3	E	210	THR	CA-CB	6.16	1.62	1.53
4	F	404	TYR	N-CA	-6.15	1.39	1.46
4	F	229	PHE	C-N	6.15	1.42	1.33
4	F	337	MET	C-N	6.15	1.38	1.33
3	E	396	GLY	CA-C	-6.15	1.43	1.51
6	I	216	PRO	C-N	6.15	1.41	1.33
6	I	178	TYR	CA-C	-6.14	1.45	1.52
3	A	524	ASP	N-CA	-6.13	1.38	1.46
6	I	190	VAL	CA-C	-6.13	1.45	1.52
3	C	288	ASN	CA-C	-6.13	1.44	1.52
3	C	394	ARG	C-N	6.13	1.41	1.33
6	I	222	LEU	CA-C	-6.13	1.44	1.52
6	G	211	SER	CA-CB	6.13	1.63	1.53
3	E	106	ASP	CA-CB	6.13	1.62	1.53
7	P	370	TRP	CA-C	-6.13	1.44	1.52
4	F	98	GLU	C-N	6.12	1.41	1.33
4	D	343	THR	C-N	6.12	1.42	1.33
4	D	395	ASP	C-N	6.12	1.41	1.33
3	A	527	GLN	N-CA	-6.12	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	21	LEU	C-O	-6.12	1.17	1.24
6	I	202	THR	C-N	6.11	1.42	1.33
3	C	355	ASP	C-N	6.11	1.42	1.33
8	O	6	TYR	CA-C	-6.11	1.44	1.52
3	C	349	ASN	CA-C	-6.11	1.45	1.52
4	D	478	PRO	CA-CB	6.11	1.62	1.53
4	F	272	ARG	CA-C	-6.10	1.45	1.52
3	A	241	ASP	N-CA	-6.10	1.39	1.46
4	F	83	THR	C-N	6.10	1.41	1.33
8	O	289	VAL	C-N	6.10	1.41	1.33
6	I	11	ASN	N-CA	-6.10	1.39	1.46
3	E	166	LEU	CA-CB	6.09	1.63	1.53
7	P	364	ASP	CA-C	-6.09	1.45	1.52
7	P	19	ILE	CA-CB	-6.09	1.46	1.54
7	P	285	LYS	CA-C	-6.09	1.45	1.52
4	D	457	SER	CA-C	-6.09	1.45	1.52
3	A	278	ILE	CA-C	-6.09	1.45	1.52
3	E	234	LEU	CA-C	-6.09	1.45	1.52
8	O	26	PRO	CA-C	-6.09	1.44	1.52
3	E	609	GLU	N-CA	-6.08	1.38	1.46
3	C	126	ARG	CA-C	-6.08	1.44	1.52
4	F	170	ILE	N-CA	-6.08	1.41	1.45
4	B	255	THR	C-O	-6.07	1.18	1.24
4	B	285	ALA	CA-C	-6.07	1.45	1.52
4	F	398	ASP	CA-C	-6.07	1.45	1.52
4	B	255	THR	CA-CB	-6.07	1.45	1.53
3	C	417	SER	N-CA	-6.07	1.40	1.46
3	C	597	HIS	C-O	-6.07	1.16	1.24
4	F	426	SER	C-N	6.07	1.41	1.33
3	E	91	PRO	N-CA	-6.07	1.39	1.47
7	P	89	ASN	CA-C	6.06	1.60	1.52
4	F	163	SER	C-N	6.06	1.39	1.33
4	D	160	THR	CA-C	6.06	1.60	1.52
3	A	564	GLY	CA-C	-6.05	1.43	1.51
6	G	95	SER	CA-C	6.05	1.60	1.52
4	F	55	LEU	C-O	-6.05	1.16	1.24
6	I	117	TYR	N-CA	-6.04	1.38	1.46
4	B	250	ILE	CA-C	-6.03	1.45	1.52
8	O	285	ARG	C-N	6.03	1.41	1.33
8	O	97	TYR	CA-C	-6.03	1.45	1.53
6	I	108	SER	N-CA	-6.03	1.39	1.46
3	C	320	ASN	CA-C	-6.02	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	493	GLU	C-N	6.02	1.41	1.33
6	G	44	GLU	CA-C	-6.02	1.45	1.52
3	A	575	GLY	CA-C	-6.02	1.43	1.51
8	O	193	THR	CA-C	-6.02	1.45	1.52
7	P	175	GLN	N-CA	6.02	1.53	1.46
4	B	70	ILE	N-CA	-6.02	1.39	1.46
8	O	78	SER	CA-C	-6.02	1.44	1.52
3	C	511	ASP	CA-C	-6.01	1.44	1.52
8	O	29	LYS	N-CA	-6.01	1.38	1.46
4	D	149	GLU	CA-C	-6.00	1.45	1.52
6	G	204	GLU	CA-C	-6.00	1.45	1.52
3	A	541	TRP	N-CA	-6.00	1.39	1.46
3	E	446	ALA	N-CA	-6.00	1.38	1.46
4	F	257	ARG	C-N	5.99	1.41	1.33
4	F	164	ILE	CA-CB	5.99	1.60	1.53
4	B	35	ASN	CA-C	-5.99	1.45	1.53
8	O	287	GLN	C-O	-5.98	1.17	1.24
6	I	199	ILE	N-CA	-5.98	1.38	1.46
3	A	202	PHE	C-N	5.98	1.42	1.33
4	B	254	ILE	CA-C	-5.98	1.44	1.52
4	D	214	ALA	N-CA	-5.97	1.38	1.46
7	P	444	THR	CA-C	-5.97	1.45	1.52
5	J	47	LYS	CA-C	-5.97	1.45	1.52
3	A	472	ASP	C-N	5.96	1.41	1.33
8	O	362	GLY	CA-C	-5.96	1.43	1.51
2	N	92	LEU	CA-C	-5.96	1.45	1.52
6	I	223	TYR	N-CA	-5.96	1.37	1.46
1	M	80	GLY	CA-C	-5.95	1.44	1.52
8	O	19	ASN	CA-CB	5.94	1.63	1.53
4	F	375	VAL	CA-CB	-5.94	1.48	1.54
8	O	333	PRO	CA-C	5.94	1.57	1.52
4	B	222	ALA	C-O	5.93	1.30	1.24
3	E	81	VAL	N-CA	-5.93	1.39	1.46
4	D	272	ARG	CA-C	-5.93	1.45	1.52
4	D	161	MET	C-N	5.93	1.42	1.33
5	L	100	GLU	C-N	5.93	1.41	1.33
3	E	559	LYS	CA-C	-5.92	1.45	1.52
6	G	106	LYS	C-N	5.92	1.42	1.34
8	O	223	SER	C-N	5.92	1.40	1.33
3	E	342	TYR	CA-C	-5.91	1.45	1.52
3	C	158	TYR	C-N	5.91	1.39	1.33
3	E	502	VAL	CA-CB	5.91	1.62	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	513	ILE	C-N	5.90	1.41	1.33
8	O	328	LYS	N-CA	-5.90	1.38	1.45
4	D	474	ASN	N-CA	-5.90	1.38	1.46
4	D	208	PHE	CA-C	-5.90	1.45	1.52
7	P	110	GLY	CA-C	-5.90	1.43	1.51
6	K	65	LYS	CA-CB	5.89	1.62	1.53
7	P	361	ALA	N-CA	-5.89	1.39	1.46
4	F	274	VAL	N-CA	-5.89	1.39	1.46
4	F	353	ILE	CA-CB	-5.89	1.46	1.54
5	J	6	GLY	N-CA	5.89	1.53	1.45
1	M	55	GLN	C-O	-5.88	1.17	1.24
6	K	78	SER	C-N	5.88	1.42	1.34
7	P	188	ARG	CA-CB	5.88	1.62	1.53
3	A	326	VAL	N-CA	-5.88	1.38	1.46
7	P	283	LYS	CA-CB	5.88	1.62	1.53
8	O	232	VAL	CA-CB	-5.88	1.46	1.54
8	O	71	VAL	C-N	5.88	1.41	1.33
4	B	375	VAL	CA-C	-5.88	1.45	1.52
3	E	345	ASP	C-N	5.87	1.42	1.33
3	E	374	MET	CA-C	-5.87	1.46	1.53
4	F	449	TYR	C-N	5.87	1.41	1.33
6	G	72	SER	C-N	5.87	1.42	1.33
3	A	293	VAL	C-N	5.87	1.41	1.33
3	A	435	THR	CA-C	-5.87	1.45	1.52
4	B	170	ILE	CA-CB	-5.87	1.47	1.54
6	I	60	GLY	C-N	5.87	1.42	1.33
3	A	222	PRO	CA-CB	-5.87	1.46	1.53
3	E	237	GLN	CA-C	-5.87	1.45	1.52
3	A	360	TRP	CA-CB	5.87	1.62	1.53
3	A	550	PHE	C-N	5.86	1.41	1.33
5	J	92	ASP	C-O	-5.86	1.16	1.24
7	P	17	ARG	C-N	5.86	1.42	1.33
4	B	54	ASN	CA-C	-5.86	1.45	1.52
1	M	36	SER	CA-CB	5.86	1.62	1.53
4	B	81	GLU	CA-C	-5.86	1.45	1.52
6	K	82	ASN	N-CA	5.86	1.53	1.46
4	D	435	PHE	C-N	5.85	1.41	1.33
4	D	477	SER	C-N	5.85	1.40	1.33
3	E	307	THR	CA-C	5.85	1.59	1.52
8	O	85	ILE	CA-C	5.85	1.59	1.52
6	K	51	VAL	CA-C	5.85	1.60	1.52
6	K	129	LEU	CA-C	-5.85	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	219	LEU	C-N	5.85	1.41	1.33
4	F	454	VAL	CA-CB	5.85	1.61	1.54
1	M	69	ALA	C-O	-5.84	1.17	1.24
4	B	210	ILE	N-CA	-5.84	1.39	1.46
3	E	135	ARG	N-CA	-5.84	1.39	1.46
6	G	177	ASP	C-N	5.84	1.41	1.33
6	K	115	ASP	CA-C	-5.84	1.44	1.52
7	P	13	PHE	CA-C	-5.84	1.45	1.52
8	O	65	SER	C-O	-5.84	1.17	1.24
3	C	219	VAL	C-N	5.84	1.40	1.33
6	G	47	LYS	C-N	5.83	1.41	1.33
4	B	48	ARG	C-N	-5.83	1.25	1.33
3	E	419	ALA	N-CA	-5.83	1.41	1.46
3	E	69	THR	CA-C	-5.83	1.45	1.52
8	O	122	LYS	CA-C	-5.83	1.45	1.52
4	F	422	GLU	CA-CB	5.83	1.61	1.53
7	P	415	GLN	CA-C	-5.83	1.45	1.52
3	A	167	ILE	CA-CB	-5.82	1.46	1.55
5	L	91	LYS	N-CA	5.82	1.53	1.46
1	M	132	VAL	CA-CB	5.82	1.62	1.54
6	I	28	ALA	CA-C	-5.82	1.45	1.52
2	N	106	ASP	CA-CB	5.82	1.62	1.53
4	B	129	GLU	N-CA	-5.82	1.39	1.46
4	D	407	TYR	CA-CB	5.81	1.62	1.53
1	M	158	ILE	CA-CB	-5.81	1.47	1.54
4	B	216	GLY	C-O	-5.81	1.17	1.24
4	F	189	ARG	C-N	5.81	1.42	1.33
3	A	397	LYS	CA-C	-5.81	1.45	1.52
4	B	144	ARG	CA-C	5.80	1.60	1.52
4	D	67	VAL	C-O	5.80	1.29	1.24
4	D	111	ARG	CA-C	-5.80	1.45	1.52
4	F	341	ASP	C-N	5.80	1.40	1.33
4	F	289	ARG	CA-CB	5.80	1.62	1.53
7	P	147	VAL	N-CA	-5.80	1.39	1.46
1	M	103	GLY	N-CA	5.79	1.53	1.45
3	A	614	SER	CA-C	-5.79	1.45	1.52
4	B	74	ARG	CA-C	-5.79	1.45	1.52
3	C	512	LYS	CA-C	-5.79	1.45	1.52
7	P	143	GLY	CA-C	-5.79	1.45	1.52
6	I	126	VAL	C-N	5.79	1.41	1.33
4	D	70	ILE	C-O	-5.78	1.18	1.24
1	M	187	TYR	CA-C	-5.78	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	304	MET	C-N	5.78	1.41	1.33
4	B	87	ASP	C-N	5.78	1.40	1.34
4	D	78	GLN	N-CA	5.78	1.53	1.46
4	F	463	SER	C-N	5.78	1.41	1.33
6	G	52	ARG	C-O	-5.78	1.17	1.24
6	G	145	ASP	C-N	5.77	1.41	1.33
3	C	85	VAL	CA-C	-5.77	1.45	1.52
4	F	102	ILE	N-CA	-5.77	1.40	1.46
8	O	229	ALA	C-O	5.77	1.30	1.24
3	A	92	LEU	C-N	5.76	1.41	1.33
3	C	532	SER	CA-C	-5.76	1.45	1.52
3	A	170	HIS	CA-C	-5.76	1.45	1.53
4	B	434	GLU	C-N	5.76	1.41	1.33
4	F	477	SER	CA-C	5.76	1.60	1.52
1	M	37	GLU	CA-C	-5.76	1.45	1.52
4	B	270	THR	CA-CB	-5.76	1.44	1.53
4	F	219	LEU	N-CA	-5.76	1.39	1.46
6	K	115	ASP	CA-CB	5.75	1.62	1.53
7	P	171	ILE	CA-C	5.75	1.61	1.52
2	N	32	THR	N-CA	-5.75	1.38	1.46
3	A	412	ILE	CA-CB	-5.75	1.47	1.54
7	P	39	ILE	N-CA	-5.75	1.39	1.46
1	M	180	ARG	C-N	5.75	1.41	1.33
4	F	391	MET	N-CA	-5.75	1.38	1.46
4	F	482	ASP	C-N	5.75	1.41	1.33
7	P	373	PRO	N-CA	-5.75	1.40	1.47
3	A	604	LEU	CA-CB	5.75	1.62	1.53
3	C	487	GLU	C-N	5.75	1.41	1.33
7	P	442	ASP	C-N	5.75	1.41	1.33
3	A	167	ILE	C-N	5.75	1.43	1.33
8	O	103	ASN	N-CA	5.74	1.55	1.46
4	B	143	ALA	CA-C	-5.74	1.45	1.53
4	F	282	SER	CA-C	-5.74	1.45	1.52
6	K	46	GLU	CA-CB	5.74	1.62	1.53
7	P	414	LYS	C-N	5.74	1.41	1.33
6	K	128	ALA	N-CA	-5.74	1.39	1.46
3	C	119	SER	C-N	5.74	1.42	1.33
4	D	380	SER	N-CA	-5.74	1.39	1.46
3	C	417	SER	CA-CB	5.73	1.62	1.54
4	D	119	PRO	N-CA	-5.73	1.40	1.46
5	L	9	THR	N-CA	-5.73	1.39	1.46
6	K	42	GLU	N-CA	-5.73	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	70	ILE	CA-CB	-5.72	1.46	1.54
3	E	315	THR	C-N	5.72	1.42	1.33
3	C	231	TYR	N-CA	-5.72	1.39	1.46
3	E	117	GLU	N-CA	-5.72	1.39	1.46
4	F	219	LEU	C-N	5.71	1.41	1.33
6	I	162	GLU	C-O	-5.71	1.16	1.24
1	M	173	ILE	CA-C	-5.71	1.45	1.52
6	I	51	VAL	C-O	-5.70	1.17	1.24
6	I	67	LYS	CA-C	5.70	1.60	1.52
4	B	367	LYS	C-N	5.70	1.41	1.33
4	D	139	ILE	CA-CB	5.70	1.62	1.54
6	K	61	ASN	CA-CB	5.70	1.63	1.53
2	N	73	ILE	N-CA	-5.70	1.39	1.46
3	E	318	VAL	CA-C	-5.70	1.45	1.52
6	I	98	GLY	C-N	5.70	1.41	1.33
3	A	274	ASN	C-N	5.69	1.40	1.33
3	E	411	SER	N-CA	-5.69	1.39	1.46
3	C	462	LYS	C-N	5.69	1.41	1.33
7	P	412	ASN	CA-CB	5.69	1.63	1.53
3	C	237	GLN	CA-C	-5.68	1.46	1.52
7	P	34	GLU	CA-C	-5.68	1.45	1.52
4	D	396	HIS	CA-C	-5.68	1.45	1.52
4	D	412	ASP	CA-CB	-5.68	1.44	1.53
4	F	274	VAL	CA-C	-5.68	1.45	1.52
7	P	79	PRO	N-CA	-5.68	1.40	1.47
3	A	178	SER	N-CA	-5.68	1.39	1.46
3	C	99	GLY	CA-C	-5.68	1.43	1.51
6	G	200	ASN	N-CA	-5.68	1.39	1.46
4	B	379	LEU	N-CA	5.67	1.53	1.45
3	E	247	VAL	CA-C	-5.67	1.45	1.52
3	E	172	ILE	CA-CB	5.67	1.61	1.54
4	D	106	GLU	CA-CB	5.67	1.62	1.53
3	A	318	VAL	N-CA	-5.66	1.39	1.46
8	O	107	VAL	CA-CB	-5.66	1.51	1.54
4	F	471	GLU	CA-C	-5.66	1.45	1.52
5	J	30	ASP	N-CA	-5.66	1.39	1.46
2	N	54	PHE	C-N	5.66	1.41	1.33
7	P	174	LEU	C-O	5.66	1.30	1.24
4	D	99	SER	C-N	5.66	1.41	1.33
4	B	51	GLU	CA-C	-5.65	1.45	1.52
3	E	186	ALA	CA-CB	5.65	1.61	1.53
4	B	309	TYR	N-CA	-5.65	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	453	SER	CA-C	-5.65	1.45	1.52
5	H	85	LYS	CA-CB	5.65	1.62	1.53
6	G	82	ASN	CA-CB	5.65	1.62	1.53
5	J	3	GLN	C-N	5.65	1.41	1.33
4	D	104	VAL	CA-C	-5.64	1.46	1.52
3	A	410	VAL	CA-C	-5.64	1.46	1.52
4	F	89	LYS	CA-C	-5.64	1.44	1.52
4	D	184	ALA	C-O	-5.64	1.17	1.24
3	E	263	THR	C-N	5.64	1.41	1.33
6	K	219	ARG	CA-C	-5.63	1.45	1.52
3	A	607	MET	CA-C	-5.63	1.45	1.52
3	C	519	THR	C-O	-5.63	1.17	1.24
7	P	334	GLU	CA-CB	5.63	1.62	1.53
4	F	100	LEU	CA-C	-5.63	1.45	1.52
7	P	306	LYS	CA-CB	5.63	1.62	1.53
8	O	376	SER	CA-C	-5.63	1.45	1.52
4	B	351	GLY	CA-C	-5.63	1.45	1.52
5	H	82	GLU	CA-C	-5.62	1.44	1.52
7	P	94	LYS	N-CA	5.62	1.53	1.46
4	B	309	TYR	CA-CB	5.62	1.62	1.53
4	D	184	ALA	CA-CB	-5.62	1.44	1.53
8	O	96	ALA	N-CA	-5.62	1.39	1.46
8	O	107	VAL	CA-C	5.62	1.57	1.52
4	F	402	GLN	N-CA	-5.61	1.39	1.46
5	L	31	LYS	CA-C	5.61	1.60	1.52
4	B	434	GLU	CA-CB	5.61	1.62	1.53
4	B	113	PHE	CA-C	-5.61	1.45	1.52
4	B	134	ILE	CA-C	-5.61	1.45	1.52
3	C	160	SER	C-N	5.61	1.41	1.33
4	D	444	ILE	C-N	5.61	1.41	1.33
3	E	486	LYS	CA-C	-5.61	1.45	1.52
8	O	226	ALA	N-CA	-5.61	1.38	1.45
8	O	268	ASP	C-N	5.61	1.41	1.33
5	J	3	GLN	CA-C	-5.61	1.45	1.52
8	O	237	HIS	N-CA	-5.60	1.39	1.46
4	B	241	PHE	C-N	5.60	1.41	1.33
3	E	240	LEU	C-N	5.60	1.41	1.33
4	B	32	SER	C-N	5.60	1.39	1.33
3	C	460	TYR	CA-C	-5.60	1.45	1.52
3	C	492	ALA	C-N	5.60	1.41	1.33
1	M	70	GLU	C-N	5.60	1.40	1.33
3	A	314	ARG	N-CA	-5.60	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	427	VAL	N-CA	-5.59	1.40	1.46
3	E	254	ILE	CA-C	-5.59	1.48	1.52
4	F	359	PHE	N-CA	-5.59	1.39	1.46
4	B	384	LYS	C-O	5.59	1.30	1.24
6	I	72	SER	CA-CB	5.59	1.62	1.53
3	E	28	TYR	CA-C	-5.58	1.45	1.52
7	P	241	GLN	C-N	5.58	1.41	1.33
8	O	343	GLU	CA-CB	5.58	1.62	1.53
4	B	56	THR	CA-C	5.58	1.59	1.52
3	C	188	ALA	C-N	5.58	1.38	1.32
8	O	64	GLU	C-N	5.58	1.41	1.33
3	E	487	GLU	N-CA	-5.58	1.39	1.46
7	P	321	THR	CA-C	-5.58	1.45	1.52
3	A	278	ILE	CA-CB	-5.57	1.47	1.54
3	E	253	CYS	C-O	5.57	1.31	1.24
6	K	193	ALA	CA-CB	5.57	1.61	1.53
4	F	311	ASP	N-CA	-5.57	1.39	1.46
4	D	194	VAL	C-N	5.57	1.40	1.33
8	O	277	ALA	C-N	5.57	1.41	1.33
3	C	41	ILE	CA-CB	-5.57	1.47	1.54
5	L	43	ILE	CA-C	-5.57	1.45	1.52
4	B	370	TYR	CA-CB	5.57	1.62	1.53
2	N	30	PRO	C-N	5.56	1.41	1.33
3	E	611	PHE	CA-C	-5.56	1.45	1.52
5	L	80	LEU	C-N	5.56	1.41	1.33
8	O	224	VAL	CA-CB	-5.56	1.47	1.53
6	G	155	ASP	CA-C	-5.56	1.45	1.52
3	A	120	GLN	C-N	5.56	1.40	1.33
3	C	112	LEU	CA-C	-5.56	1.45	1.52
2	N	33	GLN	C-N	5.56	1.40	1.33
4	B	251	GLU	N-CA	-5.56	1.39	1.46
3	C	276	ASP	CA-CB	5.56	1.62	1.53
8	O	273	GLU	C-N	5.56	1.41	1.33
3	C	50	LYS	C-N	5.56	1.40	1.33
8	O	299	VAL	C-O	-5.56	1.17	1.24
5	L	62	ALA	C-N	5.55	1.41	1.33
5	H	20	ILE	CA-C	-5.55	1.45	1.52
2	N	23	ALA	N-CA	-5.55	1.39	1.46
6	K	18	ASN	C-O	-5.55	1.17	1.24
7	P	355	SER	C-N	5.55	1.41	1.33
6	G	82	ASN	C-N	5.55	1.41	1.33
6	I	19	LYS	C-N	5.55	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	559	LYS	N-CA	-5.55	1.39	1.46
3	C	181	THR	CA-C	-5.55	1.45	1.52
3	C	270	SER	N-CA	-5.55	1.39	1.46
3	C	408	GLY	C-N	5.55	1.40	1.33
6	I	189	VAL	CA-C	-5.55	1.45	1.52
3	A	606	THR	CA-C	-5.55	1.45	1.52
8	O	240	LYS	CA-C	-5.55	1.45	1.52
3	C	178	SER	CA-C	-5.54	1.45	1.52
4	D	468	TYR	N-CA	-5.54	1.37	1.45
3	E	332	SER	CA-CB	5.54	1.62	1.53
4	F	397	GLY	CA-C	-5.54	1.45	1.52
3	C	396	GLY	C-N	5.54	1.41	1.33
4	B	421	GLY	N-CA	-5.54	1.39	1.45
6	K	174	ILE	CA-C	-5.54	1.46	1.52
6	I	93	GLU	N-CA	-5.54	1.39	1.46
6	K	201	ASN	CA-CB	5.54	1.60	1.53
6	K	163	LYS	N-CA	-5.53	1.39	1.46
6	G	50	ILE	N-CA	-5.53	1.40	1.46
3	A	362	GLU	N-CA	-5.53	1.39	1.46
3	A	553	TYR	N-CA	-5.53	1.39	1.46
3	E	539	PRO	N-CA	-5.53	1.40	1.47
7	P	76	THR	N-CA	-5.53	1.38	1.46
7	P	346	LEU	CA-C	5.53	1.59	1.52
8	O	84	GLU	CA-C	-5.53	1.45	1.52
4	F	404	TYR	CA-CB	5.52	1.61	1.53
4	B	194	VAL	C-N	5.52	1.41	1.33
7	P	240	ILE	CA-CB	5.52	1.61	1.54
6	I	121	LEU	CA-C	-5.52	1.45	1.52
3	C	412	ILE	C-N	5.51	1.40	1.33
4	D	363	GLN	CA-C	-5.51	1.45	1.52
3	A	167	ILE	N-CA	-5.51	1.40	1.46
4	F	403	LEU	C-N	5.51	1.41	1.33
8	O	40	GLY	C-N	5.51	1.41	1.33
4	D	277	ILE	CA-CB	-5.50	1.47	1.54
3	C	384	LEU	C-N	5.50	1.41	1.33
3	E	533	THR	CA-C	-5.50	1.45	1.52
4	F	340	ASP	C-N	5.50	1.40	1.33
3	C	381	PRO	CA-C	-5.50	1.44	1.52
4	D	376	LEU	C-N	5.50	1.38	1.33
6	K	22	ALA	C-N	5.50	1.41	1.33
2	N	81	VAL	C-N	5.50	1.41	1.33
3	C	458	VAL	C-N	5.50	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	89	LEU	C-N	5.50	1.42	1.33
3	A	93	SER	CA-C	5.49	1.59	1.52
3	C	467	LEU	CA-CB	5.49	1.61	1.53
3	E	525	PHE	CA-C	-5.49	1.46	1.52
7	P	324	SER	CA-C	-5.49	1.45	1.52
6	G	44	GLU	C-O	-5.49	1.17	1.24
4	B	421	GLY	C-O	5.49	1.28	1.23
2	N	104	GLU	N-CA	-5.49	1.39	1.46
8	O	332	VAL	C-N	-5.49	1.26	1.33
6	G	18	ASN	N-CA	-5.49	1.39	1.46
3	A	488	ILE	C-N	5.49	1.41	1.34
4	F	462	TRP	C-N	5.49	1.41	1.33
8	O	311	VAL	N-CA	-5.49	1.39	1.46
7	P	462	LYS	CA-CB	5.49	1.62	1.53
3	A	425	ASP	CA-CB	5.48	1.61	1.53
5	L	7	ILE	CA-C	-5.48	1.45	1.52
7	P	27	TRP	N-CA	5.48	1.52	1.46
6	K	33	LYS	CA-C	5.48	1.59	1.52
6	G	120	ILE	N-CA	-5.48	1.39	1.46
3	C	378	GLN	CA-C	-5.48	1.45	1.52
3	E	253	CYS	C-N	5.48	1.39	1.33
1	M	160	ASP	N-CA	-5.47	1.39	1.46
4	D	82	GLY	CA-C	-5.47	1.44	1.51
3	E	328	ALA	CA-C	-5.47	1.45	1.52
4	F	37	PRO	CA-C	-5.47	1.45	1.52
6	K	188	VAL	CA-C	-5.47	1.46	1.52
3	A	542	LYS	C-N	5.47	1.41	1.33
3	E	309	GLU	CA-C	-5.47	1.46	1.52
7	P	452	GLU	CA-CB	-5.47	1.44	1.53
3	A	220	PRO	N-CA	5.47	1.53	1.47
8	O	185	VAL	CA-C	-5.47	1.45	1.52
4	F	278	LEU	CA-C	-5.46	1.46	1.52
6	K	192	ASN	C-N	5.46	1.41	1.33
3	E	111	PRO	N-CA	-5.46	1.40	1.47
8	O	54	LYS	CA-CB	5.46	1.60	1.53
6	I	169	LEU	CA-C	5.46	1.59	1.52
2	N	19	GLY	N-CA	-5.46	1.39	1.45
2	N	56	HIS	N-CA	-5.46	1.39	1.46
3	A	232	PRO	N-CA	-5.46	1.40	1.47
3	E	47	GLU	CA-CB	5.46	1.62	1.53
3	C	317	LEU	N-CA	-5.45	1.39	1.46
3	E	246	CYS	C-N	5.45	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	318	VAL	C-N	5.45	1.41	1.33
6	I	24	ILE	CA-CB	-5.45	1.48	1.54
7	P	216	LYS	N-CA	-5.45	1.39	1.46
3	A	252	THR	N-CA	-5.45	1.39	1.46
3	C	361	ALA	CA-C	-5.45	1.45	1.52
3	C	412	ILE	CA-C	-5.45	1.45	1.52
3	E	165	SER	CA-CB	5.44	1.61	1.53
4	F	417	LYS	CA-CB	5.44	1.61	1.53
8	O	292	ALA	C-O	-5.44	1.17	1.24
6	G	217	ALA	C-N	5.44	1.40	1.33
4	D	393	ARG	CA-CB	-5.44	1.44	1.53
4	B	155	VAL	C-N	5.44	1.41	1.33
6	K	64	SER	C-N	5.44	1.41	1.33
3	C	604	LEU	C-N	5.43	1.41	1.33
5	J	38	ASP	CA-C	-5.43	1.45	1.52
5	L	20	ILE	N-CA	5.43	1.52	1.46
7	P	464	GLU	C-N	5.43	1.41	1.33
6	G	170	GLU	CA-C	-5.43	1.47	1.53
1	M	134	ARG	CA-CB	5.43	1.61	1.53
7	P	338	ASP	CA-C	-5.43	1.45	1.52
6	G	13	VAL	C-N	5.43	1.41	1.34
4	B	143	ALA	C-N	5.42	1.39	1.33
4	B	248	PRO	C-N	-5.42	1.26	1.33
7	P	211	MET	CA-CB	5.42	1.61	1.53
4	B	398	ASP	CA-C	-5.42	1.45	1.52
7	P	173	ILE	CA-CB	5.42	1.61	1.54
3	C	478	PHE	CA-CB	5.42	1.61	1.53
3	E	291	ALA	C-N	5.42	1.40	1.33
6	G	64	SER	N-CA	-5.42	1.39	1.46
4	B	271	GLU	CA-C	-5.42	1.45	1.52
4	F	348	ASP	N-CA	-5.42	1.39	1.46
7	P	290	CYS	C-N	5.42	1.40	1.33
3	A	331	ALA	C-N	5.42	1.40	1.33
6	I	121	LEU	C-O	5.42	1.30	1.24
7	P	276	LYS	C-N	5.42	1.41	1.33
3	E	455	ASN	CA-C	-5.41	1.46	1.52
3	C	340	ALA	N-CA	5.41	1.52	1.46
4	F	353	ILE	CA-C	-5.41	1.45	1.52
4	B	176	SER	N-CA	-5.41	1.39	1.46
6	G	50	ILE	CA-CB	-5.40	1.48	1.54
3	A	378	GLN	CA-C	-5.40	1.45	1.53
4	F	249	THR	C-N	5.40	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	151	SER	CA-CB	5.40	1.61	1.53
3	E	539	PRO	CA-C	5.40	1.58	1.52
6	K	26	LYS	C-N	5.40	1.41	1.33
7	P	310	LYS	C-N	5.40	1.40	1.33
8	O	313	VAL	CA-CB	-5.40	1.47	1.54
3	A	83	ASP	C-N	5.39	1.40	1.33
4	F	388	GLY	C-N	5.39	1.41	1.33
6	K	166	ARG	CA-C	-5.39	1.46	1.52
6	G	164	ALA	N-CA	-5.39	1.40	1.46
6	I	60	GLY	N-CA	-5.39	1.39	1.45
3	A	316	THR	C-N	5.39	1.40	1.33
7	P	75	LYS	C-N	5.39	1.41	1.33
5	J	79	GLU	CA-CB	-5.39	1.44	1.53
4	F	383	MET	CA-C	5.39	1.59	1.52
3	E	532	SER	CA-C	-5.39	1.45	1.52
6	G	125	ILE	CA-C	-5.39	1.45	1.52
3	A	315	THR	CA-C	-5.39	1.46	1.52
3	C	571	ALA	CA-C	-5.39	1.45	1.52
4	F	478	PRO	N-CA	-5.39	1.40	1.47
7	P	165	LEU	CA-CB	5.39	1.61	1.53
7	P	204	TRP	N-CA	-5.39	1.39	1.46
4	F	343	THR	C-N	5.38	1.40	1.33
3	E	291	ALA	N-CA	-5.38	1.39	1.46
3	E	342	TYR	N-CA	-5.38	1.40	1.46
4	B	363	GLN	CA-CB	5.38	1.61	1.53
6	I	124	LEU	CA-C	-5.38	1.45	1.52
5	L	31	LYS	C-N	5.38	1.41	1.33
3	C	177	ARG	C-N	5.38	1.40	1.33
2	N	79	ALA	C-N	5.37	1.41	1.34
3	C	91	PRO	CA-C	-5.37	1.46	1.52
6	I	133	LEU	CA-C	-5.37	1.46	1.53
4	D	350	THR	CA-C	-5.37	1.45	1.52
3	E	87	ARG	CA-C	-5.37	1.45	1.52
3	E	511	ASP	C-N	5.37	1.41	1.33
3	C	190	GLU	C-N	5.37	1.40	1.33
3	E	239	VAL	CA-CB	-5.37	1.47	1.54
4	F	331	GLN	CA-C	-5.37	1.46	1.52
6	G	68	LYS	CA-C	-5.37	1.46	1.52
4	B	87	ASP	CA-C	-5.36	1.45	1.53
4	B	313	SER	CA-C	-5.36	1.45	1.52
3	C	51	VAL	N-CA	-5.36	1.39	1.46
3	C	325	PRO	CA-C	-5.36	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	514	THR	CA-C	-5.36	1.45	1.52
6	G	190	VAL	N-CA	-5.36	1.39	1.46
7	P	148	SER	CA-C	-5.36	1.45	1.52
7	P	475	TYR	C-N	5.36	1.41	1.33
3	E	541	TRP	N-CA	-5.36	1.39	1.46
3	C	469	LYS	C-N	5.36	1.40	1.33
6	K	213	GLU	CA-CB	5.36	1.61	1.53
5	J	44	ASP	N-CA	-5.36	1.39	1.46
8	O	13	LEU	C-N	5.35	1.41	1.33
8	O	211	GLU	C-N	5.35	1.41	1.33
3	A	566	ASN	CA-C	-5.35	1.46	1.52
3	E	293	VAL	CA-C	5.35	1.60	1.52
3	A	121	SER	N-CA	-5.35	1.39	1.46
4	F	451	ASP	CA-C	-5.34	1.46	1.52
3	A	479	PRO	CA-CB	5.34	1.61	1.53
3	E	432	LEU	CA-C	-5.34	1.45	1.52
7	P	261	ASN	CA-CB	5.34	1.61	1.53
4	B	360	VAL	N-CA	-5.34	1.40	1.46
3	C	41	ILE	CA-C	-5.34	1.46	1.52
3	E	105	TYR	CA-C	-5.34	1.46	1.52
3	E	356	SER	C-N	5.34	1.41	1.33
3	E	157	ILE	CA-C	-5.33	1.46	1.52
6	K	63	LYS	C-N	5.33	1.41	1.33
7	P	367	LEU	C-N	5.33	1.40	1.33
5	J	33	LYS	N-CA	-5.33	1.39	1.46
4	D	39	VAL	CA-C	-5.33	1.46	1.52
3	E	371	LEU	N-CA	-5.33	1.40	1.46
8	O	314	GLU	C-N	5.33	1.41	1.33
5	J	38	ASP	CA-CB	5.33	1.62	1.53
3	A	405	ASP	CA-CB	5.33	1.62	1.53
3	E	198	LEU	C-N	5.33	1.41	1.33
3	C	55	ASN	CA-C	-5.33	1.46	1.53
8	O	211	GLU	N-CA	-5.33	1.40	1.46
3	A	142	THR	CA-C	5.32	1.60	1.52
4	B	174	SER	CA-C	-5.32	1.45	1.52
5	J	64	GLY	C-N	5.32	1.40	1.33
5	L	85	LYS	C-N	5.32	1.39	1.34
7	P	212	PRO	N-CA	5.32	1.54	1.47
7	P	313	LEU	N-CA	-5.32	1.40	1.46
6	G	67	LYS	C-N	5.32	1.40	1.33
6	I	180	ASN	N-CA	5.32	1.51	1.45
3	A	294	LEU	N-CA	-5.32	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	482	ARG	CA-C	-5.32	1.46	1.52
5	J	103	ILE	CA-CB	-5.32	1.48	1.54
3	C	370	ARG	C-N	5.32	1.41	1.34
5	J	18	HIS	CA-C	-5.32	1.45	1.52
3	C	551	ILE	N-CA	-5.31	1.40	1.46
4	D	323	GLU	N-CA	-5.31	1.39	1.46
3	C	293	VAL	CA-C	-5.31	1.46	1.52
4	B	150	MET	C-N	5.31	1.40	1.33
3	A	250	GLY	CA-C	-5.31	1.42	1.52
4	D	280	ASP	CA-CB	5.31	1.64	1.53
6	K	173	VAL	C-O	-5.31	1.18	1.24
3	A	313	LYS	CA-C	5.30	1.59	1.52
3	E	46	TYR	N-CA	-5.30	1.40	1.46
3	C	60	VAL	CA-C	-5.30	1.46	1.52
4	D	282	SER	N-CA	-5.30	1.40	1.46
3	A	41	ILE	C-N	5.30	1.41	1.33
3	A	233	LEU	CA-C	-5.30	1.46	1.52
3	E	548	ARG	CA-CB	5.30	1.61	1.53
6	G	200	ASN	C-N	5.30	1.41	1.33
3	E	409	SER	CA-C	-5.30	1.46	1.52
3	E	91	PRO	C-N	5.30	1.41	1.33
3	E	129	ASP	CA-C	-5.30	1.45	1.52
1	M	97	ARG	C-N	5.30	1.40	1.33
6	I	168	PRO	CA-C	-5.30	1.44	1.52
3	A	361	ALA	N-CA	-5.29	1.39	1.46
3	C	369	GLY	C-N	5.29	1.41	1.33
3	E	260	CYS	CA-CB	5.29	1.61	1.53
7	P	429	HIS	C-N	5.29	1.40	1.33
8	O	300	PHE	CA-C	5.29	1.59	1.52
4	F	268	TYR	CA-CB	5.29	1.61	1.53
4	D	146	TYR	CA-C	-5.29	1.47	1.53
4	D	426	SER	C-N	5.29	1.40	1.33
4	F	312	LEU	CA-C	5.29	1.59	1.52
7	P	198	GLU	CA-C	-5.29	1.46	1.52
8	O	209	SER	CA-C	-5.29	1.45	1.52
4	B	402	GLN	CA-C	-5.28	1.46	1.52
3	E	517	VAL	C-O	-5.28	1.18	1.24
8	O	183	ASP	C-N	5.28	1.40	1.33
8	O	161	ALA	N-CA	-5.28	1.40	1.46
6	G	48	THR	CA-C	-5.28	1.46	1.52
4	B	461	ALA	CA-CB	5.28	1.61	1.53
3	C	481	LEU	CA-C	-5.28	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	147	ASP	CA-CB	5.28	1.62	1.53
3	A	111	PRO	N-CA	-5.27	1.40	1.47
4	B	305	PRO	C-N	5.27	1.42	1.33
3	C	555	ASP	N-CA	-5.27	1.39	1.46
5	H	5	ASN	N-CA	5.27	1.52	1.46
4	B	97	GLY	CA-C	-5.27	1.44	1.51
4	D	147	PRO	CA-CB	5.27	1.61	1.53
1	M	67	SER	CA-CB	5.27	1.61	1.53
4	D	261	THR	C-N	5.27	1.41	1.34
4	F	456	GLU	CA-C	-5.27	1.46	1.52
4	B	194	VAL	CA-CB	-5.26	1.47	1.54
8	O	182	GLU	CA-CB	5.26	1.61	1.54
3	A	439	TRP	N-CA	-5.26	1.40	1.46
4	F	268	TYR	CA-C	-5.26	1.46	1.52
7	P	5	LYS	CA-CB	5.26	1.62	1.53
3	C	25	GLY	C-N	5.26	1.40	1.33
6	I	143	GLU	CA-CB	5.25	1.61	1.53
3	A	591	ARG	N-CA	-5.25	1.39	1.46
3	E	255	PRO	C-N	5.25	1.40	1.33
3	A	615	THR	CA-C	5.25	1.59	1.52
7	P	200	ARG	CA-C	-5.25	1.45	1.52
3	E	301	TYR	CA-CB	5.25	1.62	1.53
8	O	110	TYR	CA-C	-5.25	1.46	1.52
3	C	548	ARG	C-N	5.25	1.41	1.33
3	C	113	LYS	CA-CB	5.24	1.61	1.53
3	C	545	ASP	CA-CB	5.24	1.61	1.53
3	E	87	ARG	CA-CB	5.24	1.61	1.53
5	L	39	ALA	C-N	5.24	1.41	1.34
4	B	34	VAL	N-CA	-5.24	1.40	1.46
4	D	165	ALA	N-CA	-5.24	1.39	1.45
3	E	351	SER	CA-CB	5.24	1.61	1.53
6	I	177	ASP	CA-CB	-5.24	1.44	1.53
4	D	440	GLU	CA-C	-5.24	1.46	1.52
3	A	421	GLY	CA-C	-5.24	1.44	1.51
3	E	524	ASP	C-N	5.24	1.40	1.33
5	H	41	LYS	CA-CB	5.24	1.62	1.53
3	A	183	THR	C-N	5.23	1.40	1.33
3	A	409	SER	CA-CB	5.23	1.63	1.53
4	B	38	LEU	C-N	5.23	1.40	1.33
3	A	507	LEU	CA-CB	5.22	1.62	1.53
3	E	428	THR	CA-C	-5.22	1.46	1.52
3	A	300	LEU	N-CA	-5.22	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	295	MET	CA-C	-5.22	1.46	1.52
4	B	43	LYS	CA-C	-5.22	1.45	1.52
4	D	165	ALA	CA-C	-5.22	1.46	1.52
4	D	338	PRO	C-N	5.22	1.41	1.33
3	A	438	PHE	N-CA	-5.22	1.39	1.46
3	C	530	GLY	CA-C	5.22	1.58	1.51
1	M	144	GLU	CA-C	-5.21	1.45	1.52
4	B	64	GLN	N-CA	-5.21	1.39	1.45
3	E	493	GLU	C-O	-5.21	1.18	1.24
4	F	149	GLU	N-CA	-5.21	1.39	1.45
8	O	71	VAL	CA-C	-5.21	1.46	1.52
8	O	290	ARG	N-CA	-5.21	1.40	1.46
2	N	90	ALA	CA-C	-5.21	1.46	1.52
7	P	330	TYR	C-N	5.21	1.40	1.33
3	A	376	ALA	C-N	5.21	1.40	1.33
3	E	295	MET	CA-CB	5.21	1.61	1.53
3	E	566	ASN	CA-C	-5.21	1.46	1.52
4	F	336	THR	C-O	-5.21	1.17	1.24
3	A	537	PHE	N-CA	-5.20	1.39	1.46
8	O	174	SER	C-O	-5.20	1.18	1.24
4	B	74	ARG	C-N	5.20	1.40	1.33
6	G	54	GLU	C-N	5.20	1.41	1.34
6	G	58	ILE	C-N	5.20	1.40	1.33
3	E	422	ASP	CA-C	-5.20	1.46	1.52
6	I	213	GLU	N-CA	-5.20	1.39	1.46
3	C	180	GLY	CA-C	-5.20	1.45	1.52
3	E	122	ILE	C-N	5.20	1.40	1.33
1	M	43	PHE	N-CA	-5.19	1.40	1.46
3	A	450	HIS	CA-C	-5.19	1.46	1.52
4	B	139	ILE	CA-CB	-5.19	1.47	1.54
4	F	87	ASP	C-N	5.19	1.40	1.33
7	P	461	VAL	N-CA	-5.19	1.40	1.46
8	O	83	ILE	CA-C	-5.19	1.46	1.52
6	I	84	MET	CA-C	-5.19	1.46	1.52
3	A	363	ALA	N-CA	-5.19	1.40	1.46
3	E	219	VAL	C-N	5.19	1.40	1.33
4	F	150	MET	CA-C	-5.19	1.46	1.52
3	C	484	ARG	CA-C	-5.19	1.45	1.52
3	E	300	LEU	CA-C	-5.19	1.45	1.53
7	P	272	LEU	CA-C	-5.19	1.45	1.52
7	P	437	SER	C-N	5.19	1.40	1.33
3	C	197	ILE	N-CA	-5.19	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	399	VAL	C-N	5.19	1.40	1.33
6	I	20	MET	CA-C	-5.18	1.46	1.52
6	G	222	LEU	CA-C	-5.18	1.45	1.52
1	M	41	LYS	CA-C	5.18	1.59	1.52
8	O	125	LYS	N-CA	-5.18	1.40	1.45
5	J	17	ALA	CA-C	-5.18	1.46	1.52
3	E	148	VAL	C-O	-5.18	1.18	1.24
3	A	586	PHE	C-N	5.17	1.40	1.33
3	E	438	PHE	CA-C	-5.17	1.46	1.52
4	F	275	LEU	C-N	5.17	1.40	1.33
4	D	244	LEU	CA-CB	5.17	1.61	1.53
3	C	277	ALA	CA-C	-5.17	1.46	1.52
3	C	492	ALA	N-CA	-5.17	1.40	1.46
3	A	366	GLU	CA-C	-5.17	1.46	1.52
3	A	562	ALA	C-N	5.17	1.41	1.33
3	E	525	PHE	CA-CB	5.17	1.61	1.53
8	O	262	TYR	C-N	5.17	1.40	1.33
5	H	76	VAL	CA-C	-5.17	1.46	1.52
7	P	356	PHE	C-N	5.17	1.40	1.33
6	I	124	LEU	CA-CB	5.17	1.61	1.53
3	A	384	LEU	CA-C	-5.17	1.46	1.52
8	O	207	GLU	CA-CB	5.17	1.61	1.53
2	N	92	LEU	C-N	5.16	1.40	1.33
3	A	184	TRP	C-N	5.16	1.39	1.33
3	A	613	GLU	C-N	5.16	1.40	1.33
3	C	545	ASP	C-N	-5.16	1.27	1.33
4	D	35	ASN	CA-CB	5.16	1.61	1.53
3	E	61	ILE	CA-C	-5.16	1.46	1.52
5	L	35	ALA	CA-C	-5.16	1.46	1.52
7	P	10	SER	CA-C	-5.16	1.46	1.52
7	P	121	PRO	C-N	5.16	1.40	1.33
7	P	333	GLU	C-N	-5.16	1.27	1.34
4	B	365	HIS	CA-CB	5.16	1.61	1.53
4	D	194	VAL	CA-C	-5.16	1.46	1.52
8	O	273	GLU	CA-C	-5.16	1.46	1.52
3	C	541	TRP	CA-C	-5.16	1.46	1.52
4	B	53	VAL	CA-C	-5.16	1.46	1.52
3	A	110	ARG	CA-C	-5.15	1.46	1.52
3	A	415	ALA	CA-C	-5.15	1.46	1.52
4	D	120	ILE	CA-C	-5.15	1.46	1.52
3	E	244	PHE	C-N	5.15	1.39	1.33
4	F	339	ASN	CA-C	-5.15	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	I	88	VAL	CA-C	-5.15	1.46	1.52
4	D	42	GLU	CA-CB	5.15	1.61	1.53
7	P	246	SER	N-CA	-5.15	1.40	1.46
5	J	9	THR	C-O	-5.15	1.18	1.24
3	C	351	SER	CA-C	-5.15	1.46	1.52
2	N	97	LYS	CA-CB	5.14	1.60	1.53
4	F	51	GLU	CA-C	-5.14	1.46	1.52
6	G	24	ILE	CA-C	-5.14	1.46	1.52
1	M	143	VAL	N-CA	-5.14	1.40	1.46
8	O	18	GLN	N-CA	-5.14	1.39	1.46
3	C	194	ASP	CA-C	-5.14	1.46	1.52
5	L	105	PRO	CA-CB	-5.14	1.46	1.53
5	H	35	ALA	C-N	5.14	1.41	1.34
3	E	488	ILE	C-N	5.13	1.41	1.33
7	P	223	ASP	CA-C	5.13	1.59	1.52
2	N	73	ILE	C-N	5.13	1.41	1.33
3	E	578	LYS	N-CA	5.13	1.52	1.46
7	P	446	GLY	CA-C	-5.13	1.45	1.52
8	O	57	SER	CA-C	-5.13	1.46	1.53
6	I	170	GLU	C-O	-5.13	1.17	1.24
6	I	132	LEU	C-N	5.13	1.41	1.33
3	E	489	LEU	C-N	5.13	1.40	1.33
6	G	105	GLU	C-N	5.13	1.40	1.33
3	A	243	LEU	CA-C	-5.13	1.46	1.52
3	C	237	GLN	N-CA	-5.13	1.40	1.46
3	C	589	PRO	C-N	5.13	1.40	1.33
4	D	248	PRO	N-CA	-5.12	1.40	1.47
8	O	184	PHE	N-CA	-5.12	1.40	1.46
3	C	327	ALA	N-CA	-5.12	1.40	1.46
5	J	68	LEU	N-CA	5.12	1.52	1.46
3	E	546	MET	N-CA	-5.12	1.40	1.46
1	M	102	SER	N-CA	-5.12	1.40	1.46
3	E	463	TYR	C-N	5.12	1.40	1.33
1	M	27	GLN	N-CA	-5.12	1.40	1.46
4	D	232	ASN	CA-C	-5.12	1.46	1.52
6	K	34	GLU	C-N	5.11	1.40	1.33
4	D	142	TYR	CA-C	-5.11	1.46	1.52
3	A	533	THR	N-CA	-5.11	1.39	1.46
3	A	590	SER	N-CA	-5.11	1.39	1.46
3	E	355	ASP	N-CA	-5.11	1.40	1.46
4	F	155	VAL	CA-CB	-5.11	1.48	1.54
4	F	278	LEU	N-CA	-5.11	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	L	96	LYS	C-N	5.11	1.40	1.33
4	D	107	ASP	C-N	5.10	1.41	1.33
6	I	191	SER	CA-C	-5.10	1.46	1.52
1	M	171	ASN	C-N	5.10	1.40	1.33
4	D	361	ASP	CA-C	-5.10	1.46	1.52
5	H	80	LEU	C-N	5.10	1.41	1.33
4	F	96	THR	CA-CB	5.09	1.61	1.53
4	F	118	ARG	CA-CB	5.09	1.60	1.53
5	L	104	LYS	CA-CB	5.09	1.60	1.54
4	F	151	ILE	C-N	5.09	1.41	1.33
4	F	182	GLU	CA-C	-5.09	1.46	1.52
6	K	122	GLN	C-N	5.09	1.41	1.34
3	C	429	THR	C-N	5.09	1.40	1.33
3	C	575	GLY	CA-C	-5.09	1.44	1.51
8	O	277	ALA	CA-C	5.09	1.59	1.52
3	A	185	ILE	CA-C	-5.09	1.46	1.52
8	O	204	SER	C-N	5.08	1.40	1.33
3	C	404	PRO	CA-CB	-5.08	1.46	1.53
3	E	37	ALA	CA-C	-5.08	1.46	1.52
3	E	551	ILE	C-N	5.08	1.40	1.33
4	F	79	VAL	C-N	5.08	1.41	1.33
4	F	375	VAL	CA-C	-5.08	1.46	1.52
5	L	86	ILE	CA-C	5.08	1.60	1.52
4	B	187	ILE	N-CA	-5.08	1.40	1.46
3	C	211	LEU	CA-C	-5.08	1.45	1.52
8	O	61	LEU	C-N	5.08	1.40	1.33
7	P	473	ILE	C-N	5.08	1.40	1.33
1	M	31	LEU	CA-C	-5.08	1.46	1.52
5	J	88	GLU	C-N	5.08	1.40	1.33
4	B	430	LYS	N-CA	5.08	1.52	1.46
7	P	382	ASP	CA-C	-5.08	1.46	1.52
4	B	391	MET	C-N	5.07	1.39	1.33
3	E	365	ARG	N-CA	-5.07	1.40	1.46
6	G	154	ASP	CA-CB	5.07	1.61	1.53
4	F	386	ALA	CA-C	-5.07	1.46	1.52
8	O	332	VAL	CA-C	-5.07	1.47	1.52
5	J	58	GLU	CA-C	-5.07	1.45	1.52
1	M	46	ILE	N-CA	-5.07	1.40	1.46
4	F	450	GLU	N-CA	-5.07	1.39	1.46
4	D	88	VAL	C-N	5.06	1.41	1.33
3	C	278	ILE	C-N	5.06	1.39	1.33
3	C	329	ARG	N-CA	-5.06	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	169	LEU	C-N	5.06	1.40	1.33
5	J	92	ASP	CA-C	-5.06	1.45	1.52
7	P	456	HIS	C-N	5.06	1.40	1.33
4	B	175	ALA	CA-C	-5.06	1.46	1.52
3	C	483	ASP	CA-CB	5.06	1.61	1.53
3	E	193	LEU	CA-CB	5.06	1.61	1.53
6	K	24	ILE	CA-C	5.06	1.59	1.52
4	D	29	ASN	CA-C	-5.06	1.42	1.52
8	O	91	GLU	C-N	5.06	1.40	1.33
4	B	52	ILE	CA-CB	-5.06	1.48	1.54
8	O	64	GLU	N-CA	5.06	1.52	1.46
8	O	20	ALA	CA-C	5.05	1.59	1.52
5	J	53	GLU	CA-CB	5.05	1.62	1.53
3	A	196	LYS	C-N	5.05	1.40	1.33
5	H	53	GLU	C-N	5.05	1.41	1.33
1	M	123	THR	CA-C	-5.05	1.46	1.52
3	A	556	GLU	N-CA	-5.05	1.40	1.46
7	P	410	ASP	C-N	5.05	1.40	1.33
2	N	68	LEU	C-N	5.05	1.39	1.33
4	B	388	GLY	CA-C	-5.05	1.44	1.51
4	B	57	LEU	CA-C	-5.05	1.45	1.52
4	B	221	THR	N-CA	-5.05	1.40	1.46
4	D	112	ILE	CA-CB	-5.05	1.48	1.54
4	D	460	GLN	CA-CB	5.05	1.61	1.53
3	A	141	PHE	CA-CB	5.05	1.60	1.53
7	P	162	GLU	CA-C	5.05	1.59	1.52
7	P	233	THR	CA-C	-5.05	1.46	1.52
3	E	239	VAL	N-CA	-5.04	1.40	1.46
3	A	332	SER	CA-C	-5.04	1.46	1.52
4	D	442	THR	C-N	5.04	1.40	1.33
4	F	293	ALA	CA-C	5.04	1.58	1.52
6	K	199	ILE	CA-C	-5.04	1.46	1.52
2	N	3	GLU	N-CA	5.04	1.52	1.46
3	A	474	ASN	CA-C	-5.04	1.46	1.52
4	B	303	GLY	CA-C	-5.04	1.44	1.51
7	P	270	ASP	CA-CB	5.04	1.61	1.53
5	H	81	ALA	N-CA	-5.04	1.39	1.46
3	A	332	SER	N-CA	-5.04	1.40	1.46
3	A	444	LYS	CA-C	-5.04	1.46	1.52
6	K	152	MET	C-O	-5.04	1.20	1.23
3	A	48	LEU	N-CA	-5.04	1.39	1.46
8	O	312	TYR	C-N	5.04	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	561	VAL	C-N	5.04	1.40	1.34
3	C	291	ALA	C-N	5.04	1.40	1.33
7	P	442	ASP	CA-CB	-5.04	1.45	1.53
5	J	53	GLU	CA-C	5.04	1.59	1.52
4	D	77	VAL	CA-CB	-5.03	1.47	1.55
3	E	338	THR	N-CA	-5.03	1.40	1.46
6	K	30	GLU	CA-CB	5.03	1.61	1.53
4	D	191	ALA	N-CA	-5.03	1.40	1.46
4	D	249	THR	N-CA	-5.03	1.40	1.46
3	A	324	MET	CA-CB	5.03	1.61	1.53
3	E	383	TYR	CA-CB	5.03	1.62	1.53
8	O	52	GLU	C-N	5.03	1.40	1.33
6	K	97	ASP	C-N	5.03	1.40	1.33
5	L	54	LEU	CA-C	-5.02	1.46	1.52
3	A	525	PHE	CA-C	-5.02	1.47	1.53
4	B	200	VAL	N-CA	-5.02	1.40	1.46
6	K	153	LYS	C-O	-5.02	1.18	1.24
7	P	4	THR	C-N	5.02	1.40	1.33
7	P	179	GLN	N-CA	-5.02	1.39	1.46
4	B	433	LEU	CA-C	-5.01	1.46	1.52
3	C	100	LEU	N-CA	5.01	1.52	1.46
8	O	102	ILE	C-N	5.01	1.41	1.33
5	H	91	LYS	CA-CB	5.01	1.61	1.53
1	M	30	SER	N-CA	-5.01	1.40	1.46
3	E	447	GLN	C-O	-5.01	1.17	1.24
4	F	78	GLN	CA-C	-5.01	1.46	1.52
5	J	77	GLN	N-CA	-5.01	1.40	1.46
3	E	503	GLY	N-CA	5.01	1.50	1.45
7	P	243	GLN	N-CA	-5.01	1.40	1.46
5	L	21	VAL	CA-C	-5.01	1.46	1.52
3	A	126	ARG	CA-C	-5.00	1.46	1.52
8	O	336	ASN	CA-C	-5.00	1.46	1.52
7	P	471	ALA	N-CA	-5.00	1.40	1.46
8	O	282	GLN	CA-C	-5.00	1.46	1.52

All (2632) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	123	GLY	CA-C-N	12.77	132.92	119.76
4	F	123	GLY	C-N-CA	12.77	132.92	119.76
3	A	535	ASP	N-CA-C	-11.41	99.89	114.04
4	F	104	VAL	N-CA-C	-11.39	92.07	108.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	477	SER	CA-C-N	11.36	131.15	119.56
4	B	477	SER	C-N-CA	11.36	131.15	119.56
3	E	403	SER	CA-C-N	11.30	130.99	119.24
3	E	403	SER	C-N-CA	11.30	130.99	119.24
5	H	8	ALA	N-CA-C	11.04	123.32	111.28
3	E	259	GLY	CA-C-N	10.81	135.13	120.54
3	E	259	GLY	C-N-CA	10.81	135.13	120.54
4	F	269	GLN	N-CA-C	10.46	122.76	111.36
3	E	311	ILE	CA-C-N	10.40	135.26	120.28
3	E	311	ILE	C-N-CA	10.40	135.26	120.28
3	A	541	TRP	N-CA-C	10.34	122.55	111.28
6	G	51	VAL	N-CA-C	10.29	120.30	110.42
6	G	145	ASP	CA-C-N	10.11	134.31	120.46
6	G	145	ASP	C-N-CA	10.11	134.31	120.46
4	D	175	ALA	N-CA-C	-10.10	93.72	109.07
5	H	29	GLN	N-CA-C	10.01	122.19	111.28
7	P	446	GLY	CA-C-N	9.92	133.97	120.38
7	P	446	GLY	C-N-CA	9.92	133.97	120.38
4	F	361	ASP	CA-C-N	9.90	134.34	120.29
4	F	361	ASP	C-N-CA	9.90	134.34	120.29
8	O	84	GLU	N-CA-C	9.87	122.04	111.28
3	C	327	ALA	CA-C-N	9.77	133.15	120.44
3	C	327	ALA	C-N-CA	9.77	133.15	120.44
3	E	175	PRO	CA-C-O	-9.75	113.88	120.90
4	D	178	LEU	O-C-N	-9.72	115.49	121.71
3	A	567	TRP	CA-C-N	9.70	133.28	120.28
3	A	567	TRP	C-N-CA	9.70	133.28	120.28
8	O	215	LYS	CA-C-O	-9.69	110.38	121.81
7	P	158	VAL	CA-C-N	9.68	133.26	120.28
7	P	158	VAL	C-N-CA	9.68	133.26	120.28
8	O	109	GLU	CA-C-N	9.68	133.25	120.28
8	O	109	GLU	C-N-CA	9.68	133.25	120.28
7	P	339	ILE	N-CA-CB	9.60	121.78	110.55
3	A	240	LEU	O-C-N	9.55	131.91	122.07
6	K	50	ILE	CA-C-N	9.49	133.47	120.46
6	K	50	ILE	C-N-CA	9.49	133.47	120.46
7	P	117	PHE	CA-C-N	9.47	132.75	120.44
7	P	117	PHE	C-N-CA	9.47	132.75	120.44
3	A	535	ASP	CA-C-N	9.39	133.63	120.29
3	A	535	ASP	C-N-CA	9.39	133.63	120.29
7	P	147	VAL	CA-C-N	9.37	133.19	120.54
7	P	147	VAL	C-N-CA	9.37	133.19	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	10	SER	CA-C-N	9.35	133.56	120.29
7	P	10	SER	C-N-CA	9.35	133.56	120.29
3	C	408	GLY	N-CA-C	-9.34	97.05	110.96
8	O	116	TRP	N-CA-CB	9.27	126.16	110.49
3	E	75	GLU	N-CA-CB	9.25	123.50	110.17
4	F	175	ALA	CA-C-O	-9.25	111.55	121.45
3	A	386	ALA	CA-C-O	-9.23	110.64	120.42
7	P	401	LEU	CA-C-N	9.17	132.57	120.28
7	P	401	LEU	C-N-CA	9.17	132.57	120.28
6	G	209	LEU	CA-C-N	9.16	133.47	120.28
6	G	209	LEU	C-N-CA	9.16	133.47	120.28
6	I	71	LEU	N-CA-C	-9.14	99.75	112.45
3	E	153	SER	N-CA-C	-9.07	94.43	108.76
3	C	309	GLU	CA-C-N	9.00	131.09	119.84
3	C	309	GLU	C-N-CA	9.00	131.09	119.84
5	H	33	LYS	CA-C-N	8.97	132.31	120.28
5	H	33	LYS	C-N-CA	8.97	132.31	120.28
3	A	355	ASP	N-CA-C	-8.97	92.28	107.80
8	O	218	VAL	CA-C-N	8.96	128.72	119.76
8	O	218	VAL	C-N-CA	8.96	128.72	119.76
4	B	337	MET	O-C-N	-8.95	112.86	121.18
4	F	427	ILE	CA-C-N	8.94	132.26	120.28
4	F	427	ILE	C-N-CA	8.94	132.26	120.28
3	E	609	GLU	CA-C-N	8.93	132.25	120.28
3	E	609	GLU	C-N-CA	8.93	132.25	120.28
5	J	8	ALA	CA-C-N	8.93	132.97	120.29
5	J	8	ALA	C-N-CA	8.93	132.97	120.29
2	N	82	ASP	N-CA-CB	8.91	123.22	110.12
3	A	399	VAL	CA-C-N	8.89	133.33	120.71
3	A	399	VAL	C-N-CA	8.89	133.33	120.71
8	O	105	MET	CA-C-N	8.88	130.94	119.84
8	O	105	MET	C-N-CA	8.88	130.94	119.84
4	F	430	LYS	N-CA-CB	8.87	123.16	110.12
4	B	120	ILE	N-CA-C	-8.84	104.72	113.20
7	P	409	GLY	N-CA-C	-8.81	102.42	115.72
7	P	183	CYS	CA-C-N	8.81	132.27	120.65
7	P	183	CYS	C-N-CA	8.81	132.27	120.65
3	C	166	LEU	N-CA-C	-8.78	100.69	111.40
3	C	417	SER	N-CA-C	-8.73	100.30	108.07
6	I	88	VAL	N-CA-C	-8.63	102.42	110.53
5	J	104	LYS	N-CA-C	-8.63	96.90	110.10
4	B	395	ASP	CA-C-N	8.61	131.82	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	395	ASP	C-N-CA	8.61	131.82	120.28
3	A	402	GLY	N-CA-C	-8.59	101.76	111.63
5	H	5	ASN	CA-C-N	8.57	129.43	120.00
5	H	5	ASN	C-N-CA	8.57	129.43	120.00
4	B	34	VAL	N-CA-C	-8.56	95.67	108.17
8	O	86	LEU	N-CA-C	8.54	120.59	111.28
2	N	81	VAL	N-CA-CB	8.49	123.31	110.58
3	A	244	PHE	CA-C-O	-8.48	112.83	121.06
4	B	343	THR	N-CA-C	-8.48	101.94	112.88
4	F	305	PRO	CA-C-N	8.48	131.03	120.34
4	F	305	PRO	C-N-CA	8.48	131.03	120.34
3	E	130	THR	O-C-N	-8.47	115.92	121.85
6	K	110	ILE	O-C-N	8.47	130.09	121.87
4	D	94	GLU	N-CA-C	-8.45	95.73	108.99
4	B	361	ASP	CA-C-N	8.44	133.14	120.31
4	B	361	ASP	C-N-CA	8.44	133.14	120.31
3	C	53	HIS	N-CA-C	-8.44	102.99	113.28
3	C	543	THR	CA-C-N	8.42	131.38	120.44
3	C	543	THR	C-N-CA	8.42	131.38	120.44
3	A	399	VAL	N-CA-CB	8.40	121.07	110.99
4	D	259	ALA	O-C-N	8.40	131.03	122.12
7	P	211	MET	O-C-N	-8.38	112.83	120.71
3	E	549	ALA	CA-C-N	8.36	131.81	120.44
3	E	549	ALA	C-N-CA	8.36	131.81	120.44
7	P	358	GLU	CA-C-N	8.35	131.30	120.44
7	P	358	GLU	C-N-CA	8.35	131.30	120.44
4	F	477	SER	CA-C-N	8.35	128.46	119.28
4	F	477	SER	C-N-CA	8.35	128.46	119.28
3	E	598	GLY	CA-C-N	8.34	131.45	120.28
3	E	598	GLY	C-N-CA	8.34	131.45	120.28
4	F	146	TYR	CA-C-N	8.33	128.28	120.03
4	F	146	TYR	C-N-CA	8.33	128.28	120.03
3	E	175	PRO	N-CA-CB	8.32	107.85	103.19
4	D	54	ASN	CA-C-N	8.29	134.17	122.72
4	D	54	ASN	C-N-CA	8.29	134.17	122.72
3	E	614	SER	N-CA-CB	8.29	122.09	110.07
4	D	263	ALA	CA-C-N	8.28	131.38	120.28
4	D	263	ALA	C-N-CA	8.28	131.38	120.28
3	C	433	GLY	O-C-N	8.26	130.12	122.19
4	F	478	PRO	N-CA-CB	8.26	112.31	103.39
4	F	218	ASN	CA-C-N	8.23	131.14	120.44
4	F	218	ASN	C-N-CA	8.23	131.14	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	90	LYS	N-CA-C	-8.22	103.35	112.72
5	L	5	ASN	CA-C-N	8.20	129.02	120.00
5	L	5	ASN	C-N-CA	8.20	129.02	120.00
3	A	142	THR	CA-C-N	8.18	130.07	119.84
3	A	142	THR	C-N-CA	8.18	130.07	119.84
4	B	121	ASP	CA-C-O	8.18	129.38	119.97
4	F	346	ILE	CA-C-O	-8.18	108.99	119.95
3	A	611	PHE	CA-C-O	-8.18	111.75	120.42
13	l	54	ILE	CA-C-N	8.17	125.39	120.24
13	l	54	ILE	C-N-CA	8.17	125.39	120.24
3	C	174	LEU	CA-C-N	8.16	128.78	120.38
3	C	174	LEU	C-N-CA	8.16	128.78	120.38
4	F	415	ALA	N-CA-C	-8.16	102.39	111.28
1	M	165	VAL	CA-C-O	-8.15	112.21	120.85
3	E	367	ILE	CA-C-N	8.15	131.20	120.28
3	E	367	ILE	C-N-CA	8.15	131.20	120.28
6	G	25	ARG	N-CA-C	8.13	120.14	111.28
3	C	486	LYS	CA-C-N	8.12	131.16	120.28
3	C	486	LYS	C-N-CA	8.12	131.16	120.28
6	I	118	LYS	CA-C-N	8.11	127.79	119.19
6	I	118	LYS	C-N-CA	8.11	127.79	119.19
3	E	57	VAL	CA-C-O	-8.11	111.80	121.04
3	A	265	ILE	CA-C-O	-8.09	112.28	120.85
5	J	100	GLU	N-CA-C	8.08	120.09	111.28
3	A	539	PRO	CA-C-N	8.04	131.84	120.42
3	A	539	PRO	C-N-CA	8.04	131.84	120.42
4	D	383	MET	CB-CA-C	-8.04	98.20	110.90
7	P	13	PHE	CA-C-N	8.01	131.01	120.28
7	P	13	PHE	C-N-CA	8.01	131.01	120.28
7	P	271	PHE	CA-C-N	8.00	131.80	120.28
7	P	271	PHE	C-N-CA	8.00	131.80	120.28
3	A	370	ARG	CA-C-N	8.00	131.64	120.29
3	A	370	ARG	C-N-CA	8.00	131.64	120.29
4	D	265	TYR	CA-C-O	-7.99	112.47	120.70
3	C	563	ASN	N-CA-C	-7.99	103.26	113.16
5	L	16	GLU	N-CA-C	7.98	119.98	111.28
8	O	56	GLY	O-C-N	7.98	129.68	122.81
6	K	209	LEU	CA-C-N	7.96	130.95	120.28
6	K	209	LEU	C-N-CA	7.96	130.95	120.28
3	A	254	ILE	CA-C-O	-7.94	115.81	119.94
4	B	245	ALA	N-CA-C	7.93	123.00	113.16
4	D	195	ARG	CA-C-N	7.93	127.59	119.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	195	ARG	C-N-CA	7.93	127.59	119.19
3	E	54	ASP	N-CA-C	-7.92	101.94	111.69
4	F	279	THR	O-C-N	-7.92	113.60	123.27
6	I	82	ASN	N-CA-C	-7.92	103.22	113.12
2	N	38	PHE	CA-C-N	7.92	132.28	120.95
2	N	38	PHE	C-N-CA	7.92	132.28	120.95
5	H	72	ALA	N-CA-C	-7.92	103.41	113.23
4	F	418	ALA	CA-C-N	7.91	130.37	120.72
4	F	418	ALA	C-N-CA	7.91	130.37	120.72
6	G	110	ILE	N-CA-C	-7.90	103.10	110.53
3	E	578	LYS	CA-C-N	7.89	131.50	120.29
3	E	578	LYS	C-N-CA	7.89	131.50	120.29
3	E	297	PHE	CA-C-N	7.87	127.51	119.56
3	E	297	PHE	C-N-CA	7.87	127.51	119.56
8	O	240	LYS	CA-C-O	-7.86	112.21	120.55
3	C	423	PHE	N-CA-C	-7.86	102.52	114.16
3	C	556	GLU	N-CA-C	-7.86	102.71	111.28
3	C	167	ILE	CA-C-O	7.85	128.99	120.43
4	D	177	GLY	N-CA-C	-7.85	103.14	116.01
8	O	4	ALA	CA-C-N	7.85	133.81	121.56
8	O	4	ALA	C-N-CA	7.85	133.81	121.56
4	D	142	TYR	CA-C-N	7.84	132.58	120.75
4	D	142	TYR	C-N-CA	7.84	132.58	120.75
3	A	610	ARG	CA-C-N	7.83	131.40	120.29
3	A	610	ARG	C-N-CA	7.83	131.40	120.29
7	P	449	ASP	CA-C-O	-7.82	112.26	120.55
3	A	500	GLN	CA-C-O	-7.80	112.80	121.00
8	O	341	LYS	CA-C-N	7.79	130.57	120.44
8	O	341	LYS	C-N-CA	7.79	130.57	120.44
7	P	27	TRP	CA-C-N	7.79	131.06	120.38
7	P	27	TRP	C-N-CA	7.79	131.06	120.38
8	O	164	ARG	CA-C-N	7.79	130.72	120.28
8	O	164	ARG	C-N-CA	7.79	130.72	120.28
3	E	247	VAL	O-C-N	-7.79	114.67	123.00
4	D	410	GLY	CA-C-N	7.78	131.33	120.29
4	D	410	GLY	C-N-CA	7.78	131.33	120.29
3	C	547	MET	CA-C-N	7.77	130.69	120.28
3	C	547	MET	C-N-CA	7.77	130.69	120.28
5	J	26	LYS	CA-C-N	7.76	130.53	120.44
5	J	26	LYS	C-N-CA	7.76	130.53	120.44
3	C	569	LYS	N-CA-C	-7.75	102.91	111.36
8	O	264	GLU	O-C-N	7.75	130.34	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	112	ASP	CA-C-N	7.75	131.00	120.54
7	P	112	ASP	C-N-CA	7.75	131.00	120.54
6	I	12	GLN	N-CA-CB	7.74	121.24	110.01
2	N	13	ASP	N-CA-CB	7.74	121.41	110.04
3	C	324	MET	CA-C-N	7.74	127.79	119.90
3	C	324	MET	C-N-CA	7.74	127.79	119.90
3	C	364	LEU	CA-C-O	-7.73	112.23	120.42
4	F	482	ASP	N-CA-CB	7.73	121.60	110.16
4	F	193	LEU	N-CA-C	-7.70	102.94	113.18
1	M	86	SER	CA-C-N	-7.70	112.75	122.37
1	M	86	SER	C-N-CA	-7.70	112.75	122.37
4	D	197	THR	N-CA-C	-7.70	102.97	111.36
4	D	162	ASN	CA-C-N	7.68	132.04	121.05
4	D	162	ASN	C-N-CA	7.68	132.04	121.05
6	K	70	MET	N-CA-C	-7.68	103.36	112.89
8	O	161	ALA	N-CA-C	-7.68	102.84	111.14
2	N	25	ILE	N-CA-CB	7.68	123.90	111.23
3	C	365	ARG	CA-C-N	7.68	130.42	120.44
3	C	365	ARG	C-N-CA	7.68	130.42	120.44
3	E	85	VAL	N-CA-C	-7.66	97.38	108.11
7	P	313	LEU	CA-C-N	7.66	131.05	120.63
7	P	313	LEU	C-N-CA	7.66	131.05	120.63
4	F	311	ASP	CA-C-N	7.66	130.39	120.44
4	F	311	ASP	C-N-CA	7.66	130.39	120.44
3	A	383	TYR	CA-C-N	7.65	130.86	120.54
3	A	383	TYR	C-N-CA	7.65	130.86	120.54
3	A	316	THR	N-CA-C	-7.63	95.86	108.76
5	L	20	ILE	CA-C-O	-7.63	113.08	121.17
2	N	28	ILE	N-CA-C	-7.62	96.09	107.37
6	I	107	LEU	N-CA-C	7.62	119.58	111.28
5	J	8	ALA	N-CA-C	7.62	119.58	111.28
3	E	339	LEU	CA-C-N	7.61	130.47	120.28
3	E	339	LEU	C-N-CA	7.61	130.47	120.28
6	G	138	ILE	N-CA-CB	7.59	120.10	110.99
3	A	271	LYS	N-CA-CB	-7.59	99.06	110.07
4	D	106	GLU	N-CA-C	-7.59	103.09	112.88
4	B	291	VAL	N-CA-CB	7.59	120.66	110.26
2	N	44	LYS	N-CA-C	-7.57	102.25	113.61
3	A	597	HIS	CA-C-N	7.57	129.84	120.22
3	A	597	HIS	C-N-CA	7.57	129.84	120.22
1	M	44	ARG	CB-CA-C	-7.57	98.23	110.79
4	F	145	ILE	N-CA-C	-7.57	97.25	108.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	184	TRP	CA-C-N	7.57	133.40	123.11
3	E	184	TRP	C-N-CA	7.57	133.40	123.11
3	E	215	TRP	CA-C-N	7.57	127.33	119.76
3	E	215	TRP	C-N-CA	7.57	127.33	119.76
3	A	533	THR	N-CA-C	-7.56	104.47	112.93
3	E	419	ALA	N-CA-C	-7.56	100.83	112.99
3	C	552	SER	CA-C-O	7.55	128.55	120.55
6	K	134	GLU	CA-C-O	-7.54	114.37	121.08
3	E	535	ASP	N-CA-C	-7.54	102.61	112.41
3	E	559	LYS	CA-C-O	-7.54	112.56	120.55
5	J	30	ASP	CA-C-N	7.53	131.13	120.28
5	J	30	ASP	C-N-CA	7.53	131.13	120.28
6	K	75	ILE	N-CA-C	-7.53	103.12	110.72
6	K	101	GLU	CA-C-N	7.51	130.35	120.28
6	K	101	GLU	C-N-CA	7.51	130.35	120.28
4	D	444	ILE	CA-C-N	7.51	131.41	120.82
4	D	444	ILE	C-N-CA	7.51	131.41	120.82
3	E	548	ARG	CA-C-O	7.51	128.51	120.55
4	D	248	PRO	CA-C-N	7.51	130.20	120.44
4	D	248	PRO	C-N-CA	7.51	130.20	120.44
8	O	184	PHE	CB-CA-C	-7.51	101.33	110.94
5	H	8	ALA	CA-C-N	7.50	130.94	120.29
5	H	8	ALA	C-N-CA	7.50	130.94	120.29
1	M	101	VAL	N-CA-C	-7.50	95.35	107.28
3	A	299	GLU	O-C-N	7.49	131.49	122.27
4	B	62	VAL	N-CA-C	-7.49	97.67	108.53
7	P	335	LEU	CA-C-N	7.48	130.31	120.28
7	P	335	LEU	C-N-CA	7.48	130.31	120.28
3	A	252	THR	N-CA-C	-7.48	95.96	108.75
8	O	9	ASN	CA-C-O	-7.48	113.62	121.55
3	E	206	LYS	CA-C-O	7.48	128.47	120.55
3	A	71	GLN	N-CA-C	-7.47	97.06	109.24
7	P	411	VAL	CB-CA-C	7.46	121.98	110.50
3	E	579	HIS	CA-C-N	7.45	130.26	120.28
3	E	579	HIS	C-N-CA	7.45	130.26	120.28
4	B	475	ARG	CA-C-N	7.45	133.34	122.99
4	B	475	ARG	C-N-CA	7.45	133.34	122.99
3	A	590	SER	CA-C-N	7.44	133.33	120.68
3	A	590	SER	C-N-CA	7.44	133.33	120.68
6	K	173	VAL	CA-C-N	7.44	131.81	122.43
6	K	173	VAL	C-N-CA	7.44	131.81	122.43
1	M	78	ASN	CA-C-N	7.43	130.64	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	78	ASN	C-N-CA	7.43	130.64	120.46
3	E	174	LEU	CA-C-N	7.43	125.08	119.66
3	E	174	LEU	C-N-CA	7.43	125.08	119.66
3	A	101	MET	CA-C-N	7.42	132.68	122.07
3	A	101	MET	C-N-CA	7.42	132.68	122.07
4	B	129	GLU	N-CA-C	-7.42	106.16	114.62
7	P	243	GLN	CA-C-N	7.42	130.53	120.44
7	P	243	GLN	C-N-CA	7.42	130.53	120.44
2	N	97	LYS	CA-C-N	7.41	133.17	122.35
2	N	97	LYS	C-N-CA	7.41	133.17	122.35
3	C	354	ALA	N-CA-C	-7.41	96.25	108.76
4	F	142	TYR	CA-C-N	7.40	135.68	121.54
4	F	142	TYR	C-N-CA	7.40	135.68	121.54
5	J	48	ILE	N-CA-C	7.40	122.40	112.04
4	D	283	SER	CA-C-N	7.39	130.18	120.28
4	D	283	SER	C-N-CA	7.39	130.18	120.28
4	D	276	THR	CA-C-O	7.39	128.43	120.38
5	L	7	ILE	CA-C-N	7.39	130.18	120.28
5	L	7	ILE	C-N-CA	7.39	130.18	120.28
6	K	110	ILE	CA-C-O	-7.39	113.27	120.95
6	K	130	LEU	N-CA-CB	-7.38	98.36	110.40
7	P	168	ASN	CA-C-O	-7.38	112.65	120.55
8	O	245	GLU	CA-C-N	7.38	130.04	120.44
8	O	245	GLU	C-N-CA	7.38	130.04	120.44
3	C	458	VAL	N-CA-C	-7.38	105.16	112.17
6	G	12	GLN	N-CA-C	7.38	119.32	111.28
7	P	432	GLU	CA-C-O	7.38	128.24	120.42
8	O	330	ILE	N-CA-C	-7.38	97.78	108.11
3	E	287	GLY	N-CA-C	-7.37	104.67	114.25
8	O	19	ASN	N-CA-C	-7.37	103.42	113.30
6	I	176	ASN	CA-C-O	7.35	127.95	119.35
3	C	479	PRO	CA-C-N	7.35	130.53	120.46
3	C	479	PRO	C-N-CA	7.35	130.53	120.46
1	M	81	TYR	CA-C-N	7.34	130.12	120.28
1	M	81	TYR	C-N-CA	7.34	130.12	120.28
3	C	424	SER	CA-C-N	7.33	131.82	120.60
3	C	424	SER	C-N-CA	7.33	131.82	120.60
8	O	165	LYS	N-CA-CB	7.32	120.89	110.12
2	N	32	THR	N-CA-C	-7.32	104.33	113.55
8	O	335	LYS	N-CA-CB	7.32	122.86	110.49
7	P	443	LYS	CA-C-N	7.31	130.68	120.29
7	P	443	LYS	C-N-CA	7.31	130.68	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	41	ILE	CA-C-N	7.30	133.93	120.87
3	C	41	ILE	C-N-CA	7.30	133.93	120.87
4	F	342	ILE	N-CA-C	-7.29	105.44	112.29
1	M	199	GLU	CA-C-N	7.28	130.04	120.28
1	M	199	GLU	C-N-CA	7.28	130.04	120.28
3	A	201	GLU	N-CA-CB	7.27	121.97	110.55
7	P	425	ASN	N-CA-C	-7.27	103.29	111.14
3	E	161	VAL	CA-C-N	7.27	131.81	121.42
3	E	161	VAL	C-N-CA	7.27	131.81	121.42
8	O	24	THR	N-CA-C	-7.26	102.36	112.45
8	O	38	LEU	CA-C-N	7.26	135.04	121.97
8	O	38	LEU	C-N-CA	7.26	135.04	121.97
6	I	62	PHE	CA-C-N	7.26	130.01	120.28
6	I	62	PHE	C-N-CA	7.26	130.01	120.28
4	B	246	ASN	N-CA-C	-7.25	104.25	113.23
7	P	196	ILE	CA-C-N	7.25	127.58	119.32
7	P	196	ILE	C-N-CA	7.25	127.58	119.32
6	K	184	VAL	N-CA-C	-7.25	97.97	108.11
3	C	137	ILE	N-CA-C	7.24	118.35	109.30
5	L	39	ALA	N-CA-C	-7.24	104.60	113.50
3	C	147	GLN	N-CA-C	-7.24	98.86	108.34
4	B	36	GLY	CA-C-N	7.23	127.23	119.28
4	B	36	GLY	C-N-CA	7.23	127.23	119.28
4	F	477	SER	CA-C-O	-7.23	112.79	120.88
6	K	92	ARG	CA-C-O	-7.22	112.90	120.55
8	O	242	ASN	CA-C-N	7.22	130.35	120.46
8	O	242	ASN	C-N-CA	7.22	130.35	120.46
4	B	107	ASP	N-CA-C	-7.22	103.63	113.30
6	K	74	GLN	CA-C-N	7.21	130.66	120.42
6	K	74	GLN	C-N-CA	7.21	130.66	120.42
4	D	204	HIS	O-C-N	-7.21	115.19	123.33
6	K	67	LYS	CA-C-N	7.21	129.81	120.44
6	K	67	LYS	C-N-CA	7.21	129.81	120.44
6	I	9	THR	CA-C-N	7.21	127.53	119.32
6	I	9	THR	C-N-CA	7.21	127.53	119.32
3	E	326	VAL	CA-C-N	7.20	129.93	120.28
3	E	326	VAL	C-N-CA	7.20	129.93	120.28
6	G	212	GLU	N-CA-CB	7.20	120.86	110.06
6	G	109	GLY	CA-C-N	7.20	129.78	120.56
6	G	109	GLY	C-N-CA	7.20	129.78	120.56
4	F	376	LEU	O-C-N	-7.20	113.94	120.71
3	E	499	VAL	CB-CA-C	-7.19	102.76	111.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	90	ALA	CA-C-O	7.19	128.30	120.32
3	E	122	ILE	N-CA-C	-7.18	104.20	110.74
7	P	384	ILE	N-CA-CB	-7.18	102.14	110.55
3	A	159	GLY	N-CA-C	-7.18	100.67	110.80
4	B	107	ASP	CA-C-N	7.18	130.48	120.29
4	B	107	ASP	C-N-CA	7.18	130.48	120.29
1	M	156	PHE	CA-C-N	7.17	130.60	120.42
1	M	156	PHE	C-N-CA	7.17	130.60	120.42
4	B	234	SER	CA-C-N	7.17	130.22	120.54
4	B	234	SER	C-N-CA	7.17	130.22	120.54
4	B	61	THR	O-C-N	-7.16	114.96	123.27
4	F	192	GLY	N-CA-C	-7.16	104.72	115.32
6	G	25	ARG	CA-C-N	7.16	129.87	120.28
6	G	25	ARG	C-N-CA	7.16	129.87	120.28
6	K	218	ILE	N-CA-C	7.16	117.95	110.72
7	P	290	CYS	CA-C-N	7.16	129.58	120.56
7	P	290	CYS	C-N-CA	7.16	129.58	120.56
4	B	462	TRP	CA-C-O	-7.16	111.74	119.97
4	B	265	TYR	CA-C-N	7.16	129.87	120.28
4	B	265	TYR	C-N-CA	7.16	129.87	120.28
4	F	254	ILE	CA-C-N	7.15	129.85	120.26
4	F	254	ILE	C-N-CA	7.15	129.85	120.26
4	B	63	ARG	N-CA-C	-7.15	97.30	109.24
4	B	414	ALA	N-CA-CB	7.15	120.63	110.12
6	K	202	THR	N-CA-C	-7.15	99.94	110.52
3	E	330	GLU	N-CA-CB	7.15	120.74	110.16
3	E	449	LYS	N-CA-CB	7.15	122.57	110.49
6	G	122	GLN	CA-C-N	7.14	130.56	120.28
6	G	122	GLN	C-N-CA	7.14	130.56	120.28
7	P	419	ILE	O-C-N	7.14	128.79	121.87
4	B	31	VAL	O-C-N	7.13	130.86	122.66
4	D	320	GLY	O-C-N	-7.13	117.37	123.43
4	B	140	ASN	N-CA-CB	7.13	123.06	110.37
5	J	33	LYS	CA-C-N	7.13	129.83	120.28
5	J	33	LYS	C-N-CA	7.13	129.83	120.28
4	F	239	SER	N-CA-C	-7.12	97.79	109.40
8	O	162	ALA	N-CA-C	7.12	119.04	111.28
3	A	589	PRO	N-CA-C	-7.11	104.60	114.98
5	H	24	ALA	O-C-N	-7.11	113.52	122.27
6	I	76	THR	N-CA-CB	7.11	120.69	110.16
1	M	130	GLN	O-C-N	7.11	129.65	122.12
7	P	52	VAL	N-CA-C	7.10	117.89	110.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	363	LEU	CA-C-N	7.10	129.67	120.44
7	P	363	LEU	C-N-CA	7.10	129.67	120.44
4	D	442	THR	N-CA-C	-7.10	103.49	112.93
4	F	227	GLN	N-CA-C	-7.10	103.47	111.07
5	H	3	GLN	N-CA-C	7.10	118.81	111.14
4	D	287	ALA	CA-C-N	7.09	129.79	120.28
4	D	287	ALA	C-N-CA	7.09	129.79	120.28
3	E	584	SER	CA-C-N	7.09	130.49	120.28
3	E	584	SER	C-N-CA	7.09	130.49	120.28
3	C	288	ASN	CA-C-O	-7.08	112.38	120.24
6	K	141	ALA	CA-C-O	-7.08	113.86	121.36
6	G	9	THR	CA-C-N	7.08	127.06	119.28
6	G	9	THR	C-N-CA	7.08	127.06	119.28
6	G	29	GLU	CA-C-N	7.08	129.64	120.44
6	G	29	GLU	C-N-CA	7.08	129.64	120.44
4	D	330	THR	N-CA-C	-7.07	97.88	109.40
4	B	118	ARG	CA-C-N	7.06	128.67	119.84
4	B	118	ARG	C-N-CA	7.06	128.67	119.84
7	P	427	ILE	N-CA-CB	7.06	120.14	110.54
7	P	284	GLU	N-CA-C	-7.06	104.64	113.18
3	A	364	LEU	CA-C-N	7.05	129.73	120.28
3	A	364	LEU	C-N-CA	7.05	129.73	120.28
7	P	438	ILE	CA-C-O	-7.05	113.61	120.95
3	E	426	PRO	O-C-N	7.05	130.35	122.24
4	B	206	GLU	N-CA-C	-7.05	99.22	110.14
7	P	372	PRO	N-CA-CB	7.05	109.92	103.08
3	E	257	ALA	CA-C-N	7.04	132.14	122.07
3	E	257	ALA	C-N-CA	7.04	132.14	122.07
7	P	133	LYS	N-CA-C	-7.04	97.09	109.06
3	E	97	GLY	CA-C-N	7.04	127.59	119.99
3	E	97	GLY	C-N-CA	7.04	127.59	119.99
7	P	128	PHE	N-CA-C	7.04	119.98	111.82
5	J	16	GLU	O-C-N	7.03	130.17	122.15
7	P	78	ILE	CB-CA-C	7.03	120.38	113.70
6	K	15	ASP	CB-CA-C	-7.03	99.13	110.79
3	A	509	ASP	CA-C-N	7.02	130.26	120.29
3	A	509	ASP	C-N-CA	7.02	130.26	120.29
6	G	120	ILE	CA-C-N	7.02	129.69	120.28
6	G	120	ILE	C-N-CA	7.02	129.69	120.28
6	G	178	TYR	N-CA-CB	7.02	121.58	110.55
4	B	147	PRO	N-CA-C	7.02	122.70	111.26
5	L	2	SER	CA-C-N	7.02	129.56	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	L	2	SER	C-N-CA	7.02	129.56	120.44
7	P	219	GLN	CA-C-N	7.02	129.68	120.28
7	P	219	GLN	C-N-CA	7.02	129.68	120.28
6	I	62	PHE	N-CA-C	-7.01	103.57	111.14
4	F	159	ASP	N-CA-C	7.01	118.92	111.28
4	B	143	ALA	N-CA-C	7.00	119.60	110.43
5	J	7	ILE	N-CA-C	-7.00	103.65	110.72
4	D	293	ALA	N-CA-C	-7.00	103.92	113.30
4	D	380	SER	N-CA-C	-7.00	96.94	108.76
3	C	275	SER	N-CA-C	-6.99	98.72	109.14
6	K	153	LYS	CA-C-N	6.99	129.53	120.44
6	K	153	LYS	C-N-CA	6.99	129.53	120.44
3	E	182	ILE	N-CA-CB	6.99	118.97	111.00
3	E	30	VAL	N-CA-CB	6.99	121.04	112.10
7	P	143	GLY	CA-C-N	6.99	129.52	120.44
7	P	143	GLY	C-N-CA	6.99	129.52	120.44
5	H	36	LYS	CA-C-N	6.98	129.93	120.44
5	H	36	LYS	C-N-CA	6.98	129.93	120.44
3	A	532	SER	N-CA-C	-6.98	99.11	108.74
4	F	85	GLY	CA-C-O	6.97	127.70	119.19
2	N	94	ILE	CA-C-O	-6.97	110.61	119.95
4	D	93	VAL	N-CA-C	-6.97	97.46	108.95
3	E	582	SER	O-C-N	6.96	129.50	122.12
6	K	33	LYS	N-CA-CB	6.96	120.45	110.16
7	P	235	SER	N-CA-C	-6.96	102.92	112.03
4	D	179	PRO	CA-C-N	6.95	129.60	120.28
4	D	179	PRO	C-N-CA	6.95	129.60	120.28
3	C	395	ALA	O-C-N	-6.95	114.93	122.85
3	E	613	GLU	CA-C-N	6.95	129.89	120.44
3	E	613	GLU	C-N-CA	6.95	129.89	120.44
6	G	181	LYS	N-CA-C	-6.95	104.32	114.39
1	M	36	SER	CA-C-N	6.94	129.88	120.44
1	M	36	SER	C-N-CA	6.94	129.88	120.44
3	C	145	LYS	N-CA-C	-6.94	102.93	112.03
4	F	444	ILE	N-CA-C	-6.94	104.23	111.58
4	D	249	THR	N-CA-C	6.93	118.48	111.07
3	E	125	PRO	CA-C-O	-6.93	113.46	122.19
7	P	81	ILE	CA-C-N	6.93	129.45	120.44
7	P	81	ILE	C-N-CA	6.93	129.45	120.44
7	P	432	GLU	CA-C-N	6.92	130.12	120.29
7	P	432	GLU	C-N-CA	6.92	130.12	120.29
4	B	223	ARG	CA-C-N	6.92	129.56	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	223	ARG	C-N-CA	6.92	129.56	120.28
4	B	342	ILE	N-CA-C	-6.92	105.98	112.83
3	A	287	GLY	N-CA-C	-6.92	105.69	113.79
3	A	362	GLU	CA-C-N	6.92	129.55	120.28
3	A	362	GLU	C-N-CA	6.92	129.55	120.28
6	K	119	PRO	CA-C-N	6.92	129.42	120.56
6	K	119	PRO	C-N-CA	6.92	129.42	120.56
8	O	323	PRO	O-C-N	6.92	132.17	122.55
6	G	126	VAL	N-CA-C	6.92	117.67	110.62
1	M	197	ARG	N-CA-CB	6.91	120.39	110.16
4	F	424	ALA	N-CA-CB	6.91	122.17	110.49
3	A	588	GLU	CA-C-N	6.91	129.40	121.04
3	A	588	GLU	C-N-CA	6.91	129.40	121.04
3	E	53	HIS	N-CA-C	-6.91	104.85	113.28
3	E	69	THR	CA-C-O	6.91	127.75	120.36
4	B	398	ASP	CA-C-O	-6.90	113.11	120.42
2	N	20	LEU	CA-C-N	6.89	129.52	120.28
2	N	20	LEU	C-N-CA	6.89	129.52	120.28
6	G	153	LYS	O-C-N	6.89	129.17	122.07
4	F	469	PRO	CA-C-N	6.89	129.52	120.28
4	F	469	PRO	C-N-CA	6.89	129.52	120.28
8	O	289	VAL	N-CA-CB	6.89	120.92	110.58
3	A	578	LYS	O-C-N	-6.89	114.29	122.15
4	B	43	LYS	CA-C-N	6.88	134.36	121.97
4	B	43	LYS	C-N-CA	6.88	134.36	121.97
4	D	218	ASN	CA-C-N	6.88	129.50	120.28
4	D	218	ASN	C-N-CA	6.88	129.50	120.28
6	K	9	THR	CA-C-O	-6.88	113.20	120.70
1	M	178	ILE	O-C-N	-6.88	116.02	120.42
3	E	451	PHE	O-C-N	-6.88	115.33	121.31
8	O	157	THR	CA-C-N	6.87	130.05	120.29
8	O	157	THR	C-N-CA	6.87	130.05	120.29
4	B	341	ASP	N-CA-C	-6.87	97.71	108.90
3	C	554	HIS	CA-C-O	-6.86	113.61	120.82
3	C	174	LEU	O-C-N	-6.86	114.15	121.42
4	F	211	VAL	N-CA-C	-6.85	97.63	107.77
5	J	41	LYS	CA-C-N	6.85	133.13	121.14
5	J	41	LYS	C-N-CA	6.85	133.13	121.14
3	C	538	CYS	CA-C-N	6.85	127.25	119.92
3	C	538	CYS	C-N-CA	6.85	127.25	119.92
3	A	506	ALA	N-CA-C	-6.84	101.97	112.99
4	B	308	MET	CA-C-N	6.84	129.77	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	308	MET	C-N-CA	6.84	129.77	120.54
3	E	614	SER	O-C-N	6.84	129.48	122.09
8	O	10	ASP	N-CA-C	-6.84	99.08	109.95
7	P	259	PHE	CA-C-N	6.83	129.99	120.29
7	P	259	PHE	C-N-CA	6.83	129.99	120.29
8	O	287	GLN	CA-C-N	6.83	129.32	120.44
8	O	287	GLN	C-N-CA	6.83	129.32	120.44
4	D	356	GLY	CA-C-O	-6.83	114.87	122.24
4	F	101	ARG	CA-C-N	6.82	129.32	123.04
4	F	101	ARG	C-N-CA	6.82	129.32	123.04
7	P	451	MET	N-CA-C	-6.82	103.84	111.28
8	O	337	LEU	CA-C-N	6.82	129.42	120.28
8	O	337	LEU	C-N-CA	6.82	129.42	120.28
7	P	383	ASN	N-CA-C	6.82	121.43	113.18
4	F	284	TYR	O-C-N	6.82	129.92	122.15
3	A	559	LYS	CA-C-O	6.81	127.97	120.82
8	O	366	LYS	CA-C-O	6.81	128.52	121.23
6	I	24	ILE	CA-C-O	-6.81	113.95	121.17
3	C	101	MET	CA-C-N	6.81	132.54	122.74
3	C	101	MET	C-N-CA	6.81	132.54	122.74
6	G	203	LEU	O-C-N	6.81	129.33	122.12
3	A	432	LEU	CA-C-N	6.80	127.53	119.98
3	A	432	LEU	C-N-CA	6.80	127.53	119.98
4	F	430	LYS	CA-C-N	6.80	129.95	120.29
4	F	430	LYS	C-N-CA	6.80	129.95	120.29
1	M	27	GLN	N-CA-C	-6.79	103.95	111.36
3	E	400	ALA	CA-C-N	6.79	130.40	120.82
3	E	400	ALA	C-N-CA	6.79	130.40	120.82
6	G	135	PRO	N-CA-C	-6.79	105.98	114.68
4	F	285	ALA	CA-C-N	6.79	129.38	120.28
4	F	285	ALA	C-N-CA	6.79	129.38	120.28
4	B	289	ARG	CA-C-N	6.78	129.66	120.44
4	B	289	ARG	C-N-CA	6.78	129.66	120.44
5	L	73	GLU	N-CA-C	-6.78	103.13	111.40
5	J	20	ILE	CA-C-N	6.78	129.75	120.46
5	J	20	ILE	C-N-CA	6.78	129.75	120.46
4	F	202	ASP	CA-C-N	6.78	128.88	120.34
4	F	202	ASP	C-N-CA	6.78	128.88	120.34
3	C	292	GLU	CA-C-O	-6.77	113.71	120.82
4	D	34	VAL	N-CA-C	-6.77	98.28	108.17
7	P	232	ALA	CA-C-N	6.77	130.37	120.82
7	P	232	ALA	C-N-CA	6.77	130.37	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	215	LEU	CA-C-N	6.76	126.36	119.19
6	I	215	LEU	C-N-CA	6.76	126.36	119.19
4	D	170	ILE	CA-C-N	6.76	127.31	120.14
4	D	170	ILE	C-N-CA	6.76	127.31	120.14
6	I	11	ASN	CA-C-N	6.76	129.23	120.44
6	I	11	ASN	C-N-CA	6.76	129.23	120.44
5	J	16	GLU	CA-C-N	6.76	129.34	120.28
5	J	16	GLU	C-N-CA	6.76	129.34	120.28
3	E	257	ALA	N-CA-CB	6.76	121.91	110.49
4	B	111	ARG	CA-C-N	6.76	131.57	123.19
4	B	111	ARG	C-N-CA	6.76	131.57	123.19
8	O	116	TRP	N-CA-C	-6.75	96.42	110.80
3	E	60	VAL	CA-C-N	6.75	130.39	120.74
3	E	60	VAL	C-N-CA	6.75	130.39	120.74
3	E	103	THR	N-CA-C	-6.75	97.21	108.75
8	O	183	ASP	N-CA-C	-6.75	104.67	113.17
2	N	91	ILE	N-CA-C	-6.74	98.02	107.80
1	M	90	ALA	O-C-N	-6.74	115.42	123.31
3	C	530	GLY	N-CA-C	-6.74	105.92	115.43
7	P	34	GLU	N-CA-CB	6.73	121.86	110.49
4	B	435	PHE	CA-C-O	-6.72	113.42	120.55
7	P	299	SER	CA-C-N	6.72	130.19	120.38
7	P	299	SER	C-N-CA	6.72	130.19	120.38
8	O	306	ILE	N-CA-C	6.72	117.50	110.72
1	M	70	GLU	CA-C-N	6.72	129.02	120.56
1	M	70	GLU	C-N-CA	6.72	129.02	120.56
3	A	63	ILE	N-CA-C	-6.71	98.37	108.17
3	A	327	ALA	N-CA-C	6.71	118.60	111.28
7	P	233	THR	CA-C-O	6.71	128.57	120.92
3	C	542	LYS	CA-C-N	6.71	129.16	120.44
3	C	542	LYS	C-N-CA	6.71	129.16	120.44
5	H	43	ILE	CA-C-O	-6.71	113.74	120.85
3	E	480	VAL	O-C-N	6.70	128.73	121.83
3	C	450	HIS	CA-C-N	6.70	130.00	120.49
3	C	450	HIS	C-N-CA	6.70	130.00	120.49
4	B	75	ALA	N-CA-C	-6.70	99.13	109.24
4	D	322	VAL	N-CA-CB	6.68	119.68	112.07
3	E	374	MET	CA-C-O	-6.68	113.42	120.70
4	B	102	ILE	N-CA-CB	6.68	119.44	111.23
4	B	370	TYR	CB-CA-C	-6.68	100.97	109.65
1	M	193	ASP	N-CA-CB	6.67	119.93	110.12
6	I	198	GLU	N-CA-C	-6.67	98.10	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	320	GLY	N-CA-C	-6.67	104.78	111.85
8	O	224	VAL	CB-CA-C	6.67	119.72	111.25
3	E	374	MET	CA-C-N	6.66	128.17	119.84
3	E	374	MET	C-N-CA	6.66	128.17	119.84
7	P	412	ASN	N-CA-CB	6.66	121.75	110.49
8	O	7	THR	CA-C-N	6.66	130.28	120.95
8	O	7	THR	C-N-CA	6.66	130.28	120.95
1	M	21	LYS	CA-C-N	6.66	129.10	120.44
1	M	21	LYS	C-N-CA	6.66	129.10	120.44
6	K	32	ALA	CA-C-O	6.65	127.47	120.42
3	A	103	THR	CA-C-N	6.65	131.85	123.14
3	A	103	THR	C-N-CA	6.65	131.85	123.14
3	C	489	LEU	O-C-N	6.65	129.73	122.15
6	I	177	ASP	N-CA-C	-6.64	98.90	109.59
3	C	291	ALA	CA-C-N	6.64	129.07	120.44
3	C	291	ALA	C-N-CA	6.64	129.07	120.44
3	E	569	LYS	CA-C-N	6.64	129.17	120.28
3	E	569	LYS	C-N-CA	6.64	129.17	120.28
6	K	134	GLU	O-C-N	6.63	125.92	121.14
4	B	417	LYS	CA-C-N	6.63	129.17	120.28
4	B	417	LYS	C-N-CA	6.63	129.17	120.28
4	F	55	LEU	CA-C-O	-6.63	113.20	120.43
4	D	125	LYS	N-CA-CB	6.63	119.52	110.38
4	D	185	ALA	O-C-N	6.62	129.14	122.12
7	P	445	GLY	N-CA-C	-6.62	105.76	115.63
5	L	45	SER	CA-C-O	6.62	126.42	119.14
3	A	175	PRO	CA-C-O	-6.62	110.97	120.56
3	E	183	THR	N-CA-C	-6.62	103.55	111.69
1	M	172	ALA	CB-CA-C	-6.61	100.50	110.88
4	F	34	VAL	N-CA-C	-6.61	99.21	108.27
4	F	454	VAL	N-CA-C	6.61	117.36	110.62
5	H	82	GLU	N-CA-C	-6.61	104.69	112.89
4	B	259	ALA	CA-C-N	6.61	129.13	120.28
4	B	259	ALA	C-N-CA	6.61	129.13	120.28
6	K	13	VAL	N-CA-C	6.61	119.35	111.09
3	A	343	PHE	O-C-N	-6.60	114.15	122.27
8	O	70	LYS	CA-C-O	-6.60	113.89	120.82
4	F	416	MET	CA-C-N	6.59	129.12	120.28
4	F	416	MET	C-N-CA	6.59	129.12	120.28
4	F	446	GLN	N-CA-C	-6.59	97.48	108.75
6	K	79	THR	CA-C-N	6.59	129.78	120.42
6	K	79	THR	C-N-CA	6.59	129.78	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	54	ASN	N-CA-C	-6.59	98.17	108.90
3	E	586	PHE	CA-C-N	6.59	130.06	120.71
3	E	586	PHE	C-N-CA	6.59	130.06	120.71
4	F	332	ILE	CA-C-N	6.58	127.12	120.14
4	F	332	ILE	C-N-CA	6.58	127.12	120.14
4	D	251	GLU	CA-C-N	6.58	129.10	120.28
4	D	251	GLU	C-N-CA	6.58	129.10	120.28
7	P	272	LEU	CA-C-N	6.58	129.76	120.28
7	P	272	LEU	C-N-CA	6.58	129.76	120.28
4	D	399	VAL	N-CA-CB	6.58	120.45	110.58
5	J	66	GLY	N-CA-C	-6.58	105.70	114.25
3	E	309	GLU	N-CA-CB	6.58	122.08	110.37
5	J	7	ILE	N-CA-CB	6.58	120.44	110.58
3	A	382	ALA	CA-C-O	6.57	126.96	119.27
4	F	219	LEU	N-CA-C	-6.57	104.04	111.07
4	D	259	ALA	N-CA-C	6.57	118.44	111.28
3	C	306	GLY	N-CA-C	-6.56	100.79	112.54
3	A	588	GLU	CA-C-O	-6.56	113.28	120.69
2	N	82	ASP	CA-C-O	-6.56	113.60	120.55
1	M	133	GLN	CA-C-N	6.56	129.07	120.28
1	M	133	GLN	C-N-CA	6.56	129.07	120.28
3	E	399	VAL	CA-C-N	6.56	130.02	120.71
3	E	399	VAL	C-N-CA	6.56	130.02	120.71
6	G	83	LYS	CA-C-N	6.56	129.36	120.44
6	G	83	LYS	C-N-CA	6.56	129.36	120.44
8	O	250	ALA	N-CA-C	6.55	118.42	111.28
7	P	454	LEU	CA-C-N	6.55	131.81	120.68
7	P	454	LEU	C-N-CA	6.55	131.81	120.68
5	H	82	GLU	N-CA-CB	6.55	121.08	110.40
5	L	61	ASN	N-CA-CB	6.55	119.92	110.88
1	M	206	VAL	CA-C-N	6.55	129.05	120.28
1	M	206	VAL	C-N-CA	6.55	129.05	120.28
6	I	158	ARG	CA-C-N	6.54	129.70	120.28
6	I	158	ARG	C-N-CA	6.54	129.70	120.28
6	K	70	MET	N-CA-CB	6.54	121.06	110.40
4	F	255	THR	CA-C-O	-6.54	112.32	118.73
5	J	69	GLU	CA-C-O	-6.54	111.95	119.60
3	A	150	ASP	CB-CA-C	-6.54	97.44	109.46
3	A	232	PRO	CB-CA-C	6.54	122.34	111.56
3	C	231	TYR	CA-C-O	-6.54	113.48	119.62
5	L	99	ILE	CA-C-N	6.54	129.04	120.28
5	L	99	ILE	C-N-CA	6.54	129.04	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	312	MET	O-C-N	6.53	129.05	122.12
4	B	173	PHE	N-CA-C	-6.53	97.87	108.52
4	B	238	THR	CA-C-O	-6.53	113.82	121.46
3	C	574	THR	N-CA-C	-6.53	104.24	111.36
3	E	351	SER	N-CA-C	-6.53	97.76	108.41
6	G	138	ILE	N-CA-C	-6.53	99.02	108.36
7	P	100	ILE	CA-C-N	6.53	128.93	120.44
7	P	100	ILE	C-N-CA	6.53	128.93	120.44
8	O	288	LEU	CA-C-O	-6.53	113.97	120.82
4	D	463	SER	O-C-N	6.53	129.04	122.12
3	E	174	LEU	CA-C-O	-6.53	113.20	120.25
4	D	344	HIS	CA-C-N	6.52	126.02	119.24
4	D	344	HIS	C-N-CA	6.52	126.02	119.24
4	D	289	ARG	CA-C-N	6.52	129.67	120.28
4	D	289	ARG	C-N-CA	6.52	129.67	120.28
3	E	290	MET	CA-C-N	6.52	129.54	120.29
3	E	290	MET	C-N-CA	6.52	129.54	120.29
8	O	42	ARG	CA-C-N	6.52	131.17	121.72
8	O	42	ARG	C-N-CA	6.52	131.17	121.72
7	P	5	LYS	CA-C-N	6.51	129.41	120.35
7	P	5	LYS	C-N-CA	6.51	129.41	120.35
3	E	604	LEU	CA-C-N	6.51	129.54	120.29
3	E	604	LEU	C-N-CA	6.51	129.54	120.29
3	A	168	SER	CA-C-O	6.51	127.87	120.84
7	P	316	GLY	CA-C-N	6.51	131.39	122.34
7	P	316	GLY	C-N-CA	6.51	131.39	122.34
3	E	117	GLU	N-CA-C	6.51	118.17	111.14
4	F	245	ALA	N-CA-C	6.51	119.37	111.82
4	F	324	GLY	N-CA-C	-6.50	105.53	114.64
8	O	203	LYS	CA-C-O	-6.50	113.99	120.82
4	F	344	HIS	CA-C-N	6.50	126.27	119.05
4	F	344	HIS	C-N-CA	6.50	126.27	119.05
4	F	198	LYS	CA-C-N	6.50	128.99	120.28
4	F	198	LYS	C-N-CA	6.50	128.99	120.28
6	G	39	ALA	CA-C-N	6.50	128.98	120.28
6	G	39	ALA	C-N-CA	6.50	128.98	120.28
3	E	210	THR	CA-C-N	6.49	128.98	120.28
3	E	210	THR	C-N-CA	6.49	128.98	120.28
3	E	561	VAL	CA-C-O	-6.49	113.46	120.47
3	A	533	THR	CA-C-N	6.49	132.41	122.29
3	A	533	THR	C-N-CA	6.49	132.41	122.29
3	C	222	PRO	N-CA-CB	6.49	110.06	103.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	140	LEU	CA-C-N	6.49	129.34	120.46
7	P	140	LEU	C-N-CA	6.49	129.34	120.46
8	O	8	ALA	CA-C-N	6.48	130.54	120.75
8	O	8	ALA	C-N-CA	6.48	130.54	120.75
5	H	65	VAL	N-CA-C	-6.48	106.36	113.43
7	P	427	ILE	CA-C-N	6.48	128.86	120.44
7	P	427	ILE	C-N-CA	6.48	128.86	120.44
3	A	274	ASN	CA-C-O	6.48	126.83	119.18
5	J	26	LYS	CA-C-O	-6.48	113.68	120.55
3	A	205	LYS	CA-C-N	6.48	128.96	120.28
3	A	205	LYS	C-N-CA	6.48	128.96	120.28
8	O	70	LYS	O-C-N	6.48	128.74	122.07
4	D	107	ASP	N-CA-C	-6.48	104.53	112.88
7	P	468	ALA	CB-CA-C	-6.48	100.04	110.79
2	N	82	ASP	O-C-N	6.47	128.98	122.12
6	K	16	GLU	CA-C-N	6.47	129.24	120.44
6	K	16	GLU	C-N-CA	6.47	129.24	120.44
4	D	376	LEU	CA-C-O	-6.47	112.58	118.79
3	A	384	LEU	N-CA-C	6.46	118.87	111.11
7	P	16	ILE	CA-C-O	-6.46	114.00	120.85
3	E	234	LEU	N-CA-C	-6.46	98.01	108.41
4	F	107	ASP	N-CA-C	-6.46	105.27	112.57
6	G	71	LEU	N-CA-C	-6.46	104.43	112.90
3	A	177	ARG	N-CA-CB	6.46	121.40	110.49
4	B	165	ALA	N-CA-C	-6.46	100.14	110.14
4	F	340	ASP	N-CA-C	6.46	120.45	111.74
4	D	249	THR	CA-C-O	6.45	127.60	120.82
6	K	125	ILE	CA-C-N	6.45	128.69	120.56
6	K	125	ILE	C-N-CA	6.45	128.69	120.56
4	D	300	GLY	CA-C-N	6.45	129.92	120.82
4	D	300	GLY	C-N-CA	6.45	129.92	120.82
3	C	79	LEU	CA-C-O	-6.45	113.01	120.49
6	I	189	VAL	N-CA-CB	6.45	120.02	111.90
3	E	513	ILE	CA-C-N	6.45	128.92	120.28
3	E	513	ILE	C-N-CA	6.45	128.92	120.28
8	O	96	ALA	N-CA-CB	6.45	121.38	110.49
3	C	465	ASN	O-C-N	-6.44	115.44	122.07
8	O	345	ILE	CA-C-O	-6.44	114.34	121.17
5	J	39	ALA	CA-C-O	-6.44	112.07	119.60
3	A	333	ILE	O-C-N	6.43	128.46	121.83
4	F	168	GLN	N-CA-C	-6.43	101.00	110.52
6	I	216	PRO	N-CA-CB	6.43	110.33	103.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	55	GLN	CA-C-N	6.43	128.79	120.44
1	M	55	GLN	C-N-CA	6.43	128.79	120.44
4	F	291	VAL	O-C-N	-6.43	114.54	122.57
4	D	178	LEU	CB-CA-C	-6.42	98.34	109.32
6	G	108	SER	CA-C-N	6.42	127.06	120.00
6	G	108	SER	C-N-CA	6.42	127.06	120.00
6	K	190	VAL	O-C-N	6.42	129.74	122.93
4	D	456	GLU	CA-C-O	6.42	127.36	120.55
4	B	294	ALA	N-CA-C	-6.42	104.66	114.16
3	E	150	ASP	CA-C-O	6.42	128.37	121.05
7	P	76	THR	CA-C-N	6.42	128.78	120.44
7	P	76	THR	C-N-CA	6.42	128.78	120.44
4	D	235	LEU	CA-C-N	6.41	129.52	120.28
4	D	235	LEU	C-N-CA	6.41	129.52	120.28
3	E	346	GLN	N-CA-C	-6.41	104.94	112.89
3	E	360	TRP	CA-C-O	-6.41	113.63	120.42
1	M	75	THR	CA-C-O	6.40	127.33	119.97
3	C	545	ASP	CA-C-N	6.40	128.76	120.44
3	C	545	ASP	C-N-CA	6.40	128.76	120.44
4	F	77	VAL	O-C-N	-6.40	116.31	123.03
7	P	418	ILE	CA-C-O	-6.40	113.94	121.05
4	B	237	ARG	N-CA-C	-6.40	105.30	113.23
4	B	412	ASP	N-CA-C	-6.40	104.39	111.36
4	F	185	ALA	CA-C-O	-6.39	113.78	120.55
3	A	255	PRO	CA-C-N	6.39	129.70	122.67
3	A	255	PRO	C-N-CA	6.39	129.70	122.67
4	B	470	LYS	N-CA-C	-6.39	104.97	112.89
4	D	149	GLU	N-CA-C	-6.39	100.75	110.14
8	O	34	PHE	CA-C-O	-6.38	114.12	120.82
4	B	146	TYR	CA-C-N	6.38	126.76	119.93
4	B	146	TYR	C-N-CA	6.38	126.76	119.93
4	F	142	TYR	N-CA-CB	6.38	119.35	109.97
3	A	606	THR	CA-C-N	6.38	128.83	120.28
3	A	606	THR	C-N-CA	6.38	128.83	120.28
3	E	427	VAL	CB-CA-C	-6.38	103.81	111.97
4	F	468	TYR	CA-C-O	-6.38	113.36	120.25
8	O	229	ALA	CA-C-N	6.38	130.00	120.31
8	O	229	ALA	C-N-CA	6.38	130.00	120.31
6	G	192	ASN	CA-C-O	-6.38	114.61	121.94
8	O	55	ILE	N-CA-C	-6.38	99.21	108.71
6	I	9	THR	CA-C-O	-6.38	112.72	120.05
3	A	447	GLN	CB-CA-C	-6.37	98.43	110.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	462	TRP	CA-C-N	6.37	128.81	120.28
4	D	462	TRP	C-N-CA	6.37	128.81	120.28
4	B	421	GLY	N-CA-C	-6.37	103.55	111.70
7	P	250	ILE	N-CA-CB	6.36	117.99	110.55
7	P	330	TYR	N-CA-C	-6.36	99.81	109.85
8	O	264	GLU	CA-C-N	6.36	129.31	120.29
8	O	264	GLU	C-N-CA	6.36	129.31	120.29
6	I	51	VAL	CA-C-O	-6.35	114.44	121.17
4	D	436	LEU	CA-C-O	-6.35	114.16	120.82
3	C	279	ILE	O-C-N	-6.35	116.47	123.20
3	A	81	VAL	CB-CA-C	-6.34	101.17	110.62
8	O	95	ASN	N-CA-CB	6.34	121.20	110.49
4	B	431	LEU	CA-C-N	6.34	129.29	120.29
4	B	431	LEU	C-N-CA	6.34	129.29	120.29
2	N	37	PHE	CA-C-O	6.33	128.08	120.99
6	I	59	ASP	CA-C-N	6.33	126.97	119.94
6	I	59	ASP	C-N-CA	6.33	126.97	119.94
3	A	266	SER	CA-C-N	6.33	129.28	120.29
3	A	266	SER	C-N-CA	6.33	129.28	120.29
3	A	34	VAL	CA-C-N	-6.33	114.33	123.06
3	A	34	VAL	C-N-CA	-6.33	114.33	123.06
4	B	193	LEU	CA-C-N	6.33	129.41	120.42
4	B	193	LEU	C-N-CA	6.33	129.41	120.42
3	C	493	GLU	CA-C-O	-6.33	114.17	120.82
4	B	192	GLY	CA-C-O	-6.32	112.00	119.02
3	A	343	PHE	CA-C-N	6.32	128.75	120.28
3	A	343	PHE	C-N-CA	6.32	128.75	120.28
4	B	432	SER	CA-C-N	6.32	128.75	120.28
4	B	432	SER	C-N-CA	6.32	128.75	120.28
3	A	571	ALA	N-CA-C	6.32	118.17	111.28
4	D	145	ILE	N-CA-CB	6.32	120.74	111.52
6	I	199	ILE	N-CA-CB	6.32	119.63	111.67
8	O	340	CYS	CA-C-N	6.31	128.74	120.28
8	O	340	CYS	C-N-CA	6.31	128.74	120.28
6	G	150	GLU	N-CA-C	6.30	118.15	111.28
4	D	315	ILE	CA-C-O	6.30	127.53	120.85
4	B	241	PHE	CB-CA-C	-6.29	98.19	109.71
3	A	271	LYS	N-CA-C	6.29	117.94	111.14
4	F	428	GLU	CA-C-N	6.29	129.23	120.29
4	F	428	GLU	C-N-CA	6.29	129.23	120.29
4	B	213	ALA	CA-C-N	6.29	131.86	122.99
4	B	213	ALA	C-N-CA	6.29	131.86	122.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	148	VAL	N-CA-CB	6.29	118.55	110.13
4	D	417	LYS	N-CA-C	-6.29	104.43	111.28
4	F	286	ASP	N-CA-C	-6.28	104.43	111.28
4	B	218	ASN	CA-C-O	-6.28	113.87	121.28
3	C	520	LEU	CA-C-O	6.28	127.21	120.55
5	H	11	LEU	N-CA-CB	6.28	119.46	110.16
6	G	184	VAL	CA-C-O	-6.28	113.80	120.39
7	P	52	VAL	CA-C-N	6.27	133.52	121.54
7	P	52	VAL	C-N-CA	6.27	133.52	121.54
8	O	206	PHE	CA-C-O	-6.27	113.77	120.42
6	I	134	GLU	CA-C-O	-6.27	114.60	120.94
3	A	385	GLY	O-C-N	6.27	128.21	122.19
4	F	45	LYS	N-CA-C	-6.27	105.27	113.17
6	K	105	GLU	N-CA-C	-6.27	103.98	111.69
8	O	110	TYR	O-C-N	-6.27	115.47	122.12
6	I	205	GLU	CA-C-N	6.27	128.59	120.44
6	I	205	GLU	C-N-CA	6.27	128.59	120.44
6	G	178	TYR	N-CA-C	-6.27	98.30	108.52
7	P	361	ALA	CA-C-N	6.27	129.19	120.29
7	P	361	ALA	C-N-CA	6.27	129.19	120.29
6	I	24	ILE	CA-C-N	6.27	128.68	120.28
6	I	24	ILE	C-N-CA	6.27	128.68	120.28
3	E	298	PRO	N-CA-C	-6.27	106.03	113.86
3	E	523	GLU	CA-C-O	6.26	127.15	120.70
4	B	409	ILE	CA-C-N	6.26	126.93	119.98
4	B	409	ILE	C-N-CA	6.26	126.93	119.98
4	F	224	PHE	N-CA-C	-6.26	104.46	111.28
8	O	270	LEU	N-CA-CB	6.26	119.32	110.12
3	E	185	ILE	N-CA-CB	6.25	119.55	111.67
1	M	15	LEU	CA-C-N	6.25	127.05	119.99
1	M	15	LEU	C-N-CA	6.25	127.05	119.99
8	O	390	ILE	O-C-N	6.25	130.01	123.26
3	C	549	ALA	CA-C-N	6.25	128.56	120.44
3	C	549	ALA	C-N-CA	6.25	128.56	120.44
4	F	124	PRO	CA-C-N	6.25	129.58	120.71
4	F	124	PRO	C-N-CA	6.25	129.58	120.71
7	P	77	LEU	CA-C-N	6.25	126.42	120.43
7	P	77	LEU	C-N-CA	6.25	126.42	120.43
3	A	227	LEU	CA-C-N	6.24	129.62	120.82
3	A	227	LEU	C-N-CA	6.24	129.62	120.82
4	B	165	ALA	CB-CA-C	-6.24	98.48	109.71
4	B	422	GLU	N-CA-C	-6.24	104.73	112.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	42	GLU	N-CA-C	-6.24	99.03	109.07
6	G	27	GLU	N-CA-CB	6.24	119.39	110.16
1	M	100	ASN	CA-C-O	6.24	127.72	120.49
4	B	161	MET	CB-CA-C	-6.24	96.96	109.99
3	E	368	SER	CA-C-N	6.24	126.86	120.00
3	E	368	SER	C-N-CA	6.24	126.86	120.00
4	F	149	GLU	N-CA-CB	6.24	120.13	110.46
6	K	113	ASN	N-CA-CB	6.24	120.66	110.37
7	P	184	TYR	N-CA-C	-6.23	104.18	110.97
3	A	265	ILE	O-C-N	6.23	128.24	121.83
3	C	540	ILE	CA-C-O	6.22	127.44	120.85
3	E	494	GLU	CA-C-N	6.22	128.62	120.28
3	E	494	GLU	C-N-CA	6.22	128.62	120.28
4	F	304	TYR	CA-C-N	6.22	127.61	119.84
4	F	304	TYR	C-N-CA	6.22	127.61	119.84
8	O	290	ARG	CA-C-N	6.22	128.61	120.28
8	O	290	ARG	C-N-CA	6.22	128.61	120.28
3	A	333	ILE	CB-CA-C	-6.21	103.65	112.22
7	P	138	THR	CA-C-N	6.21	129.24	120.42
7	P	138	THR	C-N-CA	6.21	129.24	120.42
7	P	323	GLN	CA-C-O	-6.21	113.97	120.55
3	C	412	ILE	CB-CA-C	6.20	119.48	110.98
7	P	364	ASP	O-C-N	-6.20	115.68	122.07
4	B	355	GLU	CB-CA-C	-6.20	103.14	111.88
4	F	324	GLY	CA-C-N	6.20	133.38	121.54
4	F	324	GLY	C-N-CA	6.20	133.38	121.54
6	I	45	ILE	CA-C-N	6.20	129.09	120.29
6	I	45	ILE	C-N-CA	6.20	129.09	120.29
4	D	323	GLU	CA-C-O	6.20	127.68	120.49
7	P	378	GLY	CA-C-N	6.20	128.50	120.44
7	P	378	GLY	C-N-CA	6.20	128.50	120.44
8	O	170	LEU	CB-CA-C	-6.20	99.87	110.22
4	B	65	GLY	O-C-N	-6.20	116.72	123.29
4	F	420	VAL	N-CA-C	6.20	117.75	111.00
3	A	244	PHE	CA-C-N	6.19	127.58	119.84
3	A	244	PHE	C-N-CA	6.19	127.58	119.84
3	A	166	LEU	CA-C-N	6.19	130.62	122.51
3	A	166	LEU	C-N-CA	6.19	130.62	122.51
3	E	335	THR	CA-C-N	6.19	126.81	120.00
3	E	335	THR	C-N-CA	6.19	126.81	120.00
3	C	142	THR	N-CA-C	-6.19	100.80	110.14
3	A	190	GLU	O-C-N	-6.18	115.99	123.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	237	GLN	CA-C-N	6.18	128.57	120.28
3	A	237	GLN	C-N-CA	6.18	128.57	120.28
7	P	105	SER	CA-C-N	6.18	130.09	120.75
7	P	105	SER	C-N-CA	6.18	130.09	120.75
4	D	106	GLU	CA-C-N	6.18	132.24	122.60
4	D	106	GLU	C-N-CA	6.18	132.24	122.60
6	I	87	LYS	N-CA-C	6.18	118.02	111.28
7	P	181	ASP	N-CA-C	6.18	117.68	111.07
1	M	209	LYS	CA-C-N	6.18	129.06	120.29
1	M	209	LYS	C-N-CA	6.18	129.06	120.29
3	A	240	LEU	CA-C-O	-6.18	114.33	120.82
4	B	245	ALA	CB-CA-C	-6.17	98.89	110.01
4	F	271	GLU	CA-C-O	-6.17	114.38	121.54
5	H	102	VAL	CA-C-O	6.17	127.39	120.85
7	P	52	VAL	O-C-N	6.17	128.18	121.83
4	B	312	LEU	N-CA-C	6.16	118.00	111.28
4	D	156	SER	CA-C-N	6.16	129.68	120.31
4	D	156	SER	C-N-CA	6.16	129.68	120.31
3	A	24	TYR	CA-C-N	6.16	130.17	121.30
3	A	24	TYR	C-N-CA	6.16	130.17	121.30
6	I	167	ALA	CA-C-N	6.16	127.54	119.84
6	I	167	ALA	C-N-CA	6.16	127.54	119.84
3	E	335	THR	N-CA-C	-6.16	104.65	111.36
4	D	195	ARG	O-C-N	-6.15	114.61	120.70
1	M	163	ILE	N-CA-C	6.15	116.89	110.62
3	A	279	ILE	CA-C-O	-6.15	113.95	120.53
7	P	204	TRP	CA-C-N	6.15	128.53	120.28
7	P	204	TRP	C-N-CA	6.15	128.53	120.28
5	J	43	ILE	N-CA-CB	6.15	119.38	110.52
3	C	566	ASN	CA-C-N	6.15	128.52	120.28
3	C	566	ASN	C-N-CA	6.15	128.52	120.28
3	E	38	GLU	CA-C-O	6.15	129.09	121.89
7	P	340	SER	N-CA-C	6.15	117.98	111.28
3	C	356	SER	CA-C-N	6.15	130.99	120.72
3	C	356	SER	C-N-CA	6.15	130.99	120.72
5	L	55	LYS	CA-C-N	6.15	129.02	120.29
5	L	55	LYS	C-N-CA	6.15	129.02	120.29
1	M	173	ILE	CA-C-O	-6.14	114.34	120.85
8	O	277	ALA	CB-CA-C	-6.14	100.41	110.85
3	C	316	THR	N-CA-C	-6.14	98.89	108.90
6	I	181	LYS	CA-C-N	6.14	132.81	121.52
6	I	181	LYS	C-N-CA	6.14	132.81	121.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	101	ARG	CA-C-N	-6.13	117.40	123.04
4	D	101	ARG	C-N-CA	-6.13	117.40	123.04
6	G	149	ILE	CB-CA-C	-6.13	103.75	112.22
4	B	172	ILE	N-CA-C	-6.13	98.91	107.80
8	O	264	GLU	N-CA-C	6.13	117.96	111.28
3	A	90	LYS	N-CA-C	-6.13	102.70	108.22
4	D	296	GLU	CA-C-N	6.13	129.46	120.82
4	D	296	GLU	C-N-CA	6.13	129.46	120.82
3	C	475	TYR	O-C-N	-6.13	114.28	121.32
4	D	416	MET	CA-C-N	6.13	128.49	120.28
4	D	416	MET	C-N-CA	6.13	128.49	120.28
3	A	508	SER	CA-C-N	6.12	128.49	120.28
3	A	508	SER	C-N-CA	6.12	128.49	120.28
8	O	128	LYS	CA-C-O	6.12	127.04	120.55
6	I	153	LYS	CA-C-N	6.12	128.40	120.44
6	I	153	LYS	C-N-CA	6.12	128.40	120.44
4	B	393	ARG	N-CA-C	-6.12	100.10	109.41
6	K	167	ALA	CA-C-N	6.12	127.49	119.84
6	K	167	ALA	C-N-CA	6.12	127.49	119.84
7	P	433	LEU	O-C-N	-6.12	115.17	122.15
4	B	314	THR	CA-C-N	6.12	129.11	120.42
4	B	314	THR	C-N-CA	6.12	129.11	120.42
4	D	250	ILE	CA-C-N	6.12	129.61	120.31
4	D	250	ILE	C-N-CA	6.12	129.61	120.31
4	D	288	LEU	CB-CA-C	-6.12	100.63	110.79
3	E	129	ASP	N-CA-C	-6.12	99.10	108.76
4	F	187	ILE	CA-C-N	6.12	128.76	120.44
4	F	187	ILE	C-N-CA	6.12	128.76	120.44
4	F	406	LYS	O-C-N	6.12	129.12	122.15
6	K	55	THR	O-C-N	-6.12	114.75	122.27
3	E	553	TYR	CA-C-N	6.11	128.47	120.28
3	E	553	TYR	C-N-CA	6.11	128.47	120.28
4	D	283	SER	N-CA-C	-6.11	104.70	111.36
3	A	312	MET	CA-C-O	-6.11	114.07	120.55
4	B	225	PHE	O-C-N	6.11	128.60	122.12
4	D	176	SER	CA-C-N	6.11	131.06	122.63
4	D	176	SER	C-N-CA	6.11	131.06	122.63
3	A	407	THR	N-CA-C	-6.10	99.45	109.40
4	B	249	THR	CA-C-N	6.10	128.82	120.46
4	B	249	THR	C-N-CA	6.10	128.82	120.46
4	F	404	TYR	CA-C-O	-6.10	114.08	120.55
7	P	82	HIS	CA-C-N	6.10	128.46	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	82	HIS	C-N-CA	6.10	128.46	120.28
4	B	265	TYR	N-CA-C	6.10	117.60	111.07
4	F	289	ARG	CA-C-N	6.10	129.58	120.31
4	F	289	ARG	C-N-CA	6.10	129.58	120.31
1	M	169	ARG	CA-C-N	6.10	128.81	120.46
1	M	169	ARG	C-N-CA	6.10	128.81	120.46
5	H	46	TYR	N-CA-C	-6.10	104.91	112.90
3	C	431	THR	N-CA-CB	6.09	119.18	110.16
7	P	301	ARG	CA-C-N	6.09	129.27	120.98
7	P	301	ARG	C-N-CA	6.09	129.27	120.98
1	M	177	ILE	CA-C-N	6.09	125.20	120.33
1	M	177	ILE	C-N-CA	6.09	125.20	120.33
3	A	386	ALA	O-C-N	6.09	129.09	122.15
4	B	48	ARG	CA-C-N	6.09	129.48	120.95
4	B	48	ARG	C-N-CA	6.09	129.48	120.95
1	M	87	VAL	CB-CA-C	6.09	118.33	110.96
2	N	64	ILE	N-CA-CB	6.09	117.94	111.00
7	P	253	LEU	N-CA-C	-6.09	104.76	111.82
7	P	273	ASP	N-CA-CB	6.09	119.59	110.22
4	D	176	SER	N-CA-C	-6.08	100.38	110.17
4	B	434	GLU	N-CA-C	-6.08	104.73	111.36
3	C	303	GLU	N-CA-C	-6.08	105.17	112.59
6	I	86	LEU	CB-CA-C	-6.08	100.57	110.79
6	I	152	MET	CA-C-O	-6.08	115.55	121.02
3	A	540	ILE	CA-C-N	6.08	128.43	120.28
3	A	540	ILE	C-N-CA	6.08	128.43	120.28
3	A	165	SER	CB-CA-C	-6.08	100.45	110.72
8	O	386	VAL	CB-CA-C	-6.08	104.73	111.35
5	L	43	ILE	CA-C-O	-6.07	114.21	120.71
3	E	504	LYS	N-CA-C	-6.07	105.52	113.17
5	L	51	ASP	CA-C-N	6.07	128.33	120.44
5	L	51	ASP	C-N-CA	6.07	128.33	120.44
4	B	177	GLY	O-C-N	6.07	129.88	122.84
4	F	191	ALA	N-CA-CB	6.07	118.97	109.69
7	P	177	ILE	CA-C-N	6.07	129.53	120.31
7	P	177	ILE	C-N-CA	6.07	129.53	120.31
3	C	51	VAL	N-CA-C	-6.06	99.69	108.17
5	J	22	SER	CA-C-N	6.06	128.89	120.29
5	J	22	SER	C-N-CA	6.06	128.89	120.29
3	E	321	THR	CA-C-N	6.05	128.89	120.29
3	E	321	THR	C-N-CA	6.05	128.89	120.29
5	L	104	LYS	O-C-N	-6.05	116.17	121.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	327	ALA	CB-CA-C	-6.05	100.74	110.79
8	O	254	LYS	N-CA-CB	6.05	120.72	110.49
6	G	210	LEU	CA-C-N	6.05	128.99	120.28
6	G	210	LEU	C-N-CA	6.05	128.99	120.28
8	O	229	ALA	CB-CA-C	-6.05	101.57	110.95
7	P	450	ILE	CA-C-N	6.05	128.38	120.28
7	P	450	ILE	C-N-CA	6.05	128.38	120.28
3	A	141	PHE	N-CA-C	-6.05	99.39	109.24
3	E	565	ALA	O-C-N	-6.05	116.95	123.42
7	P	3	ALA	CA-C-O	6.04	129.15	120.51
7	P	236	ASN	N-CA-CB	6.04	118.72	110.38
3	C	108	ILE	N-CA-C	-6.04	104.16	113.16
4	B	131	TYR	CA-C-O	6.04	126.96	120.32
3	C	55	ASN	N-CA-CB	6.04	121.09	111.91
7	P	410	ASP	CB-CA-C	6.04	122.43	110.42
3	C	170	HIS	N-CA-CB	6.03	119.34	110.35
3	E	130	THR	CA-C-N	6.03	127.38	119.84
3	E	130	THR	C-N-CA	6.03	127.38	119.84
6	G	105	GLU	CB-CA-C	-6.03	99.66	110.70
3	C	562	ALA	N-CA-C	6.03	117.85	111.28
8	O	324	HIS	CB-CA-C	-6.03	100.42	110.19
8	O	90	ASN	N-CA-C	-6.03	104.54	113.40
3	E	356	SER	CA-C-N	6.02	130.78	120.72
3	E	356	SER	C-N-CA	6.02	130.78	120.72
7	P	277	LEU	N-CA-C	-6.02	104.72	111.28
4	F	346	ILE	N-CA-CB	6.01	119.63	111.21
8	O	195	LEU	O-C-N	6.01	130.85	123.21
3	A	397	LYS	N-CA-C	-6.01	99.86	109.96
6	K	9	THR	CA-C-N	6.01	126.44	119.47
6	K	9	THR	C-N-CA	6.01	126.44	119.47
4	D	429	ASP	CA-C-N	6.01	128.33	120.28
4	D	429	ASP	C-N-CA	6.01	128.33	120.28
7	P	310	LYS	CA-C-O	-6.01	114.51	120.82
8	O	390	ILE	CA-C-O	-6.01	114.08	120.39
3	C	554	HIS	N-CA-C	6.00	117.50	111.07
3	E	439	TRP	CA-C-N	6.00	133.18	121.41
3	E	439	TRP	C-N-CA	6.00	133.18	121.41
6	I	144	ARG	N-CA-C	-6.00	105.71	113.16
3	C	175	PRO	N-CA-C	6.00	118.03	110.70
7	P	44	ALA	CA-C-N	6.00	128.24	120.44
7	P	44	ALA	C-N-CA	6.00	128.24	120.44
8	O	238	LEU	CA-C-N	6.00	129.40	120.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	238	LEU	C-N-CA	6.00	129.40	120.87
8	O	367	GLN	N-CA-C	-6.00	103.70	113.19
7	P	357	ASP	N-CA-C	6.00	117.82	111.28
5	J	39	ALA	O-C-N	6.00	130.88	122.36
6	G	72	SER	CA-C-N	6.00	128.81	120.29
6	G	72	SER	C-N-CA	6.00	128.81	120.29
3	A	612	ALA	CA-C-N	6.00	128.32	120.28
3	A	612	ALA	C-N-CA	6.00	128.32	120.28
8	O	275	ASP	O-C-N	-6.00	115.31	122.15
6	G	87	LYS	CA-C-N	6.00	128.12	120.56
6	G	87	LYS	C-N-CA	6.00	128.12	120.56
3	C	540	ILE	N-CA-CB	6.00	119.58	110.58
6	I	52	ARG	CA-C-N	6.00	128.24	120.44
6	I	52	ARG	C-N-CA	6.00	128.24	120.44
3	C	411	SER	CA-C-O	6.00	126.96	120.43
4	B	210	ILE	N-CA-C	-5.99	99.85	108.48
3	C	221	ARG	CA-C-N	5.99	127.33	119.84
3	C	221	ARG	C-N-CA	5.99	127.33	119.84
4	F	75	ALA	CA-C-O	-5.99	114.11	121.06
3	C	509	ASP	CA-C-N	5.99	128.31	120.28
3	C	509	ASP	C-N-CA	5.99	128.31	120.28
4	B	152	SER	CA-C-N	5.99	132.27	121.92
4	B	152	SER	C-N-CA	5.99	132.27	121.92
3	E	476	PRO	N-CA-C	5.99	120.63	111.11
4	F	403	LEU	O-C-N	5.99	128.24	122.07
4	B	170	ILE	O-C-N	5.98	126.68	121.12
8	O	107	VAL	O-C-N	-5.98	116.59	120.42
4	B	205	GLU	CA-C-O	5.98	126.00	119.24
4	F	238	THR	CA-C-O	-5.98	114.46	121.46
4	F	403	LEU	CA-C-O	-5.98	114.54	120.82
4	B	147	PRO	CA-C-O	-5.98	114.81	121.32
7	P	75	LYS	CA-C-O	5.98	126.76	119.11
8	O	282	GLN	CA-C-O	-5.98	114.55	120.82
3	E	483	ASP	N-CA-CB	5.97	119.00	110.16
7	P	93	LYS	CB-CA-C	-5.97	99.58	110.63
3	E	74	GLU	N-CA-CB	5.97	118.90	110.36
8	O	269	GLN	CA-C-O	-5.97	113.61	120.24
7	P	97	GLN	N-CA-C	5.97	117.78	111.28
7	P	161	VAL	O-C-N	5.97	128.11	121.90
8	O	208	LYS	CA-C-O	-5.97	114.56	120.70
4	F	247	ASP	CA-C-N	5.96	127.29	119.84
4	F	247	ASP	C-N-CA	5.96	127.29	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	140	LYS	N-CA-C	-5.96	99.52	109.24
3	A	284	GLY	N-CA-C	-5.96	99.05	113.18
5	J	54	LEU	N-CA-C	-5.96	104.16	112.45
4	B	413	ALA	N-CA-C	5.96	118.56	111.71
8	O	186	LEU	N-CA-C	-5.96	98.11	110.80
3	E	163	GLU	N-CA-C	-5.96	107.25	114.75
4	B	362	ARG	CA-C-N	5.95	128.26	120.28
4	B	362	ARG	C-N-CA	5.95	128.26	120.28
6	K	181	LYS	CA-C-O	5.95	125.94	119.15
7	P	345	ILE	N-CA-CB	5.95	117.52	110.55
4	B	247	ASP	CA-C-N	5.95	127.27	119.84
4	B	247	ASP	C-N-CA	5.95	127.27	119.84
3	A	382	ALA	N-CA-C	-5.95	105.86	113.23
7	P	138	THR	N-CA-C	-5.94	104.71	111.07
3	E	257	ALA	CB-CA-C	-5.94	98.59	110.42
3	A	424	SER	N-CA-C	-5.94	105.89	113.02
4	D	155	VAL	N-CA-CB	5.94	118.94	111.46
4	D	426	SER	N-CA-C	-5.94	100.11	108.96
5	J	62	ALA	N-CA-C	-5.94	106.00	113.72
4	D	313	SER	CA-C-N	5.94	128.24	120.28
4	D	313	SER	C-N-CA	5.94	128.24	120.28
6	K	22	ALA	CA-C-N	5.94	128.24	120.28
6	K	22	ALA	C-N-CA	5.94	128.24	120.28
5	J	5	ASN	N-CA-C	-5.94	104.19	112.45
3	C	254	ILE	CA-C-O	-5.94	116.85	119.94
3	C	475	TYR	N-CA-CB	5.94	120.94	110.37
8	O	85	ILE	N-CA-C	-5.94	104.72	110.42
3	A	249	GLY	N-CA-C	-5.93	107.06	115.43
3	E	446	ALA	CA-C-N	5.93	129.33	120.31
3	E	446	ALA	C-N-CA	5.93	129.33	120.31
3	E	484	ARG	CA-C-N	5.93	128.55	120.54
3	E	484	ARG	C-N-CA	5.93	128.55	120.54
8	O	93	SER	CA-C-N	5.93	128.51	120.44
8	O	93	SER	C-N-CA	5.93	128.51	120.44
6	I	110	ILE	CA-C-N	5.93	129.32	120.31
6	I	110	ILE	C-N-CA	5.93	129.32	120.31
1	M	89	THR	N-CA-CB	5.93	121.11	111.21
4	B	79	VAL	CA-C-N	5.93	128.15	120.44
4	B	79	VAL	C-N-CA	5.93	128.15	120.44
3	C	165	SER	CA-C-O	5.93	125.31	118.97
3	C	325	PRO	CA-C-N	5.93	130.02	120.30
3	C	325	PRO	C-N-CA	5.93	130.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	491	ASN	CA-C-N	5.93	128.22	120.28
3	E	491	ASN	C-N-CA	5.93	128.22	120.28
6	G	87	LYS	CA-C-O	-5.93	114.27	120.55
8	O	187	ASN	CB-CA-C	-5.93	101.40	109.28
2	N	14	GLU	CA-C-N	5.92	128.22	120.28
2	N	14	GLU	C-N-CA	5.92	128.22	120.28
3	E	608	GLN	N-CA-CB	5.92	118.82	110.12
3	C	322	SER	N-CA-C	-5.92	105.89	113.23
4	D	202	ASP	CA-C-N	5.92	133.01	121.41
4	D	202	ASP	C-N-CA	5.92	133.01	121.41
4	F	448	ALA	CB-CA-C	-5.91	102.12	111.17
6	I	105	GLU	CA-C-N	5.91	128.48	120.44
6	I	105	GLU	C-N-CA	5.91	128.48	120.44
8	O	357	MET	N-CA-C	-5.91	99.37	109.24
4	F	221	THR	CB-CA-C	-5.91	100.81	110.85
5	L	27	TYR	CA-C-N	5.91	128.12	120.44
5	L	27	TYR	C-N-CA	5.91	128.12	120.44
4	B	439	PHE	N-CA-C	-5.91	104.75	111.07
4	F	35	ASN	CA-C-O	5.91	126.60	120.40
4	F	322	VAL	N-CA-CB	5.90	121.66	111.39
3	A	412	ILE	N-CA-CB	5.90	119.28	111.25
6	G	56	ASN	CB-CA-C	-5.90	99.34	110.67
4	F	375	VAL	CA-C-N	5.90	127.46	120.09
4	F	375	VAL	C-N-CA	5.90	127.46	120.09
1	M	118	ASN	CA-C-N	5.89	129.24	120.87
1	M	118	ASN	C-N-CA	5.89	129.24	120.87
6	K	76	THR	CA-C-N	5.89	128.46	120.38
6	K	76	THR	C-N-CA	5.89	128.46	120.38
4	D	320	GLY	CA-C-O	5.89	127.10	122.33
7	P	257	PRO	CA-C-N	5.89	128.79	120.42
7	P	257	PRO	C-N-CA	5.89	128.79	120.42
3	A	128	ILE	CB-CA-C	-5.89	101.86	110.81
4	B	187	ILE	N-CA-C	-5.89	104.99	110.53
1	M	77	GLU	N-CA-C	-5.89	99.78	108.79
4	B	369	ILE	O-C-N	-5.89	116.39	122.63
3	C	582	SER	N-CA-CB	5.89	118.78	110.12
1	M	69	ALA	CA-C-N	5.89	128.09	120.44
1	M	69	ALA	C-N-CA	5.89	128.09	120.44
1	M	172	ALA	N-CA-CB	5.89	118.55	110.01
2	N	98	ASP	CB-CA-C	5.89	119.64	111.63
6	K	124	LEU	CA-C-N	5.89	128.09	120.56
6	K	124	LEU	C-N-CA	5.89	128.09	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	512	LYS	CA-C-N	5.88	128.52	120.46
3	A	512	LYS	C-N-CA	5.88	128.52	120.46
3	E	561	VAL	CA-C-N	5.88	128.16	120.28
3	E	561	VAL	C-N-CA	5.88	128.16	120.28
8	O	284	LEU	O-C-N	5.88	128.35	122.12
6	G	71	LEU	CA-C-N	5.88	128.75	120.28
6	G	71	LEU	C-N-CA	5.88	128.75	120.28
3	C	590	SER	CA-C-N	5.88	131.73	122.21
3	C	590	SER	C-N-CA	5.88	131.73	122.21
6	G	213	GLU	N-CA-C	-5.88	106.45	113.97
1	M	191	GLU	CA-C-N	5.88	128.08	120.44
1	M	191	GLU	C-N-CA	5.88	128.08	120.44
4	B	210	ILE	CB-CA-C	5.88	119.37	110.62
3	E	111	PRO	CA-C-O	-5.87	115.10	121.27
4	B	65	GLY	N-CA-C	-5.87	99.57	110.73
8	O	19	ASN	CA-C-N	-5.87	113.02	121.42
8	O	19	ASN	C-N-CA	-5.87	113.02	121.42
4	B	31	VAL	CA-C-O	-5.87	113.85	120.95
3	E	450	HIS	CA-C-N	5.87	131.51	121.35
3	E	450	HIS	C-N-CA	5.87	131.51	121.35
2	N	52	ASP	N-CA-C	-5.87	104.80	111.14
3	E	536	ALA	O-C-N	5.87	130.40	122.59
2	N	64	ILE	O-C-N	-5.87	115.78	122.94
3	C	182	ILE	N-CA-CB	5.87	117.69	111.00
2	N	29	THR	N-CA-C	5.87	117.99	109.84
3	C	194	ASP	N-CA-C	-5.87	106.09	113.72
3	A	219	VAL	CB-CA-C	5.86	116.75	110.53
4	D	155	VAL	CB-CA-C	-5.86	102.40	110.96
3	E	334	TYR	CA-C-N	5.86	128.62	120.29
3	E	334	TYR	C-N-CA	5.86	128.62	120.29
4	F	144	ARG	N-CA-C	-5.86	103.83	113.50
8	O	184	PHE	N-CA-CB	5.86	118.93	110.37
3	A	600	PHE	CA-C-O	-5.86	114.21	120.42
6	K	68	LYS	N-CA-CB	5.86	118.50	110.01
4	F	320	GLY	CA-C-N	5.85	129.18	120.87
4	F	320	GLY	C-N-CA	5.85	129.18	120.87
8	O	139	SER	N-CA-C	5.85	117.66	111.28
6	G	82	ASN	N-CA-C	-5.85	104.32	112.45
4	F	156	SER	CA-C-N	5.85	128.12	120.28
4	F	156	SER	C-N-CA	5.85	128.12	120.28
1	M	114	ASP	CA-C-O	-5.85	114.96	119.46
3	E	192	THR	CA-C-O	-5.85	115.05	121.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	425	ASN	CA-C-N	5.85	128.04	120.44
7	P	425	ASN	C-N-CA	5.85	128.04	120.44
3	C	407	THR	N-CA-C	-5.85	100.18	109.59
3	A	614	SER	CA-C-N	5.84	128.03	120.44
3	A	614	SER	C-N-CA	5.84	128.03	120.44
8	O	263	SER	N-CA-CB	5.84	118.65	109.83
6	K	102	GLU	CA-C-N	5.84	128.10	120.28
6	K	102	GLU	C-N-CA	5.84	128.10	120.28
1	M	150	ALA	CA-C-N	5.83	128.10	120.28
1	M	150	ALA	C-N-CA	5.83	128.10	120.28
5	J	25	ARG	CA-C-N	5.83	128.10	120.28
5	J	25	ARG	C-N-CA	5.83	128.10	120.28
3	A	309	GLU	CA-C-N	5.83	127.13	119.84
3	A	309	GLU	C-N-CA	5.83	127.13	119.84
4	D	250	ILE	N-CA-CB	5.83	118.47	110.54
1	M	140	SER	O-C-N	5.83	128.30	122.12
3	E	363	ALA	CA-C-N	5.83	128.09	120.28
3	E	363	ALA	C-N-CA	5.83	128.09	120.28
3	A	282	GLY	N-CA-C	-5.83	99.36	113.18
8	O	199	PRO	CA-C-O	-5.83	114.56	121.67
5	L	78	GLY	N-CA-C	-5.83	107.44	114.66
8	O	210	TYR	O-C-N	5.83	128.29	122.12
4	F	80	PHE	N-CA-C	-5.82	104.89	112.23
1	M	185	ILE	CA-C-N	5.82	128.35	120.44
1	M	185	ILE	C-N-CA	5.82	128.35	120.44
4	D	129	GLU	N-CA-C	-5.82	107.99	114.62
4	D	396	HIS	CA-C-N	5.82	126.40	120.00
4	D	396	HIS	C-N-CA	5.82	126.40	120.00
6	K	58	ILE	CA-C-N	5.82	128.66	120.28
6	K	58	ILE	C-N-CA	5.82	128.66	120.28
6	G	130	LEU	N-CA-CB	-5.82	100.73	110.39
3	E	215	TRP	CA-C-O	-5.81	112.20	120.16
7	P	458	ASP	N-CA-CB	5.81	120.31	110.49
3	C	224	THR	O-C-N	5.81	128.36	122.09
4	D	293	ALA	CA-C-O	5.81	126.23	119.32
6	G	146	VAL	N-CA-CB	5.81	118.44	110.54
7	P	276	LYS	N-CA-C	5.80	117.28	111.07
13	m	54	ILE	CA-C-N	5.80	123.90	120.24
13	m	54	ILE	C-N-CA	5.80	123.90	120.24
1	M	182	GLU	N-CA-CB	5.80	118.48	110.07
4	D	169	LYS	N-CA-C	-5.80	98.95	108.41
4	F	49	TYR	CA-C-N	5.80	130.61	122.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	49	TYR	C-N-CA	5.80	130.61	122.08
7	P	413	ALA	CA-C-N	5.80	128.37	120.54
7	P	413	ALA	C-N-CA	5.80	128.37	120.54
6	K	152	MET	CA-C-N	5.80	128.05	120.28
6	K	152	MET	C-N-CA	5.80	128.05	120.28
8	O	130	LEU	CA-C-N	5.80	128.66	120.42
8	O	130	LEU	C-N-CA	5.80	128.66	120.42
8	O	333	PRO	CA-C-N	5.80	127.09	119.84
8	O	333	PRO	C-N-CA	5.80	127.09	119.84
1	M	167	ASN	N-CA-CB	5.79	118.47	110.07
5	J	79	GLU	N-CA-C	-5.79	104.56	111.69
4	B	415	ALA	CA-C-O	-5.79	114.28	120.42
6	I	101	GLU	CA-C-N	5.79	129.11	120.31
6	I	101	GLU	C-N-CA	5.79	129.11	120.31
3	E	494	GLU	O-C-N	-5.79	116.11	122.07
8	O	37	THR	CA-C-N	5.79	129.33	121.05
8	O	37	THR	C-N-CA	5.79	129.33	121.05
8	O	273	GLU	CA-C-N	5.79	127.97	120.44
8	O	273	GLU	C-N-CA	5.79	127.97	120.44
3	A	293	VAL	N-CA-CB	5.78	121.24	110.77
4	F	305	PRO	N-CA-CB	5.78	109.32	103.25
4	F	479	LYS	CA-C-N	5.78	128.63	120.42
4	F	479	LYS	C-N-CA	5.78	128.63	120.42
5	J	97	ILE	CB-CA-C	-5.78	104.24	112.22
3	A	320	ASN	N-CA-C	-5.78	99.48	108.90
3	A	406	ARG	N-CA-C	-5.78	100.53	109.14
4	B	228	ASP	O-C-N	5.78	128.02	122.07
4	D	109	LEU	N-CA-C	-5.78	102.75	110.55
2	N	70	ASN	N-CA-CB	5.78	118.79	110.06
7	P	80	LEU	N-CA-CB	5.78	118.71	110.16
3	C	243	LEU	N-CA-C	5.78	117.66	111.36
6	I	72	SER	CA-C-N	5.78	129.09	120.31
6	I	72	SER	C-N-CA	5.78	129.09	120.31
7	P	296	GLN	N-CA-CB	5.78	118.61	110.12
3	E	224	THR	N-CA-C	5.77	118.04	111.11
3	A	178	SER	N-CA-CB	5.77	120.29	110.71
3	C	405	ASP	N-CA-CB	5.77	120.24	110.49
3	E	368	SER	N-CA-CB	5.77	118.61	110.12
4	F	365	HIS	N-CA-C	5.77	117.57	111.28
4	D	234	SER	N-CA-C	-5.77	104.91	112.41
4	F	263	ALA	O-C-N	5.77	128.24	122.12
2	N	8	ILE	N-CA-CB	5.77	119.14	111.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	213	GLU	CA-C-O	5.77	125.93	119.41
7	P	17	ARG	CA-C-N	5.77	128.48	120.29
7	P	17	ARG	C-N-CA	5.77	128.48	120.29
6	G	207	LEU	CA-C-N	5.77	128.01	120.28
6	G	207	LEU	C-N-CA	5.77	128.01	120.28
7	P	48	GLU	CA-C-N	5.76	129.07	120.31
7	P	48	GLU	C-N-CA	5.76	129.07	120.31
3	A	62	ARG	O-C-N	-5.76	116.68	123.25
8	O	383	GLU	CA-C-O	-5.76	114.70	120.64
4	B	372	PRO	N-CA-CB	-5.76	97.20	103.25
3	C	116	LYS	CB-CA-C	-5.76	101.23	110.79
4	F	227	GLN	CA-C-N	5.76	127.93	120.44
4	F	227	GLN	C-N-CA	5.76	127.93	120.44
3	C	75	GLU	N-CA-CB	5.76	118.59	110.36
4	D	220	GLU	CA-C-N	5.76	129.06	120.31
4	D	220	GLU	C-N-CA	5.76	129.06	120.31
4	D	423	GLU	N-CA-CB	5.76	118.97	110.33
1	M	49	ARG	CB-CA-C	-5.75	101.07	110.85
3	A	210	THR	CA-C-N	5.75	128.26	120.38
3	A	210	THR	C-N-CA	5.75	128.26	120.38
3	C	177	ARG	N-CA-CB	5.75	120.21	110.49
4	F	160	THR	O-C-N	-5.75	115.88	122.09
7	P	241	GLN	CA-C-O	-5.75	114.32	120.42
4	B	479	LYS	CA-C-N	5.75	127.92	120.56
4	B	479	LYS	C-N-CA	5.75	127.92	120.56
6	K	36	GLN	CA-C-N	5.75	128.45	120.29
6	K	36	GLN	C-N-CA	5.75	128.45	120.29
3	A	335	THR	CA-C-N	5.75	126.32	120.00
3	A	335	THR	C-N-CA	5.75	126.32	120.00
4	B	402	GLN	N-CA-CB	5.74	118.39	110.07
3	C	207	SER	O-C-N	-5.74	117.86	123.26
6	I	24	ILE	N-CA-C	-5.74	104.91	110.42
3	A	425	ASP	CA-C-N	5.74	125.86	119.32
3	A	425	ASP	C-N-CA	5.74	125.86	119.32
5	L	93	ASP	CA-C-O	5.74	126.56	119.79
7	P	247	LEU	N-CA-C	-5.74	105.11	111.36
1	M	66	PHE	O-C-N	-5.73	116.04	122.12
3	A	385	GLY	CA-C-N	5.73	128.43	120.29
3	A	385	GLY	C-N-CA	5.73	128.43	120.29
3	A	168	SER	O-C-N	-5.73	115.82	122.87
3	C	42	GLY	CA-C-O	5.73	126.71	119.72
7	P	354	THR	N-CA-C	-5.73	102.42	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	421	GLN	CA-C-N	5.73	128.31	120.46
7	P	421	GLN	C-N-CA	5.73	128.31	120.46
8	O	59	ASP	CA-C-O	-5.73	114.80	120.82
6	K	52	ARG	CA-C-N	5.73	127.89	120.44
6	K	52	ARG	C-N-CA	5.73	127.89	120.44
6	I	82	ASN	CA-C-N	5.73	129.02	120.31
6	I	82	ASN	C-N-CA	5.73	129.02	120.31
3	C	482	ARG	O-C-N	5.73	128.28	122.09
7	P	411	VAL	N-CA-C	-5.73	99.93	108.46
7	P	119	GLU	O-C-N	-5.73	116.17	122.07
3	C	144	GLY	CA-C-N	5.72	130.47	121.08
3	C	144	GLY	C-N-CA	5.72	130.47	121.08
3	C	294	LEU	CA-C-O	5.72	126.62	120.55
6	K	102	GLU	N-CA-C	-5.72	105.04	111.28
8	O	301	ILE	CA-C-N	5.72	127.95	120.28
8	O	301	ILE	C-N-CA	5.72	127.95	120.28
7	P	379	PHE	O-C-N	5.72	127.97	122.07
1	M	29	TYR	CA-C-O	-5.72	114.81	120.82
6	K	68	LYS	CA-C-O	-5.72	114.81	120.82
3	E	383	TYR	CA-C-N	5.72	127.87	120.44
3	E	383	TYR	C-N-CA	5.72	127.87	120.44
8	O	203	LYS	CB-CA-C	-5.72	101.90	110.88
4	B	325	ARG	N-CA-C	5.72	119.23	111.17
3	C	419	ALA	N-CA-C	-5.72	104.53	112.30
5	L	46	TYR	N-CA-C	-5.72	106.14	113.23
1	M	210	LYS	N-CA-CB	5.71	118.62	110.16
2	N	28	ILE	N-CA-CB	5.71	118.87	111.67
3	A	462	LYS	N-CA-C	-5.71	106.35	113.38
7	P	77	LEU	N-CA-CB	5.71	118.30	110.01
7	P	120	ASP	CA-C-N	5.71	125.39	119.56
7	P	120	ASP	C-N-CA	5.71	125.39	119.56
6	G	42	GLU	CB-CA-C	-5.71	101.14	110.85
6	G	121	LEU	CA-C-O	5.71	126.61	120.55
4	B	257	ARG	CA-C-N	5.71	128.40	120.29
4	B	257	ARG	C-N-CA	5.71	128.40	120.29
3	C	403	SER	CA-C-O	-5.71	112.34	120.16
3	A	357	SER	CA-C-N	5.71	128.40	120.29
3	A	357	SER	C-N-CA	5.71	128.40	120.29
3	C	80	THR	CA-C-N	5.71	128.28	120.35
3	C	80	THR	C-N-CA	5.71	128.28	120.35
4	D	446	GLN	O-C-N	-5.71	117.81	123.46
7	P	110	GLY	O-C-N	5.71	129.01	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	57	ASN	CA-C-O	-5.71	114.82	120.70
1	M	113	ILE	N-CA-C	-5.71	100.12	108.11
3	A	460	TYR	O-C-N	-5.71	117.31	123.42
4	B	219	LEU	CB-CA-C	-5.71	101.32	110.79
3	C	478	PHE	CA-C-N	5.71	125.38	119.05
3	C	478	PHE	C-N-CA	5.71	125.38	119.05
3	E	327	ALA	CB-CA-C	-5.71	101.32	110.79
8	O	326	ASN	CB-CA-C	-5.71	101.49	110.79
3	A	238	ARG	CA-C-N	5.71	129.48	120.47
3	A	238	ARG	C-N-CA	5.71	129.48	120.47
3	C	32	GLY	CA-C-O	-5.71	113.36	121.52
3	E	525	PHE	N-CA-C	-5.71	103.88	111.24
8	O	233	LEU	N-CA-C	-5.71	99.89	109.07
8	O	369	THR	N-CA-C	-5.71	100.64	109.14
2	N	41	GLN	N-CA-C	-5.70	99.43	108.73
3	A	377	ASP	CA-C-N	5.70	130.67	122.40
3	A	377	ASP	C-N-CA	5.70	130.67	122.40
3	E	416	VAL	N-CA-C	-5.70	100.38	108.65
7	P	365	SER	CA-C-N	5.70	130.46	122.36
7	P	365	SER	C-N-CA	5.70	130.46	122.36
6	G	72	SER	N-CA-CB	5.70	119.00	110.22
8	O	151	ASN	N-CA-CB	5.70	118.60	110.16
8	O	310	ARG	CA-C-N	5.70	128.51	120.42
8	O	310	ARG	C-N-CA	5.70	128.51	120.42
3	C	34	VAL	N-CA-C	-5.70	100.22	108.71
4	F	201	HIS	CA-C-N	5.70	132.42	121.54
4	F	201	HIS	C-N-CA	5.70	132.42	121.54
4	D	116	SER	N-CA-C	-5.70	105.67	113.30
3	E	555	ASP	CA-C-O	5.69	126.45	120.42
7	P	23	ARG	CB-CA-C	5.69	119.12	109.84
4	D	324	GLY	N-CA-C	-5.69	99.69	113.18
3	E	84	PRO	CA-C-O	-5.69	115.02	122.19
3	E	444	LYS	CA-C-N	5.69	128.37	120.29
3	E	444	LYS	C-N-CA	5.69	128.37	120.29
6	I	210	LEU	CA-C-N	5.68	128.17	120.38
6	I	210	LEU	C-N-CA	5.68	128.17	120.38
2	N	63	ASP	CA-C-N	5.68	129.47	122.37
2	N	63	ASP	C-N-CA	5.68	129.47	122.37
3	C	289	GLU	CA-C-N	5.68	128.36	120.29
3	C	289	GLU	C-N-CA	5.68	128.36	120.29
3	C	611	PHE	N-CA-C	-5.68	105.09	111.28
7	P	35	GLU	N-CA-C	-5.68	98.70	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	96	LEU	CB-CA-C	-5.68	101.59	110.74
4	D	479	LYS	CA-C-N	5.68	128.49	120.42
4	D	479	LYS	C-N-CA	5.68	128.49	120.42
3	E	142	THR	CA-C-N	5.68	126.94	119.84
3	E	142	THR	C-N-CA	5.68	126.94	119.84
6	K	61	ASN	CA-C-O	5.68	125.94	119.18
7	P	326	SER	O-C-N	5.68	128.14	122.12
2	N	73	ILE	CA-C-N	5.67	128.35	120.29
2	N	73	ILE	C-N-CA	5.67	128.35	120.29
3	A	132	ALA	N-CA-CB	5.67	119.97	110.32
3	E	270	SER	N-CA-C	5.67	117.47	111.28
3	E	327	ALA	O-C-N	5.67	128.13	122.12
3	E	263	THR	O-C-N	5.67	128.13	122.12
8	O	100	LEU	CA-C-N	5.67	126.93	119.84
8	O	100	LEU	C-N-CA	5.67	126.93	119.84
3	C	453	SER	CA-C-N	-5.67	116.16	123.19
3	C	453	SER	C-N-CA	-5.67	116.16	123.19
2	N	87	ALA	N-CA-C	-5.67	105.71	113.30
3	C	84	PRO	N-CA-C	-5.67	102.96	111.57
3	C	302	THR	CA-C-N	5.67	131.68	122.67
3	C	302	THR	C-N-CA	5.67	131.68	122.67
3	E	556	GLU	O-C-N	5.67	129.24	122.27
3	C	583	SER	CB-CA-C	-5.67	99.81	110.01
1	M	151	SER	CB-CA-C	-5.66	101.39	110.79
3	E	303	GLU	CA-C-N	5.66	128.86	119.35
3	E	303	GLU	C-N-CA	5.66	128.86	119.35
6	K	119	PRO	N-CA-CB	5.66	109.51	103.39
8	O	206	PHE	CA-C-N	5.66	127.87	120.28
8	O	206	PHE	C-N-CA	5.66	127.87	120.28
5	J	98	LEU	CA-C-N	5.66	127.70	120.56
5	J	98	LEU	C-N-CA	5.66	127.70	120.56
6	I	87	LYS	CA-C-N	5.66	127.81	120.56
6	I	87	LYS	C-N-CA	5.66	127.81	120.56
4	B	434	GLU	N-CA-CB	5.66	118.54	110.16
3	E	579	HIS	O-C-N	5.66	128.60	122.15
6	I	199	ILE	N-CA-C	-5.66	99.00	107.37
4	D	146	TYR	CA-C-N	5.66	126.91	119.84
4	D	146	TYR	C-N-CA	5.66	126.91	119.84
4	D	184	ALA	N-CA-CB	5.65	118.43	110.12
3	A	298	PRO	CA-C-N	5.65	128.90	120.31
3	A	298	PRO	C-N-CA	5.65	128.90	120.31
3	A	600	PHE	N-CA-C	5.65	117.52	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	237	HIS	N-CA-C	5.65	117.89	111.11
1	M	78	ASN	N-CA-CB	5.64	119.19	110.21
3	A	589	PRO	CB-CA-C	5.64	116.83	109.89
4	B	411	LYS	CA-C-N	5.64	128.31	120.29
4	B	411	LYS	C-N-CA	5.64	128.31	120.29
3	E	339	LEU	N-CA-CB	5.64	118.42	110.12
8	O	282	GLN	N-CA-C	5.64	117.11	111.07
4	B	163	SER	CA-C-O	-5.64	114.21	120.70
4	F	256	PRO	CA-C-N	5.64	127.84	120.28
4	F	256	PRO	C-N-CA	5.64	127.84	120.28
4	B	399	VAL	CB-CA-C	5.64	119.75	112.14
7	P	171	ILE	N-CA-CB	5.64	120.98	110.77
8	O	150	ALA	CA-C-N	5.64	128.30	120.29
8	O	150	ALA	C-N-CA	5.64	128.30	120.29
4	F	384	LYS	CA-C-O	5.64	126.53	120.55
4	B	431	LEU	CA-C-O	-5.64	114.58	120.55
4	B	456	GLU	CA-C-N	5.64	127.83	120.28
4	B	456	GLU	C-N-CA	5.64	127.83	120.28
8	O	201	SER	O-C-N	5.64	128.09	122.12
3	C	239	VAL	N-CA-C	5.63	116.37	110.62
4	F	470	LYS	CA-C-N	5.63	128.29	120.29
4	F	470	LYS	C-N-CA	5.63	128.29	120.29
1	M	171	ASN	CA-C-N	5.63	127.76	120.44
1	M	171	ASN	C-N-CA	5.63	127.76	120.44
3	C	267	GLN	CA-C-N	5.63	127.83	120.28
3	C	267	GLN	C-N-CA	5.63	127.83	120.28
4	B	58	PRO	N-CA-C	-5.63	108.82	114.68
4	F	338	PRO	CA-C-O	5.63	125.10	118.68
7	P	87	SER	CA-C-O	-5.63	115.43	121.56
3	C	495	LEU	CA-C-N	5.63	127.82	120.28
3	C	495	LEU	C-N-CA	5.63	127.82	120.28
6	K	55	THR	N-CA-CB	5.62	119.00	110.28
4	D	64	GLN	N-CA-C	-5.62	101.01	109.95
3	E	330	GLU	N-CA-C	-5.62	105.23	111.36
6	K	148	LEU	CA-C-N	5.62	127.64	120.56
6	K	148	LEU	C-N-CA	5.62	127.64	120.56
1	M	120	PHE	CA-C-O	-5.62	115.18	121.81
3	E	522	LYS	CB-CA-C	-5.62	102.06	110.88
3	C	38	GLU	O-C-N	-5.62	116.11	122.68
4	B	475	ARG	N-CA-C	-5.61	106.64	112.93
3	C	104	ILE	CA-C-O	5.61	126.28	120.39
3	E	240	LEU	CA-C-O	-5.61	114.92	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	87	ASP	CA-C-O	-5.61	114.66	120.89
8	O	108	PRO	CA-C-N	5.61	128.26	120.29
8	O	108	PRO	C-N-CA	5.61	128.26	120.29
2	N	49	GLU	CA-C-N	5.61	128.38	120.42
2	N	49	GLU	C-N-CA	5.61	128.38	120.42
3	A	109	GLN	N-CA-CB	5.61	119.97	110.49
6	K	208	LYS	CA-C-O	5.61	126.49	120.55
4	B	173	PHE	CA-C-N	5.60	132.98	123.01
4	B	173	PHE	C-N-CA	5.60	132.98	123.01
4	D	464	LEU	CA-C-N	5.60	130.07	120.72
4	D	464	LEU	C-N-CA	5.60	130.07	120.72
6	K	213	GLU	CA-C-N	5.60	128.83	120.31
6	K	213	GLU	C-N-CA	5.60	128.83	120.31
5	H	27	TYR	CA-C-N	5.60	127.72	120.44
5	H	27	TYR	C-N-CA	5.60	127.72	120.44
6	G	34	GLU	CA-C-N	5.60	127.62	120.56
6	G	34	GLU	C-N-CA	5.60	127.62	120.56
6	G	53	ASN	CA-C-O	-5.60	114.94	120.82
4	B	260	LEU	CB-CA-C	-5.60	101.49	110.79
4	D	154	GLY	O-C-N	5.60	129.50	122.39
8	O	159	LEU	CA-C-N	5.60	128.24	120.29
8	O	159	LEU	C-N-CA	5.60	128.24	120.29
3	E	88	THR	N-CA-C	-5.60	105.95	112.89
8	O	300	PHE	CA-C-N	5.60	128.13	120.46
8	O	300	PHE	C-N-CA	5.60	128.13	120.46
4	F	42	GLU	N-CA-C	-5.59	99.40	108.52
6	K	156	ILE	CA-C-O	-5.59	114.30	120.96
5	H	96	LYS	CB-CA-C	-5.59	101.50	110.79
2	N	100	PRO	O-C-N	5.59	130.19	122.64
7	P	121	PRO	CA-C-N	5.59	127.77	120.28
7	P	121	PRO	C-N-CA	5.59	127.77	120.28
6	G	50	ILE	N-CA-CB	5.59	116.71	110.51
6	K	22	ALA	O-C-N	5.59	128.12	122.09
4	F	244	LEU	N-CA-C	-5.58	101.03	109.85
8	O	280	LEU	CA-C-N	5.58	127.76	120.28
8	O	280	LEU	C-N-CA	5.58	127.76	120.28
6	I	17	LEU	O-C-N	5.58	128.51	122.15
6	I	205	GLU	N-CA-CB	5.58	118.33	110.12
3	C	561	VAL	N-CA-C	5.58	116.36	110.72
3	E	41	ILE	O-C-N	-5.58	116.74	122.82
5	L	11	LEU	O-C-N	5.58	128.04	122.12
6	I	71	LEU	CA-C-N	5.58	128.79	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	71	LEU	C-N-CA	5.58	128.79	120.31
3	C	330	GLU	CA-C-O	5.58	126.45	120.70
8	O	210	TYR	N-CA-CB	5.58	118.32	110.12
1	M	24	GLY	CA-C-N	5.58	127.75	120.28
1	M	24	GLY	C-N-CA	5.58	127.75	120.28
3	E	266	SER	N-CA-CB	5.58	118.41	110.16
5	J	90	LYS	N-CA-CB	5.58	118.56	110.47
4	B	458	LEU	O-C-N	-5.58	115.79	122.15
3	C	382	ALA	CA-C-O	5.58	126.33	120.42
7	P	89	ASN	O-C-N	5.58	129.58	123.22
2	N	68	LEU	O-C-N	-5.57	116.69	123.16
3	A	476	PRO	CA-C-O	-5.57	115.06	121.36
4	B	411	LYS	O-C-N	5.57	128.03	122.12
4	D	330	THR	CA-C-O	5.57	126.72	120.70
7	P	37	SER	CA-C-N	5.57	128.31	120.28
7	P	37	SER	C-N-CA	5.57	128.31	120.28
3	A	212	TYR	N-CA-CB	5.57	119.25	110.23
4	B	218	ASN	O-C-N	5.57	129.50	123.10
4	D	247	ASP	CA-C-N	5.57	126.80	119.84
4	D	247	ASP	C-N-CA	5.57	126.80	119.84
3	E	570	LEU	CA-C-N	5.57	128.20	120.29
3	E	570	LEU	C-N-CA	5.57	128.20	120.29
4	F	344	HIS	CB-CA-C	5.57	118.59	109.46
3	E	210	THR	N-CA-C	-5.57	101.67	109.69
5	H	15	LYS	CA-C-O	-5.57	114.52	120.42
1	M	115	PRO	N-CA-C	-5.57	106.90	114.80
3	C	115	ILE	CB-CA-C	5.57	119.66	112.14
6	I	217	ALA	CA-C-O	5.57	126.66	120.82
3	A	59	GLU	CA-C-N	5.56	129.44	122.43
3	A	59	GLU	C-N-CA	5.56	129.44	122.43
3	C	528	GLN	N-CA-C	-5.56	98.95	110.80
1	M	214	THR	CA-C-O	5.56	126.37	119.97
3	E	614	SER	CA-C-O	-5.56	114.97	120.70
6	K	127	GLU	N-CA-CB	5.56	118.78	110.22
3	A	324	MET	CA-C-N	5.56	126.79	119.84
3	A	324	MET	C-N-CA	5.56	126.79	119.84
3	A	536	ALA	O-C-N	-5.56	115.81	122.15
3	E	186	ALA	N-CA-C	5.56	116.70	109.64
3	A	377	ASP	N-CA-C	5.55	118.38	110.10
6	I	10	PRO	N-CA-CB	5.55	109.59	103.26
3	E	298	PRO	CA-C-O	-5.55	111.23	119.00
4	B	42	GLU	CA-C-O	5.55	126.40	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	210	LYS	O-C-N	5.55	128.47	122.15
4	B	309	TYR	O-C-N	5.55	127.86	122.09
6	K	128	ALA	CA-C-N	5.55	129.98	120.72
6	K	128	ALA	C-N-CA	5.55	129.98	120.72
3	C	362	GLU	CA-C-N	5.54	128.16	120.29
3	C	362	GLU	C-N-CA	5.54	128.16	120.29
4	D	269	GLN	CB-CA-C	-5.54	100.03	110.67
4	F	366	ASN	N-CA-C	5.54	118.08	111.71
3	E	54	ASP	CA-C-O	-5.54	114.09	120.24
8	O	275	ASP	CA-C-O	5.54	126.29	120.42
5	J	28	ARG	CA-C-N	5.54	127.97	120.38
5	J	28	ARG	C-N-CA	5.54	127.97	120.38
7	P	228	THR	CA-C-O	-5.54	115.25	121.40
3	E	260	CYS	CA-C-O	-5.54	114.97	120.90
3	E	427	VAL	O-C-N	5.54	127.34	121.91
3	C	411	SER	N-CA-C	-5.54	100.22	109.24
4	D	308	MET	CA-C-N	5.54	127.70	120.28
4	D	308	MET	C-N-CA	5.54	127.70	120.28
4	D	336	THR	N-CA-C	-5.53	100.22	109.24
3	A	275	SER	CA-C-N	5.53	127.63	120.44
3	A	275	SER	C-N-CA	5.53	127.63	120.44
3	C	601	GLU	CA-C-N	5.53	128.14	120.29
3	C	601	GLU	C-N-CA	5.53	128.14	120.29
5	J	19	GLU	CA-C-N	5.53	127.53	120.56
5	J	19	GLU	C-N-CA	5.53	127.53	120.56
3	A	425	ASP	N-CA-CB	5.53	118.66	109.98
4	B	151	ILE	N-CA-C	-5.53	100.37	108.11
3	C	229	ALA	N-CA-C	5.53	118.34	110.10
1	M	84	GLN	CB-CA-C	-5.53	101.61	110.79
4	D	79	VAL	N-CA-CB	5.53	116.75	110.72
7	P	214	LEU	N-CA-C	5.53	117.31	111.28
7	P	470	GLN	CA-C-N	5.53	127.69	120.28
7	P	470	GLN	C-N-CA	5.53	127.69	120.28
3	A	475	TYR	N-CA-CB	5.53	120.21	110.37
3	A	558	GLN	O-C-N	-5.53	115.85	122.15
3	C	142	THR	CA-C-N	5.53	125.83	119.92
3	C	142	THR	C-N-CA	5.53	125.83	119.92
3	E	162	PHE	N-CA-CB	5.53	118.40	110.06
4	F	222	ALA	CB-CA-C	-5.53	101.62	110.79
8	O	342	SER	CA-C-N	5.53	127.68	120.28
8	O	342	SER	C-N-CA	5.53	127.68	120.28
4	F	136	GLY	N-CA-C	-5.52	107.62	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	120	ILE	CA-C-N	5.52	128.71	120.31
4	B	120	ILE	C-N-CA	5.52	128.71	120.31
4	D	436	LEU	O-C-N	5.52	127.76	122.07
3	E	175	PRO	O-C-N	-5.52	118.77	121.31
3	C	473	SER	CA-C-N	5.52	129.94	120.72
3	C	473	SER	C-N-CA	5.52	129.94	120.72
3	C	565	ALA	N-CA-C	-5.52	99.04	110.80
7	P	344	GLU	CA-C-N	5.52	127.51	120.56
7	P	344	GLU	C-N-CA	5.52	127.51	120.56
1	M	197	ARG	N-CA-C	5.52	117.37	111.36
6	K	141	ALA	O-C-N	5.52	129.38	122.92
4	B	358	ILE	N-CA-CB	5.52	118.75	111.25
4	D	226	LYS	CA-C-N	5.52	128.12	120.29
4	D	226	LYS	C-N-CA	5.52	128.12	120.29
7	P	464	GLU	CA-C-N	5.52	127.67	120.28
7	P	464	GLU	C-N-CA	5.52	127.67	120.28
4	B	48	ARG	N-CA-CB	5.51	119.01	110.46
3	E	548	ARG	O-C-N	-5.51	116.28	122.12
6	K	80	ILE	N-CA-C	-5.51	105.15	110.72
7	P	11	THR	N-CA-C	-5.51	105.35	111.36
3	C	272	TYR	N-CA-C	5.51	117.37	111.36
3	E	514	THR	CA-C-O	-5.51	114.71	120.55
3	A	323	ASN	CB-CA-C	-5.51	100.29	109.55
4	B	211	VAL	N-CA-CB	5.51	118.80	111.64
3	E	494	GLU	CA-C-O	5.51	126.61	120.82
6	I	64	SER	CB-CA-C	-5.51	100.61	110.70
1	M	195	LEU	CA-C-O	-5.51	115.03	120.82
3	A	557	ALA	CA-C-N	5.51	128.11	120.29
3	A	557	ALA	C-N-CA	5.51	128.11	120.29
4	B	255	THR	CA-C-N	5.51	125.03	119.19
4	B	255	THR	C-N-CA	5.51	125.03	119.19
3	E	510	SER	CA-C-O	-5.51	114.71	120.55
3	E	193	LEU	N-CA-C	-5.51	106.40	113.23
3	A	614	SER	N-CA-C	5.51	117.09	111.14
3	E	519	THR	N-CA-CB	5.51	118.22	110.12
3	E	599	GLU	N-CA-C	-5.51	105.28	111.28
4	B	478	PRO	N-CA-CB	5.50	108.98	103.48
3	C	569	LYS	CA-C-N	5.50	127.66	120.28
3	C	569	LYS	C-N-CA	5.50	127.66	120.28
3	A	323	ASN	CA-C-O	5.50	125.11	119.05
3	A	398	ALA	CA-C-O	-5.50	115.39	121.33
4	B	294	ALA	O-C-N	-5.50	116.18	121.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	354	THR	CA-C-N	5.50	130.33	122.08
4	B	354	THR	C-N-CA	5.50	130.33	122.08
7	P	166	LYS	CA-C-N	5.50	128.68	120.87
7	P	166	LYS	C-N-CA	5.50	128.68	120.87
1	M	57	MET	N-CA-CB	5.50	117.98	110.01
16	f	39	VAL	N-CA-C	-5.50	108.14	113.53
3	C	482	ARG	CA-C-O	-5.50	115.04	120.70
7	P	302	VAL	O-C-N	-5.50	116.68	122.67
5	J	14	GLU	CA-C-N	5.49	128.09	120.29
5	J	14	GLU	C-N-CA	5.49	128.09	120.29
4	B	411	LYS	CB-CA-C	-5.49	101.67	110.79
3	E	575	GLY	CA-C-N	5.49	127.58	120.44
3	E	575	GLY	C-N-CA	5.49	127.58	120.44
3	E	615	THR	N-CA-C	5.49	116.95	111.07
6	I	208	LYS	N-CA-C	5.49	117.27	111.28
3	E	234	LEU	CA-C-N	5.49	130.75	121.14
3	E	234	LEU	C-N-CA	5.49	130.75	121.14
7	P	473	ILE	CA-C-N	5.49	126.07	119.98
7	P	473	ILE	C-N-CA	5.49	126.07	119.98
6	G	187	GLY	N-CA-C	-5.49	104.48	112.17
6	I	170	GLU	N-CA-C	-5.49	105.71	112.90
3	C	436	GLN	CA-C-O	-5.49	113.01	119.05
3	E	163	GLU	CB-CA-C	-5.49	102.08	109.16
6	K	159	GLU	CA-C-N	5.49	128.08	120.29
6	K	159	GLU	C-N-CA	5.49	128.08	120.29
4	D	372	PRO	N-CA-C	-5.49	101.17	112.47
6	K	137	ALA	CA-C-O	-5.49	114.35	120.66
8	O	180	LYS	CA-C-O	-5.49	115.29	120.34
7	P	14	ASN	CA-C-O	-5.48	114.74	120.55
2	N	12	ALA	CA-C-N	5.48	129.03	120.75
2	N	12	ALA	C-N-CA	5.48	129.03	120.75
3	A	147	GLN	CA-C-O	-5.48	115.36	121.23
3	C	204	GLY	O-C-N	-5.48	117.03	123.17
3	C	321	THR	N-CA-C	-5.48	102.35	110.46
3	E	121	SER	CA-C-O	-5.48	114.70	121.06
5	L	51	ASP	O-C-N	-5.48	115.53	122.27
3	C	239	VAL	CA-C-N	5.48	127.89	120.44
3	C	239	VAL	C-N-CA	5.48	127.89	120.44
4	F	57	LEU	CA-C-O	5.48	126.72	120.97
6	K	213	GLU	N-CA-C	-5.48	106.72	113.41
8	O	222	ALA	N-CA-CB	5.48	119.75	110.49
8	O	274	HIS	CA-C-N	5.48	128.07	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	274	HIS	C-N-CA	5.48	128.07	120.29
8	O	302	ASN	N-CA-C	5.48	117.25	111.28
5	H	18	HIS	N-CA-CB	5.48	118.18	110.12
5	J	21	VAL	CA-C-N	5.48	127.62	120.28
5	J	21	VAL	C-N-CA	5.48	127.62	120.28
7	P	310	LYS	N-CA-CB	5.48	117.95	110.01
2	N	36	ASN	N-CA-C	-5.48	104.00	111.56
2	N	108	VAL	CA-C-O	-5.48	115.25	120.95
3	A	130	THR	O-C-N	-5.48	118.20	121.71
4	F	312	LEU	CA-C-N	5.48	128.38	120.38
4	F	312	LEU	C-N-CA	5.48	128.38	120.38
6	K	154	ASP	CA-C-N	5.48	128.17	120.28
6	K	154	ASP	C-N-CA	5.48	128.17	120.28
8	O	97	TYR	N-CA-C	5.48	119.39	111.56
4	B	393	ARG	CA-C-N	5.47	128.16	120.28
4	B	393	ARG	C-N-CA	5.47	128.16	120.28
7	P	318	ALA	CB-CA-C	-5.47	101.70	110.79
3	C	492	ALA	CA-C-N	5.47	127.56	120.44
3	C	492	ALA	C-N-CA	5.47	127.56	120.44
5	L	19	GLU	CA-C-O	-5.47	114.62	120.42
4	B	250	ILE	N-CA-C	5.47	116.20	110.62
3	E	379	GLY	CA-C-O	5.47	125.09	119.02
4	F	94	GLU	N-CA-C	-5.47	99.76	109.06
6	K	56	ASN	O-C-N	5.47	128.39	122.15
6	G	116	GLU	O-C-N	5.47	129.66	122.33
4	F	278	LEU	CA-C-O	5.47	126.14	120.40
1	M	168	ARG	CB-CA-C	-5.47	101.39	110.68
3	C	420	GLY	N-CA-C	-5.47	100.22	113.18
5	J	52	LYS	N-CA-C	5.46	116.92	111.07
3	E	273	SER	N-CA-CB	5.46	118.00	109.97
7	P	97	GLN	CA-C-N	5.46	127.54	120.44
7	P	97	GLN	C-N-CA	5.46	127.54	120.44
4	B	147	PRO	CB-CA-C	-5.46	104.71	111.64
4	D	138	PRO	N-CA-C	5.46	121.88	113.75
7	P	311	GLN	N-CA-C	-5.46	105.23	111.07
1	M	112	TYR	N-CA-CB	5.46	121.30	111.37
3	A	543	THR	CA-C-N	5.46	127.86	120.44
3	A	543	THR	C-N-CA	5.46	127.86	120.44
4	B	467	ILE	O-C-N	5.46	127.96	121.80
3	E	377	ASP	N-CA-CB	5.45	118.12	109.51
3	C	157	ILE	CA-C-N	5.45	131.25	121.66
3	C	157	ILE	C-N-CA	5.45	131.25	121.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	59	ASP	N-CA-CB	5.45	118.61	110.22
6	G	59	ASP	N-CA-C	-5.45	105.34	111.28
6	I	124	LEU	CB-CA-C	-5.45	101.58	110.85
4	D	46	PHE	CA-C-N	-5.45	113.65	120.51
4	D	46	PHE	C-N-CA	-5.45	113.65	120.51
6	I	57	ASN	CA-C-N	5.45	127.92	120.46
6	I	57	ASN	C-N-CA	5.45	127.92	120.46
4	B	201	HIS	CA-C-N	5.44	131.94	121.54
4	B	201	HIS	C-N-CA	5.44	131.94	121.54
4	D	242	LEU	CA-C-O	5.44	126.24	120.36
8	O	311	VAL	CB-CA-C	-5.44	104.71	112.22
6	G	101	GLU	CB-CA-C	-5.44	101.60	110.85
3	A	365	ARG	CA-C-N	5.44	127.51	120.44
3	A	365	ARG	C-N-CA	5.44	127.51	120.44
8	O	110	TYR	CA-C-N	5.43	128.11	120.28
8	O	110	TYR	C-N-CA	5.43	128.11	120.28
6	I	174	ILE	N-CA-CB	5.43	117.99	111.31
4	F	80	PHE	CA-C-O	-5.43	113.38	119.79
4	F	197	THR	CA-C-O	5.43	126.18	120.42
1	M	148	GLU	CA-C-N	5.43	128.00	120.29
1	M	148	GLU	C-N-CA	5.43	128.00	120.29
6	K	14	ASN	CA-C-N	5.43	127.56	120.28
6	K	14	ASN	C-N-CA	5.43	127.56	120.28
8	O	85	ILE	CA-C-O	-5.43	115.41	121.17
5	H	19	GLU	CA-C-N	5.43	127.90	120.46
5	H	19	GLU	C-N-CA	5.43	127.90	120.46
5	L	92	ASP	CB-CA-C	-5.43	100.25	110.67
7	P	475	TYR	N-CA-C	5.43	119.07	112.23
1	M	187	TYR	CA-C-N	5.43	128.13	120.42
1	M	187	TYR	C-N-CA	5.43	128.13	120.42
3	A	116	LYS	CA-C-N	5.43	127.82	120.44
3	A	116	LYS	C-N-CA	5.43	127.82	120.44
3	A	404	PRO	O-C-N	5.43	128.48	122.24
3	E	424	SER	N-CA-C	-5.43	106.03	113.30
8	O	367	GLN	CA-C-O	5.43	124.67	119.08
3	A	548	ARG	CA-C-N	5.43	127.55	120.28
3	A	548	ARG	C-N-CA	5.43	127.55	120.28
3	E	72	VAL	N-CA-C	-5.43	100.07	107.99
3	E	417	SER	CB-CA-C	5.43	117.38	110.22
4	F	207	ASN	CA-C-O	5.43	128.16	121.87
1	M	143	VAL	N-CA-CB	5.42	117.91	110.54
3	A	417	SER	N-CA-CB	5.42	116.87	111.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	210	PHE	N-CA-CB	5.42	118.28	110.20
3	E	186	ALA	CA-C-O	-5.42	114.53	120.17
6	I	99	ILE	N-CA-C	-5.42	105.44	110.53
3	A	359	ARG	CA-C-O	-5.42	113.74	119.97
6	I	148	LEU	CA-C-N	5.42	127.88	120.46
6	I	148	LEU	C-N-CA	5.42	127.88	120.46
3	E	110	ARG	CA-C-N	5.41	126.26	119.98
3	E	110	ARG	C-N-CA	5.41	126.26	119.98
7	P	54	LYS	CA-C-N	5.41	131.44	121.70
7	P	54	LYS	C-N-CA	5.41	131.44	121.70
7	P	242	LEU	CA-C-N	5.41	127.48	120.44
7	P	242	LEU	C-N-CA	5.41	127.48	120.44
3	A	288	ASN	N-CA-C	-5.41	105.03	111.69
2	N	47	LYS	CA-C-N	5.41	128.53	120.31
2	N	47	LYS	C-N-CA	5.41	128.53	120.31
3	A	266	SER	N-CA-C	5.41	117.18	111.28
3	A	361	ALA	CA-C-N	5.41	127.53	120.28
3	A	361	ALA	C-N-CA	5.41	127.53	120.28
4	D	198	LYS	CA-C-N	5.41	127.53	120.28
4	D	198	LYS	C-N-CA	5.41	127.53	120.28
1	M	116	GLU	N-CA-C	-5.41	106.45	113.16
3	E	354	ALA	O-C-N	-5.41	116.89	123.27
4	B	80	PHE	CA-C-O	-5.41	115.14	120.82
3	C	133	LEU	O-C-N	-5.41	116.15	122.96
6	K	156	ILE	N-CA-C	-5.40	105.58	110.82
6	I	215	LEU	O-C-N	-5.40	115.42	120.55
5	L	17	ALA	CA-C-N	5.40	127.52	120.28
5	L	17	ALA	C-N-CA	5.40	127.52	120.28
3	C	400	ALA	N-CA-C	5.40	117.26	110.24
4	F	349	LEU	N-CA-C	-5.40	105.47	111.36
3	A	324	MET	CA-C-O	-5.40	114.82	120.70
7	P	52	VAL	CA-C-O	-5.40	115.13	120.85
6	I	92	ARG	CA-C-O	-5.40	114.83	120.55
4	D	373	ILE	O-C-N	5.40	128.59	123.03
6	G	88	VAL	CA-C-N	5.40	127.51	120.28
6	G	88	VAL	C-N-CA	5.40	127.51	120.28
4	D	338	PRO	O-C-N	5.39	129.88	122.38
4	D	68	LEU	O-C-N	5.39	129.24	122.23
8	O	95	ASN	N-CA-C	-5.39	99.31	110.80
4	F	412	ASP	CA-C-N	5.39	127.94	120.29
4	F	412	ASP	C-N-CA	5.39	127.94	120.29
7	P	362	GLU	CA-C-O	5.39	126.14	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	368	ASP	CB-CA-C	-5.39	101.69	110.85
6	I	167	ALA	CA-C-O	-5.39	114.43	120.25
3	A	312	MET	CA-C-N	5.39	128.04	120.28
3	A	312	MET	C-N-CA	5.39	128.04	120.28
3	E	425	ASP	CA-C-O	-5.39	114.83	120.70
7	P	180	MET	CA-C-N	5.39	127.45	120.44
7	P	180	MET	C-N-CA	5.39	127.45	120.44
6	I	107	LEU	CB-CA-C	-5.39	101.85	110.79
4	B	216	GLY	O-C-N	5.39	127.47	122.57
5	H	10	LEU	N-CA-C	5.39	117.23	111.36
4	D	392	THR	N-CA-CB	5.38	119.59	110.49
3	A	439	TRP	N-CA-CB	5.38	119.54	110.77
3	A	27	ILE	N-CA-C	5.38	115.94	108.84
4	F	121	ASP	CA-C-O	5.38	125.11	119.51
6	K	78	SER	N-CA-C	-5.38	105.07	111.69
3	C	392	TYR	CA-C-N	5.38	129.71	120.72
3	C	392	TYR	C-N-CA	5.38	129.71	120.72
3	E	547	MET	CA-C-N	5.38	127.49	120.28
3	E	547	MET	C-N-CA	5.38	127.49	120.28
4	F	219	LEU	O-C-N	5.38	127.61	122.07
7	P	15	GLU	N-CA-C	-5.38	105.33	111.14
3	E	95	GLU	CA-C-O	-5.38	114.57	120.43
6	K	110	ILE	N-CA-CB	5.38	117.86	110.54
7	P	12	HIS	CB-CA-C	-5.38	101.71	110.85
3	A	49	VAL	CA-C-O	-5.38	116.31	121.63
3	A	542	LYS	CA-C-N	5.38	127.48	120.28
3	A	542	LYS	C-N-CA	5.38	127.48	120.28
4	F	91	THR	O-C-N	5.38	129.63	123.29
8	O	87	GLN	CA-C-N	5.37	125.91	120.00
8	O	87	GLN	C-N-CA	5.37	125.91	120.00
5	J	68	LEU	CB-CA-C	5.37	120.57	110.63
4	B	220	GLU	CA-C-N	5.37	127.92	120.29
4	B	220	GLU	C-N-CA	5.37	127.92	120.29
7	P	413	ALA	N-CA-C	-5.37	101.13	109.72
3	E	328	ALA	N-CA-C	5.37	117.21	111.36
6	K	75	ILE	CA-C-N	5.37	127.91	120.29
6	K	75	ILE	C-N-CA	5.37	127.91	120.29
2	N	34	GLU	N-CA-C	-5.36	99.58	108.75
3	C	396	GLY	CA-C-N	5.36	130.03	122.09
3	C	396	GLY	C-N-CA	5.36	130.03	122.09
6	G	50	ILE	N-CA-C	5.36	115.99	110.36
3	C	314	ARG	N-CA-CB	-5.36	102.05	110.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	346	LEU	CA-C-O	5.36	126.63	121.00
8	O	79	ILE	N-CA-C	-5.36	105.31	110.72
3	A	498	VAL	CB-CA-C	-5.36	104.91	112.14
4	B	185	ALA	CB-CA-C	-5.36	101.89	110.79
7	P	77	LEU	CA-C-O	-5.36	115.19	120.82
2	N	94	ILE	CA-C-N	5.36	126.54	119.84
2	N	94	ILE	C-N-CA	5.36	126.54	119.84
3	A	185	ILE	N-CA-CB	5.36	118.61	111.64
3	C	254	ILE	O-C-N	5.36	125.84	120.59
4	B	454	VAL	CA-C-N	5.36	127.46	120.28
4	B	454	VAL	C-N-CA	5.36	127.46	120.28
4	D	406	LYS	CA-C-N	5.36	127.46	120.28
4	D	406	LYS	C-N-CA	5.36	127.46	120.28
3	A	331	ALA	CA-C-O	-5.35	113.82	119.97
3	E	461	SER	N-CA-C	-5.35	99.22	108.69
4	F	401	ASN	CB-CA-C	-5.35	101.90	110.79
3	A	549	ALA	CA-C-O	-5.35	114.88	120.55
3	A	563	ASN	N-CA-CB	-5.35	102.25	110.44
5	H	49	GLN	CB-CA-C	-5.35	101.75	110.85
1	M	162	VAL	CA-C-O	-5.35	115.18	120.85
3	A	268	SER	O-C-N	5.35	127.79	122.12
3	C	442	ASP	O-C-N	-5.35	116.93	123.19
4	D	470	LYS	N-CA-CB	5.35	118.78	110.44
4	B	418	ALA	N-CA-C	-5.35	105.45	111.28
3	C	332	SER	CA-C-O	-5.35	115.19	121.07
3	E	200	VAL	N-CA-C	-5.35	100.78	108.48
3	E	484	ARG	O-C-N	-5.35	116.06	122.15
6	G	142	LEU	CA-C-N	5.35	130.10	122.08
6	G	142	LEU	C-N-CA	5.35	130.10	122.08
3	E	331	ALA	CA-C-N	5.34	127.75	120.54
3	E	331	ALA	C-N-CA	5.34	127.75	120.54
6	G	27	GLU	CA-C-N	5.34	127.88	120.29
6	G	27	GLU	C-N-CA	5.34	127.88	120.29
6	G	161	GLY	CA-C-N	5.34	128.44	120.31
6	G	161	GLY	C-N-CA	5.34	128.44	120.31
8	O	60	THR	CA-C-N	5.34	127.44	120.28
8	O	60	THR	C-N-CA	5.34	127.44	120.28
1	M	63	THR	CA-C-N	5.34	127.88	120.29
1	M	63	THR	C-N-CA	5.34	127.88	120.29
3	C	532	SER	N-CA-C	-5.34	99.81	108.52
3	E	95	GLU	CB-CA-C	-5.34	100.94	109.75
3	E	163	GLU	O-C-N	5.34	128.21	121.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	L	26	LYS	CB-CA-C	-5.34	101.92	110.79
6	I	194	SER	CA-C-N	5.34	131.74	121.54
6	I	194	SER	C-N-CA	5.34	131.74	121.54
3	A	149	GLY	N-CA-C	-5.34	108.27	115.21
3	E	318	VAL	O-C-N	-5.34	117.57	123.18
3	C	123	TYR	N-CA-CB	5.34	119.39	110.85
4	B	227	GLN	CA-C-O	-5.34	114.89	120.55
3	C	508	SER	CA-C-N	5.34	127.87	120.29
3	C	508	SER	C-N-CA	5.34	127.87	120.29
3	E	164	ASN	N-CA-C	-5.34	101.42	109.85
13	g	54	ILE	CA-C-N	5.34	123.60	120.24
13	g	54	ILE	C-N-CA	5.34	123.60	120.24
3	C	425	ASP	N-CA-CB	5.33	118.09	110.03
4	D	340	ASP	N-CA-CB	5.33	119.51	110.49
4	B	408	ALA	CA-C-N	5.33	129.05	120.30
4	B	408	ALA	C-N-CA	5.33	129.05	120.30
4	D	379	LEU	CA-C-O	-5.33	115.02	120.99
3	E	597	HIS	O-C-N	-5.33	116.44	122.68
8	O	130	LEU	N-CA-C	-5.33	105.38	111.14
4	B	128	ALA	N-CA-C	-5.33	101.26	109.52
3	C	156	ASP	N-CA-CB	5.33	118.39	110.29
3	C	482	ARG	N-CA-CB	5.33	117.80	110.07
3	E	271	LYS	CA-C-O	5.33	126.25	120.55
8	O	49	LYS	N-CA-CB	5.33	119.32	110.47
4	F	274	VAL	N-CA-C	-5.33	100.71	108.17
5	J	66	GLY	CA-C-N	5.33	130.46	121.14
5	J	66	GLY	C-N-CA	5.33	130.46	121.14
1	M	73	TYR	N-CA-C	5.32	117.16	111.36
3	A	358	SER	N-CA-C	-5.32	105.56	111.36
3	C	441	LEU	N-CA-CB	5.32	119.11	110.32
3	E	473	SER	CA-C-N	5.32	128.40	120.31
3	E	473	SER	C-N-CA	5.32	128.40	120.31
7	P	115	LYS	CA-C-O	-5.32	115.23	120.82
7	P	324	SER	CB-CA-C	-5.32	101.95	110.79
1	M	71	VAL	CA-C-N	5.32	127.36	120.44
1	M	71	VAL	C-N-CA	5.32	127.36	120.44
3	A	504	LYS	N-CA-CB	-5.32	102.62	110.49
5	H	26	LYS	O-C-N	5.32	127.76	122.12
3	C	492	ALA	O-C-N	-5.32	116.48	122.12
4	D	431	LEU	N-CA-CB	5.32	118.03	110.16
1	M	203	LEU	CA-C-N	5.32	127.84	120.29
1	M	203	LEU	C-N-CA	5.32	127.84	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	588	GLU	CA-C-N	5.32	126.49	119.84
3	C	588	GLU	C-N-CA	5.32	126.49	119.84
7	P	11	THR	CA-C-N	5.32	127.84	120.29
7	P	11	THR	C-N-CA	5.32	127.84	120.29
7	P	369	CYS	N-CA-CB	5.32	121.41	111.52
6	G	182	ASP	N-CA-C	-5.32	105.61	112.68
3	C	136	THR	N-CA-C	-5.32	107.17	113.97
4	F	432	SER	N-CA-C	-5.32	105.65	111.82
8	O	18	GLN	CA-C-O	-5.31	111.05	119.23
3	A	243	LEU	N-CA-CB	5.31	117.99	110.13
4	D	256	PRO	O-C-N	5.31	129.44	122.27
6	K	53	ASN	N-CA-C	5.31	116.75	111.07
7	P	400	GLU	CA-C-N	5.31	127.35	120.44
7	P	400	GLU	C-N-CA	5.31	127.35	120.44
6	G	35	ILE	N-CA-CB	5.31	116.77	110.55
2	N	36	ASN	CB-CA-C	-5.31	102.89	111.18
3	E	33	PRO	CA-C-N	-5.31	116.24	122.93
3	E	33	PRO	C-N-CA	-5.31	116.24	122.93
8	O	67	GLU	CA-C-N	5.31	127.40	120.28
8	O	67	GLU	C-N-CA	5.31	127.40	120.28
3	A	342	TYR	CA-C-N	5.31	128.38	120.31
3	A	342	TYR	C-N-CA	5.31	128.38	120.31
4	F	210	ILE	N-CA-C	-5.31	100.55	108.46
4	F	296	GLU	N-CA-C	-5.31	106.65	113.02
5	L	45	SER	N-CA-C	-5.31	106.97	113.50
7	P	371	SER	CA-C-N	5.31	125.85	120.38
7	P	371	SER	C-N-CA	5.31	125.85	120.38
3	C	468	ASN	CB-CA-C	5.31	119.87	110.85
5	J	61	ASN	N-CA-C	-5.31	105.65	113.61
2	N	111	ARG	CA-C-N	5.31	127.95	120.42
2	N	111	ARG	C-N-CA	5.31	127.95	120.42
1	M	166	THR	N-CA-CB	5.30	118.50	110.28
8	O	282	GLN	O-C-N	5.30	127.53	122.07
3	C	555	ASP	O-C-N	5.30	128.19	122.15
4	B	349	LEU	O-C-N	5.30	128.19	122.15
8	O	92	THR	CB-CA-C	-5.30	102.88	110.62
8	O	191	LEU	N-CA-C	-5.30	101.53	109.95
8	O	249	ALA	CA-C-N	5.30	127.38	120.28
8	O	249	ALA	C-N-CA	5.30	127.38	120.28
3	A	311	ILE	CA-C-N	5.30	127.38	120.28
3	A	311	ILE	C-N-CA	5.30	127.38	120.28
3	C	96	LEU	CB-CA-C	-5.30	101.67	110.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	476	ILE	CA-C-N	5.30	127.75	120.39
4	D	476	ILE	C-N-CA	5.30	127.75	120.39
3	A	47	GLU	N-CA-C	5.29	117.91	110.23
3	C	455	ASN	CA-C-O	-5.29	114.61	120.38
7	P	107	ASP	N-CA-C	-5.29	106.84	113.72
1	M	82	GLN	N-CA-CB	5.29	117.90	110.12
4	B	307	TYR	N-CA-C	-5.29	105.27	112.26
3	C	584	SER	CA-C-N	5.29	127.90	120.28
3	C	584	SER	C-N-CA	5.29	127.90	120.28
4	D	95	PHE	N-CA-CB	5.29	119.05	110.43
4	D	144	ARG	N-CA-C	-5.29	105.05	112.25
4	D	310	THR	CA-C-O	5.29	126.03	120.42
2	N	59	GLU	N-CA-C	5.29	120.60	114.04
4	F	405	ALA	O-C-N	5.29	127.80	122.09
3	A	123	TYR	N-CA-C	-5.29	102.23	110.42
3	E	504	LYS	CA-C-N	5.29	128.34	120.31
3	E	504	LYS	C-N-CA	5.29	128.34	120.31
7	P	341	ASN	CA-C-N	5.29	127.36	120.28
7	P	341	ASN	C-N-CA	5.29	127.36	120.28
3	A	536	ALA	CA-C-O	5.28	126.02	120.42
4	F	55	LEU	O-C-N	5.28	129.24	123.27
3	A	111	PRO	N-CA-CB	5.28	107.87	103.17
4	B	276	THR	N-CA-CB	5.28	118.86	110.57
3	C	519	THR	CA-C-N	5.28	127.35	120.28
3	C	519	THR	C-N-CA	5.28	127.35	120.28
3	C	486	LYS	N-CA-C	5.28	117.03	111.28
4	D	158	ILE	CA-C-O	5.28	128.12	121.15
4	F	370	TYR	CA-C-O	-5.28	114.79	119.86
3	A	471	TYR	CA-C-N	5.28	127.35	120.28
3	A	471	TYR	C-N-CA	5.28	127.35	120.28
4	B	353	ILE	N-CA-C	5.27	116.05	110.72
3	C	471	TYR	CA-C-N	5.27	127.35	120.28
3	C	471	TYR	C-N-CA	5.27	127.35	120.28
8	O	74	GLN	CA-C-N	5.27	127.91	120.42
8	O	74	GLN	C-N-CA	5.27	127.91	120.42
6	G	49	ASN	N-CA-C	5.27	116.71	111.07
3	C	467	LEU	CA-C-O	-5.27	115.28	120.82
4	D	95	PHE	N-CA-C	-5.27	100.65	109.24
6	G	84	MET	O-C-N	-5.27	116.39	122.09
2	N	36	ASN	N-CA-CB	5.27	119.18	111.54
3	A	327	ALA	N-CA-CB	5.27	117.86	110.12
3	E	388	LEU	N-CA-CB	5.27	117.96	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	404	PRO	N-CA-CB	5.27	108.89	103.15
3	E	566	ASN	CA-C-N	5.27	127.77	120.29
3	E	566	ASN	C-N-CA	5.27	127.77	120.29
4	F	453	THR	N-CA-C	-5.27	101.28	109.24
7	P	211	MET	CA-C-N	5.27	124.90	119.05
7	P	211	MET	C-N-CA	5.27	124.90	119.05
3	E	245	PRO	N-CA-CB	5.27	108.26	103.15
4	F	314	THR	CA-C-O	-5.27	114.97	120.55
1	M	123	THR	N-CA-C	-5.26	101.70	109.18
4	F	181	ASN	CB-CA-C	-5.26	102.05	110.79
8	O	336	ASN	CA-C-N	5.26	127.60	120.44
8	O	336	ASN	C-N-CA	5.26	127.60	120.44
3	A	370	ARG	CA-C-O	-5.26	114.97	120.55
5	L	58	GLU	CA-C-N	5.26	127.86	120.28
5	L	58	GLU	C-N-CA	5.26	127.86	120.28
8	O	42	ARG	N-CA-C	-5.26	106.45	112.92
4	B	308	MET	N-CA-C	-5.26	105.72	111.82
3	A	58	GLY	N-CA-C	-5.26	101.68	111.14
3	C	540	ILE	O-C-N	-5.26	116.42	121.83
5	L	28	ARG	CA-C-N	5.26	127.58	120.38
5	L	28	ARG	C-N-CA	5.26	127.58	120.38
7	P	332	ASP	N-CA-CB	5.26	119.37	110.49
4	F	155	VAL	CA-C-N	5.25	127.32	120.28
4	F	155	VAL	C-N-CA	5.25	127.32	120.28
7	P	8	MET	N-CA-C	-5.25	108.13	114.75
7	P	247	LEU	CA-C-N	5.25	127.32	120.28
7	P	247	LEU	C-N-CA	5.25	127.32	120.28
6	G	61	ASN	N-CA-CB	5.25	119.11	110.39
4	B	112	ILE	N-CA-CB	5.25	118.39	111.25
4	B	430	LYS	N-CA-CB	5.25	117.84	110.12
3	A	154	GLY	CA-C-N	5.25	132.12	121.93
3	A	154	GLY	C-N-CA	5.25	132.12	121.93
3	A	500	GLN	O-C-N	5.25	127.49	122.03
4	D	357	GLN	CA-C-N	5.25	130.44	122.98
4	D	357	GLN	C-N-CA	5.25	130.44	122.98
3	E	582	SER	CB-CA-C	-5.25	102.07	110.79
4	D	420	VAL	N-CA-C	5.25	117.14	111.58
4	B	427	ILE	O-C-N	5.25	127.24	121.83
3	E	392	TYR	CA-C-N	5.25	129.00	120.60
3	E	392	TYR	C-N-CA	5.25	129.00	120.60
4	F	303	GLY	N-CA-C	-5.25	108.00	115.30
5	L	10	LEU	CA-C-N	5.25	127.31	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	L	10	LEU	C-N-CA	5.25	127.31	120.28
7	P	235	SER	CA-C-O	5.25	124.90	119.97
7	P	448	ALA	CA-C-N	5.25	127.31	120.28
7	P	448	ALA	C-N-CA	5.25	127.31	120.28
3	C	602	LYS	N-CA-C	-5.25	105.64	111.36
4	F	407	TYR	CA-C-N	5.25	127.26	120.44
4	F	407	TYR	C-N-CA	5.25	127.26	120.44
1	M	200	PHE	CA-C-N	5.25	127.31	120.28
1	M	200	PHE	C-N-CA	5.25	127.31	120.28
4	B	300	GLY	O-C-N	-5.25	115.42	122.92
4	B	453	THR	CA-C-O	-5.25	115.62	121.81
4	B	240	LEU	CB-CA-C	-5.24	100.65	109.72
3	C	240	LEU	N-CA-C	-5.24	105.48	111.14
3	E	479	PRO	CA-C-N	5.24	127.86	120.42
3	E	479	PRO	C-N-CA	5.24	127.86	120.42
3	C	51	VAL	N-CA-CB	5.24	118.38	111.25
4	D	153	THR	CA-C-O	5.24	125.66	119.48
3	E	433	GLY	O-C-N	5.24	127.21	122.18
3	E	523	GLU	O-C-N	-5.24	116.43	122.09
8	O	296	TYR	CA-C-N	5.24	127.16	120.56
8	O	296	TYR	C-N-CA	5.24	127.16	120.56
4	B	348	ASP	CA-C-O	-5.24	115.31	120.70
5	L	52	LYS	CA-C-O	-5.24	115.32	120.82
7	P	362	GLU	CA-C-N	5.24	127.25	120.44
7	P	362	GLU	C-N-CA	5.24	127.25	120.44
7	P	442	ASP	CB-CA-C	-5.24	102.66	110.88
4	D	182	GLU	CA-C-N	5.24	127.86	120.42
4	D	182	GLU	C-N-CA	5.24	127.86	120.42
3	E	370	ARG	N-CA-C	-5.23	105.66	111.36
3	E	579	HIS	CA-C-O	-5.23	114.87	120.42
4	D	311	ASP	CA-C-N	5.23	127.29	120.28
4	D	311	ASP	C-N-CA	5.23	127.29	120.28
3	E	551	ILE	CA-C-O	-5.23	115.51	120.95
4	F	462	TRP	CA-C-O	5.23	125.97	120.42
3	A	344	ARG	O-C-N	5.23	127.66	122.12
4	D	126	VAL	O-C-N	5.23	127.34	121.90
3	E	181	THR	N-CA-C	-5.23	100.87	109.40
6	K	108	SER	CA-C-N	5.23	125.75	120.00
6	K	108	SER	C-N-CA	5.23	125.75	120.00
7	P	108	LYS	N-CA-C	-5.23	105.49	111.14
7	P	474	GLY	CA-C-O	5.23	126.14	120.75
4	B	101	ARG	N-CA-C	-5.23	101.12	109.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	423	GLU	CA-C-O	-5.23	113.44	119.56
3	E	368	SER	N-CA-C	-5.23	105.58	111.28
1	M	33	LYS	CA-C-N	5.23	127.28	120.28
1	M	33	LYS	C-N-CA	5.23	127.28	120.28
1	M	173	ILE	CA-C-N	5.22	127.54	120.44
1	M	173	ILE	C-N-CA	5.22	127.54	120.44
3	A	558	GLN	CA-C-O	5.22	125.96	120.42
3	C	610	ARG	CA-C-N	5.22	127.28	120.28
3	C	610	ARG	C-N-CA	5.22	127.28	120.28
3	A	485	MET	N-CA-C	5.22	116.97	111.28
3	C	519	THR	N-CA-CB	5.22	117.79	110.12
4	D	286	ASP	CA-C-N	5.22	127.27	120.28
4	D	286	ASP	C-N-CA	5.22	127.27	120.28
8	O	379	ASP	N-CA-CB	5.22	117.63	109.85
3	A	568	SER	CA-C-N	5.22	127.22	120.44
3	A	568	SER	C-N-CA	5.22	127.22	120.44
4	D	222	ALA	N-CA-C	-5.22	105.67	111.36
6	G	159	GLU	N-CA-CB	-5.22	102.18	110.22
3	E	492	ALA	CA-C-N	5.22	127.53	120.44
3	E	492	ALA	C-N-CA	5.22	127.53	120.44
3	E	514	THR	O-C-N	5.22	127.65	122.12
7	P	116	PHE	CA-C-N	5.22	127.22	120.44
7	P	116	PHE	C-N-CA	5.22	127.22	120.44
8	O	55	ILE	CA-C-N	5.22	129.16	121.96
8	O	55	ILE	C-N-CA	5.22	129.16	121.96
4	D	37	PRO	CA-C-N	5.21	128.25	120.95
4	D	37	PRO	C-N-CA	5.21	128.25	120.95
7	P	472	ILE	CA-C-O	5.21	126.84	121.05
8	O	9	ASN	N-CA-C	5.21	117.44	110.35
4	B	65	GLY	CA-C-O	5.21	127.45	121.46
7	P	244	TYR	N-CA-C	-5.21	105.51	111.14
3	A	299	GLU	CA-C-O	-5.21	113.98	119.97
3	A	481	LEU	N-CA-CB	5.21	117.86	110.16
4	F	129	GLU	N-CA-C	-5.21	107.95	114.56
4	D	409	ILE	CB-CA-C	-5.20	105.12	112.14
7	P	370	TRP	N-CA-CB	5.20	117.62	109.97
3	A	391	PHE	N-CA-CB	-5.20	102.46	110.16
3	E	315	THR	N-CA-CB	5.20	119.88	110.83
3	C	170	HIS	N-CA-C	-5.20	98.84	107.99
3	C	344	ARG	CB-CA-C	-5.20	102.72	110.88
7	P	221	ALA	N-CA-CB	5.20	117.77	110.12
8	O	175	LEU	O-C-N	5.20	128.78	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	221	SER	N-CA-CB	5.20	118.31	110.30
1	M	77	GLU	N-CA-CB	5.20	119.62	111.56
5	L	34	GLN	N-CA-CB	5.20	117.76	110.12
3	A	461	SER	N-CA-CB	5.20	119.17	110.59
5	J	13	ALA	CA-C-N	5.20	127.67	120.29
5	J	13	ALA	C-N-CA	5.20	127.67	120.29
3	A	291	ALA	CA-C-O	-5.20	115.04	120.55
3	A	423	PHE	N-CA-CB	5.20	118.39	110.44
3	C	223	VAL	CA-C-O	-5.20	115.84	121.19
3	C	600	PHE	CA-C-N	5.20	127.67	120.29
3	C	600	PHE	C-N-CA	5.20	127.67	120.29
4	F	299	PRO	CA-C-O	-5.20	115.29	122.15
4	F	460	GLN	CA-C-N	5.20	127.24	120.28
4	F	460	GLN	C-N-CA	5.20	127.24	120.28
7	P	108	LYS	CA-C-O	-5.20	115.35	120.70
4	B	73	ASP	CA-C-O	-5.19	113.08	120.51
3	A	61	ILE	CA-C-O	-5.19	114.78	120.96
4	D	39	VAL	CA-C-N	5.19	129.73	122.93
4	D	39	VAL	C-N-CA	5.19	129.73	122.93
4	D	265	TYR	O-C-N	5.19	127.70	122.09
8	O	41	GLY	CA-C-O	5.19	125.46	119.13
4	B	242	LEU	N-CA-CB	5.19	119.40	110.68
4	B	304	TYR	CA-C-O	-5.19	115.83	120.19
3	C	199	GLU	N-CA-C	-5.19	100.57	109.24
3	E	195	GLU	CA-C-N	5.19	128.84	121.42
3	E	195	GLU	C-N-CA	5.19	128.84	121.42
7	P	444	THR	N-CA-CB	5.19	117.84	110.16
3	C	47	GLU	N-CA-CB	5.19	117.67	109.83
4	D	145	ILE	N-CA-C	-5.19	100.65	108.12
1	M	168	ARG	CA-C-O	-5.19	115.03	120.63
3	A	341	GLU	CA-C-N	5.19	127.49	120.44
3	A	341	GLU	C-N-CA	5.19	127.49	120.44
3	A	285	GLU	CA-C-N	5.18	127.18	120.44
3	A	285	GLU	C-N-CA	5.18	127.18	120.44
4	D	183	ILE	CB-CA-C	-5.18	105.07	112.22
3	A	392	TYR	N-CA-C	5.18	117.83	111.82
4	B	412	ASP	CA-C-N	5.18	127.74	120.28
4	B	412	ASP	C-N-CA	5.18	127.74	120.28
3	E	249	GLY	CA-C-O	5.18	124.13	118.95
7	P	441	LEU	O-C-N	-5.18	116.25	122.15
6	G	154	ASP	CA-C-N	5.18	127.22	120.28
6	G	154	ASP	C-N-CA	5.18	127.22	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	99	GLY	N-CA-C	-5.18	108.10	115.30
3	A	242	ALA	N-CA-C	5.18	116.73	111.14
3	A	399	VAL	N-CA-C	-5.18	100.95	108.36
3	C	94	VAL	CA-C-N	5.18	129.87	122.72
3	C	94	VAL	C-N-CA	5.18	129.87	122.72
6	I	92	ARG	N-CA-CB	5.18	117.73	110.12
3	A	244	PHE	O-C-N	5.18	124.85	121.23
4	B	470	LYS	CA-C-N	5.18	129.48	120.68
4	B	470	LYS	C-N-CA	5.18	129.48	120.68
3	A	144	GLY	O-C-N	5.17	129.43	122.70
4	D	312	LEU	CA-C-N	5.17	127.73	120.28
4	D	312	LEU	C-N-CA	5.17	127.73	120.28
7	P	53	LYS	CA-C-N	5.17	131.42	121.54
7	P	53	LYS	C-N-CA	5.17	131.42	121.54
3	E	295	MET	CA-C-N	5.17	128.17	120.31
3	E	295	MET	C-N-CA	5.17	128.17	120.31
4	F	403	LEU	CB-CA-C	-5.17	102.76	110.88
3	E	100	LEU	N-CA-C	-5.17	106.82	113.23
7	P	150	LEU	CA-C-O	-5.17	115.07	120.55
4	F	367	LYS	N-CA-C	5.17	117.82	111.82
2	N	51	THR	CA-C-N	5.17	127.47	120.44
2	N	51	THR	C-N-CA	5.17	127.47	120.44
1	M	122	LEU	N-CA-C	-5.17	104.79	111.71
4	F	195	ARG	CA-C-N	5.17	124.96	119.28
4	F	195	ARG	C-N-CA	5.17	124.96	119.28
3	C	167	ILE	CA-C-N	5.17	131.21	122.79
3	C	167	ILE	C-N-CA	5.17	131.21	122.79
4	D	70	ILE	N-CA-C	-5.17	101.04	108.48
3	A	236	GLY	N-CA-C	-5.16	108.49	115.36
3	C	539	PRO	N-CA-CB	5.16	108.24	103.39
4	D	457	SER	N-CA-CB	5.16	117.50	110.01
4	F	414	ALA	O-C-N	5.16	127.59	122.12
6	K	122	GLN	CA-C-N	5.16	128.16	120.31
6	K	122	GLN	C-N-CA	5.16	128.16	120.31
4	B	468	TYR	O-C-N	-5.16	115.85	121.53
8	O	143	ALA	N-CA-C	5.16	116.91	111.28
4	D	400	SER	CB-CA-C	-5.16	102.23	110.79
4	F	194	VAL	O-C-N	5.16	127.14	121.83
7	P	22	SER	N-CA-C	5.16	116.59	111.07
2	N	17	THR	CA-C-N	5.16	127.19	120.28
2	N	17	THR	C-N-CA	5.16	127.19	120.28
4	B	481	LEU	N-CA-C	-5.16	105.74	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	218	ASN	N-CA-CB	5.16	117.63	110.26
4	F	231	GLU	N-CA-CB	-5.16	102.54	110.12
6	K	207	LEU	CA-C-O	-5.16	115.08	120.55
6	K	23	PHE	N-CA-CB	5.15	117.70	110.12
3	E	269	LEU	CA-C-O	-5.15	114.96	120.42
4	B	307	TYR	CA-C-N	5.15	128.14	120.31
4	B	307	TYR	C-N-CA	5.15	128.14	120.31
4	D	106	GLU	CB-CA-C	-5.15	102.02	110.72
5	J	15	LYS	CA-C-N	5.15	127.60	120.29
5	J	15	LYS	C-N-CA	5.15	127.60	120.29
3	E	516	ASP	N-CA-C	5.15	116.70	111.14
5	L	57	PHE	CA-C-N	5.15	129.32	120.72
5	L	57	PHE	C-N-CA	5.15	129.32	120.72
3	E	307	THR	O-C-N	5.15	129.56	123.33
1	M	49	ARG	CA-C-N	5.14	127.72	120.42
1	M	49	ARG	C-N-CA	5.14	127.72	120.42
3	C	466	VAL	CA-C-N	5.14	127.13	120.44
3	C	466	VAL	C-N-CA	5.14	127.13	120.44
3	E	589	PRO	O-C-N	-5.14	115.69	122.64
1	M	182	GLU	CB-CA-C	-5.14	102.77	110.90
3	E	254	ILE	CA-C-N	5.14	127.19	120.25
3	E	254	ILE	C-N-CA	5.14	127.19	120.25
3	A	142	THR	CA-C-O	-5.14	114.14	120.05
4	B	349	LEU	CA-C-O	-5.14	114.97	120.42
8	O	156	LYS	CA-C-N	5.14	127.17	120.28
8	O	156	LYS	C-N-CA	5.14	127.17	120.28
8	O	234	PHE	CA-C-N	5.14	130.38	122.93
8	O	234	PHE	C-N-CA	5.14	130.38	122.93
6	G	173	VAL	O-C-N	5.14	129.11	123.10
3	A	85	VAL	N-CA-C	-5.14	100.25	107.75
4	D	219	LEU	O-C-N	5.14	127.57	122.12
5	H	24	ALA	CA-C-O	5.14	125.88	119.97
3	A	234	LEU	O-C-N	5.14	128.69	122.68
4	D	333	PRO	CA-C-N	5.14	129.93	123.10
4	D	333	PRO	C-N-CA	5.14	129.93	123.10
3	E	584	SER	O-C-N	5.14	127.56	122.12
7	P	239	GLY	N-CA-C	5.14	118.89	112.73
6	G	24	ILE	CA-C-O	-5.14	115.72	121.17
4	B	473	LEU	N-CA-C	-5.13	100.53	108.90
4	D	135	ASN	N-CA-C	-5.13	106.17	112.90
8	O	175	LEU	CA-C-O	-5.13	115.75	121.81
3	E	285	GLU	CA-C-N	5.13	127.58	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	285	GLU	C-N-CA	5.13	127.58	120.29
4	B	316	TYR	CA-C-O	-5.13	114.30	120.10
3	A	218	ARG	N-CA-CB	5.13	118.51	110.46
4	F	378	SER	N-CA-CB	5.13	117.51	109.97
7	P	285	LYS	CA-C-N	5.13	127.13	120.88
7	P	285	LYS	C-N-CA	5.13	127.13	120.88
5	H	20	ILE	O-C-N	5.12	126.84	121.87
2	N	81	VAL	CB-CA-C	-5.12	105.15	112.22
6	K	120	ILE	N-CA-C	-5.12	105.71	110.53
3	A	207	SER	N-CA-C	-5.12	99.89	110.80
4	D	194	VAL	N-CA-C	5.12	115.84	110.62
4	D	46	PHE	O-C-N	-5.12	115.43	121.32
3	A	541	TRP	CA-C-N	5.12	127.56	120.29
3	A	541	TRP	C-N-CA	5.12	127.56	120.29
4	B	300	GLY	CA-C-N	5.12	127.98	120.71
4	B	300	GLY	C-N-CA	5.12	127.98	120.71
3	C	332	SER	CA-C-N	5.12	127.69	120.42
3	C	332	SER	C-N-CA	5.12	127.69	120.42
4	F	302	ARG	N-CA-C	5.12	118.66	111.90
6	K	188	VAL	CA-C-N	-5.12	116.29	123.10
6	K	188	VAL	C-N-CA	-5.12	116.29	123.10
1	M	27	GLN	CA-C-N	5.12	125.66	119.98
1	M	27	GLN	C-N-CA	5.12	125.66	119.98
3	A	359	ARG	O-C-N	5.12	128.56	122.27
4	B	304	TYR	CA-C-N	5.12	126.23	119.84
4	B	304	TYR	C-N-CA	5.12	126.23	119.84
3	E	500	GLN	CB-CA-C	-5.12	102.85	110.88
1	M	17	LEU	CB-CA-C	-5.11	102.82	110.90
3	A	399	VAL	CA-C-O	5.11	126.04	120.57
1	M	25	ALA	CA-C-N	5.11	127.55	120.29
1	M	25	ALA	C-N-CA	5.11	127.55	120.29
7	P	51	LEU	N-CA-CB	5.11	117.72	110.16
3	E	111	PRO	N-CA-CB	5.11	107.72	103.17
13	i	156	GLN	CA-C-N	5.11	131.29	121.54
13	i	156	GLN	C-N-CA	5.11	131.29	121.54
4	B	67	VAL	CA-C-N	5.11	127.54	120.29
4	B	67	VAL	C-N-CA	5.11	127.54	120.29
3	E	220	PRO	CA-C-O	-5.11	115.18	121.31
4	D	351	GLY	CA-C-N	5.10	127.54	120.29
4	D	351	GLY	C-N-CA	5.10	127.54	120.29
3	E	595	GLU	CA-C-N	5.10	128.86	122.48
3	E	595	GLU	C-N-CA	5.10	128.86	122.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	193	ALA	N-CA-C	5.10	116.84	111.28
7	P	111	ASP	CA-C-N	5.10	127.63	120.28
7	P	111	ASP	C-N-CA	5.10	127.63	120.28
3	A	572	ASP	N-CA-CB	5.10	117.71	110.16
4	F	67	VAL	N-CA-CB	5.10	116.48	110.82
2	N	62	ASP	N-CA-C	-5.10	105.09	113.50
4	B	279	THR	O-C-N	-5.10	117.05	123.27
3	C	217	VAL	N-CA-C	-5.10	106.94	112.80
7	P	251	TRP	O-C-N	5.10	127.53	122.12
8	O	151	ASN	CB-CA-C	-5.10	102.18	110.85
3	C	175	PRO	N-CA-CB	5.10	108.03	103.08
3	E	416	VAL	N-CA-CB	5.10	119.94	112.35
4	F	308	MET	CA-C-N	5.10	127.42	120.54
4	F	308	MET	C-N-CA	5.10	127.42	120.54
7	P	246	SER	CA-C-N	5.10	127.53	120.29
7	P	246	SER	C-N-CA	5.10	127.53	120.29
8	O	35	ASN	N-CA-CB	5.10	117.68	110.13
8	O	202	LEU	O-C-N	-5.10	114.84	122.39
6	G	200	ASN	CB-CA-C	-5.10	103.00	111.41
3	A	266	SER	O-C-N	-5.10	116.72	122.12
5	L	56	GLU	CA-C-N	5.10	127.53	120.29
5	L	56	GLU	C-N-CA	5.10	127.53	120.29
4	B	195	ARG	CA-C-O	-5.09	113.40	118.34
4	B	287	ALA	N-CA-CB	5.09	117.40	110.01
3	C	410	VAL	O-C-N	-5.09	117.88	123.18
4	F	111	ARG	CB-CA-C	-5.09	100.89	109.50
4	D	148	GLU	N-CA-CB	5.09	119.09	110.49
4	F	451	ASP	N-CA-CB	5.09	119.23	110.68
3	A	561	VAL	N-CA-CB	5.09	119.35	110.65
4	B	126	VAL	CA-C-N	5.09	131.26	121.54
4	B	126	VAL	C-N-CA	5.09	131.26	121.54
3	C	442	ASP	CA-C-N	5.09	127.10	120.28
3	C	442	ASP	C-N-CA	5.09	127.10	120.28
3	E	366	GLU	CB-CA-C	-5.09	102.20	110.85
3	E	409	SER	CB-CA-C	-5.09	99.10	109.94
3	C	66	ASP	N-CA-C	-5.09	106.23	112.90
3	C	550	PHE	N-CA-CB	5.09	117.39	110.01
4	D	284	TYR	CA-C-N	5.09	127.51	120.29
4	D	284	TYR	C-N-CA	5.09	127.51	120.29
3	E	466	VAL	CB-CA-C	5.09	119.24	112.22
5	L	73	GLU	CA-C-N	5.09	127.60	120.28
5	L	73	GLU	C-N-CA	5.09	127.60	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	233	THR	O-C-N	-5.08	116.64	122.95
8	O	148	THR	N-CA-C	5.08	116.82	111.28
5	H	9	THR	CA-C-N	5.08	127.51	120.29
5	H	9	THR	C-N-CA	5.08	127.51	120.29
4	F	477	SER	O-C-N	5.08	127.22	121.53
7	P	83	LEU	CA-C-N	5.08	127.09	120.28
7	P	83	LEU	C-N-CA	5.08	127.09	120.28
3	E	206	LYS	CA-C-N	5.08	131.23	121.54
3	E	206	LYS	C-N-CA	5.08	131.23	121.54
3	A	523	GLU	O-C-N	5.07	127.57	122.09
3	E	601	GLU	N-CA-C	5.07	116.81	111.28
8	O	71	VAL	CB-CA-C	5.07	118.99	112.14
3	E	589	PRO	N-CA-C	-5.07	102.02	112.47
8	O	131	ILE	O-C-N	5.07	127.05	121.83
3	A	477	GLU	CA-C-N	5.07	129.58	121.62
3	A	477	GLU	C-N-CA	5.07	129.58	121.62
7	P	148	SER	N-CA-CB	5.07	117.49	109.94
7	P	381	SER	N-CA-C	5.07	116.81	111.28
1	M	55	GLN	N-CA-CB	5.07	117.42	110.07
4	B	407	TYR	CA-C-N	5.07	127.07	120.28
4	B	407	TYR	C-N-CA	5.07	127.07	120.28
3	C	391	PHE	CA-C-N	5.07	127.07	120.28
3	C	391	PHE	C-N-CA	5.07	127.07	120.28
3	C	602	LYS	N-CA-CB	5.07	117.66	110.16
6	G	168	PRO	CA-C-O	-5.07	115.25	121.03
4	D	399	VAL	N-CA-C	-5.07	105.60	110.72
5	L	96	LYS	CA-C-N	5.07	127.05	120.56
5	L	96	LYS	C-N-CA	5.07	127.05	120.56
1	M	183	ASN	CA-C-N	5.07	127.33	120.44
1	M	183	ASN	C-N-CA	5.07	127.33	120.44
8	O	178	ILE	N-CA-C	-5.07	106.51	111.88
3	A	559	LYS	O-C-N	-5.06	116.85	122.07
3	E	275	SER	CA-C-N	5.06	127.06	120.28
3	E	275	SER	C-N-CA	5.06	127.06	120.28
8	O	115	GLN	CA-C-N	5.06	131.21	121.54
8	O	115	GLN	C-N-CA	5.06	131.21	121.54
8	O	154	SER	O-C-N	5.06	127.92	122.15
6	G	141	ALA	CA-C-O	-5.06	115.84	121.51
3	C	86	LEU	N-CA-CB	-5.06	102.75	110.65
3	C	493	GLU	CA-C-N	5.06	127.48	120.29
3	C	493	GLU	C-N-CA	5.06	127.48	120.29
3	E	583	SER	N-CA-C	-5.06	106.88	113.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	243	LEU	O-C-N	-5.06	116.05	122.17
3	A	305	SER	CA-C-O	5.06	127.75	120.51
6	K	64	SER	O-C-N	-5.06	116.38	122.15
6	K	111	ALA	O-C-N	5.06	128.14	122.22
3	C	308	LYS	O-C-N	-5.06	116.90	123.32
4	F	313	SER	CA-C-N	5.06	127.05	120.28
4	F	313	SER	C-N-CA	5.06	127.05	120.28
8	O	253	LYS	CA-C-N	5.06	131.20	121.54
8	O	253	LYS	C-N-CA	5.06	131.20	121.54
4	D	250	ILE	N-CA-C	5.05	115.78	110.62
6	G	135	PRO	N-CA-CB	5.05	106.08	101.83
3	C	316	THR	N-CA-CB	5.05	119.17	110.68
7	P	160	LEU	CA-C-N	5.05	127.03	120.56
7	P	160	LEU	C-N-CA	5.05	127.03	120.56
4	B	333	PRO	N-CA-CB	5.05	108.05	103.15
7	P	42	SER	N-CA-CB	5.05	117.55	110.12
7	P	286	VAL	CA-C-N	5.05	127.01	120.44
7	P	286	VAL	C-N-CA	5.05	127.01	120.44
6	I	10	PRO	CA-C-N	5.05	127.05	120.28
6	I	10	PRO	C-N-CA	5.05	127.05	120.28
3	C	90	LYS	CA-C-N	5.05	125.77	120.11
3	C	90	LYS	C-N-CA	5.05	125.77	120.11
3	E	70	ILE	N-CA-C	-5.05	100.94	108.46
8	O	57	SER	CA-C-O	-5.05	115.19	121.50
3	C	489	LEU	CA-C-O	-5.05	115.07	120.42
3	E	568	SER	CA-C-N	5.05	127.46	120.29
3	E	568	SER	C-N-CA	5.05	127.46	120.29
8	O	192	THR	CA-C-O	-5.05	116.01	121.36
3	A	214	THR	O-C-N	-5.04	116.80	123.16
3	A	558	GLN	CA-C-N	5.04	127.00	120.44
3	A	558	GLN	C-N-CA	5.04	127.00	120.44
3	E	573	SER	CB-CA-C	-5.04	101.47	110.70
6	G	165	GLN	N-CA-C	-5.04	107.13	113.28
1	M	64	ALA	CA-C-N	5.04	127.03	120.28
1	M	64	ALA	C-N-CA	5.04	127.03	120.28
3	A	221	ARG	CA-C-O	-5.04	114.99	120.69
4	D	418	ALA	N-CA-C	5.04	116.78	111.28
4	D	433	LEU	CB-CA-C	-5.04	102.42	110.79
3	A	174	LEU	CB-CA-C	-5.04	101.51	109.42
7	P	54	LYS	N-CA-CB	5.04	119.01	110.49
4	D	328	SER	N-CA-C	-5.04	101.08	108.79
3	A	173	LEU	CA-C-O	-5.03	115.47	121.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	498	VAL	N-CA-CB	-5.03	103.69	110.54
4	F	125	LYS	N-CA-CB	5.03	117.43	109.83
7	P	450	ILE	O-C-N	5.03	126.75	121.87
5	H	34	GLN	N-CA-C	-5.03	105.79	111.28
6	I	28	ALA	CA-C-N	5.03	126.98	120.44
6	I	28	ALA	C-N-CA	5.03	126.98	120.44
3	C	324	MET	N-CA-C	-5.03	104.34	110.13
4	D	126	VAL	CA-C-O	-5.03	115.47	121.05
1	M	89	THR	N-CA-C	-5.03	101.80	108.74
3	C	498	VAL	CA-C-N	5.03	126.90	120.56
3	C	498	VAL	C-N-CA	5.03	126.90	120.56
7	P	326	SER	CA-C-O	-5.03	115.22	120.55
1	M	79	ILE	N-CA-CB	5.03	117.38	110.54
2	N	52	ASP	CB-CA-C	-5.03	102.96	110.90
3	A	176	PRO	CB-CA-C	-5.03	104.52	111.21
4	D	87	ASP	CA-C-N	5.03	126.98	120.70
4	D	87	ASP	C-N-CA	5.03	126.98	120.70
4	F	226	LYS	CA-C-N	5.03	126.98	120.44
4	F	226	LYS	C-N-CA	5.03	126.98	120.44
6	K	62	PHE	CA-C-N	5.03	127.95	120.31
6	K	62	PHE	C-N-CA	5.03	127.95	120.31
8	O	37	THR	CA-C-O	5.03	126.59	120.31
3	C	446	ALA	N-CA-C	5.03	116.76	111.28
7	P	250	ILE	CA-C-N	5.03	127.01	120.28
7	P	250	ILE	C-N-CA	5.03	127.01	120.28
3	C	608	GLN	N-CA-CB	5.02	117.50	110.12
6	K	22	ALA	CA-C-O	-5.02	115.53	120.70
4	D	39	VAL	N-CA-CB	5.02	118.08	111.25
4	F	219	LEU	CA-C-N	5.02	127.42	120.29
4	F	219	LEU	C-N-CA	5.02	127.42	120.29
7	P	458	ASP	CA-C-N	5.02	126.97	120.44
7	P	458	ASP	C-N-CA	5.02	126.97	120.44
3	C	103	THR	N-CA-C	-5.02	101.11	108.99
4	D	180	HIS	CA-C-O	-5.02	115.23	120.55
3	E	354	ALA	CA-C-O	5.02	125.84	120.32
3	A	520	LEU	N-CA-C	5.02	116.83	111.36
7	P	193	LEU	N-CA-C	-5.02	105.81	111.28
1	M	41	LYS	N-CA-CB	5.01	117.49	110.12
4	B	353	ILE	CA-C-N	5.01	129.72	121.39
4	B	353	ILE	C-N-CA	5.01	129.72	121.39
3	C	277	ALA	N-CA-C	-5.01	101.46	109.23
5	J	10	LEU	N-CA-C	-5.01	105.90	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	192	ASN	CA-C-N	5.01	127.00	120.28
6	K	192	ASN	C-N-CA	5.01	127.00	120.28
4	B	82	GLY	CA-C-O	-5.01	116.23	122.74
3	C	124	ILE	CA-C-N	5.01	126.82	120.51
3	C	124	ILE	C-N-CA	5.01	126.82	120.51
3	A	251	THR	N-CA-C	-5.01	100.88	109.24
4	D	326	ASN	O-C-N	5.01	127.35	122.19
4	F	106	GLU	N-CA-C	-5.01	107.22	113.38
6	K	186	GLY	N-CA-C	-5.01	101.32	113.18
7	P	288	ARG	CA-C-N	5.01	127.40	120.29
7	P	288	ARG	C-N-CA	5.01	127.40	120.29
6	G	157	MET	N-CA-C	5.01	116.82	111.36
4	B	327	GLY	N-CA-C	-5.00	105.91	112.82
3	E	225	GLU	CA-C-N	5.00	129.50	122.09
3	E	225	GLU	C-N-CA	5.00	129.50	122.09
5	J	44	ASP	CB-CA-C	-5.00	99.99	109.95
3	C	33	PRO	N-CA-C	-5.00	102.16	112.47
3	C	418	PRO	CA-C-O	-5.00	115.83	121.43
6	I	128	ALA	CA-C-N	5.00	127.48	120.28
6	I	128	ALA	C-N-CA	5.00	127.48	120.28
1	M	72	SER	CA-C-N	5.00	127.39	120.29
1	M	72	SER	C-N-CA	5.00	127.39	120.29
6	I	135	PRO	CA-C-N	5.00	130.44	122.94
6	I	135	PRO	C-N-CA	5.00	130.44	122.94

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	A	153	SER	Mainchain
4	F	44	VAL	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	M	1039	0	475	5	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	N	571	0	255	0	0
3	A	2915	0	1343	1	0
3	C	2915	0	1343	2	0
3	E	2915	0	1343	1	0
4	B	2250	0	1016	4	0
4	D	2250	0	1016	1	0
4	F	2250	0	1016	0	0
5	H	519	0	250	0	0
5	J	519	0	250	0	0
5	L	519	0	250	0	0
6	G	1078	0	483	0	0
6	I	1078	0	483	0	0
6	K	1078	0	483	0	0
7	P	2292	0	993	0	0
8	O	1947	0	876	5	0
9	a	3092	0	1352	4	0
10	b	218	0	98	0	0
11	c	962	0	477	2	0
12	d	1699	0	752	7	0
13	g	743	0	379	0	0
13	h	763	0	387	0	0
13	i	763	0	387	1	0
13	j	758	0	385	0	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	23	0

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

All (23) 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)
8:O:379:ASP:HA	9:a:258:ARG:CB	1.40	1.48
8:O:379:ASP:CA	9:a:258:ARG:CB	2.11	1.27
8:O:379:ASP:CB	9:a:258:ARG:CB	2.22	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:85:GLU:CB	12:d:116:HIS:CB	2.56	0.84
8:O:171:SER:CB	12:d:31:ILE:CB	2.61	0.78
1:M:77:GLU:HA	12:d:126:ARG:O	1.91	0.70
1:M:85:GLU:N	12:d:116:HIS:CB	2.64	0.61
11:c:74:GLY:HA3	11:c:157:LEU:HA	1.84	0.58
13:i:20:ALA:HB2	13:i:94:GLY:HA2	1.88	0.55
1:M:85:GLU:CB	12:d:116:HIS:CA	2.84	0.55
8:O:59:ASP:CB	9:a:295:THR:N	2.59	0.54
4:B:165:ALA:HB2	4:B:386:ALA:CB	2.38	0.54
13:m:20:ALA:HB2	13:m:94:GLY:HA2	1.90	0.53
1:M:85:GLU:CA	12:d:116:HIS:CB	2.86	0.52
4:B:165:ALA:HB2	4:B:386:ALA:HB2	1.92	0.51
3:E:93:SER:HA	3:E:216:PRO:HA	1.98	0.45
4:B:474:ASN:C	4:B:476:ILE:H	2.24	0.44
3:A:532:SER:C	3:A:534:TYR:H	2.27	0.42
12:d:47:SER:HA	12:d:52:GLY:HA2	2.01	0.42
11:c:162:ALA:HB2	14:o:35:ALA:HB1	2.01	0.42
4:D:51:GLU:HA	4:D:99:SER:HA	2.03	0.41
3:C:355:ASP:HA	3:C:356:SER:HA	1.91	0.41
4:B:245:ALA:HB1	3:C:389:ALA:HB1	2.02	0.40

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	M	208/256 (81%)	206 (99%)	2 (1%)	0	100	100
2	N	113/118 (96%)	102 (90%)	10 (9%)	1 (1%)	14	51
3	A	591/639 (92%)	541 (92%)	31 (5%)	19 (3%)	3	21
3	C	591/639 (92%)	538 (91%)	37 (6%)	16 (3%)	4	25

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	E	591/639 (92%)	542 (92%)	32 (5%)	17 (3%)	3	23
4	B	455/517 (88%)	413 (91%)	27 (6%)	15 (3%)	3	21
4	D	455/517 (88%)	416 (91%)	25 (6%)	14 (3%)	3	22
4	F	455/517 (88%)	411 (90%)	30 (7%)	14 (3%)	3	22
5	H	103/114 (90%)	99 (96%)	3 (3%)	1 (1%)	12	48
5	J	103/114 (90%)	100 (97%)	3 (3%)	0	100	100
5	L	103/114 (90%)	98 (95%)	4 (4%)	1 (1%)	12	48
6	G	215/233 (92%)	207 (96%)	7 (3%)	1 (0%)	24	63
6	I	215/233 (92%)	208 (97%)	6 (3%)	1 (0%)	24	63
6	K	215/233 (92%)	205 (95%)	9 (4%)	1 (0%)	24	63
7	P	457/478 (96%)	431 (94%)	18 (4%)	8 (2%)	6	34
8	O	390/392 (100%)	350 (90%)	21 (5%)	19 (5%)	1	16
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%)	7509 (94%)	325 (4%)	128 (2%)	10	38

All (128) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	A	257	ALA

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Mol	Chain	Res	Type
3	A	475	TYR
4	B	292	SER
3	C	475	TYR
3	C	529	ASN
3	C	565	ALA
4	D	46	PHE
4	D	467	ILE
3	E	257	ALA
3	E	308	LYS
3	E	475	TYR
4	F	143	ALA
4	F	377	PRO
7	P	53	LYS
7	P	390	ASP
8	O	116	TRP
8	O	254	LYS
2	N	4	LYS
3	A	529	ASN
3	A	575	GLY
4	B	83	THR
4	B	141	PRO
4	B	391	MET
3	C	259	GLY
3	C	378	GLN
3	C	528	GLN
3	C	535	ASP
3	C	575	GLY
4	D	59	ASP
4	D	127	PHE
3	E	230	ASP
3	E	575	GLY
3	E	590	SER
4	F	141	PRO
4	F	179	PRO
4	F	391	MET
7	P	54	LYS
7	P	332	ASP
7	P	410	ASP
7	P	412	ASN
7	P	458	ASP
8	O	39	ILE
8	O	172	VAL

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Mol	Chain	Res	Type
5	H	77	GLN
6	G	144	ARG
3	A	42	GLY
3	A	207	SER
3	A	245	PRO
3	A	308	LYS
3	A	405	ASP
3	A	449	LYS
3	A	595	GLU
4	B	44	VAL
4	B	293	ALA
4	B	305	PRO
4	B	319	ALA
4	B	372	PRO
4	B	377	PRO
3	C	508	SER
4	D	48	ARG
4	D	122	ASN
4	D	141	PRO
4	D	319	ALA
4	D	474	ASN
3	E	44	ALA
3	E	78	GLY
3	E	589	PRO
3	E	594	LYS
3	E	595	GLU
4	F	128	ALA
4	F	167	GLY
4	F	202	ASP
4	F	424	ALA
5	L	63	GLY
8	O	7	THR
8	O	96	ALA
8	O	167	THR
8	O	171	SER
8	O	176	HIS
8	O	186	LEU
8	O	335	LYS
3	A	203	ASP
3	C	78	GLY
3	C	257	ALA
3	C	260	CYS

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Mol	Chain	Res	Type
4	D	202	ASP
4	D	340	ASP
4	D	390	GLY
3	E	45	MET
3	E	207	SER
3	E	310	PRO
4	F	148	GLU
4	F	326	ASN
8	O	95	ASN
3	A	75	GLU
3	A	177	ARG
3	A	305	SER
3	A	381	PRO
4	B	138	PRO
4	B	149	GLU
4	B	202	ASP
4	B	271	GLU
3	C	177	ARG
3	C	230	ASP
3	C	590	SER
3	E	55	ASN
4	F	292	SER
7	P	135	ASP
8	O	106	PRO
8	O	355	ALA
4	D	391	MET
8	O	120	LYS
8	O	189	GLU
8	O	101	PRO
3	A	310	PRO
3	A	375	PRO
4	D	58	PRO
4	F	72	GLY
6	K	168	PRO
3	A	284	GLY
4	B	139	ILE
3	C	420	GLY
3	E	143	PRO
3	E	564	GLY
8	O	362	GLY
6	I	168	PRO
4	F	138	PRO

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Mol	Chain	Res	Type
8	O	168	GLY

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.

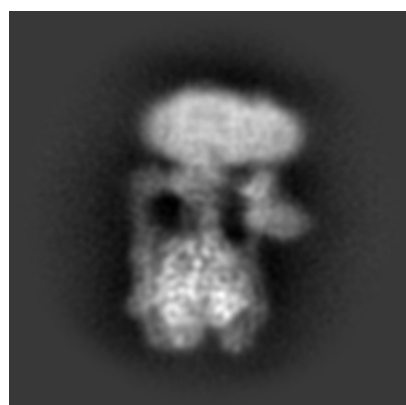
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-0646. These allow visual inspection of the internal detail of the map and identification of artifacts.

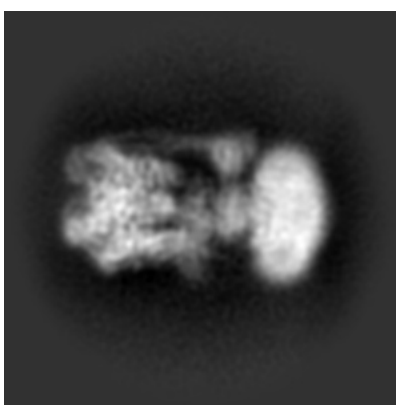
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

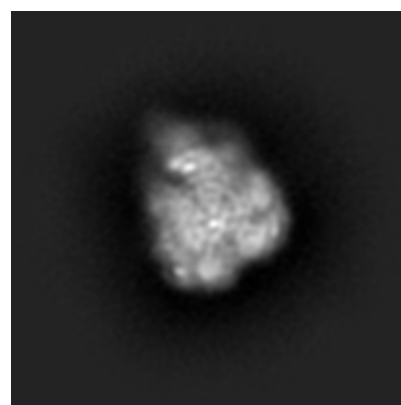
6.1.1 Primary map



X



Y

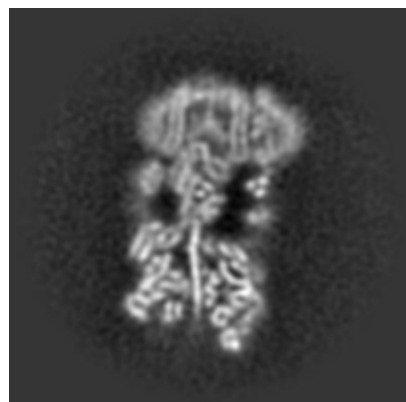


Z

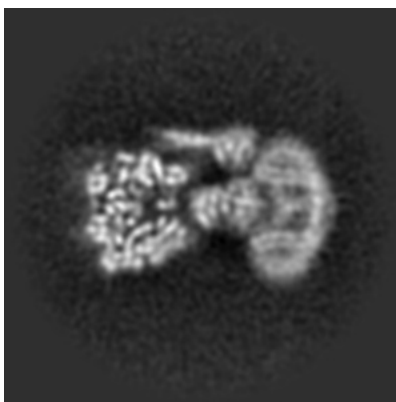
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

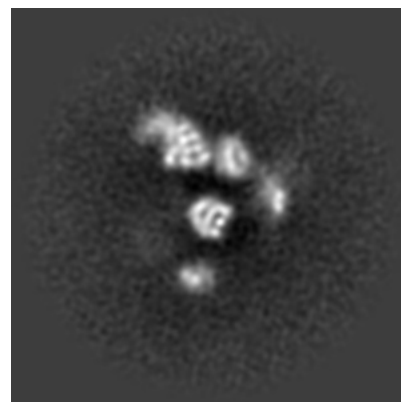
6.2.1 Primary map



X Index: 128



Y Index: 128

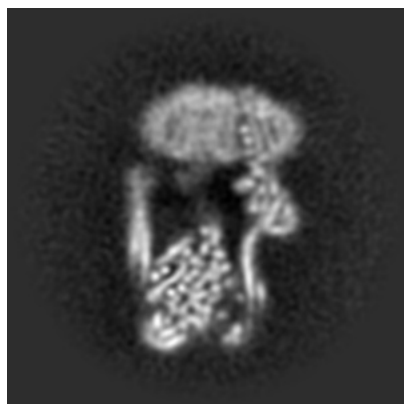


Z Index: 128

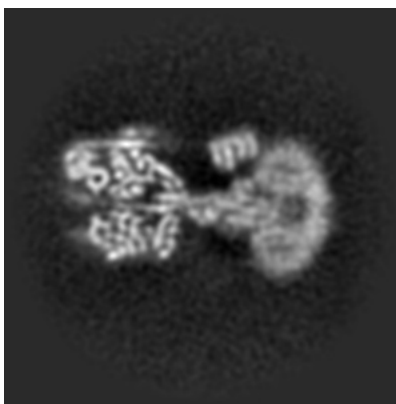
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

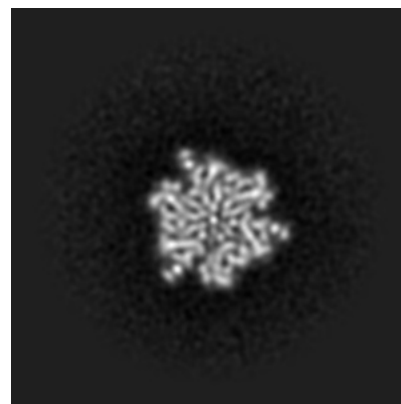
6.3.1 Primary map



X Index: 111



Y Index: 116



Z Index: 74

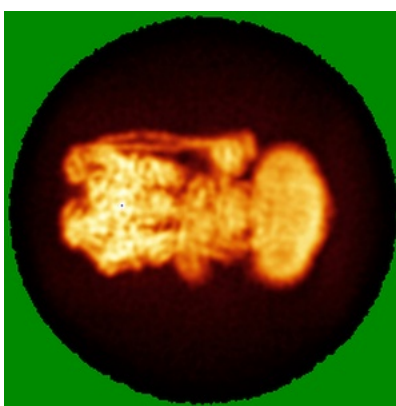
The images above show the largest variance slices of the map in three orthogonal directions.

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

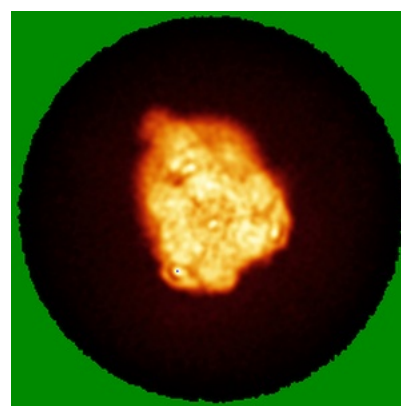
6.4.1 Primary map



X



Y

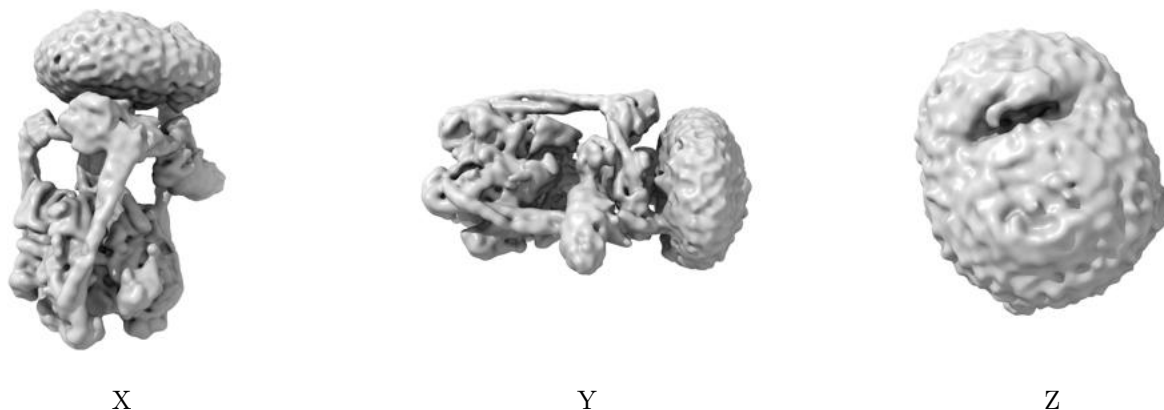


Z

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 0.18. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

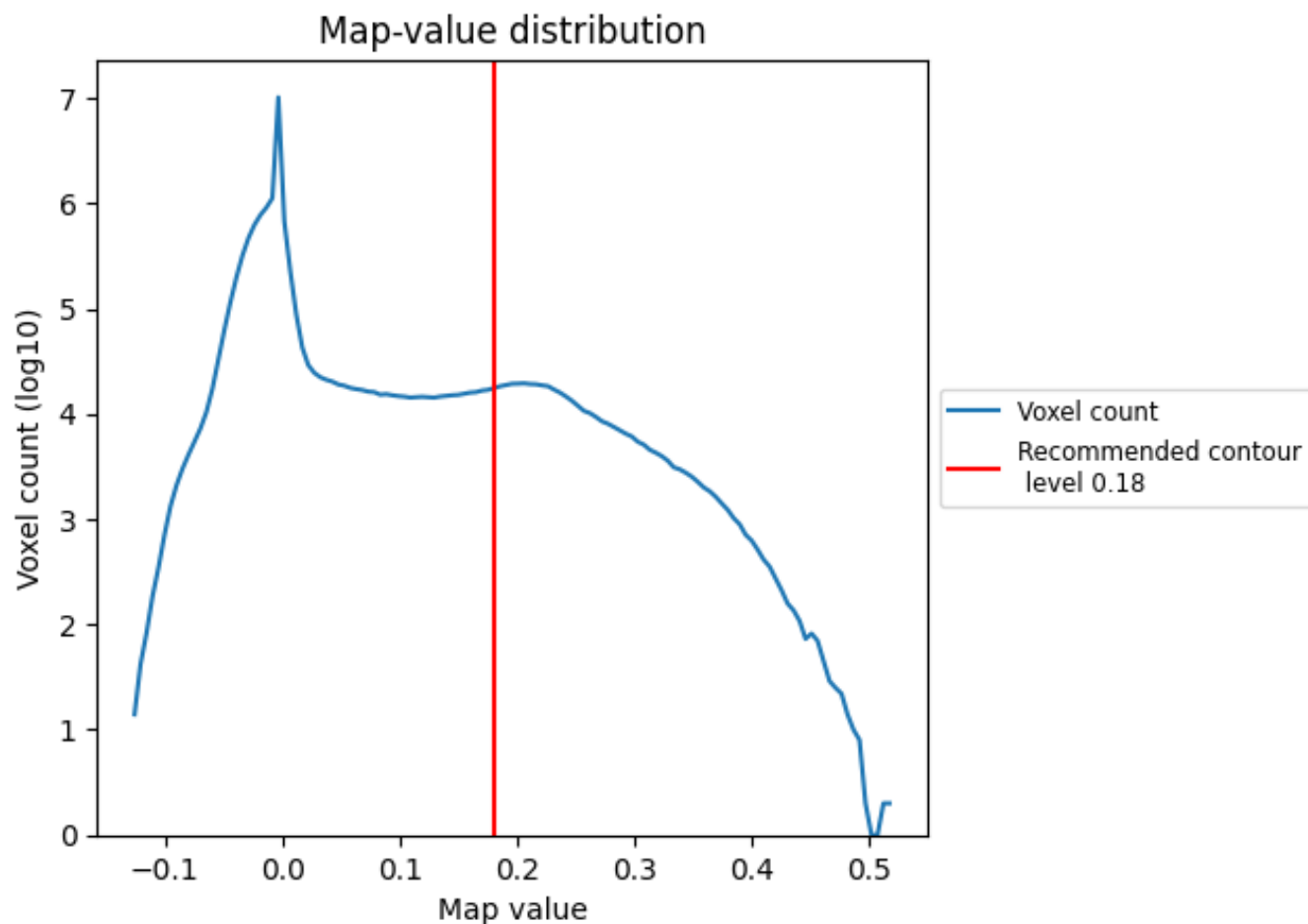
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

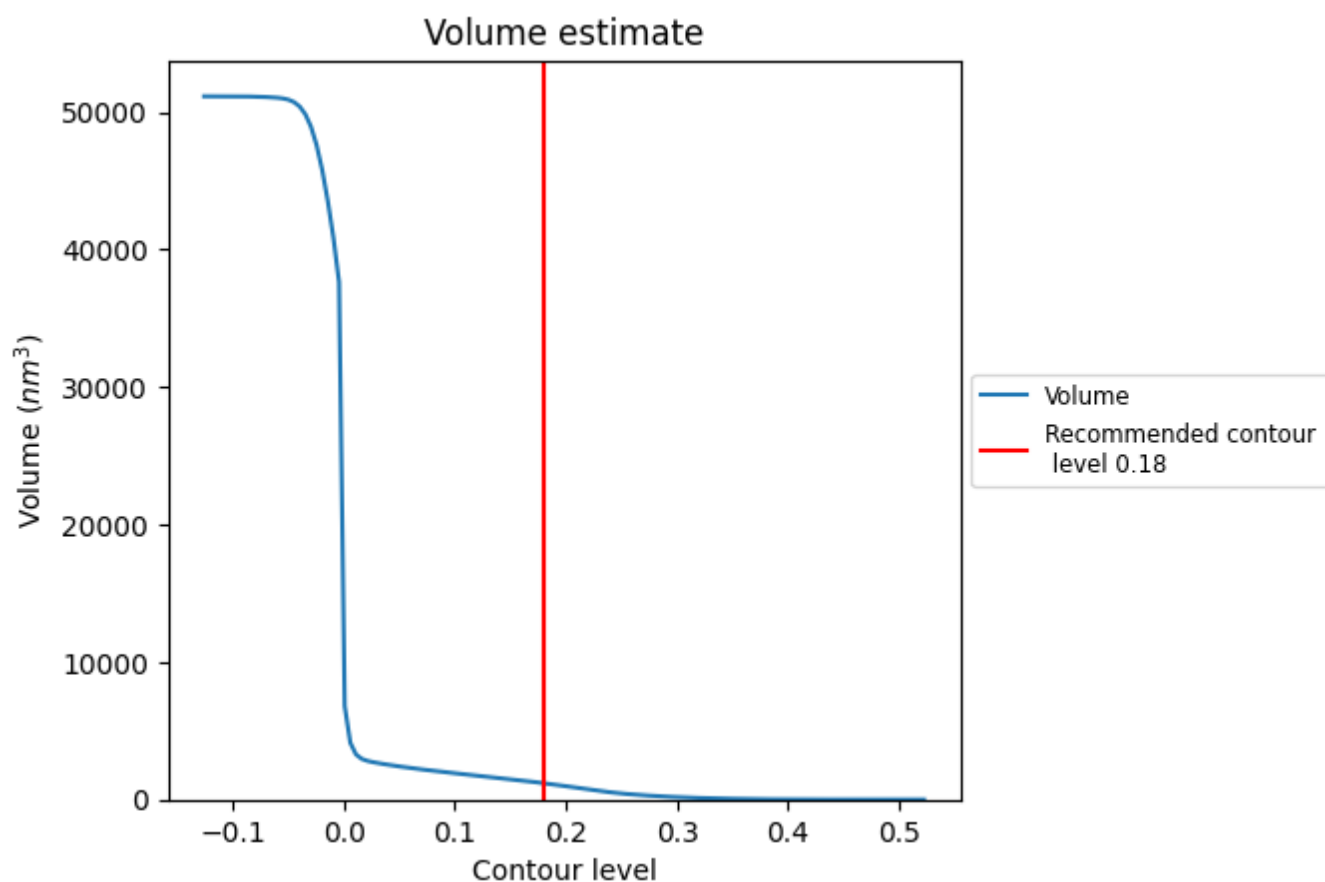
This section contains the results of statistical analysis of the map.

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.

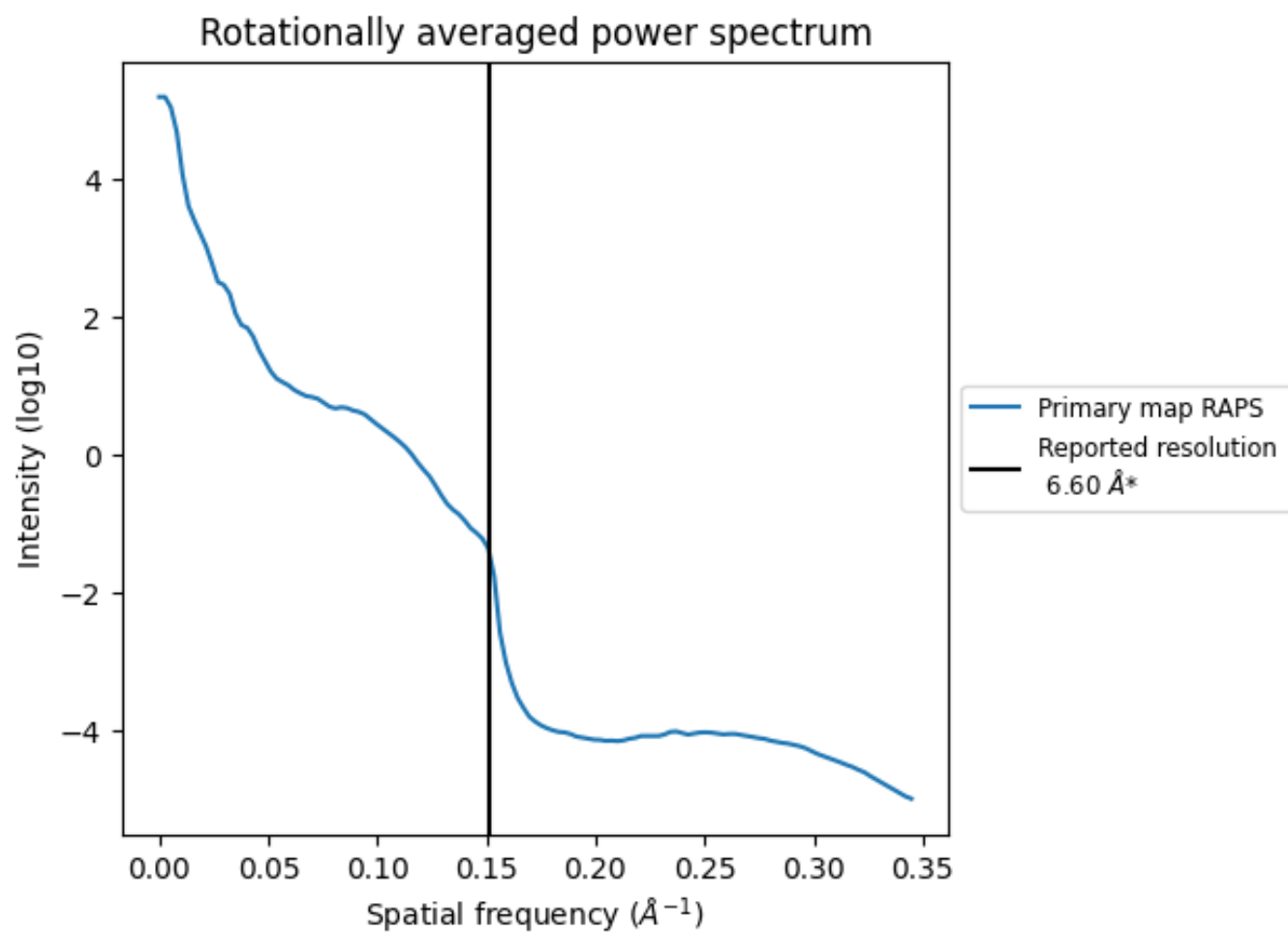
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1190 nm³; this corresponds to an approximate mass of 1075 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 0.152 Å⁻¹

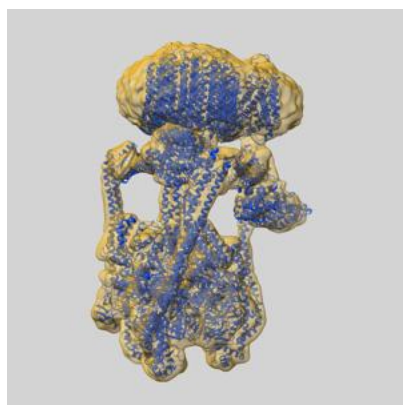
8 Fourier-Shell correlation

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

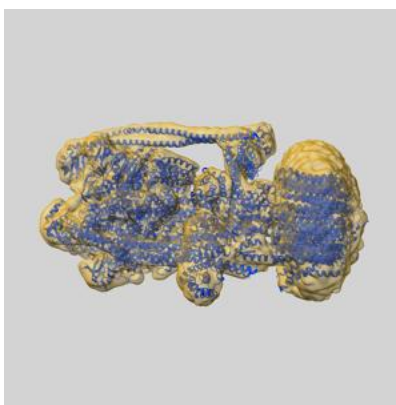
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-0646 and PDB model 6O7V. Per-residue inclusion information can be found in [section 3](#) on [page 10](#).

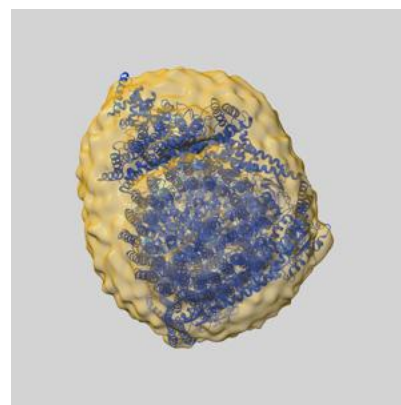
9.1 Map-model overlay [i](#)



X



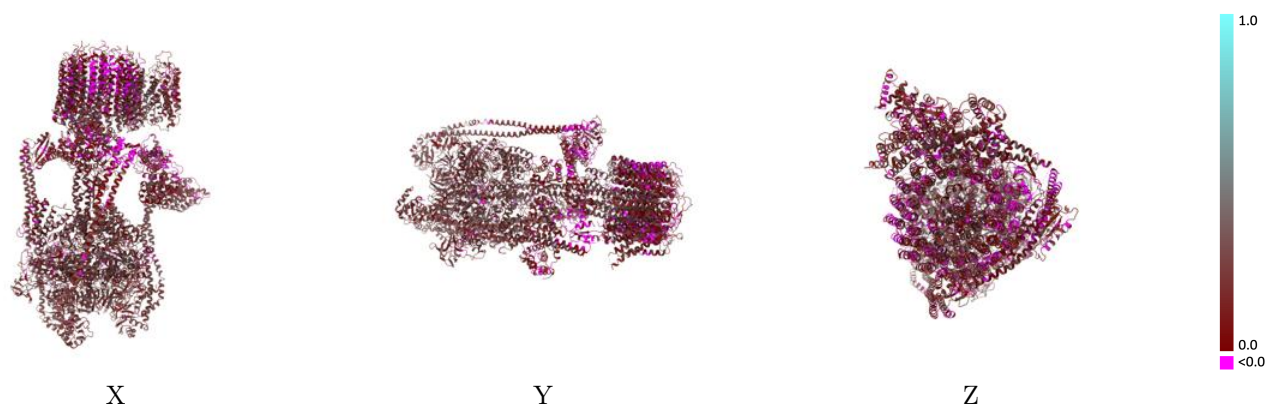
Y



Z

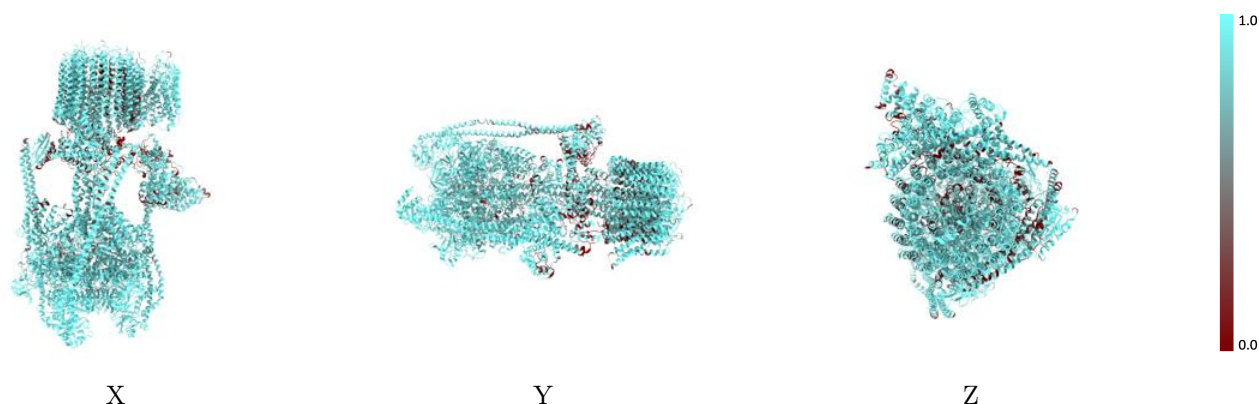
The images above show the 3D surface view of the map at the recommended contour level 0.18 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



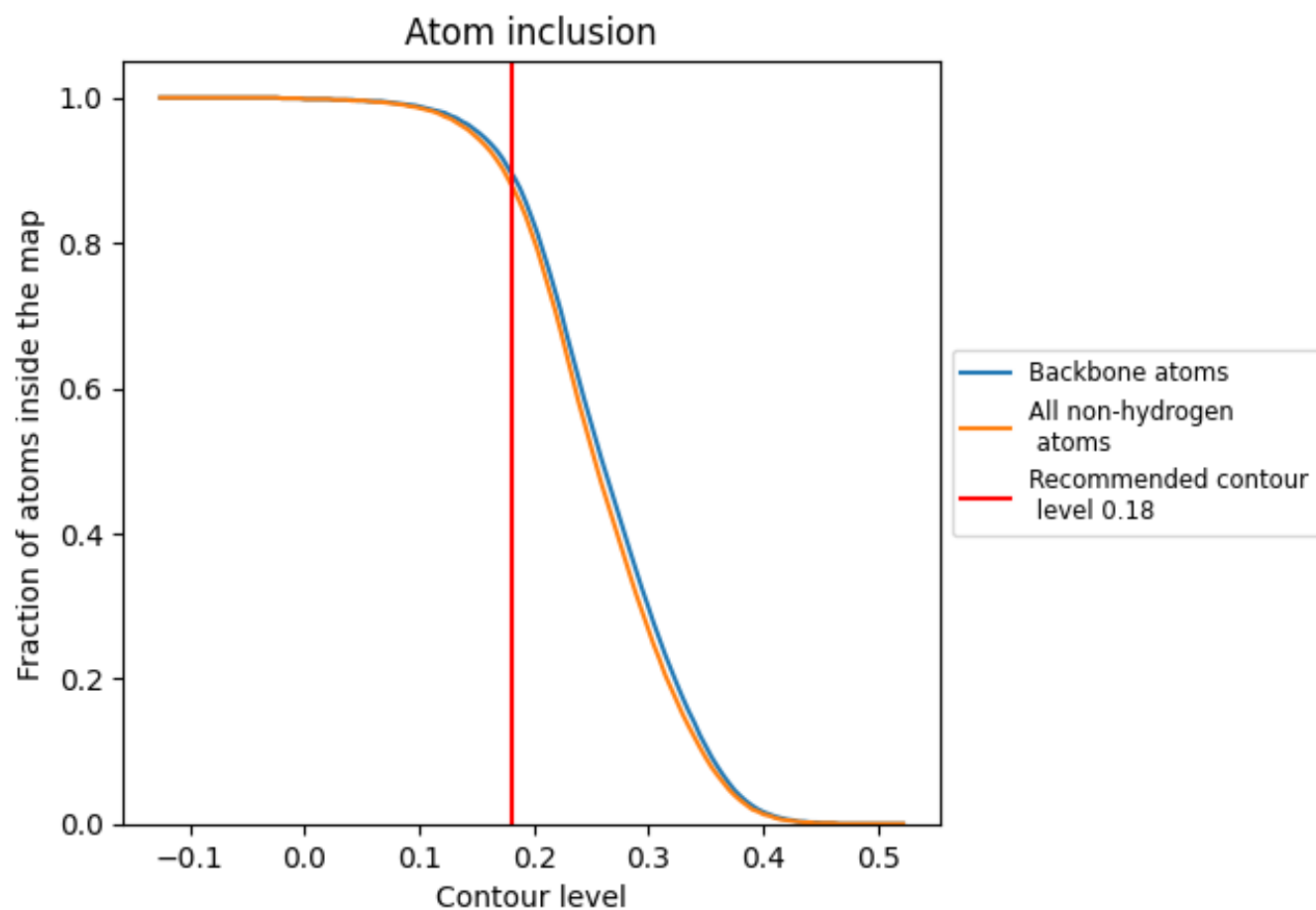
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.18).

































































9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 88% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.18) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8810	 0.1750
A	 0.9300	 0.2060
B	 0.9500	 0.2250
C	 0.9600	 0.2280
D	 0.9400	 0.2220
E	 0.9440	 0.2150
F	 0.9360	 0.2150
G	 0.9770	 0.2290
H	 0.9520	 0.1960
I	 0.9340	 0.2020
J	 0.8940	 0.1530
K	 0.9550	 0.2190
L	 0.9460	 0.2260
M	 0.9050	 0.2230
N	 0.8000	 0.1800
O	 0.6720	 0.1090
P	 0.8360	 0.1580
a	 0.8220	 0.1310
b	 0.4950	 0.0300
c	 0.8930	 0.1340
d	 0.7320	 0.1800
e	 0.9150	 0.1470
f	 0.9900	 0.1650
g	 0.8430	 0.0730
h	 0.8230	 0.0580
i	 0.7550	 0.1020
j	 0.8250	 0.1640
k	 0.7880	 0.1310
l	 0.8010	 0.0710
m	 0.8400	 0.0410
n	 0.9410	 0.0990
o	 0.9570	 0.1450

